TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 180-43134-1

Job Description: Harley Davidson

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

Attention: Allan Miller

Approved for release.
Carrie L Gamber
Senior Project Manager
4/23/2015 7:00 AM

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04/23/2015

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

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: 180-43134-1

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

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

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

RECEIPT

The samples were received on 04/16/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.1 C.

VOLATILES

The following sample was diluted to bring the concentration of target analytes within the calibration range: HD-MW-64D-0/1-0 (180-43134-1). Elevated reporting limits (RLs) are provided.

Methylene Chloride was detected in method blank MB 180-139024/12 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43134-1

Client Sample ID: HD-MW-64D-0/1-0 — Lab Sample ID: 180-43134-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.8	J	2.5	0.31	ug/L	2.5		8260C	Total/NA
Trichloroethene	220	E	2.5	0.36	ug/L	2.5		8260C	Total/NA
Tetrachloroethene	410	E	2.5	0.37	ug/L	2.5		8260C	Total/NA
Methylene Chloride - DL	25	B	25	3.1	ug/L	25		8260C	Total/NA
Trichloroethene - DL	250		25	3.6	ug/L	25		8260C	Total/NA
Tetrachloroethene - DL	520		25	3.7	ug/L	25		8260C	Total/NA

Client Sample ID: HD-MW-141A-0/1-0 — Lab Sample ID: 180-43134-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.3		5.0	2.5	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.4		1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	2.6		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	6.9		1.0	0.15	ug/L	1		8260C	Total/NA

Client Sample ID: HD-QC1-0/1-2 — Lab Sample ID: 180-43134-3

No Detections.

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: HD-MW-64D-0/1-0
Date Collected: 04/14/15 13:35
Date Received: 04/16/15 09:10

Lab Sample ID: 180-43134-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	2.5	U	2.5	0.71	ug/L			04/21/15 22:16	2.5
Vinyl chloride	2.5	U	2.5	0.57	ug/L			04/21/15 22:16	2.5
Bromomethane	2.5	U	2.5	0.78	ug/L			04/21/15 22:16	2.5
Chloroethane	2.5	U	2.5	0.54	ug/L			04/21/15 22:16	2.5
1,1-Dichloroethene	2.5	U	2.5	0.74	ug/L			04/21/15 22:16	2.5
Acetone	13	U	13	6.3	ug/L			04/21/15 22:16	2.5
Carbon disulfide	2.5	U	2.5	0.53	ug/L			04/21/15 22:16	2.5
Methylene Chloride	**1.8**	**J**	2.5	0.31	ug/L			04/21/15 22:16	2.5
trans-1,2-Dichloroethene	2.5	U	2.5	0.42	ug/L			04/21/15 22:16	2.5
Methyl tert-butyl ether	2.5	U	2.5	0.46	ug/L			04/21/15 22:16	2.5
1,1-Dichloroethane	2.5	U	2.5	0.29	ug/L			04/21/15 22:16	2.5
cis-1,2-Dichloroethene	2.5	U	2.5	0.59	ug/L			04/21/15 22:16	2.5
Bromochloromethane	2.5	U	2.5	0.45	ug/L			04/21/15 22:16	2.5
2-Butanone (MEK)	13	U	13	1.4	ug/L			04/21/15 22:16	2.5
Chloroform	2.5	U	2.5	0.43	ug/L			04/21/15 22:16	2.5
1,1,1-Trichloroethane	2.5	U	2.5	0.72	ug/L			04/21/15 22:16	2.5
Carbon tetrachloride	2.5	U	2.5	0.34	ug/L			04/21/15 22:16	2.5
Benzene	2.5	U	2.5	0.26	ug/L			04/21/15 22:16	2.5
1,2-Dichloroethane	2.5	U	2.5	0.53	ug/L			04/21/15 22:16	2.5
Trichloroethene	**220**	**E**	2.5	0.36	ug/L			04/21/15 22:16	2.5
1,2-Dichloropropane	2.5	U	2.5	0.24	ug/L			04/21/15 22:16	2.5
Bromodichloromethane	2.5	U	2.5	0.33	ug/L			04/21/15 22:16	2.5
cis-1,3-Dichloropropene	2.5	U	2.5	0.47	ug/L			04/21/15 22:16	2.5
4-Methyl-2-pentanone (MIBK)	13	U	13	1.3	ug/L			04/21/15 22:16	2.5
Toluene	2.5	U	2.5	0.38	ug/L			04/21/15 22:16	2.5
trans-1,3-Dichloropropene	2.5	U	2.5	0.37	ug/L			04/21/15 22:16	2.5
1,1,2-Trichloroethane	2.5	U	2.5	0.50	ug/L			04/21/15 22:16	2.5
Tetrachloroethene	**410**	**E**	2.5	0.37	ug/L			04/21/15 22:16	2.5
2-Hexanone	13	U	13	0.40	ug/L			04/21/15 22:16	2.5
Dibromochloromethane	2.5	U	2.5	0.34	ug/L			04/21/15 22:16	2.5
1,2-Dibromoethane (EDB)	2.5	U	2.5	0.45	ug/L			04/21/15 22:16	2.5
Chlorobenzene	2.5	U	2.5	0.34	ug/L			04/21/15 22:16	2.5
1,1,1,2-Tetrachloroethane	2.5	U	2.5	0.69	ug/L			04/21/15 22:16	2.5
Ethylbenzene	2.5	U	2.5	0.57	ug/L			04/21/15 22:16	2.5
Xylenes, Total	7.5	U	7.5	1.2	ug/L			04/21/15 22:16	2.5
Styrene	2.5	U	2.5	0.24	ug/L			04/21/15 22:16	2.5
Bromoform	2.5	U	2.5	0.48	ug/L			04/21/15 22:16	2.5
1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.50	ug/L			04/21/15 22:16	2.5
Acrylonitrile	50	U	50	1.4	ug/L			04/21/15 22:16	2.5
1,4-Dioxane	500	U	500	86	ug/L			04/21/15 22:16	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*64 - 135*		*04/21/15 22:16*	*2.5*
Toluene-d8 (Surr)	*105*		*71 - 118*		*04/21/15 22:16*	*2.5*
4-Bromofluorobenzene (Surr)	*88*		*70 - 118*		*04/21/15 22:16*	*2.5*
Dibromofluoromethane (Surr)	*114*		*70 - 128*		*04/21/15 22:16*	*2.5*

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

Client Sample ID: HD-MW-141A-0/1-0
Date Collected: 04/15/15 09:32
Date Received: 04/16/15 09:10

Lab Sample ID: 180-43134-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/20/15 20:06	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/20/15 20:06	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/20/15 20:06	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/20/15 20:06	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/20/15 20:06	1
Acetone	**5.3**		5.0	2.5	ug/L			04/20/15 20:06	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/20/15 20:06	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/20/15 20:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/20/15 20:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/20/15 20:06	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/20/15 20:06	1
cis-1,2-Dichloroethene	**1.4**		1.0	0.24	ug/L			04/20/15 20:06	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/20/15 20:06	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/20/15 20:06	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/20/15 20:06	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/20/15 20:06	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/20/15 20:06	1
Benzene	1.0	U	1.0	0.11	ug/L			04/20/15 20:06	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/20/15 20:06	1
Trichloroethene	**2.6**		1.0	0.14	ug/L			04/20/15 20:06	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/20/15 20:06	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/20/15 20:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/20/15 20:06	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/20/15 20:06	1
Toluene	1.0	U	1.0	0.15	ug/L			04/20/15 20:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/20/15 20:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/20/15 20:06	1
Tetrachloroethene	**6.9**		1.0	0.15	ug/L			04/20/15 20:06	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/20/15 20:06	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/20/15 20:06	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/20/15 20:06	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/20/15 20:06	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/20/15 20:06	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/20/15 20:06	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/20/15 20:06	1
Styrene	1.0	U	1.0	0.097	ug/L			04/20/15 20:06	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/20/15 20:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/20/15 20:06	1
Acrylonitrile	20	U	20	0.55	ug/L			04/20/15 20:06	1
1,4-Dioxane	200	U	200	34	ug/L			04/20/15 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*64 - 135*		*04/20/15 20:06*	*1*
Toluene-d8 (Surr)	*105*		*71 - 118*		*04/20/15 20:06*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 118*		*04/20/15 20:06*	*1*
Dibromofluoromethane (Surr)	*117*		*70 - 128*		*04/20/15 20:06*	*1*

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

Client Sample ID: HD-QC1-0/1-2
Date Collected: 04/15/15 12:00
Date Received: 04/16/15 09:10

Lab Sample ID: 180-43134-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/20/15 19:42	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/20/15 19:42	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/20/15 19:42	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/20/15 19:42	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/20/15 19:42	1
Acetone	5.0	U	5.0	2.5	ug/L			04/20/15 19:42	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/20/15 19:42	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/20/15 19:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/20/15 19:42	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/20/15 19:42	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/20/15 19:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/20/15 19:42	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/20/15 19:42	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/20/15 19:42	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/20/15 19:42	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/20/15 19:42	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/20/15 19:42	1
Benzene	1.0	U	1.0	0.11	ug/L			04/20/15 19:42	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/20/15 19:42	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/20/15 19:42	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/20/15 19:42	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/20/15 19:42	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/20/15 19:42	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/20/15 19:42	1
Toluene	1.0	U	1.0	0.15	ug/L			04/20/15 19:42	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/20/15 19:42	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/20/15 19:42	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/20/15 19:42	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/20/15 19:42	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/20/15 19:42	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/20/15 19:42	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/20/15 19:42	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/20/15 19:42	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/20/15 19:42	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/20/15 19:42	1
Styrene	1.0	U	1.0	0.097	ug/L			04/20/15 19:42	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/20/15 19:42	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/20/15 19:42	1
Acrylonitrile	20	U	20	0.55	ug/L			04/20/15 19:42	1
1,4-Dioxane	200	U	200	34	ug/L			04/20/15 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*64 - 135*		*04/20/15 19:42*	*1*
Toluene-d8 (Surr)	*102*		*71 - 118*		*04/20/15 19:42*	*1*
4-Bromofluorobenzene (Surr)	*86*		*70 - 118*		*04/20/15 19:42*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 128*		*04/20/15 19:42*	*1*

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

Client Sample ID: HD-MW-64D-0/1-0
Date Collected: 04/14/15 13:35
Date Received: 04/16/15 09:10

Lab Sample ID: 180-43134-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	25	U	25	7.1	ug/L			04/20/15 19:18	25
Vinyl chloride	25	U	25	5.7	ug/L			04/20/15 19:18	25
Bromomethane	25	U	25	7.8	ug/L			04/20/15 19:18	25
Chloroethane	25	U	25	5.4	ug/L			04/20/15 19:18	25
1,1-Dichloroethene	25	U	25	7.4	ug/L			04/20/15 19:18	25
Acetone	130	U	130	63	ug/L			04/20/15 19:18	25
Carbon disulfide	25	U	25	5.3	ug/L			04/20/15 19:18	25
Methylene Chloride	**25**	**B**	25	3.1	ug/L			04/20/15 19:18	25
trans-1,2-Dichloroethene	25	U	25	4.2	ug/L			04/20/15 19:18	25
Methyl tert-butyl ether	25	U	25	4.6	ug/L			04/20/15 19:18	25
1,1-Dichloroethane	25	U	25	2.9	ug/L			04/20/15 19:18	25
cis-1,2-Dichloroethene	25	U	25	5.9	ug/L			04/20/15 19:18	25
Bromochloromethane	25	U	25	4.5	ug/L			04/20/15 19:18	25
2-Butanone (MEK)	130	U	130	14	ug/L			04/20/15 19:18	25
Chloroform	25	U	25	4.3	ug/L			04/20/15 19:18	25
1,1,1-Trichloroethane	25	U	25	7.2	ug/L			04/20/15 19:18	25
Carbon tetrachloride	25	U	25	3.4	ug/L			04/20/15 19:18	25
Benzene	25	U	25	2.6	ug/L			04/20/15 19:18	25
1,2-Dichloroethane	25	U	25	5.3	ug/L			04/20/15 19:18	25
Trichloroethene	**250**		25	3.6	ug/L			04/20/15 19:18	25
1,2-Dichloropropane	25	U	25	2.4	ug/L			04/20/15 19:18	25
Bromodichloromethane	25	U	25	3.3	ug/L			04/20/15 19:18	25
cis-1,3-Dichloropropene	25	U	25	4.7	ug/L			04/20/15 19:18	25
4-Methyl-2-pentanone (MIBK)	130	U	130	13	ug/L			04/20/15 19:18	25
Toluene	25	U	25	3.8	ug/L			04/20/15 19:18	25
trans-1,3-Dichloropropene	25	U	25	3.7	ug/L			04/20/15 19:18	25
1,1,2-Trichloroethane	25	U	25	5.0	ug/L			04/20/15 19:18	25
Tetrachloroethene	**520**		25	3.7	ug/L			04/20/15 19:18	25
2-Hexanone	130	U	130	4.0	ug/L			04/20/15 19:18	25
Dibromochloromethane	25	U	25	3.4	ug/L			04/20/15 19:18	25
1,2-Dibromoethane (EDB)	25	U	25	4.5	ug/L			04/20/15 19:18	25
Chlorobenzene	25	U	25	3.4	ug/L			04/20/15 19:18	25
1,1,1,2-Tetrachloroethane	25	U	25	6.9	ug/L			04/20/15 19:18	25
Ethylbenzene	25	U	25	5.7	ug/L			04/20/15 19:18	25
Xylenes, Total	75	U	75	12	ug/L			04/20/15 19:18	25
Styrene	25	U	25	2.4	ug/L			04/20/15 19:18	25
Bromoform	25	U	25	4.8	ug/L			04/20/15 19:18	25
1,1,2,2-Tetrachloroethane	25	U	25	5.0	ug/L			04/20/15 19:18	25
Acrylonitrile	500	U	500	14	ug/L			04/20/15 19:18	25
1,4-Dioxane	5000	U	5000	860	ug/L			04/20/15 19:18	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*64 - 135*		*04/20/15 19:18*	*25*
Toluene-d8 (Surr)	*102*		*71 - 118*		*04/20/15 19:18*	*25*
4-Bromofluorobenzene (Surr)	*87*		*70 - 118*		*04/20/15 19:18*	*25*
Dibromofluoromethane (Surr)	*117*		*70 - 128*		*04/20/15 19:18*	*25*

Default Detection Limits

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43134-1

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

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

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43134-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(64-135)	(71-118)	(70-118)	(70-128)
180-43134-1 - DL	HD-MW-64D-0/1-0	125	102	87	117
180-43134-1	HD-MW-64D-0/1-0	117	105	88	114
180-43134-2	HD-MW-141A-0/1-0	122	105	90	117
180-43134-3	HD-QC1-0/1-2	121	102	86	113
LCS 180-139024/10	Lab Control Sample	95	100	95	95
LCS 180-139148/9	Lab Control Sample	92	102	93	88
MB 180-139024/12	Method Blank	117	105	92	113
MB 180-139148/6	Method Blank	116	104	88	105

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

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

Lab Sample ID: MB 180-139024/12
Matrix: Water
Analysis Batch: 139024

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			04/20/15 11:28	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/20/15 11:28	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/20/15 11:28	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/20/15 11:28	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/20/15 11:28	1
Acetone	5.0	U	5.0	2.5	ug/L			04/20/15 11:28	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/20/15 11:28	1
Methylene Chloride	0.363	J	1.0	0.13	ug/L			04/20/15 11:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/20/15 11:28	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/20/15 11:28	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/20/15 11:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/20/15 11:28	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/20/15 11:28	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/20/15 11:28	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/20/15 11:28	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/20/15 11:28	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/20/15 11:28	1
Benzene	1.0	U	1.0	0.11	ug/L			04/20/15 11:28	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/20/15 11:28	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/20/15 11:28	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/20/15 11:28	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/20/15 11:28	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/20/15 11:28	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/20/15 11:28	1
Toluene	1.0	U	1.0	0.15	ug/L			04/20/15 11:28	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/20/15 11:28	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/20/15 11:28	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/20/15 11:28	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/20/15 11:28	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/20/15 11:28	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/20/15 11:28	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/20/15 11:28	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/20/15 11:28	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/20/15 11:28	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/20/15 11:28	1
Styrene	1.0	U	1.0	0.097	ug/L			04/20/15 11:28	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/20/15 11:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/20/15 11:28	1
Acrylonitrile	20	U	20	0.55	ug/L			04/20/15 11:28	1
1,4-Dioxane	200	U	200	34	ug/L			04/20/15 11:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*64 - 135*		*04/20/15 11:28*	*1*
Toluene-d8 (Surr)	*105*		*71 - 118*		*04/20/15 11:28*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 118*		*04/20/15 11:28*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 128*		*04/20/15 11:28*	*1*

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

Lab Sample ID: LCS 180-139024/10
Matrix: Water
Analysis Batch: 139024

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	11.1		ug/L		111	50 - 139
Vinyl chloride	10.0	10.6		ug/L		106	53 - 138
Bromomethane	10.0	10.2		ug/L		102	33 - 150
Chloroethane	10.0	11.1		ug/L		111	36 - 142
1,1-Dichloroethene	10.0	9.54		ug/L		95	65 - 136
Acetone	20.0	20.1		ug/L		101	22 - 150
Carbon disulfide	10.0	5.95		ug/L		60	54 - 132
Methylene Chloride	10.0	10.3		ug/L		103	63 - 129
trans-1,2-Dichloroethene	10.0	9.62		ug/L		96	73 - 126
Methyl tert-butyl ether	10.0	9.93		ug/L		99	64 - 123
1,1-Dichloroethane	10.0	9.80		ug/L		98	73 - 126
cis-1,2-Dichloroethene	10.0	9.86		ug/L		99	70 - 120
Bromochloromethane	10.0	9.84		ug/L		98	70 - 127
2-Butanone (MEK)	20.0	17.5		ug/L		87	39 - 138
Chloroform	10.0	10.2		ug/L		102	72 - 127
1,1,1-Trichloroethane	10.0	10.2		ug/L		102	63 - 133
Carbon tetrachloride	10.0	10.7		ug/L		107	55 - 150
Benzene	10.0	10.3		ug/L		103	80 - 120
1,2-Dichloroethane	10.0	9.99		ug/L		100	68 - 132
Trichloroethene	10.0	9.66		ug/L		97	73 - 120
1,2-Dichloropropane	10.0	10.2		ug/L		102	76 - 124
Bromodichloromethane	10.0	9.70		ug/L		97	66 - 130
cis-1,3-Dichloropropene	10.0	10.4		ug/L		104	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	18.5		ug/L		92	45 - 145
Toluene	10.0	10.8		ug/L		108	80 - 123
trans-1,3-Dichloropropene	10.0	11.4		ug/L		114	65 - 125
1,1,2-Trichloroethane	10.0	11.5		ug/L		115	77 - 127
Tetrachloroethene	10.0	10.2		ug/L		102	70 - 135
2-Hexanone	20.0	16.1		ug/L		81	25 - 132
Dibromochloromethane	10.0	10.6		ug/L		106	60 - 140
1,2-Dibromoethane (EDB)	10.0	11.1		ug/L		111	74 - 123
Chlorobenzene	10.0	10.7		ug/L		107	80 - 120
1,1,1,2-Tetrachloroethane	10.0	12.3		ug/L		123	63 - 140
Ethylbenzene	10.0	10.4		ug/L		104	72 - 126
Xylenes, Total	20.0	20.7		ug/L		104	76 - 128
Styrene	10.0	10.5		ug/L		105	71 - 127
Bromoform	10.0	10.4		ug/L		104	46 - 150
1,1,2,2-Tetrachloroethane	10.0	11.4		ug/L		114	62 - 125
1,4-Dioxane	200	186	J	ug/L		93	10 - 160

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

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

Lab Sample ID: MB 180-139148/6
Matrix: Water
Analysis Batch: 139148

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			04/21/15 12:50	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/21/15 12:50	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/21/15 12:50	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/21/15 12:50	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/21/15 12:50	1
Acetone	5.0	U	5.0	2.5	ug/L			04/21/15 12:50	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/21/15 12:50	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/21/15 12:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/21/15 12:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/21/15 12:50	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/21/15 12:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/21/15 12:50	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/21/15 12:50	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/21/15 12:50	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/21/15 12:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/21/15 12:50	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/21/15 12:50	1
Benzene	1.0	U	1.0	0.11	ug/L			04/21/15 12:50	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/21/15 12:50	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/21/15 12:50	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/21/15 12:50	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/21/15 12:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/21/15 12:50	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/21/15 12:50	1
Toluene	1.0	U	1.0	0.15	ug/L			04/21/15 12:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/21/15 12:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/21/15 12:50	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/21/15 12:50	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/21/15 12:50	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/21/15 12:50	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/21/15 12:50	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/21/15 12:50	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/21/15 12:50	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/21/15 12:50	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/21/15 12:50	1
Styrene	1.0	U	1.0	0.097	ug/L			04/21/15 12:50	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/21/15 12:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/21/15 12:50	1
Acrylonitrile	20	U	20	0.55	ug/L			04/21/15 12:50	1
1,4-Dioxane	200	U	200	34	ug/L			04/21/15 12:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*64 - 135*		*04/21/15 12:50*	*1*
Toluene-d8 (Surr)	*104*		*71 - 118*		*04/21/15 12:50*	*1*
4-Bromofluorobenzene (Surr)	*88*		*70 - 118*		*04/21/15 12:50*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 128*		*04/21/15 12:50*	*1*

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

Lab Sample ID: LCS 180-139148/9
Matrix: Water
Analysis Batch: 139148

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	11.0		ug/L		110	50 - 139
Vinyl chloride	10.0	10.5		ug/L		105	53 - 138
Bromomethane	10.0	13.2		ug/L		132	33 - 150
Chloroethane	10.0	11.8		ug/L		118	36 - 142
1,1-Dichloroethene	10.0	9.29		ug/L		93	65 - 136
Acetone	20.0	17.1		ug/L		86	22 - 150
Carbon disulfide	10.0	5.91		ug/L		59	54 - 132
Methylene Chloride	10.0	10.1		ug/L		101	63 - 129
trans-1,2-Dichloroethene	10.0	9.55		ug/L		95	73 - 126
Methyl tert-butyl ether	10.0	9.15		ug/L		92	64 - 123
1,1-Dichloroethane	10.0	9.74		ug/L		97	73 - 126
cis-1,2-Dichloroethene	10.0	9.05		ug/L		90	70 - 120
Bromochloromethane	10.0	8.80		ug/L		88	70 - 127
2-Butanone (MEK)	20.0	16.6		ug/L		83	39 - 138
Chloroform	10.0	9.97		ug/L		100	72 - 127
1,1,1-Trichloroethane	10.0	10.2		ug/L		102	63 - 133
Carbon tetrachloride	10.0	10.8		ug/L		108	55 - 150
Benzene	10.0	10.2		ug/L		102	80 - 120
1,2-Dichloroethane	10.0	9.53		ug/L		95	68 - 132
Trichloroethene	10.0	9.02		ug/L		90	73 - 120
1,2-Dichloropropane	10.0	9.78		ug/L		98	76 - 124
Bromodichloromethane	10.0	8.88		ug/L		89	66 - 130
cis-1,3-Dichloropropene	10.0	9.47		ug/L		95	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	17.5		ug/L		88	45 - 145
Toluene	10.0	11.2		ug/L		112	80 - 123
trans-1,3-Dichloropropene	10.0	11.3		ug/L		113	65 - 125
1,1,2-Trichloroethane	10.0	11.5		ug/L		115	77 - 127
Tetrachloroethene	10.0	10.9		ug/L		109	70 - 135
2-Hexanone	20.0	15.2		ug/L		76	25 - 132
Dibromochloromethane	10.0	10.4		ug/L		104	60 - 140
1,2-Dibromoethane (EDB)	10.0	10.7		ug/L		107	74 - 123
Chlorobenzene	10.0	10.7		ug/L		107	80 - 120
1,1,1,2-Tetrachloroethane	10.0	11.9		ug/L		119	63 - 140
Ethylbenzene	10.0	10.2		ug/L		102	72 - 126
Xylenes, Total	20.0	20.1		ug/L		100	76 - 128
Styrene	10.0	10.3		ug/L		103	71 - 127
Bromoform	10.0	9.28		ug/L		93	46 - 150
1,1,2,2-Tetrachloroethane	10.0	10.9		ug/L		109	62 - 125
1,4-Dioxane	200	129	J	ug/L		64	10 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*64 - 135*
Toluene-d8 (Surr)	*102*		*71 - 118*
4-Bromofluorobenzene (Surr)	*93*		*70 - 118*
Dibromofluoromethane (Surr)	*88*		*70 - 128*

GC/MS VOA

Analysis Batch: 139024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43134-1 - DL	HD-MW-64D-0/1-0	Total/NA	Water	8260C	
180-43134-2	HD-MW-141A-0/1-0	Total/NA	Water	8260C	
180-43134-3	HD-QC1-0/1-2	Total/NA	Water	8260C	
LCS 180-139024/10	Lab Control Sample	Total/NA	Water	8260C	
MB 180-139024/12	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 139148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43134-1	HD-MW-64D-0/1-0	Total/NA	Water	8260C	
LCS 180-139148/9	Lab Control Sample	Total/NA	Water	8260C	
MB 180-139148/6	Method Blank	Total/NA	Water	8260C	

Lab Chronicle

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43134-1

Client Sample ID: HD-MW-64D-0/1-0

Lab Sample ID: 180-43134-1

Date Collected: 04/14/15 13:35

Matrix: Water

Date Received: 04/16/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	25	5 mL	5 mL	139024	04/20/15 19:18	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	8260C		2.5	5 mL	5 mL	139148	04/21/15 22:16	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-MW-141A-0/1-0

Lab Sample ID: 180-43134-2

Date Collected: 04/15/15 09:32

Matrix: Water

Date Received: 04/16/15 09:10

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	139024	04/20/15 20:06	DLF	TAL PIT
	Instrument ID: CHHP5									

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

Lab Sample ID: 180-43134-3

Date Collected: 04/15/15 12:00

Matrix: Water

Date Received: 04/16/15 09:10

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	139024	04/20/15 19:42	DLF	TAL PIT
	Instrument ID: CHHP5									

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

DLF = Donald Ferguson

Certification Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43134-1

Laboratory: TestAmerica Pittsburgh

The certifications listed below are applicable to this report.

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

* Certification renewal pending - certification considered valid.

Method Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43134-1

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43134-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-43134-1	HD-MW-64D-0/1-0	Water	04/14/15 13:35	04/16/15 09:10
180-43134-2	HD-MW-141A-0/1-0	Water	04/15/15 09:32	04/16/15 09:10
180-43134-3	HD-QC1-0/1-2	Water	04/15/15 12:00	04/16/15 09:10

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 135593

Lab Sample ID: IC 180-135593/4 Client Sample ID:

Date Analyzed: 03/16/15 12:41 Lab File ID: 50316004.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.25	Baseline	fergusond	03/17/15 09:42

Lab Sample ID: ICIS 180-135593/5 Client Sample ID:

Date Analyzed: 03/16/15 13:05 Lab File ID: 50316005.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.06	Peak Tail	fergusond	03/17/15 09:27

Lab Sample ID: IC 180-135593/6 Client Sample ID:

Date Analyzed: 03/16/15 13:29 Lab File ID: 50316006.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isobutyl alcohol	6.95	Peak Tail	fergusond	03/17/15 09:45

Lab Sample ID: IC 180-135593/7 Client Sample ID:

Date Analyzed: 03/16/15 13:53 Lab File ID: 50316007.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	03/17/15 09:48

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 135593

Lab Sample ID: IC 180-135593/13 Client Sample ID:

Date Analyzed: 03/16/15 16:17 Lab File ID: 50316013.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.77	Poor chromatography	fergusond	03/17/15 10:01
Acrolein	3.25	Poor chromatography	fergusond	03/17/15 10:01
2-Hexanone	9.66	Poor chromatography	fergusond	03/17/15 10:01
trans-1,4-Dichloro-2-butene	11.74	Poor chromatography	fergusond	03/17/15 10:01

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 139024

Lab Sample ID: CCVIS 180-139024/2 Client Sample ID:

Date Analyzed: 04/20/15 09:32 Lab File ID: 50420002.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.27	Baseline	fergusond	04/20/15 10:03

Lab Sample ID: MB 180-139024/12 Client Sample ID:

Date Analyzed: 04/20/15 11:28 Lab File ID: 50420012.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.15	Poor chromatography	fergusond	04/20/15 12:27

Lab Sample ID: LCS 180-139024/10 Client Sample ID:

Date Analyzed: 04/20/15 13:16 Lab File ID: 50420010.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	04/20/15 13:38

Lab Sample ID: 180-43134-1 DL Client Sample ID: HD-MW-64D-0/1-0 DL

Date Analyzed: 04/20/15 19:18 Lab File ID: 50420026.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.16	Poor chromatography	fergusond	04/21/15 08:20

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 139148

Lab Sample ID: CCVIS 180-139148/2 Client Sample ID:

Date Analyzed: 04/21/15 11:38 Lab File ID: 50421002.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.26	Poor chromatography	fergusond	04/21/15 12:10
Iodomethane	3.62	Poor chromatography	fergusond	04/21/15 12:10
1,4-Dioxane	8.06	Peak Tail	fergusond	04/21/15 12:10

Lab Sample ID: MB 180-139148/6 Client Sample ID:

Date Analyzed: 04/21/15 12:50 Lab File ID: 50421006.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.16	Split Peak	fergusond	04/21/15 13:20

Lab Sample ID: LCS 180-139148/9 Client Sample ID:

Date Analyzed: 04/21/15 14:13 Lab File ID: 50421009.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.05	Peak Tail	fergusond	04/21/15 14:35

Lab Sample ID: 180-43134-1 Client Sample ID: HD-MW-64D-0/1-0

Date Analyzed: 04/21/15 22:16 Lab File ID: 50421029.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.17	Poor chromatography	fergusond	04/22/15 08:20
Chloroform	6.34	Poor chromatography	fergusond	04/22/15 08:20

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOA8260INT_00030	04/10/15	03/10/15	Methanol, Lot 85233	10 mL	VOA8260INTRES_00091	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_00091	07/31/19		Restek, Lot A0104742		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260SURR_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
VOA8260SURR_00033	05/03/15	04/03/15	Methanol, Lot 85233	100 mL	VOA8260SURRES_00087	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_00087	04/30/19		Restek, Lot A0102817		(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_00111	04/22/16	04/15/15	Methanol, Lot 85233	10 mL	VOA8260GAS2ND_00093	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.: 180-43134-1

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_00093	01/31/18		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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	200 ug/mL
							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_00105	03/20/15	03/13/15	Methanol, Lot 85233	8 mL	VOA8260GAS1ST_00091	0.08 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00101	1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							1,1,1,2-Tetrachloroethane	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

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.: 180-43134-1

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_00091	09/30/16		Restek, Lot A0108198		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00101	03/24/15	02/24/15	Methanol, Lot 85233	10 mL	VOA8260KET1ST_00036	0.2 mL	2-Butanone (MEK)	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone (MIBK)	200 ug/mL
							Acetone	200 ug/mL
					VOA8260MEGA1_00027	1 mL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,1-Dichloropropene	200 ug/mL
							1,2,3-Trichlorobenzene	200 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2,4-Trimethylbenzene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

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_00036	02/28/16		Restek, Lot A093365		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
..VOA8260MEGA1_00027	02/28/16		Restek, Lot A093581		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane (EDB)	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							2-Methyl-2-propanol	20000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

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_00110	04/22/15	04/15/15	Methanol, Lot 85233	10 mL	VOA8260GAS1ST_00095	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

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_00095	01/31/18		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.: 180-43134-1

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.: 180-43134-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOAACRPRI_00003	03/31/15	03/03/15	Methanol, Lot 85233	100 mL	VOAACRORES_00064	0.125 mL	Acrolein	25 ug/mL
.VOAACRORES_00064	03/31/15		Restek, Lot A0107338		(Purchased Reagent)		Acrolein	20000 ug/mL
VOAVAPRI_00005	04/13/15	03/13/15	Methanol, Lot 85233	50 mL	VOA8260VARES_00050	0.25 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00050	07/31/15		Restek, Lot A0108225		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
voaWEEpri Res_00003	03/30/15	03/02/15	Methanol, Lot 85233	25 mL	VOARESEE1ST_00008	0.125 mL	1,2-dichloro-4-(trifluoromethyl)benzene	25 ug/mL
							2,3,6-Trichlorotoluene	25 ug/mL
							2,4,5-Trichlorotoluene	25 ug/mL
							2,4-Dichloro-1-(triflouromethyl)-benzene	25 ug/mL
							2,5-Dichlorobenzotrifluoride	25 ug/mL
							2-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorotoluene	25 ug/mL
							4-Chlorobenzotrifluoride	25 ug/mL
.VOARESEE1ST_00008	02/28/15		Restek, Lot A097285		(Purchased Reagent)		1,2-dichloro-4-(trifluoromethyl)benzene	5000 ug/mL
							2,3,6-Trichlorotoluene	5000 ug/mL
							2,4,5-Trichlorotoluene	5000 ug/mL
							2,4-Dichloro-1-(triflouromethyl)-benzene	5000 ug/mL
							2,5-Dichlorobenzotrifluoride	5000 ug/mL
							2-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorotoluene	5000 ug/mL
							4-Chlorobenzotrifluoride	5000 ug/mL
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
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL

Reagent

VOA8260GAS1ST_00091

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Certificate #3222.01

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

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

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

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

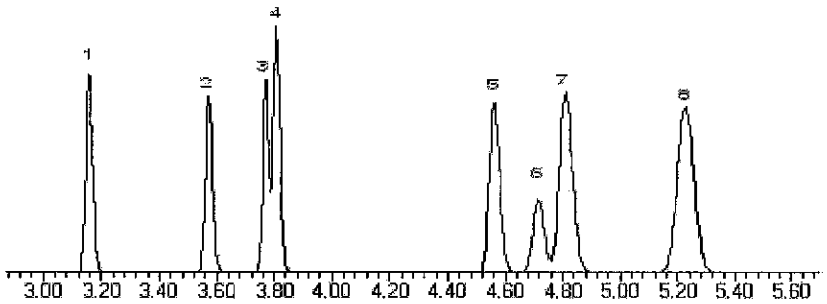
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Kendra Swope - Mix Technician

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

Jennifer L. Pollino - QC Analyst

Date Passed: 14-Jan-2015

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

Reagent

VOA8260GAS1ST_00095

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

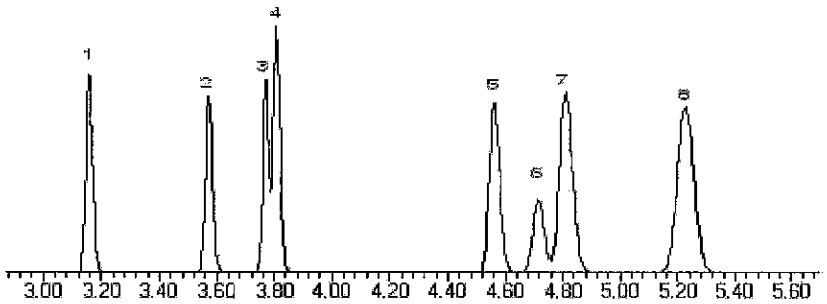
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_00093

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

Catalog No. : 569722.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)

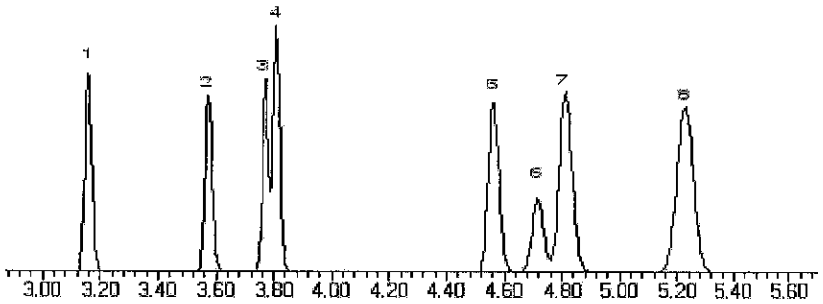
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

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

Reagent

VOA8260INTRES_00091

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

Description : 8260 Internal Standard

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

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

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

CERTIFIED VALUES

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

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

Reagent

VOA8260KET1ST_00036

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FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

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

Description : 8260 List 1 / Std #2 Ketones

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

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

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

CERTIFIED VALUES

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

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

Reagent

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

VOA8260MEGA1_00014

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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)

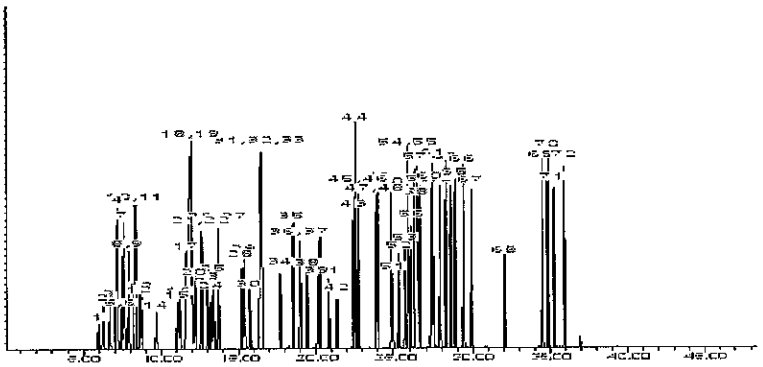
Carrier Gas:
helium-constant pressure 30 psi

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_00027

RESTEK

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www.restek.com

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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)

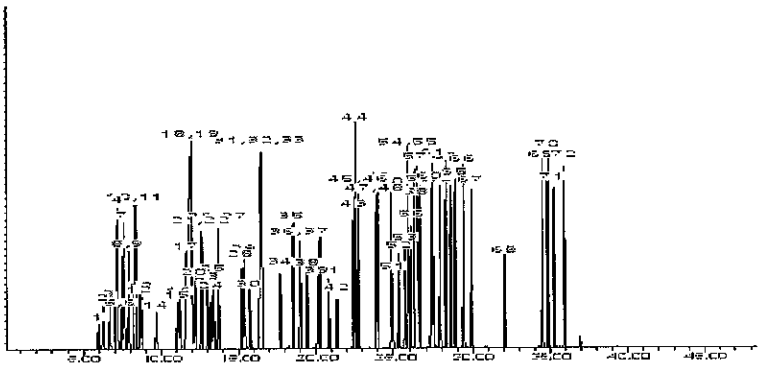
Carrier Gas:
helium-constant pressure 30 psi

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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Tel: (800)356-1688
Fax: (814)353-1309

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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)

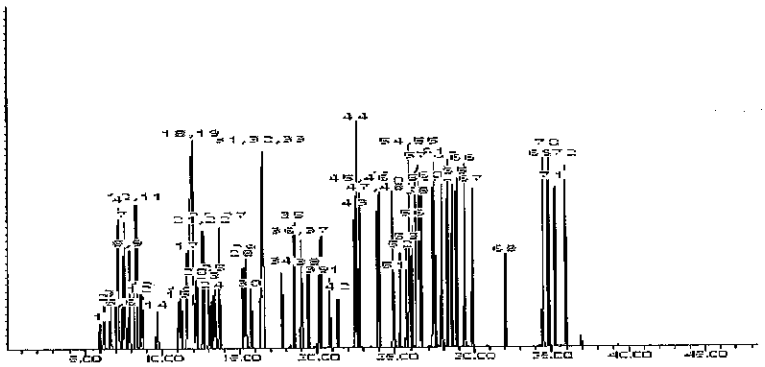
Carrier Gas:
helium-constant pressure 30 psi

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

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
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Testing Laboratory
Certificate #3222.02

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_00087

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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Testing Laboratory
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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.:** A0102817

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 : April 30, 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%	2,503.8 µg/mL	+/- 14.5573 µg/mL +/- 28.2339 µg/mL +/- 32.4891 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot 13J-483) **Purity** 99%	2,502.4 µg/mL	+/- 14.5492 µg/mL +/- 28.2182 µg/mL +/- 32.4709 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot 13I-050) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 28.1911 µg/mL +/- 32.4398 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 01127COV) **Purity** 99%	2,503.6 µg/mL	+/- 14.5561 µg/mL +/- 28.2317 µg/mL +/- 32.4865 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260VARES_00050

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Catalog No. : 569724 **Lot No.:** A0108225

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5000 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : July 31, 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	5,000.0 µg/mL	+/- 29.3428	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBC8935V)		+/- 266.1189	µg/mL	Unstressed
	Purity 99%		+/- 266.4123	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_00064

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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.:** A0107338

Description : 8260 List 1/Std #5 Acrolein High

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

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

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

Handling: This product is photosensitive.

CERTIFIED VALUES

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

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

Reagent

VOARESEE1ST_00008

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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.: 180-43134-1

SDG No.:

Matrix: Water Level: Low

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

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-MW-64D-0/1-0	180-43134-1	114	117	105	88
HD-MW-64D-0/1-0 DL	180-43134-1 DL	117	125	102	87
HD-MW-141A-0/1-0	180-43134-2	117	122	105	90
HD-QC1-0/1-2	180-43134-3	113	121	102	86
	MB 180-139024/12	113	117	105	92
	MB 180-139148/6	105	116	104	88
	LCS 180-139024/10	95	95	100	95
	LCS 180-139148/9	88	92	102	93

	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.: 180-43134-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50420010.D

Lab ID: LCS 180-139024/10 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	11.1	111	50-139	
Vinyl chloride	10.0	10.6	106	53-138	
Bromomethane	10.0	10.2	102	33-150	
Chloroethane	10.0	11.1	111	36-142	
1,1-Dichloroethene	10.0	9.54	95	65-136	
Acetone	20.0	20.1	101	22-150	
Carbon disulfide	10.0	5.95	60	54-132	
Methylene Chloride	10.0	10.3	103	63-129	
trans-1,2-Dichloroethene	10.0	9.62	96	73-126	
Methyl tert-butyl ether	10.0	9.93	99	64-123	
1,1-Dichloroethane	10.0	9.80	98	73-126	
cis-1,2-Dichloroethene	10.0	9.86	99	70-120	
Bromochloromethane	10.0	9.84	98	70-127	
2-Butanone (MEK)	20.0	17.5	87	39-138	
Chloroform	10.0	10.2	102	72-127	
1,1,1-Trichloroethane	10.0	10.2	102	63-133	
Carbon tetrachloride	10.0	10.7	107	55-150	
Benzene	10.0	10.3	103	80-120	
1,2-Dichloroethane	10.0	9.99	100	68-132	
Trichloroethene	10.0	9.66	97	73-120	
1,2-Dichloropropane	10.0	10.2	102	76-124	
Bromodichloromethane	10.0	9.70	97	66-130	
cis-1,3-Dichloropropene	10.0	10.4	104	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	18.5	92	45-145	
Toluene	10.0	10.8	108	80-123	
trans-1,3-Dichloropropene	10.0	11.4	114	65-125	
1,1,2-Trichloroethane	10.0	11.5	115	77-127	
Tetrachloroethene	10.0	10.2	102	70-135	
2-Hexanone	20.0	16.1	81	25-132	
Dibromochloromethane	10.0	10.6	106	60-140	
1,2-Dibromoethane (EDB)	10.0	11.1	111	74-123	
Chlorobenzene	10.0	10.7	107	80-120	
1,1,1,2-Tetrachloroethane	10.0	12.3	123	63-140	
Ethylbenzene	10.0	10.4	104	72-126	
Xylenes, Total	20.0	20.7	104	76-128	
Styrene	10.0	10.5	105	71-127	
Bromoform	10.0	10.4	104	46-150	
1,1,2,2-Tetrachloroethane	10.0	11.4	114	62-125	
1,4-Dioxane	200	186 J	93	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50421009.D

Lab ID: LCS 180-139148/9 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	11.0	110	50-139	
Vinyl chloride	10.0	10.5	105	53-138	
Bromomethane	10.0	13.2	132	33-150	
Chloroethane	10.0	11.8	118	36-142	
1,1-Dichloroethene	10.0	9.29	93	65-136	
Acetone	20.0	17.1	86	22-150	
Carbon disulfide	10.0	5.91	59	54-132	
Methylene Chloride	10.0	10.1	101	63-129	
trans-1,2-Dichloroethene	10.0	9.55	95	73-126	
Methyl tert-butyl ether	10.0	9.15	92	64-123	
1,1-Dichloroethane	10.0	9.74	97	73-126	
cis-1,2-Dichloroethene	10.0	9.05	90	70-120	
Bromochloromethane	10.0	8.80	88	70-127	
2-Butanone (MEK)	20.0	16.6	83	39-138	
Chloroform	10.0	9.97	100	72-127	
1,1,1-Trichloroethane	10.0	10.2	102	63-133	
Carbon tetrachloride	10.0	10.8	108	55-150	
Benzene	10.0	10.2	102	80-120	
1,2-Dichloroethane	10.0	9.53	95	68-132	
Trichloroethene	10.0	9.02	90	73-120	
1,2-Dichloropropane	10.0	9.78	98	76-124	
Bromodichloromethane	10.0	8.88	89	66-130	
cis-1,3-Dichloropropene	10.0	9.47	95	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	17.5	88	45-145	
Toluene	10.0	11.2	112	80-123	
trans-1,3-Dichloropropene	10.0	11.3	113	65-125	
1,1,2-Trichloroethane	10.0	11.5	115	77-127	
Tetrachloroethene	10.0	10.9	109	70-135	
2-Hexanone	20.0	15.2	76	25-132	
Dibromochloromethane	10.0	10.4	104	60-140	
1,2-Dibromoethane (EDB)	10.0	10.7	107	74-123	
Chlorobenzene	10.0	10.7	107	80-120	
1,1,1,2-Tetrachloroethane	10.0	11.9	119	63-140	
Ethylbenzene	10.0	10.2	102	72-126	
Xylenes, Total	20.0	20.1	100	76-128	
Styrene	10.0	10.3	103	71-127	
Bromoform	10.0	9.28	93	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.9	109	62-125	
1,4-Dioxane	200	129 J	64	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.: 180-43134-1

SDG No.:

Lab File ID: 50420012.D Lab Sample ID: MB 180-139024/12

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

Instrument ID: CHHP5 Date Analyzed: 04/20/2015 11:28

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
	LCS 180-139024/10	50420010.D	04/20/2015 13:16
HD-MW-64D-0/1-0 DL	180-43134-1 DL	50420026.D	04/20/2015 19:18
HD-QC1-0/1-2	180-43134-3	50420027.D	04/20/2015 19:42
HD-MW-141A-0/1-0	180-43134-2	50420028.D	04/20/2015 20:06

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Lab File ID: 50421006.D Lab Sample ID: MB 180-139148/6

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

Instrument ID: CHHP5 Date Analyzed: 04/21/2015 12:50

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
	LCS 180-139148/9	50421009.D	04/21/2015 14:13
HD-MW-64D-0/1-0	180-43134-1	50421029.D	04/21/2015 22:16

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Lab File ID: 50316001.D BFB Injection Date: 03/16/2015

Instrument ID: CHHP5 BFB Injection Time: 10:49

Analysis Batch No.: 135593

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.7	
75	30.0 - 60.0 % of mass 95	54.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.8	(0.9)1
174	50.0 - 120.00 % of mass 95	85.5	
175	5.0 - 9.0 % of mass 174	6.4	(7.5)1
176	95.0 - 101.0 % of mass 174	83.4	(97.4)1
177	5.0 - 9.0 % of mass 176	4.9	(5.8)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 180-135593/4	50316004.D	03/16/2015	12:41
	ICIS 180-135593/5	50316005.D	03/16/2015	13:05
	IC 180-135593/6	50316006.D	03/16/2015	13:29
	IC 180-135593/7	50316007.D	03/16/2015	13:53
	IC 180-135593/8	50316008.D	03/16/2015	14:17
	IC 180-135593/9	50316009.D	03/16/2015	14:41
	IC 180-135593/10	50316010.D	03/16/2015	15:05
	IC 180-135593/13	50316013.D	03/16/2015	16:17

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Lab File ID: 50420004.D BFB Injection Date: 04/20/2015

Instrument ID: CHHP5 BFB Injection Time: 08:52

Analysis Batch No.: 139024

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.8	
75	30.0 - 60.0 % of mass 95	52.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	8.0	
173	Less than 2.0 % of mass 174	0.6	(0.8)1
174	50.0 - 120.00 % of mass 95	81.5	
175	5.0 - 9.0 % of mass 174	6.1	(7.5)1
176	95.0 - 101.0 % of mass 174	80.2	(98.3)1
177	5.0 - 9.0 % of mass 176	5.4	(6.8)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 180-139024/2	50420002.D	04/20/2015	09:32
	CCV 180-139024/3	50420003.D	04/20/2015	09:56
	MB 180-139024/12	50420012.D	04/20/2015	11:28
	LCS 180-139024/10	50420010.D	04/20/2015	13:16
HD-MW-64D-0/1-0 DL	180-43134-1 DL	50420026.D	04/20/2015	19:18
HD-QC1-0/1-2	180-43134-3	50420027.D	04/20/2015	19:42
HD-MW-141A-0/1-0	180-43134-2	50420028.D	04/20/2015	20:06

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Lab File ID: 50421004.D BFB Injection Date: 04/21/2015

Instrument ID: CHHP5 BFB Injection Time: 10:57

Analysis Batch No.: 139148

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.1	
75	30.0 - 60.0 % of mass 95	52.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.9	
173	Less than 2.0 % of mass 174	0.5	(0.6)1
174	50.0 - 120.00 % of mass 95	81.6	
175	5.0 - 9.0 % of mass 174	6.2	(7.7)1
176	95.0 - 101.0 % of mass 174	82.1	(100.6)1
177	5.0 - 9.0 % of mass 176	5.2	(6.3)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-139148/2	50421002.D	04/21/2015	11:38
	CCV 180-139148/3	50421003.D	04/21/2015	12:02
	MB 180-139148/6	50421006.D	04/21/2015	12:50
	LCS 180-139148/9	50421009.D	04/21/2015	14:13
HD-MW-64D-0/1-0	180-43134-1	50421029.D	04/21/2015	22:16

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Sample No.: CCVIS 180-139024/2 Date Analyzed: 04/20/2015 09:32

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

Lab File ID (Standard): 50420002.D Heated Purge: (Y/N) N

Calibration ID: 22514

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		167120	4.32	564131	7.28	122940	10.36
UPPER LIMIT		334240	4.82	1128262	7.78	245880	10.86
LOWER LIMIT		83560	3.82	282066	6.78	61470	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-139024/3		178705	4.30	531452	7.28	112818	10.37
MB 180-139024/12		174873	4.30	500362	7.28	107502	10.36
LCS 180-139024/10		179952	4.32	579347	7.27	131148	10.36
180-43134-1 DL	HD-MW-64D-0/1-0 DL	140192	4.30	422601	7.28	96478	10.36
180-43134-3	HD-QC1-0/1-2	141911	4.29	424778	7.28	89343	10.36
180-43134-2	HD-MW-141A-0/1-0	133135	4.31	411936	7.28	91779	10.36

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

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Sample No.: CCVIS 180-139024/2 Date Analyzed: 04/20/2015 09:32

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

Lab File ID (Standard): 50420002.D Heated Purge: (Y/N) N

Calibration ID: 22514

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		184767	12.69				
UPPER LIMIT		369534	13.19				
LOWER LIMIT		92384	12.19				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-139024/3		134086	12.69				
MB 180-139024/12		145486	12.68				
LCS 180-139024/10		189455	12.68				
180-43134-1 DL	HD-MW-64D-0/1-0 DL	124942	12.69				
180-43134-3	HD-QC1-0/1-2	118995	12.68				
180-43134-2	HD-MW-141A-0/1-0	116800	12.68				

DCB = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Sample No.: CCVIS 180-139148/2 Date Analyzed: 04/21/2015 11:38

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

Lab File ID (Standard): 50421002.D Heated Purge: (Y/N) N

Calibration ID: 22514

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		175229	4.32	603627	7.27	130536	10.36
UPPER LIMIT		350458	4.82	1207254	7.77	261072	10.86
LOWER LIMIT		87615	3.82	301814	6.77	65268	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-139148/3		167650	4.31	556504	7.28	121708	10.36
MB 180-139148/6		177829	4.30	527912	7.28	115506	10.36
LCS 180-139148/9		118836	4.32	561426	7.27	116616	10.36
180-43134-1	HD-MW-64D-0/1-0	160196	4.30	462145	7.28	106195	10.36

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

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Sample No.: CCVIS 180-139148/2 Date Analyzed: 04/21/2015 11:38

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

Lab File ID (Standard): 50421002.D Heated Purge: (Y/N) N

Calibration ID: 22514

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		192725	12.68				
UPPER LIMIT		385450	13.18				
LOWER LIMIT		96363	12.18				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-139148/3		139147	12.69				
MB 180-139148/6		151681	12.68				
LCS 180-139148/9		180594	12.68				
180-43134-1	HD-MW-64D-0/1-0	137071	12.68				

DCB = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-43134-1

SDG No.:

Client Sample ID: HD-MW-64D-0/1-0 | Lab Sample ID: 180-43134-1

Matrix: Water | Lab File ID: 50421029.D

Analysis Method: 8260C | Date Collected: 04/14/2015 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 04/21/2015 22:16

Soil Aliquot Vol: | Dilution Factor: 2.5

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

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

Analysis Batch No.: 139148 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	2.5	U	2.5	0.71
75-01-4	Vinyl chloride	2.5	U	2.5	0.57
74-83-9	Bromomethane	2.5	U	2.5	0.78
75-00-3	Chloroethane	2.5	U	2.5	0.54
75-35-4	1,1-Dichloroethene	2.5	U	2.5	0.74
67-64-1	Acetone	13	U	13	6.3
75-15-0	Carbon disulfide	2.5	U	2.5	0.53
75-09-2	Methylene Chloride	1.8	J	2.5	0.31
156-60-5	trans-1,2-Dichloroethene	2.5	U	2.5	0.42
1634-04-4	Methyl tert-butyl ether	2.5	U	2.5	0.46
75-34-3	1,1-Dichloroethane	2.5	U	2.5	0.29
156-59-2	cis-1,2-Dichloroethene	2.5	U	2.5	0.59
74-97-5	Bromochloromethane	2.5	U	2.5	0.45
78-93-3	2-Butanone (MEK)	13	U	13	1.4
67-66-3	Chloroform	2.5	U	2.5	0.43
71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	0.72
56-23-5	Carbon tetrachloride	2.5	U	2.5	0.34
71-43-2	Benzene	2.5	U	2.5	0.26
107-06-2	1,2-Dichloroethane	2.5	U	2.5	0.53
79-01-6	*Trichloroethene*	*220*	*E*	*2.5*	*0.36*
78-87-5	1,2-Dichloropropane	2.5	U	2.5	0.24
75-27-4	Bromodichloromethane	2.5	U	2.5	0.33
10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	0.47
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	13	1.3
108-88-3	Toluene	2.5	U	2.5	0.38
10061-02-6	trans-1,3-Dichloropropene	2.5	U	2.5	0.37
79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	0.50
127-18-4	*Tetrachloroethene*	*410*	*E*	*2.5*	*0.37*
591-78-6	2-Hexanone	13	U	13	0.40
124-48-1	Dibromochloromethane	2.5	U	2.5	0.34
106-93-4	1,2-Dibromoethane (EDB)	2.5	U	2.5	0.45
108-90-7	Chlorobenzene	2.5	U	2.5	0.34
630-20-6	1,1,1,2-Tetrachloroethane	2.5	U	2.5	0.69
100-41-4	Ethylbenzene	2.5	U	2.5	0.57
1330-20-7	Xylenes, Total	7.5	U	7.5	1.2
100-42-5	Styrene	2.5	U	2.5	0.24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Client Sample ID: HD-MW-64D-0/1-0 Lab Sample ID: 180-43134-1

Matrix: Water Lab File ID: 50421029.D

Analysis Method: 8260C Date Collected: 04/14/2015 13:35

Sample wt/vol: 5(mL) Date Analyzed: 04/21/2015 22:16

Soil Aliquot Vol: Dilution Factor: 2.5

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139148 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	2.5	U	2.5	0.48
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.50
107-13-1	Acrylonitrile	50	U	50	1.4
123-91-1	1,4-Dioxane	500	U	500	86

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		64-135
2037-26-5	Toluene-d8 (Surr)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	88		70-118
1868-53-7	Dibromofluoromethane (Surr)	114		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421029.D
Lims ID: 180-43134-A-1 Lab Sample ID: 180-43134-1
Client ID: HD-MW-64D-0/1-0
Sample Type: Client
Inject. Date: 21-Apr-2015 22:16:30 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 2.5000
Sample Info: 180-43134-A-1, 2.5x
Misc. Info.: 180-0006566-029
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 22-Apr-2015 08:20:27 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: fergusond Date: 22-Apr-2015 08:20:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.302	4.309	-0.007	0	160196	1000.0	
* 2 Fluorobenzene (IS)	96	7.277	7.277	0.000	98	462145	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.362	-0.001	89	106195	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.679	12.686	-0.007	97	137071	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.534	6.531	0.003	93	120089	57.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.899	6.902	-0.003	0	162342	58.6	
$ 7 Toluene-d8 (Surr)	98	8.925	8.922	0.003	94	443011	52.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.532	-0.003	88	133746	43.9	
12 Chloromethane	50		1.792				ND	
13 Vinyl chloride	62		1.914				ND	
15 Bromomethane	94		2.260				ND	
16 Chloroethane	64		2.406				ND	
22 1,1-Dichloroethene	96		3.410				ND	
24 Acetone	43		3.502				ND	
26 Carbon disulfide	76		3.672				ND	
31 Methylene Chloride	84	4.168	4.140	0.028	46	10876	3.53	M
33 Acrylonitrile	53		4.554				ND	
34 trans-1,2-Dichloroethene	96		4.560				ND	
35 Methyl tert-butyl ether	73		4.597				ND	
37 1,1-Dichloroethane	63		5.174				ND	
45 cis-1,2-Dichloroethene	96	5.969	5.941	0.028	1	1213	0.4177	
46 2-Butanone (MEK)	43		5.984				ND	
49 Chlorobromomethane	128		6.227				ND	
52 Chloroform	83	6.340	6.343	-0.002	45	3472	0.7768	M
53 1,1,1-Trichloroethane	97		6.525				ND	
56 Carbon tetrachloride	117		6.720				ND	
58 Benzene	78		6.957				ND	
59 1,2-Dichloroethane	62		6.981				ND	
64 Trichloroethene	130	7.666	7.663	0.003	96	1219651	444.5	E
67 1,2-Dichloropropane	63		7.900				ND	
70 1,4-Dioxane	88		8.058				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.198				ND	
74 cis-1,3-Dichloropropene	75		8.654				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.818				ND	
76 Toluene	91		8.989				ND	
77 trans-1,3-Dichloropropene	75		9.214				ND	
79 1,1,2-Trichloroethane	97		9.402				ND	
80 Tetrachloroethene	164	9.534	9.536	-0.002	93	1735798	815.4	E
82 2-Hexanone	43		9.652				ND	
84 Chlorodibromomethane	129		9.792				ND	
85 Ethylene Dibromide	107		9.895				ND	
87 Chlorobenzene	112		10.388				ND	
89 1,1,1,2-Tetrachloroethane	131		10.473				ND	
90 Ethylbenzene	106		10.498				ND	
91 m-Xylene & p-Xylene	106		10.619				ND	
92 o-Xylene	106		11.009				ND	
93 Styrene	104		11.027				ND	
94 Bromoform	173		11.209				ND	
99 1,1,2,2-Tetrachloroethane	83		11.672				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

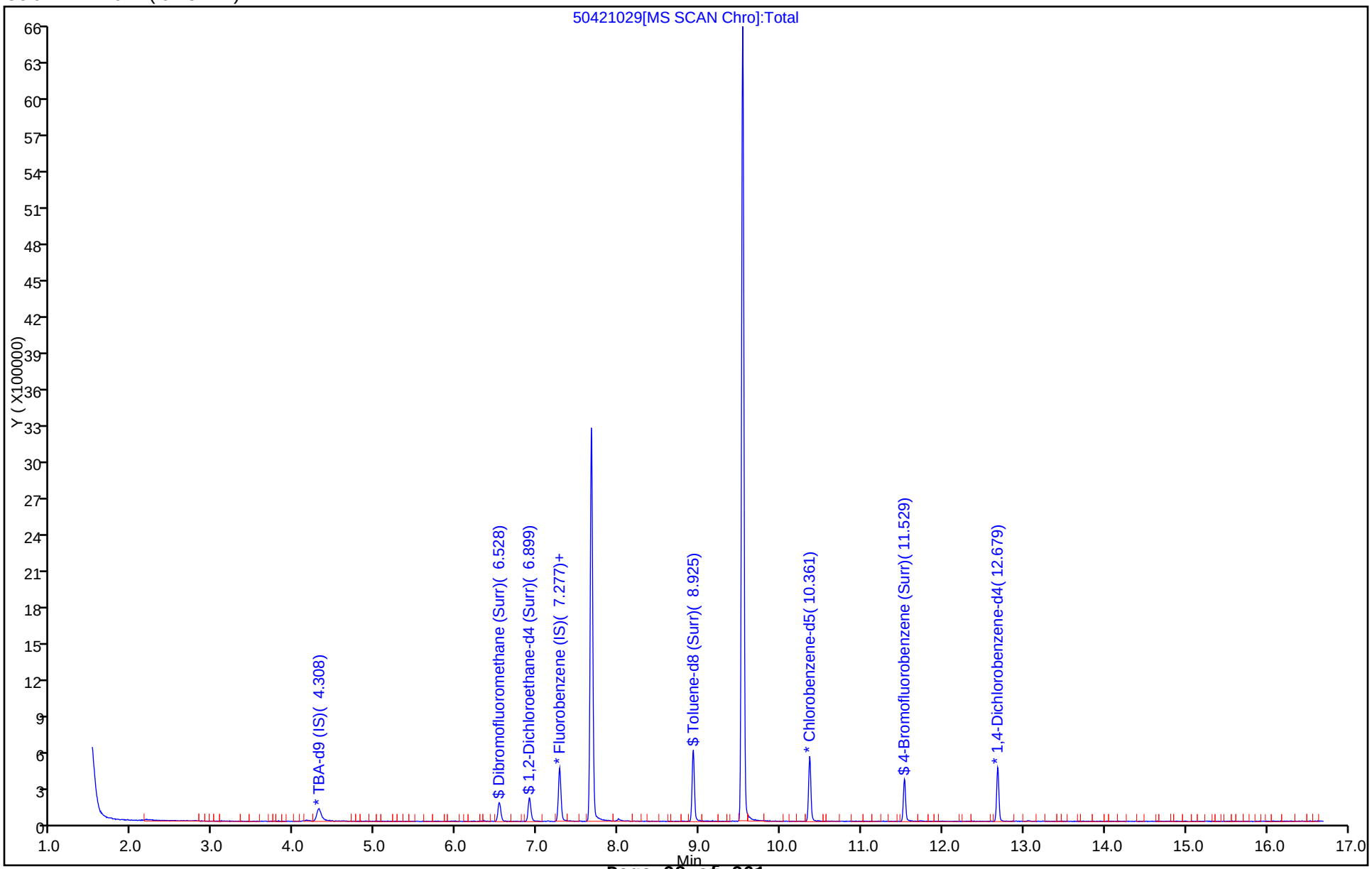
VOA8260INT_00031	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 22-Apr-2015 08:20:27 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421029.D				
Injection Date:	21-Apr-2015 22:16:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-43134-A-1	Lab Sample ID:	180-43134-1	Worklist Smp#:	29
Client ID:	HD-MW-64D-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	2.5000	ALS Bottle#:	28
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

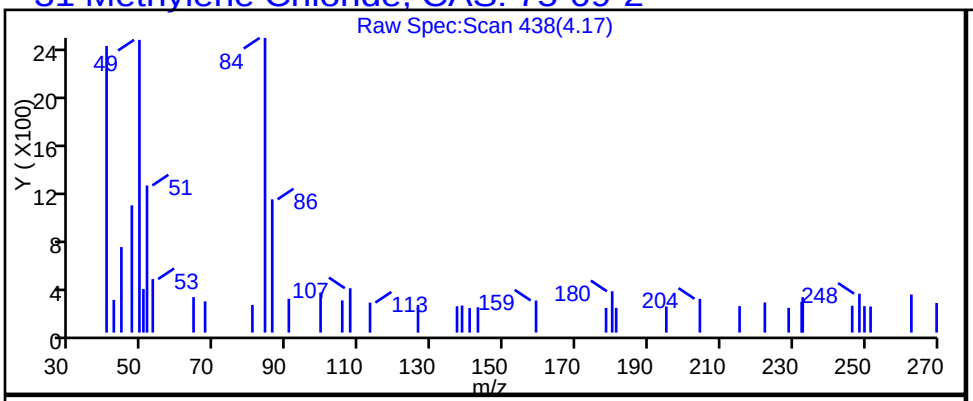


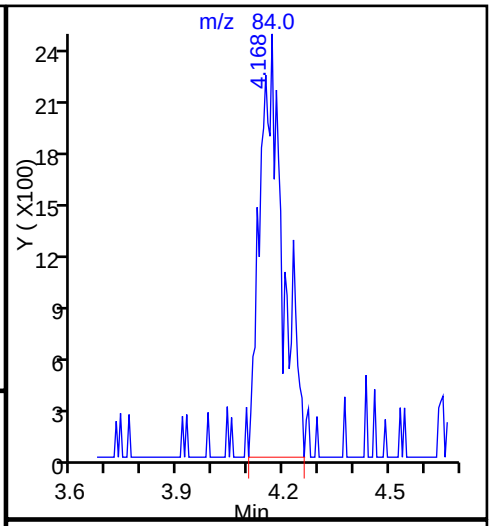
Report Date: 22-Apr-2015 08:20:27 Chrom Revision: 2.2 09-Apr-2015 10:05:40

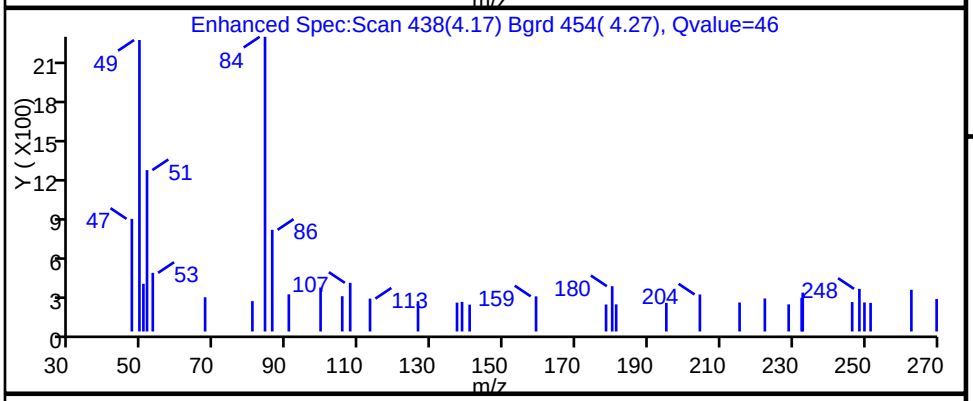
TestAmerica Pittsburgh

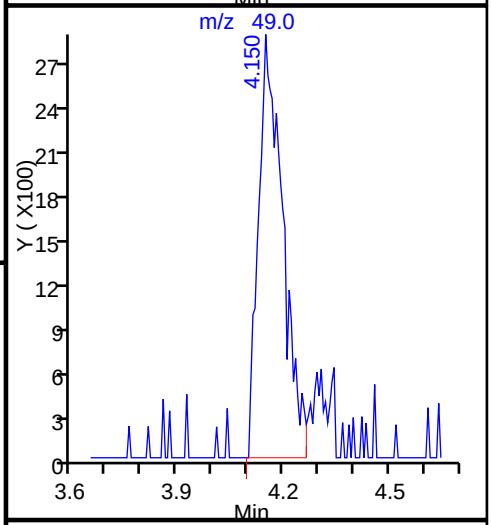
Data File:	\\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421029.D				
Injection Date:	21-Apr-2015 22:16:30	Instrument ID:	CHHP5		
Lims ID:	180-43134-A-1	Lab Sample ID:	180-43134-1		
Client ID:	HD-MW-64D-0/1-0				
Operator ID:	001562	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	2.5000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

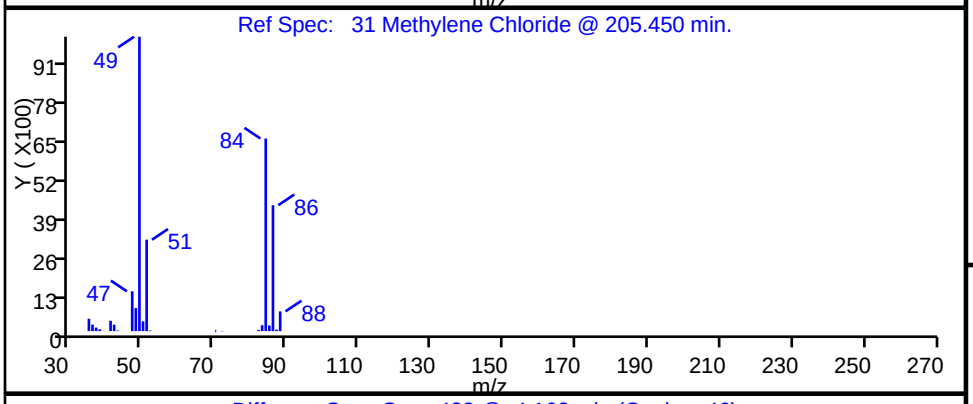
31 Methylene Chloride, CAS: 75-09-2

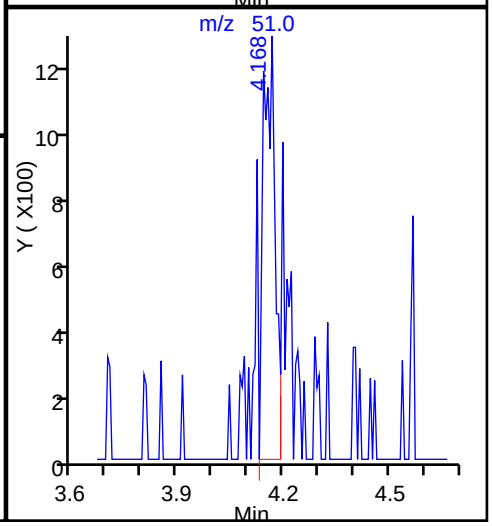


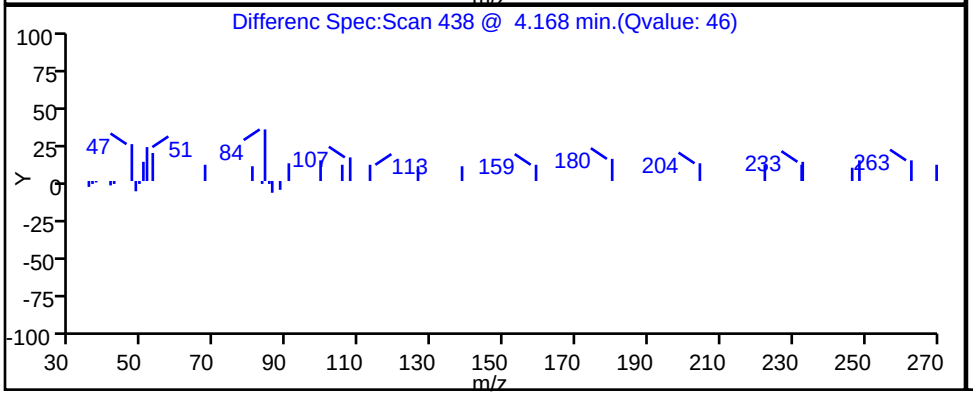










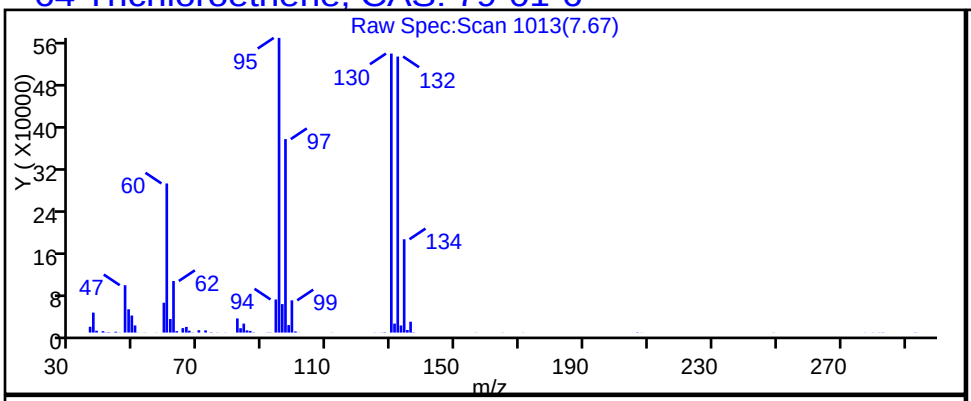


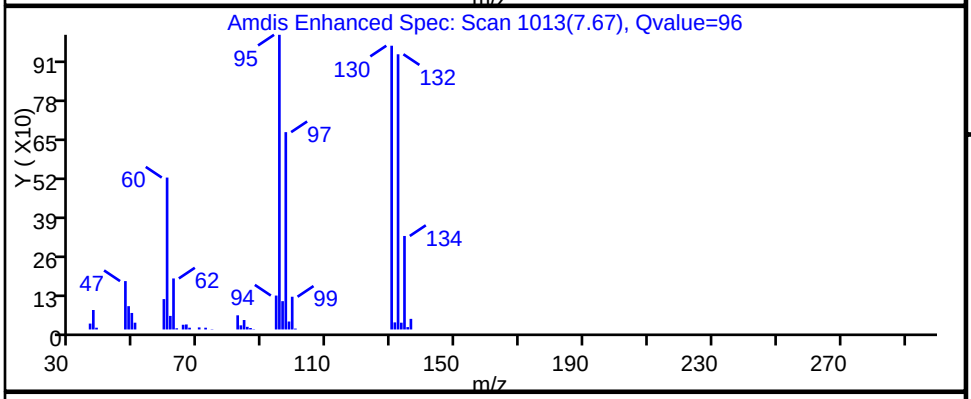
Report Date: 22-Apr-2015 08:20:27 Chrom Revision: 2.2 09-Apr-2015 10:05:40

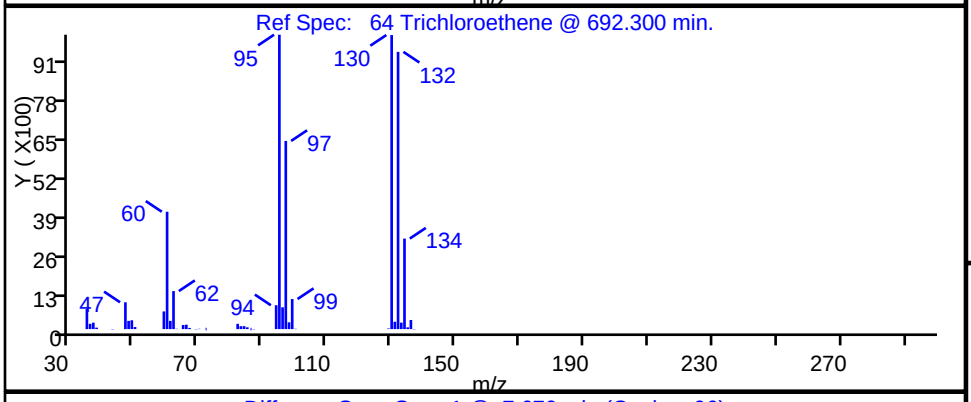
TestAmerica Pittsburgh

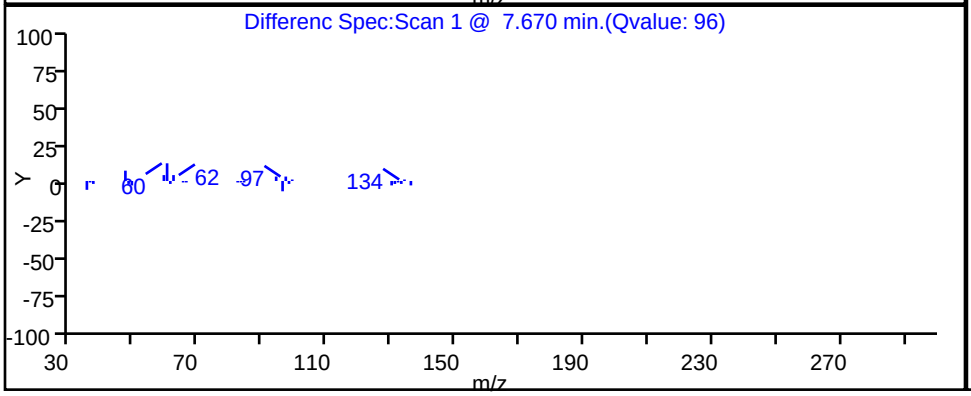
Data File:	\\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421029.D		
Injection Date:	21-Apr-2015 22:16:30	Instrument ID:	CHHP5
Lims ID:	180-43134-A-1	Lab Sample ID:	180-43134-1
Client ID:	HD-MW-64D-0/1-0		
Operator ID:	001562	ALS Bottle#:	28 Worklist Smp#: 29
Purge Vol:	5.000 mL	Dil. Factor:	2.5000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

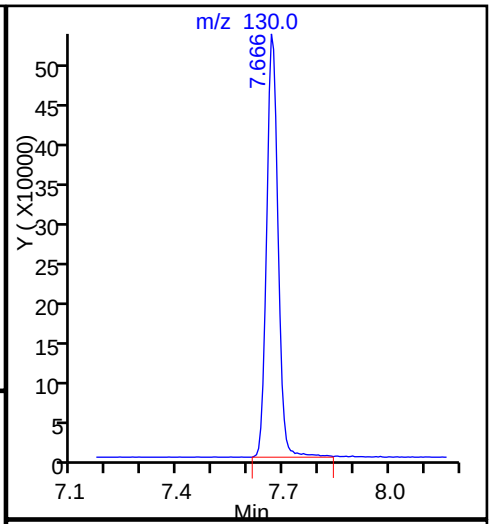
64 Trichloroethene, CAS: 79-01-6

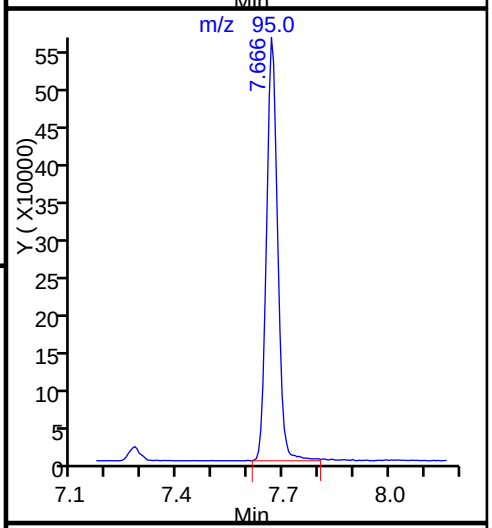


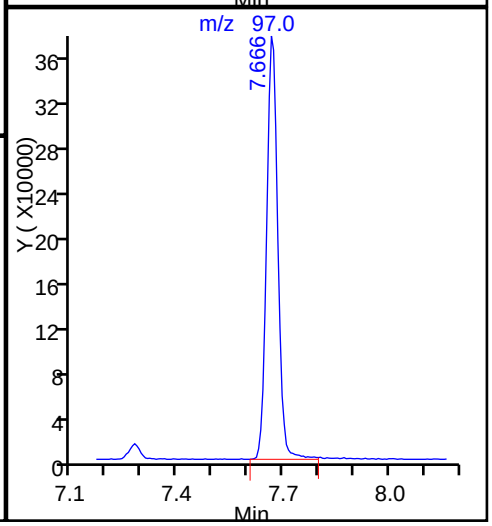










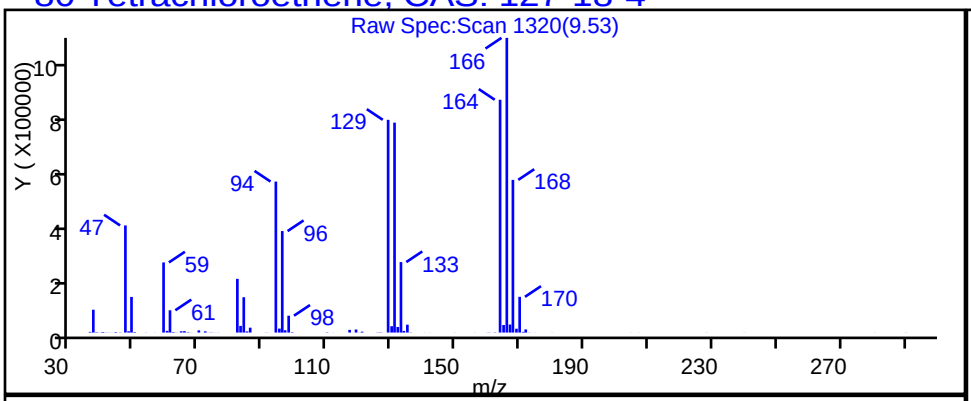


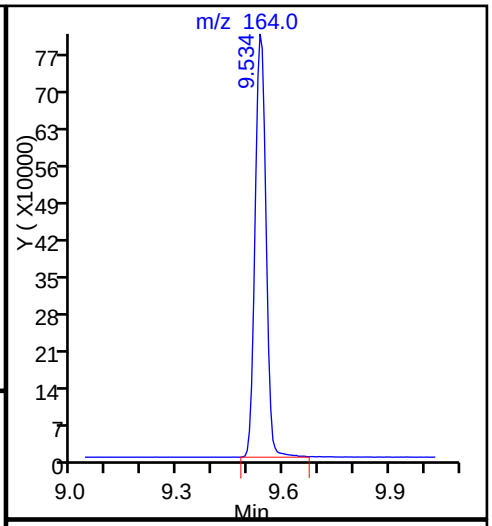
Report Date: 22-Apr-2015 08:20:27 Chrom Revision: 2.2 09-Apr-2015 10:05:40

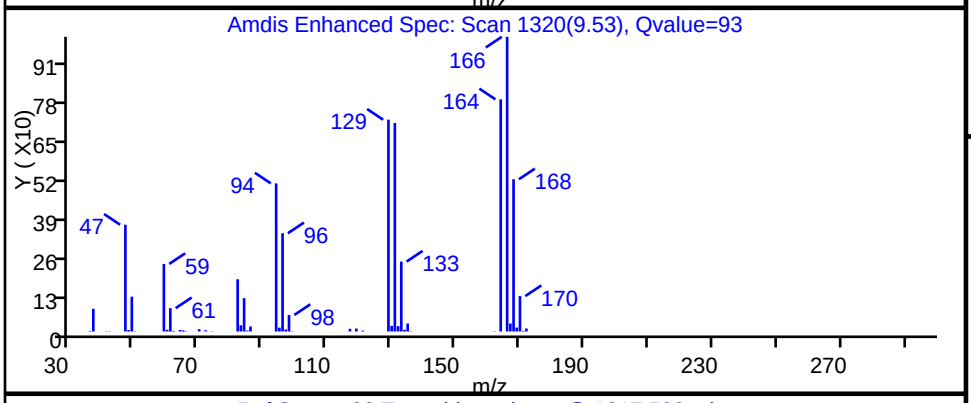
TestAmerica Pittsburgh

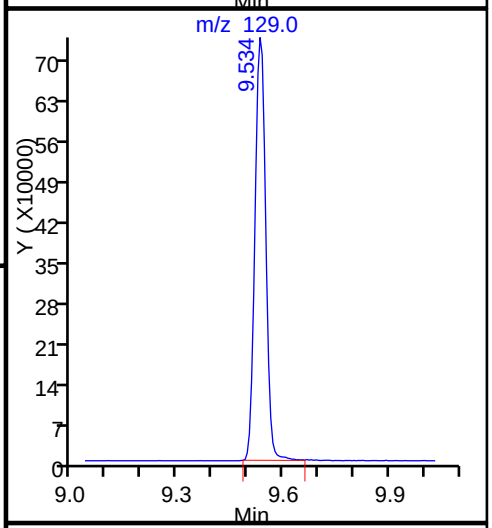
Data File:	\\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421029.D		
Injection Date:	21-Apr-2015 22:16:30	Instrument ID:	CHHP5
Lims ID:	180-43134-A-1	Lab Sample ID:	180-43134-1
Client ID:	HD-MW-64D-0/1-0		
Operator ID:	001562	ALS Bottle#:	28 Worklist Smp#: 29
Purge Vol:	5.000 mL	Dil. Factor:	2.5000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

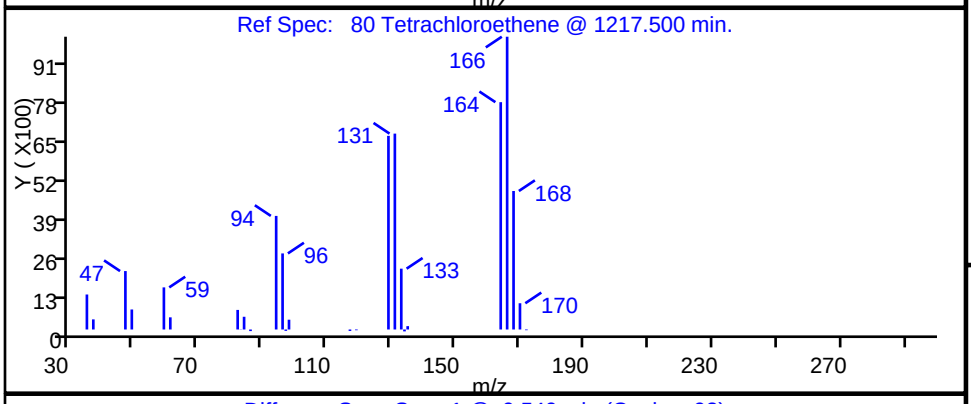
80 Tetrachloroethene, CAS: 127-18-4

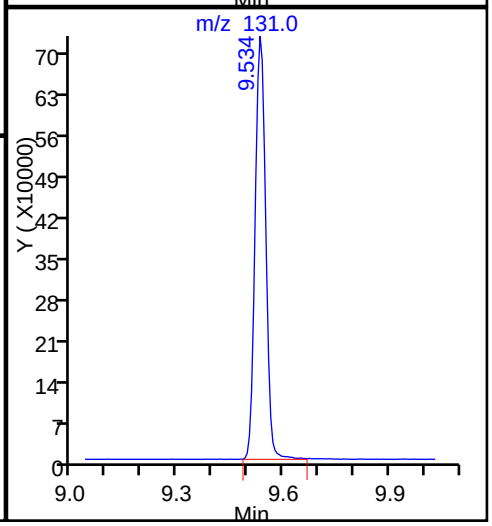


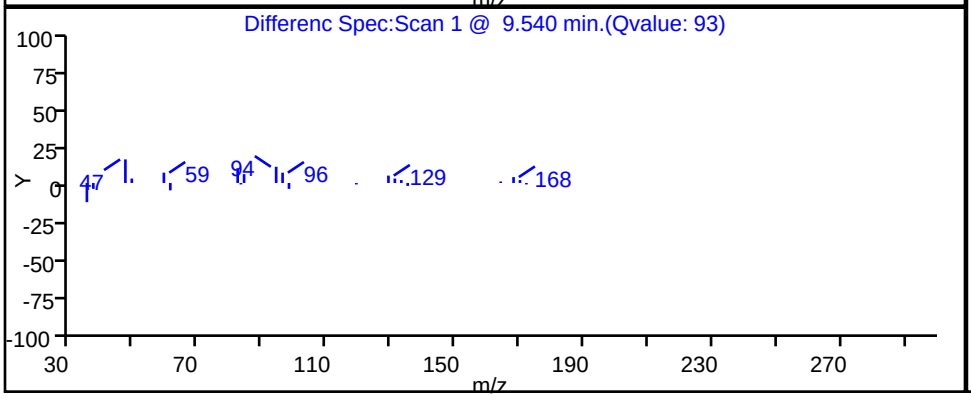












Manual Integration/User Assign Peak Report

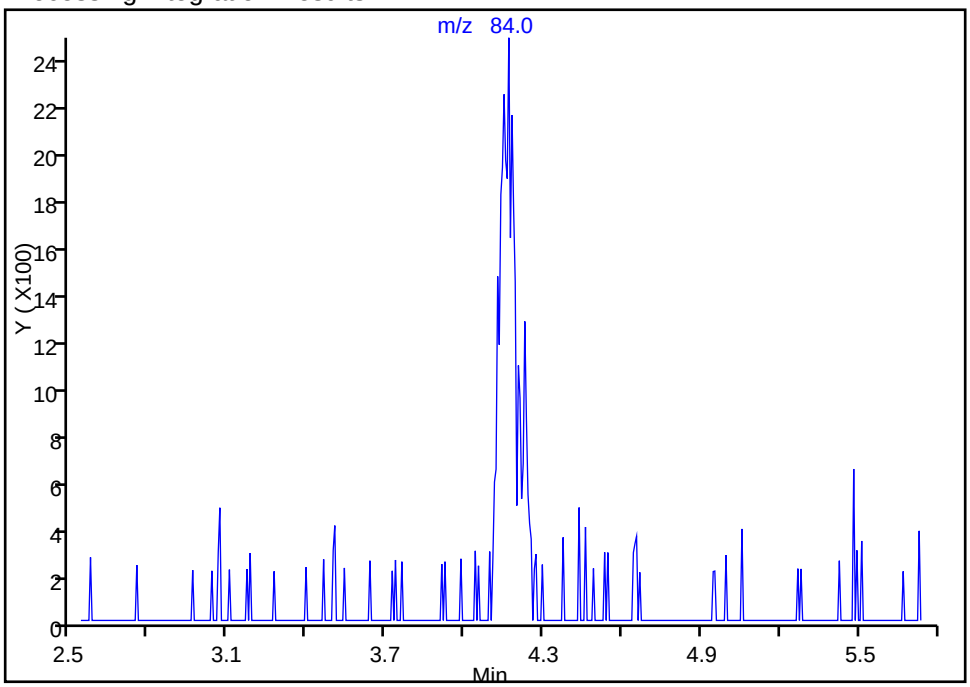
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421029.D				
Injection Date:	21-Apr-2015 22:16:30	Instrument ID:	CHHP5		
Lims ID:	180-43134-A-1	Lab Sample ID:	180-43134-1		
Client ID:	HD-MW-64D-0/1-0				
Operator ID:	001562	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	2.5000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

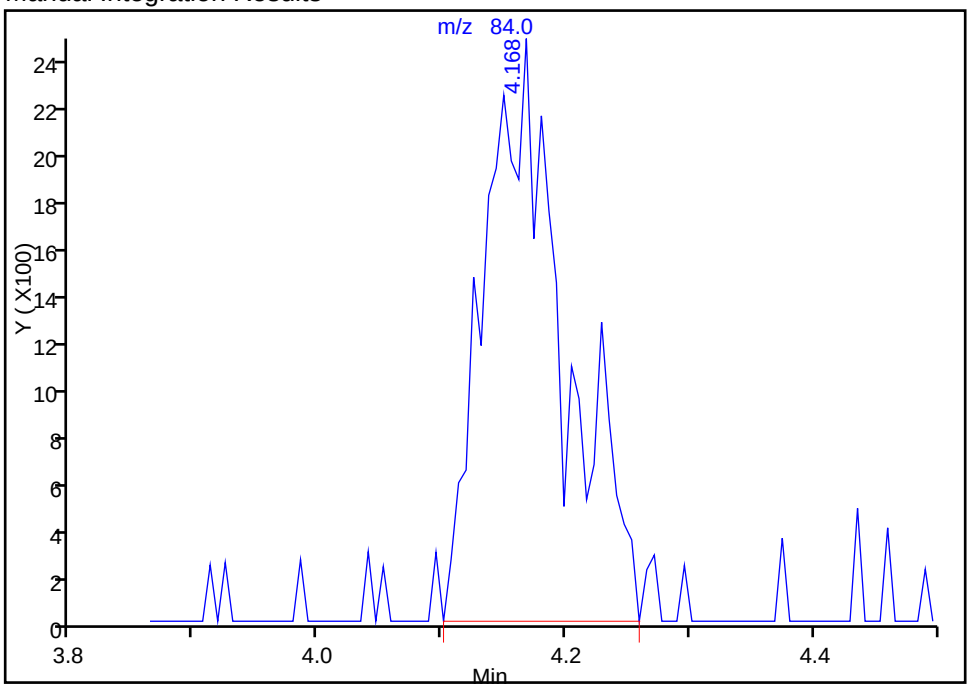
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.17
Area: 10876
Amount: 3.528812
Amount Units: ng



Reviewer: fergusond, 22-Apr-2015 08:20:27
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

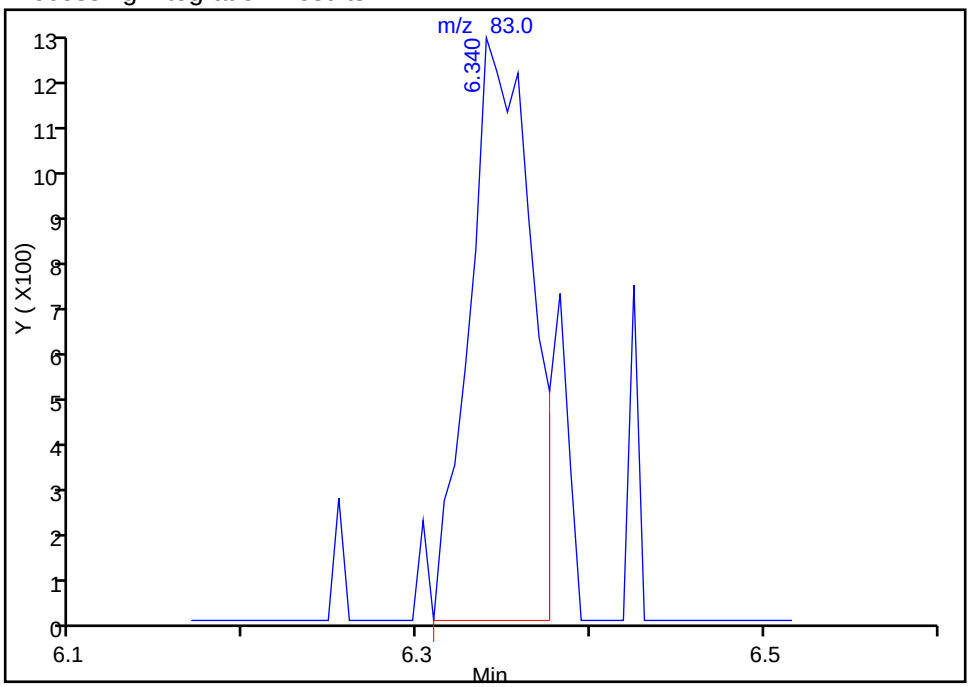
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421029.D				
Injection Date:	21-Apr-2015 22:16:30	Instrument ID:	CHHP5		
Lims ID:	180-43134-A-1	Lab Sample ID:	180-43134-1		
Client ID:	HD-MW-64D-0/1-0				
Operator ID:	001562	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	2.5000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

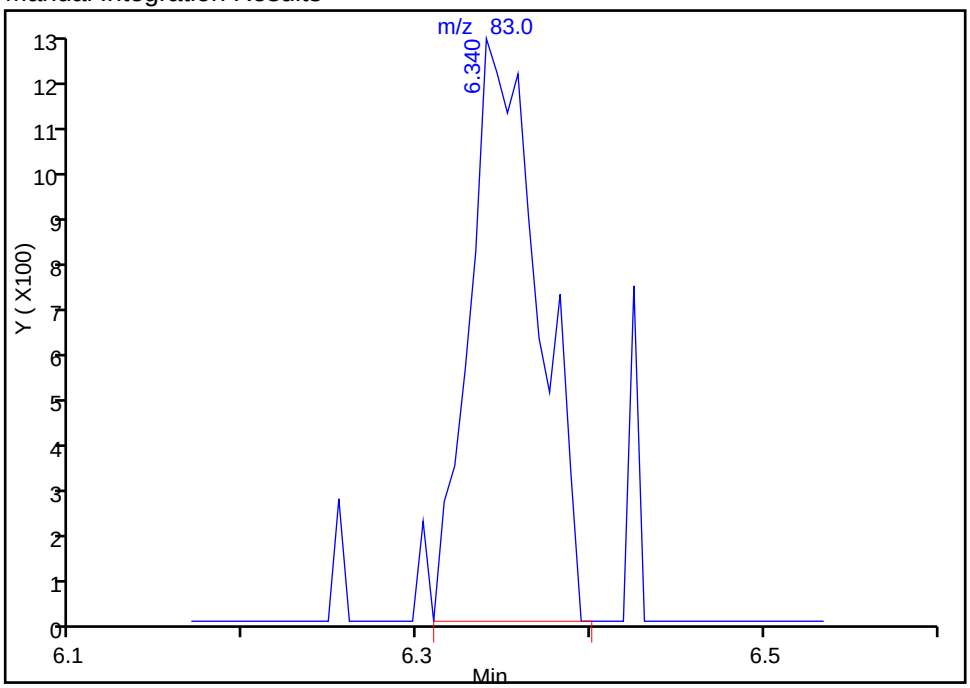
Processing Integration Results

RT: 6.34
Area: 3101
Amount: 0.693789
Amount Units: ng



Manual Integration Results

RT: 6.34
Area: 3472
Amount: 0.776793
Amount Units: ng



Reviewer: fergusond, 22-Apr-2015 08:20:27
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-43134-1

SDG No.:

Client Sample ID: HD-MW-64D-0/1-0 DL | Lab Sample ID: 180-43134-1 DL

Matrix: Water | Lab File ID: 50420026.D

Analysis Method: 8260C | Date Collected: 04/14/2015 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 04/20/2015 19:18

Soil Aliquot Vol: | Dilution Factor: 25

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

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

Analysis Batch No.: 139024 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	25	U	25	7.1
75-01-4	Vinyl chloride	25	U	25	5.7
74-83-9	Bromomethane	25	U	25	7.8
75-00-3	Chloroethane	25	U	25	5.4
75-35-4	1,1-Dichloroethene	25	U	25	7.4
67-64-1	Acetone	130	U	130	63
75-15-0	Carbon disulfide	25	U	25	5.3
75-09-2	Methylene Chloride	25	B	25	3.1
156-60-5	trans-1,2-Dichloroethene	25	U	25	4.2
1634-04-4	Methyl tert-butyl ether	25	U	25	4.6
75-34-3	1,1-Dichloroethane	25	U	25	2.9
156-59-2	cis-1,2-Dichloroethene	25	U	25	5.9
74-97-5	Bromochloromethane	25	U	25	4.5
78-93-3	2-Butanone (MEK)	130	U	130	14
67-66-3	Chloroform	25	U	25	4.3
71-55-6	1,1,1-Trichloroethane	25	U	25	7.2
56-23-5	Carbon tetrachloride	25	U	25	3.4
71-43-2	Benzene	25	U	25	2.6
107-06-2	1,2-Dichloroethane	25	U	25	5.3
79-01-6	Trichloroethene	250		25	3.6
78-87-5	1,2-Dichloropropane	25	U	25	2.4
75-27-4	Bromodichloromethane	25	U	25	3.3
10061-01-5	cis-1,3-Dichloropropene	25	U	25	4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	130	U	130	13
108-88-3	Toluene	25	U	25	3.8
10061-02-6	trans-1,3-Dichloropropene	25	U	25	3.7
79-00-5	1,1,2-Trichloroethane	25	U	25	5.0
127-18-4	Tetrachloroethene	520		25	3.7
591-78-6	2-Hexanone	130	U	130	4.0
124-48-1	Dibromochloromethane	25	U	25	3.4
106-93-4	1,2-Dibromoethane (EDB)	25	U	25	4.5
108-90-7	Chlorobenzene	25	U	25	3.4
630-20-6	1,1,1,2-Tetrachloroethane	25	U	25	6.9
100-41-4	Ethylbenzene	25	U	25	5.7
1330-20-7	Xylenes, Total	75	U	75	12
100-42-5	Styrene	25	U	25	2.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Client Sample ID: HD-MW-64D-0/1-0 DL Lab Sample ID: 180-43134-1 DL

Matrix: Water Lab File ID: 50420026.D

Analysis Method: 8260C Date Collected: 04/14/2015 13:35

Sample wt/vol: 5(mL) Date Analyzed: 04/20/2015 19:18

Soil Aliquot Vol: Dilution Factor: 25

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139024 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	*Bromoform*	*25*	*U*	*25*	*4.8*
79-34-5	*1,1,2,2-Tetrachloroethane*	*25*	*U*	*25*	*5.0*
107-13-1	*Acrylonitrile*	*500*	*U*	*500*	*14*
123-91-1	*1,4-Dioxane*	*5000*	*U*	*5000*	*860*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	125		64-135
2037-26-5	Toluene-d8 (Surr)	102		71-118
460-00-4	4-Bromofluorobenzene (Surr)	87		70-118
1868-53-7	Dibromofluoromethane (Surr)	117		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420026.D
Lims ID: 180-43134-B-1 Lab Sample ID: 180-43134-1
Client ID: HD-MW-64D-0/1-0
Sample Type: Client
Inject. Date: 20-Apr-2015 19:18:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 25.0000
Sample Info: 180-43134-B-1, 25x
Misc. Info.: 180-0006546-026
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 21-Apr-2015 08:20:21 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: fergusond Date: 21-Apr-2015 08:20:21

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.297	4.302	-0.005	0	140192	1000.0	
*	2 Fluorobenzene (IS)	96	7.278	7.277	0.001	98	422601	50.0	
*	3 Chlorobenzene-d5	119	10.363	10.367	-0.004	89	96478	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.686	12.685	0.001	97	124942	50.0	
$	5 Dibromofluoromethane (Surr	113	6.530	6.529	0.001	92	112683	58.6	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.907	6.901	0.007	0	158878	62.7	
$	7 Toluene-d8 (Surr)	98	8.927	8.920	0.007	94	393482	51.2	
$	8 4-Bromofluorobenzene (Surr	95	11.531	11.530	0.001	89	120886	43.6	
	12 Chloromethane	50		1.790				ND	
	13 Vinyl chloride	62		1.918				ND	
	15 Bromomethane	94		2.265				ND	
	16 Chloroethane	64		2.405				ND	
	22 1,1-Dichloroethene	96		3.396				ND	
	24 Acetone	43		3.512				ND	
	26 Carbon disulfide	76		3.688				ND	
	31 Methylene Chloride	84	4.157	4.145	0.012	81	14204	5.04	M
	33 Acrylonitrile	53		4.552				ND	
	34 trans-1,2-Dichloroethene	96		4.564				ND	
	35 Methyl tert-butyl ether	73		4.595				ND	
	37 1,1-Dichloroethane	63		5.173				ND	
	45 cis-1,2-Dichloroethene	96		5.939				ND	
	46 2-Butanone (MEK)	43		5.988				ND	
	49 Chlorobromomethane	128		6.231				ND	
	52 Chloroform	83		6.347				ND	
	53 1,1,1-Trichloroethane	97		6.536				ND	
	56 Carbon tetrachloride	117		6.718				ND	
	58 Benzene	78		6.955				ND	
	59 1,2-Dichloroethane	62		6.986				ND	
	64 Trichloroethene	130	7.674	7.673	0.001	97	127359	50.8	
	67 1,2-Dichloropropane	63		7.898				ND	
	70 1,4-Dioxane	88		8.062				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.196				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823				ND	
76 Toluene	91		8.987				ND	
77 trans-1,3-Dichloropropene	75		9.218				ND	
79 1,1,2-Trichloroethane	97		9.401				ND	
80 Tetrachloroethene	164	9.535	9.535	0.000	96	200843	103.9	
82 2-Hexanone	43		9.656				ND	
84 Chlorodibromomethane	129		9.784				ND	
85 Ethylene Dibromide	107		9.900				ND	
87 Chlorobenzene	112		10.392				ND	
89 1,1,1,2-Tetrachloroethane	131		10.472				ND	
90 Ethylbenzene	106		10.502				ND	
91 m-Xylene & p-Xylene	106		10.618				ND	
92 o-Xylene	106		11.013				ND	
93 Styrene	104		11.025				ND	
94 Bromoform	173		11.208				ND	
99 1,1,2,2-Tetrachloroethane	83		11.670				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

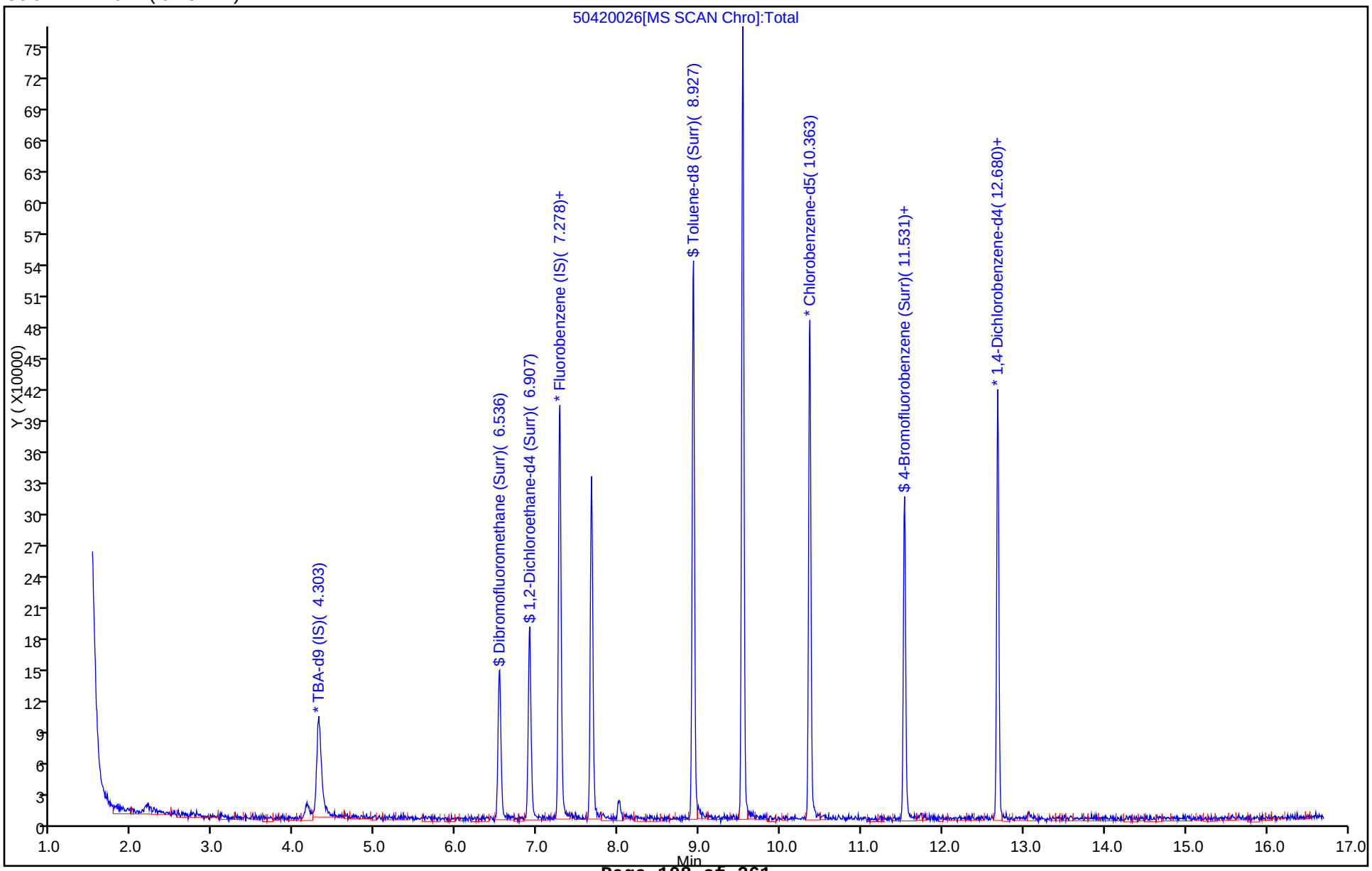
VOA8260INT_00031	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 21-Apr-2015 08:20:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420026.D				
Injection Date:	20-Apr-2015 19:18:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-43134-B-1	Lab Sample ID:	180-43134-1	Worklist Smp#:	26
Client ID:	HD-MW-64D-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	25.0000	ALS Bottle#:	25
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

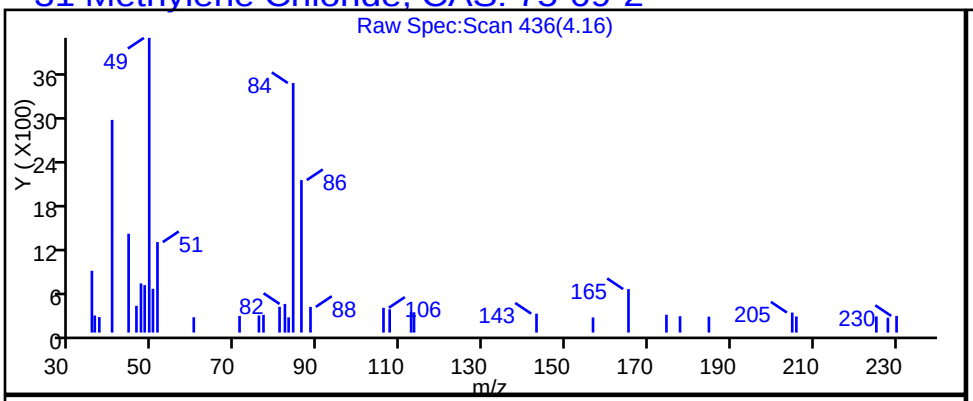


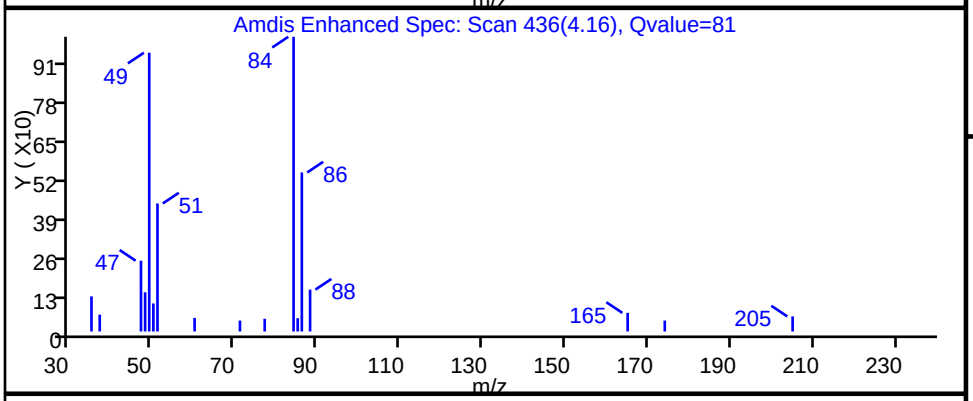
Report Date: 21-Apr-2015 08:20:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

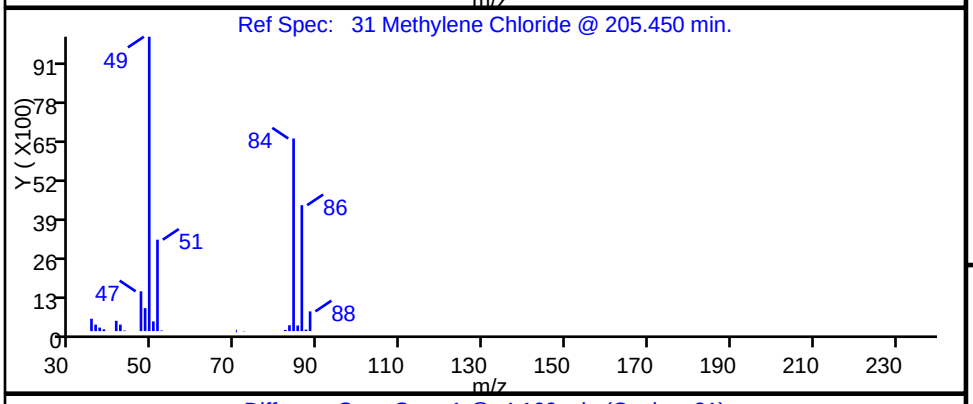
TestAmerica Pittsburgh

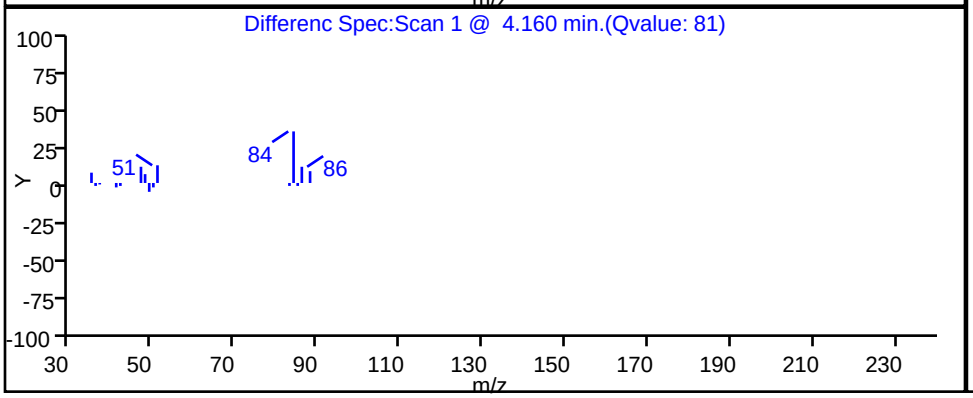
Data File:	\\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420026.D		
Injection Date:	20-Apr-2015 19:18:30	Instrument ID:	CHHP5
Lims ID:	180-43134-B-1	Lab Sample ID:	180-43134-1
Client ID:	HD-MW-64D-0/1-0		
Operator ID:	001562	ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	25.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

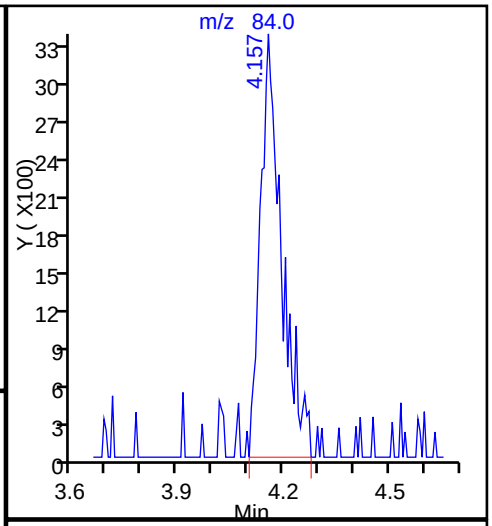
31 Methylene Chloride, CAS: 75-09-2

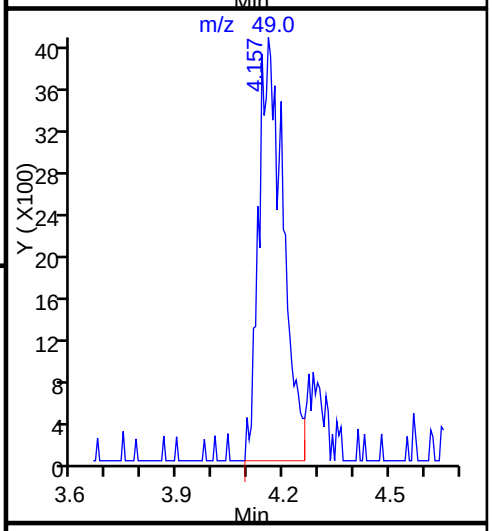


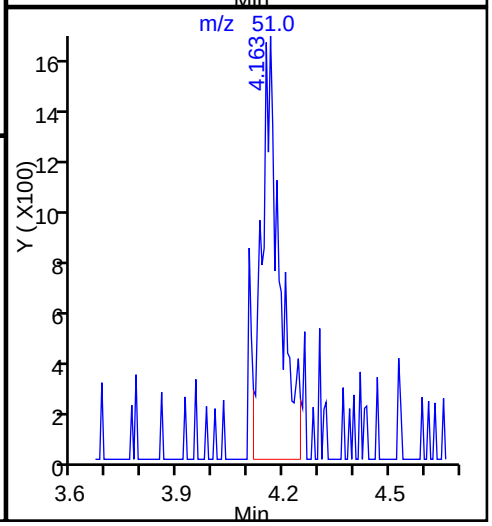










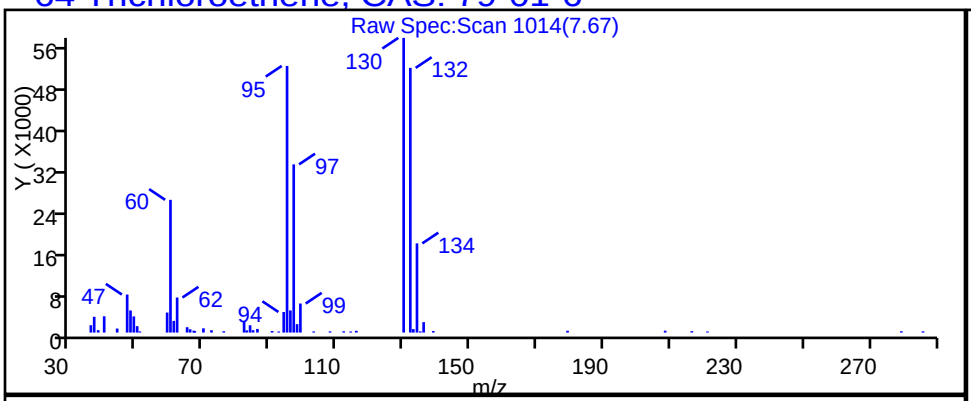


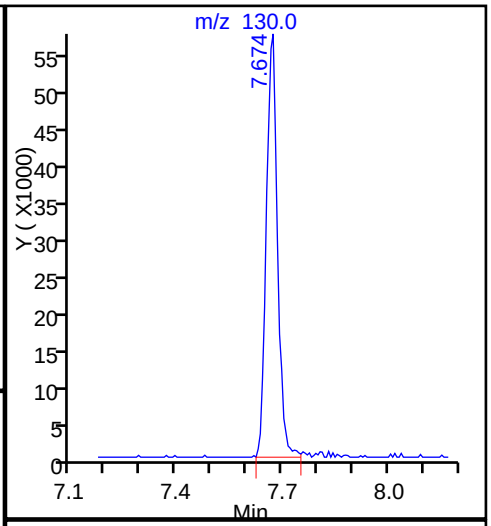
Report Date: 21-Apr-2015 08:20:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

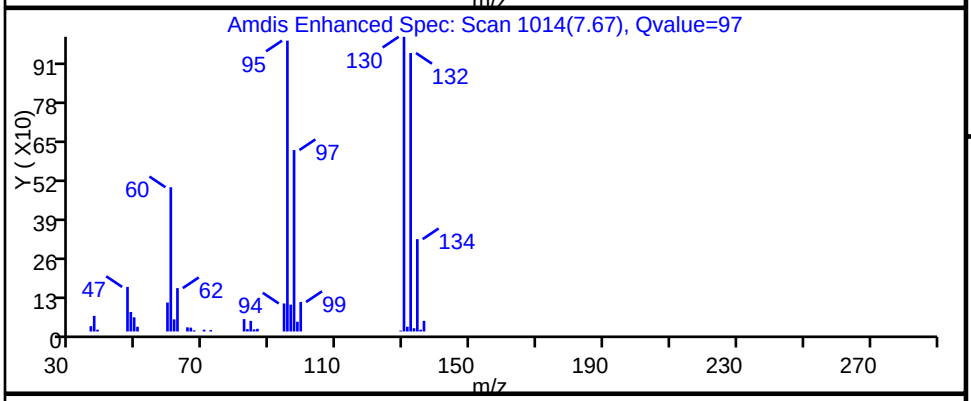
TestAmerica Pittsburgh

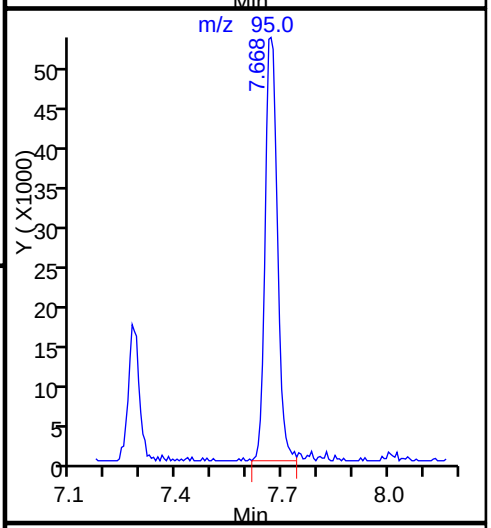
Data File:	\\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420026.D		
Injection Date:	20-Apr-2015 19:18:30	Instrument ID:	CHHP5
Lims ID:	180-43134-B-1	Lab Sample ID:	180-43134-1
Client ID:	HD-MW-64D-0/1-0		
Operator ID:	001562	ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	25.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

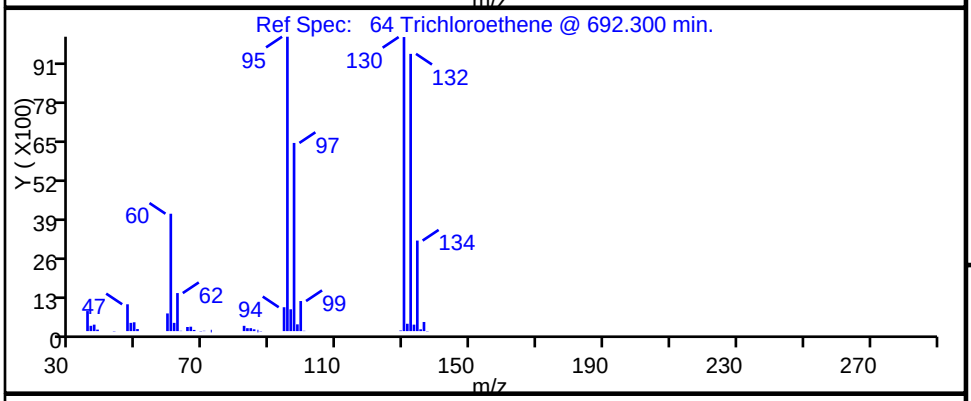
64 Trichloroethene, CAS: 79-01-6

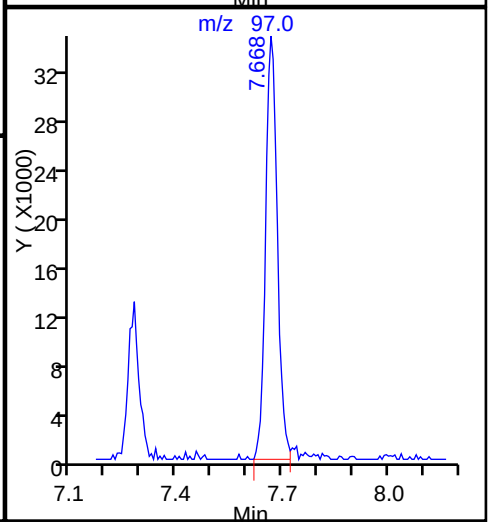


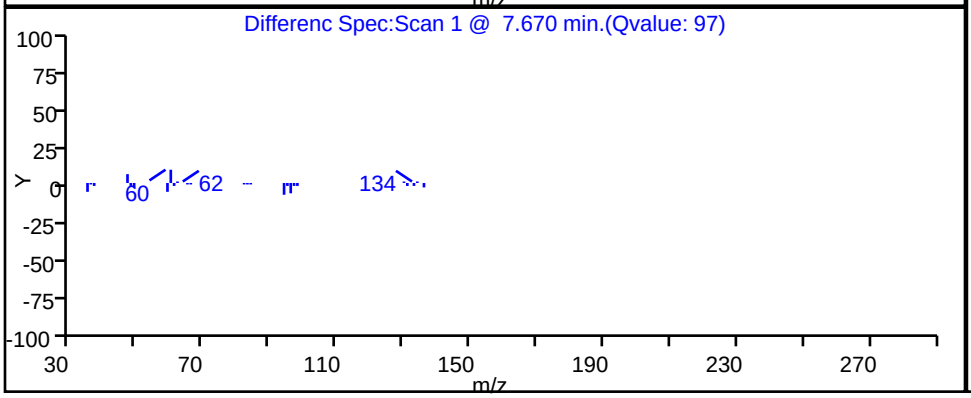












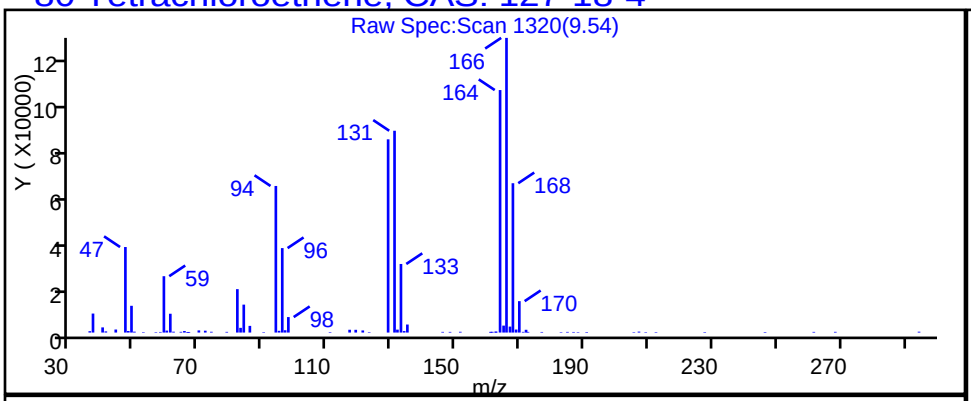
Report Date: 21-Apr-2015 08:20:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

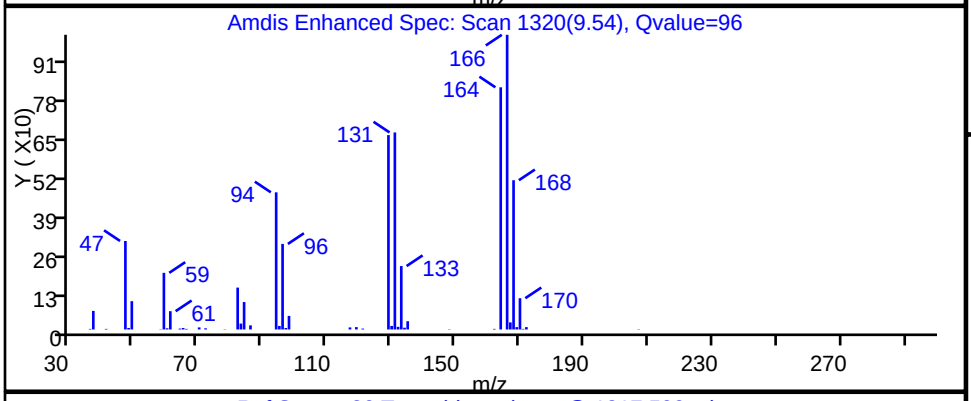
TestAmerica Pittsburgh

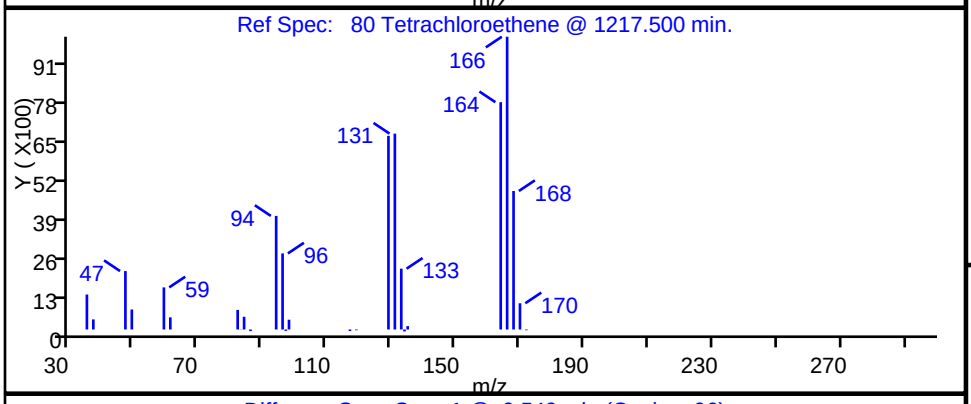
Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420026.D

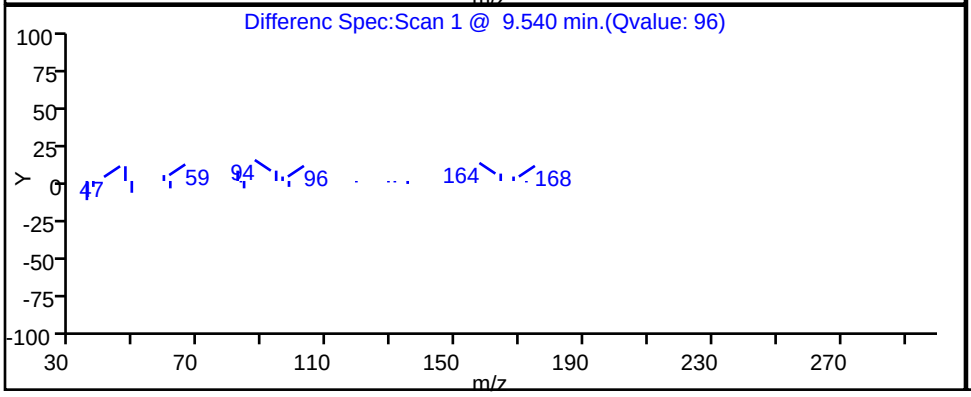
Injection Date:	20-Apr-2015 19:18:30	Instrument ID:	CHHP5
Lims ID:	180-43134-B-1	Lab Sample ID:	180-43134-1
Client ID:	HD-MW-64D-0/1-0		
Operator ID:	001562	ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	25.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

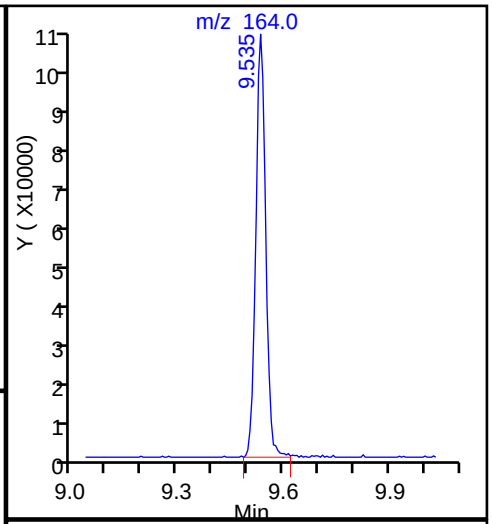
80 Tetrachloroethene, CAS: 127-18-4

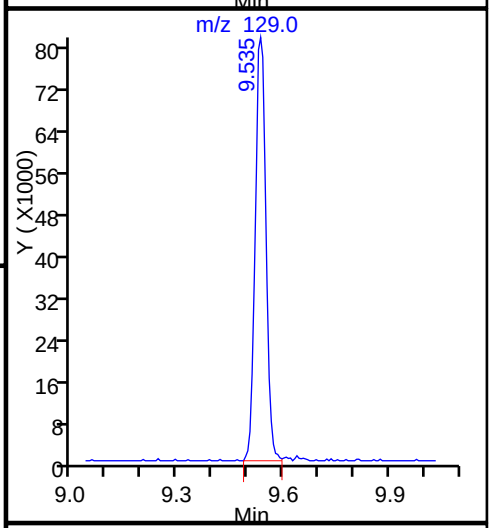


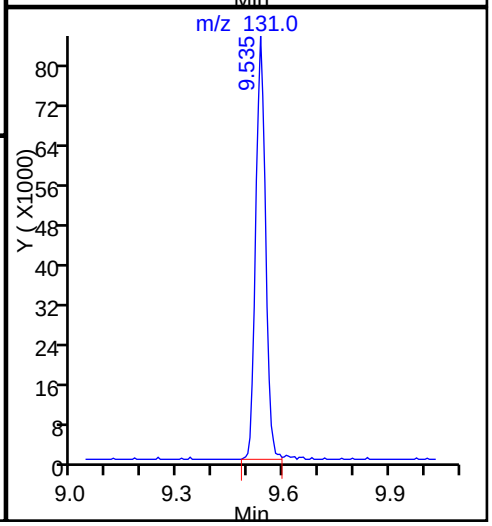












Manual Integration/User Assign Peak Report

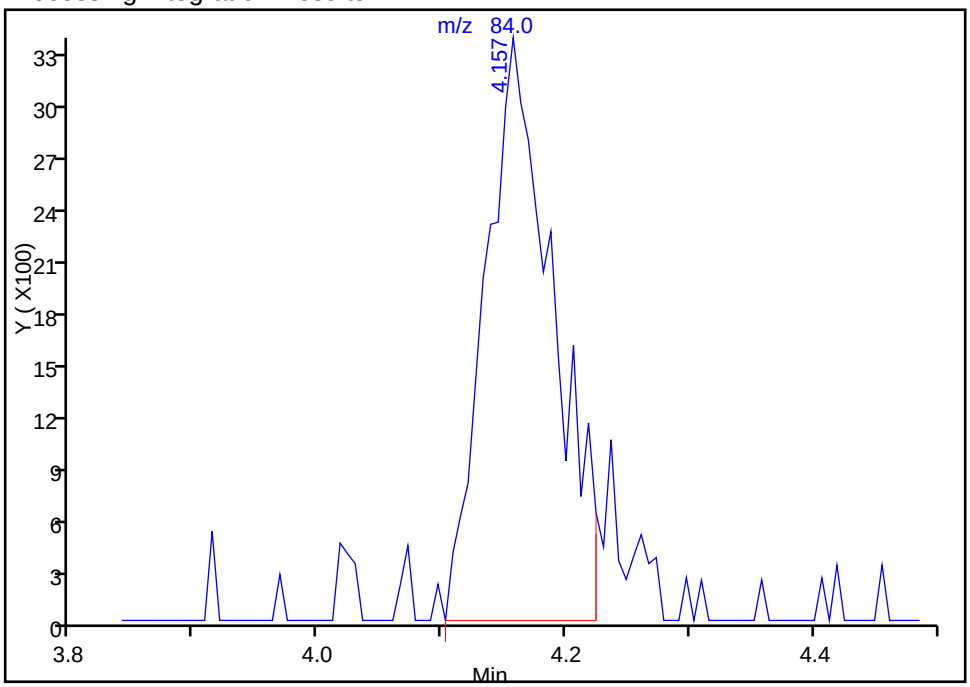
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420026.D				
Injection Date:	20-Apr-2015 19:18:30	Instrument ID:	CHHP5		
Lims ID:	180-43134-B-1	Lab Sample ID:	180-43134-1		
Client ID:	HD-MW-64D-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	25.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

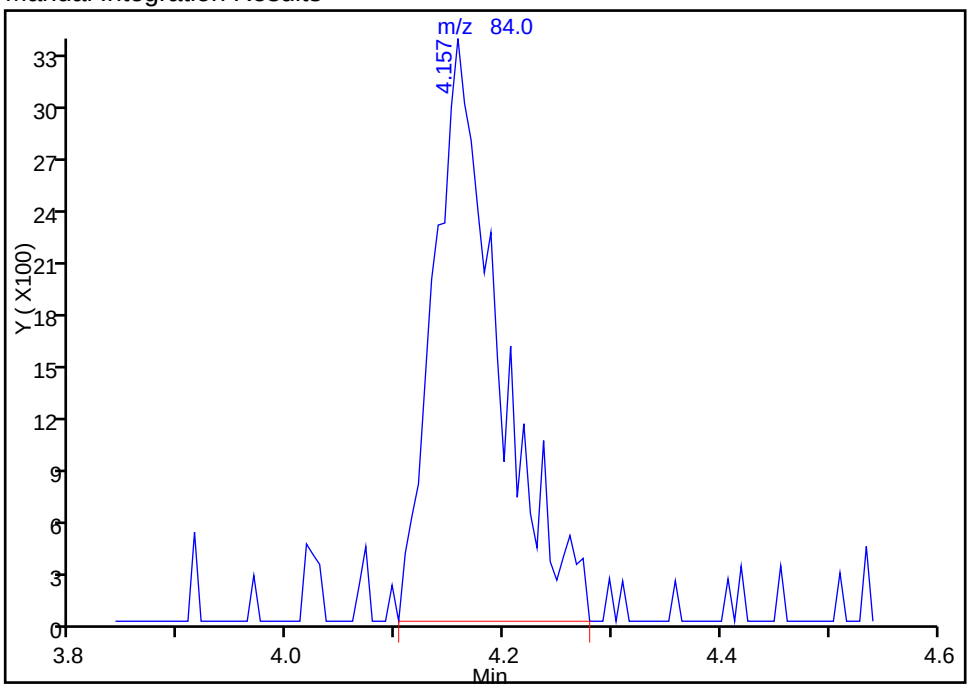
Processing Integration Results

RT: 4.16
Area: 12877
Amount: 4.569006
Amount Units: ng



Manual Integration Results

RT: 4.16
Area: 14204
Amount: 5.039851
Amount Units: ng



Reviewer: fergusond, 21-Apr-2015 08:20:21
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Client Sample ID: HD-MW-141A-0/1-0 Lab Sample ID: 180-43134-2

Matrix: Water Lab File ID: 50420028.D

Analysis Method: 8260C Date Collected: 04/15/2015 09:32

Sample wt/vol: 5(mL) Date Analyzed: 04/20/2015 20:06

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139024 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	5.3		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	1.4		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	2.6		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	6.9		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.: 180-43134-1

SDG No.:

Client Sample ID: HD-MW-141A-0/1-0 Lab Sample ID: 180-43134-2

Matrix: Water Lab File ID: 50420028.D

Analysis Method: 8260C Date Collected: 04/15/2015 09:32

Sample wt/vol: 5(mL) Date Analyzed: 04/20/2015 20:06

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139024 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)	122		64-135
2037-26-5	Toluene-d8 (Surr)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	90		70-118
1868-53-7	Dibromofluoromethane (Surr)	117		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420028.D
Lims ID: 180-43134-A-2 Lab Sample ID: 180-43134-2
Client ID: HD-MW-141A-0/1-0
Sample Type: Client
Inject. Date: 20-Apr-2015 20:06:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-43134-A-2
Misc. Info.: 180-0006546-028
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 21-Apr-2015 08:22:27 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: fergusond Date: 21-Apr-2015 08:22:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.314	4.302	0.012	0	133135	1000.0	
* 2 Fluorobenzene (IS)	96	7.277	7.277	0.000	98	411936	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.367	-0.006	89	91779	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.679	12.685	-0.006	98	116800	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.535	6.529	0.006	93	109366	58.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.901	0.006	0	150838	61.1	
$ 7 Toluene-d8 (Surr)	98	8.925	8.920	0.005	94	382834	52.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.530	-0.001	87	118306	44.9	
12 Chloromethane	50		1.790				ND	
13 Vinyl chloride	62		1.918				ND	
15 Bromomethane	94		2.265				ND	
16 Chloroethane	64		2.405				ND	
22 1,1-Dichloroethene	96		3.396				ND	
24 Acetone	43	3.499	3.512	-0.013	99	22187	26.3	
26 Carbon disulfide	76		3.688				ND	
31 Methylene Chloride	84		4.145				ND	
33 Acrylonitrile	53		4.552				ND	
34 trans-1,2-Dichloroethene	96		4.564				ND	
35 Methyl tert-butyl ether	73		4.595				ND	
37 1,1-Dichloroethane	63		5.173				ND	
45 cis-1,2-Dichloroethene	96	5.951	5.939	0.011	82	18296	7.07	
46 2-Butanone (MEK)	43		5.988				ND	
49 Chlorobromomethane	128		6.231				ND	
52 Chloroform	83		6.347				ND	
53 1,1,1-Trichloroethane	97		6.536				ND	
56 Carbon tetrachloride	117		6.718				ND	
58 Benzene	78		6.955				ND	
59 1,2-Dichloroethane	62		6.986				ND	
64 Trichloroethene	130	7.666	7.673	-0.007	97	31606	12.9	
67 1,2-Dichloropropane	63		7.898				ND	
70 1,4-Dioxane	88		8.062				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.196				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823				ND	
76 Toluene	91		8.987				ND	
77 trans-1,3-Dichloropropene	75		9.218				ND	
79 1,1,2-Trichloroethane	97		9.401				ND	
80 Tetrachloroethene	164	9.534	9.535	-0.001	97	63236	34.4	
82 2-Hexanone	43		9.656				ND	
84 Chlorodibromomethane	129		9.784				ND	
85 Ethylene Dibromide	107		9.900				ND	
87 Chlorobenzene	112		10.392				ND	
89 1,1,1,2-Tetrachloroethane	131		10.472				ND	
90 Ethylbenzene	106		10.502				ND	
91 m-Xylene & p-Xylene	106		10.618				ND	
92 o-Xylene	106		11.013				ND	
93 Styrene	104		11.025				ND	
94 Bromoform	173		11.208				ND	
99 1,1,2,2-Tetrachloroethane	83		11.670				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00031	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added:	2.00	Units: uL	Run Reagent

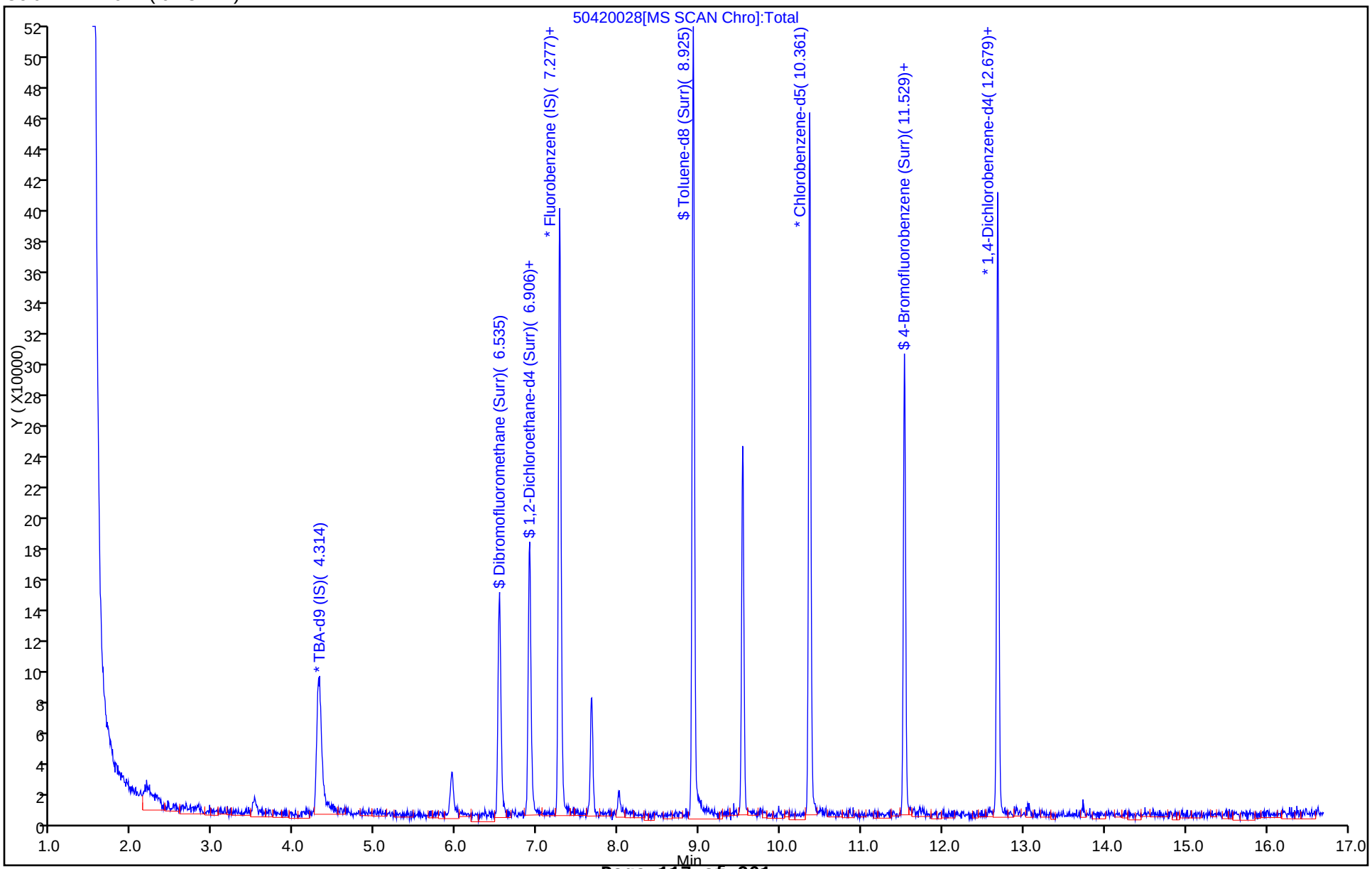
Report Date: 21-Apr-2015 08:22:28 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420028.D

Injection Date:	20-Apr-2015 20:06:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-43134-A-2	Lab Sample ID:	180-43134-2	Worklist Smp#:	28
Client ID:	HD-MW-141A-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

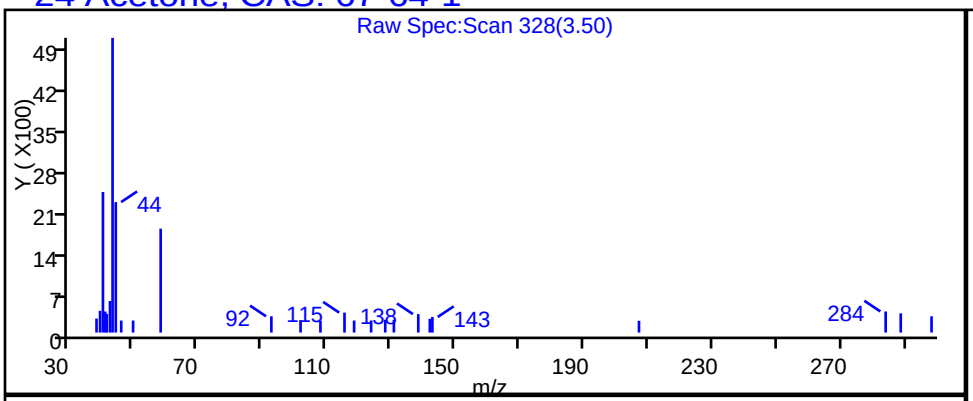


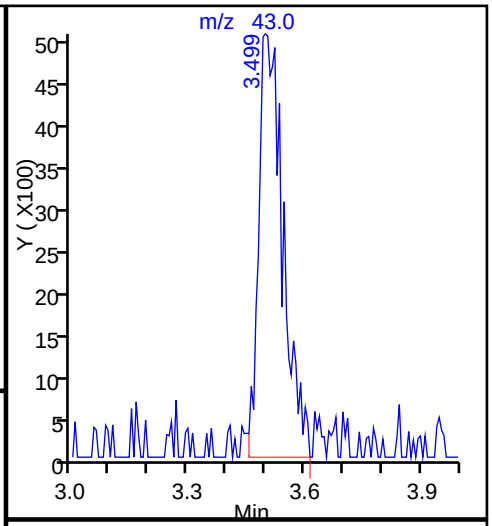
Report Date: 21-Apr-2015 08:22:28 Chrom Revision: 2.2 09-Apr-2015 10:05:40

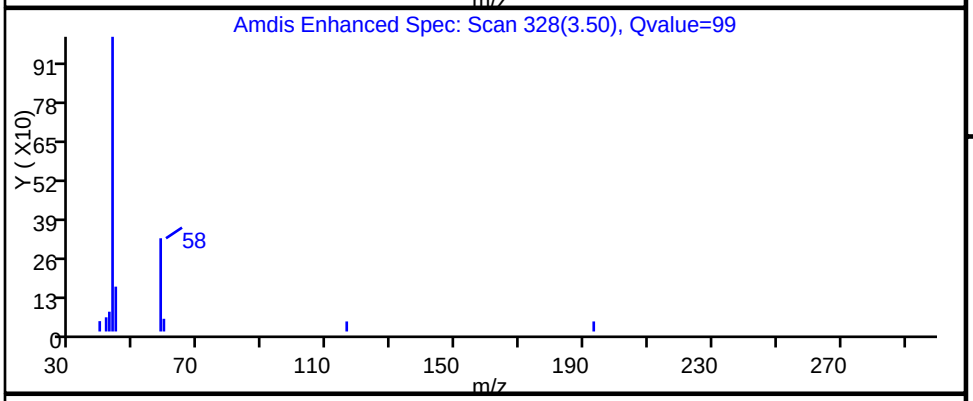
TestAmerica Pittsburgh

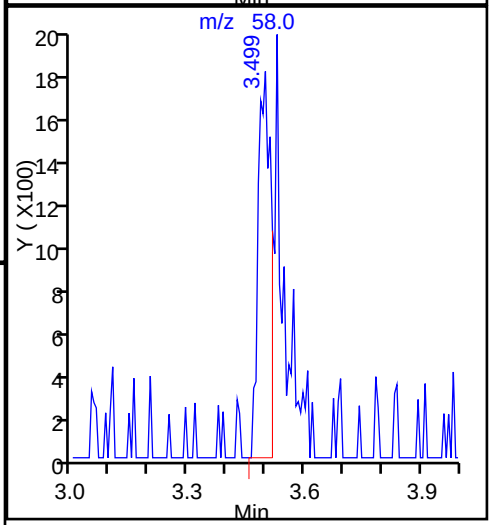
Data File:	\\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420028.D		
Injection Date:	20-Apr-2015 20:06:30	Instrument ID:	CHHP5
Lims ID:	180-43134-A-2	Lab Sample ID:	180-43134-2
Client ID:	HD-MW-141A-0/1-0		
Operator ID:	001562	ALS Bottle#:	27 Worklist Smp#: 28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

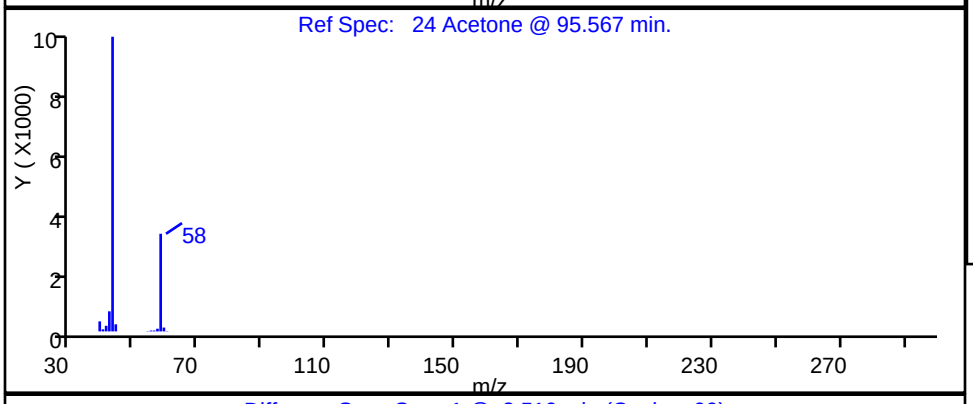
24 Acetone, CAS: 67-64-1

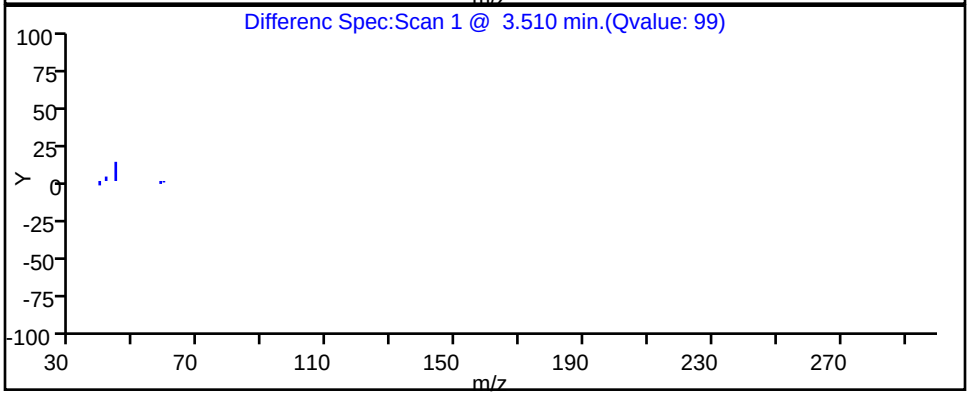












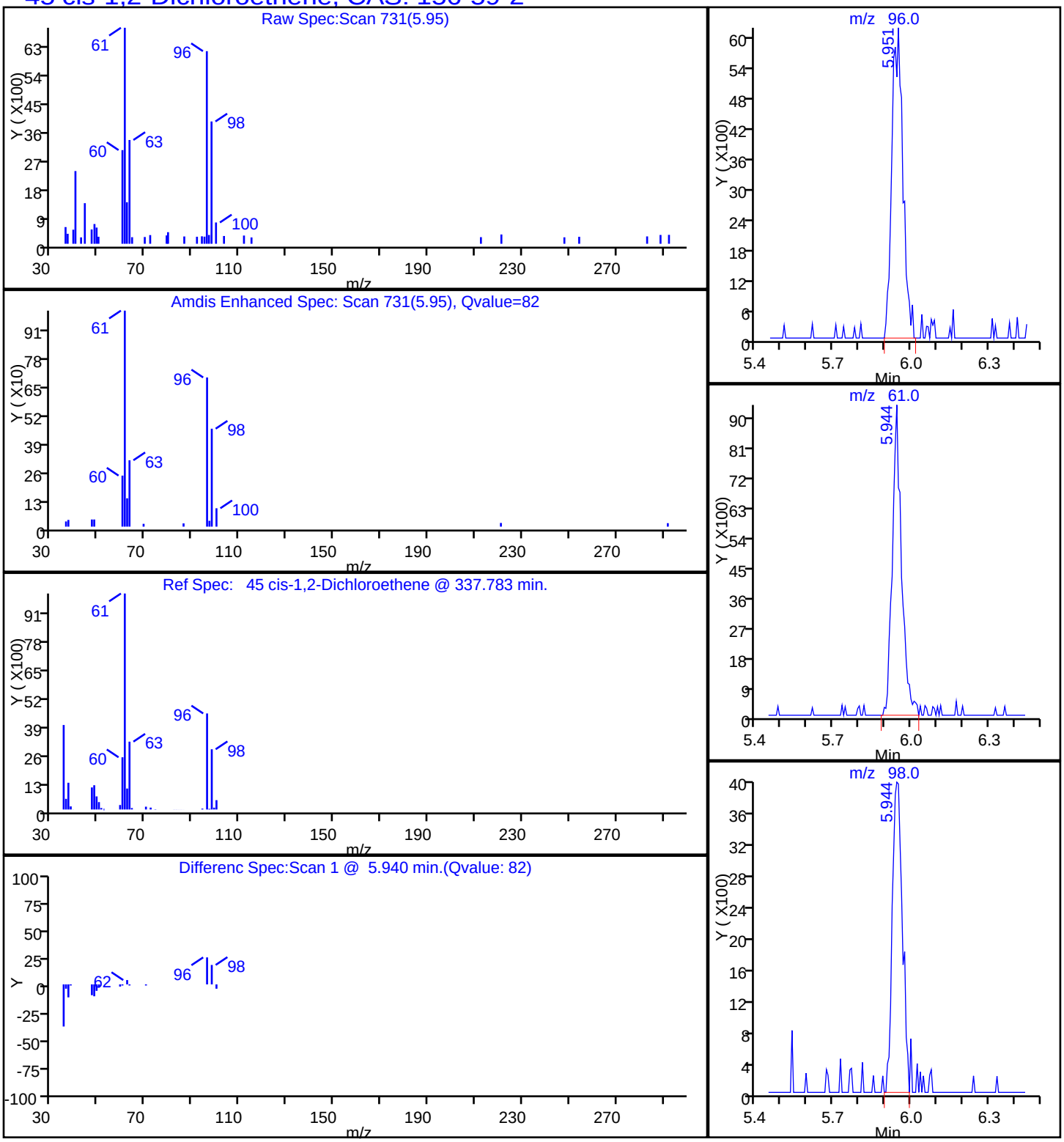
Report Date: 21-Apr-2015 08:22:28 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420028.D

Injection Date:	20-Apr-2015 20:06:30	Instrument ID:	CHHP5		
Lims ID:	180-43134-A-2	Lab Sample ID:	180-43134-2		
Client ID:	HD-MW-141A-0/1-0				
Operator ID:	001562	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

45 cis-1,2-Dichloroethene, CAS: 156-59-2



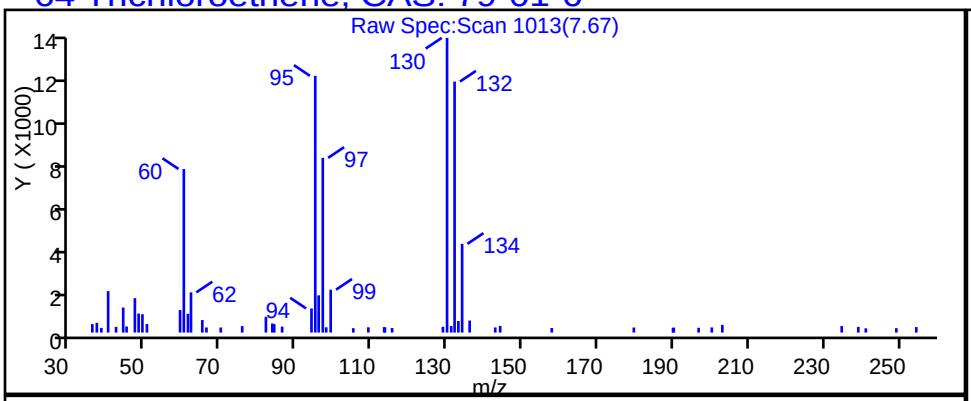
Report Date: 21-Apr-2015 08:22:28 Chrom Revision: 2.2 09-Apr-2015 10:05:40

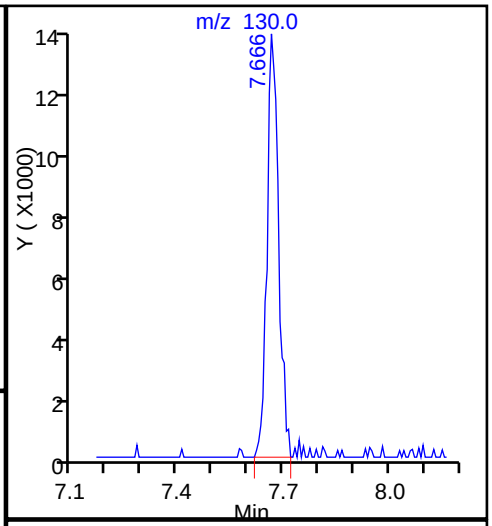
TestAmerica Pittsburgh

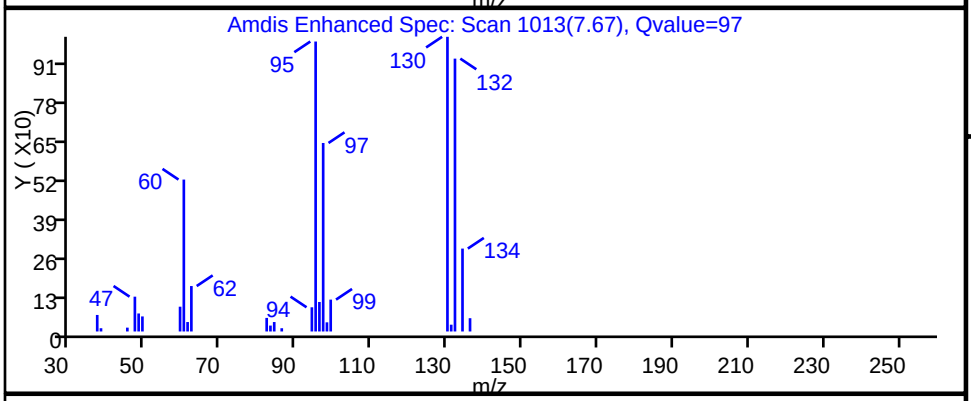
Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420028.D

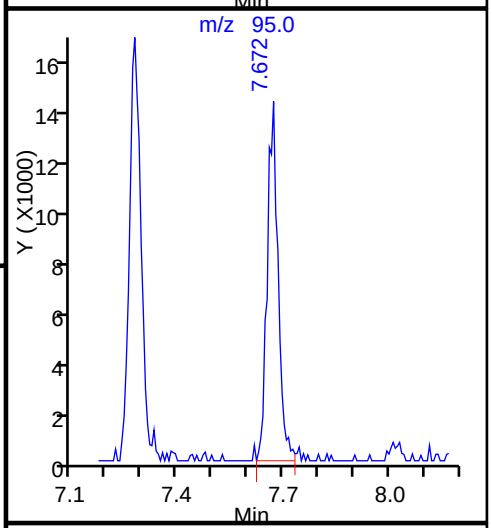
Injection Date:	20-Apr-2015 20:06:30	Instrument ID:	CHHP5
Lims ID:	180-43134-A-2	Lab Sample ID:	180-43134-2
Client ID:	HD-MW-141A-0/1-0		
Operator ID:	001562	ALS Bottle#:	27 Worklist Smp#: 28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

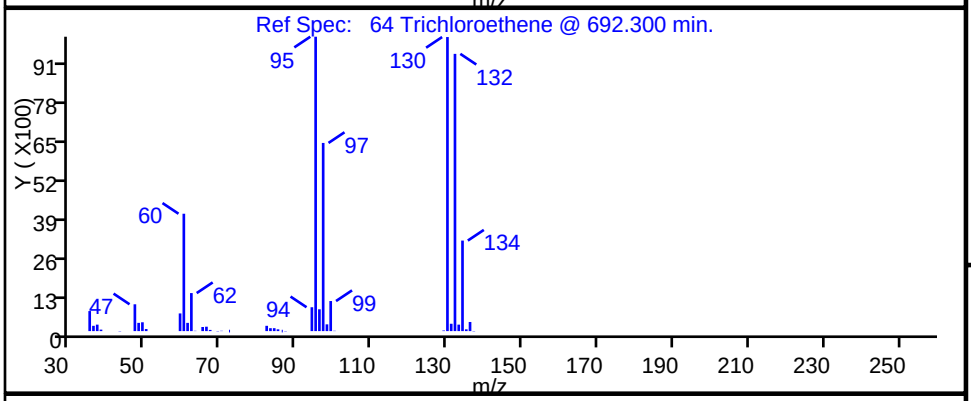
64 Trichloroethene, CAS: 79-01-6

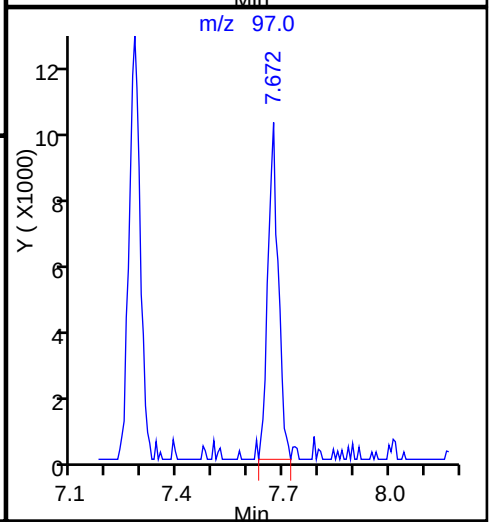


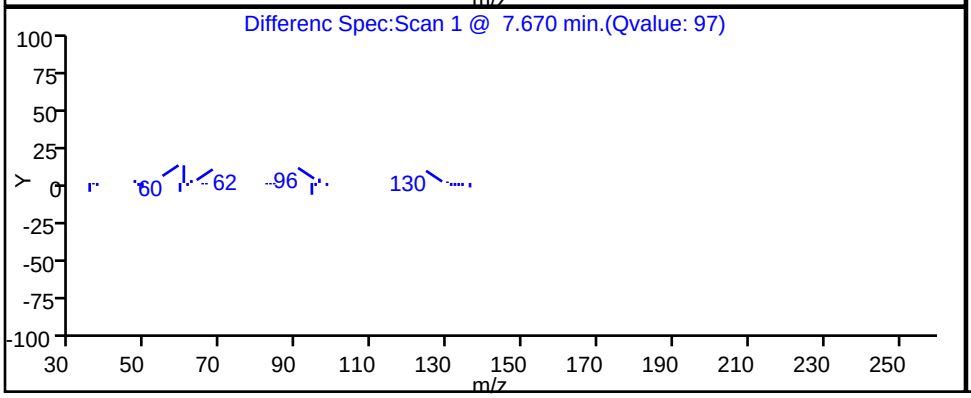












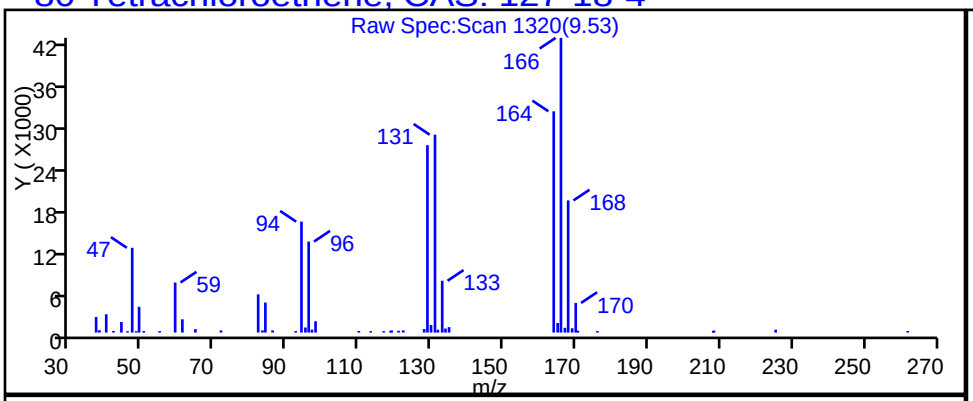
Report Date: 21-Apr-2015 08:22:28 Chrom Revision: 2.2 09-Apr-2015 10:05:40

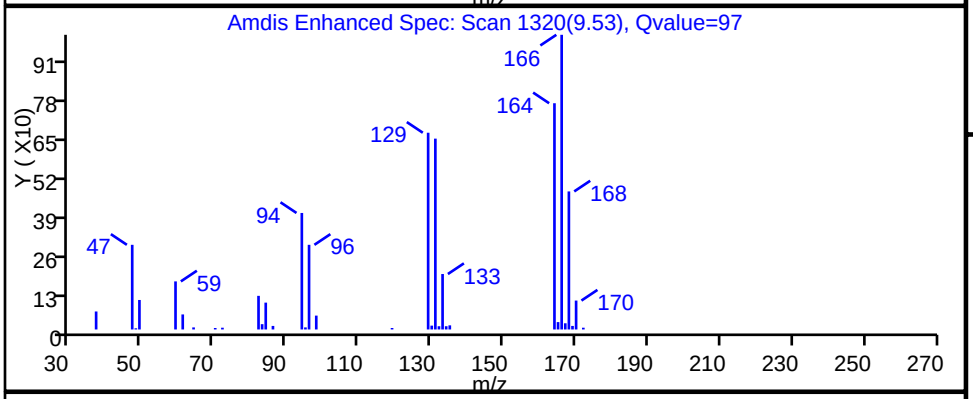
TestAmerica Pittsburgh

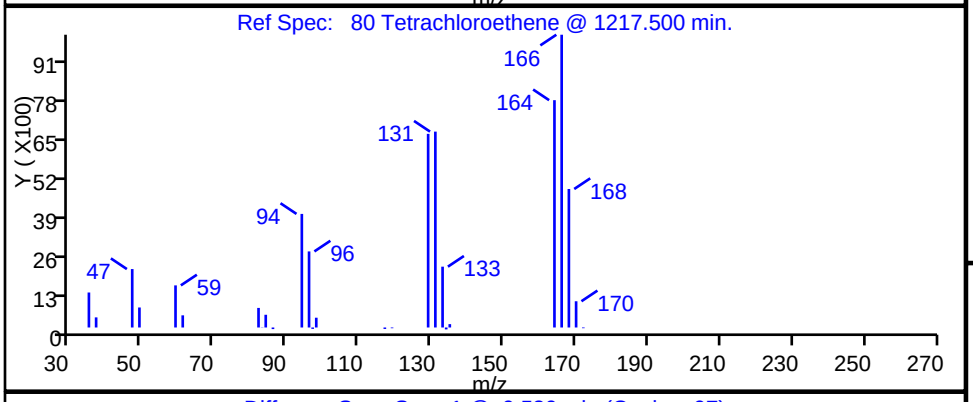
Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420028.D

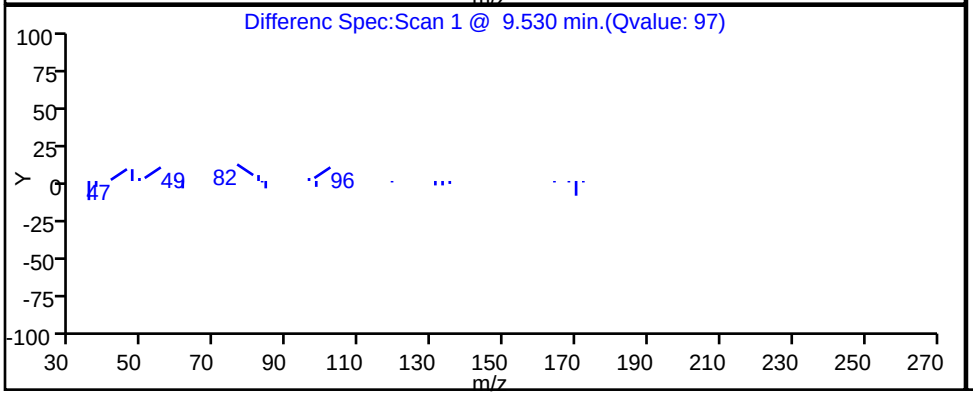
Injection Date:	20-Apr-2015 20:06:30	Instrument ID:	CHHP5
Lims ID:	180-43134-A-2	Lab Sample ID:	180-43134-2
Client ID:	HD-MW-141A-0/1-0		
Operator ID:	001562	ALS Bottle#:	27 Worklist Smp#: 28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

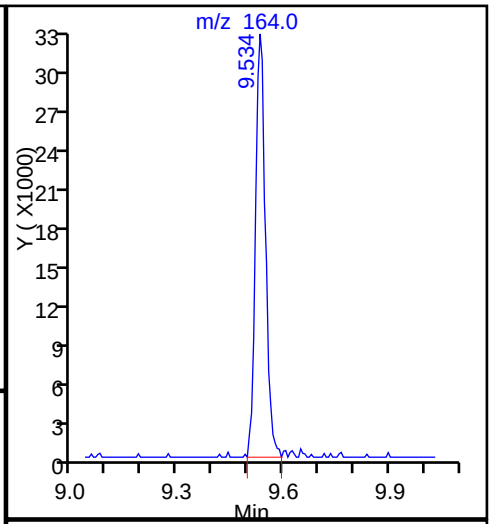
80 Tetrachloroethene, CAS: 127-18-4

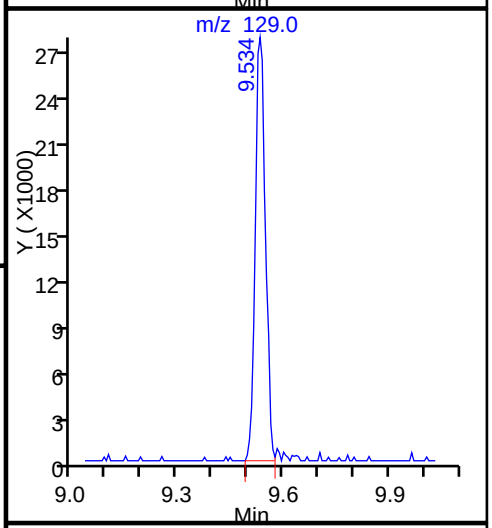


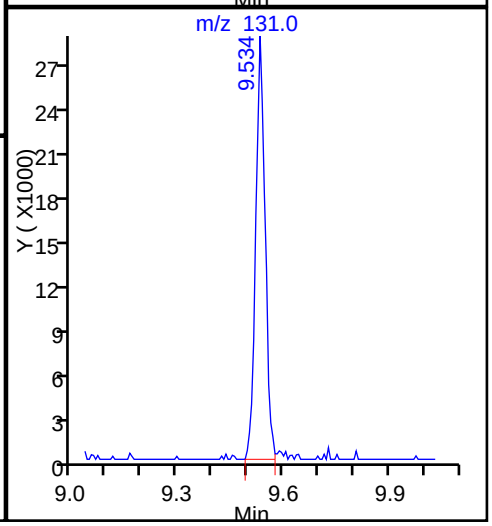












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-43134-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 | Lab Sample ID: 180-43134-3

Matrix: Water | Lab File ID: 50420027.D

Analysis Method: 8260C | Date Collected: 04/15/2015 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 04/20/2015 19:42

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 139024 | 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.: 180-43134-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 180-43134-3

Matrix: Water Lab File ID: 50420027.D

Analysis Method: 8260C Date Collected: 04/15/2015 12:00

Sample wt/vol: 5(mL) Date Analyzed: 04/20/2015 19:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139024 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)	102		71-118
460-00-4	4-Bromofluorobenzene (Surr)	86		70-118
1868-53-7	Dibromofluoromethane (Surr)	113		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420027.D
Lims ID: 180-43134-B-3 Lab Sample ID: 180-43134-3
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 20-Apr-2015 19:42:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-43134-B-3
Misc. Info.: 180-0006546-027
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 21-Apr-2015 08:21:19 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: fergusond Date: 21-Apr-2015 08:21:19

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.289	4.302	-0.013	0	141911	1000.0	
*	2 Fluorobenzene (IS)	96	7.276	7.277	-0.001	99	424778	50.0	
*	3 Chlorobenzene-d5	119	10.360	10.367	-0.007	88	89343	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.684	12.685	-0.001	93	118995	50.0	
$	5 Dibromofluoromethane (Surr	113	6.528	6.529	-0.001	93	109011	56.4	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.905	6.901	0.005	0	153535	60.3	
$	7 Toluene-d8 (Surr)	98	8.925	8.920	0.005	95	362987	51.0	
$	8 4-Bromofluorobenzene (Surr	95	11.529	11.530	-0.002	88	110229	43.0	
	12 Chloromethane	50		1.790				ND	
	13 Vinyl chloride	62		1.918				ND	
	15 Bromomethane	94		2.265				ND	
	16 Chloroethane	64		2.405				ND	
	22 1,1-Dichloroethene	96		3.396				ND	
	24 Acetone	43	3.498	3.512	-0.014	30	2882	3.31	
	26 Carbon disulfide	76		3.688				ND	
	31 Methylene Chloride	84	4.168	4.145	0.023	46	1736	0.6128	
	33 Acrylonitrile	53		4.552				ND	
	34 trans-1,2-Dichloroethene	96		4.564				ND	
	35 Methyl tert-butyl ether	73		4.595				ND	
	37 1,1-Dichloroethane	63		5.173				ND	
	45 cis-1,2-Dichloroethene	96		5.939				ND	
	46 2-Butanone (MEK)	43		5.988				ND	
	49 Chlorobromomethane	128		6.231				ND	
	52 Chloroform	83		6.347				ND	
	53 1,1,1-Trichloroethane	97		6.536				ND	
	56 Carbon tetrachloride	117		6.718				ND	
	58 Benzene	78		6.955				ND	
	59 1,2-Dichloroethane	62		6.986				ND	
	64 Trichloroethene	130		7.673				ND	
	67 1,2-Dichloropropane	63		7.898				ND	
	70 1,4-Dioxane	88		8.062				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.196				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823				ND	
76 Toluene	91		8.987				ND	
77 trans-1,3-Dichloropropene	75		9.218				ND	
79 1,1,2-Trichloroethane	97		9.401				ND	
80 Tetrachloroethene	164		9.535				ND	
82 2-Hexanone	43		9.656				ND	
84 Chlorodibromomethane	129		9.784				ND	
85 Ethylene Dibromide	107		9.900				ND	
87 Chlorobenzene	112		10.392				ND	
89 1,1,1,2-Tetrachloroethane	131		10.472				ND	
90 Ethylbenzene	106		10.502				ND	
91 m-Xylene & p-Xylene	106		10.618				ND	
92 o-Xylene	106		11.013				ND	
93 Styrene	104		11.025				ND	
94 Bromoform	173		11.208				ND	
99 1,1,2,2-Tetrachloroethane	83		11.670				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00031	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added:	2.00	Units: uL	Run Reagent

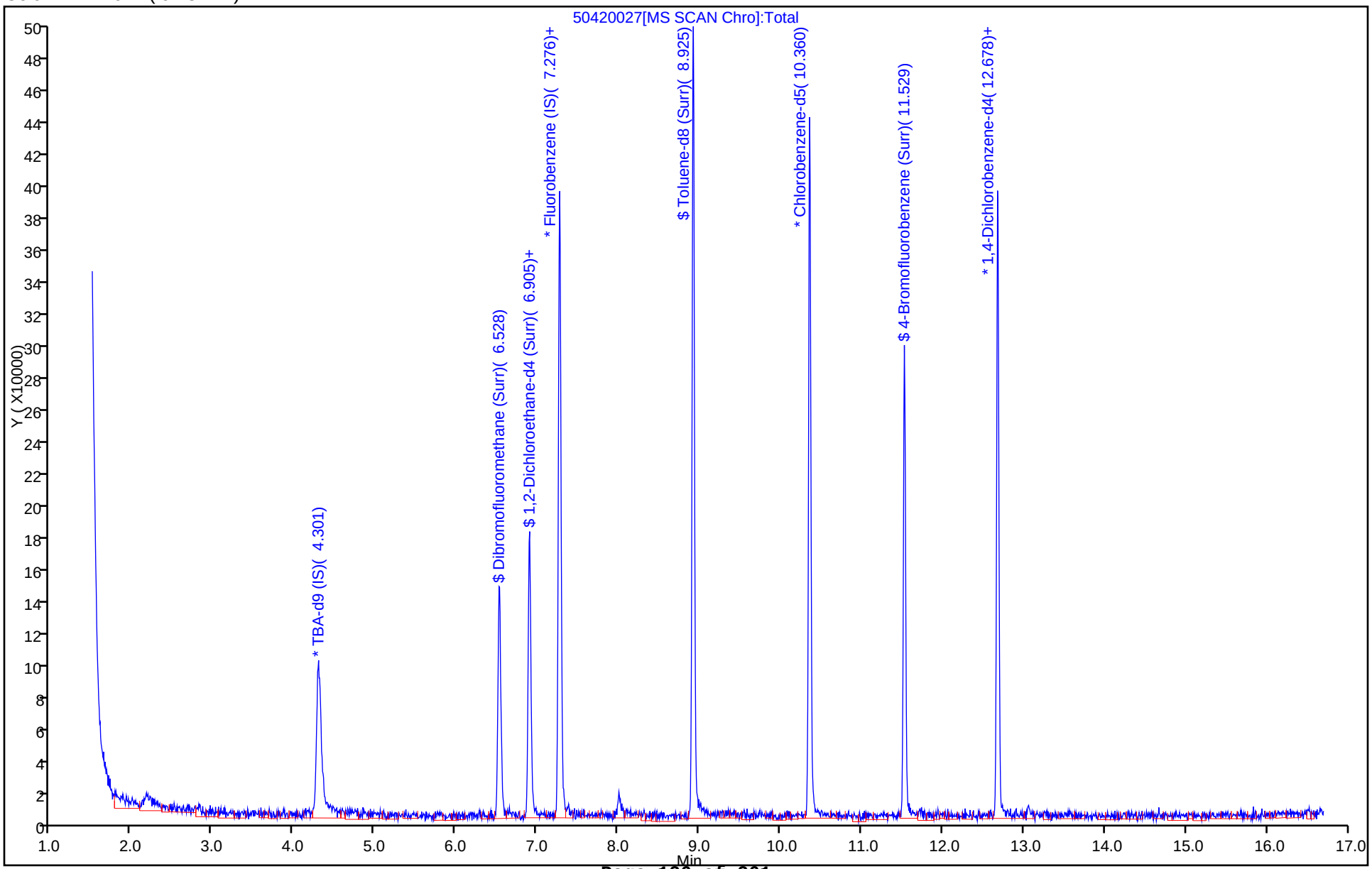
Report Date: 21-Apr-2015 08:21:20 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420027.D

Injection Date:	20-Apr-2015 19:42:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-43134-B-3	Lab Sample ID:	180-43134-3	Worklist Smp#:	27
Client ID:	HD-QC1-0/1-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-135593/13	50316013.D
Level 2	IC 180-135593/4	50316004.D
Level 3	ICIS 180-135593/5	50316005.D
Level 4	IC 180-135593/6	50316006.D
Level 5	IC 180-135593/7	50316007.D
Level 6	IC 180-135593/8	50316008.D
Level 7	IC 180-135593/9	50316009.D
Level 8	IC 180-135593/10	50316010.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	0.1981 0.2196	0.2184 0.2203	0.2158 0.2064	0.2176	0.2184	Ave		0.2143			0.1000	3.7		20.0			
Chloromethane	0.3161 0.2913	0.3036 0.2846	0.2971 0.2760	0.3139	0.2839	Ave		0.2958			0.1000	4.9		20.0			
Vinyl chloride	0.3339 0.3170	0.3476 0.3238	0.3406 0.2981	0.3521	0.3317	Ave		0.3306			0.1000	5.3		20.0			
1,3-Butadiene	0.4238 0.3606	0.3989 0.3546	0.3880 0.3243	0.3988	0.3720	Ave		0.3776			0.0100	8.3		20.0			
Bromomethane	0.3177 0.1565	0.2026 0.1546	0.1872 0.1489	0.2009	0.1727	Lin2	0.7885	0.1633			0.0500				0.9910		0.9900
Chloroethane	0.2320 0.2316	0.2215 0.2239	0.2348 0.2259	0.2403	0.2201	Ave		0.2287			0.0500	3.1		20.0			
Dichlorofluoromethane	0.6033 0.4953	0.5246 0.5015	0.5246 0.4874	0.5502	0.4911	Ave		0.5222			0.0100	7.5		20.0			
Trichlorofluoromethane	0.3610 0.3924	0.3936 0.3991	0.4043 0.3800	0.4504	0.3921	Ave		0.3966			0.1000	6.4		20.0			
Ethyl ether	0.2888 0.2638	0.2444 0.2500	0.2576 0.2556	0.2691	0.2633	Ave		0.2615			0.0100	5.2		20.0			
Acrolein	0.0310 0.0323	0.0302 0.0321	0.0313 0.0320	0.0335	0.0318	Ave		0.0318			0.0100	3.1		20.0			
1,1-Dichloroethene	0.3207 0.2859	0.2901 0.2792	0.2822 0.2667	0.2965	0.2853	Ave		0.2883			0.1000	5.4		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2914 0.2935	0.2973 0.2885	0.2973 0.2692	0.3100	0.2859	Ave		0.2916			0.1000	4.0		20.0			
Acetone	0.1044 0.1092	0.0964 0.1031	0.0956 0.1001	0.1134	0.0972	Ave		0.1024			0.0500	6.2		20.0			
Iodomethane	0.4015 0.3985	0.4019 0.3989	0.4026 0.3873	0.4200	0.3937	Ave		0.4005			0.0100	2.3		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.: 180-43134-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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	0.7271 0.7017	0.7065 0.6934	0.7209 0.6551	0.7444	0.6916	Ave		0.7051			0.1000	3.8		20.0			
Allyl chloride	0.1408 0.1596	0.1433 0.1659	0.1497 0.1554	0.1576	0.1468	Ave		0.1524			0.0100	5.7		20.0			
Methyl acetate	0.2499 0.2446	0.2206 0.2371	0.2383 0.2398	0.2500	0.2368	Ave		0.2396			0.1000	3.9		20.0			
Methylene Chloride	0.4921 0.3038	0.3340 0.2965	0.3132 0.2964	0.3223	0.3092	Ave		0.3335			0.1000	20.0		20.0			
tert-Butyl alcohol	1.4634 1.1634	1.1166 1.0879	1.2271 1.0609	1.1679	1.1362	Ave		1.1779			0.0100	11.0		20.0			
Acrylonitrile	0.1262 0.1243	0.1185 0.1210	0.1238 0.1200	0.1302	0.1222	Ave		0.1233			0.0100	3.0		20.0			
trans-1,2-Dichloroethene	0.3010 0.2955	0.3039 0.2920	0.2999 0.2846	0.3158	0.2932	Ave		0.2982			0.1000	3.1		20.0			
Methyl tert-butyl ether	0.7046 0.6848	0.5895 0.6670	0.6262 0.6870	0.6643	0.6513	Ave		0.6593			0.1000	5.6		20.0			
Hexane	0.5105 0.4724	0.4808 0.4625	0.4867 0.4447	0.4928	0.4612	Ave		0.4764			0.0100	4.3		20.0			
1,1-Dichloroethane	0.5210 0.5346	0.5355 0.5274	0.5415 0.5173	0.5479	0.5333	Ave		0.5323			0.2000	1.9		20.0			
Vinyl acetate	0.3354 0.4226	0.3143 0.4225	0.3492 0.4312	0.3701	0.3754	Ave		0.3776			0.0100	12.0		20.0			
2,2-Dichloropropane	0.1102 0.1425	0.1245 0.1427	0.1303 0.1457	0.1368	0.1319	Ave		0.1331			0.0100	8.8		20.0			
cis-1,2-Dichloroethene	0.3333 0.3114	0.3188 0.3041	0.3064 0.2999	0.3262	0.3133	Ave		0.3142			0.1000	3.6		20.0			
2-Butanone (MEK)	0.1479 0.1689	0.1544 0.1707	0.1682 0.1707	0.1629	0.1664	Ave		0.1638			0.0500	5.1		20.0			
Bromochloromethane	0.1516 0.1369	0.1328 0.1312	0.1322 0.1303	0.1382	0.1345	Ave		0.1360			0.0100	5.1		20.0			
Tetrahydrofuran	0.1048 0.1057	0.0960 0.1019	0.1025 0.1042	0.1047	0.1007	Ave		0.1026			0.0100	3.0		20.0			
Chloroform	0.5131 0.4845	0.4800 0.4679	0.4876 0.4593	0.4976	0.4787	Ave		0.4836			0.2000	3.5		20.0			
1,1,1-Trichloroethane	0.2755 0.3251	0.2860 0.3242	0.3106 0.3133	0.3267	0.3088	Ave		0.3088			0.1000	6.1		20.0			
Cyclohexane	0.6382 0.5901	0.5930 0.5765	0.5992 0.5384	0.6258	0.5817	Ave		0.5929			0.1000	5.2		20.0			
Carbon tetrachloride	0.2289 0.2566	0.2357 0.2582	0.2463 0.2549	0.2561	0.2457	Ave		0.2478			0.1000	4.4		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.: 180-43134-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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	0.4232 0.3982	0.4094 0.3936	0.4088 0.3740	0.4106	0.3910	Ave		0.4011			0.0100	3.8		20.0			
Isobutyl alcohol	0.0062 0.0078	0.0044 0.0073	0.0062 0.0083	0.0069	0.0062	Ave		0.0067		*	0.0100	18.0		20.0			
Benzene	1.2964 1.1615	1.1929 1.1190	1.2156 1.0805	1.2375	1.1757	Ave		1.1849			0.5000	5.7		20.0			
1,2-Dichloroethane	0.3889 0.3972	0.3853 0.3828	0.3878 0.3740	0.4029	0.3849	Ave		0.3880			0.1000	2.3		20.0			
n-Heptane	0.4132 0.4165	0.4157 0.3968	0.4135 0.3813	0.4223	0.3971	Ave		0.4071			0.0100	3.4		20.0			
Trichloroethene	0.3236 0.2977	0.2885 0.2885	0.3022 0.2774	0.3045	0.2926	Ave		0.2969			0.2000	4.7		20.0			
Methylcyclohexane	0.5265 0.5361	0.5390 0.5114	0.5500 0.4900	0.5614	0.5230	Ave		0.5297			0.1000	4.2		20.0			
1,2-Dichloropropane	0.2976 0.3036	0.2675 0.2956	0.2870 0.2962	0.2996	0.2976	Ave		0.2931			0.1000	3.9		20.0			
Dibromomethane	0.1682 0.1567	0.1491 0.1563	0.1532 0.1546	0.1640	0.1603	Ave		0.1578			0.0100	3.9		20.0			
1,4-Dioxane	0.0033 0.0034	0.0029 0.0031	0.0029 0.0030	0.0032	0.0030	Ave		0.0031		*	0.0100	5.9		20.0			
Bromodichloromethane	0.2966 0.3370	0.3114 0.3262	0.3286 0.3235	0.3266	0.3259	Ave		0.3220			0.2000	3.9		20.0			
cis-1,3-Dichloropropene	0.2720 0.3463	0.2598 0.3498	0.2835 0.3541	0.3106	0.3095	Ave		0.3107			0.2000	12.0		20.0			
4-Methyl-2-pentanone (MIBK)	1.2503 1.3434	1.2818 1.3687	1.4091 1.3065	1.4145	1.4492	Ave		1.3529			0.1000	5.2		20.0			
Toluene	5.9882 4.5343	5.4946 4.5939	5.5890 4.1718	5.4186	5.2011	Ave		5.1239			0.4000	12.0		20.0			
trans-1,3-Dichloropropene	0.8645 0.9716	0.7455 1.0385	0.8963 1.0484	0.8911	0.9475	Ave		0.9254			0.1000	11.0		20.0			
Ethyl methacrylate	1.1000 1.2637	0.9953 1.3239	1.1753 1.3175	1.1818	1.2989	Ave		1.2070			0.0100	9.7		20.0			
1,1,2-Trichloroethane	1.0794 0.8993	0.9278 0.9152	1.0316 0.8752	0.9797	0.9793	Ave		0.9609			0.1000	7.3		20.0			
Tetrachloroethene	1.1314 0.9214	1.0730 0.9231	1.0654 0.8552	1.0357	1.0130	Ave		1.0023			0.2000	9.3		20.0			
1,3-Dichloropropane	1.9127 1.6507	1.8290 1.6948	1.9187 1.6444	1.8257	1.8122	Ave		1.7860			0.0100	6.1		20.0			
2-Hexanone	0.8865 1.0653	0.9324 1.1043	1.1169 1.0437	1.0718	1.0506	Ave		1.0339			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.: 180-43134-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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	0.6589 0.7861	0.7302 0.8019	0.7961 0.7741	0.7741	0.8146	Ave		0.7670			0.1000	6.6		20.0			
1,2-Dibromoethane (EDB)	0.9462 0.8909	0.8507 0.9041	0.9478 0.8836	0.9579	0.9540	Ave		0.9169			0.1000	4.4		20.0			
3-Chlorobenzotrifluoride	2.1568 1.7885	2.0616 1.8999	2.0657 1.6136	2.0676	1.9855	Ave		1.9549			0.0100	9.2		20.0			
Chlorobenzene	3.9165 2.9120	3.3811 2.9538	3.4265 2.7856	3.3185	3.2780	Ave		3.2465			0.5000	11.0		20.0			
4-Chlorobenzotrifluoride	2.1386 1.7554	1.9292 1.8762	1.9271 1.5481	1.9634	1.9831	Ave		1.8901			0.0100	9.2		20.0			
1,1,1,2-Tetrachloroethane	0.7551 0.8493	0.8012 0.8680	0.8363 0.8428	0.8482	0.9047	Ave		0.8382			0.0100	5.3		20.0			
Ethylbenzene	1.9914 1.7179	1.9333 1.7672	1.9980 1.6464	1.9518	1.8953	Ave		1.8627			0.1000	7.2		20.0			
m-Xylene & p-Xylene	2.4849 2.1093	2.3674 2.1267	2.4171 1.9994	2.4234	2.2969	Ave		2.2781			0.1000	7.8		20.0			
o-Xylene	2.6403 2.0475	2.2064 2.0545	2.3516 1.9292	2.3257	2.2716	Ave		2.2283			0.3000	10.0		20.0			
Styrene	3.8818 3.3296	3.6611 3.3147	3.8658 3.1277	3.7940	3.7504	Ave		3.5907			0.3000	8.1		20.0			
Bromoform	0.4254 0.4898	0.4398 0.4974	0.4744 0.4894	0.4822	0.4911	Ave		0.4737			0.1000	5.6		20.0			
2-Chlorobenzotrifluoride	2.0985 1.7811	2.0764 1.8958	2.0751 1.6078	2.0615	2.0224	Ave		1.9523			0.0100	9.1		20.0			
Isopropylbenzene	6.2252 4.9838	6.1153 4.8827	6.0965 4.4013	6.0579	5.7184	Ave		5.5601			0.1000	13.0		20.0			
1,1,2,2-Tetrachloroethane	1.5778 1.3165	1.3921 1.3063	1.4139 1.2430	1.4088	1.3646	Ave		1.3779			0.3000	7.2		20.0			
Bromobenzene	0.9601 0.9043	0.9163 0.9102	0.9670 0.9012	0.9241	0.9202	Ave		0.9254			0.0100	2.7		20.0			
1,2,3-Trichloropropane	0.3380 0.3040	0.2838 0.2874	0.3205 0.3069	0.2961	0.2961	Ave		0.3041			0.0100	5.9		20.0			
trans-1,4-Dichloro-2-butene	0.2572 0.2562	0.2443 0.2601	0.2456 0.2696	0.2438	0.2460	Ave		0.2528			0.0100	3.7		20.0			
N-Propylbenzene	1.2305 1.1066	1.1620 1.0908	1.2081 1.0656	1.1555	1.1135	Ave		1.1416			0.0100	5.1		20.0			
2-Chlorotoluene	1.0248 0.9458	0.9575 0.9297	1.0195 0.9076	0.9558	0.9319	Ave		0.9591			0.0100	4.4		20.0			
3-Chlorotoluene	1.1523 1.0737	1.0357 1.0942	1.0635 0.9927	1.0618	1.1018	Ave		1.0720			0.0100	4.4		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.: 180-43134-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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	3.5091 3.0301	3.2905 2.9338	3.3765 2.8104	3.3601	3.1525	Ave		3.1829			0.0100	7.6		20.0			
4-Chlorotoluene	1.1316 1.0097	1.0151 0.9774	1.0863 1.0009	1.0825	1.0021	Ave		1.0382			0.0100	5.2		20.0			
tert-Butylbenzene	3.1830 2.5928	2.8173 2.5318	2.9656 2.3701	2.8959	2.7052	Ave		2.7577			0.0100	9.5		20.0			
1,2,4-Trimethylbenzene	3.6039 3.1029	3.3270 3.0238	3.4986 2.8908	3.4674	3.2206	Ave		3.2669			0.0100	7.7		20.0			
3,4-Dichlorobenzotrifluoride	1.1042 1.0202	0.9953 1.0227	1.0269 0.9335	1.1049	1.0507	Ave		1.0323			0.0100	5.5		20.0			
sec-Butylbenzene	4.3054 3.6389	4.1108 3.5066	4.1991 3.2620	4.1487	3.8794	Ave		3.8814			0.0100	9.7		20.0			
1,3-Dichlorobenzene	1.9132 1.6438	1.7258 1.6071	1.7369 1.5897	1.7497	1.6725	Ave		1.7048			0.6000	6.1		20.0			
4-Isopropyltoluene	3.4872 3.0606	3.2348 2.9586	3.4694 2.7984	3.4562	3.1691	Ave		3.2043			0.0100	8.0		20.0			
1,4-Dichlorobenzene	1.9760 1.6976	1.7145 1.6569	1.7807 1.6355	1.7648	1.7035	Ave		1.7412			0.5000	6.1		20.0			
2,4-Dichlorobenzotrifluoride	1.0162 0.9585	0.9307 0.9665	1.0004 0.8567	1.0551	0.9508	Ave		0.9669			0.0100	6.2		20.0			
2,5-Dichlorobenzotrifluoride	1.1811 1.0613	1.0765 1.0776	1.0685 0.9818	1.1269	1.0793	Ave		1.0816			0.0100	5.2		20.0			
n-Butylbenzene	3.1276 2.8128	2.9811 2.7148	3.1079 2.5582	3.1414	2.9001	Ave		2.9180			0.0100	7.3		20.0			
1,2-Dichlorobenzene	1.7371 1.5488	1.5543 1.5042	1.6235 1.4749	1.6066	1.5803	Ave		1.5787			0.4000	5.1		20.0			
1,2-Dibromo-3-Chloropropane	0.1313 0.1386	0.1067 0.1383	0.1229 0.1385	0.1324	0.1248	Ave		0.1292			0.0500	8.5		20.0			
1,2,4-Trichlorobenzene	0.9720 0.8625	0.7083 0.8349	0.7579 0.7778	0.8780	0.7835	Ave		0.8219			0.2000	10.0		20.0			
Hexachlorobutadiene	0.4883 0.3899	0.3825 0.3778	0.3866 0.3464	0.4091	0.3724	Ave		0.3941			0.0100	11.0		20.0			
Naphthalene	2.3899 2.2683	1.8332 2.1948	1.9931 2.0920	2.3983	2.0941	Ave		2.1580			0.0100	9.0		20.0			
1,2,3-Trichlorobenzene	0.7895 0.7155	0.5376 0.7162	0.6024 0.6573	0.7303	0.6432	Ave		0.6740			0.0100	12.0		20.0			
2,4,5-Trichlorotoluene	0.4907 0.3881	0.2750 0.3876	0.2929 0.3431	0.3938	0.3283	Ave		0.3624			0.0100	19.0		20.0			
2,3,6-Trichlorotoluene	0.4374 0.3491	0.2501 0.3509	0.2713 0.3051	0.3608	0.2936	Ave		0.3273			0.0100	18.0		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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)	0.2497 0.2212	0.2276 0.2219	0.2284 0.2143	0.2334	0.2228	Ave		0.2274				4.7		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3017 0.2995	0.3055 0.2914	0.3015 0.2867	0.3115	0.3008	Ave		0.2998				2.6		20.0			
Toluene-d8 (Surr)	4.5313 3.5890	4.2126 3.6439	4.3365 3.2599	4.2301	4.0882	Ave		3.9864				11.0		20.0			
4-Bromofluorobenzene (Surr)	1.5722 1.3558	1.4371 1.3519	1.5107 1.2944	1.4891	1.4730	Ave		1.4356				6.6		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.: 180-43134-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-135593/13	50316013.D
Level 2	IC 180-135593/4	50316004.D
Level 3	ICIS 180-135593/5	50316005.D
Level 4	IC 180-135593/6	50316006.D
Level 5	IC 180-135593/7	50316007.D
Level 6	IC 180-135593/8	50316008.D
Level 7	IC 180-135593/9	50316009.D
Level 8	IC 180-135593/10	50316010.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	11265 432190	59394 522240	116111 640090	173113	243823	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	17972 573343	82552 674845	159885 855933	249772	316915	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	18981 624000	94520 767804	183317 924535	280135	370271	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	24095 709784	108469 840803	208815 1005925	317272	415323	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Lin2	18060 307964	55097 366671	100717 461680	159846	192846	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	13187 455903	60248 530813	126349 700467	191164	245673	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	34297 974888	142662 1188936	282324 1511714	437737	548270	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Ave	20521 772293	107038 946313	217544 1178605	358375	437688	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	16416 519119	66452 592652	138609 792637	214135	293889	5.00 175	25.0 200	50.0 250	75.0	100
Acrolein	FB	Ave	35289 81646	41017 95028	50582 109180	62132	71073	100 225	125 250	150 275	175	200
1,1-Dichloroethene	FB	Ave	18234 562804	78897 662050	151843 827120	235889	318457	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	16567 577719	80854 684103	159979 834802	246660	319162	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	29674 429781	52410 489133	102899 621064	180387	217095	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	22824 784350	109309 945860	216640 1201056	334141	439512	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	41336 1381152	192118 1643948	387934 2031733	592248	772081	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.: 180-43134-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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	8006 314052	38957 393345	80577 482122	125423	163875	5.00 175	25.0 200	50.0 250	75.0	100
Methyl acetate	FB	Ave	71022 2407305	299965 2810332	641136 3718382	994505	1321970	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Ave	27978 597904	90836 703059	168570 919183	256424	345226	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBA	Ave	10830 351016	39251 399281	83098 537174	133756	175500	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	71728 2446379	322268 2868164	666088 3721902	1035956	1363975	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	17111 581552	82640 692220	161381 882651	251288	327278	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	40058 1347848	160325 1581345	336961 2130684	528520	727030	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	29021 929791	130741 1096478	261916 1379168	392065	514868	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	29622 1052201	145639 1250453	291408 1604398	435915	595324	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	19067 831670	85462 1001771	187915 1337263	294456	419086	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	6267 280515	33850 338302	70106 452022	108858	147216	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	18951 612812	86701 721075	164893 930230	259517	349805	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	42054 665013	83987 809232	180996 1059138	259227	371447	25.0 350	50.0 400	100 500	150	200
Bromochloromethane	FB	Ave	8619 269375	36107 311076	71124 404105	109930	150204	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	11913 415944	52231 483324	110274 646482	166594	224920	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	29168 953676	130523 1109416	262371 1424461	395935	534362	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	15663 639960	77770 768585	167130 971626	259963	344772	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	36280 1161488	161271 1366913	322468 1669676	497889	649387	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	13013 504991	64089 612080	132517 790495	203736	274328	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	24060 783682	111342 933326	219974 1159811	326699	436454	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Ave	8820 386141	29897 433313	83109 644697	137203	174166	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.: 180-43134-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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	73700 2286079	324419 2653105	654151 3351151	984614	1312435	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane	FB	Ave	22108 781760	104777 907622	208683 1159879	320594	429724	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	23490 819785	113041 940924	222515 1182643	335961	443357	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	18397 586010	78459 684010	162608 860273	242252	326599	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	29934 1055175	146574 1212427	295972 1519674	446628	583894	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	16916 597514	72742 700921	154467 918714	238331	332279	5.00 175	25.0 200	50.0 250	75.0	100
Dibromomethane	FB	Ave	9562 308441	40542 370624	82469 479407	130496	178905	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	3746 132396	15563 146272	31354 185631	50907	66490	100 3500	500 4000	1000 5000	1500	2000
Bromodichloromethane	FB	Ave	16863 663337	84673 773432	176851 1003399	259871	363842	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Ave	15462 681682	70642 829306	152581 1098242	247138	345528	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	75787 1390980	154453 1617802	342539 2109966	531084	747218	25.0 350	50.0 400	100 500	150	200
Toluene	CBZ	Ave	72597 2347437	331041 2714932	679332 3368812	1017198	1340817	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBZ	Ave	10481 502980	44917 613747	108942 846559	167274	244258	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBZ	Ave	13336 654210	59964 782394	142858 1063861	221852	334858	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBZ	Ave	13086 465584	55897 540864	125390 706748	183907	252461	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBZ	Ave	13716 477004	64647 545517	129494 690601	194422	261148	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBZ	Ave	23188 854593	110194 1001573	233217 1327847	342719	467174	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBZ	Ave	53734 1103034	112348 1305223	271508 1685534	402386	541680	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBZ	Ave	7988 406960	43996 473922	96762 625118	145315	210013	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBZ	Ave	11471 461219	51254 534328	115204 713501	179814	245946	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorobenzotrifluoride	CBZ	Ave	26148 925933	124209 1122812	251080 1303041	388132	511845	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.: 180-43134-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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	47481 1507544	203702 1745676	416488 2249414	622968	845046	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBZ	Ave	25927 908777	116232 1108797	234233 1250140	368570	511237	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBZ	Ave	9154 439701	48269 512980	101650 680608	159225	233228	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBZ	Ave	24142 889389	116477 1044399	242856 1329470	366398	488611	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBZ	Ave	30126 1092005	142634 1256840	293796 1614511	454933	592135	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBZ	Ave	32009 1059986	132929 1214164	285835 1557898	436586	585609	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBZ	Ave	47061 1723778	220574 1958961	469890 2525667	712222	966850	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBZ	Ave	5157 253560	26498 293938	57667 395201	90522	126605	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBZ	Ave	25441 922108	125099 1120386	252226 1298335	386985	521379	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBZ	Ave	75470 2580136	368436 2885608	741027 3554151	1137215	1474178	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBZ	Ave	19128 681581	83874 772016	171864 1003707	264462	351798	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCB	Ave	16809 637569	80670 740842	168649 956763	253502	346996	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCB	Ave	5918 214358	24990 233938	55900 325768	81225	111668	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCB	Ave	4503 180624	21505 211691	42827 286166	66879	92761	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCB	Ave	21543 780243	102304 887838	210687 1131297	316980	419888	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCB	Ave	17942 666866	84295 756732	177793 963573	262207	351403	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCB	Ave	20174 757051	91182 890638	185477 1053875	291288	415463	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCB	Ave	61438 2136446	289696 2387945	588847 2983647	921783	1188743	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCB	Ave	19812 711885	89370 795532	189449 1062581	296950	377870	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCB	Ave	55729 1828125	248042 2060731	517188 2516209	794422	1020106	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCB	Ave	63098 2187785	292909 2461131	610150 3068942	951216	1214438	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.: 180-43134-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

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	19333 719294	87627 832435	179092 991010	303120	396211	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCB	Ave	75379 2565671	361915 2854173	732318 3463106	1138120	1462842	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCB	Ave	33497 1159025	151937 1308081	302903 1687649	480001	630675	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCB	Ave	61054 2157955	284792 2408127	605051 2970922	948139	1195021	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCB	Ave	34596 1196958	150942 1348596	310551 1736319	484138	642365	5.00 175	25.0 200	50.0 250	75.0	100
2,4-Dichlorobenzotrifluoride	DCB	Ave	17792 675783	81937 786683	174468 909481	289446	358539	5.00 175	25.0 200	50.0 250	75.0	100
2,5-Dichlorobenzotrifluoride	DCB	Ave	20678 748317	94772 877059	186350 1042359	309155	406971	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCB	Ave	54758 1983203	262455 2209671	542017 2715831	861784	1093564	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCB	Ave	30414 1092014	136843 1224311	283138 1565775	440732	595901	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCB	Ave	2299 97714	9396 112547	21428 147059	36318	47067	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trichlorobenzene	DCB	Ave	17018 608110	62363 679520	132179 825772	240861	295444	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCB	Ave	8549 274932	33676 307470	67414 367792	112236	140410	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCB	Ave	41842 1599300	161398 1786434	347596 2220927	657935	789643	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCB	Ave	13823 504504	47333 582911	105062 697862	200345	242534	5.00 175	25.0 200	50.0 250	75.0	100
2,4,5-Trichlorotoluene	DCB	Ave	8592 273662	24209 315499	51080 364223	108037	123791	5.00 175	25.0 200	50.0 250	75.0	100
2,3,6-Trichlorotoluene	DCB	Ave	7658 246163	22020 285573	47319 323920	98974	110702	5.00 175	25.0 200	50.0 250	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	14193 435320	61901 526164	122918 664693	185698	248750	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	17152 589491	83077 691002	162227 889045	247858	335757	5.00 175	25.0 200	50.0 250	75.0	100
Toluene-d8 (Surr)	CBZ	Ave	54935 1858068	253798 2153477	527093 2632400	794092	1053927	5.00 175	25.0 200	50.0 250	75.0	100
4-Bromofluorobenzene (Surr)	CBZ	Ave	19061 701915	86585 798953	183629 1045249	279546	379740	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.: 180-43134-1 Analy Batch No.: 135593

SDG No.:

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

Calibration Start Date: 03/16/2015 12:41 Calibration End Date: 03/16/2015 16:17 Calibration ID: 22457

Curve Type Legend:

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

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316004.D
Lims ID: IC VSTD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Mar-2015 12:41:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD5
Misc. Info.: 180-0006031-004
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:20 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 09:28:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.302	4.305	-0.003	88	140612	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.277	7.273	0.004	97	543896	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.364	-0.003	99	120496	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.682	0.003	97	176082	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.535	6.525	0.010	94	61901	25.0	25.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.902	0.004	96	83077	25.0	25.5	
$ 7 Toluene-d8 (Surr)	98	8.919	8.922	-0.003	100	253798	25.0	26.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.532	-0.003	95	86585	25.0	25.0	
11 Dichlorodifluoromethane	85	1.619	1.616	0.003	98	59394	25.0	25.5	
12 Chloromethane	50	1.771	1.774	-0.003	100	82552	25.0	25.7	
13 Vinyl chloride	62	1.905	1.902	0.003	99	94520	25.0	26.3	
14 Butadiene	39	1.948	1.944	0.004	98	108469	25.0	26.4	
15 Bromomethane	94	2.252	2.249	0.003	90	55097	25.0	26.2	M
16 Chloroethane	64	2.392	2.370	0.022	97	60248	25.0	24.2	
17 Dichlorofluoromethane	67	2.660	2.650	0.010	98	142662	25.0	25.1	
18 Trichlorofluoromethane	101	2.690	2.711	-0.021	96	107038	25.0	24.8	
20 Ethyl ether	59	3.085	3.088	-0.003	98	66452	25.0	23.4	
21 Acrolein	56	3.256	3.252	0.004	96	41017	125.0	118.7	
22 1,1-Dichloroethene	96	3.371	3.386	-0.015	97	78897	25.0	25.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.444	3.429	0.015	97	80854	25.0	25.5	
24 Acetone	43	3.493	3.496	-0.003	98	52410	50.0	47.0	
25 Iodomethane	142	3.572	3.587	-0.015	98	109309	25.0	25.1	
26 Carbon disulfide	76	3.651	3.654	-0.003	100	192118	25.0	25.0	
28 3-Chloro-1-propene	76	3.931	3.940	-0.009	92	38957	25.0	23.5	
30 Methyl acetate	43	4.022	4.019	0.003	100	299965	125.0	115.1	
31 Methylene Chloride	84	4.144	4.134	0.010	95	90836	25.0	25.0	
32 2-Methyl-2-propanol	59	4.430	4.445	-0.015	90	39251	250.0	237.0	
33 Acrylonitrile	53	4.552	4.554	-0.002	100	322268	250.0	240.3	
34 trans-1,2-Dichloroethene	96	4.564	4.560	0.004	61	82640	25.0	25.5	
35 Methyl tert-butyl ether	73	4.594	4.591	0.003	96	160325	25.0	22.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.983	4.980	0.003	97	130741	25.0	25.2	
37 1,1-Dichloroethane	63	5.178	5.169	0.009	99	145639	25.0	25.2	
38 Vinyl acetate	43	5.300	5.290	0.010	100	85462	25.0	20.8	
44 2,2-Dichloropropane	77	5.926	5.923	0.003	85	33850	25.0	23.4	
45 cis-1,2-Dichloroethene	96	5.939	5.935	0.004	94	86701	25.0	25.4	
46 2-Butanone (MEK)	43	5.987	5.990	-0.003	99	83987	50.0	47.1	
49 Chlorobromomethane	128	6.224	6.233	-0.009	96	36107	25.0	24.4	
51 Tetrahydrofuran	42	6.285	6.288	-0.003	97	52231	50.0	46.8	
52 Chloroform	83	6.340	6.343	-0.003	96	130523	25.0	24.8	
53 1,1,1-Trichloroethane	97	6.529	6.531	-0.002	95	77770	25.0	23.2	
54 Cyclohexane	56	6.589	6.586	0.003	96	161271	25.0	25.0	
56 Carbon tetrachloride	117	6.723	6.720	0.003	69	64089	25.0	23.8	
55 1,1-Dichloropropene	75	6.729	6.726	0.003	96	111342	25.0	25.5	
57 Isobutyl alcohol	41	6.942	6.945	-0.003	33	29897	625.0	411.8	
58 Benzene	78	6.954	6.957	-0.003	98	324419	25.0	25.2	
59 1,2-Dichloroethane	62	6.985	6.981	0.004	98	104777	25.0	24.8	
62 n-Heptane	43	7.277	7.280	-0.003	65	113041	25.0	25.5	
64 Trichloroethene	130	7.666	7.669	-0.003	99	78459	25.0	24.3	
66 Methylcyclohexane	83	7.867	7.864	0.003	96	146574	25.0	25.4	
67 1,2-Dichloropropane	63	7.903	7.906	-0.003	95	72742	25.0	22.8	
68 Dibromomethane	93	8.031	8.028	0.003	94	40542	25.0	23.6	
70 1,4-Dioxane	88	8.068	8.058	0.010	87	15563	500.0	463.6	
71 Dichlorobromomethane	83	8.196	8.198	-0.002	97	84673	25.0	24.2	
74 cis-1,3-Dichloropropene	75	8.658	8.661	-0.002	98	70642	25.0	20.9	
75 4-Methyl-2-pentanone (MIBK	43	8.822	8.825	-0.003	98	154453	50.0	47.4	
76 Toluene	91	8.992	8.989	0.003	99	331041	25.0	26.8	
77 trans-1,3-Dichloropropene	75	9.224	9.220	0.004	95	44917	25.0	20.1	
78 Ethyl methacrylate	69	9.321	9.318	0.003	97	59964	25.0	20.6	
79 1,1,2-Trichloroethane	97	9.400	9.397	0.003	98	55897	25.0	24.1	
80 Tetrachloroethene	164	9.534	9.537	-0.003	96	64647	25.0	26.8	
81 1,3-Dichloropropane	76	9.570	9.567	0.003	98	110194	25.0	25.6	
82 2-Hexanone	43	9.662	9.658	0.004	99	112348	50.0	45.1	
84 Chlorodibromomethane	129	9.795	9.786	0.009	98	43996	25.0	23.8	
85 Ethylene Dibromide	107	9.899	9.902	-0.003	99	51254	25.0	23.2	
86 3-Chlorobenzotrifluoride	180	10.373	10.370	0.003	89	124209	25.0	26.4	
87 Chlorobenzene	112	10.392	10.394	-0.002	99	203702	25.0	26.0	
88 4-Chlorobenzotrifluoride	180	10.434	10.431	0.003	99	116232	25.0	25.5	
89 1,1,1,2-Tetrachloroethane	131	10.477	10.473	0.004	96	48269	25.0	23.9	
90 Ethylbenzene	106	10.501	10.498	0.003	100	116477	25.0	25.9	
91 m-Xylene & p-Xylene	106	10.617	10.619	-0.002	99	142634	25.0	26.0	
92 o-Xylene	106	11.012	11.015	-0.003	97	132929	25.0	24.8	
93 Styrene	104	11.024	11.027	-0.003	99	220574	25.0	25.5	
94 Bromoform	173	11.213	11.209	0.004	97	26498	25.0	23.2	
96 2-Chlorobenzotrifluoride	180	11.274	11.276	-0.002	97	125099	25.0	26.6	
97 Isopropylbenzene	105	11.377	11.380	-0.003	99	368436	25.0	27.5	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.672	0.003	70	83874	25.0	25.3	
100 Bromobenzene	156	11.681	11.684	-0.003	98	80670	25.0	24.8	
101 1,2,3-Trichloropropane	110	11.718	11.720	-0.002	95	24990	25.0	23.3	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.727	0.003	85	21505	25.0	24.2	
103 N-Propylbenzene	120	11.791	11.787	0.004	100	102304	25.0	25.4	
104 2-Chlorotoluene	126	11.876	11.873	0.003	99	84295	25.0	25.0	
105 3-Chlorotoluene	126	11.937	11.933	0.004	98	91182	25.0	24.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.964	-0.003	100	289696	25.0	25.8	
107 4-Chlorotoluene	126	11.986	11.982	0.004	96	89370	25.0	24.4	
108 tert-Butylbenzene	119	12.290	12.286	0.004	98	248042	25.0	25.5	
110 1,2,4-Trimethylbenzene	105	12.338	12.335	0.003	99	292909	25.0	25.5	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.402	-0.003	98	87627	25.0	24.1	
112 sec-Butylbenzene	105	12.509	12.505	0.004	100	361915	25.0	26.5	
113 1,3-Dichlorobenzene	146	12.618	12.615	0.003	99	151937	25.0	25.3	
114 4-Isopropyltoluene	119	12.655	12.651	0.004	99	284792	25.0	25.2	
115 1,4-Dichlorobenzene	146	12.709	12.706	0.003	98	150942	25.0	24.6	
116 2,4-Dichloro-1-(triflourom	214	12.758	12.761	-0.003	94	81937	25.0	24.1	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.809	-0.002	97	94772	25.0	24.9	
120 n-Butylbenzene	91	13.062	13.059	0.003	100	262455	25.0	25.5	
121 1,2-Dichlorobenzene	146	13.081	13.083	-0.002	99	136843	25.0	24.6	
122 1,2-Dibromo-3-Chloropropan	75	13.859	13.862	-0.003	92	9396	25.0	20.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.011	14.008	0.003	99	300911	75.0	71.6	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.428	-0.003	99	191256	50.0	46.8	
126 1,2,4-Trichlorobenzene	180	14.693	14.689	0.004	98	62363	25.0	21.5	
127 Hexachlorobutadiene	225	14.863	14.860	0.003	95	33676	25.0	24.3	
128 Naphthalene	128	14.942	14.939	0.003	99	161398	25.0	21.2	
129 1,2,3-Trichlorobenzene	180	15.185	15.188	-0.003	97	47333	25.0	19.9	
131 2,4,5-Trichlorotoluene	159	15.964	15.961	0.003	95	24209	25.0	19.0	
130 2,3,6-Trichlorotoluene	159	16.061	16.064	-0.003	95	22020	25.0	19.1	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		50.0	50.7	
S 134 1,2-Dichloroethene, Total	96				0		50.0	50.8	
S 135 1,3-Dichloropropene, Total	1				0		50.0	41.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00003	Amount Added:	5.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	1.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	1.00	Units: uL	
VOA8260SURR_00032	Amount Added:	1.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	1.00	Units: uL	
VOAVAPRI_00005	Amount Added:	1.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

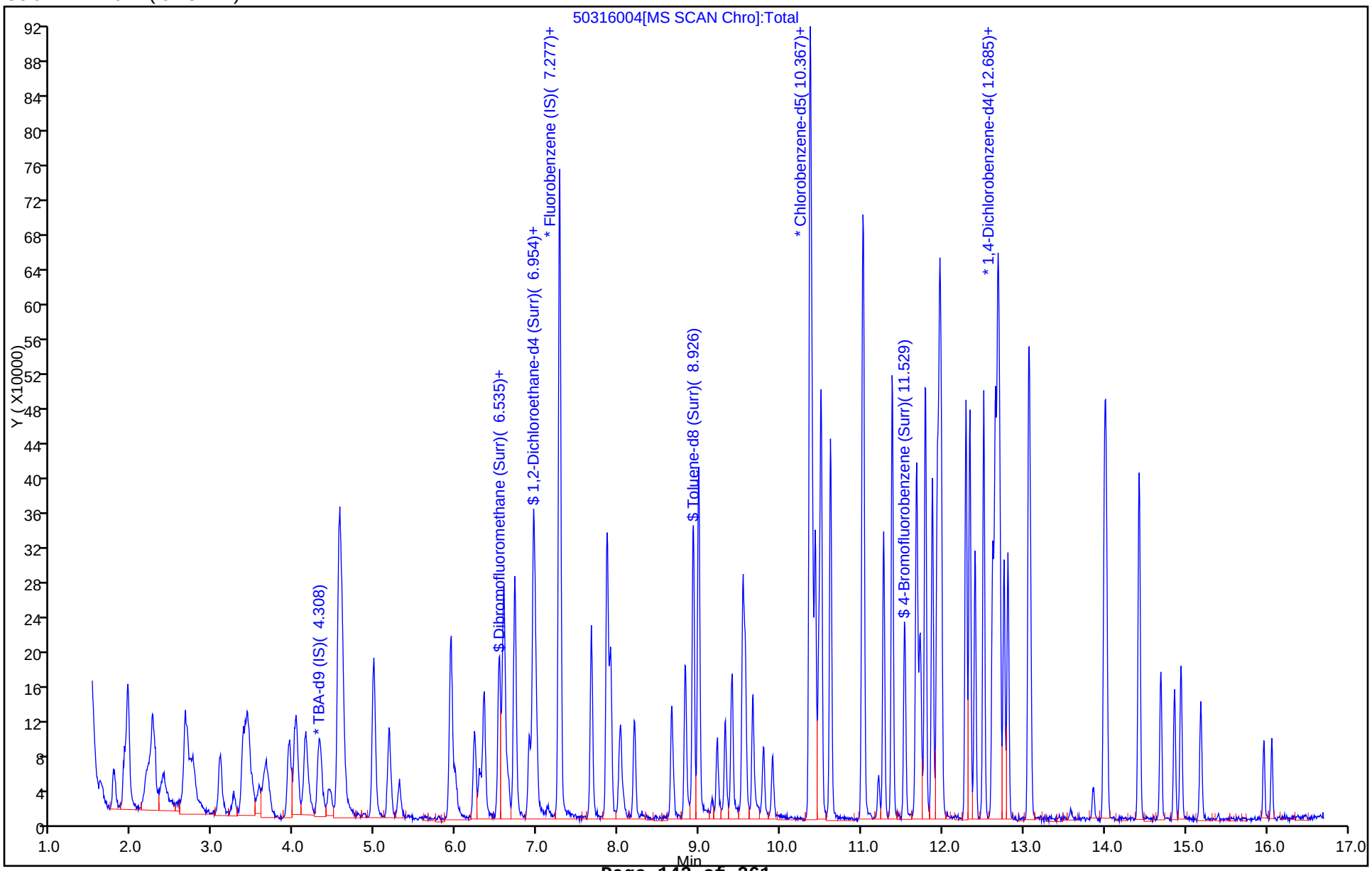
Report Date: 17-Mar-2015 10:59:21 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316004.D

Injection Date:	16-Mar-2015 12:41:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD5			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

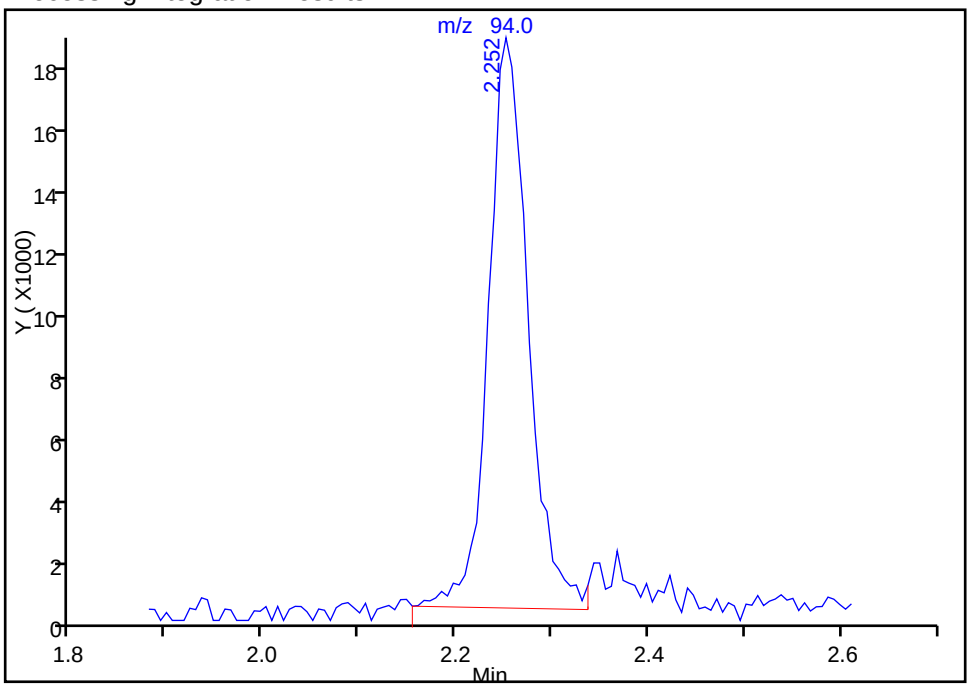
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316004.D				
Injection Date:	16-Mar-2015 12:41:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD5				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

15 Bromomethane, CAS: 74-83-9

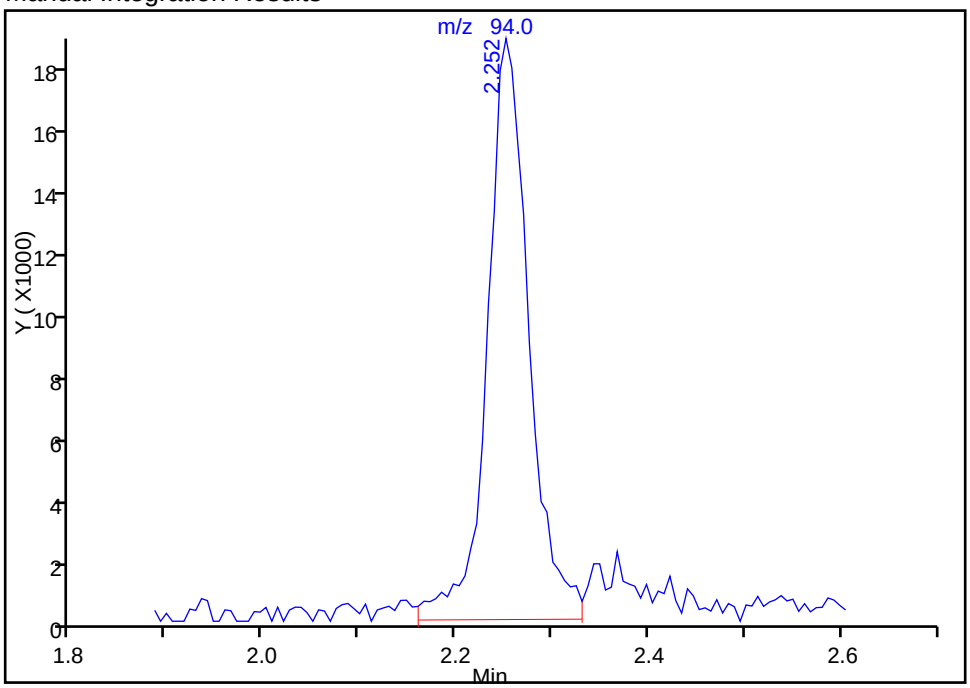
Processing Integration Results

RT: 2.25
Area: 51742
Amount: 22.147125
Amount Units: ng



Manual Integration Results

RT: 2.25
Area: 55097
Amount: 26.195176
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 09:42:10
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316005.D
Lims ID: ICIS VSTD10
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 16-Mar-2015 13:05:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS VSTD10
Misc. Info.: 180-0006031-005
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:21 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 16-Mar-2015 15:03:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.305	4.305	0.000	86	135440	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.273	0.000	99	538139	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.364	0.000	97	121549	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.682	0.000	98	174397	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.525	6.525	0.000	95	122918	50.0	50.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.902	6.902	0.000	99	162227	50.0	50.3	
$ 7 Toluene-d8 (Surr)	98	8.922	8.922	0.000	100	527093	50.0	54.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.532	0.000	95	183629	50.0	52.6	
11 Dichlorodifluoromethane	85	1.616	1.616	0.000	100	116111	50.0	50.3	
12 Chloromethane	50	1.774	1.774	0.000	100	159885	50.0	50.2	
13 Vinyl chloride	62	1.902	1.902	0.000	100	183317	50.0	51.5	
14 Butadiene	39	1.944	1.944	0.000	99	208815	50.0	51.4	
15 Bromomethane	94	2.249	2.249	0.000	93	100717	50.0	52.5	
16 Chloroethane	64	2.370	2.370	0.000	98	126349	50.0	51.3	
17 Dichlorofluoromethane	67	2.650	2.650	0.000	100	282324	50.0	50.2	
18 Trichlorofluoromethane	101	2.711	2.711	0.000	98	217544	50.0	51.0	
20 Ethyl ether	59	3.088	3.088	0.000	98	138609	50.0	49.2	
21 Acrolein	56	3.252	3.252	0.000	98	50582	150.0	147.9	
22 1,1-Dichloroethene	96	3.386	3.386	0.000	99	151843	50.0	48.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.429	3.429	0.000	97	159979	50.0	51.0	
24 Acetone	43	3.496	3.496	0.000	99	102899	100.0	93.3	
25 Iodomethane	142	3.587	3.587	0.000	96	216640	50.0	50.3	
26 Carbon disulfide	76	3.654	3.654	0.000	100	387934	50.0	51.1	
28 3-Chloro-1-propene	76	3.940	3.940	0.000	96	80577	50.0	49.1	
30 Methyl acetate	43	4.019	4.019	0.000	100	641136	250.0	248.6	
31 Methylene Chloride	84	4.134	4.134	0.000	86	168570	50.0	47.0	
32 2-Methyl-2-propanol	59	4.445	4.445	0.000	86	83098	500.0	520.9	
33 Acrylonitrile	53	4.554	4.554	0.000	99	666088	500.0	502.1	
34 trans-1,2-Dichloroethene	96	4.560	4.560	0.000	59	161381	50.0	50.3	
35 Methyl tert-butyl ether	73	4.591	4.591	0.000	96	336961	50.0	47.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.980	4.980	0.000	98	261916	50.0	51.1	
37 1,1-Dichloroethane	63	5.169	5.169	0.000	100	291408	50.0	50.9	
38 Vinyl acetate	43	5.290	5.290	0.000	100	187915	50.0	46.2	
44 2,2-Dichloropropane	77	5.923	5.923	0.000	67	70106	50.0	48.9	
45 cis-1,2-Dichloroethene	96	5.935	5.935	0.000	92	164893	50.0	48.8	
46 2-Butanone (MEK)	43	5.990	5.990	0.000	100	180996	100.0	102.7	
49 Chlorobromomethane	128	6.233	6.233	0.000	95	71124	50.0	48.6	
51 Tetrahydrofuran	42	6.288	6.288	0.000	98	110274	100.0	99.9	
52 Chloroform	83	6.343	6.343	0.000	96	262371	50.0	50.4	
53 1,1,1-Trichloroethane	97	6.531	6.531	0.000	95	167130	50.0	50.3	
54 Cyclohexane	56	6.586	6.586	0.000	95	322468	50.0	50.5	
56 Carbon tetrachloride	117	6.720	6.720	0.000	69	132517	50.0	49.7	
55 1,1-Dichloropropene	75	6.726	6.726	0.000	97	219974	50.0	51.0	
57 Isobutyl alcohol	41	6.945	6.945	0.000	37	83109	1250.0	1157.0	
58 Benzene	78	6.957	6.957	0.000	99	654151	50.0	51.3	
59 1,2-Dichloroethane	62	6.981	6.981	0.000	97	208683	50.0	50.0	
62 n-Heptane	43	7.280	7.280	0.000	81	222515	50.0	50.8	
64 Trichloroethene	130	7.669	7.669	0.000	98	162608	50.0	50.9	
66 Methylcyclohexane	83	7.864	7.864	0.000	96	295972	50.0	51.9	
67 1,2-Dichloropropane	63	7.906	7.906	0.000	95	154467	50.0	49.0	
68 Dibromomethane	93	8.028	8.028	0.000	95	82469	50.0	48.6	
70 1,4-Dioxane	88	8.058	8.058	0.000	96	31354	1000.0	944.0	M
71 Dichlorobromomethane	83	8.198	8.198	0.000	99	176851	50.0	51.0	
74 cis-1,3-Dichloropropene	75	8.661	8.661	0.000	99	152581	50.0	45.6	
75 4-Methyl-2-pentanone (MIBK	43	8.825	8.825	0.000	99	342539	100.0	104.1	
76 Toluene	91	8.989	8.989	0.000	100	679332	50.0	54.5	
77 trans-1,3-Dichloropropene	75	9.220	9.220	0.000	94	108942	50.0	48.4	
78 Ethyl methacrylate	69	9.318	9.318	0.000	96	142858	50.0	48.7	
79 1,1,2-Trichloroethane	97	9.397	9.397	0.000	99	125390	50.0	53.7	
80 Tetrachloroethene	164	9.537	9.537	0.000	95	129494	50.0	53.1	
81 1,3-Dichloropropane	76	9.567	9.567	0.000	98	233217	50.0	53.7	
82 2-Hexanone	43	9.658	9.658	0.000	99	271508	100.0	108.0	
84 Chlorodibromomethane	129	9.786	9.786	0.000	99	96762	50.0	51.9	
85 Ethylene Dibromide	107	9.902	9.902	0.000	98	115204	50.0	51.7	
86 3-Chlorobenzotrifluoride	180	10.370	10.370	0.000	97	251080	50.0	52.8	
87 Chlorobenzene	112	10.394	10.394	0.000	99	416488	50.0	52.8	
88 4-Chlorobenzotrifluoride	180	10.431	10.431	0.000	99	234233	50.0	51.0	
89 1,1,1,2-Tetrachloroethane	131	10.473	10.473	0.000	97	101650	50.0	49.9	
90 Ethylbenzene	106	10.498	10.498	0.000	100	242856	50.0	53.6	
91 m-Xylene & p-Xylene	106	10.619	10.619	0.000	99	293796	50.0	53.0	
92 o-Xylene	106	11.015	11.015	0.000	97	285835	50.0	52.8	
93 Styrene	104	11.027	11.027	0.000	99	469890	50.0	53.8	
94 Bromoform	173	11.209	11.209	0.000	96	57667	50.0	50.1	
96 2-Chlorobenzotrifluoride	180	11.276	11.276	0.000	99	252226	50.0	53.1	
97 Isopropylbenzene	105	11.380	11.380	0.000	100	741027	50.0	54.8	
99 1,1,2,2-Tetrachloroethane	83	11.672	11.672	0.000	97	171864	50.0	51.3	
100 Bromobenzene	156	11.684	11.684	0.000	98	168649	50.0	52.2	
101 1,2,3-Trichloropropane	110	11.720	11.720	0.000	97	55900	50.0	52.7	
102 trans-1,4-Dichloro-2-buten	53	11.727	11.727	0.000	88	42827	50.0	48.6	
103 N-Propylbenzene	120	11.787	11.787	0.000	100	210687	50.0	52.9	
104 2-Chlorotoluene	126	11.873	11.873	0.000	100	177793	50.0	53.1	
105 3-Chlorotoluene	126	11.933	11.933	0.000	99	185477	50.0	49.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.964	11.964	0.000	99	588847	50.0	53.0	
107 4-Chlorotoluene	126	11.982	11.982	0.000	99	189449	50.0	52.3	
108 tert-Butylbenzene	119	12.286	12.286	0.000	100	517188	50.0	53.8	
110 1,2,4-Trimethylbenzene	105	12.335	12.335	0.000	100	610150	50.0	53.5	
111 1,2-dichloro-4-(trifluorom	214	12.402	12.402	0.000	98	179092	50.0	49.7	
112 sec-Butylbenzene	105	12.505	12.505	0.000	100	732318	50.0	54.1	
113 1,3-Dichlorobenzene	146	12.615	12.615	0.000	98	302903	50.0	50.9	
114 4-Isopropyltoluene	119	12.651	12.651	0.000	99	605051	50.0	54.1	
115 1,4-Dichlorobenzene	146	12.706	12.706	0.000	98	310551	50.0	51.1	
116 2,4-Dichloro-1-(triflourom	214	12.761	12.761	0.000	94	174468	50.0	51.7	
118 2,5-Dichlorobenzotrifluori	214	12.809	12.809	0.000	98	186350	50.0	49.4	
120 n-Butylbenzene	91	13.059	13.059	0.000	100	542017	50.0	53.3	
121 1,2-Dichlorobenzene	146	13.083	13.083	0.000	100	283138	50.0	51.4	
122 1,2-Dibromo-3-Chloropropan	75	13.862	13.862	0.000	86	21428	50.0	47.6	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.008	14.008	0.000	99	613057	150.0	147.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.428	14.428	0.000	100	386758	100.0	95.5	
126 1,2,4-Trichlorobenzene	180	14.689	14.689	0.000	96	132179	50.0	46.1	
127 Hexachlorobutadiene	225	14.860	14.860	0.000	96	67414	50.0	49.0	
128 Naphthalene	128	14.939	14.939	0.000	100	347596	50.0	46.2	
129 1,2,3-Trichlorobenzene	180	15.188	15.188	0.000	98	105062	50.0	44.7	
131 2,4,5-Trichlorotoluene	159	15.961	15.961	0.000	96	51080	50.0	40.4	
130 2,3,6-Trichlorotoluene	159	16.064	16.064	0.000	97	47319	50.0	41.5	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	105.8	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	94.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAVAPRI_00005	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	2.00	Units: uL	
VOA8260SURR_00032	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	2.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	2.00	Units: uL	
VOAACRPRI_00003	Amount Added:	6.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

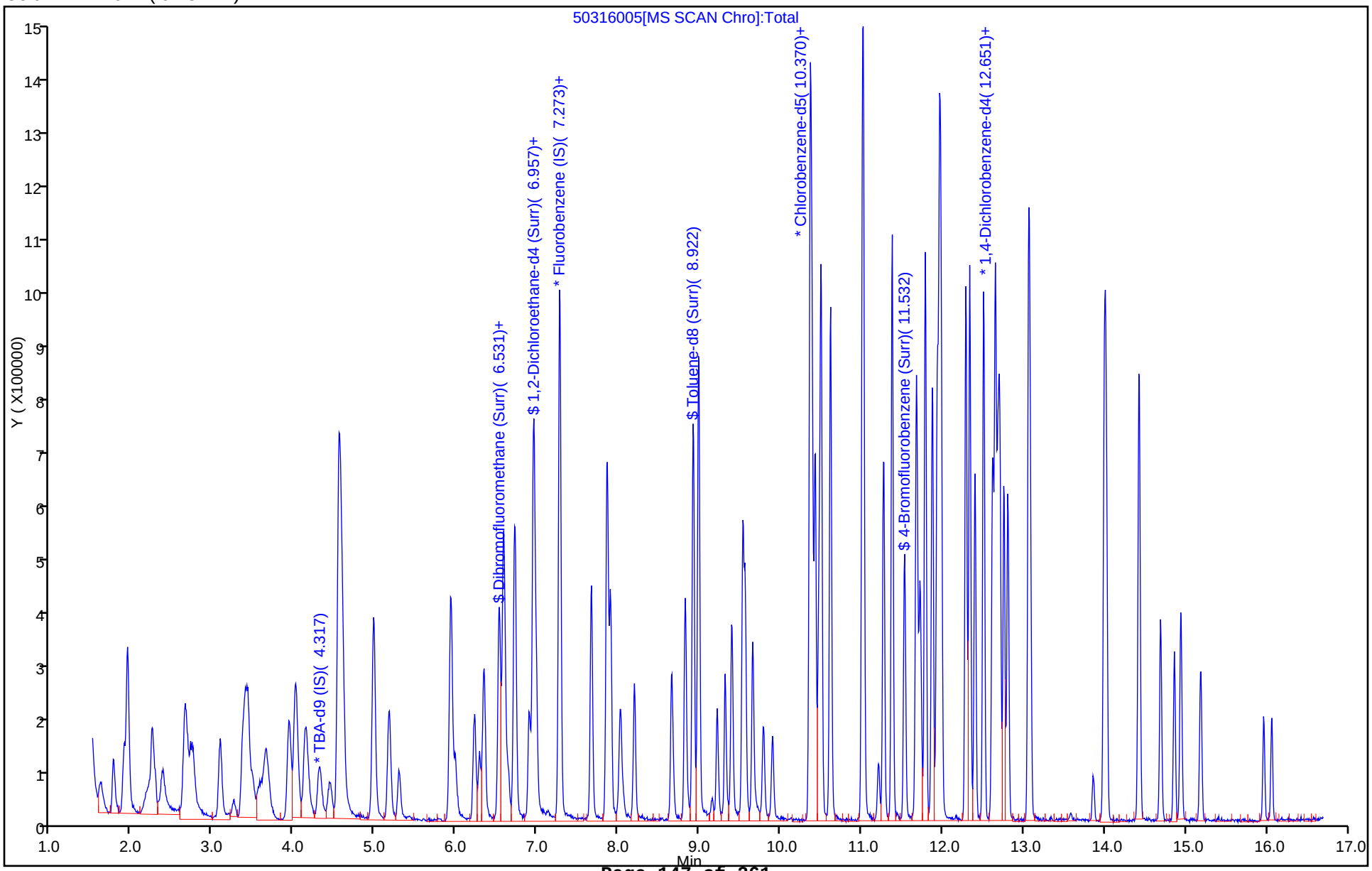
Report Date: 17-Mar-2015 10:59:23 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316005.D

Injection Date:	16-Mar-2015 13:05:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	ICIS VSTD10			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

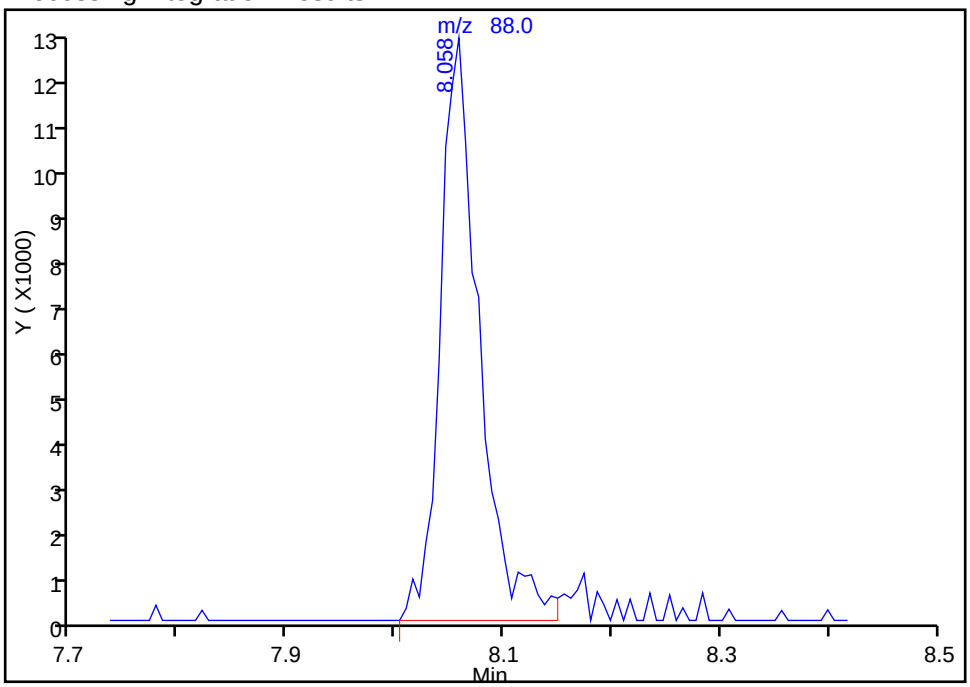
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316005.D
Injection Date: 16-Mar-2015 13:05:30 Instrument ID: CHHP5
Lims ID: ICIS VSTD10
Client ID:
Operator ID: 001562 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

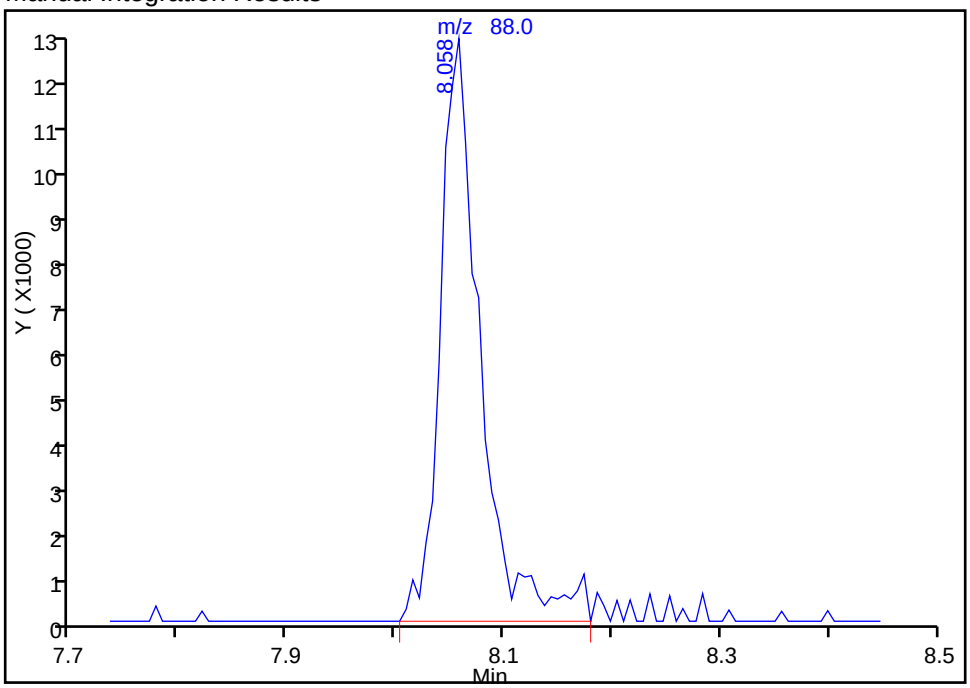
Processing Integration Results

RT: 8.06
Area: 30397
Amount: 939.9751
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 31354
Amount: 944.0403
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 09:27:38
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316006.D
Lims ID: IC VSTD15
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-Mar-2015 13:29:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD15
Misc. Info.: 180-0006031-006
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:26 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 09:45:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.305	4.305	0.000	89	152705	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.273	0.000	99	530419	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.364	0.000	99	125149	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.682	0.000	95	182887	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.525	6.525	0.000	97	185698	75.0	77.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.902	6.902	0.000	96	247858	75.0	77.9	
$ 7 Toluene-d8 (Surr)	98	8.922	8.922	0.000	100	794092	75.0	79.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.532	0.000	97	279546	75.0	77.8	
11 Dichlorodifluoromethane	85	1.622	1.622	0.000	99	173113	75.0	76.1	
12 Chloromethane	50	1.768	1.768	0.000	99	249772	75.0	79.6	
13 Vinyl chloride	62	1.896	1.896	0.000	100	280135	75.0	79.9	
14 Butadiene	39	1.944	1.944	0.000	99	317272	75.0	79.2	
15 Bromomethane	94	2.249	2.249	0.000	92	159846	75.0	87.5	
16 Chloroethane	64	2.376	2.376	0.000	96	191164	75.0	78.8	
17 Dichlorofluoromethane	67	2.644	2.644	0.000	99	437737	75.0	79.0	
18 Trichlorofluoromethane	101	2.723	2.723	0.000	96	358375	75.0	85.2	
20 Ethyl ether	59	3.082	3.082	0.000	100	214135	75.0	77.2	
21 Acrolein	56	3.258	3.258	0.000	100	62132	175.0	184.3	
22 1,1-Dichloroethene	96	3.374	3.374	0.000	100	235889	75.0	77.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.423	3.423	0.000	100	246660	75.0	79.7	
24 Acetone	43	3.496	3.496	0.000	100	180387	150.0	166.0	
25 Iodomethane	142	3.581	3.581	0.000	100	334141	75.0	78.6	
26 Carbon disulfide	76	3.660	3.660	0.000	100	592248	75.0	79.2	
28 3-Chloro-1-propene	76	3.934	3.934	0.000	100	125423	75.0	77.6	
30 Methyl acetate	43	4.019	4.019	0.000	100	994505	375.0	391.2	
31 Methylene Chloride	84	4.147	4.147	0.000	100	256424	75.0	72.5	
32 2-Methyl-2-propanol	59	4.439	4.439	0.000	100	133756	750.0	743.6	
33 Acrylonitrile	53	4.554	4.554	0.000	100	1035956	750.0	792.2	
34 trans-1,2-Dichloroethene	96	4.560	4.560	0.000	100	251288	75.0	79.4	
35 Methyl tert-butyl ether	73	4.597	4.597	0.000	100	528520	75.0	75.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.980	4.980	0.000	100	392065	75.0	77.6	
37 1,1-Dichloroethane	63	5.175	5.175	0.000	100	435915	75.0	77.2	
38 Vinyl acetate	43	5.296	5.296	0.000	100	294456	75.0	73.5	
44 2,2-Dichloropropane	77	5.929	5.929	0.000	100	108858	75.0	77.1	
45 cis-1,2-Dichloroethene	96	5.941	5.941	0.000	100	259517	75.0	77.9	
46 2-Butanone (MEK)	43	5.990	5.990	0.000	100	259227	150.0	149.2	
49 Chlorobromomethane	128	6.227	6.227	0.000	100	109930	75.0	76.2	
51 Tetrahydrofuran	42	6.282	6.282	0.000	100	166594	150.0	153.1	
52 Chloroform	83	6.343	6.343	0.000	100	395935	75.0	77.2	
53 1,1,1-Trichloroethane	97	6.531	6.531	0.000	100	259963	75.0	79.4	
54 Cyclohexane	56	6.586	6.586	0.000	100	497889	75.0	79.2	
56 Carbon tetrachloride	117	6.720	6.720	0.000	100	203736	75.0	77.5	
55 1,1-Dichloropropene	75	6.726	6.726	0.000	100	326699	75.0	76.8	
57 Isobutyl alcohol	41	6.945	6.945	0.000	100	137203	1875.0	1937.9	M
58 Benzene	78	6.957	6.957	0.000	100	984614	75.0	78.3	
59 1,2-Dichloroethane	62	6.988	6.988	0.000	100	320594	75.0	77.9	
62 n-Heptane	43	7.280	7.280	0.000	100	335961	75.0	77.8	
64 Trichloroethene	130	7.669	7.669	0.000	100	242252	75.0	76.9	
66 Methylcyclohexane	83	7.864	7.864	0.000	100	446628	75.0	79.5	
67 1,2-Dichloropropane	63	7.906	7.906	0.000	100	238331	75.0	76.7	
68 Dibromomethane	93	8.022	8.022	0.000	100	130496	75.0	78.0	
70 1,4-Dioxane	88	8.058	8.058	0.000	100	50907	1500.0	1555.1	
71 Dichlorobromomethane	83	8.198	8.198	0.000	100	259871	75.0	76.1	
74 cis-1,3-Dichloropropene	75	8.661	8.661	0.000	100	247138	75.0	75.0	
75 4-Methyl-2-pentanone (MIBK	43	8.825	8.825	0.000	100	531084	150.0	156.8	
76 Toluene	91	8.989	8.989	0.000	100	1017198	75.0	79.3	
77 trans-1,3-Dichloropropene	75	9.220	9.220	0.000	100	167274	75.0	72.2	
78 Ethyl methacrylate	69	9.318	9.318	0.000	100	221852	75.0	73.4	
79 1,1,2-Trichloroethane	97	9.403	9.403	0.000	100	183907	75.0	76.5	
80 Tetrachloroethene	164	9.537	9.537	0.000	100	194422	75.0	77.5	
81 1,3-Dichloropropane	76	9.561	9.561	0.000	100	342719	75.0	76.7	
82 2-Hexanone	43	9.658	9.658	0.000	100	402386	150.0	155.5	
84 Chlorodibromomethane	129	9.792	9.792	0.000	100	145315	75.0	75.7	
85 Ethylene Dibromide	107	9.902	9.902	0.000	100	179814	75.0	78.4	
86 3-Chlorobenzotrifluoride	180	10.370	10.370	0.000	100	388132	75.0	79.3	
87 Chlorobenzene	112	10.388	10.388	0.000	100	622968	75.0	76.7	
88 4-Chlorobenzotrifluoride	180	10.431	10.431	0.000	100	368570	75.0	77.9	
89 1,1,1,2-Tetrachloroethane	131	10.473	10.473	0.000	100	159225	75.0	75.9	
90 Ethylbenzene	106	10.504	10.504	0.000	100	366398	75.0	78.6	
91 m-Xylene & p-Xylene	106	10.619	10.619	0.000	100	454933	75.0	79.8	
92 o-Xylene	106	11.009	11.009	0.000	100	436586	75.0	78.3	
93 Styrene	104	11.027	11.027	0.000	100	712222	75.0	79.2	
94 Bromoform	173	11.209	11.209	0.000	100	90522	75.0	76.3	
96 2-Chlorobenzotrifluoride	180	11.276	11.276	0.000	100	386985	75.0	79.2	
97 Isopropylbenzene	105	11.380	11.380	0.000	100	1137215	75.0	81.7	
99 1,1,2,2-Tetrachloroethane	83	11.678	11.678	0.000	100	264462	75.0	76.7	
100 Bromobenzene	156	11.678	11.678	0.000	100	253502	75.0	74.9	
101 1,2,3-Trichloropropane	110	11.721	11.721	0.000	100	81225	75.0	73.0	
102 trans-1,4-Dichloro-2-buten	53	11.733	11.733	0.000	100	66879	75.0	72.3	
103 N-Propylbenzene	120	11.787	11.787	0.000	100	316980	75.0	75.9	
104 2-Chlorotoluene	126	11.873	11.873	0.000	100	262207	75.0	74.7	
105 3-Chlorotoluene	126	11.933	11.933	0.000	100	291288	75.0	74.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.964	11.964	0.000	100	921783	75.0	79.2	
107 4-Chlorotoluene	126	11.982	11.982	0.000	100	296950	75.0	78.2	
108 tert-Butylbenzene	119	12.286	12.286	0.000	100	794422	75.0	78.8	
110 1,2,4-Trimethylbenzene	105	12.335	12.335	0.000	100	951216	75.0	79.6	
111 1,2-dichloro-4-(trifluorom	214	12.402	12.402	0.000	100	303120	75.0	80.3	
112 sec-Butylbenzene	105	12.511	12.511	0.000	100	1138120	75.0	80.2	
113 1,3-Dichlorobenzene	146	12.621	12.621	0.000	100	480001	75.0	77.0	
114 4-Isopropyltoluene	119	12.651	12.651	0.000	100	948139	75.0	80.9	
115 1,4-Dichlorobenzene	146	12.706	12.706	0.000	100	484138	75.0	76.0	
116 2,4-Dichloro-1-(triflourom	214	12.755	12.755	0.000	100	289446	75.0	81.8	
118 2,5-Dichlorobenzotrifluori	214	12.803	12.803	0.000	100	309155	75.0	78.1	
120 n-Butylbenzene	91	13.065	13.065	0.000	100	861784	75.0	80.7	
121 1,2-Dichlorobenzene	146	13.083	13.083	0.000	100	440732	75.0	76.3	
122 1,2-Dibromo-3-Chloropropan	75	13.856	13.856	0.000	100	36318	75.0	76.9	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.008	14.008	0.000	100	1058653	225.0	242.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.428	14.428	0.000	100	694253	150.0	163.5	
126 1,2,4-Trichlorobenzene	180	14.695	14.695	0.000	100	240861	75.0	80.1	
127 Hexachlorobutadiene	225	14.866	14.866	0.000	100	112236	75.0	77.9	
128 Naphthalene	128	14.939	14.939	0.000	100	657935	75.0	83.4	
129 1,2,3-Trichlorobenzene	180	15.188	15.188	0.000	100	200345	75.0	81.3	
131 2,4,5-Trichlorotoluene	159	15.967	15.967	0.000	100	108037	75.0	81.5	
130 2,3,6-Trichlorotoluene	159	16.064	16.064	0.000	100	98974	75.0	82.7	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		150.0	158.1	
S 134 1,2-Dichloroethene, Total	96				0		150.0	157.3	
S 135 1,3-Dichloropropene, Total	1				0		150.0	147.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00003	Amount Added:	7.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	3.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	3.00	Units: uL	
VOA8260SURR_00032	Amount Added:	3.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	3.00	Units: uL	
VOAVAPRI_00005	Amount Added:	3.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

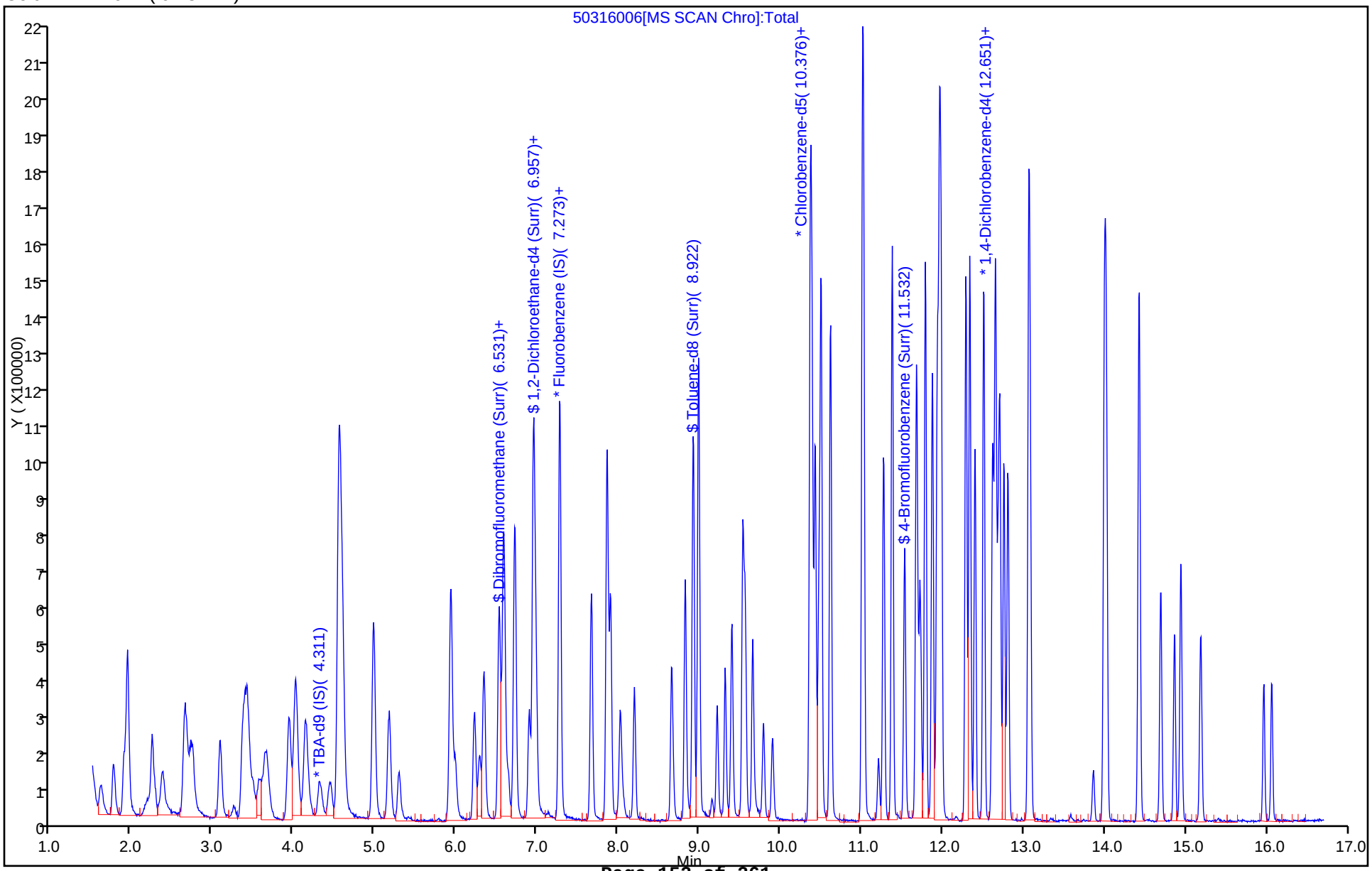
Report Date: 17-Mar-2015 10:59:27 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316006.D

Injection Date:	16-Mar-2015 13:29:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD15			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

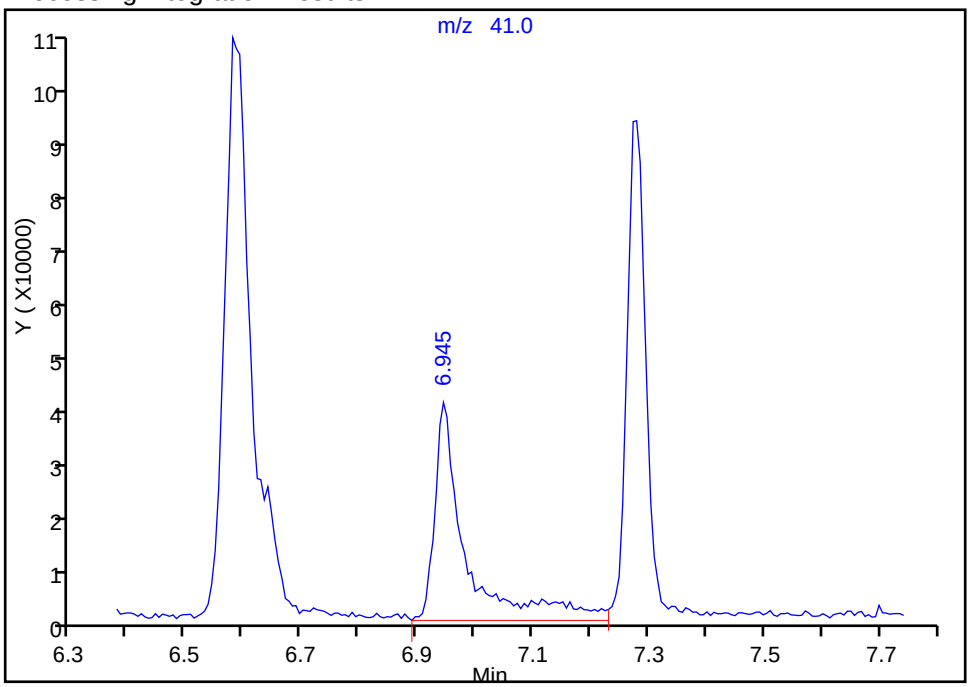
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316006.D				
Injection Date:	16-Mar-2015 13:29:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD15				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

57 Isobutyl alcohol, CAS: 78-83-1

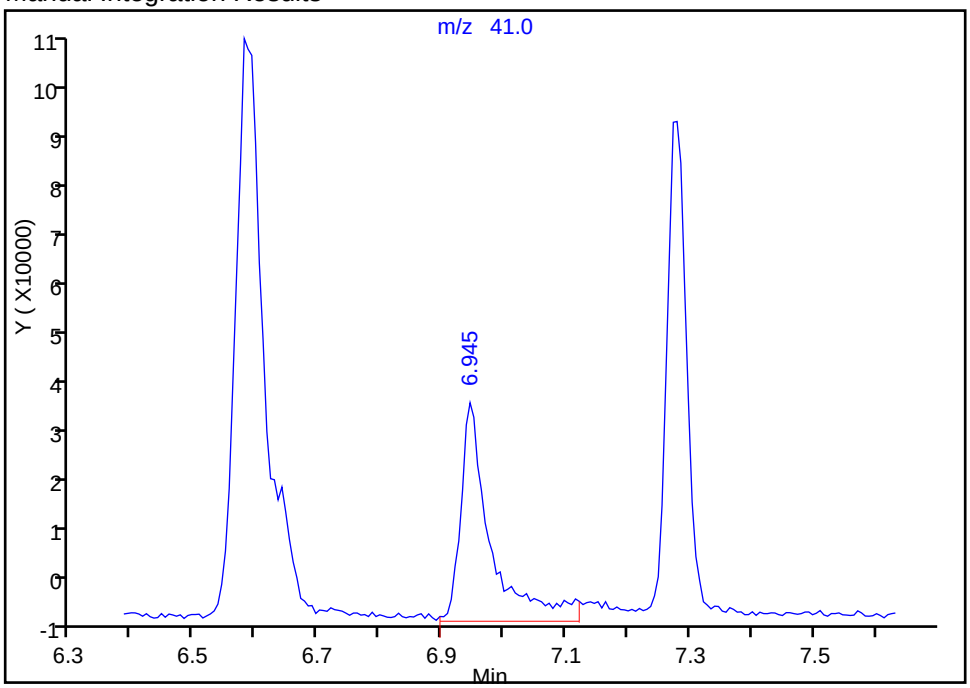
Processing Integration Results

RT: 6.94
Area: 150922
Amount: 2067.3126
Amount Units: ng



Manual Integration Results

RT: 6.94
Area: 137203
Amount: 1937.8985
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 09:45:06
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316007.D
Lims ID: IC VSTD20
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Mar-2015 13:53:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD20
Misc. Info.: 180-0006031-007
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:28 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 09:48:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.326	4.305	0.021	86	154462	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.270	7.273	-0.003	99	558174	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.367	10.364	0.003	99	128898	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.682	0.003	99	188542	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.528	6.525	0.003	99	248750	100.0	98.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.899	6.902	-0.003	97	335757	100.0	100.3	
$ 7 Toluene-d8 (Surr)	98	8.919	8.922	-0.003	100	1053927	100.0	102.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.532	-0.003	98	379740	100.0	102.6	
11 Dichlorodifluoromethane	85	1.619	1.622	-0.003	98	243823	100.0	101.9	
12 Chloromethane	50	1.777	1.768	0.009	100	316915	100.0	96.0	
13 Vinyl chloride	62	1.905	1.896	0.009	100	370271	100.0	100.3	
14 Butadiene	39	1.947	1.944	0.003	100	415323	100.0	98.5	
15 Bromomethane	94	2.251	2.249	0.002	99	192846	100.0	101.0	
16 Chloroethane	64	2.373	2.376	-0.003	99	245673	100.0	96.2	
17 Dichlorofluoromethane	67	2.653	2.644	0.009	100	548270	100.0	94.0	
18 Trichlorofluoromethane	101	2.702	2.723	-0.021	98	437688	100.0	98.9	
20 Ethyl ether	59	3.085	3.082	0.003	100	293889	100.0	100.7	
21 Acrolein	56	3.261	3.258	0.003	99	71073	200.0	200.4	
22 1,1-Dichloroethene	96	3.377	3.374	0.003	98	318457	100.0	98.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.432	3.423	0.009	98	319162	100.0	98.0	
24 Acetone	43	3.492	3.496	-0.004	100	217095	200.0	189.9	
25 Iodomethane	142	3.596	3.581	0.015	99	439512	100.0	98.3	
26 Carbon disulfide	76	3.669	3.660	0.009	100	772081	100.0	98.1	
28 3-Chloro-1-propene	76	3.930	3.934	-0.004	99	163875	100.0	96.3	
30 Methyl acetate	43	4.022	4.019	0.003	100	1321970	500.0	494.2	
31 Methylene Chloride	84	4.143	4.147	-0.004	98	345226	100.0	92.7	
32 2-Methyl-2-propanol	59	4.435	4.439	-0.004	99	175500	1000.0	964.6	
33 Acrylonitrile	53	4.551	4.554	-0.003	100	1363975	1000.0	991.2	
34 trans-1,2-Dichloroethene	96	4.557	4.560	-0.003	95	327278	100.0	98.3	
35 Methyl tert-butyl ether	73	4.594	4.597	-0.003	99	727030	100.0	98.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.983	4.980	0.003	99	514868	100.0	96.8	
37 1,1-Dichloroethane	63	5.171	5.175	-0.004	100	595324	100.0	100.2	
38 Vinyl acetate	43	5.293	5.296	-0.003	100	419086	100.0	99.4	
44 2,2-Dichloropropane	77	5.926	5.929	-0.003	98	147216	100.0	99.1	
45 cis-1,2-Dichloroethene	96	5.938	5.941	-0.003	98	349805	100.0	99.7	
46 2-Butanone (MEK)	43	5.987	5.990	-0.003	100	371447	200.0	203.2	
49 Chlorobromomethane	128	6.230	6.227	0.003	98	150204	100.0	99.0	
51 Tetrahydrofuran	42	6.285	6.282	0.003	99	224920	200.0	196.4	
52 Chloroform	83	6.346	6.343	0.003	100	534362	100.0	99.0	
53 1,1,1-Trichloroethane	97	6.528	6.531	-0.003	99	344772	100.0	100.0	
54 Cyclohexane	56	6.589	6.586	0.003	99	649387	100.0	98.1	
56 Carbon tetrachloride	117	6.717	6.720	-0.003	98	274328	100.0	99.2	
55 1,1-Dichloropropene	75	6.723	6.726	-0.003	98	436454	100.0	97.5	
57 Isobutyl alcohol	41	6.942	6.945	-0.003	98	174166	2500.0	2337.7	M
58 Benzene	78	6.954	6.957	-0.003	99	1312435	100.0	99.2	
59 1,2-Dichloroethane	62	6.984	6.988	-0.004	99	429724	100.0	99.2	
62 n-Heptane	43	7.276	7.280	-0.004	99	443357	100.0	97.6	
64 Trichloroethene	130	7.666	7.669	-0.003	99	326599	100.0	98.5	
66 Methylcyclohexane	83	7.860	7.864	-0.004	100	583894	100.0	98.7	
67 1,2-Dichloropropane	63	7.903	7.906	-0.003	99	332279	100.0	101.6	
68 Dibromomethane	93	8.025	8.022	0.003	99	178905	100.0	101.6	
70 1,4-Dioxane	88	8.055	8.058	-0.003	99	66490	2000.0	1930.1	
71 Dichlorobromomethane	83	8.195	8.198	-0.003	98	363842	100.0	101.2	
74 cis-1,3-Dichloropropene	75	8.657	8.661	-0.004	99	345528	100.0	99.6	
75 4-Methyl-2-pentanone (MIBK	43	8.822	8.825	-0.003	100	747218	200.0	214.2	
76 Toluene	91	8.992	8.989	0.003	100	1340817	100.0	101.5	
77 trans-1,3-Dichloropropene	75	9.217	9.220	-0.003	99	244258	100.0	102.4	
78 Ethyl methacrylate	69	9.314	9.318	-0.004	97	334858	100.0	107.6	
79 1,1,2-Trichloroethane	97	9.399	9.403	-0.004	99	252461	100.0	101.9	
80 Tetrachloroethene	164	9.539	9.537	0.002	99	261148	100.0	101.1	
81 1,3-Dichloropropane	76	9.564	9.561	0.003	100	467174	100.0	101.5	
82 2-Hexanone	43	9.655	9.658	-0.003	100	541680	200.0	203.2	
84 Chlorodibromomethane	129	9.789	9.792	-0.003	99	210013	100.0	106.2	
85 Ethylene Dibromide	107	9.898	9.902	-0.004	100	245946	100.0	104.0	
86 3-Chlorobenzotrifluoride	180	10.373	10.370	0.003	97	511845	100.0	101.6	
87 Chlorobenzene	112	10.391	10.388	0.003	100	845046	100.0	101.0	
88 4-Chlorobenzotrifluoride	180	10.428	10.431	-0.003	99	511237	100.0	104.9	
89 1,1,1,2-Tetrachloroethane	131	10.476	10.473	0.003	95	233228	100.0	107.9	
90 Ethylbenzene	106	10.501	10.504	-0.003	100	488611	100.0	101.8	
91 m-Xylene & p-Xylene	106	10.616	10.619	-0.003	100	592135	100.0	100.8	
92 o-Xylene	106	11.012	11.009	0.003	100	585609	100.0	101.9	
93 Styrene	104	11.024	11.027	-0.003	95	966850	100.0	104.4	
94 Bromoform	173	11.212	11.209	0.003	98	126605	100.0	103.7	
96 2-Chlorobenzotrifluoride	180	11.273	11.276	-0.003	99	521379	100.0	103.6	
97 Isopropylbenzene	105	11.377	11.380	-0.003	100	1474178	100.0	102.8	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.678	-0.003	98	351798	100.0	99.0	
100 Bromobenzene	156	11.681	11.678	0.003	99	346996	100.0	99.4	
101 1,2,3-Trichloropropane	110	11.717	11.721	-0.003	97	111668	100.0	97.4	
102 trans-1,4-Dichloro-2-buten	53	11.729	11.733	-0.004	97	92761	100.0	97.3	
103 N-Propylbenzene	120	11.784	11.787	-0.003	100	419888	100.0	97.5	
104 2-Chlorotoluene	126	11.875	11.873	0.002	100	351403	100.0	97.2	
105 3-Chlorotoluene	126	11.936	11.933	0.003	98	415463	100.0	102.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.964	-0.003	100	1188743	100.0	99.0	
107 4-Chlorotoluene	126	11.985	11.982	0.003	97	377870	100.0	96.5	
108 tert-Butylbenzene	119	12.289	12.286	0.003	99	1020106	100.0	98.1	
110 1,2,4-Trimethylbenzene	105	12.338	12.335	0.003	100	1214438	100.0	98.6	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.402	-0.003	100	396211	100.0	101.8	
112 sec-Butylbenzene	105	12.508	12.511	-0.003	100	1462842	100.0	99.9	
113 1,3-Dichlorobenzene	146	12.618	12.621	-0.003	99	630675	100.0	98.1	
114 4-Isopropyltoluene	119	12.648	12.651	-0.003	100	1195021	100.0	98.9	
115 1,4-Dichlorobenzene	146	12.709	12.706	0.003	99	642365	100.0	97.8	
116 2,4-Dichloro-1-(triflourom	214	12.758	12.755	0.003	98	358539	100.0	98.3	
118 2,5-Dichlorobenzotrifluori	214	12.806	12.803	0.003	99	406971	100.0	99.8	
120 n-Butylbenzene	91	13.062	13.065	-0.003	100	1093564	100.0	99.4	
121 1,2-Dichlorobenzene	146	13.080	13.083	-0.003	99	595901	100.0	100.1	
122 1,2-Dibromo-3-Chloropropan	75	13.859	13.856	0.003	95	47067	100.0	96.6	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.005	14.008	-0.003	100	1333690	300.0	296.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.424	14.428	-0.004	100	866884	200.0	198.1	
126 1,2,4-Trichlorobenzene	180	14.692	14.695	-0.003	99	295444	100.0	95.3	
127 Hexachlorobutadiene	225	14.862	14.866	-0.004	98	140410	100.0	94.5	
128 Naphthalene	128	14.942	14.939	0.003	100	789643	100.0	97.0	
129 1,2,3-Trichlorobenzene	180	15.185	15.188	-0.003	98	242534	100.0	95.4	
131 2,4,5-Trichlorotoluene	159	15.964	15.967	-0.003	98	123791	100.0	90.6	
130 2,3,6-Trichlorotoluene	159	16.061	16.064	-0.003	98	110702	100.0	89.7	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		200.0	202.8	
S 134 1,2-Dichloroethene, Total	96				0		200.0	198.0	
S 135 1,3-Dichloropropene, Total	1				0		200.0	202.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAVAPRI_00005	Amount Added:	4.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	4.00	Units: uL	
VOA8260SURR_00032	Amount Added:	4.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	4.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	4.00	Units: uL	
VOAACRPRI_00003	Amount Added:	8.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

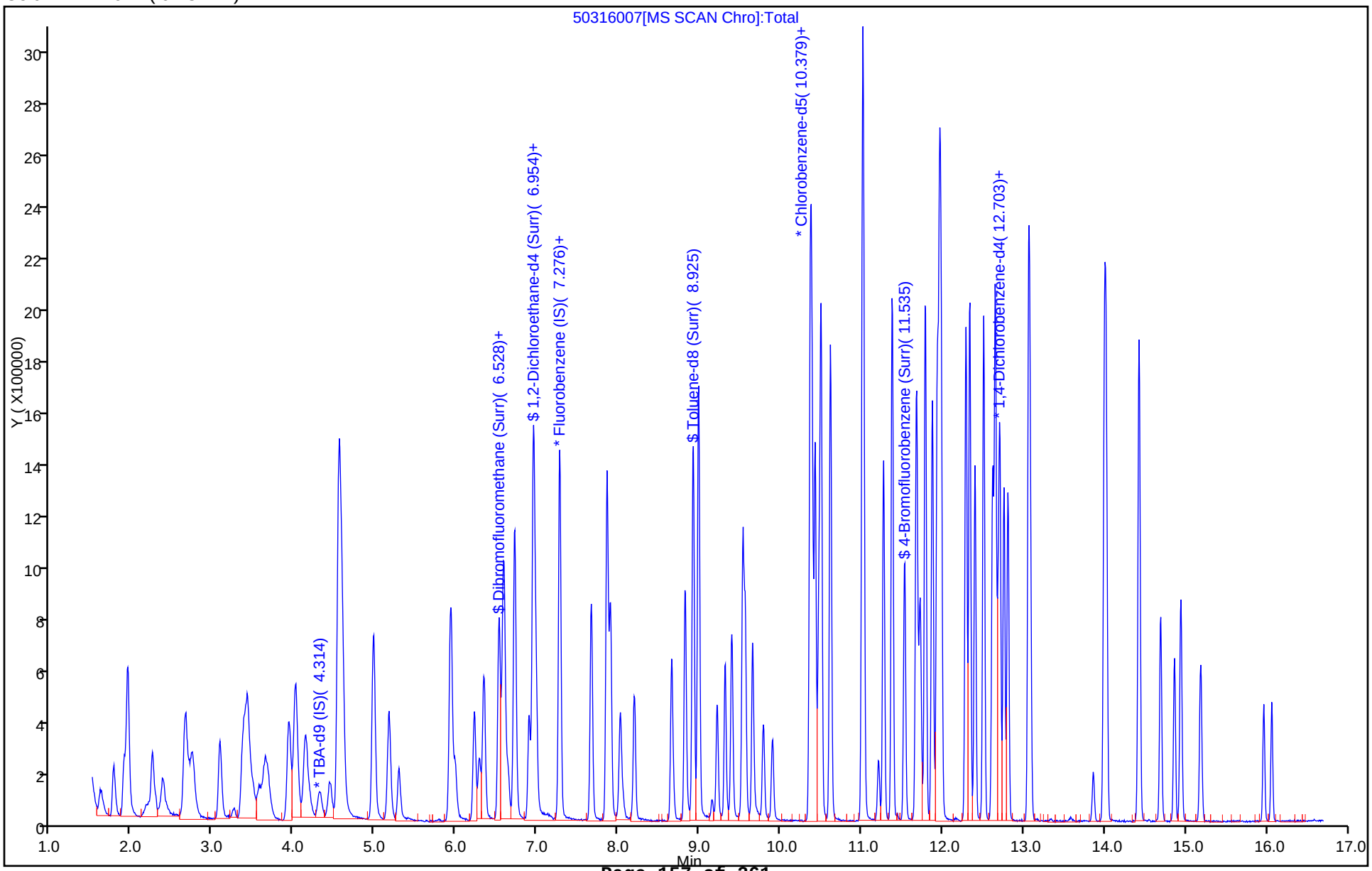
Report Date: 17-Mar-2015 10:59:29 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316007.D

Injection Date:	16-Mar-2015 13:53:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD20			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

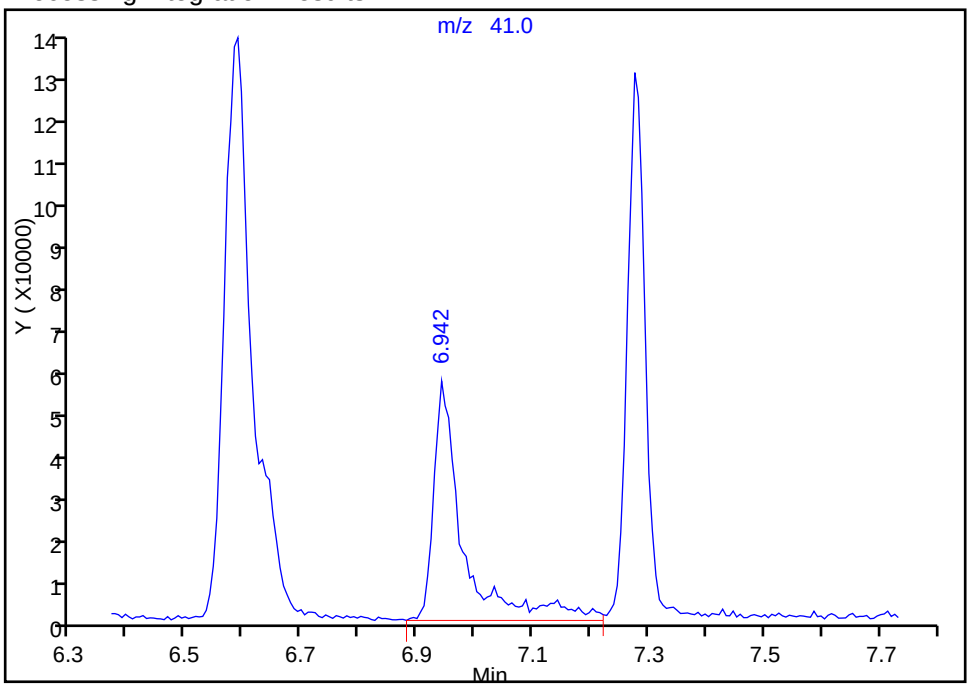
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316007.D				
Injection Date:	16-Mar-2015 13:53:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD20				
Client ID:					
Operator ID:	001562	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

57 Isobutyl alcohol, CAS: 78-83-1

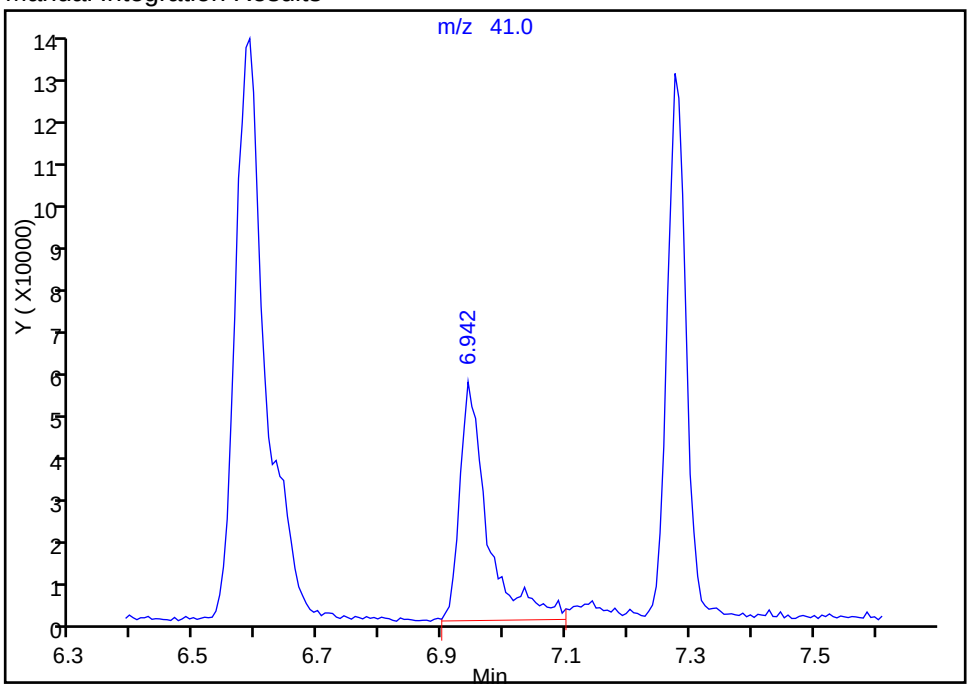
Processing Integration Results

RT: 6.94
Area: 197796
Amount: 2559.7908
Amount Units: ng



Manual Integration Results

RT: 6.94
Area: 174166
Amount: 2337.6542
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 09:48:25
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316008.D
Lims ID: IC VSTD35
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Mar-2015 14:17:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD35
Misc. Info.: 180-0006031-008
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:29 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 09:49:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.309	4.305	0.004	95	172412	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.273	-0.002	99	562344	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.362	10.364	-0.002	92	147916	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.682	0.004	95	201448	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.529	6.525	0.004	99	435320	175.0	170.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.902	-0.002	98	589491	175.0	174.8	
$ 7 Toluene-d8 (Surr)	98	8.920	8.922	-0.002	99	1858068	175.0	157.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.530	11.532	-0.002	98	701915	175.0	165.3	
11 Dichlorodifluoromethane	85	1.614	1.622	-0.008	99	432190	175.0	179.3	
12 Chloromethane	50	1.772	1.768	0.004	100	573343	175.0	172.3	
13 Vinyl chloride	62	1.906	1.896	0.010	100	624000	175.0	167.8	
14 Butadiene	39	1.948	1.944	0.004	99	709784	175.0	167.1	
15 Bromomethane	94	2.252	2.249	0.003	100	307964	175.0	162.9	
16 Chloroethane	64	2.380	2.376	0.004	98	455903	175.0	177.2	
17 Dichlorofluoromethane	67	2.648	2.644	0.004	100	974888	175.0	166.0	
18 Trichlorofluoromethane	101	2.703	2.723	-0.020	98	772293	175.0	173.1	
20 Ethyl ether	59	3.086	3.082	0.004	99	519119	175.0	176.5	
21 Acrolein	56	3.250	3.258	-0.008	100	81646	225.0	228.5	
22 1,1-Dichloroethene	96	3.372	3.374	-0.002	98	562804	175.0	173.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.427	3.423	0.004	98	577719	175.0	176.1	
24 Acetone	43	3.493	3.496	-0.003	100	429781	350.0	373.1	
25 Iodomethane	142	3.573	3.581	-0.008	100	784350	175.0	174.1	
26 Carbon disulfide	76	3.652	3.660	-0.008	100	1381152	175.0	174.2	
28 3-Chloro-1-propene	76	3.931	3.934	-0.003	100	314052	175.0	183.2	
30 Methyl acetate	43	4.017	4.019	-0.002	100	2407305	875.0	893.2	
31 Methylene Chloride	84	4.138	4.147	-0.009	97	597904	175.0	159.4	
32 2-Methyl-2-propanol	59	4.442	4.439	0.003	99	351016	1750.0	1728.4	
33 Acrylonitrile	53	4.546	4.554	-0.008	99	2446379	1750.0	1764.6	
34 trans-1,2-Dichloroethene	96	4.558	4.560	-0.002	92	581552	175.0	173.4	
35 Methyl tert-butyl ether	73	4.595	4.597	-0.002	98	1347848	175.0	181.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.978	4.980	-0.002	99	929791	175.0	173.5	
37 1,1-Dichloroethane	63	5.166	5.175	-0.009	100	1052201	175.0	175.7	
38 Vinyl acetate	43	5.294	5.296	-0.002	100	831670	175.0	195.8	
44 2,2-Dichloropropane	77	5.927	5.929	-0.002	98	280515	175.0	187.4	
45 cis-1,2-Dichloroethene	96	5.933	5.941	-0.008	98	612812	175.0	173.4	
46 2-Butanone (MEK)	43	5.982	5.990	-0.008	100	665013	350.0	361.1	
49 Chlorobromomethane	128	6.225	6.227	-0.002	99	269375	175.0	176.2	
51 Tetrahydrofuran	42	6.286	6.282	0.004	100	415944	350.0	360.6	
52 Chloroform	83	6.341	6.343	-0.003	100	953676	175.0	175.3	
53 1,1,1-Trichloroethane	97	6.529	6.531	-0.002	99	639960	175.0	184.3	
54 Cyclohexane	56	6.584	6.586	-0.002	99	1161488	175.0	174.2	
56 Carbon tetrachloride	117	6.718	6.720	-0.002	100	504991	175.0	181.2	
55 1,1-Dichloropropene	75	6.724	6.726	-0.002	100	783682	175.0	173.7	
57 Isobutyl alcohol	41	6.943	6.945	-0.002	98	386141	4375.0	5144.3	
58 Benzene	78	6.955	6.957	-0.002	98	2286079	175.0	171.5	
59 1,2-Dichloroethane	62	6.985	6.988	-0.003	99	781760	175.0	179.2	
62 n-Heptane	43	7.277	7.280	-0.003	90	819785	175.0	179.1	
64 Trichloroethene	130	7.667	7.669	-0.002	99	586010	175.0	175.5	
66 Methylcyclohexane	83	7.861	7.864	-0.003	100	1055175	175.0	177.1	
67 1,2-Dichloropropane	63	7.904	7.906	-0.002	98	597514	175.0	181.3	
68 Dibromomethane	93	8.026	8.022	0.004	100	308441	175.0	173.8	
70 1,4-Dioxane	88	8.056	8.058	-0.002	97	132396	3500.0	3814.7	
71 Dichlorobromomethane	83	8.196	8.198	-0.002	100	663337	175.0	183.2	
74 cis-1,3-Dichloropropene	75	8.658	8.661	-0.003	100	681682	175.0	195.1	
75 4-Methyl-2-pentanone (MIBK	43	8.823	8.825	-0.002	99	1390980	350.0	347.5	
76 Toluene	91	8.993	8.989	0.004	99	2347437	175.0	154.9	
77 trans-1,3-Dichloropropene	75	9.218	9.220	-0.002	98	502980	175.0	183.7	
78 Ethyl methacrylate	69	9.315	9.318	-0.003	98	654210	175.0	183.2	
79 1,1,2-Trichloroethane	97	9.400	9.403	-0.003	100	465584	175.0	163.8	
80 Tetrachloroethene	164	9.534	9.537	-0.003	99	477004	175.0	160.9	
81 1,3-Dichloropropane	76	9.565	9.561	0.004	99	854593	175.0	161.7	
82 2-Hexanone	43	9.656	9.658	-0.002	100	1103034	350.0	360.6	
84 Chlorodibromomethane	129	9.790	9.792	-0.002	99	406960	175.0	179.4	
85 Ethylene Dibromide	107	9.899	9.902	-0.003	99	461219	175.0	170.0	
86 3-Chlorobenzotrifluoride	180	10.374	10.370	0.004	87	925933	175.0	160.1	
87 Chlorobenzene	112	10.392	10.388	0.004	99	1507544	175.0	157.0	
88 4-Chlorobenzotrifluoride	180	10.429	10.431	-0.002	99	908777	175.0	162.5	
89 1,1,1,2-Tetrachloroethane	131	10.471	10.473	-0.002	95	439701	175.0	177.3	
90 Ethylbenzene	106	10.502	10.504	-0.002	99	889389	175.0	161.4	
91 m-Xylene & p-Xylene	106	10.617	10.619	-0.002	99	1092005	175.0	162.0	
92 o-Xylene	106	11.013	11.009	0.004	98	1059986	175.0	160.8	
93 Styrene	104	11.025	11.027	-0.002	93	1723778	175.0	162.3	
94 Bromoform	173	11.213	11.209	0.004	99	253560	175.0	180.9	
96 2-Chlorobenzotrifluoride	180	11.274	11.276	-0.002	99	922108	175.0	159.7	
97 Isopropylbenzene	105	11.378	11.380	-0.002	98	2580136	175.0	156.9	
99 1,1,2,2-Tetrachloroethane	83	11.676	11.678	-0.002	99	681581	175.0	167.2	
100 Bromobenzene	156	11.682	11.678	0.004	98	637569	175.0	171.0	
101 1,2,3-Trichloropropane	110	11.718	11.721	-0.002	98	214358	175.0	174.9	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.733	-0.003	98	180624	175.0	177.3	
103 N-Propylbenzene	120	11.791	11.787	0.004	99	780243	175.0	169.6	
104 2-Chlorotoluene	126	11.876	11.873	0.003	99	666866	175.0	172.6	
105 3-Chlorotoluene	126	11.937	11.933	0.004	97	757051	175.0	175.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.962	11.964	-0.002	99	2136446	175.0	166.6	
107 4-Chlorotoluene	126	11.986	11.982	0.004	97	711885	175.0	170.2	
108 tert-Butylbenzene	119	12.290	12.286	0.004	100	1828125	175.0	164.5	
110 1,2,4-Trimethylbenzene	105	12.339	12.335	0.004	98	2187785	175.0	166.2	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.402	-0.002	100	719294	175.0	172.9	
112 sec-Butylbenzene	105	12.509	12.511	-0.002	99	2565671	175.0	164.1	
113 1,3-Dichlorobenzene	146	12.619	12.621	-0.002	99	1159025	175.0	168.7	
114 4-Isopropyltoluene	119	12.655	12.651	0.004	98	2157955	175.0	167.2	
115 1,4-Dichlorobenzene	146	12.704	12.706	-0.002	99	1196958	175.0	170.6	
116 2,4-Dichloro-1-(triflourom	214	12.759	12.755	0.004	99	675783	175.0	173.5	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.803	0.004	99	748317	175.0	171.7	
120 n-Butylbenzene	91	13.063	13.065	-0.002	99	1983203	175.0	168.7	
121 1,2-Dichlorobenzene	146	13.081	13.083	-0.002	99	1092014	175.0	171.7	
122 1,2-Dibromo-3-Chloropropan	75	13.860	13.856	0.004	95	97714	175.0	187.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.006	14.008	-0.002	99	2487475	525.0	517.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.428	-0.003	98	1639357	350.0	350.6	
126 1,2,4-Trichlorobenzene	180	14.693	14.695	-0.002	100	608110	175.0	183.6	
127 Hexachlorobutadiene	225	14.863	14.866	-0.003	98	274932	175.0	173.1	
128 Naphthalene	128	14.943	14.939	0.004	100	1599300	175.0	183.9	
129 1,2,3-Trichlorobenzene	180	15.186	15.188	-0.002	100	504504	175.0	185.8	
131 2,4,5-Trichlorotoluene	159	15.965	15.967	-0.002	99	273662	175.0	187.4	
130 2,3,6-Trichlorotoluene	159	16.062	16.064	-0.002	99	246163	175.0	186.7	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		350.0	322.8	
S 134 1,2-Dichloroethene, Total	96				0		350.0	346.8	
S 135 1,3-Dichloropropene, Total	1				0		350.0	378.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOAACRPRI_00003	Amount Added:	9.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	7.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	7.00	Units: uL	
VOA8260SURR_00032	Amount Added:	7.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	7.00	Units: uL	
VOAVAPRI_00005	Amount Added:	7.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

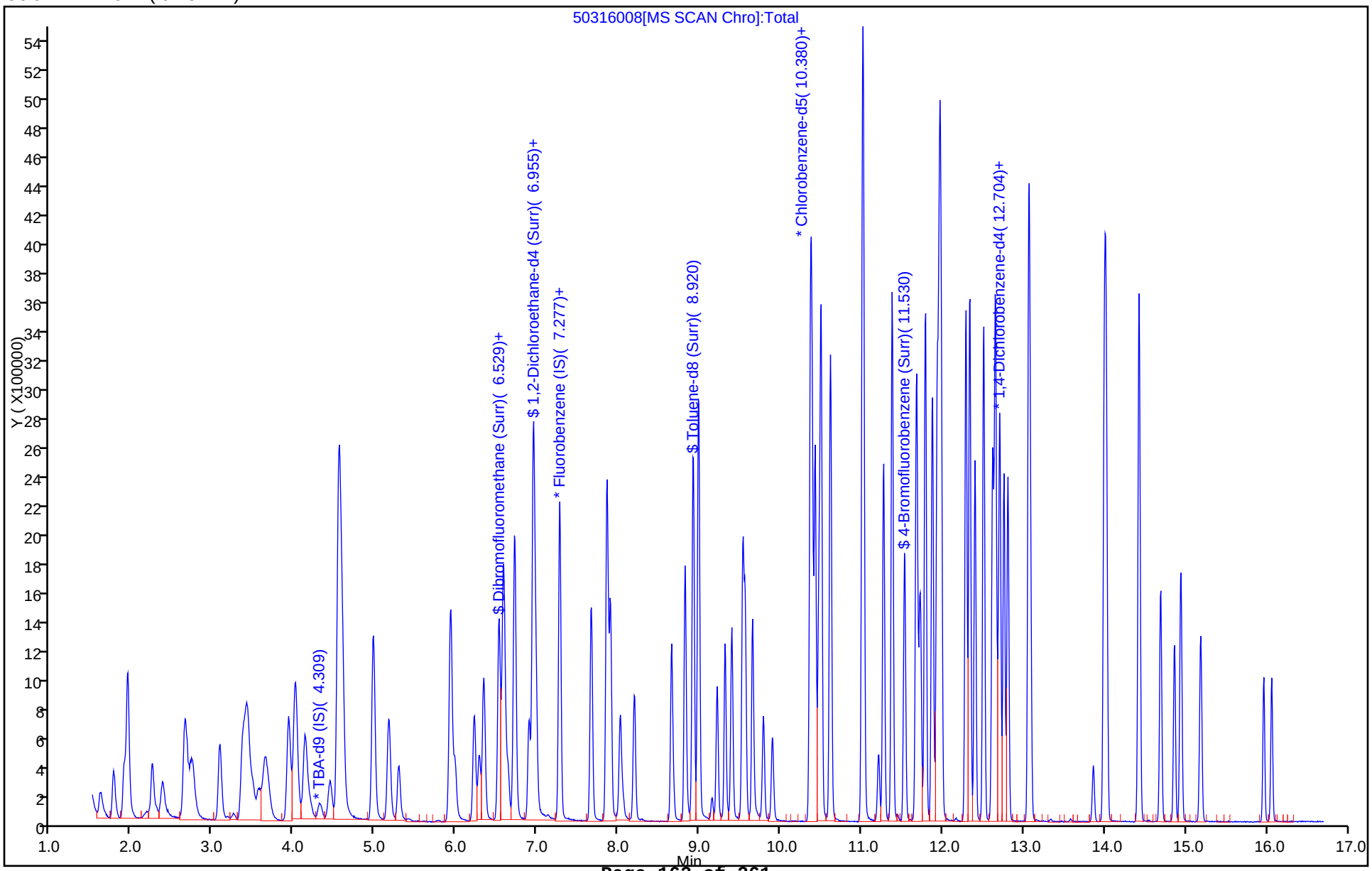
Report Date: 17-Mar-2015 10:59:30 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316008.D

Injection Date:	16-Mar-2015 14:17:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD35			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316009.D
Lims ID: IC VSTD40
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 16-Mar-2015 14:41:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD40
Misc. Info.: 180-0006031-009
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:31 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 09:50:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.327	4.305	0.022	86	183503	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.273	-0.002	99	592746	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.364	0.004	94	147746	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.682	0.003	94	203483	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.529	6.525	0.004	99	526164	200.0	195.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.902	-0.002	98	691002	200.0	194.4	
$ 7 Toluene-d8 (Surr)	98	8.926	8.922	0.004	99	2153477	200.0	182.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.532	-0.003	98	798953	200.0	188.3	
11 Dichlorodifluoromethane	85	1.619	1.622	-0.003	99	522240	200.0	205.5	
12 Chloromethane	50	1.778	1.768	0.010	100	674845	200.0	192.4	
13 Vinyl chloride	62	1.905	1.896	0.009	100	767804	200.0	195.9	
14 Butadiene	39	1.948	1.944	0.004	98	840803	200.0	187.8	
15 Bromomethane	94	2.252	2.249	0.003	100	366671	200.0	184.6	
16 Chloroethane	64	2.374	2.376	-0.002	99	530813	200.0	195.7	
17 Dichlorofluoromethane	67	2.654	2.644	0.010	99	1188936	200.0	192.0	
18 Trichlorofluoromethane	101	2.733	2.723	0.010	98	946313	200.0	201.3	
20 Ethyl ether	59	3.092	3.082	0.010	100	592652	200.0	191.1	
21 Acrolein	56	3.250	3.258	-0.008	100	95028	250.0	252.3	
22 1,1-Dichloroethene	96	3.378	3.374	0.004	98	662050	200.0	193.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.432	3.423	0.009	98	684103	200.0	197.9	
24 Acetone	43	3.505	3.496	0.009	100	489133	400.0	402.8	
25 Iodomethane	142	3.597	3.581	0.016	100	945860	200.0	199.2	
26 Carbon disulfide	76	3.664	3.660	0.004	100	1643948	200.0	196.7	
28 3-Chloro-1-propene	76	3.931	3.934	-0.003	99	393345	200.0	217.7	
30 Methyl acetate	43	4.022	4.019	0.003	99	2810332	1000.0	989.3	
31 Methylene Chloride	84	4.144	4.147	-0.003	98	703059	200.0	177.9	
32 2-Methyl-2-propanol	59	4.448	4.439	0.009	99	399281	2000.0	1847.2	
33 Acrylonitrile	53	4.552	4.554	-0.002	99	2868164	2000.0	1962.8	
34 trans-1,2-Dichloroethene	96	4.564	4.560	0.004	96	692220	200.0	195.8	
35 Methyl tert-butyl ether	73	4.600	4.597	0.003	98	1581345	200.0	202.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.978	4.980	-0.002	100	1096478	200.0	194.1	
37 1,1-Dichloroethane	63	5.172	5.175	-0.003	100	1250453	200.0	198.2	
38 Vinyl acetate	43	5.294	5.296	-0.002	100	1001771	200.0	223.8	
44 2,2-Dichloropropane	77	5.927	5.929	-0.002	98	338302	200.0	214.4	
45 cis-1,2-Dichloroethene	96	5.933	5.941	-0.008	98	721075	200.0	193.6	
46 2-Butanone (MEK)	43	5.987	5.990	-0.003	100	809232	400.0	416.8	
49 Chlorobromomethane	128	6.225	6.227	-0.002	98	311076	200.0	193.0	
51 Tetrahydrofuran	42	6.286	6.282	0.004	99	483324	400.0	397.5	
52 Chloroform	83	6.340	6.343	-0.003	100	1109416	200.0	193.5	
53 1,1,1-Trichloroethane	97	6.529	6.531	-0.002	99	768585	200.0	210.0	
54 Cyclohexane	56	6.584	6.586	-0.002	99	1366913	200.0	194.5	
56 Carbon tetrachloride	117	6.717	6.720	-0.003	99	612080	200.0	208.4	
55 1,1-Dichloropropene	75	6.724	6.726	-0.002	99	933326	200.0	196.3	
57 Isobutyl alcohol	41	6.949	6.945	0.004	98	433313	5000.0	5476.7	
58 Benzene	78	6.955	6.957	-0.002	97	2653105	200.0	188.9	
59 1,2-Dichloroethane	62	6.985	6.988	-0.003	99	907622	200.0	197.3	
62 n-Heptane	43	7.277	7.280	-0.003	88	940924	200.0	195.0	
64 Trichloroethene	130	7.666	7.669	-0.003	99	684010	200.0	194.4	
66 Methylcyclohexane	83	7.861	7.864	-0.003	100	1212427	200.0	193.1	
67 1,2-Dichloropropane	63	7.904	7.906	-0.002	98	700921	200.0	201.7	
68 Dibromomethane	93	8.025	8.022	0.003	99	370624	200.0	198.1	
70 1,4-Dioxane	88	8.062	8.058	0.004	98	146272	4000.0	3998.4	
71 Dichlorobromomethane	83	8.196	8.198	-0.002	100	773432	200.0	202.6	
74 cis-1,3-Dichloropropene	75	8.658	8.661	-0.003	99	829306	200.0	225.1	
75 4-Methyl-2-pentanone (MIBK	43	8.822	8.825	-0.003	99	1617802	400.0	404.7	
76 Toluene	91	8.993	8.989	0.004	99	2714932	200.0	179.3	
77 trans-1,3-Dichloropropene	75	9.218	9.220	-0.002	98	613747	200.0	224.4	
78 Ethyl methacrylate	69	9.315	9.318	-0.003	98	782394	200.0	219.4	
79 1,1,2-Trichloroethane	97	9.400	9.403	-0.003	99	540864	200.0	190.5	
80 Tetrachloroethene	164	9.540	9.537	0.003	99	545517	200.0	184.2	
81 1,3-Dichloropropane	76	9.564	9.561	0.003	99	1001573	200.0	189.8	
82 2-Hexanone	43	9.656	9.658	-0.002	100	1305223	400.0	427.2	
84 Chlorodibromomethane	129	9.790	9.792	-0.002	99	473922	200.0	209.1	
85 Ethylene Dibromide	107	9.899	9.902	-0.003	100	534328	200.0	197.2	
86 3-Chlorobenzotrifluoride	180	10.374	10.370	0.004	88	1122812	200.0	194.4	
87 Chlorobenzene	112	10.392	10.388	0.004	99	1745676	200.0	182.0	
88 4-Chlorobenzotrifluoride	180	10.428	10.431	-0.003	99	1108797	200.0	198.5	
89 1,1,1,2-Tetrachloroethane	131	10.477	10.473	0.004	95	512980	200.0	207.1	
90 Ethylbenzene	106	10.501	10.504	-0.003	98	1044399	200.0	189.8	
91 m-Xylene & p-Xylene	106	10.617	10.619	-0.002	98	1256840	200.0	186.7	
92 o-Xylene	106	11.012	11.009	0.003	99	1214164	200.0	184.4	
93 Styrene	104	11.025	11.027	-0.002	97	1958961	200.0	184.6	
94 Bromoform	173	11.213	11.209	0.004	98	293938	200.0	210.0	
96 2-Chlorobenzotrifluoride	180	11.274	11.276	-0.002	99	1120386	200.0	194.2	
97 Isopropylbenzene	105	11.377	11.380	-0.003	98	2885608	200.0	175.6	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.678	-0.003	98	772016	200.0	189.6	
100 Bromobenzene	156	11.682	11.678	0.004	99	740842	200.0	196.7	
101 1,2,3-Trichloropropane	110	11.718	11.721	-0.002	96	233938	200.0	189.0	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.733	-0.003	98	211691	200.0	205.7	
103 N-Propylbenzene	120	11.791	11.787	0.004	98	887838	200.0	191.1	
104 2-Chlorotoluene	126	11.870	11.873	-0.003	99	756732	200.0	193.9	
105 3-Chlorotoluene	126	11.937	11.933	0.004	97	890638	200.0	204.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.964	-0.003	99	2387945	200.0	184.4	
107 4-Chlorotoluene	126	11.980	11.982	-0.002	96	795532	200.0	188.3	
108 tert-Butylbenzene	119	12.290	12.286	0.004	99	2060731	200.0	183.6	
110 1,2,4-Trimethylbenzene	105	12.339	12.335	0.004	99	2461131	200.0	185.1	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.402	-0.003	99	832435	200.0	198.1	
112 sec-Butylbenzene	105	12.509	12.511	-0.002	99	2854173	200.0	180.7	
113 1,3-Dichlorobenzene	146	12.618	12.621	-0.003	99	1308081	200.0	188.5	
114 4-Isopropyltoluene	119	12.655	12.651	0.004	98	2408127	200.0	184.7	
115 1,4-Dichlorobenzene	146	12.710	12.706	0.004	99	1348596	200.0	190.3	
116 2,4-Dichloro-1-(triflourom	214	12.758	12.755	0.003	99	786683	200.0	199.9	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.803	0.004	99	877059	200.0	199.2	
120 n-Butylbenzene	91	13.062	13.065	-0.003	98	2209671	200.0	186.1	
121 1,2-Dichlorobenzene	146	13.081	13.083	-0.002	99	1224311	200.0	190.6	
122 1,2-Dibromo-3-Chloropropan	75	13.859	13.856	0.003	94	112547	200.0	214.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.005	14.008	-0.003	98	2860911	600.0	589.0	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.428	-0.003	98	1868280	400.0	395.5	
126 1,2,4-Trichlorobenzene	180	14.693	14.695	-0.002	99	679520	200.0	203.2	
127 Hexachlorobutadiene	225	14.863	14.866	-0.003	99	307470	200.0	191.7	
128 Naphthalene	128	14.942	14.939	0.003	100	1786434	200.0	203.4	
129 1,2,3-Trichlorobenzene	180	15.186	15.188	-0.002	99	582911	200.0	212.5	
131 2,4,5-Trichlorotoluene	159	15.964	15.967	-0.003	98	315499	200.0	213.9	
130 2,3,6-Trichlorotoluene	159	16.062	16.064	-0.002	98	285573	200.0	214.4	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		400.0	371.1	
S 134 1,2-Dichloroethene, Total	96				0		400.0	389.4	
S 135 1,3-Dichloropropene, Total	1				0		400.0	449.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOAVAPRI_00005	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	8.00	Units: uL	
VOA8260SURR_00032	Amount Added:	8.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	8.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	8.00	Units: uL	
VOAACRPRI_00003	Amount Added:	10.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

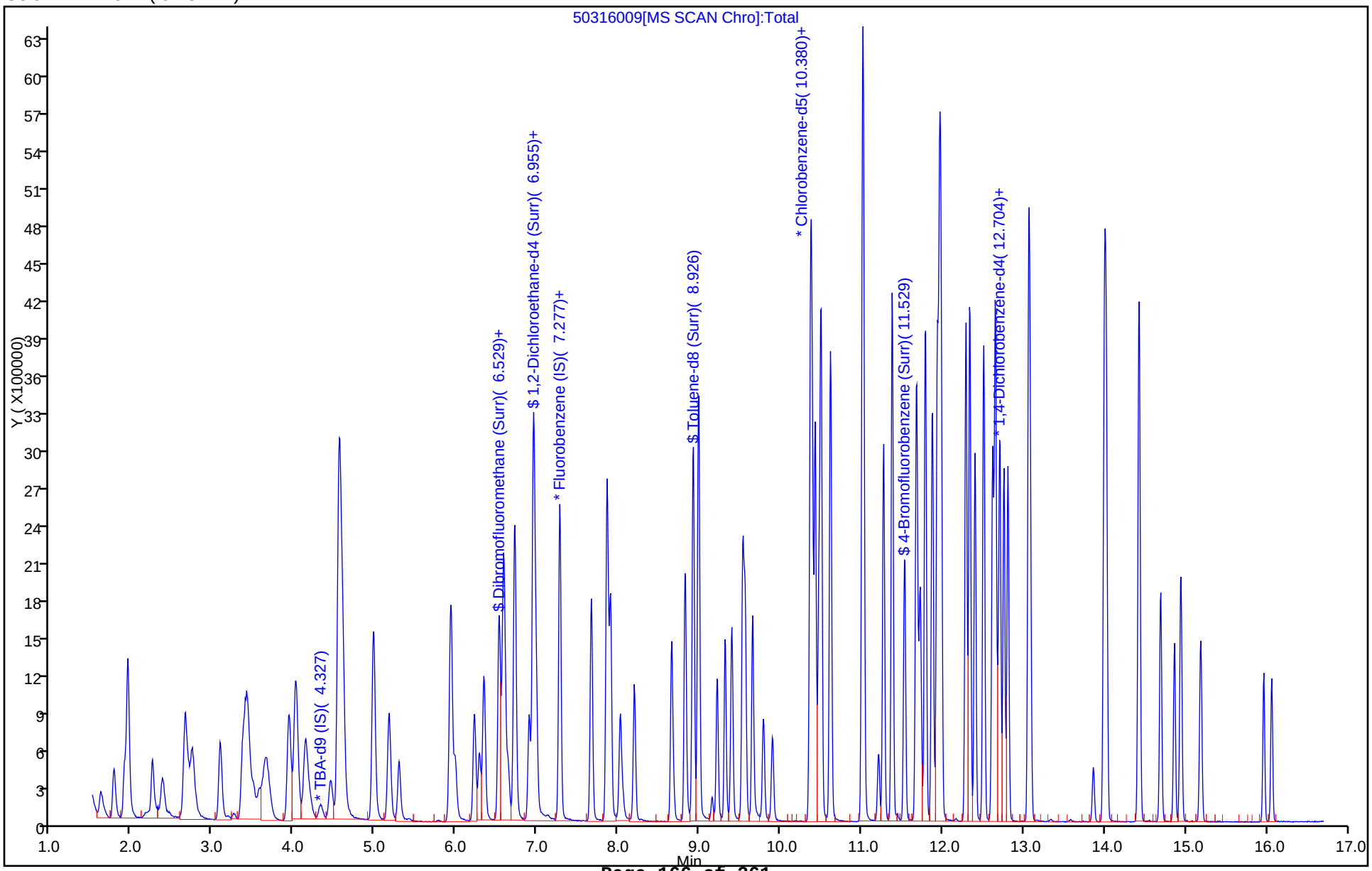
Report Date: 17-Mar-2015 10:59:31 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316009.D

Injection Date:	16-Mar-2015 14:41:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD40			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316010.D
Lims ID: IC VSTD50
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 16-Mar-2015 15:05:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD50
Misc. Info.: 180-0006031-010
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:32 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 09:55:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.336	4.305	0.031	85	202534	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.275	7.273	0.002	99	620293	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.359	10.364	-0.005	77	161503	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.683	12.682	0.001	92	212327	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.527	6.525	0.001	99	664693	250.0	235.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.898	6.902	-0.004	99	889045	250.0	239.0	
$ 7 Toluene-d8 (Surr)	98	8.923	8.922	0.001	98	2632400	250.0	204.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.533	11.532	0.001	98	1045249	250.0	225.4	
11 Dichlorodifluoromethane	85	1.617	1.622	-0.005	99	640090	250.0	240.7	
12 Chloromethane	50	1.775	1.768	0.007	100	855933	250.0	233.2	
13 Vinyl chloride	62	1.909	1.896	0.013	100	924535	250.0	225.4	
14 Butadiene	39	1.946	1.944	0.002	99	1005925	250.0	214.7	
15 Bromomethane	94	2.250	2.249	0.001	100	461680	250.0	223.1	
16 Chloroethane	64	2.371	2.376	-0.005	99	700467	250.0	246.8	
17 Dichlorofluoromethane	67	2.651	2.644	0.007	100	1511714	250.0	233.3	
18 Trichlorofluoromethane	101	2.724	2.723	0.001	98	1178605	250.0	239.5	
20 Ethyl ether	59	3.083	3.082	0.001	99	792637	250.0	244.3	
21 Acrolein	56	3.254	3.258	-0.004	96	109180	275.0	277.0	
22 1,1-Dichloroethene	96	3.375	3.374	0.001	98	827120	250.0	231.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.424	3.423	0.001	99	834802	250.0	230.7	
24 Acetone	43	3.497	3.496	0.001	99	621064	500.0	488.8	
25 Iodomethane	142	3.594	3.581	0.013	100	1201056	250.0	241.7	
26 Carbon disulfide	76	3.655	3.660	-0.005	100	2031733	250.0	232.3	
28 3-Chloro-1-propene	76	3.935	3.934	0.001	99	482122	250.0	255.0	
30 Methyl acetate	43	4.014	4.019	-0.005	99	3718382	1250.0	1250.8	
31 Methylene Chloride	84	4.142	4.147	-0.005	98	919183	250.0	222.2	
32 2-Methyl-2-propanol	59	4.446	4.439	0.007	98	537174	2500.0	2251.6	
33 Acrylonitrile	53	4.549	4.554	-0.005	99	3721902	2500.0	2433.9	
34 trans-1,2-Dichloroethene	96	4.562	4.560	0.002	97	882651	250.0	238.6	
35 Methyl tert-butyl ether	73	4.598	4.597	0.001	98	2130684	250.0	260.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.975	4.980	-0.005	99	1379168	250.0	233.3	
37 1,1-Dichloroethane	63	5.170	5.175	-0.005	99	1604398	250.0	242.9	
38 Vinyl acetate	43	5.292	5.296	-0.004	100	1337263	250.0	285.5	
44 2,2-Dichloropropane	77	5.924	5.929	-0.005	97	452022	250.0	273.8	
45 cis-1,2-Dichloroethene	96	5.936	5.941	-0.005	97	930230	250.0	238.7	
46 2-Butanone (MEK)	43	5.985	5.990	-0.005	100	1059138	500.0	521.3	
49 Chlorobromomethane	128	6.222	6.227	-0.005	99	404105	250.0	239.6	
51 Tetrahydrofuran	42	6.283	6.282	0.001	99	646482	500.0	508.1	
52 Chloroform	83	6.338	6.343	-0.005	100	1424461	250.0	237.4	
53 1,1,1-Trichloroethane	97	6.527	6.531	-0.005	99	971626	250.0	253.6	
54 Cyclohexane	56	6.581	6.586	-0.005	98	1669676	250.0	227.0	
56 Carbon tetrachloride	117	6.715	6.720	-0.005	99	790495	250.0	257.2	
55 1,1-Dichloropropene	75	6.721	6.726	-0.005	99	1159811	250.0	233.1	
57 Isobutyl alcohol	41	6.946	6.945	0.001	97	644697	6250.0	7786.6	
58 Benzene	78	6.952	6.957	-0.005	97	3351151	250.0	228.0	
59 1,2-Dichloroethane	62	6.983	6.988	-0.005	99	1159879	250.0	241.0	
62 n-Heptane	43	7.275	7.280	-0.005	86	1182643	250.0	234.2	
64 Trichloroethene	130	7.664	7.669	-0.005	99	860273	250.0	233.6	
66 Methylcyclohexane	83	7.859	7.864	-0.005	99	1519674	250.0	231.3	
67 1,2-Dichloropropane	63	7.907	7.906	0.001	99	918714	250.0	252.7	
68 Dibromomethane	93	8.023	8.022	0.001	99	479407	250.0	244.9	
70 1,4-Dioxane	88	8.053	8.058	-0.005	98	185631	5000.0	4848.9	
71 Dichlorobromomethane	83	8.199	8.198	0.001	100	1003399	250.0	251.2	
74 cis-1,3-Dichloropropene	75	8.656	8.661	-0.005	99	1098242	250.0	284.9	
75 4-Methyl-2-pentanone (MIBK	43	8.820	8.825	-0.005	98	2109966	500.0	482.8	
76 Toluene	91	8.990	8.989	0.001	97	3368812	250.0	203.5	
77 trans-1,3-Dichloropropene	75	9.221	9.220	0.001	98	846559	250.0	283.2	
78 Ethyl methacrylate	69	9.319	9.318	0.001	98	1063861	250.0	272.9	
79 1,1,2-Trichloroethane	97	9.398	9.403	-0.005	99	706748	250.0	227.7	
80 Tetrachloroethene	164	9.538	9.537	0.001	99	690601	250.0	213.3	
81 1,3-Dichloropropane	76	9.562	9.561	0.001	100	1327847	250.0	230.2	
82 2-Hexanone	43	9.653	9.658	-0.005	99	1685534	500.0	504.7	
84 Chlorodibromomethane	129	9.787	9.792	-0.005	99	625118	250.0	252.3	
85 Ethylene Dibromide	107	9.903	9.902	0.001	99	713501	250.0	240.9	
86 3-Chlorobenzotrifluoride	180	10.371	10.370	0.001	87	1303041	250.0	206.4	
87 Chlorobenzene	112	10.390	10.388	0.002	98	2249414	250.0	214.5	
88 4-Chlorobenzotrifluoride	180	10.426	10.431	-0.005	99	1250140	250.0	204.8	
89 1,1,1,2-Tetrachloroethane	131	10.475	10.473	0.002	95	680608	250.0	251.4	
90 Ethylbenzene	106	10.499	10.504	-0.005	97	1329470	250.0	221.0	
91 m-Xylene & p-Xylene	106	10.621	10.619	0.002	97	1614511	250.0	219.4	
92 o-Xylene	106	11.010	11.009	0.001	94	1557898	250.0	216.4	
93 Styrene	104	11.022	11.027	-0.005	91	2525667	250.0	217.8	
94 Bromoform	173	11.211	11.209	0.002	99	395201	250.0	258.3	
96 2-Chlorobenzotrifluoride	180	11.272	11.276	-0.004	99	1298335	250.0	205.9	
97 Isopropylbenzene	105	11.381	11.380	0.001	97	3554151	250.0	197.9	
99 1,1,2,2-Tetrachloroethane	83	11.673	11.678	-0.005	98	1003707	250.0	225.5	
100 Bromobenzene	156	11.685	11.678	0.007	99	956763	250.0	243.5	
101 1,2,3-Trichloropropane	110	11.716	11.721	-0.004	97	325768	250.0	252.3	
102 trans-1,4-Dichloro-2-buten	53	11.728	11.733	-0.005	98	286166	250.0	266.5	
103 N-Propylbenzene	120	11.789	11.787	0.002	97	1131297	250.0	233.4	
104 2-Chlorotoluene	126	11.874	11.873	0.001	97	963573	250.0	236.6	
105 3-Chlorotoluene	126	11.935	11.933	0.002	96	1053875	250.0	231.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.965	11.964	0.001	98	2983647	250.0	220.7	
107 4-Chlorotoluene	126	11.983	11.982	0.001	97	1062581	250.0	241.0	
108 tert-Butylbenzene	119	12.288	12.286	0.002	98	2516209	250.0	214.9	
110 1,2,4-Trimethylbenzene	105	12.336	12.335	0.001	97	3068942	250.0	221.2	
111 1,2-dichloro-4-(trifluorom	214	12.403	12.402	0.001	99	991010	250.0	226.1	
112 sec-Butylbenzene	105	12.507	12.511	-0.004	98	3463106	250.0	210.1	
113 1,3-Dichlorobenzene	146	12.616	12.621	-0.005	98	1687649	250.0	233.1	
114 4-Isopropyltoluene	119	12.653	12.651	0.002	97	2970922	250.0	218.3	
115 1,4-Dichlorobenzene	146	12.707	12.706	0.001	98	1736319	250.0	234.8	
116 2,4-Dichloro-1-(triflourom	214	12.756	12.755	0.001	98	909481	250.0	221.5	
118 2,5-Dichlorobenzotrifluori	214	12.811	12.803	0.008	99	1042359	250.0	226.9	
120 n-Butylbenzene	91	13.060	13.065	-0.005	97	2715831	250.0	219.2	
121 1,2-Dichlorobenzene	146	13.078	13.083	-0.005	99	1565775	250.0	233.6	
122 1,2-Dibromo-3-Chloropropan	75	13.863	13.856	0.007	94	147059	250.0	268.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.003	14.008	-0.005	98	3379751	750.0	666.8	
125 2,3- & 3,4- Dichlorotoluen	125	14.423	14.428	-0.005	97	2218229	500.0	450.0	
126 1,2,4-Trichlorobenzene	180	14.691	14.695	-0.004	99	825772	250.0	236.6	
127 Hexachlorobutadiene	225	14.861	14.866	-0.005	99	367792	250.0	219.8	
128 Naphthalene	128	14.940	14.939	0.001	99	2220927	250.0	242.4	
129 1,2,3-Trichlorobenzene	180	15.189	15.188	0.001	99	697862	250.0	243.8	
131 2,4,5-Trichlorotoluene	159	15.962	15.967	-0.005	99	364223	250.0	236.6	
130 2,3,6-Trichlorotoluene	159	16.065	16.064	0.001	98	323920	250.0	233.1	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		500.0	435.9	
S 134 1,2-Dichloroethene, Total	96				0		500.0	477.2	
S 135 1,3-Dichloropropene, Total	1				0		500.0	568.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOAACRPRI_00003	Amount Added:	11.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	10.00	Units: uL	
voaWKetpri Re_00003	Amount Added:	10.00	Units: uL	
VOA8260SURR_00032	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	10.00	Units: uL	
VOAVAPRI_00005	Amount Added:	10.00	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

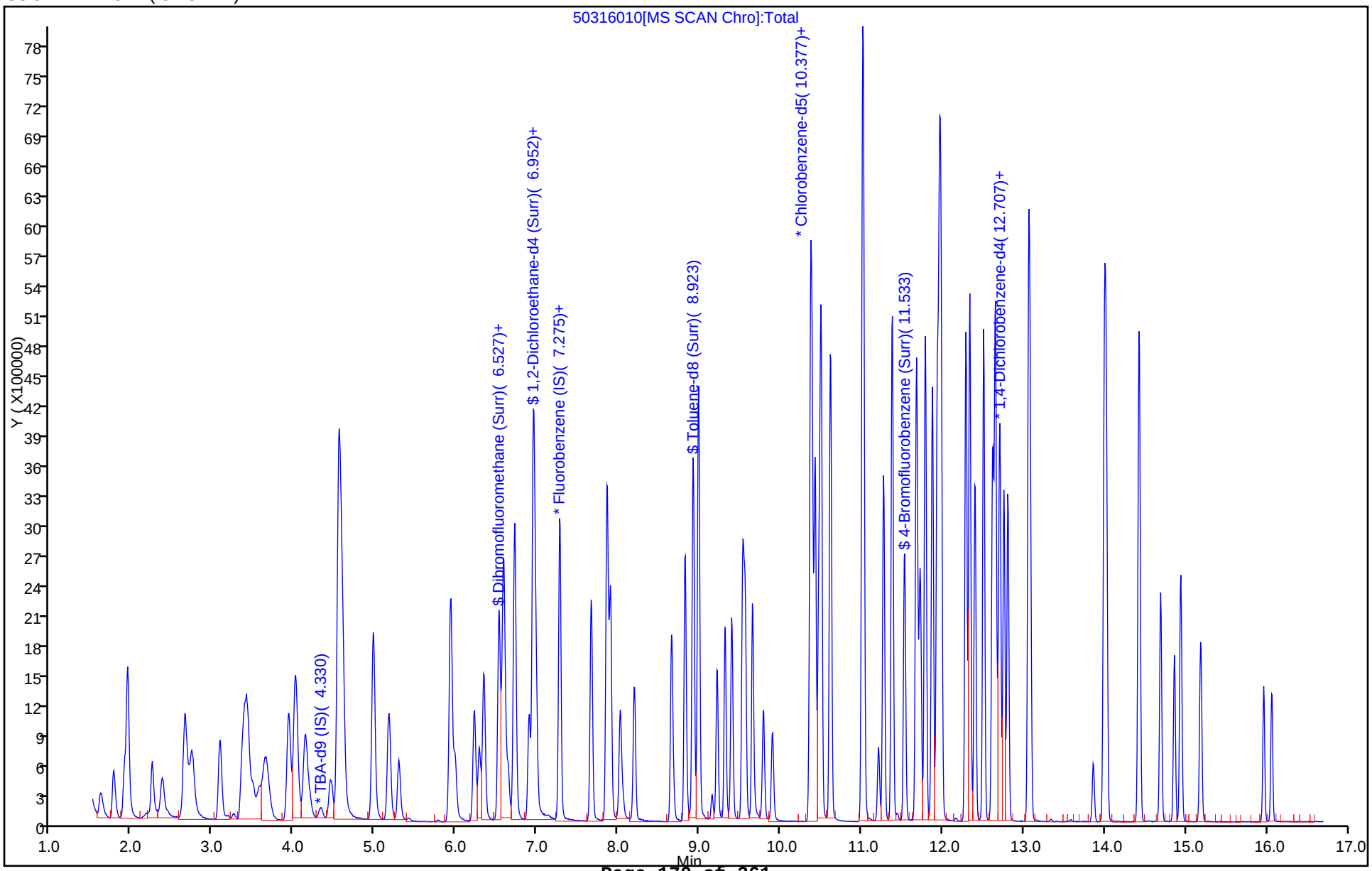
Report Date: 17-Mar-2015 10:59:33 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316010.D

Injection Date:	16-Mar-2015 15:05:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD50			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D
Lims ID: IC VSTD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Mar-2015 16:17:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD1
Misc. Info.: 180-0006031-013
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub4

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:33 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 17-Mar-2015 10:01:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.317	4.305	0.012	83	148007	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.273	0.001	99	568509	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.364	0.000	74	121234	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.682	0.000	96	175081	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.526	6.525	0.001	93	14193	5.00	5.49	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.902	0.001	96	17152	5.00	5.03	
$ 7 Toluene-d8 (Surr)	98	8.923	8.922	0.001	98	54935	5.00	5.68	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.532	0.000	92	19061	5.00	5.48	
11 Dichlorodifluoromethane	85	1.616	1.622	-0.006	96	11265	5.00	4.62	
12 Chloromethane	50	1.768	1.768	0.000	97	17972	5.00	5.34	M
13 Vinyl chloride	62	1.908	1.896	0.012	96	18981	5.00	5.05	
14 Butadiene	39	1.951	1.944	0.007	98	24095	5.00	5.61	
15 Bromomethane	94	2.249	2.249	0.000	85	18060	5.00	4.90	
16 Chloroethane	64	2.377	2.376	0.001	53	13187	5.00	5.07	
17 Dichlorofluoromethane	67	2.644	2.644	0.000	99	34297	5.00	5.78	
18 Trichlorofluoromethane	101	2.711	2.723	-0.012	92	20521	5.00	4.55	
20 Ethyl ether	59	3.082	3.082	0.000	94	16416	5.00	5.52	
21 Acrolein	56	3.247	3.258	-0.011	96	35289	100.0	97.7	M
22 1,1-Dichloroethene	96	3.368	3.374	-0.006	97	18234	5.00	5.56	
23 1,1,2-Trichloro-1,2,2-trif	101	3.435	3.423	0.012	90	16567	5.00	5.00	
24 Acetone	43	3.490	3.496	-0.006	93	29674	25.0	25.5	
25 Iodomethane	142	3.581	3.581	0.000	97	22824	5.00	5.01	
26 Carbon disulfide	76	3.648	3.660	-0.012	98	41336	5.00	5.16	
28 3-Chloro-1-propene	76	3.940	3.934	0.006	95	8006	5.00	4.62	
30 Methyl acetate	43	4.031	4.019	0.012	100	71022	25.0	26.1	
31 Methylene Chloride	84	4.135	4.147	-0.012	96	27978	5.00	7.38	
32 2-Methyl-2-propanol	59	4.433	4.439	-0.006	73	10830	50.0	62.1	
33 Acrylonitrile	53	4.555	4.554	0.001	99	71728	50.0	51.2	
34 trans-1,2-Dichloroethene	96	4.555	4.560	-0.005	57	17111	5.00	5.05	
35 Methyl tert-butyl ether	73	4.603	4.597	0.006	94	40058	5.00	5.34	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.974	4.980	-0.006	96	29021	5.00	5.36	
37 1,1-Dichloroethane	63	5.169	5.175	-0.006	99	29622	5.00	4.89	
38 Vinyl acetate	43	5.297	5.296	0.001	79	19067	5.00	4.44	
44 2,2-Dichloropropane	77	5.936	5.929	0.007	87	6267	5.00	4.14	
45 cis-1,2-Dichloroethene	96	5.936	5.941	-0.005	95	18951	5.00	5.30	
46 2-Butanone (MEK)	43	5.996	5.990	0.006	99	42054	25.0	22.6	
49 Chlorobromomethane	128	6.234	6.227	0.007	95	8619	5.00	5.58	
51 Tetrahydrofuran	42	6.288	6.282	0.006	75	11913	10.0	10.2	
52 Chloroform	83	6.343	6.343	0.000	97	29168	5.00	5.30	
53 1,1,1-Trichloroethane	97	6.532	6.531	0.001	93	15663	5.00	4.46	
54 Cyclohexane	56	6.580	6.586	-0.006	94	36280	5.00	5.38	
56 Carbon tetrachloride	117	6.720	6.720	0.000	97	13013	5.00	4.62	
55 1,1-Dichloropropene	75	6.720	6.726	-0.006	97	24060	5.00	5.28	
57 Isobutyl alcohol	41	6.958	6.945	0.013	95	8820	125.0	116.2	
58 Benzene	78	6.958	6.957	0.001	96	73700	5.00	5.47	
59 1,2-Dichloroethane	62	6.976	6.988	-0.012	98	22108	5.00	5.01	
62 n-Heptane	43	7.274	7.280	-0.006	58	23490	5.00	5.08	
64 Trichloroethene	130	7.669	7.669	0.000	96	18397	5.00	5.45	
66 Methylcyclohexane	83	7.858	7.864	-0.006	94	29934	5.00	4.97	
67 1,2-Dichloropropane	63	7.907	7.906	0.001	90	16916	5.00	5.08	
68 Dibromomethane	93	8.022	8.022	0.000	93	9562	5.00	5.33	
70 1,4-Dioxane	88	8.047	8.058	-0.012	33	3746	100.0	106.8	
71 Dichlorobromomethane	83	8.193	8.198	-0.006	98	16863	5.00	4.61	
74 cis-1,3-Dichloropropene	75	8.655	8.661	-0.006	98	15462	5.00	4.38	
75 4-Methyl-2-pentanone (MIBK	43	8.831	8.825	0.006	99	75787	25.0	23.1	
76 Toluene	91	8.989	8.989	0.000	99	72597	5.00	5.84	
77 trans-1,3-Dichloropropene	75	9.208	9.220	-0.012	92	10481	5.00	4.67	
78 Ethyl methacrylate	69	9.318	9.318	0.000	94	13336	5.00	4.56	
79 1,1,2-Trichloroethane	97	9.403	9.403	0.000	95	13086	5.00	5.62	
80 Tetrachloroethene	164	9.531	9.537	-0.006	96	13716	5.00	5.64	
81 1,3-Dichloropropane	76	9.567	9.561	0.006	97	23188	5.00	5.35	
82 2-Hexanone	43	9.659	9.658	0.001	98	53734	25.0	21.4	M
84 Chlorodibromomethane	129	9.786	9.792	-0.006	95	7988	5.00	4.30	
85 Ethylene Dibromide	107	9.902	9.902	0.000	96	11471	5.00	5.16	
86 3-Chlorobenzotrifluoride	180	10.370	10.370	0.000	67	26148	5.00	5.52	
87 Chlorobenzene	112	10.389	10.388	0.001	98	47481	5.00	6.03	
88 4-Chlorobenzotrifluoride	180	10.425	10.431	-0.006	97	25927	5.00	5.66	
89 1,1,1,2-Tetrachloroethane	131	10.474	10.473	0.001	87	9154	5.00	4.50	
90 Ethylbenzene	106	10.504	10.504	0.000	99	24142	5.00	5.35	
91 m-Xylene & p-Xylene	106	10.614	10.619	-0.005	98	30126	5.00	5.45	
92 o-Xylene	106	11.015	11.009	0.006	97	32009	5.00	5.92	
93 Styrene	104	11.027	11.027	0.000	95	47061	5.00	5.41	
94 Bromoform	173	11.216	11.209	0.007	32	5157	5.00	4.49	
96 2-Chlorobenzotrifluoride	180	11.277	11.276	0.001	98	25441	5.00	5.37	
97 Isopropylbenzene	105	11.380	11.380	0.000	99	75470	5.00	5.60	
99 1,1,2,2-Tetrachloroethane	83	11.672	11.678	-0.006	93	19128	5.00	5.73	
100 Bromobenzene	156	11.691	11.678	0.012	97	16809	5.00	5.19	
101 1,2,3-Trichloropropane	110	11.721	11.721	0.001	89	5918	5.00	5.56	
102 trans-1,4-Dichloro-2-buten	53	11.739	11.733	0.006	50	4503	5.00	5.09	M
103 N-Propylbenzene	120	11.788	11.787	0.001	99	21543	5.00	5.39	
104 2-Chlorotoluene	126	11.873	11.873	0.000	99	17942	5.00	5.34	
105 3-Chlorotoluene	126	11.934	11.933	0.001	98	20174	5.00	5.37	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.964	11.964	0.000	99	61438	5.00	5.51	
107 4-Chlorotoluene	126	11.983	11.982	0.000	94	19812	5.00	5.45	
108 tert-Butylbenzene	119	12.287	12.286	0.001	97	55729	5.00	5.77	
110 1,2,4-Trimethylbenzene	105	12.335	12.335	0.000	97	63098	5.00	5.52	
111 1,2-dichloro-4-(trifluorom	214	12.408	12.402	0.006	98	19333	5.00	5.35	
112 sec-Butylbenzene	105	12.506	12.511	-0.005	100	75379	5.00	5.55	
113 1,3-Dichlorobenzene	146	12.621	12.621	0.000	98	33497	5.00	5.61	
114 4-Isopropyltoluene	119	12.652	12.651	0.001	98	61054	5.00	5.44	
115 1,4-Dichlorobenzene	146	12.706	12.706	0.000	98	34596	5.00	5.67	
116 2,4-Dichloro-1-(triflourom	214	12.755	12.755	0.000	94	17792	5.00	5.26	
118 2,5-Dichlorobenzotrifluori	214	12.810	12.803	0.007	96	20678	5.00	5.46	
120 n-Butylbenzene	91	13.065	13.065	0.000	99	54758	5.00	5.36	
121 1,2-Dichlorobenzene	146	13.084	13.083	0.001	99	30414	5.00	5.50	
122 1,2-Dibromo-3-Chloropropan	75	13.874	13.856	0.018	18	2299	5.00	5.08	
123 2,4- & 2,5- & 2,6- Dichlor	125	13.996	14.008	-0.012	93	71584	15.0	17.1	
125 2,3- & 3,4- Dichlorotoluen	125	14.428	14.428	0.000	97	46257	10.0	11.4	
126 1,2,4-Trichlorobenzene	180	14.690	14.695	-0.005	94	17018	5.00	5.91	
127 Hexachlorobutadiene	225	14.866	14.866	0.000	90	8549	5.00	6.19	
128 Naphthalene	128	14.939	14.939	0.000	99	41842	5.00	5.54	
129 1,2,3-Trichlorobenzene	180	15.189	15.188	0.000	95	13823	5.00	5.86	
131 2,4,5-Trichlorotoluene	159	15.961	15.967	-0.006	94	8592	5.00	6.77	
130 2,3,6-Trichlorotoluene	159	16.058	16.064	-0.006	94	7658	5.00	6.68	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		10.0	11.4	
S 134 1,2-Dichloroethene, Total	96				0		10.0	10.4	
S 135 1,3-Dichloropropene, Total	1				0		10.0	9.05	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00032	Amount Added:	0.20	Units: uL	
VOA8260VOAPRI_00105	Amount Added:	0.20	Units: uL	
VOAVAPRI_00005	Amount Added:	0.20	Units: uL	
voaWKetpri Re_00003	Amount Added:	0.80	Units: uL	
VOAACRPRI_00003	Amount Added:	4.00	Units: uL	
voaWEEpri Res_00003	Amount Added:	0.20	Units: uL	
VOA8260INT_00030	Amount Added:	2.00	Units: uL	Run Reagent

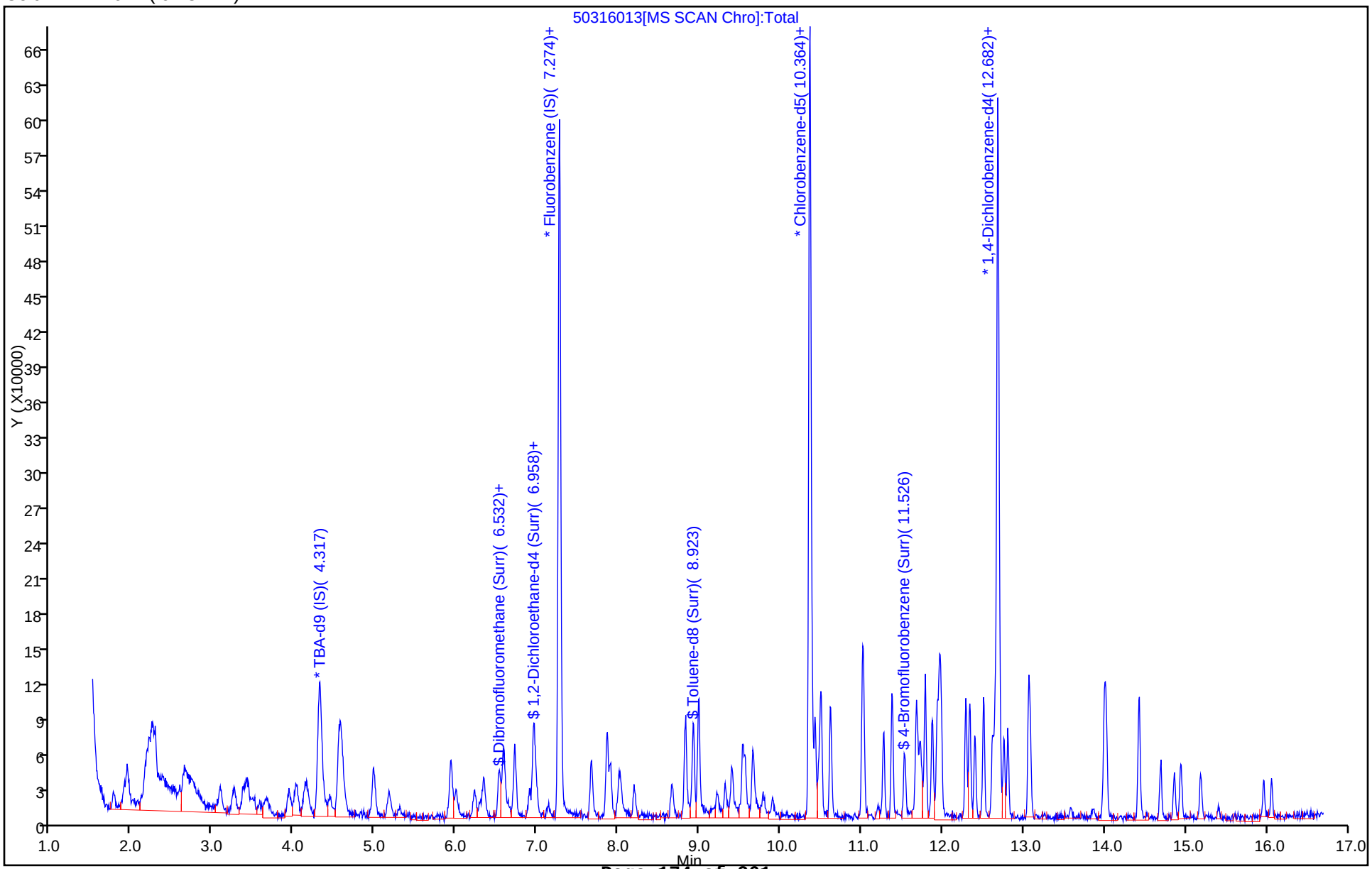
Report Date: 17-Mar-2015 10:59:34 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Injection Date:	16-Mar-2015 16:17:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD1			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

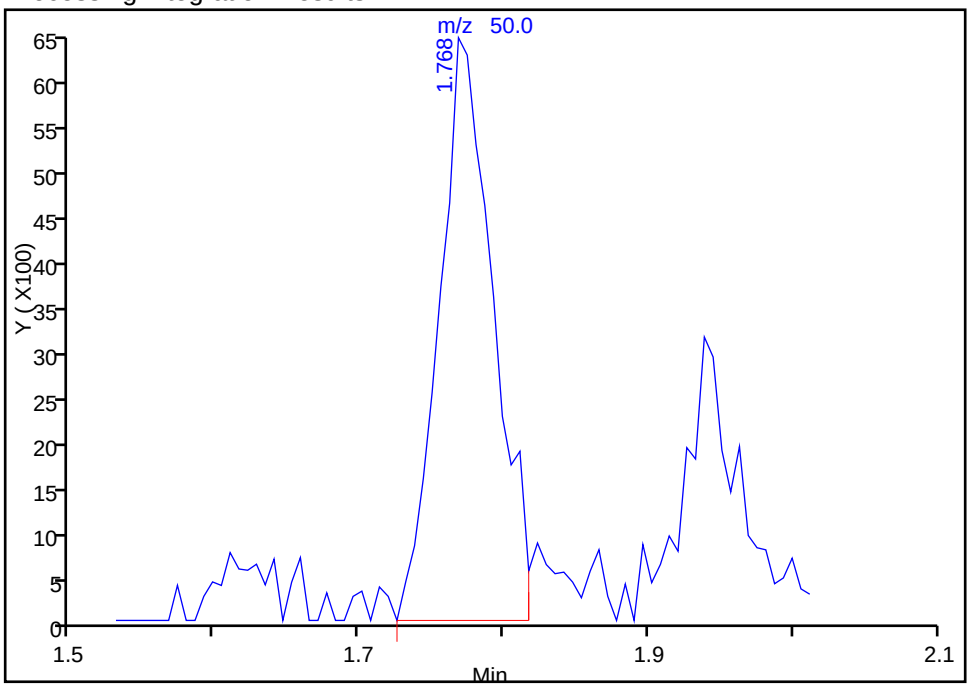
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D				
Injection Date:	16-Mar-2015 16:17:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Chloromethane, CAS: 74-87-3

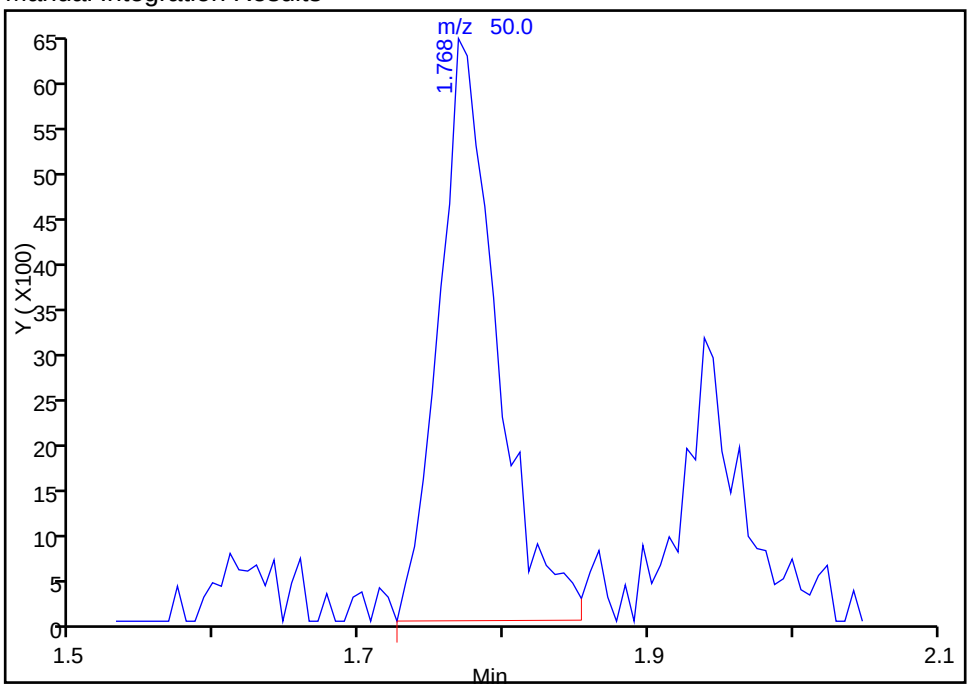
Processing Integration Results

RT: 1.77
Area: 16860
Amount: 4.846171
Amount Units: ng



Manual Integration Results

RT: 1.77
Area: 17972
Amount: 5.343308
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 10:01:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

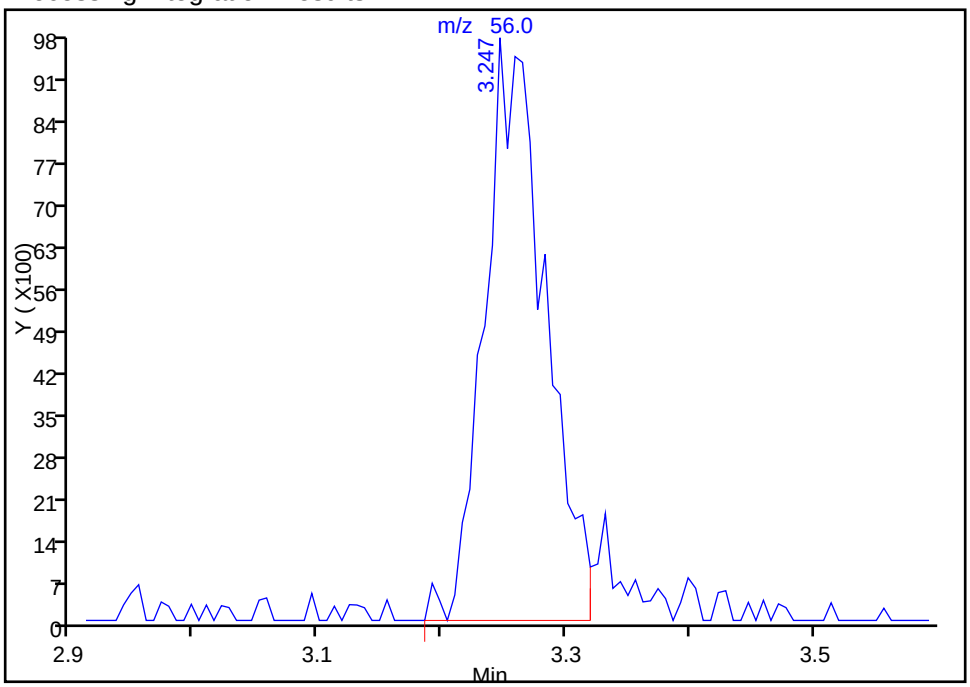
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D
Injection Date: 16-Mar-2015 16:17:30 Instrument ID: CHHP5
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

21 Acrolein, CAS: 107-02-8

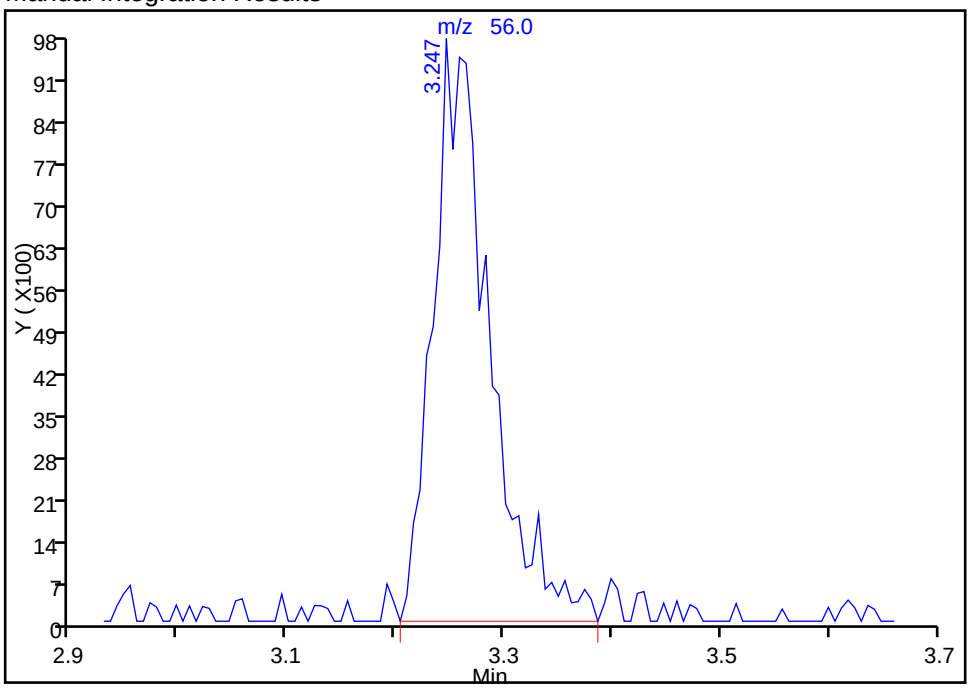
Processing Integration Results

RT: 3.25
Area: 33235
Amount: 92.071591
Amount Units: ng



Manual Integration Results

RT: 3.25
Area: 35289
Amount: 97.689446
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 10:01:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

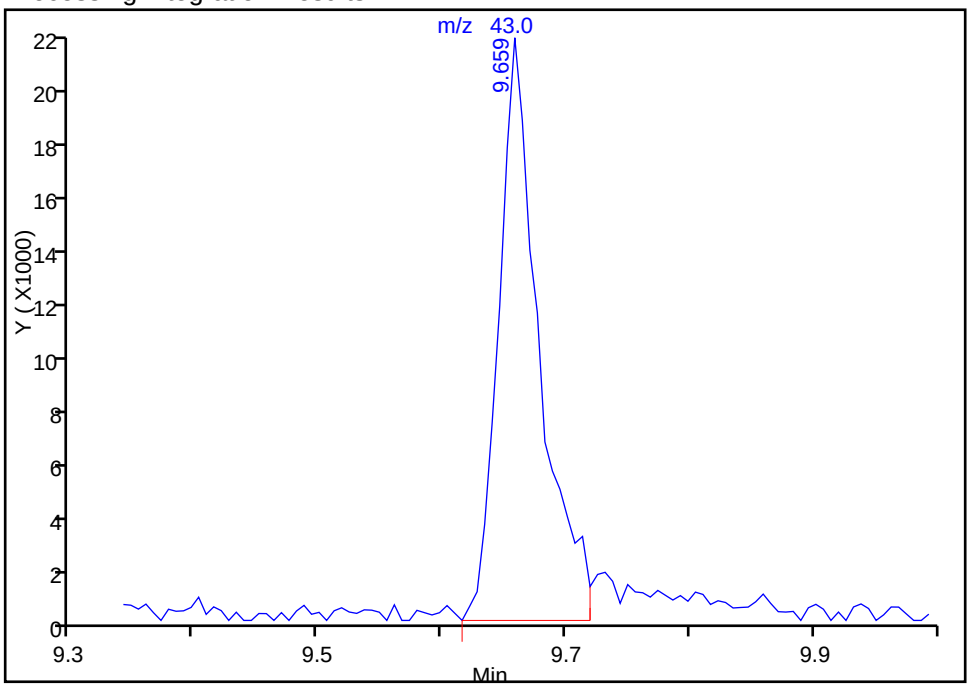
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D				
Injection Date:	16-Mar-2015 16:17:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

82 2-Hexanone, CAS: 591-78-6

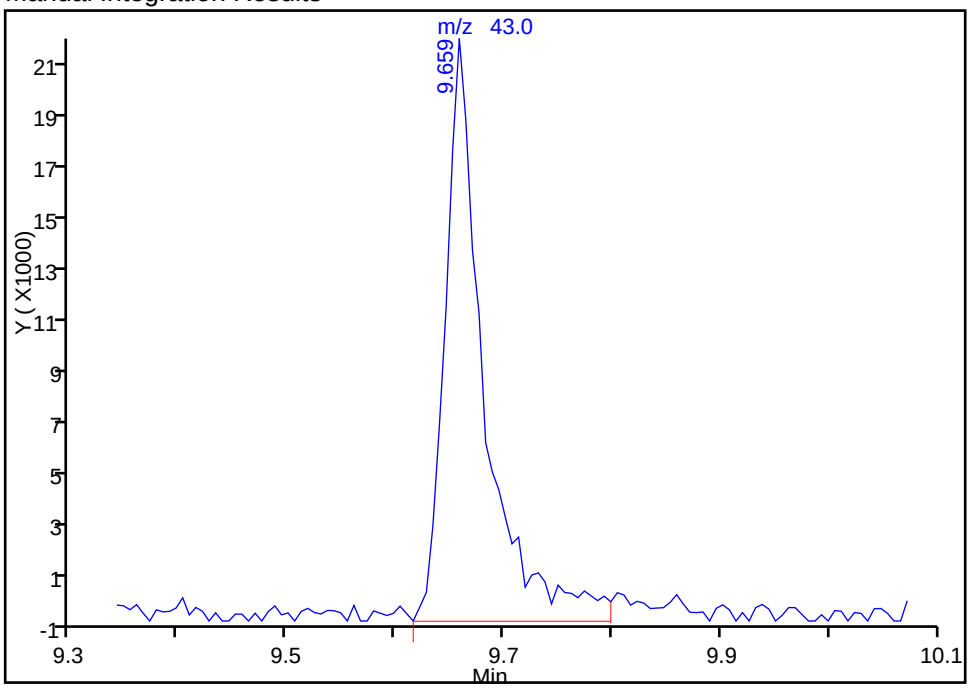
Processing Integration Results

RT: 9.66
Area: 48498
Amount: 19.235523
Amount Units: ng



Manual Integration Results

RT: 9.66
Area: 53734
Amount: 21.434406
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 10:01:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

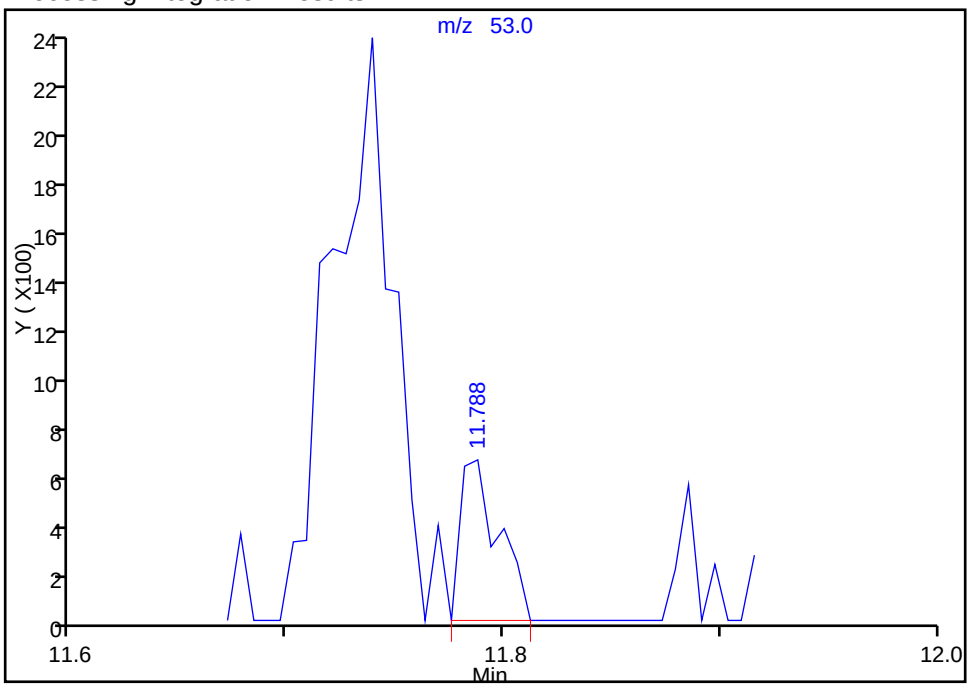
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D				
Injection Date:	16-Mar-2015 16:17:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

102 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

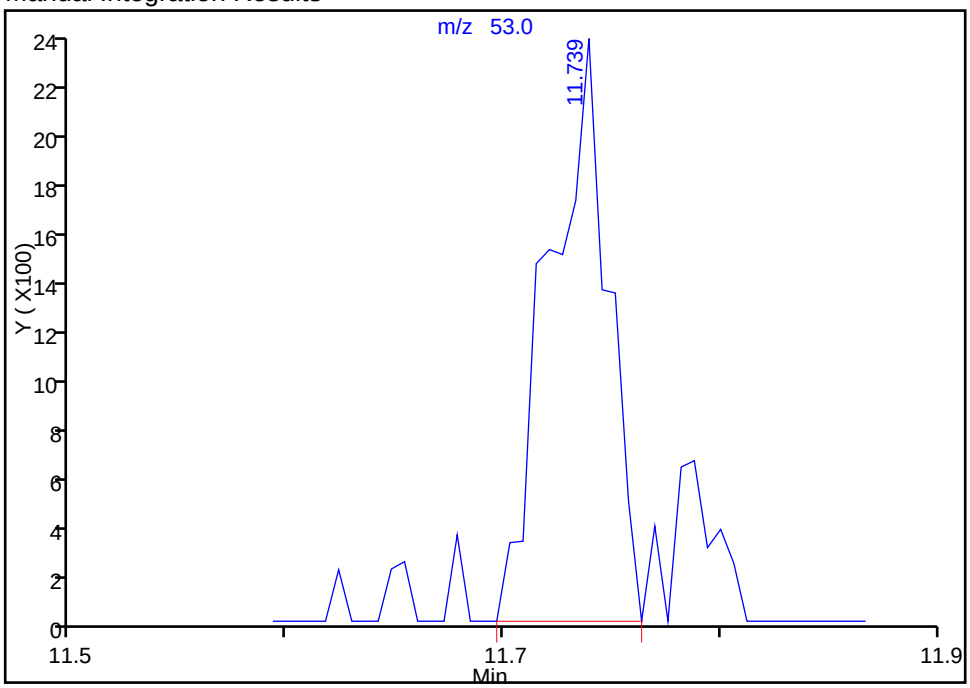
Processing Integration Results

RT: 11.79
Area: 798
Amount: 0.892929
Amount Units: ng



Manual Integration Results

RT: 11.74
Area: 4503
Amount: 5.086353
Amount Units: ng



Reviewer: fergusond, 17-Mar-2015 10:01:36
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Lab Sample ID: CCVIS 180-139024/2 Calibration Date: 04/20/2015 09:32

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50420002.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	0.2143	0.3008	0.1000	14.0	10.0	40.4*	20.0
Chloromethane	Ave	0.2958	0.3633	0.1000	12.3	10.0	22.8*	20.0
Vinyl chloride	Ave	0.3306	0.4042	0.1000	12.2	10.0	22.3*	20.0
Bromomethane	Lin2		0.1887	0.0500	10.6	10.0	5.9	20.0
Chloroethane	Ave	0.2287	0.2722	0.0500	11.9	10.0	19.0	20.0
Dichlorofluoromethane	Ave	0.5222	0.6095	0.0100	11.7	10.0	16.7	20.0
Trichlorofluoromethane	Ave	0.3966	0.4186	0.1000	10.6	10.0	5.6	20.0
Ethyl ether	Ave	0.2615	0.2780	0.0100	10.6	10.0	6.3	20.0
Acrolein	Ave	0.0318	0.0268	0.0100	25.3	30.0	-15.8	20.0
1,1-Dichloroethene	Ave	0.2883	0.2818	0.1000	9.77	10.0	-2.3	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2916	0.3120	0.1000	10.7	10.0	7.0	20.0
Acetone	Ave	0.1024	0.1105	0.0500	21.6	20.0	7.9	20.0
Iodomethane	Ave	0.4005	0.3840	0.0100	9.59	10.0	-4.1	20.0
Carbon disulfide	Ave	0.7051	0.4632	0.1000	6.57	10.0	-34.3*	20.0
Allyl chloride	Ave	0.1524	0.1348	0.0100	8.85	10.0	-11.5	20.0
Methyl acetate	Ave	0.2396	0.2426	0.1000	50.6	50.0	1.2	20.0
Methylene Chloride	Ave	0.3335	0.4058	0.1000	12.2	10.0	21.7*	20.0
tert-Butyl alcohol	Ave	1.178	1.248	0.0100	106	100	6.0	20.0
Acrylonitrile	Ave	0.1233	0.1261	0.0100	102	100	2.3	20.0
trans-1,2-Dichloroethene	Ave	0.2982	0.3075	0.1000	10.3	10.0	3.1	20.0
Methyl tert-butyl ether	Ave	0.6593	0.6091	0.1000	9.24	10.0	-7.6	20.0
Hexane	Ave	0.4764	0.4331	0.0100	9.09	10.0	-9.1	20.0
1,1-Dichloroethane	Ave	0.5323	0.5291	0.2000	9.94	10.0	-0.6	20.0
Vinyl acetate	Ave	0.3776	0.3121	0.0100	8.27	10.0	-17.3	20.0
2,2-Dichloropropane	Ave	0.1331	0.1686	0.0100	12.7	10.0	26.7*	20.0
cis-1,2-Dichloroethene	Ave	0.3142	0.3002	0.1000	9.55	10.0	-4.5	20.0
2-Butanone (MEK)	Ave	0.1638	0.1314	0.0500	16.1	20.0	-19.7	20.0
Bromochloromethane	Ave	0.1360	0.1275	0.0100	9.38	10.0	-6.2	20.0
Tetrahydrofuran	Ave	0.1026	0.0873	0.0100	17.0	20.0	-14.9	20.0
Chloroform	Ave	0.4836	0.4981	0.2000	10.3	10.0	3.0	20.0
1,1,1-Trichloroethane	Ave	0.3088	0.3349	0.1000	10.8	10.0	8.5	20.0
Cyclohexane	Ave	0.5929	0.5464	0.1000	9.22	10.0	-7.8	20.0
1,1-Dichloropropene	Ave	0.4011	0.3754	0.0100	9.36	10.0	-6.4	20.0
Carbon tetrachloride	Ave	0.2478	0.2801	0.1000	11.3	10.0	13.0	20.0
Isobutyl alcohol	Ave	0.0067	0.0081*	0.0100	302	250	20.8*	20.0
Benzene	Ave	1.185	1.235	0.5000	10.4	10.0	4.2	20.0
1,2-Dichloroethane	Ave	0.3880	0.3860	0.1000	9.95	10.0	-0.5	20.0
n-Heptane	Ave	0.4071	0.3780	0.0100	9.29	10.0	-7.1	20.0
Trichloroethene	Ave	0.2969	0.2775	0.2000	9.35	10.0	-6.5	20.0
Methylcyclohexane	Ave	0.5297	0.4708	0.1000	8.89	10.0	-11.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Lab Sample ID: CCVIS 180-139024/2 Calibration Date: 04/20/2015 09:32

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50420002.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	0.2931	0.2866	0.1000	9.78	10.0	-2.2	20.0
Dibromomethane	Ave	0.1578	0.1535	0.0100	9.73	10.0	-2.7	20.0
1,4-Dioxane	Ave	0.0031	0.0027*	0.0100	177	200	-11.5	20.0
Bromodichloromethane	Ave	0.3220	0.2970	0.2000	9.22	10.0	-7.8	20.0
cis-1,3-Dichloropropene	Ave	0.3107	0.3009	0.2000	9.68	10.0	-3.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.353	1.247	0.1000	18.4	20.0	-7.8	20.0
Toluene	Ave	5.124	5.728	0.4000	11.2	10.0	11.8	20.0
trans-1,3-Dichloropropene	Ave	0.9254	1.026	0.1000	11.1	10.0	10.8	20.0
Ethyl methacrylate	Ave	1.207	1.160	0.0100	9.61	10.0	-3.9	20.0
1,1,2-Trichloroethane	Ave	0.9609	1.078	0.1000	11.2	10.0	12.2	20.0
Tetrachloroethene	Ave	1.002	1.114	0.2000	11.1	10.0	11.1	20.0
1,3-Dichloropropane	Ave	1.786	1.913	0.0100	10.7	10.0	7.1	20.0
2-Hexanone	Ave	1.034	0.9481	0.1000	18.3	20.0	-8.3	20.0
Dibromochloromethane	Ave	0.7670	0.8074	0.1000	10.5	10.0	5.3	20.0
1,2-Dibromoethane (EDB)	Ave	0.9169	0.9615	0.1000	10.5	10.0	4.9	20.0
3-Chlorobenzotrifluoride	Ave	1.955	2.028	0.0100	10.4	10.0	3.7	20.0
Chlorobenzene	Ave	3.246	3.555	0.5000	11.0	10.0	9.5	20.0
4-Chlorobenzotrifluoride	Ave	1.890	1.994	0.0100	10.5	10.0	5.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8382	0.9675	0.0100	11.5	10.0	15.4	20.0
Ethylbenzene	Ave	1.863	1.960	0.1000	10.5	10.0	5.2	20.0
m-Xylene & p-Xylene	Ave	2.278	2.458	0.1000	10.8	10.0	7.9	20.0
o-Xylene	Ave	2.228	2.250	0.3000	10.1	10.0	1.0	20.0
Styrene	Ave	3.591	3.760	0.3000	10.5	10.0	4.7	20.0
Bromoform	Ave	0.4737	0.4683	0.1000	9.89	10.0	-1.1	20.0
2-Chlorobenzotrifluoride	Ave	1.952	1.974	0.0100	10.1	10.0	1.1	20.0
Isopropylbenzene	Ave	5.560	5.804	0.1000	10.4	10.0	4.4	20.0
1,1,2,2-Tetrachloroethane	Ave	1.378	1.558	0.3000	11.3	10.0	13.0	20.0
Bromobenzene	Ave	0.9254	0.9212	0.0100	9.95	10.0	-0.5	20.0
1,2,3-Trichloropropane	Ave	0.3041	0.3293	0.0100	10.8	10.0	8.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2528	0.2561	0.0100	10.1	10.0	1.3	20.0
N-Propylbenzene	Ave	1.142	1.079	0.0100	9.45	10.0	-5.5	20.0
2-Chlorotoluene	Ave	0.9591	0.9127	0.0100	9.52	10.0	-4.8	20.0
3-Chlorotoluene	Ave	1.072	1.035	0.0100	9.65	10.0	-3.5	20.0
1,3,5-Trimethylbenzene	Ave	3.183	3.285	0.0100	10.3	10.0	3.2	20.0
4-Chlorotoluene	Ave	1.038	1.121	0.0100	10.8	10.0	8.0	20.0
tert-Butylbenzene	Ave	2.758	2.533	0.0100	9.19	10.0	-8.1	20.0
1,2,4-Trimethylbenzene	Ave	3.267	3.198	0.0100	9.79	10.0	-2.1	20.0
3,4-Dichlorobenzotrifluoride	Ave	1.032	1.018	0.0100	9.86	10.0	-1.4	20.0
sec-Butylbenzene	Ave	3.881	3.798	0.0100	9.79	10.0	-2.1	20.0
1,3-Dichlorobenzene	Ave	1.705	1.725	0.6000	10.1	10.0	1.2	20.0
4-Isopropyltoluene	Ave	3.204	3.068	0.0100	9.57	10.0	-4.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Lab Sample ID: CCVIS 180-139024/2 Calibration Date: 04/20/2015 09:32

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50420002.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	1.741	1.809	0.5000	10.4	10.0	3.9	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.9669	0.9542	0.0100	9.87	10.0	-1.3	20.0
2,5-Dichlorobenzotrifluoride	Ave	1.082	1.030	0.0100	9.52	10.0	-4.8	20.0
n-Butylbenzene	Ave	2.918	2.712	0.0100	9.29	10.0	-7.1	20.0
1,2-Dichlorobenzene	Ave	1.579	1.606	0.4000	10.2	10.0	1.7	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1292	0.1116	0.0500	8.64	10.0	-13.6	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.194	0.9867	0.0100	24.8	30.0	-17.3	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.161	0.8785	0.0100	15.1	20.0	-24.3*	20.0
1,2,4-Trichlorobenzene	Ave	0.8219	0.6856	0.2000	8.34	10.0	-16.6	20.0
Hexachlorobutadiene	Ave	0.3941	0.3726	0.0100	9.45	10.0	-5.5	20.0
Naphthalene	Ave	2.158	1.538	0.0100	7.13	10.0	-28.7*	20.0
1,2,3-Trichlorobenzene	Ave	0.6740	0.5364	0.0100	7.96	10.0	-20.4*	20.0
2,4,5-Trichlorotoluene	Ave	0.3624	0.1854	0.0100	5.11	10.0	-48.9*	20.0
2,3,6-Trichlorotoluene	Ave	0.3273	0.1843	0.0100	5.63	10.0	-43.7*	20.0
Dibromofluoromethane (Surr)	Ave	0.2274	0.2065		9.08	10.0	-9.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2998	0.2792		9.31	10.0	-6.9	20.0
Toluene-d8 (Surr)	Ave	3.986	4.223		10.6	10.0	5.9	20.0
4-Bromofluorobenzene (Surr)	Ave	1.436	1.394		9.71	10.0	-2.9	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Apr-2015 09:32:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006546-002
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub11

Method: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 20-Apr-2015 12:20:40 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: fergusond Date: 20-Apr-2015 10:03:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.315	4.315	0.000	0	167120	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.278	7.278	0.000	94	564131	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.362	10.362	0.000	85	122940	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.686	0.000	90	184767	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.529	6.529	0.000	46	116479	50.0	45.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.901	6.901	0.000	0	157480	50.0	46.6	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	93	519159	50.0	53.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.530	11.530	0.000	87	171360	50.0	48.5	
11 Dichlorodifluoromethane	85	1.632	1.632	0.000	68	169688	50.0	70.2	
12 Chloromethane	50	1.790	1.790	0.000	85	204950	50.0	61.4	
13 Vinyl chloride	62	1.918	1.918	0.000	83	228032	50.0	61.1	
14 Butadiene	39	1.967	1.967	0.000	97	229304	50.0	53.8	
15 Bromomethane	94	2.265	2.265	0.000	90	106425	50.0	52.9	M
16 Chloroethane	64	2.405	2.405	0.000	91	153542	50.0	59.5	
17 Dichlorofluoromethane	67	2.666	2.666	0.000	82	343850	50.0	58.4	
18 Trichlorofluoromethane	101	2.721	2.721	0.000	83	236165	50.0	52.8	
20 Ethyl ether	59	3.092	3.092	0.000	93	156830	50.0	53.1	
21 Acrolein	56	3.250	3.250	0.000	73	45286	150.0	126.3	
22 1,1-Dichloroethene	96	3.396	3.396	0.000	97	158993	50.0	48.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.445	3.445	0.000	82	175996	50.0	53.5	
24 Acetone	43	3.512	3.512	0.000	94	124704	100.0	107.9	
25 Iodomethane	142	3.615	3.615	0.000	97	216641	50.0	47.9	
26 Carbon disulfide	76	3.688	3.688	0.000	99	261285	50.0	32.8	
28 3-Chloro-1-propene	76	3.956	3.956	0.000	77	76055	50.0	44.2	
30 Methyl acetate	43	4.023	4.023	0.000	96	684280	250.0	253.1	
31 Methylene Chloride	84	4.145	4.145	0.000	88	228909	50.0	60.8	
32 2-Methyl-2-propanol	59	4.443	4.443	0.000	80	104302	500.0	529.8	
33 Acrylonitrile	53	4.552	4.552	0.000	99	711217	500.0	511.4	
34 trans-1,2-Dichloroethene	96	4.564	4.564	0.000	58	173490	50.0	51.6	
35 Methyl tert-butyl ether	73	4.595	4.595	0.000	93	343590	50.0	46.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.990	4.990	0.000	95	244331	50.0	45.5	
37 1,1-Dichloroethane	63	5.173	5.173	0.000	96	298503	50.0	49.7	
38 Vinyl acetate	43	5.301	5.301	0.000	92	176075	50.0	41.3	
44 2,2-Dichloropropane	77	5.927	5.927	0.000	56	95095	50.0	63.3	
45 cis-1,2-Dichloroethene	96	5.939	5.939	0.000	68	169334	50.0	47.8	
46 2-Butanone (MEK)	43	5.988	5.988	0.000	99	148291	100.0	80.3	
49 Chlorobromomethane	128	6.231	6.231	0.000	83	71933	50.0	46.9	
51 Tetrahydrofuran	42	6.286	6.286	0.000	88	98436	100.0	85.1	
52 Chloroform	83	6.347	6.347	0.000	83	281001	50.0	51.5	
53 1,1,1-Trichloroethane	97	6.536	6.536	0.000	88	188936	50.0	54.2	
54 Cyclohexane	56	6.590	6.590	0.000	92	308259	50.0	46.1	
56 Carbon tetrachloride	117	6.718	6.718	0.000	70	157987	50.0	56.5	
55 1,1-Dichloropropene	75	6.718	6.718	0.000	89	211786	50.0	46.8	
57 Isobutyl alcohol	41	6.943	6.943	0.000	47	113699	1250.0	1510.0	
58 Benzene	78	6.955	6.955	0.000	97	696421	50.0	52.1	
59 1,2-Dichloroethane	62	6.986	6.986	0.000	88	217756	50.0	49.7	
62 n-Heptane	43	7.278	7.278	0.000	68	213244	50.0	46.4	
64 Trichloroethene	130	7.673	7.673	0.000	91	156564	50.0	46.7	
66 Methylcyclohexane	83	7.862	7.862	0.000	93	265609	50.0	44.4	
67 1,2-Dichloropropane	63	7.898	7.898	0.000	86	161668	50.0	48.9	
68 Dibromomethane	93	8.026	8.026	0.000	92	86583	50.0	48.6	
70 1,4-Dioxane	88	8.062	8.062	0.000	91	30810	1000.0	884.9	
71 Dichlorobromomethane	83	8.196	8.196	0.000	92	167516	50.0	46.1	
73 2-Chloroethyl vinyl ether	63	8.519	8.519	0.000	90	157537	100.0	84.5	
74 cis-1,3-Dichloropropene	75	8.659	8.659	0.000	89	169742	50.0	48.4	
75 4-Methyl-2-pentanone (MIBK	43	8.823	8.823	0.000	96	306638	100.0	92.2	
76 Toluene	91	8.987	8.987	0.000	91	704237	50.0	55.9	
77 trans-1,3-Dichloropropene	75	9.218	9.218	0.000	83	126087	50.0	55.4	
78 Ethyl methacrylate	69	9.316	9.316	0.000	73	142640	50.0	48.1	
79 1,1,2-Trichloroethane	97	9.401	9.401	0.000	88	132576	50.0	56.1	
80 Tetrachloroethene	164	9.535	9.535	0.000	92	136935	50.0	55.6	
81 1,3-Dichloropropane	76	9.565	9.565	0.000	94	235166	50.0	53.6	
82 2-Hexanone	43	9.656	9.656	0.000	97	233109	100.0	91.7	
84 Chlorodibromomethane	129	9.784	9.784	0.000	85	99261	50.0	52.6	
85 Ethylene Dibromide	107	9.900	9.900	0.000	94	118209	50.0	52.4	
86 3-Chlorobenzotrifluoride	180	10.368	10.368	0.000	80	249263	50.0	51.9	
87 Chlorobenzene	112	10.392	10.392	0.000	90	437061	50.0	54.8	
88 4-Chlorobenzotrifluoride	180	10.429	10.429	0.000	76	245094	50.0	52.7	
89 1,1,1,2-Tetrachloroethane	131	10.472	10.472	0.000	85	118945	50.0	57.7	
90 Ethylbenzene	106	10.502	10.502	0.000	99	240943	50.0	52.6	
91 m-Xylene & p-Xylene	106	10.618	10.618	0.000	0	302199	50.0	53.9	
92 o-Xylene	106	11.013	11.013	0.000	90	276649	50.0	50.5	
93 Styrene	104	11.025	11.025	0.000	90	462244	50.0	52.4	
94 Bromoform	173	11.208	11.208	0.000	92	57569	50.0	49.4	
96 2-Chlorobenzotrifluoride	180	11.275	11.275	0.000	94	242623	50.0	50.5	
97 Isopropylbenzene	105	11.378	11.378	0.000	97	713535	50.0	52.2	
99 1,1,2,2-Tetrachloroethane	83	11.670	11.670	0.000	81	191504	50.0	56.5	
100 Bromobenzene	156	11.682	11.682	0.000	94	170206	50.0	49.8	
101 1,2,3-Trichloropropane	110	11.719	11.719	0.000	58	60848	50.0	54.1	
102 trans-1,4-Dichloro-2-buten	53	11.731	11.731	0.000	40	47313	50.0	50.6	
103 N-Propylbenzene	120	11.792	11.792	0.000	94	199289	50.0	47.2	
104 2-Chlorotoluene	126	11.877	11.877	0.000	96	168639	50.0	47.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.938	11.938	0.000	46	191185	50.0	48.3	
106 1,3,5-Trimethylbenzene	105	11.962	11.962	0.000	92	606927	50.0	51.6	
107 4-Chlorotoluene	126	11.980	11.980	0.000	98	207198	50.0	54.0	
108 tert-Butylbenzene	119	12.290	12.290	0.000	67	468034	50.0	45.9	
110 1,2,4-Trimethylbenzene	105	12.333	12.333	0.000	98	590867	50.0	48.9	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	98	188099	50.0	49.3	
112 sec-Butylbenzene	105	12.509	12.509	0.000	82	701766	50.0	48.9	
113 1,3-Dichlorobenzene	146	12.619	12.619	0.000	82	318802	50.0	50.6	
114 4-Isopropyltoluene	119	12.649	12.649	0.000	92	566830	50.0	47.9	
115 1,4-Dichlorobenzene	146	12.704	12.704	0.000	93	334259	50.0	51.9	
116 2,4-Dichloro-1-(triflourom	214	12.753	12.753	0.000	92	176300	50.0	49.3	
118 2,5-Dichlorobenzotrifluori	214	12.808	12.808	0.000	0	190237	50.0	47.6	
120 n-Butylbenzene	91	13.063	13.063	0.000	95	501072	50.0	46.5	
121 1,2-Dichlorobenzene	146	13.081	13.081	0.000	95	296725	50.0	50.9	
122 1,2-Dibromo-3-Chloropropan	75	13.860	13.860	0.000	74	20615	50.0	43.2	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.000	14.000	0.000	0	546940	150.0	124.0	
124 1,3,5-Trichlorobenzene	180	14.067	14.067	0.000	94	174430	50.0	49.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.426	14.426	0.000	0	324623	100.0	75.7	
126 1,2,4-Trichlorobenzene	180	14.693	14.693	0.000	92	126668	50.0	41.7	
127 Hexachlorobutadiene	225	14.864	14.864	0.000	91	68839	50.0	47.3	
128 Naphthalene	128	14.937	14.937	0.000	97	284230	50.0	35.6	
129 1,2,3-Trichlorobenzene	180	15.186	15.186	0.000	93	99116	50.0	39.8	
131 2,4,5-Trichlorotoluene	159	15.965	15.965	0.000	0	34253	50.0	25.6	
130 2,3,6-Trichlorotoluene	159	16.062	16.062	0.000	90	34056	50.0	28.2	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	104.4	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.3	
S 135 1,3-Dichloropropene, Total	1				0		100.0	103.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaW 135tcb a_00001	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00110	Amount Added:	2.00	Units: uL	
voaWKetpri Re_00004	Amount Added:	2.00	Units: uL	
voaWeemixPRI_00002	Amount Added:	2.00	Units: uL	
voaW VA pri R_00005	Amount Added:	2.00	Units: uL	
VOAACRPRI_00005	Amount Added:	6.00	Units: uL	
voaW2-cle pri_00006	Amount Added:	2.00	Units: uL	
VOA8260INT_00031	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added:	2.00	Units: uL	Run Reagent

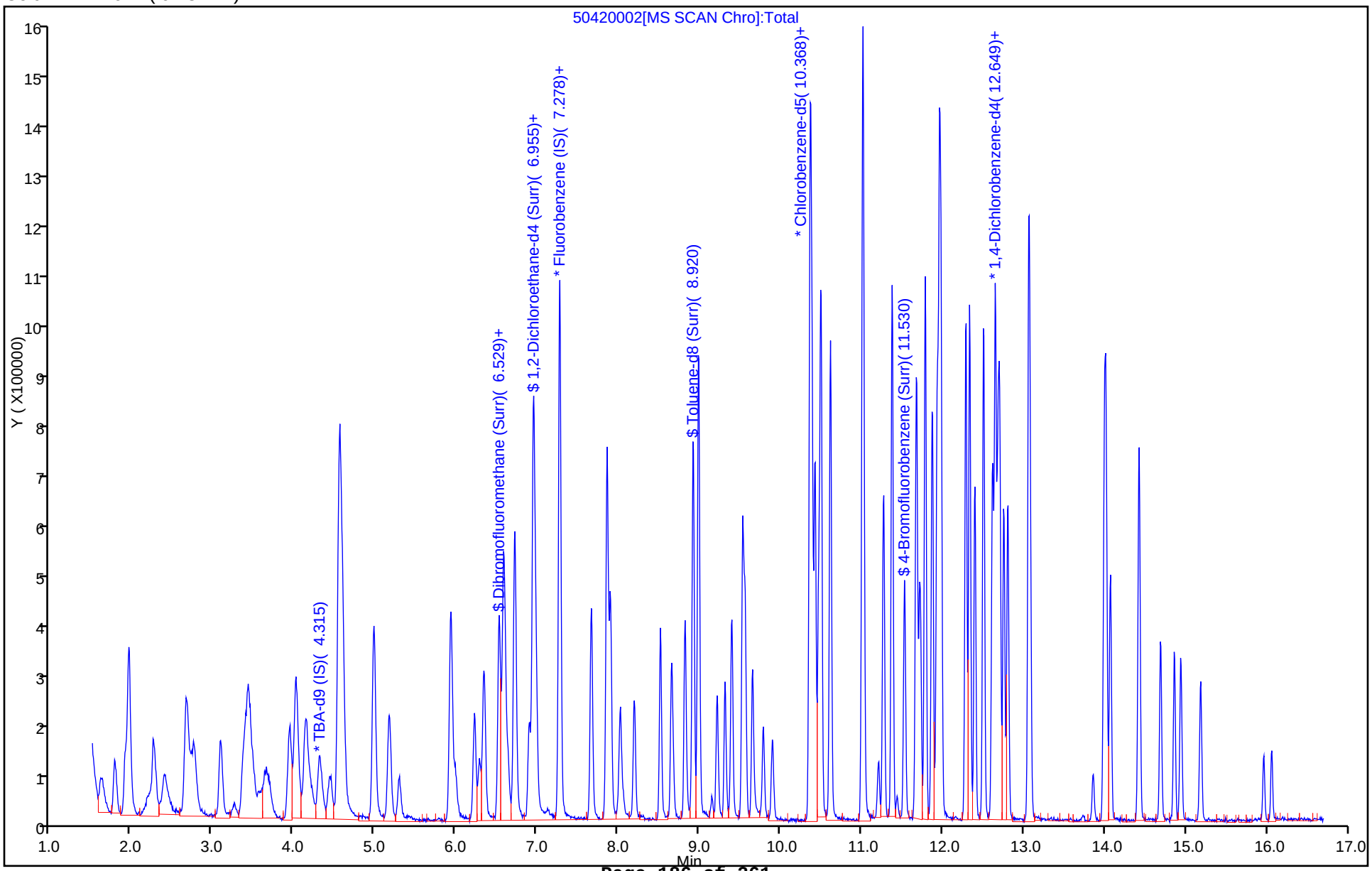
Report Date: 20-Apr-2015 12:20:41 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420002.D

Injection Date:	20-Apr-2015 09:32:30	Instrument ID:	CHHP5	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_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

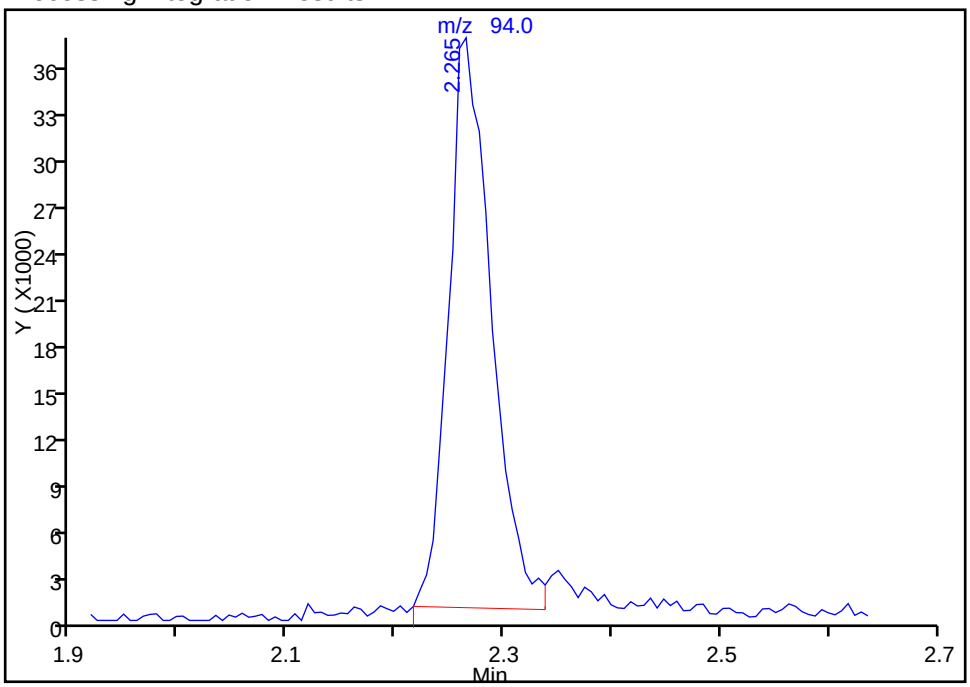
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420002.D				
Injection Date:	20-Apr-2015 09:32:30	Instrument ID:	CHHP5		
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_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

15 Bromomethane, CAS: 74-83-9

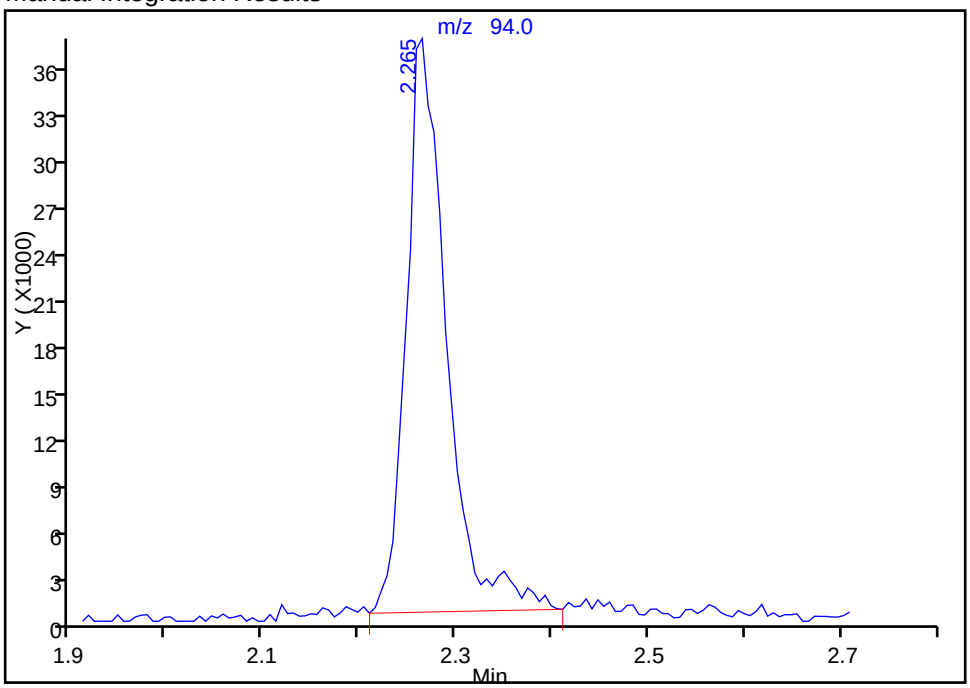
Processing Integration Results

RT: 2.26
Area: 100151
Amount: 49.541882
Amount Units: ng



Manual Integration Results

RT: 2.26
Area: 106425
Amount: 52.947998
Amount Units: ng



Reviewer: fergusond, 20-Apr-2015 10:03:14
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Lab Sample ID: CCVIS 180-139024/2 Calibration Date: 04/20/2015 09:32

Instrument ID: CHHP5 Calib Start Date: 03/18/2015 13:31

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/18/2015 16:19

Lab File ID: 50420002.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
2-Chloroethyl vinyl ether	Ave	0.1652	0.1396	0.0100	16.9	20.0	-15.5	20.0
1,3,5-Trichlorobenzene	Ave	0.9577	0.9441	0.0100	9.86	10.0	-1.4	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Apr-2015 09:32:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006546-002
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub11

Method: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 20-Apr-2015 12:20:40 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: fergusond Date: 20-Apr-2015 10:03:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.315	4.315	0.000	0	167120	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.278	7.278	0.000	94	564131	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.362	10.362	0.000	85	122940	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.686	0.000	90	184767	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.529	6.529	0.000	46	116479	50.0	45.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.901	6.901	0.000	0	157480	50.0	46.6	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	93	519159	50.0	53.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.530	11.530	0.000	87	171360	50.0	48.5	
11 Dichlorodifluoromethane	85	1.632	1.632	0.000	68	169688	50.0	70.2	
12 Chloromethane	50	1.790	1.790	0.000	85	204950	50.0	61.4	
13 Vinyl chloride	62	1.918	1.918	0.000	83	228032	50.0	61.1	
14 Butadiene	39	1.967	1.967	0.000	97	229304	50.0	53.8	
15 Bromomethane	94	2.265	2.265	0.000	90	106425	50.0	52.9	M
16 Chloroethane	64	2.405	2.405	0.000	91	153542	50.0	59.5	
17 Dichlorofluoromethane	67	2.666	2.666	0.000	82	343850	50.0	58.4	
18 Trichlorofluoromethane	101	2.721	2.721	0.000	83	236165	50.0	52.8	
20 Ethyl ether	59	3.092	3.092	0.000	93	156830	50.0	53.1	
21 Acrolein	56	3.250	3.250	0.000	73	45286	150.0	126.3	
22 1,1-Dichloroethene	96	3.396	3.396	0.000	97	158993	50.0	48.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.445	3.445	0.000	82	175996	50.0	53.5	
24 Acetone	43	3.512	3.512	0.000	94	124704	100.0	107.9	
25 Iodomethane	142	3.615	3.615	0.000	97	216641	50.0	47.9	
26 Carbon disulfide	76	3.688	3.688	0.000	99	261285	50.0	32.8	
28 3-Chloro-1-propene	76	3.956	3.956	0.000	77	76055	50.0	44.2	
30 Methyl acetate	43	4.023	4.023	0.000	96	684280	250.0	253.1	
31 Methylene Chloride	84	4.145	4.145	0.000	88	228909	50.0	60.8	
32 2-Methyl-2-propanol	59	4.443	4.443	0.000	80	104302	500.0	529.8	
33 Acrylonitrile	53	4.552	4.552	0.000	99	711217	500.0	511.4	
34 trans-1,2-Dichloroethene	96	4.564	4.564	0.000	58	173490	50.0	51.6	
35 Methyl tert-butyl ether	73	4.595	4.595	0.000	93	343590	50.0	46.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.990	4.990	0.000	95	244331	50.0	45.5	
37 1,1-Dichloroethane	63	5.173	5.173	0.000	96	298503	50.0	49.7	
38 Vinyl acetate	43	5.301	5.301	0.000	92	176075	50.0	41.3	
44 2,2-Dichloropropane	77	5.927	5.927	0.000	56	95095	50.0	63.3	
45 cis-1,2-Dichloroethene	96	5.939	5.939	0.000	68	169334	50.0	47.8	
46 2-Butanone (MEK)	43	5.988	5.988	0.000	99	148291	100.0	80.3	
49 Chlorobromomethane	128	6.231	6.231	0.000	83	71933	50.0	46.9	
51 Tetrahydrofuran	42	6.286	6.286	0.000	88	98436	100.0	85.1	
52 Chloroform	83	6.347	6.347	0.000	83	281001	50.0	51.5	
53 1,1,1-Trichloroethane	97	6.536	6.536	0.000	88	188936	50.0	54.2	
54 Cyclohexane	56	6.590	6.590	0.000	92	308259	50.0	46.1	
56 Carbon tetrachloride	117	6.718	6.718	0.000	70	157987	50.0	56.5	
55 1,1-Dichloropropene	75	6.718	6.718	0.000	89	211786	50.0	46.8	
57 Isobutyl alcohol	41	6.943	6.943	0.000	47	113699	1250.0	1510.0	
58 Benzene	78	6.955	6.955	0.000	97	696421	50.0	52.1	
59 1,2-Dichloroethane	62	6.986	6.986	0.000	88	217756	50.0	49.7	
62 n-Heptane	43	7.278	7.278	0.000	68	213244	50.0	46.4	
64 Trichloroethene	130	7.673	7.673	0.000	91	156564	50.0	46.7	
66 Methylcyclohexane	83	7.862	7.862	0.000	93	265609	50.0	44.4	
67 1,2-Dichloropropane	63	7.898	7.898	0.000	86	161668	50.0	48.9	
68 Dibromomethane	93	8.026	8.026	0.000	92	86583	50.0	48.6	
70 1,4-Dioxane	88	8.062	8.062	0.000	91	30810	1000.0	884.9	
71 Dichlorobromomethane	83	8.196	8.196	0.000	92	167516	50.0	46.1	
73 2-Chloroethyl vinyl ether	63	8.519	8.519	0.000	90	157537	100.0	84.5	
74 cis-1,3-Dichloropropene	75	8.659	8.659	0.000	89	169742	50.0	48.4	
75 4-Methyl-2-pentanone (MIBK	43	8.823	8.823	0.000	96	306638	100.0	92.2	
76 Toluene	91	8.987	8.987	0.000	91	704237	50.0	55.9	
77 trans-1,3-Dichloropropene	75	9.218	9.218	0.000	83	126087	50.0	55.4	
78 Ethyl methacrylate	69	9.316	9.316	0.000	73	142640	50.0	48.1	
79 1,1,2-Trichloroethane	97	9.401	9.401	0.000	88	132576	50.0	56.1	
80 Tetrachloroethene	164	9.535	9.535	0.000	92	136935	50.0	55.6	
81 1,3-Dichloropropane	76	9.565	9.565	0.000	94	235166	50.0	53.6	
82 2-Hexanone	43	9.656	9.656	0.000	97	233109	100.0	91.7	
84 Chlorodibromomethane	129	9.784	9.784	0.000	85	99261	50.0	52.6	
85 Ethylene Dibromide	107	9.900	9.900	0.000	94	118209	50.0	52.4	
86 3-Chlorobenzotrifluoride	180	10.368	10.368	0.000	80	249263	50.0	51.9	
87 Chlorobenzene	112	10.392	10.392	0.000	90	437061	50.0	54.8	
88 4-Chlorobenzotrifluoride	180	10.429	10.429	0.000	76	245094	50.0	52.7	
89 1,1,1,2-Tetrachloroethane	131	10.472	10.472	0.000	85	118945	50.0	57.7	
90 Ethylbenzene	106	10.502	10.502	0.000	99	240943	50.0	52.6	
91 m-Xylene & p-Xylene	106	10.618	10.618	0.000	0	302199	50.0	53.9	
92 o-Xylene	106	11.013	11.013	0.000	90	276649	50.0	50.5	
93 Styrene	104	11.025	11.025	0.000	90	462244	50.0	52.4	
94 Bromoform	173	11.208	11.208	0.000	92	57569	50.0	49.4	
96 2-Chlorobenzotrifluoride	180	11.275	11.275	0.000	94	242623	50.0	50.5	
97 Isopropylbenzene	105	11.378	11.378	0.000	97	713535	50.0	52.2	
99 1,1,2,2-Tetrachloroethane	83	11.670	11.670	0.000	81	191504	50.0	56.5	
100 Bromobenzene	156	11.682	11.682	0.000	94	170206	50.0	49.8	
101 1,2,3-Trichloropropane	110	11.719	11.719	0.000	58	60848	50.0	54.1	
102 trans-1,4-Dichloro-2-buten	53	11.731	11.731	0.000	40	47313	50.0	50.6	
103 N-Propylbenzene	120	11.792	11.792	0.000	94	199289	50.0	47.2	
104 2-Chlorotoluene	126	11.877	11.877	0.000	96	168639	50.0	47.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.938	11.938	0.000	46	191185	50.0	48.3	
106 1,3,5-Trimethylbenzene	105	11.962	11.962	0.000	92	606927	50.0	51.6	
107 4-Chlorotoluene	126	11.980	11.980	0.000	98	207198	50.0	54.0	
108 tert-Butylbenzene	119	12.290	12.290	0.000	67	468034	50.0	45.9	
110 1,2,4-Trimethylbenzene	105	12.333	12.333	0.000	98	590867	50.0	48.9	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	98	188099	50.0	49.3	
112 sec-Butylbenzene	105	12.509	12.509	0.000	82	701766	50.0	48.9	
113 1,3-Dichlorobenzene	146	12.619	12.619	0.000	82	318802	50.0	50.6	
114 4-Isopropyltoluene	119	12.649	12.649	0.000	92	566830	50.0	47.9	
115 1,4-Dichlorobenzene	146	12.704	12.704	0.000	93	334259	50.0	51.9	
116 2,4-Dichloro-1-(triflourom	214	12.753	12.753	0.000	92	176300	50.0	49.3	
118 2,5-Dichlorobenzotrifluori	214	12.808	12.808	0.000	0	190237	50.0	47.6	
120 n-Butylbenzene	91	13.063	13.063	0.000	95	501072	50.0	46.5	
121 1,2-Dichlorobenzene	146	13.081	13.081	0.000	95	296725	50.0	50.9	
122 1,2-Dibromo-3-Chloropropan	75	13.860	13.860	0.000	74	20615	50.0	43.2	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.000	14.000	0.000	0	546940	150.0	124.0	
124 1,3,5-Trichlorobenzene	180	14.067	14.067	0.000	94	174430	50.0	49.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.426	14.426	0.000	0	324623	100.0	75.7	
126 1,2,4-Trichlorobenzene	180	14.693	14.693	0.000	92	126668	50.0	41.7	
127 Hexachlorobutadiene	225	14.864	14.864	0.000	91	68839	50.0	47.3	
128 Naphthalene	128	14.937	14.937	0.000	97	284230	50.0	35.6	
129 1,2,3-Trichlorobenzene	180	15.186	15.186	0.000	93	99116	50.0	39.8	
131 2,4,5-Trichlorotoluene	159	15.965	15.965	0.000	0	34253	50.0	25.6	
130 2,3,6-Trichlorotoluene	159	16.062	16.062	0.000	90	34056	50.0	28.2	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	104.4	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.3	
S 135 1,3-Dichloropropene, Total	1				0		100.0	103.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaW 135tcb a_00001	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00110	Amount Added:	2.00	Units: uL	
voaWKetpri Re_00004	Amount Added:	2.00	Units: uL	
voaWeemixPRI_00002	Amount Added:	2.00	Units: uL	
voaW VA pri R_00005	Amount Added:	2.00	Units: uL	
VOAACRPRI_00005	Amount Added:	6.00	Units: uL	
voaW2-cle pri_00006	Amount Added:	2.00	Units: uL	
VOA8260INT_00031	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added:	2.00	Units: uL	Run Reagent

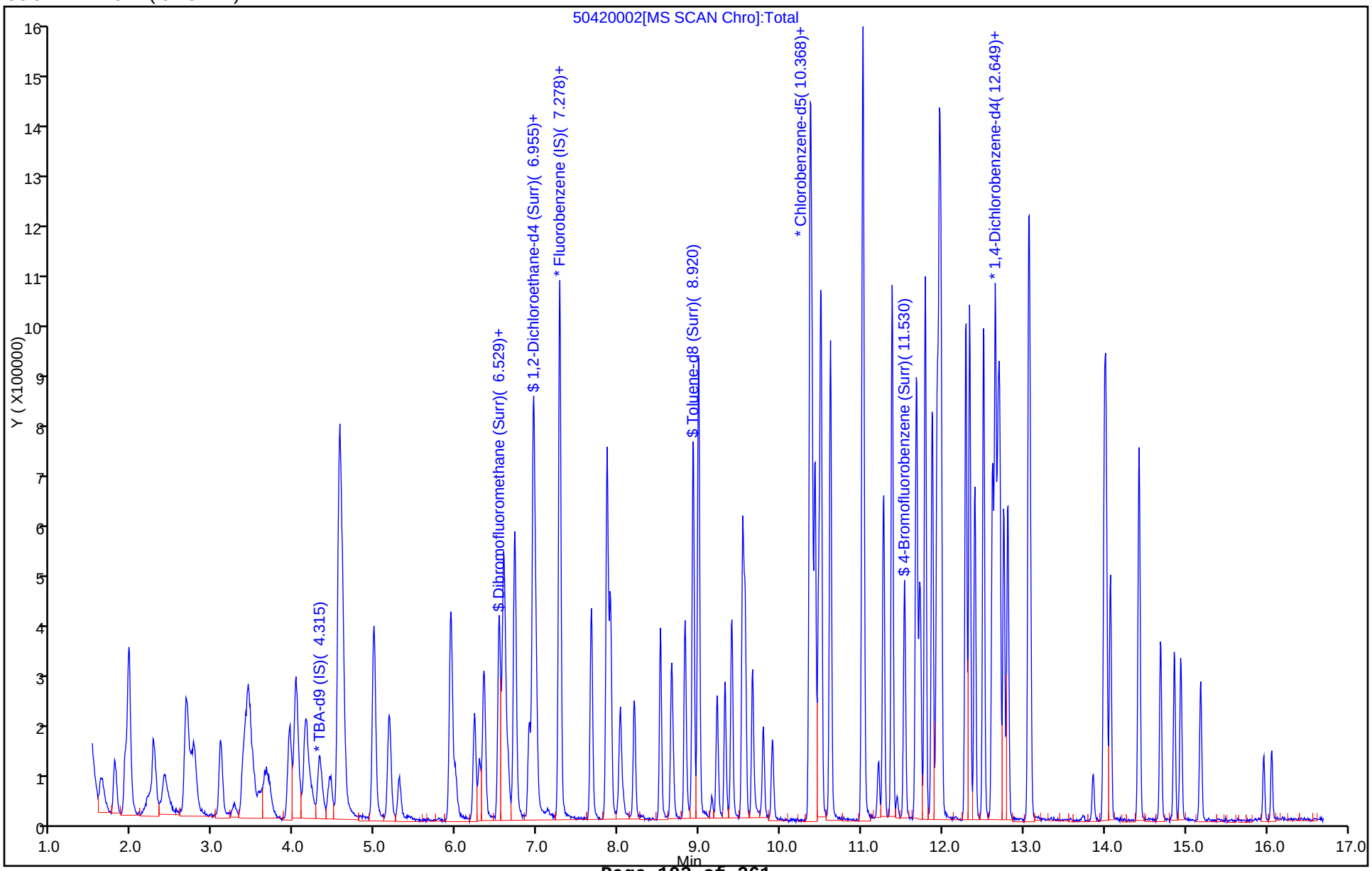
Report Date: 20-Apr-2015 12:20:41 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420002.D

Injection Date:	20-Apr-2015 09:32:30	Instrument ID:	CHHP5	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_CHHP5	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.: 180-43134-1

SDG No.:

Lab Sample ID: CCVIS 180-139148/2 Calibration Date: 04/21/2015 11:38

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50421002.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	0.2143	0.2857	0.1000	13.3	10.0	33.3*	20.0
Chloromethane	Ave	0.2958	0.3452	0.1000	11.7	10.0	16.7	20.0
Vinyl chloride	Ave	0.3306	0.3578	0.1000	10.8	10.0	8.2	20.0
Bromomethane	Lin2		0.1688	0.0500	9.37	10.0	-6.3	20.0
Chloroethane	Ave	0.2287	0.2539	0.0500	11.1	10.0	11.0	20.0
Dichlorofluoromethane	Ave	0.5222	0.5803	0.0100	11.1	10.0	11.1	20.0
Trichlorofluoromethane	Ave	0.3966	0.3897	0.1000	9.83	10.0	-1.7	20.0
Ethyl ether	Ave	0.2615	0.2513	0.0100	9.61	10.0	-3.9	20.0
Acrolein	Ave	0.0318	0.0248	0.0100	23.4	30.0	-21.8*	20.0
1,1-Dichloroethene	Ave	0.2883	0.2633	0.1000	9.13	10.0	-8.7	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2916	0.2858	0.1000	9.80	10.0	-2.0	20.0
Acetone	Ave	0.1024	0.1098	0.0500	21.4	20.0	7.2	20.0
Iodomethane	Ave	0.4005	0.3561	0.0100	8.89	10.0	-11.1	20.0
Carbon disulfide	Ave	0.7051	0.3965	0.1000	5.62	10.0	-43.8*	20.0
Allyl chloride	Ave	0.1524	0.1245	0.0100	8.17	10.0	-18.3	20.0
Methyl acetate	Ave	0.2396	0.2349	0.1000	49.0	50.0	-2.0	20.0
Methylene Chloride	Ave	0.3335	0.3079	0.1000	9.23	10.0	-7.7	20.0
tert-Butyl alcohol	Ave	1.178	1.047	0.0100	88.9	100	-11.1	20.0
Acrylonitrile	Ave	0.1233	0.1184	0.0100	96.0	100	-4.0	20.0
trans-1,2-Dichloroethene	Ave	0.2982	0.2845	0.1000	9.54	10.0	-4.6	20.0
Methyl tert-butyl ether	Ave	0.6593	0.5771	0.1000	8.75	10.0	-12.5	20.0
Hexane	Ave	0.4764	0.3970	0.0100	8.33	10.0	-16.7	20.0
1,1-Dichloroethane	Ave	0.5323	0.4964	0.2000	9.32	10.0	-6.8	20.0
Vinyl acetate	Ave	0.3776	0.3080	0.0100	8.16	10.0	-18.4	20.0
2,2-Dichloropropane	Ave	0.1331	0.1547	0.0100	11.6	10.0	16.3	20.0
cis-1,2-Dichloroethene	Ave	0.3142	0.2813	0.1000	8.95	10.0	-10.5	20.0
2-Butanone (MEK)	Ave	0.1638	0.1295	0.0500	15.8	20.0	-20.9*	20.0
Bromochloromethane	Ave	0.1360	0.1239	0.0100	9.11	10.0	-8.9	20.0
Tetrahydrofuran	Ave	0.1026	0.0853	0.0100	16.6	20.0	-16.8	20.0
Chloroform	Ave	0.4836	0.4553	0.2000	9.41	10.0	-5.9	20.0
1,1,1-Trichloroethane	Ave	0.3088	0.3058	0.1000	9.90	10.0	-1.0	20.0
Cyclohexane	Ave	0.5929	0.5021	0.1000	8.47	10.0	-15.3	20.0
Carbon tetrachloride	Ave	0.2478	0.2454	0.1000	9.90	10.0	-1.0	20.0
1,1-Dichloropropene	Ave	0.4011	0.3507	0.0100	8.74	10.0	-12.6	20.0
Isobutyl alcohol	Ave	0.0067	0.0073*	0.0100	274	250	9.6	20.0
Benzene	Ave	1.185	1.177	0.5000	9.93	10.0	-0.7	20.0
1,2-Dichloroethane	Ave	0.3880	0.3650	0.1000	9.41	10.0	-5.9	20.0
n-Heptane	Ave	0.4071	0.3435	0.0100	8.44	10.0	-15.6	20.0
Trichloroethene	Ave	0.2969	0.2566	0.2000	8.64	10.0	-13.6	20.0
Methylcyclohexane	Ave	0.5297	0.4377	0.1000	8.26	10.0	-17.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Lab Sample ID: CCVIS 180-139148/2 Calibration Date: 04/21/2015 11:38

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50421002.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	0.2931	0.2663	0.1000	9.09	10.0	-9.1	20.0
Dibromomethane	Ave	0.1578	0.1418	0.0100	8.98	10.0	-10.2	20.0
1,4-Dioxane	Ave	0.0031	0.0023*	0.0100	151	200	-24.6*	20.0
Bromodichloromethane	Ave	0.3220	0.2645	0.2000	8.21	10.0	-17.9	20.0
cis-1,3-Dichloropropene	Ave	0.3107	0.2723	0.2000	8.76	10.0	-12.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.353	1.133	0.1000	16.7	20.0	-16.3	20.0
Toluene	Ave	5.124	5.442	0.4000	10.6	10.0	6.2	20.0
trans-1,3-Dichloropropene	Ave	0.9254	0.9453	0.1000	10.2	10.0	2.2	20.0
Ethyl methacrylate	Ave	1.207	1.050	0.0100	8.70	10.0	-13.0	20.0
1,1,2-Trichloroethane	Ave	0.9609	1.036	0.1000	10.8	10.0	7.8	20.0
Tetrachloroethene	Ave	1.002	1.024	0.2000	10.2	10.0	2.1	20.0
1,3-Dichloropropane	Ave	1.786	1.809	0.0100	10.1	10.0	1.3	20.0
2-Hexanone	Ave	1.034	0.8907	0.1000	17.2	20.0	-13.9	20.0
Dibromochloromethane	Ave	0.7670	0.6819	0.1000	8.89	10.0	-11.1	20.0
1,2-Dibromoethane (EDB)	Ave	0.9169	0.8964	0.1000	9.78	10.0	-2.2	20.0
3-Chlorobenzotrifluoride	Ave	1.955	1.952	0.0100	9.99	10.0	-0.1	20.0
Chlorobenzene	Ave	3.246	3.227	0.5000	9.94	10.0	-0.6	20.0
4-Chlorobenzotrifluoride	Ave	1.890	1.882	0.0100	9.96	10.0	-0.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8382	0.8190	0.0100	9.77	10.0	-2.3	20.0
Ethylbenzene	Ave	1.863	1.828	0.1000	9.81	10.0	-1.9	20.0
m-Xylene & p-Xylene	Ave	2.278	2.219	0.1000	9.74	10.0	-2.6	20.0
o-Xylene	Ave	2.228	2.069	0.3000	9.29	10.0	-7.1	20.0
Styrene	Ave	3.591	3.430	0.3000	9.55	10.0	-4.5	20.0
Bromoform	Ave	0.4737	0.3874	0.1000	8.18	10.0	-18.2	20.0
2-Chlorobenzotrifluoride	Ave	1.952	1.878	0.0100	9.62	10.0	-3.8	20.0
Isopropylbenzene	Ave	5.560	5.285	0.1000	9.51	10.0	-4.9	20.0
1,1,2,2-Tetrachloroethane	Ave	1.378	1.391	0.3000	10.1	10.0	1.0	20.0
Bromobenzene	Ave	0.9254	0.8483	0.0100	9.17	10.0	-8.3	20.0
1,2,3-Trichloropropane	Ave	0.3041	0.3105	0.0100	10.2	10.0	2.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2528	0.2280	0.0100	9.02	10.0	-9.8	20.0
N-Propylbenzene	Ave	1.142	1.022	0.0100	8.95	10.0	-10.5	20.0
2-Chlorotoluene	Ave	0.9591	0.8831	0.0100	9.21	10.0	-7.9	20.0
3-Chlorotoluene	Ave	1.072	1.018	0.0100	9.50	10.0	-5.0	20.0
1,3,5-Trimethylbenzene	Ave	3.183	3.042	0.0100	9.56	10.0	-4.4	20.0
4-Chlorotoluene	Ave	1.038	1.013	0.0100	9.76	10.0	-2.4	20.0
tert-Butylbenzene	Ave	2.758	2.285	0.0100	8.29	10.0	-17.1	20.0
1,2,4-Trimethylbenzene	Ave	3.267	2.939	0.0100	9.00	10.0	-10.0	20.0
3,4-Dichlorobenzotrifluoride	Ave	1.032	0.9695	0.0100	9.39	10.0	-6.1	20.0
sec-Butylbenzene	Ave	3.881	3.538	0.0100	9.11	10.0	-8.9	20.0
1,3-Dichlorobenzene	Ave	1.705	1.560	0.6000	9.15	10.0	-8.5	20.0
4-Isopropyltoluene	Ave	3.204	2.791	0.0100	8.71	10.0	-12.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Lab Sample ID: CCVIS 180-139148/2 Calibration Date: 04/21/2015 11:38

Instrument ID: CHHP5 Calib Start Date: 03/16/2015 12:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/16/2015 16:17

Lab File ID: 50421002.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	1.741	1.628	0.5000	9.35	10.0	-6.5	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.9669	0.8716	0.0100	9.01	10.0	-9.9	20.0
2,5-Dichlorobenzotrifluoride	Ave	1.082	0.9942	0.0100	9.19	10.0	-8.1	20.0
n-Butylbenzene	Ave	2.918	2.510	0.0100	8.60	10.0	-14.0	20.0
1,2-Dichlorobenzene	Ave	1.579	1.483	0.4000	9.39	10.0	-6.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1292	0.0925	0.0500	7.16	10.0	-28.4*	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.194	0.9289	0.0100	23.3	30.0	-22.2*	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.161	0.8373	0.0100	14.4	20.0	-27.9*	20.0
1,2,4-Trichlorobenzene	Ave	0.8219	0.5972	0.2000	7.27	10.0	-27.3*	20.0
Hexachlorobutadiene	Ave	0.3941	0.3476	0.0100	8.82	10.0	-11.8	20.0
Naphthalene	Ave	2.158	1.366	0.0100	6.33	10.0	-36.7*	20.0
1,2,3-Trichlorobenzene	Ave	0.6740	0.4698	0.0100	6.97	10.0	-30.3*	20.0
2,4,5-Trichlorotoluene	Ave	0.3624	0.1619	0.0100	4.47	10.0	-55.3*	20.0
2,3,6-Trichlorotoluene	Ave	0.3273	0.1736	0.0100	5.30	10.0	-47.0*	20.0
Dibromofluoromethane (Surr)	Ave	0.2274	0.1998		8.78	10.0	-12.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2998	0.2716		9.06	10.0	-9.4	20.0
Toluene-d8 (Surr)	Ave	3.986	3.937		9.87	10.0	-1.3	20.0
4-Bromofluorobenzene (Surr)	Ave	1.436	1.257		8.76	10.0	-12.4	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 21-Apr-2015 11:38:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006566-002
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 21-Apr-2015 13:20:23 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: fergusond Date: 21-Apr-2015 12:10:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.323	4.323	0.000	0	175229	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.273	0.000	94	603627	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.358	10.358	0.000	82	130536	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.681	12.681	0.000	92	192725	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.531	6.531	0.000	45	120576	50.0	43.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.902	6.902	0.000	0	163968	50.0	45.3	
$ 7 Toluene-d8 (Surr)	98	8.922	8.922	0.000	74	513866	50.0	49.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.532	0.000	88	164116	50.0	43.8	
11 Dichlorodifluoromethane	85	1.616	1.616	0.000	84	172454	50.0	66.7	
12 Chloromethane	50	1.792	1.792	0.000	95	208343	50.0	58.3	
13 Vinyl chloride	62	1.914	1.914	0.000	83	215991	50.0	54.1	
14 Butadiene	39	1.962	1.962	0.000	99	244993	50.0	53.7	
15 Bromomethane	94	2.260	2.260	0.000	93	101866	50.0	46.9	M
16 Chloroethane	64	2.406	2.406	0.000	94	153228	50.0	55.5	
17 Dichlorofluoromethane	67	2.668	2.668	0.000	82	350284	50.0	55.6	
18 Trichlorofluoromethane	101	2.729	2.729	0.000	83	235244	50.0	49.1	
20 Ethyl ether	59	3.088	3.088	0.000	92	151679	50.0	48.0	
21 Acrolein	56	3.258	3.258	0.000	91	44964	150.0	117.2	
22 1,1-Dichloroethene	96	3.410	3.410	0.000	86	158903	50.0	45.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.447	3.447	0.000	85	172539	50.0	49.0	
24 Acetone	43	3.502	3.502	0.000	94	132516	100.0	107.2	
25 Iodomethane	142	3.623	3.623	0.000	93	214957	50.0	44.5	M
26 Carbon disulfide	76	3.672	3.672	0.000	99	239364	50.0	28.1	
28 3-Chloro-1-propene	76	3.946	3.946	0.000	84	75132	50.0	40.8	
30 Methyl acetate	43	4.025	4.025	0.000	98	708840	250.0	245.0	
31 Methylene Chloride	84	4.140	4.140	0.000	87	185831	50.0	46.2	
32 2-Methyl-2-propanol	59	4.438	4.438	0.000	78	91756	500.0	444.5	
33 Acrylonitrile	53	4.554	4.554	0.000	98	714443	500.0	480.1	
34 trans-1,2-Dichloroethene	96	4.560	4.560	0.000	54	171732	50.0	47.7	
35 Methyl tert-butyl ether	73	4.597	4.597	0.000	88	348347	50.0	43.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.980	4.980	0.000	93	239651	50.0	41.7	
37 1,1-Dichloroethane	63	5.174	5.174	0.000	97	299632	50.0	46.6	
38 Vinyl acetate	43	5.296	5.296	0.000	91	185922	50.0	40.8	
44 2,2-Dichloropropane	77	5.929	5.929	0.000	56	93399	50.0	58.1	
45 cis-1,2-Dichloroethene	96	5.941	5.941	0.000	70	169780	50.0	44.8	
46 2-Butanone (MEK)	43	5.984	5.984	0.000	98	156364	100.0	79.1	
49 Chlorobromomethane	128	6.227	6.227	0.000	84	74794	50.0	45.6	
51 Tetrahydrofuran	42	6.282	6.282	0.000	90	103030	100.0	83.2	
52 Chloroform	83	6.343	6.343	0.000	83	274799	50.0	47.1	
53 1,1,1-Trichloroethane	97	6.525	6.525	0.000	86	184604	50.0	49.5	
54 Cyclohexane	56	6.586	6.586	0.000	79	303055	50.0	42.3	
56 Carbon tetrachloride	117	6.720	6.720	0.000	64	148130	50.0	49.5	
55 1,1-Dichloropropene	75	6.726	6.726	0.000	93	211719	50.0	43.7	
57 Isobutyl alcohol	41	6.951	6.951	0.000	41	110384	1250.0	1370.0	
58 Benzene	78	6.957	6.957	0.000	97	710241	50.0	49.7	
59 1,2-Dichloroethane	62	6.981	6.981	0.000	94	220326	50.0	47.0	
62 n-Heptane	43	7.273	7.273	0.000	63	207315	50.0	42.2	
64 Trichloroethene	130	7.663	7.663	0.000	92	154910	50.0	43.2	
66 Methylcyclohexane	83	7.863	7.863	0.000	92	264219	50.0	41.3	
67 1,2-Dichloropropane	63	7.900	7.900	0.000	88	160747	50.0	45.4	
68 Dibromomethane	93	8.022	8.022	0.000	87	85574	50.0	44.9	
70 1,4-Dioxane	88	8.058	8.058	0.000	89	28094	1000.0	754.1	M
71 Dichlorobromomethane	83	8.198	8.198	0.000	92	159654	50.0	41.1	
73 2-Chloroethyl vinyl ether	63	8.514	8.514	0.000	92	156688	100.0	78.6	
74 cis-1,3-Dichloropropene	75	8.654	8.654	0.000	88	164357	50.0	43.8	
75 4-Methyl-2-pentanone (MIBK	43	8.818	8.818	0.000	65	295667	100.0	83.7	
76 Toluene	91	8.989	8.989	0.000	98	710389	50.0	53.1	
77 trans-1,3-Dichloropropene	75	9.214	9.214	0.000	91	123399	50.0	51.1	
78 Ethyl methacrylate	69	9.317	9.317	0.000	73	137002	50.0	43.5	
79 1,1,2-Trichloroethane	97	9.402	9.402	0.000	82	135274	50.0	53.9	
80 Tetrachloroethene	164	9.536	9.536	0.000	92	133641	50.0	51.1	
81 1,3-Dichloropropane	76	9.561	9.561	0.000	92	236182	50.0	50.7	
82 2-Hexanone	43	9.652	9.652	0.000	97	232528	100.0	86.1	
84 Chlorodibromomethane	129	9.792	9.792	0.000	87	89017	50.0	44.5	
85 Ethylene Dibromide	107	9.895	9.895	0.000	98	117015	50.0	48.9	
86 3-Chlorobenzotrifluoride	180	10.370	10.370	0.000	89	254862	50.0	49.9	
87 Chlorobenzene	112	10.388	10.388	0.000	89	421245	50.0	49.7	
88 4-Chlorobenzotrifluoride	180	10.425	10.425	0.000	83	245715	50.0	49.8	
89 1,1,1,2-Tetrachloroethane	131	10.473	10.473	0.000	73	106913	50.0	48.9	
90 Ethylbenzene	106	10.498	10.498	0.000	99	238576	50.0	49.1	
91 m-Xylene & p-Xylene	106	10.619	10.619	0.000	0	289720	50.0	48.7	
92 o-Xylene	106	11.009	11.009	0.000	93	270126	50.0	46.4	
93 Styrene	104	11.027	11.027	0.000	92	447676	50.0	47.8	
94 Bromoform	173	11.209	11.209	0.000	93	50570	50.0	40.9	
96 2-Chlorobenzotrifluoride	180	11.270	11.270	0.000	97	245126	50.0	48.1	
97 Isopropylbenzene	105	11.380	11.380	0.000	97	689924	50.0	47.5	
99 1,1,2,2-Tetrachloroethane	83	11.672	11.672	0.000	79	181613	50.0	50.5	
100 Bromobenzene	156	11.684	11.684	0.000	92	163482	50.0	45.8	
101 1,2,3-Trichloropropane	110	11.720	11.720	0.000	73	59833	50.0	51.0	
102 trans-1,4-Dichloro-2-buten	53	11.732	11.732	0.000	62	43943	50.0	45.1	
103 N-Propylbenzene	120	11.787	11.787	0.000	98	196935	50.0	44.8	
104 2-Chlorotoluene	126	11.872	11.872	0.000	96	170204	50.0	46.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.933	11.933	0.000	55	196261	50.0	47.5	
106 1,3,5-Trimethylbenzene	105	11.964	11.964	0.000	92	586302	50.0	47.8	
107 4-Chlorotoluene	126	11.982	11.982	0.000	98	195251	50.0	48.8	
108 tert-Butylbenzene	119	12.286	12.286	0.000	75	440370	50.0	41.4	
110 1,2,4-Trimethylbenzene	105	12.335	12.335	0.000	88	566405	50.0	45.0	
111 1,2-dichloro-4-(trifluorom	214	12.402	12.402	0.000	95	186852	50.0	47.0	
112 sec-Butylbenzene	105	12.505	12.505	0.000	95	681799	50.0	45.6	
113 1,3-Dichlorobenzene	146	12.615	12.615	0.000	81	300600	50.0	45.7	
114 4-Isopropyltoluene	119	12.651	12.651	0.000	90	537955	50.0	43.6	
115 1,4-Dichlorobenzene	146	12.706	12.706	0.000	93	313670	50.0	46.7	
116 2,4-Dichloro-1-(triflourom	214	12.754	12.754	0.000	95	167982	50.0	45.1	
118 2,5-Dichlorobenzotrifluori	214	12.803	12.803	0.000	0	191603	50.0	46.0	
120 n-Butylbenzene	91	13.065	13.065	0.000	95	483820	50.0	43.0	
121 1,2-Dichlorobenzene	146	13.077	13.077	0.000	95	285827	50.0	47.0	
122 1,2-Dibromo-3-Chloropropan	75	13.862	13.862	0.000	67	17820	50.0	35.8	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.008	14.008	0.000	0	537087	150.0	116.7	
125 2,3- & 3,4- Dichlorotoluen	125	14.421	14.421	0.000	0	322727	100.0	72.1	
126 1,2,4-Trichlorobenzene	180	14.689	14.689	0.000	91	115091	50.0	36.3	
127 Hexachlorobutadiene	225	14.859	14.859	0.000	89	66994	50.0	44.1	
128 Naphthalene	128	14.938	14.938	0.000	97	263227	50.0	31.6	
129 1,2,3-Trichlorobenzene	180	15.182	15.182	0.000	92	90538	50.0	34.8	
131 2,4,5-Trichlorotoluene	159	15.960	15.960	0.000	0	31197	50.0	22.3	
130 2,3,6-Trichlorotoluene	159	16.064	16.064	0.000	93	33451	50.0	26.5	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	92.5	
S 133 Xylenes, Total	106				0		100.0	95.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	94.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00110	Amount Added:	2.00	Units: uL		
voaWKetpri Re_00004	Amount Added:	2.00	Units: uL		
voaWeemixPRI_00002	Amount Added:	2.00	Units: uL		
voaW VA pri R_00005	Amount Added:	2.00	Units: uL		
VOAACRPRI_00005	Amount Added:	6.00	Units: uL		
voaW2-cle pri_00006	Amount Added:	2.00	Units: uL		
VOA8260INT_00031	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00033	Amount Added:	2.00	Units: uL	Run Reagent	

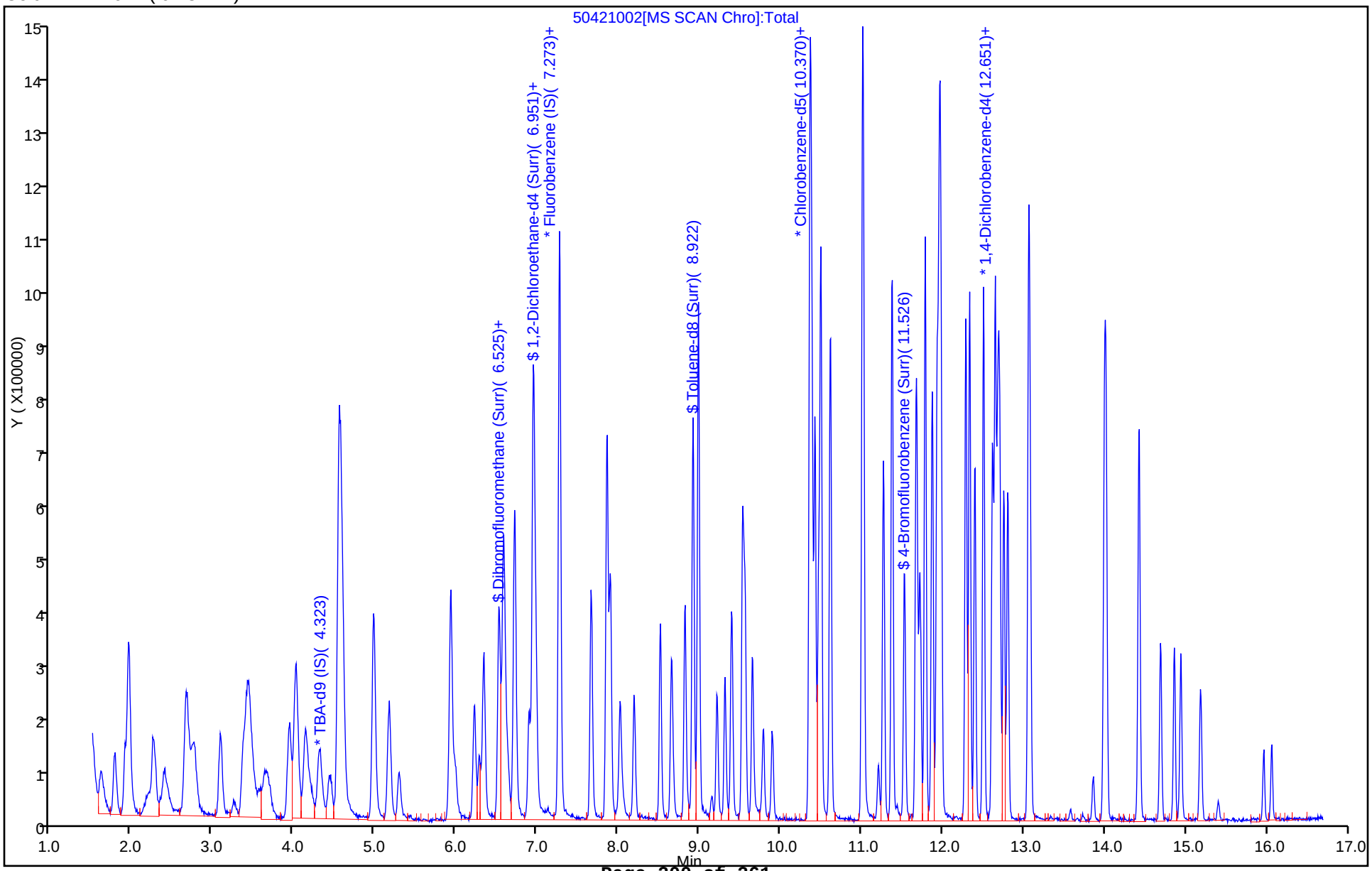
Report Date: 21-Apr-2015 13:20:24 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421002.D

Injection Date:	21-Apr-2015 11:38:30	Instrument ID:	CHHP5	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_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

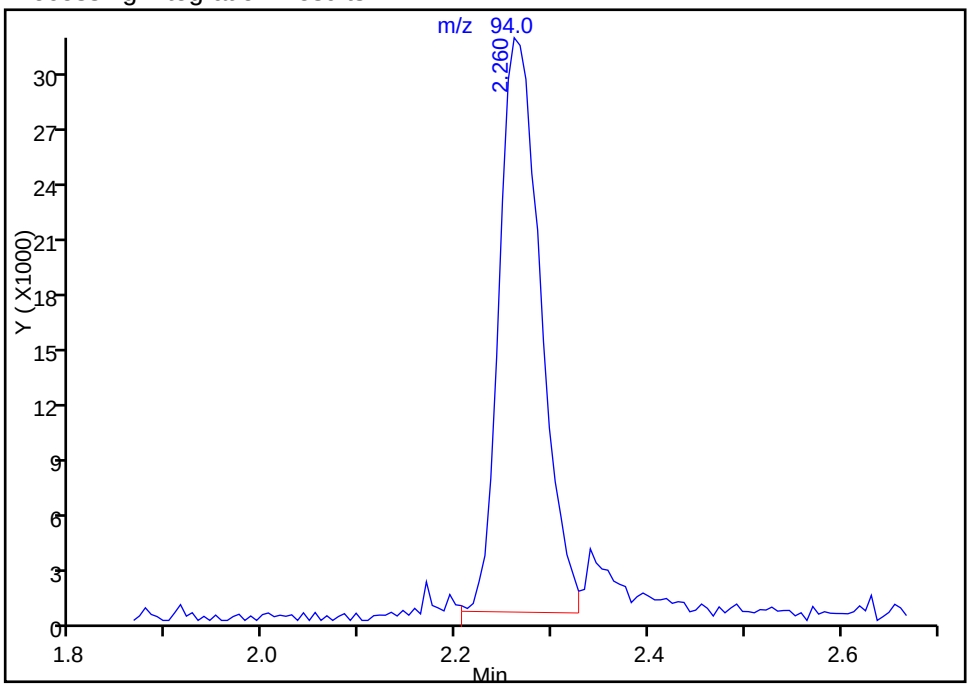
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421002.D				
Injection Date:	21-Apr-2015 11:38:30	Instrument ID:	CHHP5		
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_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

15 Bromomethane, CAS: 74-83-9

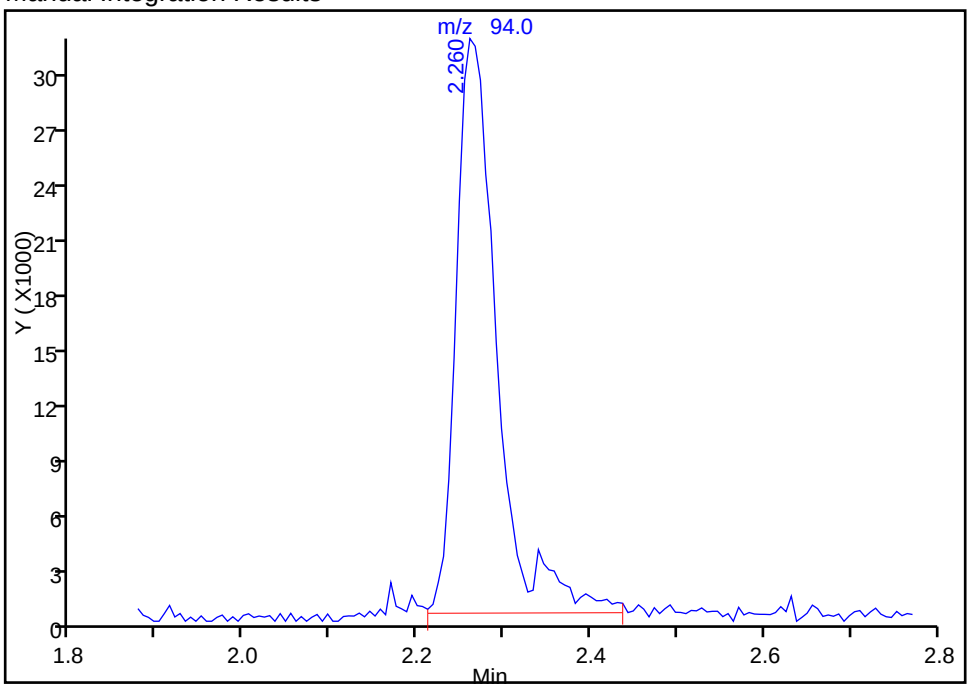
Processing Integration Results

RT: 2.26
Area: 93442
Amount: 42.580345
Amount Units: ng



Manual Integration Results

RT: 2.26
Area: 101866
Amount: 46.854444
Amount Units: ng



Reviewer: fergusond, 21-Apr-2015 12:10:23
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

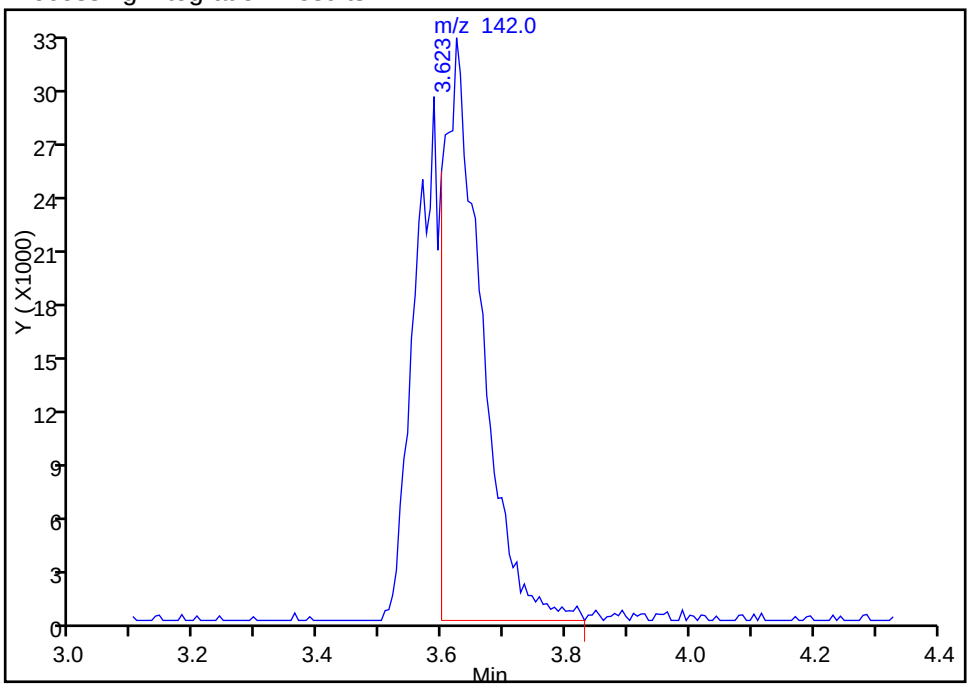
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421002.D				
Injection Date:	21-Apr-2015 11:38:30	Instrument ID:	CHHP5		
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_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

25 Iodomethane, CAS: 74-88-4

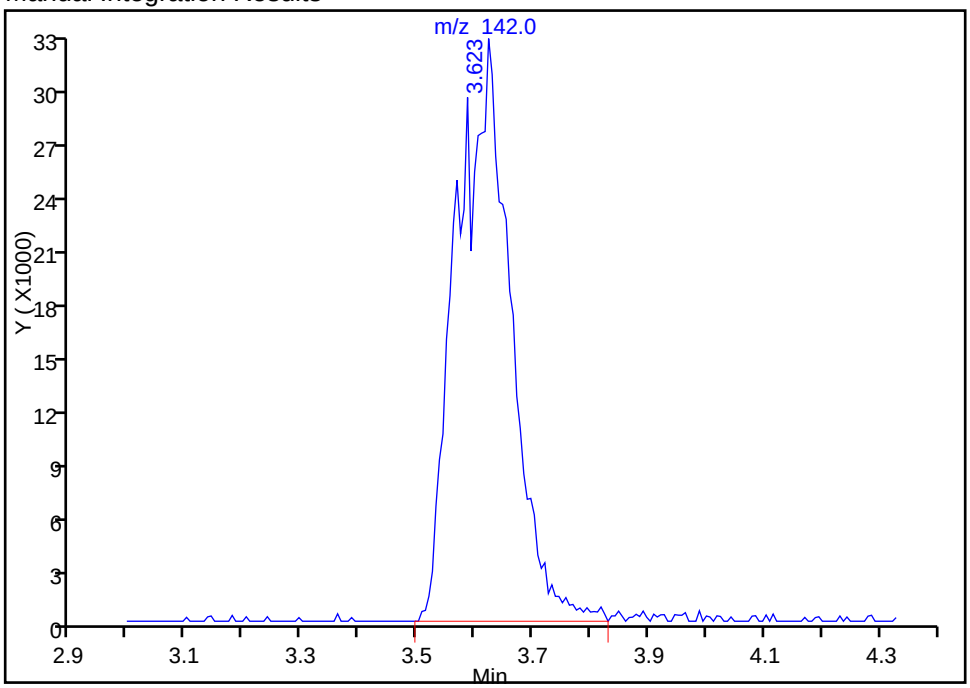
Processing Integration Results

RT: 3.62
Area: 138931
Amount: 28.730856
Amount Units: ng



Manual Integration Results

RT: 3.62
Area: 214957
Amount: 44.452992
Amount Units: ng



Reviewer: fergusond, 21-Apr-2015 12:10:23
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

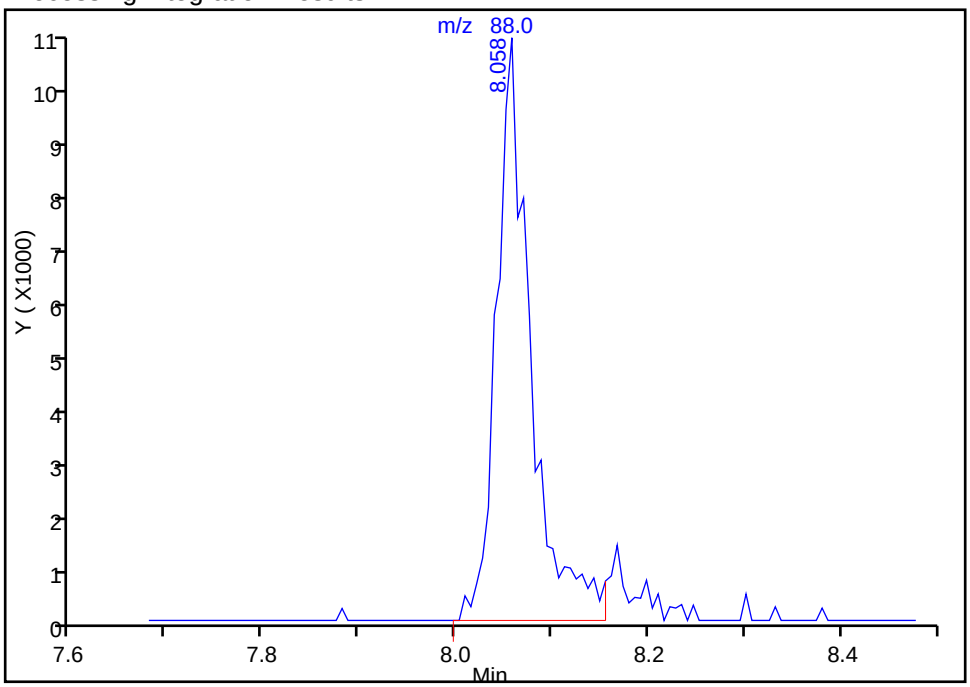
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421002.D				
Injection Date:	21-Apr-2015 11:38:30	Instrument ID:	CHHP5		
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_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

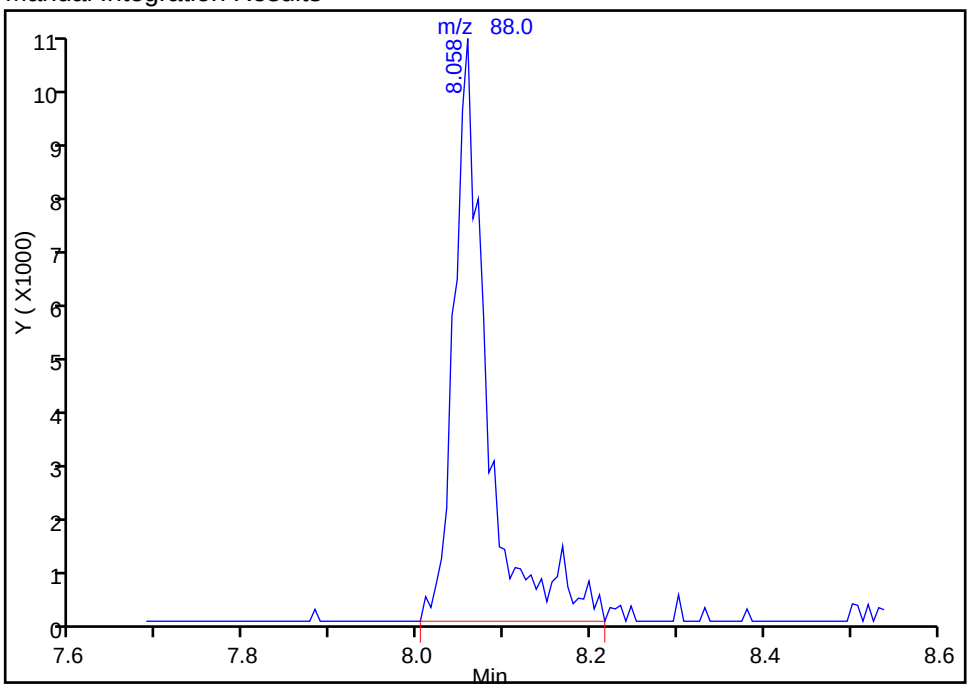
Processing Integration Results

RT: 8.06
Area: 26136
Amount: 701.5563
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 28094
Amount: 754.1140
Amount Units: ng



Reviewer: fergusond, 21-Apr-2015 12:10:23
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Lab Sample ID: CCVIS 180-139148/2 Calibration Date: 04/21/2015 11:38

Instrument ID: CHHP5 Calib Start Date: 03/18/2015 13:31

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/18/2015 16:19

Lab File ID: 50421002.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
2-Chloroethyl vinyl ether	Ave	0.1652	0.1298	0.0100	15.7	20.0	-21.4*	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 21-Apr-2015 11:38:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006566-002
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 21-Apr-2015 13:20:23 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: fergusond Date: 21-Apr-2015 12:10:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.323	4.323	0.000	0	175229	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.273	0.000	94	603627	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.358	10.358	0.000	82	130536	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.681	12.681	0.000	92	192725	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.531	6.531	0.000	45	120576	50.0	43.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.902	6.902	0.000	0	163968	50.0	45.3	
$ 7 Toluene-d8 (Surr)	98	8.922	8.922	0.000	74	513866	50.0	49.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.532	0.000	88	164116	50.0	43.8	
11 Dichlorodifluoromethane	85	1.616	1.616	0.000	84	172454	50.0	66.7	
12 Chloromethane	50	1.792	1.792	0.000	95	208343	50.0	58.3	
13 Vinyl chloride	62	1.914	1.914	0.000	83	215991	50.0	54.1	
14 Butadiene	39	1.962	1.962	0.000	99	244993	50.0	53.7	
15 Bromomethane	94	2.260	2.260	0.000	93	101866	50.0	46.9	M
16 Chloroethane	64	2.406	2.406	0.000	94	153228	50.0	55.5	
17 Dichlorofluoromethane	67	2.668	2.668	0.000	82	350284	50.0	55.6	
18 Trichlorofluoromethane	101	2.729	2.729	0.000	83	235244	50.0	49.1	
20 Ethyl ether	59	3.088	3.088	0.000	92	151679	50.0	48.0	
21 Acrolein	56	3.258	3.258	0.000	91	44964	150.0	117.2	
22 1,1-Dichloroethene	96	3.410	3.410	0.000	86	158903	50.0	45.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.447	3.447	0.000	85	172539	50.0	49.0	
24 Acetone	43	3.502	3.502	0.000	94	132516	100.0	107.2	
25 Iodomethane	142	3.623	3.623	0.000	93	214957	50.0	44.5	M
26 Carbon disulfide	76	3.672	3.672	0.000	99	239364	50.0	28.1	
28 3-Chloro-1-propene	76	3.946	3.946	0.000	84	75132	50.0	40.8	
30 Methyl acetate	43	4.025	4.025	0.000	98	708840	250.0	245.0	
31 Methylene Chloride	84	4.140	4.140	0.000	87	185831	50.0	46.2	
32 2-Methyl-2-propanol	59	4.438	4.438	0.000	78	91756	500.0	444.5	
33 Acrylonitrile	53	4.554	4.554	0.000	98	714443	500.0	480.1	
34 trans-1,2-Dichloroethene	96	4.560	4.560	0.000	54	171732	50.0	47.7	
35 Methyl tert-butyl ether	73	4.597	4.597	0.000	88	348347	50.0	43.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.980	4.980	0.000	93	239651	50.0	41.7	
37 1,1-Dichloroethane	63	5.174	5.174	0.000	97	299632	50.0	46.6	
38 Vinyl acetate	43	5.296	5.296	0.000	91	185922	50.0	40.8	
44 2,2-Dichloropropane	77	5.929	5.929	0.000	56	93399	50.0	58.1	
45 cis-1,2-Dichloroethene	96	5.941	5.941	0.000	70	169780	50.0	44.8	
46 2-Butanone (MEK)	43	5.984	5.984	0.000	98	156364	100.0	79.1	
49 Chlorobromomethane	128	6.227	6.227	0.000	84	74794	50.0	45.6	
51 Tetrahydrofuran	42	6.282	6.282	0.000	90	103030	100.0	83.2	
52 Chloroform	83	6.343	6.343	0.000	83	274799	50.0	47.1	
53 1,1,1-Trichloroethane	97	6.525	6.525	0.000	86	184604	50.0	49.5	
54 Cyclohexane	56	6.586	6.586	0.000	79	303055	50.0	42.3	
56 Carbon tetrachloride	117	6.720	6.720	0.000	64	148130	50.0	49.5	
55 1,1-Dichloropropene	75	6.726	6.726	0.000	93	211719	50.0	43.7	
57 Isobutyl alcohol	41	6.951	6.951	0.000	41	110384	1250.0	1370.0	
58 Benzene	78	6.957	6.957	0.000	97	710241	50.0	49.7	
59 1,2-Dichloroethane	62	6.981	6.981	0.000	94	220326	50.0	47.0	
62 n-Heptane	43	7.273	7.273	0.000	63	207315	50.0	42.2	
64 Trichloroethene	130	7.663	7.663	0.000	92	154910	50.0	43.2	
66 Methylcyclohexane	83	7.863	7.863	0.000	92	264219	50.0	41.3	
67 1,2-Dichloropropane	63	7.900	7.900	0.000	88	160747	50.0	45.4	
68 Dibromomethane	93	8.022	8.022	0.000	87	85574	50.0	44.9	
70 1,4-Dioxane	88	8.058	8.058	0.000	89	28094	1000.0	754.1	M
71 Dichlorobromomethane	83	8.198	8.198	0.000	92	159654	50.0	41.1	
73 2-Chloroethyl vinyl ether	63	8.514	8.514	0.000	92	156688	100.0	78.6	
74 cis-1,3-Dichloropropene	75	8.654	8.654	0.000	88	164357	50.0	43.8	
75 4-Methyl-2-pentanone (MIBK	43	8.818	8.818	0.000	65	295667	100.0	83.7	
76 Toluene	91	8.989	8.989	0.000	98	710389	50.0	53.1	
77 trans-1,3-Dichloropropene	75	9.214	9.214	0.000	91	123399	50.0	51.1	
78 Ethyl methacrylate	69	9.317	9.317	0.000	73	137002	50.0	43.5	
79 1,1,2-Trichloroethane	97	9.402	9.402	0.000	82	135274	50.0	53.9	
80 Tetrachloroethene	164	9.536	9.536	0.000	92	133641	50.0	51.1	
81 1,3-Dichloropropane	76	9.561	9.561	0.000	92	236182	50.0	50.7	
82 2-Hexanone	43	9.652	9.652	0.000	97	232528	100.0	86.1	
84 Chlorodibromomethane	129	9.792	9.792	0.000	87	89017	50.0	44.5	
85 Ethylene Dibromide	107	9.895	9.895	0.000	98	117015	50.0	48.9	
86 3-Chlorobenzotrifluoride	180	10.370	10.370	0.000	89	254862	50.0	49.9	
87 Chlorobenzene	112	10.388	10.388	0.000	89	421245	50.0	49.7	
88 4-Chlorobenzotrifluoride	180	10.425	10.425	0.000	83	245715	50.0	49.8	
89 1,1,1,2-Tetrachloroethane	131	10.473	10.473	0.000	73	106913	50.0	48.9	
90 Ethylbenzene	106	10.498	10.498	0.000	99	238576	50.0	49.1	
91 m-Xylene & p-Xylene	106	10.619	10.619	0.000	0	289720	50.0	48.7	
92 o-Xylene	106	11.009	11.009	0.000	93	270126	50.0	46.4	
93 Styrene	104	11.027	11.027	0.000	92	447676	50.0	47.8	
94 Bromoform	173	11.209	11.209	0.000	93	50570	50.0	40.9	
96 2-Chlorobenzotrifluoride	180	11.270	11.270	0.000	97	245126	50.0	48.1	
97 Isopropylbenzene	105	11.380	11.380	0.000	97	689924	50.0	47.5	
99 1,1,2,2-Tetrachloroethane	83	11.672	11.672	0.000	79	181613	50.0	50.5	
100 Bromobenzene	156	11.684	11.684	0.000	92	163482	50.0	45.8	
101 1,2,3-Trichloropropane	110	11.720	11.720	0.000	73	59833	50.0	51.0	
102 trans-1,4-Dichloro-2-buten	53	11.732	11.732	0.000	62	43943	50.0	45.1	
103 N-Propylbenzene	120	11.787	11.787	0.000	98	196935	50.0	44.8	
104 2-Chlorotoluene	126	11.872	11.872	0.000	96	170204	50.0	46.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.933	11.933	0.000	55	196261	50.0	47.5	
106 1,3,5-Trimethylbenzene	105	11.964	11.964	0.000	92	586302	50.0	47.8	
107 4-Chlorotoluene	126	11.982	11.982	0.000	98	195251	50.0	48.8	
108 tert-Butylbenzene	119	12.286	12.286	0.000	75	440370	50.0	41.4	
110 1,2,4-Trimethylbenzene	105	12.335	12.335	0.000	88	566405	50.0	45.0	
111 1,2-dichloro-4-(trifluorom	214	12.402	12.402	0.000	95	186852	50.0	47.0	
112 sec-Butylbenzene	105	12.505	12.505	0.000	95	681799	50.0	45.6	
113 1,3-Dichlorobenzene	146	12.615	12.615	0.000	81	300600	50.0	45.7	
114 4-Isopropyltoluene	119	12.651	12.651	0.000	90	537955	50.0	43.6	
115 1,4-Dichlorobenzene	146	12.706	12.706	0.000	93	313670	50.0	46.7	
116 2,4-Dichloro-1-(triflourom	214	12.754	12.754	0.000	95	167982	50.0	45.1	
118 2,5-Dichlorobenzotrifluori	214	12.803	12.803	0.000	0	191603	50.0	46.0	
120 n-Butylbenzene	91	13.065	13.065	0.000	95	483820	50.0	43.0	
121 1,2-Dichlorobenzene	146	13.077	13.077	0.000	95	285827	50.0	47.0	
122 1,2-Dibromo-3-Chloropropan	75	13.862	13.862	0.000	67	17820	50.0	35.8	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.008	14.008	0.000	0	537087	150.0	116.7	
125 2,3- & 3,4- Dichlorotoluen	125	14.421	14.421	0.000	0	322727	100.0	72.1	
126 1,2,4-Trichlorobenzene	180	14.689	14.689	0.000	91	115091	50.0	36.3	
127 Hexachlorobutadiene	225	14.859	14.859	0.000	89	66994	50.0	44.1	
128 Naphthalene	128	14.938	14.938	0.000	97	263227	50.0	31.6	
129 1,2,3-Trichlorobenzene	180	15.182	15.182	0.000	92	90538	50.0	34.8	
131 2,4,5-Trichlorotoluene	159	15.960	15.960	0.000	0	31197	50.0	22.3	
130 2,3,6-Trichlorotoluene	159	16.064	16.064	0.000	93	33451	50.0	26.5	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	92.5	
S 133 Xylenes, Total	106				0		100.0	95.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	94.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00110	Amount Added:	2.00	Units: uL		
voaWKetpri Re_00004	Amount Added:	2.00	Units: uL		
voaWeemixPRI_00002	Amount Added:	2.00	Units: uL		
voaW VA pri R_00005	Amount Added:	2.00	Units: uL		
VOAACRPRI_00005	Amount Added:	6.00	Units: uL		
voaW2-cle pri_00006	Amount Added:	2.00	Units: uL		
VOA8260INT_00031	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00033	Amount Added:	2.00	Units: uL	Run Reagent	

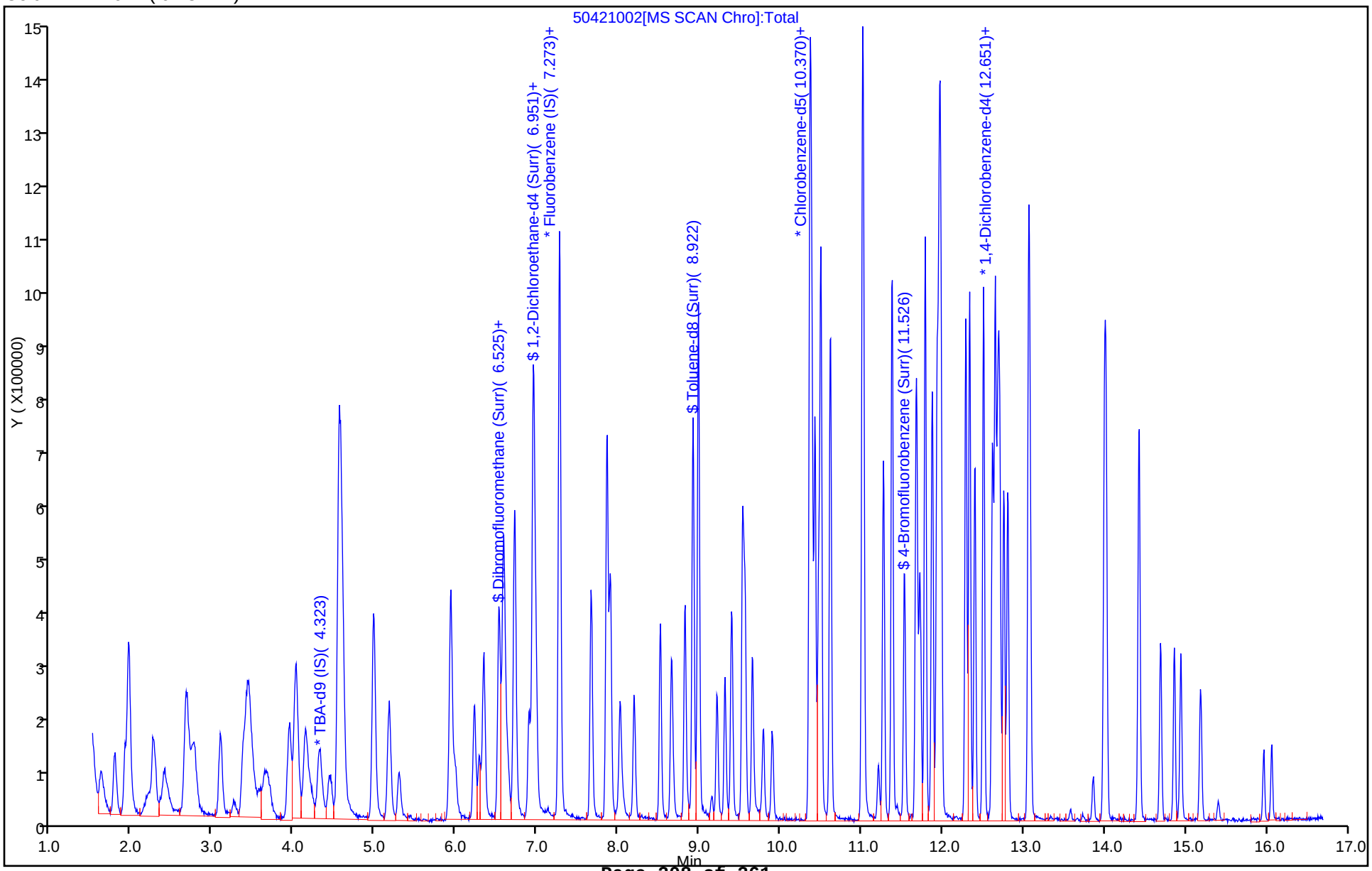
Report Date: 21-Apr-2015 13:20:24 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421002.D

Injection Date:	21-Apr-2015 11:38:30	Instrument ID:	CHHP5	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_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316001.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 16-Mar-2015 10:49:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0006031-001
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 17-Mar-2015 10:59:24 Calib Date: 16-Mar-2015 16:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316013.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: fergusond Date: 16-Mar-2015 11:15:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.341	8.341	0.000	0	133980	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

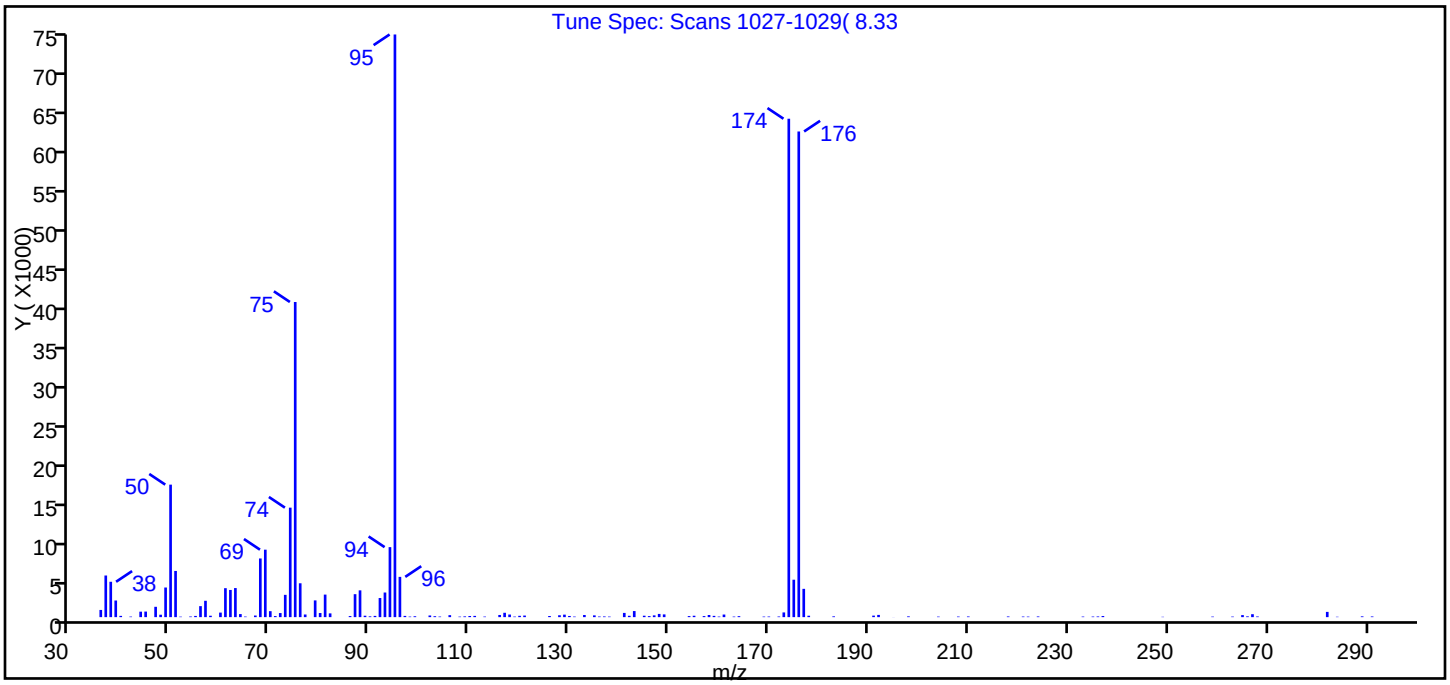
VOA BFB 25_00001 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316001.D				
Injection Date:	16-Mar-2015 10:49:30	Instrument ID:	CHHP5		
Lims ID:	BFB				
Client ID:					
Operator ID:	001562	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Tune Method:	BFB Method 8260				

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.7
75	30 to 60% of m/z 95	54.1
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.8 (0.9)
174	50 to 120% of m/z 95	85.5
175	5 to 9% of m/z 174	6.4 (7.5)
176	Greater than 95% but less than 101% of m/z 174	83.4 (97.4)
177	5 to 9% of m/z 176	4.9 (5.8)

Data File: \\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316001.D\MSVOA_LL_CHHP5.rslt\spectra.d
Injection Date: 16-Mar-2015 10:49:30
Spectrum: Tune Spec: Scans 1027-1029(8.33
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 132

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	922	75.00	40336	119.00	71	173.00	604
37.00	5329	76.00	4335	120.00	170	174.00	63792
38.00	4528	77.00	339	121.00	203	175.00	4791
39.00	2130	79.00	2142	126.00	145	176.00	62160
40.00	163	80.00	527	128.00	241	177.00	3622
42.00	71	81.00	2886	129.00	320	178.00	182
44.00	700	82.00	482	130.00	150	183.00	99
45.00	713	86.00	138	131.00	72	191.00	196
47.00	1323	87.00	2939	133.00	273	192.00	286
48.00	310	88.00	3429	135.00	226	195.00	9
49.00	3792	89.00	182	136.00	81	198.00	98
50.00	16960	90.00	101	137.00	87	204.00	68
51.00	5912	91.00	160	138.00	71	208.00	75
52.00	63	92.00	2448	141.00	541	210.00	85
54.00	83	93.00	3152	142.00	172	218.00	87
55.00	155	94.00	8961	143.00	779	221.00	76
56.00	1409	95.00	74576	145.00	182	222.00	70
57.00	2093	96.00	5155	146.00	133	224.00	88
58.00	180	97.00	159	147.00	227	233.00	73
60.00	582	98.00	71	148.00	412	235.00	76
61.00	3707	99.00	112	149.00	352	236.00	88
62.00	3479	102.00	212	154.00	135	237.00	141
63.00	3721	103.00	120	155.00	179	249.00	43
64.00	392	104.00	75	157.00	135	259.00	70
65.00	71	106.00	253	158.00	274	263.00	71
67.00	207	108.00	68	159.00	163	265.00	262
68.00	7510	109.00	97	160.00	73	266.00	100
69.00	8635	110.00	146	161.00	334	267.00	377
70.00	764	111.00	161	163.00	71	268.00	85
71.00	139	113.00	71	164.00	125	282.00	672
72.00	524	116.00	278	169.00	70	284.00	50
73.00	2854	117.00	558	170.00	78	289.00	99
74.00	14015	118.00	332	172.00	82	291.00	87

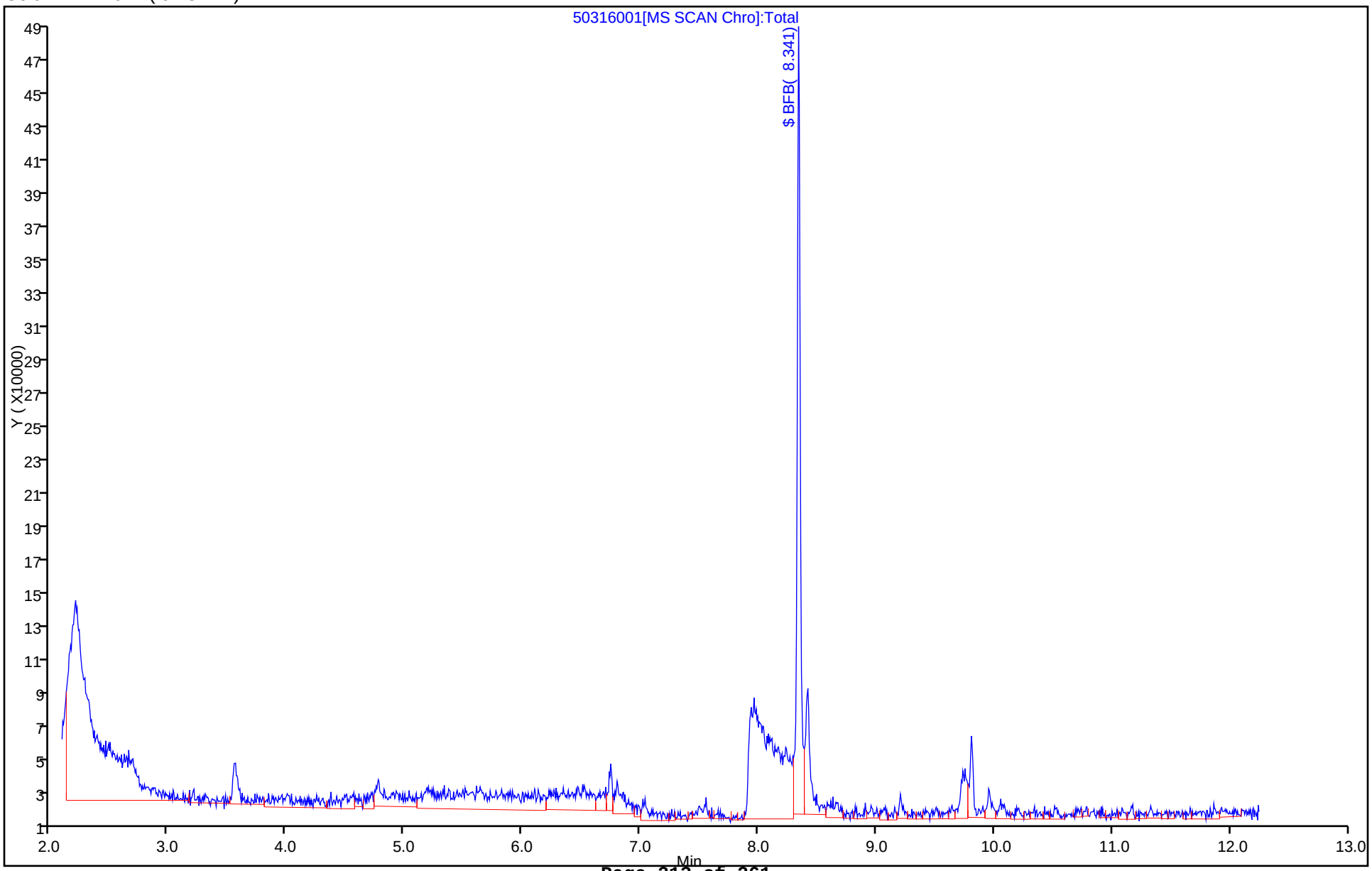
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	922	75.00	40336	119.00	71	173.00	604
37.00	5329	76.00	4335	120.00	170	174.00	63792
38.00	4528	77.00	339	121.00	203	175.00	4791
39.00	2130	79.00	2142	126.00	145	176.00	62160
40.00	163	80.00	527	128.00	241	177.00	3622
42.00	71	81.00	2886	129.00	320	178.00	182
44.00	700	82.00	482	130.00	150	183.00	99
45.00	713	86.00	138	131.00	72	191.00	196
47.00	1323	87.00	2939	133.00	273	192.00	286
48.00	310	88.00	3429	135.00	226	195.00	9
49.00	3792	89.00	182	136.00	81	198.00	98
50.00	16960	90.00	101	137.00	87	204.00	68
51.00	5912	91.00	160	138.00	71	208.00	75
52.00	63	92.00	2448	141.00	541	210.00	85
54.00	83	93.00	3152	142.00	172	218.00	87
55.00	155	94.00	8961	143.00	779	221.00	76
56.00	1409	95.00	74576	145.00	182	222.00	70
57.00	2093	96.00	5155	146.00	133	224.00	88
58.00	180	97.00	159	147.00	227	233.00	73
60.00	582	98.00	71	148.00	412	235.00	76
61.00	3707	99.00	112	149.00	352	236.00	88
62.00	3479	102.00	212	154.00	135	237.00	141
63.00	3721	103.00	120	155.00	179	249.00	43
64.00	392	104.00	75	157.00	135	259.00	70
65.00	71	106.00	253	158.00	274	263.00	71
67.00	207	108.00	68	159.00	163	265.00	262
68.00	7510	109.00	97	160.00	73	266.00	100
69.00	8635	110.00	146	161.00	334	267.00	377
70.00	764	111.00	161	163.00	71	268.00	85
71.00	139	113.00	71	164.00	125	282.00	672
72.00	524	116.00	278	169.00	70	284.00	50
73.00	2854	117.00	558	170.00	78	289.00	99
74.00	14015	118.00	332	172.00	82	291.00	87

Report Date: 17-Mar-2015 10:59:25 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150316-6031.b\50316001.D				
Injection Date:	16-Mar-2015 10:49:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420004.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 20-Apr-2015 08:52:30 ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0006546-004
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 20-Apr-2015 12:20:38 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: fergusond Date: 20-Apr-2015 09:17:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.335	8.335	0.000	0	165803	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

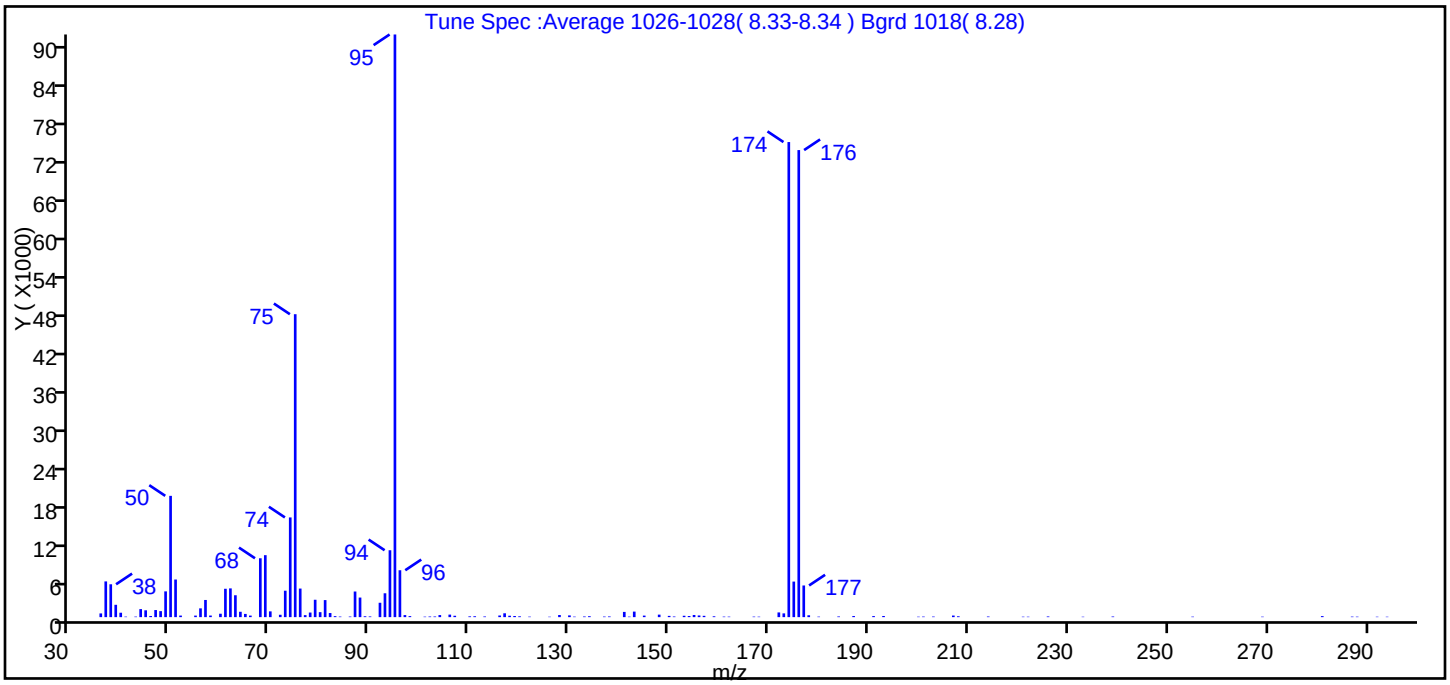
VOABFB25_00060 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420004.D				
Injection Date:	20-Apr-2015 08:52:30	Instrument ID:	CHHP5		
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_CHHP5	Limit Group:	VOA 8260C ICAL		
Tune Method:	BFB Method 8260				

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.8
75	30 to 60% of m/z 95	52.0
96	5 to 9% of m/z 95	8.0
173	Less than 2% of m/z 174	0.6 (0.8)
174	50 to 120% of m/z 95	81.5
175	5 to 9% of m/z 174	6.1 (7.5)
176	Greater than 95% but less than 101% of m/z 174	80.2 (98.3)
177	5 to 9% of m/z 176	5.4 (6.8)

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420004.D\MSVOA_LL_CHHP5.rslt\spectra.d
Injection Date: 20-Apr-2015 08:52:30
Spectrum: Tune Spec :Average 1026-1028(8.33-8.34) Bgrd 1018(8.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 125

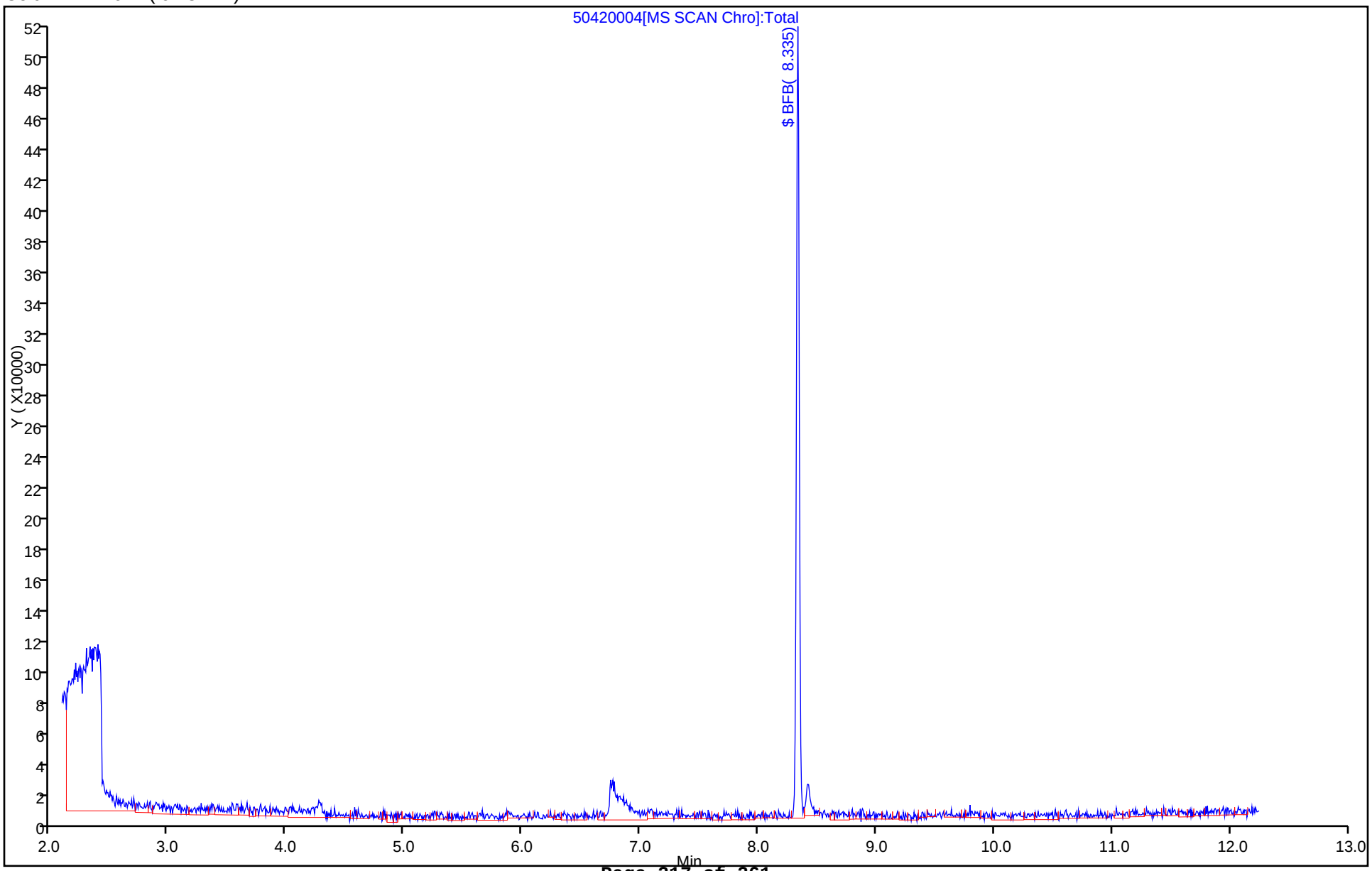
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	587	74.00	15705	116.00	259	173.00	594
37.00	5628	75.00	47712	117.00	607	174.00	74824
38.00	5177	76.00	4501	118.00	222	175.00	5601
39.00	1943	77.00	318	119.00	178	176.00	73560
40.00	695	78.00	724	120.00	130	177.00	4987
41.00	80	79.00	2738	122.00	80	178.00	294
43.00	84	80.00	785	126.00	67	180.00	80
44.00	1267	81.00	2685	128.00	333	184.00	107
45.00	1077	82.00	648	130.00	274	187.00	172
46.00	183	83.00	156	131.00	79	191.00	165
47.00	1118	84.00	90	133.00	102	193.00	178
48.00	946	86.00	95	134.00	145	200.00	72
49.00	4059	87.00	4037	137.00	89	201.00	88
50.00	19104	88.00	3085	138.00	108	203.00	91
51.00	5927	89.00	137	141.00	825	207.00	251
52.00	248	90.00	110	142.00	80	208.00	135
55.00	245	92.00	2265	143.00	873	214.00	99
56.00	1385	93.00	3760	145.00	243	221.00	72
57.00	2705	94.00	10537	148.00	395	222.00	70
58.00	252	95.00	91768	150.00	198	226.00	108
60.00	538	96.00	7387	151.00	100	233.00	66
61.00	4469	97.00	325	153.00	216	239.00	101
62.00	4528	98.00	160	154.00	178	255.00	78
63.00	3448	101.00	76	155.00	338	269.00	74
64.00	846	102.00	101	156.00	261	281.00	162
65.00	507	103.00	102	157.00	207	287.00	84
66.00	244	104.00	326	159.00	133	288.00	76
68.00	9272	106.00	398	161.00	82	292.00	68
69.00	9760	107.00	218	162.00	80	294.00	67
70.00	909	110.00	123	167.00	83		
72.00	373	111.00	139	168.00	75		
73.00	4163	113.00	104	172.00	741		

Report Date: 20-Apr-2015 12:20:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420004.D				
Injection Date:	20-Apr-2015 08:52:30	Instrument ID:	CHHP5	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_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421004.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 21-Apr-2015 10:57:30 ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0006566-004
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 21-Apr-2015 13:20:22 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: fergusond Date: 21-Apr-2015 11:10:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.335	8.335	0.000	0	265421	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

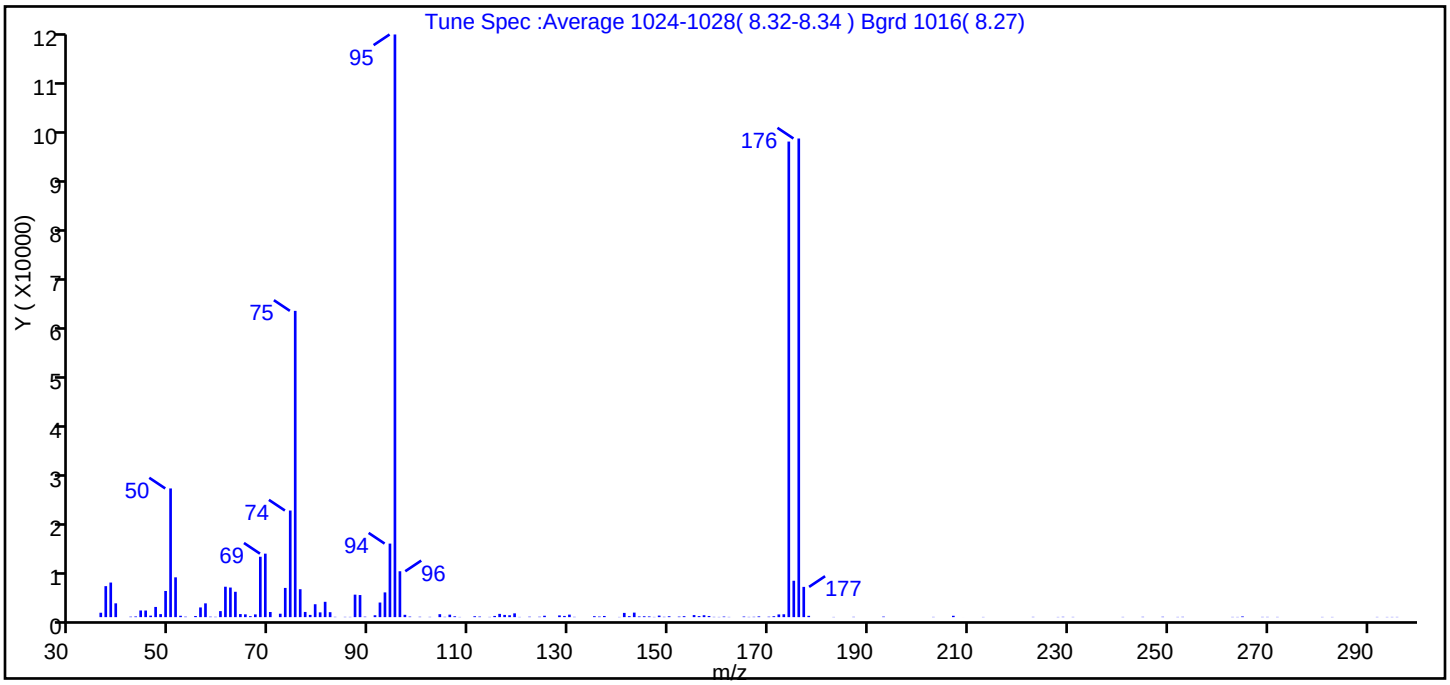
VOABFB25_00060 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421004.D
Injection Date: 21-Apr-2015 10:57:30 Instrument ID: CHHP5
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_CHHP5 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.1
75	30 to 60% of m/z 95	52.6
96	5 to 9% of m/z 95	7.9
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	81.6
175	5 to 9% of m/z 174	6.2 (7.7)
176	Greater than 95% but less than 101% of m/z 174	82.1 (100.6)
177	5 to 9% of m/z 176	5.2 (6.3)

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421004.D\MSVOA_LL_CHHP5.rslt\spectra.d
Injection Date: 21-Apr-2015 10:57:30
Spectrum: Tune Spec :Average 1024-1028(8.32-8.34) Bgrd 1016(8.27)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 145

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	854	77.00	1009	124.00	76	173.00	559
37.00	6011	78.00	434	125.00	271	174.00	92208
38.00	6707	79.00	2503	128.00	334	175.00	7058
39.00	2678	80.00	927	129.00	236	176.00	92800
42.00	89	81.00	2973	130.00	487	177.00	5868
43.00	132	82.00	960	131.00	56	178.00	256
44.00	1294	83.00	59	135.00	184	183.00	40
45.00	1284	85.00	55	136.00	115	187.00	58
46.00	290	86.00	49	137.00	226	193.00	105
47.00	1977	87.00	4362	140.00	40	203.00	47
48.00	586	88.00	4286	141.00	823	207.00	262
49.00	5076	89.00	89	142.00	189	209.00	2
50.00	24952	91.00	366	143.00	876	213.00	40
51.00	7719	92.00	2834	144.00	132	223.00	53
52.00	268	93.00	4799	145.00	169	228.00	40
53.00	90	94.00	14261	146.00	141	229.00	64
55.00	223	95.00	112968	147.00	44	231.00	46
56.00	1883	96.00	8897	148.00	299	241.00	45
57.00	2673	97.00	452	149.00	65	245.00	61
58.00	89	98.00	107	150.00	172	249.00	72
59.00	62	100.00	72	152.00	106	252.00	44
60.00	1169	102.00	54	153.00	186	253.00	60
61.00	5896	104.00	569	155.00	401	263.00	46
62.00	5740	105.00	61	156.00	204	264.00	41
63.00	4917	106.00	483	157.00	371	265.00	134
64.00	597	107.00	164	158.00	225	269.00	50
65.00	544	108.00	40	159.00	54	270.00	49
66.00	188	111.00	175	160.00	43	272.00	45
67.00	533	112.00	113	161.00	113	281.00	42
68.00	11708	114.00	46	162.00	46	283.00	40
69.00	12310	115.00	233	165.00	117	292.00	44
70.00	996	116.00	633	166.00	50	294.00	40
72.00	666	117.00	431	167.00	68	295.00	43

Report Date: 21-Apr-2015 13:20:23 Chrom Revision: 2.2 09-Apr-2015 10:05:40
Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421004.D\MSVOA_LL_CHHP5.rslt\spectra.d
Injection Date: 21-Apr-2015 10:57:30
Spectrum: Tune Spec :Average 1024-1028(8.32-8.34) Bgrd 1016(8.27)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 145

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	5665	118.00	367	168.00	148	296.00	44
74.00	20672	119.00	736	170.00	87		
75.00	59384	120.00	43	171.00	181		
76.00	5415	122.00	85	172.00	525		

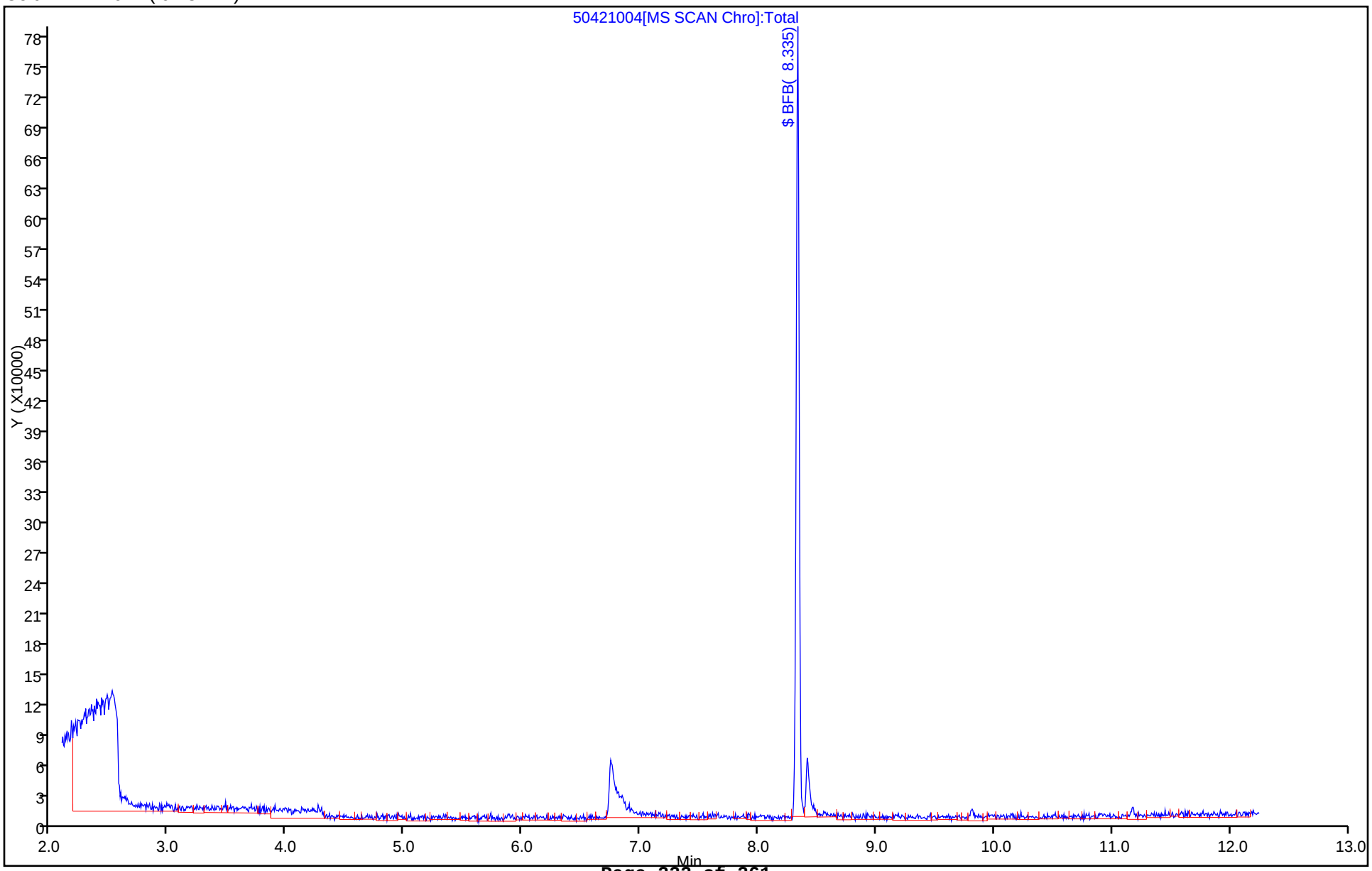
Report Date: 21-Apr-2015 13:20:23 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421004.D

Injection Date:	21-Apr-2015 10:57:30	Instrument ID:	CHHP5	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_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-139024/12

Matrix: Water Lab File ID: 50420012.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/20/2015 11:28

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.: 139024 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	0.363	J	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.: 180-43134-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-139024/12

Matrix: Water Lab File ID: 50420012.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/20/2015 11:28

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.: 139024 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)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	92		70-118
1868-53-7	Dibromofluoromethane (Surr)	113		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420012.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Apr-2015 11:28:30 ALS Bottle#: 6 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 180-0006546-012
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 20-Apr-2015 20:24:11 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: fergusond Date: 21-Apr-2015 07:44:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.303	4.302	0.001	0	174873	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.278	7.277	0.001	98	500362	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.362	10.367	-0.005	89	107502	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.680	12.685	-0.005	97	145486	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.530	6.529	0.001	93	128649	50.0	56.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.901	6.901	0.001	0	175377	50.0	58.5	
$ 7 Toluene-d8 (Surr)	98	8.927	8.920	0.007	94	451442	50.0	52.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.530	11.530	0.000	87	141548	50.0	45.9	
11 Dichlorodifluoromethane	85		1.632					ND	
12 Chloromethane	50		1.790					ND	
13 Vinyl chloride	62		1.918					ND	
14 Butadiene	39		1.967					ND	
15 Bromomethane	94		2.265					ND	
16 Chloroethane	64		2.405					ND	
17 Dichlorofluoromethane	67		2.666					ND	
18 Trichlorofluoromethane	101		2.721					ND	
19 Ethanol	45		3.025					ND	
20 Ethyl ether	59		3.092					ND	
21 Acrolein	56		3.250					ND	
22 1,1-Dichloroethene	96		3.396					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.445					ND	
24 Acetone	43		3.512					ND	
25 Iodomethane	142		3.615					ND	
26 Carbon disulfide	76		3.688					ND	
27 Isopropyl alcohol	45		3.791					ND	
29 Acetonitrile	40		3.943					ND	
28 3-Chloro-1-propene	76		3.956					ND	
30 Methyl acetate	43		4.023					ND	
31 Methylene Chloride	84	4.151	4.145	0.006	1	6055		1.81	M
32 2-Methyl-2-propanol	59		4.443					ND	
33 Acrylonitrile	53		4.552					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.564					ND	
35 Methyl tert-butyl ether	73		4.595					ND	
36 Hexane	57		4.990					ND	
37 1,1-Dichloroethane	63		5.173					ND	
38 Vinyl acetate	43		5.301					ND	
39 2-Chloro-1,3-butadiene	53		5.306					ND	
41 Isopropyl ether	45		5.330					ND	
40 Isopropyl ether TIC	45		5.409					ND	
42 Tert-butyl ethyl ether	59		5.799					ND	
44 2,2-Dichloropropane	77		5.927					ND	
45 cis-1,2-Dichloroethene	96		5.939					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
46 2-Butanone (MEK)	43		5.988					ND	
47 Propionitrile	54		6.060					ND	
48 Ethyl acetate	43		6.091					ND	
49 Chlorobromomethane	128		6.231					ND	
50 Methacrylonitrile	41		6.243					ND	
51 Tetrahydrofuran	42		6.286					ND	
52 Chloroform	83		6.347					ND	
53 1,1,1-Trichloroethane	97		6.536					ND	
54 Cyclohexane	56		6.590					ND	
56 Carbon tetrachloride	117		6.718					ND	
55 1,1-Dichloropropene	75		6.718					ND	
57 Isobutyl alcohol	41		6.943					ND	
58 Benzene	78		6.955					ND	
59 1,2-Dichloroethane	62		6.986					ND	
61 Tert-amyl methyl ether	73		7.113					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43		7.278					ND	
63 n-Butanol	56		7.660					ND	
64 Trichloroethene	130		7.673					ND	
65 Ethyl acrylate	55		7.812					ND	
66 Methylcyclohexane	83		7.862					ND	
67 1,2-Dichloropropane	63		7.898					ND	
68 Dibromomethane	93		8.026					ND	
69 Methyl methacrylate	69		8.050					ND	
70 1,4-Dioxane	88		8.062					ND	
71 Dichlorobromomethane	83		8.196					ND	
72 2-Nitropropane	41		8.445					ND	
73 2-Chloroethyl vinyl ether	63		8.519					ND	
74 cis-1,3-Dichloropropene	75		8.659					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.823					ND	
76 Toluene	91		8.987					ND	
77 trans-1,3-Dichloropropene	75		9.218					ND	
78 Ethyl methacrylate	69		9.316					ND	
79 1,1,2-Trichloroethane	97		9.401					ND	
80 Tetrachloroethene	164		9.535					ND	
81 1,3-Dichloropropane	76		9.565					ND	
82 2-Hexanone	43		9.656					ND	
84 Chlorodibromomethane	129		9.784					ND	
83 n-Butyl acetate	43		9.789					ND	
85 Ethylene Dibromide	107		9.900					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.368					ND	
87 Chlorobenzene	112		10.392					ND	
88 4-Chlorobenzotrifluoride	180		10.429					ND	
89 1,1,1,2-Tetrachloroethane	131		10.472					ND	
90 Ethylbenzene	106		10.502					ND	
91 m-Xylene & p-Xylene	106		10.618					ND	
92 o-Xylene	106		11.013					ND	
93 Styrene	104		11.025					ND	
94 Bromoform	173		11.208					ND	
95 Cyclohexanol	57		11.231					ND	
96 2-Chlorobenzotrifluoride	180		11.275					ND	
97 Isopropylbenzene	105		11.378					ND	
98 Cyclohexanone	55		11.474					ND	
99 1,1,2,2-Tetrachloroethane	83		11.670					ND	
100 Bromobenzene	156		11.682					ND	
101 1,2,3-Trichloropropane	110		11.719					ND	
102 trans-1,4-Dichloro-2-buten	53		11.731					ND	
103 N-Propylbenzene	120		11.792					ND	
104 2-Chlorotoluene	126		11.877					ND	
105 3-Chlorotoluene	126		11.938					ND	
106 1,3,5-Trimethylbenzene	105		11.962					ND	
107 4-Chlorotoluene	126		11.980					ND	
108 tert-Butylbenzene	119		12.290					ND	
109 Pentachloroethane	167		12.308					ND	
110 1,2,4-Trimethylbenzene	105		12.333					ND	
111 1,2-dichloro-4-(trifluorom	214		12.400					ND	
112 sec-Butylbenzene	105		12.509					ND	
113 1,3-Dichlorobenzene	146		12.619					ND	
114 4-Isopropyltoluene	119		12.649					ND	
115 1,4-Dichlorobenzene	146		12.704					ND	
116 2,4-Dichloro-1-(triflourom	214		12.753					ND	
117 1,2,3-Trimethylbenzene	105		12.758					ND	
118 2,5-Dichlorobenzotrifluori	214		12.808					ND	
119 Benzyl chloride	91		12.843					ND	
120 n-Butylbenzene	91		13.063					ND	
121 1,2-Dichlorobenzene	146		13.081					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.860					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.000					ND	
124 1,3,5-Trichlorobenzene	180		14.072					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.426					ND	
126 1,2,4-Trichlorobenzene	180		14.693					ND	
127 Hexachlorobutadiene	225		14.864					ND	
128 Naphthalene	128		14.937					ND	
129 1,2,3-Trichlorobenzene	180		15.186					ND	
131 2,4,5-Trichlorotoluene	159		15.965					ND	
130 2,3,6-Trichlorotoluene	159		16.062					ND	
132 2-Methylnaphthalene	142		16.074					ND	
151 Isooctane	57		0.000					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
147 2,4-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
146 2,5-Dichlorotoluene	1		0.000					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 153 1,2 Epoxybutane TIC	42		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	
T 137 Tetrahydrofuran TIC	42		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00031	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added:	2.00	Units: uL	Run Reagent

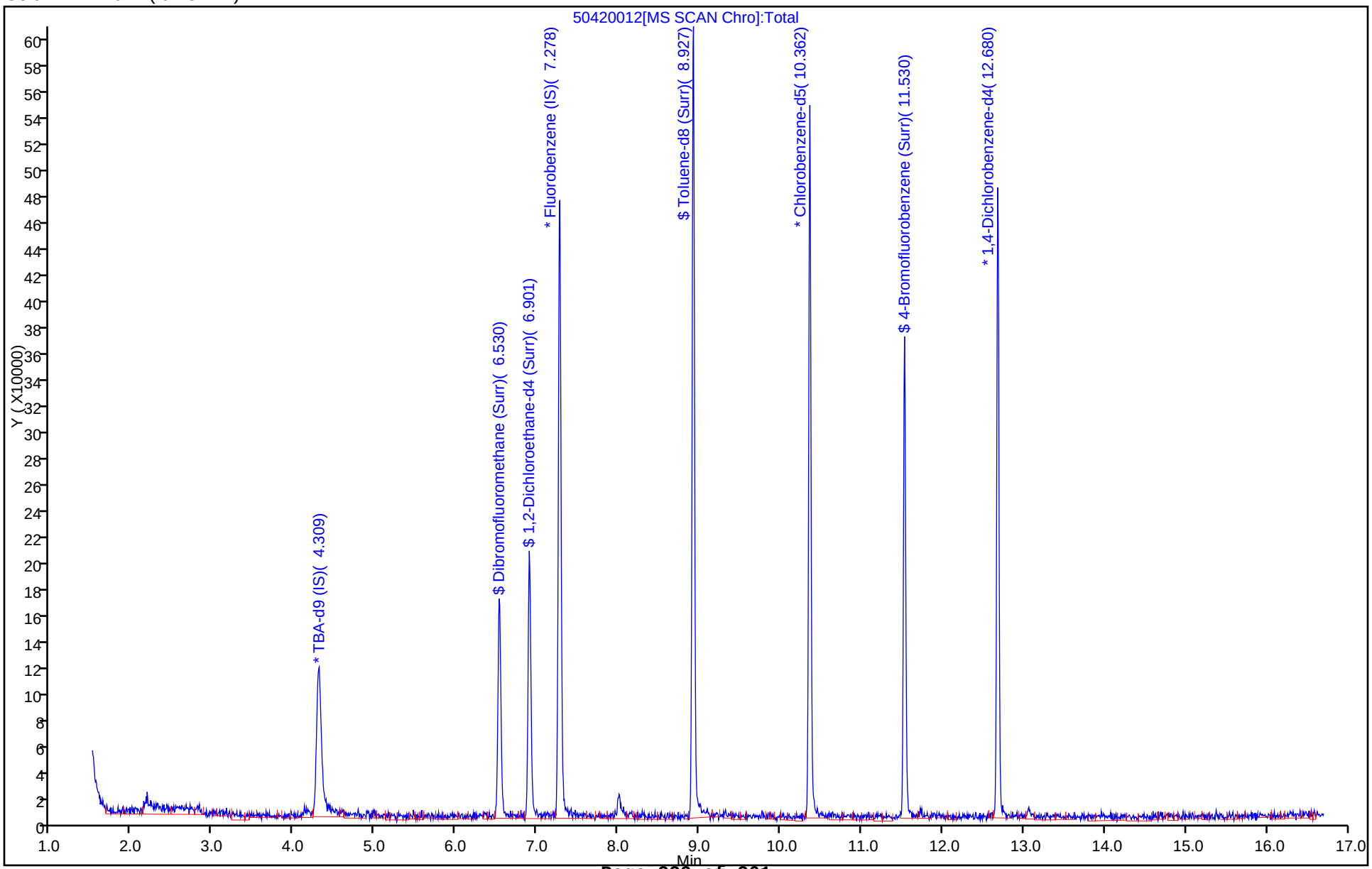
Report Date: 21-Apr-2015 07:44:33 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420012.D

Injection Date:	20-Apr-2015 11:28:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	MB			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Report Date: 21-Apr-2015 07:44:33 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420012.D

Injection Date: 20-Apr-2015 11:28:30 Instrument ID: CHHP5

Lims ID: MB

Client ID:

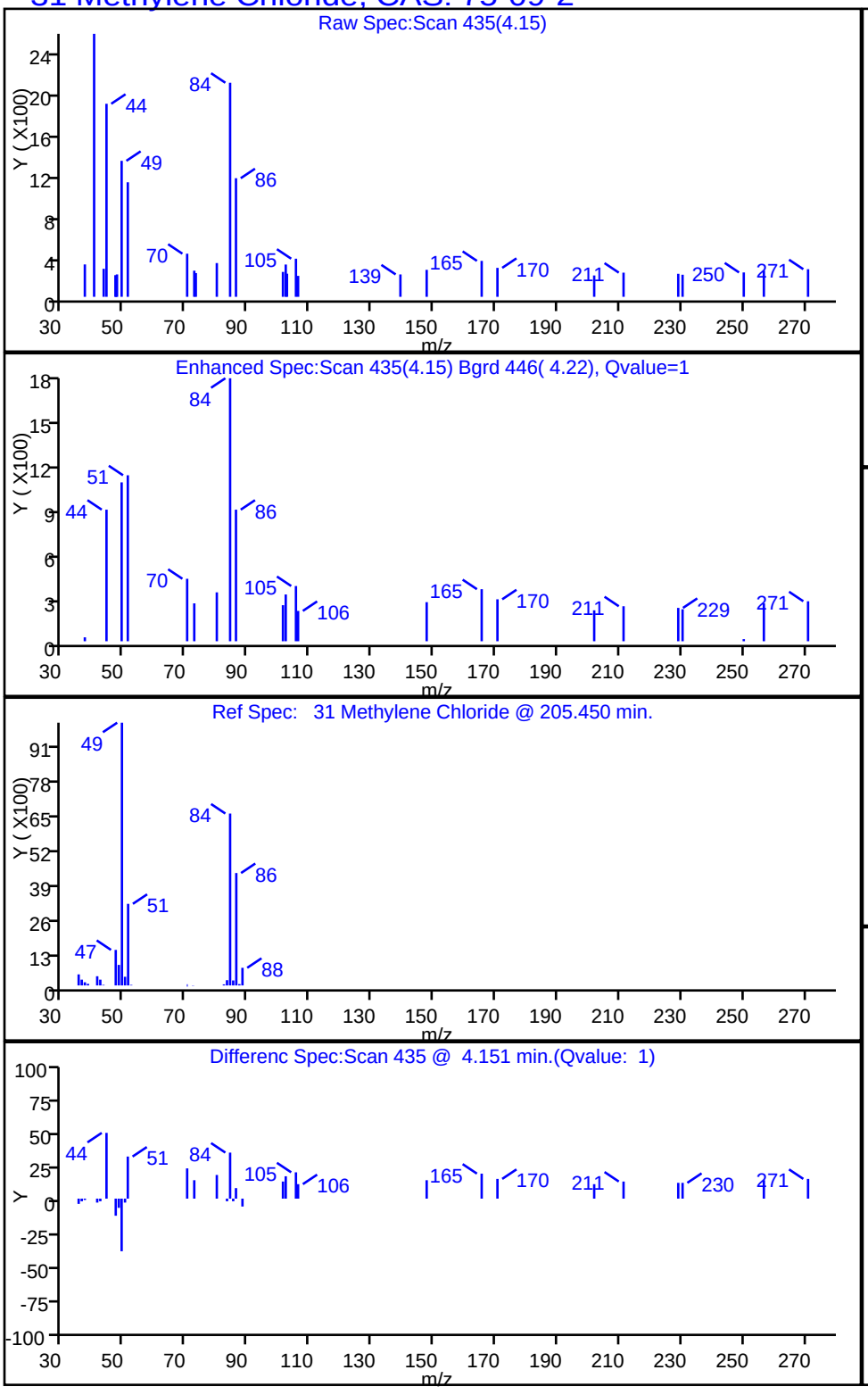
Operator ID: 001562 ALS Bottle#: 6 Worklist Smp#: 12

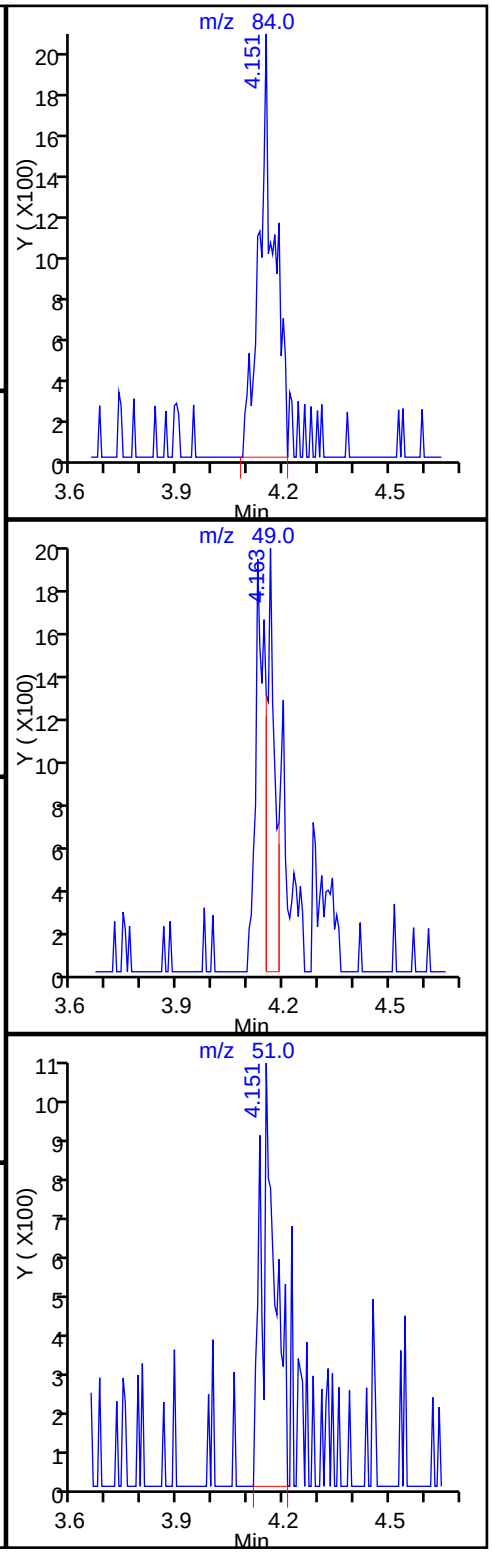
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm) Detector MS SCAN

31 Methylene Chloride, CAS: 75-09-2





Manual Integration/User Assign Peak Report

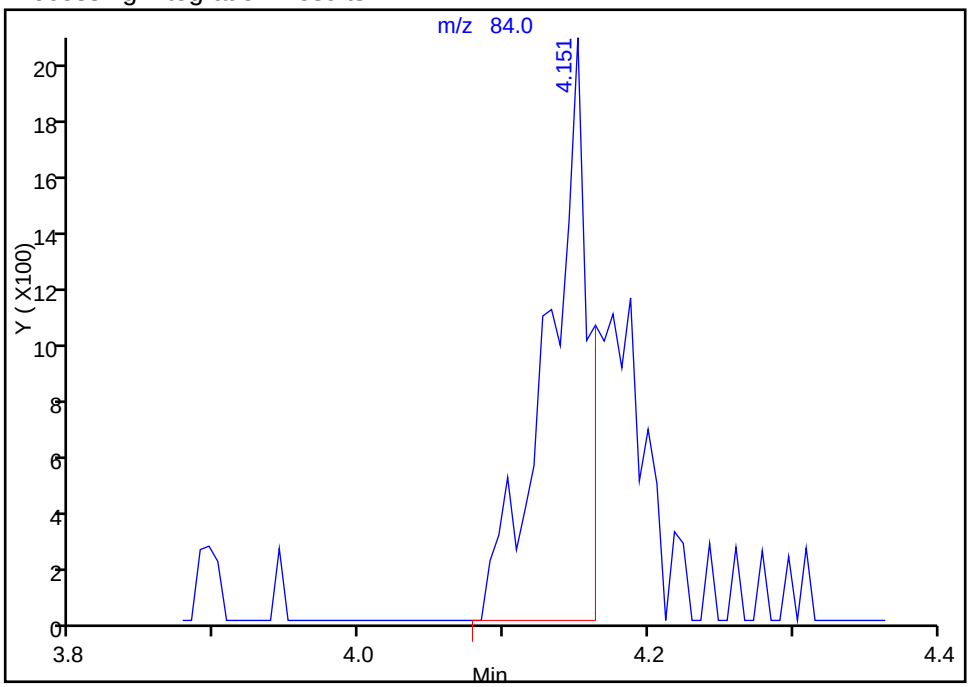
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420012.D				
Injection Date:	20-Apr-2015 11:28:30	Instrument ID:	CHHP5		
Lims ID:	MB				
Client ID:					
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

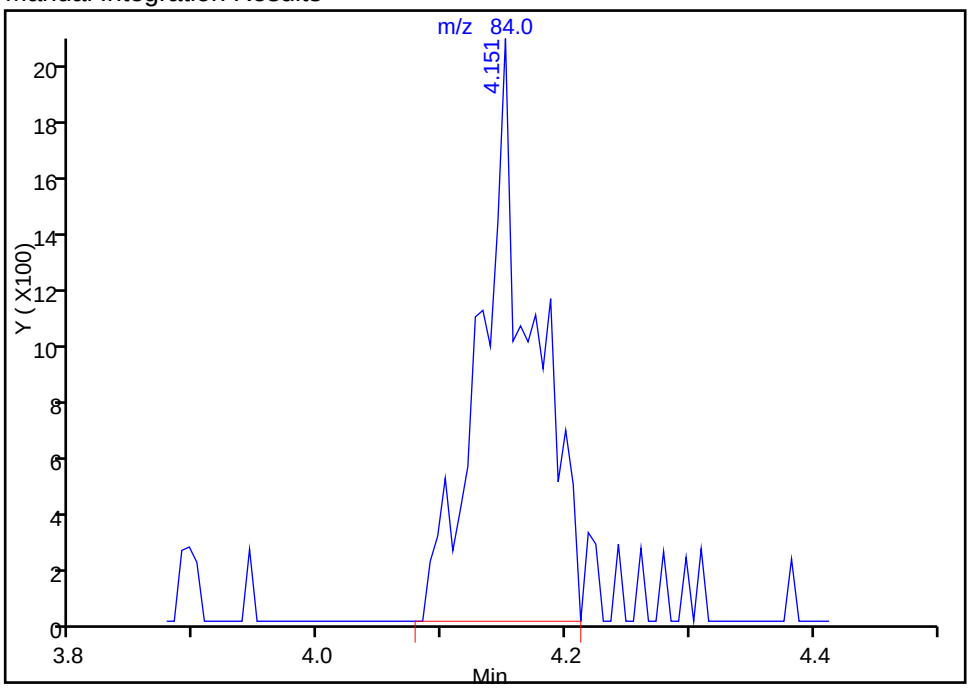
Processing Integration Results

RT: 4.15
Area: 3958
Amount: 1.186121
Amount Units: ng



Manual Integration Results

RT: 4.15
Area: 6055
Amount: 1.814543
Amount Units: ng



Reviewer: fergusond, 20-Apr-2015 12:27:48
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-139148/6

Matrix: Water Lab File ID: 50421006.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/21/2015 12:50

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.: 139148 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.: 180-43134-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-139148/6

Matrix: Water Lab File ID: 50421006.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/21/2015 12:50

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.: 139148 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)	116		64-135
2037-26-5	Toluene-d8 (Surr)	104		71-118
460-00-4	4-Bromofluorobenzene (Surr)	88		70-118
1868-53-7	Dibromofluoromethane (Surr)	105		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421006.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 21-Apr-2015 12:50:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 180-0006566-006
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 21-Apr-2015 13:46:07 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: fergusond Date: 21-Apr-2015 13:20:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.298	4.309	-0.011	0	177829	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.279	7.277	0.002	98	527912	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.363	10.362	0.001	88	115506	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.681	12.686	-0.005	97	151681	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.531	6.531	0.000	92	125926	50.0	52.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.902	6.902	0.000	0	183920	50.0	58.1	
$ 7 Toluene-d8 (Surr)	98	8.928	8.922	0.006	94	477109	50.0	51.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.531	11.532	-0.001	88	146260	50.0	44.1	
11 Dichlorodifluoromethane	85		1.616					ND	
12 Chloromethane	50		1.792					ND	
13 Vinyl chloride	62		1.914					ND	
14 Butadiene	39		1.962					ND	
15 Bromomethane	94		2.260					ND	
16 Chloroethane	64		2.406					ND	
17 Dichlorofluoromethane	67		2.668					ND	
18 Trichlorofluoromethane	101		2.729					ND	
19 Ethanol	45		3.019					ND	
20 Ethyl ether	59		3.088					ND	
21 Acrolein	56		3.258					ND	
22 1,1-Dichloroethene	96		3.410					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.447					ND	
24 Acetone	43		3.502					ND	
25 Iodomethane	142		3.623					ND	
26 Carbon disulfide	76		3.672					ND	
27 Isopropyl alcohol	45		3.786					ND	
29 Acetonitrile	40		3.932					ND	
28 3-Chloro-1-propene	76		3.946					ND	
30 Methyl acetate	43		4.025					ND	
31 Methylene Chloride	84	4.164	4.140	0.024	36	1862		0.5289	M
32 2-Methyl-2-propanol	59		4.438					ND	
33 Acrylonitrile	53		4.554					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.560					ND	
35 Methyl tert-butyl ether	73		4.597					ND	
36 Hexane	57		4.980					ND	
37 1,1-Dichloroethane	63		5.174					ND	
38 Vinyl acetate	43		5.296					ND	
39 2-Chloro-1,3-butadiene	53		5.306					ND	
41 Isopropyl ether	45		5.325					ND	
40 Isopropyl ether TIC	45		5.409					ND	
42 Tert-butyl ethyl ether	59		5.799					ND	
44 2,2-Dichloropropane	77		5.929					ND	
45 cis-1,2-Dichloroethene	96		5.941					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
46 2-Butanone (MEK)	43		5.984					ND	
47 Propionitrile	54		6.061					ND	
48 Ethyl acetate	43		6.091					ND	
49 Chlorobromomethane	128		6.227					ND	
50 Methacrylonitrile	41		6.243					ND	
51 Tetrahydrofuran	42		6.282					ND	
52 Chloroform	83		6.343					ND	
53 1,1,1-Trichloroethane	97		6.525					ND	
54 Cyclohexane	56		6.586					ND	
56 Carbon tetrachloride	117		6.720					ND	
55 1,1-Dichloropropene	75		6.726					ND	
57 Isobutyl alcohol	41		6.951					ND	
58 Benzene	78		6.957					ND	
59 1,2-Dichloroethane	62		6.981					ND	
61 Tert-amyl methyl ether	73		7.113					ND	
60 Tert-amyl methyl ether (TI	73	7.279	7.262	0.017	37	6888		0.6524	
62 n-Heptane	43		7.273					ND	
63 n-Butanol	56		7.655					ND	
64 Trichloroethene	130		7.663					ND	
65 Ethyl acrylate	55		7.813					ND	
66 Methylcyclohexane	83		7.863					ND	
67 1,2-Dichloropropane	63		7.900					ND	
68 Dibromomethane	93		8.022					ND	
69 Methyl methacrylate	69		8.050					ND	
70 1,4-Dioxane	88		8.058					ND	
71 Dichlorobromomethane	83		8.198					ND	
72 2-Nitropropane	41		8.439					ND	
73 2-Chloroethyl vinyl ether	63		8.514					ND	
74 cis-1,3-Dichloropropene	75		8.654					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.818					ND	
76 Toluene	91		8.989					ND	
77 trans-1,3-Dichloropropene	75		9.214					ND	
78 Ethyl methacrylate	69		9.317					ND	
79 1,1,2-Trichloroethane	97		9.402					ND	
80 Tetrachloroethene	164		9.536					ND	
81 1,3-Dichloropropane	76		9.561					ND	
82 2-Hexanone	43		9.652					ND	
83 n-Butyl acetate	43		9.784					ND	
84 Chlorodibromomethane	129		9.792					ND	
85 Ethylene Dibromide	107		9.895					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.370					ND	
87 Chlorobenzene	112		10.388					ND	
88 4-Chlorobenzotrifluoride	180		10.425					ND	
89 1,1,1,2-Tetrachloroethane	131		10.473					ND	
90 Ethylbenzene	106		10.498					ND	
91 m-Xylene & p-Xylene	106		10.619					ND	
92 o-Xylene	106		11.009					ND	
93 Styrene	104		11.027					ND	
94 Bromoform	173		11.209					ND	
95 Cyclohexanol	57		11.231					ND	
96 2-Chlorobenzotrifluoride	180		11.270					ND	
97 Isopropylbenzene	105		11.380					ND	
98 Cyclohexanone	55		11.469					ND	
99 1,1,2,2-Tetrachloroethane	83		11.672					ND	
100 Bromobenzene	156		11.684					ND	
101 1,2,3-Trichloropropane	110		11.720					ND	
102 trans-1,4-Dichloro-2-buten	53		11.732					ND	
103 N-Propylbenzene	120		11.787					ND	
104 2-Chlorotoluene	126		11.872					ND	
105 3-Chlorotoluene	126		11.933					ND	
106 1,3,5-Trimethylbenzene	105		11.964					ND	
107 4-Chlorotoluene	126		11.982					ND	
108 tert-Butylbenzene	119		12.286					ND	
109 Pentachloroethane	167		12.308					ND	
110 1,2,4-Trimethylbenzene	105		12.335					ND	
111 1,2-dichloro-4-(trifluorom	214		12.402					ND	
112 sec-Butylbenzene	105		12.505					ND	
113 1,3-Dichlorobenzene	146		12.615					ND	
114 4-Isopropyltoluene	119		12.651					ND	
115 1,4-Dichlorobenzene	146		12.706					ND	
116 2,4-Dichloro-1-(triflourom	214		12.754					ND	
117 1,2,3-Trimethylbenzene	105		12.759					ND	
118 2,5-Dichlorobenzotrifluori	214		12.803					ND	
119 Benzyl chloride	91		12.844					ND	
120 n-Butylbenzene	91		13.065					ND	
121 1,2-Dichlorobenzene	146		13.077					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.862					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.008					ND	
124 1,3,5-Trichlorobenzene	180		14.073					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.421					ND	
126 1,2,4-Trichlorobenzene	180		14.689					ND	
127 Hexachlorobutadiene	225		14.859					ND	
128 Naphthalene	128		14.938					ND	
129 1,2,3-Trichlorobenzene	180		15.182					ND	
131 2,4,5-Trichlorotoluene	159		15.960					ND	
130 2,3,6-Trichlorotoluene	159		16.064					ND	
132 2-Methylnaphthalene	142		16.074					ND	
151 Isooctane	57		0.000					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
147 2,4-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
146 2,5-Dichlorotoluene	1		0.000					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 153 1,2 Epoxybutane TIC	42		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	
T 137 Tetrahydrofuran TIC	42		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00031	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added:	2.00	Units: uL	Run Reagent

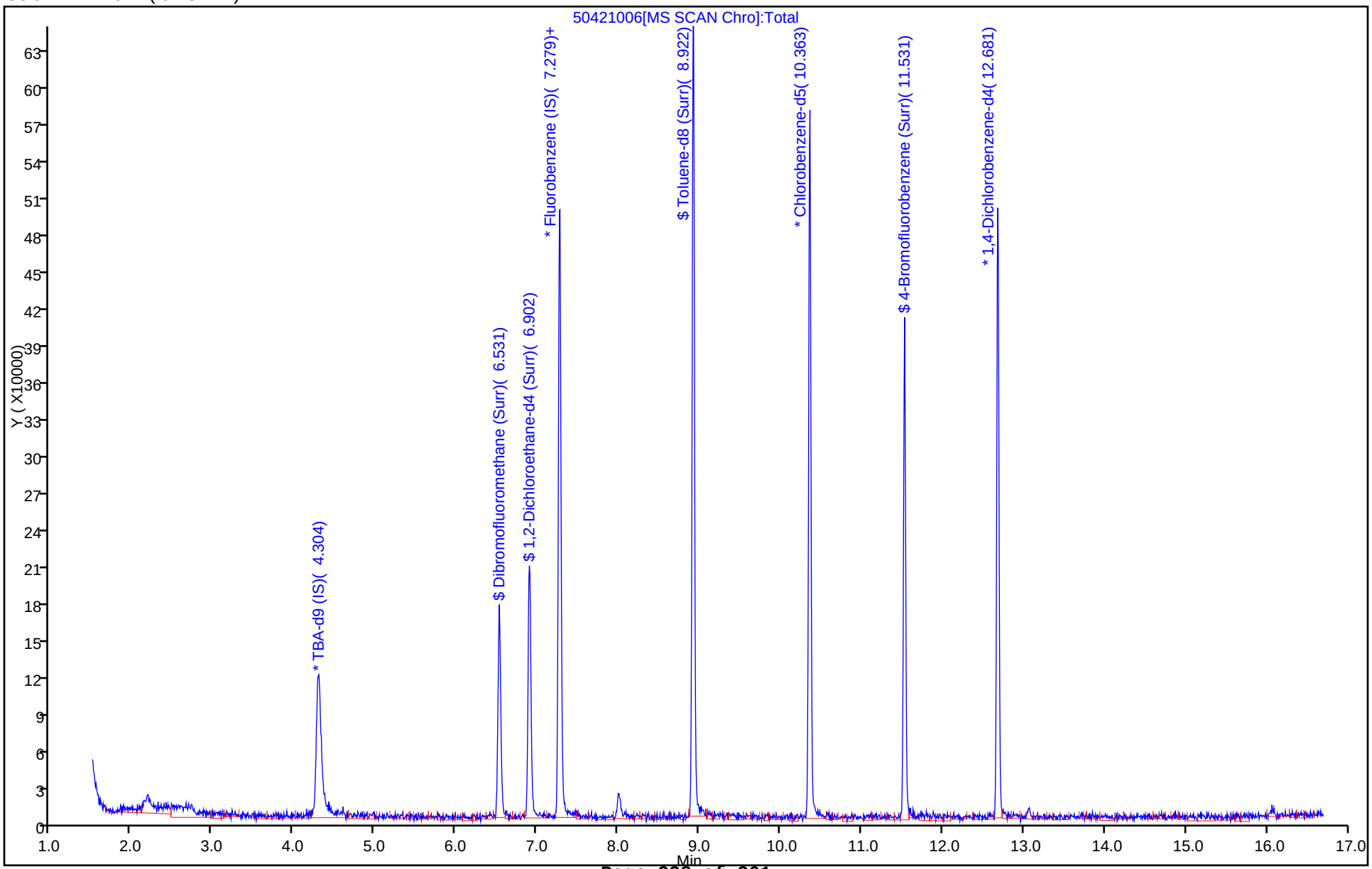
Report Date: 21-Apr-2015 13:53:25 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421006.D

Injection Date:	21-Apr-2015 12:50:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

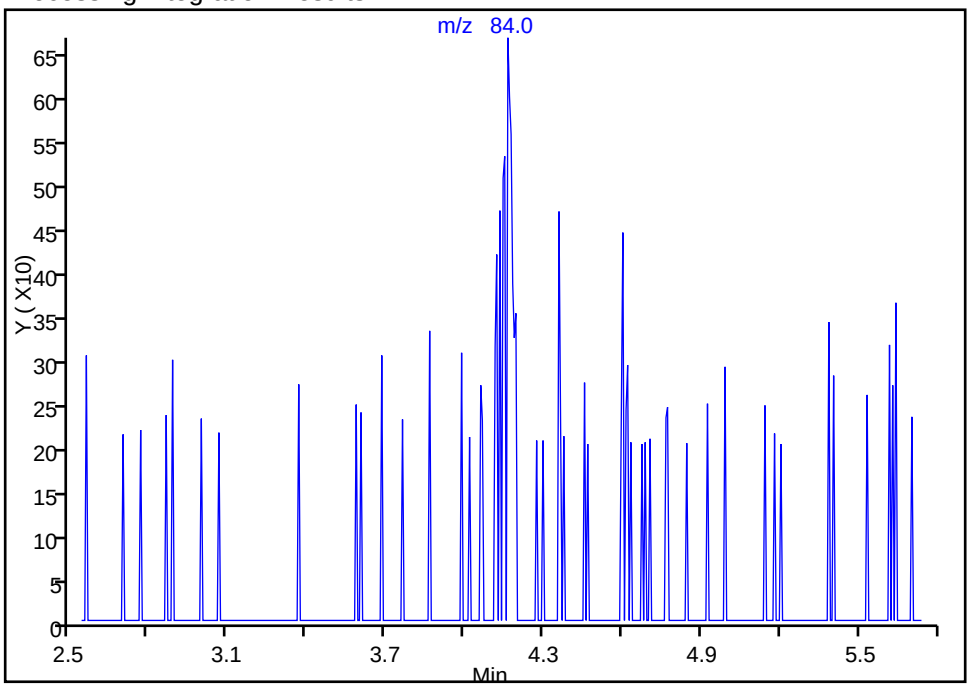
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421006.D				
Injection Date:	21-Apr-2015 12:50:30	Instrument ID:	CHHP5		
Lims ID:	MB				
Client ID:					
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

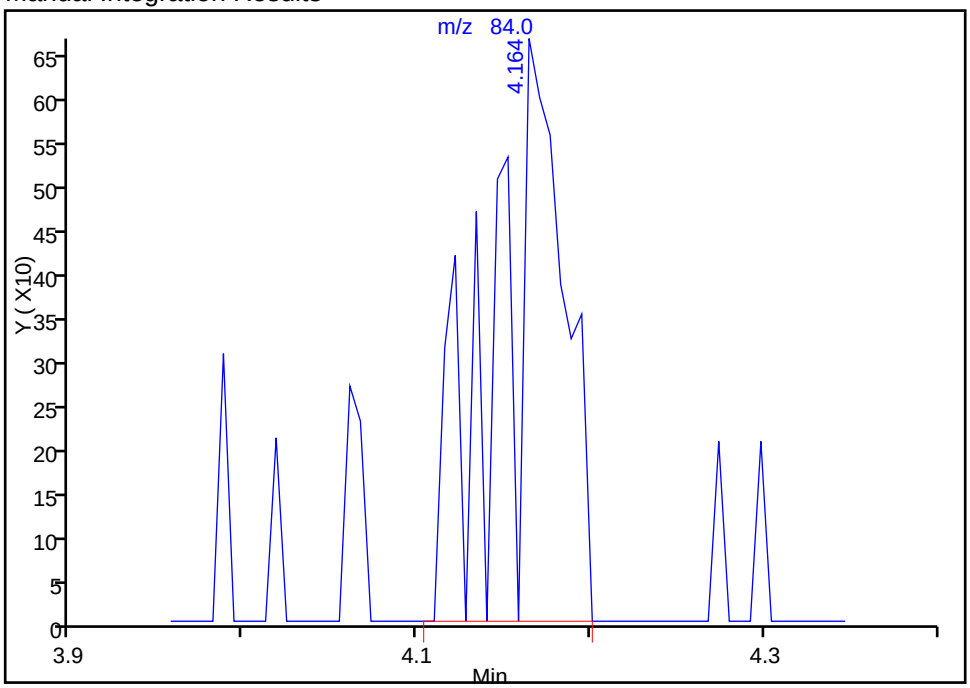
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.16
Area: 1862
Amount: 0.528878
Amount Units: ng



Reviewer: fergusond, 21-Apr-2015 13:20:08
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-139024/10

Matrix: Water Lab File ID: 50420010.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/20/2015 13:16

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.: 139024 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	11.1		1.0	0.28
75-01-4	Vinyl chloride	10.6		1.0	0.23
74-83-9	Bromomethane	10.2		1.0	0.31
75-00-3	Chloroethane	11.1		1.0	0.21
75-35-4	1,1-Dichloroethene	9.54		1.0	0.30
67-64-1	Acetone	20.1		5.0	2.5
75-15-0	Carbon disulfide	5.95		1.0	0.21
75-09-2	Methylene Chloride	10.3		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.62		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.93		1.0	0.18
75-34-3	1,1-Dichloroethane	9.80		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.86		1.0	0.24
74-97-5	Bromochloromethane	9.84		1.0	0.18
78-93-3	2-Butanone (MEK)	17.5		5.0	0.55
67-66-3	Chloroform	10.2		1.0	0.17
71-55-6	1,1,1-Trichloroethane	10.2		1.0	0.29
56-23-5	Carbon tetrachloride	10.7		1.0	0.14
71-43-2	Benzene	10.3		1.0	0.11
107-06-2	1,2-Dichloroethane	9.99		1.0	0.21
79-01-6	Trichloroethene	9.66		1.0	0.14
78-87-5	1,2-Dichloropropane	10.2		1.0	0.095
75-27-4	Bromodichloromethane	9.70		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	10.4		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	18.5		5.0	0.53
108-88-3	Toluene	10.8		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	11.4		1.0	0.15
79-00-5	1,1,2-Trichloroethane	11.5		1.0	0.20
127-18-4	Tetrachloroethene	10.2		1.0	0.15
591-78-6	2-Hexanone	16.1		5.0	0.16
124-48-1	Dibromochloromethane	10.6		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	11.1		1.0	0.18
108-90-7	Chlorobenzene	10.7		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	12.3		1.0	0.28
100-41-4	Ethylbenzene	10.4		1.0	0.23
1330-20-7	Xylenes, Total	20.7		3.0	0.49
100-42-5	Styrene	10.5		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-139024/10

Matrix: Water Lab File ID: 50420010.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/20/2015 13:16

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.: 139024 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.4		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	11.4		1.0	0.20
107-13-1	Acrylonitrile	104		20	0.55
123-91-1	1,4-Dioxane	186	J	200	34

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

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420010.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Apr-2015 13:16:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 180-0006546-010
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 20-Apr-2015 12:19:12 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: fergusond Date: 20-Apr-2015 14:21:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.317	4.302	0.015	0	179952	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.277	-0.004	94	579347	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.367	-0.003	85	131148	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.685	-0.003	90	189455	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.531	6.529	0.002	46	124662	50.0	47.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.902	6.901	0.002	0	165072	50.0	47.5	
$ 7 Toluene-d8 (Surr)	98	8.922	8.920	0.002	94	525105	50.0	50.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.526	11.530	-0.004	85	179622	50.0	47.7	
11 Dichlorodifluoromethane	85	1.634	1.632	0.002	63	159132	50.0	64.1	
12 Chloromethane	50	1.792	1.790	0.002	89	189669	50.0	55.3	
13 Vinyl chloride	62	1.920	1.918	0.002	81	202547	50.0	52.9	
14 Butadiene	39	1.963	1.967	-0.004	95	210203	50.0	48.0	
15 Bromomethane	94	2.273	2.265	0.008	89	105841	50.0	51.1	
16 Chloroethane	64	2.431	2.405	0.026	81	147699	50.0	55.7	
17 Dichlorofluoromethane	67	2.680	2.666	0.014	82	308156	50.0	50.9	
18 Trichlorofluoromethane	101	2.711	2.721	-0.010	73	194054	50.0	42.2	
20 Ethyl ether	59	3.094	3.092	0.002	93	157596	50.0	52.0	
21 Acrolein	56	3.264	3.250	0.014	91	50947	150.0	138.4	
22 1,1-Dichloroethene	96	3.429	3.396	0.033	87	159437	50.0	47.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.465	3.445	0.020	90	170526	50.0	50.5	
24 Acetone	43	3.502	3.512	-0.010	95	119429	100.0	100.6	
25 Iodomethane	142	3.642	3.615	0.027	61	205054	50.0	44.2	M
26 Carbon disulfide	76	3.690	3.688	0.002	98	243194	50.0	29.8	
28 3-Chloro-1-propene	76	3.952	3.956	-0.004	78	82157	50.0	46.5	
30 Methyl acetate	43	4.031	4.023	0.008	98	741112	250.0	266.9	
31 Methylene Chloride	84	4.147	4.145	0.002	90	199046	50.0	51.5	
32 2-Methyl-2-propanol	59	4.445	4.443	0.002	81	117047	500.0	552.2	
33 Acrylonitrile	53	4.554	4.552	0.002	99	739751	500.0	517.9	
34 trans-1,2-Dichloroethene	96	4.572	4.564	0.008	57	166293	50.0	48.1	
35 Methyl tert-butyl ether	73	4.603	4.595	0.008	89	379473	50.0	49.7	
36 Hexane	57	4.992	4.990	0.002	94	243266	50.0	44.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.175	5.173	0.002	85	302361	50.0	49.0	
38 Vinyl acetate	43	5.296	5.301	-0.005	98	170539	50.0	39.0	
44 2,2-Dichloropropane	77	5.929	5.927	0.002	57	90221	50.0	58.5	
45 cis-1,2-Dichloroethene	96	5.941	5.939	0.002	83	179520	50.0	49.3	
46 2-Butanone (MEK)	43	5.990	5.988	0.002	100	165809	100.0	87.4	
49 Chlorobromomethane	128	6.221	6.231	-0.010	80	77491	50.0	49.2	
51 Tetrahydrofuran	42	6.294	6.286	0.008	91	108688	100.0	91.5	
52 Chloroform	83	6.343	6.347	-0.004	96	285637	50.0	51.0	
53 1,1,1-Trichloroethane	97	6.531	6.536	-0.005	86	183317	50.0	51.2	
54 Cyclohexane	56	6.586	6.590	-0.004	76	313548	50.0	45.6	
56 Carbon tetrachloride	117	6.720	6.718	0.002	64	153182	50.0	53.4	
55 1,1-Dichloropropene	75	6.726	6.718	0.008	91	208411	50.0	44.8	
57 Isobutyl alcohol	41	6.945	6.943	0.002	48	126793	1250.0	1639.6	
58 Benzene	78	6.957	6.955	0.002	97	709618	50.0	51.7	
59 1,2-Dichloroethane	62	6.988	6.986	0.002	90	224592	50.0	50.0	
62 n-Heptane	43	7.280	7.278	0.002	66	204326	50.0	43.3	
64 Trichloroethene	130	7.669	7.673	-0.004	90	166147	50.0	48.3	
66 Methylcyclohexane	83	7.864	7.862	0.002	92	279651	50.0	45.6	
67 1,2-Dichloropropane	63	7.906	7.898	0.008	87	173259	50.0	51.0	
68 Dibromomethane	93	8.028	8.026	0.002	91	87441	50.0	47.8	
70 1,4-Dioxane	88	8.058	8.062	-0.004	86	33211	1000.0	928.8	M
71 Dichlorobromomethane	83	8.198	8.196	0.002	91	180930	50.0	48.5	
73 2-Chloroethyl vinyl ether	63	8.521	8.519	0.002	92	183275	100.0	95.7	
74 cis-1,3-Dichloropropene	75	8.654	8.659	-0.005	87	187434	50.0	52.1	
75 4-Methyl-2-pentanone (MIBK	43	8.825	8.823	0.002	97	327474	100.0	92.3	
76 Toluene	91	8.989	8.987	0.002	96	726761	50.0	54.1	
77 trans-1,3-Dichloropropene	75	9.220	9.218	0.002	94	138394	50.0	57.0	
78 Ethyl methacrylate	69	9.318	9.316	0.002	87	164826	50.0	52.1	
79 1,1,2-Trichloroethane	97	9.397	9.401	-0.004	80	145446	50.0	57.7	
80 Tetrachloroethene	164	9.537	9.535	0.002	91	133871	50.0	50.9	
81 1,3-Dichloropropane	76	9.567	9.565	0.002	94	259123	50.0	55.3	
82 2-Hexanone	43	9.658	9.656	0.002	95	218543	100.0	80.6	
84 Chlorodibromomethane	129	9.792	9.784	0.008	86	106846	50.0	53.1	
85 Ethylene Dibromide	107	9.902	9.900	0.002	94	133279	50.0	55.4	
86 3-Chlorobenzotrifluoride	180	10.370	10.368	0.002	87	242734	50.0	47.3	
87 Chlorobenzene	112	10.388	10.392	-0.004	90	455168	50.0	53.5	
88 4-Chlorobenzotrifluoride	180	10.431	10.429	0.002	86	234528	50.0	47.3	
89 1,1,1,2-Tetrachloroethane	131	10.473	10.472	0.001	83	134763	50.0	61.3	
90 Ethylbenzene	106	10.504	10.502	0.002	98	254199	50.0	52.0	
91 m-Xylene & p-Xylene	106	10.619	10.618	0.001	0	308906	50.0	51.7	
92 o-Xylene	106	11.015	11.013	0.002	87	302508	50.0	51.8	
93 Styrene	104	11.027	11.025	0.002	92	494129	50.0	52.5	
94 Bromoform	173	11.209	11.208	0.001	93	64376	50.0	51.8	
96 2-Chlorobenzotrifluoride	180	11.270	11.275	-0.005	96	239803	50.0	46.8	
97 Isopropylbenzene	105	11.380	11.378	0.002	97	742881	50.0	50.9	
99 1,1,2,2-Tetrachloroethane	83	11.672	11.670	0.002	83	206421	50.0	57.1	
100 Bromobenzene	156	11.684	11.682	0.002	82	182293	50.0	52.0	
101 1,2,3-Trichloropropane	110	11.720	11.719	0.001	81	64981	50.0	56.4	
102 trans-1,4-Dichloro-2-buten	53	11.733	11.731	0.002	37	51892	50.0	54.2	
103 N-Propylbenzene	120	11.787	11.792	-0.005	97	214550	50.0	49.6	
104 2-Chlorotoluene	126	11.873	11.877	-0.004	95	178207	50.0	49.0	
105 3-Chlorotoluene	126	11.933	11.938	-0.005	62	192027	50.0	47.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.958	11.962	-0.004	93	620788	50.0	51.5	
107 4-Chlorotoluene	126	11.982	11.980	0.002	98	204816	50.0	52.1	
108 tert-Butylbenzene	119	12.286	12.290	-0.004	74	478304	50.0	45.8	
110 1,2,4-Trimethylbenzene	105	12.335	12.333	0.002	93	631891	50.0	51.0	
111 1,2-dichloro-4-(trifluorom	214	12.402	12.400	0.002	98	176434	50.0	45.1	
112 sec-Butylbenzene	105	12.505	12.509	-0.004	76	723846	50.0	49.2	
113 1,3-Dichlorobenzene	146	12.615	12.619	-0.004	79	338235	50.0	52.4	
114 4-Isopropyltoluene	119	12.651	12.649	0.002	94	581619	50.0	47.9	
115 1,4-Dichlorobenzene	146	12.706	12.704	0.002	93	350572	50.0	53.1	
116 2,4-Dichloro-1-(triflourom	214	12.755	12.753	0.002	96	163111	50.0	44.5	
118 2,5-Dichlorobenzotrifluori	214	12.809	12.808	0.001	0	185597	50.0	45.3	
120 n-Butylbenzene	91	13.059	13.063	-0.004	98	509068	50.0	46.0	
121 1,2-Dichlorobenzene	146	13.077	13.081	-0.004	95	319501	50.0	53.4	
122 1,2-Dibromo-3-Chloropropan	75	13.856	13.860	-0.004	64	22861	50.0	46.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.002	14.000	0.002	0	530694	150.0	117.4	
124 1,3,5-Trichlorobenzene	180	14.069	14.072	-0.003	96	171714	50.0	47.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.428	14.426	0.002	0	328559	100.0	74.7	
126 1,2,4-Trichlorobenzene	180	14.689	14.693	-0.004	90	131097	50.0	42.1	
127 Hexachlorobutadiene	225	14.860	14.864	-0.004	89	64002	50.0	42.9	
128 Naphthalene	128	14.939	14.937	0.002	97	313259	50.0	38.3	
129 1,2,3-Trichlorobenzene	180	15.188	15.186	0.002	93	102964	50.0	40.3	
131 2,4,5-Trichlorotoluene	159	15.961	15.965	-0.004	0	30296	50.0	22.1	
130 2,3,6-Trichlorotoluene	159	16.064	16.062	0.002	90	30758	50.0	24.8	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	97.4	
S 133 Xylenes, Total	106				0		100.0	103.5	
S 135 1,3-Dichloropropene, Total	1				0		100.0	109.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaW 135tcb a_00001	Amount Added:	2.00	Units: uL	
voaWKetpri Re_00004	Amount Added:	2.00	Units: uL	
voaW2-cle pri_00006	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00111	Amount Added:	2.00	Units: uL	
voaW ee2nd_00001	Amount Added:	2.00	Units: uL	
voaW VA pri R_00005	Amount Added:	2.00	Units: uL	
VOAACRO2ND_00007	Amount Added:	6.00	Units: uL	
VOA8260INT_00031	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added:	2.00	Units: uL	Run Reagent

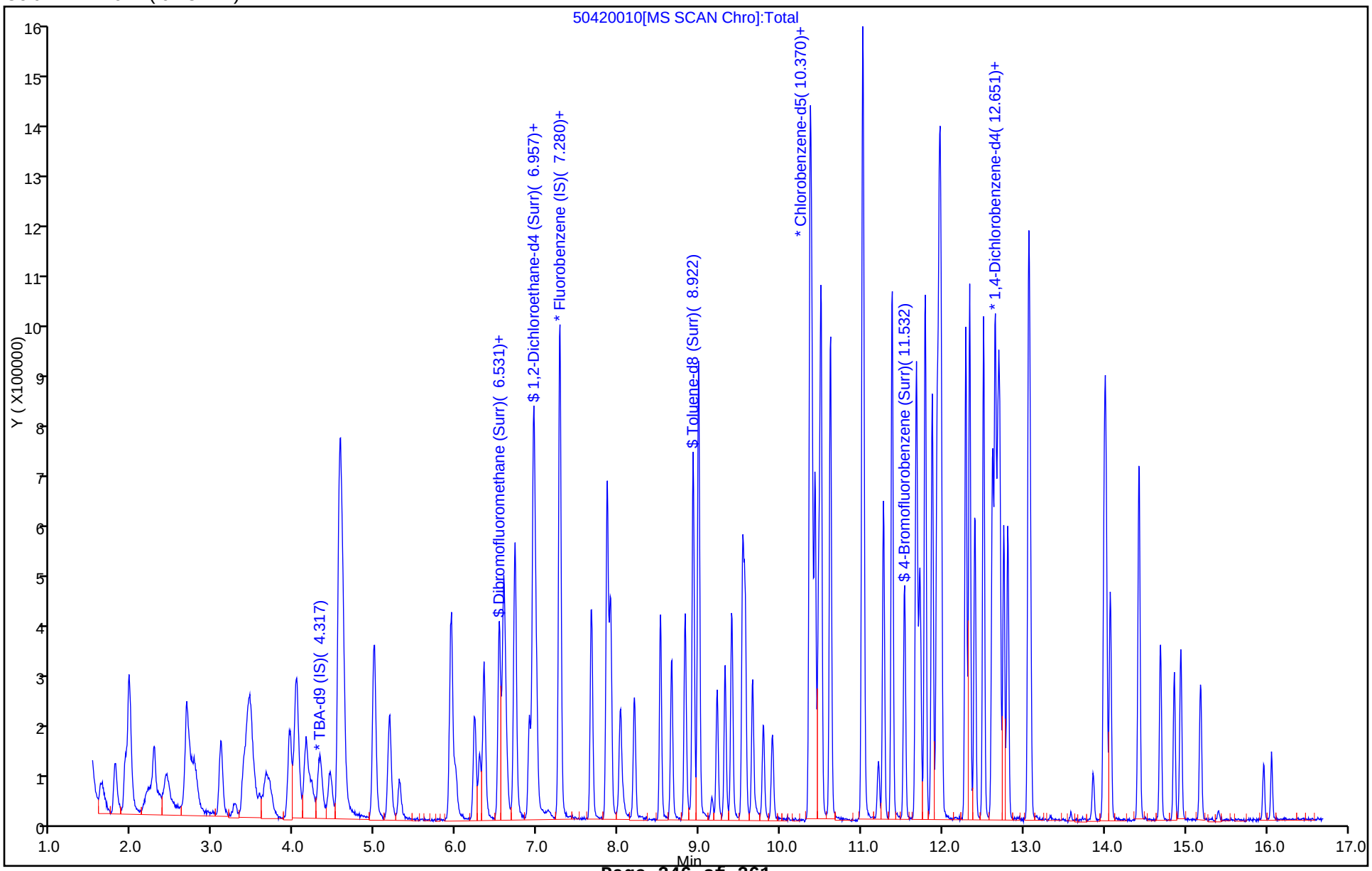
Report Date: 20-Apr-2015 14:21:03 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420010.D

Injection Date:	20-Apr-2015 13:16:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

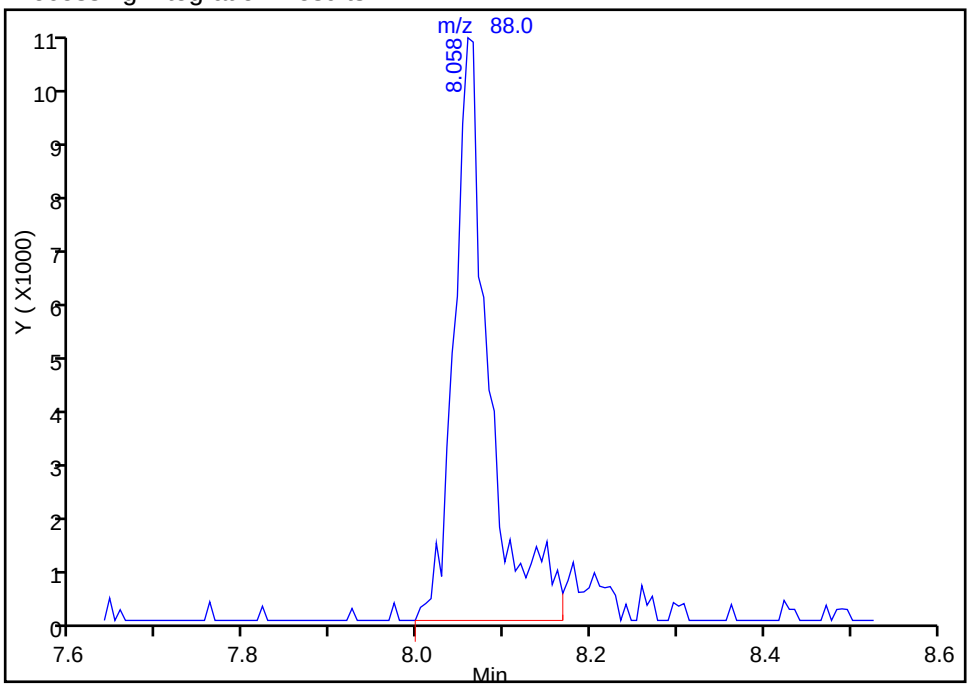
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150420-6546.b\50420010.D
Injection Date: 20-Apr-2015 13:16:30 Instrument ID: CHHP5
Lims ID: LCS
Client ID:
Operator ID: 001562 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

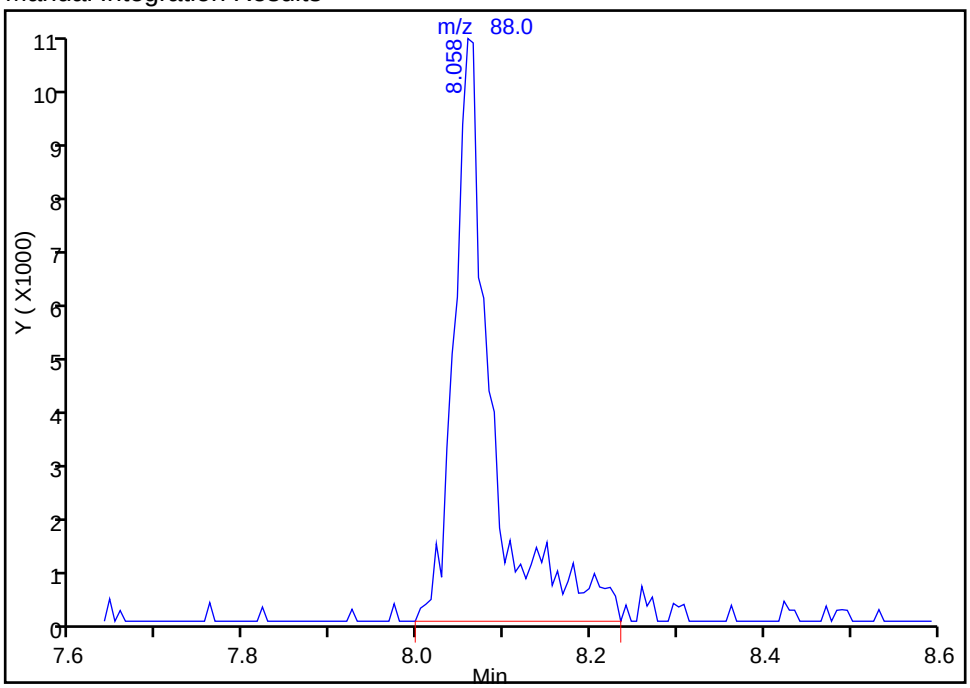
Processing Integration Results

RT: 8.06
Area: 30729
Amount: 859.4126
Amount Units: ng



Manual Integration Results

RT: 8.06
Area: 33211
Amount: 928.8279
Amount Units: ng



Reviewer: fergusond, 20-Apr-2015 13:38:41
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-43134-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-139148/9

Matrix: Water | Lab File ID: 50421009.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/21/2015 14:13

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 139148 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	11.0		1.0	0.28
75-01-4	Vinyl chloride	10.5		1.0	0.23
74-83-9	Bromomethane	13.2		1.0	0.31
75-00-3	Chloroethane	11.8		1.0	0.21
75-35-4	1,1-Dichloroethene	9.29		1.0	0.30
67-64-1	Acetone	17.1		5.0	2.5
75-15-0	Carbon disulfide	5.91		1.0	0.21
75-09-2	Methylene Chloride	10.1		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.55		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.15		1.0	0.18
75-34-3	1,1-Dichloroethane	9.74		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.05		1.0	0.24
74-97-5	Bromochloromethane	8.80		1.0	0.18
78-93-3	2-Butanone (MEK)	16.6		5.0	0.55
67-66-3	Chloroform	9.97		1.0	0.17
71-55-6	1,1,1-Trichloroethane	10.2		1.0	0.29
56-23-5	Carbon tetrachloride	10.8		1.0	0.14
71-43-2	Benzene	10.2		1.0	0.11
107-06-2	1,2-Dichloroethane	9.53		1.0	0.21
79-01-6	Trichloroethene	9.02		1.0	0.14
78-87-5	1,2-Dichloropropane	9.78		1.0	0.095
75-27-4	Bromodichloromethane	8.88		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.47		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	17.5		5.0	0.53
108-88-3	Toluene	11.2		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	11.3		1.0	0.15
79-00-5	1,1,2-Trichloroethane	11.5		1.0	0.20
127-18-4	Tetrachloroethene	10.9		1.0	0.15
591-78-6	2-Hexanone	15.2		5.0	0.16
124-48-1	Dibromochloromethane	10.4		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.7		1.0	0.18
108-90-7	Chlorobenzene	10.7		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	11.9		1.0	0.28
100-41-4	Ethylbenzene	10.2		1.0	0.23
1330-20-7	Xylenes, Total	20.1		3.0	0.49
100-42-5	Styrene	10.3		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-139148/9

Matrix: Water Lab File ID: 50421009.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/21/2015 14:13

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139148 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.28		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.9		1.0	0.20
107-13-1	Acrylonitrile	95.6		20	0.55
123-91-1	1,4-Dioxane	129	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		64-135
2037-26-5	Toluene-d8 (Surr)	102		71-118
460-00-4	4-Bromofluorobenzene (Surr)	93		70-118
1868-53-7	Dibromofluoromethane (Surr)	88		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421009.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 21-Apr-2015 14:13:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 180-0006566-009
Operator ID: 001562 Instrument ID: CHHP5

Method: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 21-Apr-2015 14:55:54 Calib Date: 14-Apr-2015 13:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP5\20150414-6459.b\50414005.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: fergusond Date: 21-Apr-2015 14:35:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.318	4.309	0.009	0	118836	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.277	-0.003	98	561426	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.359	10.362	-0.003	88	116616	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.683	12.686	-0.003	96	180594	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.532	6.531	0.001	80	112981	50.0	44.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.902	0.001	0	155309	50.0	46.1	
$ 7 Toluene-d8 (Surr)	98	8.923	8.922	0.001	94	476041	50.0	51.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.527	11.532	-0.005	88	155797	50.0	46.5	
11 Dichlorodifluoromethane	85	1.623	1.616	0.007	98	150951	50.0	62.7	
12 Chloromethane	50	1.787	1.792	-0.005	99	182590	50.0	55.0	
13 Vinyl chloride	62	1.915	1.914	0.001	97	195718	50.0	52.7	
14 Butadiene	39	1.957	1.962	-0.005	99	204175	50.0	48.2	
15 Bromomethane	94	2.286	2.260	0.026	92	129443	50.0	65.8	
16 Chloroethane	64	2.414	2.406	0.008	100	151971	50.0	59.2	
17 Dichlorofluoromethane	67	2.669	2.668	0.001	99	333522	50.0	56.9	
18 Trichlorofluoromethane	101	2.724	2.729	-0.005	97	226355	50.0	50.8	
20 Ethyl ether	59	3.089	3.088	0.001	93	151933	50.0	51.7	
21 Acrolein	56	3.265	3.258	0.007	97	44516	150.0	124.8	
22 1,1-Dichloroethene	96	3.387	3.410	-0.023	96	150331	50.0	46.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.430	3.447	-0.017	84	163824	50.0	50.0	
24 Acetone	43	3.503	3.502	0.001	98	98361	100.0	85.5	
25 Iodomethane	142	3.606	3.623	-0.017	100	203401	50.0	45.2	
26 Carbon disulfide	76	3.679	3.672	0.007	100	233881	50.0	29.5	
28 3-Chloro-1-propene	76	3.947	3.946	0.001	88	75284	50.0	44.0	
30 Methyl acetate	43	4.026	4.025	0.001	98	671580	250.0	249.6	
31 Methylene Chloride	84	4.154	4.140	0.014	96	189808	50.0	50.7	
32 2-Methyl-2-propanol	59	4.440	4.438	0.002	81	69879	500.0	499.2	
33 Acrylonitrile	53	4.561	4.554	0.007	98	661582	500.0	478.0	
34 trans-1,2-Dichloroethene	96	4.573	4.560	0.013	59	159827	50.0	47.7	
35 Methyl tert-butyl ether	73	4.604	4.597	0.007	94	338725	50.0	45.8	
36 Hexane	57	4.987	4.980	0.007	94	226291	50.0	42.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.176	5.174	0.002	97	291204	50.0	48.7	
38 Vinyl acetate	43	5.297	5.296	0.001	98	159632	50.0	37.7	
44 2,2-Dichloropropane	77	5.930	5.929	0.001	79	97242	50.0	65.1	
45 cis-1,2-Dichloroethene	96	5.942	5.941	0.001	84	159562	50.0	45.2	
46 2-Butanone (MEK)	43	5.991	5.984	0.007	100	152851	100.0	83.1	
49 Chlorobromomethane	128	6.222	6.227	-0.005	96	67188	50.0	44.0	
51 Tetrahydrofuran	42	6.295	6.282	0.013	91	92709	100.0	80.5	
52 Chloroform	83	6.344	6.343	0.002	95	270614	50.0	49.8	
53 1,1,1-Trichloroethane	97	6.532	6.525	0.007	96	176806	50.0	51.0	
54 Cyclohexane	56	6.587	6.586	0.001	94	282532	50.0	42.4	
56 Carbon tetrachloride	117	6.721	6.720	0.001	96	150269	50.0	54.0	
55 1,1-Dichloropropene	75	6.727	6.726	0.001	95	196666	50.0	43.7	
57 Isobutyl alcohol	41	6.946	6.951	-0.005	89	92315	1250.0	1231.9	
58 Benzene	78	6.958	6.957	0.001	97	675680	50.0	50.8	
59 1,2-Dichloroethane	62	6.989	6.981	0.007	95	207666	50.0	47.7	
62 n-Heptane	43	7.281	7.273	0.008	88	178873	50.0	39.1	
64 Trichloroethene	130	7.670	7.663	0.007	97	150277	50.0	45.1	
66 Methylcyclohexane	83	7.865	7.863	0.002	92	250646	50.0	42.1	
67 1,2-Dichloropropane	63	7.901	7.900	0.001	94	160863	50.0	48.9	
68 Dibromomethane	93	8.023	8.022	0.001	96	86898	50.0	49.0	
70 1,4-Dioxane	88	8.053	8.058	-0.005	95	22307	1000.0	643.8	M
71 Dichlorobromomethane	83	8.193	8.198	-0.005	98	160582	50.0	44.4	
73 2-Chloroethyl vinyl ether	63	8.522	8.514	0.008	91	152613	100.0	82.3	
74 cis-1,3-Dichloropropene	75	8.655	8.654	0.001	92	165251	50.0	47.4	
75 4-Methyl-2-pentanone (MIBK	43	8.826	8.818	0.008	98	276659	100.0	87.7	
76 Toluene	91	8.990	8.989	0.001	98	670232	50.0	56.1	
77 trans-1,3-Dichloropropene	75	9.215	9.214	0.001	97	121447	50.0	56.3	
78 Ethyl methacrylate	69	9.312	9.317	-0.005	91	130404	50.0	46.3	
79 1,1,2-Trichloroethane	97	9.398	9.402	-0.004	93	128681	50.0	57.4	
80 Tetrachloroethene	164	9.537	9.536	0.001	97	126868	50.0	54.3	
81 1,3-Dichloropropane	76	9.562	9.561	0.001	94	221700	50.0	53.2	
82 2-Hexanone	43	9.659	9.652	0.007	98	182765	100.0	75.8	
84 Chlorodibromomethane	129	9.793	9.792	0.001	91	92842	50.0	51.9	
85 Ethylene Dibromide	107	9.896	9.895	0.001	97	114362	50.0	53.5	
86 3-Chlorobenzotrifluoride	180	10.371	10.370	0.001	94	234272	50.0	51.4	
87 Chlorobenzene	112	10.389	10.388	0.001	94	406365	50.0	53.7	
88 4-Chlorobenzotrifluoride	180	10.426	10.425	0.002	94	218065	50.0	49.5	
89 1,1,1,2-Tetrachloroethane	131	10.474	10.473	0.001	90	116332	50.0	59.5	
90 Ethylbenzene	106	10.499	10.498	0.001	99	222001	50.0	51.1	
91 m-Xylene & p-Xylene	106	10.614	10.619	-0.005	0	270755	50.0	51.0	
92 o-Xylene	106	11.010	11.009	0.001	96	256237	50.0	49.3	
93 Styrene	104	11.022	11.027	-0.005	94	432321	50.0	51.6	
94 Bromoform	173	11.210	11.209	0.001	94	51247	50.0	46.4	
96 2-Chlorobenzotrifluoride	180	11.271	11.270	0.001	97	227467	50.0	50.0	
97 Isopropylbenzene	105	11.375	11.380	-0.005	97	636512	50.0	49.1	
99 1,1,2,2-Tetrachloroethane	83	11.673	11.672	0.001	96	174726	50.0	54.4	
100 Bromobenzene	156	11.679	11.684	-0.005	95	154706	50.0	46.3	
101 1,2,3-Trichloropropane	110	11.715	11.720	-0.005	87	54630	50.0	49.7	
102 trans-1,4-Dichloro-2-buten	53	11.734	11.732	0.002	68	43019	50.0	47.1	
103 N-Propylbenzene	120	11.788	11.787	0.001	99	180634	50.0	43.8	
104 2-Chlorotoluene	126	11.874	11.872	0.002	95	158451	50.0	45.7	
105 3-Chlorotoluene	126	11.934	11.933	0.001	95	169402	50.0	43.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.959	11.964	-0.005	94	538175	50.0	46.8	
107 4-Chlorotoluene	126	11.983	11.982	0.001	99	189803	50.0	50.6	
108 tert-Butylbenzene	119	12.287	12.286	0.001	94	415122	50.0	41.7	
110 1,2,4-Trimethylbenzene	105	12.336	12.335	0.001	99	539048	50.0	45.7	
111 1,2-dichloro-4-(trifluorom	214	12.403	12.402	0.001	99	168827	50.0	45.3	
112 sec-Butylbenzene	105	12.506	12.505	0.001	95	610612	50.0	43.6	
113 1,3-Dichlorobenzene	146	12.616	12.615	0.001	96	286533	50.0	46.5	
114 4-Isopropyltoluene	119	12.652	12.651	0.001	96	500184	50.0	43.2	
115 1,4-Dichlorobenzene	146	12.707	12.706	0.001	93	295780	50.0	47.0	
116 2,4-Dichloro-1-(triflourom	214	12.756	12.754	0.002	99	149904	50.0	42.9	
118 2,5-Dichlorobenzotrifluori	214	12.804	12.803	0.001	0	171633	50.0	43.9	
120 n-Butylbenzene	91	13.060	13.065	-0.005	98	429352	50.0	40.7	
121 1,2-Dichlorobenzene	146	13.078	13.077	0.001	96	259510	50.0	45.5	
122 1,2-Dibromo-3-Chloropropan	75	13.857	13.862	-0.005	75	18989	50.0	40.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.003	14.008	-0.005	0	445212	150.0	103.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.423	14.421	0.001	0	264337	100.0	63.1	
126 1,2,4-Trichlorobenzene	180	14.690	14.689	0.001	93	98900	50.0	33.3	
127 Hexachlorobutadiene	225	14.861	14.859	0.002	95	54870	50.0	38.5	
128 Naphthalene	128	14.940	14.938	0.002	97	223269	50.0	28.6	
129 1,2,3-Trichlorobenzene	180	15.183	15.182	0.001	96	77815	50.0	32.0	
131 2,4,5-Trichlorotoluene	159	15.962	15.960	0.002	0	24330	50.0	18.6	
130 2,3,6-Trichlorotoluene	159	16.065	16.064	0.001	94	24018	50.0	20.3	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	100.3	
S 134 1,2-Dichloroethene, Total	96				0		100.0	93.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	103.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00111	Amount Added:	2.00	Units: uL		
voaW ee2nd_00001	Amount Added:	2.00	Units: uL		
voaWKetpri Re_00004	Amount Added:	2.00	Units: uL		
voaW VA pri R_00005	Amount Added:	2.00	Units: uL		
voaW2-cle pri_00006	Amount Added:	2.00	Units: uL		
VOAACRO2ND_00007	Amount Added:	6.00	Units: uL		
VOA8260INT_00031	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00033	Amount Added:	2.00	Units: uL	Run Reagent	

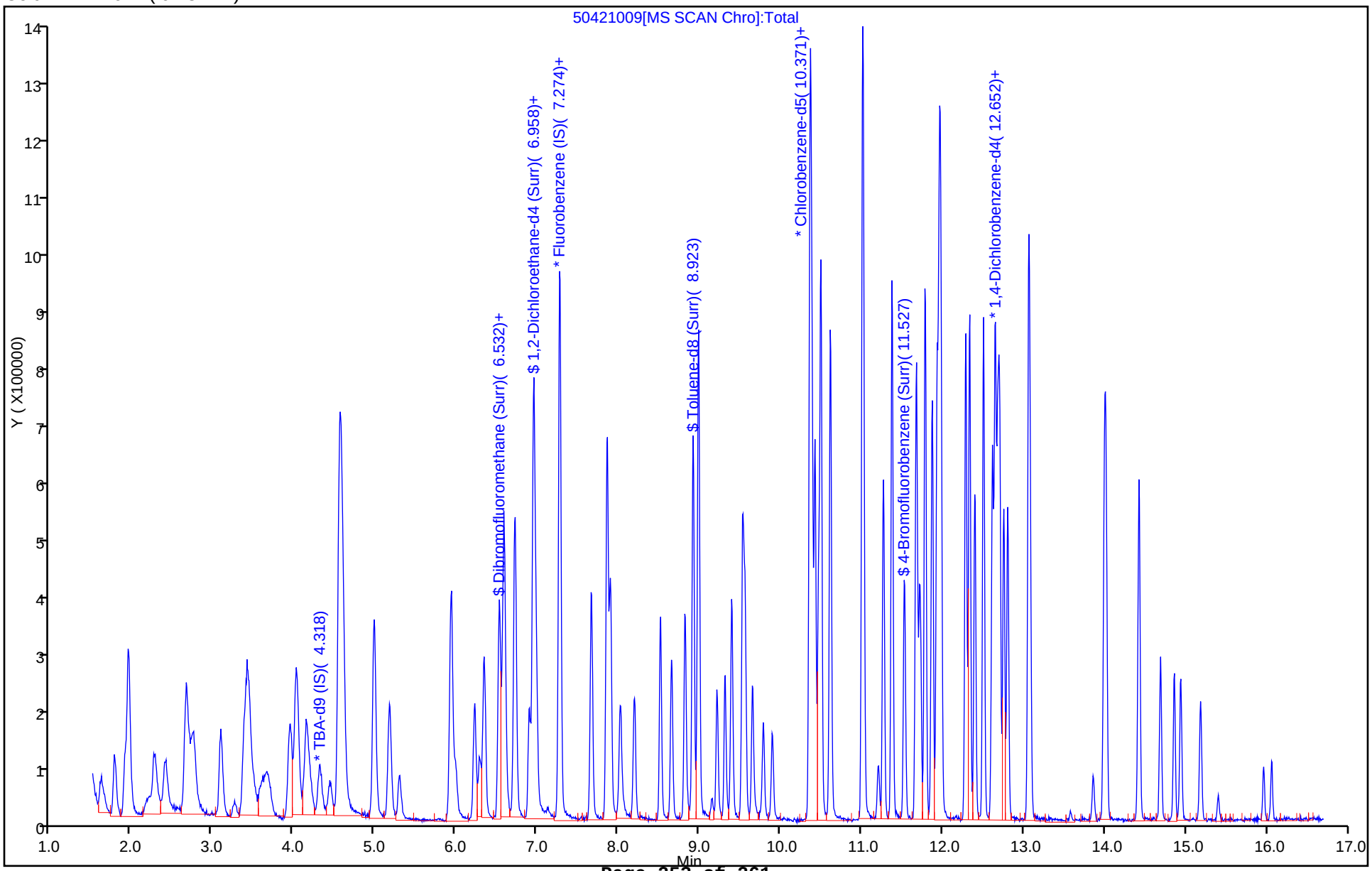
Report Date: 21-Apr-2015 14:55:54 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421009.D

Injection Date:	21-Apr-2015 14:13:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

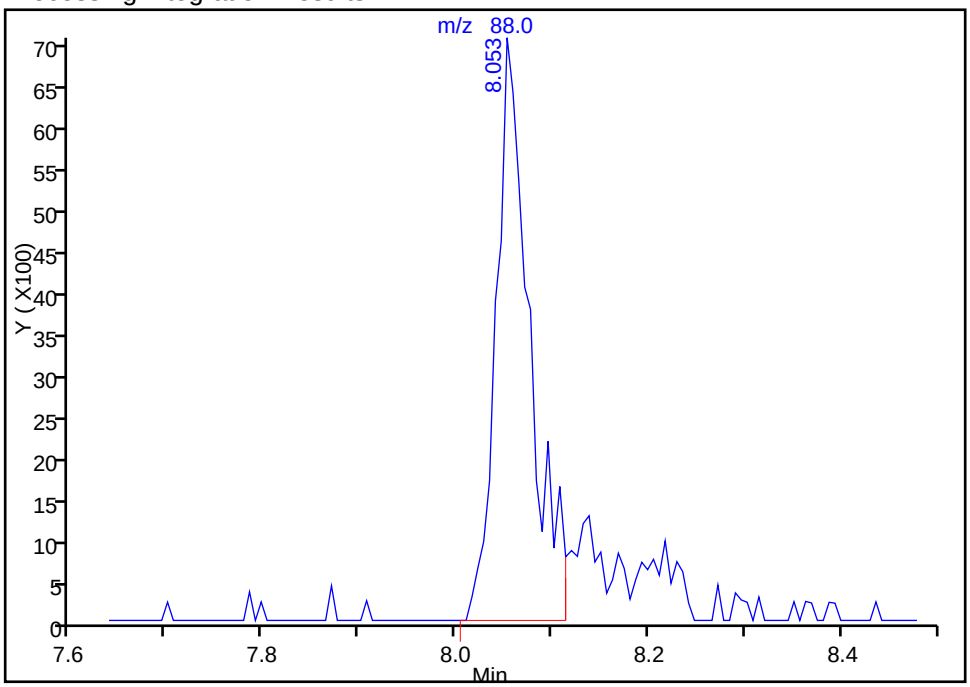
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150421-6566.b\50421009.D
Injection Date: 21-Apr-2015 14:13:30 Instrument ID: CHHP5
Lims ID: LCS
Client ID:
Operator ID: 001562 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

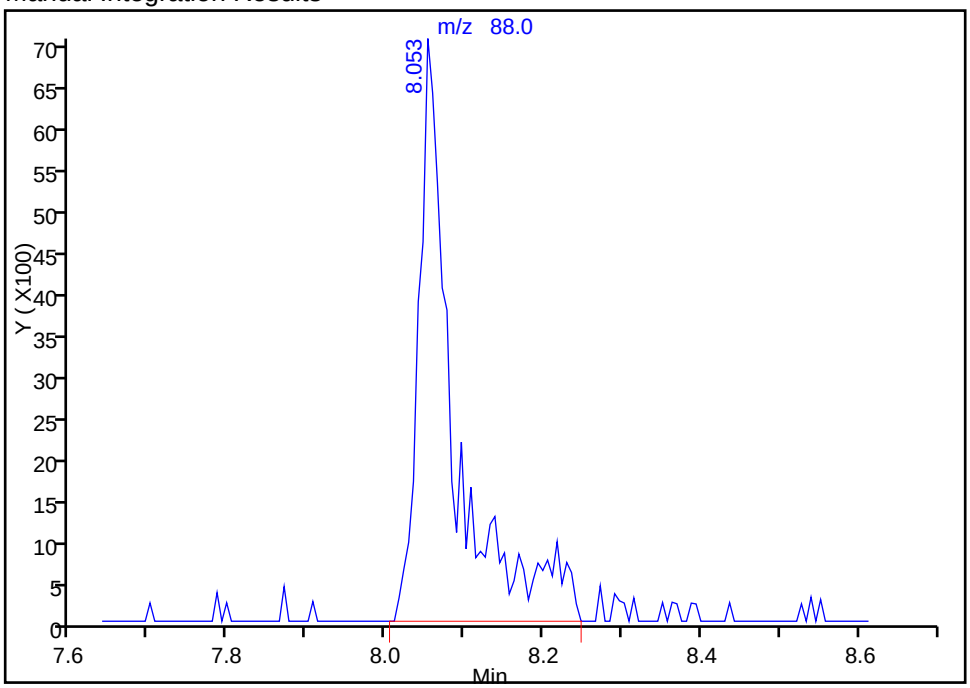
Processing Integration Results

RT: 8.05
Area: 17128
Amount: 494.3177
Amount Units: ng



Manual Integration Results

RT: 8.05
Area: 22307
Amount: 643.7848
Amount Units: ng



Reviewer: fergusond, 21-Apr-2015 14:35:21
Audit Action: Manually Integrated
Audit Reason: Peak Tail

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Instrument ID: CHHP5 Start Date: 03/16/2015 10:49

Analysis Batch Number: 135593 End Date: 03/16/2015 17:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-135593/1		03/16/2015 10:49	1	50316001.D	DB-624 0.18(mm)
IC 180-135593/4		03/16/2015 12:41	1	50316004.D	DB-624 0.18(mm)
ICIS 180-135593/5		03/16/2015 13:05	1	50316005.D	DB-624 0.18(mm)
IC 180-135593/6		03/16/2015 13:29	1	50316006.D	DB-624 0.18(mm)
IC 180-135593/7		03/16/2015 13:53	1	50316007.D	DB-624 0.18(mm)
IC 180-135593/8		03/16/2015 14:17	1	50316008.D	DB-624 0.18(mm)
IC 180-135593/9		03/16/2015 14:41	1	50316009.D	DB-624 0.18(mm)
IC 180-135593/10		03/16/2015 15:05	1	50316010.D	DB-624 0.18(mm)
IC 180-135593/13		03/16/2015 16:17	1	50316013.D	DB-624 0.18(mm)
ICV 180-135593/15		03/16/2015 17:05	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Instrument ID: CHHP5 Start Date: 04/20/2015 08:52

Analysis Batch Number: 139024 End Date: 04/20/2015 20:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-139024/4		04/20/2015 08:52	1	50420004.D	DB-624 0.18(mm)
CCVIS 180-139024/2		04/20/2015 09:32	1	50420002.D	DB-624 0.18(mm)
ZZZZZ		04/20/2015 09:32	1		DB-624 0.18(mm)
CCV 180-139024/3		04/20/2015 09:56	1	50420003.D	DB-624 0.18(mm)
MB 180-139024/12		04/20/2015 11:28	1	50420012.D	DB-624 0.18(mm)
ZZZZZ		04/20/2015 12:03	1		DB-624 0.18(mm)
ZZZZZ		04/20/2015 12:27	1		DB-624 0.18(mm)
ZZZZZ		04/20/2015 12:51	1		DB-624 0.18(mm)
LCS 180-139024/10		04/20/2015 13:16	1	50420010.D	DB-624 0.18(mm)
ZZZZZ		04/20/2015 14:28	1		DB-624 0.18(mm)
ZZZZZ		04/20/2015 14:52	1		DB-624 0.18(mm)
ZZZZZ		04/20/2015 15:16	1		DB-624 0.18(mm)
ZZZZZ		04/20/2015 15:40	1		DB-624 0.18(mm)
ZZZZZ		04/20/2015 16:05	1		DB-624 0.18(mm)
ZZZZZ		04/20/2015 16:29	1		DB-624 0.18(mm)
ZZZZZ		04/20/2015 16:53	1		DB-624 0.18(mm)
ZZZZZ		04/20/2015 17:17	1		DB-624 0.18(mm)
ZZZZZ		04/20/2015 17:41	3		DB-624 0.18(mm)
ZZZZZ		04/20/2015 18:05	5		DB-624 0.18(mm)
ZZZZZ		04/20/2015 18:30	5		DB-624 0.18(mm)
ZZZZZ		04/20/2015 18:54	1		DB-624 0.18(mm)
180-43134-1 DL	HD-MW-64D-0/1-0 DL	04/20/2015 19:18	25	50420026.D	DB-624 0.18(mm)
180-43134-3	HD-QC1-0/1-2	04/20/2015 19:42	1	50420027.D	DB-624 0.18(mm)
180-43134-2	HD-MW-141A-0/1-0	04/20/2015 20:06	1	50420028.D	DB-624 0.18(mm)
ZZZZZ		04/20/2015 20:30	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43134-1

SDG No.:

Instrument ID: CHHP5 Start Date: 04/21/2015 10:57

Analysis Batch Number: 139148 End Date: 04/21/2015 22:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-139148/4		04/21/2015 10:57	1	50421004.D	DB-624 0.18(mm)
CCVIS 180-139148/2		04/21/2015 11:38	1	50421002.D	DB-624 0.18(mm)
CCV 180-139148/3		04/21/2015 12:02	1	50421003.D	DB-624 0.18(mm)
MB 180-139148/6		04/21/2015 12:50	1	50421006.D	DB-624 0.18(mm)
ZZZZZ		04/21/2015 13:25	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 13:49	1		DB-624 0.18(mm)
LCS 180-139148/9		04/21/2015 14:13	1	50421009.D	DB-624 0.18(mm)
ZZZZZ		04/21/2015 14:38	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 15:02	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 15:50	3		DB-624 0.18(mm)
ZZZZZ		04/21/2015 16:14	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 16:38	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 17:02	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 17:26	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 17:50	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 18:15	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 18:39	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 19:03	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 19:27	20		DB-624 0.18(mm)
ZZZZZ		04/21/2015 19:51	12.5		DB-624 0.18(mm)
ZZZZZ		04/21/2015 20:15	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 21:03	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 21:27	1		DB-624 0.18(mm)
ZZZZZ		04/21/2015 21:52	1		DB-624 0.18(mm)
180-43134-1	HD-MW-64D-0/1-0	04/21/2015 22:16	2.5	50421029.D	DB-624 0.18(mm)

Shipping and Receiving Documents

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jennifer S. Reese	Site Contact: Jennifer S. Reese	DateSubmitted: 4/15/2015	COC No: TAP2015041501
Groundwater Sciences Corporation	Tel/Fax: 717-901-8181 / (717) 657-1611	Lab Contact: Carrie Gamber	Carrier: FEDEX	1 of 1 COCs
2601 Market Place St. Suite 310	Analysis Turnaround Time			Job No. 10012.26
Harrisburg, PA 17110	Calendar (C) or Work Days (W)			
(717) 901-8180 Phone	TAT if different from Below: Standard			Container No. 1
(717) 657-1611 FAX	☐ 2 weeks			SDG No.
Project Name: SPBA Sampling	☐ 1 week			
Site: Harley-Davidson, York PA	■ 5 days			
Quote # 18000557	☐ 1 day			

180-43134 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260C)	Sample Specific Notes:
HD-MW-64D-0/1-0	4/14/15	1335	Groundwater	Water	3	X	
HD-MW-141A-0/1-0	4/15/15	0932	Groundwater	Water	3	X	
HD-QC1-0/1-2 ~~HD-QC3-0/1-2~~ CSL	4/15/15	12:00	Trip Blank	Water	2	X	
					Number of Containers	3	
					Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Unpreserved 7=Zinc Acetate & NaOH	2	
					Field Filter	N	

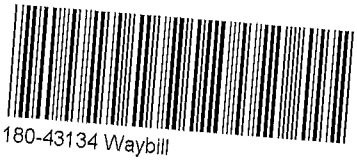
Possible Hazard Identification
■ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown*

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:	Date/Time:	Received by:	Company:	Date/Time:
CASEY LITTLEFIELD	GSC	4/15/15 1223		TAL	4/15/15 1223
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TA	4/15/15 1650	Dellue Watson	TAP	4-16-15 9:10
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

RT 197 10.00 6662
FZ 199 04.16



180-43134 Waybill

ORIGIN ID:KPDA
SAMPLE RECEIPT
TEST AMERICA
1008 WEST 9TH AVE

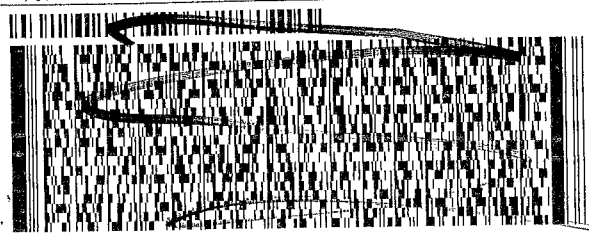
KING OF PRUSSIA, PA 19406
UNITED STATES US

CAD: 8450283/... 3610

BILL RECIPIENT

TO SAMPLE RECEIPT
TEST AMERICA - PITTSBURGH
301 ALPHA DR

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



FedEx Express

THU - 16 APR AA
TRK# 0201 7733 7977 6662 STANDARD OVERNIGHT

EV AGCA

15238
PA-US PIT

Uncorrected temp 4.1 °C
Thermometer ID 6
CF 0 Initials
PT-WI-SR-001 effective 7/26/13

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-43134-1

Login Number: 43134

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	