TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

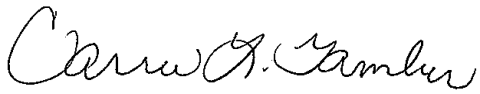
ANALYTICAL REPORT

Job Number: 180-47923-1

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
9/30/2015 9:10 AM

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09/30/2015

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
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.
^c	CCV Recovery is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

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

CASE NARRATIVE

Client: Groundwater Sciences Corporation

Project: Harley Davidson

Report Number: 180-47923-1

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 09/18/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.8 C.

VOLATILES

The following sample was diluted to bring the concentration of target analytes within the calibration range: HD-MW-136A-270/348-0 (180-47923-1). Elevated reporting limits (RLs) are provided.

cis-1,2-Dichloroethene failed the recovery criteria low for the MS/MSD of sample HD-CW-18-0/1-0 (180-47923-4) in batch 180-154899.

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-47923-1

Client Sample ID: HD-MW-136A-270/348-0 — Lab Sample ID: 180-47923-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	32	J	100	30	ug/L	100		8260C	Total/NA
1,1-Dichloroethane	15	J	100	12	ug/L	100		8260C	Total/NA
cis-1,2-Dichloroethene	17000	E	100	24	ug/L	100		8260C	Total/NA
Trichloroethene	57	J	100	14	ug/L	100		8260C	Total/NA
cis-1,2-Dichloroethene - DL	20000		1300	300	ug/L	1250		8260C	Total/NA

Client Sample ID: HD-RW-5-0/1-0 — Lab Sample ID: 180-47923-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.3		1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	0.82	J	1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.17	J	1.0	0.15	ug/L	1		8260C	Total/NA

Client Sample ID: HD-QC3-0/1-2 — Lab Sample ID: 180-47923-3

No Detections.

Client Sample ID: HD-CW-18-0/1-0 — Lab Sample ID: 180-47923-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.62	J	1.0	0.30	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	2.4		1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	19	F1	1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	8.6		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.34	J	1.0	0.15	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: HD-MW-136A-270/348-0
Date Collected: 09/17/15 14:12
Date Received: 09/18/15 09:00

Lab Sample ID: 180-47923-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		100	28	ug/L			09/25/15 21:32	100
Vinyl chloride	ND		100	23	ug/L			09/25/15 21:32	100
Bromomethane	ND		100	31	ug/L			09/25/15 21:32	100
Chloroethane	ND		100	21	ug/L			09/25/15 21:32	100
1,1-Dichloroethene	**32**	**J**	100	30	ug/L			09/25/15 21:32	100
Acetone	ND		500	250	ug/L			09/25/15 21:32	100
Carbon disulfide	ND		100	21	ug/L			09/25/15 21:32	100
Methylene Chloride	ND		100	13	ug/L			09/25/15 21:32	100
trans-1,2-Dichloroethene	ND		100	17	ug/L			09/25/15 21:32	100
Methyl tert-butyl ether	ND		100	18	ug/L			09/25/15 21:32	100
1,1-Dichloroethane	**15**	**J**	100	12	ug/L			09/25/15 21:32	100
cis-1,2-Dichloroethene	**17000**	**E**	100	24	ug/L			09/25/15 21:32	100
Bromochloromethane	ND		100	18	ug/L			09/25/15 21:32	100
2-Butanone (MEK)	ND		500	55	ug/L			09/25/15 21:32	100
Chloroform	ND		100	17	ug/L			09/25/15 21:32	100
1,1,1-Trichloroethane	ND		100	29	ug/L			09/25/15 21:32	100
Carbon tetrachloride	ND		100	14	ug/L			09/25/15 21:32	100
Benzene	ND		100	11	ug/L			09/25/15 21:32	100
1,2-Dichloroethane	ND		100	21	ug/L			09/25/15 21:32	100
Trichloroethene	**57**	**J**	100	14	ug/L			09/25/15 21:32	100
1,2-Dichloropropane	ND		100	9.5	ug/L			09/25/15 21:32	100
Bromodichloromethane	ND		100	13	ug/L			09/25/15 21:32	100
cis-1,3-Dichloropropene	ND		100	19	ug/L			09/25/15 21:32	100
4-Methyl-2-pentanone (MIBK)	ND		500	53	ug/L			09/25/15 21:32	100
Toluene	ND		100	15	ug/L			09/25/15 21:32	100
trans-1,3-Dichloropropene	ND		100	15	ug/L			09/25/15 21:32	100
1,1,2-Trichloroethane	ND		100	20	ug/L			09/25/15 21:32	100
Tetrachloroethene	ND		100	15	ug/L			09/25/15 21:32	100
2-Hexanone	ND		500	16	ug/L			09/25/15 21:32	100
Dibromochloromethane	ND	^c	100	14	ug/L			09/25/15 21:32	100
1,2-Dibromoethane (EDB)	ND		100	18	ug/L			09/25/15 21:32	100
Chlorobenzene	ND		100	14	ug/L			09/25/15 21:32	100
1,1,1,2-Tetrachloroethane	ND		100	28	ug/L			09/25/15 21:32	100
Ethylbenzene	ND		100	23	ug/L			09/25/15 21:32	100
Xylenes, Total	ND		300	49	ug/L			09/25/15 21:32	100
Styrene	ND		100	9.7	ug/L			09/25/15 21:32	100
Bromoform	ND		100	19	ug/L			09/25/15 21:32	100
1,1,2,2-Tetrachloroethane	ND		100	20	ug/L			09/25/15 21:32	100
Acrylonitrile	ND		2000	55	ug/L			09/25/15 21:32	100
1,4-Dioxane	ND		20000	3400	ug/L			09/25/15 21:32	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 135*		*09/25/15 21:32*	*100*
Toluene-d8 (Surr)	*108*		*71 - 118*		*09/25/15 21:32*	*100*
4-Bromofluorobenzene (Surr)	*87*		*70 - 118*		*09/25/15 21:32*	*100*
Dibromofluoromethane (Surr)	*114*		*70 - 128*		*09/25/15 21:32*	*100*

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

Client Sample ID: HD-RW-5-0/1-0
Date Collected: 09/17/15 14:40
Date Received: 09/18/15 09:00

Lab Sample ID: 180-47923-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.28	ug/L			09/25/15 22:20	1
Vinyl chloride	ND		1.0	0.23	ug/L			09/25/15 22:20	1
Bromomethane	ND		1.0	0.31	ug/L			09/25/15 22:20	1
Chloroethane	ND		1.0	0.21	ug/L			09/25/15 22:20	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/25/15 22:20	1
Acetone	ND		5.0	2.5	ug/L			09/25/15 22:20	1
Carbon disulfide	ND		1.0	0.21	ug/L			09/25/15 22:20	1
Methylene Chloride	ND		1.0	0.13	ug/L			09/25/15 22:20	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			09/25/15 22:20	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			09/25/15 22:20	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			09/25/15 22:20	1
cis-1,2-Dichloroethene	**1.3**		1.0	0.24	ug/L			09/25/15 22:20	1
Bromochloromethane	ND		1.0	0.18	ug/L			09/25/15 22:20	1
2-Butanone (MEK)	ND		5.0	0.55	ug/L			09/25/15 22:20	1
Chloroform	ND		1.0	0.17	ug/L			09/25/15 22:20	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			09/25/15 22:20	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			09/25/15 22:20	1
Benzene	ND		1.0	0.11	ug/L			09/25/15 22:20	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/25/15 22:20	1
Trichloroethene	**0.82**	**J**	1.0	0.14	ug/L			09/25/15 22:20	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			09/25/15 22:20	1
Bromodichloromethane	ND		1.0	0.13	ug/L			09/25/15 22:20	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			09/25/15 22:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.53	ug/L			09/25/15 22:20	1
Toluene	ND		1.0	0.15	ug/L			09/25/15 22:20	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			09/25/15 22:20	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			09/25/15 22:20	1
Tetrachloroethene	**0.17**	**J**	1.0	0.15	ug/L			09/25/15 22:20	1
2-Hexanone	ND		5.0	0.16	ug/L			09/25/15 22:20	1
Dibromochloromethane	ND	^c	1.0	0.14	ug/L			09/25/15 22:20	1
1,2-Dibromoethane (EDB)	ND		1.0	0.18	ug/L			09/25/15 22:20	1
Chlorobenzene	ND		1.0	0.14	ug/L			09/25/15 22:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.28	ug/L			09/25/15 22:20	1
Ethylbenzene	ND		1.0	0.23	ug/L			09/25/15 22:20	1
Xylenes, Total	ND		3.0	0.49	ug/L			09/25/15 22:20	1
Styrene	ND		1.0	0.097	ug/L			09/25/15 22:20	1
Bromoform	ND		1.0	0.19	ug/L			09/25/15 22:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			09/25/15 22:20	1
Acrylonitrile	ND		20	0.55	ug/L			09/25/15 22:20	1
1,4-Dioxane	ND		200	34	ug/L			09/25/15 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*64 - 135*		*09/25/15 22:20*	*1*
Toluene-d8 (Surr)	*101*		*71 - 118*		*09/25/15 22:20*	*1*
4-Bromofluorobenzene (Surr)	*83*		*70 - 118*		*09/25/15 22:20*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 128*		*09/25/15 22:20*	*1*

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

Client Sample ID: HD-QC3-0/1-2
Date Collected: 09/17/15 12:00
Date Received: 09/18/15 09:00

Lab Sample ID: 180-47923-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.28	ug/L			09/25/15 15:03	1
Vinyl chloride	ND		1.0	0.23	ug/L			09/25/15 15:03	1
Bromomethane	ND		1.0	0.31	ug/L			09/25/15 15:03	1
Chloroethane	ND		1.0	0.21	ug/L			09/25/15 15:03	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/25/15 15:03	1
Acetone	ND		5.0	2.5	ug/L			09/25/15 15:03	1
Carbon disulfide	ND		1.0	0.21	ug/L			09/25/15 15:03	1
Methylene Chloride	ND		1.0	0.13	ug/L			09/25/15 15:03	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			09/25/15 15:03	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			09/25/15 15:03	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			09/25/15 15:03	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			09/25/15 15:03	1
Bromochloromethane	ND		1.0	0.18	ug/L			09/25/15 15:03	1
2-Butanone (MEK)	ND		5.0	0.55	ug/L			09/25/15 15:03	1
Chloroform	ND		1.0	0.17	ug/L			09/25/15 15:03	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			09/25/15 15:03	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			09/25/15 15:03	1
Benzene	ND		1.0	0.11	ug/L			09/25/15 15:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/25/15 15:03	1
Trichloroethene	ND		1.0	0.14	ug/L			09/25/15 15:03	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			09/25/15 15:03	1
Bromodichloromethane	ND		1.0	0.13	ug/L			09/25/15 15:03	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			09/25/15 15:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.53	ug/L			09/25/15 15:03	1
Toluene	ND		1.0	0.15	ug/L			09/25/15 15:03	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			09/25/15 15:03	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			09/25/15 15:03	1
Tetrachloroethene	ND		1.0	0.15	ug/L			09/25/15 15:03	1
2-Hexanone	ND		5.0	0.16	ug/L			09/25/15 15:03	1
Dibromochloromethane	ND	^c	1.0	0.14	ug/L			09/25/15 15:03	1
1,2-Dibromoethane (EDB)	ND		1.0	0.18	ug/L			09/25/15 15:03	1
Chlorobenzene	ND		1.0	0.14	ug/L			09/25/15 15:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.28	ug/L			09/25/15 15:03	1
Ethylbenzene	ND		1.0	0.23	ug/L			09/25/15 15:03	1
Xylenes, Total	ND		3.0	0.49	ug/L			09/25/15 15:03	1
Styrene	ND		1.0	0.097	ug/L			09/25/15 15:03	1
Bromoform	ND		1.0	0.19	ug/L			09/25/15 15:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			09/25/15 15:03	1
Acrylonitrile	ND		20	0.55	ug/L			09/25/15 15:03	1
1,4-Dioxane	ND		200	34	ug/L			09/25/15 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 135*		*09/25/15 15:03*	*1*
Toluene-d8 (Surr)	*105*		*71 - 118*		*09/25/15 15:03*	*1*
4-Bromofluorobenzene (Surr)	*82*		*70 - 118*		*09/25/15 15:03*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 128*		*09/25/15 15:03*	*1*

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

Client Sample ID: HD-CW-18-0/1-0
Date Collected: 09/17/15 14:10
Date Received: 09/18/15 09:00

Lab Sample ID: 180-47923-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.28	ug/L			09/25/15 14:39	1
Vinyl chloride	ND		1.0	0.23	ug/L			09/25/15 14:39	1
Bromomethane	ND		1.0	0.31	ug/L			09/25/15 14:39	1
Chloroethane	ND		1.0	0.21	ug/L			09/25/15 14:39	1
1,1-Dichloroethene	**0.62**	**J**	1.0	0.30	ug/L			09/25/15 14:39	1
Acetone	ND		5.0	2.5	ug/L			09/25/15 14:39	1
Carbon disulfide	ND		1.0	0.21	ug/L			09/25/15 14:39	1
Methylene Chloride	ND		1.0	0.13	ug/L			09/25/15 14:39	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			09/25/15 14:39	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			09/25/15 14:39	1
1,1-Dichloroethane	**2.4**		1.0	0.12	ug/L			09/25/15 14:39	1
cis-1,2-Dichloroethene	**19**	**F1**	1.0	0.24	ug/L			09/25/15 14:39	1
Bromochloromethane	ND		1.0	0.18	ug/L			09/25/15 14:39	1
2-Butanone (MEK)	ND		5.0	0.55	ug/L			09/25/15 14:39	1
Chloroform	ND		1.0	0.17	ug/L			09/25/15 14:39	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			09/25/15 14:39	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			09/25/15 14:39	1
Benzene	ND		1.0	0.11	ug/L			09/25/15 14:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/25/15 14:39	1
Trichloroethene	**8.6**		1.0	0.14	ug/L			09/25/15 14:39	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			09/25/15 14:39	1
Bromodichloromethane	ND		1.0	0.13	ug/L			09/25/15 14:39	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			09/25/15 14:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.53	ug/L			09/25/15 14:39	1
Toluene	ND		1.0	0.15	ug/L			09/25/15 14:39	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			09/25/15 14:39	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			09/25/15 14:39	1
Tetrachloroethene	**0.34**	**J**	1.0	0.15	ug/L			09/25/15 14:39	1
2-Hexanone	ND		5.0	0.16	ug/L			09/25/15 14:39	1
Dibromochloromethane	ND	^c	1.0	0.14	ug/L			09/25/15 14:39	1
1,2-Dibromoethane (EDB)	ND		1.0	0.18	ug/L			09/25/15 14:39	1
Chlorobenzene	ND		1.0	0.14	ug/L			09/25/15 14:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.28	ug/L			09/25/15 14:39	1
Ethylbenzene	ND		1.0	0.23	ug/L			09/25/15 14:39	1
Xylenes, Total	ND		3.0	0.49	ug/L			09/25/15 14:39	1
Styrene	ND		1.0	0.097	ug/L			09/25/15 14:39	1
Bromoform	ND		1.0	0.19	ug/L			09/25/15 14:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			09/25/15 14:39	1
Acrylonitrile	ND		20	0.55	ug/L			09/25/15 14:39	1
1,4-Dioxane	ND		200	34	ug/L			09/25/15 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 135*		*09/25/15 14:39*	*1*
Toluene-d8 (Surr)	*105*		*71 - 118*		*09/25/15 14:39*	*1*
4-Bromofluorobenzene (Surr)	*86*		*70 - 118*		*09/25/15 14:39*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 128*		*09/25/15 14:39*	*1*

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

Client Sample ID: HD-MW-136A-270/348-0
Date Collected: 09/17/15 14:12
Date Received: 09/18/15 09:00

Lab Sample ID: 180-47923-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1300	350	ug/L			09/28/15 15:58	1250
Vinyl chloride	ND		1300	280	ug/L			09/28/15 15:58	1250
Bromomethane	ND		1300	390	ug/L			09/28/15 15:58	1250
Chloroethane	ND		1300	270	ug/L			09/28/15 15:58	1250
1,1-Dichloroethene	ND		1300	370	ug/L			09/28/15 15:58	1250
Acetone	ND		6300	3100	ug/L			09/28/15 15:58	1250
Carbon disulfide	ND		1300	270	ug/L			09/28/15 15:58	1250
Methylene Chloride	ND		1300	160	ug/L			09/28/15 15:58	1250
trans-1,2-Dichloroethene	ND		1300	210	ug/L			09/28/15 15:58	1250
Methyl tert-butyl ether	ND		1300	230	ug/L			09/28/15 15:58	1250
1,1-Dichloroethane	ND		1300	150	ug/L			09/28/15 15:58	1250
cis-1,2-Dichloroethene	**20000**		1300	300	ug/L			09/28/15 15:58	1250
Bromochloromethane	ND		1300	230	ug/L			09/28/15 15:58	1250
2-Butanone (MEK)	ND		6300	680	ug/L			09/28/15 15:58	1250
Chloroform	ND		1300	210	ug/L			09/28/15 15:58	1250
1,1,1-Trichloroethane	ND		1300	360	ug/L			09/28/15 15:58	1250
Carbon tetrachloride	ND		1300	170	ug/L			09/28/15 15:58	1250
Benzene	ND		1300	130	ug/L			09/28/15 15:58	1250
1,2-Dichloroethane	ND		1300	260	ug/L			09/28/15 15:58	1250
Trichloroethene	ND		1300	180	ug/L			09/28/15 15:58	1250
1,2-Dichloropropane	ND		1300	120	ug/L			09/28/15 15:58	1250
Bromodichloromethane	ND		1300	160	ug/L			09/28/15 15:58	1250
cis-1,3-Dichloropropene	ND		1300	230	ug/L			09/28/15 15:58	1250
4-Methyl-2-pentanone (MIBK)	ND		6300	660	ug/L			09/28/15 15:58	1250
Toluene	ND		1300	190	ug/L			09/28/15 15:58	1250
trans-1,3-Dichloropropene	ND		1300	190	ug/L			09/28/15 15:58	1250
1,1,2-Trichloroethane	ND		1300	250	ug/L			09/28/15 15:58	1250
Tetrachloroethene	ND		1300	190	ug/L			09/28/15 15:58	1250
2-Hexanone	ND	^c	6300	200	ug/L			09/28/15 15:58	1250
Dibromochloromethane	ND		1300	170	ug/L			09/28/15 15:58	1250
1,2-Dibromoethane (EDB)	ND		1300	230	ug/L			09/28/15 15:58	1250
Chlorobenzene	ND		1300	170	ug/L			09/28/15 15:58	1250
1,1,1,2-Tetrachloroethane	ND		1300	350	ug/L			09/28/15 15:58	1250
Ethylbenzene	ND		1300	280	ug/L			09/28/15 15:58	1250
Xylenes, Total	ND		3800	610	ug/L			09/28/15 15:58	1250
Styrene	ND		1300	120	ug/L			09/28/15 15:58	1250
Bromoform	ND		1300	240	ug/L			09/28/15 15:58	1250
1,1,2,2-Tetrachloroethane	ND		1300	250	ug/L			09/28/15 15:58	1250
Acrylonitrile	ND		25000	680	ug/L			09/28/15 15:58	1250
1,4-Dioxane	ND		250000	43000	ug/L			09/28/15 15:58	1250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*64 - 135*		*09/28/15 15:58*	*1250*
Toluene-d8 (Surr)	*104*		*71 - 118*		*09/28/15 15:58*	*1250*
4-Bromofluorobenzene (Surr)	*97*		*70 - 118*		*09/28/15 15:58*	*1250*
Dibromofluoromethane (Surr)	*96*		*70 - 128*		*09/28/15 15:58*	*1250*

Default Detection Limits

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-47923-1

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: 180-47923-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (64-135)	TOL (71-118)	BFB (70-118)	DBFM (70-128)
180-47923-1	HD-MW-136A-270/348-0	105	108	87	114
180-47923-1 - DL	HD-MW-136A-270/348-0	98	104	97	96
180-47923-2	HD-RW-5-0/1-0	111	101	83	115
180-47923-3	HD-QC3-0/1-2	108	105	82	113
180-47923-4	HD-CW-18-0/1-0	100	105	86	109
180-47923-4 MS	HD-CW-18-0/1-0	95	101	93	102
180-47923-4 MSD	HD-CW-18-0/1-0	96	98	91	100
LCS 180-154899/7	Lab Control Sample	100	96	87	103
LCS 180-155089/8	Lab Control Sample	98	101	96	96
MB 180-154899/4	Method Blank	105	104	83	109
MB 180-155089/4	Method Blank	99	107	95	90

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 180-154899/4
Matrix: Water
Analysis Batch: 154899

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.28	ug/L			09/25/15 14:02	1
Vinyl chloride	ND		1.0	0.23	ug/L			09/25/15 14:02	1
Bromomethane	ND		1.0	0.31	ug/L			09/25/15 14:02	1
Chloroethane	ND		1.0	0.21	ug/L			09/25/15 14:02	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/25/15 14:02	1
Acetone	ND		5.0	2.5	ug/L			09/25/15 14:02	1
Carbon disulfide	ND		1.0	0.21	ug/L			09/25/15 14:02	1
Methylene Chloride	ND		1.0	0.13	ug/L			09/25/15 14:02	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			09/25/15 14:02	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			09/25/15 14:02	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			09/25/15 14:02	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			09/25/15 14:02	1
Bromochloromethane	ND		1.0	0.18	ug/L			09/25/15 14:02	1
2-Butanone (MEK)	ND		5.0	0.55	ug/L			09/25/15 14:02	1
Chloroform	ND		1.0	0.17	ug/L			09/25/15 14:02	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			09/25/15 14:02	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			09/25/15 14:02	1
Benzene	ND		1.0	0.11	ug/L			09/25/15 14:02	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/25/15 14:02	1
Trichloroethene	ND		1.0	0.14	ug/L			09/25/15 14:02	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			09/25/15 14:02	1
Bromodichloromethane	ND		1.0	0.13	ug/L			09/25/15 14:02	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			09/25/15 14:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.53	ug/L			09/25/15 14:02	1
Toluene	ND		1.0	0.15	ug/L			09/25/15 14:02	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			09/25/15 14:02	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			09/25/15 14:02	1
Tetrachloroethene	ND		1.0	0.15	ug/L			09/25/15 14:02	1
2-Hexanone	ND		5.0	0.16	ug/L			09/25/15 14:02	1
Dibromochloromethane	ND		1.0	0.14	ug/L			09/25/15 14:02	1
1,2-Dibromoethane (EDB)	ND		1.0	0.18	ug/L			09/25/15 14:02	1
Chlorobenzene	ND		1.0	0.14	ug/L			09/25/15 14:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.28	ug/L			09/25/15 14:02	1
Ethylbenzene	ND		1.0	0.23	ug/L			09/25/15 14:02	1
Xylenes, Total	ND		3.0	0.49	ug/L			09/25/15 14:02	1
Styrene	ND		1.0	0.097	ug/L			09/25/15 14:02	1
Bromoform	ND		1.0	0.19	ug/L			09/25/15 14:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			09/25/15 14:02	1
Acrylonitrile	ND		20	0.55	ug/L			09/25/15 14:02	1
1,4-Dioxane	ND		200	34	ug/L			09/25/15 14:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 135*		*09/25/15 14:02*	*1*
Toluene-d8 (Surr)	*104*		*71 - 118*		*09/25/15 14:02*	*1*
4-Bromofluorobenzene (Surr)	*83*		*70 - 118*		*09/25/15 14:02*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 128*		*09/25/15 14:02*	*1*

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

Lab Sample ID: LCS 180-154899/7
Matrix: Water
Analysis Batch: 154899

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	11.2		ug/L		112	50 - 139
Vinyl chloride	10.0	9.83		ug/L		98	53 - 138
Bromomethane	10.0	8.69		ug/L		87	33 - 150
Chloroethane	10.0	8.92		ug/L		89	36 - 142
1,1-Dichloroethene	10.0	8.22		ug/L		82	65 - 136
Acetone	20.0	19.7		ug/L		98	22 - 150
Carbon disulfide	10.0	8.92		ug/L		89	54 - 132
Methylene Chloride	10.0	8.74		ug/L		87	63 - 129
trans-1,2-Dichloroethene	10.0	8.75		ug/L		87	73 - 126
Methyl tert-butyl ether	10.0	8.07		ug/L		81	64 - 123
1,1-Dichloroethane	10.0	9.09		ug/L		91	73 - 126
cis-1,2-Dichloroethene	10.0	8.57		ug/L		86	70 - 120
Bromochloromethane	10.0	10.9		ug/L		109	70 - 127
2-Butanone (MEK)	20.0	21.5		ug/L		107	39 - 138
Chloroform	10.0	9.33		ug/L		93	72 - 127
1,1,1-Trichloroethane	10.0	8.30		ug/L		83	63 - 133
Carbon tetrachloride	10.0	8.89		ug/L		89	55 - 150
Benzene	10.0	9.23		ug/L		92	80 - 120
1,2-Dichloroethane	10.0	9.86		ug/L		99	68 - 132
Trichloroethene	10.0	10.8		ug/L		108	73 - 120
1,2-Dichloropropane	10.0	10.6		ug/L		106	76 - 124
Bromodichloromethane	10.0	9.72		ug/L		97	66 - 130
cis-1,3-Dichloropropene	10.0	9.79		ug/L		98	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	20.5		ug/L		102	45 - 145
Toluene	10.0	9.40		ug/L		94	80 - 123
trans-1,3-Dichloropropene	10.0	8.96		ug/L		90	65 - 125
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	77 - 127
Tetrachloroethene	10.0	10.1		ug/L		101	70 - 135
2-Hexanone	20.0	22.9		ug/L		115	25 - 132
Dibromochloromethane	10.0	11.1		ug/L		111	60 - 140
1,2-Dibromoethane (EDB)	10.0	10.4		ug/L		104	74 - 123
Chlorobenzene	10.0	10.4		ug/L		104	80 - 120
1,1,1,2-Tetrachloroethane	10.0	10.8		ug/L		108	63 - 140
Ethylbenzene	10.0	9.89		ug/L		99	72 - 126
Xylenes, Total	20.0	19.2		ug/L		96	76 - 128
Styrene	10.0	10.6		ug/L		106	71 - 127
Bromoform	10.0	11.6		ug/L		116	46 - 150
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	62 - 125
Acrylonitrile	100	110		ug/L		110	30 - 140
1,4-Dioxane	200	197	J	ug/L		99	10 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 135*
Toluene-d8 (Surr)	*96*		*71 - 118*
4-Bromofluorobenzene (Surr)	*87*		*70 - 118*
Dibromofluoromethane (Surr)	*103*		*70 - 128*

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

Lab Sample ID: 180-47923-4 MS
Matrix: Water
Analysis Batch: 154899

Client Sample ID: HD-CW-18-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	ND		10.0	10.4		ug/L		104	50 - 139
Vinyl chloride	ND		10.0	9.66		ug/L		97	53 - 138
Bromomethane	ND		10.0	8.03		ug/L		80	33 - 150
Chloroethane	ND		10.0	8.63		ug/L		86	36 - 142
1,1-Dichloroethene	0.62	J	10.0	8.60		ug/L		80	65 - 136
Acetone	ND		20.0	18.5		ug/L		92	22 - 150
Carbon disulfide	ND		10.0	8.63		ug/L		86	54 - 132
Methylene Chloride	ND		10.0	7.65		ug/L		77	63 - 129
trans-1,2-Dichloroethene	ND		10.0	8.25		ug/L		83	73 - 126
Methyl tert-butyl ether	ND		10.0	7.85		ug/L		79	64 - 123
1,1-Dichloroethane	2.4		10.0	11.0		ug/L		85	73 - 126
cis-1,2-Dichloroethene	19	F1	10.0	26.3	F1	ug/L		69	70 - 120
Bromochloromethane	ND		10.0	9.64		ug/L		96	70 - 127
2-Butanone (MEK)	ND		20.0	20.7		ug/L		103	39 - 138
Chloroform	ND		10.0	8.55		ug/L		86	72 - 127
1,1,1-Trichloroethane	ND		10.0	7.94		ug/L		79	63 - 133
Carbon tetrachloride	ND		10.0	8.63		ug/L		86	55 - 150
Benzene	ND		10.0	8.72		ug/L		87	80 - 120
1,2-Dichloroethane	ND		10.0	8.98		ug/L		90	68 - 132
Trichloroethene	8.6		10.0	17.8		ug/L		92	73 - 120
1,2-Dichloropropane	ND		10.0	9.35		ug/L		94	76 - 124
Bromodichloromethane	ND		10.0	8.91		ug/L		89	66 - 130
cis-1,3-Dichloropropene	ND		10.0	8.65		ug/L		87	66 - 120
4-Methyl-2-pentanone (MIBK)	ND		20.0	20.8		ug/L		104	45 - 145
Toluene	ND		10.0	9.16		ug/L		92	80 - 123
trans-1,3-Dichloropropene	ND		10.0	8.79		ug/L		88	65 - 125
1,1,2-Trichloroethane	ND		10.0	10.2		ug/L		102	77 - 127
Tetrachloroethene	0.34	J	10.0	10.7		ug/L		104	70 - 135
2-Hexanone	ND		20.0	22.8		ug/L		114	25 - 132
Dibromochloromethane	ND	^c	10.0	10.6		ug/L		106	60 - 140
1,2-Dibromoethane (EDB)	ND		10.0	10.4		ug/L		104	74 - 123
Chlorobenzene	ND		10.0	10.5		ug/L		105	80 - 120
1,1,1,2-Tetrachloroethane	ND		10.0	11.1		ug/L		111	63 - 140
Ethylbenzene	ND		10.0	9.88		ug/L		99	72 - 126
Xylenes, Total	ND		20.0	19.4		ug/L		97	76 - 128
Styrene	ND		10.0	10.6		ug/L		106	71 - 127
Bromoform	ND		10.0	11.6		ug/L		116	46 - 150
1,1,2,2-Tetrachloroethane	ND		10.0	10.5		ug/L		105	62 - 125
Acrylonitrile	ND		100	100		ug/L		100	30 - 140
1,4-Dioxane	ND		200	200		ug/L		100	10 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*64 - 135*
Toluene-d8 (Surr)	*101*		*71 - 118*
4-Bromofluorobenzene (Surr)	*93*		*70 - 118*
Dibromofluoromethane (Surr)	*102*		*70 - 128*

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

Lab Sample ID: 180-47923-4 MSD
Matrix: Water
Analysis Batch: 154899

Client Sample ID: HD-CW-18-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane	ND		10.0	10.5		ug/L		105	50 - 139	2	35
Vinyl chloride	ND		10.0	9.42		ug/L		94	53 - 138	2	35
Bromomethane	ND		10.0	7.58		ug/L		76	33 - 150	6	35
Chloroethane	ND		10.0	8.56		ug/L		86	36 - 142	1	35
1,1-Dichloroethene	0.62	J	10.0	8.47		ug/L		79	65 - 136	1	35
Acetone	ND		20.0	17.3		ug/L		86	22 - 150	7	35
Carbon disulfide	ND		10.0	8.08		ug/L		81	54 - 132	7	35
Methylene Chloride	ND		10.0	7.73		ug/L		77	63 - 129	1	35
trans-1,2-Dichloroethene	ND		10.0	8.38		ug/L		84	73 - 126	2	35
Methyl tert-butyl ether	ND		10.0	7.79		ug/L		78	64 - 123	1	35
1,1-Dichloroethane	2.4		10.0	10.6		ug/L		81	73 - 126	4	35
cis-1,2-Dichloroethene	19	F1	10.0	24.6	F1	ug/L		52	70 - 120	7	35
Bromochloromethane	ND		10.0	9.16		ug/L		92	70 - 127	5	35
2-Butanone (MEK)	ND		20.0	20.2		ug/L		101	39 - 138	2	35
Chloroform	ND		10.0	8.61		ug/L		86	72 - 127	1	35
1,1,1-Trichloroethane	ND		10.0	8.03		ug/L		80	63 - 133	1	35
Carbon tetrachloride	ND		10.0	8.20		ug/L		82	55 - 150	5	35
Benzene	ND		10.0	8.49		ug/L		85	80 - 120	3	32
1,2-Dichloroethane	ND		10.0	8.87		ug/L		89	68 - 132	1	32
Trichloroethene	8.6		10.0	17.9		ug/L		93	73 - 120	1	35
1,2-Dichloropropane	ND		10.0	9.43		ug/L		94	76 - 124	1	34
Bromodichloromethane	ND		10.0	8.69		ug/L		87	66 - 130	3	35
cis-1,3-Dichloropropene	ND		10.0	8.42		ug/L		84	66 - 120	3	35
4-Methyl-2-pentanone (MIBK)	ND		20.0	19.4		ug/L		97	45 - 145	7	35
Toluene	ND		10.0	8.87		ug/L		89	80 - 123	3	35
trans-1,3-Dichloropropene	ND		10.0	8.23		ug/L		82	65 - 125	7	35
1,1,2-Trichloroethane	ND		10.0	9.56		ug/L		96	77 - 127	6	35
Tetrachloroethene	0.34	J	10.0	10.3		ug/L		100	70 - 135	3	35
2-Hexanone	ND		20.0	22.1		ug/L		110	25 - 132	3	35
Dibromochloromethane	ND	^c	10.0	9.65		ug/L		97	60 - 140	9	35
1,2-Dibromoethane (EDB)	ND		10.0	10.2		ug/L		102	74 - 123	2	35
Chlorobenzene	ND		10.0	10.1		ug/L		101	80 - 120	3	29
1,1,1,2-Tetrachloroethane	ND		10.0	9.99		ug/L		100	63 - 140	10	34
Ethylbenzene	ND		10.0	9.65		ug/L		97	72 - 126	2	33
Xylenes, Total	ND		20.0	18.9		ug/L		94	76 - 128	3	32
Styrene	ND		10.0	9.91		ug/L		99	71 - 127	7	34
Bromoform	ND		10.0	10.1		ug/L		101	46 - 150	13	35
1,1,2,2-Tetrachloroethane	ND		10.0	10.2		ug/L		102	62 - 125	3	35
Acrylonitrile	ND		100	99.1		ug/L		99	30 - 140	1	35
1,4-Dioxane	ND		200	219		ug/L		109	10 - 160	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 135*
Toluene-d8 (Surr)	*98*		*71 - 118*
4-Bromofluorobenzene (Surr)	*91*		*70 - 118*
Dibromofluoromethane (Surr)	*100*		*70 - 128*

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

Lab Sample ID: MB 180-155089/4
Matrix: Water
Analysis Batch: 155089

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.28	ug/L			09/28/15 12:18	1
Vinyl chloride	ND		1.0	0.23	ug/L			09/28/15 12:18	1
Bromomethane	ND		1.0	0.31	ug/L			09/28/15 12:18	1
Chloroethane	ND		1.0	0.21	ug/L			09/28/15 12:18	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/28/15 12:18	1
Acetone	ND		5.0	2.5	ug/L			09/28/15 12:18	1
Carbon disulfide	ND		1.0	0.21	ug/L			09/28/15 12:18	1
Methylene Chloride	ND		1.0	0.13	ug/L			09/28/15 12:18	1
trans-1,2-Dichloroethene	ND		1.0	0.17	ug/L			09/28/15 12:18	1
Methyl tert-butyl ether	ND		1.0	0.18	ug/L			09/28/15 12:18	1
1,1-Dichloroethane	ND		1.0	0.12	ug/L			09/28/15 12:18	1
cis-1,2-Dichloroethene	ND		1.0	0.24	ug/L			09/28/15 12:18	1
Bromochloromethane	ND		1.0	0.18	ug/L			09/28/15 12:18	1
2-Butanone (MEK)	ND		5.0	0.55	ug/L			09/28/15 12:18	1
Chloroform	ND		1.0	0.17	ug/L			09/28/15 12:18	1
1,1,1-Trichloroethane	ND		1.0	0.29	ug/L			09/28/15 12:18	1
Carbon tetrachloride	ND		1.0	0.14	ug/L			09/28/15 12:18	1
Benzene	ND		1.0	0.11	ug/L			09/28/15 12:18	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/28/15 12:18	1
Trichloroethene	ND		1.0	0.14	ug/L			09/28/15 12:18	1
1,2-Dichloropropane	ND		1.0	0.095	ug/L			09/28/15 12:18	1
Bromodichloromethane	ND		1.0	0.13	ug/L			09/28/15 12:18	1
cis-1,3-Dichloropropene	ND		1.0	0.19	ug/L			09/28/15 12:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.53	ug/L			09/28/15 12:18	1
Toluene	ND		1.0	0.15	ug/L			09/28/15 12:18	1
trans-1,3-Dichloropropene	ND		1.0	0.15	ug/L			09/28/15 12:18	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			09/28/15 12:18	1
Tetrachloroethene	ND		1.0	0.15	ug/L			09/28/15 12:18	1
2-Hexanone	ND		5.0	0.16	ug/L			09/28/15 12:18	1
Dibromochloromethane	ND		1.0	0.14	ug/L			09/28/15 12:18	1
1,2-Dibromoethane (EDB)	ND		1.0	0.18	ug/L			09/28/15 12:18	1
Chlorobenzene	ND		1.0	0.14	ug/L			09/28/15 12:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.28	ug/L			09/28/15 12:18	1
Ethylbenzene	ND		1.0	0.23	ug/L			09/28/15 12:18	1
Xylenes, Total	ND		3.0	0.49	ug/L			09/28/15 12:18	1
Styrene	ND		1.0	0.097	ug/L			09/28/15 12:18	1
Bromoform	ND		1.0	0.19	ug/L			09/28/15 12:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.20	ug/L			09/28/15 12:18	1
Acrylonitrile	ND		20	0.55	ug/L			09/28/15 12:18	1
1,4-Dioxane	ND		200	34	ug/L			09/28/15 12:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 135*		*09/28/15 12:18*	*1*
Toluene-d8 (Surr)	*107*		*71 - 118*		*09/28/15 12:18*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 118*		*09/28/15 12:18*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 128*		*09/28/15 12:18*	*1*

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

Lab Sample ID: LCS 180-155089/8
Matrix: Water
Analysis Batch: 155089

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	11.2		ug/L		112	50 - 139
Vinyl chloride	10.0	10.4		ug/L		104	53 - 138
Bromomethane	10.0	8.81		ug/L		88	33 - 150
Chloroethane	10.0	9.45		ug/L		94	36 - 142
1,1-Dichloroethene	10.0	7.60		ug/L		76	65 - 136
Acetone	20.0	16.9		ug/L		85	22 - 150
Carbon disulfide	10.0	8.01		ug/L		80	54 - 132
Methylene Chloride	10.0	8.09		ug/L		81	63 - 129
trans-1,2-Dichloroethene	10.0	8.09		ug/L		81	73 - 126
Methyl tert-butyl ether	10.0	8.15		ug/L		81	64 - 123
1,1-Dichloroethane	10.0	8.71		ug/L		87	73 - 126
cis-1,2-Dichloroethene	10.0	8.55		ug/L		85	70 - 120
Bromochloromethane	10.0	9.18		ug/L		92	70 - 127
2-Butanone (MEK)	20.0	21.9		ug/L		109	39 - 138
Chloroform	10.0	8.72		ug/L		87	72 - 127
1,1,1-Trichloroethane	10.0	8.27		ug/L		83	63 - 133
Carbon tetrachloride	10.0	8.45		ug/L		85	55 - 150
Benzene	10.0	8.93		ug/L		89	80 - 120
1,2-Dichloroethane	10.0	9.25		ug/L		93	68 - 132
Trichloroethene	10.0	10.1		ug/L		101	73 - 120
1,2-Dichloropropane	10.0	10.2		ug/L		102	76 - 124
Bromodichloromethane	10.0	8.87		ug/L		89	66 - 130
cis-1,3-Dichloropropene	10.0	9.69		ug/L		97	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	21.5		ug/L		108	45 - 145
Toluene	10.0	9.38		ug/L		94	80 - 123
trans-1,3-Dichloropropene	10.0	9.31		ug/L		93	65 - 125
1,1,2-Trichloroethane	10.0	9.86		ug/L		99	77 - 127
Tetrachloroethene	10.0	10.3		ug/L		103	70 - 135
2-Hexanone	20.0	23.5		ug/L		117	25 - 132
Dibromochloromethane	10.0	10.2		ug/L		102	60 - 140
1,2-Dibromoethane (EDB)	10.0	10.3		ug/L		103	74 - 123
Chlorobenzene	10.0	10.2		ug/L		102	80 - 120
1,1,1,2-Tetrachloroethane	10.0	10.0		ug/L		100	63 - 140
Ethylbenzene	10.0	10.1		ug/L		101	72 - 126
Xylenes, Total	20.0	20.4		ug/L		102	76 - 128
Styrene	10.0	10.6		ug/L		106	71 - 127
Bromoform	10.0	11.1		ug/L		111	46 - 150
1,1,2,2-Tetrachloroethane	10.0	9.95		ug/L		99	62 - 125
Acrylonitrile	100	104		ug/L		104	30 - 140
1,4-Dioxane	200	187	J	ug/L		94	10 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*64 - 135*
Toluene-d8 (Surr)	*101*		*71 - 118*
4-Bromofluorobenzene (Surr)	*96*		*70 - 118*
Dibromofluoromethane (Surr)	*96*		*70 - 128*

GC/MS VOA

Analysis Batch: 154899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-47923-1	HD-MW-136A-270/348-0	Total/NA	Water	8260C	
180-47923-2	HD-RW-5-0/1-0	Total/NA	Water	8260C	
180-47923-3	HD-QC3-0/1-2	Total/NA	Water	8260C	
180-47923-4	HD-CW-18-0/1-0	Total/NA	Water	8260C	
180-47923-4 MS	HD-CW-18-0/1-0	Total/NA	Water	8260C	
180-47923-4 MSD	HD-CW-18-0/1-0	Total/NA	Water	8260C	
LCS 180-154899/7	Lab Control Sample	Total/NA	Water	8260C	
MB 180-154899/4	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 155089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-47923-1 - DL	HD-MW-136A-270/348-0	Total/NA	Water	8260C	
LCS 180-155089/8	Lab Control Sample	Total/NA	Water	8260C	
MB 180-155089/4	Method Blank	Total/NA	Water	8260C	

Lab Chronicle

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-47923-1

Client Sample ID: HD-MW-136A-270/348-0

Lab Sample ID: 180-47923-1

Date Collected: 09/17/15 14:12

Matrix: Water

Date Received: 09/18/15 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	5 mL	5 mL	154899	09/25/15 21:32	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	8260C	DL	1250	5 mL	5 mL	155089	09/28/15 15:58	DLF	TAL PIT
	Instrument ID: CHHP6									

Client Sample ID: HD-RW-5-0/1-0

Lab Sample ID: 180-47923-2

Date Collected: 09/17/15 14:40

Matrix: Water

Date Received: 09/18/15 09:00

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	154899	09/25/15 22:20	DLF	TAL PIT
	Instrument ID: CHHP6									

Client Sample ID: HD-QC3-0/1-2

Lab Sample ID: 180-47923-3

Date Collected: 09/17/15 12:00

Matrix: Water

Date Received: 09/18/15 09:00

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	154899	09/25/15 15:03	DLF	TAL PIT
	Instrument ID: CHHP6									

Client Sample ID: HD-CW-18-0/1-0

Lab Sample ID: 180-47923-4

Date Collected: 09/17/15 14:10

Matrix: Water

Date Received: 09/18/15 09:00

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	154899	09/25/15 14:39	DLF	TAL PIT
	Instrument ID: CHHP6									

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

DLF = Donald Ferguson

Certification Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-47923-1

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	04-30-16

Method Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-47923-1

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: 180-47923-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-47923-1	HD-MW-136A-270/348-0	Water	09/17/15 14:12	09/18/15 09:00
180-47923-2	HD-RW-5-0/1-0	Water	09/17/15 14:40	09/18/15 09:00
180-47923-3	HD-QC3-0/1-2	Water	09/17/15 12:00	09/18/15 09:00
180-47923-4	HD-CW-18-0/1-0	Water	09/17/15 14:10	09/18/15 09:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 149469

Lab Sample ID: IC 180-149469/4 Client Sample ID:

Date Analyzed: 07/31/15 14:00 Lab File ID: 60731004.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.23	Incomplete Integration	fergusond	08/03/15 10:46
1,4-Dioxane	8.03	Incomplete Integration	fergusond	08/03/15 10:46

Lab Sample ID: ICIS 180-149469/5 Client Sample ID:

Date Analyzed: 07/31/15 14:24 Lab File ID: 60731005.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.03	Peak Tail	fergusond	08/03/15 10:47

Lab Sample ID: IC 180-149469/7 Client Sample ID:

Date Analyzed: 07/31/15 15:13 Lab File ID: 60731007.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.03	Peak Tail	fergusond	08/03/15 10:27

Lab Sample ID: IC 180-149469/8 Client Sample ID:

Date Analyzed: 07/31/15 15:37 Lab File ID: 60731008.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.03	Peak Tail	fergusond	08/03/15 10:13

Lab Sample ID: IC 180-149469/9 Client Sample ID:

Date Analyzed: 07/31/15 16:01 Lab File ID: 60731009.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.03	Peak Tail	fergusond	08/03/15 10:06

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 149469

Lab Sample ID: IC 180-149469/10 Client Sample ID:

Date Analyzed: 07/31/15 16:25 Lab File ID: 60731010.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.03	Peak Tail	fergusond	08/03/15 10:08

Lab Sample ID: IC 180-149469/14 Client Sample ID:

Date Analyzed: 07/31/15 18:02 Lab File ID: 60731014.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.68	Poor chromatography	fergusond	08/03/15 11:05
Acetone	3.42	Poor chromatography	fergusond	08/03/15 11:05
Acrylonitrile	4.51	Poor chromatography	fergusond	08/03/15 11:05
1,1,1-Trichloroethane	6.55	Poor chromatography	fergusond	08/03/15 11:05
Isobutyl alcohol	6.90	Poor chromatography	fergusond	08/03/15 11:05

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 154899

Lab Sample ID: CCVIS 180-154899/2 Client Sample ID:

Date Analyzed: 09/25/15 12:54 Lab File ID: 60925002.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.23	Incomplete Integration	fergusond	09/25/15 13:31

Lab Sample ID: 180-47923-4 Client Sample ID: HD-CW-18-0/1-0

Date Analyzed: 09/25/15 14:39 Lab File ID: 60925005.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl chloride	1.91	Incomplete Integration	fergusond	09/25/15 15:43
Benzene	6.95	Incomplete Integration	fergusond	09/25/15 15:43

Lab Sample ID: LCS 180-154899/7 Client Sample ID:

Date Analyzed: 09/25/15 15:27 Lab File ID: 60925007.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.03	Incomplete Integration	fergusond	09/25/15 15:46

Lab Sample ID: 180-47923-4 MS Client Sample ID: HD-CW-18-0/1-0 MS

Date Analyzed: 09/25/15 15:51 Lab File ID: 60925008.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.03	Incomplete Integration	fergusond	09/26/15 08:12

Lab Sample ID: 180-47923-4 MSD Client Sample ID: HD-CW-18-0/1-0 MSD

Date Analyzed: 09/25/15 16:15 Lab File ID: 60925009.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.03	Incomplete Integration	fergusond	09/26/15 08:13

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 154899

Lab Sample ID: 180-47923-1 Client Sample ID: HD-MW-136A-270/348-0

Date Analyzed: 09/25/15 21:32 Lab File ID: 60925021.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethane	5.21	Missed Peak	fergusond	09/26/15 08:33

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Instrument ID: CHHP6 Analysis Batch Number: 155089

Lab Sample ID: CCVIS 180-155089/2 Client Sample ID:

Date Analyzed: 09/28/15 11:03 Lab File ID: 60928002.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.04	Incomplete Integration	fergusond	09/28/15 11:24

Lab Sample ID: LCS 180-155089/8 Client Sample ID:

Date Analyzed: 09/28/15 14:21 Lab File ID: 60928008.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.03	Incomplete Integration	fergusond	09/28/15 14:43

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOA8260INT_00039	08/02/15	07/02/15	Methanol, Lot 85233	10 mL	VOA8260INTRES_00067	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_00067	02/01/18		Restek, Lot A093504		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260INT_00042	10/11/15	09/11/15	Methanol, Lot 99494	10 mL	VOA8260INTRES_00068	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_00068	02/01/18		Restek, Lot A093504		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260SURR_00039	08/02/15	07/02/15	Methanol, Lot 85233	100 mL	VOA8260SURRES_00066	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_00066	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_00042	10/11/15	09/11/15	Methanol, Lot 99494	100 mL	VOA8260SURRES_00077	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_00077	01/31/19		Restek, Lot A0101000		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VOA8260VOA2ND_00144	10/01/15	09/24/15	Methanol, Lot 99494	10 mL	VOA8260GAS2ND_00114	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00141	1 mL	1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,4-Dioxane	500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
.VOA8260GAS2ND_00114	04/30/18		Restek, Lot A0111273		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOA2ND_00141	10/03/15	09/03/15	Methanol, Lot 85233	10 mL	VOA8260MEGA2_00036	1 mL	1,1,1,2-Tetrachloroethane	250 ug/mL
							1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,2-Dibromoethane (EDB)	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							1,4-Dioxane	5000 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzene	250 ug/mL
							Bromochloromethane	250 ug/mL
							Bromodichloromethane	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Dibromochloromethane	250 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylene Chloride	250 ug/mL
							Styrene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							Trichloroethene	250 ug/mL
							Xylenes, Total	500 ug/mL
..VOA8260MEGA2_00036	01/31/17		Restek, Lot A0108163		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VOA8260VOAPRI_00134	08/03/15	07/27/15	Methanol, Lot 85233	10 mL	VOA8260GAS1ST_00110	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00129	1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL
							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_00110	04/30/18		Restek, Lot A011070		(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_00129	08/07/15	07/07/15	Methanol, Lot 85233	10 mL	VOA8260KET1ST_00047	0.2 mL	2-Butanone (MEK)	250 ug/mL
							2-Hexanone	250 ug/mL
							4-Methyl-2-pentanone (MIBK)	250 ug/mL
							Acetone	250 ug/mL
					VOA8260MEGA1_00030	1 mL	1,1,1,2-Tetrachloroethane	250 ug/mL
							1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,1-Dichloropropene	250 ug/mL
							1,2,3-Trichlorobenzene	250 ug/mL
							1,2,3-Trichloropropane	250 ug/mL
							1,2,4-Trichlorobenzene	250 ug/mL
							1,2,4-Trimethylbenzene	250 ug/mL
							1,2-Dibromo-3-Chloropropane	250 ug/mL
							1,2-Dibromoethane (EDB)	250 ug/mL
							1,2-Dichlorobenzene	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							1,3,5-Trimethylbenzene	250 ug/mL
							1,3-Dichlorobenzene	250 ug/mL
							1,3-Dichloropropane	250 ug/mL
							1,4-Dichlorobenzene	250 ug/mL
							1,4-Dioxane	5000 ug/mL
							2,2-Dichloropropane	250 ug/mL
							2-Chlorotoluene	250 ug/mL
							2-Methyl-2-propanol	2500 ug/mL
							3-Chloro-1-propene	250 ug/mL
							4-Chlorotoluene	250 ug/mL
							4-Isopropyltoluene	250 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzene	250 ug/mL
							Bromobenzene	250 ug/mL
							Bromochloromethane	250 ug/mL
							Bromodichloromethane	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Cyclohexane	250 ug/mL
							Dibromochloromethane	250 ug/mL
							Dibromomethane	250 ug/mL
							Ethyl ether	250 ug/mL
							Ethyl methacrylate	250 ug/mL
							Ethylbenzene	250 ug/mL
							Hexachlorobutadiene	250 ug/mL
							Hexane	250 ug/mL
							Iodomethane	250 ug/mL
							Isobutyl alcohol	6250 ug/mL
							Isopropylbenzene	250 ug/mL
							m-Xylene & p-Xylene	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl acetate	1250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylcyclohexane	250 ug/mL
							Methylene Chloride	250 ug/mL
							n-Butylbenzene	250 ug/mL
							n-Heptane	250 ug/mL
							N-Propylbenzene	250 ug/mL
							Naphthalene	250 ug/mL
							o-Xylene	250 ug/mL
							sec-Butylbenzene	250 ug/mL
							Styrene	250 ug/mL
							tert-Butylbenzene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Tetrahydrofuran	500 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							trans-1,4-Dichloro-2-butene	250 ug/mL
							Trichloroethene	250 ug/mL
..VOA8260KET1ST_00047	04/30/18		Restek, Lot A0110400		(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
..VOA8260MEGA1_00030	02/28/16		Restek, Lot A0108166		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOA8260VOAPRI_00145	10/01/15	09/24/15	Methanol, Lot 99494	10 mL	VOA8260GAS1ST_00117	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00142	1 mL	1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,4-Dioxane	500 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylene Chloride	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							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_00117	04/30/18		Restek, Lot A0110070		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00142	10/03/15	09/03/15	Methanol, Lot 85233	10 mL	VOA8260MEGA1_00033	1 mL	1,1,1,2-Tetrachloroethane	250 ug/mL
							1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,2-Dibromoethane (EDB)	250 ug/mL
							1,2-Dichloroethane	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	250 ug/mL
							1,4-Dioxane	5000 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzene	250 ug/mL
							Bromochloromethane	250 ug/mL
							Bromodichloromethane	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Dibromochloromethane	250 ug/mL
							Ethylbenzene	250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylene Chloride	250 ug/mL
							Styrene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							Trichloroethene	250 ug/mL
							Xylenes, Total	500 ug/mL
..VOA8260MEGA1_00033	02/28/16		Restek, Lot A0108166		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
voaWAcro2nd R_00006	08/07/15	07/07/15	Methanol, Lot 85233	100 mL	VOAACRRES2ND_00065	0.125 mL	Acrolein	25 ug/mL
.VOAACRRES2ND_00065	09/30/15		Restek, Lot A0111005		(Purchased Reagent)		Acrolein	20000 ug/mL
voaWeemix1Res_00001	08/20/15	07/20/15	Methanol, Lot 85233	25 mL	VOARESEE1ST_00025	0.125 mL	1,2-dichloro-4-(trifluoromethyl)benzene	25 ug/mL
							2,3,6-Trichlorotoluene	25 ug/mL
							2,3- & 3,4- Dichlorotoluene	50 ug/mL
							2,4,5-Trichlorotoluene	25 ug/mL
							2,4- & 2,5- & 2,6-Dichlorotoluene	75 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_00025	09/30/16		Restek, Lot A0109701		(Purchased Reagent)		1,2-dichloro-4-(trifluoromethyl)benzene	5000 ug/mL
							2,3,6-Trichlorotoluene	5000 ug/mL
							2,3- & 3,4- Dichlorotoluene	10000 ug/mL
							2,4,5-Trichlorotoluene	5000 ug/mL
							2,4- & 2,5- & 2,6-Dichlorotoluene	15000 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
voaWket1Reste_00001	08/02/15	07/02/15	Methanol, Lot 85233	50 mL	VOA8260KET1ST_00046	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_00046	04/30/18		Restek, Lot A0110400		(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
voaWKet1stRes_00001	10/14/15	09/14/15	Methanol, Lot 99494	50 mL	VOA8260KET1ST_00051	0.1 mL	2-Butanone (MEK)	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET1ST_00051	04/30/18		Restek, Lot A0110400		(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
voaWKetmix2nd_00002	10/22/15	09/22/15	Methanol, Lot 99494	50 mL	VOA8260KET2ND_00054	0.1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET2ND_00054	05/31/18		Restek, Lot A0110970		(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
voaWVA1st Res_00003	08/23/15	07/23/15	Methanol, Lot 85233	25 mL	VOA8260VARES_00055	0.125 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00055	08/31/15		Restek, Lot A0109190		(Purchased Reagent)		Vinyl acetate	5000 ug/mL

Reagent

VOA8260GAS1ST_00110

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569722 **Lot No.:** A0110070

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

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : April 30, 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%	2,499.9 µg/mL	+/- 17.9502 +/- 30.0934 +/- 34.1055	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBC8470V) **Purity** 99%	2,500.1 µg/mL	+/- 17.2963 +/- 29.7101 +/- 33.7686	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 17542) **Purity** 99%	2,500.2 µg/mL	+/- 16.5642 +/- 29.2906 +/- 33.4004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBF3387V) **Purity** 99%	2,500.0 µg/mL	+/- 17.0072 +/- 29.5416 +/- 33.6200	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,499.8 µg/mL	+/- 18.9451 +/- 30.6969 +/- 34.6391	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot SHBD1717V) **Purity** 99%	2,500.3 µg/mL	+/- 17.6395 +/- 29.9122 +/- 33.9470	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot Q9B-58) **Purity** 99%	2,500.2 µg/mL	+/- 16.7318 +/- 29.3854 +/- 33.4835	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,500.3	µg/mL	+/-	16.5866	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBD5121V)			+/-	29.3037	µg/mL	Unstressed
	Purity 99%				+/-	33.4120	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)

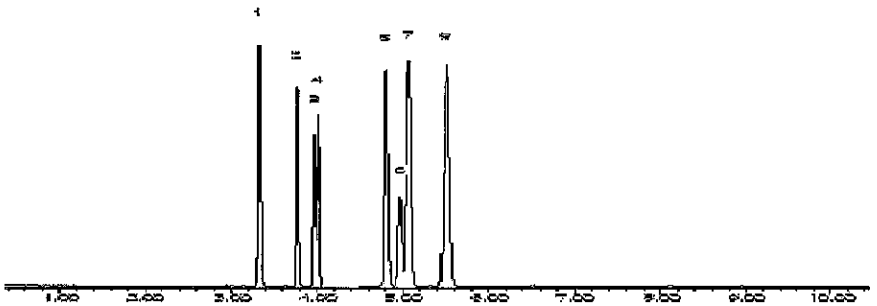
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

F. Joseph Tallon - Mix Technician

Date Mixed: 02-Apr-2015 **Balance:** B251644995

Tyler Brown - QA Analyst

Date Passed: 08-Apr-2015

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

Reagent

VOA8260GAS1ST_00117

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569722 **Lot No.:** A0110070

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

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : April 30, 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%	2,499.9 µg/mL	+/- 17.9502 µg/mL +/- 30.0934 µg/mL +/- 34.1055 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBC8470V) **Purity** 99%	2,500.1 µg/mL	+/- 17.2963 µg/mL +/- 29.7101 µg/mL +/- 33.7686 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 17542) **Purity** 99%	2,500.2 µg/mL	+/- 16.5642 µg/mL +/- 29.2906 µg/mL +/- 33.4004 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBF3387V) **Purity** 99%	2,500.0 µg/mL	+/- 17.0072 µg/mL +/- 29.5416 µg/mL +/- 33.6200 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,499.8 µg/mL	+/- 18.9451 µg/mL +/- 30.6969 µg/mL +/- 34.6391 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot SHBD1717V) **Purity** 99%	2,500.3 µg/mL	+/- 17.6395 µg/mL +/- 29.9122 µg/mL +/- 33.9470 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot Q9B-58) **Purity** 99%	2,500.2 µg/mL	+/- 16.7318 µg/mL +/- 29.3854 µg/mL +/- 33.4835 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,500.3	µg/mL	+/-	16.5866	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBD5121V)			+/-	29.3037	µg/mL	Unstressed
	Purity 99%				+/-	33.4120	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)

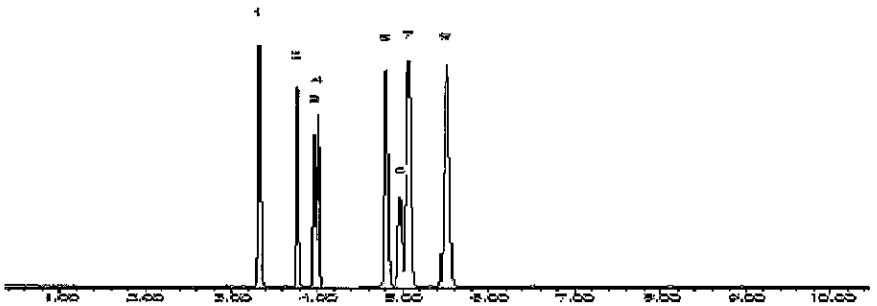
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

F. Joseph Tallon - Mix Technician

Date Mixed: 02-Apr-2015 **Balance:** B251644995

Tyler Brown - QA Analyst

Date Passed: 08-Apr-2015

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

Reagent

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569722.SEC **Lot No.:** A0111273

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

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : May 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.SEC (Lot 21773) **Purity** 99%	2,497.6 µg/mL	+/- 24.0984 +/- 34.1039 +/- 37.6853	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,503.8 µg/mL	+/- 21.5368 +/- 32.3897 +/- 36.1592	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,492.0 µg/mL	+/- 23.1023 +/- 33.3685 +/- 37.0056	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 18349) **Purity** 99%	2,488.6 µg/mL	+/- 19.2643 +/- 30.8102 +/- 34.7063	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	2,491.9 µg/mL	+/- 20.7776 +/- 31.8022 +/- 35.5993	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,516.0 µg/mL	+/- 19.4764 +/- 31.1495 +/- 35.0885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4.SEC (Lot SHBC0858V) **Purity** 99%	2,503.3 µg/mL	+/- 18.8823 +/- 30.6846 +/- 34.6386	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Reagent

VOA8260INTRES_00067

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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. : 567649 **Lot No.:** A093504

Description : 8260 Internal Standard

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

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

Expiration Date : February 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 25725-11-5		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
2	Fluorobenzene	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 462-06-6		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
3	1,4-Dioxane-d8	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 17647-74-4		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
4	Chlorobenzene-d5	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3114-55-4		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
5	1,4-Dichlorobenzene-d4	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3855-82-1		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed

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

Reagent

VOA8260INTRES_00068

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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. : 567649 **Lot No.:** A093504

Description : 8260 Internal Standard

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

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

Expiration Date : February 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 25725-11-5		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
2	Fluorobenzene	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 462-06-6		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
3	1,4-Dioxane-d8	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 17647-74-4		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
4	Chlorobenzene-d5	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3114-55-4		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
5	1,4-Dichlorobenzene-d4	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3855-82-1		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed

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

Reagent

VOA8260KET1ST_00046

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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. : 569721 **Lot No.:** A0110400

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 : April 30, 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%	12,506.8 µg/mL	+/- 73.2301 +/- 665.6407 +/- 666.3747	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot BCBH7802V) **Purity** 99%	12,504.8 µg/mL	+/- 73.2184 +/- 665.5343 +/- 666.2681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBF5332V) **Purity** 99%	12,509.2 µg/mL	+/- 73.2441 +/- 665.7684 +/- 666.5025	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKBN7380V) **Purity** 99%	12,501.6 µg/mL	+/- 73.1996 +/- 665.3640 +/- 666.0976	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260KET1ST_00047

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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.:** A0110400

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 : April 30, 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%	12,506.8 µg/mL	+/- 73.2301 µg/mL +/- 665.6407 µg/mL +/- 666.3747 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot BCBH7802V) **Purity** 99%	12,504.8 µg/mL	+/- 73.2184 µg/mL +/- 665.5343 µg/mL +/- 666.2681 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBF5332V) **Purity** 99%	12,509.2 µg/mL	+/- 73.2441 µg/mL +/- 665.7684 µg/mL +/- 666.5025 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKBN7380V) **Purity** 99%	12,501.6 µg/mL	+/- 73.1996 µg/mL +/- 665.3640 µg/mL +/- 666.0976 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260KET1ST_00051

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

Catalog No. : 569721 **Lot No.:** A0110400

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 : April 30, 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%	12,506.8 µg/mL	+/- 73.2301 µg/mL +/- 665.6407 µg/mL +/- 666.3747 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot BCBH7802V) **Purity** 99%	12,504.8 µg/mL	+/- 73.2184 µg/mL +/- 665.5343 µg/mL +/- 666.2681 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBF5332V) **Purity** 99%	12,509.2 µg/mL	+/- 73.2441 µg/mL +/- 665.7684 µg/mL +/- 666.5025 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKBN7380V) **Purity** 99%	12,501.6 µg/mL	+/- 73.1996 µg/mL +/- 665.3640 µg/mL +/- 666.0976 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260KET2ND_00054

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

Catalog No. : 569721.sec **Lot No.:** A0110970

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 : May 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.SEC (Lot P14A572) **Purity** 99%	12,528.0 µg/mL	+/- 73.3542 µg/mL +/- 666.7690 µg/mL +/- 667.5042 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3.SEC (Lot RA58J) **Purity** 99%	12,530.0 µg/mL	+/- 73.3659 µg/mL +/- 666.8755 µg/mL +/- 667.6108 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1.SEC (Lot E29T040) **Purity** 99%	12,585.0 µg/mL	+/- 73.6879 µg/mL +/- 669.8027 µg/mL +/- 670.5412 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6.SEC (Lot ZSVCD-FF) **Purity** 99%	12,516.0 µg/mL	+/- 73.2839 µg/mL +/- 666.1304 µg/mL +/- 666.8648 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260MEGA1_00030

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

Catalog No. : 569720 **Lot No.:** A0108166

Description : 8260 List 1 / Std #1 MegaMix (2015)

8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : January 31, 2017 **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 (Lot SHBF3466V) **Purity** 99%	2,521.3 µg/mL	+/- 14.6588 µg/mL +/- 134.1754 µg/mL +/- 134.3233 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00001135) **Purity** 99%	2,522.5 µg/mL	+/- 14.6660 µg/mL +/- 134.2419 µg/mL +/- 134.3899 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethane **CAS #** 75-34-3 (Lot Q179-33) **Purity** 98%	2,499.5 µg/mL	+/- 14.5323 µg/mL +/- 133.0173 µg/mL +/- 133.1640 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBC6893V) **Purity** 99%	25,002.4 µg/mL	+/- 145.3584 µg/mL +/- 1,330.5704 µg/mL +/- 1,332.0378 µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBC7288V) **Purity** 99%	2,510.0 µg/mL	+/- 14.5934 µg/mL +/- 133.5767 µg/mL +/- 133.7240 µg/mL	Gravimetric Unstressed Stressed
6	Methyl acetate **CAS #** 79-20-9 (Lot SHBD7134V) **Purity** 98%	12,505.4 µg/mL	+/- 72.7037 µg/mL +/- 665.5101 µg/mL +/- 666.2440 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot MKBG5777V) **Purity** 99%	2,500.0 µg/mL	+/- 19.2743 µg/mL +/- 133.6453 µg/mL +/- 133.7914 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,511.3	µg/mL	+/-	14.6006	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBD4974V)			+/-	133.6432	µg/mL	Unstressed
	Purity 99%				+/-	133.7906	µg/mL	Stressed
9	Carbon disulfide		2,511.7	µg/mL	+/-	14.6035	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot C30Y997)			+/-	133.6693	µg/mL	Unstressed
	Purity 98%				+/-	133.8167	µg/mL	Stressed
10	Acrylonitrile		25,017.1	µg/mL	+/-	145.4441	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot 10172706)			+/-	1,331.3554	µg/mL	Unstressed
	Purity 99%				+/-	1,332.8236	µg/mL	Stressed
11	cis-1,2-Dichloroethene		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBG8424V)			+/-	133.2507	µg/mL	Unstressed
	Purity 99%				+/-	133.3977	µg/mL	Stressed
12	n-Hexane (C6)		2,511.9	µg/mL	+/-	14.6043	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBF0293V)			+/-	133.6764	µg/mL	Unstressed
	Purity 99%				+/-	133.8239	µg/mL	Stressed
13	1,1-dichloroethene		2,521.3	µg/mL	+/-	14.6588	µg/mL	Gravimetric
	CAS # 75-35-4	(Lot SHBD6170V)			+/-	134.1754	µg/mL	Unstressed
	Purity 99%				+/-	134.3233	µg/mL	Stressed
14	2,2-Dichloropropane		2,500.0	µg/mL	+/-	14.5351	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBH9246V)			+/-	133.0434	µg/mL	Unstressed
	Purity 98%				+/-	133.1901	µg/mL	Stressed
15	trans-1,2-Dichloroethene		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	133.3106	µg/mL	Unstressed
	Purity 99%				+/-	133.4576	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)		62,553.8	µg/mL	+/-	363.6739	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBF2852V)			+/-	3,328.9705	µg/mL	Unstressed
	Purity 99%				+/-	3,332.6417	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)		2,504.6	µg/mL	+/-	14.5621	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBF1193V)			+/-	133.2906	µg/mL	Unstressed
	Purity 99%				+/-	133.4376	µg/mL	Stressed
18	Bromochloromethane		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00004559)			+/-	133.3172	µg/mL	Unstressed
	Purity 99%				+/-	133.4642	µg/mL	Stressed
19	Tetrahydrofuran		5,000.7	µg/mL	+/-	29.0746	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBF2660V)			+/-	266.1270	µg/mL	Unstressed
	Purity 97%				+/-	266.4204	µg/mL	Stressed
20	1,1,1-trichloroethane		2,508.1	µg/mL	+/-	14.5825	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B14Z1114)			+/-	133.4769	µg/mL	Unstressed
	Purity 99%				+/-	133.6241	µg/mL	Stressed
21	Cyclohexane		2,504.0	µg/mL	+/-	14.5585	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot SHBD7873V)			+/-	133.2574	µg/mL	Unstressed
	Purity 99%				+/-	133.4043	µg/mL	Stressed
22	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot PR09161302)			+/-	133.1738	µg/mL	Unstressed
	Purity 98%				+/-	133.3207	µg/mL	Stressed
23	carbon tetrachloride		2,505.3	µg/mL	+/-	14.5657	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBC1410V)			+/-	133.3239	µg/mL	Unstressed
	Purity 99%				+/-	133.4709	µg/mL	Stressed

24	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBF2321V)	2,501.4	µg/mL	+/- 14.5432 +/- 133.1177 +/- 133.2645	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBC6595V)	2,501.6	µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBD4617V)	2,509.1	µg/mL	+/- 14.5883 +/- 133.5301 +/- 133.6774	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBF0943V)	2,504.8	µg/mL	+/- 14.5628 +/- 133.2973 +/- 133.4443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot 50996APV)	2,502.5	µg/mL	+/- 14.5498 +/- 133.1775 +/- 133.3244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,502.4	µg/mL	+/- 14.5490 +/- 133.1709 +/- 133.3177	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	bromodichloromethane **CAS #** 75-27-4 **Purity** 98%	(Lot MKBL1617V)	2,507.9	µg/mL	+/- 14.5814 +/- 133.4672 +/- 133.6144	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBF2002V)	50,001.4	µg/mL	+/- 290.6971 +/- 2,660.9612 +/- 2,663.8957	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 99%	(Lot 10169264)	2,508.1	µg/mL	+/- 14.5825 +/- 133.4769 +/- 133.6241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 20936)	2,507.0	µg/mL	+/- 14.5759 +/- 133.4170 +/- 133.5641	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBF2730V)	2,502.4	µg/mL	+/- 14.5490 +/- 133.1709 +/- 133.3177	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot 69796APV)	2,500.9	µg/mL	+/- 14.5403 +/- 133.0911 +/- 133.2378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C363110)	2,502.1	µg/mL	+/- 14.5476 +/- 133.1576 +/- 133.3044	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,507.5	µg/mL	+/- 14.5788 +/- 133.4436 +/- 133.5908	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,505.3	µg/mL	+/- 14.5657 +/- 133.3239 +/- 133.4709	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD2073V)	2,506.5	µg/mL	+/- 14.5730 +/- 133.3904 +/- 133.5375	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,503.2	µg/mL	+/-	14.5536	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKBP0459V)			+/-	133.2129	µg/mL	Unstressed
	Purity 98%				+/-	133.3598	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,504.3	µg/mL	+/-	14.5599	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	133.2707	µg/mL	Unstressed
	Purity 99%				+/-	133.4176	µg/mL	Stressed
42	Chlorobenzene		2,510.8	µg/mL	+/-	14.5977	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBD3200V)			+/-	133.6166	µg/mL	Unstressed
	Purity 99%				+/-	133.7639	µg/mL	Stressed
43	1,1,2,2-Tetrachloroethane		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	133.1975	µg/mL	Unstressed
	Purity 99%				+/-	133.3444	µg/mL	Stressed
44	Ethylbenzene		2,509.6	µg/mL	+/-	14.5912	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBC9001V)			+/-	133.5567	µg/mL	Unstressed
	Purity 99%				+/-	133.7040	µg/mL	Stressed
45	m-Xylene		1,252.6	µg/mL	+/-	7.2829	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBF1720V)			+/-	66.6619	µg/mL	Unstressed
	Purity 99%				+/-	66.7355	µg/mL	Stressed
46	o-Xylene		2,503.7	µg/mL	+/-	14.5565	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBC8668V)			+/-	133.2390	µg/mL	Unstressed
	Purity 98%				+/-	133.3859	µg/mL	Stressed
47	p-Xylene		1,253.3	µg/mL	+/-	7.2865	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBF3427V)			+/-	66.6952	µg/mL	Unstressed
	Purity 99%				+/-	66.7688	µg/mL	Stressed
48	Styrene		2,503.5	µg/mL	+/-	14.5556	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot 10182421)			+/-	133.2307	µg/mL	Unstressed
	Purity 99%				+/-	133.3777	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10169400)			+/-	133.1775	µg/mL	Unstressed
	Purity 99%				+/-	133.3244	µg/mL	Stressed
50	bromoform		2,507.8	µg/mL	+/-	14.5803	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBC3410V)			+/-	133.4569	µg/mL	Unstressed
	Purity 99%				+/-	133.6041	µg/mL	Stressed
51	1,1,1,2-Tetrachloroethane		2,510.3	µg/mL	+/-	14.5948	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	133.5900	µg/mL	Unstressed
	Purity 99%				+/-	133.7373	µg/mL	Stressed
52	chloroform		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBB7498V)			+/-	133.1110	µg/mL	Unstressed
	Purity 99%				+/-	133.2578	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot 1428739V)			+/-	133.1775	µg/mL	Unstressed
	Purity 99%				+/-	133.3244	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,499.5	µg/mL	+/-	14.5322	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBP5371V)			+/-	133.0168	µg/mL	Unstressed
	Purity 96%				+/-	133.1635	µg/mL	Stressed
55	n-Propylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKBQ8049V)			+/-	133.0578	µg/mL	Unstressed
	Purity 99%				+/-	133.2045	µg/mL	Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot MKBD4032V)	2,501.1	µg/mL	+/- 14.5418 +/- 133.1044 +/- 133.2511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 98%	(Lot MKBJ1732V)	2,501.6	µg/mL	+/- 14.5444 +/- 133.1282 +/- 133.2750	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBH8892V)	2,500.3	µg/mL	+/- 14.5367 +/- 133.0578 +/- 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBB7205V)	2,506.4	µg/mL	+/- 14.5723 +/- 133.3837 +/- 133.5308	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot S52237V)	2,500.1	µg/mL	+/- 14.5359 +/- 133.0511 +/- 133.1979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBJ3305V)	2,503.1	µg/mL	+/- 14.5534 +/- 133.2108 +/- 133.3577	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBK3151V)	2,504.0	µg/mL	+/- 14.5585 +/- 133.2574 +/- 133.4043	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBK4439V)	2,501.1	µg/mL	+/- 14.5418 +/- 133.1044 +/- 133.2511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBC1891V)	2,506.1	µg/mL	+/- 14.5708 +/- 133.3704 +/- 133.5175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBL3891V)	2,507.0	µg/mL	+/- 14.5759 +/- 133.4170 +/- 133.5641	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09418JJV)	2,502.6	µg/mL	+/- 14.5505 +/- 133.1842 +/- 133.3311	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot 68996CMV)	2,501.6	µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,505.9	µg/mL	+/- 14.5694 +/- 133.3571 +/- 133.5042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot 26896BM)	2,501.5	µg/mL	+/- 14.5439 +/- 133.1243 +/- 133.2711	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 98%	(Lot K22W009)	2,501.6	µg/mL	+/- 14.5444 +/- 133.1282 +/- 133.2750	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBH4351V)	2,502.6	µg/mL	+/- 14.5505 +/- 133.1842 +/- 133.3311	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,503.4 µg/mL	+/-	14.5548	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)		+/-	133.2241	µg/mL	Unstressed
	Purity 99%			+/-	133.3710	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)

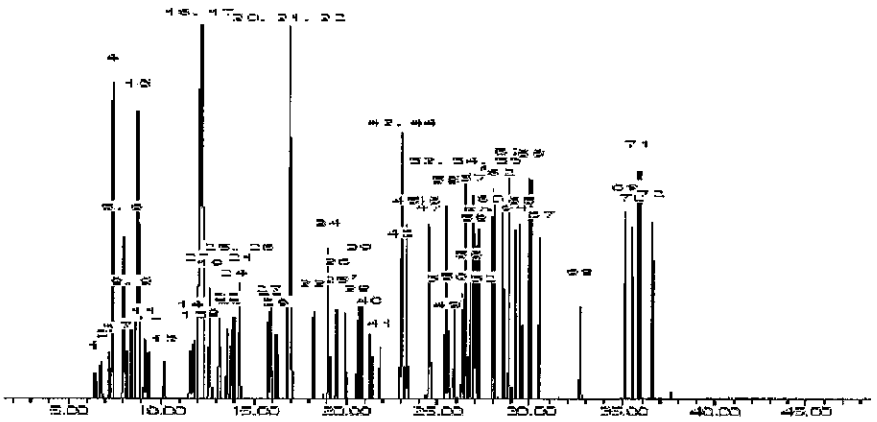
Carrier Gas:
helium-constant pressure 30 psi

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



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: 07-Jan-2015 **Balance:** 1125113331

Tyler Brown - QA Analyst

Date Passed: 14-Jan-2015

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

Reagent

VOA8260MEGA1_00033

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569720 **Lot No.:** A0108166

Description : 8260 List 1 / Std #1 MegaMix (2015)

8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : January 31, 2017 **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 (Lot SHBF3466V) **Purity** 99%	2,521.3 µg/mL	+/- 14.6588 µg/mL +/- 134.1754 µg/mL +/- 134.3233 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00001135) **Purity** 99%	2,522.5 µg/mL	+/- 14.6660 µg/mL +/- 134.2419 µg/mL +/- 134.3899 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethane **CAS #** 75-34-3 (Lot Q179-33) **Purity** 98%	2,499.5 µg/mL	+/- 14.5323 µg/mL +/- 133.0173 µg/mL +/- 133.1640 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBC6893V) **Purity** 99%	25,002.4 µg/mL	+/- 145.3584 µg/mL +/- 1,330.5704 µg/mL +/- 1,332.0378 µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBC7288V) **Purity** 99%	2,510.0 µg/mL	+/- 14.5934 µg/mL +/- 133.5767 µg/mL +/- 133.7240 µg/mL	Gravimetric Unstressed Stressed
6	Methyl acetate **CAS #** 79-20-9 (Lot SHBD7134V) **Purity** 98%	12,505.4 µg/mL	+/- 72.7037 µg/mL +/- 665.5101 µg/mL +/- 666.2440 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot MKBG5777V) **Purity** 99%	2,500.0 µg/mL	+/- 19.2743 µg/mL +/- 133.6453 µg/mL +/- 133.7914 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,511.3	µg/mL	+/-	14.6006	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBD4974V)			+/-	133.6432	µg/mL	Unstressed
	Purity 99%				+/-	133.7906	µg/mL	Stressed
9	Carbon disulfide		2,511.7	µg/mL	+/-	14.6035	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot C30Y997)			+/-	133.6693	µg/mL	Unstressed
	Purity 98%				+/-	133.8167	µg/mL	Stressed
10	Acrylonitrile		25,017.1	µg/mL	+/-	145.4441	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot 10172706)			+/-	1,331.3554	µg/mL	Unstressed
	Purity 99%				+/-	1,332.8236	µg/mL	Stressed
11	cis-1,2-Dichloroethene		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBG8424V)			+/-	133.2507	µg/mL	Unstressed
	Purity 99%				+/-	133.3977	µg/mL	Stressed
12	n-Hexane (C6)		2,511.9	µg/mL	+/-	14.6043	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBF0293V)			+/-	133.6764	µg/mL	Unstressed
	Purity 99%				+/-	133.8239	µg/mL	Stressed
13	1,1-dichloroethene		2,521.3	µg/mL	+/-	14.6588	µg/mL	Gravimetric
	CAS # 75-35-4	(Lot SHBD6170V)			+/-	134.1754	µg/mL	Unstressed
	Purity 99%				+/-	134.3233	µg/mL	Stressed
14	2,2-Dichloropropane		2,500.0	µg/mL	+/-	14.5351	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBH9246V)			+/-	133.0434	µg/mL	Unstressed
	Purity 98%				+/-	133.1901	µg/mL	Stressed
15	trans-1,2-Dichloroethene		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	133.3106	µg/mL	Unstressed
	Purity 99%				+/-	133.4576	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)		62,553.8	µg/mL	+/-	363.6739	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBF2852V)			+/-	3,328.9705	µg/mL	Unstressed
	Purity 99%				+/-	3,332.6417	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)		2,504.6	µg/mL	+/-	14.5621	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBF1193V)			+/-	133.2906	µg/mL	Unstressed
	Purity 99%				+/-	133.4376	µg/mL	Stressed
18	Bromochloromethane		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00004559)			+/-	133.3172	µg/mL	Unstressed
	Purity 99%				+/-	133.4642	µg/mL	Stressed
19	Tetrahydrofuran		5,000.7	µg/mL	+/-	29.0746	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBF2660V)			+/-	266.1270	µg/mL	Unstressed
	Purity 97%				+/-	266.4204	µg/mL	Stressed
20	1,1,1-trichloroethane		2,508.1	µg/mL	+/-	14.5825	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B14Z1114)			+/-	133.4769	µg/mL	Unstressed
	Purity 99%				+/-	133.6241	µg/mL	Stressed
21	Cyclohexane		2,504.0	µg/mL	+/-	14.5585	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot SHBD7873V)			+/-	133.2574	µg/mL	Unstressed
	Purity 99%				+/-	133.4043	µg/mL	Stressed
22	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot PR09161302)			+/-	133.1738	µg/mL	Unstressed
	Purity 98%				+/-	133.3207	µg/mL	Stressed
23	carbon tetrachloride		2,505.3	µg/mL	+/-	14.5657	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBC1410V)			+/-	133.3239	µg/mL	Unstressed
	Purity 99%				+/-	133.4709	µg/mL	Stressed

24	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBF2321V)	2,501.4	µg/mL	+/- 14.5432 +/- 133.1177 +/- 133.2645	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBC6595V)	2,501.6	µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBD4617V)	2,509.1	µg/mL	+/- 14.5883 +/- 133.5301 +/- 133.6774	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBF0943V)	2,504.8	µg/mL	+/- 14.5628 +/- 133.2973 +/- 133.4443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot 50996APV)	2,502.5	µg/mL	+/- 14.5498 +/- 133.1775 +/- 133.3244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,502.4	µg/mL	+/- 14.5490 +/- 133.1709 +/- 133.3177	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	bromodichloromethane **CAS #** 75-27-4 **Purity** 98%	(Lot MKBL1617V)	2,507.9	µg/mL	+/- 14.5814 +/- 133.4672 +/- 133.6144	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBF2002V)	50,001.4	µg/mL	+/- 290.6971 +/- 2,660.9612 +/- 2,663.8957	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 99%	(Lot 10169264)	2,508.1	µg/mL	+/- 14.5825 +/- 133.4769 +/- 133.6241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 20936)	2,507.0	µg/mL	+/- 14.5759 +/- 133.4170 +/- 133.5641	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBF2730V)	2,502.4	µg/mL	+/- 14.5490 +/- 133.1709 +/- 133.3177	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot 69796APV)	2,500.9	µg/mL	+/- 14.5403 +/- 133.0911 +/- 133.2378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C363110)	2,502.1	µg/mL	+/- 14.5476 +/- 133.1576 +/- 133.3044	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,507.5	µg/mL	+/- 14.5788 +/- 133.4436 +/- 133.5908	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,505.3	µg/mL	+/- 14.5657 +/- 133.3239 +/- 133.4709	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD2073V)	2,506.5	µg/mL	+/- 14.5730 +/- 133.3904 +/- 133.5375	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,503.2	µg/mL	+/-	14.5536	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKBP0459V)			+/-	133.2129	µg/mL	Unstressed
	Purity 98%				+/-	133.3598	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,504.3	µg/mL	+/-	14.5599	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	133.2707	µg/mL	Unstressed
	Purity 99%				+/-	133.4176	µg/mL	Stressed
42	Chlorobenzene		2,510.8	µg/mL	+/-	14.5977	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBD3200V)			+/-	133.6166	µg/mL	Unstressed
	Purity 99%				+/-	133.7639	µg/mL	Stressed
43	1,1,2,2-Tetrachloroethane		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	133.1975	µg/mL	Unstressed
	Purity 99%				+/-	133.3444	µg/mL	Stressed
44	Ethylbenzene		2,509.6	µg/mL	+/-	14.5912	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBC9001V)			+/-	133.5567	µg/mL	Unstressed
	Purity 99%				+/-	133.7040	µg/mL	Stressed
45	m-Xylene		1,252.6	µg/mL	+/-	7.2829	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBF1720V)			+/-	66.6619	µg/mL	Unstressed
	Purity 99%				+/-	66.7355	µg/mL	Stressed
46	o-Xylene		2,503.7	µg/mL	+/-	14.5565	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBC8668V)			+/-	133.2390	µg/mL	Unstressed
	Purity 98%				+/-	133.3859	µg/mL	Stressed
47	p-Xylene		1,253.3	µg/mL	+/-	7.2865	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBF3427V)			+/-	66.6952	µg/mL	Unstressed
	Purity 99%				+/-	66.7688	µg/mL	Stressed
48	Styrene		2,503.5	µg/mL	+/-	14.5556	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot 10182421)			+/-	133.2307	µg/mL	Unstressed
	Purity 99%				+/-	133.3777	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10169400)			+/-	133.1775	µg/mL	Unstressed
	Purity 99%				+/-	133.3244	µg/mL	Stressed
50	bromoform		2,507.8	µg/mL	+/-	14.5803	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBC3410V)			+/-	133.4569	µg/mL	Unstressed
	Purity 99%				+/-	133.6041	µg/mL	Stressed
51	1,1,1,2-Tetrachloroethane		2,510.3	µg/mL	+/-	14.5948	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	133.5900	µg/mL	Unstressed
	Purity 99%				+/-	133.7373	µg/mL	Stressed
52	chloroform		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBB7498V)			+/-	133.1110	µg/mL	Unstressed
	Purity 99%				+/-	133.2578	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot 1428739V)			+/-	133.1775	µg/mL	Unstressed
	Purity 99%				+/-	133.3244	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,499.5	µg/mL	+/-	14.5322	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBP5371V)			+/-	133.0168	µg/mL	Unstressed
	Purity 96%				+/-	133.1635	µg/mL	Stressed
55	n-Propylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKBQ8049V)			+/-	133.0578	µg/mL	Unstressed
	Purity 99%				+/-	133.2045	µg/mL	Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot MKBD4032V)	2,501.1	µg/mL	+/- 14.5418 +/- 133.1044 +/- 133.2511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 98%	(Lot MKBJ1732V)	2,501.6	µg/mL	+/- 14.5444 +/- 133.1282 +/- 133.2750	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBH8892V)	2,500.3	µg/mL	+/- 14.5367 +/- 133.0578 +/- 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBB7205V)	2,506.4	µg/mL	+/- 14.5723 +/- 133.3837 +/- 133.5308	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot S52237V)	2,500.1	µg/mL	+/- 14.5359 +/- 133.0511 +/- 133.1979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBJ3305V)	2,503.1	µg/mL	+/- 14.5534 +/- 133.2108 +/- 133.3577	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBK3151V)	2,504.0	µg/mL	+/- 14.5585 +/- 133.2574 +/- 133.4043	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBK4439V)	2,501.1	µg/mL	+/- 14.5418 +/- 133.1044 +/- 133.2511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBC1891V)	2,506.1	µg/mL	+/- 14.5708 +/- 133.3704 +/- 133.5175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBL3891V)	2,507.0	µg/mL	+/- 14.5759 +/- 133.4170 +/- 133.5641	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09418JJV)	2,502.6	µg/mL	+/- 14.5505 +/- 133.1842 +/- 133.3311	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot 68996CMV)	2,501.6	µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,505.9	µg/mL	+/- 14.5694 +/- 133.3571 +/- 133.5042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot 26896BM)	2,501.5	µg/mL	+/- 14.5439 +/- 133.1243 +/- 133.2711	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 98%	(Lot K22W009)	2,501.6	µg/mL	+/- 14.5444 +/- 133.1282 +/- 133.2750	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBH4351V)	2,502.6	µg/mL	+/- 14.5505 +/- 133.1842 +/- 133.3311	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,503.4 µg/mL	+/-	14.5548	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)		+/-	133.2241	µg/mL	Unstressed
	Purity 99%			+/-	133.3710	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)

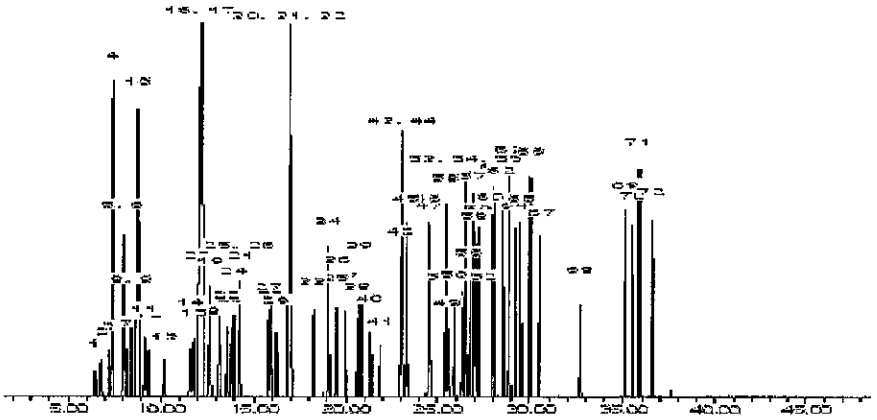
Carrier Gas:
helium-constant pressure 30 psi

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



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: 07-Jan-2015 **Balance:** 1125113331

Tyler Brown - QA Analyst

Date Passed: 14-Jan-2015

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

Reagent

VOA8260MEGA2_00036

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569720.sec **Lot No.:** A0108163

Description : 8260 List 1 / Std #1 MegaMix (2015)

8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : January 31, 2017 **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 (Lot F23X068) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 133.1044 µg/mL +/- 133.2511 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 133.1044 µg/mL +/- 133.2511 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 903000) **Purity** 99%	2,502.8 µg/mL	+/- 14.5512 µg/mL +/- 133.1908 µg/mL +/- 133.3377 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.5 µg/mL	+/- 145.3477 µg/mL +/- 1,330.4725 µg/mL +/- 1,331.9397 µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot A13Y016) **Purity** 97%	2,500.5 µg/mL	+/- 14.5383 µg/mL +/- 133.0732 µg/mL +/- 133.2199 µg/mL	Gravimetric Unstressed Stressed
6	Methyl acetate **CAS #** 79-20-9.SEC (Lot YDGVD) **Purity** 99%	12,500.6 µg/mL	+/- 72.6759 µg/mL +/- 665.2553 µg/mL +/- 665.9889 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot 5MNOA-DQ) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 µg/mL +/- 133.1110 µg/mL +/- 133.2578 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	133.1177	µg/mL	Unstressed
	Purity 99%				+/-	133.2645	µg/mL	Stressed
9	Carbon disulfide		2,501.2	µg/mL	+/-	14.5422	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	133.1086	µg/mL	Unstressed
	Purity 98%				+/-	133.2554	µg/mL	Stressed
10	Acrylonitrile		25,002.1	µg/mL	+/-	145.3569	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot CCFKL)			+/-	1,330.5571	µg/mL	Unstressed
	Purity 99%				+/-	1,332.0244	µg/mL	Stressed
11	cis-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	133.0578	µg/mL	Unstressed
	Purity 99%				+/-	133.2045	µg/mL	Stressed
12	n-Hexane (C6)		2,500.1	µg/mL	+/-	14.5358	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot K24W001)			+/-	133.0499	µg/mL	Unstressed
	Purity 98%				+/-	133.1967	µg/mL	Stressed
13	1,1-Dichloroethane		2,503.0	µg/mL	+/-	14.5527	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 2663100)			+/-	133.2041	µg/mL	Unstressed
	Purity 99%				+/-	133.3510	µg/mL	Stressed
14	2,2-Dichloropropane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot GI01)			+/-	133.0844	µg/mL	Unstressed
	Purity 99%				+/-	133.2312	µg/mL	Stressed
15	trans-1,2-Dichloroethene		2,500.2	µg/mL	+/-	14.5362	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TS5UB)			+/-	133.0538	µg/mL	Unstressed
	Purity 97%				+/-	133.2005	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)		62,501.3	µg/mL	+/-	363.3687	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot PH2XK)			+/-	3,326.1766	µg/mL	Unstressed
	Purity 99%				+/-	3,329.8447	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZAQTA-MS)			+/-	133.0711	µg/mL	Unstressed
	Purity 99%				+/-	133.2178	µg/mL	Stressed
18	Bromochloromethane		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 345600)			+/-	133.0777	µg/mL	Unstressed
	Purity 99%				+/-	133.2245	µg/mL	Stressed
19	Tetrahydrofuran		5,002.3	µg/mL	+/-	29.0835	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot XWFLA)			+/-	266.2087	µg/mL	Unstressed
	Purity 99%				+/-	266.5023	µg/mL	Stressed
20	1,1,1-Trichloroethane		2,501.9	µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 1103200)			+/-	133.1443	µg/mL	Unstressed
	Purity 99%				+/-	133.2911	µg/mL	Stressed
21	Cyclohexane		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	133.1243	µg/mL	Unstressed
	Purity 99%				+/-	133.2711	µg/mL	Stressed
22	1,1-Dichloropropene		2,501.1	µg/mL	+/-	14.5419	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 2028500)			+/-	133.1054	µg/mL	Unstressed
	Purity 97%				+/-	133.2522	µg/mL	Stressed
23	Carbon tetrachloride		2,501.9	µg/mL	+/-	14.5465	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	133.1477	µg/mL	Unstressed
	Purity 98%				+/-	133.2946	µg/mL	Stressed

24	n-Heptane (C7)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot OGM01)			+/-	133.0644	µg/mL	Unstressed
	Purity 99%				+/-	133.2112	µg/mL	Stressed
25	1,2-Dichloroethane		2,501.9	µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)			+/-	133.1443	µg/mL	Unstressed
	Purity 99%				+/-	133.2911	µg/mL	Stressed
26	Benzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	133.0911	µg/mL	Unstressed
	Purity 99%				+/-	133.2378	µg/mL	Stressed
27	Trichloroethene		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	133.0760	µg/mL	Unstressed
	Purity 98%				+/-	133.2228	µg/mL	Stressed
28	Methylcyclohexane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot 24MSD-CD)			+/-	133.0711	µg/mL	Unstressed
	Purity 99%				+/-	133.2178	µg/mL	Stressed
29	1,2-Dichloropropane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot OGG01)			+/-	133.0445	µg/mL	Unstressed
	Purity 99%				+/-	133.1912	µg/mL	Stressed
30	Bromodichloromethane		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 10171168)			+/-	133.1243	µg/mL	Unstressed
	Purity 99%				+/-	133.2711	µg/mL	Stressed
31	1,4-Dioxane		50,000.8	µg/mL	+/-	290.6935	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot CHA4A)			+/-	2,660.9280	µg/mL	Unstressed
	Purity 99%				+/-	2,663.8624	µg/mL	Stressed
32	Dibromomethane		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)			+/-	133.0777	µg/mL	Unstressed
	Purity 99%				+/-	133.2245	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 7ZLXJ-TJ)			+/-	133.0977	µg/mL	Unstressed
	Purity 99%				+/-	133.2445	µg/mL	Stressed
34	Toluene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	133.0511	µg/mL	Unstressed
	Purity 99%				+/-	133.1979	µg/mL	Stressed
35	Ethyl methacrylate		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot MLWYK-LS)			+/-	133.0844	µg/mL	Unstressed
	Purity 99%				+/-	133.2312	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,501.6	µg/mL	+/-	14.5444	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot 2ECIC-NM)			+/-	133.1282	µg/mL	Unstressed
	Purity 98%				+/-	133.2750	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 732700)			+/-	133.0977	µg/mL	Unstressed
	Purity 99%				+/-	133.2445	µg/mL	Stressed
38	1,3-Dichloropropane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	133.0844	µg/mL	Unstressed
	Purity 99%				+/-	133.2312	µg/mL	Stressed
39	Tetrachloroethene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	133.0445	µg/mL	Unstressed
	Purity 99%				+/-	133.1912	µg/mL	Stressed

40	Dibromochloromethane		2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot I13W021)			+/-	133.1377	µg/mL	Unstressed
	Purity 97%				+/-	133.2845	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,502.1	µg/mL	+/-	14.5472	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 1368400)			+/-	133.1542	µg/mL	Unstressed
	Purity 98%				+/-	133.3011	µg/mL	Stressed
42	Chlorobenzene		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	133.1310	µg/mL	Unstressed
	Purity 99%				+/-	133.2778	µg/mL	Stressed
43	1,1,1,2-Tetrachloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01-QSHR)			+/-	133.0844	µg/mL	Unstressed
	Purity 99%				+/-	133.2312	µg/mL	Stressed
44	Ethylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE-GR)			+/-	133.0578	µg/mL	Unstressed
	Purity 99%				+/-	133.2045	µg/mL	Stressed
45	m-Xylene		1,250.4	µg/mL	+/-	7.2698	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	66.5422	µg/mL	Unstressed
	Purity 99%				+/-	66.6156	µg/mL	Stressed
46	o-Xylene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01-KTPK)			+/-	133.1110	µg/mL	Unstressed
	Purity 99%				+/-	133.2578	µg/mL	Stressed
47	p-Xylene		1,251.6	µg/mL	+/-	7.2771	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/-	66.6087	µg/mL	Unstressed
	Purity 99%				+/-	66.6822	µg/mL	Stressed
48	Styrene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/-	133.0911	µg/mL	Unstressed
	Purity 99%				+/-	133.2378	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)			+/-	133.1110	µg/mL	Unstressed
	Purity 99%				+/-	133.2578	µg/mL	Stressed
50	Bromoform		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 1039300)			+/-	133.1243	µg/mL	Unstressed
	Purity 99%				+/-	133.2711	µg/mL	Stressed
51	1,1,2,2-Tetrachloroethane		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/-	133.1975	µg/mL	Unstressed
	Purity 99%				+/-	133.3444	µg/mL	Stressed
52	Chloroform		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	133.1310	µg/mL	Unstressed
	Purity 99%				+/-	133.2778	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.9	µg/mL	+/-	14.5465	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot OGI01)			+/-	133.1477	µg/mL	Unstressed
	Purity 98%				+/-	133.2946	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,502.7	µg/mL	+/-	14.5510	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-2)			+/-	133.1893	µg/mL	Unstressed
	Purity 97%				+/-	133.3362	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC-IT)			+/-	133.0445	µg/mL	Unstressed
	Purity 99%				+/-	133.1912	µg/mL	Stressed

56	Bromobenzene **CAS #** 108-86-1.SEC **Purity** 99%	(Lot 2FUHG-EM)	2,501.6	µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene **CAS #** 95-63-6.SEC **Purity** 99%	(Lot SC7LO-QA)	2,502.4	µg/mL	+/- 14.5490 +/- 133.1709 +/- 133.3177	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8.SEC **Purity** 99%	(Lot SW8QG-AO)	2,500.5	µg/mL	+/- 14.5381 +/- 133.0711 +/- 133.2178	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4.SEC **Purity** 99%	(Lot P4XHJ-AO)	2,500.3	µg/mL	+/- 14.5367 +/- 133.0578 +/- 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6.SEC **Purity** 99%	(Lot OGN01)	2,501.6	µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene **CAS #** 108-67-8.SEC **Purity** 99%	(Lot FGH02-CMLN)	2,500.3	µg/mL	+/- 14.5367 +/- 133.0578 +/- 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8.SEC **Purity** 99%	(Lot OGN01)	2,500.1	µg/mL	+/- 14.5359 +/- 133.0511 +/- 133.1979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) **CAS #** 99-87-6.SEC **Purity** 99%	(Lot 1721700)	2,501.6	µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1.SEC **Purity** 99%	(Lot FMDFD-KA)	2,501.5	µg/mL	+/- 14.5439 +/- 133.1243 +/- 133.2711	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7.SEC **Purity** 99%	(Lot YWKDC-MK)	2,500.3	µg/mL	+/- 14.5367 +/- 133.0578 +/- 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8.SEC **Purity** 99%	(Lot OGN01)	2,500.6	µg/mL	+/- 14.5388 +/- 133.0777 +/- 133.2245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1.SEC **Purity** 99%	(Lot 4NRGF-OT)	2,500.0	µg/mL	+/- 14.5352 +/- 133.0445 +/- 133.1912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8.SEC **Purity** 97%	(Lot LC00408V)	2,500.5	µg/mL	+/- 14.5383 +/- 133.0732 +/- 133.2199	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1.SEC **Purity** 99%	(Lot OGO01)	2,501.0	µg/mL	+/- 14.5410 +/- 133.0977 +/- 133.2445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3.SEC **Purity** 97%	(Lot 2009400)	2,501.0	µg/mL	+/- 14.5412 +/- 133.0990 +/- 133.2458	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3.SEC **Purity** 99%	(Lot 4KW3H-OO)	2,500.5	µg/mL	+/- 14.5381 +/- 133.0711 +/- 133.2178	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.4	µg/mL	+/-	14.5490	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)			+/-	133.1709	µg/mL	Unstressed
	Purity 99%				+/-	133.3177	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)

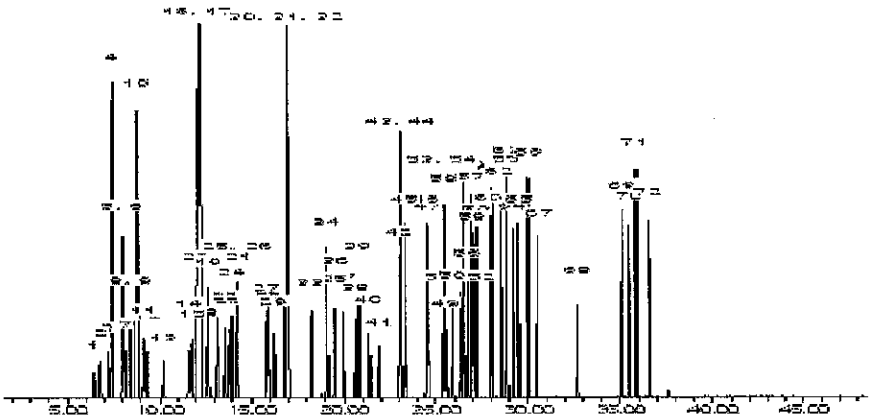
Carrier Gas:
helium-constant pressure 30 psi

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



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.

Tyler Brown - QA Analyst

Date Mixed: 07-Jan-2015 **Balance:** 1127510105

Date Passed: 14-Jan-2015

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

Reagent

VOA8260SURRES_00066

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567650 **Lot No.:** 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_00077

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567650 **Lot No.:** A0101000

Description : 8260 Surrogate Standard

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane	2,509.6 µg/mL	+/- 14.5910 µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 022012)		+/- 28.2993 µg/mL	Unstressed
	Purity 99%		+/- 32.5644 µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,508.2 µg/mL	+/- 14.5829 µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot 12K-027)		+/- 28.2836 µg/mL	Unstressed
	Purity 99%		+/- 32.5462 µg/mL	Stressed
3	Toluene-d8	2,508.8 µg/mL	+/- 14.5864 µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot 13I-050)		+/- 28.2903 µg/mL	Unstressed
	Purity 99%		+/- 32.5540 µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,509.8 µg/mL	+/- 14.5922 µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 01127COV)		+/- 28.3016 µg/mL	Unstressed
	Purity 99%		+/- 32.5670 µg/mL	Stressed

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

Reagent

VOA8260VARES_00055

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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. : 569724 **Lot No.:** A0109190

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 : August 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 **CAS #** 108-05-4 (Lot STBC8935V) **Purity** 99%	5,023.0 µg/mL	+/- 29.4778 +/- 267.3430 +/- 267.6378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

Reagent

VOAACRRES2ND_00065

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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.sec **Lot No.:** A0111005

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 : September 30, 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	19,749.2 µg/mL	+/- 115.6359	µg/mL	Gravimetric
	CAS # 107-02-8.SEC (Lot 3593700)		+/- 633.2214	µg/mL	Unstressed
	Purity 97%		+/- 736.0506	µg/mL	Stressed

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

Reagent

VOARESEE1ST_00025

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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.:** A0109701

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	3-Chlorobenzotrifluoride **CAS #** 98-15-7 **Purity** 99%	(Lot 21324DO)	5,000.0 µg/mL	+/- 29.3428 +/- 56.5231 +/- 65.0021	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	4-Chlorobenzotrifluoride **CAS #** 98-56-6 **Purity** 99%	(Lot 08507BO)	5,003.0 µg/mL	+/- 29.3604 +/- 56.5570 +/- 65.0411	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorobenzotrifluoride **CAS #** 88-16-4 **Purity** 99%	(Lot I0316DQ)	5,009.0 µg/mL	+/- 29.3956 +/- 56.6248 +/- 65.1191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	3-Chlorotoluene **CAS #** 108-41-8 **Purity** 99%	(Lot 13528LX)	5,012.0 µg/mL	+/- 29.4132 +/- 56.6587 +/- 65.1581	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	2,4-Dichlorobenzotrifluoride **CAS #** 320-60-5 **Purity** 99%	(Lot MKBL3552V)	5,013.0 µg/mL	+/- 29.4191 +/- 56.6701 +/- 65.1711	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	3,4-Dichlorobenzotrifluoride **CAS #** 328-84-7 **Purity** 99%	(Lot 11105EJV)	5,018.0 µg/mL	+/- 29.4484 +/- 56.7266 +/- 65.2361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2,5-Dichlorobenzotrifluoride **CAS #** 320-50-3 **Purity** 99%	(Lot 04415DSV)	5,015.0 µg/mL	+/- 29.4308 +/- 56.6927 +/- 65.1971	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	2,4-Dichlorotoluene		5,021.0	µg/mL	+/-	29.4660	µg/mL	Gravimetric
	CAS # 95-73-8	(Lot 07715JS)			+/-	56.7605	µg/mL	Unstressed
	Purity 99%				+/-	65.2751	µg/mL	Stressed
9	2,5-Dichlorotoluene		5,005.0	µg/mL	+/-	29.3721	µg/mL	Gravimetric
	CAS # 19398-61-9	(Lot 1381346V)			+/-	56.5796	µg/mL	Unstressed
	Purity 99%				+/-	65.0671	µg/mL	Stressed
10	2,6-Dichlorotoluene		5,014.0	µg/mL	+/-	29.4250	µg/mL	Gravimetric
	CAS # 118-69-4	(Lot 16921JS)			+/-	56.6814	µg/mL	Unstressed
	Purity 99%				+/-	65.1841	µg/mL	Stressed
11	3,4-Dichlorotoluene		5,011.0	µg/mL	+/-	29.4074	µg/mL	Gravimetric
	CAS # 95-75-0	(Lot 09419AS)			+/-	56.6474	µg/mL	Unstressed
	Purity 99%				+/-	65.1451	µg/mL	Stressed
12	2,3-Dichlorotoluene		5,016.0	µg/mL	+/-	29.4367	µg/mL	Gravimetric
	CAS # 32768-54-0	(Lot 00317)			+/-	56.7040	µg/mL	Unstressed
	Purity 99%				+/-	65.2101	µg/mL	Stressed
13	2,4,5-Trichlorotoluene		5,000.0	µg/mL	+/-	29.3428	µg/mL	Gravimetric
	CAS # 6639-30-1	(Lot 2490300)			+/-	56.5231	µg/mL	Unstressed
	Purity 99%				+/-	65.0021	µg/mL	Stressed
14	2,3,6-Trichlorotoluene		5,005.0	µg/mL	+/-	29.3721	µg/mL	Gravimetric
	CAS # 2077-46-5	(Lot NT050444)			+/-	56.5796	µg/mL	Unstressed
	Purity 99%				+/-	65.0671	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.: 180-47923-1

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-136A-270/348-0	180-47923-1	114	105	108	87
HD-MW-136A-270/348-0 DL	180-47923-1 DL	96	98	104	97
HD-RW-5-0/1-0	180-47923-2	115	111	101	83
HD-QC3-0/1-2	180-47923-3	113	108	105	82
HD-CW-18-0/1-0	180-47923-4	109	100	105	86
	MB 180-154899/4	109	105	104	83
	MB 180-155089/4	90	99	107	95
	LCS 180-154899/7	103	100	96	87
	LCS 180-155089/8	96	98	101	96
HD-CW-18-0/1-0 MS	180-47923-4 MS	102	95	101	93
HD-CW-18-0/1-0 MSD	180-47923-4 MSD	100	96	98	91

	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.: 180-47923-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 60925007.D

Lab ID: LCS 180-154899/7 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	11.2	112	50-139	
Vinyl chloride	10.0	9.83	98	53-138	
Bromomethane	10.0	8.69	87	33-150	
Chloroethane	10.0	8.92	89	36-142	
1,1-Dichloroethene	10.0	8.22	82	65-136	
Acetone	20.0	19.7	98	22-150	
Carbon disulfide	10.0	8.92	89	54-132	
Methylene Chloride	10.0	8.74	87	63-129	
trans-1,2-Dichloroethene	10.0	8.75	87	73-126	
Methyl tert-butyl ether	10.0	8.07	81	64-123	
1,1-Dichloroethane	10.0	9.09	91	73-126	
cis-1,2-Dichloroethene	10.0	8.57	86	70-120	
Bromochloromethane	10.0	10.9	109	70-127	
2-Butanone (MEK)	20.0	21.5	107	39-138	
Chloroform	10.0	9.33	93	72-127	
1,1,1-Trichloroethane	10.0	8.30	83	63-133	
Carbon tetrachloride	10.0	8.89	89	55-150	
Benzene	10.0	9.23	92	80-120	
1,2-Dichloroethane	10.0	9.86	99	68-132	
Trichloroethene	10.0	10.8	108	73-120	
1,2-Dichloropropane	10.0	10.6	106	76-124	
Bromodichloromethane	10.0	9.72	97	66-130	
cis-1,3-Dichloropropene	10.0	9.79	98	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	20.5	102	45-145	
Toluene	10.0	9.40	94	80-123	
trans-1,3-Dichloropropene	10.0	8.96	90	65-125	
1,1,2-Trichloroethane	10.0	10.3	103	77-127	
Tetrachloroethene	10.0	10.1	101	70-135	
2-Hexanone	20.0	22.9	115	25-132	
Dibromochloromethane	10.0	11.1	111	60-140	
1,2-Dibromoethane (EDB)	10.0	10.4	104	74-123	
Chlorobenzene	10.0	10.4	104	80-120	
1,1,1,2-Tetrachloroethane	10.0	10.8	108	63-140	
Ethylbenzene	10.0	9.89	99	72-126	
Xylenes, Total	20.0	19.2	96	76-128	
Styrene	10.0	10.6	106	71-127	
Bromoform	10.0	11.6	116	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.2	102	62-125	
Acrylonitrile	100	110	110	30-140	
1,4-Dioxane	200	197 J	99	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.: 180-47923-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 60928008.D

Lab ID: LCS 180-155089/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	11.2	112	50-139	
Vinyl chloride	10.0	10.4	104	53-138	
Bromomethane	10.0	8.81	88	33-150	
Chloroethane	10.0	9.45	94	36-142	
1,1-Dichloroethene	10.0	7.60	76	65-136	
Acetone	20.0	16.9	85	22-150	
Carbon disulfide	10.0	8.01	80	54-132	
Methylene Chloride	10.0	8.09	81	63-129	
trans-1,2-Dichloroethene	10.0	8.09	81	73-126	
Methyl tert-butyl ether	10.0	8.15	81	64-123	
1,1-Dichloroethane	10.0	8.71	87	73-126	
cis-1,2-Dichloroethene	10.0	8.55	85	70-120	
Bromochloromethane	10.0	9.18	92	70-127	
2-Butanone (MEK)	20.0	21.9	109	39-138	
Chloroform	10.0	8.72	87	72-127	
1,1,1-Trichloroethane	10.0	8.27	83	63-133	
Carbon tetrachloride	10.0	8.45	85	55-150	
Benzene	10.0	8.93	89	80-120	
1,2-Dichloroethane	10.0	9.25	93	68-132	
Trichloroethene	10.0	10.1	101	73-120	
1,2-Dichloropropane	10.0	10.2	102	76-124	
Bromodichloromethane	10.0	8.87	89	66-130	
cis-1,3-Dichloropropene	10.0	9.69	97	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	21.5	108	45-145	
Toluene	10.0	9.38	94	80-123	
trans-1,3-Dichloropropene	10.0	9.31	93	65-125	
1,1,2-Trichloroethane	10.0	9.86	99	77-127	
Tetrachloroethene	10.0	10.3	103	70-135	
2-Hexanone	20.0	23.5	117	25-132	
Dibromochloromethane	10.0	10.2	102	60-140	
1,2-Dibromoethane (EDB)	10.0	10.3	103	74-123	
Chlorobenzene	10.0	10.2	102	80-120	
1,1,1,2-Tetrachloroethane	10.0	10.0	100	63-140	
Ethylbenzene	10.0	10.1	101	72-126	
Xylenes, Total	20.0	20.4	102	76-128	
Styrene	10.0	10.6	106	71-127	
Bromoform	10.0	11.1	111	46-150	
1,1,2,2-Tetrachloroethane	10.0	9.95	99	62-125	
Acrylonitrile	100	104	104	30-140	
1,4-Dioxane	200	187 J	94	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 60925008.D

Lab ID: 180-47923-4 MS Client ID: HD-CW-18-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloromethane	10.0	ND	10.4	104	50-139	
Vinyl chloride	10.0	ND	9.66	97	53-138	
Bromomethane	10.0	ND	8.03	80	33-150	
Chloroethane	10.0	ND	8.63	86	36-142	
1,1-Dichloroethene	10.0	0.62 J	8.60	80	65-136	
Acetone	20.0	ND	18.5	92	22-150	
Carbon disulfide	10.0	ND	8.63	86	54-132	
Methylene Chloride	10.0	ND	7.65	77	63-129	
trans-1,2-Dichloroethene	10.0	ND	8.25	83	73-126	
Methyl tert-butyl ether	10.0	ND	7.85	79	64-123	
1,1-Dichloroethane	10.0	2.4	11.0	85	73-126	
cis-1,2-Dichloroethene	10.0	19	26.3	69	70-120	F1
Bromochloromethane	10.0	ND	9.64	96	70-127	
2-Butanone (MEK)	20.0	ND	20.7	103	39-138	
Chloroform	10.0	ND	8.55	86	72-127	
1,1,1-Trichloroethane	10.0	ND	7.94	79	63-133	
Carbon tetrachloride	10.0	ND	8.63	86	55-150	
Benzene	10.0	ND	8.72	87	80-120	
1,2-Dichloroethane	10.0	ND	8.98	90	68-132	
Trichloroethene	10.0	8.6	17.8	92	73-120	
1,2-Dichloropropane	10.0	ND	9.35	94	76-124	
Bromodichloromethane	10.0	ND	8.91	89	66-130	
cis-1,3-Dichloropropene	10.0	ND	8.65	87	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	ND	20.8	104	45-145	
Toluene	10.0	ND	9.16	92	80-123	
trans-1,3-Dichloropropene	10.0	ND	8.79	88	65-125	
1,1,2-Trichloroethane	10.0	ND	10.2	102	77-127	
Tetrachloroethene	10.0	0.34 J	10.7	104	70-135	
2-Hexanone	20.0	ND	22.8	114	25-132	
Dibromochloromethane	10.0	ND	10.6	106	60-140	
1,2-Dibromoethane (EDB)	10.0	ND	10.4	104	74-123	
Chlorobenzene	10.0	ND	10.5	105	80-120	
1,1,1,2-Tetrachloroethane	10.0	ND	11.1	111	63-140	
Ethylbenzene	10.0	ND	9.88	99	72-126	
Xylenes, Total	20.0	ND	19.4	97	76-128	
Styrene	10.0	ND	10.6	106	71-127	
Bromoform	10.0	ND	11.6	116	46-150	
1,1,2,2-Tetrachloroethane	10.0	ND	10.5	105	62-125	
Acrylonitrile	100	ND	100	100	30-140	
1,4-Dioxane	200	ND	200	100	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 60925009.D

Lab ID: 180-47923-4 MSD Client ID: HD-CW-18-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloromethane	10.0	10.5	105	2	35	50-139	
Vinyl chloride	10.0	9.42	94	2	35	53-138	
Bromomethane	10.0	7.58	76	6	35	33-150	
Chloroethane	10.0	8.56	86	1	35	36-142	
1,1-Dichloroethene	10.0	8.47	79	1	35	65-136	
Acetone	20.0	17.3	86	7	35	22-150	
Carbon disulfide	10.0	8.08	81	7	35	54-132	
Methylene Chloride	10.0	7.73	77	1	35	63-129	
trans-1,2-Dichloroethene	10.0	8.38	84	2	35	73-126	
Methyl tert-butyl ether	10.0	7.79	78	1	35	64-123	
1,1-Dichloroethane	10.0	10.6	81	4	35	73-126	
cis-1,2-Dichloroethene	10.0	24.6	52	7	35	70-120	F1
Bromochloromethane	10.0	9.16	92	5	35	70-127	
2-Butanone (MEK)	20.0	20.2	101	2	35	39-138	
Chloroform	10.0	8.61	86	1	35	72-127	
1,1,1-Trichloroethane	10.0	8.03	80	1	35	63-133	
Carbon tetrachloride	10.0	8.20	82	5	35	55-150	
Benzene	10.0	8.49	85	3	32	80-120	
1,2-Dichloroethane	10.0	8.87	89	1	32	68-132	
Trichloroethene	10.0	17.9	93	1	35	73-120	
1,2-Dichloropropane	10.0	9.43	94	1	34	76-124	
Bromodichloromethane	10.0	8.69	87	3	35	66-130	
cis-1,3-Dichloropropene	10.0	8.42	84	3	35	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	19.4	97	7	35	45-145	
Toluene	10.0	8.87	89	3	35	80-123	
trans-1,3-Dichloropropene	10.0	8.23	82	7	35	65-125	
1,1,2-Trichloroethane	10.0	9.56	96	6	35	77-127	
Tetrachloroethene	10.0	10.3	100	3	35	70-135	
2-Hexanone	20.0	22.1	110	3	35	25-132	
Dibromochloromethane	10.0	9.65	97	9	35	60-140	
1,2-Dibromoethane (EDB)	10.0	10.2	102	2	35	74-123	
Chlorobenzene	10.0	10.1	101	3	29	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.99	100	10	34	63-140	
Ethylbenzene	10.0	9.65	97	2	33	72-126	
Xylenes, Total	20.0	18.9	94	3	32	76-128	
Styrene	10.0	9.91	99	7	34	71-127	
Bromoform	10.0	10.1	101	13	35	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.2	102	3	35	62-125	
Acrylonitrile	100	99.1	99	1	35	30-140	
1,4-Dioxane	200	219	109	9	35	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Lab File ID: 60925004.D Lab Sample ID: MB 180-154899/4

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

Instrument ID: CHHP6 Date Analyzed: 09/25/2015 14:02

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
HD-CW-18-0/1-0	180-47923-4	60925005.D	09/25/2015 14:39
HD-QC3-0/1-2	180-47923-3	60925006.D	09/25/2015 15:03
	LCS 180-154899/7	60925007.D	09/25/2015 15:27
HD-CW-18-0/1-0 MS	180-47923-4 MS	60925008.D	09/25/2015 15:51
HD-CW-18-0/1-0 MSD	180-47923-4 MSD	60925009.D	09/25/2015 16:15
HD-MW-136A-270/348-0	180-47923-1	60925021.D	09/25/2015 21:32
HD-RW-5-0/1-0	180-47923-2	60925023.D	09/25/2015 22:20

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Lab File ID: 60928004.D Lab Sample ID: MB 180-155089/4

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

Instrument ID: CHHP6 Date Analyzed: 09/28/2015 12:18

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 180-155089/8	60928008.D	09/28/2015 14:21
HD-MW-136A-270/348-0 DL	180-47923-1 DL	60928012.D	09/28/2015 15:58

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Lab File ID: 60731001.D BFB Injection Date: 07/31/2015

Instrument ID: CHHP6 BFB Injection Time: 12:10

Analysis Batch No.: 149469

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.4	
75	30.0 - 60.0 % of mass 95	56.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.8	
173	Less than 2.0 % of mass 174	0.2	(0.3)1
174	50.0 - 120.00 % of mass 95	62.3	
175	5.0 - 9.0 % of mass 174	4.7	(7.5)1
176	95.0 - 101.0 % of mass 174	62.6	(100.6)1
177	5.0 - 9.0 % of mass 176	4.2	(6.7)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 180-149469/4	60731004.D	07/31/2015	14:00
	ICIS 180-149469/5	60731005.D	07/31/2015	14:24
	IC 180-149469/6	60731006.D	07/31/2015	14:49
	IC 180-149469/7	60731007.D	07/31/2015	15:13
	IC 180-149469/8	60731008.D	07/31/2015	15:37
	IC 180-149469/9	60731009.D	07/31/2015	16:01
	IC 180-149469/10	60731010.D	07/31/2015	16:25
	IC 180-149469/14	60731014.D	07/31/2015	18:02

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Lab File ID: 60925001.D BFB Injection Date: 09/25/2015

Instrument ID: CHHP6 BFB Injection Time: 12:13

Analysis Batch No.: 154899

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.3	
75	30.0 - 60.0 % of mass 95	54.6	
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	1.2	(1.5)1
174	50.0 - 120.00 % of mass 95	80.3	
175	5.0 - 9.0 % of mass 174	5.8	(7.2)1
176	95.0 - 101.0 % of mass 174	76.7	(95.5)1
177	5.0 - 9.0 % of mass 176	4.9	(6.4)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-154899/2	60925002.D	09/25/2015	12:54
	MB 180-154899/4	60925004.D	09/25/2015	14:02
HD-CW-18-0/1-0	180-47923-4	60925005.D	09/25/2015	14:39
HD-QC3-0/1-2	180-47923-3	60925006.D	09/25/2015	15:03
	LCS 180-154899/7	60925007.D	09/25/2015	15:27
HD-CW-18-0/1-0 MS	180-47923-4 MS	60925008.D	09/25/2015	15:51
HD-CW-18-0/1-0 MSD	180-47923-4 MSD	60925009.D	09/25/2015	16:15
HD-MW-136A-270/348-0	180-47923-1	60925021.D	09/25/2015	21:32
HD-RW-5-0/1-0	180-47923-2	60925023.D	09/25/2015	22:20

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Lab File ID: 60928001.D BFB Injection Date: 09/28/2015

Instrument ID: CHHP6 BFB Injection Time: 10:22

Analysis Batch No.: 155089

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.0	
75	30.0 - 60.0 % of mass 95	58.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	72.0	
175	5.0 - 9.0 % of mass 174	6.5	(9.0)1
176	95.0 - 101.0 % of mass 174	68.9	(95.7)1
177	5.0 - 9.0 % of mass 176	4.5	(6.5)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 180-155089/2	60928002.D	09/28/2015	11:03
	MB 180-155089/4	60928004.D	09/28/2015	12:18
	LCS 180-155089/8	60928008.D	09/28/2015	14:21
HD-MW-136A-270/348-0 DL	180-47923-1 DL	60928012.D	09/28/2015	15:58

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Sample No.: CCVIS 180-154899/2 Date Analyzed: 09/25/2015 12:54

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

Lab File ID (Standard): 60925002.D Heated Purge: (Y/N) N

Calibration ID: 25315

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		158550	4.24	474251	7.29	111336	10.40
UPPER LIMIT		317100	4.74	948502	7.79	222672	10.90
LOWER LIMIT		79275	3.74	237126	6.79	55668	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-154899/4		177185	4.22	508624	7.28	114022	10.40
180-47923-4	HD-CW-18-0/1-0	160281	4.22	529581	7.29	116267	10.39
180-47923-3	HD-QC3-0/1-2	158408	4.24	479313	7.29	110110	10.40
LCS 180-154899/7		175389	4.25	478360	7.28	115457	10.40
180-47923-4 MS	HD-CW-18-0/1-0 MS	201830	4.24	536900	7.29	119762	10.40
180-47923-4 MSD	HD-CW-18-0/1-0 MSD	201551	4.25	551676	7.29	125847	10.40
180-47923-1	HD-MW-136A-270/348-0	143411	4.24	498673	7.29	106366	10.40
180-47923-2	HD-RW-5-0/1-0	133857	4.23	464308	7.29	106842	10.40

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.: 180-47923-1

SDG No.:

Sample No.: CCVIS 180-154899/2 Date Analyzed: 09/25/2015 12:54

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

Lab File ID (Standard): 60925002.D Heated Purge: (Y/N) N

Calibration ID: 25315

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		197208	12.75				
UPPER LIMIT		394416	13.25				
LOWER LIMIT		98604	12.25				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-154899/4		177843	12.75				
180-47923-4	HD-CW-18-0/1-0	179875	12.75				
180-47923-3	HD-QC3-0/1-2	170859	12.75				
LCS 180-154899/7		199605	12.75				
180-47923-4 MS	HD-CW-18-0/1-0 MS	212856	12.75				
180-47923-4 MSD	HD-CW-18-0/1-0 MSD	215880	12.75				
180-47923-1	HD-MW-136A-270/348-0	169879	12.75				
180-47923-2	HD-RW-5-0/1-0	166691	12.75				

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.: 180-47923-1

SDG No.:

Sample No.: CCVIS 180-155089/2 Date Analyzed: 09/28/2015 11:03

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

Lab File ID (Standard): 60928002.D Heated Purge: (Y/N) N

Calibration ID: 25315

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		194313	4.24	501521	7.28	120842	10.40
UPPER LIMIT		388626	4.74	1003042	7.78	241684	10.90
LOWER LIMIT		97157	3.74	250761	6.78	60421	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-155089/4		203220	4.23	570858	7.29	127707	10.40
LCS 180-155089/8		218073	4.24	503917	7.28	118468	10.40
180-47923-1 DL	HD-MW-136A-270/348-0 DL	196127	4.23	554764	7.29	122759	10.40

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.: 180-47923-1

SDG No.:

Sample No.: CCVIS 180-155089/2 Date Analyzed: 09/28/2015 11:03

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

Lab File ID (Standard): 60928002.D Heated Purge: (Y/N) N

Calibration ID: 25315

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		193962	12.75				
UPPER LIMIT		387924	13.25				
LOWER LIMIT		96981	12.25				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-155089/4		213043	12.75				
LCS 180-155089/8		190158	12.75				
180-47923-1 DL	HD-MW-136A-270/348-0 DL	202717	12.75				

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.: 180-47923-1

SDG No.:

Client Sample ID: HD-MW-136A-270/348-0 | Lab Sample ID: 180-47923-1

Matrix: Water | Lab File ID: 60925021.D

Analysis Method: 8260C | Date Collected: 09/17/2015 14:12

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 21:32

Soil Aliquot Vol: | Dilution Factor: 100

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

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

Analysis Batch No.: 154899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		100	28
75-01-4	Vinyl chloride	ND		100	23
74-83-9	Bromomethane	ND		100	31
75-00-3	Chloroethane	ND		100	21
75-35-4	1,1-Dichloroethene	32	J	100	30
67-64-1	Acetone	ND		500	250
75-15-0	Carbon disulfide	ND		100	21
75-09-2	Methylene Chloride	ND		100	13
156-60-5	trans-1,2-Dichloroethene	ND		100	17
1634-04-4	Methyl tert-butyl ether	ND		100	18
75-34-3	1,1-Dichloroethane	15	J	100	12
156-59-2	*cis-1,2-Dichloroethene*	*17000*	*E*	*100*	*24*
74-97-5	Bromochloromethane	ND		100	18
78-93-3	2-Butanone (MEK)	ND		500	55
67-66-3	Chloroform	ND		100	17
71-55-6	1,1,1-Trichloroethane	ND		100	29
56-23-5	Carbon tetrachloride	ND		100	14
71-43-2	Benzene	ND		100	11
107-06-2	1,2-Dichloroethane	ND		100	21
79-01-6	Trichloroethene	57	J	100	14
78-87-5	1,2-Dichloropropane	ND		100	9.5
75-27-4	Bromodichloromethane	ND		100	13
10061-01-5	cis-1,3-Dichloropropene	ND		100	19
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		500	53
108-88-3	Toluene	ND		100	15
10061-02-6	trans-1,3-Dichloropropene	ND		100	15
79-00-5	1,1,2-Trichloroethane	ND		100	20
127-18-4	Tetrachloroethene	ND		100	15
591-78-6	2-Hexanone	ND		500	16
124-48-1	Dibromochloromethane	ND	^c	100	14
106-93-4	1,2-Dibromoethane (EDB)	ND		100	18
108-90-7	Chlorobenzene	ND		100	14
630-20-6	1,1,1,2-Tetrachloroethane	ND		100	28
100-41-4	Ethylbenzene	ND		100	23
1330-20-7	Xylenes, Total	ND		300	49
100-42-5	Styrene	ND		100	9.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: HD-MW-136A-270/348-0 | Lab Sample ID: 180-47923-1

Matrix: Water | Lab File ID: 60925021.D

Analysis Method: 8260C | Date Collected: 09/17/2015 14:12

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 21:32

Soil Aliquot Vol: | Dilution Factor: 100

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

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

Analysis Batch No.: 154899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		100	19
79-34-5	1,1,2,2-Tetrachloroethane	ND		100	20
107-13-1	Acrylonitrile	ND		2000	55
123-91-1	1,4-Dioxane	ND		20000	3400

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	87		70-118
1868-53-7	Dibromofluoromethane (Surr)	114		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925021.D
Lims ID: 180-47923-A-1 Lab Sample ID: 180-47923-1
Client ID: HD-MW-136A-270/348-0
Sample Type: Client
Inject. Date: 25-Sep-2015 21:32:30 ALS Bottle#: 22 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 100.0000
Sample Info: 180-47923-A-1, 100x
Misc. Info.: 180-0008690-021
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Sep-2015 08:33:03 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: fergusond Date: 26-Sep-2015 08:33:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.236	4.235	0.001	89	143411	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.289	0.001	97	498673	50.0	
* 3 Chlorobenzene-d5	119	10.399	10.398	0.001	91	106366	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.747	12.746	0.001	98	169879	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.554	6.553	0.001	92	131006	57.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.930	0.001	71	194839	52.6	
$ 7 Toluene-d8 (Surr)	98	8.945	8.937	0.008	95	454809	54.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.584	0.001	91	161746	43.4	
12 Chloromethane	50		1.759				ND	
13 Vinyl chloride	62		1.899				ND	
15 Bromomethane	94		2.234				ND	
16 Chloroethane	64		2.380				ND	
22 1,1-Dichloroethene	96	3.354	3.341	0.013	56	4020	1.60	
24 Acetone	43		3.420				ND	
26 Carbon disulfide	76		3.627				ND	
31 Methylene Chloride	84		4.125				ND	
33 Acrylonitrile	53		4.503				ND	
34 trans-1,2-Dichloroethene	96	4.571	4.557	0.014	23	2335	0.8060	
35 Methyl tert-butyl ether	73		4.563				ND	
37 1,1-Dichloroethane	63	5.210	5.190	0.020	1	3899	0.7518	M
43 cis-1,2-Dichloroethene	96	5.946	5.938	0.008	78	2682907	851.7	E
44 2-Butanone (MEK)	43		5.938				ND	
48 Chlorobromomethane	128		6.230				ND	
50 Chloroform	83		6.370				ND	
51 1,1,1-Trichloroethane	97		6.535				ND	
53 Carbon tetrachloride	117		6.711				ND	
56 Benzene	78		6.936				ND	
57 1,2-Dichloroethane	62		7.015				ND	
61 Trichloroethene	130	7.674	7.678	-0.004	93	6935	2.86	
64 1,2-Dichloropropane	63		7.952				ND	
65 1,4-Dioxane	88		8.031				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.226				ND	
71 cis-1,3-Dichloropropene	75		8.676				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.822				ND	
73 Toluene	91		9.011				ND	
74 trans-1,3-Dichloropropene	75		9.254				ND	
76 1,1,2-Trichloroethane	97		9.449				ND	
77 Tetrachloroethene	164	9.523	9.528	-0.005	37	1353	0.7228	
79 2-Hexanone	43		9.655				ND	
81 Chlorodibromomethane	129		9.820				ND	
82 Ethylene Dibromide	107		9.941				ND	
84 Chlorobenzene	112		10.428				ND	
86 1,1,1,2-Tetrachloroethane	131		10.519				ND	
87 Ethylbenzene	106		10.525				ND	
88 m-Xylene & p-Xylene	106		10.659				ND	
89 o-Xylene	106		11.042				ND	
90 Styrene	104		11.061				ND	
91 Bromoform	173		11.243				ND	
96 1,1,2,2-Tetrachloroethane	83		11.712				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00042	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00042	Amount Added:	2.00	Units: uL	Run Reagent

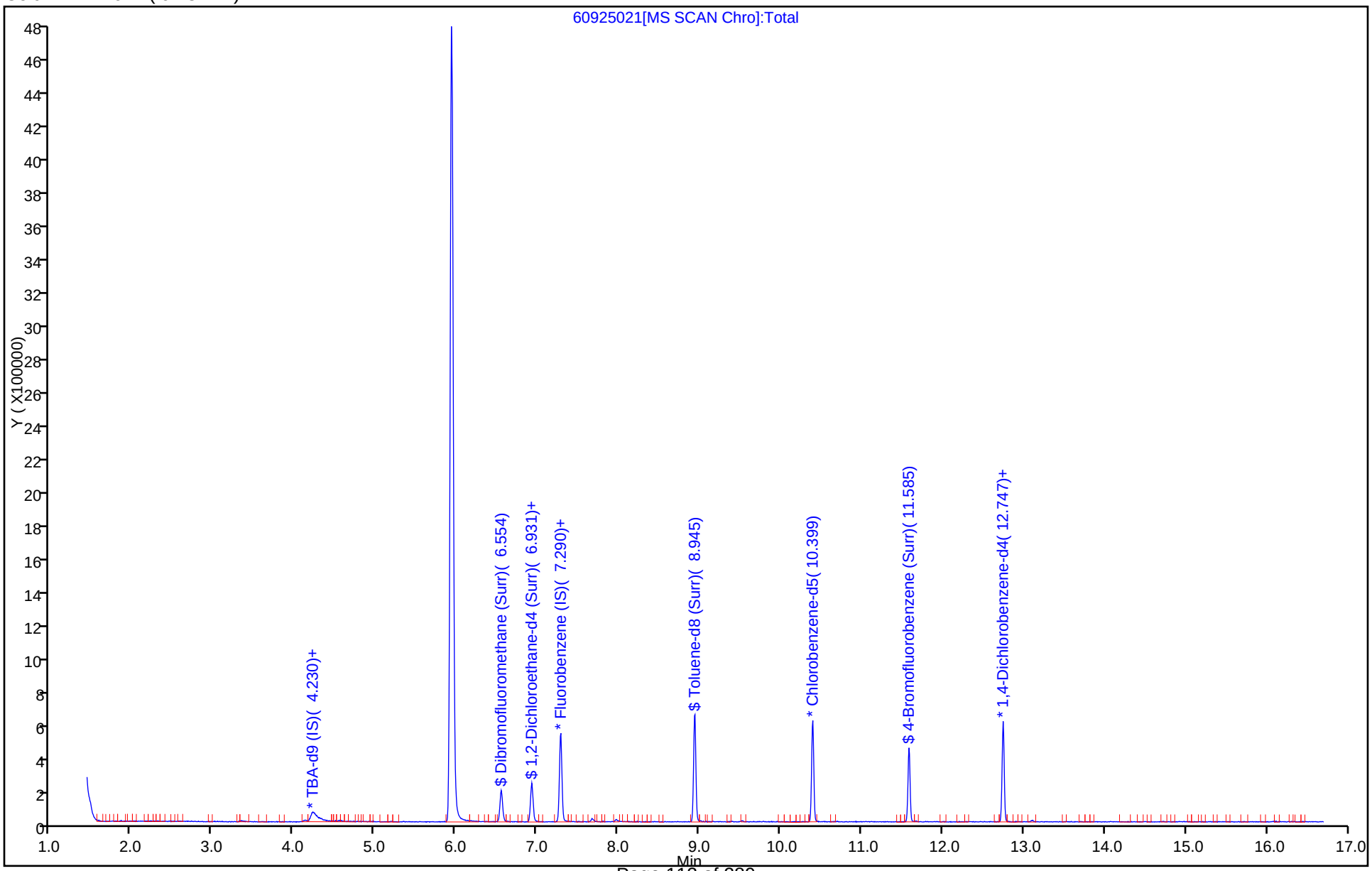
Report Date: 26-Sep-2015 08:33:04 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925021.D

Injection Date:	25-Sep-2015 21:32:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-47923-A-1	Lab Sample ID:	180-47923-1	Worklist Smp#:	21
Client ID:	HD-MW-136A-270/348-0				
Purge Vol:	5.000 mL	Dil. Factor:	100.0000	ALS Bottle#:	22
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

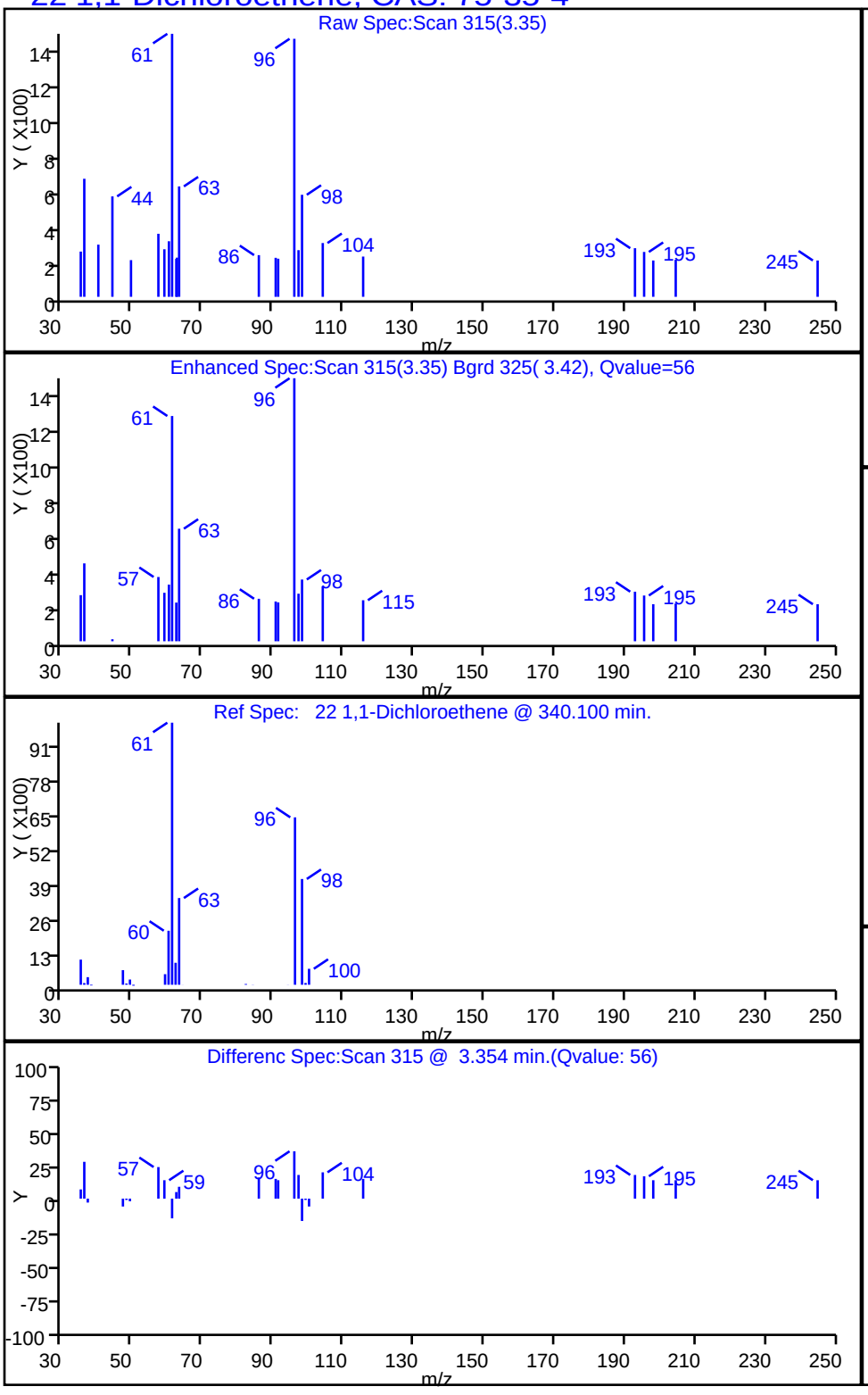


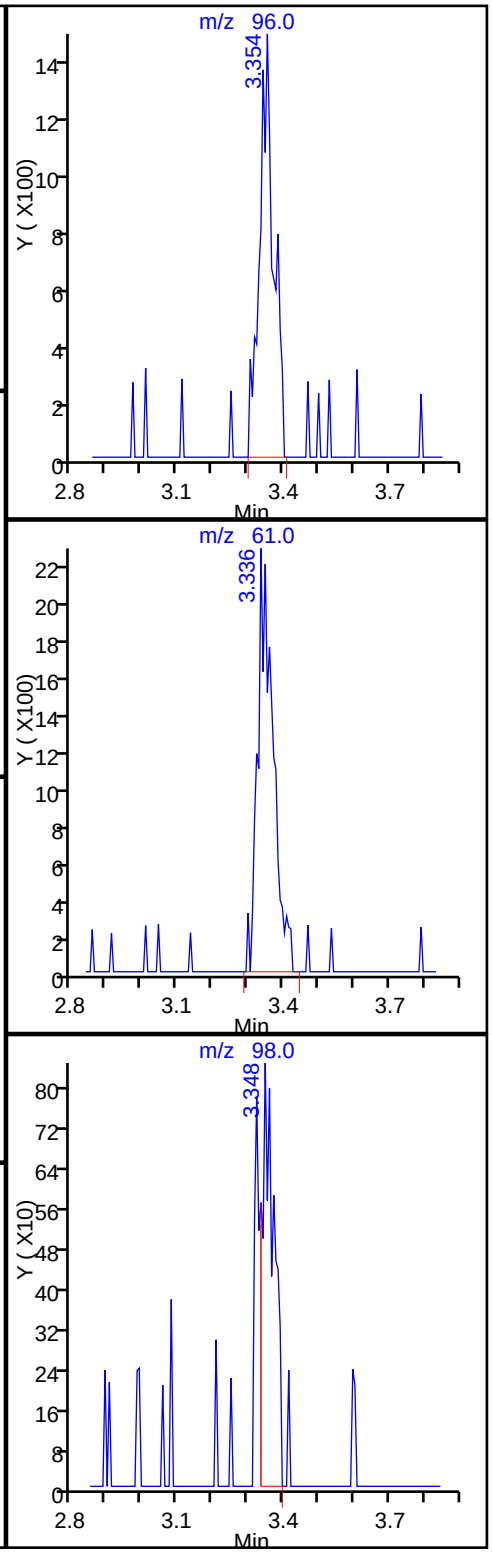
Report Date: 26-Sep-2015 08:33:04 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925021.D				
Injection Date:	25-Sep-2015 21:32:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-A-1	Lab Sample ID:	180-47923-1		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	001562	ALS Bottle#:	22	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4





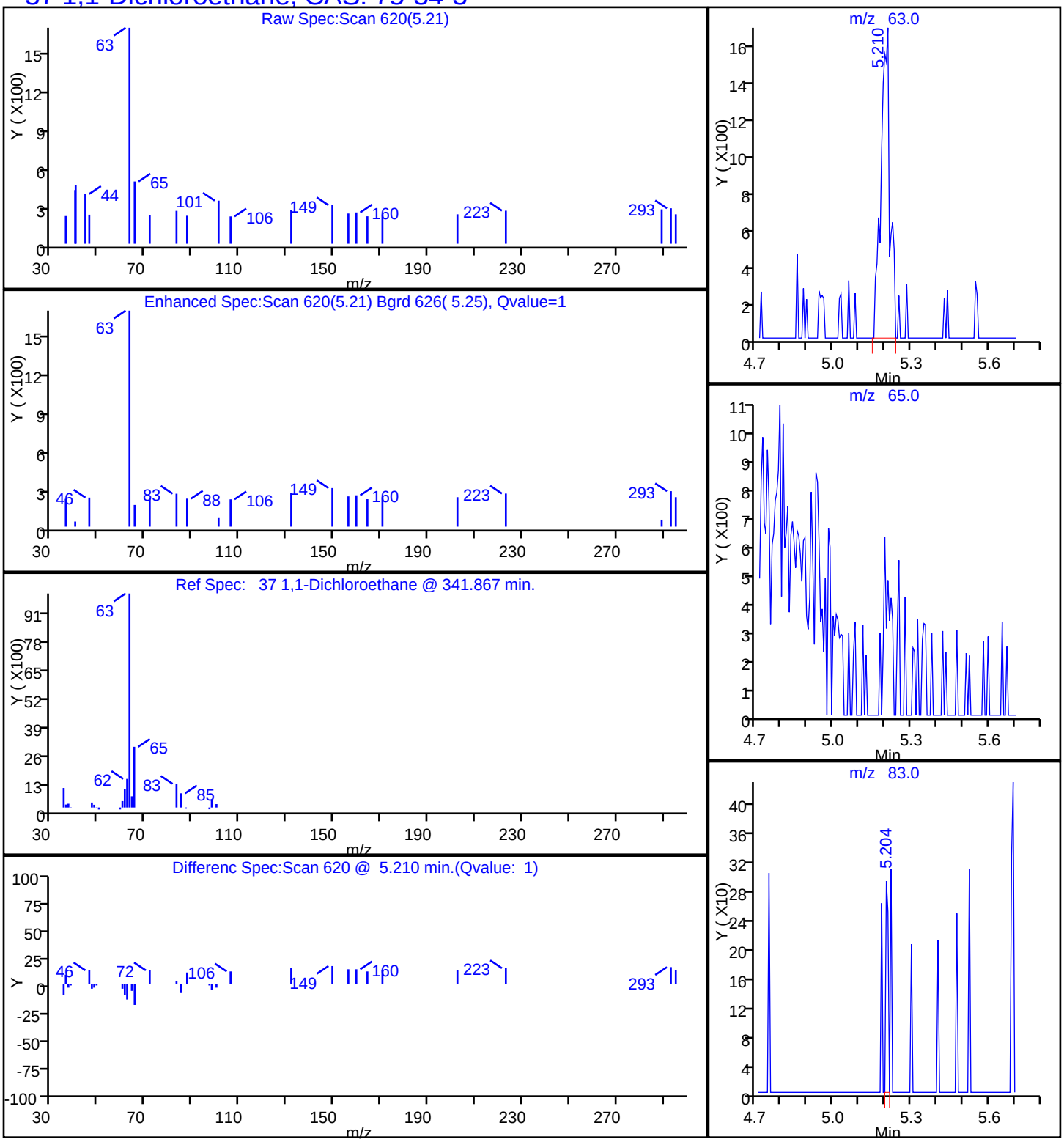
Report Date: 26-Sep-2015 08:33:04 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925021.D

Injection Date:	25-Sep-2015 21:32:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-A-1	Lab Sample ID:	180-47923-1		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	001562	ALS Bottle#:	22	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

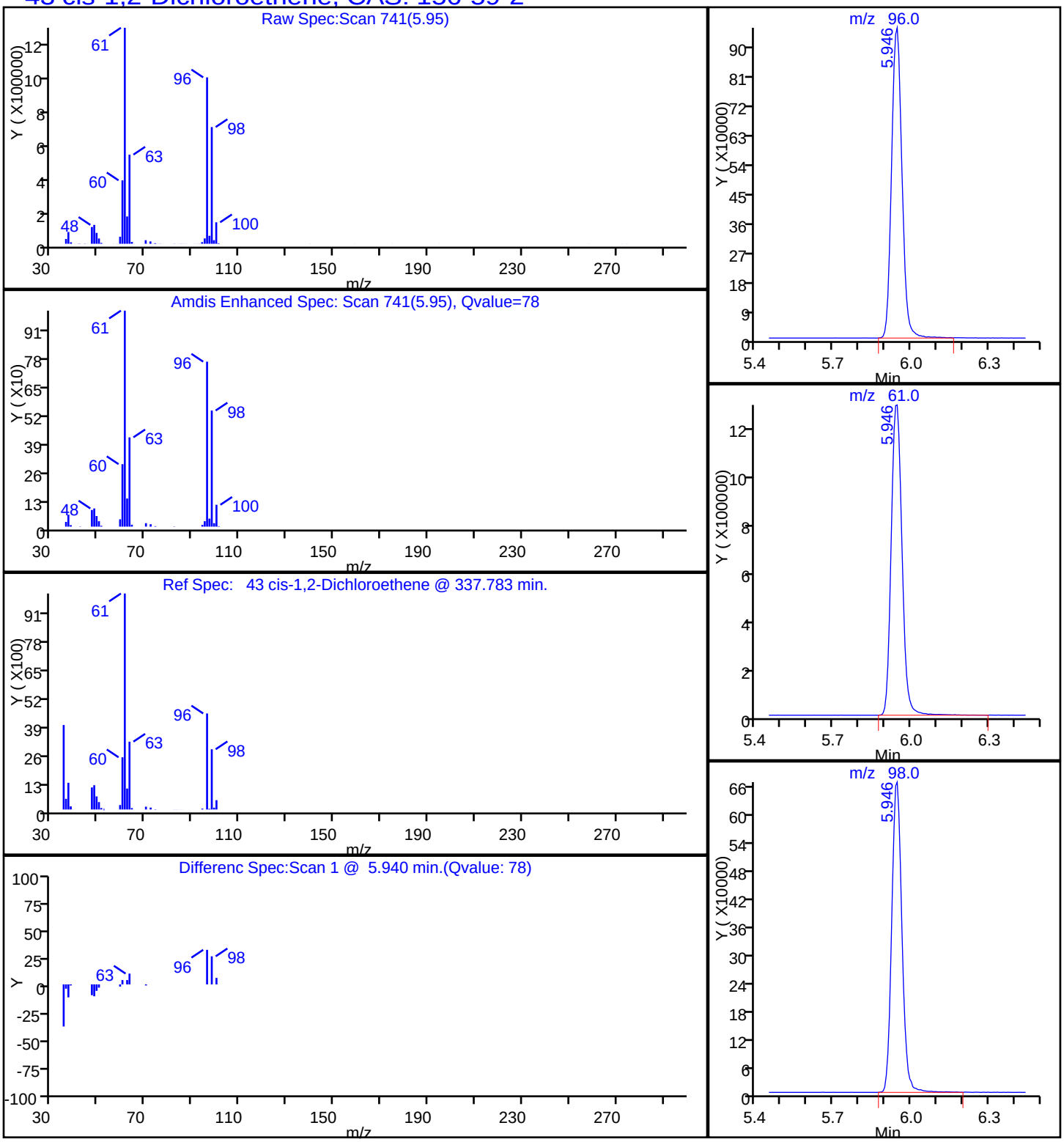


Report Date: 26-Sep-2015 08:33:04 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925021.D				
Injection Date:	25-Sep-2015 21:32:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-A-1	Lab Sample ID:	180-47923-1		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	001562	ALS Bottle#:	22	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



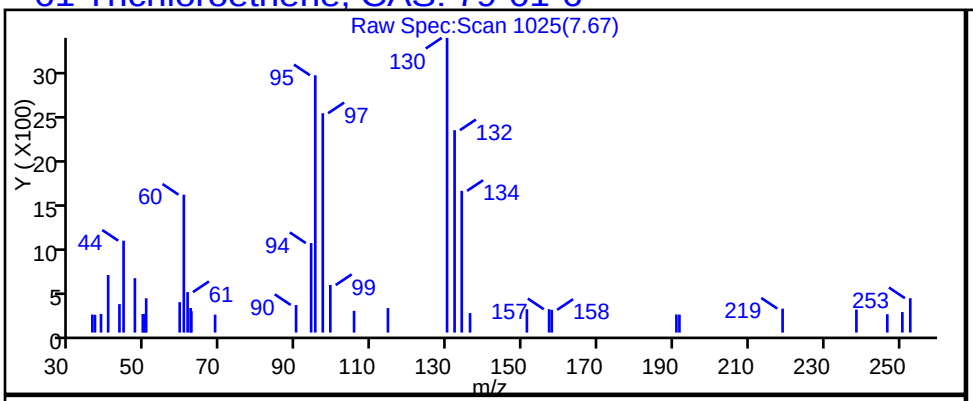
Report Date: 26-Sep-2015 08:33:04 Chrom Revision: 2.2 08-Sep-2015 13:41:46

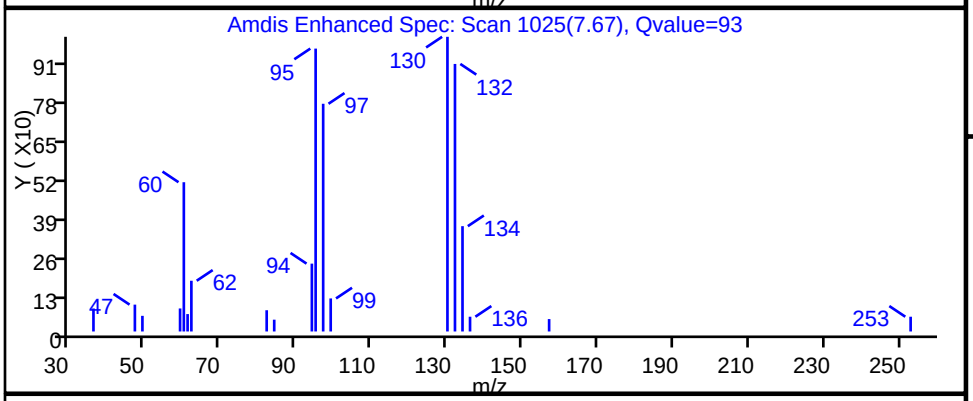
TestAmerica Pittsburgh

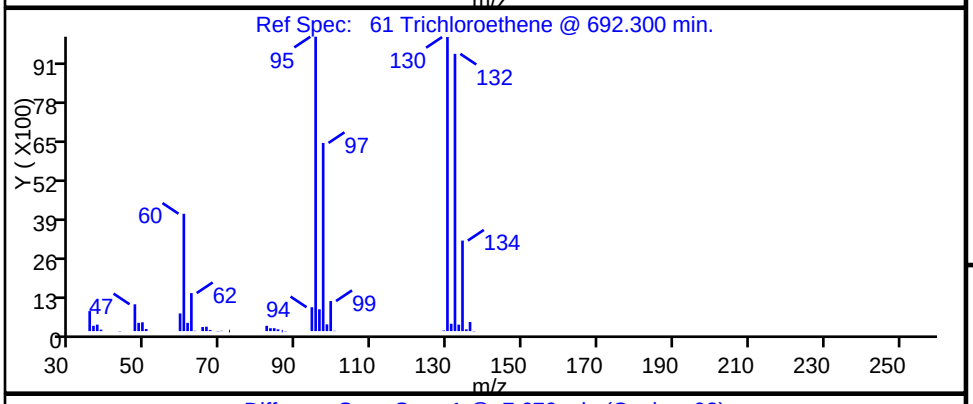
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925021.D

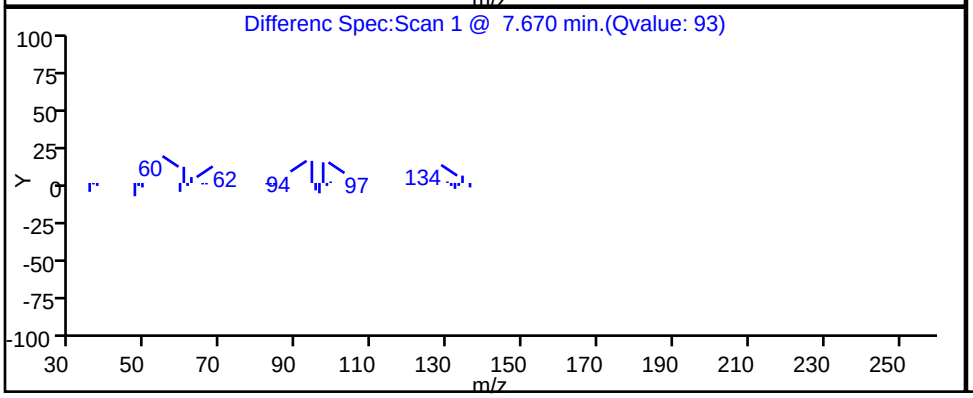
Injection Date:	25-Sep-2015 21:32:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-A-1	Lab Sample ID:	180-47923-1		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	001562	ALS Bottle#:	22	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

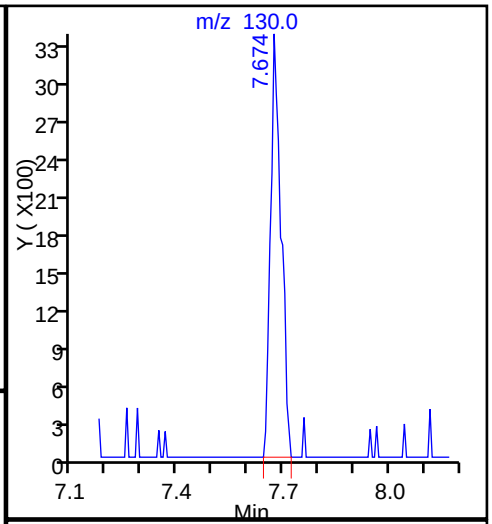
61 Trichloroethene, CAS: 79-01-6

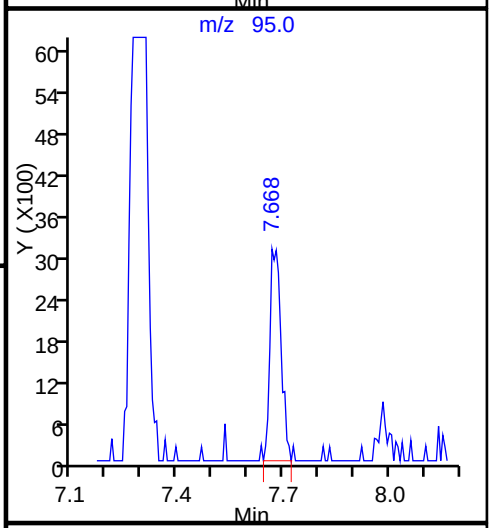


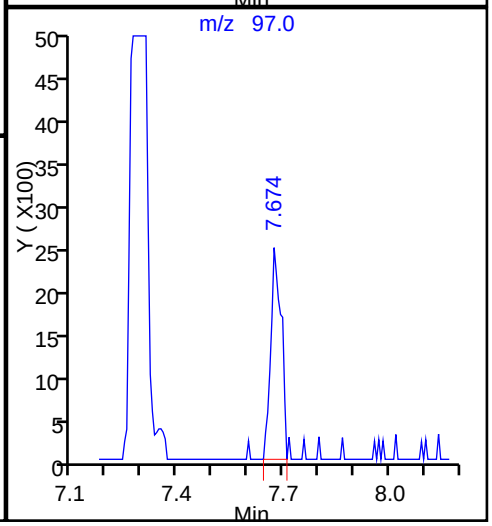












Manual Integration/User Assign Peak Report

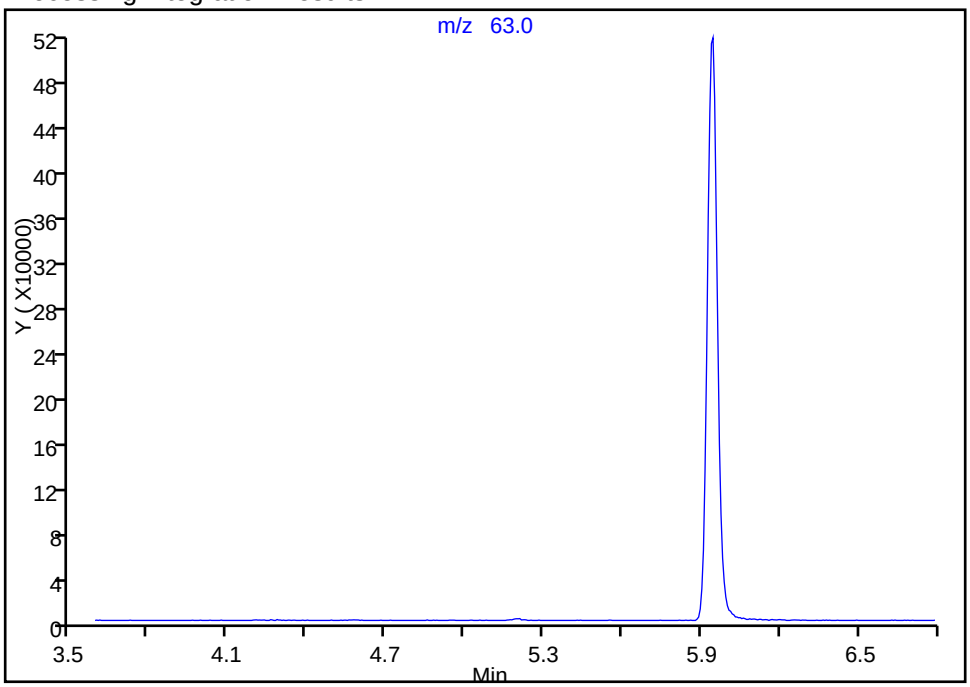
TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925021.D				
Injection Date:	25-Sep-2015 21:32:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-A-1	Lab Sample ID:	180-47923-1		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	001562	ALS Bottle#:	22	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

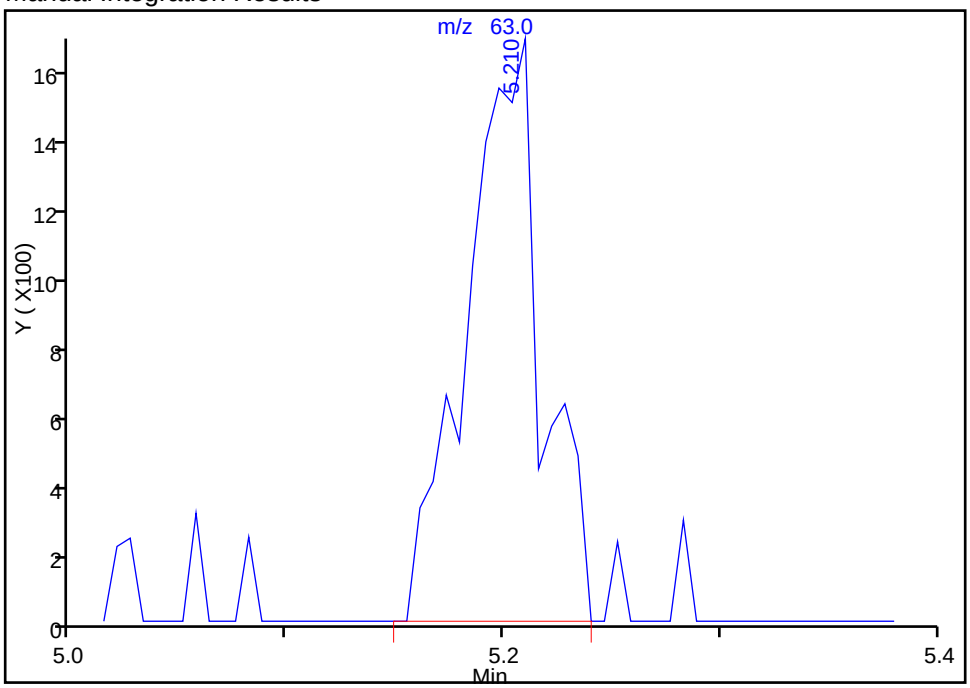
Not Detected
Expected RT: 5.19

Processing Integration Results



Manual Integration Results

RT: 5.21
Area: 3899
Amount: 0.751817
Amount Units: ng



Reviewer: fergusond, 26-Sep-2015 08:33:03
Audit Action: Manually Integrated
Audit Reason: Missed Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: HD-MW-136A-270/348-0 DL | Lab Sample ID: 180-47923-1 DL

Matrix: Water | Lab File ID: 60928012.D

Analysis Method: 8260C | Date Collected: 09/17/2015 14:12

Sample wt/vol: 5(mL) | Date Analyzed: 09/28/2015 15:58

Soil Aliquot Vol: | Dilution Factor: 1250

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

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

Analysis Batch No.: 155089 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1300	350
75-01-4	Vinyl chloride	ND		1300	280
74-83-9	Bromomethane	ND		1300	390
75-00-3	Chloroethane	ND		1300	270
75-35-4	1,1-Dichloroethene	ND		1300	370
67-64-1	Acetone	ND		6300	3100
75-15-0	Carbon disulfide	ND		1300	270
75-09-2	Methylene Chloride	ND		1300	160
156-60-5	trans-1,2-Dichloroethene	ND		1300	210
1634-04-4	Methyl tert-butyl ether	ND		1300	230
75-34-3	1,1-Dichloroethane	ND		1300	150
156-59-2	cis-1,2-Dichloroethene	20000		1300	300
74-97-5	Bromochloromethane	ND		1300	230
78-93-3	2-Butanone (MEK)	ND		6300	680
67-66-3	Chloroform	ND		1300	210
71-55-6	1,1,1-Trichloroethane	ND		1300	360
56-23-5	Carbon tetrachloride	ND		1300	170
71-43-2	Benzene	ND		1300	130
107-06-2	1,2-Dichloroethane	ND		1300	260
79-01-6	Trichloroethene	ND		1300	180
78-87-5	1,2-Dichloropropane	ND		1300	120
75-27-4	Bromodichloromethane	ND		1300	160
10061-01-5	cis-1,3-Dichloropropene	ND		1300	230
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		6300	660
108-88-3	Toluene	ND		1300	190
10061-02-6	trans-1,3-Dichloropropene	ND		1300	190
79-00-5	1,1,2-Trichloroethane	ND		1300	250
127-18-4	Tetrachloroethene	ND		1300	190
591-78-6	2-Hexanone	ND	^c	6300	200
124-48-1	Dibromochloromethane	ND		1300	170
106-93-4	1,2-Dibromoethane (EDB)	ND		1300	230
108-90-7	Chlorobenzene	ND		1300	170
630-20-6	1,1,1,2-Tetrachloroethane	ND		1300	350
100-41-4	Ethylbenzene	ND		1300	280
1330-20-7	Xylenes, Total	ND		3800	610
100-42-5	Styrene	ND		1300	120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: HD-MW-136A-270/348-0 DL | Lab Sample ID: 180-47923-1 DL

Matrix: Water | Lab File ID: 60928012.D

Analysis Method: 8260C | Date Collected: 09/17/2015 14:12

Sample wt/vol: 5(mL) | Date Analyzed: 09/28/2015 15:58

Soil Aliquot Vol: | Dilution Factor: 1250

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

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

Analysis Batch No.: 155089 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	*Bromoform*	*ND*		*1300*	*240*
79-34-5	*1,1,2,2-Tetrachloroethane*	*ND*		*1300*	*250*
107-13-1	*Acrylonitrile*	*ND*		*25000*	*680*
123-91-1	*1,4-Dioxane*	*ND*		*250000*	*43000*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		64-135
2037-26-5	Toluene-d8 (Surr)	104		71-118
460-00-4	4-Bromofluorobenzene (Surr)	97		70-118
1868-53-7	Dibromofluoromethane (Surr)	96		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928012.D
Lims ID: 180-47923-C-1 Lab Sample ID: 180-47923-1
Client ID: HD-MW-136A-270/348-0
Sample Type: Client
Inject. Date: 28-Sep-2015 15:58:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1250.0000
Sample Info: 180-47923-C-1, 1250x
Misc. Info.: 180-0008724-012
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Sep-2015 08:19:01 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

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

First Level Reviewer: fergusond Date: 29-Sep-2015 08:19:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.226	4.241	-0.015	92	196127	1000.0	
* 2 Fluorobenzene (IS)	96	7.286	7.283	0.003	97	554764	50.0	
* 3 Chlorobenzene-d5	119	10.400	10.398	0.002	92	122759	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.749	12.746	0.002	98	202717	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.556	6.547	0.009	93	122802	48.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.933	6.930	0.003	70	201524	48.9	
$ 7 Toluene-d8 (Surr)	98	8.940	8.938	0.002	94	501705	51.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.587	11.584	0.003	85	208157	48.4	
12 Chloromethane	50		1.765				ND	
13 Vinyl chloride	62		1.905				ND	
15 Bromomethane	94		2.240				ND	
16 Chloroethane	64		2.380				ND	
22 1,1-Dichloroethene	96		3.341				ND	
24 Acetone	43		3.426				ND	
26 Carbon disulfide	76		3.633				ND	
31 Methylene Chloride	84		4.126				ND	
33 Acrylonitrile	53		4.503				ND	
34 trans-1,2-Dichloroethene	96		4.558				ND	
35 Methyl tert-butyl ether	73		4.564				ND	
37 1,1-Dichloroethane	63		5.190				ND	
43 cis-1,2-Dichloroethene	96	5.947	5.933	0.014	85	278235	79.4	
44 2-Butanone (MEK)	43		5.951				ND	
48 Chlorobromomethane	128		6.225				ND	
50 Chloroform	83		6.371				ND	
51 1,1,1-Trichloroethane	97		6.535				ND	
53 Carbon tetrachloride	117		6.717				ND	
56 Benzene	78		6.942				ND	
57 1,2-Dichloroethane	62		7.015				ND	
61 Trichloroethene	130		7.679				ND	
64 1,2-Dichloropropane	63		7.952				ND	
65 1,4-Dioxane	88		8.038				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.232				ND	
71 cis-1,3-Dichloropropene	75		8.676				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.822				ND	
73 Toluene	91		9.011				ND	
74 trans-1,3-Dichloropropene	75		9.254				ND	
76 1,1,2-Trichloroethane	97		9.449				ND	
77 Tetrachloroethene	164		9.528				ND	
79 2-Hexanone	43		9.656				ND	
81 Chlorodibromomethane	129		9.820				ND	
82 Ethylene Dibromide	107		9.936				ND	
84 Chlorobenzene	112		10.428				ND	
86 1,1,1,2-Tetrachloroethane	131		10.520				ND	
87 Ethylbenzene	106		10.526				ND	
88 m-Xylene & p-Xylene	106		10.659				ND	
89 o-Xylene	106		11.037				ND	
90 Styrene	104		11.061				ND	
91 Bromoform	173		11.244				ND	
96 1,1,2,2-Tetrachloroethane	83		11.712				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00042	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00042	Amount Added:	2.00	Units: uL	Run Reagent

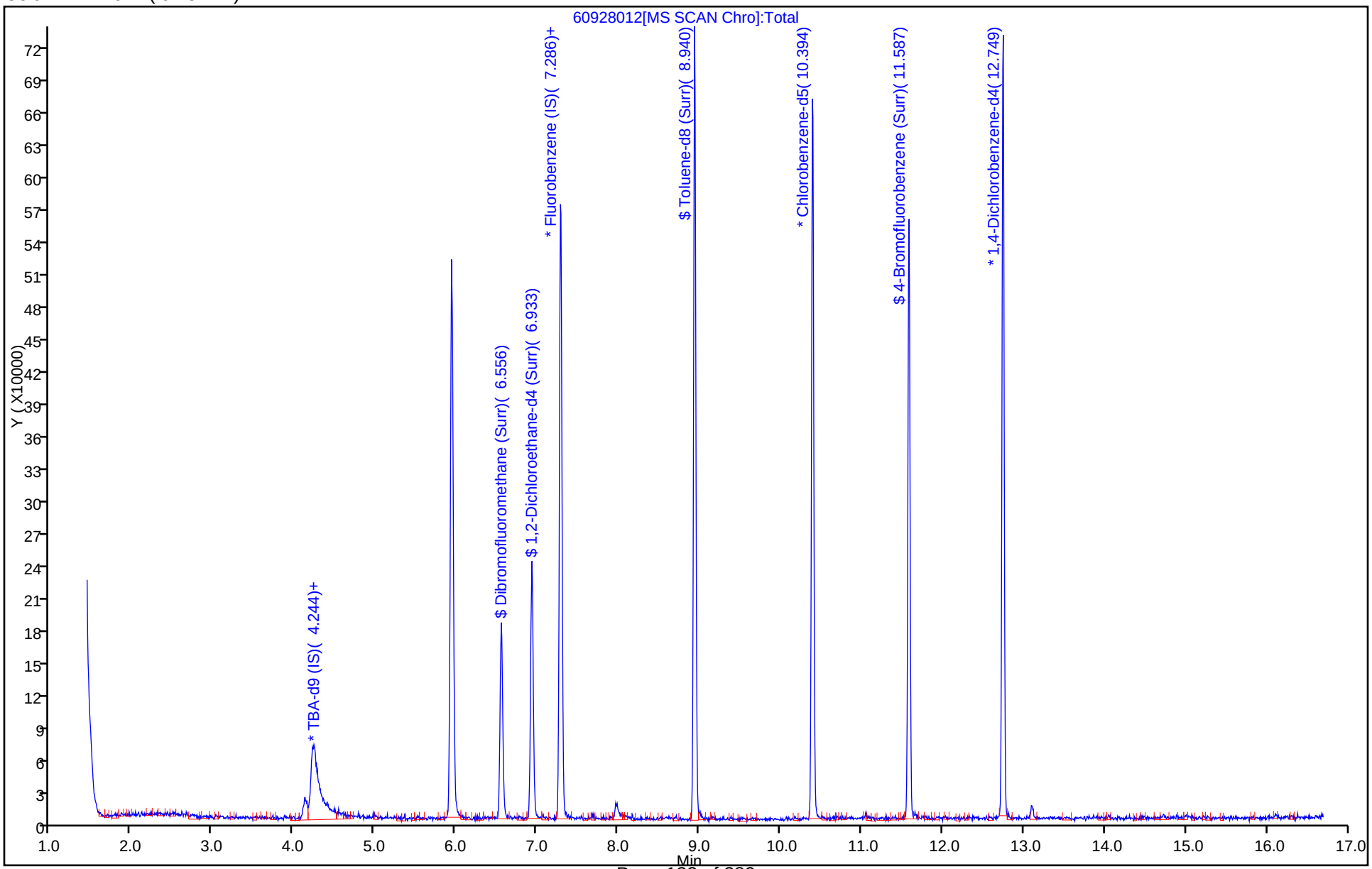
Report Date: 29-Sep-2015 08:19:02 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928012.D

Injection Date:	28-Sep-2015 15:58:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-47923-C-1	Lab Sample ID:	180-47923-1	Worklist Smp#:	12
Client ID:	HD-MW-136A-270/348-0				
Purge Vol:	5.000 mL	Dil. Factor:	1250.0000	ALS Bottle#:	12
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

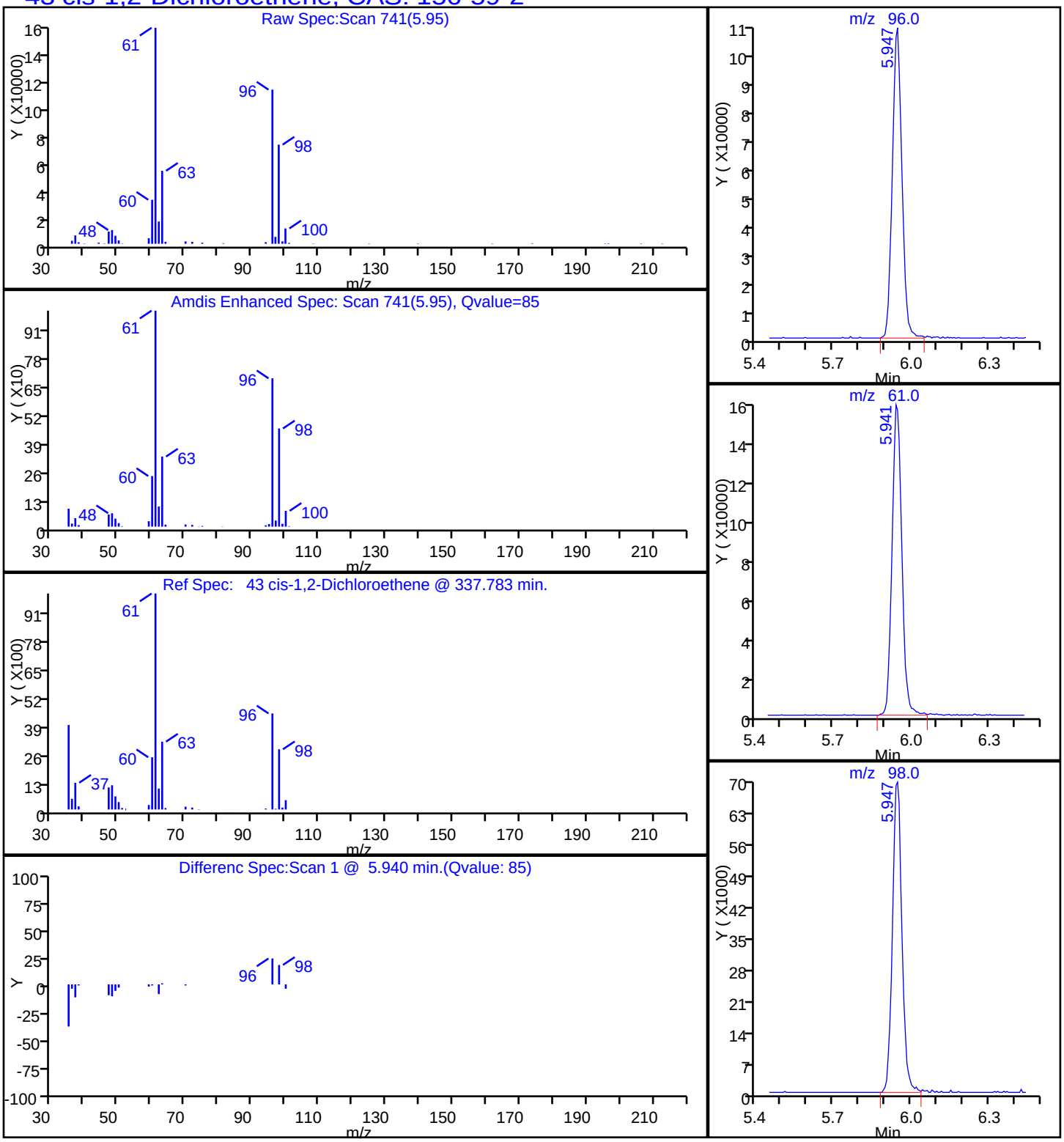


Report Date: 29-Sep-2015 08:19:02 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928012.D				
Injection Date:	28-Sep-2015 15:58:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-C-1	Lab Sample ID:	180-47923-1		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	001562	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1250.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: HD-RW-5-0/1-0 | Lab Sample ID: 180-47923-2

Matrix: Water | Lab File ID: 60925023.D

Analysis Method: 8260C | Date Collected: 09/17/2015 14:40

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 22:20

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.: 154899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.28
75-01-4	Vinyl chloride	ND		1.0	0.23
74-83-9	Bromomethane	ND		1.0	0.31
75-00-3	Chloroethane	ND		1.0	0.21
75-35-4	1,1-Dichloroethene	ND		1.0	0.30
67-64-1	Acetone	ND		5.0	2.5
75-15-0	Carbon disulfide	ND		1.0	0.21
75-09-2	Methylene Chloride	ND		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.17
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.18
75-34-3	1,1-Dichloroethane	ND		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	1.3		1.0	0.24
74-97-5	Bromochloromethane	ND		1.0	0.18
78-93-3	2-Butanone (MEK)	ND		5.0	0.55
67-66-3	Chloroform	ND		1.0	0.17
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.29
56-23-5	Carbon tetrachloride	ND		1.0	0.14
71-43-2	Benzene	ND		1.0	0.11
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
79-01-6	Trichloroethene	0.82	J	1.0	0.14
78-87-5	1,2-Dichloropropane	ND		1.0	0.095
75-27-4	Bromodichloromethane	ND		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.53
108-88-3	Toluene	ND		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.15
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.20
127-18-4	Tetrachloroethene	0.17	J	1.0	0.15
591-78-6	2-Hexanone	ND		5.0	0.16
124-48-1	Dibromochloromethane	ND	^c	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.18
108-90-7	Chlorobenzene	ND		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.28
100-41-4	Ethylbenzene	ND		1.0	0.23
1330-20-7	Xylenes, Total	ND		3.0	0.49
100-42-5	Styrene	ND		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: HD-RW-5-0/1-0 | Lab Sample ID: 180-47923-2

Matrix: Water | Lab File ID: 60925023.D

Analysis Method: 8260C | Date Collected: 09/17/2015 14:40

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 22:20

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.: 154899 | Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		64-135
2037-26-5	Toluene-d8 (Surr)	101		71-118
460-00-4	4-Bromofluorobenzene (Surr)	83		70-118
1868-53-7	Dibromofluoromethane (Surr)	115		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925023.D
Lims ID: 180-47923-A-2 Lab Sample ID: 180-47923-2
Client ID: HD-RW-5-0/1-0
Sample Type: Client
Inject. Date: 25-Sep-2015 22:20:30 ALS Bottle#: 24 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-47923-A-2
Misc. Info.: 180-0008690-023
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Sep-2015 08:35:40 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: fergusond Date: 26-Sep-2015 08:35:39

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.227	4.235	-0.008	88	133857	1000.0	
*	2 Fluorobenzene (IS)	96	7.287	7.289	-0.002	97	464308	50.0	
*	3 Chlorobenzene-d5	119	10.395	10.398	-0.003	91	106842	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.750	12.746	0.004	98	166691	50.0	
$	5 Dibromofluoromethane (Surr	113	6.557	6.553	0.004	93	123474	57.7	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.934	6.930	0.004	70	191613	55.5	
$	7 Toluene-d8 (Surr)	98	8.942	8.937	0.005	94	427058	50.7	
$	8 4-Bromofluorobenzene (Surr	95	11.588	11.584	0.004	86	154742	41.4	
	12 Chloromethane	50	1.763	1.759	0.004	9	2359	0.8513	
	13 Vinyl chloride	62		1.899				ND	
	15 Bromomethane	94		2.234				ND	
	16 Chloroethane	64		2.380				ND	
	22 1,1-Dichloroethene	96		3.341				ND	
	24 Acetone	43		3.420				ND	
	26 Carbon disulfide	76		3.627				ND	
	31 Methylene Chloride	84		4.125				ND	
	33 Acrylonitrile	53		4.503				ND	
	34 trans-1,2-Dichloroethene	96		4.557				ND	
	35 Methyl tert-butyl ether	73		4.563				ND	
	37 1,1-Dichloroethane	63		5.190				ND	
	44 2-Butanone (MEK)	43		5.938				ND	
	43 cis-1,2-Dichloroethene	96	5.942	5.938	0.004	80	18706	6.38	
	48 Chlorobromomethane	128		6.230				ND	
	50 Chloroform	83		6.370				ND	
	51 1,1,1-Trichloroethane	97		6.535				ND	
	53 Carbon tetrachloride	117		6.711				ND	
	56 Benzene	78		6.936				ND	
	57 1,2-Dichloroethane	62		7.015				ND	
	61 Trichloroethene	130	7.682	7.678	0.004	95	9215	4.08	
	64 1,2-Dichloropropane	63		7.952				ND	
	65 1,4-Dioxane	88		8.031				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.226				ND	
71 cis-1,3-Dichloropropene	75		8.676				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.822				ND	
73 Toluene	91	9.008	9.011	-0.002	38	1886	0.1711	
74 trans-1,3-Dichloropropene	75		9.254				ND	
76 1,1,2-Trichloroethane	97		9.449				ND	
77 Tetrachloroethene	164	9.519	9.528	-0.009	90	1605	0.8535	
79 2-Hexanone	43		9.655				ND	
81 Chlorodibromomethane	129		9.820				ND	
82 Ethylene Dibromide	107		9.941				ND	
84 Chlorobenzene	112		10.428				ND	
86 1,1,1,2-Tetrachloroethane	131		10.519				ND	
87 Ethylbenzene	106		10.525				ND	
88 m-Xylene & p-Xylene	106		10.659				ND	
89 o-Xylene	106		11.042				ND	
90 Styrene	104		11.061				ND	
91 Bromoform	173		11.243				ND	
96 1,1,2,2-Tetrachloroethane	83		11.712				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00042	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00042	Amount Added:	2.00	Units: uL	Run Reagent

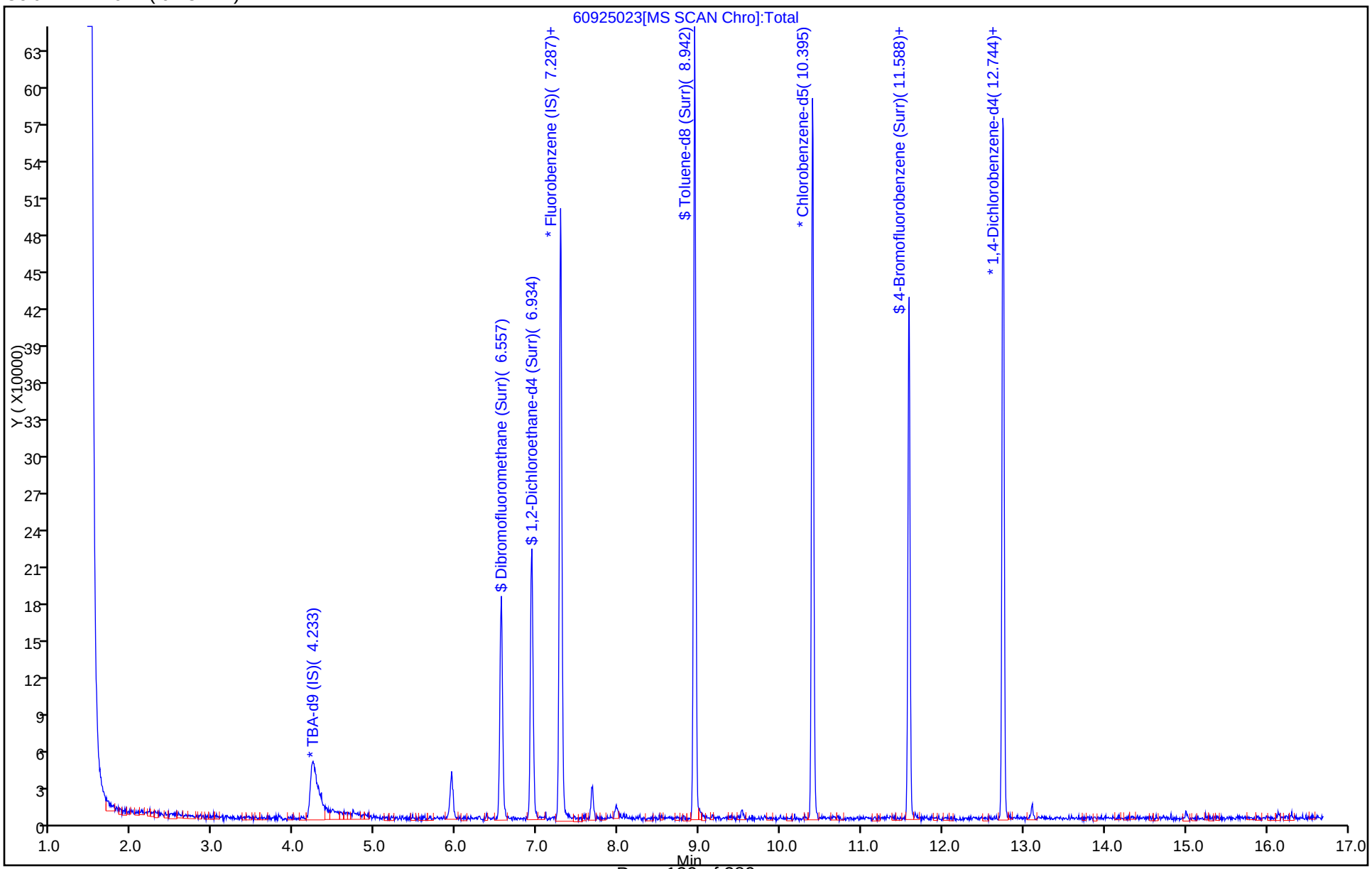
Report Date: 26-Sep-2015 08:35:40 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925023.D

Injection Date:	25-Sep-2015 22:20:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-47923-A-2	Lab Sample ID:	180-47923-2	Worklist Smp#:	23
Client ID:	HD-RW-5-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

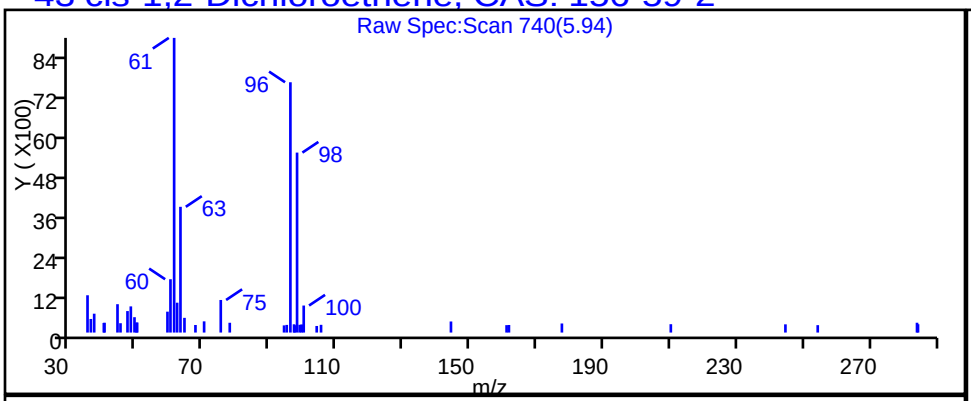


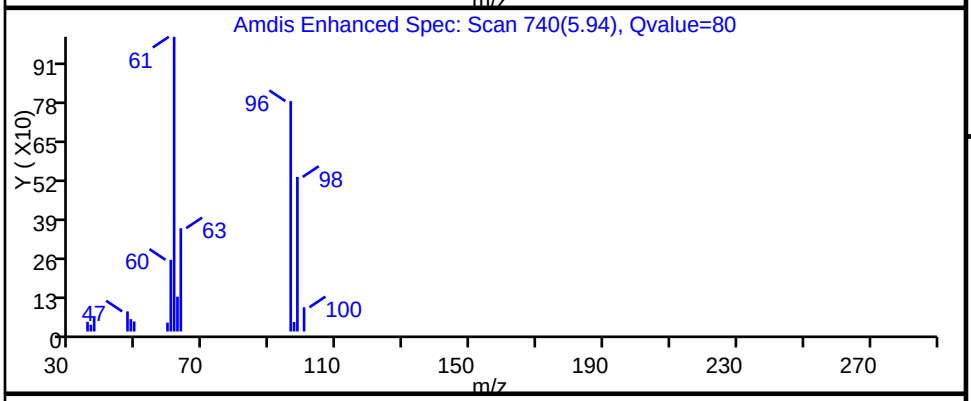
Report Date: 26-Sep-2015 08:35:40 Chrom Revision: 2.2 08-Sep-2015 13:41:46

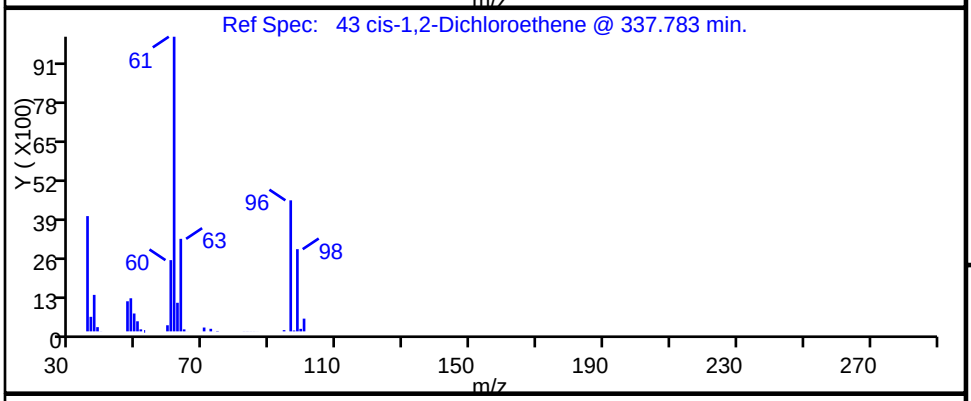
TestAmerica Pittsburgh

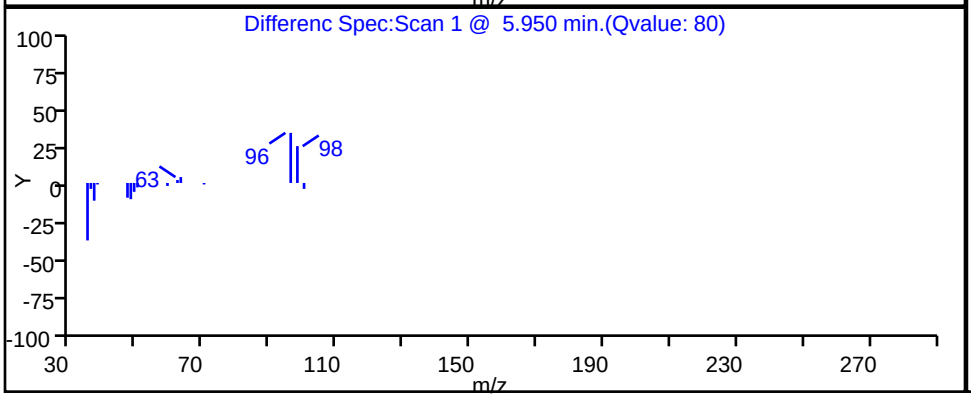
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925023.D		
Injection Date:	25-Sep-2015 22:20:30	Instrument ID:	CHHP6
Lims ID:	180-47923-A-2	Lab Sample ID:	180-47923-2
Client ID:	HD-RW-5-0/1-0		
Operator ID:	001562	ALS Bottle#:	24 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

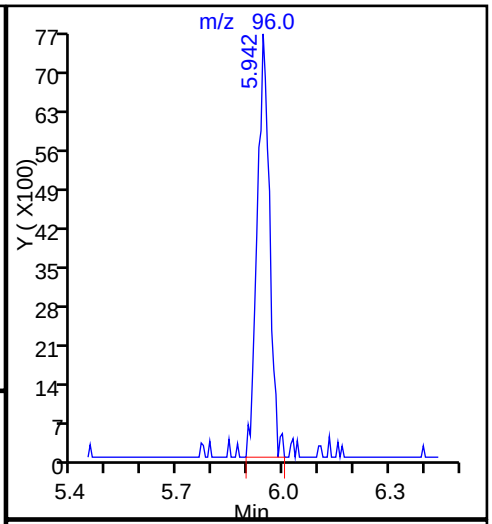
43 cis-1,2-Dichloroethene, CAS: 156-59-2

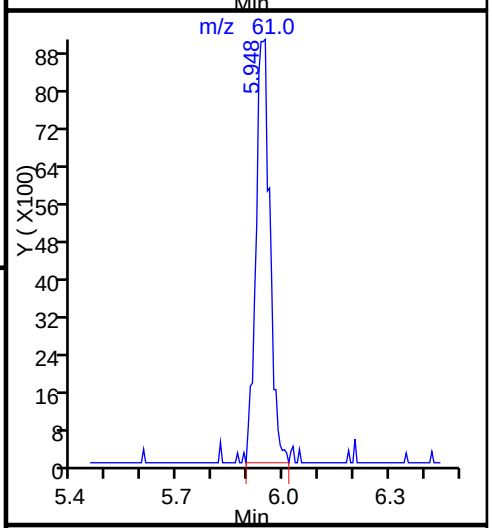


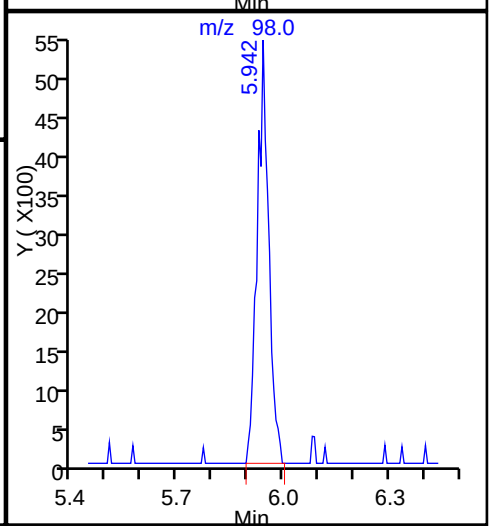










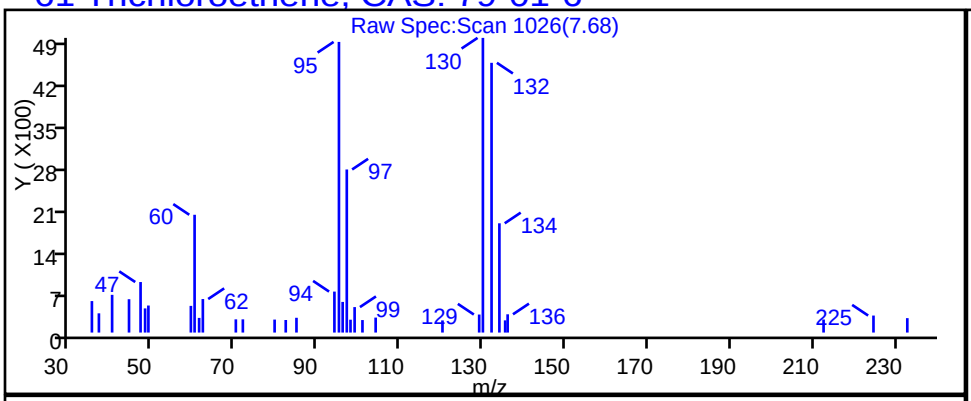


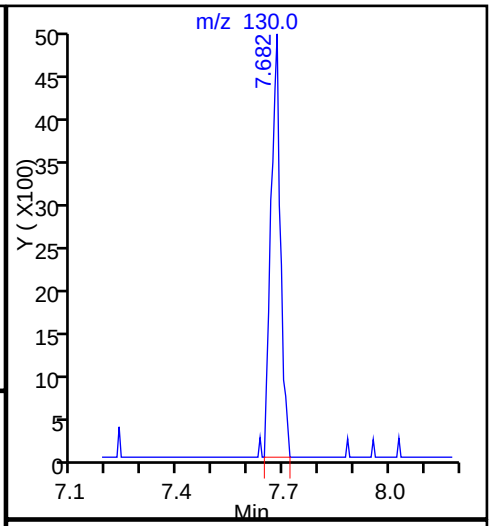
Report Date: 26-Sep-2015 08:35:40 Chrom Revision: 2.2 08-Sep-2015 13:41:46

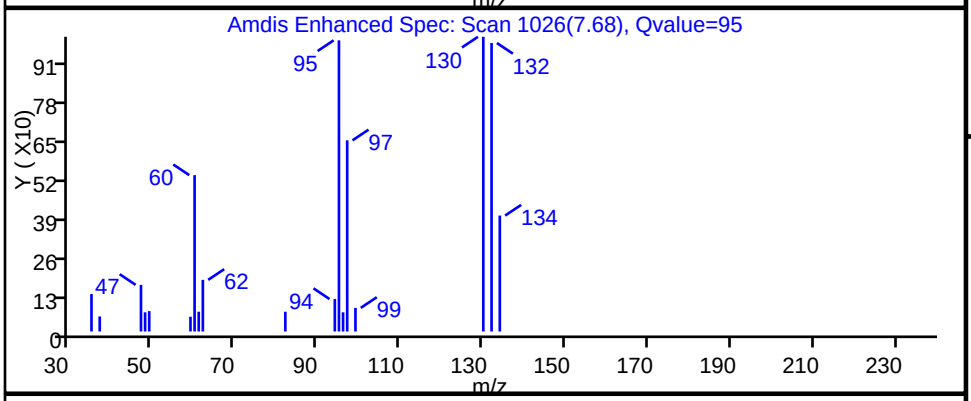
TestAmerica Pittsburgh

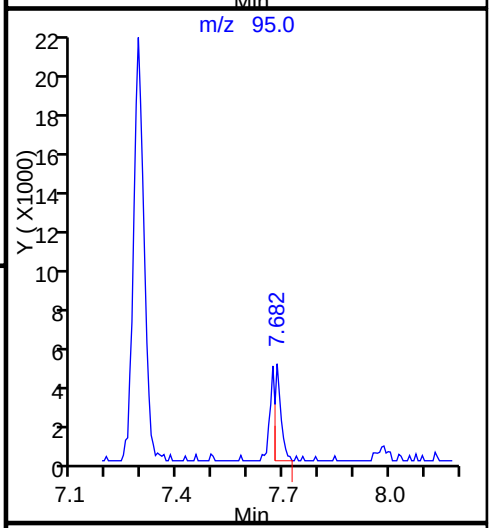
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925023.D		
Injection Date:	25-Sep-2015 22:20:30	Instrument ID:	CHHP6
Lims ID:	180-47923-A-2	Lab Sample ID:	180-47923-2
Client ID:	HD-RW-5-0/1-0		
Operator ID:	001562	ALS Bottle#:	24 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

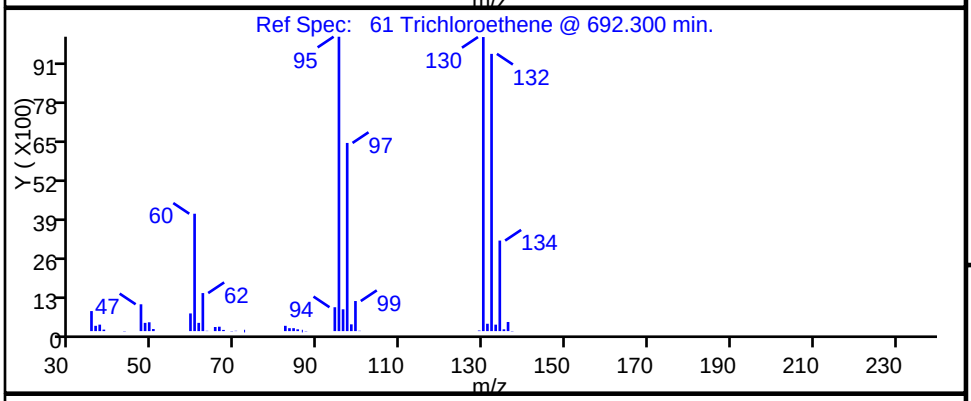
61 Trichloroethene, CAS: 79-01-6

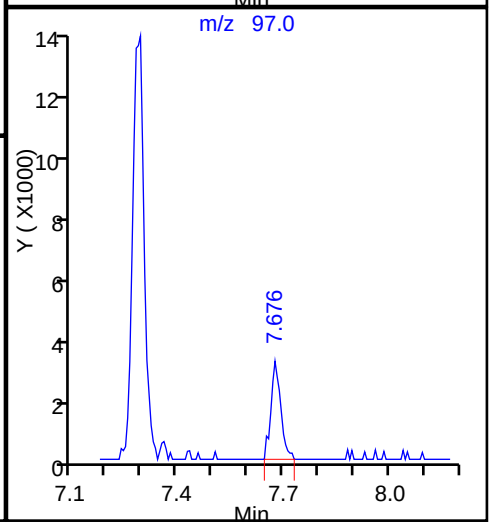


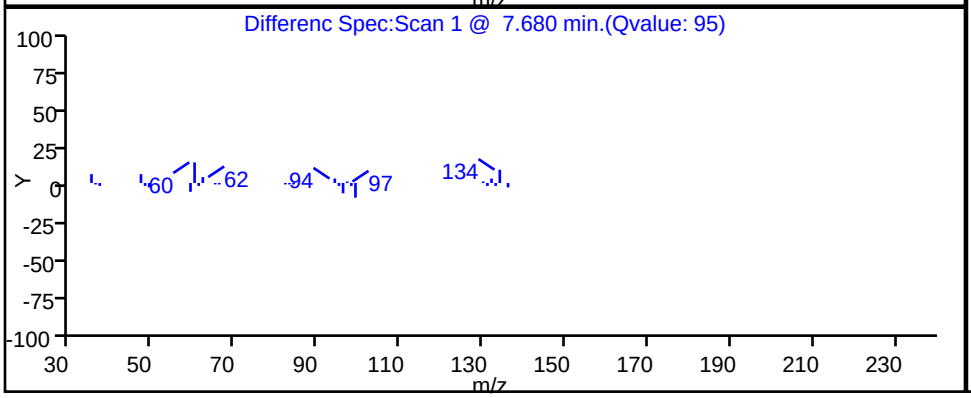












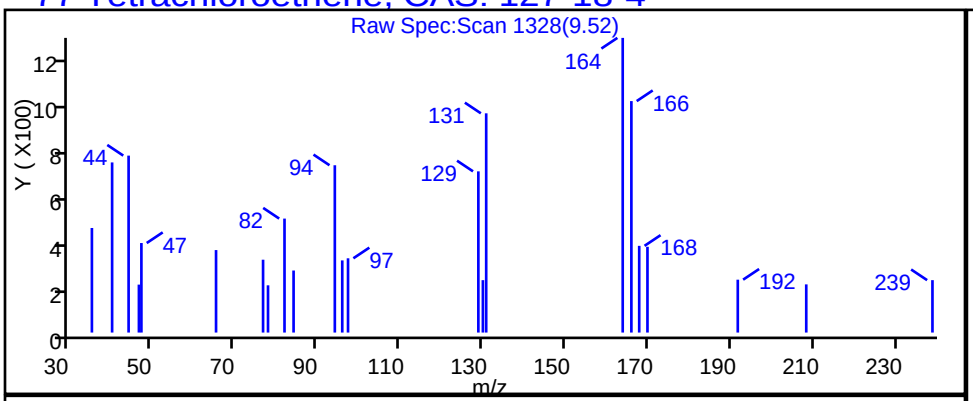
Report Date: 26-Sep-2015 08:35:40 Chrom Revision: 2.2 08-Sep-2015 13:41:46

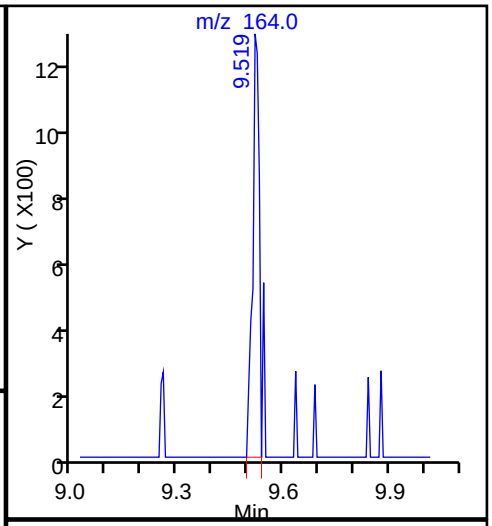
TestAmerica Pittsburgh

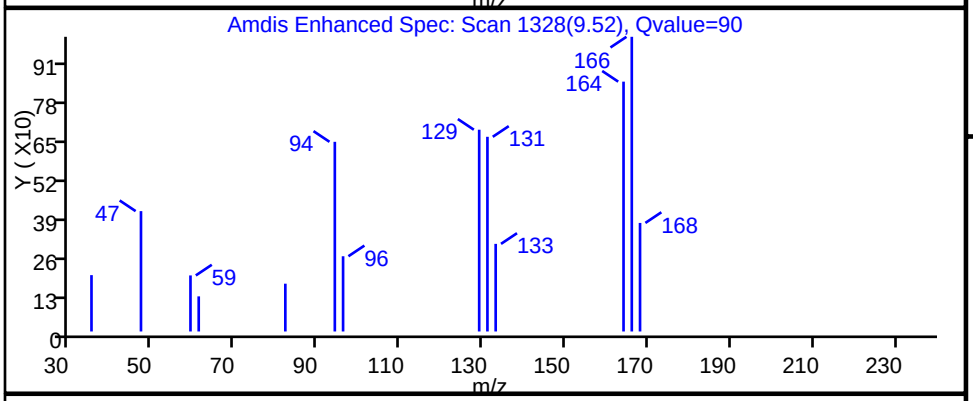
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925023.D

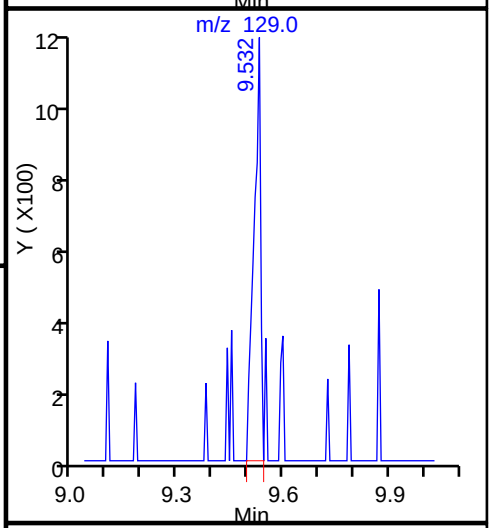
Injection Date:	25-Sep-2015 22:20:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-A-2	Lab Sample ID:	180-47923-2		
Client ID:	HD-RW-5-0/1-0				
Operator ID:	001562	ALS Bottle#:	24	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

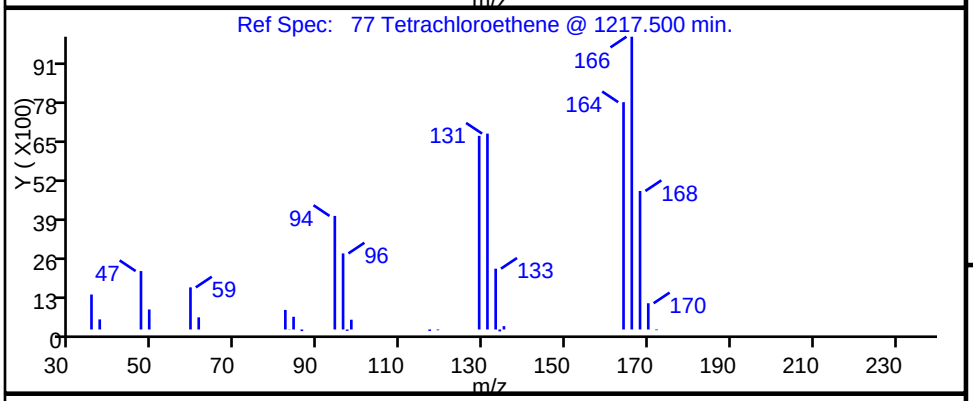
77 Tetrachloroethene, CAS: 127-18-4

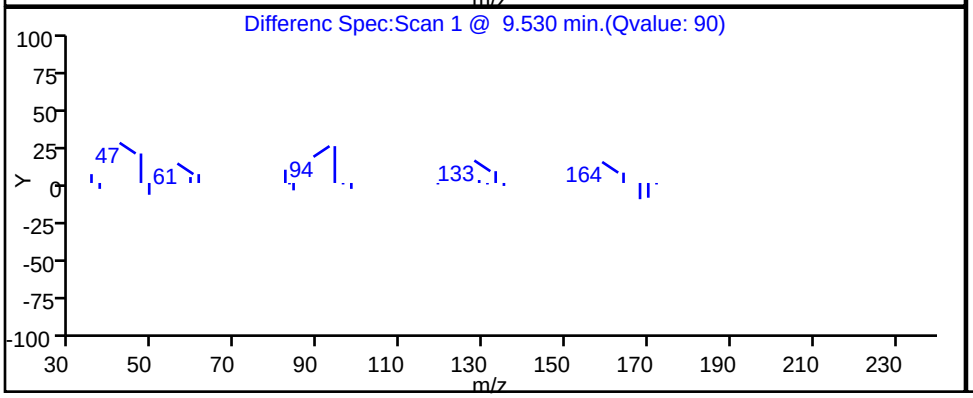


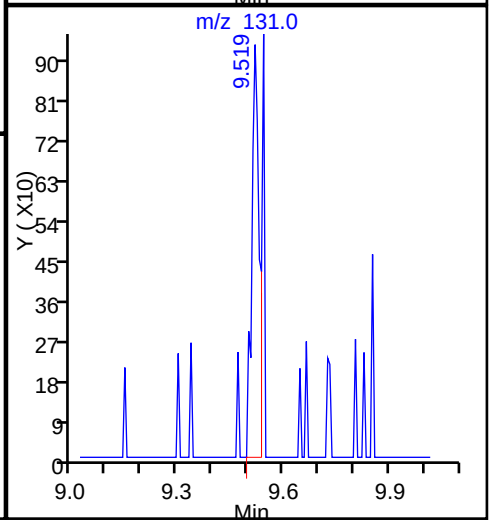












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: HD-QC3-0/1-2 | Lab Sample ID: 180-47923-3

Matrix: Water | Lab File ID: 60925006.D

Analysis Method: 8260C | Date Collected: 09/17/2015 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 15:03

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.: 154899 | Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: HD-QC3-0/1-2 | Lab Sample ID: 180-47923-3

Matrix: Water | Lab File ID: 60925006.D

Analysis Method: 8260C | Date Collected: 09/17/2015 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 15:03

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.: 154899 | Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		64-135
2037-26-5	Toluene-d8 (Surr)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	82		70-118
1868-53-7	Dibromofluoromethane (Surr)	113		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925006.D
Lims ID: 180-47923-A-3 Lab Sample ID: 180-47923-3
Client ID: HD-QC3-0/1-2
Sample Type: Client
Inject. Date: 25-Sep-2015 15:03:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-47923-A-3
Misc. Info.: 180-0008690-006
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Sep-2015 15:43:57 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: fergusond Date: 25-Sep-2015 15:43:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.235	4.235	0.000	88	158408	1000.0	
* 2 Fluorobenzene (IS)	96	7.288	7.289	-0.001	97	479313	50.0	
* 3 Chlorobenzene-d5	119	10.397	10.398	-0.001	90	110110	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.745	12.746	-0.001	98	170859	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.558	6.553	0.005	93	124523	56.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.936	6.930	0.006	70	192341	54.0	
$ 7 Toluene-d8 (Surr)	98	8.943	8.937	0.006	95	455936	52.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.583	11.584	-0.001	86	158408	41.1	
12 Chloromethane	50		1.759				ND	
13 Vinyl chloride	62		1.899				ND	
15 Bromomethane	94		2.234				ND	
16 Chloroethane	64		2.380				ND	
22 1,1-Dichloroethene	96		3.341				ND	
24 Acetone	43		3.420				ND	
26 Carbon disulfide	76		3.627				ND	
31 Methylene Chloride	84		4.125				ND	
33 Acrylonitrile	53		4.503				ND	
34 trans-1,2-Dichloroethene	96		4.557				ND	
35 Methyl tert-butyl ether	73		4.563				ND	
37 1,1-Dichloroethane	63		5.190				ND	
43 cis-1,2-Dichloroethene	96		5.938				ND	
44 2-Butanone (MEK)	43		5.938				ND	
48 Chlorobromomethane	128		6.230				ND	
50 Chloroform	83		6.370				ND	
51 1,1,1-Trichloroethane	97		6.535				ND	
53 Carbon tetrachloride	117		6.711				ND	
56 Benzene	78		6.936				ND	
57 1,2-Dichloroethane	62		7.015				ND	
61 Trichloroethene	130		7.678				ND	
64 1,2-Dichloropropane	63		7.952				ND	
65 1,4-Dioxane	88		8.031				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.226				ND	
71 cis-1,3-Dichloropropene	75		8.676				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.822				ND	
73 Toluene	91		9.011				ND	
74 trans-1,3-Dichloropropene	75		9.254				ND	
76 1,1,2-Trichloroethane	97		9.449				ND	
77 Tetrachloroethene	164		9.528				ND	
79 2-Hexanone	43		9.655				ND	
81 Chlorodibromomethane	129		9.820				ND	
82 Ethylene Dibromide	107		9.941				ND	
84 Chlorobenzene	112		10.428				ND	
86 1,1,1,2-Tetrachloroethane	131		10.519				ND	
87 Ethylbenzene	106		10.525				ND	
88 m-Xylene & p-Xylene	106		10.659				ND	
89 o-Xylene	106		11.042				ND	
90 Styrene	104		11.061				ND	
91 Bromoform	173		11.243				ND	
96 1,1,2,2-Tetrachloroethane	83		11.712				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00042	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00042	Amount Added:	2.00	Units: uL	Run Reagent

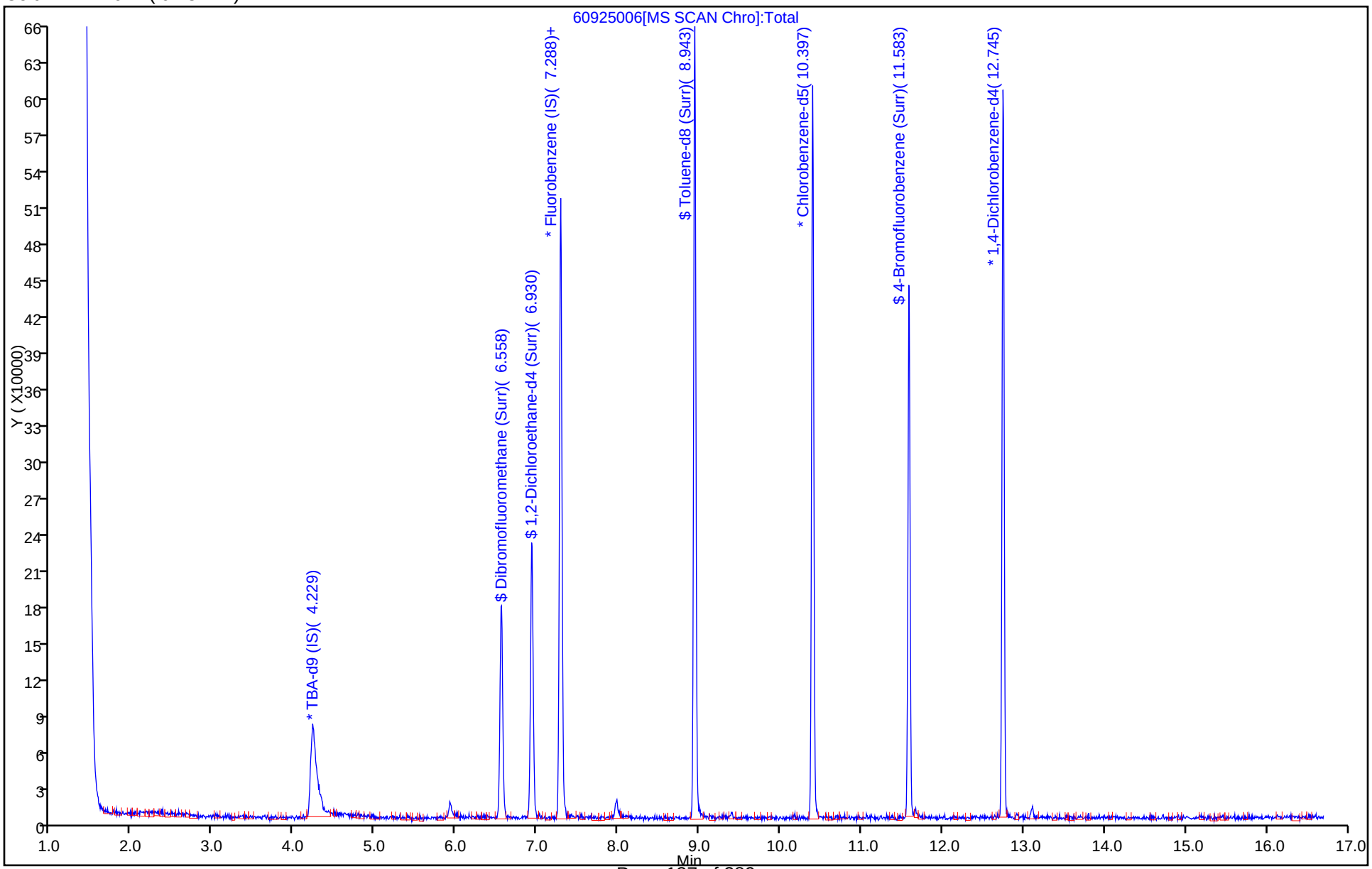
Report Date: 25-Sep-2015 15:43:58 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925006.D

Injection Date:	25-Sep-2015 15:03:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-47923-A-3	Lab Sample ID:	180-47923-3	Worklist Smp#:	6
Client ID:	HD-QC3-0/1-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 | Lab Sample ID: 180-47923-4

Matrix: Water | Lab File ID: 60925005.D

Analysis Method: 8260C | Date Collected: 09/17/2015 14:10

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 14:39

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.: 154899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.28
75-01-4	Vinyl chloride	ND		1.0	0.23
74-83-9	Bromomethane	ND		1.0	0.31
75-00-3	Chloroethane	ND		1.0	0.21
75-35-4	1,1-Dichloroethene	0.62	J	1.0	0.30
67-64-1	Acetone	ND		5.0	2.5
75-15-0	Carbon disulfide	ND		1.0	0.21
75-09-2	Methylene Chloride	ND		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.17
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.18
75-34-3	1,1-Dichloroethane	2.4		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	19	F1	1.0	0.24
74-97-5	Bromochloromethane	ND		1.0	0.18
78-93-3	2-Butanone (MEK)	ND		5.0	0.55
67-66-3	Chloroform	ND		1.0	0.17
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.29
56-23-5	Carbon tetrachloride	ND		1.0	0.14
71-43-2	Benzene	ND		1.0	0.11
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
79-01-6	Trichloroethene	8.6		1.0	0.14
78-87-5	1,2-Dichloropropane	ND		1.0	0.095
75-27-4	Bromodichloromethane	ND		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.53
108-88-3	Toluene	ND		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.15
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.20
127-18-4	Tetrachloroethene	0.34	J	1.0	0.15
591-78-6	2-Hexanone	ND		5.0	0.16
124-48-1	Dibromochloromethane	ND	^c	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.18
108-90-7	Chlorobenzene	ND		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.28
100-41-4	Ethylbenzene	ND		1.0	0.23
1330-20-7	Xylenes, Total	ND		3.0	0.49
100-42-5	Styrene	ND		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 | Lab Sample ID: 180-47923-4

Matrix: Water | Lab File ID: 60925005.D

Analysis Method: 8260C | Date Collected: 09/17/2015 14:10

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 14:39

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.: 154899 | Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		64-135
2037-26-5	Toluene-d8 (Surr)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	86		70-118
1868-53-7	Dibromofluoromethane (Surr)	109		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925005.D
Lims ID: 180-47923-B-4 Lab Sample ID: 180-47923-4
Client ID: HD-CW-18-0/1-0
Sample Type: Client
Inject. Date: 25-Sep-2015 14:39:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-47923-B-4
Misc. Info.: 180-0008690-005
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Sep-2015 15:43:13 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: fergusond Date: 25-Sep-2015 15:43:13

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.220	4.235	-0.015	89	160281	1000.0	
*	2 Fluorobenzene (IS)	96	7.286	7.289	-0.003	97	529581	50.0	
*	3 Chlorobenzene-d5	119	10.394	10.398	-0.004	90	116267	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.749	12.746	0.003	98	179875	50.0	
$	5 Dibromofluoromethane (Surr	113	6.556	6.553	0.003	93	133277	54.6	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.927	6.930	-0.003	70	196592	50.0	
$	7 Toluene-d8 (Surr)	98	8.940	8.937	0.003	95	480510	52.4	
$	8 4-Bromofluorobenzene (Surr	95	11.587	11.584	0.003	84	175986	43.2	
	11 Dichlorodifluoromethane	85		1.607				ND	
	12 Chloromethane	50		1.759				ND	
	13 Vinyl chloride	62	1.908	1.899	0.009	26	3547	1.04	M
	14 Butadiene	39		1.935				ND	
	15 Bromomethane	94		2.234				ND	
	16 Chloroethane	64		2.380				ND	
	17 Dichlorofluoromethane	67		2.653				ND	
	18 Trichlorofluoromethane	101		2.690				ND	
	19 Ethanol	45		2.915				ND	
	20 Ethyl ether	59		3.043				ND	
	21 Acrolein	56		3.219				ND	
	22 1,1-Dichloroethene	96	3.344	3.341	0.003	92	8203	3.08	
	23 1,1,2-Trichloro-1,2,2-trif	101		3.402				ND	
	24 Acetone	43		3.420				ND	
	25 Iodomethane	142		3.535				ND	
	26 Carbon disulfide	76		3.627				ND	
	27 Isopropyl alcohol	45		3.670				ND	
	28 Acetonitrile	40		3.834				ND	
	29 3-Chloro-1-propene	76		3.906				ND	
	30 Methyl acetate	43		3.919				ND	
	31 Methylene Chloride	84		4.125				ND	
	32 2-Methyl-2-propanol	59		4.363				ND	
	33 Acrylonitrile	53		4.503				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.557				ND	
35 Methyl tert-butyl ether	73		4.563				ND	
36 Hexane	57		4.989				ND	
37 1,1-Dichloroethane	63	5.199	5.190	0.009	96	67341	12.2	
38 Vinyl acetate	43		5.239				ND	
40 Isopropyl ether	45		5.294				ND	
39 2-Chloro-1,3-butadiene	53		5.294				ND	
41 Tert-butyl ethyl ether	59		5.768				ND	
44 2-Butanone (MEK)	43		5.938				ND	
43 cis-1,2-Dichloroethene	96	5.941	5.938	0.003	83	324524	97.0	
42 2,2-Dichloropropane	77		5.938				ND	
45 Propionitrile	54		6.012				ND	
46 Ethyl acetate	43		6.024				ND	
47 Methacrylonitrile	41		6.194				ND	
48 Chlorobromomethane	128		6.230				ND	
49 Tetrahydrofuran	42	6.245	6.236	0.009	82	7293	8.47	
50 Chloroform	83	6.379	6.370	0.009	5	1498	0.2740	
51 1,1,1-Trichloroethane	97	6.537	6.535	0.002	35	2615	0.6474	
52 Cyclohexane	56		6.620				ND	
53 Carbon tetrachloride	117		6.711				ND	
54 1,1-Dichloropropene	75		6.723				ND	
55 Isobutyl alcohol	41		6.893				ND	
56 Benzene	78	6.945	6.936	0.009	41	2769	0.2243	M
57 1,2-Dichloroethane	62		7.015				ND	
148 Isooctane	57		7.101				ND	
58 Tert-amyl methyl ether	73		7.119				ND	
59 n-Heptane	43		7.307				ND	
60 n-Butanol	56		7.612				ND	
61 Trichloroethene	130	7.675	7.678	-0.003	95	110069	42.8	
62 Ethyl acrylate	55		7.794				ND	
63 Methylcyclohexane	83		7.922				ND	
64 1,2-Dichloropropane	63		7.952				ND	
66 Methyl methacrylate	69		8.025				ND	
65 1,4-Dioxane	88		8.031				ND	
67 Dibromomethane	93		8.037				ND	
68 Dichlorobromomethane	83		8.226				ND	
69 2-Nitropropane	41		8.445				ND	
70 2-Chloroethyl vinyl ether	63		8.530				ND	
71 cis-1,3-Dichloropropene	75		8.676				ND	
72 4-Methyl-2-pentanone (MIBK	43		8.822				ND	
73 Toluene	91		9.011				ND	
74 trans-1,3-Dichloropropene	75		9.254				ND	
75 Ethyl methacrylate	69		9.315				ND	
76 1,1,2-Trichloroethane	97		9.449				ND	
77 Tetrachloroethene	164	9.531	9.528	0.003	92	3431	1.68	
78 1,3-Dichloropropane	76		9.607				ND	
79 2-Hexanone	43		9.655				ND	
80 n-Butyl acetate	43		9.783				ND	
81 Chlorodibromomethane	129		9.820				ND	
82 Ethylene Dibromide	107		9.941				ND	
83 3-Chlorobenzotrifluoride	180		10.391				ND	
84 Chlorobenzene	112		10.428				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
85 4-Chlorobenzotrifluoride	180		10.483				ND	
86 1,1,1,2-Tetrachloroethane	131		10.519				ND	
87 Ethylbenzene	106		10.525				ND	
88 m-Xylene & p-Xylene	106		10.659				ND	
89 o-Xylene	106		11.042				ND	
90 Styrene	104		11.061				ND	
91 Bromoform	173		11.243				ND	
129 Cyclohexanol	57		11.246				ND	
92 2-Chlorobenzotrifluoride	180		11.304				ND	
93 Isopropylbenzene	105		11.407				ND	
94 Cyclohexanone	55		11.493				ND	
96 1,1,2,2-Tetrachloroethane	83		11.712				ND	
95 Bromobenzene	156		11.724				ND	
97 trans-1,4-Dichloro-2-buten	53		11.754				ND	
98 1,2,3-Trichloropropane	110		11.772				ND	
99 N-Propylbenzene	120		11.827				ND	
100 2-Chlorotoluene	126		11.912				ND	
101 3-Chlorotoluene	126		11.979				ND	
102 1,3,5-Trimethylbenzene	105		12.010				ND	
103 4-Chlorotoluene	126		12.040				ND	
104 tert-Butylbenzene	119		12.326				ND	
105 Pentachloroethane	167		12.357				ND	
106 1,2,4-Trimethylbenzene	105		12.381				ND	
107 1,2-dichloro-4-(trifluorom	214		12.417				ND	
108 sec-Butylbenzene	105		12.551				ND	
109 1,3-Dichlorobenzene	146		12.667				ND	
110 4-Isopropyltoluene	119		12.703				ND	
111 1,4-Dichlorobenzene	146		12.770				ND	
113 2,4-Dichloro-1-(triflourom	214		12.788				ND	
112 1,2,3-Trimethylbenzene	105		12.795				ND	
114 2,5-Dichlorobenzotrifluori	214		12.831				ND	
115 Benzyl chloride	91		12.880				ND	
116 n-Butylbenzene	91		13.111				ND	
117 1,2-Dichlorobenzene	146		13.123				ND	
118 1,2-Dibromo-3-Chloropropan	75		13.920				ND	
119 2,4- & 2,5- & 2,6- Dichlor	125		14.060				ND	
120 1,3,5-Trichlorobenzene	180		14.109				ND	
121 2,3- & 3,4- Dichlorotoluen	125		14.473				ND	
122 1,2,4-Trichlorobenzene	180		14.741				ND	
123 Hexachlorobutadiene	225		14.887				ND	
124 Naphthalene	128		15.009				ND	
125 1,2,3-Trichlorobenzene	180		15.228				ND	
126 2,4,5-Trichlorotoluene	159		16.006				ND	
127 2,3,6-Trichlorotoluene	159		16.110				ND	
128 2-Methylnaphthalene	142	16.149	16.153	-0.004	1	443		NC
145 2,3-Dichlorotoluene	1		0.000				ND	
144 2,4-Dichlorotoluene	1		0.000				ND	
151 Tert-amyl methyl ether (TI	1		0.000				ND	
153 1,2 Epoxybutane TIC	1		0.000				ND	
146 3,4-Dichlorotoluene	1		0.000				ND	
152 Formaldehyde TIC	1		0.000				ND	
147 2,6-Dichlorotoluene	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
149 Isopropyl ether TIC	1		0.000				ND	
143 2,5-Dichlorotoluene	1		0.000				ND	
150 Tert-butyl ethyl ether (TI	1		0.000				ND	
S 131 Xylenes, Total	106		1.000				ND	
S 130 1,2-Dichloroethene, Total	96				0		97.0	
S 132 1,3-Dichloropropene, Total	1		0.000				ND	
T 135 Mesityl oxide TIC	83		0.000				ND	
T 134 Methyl n-amyl ketone TIC	43		0.000				ND	
T 133 Tetrahydrofuran TIC	42		0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00042	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00042	Amount Added:	2.00	Units: uL	Run Reagent

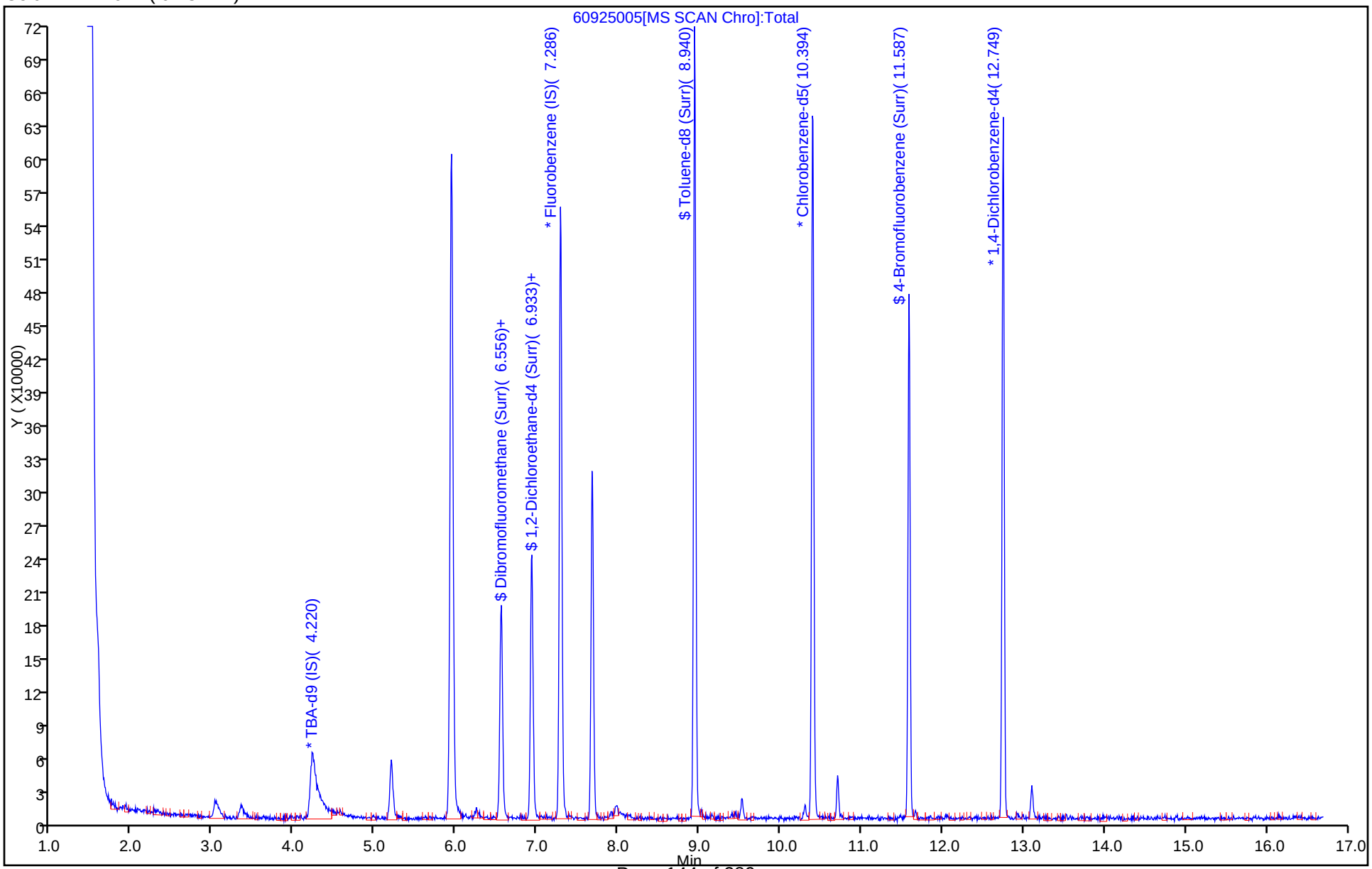
Report Date: 25-Sep-2015 15:43:14 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925005.D

Injection Date:	25-Sep-2015 14:39:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-47923-B-4	Lab Sample ID:	180-47923-4	Worklist Smp#:	5
Client ID:	HD-CW-18-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

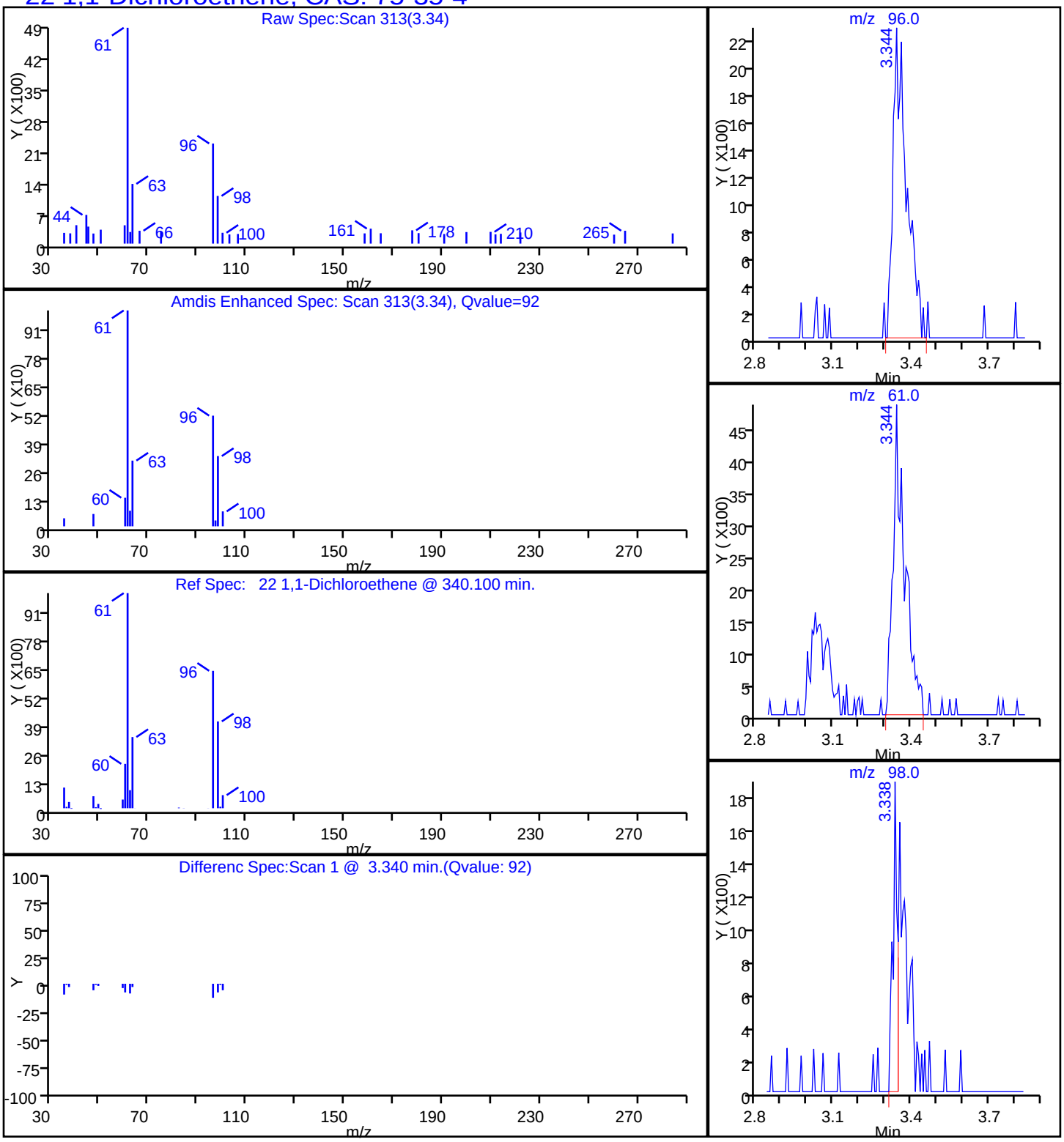


Report Date: 25-Sep-2015 15:43:14 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925005.D				
Injection Date:	25-Sep-2015 14:39:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-B-4	Lab Sample ID:	180-47923-4		
Client ID:	HD-CW-18-0/1-0				
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4

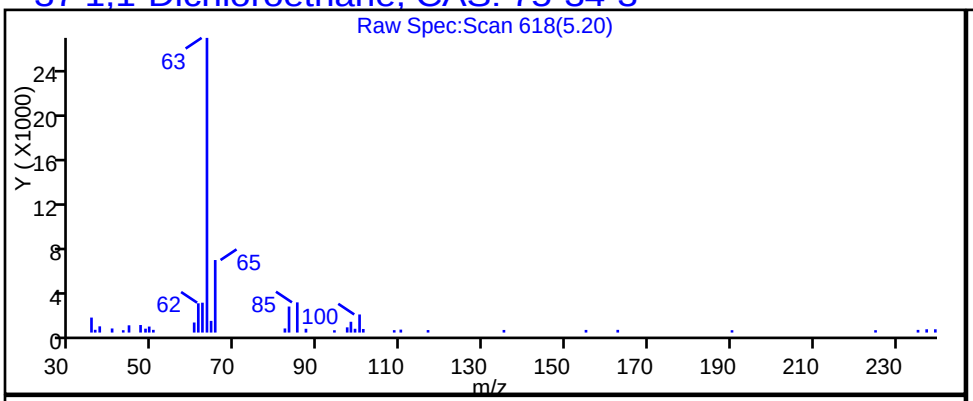


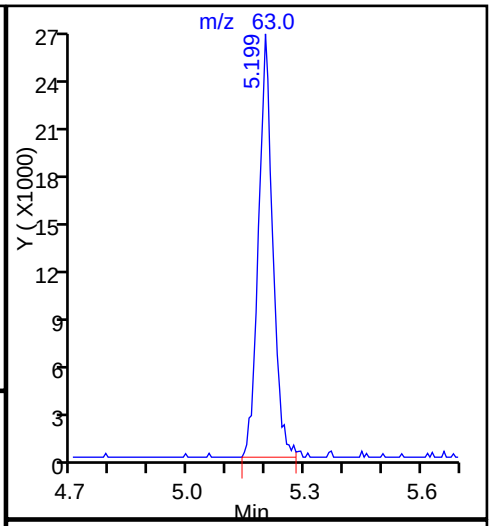
Report Date: 25-Sep-2015 15:43:14 Chrom Revision: 2.2 08-Sep-2015 13:41:46

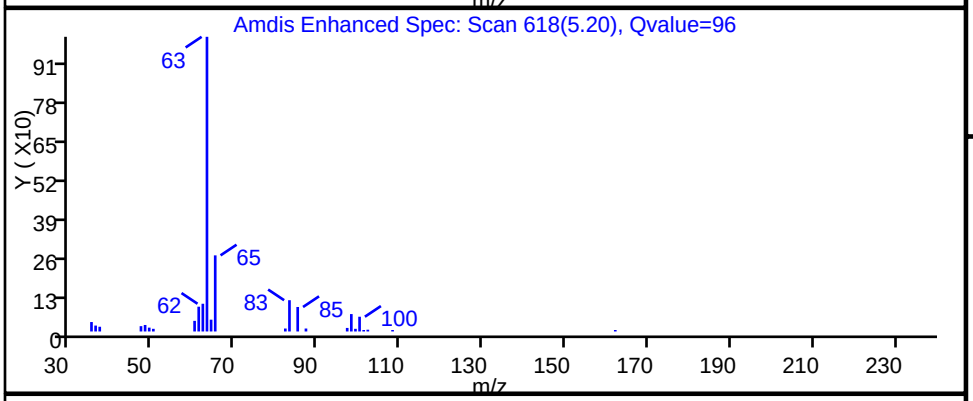
TestAmerica Pittsburgh

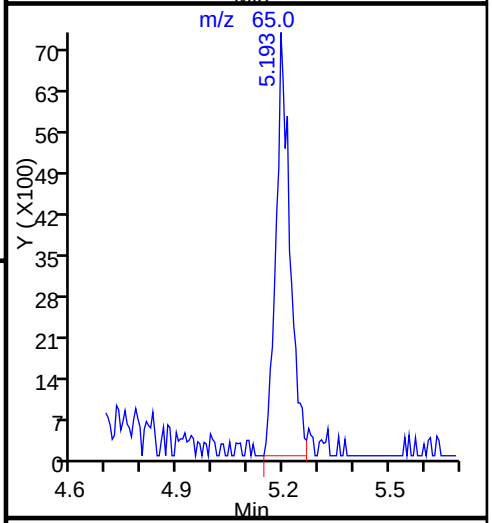
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925005.D				
Injection Date:	25-Sep-2015 14:39:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-B-4	Lab Sample ID:	180-47923-4		
Client ID:	HD-CW-18-0/1-0				
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

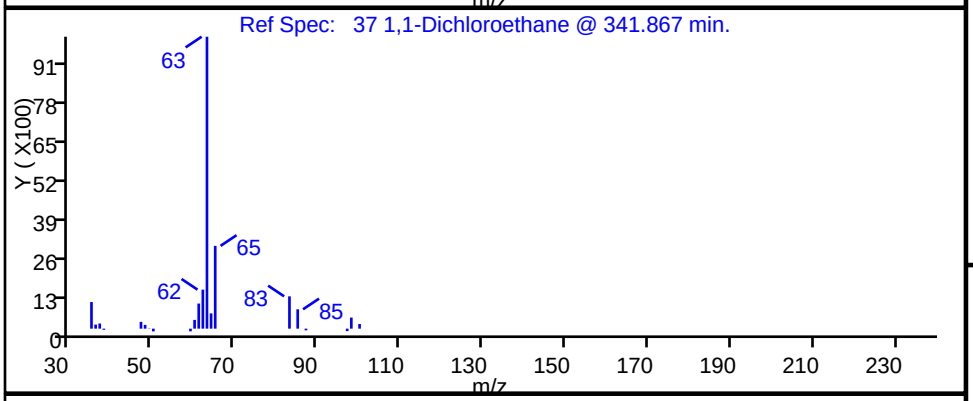
37 1,1-Dichloroethane, CAS: 75-34-3

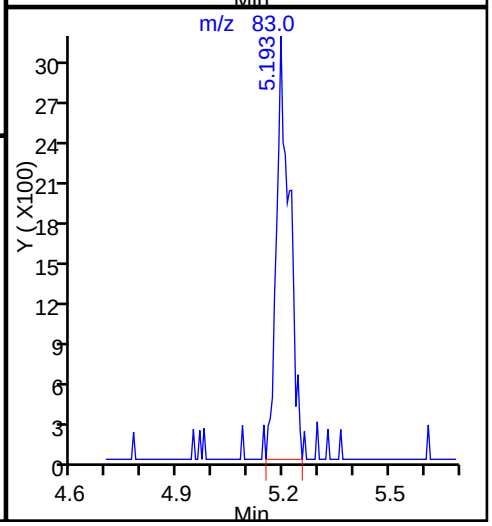


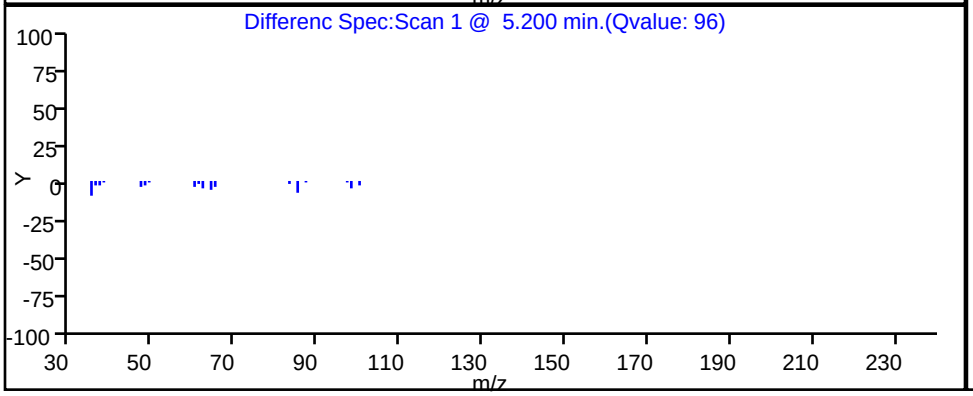










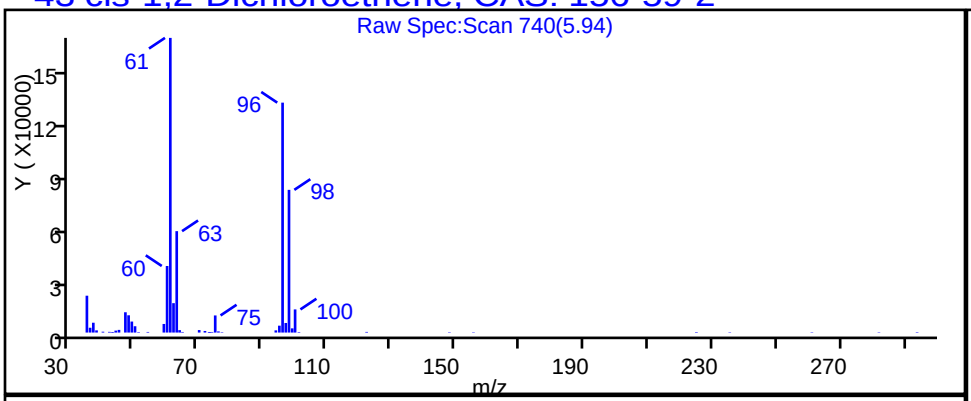


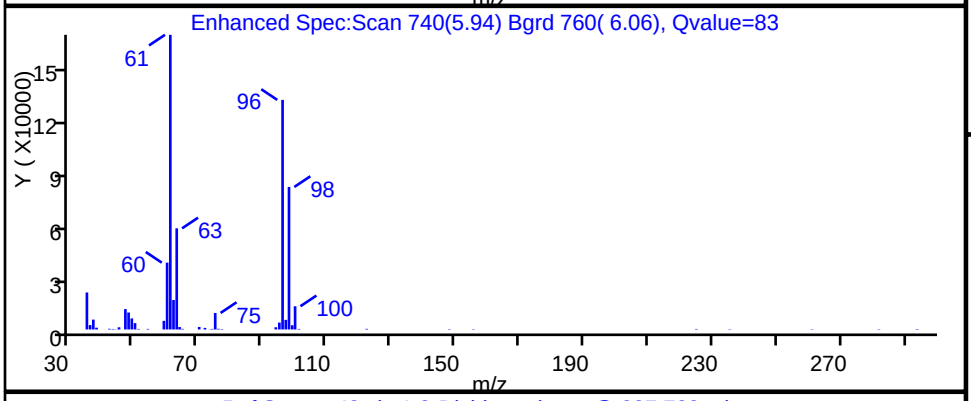
Report Date: 25-Sep-2015 15:43:14 Chrom Revision: 2.2 08-Sep-2015 13:41:46

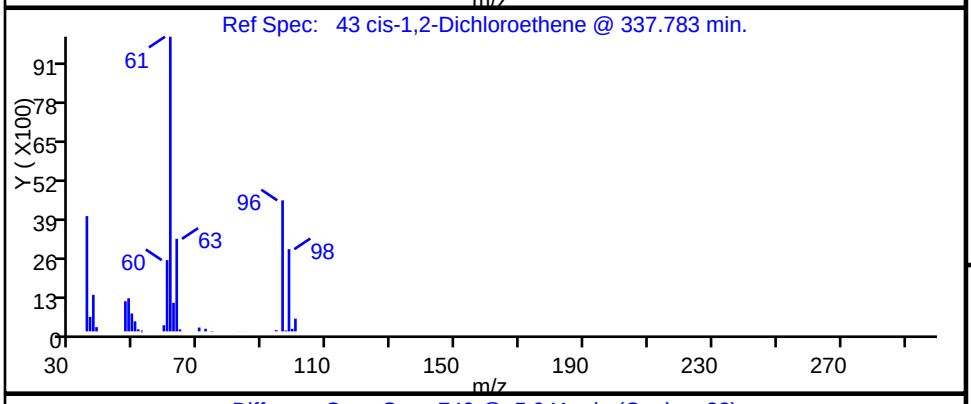
TestAmerica Pittsburgh

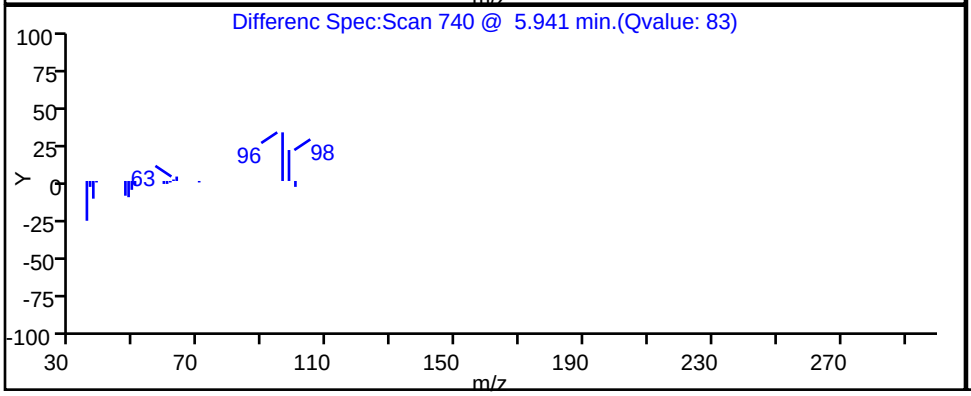
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925005.D				
Injection Date:	25-Sep-2015 14:39:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-B-4	Lab Sample ID:	180-47923-4		
Client ID:	HD-CW-18-0/1-0				
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

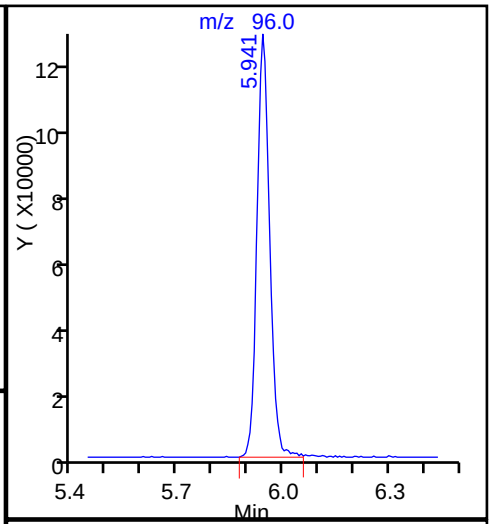
43 cis-1,2-Dichloroethene, CAS: 156-59-2

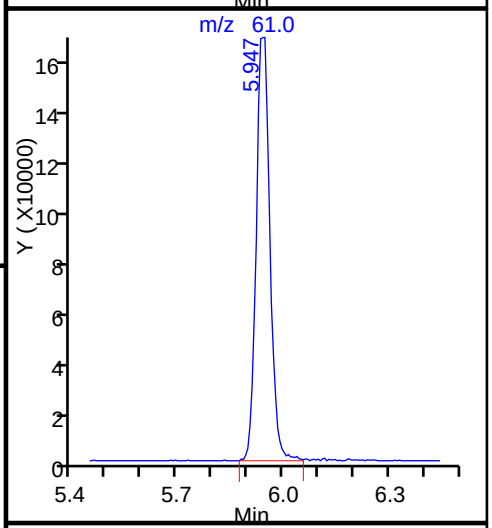


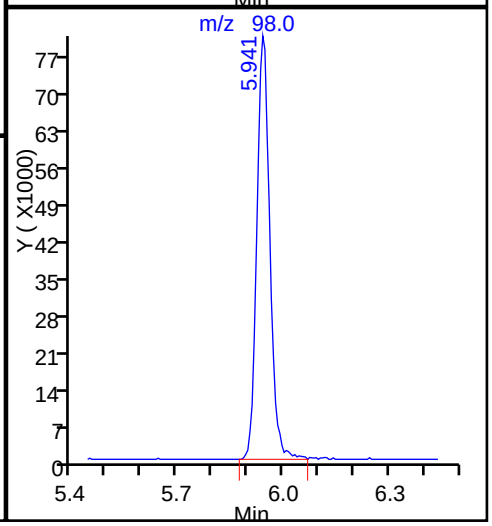










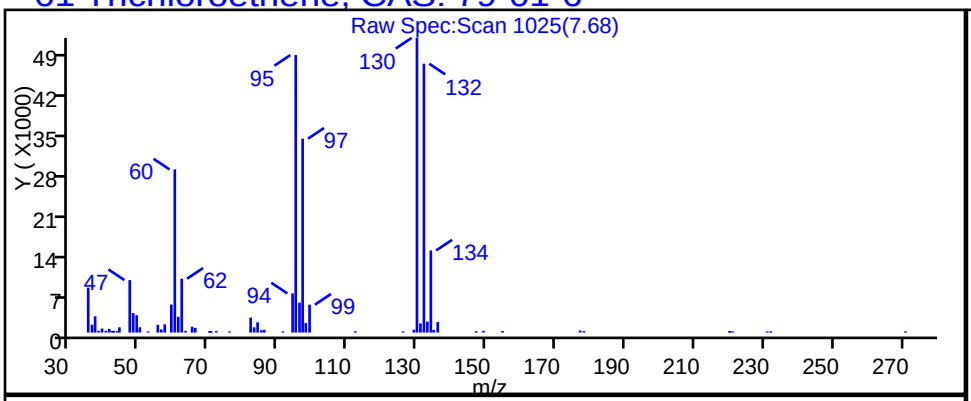


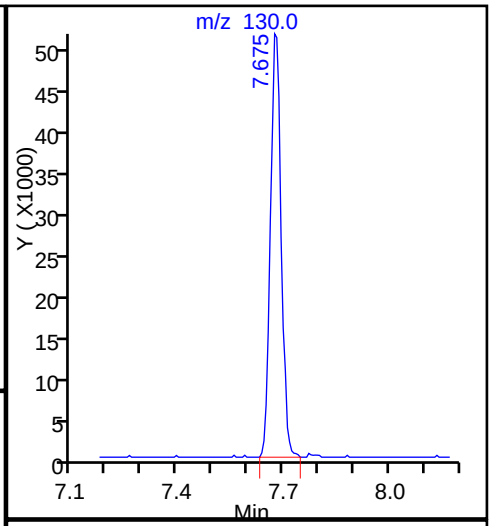
Report Date: 25-Sep-2015 15:43:15 Chrom Revision: 2.2 08-Sep-2015 13:41:46

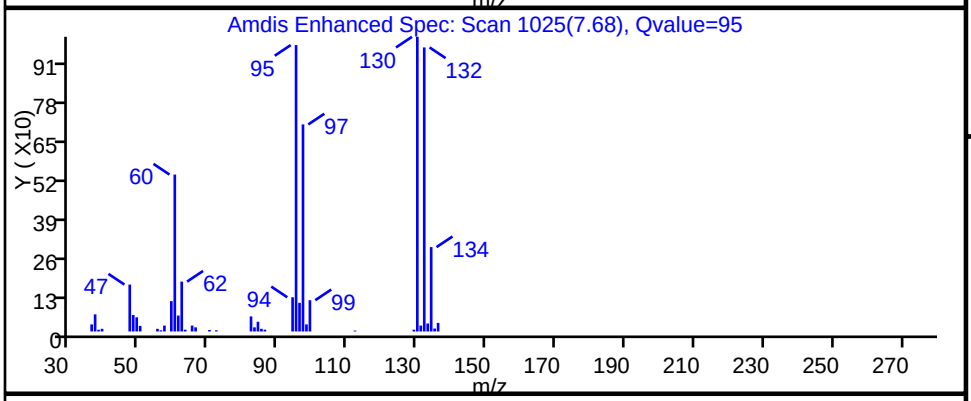
TestAmerica Pittsburgh

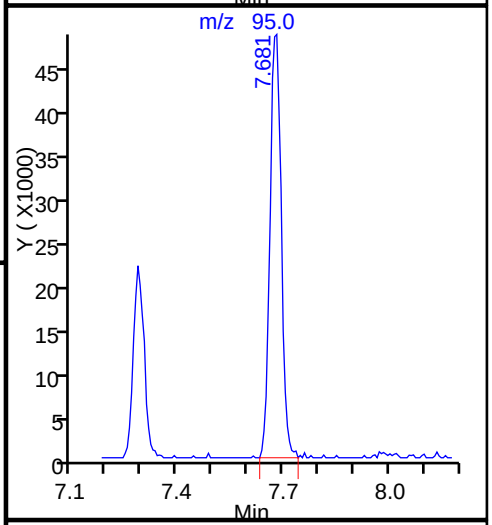
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925005.D				
Injection Date:	25-Sep-2015 14:39:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-B-4	Lab Sample ID:	180-47923-4		
Client ID:	HD-CW-18-0/1-0				
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

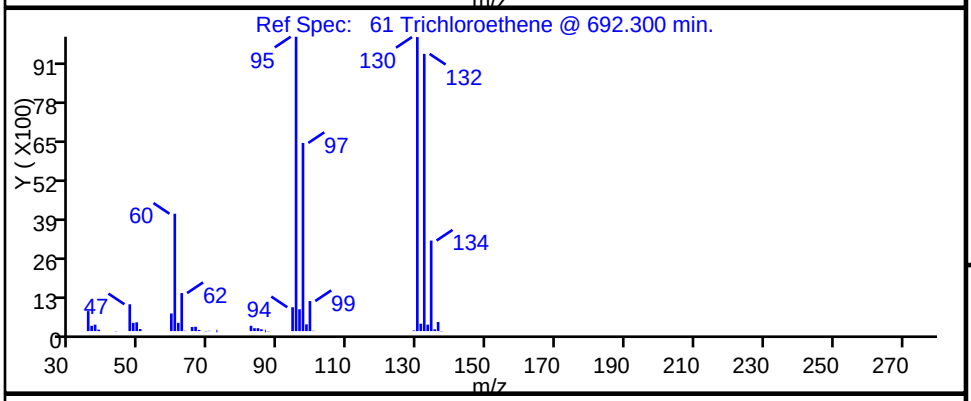
61 Trichloroethene, CAS: 79-01-6

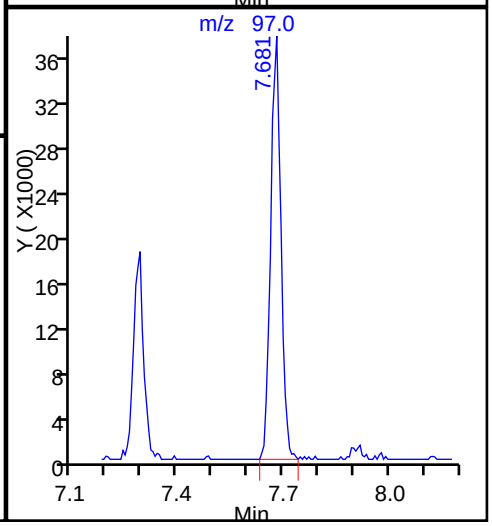


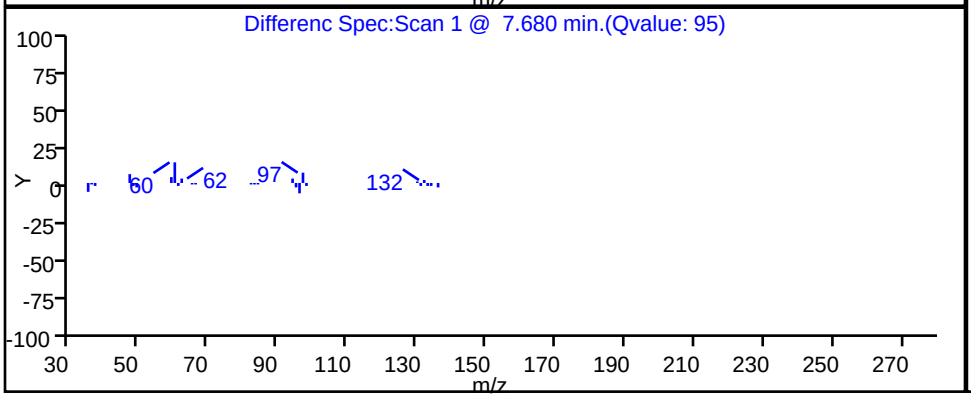












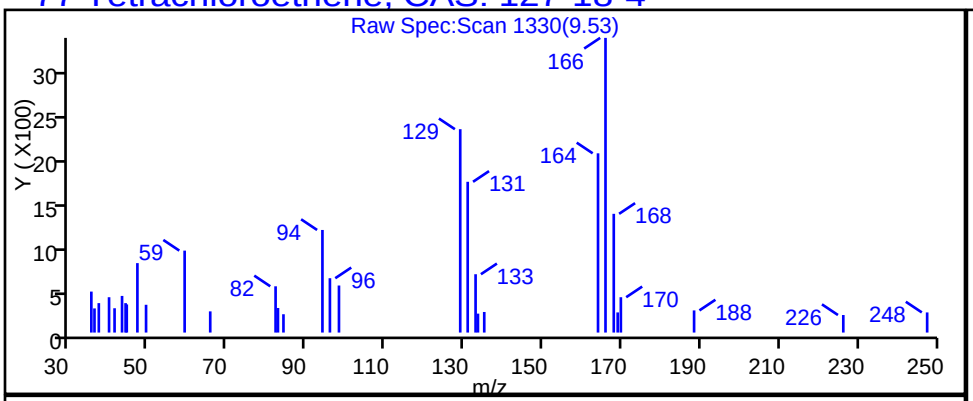
Report Date: 25-Sep-2015 15:43:15 Chrom Revision: 2.2 08-Sep-2015 13:41:46

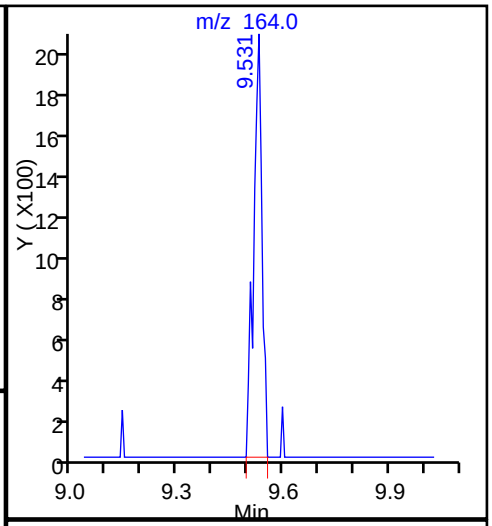
TestAmerica Pittsburgh

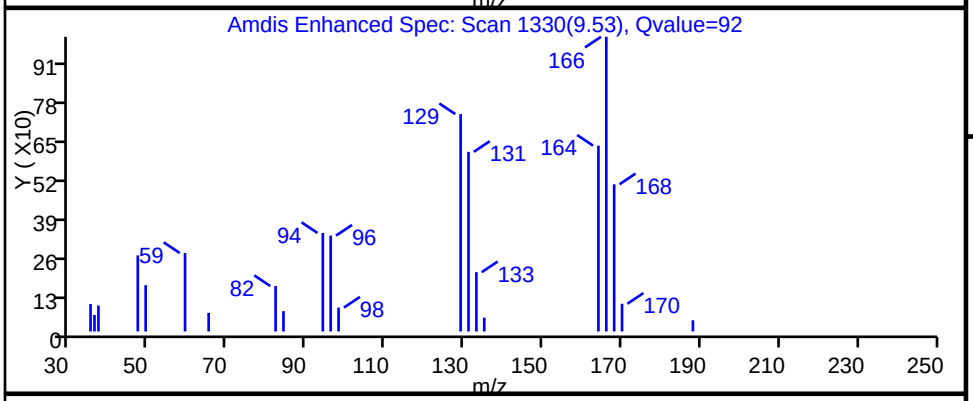
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925005.D

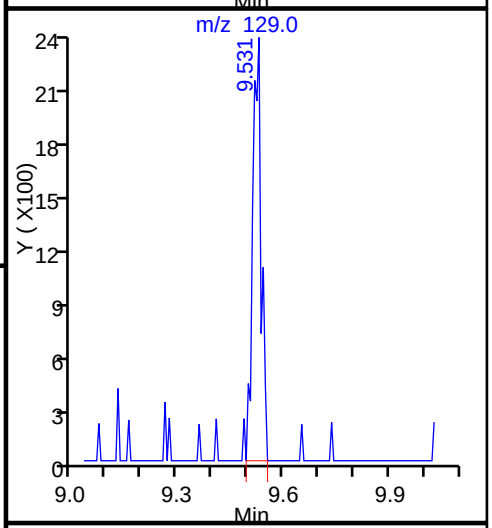
Injection Date:	25-Sep-2015 14:39:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-B-4	Lab Sample ID:	180-47923-4		
Client ID:	HD-CW-18-0/1-0				
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

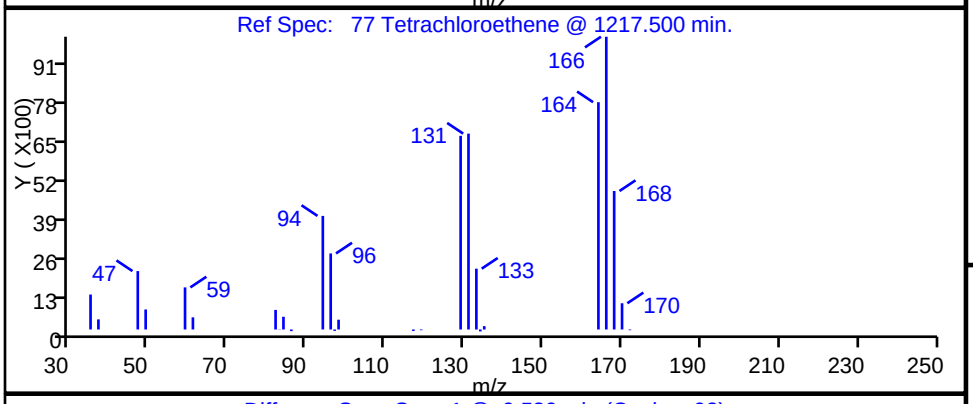
77 Tetrachloroethene, CAS: 127-18-4

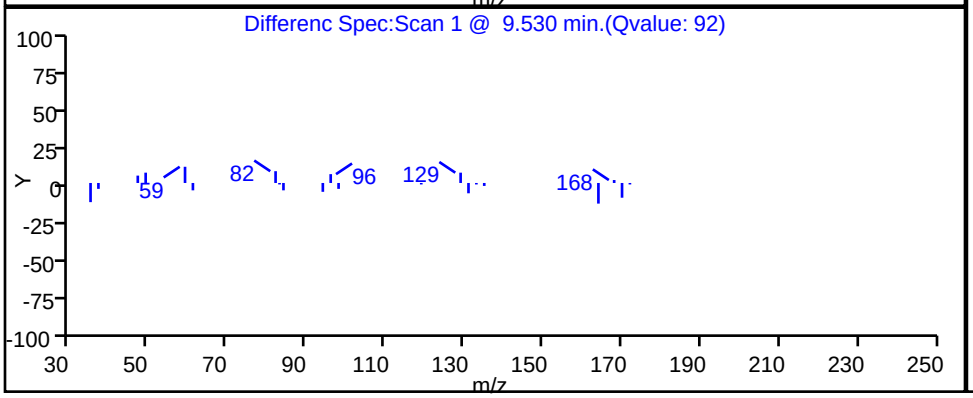


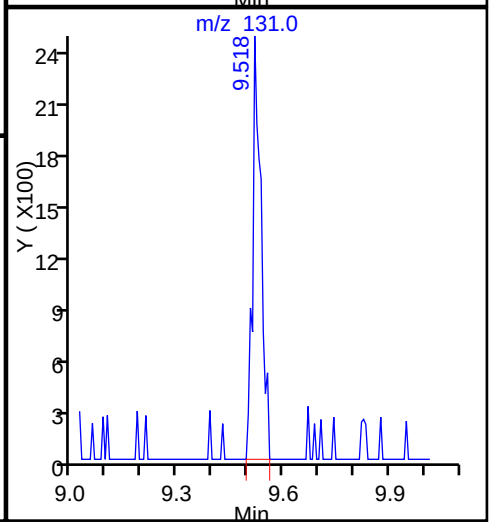












Manual Integration/User Assign Peak Report

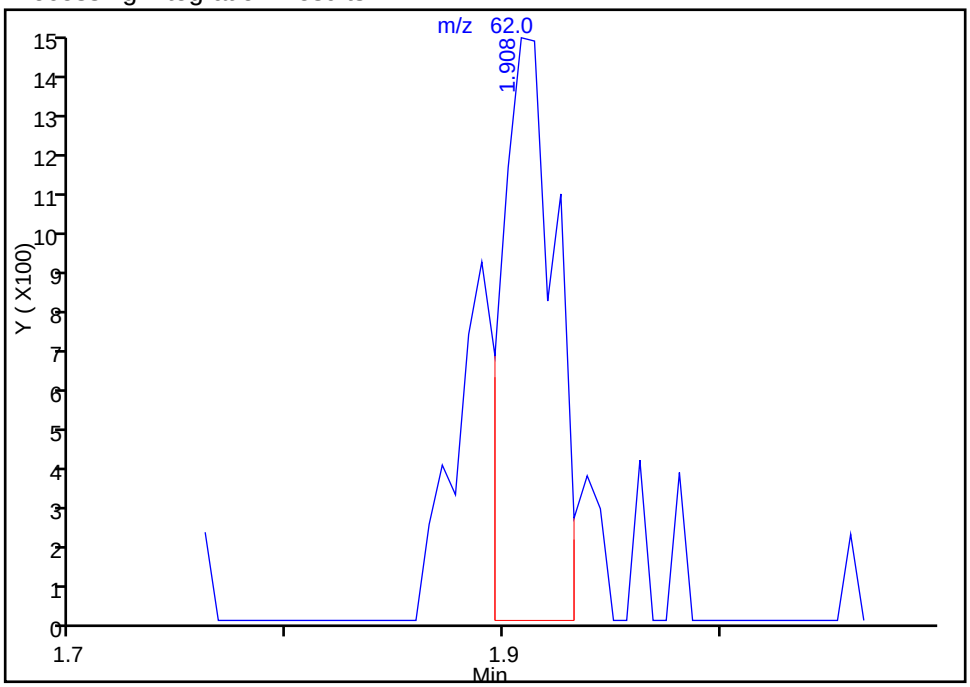
TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925005.D				
Injection Date:	25-Sep-2015 14:39:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-B-4	Lab Sample ID:	180-47923-4		
Client ID:	HD-CW-18-0/1-0				
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

13 Vinyl chloride, CAS: 75-01-4

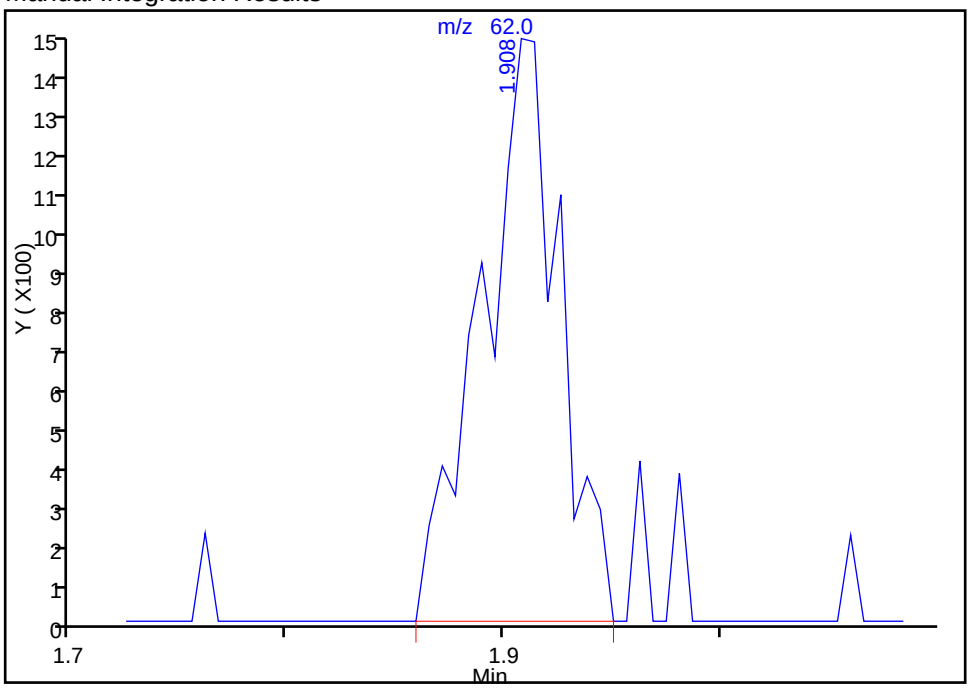
Processing Integration Results

RT: 1.91
Area: 2417
Amount: 0.709973
Amount Units: ng



Manual Integration Results

RT: 1.91
Area: 3547
Amount: 1.041900
Amount Units: ng



Reviewer: fergusond, 25-Sep-2015 15:43:13
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

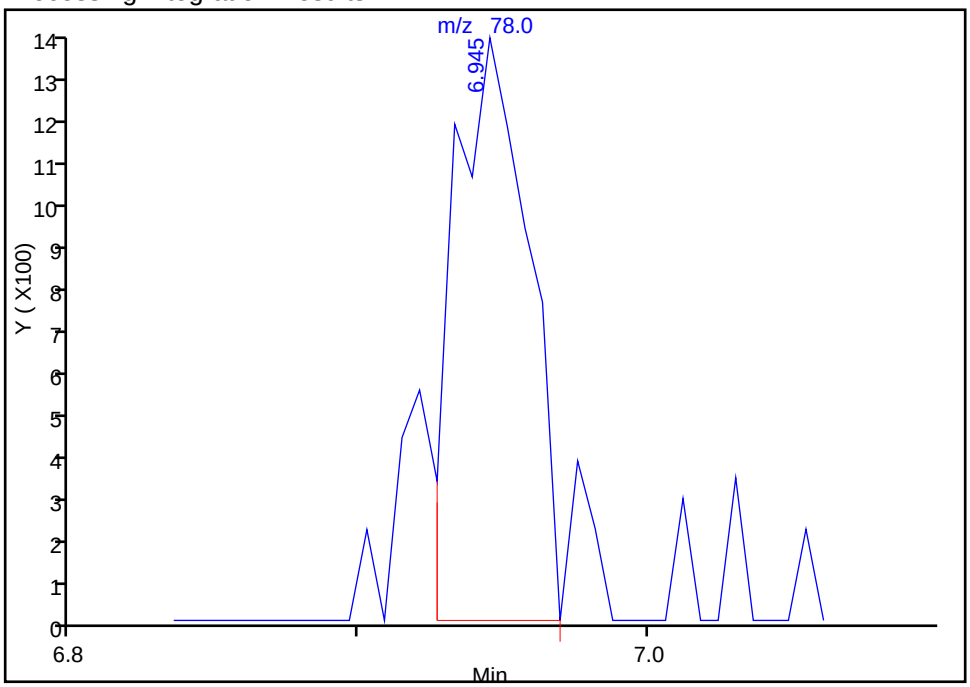
TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925005.D				
Injection Date:	25-Sep-2015 14:39:30	Instrument ID:	CHHP6		
Lims ID:	180-47923-B-4	Lab Sample ID:	180-47923-4		
Client ID:	HD-CW-18-0/1-0				
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

56 Benzene, CAS: 71-43-2

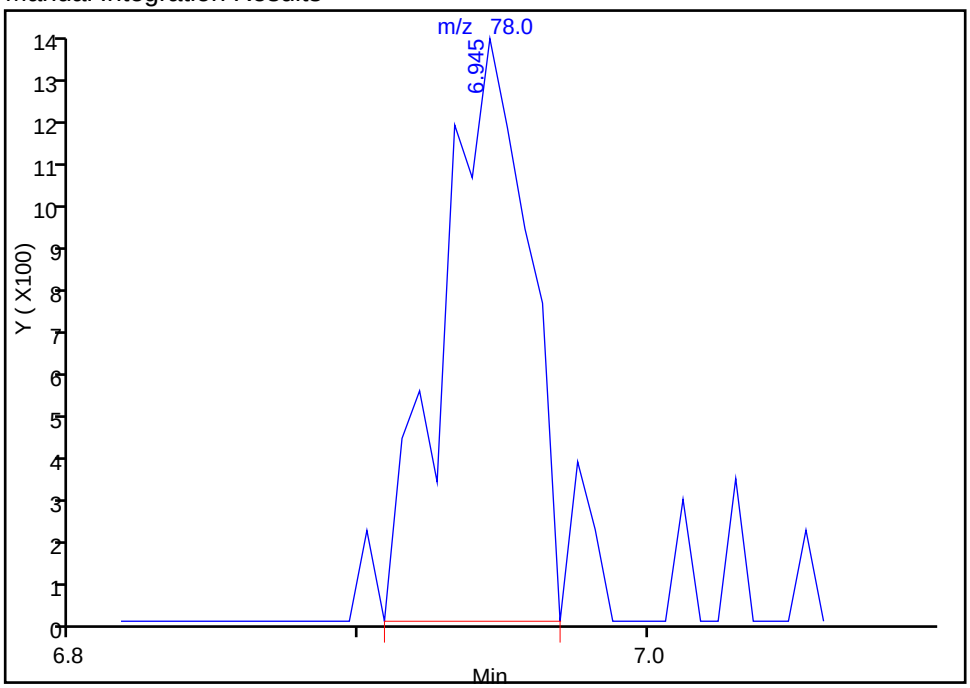
Processing Integration Results

RT: 6.95
Area: 2420
Amount: 0.196069
Amount Units: ng



Manual Integration Results

RT: 6.95
Area: 2769
Amount: 0.224345
Amount Units: ng



Reviewer: fergusond, 25-Sep-2015 15:43:13
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1 Analy Batch No.: 149469

SDG No.:

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

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-149469/14	60731014.D
Level 2	IC 180-149469/4	60731004.D
Level 3	ICIS 180-149469/5	60731005.D
Level 4	IC 180-149469/6	60731006.D
Level 5	IC 180-149469/7	60731007.D
Level 6	IC 180-149469/8	60731008.D
Level 7	IC 180-149469/9	60731009.D
Level 8	IC 180-149469/10	60731010.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	0.3784 0.3460	0.3285 0.3562	0.3421 0.3286	0.3615	0.3285	Ave		0.3462			0.1000	5.3		20.0			
Chloromethane	0.3392 0.2834	0.3040 0.2926	0.3038 0.2799	0.2953	0.2891	Ave		0.2984			0.1000	6.2		20.0			
Vinyl chloride	0.3459 0.3113	0.3263 0.3277	0.3180 0.3087	0.3307	0.3028	Ave		0.3214			0.1000	4.4		20.0			
1,3-Butadiene	0.3349 0.2908	0.3110 0.3014	0.3020 0.2828	0.3029	0.2847	Ave		0.3013			0.0100	5.5		20.0			
Bromomethane	0.2086 0.1495	0.1854 0.1475	0.1846 +++++	0.1749	0.1644	Ave		0.1735			0.0500	12.5		20.0			
Chloroethane	0.2173 0.2164	0.2251 0.2256	0.2291 0.2095	0.2259	0.2061	Ave		0.2194			0.0500	3.8		20.0			
Dichlorofluoromethane	0.5463 0.4931	0.5444 0.5038	0.5165 0.4737	0.5267	0.4802	Ave		0.5106			0.0100	5.4		20.0			
Trichlorofluoromethane	0.4247 0.4001	0.4150 0.4067	0.4245 0.3867	0.4197	0.3805	Ave		0.4072			0.1000	4.2		20.0			
Ethyl ether	0.3195 0.2756	0.2914 0.2931	0.2819 0.2818	0.2864	0.2793	Ave		0.2886			0.0100	4.8		20.0			
Acrolein	0.0310 0.0318	0.0309 0.0342	0.0297 0.0340	0.0320	0.0281	Ave		0.0315			0.0100	6.5		20.0			
1,1-Dichloroethene	0.2600 0.2474	0.2411 0.2670	0.2447 0.2555	0.2551	0.2426	Ave		0.2517			0.1000	3.7		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2893 0.2688	0.2611 0.2694	0.2602 0.2595	0.2670	0.2502	Ave		0.2657			0.1000	4.3		20.0			
Acetone	0.0973 0.0856	0.0931 0.0888	0.0785 0.0945	0.0834	0.0864	Ave		0.0885			0.0500	7.1		20.0			
Iodomethane	0.3086 0.3409	0.3325 0.3671	0.3285 0.3511	0.3438	0.3304	Ave		0.3379			0.0100	5.1		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1 Analy Batch No.: 149469

SDG No.:

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

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

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	0.5727 0.6930	0.5928 0.7451	0.6074 0.7142	0.6519	0.6407	Ave		0.6522			0.1000	9.4		20.0			
Allyl chloride	0.1218 0.1547	0.1181 0.1646	0.1364 0.1606	0.1388	0.1402	Ave		0.1419			0.0100	12.0		20.0			
Methyl acetate	0.2192 0.2022	0.2017 0.2144	0.2047 0.2065	0.2072	0.2036	Ave		0.2074			0.1000	3.0		20.0			
Methylene Chloride	0.6631 0.3174	0.3874 0.3424	0.3361 0.3218	0.3366	0.3254	Lin2	1.7443	0.3138			0.1000				0.9990		0.9900
tert-Butyl alcohol	1.2140 1.0554	1.0995 1.1213	1.1428 1.0861	1.1107	1.1728	Ave		1.1253			0.0100	4.5		20.0			
Acrylonitrile	0.1067 0.1050	0.1002 0.1099	0.1033 0.1041	0.1042	0.1030	Ave		0.1046			0.0100	2.7		20.0			
trans-1,2-Dichloroethene	0.2889 0.2884	0.2883 0.3069	0.2879 0.2909	0.2950	0.2774	Ave		0.2905			0.1000	2.9		20.0			
Methyl tert-butyl ether	0.8998 0.8761	0.8047 0.9451	0.8127 0.8903	0.8782	0.8559	Ave		0.8703			0.1000	5.3		20.0			
Hexane	0.4211 0.4030	0.3676 0.4125	0.3850 0.3998	0.3938	0.3659	Ave		0.3936			0.0100	5.0		20.0			
1,1-Dichloroethane	0.5075 0.5187	0.5138 0.5491	0.5187 0.5191	0.5246	0.5085	Ave		0.5200			0.2000	2.5		20.0			
Vinyl acetate	0.3814 0.4481	0.3469 0.4857	0.3831 0.4671	0.4180	0.4276	Ave		0.4197			0.0100	11.2		20.0			
2,2-Dichloropropane	0.2106 0.2916	0.2324 0.2998	0.2516 0.2938	0.2636	0.2601	Ave		0.2629			0.0100	12.0		20.0			
cis-1,2-Dichloroethene	0.3288 0.3134	0.2997 0.3336	0.3121 0.3178	0.3154	0.3061	Ave		0.3158			0.1000	3.5		20.0			
2-Butanone (MEK)	0.1157 0.1241	0.1112 0.1317	0.1112 0.1244	0.1274	0.1201	Ave		0.1207			0.0500	6.2		20.0			
Bromochloromethane	0.1341 0.1264	0.1227 0.1349	0.1194 0.1303	0.1248	0.1226	Ave		0.1269			0.0100	4.5		20.0			
Tetrahydrofuran	0.0899 0.0835	0.0679 0.0856	0.0729 0.0875	0.0830	0.0802	Ave		0.0813			0.0100	9.2		20.0			
Chloroform	0.5240 0.5101	0.5110 0.5372	0.5156 0.5057	0.5231	0.5023	Ave		0.5161			0.2000	2.2		20.0			
1,1,1-Trichloroethane	0.3298 0.3969	0.3454 0.4238	0.3768 0.4049	0.3936	0.3797	Ave		0.3814			0.1000	8.1		20.0			
Cyclohexane	0.4970 0.5019	0.4468 0.5151	0.4891 0.4904	0.5075	0.4613	Ave		0.4886			0.1000	4.8		20.0			
Carbon tetrachloride	0.2286 0.2886	0.2478 0.3002	0.2596 0.2920	0.2763	0.2618	Ave		0.2694			0.1000	9.1		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1 Analy Batch No.: 149469

SDG No.:

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

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

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	0.3926 0.4066	0.3932 0.4288	0.4179 0.4097	0.4260	0.4065	Ave		0.4102			0.0100	3.3		20.0			
Isobutyl alcohol	0.0064 0.0079	0.0060 0.0084	0.0067 0.0082	0.0069	0.0074	Ave		0.0072		*	0.0100	12.0		20.0			
Benzene	1.3108 1.1051	1.1747 1.1573	1.1838 1.0686	1.1862	1.1360	Ave		1.1653			0.5000	6.1		20.0			
1,2-Dichloroethane	0.5170 0.4491	0.4680 0.4788	0.4635 0.4465	0.4749	0.4571	Ave		0.4694			0.1000	4.8		20.0			
n-Heptane	0.3283 0.3166	0.2930 0.3296	0.3187 0.3201	0.3273	0.3009	Ave		0.3168			0.0100	4.2		20.0			
Trichloroethene	0.2495 0.2439	0.2242 0.2580	0.2340 0.2443	0.2514	0.2390	Ave		0.2430			0.2000	4.4		20.0			
Methylcyclohexane	0.4988 0.5022	0.4670 0.5125	0.4962 0.4944	0.5026	0.4718	Ave		0.4932			0.1000	3.2		20.0			
1,2-Dichloropropane	0.3004 0.2740	0.2605 0.2918	0.2603 0.2810	0.2821	0.2771	Ave		0.2784			0.1000	5.0		20.0			
1,4-Dioxane	0.0025 0.0030	0.0022 0.0032	0.0027 0.0030	0.0026	0.0028	Ave		0.0027		*	0.0100	11.1		20.0			
Dibromomethane	0.1697 0.1704	0.1570 0.1809	0.1594 0.1730	0.1722	0.1697	Ave		0.1690			0.0100	4.5		20.0			
Bromodichloromethane	0.2616 0.3321	0.2926 0.3618	0.2967 0.3476	0.3256	0.3231	Ave		0.3176			0.2000	10.2		20.0			
cis-1,3-Dichloropropene	0.2584 0.3913	0.2782 0.4177	0.3074 0.4064	0.3604	0.3717	Ave		0.3489			0.2000	17.3		20.0			
4-Methyl-2-pentanone (MIBK)	0.8987 1.0658	0.9802 1.1445	0.9985 1.0527	1.0544	1.0284	Ave		1.0279			0.1000	7.0		20.0			
Toluene	5.9056 4.7537	5.5995 4.8374	5.4167 4.3396	5.4012	5.0191	Ave		5.1591			0.4000	9.9		20.0			
trans-1,3-Dichloropropene	0.8702 1.4914	1.1099 1.5454	1.1917 1.4764	1.4148	1.3777	Ave		1.3097			0.1000	17.8		20.0			
Ethyl methacrylate	1.0584 1.5306	1.1597 1.6211	1.2934 1.5074	1.4730	1.4851	Ave		1.3911			0.0100	14.3		20.0			
1,1,2-Trichloroethane	1.1649 1.0331	1.0986 1.0808	1.0395 0.9995	1.0976	1.0221	Ave		1.0670			0.1000	5.0		20.0			
Tetrachloroethene	0.9697 0.8437	0.9092 0.8645	0.8932 0.8142	0.9113	0.8341	Ave		0.8800			0.2000	5.8		20.0			
1,3-Dichloropropane	2.1051 1.8922	2.0770 1.9466	1.9733 1.8014	2.0412	1.9340	Ave		1.9713			0.0100	5.1		20.0			
2-Hexanone	0.5961 0.7048	0.6359 0.7303	0.6480 0.6962	0.7009	0.6879	Ave		0.6750			0.1000	6.6		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1 Analy Batch No.: 149469

SDG No.:

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

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

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	0.4970 0.7956	0.6594 0.8501	0.6992 0.7965	0.7868	0.7414	Ave		0.7283			0.1000	15.3		20.0			
1,2-Dibromoethane (EDB)	0.9377 0.9584	0.9062 1.0009	0.8845 0.9279	0.9777	0.9601	Ave		0.9442			0.1000	4.0		20.0			
3-Chlorobenzotrifluoride	1.9346 1.5843	1.7960 1.5900	1.7022 1.3868	1.6742	1.5483	Ave		1.6520			0.0100	10.1		20.0			
Chlorobenzene	3.5287 3.0123	3.3662 3.0694	3.2495 2.7949	3.2738	3.0742	Ave		3.1711			0.5000	7.2		20.0			
4-Chlorobenzotrifluoride	1.6752 1.5041	1.6791 1.5135	1.5757 1.3040	1.5621	1.4356	Ave		1.5312			0.0100	8.1		20.0			
1,1,1,2-Tetrachloroethane	0.6900 0.9213	0.8149 0.9909	0.8591 0.9158	0.8859	0.8746	Ave		0.8691			0.0100	10.2		20.0			
Ethylbenzene	1.8948 1.7498	1.7825 1.8007	1.8382 1.6637	1.8404	1.7406	Ave		1.7888			0.1000	4.0		20.0			
m-Xylene & p-Xylene	2.2690 2.1710	2.2783 2.2282	2.2514 2.0794	2.2987	2.1836	Ave		2.2200			0.1000	3.3		20.0			
o-Xylene	2.1401 2.1982	2.2838 2.2768	2.2497 2.0945	2.3260	2.1995	Ave		2.2211			0.3000	3.5		20.0			
Styrene	3.0262 3.3999	3.5063 3.5053	3.5865 3.2169	3.6244	3.4204	Ave		3.4107			0.3000	5.9		20.0			
Bromoform	0.2774 0.4245	0.3854 0.4551	0.3553 0.4390	0.3847	0.3885	Ave		0.3887			0.1000	14.3		20.0			
2-Chlorobenzotrifluoride	1.7789 1.6566	1.8882 1.6800	1.7229 1.4654	1.7518	1.5913	Ave		1.6919			0.0100	7.5		20.0			
Isopropylbenzene	5.2778 5.0660	5.7181 5.1776	5.7365 4.6086	5.7208	5.2098	Ave		5.3144			0.1000	7.4		20.0			
1,1,2,2-Tetrachloroethane	1.4524 1.4044	1.5283 1.4375	1.4123 1.3480	1.4533	1.3845	Ave		1.4276			0.3000	3.8		20.0			
Bromobenzene	0.8149 0.7981	0.7780 0.8354	0.7958 0.7913	0.8100	0.8070	Ave		0.8038			0.0100	2.1		20.0			
trans-1,4-Dichloro-2-butene	0.2183 0.2782	0.2316 0.2872	0.2398 0.2842	0.2451	0.2549	Ave		0.2549			0.0100	10.1		20.0			
1,2,3-Trichloropropane	0.3115 0.3095	0.3103 0.3168	0.2929 0.3057	0.3005	0.2983	Ave		0.3057			0.0100	2.6		20.0			
N-Propylbenzene	0.8326 0.9631	0.8814 0.9609	0.9454 0.9440	0.9506	0.9278	Ave		0.9257			0.0100	4.9		20.0			
2-Chlorotoluene	0.7094 0.7751	0.7465 0.7992	0.7798 0.7755	0.7871	0.7761	Ave		0.7686			0.0100	3.7		20.0			
3-Chlorotoluene	0.7543 0.8420	0.8134 0.8337	0.8056 0.7727	0.8118	0.8241	Ave		0.8072			0.0100	3.7		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1 Analy Batch No.: 149469

SDG No.:

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

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

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	2.7736 3.0025	3.0962 3.0472	3.1690 2.8036	3.1761	3.0091	Ave		3.0097			0.0100	5.0		20.0			
4-Chlorotoluene	0.7667 0.8064	0.7905 0.8463	0.8267 0.8136	0.8328	0.8125	Ave		0.8119			0.0100	3.1		20.0			
tert-Butylbenzene	2.1654 2.4390	2.2766 2.4763	2.4320 2.3179	2.5249	2.3935	Ave		2.3782			0.0100	5.0		20.0			
1,2,4-Trimethylbenzene	2.6641 3.0999	3.1580 3.1389	3.2410 2.8935	3.2855	3.1393	Ave		3.0775			0.0100	6.6		20.0			
3,4-Dichlorobenzotrifluoride	0.9506 0.8837	0.9051 0.8812	0.8433 0.8086	0.8848	0.8177	Ave		0.8719			0.0100	5.4		20.0			
sec-Butylbenzene	3.1858 3.5384	3.7184 3.5357	3.7627 3.2573	3.8203	3.5793	Ave		3.5497			0.0100	6.4		20.0			
1,3-Dichlorobenzene	1.6112 1.5388	1.6196 1.5936	1.5650 1.5066	1.5844	1.5419	Ave		1.5701			0.6000	2.5		20.0			
4-Isopropyltoluene	2.5478 3.0138	2.9539 3.0592	3.1574 2.8450	3.2053	3.0463	Ave		2.9786			0.0100	6.9		20.0			
1,4-Dichlorobenzene	1.6477 1.5662	1.6451 1.6298	1.6095 1.5306	1.6252	1.5856	Ave		1.6050			0.5000	2.6		20.0			
2,4-Dichlorobenzotrifluoride	0.8809 0.9283	0.9010 0.9168	0.8399 0.7625	0.8415	0.8683	Ave		0.8674			0.0100	6.1		20.0			
2,5-Dichlorobenzotrifluoride	1.1148 0.9323	0.9613 0.9470	0.9883 0.9297	0.9952	0.8812	Ave		0.9687			0.0100	7.1		20.0			
n-Butylbenzene	2.7413 3.0098	2.9731 3.0263	3.1192 2.7966	3.1553	2.9714	Ave		2.9741			0.0100	4.8		20.0			
1,2-Dichlorobenzene	1.7344 1.5614	1.6042 1.5872	1.5781 1.4856	1.5970	1.5347	Ave		1.5853			0.4000	4.5		20.0			
1,2-Dibromo-3-Chloropropane	0.1041 0.1673	0.1254 0.1741	0.1287 0.1752	0.1449	0.1432	Ave		0.1454			0.0500	17.6		20.0			
2,4- & 2,5- & 2,6- Dichlorotoluene	1.3659 1.3828	1.4490 1.3691	1.4643 1.2123	1.4309	1.3634	Ave		1.3797			0.0100	5.7		20.0			
2,3- & 3,4- Dichlorotoluene	1.4220 1.5594	1.5913 1.5578	1.5507 1.4014	1.5802	1.5161	Ave		1.5224			0.0100	4.7		20.0			
1,2,4-Trichlorobenzene	1.1743 1.2613	1.2132 1.2999	1.2170 1.2151	1.2351	1.2123	Ave		1.2285			0.2000	3.1		20.0			
Hexachlorobutadiene	0.4483 0.5040	0.4710 0.5079	0.4894 0.4926	0.4879	0.4705	Ave		0.4839			0.0100	4.1		20.0			
Naphthalene	1.9638 2.6901	2.2408 2.7319	2.4855 2.5560	2.6099	2.5577	Ave		2.4795			0.0100	10.3		20.0			
1,2,3-Trichlorobenzene	1.1813 1.1689	1.1348 1.2045	1.1056 1.1331	1.1438	1.1242	Ave		1.1495			0.0100	2.8		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1 Analy Batch No.: 149469

SDG No.:

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

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

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								
2,4,5-Trichlorotoluene	0.6523 0.8517	0.6908 0.8911	0.7114 0.8098	0.7914	0.7765	Ave		0.7719			0.0100	10.6		20.0			
2,3,6-Trichlorotoluene	0.6747 0.7987	0.6373 0.8256	0.7048 0.7502	0.7418	0.7252	Ave		0.7323			0.0100	8.4		20.0			
Dibromofluoromethane (Surr)	0.2580 0.2278	0.2120 0.2401	0.2284 0.2160	0.2307	0.2293	Ave		0.2303				6.2		20.0			
1,2-Dichloroethane-d4 (Surr)	0.4370 0.3580	0.3544 0.3741	0.3729 0.3410	0.3684	0.3665	Ave		0.3715				7.7		20.0			
Toluene-d8 (Surr)	4.4422 3.7317	4.0733 3.7760	4.2664 3.2298	4.1020	3.9291	Ave		3.9438				9.5		20.0			
4-Bromofluorobenzene (Surr)	2.0841 1.7019	1.7074 1.7446	1.7653 1.5225	1.7965	1.6857	Ave		1.7510				9.0		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1 Analy Batch No.: 149469

SDG No.:

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

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-149469/14	60731014.D
Level 2	IC 180-149469/4	60731004.D
Level 3	ICIS 180-149469/5	60731005.D
Level 4	IC 180-149469/6	60731006.D
Level 5	IC 180-149469/7	60731007.D
Level 6	IC 180-149469/8	60731008.D
Level 7	IC 180-149469/9	60731009.D
Level 8	IC 180-149469/10	60731010.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	17276 575043	76046 636192	166146 776950	255750	316945	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	15485 470953	70391 522516	147560 661756	208858	278884	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	15792 517410	75541 585198	154423 729853	233901	292173	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	15290 483297	72002 538199	146675 668636	214248	274693	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Ave	9521 248522	42916 263364	89628 +++++	123705	158589	5.00 175	25.0 200	50.0 +++++	75.0	100
Chloroethane	FB	Ave	9922 359701	52119 402907	111283 495382	159781	198857	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	24941 819476	126043 899692	250823 1120159	372545	463283	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Ave	19389 664854	96092 726249	206141 914267	296881	367084	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	14586 458021	67458 523507	136903 666334	202583	269465	5.00 175	25.0 200	50.0 250	75.0	100
Acrolein	FB	Ave	28320 68050	35802 76429	43327 88331	52894	54177	100 225	125 250	150 275	175	200
1,1-Dichloroethene	FB	Ave	11872 411177	55817 476887	118856 604031	180424	234083	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	13209 446711	60462 481169	126375 613669	188852	241359	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	22203 284563	43121 317270	76252 446823	117975	166807	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	14090 566533	76980 655616	159542 830188	243211	318736	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	26146 1151644	137245 1330649	294989 1688724	461167	618168	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1 Analy Batch No.: 149469

SDG No.:

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

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

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	5562 257112	27346 293887	66228 379717	98190	135273	5.00 175	25.0 200	50.0 250	75.0	100
Methyl acetate	FB	Ave	50033 1680300	233460 1914014	497011 2441128	732698	982363	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Lin2	30274 527474	89699 611401	163213 760977	238130	313904	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBA	Ave	9874 354063	43837 426462	91997 559063	141735	198055	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	48723 1745686	231943 1961872	501701 2461613	737397	994141	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	13191 479327	66744 548086	139824 687783	208665	267617	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	41079 1455878	186303 1687770	394698 2105039	621185	825760	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	19223 669795	85113 736641	186977 945322	278592	352983	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	23168 861981	118950 980644	251887 1227440	371113	490563	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	17413 744628	80307 867464	186047 1104555	295714	412541	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	9613 484574	53806 535345	122189 694588	186450	250901	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	15010 520777	69383 595718	151575 751398	223081	295290	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	26408 412307	51510 470276	108037 588377	180292	231667	25.0 350	50.0 400	100 500	150	200
Bromochloromethane	FB	Ave	6120 209995	28403 240962	58005 308059	88252	118290	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	8204 277489	31436 305718	70787 413888	117489	154776	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	23924 847765	118313 959266	250393 1195678	370042	484585	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	15055 659562	79977 756837	182973 957300	278390	366376	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	22688 834057	103455 919827	237539 1159567	359010	445084	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	10435 479558	57375 536127	126096 690480	195436	252588	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	17924 675711	91039 765806	202951 968671	301319	392146	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Ave	7317 326401	34707 375937	81470 482886	122452	178080	125 4375	625 5000	1250 6250	1875	2500

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1 Analy Batch No.: 149469

SDG No.:

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

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

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	59844 1836424	271972 2066671	574901 2526807	839117	1096030	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane	FB	Ave	23604 746328	108353 855052	225116 1055651	335915	440984	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	14990 526126	67835 588643	154761 756814	231524	290327	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	11389 405251	51907 460676	113666 577638	177868	230554	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	22772 834543	108113 915285	240977 1169092	355558	455180	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	13712 455391	60301 521174	126414 664355	199527	267345	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	2321 98136	10219 114196	26388 139772	36545	54577	100 3500	500 4000	1000 5000	1500	2000
Dibromomethane	FB	Ave	7749 283101	36346 323060	77394 409028	121844	163719	5.00 175	25.0 200	50.0 250	75.0	100
Bromodichloromethane	FB	Ave	11941 551929	67754 646107	144075 821950	230314	311750	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Ave	11797 650196	64404 745866	149301 960857	254907	358605	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	42150 808342	90891 947711	208546 1194590	330779	452681	25.0 350	50.0 400	100 500	150	200
Toluene	CBZ	Ave	55394 1802740	259618 2002822	565645 2462377	847209	1104648	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBZ	Ave	8162 565592	51458 639831	124444 837722	221914	303226	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBZ	Ave	9928 580427	53768 671187	135064 855316	231048	326852	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBZ	Ave	10927 391776	50938 447467	108552 567107	172158	224945	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBZ	Ave	9096 319955	42156 357911	93269 461983	142949	183568	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBZ	Ave	19746 717566	96298 805963	206060 1022129	320167	425660	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBZ	Ave	27957 534519	58962 604727	135329 790089	219895	302805	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBZ	Ave	4662 301710	30573 351983	73014 451973	123420	163175	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBZ	Ave	8796 363449	42016 414395	92363 526477	153351	211303	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorobenzotrifluoride	CBZ	Ave	18146 600793	83271 658293	177755 786880	262608	340769	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1 Analy Batch No.: 149469

SDG No.:

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

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

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	33099 1142353	156070 1270819	339330 1585885	513514	676590	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBZ	Ave	15713 570403	77852 626628	164547 739908	245021	315960	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBZ	Ave	6472 349368	37781 410261	89710 519653	138964	192497	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBZ	Ave	17773 663577	82647 745552	191951 943999	288675	383099	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBZ	Ave	21283 823294	105633 922542	235109 1179895	360561	480587	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBZ	Ave	20074 833629	105888 942660	234926 1188451	364838	484093	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBZ	Ave	28385 1289309	162570 1451301	374525 1825312	568513	752806	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBZ	Ave	2602 160966	17870 188413	37102 249108	60348	85498	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBZ	Ave	16686 628216	87545 695569	179913 831476	274773	350232	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBZ	Ave	49505 1921153	265117 2143689	599038 2614965	897341	1146617	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBZ	Ave	13623 532593	70858 595171	147479 764885	227964	304710	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCB	Ave	12814 459843	61847 533334	136094 665597	203181	276525	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCB	Ave	3433 160304	18413 183338	41001 239026	61474	87362	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCB	Ave	4898 178317	24668 202262	50085 257089	75371	102213	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCB	Ave	13092 554932	70063 613443	161671 793964	238465	317924	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCB	Ave	11155 446590	59338 510216	133354 652311	197431	265955	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCB	Ave	11861 485130	64658 532252	137766 649907	203636	282386	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCB	Ave	43612 1730016	246129 1945327	541915 2358116	796704	1031152	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCB	Ave	12056 464650	62837 540303	141377 684319	208897	278435	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCB	Ave	34048 1405341	180978 1580824	415895 1949627	633351	820194	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCB	Ave	41890 1786151	251042 2003823	554224 2433681	824147	1075766	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1 Analy Batch No.: 149469

SDG No.:

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

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

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	14947 509173	71946 562570	144215 680073	221955	280215	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCB	Ave	50094 2038837	295586 2257148	643438 2739728	958306	1226548	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCB	Ave	25334 886632	128745 1017363	267626 1267194	397446	528372	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCB	Ave	40061 1736569	234813 1952987	539941 2392925	804039	1043904	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCB	Ave	25908 902441	130776 1040432	275229 1287354	407678	543357	5.00 175	25.0 200	50.0 250	75.0	100
2,4-Dichlorobenzotrifluoride	DCB	Ave	13852 534909	71623 585295	143623 641375	211084	297534	5.00 175	25.0 200	50.0 250	75.0	100
2,5-Dichlorobenzotrifluoride	DCB	Ave	17529 537191	76420 604585	169006 781945	249633	301973	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCB	Ave	43104 1734264	236342 1931969	533401 2352259	791496	1018212	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCB	Ave	27271 899668	127520 1013269	269873 1249514	400593	525918	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCB	Ave	1637 96376	9971 111156	22010 147337	36339	49062	5.00 175	25.0 200	50.0 250	75.0	100
2,4- & 2,5- & 2,6- Dichlorotoluene	DCB	Ave	64430 2390336	345570 2621988	751227 3058923	1076776	1401616	15.0 525	75.0 600	150 750	225	300
2,3- & 3,4- Dichlorotoluene	DCB	Ave	44720 1797097	252992 1989024	530353 2357462	792789	1039069	10.0 350	50.0 400	100 500	150	200
1,2,4-Trichlorobenzene	DCB	Ave	18465 726756	96442 829845	208112 1022001	309817	415442	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCB	Ave	7049 290426	37440 324236	83692 414314	122376	161228	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCB	Ave	30879 1550041	178131 1744010	425036 2149836	654694	876449	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCB	Ave	18575 673533	90206 768952	189066 953082	286920	385220	5.00 175	25.0 200	50.0 250	75.0	100
2,4,5-Trichlorotoluene	DCB	Ave	10257 490754	54916 568870	121646 681135	198517	266093	5.00 175	25.0 200	50.0 250	75.0	100
2,3,6-Trichlorotoluene	DCB	Ave	10609 460224	50658 527070	120523 630961	186087	248497	5.00 175	25.0 200	50.0 250	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	11777 378487	49079 428779	110929 510673	163209	221245	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	19952 595019	82044 668015	181120 806396	260570	353626	5.00 175	25.0 200	50.0 250	75.0	100
Toluene-d8 (Surr)	CBZ	Ave	41667 1415164	188855 1563368	445521 1832665	643420	864751	5.00 175	25.0 200	50.0 250	75.0	100

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1 Analy Batch No.: 149469

SDG No.:

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

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

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
4-Bromofluorobenzene (Surr)	CBZ	Ave	19549 645419	79163 722308	184340 863895	281797	371000	5.00 175	25.0 200	50.0 250	75.0	100

Curve Type Legend:

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

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1 Analy Batch No.: 149469

SDG No.:

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

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-149469/14	60731014.D
Level 2	IC 180-149469/4	60731004.D
Level 3	ICIS 180-149469/5	60731005.D
Level 4	IC 180-149469/6	60731006.D
Level 5	IC 180-149469/7	60731007.D
Level 6	IC 180-149469/8	60731008.D
Level 7	IC 180-149469/9	60731009.D
Level 8	IC 180-149469/10	60731010.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
Methylene Chloride	0.2 6.3	1.2 0.3	-4.0	-0.1	-1.9	-2.0	40 40	40 40	40	40	40	40

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731004.D
Lims ID: IC VSTD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 31-Jul-2015 14:00:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD5
Misc. Info.: 180-0007999-004
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Aug-2015 12:15:33 Calib Date: 31-Jul-2015 18:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: fergusond Date: 31-Jul-2015 16:26:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.245	4.248	-0.003	91	159479	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.286	7.284	0.002	98	463046	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.395	10.398	-0.003	92	92729	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.743	12.747	-0.004	97	158987	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.556	6.554	0.002	68	49079	25.0	23.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.934	6.931	0.003	54	82044	25.0	23.8	
$ 7 Toluene-d8 (Surr)	98	8.941	8.938	0.003	93	188855	25.0	25.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.587	11.585	0.002	81	79163	25.0	24.4	
11 Dichlorodifluoromethane	85	1.611	1.608	0.002	99	76046	25.0	23.7	
12 Chloromethane	50	1.757	1.754	0.003	100	70391	25.0	25.5	
13 Vinyl chloride	62	1.884	1.888	-0.004	98	75541	25.0	25.4	
14 Butadiene	39	1.933	1.930	0.003	92	72002	25.0	25.8	
15 Bromomethane	94	2.231	2.228	0.003	91	42916	25.0	26.7	M
16 Chloroethane	64	2.377	2.368	0.009	98	52119	25.0	25.7	
17 Dichlorofluoromethane	67	2.651	2.648	0.003	97	126043	25.0	26.7	
18 Trichlorofluoromethane	101	2.669	2.660	0.009	85	96092	25.0	25.5	
20 Ethyl ether	59	3.046	3.049	-0.003	88	67458	25.0	25.2	
21 Acrolein	56	3.223	3.220	0.003	97	35802	125.0	122.8	
22 1,1-Dichloroethene	96	3.338	3.341	-0.003	95	55817	25.0	23.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.393	3.390	0.003	94	60462	25.0	24.6	
24 Acetone	43	3.429	3.421	0.008	99	43121	50.0	52.6	
25 Iodomethane	142	3.539	3.536	0.003	97	76980	25.0	24.6	
26 Carbon disulfide	76	3.636	3.627	0.009	100	137245	25.0	22.7	
29 3-Chloro-1-propene	76	3.922	3.919	0.003	61	27346	25.0	20.8	
30 Methyl acetate	43	3.934	3.926	0.008	97	233460	125.0	121.5	
31 Methylene Chloride	84	4.135	4.132	0.003	92	89699	25.0	25.3	
32 2-Methyl-2-propanol	59	4.366	4.370	-0.004	93	43837	250.0	244.3	
33 Acrylonitrile	53	4.500	4.503	-0.003	100	231943	250.0	239.5	
34 trans-1,2-Dichloroethene	96	4.555	4.564	-0.009	95	66744	25.0	24.8	
35 Methyl tert-butyl ether	73	4.573	4.576	-0.003	97	186303	25.0	23.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.987	4.990	-0.003	94	85113	25.0	23.4	
37 1,1-Dichloroethane	63	5.206	5.197	0.009	97	118950	25.0	24.7	
38 Vinyl acetate	43	5.236	5.240	-0.004	97	80307	25.0	20.7	
43 cis-1,2-Dichloroethene	96	5.948	5.939	0.009	84	69383	25.0	23.7	
44 2-Butanone (MEK)	43	5.948	5.945	0.003	56	51510	50.0	46.1	
42 2,2-Dichloropropane	77	5.942	5.945	-0.003	59	53806	25.0	22.1	
48 Chlorobromomethane	128	6.228	6.231	-0.003	94	28403	25.0	24.2	
49 Tetrahydrofuran	42	6.240	6.249	-0.009	81	31436	50.0	41.7	
50 Chloroform	83	6.368	6.371	-0.003	93	118313	25.0	24.8	
51 1,1,1-Trichloroethane	97	6.538	6.541	-0.003	96	79977	25.0	22.6	
52 Cyclohexane	56	6.611	6.620	-0.009	93	103455	25.0	22.9	
53 Carbon tetrachloride	117	6.708	6.718	-0.010	98	57375	25.0	23.0	
54 1,1-Dichloropropene	75	6.727	6.724	0.003	94	91039	25.0	24.0	
55 Isobutyl alcohol	41	6.903	6.900	0.003	95	34707	625.0	518.1	
56 Benzene	78	6.940	6.943	-0.003	97	271972	25.0	25.2	
57 1,2-Dichloroethane	62	7.019	7.016	0.003	98	108353	25.0	24.9	
59 n-Heptane	43	7.311	7.308	0.003	89	67835	25.0	23.1	
61 Trichloroethene	130	7.676	7.679	-0.003	92	51907	25.0	23.1	
63 Methylcyclohexane	83	7.925	7.922	0.003	91	108113	25.0	23.7	
64 1,2-Dichloropropane	63	7.949	7.953	-0.004	95	60301	25.0	23.4	
65 1,4-Dioxane	88	8.029	8.032	-0.003	40	10219	500.0	401.6	M
67 Dibromomethane	93	8.035	8.038	-0.003	91	36346	25.0	23.2	
68 Dichlorobromomethane	83	8.235	8.227	0.008	98	67754	25.0	23.0	
71 cis-1,3-Dichloropropene	75	8.673	8.677	-0.004	92	64404	25.0	19.9	
72 4-Methyl-2-pentanone (MIBK	43	8.826	8.823	0.003	95	90891	50.0	47.7	
73 Toluene	91	9.008	9.011	-0.003	97	259618	25.0	27.1	
74 trans-1,3-Dichloropropene	75	9.257	9.255	0.002	97	51458	25.0	21.2	
75 Ethyl methacrylate	69	9.312	9.315	-0.003	86	53768	25.0	20.8	
76 1,1,2-Trichloroethane	97	9.446	9.449	-0.003	96	50938	25.0	25.7	
77 Tetrachloroethene	164	9.525	9.522	0.003	92	42156	25.0	25.8	
78 1,3-Dichloropropane	76	9.604	9.607	-0.003	92	96298	25.0	26.3	
79 2-Hexanone	43	9.659	9.656	0.003	97	58962	50.0	47.1	
81 Chlorodibromomethane	129	9.817	9.826	-0.009	92	30573	25.0	22.6	
82 Ethylene Dibromide	107	9.939	9.942	-0.003	97	42016	25.0	24.0	
83 3-Chlorobenzotrifluoride	180	10.395	10.392	0.003	89	83271	25.0	27.2	
84 Chlorobenzene	112	10.425	10.429	-0.004	91	156070	25.0	26.5	
85 4-Chlorobenzotrifluoride	180	10.480	10.483	-0.003	95	77852	25.0	27.4	
86 1,1,1,2-Tetrachloroethane	131	10.523	10.520	0.003	87	37781	25.0	23.4	
87 Ethylbenzene	106	10.529	10.526	0.003	99	82647	25.0	24.9	
88 m-Xylene & p-Xylene	106	10.657	10.660	-0.003	99	105633	25.0	25.7	
89 o-Xylene	106	11.040	11.043	-0.003	98	105888	25.0	25.7	
90 Styrene	104	11.058	11.061	-0.003	94	162570	25.0	25.7	
91 Bromoform	173	11.241	11.244	-0.003	94	17870	25.0	24.8	
92 2-Chlorobenzotrifluoride	180	11.308	11.305	0.003	95	87545	25.0	27.9	
93 Isopropylbenzene	105	11.405	11.408	-0.003	97	265117	25.0	26.9	
96 1,1,2,2-Tetrachloroethane	83	11.715	11.712	0.003	94	70858	25.0	26.8	
95 Bromobenzene	156	11.721	11.725	-0.004	97	61847	25.0	24.2	
97 trans-1,4-Dichloro-2-buten	53	11.752	11.749	0.003	66	18413	25.0	22.7	
98 1,2,3-Trichloropropane	110	11.770	11.767	0.003	86	24668	25.0	25.4	
99 N-Propylbenzene	120	11.825	11.828	-0.003	99	70063	25.0	23.8	
100 2-Chlorotoluene	126	11.916	11.913	0.003	94	59338	25.0	24.3	
101 3-Chlorotoluene	126	11.977	11.980	-0.003	97	64658	25.0	25.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.007	12.010	-0.003	92	246129	25.0	25.7	
103 4-Chlorotoluene	126	12.038	12.041	-0.003	98	62837	25.0	24.3	
104 tert-Butylbenzene	119	12.323	12.321	0.002	90	180978	25.0	23.9	
106 1,2,4-Trimethylbenzene	105	12.384	12.382	0.002	97	251042	25.0	25.7	
107 1,2-dichloro-4-(trifluorom	214	12.421	12.418	0.003	95	71946	25.0	26.0	
108 sec-Butylbenzene	105	12.549	12.546	0.003	96	295586	25.0	26.2	
109 1,3-Dichlorobenzene	146	12.664	12.667	-0.003	93	128745	25.0	25.8	
110 4-Isopropyltoluene	119	12.707	12.704	0.003	96	234813	25.0	24.8	
111 1,4-Dichlorobenzene	146	12.768	12.771	-0.003	89	130776	25.0	25.6	
113 2,4-Dichloro-1-(triflourom	214	12.792	12.789	0.003	94	71623	25.0	26.0	
114 2,5-Dichlorobenzotrifluori	214	12.828	12.832	-0.004	96	76420	25.0	24.8	
116 n-Butylbenzene	91	13.114	13.112	0.002	98	236342	25.0	25.0	
117 1,2-Dichlorobenzene	146	13.120	13.124	-0.004	91	127520	25.0	25.3	
118 1,2-Dibromo-3-Chloropropan	75	13.911	13.921	-0.010	62	9971	25.0	21.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.063	14.061	0.002	98	345570	75.0	78.8	
121 2,3- & 3,4- Dichlorotoluen	125	14.471	14.474	-0.003	99	252992	50.0	52.3	
122 1,2,4-Trichlorobenzene	180	14.745	14.736	0.009	92	96442	25.0	24.7	
123 Hexachlorobutadiene	225	14.891	14.888	0.003	96	37440	25.0	24.3	
124 Naphthalene	128	15.006	15.004	0.002	98	178131	25.0	22.6	
125 1,2,3-Trichlorobenzene	180	15.231	15.229	0.002	95	90206	25.0	24.7	
126 2,4,5-Trichlorotoluene	159	16.004	16.007	-0.003	0	54916	25.0	22.4	
127 2,3,6-Trichlorotoluene	159	16.107	16.111	-0.004	91	50658	25.0	21.8	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		50.0	48.5	
S 131 Xylenes, Total	106				0		50.0	51.4	
S 132 1,3-Dichloropropene, Total	1				0		50.0	41.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00039	Amount Added:	1.00	Units: uL	
voaWket1Reste_00001	Amount Added:	1.00	Units: uL	
voaWeemix1Res_00001	Amount Added:	1.00	Units: uL	
voaWVA1st Res_00003	Amount Added:	1.00	Units: uL	
VOA8260VOAPRI_00134	Amount Added:	1.00	Units: uL	
voaWAcro2nd R_00006	Amount Added:	5.00	Units: uL	
VOA8260INT_00039	Amount Added:	2.00	Units: uL	Run Reagent

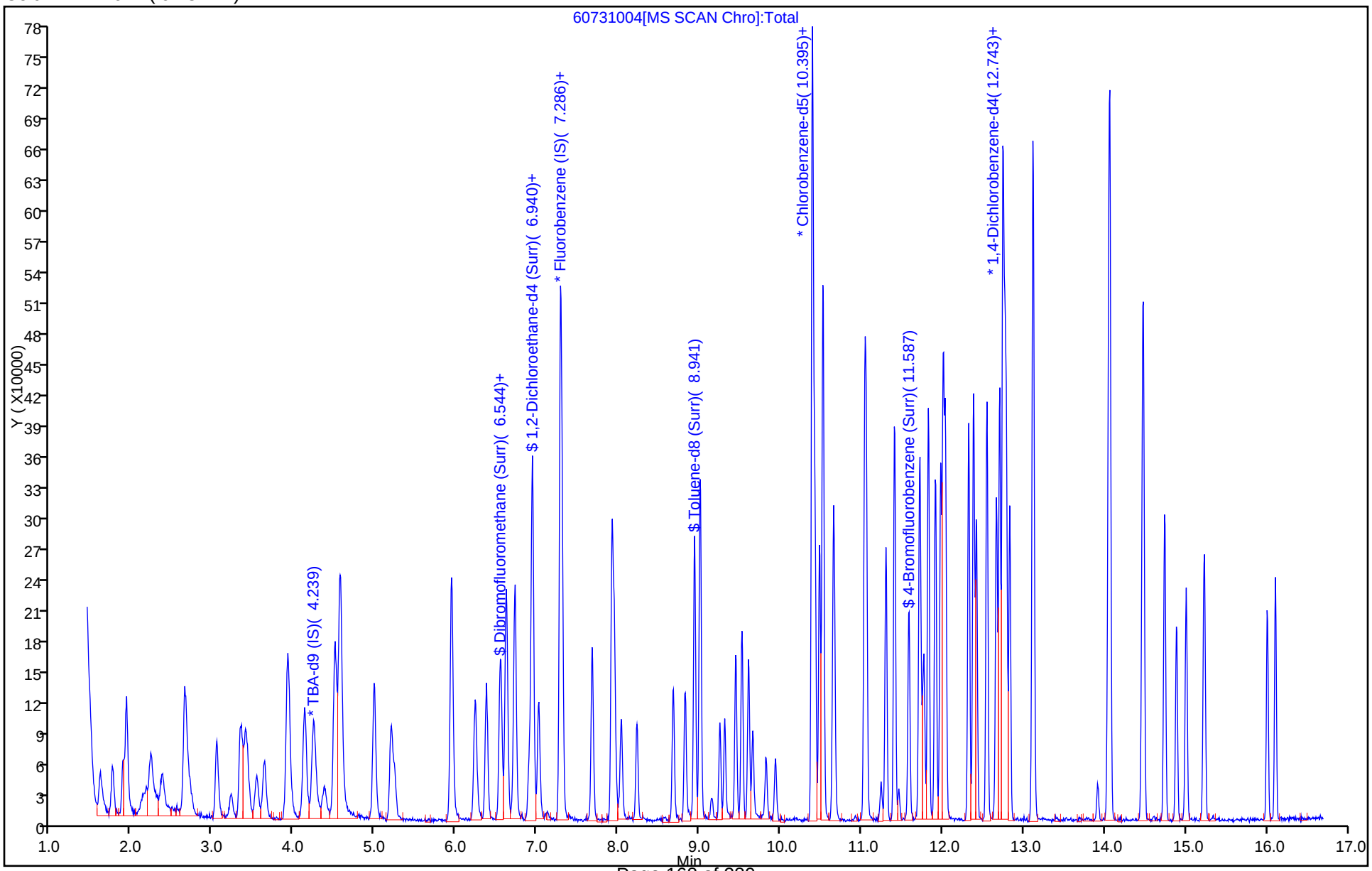
Report Date: 03-Aug-2015 12:15:35 Chrom Revision: 2.2 09-Jul-2015 10:16:20

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731004.D

Injection Date:	31-Jul-2015 14:00:30	Instrument ID:	CHHP6	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_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

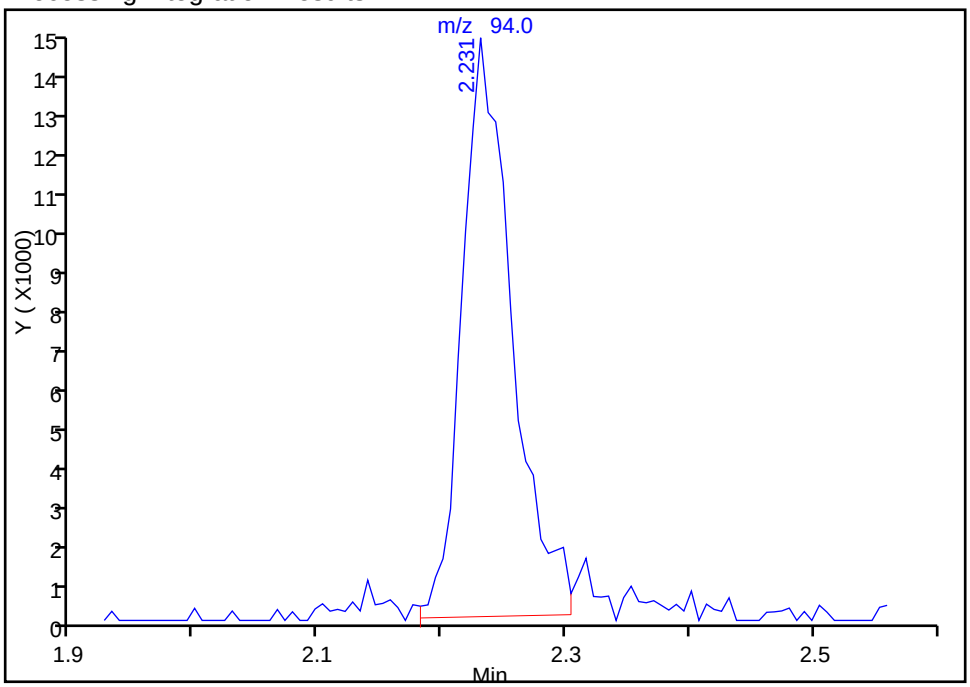
TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731004.D				
Injection Date:	31-Jul-2015 14:00:30	Instrument ID:	CHHP6		
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_CHHP6	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

15 Bromomethane, CAS: 74-83-9

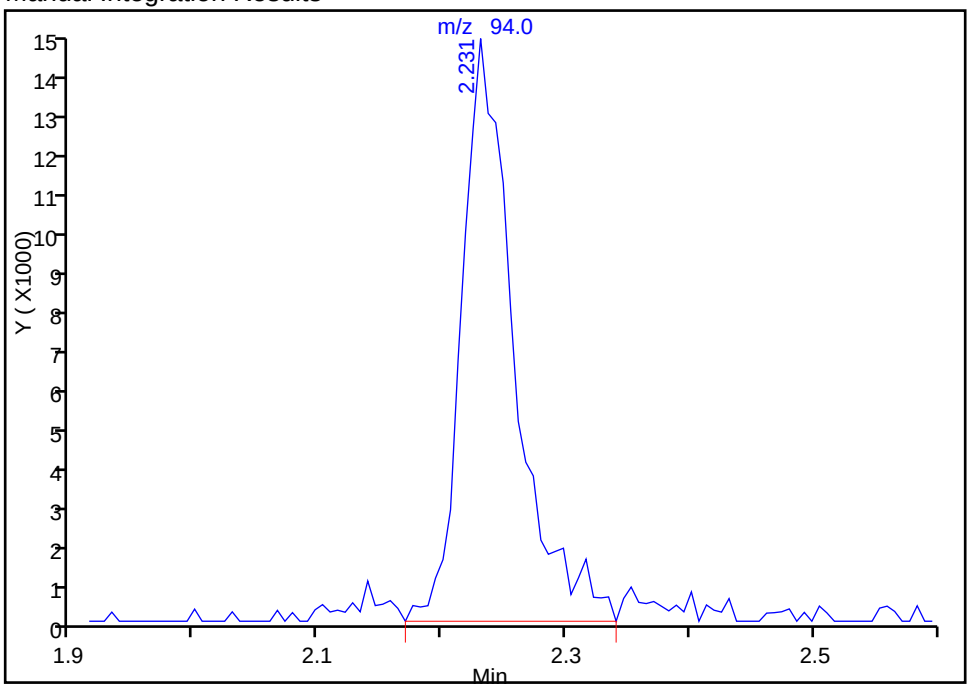
Processing Integration Results

RT: 2.23
Area: 40394
Amount: 23.319863
Amount Units: ng



Manual Integration Results

RT: 2.23
Area: 42916
Amount: 26.704234
Amount Units: ng



Reviewer: fergusond, 03-Aug-2015 10:46:01
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

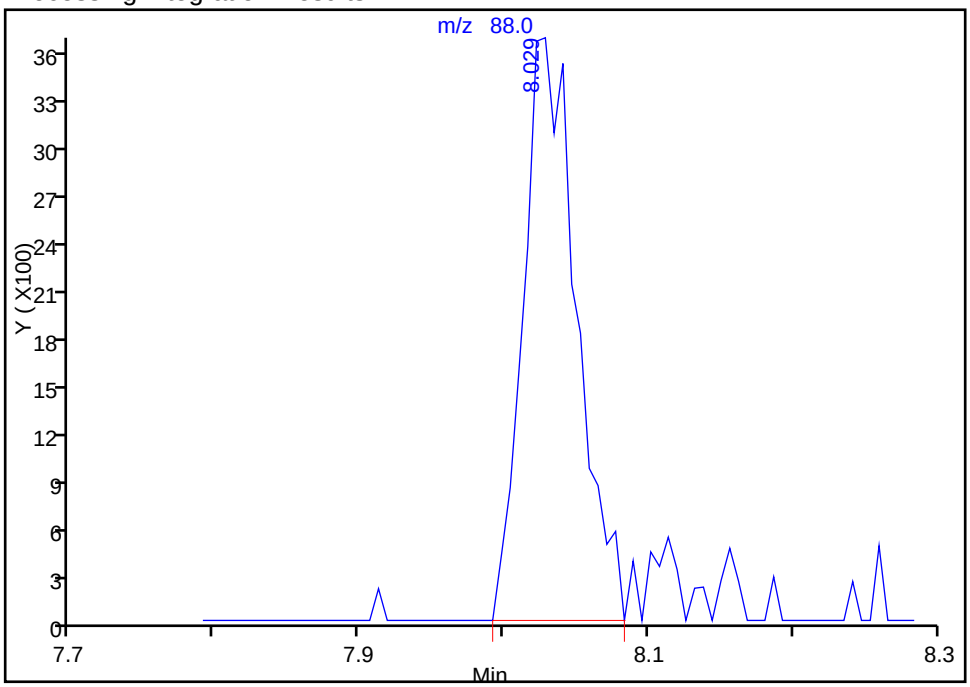
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731004.D
Injection Date: 31-Jul-2015 14:00:30 Instrument ID: CHHP6
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_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

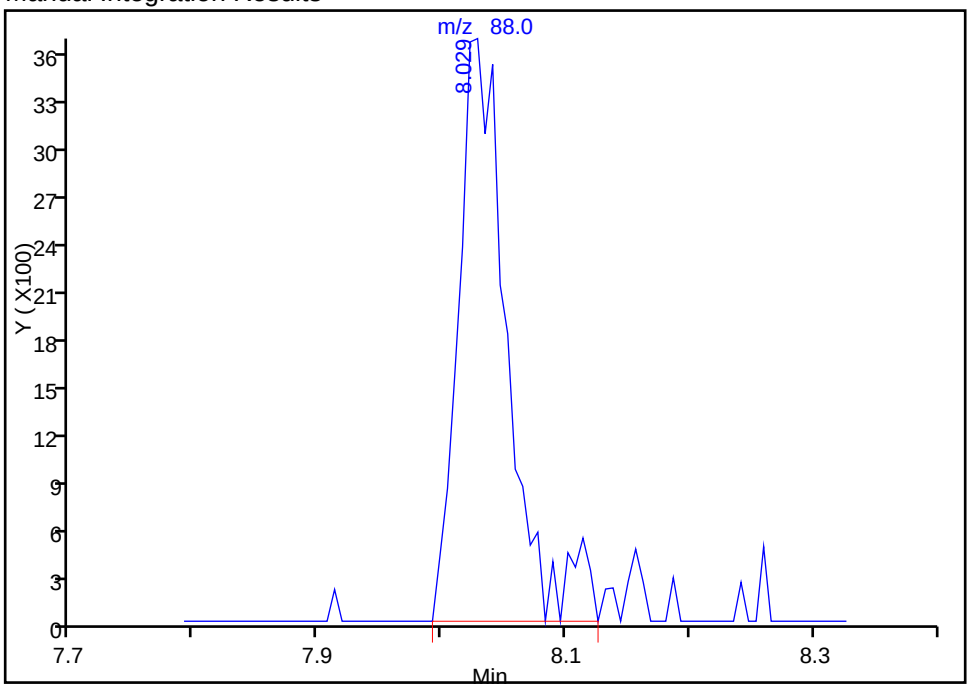
Processing Integration Results

RT: 8.03
Area: 9488
Amount: 365.3313
Amount Units: ng



Manual Integration Results

RT: 8.03
Area: 10219
Amount: 401.5715
Amount Units: ng



Reviewer: fergusond, 03-Aug-2015 10:46:01
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731005.D
Lims ID: ICIS VSTD10
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 31-Jul-2015 14:24:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS VSTD10
Misc. Info.: 180-0007999-005
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Aug-2015 12:56:50 Calib Date: 31-Jul-2015 18:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: fergusond Date: 03-Aug-2015 12:15:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.248	4.248	0.000	92	161009	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.284	7.284	0.000	98	485657	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.398	0.000	91	104426	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.747	12.747	0.000	94	171006	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.554	6.554	0.000	92	110929	50.0	49.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	71	181120	50.0	50.2	
$ 7 Toluene-d8 (Surr)	98	8.938	8.938	0.000	94	445521	50.0	54.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.585	0.000	80	184340	50.0	50.4	
11 Dichlorodifluoromethane	85	1.608	1.608	0.000	99	166146	50.0	49.4	
12 Chloromethane	50	1.754	1.754	0.000	100	147560	50.0	50.9	
13 Vinyl chloride	62	1.888	1.888	0.000	99	154423	50.0	49.5	
14 Butadiene	39	1.930	1.930	0.000	90	146675	50.0	50.1	
15 Bromomethane	94	2.228	2.228	0.000	90	89628	50.0	53.2	
16 Chloroethane	64	2.368	2.368	0.000	99	111283	50.0	52.2	
17 Dichlorofluoromethane	67	2.648	2.648	0.000	96	250823	50.0	50.6	
18 Trichlorofluoromethane	101	2.660	2.660	0.000	73	206141	50.0	52.1	
20 Ethyl ether	59	3.049	3.049	0.000	90	136903	50.0	48.8	
21 Acrolein	56	3.220	3.220	0.000	97	43327	150.0	141.7	
22 1,1-Dichloroethene	96	3.341	3.341	0.000	96	118856	50.0	48.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.390	3.390	0.000	95	126375	50.0	49.0	
24 Acetone	43	3.421	3.421	0.000	98	76252	100.0	88.7	
25 Iodomethane	142	3.536	3.536	0.000	98	159542	50.0	48.6	
26 Carbon disulfide	76	3.627	3.627	0.000	100	294989	50.0	46.6	
29 3-Chloro-1-propene	76	3.919	3.919	0.000	61	66228	50.0	48.1	
30 Methyl acetate	43	3.926	3.926	0.000	96	497011	250.0	246.7	
31 Methylene Chloride	84	4.132	4.132	0.000	93	163213	50.0	48.0	
32 2-Methyl-2-propanol	59	4.370	4.370	0.000	93	91997	500.0	507.7	
33 Acrylonitrile	53	4.503	4.503	0.000	98	501701	500.0	494.0	
34 trans-1,2-Dichloroethene	96	4.564	4.564	0.000	96	139824	50.0	49.6	
35 Methyl tert-butyl ether	73	4.576	4.576	0.000	97	394698	50.0	46.7	

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	93	186977	50.0	48.9	
37 1,1-Dichloroethane	63	5.197	5.197	0.000	97	251887	50.0	49.9	
38 Vinyl acetate	43	5.240	5.240	0.000	98	186047	50.0	45.6	
43 cis-1,2-Dichloroethene	96	5.939	5.939	0.000	85	151575	50.0	49.4	
44 2-Butanone (MEK)	43	5.945	5.945	0.000	60	108037	100.0	92.1	
42 2,2-Dichloropropane	77	5.945	5.945	0.000	61	122189	50.0	47.8	
48 Chlorobromomethane	128	6.231	6.231	0.000	96	58005	50.0	47.1	
49 Tetrahydrofuran	42	6.249	6.249	0.000	87	70787	100.0	89.6	
50 Chloroform	83	6.371	6.371	0.000	94	250393	50.0	49.9	
51 1,1,1-Trichloroethane	97	6.541	6.541	0.000	97	182973	50.0	49.4	
52 Cyclohexane	56	6.620	6.620	0.000	93	237539	50.0	50.0	
53 Carbon tetrachloride	117	6.718	6.718	0.000	95	126096	50.0	48.2	
54 1,1-Dichloropropene	75	6.724	6.724	0.000	95	202951	50.0	50.9	
55 Isobutyl alcohol	41	6.900	6.900	0.000	88	81470	1250.0	1159.5	
56 Benzene	78	6.943	6.943	0.000	97	574901	50.0	50.8	
57 1,2-Dichloroethane	62	7.016	7.016	0.000	99	225116	50.0	49.4	
59 n-Heptane	43	7.308	7.308	0.000	88	154761	50.0	50.3	
61 Trichloroethene	130	7.679	7.679	0.000	92	113666	50.0	48.2	
63 Methylcyclohexane	83	7.922	7.922	0.000	92	240977	50.0	50.3	
64 1,2-Dichloropropane	63	7.953	7.953	0.000	87	126414	50.0	46.8	
65 1,4-Dioxane	88	8.032	8.032	0.000	44	26388	1000.0	988.7	M
67 Dibromomethane	93	8.038	8.038	0.000	94	77394	50.0	47.1	
68 Dichlorobromomethane	83	8.227	8.227	0.000	98	144075	50.0	46.7	
71 cis-1,3-Dichloropropene	75	8.677	8.677	0.000	92	149301	50.0	44.1	
72 4-Methyl-2-pentanone (MIBK	43	8.823	8.823	0.000	96	208546	100.0	97.1	
73 Toluene	91	9.011	9.011	0.000	98	565645	50.0	52.5	
74 trans-1,3-Dichloropropene	75	9.255	9.255	0.000	95	124444	50.0	45.5	
75 Ethyl methacrylate	69	9.315	9.315	0.000	88	135064	50.0	46.5	
76 1,1,2-Trichloroethane	97	9.449	9.449	0.000	94	108552	50.0	48.7	
77 Tetrachloroethene	164	9.522	9.522	0.000	93	93269	50.0	50.7	
78 1,3-Dichloropropane	76	9.607	9.607	0.000	91	206060	50.0	50.0	
79 2-Hexanone	43	9.656	9.656	0.000	95	135329	100.0	96.0	
81 Chlorodibromomethane	129	9.826	9.826	0.000	91	73014	50.0	48.0	
82 Ethylene Dibromide	107	9.942	9.942	0.000	97	92363	50.0	46.8	
83 3-Chlorobenzotrifluoride	180	10.392	10.392	0.000	87	177755	50.0	51.5	
84 Chlorobenzene	112	10.429	10.429	0.000	91	339330	50.0	51.2	
85 4-Chlorobenzotrifluoride	180	10.483	10.483	0.000	96	164547	50.0	51.5	
86 1,1,1,2-Tetrachloroethane	131	10.520	10.520	0.000	85	89710	50.0	49.4	
87 Ethylbenzene	106	10.526	10.526	0.000	99	191951	50.0	51.4	
88 m-Xylene & p-Xylene	106	10.660	10.660	0.000	99	235109	50.0	50.7	
89 o-Xylene	106	11.043	11.043	0.000	98	234926	50.0	50.6	
90 Styrene	104	11.061	11.061	0.000	94	374525	50.0	52.6	
91 Bromoform	173	11.244	11.244	0.000	92	37102	50.0	45.7	
92 2-Chlorobenzotrifluoride	180	11.305	11.305	0.000	94	179913	50.0	50.9	
93 Isopropylbenzene	105	11.408	11.408	0.000	98	599038	50.0	54.0	
96 1,1,2,2-Tetrachloroethane	83	11.712	11.712	0.000	95	147479	50.0	49.5	
95 Bromobenzene	156	11.725	11.725	0.000	96	136094	50.0	49.5	
97 trans-1,4-Dichloro-2-buten	53	11.749	11.749	0.000	77	41001	50.0	47.0	
98 1,2,3-Trichloropropane	110	11.767	11.767	0.000	87	50085	50.0	47.9	
99 N-Propylbenzene	120	11.828	11.828	0.000	99	161671	50.0	51.1	
100 2-Chlorotoluene	126	11.913	11.913	0.000	93	133354	50.0	50.7	
101 3-Chlorotoluene	126	11.980	11.980	0.000	97	137766	50.0	49.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	95	541915	50.0	52.6	
103 4-Chlorotoluene	126	12.041	12.041	0.000	98	141377	50.0	50.9	
104 tert-Butylbenzene	119	12.321	12.321	0.000	91	415895	50.0	51.1	
106 1,2,4-Trimethylbenzene	105	12.382	12.382	0.000	99	554224	50.0	52.7	
107 1,2-dichloro-4-(trifluorom	214	12.418	12.418	0.000	96	144215	50.0	48.4	
108 sec-Butylbenzene	105	12.546	12.546	0.000	96	643438	50.0	53.0	
109 1,3-Dichlorobenzene	146	12.667	12.667	0.000	93	267626	50.0	49.8	
110 4-Isopropyltoluene	119	12.704	12.704	0.000	96	539941	50.0	53.0	
111 1,4-Dichlorobenzene	146	12.771	12.771	0.000	88	275229	50.0	50.1	
113 2,4-Dichloro-1-(triflourom	214	12.789	12.789	0.000	95	143623	50.0	48.4	
114 2,5-Dichlorobenzotrifluori	214	12.832	12.832	0.000	98	169006	50.0	51.0	
116 n-Butylbenzene	91	13.112	13.112	0.000	99	533401	50.0	52.4	
117 1,2-Dichlorobenzene	146	13.124	13.124	0.000	91	269873	50.0	49.8	
118 1,2-Dibromo-3-Chloropropan	75	13.915	13.921	-0.006	68	22010	50.0	44.3	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.061	14.061	0.000	98	751227	150.0	159.2	
121 2,3- & 3,4- Dichlorotoluen	125	14.474	14.474	0.000	99	530353	100.0	101.9	
122 1,2,4-Trichlorobenzene	180	14.736	14.736	0.000	92	208112	50.0	49.5	
123 Hexachlorobutadiene	225	14.888	14.888	0.000	95	83692	50.0	50.6	
124 Naphthalene	128	15.004	15.004	0.000	99	425036	50.0	50.1	
125 1,2,3-Trichlorobenzene	180	15.229	15.229	0.000	91	189066	50.0	48.1	
126 2,4,5-Trichlorotoluene	159	16.007	16.007	0.000	0	121646	50.0	46.1	
127 2,3,6-Trichlorotoluene	159	16.111	16.111	0.000	92	120523	50.0	48.1	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	99.0	
S 131 Xylenes, Total	106				0		100.0	101.4	
S 132 1,3-Dichloropropene, Total	1				0		100.0	89.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00039	Amount Added:	2.00	Units: uL	
voaWket1Reste_00001	Amount Added:	2.00	Units: uL	
voaWeemix1Res_00001	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00134	Amount Added:	2.00	Units: uL	
voaWVA1st Res_00003	Amount Added:	2.00	Units: uL	
voaWAcro2nd R_00006	Amount Added:	6.00	Units: uL	
VOA8260INT_00039	Amount Added:	2.00	Units: uL	Run Reagent

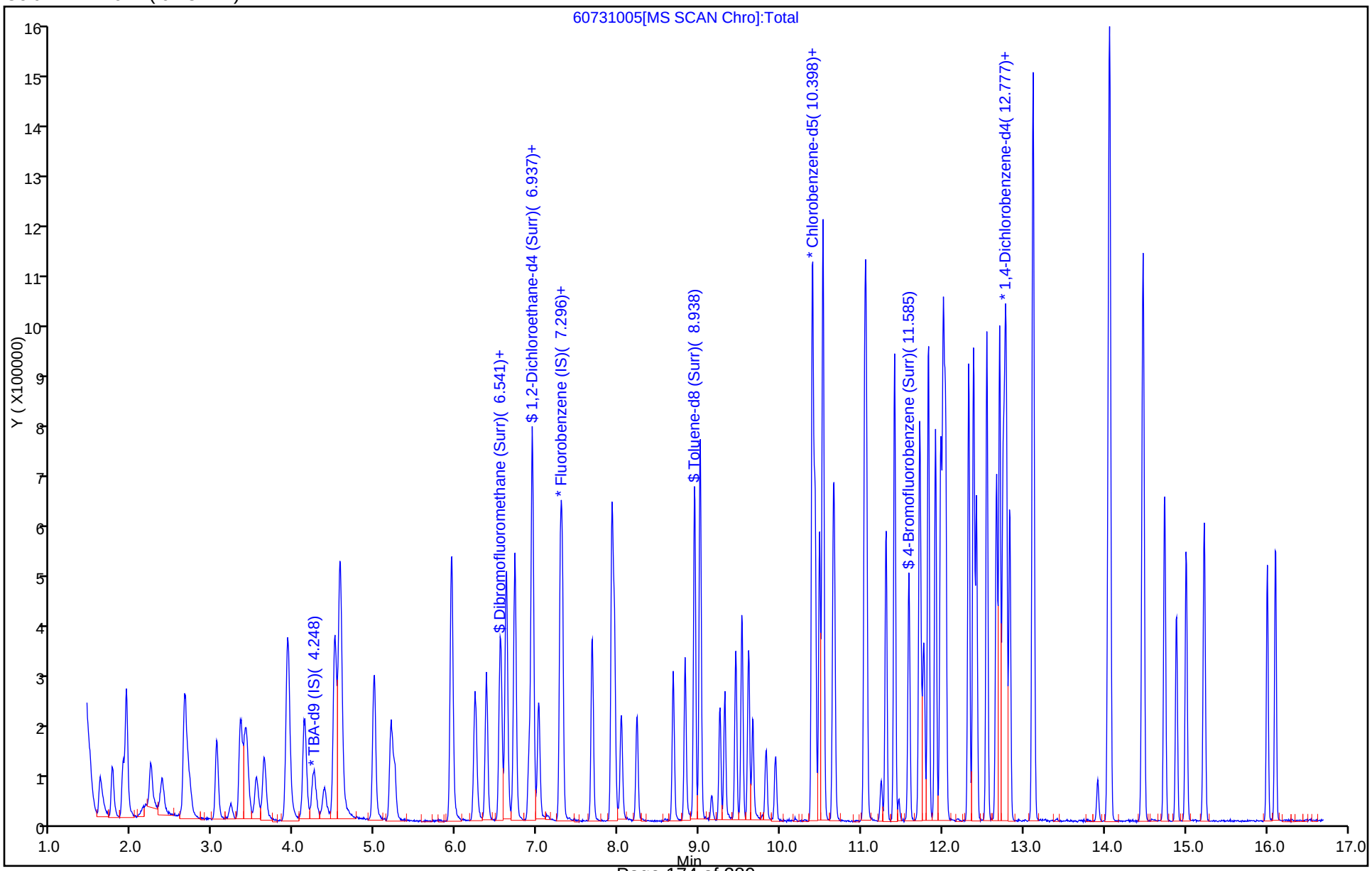
Report Date: 03-Aug-2015 12:56:52 Chrom Revision: 2.2 09-Jul-2015 10:16:20

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731005.D

Injection Date:	31-Jul-2015 14:24:30	Instrument ID:	CHHP6	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_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

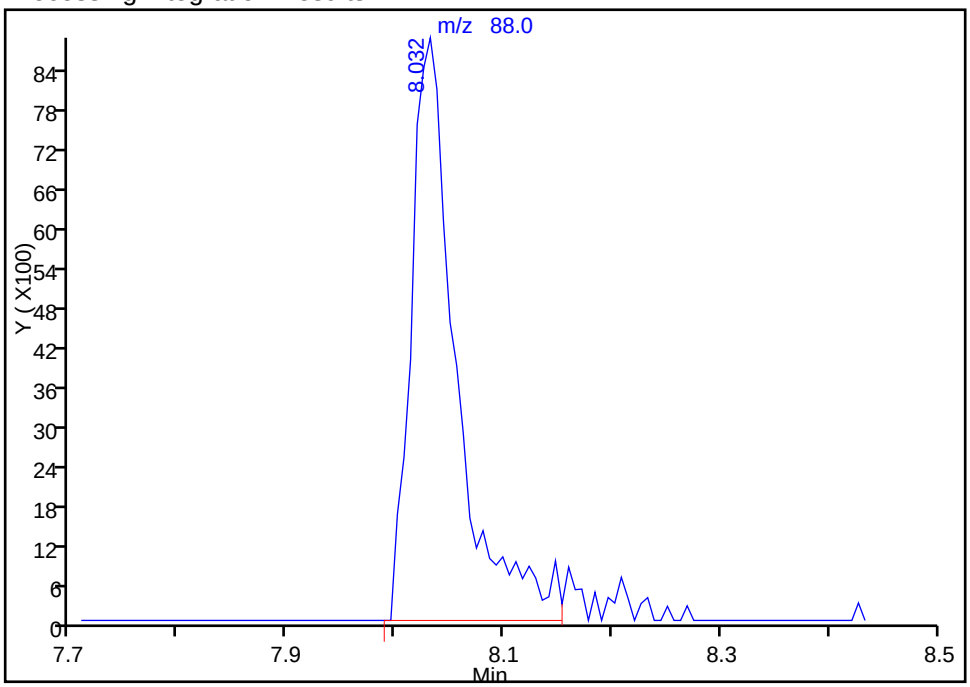
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731005.D
Injection Date: 31-Jul-2015 14:24:30 Instrument ID: CHHP6
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_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

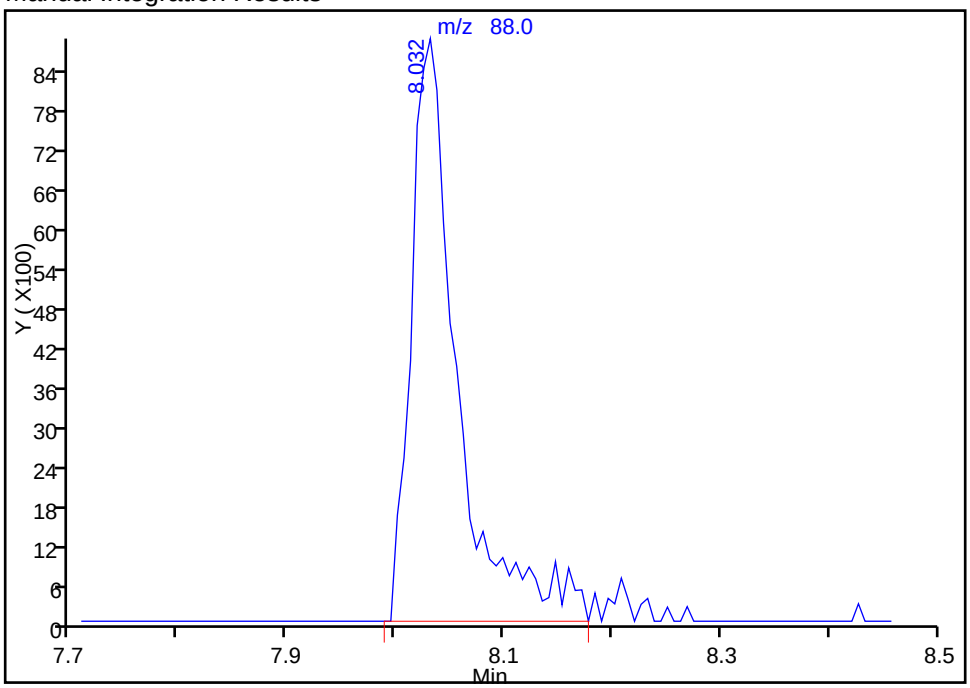
Processing Integration Results

RT: 8.03
Area: 25747
Amount: 938.6160
Amount Units: ng



Manual Integration Results

RT: 8.03
Area: 26388
Amount: 988.6792
Amount Units: ng



Reviewer: fergusond, 03-Aug-2015 10:47:28
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731006.D
Lims ID: IC VSTD15
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 31-Jul-2015 14:49:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD15
Misc. Info.: 180-0007999-006
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Aug-2015 12:15:42 Calib Date: 31-Jul-2015 18:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: fergusond Date: 03-Aug-2015 10:29:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.247	4.247	0.000	90	170149	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.289	0.000	98	471581	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.398	0.000	92	104570	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.746	0.000	95	167231	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.553	6.553	0.000	92	163209	75.0	75.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.930	6.930	0.000	71	260570	75.0	74.4	
$ 7 Toluene-d8 (Surr)	98	8.938	8.938	0.000	94	643420	75.0	78.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.584	0.000	80	281797	75.0	77.0	
11 Dichlorodifluoromethane	85	1.607	1.607	0.000	98	255750	75.0	78.3	
12 Chloromethane	50	1.759	1.759	0.000	99	208858	75.0	74.2	
13 Vinyl chloride	62	1.893	1.893	0.000	84	233901	75.0	77.2	
14 Butadiene	39	1.930	1.930	0.000	90	214248	75.0	75.4	
15 Bromomethane	94	2.228	2.228	0.000	89	123705	75.0	75.6	
16 Chloroethane	64	2.374	2.374	0.000	99	159781	75.0	77.2	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	99	372545	75.0	77.4	
18 Trichlorofluoromethane	101	2.678	2.678	0.000	84	296881	75.0	77.3	
20 Ethyl ether	59	3.043	3.043	0.000	89	202583	75.0	74.4	
21 Acrolein	56	3.213	3.213	0.000	99	52894	175.0	178.1	
22 1,1-Dichloroethene	96	3.341	3.341	0.000	96	180424	75.0	76.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.402	3.402	0.000	96	188852	75.0	75.4	
24 Acetone	43	3.432	3.432	0.000	99	117975	150.0	141.4	
25 Iodomethane	142	3.530	3.530	0.000	99	243211	75.0	76.3	
26 Carbon disulfide	76	3.633	3.633	0.000	100	461167	75.0	75.0	
29 3-Chloro-1-propene	76	3.913	3.913	0.000	89	98190	75.0	73.4	
30 Methyl acetate	43	3.925	3.925	0.000	97	732698	375.0	374.5	
31 Methylene Chloride	84	4.132	4.132	0.000	93	238130	75.0	74.9	
32 2-Methyl-2-propanol	59	4.369	4.369	0.000	92	141735	750.0	740.2	
33 Acrylonitrile	53	4.497	4.497	0.000	99	737397	750.0	747.7	
34 trans-1,2-Dichloroethene	96	4.564	4.564	0.000	71	208665	75.0	76.2	
35 Methyl tert-butyl ether	73	4.576	4.576	0.000	97	621185	75.0	75.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.990	4.990	0.000	94	278592	75.0	75.0	
37 1,1-Dichloroethane	63	5.196	5.196	0.000	97	371113	75.0	75.7	
38 Vinyl acetate	43	5.239	5.239	0.000	98	295714	75.0	74.7	
43 cis-1,2-Dichloroethene	96	5.939	5.939	0.000	85	223081	75.0	74.9	
44 2-Butanone (MEK)	43	5.945	5.945	0.000	61	180292	150.0	158.3	
42 2,2-Dichloropropane	77	5.945	5.945	0.000	61	186450	75.0	75.2	
48 Chlorobromomethane	128	6.225	6.225	0.000	97	88252	75.0	73.7	
49 Tetrahydrofuran	42	6.237	6.237	0.000	85	117489	150.0	153.2	
50 Chloroform	83	6.371	6.371	0.000	96	370042	75.0	76.0	
51 1,1,1-Trichloroethane	97	6.541	6.541	0.000	97	278390	75.0	77.4	
52 Cyclohexane	56	6.620	6.620	0.000	91	359010	75.0	77.9	
53 Carbon tetrachloride	117	6.717	6.717	0.000	97	195436	75.0	76.9	
54 1,1-Dichloropropene	75	6.730	6.730	0.000	95	301319	75.0	77.9	
55 Isobutyl alcohol	41	6.900	6.900	0.000	90	122452	1875.0	1794.8	
56 Benzene	78	6.942	6.942	0.000	97	839117	75.0	76.3	
57 1,2-Dichloroethane	62	7.015	7.015	0.000	99	335915	75.0	75.9	
59 n-Heptane	43	7.307	7.307	0.000	88	231524	75.0	77.5	
61 Trichloroethene	130	7.679	7.679	0.000	92	177868	75.0	77.6	
63 Methylcyclohexane	83	7.922	7.922	0.000	91	355558	75.0	76.4	
64 1,2-Dichloropropane	63	7.952	7.952	0.000	94	199527	75.0	76.0	
65 1,4-Dioxane	88	8.031	8.031	0.000	40	36545	1500.0	1410.1	
67 Dibromomethane	93	8.037	8.037	0.000	90	121844	75.0	76.4	
68 Dichlorobromomethane	83	8.226	8.226	0.000	98	230314	75.0	76.9	
71 cis-1,3-Dichloropropene	75	8.676	8.676	0.000	93	254907	75.0	77.5	
72 4-Methyl-2-pentanone (MIBK	43	8.822	8.822	0.000	94	330779	150.0	153.9	
73 Toluene	91	9.011	9.011	0.000	98	847209	75.0	78.5	
74 trans-1,3-Dichloropropene	75	9.254	9.254	0.000	97	221914	75.0	81.0	
75 Ethyl methacrylate	69	9.315	9.315	0.000	88	231048	75.0	79.4	
76 1,1,2-Trichloroethane	97	9.449	9.449	0.000	95	172158	75.0	77.1	
77 Tetrachloroethene	164	9.528	9.528	0.000	94	142949	75.0	77.7	
78 1,3-Dichloropropane	76	9.607	9.607	0.000	92	320167	75.0	77.7	
79 2-Hexanone	43	9.656	9.656	0.000	96	219895	150.0	155.8	
81 Chlorodibromomethane	129	9.826	9.826	0.000	89	123420	75.0	81.0	
82 Ethylene Dibromide	107	9.936	9.936	0.000	97	153351	75.0	77.7	
83 3-Chlorobenzotrifluoride	180	10.392	10.392	0.000	91	262608	75.0	76.0	
84 Chlorobenzene	112	10.428	10.428	0.000	91	513514	75.0	77.4	
85 4-Chlorobenzotrifluoride	180	10.483	10.483	0.000	96	245021	75.0	76.5	
86 1,1,1,2-Tetrachloroethane	131	10.520	10.520	0.000	87	138964	75.0	76.5	
87 Ethylbenzene	106	10.526	10.526	0.000	99	288675	75.0	77.2	
88 m-Xylene & p-Xylene	106	10.659	10.659	0.000	99	360561	75.0	77.7	
89 o-Xylene	106	11.037	11.037	0.000	98	364838	75.0	78.5	
90 Styrene	104	11.061	11.061	0.000	94	568513	75.0	79.7	
91 Bromoform	173	11.243	11.243	0.000	93	60348	75.0	74.2	
92 2-Chlorobenzotrifluoride	180	11.304	11.304	0.000	96	274773	75.0	77.7	
93 Isopropylbenzene	105	11.408	11.408	0.000	98	897341	75.0	80.7	
96 1,1,2,2-Tetrachloroethane	83	11.712	11.712	0.000	97	227964	75.0	76.4	
95 Bromobenzene	156	11.724	11.724	0.000	97	203181	75.0	75.6	
97 trans-1,4-Dichloro-2-buten	53	11.748	11.748	0.000	68	61474	75.0	72.1	
98 1,2,3-Trichloropropane	110	11.773	11.773	0.000	86	75371	75.0	73.7	
99 N-Propylbenzene	120	11.827	11.827	0.000	99	238465	75.0	77.0	
100 2-Chlorotoluene	126	11.913	11.913	0.000	93	197431	75.0	76.8	
101 3-Chlorotoluene	126	11.980	11.980	0.000	97	203636	75.0	75.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	92	796704	75.0	79.1	
103 4-Chlorotoluene	126	12.034	12.034	0.000	99	208897	75.0	76.9	
104 tert-Butylbenzene	119	12.320	12.320	0.000	91	633351	75.0	79.6	
106 1,2,4-Trimethylbenzene	105	12.381	12.381	0.000	99	824147	75.0	80.1	
107 1,2-dichloro-4-(trifluorom	214	12.418	12.418	0.000	96	221955	75.0	76.1	
108 sec-Butylbenzene	105	12.545	12.545	0.000	96	958306	75.0	80.7	
109 1,3-Dichlorobenzene	146	12.667	12.667	0.000	93	397446	75.0	75.7	
110 4-Isopropyltoluene	119	12.703	12.703	0.000	96	804039	75.0	80.7	
111 1,4-Dichlorobenzene	146	12.770	12.770	0.000	92	407678	75.0	75.9	
113 2,4-Dichloro-1-(triflourom	214	12.789	12.789	0.000	95	211084	75.0	72.8	
114 2,5-Dichlorobenzotrifluori	214	12.831	12.831	0.000	99	249633	75.0	77.0	
116 n-Butylbenzene	91	13.111	13.111	0.000	98	791496	75.0	79.6	
117 1,2-Dichlorobenzene	146	13.123	13.123	0.000	90	400593	75.0	75.6	
118 1,2-Dibromo-3-Chloropropan	75	13.914	13.920	-0.006	70	36339	75.0	74.7	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.060	14.060	0.000	98	1076776	225.0	233.3	
121 2,3- & 3,4- Dichlorotoluen	125	14.474	14.474	0.000	98	792789	150.0	155.7	
122 1,2,4-Trichlorobenzene	180	14.741	14.741	0.000	92	309817	75.0	75.4	
123 Hexachlorobutadiene	225	14.887	14.887	0.000	96	122376	75.0	75.6	
124 Naphthalene	128	15.003	15.003	0.000	99	654694	75.0	78.9	
125 1,2,3-Trichlorobenzene	180	15.228	15.228	0.000	93	286920	75.0	74.6	
126 2,4,5-Trichlorotoluene	159	16.007	16.007	0.000	0	198517	75.0	76.9	
127 2,3,6-Trichlorotoluene	159	16.110	16.110	0.000	93	186087	75.0	76.0	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		150.0	151.1	
S 131 Xylenes, Total	106				0		150.0	156.2	
S 132 1,3-Dichloropropene, Total	1				0		150.0	158.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260SURR_00039	Amount Added:	3.00	Units: uL		
voaWket1Reste_00001	Amount Added:	3.00	Units: uL		
voaWeemix1Res_00001	Amount Added:	3.00	Units: uL		
voaWVA1st Res_00003	Amount Added:	3.00	Units: uL		
VOA8260VOAPRI_00134	Amount Added:	3.00	Units: uL		
voaWAcro2nd R_00006	Amount Added:	7.00	Units: uL		
VOA8260INT_00039	Amount Added:	2.00	Units: uL	Run Reagent	

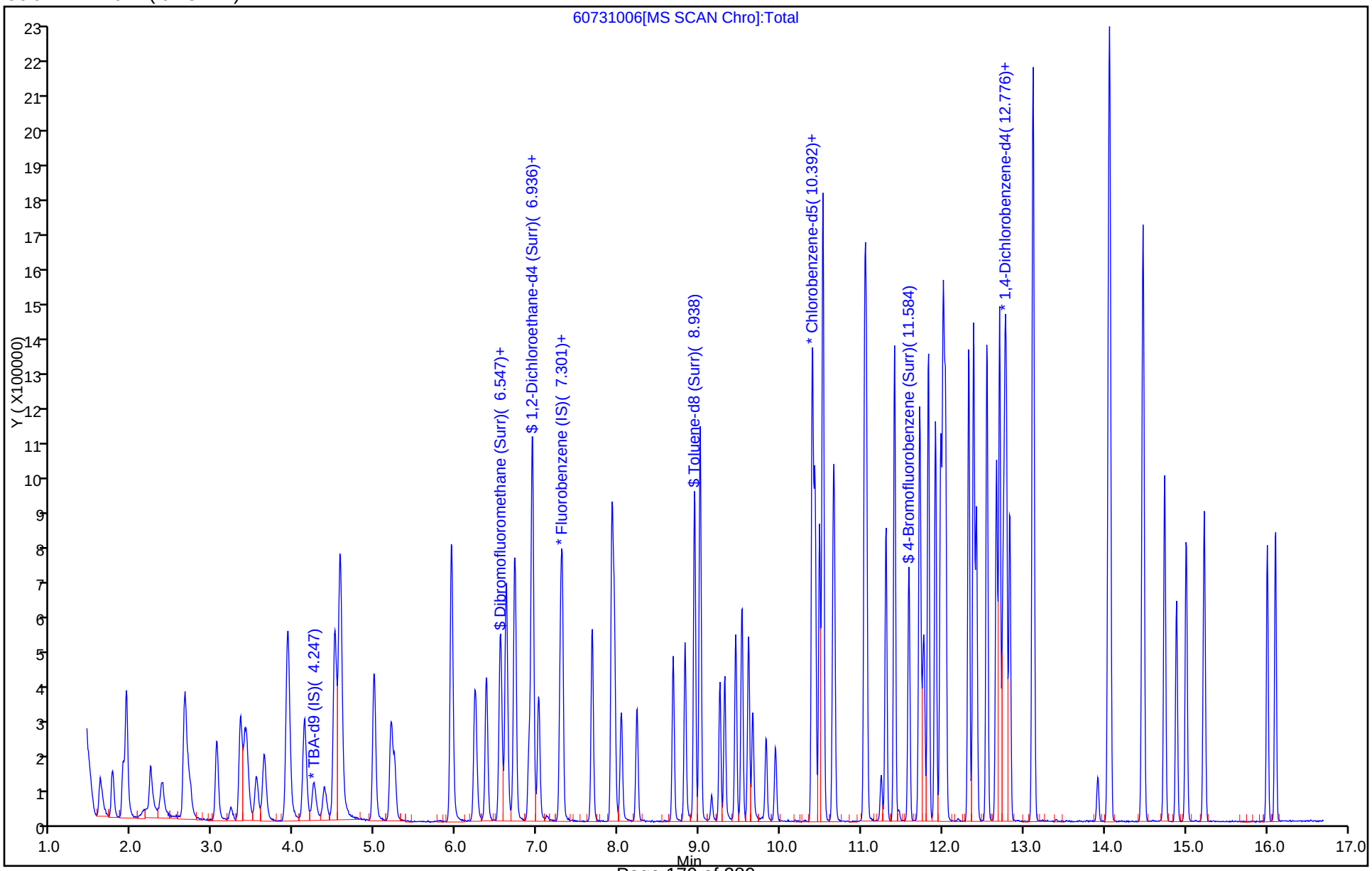
Report Date: 03-Aug-2015 12:15:44 Chrom Revision: 2.2 09-Jul-2015 10:16:20

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731006.D

Injection Date:	31-Jul-2015 14:49:30	Instrument ID:	CHHP6	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_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731007.D
Lims ID: IC VSTD20
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 31-Jul-2015 15:13:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD20
Misc. Info.: 180-0007999-007
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Aug-2015 12:15:51 Calib Date: 31-Jul-2015 18:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: fergusond Date: 03-Aug-2015 10:27:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.241	4.247	-0.006	92	168874	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.283	7.289	-0.006	98	482403	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.398	0.000	91	110045	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.746	0.000	94	171338	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.553	6.553	0.000	93	221245	100.0	99.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.930	6.930	0.000	70	353626	100.0	98.6	
$ 7 Toluene-d8 (Surr)	98	8.938	8.938	0.000	95	864751	100.0	99.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.584	0.000	81	371000	100.0	96.3	
11 Dichlorodifluoromethane	85	1.607	1.607	0.000	100	316945	100.0	94.9	
12 Chloromethane	50	1.759	1.759	0.000	99	278884	100.0	96.9	
13 Vinyl chloride	62	1.887	1.893	-0.006	99	292173	100.0	94.2	
14 Butadiene	39	1.930	1.930	0.000	90	274693	100.0	94.5	
15 Bromomethane	94	2.234	2.228	0.006	91	158589	100.0	94.7	
16 Chloroethane	64	2.368	2.374	-0.006	99	198857	100.0	93.9	
17 Dichlorofluoromethane	67	2.647	2.654	-0.007	98	463283	100.0	94.0	
18 Trichlorofluoromethane	101	2.672	2.678	-0.006	99	367084	100.0	93.4	
20 Ethyl ether	59	3.043	3.043	0.000	90	269465	100.0	96.8	
21 Acrolein	56	3.219	3.213	0.006	98	54177	200.0	178.4	
22 1,1-Dichloroethene	96	3.335	3.341	-0.006	96	234083	100.0	96.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.396	3.402	-0.006	96	241359	100.0	94.2	
24 Acetone	43	3.426	3.432	-0.006	99	166807	200.0	195.5	
25 Iodomethane	142	3.536	3.530	0.006	98	318736	100.0	97.8	
26 Carbon disulfide	76	3.633	3.633	0.000	100	618168	100.0	98.2	
29 3-Chloro-1-propene	76	3.907	3.913	-0.006	88	135273	100.0	98.8	
30 Methyl acetate	43	3.925	3.925	0.000	97	982363	500.0	490.9	
31 Methylene Chloride	84	4.132	4.132	0.000	92	313904	100.0	98.1	
32 2-Methyl-2-propanol	59	4.369	4.369	0.000	92	198055	1000.0	1042.2	
33 Acrylonitrile	53	4.503	4.497	0.006	99	994141	1000.0	985.4	
34 trans-1,2-Dichloroethene	96	4.564	4.564	0.000	97	267617	100.0	95.5	
35 Methyl tert-butyl ether	73	4.576	4.576	0.000	97	825760	100.0	98.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.983	4.990	-0.007	93	352983	100.0	93.0	
37 1,1-Dichloroethane	63	5.196	5.196	0.000	97	490563	100.0	97.8	
38 Vinyl acetate	43	5.239	5.239	0.000	97	412541	100.0	101.9	
43 cis-1,2-Dichloroethene	96	5.945	5.939	0.006	85	295290	100.0	96.9	
44 2-Butanone (MEK)	43	5.945	5.945	0.000	60	231667	200.0	198.9	
42 2,2-Dichloropropane	77	5.945	5.945	0.000	62	250901	100.0	98.9	
48 Chlorobromomethane	128	6.231	6.225	0.006	97	118290	100.0	96.6	
49 Tetrahydrofuran	42	6.249	6.237	0.012	85	154776	200.0	197.3	
50 Chloroform	83	6.370	6.371	-0.001	96	484585	100.0	97.3	
51 1,1,1-Trichloroethane	97	6.535	6.541	-0.006	98	366376	100.0	99.6	
52 Cyclohexane	56	6.614	6.620	-0.006	92	445084	100.0	94.4	
53 Carbon tetrachloride	117	6.717	6.717	0.000	98	252588	100.0	97.2	
54 1,1-Dichloropropene	75	6.729	6.730	-0.001	94	392146	100.0	99.1	
55 Isobutyl alcohol	41	6.900	6.900	0.000	92	178080	2500.0	2551.6	
56 Benzene	78	6.942	6.942	0.000	98	1096030	100.0	97.5	
57 1,2-Dichloroethane	62	7.015	7.015	0.000	99	440984	100.0	97.4	
59 n-Heptane	43	7.307	7.307	0.000	85	290327	100.0	95.0	
61 Trichloroethene	130	7.678	7.679	-0.001	93	230554	100.0	98.3	
63 Methylcyclohexane	83	7.922	7.922	0.000	91	455180	100.0	95.7	
64 1,2-Dichloropropane	63	7.952	7.952	0.000	94	267345	100.0	99.5	
65 1,4-Dioxane	88	8.031	8.031	0.000	41	54577	2000.0	2058.6	M
67 Dibromomethane	93	8.037	8.037	0.000	92	163719	100.0	100.4	
68 Dichlorobromomethane	83	8.232	8.226	0.006	99	311750	100.0	101.7	
71 cis-1,3-Dichloropropene	75	8.676	8.676	0.000	93	358605	100.0	106.5	
72 4-Methyl-2-pentanone (MIBK	43	8.822	8.822	0.000	95	452681	200.0	200.1	
73 Toluene	91	9.011	9.011	0.000	98	1104648	100.0	97.3	
74 trans-1,3-Dichloropropene	75	9.254	9.254	0.000	97	303226	100.0	105.2	
75 Ethyl methacrylate	69	9.315	9.315	0.000	88	326852	100.0	106.8	
76 1,1,2-Trichloroethane	97	9.449	9.449	0.000	95	224945	100.0	95.8	
77 Tetrachloroethene	164	9.528	9.528	0.000	94	183568	100.0	94.8	
78 1,3-Dichloropropane	76	9.607	9.607	0.000	92	425660	100.0	98.1	
79 2-Hexanone	43	9.656	9.656	0.000	95	302805	200.0	203.8	
81 Chlorodibromomethane	129	9.826	9.826	0.000	90	163175	100.0	101.8	
82 Ethylene Dibromide	107	9.941	9.936	0.005	96	211303	100.0	101.7	
83 3-Chlorobenzotrifluoride	180	10.392	10.392	0.000	91	340769	100.0	93.7	
84 Chlorobenzene	112	10.428	10.428	0.000	91	676590	100.0	96.9	
85 4-Chlorobenzotrifluoride	180	10.483	10.483	0.000	96	315960	100.0	93.8	
86 1,1,1,2-Tetrachloroethane	131	10.525	10.520	0.005	88	192497	100.0	100.6	
87 Ethylbenzene	106	10.525	10.526	-0.001	99	383099	100.0	97.3	
88 m-Xylene & p-Xylene	106	10.659	10.659	0.000	100	480587	100.0	98.4	
89 o-Xylene	106	11.036	11.037	-0.001	98	484093	100.0	99.0	
90 Styrene	104	11.061	11.061	0.000	94	752806	100.0	100.3	
91 Bromoform	173	11.243	11.243	0.000	93	85498	100.0	99.9	
92 2-Chlorobenzotrifluoride	180	11.304	11.304	0.000	93	350232	100.0	94.1	
93 Isopropylbenzene	105	11.408	11.408	0.000	98	1146617	100.0	98.0	
96 1,1,2,2-Tetrachloroethane	83	11.718	11.712	0.006	96	304710	100.0	97.0	
95 Bromobenzene	156	11.724	11.724	0.000	97	276525	100.0	100.4	
97 trans-1,4-Dichloro-2-buten	53	11.748	11.748	0.000	80	87362	100.0	100.0	
98 1,2,3-Trichloropropane	110	11.773	11.773	0.000	86	102213	100.0	97.6	
99 N-Propylbenzene	120	11.827	11.827	0.000	98	317924	100.0	100.2	
100 2-Chlorotoluene	126	11.913	11.913	-0.001	93	265955	100.0	101.0	
101 3-Chlorotoluene	126	11.979	11.980	-0.001	97	282386	100.0	102.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	94	1031152	100.0	100.0	
103 4-Chlorotoluene	126	12.034	12.034	0.000	100	278435	100.0	100.1	
104 tert-Butylbenzene	119	12.326	12.320	0.006	91	820194	100.0	100.6	
106 1,2,4-Trimethylbenzene	105	12.381	12.381	0.000	99	1075766	100.0	102.0	
107 1,2-dichloro-4-(trifluorom	214	12.417	12.418	-0.001	95	280215	100.0	93.8	
108 sec-Butylbenzene	105	12.545	12.545	0.000	97	1226548	100.0	100.8	
109 1,3-Dichlorobenzene	146	12.667	12.667	0.000	93	528372	100.0	98.2	
110 4-Isopropyltoluene	119	12.703	12.703	0.000	95	1043904	100.0	102.3	
111 1,4-Dichlorobenzene	146	12.770	12.770	0.000	90	543357	100.0	98.8	
113 2,4-Dichloro-1-(triflourom	214	12.789	12.789	0.000	97	297534	100.0	100.1	
114 2,5-Dichlorobenzotrifluori	214	12.831	12.831	0.000	98	301973	100.0	91.0	
116 n-Butylbenzene	91	13.111	13.111	0.000	97	1018212	100.0	99.9	
117 1,2-Dichlorobenzene	146	13.123	13.123	0.000	92	525918	100.0	96.8	
118 1,2-Dibromo-3-Chloropropan	75	13.914	13.920	-0.006	68	49062	100.0	98.5	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.060	14.060	0.000	98	1401616	300.0	296.5	
121 2,3- & 3,4- Dichlorotoluen	125	14.474	14.474	0.000	98	1039069	200.0	199.2	
122 1,2,4-Trichlorobenzene	180	14.741	14.741	0.000	92	415442	100.0	98.7	
123 Hexachlorobutadiene	225	14.887	14.887	0.000	97	161228	100.0	97.2	
124 Naphthalene	128	15.003	15.003	0.000	99	876449	100.0	103.2	
125 1,2,3-Trichlorobenzene	180	15.228	15.228	0.000	92	385220	100.0	97.8	
126 2,4,5-Trichlorotoluene	159	16.007	16.007	0.000	0	266093	100.0	100.6	
127 2,3,6-Trichlorotoluene	159	16.110	16.110	0.000	93	248497	100.0	99.0	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		200.0	192.4	
S 131 Xylenes, Total	106				0		200.0	197.4	
S 132 1,3-Dichloropropene, Total	1				0		200.0	211.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00039	Amount Added:	4.00	Units: uL	
voaWket1Reste_00001	Amount Added:	4.00	Units: uL	
voaWeemix1Res_00001	Amount Added:	4.00	Units: uL	
voaWVA1st Res_00003	Amount Added:	4.00	Units: uL	
VOA8260VOAPRI_00134	Amount Added:	4.00	Units: uL	
voaWAcro2nd R_00006	Amount Added:	8.00	Units: uL	
VOA8260INT_00039	Amount Added:	2.00	Units: uL	Run Reagent

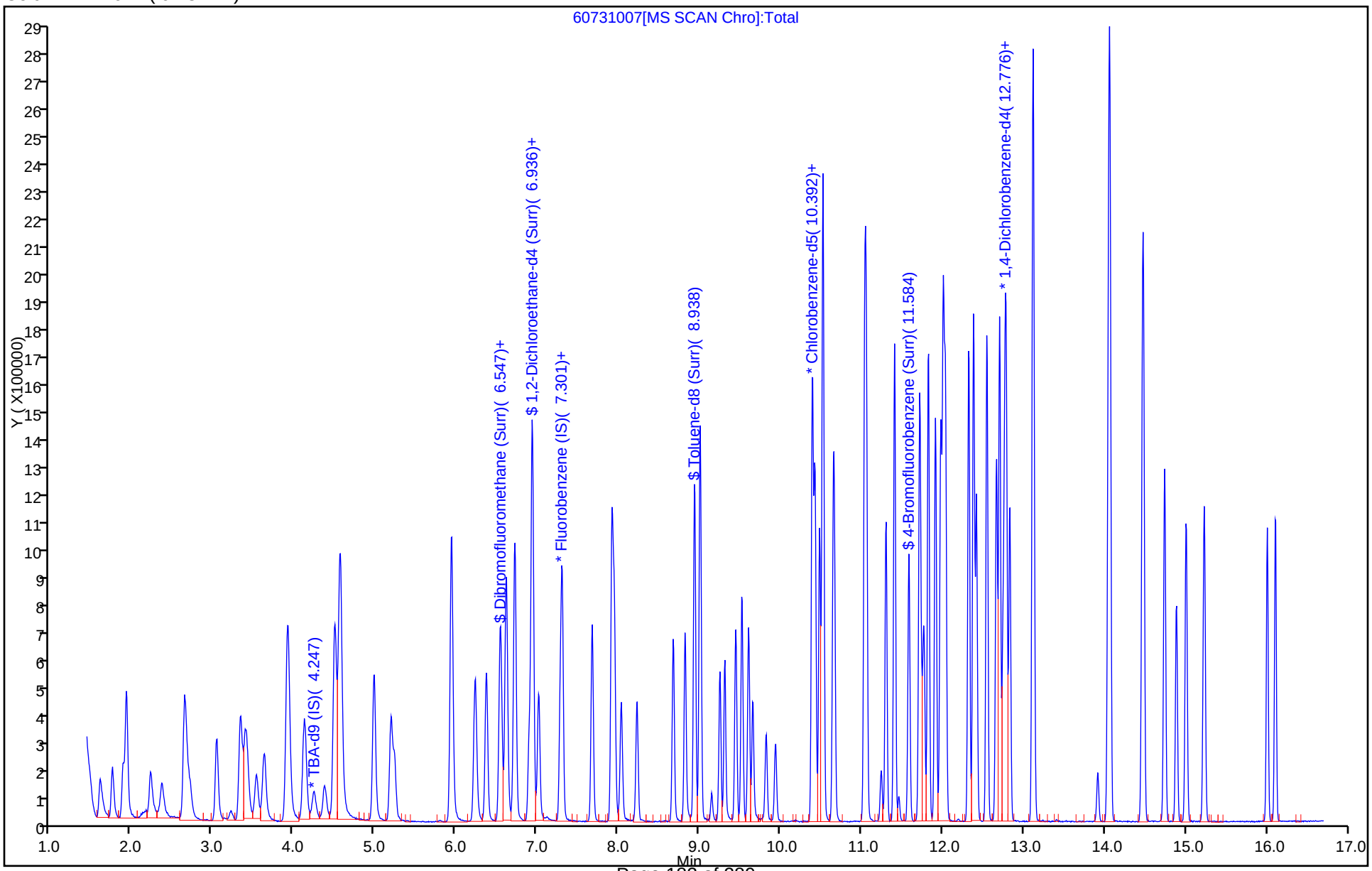
Report Date: 03-Aug-2015 12:15:52 Chrom Revision: 2.2 09-Jul-2015 10:16:20

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731007.D

Injection Date:	31-Jul-2015 15:13:30	Instrument ID:	CHHP6	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_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

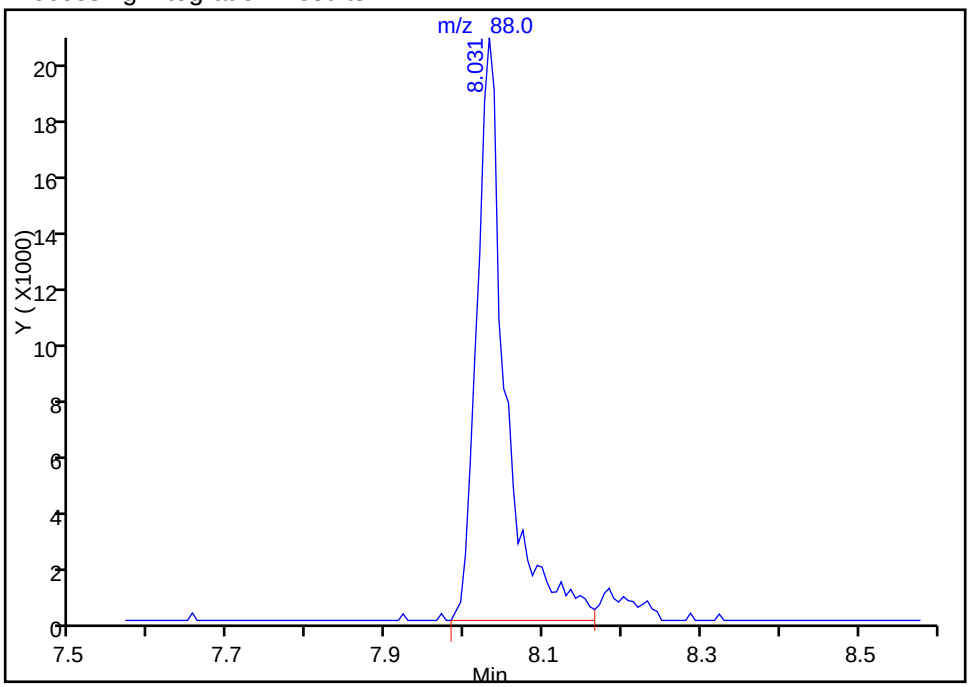
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731007.D
Injection Date: 31-Jul-2015 15:13:30 Instrument ID: CHHP6
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_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

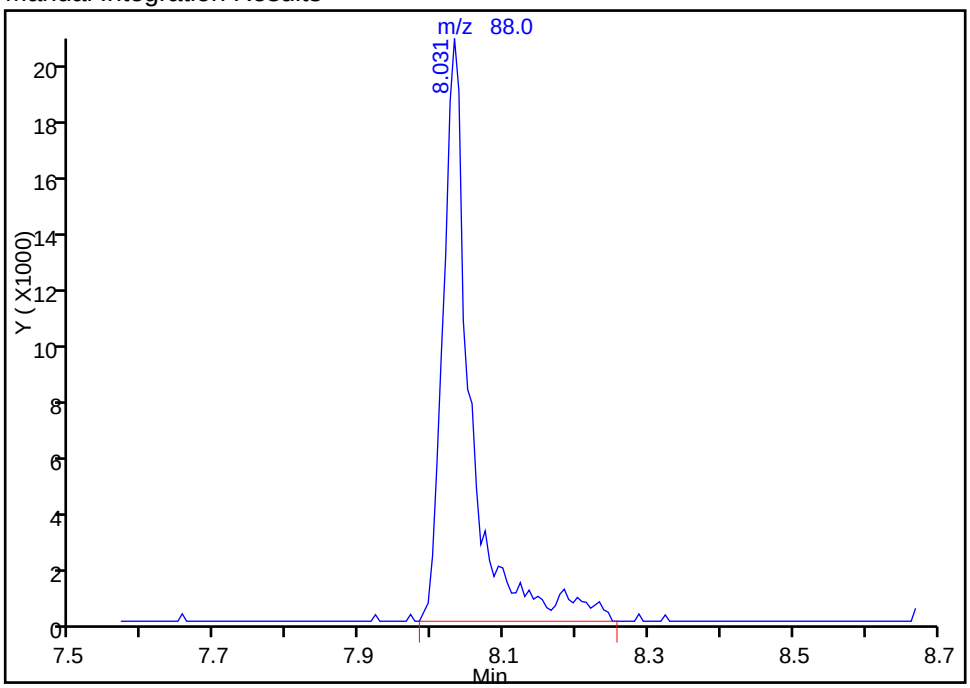
Processing Integration Results

RT: 8.03
Area: 51451
Amount: 1915.4354
Amount Units: ng



Manual Integration Results

RT: 8.03
Area: 54577
Amount: 2058.6297
Amount Units: ng



Reviewer: fergusond, 03-Aug-2015 10:27:52
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731008.D
Lims ID: IC VSTD35
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 31-Jul-2015 15:37:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD35
Misc. Info.: 180-0007999-008
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Aug-2015 12:16:01 Calib Date: 31-Jul-2015 18:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: fergusond Date: 31-Jul-2015 16:23:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.254	4.247	0.007	92	191694	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.283	7.289	-0.006	98	474812	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.398	0.000	91	108350	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.746	0.000	96	164628	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.553	6.553	0.000	92	378487	175.0	173.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.930	0.001	71	595019	175.0	168.6	
$ 7 Toluene-d8 (Surr)	98	8.938	8.938	0.000	94	1415164	175.0	165.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.584	0.000	80	645419	175.0	170.1	
11 Dichlorodifluoromethane	85	1.601	1.607	-0.006	99	575043	175.0	174.9	
12 Chloromethane	50	1.754	1.759	-0.005	99	470953	175.0	166.2	
13 Vinyl chloride	62	1.887	1.893	-0.006	99	517410	175.0	169.5	
14 Butadiene	39	1.924	1.930	-0.006	90	483297	175.0	168.9	
15 Bromomethane	94	2.222	2.228	-0.006	90	248522	175.0	150.8	
16 Chloroethane	64	2.356	2.374	-0.018	99	359701	175.0	172.7	
17 Dichlorofluoromethane	67	2.642	2.654	-0.012	97	819476	175.0	169.0	
18 Trichlorofluoromethane	101	2.654	2.678	-0.024	76	664854	175.0	171.9	
20 Ethyl ether	59	3.043	3.043	0.000	89	458021	175.0	167.1	
21 Acrolein	56	3.220	3.213	0.007	99	68050	225.0	227.6	
22 1,1-Dichloroethene	96	3.335	3.341	-0.006	96	411177	175.0	172.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.390	3.402	-0.012	95	446711	175.0	177.0	
24 Acetone	43	3.426	3.432	-0.006	100	284563	350.0	338.8	
25 Iodomethane	142	3.536	3.530	0.006	99	566533	175.0	176.6	
26 Carbon disulfide	76	3.627	3.633	-0.006	100	1151644	175.0	185.9	
29 3-Chloro-1-propene	76	3.913	3.913	0.000	89	257112	175.0	190.8	
30 Methyl acetate	43	3.925	3.925	0.000	96	1680300	875.0	853.1	
31 Methylene Chloride	84	4.132	4.132	0.000	91	527474	175.0	171.5	
32 2-Methyl-2-propanol	59	4.382	4.369	0.013	93	354063	1750.0	1641.3	
33 Acrylonitrile	53	4.503	4.497	0.006	98	1745686	1750.0	1758.1	
34 trans-1,2-Dichloroethene	96	4.558	4.564	-0.006	98	479327	175.0	173.8	
35 Methyl tert-butyl ether	73	4.570	4.576	-0.006	97	1455878	175.0	176.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.984	4.990	-0.006	92	669795	175.0	179.2	
37 1,1-Dichloroethane	63	5.191	5.196	-0.005	97	861981	175.0	174.6	
38 Vinyl acetate	43	5.239	5.239	0.000	97	744628	175.0	186.8	
43 cis-1,2-Dichloroethene	96	5.939	5.939	0.000	87	520777	175.0	173.6	
44 2-Butanone (MEK)	43	5.945	5.945	0.000	87	412307	350.0	359.6	
42 2,2-Dichloropropane	77	5.945	5.945	0.000	79	484574	175.0	194.1	
48 Chlorobromomethane	128	6.231	6.225	0.006	97	209995	175.0	174.3	
49 Tetrahydrofuran	42	6.249	6.237	0.012	86	277489	350.0	359.4	
50 Chloroform	83	6.371	6.371	0.000	94	847765	175.0	173.0	
51 1,1,1-Trichloroethane	97	6.535	6.541	-0.006	97	659562	175.0	182.1	
52 Cyclohexane	56	6.614	6.620	-0.006	92	834057	175.0	179.7	
53 Carbon tetrachloride	117	6.718	6.717	0.001	97	479558	175.0	187.5	
54 1,1-Dichloropropene	75	6.724	6.730	-0.006	95	675711	175.0	173.5	
55 Isobutyl alcohol	41	6.900	6.900	0.000	89	326401	4375.0	4751.5	
56 Benzene	78	6.943	6.942	0.001	98	1836424	175.0	166.0	
57 1,2-Dichloroethane	62	7.016	7.015	0.001	98	746328	175.0	167.4	
59 n-Heptane	43	7.308	7.307	0.001	86	526126	175.0	174.9	
61 Trichloroethene	130	7.679	7.679	0.000	93	405251	175.0	175.6	
63 Methylcyclohexane	83	7.922	7.922	0.000	91	834543	175.0	178.2	
64 1,2-Dichloropropane	63	7.953	7.952	0.001	86	455391	175.0	172.3	
65 1,4-Dioxane	88	8.032	8.031	0.001	47	98136	3500.0	3760.8	M
67 Dibromomethane	93	8.038	8.037	0.001	92	283101	175.0	176.4	
68 Dichlorobromomethane	83	8.226	8.226	0.000	98	551929	175.0	183.0	
71 cis-1,3-Dichloropropene	75	8.677	8.676	0.001	93	650196	175.0	196.2	
72 4-Methyl-2-pentanone (MIBK	43	8.823	8.822	0.001	93	808342	350.0	362.9	
73 Toluene	91	9.011	9.011	0.000	98	1802740	175.0	161.2	
74 trans-1,3-Dichloropropene	75	9.254	9.254	0.000	96	565592	175.0	199.3	
75 Ethyl methacrylate	69	9.315	9.315	0.000	87	580427	175.0	192.5	
76 1,1,2-Trichloroethane	97	9.449	9.449	0.000	94	391776	175.0	169.4	
77 Tetrachloroethene	164	9.528	9.528	0.000	95	319955	175.0	167.8	
78 1,3-Dichloropropane	76	9.607	9.607	0.000	93	717566	175.0	168.0	
79 2-Hexanone	43	9.656	9.656	0.000	94	534519	350.0	365.4	
81 Chlorodibromomethane	129	9.820	9.826	-0.006	90	301710	175.0	191.2	
82 Ethylene Dibromide	107	9.936	9.936	0.000	97	363449	175.0	177.6	
83 3-Chlorobenzotrifluoride	180	10.392	10.392	0.000	92	600793	175.0	167.8	
84 Chlorobenzene	112	10.429	10.428	0.001	89	1142353	175.0	166.2	
85 4-Chlorobenzotrifluoride	180	10.483	10.483	0.000	96	570403	175.0	171.9	
86 1,1,1,2-Tetrachloroethane	131	10.520	10.520	0.000	89	349368	175.0	185.5	
87 Ethylbenzene	106	10.526	10.526	0.000	98	663577	175.0	171.2	
88 m-Xylene & p-Xylene	106	10.660	10.659	0.001	99	823294	175.0	171.1	
89 o-Xylene	106	11.037	11.037	0.000	96	833629	175.0	173.2	
90 Styrene	104	11.061	11.061	0.000	92	1289309	175.0	174.4	
91 Bromoform	173	11.244	11.243	0.001	93	160966	175.0	191.1	
92 2-Chlorobenzotrifluoride	180	11.305	11.304	0.001	94	628216	175.0	171.3	
93 Isopropylbenzene	105	11.408	11.408	0.000	99	1921153	175.0	166.8	
96 1,1,2,2-Tetrachloroethane	83	11.712	11.712	0.000	96	532593	175.0	172.2	
95 Bromobenzene	156	11.724	11.724	0.000	98	459843	175.0	173.7	
97 trans-1,4-Dichloro-2-buten	53	11.749	11.748	0.001	80	160304	175.0	191.0	
98 1,2,3-Trichloropropane	110	11.773	11.773	0.000	84	178317	175.0	177.2	
99 N-Propylbenzene	120	11.828	11.827	0.001	98	554932	175.0	182.1	
100 2-Chlorotoluene	126	11.913	11.913	0.000	93	446590	175.0	176.5	
101 3-Chlorotoluene	126	11.980	11.980	0.000	96	485130	175.0	182.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	93	1730016	175.0	174.6	
103 4-Chlorotoluene	126	12.041	12.034	0.007	100	464650	175.0	173.8	
104 tert-Butylbenzene	119	12.327	12.320	0.007	90	1405341	175.0	179.5	
106 1,2,4-Trimethylbenzene	105	12.381	12.381	0.000	98	1786151	175.0	176.3	
107 1,2-dichloro-4-(trifluorom	214	12.418	12.418	0.000	95	509173	175.0	177.4	
108 sec-Butylbenzene	105	12.546	12.545	0.001	97	2038837	175.0	174.4	
109 1,3-Dichlorobenzene	146	12.667	12.667	0.000	92	886632	175.0	171.5	
110 4-Isopropyltoluene	119	12.704	12.703	0.001	94	1736569	175.0	177.1	
111 1,4-Dichlorobenzene	146	12.771	12.770	0.001	92	902441	175.0	170.8	
113 2,4-Dichloro-1-(triflourom	214	12.789	12.789	0.000	94	534909	175.0	187.3	
114 2,5-Dichlorobenzotrifluori	214	12.832	12.831	0.001	96	537191	175.0	168.4	
116 n-Butylbenzene	91	13.111	13.111	0.000	97	1734264	175.0	177.1	
117 1,2-Dichlorobenzene	146	13.124	13.123	0.001	89	899668	175.0	172.4	
118 1,2-Dibromo-3-Chloropropan	75	13.914	13.920	-0.006	71	96376	175.0	201.4	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.060	14.060	0.000	95	2390336	525.0	526.2	
121 2,3- & 3,4- Dichlorotoluen	125	14.474	14.474	0.000	97	1797097	350.0	358.5	
122 1,2,4-Trichlorobenzene	180	14.742	14.741	0.001	92	726756	175.0	179.7	
123 Hexachlorobutadiene	225	14.888	14.887	0.001	97	290426	175.0	182.3	
124 Naphthalene	128	15.003	15.003	0.000	99	1550041	175.0	189.9	
125 1,2,3-Trichlorobenzene	180	15.228	15.228	0.000	93	673533	175.0	178.0	
126 2,4,5-Trichlorotoluene	159	16.007	16.007	0.000	0	490754	175.0	193.1	
127 2,3,6-Trichlorotoluene	159	16.111	16.110	0.000	94	460224	175.0	190.9	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		350.0	347.4	
S 131 Xylenes, Total	106				0		350.0	344.3	
S 132 1,3-Dichloropropene, Total	1				0		350.0	395.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00039	Amount Added:	7.00	Units: uL	
voaWket1Reste_00001	Amount Added:	7.00	Units: uL	
voaWeemix1Res_00001	Amount Added:	7.00	Units: uL	
VOA8260VOAPRI_00134	Amount Added:	7.00	Units: uL	
voaWVA1st Res_00003	Amount Added:	7.00	Units: uL	
voaWAcro2nd R_00006	Amount Added:	9.00	Units: uL	
VOA8260INT_00039	Amount Added:	2.00	Units: uL	Run Reagent

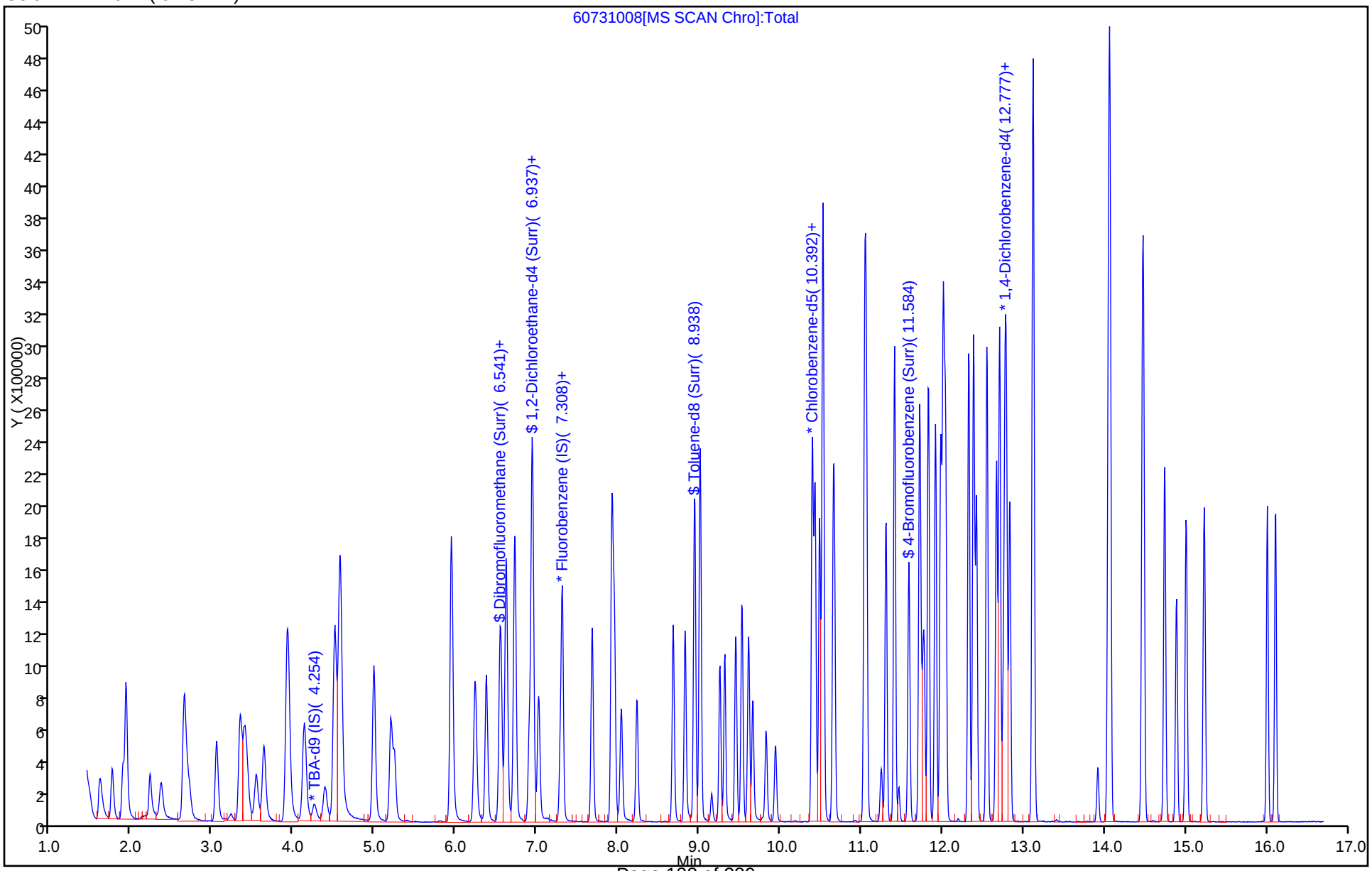
Report Date: 03-Aug-2015 12:16:03 Chrom Revision: 2.2 09-Jul-2015 10:16:20

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731008.D

Injection Date:	31-Jul-2015 15:37:30	Instrument ID:	CHHP6	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_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

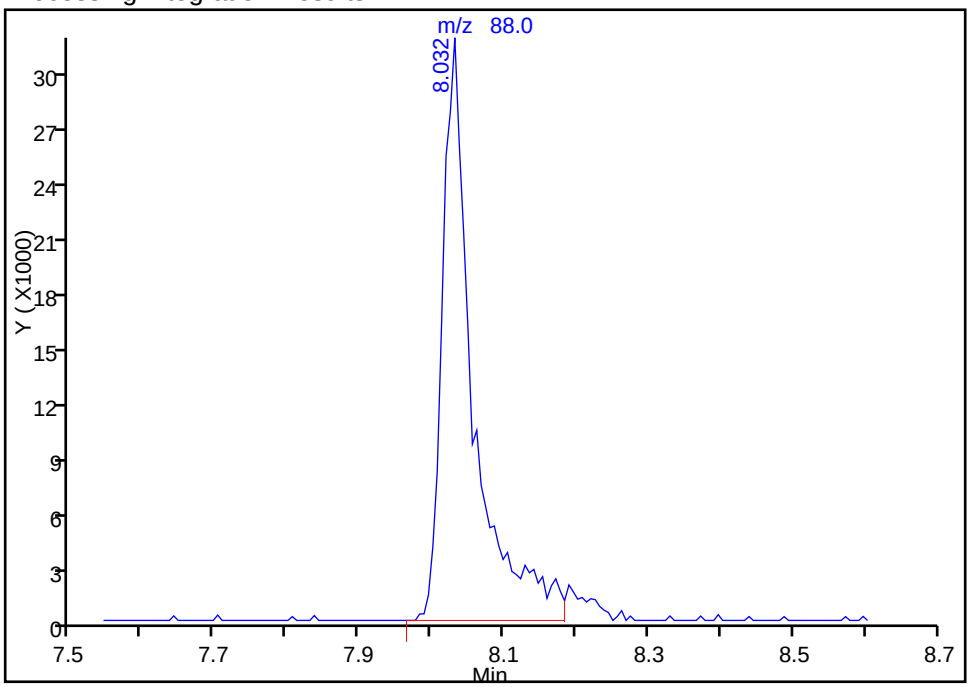
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731008.D
Injection Date: 31-Jul-2015 15:37:30 Instrument ID: CHHP6
Lims ID: IC VSTD35
Client ID:
Operator ID: 001562 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

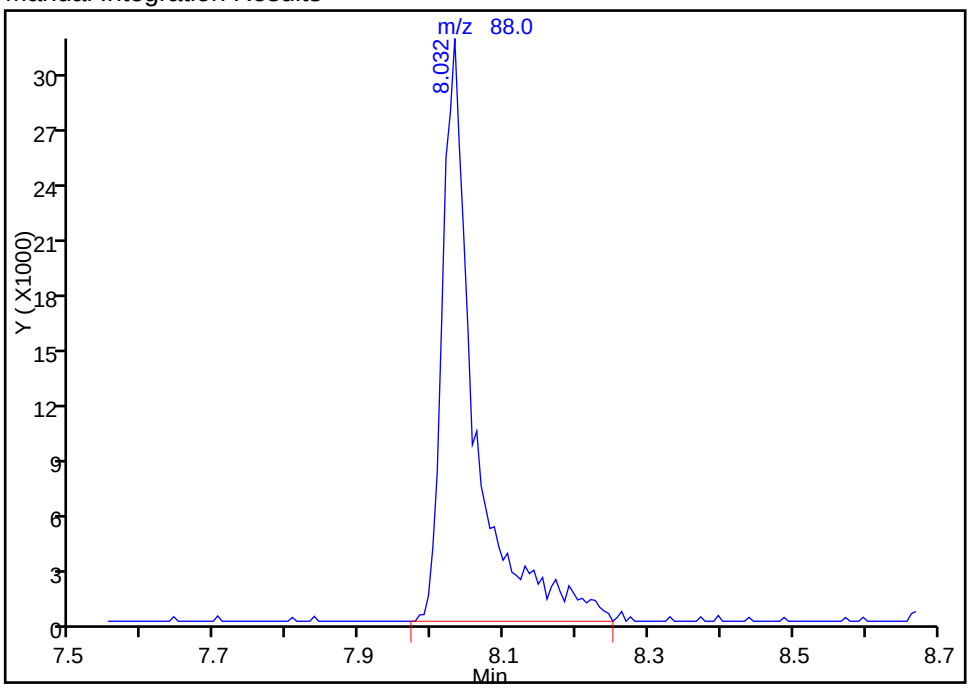
Processing Integration Results

RT: 8.03
Area: 94184
Amount: 3581.4908
Amount Units: ng



Manual Integration Results

RT: 8.03
Area: 98136
Amount: 3760.8433
Amount Units: ng



Reviewer: fergusond, 03-Aug-2015 10:13:21
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731009.D
Lims ID: IC VSTD40
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 31-Jul-2015 16:01:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD40
Misc. Info.: 180-0007999-009
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Aug-2015 12:16:10 Calib Date: 31-Jul-2015 18:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: fergusond Date: 03-Aug-2015 10:06:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.253	4.247	0.006	92	190170	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.289	0.000	98	446456	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.398	0.000	89	103508	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.746	0.000	95	159598	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.553	6.553	0.000	92	428779	200.0	208.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.930	6.930	0.000	72	668015	200.0	201.4	
$ 7 Toluene-d8 (Surr)	98	8.944	8.938	0.006	94	1563368	200.0	191.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.584	0.000	81	722308	200.0	199.3	
11 Dichlorodifluoromethane	85	1.613	1.607	0.006	99	636192	200.0	205.8	
12 Chloromethane	50	1.759	1.759	0.000	99	522516	200.0	196.1	
13 Vinyl chloride	62	1.893	1.893	0.000	98	585198	200.0	203.9	
14 Butadiene	39	1.935	1.930	0.005	92	538199	200.0	200.0	
15 Bromomethane	94	2.233	2.228	0.005	91	263364	200.0	170.0	
16 Chloroethane	64	2.373	2.374	-0.001	99	402907	200.0	205.7	
17 Dichlorofluoromethane	67	2.647	2.654	-0.007	98	899692	200.0	197.3	
18 Trichlorofluoromethane	101	2.672	2.678	-0.006	99	726249	200.0	199.7	
20 Ethyl ether	59	3.049	3.043	0.006	89	523507	200.0	203.1	
21 Acrolein	56	3.225	3.213	0.012	96	76429	250.0	271.9	
22 1,1-Dichloroethene	96	3.341	3.341	0.000	99	476887	200.0	212.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.395	3.402	-0.007	95	481169	200.0	202.8	
24 Acetone	43	3.432	3.432	0.000	100	317270	400.0	401.7	
25 Iodomethane	142	3.529	3.530	-0.001	99	655616	200.0	217.3	
26 Carbon disulfide	76	3.627	3.633	-0.006	100	1330649	200.0	228.5	
29 3-Chloro-1-propene	76	3.906	3.913	-0.007	88	293887	200.0	231.9	
30 Methyl acetate	43	3.925	3.925	0.000	96	1914014	1000.0	1033.4	
31 Methylene Chloride	84	4.125	4.132	-0.007	91	611401	200.0	212.7	
32 2-Methyl-2-propanol	59	4.381	4.369	0.012	93	426462	2000.0	1992.8	
33 Acrylonitrile	53	4.503	4.497	0.006	97	1961872	2000.0	2101.3	
34 trans-1,2-Dichloroethene	96	4.563	4.564	-0.001	97	548086	200.0	211.3	
35 Methyl tert-butyl ether	73	4.576	4.576	0.000	98	1687770	200.0	217.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.989	4.990	-0.001	91	736641	200.0	209.6	
37 1,1-Dichloroethane	63	5.196	5.196	0.000	97	980644	200.0	211.2	
38 Vinyl acetate	43	5.239	5.239	0.000	97	867464	200.0	231.4	
43 cis-1,2-Dichloroethene	96	5.944	5.939	0.005	85	595718	200.0	211.2	
44 2-Butanone (MEK)	43	5.944	5.945	-0.001	98	470276	400.0	436.3	
42 2,2-Dichloropropane	77	5.944	5.945	-0.001	66	535345	200.0	228.0	
48 Chlorobromomethane	128	6.230	6.225	0.005	97	240962	200.0	212.7	
49 Tetrahydrofuran	42	6.243	6.237	0.005	83	305718	400.0	421.1	
50 Chloroform	83	6.376	6.371	0.005	94	959266	200.0	208.2	
51 1,1,1-Trichloroethane	97	6.541	6.541	0.000	98	756837	200.0	222.3	
52 Cyclohexane	56	6.620	6.620	0.000	92	919827	200.0	210.8	
53 Carbon tetrachloride	117	6.717	6.717	0.000	97	536127	200.0	222.9	
54 1,1-Dichloropropene	75	6.729	6.730	-0.001	94	765806	200.0	209.1	
55 Isobutyl alcohol	41	6.906	6.900	0.006	92	375937	5000.0	5820.2	
56 Benzene	78	6.942	6.942	0.000	99	2066671	200.0	198.6	
57 1,2-Dichloroethane	62	7.015	7.015	0.000	98	855052	200.0	204.0	
59 n-Heptane	43	7.307	7.307	0.000	87	588643	200.0	208.1	
61 Trichloroethene	130	7.678	7.679	-0.001	92	460676	200.0	212.3	
63 Methylcyclohexane	83	7.922	7.922	0.000	91	915285	200.0	207.8	
64 1,2-Dichloropropane	63	7.952	7.952	0.000	84	521174	200.0	209.7	
65 1,4-Dioxane	88	8.031	8.031	0.000	44	114196	4000.0	4654.3	M
67 Dibromomethane	93	8.037	8.037	0.000	92	323060	200.0	214.0	
68 Dichlorobromomethane	83	8.232	8.226	0.006	99	646107	200.0	227.8	
71 cis-1,3-Dichloropropene	75	8.676	8.676	0.000	94	745866	200.0	239.4	
72 4-Methyl-2-pentanone (MIBK	43	8.822	8.822	0.000	93	947711	400.0	445.4	
73 Toluene	91	9.010	9.011	-0.001	97	2002822	200.0	187.5	
74 trans-1,3-Dichloropropene	75	9.254	9.254	0.000	96	639831	200.0	236.0	
75 Ethyl methacrylate	69	9.315	9.315	0.000	88	671187	200.0	233.1	
76 1,1,2-Trichloroethane	97	9.448	9.449	-0.001	94	447467	200.0	202.6	
77 Tetrachloroethene	164	9.528	9.528	0.000	93	357911	200.0	196.5	
78 1,3-Dichloropropane	76	9.607	9.607	0.000	93	805963	200.0	197.5	
79 2-Hexanone	43	9.655	9.656	-0.001	95	604727	400.0	432.8	
81 Chlorodibromomethane	129	9.826	9.826	0.000	91	351983	200.0	233.5	
82 Ethylene Dibromide	107	9.941	9.936	0.005	98	414395	200.0	212.0	
83 3-Chlorobenzotrifluoride	180	10.398	10.392	0.006	93	658293	200.0	192.5	
84 Chlorobenzene	112	10.428	10.428	0.000	90	1270819	200.0	193.6	
85 4-Chlorobenzotrifluoride	180	10.483	10.483	0.000	96	626628	200.0	197.7	
86 1,1,1,2-Tetrachloroethane	131	10.519	10.520	-0.001	90	410261	200.0	228.0	
87 Ethylbenzene	106	10.525	10.526	-0.001	98	745552	200.0	201.3	
88 m-Xylene & p-Xylene	106	10.659	10.659	0.000	99	922542	200.0	200.7	
89 o-Xylene	106	11.042	11.037	0.005	96	942660	200.0	205.0	
90 Styrene	104	11.061	11.061	0.000	91	1451301	200.0	205.5	
91 Bromoform	173	11.243	11.243	0.000	93	188413	200.0	234.1	
92 2-Chlorobenzotrifluoride	180	11.304	11.304	0.000	94	695569	200.0	198.6	
93 Isopropylbenzene	105	11.407	11.408	-0.001	99	2143689	200.0	194.9	
96 1,1,2,2-Tetrachloroethane	83	11.712	11.712	0.000	97	595171	200.0	201.4	
95 Bromobenzene	156	11.724	11.724	0.000	98	533334	200.0	207.9	
97 trans-1,4-Dichloro-2-buten	53	11.754	11.748	0.006	78	183338	200.0	225.3	
98 1,2,3-Trichloropropane	110	11.772	11.773	-0.001	84	202262	200.0	207.3	
99 N-Propylbenzene	120	11.827	11.827	0.000	98	613443	200.0	207.6	
100 2-Chlorotoluene	126	11.912	11.913	-0.001	93	510216	200.0	208.0	
101 3-Chlorotoluene	126	11.979	11.980	-0.001	97	532252	200.0	206.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	94	1945327	200.0	202.5	
103 4-Chlorotoluene	126	12.040	12.034	0.006	100	540303	200.0	208.5	
104 tert-Butylbenzene	119	12.326	12.320	0.006	90	1580824	200.0	208.2	
106 1,2,4-Trimethylbenzene	105	12.381	12.381	0.000	98	2003823	200.0	204.0	
107 1,2-dichloro-4-(trifluorom	214	12.423	12.418	0.005	96	562570	200.0	202.1	
108 sec-Butylbenzene	105	12.551	12.545	0.006	97	2257148	200.0	199.2	
109 1,3-Dichlorobenzene	146	12.667	12.667	0.000	92	1017363	200.0	203.0	
110 4-Isopropyltoluene	119	12.703	12.703	0.000	94	1952987	200.0	205.4	
111 1,4-Dichlorobenzene	146	12.770	12.770	0.000	91	1040432	200.0	203.1	
113 2,4-Dichloro-1-(triflourom	214	12.788	12.789	-0.001	93	585295	200.0	211.4	
114 2,5-Dichlorobenzotrifluori	214	12.831	12.831	0.000	97	604585	200.0	195.5	
116 n-Butylbenzene	91	13.111	13.111	0.000	96	1931969	200.0	203.5	
117 1,2-Dichlorobenzene	146	13.123	13.123	0.000	93	1013269	200.0	200.2	
118 1,2-Dibromo-3-Chloropropan	75	13.914	13.920	-0.006	74	111156	200.0	239.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.060	14.060	0.000	95	2621988	600.0	595.4	
121 2,3- & 3,4- Dichlorotoluen	125	14.473	14.474	-0.001	96	1989024	400.0	409.3	
122 1,2,4-Trichlorobenzene	180	14.741	14.741	0.000	92	829845	200.0	211.6	
123 Hexachlorobutadiene	225	14.887	14.887	0.000	97	324236	200.0	209.9	
124 Naphthalene	128	15.009	15.003	0.006	99	1744010	200.0	220.4	
125 1,2,3-Trichlorobenzene	180	15.228	15.228	0.000	92	768952	200.0	209.6	
126 2,4,5-Trichlorotoluene	159	16.006	16.007	-0.001	0	568870	200.0	230.9	
127 2,3,6-Trichlorotoluene	159	16.110	16.110	0.000	94	527070	200.0	225.5	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		400.0	422.6	
S 131 Xylenes, Total	106				0		400.0	405.8	
S 132 1,3-Dichloropropene, Total	1				0		400.0	475.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00039	Amount Added:	8.00	Units: uL	
voaWAcro2nd R_00006	Amount Added:	10.00	Units: uL	
voaWket1Reste_00001	Amount Added:	8.00	Units: uL	
voaWeemix1Res_00001	Amount Added:	8.00	Units: uL	
voaWVA1st Res_00003	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00134	Amount Added:	8.00	Units: uL	
VOA8260INT_00039	Amount Added:	2.00	Units: uL	Run Reagent

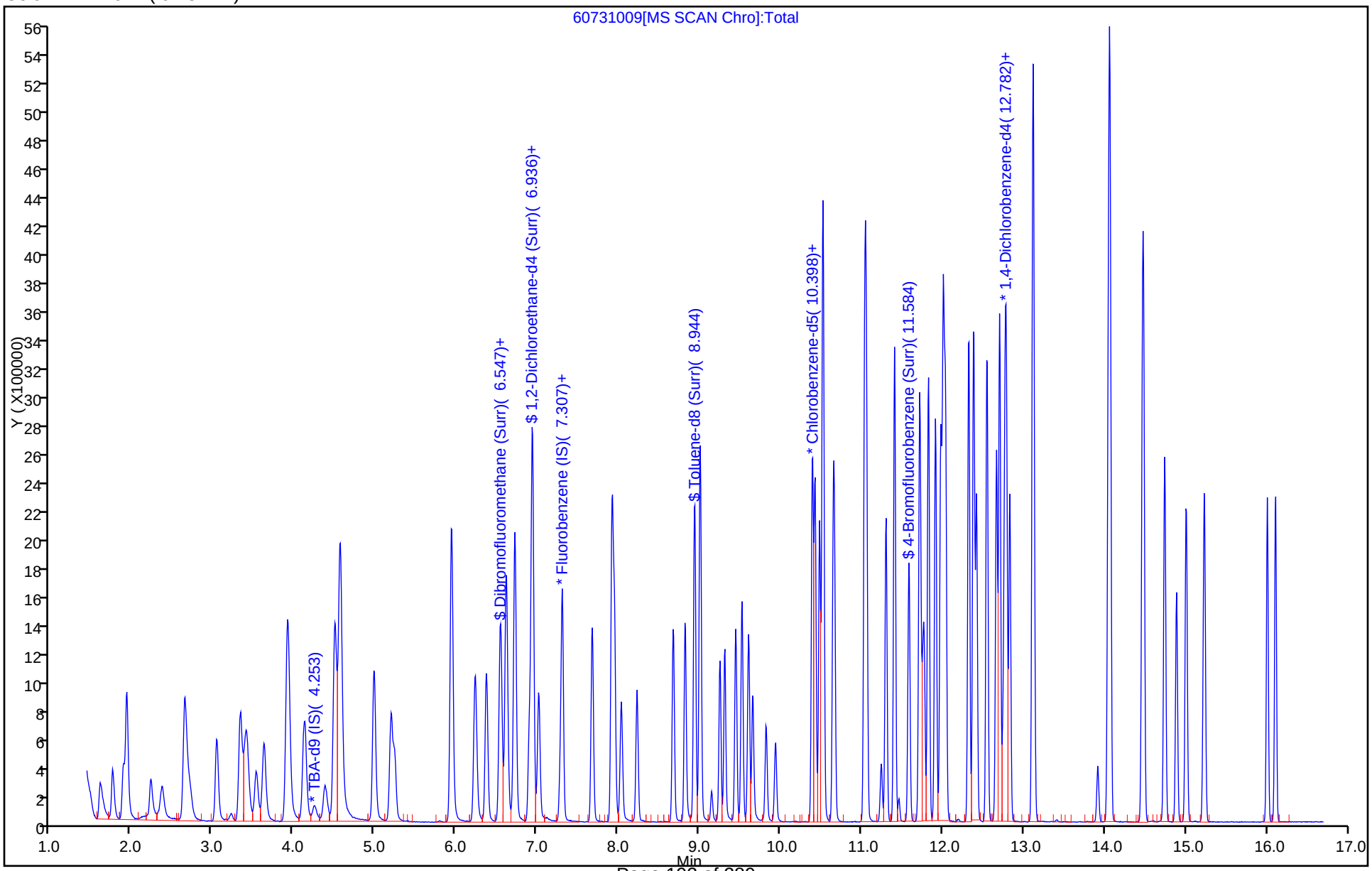
Report Date: 03-Aug-2015 12:16:13 Chrom Revision: 2.2 09-Jul-2015 10:16:20

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731009.D

Injection Date:	31-Jul-2015 16:01:30	Instrument ID:	CHHP6	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_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

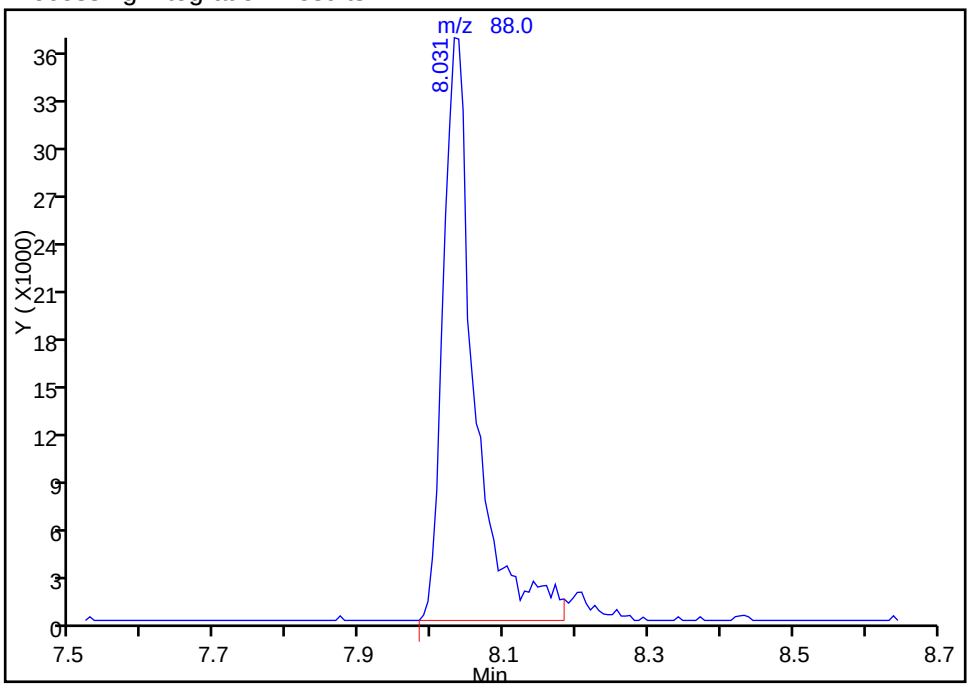
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731009.D
Injection Date: 31-Jul-2015 16:01:30 Instrument ID: CHHP6
Lims ID: IC VSTD40
Client ID:
Operator ID: 001562 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

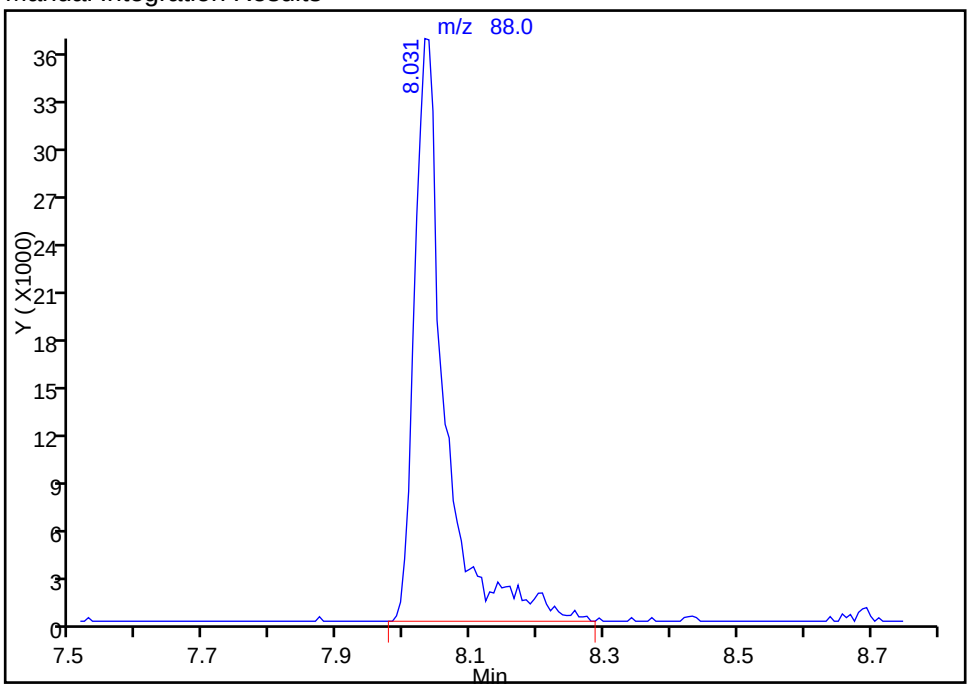
Processing Integration Results

RT: 8.03
Area: 109899
Amount: 4509.0182
Amount Units: ng



Manual Integration Results

RT: 8.03
Area: 114196
Amount: 4654.2617
Amount Units: ng



Reviewer: fergusond, 03-Aug-2015 10:06:32
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731010.D
Lims ID: IC VSTD50
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 31-Jul-2015 16:25:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD50
Misc. Info.: 180-0007999-010
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Aug-2015 12:16:19 Calib Date: 31-Jul-2015 18:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: fergusond Date: 03-Aug-2015 10:08:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.247	0.019	94	205888	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.283	7.289	-0.006	98	472902	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.398	0.000	91	113483	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.746	0.000	92	168220	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.553	6.553	0.000	92	510673	250.0	234.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.930	6.930	0.000	73	806396	250.0	229.5	
$ 7 Toluene-d8 (Surr)	98	8.938	8.938	0.000	94	1832665	250.0	204.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.584	0.000	80	863895	250.0	217.4	
11 Dichlorodifluoromethane	85	1.607	1.607	0.000	100	776950	250.0	237.3	
12 Chloromethane	50	1.759	1.759	0.000	99	661756	250.0	234.5	
13 Vinyl chloride	62	1.893	1.893	0.000	99	729853	250.0	240.1	
14 Butadiene	39	1.936	1.930	0.006	90	668636	250.0	234.6	
15 Bromomethane	94	2.228	2.228	0.000	91	301175	250.0	183.5	
16 Chloroethane	64	2.362	2.374	-0.012	98	495382	250.0	238.7	
17 Dichlorofluoromethane	67	2.647	2.654	-0.007	97	1120159	250.0	232.0	
18 Trichlorofluoromethane	101	2.660	2.678	-0.018	74	914267	250.0	237.4	
20 Ethyl ether	59	3.043	3.043	0.000	89	666334	250.0	244.1	
21 Acrolein	56	3.225	3.213	0.012	98	88331	275.0	296.7	
22 1,1-Dichloroethene	96	3.335	3.341	-0.006	98	604031	250.0	253.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.396	3.402	-0.006	95	613669	250.0	244.2	
24 Acetone	43	3.432	3.432	0.000	100	446823	500.0	534.1	
25 Iodomethane	142	3.530	3.530	0.000	99	830188	250.0	259.8	
26 Carbon disulfide	76	3.627	3.633	-0.006	100	1688724	250.0	273.8	
29 3-Chloro-1-propene	76	3.913	3.913	0.000	87	379717	250.0	282.9	
30 Methyl acetate	43	3.925	3.925	0.000	96	2441128	1250.0	1244.3	
31 Methylene Chloride	84	4.126	4.132	-0.006	90	760977	250.0	250.8	
32 2-Methyl-2-propanol	59	4.387	4.369	0.018	93	559063	2500.0	2413.0	
33 Acrylonitrile	53	4.503	4.497	0.006	97	2461613	2500.0	2489.1	
34 trans-1,2-Dichloroethene	96	4.564	4.564	0.000	97	687783	250.0	250.4	
35 Methyl tert-butyl ether	73	4.576	4.576	0.000	98	2105039	250.0	255.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.984	4.990	-0.006	92	945322	250.0	253.9	
37 1,1-Dichloroethane	63	5.196	5.196	0.000	96	1227440	250.0	249.6	
38 Vinyl acetate	43	5.239	5.239	0.000	97	1104555	250.0	278.2	
43 cis-1,2-Dichloroethene	96	5.945	5.939	0.006	83	751398	250.0	251.5	
44 2-Butanone (MEK)	43	5.945	5.945	0.000	98	588377	500.0	515.3	
42 2,2-Dichloropropane	77	5.939	5.945	-0.006	66	694588	250.0	279.3	
48 Chlorobromomethane	128	6.225	6.225	0.000	97	308059	250.0	256.7	
49 Tetrahydrofuran	42	6.243	6.237	0.006	83	413888	500.0	538.2	
50 Chloroform	83	6.371	6.371	0.000	95	1195678	250.0	244.9	
51 1,1,1-Trichloroethane	97	6.535	6.541	-0.006	98	957300	250.0	265.4	
52 Cyclohexane	56	6.614	6.620	-0.006	91	1159567	250.0	250.9	
53 Carbon tetrachloride	117	6.717	6.717	0.000	89	690480	250.0	271.0	
54 1,1-Dichloropropene	75	6.729	6.730	-0.001	93	968671	250.0	249.7	
55 Isobutyl alcohol	41	6.900	6.900	0.000	91	482886	6250.0	7057.9	
56 Benzene	78	6.942	6.942	0.000	99	2526807	250.0	229.3	
57 1,2-Dichloroethane	62	7.015	7.015	0.000	98	1055651	250.0	237.8	
59 n-Heptane	43	7.307	7.307	0.000	87	756814	250.0	252.6	
61 Trichloroethene	130	7.678	7.679	-0.001	93	577638	250.0	251.3	
63 Methylcyclohexane	83	7.922	7.922	0.000	91	1169092	250.0	250.6	
64 1,2-Dichloropropane	63	7.952	7.952	0.000	86	664355	250.0	252.3	
65 1,4-Dioxane	88	8.031	8.031	0.000	44	139772	5000.0	5378.1	M
67 Dibromomethane	93	8.037	8.037	0.000	93	409028	250.0	255.8	
68 Dichlorobromomethane	83	8.232	8.226	0.006	99	821950	250.0	273.6	
71 cis-1,3-Dichloropropene	75	8.676	8.676	0.000	93	960857	250.0	291.2	
72 4-Methyl-2-pentanone (MIBK	43	8.822	8.822	0.000	93	1194590	500.0	512.0	
73 Toluene	91	9.011	9.011	0.000	97	2462377	250.0	210.3	
74 trans-1,3-Dichloropropene	75	9.254	9.254	0.000	96	837722	250.0	281.8	
75 Ethyl methacrylate	69	9.315	9.315	0.000	88	855316	250.0	270.9	
76 1,1,2-Trichloroethane	97	9.449	9.449	0.000	93	567107	250.0	234.2	
77 Tetrachloroethene	164	9.522	9.528	-0.006	92	461983	250.0	231.3	
78 1,3-Dichloropropane	76	9.607	9.607	0.000	92	1022129	250.0	228.4	
79 2-Hexanone	43	9.656	9.656	0.000	93	790089	500.0	515.7	
81 Chlorodibromomethane	129	9.820	9.826	-0.006	90	451973	250.0	273.4	
82 Ethylene Dibromide	107	9.942	9.936	0.006	98	526477	250.0	245.7	
83 3-Chlorobenzotrifluoride	180	10.392	10.392	0.000	92	786880	250.0	209.9	
84 Chlorobenzene	112	10.428	10.428	0.000	89	1585885	250.0	220.3	
85 4-Chlorobenzotrifluoride	180	10.483	10.483	0.000	96	739908	250.0	212.9	
86 1,1,1,2-Tetrachloroethane	131	10.519	10.520	-0.001	49	519653	250.0	263.5	
87 Ethylbenzene	106	10.526	10.526	0.000	97	943999	250.0	232.5	
88 m-Xylene & p-Xylene	106	10.659	10.659	0.000	97	1179895	250.0	234.2	
89 o-Xylene	106	11.043	11.037	0.006	96	1188451	250.0	235.8	
90 Styrene	104	11.061	11.061	0.000	93	1825312	250.0	235.8	
91 Bromoform	173	11.243	11.243	0.000	93	249108	250.0	282.3	
92 2-Chlorobenzotrifluoride	180	11.304	11.304	0.000	94	831476	250.0	216.5	
93 Isopropylbenzene	105	11.408	11.408	0.000	99	2614965	250.0	216.8	
96 1,1,2,2-Tetrachloroethane	83	11.712	11.712	0.000	97	764885	250.0	236.1	
95 Bromobenzene	156	11.724	11.724	0.000	98	665597	250.0	246.1	
97 trans-1,4-Dichloro-2-buten	53	11.754	11.748	0.006	83	239026	250.0	278.7	
98 1,2,3-Trichloropropane	110	11.773	11.773	0.000	85	257089	250.0	250.0	
99 N-Propylbenzene	120	11.827	11.827	0.000	96	793964	250.0	254.9	
100 2-Chlorotoluene	126	11.913	11.913	0.000	93	652311	250.0	252.3	
101 3-Chlorotoluene	126	11.979	11.980	-0.001	96	649907	250.0	239.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	96	2358116	250.0	232.9	
103 4-Chlorotoluene	126	12.034	12.034	0.000	99	684319	250.0	250.5	
104 tert-Butylbenzene	119	12.326	12.320	0.006	90	1949627	250.0	243.7	
106 1,2,4-Trimethylbenzene	105	12.381	12.381	0.000	97	2433681	250.0	235.0	
107 1,2-dichloro-4-(trifluorom	214	12.418	12.418	0.000	95	680073	250.0	231.8	
108 sec-Butylbenzene	105	12.545	12.545	0.000	96	2739728	250.0	229.4	
109 1,3-Dichlorobenzene	146	12.667	12.667	0.000	92	1267194	250.0	239.9	
110 4-Isopropyltoluene	119	12.703	12.703	0.000	93	2392925	250.0	238.8	
111 1,4-Dichlorobenzene	146	12.770	12.770	0.000	92	1287354	250.0	238.4	
113 2,4-Dichloro-1-(triflourom	214	12.789	12.789	0.000	96	641375	250.0	219.8	
114 2,5-Dichlorobenzotrifluori	214	12.831	12.831	0.000	97	781945	250.0	239.9	
116 n-Butylbenzene	91	13.111	13.111	0.000	95	2352259	250.0	235.1	
117 1,2-Dichlorobenzene	146	13.123	13.123	0.000	95	1249514	250.0	234.3	
118 1,2-Dibromo-3-Chloropropan	75	13.914	13.920	-0.006	73	147337	250.0	301.3	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.060	14.060	0.000	93	3058923	750.0	659.0	
121 2,3- & 3,4- Dichlorotoluen	125	14.474	14.474	0.000	95	2357462	500.0	460.3	
122 1,2,4-Trichlorobenzene	180	14.741	14.741	0.000	92	1022001	250.0	247.3	
123 Hexachlorobutadiene	225	14.887	14.887	0.000	97	414314	250.0	254.5	
124 Naphthalene	128	15.003	15.003	0.000	98	2149836	250.0	257.7	
125 1,2,3-Trichlorobenzene	180	15.228	15.228	0.000	92	953082	250.0	246.4	
126 2,4,5-Trichlorotoluene	159	16.007	16.007	0.000	0	681135	250.0	262.3	
127 2,3,6-Trichlorotoluene	159	16.110	16.110	0.000	93	630961	250.0	256.1	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		500.0	501.9	
S 131 Xylenes, Total	106				0		500.0	469.9	
S 132 1,3-Dichloropropene, Total	1				0		500.0	573.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00039	Amount Added:	10.00	Units: uL	
voaWVA1st Res_00003	Amount Added:	10.00	Units: uL	
voaWket1Reste_00001	Amount Added:	10.00	Units: uL	
voaWeemix1Res_00001	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00134	Amount Added:	10.00	Units: uL	
voaWAcro2nd R_00006	Amount Added:	11.00	Units: uL	
VOA8260INT_00039	Amount Added:	2.00	Units: uL	Run Reagent

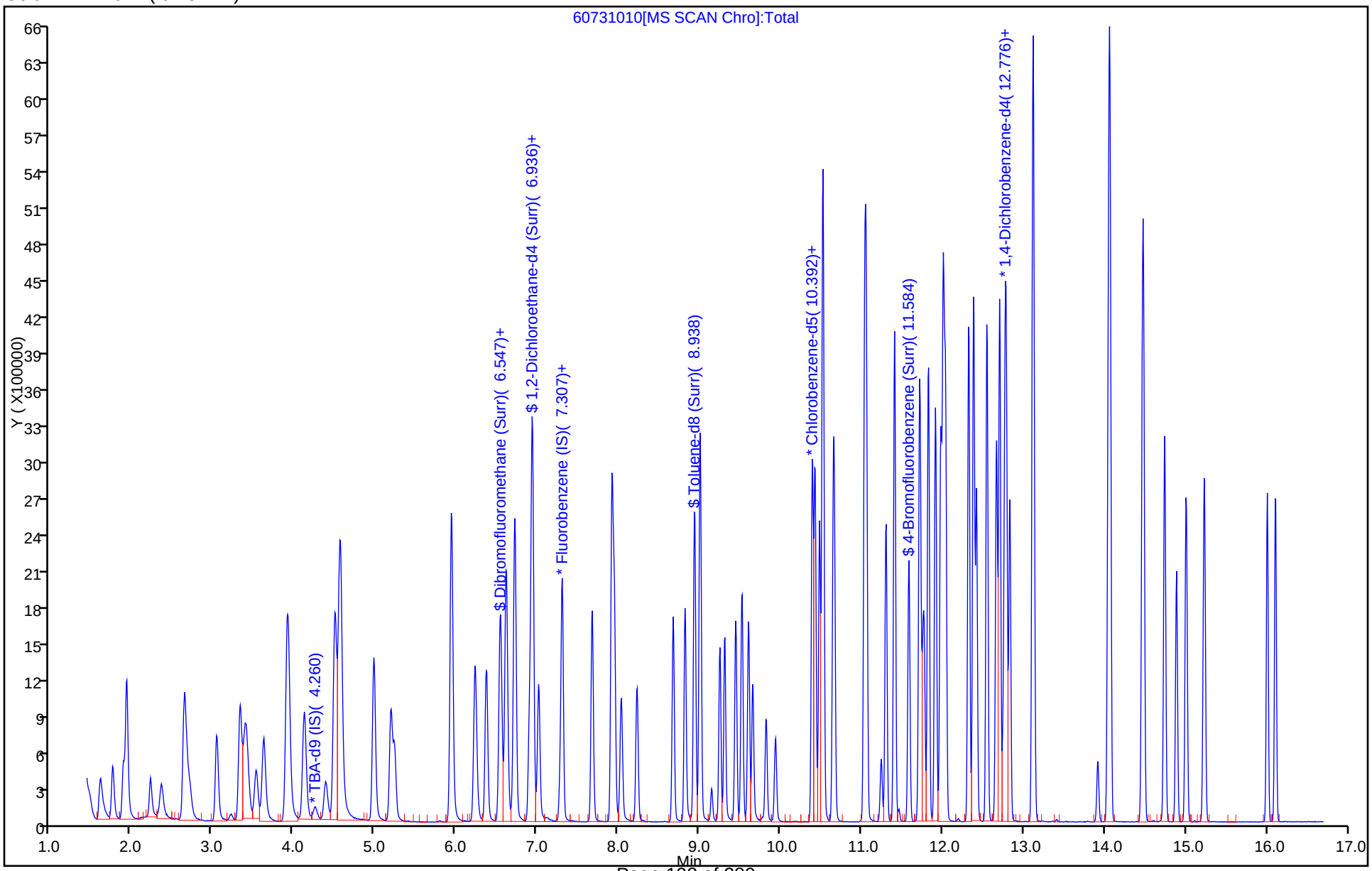
Report Date: 03-Aug-2015 12:16:21 Chrom Revision: 2.2 09-Jul-2015 10:16:20

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731010.D

Injection Date:	31-Jul-2015 16:25:30	Instrument ID:	CHHP6	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_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

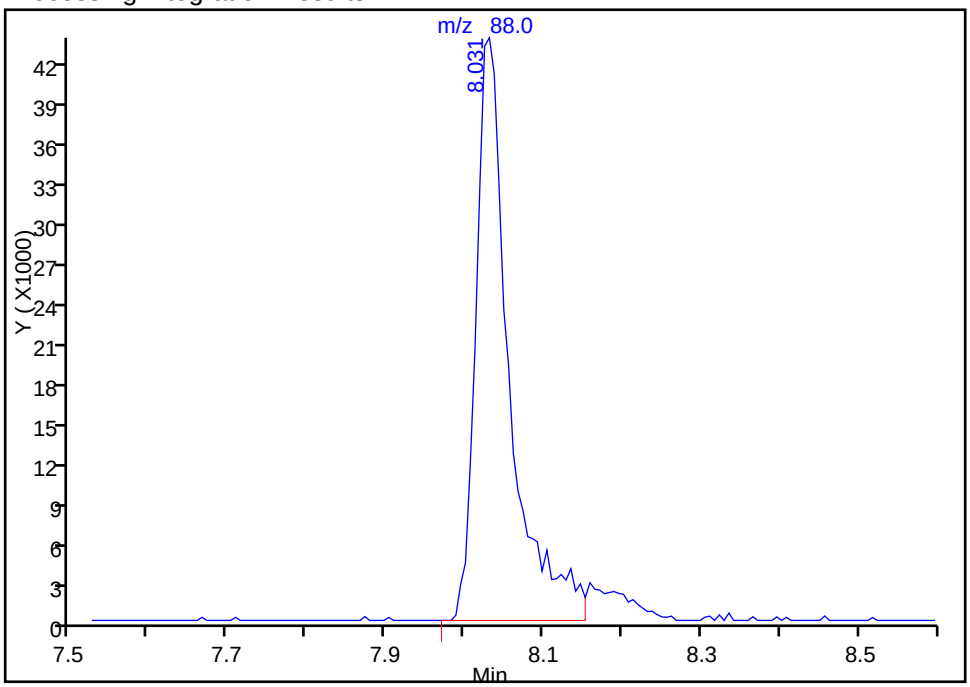
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731010.D
Injection Date: 31-Jul-2015 16:25:30 Instrument ID: CHHP6
Lims ID: IC VSTD50
Client ID:
Operator ID: 001562 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

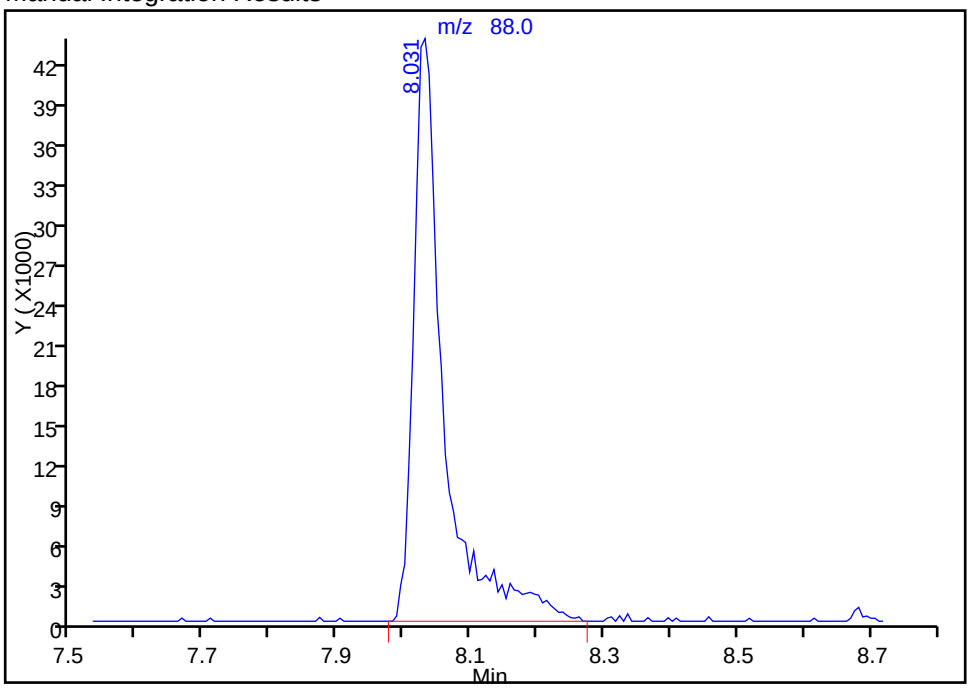
Processing Integration Results

RT: 8.03
Area: 130472
Amount: 5026.0517
Amount Units: ng



Manual Integration Results

RT: 8.03
Area: 139772
Amount: 5378.0842
Amount Units: ng



Reviewer: fergusond, 03-Aug-2015 10:08:16
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D
Lims ID: IC VSTD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 31-Jul-2015 18:02:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC VSTD1
Misc. Info.: 180-0007999-014
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Aug-2015 12:57:05 Calib Date: 31-Jul-2015 18:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: fergusond Date: 03-Aug-2015 11:05:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.242	4.248	-0.006	92	162667	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.284	7.284	0.000	98	456532	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.398	0.000	92	93799	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.747	-0.001	97	157240	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.553	6.554	-0.001	89	11777	5.00	5.60	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	54	19952	5.00	5.88	
$ 7 Toluene-d8 (Surr)	98	8.938	8.938	0.000	94	41667	5.00	5.63	
$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.585	0.000	77	19549	5.00	5.95	
11 Dichlorodifluoromethane	85	1.614	1.608	0.006	97	17276	5.00	5.46	
12 Chloromethane	50	1.754	1.754	0.000	99	15485	5.00	5.68	
13 Vinyl chloride	62	1.887	1.888	-0.001	62	15792	5.00	5.38	
14 Butadiene	39	1.930	1.930	0.000	93	15290	5.00	5.56	
15 Bromomethane	94	2.234	2.228	0.006	96	9521	5.00	6.01	
16 Chloroethane	64	2.356	2.368	-0.012	92	9922	5.00	4.95	
17 Dichlorofluoromethane	67	2.648	2.648	0.000	96	24941	5.00	5.35	
18 Trichlorofluoromethane	101	2.684	2.660	0.024	51	19389	5.00	5.21	M
20 Ethyl ether	59	3.037	3.049	-0.012	90	14586	5.00	5.53	
21 Acrolein	56	3.220	3.220	0.000	99	28320	100.0	98.5	
22 1,1-Dichloroethene	96	3.335	3.341	-0.006	95	11872	5.00	5.17	
23 1,1,2-Trichloro-1,2,2-trif	101	3.396	3.390	0.006	53	13209	5.00	5.44	
24 Acetone	43	3.421	3.421	-0.001	99	22203	25.0	27.5	M
25 Iodomethane	142	3.542	3.536	0.006	81	14090	5.00	4.57	
26 Carbon disulfide	76	3.633	3.627	0.006	99	26146	5.00	4.39	
29 3-Chloro-1-propene	76	3.919	3.919	0.000	86	5562	5.00	4.29	
30 Methyl acetate	43	3.932	3.926	0.006	98	50033	25.0	26.4	
31 Methylene Chloride	84	4.132	4.132	0.000	94	30274	5.00	5.01	
32 2-Methyl-2-propanol	59	4.363	4.370	-0.007	86	9874	50.0	53.9	
33 Acrylonitrile	53	4.509	4.503	0.006	99	48723	50.0	51.0	M
34 trans-1,2-Dichloroethene	96	4.558	4.564	-0.006	70	13191	5.00	4.97	
35 Methyl tert-butyl ether	73	4.564	4.576	-0.012	98	41079	5.00	5.17	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.984	4.990	-0.006	91	19223	5.00	5.35	
37 1,1-Dichloroethane	63	5.197	5.197	0.000	89	23168	5.00	4.88	
38 Vinyl acetate	43	5.246	5.240	0.006	96	17413	5.00	4.54	
43 cis-1,2-Dichloroethene	96	5.951	5.939	0.012	83	15010	5.00	5.20	
44 2-Butanone (MEK)	43	5.945	5.945	0.000	97	26408	25.0	24.0	
42 2,2-Dichloropropane	77	5.939	5.945	-0.006	57	9613	5.00	4.00	
48 Chlorobromomethane	128	6.231	6.231	0.000	95	6120	5.00	5.28	
49 Tetrahydrofuran	42	6.249	6.249	0.000	82	8204	10.0	11.1	
50 Chloroform	83	6.371	6.371	0.000	94	23924	5.00	5.08	
51 1,1,1-Trichloroethane	97	6.547	6.541	0.006	96	15055	5.00	4.32	M
52 Cyclohexane	56	6.608	6.620	-0.012	88	22688	5.00	5.09	
53 Carbon tetrachloride	117	6.712	6.718	-0.006	92	10435	5.00	4.24	
54 1,1-Dichloropropene	75	6.724	6.724	0.000	90	17924	5.00	4.79	
55 Isobutyl alcohol	41	6.900	6.900	0.000	80	7317	125.0	110.8	M
56 Benzene	78	6.943	6.943	0.000	96	59844	5.00	5.62	
57 1,2-Dichloroethane	62	7.016	7.016	0.000	98	23604	5.00	5.51	
59 n-Heptane	43	7.302	7.308	-0.006	86	14990	5.00	5.18	
61 Trichloroethene	130	7.679	7.679	0.000	89	11389	5.00	5.13	
63 Methylcyclohexane	83	7.916	7.922	-0.006	88	22772	5.00	5.06	
64 1,2-Dichloropropane	63	7.947	7.953	-0.006	86	13712	5.00	5.39	
65 1,4-Dioxane	88	8.026	8.032	-0.006	39	2321	100.0	92.5	
67 Dibromomethane	93	8.032	8.038	-0.006	92	7749	5.00	5.02	
68 Dichlorobromomethane	83	8.226	8.227	-0.001	96	11941	5.00	4.12	
71 cis-1,3-Dichloropropene	75	8.683	8.677	0.006	90	11797	5.00	3.70	
72 4-Methyl-2-pentanone (MIBK	43	8.829	8.823	0.006	96	42150	25.0	21.9	
73 Toluene	91	9.011	9.011	0.000	98	55394	5.00	5.72	
74 trans-1,3-Dichloropropene	75	9.255	9.255	0.000	97	8162	5.00	3.32	
75 Ethyl methacrylate	69	9.315	9.315	0.000	87	9928	5.00	3.80	
76 1,1,2-Trichloroethane	97	9.449	9.449	0.000	91	10927	5.00	5.46	
77 Tetrachloroethene	164	9.528	9.522	0.006	90	9096	5.00	5.51	
78 1,3-Dichloropropane	76	9.607	9.607	0.000	91	19746	5.00	5.34	
79 2-Hexanone	43	9.656	9.656	0.000	96	27957	25.0	22.1	
81 Chlorodibromomethane	129	9.826	9.826	0.000	88	4662	5.00	3.41	
82 Ethylene Dibromide	107	9.942	9.942	0.000	93	8796	5.00	4.97	
83 3-Chlorobenzotrifluoride	180	10.392	10.392	0.000	56	18146	5.00	5.86	
84 Chlorobenzene	112	10.429	10.429	0.000	93	33099	5.00	5.56	
85 4-Chlorobenzotrifluoride	180	10.490	10.483	0.007	96	15713	5.00	5.47	
86 1,1,1,2-Tetrachloroethane	131	10.514	10.520	-0.006	40	6472	5.00	3.97	
87 Ethylbenzene	106	10.532	10.526	0.006	98	17773	5.00	5.30	
88 m-Xylene & p-Xylene	106	10.654	10.660	-0.006	97	21283	5.00	5.11	
89 o-Xylene	106	11.037	11.043	-0.006	96	20074	5.00	4.82	
90 Styrene	104	11.061	11.061	0.000	93	28385	5.00	4.44	
91 Bromoform	173	11.244	11.244	0.000	35	2602	5.00	3.57	
92 2-Chlorobenzotrifluoride	180	11.305	11.305	0.000	92	16686	5.00	5.26	
93 Isopropylbenzene	105	11.408	11.408	0.000	96	49505	5.00	4.97	
96 1,1,2,2-Tetrachloroethane	83	11.712	11.712	0.000	73	13623	5.00	5.09	
95 Bromobenzene	156	11.724	11.725	-0.001	96	12814	5.00	5.07	
97 trans-1,4-Dichloro-2-buten	53	11.749	11.749	0.000	51	3433	5.00	4.28	
98 1,2,3-Trichloropropane	110	11.773	11.767	0.006	83	4898	5.00	5.10	
99 N-Propylbenzene	120	11.822	11.828	-0.006	99	13092	5.00	4.50	
100 2-Chlorotoluene	126	11.919	11.913	0.006	93	11155	5.00	4.62	
101 3-Chlorotoluene	126	11.980	11.980	0.000	97	11861	5.00	4.67	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	93	43612	5.00	4.61	
103 4-Chlorotoluene	126	12.035	12.041	-0.006	98	12056	5.00	4.72	
104 tert-Butylbenzene	119	12.321	12.321	0.000	92	34048	5.00	4.55	
106 1,2,4-Trimethylbenzene	105	12.381	12.382	-0.001	98	41890	5.00	4.33	
107 1,2-dichloro-4-(trifluorom	214	12.418	12.418	0.000	96	14947	5.00	5.45	
108 sec-Butylbenzene	105	12.546	12.546	0.000	96	50094	5.00	4.49	
109 1,3-Dichlorobenzene	146	12.661	12.667	-0.006	88	25334	5.00	5.13	
110 4-Isopropyltoluene	119	12.704	12.704	0.000	95	40061	5.00	4.28	
111 1,4-Dichlorobenzene	146	12.771	12.771	0.000	88	25908	5.00	5.13	
113 2,4-Dichloro-1-(triflourom	214	12.789	12.789	0.000	92	13852	5.00	5.08	
114 2,5-Dichlorobenzotrifluori	214	12.832	12.832	0.000	94	17529	5.00	5.75	
116 n-Butylbenzene	91	13.111	13.112	-0.001	98	43104	5.00	4.61	
117 1,2-Dichlorobenzene	146	13.130	13.124	0.006	93	27271	5.00	5.47	
118 1,2-Dibromo-3-Chloropropan	75	13.921	13.921	0.000	62	1637	5.00	3.58	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.054	14.061	-0.007	98	64430	15.0	14.8	
121 2,3- & 3,4- Dichlorotoluen	125	14.480	14.474	0.006	97	44720	10.0	9.34	
122 1,2,4-Trichlorobenzene	180	14.742	14.736	0.006	88	18465	5.00	4.78	
123 Hexachlorobutadiene	225	14.888	14.888	0.000	91	7049	5.00	4.63	
124 Naphthalene	128	15.010	15.004	0.006	97	30879	5.00	3.96	
125 1,2,3-Trichlorobenzene	180	15.229	15.229	0.000	92	18575	5.00	5.14	
126 2,4,5-Trichlorotoluene	159	16.013	16.007	0.006	0	10257	5.00	4.23	
127 2,3,6-Trichlorotoluene	159	16.111	16.111	0.000	93	10609	5.00	4.61	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		10.0	10.2	
S 131 Xylenes, Total	106				0		10.0	9.93	
S 132 1,3-Dichloropropene, Total	1				0		10.0	7.03	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00039	Amount Added:	0.20	Units: uL	
VOA8260VOAPRI_00134	Amount Added:	0.20	Units: uL	
voaWVA1st Res_00003	Amount Added:	0.20	Units: uL	
voaWeemix1Res_00001	Amount Added:	0.20	Units: uL	
voaWket1Reste_00001	Amount Added:	0.80	Units: uL	
voaWAcro2nd R_00006	Amount Added:	4.00	Units: uL	
VOA8260INT_00039	Amount Added:	2.00	Units: uL	Run Reagent

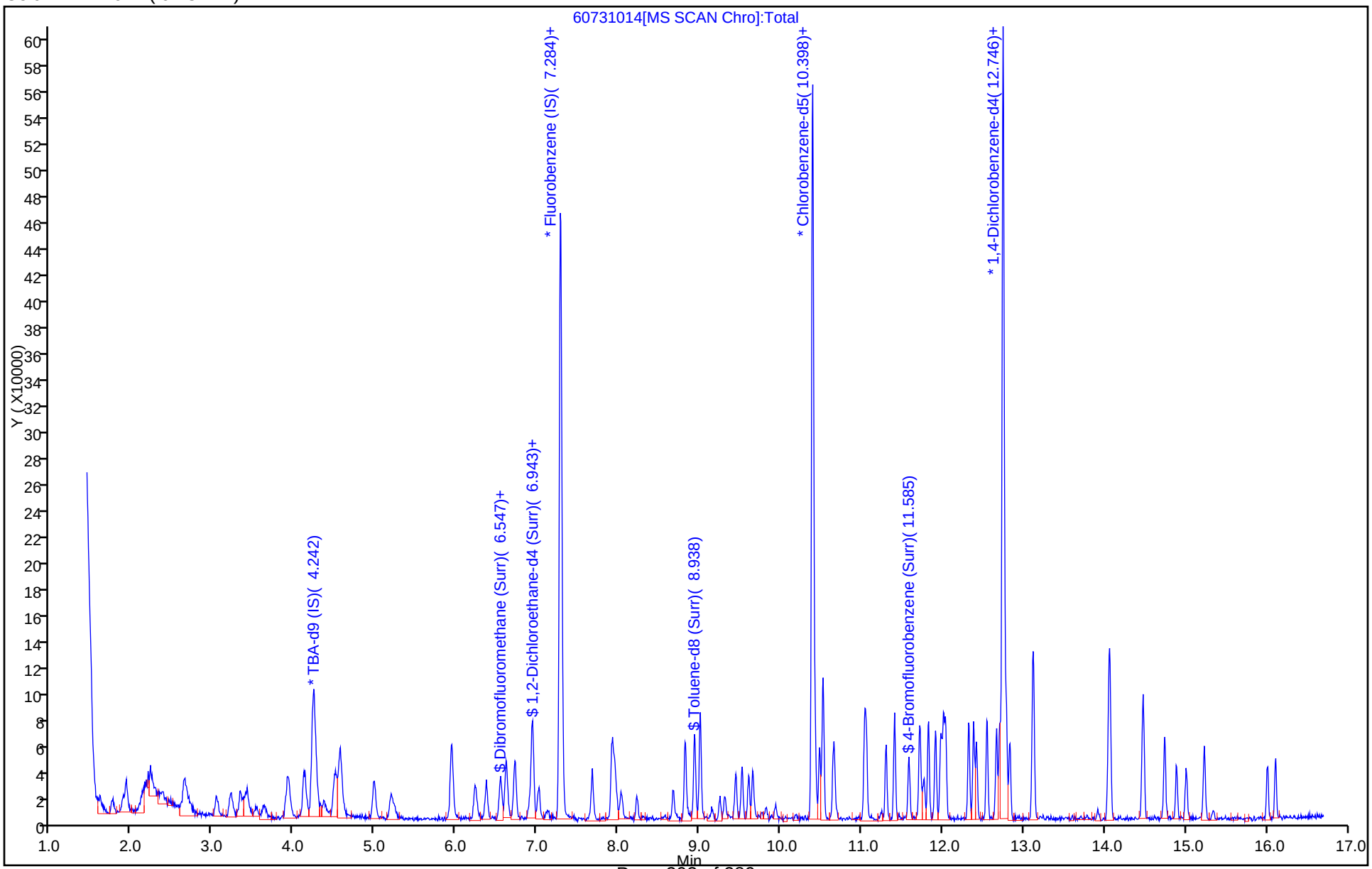
Report Date: 03-Aug-2015 12:57:06 Chrom Revision: 2.2 09-Jul-2015 10:16:20

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Injection Date:	31-Jul-2015 18:02:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	IC VSTD1			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



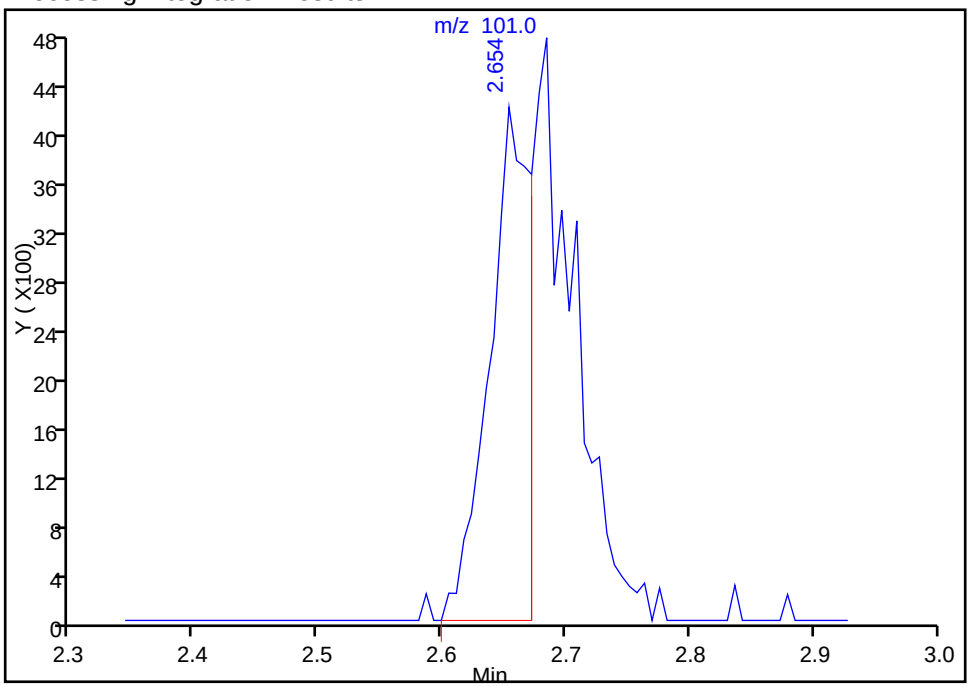
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D
Injection Date: 31-Jul-2015 18:02:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

18 Trichlorofluoromethane, CAS: 75-69-4

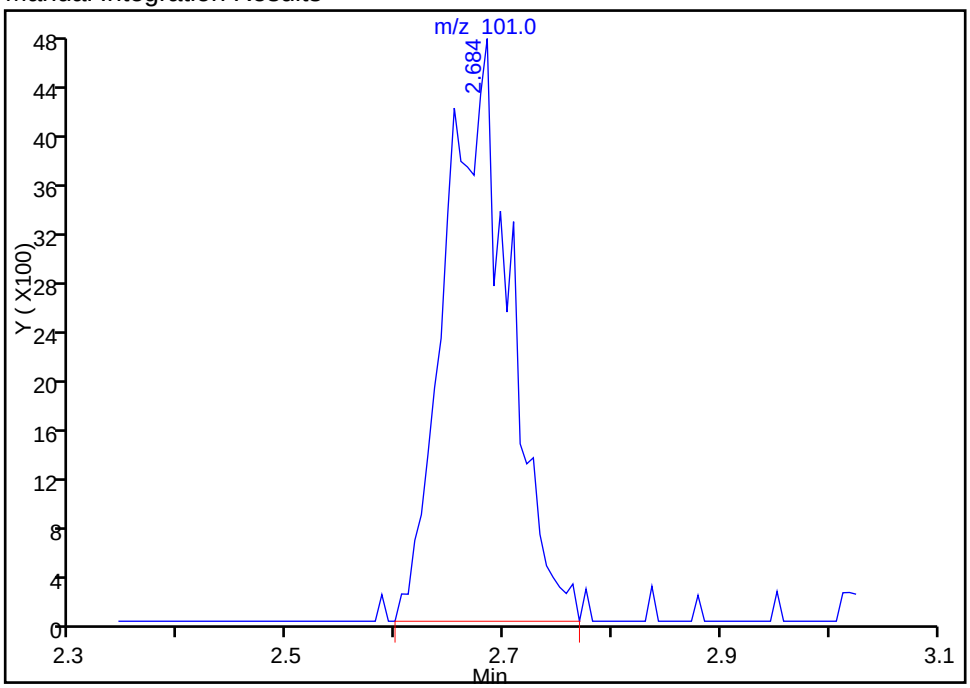
Processing Integration Results

RT: 2.65
Area: 9483
Amount: 2.504798
Amount Units: ng



Manual Integration Results

RT: 2.68
Area: 19389
Amount: 5.214616
Amount Units: ng



Reviewer: fergusond, 03-Aug-2015 11:05:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

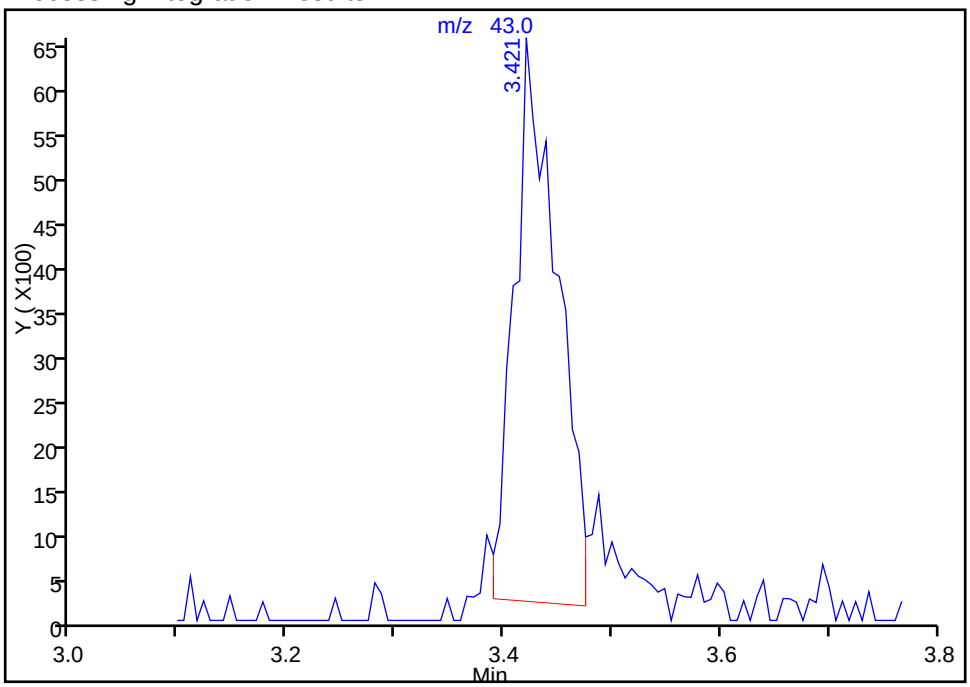
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D
Injection Date: 31-Jul-2015 18:02:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

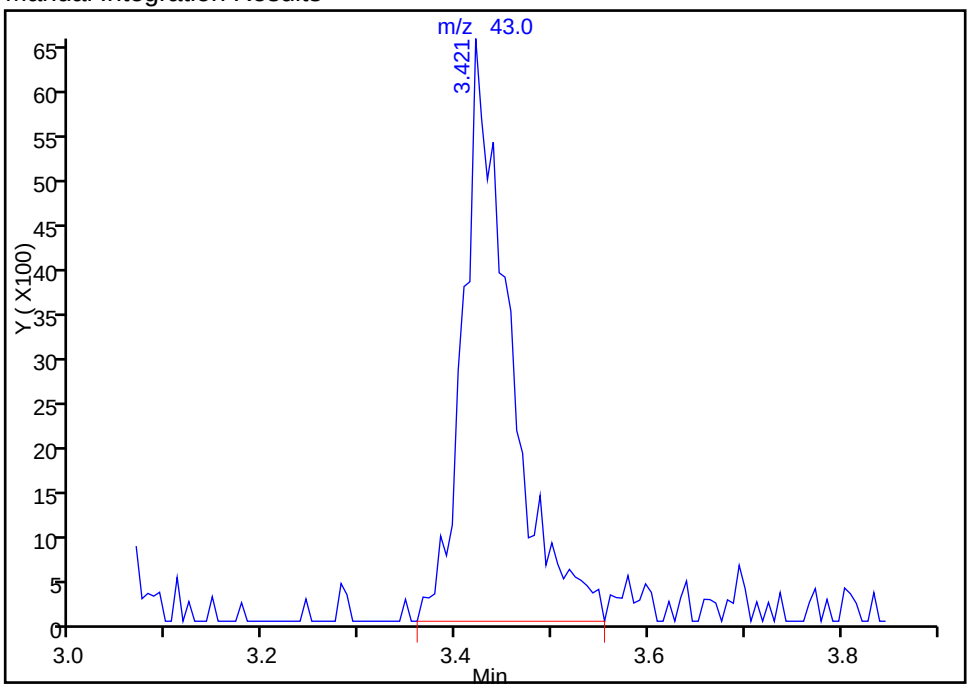
Processing Integration Results

RT: 3.42
Area: 17621
Amount: 21.931508
Amount Units: ng



Manual Integration Results

RT: 3.42
Area: 22203
Amount: 27.489890
Amount Units: ng



Reviewer: fergusond, 03-Aug-2015 11:05:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

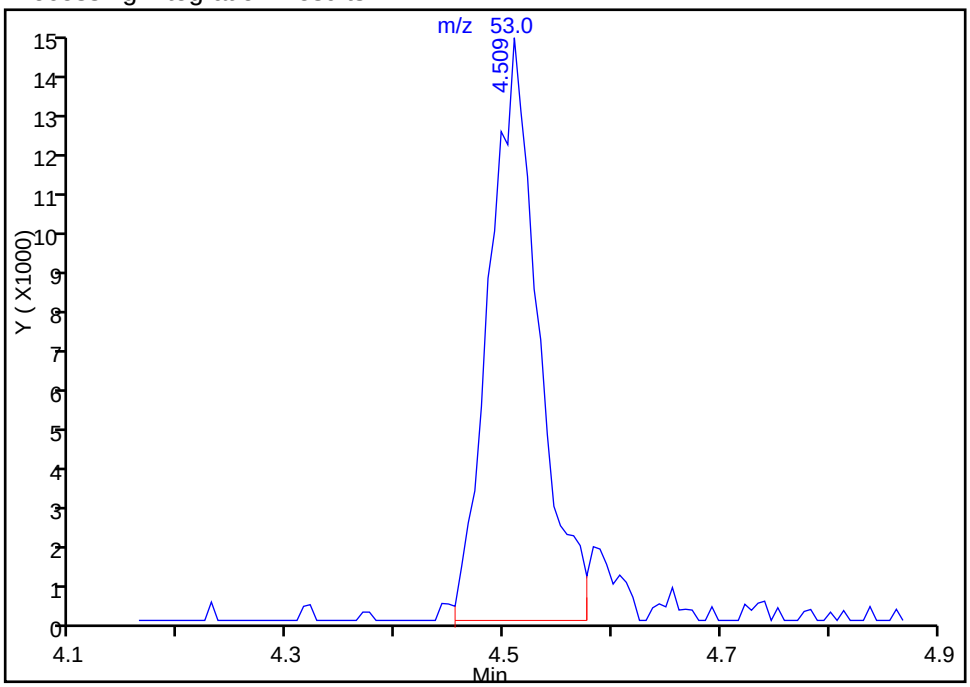
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D
Injection Date: 31-Jul-2015 18:02:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

33 Acrylonitrile, CAS: 107-13-1

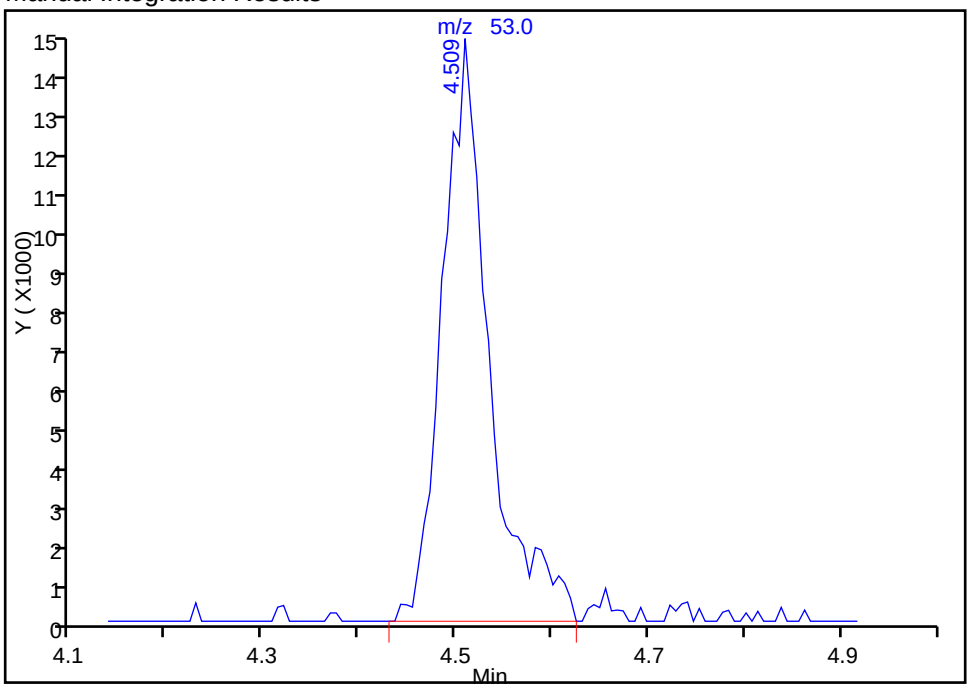
Processing Integration Results

RT: 4.51
Area: 45326
Amount: 48.323975
Amount Units: ng



Manual Integration Results

RT: 4.51
Area: 48723
Amount: 51.033411
Amount Units: ng



Reviewer: fergusond, 03-Aug-2015 11:05:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

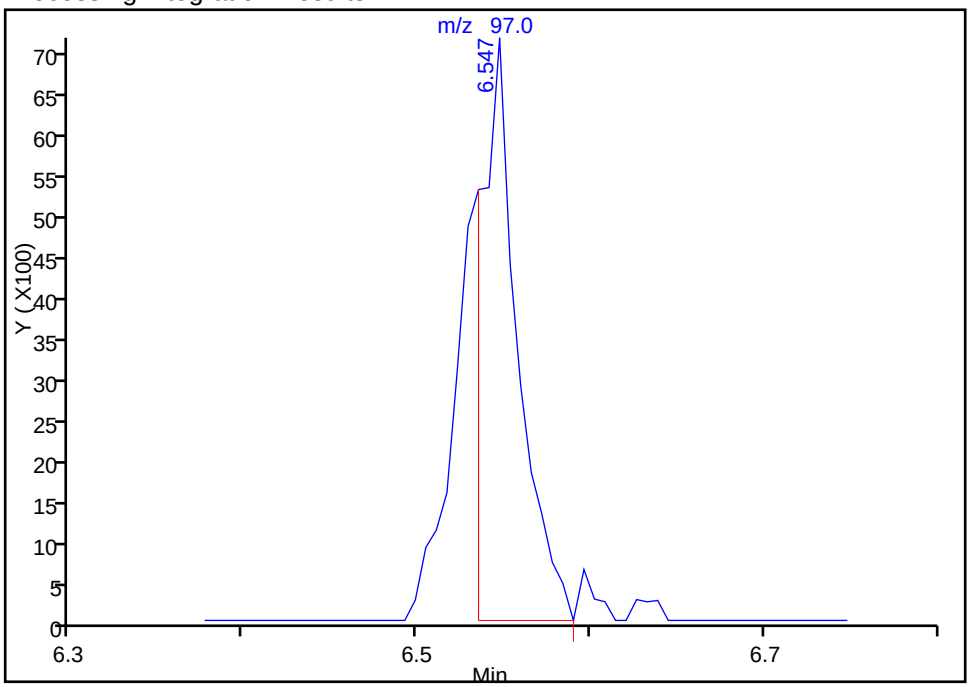
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D
Injection Date: 31-Jul-2015 18:02:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6

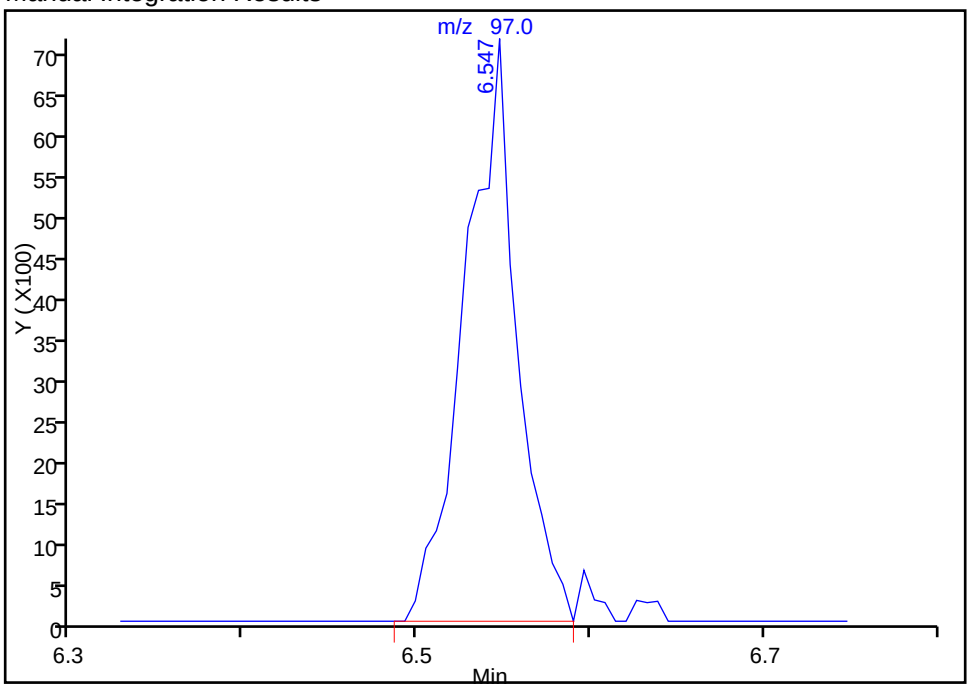
Processing Integration Results

RT: 6.55
Area: 10745
Amount: 3.045023
Amount Units: ng



Manual Integration Results

RT: 6.55
Area: 15055
Amount: 4.323691
Amount Units: ng



Reviewer: fergusond, 03-Aug-2015 11:05:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

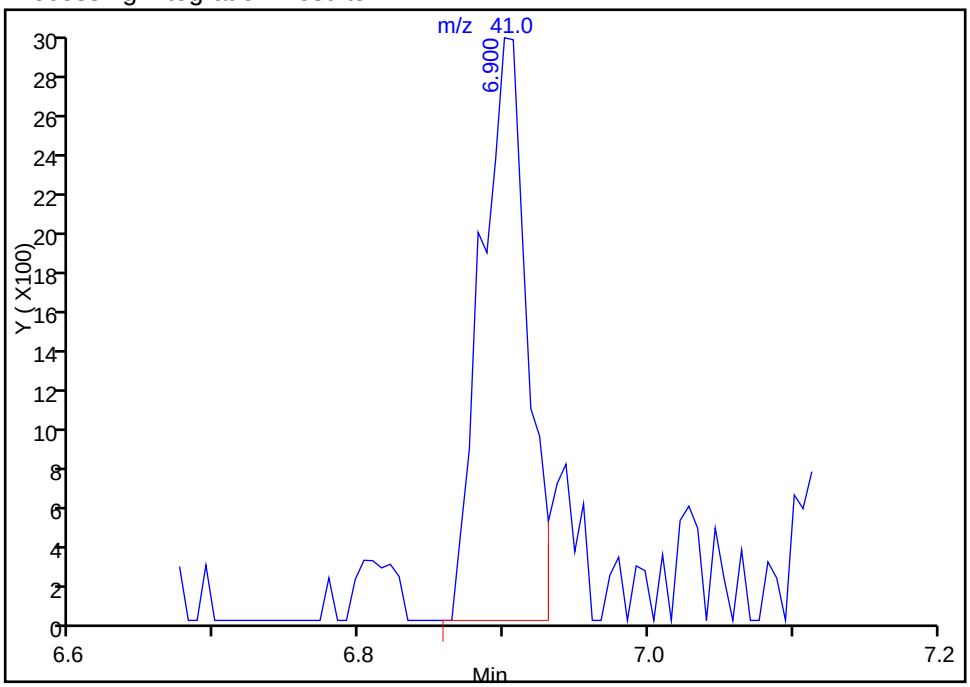
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D
Injection Date: 31-Jul-2015 18:02:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

55 Isobutyl alcohol, CAS: 78-83-1

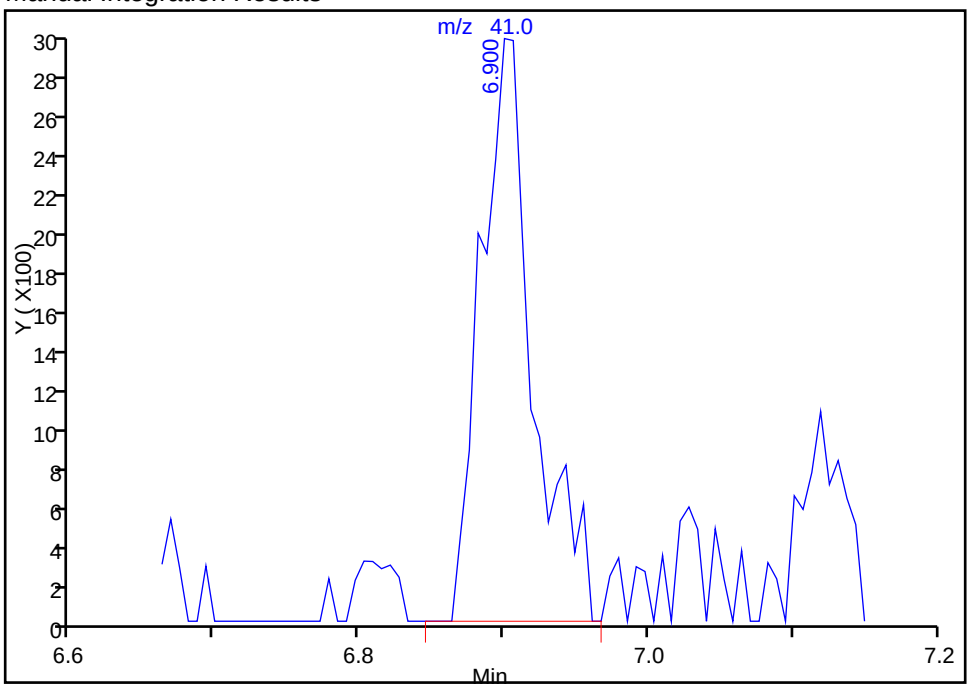
Processing Integration Results

RT: 6.90
Area: 6443
Amount: 97.511814
Amount Units: ng



Manual Integration Results

RT: 6.90
Area: 7317
Amount: 110.7809
Amount Units: ng



Reviewer: fergusond, 03-Aug-2015 11:05:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Lab Sample ID: CCVIS 180-154899/2 Calibration Date: 09/25/2015 12:54

Instrument ID: CHHP6 Calib Start Date: 07/31/2015 14:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/31/2015 18:02

Lab File ID: 60925002.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	0.3462	0.3302	0.1000	9.54	10.0	-4.6	20.0
Chloromethane	Ave	0.2984	0.3037	0.1000	10.2	10.0	1.8	20.0
Vinyl chloride	Ave	0.3214	0.3106	0.1000	9.66	10.0	-3.4	20.0
1,3-Butadiene	Ave	0.3013	0.3514	0.0100	11.7	10.0	16.6	20.0
Bromomethane	Ave	0.1735	0.1433	0.0500	8.26	10.0	-17.4	20.0
Chloroethane	Ave	0.2194	0.1915	0.0500	8.73	10.0	-12.7	20.0
Dichlorofluoromethane	Ave	0.5106	0.4617	0.0100	9.04	10.0	-9.6	20.0
Trichlorofluoromethane	Ave	0.4072	0.4090	0.1000	10.0	10.0	0.4	20.0
Ethyl ether	Ave	0.2886	0.2936	0.0100	10.2	10.0	1.7	20.0
Acrolein	Ave	0.0315	0.0237	0.0100	22.6	30.0	-24.8*	20.0
1,1-Dichloroethene	Ave	0.2517	0.2516	0.1000	10.0	10.0	-0.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2657	0.2896	0.1000	10.9	10.0	9.0	20.0
Acetone	Ave	0.0885	0.1035	0.0500	23.4	20.0	17.0	20.0
Iodomethane	Ave	0.3379	0.3963	0.0100	11.7	10.0	17.3	20.0
Carbon disulfide	Ave	0.6522	0.7397	0.1000	11.3	10.0	13.4	20.0
Allyl chloride	Ave	0.1419	0.1316	0.0100	9.27	10.0	-7.3	20.0
Methyl acetate	Ave	0.2074	0.2279	0.1000	54.9	50.0	9.9	20.0
Methylene Chloride	Lin2		0.3664	0.1000	10.6	10.0	5.6	20.0
tert-Butyl alcohol	Ave	1.125	1.139	0.0100	101	100	1.2	20.0
Acrylonitrile	Ave	0.1046	0.1115	0.0100	107	100	6.7	20.0
trans-1,2-Dichloroethene	Ave	0.2905	0.2932	0.1000	10.1	10.0	0.9	20.0
Methyl tert-butyl ether	Ave	0.8703	0.7326	0.1000	8.42	10.0	-15.8	20.0
Hexane	Ave	0.3936	0.4155	0.0100	10.6	10.0	5.6	20.0
1,1-Dichloroethane	Ave	0.5200	0.5472	0.2000	10.5	10.0	5.2	20.0
Vinyl acetate	Ave	0.4197	0.4452	0.0100	10.6	10.0	6.1	20.0
2,2-Dichloropropane	Ave	0.2629	0.2357	0.0100	8.96	10.0	-10.4	20.0
2-Butanone (MEK)	Ave	0.1207	0.1324	0.0500	21.9	20.0	9.7	20.0
cis-1,2-Dichloroethene	Ave	0.3158	0.3024	0.1000	9.58	10.0	-4.2	20.0
Bromochloromethane	Ave	0.1269	0.1460	0.0100	11.5	10.0	15.0	20.0
Tetrahydrofuran	Ave	0.0813	0.0777	0.0100	19.1	20.0	-4.5	20.0
Chloroform	Ave	0.5161	0.5047	0.2000	9.78	10.0	-2.2	20.0
1,1,1-Trichloroethane	Ave	0.3814	0.3709	0.1000	9.73	10.0	-2.7	20.0
Cyclohexane	Ave	0.4886	0.5120	0.1000	10.5	10.0	4.8	20.0
Carbon tetrachloride	Ave	0.2694	0.2923	0.1000	10.9	10.0	8.5	20.0
1,1-Dichloropropene	Ave	0.4102	0.4118	0.0100	10.0	10.0	0.4	20.0
Isobutyl alcohol	Ave	0.0072	0.0080*	0.0100	278	250	11.1	20.0
Benzene	Ave	1.165	1.219	0.5000	10.5	10.0	4.6	20.0
1,2-Dichloroethane	Ave	0.4694	0.4841	0.1000	10.3	10.0	3.1	20.0
n-Heptane	Ave	0.3168	0.4049	0.0100	12.8	10.0	27.8*	20.0
Trichloroethene	Ave	0.2430	0.2909	0.2000	12.0	10.0	19.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Lab Sample ID: CCVIS 180-154899/2 Calibration Date: 09/25/2015 12:54

Instrument ID: CHHP6 Calib Start Date: 07/31/2015 14:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/31/2015 18:02

Lab File ID: 60925002.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
Methylcyclohexane	Ave	0.4932	0.4710	0.1000	9.55	10.0	-4.5	20.0
1,2-Dichloropropane	Ave	0.2784	0.3101	0.1000	11.1	10.0	11.4	20.0
1,4-Dioxane	Ave	0.0027	0.0024*	0.0100	173	200	-13.4	20.0
Dibromomethane	Ave	0.1690	0.1774	0.0100	10.5	10.0	4.9	20.0
Bromodichloromethane	Ave	0.3176	0.3280	0.2000	10.3	10.0	3.3	20.0
cis-1,3-Dichloropropene	Ave	0.3489	0.3713	0.2000	10.6	10.0	6.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.028	0.9251	0.1000	18.0	20.0	-10.0	20.0
Toluene	Ave	5.159	5.235	0.4000	10.1	10.0	1.5	20.0
trans-1,3-Dichloropropene	Ave	1.310	1.348	0.1000	10.3	10.0	3.0	20.0
Ethyl methacrylate	Ave	1.391	1.250	0.0100	8.99	10.0	-10.1	20.0
1,1,2-Trichloroethane	Ave	1.067	1.068	0.1000	10.0	10.0	0.1	20.0
Tetrachloroethene	Ave	0.8800	1.034	0.2000	11.8	10.0	17.6	20.0
1,3-Dichloropropane	Ave	1.971	2.034	0.0100	10.3	10.0	3.2	20.0
2-Hexanone	Ave	0.6750	0.7959	0.1000	23.6	20.0	17.9	20.0
Dibromochloromethane	Ave	0.7283	0.8775	0.1000	12.0	10.0	20.5*	20.0
1,2-Dibromoethane (EDB)	Ave	0.9442	0.9731	0.1000	10.3	10.0	3.1	20.0
3-Chlorobenzotrifluoride	Ave	1.652	1.725	0.0100	10.4	10.0	4.4	20.0
Chlorobenzene	Ave	3.171	3.450	0.5000	10.9	10.0	8.8	20.0
4-Chlorobenzotrifluoride	Ave	1.531	1.611	0.0100	10.5	10.0	5.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8691	0.9925	0.0100	11.4	10.0	14.2	20.0
Ethylbenzene	Ave	1.789	1.818	0.1000	10.2	10.0	1.6	20.0
m-Xylene & p-Xylene	Ave	2.220	2.290	0.1000	10.3	10.0	3.1	20.0
o-Xylene	Ave	2.221	2.139	0.3000	9.63	10.0	-3.7	20.0
Styrene	Ave	3.411	3.622	0.3000	10.6	10.0	6.2	20.0
Bromoform	Ave	0.3887	0.4462	0.1000	11.5	10.0	14.8	20.0
2-Chlorobenzotrifluoride	Ave	1.692	1.681	0.0100	9.94	10.0	-0.6	20.0
Isopropylbenzene	Ave	5.314	5.244	0.1000	9.87	10.0	-1.3	20.0
1,1,2,2-Tetrachloroethane	Ave	1.428	1.337	0.3000	9.37	10.0	-6.3	20.0
Bromobenzene	Ave	0.8038	0.8009	0.0100	9.96	10.0	-0.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2549	0.1516	0.0100	5.95	10.0	-40.5*	20.0
1,2,3-Trichloropropane	Ave	0.3057	0.2624	0.0100	8.58	10.0	-14.2	20.0
N-Propylbenzene	Ave	0.9257	0.8520	0.0100	9.20	10.0	-8.0	20.0
2-Chlorotoluene	Ave	0.7686	0.7524	0.0100	9.79	10.0	-2.1	20.0
3-Chlorotoluene	Ave	0.8072	0.7983	0.0100	9.89	10.0	-1.1	20.0
1,3,5-Trimethylbenzene	Ave	3.010	2.749	0.0100	9.13	10.0	-8.7	20.0
4-Chlorotoluene	Ave	0.8119	0.8220	0.0100	10.1	10.0	1.2	20.0
tert-Butylbenzene	Ave	2.378	2.013	0.0100	8.46	10.0	-15.4	20.0
1,2,4-Trimethylbenzene	Ave	3.078	2.753	0.0100	8.94	10.0	-10.6	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8719	0.7748	0.0100	8.89	10.0	-11.1	20.0
sec-Butylbenzene	Ave	3.550	3.190	0.0100	8.99	10.0	-10.1	20.0
1,3-Dichlorobenzene	Ave	1.570	1.484	0.6000	9.45	10.0	-5.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Lab Sample ID: CCVIS 180-154899/2 Calibration Date: 09/25/2015 12:54

Instrument ID: CHHP6 Calib Start Date: 07/31/2015 14:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/31/2015 18:02

Lab File ID: 60925002.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
4-Isopropyltoluene	Ave	2.979	2.627	0.0100	8.82	10.0	-11.8	20.0
1,4-Dichlorobenzene	Ave	1.605	1.540	0.5000	9.60	10.0	-4.0	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.8674	0.8295	0.0100	9.56	10.0	-4.4	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.9687	0.8272	0.0100	8.54	10.0	-14.6	20.0
n-Butylbenzene	Ave	2.974	2.402	0.0100	8.08	10.0	-19.2	20.0
1,2-Dichlorobenzene	Ave	1.585	1.473	0.4000	9.29	10.0	-7.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1454	0.0978	0.0500	6.73	10.0	-32.7*	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.380	1.141	0.0100	24.8	30.0	-17.3	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.522	1.234	0.0100	16.2	20.0	-18.9	20.0
1,2,4-Trichlorobenzene	Ave	1.229	1.002	0.2000	8.16	10.0	-18.4	20.0
Hexachlorobutadiene	Ave	0.4839	0.4182	0.0100	8.64	10.0	-13.6	20.0
Naphthalene	Ave	2.479	1.904	0.0100	7.68	10.0	-23.2*	20.0
1,2,3-Trichlorobenzene	Ave	1.150	0.9030	0.0100	7.86	10.0	-21.4*	20.0
2,4,5-Trichlorotoluene	Ave	0.7719	0.4198	0.0100	5.44	10.0	-45.6*	20.0
2,3,6-Trichlorotoluene	Ave	0.7323	0.4547	0.0100	6.21	10.0	-37.9*	20.0
Dibromofluoromethane (Surr)	Ave	0.2303	0.2455		10.7	10.0	6.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3715	0.3694		9.94	10.0	-0.6	20.0
Toluene-d8 (Surr)	Ave	3.944	4.062		10.3	10.0	3.0	20.0
4-Bromofluorobenzene (Surr)	Ave	1.751	1.627		9.29	10.0	-7.1	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 25-Sep-2015 12:54:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0008690-002
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Sep-2015 14:24:02 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: fergusond Date: 25-Sep-2015 13:31:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.235	4.235	0.000	92	158550	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.289	0.000	98	474251	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.398	0.000	89	111336	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.746	0.000	95	197208	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.553	6.553	0.000	93	116421	50.0	53.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.930	6.930	0.000	71	175181	50.0	49.7	
$ 7 Toluene-d8 (Surr)	98	8.937	8.937	0.000	94	452280	50.0	51.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.584	0.000	90	181139	50.0	46.5	
11 Dichlorodifluoromethane	85	1.607	1.607	0.000	99	156592	50.0	47.7	
12 Chloromethane	50	1.759	1.759	0.000	100	144027	50.0	50.9	
13 Vinyl chloride	62	1.899	1.899	0.000	99	147297	50.0	48.3	
14 Butadiene	39	1.935	1.935	0.000	97	166647	50.0	58.3	
15 Bromomethane	94	2.234	2.234	0.000	95	67972	50.0	41.3	M
16 Chloroethane	64	2.380	2.380	0.000	100	90797	50.0	43.6	
17 Dichlorofluoromethane	67	2.653	2.653	0.000	96	218960	50.0	45.2	
18 Trichlorofluoromethane	101	2.690	2.690	0.000	96	193982	50.0	50.2	
20 Ethyl ether	59	3.043	3.043	0.000	92	139256	50.0	50.9	
21 Acrolein	56	3.219	3.219	0.000	97	33687	150.0	112.8	
22 1,1-Dichloroethene	96	3.341	3.341	0.000	95	119321	50.0	50.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.402	3.402	0.000	93	137362	50.0	54.5	
24 Acetone	43	3.420	3.420	0.000	99	98199	100.0	117.0	
25 Iodomethane	142	3.535	3.535	0.000	98	187922	50.0	58.6	
26 Carbon disulfide	76	3.627	3.627	0.000	100	350822	50.0	56.7	
29 3-Chloro-1-propene	76	3.906	3.906	0.000	82	62398	50.0	46.4	
30 Methyl acetate	43	3.919	3.919	0.000	98	540439	250.0	274.7	
31 Methylene Chloride	84	4.125	4.125	0.000	96	173758	50.0	52.8	
32 2-Methyl-2-propanol	59	4.363	4.363	0.000	89	90279	500.0	506.0	
33 Acrylonitrile	53	4.503	4.503	0.000	97	528886	500.0	533.3	
34 trans-1,2-Dichloroethene	96	4.557	4.557	0.000	78	139047	50.0	50.5	
35 Methyl tert-butyl ether	73	4.563	4.563	0.000	97	347450	50.0	42.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.989	4.989	0.000	94	197069	50.0	52.8	
37 1,1-Dichloroethane	63	5.190	5.190	0.000	97	259531	50.0	52.6	
38 Vinyl acetate	43	5.239	5.239	0.000	98	211134	50.0	53.0	
42 2,2-Dichloropropane	77	5.938	5.938	0.000	60	111775	50.0	44.8	
44 2-Butanone (MEK)	43	5.938	5.938	0.000	60	125621	100.0	109.7	
43 cis-1,2-Dichloroethene	96	5.938	5.938	0.000	84	143425	50.0	47.9	
48 Chlorobromomethane	128	6.230	6.230	0.000	97	69230	50.0	57.5	
49 Tetrahydrofuran	42	6.236	6.236	0.000	87	73651	100.0	95.5	
50 Chloroform	83	6.370	6.370	0.000	95	239352	50.0	48.9	
51 1,1,1-Trichloroethane	97	6.535	6.535	0.000	96	175901	50.0	48.6	
52 Cyclohexane	56	6.620	6.620	0.000	94	242822	50.0	52.4	
53 Carbon tetrachloride	117	6.711	6.711	0.000	88	138607	50.0	54.3	
54 1,1-Dichloropropene	75	6.723	6.723	0.000	92	195303	50.0	50.2	
55 Isobutyl alcohol	41	6.893	6.893	0.000	88	95278	1250.0	1388.6	
56 Benzene	78	6.936	6.936	0.000	98	577990	50.0	52.3	
57 1,2-Dichloroethane	62	7.015	7.015	0.000	98	229574	50.0	51.6	
59 n-Heptane	43	7.307	7.307	0.000	91	192006	50.0	63.9	
61 Trichloroethene	130	7.678	7.678	0.000	96	137941	50.0	59.8	
63 Methylcyclohexane	83	7.922	7.922	0.000	93	223350	50.0	47.7	
64 1,2-Dichloropropane	63	7.952	7.952	0.000	87	147080	50.0	55.7	
65 1,4-Dioxane	88	8.031	8.031	0.000	37	22574	1000.0	866.1	
67 Dibromomethane	93	8.037	8.037	0.000	96	84132	50.0	52.5	
68 Dichlorobromomethane	83	8.226	8.226	0.000	98	155563	50.0	51.6	
70 2-Chloroethyl vinyl ether	63	8.530	8.530	0.000	94	156212	100.0	89.3	
71 cis-1,3-Dichloropropene	75	8.676	8.676	0.000	91	176096	50.0	53.2	
72 4-Methyl-2-pentanone (MIBK	43	8.822	8.822	0.000	97	205991	100.0	90.0	
73 Toluene	91	9.011	9.011	0.000	98	582879	50.0	50.7	
74 trans-1,3-Dichloropropene	75	9.254	9.254	0.000	98	150129	50.0	51.5	
75 Ethyl methacrylate	69	9.315	9.315	0.000	91	139196	50.0	44.9	
76 1,1,2-Trichloroethane	97	9.449	9.449	0.000	95	118936	50.0	50.1	
77 Tetrachloroethene	164	9.528	9.528	0.000	96	115172	50.0	58.8	
78 1,3-Dichloropropane	76	9.607	9.607	0.000	96	226456	50.0	51.6	
79 2-Hexanone	43	9.655	9.655	0.000	99	177220	100.0	117.9	
81 Chlorodibromomethane	129	9.820	9.820	0.000	92	97693	50.0	60.2	
82 Ethylene Dibromide	107	9.941	9.941	0.000	98	108345	50.0	51.5	
83 3-Chlorobenzotrifluoride	180	10.391	10.391	0.000	92	192060	50.0	52.2	
84 Chlorobenzene	112	10.428	10.428	0.000	93	384107	50.0	54.4	
85 4-Chlorobenzotrifluoride	180	10.483	10.483	0.000	97	179355	50.0	52.6	
86 1,1,1,2-Tetrachloroethane	131	10.519	10.519	0.000	88	110500	50.0	57.1	
87 Ethylbenzene	106	10.525	10.525	0.000	99	202389	50.0	50.8	
88 m-Xylene & p-Xylene	106	10.659	10.659	0.000	100	254920	50.0	51.6	
89 o-Xylene	106	11.042	11.042	0.000	97	238179	50.0	48.2	
90 Styrene	104	11.061	11.061	0.000	94	403271	50.0	53.1	
91 Bromoform	173	11.243	11.243	0.000	94	49683	50.0	57.4	
92 2-Chlorobenzotrifluoride	180	11.304	11.304	0.000	96	187158	50.0	49.7	
93 Isopropylbenzene	105	11.407	11.407	0.000	98	583803	50.0	49.3	
96 1,1,2,2-Tetrachloroethane	83	11.712	11.712	0.000	96	148881	50.0	46.8	
95 Bromobenzene	156	11.724	11.724	0.000	98	157945	50.0	49.8	
97 trans-1,4-Dichloro-2-buten	53	11.754	11.754	0.000	73	29887	50.0	29.7	
98 1,2,3-Trichloropropane	110	11.772	11.772	0.000	86	51746	50.0	42.9	
99 N-Propylbenzene	120	11.827	11.827	0.000	99	168030	50.0	46.0	
100 2-Chlorotoluene	126	11.912	11.912	0.000	94	148374	50.0	48.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.979	11.979	0.000	96	157433	50.0	49.4	
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	93	542140	50.0	45.7	
103 4-Chlorotoluene	126	12.040	12.040	0.000	99	162100	50.0	50.6	
104 tert-Butylbenzene	119	12.326	12.326	0.000	93	396900	50.0	42.3	
106 1,2,4-Trimethylbenzene	105	12.381	12.381	0.000	98	542865	50.0	44.7	
107 1,2-dichloro-4-(trifluorom	214	12.417	12.417	0.000	96	152786	50.0	44.4	
108 sec-Butylbenzene	105	12.551	12.551	0.000	95	629090	50.0	44.9	
109 1,3-Dichlorobenzene	146	12.667	12.667	0.000	95	292721	50.0	47.3	
110 4-Isopropyltoluene	119	12.703	12.703	0.000	95	518147	50.0	44.1	
111 1,4-Dichlorobenzene	146	12.770	12.770	0.000	90	303782	50.0	48.0	
113 2,4-Dichloro-1-(triflourom	214	12.788	12.788	0.000	96	163576	50.0	47.8	
114 2,5-Dichlorobenzotrifluori	214	12.831	12.831	0.000	98	163124	50.0	42.7	
116 n-Butylbenzene	91	13.111	13.111	0.000	98	473648	50.0	40.4	
117 1,2-Dichlorobenzene	146	13.123	13.123	0.000	93	290409	50.0	46.4	
118 1,2-Dibromo-3-Chloropropan	75	13.920	13.920	0.000	72	19283	50.0	33.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.060	14.060	0.000	100	674906	150.0	124.0	
121 2,3- & 3,4- Dichlorotoluen	125	14.473	14.473	0.000	99	486832	100.0	81.1	
122 1,2,4-Trichlorobenzene	180	14.741	14.741	0.000	94	197648	50.0	40.8	
123 Hexachlorobutadiene	225	14.887	14.887	0.000	97	82473	50.0	43.2	
124 Naphthalene	128	15.009	15.009	0.000	98	375406	50.0	38.4	
125 1,2,3-Trichlorobenzene	180	15.228	15.228	0.000	94	178073	50.0	39.3	
126 2,4,5-Trichlorotoluene	159	16.006	16.006	0.000	0	82795	50.0	27.2	
127 2,3,6-Trichlorotoluene	159	16.110	16.110	0.000	95	89662	50.0	31.0	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	98.3	
S 131 Xylenes, Total	106				0		100.0	99.7	
S 132 1,3-Dichloropropene, Total	1				0		100.0	104.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00145	Amount Added:	2.00	Units: uL		
voaWKet1stRes_00001	Amount Added:	2.00	Units: uL		
VOAVAPRI_00007	Amount Added:	2.00	Units: uL		
voaW2-cle2ndR_00005	Amount Added:	2.00	Units: uL		
voaWAcro1stRe_00001	Amount Added:	6.00	Units: uL		
voaEE2Restek_00001	Amount Added:	2.00	Units: uL		
VOA8260INT_00042	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00042	Amount Added:	2.00	Units: uL	Run Reagent	

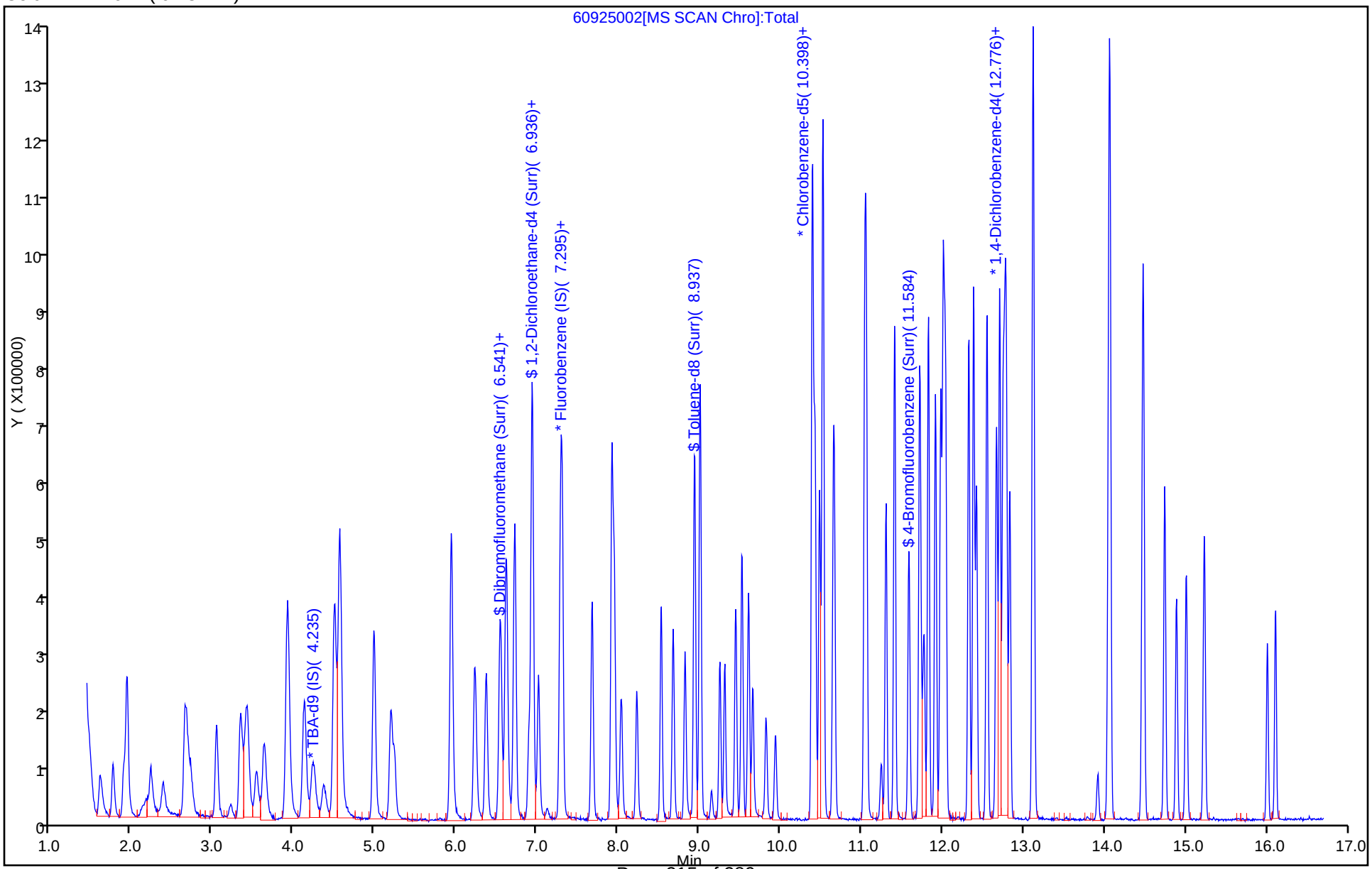
Report Date: 25-Sep-2015 14:24:03 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925002.D

Injection Date:	25-Sep-2015 12:54:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



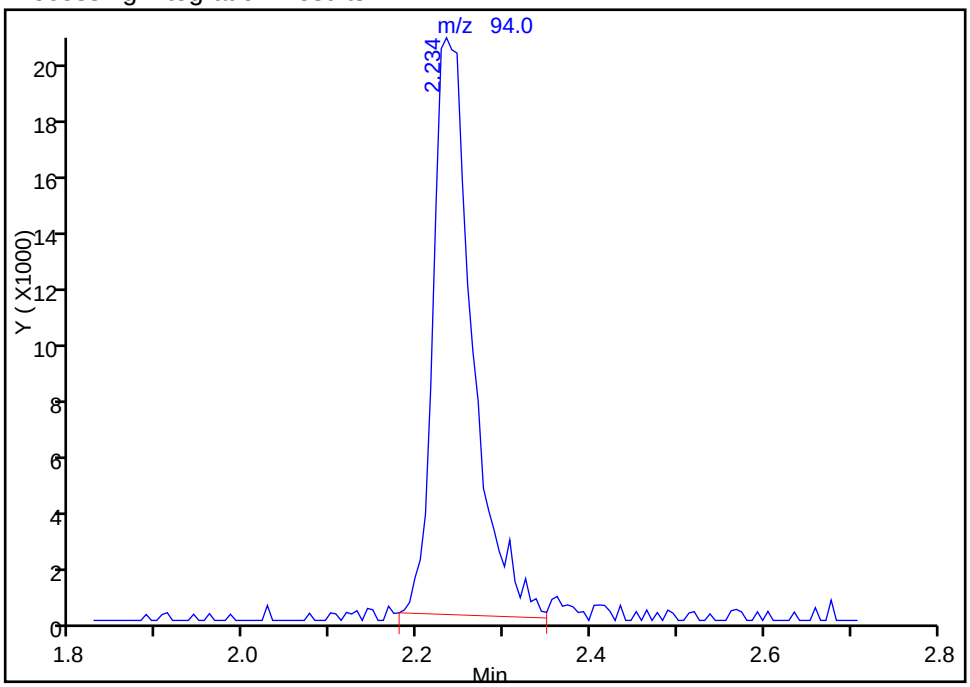
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925002.D
Injection Date: 25-Sep-2015 12:54:30 Instrument ID: CHHP6
Lims ID: CCVIS
Client ID:
Operator ID: 001562 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

15 Bromomethane, CAS: 74-83-9

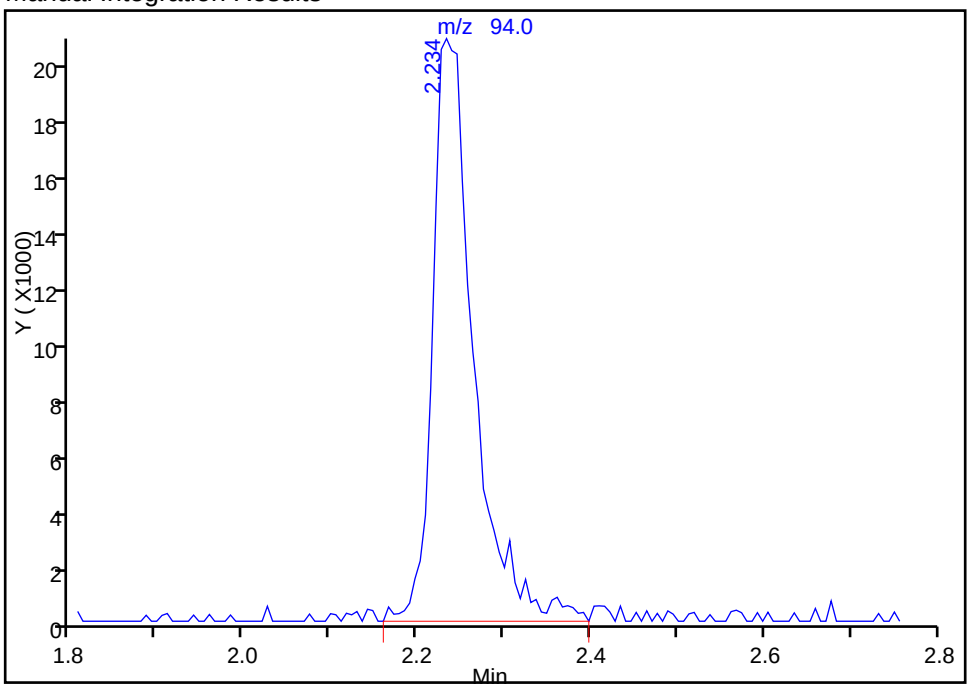
Processing Integration Results

RT: 2.23
Area: 64476
Amount: 39.171920
Amount Units: ng



Manual Integration Results

RT: 2.23
Area: 67972
Amount: 41.295889
Amount Units: ng



Reviewer: fergusond, 25-Sep-2015 13:31:01
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Lab Sample ID: CCVIS 180-154899/2 Calibration Date: 09/25/2015 12:54

Instrument ID: CHHP6 Calib Start Date: 09/10/2015 15:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/10/2015 17:58

Lab File ID: 60925002.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	0.1843	0.1647	0.0100	17.9	20.0	-10.7	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 25-Sep-2015 12:54:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0008690-002
Operator ID: 001562 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Sep-2015 14:24:02 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: fergusond Date: 25-Sep-2015 13:31:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.235	4.235	0.000	92	158550	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.289	0.000	98	474251	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.398	0.000	89	111336	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.746	0.000	95	197208	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.553	6.553	0.000	93	116421	50.0	53.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.930	6.930	0.000	71	175181	50.0	49.7	
$ 7 Toluene-d8 (Surr)	98	8.937	8.937	0.000	94	452280	50.0	51.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.584	0.000	90	181139	50.0	46.5	
11 Dichlorodifluoromethane	85	1.607	1.607	0.000	99	156592	50.0	47.7	
12 Chloromethane	50	1.759	1.759	0.000	100	144027	50.0	50.9	
13 Vinyl chloride	62	1.899	1.899	0.000	99	147297	50.0	48.3	
14 Butadiene	39	1.935	1.935	0.000	97	166647	50.0	58.3	
15 Bromomethane	94	2.234	2.234	0.000	95	67972	50.0	41.3	M
16 Chloroethane	64	2.380	2.380	0.000	100	90797	50.0	43.6	
17 Dichlorofluoromethane	67	2.653	2.653	0.000	96	218960	50.0	45.2	
18 Trichlorofluoromethane	101	2.690	2.690	0.000	96	193982	50.0	50.2	
20 Ethyl ether	59	3.043	3.043	0.000	92	139256	50.0	50.9	
21 Acrolein	56	3.219	3.219	0.000	97	33687	150.0	112.8	
22 1,1-Dichloroethene	96	3.341	3.341	0.000	95	119321	50.0	50.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.402	3.402	0.000	93	137362	50.0	54.5	
24 Acetone	43	3.420	3.420	0.000	99	98199	100.0	117.0	
25 Iodomethane	142	3.535	3.535	0.000	98	187922	50.0	58.6	
26 Carbon disulfide	76	3.627	3.627	0.000	100	350822	50.0	56.7	
29 3-Chloro-1-propene	76	3.906	3.906	0.000	82	62398	50.0	46.4	
30 Methyl acetate	43	3.919	3.919	0.000	98	540439	250.0	274.7	
31 Methylene Chloride	84	4.125	4.125	0.000	96	173758	50.0	52.8	
32 2-Methyl-2-propanol	59	4.363	4.363	0.000	89	90279	500.0	506.0	
33 Acrylonitrile	53	4.503	4.503	0.000	97	528886	500.0	533.3	
34 trans-1,2-Dichloroethene	96	4.557	4.557	0.000	78	139047	50.0	50.5	
35 Methyl tert-butyl ether	73	4.563	4.563	0.000	97	347450	50.0	42.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.989	4.989	0.000	94	197069	50.0	52.8	
37 1,1-Dichloroethane	63	5.190	5.190	0.000	97	259531	50.0	52.6	
38 Vinyl acetate	43	5.239	5.239	0.000	98	211134	50.0	53.0	
42 2,2-Dichloropropane	77	5.938	5.938	0.000	60	111775	50.0	44.8	
44 2-Butanone (MEK)	43	5.938	5.938	0.000	60	125621	100.0	109.7	
43 cis-1,2-Dichloroethene	96	5.938	5.938	0.000	84	143425	50.0	47.9	
48 Chlorobromomethane	128	6.230	6.230	0.000	97	69230	50.0	57.5	
49 Tetrahydrofuran	42	6.236	6.236	0.000	87	73651	100.0	95.5	
50 Chloroform	83	6.370	6.370	0.000	95	239352	50.0	48.9	
51 1,1,1-Trichloroethane	97	6.535	6.535	0.000	96	175901	50.0	48.6	
52 Cyclohexane	56	6.620	6.620	0.000	94	242822	50.0	52.4	
53 Carbon tetrachloride	117	6.711	6.711	0.000	88	138607	50.0	54.3	
54 1,1-Dichloropropene	75	6.723	6.723	0.000	92	195303	50.0	50.2	
55 Isobutyl alcohol	41	6.893	6.893	0.000	88	95278	1250.0	1388.6	
56 Benzene	78	6.936	6.936	0.000	98	577990	50.0	52.3	
57 1,2-Dichloroethane	62	7.015	7.015	0.000	98	229574	50.0	51.6	
59 n-Heptane	43	7.307	7.307	0.000	91	192006	50.0	63.9	
61 Trichloroethene	130	7.678	7.678	0.000	96	137941	50.0	59.8	
63 Methylcyclohexane	83	7.922	7.922	0.000	93	223350	50.0	47.7	
64 1,2-Dichloropropane	63	7.952	7.952	0.000	87	147080	50.0	55.7	
65 1,4-Dioxane	88	8.031	8.031	0.000	37	22574	1000.0	866.1	
67 Dibromomethane	93	8.037	8.037	0.000	96	84132	50.0	52.5	
68 Dichlorobromomethane	83	8.226	8.226	0.000	98	155563	50.0	51.6	
70 2-Chloroethyl vinyl ether	63	8.530	8.530	0.000	94	156212	100.0	89.3	
71 cis-1,3-Dichloropropene	75	8.676	8.676	0.000	91	176096	50.0	53.2	
72 4-Methyl-2-pentanone (MIBK	43	8.822	8.822	0.000	97	205991	100.0	90.0	
73 Toluene	91	9.011	9.011	0.000	98	582879	50.0	50.7	
74 trans-1,3-Dichloropropene	75	9.254	9.254	0.000	98	150129	50.0	51.5	
75 Ethyl methacrylate	69	9.315	9.315	0.000	91	139196	50.0	44.9	
76 1,1,2-Trichloroethane	97	9.449	9.449	0.000	95	118936	50.0	50.1	
77 Tetrachloroethene	164	9.528	9.528	0.000	96	115172	50.0	58.8	
78 1,3-Dichloropropane	76	9.607	9.607	0.000	96	226456	50.0	51.6	
79 2-Hexanone	43	9.655	9.655	0.000	99	177220	100.0	117.9	
81 Chlorodibromomethane	129	9.820	9.820	0.000	92	97693	50.0	60.2	
82 Ethylene Dibromide	107	9.941	9.941	0.000	98	108345	50.0	51.5	
83 3-Chlorobenzotrifluoride	180	10.391	10.391	0.000	92	192060	50.0	52.2	
84 Chlorobenzene	112	10.428	10.428	0.000	93	384107	50.0	54.4	
85 4-Chlorobenzotrifluoride	180	10.483	10.483	0.000	97	179355	50.0	52.6	
86 1,1,1,2-Tetrachloroethane	131	10.519	10.519	0.000	88	110500	50.0	57.1	
87 Ethylbenzene	106	10.525	10.525	0.000	99	202389	50.0	50.8	
88 m-Xylene & p-Xylene	106	10.659	10.659	0.000	100	254920	50.0	51.6	
89 o-Xylene	106	11.042	11.042	0.000	97	238179	50.0	48.2	
90 Styrene	104	11.061	11.061	0.000	94	403271	50.0	53.1	
91 Bromoform	173	11.243	11.243	0.000	94	49683	50.0	57.4	
92 2-Chlorobenzotrifluoride	180	11.304	11.304	0.000	96	187158	50.0	49.7	
93 Isopropylbenzene	105	11.407	11.407	0.000	98	583803	50.0	49.3	
96 1,1,2,2-Tetrachloroethane	83	11.712	11.712	0.000	96	148881	50.0	46.8	
95 Bromobenzene	156	11.724	11.724	0.000	98	157945	50.0	49.8	
97 trans-1,4-Dichloro-2-buten	53	11.754	11.754	0.000	73	29887	50.0	29.7	
98 1,2,3-Trichloropropane	110	11.772	11.772	0.000	86	51746	50.0	42.9	
99 N-Propylbenzene	120	11.827	11.827	0.000	99	168030	50.0	46.0	
100 2-Chlorotoluene	126	11.912	11.912	0.000	94	148374	50.0	48.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.979	11.979	0.000	96	157433	50.0	49.4	
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	93	542140	50.0	45.7	
103 4-Chlorotoluene	126	12.040	12.040	0.000	99	162100	50.0	50.6	
104 tert-Butylbenzene	119	12.326	12.326	0.000	93	396900	50.0	42.3	
106 1,2,4-Trimethylbenzene	105	12.381	12.381	0.000	98	542865	50.0	44.7	
107 1,2-dichloro-4-(trifluorom	214	12.417	12.417	0.000	96	152786	50.0	44.4	
108 sec-Butylbenzene	105	12.551	12.551	0.000	95	629090	50.0	44.9	
109 1,3-Dichlorobenzene	146	12.667	12.667	0.000	95	292721	50.0	47.3	
110 4-Isopropyltoluene	119	12.703	12.703	0.000	95	518147	50.0	44.1	
111 1,4-Dichlorobenzene	146	12.770	12.770	0.000	90	303782	50.0	48.0	
113 2,4-Dichloro-1-(triflourom	214	12.788	12.788	0.000	96	163576	50.0	47.8	
114 2,5-Dichlorobenzotrifluori	214	12.831	12.831	0.000	98	163124	50.0	42.7	
116 n-Butylbenzene	91	13.111	13.111	0.000	98	473648	50.0	40.4	
117 1,2-Dichlorobenzene	146	13.123	13.123	0.000	93	290409	50.0	46.4	
118 1,2-Dibromo-3-Chloropropan	75	13.920	13.920	0.000	72	19283	50.0	33.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.060	14.060	0.000	100	674906	150.0	124.0	
121 2,3- & 3,4- Dichlorotoluen	125	14.473	14.473	0.000	99	486832	100.0	81.1	
122 1,2,4-Trichlorobenzene	180	14.741	14.741	0.000	94	197648	50.0	40.8	
123 Hexachlorobutadiene	225	14.887	14.887	0.000	97	82473	50.0	43.2	
124 Naphthalene	128	15.009	15.009	0.000	98	375406	50.0	38.4	
125 1,2,3-Trichlorobenzene	180	15.228	15.228	0.000	94	178073	50.0	39.3	
126 2,4,5-Trichlorotoluene	159	16.006	16.006	0.000	0	82795	50.0	27.2	
127 2,3,6-Trichlorotoluene	159	16.110	16.110	0.000	95	89662	50.0	31.0	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	98.3	
S 131 Xylenes, Total	106				0		100.0	99.7	
S 132 1,3-Dichloropropene, Total	1				0		100.0	104.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00145	Amount Added:	2.00	Units: uL		
voaWKet1stRes_00001	Amount Added:	2.00	Units: uL		
VOAVAPRI_00007	Amount Added:	2.00	Units: uL		
voaW2-cle2ndR_00005	Amount Added:	2.00	Units: uL		
voaWAcro1stRe_00001	Amount Added:	6.00	Units: uL		
voaEE2Restek_00001	Amount Added:	2.00	Units: uL		
VOA8260INT_00042	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00042	Amount Added:	2.00	Units: uL	Run Reagent	

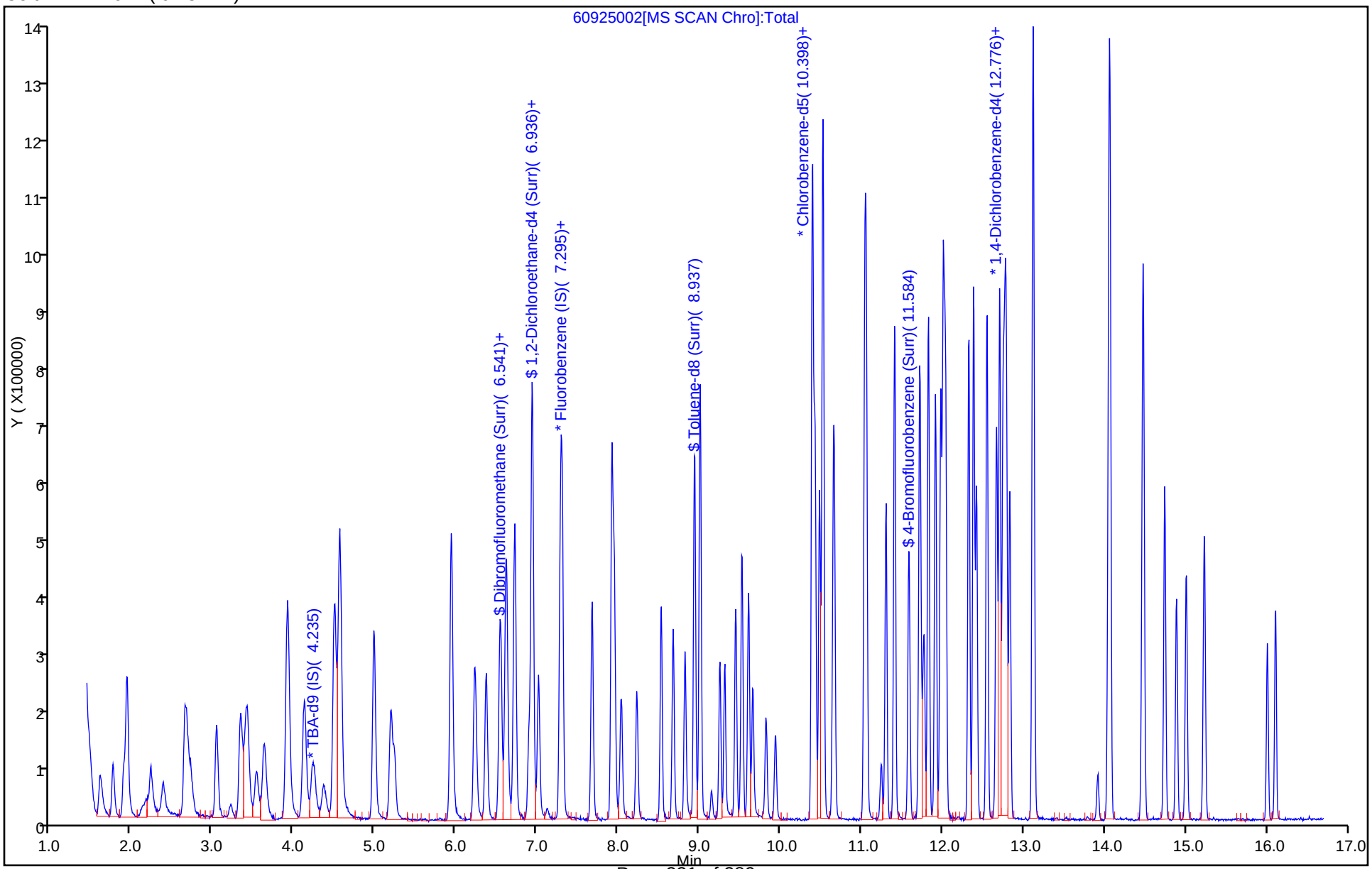
Report Date: 25-Sep-2015 14:24:03 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925002.D

Injection Date:	25-Sep-2015 12:54:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Lab Sample ID: CCVIS 180-155089/2 Calibration Date: 09/28/2015 11:03

Instrument ID: CHHP6 Calib Start Date: 07/31/2015 14:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/31/2015 18:02

Lab File ID: 60928002.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	0.3462	0.3043	0.1000	8.79	10.0	-12.1	20.0
Chloromethane	Ave	0.2984	0.3100	0.1000	10.4	10.0	3.9	20.0
Vinyl chloride	Ave	0.3214	0.3022	0.1000	9.40	10.0	-6.0	20.0
1,3-Butadiene	Ave	0.3013	0.3381	0.0100	11.2	10.0	12.2	20.0
Bromomethane	Ave	0.1735	0.1407	0.0500	8.11	10.0	-18.9	20.0
Chloroethane	Ave	0.2194	0.1907	0.0500	8.69	10.0	-13.1	20.0
Dichlorofluoromethane	Ave	0.5106	0.4478	0.0100	8.77	10.0	-12.3	20.0
Trichlorofluoromethane	Ave	0.4072	0.3440	0.1000	8.45	10.0	-15.5	20.0
Ethyl ether	Ave	0.2886	0.2856	0.0100	9.89	10.0	-1.1	20.0
Acrolein	Ave	0.0315	0.0254	0.0100	24.2	30.0	-19.4	20.0
1,1-Dichloroethene	Ave	0.2517	0.2389	0.1000	9.49	10.0	-5.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2657	0.2475	0.1000	9.31	10.0	-6.9	20.0
Acetone	Ave	0.0885	0.0865	0.0500	19.6	20.0	-2.2	20.0
Iodomethane	Ave	0.3379	0.3534	0.0100	10.5	10.0	4.6	20.0
Carbon disulfide	Ave	0.6522	0.6368	0.1000	9.76	10.0	-2.4	20.0
Allyl chloride	Ave	0.1419	0.1377	0.0100	9.70	10.0	-3.0	20.0
Methyl acetate	Ave	0.2074	0.2371	0.1000	57.1	50.0	14.3	20.0
Methylene Chloride	Lin2		0.3036	0.1000	8.56	10.0	-14.4	20.0
tert-Butyl alcohol	Ave	1.125	1.045	0.0100	92.9	100	-7.1	20.0
Acrylonitrile	Ave	0.1046	0.1091	0.0100	104	100	4.4	20.0
trans-1,2-Dichloroethene	Ave	0.2905	0.2655	0.1000	9.14	10.0	-8.6	20.0
Methyl tert-butyl ether	Ave	0.8703	0.8010	0.1000	9.20	10.0	-8.0	20.0
Hexane	Ave	0.3936	0.4611	0.0100	11.7	10.0	17.1	20.0
1,1-Dichloroethane	Ave	0.5200	0.5183	0.2000	9.97	10.0	-0.3	20.0
Vinyl acetate	Ave	0.4197	0.4614	0.0100	11.0	10.0	9.9	20.0
cis-1,2-Dichloroethene	Ave	0.3158	0.2973	0.1000	9.41	10.0	-5.9	20.0
2,2-Dichloropropane	Ave	0.2629	0.2411	0.0100	9.17	10.0	-8.3	20.0
2-Butanone (MEK)	Ave	0.1207	0.1349	0.0500	22.3	20.0	11.7	20.0
Bromochloromethane	Ave	0.1269	0.1193	0.0100	9.40	10.0	-6.0	20.0
Tetrahydrofuran	Ave	0.0813	0.0961	0.0100	23.6	20.0	18.1	20.0
Chloroform	Ave	0.5161	0.4723	0.2000	9.15	10.0	-8.5	20.0
1,1,1-Trichloroethane	Ave	0.3814	0.3623	0.1000	9.50	10.0	-5.0	20.0
Cyclohexane	Ave	0.4886	0.5468	0.1000	11.2	10.0	11.9	20.0
Carbon tetrachloride	Ave	0.2694	0.2700	0.1000	10.0	10.0	0.2	20.0
1,1-Dichloropropene	Ave	0.4102	0.4065	0.0100	9.91	10.0	-0.9	20.0
Isobutyl alcohol	Ave	0.0072	0.0077*	0.0100	266	250	6.4	20.0
Benzene	Ave	1.165	1.160	0.5000	9.95	10.0	-0.5	20.0
1,2-Dichloroethane	Ave	0.4694	0.4581	0.1000	9.76	10.0	-2.4	20.0
n-Heptane	Ave	0.3168	0.4341	0.0100	13.7	10.0	37.0*	20.0
Trichloroethene	Ave	0.2430	0.2663	0.2000	11.0	10.0	9.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Lab Sample ID: CCVIS 180-155089/2 Calibration Date: 09/28/2015 11:03

Instrument ID: CHHP6 Calib Start Date: 07/31/2015 14:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/31/2015 18:02

Lab File ID: 60928002.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
Methylcyclohexane	Ave	0.4932	0.4857	0.1000	9.85	10.0	-1.5	20.0
1,2-Dichloropropane	Ave	0.2784	0.2979	0.1000	10.7	10.0	7.0	20.0
1,4-Dioxane	Ave	0.0027	0.0028*	0.0100	203	200	1.7	20.0
Dibromomethane	Ave	0.1690	0.1602	0.0100	9.48	10.0	-5.2	20.0
Bromodichloromethane	Ave	0.3176	0.2996	0.2000	9.43	10.0	-5.7	20.0
cis-1,3-Dichloropropene	Ave	0.3489	0.3780	0.2000	10.8	10.0	8.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.028	1.000	0.1000	19.5	20.0	-2.7	20.0
Toluene	Ave	5.159	5.048	0.4000	9.78	10.0	-2.2	20.0
trans-1,3-Dichloropropene	Ave	1.310	1.325	0.1000	10.1	10.0	1.1	20.0
Ethyl methacrylate	Ave	1.391	1.420	0.0100	10.2	10.0	2.1	20.0
1,1,2-Trichloroethane	Ave	1.067	1.008	0.1000	9.45	10.0	-5.5	20.0
Tetrachloroethene	Ave	0.8800	0.9364	0.2000	10.6	10.0	6.4	20.0
1,3-Dichloropropane	Ave	1.971	1.952	0.0100	9.90	10.0	-1.0	20.0
2-Hexanone	Ave	0.6750	0.8336	0.1000	24.7	20.0	23.5*	20.0
Dibromochloromethane	Ave	0.7283	0.7527	0.1000	10.3	10.0	3.4	20.0
1,2-Dibromoethane (EDB)	Ave	0.9442	0.9452	0.1000	10.0	10.0	0.1	20.0
3-Chlorobenzotrifluoride	Ave	1.652	1.712	0.0100	10.4	10.0	3.6	20.0
Chlorobenzene	Ave	3.171	3.208	0.5000	10.1	10.0	1.2	20.0
4-Chlorobenzotrifluoride	Ave	1.531	1.582	0.0100	10.3	10.0	3.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8691	0.9282	0.0100	10.7	10.0	6.8	20.0
Ethylbenzene	Ave	1.789	1.823	0.1000	10.2	10.0	1.9	20.0
m-Xylene & p-Xylene	Ave	2.220	2.289	0.1000	10.3	10.0	3.1	20.0
o-Xylene	Ave	2.221	2.208	0.3000	9.94	10.0	-0.6	20.0
Styrene	Ave	3.411	3.537	0.3000	10.4	10.0	3.7	20.0
Bromoform	Ave	0.3887	0.4222	0.1000	10.9	10.0	8.6	20.0
2-Chlorobenzotrifluoride	Ave	1.692	1.685	0.0100	9.96	10.0	-0.4	20.0
Isopropylbenzene	Ave	5.314	5.489	0.1000	10.3	10.0	3.3	20.0
1,1,2,2-Tetrachloroethane	Ave	1.428	1.239	0.3000	8.68	10.0	-13.2	20.0
Bromobenzene	Ave	0.8038	0.8279	0.0100	10.3	10.0	3.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2549	0.2221	0.0100	8.71	10.0	-12.9	20.0
1,2,3-Trichloropropane	Ave	0.3057	0.2693	0.0100	8.81	10.0	-11.9	20.0
N-Propylbenzene	Ave	0.9257	0.9103	0.0100	9.83	10.0	-1.7	20.0
2-Chlorotoluene	Ave	0.7686	0.7704	0.0100	10.0	10.0	0.2	20.0
3-Chlorotoluene	Ave	0.8072	0.8128	0.0100	10.1	10.0	0.7	20.0
1,3,5-Trimethylbenzene	Ave	3.010	2.912	0.0100	9.68	10.0	-3.2	20.0
4-Chlorotoluene	Ave	0.8119	0.7869	0.0100	9.69	10.0	-3.1	20.0
tert-Butylbenzene	Ave	2.378	2.288	0.0100	9.62	10.0	-3.8	20.0
1,2,4-Trimethylbenzene	Ave	3.078	2.981	0.0100	9.69	10.0	-3.1	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8719	0.8556	0.0100	9.81	10.0	-1.9	20.0
sec-Butylbenzene	Ave	3.550	3.439	0.0100	9.69	10.0	-3.1	20.0
1,3-Dichlorobenzene	Ave	1.570	1.476	0.6000	9.40	10.0	-6.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Lab Sample ID: CCVIS 180-155089/2 Calibration Date: 09/28/2015 11:03

Instrument ID: CHHP6 Calib Start Date: 07/31/2015 14:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/31/2015 18:02

Lab File ID: 60928002.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
4-Isopropyltoluene	Ave	2.979	2.784	0.0100	9.35	10.0	-6.5	20.0
1,4-Dichlorobenzene	Ave	1.605	1.560	0.5000	9.72	10.0	-2.8	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.8674	0.8549	0.0100	9.86	10.0	-1.4	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.9687	0.8947	0.0100	9.24	10.0	-7.6	20.0
n-Butylbenzene	Ave	2.974	2.698	0.0100	9.07	10.0	-9.3	20.0
1,2-Dichlorobenzene	Ave	1.585	1.442	0.4000	9.09	10.0	-9.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1454	0.1102	0.0500	7.58	10.0	-24.2*	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.380	1.235	0.0100	26.9	30.0	-10.5	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.522	1.347	0.0100	17.7	20.0	-11.5	20.0
1,2,4-Trichlorobenzene	Ave	1.229	1.099	0.2000	8.94	10.0	-10.6	20.0
Hexachlorobutadiene	Ave	0.4839	0.4632	0.0100	9.57	10.0	-4.3	20.0
Naphthalene	Ave	2.479	2.398	0.0100	9.67	10.0	-3.3	20.0
1,2,3-Trichlorobenzene	Ave	1.150	0.9934	0.0100	8.64	10.0	-13.6	20.0
2,4,5-Trichlorotoluene	Ave	0.7719	0.6681	0.0100	8.66	10.0	-13.4	20.0
2,3,6-Trichlorotoluene	Ave	0.7323	0.6491	0.0100	8.86	10.0	-11.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2303	0.2200		9.55	10.0	-4.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3715	0.3523		9.48	10.0	-5.2	20.0
Toluene-d8 (Surr)	Ave	3.944	3.867		9.81	10.0	-1.9	20.0
4-Bromofluorobenzene (Surr)	Ave	1.751	1.612		9.21	10.0	-7.9	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 28-Sep-2015 11:03:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0008724-002
Operator ID: 034635 Instrument ID: CHHP6
Sublist: chrom-MSVOA_LL_CHHP6*sub5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Sep-2015 13:27:51 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: fergusond Date: 28-Sep-2015 11:24:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.241	4.241	0.000	92	194313	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.283	7.283	0.000	97	501521	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.398	0.000	90	120842	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.746	0.000	97	193962	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.547	0.000	94	110311	50.0	47.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.930	6.930	0.000	74	176677	50.0	47.4	
$ 7 Toluene-d8 (Surr)	98	8.938	8.938	0.000	94	467342	50.0	49.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.584	0.000	85	194837	50.0	46.0	
11 Dichlorodifluoromethane	85	1.613	1.613	0.000	100	152632	50.0	43.9	
12 Chloromethane	50	1.765	1.765	0.000	99	155491	50.0	51.9	
13 Vinyl chloride	62	1.905	1.905	0.000	98	151570	50.0	47.0	
14 Butadiene	39	1.942	1.942	0.000	97	169550	50.0	56.1	
15 Bromomethane	94	2.240	2.240	0.000	91	70556	50.0	40.5	
16 Chloroethane	64	2.380	2.380	0.000	99	95629	50.0	43.5	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	99	224577	50.0	43.9	
18 Trichlorofluoromethane	101	2.684	2.684	0.000	94	172520	50.0	42.2	
20 Ethyl ether	59	3.037	3.037	0.000	94	143222	50.0	49.5	
21 Acrolein	56	3.213	3.213	0.000	99	38175	150.0	120.9	
22 1,1-Dichloroethene	96	3.341	3.341	0.000	95	119805	50.0	47.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.402	3.402	0.000	94	124099	50.0	46.6	
24 Acetone	43	3.426	3.426	0.000	76	86787	100.0	97.8	
25 Iodomethane	142	3.530	3.530	0.000	100	177220	50.0	52.3	
26 Carbon disulfide	76	3.633	3.633	0.000	99	319379	50.0	48.8	
29 3-Chloro-1-propene	76	3.913	3.913	0.000	65	69054	50.0	48.5	
30 Methyl acetate	43	3.919	3.919	0.000	97	594429	250.0	285.7	
31 Methylene Chloride	84	4.126	4.126	0.000	98	152274	50.0	42.8	
32 2-Methyl-2-propanol	59	4.387	4.387	0.000	90	101545	500.0	464.4	
33 Acrylonitrile	53	4.503	4.503	0.000	97	547353	500.0	521.9	
34 trans-1,2-Dichloroethene	96	4.558	4.558	0.000	94	133138	50.0	45.7	
35 Methyl tert-butyl ether	73	4.564	4.564	0.000	99	401721	50.0	46.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.984	4.984	0.000	94	231245	50.0	58.6	
37 1,1-Dichloroethane	63	5.190	5.190	0.000	97	259937	50.0	49.8	
38 Vinyl acetate	43	5.239	5.239	0.000	98	231378	50.0	55.0	
43 cis-1,2-Dichloroethene	96	5.933	5.933	0.000	85	149119	50.0	47.1	
42 2,2-Dichloropropane	77	5.939	5.939	0.000	68	120922	50.0	45.9	
44 2-Butanone (MEK)	43	5.951	5.951	0.000	68	135283	100.0	111.7	
48 Chlorobromomethane	128	6.225	6.225	0.000	91	59807	50.0	47.0	
49 Tetrahydrofuran	42	6.243	6.243	0.000	89	96353	100.0	118.1	
50 Chloroform	83	6.371	6.371	0.000	95	236883	50.0	45.8	
51 1,1,1-Trichloroethane	97	6.535	6.535	0.000	96	181676	50.0	47.5	
52 Cyclohexane	56	6.620	6.620	0.000	96	274231	50.0	56.0	
53 Carbon tetrachloride	117	6.717	6.717	0.000	96	135416	50.0	50.1	
54 1,1-Dichloropropene	75	6.730	6.730	0.000	92	203866	50.0	49.6	
55 Isobutyl alcohol	41	6.900	6.900	0.000	92	96517	1250.0	1330.2	
56 Benzene	78	6.942	6.942	0.000	98	581610	50.0	49.8	
57 1,2-Dichloroethane	62	7.015	7.015	0.000	98	229735	50.0	48.8	
59 n-Heptane	43	7.307	7.307	0.000	95	217719	50.0	68.5	
61 Trichloroethene	130	7.679	7.679	0.000	96	133570	50.0	54.8	
63 Methylcyclohexane	83	7.922	7.922	0.000	94	243574	50.0	49.2	
64 1,2-Dichloropropane	63	7.952	7.952	0.000	86	149396	50.0	53.5	
67 Dibromomethane	93	8.038	8.038	0.000	95	80350	50.0	47.4	
65 1,4-Dioxane	88	8.038	8.038	0.000	88	28021	1000.0	1016.7	M
68 Dichlorobromomethane	83	8.232	8.232	0.000	98	150253	50.0	47.2	
71 cis-1,3-Dichloropropene	75	8.676	8.676	0.000	91	189582	50.0	54.2	
72 4-Methyl-2-pentanone (MIBK	43	8.822	8.822	0.000	96	241787	100.0	97.3	
73 Toluene	91	9.011	9.011	0.000	98	609957	50.0	48.9	
74 trans-1,3-Dichloropropene	75	9.254	9.254	0.000	99	160080	50.0	50.6	
75 Ethyl methacrylate	69	9.315	9.315	0.000	90	171561	50.0	51.0	
76 1,1,2-Trichloroethane	97	9.449	9.449	0.000	95	121817	50.0	47.2	
77 Tetrachloroethene	164	9.528	9.528	0.000	94	113157	50.0	53.2	
78 1,3-Dichloropropane	76	9.607	9.607	0.000	96	235922	50.0	49.5	
79 2-Hexanone	43	9.656	9.656	0.000	97	201464	100.0	123.5	
81 Chlorodibromomethane	129	9.820	9.820	0.000	91	90961	50.0	51.7	
82 Ethylene Dibromide	107	9.936	9.936	0.000	99	114217	50.0	50.1	
83 3-Chlorobenzotrifluoride	180	10.392	10.392	0.000	91	206832	50.0	51.8	
84 Chlorobenzene	112	10.428	10.428	0.000	91	387686	50.0	50.6	
85 4-Chlorobenzotrifluoride	180	10.483	10.483	0.000	97	191150	50.0	51.7	
86 1,1,1,2-Tetrachloroethane	131	10.520	10.520	0.000	87	112164	50.0	53.4	
87 Ethylbenzene	106	10.526	10.526	0.000	99	220289	50.0	51.0	
88 m-Xylene & p-Xylene	106	10.659	10.659	0.000	99	276573	50.0	51.5	
89 o-Xylene	106	11.037	11.037	0.000	98	266861	50.0	49.7	
90 Styrene	104	11.061	11.061	0.000	94	427465	50.0	51.9	
91 Bromoform	173	11.244	11.244	0.000	94	51024	50.0	54.3	
92 2-Chlorobenzotrifluoride	180	11.304	11.304	0.000	95	203614	50.0	49.8	
93 Isopropylbenzene	105	11.408	11.408	0.000	98	663339	50.0	51.6	
96 1,1,2,2-Tetrachloroethane	83	11.712	11.712	0.000	96	149767	50.0	43.4	
95 Bromobenzene	156	11.724	11.724	0.000	98	160573	50.0	51.5	
97 trans-1,4-Dichloro-2-buten	53	11.748	11.748	0.000	80	43076	50.0	43.6	
98 1,2,3-Trichloropropane	110	11.773	11.773	0.000	85	52242	50.0	44.1	
99 N-Propylbenzene	120	11.828	11.828	0.000	99	176565	50.0	49.2	
100 2-Chlorotoluene	126	11.913	11.913	0.000	94	149428	50.0	50.1	
101 3-Chlorotoluene	126	11.980	11.980	0.000	97	157645	50.0	50.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	94	564818	50.0	48.4	
103 4-Chlorotoluene	126	12.040	12.040	0.000	100	152632	50.0	48.5	
104 tert-Butylbenzene	119	12.326	12.326	0.000	92	443712	50.0	48.1	
106 1,2,4-Trimethylbenzene	105	12.381	12.381	0.000	98	578280	50.0	48.4	
107 1,2-dichloro-4-(trifluorom	214	12.418	12.418	0.000	97	165959	50.0	49.1	
108 sec-Butylbenzene	105	12.551	12.551	0.000	96	667116	50.0	48.4	
109 1,3-Dichlorobenzene	146	12.667	12.667	0.000	95	286378	50.0	47.0	
110 4-Isopropyltoluene	119	12.704	12.704	0.000	95	540061	50.0	46.7	
111 1,4-Dichlorobenzene	146	12.770	12.770	0.000	88	302644	50.0	48.6	
113 2,4-Dichloro-1-(triflourom	214	12.789	12.789	0.000	95	165808	50.0	49.3	
114 2,5-Dichlorobenzotrifluori	214	12.831	12.831	0.000	98	173529	50.0	46.2	
116 n-Butylbenzene	91	13.111	13.111	0.000	98	523261	50.0	45.4	
117 1,2-Dichlorobenzene	146	13.123	13.123	0.000	94	279606	50.0	45.5	
118 1,2-Dibromo-3-Chloropropan	75	13.914	13.914	0.000	72	21367	50.0	37.9	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.060	14.060	0.000	99	718745	150.0	134.3	
121 2,3- & 3,4- Dichlorotoluen	125	14.474	14.474	0.000	98	522395	100.0	88.5	
122 1,2,4-Trichlorobenzene	180	14.741	14.741	0.000	93	213076	50.0	44.7	
123 Hexachlorobutadiene	225	14.894	14.894	0.000	96	89843	50.0	47.9	
124 Naphthalene	128	15.009	15.009	0.000	99	465186	50.0	48.4	
125 1,2,3-Trichlorobenzene	180	15.228	15.228	0.000	94	192672	50.0	43.2	
126 2,4,5-Trichlorotoluene	159	16.007	16.007	0.000	0	129588	50.0	43.3	
127 2,3,6-Trichlorotoluene	159	16.110	16.110	0.000	93	125908	50.0	44.3	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		100.0	101.3	
S 130 1,2-Dichloroethene, Total	96				0		100.0	92.8	
S 132 1,3-Dichloropropene, Total	1				0		100.0	104.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00145	Amount Added:	2.00	Units: uL		
voaWKet1stRes_00001	Amount Added:	2.00	Units: uL		
VOAVAPRI_00007	Amount Added:	2.00	Units: uL		
voaWAcro1stRe_00001	Amount Added:	6.00	Units: uL		
voaWEEpri Res_00005	Amount Added:	2.00	Units: uL		
VOA8260INT_00042	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00042	Amount Added:	2.00	Units: uL	Run Reagent	

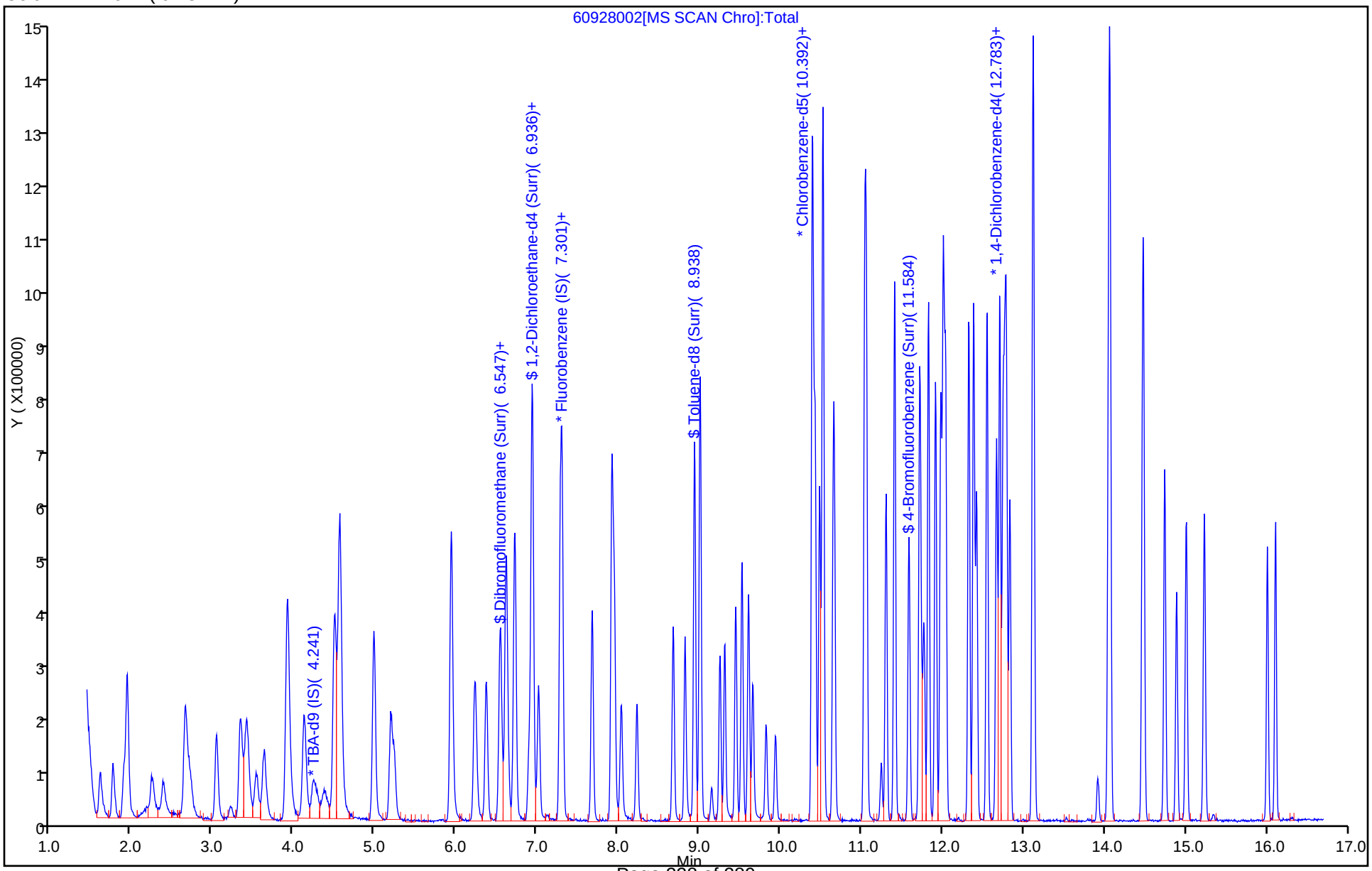
Report Date: 28-Sep-2015 13:27:52 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928002.D

Injection Date:	28-Sep-2015 11:03:30	Instrument ID:	CHHP6	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

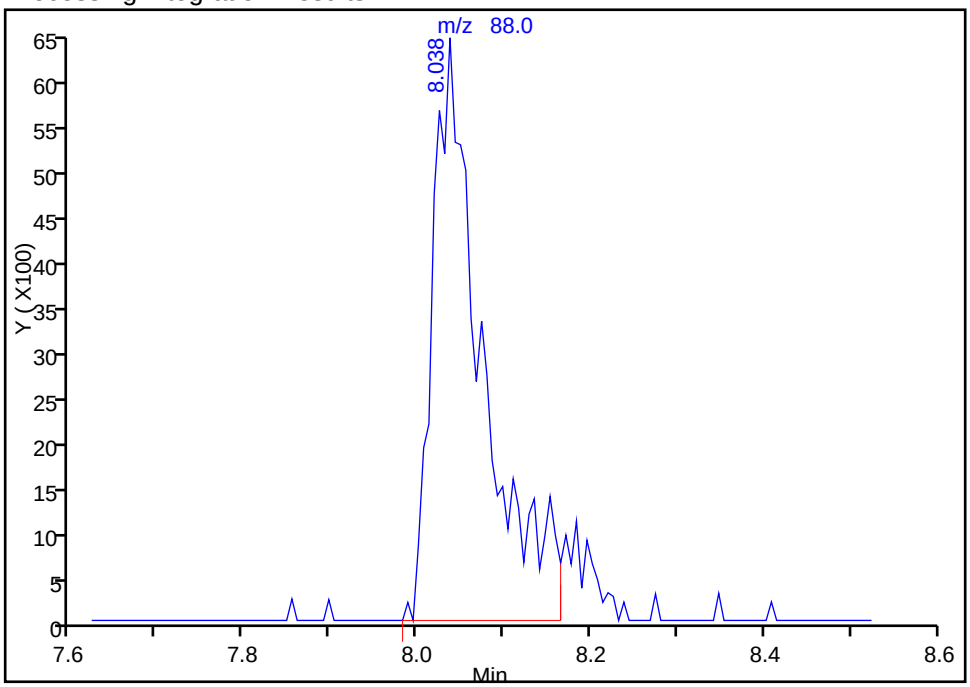
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928002.D
Injection Date: 28-Sep-2015 11:03:30 Instrument ID: CHHP6
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

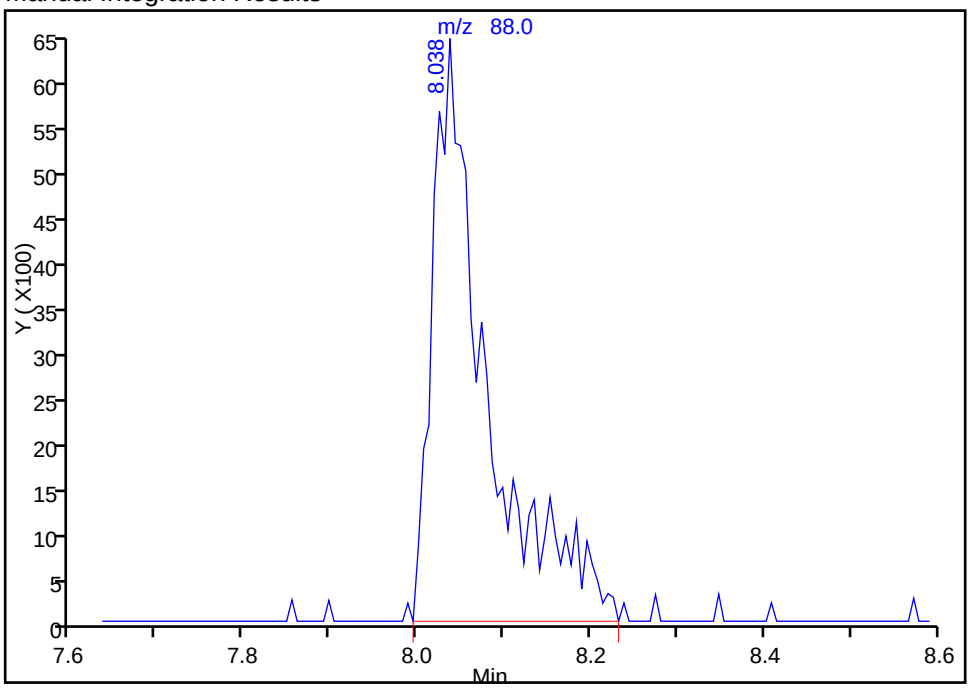
Processing Integration Results

RT: 8.04
Area: 25976
Amount: 942.4574
Amount Units: ng



Manual Integration Results

RT: 8.04
Area: 28021
Amount: 1016.6538
Amount Units: ng



Reviewer: fergusond, 28-Sep-2015 11:24:43
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731001.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	31-Jul-2015 12:10:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	180-0007999-001				
Operator ID:	001562	Instrument ID:	CHHP6		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA_LL_CHHP6.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	03-Aug-2015 12:15:22	Calib Date:	31-Jul-2015 18:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK049				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.381	8.381	0.000	0	114672	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

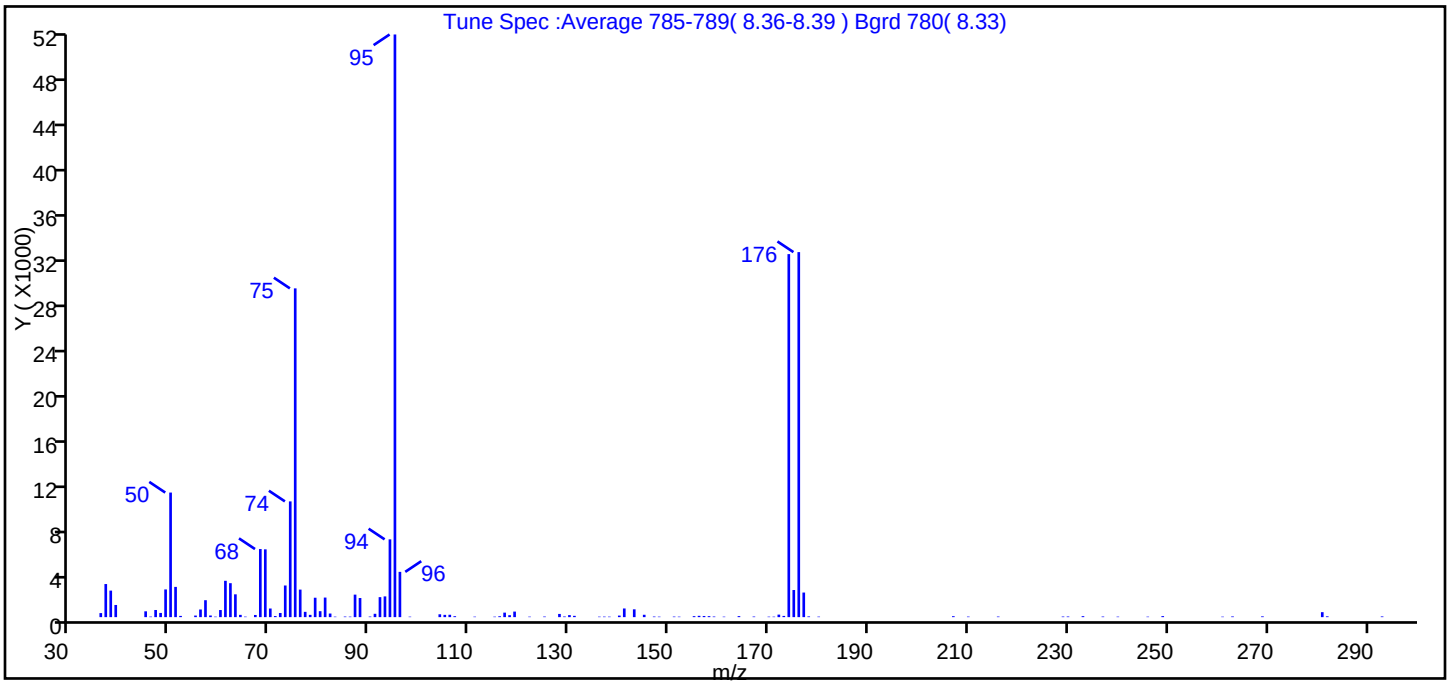
VOABFB25_00064 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731001.D
Injection Date: 31-Jul-2015 12:10:30 Instrument ID: CHHP6
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_CHHP6 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.4
75	30 to 60% of m/z 95	56.4
96	5 to 9% of m/z 95	7.8
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	62.3
175	5 to 9% of m/z 174	4.7 (7.5)
176	Greater than 95% but less than 101% of m/z 174	62.6 (100.6)
177	5 to 9% of m/z 176	4.2 (6.7)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731001.D\MSVOA_LL_CHHP6.rslt\spectra
Injection Date: 31-Jul-2015 12:10:30
Spectrum: Tune Spec :Average 785-789(8.36-8.39) Bgrd 780(8.33)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 113

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	357	73.00	2786	116.00	79	170.00	42
37.00	2914	74.00	10190	117.00	397	171.00	42
38.00	2336	75.00	28944	118.00	172	172.00	223
39.00	1071	76.00	2425	119.00	489	173.00	107
45.00	513	77.00	467	122.00	43	174.00	31960
46.00	47	78.00	201	125.00	52	175.00	2388
47.00	630	79.00	1709	128.00	283	176.00	32136
48.00	370	80.00	524	129.00	57	177.00	2165
49.00	2439	81.00	1723	130.00	180	178.00	64
50.00	10968	82.00	318	131.00	115	180.00	45
51.00	2663	83.00	42	136.00	43	207.00	82
52.00	110	85.00	51	137.00	46	210.00	48
55.00	140	86.00	45	138.00	43	216.00	52
56.00	674	87.00	1982	140.00	137	229.00	53
57.00	1491	88.00	1683	141.00	763	230.00	56
58.00	144	90.00	51	143.00	689	233.00	85
59.00	42	91.00	295	145.00	209	237.00	52
60.00	626	92.00	1761	147.00	52	240.00	44
61.00	3200	93.00	1826	148.00	43	246.00	42
62.00	2990	94.00	6848	151.00	49	249.00	90
63.00	2009	95.00	51296	152.00	43	261.00	42
64.00	201	96.00	3987	155.00	87	263.00	61
65.00	44	98.00	42	156.00	116	269.00	68
67.00	191	104.00	251	157.00	98	281.00	438
68.00	5995	105.00	201	158.00	87	282.00	71
69.00	5969	106.00	210	159.00	54	293.00	62
70.00	760	107.00	82	161.00	42		
71.00	96	111.00	42	164.00	89		
72.00	366	115.00	42	167.00	53		

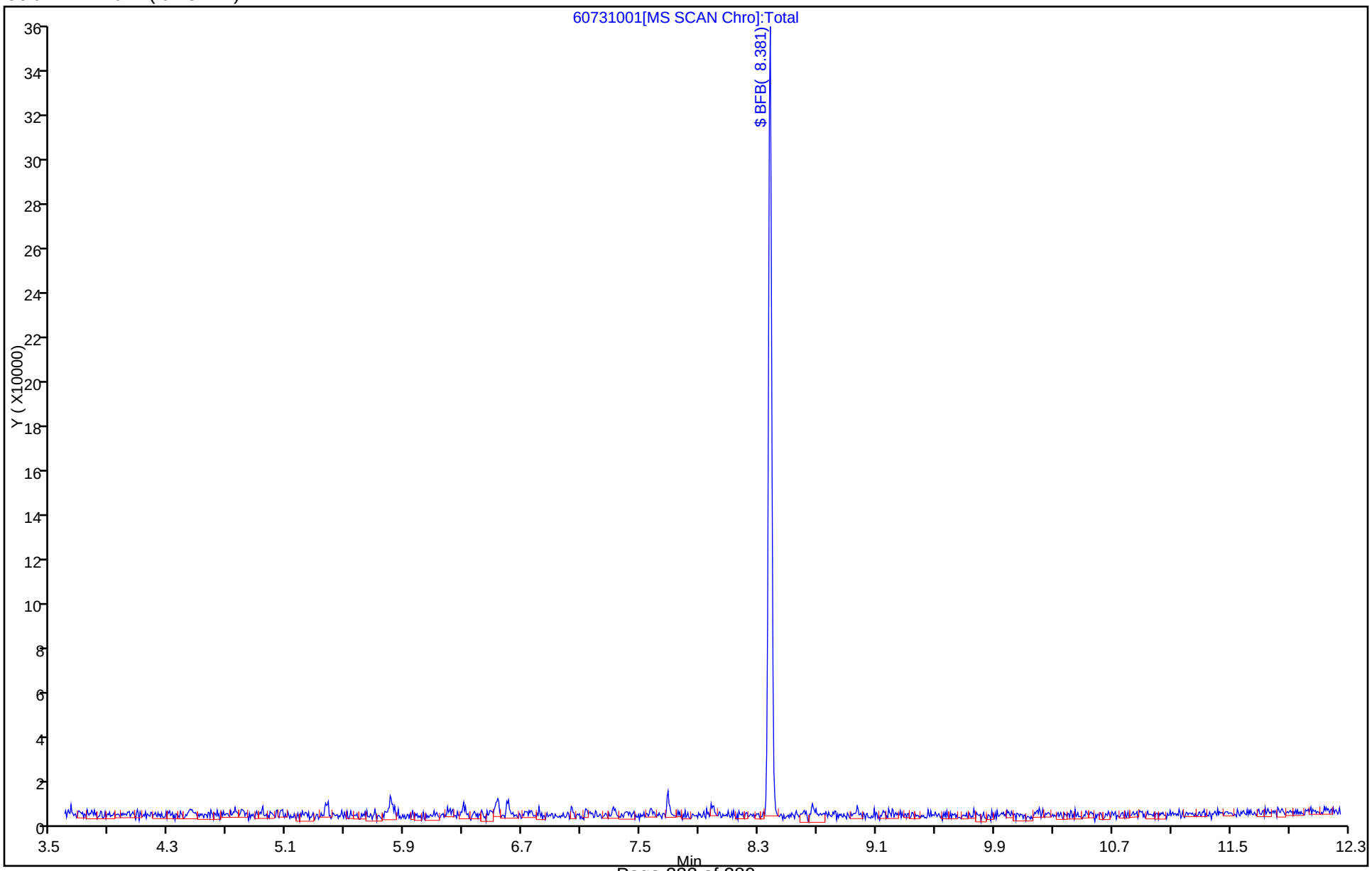
Report Date: 03-Aug-2015 12:15:24 Chrom Revision: 2.2 09-Jul-2015 10:16:20

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731001.D

Injection Date:	31-Jul-2015 12:10:30	Instrument ID:	CHHP6	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_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925001.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 25-Sep-2015 12:13:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0008690-001
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Sep-2015 14:24:01 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: fergusond Date: 25-Sep-2015 12:24:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.381	8.381	0.000	0	80966	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

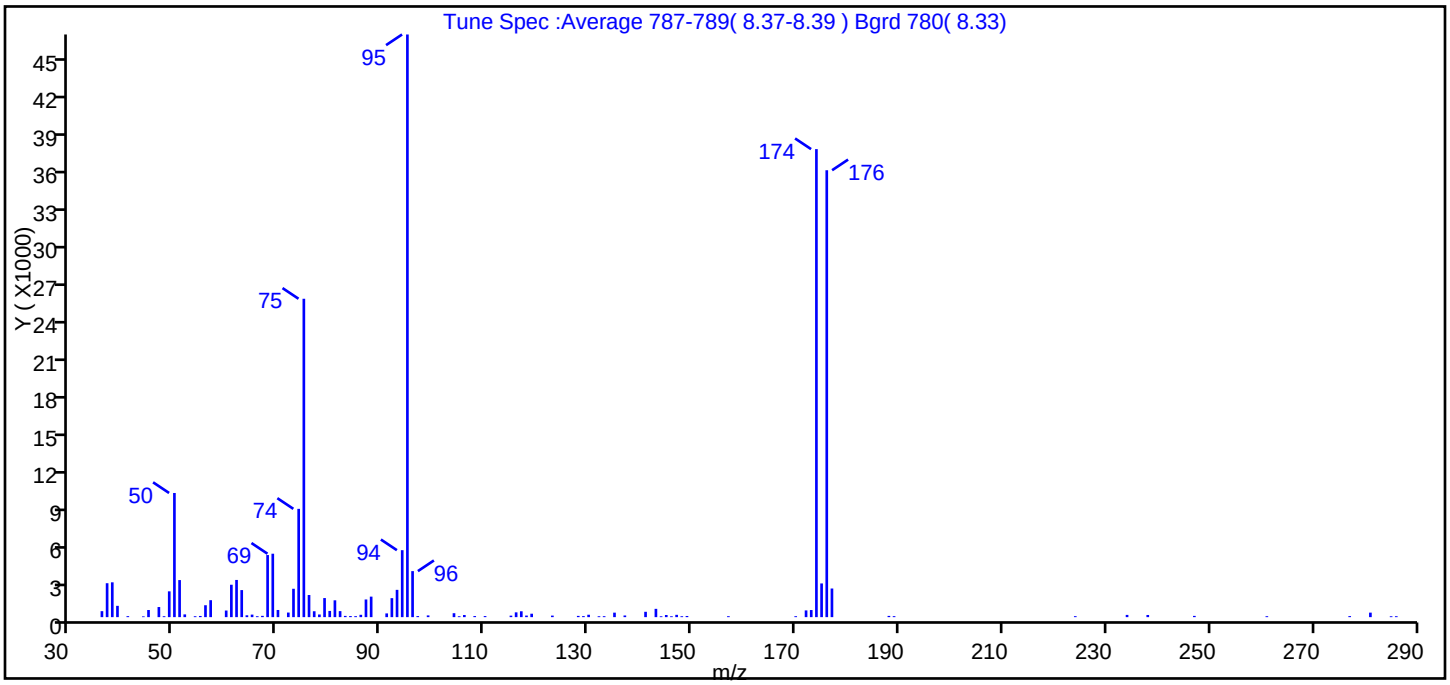
VOABFB25_00066 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925001.D
Injection Date: 25-Sep-2015 12:13:30 Instrument ID: CHHP6
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_CHHP6 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.3
75	30 to 60% of m/z 95	54.6
96	5 to 9% of m/z 95	7.9
173	Less than 2% of m/z 174	1.2 (1.5)
174	50 to 120% of m/z 95	80.3
175	5 to 9% of m/z 174	5.8 (7.2)
176	Greater than 95% but less than 101% of m/z 174	76.7 (95.5)
177	5 to 9% of m/z 176	4.9 (6.4)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925001.D\MSVOA_LL_CHHP6.rslt\spectra
Injection Date: 25-Sep-2015 12:13:30
Spectrum: Tune Spec :Average 787-789(8.37-8.39) Bgrd 780(8.33)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 98

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	476	68.00	4940	96.00	3661	146.00	69
37.00	2699	69.00	5046	97.00	83	147.00	184
38.00	2770	70.00	569	99.00	138	148.00	72
39.00	899	72.00	365	104.00	313	149.00	92
41.00	79	73.00	2257	105.00	70	157.00	74
44.00	60	74.00	8615	106.00	169	170.00	75
45.00	567	75.00	25328	108.00	86	172.00	536
47.00	804	76.00	1760	110.00	85	173.00	565
48.00	73	77.00	469	115.00	119	174.00	37232
49.00	2053	78.00	211	116.00	382	175.00	2681
50.00	9877	79.00	1518	117.00	467	176.00	35552
51.00	2949	80.00	494	118.00	125	177.00	2278
52.00	219	81.00	1339	119.00	273	188.00	99
54.00	72	82.00	478	123.00	123	189.00	78
55.00	93	83.00	99	128.00	100	224.00	77
56.00	947	84.00	86	129.00	81	234.00	178
57.00	1349	85.00	78	130.00	192	238.00	172
60.00	526	86.00	186	132.00	70	247.00	100
61.00	2578	87.00	1406	133.00	75	261.00	74
62.00	2959	88.00	1632	135.00	358	277.00	83
63.00	2152	91.00	297	137.00	132	281.00	359
64.00	147	92.00	1510	141.00	426	285.00	70
65.00	202	93.00	2171	143.00	660	286.00	74
66.00	72	94.00	5327	144.00	68		
67.00	103	95.00	46352	145.00	170		

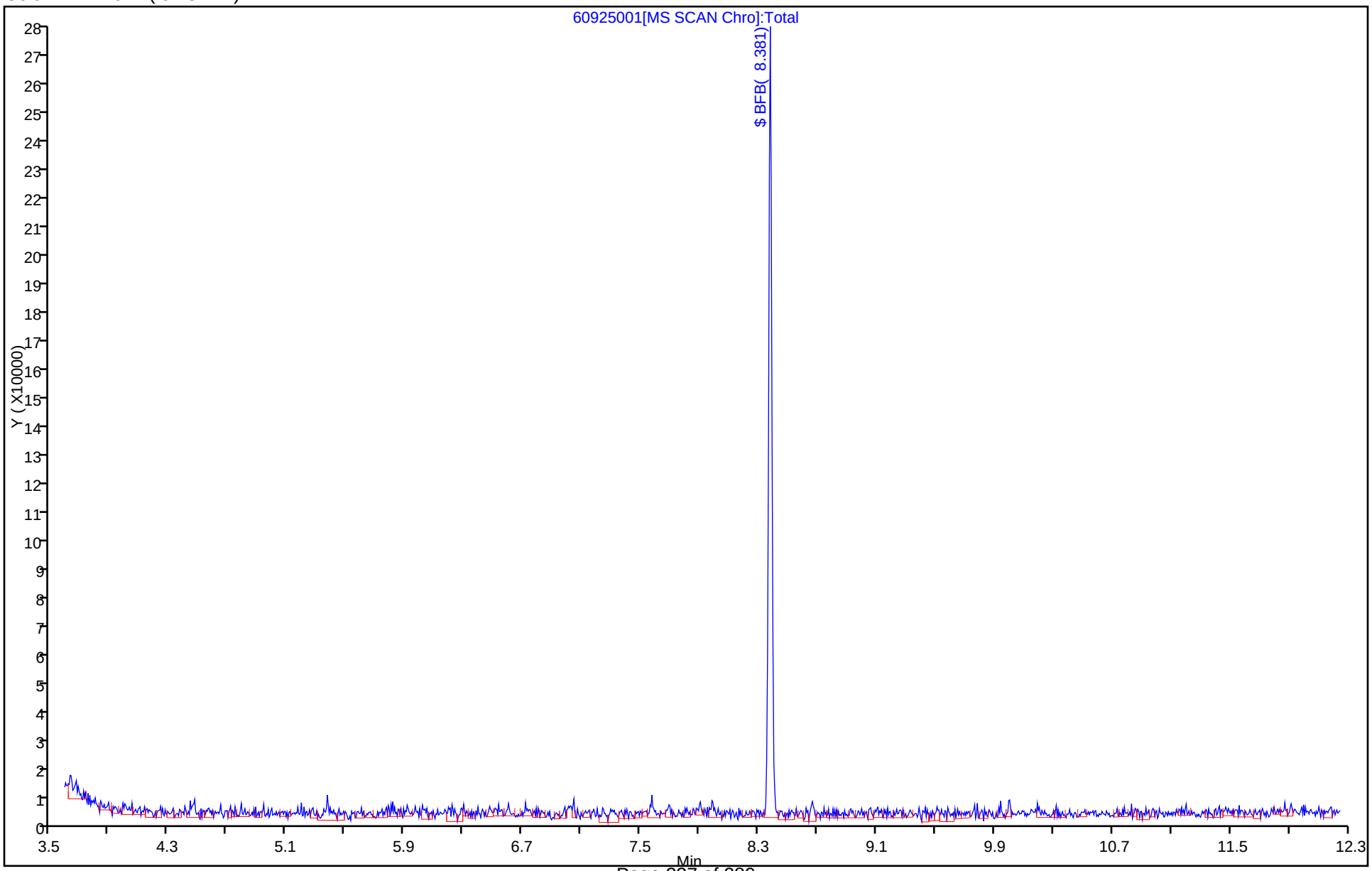
Report Date: 25-Sep-2015 14:24:01 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925001.D

Injection Date:	25-Sep-2015 12:13:30	Instrument ID:	CHHP6	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_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928001.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 28-Sep-2015 10:22:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0008724-001
Operator ID: 034635 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Sep-2015 13:27:49 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: fergusond Date: 28-Sep-2015 10:43:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.378	8.378	0.000	0	123904	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

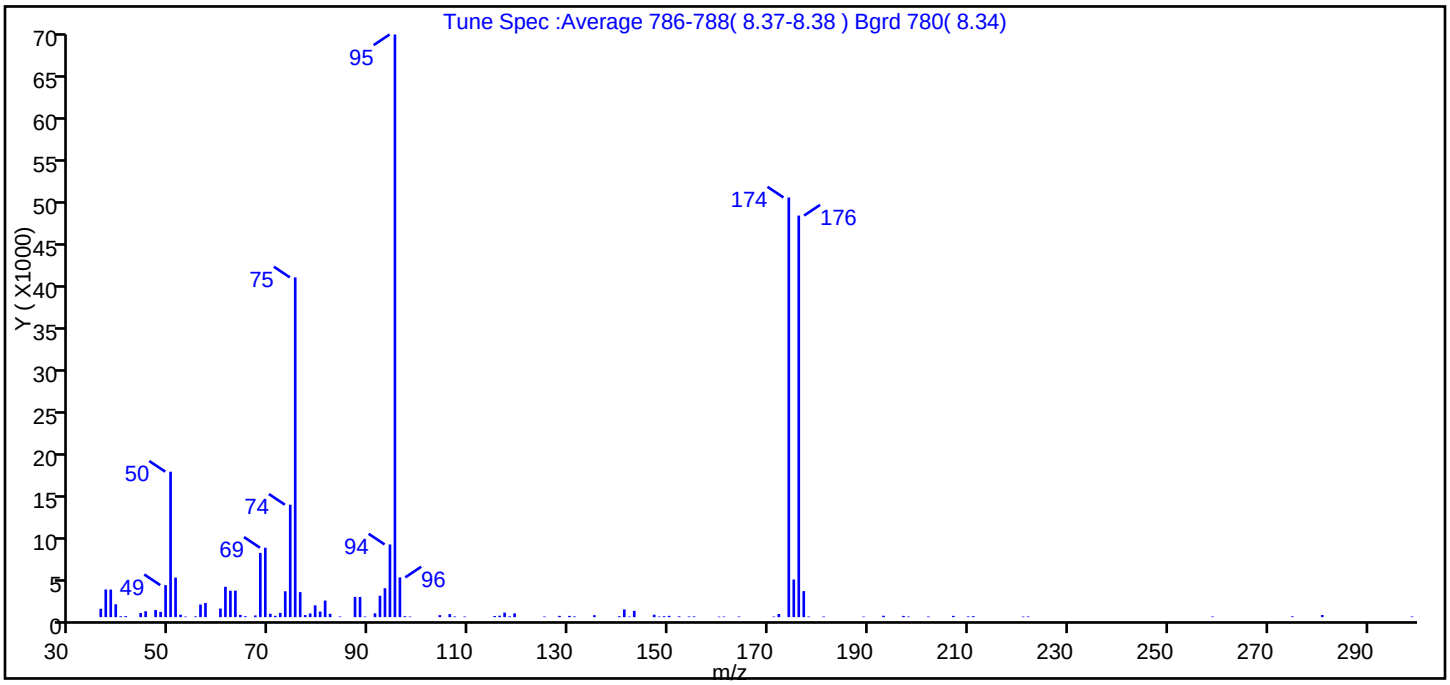
VOABFB25_00067 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928001.D				
Injection Date:	28-Sep-2015 10:22:30	Instrument ID:	CHHP6		
Lims ID:	BFB				
Client ID:					
Operator ID:	034635	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		
Tune Method:	BFB Method 8260				

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	25.0
75	30 to 60% of m/z 95	58.3
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	72.0
175	5 to 9% of m/z 174	6.5 (9.0)
176	Greater than 95% but less than 101% of m/z 174	68.9 (95.7)
177	5 to 9% of m/z 176	4.5 (6.5)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928001.D\MSVOA_LL_CHHP6.rslt\spectra
Injection Date: 28-Sep-2015 10:22:30
Spectrum: Tune Spec :Average 786-788(8.37-8.38) Bgrd 780(8.34)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1004	69.00	8329	104.00	240	161.00	70
37.00	3320	70.00	404	106.00	366	164.00	74
38.00	3306	71.00	164	107.00	81	171.00	72
39.00	1546	72.00	509	109.00	75	172.00	379
40.00	105	73.00	3102	115.00	134	174.00	50360
41.00	120	74.00	13494	116.00	171	175.00	4520
44.00	491	75.00	40768	117.00	540	176.00	48192
45.00	715	76.00	3007	118.00	95	177.00	3127
47.00	860	77.00	252	119.00	449	178.00	74
48.00	630	78.00	441	125.00	76	181.00	77
49.00	3840	79.00	1420	128.00	155	189.00	69
50.00	17456	80.00	668	130.00	152	193.00	167
51.00	4748	81.00	1992	131.00	88	197.00	149
52.00	295	82.00	399	135.00	235	198.00	71
53.00	71	84.00	74	140.00	108	202.00	81
55.00	93	87.00	2432	141.00	923	207.00	155
56.00	1516	88.00	2425	142.00	68	210.00	81
57.00	1700	89.00	70	143.00	758	211.00	115
60.00	1028	91.00	459	147.00	289	221.00	71
61.00	3644	92.00	2567	148.00	70	222.00	77
62.00	3174	93.00	3470	149.00	105	259.00	76
63.00	3180	94.00	8724	150.00	157	275.00	97
64.00	266	95.00	69920	152.00	92	281.00	253
65.00	110	96.00	4772	154.00	78	299.00	77
67.00	201	97.00	112	155.00	89		
68.00	7709	98.00	68	160.00	68		

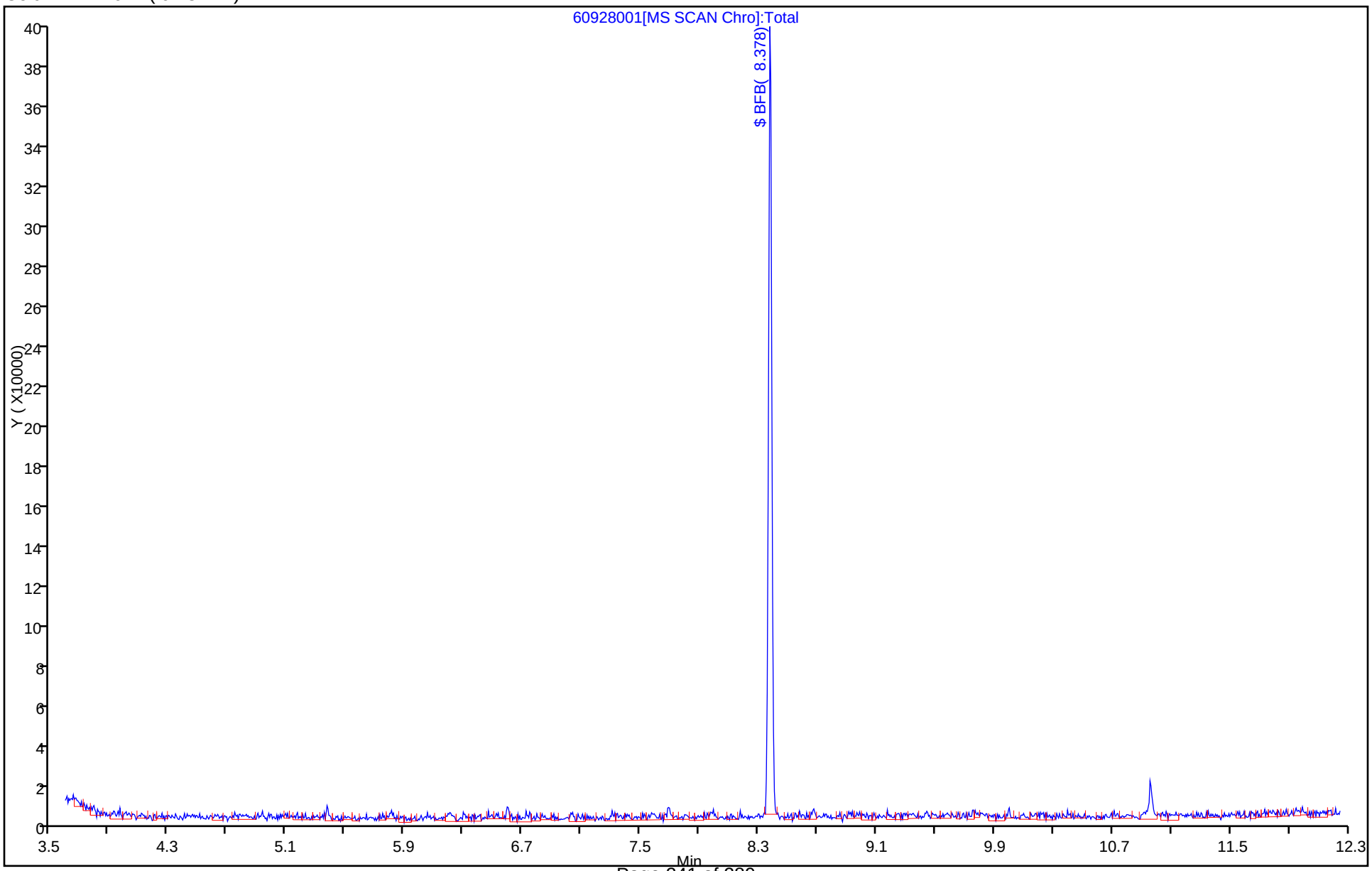
Report Date: 28-Sep-2015 13:27:50 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928001.D

Injection Date:	28-Sep-2015 10:22:30	Instrument ID:	CHHP6	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-154899/4

Matrix: Water | Lab File ID: 60925004.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 14:02

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.: 154899 | Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-154899/4

Matrix: Water Lab File ID: 60925004.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/25/2015 14:02

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.: 154899 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		64-135
2037-26-5	Toluene-d8 (Surr)	104		71-118
460-00-4	4-Bromofluorobenzene (Surr)	83		70-118
1868-53-7	Dibromofluoromethane (Surr)	109		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 25-Sep-2015 14:02:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 180-0008690-004
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Sep-2015 14:29:05 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: fergusond Date: 25-Sep-2015 14:29:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.224	4.235	-0.011	87	177185	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.284	7.289	-0.005	97	508624	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.398	0.000	90	114022	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.747	12.746	0.001	97	177843	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.554	6.553	0.001	93	127083	50.0	54.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.930	0.001	70	198161	50.0	52.4	
$ 7 Toluene-d8 (Surr)	98	8.944	8.937	0.007	95	465933	50.0	51.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.584	0.001	84	165217	50.0	41.4	
11 Dichlorodifluoromethane	85		1.607					ND	
12 Chloromethane	50		1.759					ND	
13 Vinyl chloride	62		1.899					ND	
14 Butadiene	39		1.935					ND	
15 Bromomethane	94		2.234					ND	
17 Dichlorofluoromethane	67		2.653					ND	
18 Trichlorofluoromethane	101		2.690					ND	
19 Ethanol	45		2.915					ND	
20 Ethyl ether	59		3.043					ND	
21 Acrolein	56		3.219					ND	
22 1,1-Dichloroethene	96		3.341					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.402					ND	
24 Acetone	43		3.420					ND	
25 Iodomethane	142		3.535					ND	
26 Carbon disulfide	76		3.627					ND	
27 Isopropyl alcohol	45		3.670					ND	
28 Acetonitrile	40		3.834					ND	
30 Methyl acetate	43		3.919					ND	
32 2-Methyl-2-propanol	59		4.363					ND	
33 Acrylonitrile	53		4.503					ND	
34 trans-1,2-Dichloroethene	96		4.557					ND	
36 Hexane	57		4.989					ND	
37 1,1-Dichloroethane	63		5.190					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43		5.239					ND	
40 Isopropyl ether	45		5.294					ND	
39 2-Chloro-1,3-butadiene	53		5.294					ND	
41 Tert-butyl ethyl ether	59		5.768					ND	
44 2-Butanone (MEK)	43		5.938					ND	
43 cis-1,2-Dichloroethene	96		5.938					ND	
42 2,2-Dichloropropane	77		5.938					ND	
45 Propionitrile	54		6.012					ND	
47 Methacrylonitrile	41		6.194					ND	
48 Chlorobromomethane	128		6.230					ND	
49 Tetrahydrofuran	42		6.236					ND	
50 Chloroform	83		6.370					ND	
51 1,1,1-Trichloroethane	97		6.535					ND	
52 Cyclohexane	56		6.620					ND	
53 Carbon tetrachloride	117		6.711					ND	
54 1,1-Dichloropropene	75		6.723					ND	
55 Isobutyl alcohol	41		6.893					ND	
56 Benzene	78		6.936					ND	
148 Isooctane	57		7.101					ND	
58 Tert-amyl methyl ether	73		7.119					ND	
59 n-Heptane	43		7.307					ND	
60 n-Butanol	56		7.612					ND	
61 Trichloroethene	130		7.678					ND	
62 Ethyl acrylate	55		7.794					ND	
64 1,2-Dichloropropane	63		7.952					ND	
66 Methyl methacrylate	69		8.025					ND	
65 1,4-Dioxane	88		8.031					ND	
67 Dibromomethane	93		8.037					ND	
68 Dichlorobromomethane	83		8.226					ND	
69 2-Nitropropane	41		8.445					ND	
71 cis-1,3-Dichloropropene	75		8.676					ND	
72 4-Methyl-2-pentanone (MIBK	43		8.822					ND	
74 trans-1,3-Dichloropropene	75		9.254					ND	
75 Ethyl methacrylate	69		9.315					ND	
77 Tetrachloroethene	164		9.528					ND	
78 1,3-Dichloropropane	76		9.607					ND	
79 2-Hexanone	43		9.655					ND	
81 Chlorodibromomethane	129		9.820					ND	
82 Ethylene Dibromide	107		9.941					ND	
83 3-Chlorobenzotrifluoride	180		10.391					ND	
84 Chlorobenzene	112		10.428					ND	
85 4-Chlorobenzotrifluoride	180		10.483					ND	
86 1,1,1,2-Tetrachloroethane	131		10.519					ND	
87 Ethylbenzene	106		10.525					ND	
88 m-Xylene & p-Xylene	106		10.659					ND	
89 o-Xylene	106		11.042					ND	
90 Styrene	104	11.055	11.061	-0.006	11	1551		0.1994	
91 Bromoform	173		11.243					ND	
129 Cyclohexanol	57		11.246					ND	
92 2-Chlorobenzotrifluoride	180		11.304					ND	
94 Cyclohexanone	55		11.493					ND	
96 1,1,2,2-Tetrachloroethane	83		11.712					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
95 Bromobenzene	156		11.724					ND	
97 trans-1,4-Dichloro-2-buten	53		11.754					ND	
98 1,2,3-Trichloropropane	110		11.772					ND	
99 N-Propylbenzene	120		11.827					ND	
100 2-Chlorotoluene	126		11.912					ND	
101 3-Chlorotoluene	126		11.979					ND	
102 1,3,5-Trimethylbenzene	105		12.010					ND	
103 4-Chlorotoluene	126		12.040					ND	
104 tert-Butylbenzene	119		12.326					ND	
105 Pentachloroethane	167		12.357					ND	
106 1,2,4-Trimethylbenzene	105		12.381					ND	
107 1,2-dichloro-4-(trifluorom	214		12.417					ND	
108 sec-Butylbenzene	105		12.551					ND	
110 4-Isopropyltoluene	119		12.703					ND	
113 2,4-Dichloro-1-(triflourom	214		12.788					ND	
112 1,2,3-Trimethylbenzene	105		12.795					ND	
114 2,5-Dichlorobenzotrifluori	214		12.831					ND	
115 Benzyl chloride	91		12.880					ND	
116 n-Butylbenzene	91		13.111					ND	
118 1,2-Dibromo-3-Chloropropan	75		13.920					ND	
119 2,4- & 2,5- & 2,6- Dichlor	125		14.060					ND	
120 1,3,5-Trichlorobenzene	180		14.109					ND	
121 2,3- & 3,4- Dichlorotoluen	125		14.473					ND	
122 1,2,4-Trichlorobenzene	180		14.741					ND	
123 Hexachlorobutadiene	225		14.887					ND	
125 1,2,3-Trichlorobenzene	180		15.228					ND	
128 2-Methylnaphthalene	142		16.153					ND	
146 3,4-Dichlorotoluene	1		0.000					ND	
153 1,2 Epoxybutane TIC	1		0.000					ND	
151 Tert-amyl methyl ether (TI	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
150 Tert-butyl ethyl ether (TI	1		0.000					ND	
143 2,5-Dichlorotoluene	1		0.000					ND	
147 2,6-Dichlorotoluene	1		0.000					ND	
145 2,3-Dichlorotoluene	1		0.000					ND	
144 2,4-Dichlorotoluene	1		0.000					ND	
149 Isopropyl ether TIC	1		0.000					ND	
S 131 Xylenes, Total	106		1.000					ND	
S 130 1,2-Dichloroethene, Total	96		1.000					ND	
S 132 1,3-Dichloropropene, Total	1		0.000					ND	
T 135 Mesityl oxide TIC	83		0.000					ND	
T 134 Methyl n-amyl ketone TIC	43		0.000					ND	
T 133 Tetrahydrofuran TIC	42		0.000					ND	

Reagents:

VOA8260INT_00042	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00042	Amount Added: 2.00	Units: uL	Run Reagent

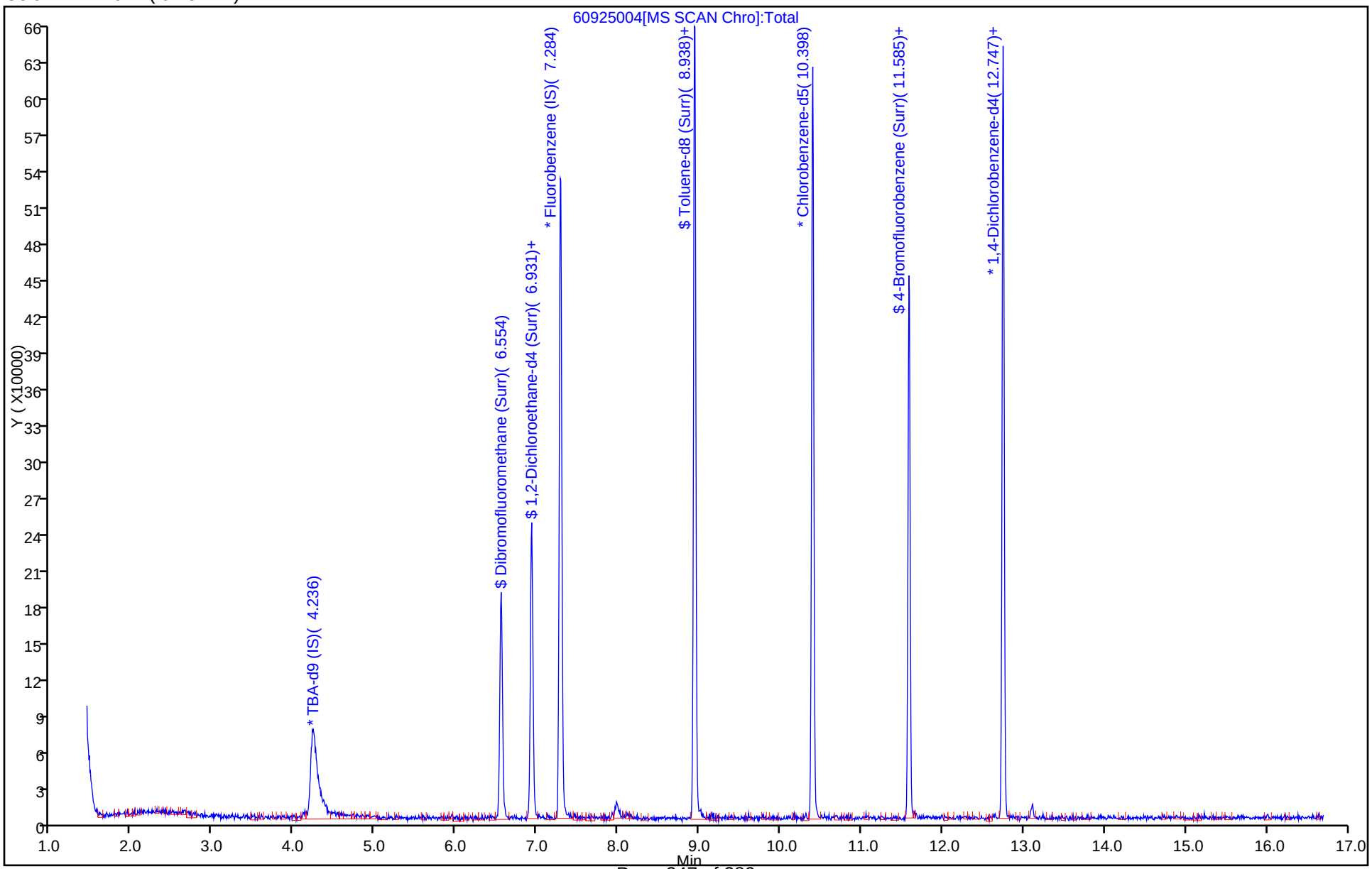
Report Date: 25-Sep-2015 14:29:06 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925004.D

Injection Date:	25-Sep-2015 14:02:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-155089/4

Matrix: Water | Lab File ID: 60928004.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 09/28/2015 12:18

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 155089 | Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-155089/4

Matrix: Water | Lab File ID: 60928004.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 09/28/2015 12:18

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 155089 | Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		64-135
2037-26-5	Toluene-d8 (Surr)	107		71-118
460-00-4	4-Bromofluorobenzene (Surr)	95		70-118
1868-53-7	Dibromofluoromethane (Surr)	90		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 28-Sep-2015 12:18:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 180-0008724-004
Operator ID: 034635 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Sep-2015 13:32:29 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: fergusond Date: 28-Sep-2015 13:32:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.229	4.241	-0.012	91	203220	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.283	0.006	97	570858	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.397	10.398	-0.001	91	127707	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.752	12.746	0.006	98	213043	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.559	6.547	0.012	93	118826	50.0	45.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.936	6.930	0.006	71	209018	50.0	49.3	
$ 7 Toluene-d8 (Surr)	98	8.943	8.938	0.005	94	536880	50.0	53.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.584	0.000	84	212611	50.0	47.5	
11 Dichlorodifluoromethane	85		1.613					ND	
12 Chloromethane	50		1.765					ND	
13 Vinyl chloride	62		1.905					ND	
14 Butadiene	39		1.942					ND	
15 Bromomethane	94		2.240					ND	
16 Chloroethane	64		2.380					ND	
17 Dichlorofluoromethane	67		2.654					ND	
18 Trichlorofluoromethane	101		2.684					ND	
19 Ethanol	45		2.915					ND	
20 Ethyl ether	59		3.037					ND	
21 Acrolein	56		3.213					ND	
22 1,1-Dichloroethene	96		3.341					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.402					ND	
24 Acetone	43		3.426					ND	
25 Iodomethane	142		3.530					ND	
26 Carbon disulfide	76		3.633					ND	
27 Isopropyl alcohol	45		3.670					ND	
28 Acetonitrile	40		3.834					ND	
29 3-Chloro-1-propene	76		3.913					ND	
30 Methyl acetate	43		3.919					ND	
31 Methylene Chloride	84		4.126					ND	
32 2-Methyl-2-propanol	59		4.387					ND	
33 Acrylonitrile	53		4.503					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		4.558					ND	
35 Methyl tert-butyl ether	73		4.564					ND	
36 Hexane	57		4.984					ND	
37 1,1-Dichloroethane	63		5.190					ND	
38 Vinyl acetate	43		5.239					ND	
40 Isopropyl ether	45		5.294					ND	
39 2-Chloro-1,3-butadiene	53		5.294					ND	
41 Tert-butyl ethyl ether	59		5.768					ND	
43 cis-1,2-Dichloroethene	96		5.933					ND	
42 2,2-Dichloropropane	77		5.939					ND	
44 2-Butanone (MEK)	43		5.951					ND	
45 Propionitrile	54		6.012					ND	
46 Ethyl acetate	43		6.024					ND	
47 Methacrylonitrile	41		6.194					ND	
48 Chlorobromomethane	128		6.225					ND	
49 Tetrahydrofuran	42		6.243					ND	
50 Chloroform	83		6.371					ND	
51 1,1,1-Trichloroethane	97		6.535					ND	
52 Cyclohexane	56		6.620					ND	
53 Carbon tetrachloride	117		6.717					ND	
54 1,1-Dichloropropene	75		6.730					ND	
55 Isobutyl alcohol	41		6.900					ND	
56 Benzene	78		6.942					ND	
57 1,2-Dichloroethane	62		7.015					ND	
148 Isooctane	57		7.101					ND	
58 Tert-amyl methyl ether	73		7.119					ND	
59 n-Heptane	43		7.307					ND	
60 n-Butanol	56		7.612					ND	
61 Trichloroethene	130		7.679					ND	
62 Ethyl acrylate	55		7.794					ND	
63 Methylcyclohexane	83		7.922					ND	
64 1,2-Dichloropropane	63		7.952					ND	
66 Methyl methacrylate	69		8.025					ND	
67 Dibromomethane	93		8.038					ND	
65 1,4-Dioxane	88		8.038					ND	
68 Dichlorobromomethane	83		8.232					ND	
69 2-Nitropropane	41		8.445					ND	
70 2-Chloroethyl vinyl ether	63		8.530					ND	
71 cis-1,3-Dichloropropene	75		8.676					ND	
72 4-Methyl-2-pentanone (MIBK	43		8.822					ND	
73 Toluene	91		9.011					ND	
74 trans-1,3-Dichloropropene	75		9.254					ND	
75 Ethyl methacrylate	69		9.315					ND	
76 1,1,2-Trichloroethane	97		9.449					ND	
77 Tetrachloroethene	164		9.528					ND	
78 1,3-Dichloropropane	76		9.607					ND	
79 2-Hexanone	43		9.656					ND	
80 n-Butyl acetate	43		9.783					ND	
81 Chlorodibromomethane	129		9.820					ND	
82 Ethylene Dibromide	107		9.936					ND	
83 3-Chlorobenzotrifluoride	180		10.392					ND	
84 Chlorobenzene	112		10.428					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 4-Chlorobenzotrifluoride	180		10.483					ND	
86 1,1,1,2-Tetrachloroethane	131		10.520					ND	
87 Ethylbenzene	106		10.526					ND	
88 m-Xylene & p-Xylene	106		10.659					ND	
89 o-Xylene	106		11.037					ND	
90 Styrene	104		11.061					ND	
91 Bromoform	173		11.244					ND	
129 Cyclohexanol	57		11.246					ND	
92 2-Chlorobenzotrifluoride	180		11.304					ND	
93 Isopropylbenzene	105		11.408					ND	
94 Cyclohexanone	55		11.493					ND	
96 1,1,2,2-Tetrachloroethane	83		11.712					ND	
95 Bromobenzene	156		11.724					ND	
97 trans-1,4-Dichloro-2-buten	53		11.748					ND	
98 1,2,3-Trichloropropane	110		11.773					ND	
99 N-Propylbenzene	120		11.828					ND	
100 2-Chlorotoluene	126		11.913					ND	
101 3-Chlorotoluene	126		11.980					ND	
102 1,3,5-Trimethylbenzene	105		12.010					ND	
103 4-Chlorotoluene	126		12.040					ND	
104 tert-Butylbenzene	119		12.326					ND	
105 Pentachloroethane	167		12.357					ND	
106 1,2,4-Trimethylbenzene	105		12.381					ND	
107 1,2-dichloro-4-(trifluorom	214		12.418					ND	
108 sec-Butylbenzene	105		12.551					ND	
109 1,3-Dichlorobenzene	146		12.667					ND	
110 4-Isopropyltoluene	119		12.704					ND	
111 1,4-Dichlorobenzene	146		12.770					ND	
113 2,4-Dichloro-1-(triflourom	214		12.789					ND	
112 1,2,3-Trimethylbenzene	105		12.795					ND	
114 2,5-Dichlorobenzotrifluori	214		12.831					ND	
115 Benzyl chloride	91		12.880					ND	
116 n-Butylbenzene	91		13.111					ND	
117 1,2-Dichlorobenzene	146		13.123					ND	
118 1,2-Dibromo-3-Chloropropan	75		13.914					ND	
119 2,4- & 2,5- & 2,6- Dichlor	125		14.060					ND	
120 1,3,5-Trichlorobenzene	180		14.109					ND	
121 2,3- & 3,4- Dichlorotoluen	125		14.474					ND	
122 1,2,4-Trichlorobenzene	180		14.741					ND	
123 Hexachlorobutadiene	225		14.894					ND	
124 Naphthalene	128	15.009	15.009	-0.001	93	7510		0.7109	M
125 1,2,3-Trichlorobenzene	180		15.228					ND	
126 2,4,5-Trichlorotoluene	159		16.007					ND	
127 2,3,6-Trichlorotoluene	159		16.110					ND	
128 2-Methylnaphthalene	142	16.146	16.153	-0.007	0	518		NC	
150 Tert-butyl ethyl ether (TI	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
151 Tert-amyl methyl ether (TI	1		0.000					ND	
143 2,5-Dichlorotoluene	1		0.000					ND	
149 Isopropyl ether TIC	1		0.000					ND	
144 2,4-Dichlorotoluene	1		0.000					ND	
147 2,6-Dichlorotoluene	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
146 3,4-Dichlorotoluene	1		0.000					ND	
153 1,2 Epoxybutane TIC	1		0.000					ND	
145 2,3-Dichlorotoluene	1		0.000					ND	
S 131 Xylenes, Total	106		1.000					ND	
S 130 1,2-Dichloroethene, Total	96		1.000					ND	
S 132 1,3-Dichloropropene, Total	1		0.000					ND	
T 135 Mesityl oxide TIC	83		0.000					ND	
T 134 Methyl n-amyl ketone TIC	43		0.000					ND	
T 133 Tetrahydrofuran TIC	42		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00042	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00042	Amount Added:	2.00	Units: uL	Run Reagent

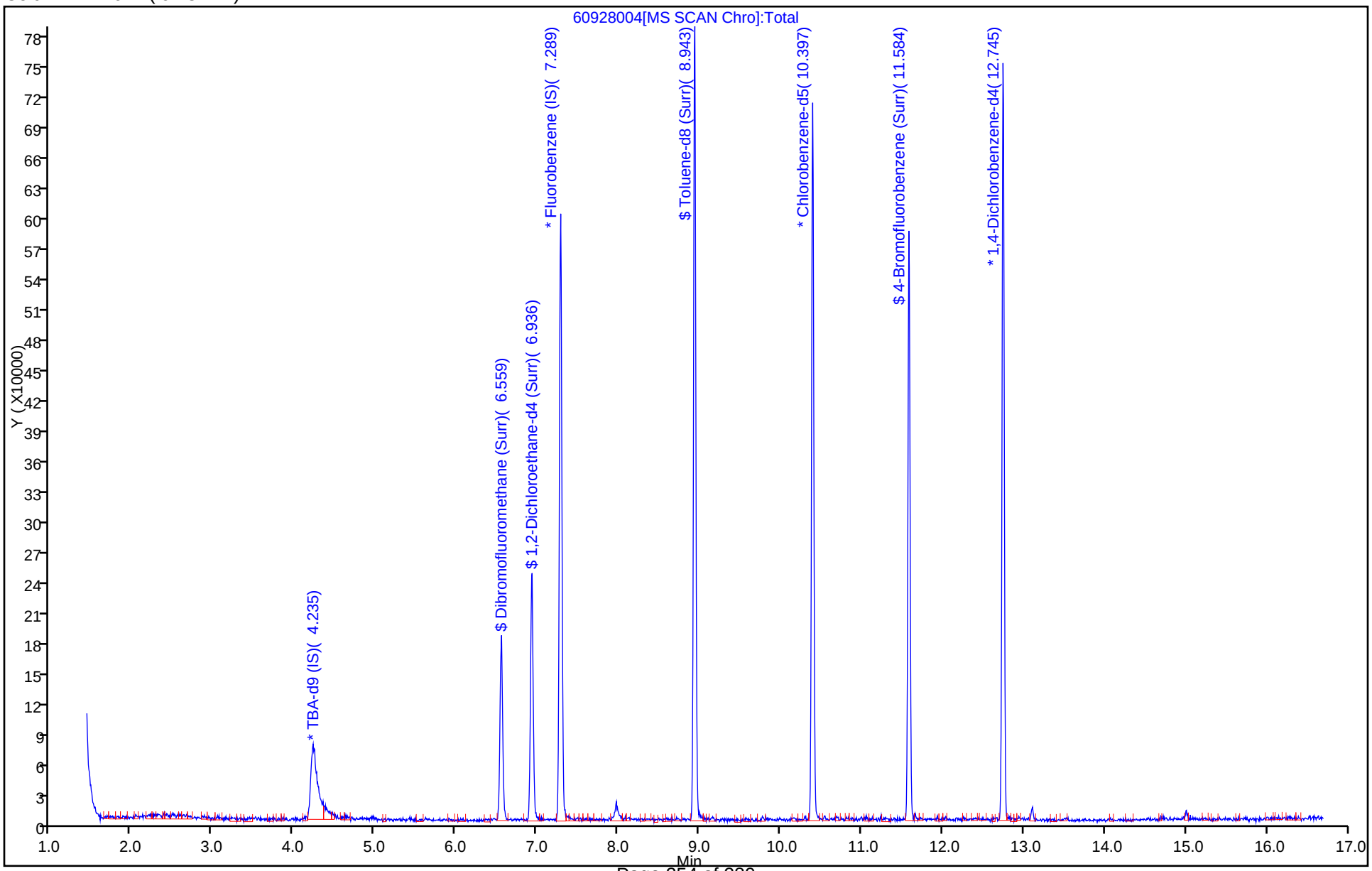
Report Date: 28-Sep-2015 13:32:31 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928004.D

Injection Date:	28-Sep-2015 12:18:30	Instrument ID:	CHHP6	Operator ID:	034635
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-154899/7

Matrix: Water | Lab File ID: 60925007.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 15:27

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.: 154899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	11.2		1.0	0.28
75-01-4	Vinyl chloride	9.83		1.0	0.23
74-83-9	Bromomethane	8.69		1.0	0.31
75-00-3	Chloroethane	8.92		1.0	0.21
75-35-4	1,1-Dichloroethene	8.22		1.0	0.30
67-64-1	Acetone	19.7		5.0	2.5
75-15-0	Carbon disulfide	8.92		1.0	0.21
75-09-2	Methylene Chloride	8.74		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	8.75		1.0	0.17
1634-04-4	Methyl tert-butyl ether	8.07		1.0	0.18
75-34-3	1,1-Dichloroethane	9.09		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	8.57		1.0	0.24
74-97-5	Bromochloromethane	10.9		1.0	0.18
78-93-3	2-Butanone (MEK)	21.5		5.0	0.55
67-66-3	Chloroform	9.33		1.0	0.17
71-55-6	1,1,1-Trichloroethane	8.30		1.0	0.29
56-23-5	Carbon tetrachloride	8.89		1.0	0.14
71-43-2	Benzene	9.23		1.0	0.11
107-06-2	1,2-Dichloroethane	9.86		1.0	0.21
79-01-6	Trichloroethene	10.8		1.0	0.14
78-87-5	1,2-Dichloropropane	10.6		1.0	0.095
75-27-4	Bromodichloromethane	9.72		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.79		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	20.5		5.0	0.53
108-88-3	Toluene	9.40		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	8.96		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.3		1.0	0.20
127-18-4	Tetrachloroethene	10.1		1.0	0.15
591-78-6	2-Hexanone	22.9		5.0	0.16
124-48-1	Dibromochloromethane	11.1		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.4		1.0	0.18
108-90-7	Chlorobenzene	10.4		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	10.8		1.0	0.28
100-41-4	Ethylbenzene	9.89		1.0	0.23
1330-20-7	Xylenes, Total	19.2		3.0	0.49
100-42-5	Styrene	10.6		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-154899/7

Matrix: Water | Lab File ID: 60925007.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 15:27

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.: 154899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	11.6		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.2		1.0	0.20
107-13-1	Acrylonitrile	110		20	0.55
123-91-1	1,4-Dioxane	197	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		64-135
2037-26-5	Toluene-d8 (Surr)	96		71-118
460-00-4	4-Bromofluorobenzene (Surr)	87		70-118
1868-53-7	Dibromofluoromethane (Surr)	103		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925007.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 25-Sep-2015 15:27:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 180-0008690-007
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 25-Sep-2015 15:46:30 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: fergusond Date: 25-Sep-2015 15:46:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.248	4.235	0.013	86	175389	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.284	7.289	-0.005	97	478360	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.398	0.000	89	115457	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.746	0.000	95	199605	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.560	6.553	0.007	93	112912	50.0	51.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.930	0.001	71	177677	50.0	50.0	
$ 7 Toluene-d8 (Surr)	98	8.938	8.937	0.001	94	438688	50.0	48.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.584	0.001	85	176302	50.0	43.6	
11 Dichlorodifluoromethane	85	1.608	1.607	0.001	99	150779	50.0	45.5	
12 Chloromethane	50	1.766	1.759	0.007	99	159865	50.0	56.0	
13 Vinyl chloride	62	1.894	1.899	-0.005	99	151119	50.0	49.1	
14 Butadiene	39	1.936	1.935	0.001	96	166287	50.0	57.7	
15 Bromomethane	94	2.246	2.234	0.012	92	72146	50.0	43.5	
16 Chloroethane	64	2.386	2.380	0.006	99	93614	50.0	44.6	
17 Dichlorofluoromethane	67	2.654	2.653	0.001	96	215050	50.0	44.0	
18 Trichlorofluoromethane	101	2.684	2.690	-0.006	92	168278	50.0	43.2	
20 Ethyl ether	59	3.043	3.043	0.000	92	119857	50.0	43.4	
21 Acrolein	56	3.220	3.219	0.001	99	28352	150.0	94.1	
22 1,1-Dichloroethene	96	3.341	3.341	0.000	98	98916	50.0	41.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.414	3.402	0.012	95	119619	50.0	47.1	
24 Acetone	43	3.433	3.420	0.013	98	83302	100.0	98.4	
25 Iodomethane	142	3.530	3.535	-0.005	98	162420	50.0	50.2	
26 Carbon disulfide	76	3.633	3.627	0.006	100	278289	50.0	44.6	
29 3-Chloro-1-propene	76	3.913	3.906	0.007	88	52282	50.0	38.5	
30 Methyl acetate	43	3.925	3.919	0.006	98	533918	250.0	269.0	
31 Methylene Chloride	84	4.126	4.125	0.001	97	147872	50.0	43.7	
32 2-Methyl-2-propanol	59	4.370	4.363	0.007	88	100934	500.0	511.4	
33 Acrylonitrile	53	4.509	4.503	0.006	99	548273	500.0	548.1	
34 trans-1,2-Dichloroethene	96	4.564	4.557	0.007	73	121546	50.0	43.7	
35 Methyl tert-butyl ether	73	4.576	4.563	0.013	96	336166	50.0	40.4	
36 Hexane	57	4.990	4.989	0.001	95	167449	50.0	44.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.191	5.190	0.001	97	226154	50.0	45.5	
38 Vinyl acetate	43	5.239	5.239	0.000	98	192067	50.0	47.8	
42 2,2-Dichloropropane	77	5.939	5.938	0.001	59	96760	50.0	38.5	
44 2-Butanone (MEK)	43	5.945	5.938	0.007	78	124105	100.0	107.5	
43 cis-1,2-Dichloroethene	96	5.939	5.938	0.001	83	129490	50.0	42.9	
48 Chlorobromomethane	128	6.231	6.230	0.001	97	66319	50.0	54.6	
49 Tetrahydrofuran	42	6.249	6.236	0.013	87	79824	100.0	102.6	
50 Chloroform	83	6.377	6.370	0.007	95	230250	50.0	46.6	
51 1,1,1-Trichloroethane	97	6.535	6.535	0.000	96	151419	50.0	41.5	
52 Cyclohexane	56	6.620	6.620	0.000	93	197770	50.0	42.3	
53 Carbon tetrachloride	117	6.718	6.711	0.007	69	114525	50.0	44.4	
54 1,1-Dichloropropene	75	6.730	6.723	0.007	91	164353	50.0	41.9	
55 Isobutyl alcohol	41	6.900	6.893	0.007	88	109949	1250.0	1588.7	
56 Benzene	78	6.943	6.936	0.007	98	514681	50.0	46.2	
57 1,2-Dichloroethane	62	7.016	7.015	0.001	98	221471	50.0	49.3	
59 n-Heptane	43	7.308	7.307	0.001	89	153639	50.0	50.7	
61 Trichloroethene	130	7.673	7.678	-0.005	95	125771	50.0	54.1	
63 Methylcyclohexane	83	7.922	7.922	0.000	94	185226	50.0	39.3	
64 1,2-Dichloropropane	63	7.947	7.952	-0.005	92	140912	50.0	52.9	
65 1,4-Dioxane	88	8.032	8.031	0.001	36	25902	1000.0	985.3	M
67 Dibromomethane	93	8.032	8.037	-0.005	95	84934	50.0	52.5	
68 Dichlorobromomethane	83	8.233	8.226	0.007	98	147643	50.0	48.6	
70 2-Chloroethyl vinyl ether	63	8.531	8.530	0.001	94	153755	100.0	87.2	
71 cis-1,3-Dichloropropene	75	8.677	8.676	0.001	90	163325	50.0	48.9	
72 4-Methyl-2-pentanone (MIBK	43	8.823	8.822	0.001	97	243177	100.0	102.5	
73 Toluene	91	9.011	9.011	0.001	98	560014	50.0	47.0	
74 trans-1,3-Dichloropropene	75	9.255	9.254	0.001	98	135456	50.0	44.8	
75 Ethyl methacrylate	69	9.315	9.315	0.000	90	158784	50.0	49.4	
76 1,1,2-Trichloroethane	97	9.449	9.449	0.001	93	126337	50.0	51.3	
77 Tetrachloroethene	164	9.528	9.528	0.000	95	102664	50.0	50.5	
78 1,3-Dichloropropane	76	9.607	9.607	0.000	95	231142	50.0	50.8	
79 2-Hexanone	43	9.656	9.655	0.001	97	178581	100.0	114.6	
81 Chlorodibromomethane	129	9.820	9.820	0.000	93	93203	50.0	55.4	
82 Ethylene Dibromide	107	9.936	9.941	-0.005	100	113465	50.0	52.0	
83 3-Chlorobenzotrifluoride	180	10.392	10.391	0.001	87	182746	50.0	47.9	
84 Chlorobenzene	112	10.429	10.428	0.001	92	381061	50.0	52.0	
85 4-Chlorobenzotrifluoride	180	10.483	10.483	0.000	96	174601	50.0	49.4	
86 1,1,1,2-Tetrachloroethane	131	10.520	10.519	0.001	88	108344	50.0	54.0	
87 Ethylbenzene	106	10.526	10.525	0.001	99	204328	50.0	49.5	
88 m-Xylene & p-Xylene	106	10.660	10.659	0.001	100	251724	50.0	49.1	
89 o-Xylene	106	11.043	11.042	0.001	97	240388	50.0	46.9	
90 Styrene	104	11.061	11.061	0.000	95	419296	50.0	53.2	
91 Bromoform	173	11.244	11.243	0.001	95	52196	50.0	58.1	
92 2-Chlorobenzotrifluoride	180	11.305	11.304	0.001	96	192972	50.0	49.4	
93 Isopropylbenzene	105	11.408	11.407	0.001	98	609649	50.0	49.7	
96 1,1,2,2-Tetrachloroethane	83	11.712	11.712	0.000	96	167393	50.0	50.8	
95 Bromobenzene	156	11.724	11.724	0.000	98	161246	50.0	50.2	
97 trans-1,4-Dichloro-2-buten	53	11.749	11.754	-0.005	72	29562	50.0	29.0	
98 1,2,3-Trichloropropane	110	11.773	11.772	0.001	87	60506	50.0	49.6	
99 N-Propylbenzene	120	11.828	11.827	0.001	99	175054	50.0	47.4	
100 2-Chlorotoluene	126	11.913	11.912	0.001	95	153378	50.0	50.0	
101 3-Chlorotoluene	126	11.980	11.979	0.001	95	166167	50.0	51.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	93	559039	50.0	46.5	
103 4-Chlorotoluene	126	12.035	12.040	-0.005	99	173178	50.0	53.4	
104 tert-Butylbenzene	119	12.327	12.326	0.001	93	424977	50.0	44.8	
106 1,2,4-Trimethylbenzene	105	12.381	12.381	0.000	99	574295	50.0	46.7	
107 1,2-dichloro-4-(trifluorom	214	12.418	12.417	0.001	96	155875	50.0	44.8	
108 sec-Butylbenzene	105	12.546	12.551	-0.005	96	654173	50.0	46.2	
109 1,3-Dichlorobenzene	146	12.667	12.667	0.000	96	320878	50.0	51.2	
110 4-Isopropyltoluene	119	12.704	12.703	0.001	96	555631	50.0	46.7	
111 1,4-Dichlorobenzene	146	12.771	12.770	0.001	89	324847	50.0	50.7	
113 2,4-Dichloro-1-(triflourom	214	12.789	12.788	0.001	95	151050	50.0	43.6	
114 2,5-Dichlorobenzotrifluori	214	12.832	12.831	0.001	98	183446	50.0	47.4	
116 n-Butylbenzene	91	13.111	13.111	0.000	98	514987	50.0	43.4	
117 1,2-Dichlorobenzene	146	13.124	13.123	0.001	93	317358	50.0	50.1	
118 1,2-Dibromo-3-Chloropropan	75	13.915	13.920	-0.006	70	24515	50.0	42.2	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.061	14.060	0.001	99	711699	150.0	129.2	
121 2,3- & 3,4- Dichlorotoluen	125	14.474	14.473	0.001	99	513298	100.0	84.5	
122 1,2,4-Trichlorobenzene	180	14.742	14.741	0.001	93	222409	50.0	45.3	
123 Hexachlorobutadiene	225	14.888	14.887	0.001	95	90511	50.0	46.8	
124 Naphthalene	128	15.010	15.009	0.001	98	471463	50.0	47.6	
125 1,2,3-Trichlorobenzene	180	15.229	15.228	0.001	94	206465	50.0	45.0	
126 2,4,5-Trichlorotoluene	159	16.007	16.006	0.001	0	88043	50.0	28.6	
127 2,3,6-Trichlorotoluene	159	16.111	16.110	0.001	94	92965	50.0	31.8	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		100.0	96.0	
S 130 1,2-Dichloroethene, Total	96				0		100.0	86.6	
S 132 1,3-Dichloropropene, Total	1				0		100.0	93.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00144	Amount Added:	2.00	Units: uL		
voaWVA2nd Res_00010	Amount Added:	2.00	Units: uL		
voaWKetmix2nd_00002	Amount Added:	2.00	Units: uL		
voaEE2Restek_00001	Amount Added:	2.00	Units: uL		
voaW2-cle2ndR_00005	Amount Added:	2.00	Units: uL		
voaWAcro1stRe_00001	Amount Added:	6.00	Units: uL		
VOA8260INT_00042	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00042	Amount Added:	2.00	Units: uL	Run Reagent	

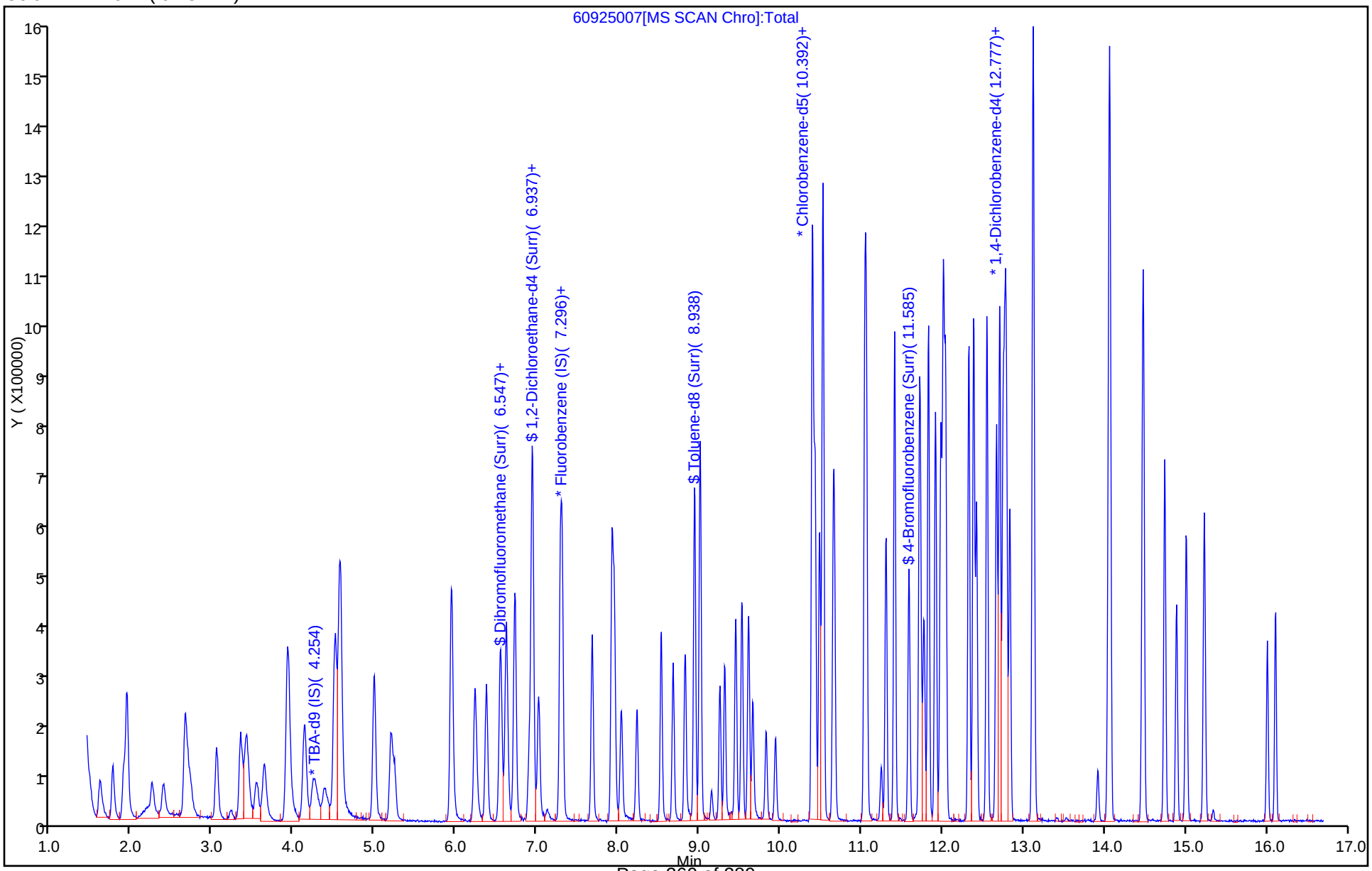
Report Date: 25-Sep-2015 15:46:31 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925007.D

Injection Date:	25-Sep-2015 15:27:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

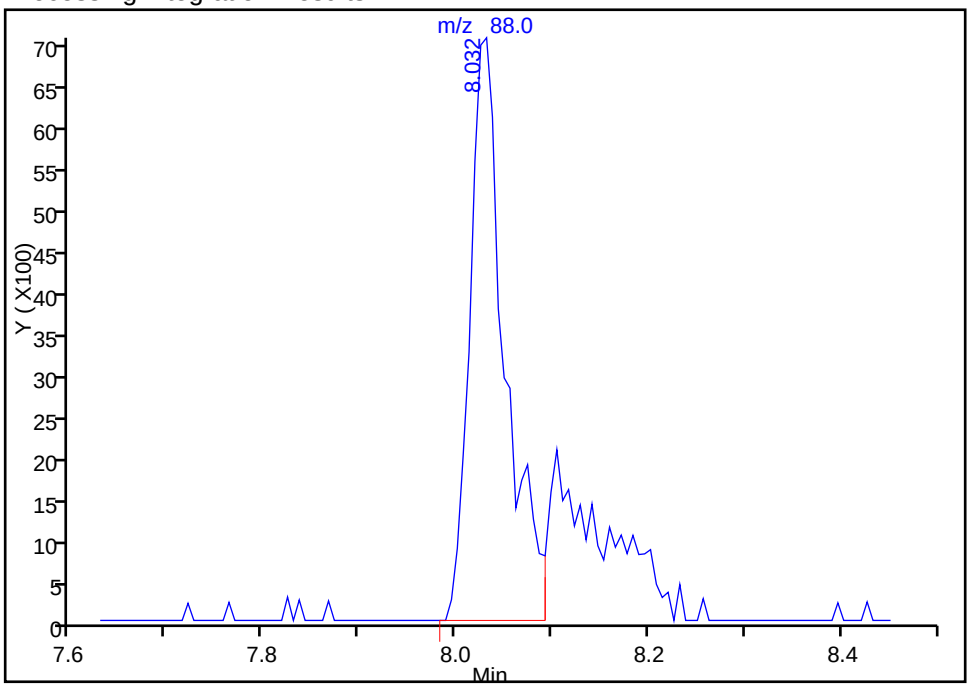
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925007.D
Injection Date: 25-Sep-2015 15:27:30 Instrument ID: CHHP6
Lims ID: LCS
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

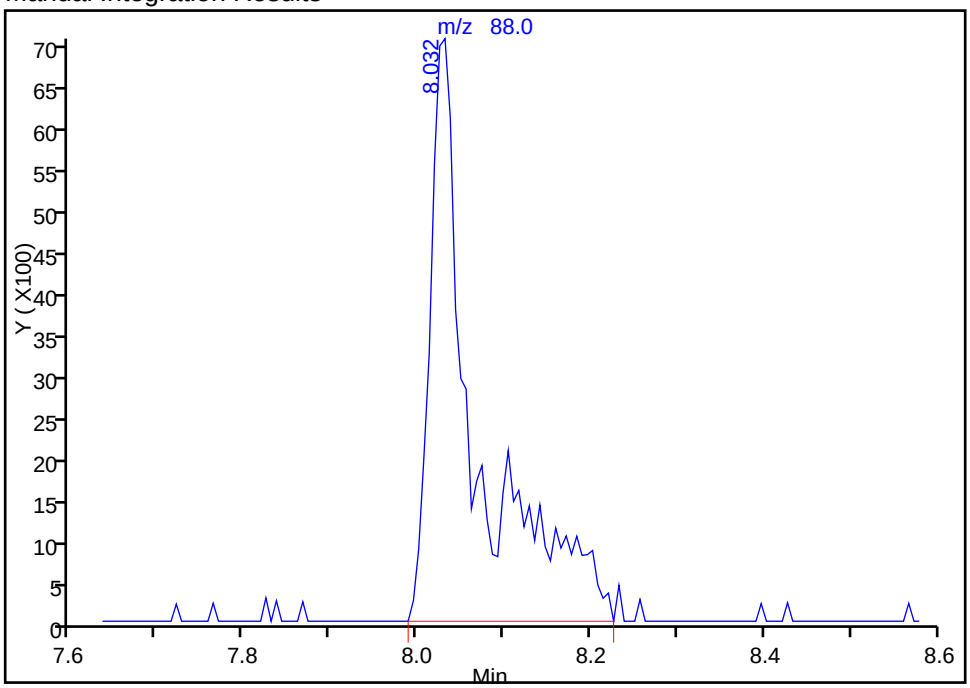
Processing Integration Results

RT: 8.03
Area: 18012
Amount: 685.1500
Amount Units: ng



Manual Integration Results

RT: 8.03
Area: 25902
Amount: 985.2740
Amount Units: ng



Reviewer: fergusond, 25-Sep-2015 15:46:30
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-155089/8

Matrix: Water | Lab File ID: 60928008.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 09/28/2015 14:21

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.: 155089 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	11.2		1.0	0.28
75-01-4	Vinyl chloride	10.4		1.0	0.23
74-83-9	Bromomethane	8.81		1.0	0.31
75-00-3	Chloroethane	9.45		1.0	0.21
75-35-4	1,1-Dichloroethene	7.60		1.0	0.30
67-64-1	Acetone	16.9		5.0	2.5
75-15-0	Carbon disulfide	8.01		1.0	0.21
75-09-2	Methylene Chloride	8.09		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	8.09		1.0	0.17
1634-04-4	Methyl tert-butyl ether	8.15		1.0	0.18
75-34-3	1,1-Dichloroethane	8.71		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	8.55		1.0	0.24
74-97-5	Bromochloromethane	9.18		1.0	0.18
78-93-3	2-Butanone (MEK)	21.9		5.0	0.55
67-66-3	Chloroform	8.72		1.0	0.17
71-55-6	1,1,1-Trichloroethane	8.27		1.0	0.29
56-23-5	Carbon tetrachloride	8.45		1.0	0.14
71-43-2	Benzene	8.93		1.0	0.11
107-06-2	1,2-Dichloroethane	9.25		1.0	0.21
79-01-6	Trichloroethene	10.1		1.0	0.14
78-87-5	1,2-Dichloropropane	10.2		1.0	0.095
75-27-4	Bromodichloromethane	8.87		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.69		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	21.5		5.0	0.53
108-88-3	Toluene	9.38		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	9.31		1.0	0.15
79-00-5	1,1,2-Trichloroethane	9.86		1.0	0.20
127-18-4	Tetrachloroethene	10.3		1.0	0.15
591-78-6	2-Hexanone	23.5		5.0	0.16
124-48-1	Dibromochloromethane	10.2		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.3		1.0	0.18
108-90-7	Chlorobenzene	10.2		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	10.0		1.0	0.28
100-41-4	Ethylbenzene	10.1		1.0	0.23
1330-20-7	Xylenes, Total	20.4		3.0	0.49
100-42-5	Styrene	10.6		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-155089/8

Matrix: Water | Lab File ID: 60928008.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 09/28/2015 14:21

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.: 155089 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	11.1		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	9.95		1.0	0.20
107-13-1	Acrylonitrile	104		20	0.55
123-91-1	1,4-Dioxane	187	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		64-135
2037-26-5	Toluene-d8 (Surr)	101		71-118
460-00-4	4-Bromofluorobenzene (Surr)	96		70-118
1868-53-7	Dibromofluoromethane (Surr)	96		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928008.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 28-Sep-2015 14:21:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 180-0008724-008
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Sep-2015 14:43:45 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: fergusond Date: 28-Sep-2015 14:43:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.242	4.241	0.001	91	218073	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.284	7.283	0.001	98	503917	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.399	10.398	0.000	91	118468	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.747	12.746	0.001	96	190158	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.548	6.547	0.001	93	110967	50.0	47.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.930	0.001	75	183832	50.0	49.1	
$ 7 Toluene-d8 (Surr)	98	8.938	8.938	0.000	95	472255	50.0	50.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.584	0.001	83	198567	50.0	47.9	
11 Dichlorodifluoromethane	85	1.608	1.613	-0.005	99	153228	50.0	43.9	
12 Chloromethane	50	1.766	1.765	0.001	99	167723	50.0	55.8	
13 Vinyl chloride	62	1.900	1.905	-0.005	99	168119	50.0	51.9	
14 Butadiene	39	1.942	1.942	0.000	95	179238	50.0	59.0	
15 Bromomethane	94	2.253	2.240	0.013	92	77052	50.0	44.1	
16 Chloroethane	64	2.387	2.380	0.007	100	104458	50.0	47.2	
17 Dichlorofluoromethane	67	2.660	2.654	0.006	97	237750	50.0	46.2	
18 Trichlorofluoromethane	101	2.679	2.684	-0.005	88	181214	50.0	44.2	
20 Ethyl ether	59	3.044	3.037	0.007	92	122574	50.0	42.1	
21 Acrolein	56	3.226	3.213	0.013	99	37670	150.0	118.7	
22 1,1-Dichloroethene	96	3.348	3.341	0.007	95	96395	50.0	38.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.415	3.402	0.013	95	111818	50.0	41.8	
24 Acetone	43	3.433	3.426	0.007	84	75385	100.0	84.6	
25 Iodomethane	142	3.536	3.530	0.006	99	144767	50.0	42.5	
26 Carbon disulfide	76	3.634	3.633	0.001	100	263307	50.0	40.1	
29 3-Chloro-1-propene	76	3.920	3.913	0.007	87	52693	50.0	36.8	
30 Methyl acetate	43	3.932	3.919	0.013	98	560717	250.0	268.2	
31 Methylene Chloride	84	4.133	4.126	0.007	98	145463	50.0	40.4	
32 2-Methyl-2-propanol	59	4.388	4.387	0.001	92	122089	500.0	497.5	
33 Acrylonitrile	53	4.510	4.503	0.007	99	547654	500.0	519.7	
34 trans-1,2-Dichloroethene	96	4.571	4.558	0.013	93	118391	50.0	40.4	
35 Methyl tert-butyl ether	73	4.571	4.564	0.007	97	357327	50.0	40.7	
36 Hexane	57	4.990	4.984	0.006	95	198753	50.0	50.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.197	5.190	0.007	97	228328	50.0	43.6	
38 Vinyl acetate	43	5.240	5.239	0.001	98	230329	50.0	54.4	
43 cis-1,2-Dichloroethene	96	5.939	5.933	0.006	84	136046	50.0	42.7	
42 2,2-Dichloropropane	77	5.939	5.939	0.000	59	102563	50.0	38.7	
44 2-Butanone (MEK)	43	5.952	5.951	0.001	70	133089	100.0	109.4	
48 Chlorobromomethane	128	6.231	6.225	0.006	94	58712	50.0	45.9	
49 Tetrahydrofuran	42	6.244	6.243	0.001	92	92373	100.0	112.7	
50 Chloroform	83	6.377	6.371	0.006	97	226855	50.0	43.6	
51 1,1,1-Trichloroethane	97	6.536	6.535	0.001	97	158859	50.0	41.3	
52 Cyclohexane	56	6.621	6.620	0.001	94	240840	50.0	48.9	
53 Carbon tetrachloride	117	6.718	6.717	0.001	96	114720	50.0	42.3	
54 1,1-Dichloropropene	75	6.724	6.730	-0.006	94	178060	50.0	43.1	
55 Isobutyl alcohol	41	6.907	6.900	0.007	88	111747	1250.0	1532.8	
56 Benzene	78	6.943	6.942	0.001	98	524148	50.0	44.6	
57 1,2-Dichloroethane	62	7.016	7.015	0.001	97	218785	50.0	46.3	
59 n-Heptane	43	7.308	7.307	0.001	92	185766	50.0	58.2	
61 Trichloroethene	130	7.679	7.679	0.000	95	124173	50.0	50.7	
63 Methylcyclohexane	83	7.923	7.922	0.001	94	215759	50.0	43.4	
64 1,2-Dichloropropane	63	7.947	7.952	-0.005	84	142602	50.0	50.8	
67 Dibromomethane	93	8.038	8.038	0.000	94	79452	50.0	46.6	
65 1,4-Dioxane	88	8.032	8.038	-0.006	37	25925	1000.0	936.1	M
68 Dichlorobromomethane	83	8.227	8.232	-0.005	97	142020	50.0	44.4	
71 cis-1,3-Dichloropropene	75	8.677	8.676	0.001	90	170374	50.0	48.5	
72 4-Methyl-2-pentanone (MIBK	43	8.823	8.822	0.001	98	261857	100.0	107.5	
73 Toluene	91	9.011	9.011	0.000	98	573199	50.0	46.9	
74 trans-1,3-Dichloropropene	75	9.255	9.254	0.001	99	144424	50.0	46.5	
75 Ethyl methacrylate	69	9.316	9.315	0.001	90	177333	50.0	53.8	
76 1,1,2-Trichloroethane	97	9.449	9.449	0.000	94	124629	50.0	49.3	
77 Tetrachloroethene	164	9.529	9.528	0.001	94	107616	50.0	51.6	
78 1,3-Dichloropropane	76	9.608	9.607	0.001	95	235235	50.0	50.4	
79 2-Hexanone	43	9.662	9.656	0.006	98	187561	100.0	117.3	
81 Chlorodibromomethane	129	9.827	9.820	0.007	90	88407	50.0	51.2	
82 Ethylene Dibromide	107	9.942	9.936	0.006	99	114807	50.0	51.3	
83 3-Chlorobenzotrifluoride	180	10.392	10.392	0.000	92	189430	50.0	48.4	
84 Chlorobenzene	112	10.429	10.428	0.001	91	381751	50.0	50.8	
85 4-Chlorobenzotrifluoride	180	10.484	10.483	0.001	97	176567	50.0	48.7	
86 1,1,1,2-Tetrachloroethane	131	10.520	10.520	0.000	88	103062	50.0	50.1	
87 Ethylbenzene	106	10.526	10.526	0.000	99	213924	50.0	50.5	
88 m-Xylene & p-Xylene	106	10.660	10.659	0.001	99	270926	50.0	51.5	
89 o-Xylene	106	11.043	11.037	0.006	97	266151	50.0	50.6	
90 Styrene	104	11.062	11.061	0.001	94	427896	50.0	52.9	
91 Bromoform	173	11.244	11.244	0.000	94	51108	50.0	55.5	
92 2-Chlorobenzotrifluoride	180	11.305	11.304	0.001	96	191762	50.0	47.8	
93 Isopropylbenzene	105	11.408	11.408	0.000	98	666274	50.0	52.9	
96 1,1,2,2-Tetrachloroethane	83	11.713	11.712	0.001	97	168277	50.0	49.7	
95 Bromobenzene	156	11.725	11.724	0.001	98	163997	50.0	53.6	
97 trans-1,4-Dichloro-2-buten	53	11.755	11.748	0.007	71	44266	50.0	45.7	
98 1,2,3-Trichloropropane	110	11.773	11.773	0.000	86	58429	50.0	50.3	
99 N-Propylbenzene	120	11.828	11.828	0.000	99	178599	50.0	50.7	
100 2-Chlorotoluene	126	11.913	11.913	0.000	94	157146	50.0	53.8	
101 3-Chlorotoluene	126	11.980	11.980	0.000	97	139483	50.0	45.4	
102 1,3,5-Trimethylbenzene	105	12.011	12.010	0.001	94	575158	50.0	50.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 4-Chlorotoluene	126	12.035	12.040	-0.005	99	164757	50.0	53.4	
104 tert-Butylbenzene	119	12.327	12.326	0.001	92	453744	50.0	50.2	
106 1,2,4-Trimethylbenzene	105	12.382	12.381	0.001	98	580885	50.0	49.6	
107 1,2-dichloro-4-(trifluorom	214	12.418	12.418	0.000	97	155557	50.0	46.9	
108 sec-Butylbenzene	105	12.546	12.551	-0.005	96	690861	50.0	51.2	
109 1,3-Dichlorobenzene	146	12.668	12.667	0.001	95	294716	50.0	49.4	
110 4-Isopropyltoluene	119	12.704	12.704	0.000	95	561743	50.0	49.6	
111 1,4-Dichlorobenzene	146	12.771	12.770	0.001	91	310765	50.0	50.9	
113 2,4-Dichloro-1-(triflourom	214	12.795	12.789	0.006	95	143774	50.0	43.6	
114 2,5-Dichlorobenzotrifluori	214	12.832	12.831	0.001	98	174670	50.0	47.4	
116 n-Butylbenzene	91	13.112	13.111	0.001	98	543789	50.0	48.1	
117 1,2-Dichlorobenzene	146	13.124	13.123	0.001	93	291176	50.0	48.3	
118 1,2-Dibromo-3-Chloropropan	75	13.921	13.914	0.007	70	23323	50.0	42.2	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.061	14.060	0.001	98	690871	150.0	131.7	
121 2,3- & 3,4- Dichlorotoluen	125	14.474	14.474	0.000	98	511558	100.0	88.4	
122 1,2,4-Trichlorobenzene	180	14.742	14.741	0.001	93	232283	50.0	49.7	
123 Hexachlorobutadiene	225	14.888	14.894	-0.006	95	99407	50.0	54.0	
124 Naphthalene	128	15.004	15.009	-0.005	98	521743	50.0	55.3	
125 1,2,3-Trichlorobenzene	180	15.229	15.228	0.001	93	213599	50.0	48.9	
126 2,4,5-Trichlorotoluene	159	16.007	16.007	0.000	0	128483	50.0	43.8	
127 2,3,6-Trichlorotoluene	159	16.105	16.110	-0.005	95	125696	50.0	45.1	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		100.0	102.1	
S 130 1,2-Dichloroethene, Total	96				0		100.0	83.2	
S 132 1,3-Dichloropropene, Total	1				0		100.0	95.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWKetmix2nd_00002	Amount Added:	2.00	Units: uL	
voaWVA2nd Res_00010	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00144	Amount Added:	2.00	Units: uL	
voaWEEpri Res_00005	Amount Added:	2.00	Units: uL	
voaWAcro1stRe_00001	Amount Added:	6.00	Units: uL	
VOA8260INT_00042	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00042	Amount Added:	2.00	Units: uL	Run Reagent

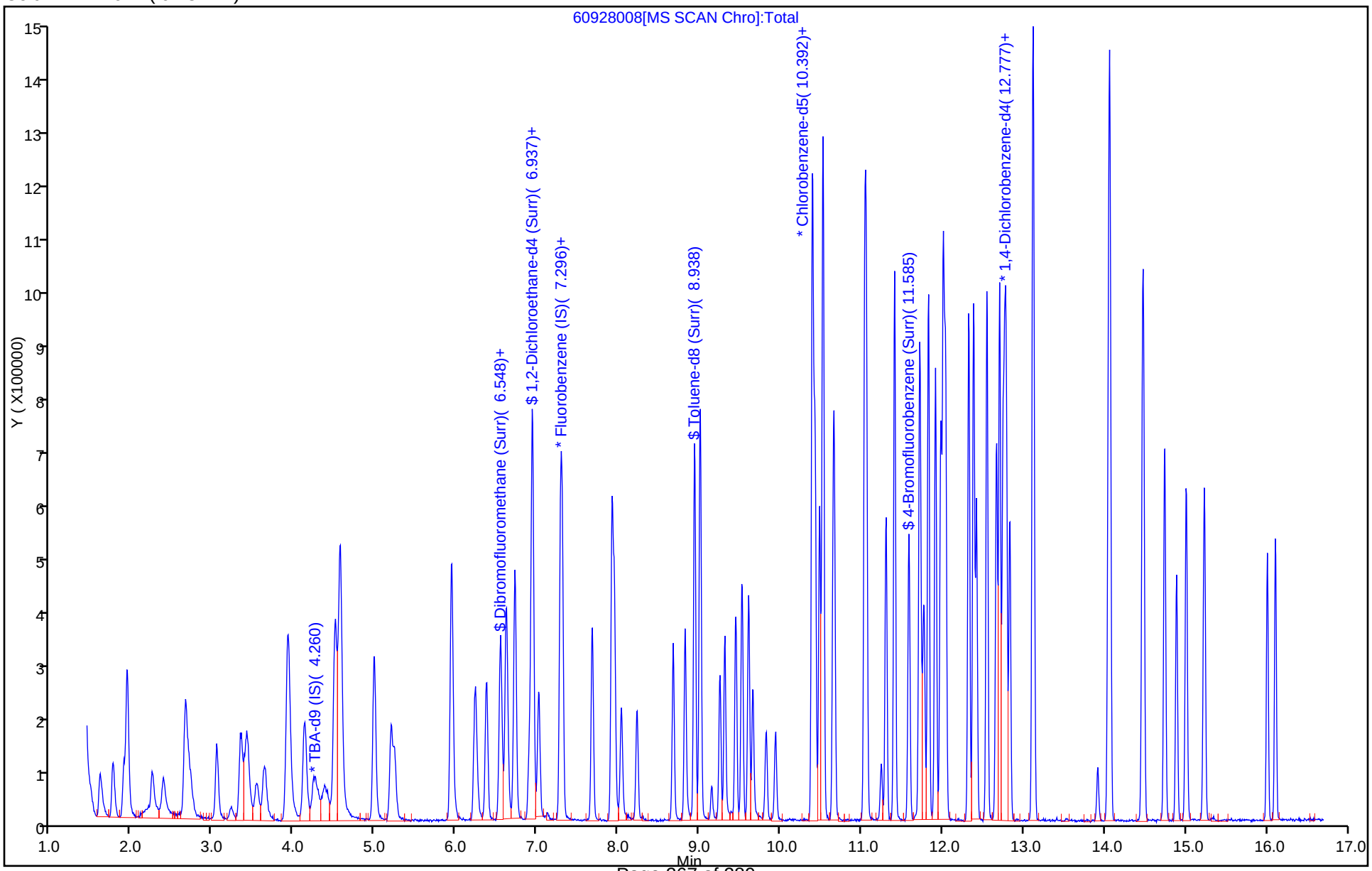
Report Date: 28-Sep-2015 14:43:45 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928008.D

Injection Date:	28-Sep-2015 14:21:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

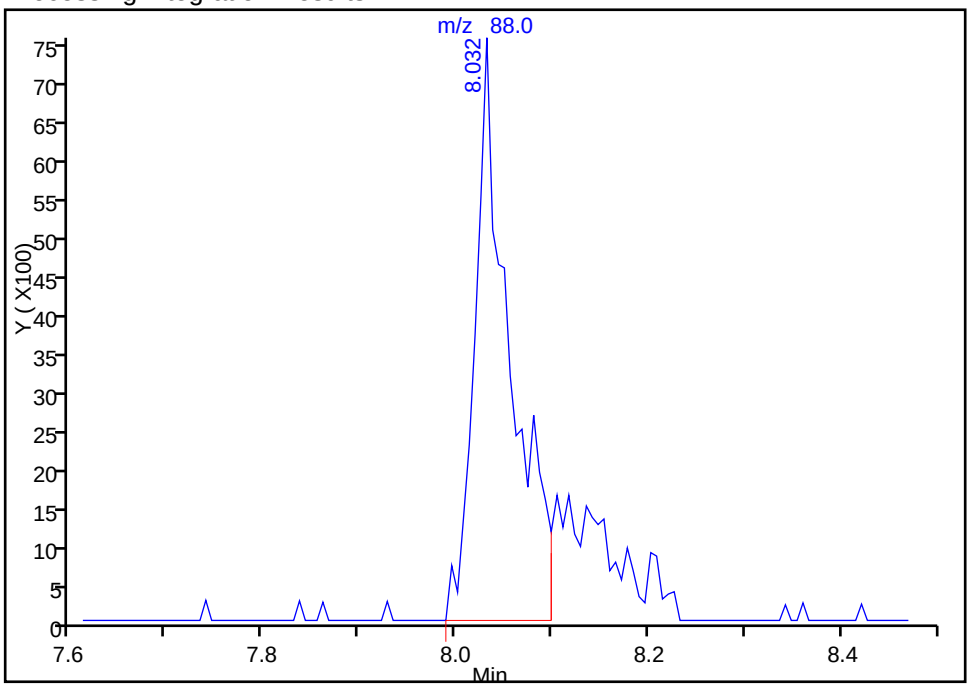
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150928-8724.b\60928008.D
Injection Date: 28-Sep-2015 14:21:30 Instrument ID: CHHP6
Lims ID: LCS
Client ID:
Operator ID: 001562 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

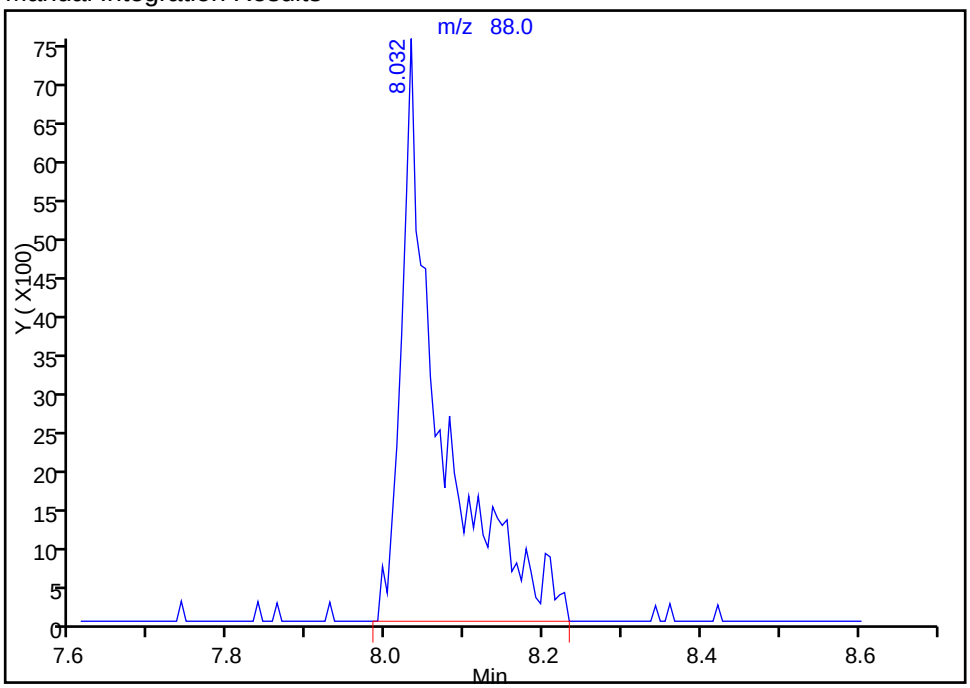
Processing Integration Results

RT: 8.03
Area: 19152
Amount: 691.5661
Amount Units: ng



Manual Integration Results

RT: 8.03
Area: 25925
Amount: 936.1347
Amount Units: ng



Reviewer: fergusond, 28-Sep-2015 14:43:45
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 MS | Lab Sample ID: 180-47923-4 MS

Matrix: Water | Lab File ID: 60925008.D

Analysis Method: 8260C | Date Collected: 09/17/2015 14:10

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 15:51

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.: 154899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10.4		1.0	0.28
75-01-4	Vinyl chloride	9.66		1.0	0.23
74-83-9	Bromomethane	8.03		1.0	0.31
75-00-3	Chloroethane	8.63		1.0	0.21
75-35-4	1,1-Dichloroethene	8.60		1.0	0.30
67-64-1	Acetone	18.5		5.0	2.5
75-15-0	Carbon disulfide	8.63		1.0	0.21
75-09-2	Methylene Chloride	7.65		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	8.25		1.0	0.17
1634-04-4	Methyl tert-butyl ether	7.85		1.0	0.18
75-34-3	1,1-Dichloroethane	11.0		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	26.3	F1	1.0	0.24
74-97-5	Bromochloromethane	9.64		1.0	0.18
78-93-3	2-Butanone (MEK)	20.7		5.0	0.55
67-66-3	Chloroform	8.55		1.0	0.17
71-55-6	1,1,1-Trichloroethane	7.94		1.0	0.29
56-23-5	Carbon tetrachloride	8.63		1.0	0.14
71-43-2	Benzene	8.72		1.0	0.11
107-06-2	1,2-Dichloroethane	8.98		1.0	0.21
79-01-6	Trichloroethene	17.8		1.0	0.14
78-87-5	1,2-Dichloropropane	9.35		1.0	0.095
75-27-4	Bromodichloromethane	8.91		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	8.65		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	20.8		5.0	0.53
108-88-3	Toluene	9.16		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	8.79		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.2		1.0	0.20
127-18-4	Tetrachloroethene	10.7		1.0	0.15
591-78-6	2-Hexanone	22.8		5.0	0.16
124-48-1	Dibromochloromethane	10.6		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.4		1.0	0.18
108-90-7	Chlorobenzene	10.5		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	11.1		1.0	0.28
100-41-4	Ethylbenzene	9.88		1.0	0.23
1330-20-7	Xylenes, Total	19.4		3.0	0.49
100-42-5	Styrene	10.6		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 MS | Lab Sample ID: 180-47923-4 MS

Matrix: Water | Lab File ID: 60925008.D

Analysis Method: 8260C | Date Collected: 09/17/2015 14:10

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 15:51

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.: 154899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	11.6		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.5		1.0	0.20
107-13-1	Acrylonitrile	100		20	0.55
123-91-1	1,4-Dioxane	200		200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		64-135
2037-26-5	Toluene-d8 (Surr)	101		71-118
460-00-4	4-Bromofluorobenzene (Surr)	93		70-118
1868-53-7	Dibromofluoromethane (Surr)	102		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925008.D
Lims ID: 180-47923-A-4 MS
Client ID:
Sample Type: MS
Inject. Date: 25-Sep-2015 15:51:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-47923-A-4 MS
Misc. Info.: 180-0008690-008
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Sep-2015 08:12:24 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: fergusond Date: 26-Sep-2015 08:12:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.238	4.235	0.003	85	201830	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.286	7.289	-0.003	97	536900	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.401	10.398	0.003	90	119762	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.749	12.746	0.003	97	212856	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.556	6.553	0.003	92	125871	50.0	50.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.927	6.930	-0.003	70	190192	50.0	47.7	
$ 7 Toluene-d8 (Surr)	98	8.941	8.937	0.004	94	476511	50.0	50.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.587	11.584	0.003	84	194260	50.0	46.3	
11 Dichlorodifluoromethane	85	1.604	1.607	-0.003	99	174408	50.0	46.9	
12 Chloromethane	50	1.762	1.759	0.003	100	165956	50.0	51.8	
13 Vinyl chloride	62	1.908	1.899	0.009	99	166641	50.0	48.3	
14 Butadiene	39	1.939	1.935	0.004	98	192182	50.0	59.4	
15 Bromomethane	94	2.249	2.234	0.015	93	74788	50.0	40.1	
16 Chloroethane	64	2.395	2.380	0.015	99	101670	50.0	43.2	
17 Dichlorofluoromethane	67	2.663	2.653	0.010	97	240558	50.0	43.9	
18 Trichlorofluoromethane	101	2.687	2.690	-0.003	98	202798	50.0	46.4	
20 Ethyl ether	59	3.040	3.043	-0.003	92	125864	50.0	40.6	
21 Acrolein	56	3.210	3.219	-0.009	95	24956	150.0	73.8	
22 1,1-Dichloroethene	96	3.344	3.341	0.003	97	116171	50.0	43.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.417	3.402	0.015	94	120750	50.0	42.3	
24 Acetone	43	3.429	3.420	0.009	93	87798	100.0	92.4	
25 Iodomethane	142	3.539	3.535	0.004	99	173370	50.0	47.8	
26 Carbon disulfide	76	3.630	3.627	0.003	100	302108	50.0	43.1	
29 3-Chloro-1-propene	76	3.922	3.906	0.016	88	59071	50.0	38.8	
30 Methyl acetate	43	3.928	3.919	0.009	98	560255	250.0	251.5	
31 Methylene Chloride	84	4.129	4.125	0.004	97	147690	50.0	38.3	
32 2-Methyl-2-propanol	59	4.366	4.363	0.003	92	135774	500.0	597.8	
33 Acrylonitrile	53	4.500	4.503	-0.003	100	563789	500.0	502.1	
34 trans-1,2-Dichloroethene	96	4.561	4.557	0.004	93	128690	50.0	41.3	
35 Methyl tert-butyl ether	73	4.573	4.563	0.010	97	366847	50.0	39.3	
36 Hexane	57	4.993	4.989	0.004	95	179262	50.0	42.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.200	5.190	0.010	97	306594	50.0	54.9	
38 Vinyl acetate	43	5.242	5.239	0.003	98	211315	50.0	46.9	
44 2-Butanone (MEK)	43	5.948	5.938	0.010	42	133984	100.0	103.4	
43 cis-1,2-Dichloroethene	96	5.942	5.938	0.004	83	446200	50.0	131.6	
42 2,2-Dichloropropane	77	5.942	5.938	0.004	41	110496	50.0	39.1	
48 Chlorobromomethane	128	6.228	6.230	-0.002	95	65668	50.0	48.2	
49 Tetrahydrofuran	42	6.240	6.236	0.004	88	91885	100.0	105.2	
50 Chloroform	83	6.374	6.370	0.004	95	236936	50.0	42.8	
51 1,1,1-Trichloroethane	97	6.544	6.535	0.009	96	162656	50.0	39.7	
52 Cyclohexane	56	6.617	6.620	-0.003	93	223547	50.0	42.6	
53 Carbon tetrachloride	117	6.714	6.711	0.003	83	124869	50.0	43.2	
54 1,1-Dichloropropene	75	6.726	6.723	0.003	91	182595	50.0	41.5	
55 Isobutyl alcohol	41	6.903	6.893	0.010	90	139479	1250.0	1795.6	
56 Benzene	78	6.945	6.936	0.009	98	545342	50.0	43.6	
57 1,2-Dichloroethane	62	7.018	7.015	0.003	99	226239	50.0	44.9	
59 n-Heptane	43	7.310	7.307	0.003	91	166157	50.0	48.8	
61 Trichloroethene	130	7.675	7.678	-0.003	97	231645	50.0	88.8	
63 Methylcyclohexane	83	7.925	7.922	0.003	92	216013	50.0	40.8	
64 1,2-Dichloropropane	63	7.955	7.952	0.003	94	139817	50.0	46.8	
65 1,4-Dioxane	88	8.028	8.031	-0.003	66	29448	1000.0	998.0	M
67 Dibromomethane	93	8.040	8.037	0.003	95	83582	50.0	46.0	
68 Dichlorobromomethane	83	8.229	8.226	0.003	98	152005	50.0	44.6	
71 cis-1,3-Dichloropropene	75	8.679	8.676	0.003	91	162131	50.0	43.3	
72 4-Methyl-2-pentanone (MIBK	43	8.825	8.822	0.003	97	256544	100.0	104.2	
73 Toluene	91	9.008	9.011	-0.002	98	566034	50.0	45.8	
74 trans-1,3-Dichloropropene	75	9.251	9.254	-0.003	100	137859	50.0	43.9	
75 Ethyl methacrylate	69	9.312	9.315	-0.003	91	169685	50.0	50.9	
76 1,1,2-Trichloroethane	97	9.452	9.449	0.004	95	129908	50.0	50.8	
77 Tetrachloroethene	164	9.525	9.528	-0.003	93	112881	50.0	53.6	
78 1,3-Dichloropropane	76	9.604	9.607	-0.003	95	236830	50.0	50.2	
79 2-Hexanone	43	9.659	9.655	0.004	97	184481	100.0	114.1	
81 Chlorodibromomethane	129	9.823	9.820	0.003	92	92556	50.0	53.1	
82 Ethylene Dibromide	107	9.939	9.941	-0.002	98	117654	50.0	52.0	
83 3-Chlorobenzotrifluoride	180	10.395	10.391	0.004	91	204754	50.0	51.7	
84 Chlorobenzene	112	10.425	10.428	-0.003	97	397242	50.0	52.3	
85 4-Chlorobenzotrifluoride	180	10.486	10.483	0.003	97	186217	50.0	50.8	
86 1,1,1,2-Tetrachloroethane	131	10.516	10.519	-0.003	87	115290	50.0	55.4	
87 Ethylbenzene	106	10.529	10.525	0.004	99	211696	50.0	49.4	
88 m-Xylene & p-Xylene	106	10.662	10.659	0.003	99	257999	50.0	48.5	
89 o-Xylene	106	11.040	11.042	-0.002	97	256606	50.0	48.2	
90 Styrene	104	11.058	11.061	-0.003	94	433458	50.0	53.1	
91 Bromoform	173	11.240	11.243	-0.003	94	53940	50.0	57.9	
92 2-Chlorobenzotrifluoride	180	11.301	11.304	-0.003	95	198838	50.0	49.1	
93 Isopropylbenzene	105	11.411	11.407	0.004	98	647266	50.0	50.8	
96 1,1,2,2-Tetrachloroethane	83	11.715	11.712	0.003	96	179314	50.0	52.4	
95 Bromobenzene	156	11.721	11.724	-0.003	97	168825	50.0	49.3	
97 trans-1,4-Dichloro-2-buten	53	11.751	11.754	-0.003	73	22666	50.0	20.9	
98 1,2,3-Trichloropropane	110	11.776	11.772	0.004	86	64806	50.0	49.8	
99 N-Propylbenzene	120	11.824	11.827	-0.003	99	176798	50.0	44.9	
100 2-Chlorotoluene	126	11.916	11.912	0.004	95	161852	50.0	49.5	
101 3-Chlorotoluene	126	11.976	11.979	-0.003	96	161729	50.0	47.1	
102 1,3,5-Trimethylbenzene	105	12.007	12.010	-0.003	93	584576	50.0	45.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 4-Chlorotoluene	126	12.037	12.040	-0.003	99	177846	50.0	51.5	
104 tert-Butylbenzene	119	12.323	12.326	-0.003	92	442867	50.0	43.7	
106 1,2,4-Trimethylbenzene	105	12.384	12.381	0.003	99	588369	50.0	44.9	
107 1,2-dichloro-4-(trifluorom	214	12.421	12.417	0.004	97	166102	50.0	44.8	
108 sec-Butylbenzene	105	12.548	12.551	-0.003	96	694322	50.0	45.9	
109 1,3-Dichlorobenzene	146	12.664	12.667	-0.003	95	322799	50.0	48.3	
110 4-Isopropyltoluene	119	12.707	12.703	0.003	95	575619	50.0	45.4	
111 1,4-Dichlorobenzene	146	12.773	12.770	0.003	91	345176	50.0	50.5	
113 2,4-Dichloro-1-(triflourom	214	12.792	12.788	0.004	94	164213	50.0	44.5	
114 2,5-Dichlorobenzotrifluori	214	12.828	12.831	-0.003	98	180545	50.0	43.8	
116 n-Butylbenzene	91	13.114	13.111	0.003	98	542021	50.0	42.8	
117 1,2-Dichlorobenzene	146	13.126	13.123	0.003	94	331391	50.0	49.1	
118 1,2-Dibromo-3-Chloropropan	75	13.911	13.920	-0.009	69	28074	50.0	45.4	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.063	14.060	0.003	99	738560	150.0	125.7	
121 2,3- & 3,4- Dichlorotoluen	125	14.477	14.473	0.004	99	522968	100.0	80.7	
122 1,2,4-Trichlorobenzene	180	14.744	14.741	0.003	94	230748	50.0	44.1	
123 Hexachlorobutadiene	225	14.890	14.887	0.003	96	94786	50.0	46.0	
124 Naphthalene	128	15.006	15.009	-0.003	99	506613	50.0	48.0	
125 1,2,3-Trichlorobenzene	180	15.225	15.228	-0.003	93	204792	50.0	41.8	
126 2,4,5-Trichlorotoluene	159	16.010	16.006	0.004	0	88838	50.0	27.0	
127 2,3,6-Trichlorotoluene	159	16.107	16.110	-0.003	93	89654	50.0	28.8	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		100.0	96.8	
S 130 1,2-Dichloroethene, Total	96				0		100.0	172.8	
S 132 1,3-Dichloropropene, Total	1				0		100.0	87.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWKetmix2nd_00002	Amount Added:	2.00	Units: uL	
voaWVA2nd Res_00010	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00144	Amount Added:	2.00	Units: uL	
voaEE2Restek_00001	Amount Added:	2.00	Units: uL	
voaWAcro1stRe_00001	Amount Added:	6.00	Units: uL	
VOA8260INT_00042	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00042	Amount Added:	2.00	Units: uL	Run Reagent

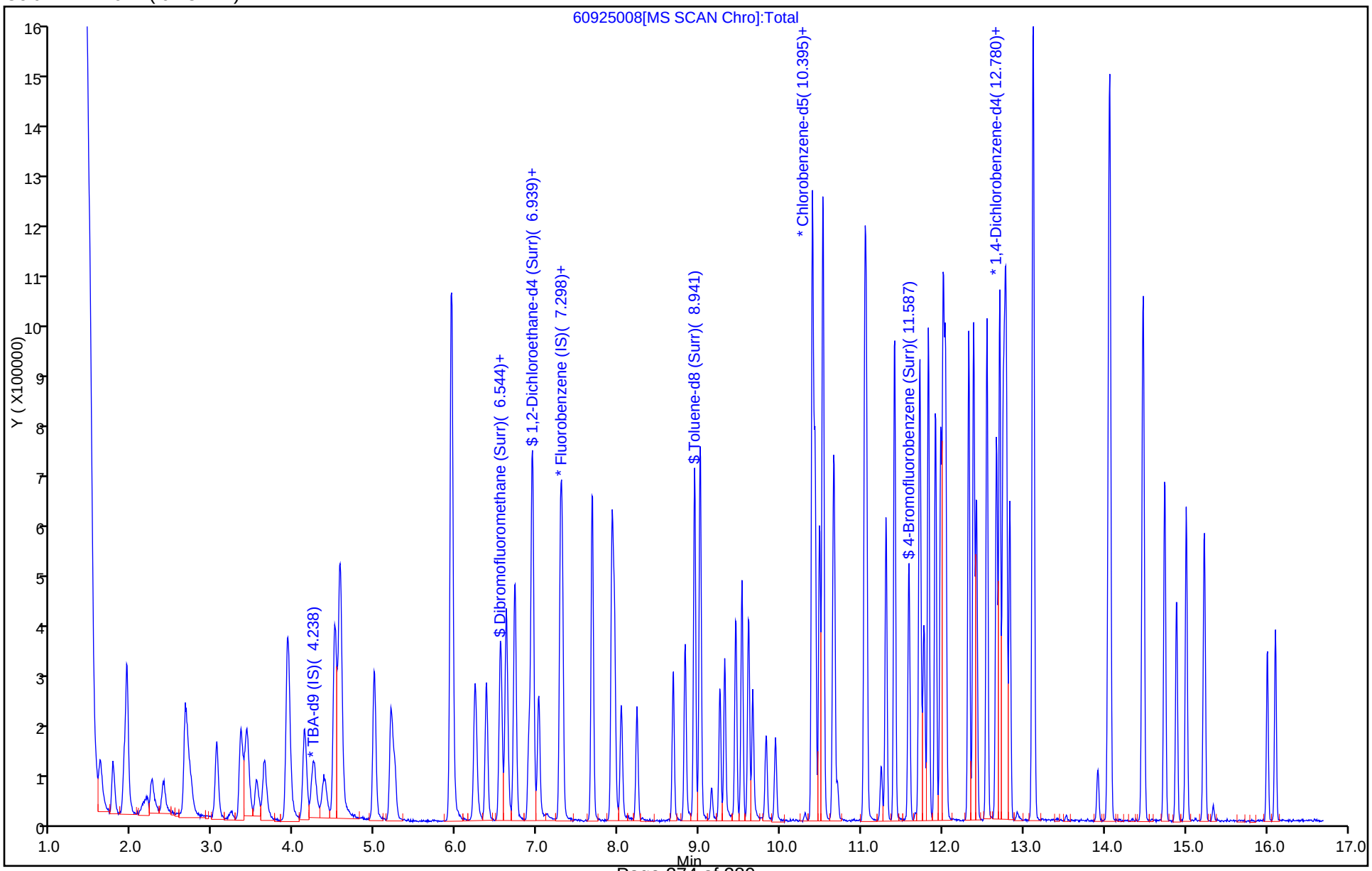
Report Date: 26-Sep-2015 08:12:25 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925008.D

Injection Date:	25-Sep-2015 15:51:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-47923-A-4 MS			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

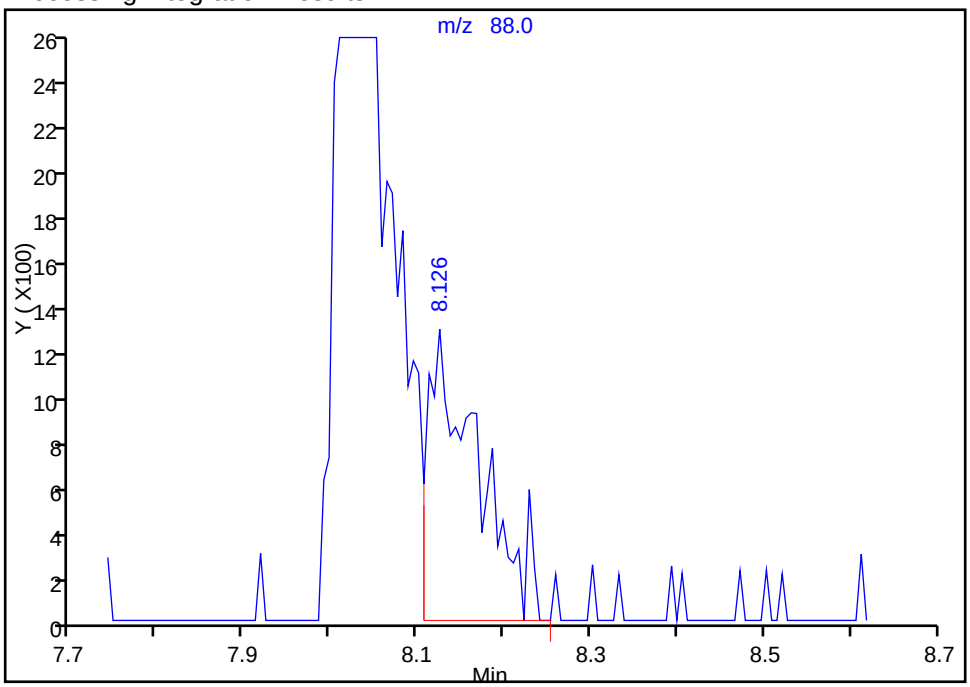
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925008.D
Injection Date: 25-Sep-2015 15:51:30 Instrument ID: CHHP6
Lims ID: 180-47923-A-4 MS
Client ID:
Operator ID: 001562 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

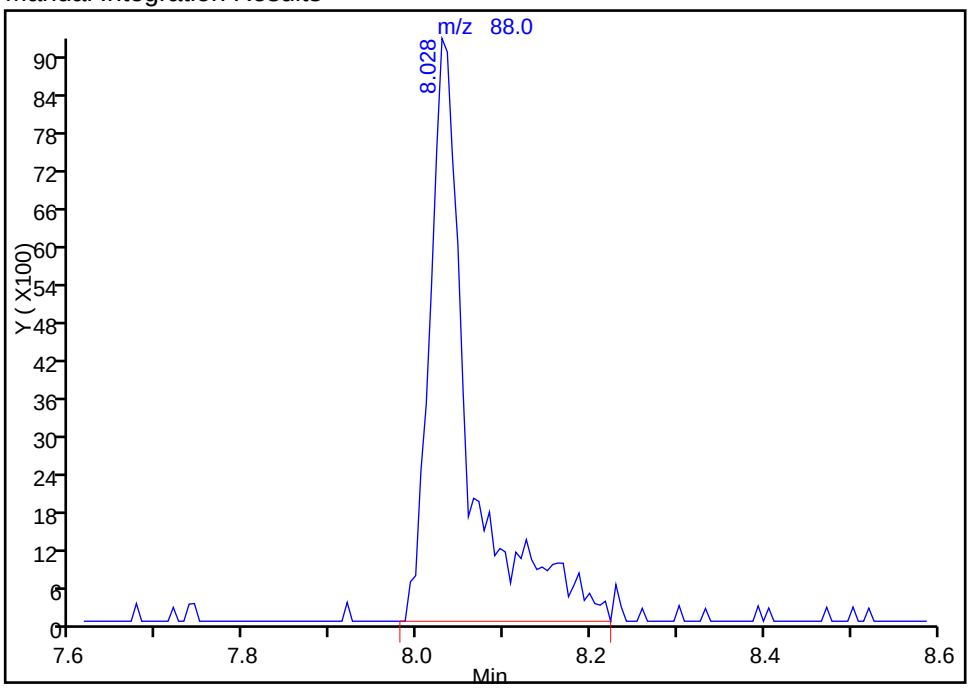
Processing Integration Results

RT: 8.13
Area: 5235
Amount: 177.4197
Amount Units: ng



Manual Integration Results

RT: 8.03
Area: 29448
Amount: 998.0240
Amount Units: ng



Reviewer: fergusond, 26-Sep-2015 08:12:24
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 MSD | Lab Sample ID: 180-47923-4 MSD

Matrix: Water | Lab File ID: 60925009.D

Analysis Method: 8260C | Date Collected: 09/17/2015 14:10

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 16:15

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.: 154899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10.5		1.0	0.28
75-01-4	Vinyl chloride	9.42		1.0	0.23
74-83-9	Bromomethane	7.58		1.0	0.31
75-00-3	Chloroethane	8.56		1.0	0.21
75-35-4	1,1-Dichloroethene	8.47		1.0	0.30
67-64-1	Acetone	17.3		5.0	2.5
75-15-0	Carbon disulfide	8.08		1.0	0.21
75-09-2	Methylene Chloride	7.73		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	8.38		1.0	0.17
1634-04-4	Methyl tert-butyl ether	7.79		1.0	0.18
75-34-3	1,1-Dichloroethane	10.6		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	24.6	F1	1.0	0.24
74-97-5	Bromochloromethane	9.16		1.0	0.18
78-93-3	2-Butanone (MEK)	20.2		5.0	0.55
67-66-3	Chloroform	8.61		1.0	0.17
71-55-6	1,1,1-Trichloroethane	8.03		1.0	0.29
56-23-5	Carbon tetrachloride	8.20		1.0	0.14
71-43-2	Benzene	8.49		1.0	0.11
107-06-2	1,2-Dichloroethane	8.87		1.0	0.21
79-01-6	Trichloroethene	17.9		1.0	0.14
78-87-5	1,2-Dichloropropane	9.43		1.0	0.095
75-27-4	Bromodichloromethane	8.69		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	8.42		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	19.4		5.0	0.53
108-88-3	Toluene	8.87		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	8.23		1.0	0.15
79-00-5	1,1,2-Trichloroethane	9.56		1.0	0.20
127-18-4	Tetrachloroethene	10.3		1.0	0.15
591-78-6	2-Hexanone	22.1		5.0	0.16
124-48-1	Dibromochloromethane	9.65		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.2		1.0	0.18
108-90-7	Chlorobenzene	10.1		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.99		1.0	0.28
100-41-4	Ethylbenzene	9.65		1.0	0.23
1330-20-7	Xylenes, Total	18.9		3.0	0.49
100-42-5	Styrene	9.91		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-47923-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 MSD | Lab Sample ID: 180-47923-4 MSD

Matrix: Water | Lab File ID: 60925009.D

Analysis Method: 8260C | Date Collected: 09/17/2015 14:10

Sample wt/vol: 5(mL) | Date Analyzed: 09/25/2015 16:15

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.: 154899 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.1		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.2		1.0	0.20
107-13-1	Acrylonitrile	99.1		20	0.55
123-91-1	1,4-Dioxane	219		200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		64-135
2037-26-5	Toluene-d8 (Surr)	98		71-118
460-00-4	4-Bromofluorobenzene (Surr)	91		70-118
1868-53-7	Dibromofluoromethane (Surr)	100		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925009.D
Lims ID: 180-47923-C-4 MSD
Client ID:
Sample Type: MSD
Inject. Date: 25-Sep-2015 16:15:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-47923-C-4 MSD
Misc. Info.: 180-0008690-009
Operator ID: 001562 Instrument ID: CHHP6

Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\MSVOA_LL_CHHP6.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Sep-2015 08:13:26 Calib Date: 14-Sep-2015 16:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: fergusond Date: 26-Sep-2015 08:13:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.248	4.235	0.013	91	201551	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.289	0.001	98	551676	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.399	10.398	0.001	91	125847	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.747	12.746	0.001	94	215880	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.548	6.553	-0.005	93	126883	50.0	49.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.930	0.001	71	196565	50.0	47.9	
$ 7 Toluene-d8 (Surr)	98	8.939	8.937	0.002	95	487499	50.0	49.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.584	0.001	86	200194	50.0	45.4	
11 Dichlorodifluoromethane	85	1.614	1.607	0.007	100	168502	50.0	44.1	
12 Chloromethane	50	1.760	1.759	0.001	99	173441	50.0	52.7	
13 Vinyl chloride	62	1.906	1.899	0.007	97	167122	50.0	47.1	
14 Butadiene	39	1.937	1.935	0.002	94	203964	50.0	61.4	
15 Bromomethane	94	2.253	2.234	0.019	91	72597	50.0	37.9	
16 Chloroethane	64	2.393	2.380	0.013	99	103623	50.0	42.8	
17 Dichlorofluoromethane	67	2.655	2.653	0.002	97	228217	50.0	40.5	
18 Trichlorofluoromethane	101	2.697	2.690	0.007	83	181095	50.0	40.3	
20 Ethyl ether	59	3.044	3.043	0.001	95	118236	50.0	37.1	
21 Acrolein	56	3.220	3.219	0.001	97	41054	150.0	118.2	
22 1,1-Dichloroethene	96	3.342	3.341	0.001	94	117596	50.0	42.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.415	3.402	0.013	92	124147	50.0	42.3	
24 Acetone	43	3.421	3.420	0.001	90	84413	100.0	86.5	
25 Iodomethane	142	3.543	3.535	0.008	99	177047	50.0	47.5	
26 Carbon disulfide	76	3.634	3.627	0.007	100	290617	50.0	40.4	
29 3-Chloro-1-propene	76	3.908	3.906	0.002	89	57581	50.0	36.8	
30 Methyl acetate	43	3.926	3.919	0.007	97	573805	250.0	250.7	
31 Methylene Chloride	84	4.127	4.125	0.002	95	152976	50.0	38.6	
32 2-Methyl-2-propanol	59	4.376	4.363	0.013	90	139264	500.0	614.0	
33 Acrylonitrile	53	4.504	4.503	0.001	98	571606	500.0	495.5	
34 trans-1,2-Dichloroethene	96	4.559	4.557	0.002	76	134297	50.0	41.9	
35 Methyl tert-butyl ether	73	4.571	4.563	0.008	97	374137	50.0	39.0	
36 Hexane	57	4.991	4.989	0.002	95	188160	50.0	43.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.197	5.190	0.007	98	302929	50.0	52.8	
38 Vinyl acetate	43	5.240	5.239	0.001	98	223449	50.0	48.2	
43 cis-1,2-Dichloroethene	96	5.940	5.938	0.002	87	428479	50.0	123.0	
42 2,2-Dichloropropane	77	5.940	5.938	0.002	53	114469	50.0	39.5	
44 2-Butanone (MEK)	43	5.946	5.938	0.008	73	134775	100.0	101.2	
48 Chlorobromomethane	128	6.232	6.230	0.002	96	64108	50.0	45.8	
49 Tetrahydrofuran	42	6.244	6.236	0.008	87	96169	100.0	107.2	
50 Chloroform	83	6.372	6.370	0.002	96	245145	50.0	43.0	
51 1,1,1-Trichloroethane	97	6.542	6.535	0.007	97	168899	50.0	40.1	
52 Cyclohexane	56	6.615	6.620	-0.005	92	224932	50.0	41.7	
53 Carbon tetrachloride	117	6.718	6.711	0.007	97	121879	50.0	41.0	
54 1,1-Dichloropropene	75	6.730	6.723	0.007	93	189793	50.0	41.9	
55 Isobutyl alcohol	41	6.895	6.893	0.002	88	132919	1250.0	1665.4	
56 Benzene	78	6.943	6.936	0.007	98	545949	50.0	42.5	
57 1,2-Dichloroethane	62	7.016	7.015	0.001	98	229601	50.0	44.3	
59 n-Heptane	43	7.308	7.307	0.001	90	175066	50.0	50.1	
61 Trichloroethene	130	7.673	7.678	-0.005	97	240003	50.0	89.5	
63 Methylcyclohexane	83	7.923	7.922	0.001	94	215528	50.0	39.6	
64 1,2-Dichloropropane	63	7.947	7.952	-0.005	92	144876	50.0	47.2	
65 1,4-Dioxane	88	8.032	8.031	0.001	38	33145	1000.0	1093.2	M
67 Dibromomethane	93	8.038	8.037	0.001	96	84705	50.0	45.4	
68 Dichlorobromomethane	83	8.227	8.226	0.001	98	152254	50.0	43.4	
71 cis-1,3-Dichloropropene	75	8.677	8.676	0.001	91	162036	50.0	42.1	
72 4-Methyl-2-pentanone (MIBK	43	8.823	8.822	0.001	97	250309	100.0	96.8	
73 Toluene	91	9.012	9.011	0.002	98	575815	50.0	44.3	
74 trans-1,3-Dichloropropene	75	9.255	9.254	0.001	97	135597	50.0	41.1	
75 Ethyl methacrylate	69	9.316	9.315	0.001	91	165596	50.0	47.3	
76 1,1,2-Trichloroethane	97	9.450	9.449	0.002	95	128431	50.0	47.8	
77 Tetrachloroethene	164	9.523	9.528	-0.005	92	114552	50.0	51.7	
78 1,3-Dichloropropane	76	9.608	9.607	0.001	95	235374	50.0	47.4	
79 2-Hexanone	43	9.657	9.655	0.002	98	187641	100.0	110.4	
81 Chlorodibromomethane	129	9.821	9.820	0.001	90	88445	50.0	48.3	
82 Ethylene Dibromide	107	9.936	9.941	-0.005	98	121428	50.0	51.1	
83 3-Chlorobenzotrifluoride	180	10.393	10.391	0.002	94	208891	50.0	50.2	
84 Chlorobenzene	112	10.423	10.428	-0.005	93	404271	50.0	50.7	
85 4-Chlorobenzotrifluoride	180	10.484	10.483	0.001	96	188253	50.0	48.8	
86 1,1,1,2-Tetrachloroethane	131	10.527	10.519	0.008	88	109248	50.0	49.9	
87 Ethylbenzene	106	10.527	10.525	0.002	99	217348	50.0	48.3	
88 m-Xylene & p-Xylene	106	10.660	10.659	0.001	100	261018	50.0	46.7	
89 o-Xylene	106	11.038	11.042	-0.004	97	266464	50.0	47.7	
90 Styrene	104	11.062	11.061	0.001	94	425457	50.0	49.6	
91 Bromoform	173	11.244	11.243	0.001	94	49636	50.0	50.7	
92 2-Chlorobenzotrifluoride	180	11.305	11.304	0.001	97	204461	50.0	48.0	
93 Isopropylbenzene	105	11.409	11.407	0.002	97	657143	50.0	49.1	
96 1,1,2,2-Tetrachloroethane	83	11.713	11.712	0.001	97	183311	50.0	51.0	
95 Bromobenzene	156	11.725	11.724	0.001	98	170237	50.0	49.1	
97 trans-1,4-Dichloro-2-buten	53	11.749	11.754	-0.005	69	16800	50.0	15.3	
98 1,2,3-Trichloropropane	110	11.768	11.772	-0.004	87	60455	50.0	45.8	
99 N-Propylbenzene	120	11.828	11.827	0.001	98	187718	50.0	47.0	
100 2-Chlorotoluene	126	11.914	11.912	0.002	94	163786	50.0	49.4	
101 3-Chlorotoluene	126	11.981	11.979	0.002	96	160071	50.0	45.9	
102 1,3,5-Trimethylbenzene	105	12.011	12.010	0.001	94	597280	50.0	46.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 4-Chlorotoluene	126	12.035	12.040	-0.005	99	186298	50.0	53.1	
104 tert-Butylbenzene	119	12.321	12.326	-0.005	92	460462	50.0	44.8	
106 1,2,4-Trimethylbenzene	105	12.382	12.381	0.001	99	611864	50.0	46.0	
107 1,2-dichloro-4-(trifluorom	214	12.419	12.417	0.002	97	171283	50.0	45.5	
108 sec-Butylbenzene	105	12.546	12.551	-0.005	96	700138	50.0	45.7	
109 1,3-Dichlorobenzene	146	12.668	12.667	0.001	95	337130	50.0	49.7	
110 4-Isopropyltoluene	119	12.704	12.703	0.001	96	589491	50.0	45.8	
111 1,4-Dichlorobenzene	146	12.771	12.770	0.001	90	348993	50.0	50.4	
113 2,4-Dichloro-1-(triflourom	214	12.790	12.788	0.002	93	158546	50.0	42.3	
114 2,5-Dichlorobenzotrifluori	214	12.832	12.831	0.001	99	188101	50.0	45.0	
116 n-Butylbenzene	91	13.112	13.111	0.001	97	541661	50.0	42.2	
117 1,2-Dichlorobenzene	146	13.124	13.123	0.001	93	331661	50.0	48.5	
118 1,2-Dibromo-3-Chloropropan	75	13.921	13.920	0.001	72	25131	50.0	40.0	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.061	14.060	0.001	99	748635	150.0	125.7	
121 2,3- & 3,4- Dichlorotoluen	125	14.475	14.473	0.002	98	521788	100.0	79.4	
122 1,2,4-Trichlorobenzene	180	14.742	14.741	0.001	93	225221	50.0	42.5	
123 Hexachlorobutadiene	225	14.888	14.887	0.001	95	89752	50.0	43.0	
124 Naphthalene	128	15.010	15.009	0.001	98	523460	50.0	48.9	
125 1,2,3-Trichlorobenzene	180	15.229	15.228	0.001	93	204322	50.0	41.2	
126 2,4,5-Trichlorotoluene	159	16.008	16.006	0.002	0	83136	50.0	24.9	
127 2,3,6-Trichlorotoluene	159	16.105	16.110	-0.005	96	85310	50.0	27.0	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		100.0	94.4	
S 130 1,2-Dichloroethene, Total	96				0		100.0	164.9	
S 132 1,3-Dichloropropene, Total	1				0		100.0	83.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWAcro1stRe_00001	Amount Added:	6.00	Units: uL	
voaEE2Restek_00001	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00144	Amount Added:	2.00	Units: uL	
voaWVA2nd Res_00010	Amount Added:	2.00	Units: uL	
voaWKetmix2nd_00002	Amount Added:	2.00	Units: uL	
VOA8260INT_00042	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00042	Amount Added:	2.00	Units: uL	Run Reagent

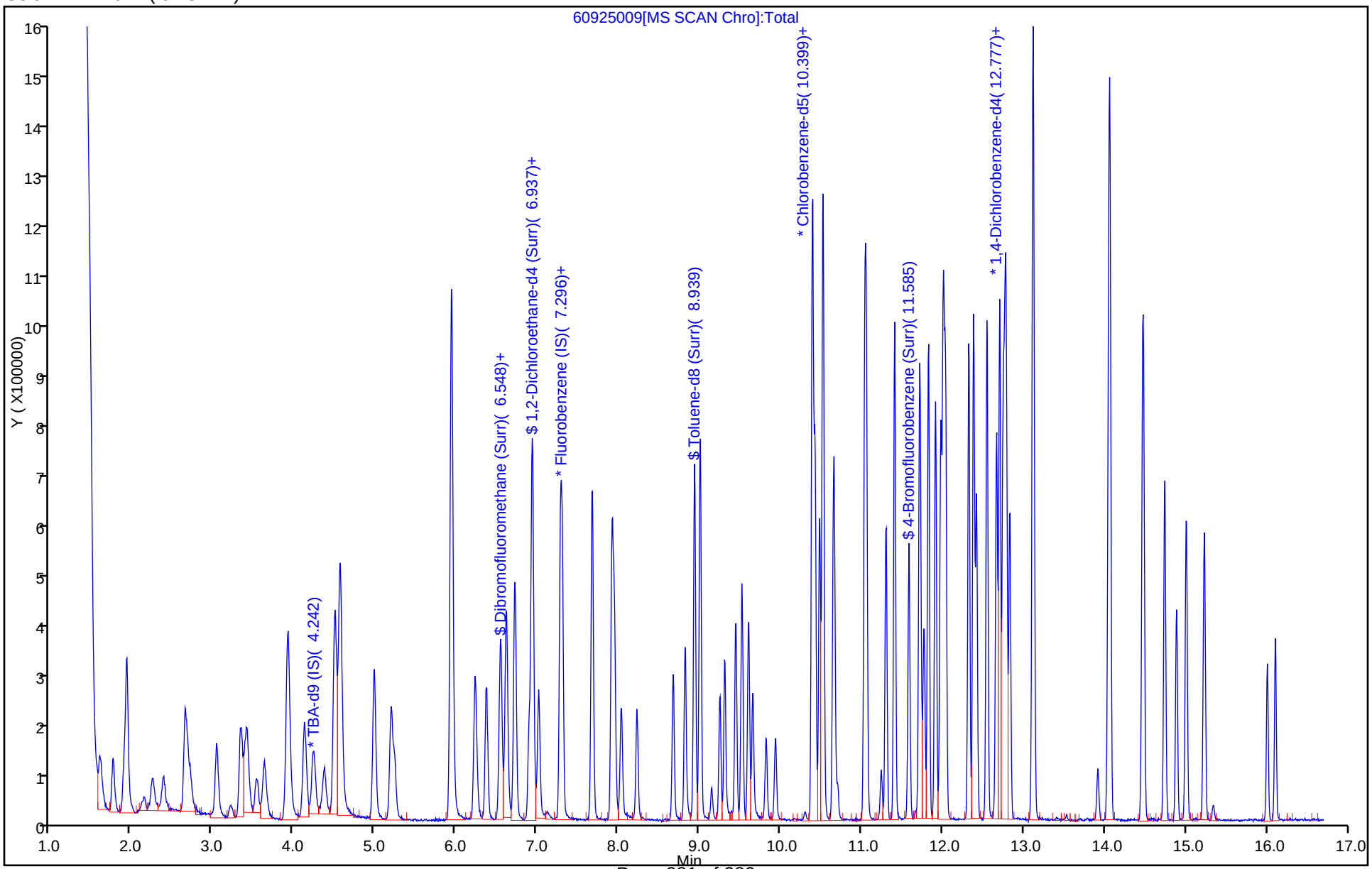
Report Date: 26-Sep-2015 08:13:26 Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925009.D

Injection Date:	25-Sep-2015 16:15:30	Instrument ID:	CHHP6	Operator ID:	001562
Lims ID:	180-47923-C-4 MSD			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP6	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

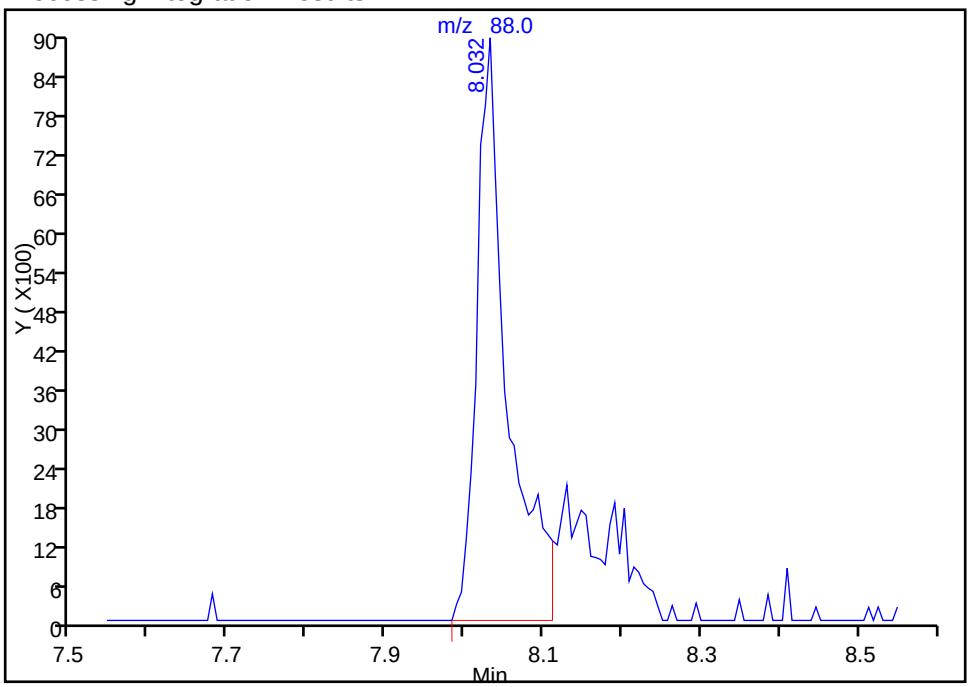
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150925-8690.b\60925009.D
Injection Date: 25-Sep-2015 16:15:30 Instrument ID: CHHP6
Lims ID: 180-47923-C-4 MSD
Client ID:
Operator ID: 001562 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

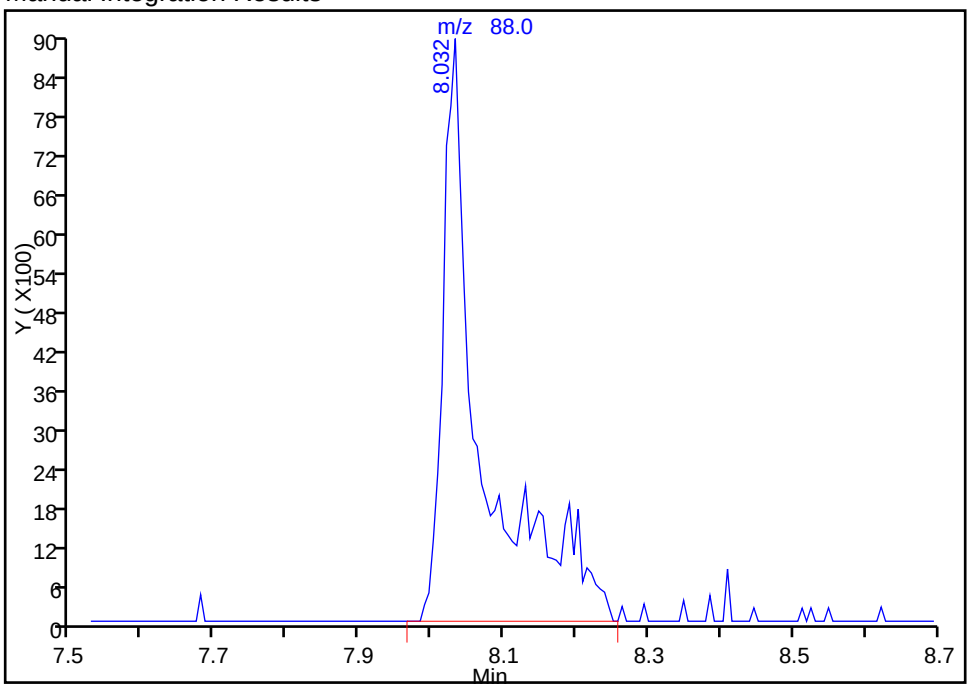
Processing Integration Results

RT: 8.03
Area: 24179
Amount: 797.5039
Amount Units: ng



Manual Integration Results

RT: 8.03
Area: 33145
Amount: 1093.2324
Amount Units: ng



Reviewer: fergusond, 26-Sep-2015 08:13:26
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Instrument ID: CHHP6 Start Date: 07/31/2015 12:10

Analysis Batch Number: 149469 End Date: 07/31/2015 18:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-149469/1		07/31/2015 12:10	1	60731001.D	DB-624 0.18(mm)
IC 180-149469/4		07/31/2015 14:00	1	60731004.D	DB-624 0.18(mm)
ICIS 180-149469/5		07/31/2015 14:24	1	60731005.D	DB-624 0.18(mm)
IC 180-149469/6		07/31/2015 14:49	1	60731006.D	DB-624 0.18(mm)
IC 180-149469/7		07/31/2015 15:13	1	60731007.D	DB-624 0.18(mm)
IC 180-149469/8		07/31/2015 15:37	1	60731008.D	DB-624 0.18(mm)
IC 180-149469/9		07/31/2015 16:01	1	60731009.D	DB-624 0.18(mm)
IC 180-149469/10		07/31/2015 16:25	1	60731010.D	DB-624 0.18(mm)
IC 180-149469/14		07/31/2015 18:02	1	60731014.D	DB-624 0.18(mm)
ZZZZZ		07/31/2015 18:26	1		DB-624 0.18(mm)
ICV 180-149469/16		07/31/2015 18:50	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Instrument ID: CHHP6 Start Date: 09/25/2015 12:13

Analysis Batch Number: 154899 End Date: 09/25/2015 23:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-154899/1		09/25/2015 12:13	1	60925001.D	DB-624 0.18(mm)
CCVIS 180-154899/2		09/25/2015 12:54	1	60925002.D	DB-624 0.18(mm)
ZZZZZ		09/25/2015 13:34	1		DB-624 0.18(mm)
MB 180-154899/4		09/25/2015 14:02	1	60925004.D	DB-624 0.18(mm)
180-47923-4	HD-CW-18-0/1-0	09/25/2015 14:39	1	60925005.D	DB-624 0.18(mm)
180-47923-3	HD-QC3-0/1-2	09/25/2015 15:03	1	60925006.D	DB-624 0.18(mm)
LCS 180-154899/7		09/25/2015 15:27	1	60925007.D	DB-624 0.18(mm)
180-47923-4 MS	HD-CW-18-0/1-0 MS	09/25/2015 15:51	1	60925008.D	DB-624 0.18(mm)
180-47923-4 MSD	HD-CW-18-0/1-0 MSD	09/25/2015 16:15	1	60925009.D	DB-624 0.18(mm)
ZZZZZ		09/25/2015 17:28	500		DB-624 0.18(mm)
ZZZZZ		09/25/2015 17:53	1		DB-624 0.18(mm)
ZZZZZ		09/25/2015 18:41	1		DB-624 0.18(mm)
ZZZZZ		09/25/2015 19:05	50		DB-624 0.18(mm)
ZZZZZ		09/25/2015 19:30	50		DB-624 0.18(mm)
ZZZZZ		09/25/2015 19:54	250		DB-624 0.18(mm)
ZZZZZ		09/25/2015 20:19	1		DB-624 0.18(mm)
ZZZZZ		09/25/2015 20:43	200		DB-624 0.18(mm)
ZZZZZ		09/25/2015 21:07	1		DB-624 0.18(mm)
180-47923-1	HD-MW-136A-270/348-0	09/25/2015 21:32	100	60925021.D	DB-624 0.18(mm)
ZZZZZ		09/25/2015 21:56	1		DB-624 0.18(mm)
180-47923-2	HD-RW-5-0/1-0	09/25/2015 22:20	1	60925023.D	DB-624 0.18(mm)
ZZZZZ		09/25/2015 22:44	1		DB-624 0.18(mm)
ZZZZZ		09/25/2015 23:08	1		DB-624 0.18(mm)
ZZZZZ		09/25/2015 23:33	100		DB-624 0.18(mm)
ZZZZZ		09/25/2015 23:57	50		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-47923-1

SDG No.:

Instrument ID: CHHP6 Start Date: 09/28/2015 10:22

Analysis Batch Number: 155089 End Date: 09/28/2015 22:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-155089/1		09/28/2015 10:22	1	60928001.D	DB-624 0.18(mm)
CCVIS 180-155089/2		09/28/2015 11:03	1	60928002.D	DB-624 0.18(mm)
ZZZZZ		09/28/2015 11:42	1		DB-624 0.18(mm)
MB 180-155089/4		09/28/2015 12:18	1	60928004.D	DB-624 0.18(mm)
ZZZZZ		09/28/2015 13:00	1		DB-624 0.18(mm)
ZZZZZ		09/28/2015 13:33	1		DB-624 0.18(mm)
ZZZZZ		09/28/2015 13:57	1		DB-624 0.18(mm)
LCS 180-155089/8		09/28/2015 14:21	1	60928008.D	DB-624 0.18(mm)
ZZZZZ		09/28/2015 14:46	1		DB-624 0.18(mm)
ZZZZZ		09/28/2015 15:10	1		DB-624 0.18(mm)
180-47923-1 DL	HD-MW-136A-270/348-0 DL	09/28/2015 15:58	1250	60928012.D	DB-624 0.18(mm)
ZZZZZ		09/28/2015 16:22	1		DB-624 0.18(mm)
ZZZZZ		09/28/2015 16:47	1		DB-624 0.18(mm)
ZZZZZ		09/28/2015 17:11	1		DB-624 0.18(mm)
ZZZZZ		09/28/2015 17:35	200		DB-624 0.18(mm)
ZZZZZ		09/28/2015 18:00	40		DB-624 0.18(mm)
ZZZZZ		09/28/2015 18:24	25		DB-624 0.18(mm)
ZZZZZ		09/28/2015 18:49	1		DB-624 0.18(mm)
ZZZZZ		09/28/2015 19:13	100		DB-624 0.18(mm)
ZZZZZ		09/28/2015 20:02	1		DB-624 0.18(mm)
ZZZZZ		09/28/2015 20:26	1		DB-624 0.18(mm)
ZZZZZ		09/28/2015 20:50	1		DB-624 0.18(mm)
ZZZZZ		09/28/2015 21:14	20		DB-624 0.18(mm)
ZZZZZ		09/28/2015 21:38	4		DB-624 0.18(mm)
ZZZZZ		09/28/2015 22:03	2.5		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: 9/17/2015	COC No: TAP2015091701
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. 10012.27
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: 2015 Comprehensive Event	☐ 1 week			
Site: Harley-Davidson, York PA	☐ 5 days			
Quote # 18000557	☐ 1 day			

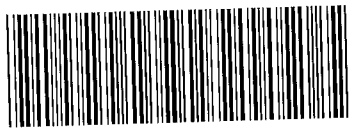
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260C)	Total CR 6+ (SW846 7196A)	Dissolved Cr 6+ (SW846 7196A)	1,4-Dioxane (SW846 8270D LL)	Sample Specific Notes:
HD-MW-136A-270/348-0	9/17/15	14:12	Groundwater	Water	3	X				
HD-RW-5-0/1-0	9/17/15	14:40	Groundwater	Water	3	X				
HD-QC3-0/1-2	9/17/15	12:00	Trip Blank	Water	2	X				
HD-CW-18-0/1-0	9/17/15	14:10	Groundwater	Water	3	X				
Number of Containers						3	1	1	2	
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Unpreserved 7=Zinc Acetate & NaOH						2	1	1	1	
Field Filter						N	N	Y	N	

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

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

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

Relinquished by (Print and Sign):	Company: GSC	Date/Time: 9/17/15 1510	Received by:	Company:	Date/Time: 9/17/15 1510
Relinquished by:	Company: TAP/CP	Date/Time: 9/17/15 1605	Received by:	Company: TAP	Date/Time: 9-18-15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time: 9:00



180-47923 Waybill

ift Using This Tag

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

KING OF PRUSSIA, PA 19406
UNITED STATES US

SHIP DATE: 17SEP15
ACTWGT: 44.00 LB
CAD: 8490299/INET3670

BILL RECIPIENT

TO SAMPLE RECEIPT
TEST AMERICA - PITTSBURGH
301 ALPHA DR

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

FedEx Express

J152015062601uv

TRK# 0201 7745 3749 5860

FRI - 18 SEP AA
STANDARD OVERNIGHT

EV AGCA

15238
PA-US PIT

Uncorrected temp 38 °C
Thermometer ID 7
CF 0 Initials DW

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

Part # 156237-435 R/T2 07/15

53932/CBB9/31nm

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-47923-1

Login Number: 47923
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

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	