TestAmerica
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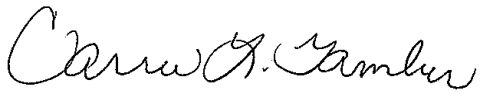
ANALYTICAL REPORT

Job Number: 180-60202-1

Job Description: Harley Davidson

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

Attention: Allan Miller



Approved for release.
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11/2/2016 1:13 PM

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11/02/2016

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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: 180-60202-1

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 10/27/2016 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5º C.

VOLATILES
The following samples was diluted to bring the concentration of target analytes within the calibration range: HD-CW-7A-0/1-0 (180-60202-1), HD-CW-3-0/1-0 (180-60202-2), HD-CW-1A-0/1-0 (180-60202-4), HD-CW-9-0/1-0 (180-60202-7), HD-CW-20-0/1-0 (180-60202-8), HD-CW-13-0/1-0 (180-60202-9), HD-CW-15A-0/1-0 (180-60202-10), HD-CW-17-0/1-0 (180-60202-11), HD-QC3-0/1-1 (180-60202-12) and INFLUENT TO #003 GWTS (180-60202-13). Elevated reporting limits (RLs) are provided.

Internal standard (ISTD) response for TBA-d9 for the following sample was outside acceptance criteria: HD-CW-1-0/1-0 (180-60202-3). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

cis-1,2-Dichloroethene and Trichloroethene failed the recovery criteria low for the MS of sample HD-CW-17-0/1-0 (180-60202-11) in batch 180-192841. cis-1,2-Dichloroethene failed the recovery criteria low for the MSD of sample HD-CW-17-0/1-0 (180-60202-11) in batch 180-192841.

The continuing calibration verification (CCV) analyzed in batch 180-192841 was outside the method criteria for the following analyte: 1,4-Dioxane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-192920 was outside the method criteria for the following analytes Bromoform and Carbon disulfide. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes are considered estimated.

SEMIVOLATILES
Sample HD-CW-15A-0/1-0 (180-60202-10) required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-60202-1

Client Sample ID: HD-CW-7A-0/1-0 — Lab Sample ID: 180-60202-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.9	J	2.0	0.57	ug/L	2		8260C	Total/NA
Chloroform	1.1	J	2.0	0.55	ug/L	2		8260C	Total/NA
Trichloroethene	86		2.0	0.52	ug/L	2		8260C	Total/NA
Tetrachloroethene	5.6		2.0	0.54	ug/L	2		8260C	Total/NA

Client Sample ID: HD-CW-3-0/1-0 — Lab Sample ID: 180-60202-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	570	E	10	5.0	ug/L	2		8260C	Total/NA
trans-1,2-Dichloroethene	1.6	J	2.0	0.57	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	33		2.0	0.57	ug/L	2		8260C	Total/NA
Dibromochloromethane	1.9	J	2.0	0.79	ug/L	2		8260C	Total/NA
Bromoform	11		2.0	0.59	ug/L	2		8260C	Total/NA
Acetone - DL	470		100	50	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene - DL	33		20	5.7	ug/L	20		8260C	Total/NA
Bromoform - DL	9.1	J	20	5.9	ug/L	20		8260C	Total/NA

Client Sample ID: HD-CW-1-0/1-0 — Lab Sample ID: 180-60202-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.6		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	1.6		1.0	0.26	ug/L	1		8260C	Total/NA

Client Sample ID: HD-CW-1A-0/1-0 — Lab Sample ID: 180-60202-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.73	J	1.0	0.29	ug/L	1		8260C	Total/NA
Chloroform	0.44	J	1.0	0.27	ug/L	1		8260C	Total/NA
Trichloroethene	58	E	1.0	0.26	ug/L	1		8260C	Total/NA
Tetrachloroethene	2.3		1.0	0.27	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - DL	0.89	J	2.0	0.57	ug/L	2		8260C	Total/NA
Trichloroethene - DL	56		2.0	0.52	ug/L	2		8260C	Total/NA
Tetrachloroethene - DL	1.9	J	2.0	0.54	ug/L	2		8260C	Total/NA

Client Sample ID: HD-CW-2-0/1-0 — Lab Sample ID: 180-60202-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6.1		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	15		1.0	0.26	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.97	J	1.0	0.27	ug/L	1		8260C	Total/NA

Client Sample ID: HD-CW-7-0/1-0 — Lab Sample ID: 180-60202-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.91	J	1.0	0.27	ug/L	1		8260C	Total/NA
Trichloroethene	1.0		1.0	0.26	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.76	J	1.0	0.27	ug/L	1		8260C	Total/NA

Client Sample ID: HD-CW-9-0/1-0 — Lab Sample ID: 180-60202-7

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-CW-9-0/1-0 (Continued) — Lab Sample ID: 180-60202-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	5.9	J	13	3.6	ug/L	12.5		8260C	Total/NA
1,1-Dichloroethane	4.3	J	13	2.9	ug/L	12.5		8260C	Total/NA
cis-1,2-Dichloroethene	91		13	3.6	ug/L	12.5		8260C	Total/NA
1,1,1-Trichloroethane	23		13	2.8	ug/L	12.5		8260C	Total/NA
Trichloroethene	110		13	3.2	ug/L	12.5		8260C	Total/NA
Tetrachloroethene	360		13	3.4	ug/L	12.5		8260C	Total/NA

Client Sample ID: HD-CW-20-0/1-0 — Lab Sample ID: 180-60202-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	14	J	50	14	ug/L	50		8260C	Total/NA
1,1-Dichloroethane	13	J	50	12	ug/L	50		8260C	Total/NA
cis-1,2-Dichloroethene	170		50	14	ug/L	50		8260C	Total/NA
1,1,1-Trichloroethane	71		50	11	ug/L	50		8260C	Total/NA
Trichloroethene	570		50	13	ug/L	50		8260C	Total/NA
Tetrachloroethene	1400		50	13	ug/L	50		8260C	Total/NA

Client Sample ID: HD-CW-13-0/1-0 — Lab Sample ID: 180-60202-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	9.3	J	20	5.7	ug/L	20		8260C	Total/NA
1,1-Dichloroethane	5.5	J	20	4.7	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	320		20	5.7	ug/L	20		8260C	Total/NA
1,1,1-Trichloroethane	17	J	20	4.4	ug/L	20		8260C	Total/NA
Trichloroethene	160		20	5.2	ug/L	20		8260C	Total/NA
Tetrachloroethene	170		20	5.4	ug/L	20		8260C	Total/NA

Client Sample ID: HD-CW-15A-0/1-0 — Lab Sample ID: 180-60202-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1800		500	140	ug/L	500		8260C	Total/NA
1,1-Dichloroethane	170	J	500	120	ug/L	500		8260C	Total/NA
cis-1,2-Dichloroethene	8600		500	140	ug/L	500		8260C	Total/NA
1,1,1-Trichloroethane	9400		500	110	ug/L	500		8260C	Total/NA
Trichloroethene	5200		500	130	ug/L	500		8260C	Total/NA
Tetrachloroethene	1600		500	130	ug/L	500		8260C	Total/NA
1,4-Dioxane	120		19	0.50	ug/L	10		8270D LL	Total/NA

Client Sample ID: HD-CW-17-0/1-0 — Lab Sample ID: 180-60202-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	3.7		2.0	0.57	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	2.5		2.0	0.47	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	55	F1	2.0	0.57	ug/L	2		8260C	Total/NA
1,1,1-Trichloroethane	4.9		2.0	0.44	ug/L	2		8260C	Total/NA
Trichloroethene	37	F1	2.0	0.52	ug/L	2		8260C	Total/NA
Tetrachloroethene	20		2.0	0.54	ug/L	2		8260C	Total/NA

Client Sample ID: HD-QC3-0/1-1 — Lab Sample ID: 180-60202-12

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-QC3-0/1-1 (Continued) — Lab Sample ID: 180-60202-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	2.9		2.0	0.57	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	2.2		2.0	0.47	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	51		2.0	0.57	ug/L	2		8260C	Total/NA
1,1,1-Trichloroethane	4.2		2.0	0.44	ug/L	2		8260C	Total/NA
Trichloroethene	33		2.0	0.52	ug/L	2		8260C	Total/NA
Tetrachloroethene	19		2.0	0.54	ug/L	2		8260C	Total/NA

Client Sample ID: INFLUENT TO #003 GWTS — Lab Sample ID: 180-60202-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	22	J	25	7.2	ug/L	25		8260C	Total/NA
Methylene Chloride	11	J	25	9.1	ug/L	25		8260C	Total/NA
1,1-Dichloroethane	6.8	J	25	5.9	ug/L	25		8260C	Total/NA
cis-1,2-Dichloroethene	210		25	7.2	ug/L	25		8260C	Total/NA
1,1,1-Trichloroethane	87		25	5.6	ug/L	25		8260C	Total/NA
Trichloroethene	280		25	6.5	ug/L	25		8260C	Total/NA
Tetrachloroethene	600		25	6.7	ug/L	25		8260C	Total/NA

Client Sample ID: OUTFALL #003 GWTS — Lab Sample ID: 180-60202-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromoform	0.31	J ^c	1.0	0.29	ug/L	1		8260C	Total/NA

Client Sample ID: HD-CW-6-0/1-0 — Lab Sample ID: 180-60202-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	35		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	11		1.0	0.26	ug/L	1		8260C	Total/NA
Tetrachloroethene	46		1.0	0.27	ug/L	1		8260C	Total/NA

Client Sample ID: HD-CW-4-0/1-0 — Lab Sample ID: 180-60202-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	33		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	2.7		1.0	0.26	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.52	J	1.0	0.27	ug/L	1		8260C	Total/NA

Client Sample ID: HD-CW-5-0/1-0 — Lab Sample ID: 180-60202-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	12		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	12		1.0	0.26	ug/L	1		8260C	Total/NA
Tetrachloroethene	41		1.0	0.27	ug/L	1		8260C	Total/NA

Client Sample ID: HD-QC8-0/1-2 — Lab Sample ID: 180-60202-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.7	J	5.0	2.5	ug/L	1		8260C	Total/NA
Methylene Chloride	0.53	J	1.0	0.36	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-CW-7A-0/1-0
Date Collected: 10/25/16 07:25
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	2.0	U	2.0	0.46	ug/L			10/31/16 18:34	2
Vinyl chloride	2.0	U	2.0	0.63	ug/L			10/31/16 18:34	2
Bromomethane	2.0	U	2.0	0.72	ug/L			10/31/16 18:34	2
Chloroethane	2.0	U	2.0	0.52	ug/L			10/31/16 18:34	2
1,1-Dichloroethene	2.0	U	2.0	0.57	ug/L			10/31/16 18:34	2
Acetone	10	U	10	5.0	ug/L			10/31/16 18:34	2
Carbon disulfide	2.0	U	2.0	0.37	ug/L			10/31/16 18:34	2
Methylene Chloride	2.0	U	2.0	0.72	ug/L			10/31/16 18:34	2
trans-1,2-Dichloroethene	2.0	U	2.0	0.57	ug/L			10/31/16 18:34	2
Methyl tert-butyl ether	2.0	U	2.0	0.49	ug/L			10/31/16 18:34	2
1,1-Dichloroethane	2.0	U	2.0	0.47	ug/L			10/31/16 18:34	2
cis-1,2-Dichloroethene	**1.9**	**J**	2.0	0.57	ug/L			10/31/16 18:34	2
Bromochloromethane	2.0	U	2.0	0.75	ug/L			10/31/16 18:34	2
2-Butanone (MEK)	10	U	10	2.3	ug/L			10/31/16 18:34	2
Chloroform	**1.1**	**J**	2.0	0.55	ug/L			10/31/16 18:34	2
1,1,1-Trichloroethane	2.0	U	2.0	0.44	ug/L			10/31/16 18:34	2
Carbon tetrachloride	2.0	U	2.0	0.49	ug/L			10/31/16 18:34	2
Benzene	2.0	U	2.0	0.51	ug/L			10/31/16 18:34	2
1,2-Dichloroethane	2.0	U	2.0	0.49	ug/L			10/31/16 18:34	2
Trichloroethene	**86**		2.0	0.52	ug/L			10/31/16 18:34	2
1,2-Dichloropropane	2.0	U	2.0	0.45	ug/L			10/31/16 18:34	2
Bromodichloromethane	2.0	U	2.0	0.47	ug/L			10/31/16 18:34	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.41	ug/L			10/31/16 18:34	2
4-Methyl-2-pentanone (MIBK)	10	U	10	1.2	ug/L			10/31/16 18:34	2
Toluene	2.0	U	2.0	0.56	ug/L			10/31/16 18:34	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.48	ug/L			10/31/16 18:34	2
1,1,2-Trichloroethane	2.0	U	2.0	0.70	ug/L			10/31/16 18:34	2
Tetrachloroethene	**5.6**		2.0	0.54	ug/L			10/31/16 18:34	2
2-Hexanone	10	U	10	1.5	ug/L			10/31/16 18:34	2
Dibromochloromethane	2.0	U	2.0	0.79	ug/L			10/31/16 18:34	2
1,2-Dibromoethane (EDB)	2.0	U	2.0	0.58	ug/L			10/31/16 18:34	2
Chlorobenzene	2.0	U	2.0	0.63	ug/L			10/31/16 18:34	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.39	ug/L			10/31/16 18:34	2
Ethylbenzene	2.0	U	2.0	0.55	ug/L			10/31/16 18:34	2
Xylenes, Total	4.0	U	4.0	0.97	ug/L			10/31/16 18:34	2
Styrene	2.0	U	2.0	0.53	ug/L			10/31/16 18:34	2
Bromoform	2.0	U	2.0	0.59	ug/L			10/31/16 18:34	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.69	ug/L			10/31/16 18:34	2
Acrylonitrile	40	U	40	5.5	ug/L			10/31/16 18:34	2
1,4-Dioxane	400	U ^c	400	15	ug/L			10/31/16 18:34	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 134*		*10/31/16 18:34*	*2*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/31/16 18:34*	*2*
4-Bromofluorobenzene (Surr)	*99*		*72 - 120*		*10/31/16 18:34*	*2*
Dibromofluoromethane (Surr)	*102*		*77 - 127*		*10/31/16 18:34*	*2*

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

Client Sample ID: HD-CW-3-0/1-0
Date Collected: 10/25/16 08:05
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	2.0	U	2.0	0.46	ug/L			10/31/16 21:23	2
Vinyl chloride	2.0	U	2.0	0.63	ug/L			10/31/16 21:23	2
Bromomethane	2.0	U	2.0	0.72	ug/L			10/31/16 21:23	2
Chloroethane	2.0	U	2.0	0.52	ug/L			10/31/16 21:23	2
1,1-Dichloroethene	2.0	U	2.0	0.57	ug/L			10/31/16 21:23	2
Acetone	**570**	**E**	10	5.0	ug/L			10/31/16 21:23	2
Carbon disulfide	2.0	U	2.0	0.37	ug/L			10/31/16 21:23	2
Methylene Chloride	2.0	U	2.0	0.72	ug/L			10/31/16 21:23	2
trans-1,2-Dichloroethene	**1.6**	**J**	2.0	0.57	ug/L			10/31/16 21:23	2
Methyl tert-butyl ether	2.0	U	2.0	0.49	ug/L			10/31/16 21:23	2
1,1-Dichloroethane	2.0	U	2.0	0.47	ug/L			10/31/16 21:23	2
cis-1,2-Dichloroethene	**33**		2.0	0.57	ug/L			10/31/16 21:23	2
Bromochloromethane	2.0	U	2.0	0.75	ug/L			10/31/16 21:23	2
2-Butanone (MEK)	10	U	10	2.3	ug/L			10/31/16 21:23	2
Chloroform	2.0	U	2.0	0.55	ug/L			10/31/16 21:23	2
1,1,1-Trichloroethane	2.0	U	2.0	0.44	ug/L			10/31/16 21:23	2
Carbon tetrachloride	2.0	U	2.0	0.49	ug/L			10/31/16 21:23	2
Benzene	2.0	U	2.0	0.51	ug/L			10/31/16 21:23	2
1,2-Dichloroethane	2.0	U	2.0	0.49	ug/L			10/31/16 21:23	2
Trichloroethene	2.0	U	2.0	0.52	ug/L			10/31/16 21:23	2
1,2-Dichloropropane	2.0	U	2.0	0.45	ug/L			10/31/16 21:23	2
Bromodichloromethane	2.0	U	2.0	0.47	ug/L			10/31/16 21:23	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.41	ug/L			10/31/16 21:23	2
4-Methyl-2-pentanone (MIBK)	10	U	10	1.2	ug/L			10/31/16 21:23	2
Toluene	2.0	U	2.0	0.56	ug/L			10/31/16 21:23	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.48	ug/L			10/31/16 21:23	2
1,1,2-Trichloroethane	2.0	U	2.0	0.70	ug/L			10/31/16 21:23	2
Tetrachloroethene	2.0	U	2.0	0.54	ug/L			10/31/16 21:23	2
2-Hexanone	10	U	10	1.5	ug/L			10/31/16 21:23	2
Dibromochloromethane	**1.9**	**J**	2.0	0.79	ug/L			10/31/16 21:23	2
1,2-Dibromoethane (EDB)	2.0	U	2.0	0.58	ug/L			10/31/16 21:23	2
Chlorobenzene	2.0	U	2.0	0.63	ug/L			10/31/16 21:23	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.39	ug/L			10/31/16 21:23	2
Ethylbenzene	2.0	U	2.0	0.55	ug/L			10/31/16 21:23	2
Xylenes, Total	4.0	U	4.0	0.97	ug/L			10/31/16 21:23	2
Styrene	2.0	U	2.0	0.53	ug/L			10/31/16 21:23	2
Bromoform	**11**		2.0	0.59	ug/L			10/31/16 21:23	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.69	ug/L			10/31/16 21:23	2
Acrylonitrile	40	U	40	5.5	ug/L			10/31/16 21:23	2
1,4-Dioxane	400	U ^c	400	15	ug/L			10/31/16 21:23	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 134*		*10/31/16 21:23*	*2*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/31/16 21:23*	*2*
4-Bromofluorobenzene (Surr)	*101*		*72 - 120*		*10/31/16 21:23*	*2*
Dibromofluoromethane (Surr)	*107*		*77 - 127*		*10/31/16 21:23*	*2*

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

Client Sample ID: HD-CW-1-0/1-0
Date Collected: 10/25/16 09:45
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			10/31/16 16:57	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			10/31/16 16:57	1
Bromomethane	1.0	U	1.0	0.36	ug/L			10/31/16 16:57	1
Chloroethane	1.0	U	1.0	0.26	ug/L			10/31/16 16:57	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/31/16 16:57	1
Acetone	5.0	U	5.0	2.5	ug/L			10/31/16 16:57	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			10/31/16 16:57	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/31/16 16:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/31/16 16:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			10/31/16 16:57	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			10/31/16 16:57	1
cis-1,2-Dichloroethene	**1.6**		1.0	0.29	ug/L			10/31/16 16:57	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			10/31/16 16:57	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			10/31/16 16:57	1
Chloroform	1.0	U	1.0	0.27	ug/L			10/31/16 16:57	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/31/16 16:57	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/31/16 16:57	1
Benzene	1.0	U	1.0	0.26	ug/L			10/31/16 16:57	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/31/16 16:57	1
Trichloroethene	**1.6**		1.0	0.26	ug/L			10/31/16 16:57	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/31/16 16:57	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/31/16 16:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/31/16 16:57	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/31/16 16:57	1
Toluene	1.0	U	1.0	0.28	ug/L			10/31/16 16:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			10/31/16 16:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			10/31/16 16:57	1
Tetrachloroethene	1.0	U	1.0	0.27	ug/L			10/31/16 16:57	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			10/31/16 16:57	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			10/31/16 16:57	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			10/31/16 16:57	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			10/31/16 16:57	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/31/16 16:57	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			10/31/16 16:57	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			10/31/16 16:57	1
Styrene	1.0	U	1.0	0.26	ug/L			10/31/16 16:57	1
Bromoform	1.0	U	1.0	0.29	ug/L			10/31/16 16:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/31/16 16:57	1
Acrylonitrile	20	U	20	2.8	ug/L			10/31/16 16:57	1
1,4-Dioxane	200	U ^c	200	7.5	ug/L			10/31/16 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 134*		*10/31/16 16:57*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/31/16 16:57*	*1*
4-Bromofluorobenzene (Surr)	*102*		*72 - 120*		*10/31/16 16:57*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 127*		*10/31/16 16:57*	*1*

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

Client Sample ID: HD-CW-1A-0/1-0
Date Collected: 10/26/16 06:05
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			10/31/16 17:22	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			10/31/16 17:22	1
Bromomethane	1.0	U	1.0	0.36	ug/L			10/31/16 17:22	1
Chloroethane	1.0	U	1.0	0.26	ug/L			10/31/16 17:22	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/31/16 17:22	1
Acetone	5.0	U	5.0	2.5	ug/L			10/31/16 17:22	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			10/31/16 17:22	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/31/16 17:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/31/16 17:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			10/31/16 17:22	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			10/31/16 17:22	1
cis-1,2-Dichloroethene	**0.73**	**J**	1.0	0.29	ug/L			10/31/16 17:22	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			10/31/16 17:22	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			10/31/16 17:22	1
Chloroform	**0.44**	**J**	1.0	0.27	ug/L			10/31/16 17:22	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/31/16 17:22	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/31/16 17:22	1
Benzene	1.0	U	1.0	0.26	ug/L			10/31/16 17:22	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/31/16 17:22	1
Trichloroethene	**58**	**E**	1.0	0.26	ug/L			10/31/16 17:22	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/31/16 17:22	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/31/16 17:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/31/16 17:22	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/31/16 17:22	1
Toluene	1.0	U	1.0	0.28	ug/L			10/31/16 17:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			10/31/16 17:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			10/31/16 17:22	1
Tetrachloroethene	**2.3**		1.0	0.27	ug/L			10/31/16 17:22	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			10/31/16 17:22	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			10/31/16 17:22	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			10/31/16 17:22	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			10/31/16 17:22	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/31/16 17:22	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			10/31/16 17:22	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			10/31/16 17:22	1
Styrene	1.0	U	1.0	0.26	ug/L			10/31/16 17:22	1
Bromoform	1.0	U	1.0	0.29	ug/L			10/31/16 17:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/31/16 17:22	1
Acrylonitrile	20	U	20	2.8	ug/L			10/31/16 17:22	1
1,4-Dioxane	200	U ^c	200	7.5	ug/L			10/31/16 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 134*		*10/31/16 17:22*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/31/16 17:22*	*1*
4-Bromofluorobenzene (Surr)	*102*		*72 - 120*		*10/31/16 17:22*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 127*		*10/31/16 17:22*	*1*

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

Client Sample ID: HD-CW-2-0/1-0
Date Collected: 10/26/16 06:10
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 15:26	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			11/01/16 15:26	1
Bromomethane	1.0	U	1.0	0.36	ug/L			11/01/16 15:26	1
Chloroethane	1.0	U	1.0	0.26	ug/L			11/01/16 15:26	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 15:26	1
Acetone	5.0	U	5.0	2.5	ug/L			11/01/16 15:26	1
Carbon disulfide	1.0	U ^c	1.0	0.18	ug/L			11/01/16 15:26	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/16 15:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 15:26	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			11/01/16 15:26	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			11/01/16 15:26	1
cis-1,2-Dichloroethene	**6.1**		1.0	0.29	ug/L			11/01/16 15:26	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			11/01/16 15:26	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			11/01/16 15:26	1
Chloroform	1.0	U	1.0	0.27	ug/L			11/01/16 15:26	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			11/01/16 15:26	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			11/01/16 15:26	1
Benzene	1.0	U	1.0	0.26	ug/L			11/01/16 15:26	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/01/16 15:26	1
Trichloroethene	**15**		1.0	0.26	ug/L			11/01/16 15:26	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			11/01/16 15:26	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 15:26	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			11/01/16 15:26	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			11/01/16 15:26	1
Toluene	1.0	U	1.0	0.28	ug/L			11/01/16 15:26	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			11/01/16 15:26	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 15:26	1
Tetrachloroethene	**0.97**	**J**	1.0	0.27	ug/L			11/01/16 15:26	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			11/01/16 15:26	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			11/01/16 15:26	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			11/01/16 15:26	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			11/01/16 15:26	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			11/01/16 15:26	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			11/01/16 15:26	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			11/01/16 15:26	1
Styrene	1.0	U	1.0	0.26	ug/L			11/01/16 15:26	1
Bromoform	1.0	U ^c	1.0	0.29	ug/L			11/01/16 15:26	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 15:26	1
Acrylonitrile	20	U	20	2.8	ug/L			11/01/16 15:26	1
1,4-Dioxane	200	U	200	7.5	ug/L			11/01/16 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 134*		*11/01/16 15:26*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/01/16 15:26*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 120*		*11/01/16 15:26*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 127*		*11/01/16 15:26*	*1*

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

Client Sample ID: HD-CW-7-0/1-0
Date Collected: 10/26/16 06:12
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 15:50	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			11/01/16 15:50	1
Bromomethane	1.0	U	1.0	0.36	ug/L			11/01/16 15:50	1
Chloroethane	1.0	U	1.0	0.26	ug/L			11/01/16 15:50	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 15:50	1
Acetone	5.0	U	5.0	2.5	ug/L			11/01/16 15:50	1
Carbon disulfide	1.0	U ^c	1.0	0.18	ug/L			11/01/16 15:50	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/16 15:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 15:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			11/01/16 15:50	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			11/01/16 15:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 15:50	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			11/01/16 15:50	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			11/01/16 15:50	1
Chloroform	**0.91**	**J**	1.0	0.27	ug/L			11/01/16 15:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			11/01/16 15:50	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			11/01/16 15:50	1
Benzene	1.0	U	1.0	0.26	ug/L			11/01/16 15:50	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/01/16 15:50	1
Trichloroethene	**1.0**		1.0	0.26	ug/L			11/01/16 15:50	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			11/01/16 15:50	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 15:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			11/01/16 15:50	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			11/01/16 15:50	1
Toluene	1.0	U	1.0	0.28	ug/L			11/01/16 15:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			11/01/16 15:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 15:50	1
Tetrachloroethene	**0.76**	**J**	1.0	0.27	ug/L			11/01/16 15:50	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			11/01/16 15:50	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			11/01/16 15:50	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			11/01/16 15:50	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			11/01/16 15:50	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			11/01/16 15:50	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			11/01/16 15:50	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			11/01/16 15:50	1
Styrene	1.0	U	1.0	0.26	ug/L			11/01/16 15:50	1
Bromoform	1.0	U ^c	1.0	0.29	ug/L			11/01/16 15:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 15:50	1
Acrylonitrile	20	U	20	2.8	ug/L			11/01/16 15:50	1
1,4-Dioxane	200	U	200	7.5	ug/L			11/01/16 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 134*		*11/01/16 15:50*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/01/16 15:50*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 120*		*11/01/16 15:50*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 127*		*11/01/16 15:50*	*1*

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

Client Sample ID: HD-CW-9-0/1-0
Date Collected: 10/26/16 06:45
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	13	U	13	2.9	ug/L			10/31/16 19:46	12.5
Vinyl chloride	13	U	13	3.9	ug/L			10/31/16 19:46	12.5
Bromomethane	13	U	13	4.5	ug/L			10/31/16 19:46	12.5
Chloroethane	13	U	13	3.2	ug/L			10/31/16 19:46	12.5
1,1-Dichloroethene	**5.9**	**J**	13	3.6	ug/L			10/31/16 19:46	12.5
Acetone	63	U	63	31	ug/L			10/31/16 19:46	12.5
Carbon disulfide	13	U	13	2.3	ug/L			10/31/16 19:46	12.5
Methylene Chloride	13	U	13	4.5	ug/L			10/31/16 19:46	12.5
trans-1,2-Dichloroethene	13	U	13	3.6	ug/L			10/31/16 19:46	12.5
Methyl tert-butyl ether	13	U	13	3.0	ug/L			10/31/16 19:46	12.5
1,1-Dichloroethane	**4.3**	**J**	13	2.9	ug/L			10/31/16 19:46	12.5
cis-1,2-Dichloroethene	**91**		13	3.6	ug/L			10/31/16 19:46	12.5
Bromochloromethane	13	U	13	4.7	ug/L			10/31/16 19:46	12.5
2-Butanone (MEK)	63	U	63	14	ug/L			10/31/16 19:46	12.5
Chloroform	13	U	13	3.4	ug/L			10/31/16 19:46	12.5
1,1,1-Trichloroethane	**23**		13	2.8	ug/L			10/31/16 19:46	12.5
Carbon tetrachloride	13	U	13	3.0	ug/L			10/31/16 19:46	12.5
Benzene	13	U	13	3.2	ug/L			10/31/16 19:46	12.5
1,2-Dichloroethane	13	U	13	3.1	ug/L			10/31/16 19:46	12.5
Trichloroethene	**110**		13	3.2	ug/L			10/31/16 19:46	12.5
1,2-Dichloropropane	13	U	13	2.8	ug/L			10/31/16 19:46	12.5
Bromodichloromethane	13	U	13	2.9	ug/L			10/31/16 19:46	12.5
cis-1,3-Dichloropropene	13	U	13	2.6	ug/L			10/31/16 19:46	12.5
4-Methyl-2-pentanone (MIBK)	63	U	63	7.4	ug/L			10/31/16 19:46	12.5
Toluene	13	U	13	3.5	ug/L			10/31/16 19:46	12.5
trans-1,3-Dichloropropene	13	U	13	3.0	ug/L			10/31/16 19:46	12.5
1,1,2-Trichloroethane	13	U	13	4.4	ug/L			10/31/16 19:46	12.5
Tetrachloroethene	**360**		13	3.4	ug/L			10/31/16 19:46	12.5
2-Hexanone	63	U	63	9.3	ug/L			10/31/16 19:46	12.5
Dibromochloromethane	13	U	13	4.9	ug/L			10/31/16 19:46	12.5
1,2-Dibromoethane (EDB)	13	U	13	3.6	ug/L			10/31/16 19:46	12.5
Chlorobenzene	13	U	13	3.9	ug/L			10/31/16 19:46	12.5
1,1,1,2-Tetrachloroethane	13	U	13	2.4	ug/L			10/31/16 19:46	12.5
Ethylbenzene	13	U	13	3.4	ug/L			10/31/16 19:46	12.5
Xylenes, Total	25	U	25	6.1	ug/L			10/31/16 19:46	12.5
Styrene	13	U	13	3.3	ug/L			10/31/16 19:46	12.5
Bromoform	13	U	13	3.7	ug/L			10/31/16 19:46	12.5
1,1,2,2-Tetrachloroethane	13	U	13	4.3	ug/L			10/31/16 19:46	12.5
Acrylonitrile	250	U	250	34	ug/L			10/31/16 19:46	12.5
1,4-Dioxane	2500	U ^c	2500	93	ug/L			10/31/16 19:46	12.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 134*		*10/31/16 19:46*	*12.5*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/31/16 19:46*	*12.5*
4-Bromofluorobenzene (Surr)	*100*		*72 - 120*		*10/31/16 19:46*	*12.5*
Dibromofluoromethane (Surr)	*103*		*77 - 127*		*10/31/16 19:46*	*12.5*

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

Client Sample ID: HD-CW-20-0/1-0
Date Collected: 10/26/16 06:50
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	50	U	50	11	ug/L			10/31/16 20:10	50
Vinyl chloride	50	U	50	16	ug/L			10/31/16 20:10	50
Bromomethane	50	U	50	18	ug/L			10/31/16 20:10	50
Chloroethane	50	U	50	13	ug/L			10/31/16 20:10	50
1,1-Dichloroethene	**14**	**J**	50	14	ug/L			10/31/16 20:10	50
Acetone	250	U	250	130	ug/L			10/31/16 20:10	50
Carbon disulfide	50	U	50	9.2	ug/L			10/31/16 20:10	50
Methylene Chloride	50	U	50	18	ug/L			10/31/16 20:10	50
trans-1,2-Dichloroethene	50	U	50	14	ug/L			10/31/16 20:10	50
Methyl tert-butyl ether	50	U	50	12	ug/L			10/31/16 20:10	50
1,1-Dichloroethane	**13**	**J**	50	12	ug/L			10/31/16 20:10	50
cis-1,2-Dichloroethene	**170**		50	14	ug/L			10/31/16 20:10	50
Bromochloromethane	50	U	50	19	ug/L			10/31/16 20:10	50
2-Butanone (MEK)	250	U	250	58	ug/L			10/31/16 20:10	50
Chloroform	50	U	50	14	ug/L			10/31/16 20:10	50
1,1,1-Trichloroethane	**71**		50	11	ug/L			10/31/16 20:10	50
Carbon tetrachloride	50	U	50	12	ug/L			10/31/16 20:10	50
Benzene	50	U	50	13	ug/L			10/31/16 20:10	50
1,2-Dichloroethane	50	U	50	12	ug/L			10/31/16 20:10	50
Trichloroethene	**570**		50	13	ug/L			10/31/16 20:10	50
1,2-Dichloropropane	50	U	50	11	ug/L			10/31/16 20:10	50
Bromodichloromethane	50	U	50	12	ug/L			10/31/16 20:10	50
cis-1,3-Dichloropropene	50	U	50	10	ug/L			10/31/16 20:10	50
4-Methyl-2-pentanone (MIBK)	250	U	250	30	ug/L			10/31/16 20:10	50
Toluene	50	U	50	14	ug/L			10/31/16 20:10	50
trans-1,3-Dichloropropene	50	U	50	12	ug/L			10/31/16 20:10	50
1,1,2-Trichloroethane	50	U	50	17	ug/L			10/31/16 20:10	50
Tetrachloroethene	**1400**		50	13	ug/L			10/31/16 20:10	50
2-Hexanone	250	U	250	37	ug/L			10/31/16 20:10	50
Dibromochloromethane	50	U	50	20	ug/L			10/31/16 20:10	50
1,2-Dibromoethane (EDB)	50	U	50	14	ug/L			10/31/16 20:10	50
Chlorobenzene	50	U	50	16	ug/L			10/31/16 20:10	50
1,1,1,2-Tetrachloroethane	50	U	50	9.8	ug/L			10/31/16 20:10	50
Ethylbenzene	50	U	50	14	ug/L			10/31/16 20:10	50
Xylenes, Total	100	U	100	24	ug/L			10/31/16 20:10	50
Styrene	50	U	50	13	ug/L			10/31/16 20:10	50
Bromoform	50	U	50	15	ug/L			10/31/16 20:10	50
1,1,2,2-Tetrachloroethane	50	U	50	17	ug/L			10/31/16 20:10	50
Acrylonitrile	1000	U	1000	140	ug/L			10/31/16 20:10	50
1,4-Dioxane	10000	U ^c	10000	370	ug/L			10/31/16 20:10	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 134*		*10/31/16 20:10*	*50*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/31/16 20:10*	*50*
4-Bromofluorobenzene (Surr)	*104*		*72 - 120*		*10/31/16 20:10*	*50*
Dibromofluoromethane (Surr)	*106*		*77 - 127*		*10/31/16 20:10*	*50*

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

Client Sample ID: HD-CW-13-0/1-0
Date Collected: 10/26/16 06:55
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	20	U	20	4.6	ug/L			10/31/16 20:34	20
Vinyl chloride	20	U	20	6.3	ug/L			10/31/16 20:34	20
Bromomethane	20	U	20	7.2	ug/L			10/31/16 20:34	20
Chloroethane	20	U	20	5.2	ug/L			10/31/16 20:34	20
1,1-Dichloroethene	**9.3**	**J**	20	5.7	ug/L			10/31/16 20:34	20
Acetone	100	U	100	50	ug/L			10/31/16 20:34	20
Carbon disulfide	20	U	20	3.7	ug/L			10/31/16 20:34	20
Methylene Chloride	20	U	20	7.2	ug/L			10/31/16 20:34	20
trans-1,2-Dichloroethene	20	U	20	5.7	ug/L			10/31/16 20:34	20
Methyl tert-butyl ether	20	U	20	4.9	ug/L			10/31/16 20:34	20
1,1-Dichloroethane	**5.5**	**J**	20	4.7	ug/L			10/31/16 20:34	20
cis-1,2-Dichloroethene	**320**		20	5.7	ug/L			10/31/16 20:34	20
Bromochloromethane	20	U	20	7.5	ug/L			10/31/16 20:34	20
2-Butanone (MEK)	100	U	100	23	ug/L			10/31/16 20:34	20
Chloroform	20	U	20	5.5	ug/L			10/31/16 20:34	20
1,1,1-Trichloroethane	**17**	**J**	20	4.4	ug/L			10/31/16 20:34	20
Carbon tetrachloride	20	U	20	4.9	ug/L			10/31/16 20:34	20
Benzene	20	U	20	5.1	ug/L			10/31/16 20:34	20
1,2-Dichloroethane	20	U	20	4.9	ug/L			10/31/16 20:34	20
Trichloroethene	**160**		20	5.2	ug/L			10/31/16 20:34	20
1,2-Dichloropropane	20	U	20	4.5	ug/L			10/31/16 20:34	20
Bromodichloromethane	20	U	20	4.7	ug/L			10/31/16 20:34	20
cis-1,3-Dichloropropene	20	U	20	4.1	ug/L			10/31/16 20:34	20
4-Methyl-2-pentanone (MIBK)	100	U	100	12	ug/L			10/31/16 20:34	20
Toluene	20	U	20	5.6	ug/L			10/31/16 20:34	20
trans-1,3-Dichloropropene	20	U	20	4.8	ug/L			10/31/16 20:34	20
1,1,2-Trichloroethane	20	U	20	7.0	ug/L			10/31/16 20:34	20
Tetrachloroethene	**170**		20	5.4	ug/L			10/31/16 20:34	20
2-Hexanone	100	U	100	15	ug/L			10/31/16 20:34	20
Dibromochloromethane	20	U	20	7.9	ug/L			10/31/16 20:34	20
1,2-Dibromoethane (EDB)	20	U	20	5.8	ug/L			10/31/16 20:34	20
Chlorobenzene	20	U	20	6.3	ug/L			10/31/16 20:34	20
1,1,1,2-Tetrachloroethane	20	U	20	3.9	ug/L			10/31/16 20:34	20
Ethylbenzene	20	U	20	5.5	ug/L			10/31/16 20:34	20
Xylenes, Total	40	U	40	9.7	ug/L			10/31/16 20:34	20
Styrene	20	U	20	5.3	ug/L			10/31/16 20:34	20
Bromoform	20	U	20	5.9	ug/L			10/31/16 20:34	20
1,1,2,2-Tetrachloroethane	20	U	20	6.9	ug/L			10/31/16 20:34	20
Acrylonitrile	400	U	400	55	ug/L			10/31/16 20:34	20
1,4-Dioxane	4000	U ^c	4000	150	ug/L			10/31/16 20:34	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 134*		*10/31/16 20:34*	*20*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/31/16 20:34*	*20*
4-Bromofluorobenzene (Surr)	*101*		*72 - 120*		*10/31/16 20:34*	*20*
Dibromofluoromethane (Surr)	*102*		*77 - 127*		*10/31/16 20:34*	*20*

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

Client Sample ID: HD-CW-15A-0/1-0
Date Collected: 10/26/16 07:00
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	500	U	500	110	ug/L			10/31/16 20:59	500
Vinyl chloride	500	U	500	160	ug/L			10/31/16 20:59	500
Bromomethane	500	U	500	180	ug/L			10/31/16 20:59	500
Chloroethane	500	U	500	130	ug/L			10/31/16 20:59	500
1,1-Dichloroethene	**1800**		500	140	ug/L			10/31/16 20:59	500
Acetone	2500	U	2500	1300	ug/L			10/31/16 20:59	500
Carbon disulfide	500	U	500	92	ug/L			10/31/16 20:59	500
Methylene Chloride	500	U	500	180	ug/L			10/31/16 20:59	500
trans-1,2-Dichloroethene	500	U	500	140	ug/L			10/31/16 20:59	500
Methyl tert-butyl ether	500	U	500	120	ug/L			10/31/16 20:59	500
1,1-Dichloroethane	**170**	**J**	500	120	ug/L			10/31/16 20:59	500
cis-1,2-Dichloroethene	**8600**		500	140	ug/L			10/31/16 20:59	500
Bromochloromethane	500	U	500	190	ug/L			10/31/16 20:59	500
2-Butanone (MEK)	2500	U	2500	580	ug/L			10/31/16 20:59	500
Chloroform	500	U	500	140	ug/L			10/31/16 20:59	500
1,1,1-Trichloroethane	**9400**		500	110	ug/L			10/31/16 20:59	500
Carbon tetrachloride	500	U	500	120	ug/L			10/31/16 20:59	500
Benzene	500	U	500	130	ug/L			10/31/16 20:59	500
1,2-Dichloroethane	500	U	500	120	ug/L			10/31/16 20:59	500
Trichloroethene	**5200**		500	130	ug/L			10/31/16 20:59	500
1,2-Dichloropropane	500	U	500	110	ug/L			10/31/16 20:59	500
Bromodichloromethane	500	U	500	120	ug/L			10/31/16 20:59	500
cis-1,3-Dichloropropene	500	U	500	100	ug/L			10/31/16 20:59	500
4-Methyl-2-pentanone (MIBK)	2500	U	2500	300	ug/L			10/31/16 20:59	500
Toluene	500	U	500	140	ug/L			10/31/16 20:59	500
trans-1,3-Dichloropropene	500	U	500	120	ug/L			10/31/16 20:59	500
1,1,2-Trichloroethane	500	U	500	170	ug/L			10/31/16 20:59	500
Tetrachloroethene	**1600**		500	130	ug/L			10/31/16 20:59	500
2-Hexanone	2500	U	2500	370	ug/L			10/31/16 20:59	500
Dibromochloromethane	500	U	500	200	ug/L			10/31/16 20:59	500
1,2-Dibromoethane (EDB)	500	U	500	140	ug/L			10/31/16 20:59	500
Chlorobenzene	500	U	500	160	ug/L			10/31/16 20:59	500
1,1,1,2-Tetrachloroethane	500	U	500	98	ug/L			10/31/16 20:59	500
Ethylbenzene	500	U	500	140	ug/L			10/31/16 20:59	500
Xylenes, Total	1000	U	1000	240	ug/L			10/31/16 20:59	500
Styrene	500	U	500	130	ug/L			10/31/16 20:59	500
Bromoform	500	U	500	150	ug/L			10/31/16 20:59	500
1,1,2,2-Tetrachloroethane	500	U	500	170	ug/L			10/31/16 20:59	500
Acrylonitrile	10000	U	10000	1400	ug/L			10/31/16 20:59	500
1,4-Dioxane	100000	U ^c	100000	3700	ug/L			10/31/16 20:59	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 134*		*10/31/16 20:59*	*500*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/31/16 20:59*	*500*
4-Bromofluorobenzene (Surr)	*102*		*72 - 120*		*10/31/16 20:59*	*500*
Dibromofluoromethane (Surr)	*102*		*77 - 127*		*10/31/16 20:59*	*500*

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

Client Sample ID: HD-CW-17-0/1-0
Date Collected: 10/26/16 07:05
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	2.0	U	2.0	0.46	ug/L			10/31/16 11:44	2
Vinyl chloride	2.0	U	2.0	0.63	ug/L			10/31/16 11:44	2
Bromomethane	2.0	U	2.0	0.72	ug/L			10/31/16 11:44	2
Chloroethane	2.0	U	2.0	0.52	ug/L			10/31/16 11:44	2
1,1-Dichloroethene	**3.7**		2.0	0.57	ug/L			10/31/16 11:44	2
Acetone	10	U	10	5.0	ug/L			10/31/16 11:44	2
Carbon disulfide	2.0	U	2.0	0.37	ug/L			10/31/16 11:44	2
Methylene Chloride	2.0	U	2.0	0.72	ug/L			10/31/16 11:44	2
trans-1,2-Dichloroethene	2.0	U	2.0	0.57	ug/L			10/31/16 11:44	2
Methyl tert-butyl ether	2.0	U	2.0	0.49	ug/L			10/31/16 11:44	2
1,1-Dichloroethane	**2.5**		2.0	0.47	ug/L			10/31/16 11:44	2
cis-1,2-Dichloroethene	**55**	**F1**	2.0	0.57	ug/L			10/31/16 11:44	2
Bromochloromethane	2.0	U	2.0	0.75	ug/L			10/31/16 11:44	2
2-Butanone (MEK)	10	U	10	2.3	ug/L			10/31/16 11:44	2
Chloroform	2.0	U	2.0	0.55	ug/L			10/31/16 11:44	2
1,1,1-Trichloroethane	**4.9**		2.0	0.44	ug/L			10/31/16 11:44	2
Carbon tetrachloride	2.0	U	2.0	0.49	ug/L			10/31/16 11:44	2
Benzene	2.0	U	2.0	0.51	ug/L			10/31/16 11:44	2
1,2-Dichloroethane	2.0	U	2.0	0.49	ug/L			10/31/16 11:44	2
Trichloroethene	**37**	**F1**	2.0	0.52	ug/L			10/31/16 11:44	2
1,2-Dichloropropane	2.0	U	2.0	0.45	ug/L			10/31/16 11:44	2
Bromodichloromethane	2.0	U	2.0	0.47	ug/L			10/31/16 11:44	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.41	ug/L			10/31/16 11:44	2
4-Methyl-2-pentanone (MIBK)	10	U	10	1.2	ug/L			10/31/16 11:44	2
Toluene	2.0	U	2.0	0.56	ug/L			10/31/16 11:44	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.48	ug/L			10/31/16 11:44	2
1,1,2-Trichloroethane	2.0	U	2.0	0.70	ug/L			10/31/16 11:44	2
Tetrachloroethene	**20**		2.0	0.54	ug/L			10/31/16 11:44	2
2-Hexanone	10	U	10	1.5	ug/L			10/31/16 11:44	2
Dibromochloromethane	2.0	U	2.0	0.79	ug/L			10/31/16 11:44	2
1,2-Dibromoethane (EDB)	2.0	U	2.0	0.58	ug/L			10/31/16 11:44	2
Chlorobenzene	2.0	U	2.0	0.63	ug/L			10/31/16 11:44	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.39	ug/L			10/31/16 11:44	2
Ethylbenzene	2.0	U	2.0	0.55	ug/L			10/31/16 11:44	2
Xylenes, Total	4.0	U	4.0	0.97	ug/L			10/31/16 11:44	2
Styrene	2.0	U	2.0	0.53	ug/L			10/31/16 11:44	2
Bromoform	2.0	U	2.0	0.59	ug/L			10/31/16 11:44	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.69	ug/L			10/31/16 11:44	2
Acrylonitrile	40	U	40	5.5	ug/L			10/31/16 11:44	2
1,4-Dioxane	400	U ^c	400	15	ug/L			10/31/16 11:44	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 134*		*10/31/16 11:44*	*2*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/31/16 11:44*	*2*
4-Bromofluorobenzene (Surr)	*100*		*72 - 120*		*10/31/16 11:44*	*2*
Dibromofluoromethane (Surr)	*96*		*77 - 127*		*10/31/16 11:44*	*2*

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

Client Sample ID: HD-QC3-0/1-1
Date Collected: 10/26/16 08:00
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	2.0	U	2.0	0.46	ug/L			11/01/16 16:15	2
Vinyl chloride	2.0	U	2.0	0.63	ug/L			11/01/16 16:15	2
Bromomethane	2.0	U	2.0	0.72	ug/L			11/01/16 16:15	2
Chloroethane	2.0	U	2.0	0.52	ug/L			11/01/16 16:15	2
1,1-Dichloroethene	**2.9**		2.0	0.57	ug/L			11/01/16 16:15	2
Acetone	10	U	10	5.0	ug/L			11/01/16 16:15	2
Carbon disulfide	2.0	U ^c	2.0	0.37	ug/L			11/01/16 16:15	2
Methylene Chloride	2.0	U	2.0	0.72	ug/L			11/01/16 16:15	2
trans-1,2-Dichloroethene	2.0	U	2.0	0.57	ug/L			11/01/16 16:15	2
Methyl tert-butyl ether	2.0	U	2.0	0.49	ug/L			11/01/16 16:15	2
1,1-Dichloroethane	**2.2**		2.0	0.47	ug/L			11/01/16 16:15	2
cis-1,2-Dichloroethene	**51**		2.0	0.57	ug/L			11/01/16 16:15	2
Bromochloromethane	2.0	U	2.0	0.75	ug/L			11/01/16 16:15	2
2-Butanone (MEK)	10	U	10	2.3	ug/L			11/01/16 16:15	2
Chloroform	2.0	U	2.0	0.55	ug/L			11/01/16 16:15	2
1,1,1-Trichloroethane	**4.2**		2.0	0.44	ug/L			11/01/16 16:15	2
Carbon tetrachloride	2.0	U	2.0	0.49	ug/L			11/01/16 16:15	2
Benzene	2.0	U	2.0	0.51	ug/L			11/01/16 16:15	2
1,2-Dichloroethane	2.0	U	2.0	0.49	ug/L			11/01/16 16:15	2
Trichloroethene	**33**		2.0	0.52	ug/L			11/01/16 16:15	2
1,2-Dichloropropane	2.0	U	2.0	0.45	ug/L			11/01/16 16:15	2
Bromodichloromethane	2.0	U	2.0	0.47	ug/L			11/01/16 16:15	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.41	ug/L			11/01/16 16:15	2
4-Methyl-2-pentanone (MIBK)	10	U	10	1.2	ug/L			11/01/16 16:15	2
Toluene	2.0	U	2.0	0.56	ug/L			11/01/16 16:15	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.48	ug/L			11/01/16 16:15	2
1,1,2-Trichloroethane	2.0	U	2.0	0.70	ug/L			11/01/16 16:15	2
Tetrachloroethene	**19**		2.0	0.54	ug/L			11/01/16 16:15	2
2-Hexanone	10	U	10	1.5	ug/L			11/01/16 16:15	2
Dibromochloromethane	2.0	U	2.0	0.79	ug/L			11/01/16 16:15	2
1,2-Dibromoethane (EDB)	2.0	U	2.0	0.58	ug/L			11/01/16 16:15	2
Chlorobenzene	2.0	U	2.0	0.63	ug/L			11/01/16 16:15	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.39	ug/L			11/01/16 16:15	2
Ethylbenzene	2.0	U	2.0	0.55	ug/L			11/01/16 16:15	2
Xylenes, Total	4.0	U	4.0	0.97	ug/L			11/01/16 16:15	2
Styrene	2.0	U	2.0	0.53	ug/L			11/01/16 16:15	2
Bromoform	2.0	U ^c	2.0	0.59	ug/L			11/01/16 16:15	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.69	ug/L			11/01/16 16:15	2
Acrylonitrile	40	U	40	5.5	ug/L			11/01/16 16:15	2
1,4-Dioxane	400	U	400	15	ug/L			11/01/16 16:15	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 134*		*11/01/16 16:15*	*2*
Toluene-d8 (Surr)	*99*		*80 - 120*		*11/01/16 16:15*	*2*
4-Bromofluorobenzene (Surr)	*100*		*72 - 120*		*11/01/16 16:15*	*2*
Dibromofluoromethane (Surr)	*96*		*77 - 127*		*11/01/16 16:15*	*2*

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

Client Sample ID: INFLUENT TO #003 GWTS
Date Collected: 10/26/16 07:10
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	25	U	25	5.7	ug/L			11/01/16 16:39	25
Vinyl chloride	25	U	25	7.9	ug/L			11/01/16 16:39	25
Bromomethane	25	U	25	9.1	ug/L			11/01/16 16:39	25
Chloroethane	25	U	25	6.5	ug/L			11/01/16 16:39	25
1,1-Dichloroethene	**22**	**J**	25	7.2	ug/L			11/01/16 16:39	25
Acetone	130	U	130	63	ug/L			11/01/16 16:39	25
Carbon disulfide	25	U ^c	25	4.6	ug/L			11/01/16 16:39	25
Methylene Chloride	**11**	**J**	25	9.1	ug/L			11/01/16 16:39	25
trans-1,2-Dichloroethene	25	U	25	7.2	ug/L			11/01/16 16:39	25
Methyl tert-butyl ether	25	U	25	6.1	ug/L			11/01/16 16:39	25
1,1-Dichloroethane	**6.8**	**J**	25	5.9	ug/L			11/01/16 16:39	25
cis-1,2-Dichloroethene	**210**		25	7.2	ug/L			11/01/16 16:39	25
Bromochloromethane	25	U	25	9.4	ug/L			11/01/16 16:39	25
2-Butanone (MEK)	130	U	130	29	ug/L			11/01/16 16:39	25
Chloroform	25	U	25	6.9	ug/L			11/01/16 16:39	25
1,1,1-Trichloroethane	**87**		25	5.6	ug/L			11/01/16 16:39	25
Carbon tetrachloride	25	U	25	6.1	ug/L			11/01/16 16:39	25
Benzene	25	U	25	6.4	ug/L			11/01/16 16:39	25
1,2-Dichloroethane	25	U	25	6.1	ug/L			11/01/16 16:39	25
Trichloroethene	**280**		25	6.5	ug/L			11/01/16 16:39	25
1,2-Dichloropropane	25	U	25	5.7	ug/L			11/01/16 16:39	25
Bromodichloromethane	25	U	25	5.8	ug/L			11/01/16 16:39	25
cis-1,3-Dichloropropene	25	U	25	5.2	ug/L			11/01/16 16:39	25
4-Methyl-2-pentanone (MIBK)	130	U	130	15	ug/L			11/01/16 16:39	25
Toluene	25	U	25	7.0	ug/L			11/01/16 16:39	25
trans-1,3-Dichloropropene	25	U	25	6.0	ug/L			11/01/16 16:39	25
1,1,2-Trichloroethane	25	U	25	8.7	ug/L			11/01/16 16:39	25
Tetrachloroethene	**600**		25	6.7	ug/L			11/01/16 16:39	25
2-Hexanone	130	U	130	19	ug/L			11/01/16 16:39	25
Dibromochloromethane	25	U	25	9.9	ug/L			11/01/16 16:39	25
1,2-Dibromoethane (EDB)	25	U	25	7.2	ug/L			11/01/16 16:39	25
Chlorobenzene	25	U	25	7.8	ug/L			11/01/16 16:39	25
1,1,1,2-Tetrachloroethane	25	U	25	4.9	ug/L			11/01/16 16:39	25
Ethylbenzene	25	U	25	6.9	ug/L			11/01/16 16:39	25
Xylenes, Total	50	U	50	12	ug/L			11/01/16 16:39	25
Styrene	25	U	25	6.6	ug/L			11/01/16 16:39	25
Bromoform	25	U ^c	25	7.4	ug/L			11/01/16 16:39	25
1,1,2,2-Tetrachloroethane	25	U	25	8.6	ug/L			11/01/16 16:39	25
Acrylonitrile	500	U	500	69	ug/L			11/01/16 16:39	25
1,4-Dioxane	5000	U	5000	190	ug/L			11/01/16 16:39	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 134*		*11/01/16 16:39*	*25*
Toluene-d8 (Surr)	*101*		*80 - 120*		*11/01/16 16:39*	*25*
4-Bromofluorobenzene (Surr)	*96*		*72 - 120*		*11/01/16 16:39*	*25*
Dibromofluoromethane (Surr)	*96*		*77 - 127*		*11/01/16 16:39*	*25*

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

Client Sample ID: OUTFALL #003 GWTS
Date Collected: 10/26/16 07:20
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 17:03	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			11/01/16 17:03	1
Bromomethane	1.0	U	1.0	0.36	ug/L			11/01/16 17:03	1
Chloroethane	1.0	U	1.0	0.26	ug/L			11/01/16 17:03	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 17:03	1
Acetone	5.0	U	5.0	2.5	ug/L			11/01/16 17:03	1
Carbon disulfide	1.0	U ^c	1.0	0.18	ug/L			11/01/16 17:03	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/16 17:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 17:03	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			11/01/16 17:03	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			11/01/16 17:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 17:03	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			11/01/16 17:03	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			11/01/16 17:03	1
Chloroform	1.0	U	1.0	0.27	ug/L			11/01/16 17:03	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			11/01/16 17:03	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			11/01/16 17:03	1
Benzene	1.0	U	1.0	0.26	ug/L			11/01/16 17:03	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/01/16 17:03	1
Trichloroethene	1.0	U	1.0	0.26	ug/L			11/01/16 17:03	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			11/01/16 17:03	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 17:03	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			11/01/16 17:03	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			11/01/16 17:03	1
Toluene	1.0	U	1.0	0.28	ug/L			11/01/16 17:03	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			11/01/16 17:03	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 17:03	1
Tetrachloroethene	1.0	U	1.0	0.27	ug/L			11/01/16 17:03	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			11/01/16 17:03	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			11/01/16 17:03	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			11/01/16 17:03	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			11/01/16 17:03	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			11/01/16 17:03	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			11/01/16 17:03	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			11/01/16 17:03	1
Styrene	1.0	U	1.0	0.26	ug/L			11/01/16 17:03	1
Bromoform	**0.31**	**J ^c**	1.0	0.29	ug/L			11/01/16 17:03	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 17:03	1
Acrylonitrile	20	U	20	2.8	ug/L			11/01/16 17:03	1
1,4-Dioxane	200	U	200	7.5	ug/L			11/01/16 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 134*		*11/01/16 17:03*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/01/16 17:03*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 120*		*11/01/16 17:03*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 127*		*11/01/16 17:03*	*1*

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

Client Sample ID: HD-CW-6-0/1-0
Date Collected: 10/26/16 07:45
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 17:27	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			11/01/16 17:27	1
Bromomethane	1.0	U	1.0	0.36	ug/L			11/01/16 17:27	1
Chloroethane	1.0	U	1.0	0.26	ug/L			11/01/16 17:27	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 17:27	1
Acetone	5.0	U	5.0	2.5	ug/L			11/01/16 17:27	1
Carbon disulfide	1.0	U ^c	1.0	0.18	ug/L			11/01/16 17:27	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/16 17:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 17:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			11/01/16 17:27	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			11/01/16 17:27	1
cis-1,2-Dichloroethene	**35**		1.0	0.29	ug/L			11/01/16 17:27	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			11/01/16 17:27	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			11/01/16 17:27	1
Chloroform	1.0	U	1.0	0.27	ug/L			11/01/16 17:27	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			11/01/16 17:27	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			11/01/16 17:27	1
Benzene	1.0	U	1.0	0.26	ug/L			11/01/16 17:27	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/01/16 17:27	1
Trichloroethene	**11**		1.0	0.26	ug/L			11/01/16 17:27	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			11/01/16 17:27	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 17:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			11/01/16 17:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			11/01/16 17:27	1
Toluene	1.0	U	1.0	0.28	ug/L			11/01/16 17:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			11/01/16 17:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 17:27	1
Tetrachloroethene	**46**		1.0	0.27	ug/L			11/01/16 17:27	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			11/01/16 17:27	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			11/01/16 17:27	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			11/01/16 17:27	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			11/01/16 17:27	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			11/01/16 17:27	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			11/01/16 17:27	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			11/01/16 17:27	1
Styrene	1.0	U	1.0	0.26	ug/L			11/01/16 17:27	1
Bromoform	1.0	U ^c	1.0	0.29	ug/L			11/01/16 17:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 17:27	1
Acrylonitrile	20	U	20	2.8	ug/L			11/01/16 17:27	1
1,4-Dioxane	200	U	200	7.5	ug/L			11/01/16 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 134*		*11/01/16 17:27*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/01/16 17:27*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 120*		*11/01/16 17:27*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 127*		*11/01/16 17:27*	*1*

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

Client Sample ID: HD-CW-4-0/1-0
Date Collected: 10/26/16 09:10
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 18:15	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			11/01/16 18:15	1
Bromomethane	1.0	U	1.0	0.36	ug/L			11/01/16 18:15	1
Chloroethane	1.0	U	1.0	0.26	ug/L			11/01/16 18:15	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 18:15	1
Acetone	5.0	U	5.0	2.5	ug/L			11/01/16 18:15	1
Carbon disulfide	1.0	U ^c	1.0	0.18	ug/L			11/01/16 18:15	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/16 18:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 18:15	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			11/01/16 18:15	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			11/01/16 18:15	1
cis-1,2-Dichloroethene	**33**		1.0	0.29	ug/L			11/01/16 18:15	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			11/01/16 18:15	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			11/01/16 18:15	1
Chloroform	1.0	U	1.0	0.27	ug/L			11/01/16 18:15	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			11/01/16 18:15	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			11/01/16 18:15	1
Benzene	1.0	U	1.0	0.26	ug/L			11/01/16 18:15	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/01/16 18:15	1
Trichloroethene	**2.7**		1.0	0.26	ug/L			11/01/16 18:15	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			11/01/16 18:15	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 18:15	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			11/01/16 18:15	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			11/01/16 18:15	1
Toluene	1.0	U	1.0	0.28	ug/L			11/01/16 18:15	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			11/01/16 18:15	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 18:15	1
Tetrachloroethene	**0.52**	**J**	1.0	0.27	ug/L			11/01/16 18:15	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			11/01/16 18:15	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			11/01/16 18:15	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			11/01/16 18:15	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			11/01/16 18:15	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			11/01/16 18:15	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			11/01/16 18:15	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			11/01/16 18:15	1
Styrene	1.0	U	1.0	0.26	ug/L			11/01/16 18:15	1
Bromoform	1.0	U ^c	1.0	0.29	ug/L			11/01/16 18:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 18:15	1
Acrylonitrile	20	U	20	2.8	ug/L			11/01/16 18:15	1
1,4-Dioxane	200	U	200	7.5	ug/L			11/01/16 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 134*		*11/01/16 18:15*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/01/16 18:15*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 120*		*11/01/16 18:15*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 127*		*11/01/16 18:15*	*1*

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

Client Sample ID: HD-CW-5-0/1-0
Date Collected: 10/26/16 10:45
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-17
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 18:39	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			11/01/16 18:39	1
Bromomethane	1.0	U	1.0	0.36	ug/L			11/01/16 18:39	1
Chloroethane	1.0	U	1.0	0.26	ug/L			11/01/16 18:39	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 18:39	1
Acetone	5.0	U	5.0	2.5	ug/L			11/01/16 18:39	1
Carbon disulfide	1.0	U ^c	1.0	0.18	ug/L			11/01/16 18:39	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/16 18:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 18:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			11/01/16 18:39	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			11/01/16 18:39	1
cis-1,2-Dichloroethene	**12**		1.0	0.29	ug/L			11/01/16 18:39	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			11/01/16 18:39	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			11/01/16 18:39	1
Chloroform	1.0	U	1.0	0.27	ug/L			11/01/16 18:39	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			11/01/16 18:39	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			11/01/16 18:39	1
Benzene	1.0	U	1.0	0.26	ug/L			11/01/16 18:39	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/01/16 18:39	1
Trichloroethene	**12**		1.0	0.26	ug/L			11/01/16 18:39	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			11/01/16 18:39	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 18:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			11/01/16 18:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			11/01/16 18:39	1
Toluene	1.0	U	1.0	0.28	ug/L			11/01/16 18:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			11/01/16 18:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 18:39	1
Tetrachloroethene	**41**		1.0	0.27	ug/L			11/01/16 18:39	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			11/01/16 18:39	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			11/01/16 18:39	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			11/01/16 18:39	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			11/01/16 18:39	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			11/01/16 18:39	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			11/01/16 18:39	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			11/01/16 18:39	1
Styrene	1.0	U	1.0	0.26	ug/L			11/01/16 18:39	1
Bromoform	1.0	U ^c	1.0	0.29	ug/L			11/01/16 18:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 18:39	1
Acrylonitrile	20	U	20	2.8	ug/L			11/01/16 18:39	1
1,4-Dioxane	200	U	200	7.5	ug/L			11/01/16 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 134*		*11/01/16 18:39*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/01/16 18:39*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 120*		*11/01/16 18:39*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 127*		*11/01/16 18:39*	*1*

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

Client Sample ID: HD-QC8-0/1-2
Date Collected: 10/26/16 12:00
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-18
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			10/31/16 12:08	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			10/31/16 12:08	1
Bromomethane	1.0	U	1.0	0.36	ug/L			10/31/16 12:08	1
Chloroethane	1.0	U	1.0	0.26	ug/L			10/31/16 12:08	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/31/16 12:08	1
Acetone	**3.7**	**J**	5.0	2.5	ug/L			10/31/16 12:08	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			10/31/16 12:08	1
Methylene Chloride	**0.53**	**J**	1.0	0.36	ug/L			10/31/16 12:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/31/16 12:08	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			10/31/16 12:08	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			10/31/16 12:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/31/16 12:08	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			10/31/16 12:08	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			10/31/16 12:08	1
Chloroform	1.0	U	1.0	0.27	ug/L			10/31/16 12:08	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/31/16 12:08	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/31/16 12:08	1
Benzene	1.0	U	1.0	0.26	ug/L			10/31/16 12:08	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/31/16 12:08	1
Trichloroethene	1.0	U	1.0	0.26	ug/L			10/31/16 12:08	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/31/16 12:08	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/31/16 12:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/31/16 12:08	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/31/16 12:08	1
Toluene	1.0	U	1.0	0.28	ug/L			10/31/16 12:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			10/31/16 12:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			10/31/16 12:08	1
Tetrachloroethene	1.0	U	1.0	0.27	ug/L			10/31/16 12:08	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			10/31/16 12:08	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			10/31/16 12:08	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			10/31/16 12:08	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			10/31/16 12:08	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/31/16 12:08	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			10/31/16 12:08	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			10/31/16 12:08	1
Styrene	1.0	U	1.0	0.26	ug/L			10/31/16 12:08	1
Bromoform	1.0	U	1.0	0.29	ug/L			10/31/16 12:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/31/16 12:08	1
Acrylonitrile	20	U	20	2.8	ug/L			10/31/16 12:08	1
1,4-Dioxane	200	U ^c	200	7.5	ug/L			10/31/16 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 134*		*10/31/16 12:08*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/31/16 12:08*	*1*
4-Bromofluorobenzene (Surr)	*103*		*72 - 120*		*10/31/16 12:08*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 127*		*10/31/16 12:08*	*1*

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

Client Sample ID: HD-CW-3-0/1-0
Date Collected: 10/25/16 08:05
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	20	U	20	4.6	ug/L			10/31/16 19:22	20
Vinyl chloride	20	U	20	6.3	ug/L			10/31/16 19:22	20
Bromomethane	20	U	20	7.2	ug/L			10/31/16 19:22	20
Chloroethane	20	U	20	5.2	ug/L			10/31/16 19:22	20
1,1-Dichloroethene	20	U	20	5.7	ug/L			10/31/16 19:22	20
Acetone	**470**		100	50	ug/L			10/31/16 19:22	20
Carbon disulfide	20	U	20	3.7	ug/L			10/31/16 19:22	20
Methylene Chloride	20	U	20	7.2	ug/L			10/31/16 19:22	20
trans-1,2-Dichloroethene	20	U	20	5.7	ug/L			10/31/16 19:22	20
Methyl tert-butyl ether	20	U	20	4.9	ug/L			10/31/16 19:22	20
1,1-Dichloroethane	20	U	20	4.7	ug/L			10/31/16 19:22	20
cis-1,2-Dichloroethene	**33**		20	5.7	ug/L			10/31/16 19:22	20
Bromochloromethane	20	U	20	7.5	ug/L			10/31/16 19:22	20
2-Butanone (MEK)	100	U	100	23	ug/L			10/31/16 19:22	20
Chloroform	20	U	20	5.5	ug/L			10/31/16 19:22	20
1,1,1-Trichloroethane	20	U	20	4.4	ug/L			10/31/16 19:22	20
Carbon tetrachloride	20	U	20	4.9	ug/L			10/31/16 19:22	20
Benzene	20	U	20	5.1	ug/L			10/31/16 19:22	20
1,2-Dichloroethane	20	U	20	4.9	ug/L			10/31/16 19:22	20
Trichloroethene	20	U	20	5.2	ug/L			10/31/16 19:22	20
1,2-Dichloropropane	20	U	20	4.5	ug/L			10/31/16 19:22	20
Bromodichloromethane	20	U	20	4.7	ug/L			10/31/16 19:22	20
cis-1,3-Dichloropropene	20	U	20	4.1	ug/L			10/31/16 19:22	20
4-Methyl-2-pentanone (MIBK)	100	U	100	12	ug/L			10/31/16 19:22	20
Toluene	20	U	20	5.6	ug/L			10/31/16 19:22	20
trans-1,3-Dichloropropene	20	U	20	4.8	ug/L			10/31/16 19:22	20
1,1,2-Trichloroethane	20	U	20	7.0	ug/L			10/31/16 19:22	20
Tetrachloroethene	20	U	20	5.4	ug/L			10/31/16 19:22	20
2-Hexanone	100	U	100	15	ug/L			10/31/16 19:22	20
Dibromochloromethane	20	U	20	7.9	ug/L			10/31/16 19:22	20
1,2-Dibromoethane (EDB)	20	U	20	5.8	ug/L			10/31/16 19:22	20
Chlorobenzene	20	U	20	6.3	ug/L			10/31/16 19:22	20
1,1,1,2-Tetrachloroethane	20	U	20	3.9	ug/L			10/31/16 19:22	20
Ethylbenzene	20	U	20	5.5	ug/L			10/31/16 19:22	20
Xylenes, Total	40	U	40	9.7	ug/L			10/31/16 19:22	20
Styrene	20	U	20	5.3	ug/L			10/31/16 19:22	20
Bromoform	**9.1**	**J**	20	5.9	ug/L			10/31/16 19:22	20
1,1,2,2-Tetrachloroethane	20	U	20	6.9	ug/L			10/31/16 19:22	20
Acrylonitrile	400	U	400	55	ug/L			10/31/16 19:22	20
1,4-Dioxane	4000	U ^c	4000	150	ug/L			10/31/16 19:22	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 134*		*10/31/16 19:22*	*20*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/31/16 19:22*	*20*
4-Bromofluorobenzene (Surr)	*105*		*72 - 120*		*10/31/16 19:22*	*20*
Dibromofluoromethane (Surr)	*99*		*77 - 127*		*10/31/16 19:22*	*20*

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

Client Sample ID: HD-CW-1A-0/1-0
Date Collected: 10/26/16 06:05
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	2.0	U	2.0	0.46	ug/L			11/01/16 15:02	2
Vinyl chloride	2.0	U	2.0	0.63	ug/L			11/01/16 15:02	2
Bromomethane	2.0	U	2.0	0.72	ug/L			11/01/16 15:02	2
Chloroethane	2.0	U	2.0	0.52	ug/L			11/01/16 15:02	2
1,1-Dichloroethene	2.0	U	2.0	0.57	ug/L			11/01/16 15:02	2
Acetone	10	U	10	5.0	ug/L			11/01/16 15:02	2
Carbon disulfide	2.0	U ^c	2.0	0.37	ug/L			11/01/16 15:02	2
Methylene Chloride	2.0	U	2.0	0.72	ug/L			11/01/16 15:02	2
trans-1,2-Dichloroethene	2.0	U	2.0	0.57	ug/L			11/01/16 15:02	2
Methyl tert-butyl ether	2.0	U	2.0	0.49	ug/L			11/01/16 15:02	2
1,1-Dichloroethane	2.0	U	2.0	0.47	ug/L			11/01/16 15:02	2
cis-1,2-Dichloroethene	**0.89**	**J**	2.0	0.57	ug/L			11/01/16 15:02	2
Bromochloromethane	2.0	U	2.0	0.75	ug/L			11/01/16 15:02	2
2-Butanone (MEK)	10	U	10	2.3	ug/L			11/01/16 15:02	2
Chloroform	2.0	U	2.0	0.55	ug/L			11/01/16 15:02	2
1,1,1-Trichloroethane	2.0	U	2.0	0.44	ug/L			11/01/16 15:02	2
Carbon tetrachloride	2.0	U	2.0	0.49	ug/L			11/01/16 15:02	2
Benzene	2.0	U	2.0	0.51	ug/L			11/01/16 15:02	2
1,2-Dichloroethane	2.0	U	2.0	0.49	ug/L			11/01/16 15:02	2
Trichloroethene	**56**		2.0	0.52	ug/L			11/01/16 15:02	2
1,2-Dichloropropane	2.0	U	2.0	0.45	ug/L			11/01/16 15:02	2
Bromodichloromethane	2.0	U	2.0	0.47	ug/L			11/01/16 15:02	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.41	ug/L			11/01/16 15:02	2
4-Methyl-2-pentanone (MIBK)	10	U	10	1.2	ug/L			11/01/16 15:02	2
Toluene	2.0	U	2.0	0.56	ug/L			11/01/16 15:02	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.48	ug/L			11/01/16 15:02	2
1,1,2-Trichloroethane	2.0	U	2.0	0.70	ug/L			11/01/16 15:02	2
Tetrachloroethene	**1.9**	**J**	2.0	0.54	ug/L			11/01/16 15:02	2
2-Hexanone	10	U	10	1.5	ug/L			11/01/16 15:02	2
Dibromochloromethane	2.0	U	2.0	0.79	ug/L			11/01/16 15:02	2
1,2-Dibromoethane (EDB)	2.0	U	2.0	0.58	ug/L			11/01/16 15:02	2
Chlorobenzene	2.0	U	2.0	0.63	ug/L			11/01/16 15:02	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.39	ug/L			11/01/16 15:02	2
Ethylbenzene	2.0	U	2.0	0.55	ug/L			11/01/16 15:02	2
Xylenes, Total	4.0	U	4.0	0.97	ug/L			11/01/16 15:02	2
Styrene	2.0	U	2.0	0.53	ug/L			11/01/16 15:02	2
Bromoform	2.0	U ^c	2.0	0.59	ug/L			11/01/16 15:02	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.69	ug/L			11/01/16 15:02	2
Acrylonitrile	40	U	40	5.5	ug/L			11/01/16 15:02	2
1,4-Dioxane	400	U	400	15	ug/L			11/01/16 15:02	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 134*		*11/01/16 15:02*	*2*
Toluene-d8 (Surr)	*98*		*80 - 120*		*11/01/16 15:02*	*2*
4-Bromofluorobenzene (Surr)	*101*		*72 - 120*		*11/01/16 15:02*	*2*
Dibromofluoromethane (Surr)	*93*		*77 - 127*		*11/01/16 15:02*	*2*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Client Sample ID: HD-CW-15A-0/1-0
Date Collected: 10/26/16 07:00
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	120		19	0.50	ug/L		10/28/16 07:25	10/31/16 16:01	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*36*		*24 - 100*	*10/28/16 07:25*	*10/31/16 16:01*	*10*
2-Fluorophenol (Surr)	*38*		*20 - 100*	*10/28/16 07:25*	*10/31/16 16:01*	*10*
2,4,6-Tribromophenol (Surr)	*56*		*22 - 118*	*10/28/16 07:25*	*10/31/16 16:01*	*10*
Nitrobenzene-d5 (Surr)	*41*		*25 - 105*	*10/28/16 07:25*	*10/31/16 16:01*	*10*
Phenol-d5 (Surr)	*45*		*21 - 100*	*10/28/16 07:25*	*10/31/16 16:01*	*10*
Terphenyl-d14 (Surr)	*62*		*20 - 124*	*10/28/16 07:25*	*10/31/16 16:01*	*10*

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

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	1.0	0.20	ug/L	8260C
1,1,1-Trichloroethane	1.0	0.22	ug/L	8260C
1,1,2,2-Tetrachloroethane	1.0	0.35	ug/L	8260C
1,1,2-Trichloroethane	1.0	0.35	ug/L	8260C
1,1-Dichloroethane	1.0	0.24	ug/L	8260C
1,1-Dichloroethene	1.0	0.29	ug/L	8260C
1,2-Dibromoethane (EDB)	1.0	0.29	ug/L	8260C
1,2-Dichloroethane	1.0	0.25	ug/L	8260C
1,2-Dichloropropane	1.0	0.23	ug/L	8260C
1,4-Dioxane	200	7.5	ug/L	8260C
2-Butanone (MEK)	5.0	1.2	ug/L	8260C
2-Hexanone	5.0	0.74	ug/L	8260C
4-Methyl-2-pentanone (MIBK)	5.0	0.59	ug/L	8260C
Acetone	5.0	2.5	ug/L	8260C
Acrylonitrile	20	2.8	ug/L	8260C
Benzene	1.0	0.26	ug/L	8260C
Bromochloromethane	1.0	0.38	ug/L	8260C
Bromodichloromethane	1.0	0.23	ug/L	8260C
Bromoform	1.0	0.29	ug/L	8260C
Bromomethane	1.0	0.36	ug/L	8260C
Carbon disulfide	1.0	0.18	ug/L	8260C
Carbon tetrachloride	1.0	0.24	ug/L	8260C
Chlorobenzene	1.0	0.31	ug/L	8260C
Chloroethane	1.0	0.26	ug/L	8260C
Chloroform	1.0	0.27	ug/L	8260C
Chloromethane	1.0	0.23	ug/L	8260C
cis-1,2-Dichloroethene	1.0	0.29	ug/L	8260C
cis-1,3-Dichloropropene	1.0	0.21	ug/L	8260C
Dibromochloromethane	1.0	0.40	ug/L	8260C
Ethylbenzene	1.0	0.27	ug/L	8260C
Methyl tert-butyl ether	1.0	0.24	ug/L	8260C
Methylene Chloride	1.0	0.36	ug/L	8260C
Styrene	1.0	0.26	ug/L	8260C
Tetrachloroethene	1.0	0.27	ug/L	8260C
Toluene	1.0	0.28	ug/L	8260C
trans-1,2-Dichloroethene	1.0	0.29	ug/L	8260C
trans-1,3-Dichloropropene	1.0	0.24	ug/L	8260C
Trichloroethene	1.0	0.26	ug/L	8260C
Vinyl chloride	1.0	0.32	ug/L	8260C
Xylenes, Total	2.0	0.48	ug/L	8260C

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Prep: 3520C

Analyte	RL	MDL	Units	Method
1,4-Dioxane	2.0	0.052	ug/L	8270D LL

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-60202-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(72-134)	(80-120)	(72-120)	(77-127)
180-60202-1	HD-CW-7A-0/1-0	101	97	99	102
180-60202-2 - DL	HD-CW-3-0/1-0	100	99	105	99
180-60202-2	HD-CW-3-0/1-0	103	97	101	107
180-60202-3	HD-CW-1-0/1-0	100	99	102	98
180-60202-4	HD-CW-1A-0/1-0	99	101	102	102
180-60202-4 - DL	HD-CW-1A-0/1-0	98	98	101	93
180-60202-5	HD-CW-2-0/1-0	97	97	101	99
180-60202-6	HD-CW-7-0/1-0	104	94	98	101
180-60202-7	HD-CW-9-0/1-0	97	97	100	103
180-60202-8	HD-CW-20-0/1-0	98	100	104	106
180-60202-9	HD-CW-13-0/1-0	96	99	101	102
180-60202-10	HD-CW-15A-0/1-0	99	100	102	102
180-60202-11	HD-CW-17-0/1-0	99	98	100	96
180-60202-11 MS	HD-CW-17-0/1-0	98	109	105	102
180-60202-11 MSD	HD-CW-17-0/1-0	100	106	102	99
180-60202-12	HD-QC3-0/1-1	94	99	100	96
180-60202-13	INFLUENT TO #003 GWTS	98	101	96	96
180-60202-14	OUTFALL #003 GWTS	97	97	101	96
180-60202-15	HD-CW-6-0/1-0	104	97	99	100
180-60202-16	HD-CW-4-0/1-0	99	95	100	101
180-60202-17	HD-CW-5-0/1-0	98	96	100	98
180-60202-18	HD-QC8-0/1-2	98	100	103	102
LCS 180-192841/8	Lab Control Sample	89	106	100	94
LCS 180-192920/10	Lab Control Sample	102	113	108	104
MB 180-192841/5	Method Blank	95	96	101	94
MB 180-192920/6	Method Blank	98	98	98	97

Surrogate Legend

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

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

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

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(24-100)	(20-100)	(22-118)	(25-105)	(21-100)	(20-124)
180-60202-10	HD-CW-15A-0/1-0	36	38	56	41	45	62
LCS 180-192646/2-A	Lab Control Sample	62	75	74	67	70	66
LCSD 180-192646/3-A	Lab Control Sample Dup	65	74	76	69	68	67
MB 180-192646/1-A	Method Blank	58	64	69	60	62	60

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-60202-1

TPH = Terphenyl-d14 (Surr)

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

Lab Sample ID: MB 180-192841/5
Matrix: Water
Analysis Batch: 192841

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			10/31/16 11:09	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			10/31/16 11:09	1
Bromomethane	1.0	U	1.0	0.36	ug/L			10/31/16 11:09	1
Chloroethane	1.0	U	1.0	0.26	ug/L			10/31/16 11:09	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/31/16 11:09	1
Acetone	5.0	U	5.0	2.5	ug/L			10/31/16 11:09	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			10/31/16 11:09	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/31/16 11:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/31/16 11:09	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			10/31/16 11:09	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			10/31/16 11:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/31/16 11:09	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			10/31/16 11:09	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			10/31/16 11:09	1
Chloroform	1.0	U	1.0	0.27	ug/L			10/31/16 11:09	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/31/16 11:09	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			10/31/16 11:09	1
Benzene	1.0	U	1.0	0.26	ug/L			10/31/16 11:09	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			10/31/16 11:09	1
Trichloroethene	1.0	U	1.0	0.26	ug/L			10/31/16 11:09	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			10/31/16 11:09	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			10/31/16 11:09	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			10/31/16 11:09	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			10/31/16 11:09	1
Toluene	1.0	U	1.0	0.28	ug/L			10/31/16 11:09	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			10/31/16 11:09	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			10/31/16 11:09	1
Tetrachloroethene	1.0	U	1.0	0.27	ug/L			10/31/16 11:09	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			10/31/16 11:09	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			10/31/16 11:09	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			10/31/16 11:09	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			10/31/16 11:09	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			10/31/16 11:09	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			10/31/16 11:09	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			10/31/16 11:09	1
Styrene	1.0	U	1.0	0.26	ug/L			10/31/16 11:09	1
Bromoform	1.0	U	1.0	0.29	ug/L			10/31/16 11:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/31/16 11:09	1
Acrylonitrile	20	U	20	2.8	ug/L			10/31/16 11:09	1
1,4-Dioxane	200	U	200	7.5	ug/L			10/31/16 11:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 134*		*10/31/16 11:09*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/31/16 11:09*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 120*		*10/31/16 11:09*	*1*
Dibromofluoromethane (Surr)	*94*		*77 - 127*		*10/31/16 11:09*	*1*

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

Lab Sample ID: LCS 180-192841/8
Matrix: Water
Analysis Batch: 192841

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	10.4		ug/L		104	51 - 150
Vinyl chloride	10.0	10.1		ug/L		101	61 - 138
Bromomethane	10.0	9.83		ug/L		98	39 - 150
Chloroethane	10.0	10.3		ug/L		103	53 - 148
1,1-Dichloroethene	10.0	9.96		ug/L		100	71 - 122
Acetone	20.0	15.2		ug/L		76	10 - 150
Carbon disulfide	10.0	8.90		ug/L		89	57 - 137
Methylene Chloride	10.0	9.13		ug/L		91	71 - 129
trans-1,2-Dichloroethene	10.0	10.0		ug/L		100	80 - 121
Methyl tert-butyl ether	10.0	8.90		ug/L		89	68 - 124
1,1-Dichloroethane	10.0	9.36		ug/L		94	76 - 126
cis-1,2-Dichloroethene	10.0	9.43		ug/L		94	80 - 120
Bromochloromethane	10.0	9.35		ug/L		94	76 - 120
2-Butanone (MEK)	20.0	18.3		ug/L		92	41 - 150
Chloroform	10.0	9.34		ug/L		93	78 - 122
1,1,1-Trichloroethane	10.0	9.75		ug/L		98	57 - 128
Carbon tetrachloride	10.0	9.69		ug/L		97	59 - 145
Benzene	10.0	9.56		ug/L		96	80 - 121
1,2-Dichloroethane	10.0	8.74		ug/L		87	72 - 126
Trichloroethene	10.0	9.69		ug/L		97	79 - 120
1,2-Dichloropropane	10.0	8.86		ug/L		89	78 - 123
Bromodichloromethane	10.0	8.88		ug/L		89	72 - 124
cis-1,3-Dichloropropene	10.0	8.65		ug/L		86	67 - 127
4-Methyl-2-pentanone (MIBK)	20.0	18.4		ug/L		92	49 - 147
Toluene	10.0	10.4		ug/L		104	80 - 125
trans-1,3-Dichloropropene	10.0	9.28		ug/L		93	63 - 144
1,1,2-Trichloroethane	10.0	9.45		ug/L		95	77 - 127
Tetrachloroethene	10.0	10.9		ug/L		109	80 - 122
2-Hexanone	20.0	17.8		ug/L		89	40 - 150
Dibromochloromethane	10.0	8.83		ug/L		88	71 - 134
1,2-Dibromoethane (EDB)	10.0	9.76		ug/L		98	79 - 126
Chlorobenzene	10.0	10.5		ug/L		105	80 - 120
1,1,1,2-Tetrachloroethane	10.0	9.97		ug/L		100	75 - 135
Ethylbenzene	10.0	10.3		ug/L		103	80 - 123
Xylenes, Total	20.0	20.9		ug/L		105	80 - 123
Styrene	10.0	10.2		ug/L		102	80 - 125
Bromoform	10.0	8.64		ug/L		86	62 - 138
1,1,2,2-Tetrachloroethane	10.0	9.54		ug/L		95	78 - 135
Acrylonitrile	100	93.6		ug/L		94	66 - 146
1,4-Dioxane	200	147	J	ug/L		73	10 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 134*
Toluene-d8 (Surr)	*106*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*72 - 120*
Dibromofluoromethane (Surr)	*94*		*77 - 127*

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

Lab Sample ID: 180-60202-11 MS
Matrix: Water
Analysis Batch: 192841

Client Sample ID: HD-CW-17-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	2.0	U	20.0	21.8		ug/L		109	51 - 150
Vinyl chloride	2.0	U	20.0	21.7		ug/L		109	61 - 138
Bromomethane	2.0	U	20.0	21.3		ug/L		107	39 - 150
Chloroethane	2.0	U	20.0	22.2		ug/L		111	53 - 148
1,1-Dichloroethene	3.7		20.0	24.2		ug/L		103	71 - 122
Acetone	10	U	40.0	41.8		ug/L		105	10 - 150
Carbon disulfide	2.0	U	20.0	18.7		ug/L		93	57 - 137
Methylene Chloride	2.0	U	20.0	19.7		ug/L		99	71 - 129
trans-1,2-Dichloroethene	2.0	U	20.0	21.2		ug/L		106	80 - 121
Methyl tert-butyl ether	2.0	U	20.0	20.9		ug/L		105	68 - 124
1,1-Dichloroethane	2.5		20.0	22.7		ug/L		101	76 - 126
cis-1,2-Dichloroethene	55	F1	20.0	68.8	F1	ug/L		70	80 - 120
Bromochloromethane	2.0	U	20.0	21.5		ug/L		108	76 - 120
2-Butanone (MEK)	10	U	40.0	43.0		ug/L		107	41 - 150
Chloroform	2.0	U	20.0	21.0		ug/L		105	78 - 122
1,1,1-Trichloroethane	4.9		20.0	24.6		ug/L		98	68 - 128
Carbon tetrachloride	2.0	U	20.0	21.1		ug/L		106	59 - 145
Benzene	2.0	U	20.0	21.0		ug/L		105	80 - 121
1,2-Dichloroethane	2.0	U	20.0	19.4		ug/L		97	72 - 126
Trichloroethene	37	F1	20.0	50.5	F1	ug/L		69	79 - 120
1,2-Dichloropropane	2.0	U	20.0	20.0		ug/L		100	78 - 123
Bromodichloromethane	2.0	U	20.0	19.0		ug/L		95	72 - 124
cis-1,3-Dichloropropene	2.0	U	20.0	19.3		ug/L		97	67 - 127
4-Methyl-2-pentanone (MIBK)	10	U	40.0	42.0		ug/L		105	49 - 147
Toluene	2.0	U	20.0	21.9		ug/L		109	80 - 125
trans-1,3-Dichloropropene	2.0	U	20.0	20.7		ug/L		103	63 - 144
1,1,2-Trichloroethane	2.0	U	20.0	22.2		ug/L		111	77 - 127
Tetrachloroethene	20		20.0	40.8		ug/L		102	80 - 122
2-Hexanone	10	U	40.0	39.2		ug/L		98	40 - 150
Dibromochloromethane	2.0	U	20.0	19.4		ug/L		97	71 - 134
1,2-Dibromoethane (EDB)	2.0	U	20.0	21.2		ug/L		106	79 - 126
Chlorobenzene	2.0	U	20.0	21.9		ug/L		109	80 - 120
1,1,1,2-Tetrachloroethane	2.0	U	20.0	21.7		ug/L		108	75 - 135
Ethylbenzene	2.0	U	20.0	22.0		ug/L		110	80 - 123
Xylenes, Total	4.0	U	40.0	44.6		ug/L		112	80 - 123
Styrene	2.0	U	20.0	22.0		ug/L		110	80 - 125
Bromoform	2.0	U	20.0	18.0		ug/L		90	62 - 138
1,1,2,2-Tetrachloroethane	2.0	U	20.0	22.3		ug/L		112	78 - 135
Acrylonitrile	40	U	200	214		ug/L		107	66 - 146
1,4-Dioxane	400	U ^c	400	384	J	ug/L		96	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 134*
Toluene-d8 (Surr)	*109*		*80 - 120*
4-Bromofluorobenzene (Surr)	*105*		*72 - 120*
Dibromofluoromethane (Surr)	*102*		*77 - 127*

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

Lab Sample ID: 180-60202-11 MSD
Matrix: Water
Analysis Batch: 192841

Client Sample ID: HD-CW-17-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane	2.0	U	20.0	22.1		ug/L		111	51 - 150	1	35
Vinyl chloride	2.0	U	20.0	22.2		ug/L		111	61 - 138	2	35
Bromomethane	2.0	U	20.0	22.6		ug/L		113	39 - 150	6	35
Chloroethane	2.0	U	20.0	22.7		ug/L		113	53 - 148	2	35
1,1-Dichloroethene	3.7		20.0	25.0		ug/L		107	71 - 122	3	35
Acetone	10	U	40.0	45.3		ug/L		113	10 - 150	8	35
Carbon disulfide	2.0	U	20.0	19.1		ug/L		95	57 - 137	2	35
Methylene Chloride	2.0	U	20.0	20.2		ug/L		101	71 - 129	3	35
trans-1,2-Dichloroethene	2.0	U	20.0	22.6		ug/L		113	80 - 121	6	35
Methyl tert-butyl ether	2.0	U	20.0	21.5		ug/L		107	68 - 124	3	35
1,1-Dichloroethane	2.5		20.0	23.5		ug/L		105	76 - 126	3	35
cis-1,2-Dichloroethene	55	F1	20.0	70.2	F1	ug/L		77	80 - 120	2	35
Bromochloromethane	2.0	U	20.0	21.8		ug/L		109	76 - 120	1	35
2-Butanone (MEK)	10	U	40.0	43.2		ug/L		108	41 - 150	0	35
Chloroform	2.0	U	20.0	21.2		ug/L		106	78 - 122	1	35
1,1,1-Trichloroethane	4.9		20.0	25.3		ug/L		102	68 - 128	3	35
Carbon tetrachloride	2.0	U	20.0	21.4		ug/L		107	59 - 145	1	35
Benzene	2.0	U	20.0	22.0		ug/L		110	80 - 121	4	32
1,2-Dichloroethane	2.0	U	20.0	20.2		ug/L		101	72 - 126	4	32
Trichloroethene	37	F1	20.0	53.7		ug/L		85	79 - 120	6	35
1,2-Dichloropropane	2.0	U	20.0	21.3		ug/L		107	78 - 123	6	34
Bromodichloromethane	2.0	U	20.0	19.3		ug/L		97	72 - 124	1	35
cis-1,3-Dichloropropene	2.0	U	20.0	20.3		ug/L		101	67 - 127	5	35
4-Methyl-2-pentanone (MIBK)	10	U	40.0	46.3		ug/L		116	49 - 147	10	35
Toluene	2.0	U	20.0	23.0		ug/L		115	80 - 125	5	35
trans-1,3-Dichloropropene	2.0	U	20.0	22.0		ug/L		110	63 - 144	6	35
1,1,2-Trichloroethane	2.0	U	20.0	22.7		ug/L		114	77 - 127	2	35
Tetrachloroethene	20		20.0	41.1		ug/L		104	80 - 122	1	35
2-Hexanone	10	U	40.0	43.8		ug/L		110	40 - 150	11	35
Dibromochloromethane	2.0	U	20.0	20.4		ug/L		102	71 - 134	5	35
1,2-Dibromoethane (EDB)	2.0	U	20.0	22.7		ug/L		114	79 - 126	7	35
Chlorobenzene	2.0	U	20.0	23.0		ug/L		115	80 - 120	5	29
1,1,1,2-Tetrachloroethane	2.0	U	20.0	22.6		ug/L		113	75 - 135	4	34
Ethylbenzene	2.0	U	20.0	22.8		ug/L		114	80 - 123	4	33
Xylenes, Total	4.0	U	40.0	46.1		ug/L		115	80 - 123	3	32
Styrene	2.0	U	20.0	23.1		ug/L		115	80 - 125	5	34
Bromoform	2.0	U	20.0	19.5		ug/L		97	62 - 138	8	35
1,1,2,2-Tetrachloroethane	2.0	U	20.0	24.0		ug/L		120	78 - 135	7	35
Acrylonitrile	40	U	200	219		ug/L		109	66 - 146	2	35
1,4-Dioxane	400	U ^c	400	392	J	ug/L		98	10 - 150	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 134*
Toluene-d8 (Surr)	*106*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*72 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 127*

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

Lab Sample ID: MB 180-192920/6
Matrix: Water
Analysis Batch: 192920

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 11:35	1
Vinyl chloride	1.0	U	1.0	0.32	ug/L			11/01/16 11:35	1
Bromomethane	1.0	U	1.0	0.36	ug/L			11/01/16 11:35	1
Chloroethane	1.0	U	1.0	0.26	ug/L			11/01/16 11:35	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 11:35	1
Acetone	5.0	U	5.0	2.5	ug/L			11/01/16 11:35	1
Carbon disulfide	1.0	U	1.0	0.18	ug/L			11/01/16 11:35	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/16 11:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 11:35	1
Methyl tert-butyl ether	1.0	U	1.0	0.24	ug/L			11/01/16 11:35	1
1,1-Dichloroethane	1.0	U	1.0	0.24	ug/L			11/01/16 11:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/L			11/01/16 11:35	1
Bromochloromethane	1.0	U	1.0	0.38	ug/L			11/01/16 11:35	1
2-Butanone (MEK)	5.0	U	5.0	1.2	ug/L			11/01/16 11:35	1
Chloroform	1.0	U	1.0	0.27	ug/L			11/01/16 11:35	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			11/01/16 11:35	1
Carbon tetrachloride	1.0	U	1.0	0.24	ug/L			11/01/16 11:35	1
Benzene	1.0	U	1.0	0.26	ug/L			11/01/16 11:35	1
1,2-Dichloroethane	1.0	U	1.0	0.25	ug/L			11/01/16 11:35	1
Trichloroethene	1.0	U	1.0	0.26	ug/L			11/01/16 11:35	1
1,2-Dichloropropane	1.0	U	1.0	0.23	ug/L			11/01/16 11:35	1
Bromodichloromethane	1.0	U	1.0	0.23	ug/L			11/01/16 11:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/L			11/01/16 11:35	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59	ug/L			11/01/16 11:35	1
Toluene	1.0	U	1.0	0.28	ug/L			11/01/16 11:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.24	ug/L			11/01/16 11:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 11:35	1
Tetrachloroethene	1.0	U	1.0	0.27	ug/L			11/01/16 11:35	1
2-Hexanone	5.0	U	5.0	0.74	ug/L			11/01/16 11:35	1
Dibromochloromethane	1.0	U	1.0	0.40	ug/L			11/01/16 11:35	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29	ug/L			11/01/16 11:35	1
Chlorobenzene	1.0	U	1.0	0.31	ug/L			11/01/16 11:35	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			11/01/16 11:35	1
Ethylbenzene	1.0	U	1.0	0.27	ug/L			11/01/16 11:35	1
Xylenes, Total	2.0	U	2.0	0.48	ug/L			11/01/16 11:35	1
Styrene	1.0	U	1.0	0.26	ug/L			11/01/16 11:35	1
Bromoform	1.0	U	1.0	0.29	ug/L			11/01/16 11:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			11/01/16 11:35	1
Acrylonitrile	20	U	20	2.8	ug/L			11/01/16 11:35	1
1,4-Dioxane	200	U	200	7.5	ug/L			11/01/16 11:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 134*		*11/01/16 11:35*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*11/01/16 11:35*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 120*		*11/01/16 11:35*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 127*		*11/01/16 11:35*	*1*

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

Lab Sample ID: LCS 180-192920/10
Matrix: Water
Analysis Batch: 192920

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	11.3		ug/L		113	51 - 150
Vinyl chloride	10.0	10.9		ug/L		109	61 - 138
Bromomethane	10.0	11.1		ug/L		111	39 - 150
Chloroethane	10.0	10.7		ug/L		107	53 - 148
1,1-Dichloroethene	10.0	10.9		ug/L		109	71 - 122
Acetone	20.0	21.0		ug/L		105	10 - 150
Carbon disulfide	10.0	8.43		ug/L		84	57 - 137
Methylene Chloride	10.0	10.5		ug/L		105	71 - 129
trans-1,2-Dichloroethene	10.0	11.0		ug/L		110	80 - 121
Methyl tert-butyl ether	10.0	10.4		ug/L		104	68 - 124
1,1-Dichloroethane	10.0	10.9		ug/L		109	76 - 126
cis-1,2-Dichloroethene	10.0	10.9		ug/L		109	80 - 120
Bromochloromethane	10.0	10.7		ug/L		107	76 - 120
2-Butanone (MEK)	20.0	21.2		ug/L		106	41 - 150
Chloroform	10.0	10.5		ug/L		105	78 - 122
1,1,1-Trichloroethane	10.0	10.2		ug/L		102	57 - 128
Carbon tetrachloride	10.0	10.3		ug/L		103	59 - 145
Benzene	10.0	11.0		ug/L		110	80 - 121
1,2-Dichloroethane	10.0	10.3		ug/L		103	72 - 126
Trichloroethene	10.0	10.8		ug/L		108	79 - 120
1,2-Dichloropropane	10.0	10.6		ug/L		106	78 - 123
Bromodichloromethane	10.0	9.56		ug/L		96	72 - 124
cis-1,3-Dichloropropene	10.0	9.93		ug/L		99	67 - 127
4-Methyl-2-pentanone (MIBK)	20.0	23.2		ug/L		116	49 - 147
Toluene	10.0	11.5		ug/L		115	80 - 125
trans-1,3-Dichloropropene	10.0	10.7		ug/L		107	63 - 144
1,1,2-Trichloroethane	10.0	11.5		ug/L		115	77 - 127
Tetrachloroethene	10.0	11.5		ug/L		115	80 - 122
2-Hexanone	20.0	21.3		ug/L		107	40 - 150
Dibromochloromethane	10.0	9.88		ug/L		99	71 - 134
1,2-Dibromoethane (EDB)	10.0	11.4		ug/L		114	79 - 126
Chlorobenzene	10.0	11.8		ug/L		118	80 - 120
1,1,1,2-Tetrachloroethane	10.0	10.9		ug/L		109	75 - 135
Ethylbenzene	10.0	11.5		ug/L		115	80 - 123
Xylenes, Total	20.0	23.2		ug/L		116	80 - 123
Styrene	10.0	11.4		ug/L		114	80 - 125
Bromoform	10.0	9.22		ug/L		92	62 - 138
1,1,2,2-Tetrachloroethane	10.0	11.4		ug/L		114	78 - 135
Acrylonitrile	100	112		ug/L		112	66 - 146
1,4-Dioxane	200	200		ug/L		100	10 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 134*
Toluene-d8 (Surr)	*113*		*80 - 120*
4-Bromofluorobenzene (Surr)	*108*		*72 - 120*
Dibromofluoromethane (Surr)	*104*		*77 - 127*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 180-192646/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 192814 — **Prep Batch: 192646**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.052	ug/L		10/28/16 07:25	10/31/16 14:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*24 - 100*	*10/28/16 07:25*	*10/31/16 14:40*	*1*
2-Fluorophenol (Surr)	*64*		*20 - 100*	*10/28/16 07:25*	*10/31/16 14:40*	*1*
2,4,6-Tribromophenol (Surr)	*69*		*22 - 118*	*10/28/16 07:25*	*10/31/16 14:40*	*1*
Nitrobenzene-d5 (Surr)	*60*		*25 - 105*	*10/28/16 07:25*	*10/31/16 14:40*	*1*
Phenol-d5 (Surr)	*62*		*21 - 100*	*10/28/16 07:25*	*10/31/16 14:40*	*1*
Terphenyl-d14 (Surr)	*60*		*20 - 124*	*10/28/16 07:25*	*10/31/16 14:40*	*1*

Lab Sample ID: LCS 180-192646/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 192814 — **Prep Batch: 192646**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			20.0	14.9		ug/L		74	25 - 106		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*24 - 100*
2-Fluorophenol (Surr)	*75*		*20 - 100*
2,4,6-Tribromophenol (Surr)	*74*		*22 - 118*
Nitrobenzene-d5 (Surr)	*67*		*25 - 105*
Phenol-d5 (Surr)	*70*		*21 - 100*
Terphenyl-d14 (Surr)	*66*		*20 - 124*

Lab Sample ID: LCSD 180-192646/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 192814 — **Prep Batch: 192646**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			20.0	14.9		ug/L		74	25 - 106	0	16

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*65*		*24 - 100*
2-Fluorophenol (Surr)	*74*		*20 - 100*
2,4,6-Tribromophenol (Surr)	*76*		*22 - 118*
Nitrobenzene-d5 (Surr)	*69*		*25 - 105*
Phenol-d5 (Surr)	*68*		*21 - 100*
Terphenyl-d14 (Surr)	*67*		*20 - 124*

GC/MS VOA

Analysis Batch: 192841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-60202-1	HD-CW-7A-0/1-0	Total/NA	Water	8260C	
180-60202-2 - DL	HD-CW-3-0/1-0	Total/NA	Water	8260C	
180-60202-2	HD-CW-3-0/1-0	Total/NA	Water	8260C	
180-60202-3	HD-CW-1-0/1-0	Total/NA	Water	8260C	
180-60202-4	HD-CW-1A-0/1-0	Total/NA	Water	8260C	
180-60202-7	HD-CW-9-0/1-0	Total/NA	Water	8260C	
180-60202-8	HD-CW-20-0/1-0	Total/NA	Water	8260C	
180-60202-9	HD-CW-13-0/1-0	Total/NA	Water	8260C	
180-60202-10	HD-CW-15A-0/1-0	Total/NA	Water	8260C	
180-60202-11	HD-CW-17-0/1-0	Total/NA	Water	8260C	
180-60202-18	HD-QC8-0/1-2	Total/NA	Water	8260C	
MB 180-192841/5	Method Blank	Total/NA	Water	8260C	
LCS 180-192841/8	Lab Control Sample	Total/NA	Water	8260C	
180-60202-11 MS	HD-CW-17-0/1-0	Total/NA	Water	8260C	
180-60202-11 MSD	HD-CW-17-0/1-0	Total/NA	Water	8260C	

Analysis Batch: 192920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-60202-4 - DL	HD-CW-1A-0/1-0	Total/NA	Water	8260C	
180-60202-5	HD-CW-2-0/1-0	Total/NA	Water	8260C	
180-60202-6	HD-CW-7-0/1-0	Total/NA	Water	8260C	
180-60202-12	HD-QC3-0/1-1	Total/NA	Water	8260C	
180-60202-13	INFLUENT TO #003 GWTS	Total/NA	Water	8260C	
180-60202-14	OUTFALL #003 GWTS	Total/NA	Water	8260C	
180-60202-15	HD-CW-6-0/1-0	Total/NA	Water	8260C	
180-60202-16	HD-CW-4-0/1-0	Total/NA	Water	8260C	
180-60202-17	HD-CW-5-0/1-0	Total/NA	Water	8260C	
MB 180-192920/6	Method Blank	Total/NA	Water	8260C	
LCS 180-192920/10	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 192646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-60202-10	HD-CW-15A-0/1-0	Total/NA	Water	3520C	
MB 180-192646/1-A	Method Blank	Total/NA	Water	3520C	
LCS 180-192646/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 180-192646/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 192814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-60202-10	HD-CW-15A-0/1-0	Total/NA	Water	8270D LL	192646
MB 180-192646/1-A	Method Blank	Total/NA	Water	8270D LL	192646
LCS 180-192646/2-A	Lab Control Sample	Total/NA	Water	8270D LL	192646
LCSD 180-192646/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	192646

Client Sample ID: HD-CW-7A-0/1-0
Date Collected: 10/25/16 07:25
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	5 mL	5 mL	192841	10/31/16 18:34	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-CW-3-0/1-0
Date Collected: 10/25/16 08:05
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	20	5 mL	5 mL	192841	10/31/16 19:22	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	8260C		2	5 mL	5 mL	192841	10/31/16 21:23	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-CW-1-0/1-0
Date Collected: 10/25/16 09:45
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-3
Matrix: Water

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	192841	10/31/16 16:57	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-CW-1A-0/1-0
Date Collected: 10/26/16 06:05
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-4
Matrix: Water

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	192841	10/31/16 17:22	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	8260C	DL	2	5 mL	5 mL	192920	11/01/16 15:02	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-CW-2-0/1-0
Date Collected: 10/26/16 06:10
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-5
Matrix: Water

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	192920	11/01/16 15:26	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-CW-7-0/1-0
Date Collected: 10/26/16 06:12
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-6
Matrix: Water

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	192920	11/01/16 15:50	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-CW-9-0/1-0
Date Collected: 10/26/16 06:45
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		12.5	5 mL	5 mL	192841	10/31/16 19:46	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-CW-20-0/1-0
Date Collected: 10/26/16 06:50
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	5 mL	5 mL	192841	10/31/16 20:10	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-CW-13-0/1-0
Date Collected: 10/26/16 06:55
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	5 mL	5 mL	192841	10/31/16 20:34	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-CW-15A-0/1-0
Date Collected: 10/26/16 07:00
Date Received: 10/27/16 09:00

Lab Sample ID: 180-60202-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		500	5 mL	5 mL	192841	10/31/16 20:59	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Prep	3520C			260 mL	0.25 mL	192646	10/28/16 07:25	BJT	TAL PIT
Total/NA	Analysis	8270D LL		10	1 mL	1 mL	192814	10/31/16 16:01	VVP	TAL PIT
	Instrument ID: CH732									

Client Sample ID: HD-CW-17-0/1-0

Lab Sample ID: 180-60202-11

Date Collected: 10/26/16 07:05

Matrix: Water

Date Received: 10/27/16 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		2	5 mL	5 mL	192841	10/31/16 11:44	DLF	TAL PIT
	Instrument ID: CHHP5									

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

Lab Sample ID: 180-60202-12

Date Collected: 10/26/16 08:00

Matrix: Water

Date Received: 10/27/16 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		2	5 mL	5 mL	192920	11/01/16 16:15	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: INFLUENT TO #003 GWTS

Lab Sample ID: 180-60202-13

Date Collected: 10/26/16 07:10

Matrix: Water

Date Received: 10/27/16 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		25	5 mL	5 mL	192920	11/01/16 16:39	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: OUTFALL #003 GWTS

Lab Sample ID: 180-60202-14

Date Collected: 10/26/16 07:20

Matrix: Water

Date Received: 10/27/16 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	192920	11/01/16 17:03	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-CW-6-0/1-0

Lab Sample ID: 180-60202-15

Date Collected: 10/26/16 07:45

Matrix: Water

Date Received: 10/27/16 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	192920	11/01/16 17:27	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-CW-4-0/1-0

Lab Sample ID: 180-60202-16

Date Collected: 10/26/16 09:10

Matrix: Water

Date Received: 10/27/16 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	192920	11/01/16 18:15	DLF	TAL PIT
	Instrument ID: CHHP5									

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

Lab Sample ID: 180-60202-17

Date Collected: 10/26/16 10:45

Matrix: Water

Date Received: 10/27/16 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	192920	11/01/16 18:39	DLF	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-QC8-0/1-2

Lab Sample ID: 180-60202-18

Date Collected: 10/26/16 12:00

Matrix: Water

Date Received: 10/27/16 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	192841	10/31/16 12:08	DLF	TAL PIT
	Instrument ID: CHHP5									

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Prep

BJT = Bill Trout

Batch Type: Analysis

DLF = Donald Ferguson

VVP = Vincent Piccolino

Certification Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-60202-1

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	04-30-17

Method Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-60202-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	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: 180-60202-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-60202-1	HD-CW-7A-0/1-0	Water	10/25/16 07:25	10/27/16 09:00
180-60202-2	HD-CW-3-0/1-0	Water	10/25/16 08:05	10/27/16 09:00
180-60202-3	HD-CW-1-0/1-0	Water	10/25/16 09:45	10/27/16 09:00
180-60202-4	HD-CW-1A-0/1-0	Water	10/26/16 06:05	10/27/16 09:00
180-60202-5	HD-CW-2-0/1-0	Water	10/26/16 06:10	10/27/16 09:00
180-60202-6	HD-CW-7-0/1-0	Water	10/26/16 06:12	10/27/16 09:00
180-60202-7	HD-CW-9-0/1-0	Water	10/26/16 06:45	10/27/16 09:00
180-60202-8	HD-CW-20-0/1-0	Water	10/26/16 06:50	10/27/16 09:00
180-60202-9	HD-CW-13-0/1-0	Water	10/26/16 06:55	10/27/16 09:00
180-60202-10	HD-CW-15A-0/1-0	Water	10/26/16 07:00	10/27/16 09:00
180-60202-11	HD-CW-17-0/1-0	Water	10/26/16 07:05	10/27/16 09:00
180-60202-12	HD-QC3-0/1-1	Water	10/26/16 08:00	10/27/16 09:00
180-60202-13	INFLUENT TO #003 GWTS	Water	10/26/16 07:10	10/27/16 09:00
180-60202-14	OUTFALL #003 GWTS	Water	10/26/16 07:20	10/27/16 09:00
180-60202-15	HD-CW-6-0/1-0	Water	10/26/16 07:45	10/27/16 09:00
180-60202-16	HD-CW-4-0/1-0	Water	10/26/16 09:10	10/27/16 09:00
180-60202-17	HD-CW-5-0/1-0	Water	10/26/16 10:45	10/27/16 09:00
180-60202-18	HD-QC8-0/1-2	Water	10/26/16 12:00	10/27/16 09:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 192047

Lab Sample ID: IC 180-192047/3 Client Sample ID:

Date Analyzed: 10/22/16 14:57 Lab File ID: 51022003.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.67	Incomplete Integration	fergusond	10/23/16 09:39
2,2-Dichloropropane	5.93	Incomplete Integration	fergusond	10/23/16 09:39

Lab Sample ID: IC 180-192047/4 Client Sample ID:

Date Analyzed: 10/22/16 15:21 Lab File ID: 51022004.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.69	Incomplete Integration	fergusond	10/23/16 09:59

Lab Sample ID: ICIS 180-192047/5 Client Sample ID:

Date Analyzed: 10/22/16 15:45 Lab File ID: 51022005.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.66	Incomplete Integration	fergusond	10/23/16 13:13
1,4-Dioxane	8.02	Incomplete Integration	fergusond	10/23/16 13:13

Lab Sample ID: IC 180-192047/7 Client Sample ID:

Date Analyzed: 10/22/16 16:33 Lab File ID: 51022007.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.01	Incomplete Integration	fergusond	10/23/16 13:17

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 192841

Lab Sample ID: CCVIS 180-192841/2 Client Sample ID:

Date Analyzed: 10/31/16 10:11 Lab File ID: 51031002.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.01	Incomplete Integration	fergusond	10/31/16 10:37

Lab Sample ID: LCS 180-192841/8 Client Sample ID:

Date Analyzed: 10/31/16 12:32 Lab File ID: 51031008.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.02	Other	fergusond	10/31/16 12:55

Lab Sample ID: 180-60202-2 DL Client Sample ID: HD-CW-3-0/1-0 DL

Date Analyzed: 10/31/16 19:22 Lab File ID: 51031025.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.12	Incomplete Integration	fergusond	11/01/16 07:42

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 192920

Lab Sample ID: CCVIS 180-192920/2 Client Sample ID:

Date Analyzed: 11/01/16 10:35 Lab File ID: 51101002.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.02	Incomplete Integration	fergusond	11/01/16 11:02

Lab Sample ID: LCS 180-192920/10 Client Sample ID:

Date Analyzed: 11/01/16 13:25 Lab File ID: 51101010.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.02	Incomplete Integration	fergusond	11/01/16 13:48

Lab Sample ID: 180-60202-4 DL Client Sample ID: HD-CW-1A-0/1-0 DL

Date Analyzed: 11/01/16 15:02 Lab File ID: 51101014.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.36	Incomplete Integration	fergusond	11/02/16 07:15

Lab Sample ID: 180-60202-12 Client Sample ID: HD-QC3-0/1-1

Date Analyzed: 11/01/16 16:15 Lab File ID: 51101017.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.37	Incomplete Integration	fergusond	11/02/16 07:20

Lab Sample ID: 180-60202-14 Client Sample ID: OUTFALL #003 GWTS

Date Analyzed: 11/01/16 17:03 Lab File ID: 51101019.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.77	Incomplete Integration	fergusond	11/02/16 07:24

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 192920

Lab Sample ID: 180-60202-16 Client Sample ID: HD-CW-4-0/1-0

Date Analyzed: 11/01/16 18:15 Lab File ID: 51101022.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.76	Incomplete Integration	fergusond	11/02/16 07:27

Lab Sample ID: 180-60202-17 Client Sample ID: HD-CW-5-0/1-0

Date Analyzed: 11/01/16 18:39 Lab File ID: 51101023.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,2-Dichloroethene	4.55	Incomplete Integration	fergusond	11/02/16 07:29

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Instrument ID: CH732 Analysis Batch Number: 189377

Lab Sample ID: IC 180-189377/3 Client Sample ID:

Date Analyzed: 09/28/16 05:28 Lab File ID: D09280003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.57	Poor chromatography	piccolinov	09/28/16 06:56
N-Nitrosodimethylamine	2.19	Poor chromatography	piccolinov	09/28/16 06:56
Pyridine	2.31	Poor chromatography	piccolinov	09/28/16 06:56
Methyl methanesulfonate	4.49	Poor chromatography	piccolinov	09/28/16 06:56
Dibenz(a,h)anthracene	19.53	Poor chromatography	piccolinov	09/28/16 06:56
Benzo[g,h,i]perylene	20.15	Poor chromatography	piccolinov	09/28/16 06:56

Lab Sample ID: IC 180-189377/4 Client Sample ID:

Date Analyzed: 09/28/16 05:55 Lab File ID: D09280004.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.23	Poor chromatography	piccolinov	09/28/16 07:01

Lab Sample ID: IC 180-189377/5 Client Sample ID:

Date Analyzed: 09/28/16 06:22 Lab File ID: D09280005.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.13	Poor chromatography	piccolinov	09/28/16 07:03

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Instrument ID: CH732 Analysis Batch Number: 189377

Lab Sample ID: IC 180-189377/8 Client Sample ID:

Date Analyzed: 09/28/16 07:44 Lab File ID: D09280008.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.57	Poor chromatography	piccolinov	09/28/16 08:13

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
OPLVISPKMIX1i_00052	01/31/17	08/04/16	Methanol, Lot 0000082533	250 mL	SVLVstd1_00039	50 mL	1,1'-Biphenyl	200 ug/mL
							1,2,4,5-Tetrachlorobenzene	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Diphenylhydrazine	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	200 ug/mL
							1-Methylnaphthalene	200 ug/mL
							2,2'-oxybis[1-chloropropane]	200 ug/mL
							2,3,4,6-Tetrachlorophenol	200 ug/mL
							2,4,5-Trichlorophenol	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL
							2,4-Dichlorophenol	200 ug/mL
							2,4-Dimethylphenol	200 ug/mL
							2,4-Dinitrophenol	400 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dichlorophenol	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Chloronaphthalene	200 ug/mL
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL
							2-Nitroaniline	200 ug/mL
							2-Nitrophenol	200 ug/mL
							3 & 4 Methylphenol	200 ug/mL
							3-Nitroaniline	200 ug/mL
							4,6-Dinitro-2-methylphenol	400 ug/mL
							4-Bromophenyl phenyl ether	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Chloroaniline	200 ug/mL
							4-Chlorophenyl phenyl ether	200 ug/mL
							4-Methylphenol	200 ug/mL
							4-Nitroaniline	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Acetophenone	200 ug/mL
							Aniline	200 ug/mL
							Anthracene	200 ug/mL
							Azobenzene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl alcohol	200 ug/mL
							Bis(2-chloroethoxy)methane	200 ug/mL
							Bis(2-chloroethyl)ether	200 ug/mL
							Bis(2-ethylhexyl) phthalate	200 ug/mL
							Butyl benzyl phthalate	200 ug/mL
							Carbazole	200 ug/mL
							Chrysene	200 ug/mL
							Di-n-butyl phthalate	200 ug/mL
							Di-n-octyl phthalate	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Dibenzofuran	200 ug/mL
							Diethyl phthalate	200 ug/mL
							Dimethyl phthalate	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Hexachlorobenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexachlorocyclopentadiene	200 ug/mL
							Hexachloroethane	200 ug/mL
							Hexadecane	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Isophorone	200 ug/mL
							Methyl Phenols,Total	400 ug/mL
							n-Decane	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL
							N-Nitrosodimethylamine	200 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							n-Octadecane	200 ug/mL
							Naphthalene	200 ug/mL
							Nitrobenzene	200 ug/mL
							Pentachlorophenol	400 ug/mL
							Phenanthrene	200 ug/mL
							Phenol	200 ug/mL
							Pyrene	200 ug/mL
							Pyridine	200 ug/mL
							Total Cresols	400 ug/mL
					SVLVstd10_00005	25 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SVLVstd11_00005	25 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SVLVstd9_00004	25 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
.SVLVstd1_00039	04/30/17		Restek, Lot A0114832		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							Methyl Phenols,Total	2000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
							Total Cresols	2000 ug/mL
.SVLVstd10_00005	05/31/17		Restek, Lot A0115596		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
.SVLVstd11_00005	05/31/17		Restek, Lot A0115387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.SVLVstd9_00004	01/31/17		Restek, Lot A0112567		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
OPQL8270SURi_00048	03/24/17	09/24/16	Methanol, Lot b#00000118655	500 mL	SVLVSURSPK_00002	20 mL	2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
.SVLVSURSPK_00002	08/31/19		Restek, Lot A0103960		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SVTAPITINTRNi_00012	09/15/17	09/15/16	MeCl2, Lot 2022771	25 mL	SVLVIntstd_00004	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
.SVLVIntstd_00004	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
SVTAPSTD0.38i_00001	03/14/17	09/24/16	MeCl2, Lot 2022771	1 mL	SVTAPITINTRNi_00012	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00015	4.75 uL	Benzo[e]pyrene	0.19 ug/mL
							2,3,5,6-Tetrachlorophenol	0.19 ug/mL
							2-Naphthylamine	0.19 ug/mL
							7,12-Dimethylbenz(a)anthracene	0.19 ug/mL
							1,1'-Biphenyl	0.19 ug/mL
							1,2,4,5-Tetrachlorobenzene	0.19 ug/mL
							1,2,4-Trichlorobenzene	0.19 ug/mL
							1,2-Dichlorobenzene	0.19 ug/mL
							1,2-Diphenylhydrazine	0.19 ug/mL
							1,3-Dichlorobenzene	0.19 ug/mL
							1,3-Dinitrobenzene	0.19 ug/mL
							1,4-Dichlorobenzene	0.19 ug/mL
							1,4-Dioxane	0.19 ug/mL
							1-Methylnaphthalene	0.19 ug/mL
							2,2'-oxybis[1-chloropropane]	0.19 ug/mL
							2,3,4,6-Tetrachlorophenol	0.19 ug/mL
							2,4,5-Trichlorophenol	0.19 ug/mL
							2,4,6-Trichlorophenol	0.19 ug/mL
							2,4-Dichlorophenol	0.19 ug/mL
							2,4-Dimethylphenol	0.19 ug/mL
							2,4-Dinitrophenol	0.38 ug/mL
							2,4-Dinitrotoluene	0.19 ug/mL
							2,6-Dichlorophenol	0.19 ug/mL
							2,6-Dinitrotoluene	0.19 ug/mL
							2-Chloronaphthalene	0.19 ug/mL
							2-Chlorophenol	0.19 ug/mL
							2-Methylnaphthalene	0.19 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylphenol	0.19 ug/mL
							2-Nitroaniline	0.19 ug/mL
							2-Nitrophenol	0.19 ug/mL
							3-Nitroaniline	0.19 ug/mL
							4,6-Dinitro-2-methylphenol	0.38 ug/mL
							4-Bromophenyl phenyl ether	0.19 ug/mL
							4-Chloro-3-methylphenol	0.19 ug/mL
							4-Chloroaniline	0.19 ug/mL
							4-Chlorophenyl phenyl ether	0.19 ug/mL
							4-Methylphenol	0.19 ug/mL
							4-Nitroaniline	0.19 ug/mL
							4-Nitrophenol	0.38 ug/mL
							Acenaphthene	0.19 ug/mL
							Acenaphthylene	0.19 ug/mL
							Acetophenone	0.19 ug/mL
							Aniline	0.19 ug/mL
							Anthracene	0.19 ug/mL
							Benzo[a]anthracene	0.19 ug/mL
							Benzo[a]pyrene	0.19 ug/mL
							Benzo[b]fluoranthene	0.19 ug/mL
							Benzo[g,h,i]perylene	0.19 ug/mL
							Benzo[k]fluoranthene	0.19 ug/mL
							Benzyl alcohol	0.19 ug/mL
							Bis(2-chloroethoxy)methane	0.19 ug/mL
							Bis(2-chloroethyl)ether	0.19 ug/mL
							Bis(2-ethylhexyl) phthalate	0.19 ug/mL
							Butyl benzyl phthalate	0.19 ug/mL
							Carbazole	0.19 ug/mL
							Chrysene	0.19 ug/mL
							Di-n-butyl phthalate	0.19 ug/mL
							Di-n-octyl phthalate	0.19 ug/mL
							Dibenz(a,h)anthracene	0.19 ug/mL
							Dibenzofuran	0.19 ug/mL
							Diethyl phthalate	0.19 ug/mL
							Dimethyl phthalate	0.19 ug/mL
							Fluoranthene	0.19 ug/mL
							Fluorene	0.19 ug/mL
							Hexachlorobenzene	0.19 ug/mL
							Hexachlorobutadiene	0.19 ug/mL
							Hexachlorocyclopentadiene	0.19 ug/mL
							Hexachloroethane	0.19 ug/mL
							Hexadecane	0.19 ug/mL
							Indeno[1,2,3-cd]pyrene	0.19 ug/mL
							Isophorone	0.19 ug/mL
							n-Decane	0.19 ug/mL
							N-Nitrosodi-n-propylamine	0.19 ug/mL
							N-Nitrosodimethylamine	0.19 ug/mL
							N-Nitrosodiphenylamine	0.19 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Octadecane	0.19 ug/mL
							Naphthalene	0.19 ug/mL
							Nitrobenzene	0.19 ug/mL
							Pentachlorophenol	0.38 ug/mL
							Phenanthrene	0.19 ug/mL
							Phenol	0.19 ug/mL
							Pyrene	0.19 ug/mL
							Pyridine	0.19 ug/mL
							Benzoic acid	0.19 ug/mL
							Indene	0.19 ug/mL
							Atrazine	0.19 ug/mL
							Benzaldehyde	0.19 ug/mL
							Caprolactam	0.19 ug/mL
							3,3'-Dichlorobenzidine	0.19 ug/mL
							Benzidine	0.19 ug/mL
							2,4,6-Tribromophenol (Surr)	0.19 ug/mL
							2-Fluorobiphenyl	0.19 ug/mL
							2-Fluorophenol (Surr)	0.19 ug/mL
							Nitrobenzene-d5 (Surr)	0.19 ug/mL
							Phenol-d5 (Surr)	0.19 ug/mL
							Terphenyl-d14 (Surr)	0.19 ug/mL
							Methyl methanesulfonate	0.19 ug/mL
							N-Nitrosopyrrolidine	0.19 ug/mL
.SVTAPITINTRNi_00012	09/15/17	09/15/16	MeCl2, Lot 2022771	25 mL	SVLVIntstd_00004	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00004	02/28/18	Restek, Lot A093676			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00015	03/24/17	09/24/16	MeCl2, Lot 2022771	20 mL	sv benzoepyre_00003	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00003	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00004	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00011	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00041	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd10_00006	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00006	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00002	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00011	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00017	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00003	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00003	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00004	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00011	04/09/20		Absolute, Lot 040915		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00041	04/30/17		Restek, Lot A0114832		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd10_00006	05/31/17		Restek, Lot A0115596		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00006	05/31/17		Restek, Lot A0115387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00006	09/30/17		Restek, Lot A0118008		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00002	08/31/19		Restek, Lot A0103960		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00011	02/13/20		Absolute, Lot 021315		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00017	01/08/19		absolute, Lot 010816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00187	10/01/16	09/24/16	MeCl2, Lot 2022771	1 mL	SVTAPITINTRNi_00012	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00015	125 uL	Benzo[e]pyrene	5 ug/mL
							2,3,5,6-Tetrachlorophenol	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Naphthylamine	5 ug/mL
							7,12-Dimethylbenz(a)anthracene	5 ug/mL
							1,1'-Biphenyl	5 ug/mL
							1,2,4,5-Tetrachlorobenzene	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,2-Diphenylhydrazine	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dinitrobenzene	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	5 ug/mL
							1-Methylnaphthalene	5 ug/mL
							2,2'-oxybis[1-chloropropane]	5 ug/mL
							2,3,4,6-Tetrachlorophenol	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dichlorophenol	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							2-Methylphenol	5 ug/mL
							2-Nitroaniline	5 ug/mL
							2-Nitrophenol	5 ug/mL
							3-Nitroaniline	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chloroaniline	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Methylphenol	5 ug/mL
							4-Nitroaniline	5 ug/mL
							4-Nitrophenol	10 ug/mL
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL
							Acetophenone	5 ug/mL
							Aniline	5 ug/mL
							Anthracene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL
							Benzo[k]fluoranthene	5 ug/mL
							Benzyl alcohol	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethoxy)methane	5 ug/mL
							Bis(2-chloroethyl)ether	5 ug/mL
							Bis(2-ethylhexyl) phthalate	5 ug/mL
							Butyl benzyl phthalate	5 ug/mL
							Carbazole	5 ug/mL
							Chrysene	5 ug/mL
							Di-n-butyl phthalate	5 ug/mL
							Di-n-octyl phthalate	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Dibenzofuran	5 ug/mL
							Diethyl phthalate	5 ug/mL
							Dimethyl phthalate	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexachlorocyclopentadiene	5 ug/mL
							Hexachloroethane	5 ug/mL
							Hexadecane	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Isophorone	5 ug/mL
							n-Decane	5 ug/mL
							N-Nitrosodi-n-propylamine	5 ug/mL
							N-Nitrosodimethylamine	5 ug/mL
							N-Nitrosodiphenylamine	5 ug/mL
							n-Octadecane	5 ug/mL
							Naphthalene	5 ug/mL
							Nitrobenzene	5 ug/mL
							Pentachlorophenol	10 ug/mL
							Phenanthrene	5 ug/mL
							Phenol	5 ug/mL
							Pyrene	5 ug/mL
							Pyridine	5 ug/mL
							Benzoic acid	5 ug/mL
							Indene	5 ug/mL
							Atrazine	5 ug/mL
							Benzaldehyde	5 ug/mL
							Caprolactam	5 ug/mL
							3,3'-Dichlorobenzidine	5 ug/mL
							Benzidine	5 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
							Methyl methanesulfonate	5 ug/mL
							N-Nitrosopyrrolidine	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SVTAPITINTRNi_00012	09/15/17	09/15/16	MeCl2, Lot 2022771	25 mL	SVLVIntstd_00004	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00004	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00015	03/24/17	09/24/16	MeCl2, Lot 2022771	20 mL	sv benzoepyre_00003	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00003	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00004	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00011	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00041	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd10_00006	400 uL	Benzoic acid	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indene	40 ug/mL
					SVLVstd11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00006	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00002	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00011	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00017	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00003	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00003	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00004	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00011	04/09/20		Absolute, Lot 040915		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00041	04/30/17		Restek, Lot A0114832		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyridine	1000 ug/mL
..SVLVstd10_00006	05/31/17		Restek, Lot A0115596		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00006	05/31/17		Restek, Lot A0115387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00006	09/30/17		Restek, Lot A0118008		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00002	08/31/19		Restek, Lot A0103960		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00011	02/13/20		Absolute, Lot 021315		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00017	01/08/19		absolute, Lot 010816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00193	11/01/16	10/25/16	MeCl2, Lot 2022771	1 mL	SVTAPITINTRNi_00012	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
.SVTAPITINTRNi_00012	09/15/17	09/15/16	MeCl2, Lot 2022771	25 mL	SVLVIntstd_00004	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00004	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
SVTAPSTD10i_00193	11/01/16	10/25/16	MeCl2, Lot 2022771	1 mL	SVTAPITSTCKi_00015	125 uL	1,4-Dioxane	5 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
.SVTAPITSTCKi_00015	03/24/17	09/24/16	MeCl2, Lot 2022771	20 mL	SVLVstd1_00041	800 uL	1,4-Dioxane	40 ug/mL
					SVLVSURSPK_00002	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Terphenyl-d14 (Surr)	40 ug/mL
..SVLVstd1_00041	04/30/17		Restek, Lot A0114832		(Purchased Reagent)		1,4-Dioxane	1000 ug/mL
..SVLVSURSPK_00002	08/31/19		Restek, Lot A0103960		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SVTAPSTD2.0i_00011	03/24/17	09/14/16	MeCl2, Lot 2022771	1 mL	SVTAPITINTRNi_00012	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00015	25 uL	Benzo[e]pyrene	1 ug/mL
							2,3,5,6-Tetrachlorophenol	1 ug/mL
							2-Naphthylamine	1 ug/mL
							7,12-Dimethylbenz(a)anthracene	1 ug/mL
							1,1'-Biphenyl	1 ug/mL
							1,2,4,5-Tetrachlorobenzene	1 ug/mL
							1,2,4-Trichlorobenzene	1 ug/mL
							1,2-Dichlorobenzene	1 ug/mL
							1,2-Diphenylhydrazine	1 ug/mL
							1,3-Dichlorobenzene	1 ug/mL
							1,3-Dinitrobenzene	1 ug/mL
							1,4-Dichlorobenzene	1 ug/mL
							1,4-Dioxane	1 ug/mL
							1-Methylnaphthalene	1 ug/mL
							2,2'-oxybis[1-chloropropane]	1 ug/mL
							2,3,4,6-Tetrachlorophenol	1 ug/mL
							2,4,5-Trichlorophenol	1 ug/mL
							2,4,6-Trichlorophenol	1 ug/mL
							2,4-Dichlorophenol	1 ug/mL
							2,4-Dimethylphenol	1 ug/mL
							2,4-Dinitrophenol	2 ug/mL
							2,4-Dinitrotoluene	1 ug/mL
							2,6-Dichlorophenol	1 ug/mL
							2,6-Dinitrotoluene	1 ug/mL
							2-Chloronaphthalene	1 ug/mL
							2-Chlorophenol	1 ug/mL
							2-Methylnaphthalene	1 ug/mL
							2-Methylphenol	1 ug/mL
							2-Nitroaniline	1 ug/mL
							2-Nitrophenol	1 ug/mL
							3-Nitroaniline	1 ug/mL
							4,6-Dinitro-2-methylphenol	2 ug/mL
							4-Bromophenyl phenyl ether	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloro-3-methylphenol	1 ug/mL
							4-Chloroaniline	1 ug/mL
							4-Chlorophenyl phenyl ether	1 ug/mL
							4-Methylphenol	1 ug/mL
							4-Nitroaniline	1 ug/mL
							4-Nitrophenol	2 ug/mL
							Acenaphthene	1 ug/mL
							Acenaphthylene	1 ug/mL
							Acetophenone	1 ug/mL
							Aniline	1 ug/mL
							Anthracene	1 ug/mL
							Benzo[a]anthracene	1 ug/mL
							Benzo[a]pyrene	1 ug/mL
							Benzo[b]fluoranthene	1 ug/mL
							Benzo[g,h,i]perylene	1 ug/mL
							Benzo[k]fluoranthene	1 ug/mL
							Benzyl alcohol	1 ug/mL
							Bis(2-chloroethoxy)methane	1 ug/mL
							Bis(2-chloroethyl)ether	1 ug/mL
							Bis(2-ethylhexyl) phthalate	1 ug/mL
							Butyl benzyl phthalate	1 ug/mL
							Carbazole	1 ug/mL
							Chrysene	1 ug/mL
							Di-n-butyl phthalate	1 ug/mL
							Di-n-octyl phthalate	1 ug/mL
							Dibenz(a,h)anthracene	1 ug/mL
							Dibenzofuran	1 ug/mL
							Diethyl phthalate	1 ug/mL
							Dimethyl phthalate	1 ug/mL
							Fluoranthene	1 ug/mL
							Fluorene	1 ug/mL
							Hexachlorobenzene	1 ug/mL
							Hexachlorobutadiene	1 ug/mL
							Hexachlorocyclopentadiene	1 ug/mL
							Hexachloroethane	1 ug/mL
							Hexadecane	1 ug/mL
							Indeno[1,2,3-cd]pyrene	1 ug/mL
							Isophorone	1 ug/mL
							n-Decane	1 ug/mL
							N-Nitrosodi-n-propylamine	1 ug/mL
							N-Nitrosodimethylamine	1 ug/mL
							N-Nitrosodiphenylamine	1 ug/mL
							n-Octadecane	1 ug/mL
							Naphthalene	1 ug/mL
							Nitrobenzene	1 ug/mL
							Pentachlorophenol	2 ug/mL
							Phenanthrene	1 ug/mL
							Phenol	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyrene	1 ug/mL
							Pyridine	1 ug/mL
							Benzoic acid	1 ug/mL
							Indene	1 ug/mL
							Atrazine	1 ug/mL
							Benzaldehyde	1 ug/mL
							Caprolactam	1 ug/mL
							3,3'-Dichlorobenzidine	1 ug/mL
							Benzidine	1 ug/mL
							2,4,6-Tribromophenol (Surr)	1 ug/mL
							2-Fluorobiphenyl	1 ug/mL
							2-Fluorophenol (Surr)	1 ug/mL
							Nitrobenzene-d5 (Surr)	1 ug/mL
							Phenol-d5 (Surr)	1 ug/mL
							Terphenyl-d14 (Surr)	1 ug/mL
							Methyl methanesulfonate	1 ug/mL
							N-Nitrosopyrrolidine	1 ug/mL
.SVTAPITINTRNi_00012	09/15/17	09/15/16	MeCl2, Lot 2022771	25 mL	SVLVIntstd_00004	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00004	02/28/18	Restek, Lot A093676			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00015	03/24/17	09/24/16	MeCl2, Lot 2022771	20 mL	sv benzoepyre_00003	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00003	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00004	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00011	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00041	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd10_00006	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00006	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00002	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00011	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00017	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00003	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00003	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00004	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00011	04/09/20		Absolute, Lot 040915		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00041	04/30/17		Restek, Lot A0114832		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd10_00006	05/31/17		Restek, Lot A0115596		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00006	05/31/17		Restek, Lot A0115387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00006	09/30/17		Restek, Lot A0118008		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00002	08/31/19		Restek, Lot A0103960		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00011	02/13/20		Absolute, Lot 021315		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00017	01/08/19		absolute, Lot 010816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD20i_00010	03/24/17	09/24/16	MeCl2, Lot 2022771	1 mL	SVTAPITINTRNi_00012	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00015	250 uL	Benzo[e]pyrene	10 ug/mL
							2,3,5,6-Tetrachlorophenol	10 ug/mL
							2-Naphthylamine	10 ug/mL
							7,12-Dimethylbenz(a)anthracene	10 ug/mL
							1,1'-Biphenyl	10 ug/mL
							1,2,4,5-Tetrachlorobenzene	10 ug/mL
							1,2,4-Trichlorobenzene	10 ug/mL
							1,2-Dichlorobenzene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Diphenylhydrazine	10 ug/mL
							1,3-Dichlorobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							1,4-Dichlorobenzene	10 ug/mL
							1,4-Dioxane	10 ug/mL
							1-Methylnaphthalene	10 ug/mL
							2,2'-oxybis[1-chloropropane]	10 ug/mL
							2,3,4,6-Tetrachlorophenol	10 ug/mL
							2,4,5-Trichlorophenol	10 ug/mL
							2,4,6-Trichlorophenol	10 ug/mL
							2,4-Dichlorophenol	10 ug/mL
							2,4-Dimethylphenol	10 ug/mL
							2,4-Dinitrophenol	20 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Chloronaphthalene	10 ug/mL
							2-Chlorophenol	10 ug/mL
							2-Methylnaphthalene	10 ug/mL
							2-Methylphenol	10 ug/mL
							2-Nitroaniline	10 ug/mL
							2-Nitrophenol	10 ug/mL
							3-Nitroaniline	10 ug/mL
							4,6-Dinitro-2-methylphenol	20 ug/mL
							4-Bromophenyl phenyl ether	10 ug/mL
							4-Chloro-3-methylphenol	10 ug/mL
							4-Chloroaniline	10 ug/mL
							4-Chlorophenyl phenyl ether	10 ug/mL
							4-Methylphenol	10 ug/mL
							4-Nitroaniline	10 ug/mL
							4-Nitrophenol	20 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Acetophenone	10 ug/mL
							Aniline	10 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	10 ug/mL
							Benzo[g,h,i]perylene	10 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Benzyl alcohol	10 ug/mL
							Bis(2-chloroethoxy)methane	10 ug/mL
							Bis(2-chloroethyl)ether	10 ug/mL
							Bis(2-ethylhexyl) phthalate	10 ug/mL
							Butyl benzyl phthalate	10 ug/mL
							Carbazole	10 ug/mL
							Chrysene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-butyl phthalate	10 ug/mL
							Di-n-octyl phthalate	10 ug/mL
							Dibenz(a,h)anthracene	10 ug/mL
							Dibenzofuran	10 ug/mL
							Diethyl phthalate	10 ug/mL
							Dimethyl phthalate	10 ug/mL
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Hexachlorobenzene	10 ug/mL
							Hexachlorobutadiene	10 ug/mL
							Hexachlorocyclopentadiene	10 ug/mL
							Hexachloroethane	10 ug/mL
							Hexadecane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							n-Decane	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL
							N-Nitrosodimethylamine	10 ug/mL
							N-Nitrosodiphenylamine	10 ug/mL
							n-Octadecane	10 ug/mL
							Naphthalene	10 ug/mL
							Nitrobenzene	10 ug/mL
							Pentachlorophenol	20 ug/mL
							Phenanthrene	10 ug/mL
							Phenol	10 ug/mL
							Pyrene	10 ug/mL
							Pyridine	10 ug/mL
							Benzoic acid	10 ug/mL
							Indene	10 ug/mL
							Atrazine	10 ug/mL
							Benzaldehyde	10 ug/mL
							Caprolactam	10 ug/mL
							3,3'-Dichlorobenzidine	10 ug/mL
							Benzidine	10 ug/mL
							2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10 ug/mL
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
							Methyl methanesulfonate	10 ug/mL
							N-Nitrosopyrrolidine	10 ug/mL
.SVTAPITINTRNi_00012	09/15/17	09/15/16	MeCl2, Lot 2022771	25 mL	SVLVIntstd_00004	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVLVIntstd_00004	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00015	03/24/17	09/24/16	MeCl2, Lot 2022771	20 mL	sv benzoepyre_00003	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00003	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00004	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00011	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00041	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd10_00006	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00006	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SVLVSURSPK_00002	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00011	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00017	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00003	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00003	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00004	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00011	04/09/20		Absolute, Lot 040915		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00041	04/30/17		Restek, Lot A0114832		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd10_00006	05/31/17		Restek, Lot A0115596		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00006	05/31/17		Restek, Lot A0115387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVLVstd9_00006	09/30/17		Restek, Lot A0118008		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00002	08/31/19		Restek, Lot A0103960		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00011	02/13/20		Absolute, Lot 021315		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00017	01/08/19		absolute, Lot 010816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD4.0i_00011	03/24/17	09/24/16	MeCl2, Lot 2022771	1 mL	SVTAPITINTRNi_00012	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00015	50 uL	Benzo[e]pyrene	2 ug/mL
							2,3,5,6-Tetrachlorophenol	2 ug/mL
							2-Naphthylamine	2 ug/mL
							7,12-Dimethylbenz(a)anthracene	2 ug/mL
							1,1'-Biphenyl	2 ug/mL
							1,2,4,5-Tetrachlorobenzene	2 ug/mL
							1,2,4-Trichlorobenzene	2 ug/mL
							1,2-Dichlorobenzene	2 ug/mL
							1,2-Diphenylhydrazine	2 ug/mL
							1,3-Dichlorobenzene	2 ug/mL
							1,3-Dinitrobenzene	2 ug/mL
							1,4-Dichlorobenzene	2 ug/mL
							1,4-Dioxane	2 ug/mL
							1-Methylnaphthalene	2 ug/mL
							2,2'-oxybis[1-chloropropane]	2 ug/mL
							2,3,4,6-Tetrachlorophenol	2 ug/mL
							2,4,5-Trichlorophenol	2 ug/mL
							2,4,6-Trichlorophenol	2 ug/mL
							2,4-Dichlorophenol	2 ug/mL
							2,4-Dimethylphenol	2 ug/mL
							2,4-Dinitrophenol	4 ug/mL
							2,4-Dinitrotoluene	2 ug/mL
							2,6-Dichlorophenol	2 ug/mL
							2,6-Dinitrotoluene	2 ug/mL
							2-Chloronaphthalene	2 ug/mL
							2-Chlorophenol	2 ug/mL
							2-Methylnaphthalene	2 ug/mL
							2-Methylphenol	2 ug/mL
							2-Nitroaniline	2 ug/mL
							2-Nitrophenol	2 ug/mL
							3-Nitroaniline	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,6-Dinitro-2-methylphenol	4 ug/mL
							4-Bromophenyl phenyl ether	2 ug/mL
							4-Chloro-3-methylphenol	2 ug/mL
							4-Chloroaniline	2 ug/mL
							4-Chlorophenyl phenyl ether	2 ug/mL
							4-Methylphenol	2 ug/mL
							4-Nitroaniline	2 ug/mL
							4-Nitrophenol	4 ug/mL
							Acenaphthene	2 ug/mL
							Acenaphthylene	2 ug/mL
							Acetophenone	2 ug/mL
							Aniline	2 ug/mL
							Anthracene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Benzyl alcohol	2 ug/mL
							Bis(2-chloroethoxy)methane	2 ug/mL
							Bis(2-chloroethyl)ether	2 ug/mL
							Bis(2-ethylhexyl) phthalate	2 ug/mL
							Butyl benzyl phthalate	2 ug/mL
							Carbazole	2 ug/mL
							Chrysene	2 ug/mL
							Di-n-butyl phthalate	2 ug/mL
							Di-n-octyl phthalate	2 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Dibenzofuran	2 ug/mL
							Diethyl phthalate	2 ug/mL
							Dimethyl phthalate	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Hexachlorobenzene	2 ug/mL
							Hexachlorobutadiene	2 ug/mL
							Hexachlorocyclopentadiene	2 ug/mL
							Hexachloroethane	2 ug/mL
							Hexadecane	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Isophorone	2 ug/mL
							n-Decane	2 ug/mL
							N-Nitrosodi-n-propylamine	2 ug/mL
							N-Nitrosodimethylamine	2 ug/mL
							N-Nitrosodiphenylamine	2 ug/mL
							n-Octadecane	2 ug/mL
							Naphthalene	2 ug/mL
							Nitrobenzene	2 ug/mL
							Pentachlorophenol	4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene	2 ug/mL
							Phenol	2 ug/mL
							Pyrene	2 ug/mL
							Pyridine	2 ug/mL
							Benzoic acid	2 ug/mL
							Indene	2 ug/mL
							Atrazine	2 ug/mL
							Benzaldehyde	2 ug/mL
							Caprolactam	2 ug/mL
							3,3'-Dichlorobenzidine	2 ug/mL
							Benzidine	2 ug/mL
							2,4,6-Tribromophenol (Surr)	2 ug/mL
							2-Fluorobiphenyl	2 ug/mL
							2-Fluorophenol (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2 ug/mL
							Phenol-d5 (Surr)	2 ug/mL
							Terphenyl-d14 (Surr)	2 ug/mL
							Methyl methanesulfonate	2 ug/mL
							N-Nitrosopyrrolidine	2 ug/mL
.SVTAPITINTRNi_00012	09/15/17	09/15/16	MeCl2, Lot 2022771	25 mL	SVLVIntstd_00004	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00004	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00015	03/24/17	09/24/16	MeCl2, Lot 2022771	20 mL	sv benzoepyre_00003	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00003	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00004	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00011	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00041	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd10_00006	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00006	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00002	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00011	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00017	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00003	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00003	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00004	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00011	04/09/20		Absolute, Lot 040915		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00041	04/30/17		Restek, Lot A0114832		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd10_00006	05/31/17		Restek, Lot A0115596		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00006	05/31/17		Restek, Lot A0115387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00006	09/30/17		Restek, Lot A0118008		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00002	08/31/19		Restek, Lot A0103960		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00011	02/13/20		Absolute, Lot 021315		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00017	01/08/19		absolute, Lot 010816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD40i_00010	03/24/17	09/14/16	MeCl2, Lot 2022771	1 mL	SVTAPITINTRNi_00012	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00015	500 uL	Benzo[e]pyrene	20 ug/mL
							2,3,5,6-Tetrachlorophenol	20 ug/mL
							2-Naphthylamine	20 ug/mL
							7,12-Dimethylbenz(a)anthracene	20 ug/mL
							1,1'-Biphenyl	20 ug/mL
							1,2,4,5-Tetrachlorobenzene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Diphenylhydrazine	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,3-Dinitrobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							1,4-Dioxane	20 ug/mL
							1-Methylnaphthalene	20 ug/mL
							2,2'-oxybis[1-chloropropane]	20 ug/mL
							2,3,4,6-Tetrachlorophenol	20 ug/mL
							2,4,5-Trichlorophenol	20 ug/mL
							2,4,6-Trichlorophenol	20 ug/mL
							2,4-Dichlorophenol	20 ug/mL
							2,4-Dimethylphenol	20 ug/mL
							2,4-Dinitrophenol	40 ug/mL
							2,4-Dinitrotoluene	20 ug/mL
							2,6-Dichlorophenol	20 ug/mL
							2,6-Dinitrotoluene	20 ug/mL
							2-Chloronaphthalene	20 ug/mL
							2-Chlorophenol	20 ug/mL
							2-Methylnaphthalene	20 ug/mL
							2-Methylphenol	20 ug/mL
							2-Nitroaniline	20 ug/mL
							2-Nitrophenol	20 ug/mL
							3-Nitroaniline	20 ug/mL
							4,6-Dinitro-2-methylphenol	40 ug/mL
							4-Bromophenyl phenyl ether	20 ug/mL
							4-Chloro-3-methylphenol	20 ug/mL
							4-Chloroaniline	20 ug/mL
							4-Chlorophenyl phenyl ether	20 ug/mL
							4-Methylphenol	20 ug/mL
							4-Nitroaniline	20 ug/mL
							4-Nitrophenol	40 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Acetophenone	20 ug/mL
							Aniline	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Benzyl alcohol	20 ug/mL
							Bis(2-chloroethoxy)methane	20 ug/mL
							Bis(2-chloroethyl)ether	20 ug/mL
							Bis(2-ethylhexyl) phthalate	20 ug/mL
							Butyl benzyl phthalate	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbazole	20 ug/mL
							Chrysene	20 ug/mL
							Di-n-butyl phthalate	20 ug/mL
							Di-n-octyl phthalate	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Dibenzofuran	20 ug/mL
							Diethyl phthalate	20 ug/mL
							Dimethyl phthalate	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Hexachlorobenzene	20 ug/mL
							Hexachlorobutadiene	20 ug/mL
							Hexachlorocyclopentadiene	20 ug/mL
							Hexachloroethane	20 ug/mL
							Hexadecane	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Isophorone	20 ug/mL
							n-Decane	20 ug/mL
							N-Nitrosodi-n-propylamine	20 ug/mL
							N-Nitrosodimethylamine	20 ug/mL
							N-Nitrosodiphenylamine	20 ug/mL
							n-Octadecane	20 ug/mL
							Naphthalene	20 ug/mL
							Nitrobenzene	20 ug/mL
							Pentachlorophenol	40 ug/mL
							Phenanthrene	20 ug/mL
							Phenol	20 ug/mL
							Pyrene	20 ug/mL
							Pyridine	20 ug/mL
							Benzoic acid	20 ug/mL
							Indene	20 ug/mL
							Atrazine	20 ug/mL
							Benzaldehyde	20 ug/mL
							Caprolactam	20 ug/mL
							3,3'-Dichlorobenzidine	20 ug/mL
							Benzidine	20 ug/mL
							2,4,6-Tribromophenol (Surr)	20 ug/mL
							2-Fluorobiphenyl	20 ug/mL
							2-Fluorophenol (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20 ug/mL
							Phenol-d5 (Surr)	20 ug/mL
							Terphenyl-d14 (Surr)	20 ug/mL
							Methyl methanesulfonate	20 ug/mL
							N-Nitrosopyrrolidine	20 ug/mL
.SVTAPITINTRNi_00012	09/15/17	09/15/16	MeCl2, Lot 2022771	25 mL	SVLVIntstd_00004	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00004	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00015	03/24/17	09/24/16	MeCl2, Lot 2022771	20 mL	sv benzoepyre_00003	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00003	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00004	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00011	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00041	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd10_00006	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SVLVstd9_00006	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00002	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00011	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00017	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00003	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00003	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00004	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00011	04/09/20		Absolute, Lot 040915		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00041	04/30/17		Restek, Lot A0114832		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd10_00006	05/31/17		Restek, Lot A0115596		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00006	05/31/17		Restek, Lot A0115387		(Purchased Reagent)		Atrazine	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00006	09/30/17		Restek, Lot A0118008		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00002	08/31/19		Restek, Lot A0103960		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00011	02/13/20		Absolute, Lot 021315		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00017	01/08/19		absolute, Lot 010816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD60i_00010	03/24/17	09/24/16	MeCl2, Lot 2022771	1 mL	SVTAPITINTRNi_00012	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00015	750 uL	Benzo[e]pyrene	30 ug/mL
							2,3,5,6-Tetrachlorophenol	30 ug/mL
							2-Naphthylamine	30 ug/mL
							7,12-Dimethylbenz(a)anthracene	30 ug/mL
							1,1'-Biphenyl	30 ug/mL
							1,2,4,5-Tetrachlorobenzene	30 ug/mL
							1,2,4-Trichlorobenzene	30 ug/mL
							1,2-Dichlorobenzene	30 ug/mL
							1,2-Diphenylhydrazine	30 ug/mL
							1,3-Dichlorobenzene	30 ug/mL
							1,3-Dinitrobenzene	30 ug/mL
							1,4-Dichlorobenzene	30 ug/mL
							1,4-Dioxane	30 ug/mL
							1-Methylnaphthalene	30 ug/mL
							2,2'-oxybis[1-chloropropane]	30 ug/mL
							2,3,4,6-Tetrachlorophenol	30 ug/mL
							2,4,5-Trichlorophenol	30 ug/mL
							2,4,6-Trichlorophenol	30 ug/mL
							2,4-Dichlorophenol	30 ug/mL
							2,4-Dimethylphenol	30 ug/mL
							2,4-Dinitrophenol	60 ug/mL
							2,4-Dinitrotoluene	30 ug/mL
							2,6-Dichlorophenol	30 ug/mL
							2,6-Dinitrotoluene	30 ug/mL
							2-Chloronaphthalene	30 ug/mL
							2-Chlorophenol	30 ug/mL
							2-Methylnaphthalene	30 ug/mL
							2-Methylphenol	30 ug/mL
							2-Nitroaniline	30 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitrophenol	30 ug/mL
							3-Nitroaniline	30 ug/mL
							4,6-Dinitro-2-methylphenol	60 ug/mL
							4-Bromophenyl phenyl ether	30 ug/mL
							4-Chloro-3-methylphenol	30 ug/mL
							4-Chloroaniline	30 ug/mL
							4-Chlorophenyl phenyl ether	30 ug/mL
							4-Methylphenol	30 ug/mL
							4-Nitroaniline	30 ug/mL
							4-Nitrophenol	60 ug/mL
							Acenaphthene	30 ug/mL
							Acenaphthylene	30 ug/mL
							Acetophenone	30 ug/mL
							Aniline	30 ug/mL
							Anthracene	30 ug/mL
							Benzo[a]anthracene	30 ug/mL
							Benzo[a]pyrene	30 ug/mL
							Benzo[b]fluoranthene	30 ug/mL
							Benzo[g,h,i]perylene	30 ug/mL
							Benzo[k]fluoranthene	30 ug/mL
							Benzyl alcohol	30 ug/mL
							Bis(2-chloroethoxy)methane	30 ug/mL
							Bis(2-chloroethyl)ether	30 ug/mL
							Bis(2-ethylhexyl) phthalate	30 ug/mL
							Butyl benzyl phthalate	30 ug/mL
							Carbazole	30 ug/mL
							Chrysene	30 ug/mL
							Di-n-butyl phthalate	30 ug/mL
							Di-n-octyl phthalate	30 ug/mL
							Dibenz(a,h)anthracene	30 ug/mL
							Dibenzofuran	30 ug/mL
							Diethyl phthalate	30 ug/mL
							Dimethyl phthalate	30 ug/mL
							Fluoranthene	30 ug/mL
							Fluorene	30 ug/mL
							Hexachlorobenzene	30 ug/mL
							Hexachlorobutadiene	30 ug/mL
							Hexachlorocyclopentadiene	30 ug/mL
							Hexachloroethane	30 ug/mL
							Hexadecane	30 ug/mL
							Indeno[1,2,3-cd]pyrene	30 ug/mL
							Isophorone	30 ug/mL
							n-Decane	30 ug/mL
							N-Nitrosodi-n-propylamine	30 ug/mL
							N-Nitrosodimethylamine	30 ug/mL
							N-Nitrosodiphenylamine	30 ug/mL
							n-Octadecane	30 ug/mL
							Naphthalene	30 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene	30 ug/mL
							Pentachlorophenol	60 ug/mL
							Phenanthrene	30 ug/mL
							Phenol	30 ug/mL
							Pyrene	30 ug/mL
							Pyridine	30 ug/mL
							Benzoic acid	30 ug/mL
							Indene	30 ug/mL
							Atrazine	30 ug/mL
							Benzaldehyde	30 ug/mL
							Caprolactam	30 ug/mL
							3,3'-Dichlorobenzidine	30 ug/mL
							Benzidine	30 ug/mL
							2,4,6-Tribromophenol (Surr)	30 ug/mL
							2-Fluorobiphenyl	30 ug/mL
							2-Fluorophenol (Surr)	30 ug/mL
							Nitrobenzene-d5 (Surr)	30 ug/mL
							Phenol-d5 (Surr)	30 ug/mL
							Terphenyl-d14 (Surr)	30 ug/mL
							Methyl methanesulfonate	30 ug/mL
							N-Nitrosopyrrolidine	30 ug/mL
.SVTAPITINTRNi_00012	09/15/17	09/15/16	MeCl2, Lot 2022771	25 mL	SVLVIntstd_00004	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00004	02/28/18	Restek, Lot A093676			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00015	03/24/17	09/24/16	MeCl2, Lot 2022771	20 mL	sv benzoepyre_00003	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00003	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00004	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00011	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00041	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd10_00006	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00006	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00002	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00011	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00017	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00003	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00003	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00004	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00011	04/09/20		Absolute, Lot 040915		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00041	04/30/17		Restek, Lot A0114832		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd10_00006	05/31/17		Restek, Lot A0115596		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00006	05/31/17		Restek, Lot A0115387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00006	09/30/17		Restek, Lot A0118008		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00002	08/31/19		Restek, Lot A0103960		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00011	02/13/20		Absolute, Lot 021315		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00017	01/08/19		absolute, Lot 010816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD80i_00010	03/24/17	09/24/16	MeCl2, Lot 2022771	1 mL	SVTAPITINTRNi_00012	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00015	1000 uL	Benzo[e]pyrene	40 ug/mL
							2,3,5,6-Tetrachlorophenol	40 ug/mL
							2-Naphthylamine	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
							Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
							3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
							2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
							N-Nitrosopyrrolidine	40 ug/mL
.SVTAPITINTRNi_00012	09/15/17	09/15/16	MeCl2, Lot 2022771	25 mL	SVLVIntstd_00004	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00004	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00015	03/24/17	09/24/16	MeCl2, Lot 2022771	20 mL	sv benzoepyre_00003	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00003	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00004	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00011	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00041	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd10_00006	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00006	400 uL	Atrazine	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00006	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00002	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00011	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00017	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00003	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00003	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00004	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00011	04/09/20		Absolute, Lot 040915		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00041	04/30/17		Restek, Lot A0114832		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd10_00006	05/31/17		Restek, Lot A0115596		(Purchased Reagent)		Benzoic acid	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indene	2000 ug/mL
..SVLVstd11_00006	05/31/17		Restek, Lot A0115387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00006	09/30/17		Restek, Lot A0118008		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00002	08/31/19		Restek, Lot A0103960		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00011	02/13/20		Absolute, Lot 021315		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00017	01/08/19		absolute, Lot 010816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
VOA8260INT_00062	11/11/16	10/11/16	Methanol, Lot 2019054	10 mL	VOA8260INTRES_00127	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_00127	08/31/20		Restek, Lot A0113246		(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_00060	11/11/16	10/11/16	Methanol, Lot 2019054	100 mL	VOA8260SURRES_00117	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_00117	07/31/20		Restek, Lot A0112455		(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_00211	11/04/16	10/31/16	Methanol, Lot 136118	10 mL	VOA8260GAS2ND_00168	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00207	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00168	11/30/18		Restek, Lot A0115484		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOA2ND_00207	11/04/16	10/04/16	Methanol, Lot 136118	10 mL	VOA8260MEGA2_00052	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
							Ethylbenzene	250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylene Chloride	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00052	01/31/17		Restek, Lot A0118163		(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_00217	10/29/16	10/22/16	Methanol, Lot 2019054	10 mL	VOA8260GAS1ST_00169	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					VOA8260VOAPRI_00214	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
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00169	04/30/19		Restek, Lot A0118719		(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_00214	11/04/16	10/04/16	Methanol, Lot 136118	10 mL	VOA8260KET1ST_00079	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_00054	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
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Methyl acetate	1250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylcyclohexane	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00079	11/30/18		Restek, Lot A0115554		(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_00054	03/31/18		Restek, Lot A0108177		(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
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
VOA8260VOAPRI_00218	11/04/16	10/31/16	Methanol, Lot 136118	10 mL	VOA8260GAS1ST_00170	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00214	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_00170	04/30/19		Restek, Lot A0118719		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00214	11/04/16	10/04/16	Methanol, Lot 136118	10 mL	VOA8260MEGA1_00054	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00054	03/31/18		Restek, Lot A0108177		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
VOAACROPRI_00007	10/31/16	10/18/16	Methanol, Lot 136118	100 mL	VOAACRORES_00103	0.125 mL	Acrolein	25 ug/mL
.VOAACRORES_00103	10/31/16		Restek, Lot A0119846		(Purchased Reagent)		Acrolein	20000 ug/mL
voaW2cleveRes_00002	10/24/16	10/17/16	Methanol, Lot 2019056	10 mL	VOACEVERES2ND_00067	0.2 mL	2-Chloroethyl vinyl ether	50 ug/mL
.VOACEVERES2ND_00067	11/30/18		Restek, Lot A0115500		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
voaWEEmixRest_00001	10/27/16	09/27/16	Methanol, Lot 2019056	25 mL	VOARESEE1ST_00035	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_00035	01/01/18		Restek, Lot A0120234		(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
voaWKet2ndRes_00014	11/23/16	10/23/16	Methanol, Lot 2019067	50 mL	VOA8260KET2ND_00080	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_00080	11/30/18		Restek, Lot A0115554		(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
voaWKetPriRes_00002	10/26/16	09/26/16	Methanol, Lot 2019054	50 mL	VOA8260KET1ST_00075	0.1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET1ST_00075	11/30/18	Restek, Lot A0115554			(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
voaWVA1stRest_00009	11/18/16	10/18/16	Methanol, Lot 2019056	25 mL	VOA8260VARES_00071	0.125 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00071	11/30/16	Restek, Lot A0118255			(Purchased Reagent)		Vinyl acetate	5000 ug/mL

Reagent

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sv benzoepyre_00003

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CERTIFIED WEIGHT REPORT

Part Number: 71016
Lot Number: 031715
Description: Benzo(e)pyrene

Solvent(s): **Lot#**
Methylene chloride 72062

Expiration Date: 031720
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000

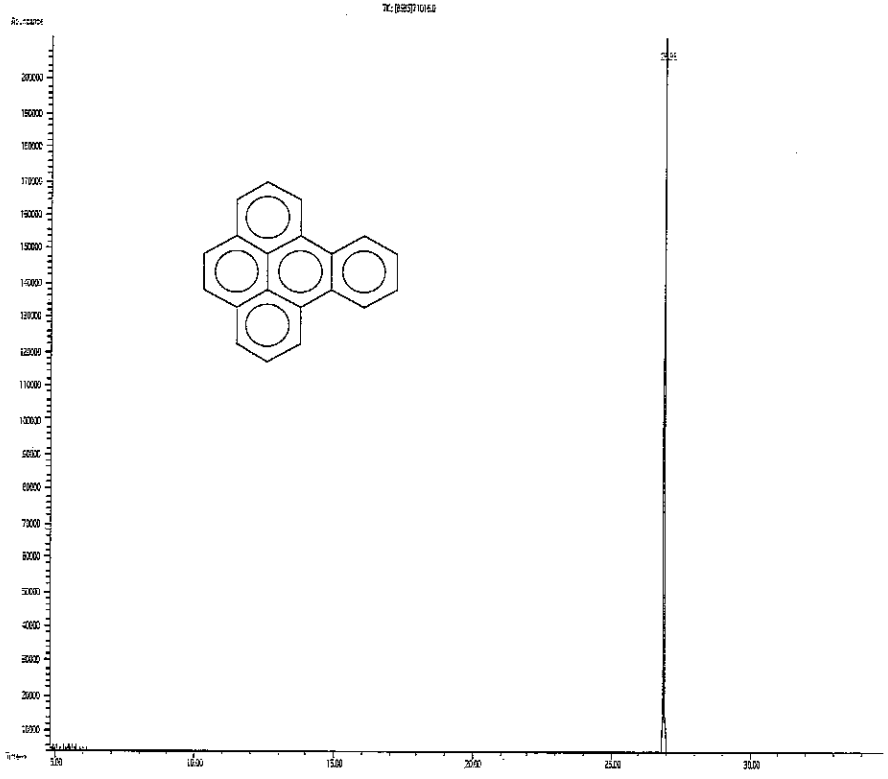
Formulated By: Paul Barron 031715 DATE

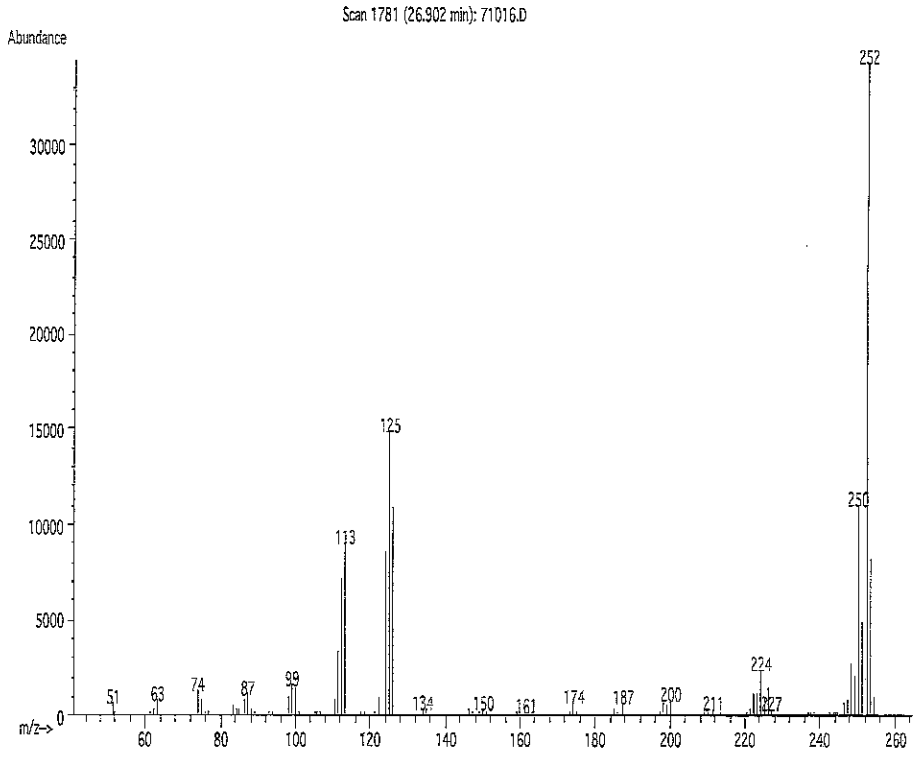
Reviewed By: Pedro L. Rentas 031715 DATE

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.003 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Benzo(e)pyrene	1016	012013	1000	99.5	0.2	0.10051	0.10082	1003.1	0.0041	00192-97-2	N/A	N/A

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





Reagent

SV2356TCPs_00003

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Certified Reference Material CRM

ISO 9001 QS Registered
ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number: 70315
Lot Number: 092115
Description: 2,3,5,6-Tetrachlorophenol

Solvent(s): **Lot#**
Methylene chloride 72062

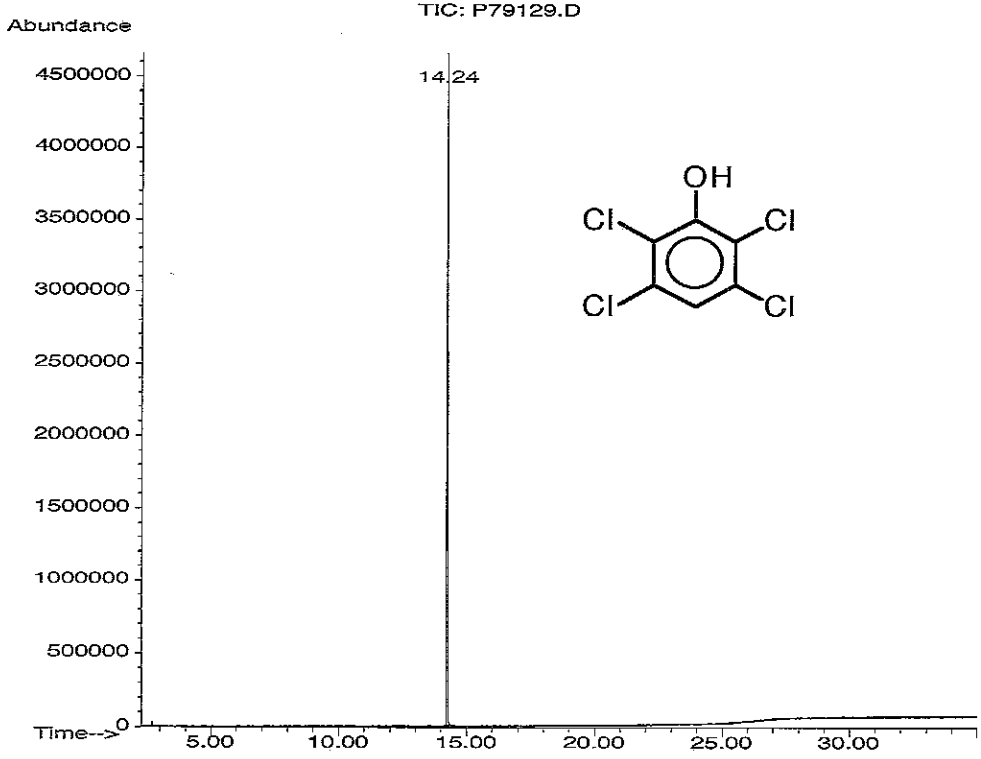
Expiration Date: 092120
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000

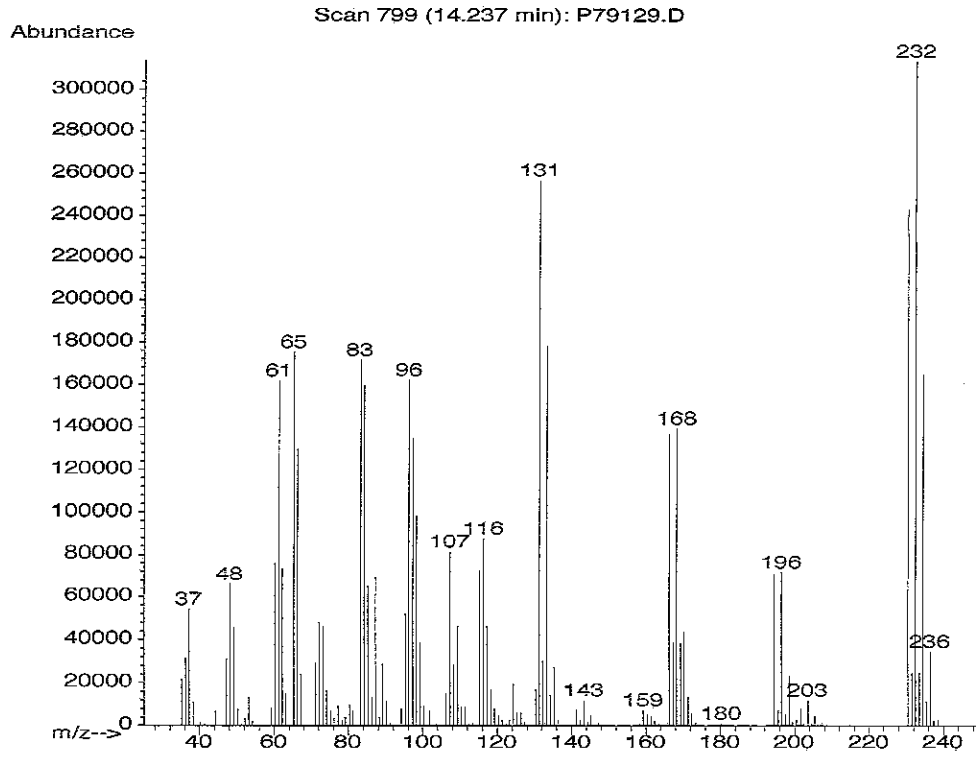
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

Paul Barron		092115
Formulated By:	Paul Barron	DATE
Pedro L. Rentas		092115
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2,3,5,6-Tetrachlorophenol	315	060697	1000	98	0.2	0.02551	0.02555	1001.7	0.0057	00935-95-5	N/A	N/A

Method GC8MSD-3.M: Column: SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 300°C. Scan Rate = 2, Split Ratio = 100:1. Analysis performed by Lance R. Boynton.





Reagent

SV2NAPAMINEs_00004

Certificate of Analysis

2-Naphthylamine Solution

Product Number: EPA-1135 **Page:** 1 of 1

Lot Number: CK-1617 **Lot Issue Date:** 20-May-2013 **Expiration Date:** 30-Jun-2017

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
2-naphthylamine	000091-59-8	RM06488	1001 ± 5 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store at Room Temperature (15-30°C)

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

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401-294-9400 Fax: 295-2330
wwww.ultrasci.com

William J. Leary
Quality Assurance Manager

Reagent

sv712dimbenza_00011

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Certified Reference Material CRM

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ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number:	70411	**Solvent(s):**	**Lot#**
Lot Number:	040915	Methylene chloride	72062
Description:	7,12-Dimethylbenz(a)anthracene		
Expiration Date:	040920		
Recommended Storage:	Refrigerate (4 °C)		
Nominal Concentration (µg/mL):	1000		

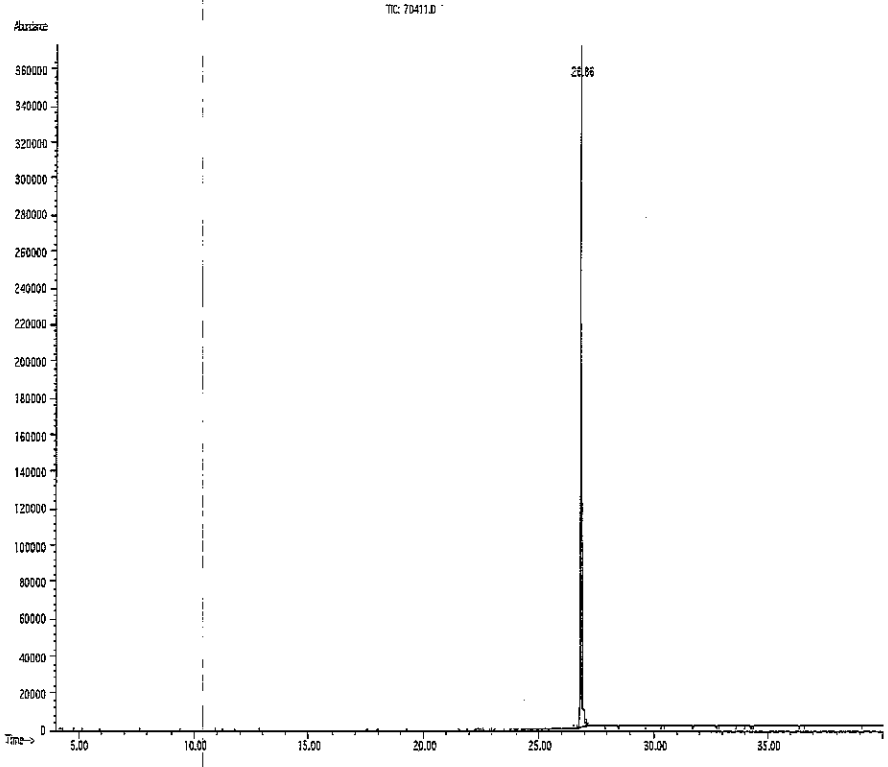
Weight(s) shown below were combined and diluted to (mL): 25.0 (5E-05 Balance Uncertainty, 0.001 Flask Uncertainty)

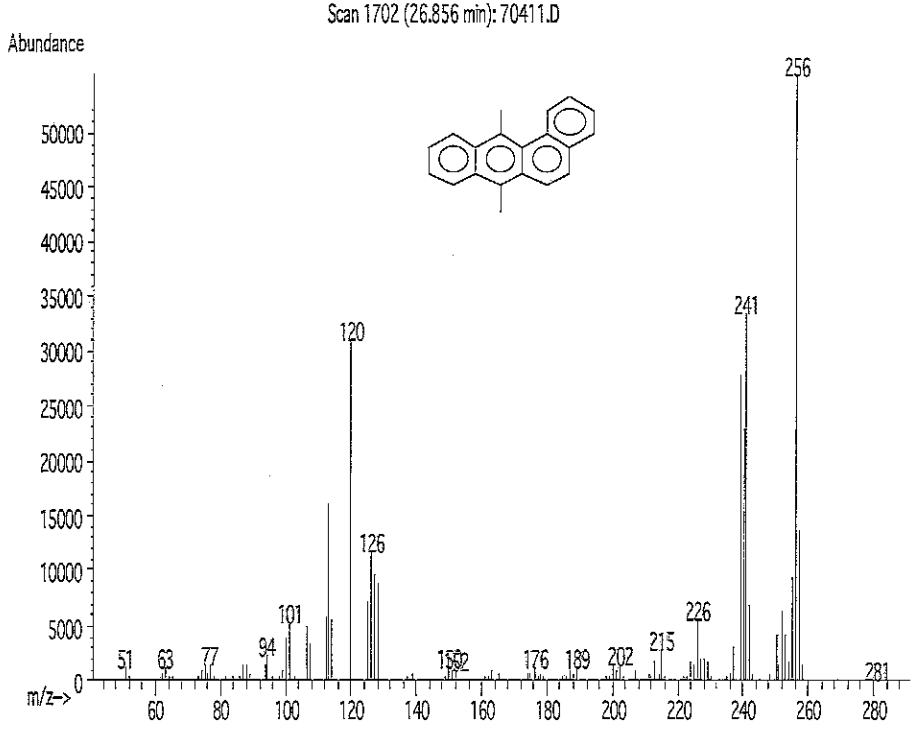
Formulated By: Paul Barron	040915 DATE
Reviewed By: Pedro L. Rentas	040915 DATE

MSDS Information
(Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. 7,12-Dimethylbenz(a)anthracene	411	GGR4E-DC	1000	98	0.2	0.02551	0.02553	1000.9	0.00566	00057-97-6	N/A	orl-rat 327mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness), Temp 1 = 50°C (1min.), Temp 2 = 300°C (9 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 300°C, Scan Rate = 2, Analysis performed by Candice Warren.





Reagent

SVLVIntstd_00004

RESTEK

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Testing Laboratory
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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 567684 **Lot No.:** A093676

Description : 8270 Internal Standard

8270 Internal Standard 2,000µg/mL, Methylene Chloride, 5mL/ampul

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

Expiration Date : February 2018 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 3855-82-1		+/- 92.7158	µg/mL	Unstressed
	Purity 99%		+/- 101.3766	µg/mL	Stressed
2	Naphthalene-d8	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 1146-65-2		+/- 92.7158	µg/mL	Unstressed
	Purity 99%		+/- 101.3766	µg/mL	Stressed
3	Acenaphthene-d10	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 15067-26-2		+/- 92.7163	µg/mL	Unstressed
	Purity 97%		+/- 101.3771	µg/mL	Stressed
4	Phenanthrene-d10	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 1517-22-2		+/- 92.7158	µg/mL	Unstressed
	Purity 99%		+/- 101.3766	µg/mL	Stressed
5	Chrysene-d12	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 1719-03-5		+/- 92.7150	µg/mL	Unstressed
	Purity 98%		+/- 101.3758	µg/mL	Stressed
6	Perylene-d12	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 1520-96-3		+/- 92.7158	µg/mL	Unstressed
	Purity 99%		+/- 101.3766	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

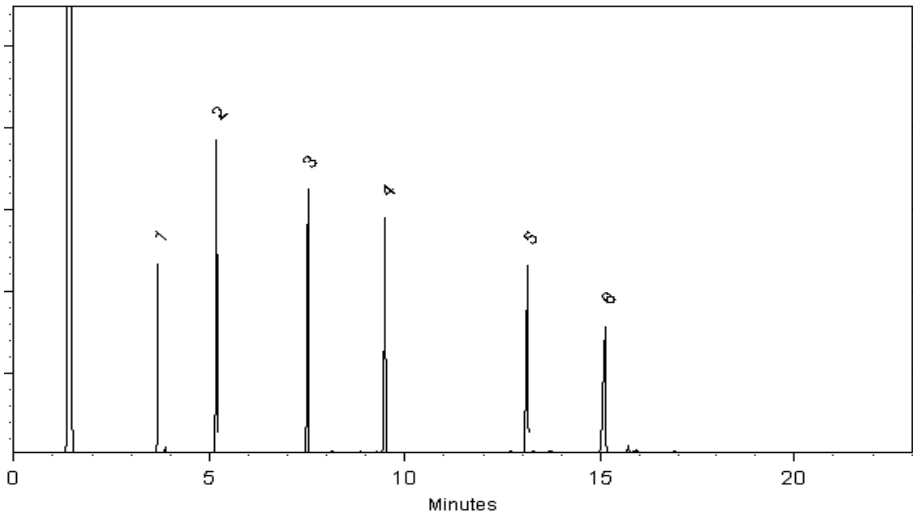
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Jodi E. Breon - QA Analyst

Date Passed: 27-Feb-2013 **Balance:** 1128342313

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date of the unopened ampul stored at the recommended storage condition is the last day of the month listed in the expiration date field.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SVLVstd1_00039

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CERTIFIED REFERENCE MATERIAL

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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. : 570666 **Lot No.:** A0114832

Description : 8270 List 1 / Std #1 MegaMix (2016)

8270 List 1 / Std #1 MegaMix (2016) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2017 **Storage:** 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane **CAS #** 123-91-1 (Lot SHBG1461V) **Purity** 99%	1,000.9 µg/mL	+/- 5.8193 µg/mL +/- 11.9648 µg/mL +/- 19.0418 µg/mL	Gravimetric Unstressed Stressed
2	Pyridine **CAS #** 110-86-1 (Lot SHBC7174V) **Purity** 99%	1,004.7 µg/mL	+/- 5.8416 µg/mL +/- 12.0106 µg/mL +/- 19.1148 µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine **CAS #** 62-75-9 (Lot 4370100) **Purity** 99%	1,002.6 µg/mL	+/- 5.8294 µg/mL +/- 11.9855 µg/mL +/- 19.0748 µg/mL	Gravimetric Unstressed Stressed
4	Aniline **CAS #** 62-53-3 (Lot K22Z462) **Purity** 99%	1,001.8 µg/mL	+/- 5.8246 µg/mL +/- 11.9756 µg/mL +/- 19.0590 µg/mL	Gravimetric Unstressed Stressed
5	Bis(2-chloroethyl)ether **CAS #** 111-44-4 (Lot SHBD4430V) **Purity** 99%	1,000.2 µg/mL	+/- 5.8152 µg/mL +/- 11.9565 µg/mL +/- 19.0285 µg/mL	Gravimetric Unstressed Stressed
6	2-Chlorophenol **CAS #** 95-57-8 (Lot STBF2690V) **Purity** 99%	1,001.6 µg/mL	+/- 5.8236 µg/mL +/- 11.9736 µg/mL +/- 19.0558 µg/mL	Gravimetric Unstressed Stressed
7	Phenol **CAS #** 108-95-2 (Lot SHBF1351V) **Purity** 99%	1,000.6 µg/mL	+/- 5.8176 µg/mL +/- 11.9612 µg/mL +/- 19.0361 µg/mL	Gravimetric Unstressed Stressed

24	Bis(2-chloroethoxy)methane		1,000.2	µg/mL	+/-	5.8151	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 3299900)			+/-	11.9561	µg/mL	Unstressed
	Purity 99%				+/-	19.0279	µg/mL	Stressed
25	2,4-Dichlorophenol		1,002.2	µg/mL	+/-	5.8271	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	11.9808	µg/mL	Unstressed
	Purity 99%				+/-	19.0672	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,000.1	µg/mL	+/-	5.8144	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBC5541V)			+/-	11.9547	µg/mL	Unstressed
	Purity 98%				+/-	19.0258	µg/mL	Stressed
27	Naphthalene		1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBH4351V)			+/-	11.9588	µg/mL	Unstressed
	Purity 99%				+/-	19.0323	µg/mL	Stressed
28	2,6-Dichlorophenol		1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKBN2776V)			+/-	11.9672	µg/mL	Unstressed
	Purity 99%				+/-	19.0456	µg/mL	Stressed
29	4-Chloroaniline		1,000.7	µg/mL	+/-	5.8182	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot 12528PH)			+/-	11.9624	µg/mL	Unstressed
	Purity 99%				+/-	19.0380	µg/mL	Stressed
30	Hexachlorobutadiene		1,000.7	µg/mL	+/-	5.8182	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	11.9626	µg/mL	Unstressed
	Purity 98%				+/-	19.0382	µg/mL	Stressed
31	2-Methylnaphthalene		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot 19399MJV)			+/-	11.9696	µg/mL	Unstressed
	Purity 99%				+/-	19.0494	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,000.2	µg/mL	+/-	5.8151	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC0769V)			+/-	11.9561	µg/mL	Unstressed
	Purity 99%				+/-	19.0279	µg/mL	Stressed
33	1-Methylnaphthalene		1,001.1	µg/mL	+/-	5.8203	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 525000-10)			+/-	11.9668	µg/mL	Unstressed
	Purity 99%				+/-	19.0450	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,000.1	µg/mL	+/-	5.8145	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot 06024AIV)			+/-	11.9549	µg/mL	Unstressed
	Purity 99%				+/-	19.0260	µg/mL	Stressed
35	Hexachlorocyclopentadiene		999.7	µg/mL	+/-	5.8126	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 150909)			+/-	11.9510	µg/mL	Unstressed
	Purity 97%				+/-	19.0199	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,001.4	µg/mL	+/-	5.8220	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBH7393V)			+/-	11.9704	µg/mL	Unstressed
	Purity 99%				+/-	19.0507	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,000.1	µg/mL	+/-	5.8145	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot 150806JLM)			+/-	11.9549	µg/mL	Unstressed
	Purity 99%				+/-	19.0260	µg/mL	Stressed
38	2-Chloronaphthalene		1,000.9	µg/mL	+/-	5.8193	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot AJ2UI-TE)			+/-	11.9648	µg/mL	Unstressed
	Purity 99%				+/-	19.0418	µg/mL	Stressed
39	Biphenyl		1,000.6	µg/mL	+/-	5.8178	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot 1277976)			+/-	11.9616	µg/mL	Unstressed
	Purity 99%				+/-	19.0368	µg/mL	Stressed

56	Azobenzene		1,001.2	µg/mL	+/-	5.8213	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot MKBS2559V)			+/-	11.9688	µg/mL	Unstressed
	Purity 99%				+/-	19.0482	µg/mL	Stressed
57	Diphenylamine		850.7	µg/mL	+/-	4.9460	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot MKBN8295V)			+/-	10.1693	µg/mL	Unstressed
	Purity 99%				+/-	16.1843	µg/mL	Stressed
58	2-Nitroaniline		1,000.2	µg/mL	+/-	5.8151	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)			+/-	11.9561	µg/mL	Unstressed
	Purity 99%				+/-	19.0279	µg/mL	Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,000.9	µg/mL	+/-	11.6336	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC12394V)			+/-	23.9193	µg/mL	Unstressed
	Purity 99%				+/-	38.0672	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		999.8	µg/mL	+/-	5.8131	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	11.9520	µg/mL	Unstressed
	Purity 98%				+/-	19.0215	µg/mL	Stressed
61	Hexachlorobenzene		1,001.6	µg/mL	+/-	5.8234	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LC10604V)			+/-	11.9732	µg/mL	Unstressed
	Purity 99%				+/-	19.0551	µg/mL	Stressed
62	Pentachlorophenol		2,000.5	µg/mL	+/-	11.6311	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 150902JLM)			+/-	23.9142	µg/mL	Unstressed
	Purity 98%				+/-	38.0591	µg/mL	Stressed
63	Phenanthrene		1,001.9	µg/mL	+/-	5.8249	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKBT8628V)			+/-	11.9764	µg/mL	Unstressed
	Purity 99%				+/-	19.0602	µg/mL	Stressed
64	n-Octadecane (C18)		1,000.8	µg/mL	+/-	5.8187	µg/mL	Gravimetric
	CAS # 593-45-3	(Lot 27SOF)			+/-	11.9636	µg/mL	Unstressed
	Purity 99%				+/-	19.0399	µg/mL	Stressed
65	Anthracene		1,001.4	µg/mL	+/-	5.8224	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBK5208V)			+/-	11.9712	µg/mL	Unstressed
	Purity 99%				+/-	19.0520	µg/mL	Stressed
66	Carbazole		1,000.4	µg/mL	+/-	5.8161	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot 4017900)			+/-	11.9583	µg/mL	Unstressed
	Purity 98%				+/-	19.0314	µg/mL	Stressed
67	Di-n-butylphthalate		1,003.6	µg/mL	+/-	5.8348	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBL8501V)			+/-	11.9967	µg/mL	Unstressed
	Purity 99%				+/-	19.0926	µg/mL	Stressed
68	Fluoranthene		1,000.7	µg/mL	+/-	5.8184	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	11.9629	µg/mL	Unstressed
	Purity 98%				+/-	19.0389	µg/mL	Stressed
69	Pyrene		1,000.2	µg/mL	+/-	5.8151	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBL6786V)			+/-	11.9561	µg/mL	Unstressed
	Purity 99%				+/-	19.0279	µg/mL	Stressed
70	Benzyl butyl phthalate		1,000.3	µg/mL	+/-	5.8158	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot 03027HV)			+/-	11.9576	µg/mL	Unstressed
	Purity 99%				+/-	19.0304	µg/mL	Stressed
71	Benz(a)anthracene		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER031412-01)			+/-	11.9553	µg/mL	Unstressed
	Purity 99%				+/-	19.0266	µg/mL	Stressed

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

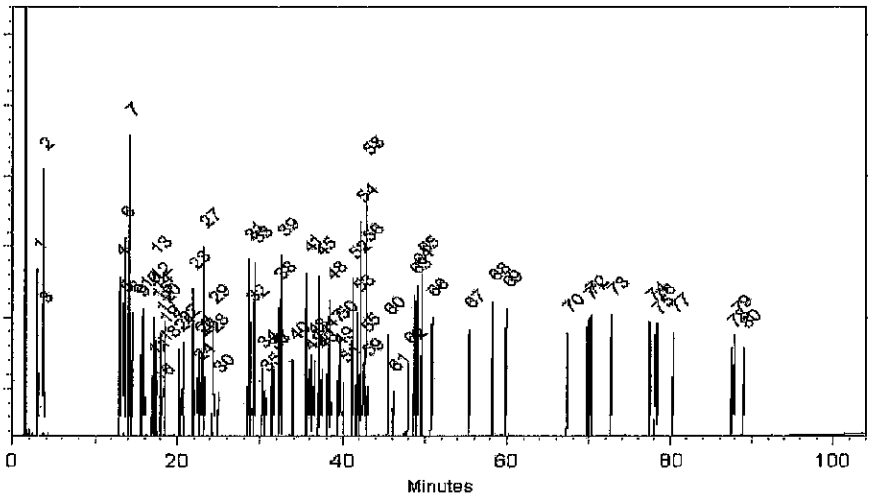
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



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: 20-Oct-2015 **Balance:** B442140311

Jodi E. Breon - QA Analyst

Date Passed: 04-Nov-2015

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

Reagent

SVLVstd1_00041

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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. : 570666 **Lot No.:** A0114832

Description : 8270 List 1 / Std #1 MegaMix (2016)

8270 List 1 / Std #1 MegaMix (2016) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2017 **Storage:** 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane **CAS #** 123-91-1 (Lot SHBG1461V) **Purity** 99%	1,000.9 µg/mL	+/- 5.8193 µg/mL +/- 11.9648 µg/mL +/- 19.0418 µg/mL	Gravimetric Unstressed Stressed
2	Pyridine **CAS #** 110-86-1 (Lot SHBC7174V) **Purity** 99%	1,004.7 µg/mL	+/- 5.8416 µg/mL +/- 12.0106 µg/mL +/- 19.1148 µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine **CAS #** 62-75-9 (Lot 4370100) **Purity** 99%	1,002.6 µg/mL	+/- 5.8294 µg/mL +/- 11.9855 µg/mL +/- 19.0748 µg/mL	Gravimetric Unstressed Stressed
4	Aniline **CAS #** 62-53-3 (Lot K22Z462) **Purity** 99%	1,001.8 µg/mL	+/- 5.8246 µg/mL +/- 11.9756 µg/mL +/- 19.0590 µg/mL	Gravimetric Unstressed Stressed
5	Bis(2-chloroethyl)ether **CAS #** 111-44-4 (Lot SHBD4430V) **Purity** 99%	1,000.2 µg/mL	+/- 5.8152 µg/mL +/- 11.9565 µg/mL +/- 19.0285 µg/mL	Gravimetric Unstressed Stressed
6	2-Chlorophenol **CAS #** 95-57-8 (Lot STBF2690V) **Purity** 99%	1,001.6 µg/mL	+/- 5.8236 µg/mL +/- 11.9736 µg/mL +/- 19.0558 µg/mL	Gravimetric Unstressed Stressed
7	Phenol **CAS #** 108-95-2 (Lot SHBF1351V) **Purity** 99%	1,000.6 µg/mL	+/- 5.8176 µg/mL +/- 11.9612 µg/mL +/- 19.0361 µg/mL	Gravimetric Unstressed Stressed

24	Bis(2-chloroethoxy)methane		1,000.2	µg/mL	+/-	5.8151	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 3299900)			+/-	11.9561	µg/mL	Unstressed
	Purity 99%				+/-	19.0279	µg/mL	Stressed
25	2,4-Dichlorophenol		1,002.2	µg/mL	+/-	5.8271	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	11.9808	µg/mL	Unstressed
	Purity 99%				+/-	19.0672	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,000.1	µg/mL	+/-	5.8144	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBC5541V)			+/-	11.9547	µg/mL	Unstressed
	Purity 98%				+/-	19.0258	µg/mL	Stressed
27	Naphthalene		1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBH4351V)			+/-	11.9588	µg/mL	Unstressed
	Purity 99%				+/-	19.0323	µg/mL	Stressed
28	2,6-Dichlorophenol		1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKBN2776V)			+/-	11.9672	µg/mL	Unstressed
	Purity 99%				+/-	19.0456	µg/mL	Stressed
29	4-Chloroaniline		1,000.7	µg/mL	+/-	5.8182	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot 12528PH)			+/-	11.9624	µg/mL	Unstressed
	Purity 99%				+/-	19.0380	µg/mL	Stressed
30	Hexachlorobutadiene		1,000.7	µg/mL	+/-	5.8182	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	11.9626	µg/mL	Unstressed
	Purity 98%				+/-	19.0382	µg/mL	Stressed
31	2-Methylnaphthalene		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot 19399MJV)			+/-	11.9696	µg/mL	Unstressed
	Purity 99%				+/-	19.0494	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,000.2	µg/mL	+/-	5.8151	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC0769V)			+/-	11.9561	µg/mL	Unstressed
	Purity 99%				+/-	19.0279	µg/mL	Stressed
33	1-Methylnaphthalene		1,001.1	µg/mL	+/-	5.8203	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 525000-10)			+/-	11.9668	µg/mL	Unstressed
	Purity 99%				+/-	19.0450	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,000.1	µg/mL	+/-	5.8145	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot 06024AIV)			+/-	11.9549	µg/mL	Unstressed
	Purity 99%				+/-	19.0260	µg/mL	Stressed
35	Hexachlorocyclopentadiene		999.7	µg/mL	+/-	5.8126	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 150909)			+/-	11.9510	µg/mL	Unstressed
	Purity 97%				+/-	19.0199	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,001.4	µg/mL	+/-	5.8220	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBH7393V)			+/-	11.9704	µg/mL	Unstressed
	Purity 99%				+/-	19.0507	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,000.1	µg/mL	+/-	5.8145	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot 150806JLM)			+/-	11.9549	µg/mL	Unstressed
	Purity 99%				+/-	19.0260	µg/mL	Stressed
38	2-Chloronaphthalene		1,000.9	µg/mL	+/-	5.8193	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot AJ2UI-TE)			+/-	11.9648	µg/mL	Unstressed
	Purity 99%				+/-	19.0418	µg/mL	Stressed
39	Biphenyl		1,000.6	µg/mL	+/-	5.8178	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot 1277976)			+/-	11.9616	µg/mL	Unstressed
	Purity 99%				+/-	19.0368	µg/mL	Stressed

56	Azobenzene		1,001.2	µg/mL	+/-	5.8213	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot MKBS2559V)			+/-	11.9688	µg/mL	Unstressed
	Purity 99%				+/-	19.0482	µg/mL	Stressed
57	Diphenylamine		850.7	µg/mL	+/-	4.9460	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot MKBN8295V)			+/-	10.1693	µg/mL	Unstressed
	Purity 99%				+/-	16.1843	µg/mL	Stressed
58	2-Nitroaniline		1,000.2	µg/mL	+/-	5.8151	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)			+/-	11.9561	µg/mL	Unstressed
	Purity 99%				+/-	19.0279	µg/mL	Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,000.9	µg/mL	+/-	11.6336	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC12394V)			+/-	23.9193	µg/mL	Unstressed
	Purity 99%				+/-	38.0672	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		999.8	µg/mL	+/-	5.8131	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	11.9520	µg/mL	Unstressed
	Purity 98%				+/-	19.0215	µg/mL	Stressed
61	Hexachlorobenzene		1,001.6	µg/mL	+/-	5.8234	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LC10604V)			+/-	11.9732	µg/mL	Unstressed
	Purity 99%				+/-	19.0551	µg/mL	Stressed
62	Pentachlorophenol		2,000.5	µg/mL	+/-	11.6311	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 150902JLM)			+/-	23.9142	µg/mL	Unstressed
	Purity 98%				+/-	38.0591	µg/mL	Stressed
63	Phenanthrene		1,001.9	µg/mL	+/-	5.8249	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKBT8628V)			+/-	11.9764	µg/mL	Unstressed
	Purity 99%				+/-	19.0602	µg/mL	Stressed
64	n-Octadecane (C18)		1,000.8	µg/mL	+/-	5.8187	µg/mL	Gravimetric
	CAS # 593-45-3	(Lot 27SOF)			+/-	11.9636	µg/mL	Unstressed
	Purity 99%				+/-	19.0399	µg/mL	Stressed
65	Anthracene		1,001.4	µg/mL	+/-	5.8224	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBK5208V)			+/-	11.9712	µg/mL	Unstressed
	Purity 99%				+/-	19.0520	µg/mL	Stressed
66	Carbazole		1,000.4	µg/mL	+/-	5.8161	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot 4017900)			+/-	11.9583	µg/mL	Unstressed
	Purity 98%				+/-	19.0314	µg/mL	Stressed
67	Di-n-butylphthalate		1,003.6	µg/mL	+/-	5.8348	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBL8501V)			+/-	11.9967	µg/mL	Unstressed
	Purity 99%				+/-	19.0926	µg/mL	Stressed
68	Fluoranthene		1,000.7	µg/mL	+/-	5.8184	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	11.9629	µg/mL	Unstressed
	Purity 98%				+/-	19.0389	µg/mL	Stressed
69	Pyrene		1,000.2	µg/mL	+/-	5.8151	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBL6786V)			+/-	11.9561	µg/mL	Unstressed
	Purity 99%				+/-	19.0279	µg/mL	Stressed
70	Benzyl butyl phthalate		1,000.3	µg/mL	+/-	5.8158	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot 03027HV)			+/-	11.9576	µg/mL	Unstressed
	Purity 99%				+/-	19.0304	µg/mL	Stressed
71	Benz(a)anthracene		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER031412-01)			+/-	11.9553	µg/mL	Unstressed
	Purity 99%				+/-	19.0266	µg/mL	Stressed

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

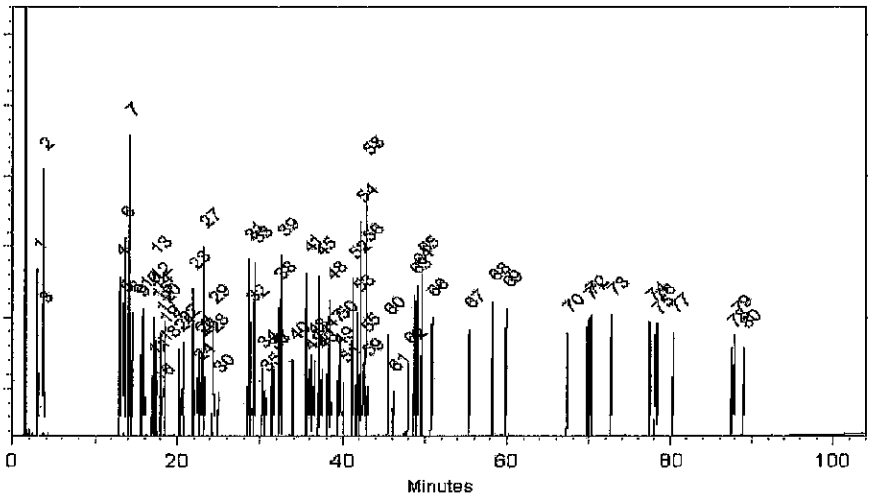
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



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: 20-Oct-2015 **Balance:** B442140311

Jodi E. Breon - QA Analyst

Date Passed: 04-Nov-2015

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

Reagent

SVLVstd10_00005

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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. : 569731 **Lot No.:** A0115596

Description : 8270 List 1 / Std #10

8270 List 1 / Std #10 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : May 31, 2017 **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	Indene	2,009.8 µg/mL	+/- 11.6852	µg/mL	Gravimetric
	CAS # 95-13-6 (Lot MKBP3098V)		+/- 112.6875	µg/mL	Unstressed
	Purity 99%		+/- 115.3242	µg/mL	Stressed
2	Benzoic acid	2,011.6 µg/mL	+/- 11.6953	µg/mL	Gravimetric
	CAS # 65-85-0 (Lot MKBL6689V)		+/- 112.7856	µg/mL	Unstressed
	Purity 99%		+/- 115.4247	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Reagent

SVLVstd10_00006

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Catalog No. : 569731 **Lot No.:** A0115596

Description : 8270 List 1 / Std #10

8270 List 1 / Std #10 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : May 31, 2017 **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	Indene	2,009.8 µg/mL	+/- 11.6852	µg/mL	Gravimetric
	CAS # 95-13-6 (Lot MKBP3098V)		+/- 112.6875	µg/mL	Unstressed
	Purity 99%		+/- 115.3242	µg/mL	Stressed
2	Benzoic acid	2,011.6 µg/mL	+/- 11.6953	µg/mL	Gravimetric
	CAS # 65-85-0 (Lot MKBL6689V)		+/- 112.7856	µg/mL	Unstressed
	Purity 99%		+/- 115.4247	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Reagent

SVLVstd11_00005

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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. : 569732 **Lot No.:** A0115387

Description : 8270 List 1 / Std #11

8270 List 1 / Std #11 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : May 31, 2017 **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	Benzaldehyde		2,017.4	µg/mL	+/- 11.7290	µg/mL	Gravimetric
	CAS # 100-52-7	(Lot SHBD3510V)			+/- 64.6675	µg/mL	Unstressed
	Purity 99%				+/- 75.1734	µg/mL	Stressed
2	epsilon-Caprolactam		2,012.4	µg/mL	+/- 11.7003	µg/mL	Gravimetric
	CAS # 105-60-2	(Lot I16X016)			+/- 64.5088	µg/mL	Unstressed
	Purity 99%				+/- 74.9890	µg/mL	Stressed
3	Atrazine		2,003.5	µg/mL	+/- 11.6483	µg/mL	Gravimetric
	CAS # 1912-24-9	(Lot TZ8ED)			+/- 64.2223	µg/mL	Unstressed
	Purity 98%				+/- 74.6560	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Reagent

SVLVstd11_00006

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Catalog No. : 569732 **Lot No.:** A0115387

Description : 8270 List 1 / Std #11

8270 List 1 / Std #11 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : May 31, 2017 **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	Benzaldehyde		2,017.4	µg/mL	+/- 11.7290	µg/mL	Gravimetric
	CAS # 100-52-7	(Lot SHBD3510V)			+/- 64.6675	µg/mL	Unstressed
	Purity 99%				+/- 75.1734	µg/mL	Stressed
2	epsilon-Caprolactam		2,012.4	µg/mL	+/- 11.7003	µg/mL	Gravimetric
	CAS # 105-60-2	(Lot I16X016)			+/- 64.5088	µg/mL	Unstressed
	Purity 99%				+/- 74.9890	µg/mL	Stressed
3	Atrazine		2,003.5	µg/mL	+/- 11.6483	µg/mL	Gravimetric
	CAS # 1912-24-9	(Lot TZ8ED)			+/- 64.2223	µg/mL	Unstressed
	Purity 98%				+/- 74.6560	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Reagent

SVLVstd9_00004

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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. : 569730 **Lot No.:** A0112567

Description : 8270 List 1 / Std #9

8270 List 1 / Std #9 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2017 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzidine		2,001.0 µg/mL	+/- 11.6337	µg/mL	Gravimetric
	CAS # 92-87-5	(Lot 150701JLMB)		+/- 21.9078	µg/mL	Unstressed
	Purity 99%			+/- 37.1592	µg/mL	Stressed
2	3,3'-Dichlorobenzidine		2,001.5 µg/mL	+/- 11.6369	µg/mL	Gravimetric
	CAS # 91-94-1	(Lot 150701JLMA)		+/- 21.9138	µg/mL	Unstressed
	Purity 99%			+/- 37.1694	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Reagent

SVLVstd9_00006

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 569730 **Lot No.:** A0118008

Description : 8270 List 1 / Std #9

8270 List 1 / Std #9 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2017 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzidine		2,007.6 µg/mL	+/- 11.7817	µg/mL	Gravimetric
	CAS # 92-87-5	(Lot 160309JLM)		+/- 24.0524	µg/mL	Unstressed
	Purity 99%			+/- 38.2276	µg/mL	Stressed
2	3,3'-Dichlorobenzidine		2,006.0 µg/mL	+/- 11.7723	µg/mL	Gravimetric
	CAS # 91-94-1	(Lot 160311JLM)		+/- 24.0332	µg/mL	Unstressed
	Purity 99%			+/- 38.1971	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Reagent

SVLVSURSPK_00002

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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. : 567685 **Lot No.:** A0103960

Description : 8270 Surrogate Standard

8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : June 30, 2019 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Fluorophenol	5,006.1 µg/mL	+/- 29.1044	µg/mL	Gravimetric
	CAS # 367-12-4 (Lot STBC5591V)		+/- 124.7363	µg/mL	Unstressed
	Purity 99%		+/- 156.8636	µg/mL	Stressed
2	Phenol-d5	5,002.5 µg/mL	+/- 29.0834	µg/mL	Gravimetric
	CAS # 4165-62-2 (Lot X479P6)		+/- 124.6466	µg/mL	Unstressed
	Purity 99%		+/- 156.7508	µg/mL	Stressed
3	Nitrobenzene-d5	5,003.7 µg/mL	+/- 29.0901	µg/mL	Gravimetric
	CAS # 4165-60-0 (Lot PR-20474)		+/- 124.6753	µg/mL	Unstressed
	Purity 99%		+/- 156.7868	µg/mL	Stressed
4	2-Fluorobiphenyl	5,002.4 µg/mL	+/- 29.0826	µg/mL	Gravimetric
	CAS # 321-60-8 (Lot B19Z016)		+/- 124.6429	µg/mL	Unstressed
	Purity 99%		+/- 156.7461	µg/mL	Stressed
5	2,4,6-Tribromophenol	5,024.2 µg/mL	+/- 29.2093	µg/mL	Gravimetric
	CAS # 118-79-6 (Lot 29699MJV)		+/- 125.1861	µg/mL	Unstressed
	Purity 99%		+/- 157.4292	µg/mL	Stressed
6	p-Terphenyl-d14	5,010.4 µg/mL	+/- 29.1291	µg/mL	Gravimetric
	CAS # 1718-51-0 (Lot PR-20577)		+/- 124.8422	µg/mL	Unstressed
	Purity 99%		+/- 156.9968	µg/mL	Stressed

Reagent

svmethylmetha_00011

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Analytical Reference Material ARM

ISO 9001 QS Registered
ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number: 70443
Lot Number: 021315
Description: Methyl methane sulfonate

Solvent(s): Methylene chloride **Lot#** 72062

Expiration Date: 021320
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000

Weight(s) shown below were combined and diluted to: 25.0 5E-05 Balance Uncertainty 0.001 Flask Uncertainty

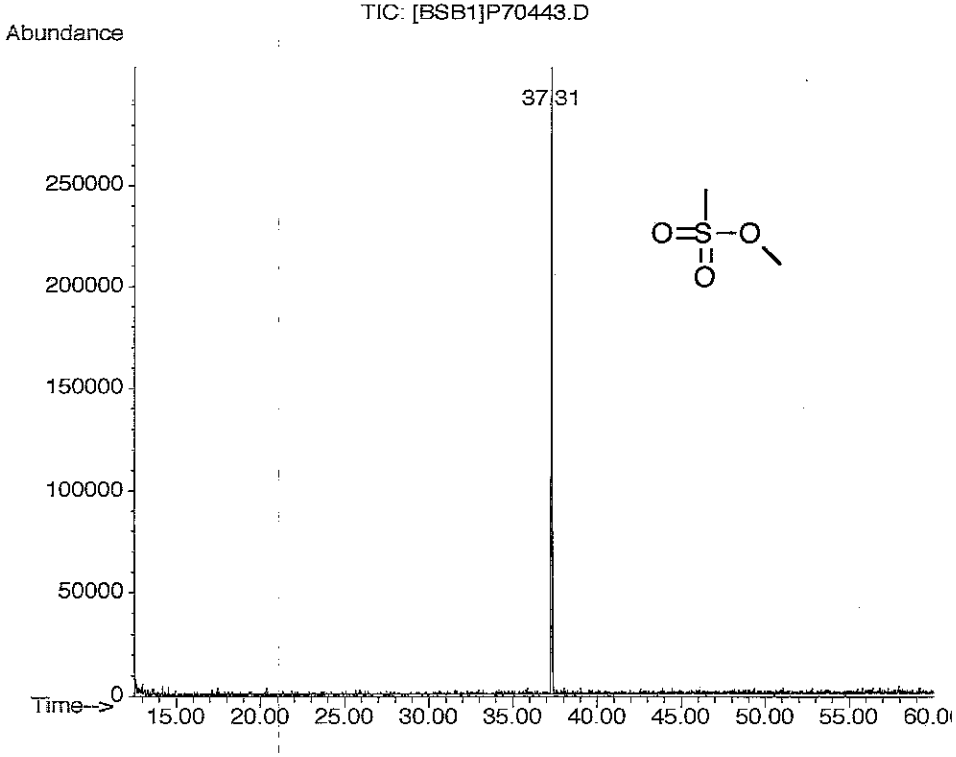
Formulated By: Paul Barron 021315 DATE

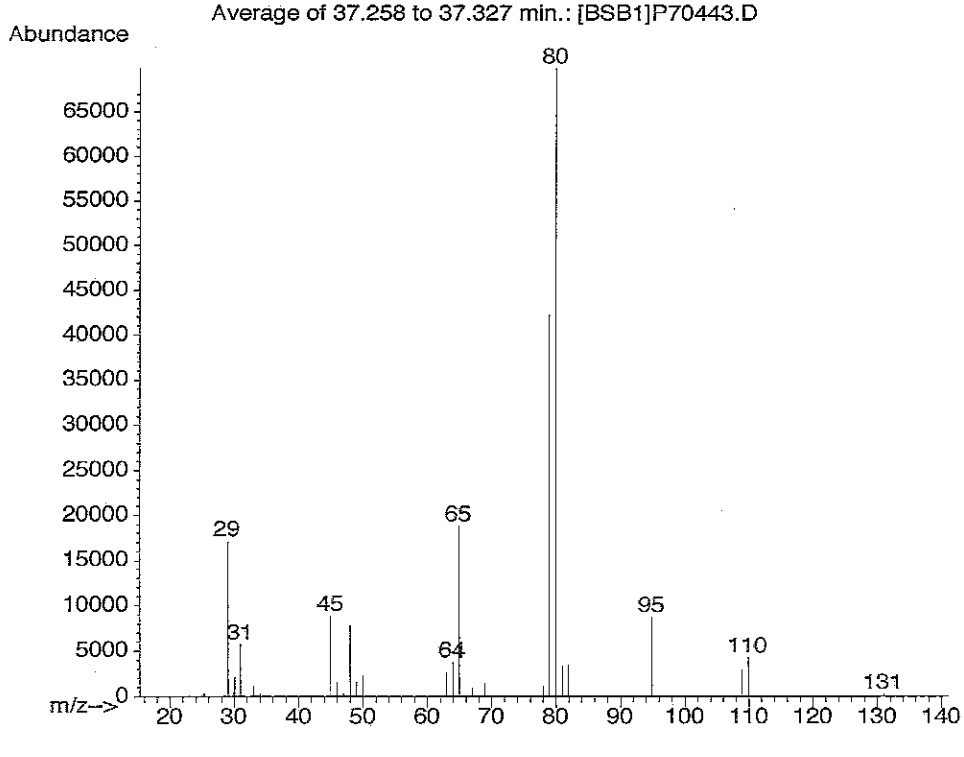
Reviewed By: Pedro L. Rentas 021315 DATE

MSDS Information
(Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. Methyl methane sulfonate	443	07322PW	1000	99	0.2	0.02524	0.02530	1002.2	0.00565	00066-27-3	N/A	orl-rat 225mg/kg

Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Temp. 1=35°C (10min.), Temp. 2=200°C (8.75 min.), Rate=4°C/min., Injector Temp.=200°C, Detector Temp.=220°C. Analysis performed by Pedro Rentas.





Reagent

SVNNITROPYROs_00017

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CERTIFIED WEIGHT REPORT

Part Number: 70451
Lot Number: 010816
Description: N-Nitrosopyrrolidine

Expiration Date: 010819
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 822-275872-11

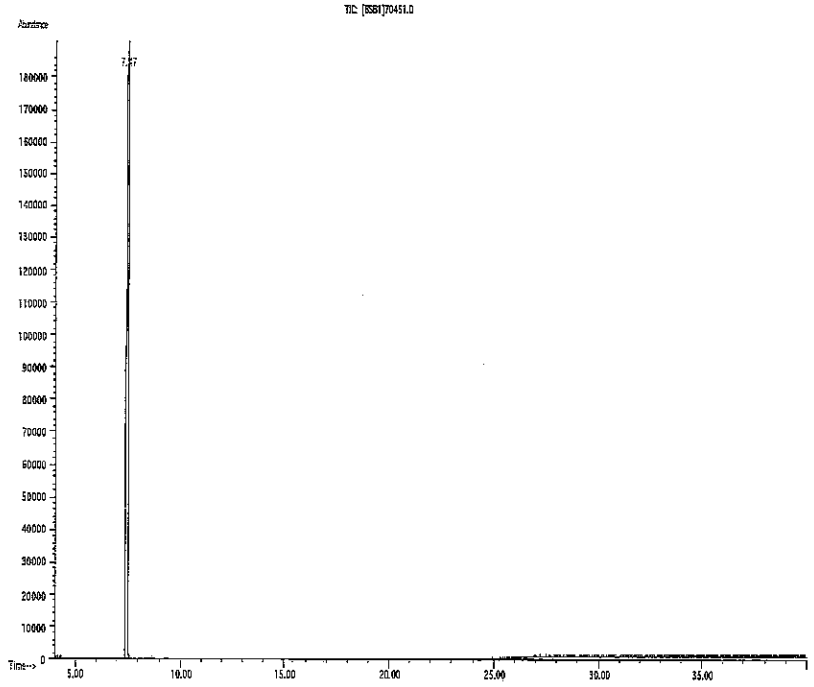
Solvent(s):	Lot#
Methylene chloride	72062

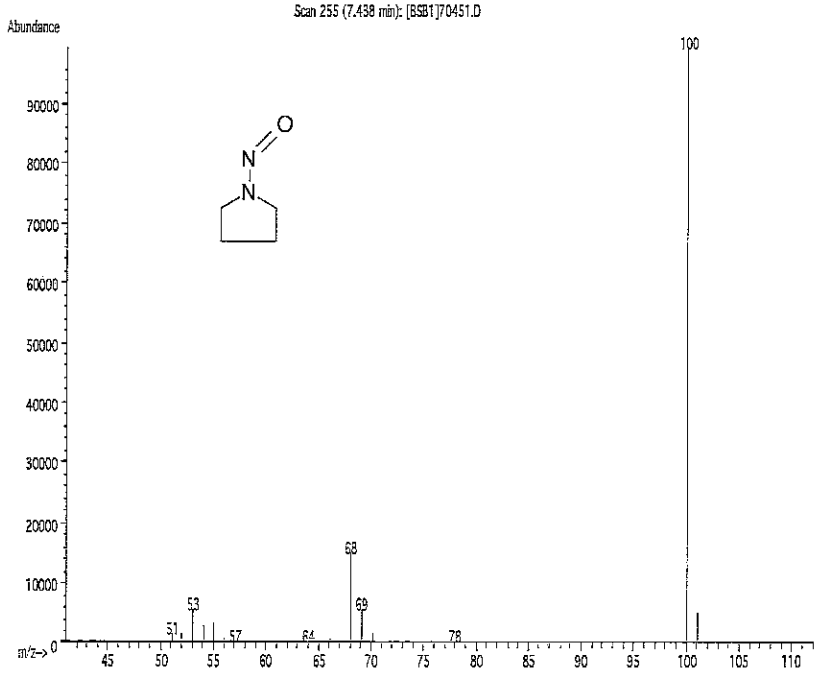
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

Giovanni Esposito	010816
Formulated By: Giovanni Esposito	DATE
Pedro L. Rentas	010816
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. N-Nitrosopyrrolidine	451	04025BM	1000	99	0.2	0.02525	0.02529	1001.6	5.7	930-55-2	N/A	orl-rat 900mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

VOA8260GAS1ST_00169

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

Catalog No. : 569722 **Lot No.:** A0118719

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, 2019 **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 **Purity** 99%	(Lot Q167-08)	2,504.2	µg/mL	+/- 18.7109 +/- 140.8995 +/- 144.1737	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 **Purity** 99%	(Lot SHBG1480V)	2,500.6	µg/mL	+/- 18.9897 +/- 140.7385 +/- 144.0070	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 **Purity** 99%	(Lot 25LPST)	2,499.8	µg/mL	+/- 20.8058 +/- 140.9486 +/- 144.2103	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 **Purity** 99%	(Lot SHBF3387V)	2,500.6	µg/mL	+/- 21.2874 +/- 141.0663 +/- 144.3274	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 **Purity** 99%	(Lot 101604)	2,500.1	µg/mL	+/- 22.8576 +/- 141.2859 +/- 144.5409	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 **Purity** 99%	(Lot SHBD1717V)	2,500.3	µg/mL	+/- 19.5969 +/- 140.8062 +/- 144.0725	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 **Purity** 99%	(Lot Q9B-58)	2,504.7	µg/mL	+/- 19.5937 +/- 141.0449 +/- 144.3170	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,524.5	µg/mL	+/-	16.8928	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)			+/-	141.7952	µg/mL	Unstressed
	Purity 99%				+/-	145.1017	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)

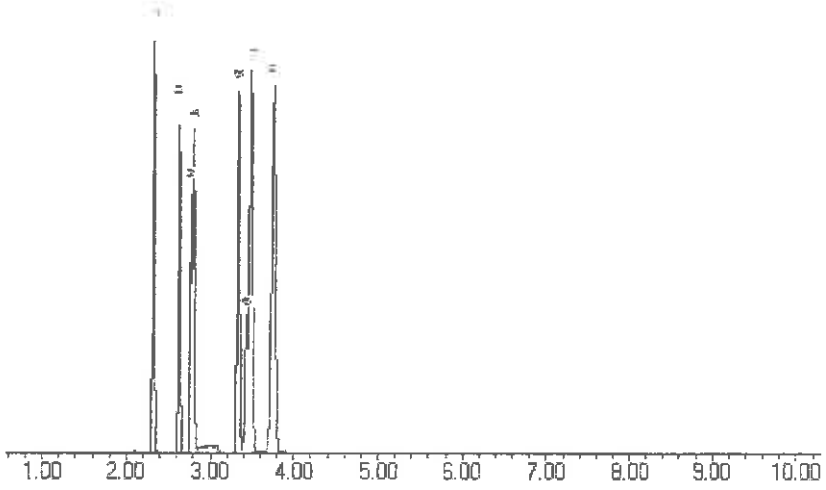
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Lane Klbe - Mix Technician

Date Mixed: 17-Nov-2015 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 10-Dec-2015

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Catalog No. : 569722 **Lot No.:** A0118719

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, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot Q167-08) **Purity** 99%	2,504.2 µg/mL	+/- 18.7109 µg/mL +/- 140.8995 µg/mL +/- 144.1737 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBG1480V) **Purity** 99%	2,500.6 µg/mL	+/- 18.9897 µg/mL +/- 140.7385 µg/mL +/- 144.0070 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 25LPST) **Purity** 99%	2,499.8 µg/mL	+/- 20.8058 µg/mL +/- 140.9486 µg/mL +/- 144.2103 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBF3387V) **Purity** 99%	2,500.6 µg/mL	+/- 21.2874 µg/mL +/- 141.0663 µg/mL +/- 144.3274 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.1 µg/mL	+/- 22.8576 µg/mL +/- 141.2859 µg/mL +/- 144.5409 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot SHBD1717V) **Purity** 99%	2,500.3 µg/mL	+/- 19.5969 µg/mL +/- 140.8062 µg/mL +/- 144.0725 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot Q9B-58) **Purity** 99%	2,504.7 µg/mL	+/- 19.5937 µg/mL +/- 141.0449 µg/mL +/- 144.3170 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,524.5	µg/mL	+/-	16.8928	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)			+/-	141.7952	µg/mL	Unstressed
	Purity 99%				+/-	145.1017	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)

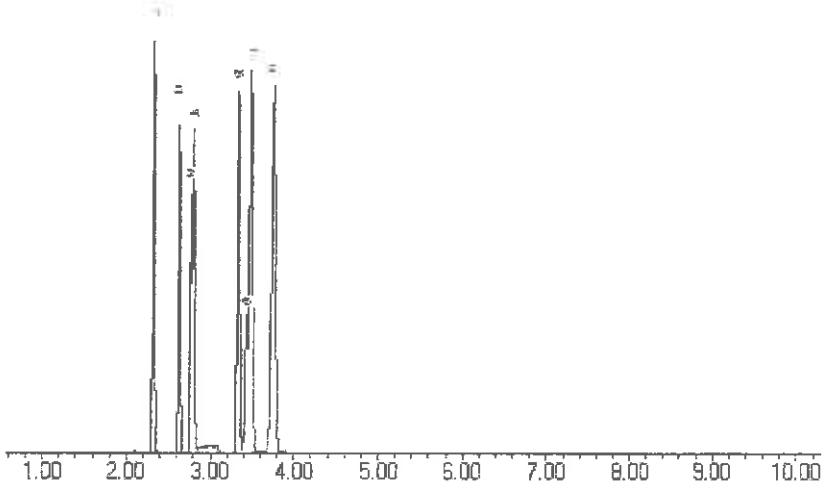
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Lane Klbe - Mix Technician

Date Mixed: 17-Nov-2015 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 10-Dec-2015

Manufactured under Restek's ISO 9001:2008
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Reagent

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Catalog No. : 569722.sec **Lot No.:** A0115484

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 : November 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.SEC (Lot 22274) Purity 99%	2,505.6 µg/mL	+/- 16.6251 +/- 140.7169 +/- 143.9990	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3.SEC (Lot 18343) Purity 99%	2,517.3 µg/mL	+/- 17.3796 +/- 141.4522 +/- 144.7477	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride CAS # 75-01-4.SEC (Lot MKBK6872V) Purity 99%	2,510.2 µg/mL	+/- 16.6342 +/- 140.9727 +/- 144.2609	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene CAS # 106-99-0.SEC (Lot 22331) Purity 99%	2,516.5 µg/mL	+/- 17.4874 +/- 141.4240 +/- 144.7182	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9.SEC (Lot Q119-46) Purity 99%	2,511.5 µg/mL	+/- 16.8310 +/- 141.0664 +/- 144.3557	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3.SEC (Lot 00004202) Purity 99%	2,504.8 µg/mL	+/- 16.4341 +/- 140.6469 +/- 143.9283	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4.SEC (Lot SHBC0858V) Purity 99%	2,500.5 µg/mL	+/- 16.1659 +/- 140.3776 +/- 143.6540	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,524.5	µg/mL	+/-	16.8928	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)			+/-	141.7952	µg/mL	Unstressed
	Purity 99%				+/-	145.1017	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)

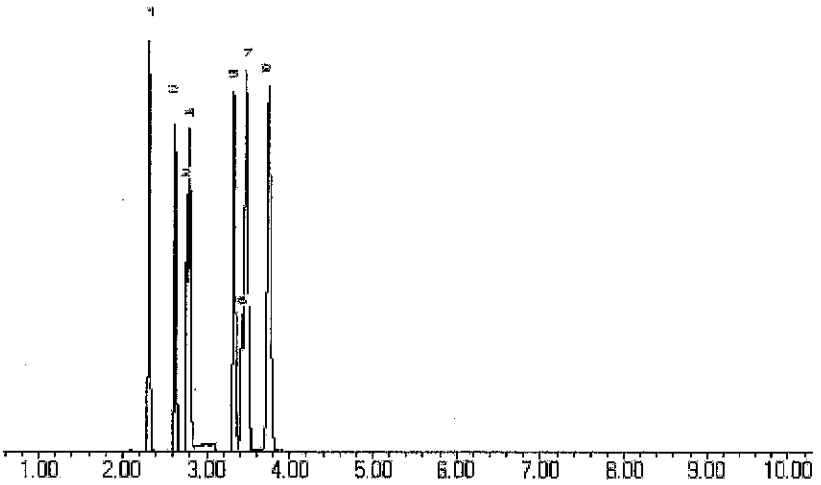
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Lane Kibe - Mix Technician

Date Mixed: 17-Nov-2015 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 10-Dec-2015

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

Reagent

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

Catalog No. : 568718 **Lot No.:** A0113246

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

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

Expiration Date : August 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 **Purity** 99%	(Lot I201P18)	5,000.4 µg/mL	+/- 29.0712 µg/mL Gravimetric +/- 106.0450 µg/mL Unstressed +/- 106.5155 µg/mL Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 **Purity** 99%	(Lot M276P24)	1,250.2 µg/mL	+/- 7.2688 µg/mL Gravimetric +/- 26.5135 µg/mL Unstressed +/- 26.6311 µg/mL Stressed
3	Fluorobenzene **CAS #** 462-06-6 **Purity** 99%	(Lot BCBK8171V)	250.2 µg/mL	+/- 1.4580 µg/mL Gravimetric +/- 5.3070 µg/mL Unstressed +/- 5.3305 µg/mL Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 **Purity** 98%	(Lot I-19073)	5,000.6 µg/mL	+/- 29.0727 µg/mL Gravimetric +/- 106.0502 µg/mL Unstressed +/- 106.5208 µg/mL Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 **Purity** 99%	(Lot PR-23926)	250.4 µg/mL	+/- 1.4592 µg/mL Gravimetric +/- 5.3113 µg/mL Unstressed +/- 5.3348 µg/mL Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 **Purity** 99%	(Lot PR-18488)	250.0 µg/mL	+/- 1.4569 µg/mL Gravimetric +/- 5.3028 µg/mL Unstressed +/- 5.3263 µg/mL Stressed

Reagent

VOA8260KET1ST_00075

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Certificate #3222.02

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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.:** A0115554

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 : November 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 **Purity** 99%	(Lot 07196AK)	12,501.8 µg/mL	+/- 72.6865 µg/mL +/- 754.2890 µg/mL +/- 756.0798 µg/mL		Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 **Purity** 98%	(Lot SHBG0444V)	12,499.7 µg/mL	+/- 72.6744 µg/mL +/- 754.1625 µg/mL +/- 755.9530 µg/mL		Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 **Purity** 99%	(Lot SHBF9556V)	12,500.6 µg/mL	+/- 72.6796 µg/mL +/- 754.2166 µg/mL +/- 756.0072 µg/mL		Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 **Purity** 99%	(Lot MKBT3158V)	12,502.4 µg/mL	+/- 72.6900 µg/mL +/- 754.3252 µg/mL +/- 756.1161 µg/mL		Gravimetric Unstressed Stressed

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

Reagent

VOA8260MEGA1_00054

RESTEK
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Bellefonte, PA 16823-8812
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CERTIFIED REFERENCE MATERIAL

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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. : 569720 **Lot No.:** A0118177

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 : March 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 **Purity** 99%	(Lot SHBG1462V)	2,503.5	µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 **Purity** 99%	(Lot 00004562)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 00008621)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 **Purity** 99%	(Lot SHBD0362V)	25,033.4	µg/mL	+/- 145.5386 +/- 1,510.3737 +/- 1,513.9596	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4 **Purity** 98%	(Lot SHBF2149V)	2,502.9	µg/mL	+/- 14.5522 +/- 151.0123 +/- 151.3708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Methyl acetate **CAS #** 79-20-9 **Purity** 98%	(Lot SHBD7134V)	12,508.6	µg/mL	+/- 72.7223 +/- 754.6987 +/- 756.4905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 **Purity** 99%	(Lot SHBF8133V)	2,500.0	µg/mL	+/- 19.2743 +/- 151.3663 +/- 151.7231	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBF9870V)	2,521.4	µg/mL	+/- 14.6595 +/- 152.1257 +/- 152.4869	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot S20A856)	2,516.0	µg/mL	+/- 14.6282 +/- 151.8014 +/- 152.1618	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot J08Z057)	25,001.3	µg/mL	+/- 145.3518 +/- 1,508.4355 +/- 1,512.0167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 98%	(Lot MKBV2831V)	2,507.8	µg/mL	+/- 14.5807 +/- 151.3079 +/- 151.6671	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBF7674V)	2,512.4	µg/mL	+/- 14.6072 +/- 151.5827 +/- 151.9426	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	1,1-dichloroethene **CAS #** 75-35-4 **Purity** 99%	(Lot 73896KMV)	2,508.1	µg/mL	+/- 14.5825 +/- 151.3263 +/- 151.6856	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 99%	(Lot BCBL9720V)	2,507.6	µg/mL	+/- 14.5795 +/- 151.2961 +/- 151.6553	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot MKBH9850V)	2,509.8	µg/mL	+/- 14.5919 +/- 151.4243 +/- 151.7838	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBD1647V)	62,815.4	µg/mL	+/- 365.1949 +/- 3,789.9281 +/- 3,798.9260	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot MKBV2134V)	2,510.0	µg/mL	+/- 14.5934 +/- 151.4394 +/- 151.7990	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Bromochloromethane **CAS #** 74-97-5 **Purity** 99%	(Lot 00004559)	2,507.0	µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBG2910V)	5,025.3	µg/mL	+/- 29.2172 +/- 303.1956 +/- 303.9154	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15MW0705)	2,508.9	µg/mL	+/- 14.5868 +/- 151.3715 +/- 151.7309	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKBV3194V)	2,503.4	µg/mL	+/- 14.5548 +/- 151.0397 +/- 151.3983	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot PR09161302)	2,507.4	µg/mL	+/- 14.5781 +/- 151.2810 +/- 151.6402	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG1763V)	2,505.9	µg/mL	+/- 14.5694 +/- 151.1905 +/- 151.5495	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot MKBV6176V)	2,510.8	µg/mL	+/- +/- +/-	14.5977 151.4847 151.8443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot MKBV4565V)	2,511.1	µg/mL	+/- +/- +/-	14.5999 151.5073 151.8670	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBG1169V)	2,502.9	µg/mL	+/- +/- +/-	14.5519 151.0095 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBF0943V)	2,500.4	µg/mL	+/- +/- +/-	14.5374 150.8587 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot 50996APV)	2,503.9	µg/mL	+/- +/- +/-	14.5577 151.0699 151.4285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,523.5	µg/mL	+/- +/- +/-	14.6718 152.2539 152.6154	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	bromodichloromethane **CAS #** 75-27-4 **Purity** 98%	(Lot MKBL1617V)	2,509.0	µg/mL	+/- +/- +/-	14.5878 151.3818 151.7412	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBG6312V)	50,018.1	µg/mL	+/- +/- +/-	290.7945 3,017.8137 3,024.9785	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 98%	(Lot 10183283)	2,511.4	µg/mL	+/- +/- +/-	14.6013 151.5222 151.8820	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 22622)	2,506.0	µg/mL	+/- +/- +/-	14.5701 151.1981 151.5571	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot MKBV5601V)	2,515.5	µg/mL	+/- +/- +/-	14.6253 151.7713 152.1316	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBD9190V)	2,503.1	µg/mL	+/- +/- +/-	14.5534 151.0246 151.3832	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C584177)	2,508.0	µg/mL	+/- +/- +/-	14.5817 151.3188 151.6780	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,508.4	µg/mL	+/- +/- +/-	14.5839 151.3414 151.7007	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,522.8	µg/mL	+/- +/- +/-	14.6675 152.2087 152.5701	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD9374V)	2,518.9	µg/mL	+/- +/- +/-	14.6450 151.9749 152.3357	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,505.4	µg/mL	+/-	14.5664	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKBQ6577V)			+/-	151.1601	µg/mL	Unstressed
	Purity 98%				+/-	151.5190	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	151.1453	µg/mL	Unstressed
	Purity 99%				+/-	151.5041	µg/mL	Stressed
42	Chlorobenzene		2,505.6	µg/mL	+/-	14.5679	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBF0505V)			+/-	151.1755	µg/mL	Unstressed
	Purity 99%				+/-	151.5344	µg/mL	Stressed
43	1,1,2,2-Tetrachloroethane		2,505.1	µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	151.1453	µg/mL	Unstressed
	Purity 99%				+/-	151.5041	µg/mL	Stressed
44	Ethylbenzene		2,506.1	µg/mL	+/-	14.5708	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBG5920V)			+/-	151.2056	µg/mL	Unstressed
	Purity 99%				+/-	151.5646	µg/mL	Stressed
45	m-Xylene		1,254.4	µg/mL	+/-	7.2930	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBF8095V)			+/-	75.6820	µg/mL	Unstressed
	Purity 99%				+/-	75.8617	µg/mL	Stressed
46	p-Xylene		1,250.0	µg/mL	+/-	7.2676	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBF3427V)			+/-	75.4180	µg/mL	Unstressed
	Purity 99%				+/-	75.5971	µg/mL	Stressed
47	o-Xylene		2,506.3	µg/mL	+/-	14.5716	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBF7003V)			+/-	151.2132	µg/mL	Unstressed
	Purity 99%				+/-	151.5722	µg/mL	Stressed
48	Styrene		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKBS7097V)			+/-	151.0699	µg/mL	Unstressed
	Purity 99%				+/-	151.4285	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,509.4	µg/mL	+/-	14.5897	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	151.4017	µg/mL	Unstressed
	Purity 99%				+/-	151.7612	µg/mL	Stressed
50	bromoform		2,503.3	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBC3410V)			+/-	151.0322	µg/mL	Unstressed
	Purity 99%				+/-	151.3907	µg/mL	Stressed
51	1,1,1,2-Tetrachloroethane		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	151.1378	µg/mL	Unstressed
	Purity 99%				+/-	151.4966	µg/mL	Stressed
52	chloroform		2,507.8	µg/mL	+/-	14.5803	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot MKBV2089V)			+/-	151.3037	µg/mL	Unstressed
	Purity 99%				+/-	151.6629	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,504.8	µg/mL	+/-	14.5628	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	151.1227	µg/mL	Unstressed
	Purity 99%				+/-	151.4815	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,499.7	µg/mL	+/-	14.5334	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBP6041V)			+/-	150.8172	µg/mL	Unstressed
	Purity 95%				+/-	151.1753	µg/mL	Stressed
55	n-Propylbenzene		2,507.5	µg/mL	+/-	14.5788	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKBJ0332V)			+/-	151.2886	µg/mL	Unstressed
	Purity 99%				+/-	151.6478	µg/mL	Stressed

56	Bromobenzene		2,515.1	µg/mL	+/-	14.6232	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot MKBD4032V)			+/-	151.7486	µg/mL	Unstressed
	Purity 99%				+/-	152.1089	µg/mL	Stressed
57	1,2,4-Trimethylbenzene		2,503.7	µg/mL	+/-	14.5565	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)			+/-	151.0566	µg/mL	Unstressed
	Purity 98%				+/-	151.4152	µg/mL	Stressed
58	2-Chlorotoluene		2,502.1	µg/mL	+/-	14.5476	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBH8892V)			+/-	150.9643	µg/mL	Unstressed
	Purity 99%				+/-	151.3227	µg/mL	Stressed
59	4-Chlorotoluene		2,512.6	µg/mL	+/-	14.6086	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	151.5978	µg/mL	Unstressed
	Purity 99%				+/-	151.9577	µg/mL	Stressed
60	tert-Butylbenzene		2,507.8	µg/mL	+/-	14.5803	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot S52237V)			+/-	151.3037	µg/mL	Unstressed
	Purity 99%				+/-	151.6629	µg/mL	Stressed
61	1,3,5-Trimethylbenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBJ6245V)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed
62	sec-Butylbenzene		2,521.8	µg/mL	+/-	14.6617	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBK3151V)			+/-	152.1484	µg/mL	Unstressed
	Purity 99%				+/-	152.5096	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,502.6	µg/mL	+/-	14.5505	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKBK4439V)			+/-	150.9945	µg/mL	Unstressed
	Purity 99%				+/-	151.3529	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,505.8	µg/mL	+/-	14.5686	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBM5751V)			+/-	151.1830	µg/mL	Unstressed
	Purity 99%				+/-	151.5419	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,504.1	µg/mL	+/-	14.5592	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS1350V)			+/-	151.0850	µg/mL	Unstressed
	Purity 99%				+/-	151.4437	µg/mL	Stressed
66	n-Butylbenzene		2,503.3	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09418JJV)			+/-	151.0322	µg/mL	Unstressed
	Purity 99%				+/-	151.3907	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,505.5	µg/mL	+/-	14.5672	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBD7331V)			+/-	151.1679	µg/mL	Unstressed
	Purity 99%				+/-	151.5268	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.6	µg/mL	+/-	14.5854	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01-JM)			+/-	151.3565	µg/mL	Unstressed
	Purity 99%				+/-	151.7158	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,518.6	µg/mL	+/-	14.6435	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot 26896BM)			+/-	151.9598	µg/mL	Unstressed
	Purity 99%				+/-	152.3206	µg/mL	Stressed
70	Hexachlorobutadiene		2,499.9	µg/mL	+/-	14.5344	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	150.8275	µg/mL	Unstressed
	Purity 98%				+/-	151.1856	µg/mL	Stressed
71	Naphthalene		2,514.9	µg/mL	+/-	14.6217	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBH4351V)			+/-	151.7336	µg/mL	Unstressed
	Purity 99%				+/-	152.0938	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,502.0 µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBS4859V)		+/-	150.9567	µg/mL	Unstressed
	Purity 99%			+/-	151.3151	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)

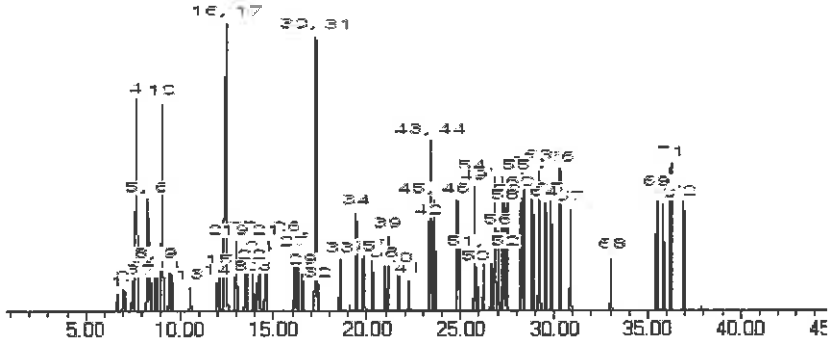
Carrier Gas:
helium-constant pressure 30 psi

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.

Rebecca Hauver

Date Mixed: 21-Mar-2016 **Balance:** 1125113331

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 28-Mar-2016

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

Reagent

VOA8260MEGA2_00052

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ilac-MRA

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

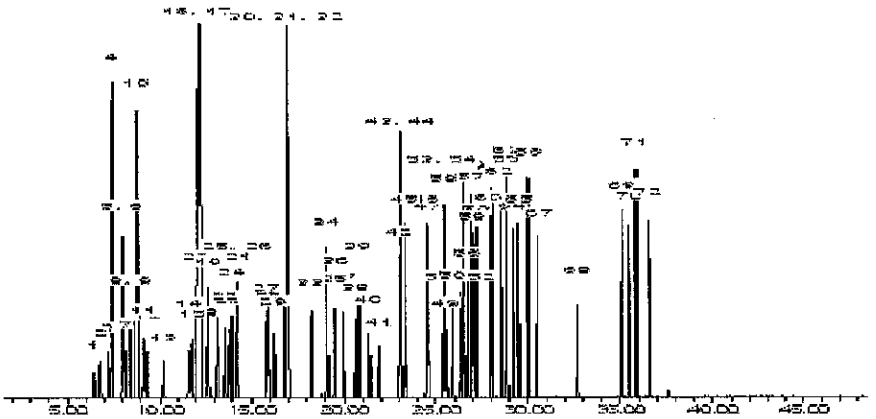
Carrier Gas:
helium-constant pressure 30 psi

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.

Michael J Maye

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_00117

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

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CERTIFIED REFERENCE MATERIAL

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ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

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. : 567650 **Lot No.:** A0112455

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 : July 31, 2020 **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 **Purity** 99%	(Lot 022012)	2,509.6	µg/mL	+/- 14.5910 +/- 28.2993 +/- 32.5644	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 **Purity** 99%	(Lot 14C-191)	2,507.5	µg/mL	+/- 14.5788 +/- 28.2757 +/- 32.5371	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 **Purity** 99%	(Lot PR-26282)	2,509.0	µg/mL	+/- 14.5875 +/- 28.2926 +/- 32.5566	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 **Purity** 99%	(Lot 20401KOV)	2,506.0	µg/mL	+/- 14.5701 +/- 28.2587 +/- 32.5176	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOAACRORES_00103

RESTEK
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Certificate of Analysis

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568720 **Lot No.:** A0119846

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 : October 31, 2016 **Storage:** 0°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 **CAS #** 107-02-8 (Lot 160518JLM) **Purity** 99%	19,873.0 µg/mL	+/- 116.3608 µg/mL +/- 637.1909 µg/mL +/- 740.6647 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOACEVERES2ND_00067

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

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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. : 569723.sec **Lot No.:** A0115500

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether **CAS #** 110-75-8.SEC (Lot BQZ2K-QD) **Purity** 99%	2,501.5 µg/mL	+/- 14.5439 +/- 53.5574 +/- 55.1144	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VOARESEE1ST_00035

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

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. : 568363-FL **Lot No.:** A0120234

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	3-Chlorobenzotrifluoride **CAS #** 98-15-7 (Lot 21324DO) **Purity** 99%	5,025.0 µg/mL	+/- 29.4895 +/- 281.7753 +/- 288.3671	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	4-Chlorobenzotrifluoride **CAS #** 98-56-6 (Lot 08507BO) **Purity** 99%	5,031.0 µg/mL	+/- 29.5247 +/- 282.1117 +/- 288.7115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorobenzotrifluoride **CAS #** 88-16-4 (Lot I0316DQ) **Purity** 99%	5,011.0 µg/mL	+/- 29.4074 +/- 280.9902 +/- 287.5637	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	3-Chlorotoluene **CAS #** 108-41-8 (Lot 13528LX) **Purity** 99%	5,046.0 µg/mL	+/- 29.6128 +/- 282.9528 +/- 289.5723	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	2,4-Dichlorobenzotrifluoride **CAS #** 320-60-5 (Lot MKBL3552V) **Purity** 99%	5,018.0 µg/mL	+/- 29.4484 +/- 281.3828 +/- 287.9654	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	3,4-Dichlorobenzotrifluoride **CAS #** 328-84-7 (Lot 11105EJV) **Purity** 99%	5,031.0 µg/mL	+/- 29.5247 +/- 282.1117 +/- 288.7115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2,5-Dichlorobenzotrifluoride **CAS #** 320-50-3 (Lot 04415DSV) **Purity** 99%	5,047.0 µg/mL	+/- 29.6186 +/- 283.0089 +/- 289.6296	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	2,4-Dichlorotoluene **CAS #** 95-73-8 **Purity** 99%	(Lot 4194700)	5,036.0 µg/mL	+/- 29.5541 +/- 282.3921 +/- 288.9984	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	2,5-Dichlorotoluene **CAS #** 19398-61-9 **Purity** 99%	(Lot 1381346V)	5,016.0 µg/mL	+/- 29.4367 +/- 281.2706 +/- 287.8507	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	2,6-Dichlorotoluene **CAS #** 118-69-4 **Purity** 99%	(Lot MKBG8583V)	5,027.0 µg/mL	+/- 29.5013 +/- 281.8874 +/- 288.4819	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	3,4-Dichlorotoluene **CAS #** 95-75-0 **Purity** 99%	(Lot 09419AS)	5,021.0 µg/mL	+/- 29.4660 +/- 281.5510 +/- 288.1376	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	2,3-Dichlorotoluene **CAS #** 32768-54-0 **Purity** 99%	(Lot 41215)	5,031.0 µg/mL	+/- 29.5247 +/- 282.1117 +/- 288.7115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2,4,5-Trichlorotoluene **CAS #** 6639-30-1 **Purity** 99%	(Lot 5150700)	5,041.0 µg/mL	+/- 29.5834 +/- 282.6725 +/- 289.2853	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2,3,6-Trichlorotoluene **CAS #** 2077-46-5 **Purity** 99%	(Lot NT054179)	5,003.0 µg/mL	+/- 29.3604 +/- 280.5416 +/- 287.1046	µg/mL µg/mL µg/mL	Gravimetric Unstressed 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.: 180-60202-1

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-CW-7A-0/1-0	180-60202-1	102	101	97	99
HD-CW-3-0/1-0	180-60202-2	107	103	97	101
HD-CW-3-0/1-0 DL	180-60202-2 DL	99	100	99	105
HD-CW-1-0/1-0	180-60202-3	98	100	99	102
HD-CW-1A-0/1-0	180-60202-4	102	99	101	102
HD-CW-1A-0/1-0 DL	180-60202-4 DL	93	98	98	101
HD-CW-2-0/1-0	180-60202-5	99	97	97	101
HD-CW-7-0/1-0	180-60202-6	101	104	94	98
HD-CW-9-0/1-0	180-60202-7	103	97	97	100
HD-CW-20-0/1-0	180-60202-8	106	98	100	104
HD-CW-13-0/1-0	180-60202-9	102	96	99	101
HD-CW-15A-0/1-0	180-60202-10	102	99	100	102
HD-CW-17-0/1-0	180-60202-11	96	99	98	100
HD-QC3-0/1-1	180-60202-12	96	94	99	100
INFLUENT TO #003 GWTS	180-60202-13	96	98	101	96
OUTFALL #003 GWTS	180-60202-14	96	97	97	101
HD-CW-6-0/1-0	180-60202-15	100	104	97	99
HD-CW-4-0/1-0	180-60202-16	101	99	95	100
HD-CW-5-0/1-0	180-60202-17	98	98	96	100
HD-QC8-0/1-2	180-60202-18	102	98	100	103
	MB 180-192841/5	94	95	96	101
	MB 180-192920/6	97	98	98	98
	LCS 180-192841/8	94	89	106	100
	LCS 180-192920/10	104	102	113	108
HD-CW-17-0/1-0 MS	180-60202-11 MS	102	98	109	105
HD-CW-17-0/1-0 MSD	180-60202-11 MSD	99	100	106	102

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	77-127
DCA = 1,2-Dichloroethane-d4 (Surr)	72-134
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	72-120

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.: 180-60202-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51031008.D

Lab ID: LCS 180-192841/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	10.4	104	51-150	
Vinyl chloride	10.0	10.1	101	61-138	
Bromomethane	10.0	9.83	98	39-150	
Chloroethane	10.0	10.3	103	53-148	
1,1-Dichloroethene	10.0	9.96	100	71-122	
Acetone	20.0	15.2	76	10-150	
Carbon disulfide	10.0	8.90	89	57-137	
Methylene Chloride	10.0	9.13	91	71-129	
trans-1,2-Dichloroethene	10.0	10.0	100	80-121	
Methyl tert-butyl ether	10.0	8.90	89	68-124	
1,1-Dichloroethane	10.0	9.36	94	76-126	
cis-1,2-Dichloroethene	10.0	9.43	94	80-120	
Bromochloromethane	10.0	9.35	94	76-120	
2-Butanone (MEK)	20.0	18.3	92	41-150	
Chloroform	10.0	9.34	93	78-122	
1,1,1-Trichloroethane	10.0	9.75	98	57-128	
Carbon tetrachloride	10.0	9.69	97	59-145	
Benzene	10.0	9.56	96	80-121	
1,2-Dichloroethane	10.0	8.74	87	72-126	
Trichloroethene	10.0	9.69	97	79-120	
1,2-Dichloropropane	10.0	8.86	89	78-123	
Bromodichloromethane	10.0	8.88	89	72-124	
cis-1,3-Dichloropropene	10.0	8.65	86	67-127	
4-Methyl-2-pentanone (MIBK)	20.0	18.4	92	49-147	
Toluene	10.0	10.4	104	80-125	
trans-1,3-Dichloropropene	10.0	9.28	93	63-144	
1,1,2-Trichloroethane	10.0	9.45	95	77-127	
Tetrachloroethene	10.0	10.9	109	80-122	
2-Hexanone	20.0	17.8	89	40-150	
Dibromochloromethane	10.0	8.83	88	71-134	
1,2-Dibromoethane (EDB)	10.0	9.76	98	79-126	
Chlorobenzene	10.0	10.5	105	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.97	100	75-135	
Ethylbenzene	10.0	10.3	103	80-123	
Xylenes, Total	20.0	20.9	105	80-123	
Styrene	10.0	10.2	102	80-125	
Bromoform	10.0	8.64	86	62-138	
1,1,2,2-Tetrachloroethane	10.0	9.54	95	78-135	
Acrylonitrile	100	93.6	94	66-146	
1,4-Dioxane	200	147 J	73	10-150	

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.: 180-60202-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51101010.D

Lab ID: LCS 180-192920/10 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	11.3	113	51-150	
Vinyl chloride	10.0	10.9	109	61-138	
Bromomethane	10.0	11.1	111	39-150	
Chloroethane	10.0	10.7	107	53-148	
1,1-Dichloroethene	10.0	10.9	109	71-122	
Acetone	20.0	21.0	105	10-150	
Carbon disulfide	10.0	8.43	84	57-137	
Methylene Chloride	10.0	10.5	105	71-129	
trans-1,2-Dichloroethene	10.0	11.0	110	80-121	
Methyl tert-butyl ether	10.0	10.4	104	68-124	
1,1-Dichloroethane	10.0	10.9	109	76-126	
cis-1,2-Dichloroethene	10.0	10.9	109	80-120	
Bromochloromethane	10.0	10.7	107	76-120	
2-Butanone (MEK)	20.0	21.2	106	41-150	
Chloroform	10.0	10.5	105	78-122	
1,1,1-Trichloroethane	10.0	10.2	102	57-128	
Carbon tetrachloride	10.0	10.3	103	59-145	
Benzene	10.0	11.0	110	80-121	
1,2-Dichloroethane	10.0	10.3	103	72-126	
Trichloroethene	10.0	10.8	108	79-120	
1,2-Dichloropropane	10.0	10.6	106	78-123	
Bromodichloromethane	10.0	9.56	96	72-124	
cis-1,3-Dichloropropene	10.0	9.93	99	67-127	
4-Methyl-2-pentanone (MIBK)	20.0	23.2	116	49-147	
Toluene	10.0	11.5	115	80-125	
trans-1,3-Dichloropropene	10.0	10.7	107	63-144	
1,1,2-Trichloroethane	10.0	11.5	115	77-127	
Tetrachloroethene	10.0	11.5	115	80-122	
2-Hexanone	20.0	21.3	107	40-150	
Dibromochloromethane	10.0	9.88	99	71-134	
1,2-Dibromoethane (EDB)	10.0	11.4	114	79-126	
Chlorobenzene	10.0	11.8	118	80-120	
1,1,1,2-Tetrachloroethane	10.0	10.9	109	75-135	
Ethylbenzene	10.0	11.5	115	80-123	
Xylenes, Total	20.0	23.2	116	80-123	
Styrene	10.0	11.4	114	80-125	
Bromoform	10.0	9.22	92	62-138	
1,1,2,2-Tetrachloroethane	10.0	11.4	114	78-135	
Acrylonitrile	100	112	112	66-146	
1,4-Dioxane	200	200	100	10-150	

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.: 180-60202-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51031009.D

Lab ID: 180-60202-11 MS Client ID: HD-CW-17-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloromethane	20.0	2.0 U	21.8	109	51-150	
Vinyl chloride	20.0	2.0 U	21.7	109	61-138	
Bromomethane	20.0	2.0 U	21.3	107	39-150	
Chloroethane	20.0	2.0 U	22.2	111	53-148	
1,1-Dichloroethene	20.0	3.7	24.2	103	71-122	
Acetone	40.0	10 U	41.8	105	10-150	
Carbon disulfide	20.0	2.0 U	18.7	93	57-137	
Methylene Chloride	20.0	2.0 U	19.7	99	71-129	
trans-1,2-Dichloroethene	20.0	2.0 U	21.2	106	80-121	
Methyl tert-butyl ether	20.0	2.0 U	20.9	105	68-124	
1,1-Dichloroethane	20.0	2.5	22.7	101	76-126	
cis-1,2-Dichloroethene	20.0	55	68.8	70	80-120	F1
Bromochloromethane	20.0	2.0 U	21.5	108	76-120	
2-Butanone (MEK)	40.0	10 U	43.0	107	41-150	
Chloroform	20.0	2.0 U	21.0	105	78-122	
1,1,1-Trichloroethane	20.0	4.9	24.6	98	68-128	
Carbon tetrachloride	20.0	2.0 U	21.1	106	59-145	
Benzene	20.0	2.0 U	21.0	105	80-121	
1,2-Dichloroethane	20.0	2.0 U	19.4	97	72-126	
Trichloroethene	20.0	37	50.5	69	79-120	F1
1,2-Dichloropropane	20.0	2.0 U	20.0	100	78-123	
Bromodichloromethane	20.0	2.0 U	19.0	95	72-124	
cis-1,3-Dichloropropene	20.0	2.0 U	19.3	97	67-127	
4-Methyl-2-pentanone (MIBK)	40.0	10 U	42.0	105	49-147	
Toluene	20.0	2.0 U	21.9	109	80-125	
trans-1,3-Dichloropropene	20.0	2.0 U	20.7	103	63-144	
1,1,2-Trichloroethane	20.0	2.0 U	22.2	111	77-127	
Tetrachloroethene	20.0	20	40.8	102	80-122	
2-Hexanone	40.0	10 U	39.2	98	40-150	
Dibromochloromethane	20.0	2.0 U	19.4	97	71-134	
1,2-Dibromoethane (EDB)	20.0	2.0 U	21.2	106	79-126	
Chlorobenzene	20.0	2.0 U	21.9	109	80-120	
1,1,1,2-Tetrachloroethane	20.0	2.0 U	21.7	108	75-135	
Ethylbenzene	20.0	2.0 U	22.0	110	80-123	
Xylenes, Total	40.0	4.0 U	44.6	112	80-123	
Styrene	20.0	2.0 U	22.0	110	80-125	
Bromoform	20.0	2.0 U	18.0	90	62-138	
1,1,2,2-Tetrachloroethane	20.0	2.0 U	22.3	112	78-135	
Acrylonitrile	200	40 U	214	107	66-146	
1,4-Dioxane	400	400 U	384 J	96	10-150	

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.: 180-60202-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51031010.D

Lab ID: 180-60202-11 MSD Client ID: HD-CW-17-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloromethane	20.0	22.1	111	1	35	51-150	
Vinyl chloride	20.0	22.2	111	2	35	61-138	
Bromomethane	20.0	22.6	113	6	35	39-150	
Chloroethane	20.0	22.7	113	2	35	53-148	
1,1-Dichloroethene	20.0	25.0	107	3	35	71-122	
Acetone	40.0	45.3	113	8	35	10-150	
Carbon disulfide	20.0	19.1	95	2	35	57-137	
Methylene Chloride	20.0	20.2	101	3	35	71-129	
trans-1,2-Dichloroethene	20.0	22.6	113	6	35	80-121	
Methyl tert-butyl ether	20.0	21.5	107	3	35	68-124	
1,1-Dichloroethane	20.0	23.5	105	3	35	76-126	
cis-1,2-Dichloroethene	20.0	70.2	77	2	35	80-120	F1
Bromochloromethane	20.0	21.8	109	1	35	76-120	
2-Butanone (MEK)	40.0	43.2	108	0	35	41-150	
Chloroform	20.0	21.2	106	1	35	78-122	
1,1,1-Trichloroethane	20.0	25.3	102	3	35	68-128	
Carbon tetrachloride	20.0	21.4	107	1	35	59-145	
Benzene	20.0	22.0	110	4	32	80-121	
1,2-Dichloroethane	20.0	20.2	101	4	32	72-126	
Trichloroethene	20.0	53.7	85	6	35	79-120	
1,2-Dichloropropane	20.0	21.3	107	6	34	78-123	
Bromodichloromethane	20.0	19.3	97	1	35	72-124	
cis-1,3-Dichloropropene	20.0	20.3	101	5	35	67-127	
4-Methyl-2-pentanone (MIBK)	40.0	46.3	116	10	35	49-147	
Toluene	20.0	23.0	115	5	35	80-125	
trans-1,3-Dichloropropene	20.0	22.0	110	6	35	63-144	
1,1,2-Trichloroethane	20.0	22.7	114	2	35	77-127	
Tetrachloroethene	20.0	41.1	104	1	35	80-122	
2-Hexanone	40.0	43.8	110	11	35	40-150	
Dibromochloromethane	20.0	20.4	102	5	35	71-134	
1,2-Dibromoethane (EDB)	20.0	22.7	114	7	35	79-126	
Chlorobenzene	20.0	23.0	115	5	29	80-120	
1,1,1,2-Tetrachloroethane	20.0	22.6	113	4	34	75-135	
Ethylbenzene	20.0	22.8	114	4	33	80-123	
Xylenes, Total	40.0	46.1	115	3	32	80-123	
Styrene	20.0	23.1	115	5	34	80-125	
Bromoform	20.0	19.5	97	8	35	62-138	
1,1,2,2-Tetrachloroethane	20.0	24.0	120	7	35	78-135	
Acrylonitrile	200	219	109	2	35	66-146	
1,4-Dioxane	400	392 J	98	2	35	10-150	

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.: 180-60202-1

SDG No.:

Lab File ID: 51031005.D Lab Sample ID: MB 180-192841/5

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

Instrument ID: CHHP5 Date Analyzed: 10/31/2016 11:09

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-17-0/1-0	180-60202-11	51031006.D	10/31/2016 11:44
HD-QC8-0/1-2	180-60202-18	51031007.D	10/31/2016 12:08
	LCS 180-192841/8	51031008.D	10/31/2016 12:32
HD-CW-17-0/1-0 MS	180-60202-11 MS	51031009.D	10/31/2016 12:56
HD-CW-17-0/1-0 MSD	180-60202-11 MSD	51031010.D	10/31/2016 13:20
HD-CW-1-0/1-0	180-60202-3	51031019.D	10/31/2016 16:57
HD-CW-1A-0/1-0	180-60202-4	51031020.D	10/31/2016 17:22
HD-CW-7A-0/1-0	180-60202-1	51031023.D	10/31/2016 18:34
HD-CW-3-0/1-0 DL	180-60202-2 DL	51031025.D	10/31/2016 19:22
HD-CW-9-0/1-0	180-60202-7	51031026.D	10/31/2016 19:46
HD-CW-20-0/1-0	180-60202-8	51031027.D	10/31/2016 20:10
HD-CW-13-0/1-0	180-60202-9	51031028.D	10/31/2016 20:34
HD-CW-15A-0/1-0	180-60202-10	51031029.D	10/31/2016 20:59
HD-CW-3-0/1-0	180-60202-2	51031030.D	10/31/2016 21:23

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab File ID: 51101006.D Lab Sample ID: MB 180-192920/6

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

Instrument ID: CHHP5 Date Analyzed: 11/01/2016 11:35

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 180-192920/10	51101010.D	11/01/2016 13:25
HD-CW-1A-0/1-0 DL	180-60202-4 DL	51101014.D	11/01/2016 15:02
HD-CW-2-0/1-0	180-60202-5	51101015.D	11/01/2016 15:26
HD-CW-7-0/1-0	180-60202-6	51101016.D	11/01/2016 15:50
HD-QC3-0/1-1	180-60202-12	51101017.D	11/01/2016 16:15
INFLUENT TO #003 GWTS	180-60202-13	51101018.D	11/01/2016 16:39
OUTFALL #003 GWTS	180-60202-14	51101019.D	11/01/2016 17:03
HD-CW-6-0/1-0	180-60202-15	51101020.D	11/01/2016 17:27
HD-CW-4-0/1-0	180-60202-16	51101022.D	11/01/2016 18:15
HD-CW-5-0/1-0	180-60202-17	51101023.D	11/01/2016 18:39

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab File ID: 51022001.D BFB Injection Date: 10/22/2016

Instrument ID: CHHP5 BFB Injection Time: 12:45

Analysis Batch No.: 192047

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	29.4	
75	30.0 - 60.0 % of mass 95	57.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.5	(0.6) 1
174	50.0 - 120.00 % of mass 95	84.0	
175	5.0 - 9.0 % of mass 174	6.1	(7.3) 1
176	95.0 - 101.0 % of mass 174	81.7	(97.3) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.9) 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 180-192047/3	51022003.D	10/22/2016	14:57
	IC 180-192047/4	51022004.D	10/22/2016	15:21
	ICIS 180-192047/5	51022005.D	10/22/2016	15:45
	IC 180-192047/6	51022006.D	10/22/2016	16:09
	IC 180-192047/7	51022007.D	10/22/2016	16:33
	IC 180-192047/8	51022008.D	10/22/2016	16:57
	IC 180-192047/9	51022009.D	10/22/2016	17:22
	IC 180-192047/10	51022010.D	10/22/2016	17:46

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab File ID: 51031004.D BFB Injection Date: 10/31/2016

Instrument ID: CHHP5 BFB Injection Time: 09:32

Analysis Batch No.: 192841

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	31.2	
75	30.0 - 60.0 % of mass 95	52.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	85.8	
175	5.0 - 9.0 % of mass 174	7.0	(8.1) 1
176	95.0 - 101.0 % of mass 174	82.6	(96.2) 1
177	5.0 - 9.0 % of mass 176	5.3	(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 180-192841/2	51031002.D	10/31/2016	10:11
	MB 180-192841/5	51031005.D	10/31/2016	11:09
HD-CW-17-0/1-0	180-60202-11	51031006.D	10/31/2016	11:44
HD-QC8-0/1-2	180-60202-18	51031007.D	10/31/2016	12:08
	LCS 180-192841/8	51031008.D	10/31/2016	12:32
HD-CW-17-0/1-0 MS	180-60202-11 MS	51031009.D	10/31/2016	12:56
HD-CW-17-0/1-0 MSD	180-60202-11 MSD	51031010.D	10/31/2016	13:20
HD-CW-1-0/1-0	180-60202-3	51031019.D	10/31/2016	16:57
HD-CW-1A-0/1-0	180-60202-4	51031020.D	10/31/2016	17:22
HD-CW-7A-0/1-0	180-60202-1	51031023.D	10/31/2016	18:34
HD-CW-3-0/1-0 DL	180-60202-2 DL	51031025.D	10/31/2016	19:22
HD-CW-9-0/1-0	180-60202-7	51031026.D	10/31/2016	19:46
HD-CW-20-0/1-0	180-60202-8	51031027.D	10/31/2016	20:10
HD-CW-13-0/1-0	180-60202-9	51031028.D	10/31/2016	20:34
HD-CW-15A-0/1-0	180-60202-10	51031029.D	10/31/2016	20:59
HD-CW-3-0/1-0	180-60202-2	51031030.D	10/31/2016	21:23

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab File ID: 51101005.D BFB Injection Date: 11/01/2016

Instrument ID: CHHP5 BFB Injection Time: 10:01

Analysis Batch No.: 192920

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	27.8	
75	30.0 - 60.0 % of mass 95	51.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	77.8	
175	5.0 - 9.0 % of mass 174	6.7	(8.7) 1
176	95.0 - 101.0 % of mass 174	76.7	(98.5) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.9) 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 180-192920/2	51101002.D	11/01/2016	10:35
	MB 180-192920/6	51101006.D	11/01/2016	11:35
	LCS 180-192920/10	51101010.D	11/01/2016	13:25
HD-CW-1A-0/1-0 DL	180-60202-4 DL	51101014.D	11/01/2016	15:02
HD-CW-2-0/1-0	180-60202-5	51101015.D	11/01/2016	15:26
HD-CW-7-0/1-0	180-60202-6	51101016.D	11/01/2016	15:50
HD-QC3-0/1-1	180-60202-12	51101017.D	11/01/2016	16:15
INFLUENT TO #003 GWTS	180-60202-13	51101018.D	11/01/2016	16:39
OUTFALL #003 GWTS	180-60202-14	51101019.D	11/01/2016	17:03
HD-CW-6-0/1-0	180-60202-15	51101020.D	11/01/2016	17:27
HD-CW-4-0/1-0	180-60202-16	51101022.D	11/01/2016	18:15
HD-CW-5-0/1-0	180-60202-17	51101023.D	11/01/2016	18:39

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Sample No.: CCVIS 180-192841/2 Date Analyzed: 10/31/2016 10:11

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

Lab File ID (Standard): 51031002.D Heated Purge: (Y/N) N

Calibration ID: 33332

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		107694	4.28	383792	7.27	92805	10.38
UPPER LIMIT		215388	4.78	767584	7.77	185610	10.88
LOWER LIMIT		53847	3.78	191896	6.77	46403	9.88
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-192841/5		111698	4.26	356869	7.27	90574	10.37
180-60202-11	HD-CW-17-0/1-0	125789	4.27	346163	7.27	88461	10.38
180-60202-18	HD-QC8-0/1-2	89450	4.27	333828	7.27	80685	10.37
LCS 180-192841/8		105529	4.30	379139	7.27	89087	10.37
180-60202-11 MS	HD-CW-17-0/1-0 MS	117487	4.29	345389	7.27	83970	10.37
180-60202-11 MSD	HD-CW-17-0/1-0 MSD	120569	4.28	346392	7.27	84585	10.37
180-60202-3	HD-CW-1-0/1-0	256168*	4.27	341508	7.27	84717	10.37
180-60202-4	HD-CW-1A-0/1-0	132256	4.27	334896	7.27	83509	10.37
180-60202-1	HD-CW-7A-0/1-0	124943	4.27	333508	7.28	89006	10.37
180-60202-2 DL	HD-CW-3-0/1-0 DL	100477	4.27	335391	7.27	84688	10.37
180-60202-7	HD-CW-9-0/1-0	100161	4.26	317746	7.27	82889	10.38
180-60202-8	HD-CW-20-0/1-0	106300	4.26	332775	7.27	84329	10.37
180-60202-9	HD-CW-13-0/1-0	69791	4.26	329302	7.27	81202	10.37
180-60202-10	HD-CW-15A-0/1-0	104887	4.27	338270	7.27	85380	10.37
180-60202-2	HD-CW-3-0/1-0	179534	4.27	332349	7.27	87595	10.37

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBNZd5 = 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.: 180-60202-1

SDG No.:

Sample No.: CCVIS 180-192841/2 Date Analyzed: 10/31/2016 10:11

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

Lab File ID (Standard): 51031002.D Heated Purge: (Y/N) N

Calibration ID: 33332

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		132882	12.72				
UPPER LIMIT		265764	13.22				
LOWER LIMIT		66441	12.22				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-192841/5		144567	12.72				
180-60202-11	HD-CW-17-0/1-0	140701	12.72				
180-60202-18	HD-QC8-0/1-2	121924	12.72				
LCS 180-192841/8		135610	12.72				
180-60202-11 MS	HD-CW-17-0/1-0 MS	127672	12.72				
180-60202-11 MSD	HD-CW-17-0/1-0 MSD	127079	12.72				
180-60202-3	HD-CW-1-0/1-0	132943	12.72				
180-60202-4	HD-CW-1A-0/1-0	133072	12.72				
180-60202-1	HD-CW-7A-0/1-0	134840	12.72				
180-60202-2 DL	HD-CW-3-0/1-0 DL	135890	12.72				
180-60202-7	HD-CW-9-0/1-0	128794	12.72				
180-60202-8	HD-CW-20-0/1-0	135512	12.72				
180-60202-9	HD-CW-13-0/1-0	125421	12.72				
180-60202-10	HD-CW-15A-0/1-0	135863	12.72				
180-60202-2	HD-CW-3-0/1-0	138541	12.72				

DCBd4 = 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.: 180-60202-1

SDG No.:

Sample No.: CCVIS 180-192920/2 Date Analyzed: 11/01/2016 10:35

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

Lab File ID (Standard): 51101002.D Heated Purge: (Y/N) N

Calibration ID: 33332

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		115749	4.28	396125	7.27	94552	10.38
UPPER LIMIT		231498	4.78	792250	7.77	189104	10.88
LOWER LIMIT		57875	3.78	198063	6.77	47276	9.88
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-192920/6		135837	4.27	364627	7.27	93580	10.38
LCS 180-192920/10		125629	4.28	358485	7.27	85780	10.37
180-60202-4 DL	HD-CW-1A-0/1-0 DL	145721	4.27	354885	7.27	90420	10.37
180-60202-5	HD-CW-2-0/1-0	137669	4.27	352195	7.28	89491	10.37
180-60202-6	HD-CW-7-0/1-0	163237	4.26	362484	7.28	94735	10.38
180-60202-12	HD-QC3-0/1-1	140960	4.26	378629	7.28	95158	10.37
180-60202-13	INFLUENT TO #003 GWTS	121676	4.27	372754	7.27	94874	10.37
180-60202-14	OUTFALL #003 GWTS	130862	4.27	355834	7.27	91484	10.37
180-60202-15	HD-CW-6-0/1-0	148052	4.27	355897	7.27	91582	10.37
180-60202-16	HD-CW-4-0/1-0	160964	4.27	353219	7.27	91804	10.38
180-60202-17	HD-CW-5-0/1-0	145457	4.27	367283	7.27	95031	10.37

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBNZd5 = 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.: 180-60202-1

SDG No.:

Sample No.: CCVIS 180-192920/2 Date Analyzed: 11/01/2016 10:35

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

Lab File ID (Standard): 51101002.D Heated Purge: (Y/N) N

Calibration ID: 33332

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		136902	12.72				
UPPER LIMIT		273804	13.22				
LOWER LIMIT		68451	12.22				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-192920/6		148761	12.72				
LCS 180-192920/10		128003	12.72				
180-60202-4 DL	HD-CW-1A-0/1-0 DL	138292	12.72				
180-60202-5	HD-CW-2-0/1-0	139395	12.72				
180-60202-6	HD-CW-7-0/1-0	145669	12.72				
180-60202-12	HD-QC3-0/1-1	142538	12.72				
180-60202-13	INFLUENT TO #003 GWTS	145586	12.72				
180-60202-14	OUTFALL #003 GWTS	140876	12.72				
180-60202-15	HD-CW-6-0/1-0	137505	12.72				
180-60202-16	HD-CW-4-0/1-0	141380	12.72				
180-60202-17	HD-CW-5-0/1-0	149330	12.72				

DCBd4 = 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.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-7A-0/1-0 | Lab Sample ID: 180-60202-1

Matrix: Water | Lab File ID: 51031023.D

Analysis Method: 8260C | Date Collected: 10/25/2016 07:25

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 18:34

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	2.0	U	2.0	0.46
75-01-4	Vinyl chloride	2.0	U	2.0	0.63
74-83-9	Bromomethane	2.0	U	2.0	0.72
75-00-3	Chloroethane	2.0	U	2.0	0.52
75-35-4	1,1-Dichloroethene	2.0	U	2.0	0.57
67-64-1	Acetone	10	U	10	5.0
75-15-0	Carbon disulfide	2.0	U	2.0	0.37
75-09-2	Methylene Chloride	2.0	U	2.0	0.72
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	0.57
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	0.49
75-34-3	1,1-Dichloroethane	2.0	U	2.0	0.47
156-59-2	cis-1,2-Dichloroethene	1.9	J	2.0	0.57
74-97-5	Bromochloromethane	2.0	U	2.0	0.75
78-93-3	2-Butanone (MEK)	10	U	10	2.3
67-66-3	Chloroform	1.1	J	2.0	0.55
71-55-6	1,1,1-Trichloroethane	2.0	U	2.0	0.44
56-23-5	Carbon tetrachloride	2.0	U	2.0	0.49
71-43-2	Benzene	2.0	U	2.0	0.51
107-06-2	1,2-Dichloroethane	2.0	U	2.0	0.49
79-01-6	Trichloroethene	86		2.0	0.52
78-87-5	1,2-Dichloropropane	2.0	U	2.0	0.45
75-27-4	Bromodichloromethane	2.0	U	2.0	0.47
10061-01-5	cis-1,3-Dichloropropene	2.0	U	2.0	0.41
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	1.2
108-88-3	Toluene	2.0	U	2.0	0.56
10061-02-6	trans-1,3-Dichloropropene	2.0	U	2.0	0.48
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	0.70
127-18-4	Tetrachloroethene	5.6		2.0	0.54
591-78-6	2-Hexanone	10	U	10	1.5
124-48-1	Dibromochloromethane	2.0	U	2.0	0.79
106-93-4	1,2-Dibromoethane (EDB)	2.0	U	2.0	0.58
108-90-7	Chlorobenzene	2.0	U	2.0	0.63
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.39
100-41-4	Ethylbenzene	2.0	U	2.0	0.55
1330-20-7	Xylenes, Total	4.0	U	4.0	0.97
100-42-5	Styrene	2.0	U	2.0	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-7A-0/1-0 | Lab Sample ID: 180-60202-1

Matrix: Water | Lab File ID: 51031023.D

Analysis Method: 8260C | Date Collected: 10/25/2016 07:25

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 18:34

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	2.0	U	2.0	0.59
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.69
107-13-1	Acrylonitrile	40	U	40	5.5
123-91-1	1,4-Dioxane	400	U ^c	400	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		72-134
2037-26-5	Toluene-d8 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		72-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031023.D
Lims ID: 180-60202-B-1
Client ID: HD-CW-7A-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 18:34:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0014116-023
Misc. Info.: 180-60202-B-1, 2x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:36:35 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:36:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.272	4.279	-0.007	0	124943	1000.0	
* 2 Fluorobenzene (IS)	96	7.277	7.272	0.005	97	333508	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.375	-0.002	91	89006	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.723	-0.001	97	134840	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.553	6.548	0.005	93	81313	51.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.924	6.919	0.005	0	116465	50.6	
$ 7 Toluene-d8 (Surr)	98	8.919	8.921	-0.002	95	324471	48.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.561	-0.001	86	134043	49.4	
12 Chloromethane	50		1.767				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.229				ND	
16 Chloroethane	64		2.375				ND	
22 1,1-Dichloroethene	96		3.330				ND	
24 Acetone	43	3.463	3.440	0.023	67	1513	1.76	
26 Carbon disulfide	76		3.616				ND	
31 Methylene Chloride	84	4.138	4.121	0.017	63	2022	0.9583	
33 Acrylonitrile	53		4.516				ND	
34 trans-1,2-Dichloroethene	96		4.553				ND	
35 Methyl tert-butyl ether	73		4.565				ND	
37 1,1-Dichloroethane	63		5.186				ND	
45 cis-1,2-Dichloroethene	96	5.932	5.934	-0.002	85	9850	4.86	
46 2-Butanone (MEK)	43		5.952				ND	
49 Chlorobromomethane	128		6.220				ND	
52 Chloroform	83	6.377	6.360	0.017	97	8924	2.74	
53 1,1,1-Trichloroethane	97		6.524				ND	
56 Carbon tetrachloride	117		6.700				ND	
58 Benzene	78		6.925				ND	
59 1,2-Dichloroethane	62		7.005				ND	
64 Trichloroethene	130	7.660	7.662	-0.002	95	399278	214.1	
67 1,2-Dichloropropane	63		7.935				ND	
70 1,4-Dioxane	88		8.014				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.215				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.817				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.243				ND	
79 1,1,2-Trichloroethane	97		9.432				ND	
80 Tetrachloroethene	164	9.503	9.505	-0.002	97	22412	13.9	
82 2-Hexanone	43		9.645				ND	
84 Chlorodibromomethane	129		9.809				ND	
85 Ethylene Dibromide	107		9.918				ND	
87 Chlorobenzene	112		10.405				ND	
89 1,1,1,2-Tetrachloroethane	131		10.503				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.636				ND	
92 o-Xylene	106		11.020				ND	
93 Styrene	104		11.038				ND	
94 Bromoform	173		11.220				ND	
99 1,1,2,2-Tetrachloroethane	83		11.695				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

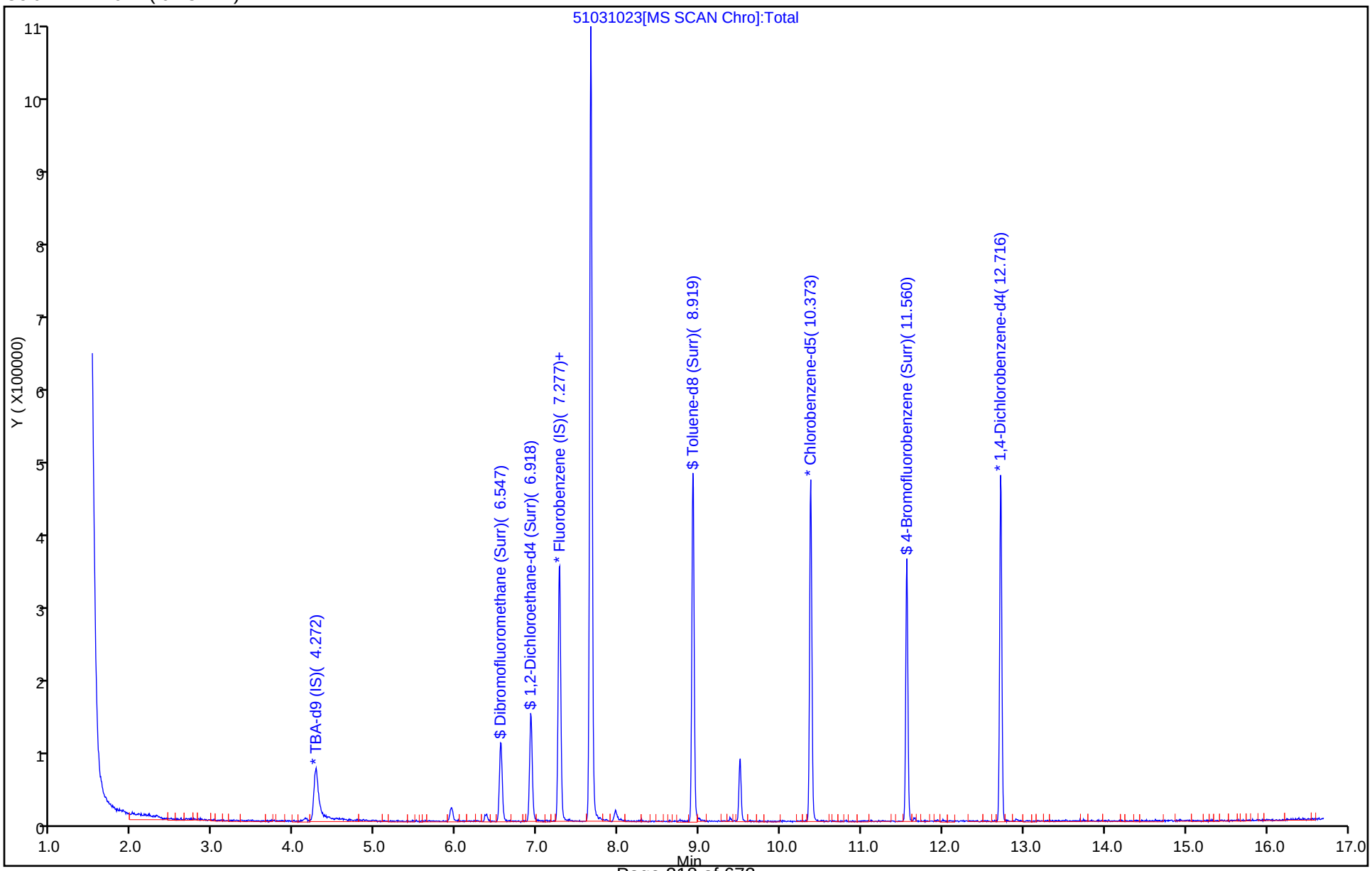
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 01-Nov-2016 07:36:36 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031023.D				
Injection Date:	31-Oct-2016 18:34:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-B-1	Lab Sample ID:	180-60202-1	Worklist Smp#:	23
Client ID:	HD-CW-7A-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	22
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031023.D
Lims ID: 180-60202-B-1
Client ID: HD-CW-7A-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 18:34:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0014116-023
Misc. Info.: 180-60202-B-1, 2x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:36:35 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:36:35

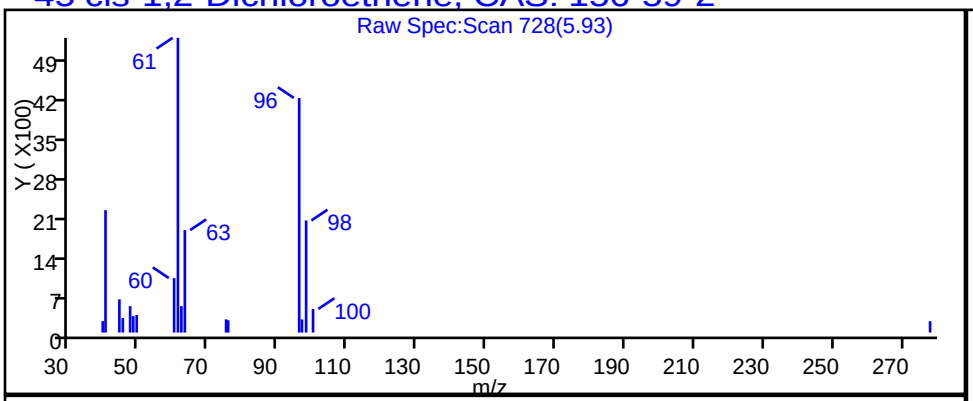
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.0	101.92
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.6	101.12
$ 7 Toluene-d8 (Surr)	50.0	48.3	96.60
$ 8 4-Bromofluorobenzene (Surr)	50.0	49.4	98.71

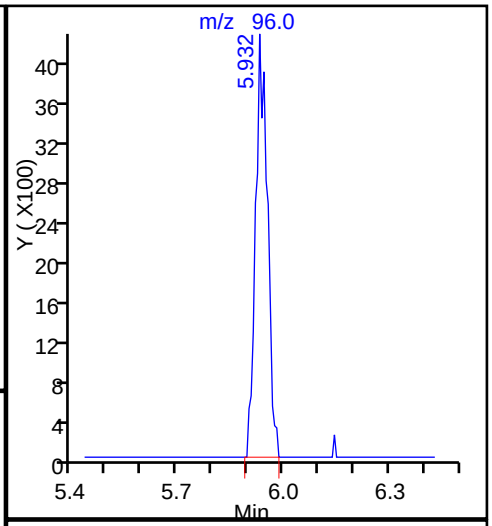
Report Date: 01-Nov-2016 07:36:36 Chrom Revision: 2.2 17-Oct-2016 09:27:18

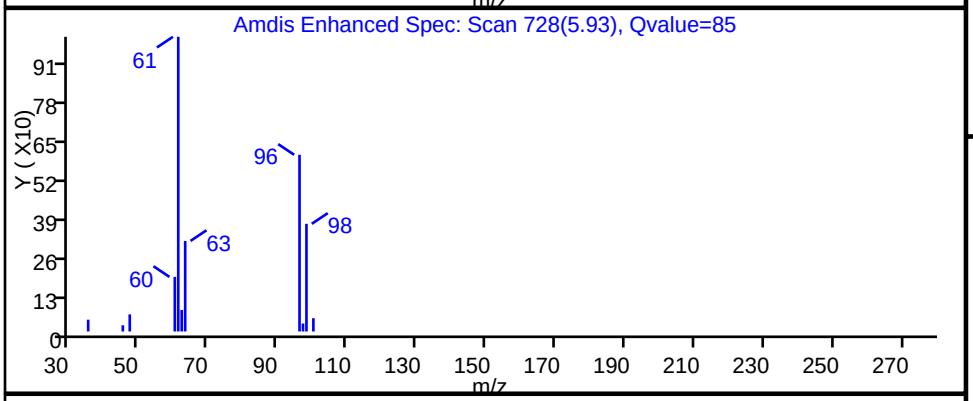
TestAmerica Pittsburgh

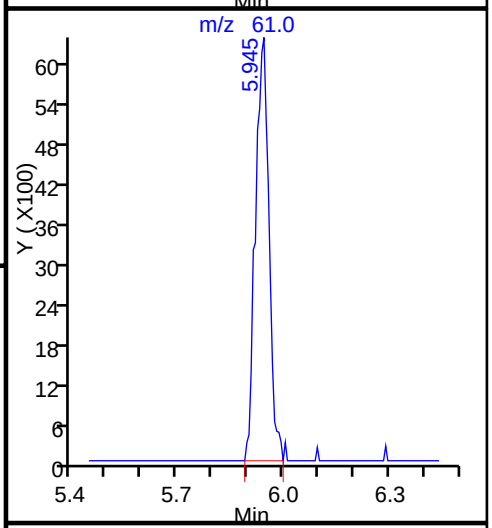
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031023.D		
Injection Date:	31-Oct-2016 18:34:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-1	Lab Sample ID:	180-60202-1
Client ID:	HD-CW-7A-0/1-0		
Operator ID:	001562	ALS Bottle#:	22 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

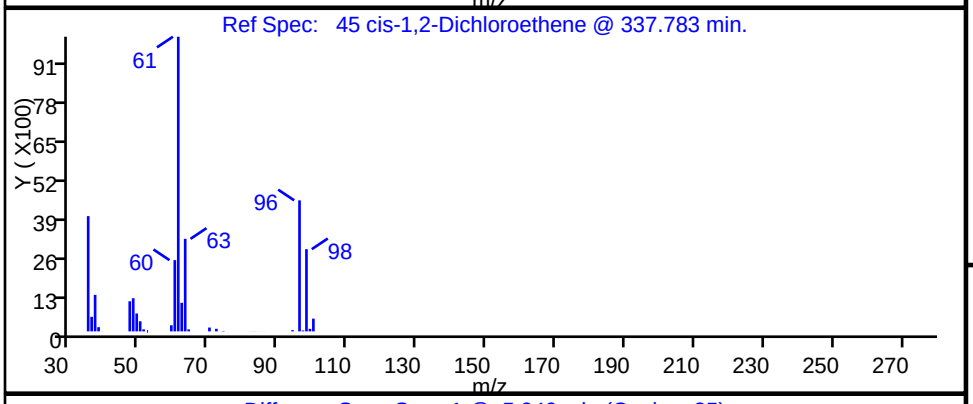
45 cis-1,2-Dichloroethene, CAS: 156-59-2

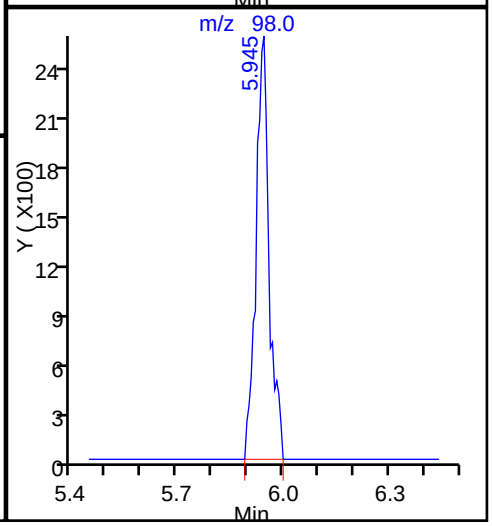


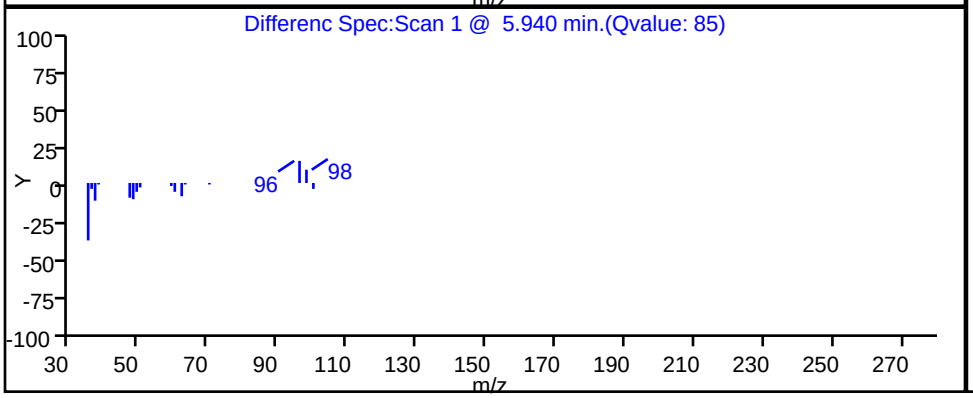










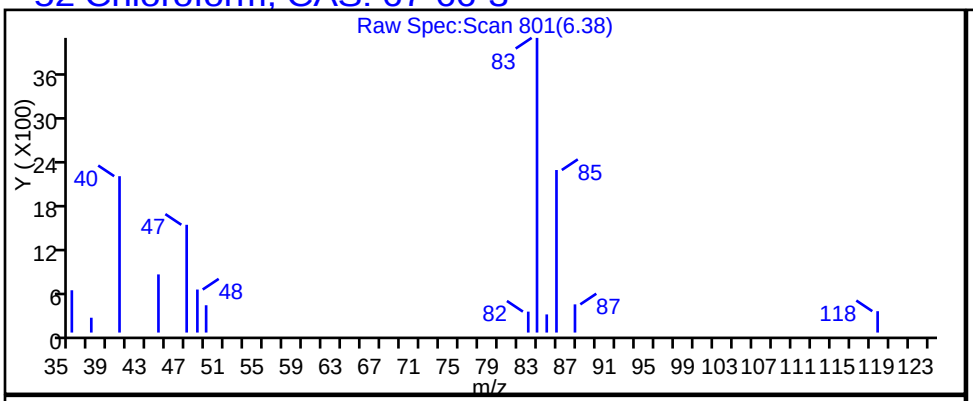


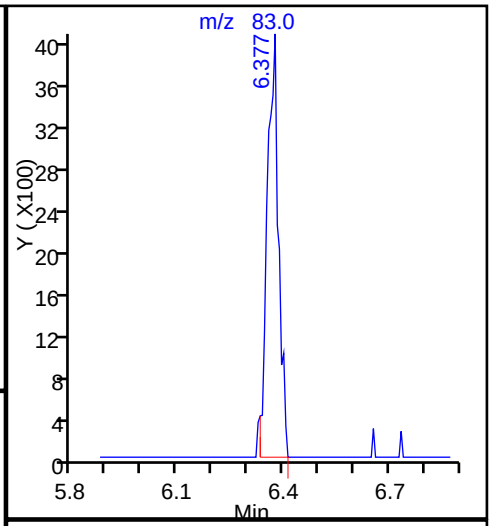
Report Date: 01-Nov-2016 07:36:36 Chrom Revision: 2.2 17-Oct-2016 09:27:18

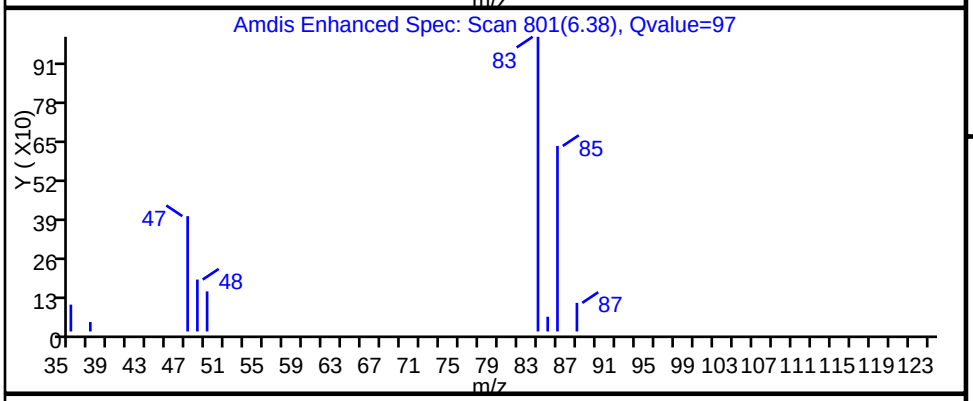
TestAmerica Pittsburgh

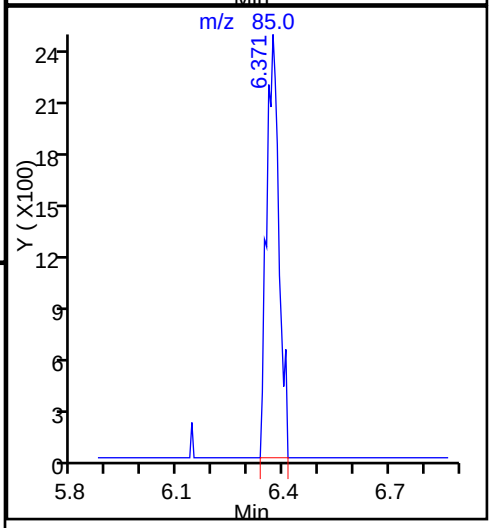
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031023.D		
Injection Date:	31-Oct-2016 18:34:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-1	Lab Sample ID:	180-60202-1
Client ID:	HD-CW-7A-0/1-0		
Operator ID:	001562	ALS Bottle#:	22 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

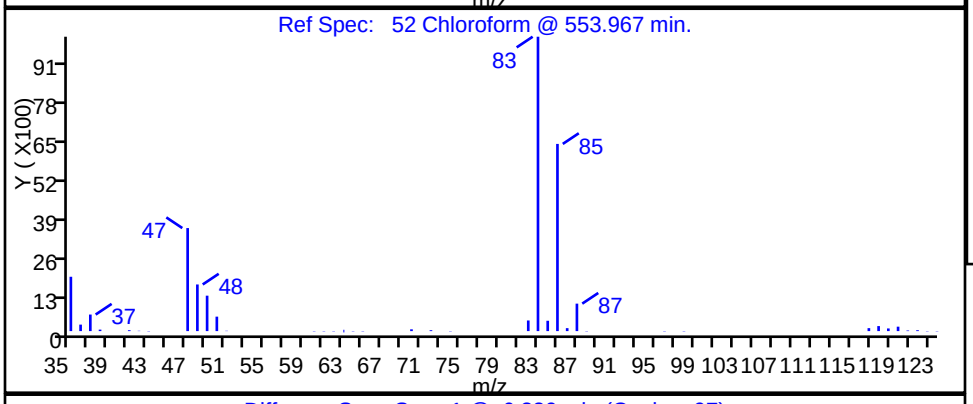
52 Chloroform, CAS: 67-66-3

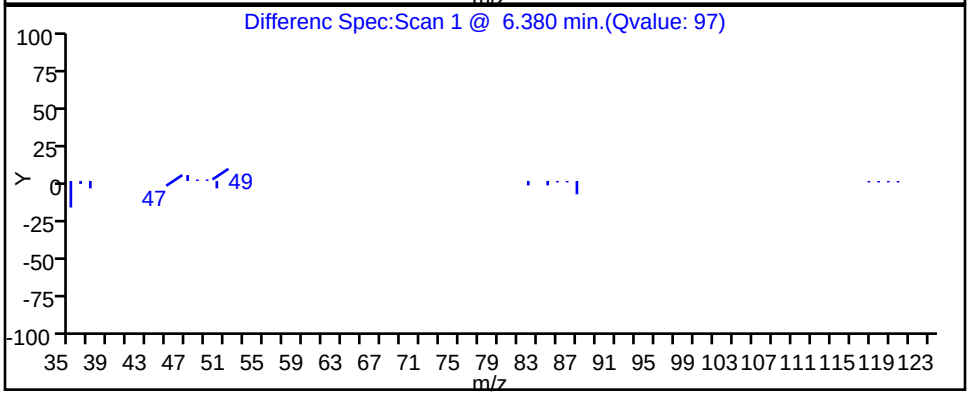












Report Date: 01-Nov-2016 07:36:36 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031023.D

Injection Date: 31-Oct-2016 18:34:30 Instrument ID: CHHP5

Lims ID: 180-60202-B-1 Lab Sample ID: 180-60202-1

Client ID: HD-CW-7A-0/1-0

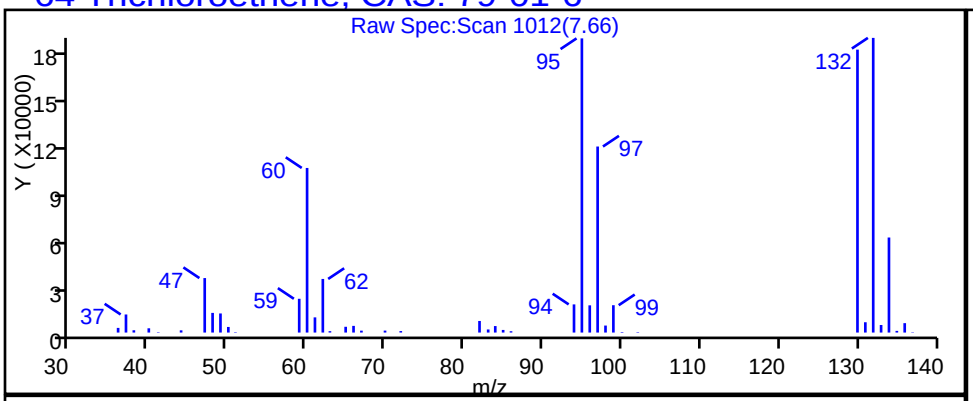
Operator ID: 001562 ALS Bottle#: 22 Worklist Smp#: 23

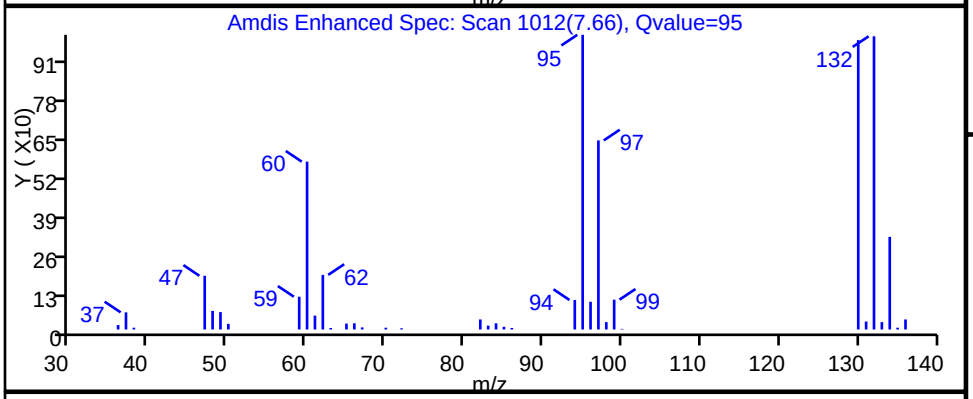
Purge Vol: 5.000 mL Dil. Factor: 2.0000

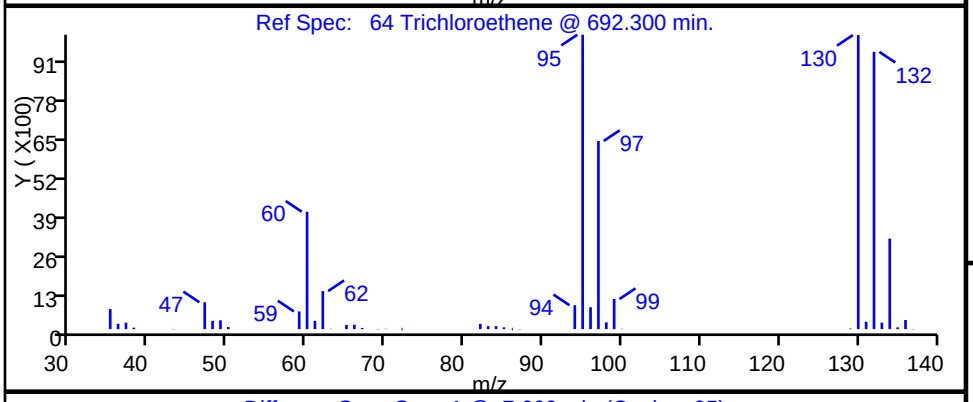
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

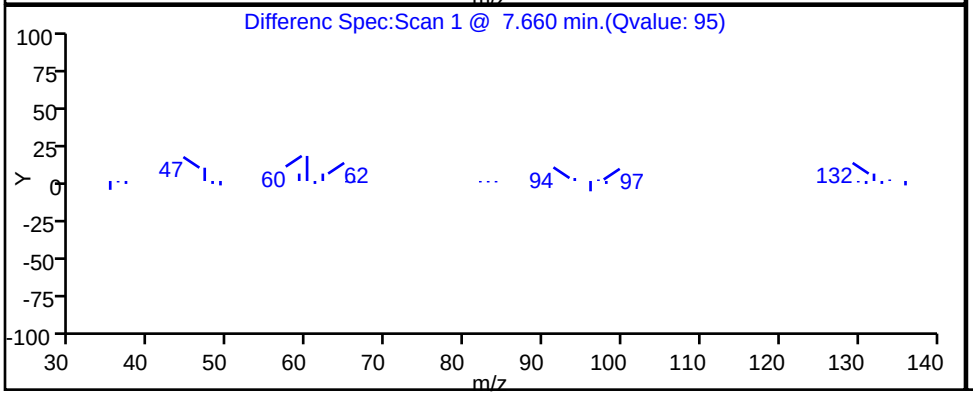
Column: DB-624 (0.18 mm) Detector MS SCAN

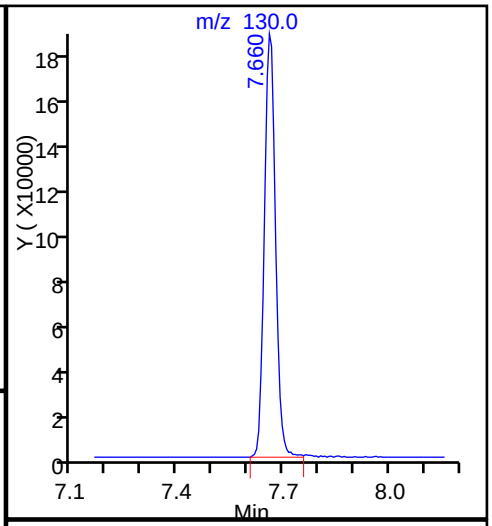
64 Trichloroethene, CAS: 79-01-6

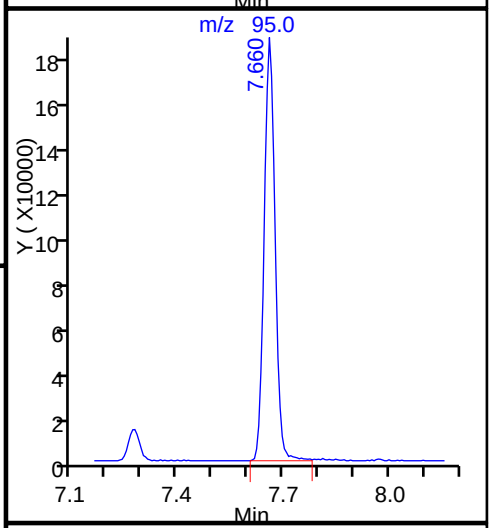


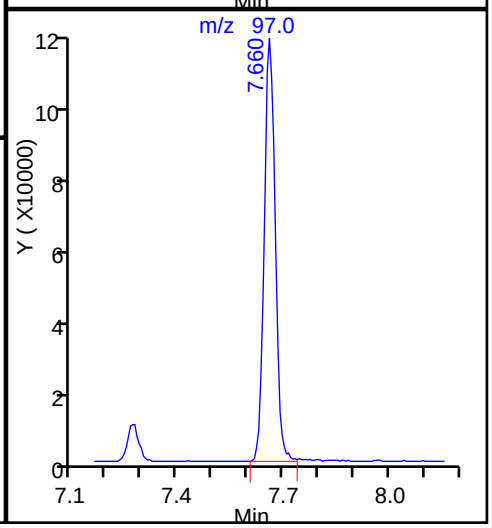










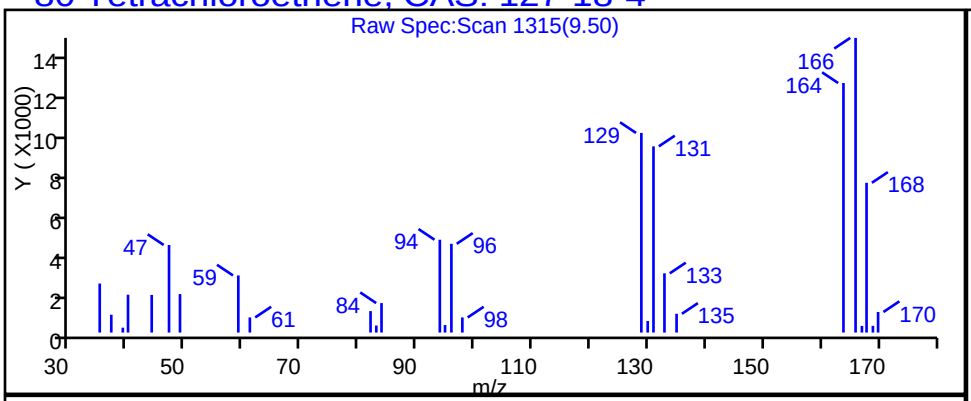


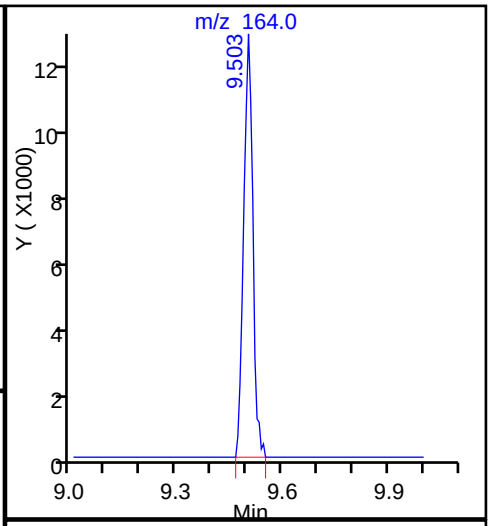
Report Date: 01-Nov-2016 07:36:36 Chrom Revision: 2.2 17-Oct-2016 09:27:18

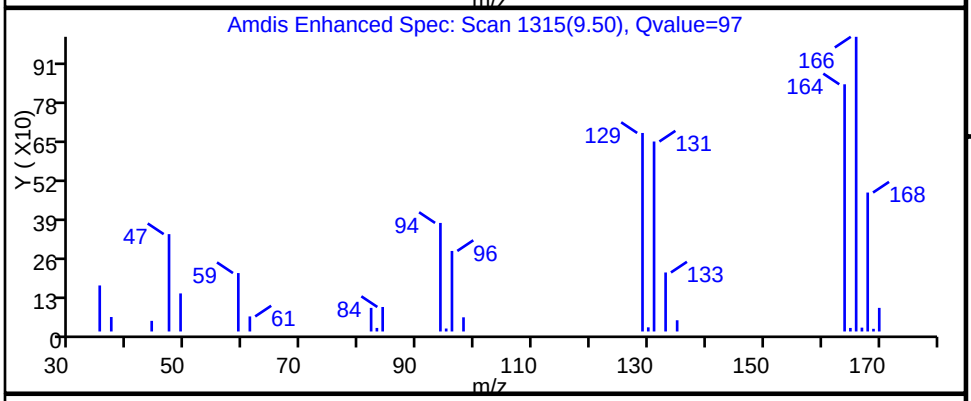
TestAmerica Pittsburgh

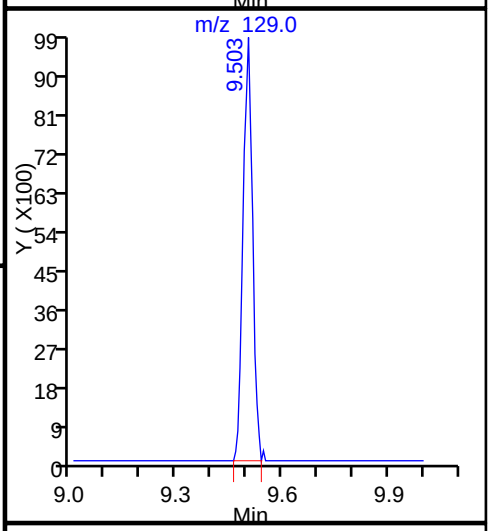
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031023.D		
Injection Date:	31-Oct-2016 18:34:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-1	Lab Sample ID:	180-60202-1
Client ID:	HD-CW-7A-0/1-0		
Operator ID:	001562	ALS Bottle#:	22 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

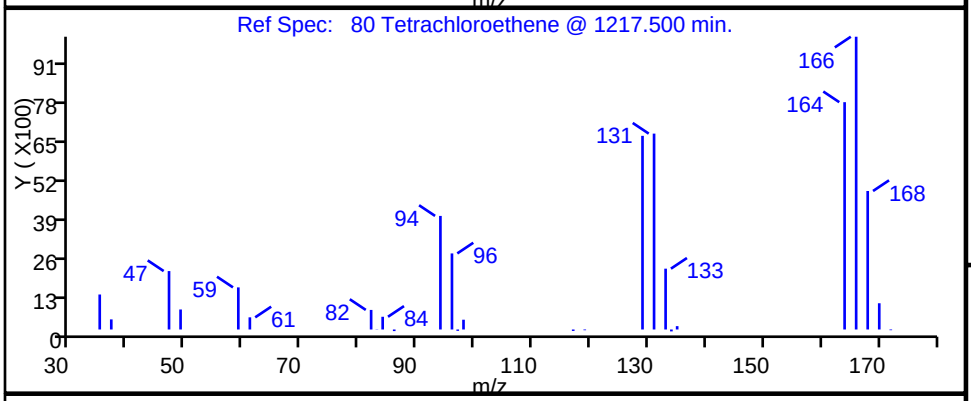
80 Tetrachloroethene, CAS: 127-18-4

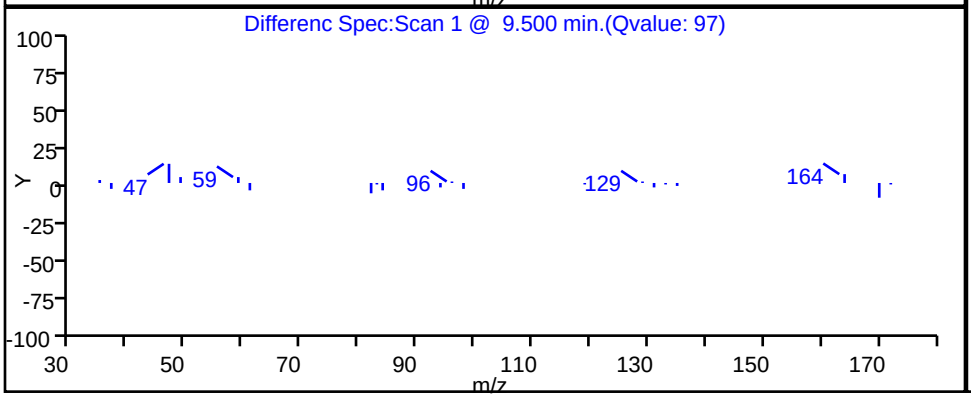


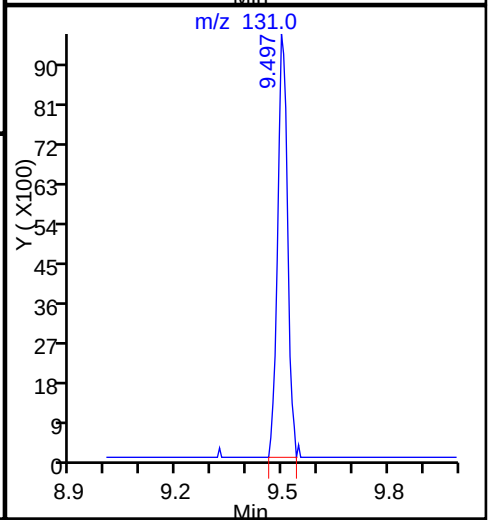












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-3-0/1-0 | Lab Sample ID: 180-60202-2

Matrix: Water | Lab File ID: 51031030.D

Analysis Method: 8260C | Date Collected: 10/25/2016 08:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 21:23

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	2.0	U	2.0	0.46
75-01-4	Vinyl chloride	2.0	U	2.0	0.63
74-83-9	Bromomethane	2.0	U	2.0	0.72
75-00-3	Chloroethane	2.0	U	2.0	0.52
75-35-4	1,1-Dichloroethene	2.0	U	2.0	0.57
67-64-1	*Acetone*	*570*	*E*	*10*	*5.0*
75-15-0	Carbon disulfide	2.0	U	2.0	0.37
75-09-2	Methylene Chloride	2.0	U	2.0	0.72
156-60-5	trans-1,2-Dichloroethene	1.6	J	2.0	0.57
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	0.49
75-34-3	1,1-Dichloroethane	2.0	U	2.0	0.47
156-59-2	cis-1,2-Dichloroethene	33		2.0	0.57
74-97-5	Bromochloromethane	2.0	U	2.0	0.75
78-93-3	2-Butanone (MEK)	10	U	10	2.3
67-66-3	Chloroform	2.0	U	2.0	0.55
71-55-6	1,1,1-Trichloroethane	2.0	U	2.0	0.44
56-23-5	Carbon tetrachloride	2.0	U	2.0	0.49
71-43-2	Benzene	2.0	U	2.0	0.51
107-06-2	1,2-Dichloroethane	2.0	U	2.0	0.49
79-01-6	Trichloroethene	2.0	U	2.0	0.52
78-87-5	1,2-Dichloropropane	2.0	U	2.0	0.45
75-27-4	Bromodichloromethane	2.0	U	2.0	0.47
10061-01-5	cis-1,3-Dichloropropene	2.0	U	2.0	0.41
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	1.2
108-88-3	Toluene	2.0	U	2.0	0.56
10061-02-6	trans-1,3-Dichloropropene	2.0	U	2.0	0.48
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	0.70
127-18-4	Tetrachloroethene	2.0	U	2.0	0.54
591-78-6	2-Hexanone	10	U	10	1.5
124-48-1	Dibromochloromethane	1.9	J	2.0	0.79
106-93-4	1,2-Dibromoethane (EDB)	2.0	U	2.0	0.58
108-90-7	Chlorobenzene	2.0	U	2.0	0.63
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.39
100-41-4	Ethylbenzene	2.0	U	2.0	0.55
1330-20-7	Xylenes, Total	4.0	U	4.0	0.97
100-42-5	Styrene	2.0	U	2.0	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-3-0/1-0 | Lab Sample ID: 180-60202-2

Matrix: Water | Lab File ID: 51031030.D

Analysis Method: 8260C | Date Collected: 10/25/2016 08:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 21:23

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	11		2.0	0.59
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.69
107-13-1	Acrylonitrile	40	U	40	5.5
123-91-1	1,4-Dioxane	400	U ^c	400	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		72-134
2037-26-5	Toluene-d8 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	101		72-120
1868-53-7	Dibromofluoromethane (Surr)	107		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031030.D
Lims ID: 180-60202-B-2
Client ID: HD-CW-3-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 21:23:30 ALS Bottle#: 29 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0014116-030
Misc. Info.: 180-60202-B-2, 2x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:52:41 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:52:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.272	4.279	-0.007	0	179534	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.272	-0.001	97	332349	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.375	-0.002	92	87595	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.723	-0.001	97	138541	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.548	-0.001	94	84970	53.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.919	-0.001	0	118192	51.5	
$ 7 Toluene-d8 (Surr)	98	8.919	8.921	-0.002	96	319953	48.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.561	-0.001	86	135416	50.7	
12 Chloromethane	50		1.767				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.229				ND	
16 Chloroethane	64		2.375				ND	
22 1,1-Dichloroethene	96		3.330				ND	
24 Acetone	43	3.438	3.440	-0.002	98	1210966	1415.5	E
26 Carbon disulfide	76		3.616				ND	
31 Methylene Chloride	84	4.132	4.121	0.011	22	1648	0.7838	
33 Acrylonitrile	53		4.516				ND	
34 trans-1,2-Dichloroethene	96	4.558	4.553	0.005	89	7464	4.08	
35 Methyl tert-butyl ether	73		4.565				ND	
37 1,1-Dichloroethane	63		5.186				ND	
45 cis-1,2-Dichloroethene	96	5.938	5.934	0.004	86	166546	82.4	
46 2-Butanone (MEK)	43		5.952				ND	
49 Chlorobromomethane	128		6.220				ND	
52 Chloroform	83		6.360				ND	
53 1,1,1-Trichloroethane	97		6.524				ND	
56 Carbon tetrachloride	117		6.700				ND	
58 Benzene	78		6.925				ND	
59 1,2-Dichloroethane	62		7.005				ND	
64 Trichloroethene	130	7.660	7.662	-0.002	16	1264	0.6801	
67 1,2-Dichloropropane	63		7.935				ND	
70 1,4-Dioxane	88		8.014				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.215				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.817				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.243				ND	
79 1,1,2-Trichloroethane	97		9.432				ND	
80 Tetrachloroethene	164	9.497	9.505	-0.008	10	618	0.3905	
82 2-Hexanone	43		9.645				ND	
84 Chlorodibromomethane	129	9.814	9.809	0.005	86	6506	4.74	
85 Ethylene Dibromide	107		9.918				ND	
87 Chlorobenzene	112		10.405				ND	
89 1,1,1,2-Tetrachloroethane	131		10.503				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.636				ND	
92 o-Xylene	106		11.020				ND	
93 Styrene	104		11.038				ND	
94 Bromoform	173	11.219	11.220	-0.001	95	22876	27.6	
99 1,1,2,2-Tetrachloroethane	83		11.695				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

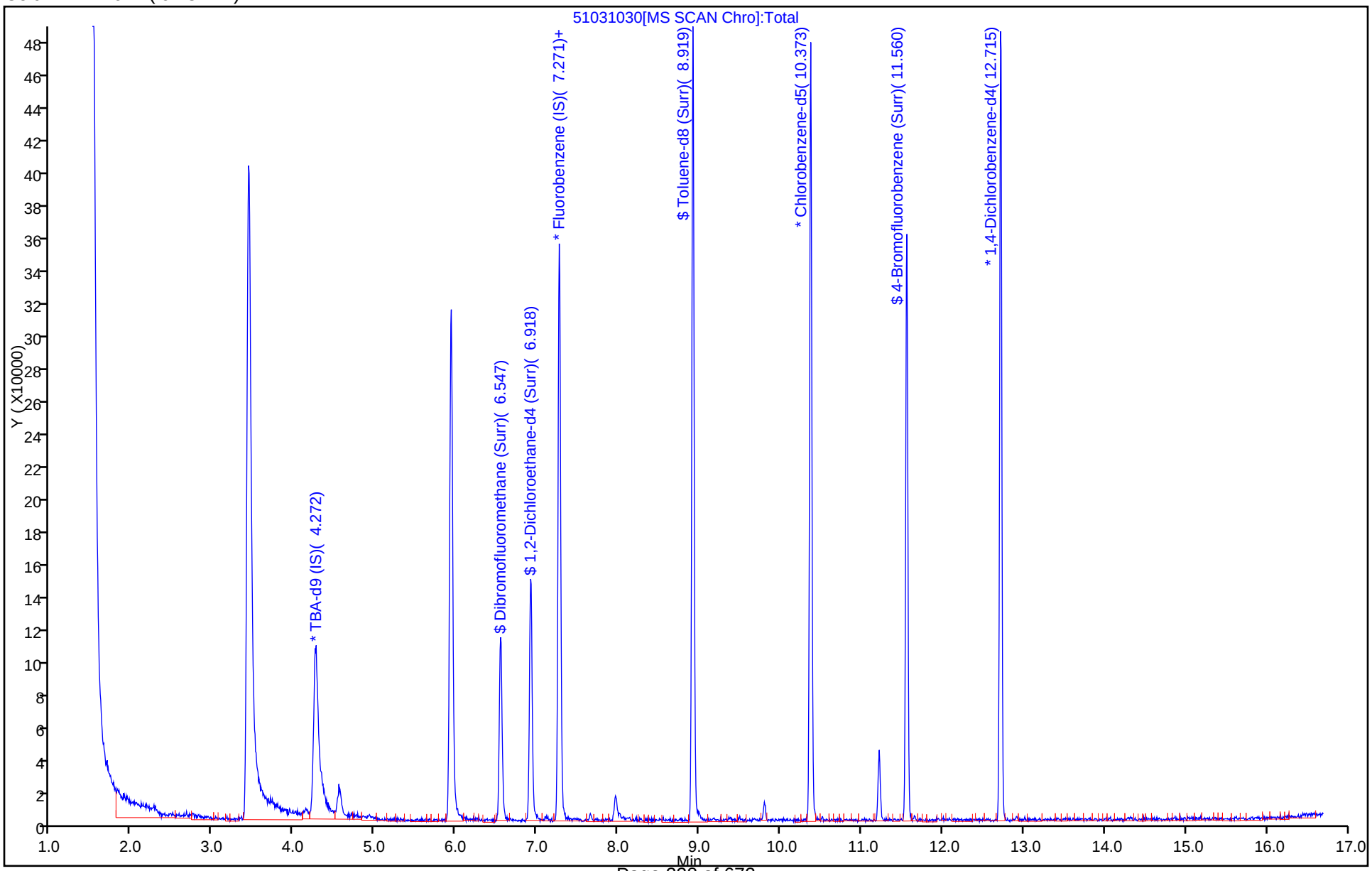
Report Date: 01-Nov-2016 07:52:42 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031030.D

Injection Date:	31-Oct-2016 21:23:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-B-2	Lab Sample ID:	180-60202-2	Worklist Smp#:	30
Client ID:	HD-CW-3-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	29
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031030.D				
Lims ID:	180-60202-B-2				
Client ID:	HD-CW-3-0/1-0				
Sample Type:	Client				
Inject. Date:	31-Oct-2016 21:23:30	ALS Bottle#:	29	Worklist Smp#:	30
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Sample Info:	180-0014116-030				
Misc. Info.:	180-60202-B-2, 2x				
Operator ID:	001562	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	01-Nov-2016 07:52:41	Calib Date:	22-Oct-2016 17:46:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK031				

First Level Reviewer: fergusond Date: 01-Nov-2016 07:52:41

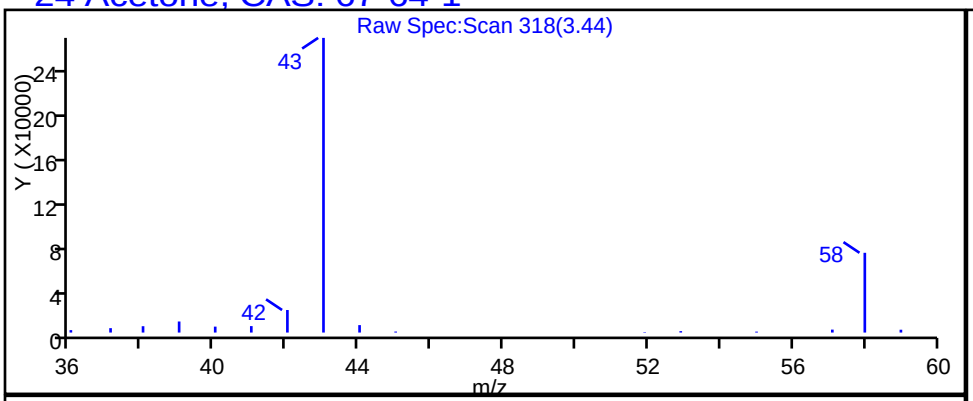
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	53.4	106.87
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	51.5	102.97
$ 7 Toluene-d8 (Surr)	50.0	48.4	96.79
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.7	101.33

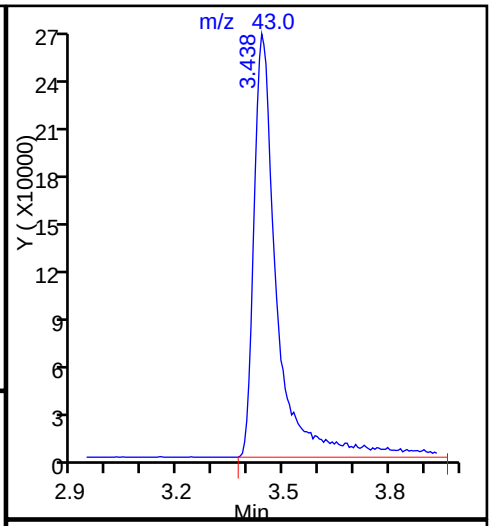
Report Date: 01-Nov-2016 07:52:42 Chrom Revision: 2.2 17-Oct-2016 09:27:18

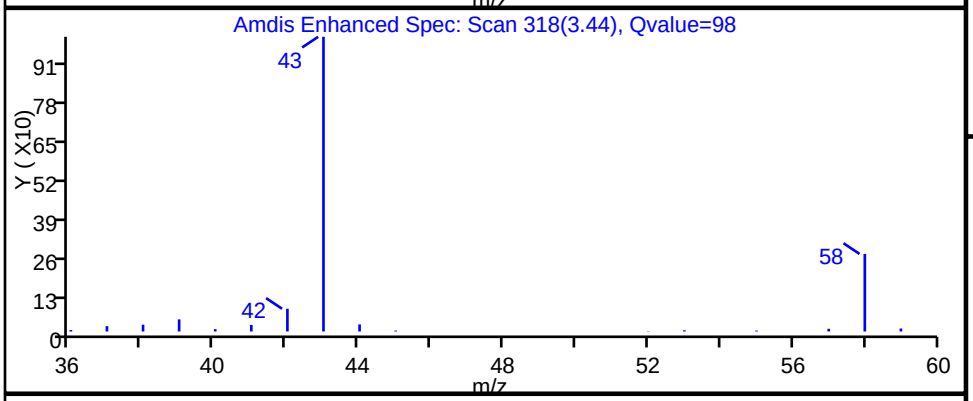
TestAmerica Pittsburgh

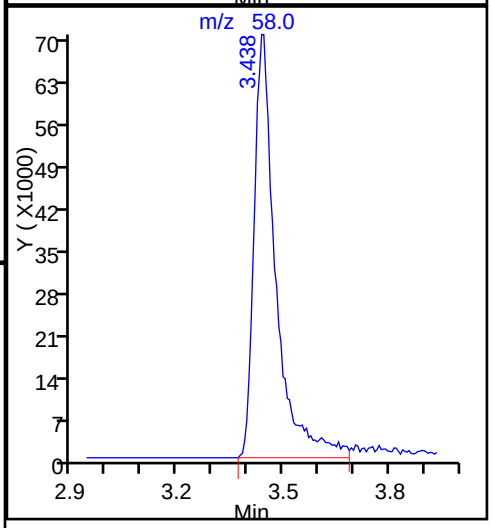
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031030.D		
Injection Date:	31-Oct-2016 21:23:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-2	Lab Sample ID:	180-60202-2
Client ID:	HD-CW-3-0/1-0		
Operator ID:	001562	ALS Bottle#:	29 Worklist Smp#: 30
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

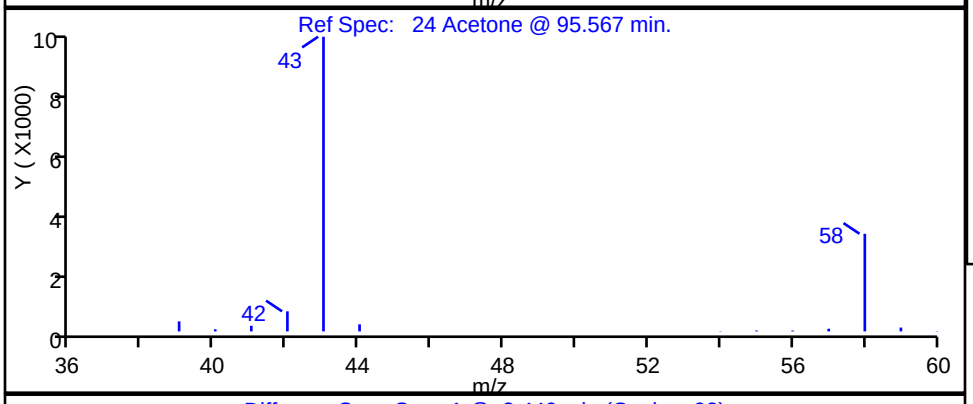
24 Acetone, CAS: 67-64-1

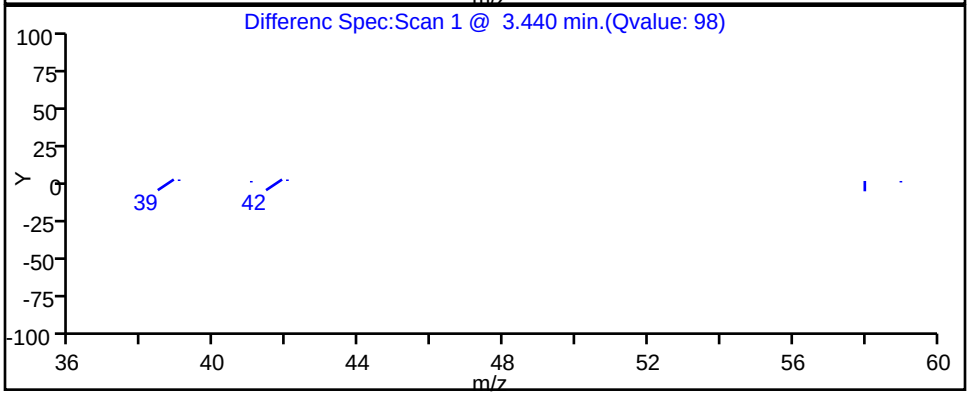










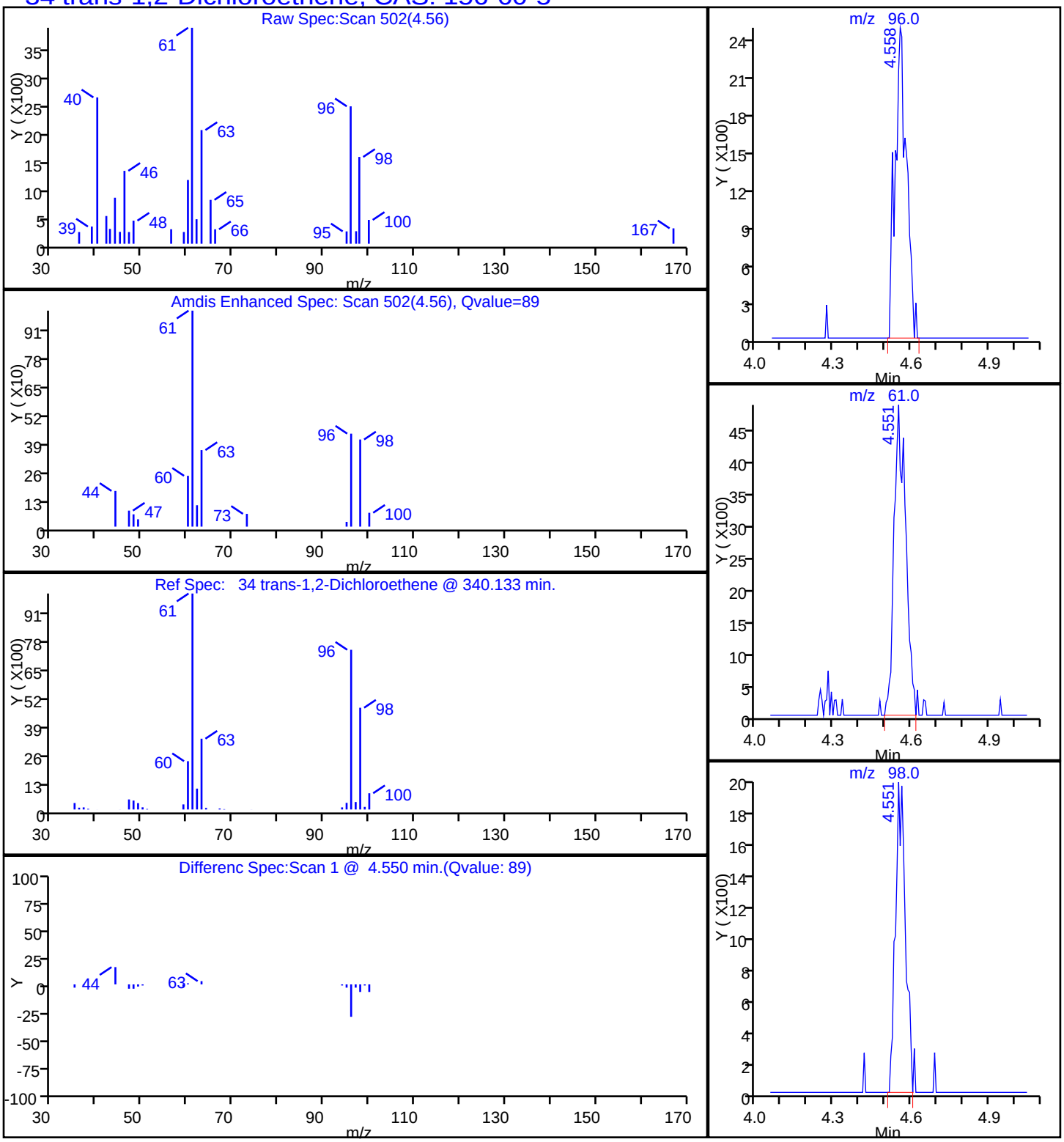


Report Date: 01-Nov-2016 07:52:42 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031030.D				
Injection Date:	31-Oct-2016 21:23:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-2	Lab Sample ID:	180-60202-2		
Client ID:	HD-CW-3-0/1-0				
Operator ID:	001562	ALS Bottle#:	29	Worklist Smp#:	30
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5

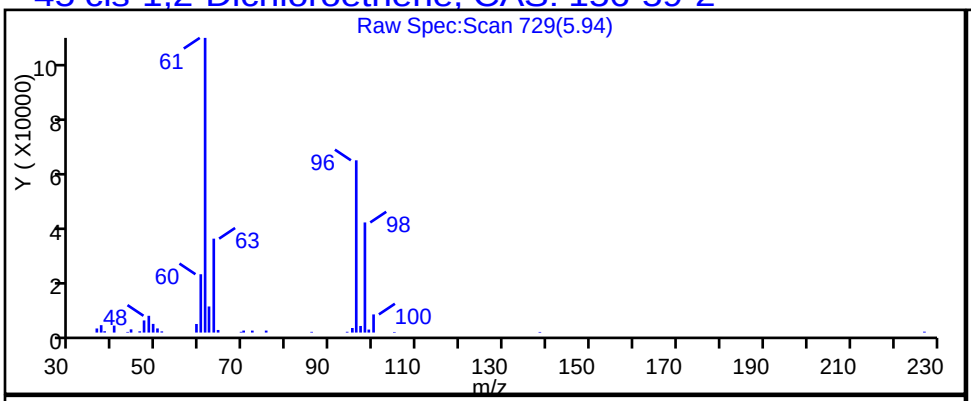


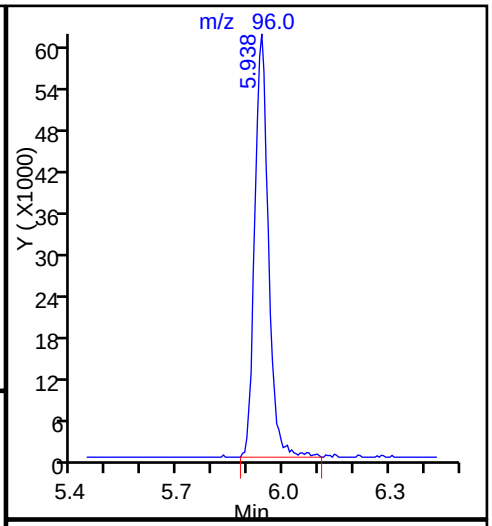
Report Date: 01-Nov-2016 07:52:42 Chrom Revision: 2.2 17-Oct-2016 09:27:18

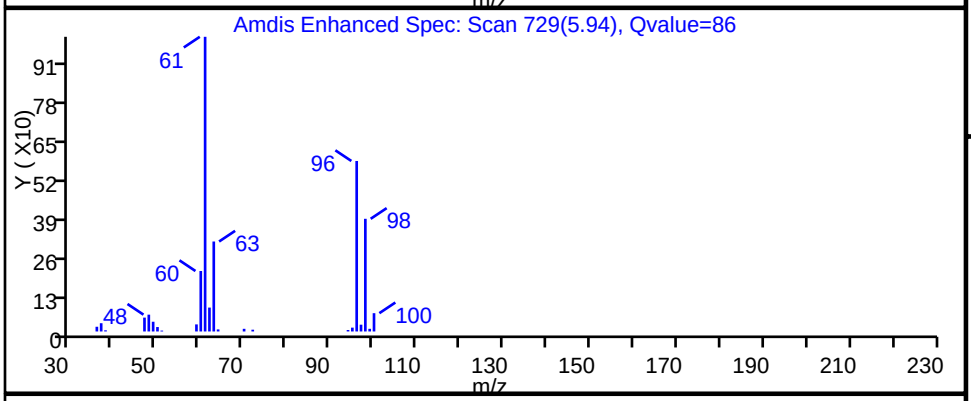
TestAmerica Pittsburgh

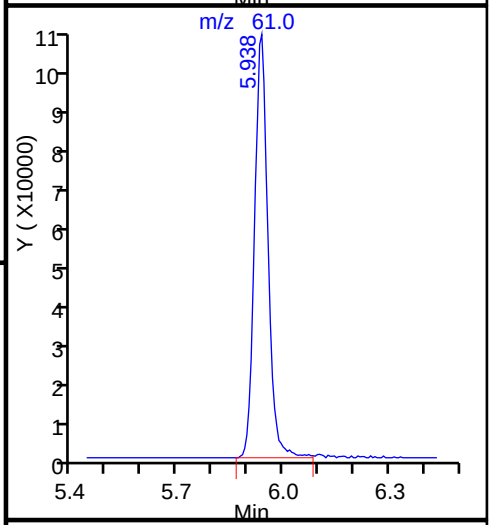
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031030.D		
Injection Date:	31-Oct-2016 21:23:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-2	Lab Sample ID:	180-60202-2
Client ID:	HD-CW-3-0/1-0		
Operator ID:	001562	ALS Bottle#:	29 Worklist Smp#: 30
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

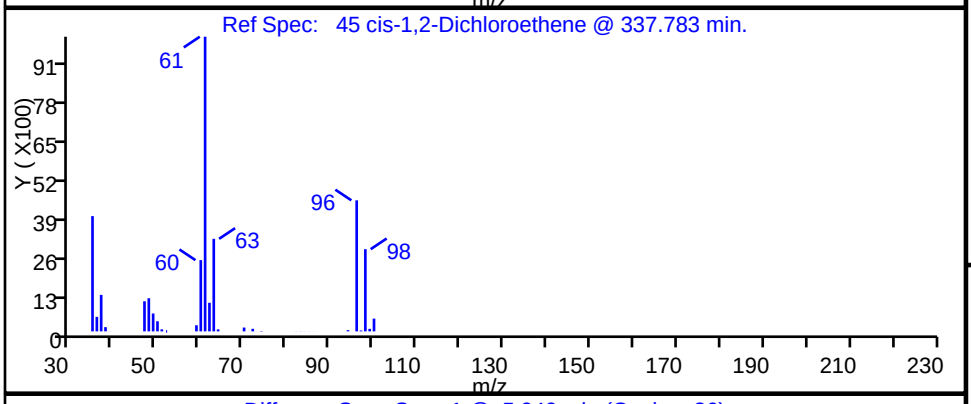
45 cis-1,2-Dichloroethene, CAS: 156-59-2

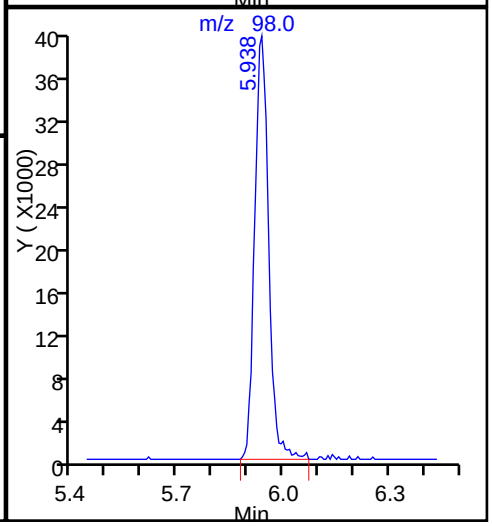


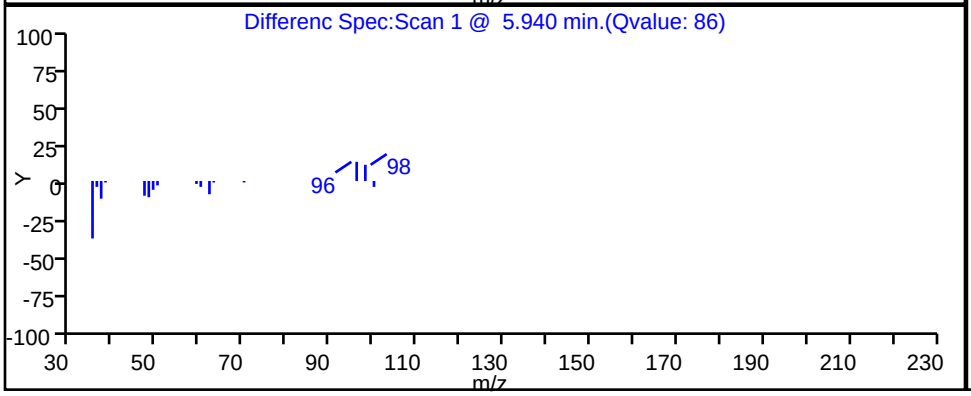










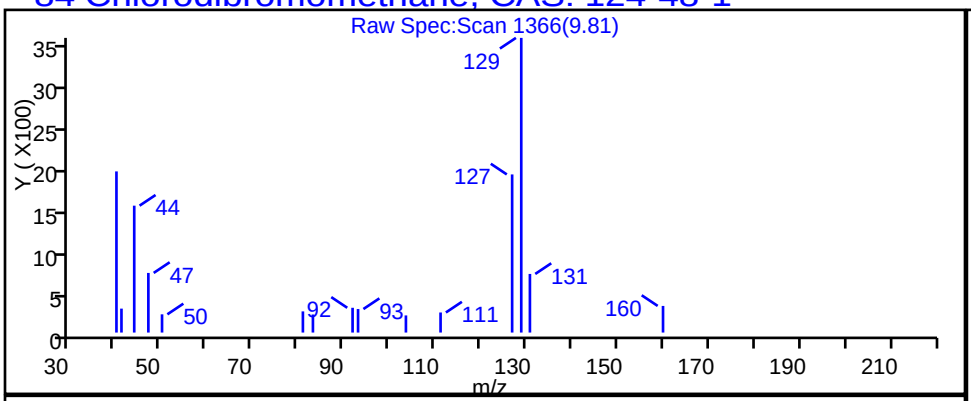


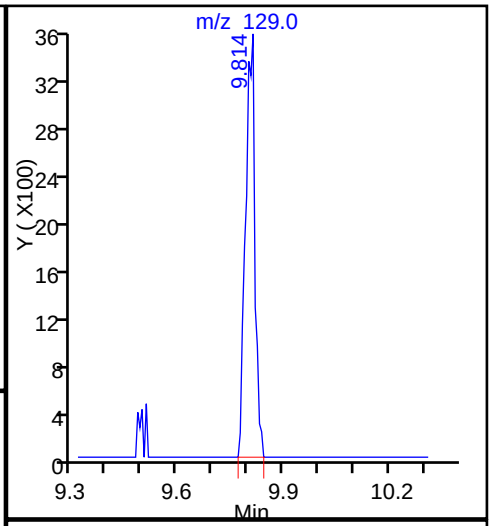
Report Date: 01-Nov-2016 07:52:42 Chrom Revision: 2.2 17-Oct-2016 09:27:18

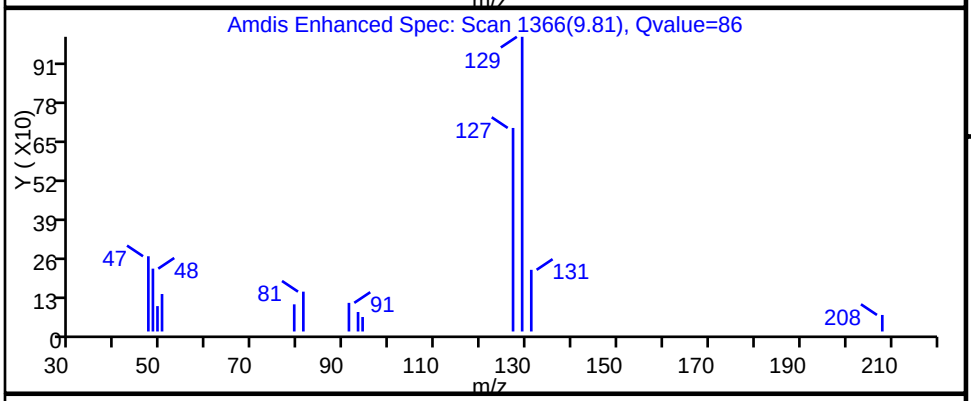
TestAmerica Pittsburgh

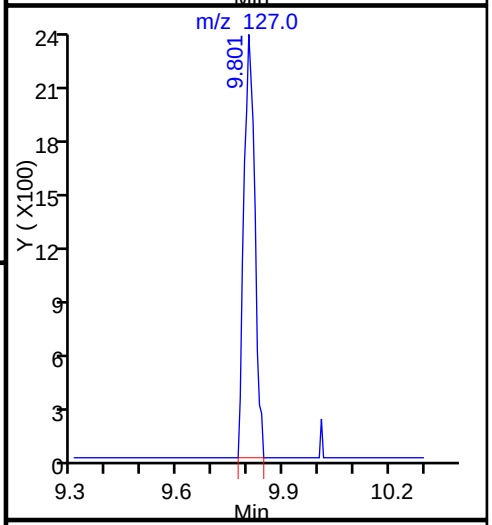
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031030.D				
Injection Date:	31-Oct-2016 21:23:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-2	Lab Sample ID:	180-60202-2		
Client ID:	HD-CW-3-0/1-0				
Operator ID:	001562	ALS Bottle#:	29	Worklist Smp#:	30
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

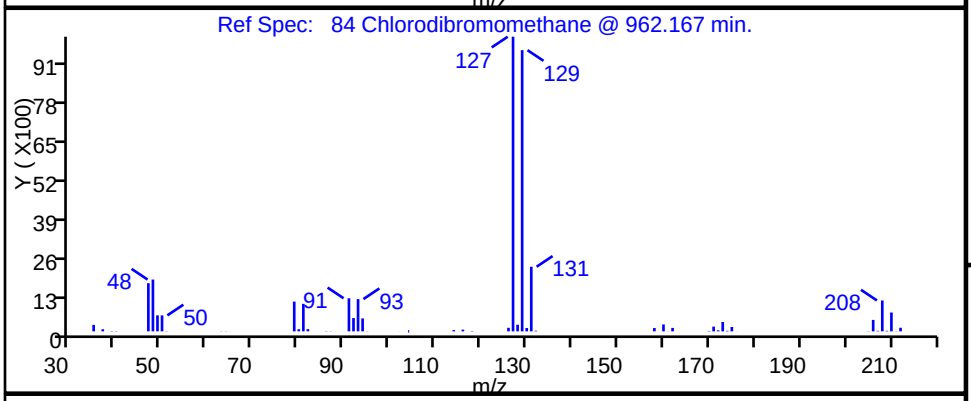
84 Chlorodibromomethane, CAS: 124-48-1

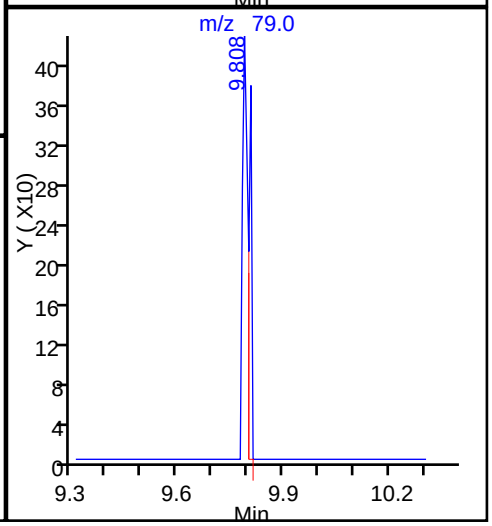


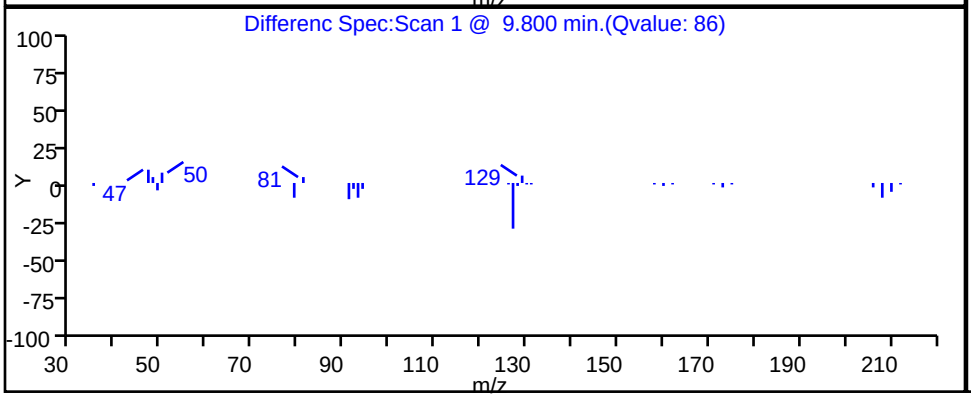










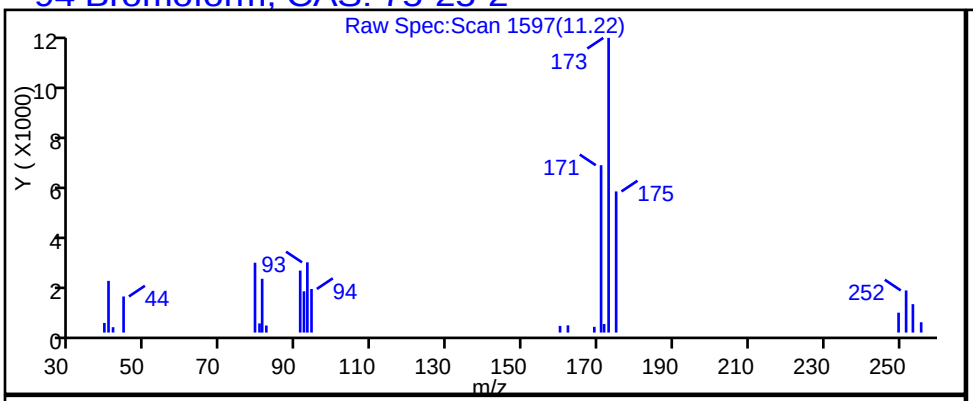


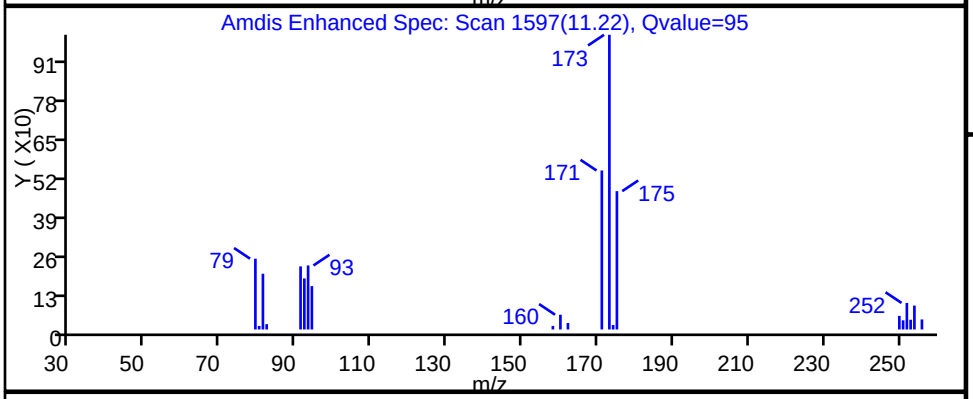
Report Date: 01-Nov-2016 07:52:42 Chrom Revision: 2.2 17-Oct-2016 09:27:18

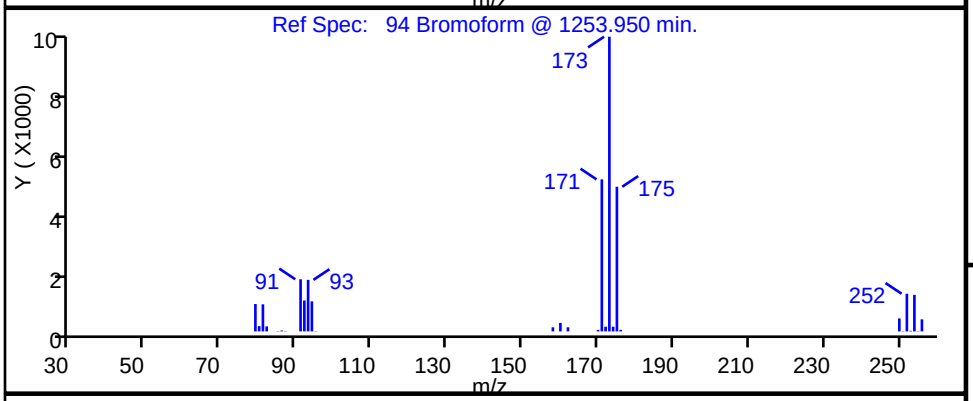
TestAmerica Pittsburgh

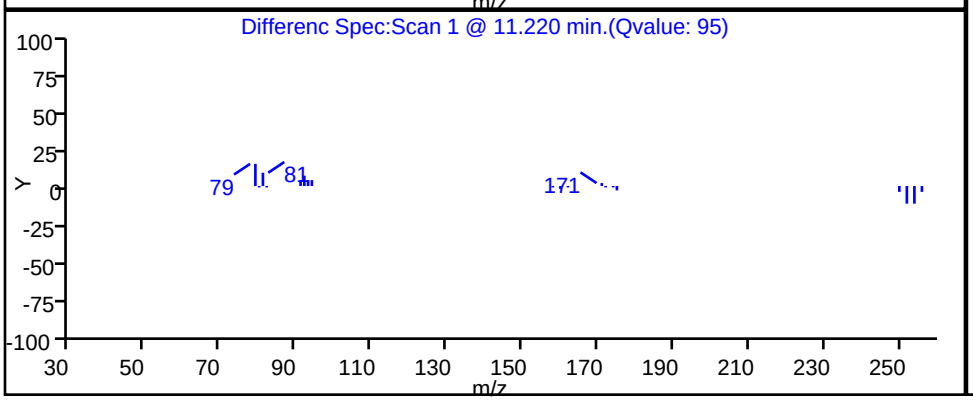
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031030.D		
Injection Date:	31-Oct-2016 21:23:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-2	Lab Sample ID:	180-60202-2
Client ID:	HD-CW-3-0/1-0		
Operator ID:	001562	ALS Bottle#:	29 Worklist Smp#: 30
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

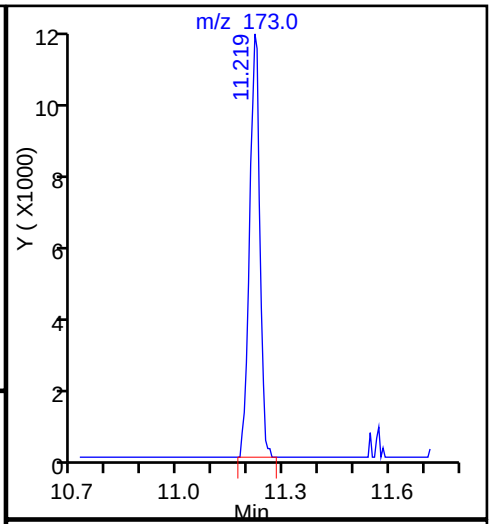
94 Bromoform, CAS: 75-25-2

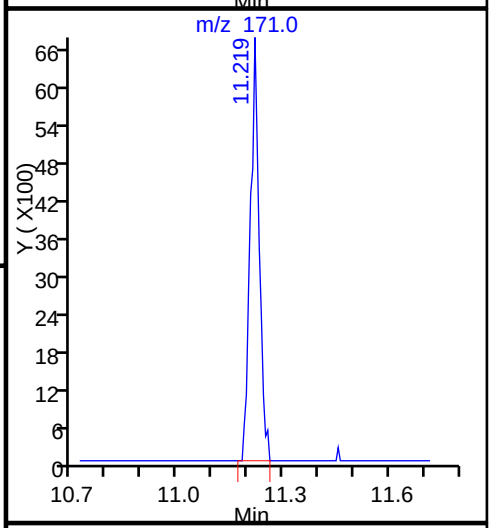


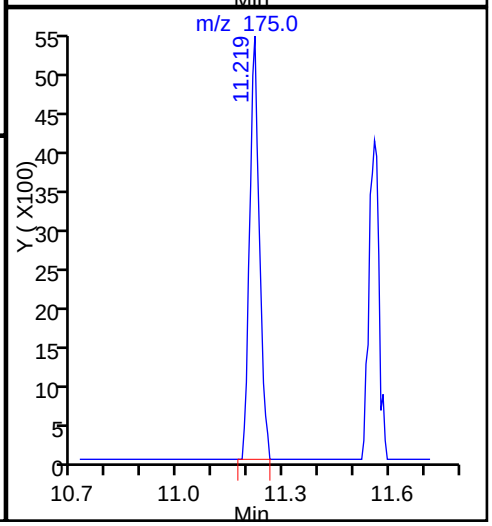












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-3-0/1-0 DL | Lab Sample ID: 180-60202-2 DL

Matrix: Water | Lab File ID: 51031025.D

Analysis Method: 8260C | Date Collected: 10/25/2016 08:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 19:22

Soil Aliquot Vol: | Dilution Factor: 20

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	20	U	20	4.6
75-01-4	Vinyl chloride	20	U	20	6.3
74-83-9	Bromomethane	20	U	20	7.2
75-00-3	Chloroethane	20	U	20	5.2
75-35-4	1,1-Dichloroethene	20	U	20	5.7
67-64-1	Acetone	470		100	50
75-15-0	Carbon disulfide	20	U	20	3.7
75-09-2	Methylene Chloride	20	U	20	7.2
156-60-5	trans-1,2-Dichloroethene	20	U	20	5.7
1634-04-4	Methyl tert-butyl ether	20	U	20	4.9
75-34-3	1,1-Dichloroethane	20	U	20	4.7
156-59-2	cis-1,2-Dichloroethene	33		20	5.7
74-97-5	Bromochloromethane	20	U	20	7.5
78-93-3	2-Butanone (MEK)	100	U	100	23
67-66-3	Chloroform	20	U	20	5.5
71-55-6	1,1,1-Trichloroethane	20	U	20	4.4
56-23-5	Carbon tetrachloride	20	U	20	4.9
71-43-2	Benzene	20	U	20	5.1
107-06-2	1,2-Dichloroethane	20	U	20	4.9
79-01-6	Trichloroethene	20	U	20	5.2
78-87-5	1,2-Dichloropropane	20	U	20	4.5
75-27-4	Bromodichloromethane	20	U	20	4.7
10061-01-5	cis-1,3-Dichloropropene	20	U	20	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	100	U	100	12
108-88-3	Toluene	20	U	20	5.6
10061-02-6	trans-1,3-Dichloropropene	20	U	20	4.8
79-00-5	1,1,2-Trichloroethane	20	U	20	7.0
127-18-4	Tetrachloroethene	20	U	20	5.4
591-78-6	2-Hexanone	100	U	100	15
124-48-1	Dibromochloromethane	20	U	20	7.9
106-93-4	1,2-Dibromoethane (EDB)	20	U	20	5.8
108-90-7	Chlorobenzene	20	U	20	6.3
630-20-6	1,1,1,2-Tetrachloroethane	20	U	20	3.9
100-41-4	Ethylbenzene	20	U	20	5.5
1330-20-7	Xylenes, Total	40	U	40	9.7
100-42-5	Styrene	20	U	20	5.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-3-0/1-0 DL | Lab Sample ID: 180-60202-2 DL

Matrix: Water | Lab File ID: 51031025.D

Analysis Method: 8260C | Date Collected: 10/25/2016 08:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 19:22

Soil Aliquot Vol: | Dilution Factor: 20

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	*Bromoform*	*9.1*	*J*	*20*	*5.9*
79-34-5	*1,1,2,2-Tetrachloroethane*	*20*	*U*	*20*	*6.9*
107-13-1	*Acrylonitrile*	*400*	*U*	*400*	*55*
123-91-1	*1,4-Dioxane*	*4000*	*U ^c*	*4000*	*150*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		72-134
2037-26-5	Toluene-d8 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	105		72-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031025.D
Lims ID: 180-60202-C-2
Client ID: HD-CW-3-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 19:22:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info: 180-0014116-025
Misc. Info.: 180-60202-C-2, 20x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:42:39 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:42:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.269	4.279	-0.010	0	100477	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.272	0.002	97	335391	50.0	
* 3 Chlorobenzene-d5	119	10.370	10.375	-0.005	92	84688	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.719	12.723	-0.005	97	135890	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.550	6.548	0.002	93	79803	49.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.921	6.919	0.002	0	115849	50.0	
$ 7 Toluene-d8 (Surr)	98	8.922	8.921	0.001	96	315606	49.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.557	11.561	-0.004	87	135403	52.4	
12 Chloromethane	50		1.767				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.229				ND	
16 Chloroethane	64		2.375				ND	
22 1,1-Dichloroethene	96		3.330				ND	
24 Acetone	43	3.453	3.440	0.013	98	101044	117.0	
26 Carbon disulfide	76		3.616				ND	
31 Methylene Chloride	84	4.123	4.121	0.002	13	3130	1.48	M
33 Acrylonitrile	53		4.516				ND	
34 trans-1,2-Dichloroethene	96		4.553				ND	
35 Methyl tert-butyl ether	73		4.565				ND	
37 1,1-Dichloroethane	63		5.186				ND	
45 cis-1,2-Dichloroethene	96	5.935	5.934	0.001	86	16839	8.26	
46 2-Butanone (MEK)	43		5.952				ND	
49 Chlorobromomethane	128		6.220				ND	
52 Chloroform	83		6.360				ND	
53 1,1,1-Trichloroethane	97		6.524				ND	
56 Carbon tetrachloride	117		6.700				ND	
58 Benzene	78		6.925				ND	
59 1,2-Dichloroethane	62		7.005				ND	
64 Trichloroethene	130		7.662				ND	
67 1,2-Dichloropropane	63		7.935				ND	
70 1,4-Dioxane	88		8.014				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.215				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.817				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.243				ND	
79 1,1,2-Trichloroethane	97		9.432				ND	
80 Tetrachloroethene	164		9.505				ND	
82 2-Hexanone	43		9.645				ND	
84 Chlorodibromomethane	129		9.809				ND	
85 Ethylene Dibromide	107		9.918				ND	
87 Chlorobenzene	112		10.405				ND	
89 1,1,1,2-Tetrachloroethane	131		10.503				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.636				ND	
92 o-Xylene	106		11.020				ND	
93 Styrene	104		11.038				ND	
94 Bromoform	173	11.216	11.220	-0.004	67	1831	2.29	
99 1,1,2,2-Tetrachloroethane	83		11.695				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

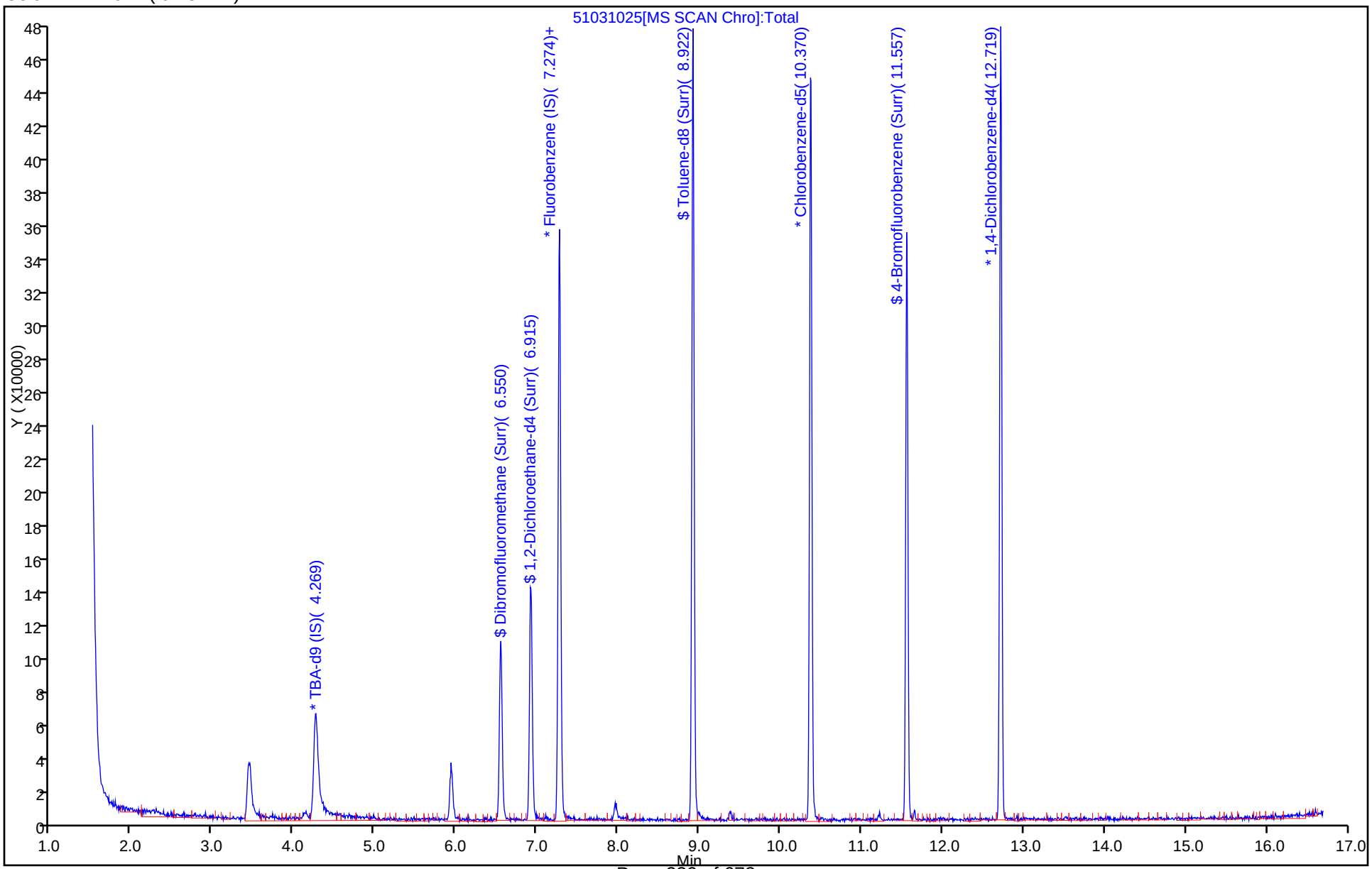
Report Date: 01-Nov-2016 07:42:40 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031025.D

Injection Date:	31-Oct-2016 19:22:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-C-2	Lab Sample ID:	180-60202-2	Worklist Smp#:	25
Client ID:	HD-CW-3-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	20.0000	ALS Bottle#:	24
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031025.D
Lims ID: 180-60202-C-2
Client ID: HD-CW-3-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 19:22:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info: 180-0014116-025
Misc. Info.: 180-60202-C-2, 20x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:42:39 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:42:39

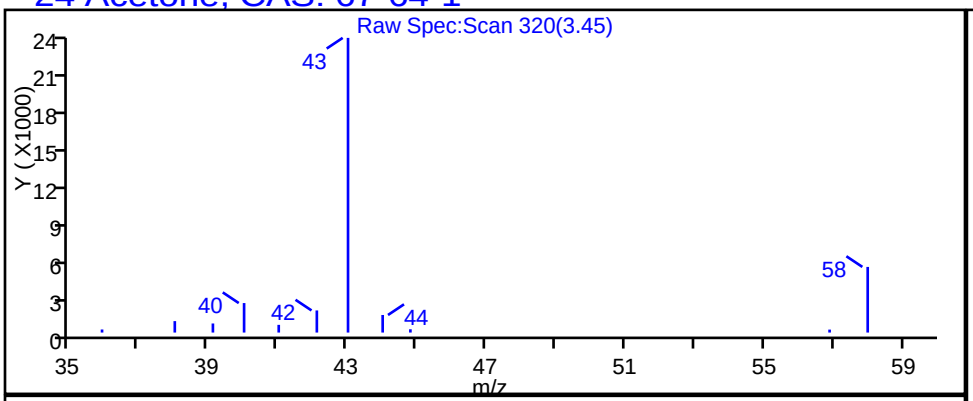
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.7	99.46
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.0	100.02
$ 7 Toluene-d8 (Surr)	50.0	49.4	98.75
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.4	104.79

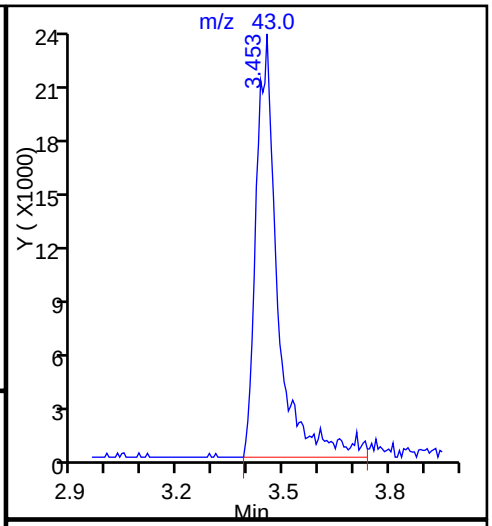
Report Date: 01-Nov-2016 07:42:40 Chrom Revision: 2.2 17-Oct-2016 09:27:18

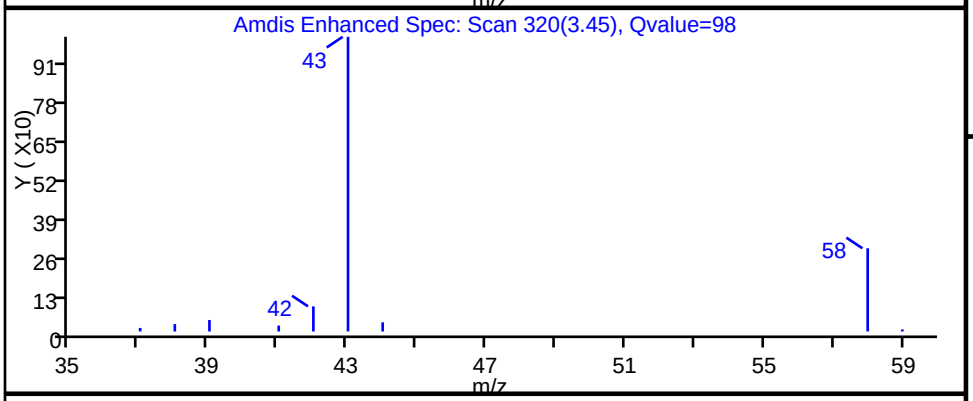
TestAmerica Pittsburgh

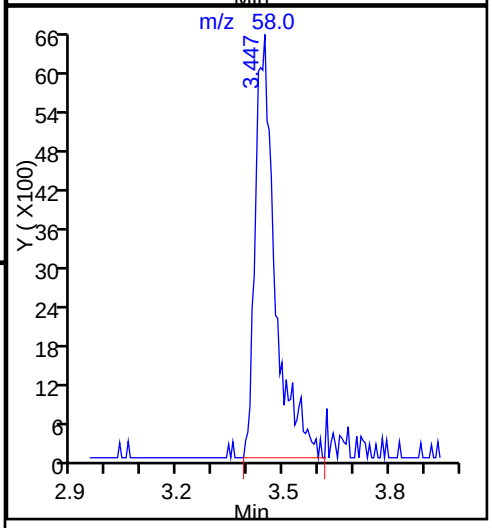
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031025.D		
Injection Date:	31-Oct-2016 19:22:30	Instrument ID:	CHHP5
Lims ID:	180-60202-C-2	Lab Sample ID:	180-60202-2
Client ID:	HD-CW-3-0/1-0		
Operator ID:	001562	ALS Bottle#:	24 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	20.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

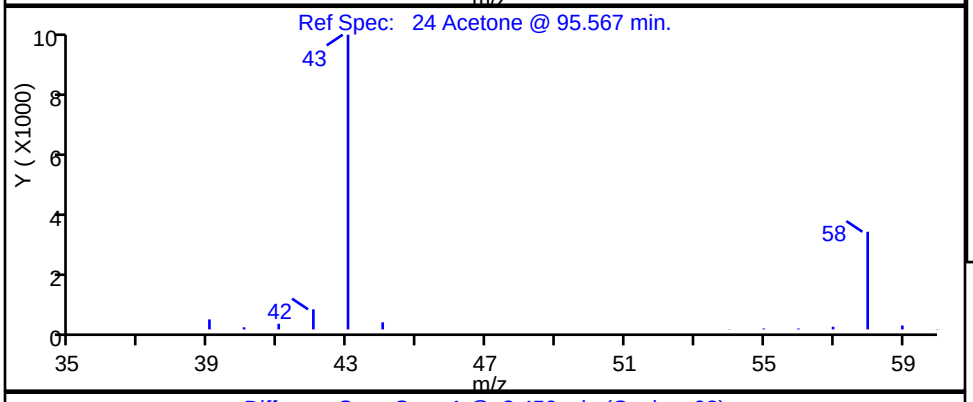
24 Acetone, CAS: 67-64-1

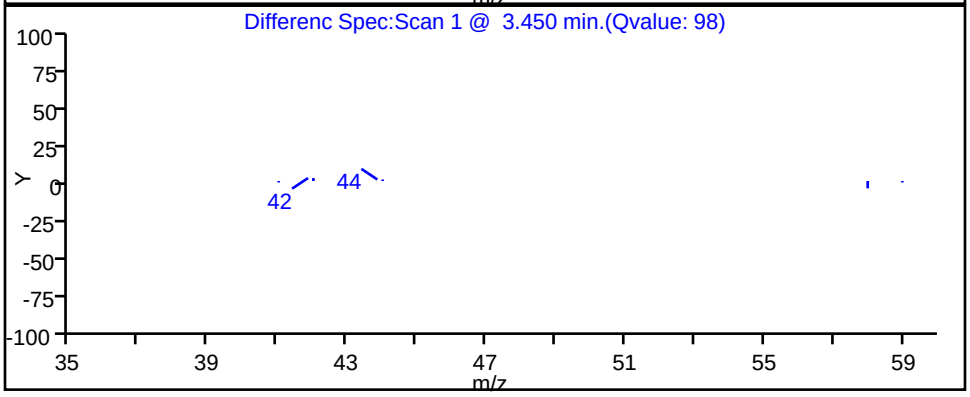










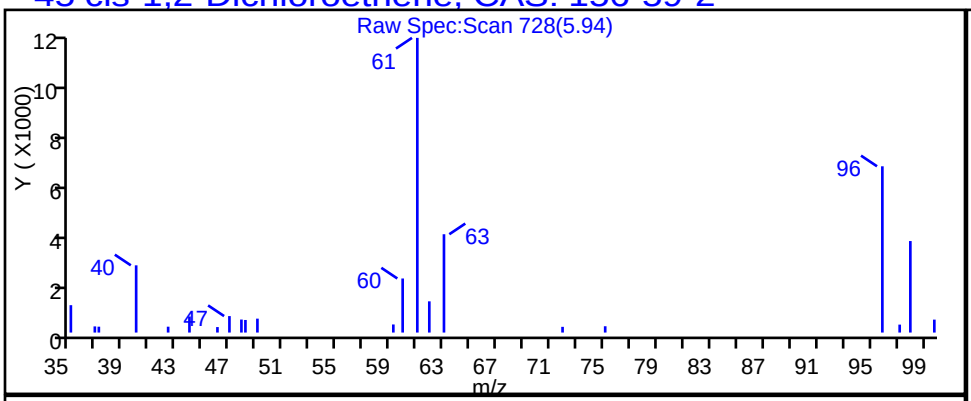


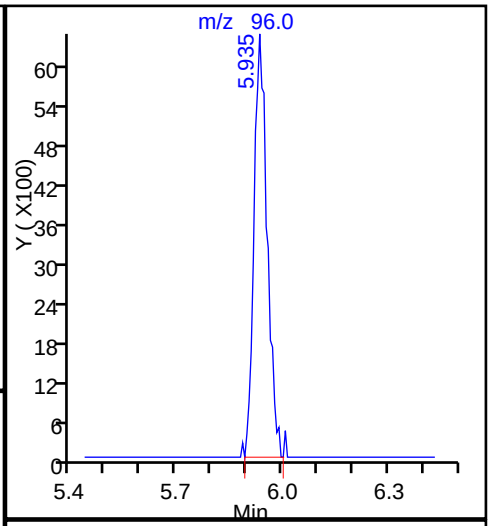
Report Date: 01-Nov-2016 07:42:40 Chrom Revision: 2.2 17-Oct-2016 09:27:18

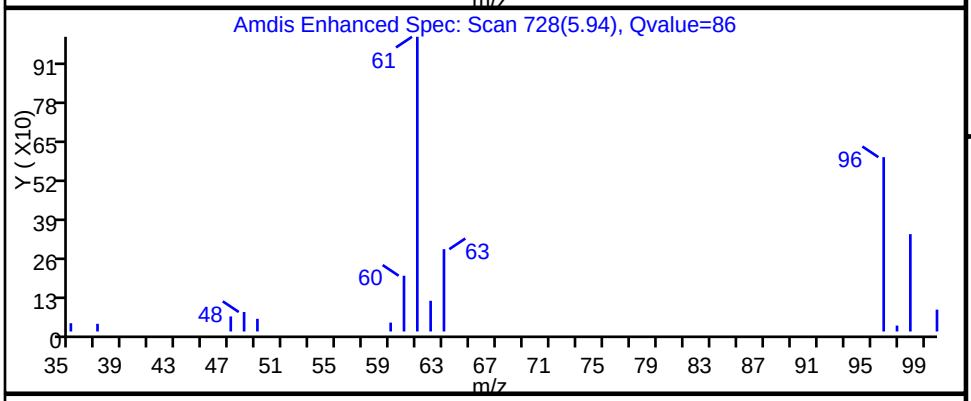
TestAmerica Pittsburgh

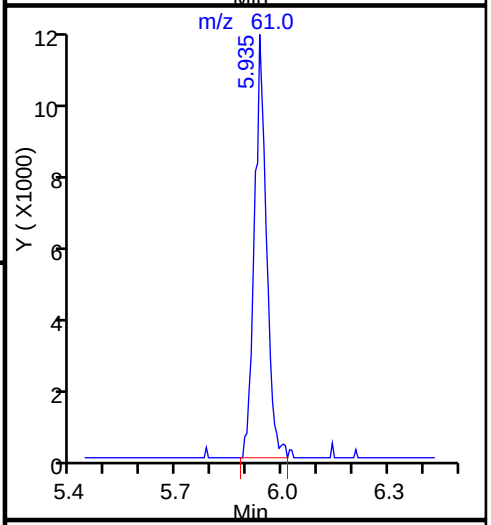
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031025.D				
Injection Date:	31-Oct-2016 19:22:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-C-2	Lab Sample ID:	180-60202-2		
Client ID:	HD-CW-3-0/1-0				
Operator ID:	001562	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	20.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

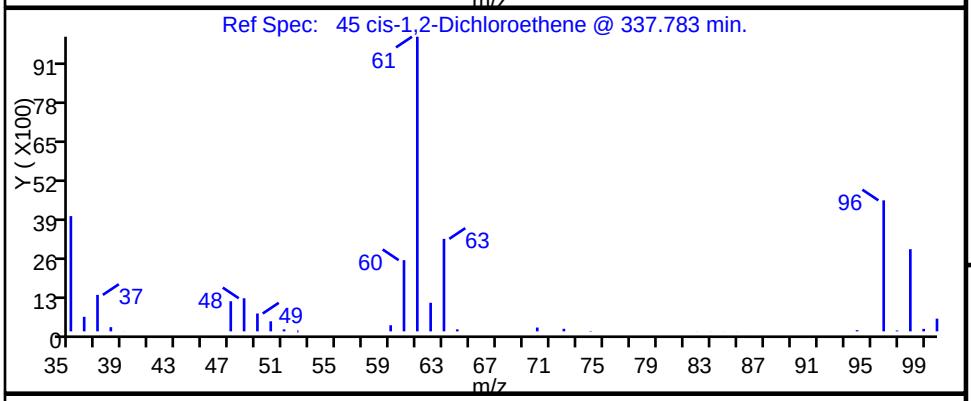
45 cis-1,2-Dichloroethene, CAS: 156-59-2

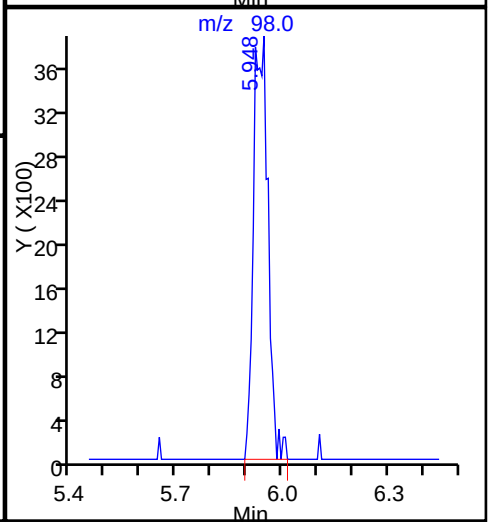


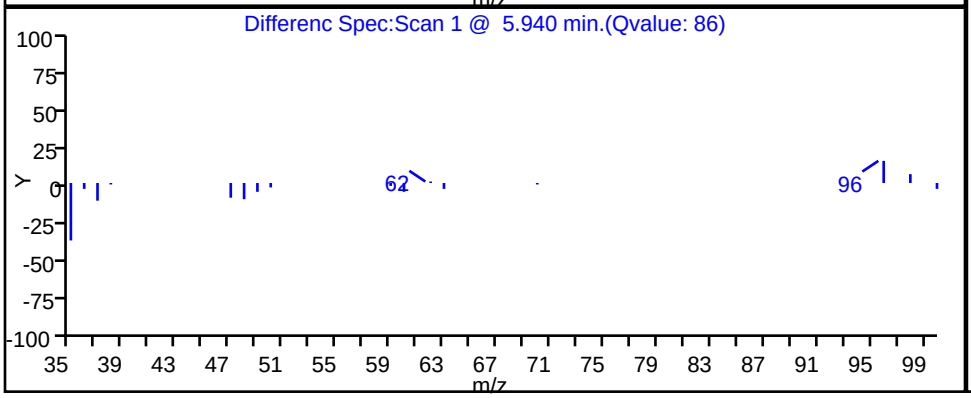










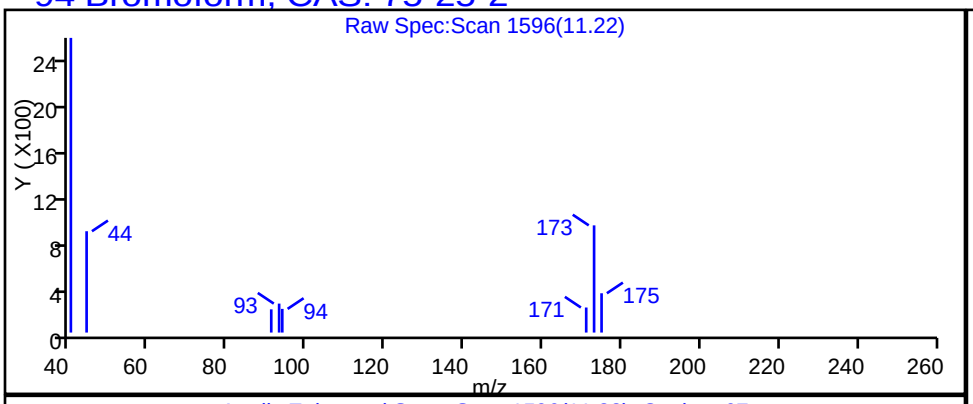


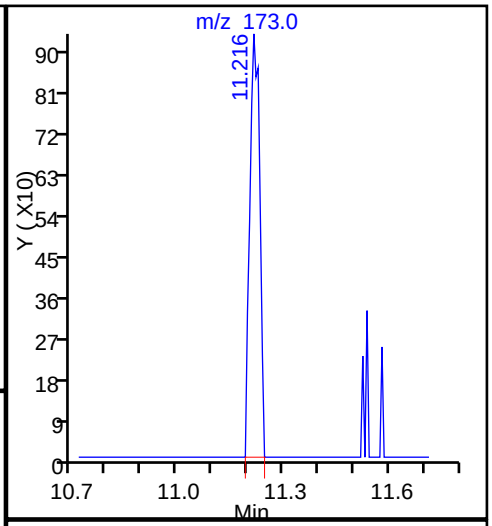
Report Date: 01-Nov-2016 07:42:40 Chrom Revision: 2.2 17-Oct-2016 09:27:18

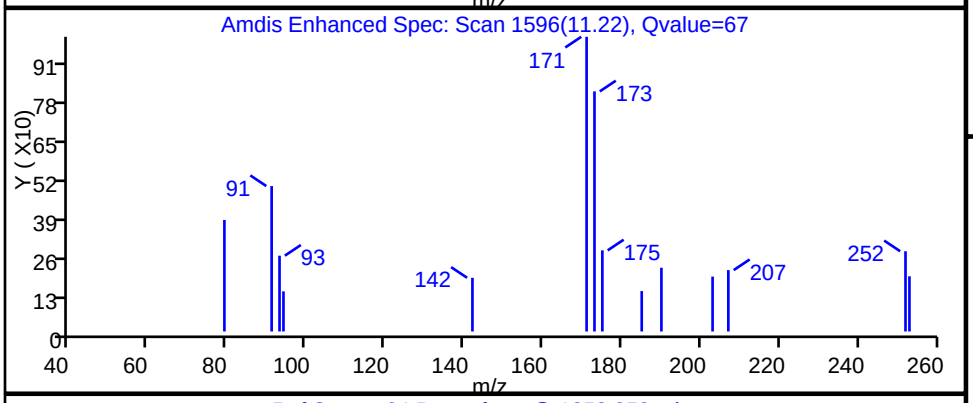
TestAmerica Pittsburgh

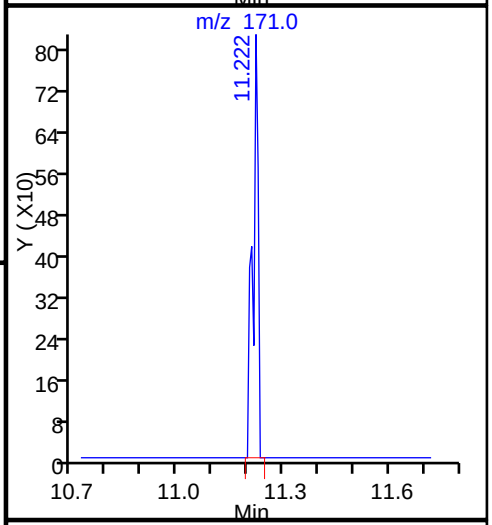
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031025.D		
Injection Date:	31-Oct-2016 19:22:30	Instrument ID:	CHHP5
Lims ID:	180-60202-C-2	Lab Sample ID:	180-60202-2
Client ID:	HD-CW-3-0/1-0		
Operator ID:	001562	ALS Bottle#:	24 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	20.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

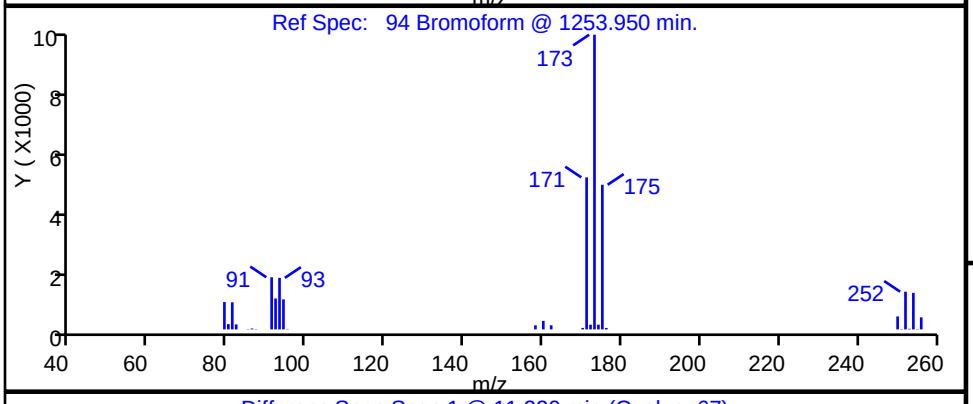
94 Bromoform, CAS: 75-25-2

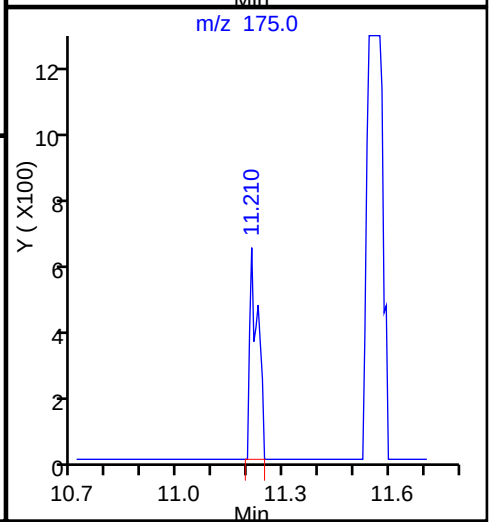


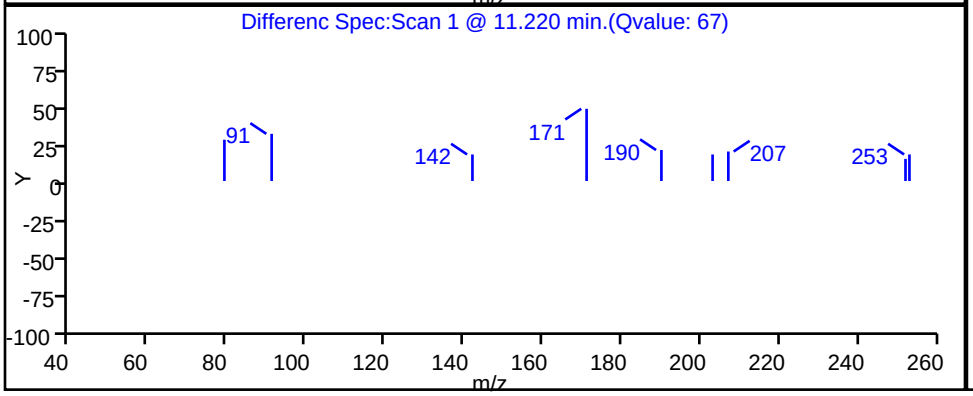












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

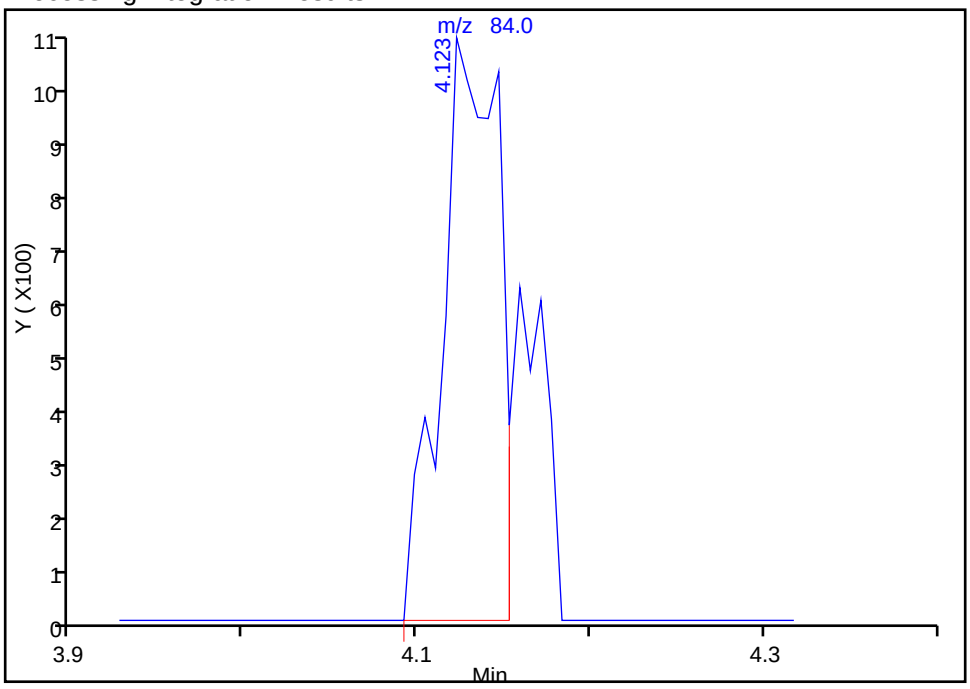
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031025.D				
Injection Date:	31-Oct-2016 19:22:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-C-2	Lab Sample ID:	180-60202-2		
Client ID:	HD-CW-3-0/1-0				
Operator ID:	001562	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	20.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

Signal: 1

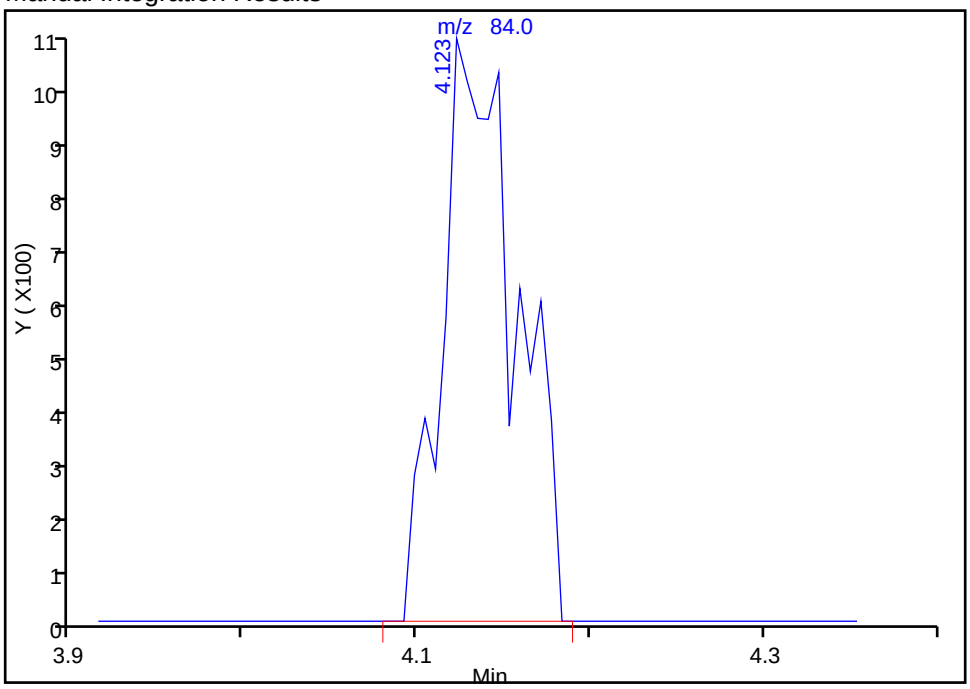
Processing Integration Results

RT: 4.12
Area: 2407
Amount: 1.134381
Amount Units: ng



Manual Integration Results

RT: 4.12
Area: 3130
Amount: 1.475119
Amount Units: ng



Reviewer: fergusond, 01-Nov-2016 07:42:39

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-1-0/1-0 | Lab Sample ID: 180-60202-3

Matrix: Water | Lab File ID: 51031019.D

Analysis Method: 8260C | Date Collected: 10/25/2016 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 16:57

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.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	1.6		1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	1.6		1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	1.0	U	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-1-0/1-0 | Lab Sample ID: 180-60202-3

Matrix: Water | Lab File ID: 51031019.D

Analysis Method: 8260C | Date Collected: 10/25/2016 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 16:57

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.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U ^c	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		72-134
2037-26-5	Toluene-d8 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	102		72-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031019.D
Lims ID: 180-60202-A-3
Client ID: HD-CW-1-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 16:57:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014116-019
Misc. Info.: 180-60202-A-3
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:31:09 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:31:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.271	4.279	-0.008	0	256168	1000.0	s
* 2 Fluorobenzene (IS)	96	7.270	7.272	-0.002	97	341508	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.375	-0.002	91	84717	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.721	12.723	-0.002	98	132943	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.553	6.548	0.005	93	79831	48.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.924	6.919	0.005	0	117374	49.8	
$ 7 Toluene-d8 (Surr)	98	8.919	8.921	-0.002	95	317462	49.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.559	11.561	-0.002	88	131853	51.0	
12 Chloromethane	50		1.767				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.229				ND	
16 Chloroethane	64		2.375				ND	
22 1,1-Dichloroethene	96		3.330				ND	
24 Acetone	43	3.468	3.440	0.028	76	7477	8.51	
26 Carbon disulfide	76		3.616				ND	
31 Methylene Chloride	84		4.121				ND	
33 Acrylonitrile	53		4.516				ND	
34 trans-1,2-Dichloroethene	96		4.553				ND	
35 Methyl tert-butyl ether	73		4.565				ND	
37 1,1-Dichloroethane	63		5.186				ND	
45 cis-1,2-Dichloroethene	96	5.932	5.934	-0.002	85	16852	8.12	
46 2-Butanone (MEK)	43		5.952				ND	
49 Chlorobromomethane	128		6.220				ND	
52 Chloroform	83		6.360				ND	
53 1,1,1-Trichloroethane	97		6.524				ND	
56 Carbon tetrachloride	117		6.700				ND	
58 Benzene	78		6.925				ND	
59 1,2-Dichloroethane	62		7.005				ND	
64 Trichloroethene	130	7.660	7.662	-0.002	97	14981	7.84	
67 1,2-Dichloropropane	63		7.935				ND	
70 1,4-Dioxane	88		8.014				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.215				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.817				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.243				ND	
79 1,1,2-Trichloroethane	97		9.432				ND	
80 Tetrachloroethene	164	9.503	9.505	-0.002	17	825	0.5391	
82 2-Hexanone	43		9.645				ND	
84 Chlorodibromomethane	129		9.809				ND	
85 Ethylene Dibromide	107		9.918				ND	
87 Chlorobenzene	112		10.405				ND	
89 1,1,1,2-Tetrachloroethane	131		10.503				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.636				ND	
92 o-Xylene	106		11.020				ND	
93 Styrene	104		11.038				ND	
94 Bromoform	173		11.220				ND	
99 1,1,2,2-Tetrachloroethane	83		11.695				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

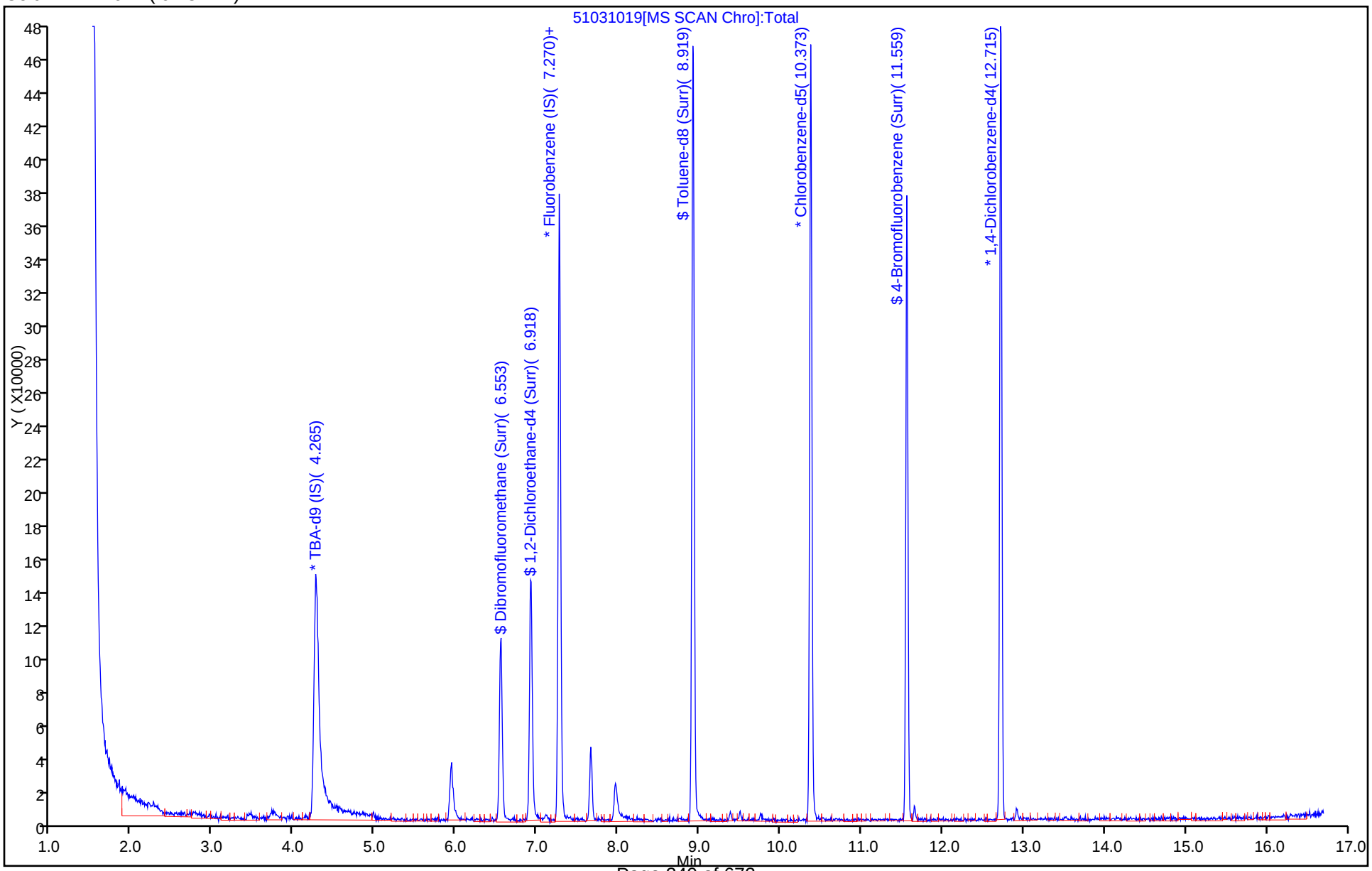
Report Date: 01-Nov-2016 07:31:10 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031019.D

Injection Date:	31-Oct-2016 16:57:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-A-3	Lab Sample ID:	180-60202-3	Worklist Smp#:	19
Client ID:	HD-CW-1-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031019.D
Lims ID: 180-60202-A-3
Client ID: HD-CW-1-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 16:57:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014116-019
Misc. Info.: 180-60202-A-3
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:31:09 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:31:09

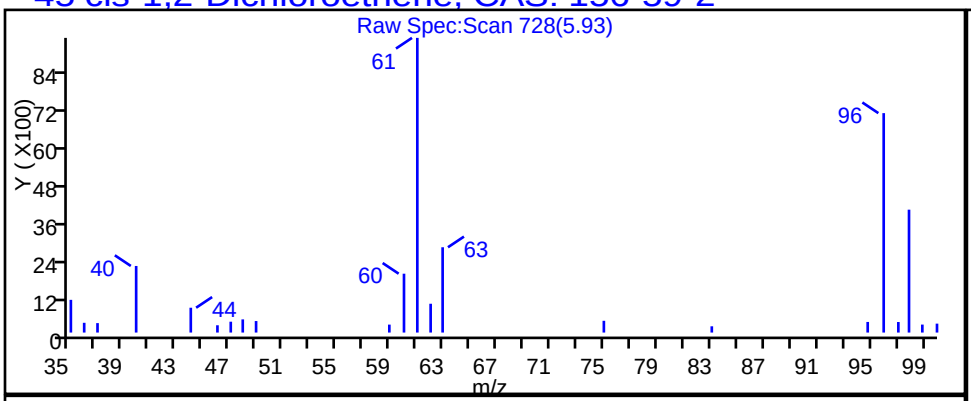
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.9	97.72
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.8	99.52
$ 7 Toluene-d8 (Surr)	50.0	49.6	99.30
$ 8 4-Bromofluorobenzene (Surr)	50.0	51.0	102.01

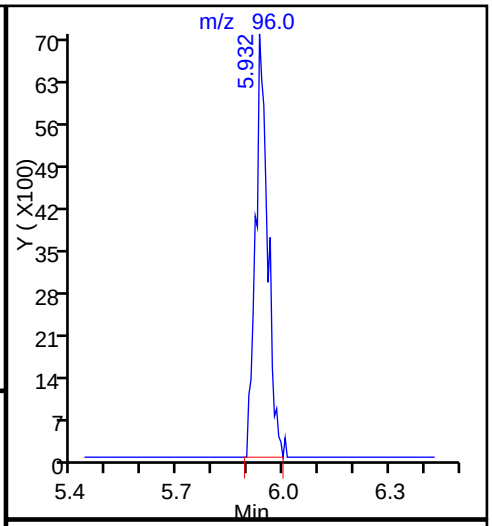
Report Date: 01-Nov-2016 07:31:10 Chrom Revision: 2.2 17-Oct-2016 09:27:18

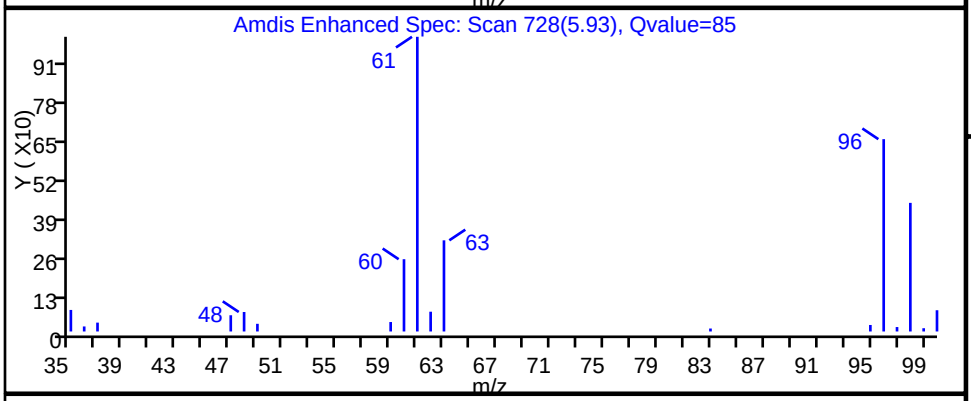
TestAmerica Pittsburgh

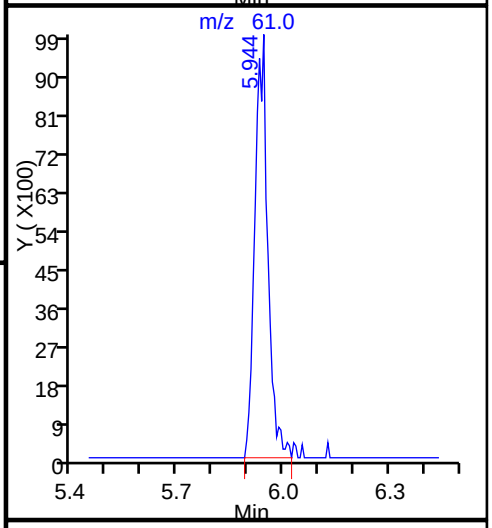
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031019.D		
Injection Date:	31-Oct-2016 16:57:30	Instrument ID:	CHHP5
Lims ID:	180-60202-A-3	Lab Sample ID:	180-60202-3
Client ID:	HD-CW-1-0/1-0		
Operator ID:	001562	ALS Bottle#:	18 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

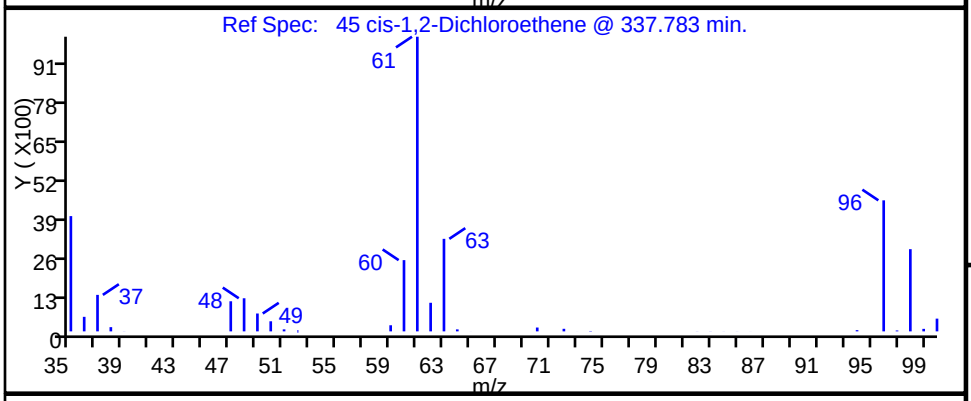
45 cis-1,2-Dichloroethene, CAS: 156-59-2

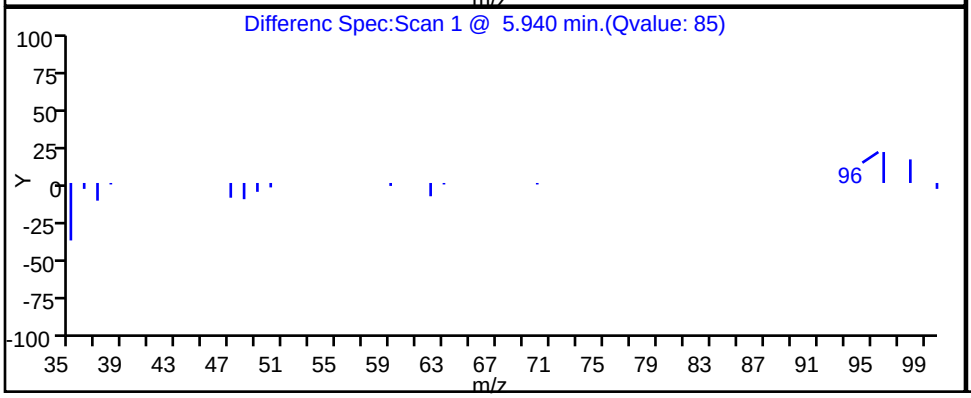


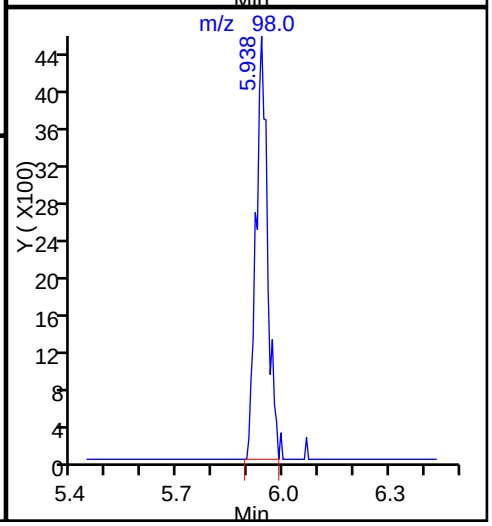












Report Date: 01-Nov-2016 07:31:10 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031019.D

Injection Date: 31-Oct-2016 16:57:30 Instrument ID: CHHP5

Lims ID: 180-60202-A-3 Lab Sample ID: 180-60202-3

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

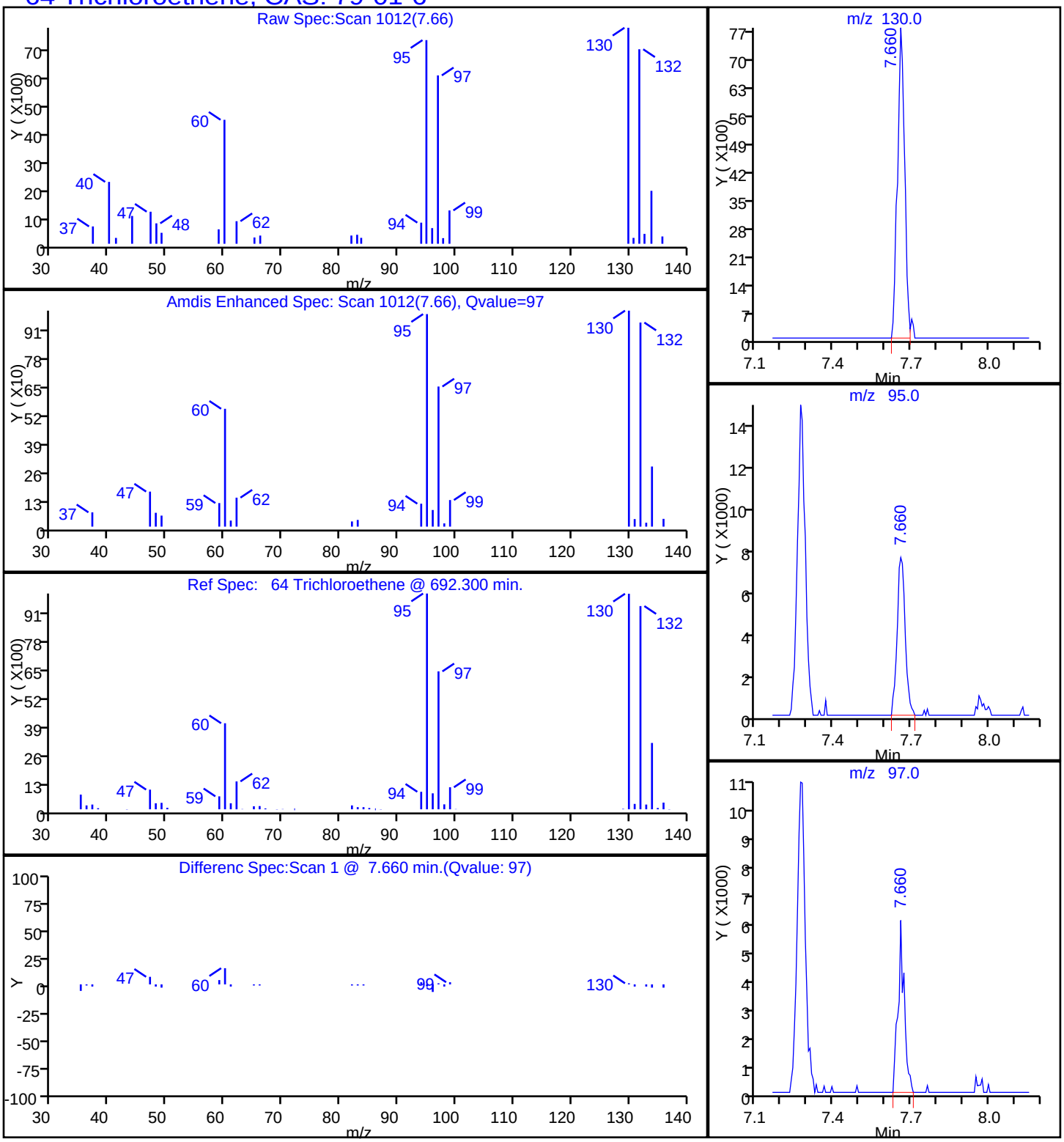
Operator ID: 001562 ALS Bottle#: 18 Worklist Smp#: 19

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

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

64 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-1A-0/1-0 | Lab Sample ID: 180-60202-4

Matrix: Water | Lab File ID: 51031020.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 17:22

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.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	0.73	J	1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	0.44	J	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	*Trichloroethene*	*58*	*E*	*1.0*	*0.26*
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	2.3		1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-1A-0/1-0 | Lab Sample ID: 180-60202-4

Matrix: Water | Lab File ID: 51031020.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 17:22

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.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U ^c	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		72-134
2037-26-5	Toluene-d8 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	102		72-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031020.D
Lims ID: 180-60202-A-4
Client ID: HD-CW-1A-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 17:22:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014116-020
Misc. Info.: 180-60202-A-4
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:33:15 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:33:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.279	-0.013	0	132256	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.272	-0.001	97	334896	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.375	-0.001	91	83509	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.723	-0.007	97	133072	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.541	6.548	-0.007	93	81828	51.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.919	-0.001	0	114961	49.7	
$ 7 Toluene-d8 (Surr)	98	8.920	8.921	-0.001	95	318845	50.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.561	-0.001	87	129719	50.9	
12 Chloromethane	50		1.767				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.229				ND	
16 Chloroethane	64		2.375				ND	
22 1,1-Dichloroethene	96		3.330				ND	
24 Acetone	43	3.463	3.440	0.023	89	8411	9.76	
26 Carbon disulfide	76		3.616				ND	
31 Methylene Chloride	84		4.121				ND	
33 Acrylonitrile	53		4.516				ND	
34 trans-1,2-Dichloroethene	96		4.553				ND	
35 Methyl tert-butyl ether	73		4.565				ND	
37 1,1-Dichloroethane	63		5.186				ND	
45 cis-1,2-Dichloroethene	96	5.939	5.934	0.005	87	7401	3.64	
46 2-Butanone (MEK)	43		5.952				ND	
49 Chlorobromomethane	128		6.220				ND	
52 Chloroform	83	6.365	6.360	0.005	95	7234	2.21	
53 1,1,1-Trichloroethane	97		6.524				ND	
56 Carbon tetrachloride	117		6.700				ND	
58 Benzene	78		6.925				ND	
59 1,2-Dichloroethane	62		7.005				ND	
64 Trichloroethene	130	7.661	7.662	-0.001	95	540777	288.7	E
67 1,2-Dichloropropane	63		7.935				ND	
70 1,4-Dioxane	88		8.014				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.215				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.817				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.243				ND	
79 1,1,2-Trichloroethane	97		9.432				ND	
80 Tetrachloroethene	164	9.498	9.505	-0.007	95	17155	11.4	
82 2-Hexanone	43		9.645				ND	
84 Chlorodibromomethane	129		9.809				ND	
85 Ethylene Dibromide	107		9.918				ND	
87 Chlorobenzene	112		10.405				ND	
89 1,1,1,2-Tetrachloroethane	131		10.503				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.636				ND	
92 o-Xylene	106		11.020				ND	
93 Styrene	104		11.038				ND	
94 Bromoform	173		11.220				ND	
99 1,1,2,2-Tetrachloroethane	83		11.695				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

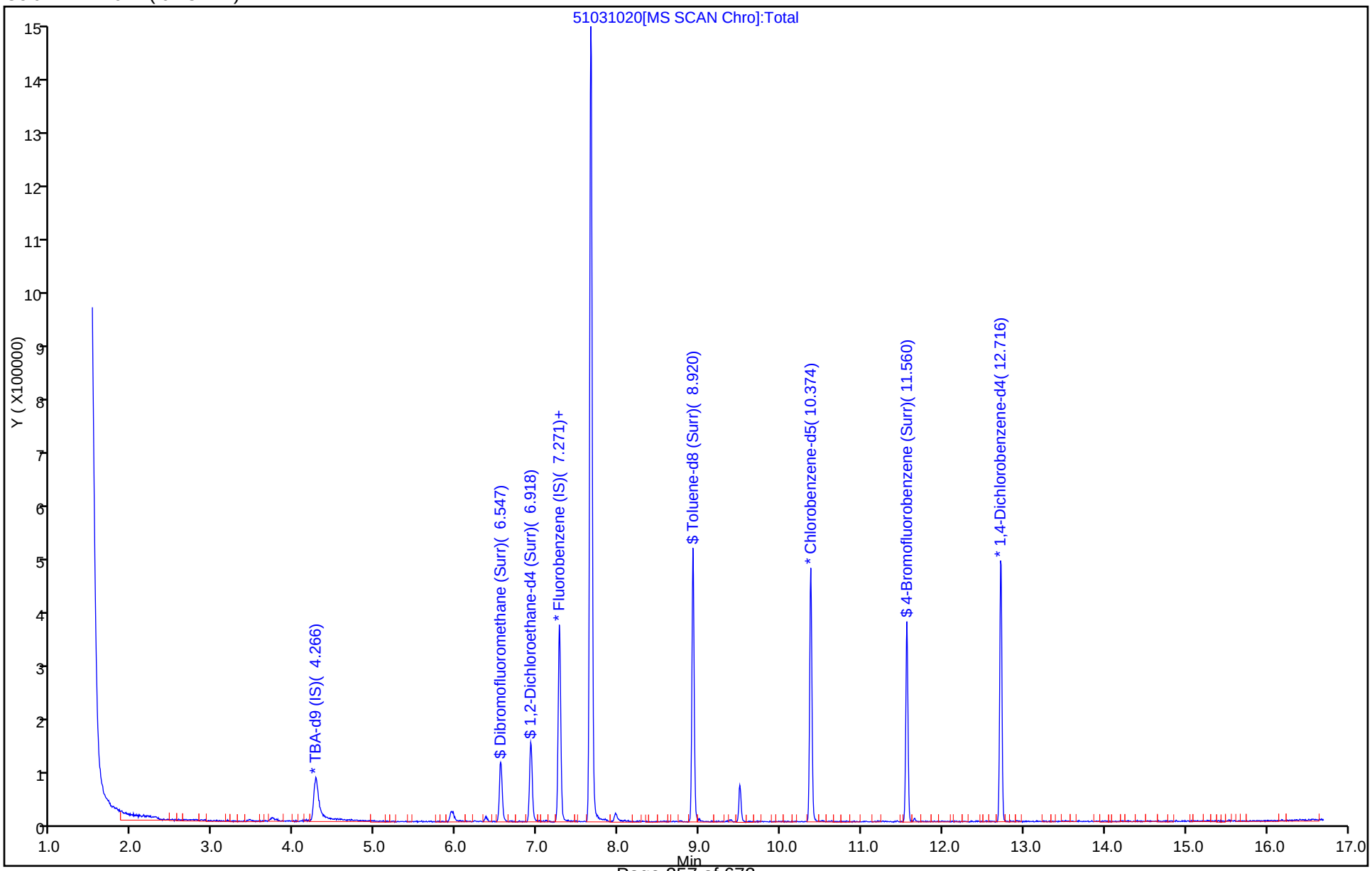
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 01-Nov-2016 07:33:16 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031020.D				
Injection Date:	31-Oct-2016 17:22:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-A-4	Lab Sample ID:	180-60202-4	Worklist Smp#:	20
Client ID:	HD-CW-1A-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031020.D				
Lims ID:	180-60202-A-4				
Client ID:	HD-CW-1A-0/1-0				
Sample Type:	Client				
Inject. Date:	31-Oct-2016 17:22:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	180-0014116-020				
Misc. Info.:	180-60202-A-4				
Operator ID:	001562	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	01-Nov-2016 07:33:15	Calib Date:	22-Oct-2016 17:46:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK031				

First Level Reviewer: fergusond Date: 01-Nov-2016 07:33:15

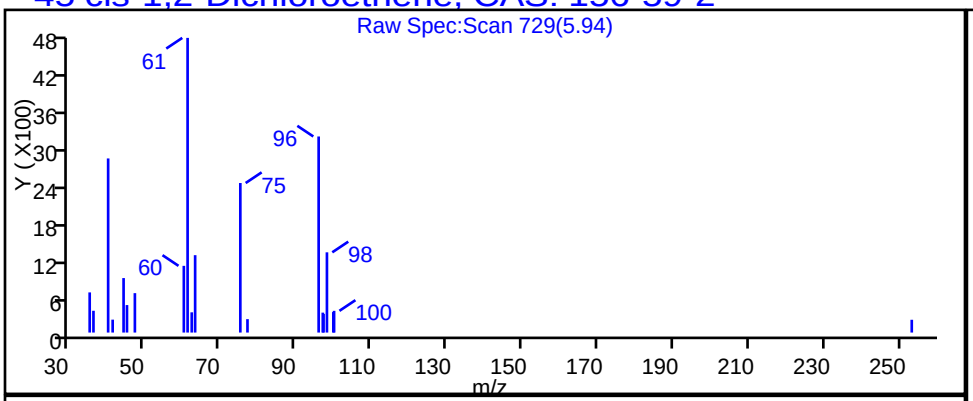
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.1	102.14
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.7	99.40
$ 7 Toluene-d8 (Surr)	50.0	50.6	101.17
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.9	101.81

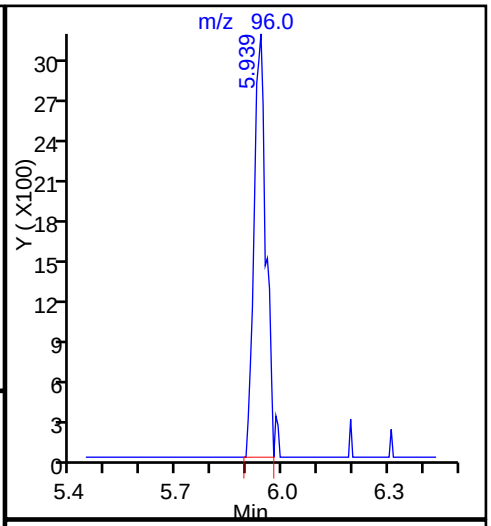
Report Date: 01-Nov-2016 07:33:16 Chrom Revision: 2.2 17-Oct-2016 09:27:18

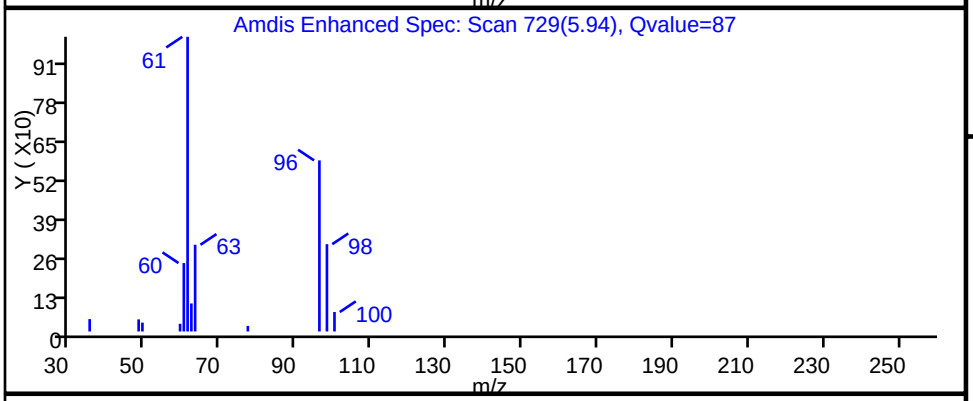
TestAmerica Pittsburgh

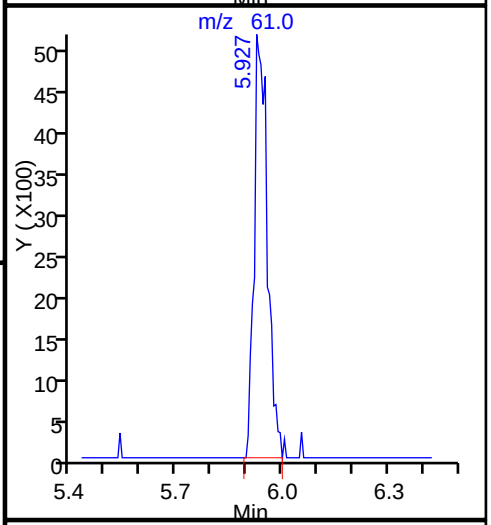
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031020.D		
Injection Date:	31-Oct-2016 17:22:30	Instrument ID:	CHHP5
Lims ID:	180-60202-A-4	Lab Sample ID:	180-60202-4
Client ID:	HD-CW-1A-0/1-0		
Operator ID:	001562	ALS Bottle#:	19 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

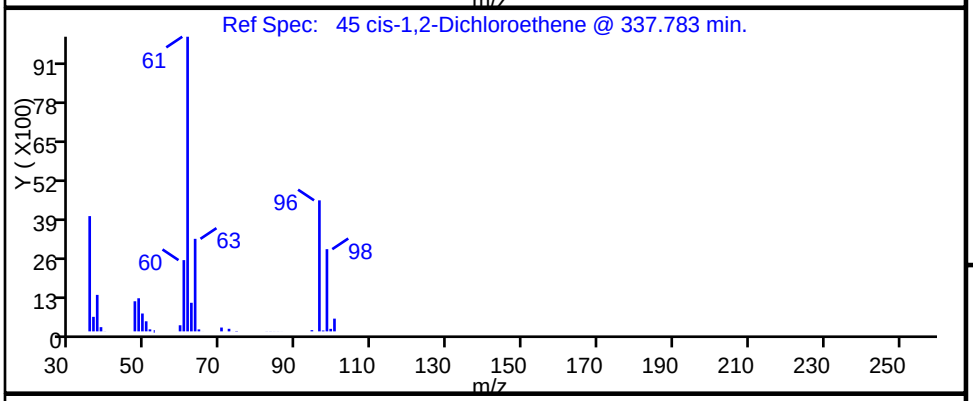
45 cis-1,2-Dichloroethene, CAS: 156-59-2

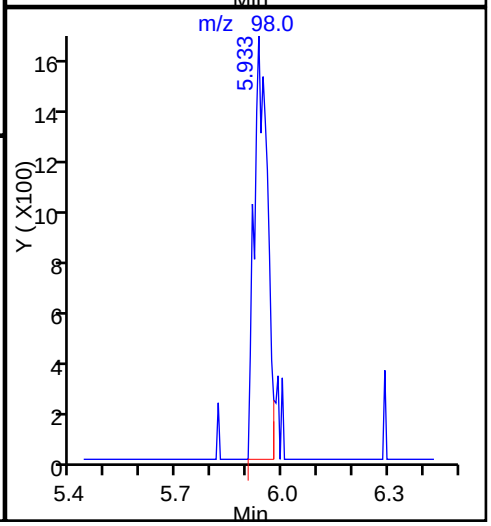


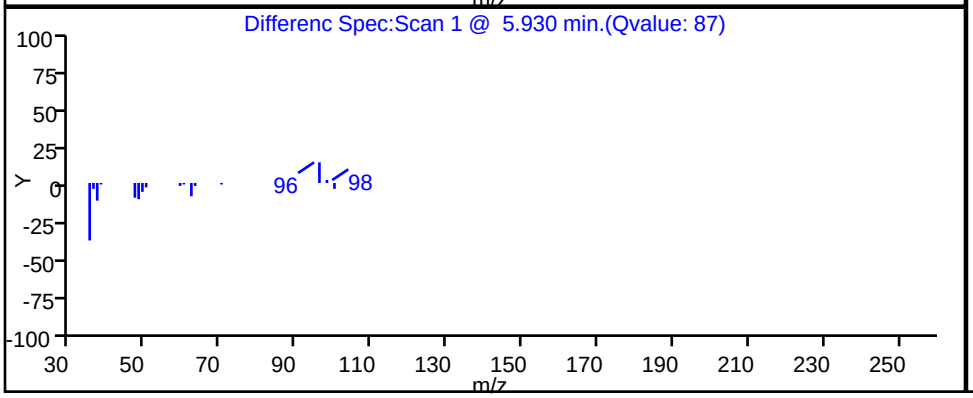










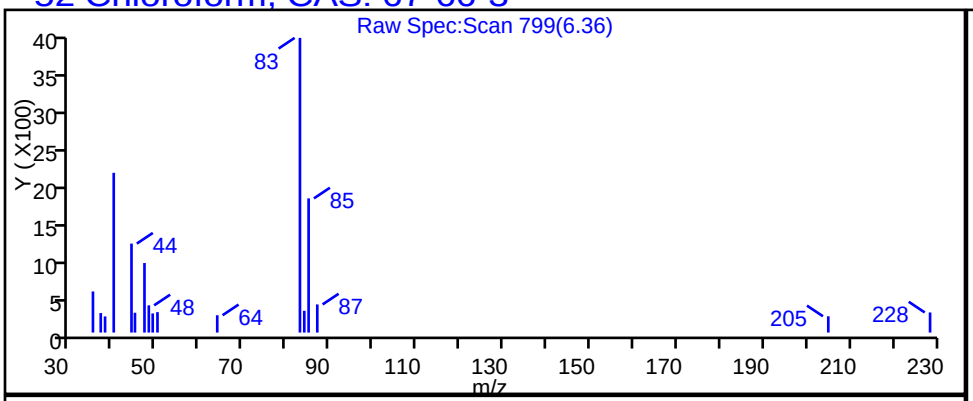


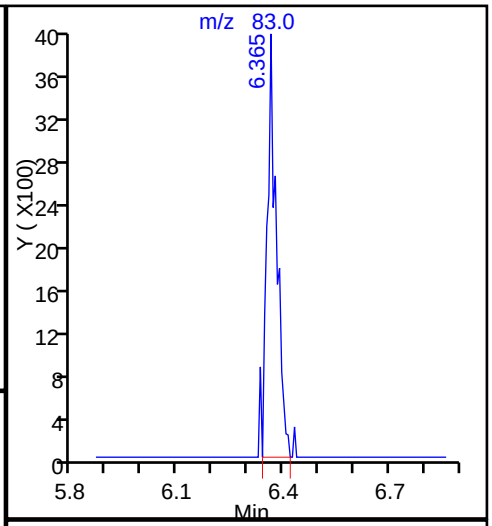
Report Date: 01-Nov-2016 07:33:16 Chrom Revision: 2.2 17-Oct-2016 09:27:18

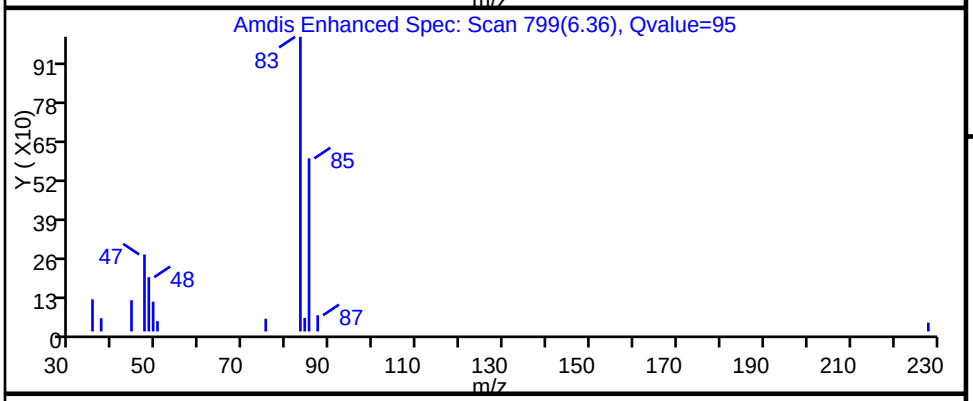
TestAmerica Pittsburgh

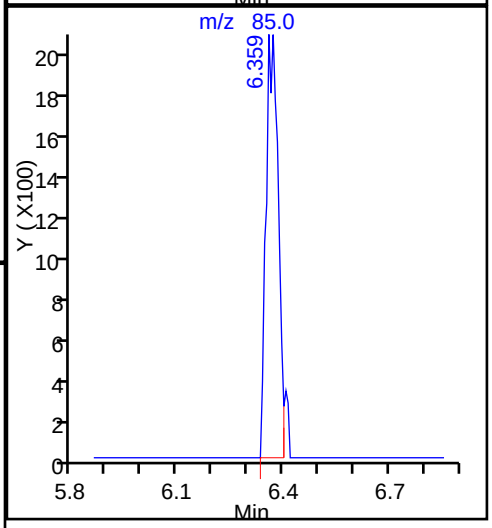
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031020.D		
Injection Date:	31-Oct-2016 17:22:30	Instrument ID:	CHHP5
Lims ID:	180-60202-A-4	Lab Sample ID:	180-60202-4
Client ID:	HD-CW-1A-0/1-0		
Operator ID:	001562	ALS Bottle#:	19 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

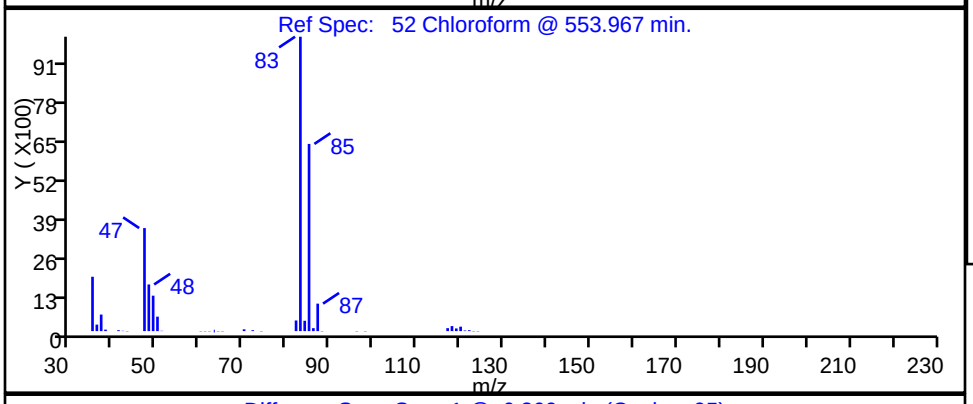
52 Chloroform, CAS: 67-66-3

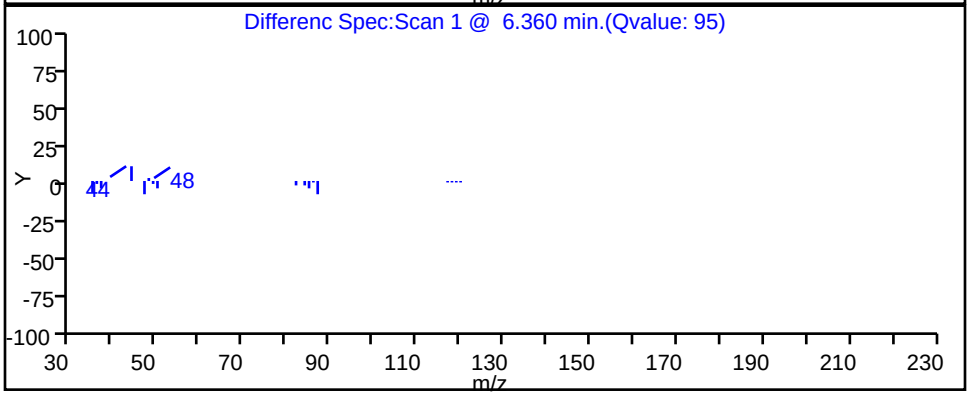










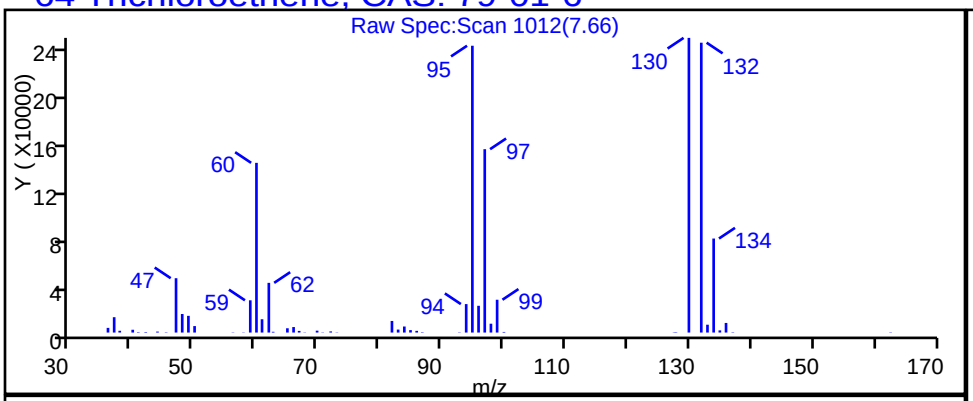


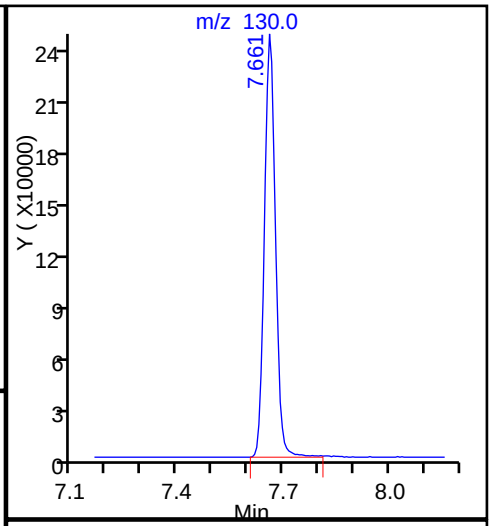
Report Date: 01-Nov-2016 07:33:16 Chrom Revision: 2.2 17-Oct-2016 09:27:18

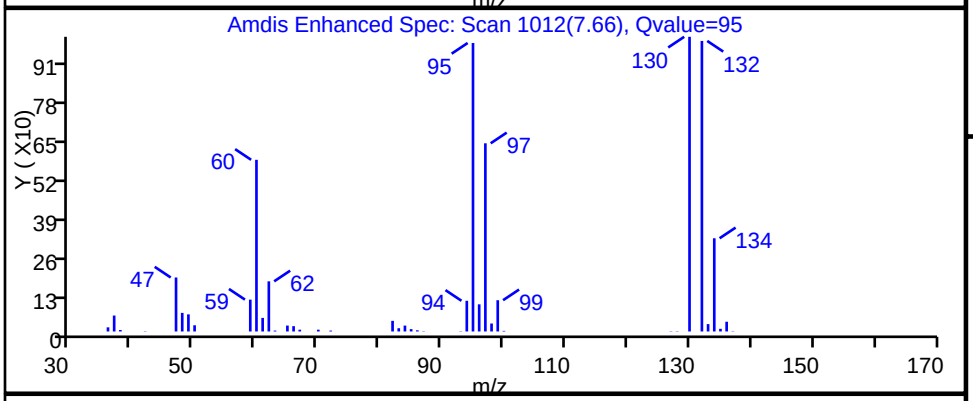
TestAmerica Pittsburgh

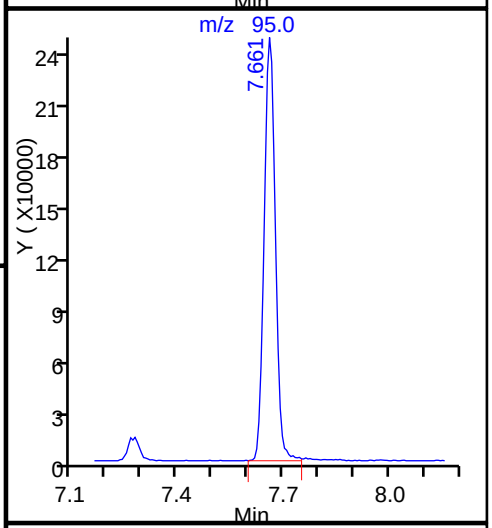
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031020.D		
Injection Date:	31-Oct-2016 17:22:30	Instrument ID:	CHHP5
Lims ID:	180-60202-A-4	Lab Sample ID:	180-60202-4
Client ID:	HD-CW-1A-0/1-0		
Operator ID:	001562	ALS Bottle#:	19 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

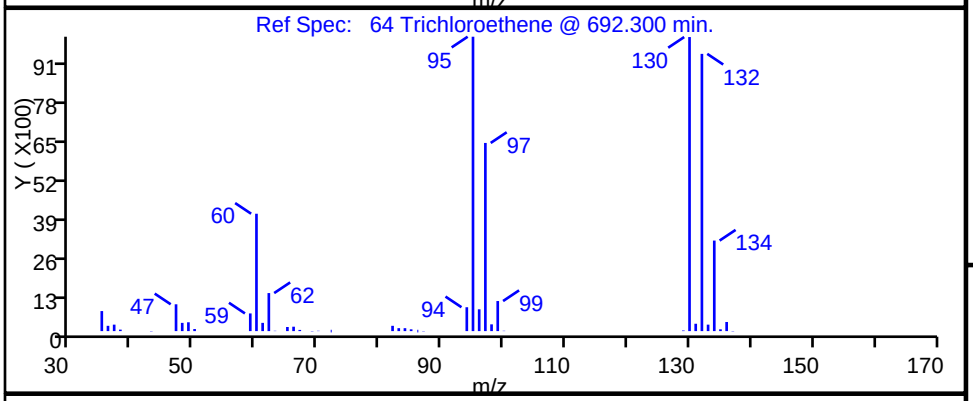
64 Trichloroethene, CAS: 79-01-6

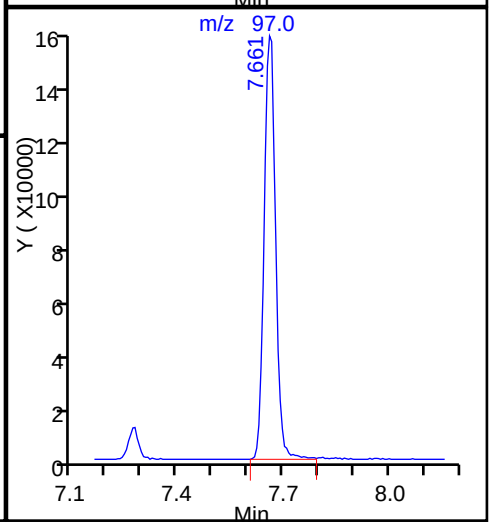


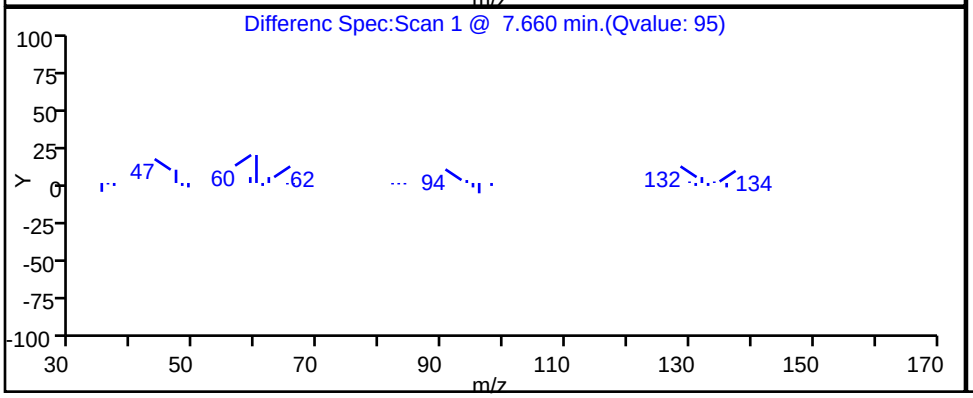










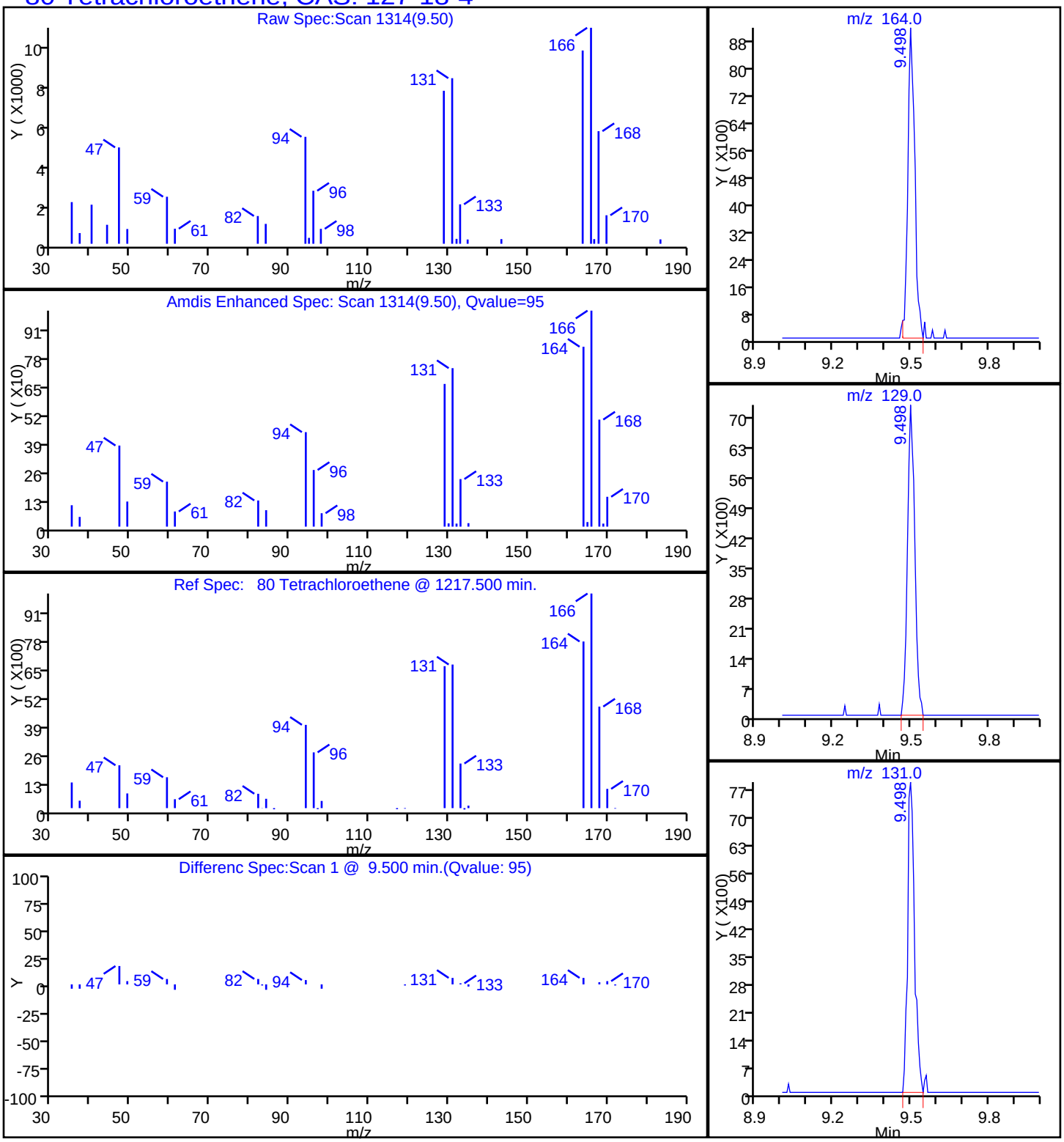


Report Date: 01-Nov-2016 07:33:16 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031020.D		
Injection Date:	31-Oct-2016 17:22:30	Instrument ID:	CHHP5
Lims ID:	180-60202-A-4	Lab Sample ID:	180-60202-4
Client ID:	HD-CW-1A-0/1-0		
Operator ID:	001562	ALS Bottle#:	19 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-1A-0/1-0 DL | Lab Sample ID: 180-60202-4 DL

Matrix: Water | Lab File ID: 51101014.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:05

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 15:02

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	2.0	U	2.0	0.46
75-01-4	Vinyl chloride	2.0	U	2.0	0.63
74-83-9	Bromomethane	2.0	U	2.0	0.72
75-00-3	Chloroethane	2.0	U	2.0	0.52
75-35-4	1,1-Dichloroethene	2.0	U	2.0	0.57
67-64-1	Acetone	10	U	10	5.0
75-15-0	Carbon disulfide	2.0	U ^c	2.0	0.37
75-09-2	Methylene Chloride	2.0	U	2.0	0.72
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	0.57
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	0.49
75-34-3	1,1-Dichloroethane	2.0	U	2.0	0.47
156-59-2	cis-1,2-Dichloroethene	0.89	J	2.0	0.57
74-97-5	Bromochloromethane	2.0	U	2.0	0.75
78-93-3	2-Butanone (MEK)	10	U	10	2.3
67-66-3	Chloroform	2.0	U	2.0	0.55
71-55-6	1,1,1-Trichloroethane	2.0	U	2.0	0.44
56-23-5	Carbon tetrachloride	2.0	U	2.0	0.49
71-43-2	Benzene	2.0	U	2.0	0.51
107-06-2	1,2-Dichloroethane	2.0	U	2.0	0.49
79-01-6	Trichloroethene	56		2.0	0.52
78-87-5	1,2-Dichloropropane	2.0	U	2.0	0.45
75-27-4	Bromodichloromethane	2.0	U	2.0	0.47
10061-01-5	cis-1,3-Dichloropropene	2.0	U	2.0	0.41
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	1.2
108-88-3	Toluene	2.0	U	2.0	0.56
10061-02-6	trans-1,3-Dichloropropene	2.0	U	2.0	0.48
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	0.70
127-18-4	Tetrachloroethene	1.9	J	2.0	0.54
591-78-6	2-Hexanone	10	U	10	1.5
124-48-1	Dibromochloromethane	2.0	U	2.0	0.79
106-93-4	1,2-Dibromoethane (EDB)	2.0	U	2.0	0.58
108-90-7	Chlorobenzene	2.0	U	2.0	0.63
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.39
100-41-4	Ethylbenzene	2.0	U	2.0	0.55
1330-20-7	Xylenes, Total	4.0	U	4.0	0.97
100-42-5	Styrene	2.0	U	2.0	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-1A-0/1-0 DL | Lab Sample ID: 180-60202-4 DL

Matrix: Water | Lab File ID: 51101014.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:05

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 15:02

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	*Bromoform*	*2.0*	*U ^c*	*2.0*	*0.59*
79-34-5	*1,1,2,2-Tetrachloroethane*	*2.0*	*U*	*2.0*	*0.69*
107-13-1	*Acrylonitrile*	*40*	*U*	*40*	*5.5*
123-91-1	*1,4-Dioxane*	*400*	*U*	*400*	*15*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-134
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	101		72-120
1868-53-7	Dibromofluoromethane (Surr)	93		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101014.D
Lims ID: 180-60202-C-4
Client ID: HD-CW-1A-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2016 15:02:30 ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0014130-014
Misc. Info.: 180-60202-C-4, 2x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:15:43 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:15:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.265	4.275	-0.010	0	145721	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.274	-0.003	97	354885	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.377	-0.004	91	90420	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.719	0.003	97	138292	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.541	6.550	-0.009	93	78632	46.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.921	-0.003	0	119659	48.8	
$ 7 Toluene-d8 (Surr)	98	8.919	8.923	-0.004	95	333439	48.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.557	0.003	85	139186	50.4	
12 Chloromethane	50		1.763				ND	
13 Vinyl chloride	62		1.909				ND	
15 Bromomethane	94		2.231				ND	
16 Chloroethane	64		2.377				ND	
22 1,1-Dichloroethene	96		3.338				ND	
24 Acetone	43	3.450	3.442	0.008	58	5111	5.59	
26 Carbon disulfide	76		3.618				ND	
31 Methylene Chloride	84	4.132	4.123	0.009	60	3299	1.47	
33 Acrylonitrile	53		4.512				ND	
34 trans-1,2-Dichloroethene	96		4.549				ND	
35 Methyl tert-butyl ether	73		4.573				ND	
37 1,1-Dichloroethane	63		5.188				ND	
45 cis-1,2-Dichloroethene	96	5.938	5.936	0.002	75	4795	2.22	
46 2-Butanone (MEK)	43		5.948				ND	
49 Chlorobromomethane	128		6.222				ND	
52 Chloroform	83	6.364	6.368	-0.004	27	4475	1.29	M
53 1,1,1-Trichloroethane	97		6.526				ND	
56 Carbon tetrachloride	117		6.696				ND	
58 Benzene	78		6.927				ND	
59 1,2-Dichloroethane	62		7.000				ND	
64 Trichloroethene	130	7.660	7.657	0.003	95	280250	141.2	
67 1,2-Dichloropropane	63		7.937				ND	
70 1,4-Dioxane	88		8.016				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.217				ND	
74 cis-1,3-Dichloropropene	75		8.661				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.813				ND	
76 Toluene	91		8.990				ND	
77 trans-1,3-Dichloropropene	75		9.239				ND	
79 1,1,2-Trichloroethane	97		9.434				ND	
80 Tetrachloroethene	164	9.497	9.501	-0.004	96	7857	4.81	
82 2-Hexanone	43		9.647				ND	
84 Chlorodibromomethane	129		9.805				ND	
85 Ethylene Dibromide	107		9.914				ND	
87 Chlorobenzene	112		10.401				ND	
89 1,1,1,2-Tetrachloroethane	131		10.498				ND	
90 Ethylbenzene	106		10.498				ND	
91 m-Xylene & p-Xylene	106		10.638				ND	
92 o-Xylene	106		11.015				ND	
93 Styrene	104		11.034				ND	
94 Bromoform	173		11.222				ND	
99 1,1,2,2-Tetrachloroethane	83		11.703				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

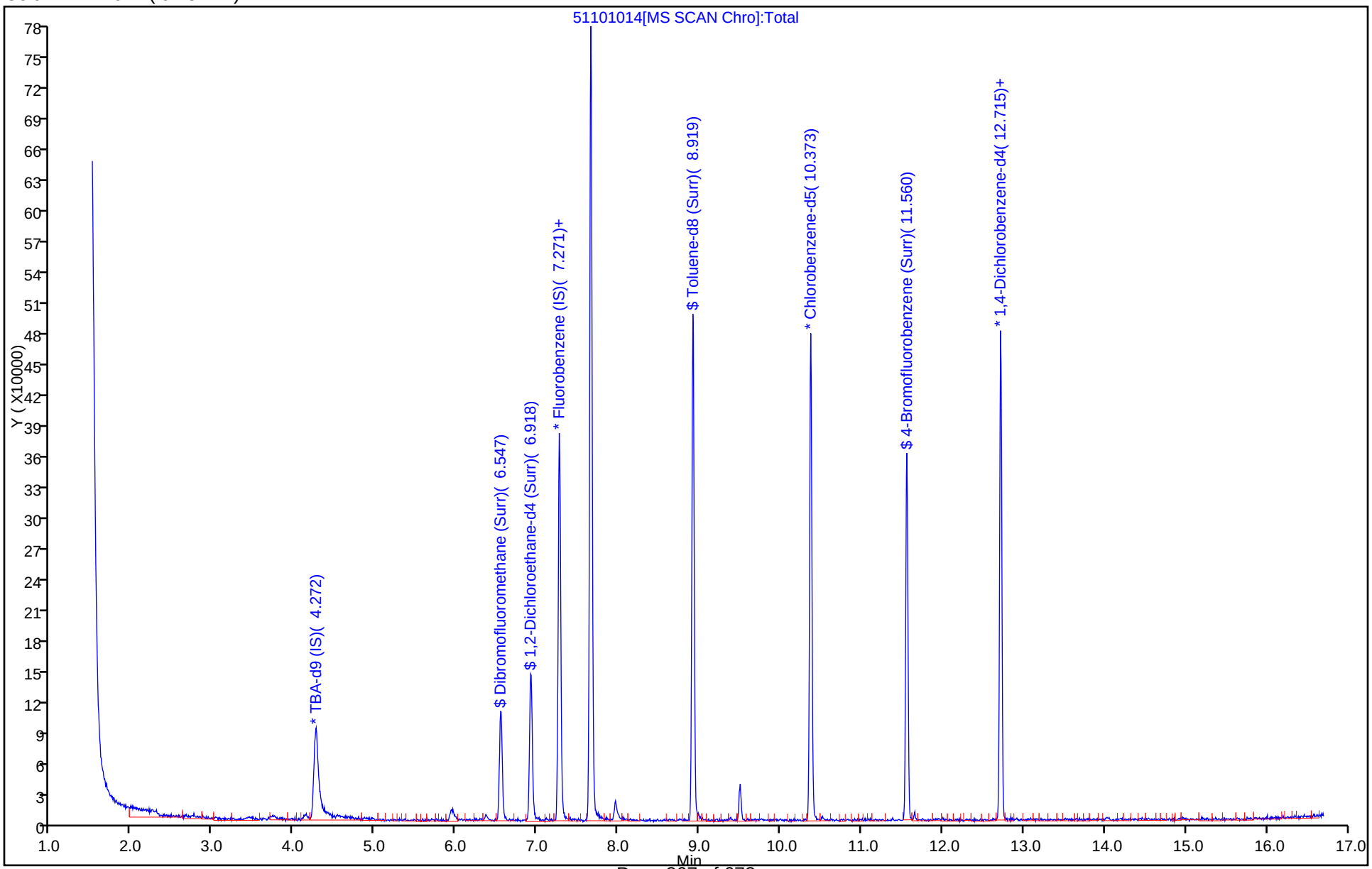
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 02-Nov-2016 07:15:44 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101014.D				
Injection Date:	01-Nov-2016 15:02:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-C-4	Lab Sample ID:	180-60202-4	Worklist Smp#:	14
Client ID:	HD-CW-1A-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	11
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101014.D
Lims ID: 180-60202-C-4
Client ID: HD-CW-1A-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2016 15:02:30 ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0014130-014
Misc. Info.: 180-60202-C-4, 2x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:15:43 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:15:43

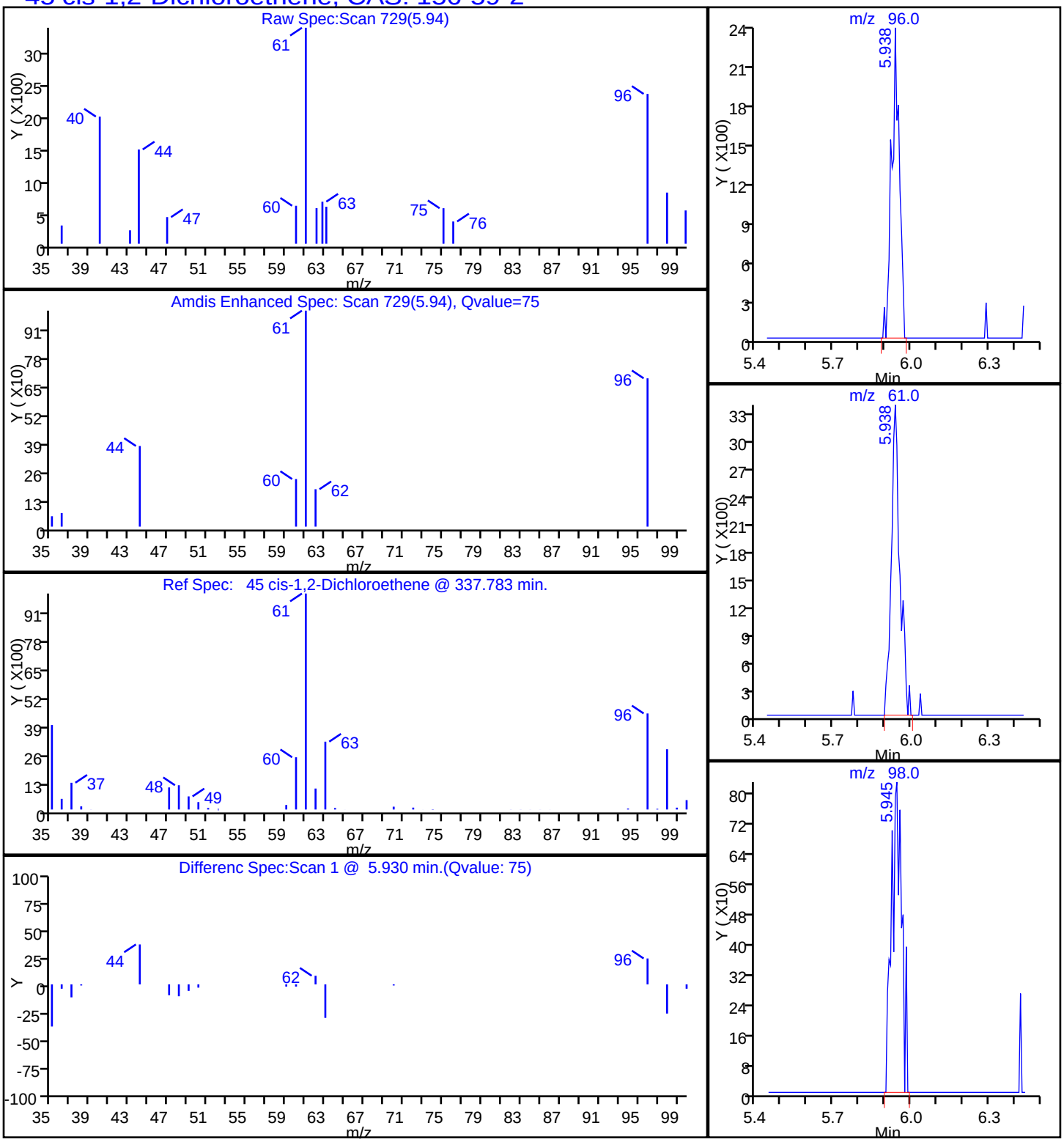
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	46.3	92.62
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.8	97.63
$ 7 Toluene-d8 (Surr)	50.0	48.9	97.72
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.4	100.89

Report Date: 02-Nov-2016 07:15:45 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101014.D				
Injection Date:	01-Nov-2016 15:02:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-C-4	Lab Sample ID:	180-60202-4		
Client ID:	HD-CW-1A-0/1-0				
Operator ID:	001562	ALS Bottle#:	11	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



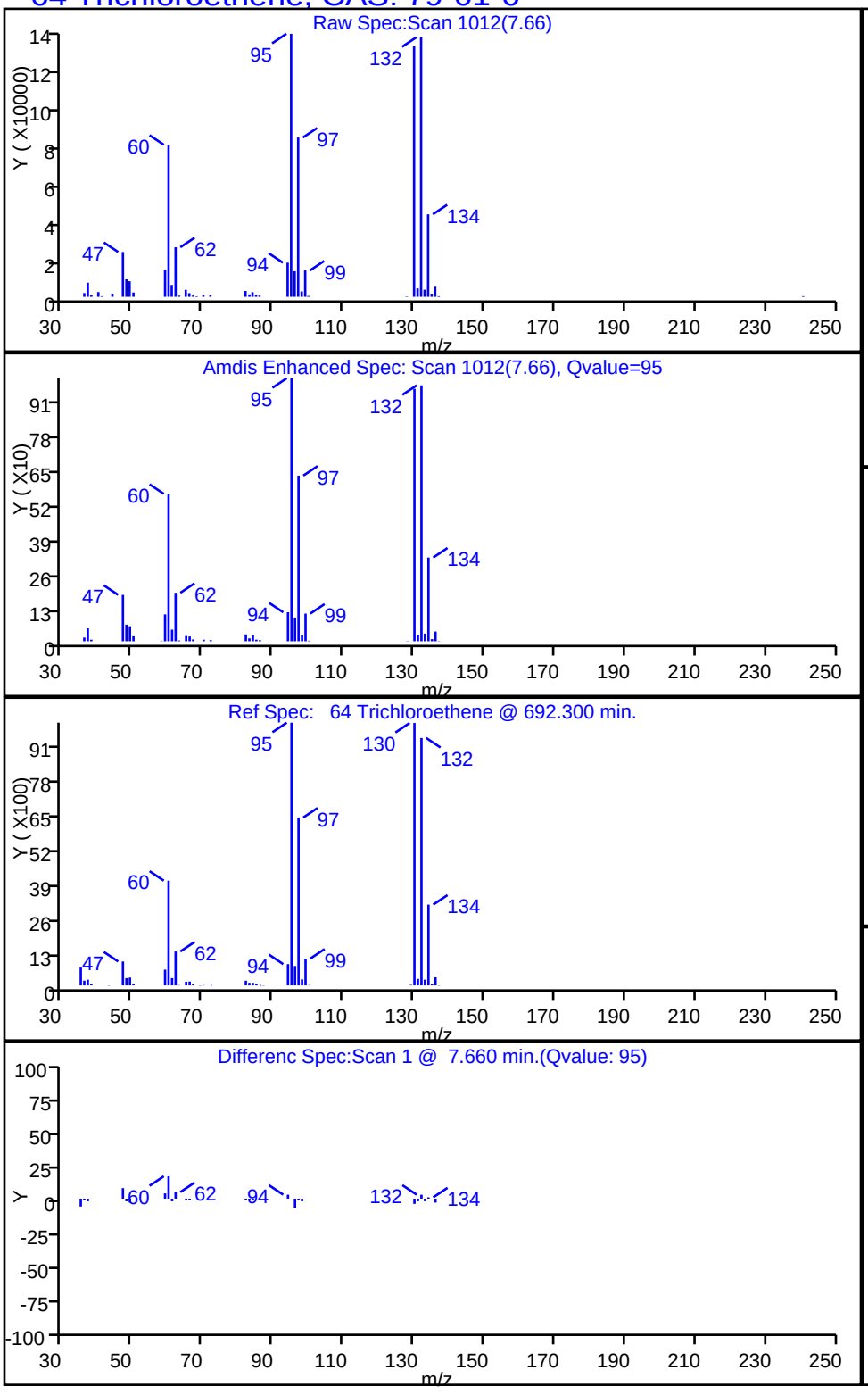
Report Date: 02-Nov-2016 07:15:45 Chrom Revision: 2.2 17-Oct-2016 09:27:18

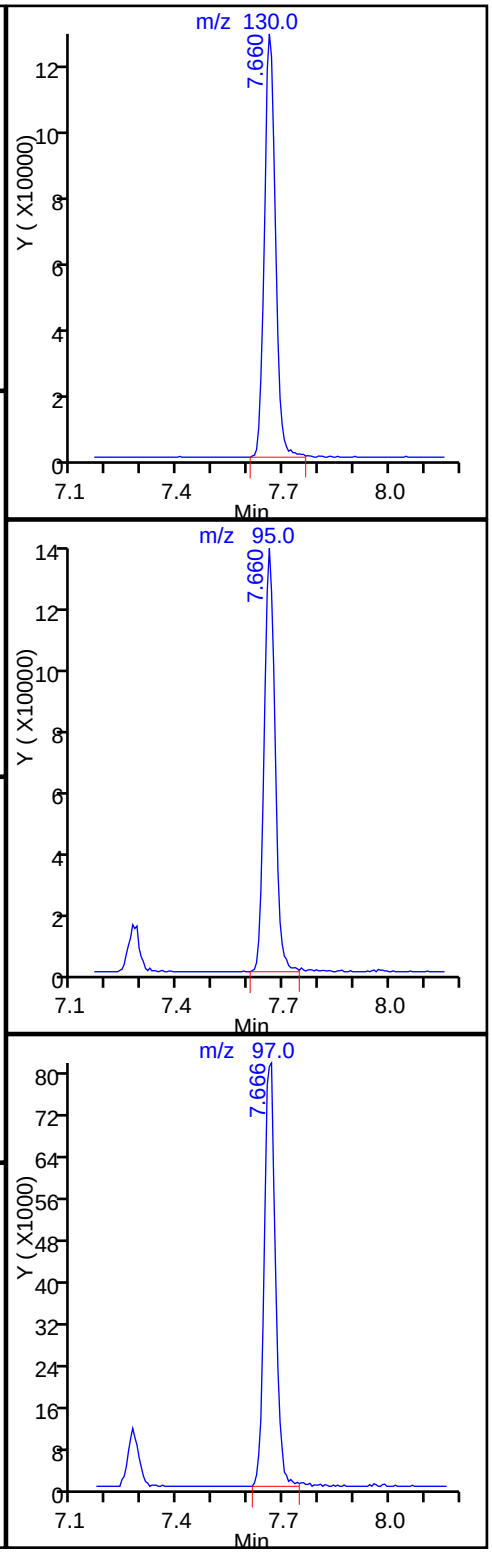
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101014.D

Injection Date:	01-Nov-2016 15:02:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-C-4	Lab Sample ID:	180-60202-4		
Client ID:	HD-CW-1A-0/1-0				
Operator ID:	001562	ALS Bottle#:	11	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6





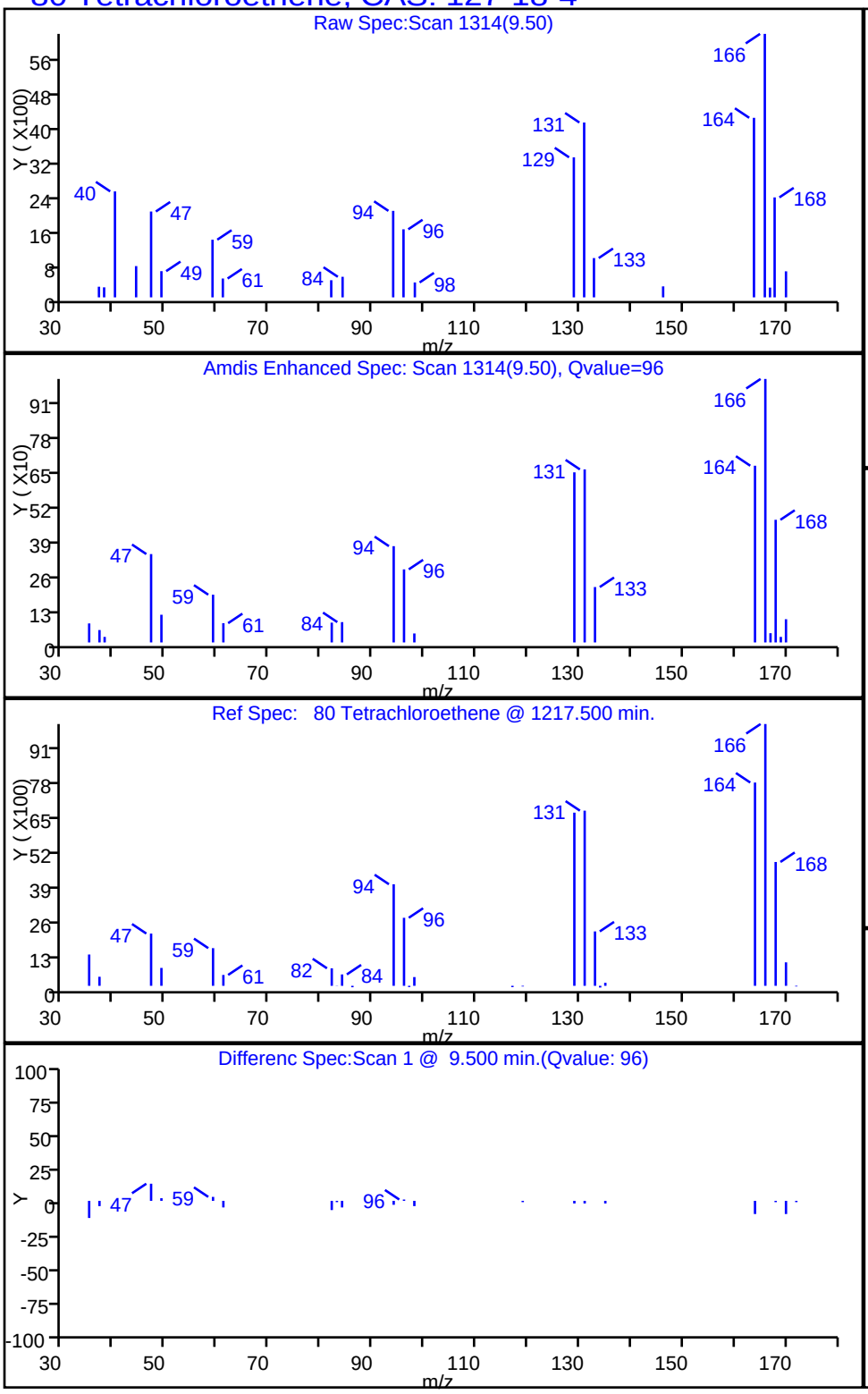
Report Date: 02-Nov-2016 07:15:45 Chrom Revision: 2.2 17-Oct-2016 09:27:18

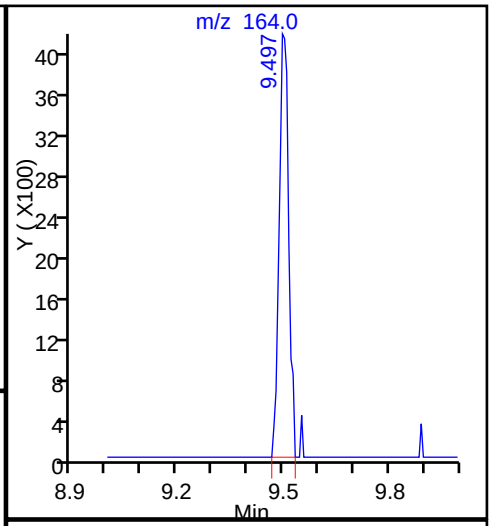
TestAmerica Pittsburgh

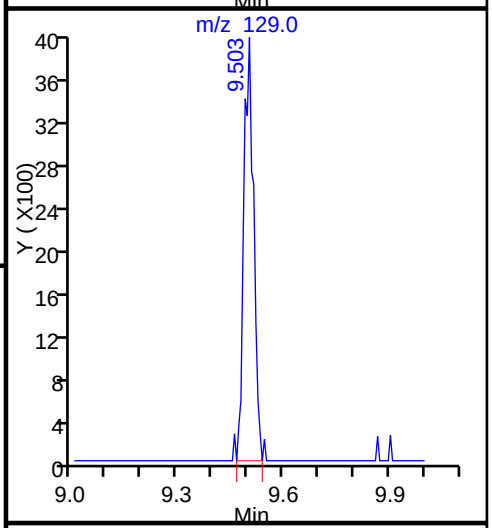
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101014.D

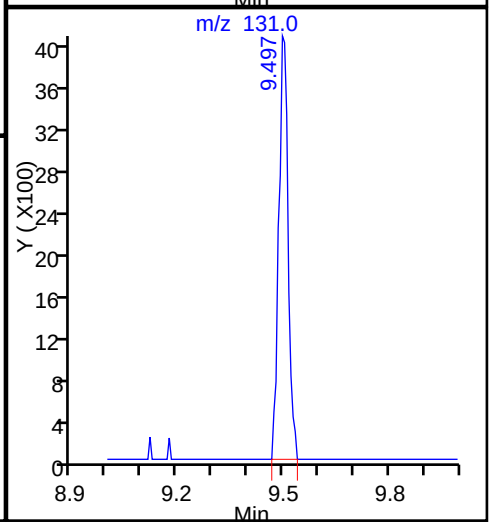
Injection Date:	01-Nov-2016 15:02:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-C-4	Lab Sample ID:	180-60202-4		
Client ID:	HD-CW-1A-0/1-0				
Operator ID:	001562	ALS Bottle#:	11	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

80 Tetrachloroethene, CAS: 127-18-4









Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

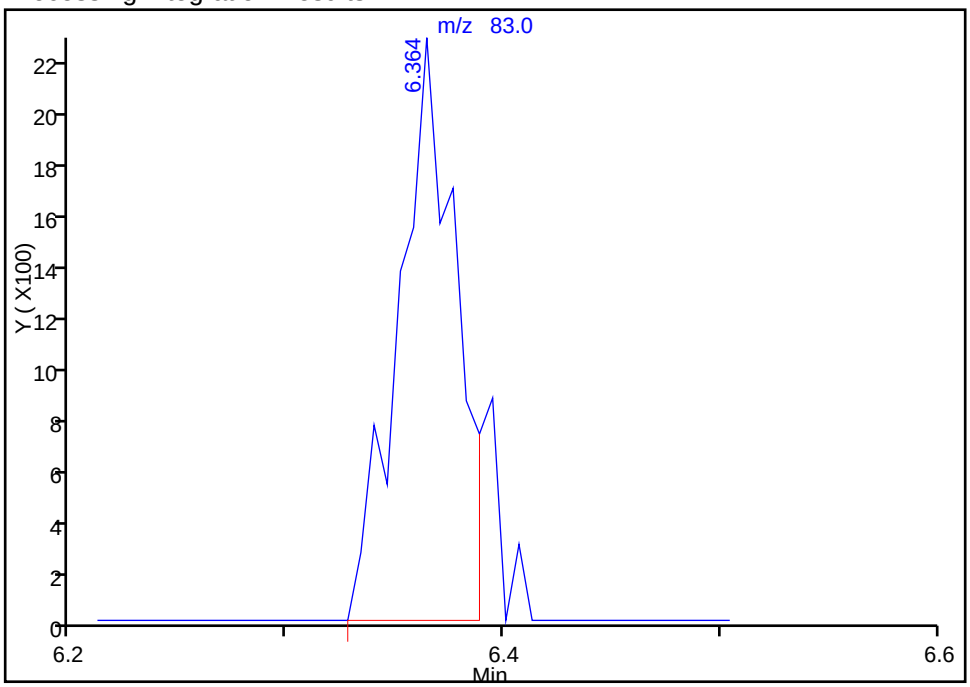
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101014.D				
Injection Date:	01-Nov-2016 15:02:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-C-4	Lab Sample ID:	180-60202-4		
Client ID:	HD-CW-1A-0/1-0				
Operator ID:	001562	ALS Bottle#:	11	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

Signal: 1

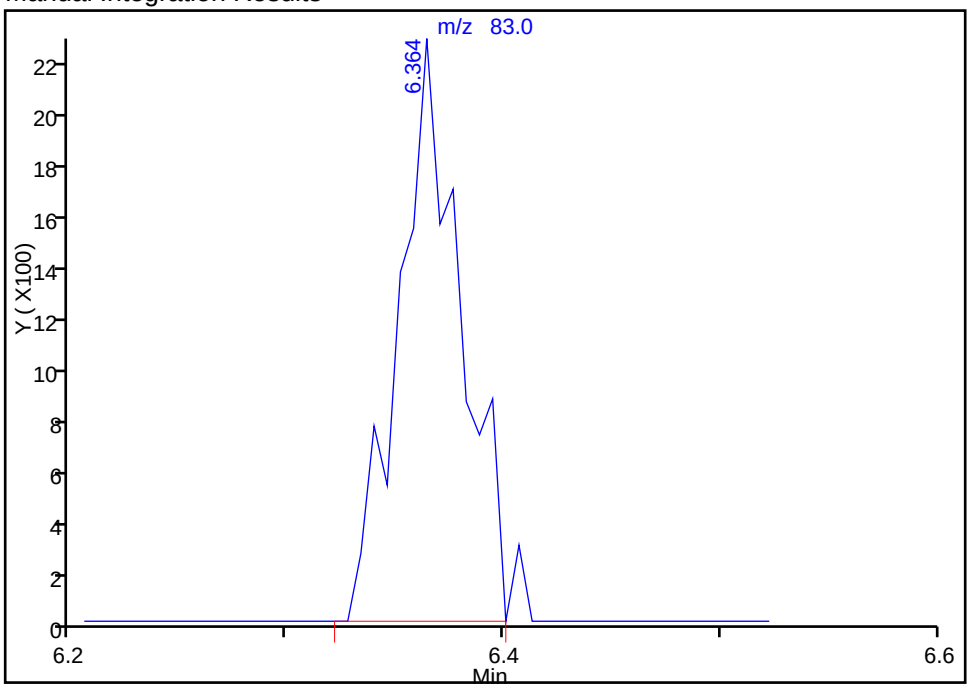
Processing Integration Results

RT: 6.36
Area: 4162
Amount: 1.200838
Amount Units: ng



Manual Integration Results

RT: 6.36
Area: 4475
Amount: 1.291146
Amount Units: ng



Reviewer: fergusond, 02-Nov-2016 07:15:43

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-2-0/1-0 | Lab Sample ID: 180-60202-5

Matrix: Water | Lab File ID: 51101015.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 15:26

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.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U ^c	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	6.1		1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	15		1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	0.97	J	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-2-0/1-0 | Lab Sample ID: 180-60202-5

Matrix: Water | Lab File ID: 51101015.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 15:26

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.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U ^c	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		72-134
2037-26-5	Toluene-d8 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	101		72-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101015.D
Lims ID: 180-60202-B-5
Client ID: HD-CW-2-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2016 15:26:30 ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-015
Misc. Info.: 180-60202-B-5
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:17:03 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:17:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.265	4.275	-0.010	0	137669	1000.0	
* 2 Fluorobenzene (IS)	96	7.276	7.274	0.002	97	352195	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.377	-0.004	91	89491	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.721	12.719	0.002	97	139395	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.552	6.550	0.002	93	83486	49.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.917	6.921	-0.004	0	118294	48.6	
$ 7 Toluene-d8 (Surr)	98	8.919	8.923	-0.004	95	329269	48.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.559	11.557	0.002	86	137487	50.3	
12 Chloromethane	50		1.763				ND	
13 Vinyl chloride	62		1.909				ND	
15 Bromomethane	94		2.231				ND	
16 Chloroethane	64		2.377				ND	
22 1,1-Dichloroethene	96		3.338				ND	
24 Acetone	43	3.450	3.442	0.008	73	7560	8.34	
26 Carbon disulfide	76		3.618				ND	
31 Methylene Chloride	84	4.143	4.123	0.020	22	1069	0.4798	
33 Acrylonitrile	53		4.512				ND	
34 trans-1,2-Dichloroethene	96		4.549				ND	
35 Methyl tert-butyl ether	73	4.581	4.573	0.008	44	1591	0.3159	
37 1,1-Dichloroethane	63		5.188				ND	
45 cis-1,2-Dichloroethene	96	5.938	5.936	0.002	86	64866	30.3	
46 2-Butanone (MEK)	43		5.948				ND	
49 Chlorobromomethane	128		6.222				ND	
52 Chloroform	83		6.368				ND	
53 1,1,1-Trichloroethane	97		6.526				ND	
56 Carbon tetrachloride	117		6.696				ND	
58 Benzene	78		6.927				ND	
59 1,2-Dichloroethane	62		7.000				ND	
64 Trichloroethene	130	7.659	7.657	0.002	95	143726	73.0	
67 1,2-Dichloropropane	63		7.937				ND	
70 1,4-Dioxane	88		8.016				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.217				ND	
74 cis-1,3-Dichloropropene	75		8.661				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.813				ND	
76 Toluene	91		8.990				ND	
77 trans-1,3-Dichloropropene	75		9.239				ND	
79 1,1,2-Trichloroethane	97		9.434				ND	
80 Tetrachloroethene	164	9.503	9.501	0.002	94	7803	4.83	
82 2-Hexanone	43		9.647				ND	
84 Chlorodibromomethane	129		9.805				ND	
85 Ethylene Dibromide	107		9.914				ND	
87 Chlorobenzene	112		10.401				ND	
89 1,1,1,2-Tetrachloroethane	131		10.498				ND	
90 Ethylbenzene	106		10.498				ND	
91 m-Xylene & p-Xylene	106		10.638				ND	
92 o-Xylene	106		11.015				ND	
93 Styrene	104		11.034				ND	
94 Bromoform	173		11.222				ND	
99 1,1,2,2-Tetrachloroethane	83		11.703				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

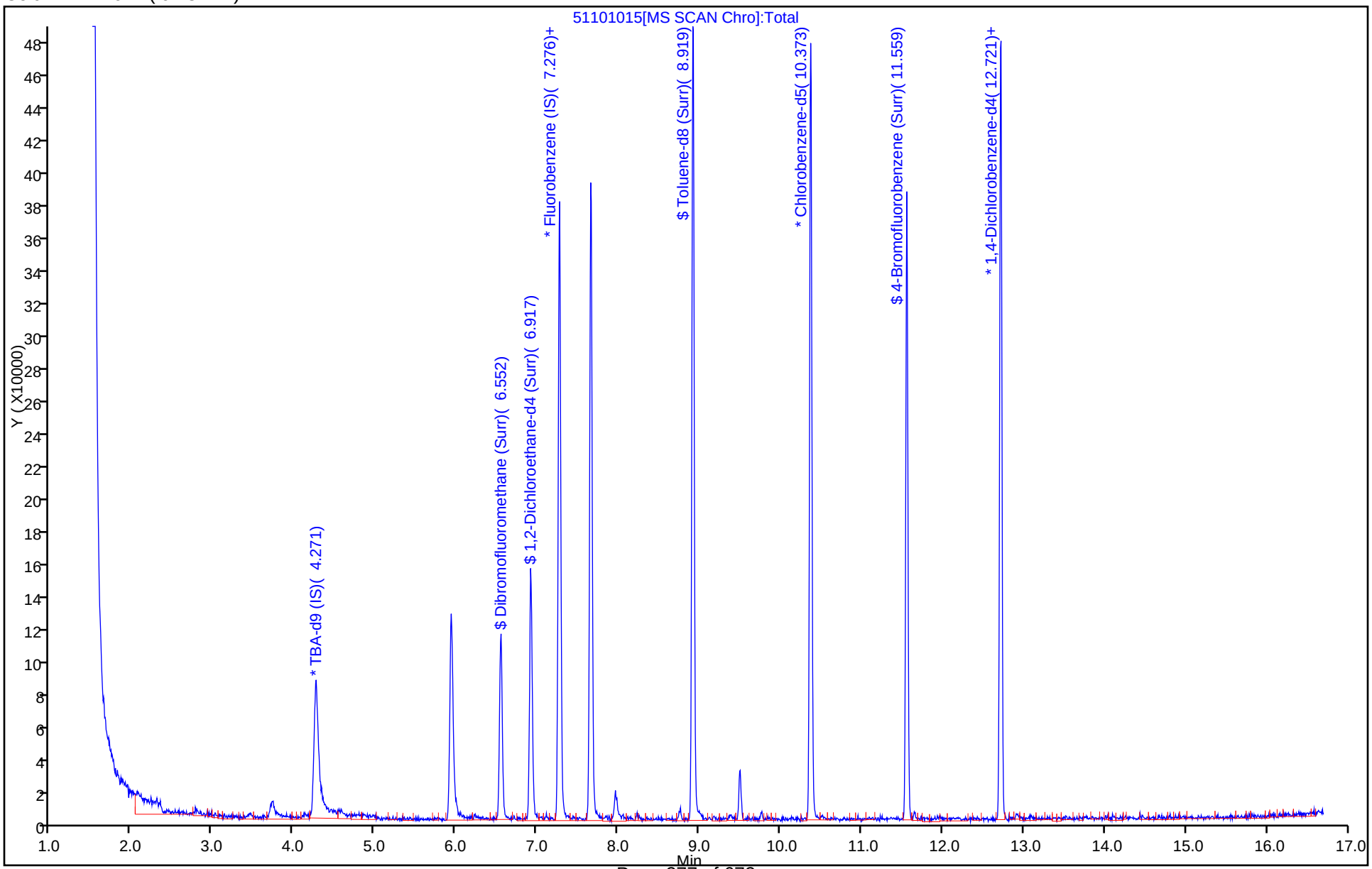
Report Date: 02-Nov-2016 07:17:04 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101015.D

Injection Date:	01-Nov-2016 15:26:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-B-5	Lab Sample ID:	180-60202-5	Worklist Smp#:	15
Client ID:	HD-CW-2-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101015.D
Lims ID: 180-60202-B-5
Client ID: HD-CW-2-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2016 15:26:30 ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-015
Misc. Info.: 180-60202-B-5
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:17:03 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:17:03

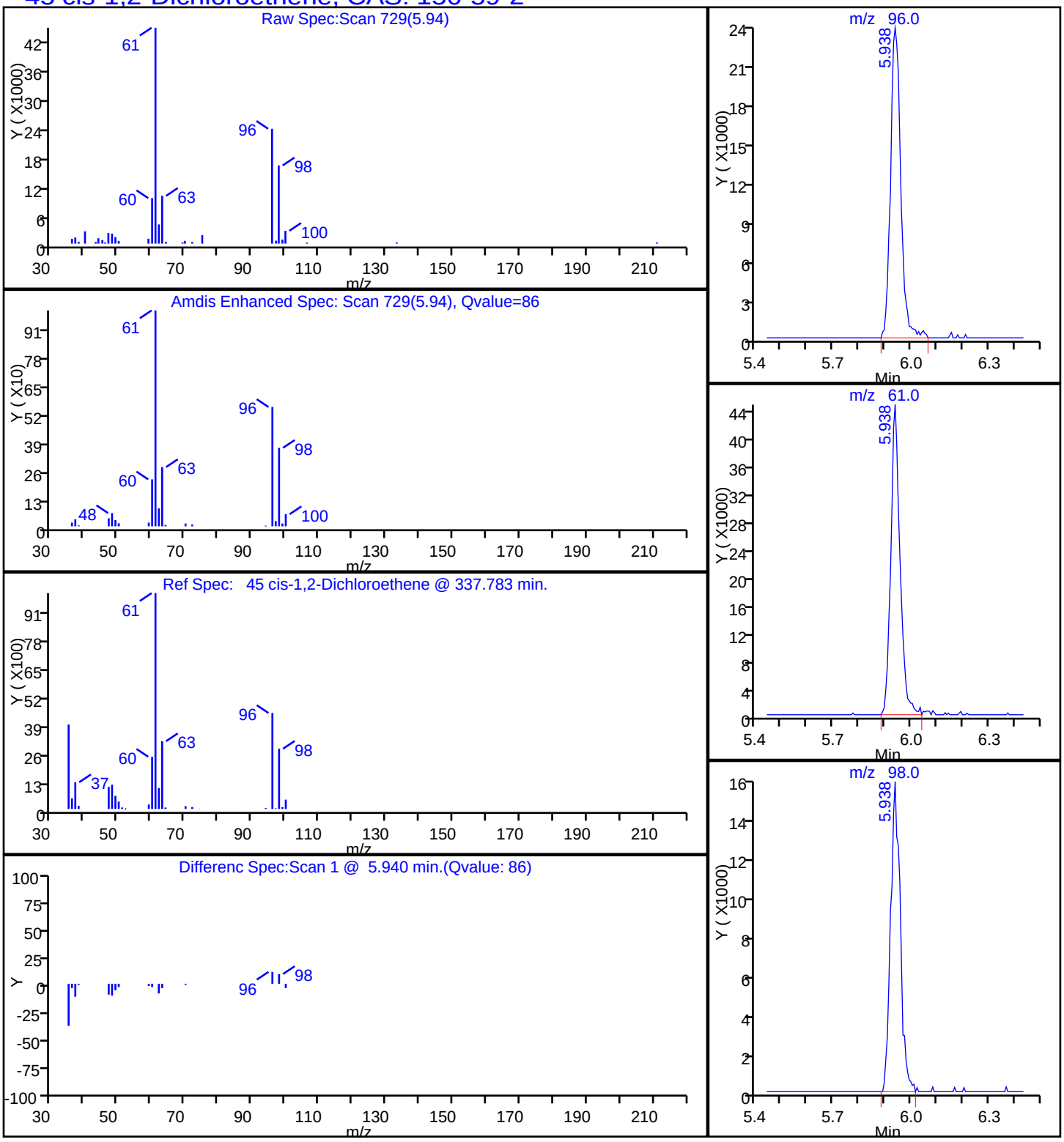
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.5	99.09
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.6	97.26
$ 7 Toluene-d8 (Surr)	50.0	48.7	97.50
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.3	100.70

Report Date: 02-Nov-2016 07:17:04 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101015.D				
Injection Date:	01-Nov-2016 15:26:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-5	Lab Sample ID:	180-60202-5		
Client ID:	HD-CW-2-0/1-0				
Operator ID:	001562	ALS Bottle#:	12	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



Report Date: 02-Nov-2016 07:17:04 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101015.D

Injection Date: 01-Nov-2016 15:26:30 Instrument ID: CHHP5

Lims ID: 180-60202-B-5 Lab Sample ID: 180-60202-5

Client ID: HD-CW-2-0/1-0

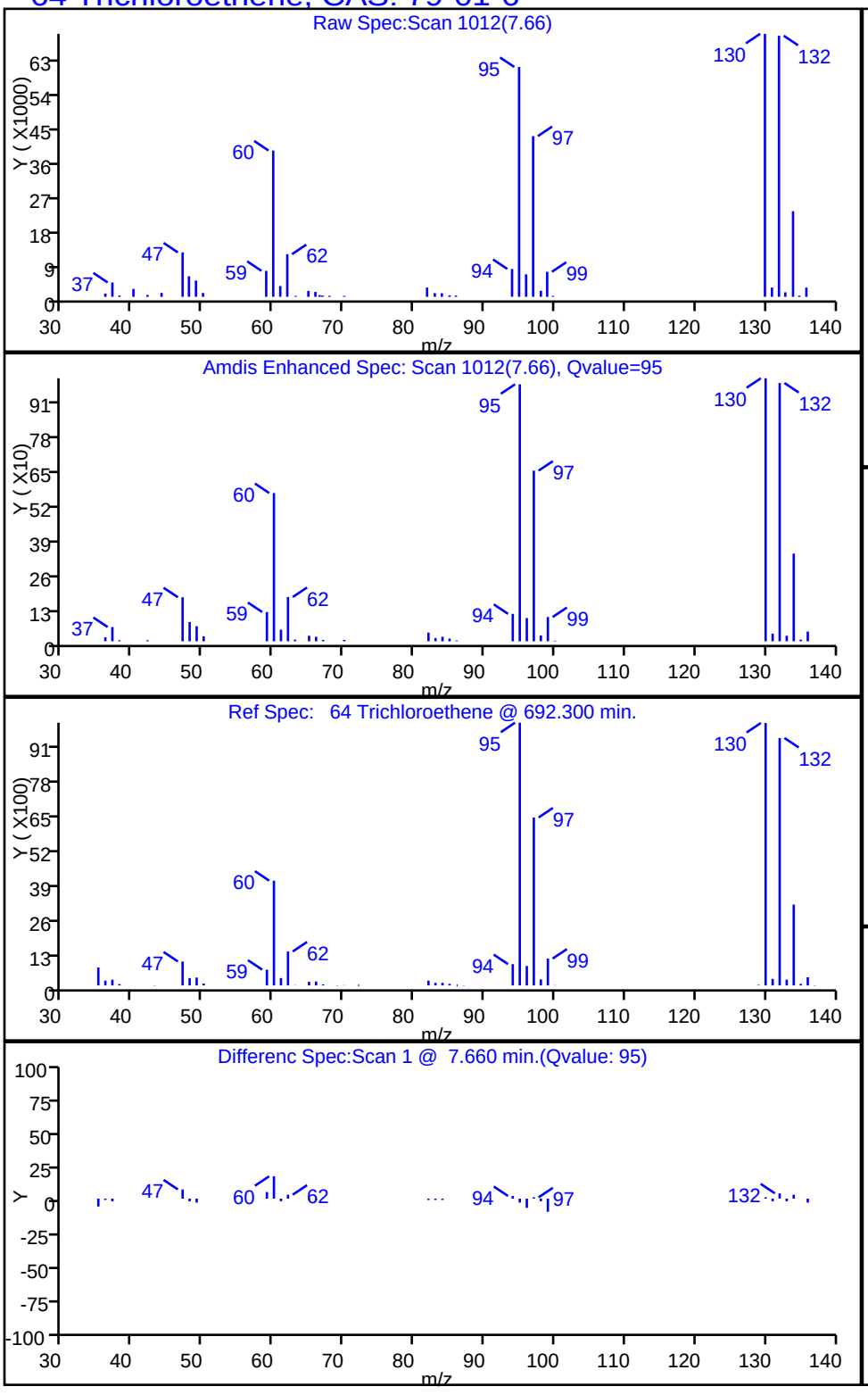
Operator ID: 001562 ALS Bottle#: 12 Worklist Smp#: 15

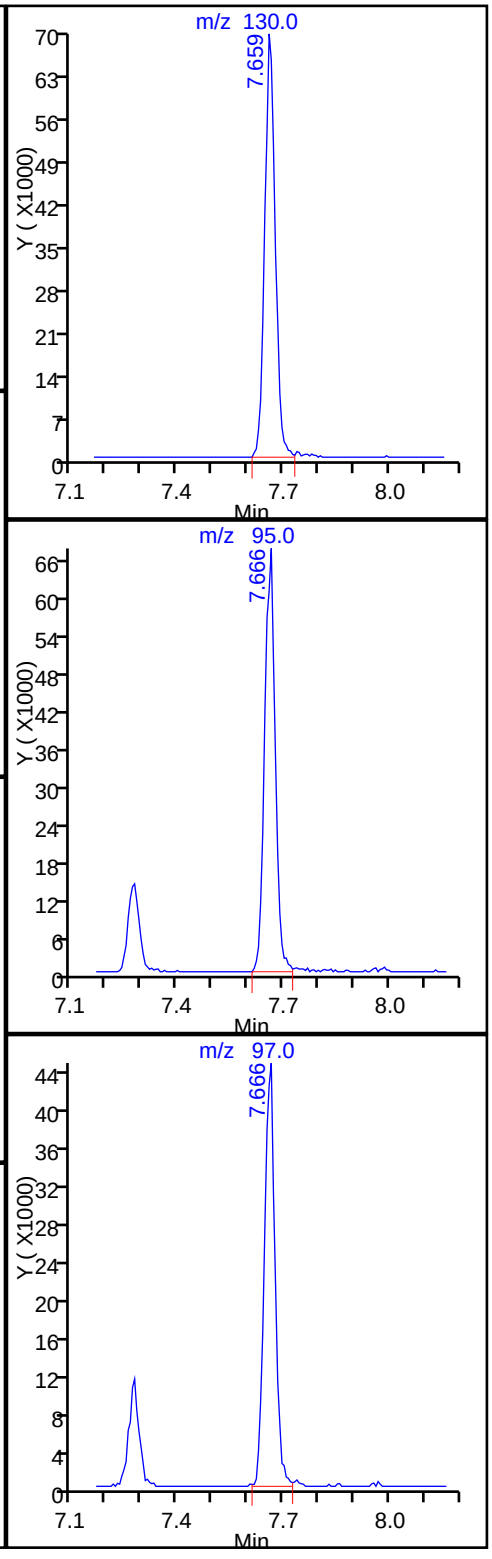
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

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

64 Trichloroethene, CAS: 79-01-6



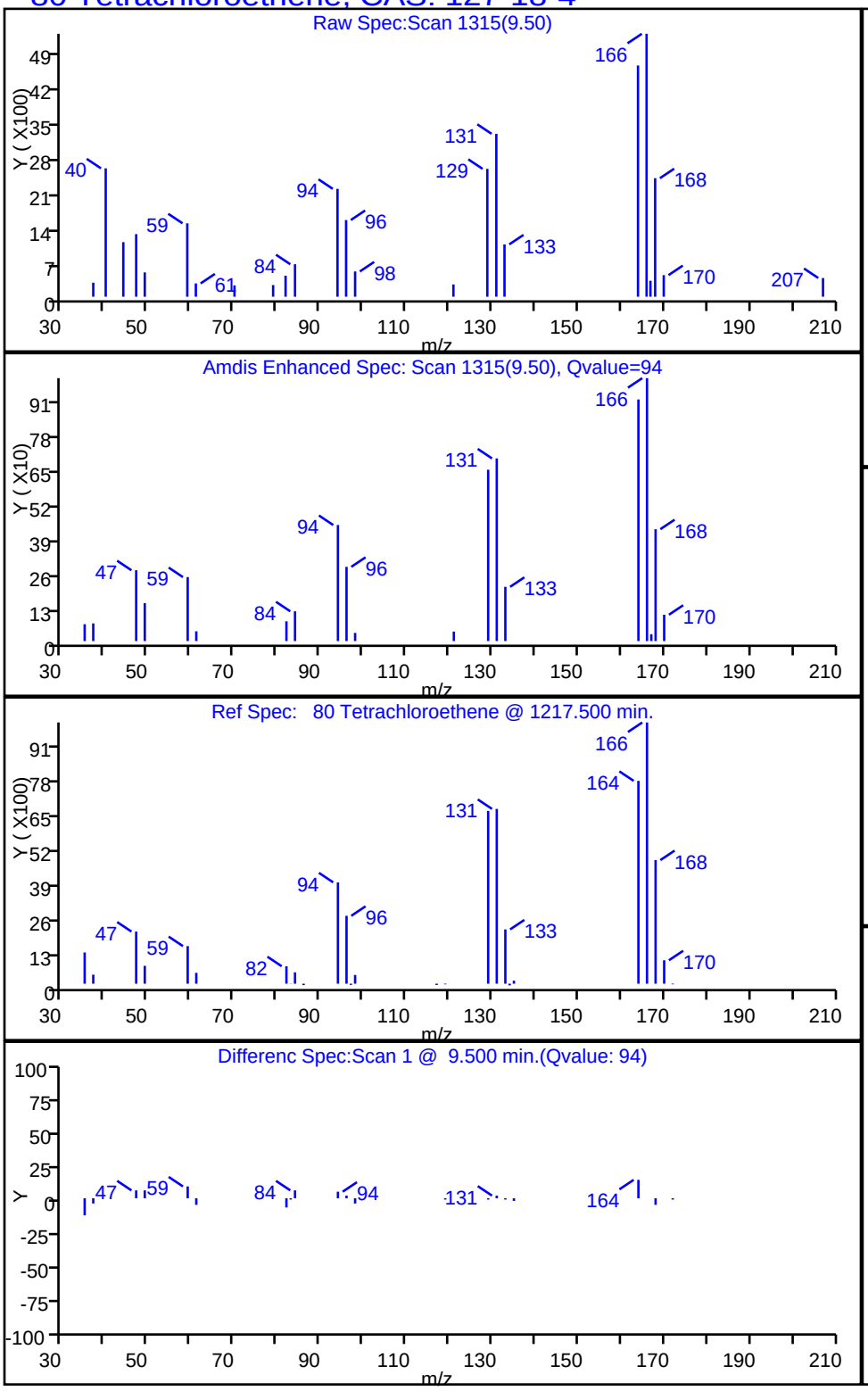


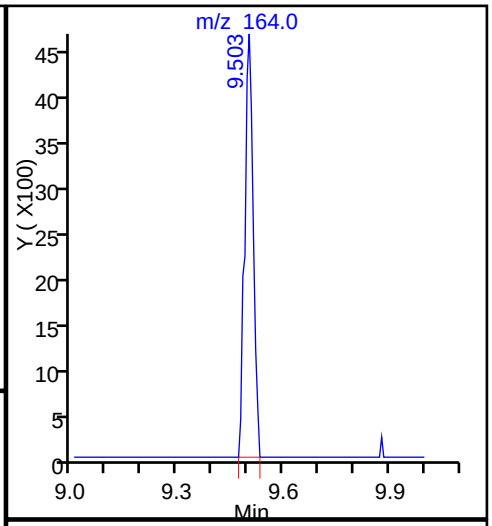
Report Date: 02-Nov-2016 07:17:04 Chrom Revision: 2.2 17-Oct-2016 09:27:18

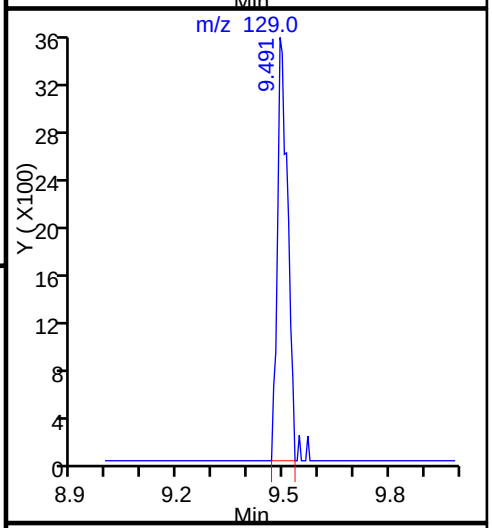
TestAmerica Pittsburgh

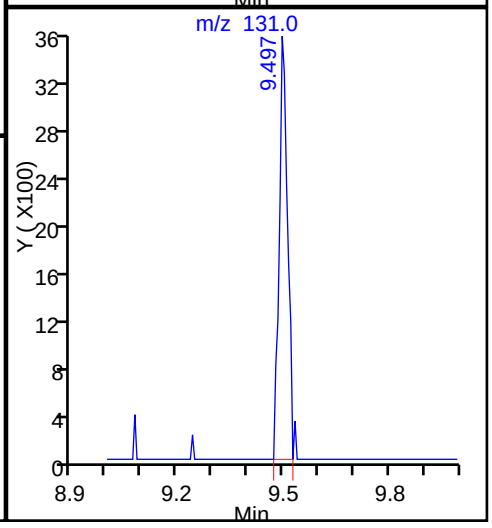
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101015.D		
Injection Date:	01-Nov-2016 15:26:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-5	Lab Sample ID:	180-60202-5
Client ID:	HD-CW-2-0/1-0		
Operator ID:	001562	ALS Bottle#:	12 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

80 Tetrachloroethene, CAS: 127-18-4









FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-7-0/1-0 | Lab Sample ID: 180-60202-6

Matrix: Water | Lab File ID: 51101016.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:12

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 15:50

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U ^c	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	0.91	J	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	1.0		1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	0.76	J	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-7-0/1-0 | Lab Sample ID: 180-60202-6

Matrix: Water | Lab File ID: 51101016.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:12

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 15:50

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U ^c	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		72-134
2037-26-5	Toluene-d8 (Surr)	94		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		72-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101016.D
Lims ID: 180-60202-C-6
Client ID: HD-CW-7-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2016 15:50:30 ALS Bottle#: 13 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-016
Misc. Info.: 180-60202-C-6
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:18:36 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:18:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.263	4.275	-0.012	0	163237	1000.0	
* 2 Fluorobenzene (IS)	96	7.275	7.274	0.001	97	362484	50.0	
* 3 Chlorobenzene-d5	119	10.377	10.377	0.000	91	94735	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.719	12.719	0.000	97	145669	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.545	6.550	-0.005	94	87624	50.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.922	6.921	0.001	0	130746	52.2	
$ 7 Toluene-d8 (Surr)	98	8.917	8.923	-0.006	95	336611	47.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.558	11.557	0.001	86	141833	49.1	
12 Chloromethane	50		1.763				ND	
13 Vinyl chloride	62		1.909				ND	
15 Bromomethane	94		2.231				ND	
16 Chloroethane	64		2.377				ND	
22 1,1-Dichloroethene	96		3.338				ND	
24 Acetone	43	3.454	3.442	0.012	69	10487	11.2	
26 Carbon disulfide	76		3.618				ND	
31 Methylene Chloride	84	4.160	4.123	0.037	1	1275	0.5560	
33 Acrylonitrile	53		4.512				ND	
34 trans-1,2-Dichloroethene	96		4.549				ND	
35 Methyl tert-butyl ether	73	4.562	4.573	-0.011	5	2004	0.3867	
37 1,1-Dichloroethane	63		5.188				ND	
45 cis-1,2-Dichloroethene	96		5.936				ND	
46 2-Butanone (MEK)	43		5.948				ND	
49 Chlorobromomethane	128		6.222				ND	
52 Chloroform	83	6.374	6.368	0.006	95	16108	4.55	
53 1,1,1-Trichloroethane	97		6.526				ND	
56 Carbon tetrachloride	117		6.696				ND	
58 Benzene	78		6.927				ND	
59 1,2-Dichloroethane	62		7.000				ND	
64 Trichloroethene	130	7.664	7.657	0.007	93	10431	5.15	
67 1,2-Dichloropropane	63		7.937				ND	
70 1,4-Dioxane	88		8.016				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.217				ND	
74 cis-1,3-Dichloropropene	75		8.661				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.813				ND	
76 Toluene	91		8.990				ND	
77 trans-1,3-Dichloropropene	75		9.239				ND	
79 1,1,2-Trichloroethane	97		9.434				ND	
80 Tetrachloroethene	164	9.507	9.501	0.006	86	6493	3.79	
82 2-Hexanone	43		9.647				ND	
84 Chlorodibromomethane	129		9.805				ND	
85 Ethylene Dibromide	107		9.914				ND	
87 Chlorobenzene	112		10.401				ND	
89 1,1,1,2-Tetrachloroethane	131		10.498				ND	
90 Ethylbenzene	106		10.498				ND	
91 m-Xylene & p-Xylene	106		10.638				ND	
92 o-Xylene	106		11.015				ND	
93 Styrene	104		11.034				ND	
94 Bromoform	173		11.222				ND	
99 1,1,2,2-Tetrachloroethane	83		11.703				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

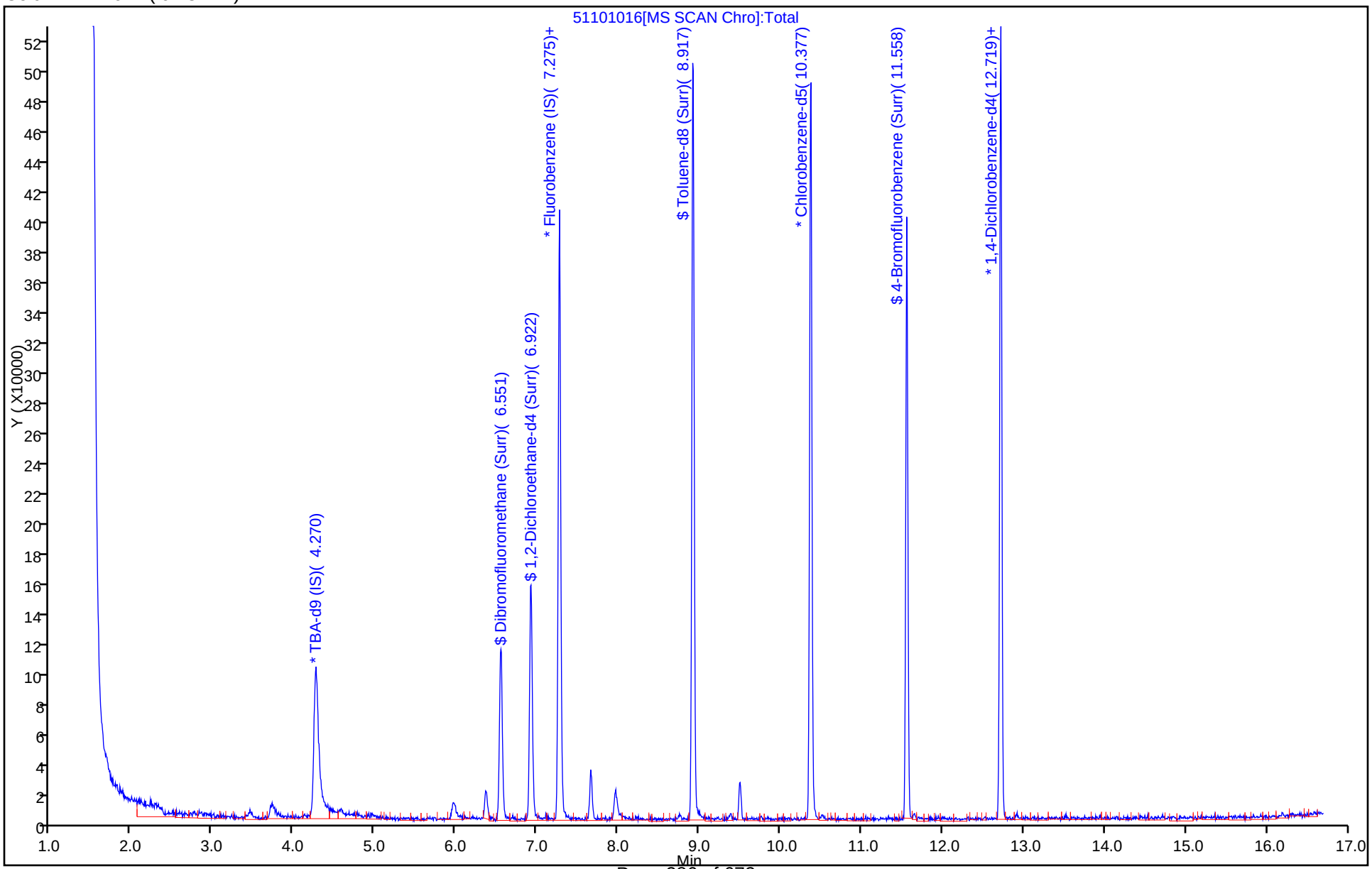
Report Date: 02-Nov-2016 07:18:37 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101016.D

Injection Date:	01-Nov-2016 15:50:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-C-6	Lab Sample ID:	180-60202-6	Worklist Smp#:	16
Client ID:	HD-CW-7-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101016.D
Lims ID: 180-60202-C-6
Client ID: HD-CW-7-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2016 15:50:30 ALS Bottle#: 13 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-016
Misc. Info.: 180-60202-C-6
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:18:36 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:18:36

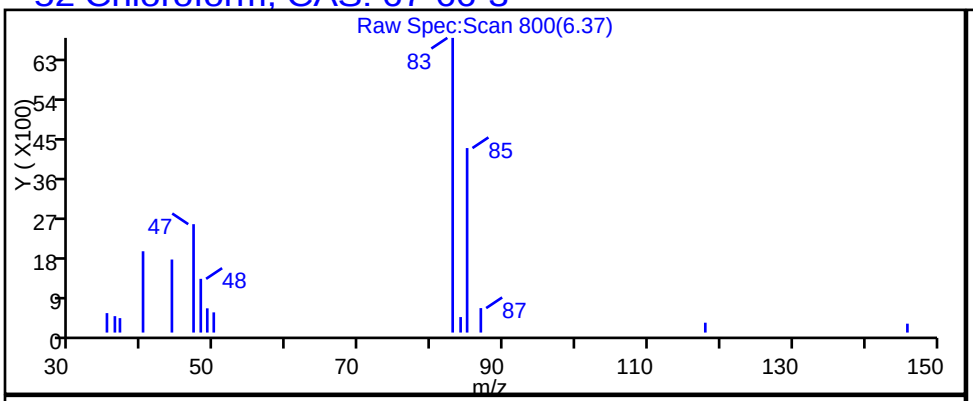
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.5	101.05
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	52.2	104.44
$ 7 Toluene-d8 (Surr)	50.0	47.1	94.16
$ 8 4-Bromofluorobenzene (Surr)	50.0	49.1	98.13

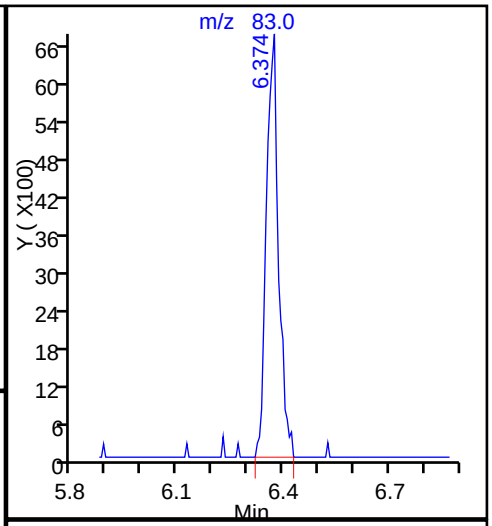
Report Date: 02-Nov-2016 07:18:37 Chrom Revision: 2.2 17-Oct-2016 09:27:18

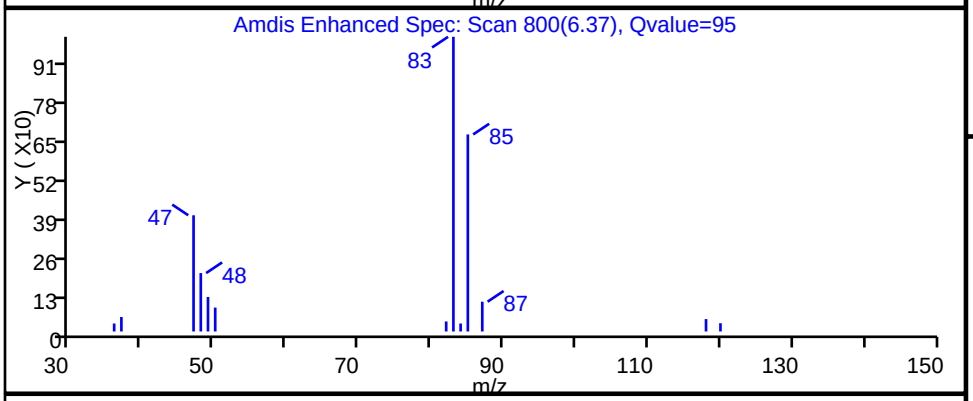
TestAmerica Pittsburgh

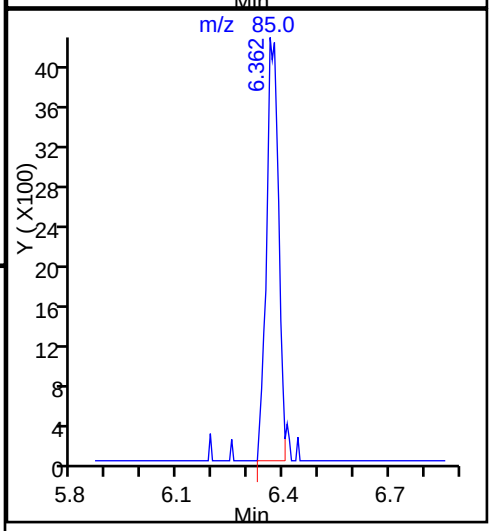
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101016.D		
Injection Date:	01-Nov-2016 15:50:30	Instrument ID:	CHHP5
Lims ID:	180-60202-C-6	Lab Sample ID:	180-60202-6
Client ID:	HD-CW-7-0/1-0		
Operator ID:	001562	ALS Bottle#:	13 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

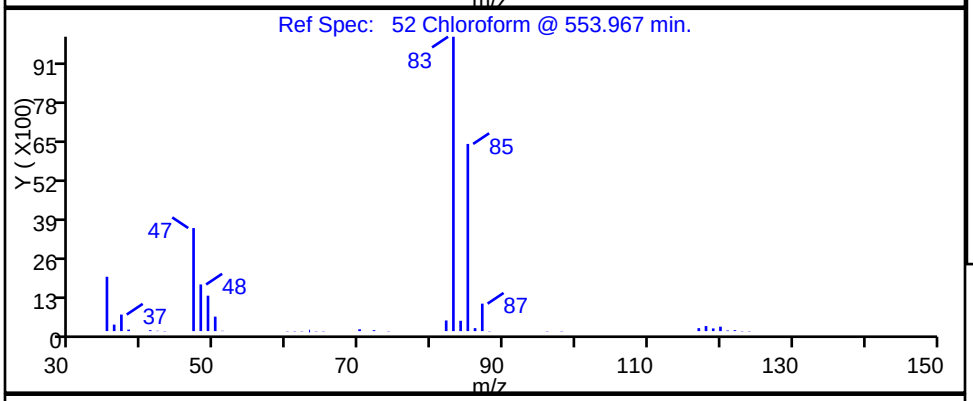
52 Chloroform, CAS: 67-66-3

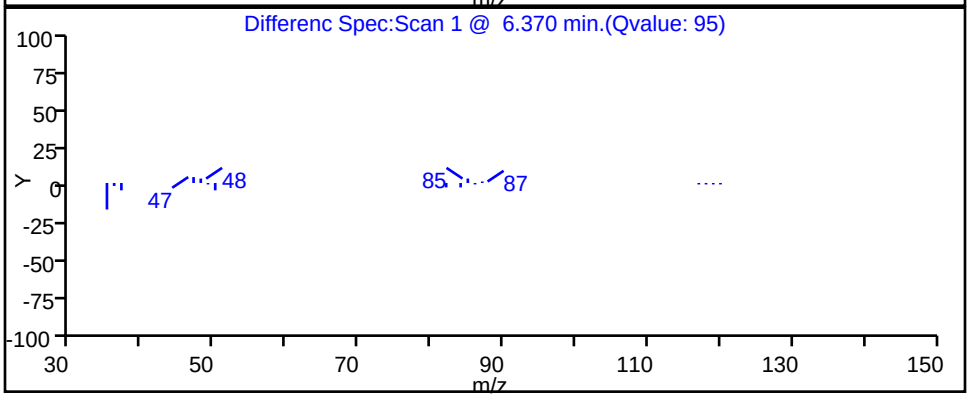












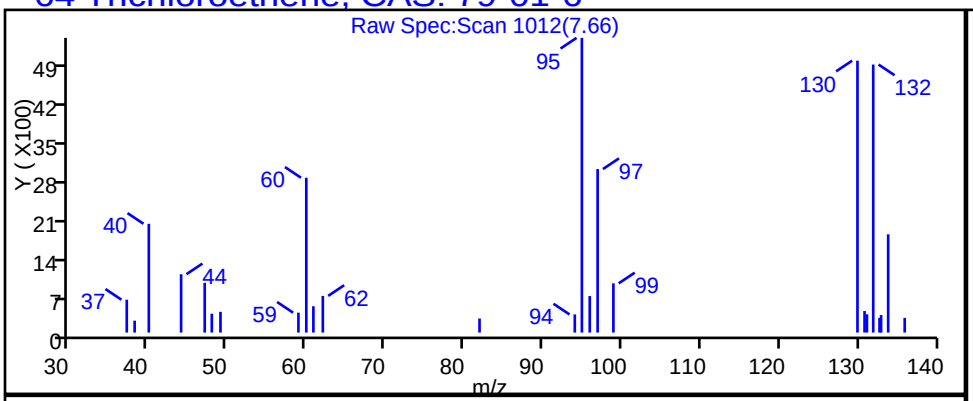
Report Date: 02-Nov-2016 07:18:37 Chrom Revision: 2.2 17-Oct-2016 09:27:18

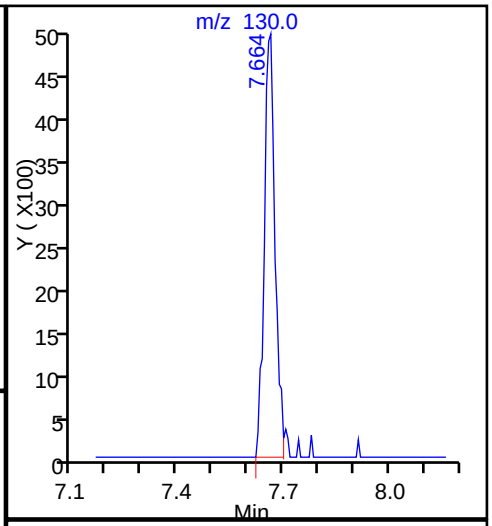
TestAmerica Pittsburgh

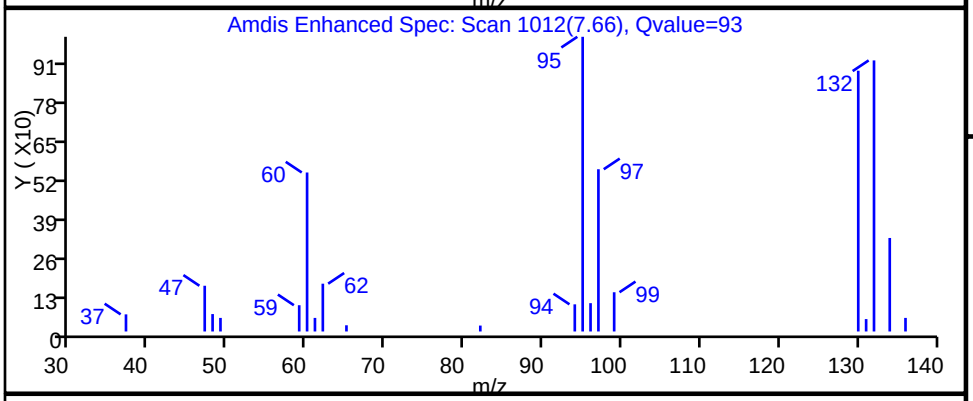
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101016.D

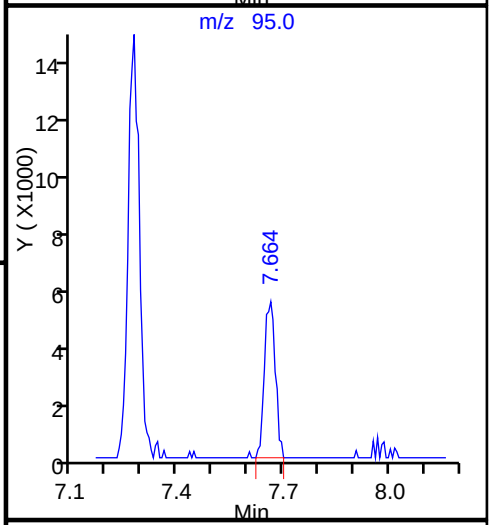
Injection Date:	01-Nov-2016 15:50:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-C-6	Lab Sample ID:	180-60202-6		
Client ID:	HD-CW-7-0/1-0				
Operator ID:	001562	ALS Bottle#:	13	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

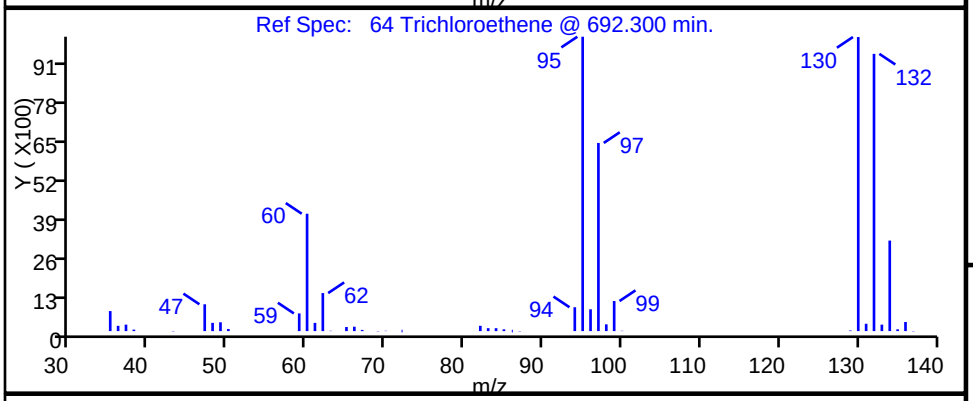
64 Trichloroethene, CAS: 79-01-6

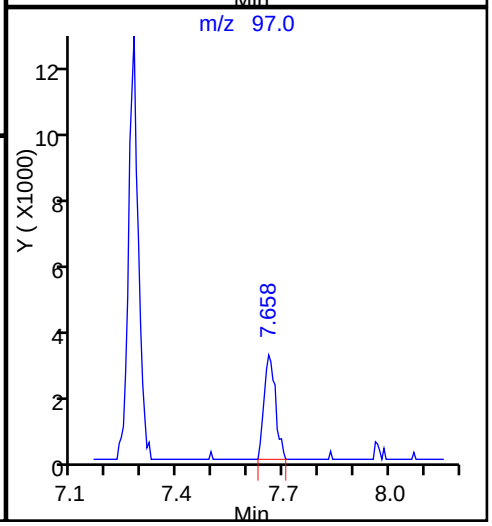


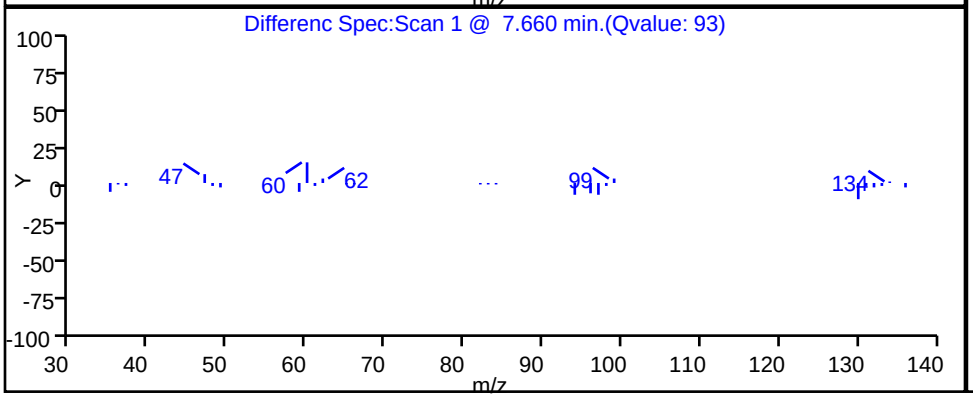










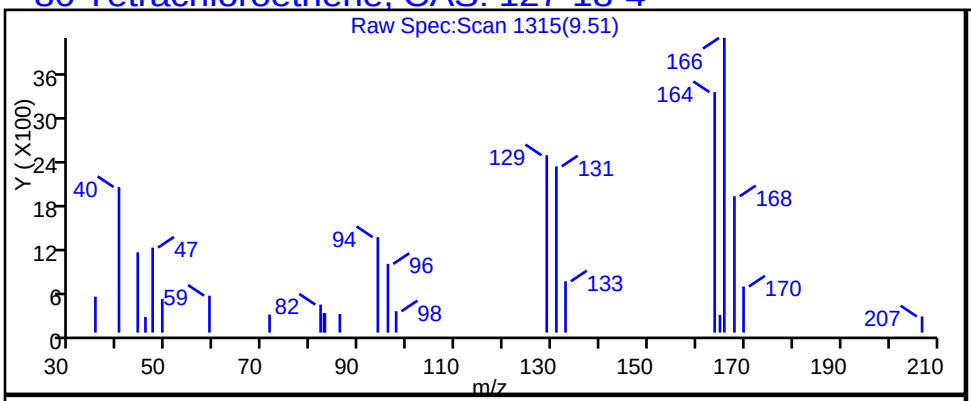


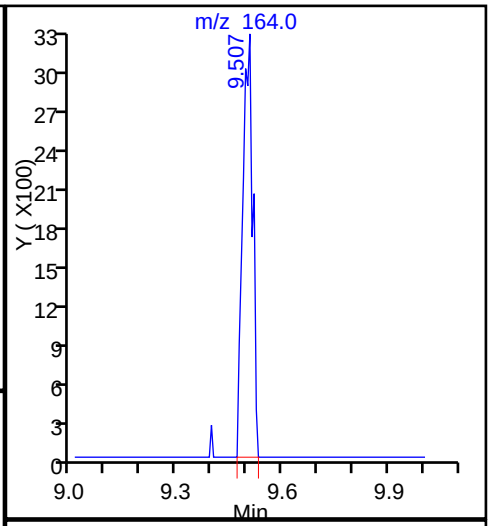
Report Date: 02-Nov-2016 07:18:38 Chrom Revision: 2.2 17-Oct-2016 09:27:18

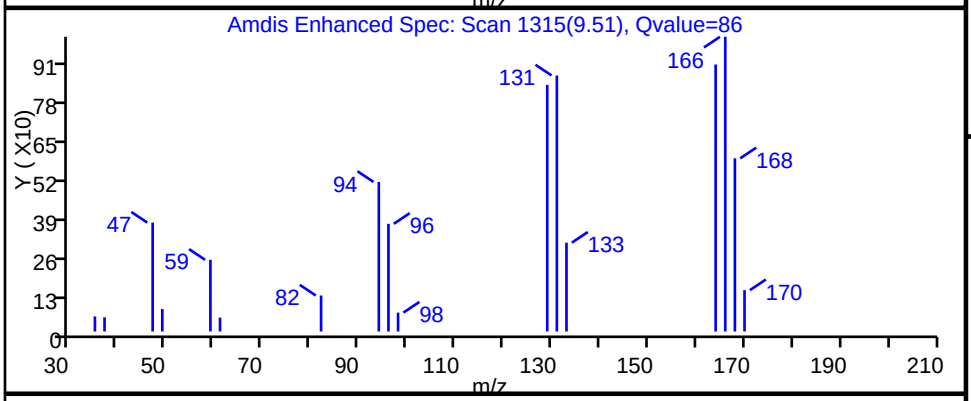
TestAmerica Pittsburgh

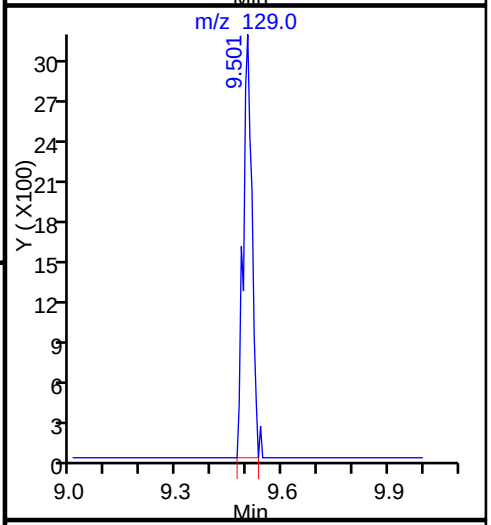
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101016.D		
Injection Date:	01-Nov-2016 15:50:30	Instrument ID:	CHHP5
Lims ID:	180-60202-C-6	Lab Sample ID:	180-60202-6
Client ID:	HD-CW-7-0/1-0		
Operator ID:	001562	ALS Bottle#:	13 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

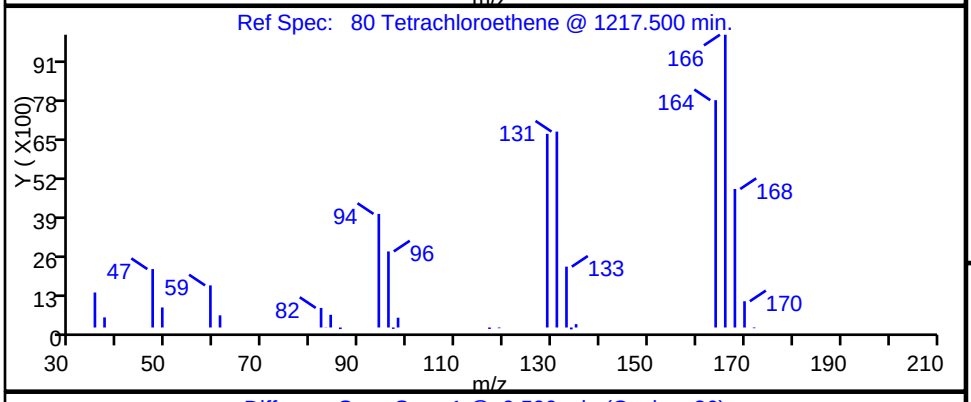
80 Tetrachloroethene, CAS: 127-18-4

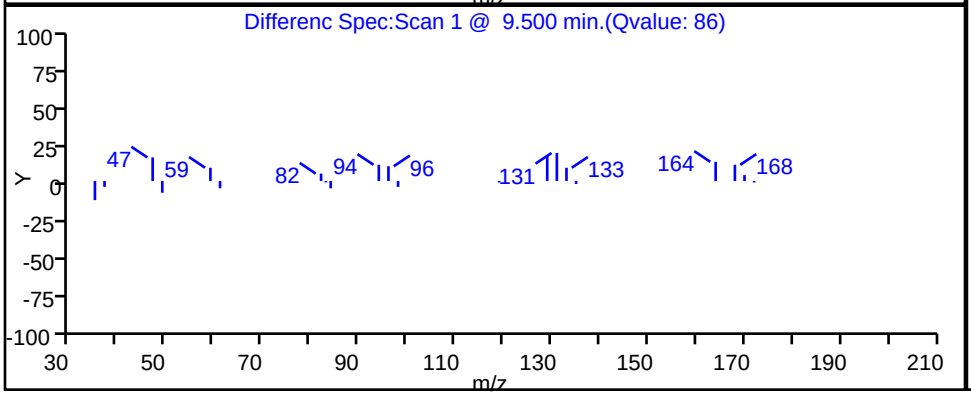


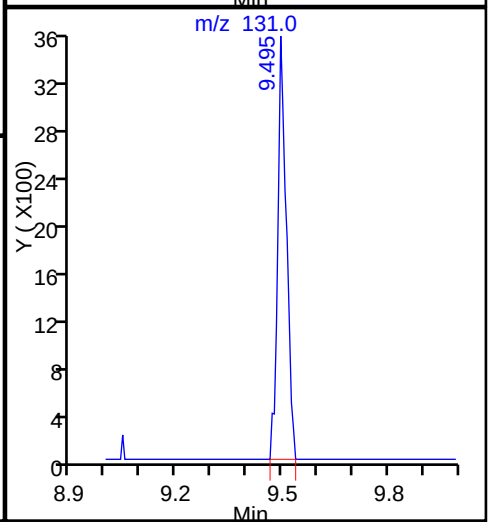












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-9-0/1-0 | Lab Sample ID: 180-60202-7

Matrix: Water | Lab File ID: 51031026.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:45

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 19:46

Soil Aliquot Vol: | Dilution Factor: 12.5

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	13	U	13	2.9
75-01-4	Vinyl chloride	13	U	13	3.9
74-83-9	Bromomethane	13	U	13	4.5
75-00-3	Chloroethane	13	U	13	3.2
75-35-4	1,1-Dichloroethene	5.9	J	13	3.6
67-64-1	Acetone	63	U	63	31
75-15-0	Carbon disulfide	13	U	13	2.3
75-09-2	Methylene Chloride	13	U	13	4.5
156-60-5	trans-1,2-Dichloroethene	13	U	13	3.6
1634-04-4	Methyl tert-butyl ether	13	U	13	3.0
75-34-3	1,1-Dichloroethane	4.3	J	13	2.9
156-59-2	cis-1,2-Dichloroethene	91		13	3.6
74-97-5	Bromochloromethane	13	U	13	4.7
78-93-3	2-Butanone (MEK)	63	U	63	14
67-66-3	Chloroform	13	U	13	3.4
71-55-6	1,1,1-Trichloroethane	23		13	2.8
56-23-5	Carbon tetrachloride	13	U	13	3.0
71-43-2	Benzene	13	U	13	3.2
107-06-2	1,2-Dichloroethane	13	U	13	3.1
79-01-6	Trichloroethene	110		13	3.2
78-87-5	1,2-Dichloropropane	13	U	13	2.8
75-27-4	Bromodichloromethane	13	U	13	2.9
10061-01-5	cis-1,3-Dichloropropene	13	U	13	2.6
108-10-1	4-Methyl-2-pentanone (MIBK)	63	U	63	7.4
108-88-3	Toluene	13	U	13	3.5
10061-02-6	trans-1,3-Dichloropropene	13	U	13	3.0
79-00-5	1,1,2-Trichloroethane	13	U	13	4.4
127-18-4	Tetrachloroethene	360		13	3.4
591-78-6	2-Hexanone	63	U	63	9.3
124-48-1	Dibromochloromethane	13	U	13	4.9
106-93-4	1,2-Dibromoethane (EDB)	13	U	13	3.6
108-90-7	Chlorobenzene	13	U	13	3.9
630-20-6	1,1,1,2-Tetrachloroethane	13	U	13	2.4
100-41-4	Ethylbenzene	13	U	13	3.4
1330-20-7	Xylenes, Total	25	U	25	6.1
100-42-5	Styrene	13	U	13	3.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-9-0/1-0 | Lab Sample ID: 180-60202-7

Matrix: Water | Lab File ID: 51031026.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:45

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 19:46

Soil Aliquot Vol: | Dilution Factor: 12.5

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	13	U	13	3.7
79-34-5	1,1,2,2-Tetrachloroethane	13	U	13	4.3
107-13-1	Acrylonitrile	250	U	250	34
123-91-1	1,4-Dioxane	2500	U ^c	2500	93

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		72-134
2037-26-5	Toluene-d8 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		72-120
1868-53-7	Dibromofluoromethane (Surr)	103		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031026.D
Lims ID: 180-60202-A-7
Client ID: HD-CW-9-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 19:46:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 12.5000
Sample Info: 180-0014116-026
Misc. Info.: 180-60202-A-7, 12.5x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:44:03 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:44:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.262	4.279	-0.017	0	100161	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.272	0.002	97	317746	50.0	
* 3 Chlorobenzene-d5	119	10.376	10.375	0.001	90	82889	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.718	12.723	-0.005	97	128794	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.550	6.548	0.002	94	78083	51.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.915	6.919	-0.004	0	106189	48.4	
$ 7 Toluene-d8 (Surr)	98	8.922	8.921	0.001	96	304904	48.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.556	11.561	-0.005	87	126780	50.1	
12 Chloromethane	50		1.767				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.229				ND	
16 Chloroethane	64		2.375				ND	
22 1,1-Dichloroethene	96	3.350	3.330	0.020	74	3806	2.37	
24 Acetone	43		3.440				ND	
26 Carbon disulfide	76		3.616				ND	
31 Methylene Chloride	84	4.135	4.121	0.014	96	3216	1.60	
33 Acrylonitrile	53		4.516				ND	
34 trans-1,2-Dichloroethene	96		4.553				ND	
35 Methyl tert-butyl ether	73		4.565				ND	
37 1,1-Dichloroethane	63	5.181	5.186	-0.005	92	6719	1.72	
45 cis-1,2-Dichloroethene	96	5.935	5.934	0.001	86	70107	36.3	
46 2-Butanone (MEK)	43		5.952				ND	
49 Chlorobromomethane	128		6.220				ND	
52 Chloroform	83		6.360				ND	
53 1,1,1-Trichloroethane	97	6.525	6.524	0.001	93	20270	9.28	
56 Carbon tetrachloride	117		6.700				ND	
58 Benzene	78		6.925				ND	
59 1,2-Dichloroethane	62		7.005				ND	
64 Trichloroethene	130	7.663	7.662	0.001	94	78025	43.9	
67 1,2-Dichloropropane	63		7.935				ND	
70 1,4-Dioxane	88		8.014				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.215				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.817				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.243				ND	
79 1,1,2-Trichloroethane	97		9.432				ND	
80 Tetrachloroethene	164	9.500	9.505	-0.005	97	213003	142.2	
82 2-Hexanone	43		9.645				ND	
84 Chlorodibromomethane	129		9.809				ND	
85 Ethylene Dibromide	107		9.918				ND	
87 Chlorobenzene	112		10.405				ND	
89 1,1,1,2-Tetrachloroethane	131		10.503				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.636				ND	
92 o-Xylene	106		11.020				ND	
93 Styrene	104		11.038				ND	
94 Bromoform	173		11.220				ND	
99 1,1,2,2-Tetrachloroethane	83		11.695				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

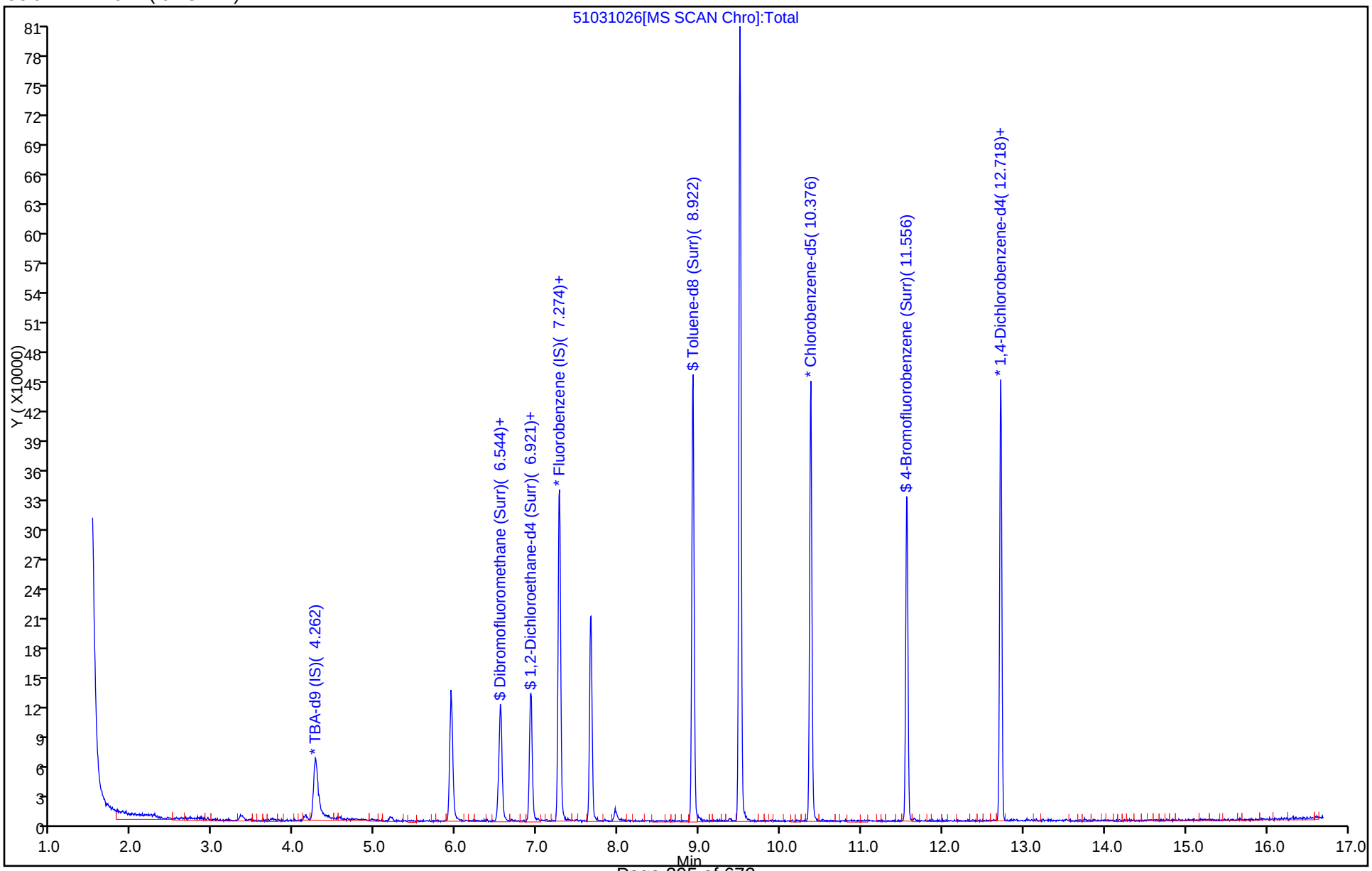
Report Date: 01-Nov-2016 07:44:03 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031026.D

Injection Date:	31-Oct-2016 19:46:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-A-7	Lab Sample ID:	180-60202-7	Worklist Smp#:	26
Client ID:	HD-CW-9-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	12.5000	ALS Bottle#:	25
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031026.D
Lims ID: 180-60202-A-7
Client ID: HD-CW-9-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 19:46:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 12.5000
Sample Info: 180-0014116-026
Misc. Info.: 180-60202-A-7, 12.5x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:44:03 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:44:03

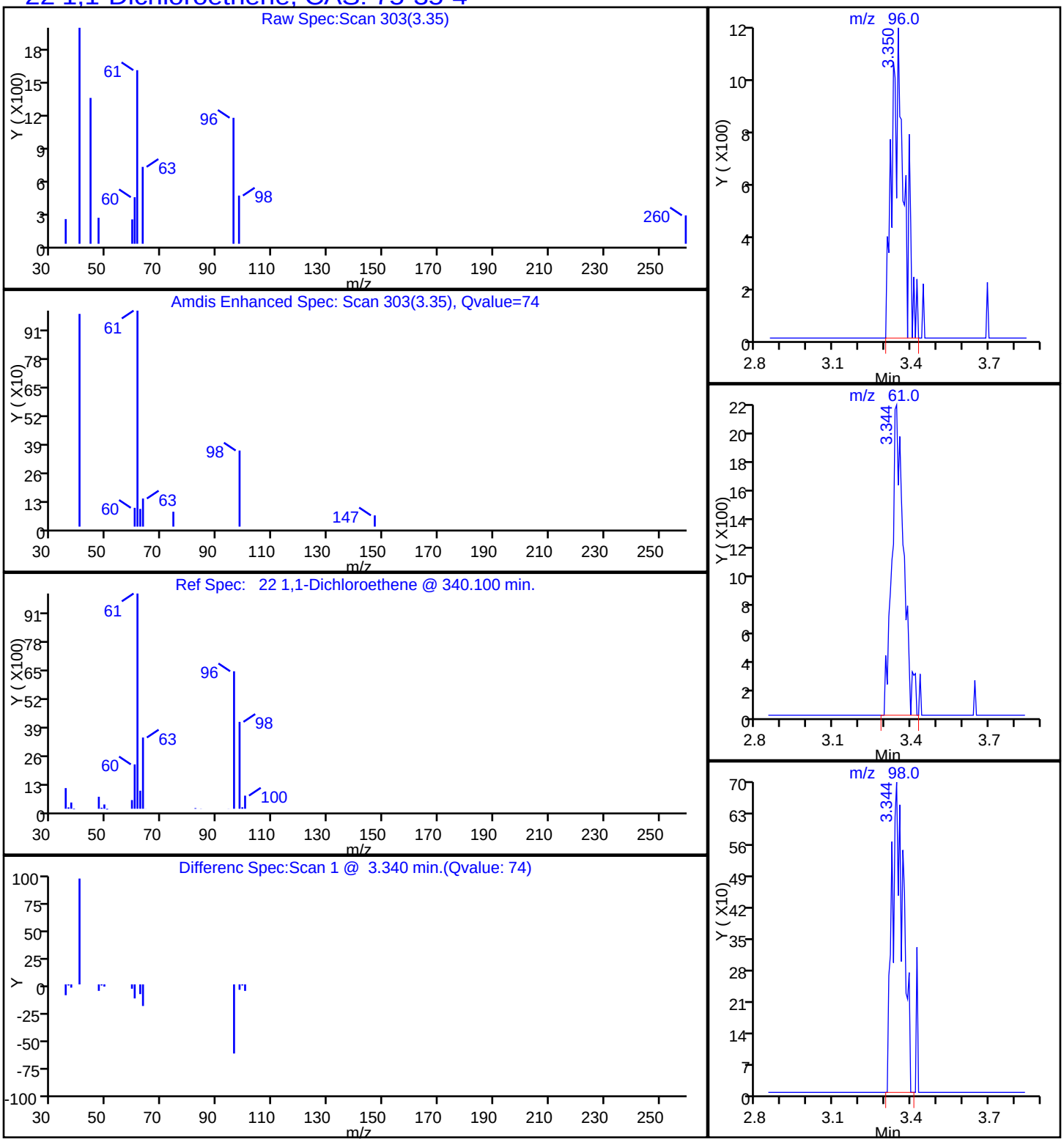
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.4	102.72
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.4	96.77
$ 7 Toluene-d8 (Surr)	50.0	48.7	97.47
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.1	100.25

Report Date: 01-Nov-2016 07:44:03 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031026.D		
Injection Date:	31-Oct-2016 19:46:30	Instrument ID:	CHHP5
Lims ID:	180-60202-A-7	Lab Sample ID:	180-60202-7
Client ID:	HD-CW-9-0/1-0		
Operator ID:	001562	ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	12.5000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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

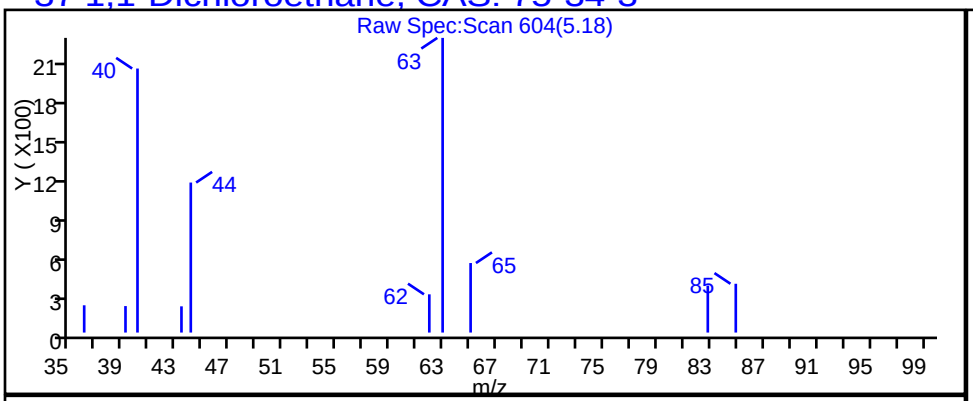


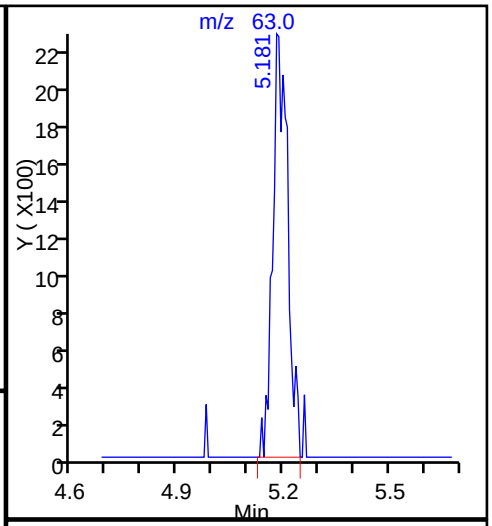
Report Date: 01-Nov-2016 07:44:03 Chrom Revision: 2.2 17-Oct-2016 09:27:18

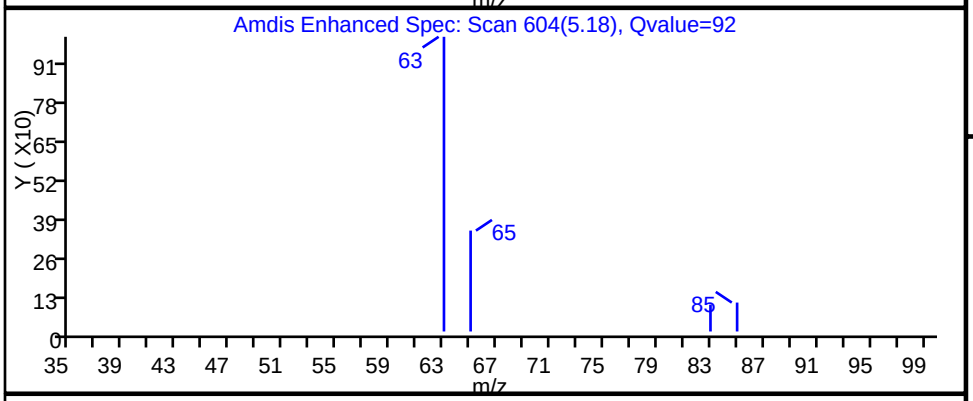
TestAmerica Pittsburgh

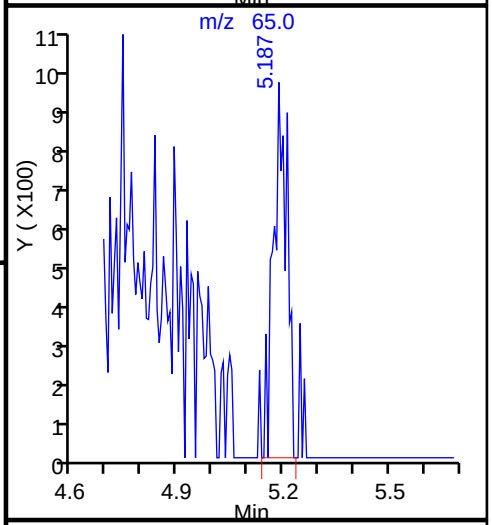
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031026.D		
Injection Date:	31-Oct-2016 19:46:30	Instrument ID:	CHHP5
Lims ID:	180-60202-A-7	Lab Sample ID:	180-60202-7
Client ID:	HD-CW-9-0/1-0		
Operator ID:	001562	ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	12.5000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

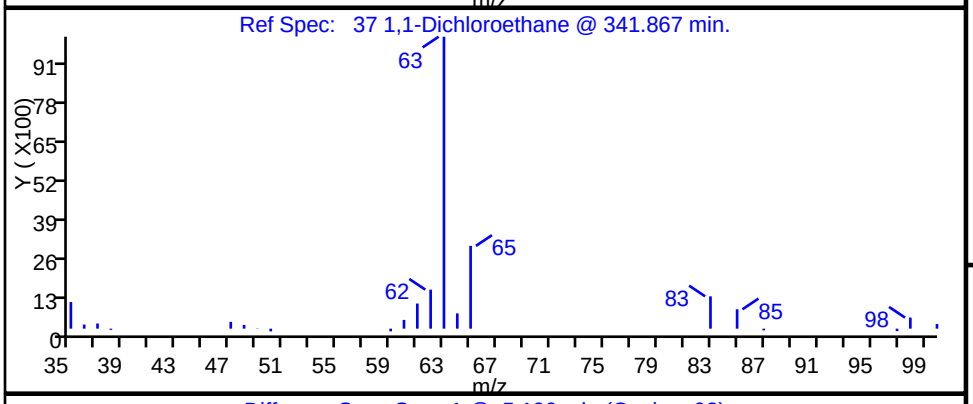
37 1,1-Dichloroethane, CAS: 75-34-3

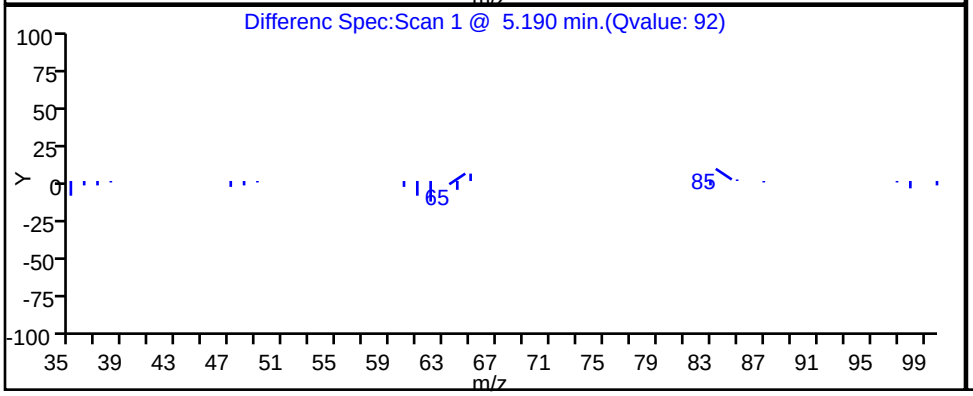


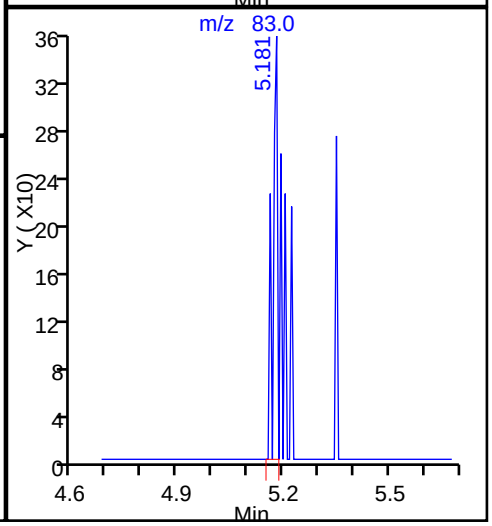










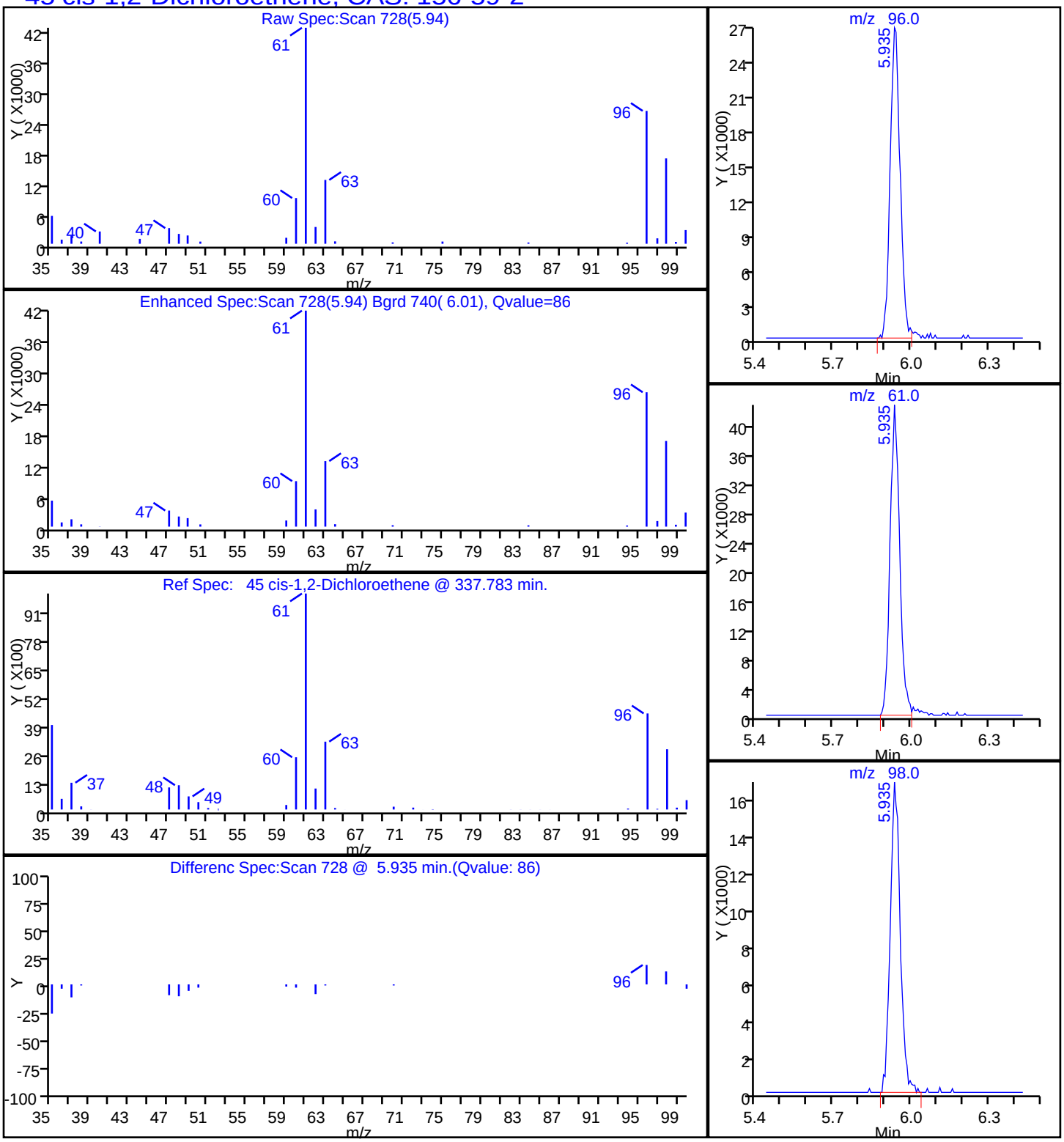


Report Date: 01-Nov-2016 07:44:03 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031026.D				
Injection Date:	31-Oct-2016 19:46:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-7	Lab Sample ID:	180-60202-7		
Client ID:	HD-CW-9-0/1-0				
Operator ID:	001562	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	12.5000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

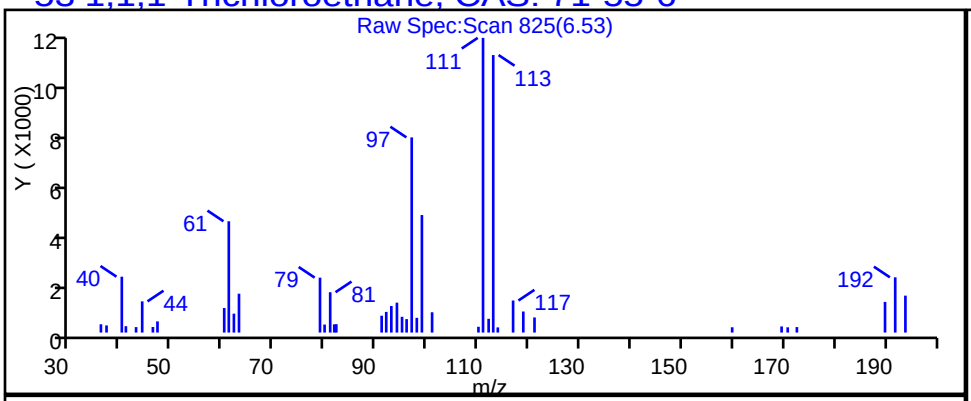


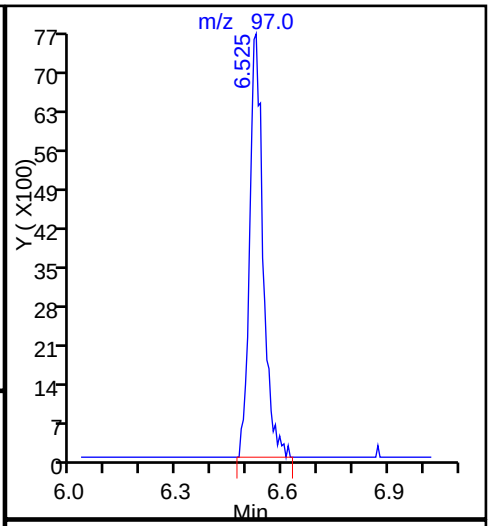
Report Date: 01-Nov-2016 07:44:03 Chrom Revision: 2.2 17-Oct-2016 09:27:18

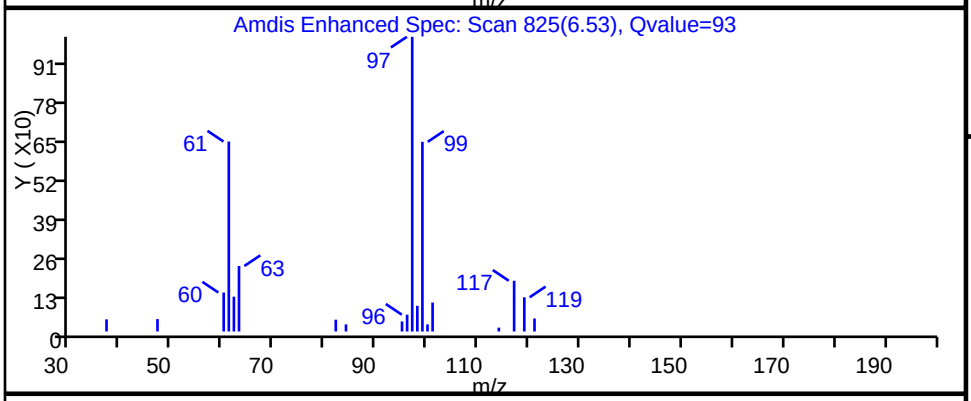
TestAmerica Pittsburgh

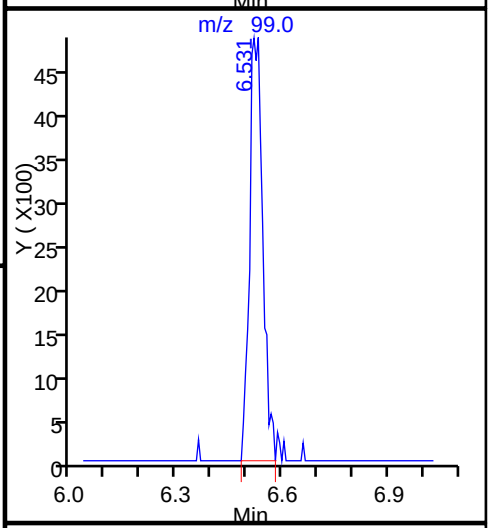
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031026.D		
Injection Date:	31-Oct-2016 19:46:30	Instrument ID:	CHHP5
Lims ID:	180-60202-A-7	Lab Sample ID:	180-60202-7
Client ID:	HD-CW-9-0/1-0		
Operator ID:	001562	ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	12.5000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

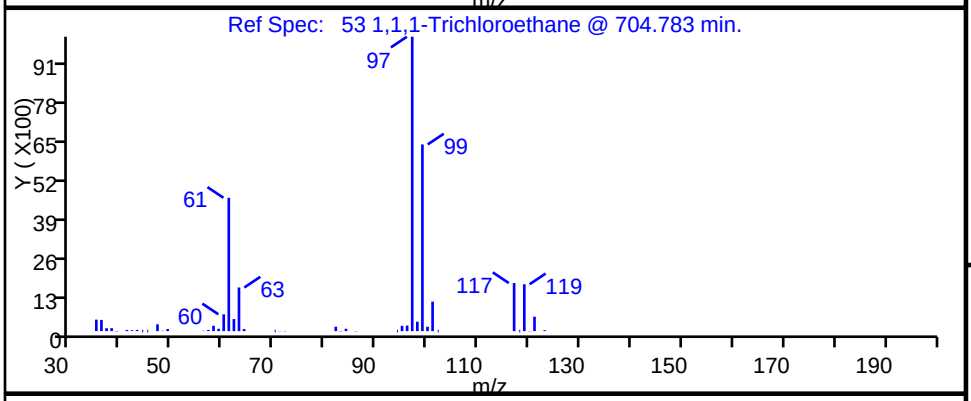
53 1,1,1-Trichloroethane, CAS: 71-55-6

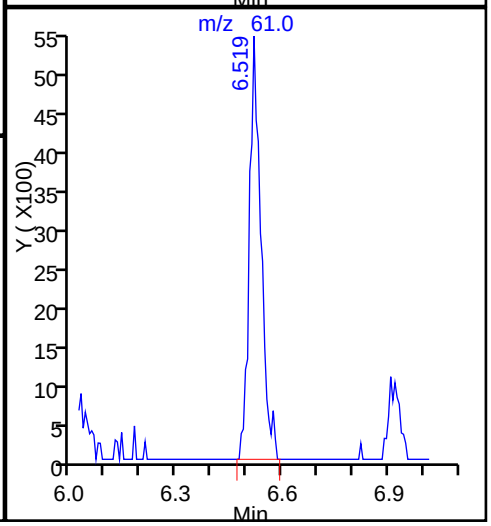


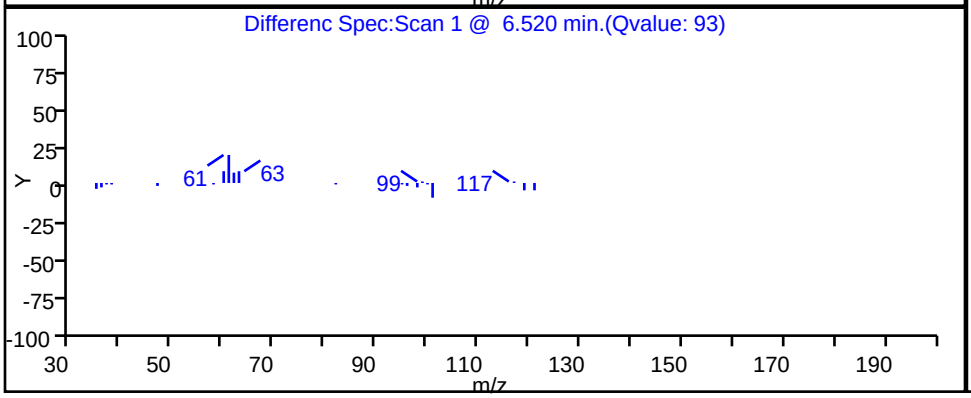












Report Date: 01-Nov-2016 07:44:04 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031026.D

Injection Date: 31-Oct-2016 19:46:30 Instrument ID: CHHP5

Lims ID: 180-60202-A-7 Lab Sample ID: 180-60202-7

Client ID: HD-CW-9-0/1-0

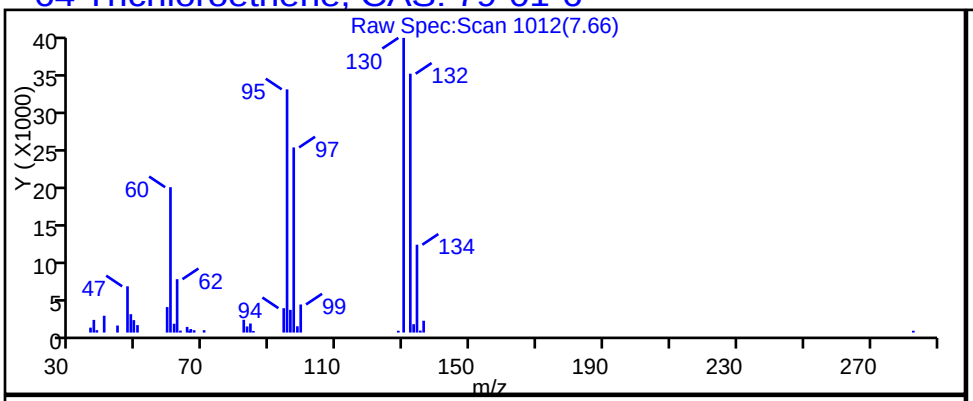
Operator ID: 001562 ALS Bottle#: 25 Worklist Smp#: 26

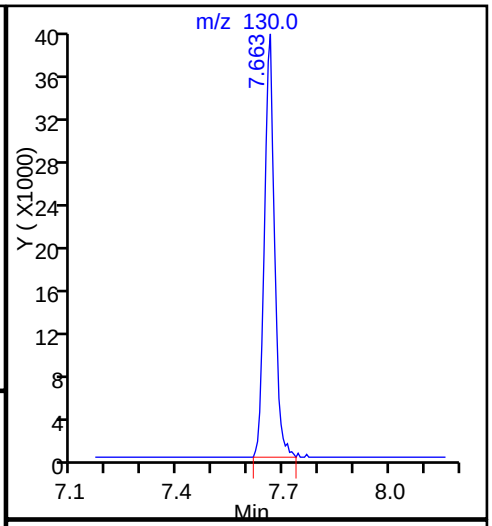
Purge Vol: 5.000 mL Dil. Factor: 12.5000

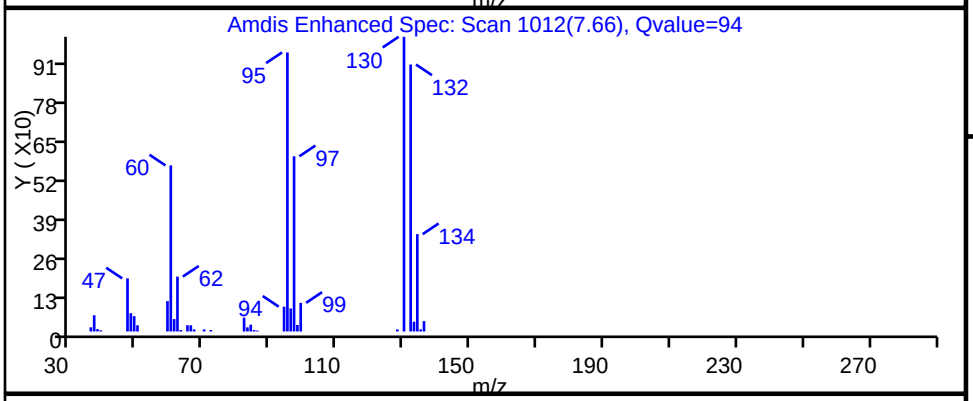
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

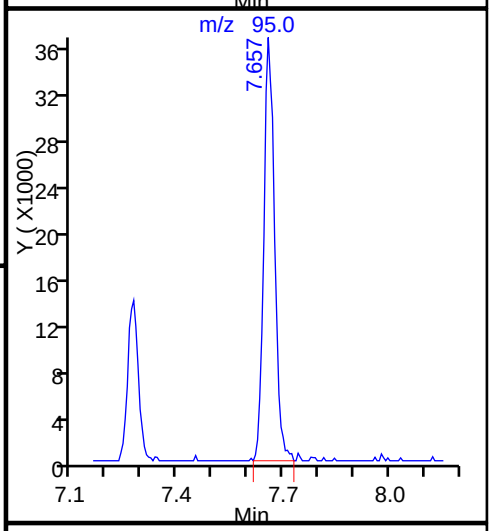
Column: DB-624 (0.18 mm) Detector MS SCAN

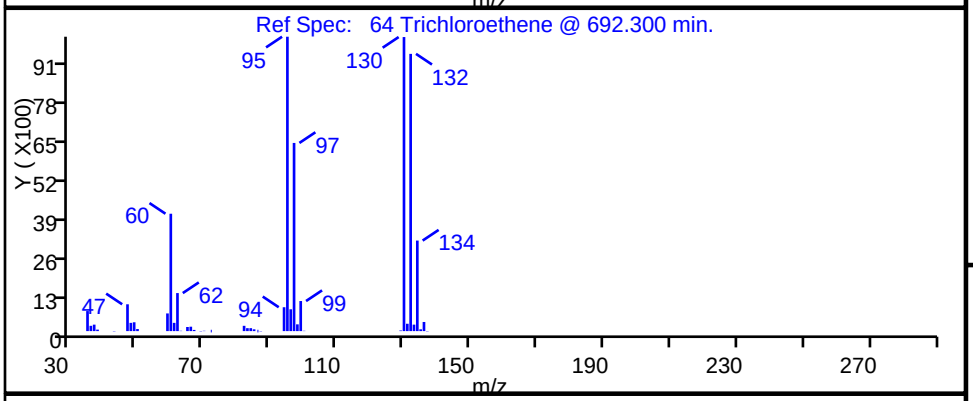
64 Trichloroethene, CAS: 79-01-6

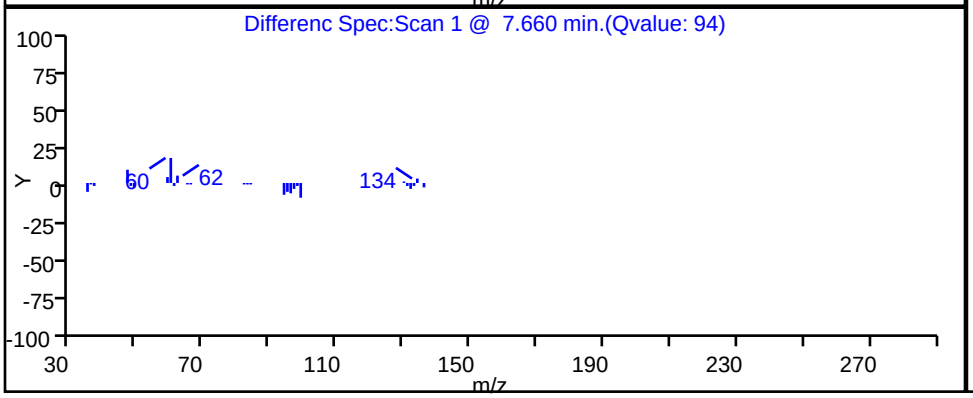


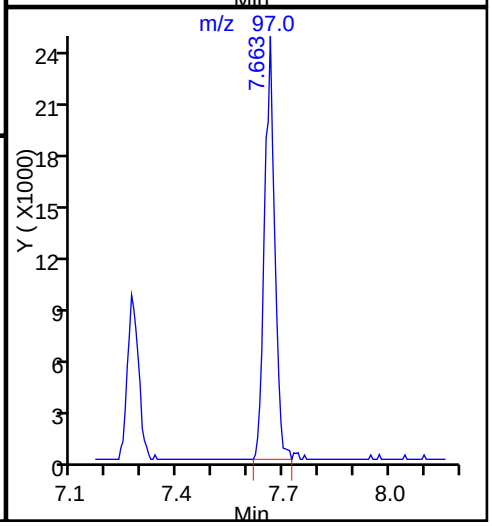












Report Date: 01-Nov-2016 07:44:04 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031026.D

Injection Date: 31-Oct-2016 19:46:30 Instrument ID: CHHP5

Lims ID: 180-60202-A-7 Lab Sample ID: 180-60202-7

Client ID: HD-CW-9-0/1-0

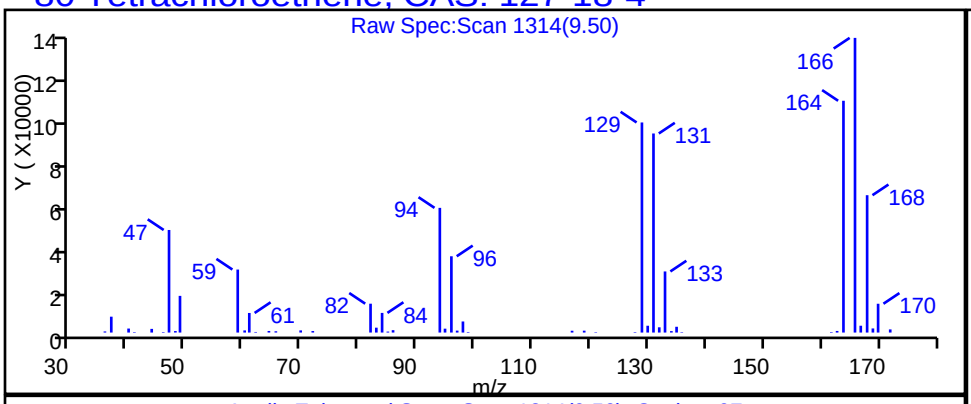
Operator ID: 001562 ALS Bottle#: 25 Worklist Smp#: 26

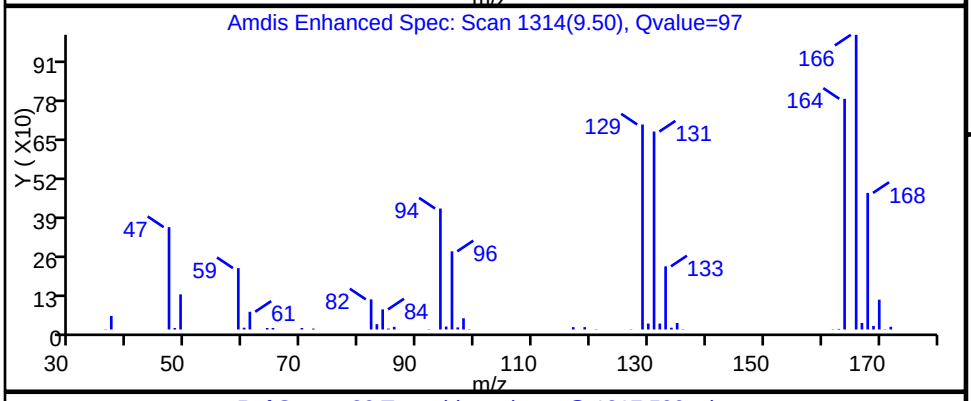
Purge Vol: 5.000 mL Dil. Factor: 12.5000

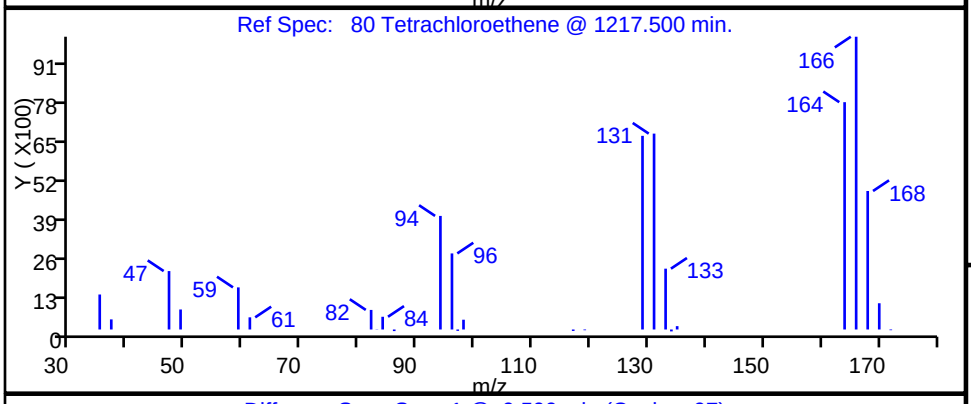
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

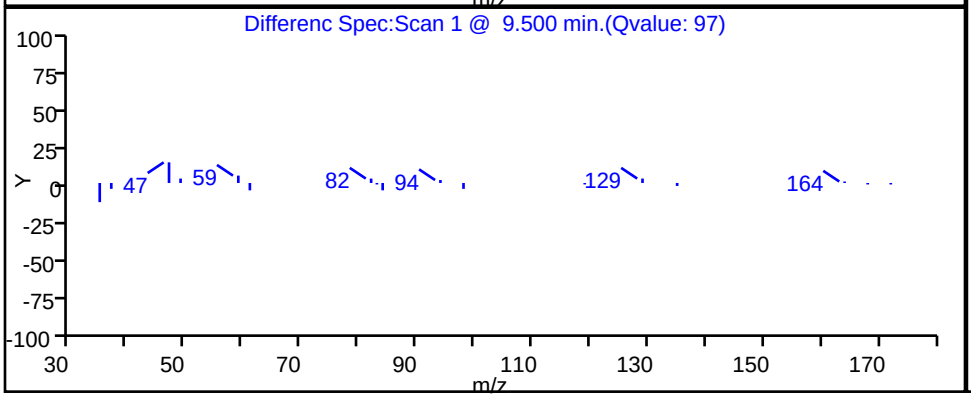
Column: DB-624 (0.18 mm) Detector MS SCAN

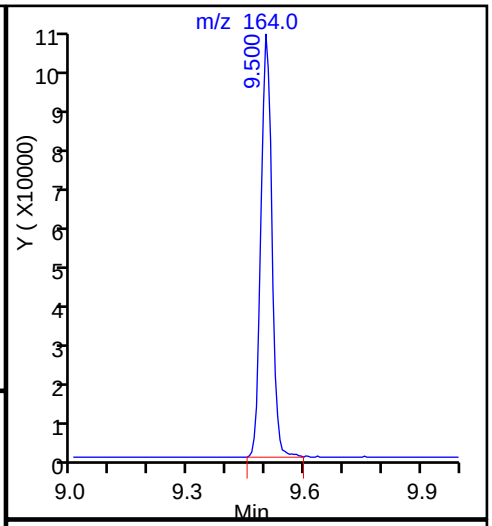
80 Tetrachloroethene, CAS: 127-18-4

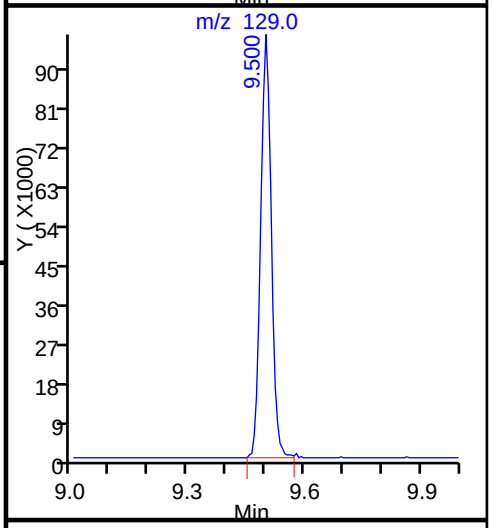


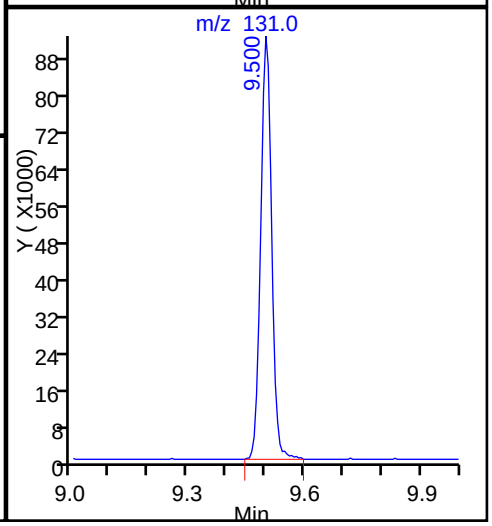












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-20-0/1-0 | Lab Sample ID: 180-60202-8

Matrix: Water | Lab File ID: 51031027.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 20:10

Soil Aliquot Vol: | Dilution Factor: 50

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50	U	50	11
75-01-4	Vinyl chloride	50	U	50	16
74-83-9	Bromomethane	50	U	50	18
75-00-3	Chloroethane	50	U	50	13
75-35-4	1,1-Dichloroethene	14	J	50	14
67-64-1	Acetone	250	U	250	130
75-15-0	Carbon disulfide	50	U	50	9.2
75-09-2	Methylene Chloride	50	U	50	18
156-60-5	trans-1,2-Dichloroethene	50	U	50	14
1634-04-4	Methyl tert-butyl ether	50	U	50	12
75-34-3	1,1-Dichloroethane	13	J	50	12
156-59-2	cis-1,2-Dichloroethene	170		50	14
74-97-5	Bromochloromethane	50	U	50	19
78-93-3	2-Butanone (MEK)	250	U	250	58
67-66-3	Chloroform	50	U	50	14
71-55-6	1,1,1-Trichloroethane	71		50	11
56-23-5	Carbon tetrachloride	50	U	50	12
71-43-2	Benzene	50	U	50	13
107-06-2	1,2-Dichloroethane	50	U	50	12
79-01-6	Trichloroethene	570		50	13
78-87-5	1,2-Dichloropropane	50	U	50	11
75-27-4	Bromodichloromethane	50	U	50	12
10061-01-5	cis-1,3-Dichloropropene	50	U	50	10
108-10-1	4-Methyl-2-pentanone (MIBK)	250	U	250	30
108-88-3	Toluene	50	U	50	14
10061-02-6	trans-1,3-Dichloropropene	50	U	50	12
79-00-5	1,1,2-Trichloroethane	50	U	50	17
127-18-4	Tetrachloroethene	1400		50	13
591-78-6	2-Hexanone	250	U	250	37
124-48-1	Dibromochloromethane	50	U	50	20
106-93-4	1,2-Dibromoethane (EDB)	50	U	50	14
108-90-7	Chlorobenzene	50	U	50	16
630-20-6	1,1,1,2-Tetrachloroethane	50	U	50	9.8
100-41-4	Ethylbenzene	50	U	50	14
1330-20-7	Xylenes, Total	100	U	100	24
100-42-5	Styrene	50	U	50	13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-20-0/1-0 | Lab Sample ID: 180-60202-8

Matrix: Water | Lab File ID: 51031027.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 20:10

Soil Aliquot Vol: | Dilution Factor: 50

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	50	U	50	15
79-34-5	1,1,2,2-Tetrachloroethane	50	U	50	17
107-13-1	Acrylonitrile	1000	U	1000	140
123-91-1	1,4-Dioxane	10000	U ^c	10000	370

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-134
2037-26-5	Toluene-d8 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	104		72-120
1868-53-7	Dibromofluoromethane (Surr)	106		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031027.D
Lims ID: 180-60202-B-8
Client ID: HD-CW-20-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 20:10:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 50.0000
Sample Info: 180-0014116-027
Misc. Info.: 180-60202-B-8, 50x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:45:52 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:45:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.262	4.279	-0.017	0	106300	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.272	0.002	97	332775	50.0	
* 3 Chlorobenzene-d5	119	10.370	10.375	-0.005	92	84329	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.718	12.723	-0.005	97	135512	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.544	6.548	-0.004	94	84094	52.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.921	6.919	0.002	0	112951	49.1	
$ 7 Toluene-d8 (Surr)	98	8.922	8.921	0.001	95	318305	50.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.557	11.561	-0.005	87	133942	52.1	
12 Chloromethane	50		1.767				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.229				ND	
16 Chloroethane	64		2.375				ND	
22 1,1-Dichloroethene	96	3.344	3.330	0.014	56	2432	1.45	
24 Acetone	43		3.440				ND	
26 Carbon disulfide	76		3.616				ND	
31 Methylene Chloride	84	4.129	4.121	0.008	86	2942	1.40	
33 Acrylonitrile	53		4.516				ND	
34 trans-1,2-Dichloroethene	96		4.553				ND	
35 Methyl tert-butyl ether	73		4.565				ND	
37 1,1-Dichloroethane	63	5.205	5.186	0.019	17	5325	1.30	
45 cis-1,2-Dichloroethene	96	5.941	5.934	0.007	86	34196	16.9	
46 2-Butanone (MEK)	43		5.952				ND	
49 Chlorobromomethane	128		6.220				ND	
52 Chloroform	83		6.360				ND	
53 1,1,1-Trichloroethane	97	6.532	6.524	0.008	46	16175	7.07	
56 Carbon tetrachloride	117		6.700				ND	
58 Benzene	78		6.925				ND	
59 1,2-Dichloroethane	62		7.005				ND	
64 Trichloroethene	130	7.663	7.662	0.001	96	106528	57.2	
67 1,2-Dichloropropane	63		7.935				ND	
70 1,4-Dioxane	88		8.014				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.215				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.817				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.243				ND	
79 1,1,2-Trichloroethane	97		9.432				ND	
80 Tetrachloroethene	164	9.500	9.505	-0.005	97	219021	143.8	
82 2-Hexanone	43		9.645				ND	
84 Chlorodibromomethane	129		9.809				ND	
85 Ethylene Dibromide	107		9.918				ND	
87 Chlorobenzene	112		10.405				ND	
89 1,1,1,2-Tetrachloroethane	131		10.503				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.636				ND	
92 o-Xylene	106		11.020				ND	
93 Styrene	104		11.038				ND	
94 Bromoform	173		11.220				ND	
99 1,1,2,2-Tetrachloroethane	83		11.695				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

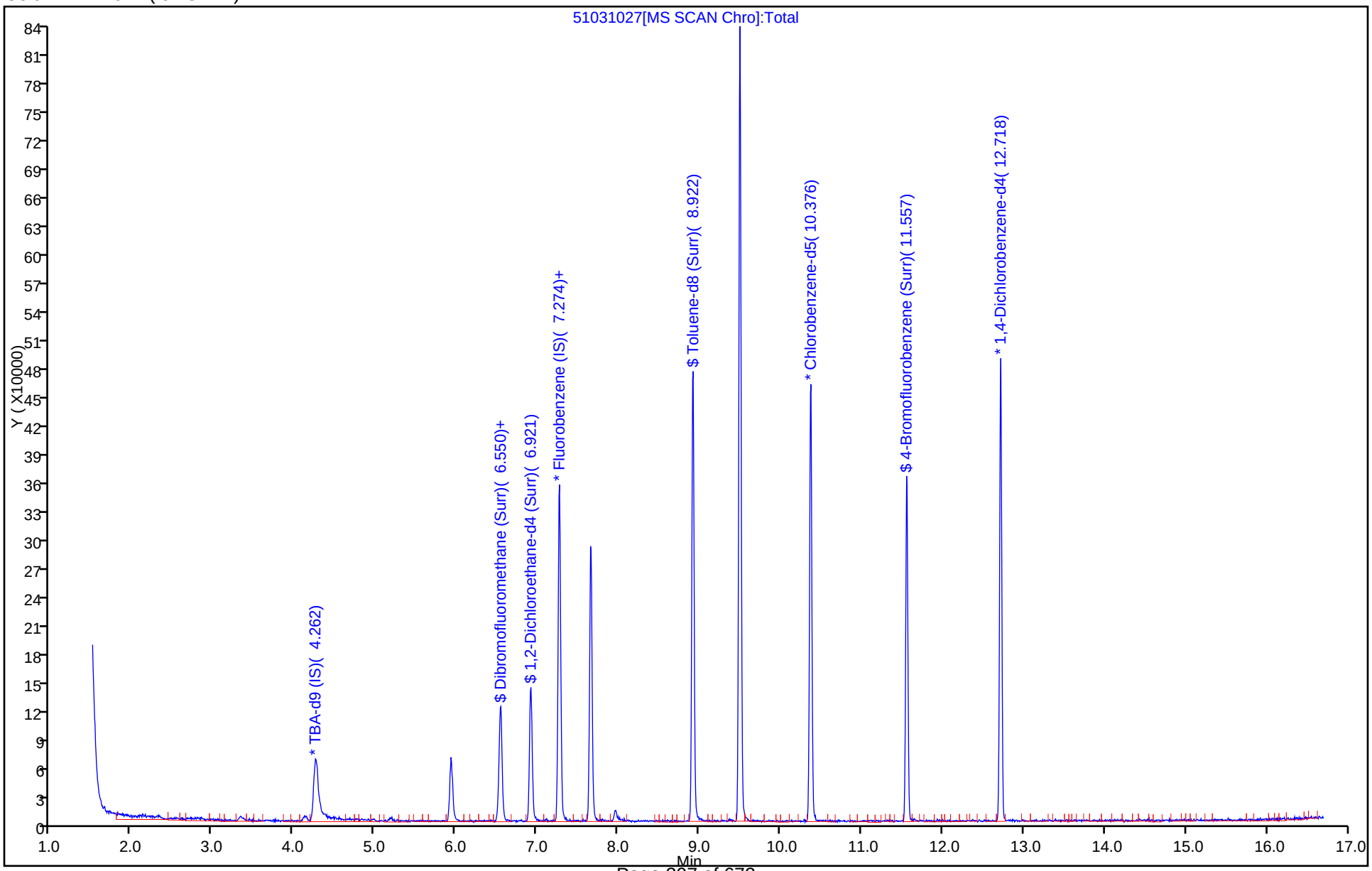
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 01-Nov-2016 07:45:53 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031027.D				
Injection Date:	31-Oct-2016 20:10:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-B-8	Lab Sample ID:	180-60202-8	Worklist Smp#:	27
Client ID:	HD-CW-20-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	50.0000	ALS Bottle#:	26
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031027.D
Lims ID: 180-60202-B-8
Client ID: HD-CW-20-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 20:10:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 50.0000
Sample Info: 180-0014116-027
Misc. Info.: 180-60202-B-8, 50x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:45:52 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:45:52

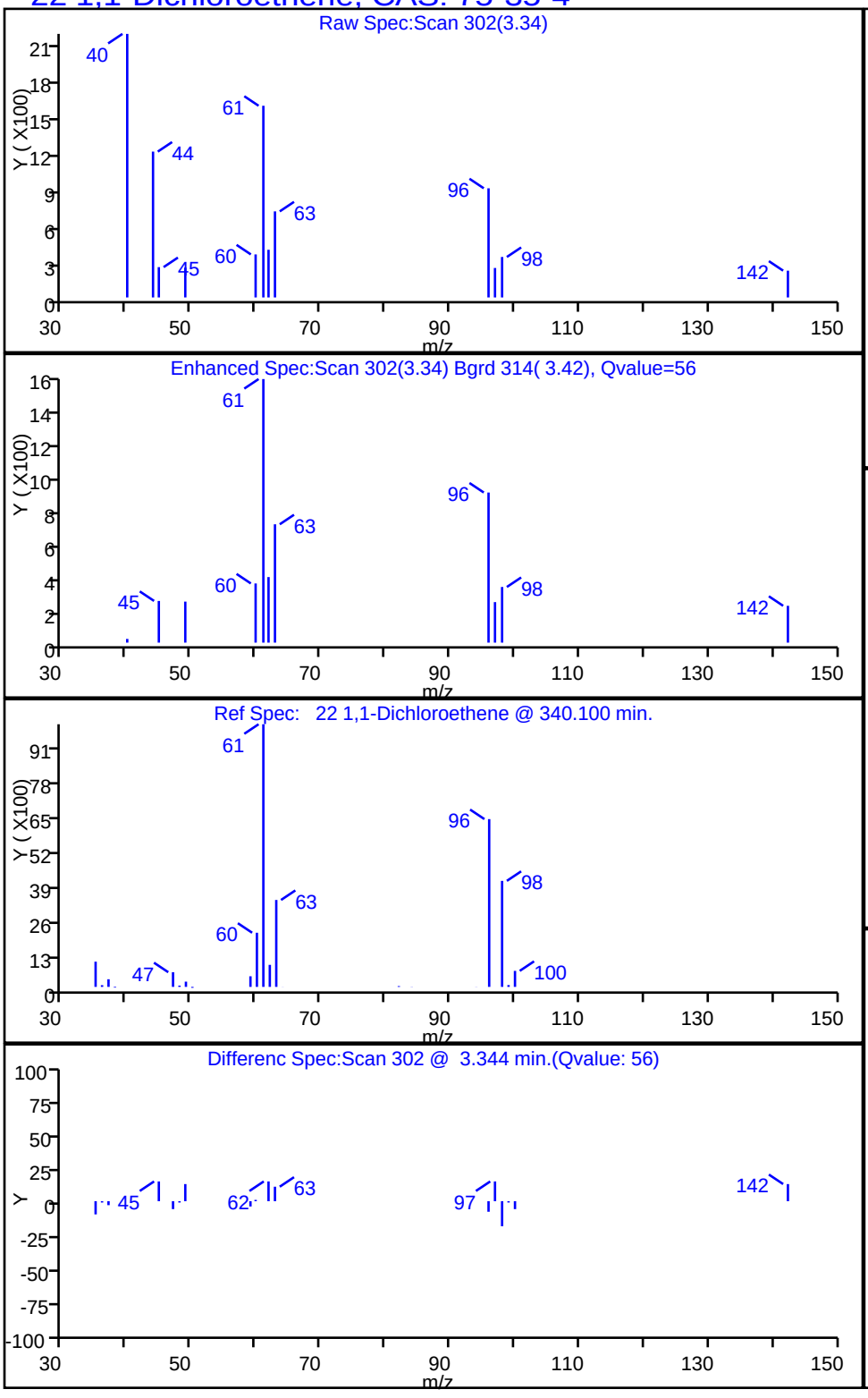
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	52.8	105.64
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.1	98.28
$ 7 Toluene-d8 (Surr)	50.0	50.0	100.02
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.1	104.10

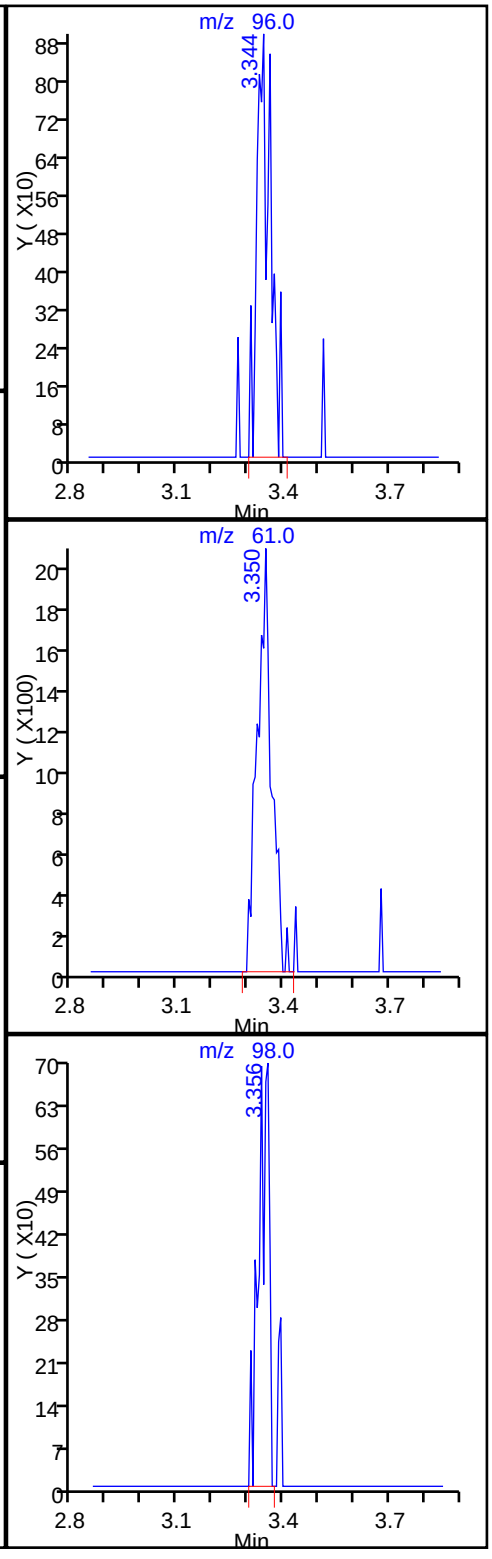
Report Date: 01-Nov-2016 07:45:53 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031027.D				
Injection Date:	31-Oct-2016 20:10:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-8	Lab Sample ID:	180-60202-8		
Client ID:	HD-CW-20-0/1-0				
Operator ID:	001562	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



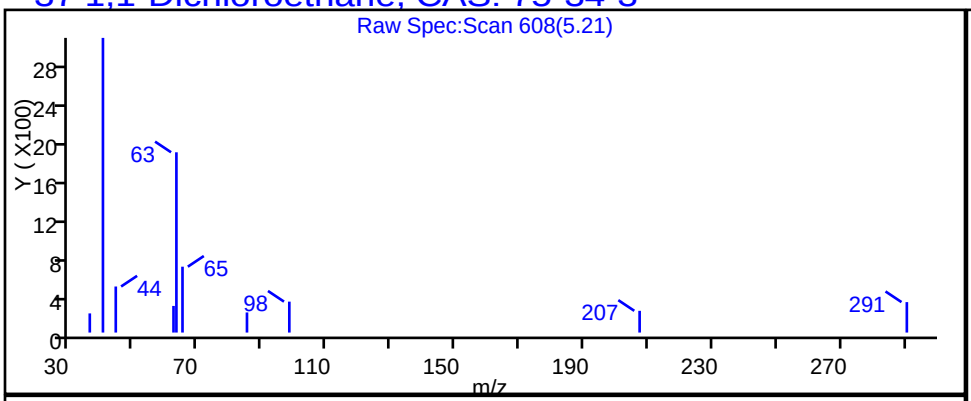


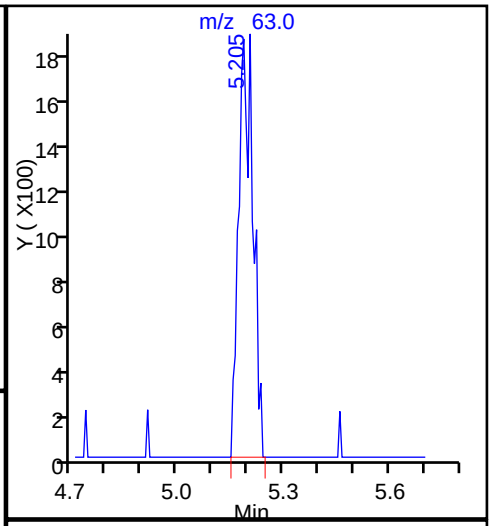
Report Date: 01-Nov-2016 07:45:53 Chrom Revision: 2.2 17-Oct-2016 09:27:18

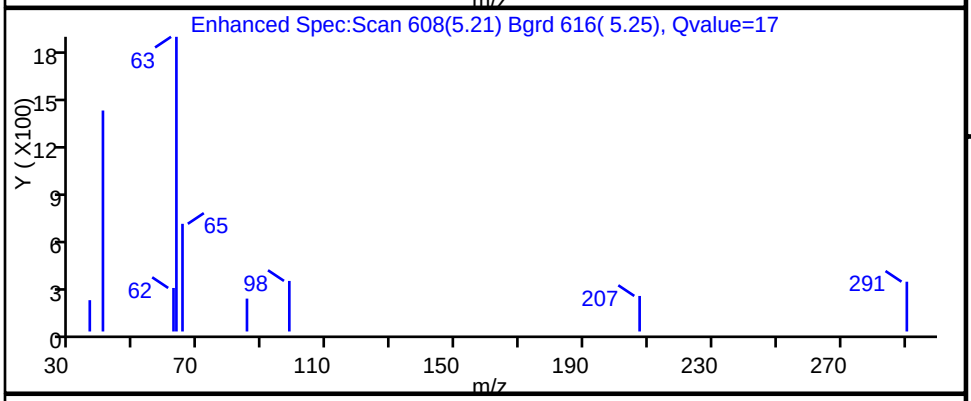
TestAmerica Pittsburgh

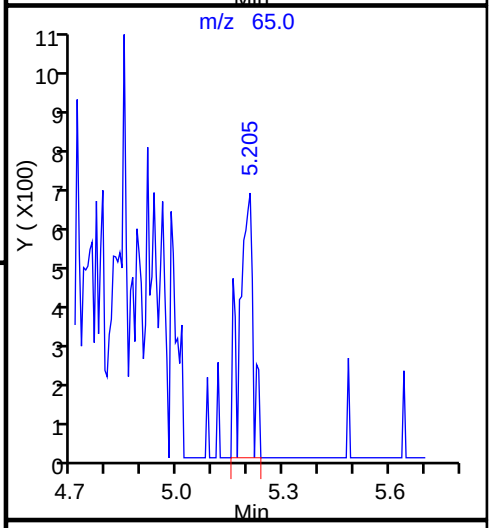
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031027.D				
Injection Date:	31-Oct-2016 20:10:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-8	Lab Sample ID:	180-60202-8		
Client ID:	HD-CW-20-0/1-0				
Operator ID:	001562	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

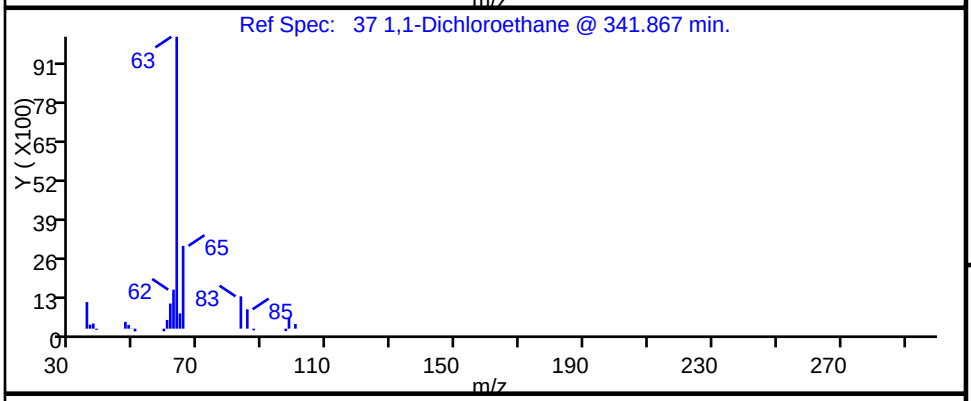
37 1,1-Dichloroethane, CAS: 75-34-3

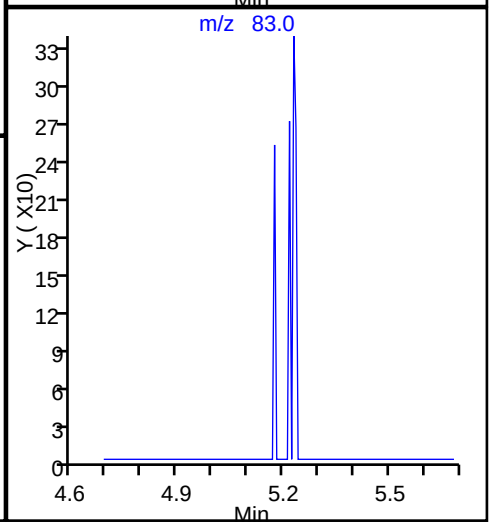


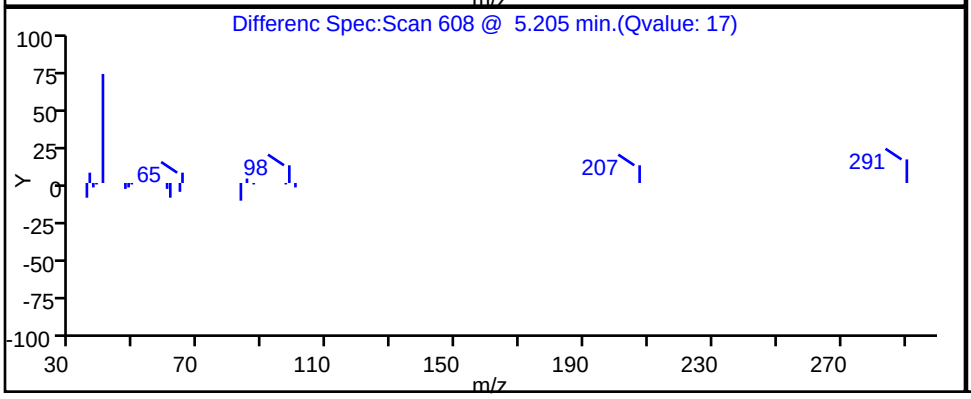










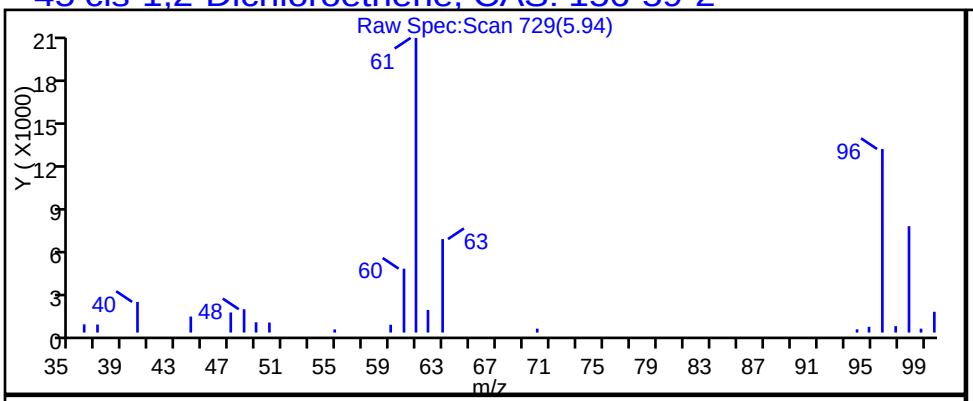


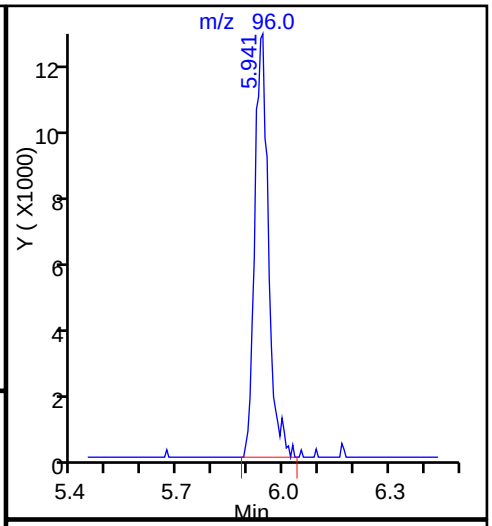
Report Date: 01-Nov-2016 07:45:53 Chrom Revision: 2.2 17-Oct-2016 09:27:18

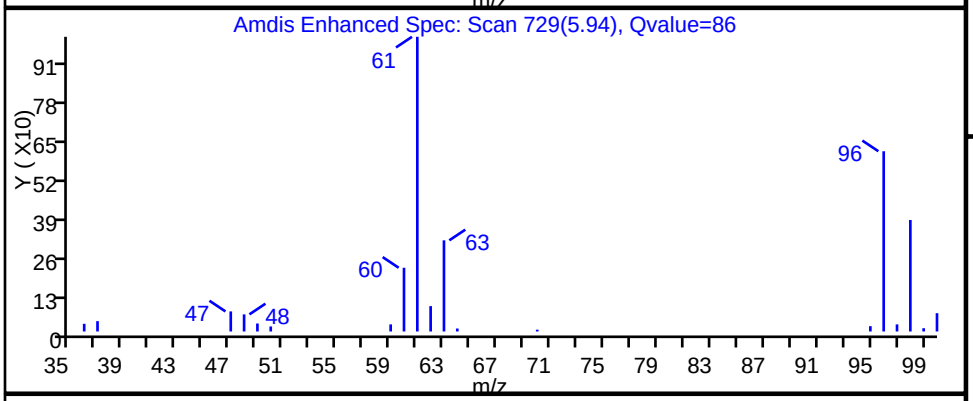
TestAmerica Pittsburgh

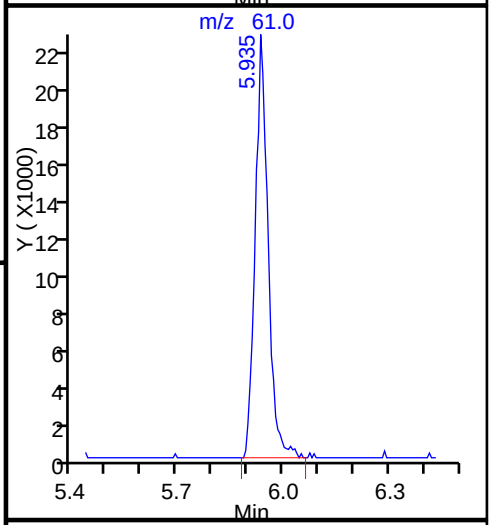
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031027.D				
Injection Date:	31-Oct-2016 20:10:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-8	Lab Sample ID:	180-60202-8		
Client ID:	HD-CW-20-0/1-0				
Operator ID:	001562	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

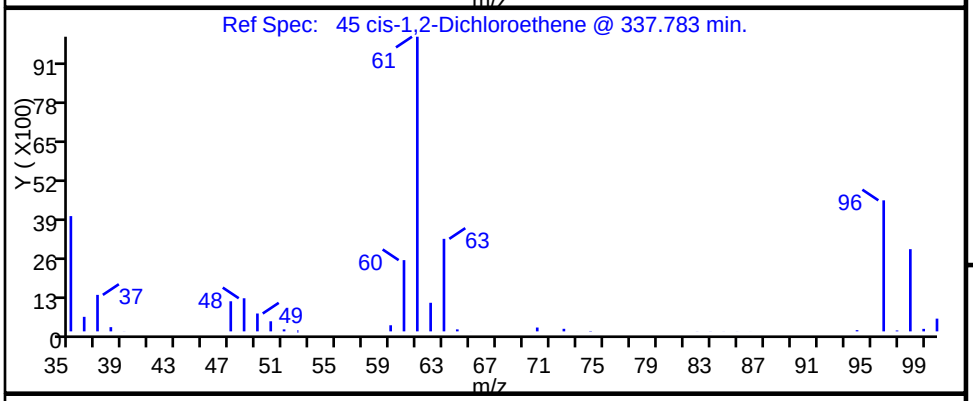
45 cis-1,2-Dichloroethene, CAS: 156-59-2

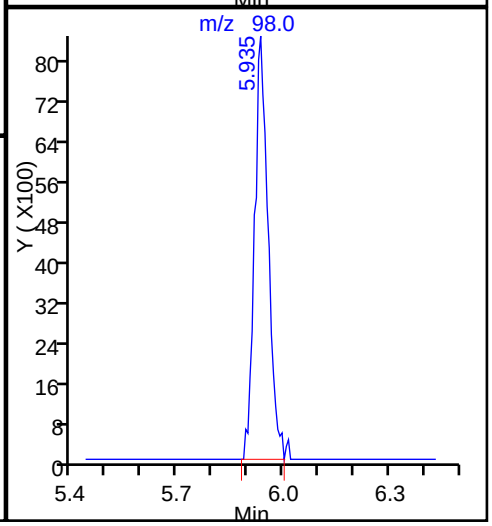


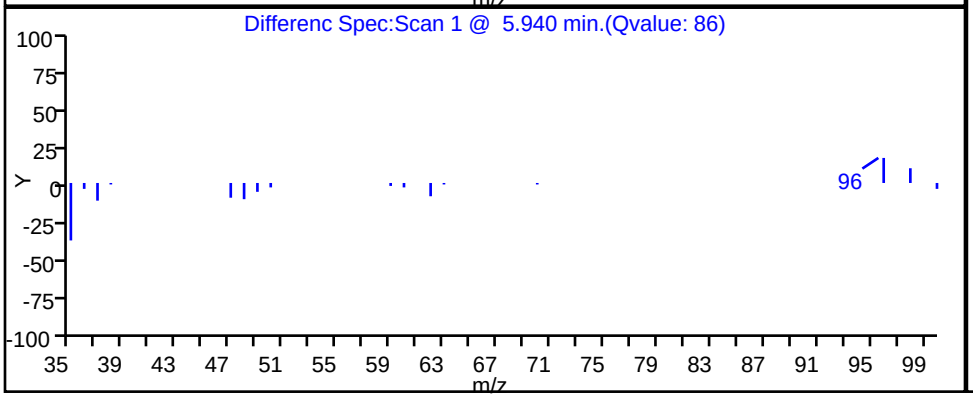












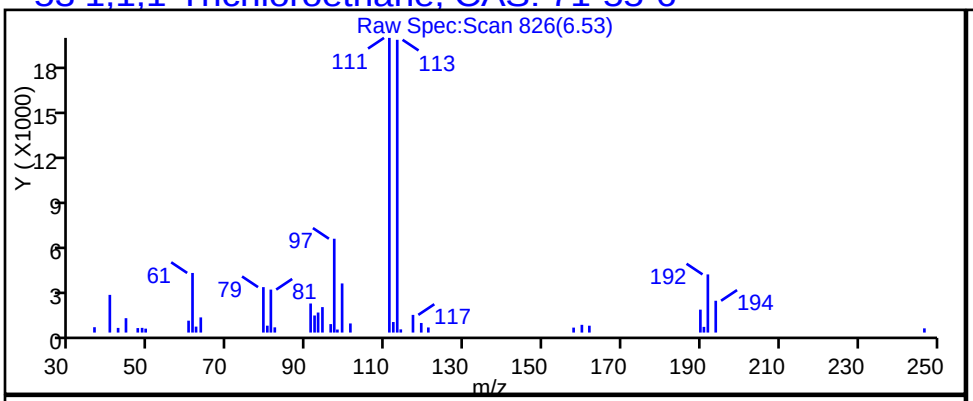
Report Date: 01-Nov-2016 07:45:53 Chrom Revision: 2.2 17-Oct-2016 09:27:18

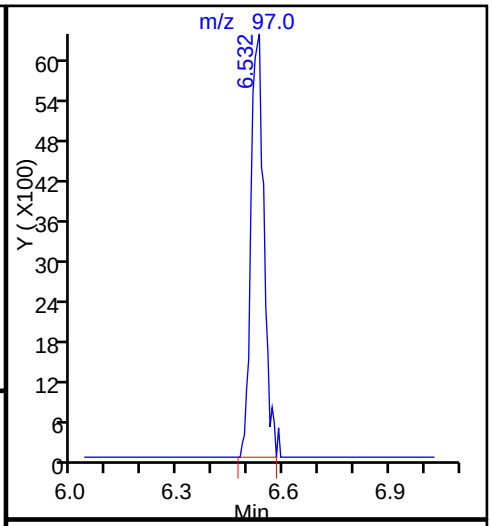
TestAmerica Pittsburgh

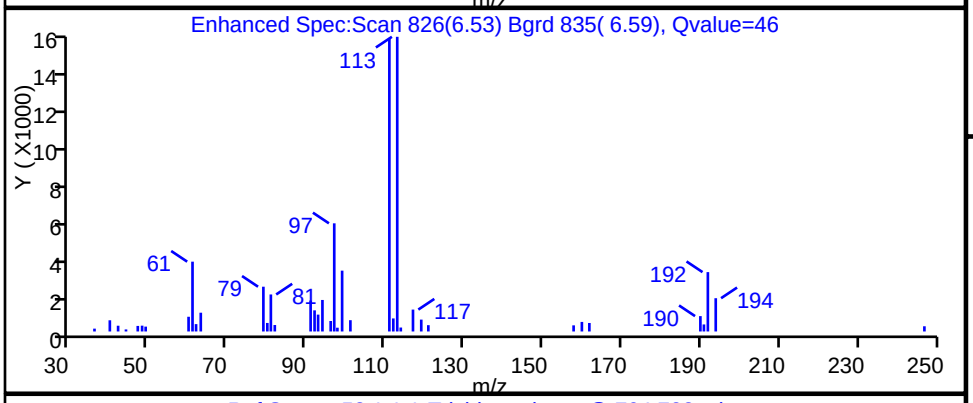
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031027.D

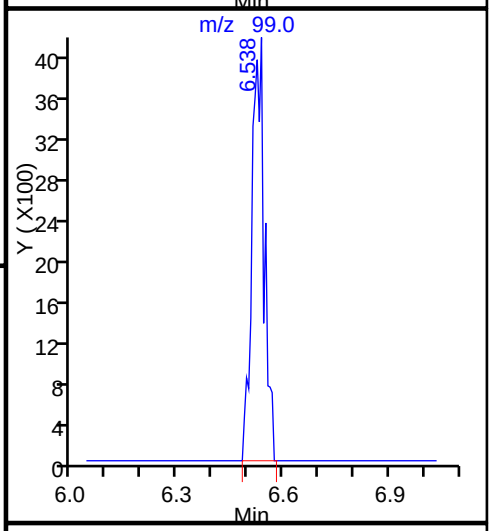
Injection Date:	31-Oct-2016 20:10:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-8	Lab Sample ID:	180-60202-8		
Client ID:	HD-CW-20-0/1-0				
Operator ID:	001562	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

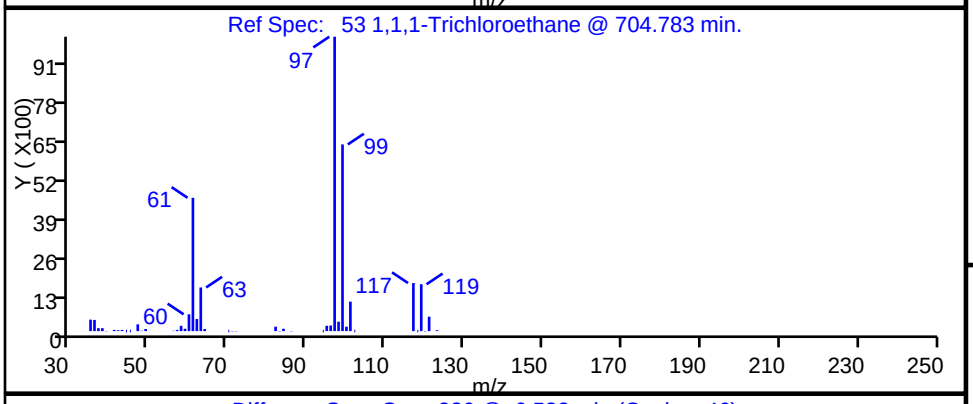
53 1,1,1-Trichloroethane, CAS: 71-55-6

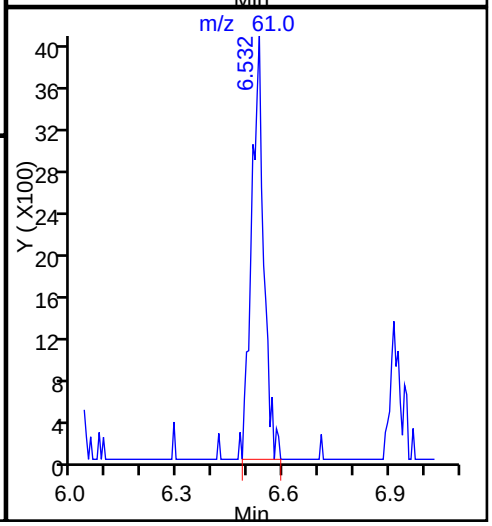


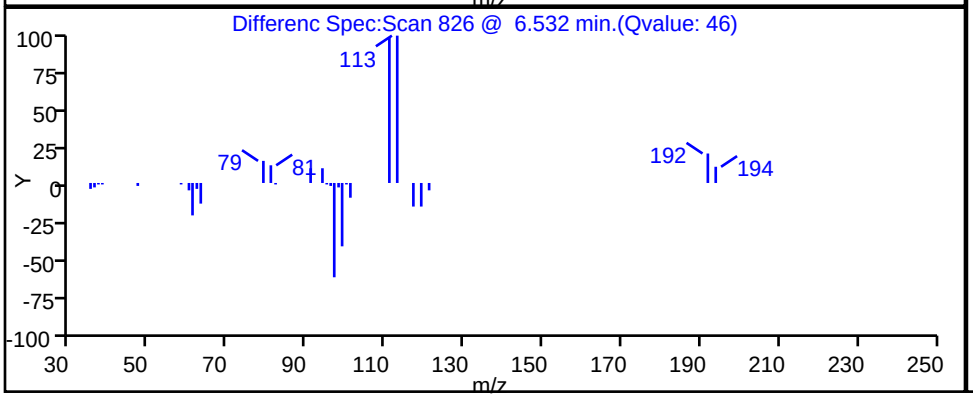












Report Date: 01-Nov-2016 07:45:54 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031027.D

Injection Date: 31-Oct-2016 20:10:30 Instrument ID: CHHP5

Lims ID: 180-60202-B-8 Lab Sample ID: 180-60202-8

Client ID: HD-CW-20-0/1-0

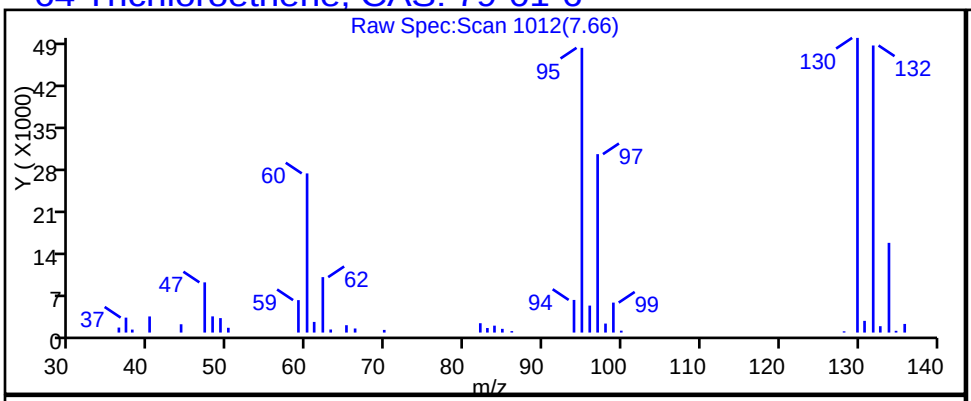
Operator ID: 001562 ALS Bottle#: 26 Worklist Smp#: 27

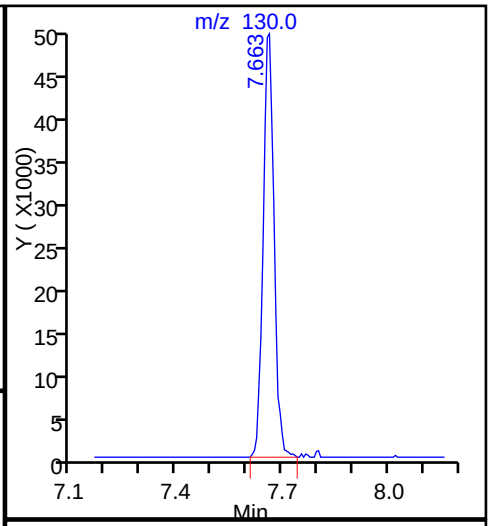
Purge Vol: 5.000 mL Dil. Factor: 50.0000

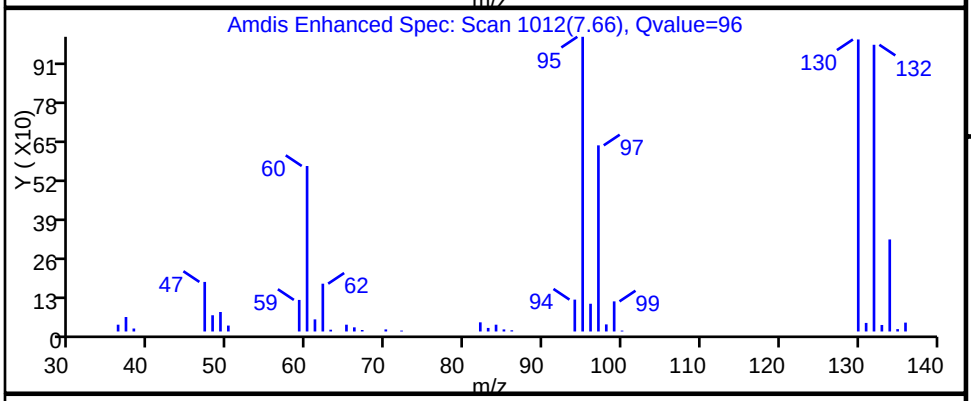
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

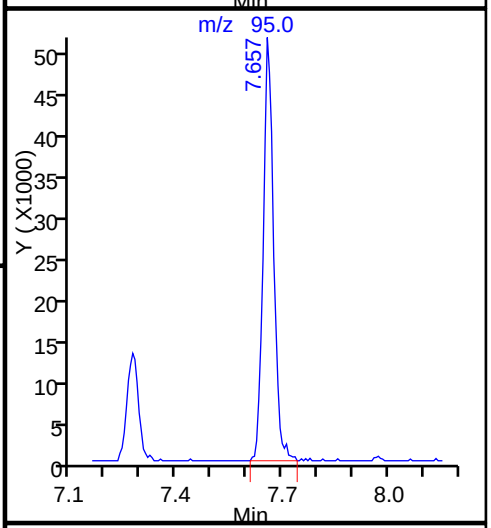
Column: DB-624 (0.18 mm) Detector MS SCAN

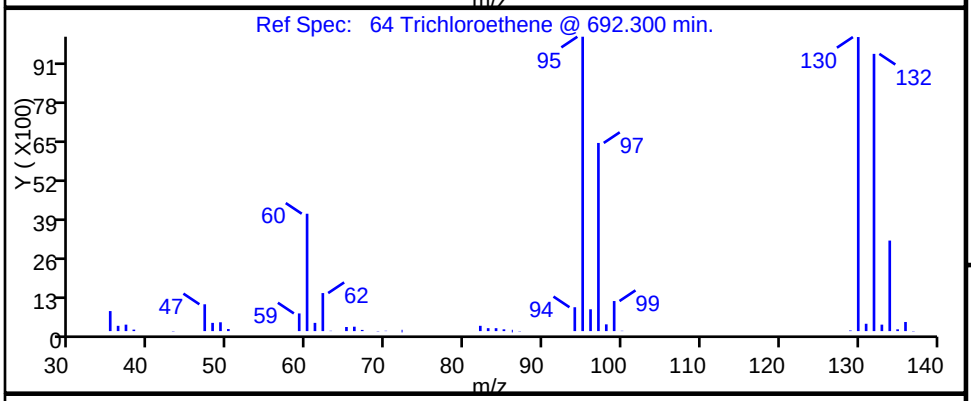
64 Trichloroethene, CAS: 79-01-6

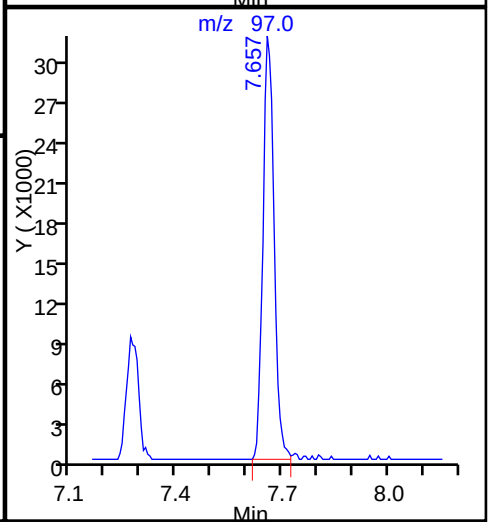


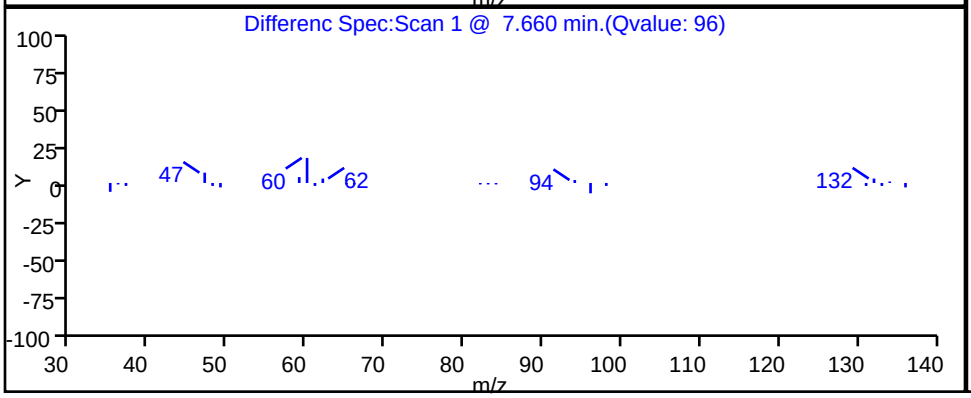












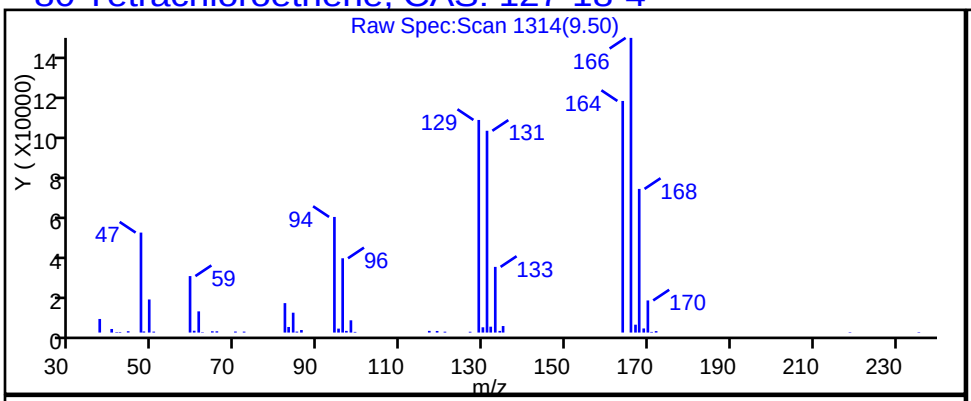
Report Date: 01-Nov-2016 07:45:54 Chrom Revision: 2.2 17-Oct-2016 09:27:18

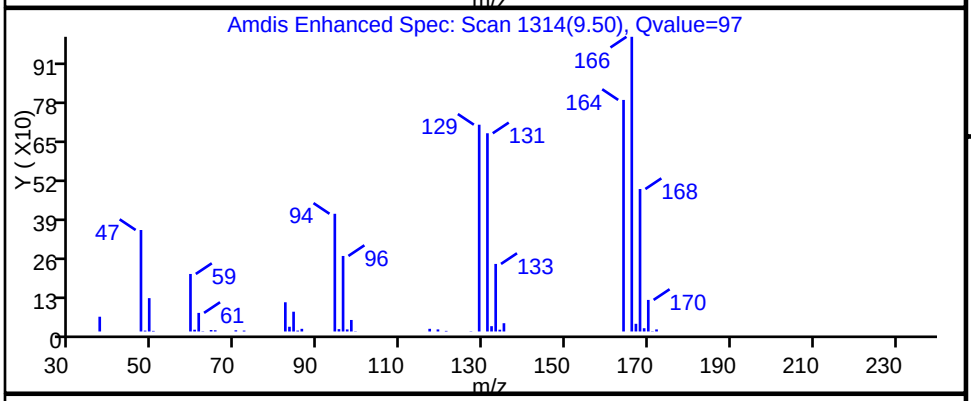
TestAmerica Pittsburgh

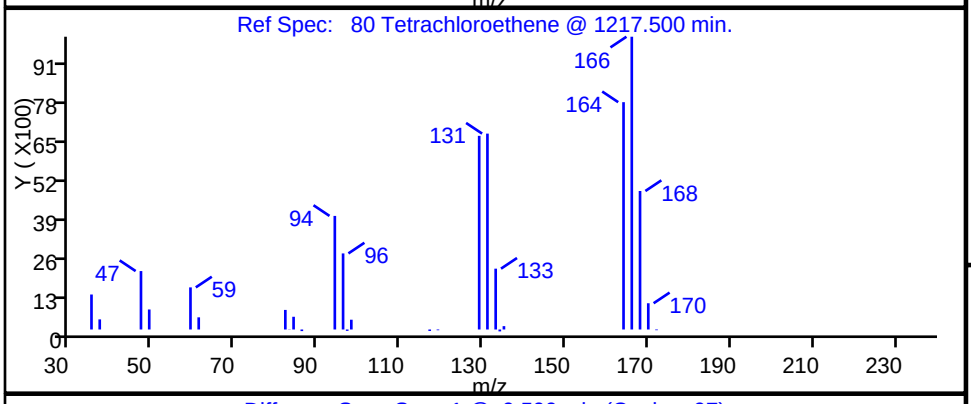
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031027.D

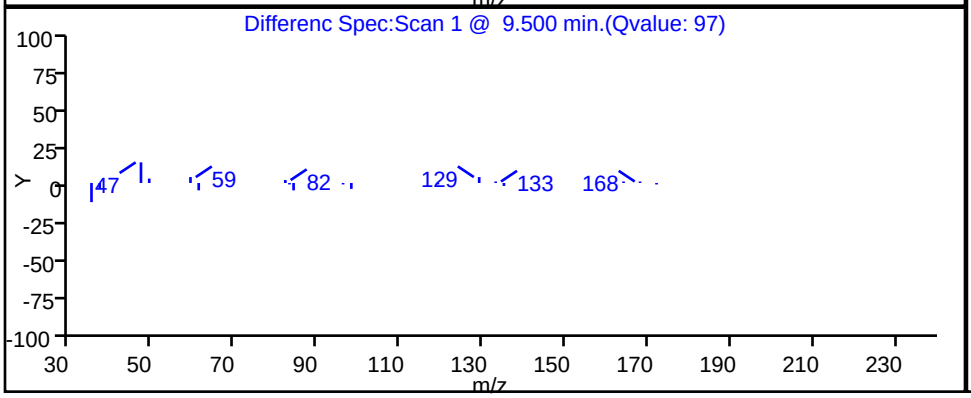
Injection Date:	31-Oct-2016 20:10:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-8	Lab Sample ID:	180-60202-8		
Client ID:	HD-CW-20-0/1-0				
Operator ID:	001562	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

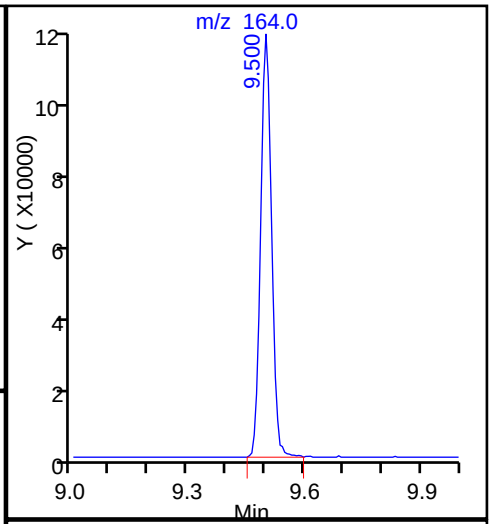
80 Tetrachloroethene, CAS: 127-18-4

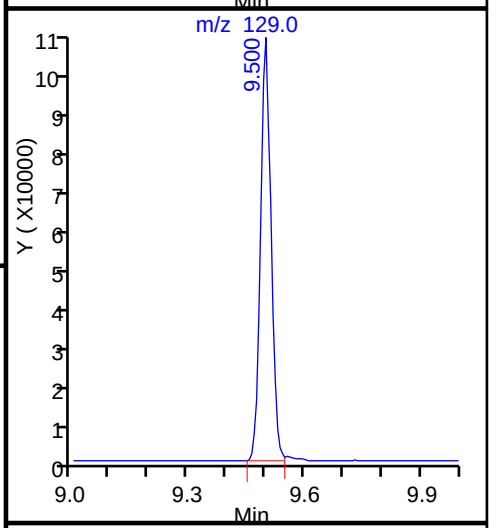


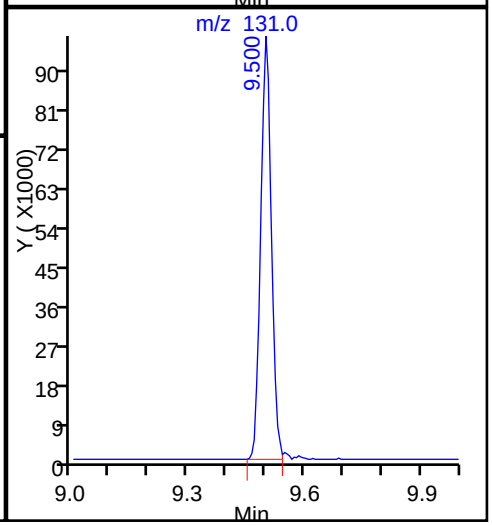












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-13-0/1-0 | Lab Sample ID: 180-60202-9

Matrix: Water | Lab File ID: 51031028.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:55

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 20:34

Soil Aliquot Vol: | Dilution Factor: 20

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	20	U	20	4.6
75-01-4	Vinyl chloride	20	U	20	6.3
74-83-9	Bromomethane	20	U	20	7.2
75-00-3	Chloroethane	20	U	20	5.2
75-35-4	1,1-Dichloroethene	9.3	J	20	5.7
67-64-1	Acetone	100	U	100	50
75-15-0	Carbon disulfide	20	U	20	3.7
75-09-2	Methylene Chloride	20	U	20	7.2
156-60-5	trans-1,2-Dichloroethene	20	U	20	5.7
1634-04-4	Methyl tert-butyl ether	20	U	20	4.9
75-34-3	1,1-Dichloroethane	5.5	J	20	4.7
156-59-2	cis-1,2-Dichloroethene	320		20	5.7
74-97-5	Bromochloromethane	20	U	20	7.5
78-93-3	2-Butanone (MEK)	100	U	100	23
67-66-3	Chloroform	20	U	20	5.5
71-55-6	1,1,1-Trichloroethane	17	J	20	4.4
56-23-5	Carbon tetrachloride	20	U	20	4.9
71-43-2	Benzene	20	U	20	5.1
107-06-2	1,2-Dichloroethane	20	U	20	4.9
79-01-6	Trichloroethene	160		20	5.2
78-87-5	1,2-Dichloropropane	20	U	20	4.5
75-27-4	Bromodichloromethane	20	U	20	4.7
10061-01-5	cis-1,3-Dichloropropene	20	U	20	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	100	U	100	12
108-88-3	Toluene	20	U	20	5.6
10061-02-6	trans-1,3-Dichloropropene	20	U	20	4.8
79-00-5	1,1,2-Trichloroethane	20	U	20	7.0
127-18-4	Tetrachloroethene	170		20	5.4
591-78-6	2-Hexanone	100	U	100	15
124-48-1	Dibromochloromethane	20	U	20	7.9
106-93-4	1,2-Dibromoethane (EDB)	20	U	20	5.8
108-90-7	Chlorobenzene	20	U	20	6.3
630-20-6	1,1,1,2-Tetrachloroethane	20	U	20	3.9
100-41-4	Ethylbenzene	20	U	20	5.5
1330-20-7	Xylenes, Total	40	U	40	9.7
100-42-5	Styrene	20	U	20	5.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-13-0/1-0 | Lab Sample ID: 180-60202-9

Matrix: Water | Lab File ID: 51031028.D

Analysis Method: 8260C | Date Collected: 10/26/2016 06:55

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 20:34

Soil Aliquot Vol: | Dilution Factor: 20

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	20	U	20	5.9
79-34-5	1,1,2,2-Tetrachloroethane	20	U	20	6.9
107-13-1	Acrylonitrile	400	U	400	55
123-91-1	1,4-Dioxane	4000	U ^c	4000	150

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		72-134
2037-26-5	Toluene-d8 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	101		72-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031028.D
Lims ID: 180-60202-A-9
Client ID: HD-CW-13-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 20:34:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info: 180-0014116-028
Misc. Info.: 180-60202-A-9, 20x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:47:20 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:47:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.259	4.279	-0.020	0	69791	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.272	-0.001	97	329302	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.375	-0.002	90	81202	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.715	12.723	-0.008	97	125421	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.548	-0.001	92	80069	50.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.919	-0.001	0	109666	48.2	
$ 7 Toluene-d8 (Surr)	98	8.919	8.921	-0.002	95	303057	49.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.561	-0.001	87	124680	50.3	
12 Chloromethane	50		1.767				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.229				ND	
16 Chloroethane	64		2.375				ND	
22 1,1-Dichloroethene	96	3.347	3.330	0.017	91	3873	2.33	
24 Acetone	43		3.440				ND	
26 Carbon disulfide	76		3.616				ND	
31 Methylene Chloride	84		4.121				ND	
33 Acrylonitrile	53		4.516				ND	
34 trans-1,2-Dichloroethene	96		4.553				ND	
35 Methyl tert-butyl ether	73		4.565				ND	
37 1,1-Dichloroethane	63	5.184	5.186	-0.002	1	5551	1.37	
45 cis-1,2-Dichloroethene	96	5.932	5.934	-0.002	85	159195	79.5	
46 2-Butanone (MEK)	43		5.952				ND	
49 Chlorobromomethane	128		6.220				ND	
52 Chloroform	83		6.360				ND	
53 1,1,1-Trichloroethane	97	6.523	6.524	-0.002	95	9414	4.16	
56 Carbon tetrachloride	117		6.700				ND	
58 Benzene	78		6.925				ND	
59 1,2-Dichloroethane	62		7.005				ND	
64 Trichloroethene	130	7.660	7.662	-0.002	95	72198	39.2	
67 1,2-Dichloropropane	63		7.935				ND	
70 1,4-Dioxane	88		8.014				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.215				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.817				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.243				ND	
79 1,1,2-Trichloroethane	97		9.432				ND	
80 Tetrachloroethene	164	9.503	9.505	-0.002	97	60667	41.4	
82 2-Hexanone	43		9.645				ND	
84 Chlorodibromomethane	129		9.809				ND	
85 Ethylene Dibromide	107		9.918				ND	
87 Chlorobenzene	112		10.405				ND	
89 1,1,1,2-Tetrachloroethane	131		10.503				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.636				ND	
92 o-Xylene	106		11.020				ND	
93 Styrene	104		11.038				ND	
94 Bromoform	173		11.220				ND	
99 1,1,2,2-Tetrachloroethane	83		11.695				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

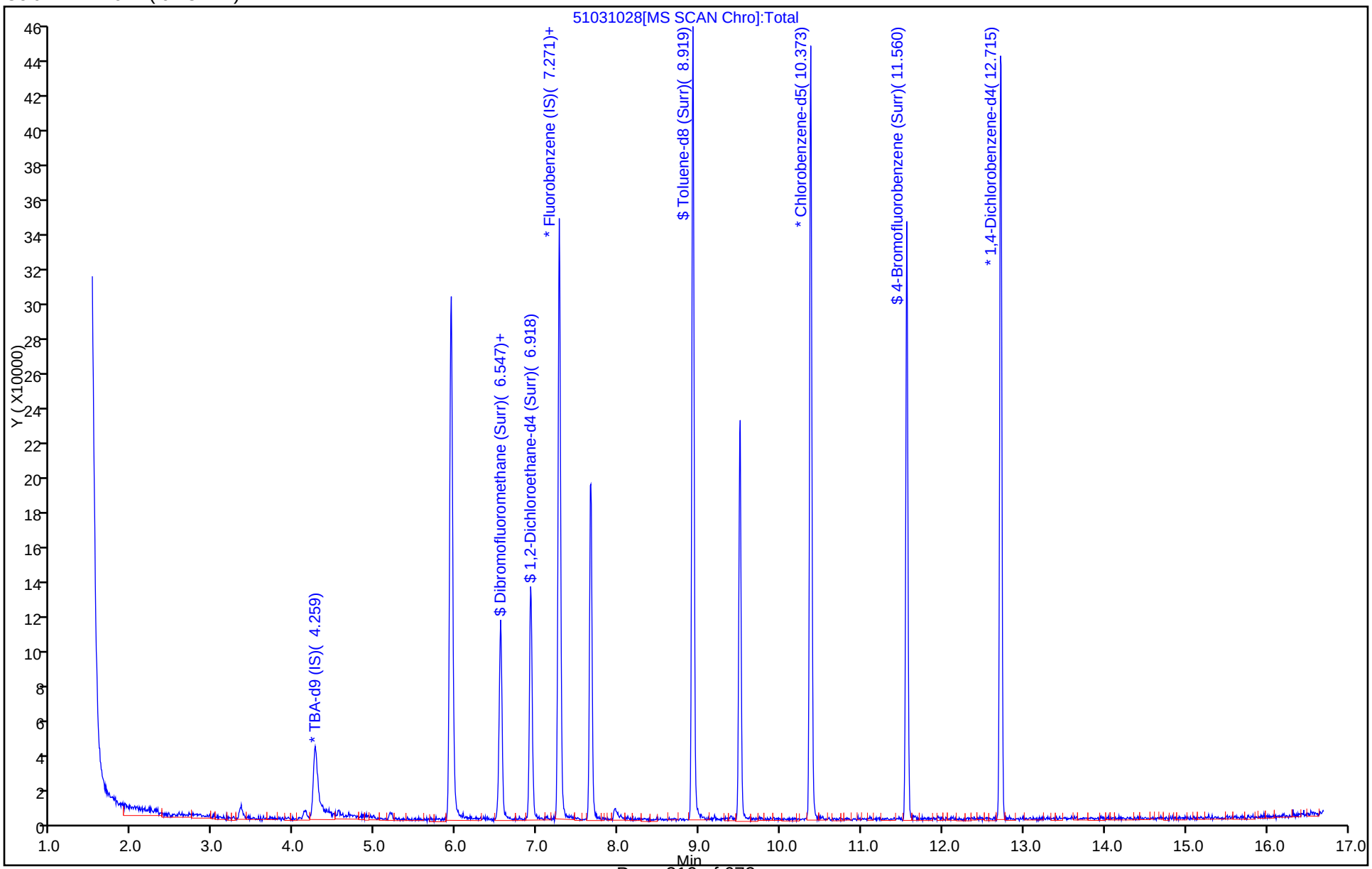
Report Date: 01-Nov-2016 07:47:21 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031028.D

Injection Date:	31-Oct-2016 20:34:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-A-9	Lab Sample ID:	180-60202-9	Worklist Smp#:	28
Client ID:	HD-CW-13-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	20.0000	ALS Bottle#:	27
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031028.D
Lims ID: 180-60202-A-9
Client ID: HD-CW-13-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 20:34:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info: 180-0014116-028
Misc. Info.: 180-60202-A-9, 20x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:47:20 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:47:20

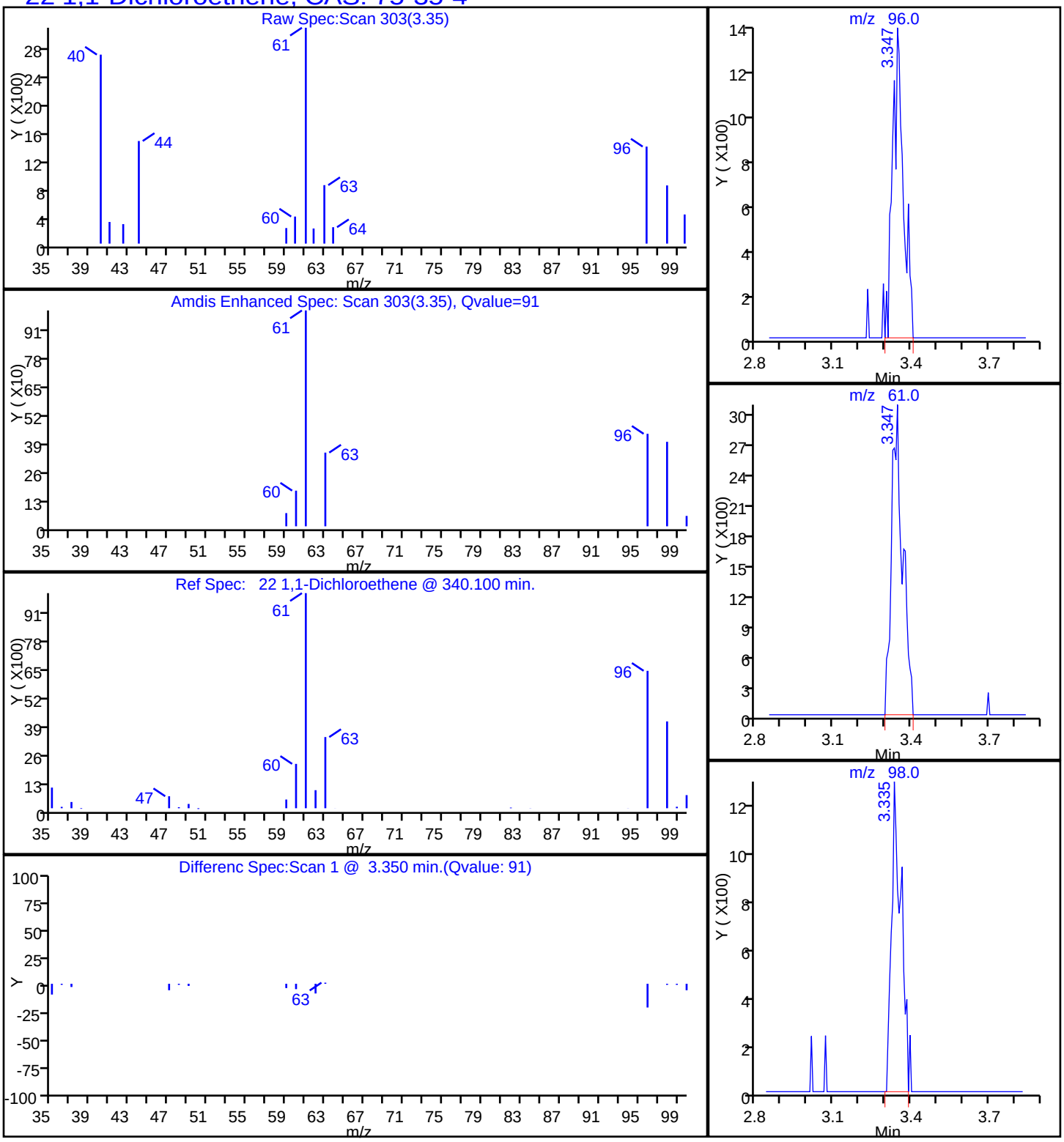
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.8	101.64
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.2	96.43
$ 7 Toluene-d8 (Surr)	50.0	49.4	98.90
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.3	100.64

Report Date: 01-Nov-2016 07:47:21 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031028.D		
Injection Date:	31-Oct-2016 20:34:30	Instrument ID:	CHHP5
Lims ID:	180-60202-A-9	Lab Sample ID:	180-60202-9
Client ID:	HD-CW-13-0/1-0		
Operator ID:	001562	ALS Bottle#:	27 Worklist Smp#: 28
Purge Vol:	5.000 mL	Dil. Factor:	20.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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



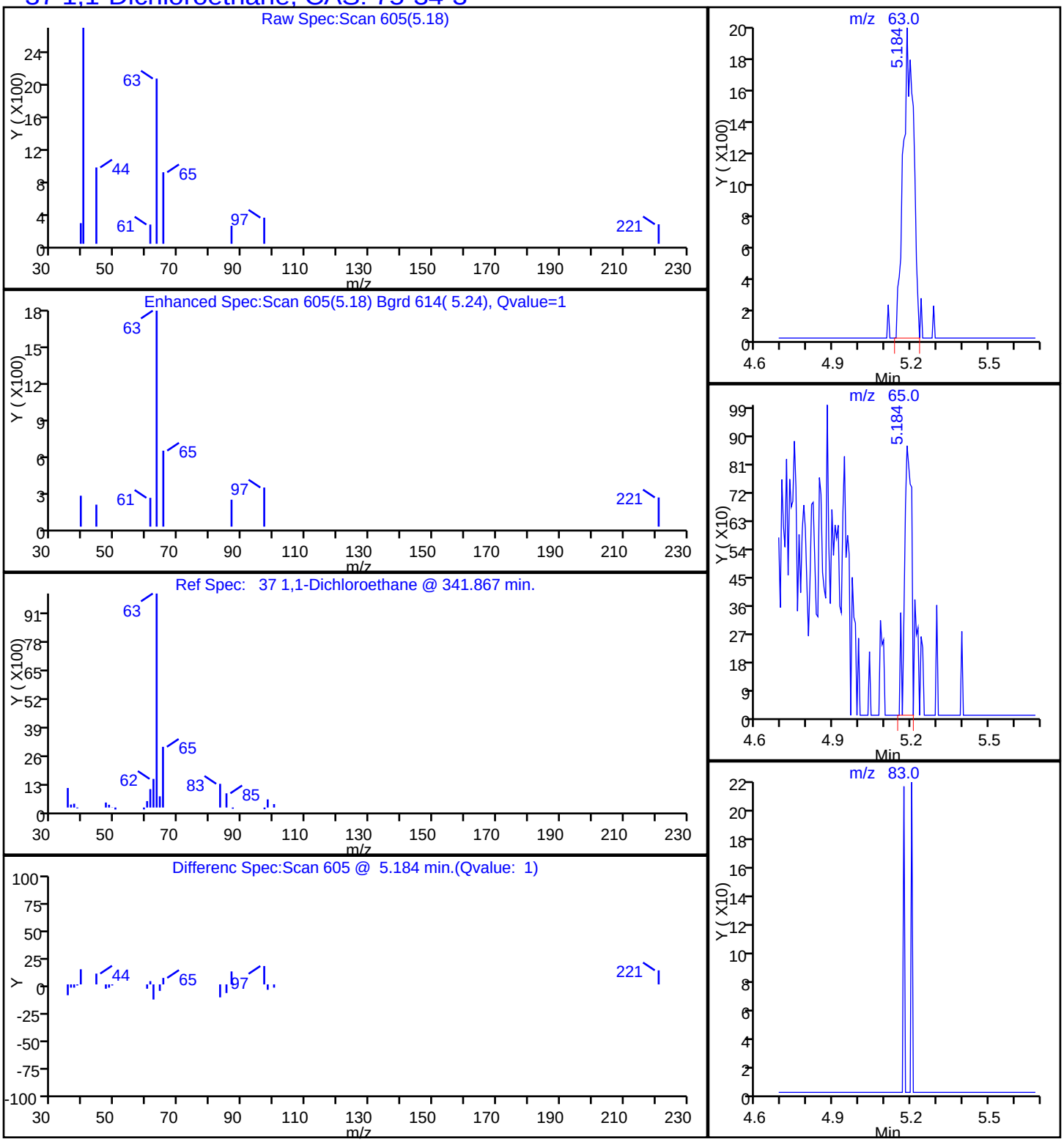
Report Date: 01-Nov-2016 07:47:21 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031028.D

Injection Date:	31-Oct-2016 20:34:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-9	Lab Sample ID:	180-60202-9		
Client ID:	HD-CW-13-0/1-0				
Operator ID:	001562	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	20.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

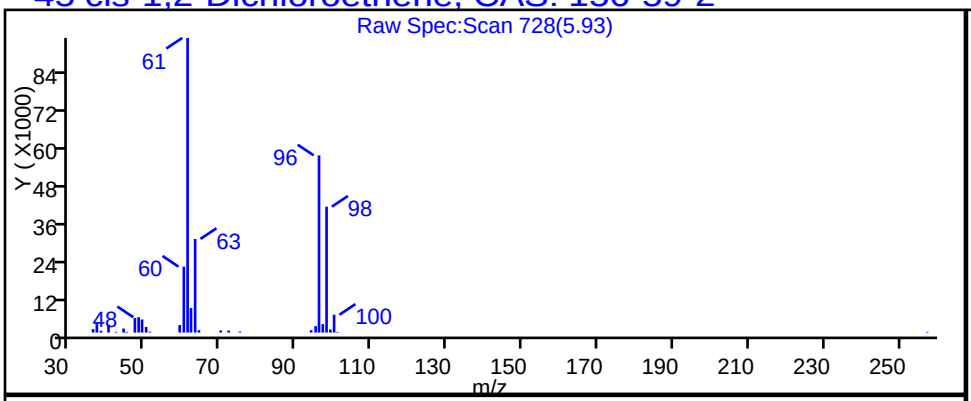


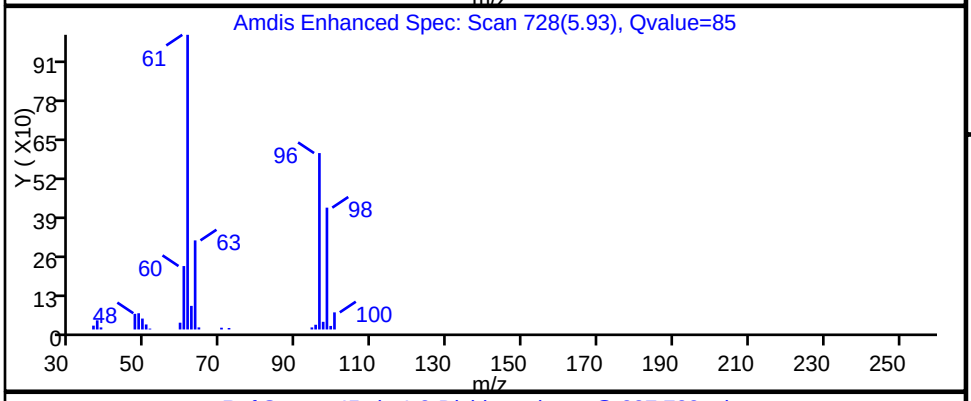
Report Date: 01-Nov-2016 07:47:21 Chrom Revision: 2.2 17-Oct-2016 09:27:18

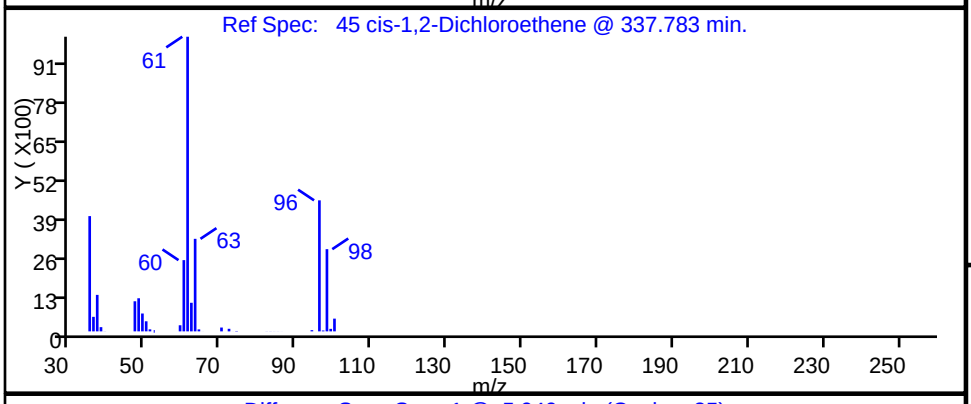
TestAmerica Pittsburgh

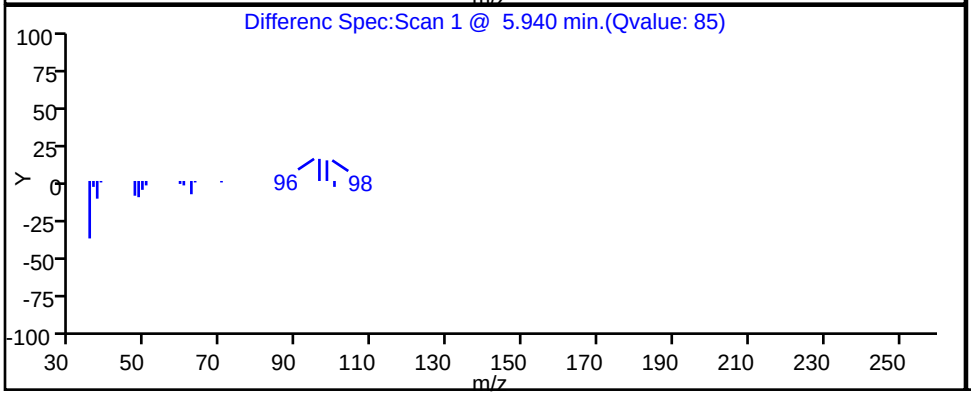
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031028.D				
Injection Date:	31-Oct-2016 20:34:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-9	Lab Sample ID:	180-60202-9		
Client ID:	HD-CW-13-0/1-0				
Operator ID:	001562	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	20.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

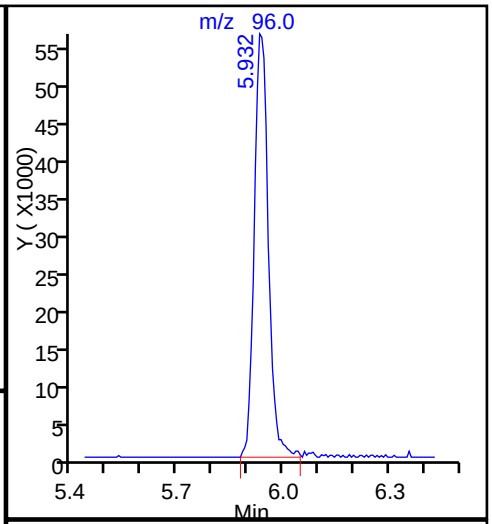
45 cis-1,2-Dichloroethene, CAS: 156-59-2

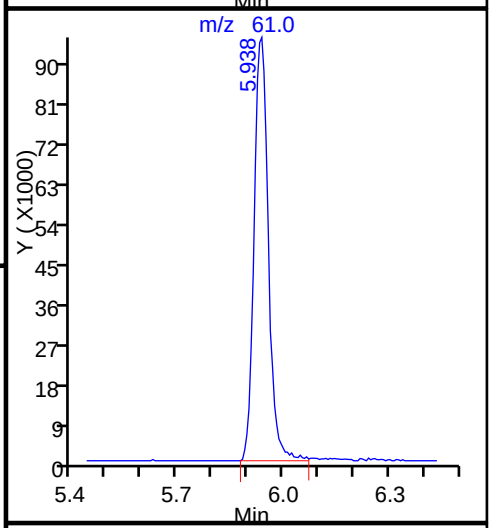


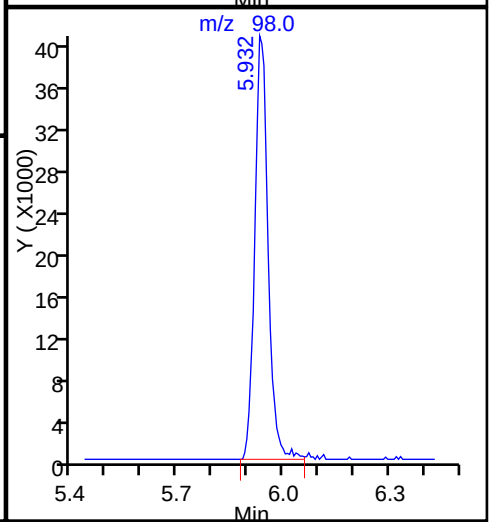










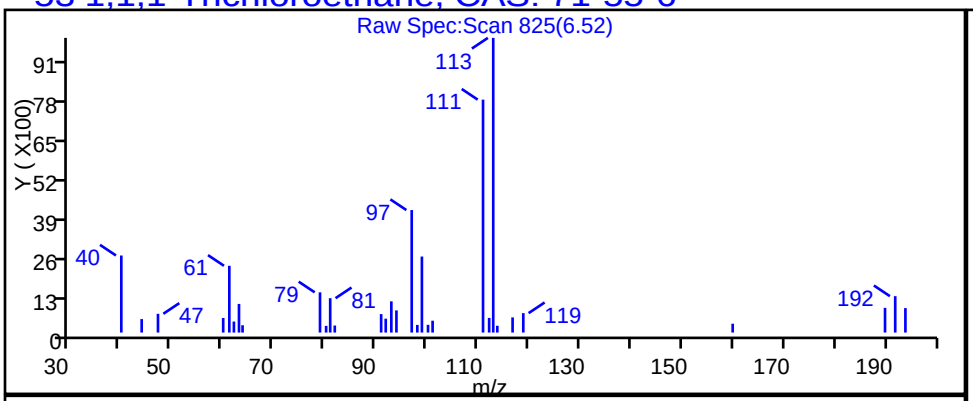


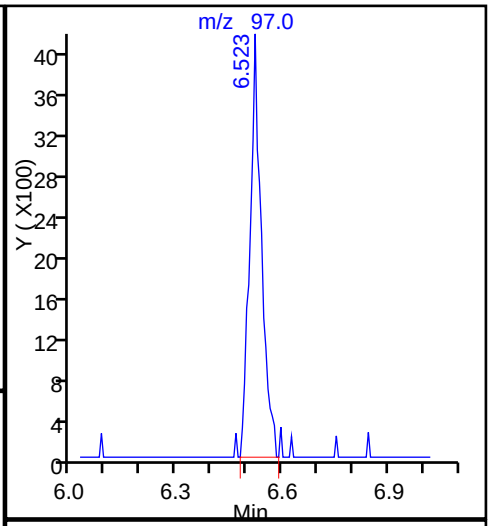
Report Date: 01-Nov-2016 07:47:21 Chrom Revision: 2.2 17-Oct-2016 09:27:18

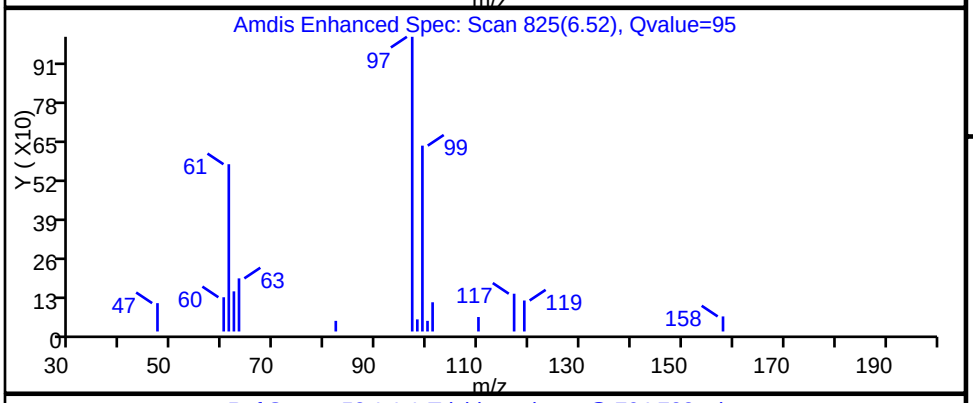
TestAmerica Pittsburgh

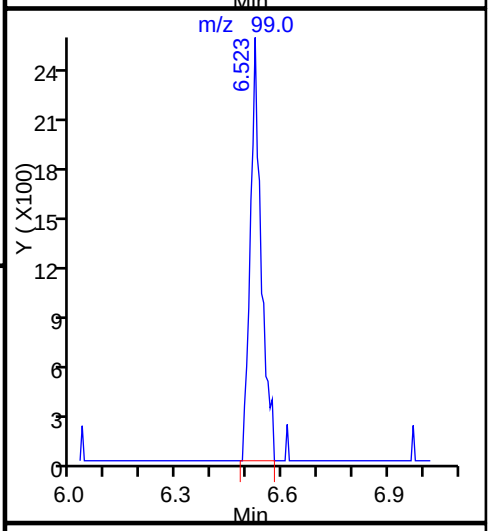
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031028.D				
Injection Date:	31-Oct-2016 20:34:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-9	Lab Sample ID:	180-60202-9		
Client ID:	HD-CW-13-0/1-0				
Operator ID:	001562	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	20.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

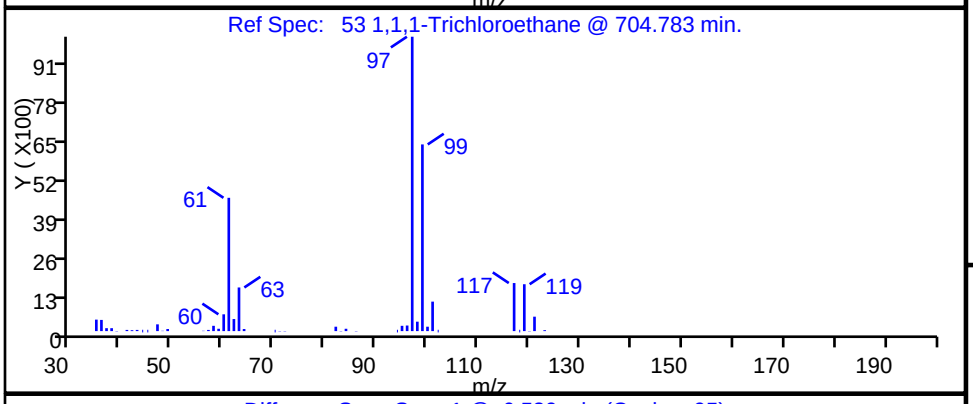
53 1,1,1-Trichloroethane, CAS: 71-55-6

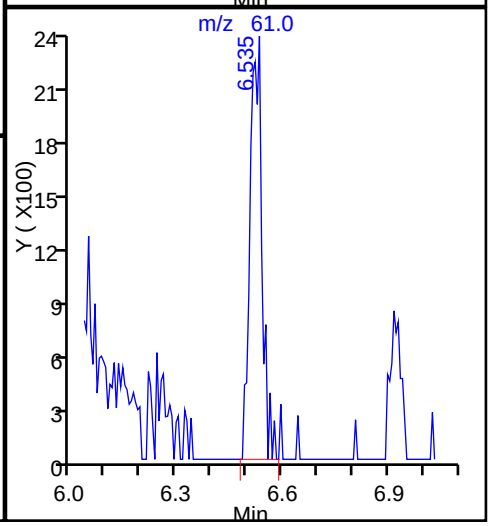


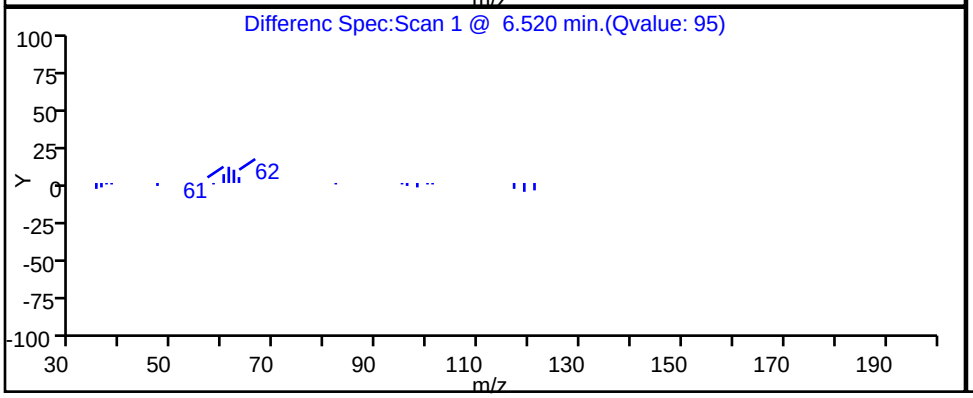












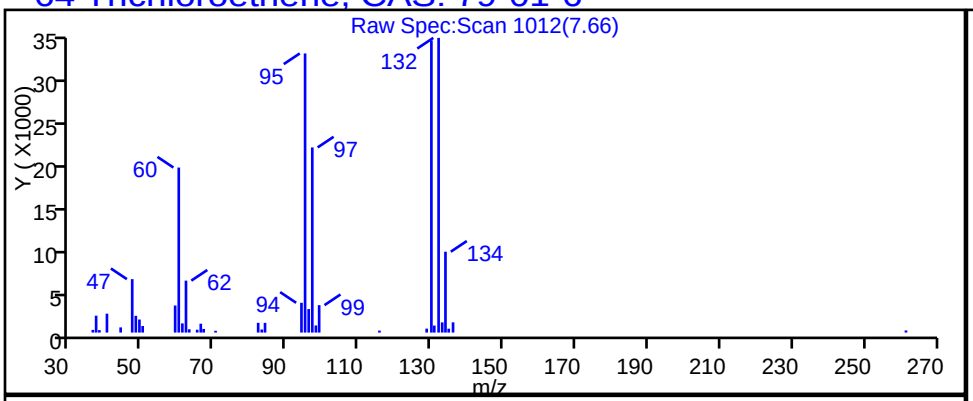
Report Date: 01-Nov-2016 07:47:22 Chrom Revision: 2.2 17-Oct-2016 09:27:18

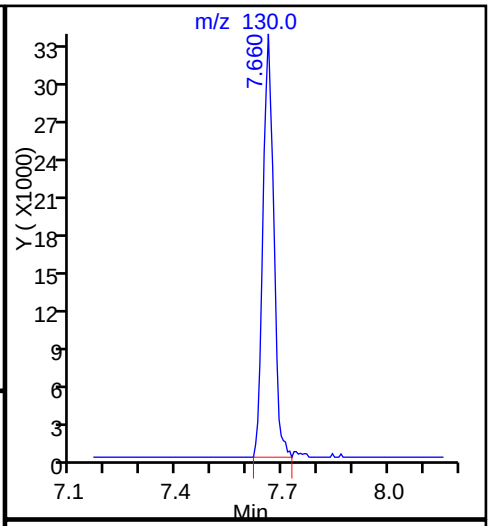
TestAmerica Pittsburgh

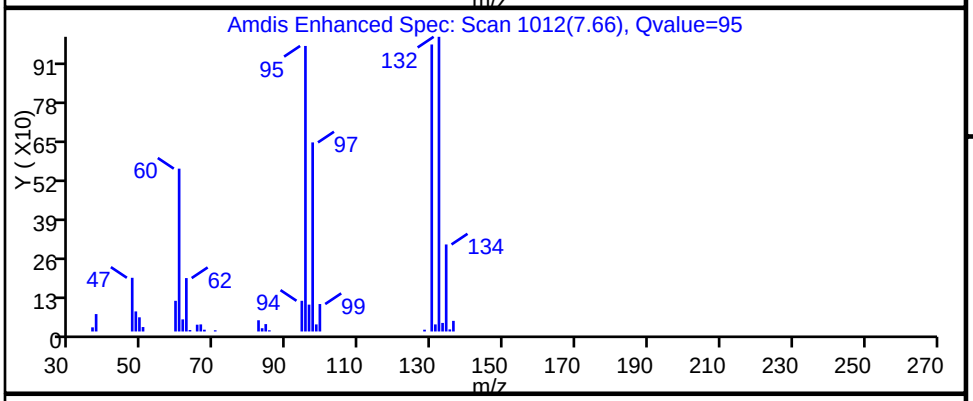
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031028.D

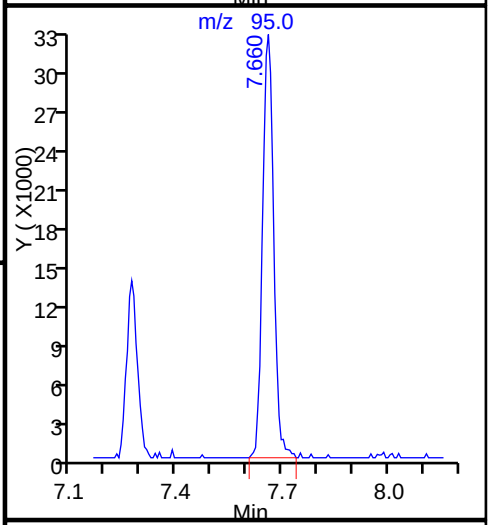
Injection Date:	31-Oct-2016 20:34:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-9	Lab Sample ID:	180-60202-9		
Client ID:	HD-CW-13-0/1-0				
Operator ID:	001562	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	20.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

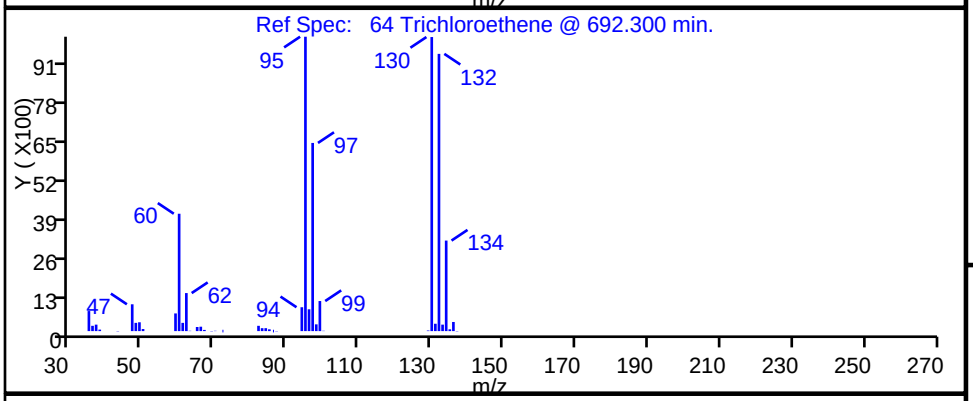
64 Trichloroethene, CAS: 79-01-6

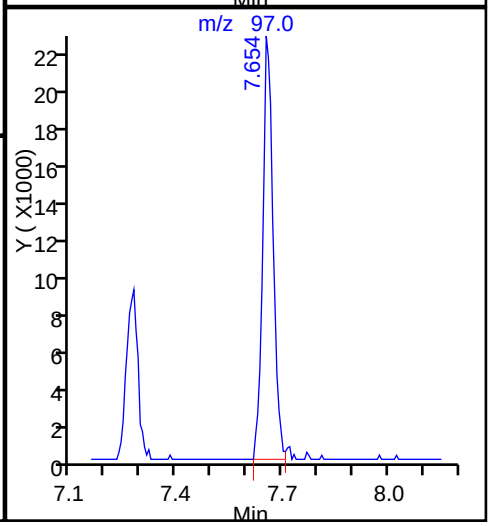


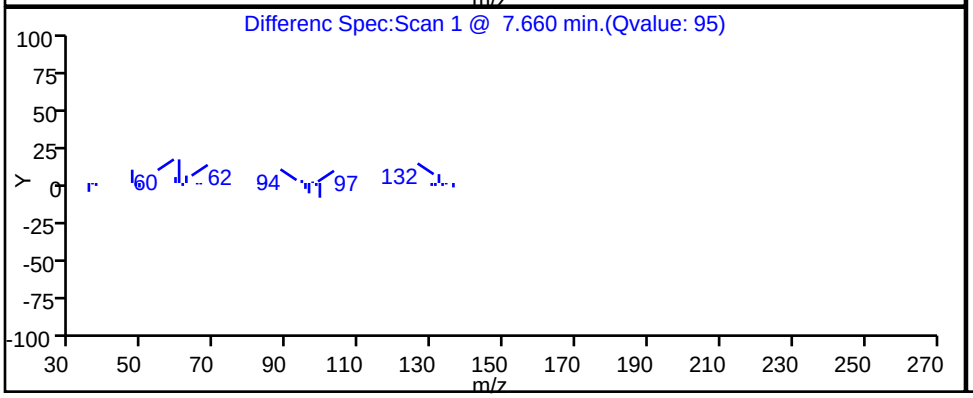










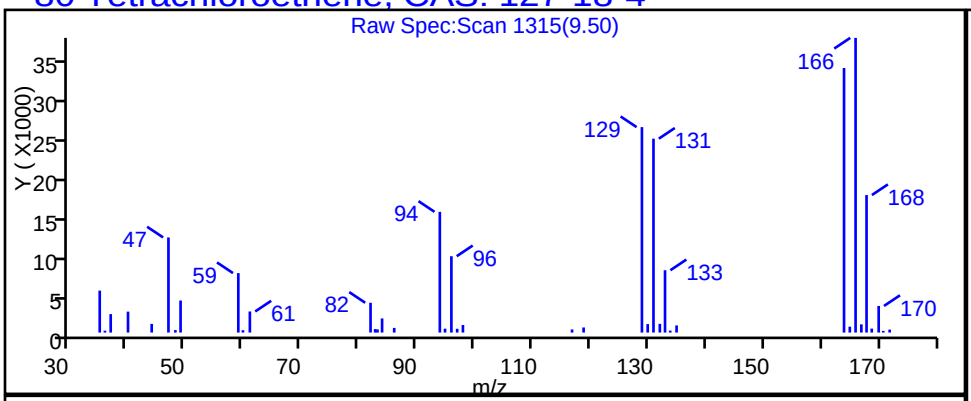


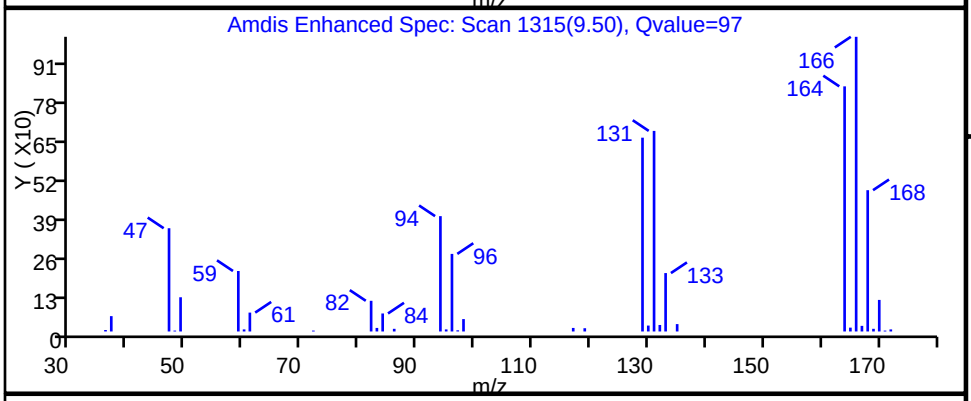
Report Date: 01-Nov-2016 07:47:22 Chrom Revision: 2.2 17-Oct-2016 09:27:18

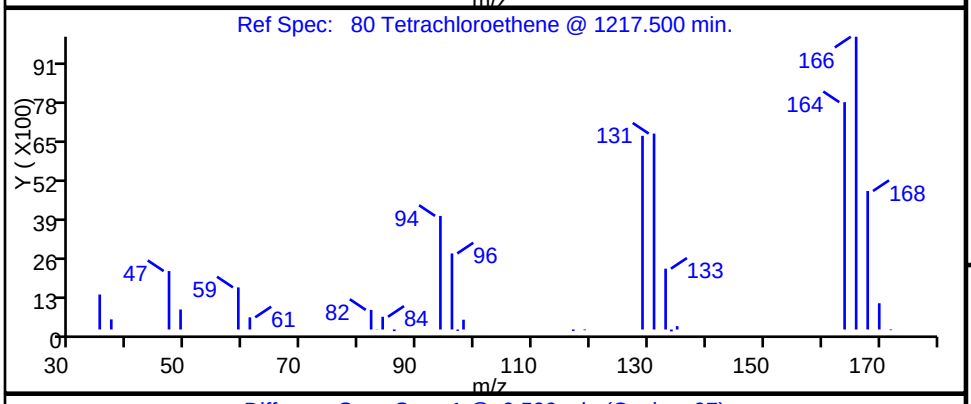
TestAmerica Pittsburgh

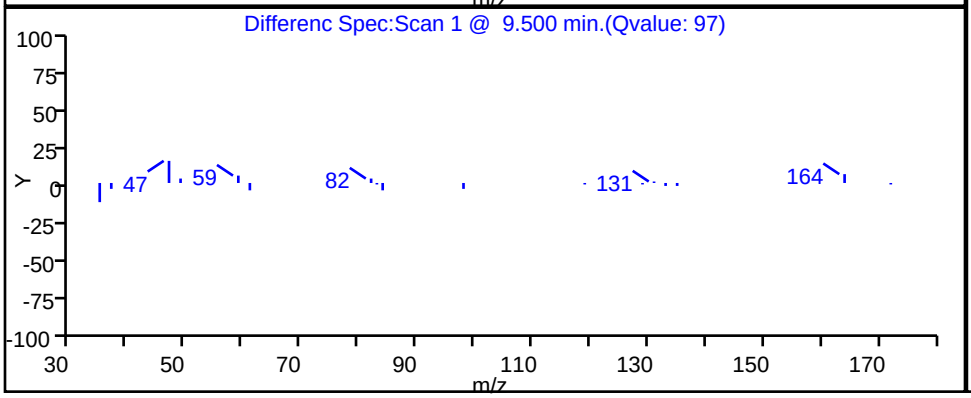
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031028.D		
Injection Date:	31-Oct-2016 20:34:30	Instrument ID:	CHHP5
Lims ID:	180-60202-A-9	Lab Sample ID:	180-60202-9
Client ID:	HD-CW-13-0/1-0		
Operator ID:	001562	ALS Bottle#:	27 Worklist Smp#: 28
Purge Vol:	5.000 mL	Dil. Factor:	20.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

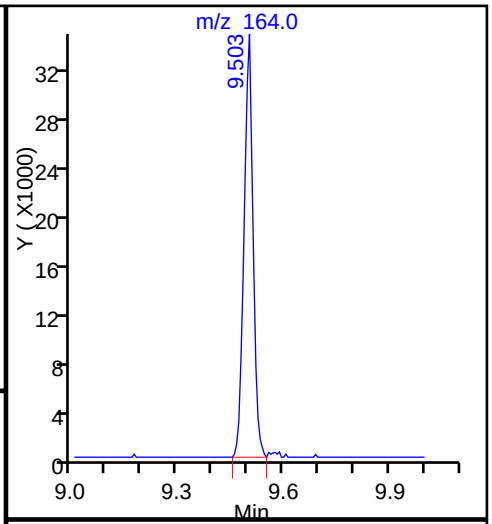
80 Tetrachloroethene, CAS: 127-18-4

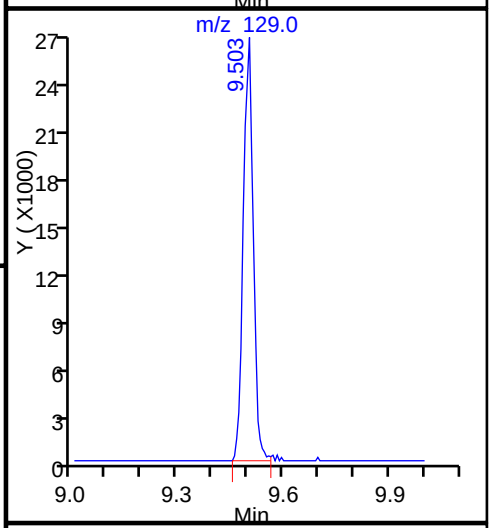


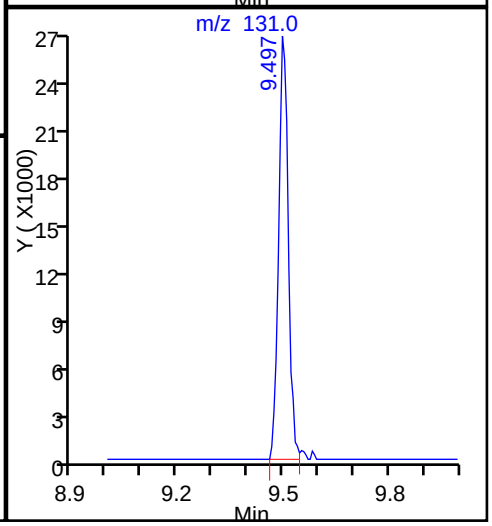












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-15A-0/1-0 | Lab Sample ID: 180-60202-10

Matrix: Water | Lab File ID: 51031029.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 20:59

Soil Aliquot Vol: | Dilution Factor: 500

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	500	U	500	110
75-01-4	Vinyl chloride	500	U	500	160
74-83-9	Bromomethane	500	U	500	180
75-00-3	Chloroethane	500	U	500	130
75-35-4	1,1-Dichloroethene	1800		500	140
67-64-1	Acetone	2500	U	2500	1300
75-15-0	Carbon disulfide	500	U	500	92
75-09-2	Methylene Chloride	500	U	500	180
156-60-5	trans-1,2-Dichloroethene	500	U	500	140
1634-04-4	Methyl tert-butyl ether	500	U	500	120
75-34-3	1,1-Dichloroethane	170	J	500	120
156-59-2	cis-1,2-Dichloroethene	8600		500	140
74-97-5	Bromochloromethane	500	U	500	190
78-93-3	2-Butanone (MEK)	2500	U	2500	580
67-66-3	Chloroform	500	U	500	140
71-55-6	1,1,1-Trichloroethane	9400		500	110
56-23-5	Carbon tetrachloride	500	U	500	120
71-43-2	Benzene	500	U	500	130
107-06-2	1,2-Dichloroethane	500	U	500	120
79-01-6	Trichloroethene	5200		500	130
78-87-5	1,2-Dichloropropane	500	U	500	110
75-27-4	Bromodichloromethane	500	U	500	120
10061-01-5	cis-1,3-Dichloropropene	500	U	500	100
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	U	2500	300
108-88-3	Toluene	500	U	500	140
10061-02-6	trans-1,3-Dichloropropene	500	U	500	120
79-00-5	1,1,2-Trichloroethane	500	U	500	170
127-18-4	Tetrachloroethene	1600		500	130
591-78-6	2-Hexanone	2500	U	2500	370
124-48-1	Dibromochloromethane	500	U	500	200
106-93-4	1,2-Dibromoethane (EDB)	500	U	500	140
108-90-7	Chlorobenzene	500	U	500	160
630-20-6	1,1,1,2-Tetrachloroethane	500	U	500	98
100-41-4	Ethylbenzene	500	U	500	140
1330-20-7	Xylenes, Total	1000	U	1000	240
100-42-5	Styrene	500	U	500	130

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-15A-0/1-0 | Lab Sample ID: 180-60202-10

Matrix: Water | Lab File ID: 51031029.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 20:59

Soil Aliquot Vol: | Dilution Factor: 500

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	500	U	500	150
79-34-5	1,1,2,2-Tetrachloroethane	500	U	500	170
107-13-1	Acrylonitrile	10000	U	10000	1400
123-91-1	1,4-Dioxane	100000	U ^c	100000	3700

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		72-134
2037-26-5	Toluene-d8 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	102		72-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031029.D
Lims ID: 180-60202-A-10
Client ID: HD-CW-15A-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 20:59:30 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 500.0000
Sample Info: 180-0014116-029
Misc. Info.: 180-60202-A-10, 500x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:51:04 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 07:51:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.279	-0.013	0	104887	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.272	-0.001	97	338270	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.375	-0.001	91	85380	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.723	-0.001	97	135863	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.548	-0.001	94	82253	50.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.919	-0.001	0	115891	49.6	
$ 7 Toluene-d8 (Surr)	98	8.920	8.921	-0.001	95	321629	49.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.561	-0.001	87	133464	51.2	
12 Chloromethane	50		1.767				ND	
13 Vinyl chloride	62		1.900				ND	
15 Bromomethane	94		2.229				ND	
16 Chloroethane	64		2.375				ND	
22 1,1-Dichloroethene	96	3.341	3.330	0.011	92	31468	18.4	
24 Acetone	43		3.440				ND	
26 Carbon disulfide	76		3.616				ND	
31 Methylene Chloride	84	4.132	4.121	0.011	53	3128	1.46	
33 Acrylonitrile	53		4.516				ND	
34 trans-1,2-Dichloroethene	96		4.553				ND	
35 Methyl tert-butyl ether	73		4.565				ND	
37 1,1-Dichloroethane	63	5.197	5.186	0.011	93	7227	1.74	
45 cis-1,2-Dichloroethene	96	5.933	5.934	-0.001	88	177708	86.4	
46 2-Butanone (MEK)	43		5.952				ND	
49 Chlorobromomethane	128		6.220				ND	
52 Chloroform	83		6.360				ND	
53 1,1,1-Trichloroethane	97	6.523	6.524	-0.001	94	218132	93.8	
56 Carbon tetrachloride	117		6.700				ND	
58 Benzene	78		6.925				ND	
59 1,2-Dichloroethane	62		7.005				ND	
64 Trichloroethene	130	7.660	7.662	-0.002	97	98820	52.2	
67 1,2-Dichloropropane	63		7.935				ND	
70 1,4-Dioxane	88		8.014				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.215				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.817				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.243				ND	
79 1,1,2-Trichloroethane	97		9.432				ND	
80 Tetrachloroethene	164	9.504	9.505	-0.001	96	24222	15.7	
82 2-Hexanone	43		9.645				ND	
84 Chlorodibromomethane	129		9.809				ND	
85 Ethylene Dibromide	107		9.918				ND	
87 Chlorobenzene	112		10.405				ND	
89 1,1,1,2-Tetrachloroethane	131		10.503				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.636				ND	
92 o-Xylene	106		11.020				ND	
93 Styrene	104		11.038				ND	
94 Bromoform	173		11.220				ND	
99 1,1,2,2-Tetrachloroethane	83		11.695				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

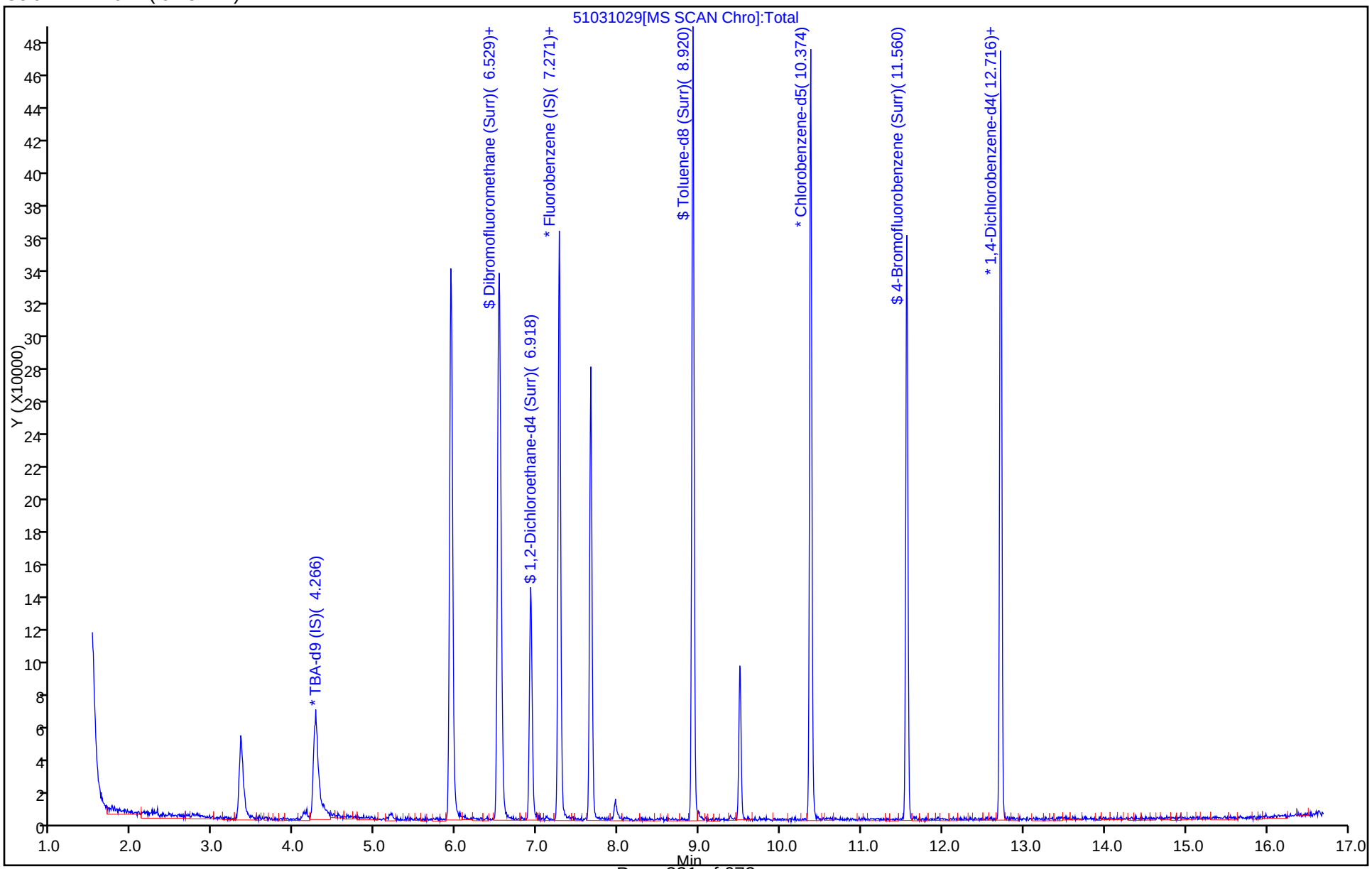
Report Date: 01-Nov-2016 07:51:04 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031029.D

Injection Date:	31-Oct-2016 20:59:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-A-10	Lab Sample ID:	180-60202-10	Worklist Smp#:	29
Client ID:	HD-CW-15A-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	500.0000	ALS Bottle#:	28
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031029.D				
Lims ID:	180-60202-A-10				
Client ID:	HD-CW-15A-0/1-0				
Sample Type:	Client				
Inject. Date:	31-Oct-2016 20:59:30	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Sample Info:	180-0014116-029				
Misc. Info.:	180-60202-A-10, 500x				
Operator ID:	001562	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	01-Nov-2016 07:51:04	Calib Date:	22-Oct-2016 17:46:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK031				

First Level Reviewer: fergusond Date: 01-Nov-2016 07:51:04

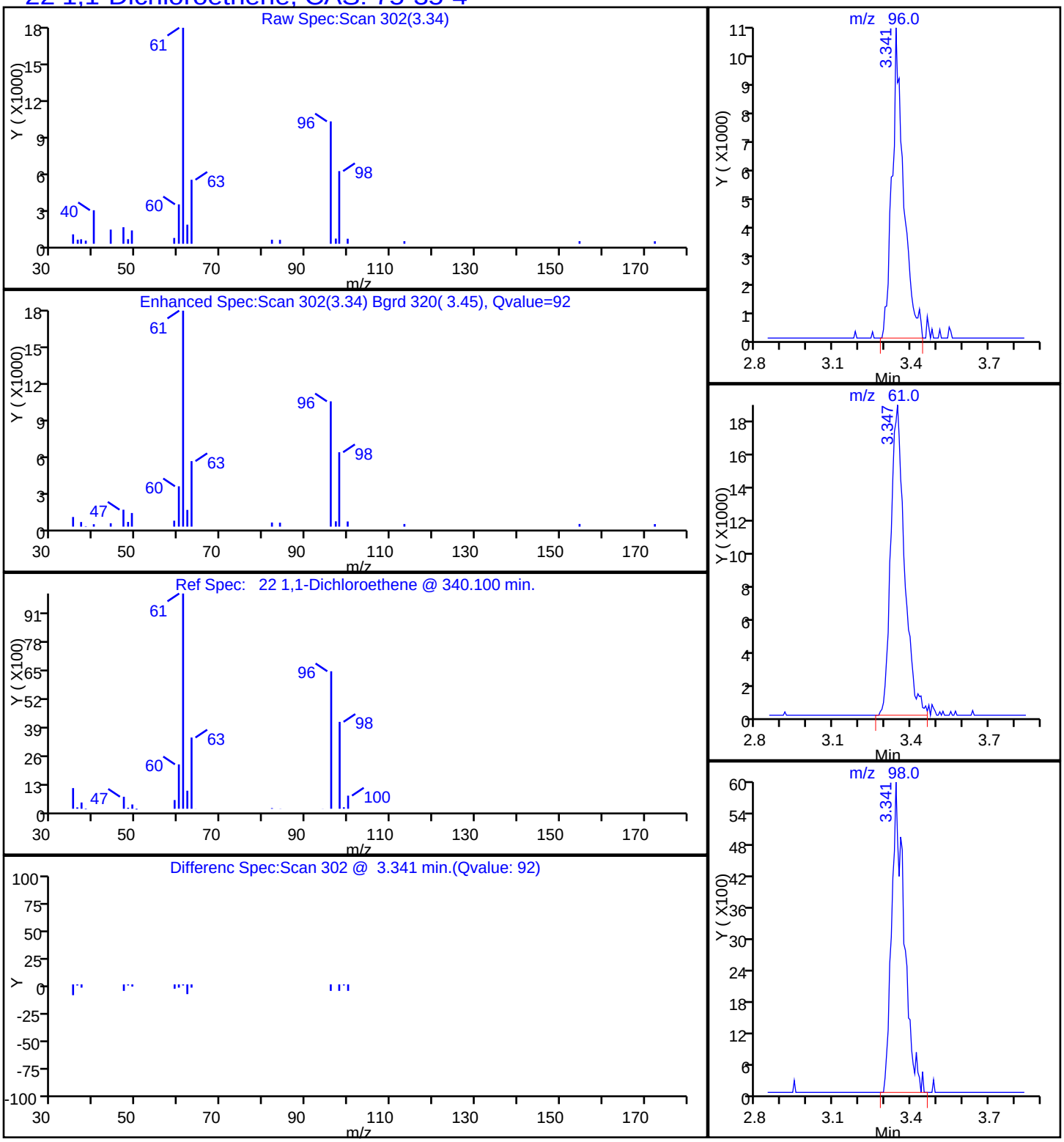
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.8	101.64
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.6	99.20
$ 7 Toluene-d8 (Surr)	50.0	49.9	99.82
$ 8 4-Bromofluorobenzene (Surr)	50.0	51.2	102.46

Report Date: 01-Nov-2016 07:51:04 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031029.D				
Injection Date:	31-Oct-2016 20:59:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-10	Lab Sample ID:	180-60202-10		
Client ID:	HD-CW-15A-0/1-0				
Operator ID:	001562	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

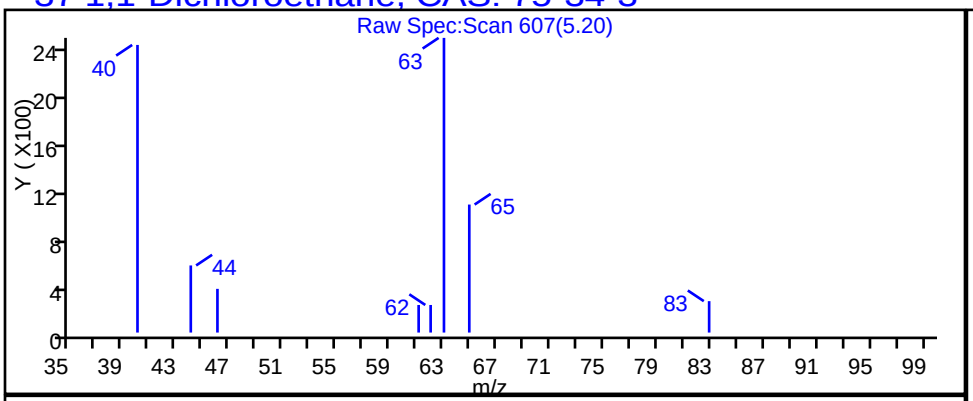


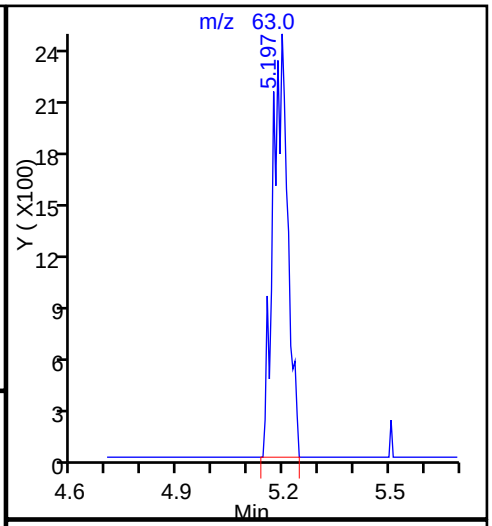
Report Date: 01-Nov-2016 07:51:04 Chrom Revision: 2.2 17-Oct-2016 09:27:18

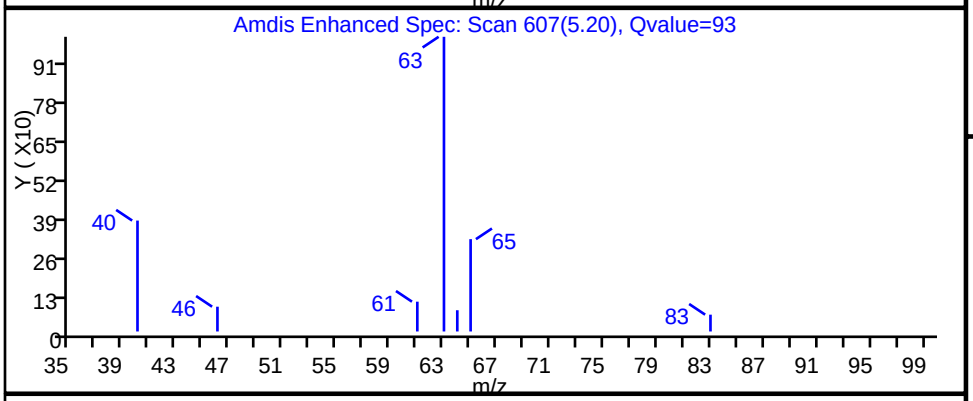
TestAmerica Pittsburgh

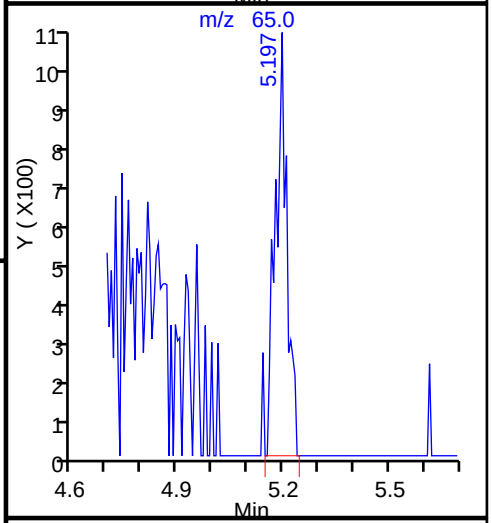
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031029.D				
Injection Date:	31-Oct-2016 20:59:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-10	Lab Sample ID:	180-60202-10		
Client ID:	HD-CW-15A-0/1-0				
Operator ID:	001562	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

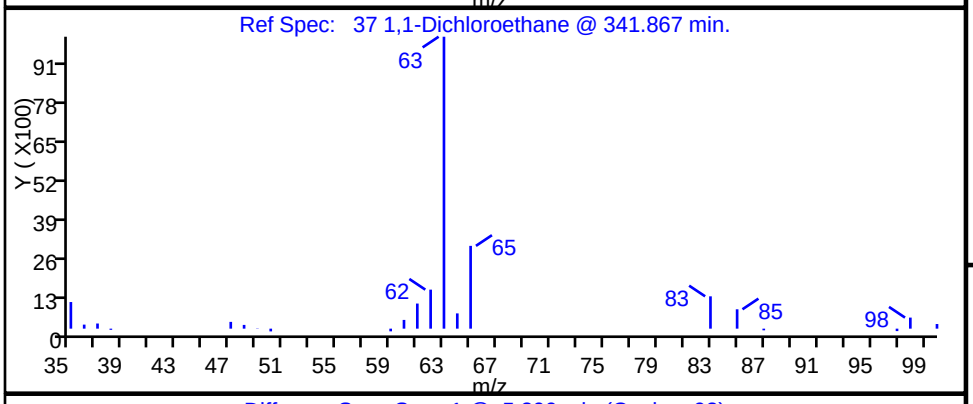
37 1,1-Dichloroethane, CAS: 75-34-3

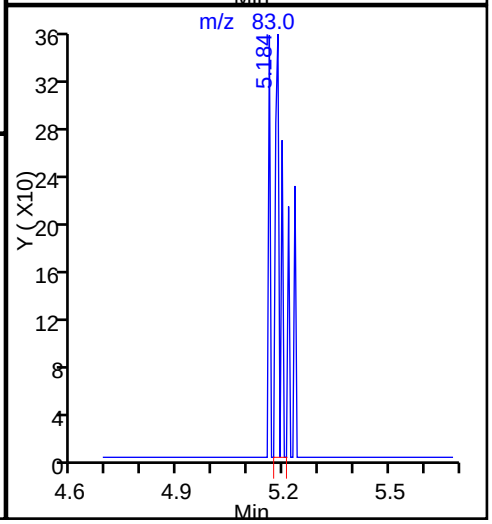


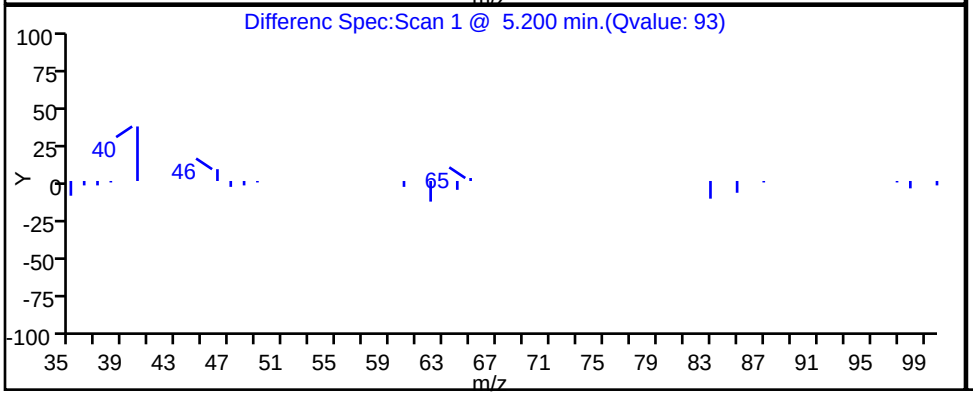










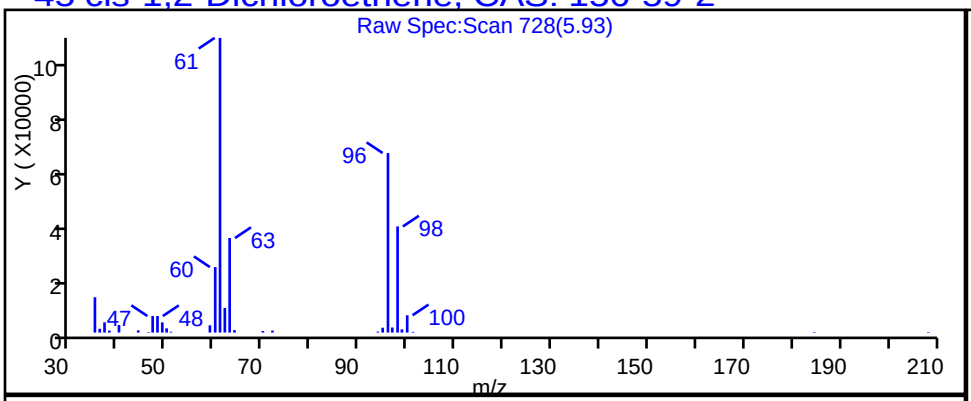


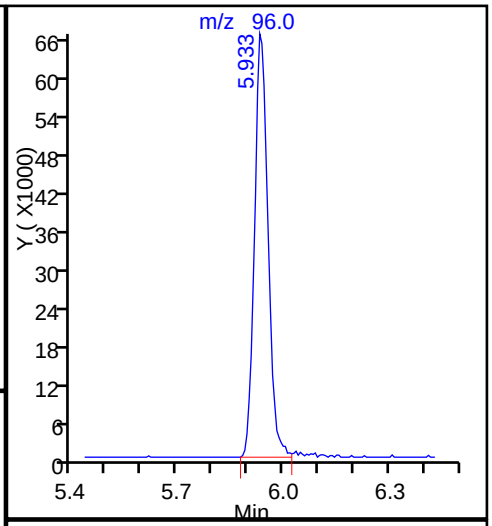
Report Date: 01-Nov-2016 07:51:04 Chrom Revision: 2.2 17-Oct-2016 09:27:18

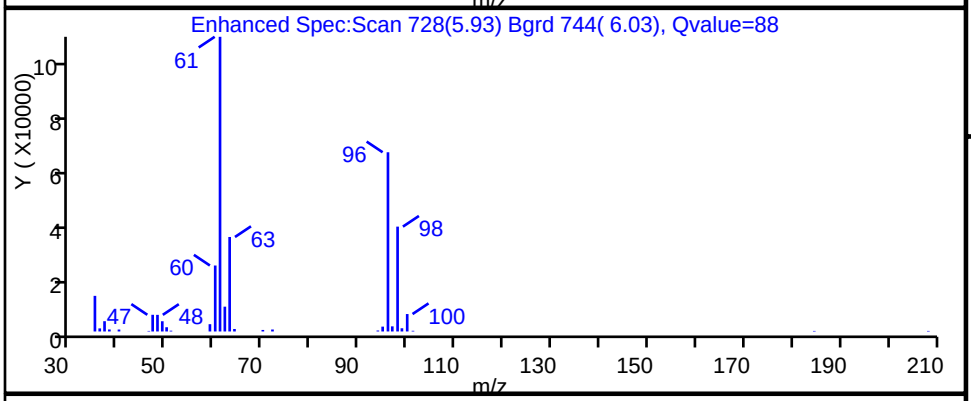
TestAmerica Pittsburgh

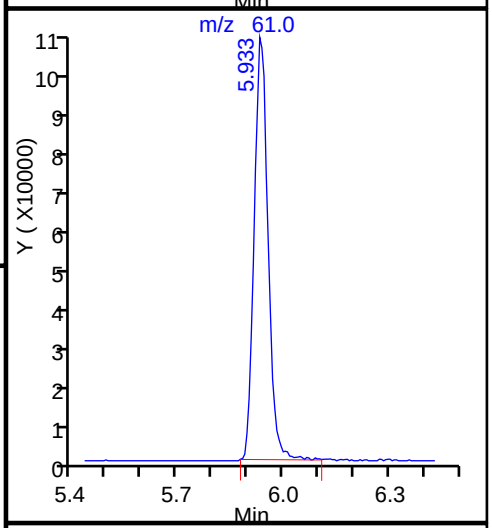
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031029.D				
Injection Date:	31-Oct-2016 20:59:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-10	Lab Sample ID:	180-60202-10		
Client ID:	HD-CW-15A-0/1-0				
Operator ID:	001562	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

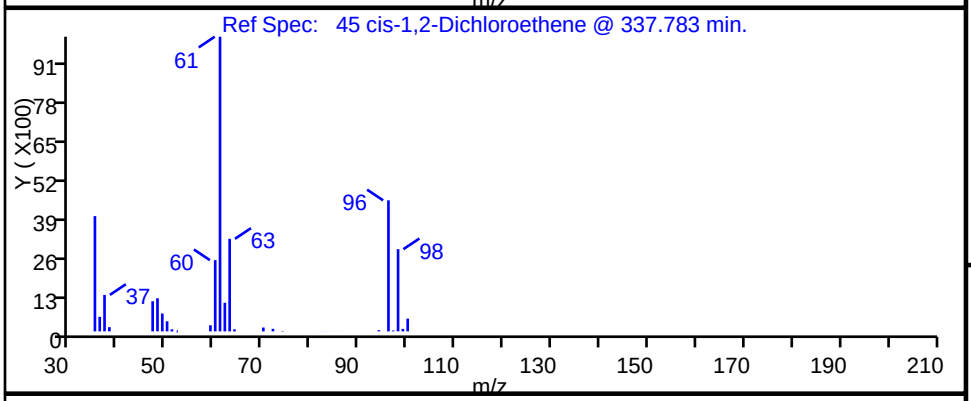
45 cis-1,2-Dichloroethene, CAS: 156-59-2

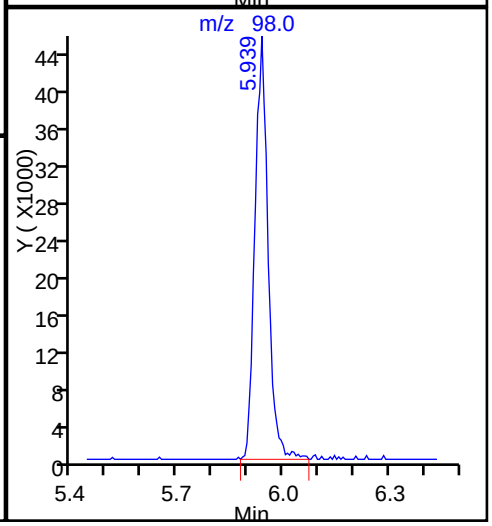


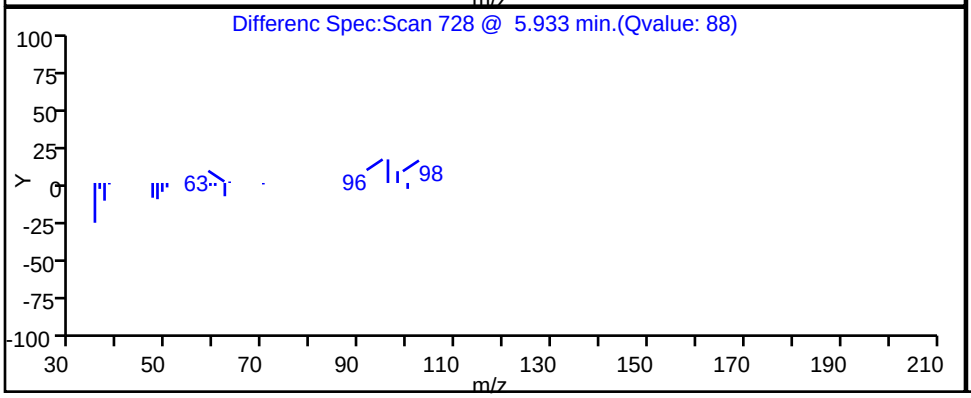










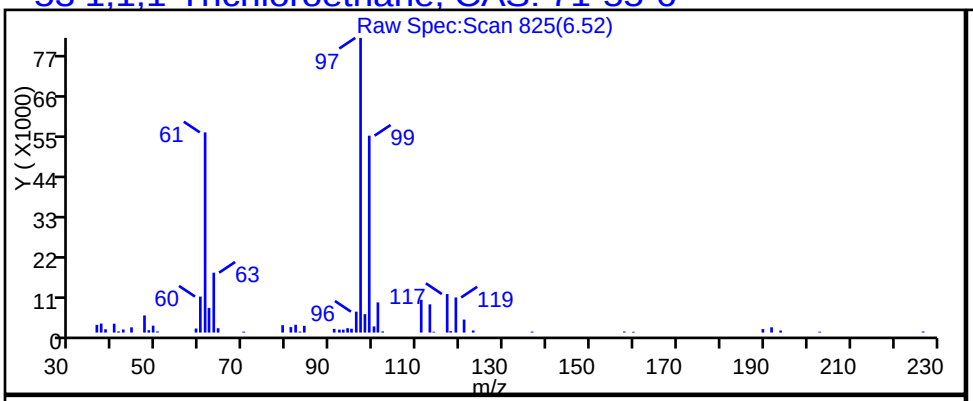


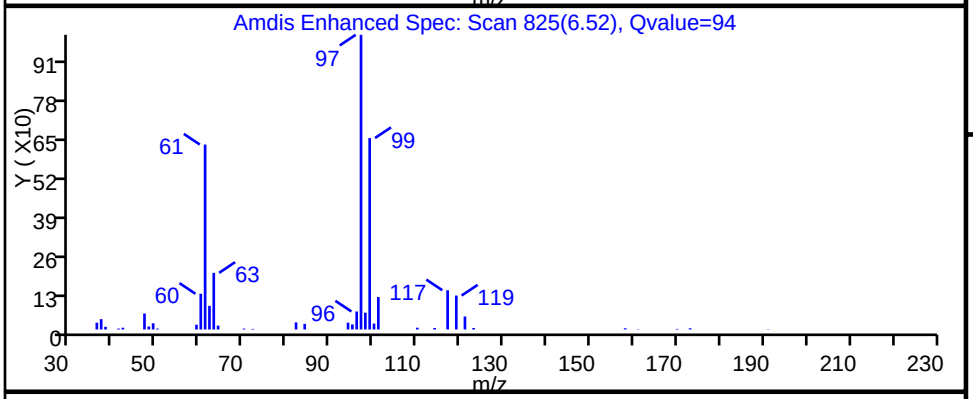
Report Date: 01-Nov-2016 07:51:04 Chrom Revision: 2.2 17-Oct-2016 09:27:18

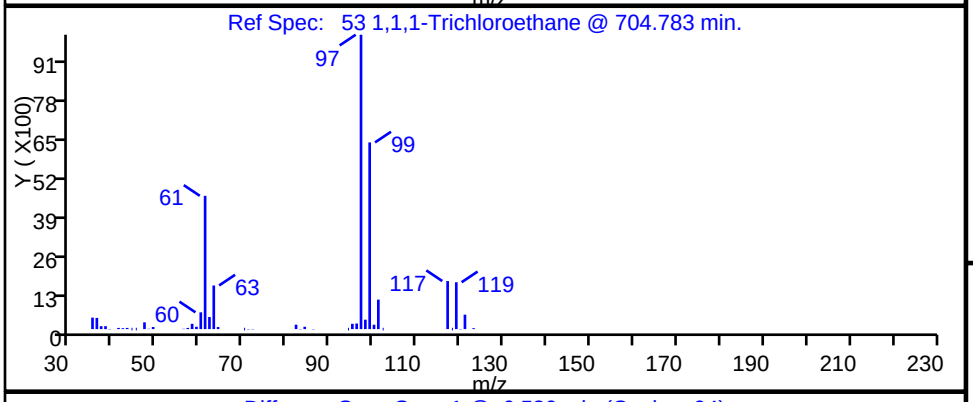
TestAmerica Pittsburgh

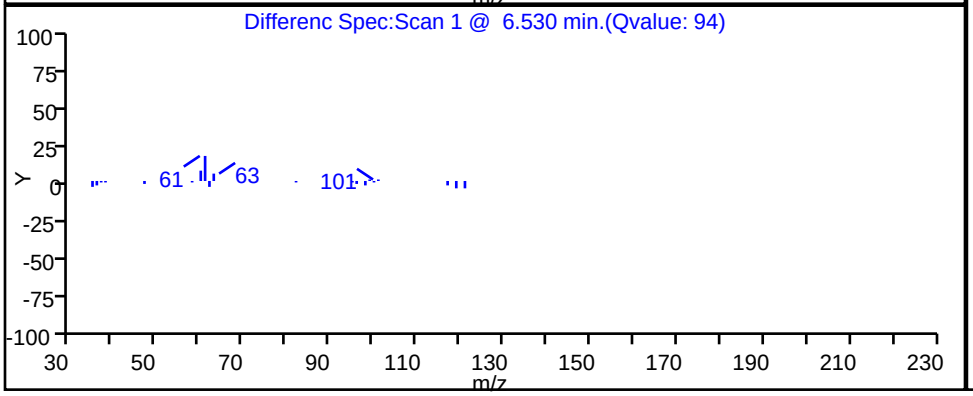
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031029.D				
Injection Date:	31-Oct-2016 20:59:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-10	Lab Sample ID:	180-60202-10		
Client ID:	HD-CW-15A-0/1-0				
Operator ID:	001562	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

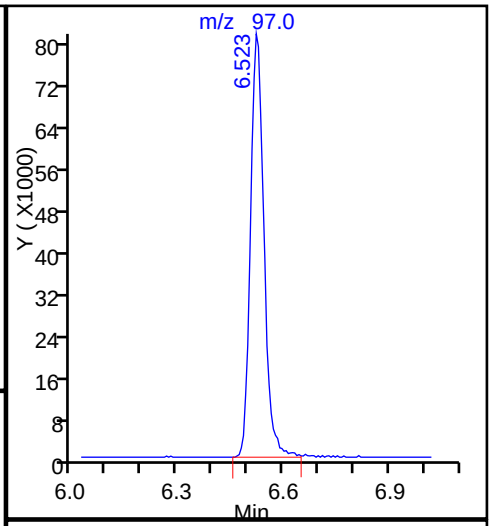
53 1,1,1-Trichloroethane, CAS: 71-55-6

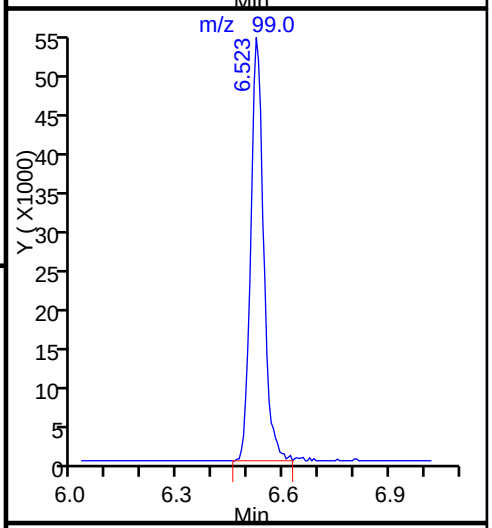


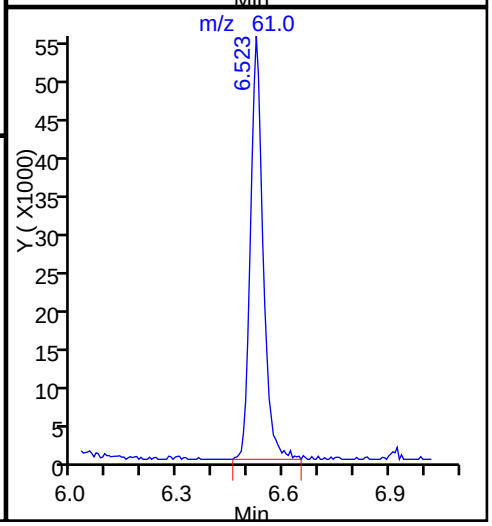










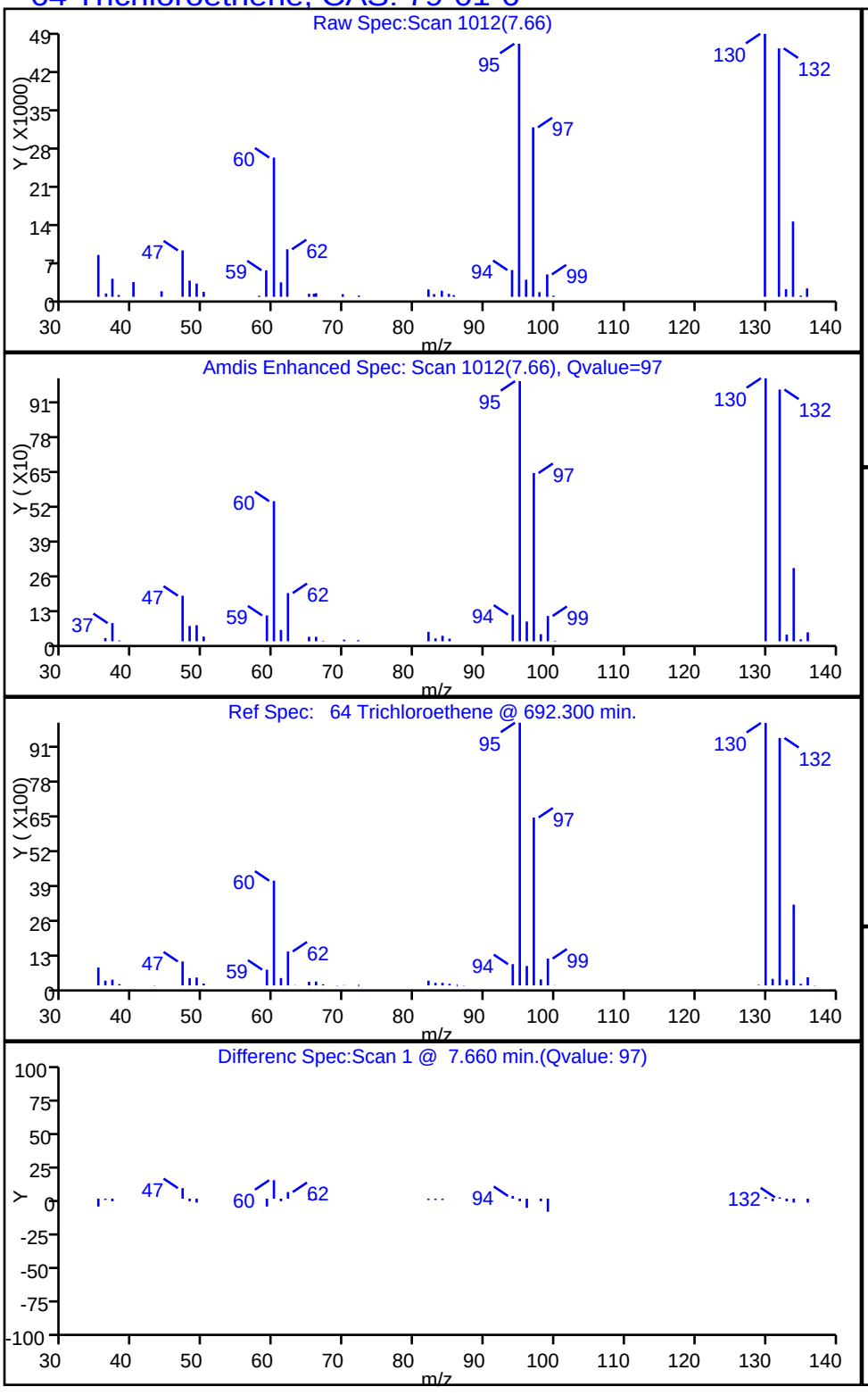


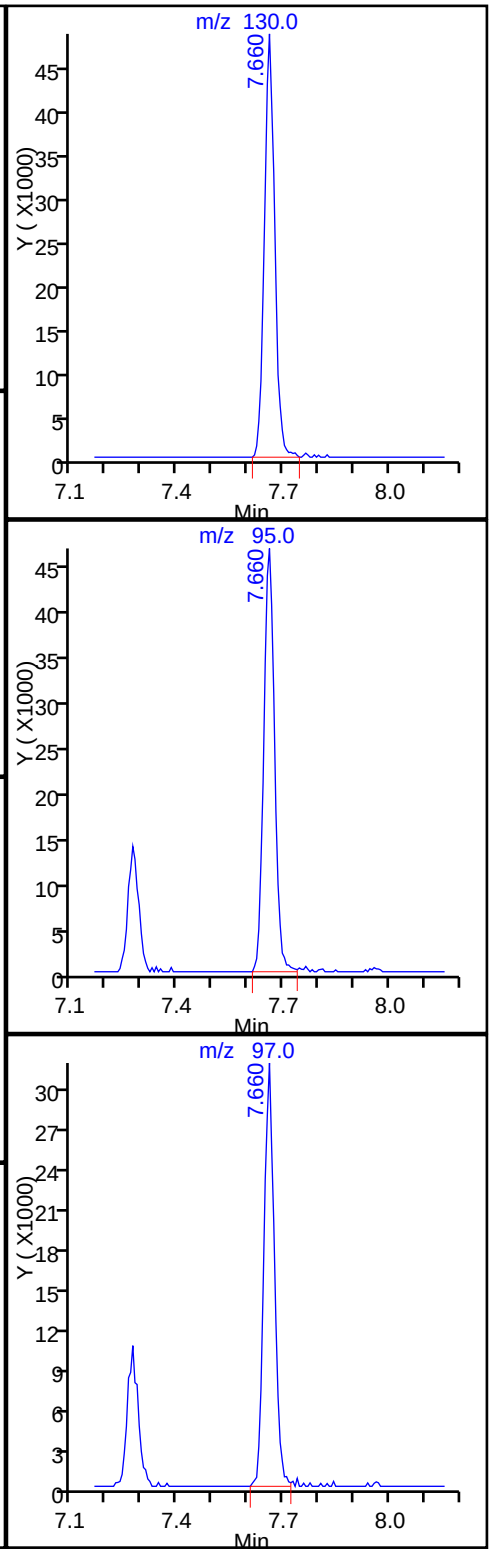
Report Date: 01-Nov-2016 07:51:04 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031029.D				
Injection Date:	31-Oct-2016 20:59:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-10	Lab Sample ID:	180-60202-10		
Client ID:	HD-CW-15A-0/1-0				
Operator ID:	001562	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



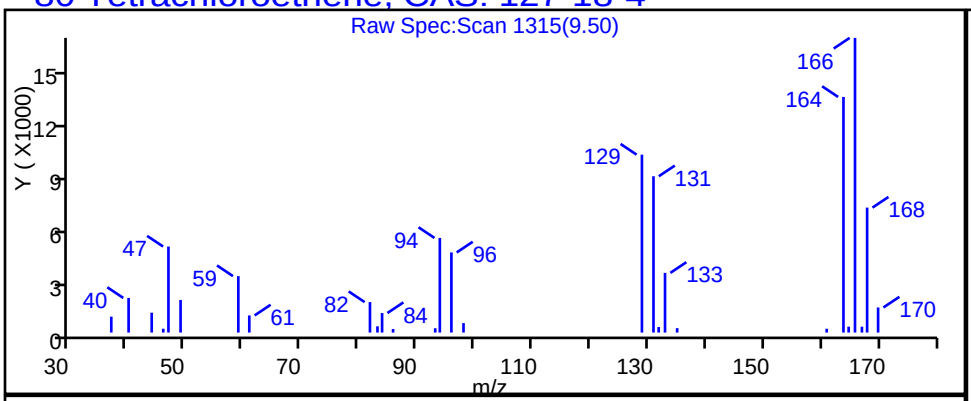


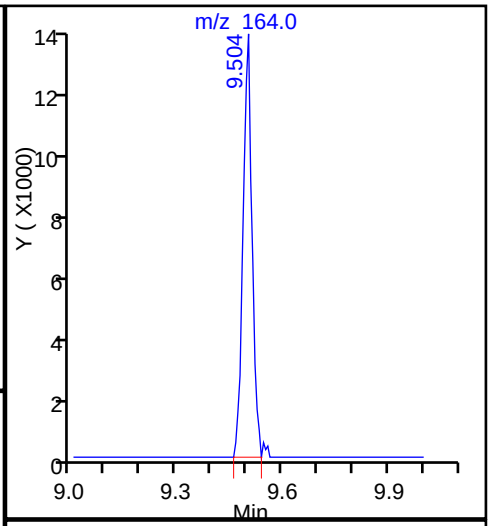
Report Date: 01-Nov-2016 07:51:04 Chrom Revision: 2.2 17-Oct-2016 09:27:18

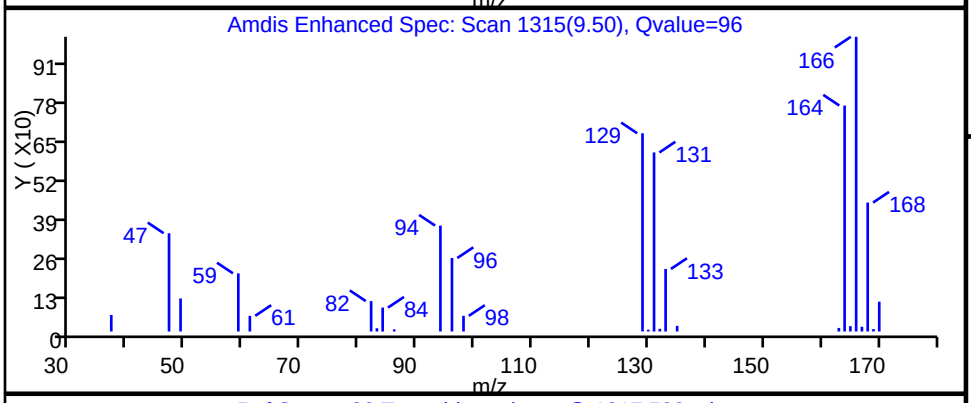
TestAmerica Pittsburgh

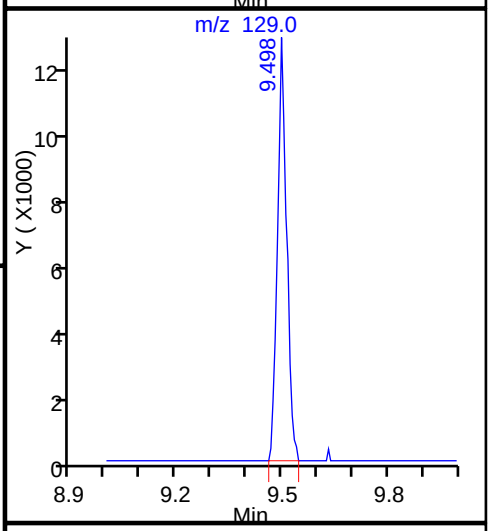
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031029.D				
Injection Date:	31-Oct-2016 20:59:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-10	Lab Sample ID:	180-60202-10		
Client ID:	HD-CW-15A-0/1-0				
Operator ID:	001562	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

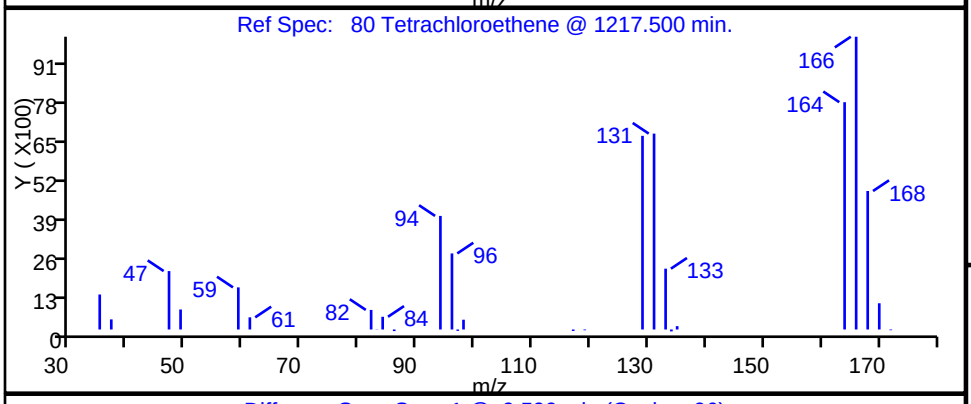
80 Tetrachloroethene, CAS: 127-18-4

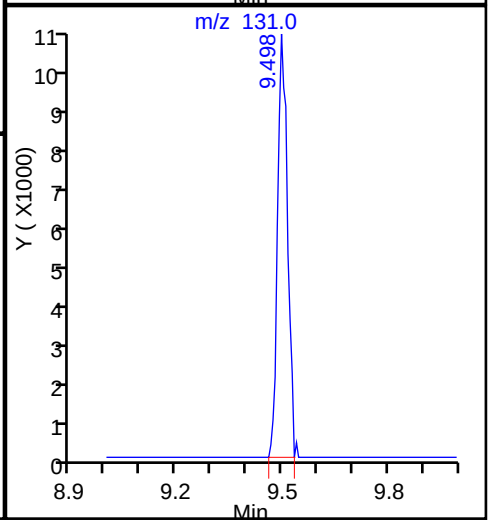


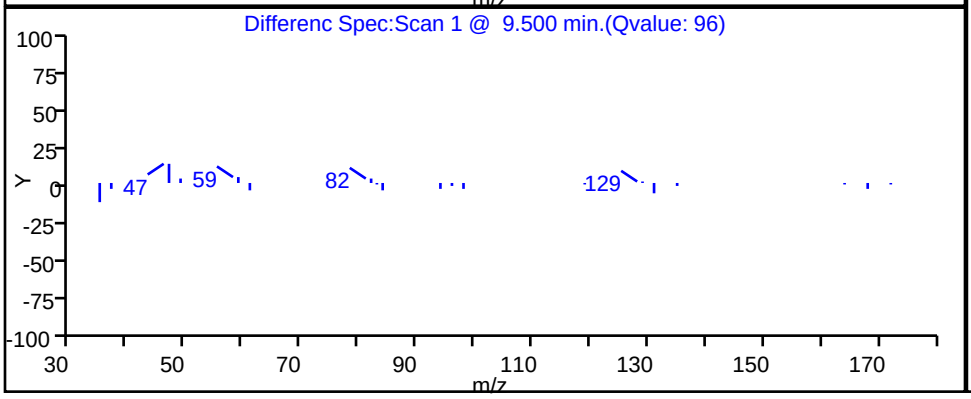












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-17-0/1-0 | Lab Sample ID: 180-60202-11

Matrix: Water | Lab File ID: 51031006.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 11:44

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	2.0	U	2.0	0.46
75-01-4	Vinyl chloride	2.0	U	2.0	0.63
74-83-9	Bromomethane	2.0	U	2.0	0.72
75-00-3	Chloroethane	2.0	U	2.0	0.52
75-35-4	1,1-Dichloroethene	3.7		2.0	0.57
67-64-1	Acetone	10	U	10	5.0
75-15-0	Carbon disulfide	2.0	U	2.0	0.37
75-09-2	Methylene Chloride	2.0	U	2.0	0.72
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	0.57
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	0.49
75-34-3	1,1-Dichloroethane	2.5		2.0	0.47
156-59-2	cis-1,2-Dichloroethene	55	F1	2.0	0.57
74-97-5	Bromochloromethane	2.0	U	2.0	0.75
78-93-3	2-Butanone (MEK)	10	U	10	2.3
67-66-3	Chloroform	2.0	U	2.0	0.55
71-55-6	1,1,1-Trichloroethane	4.9		2.0	0.44
56-23-5	Carbon tetrachloride	2.0	U	2.0	0.49
71-43-2	Benzene	2.0	U	2.0	0.51
107-06-2	1,2-Dichloroethane	2.0	U	2.0	0.49
79-01-6	Trichloroethene	37	F1	2.0	0.52
78-87-5	1,2-Dichloropropane	2.0	U	2.0	0.45
75-27-4	Bromodichloromethane	2.0	U	2.0	0.47
10061-01-5	cis-1,3-Dichloropropene	2.0	U	2.0	0.41
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	1.2
108-88-3	Toluene	2.0	U	2.0	0.56
10061-02-6	trans-1,3-Dichloropropene	2.0	U	2.0	0.48
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	0.70
127-18-4	Tetrachloroethene	20		2.0	0.54
591-78-6	2-Hexanone	10	U	10	1.5
124-48-1	Dibromochloromethane	2.0	U	2.0	0.79
106-93-4	1,2-Dibromoethane (EDB)	2.0	U	2.0	0.58
108-90-7	Chlorobenzene	2.0	U	2.0	0.63
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.39
100-41-4	Ethylbenzene	2.0	U	2.0	0.55
1330-20-7	Xylenes, Total	4.0	U	4.0	0.97
100-42-5	Styrene	2.0	U	2.0	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-17-0/1-0 | Lab Sample ID: 180-60202-11

Matrix: Water | Lab File ID: 51031006.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 11:44

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	2.0	U	2.0	0.59
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.69
107-13-1	Acrylonitrile	40	U	40	5.5
123-91-1	1,4-Dioxane	400	U ^c	400	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		72-134
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		72-120
1868-53-7	Dibromofluoromethane (Surr)	96		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031006.D
Lims ID: 180-60202-B-11
Client ID: HD-CW-17-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 11:44:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0014116-006
Misc. Info.: 180-60202-B-11, 2x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2016 12:47:11 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: fergusond Date: 31-Oct-2016 12:47:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.271	4.279	-0.008	0	125789	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.272	-0.002	97	346163	50.0	
* 3 Chlorobenzene-d5	119	10.379	10.375	0.004	90	88461	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.721	12.723	-0.002	97	140701	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.553	6.548	0.005	94	79632	48.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.924	6.919	0.005	0	118567	49.6	
$ 7 Toluene-d8 (Surr)	98	8.919	8.921	-0.002	95	327789	49.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.565	11.561	0.004	88	134649	49.9	
11 Dichlorodifluoromethane	85		1.608				ND	
12 Chloromethane	50		1.767				ND	
13 Vinyl chloride	62		1.900				ND	
14 Butadiene	39		1.937				ND	
15 Bromomethane	94		2.229				ND	
16 Chloroethane	64		2.375				ND	
18 Trichlorofluoromethane	101		2.655				ND	
17 Dichlorofluoromethane	67		2.661				ND	
19 Ethanol	45		2.952				ND	
20 Ethyl ether	59		3.044				ND	
21 Acrolein	56		3.227				ND	
22 1,1-Dichloroethene	96	3.347	3.330	0.017	93	16201	9.26	
23 1,1,2-Trichloro-1,2,2-trif	101		3.409				ND	
24 Acetone	43	3.474	3.440	0.034	65	3511	3.94	
25 Iodomethane	142		3.525				ND	
26 Carbon disulfide	76		3.616				ND	
27 Isopropyl alcohol	45		3.724				ND	
29 Acetonitrile	41		3.876				ND	
28 3-Chloro-1-propene	76		3.908				ND	
30 Methyl acetate	43		3.932				ND	
31 Methylene Chloride	84	4.168	4.121	0.047	39	2969	1.36	
32 2-Methyl-2-propanol	59		4.401				ND	
33 Acrylonitrile	53		4.516				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.553				ND	
35 Methyl tert-butyl ether	73		4.565				ND	
36 Hexane	57		4.973				ND	
37 1,1-Dichloroethane	63	5.190	5.186	0.004	96	26742	6.29	
38 Vinyl acetate	43		5.234				ND	
39 2-Chloro-1,3-butadiene	53		5.281				ND	
41 Isopropyl ether	45		5.281				ND	
40 Isopropyl ether TIC	45		5.410				ND	
42 Tert-butyl ethyl ether	59		5.762				ND	
44 2,2-Dichloropropane	97		5.922				ND	
45 cis-1,2-Dichloroethene	96	5.938	5.934	0.004	87	288049	136.9	
46 2-Butanone (MEK)	43		5.952				ND	
43 Tert-butyl ethyl ether (TI	59		5.961				ND	
47 Propionitrile	54		6.024				ND	
48 Ethyl acetate	43		6.024				ND	
50 Methacrylonitrile	41		6.200				ND	
49 Chlorobromomethane	128		6.220				ND	
51 Tetrahydrofuran	42		6.238				ND	
52 Chloroform	83	6.364	6.360	0.004	17	1817	0.5375	
53 1,1,1-Trichloroethane	97	6.528	6.524	0.004	95	28996	12.2	
54 Cyclohexane	56		6.591				ND	
56 Carbon tetrachloride	117		6.700				ND	
55 1,1-Dichloropropene	75		6.713				ND	
57 Isobutyl alcohol	41		6.919				ND	
58 Benzene	78		6.925				ND	
59 1,2-Dichloroethane	62		7.005				ND	
151 Isooctane	57		7.082				ND	
61 Tert-amyl methyl ether	73		7.107				ND	
60 Tert-amyl methyl ether (TI	73		7.262				ND	
62 n-Heptane	43		7.290				ND	
63 n-Butanol	56		7.630				ND	
64 Trichloroethene	130	7.666	7.662	0.004	94	177365	91.6	
65 Ethyl acrylate	55		7.782				ND	
66 Methylcyclohexane	83		7.893				ND	
67 1,2-Dichloropropane	63		7.935				ND	
70 1,4-Dioxane	88		8.014				ND	
68 Dibromomethane	93		8.014				ND	
69 Methyl methacrylate	69		8.019				ND	
71 Dichlorobromomethane	83		8.215				ND	
72 2-Nitropropane	41		8.445				ND	
73 2-Chloroethyl vinyl ether	63		8.519				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.817				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.243				ND	
78 Ethyl methacrylate	69		9.298				ND	
79 1,1,2-Trichloroethane	97		9.432				ND	
80 Tetrachloroethene	164	9.503	9.505	-0.002	97	81409	50.9	
81 1,3-Dichloropropane	76		9.590				ND	
82 2-Hexanone	43		9.645				ND	
83 n-Butyl acetate	43		9.771				ND	
84 Chlorodibromomethane	129		9.809				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
85 Ethylene Dibromide	107		9.918				ND	
86 3-Chlorobenzotrifluoride	180		10.381				ND	
87 Chlorobenzene	112		10.405				ND	
88 4-Chlorobenzotrifluoride	180		10.466				ND	
90 Ethylbenzene	106		10.503				ND	
89 1,1,1,2-Tetrachloroethane	131		10.503				ND	
91 m-Xylene & p-Xylene	106		10.636				ND	
92 o-Xylene	106		11.020				ND	
93 Styrene	104		11.038				ND	
94 Bromoform	173		11.220				ND	
95 Cyclohexanol	57		11.244				ND	
96 2-Chlorobenzotrifluoride	180		11.287				ND	
97 Isopropylbenzene	105		11.385				ND	
98 Cyclohexanone	55		11.474				ND	
99 1,1,2,2-Tetrachloroethane	83		11.695				ND	
100 Bromobenzene	156		11.701				ND	
102 trans-1,4-Dichloro-2-buten	53		11.737				ND	
101 1,2,3-Trichloropropane	110		11.756				ND	
103 N-Propylbenzene	120		11.804				ND	
104 2-Chlorotoluene	126		11.890				ND	
105 3-Chlorotoluene	126		11.956				ND	
106 1,3,5-Trimethylbenzene	105		11.987				ND	
107 4-Chlorotoluene	126		12.017				ND	
108 tert-Butylbenzene	119		12.297				ND	
110 1,2,4-Trimethylbenzene	105		12.358				ND	
111 1,2-dichloro-4-(trifluorom	214		12.401				ND	
109 Pentachloroethane	167		12.402				ND	
112 sec-Butylbenzene	105		12.522				ND	
113 1,3-Dichlorobenzene	146		12.644				ND	
114 4-Isopropyltoluene	119		12.680				ND	
115 1,4-Dichlorobenzene	146		12.747				ND	
117 1,2,3-Trimethylbenzene	105		12.770				ND	
116 2,4-Dichloro-1-(triflourom	214		12.772				ND	
118 2,5-Dichlorobenzotrifluori	214		12.814				ND	
119 Benzyl chloride	91		12.855				ND	
120 n-Butylbenzene	91		13.088				ND	
121 1,2-Dichlorobenzene	146		13.100				ND	
122 1,2-Dibromo-3-Chloropropan	75		13.891				ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.031				ND	
124 1,3,5-Trichlorobenzene	180		14.078				ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.451				ND	
126 1,2,4-Trichlorobenzene	180		14.718				ND	
127 Hexachlorobutadiene	225		14.858				ND	
128 Naphthalene	128		14.986				ND	
129 1,2,3-Trichlorobenzene	180		15.205				ND	
131 2,4,5-Trichlorotoluene	159		15.984				ND	
130 2,3,6-Trichlorotoluene	159		16.081				ND	
132 2-Methylnaphthalene	142		16.098				ND	
149 3,4-Dichlorotoluene	1		0.000				ND	
150 2,6-Dichlorotoluene	1		0.000				ND	
152 Formaldehyde TIC	1		0.000				ND	
147 2,4-Dichlorotoluene	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
148 2,3-Dichlorotoluene	1		0.000				ND	
146 2,5-Dichlorotoluene	1		0.000				ND	
S 133 Xylenes, Total	106		1.000				ND	
S 134 1,2-Dichloroethene, Total	96				0		136.9	
S 135 1,3-Dichloropropene, Total	1		0.000				ND	
T 136 Mesityl oxide TIC	83		0.000				ND	
T 138 Methyl n-amyl ketone TIC	43		0.000				ND	
T 137 Tetrahydrofuran TIC	42		6.253				ND	
T 153 1,2 Epoxybutane TIC	42		6.253				ND	

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

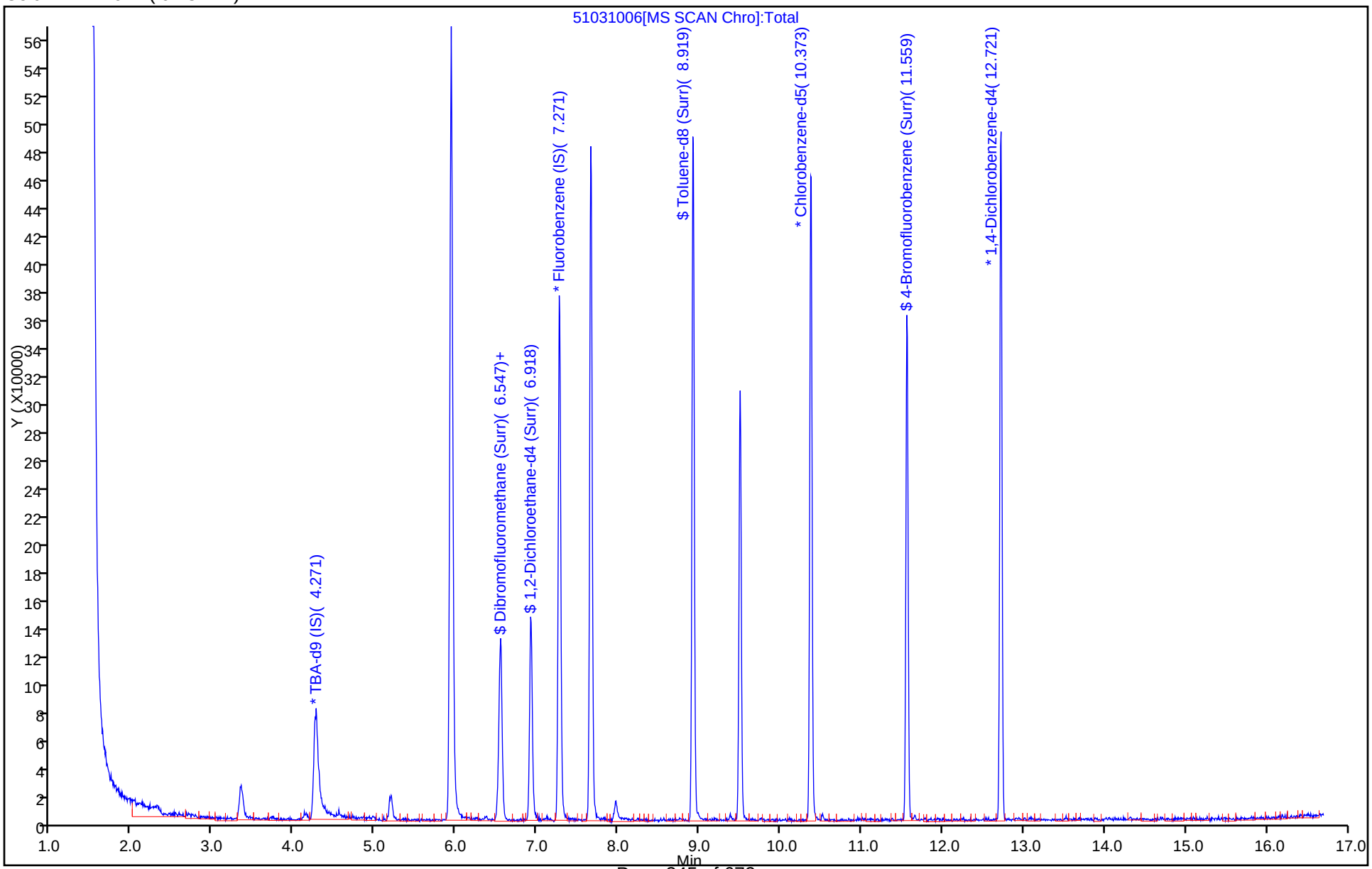
Report Date: 31-Oct-2016 12:47:13 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031006.D

Injection Date:	31-Oct-2016 11:44:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-B-11	Lab Sample ID:	180-60202-11	Worklist Smp#:	6
Client ID:	HD-CW-17-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031006.D				
Lims ID:	180-60202-B-11				
Client ID:	HD-CW-17-0/1-0				
Sample Type:	Client				
Inject. Date:	31-Oct-2016 11:44:30	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Sample Info:	180-0014116-006				
Misc. Info.:	180-60202-B-11, 2x				
Operator ID:	001562	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	31-Oct-2016 12:47:11	Calib Date:	22-Oct-2016 17:46:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK007				

First Level Reviewer: fergusond Date: 31-Oct-2016 12:47:10

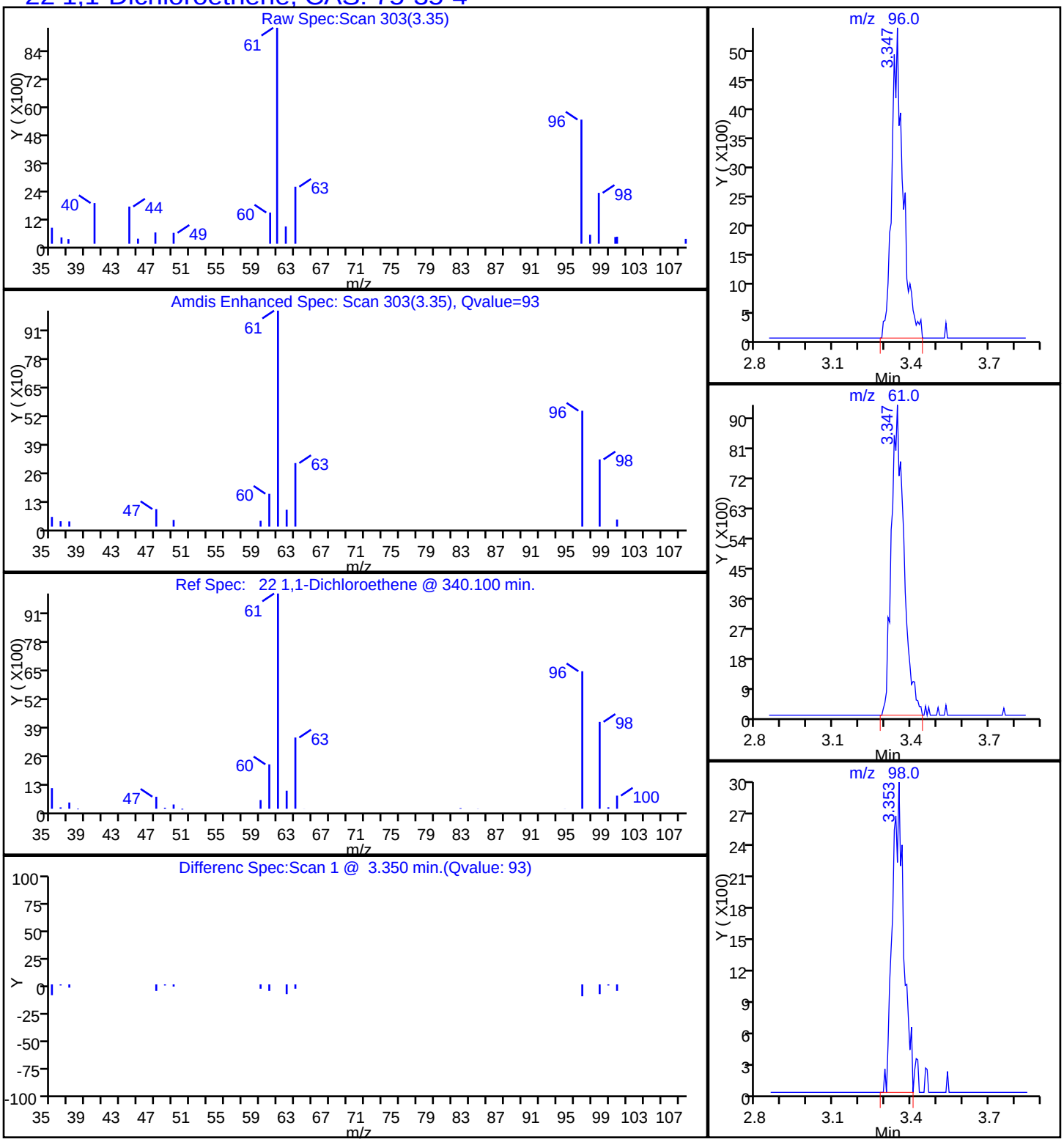
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.1	96.16
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.6	99.18
$ 7 Toluene-d8 (Surr)	50.0	49.1	98.19
$ 8 4-Bromofluorobenzene (Surr)	50.0	49.9	99.77

Report Date: 31-Oct-2016 12:47:13 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031006.D		
Injection Date:	31-Oct-2016 11:44:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-11	Lab Sample ID:	180-60202-11
Client ID:	HD-CW-17-0/1-0		
Operator ID:	001562	ALS Bottle#:	5 Worklist Smp#: 6
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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

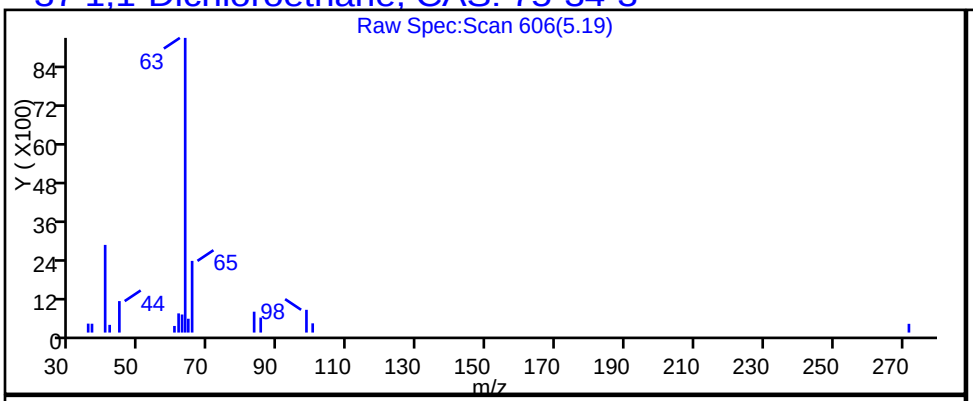


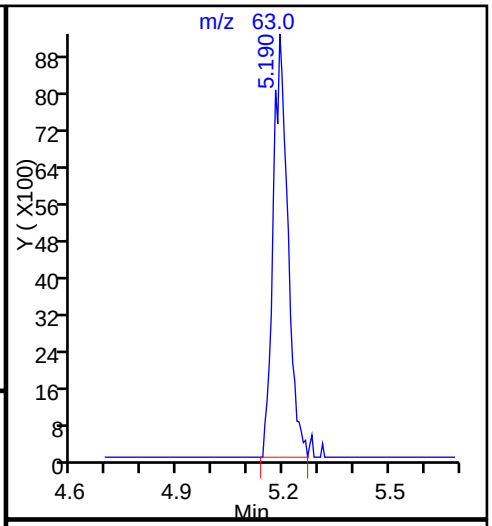
Report Date: 31-Oct-2016 12:47:13 Chrom Revision: 2.2 17-Oct-2016 09:27:18

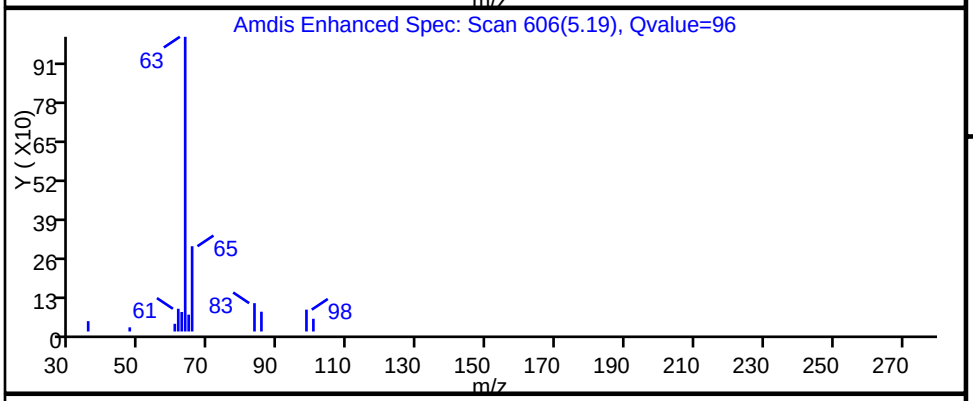
TestAmerica Pittsburgh

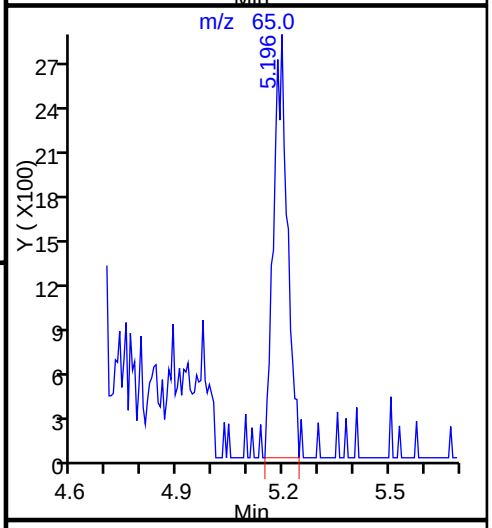
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031006.D				
Injection Date:	31-Oct-2016 11:44:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-11	Lab Sample ID:	180-60202-11		
Client ID:	HD-CW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

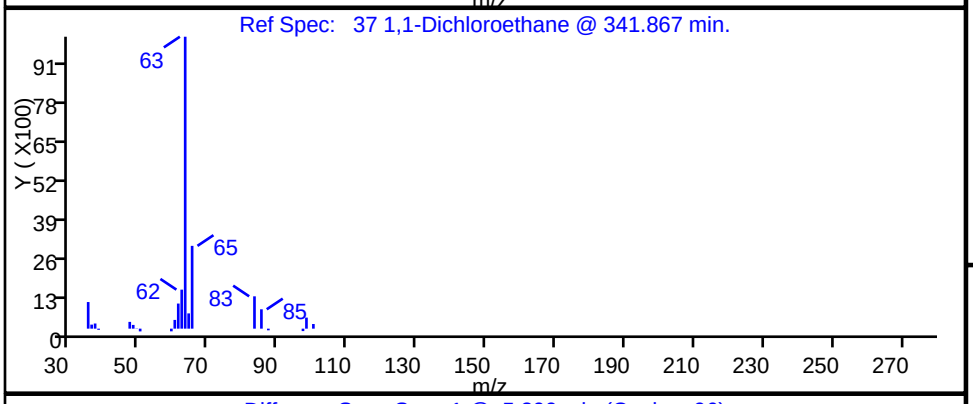
37 1,1-Dichloroethane, CAS: 75-34-3

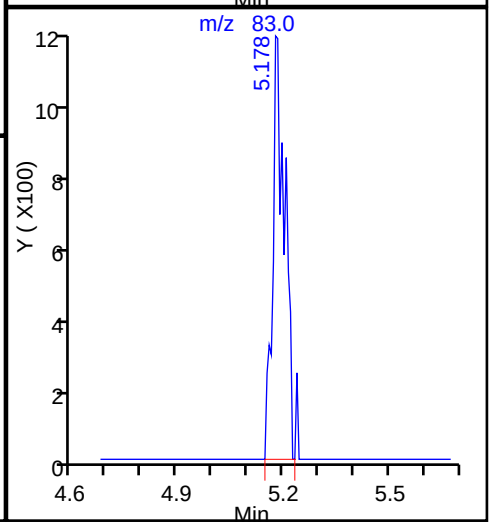


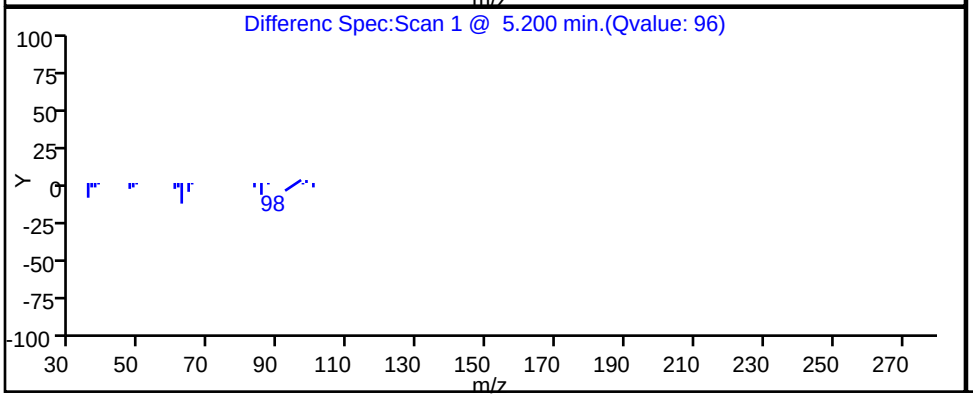










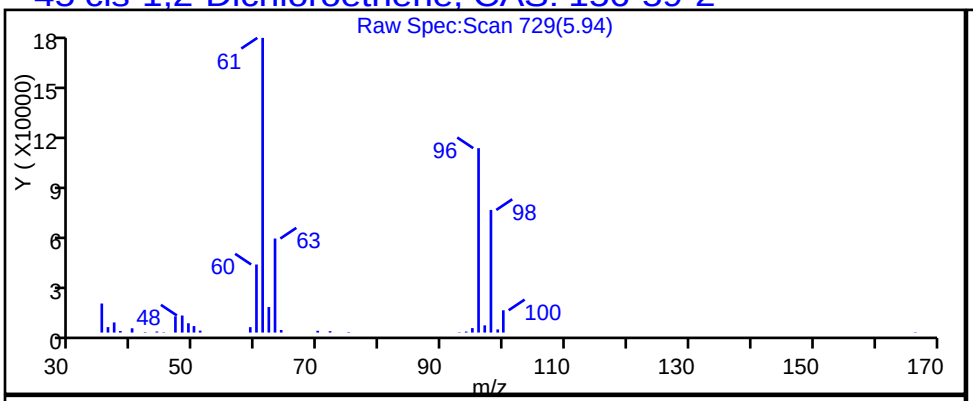


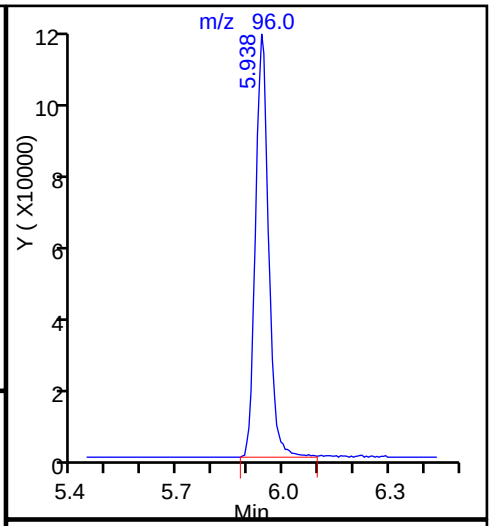
Report Date: 31-Oct-2016 12:47:13 Chrom Revision: 2.2 17-Oct-2016 09:27:18

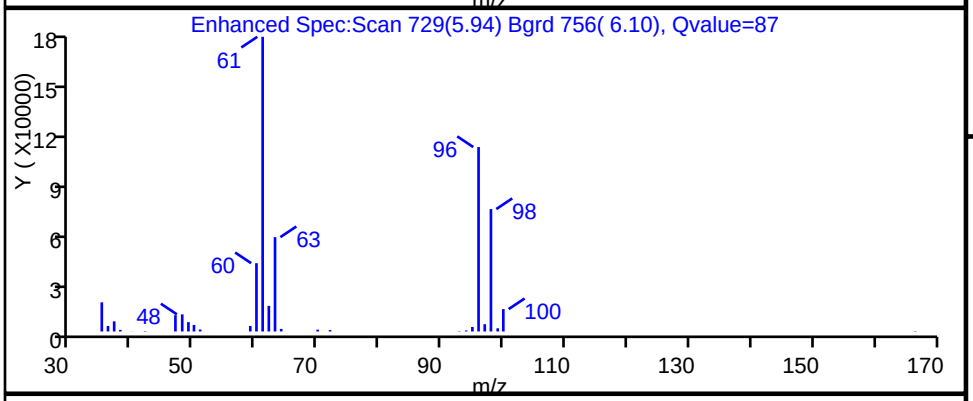
TestAmerica Pittsburgh

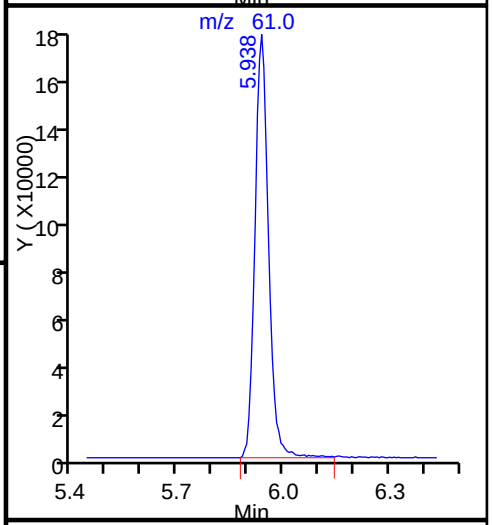
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031006.D				
Injection Date:	31-Oct-2016 11:44:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-11	Lab Sample ID:	180-60202-11		
Client ID:	HD-CW-17-0/1-0				
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

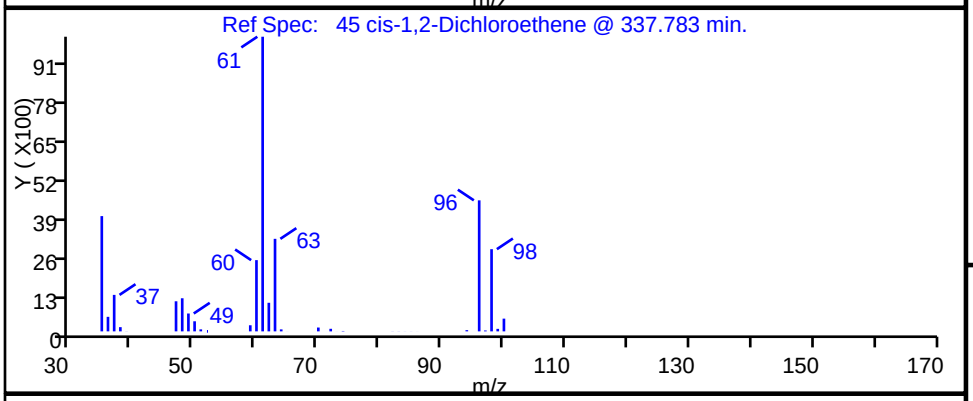
45 cis-1,2-Dichloroethene, CAS: 156-59-2

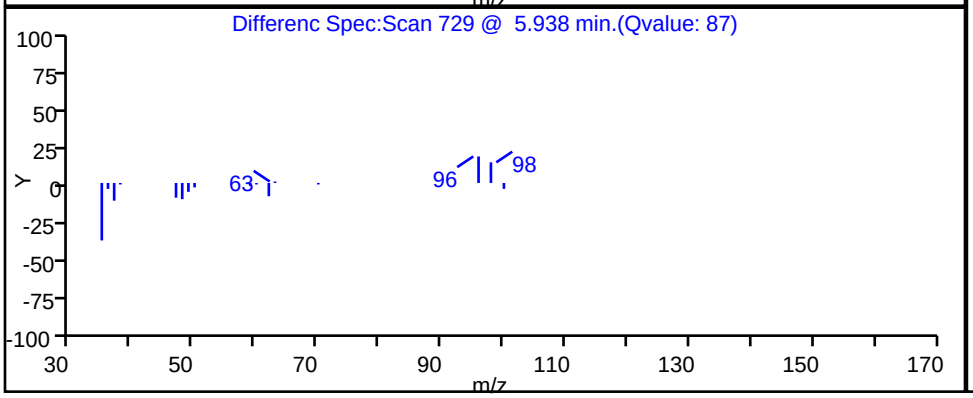


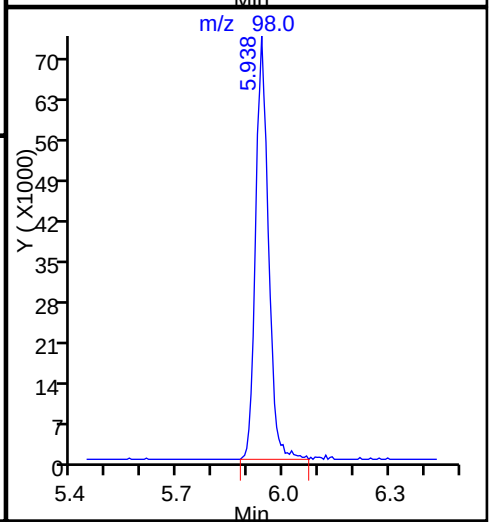










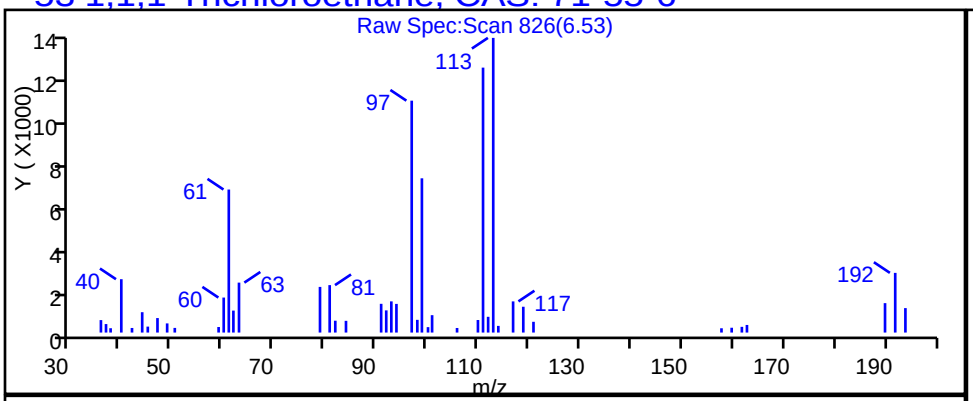


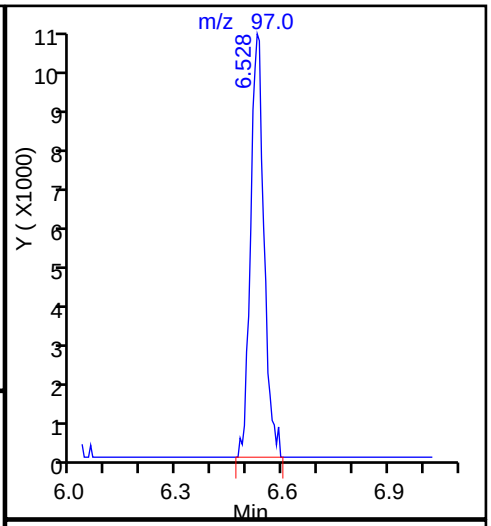
Report Date: 31-Oct-2016 12:47:13 Chrom Revision: 2.2 17-Oct-2016 09:27:18

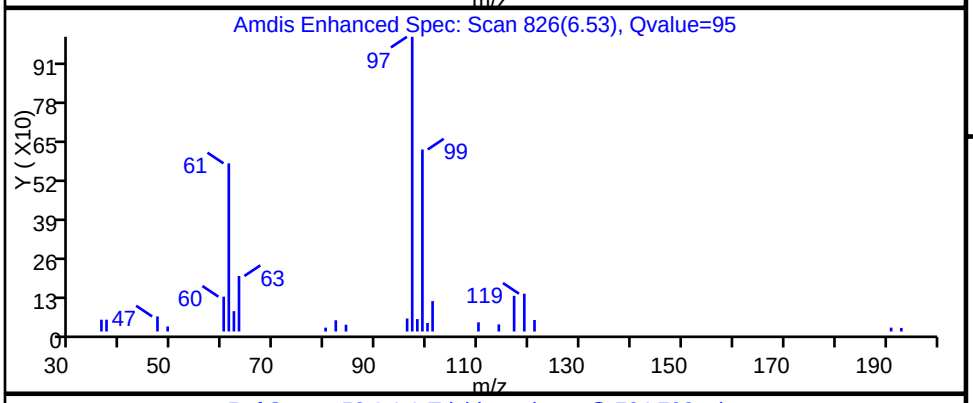
TestAmerica Pittsburgh

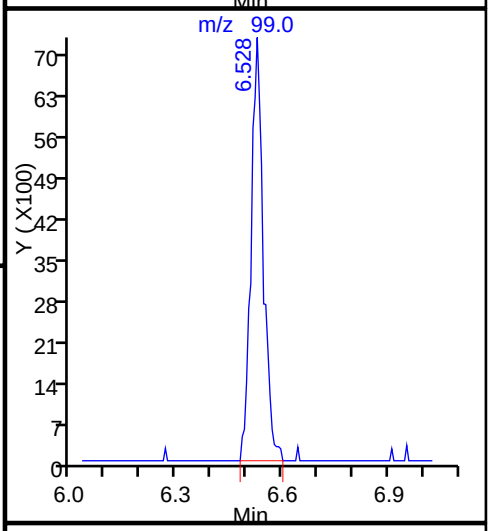
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031006.D		
Injection Date:	31-Oct-2016 11:44:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-11	Lab Sample ID:	180-60202-11
Client ID:	HD-CW-17-0/1-0		
Operator ID:	001562	ALS Bottle#:	5 Worklist Smp#: 6
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

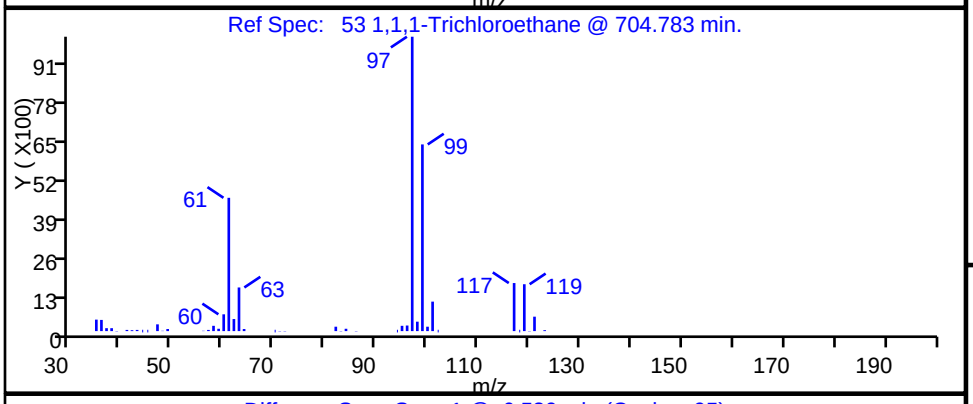
53 1,1,1-Trichloroethane, CAS: 71-55-6

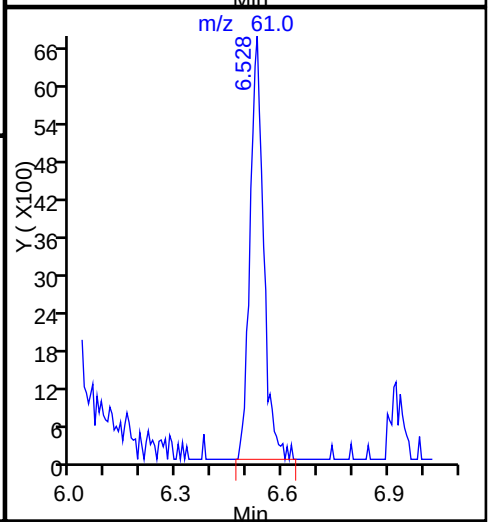


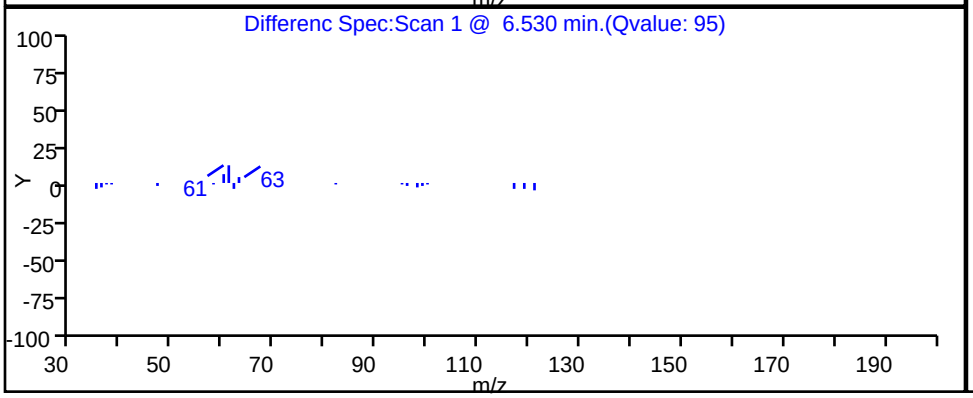










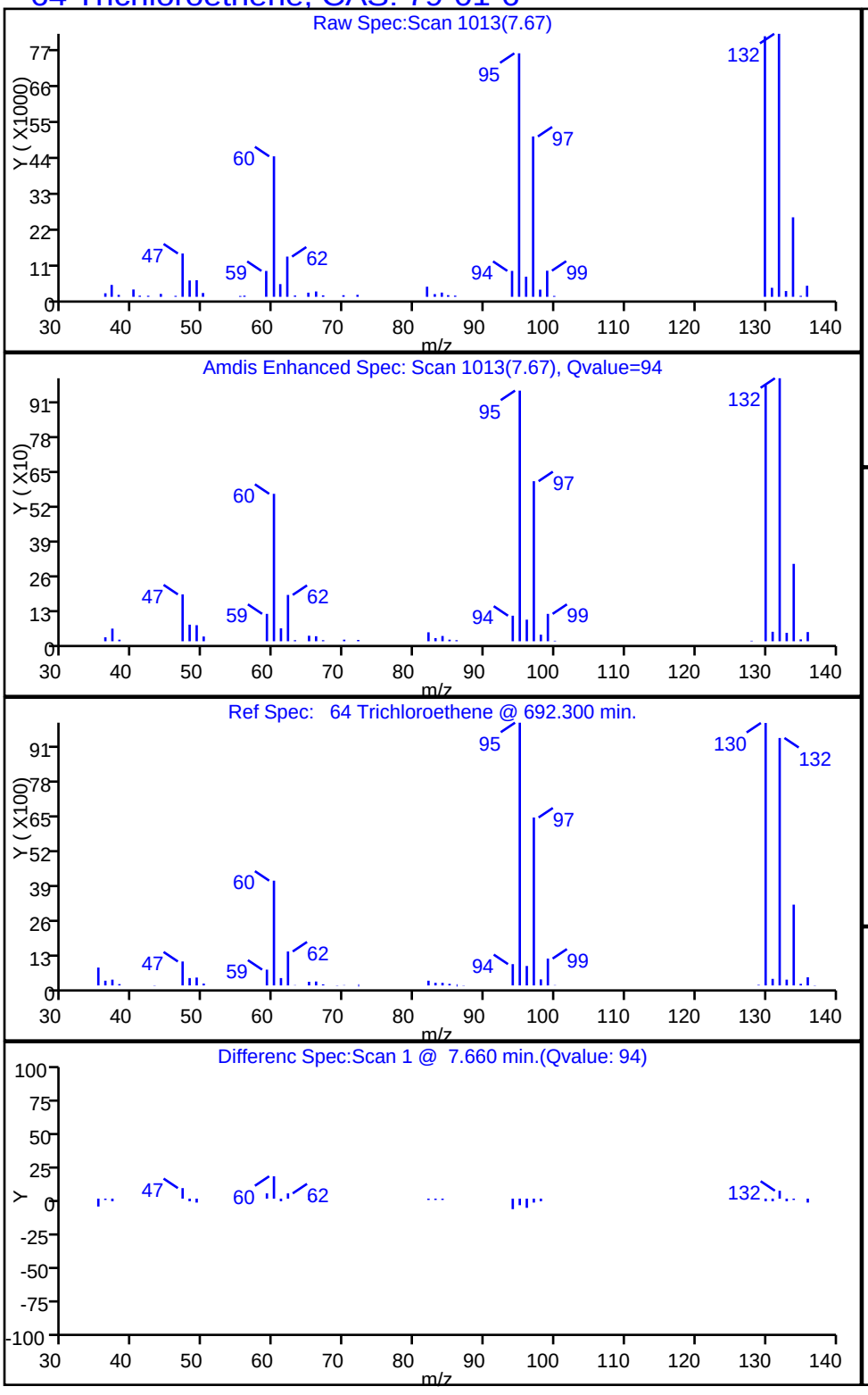


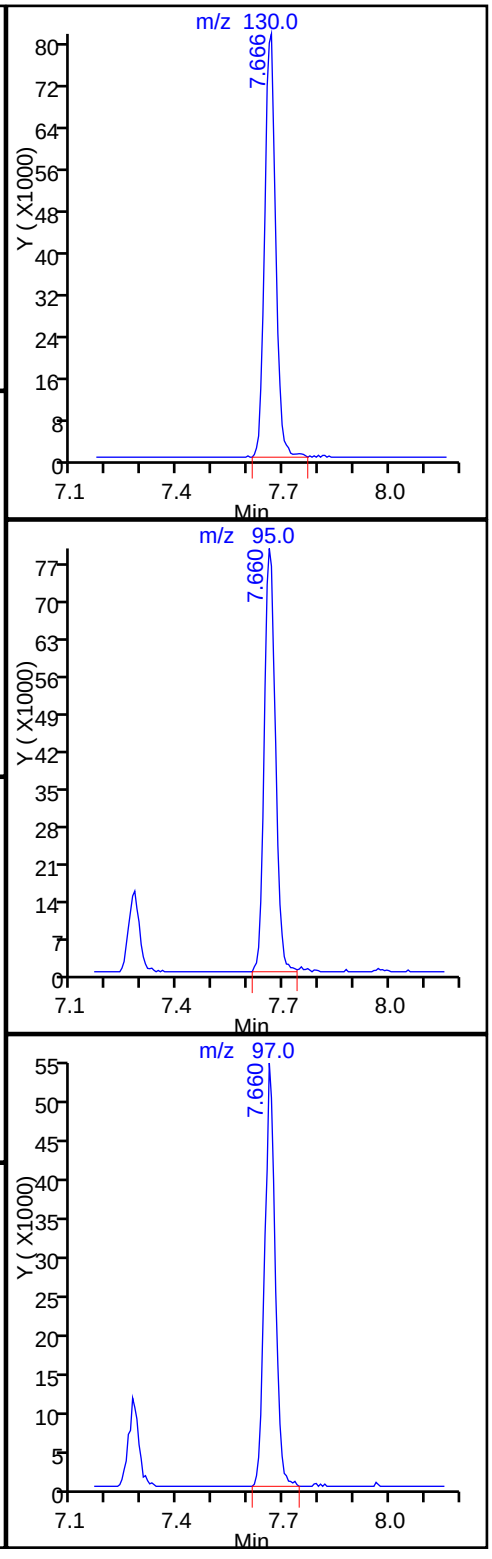
Report Date: 31-Oct-2016 12:47:14 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031006.D		
Injection Date:	31-Oct-2016 11:44:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-11	Lab Sample ID:	180-60202-11
Client ID:	HD-CW-17-0/1-0		
Operator ID:	001562	ALS Bottle#:	5 Worklist Smp#: 6
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

64 Trichloroethene, CAS: 79-01-6





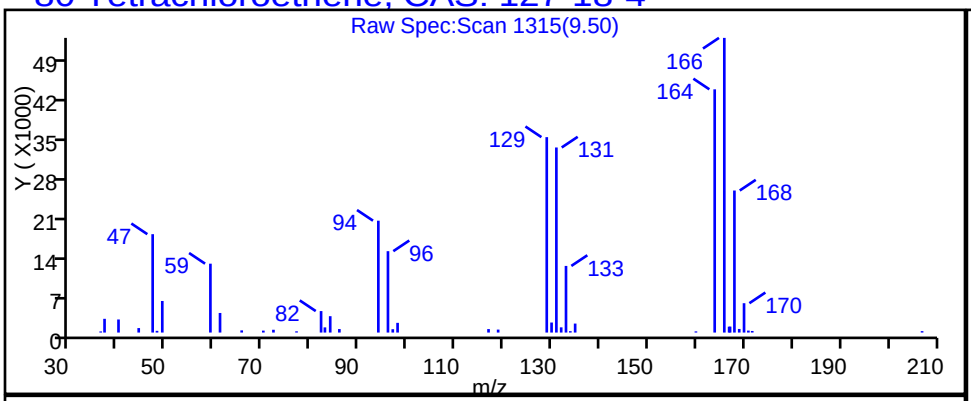
Report Date: 31-Oct-2016 12:47:14 Chrom Revision: 2.2 17-Oct-2016 09:27:18

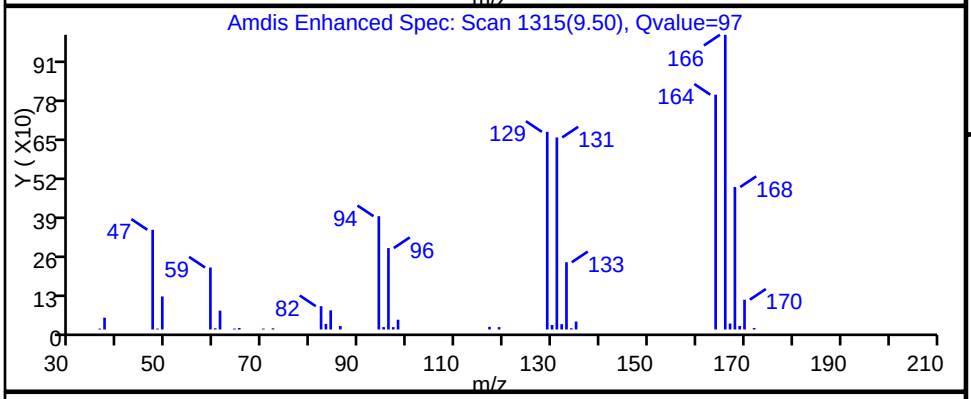
TestAmerica Pittsburgh

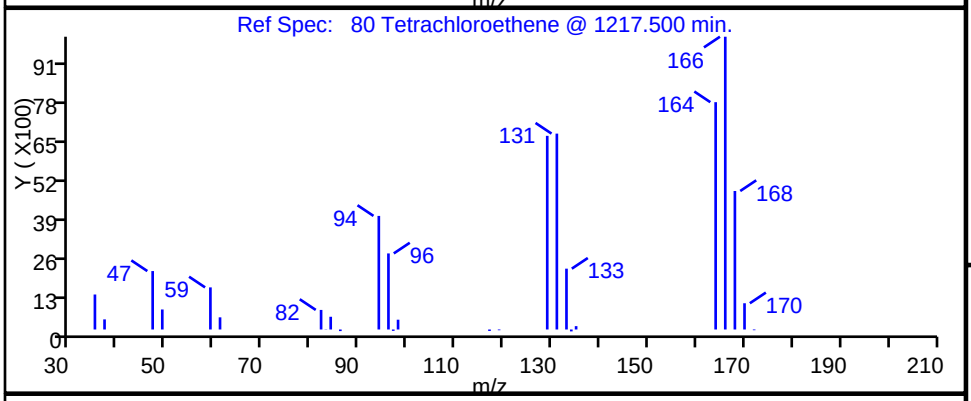
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031006.D

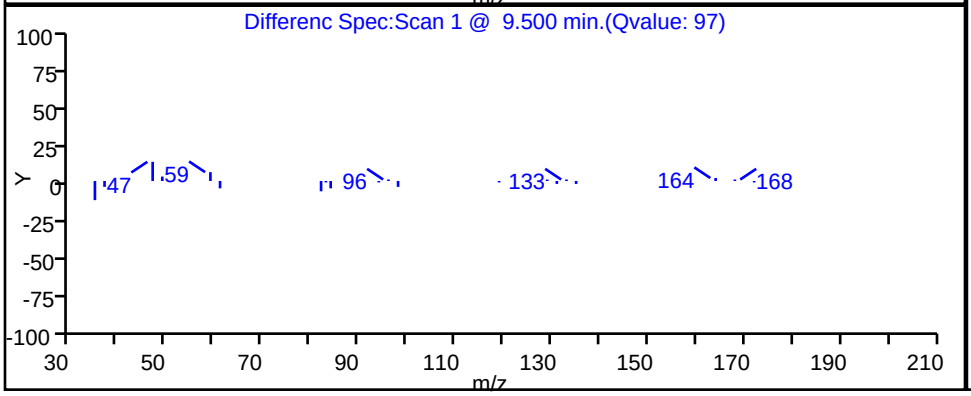
Injection Date:	31-Oct-2016 11:44:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-11	Lab Sample ID:	180-60202-11
Client ID:	HD-CW-17-0/1-0		
Operator ID:	001562	ALS Bottle#:	5 Worklist Smp#: 6
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

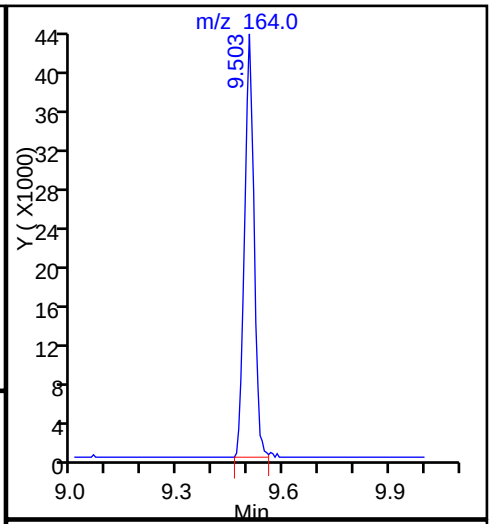
80 Tetrachloroethene, CAS: 127-18-4

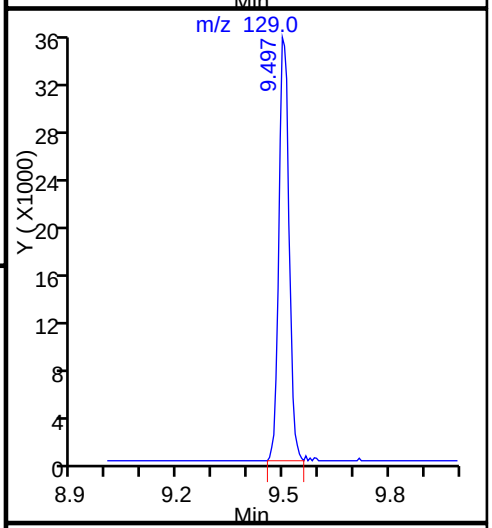


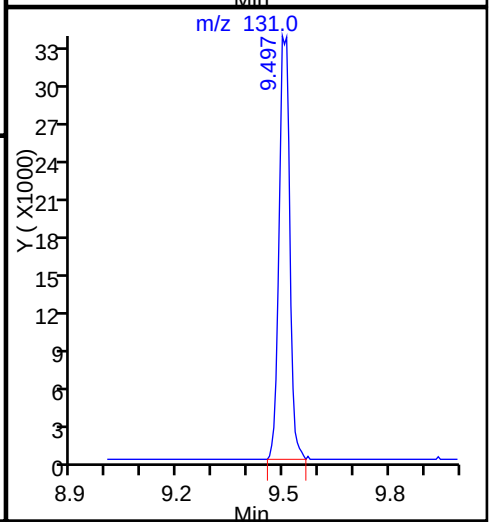












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-QC3-0/1-1 | Lab Sample ID: 180-60202-12

Matrix: Water | Lab File ID: 51101017.D

Analysis Method: 8260C | Date Collected: 10/26/2016 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 16:15

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	2.0	U	2.0	0.46
75-01-4	Vinyl chloride	2.0	U	2.0	0.63
74-83-9	Bromomethane	2.0	U	2.0	0.72
75-00-3	Chloroethane	2.0	U	2.0	0.52
75-35-4	1,1-Dichloroethene	2.9		2.0	0.57
67-64-1	Acetone	10	U	10	5.0
75-15-0	Carbon disulfide	2.0	U ^c	2.0	0.37
75-09-2	Methylene Chloride	2.0	U	2.0	0.72
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	0.57
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	0.49
75-34-3	1,1-Dichloroethane	2.2		2.0	0.47
156-59-2	cis-1,2-Dichloroethene	51		2.0	0.57
74-97-5	Bromochloromethane	2.0	U	2.0	0.75
78-93-3	2-Butanone (MEK)	10	U	10	2.3
67-66-3	Chloroform	2.0	U	2.0	0.55
71-55-6	1,1,1-Trichloroethane	4.2		2.0	0.44
56-23-5	Carbon tetrachloride	2.0	U	2.0	0.49
71-43-2	Benzene	2.0	U	2.0	0.51
107-06-2	1,2-Dichloroethane	2.0	U	2.0	0.49
79-01-6	Trichloroethene	33		2.0	0.52
78-87-5	1,2-Dichloropropane	2.0	U	2.0	0.45
75-27-4	Bromodichloromethane	2.0	U	2.0	0.47
10061-01-5	cis-1,3-Dichloropropene	2.0	U	2.0	0.41
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	1.2
108-88-3	Toluene	2.0	U	2.0	0.56
10061-02-6	trans-1,3-Dichloropropene	2.0	U	2.0	0.48
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	0.70
127-18-4	Tetrachloroethene	19		2.0	0.54
591-78-6	2-Hexanone	10	U	10	1.5
124-48-1	Dibromochloromethane	2.0	U	2.0	0.79
106-93-4	1,2-Dibromoethane (EDB)	2.0	U	2.0	0.58
108-90-7	Chlorobenzene	2.0	U	2.0	0.63
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.39
100-41-4	Ethylbenzene	2.0	U	2.0	0.55
1330-20-7	Xylenes, Total	4.0	U	4.0	0.97
100-42-5	Styrene	2.0	U	2.0	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-QC3-0/1-1 | Lab Sample ID: 180-60202-12

Matrix: Water | Lab File ID: 51101017.D

Analysis Method: 8260C | Date Collected: 10/26/2016 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 16:15

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	2.0	U ^c	2.0	0.59
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.69
107-13-1	Acrylonitrile	40	U	40	5.5
123-91-1	1,4-Dioxane	400	U	400	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		72-134
2037-26-5	Toluene-d8 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		72-120
1868-53-7	Dibromofluoromethane (Surr)	96		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101017.D
Lims ID: 180-60202-B-12
Client ID: HD-QC3-0/1-1
Sample Type: Client
Inject. Date: 01-Nov-2016 16:15:30 ALS Bottle#: 14 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0014130-017
Misc. Info.: 180-60202-B-12, 2x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:20:28 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:20:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.259	4.275	-0.016	0	140960	1000.0	
* 2 Fluorobenzene (IS)	96	7.276	7.274	0.002	97	378629	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.377	-0.004	91	95158	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.715	12.719	-0.004	97	142538	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.546	6.550	-0.004	93	87135	48.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.917	6.921	-0.004	0	123531	47.2	
$ 7 Toluene-d8 (Surr)	98	8.919	8.923	-0.004	95	356632	49.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.559	11.557	0.002	86	144752	49.9	
12 Chloromethane	50		1.763				ND	
13 Vinyl chloride	62		1.909				ND	
15 Bromomethane	94		2.231				ND	
16 Chloroethane	64		2.377				ND	
22 1,1-Dichloroethene	96	3.347	3.338	0.008	91	14001	7.32	
24 Acetone	43	3.438	3.442	-0.004	79	4803	4.93	
26 Carbon disulfide	76		3.618				ND	
31 Methylene Chloride	84	4.131	4.123	0.008	56	3134	1.31	
33 Acrylonitrile	53		4.512				ND	
34 trans-1,2-Dichloroethene	96		4.549				ND	
35 Methyl tert-butyl ether	73		4.573				ND	
37 1,1-Dichloroethane	63	5.196	5.188	0.008	97	26030	5.59	
45 cis-1,2-Dichloroethene	96	5.938	5.936	0.002	86	294288	127.9	
46 2-Butanone (MEK)	43		5.948				ND	
49 Chlorobromomethane	128		6.222				ND	
52 Chloroform	83	6.370	6.368	0.002	1	2394	0.6474	M
53 1,1,1-Trichloroethane	97	6.528	6.526	0.002	94	27119	10.4	
56 Carbon tetrachloride	117		6.696				ND	
58 Benzene	78		6.927				ND	
59 1,2-Dichloroethane	62		7.000				ND	
64 Trichloroethene	130	7.666	7.657	0.009	96	176181	83.2	
67 1,2-Dichloropropane	63		7.937				ND	
70 1,4-Dioxane	88		8.016				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.217				ND	
74 cis-1,3-Dichloropropene	75		8.661				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.813				ND	
76 Toluene	91		8.990				ND	
77 trans-1,3-Dichloropropene	75		9.239				ND	
79 1,1,2-Trichloroethane	97		9.434				ND	
80 Tetrachloroethene	164	9.503	9.501	0.002	95	81418	47.4	
82 2-Hexanone	43		9.647				ND	
84 Chlorodibromomethane	129		9.805				ND	
85 Ethylene Dibromide	107		9.914				ND	
87 Chlorobenzene	112		10.401				ND	
89 1,1,1,2-Tetrachloroethane	131		10.498				ND	
90 Ethylbenzene	106		10.498				ND	
91 m-Xylene & p-Xylene	106		10.638				ND	
92 o-Xylene	106		11.015				ND	
93 Styrene	104		11.034				ND	
94 Bromoform	173		11.222				ND	
99 1,1,2,2-Tetrachloroethane	83		11.703				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

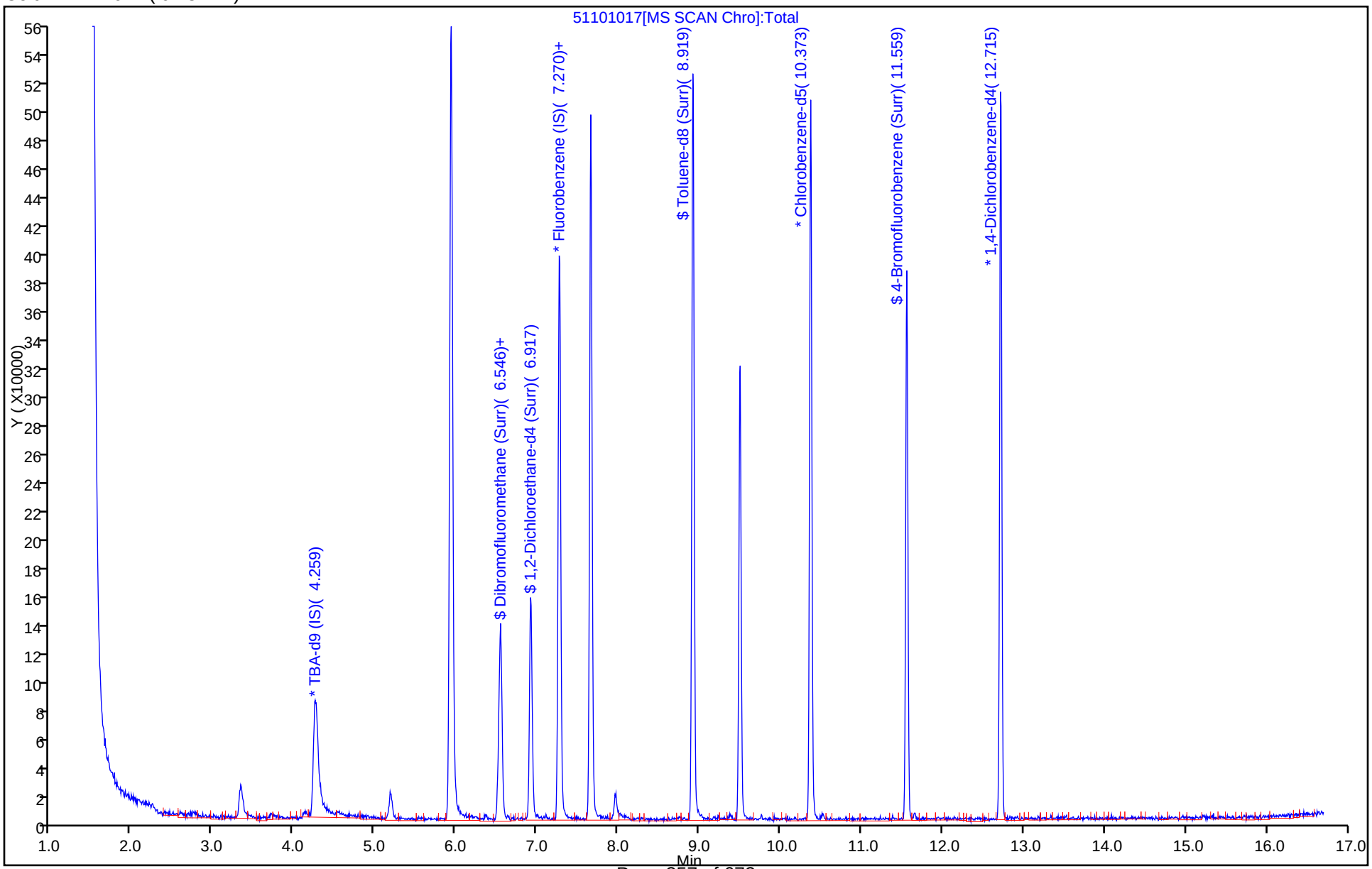
Report Date: 02-Nov-2016 07:20:29 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101017.D

Injection Date:	01-Nov-2016 16:15:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-B-12	Lab Sample ID:	180-60202-12	Worklist Smp#:	17
Client ID:	HD-QC3-0/1-1				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	14
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101017.D				
Lims ID:	180-60202-B-12				
Client ID:	HD-QC3-0/1-1				
Sample Type:	Client				
Inject. Date:	01-Nov-2016 16:15:30	ALS Bottle#:	14	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Sample Info:	180-0014130-017				
Misc. Info.:	180-60202-B-12, 2x				
Operator ID:	001562	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	02-Nov-2016 07:20:28	Calib Date:	22-Oct-2016 17:46:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK014				

First Level Reviewer: fergusond Date: 02-Nov-2016 07:20:28

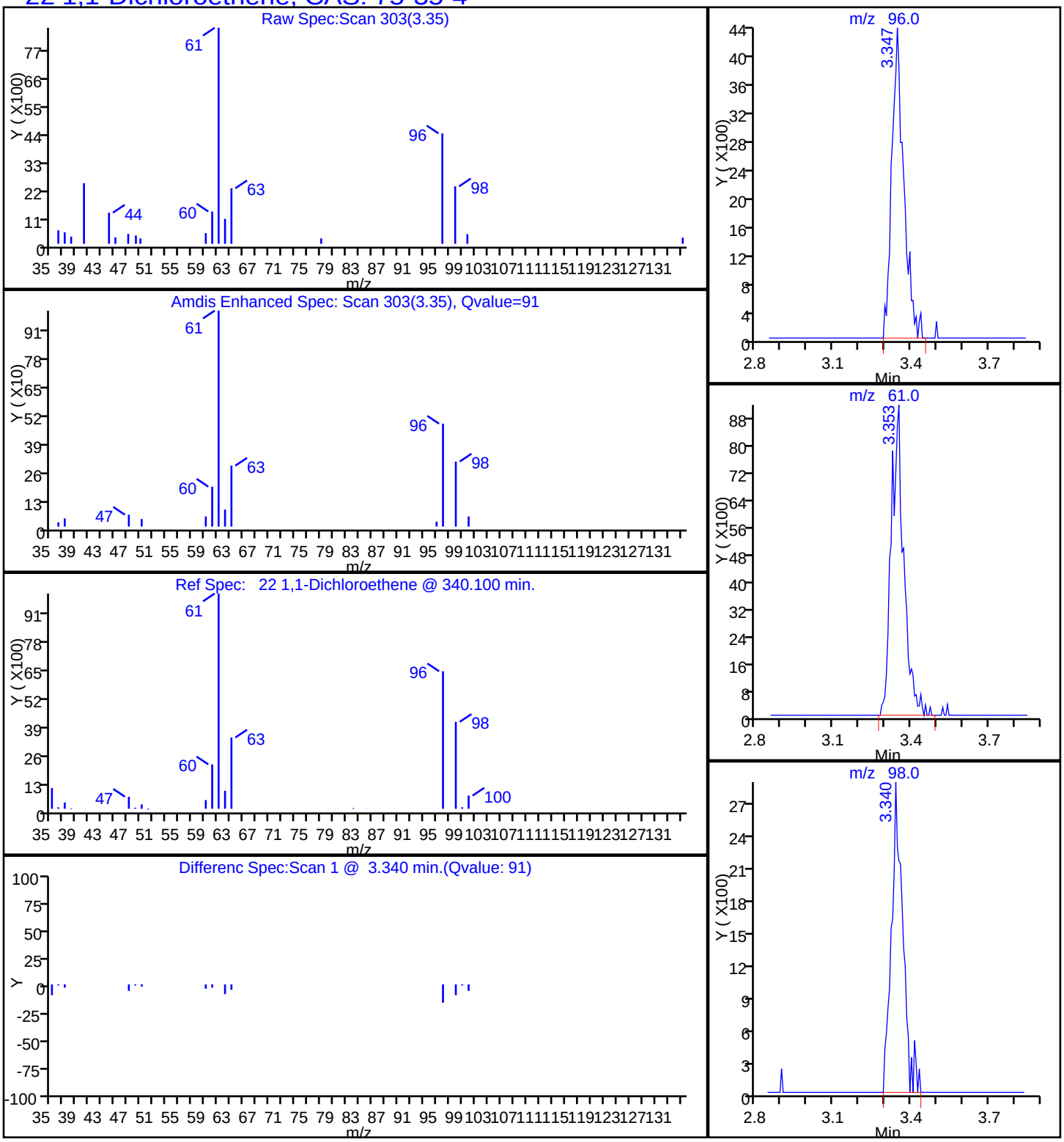
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.1	96.20
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.2	94.47
$ 7 Toluene-d8 (Surr)	50.0	49.7	99.31
$ 8 4-Bromofluorobenzene (Surr)	50.0	49.9	99.70

Report Date: 02-Nov-2016 07:20:29 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101017.D		
Injection Date:	01-Nov-2016 16:15:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-12	Lab Sample ID:	180-60202-12
Client ID:	HD-QC3-0/1-1		
Operator ID:	001562	ALS Bottle#:	14 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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



Report Date: 02-Nov-2016 07:20:29 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101017.D

Injection Date: 01-Nov-2016 16:15:30 Instrument ID: CHHP5

Lims ID: 180-60202-B-12 Lab Sample ID: 180-60202-12

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

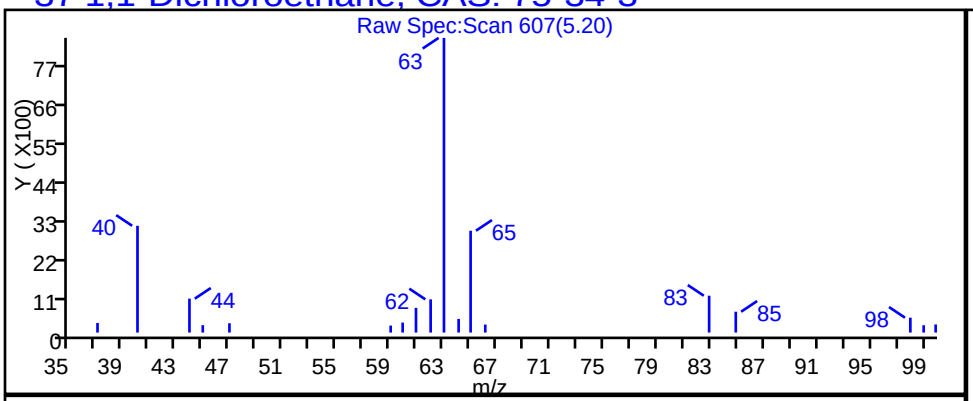
Operator ID: 001562 ALS Bottle#: 14 Worklist Smp#: 17

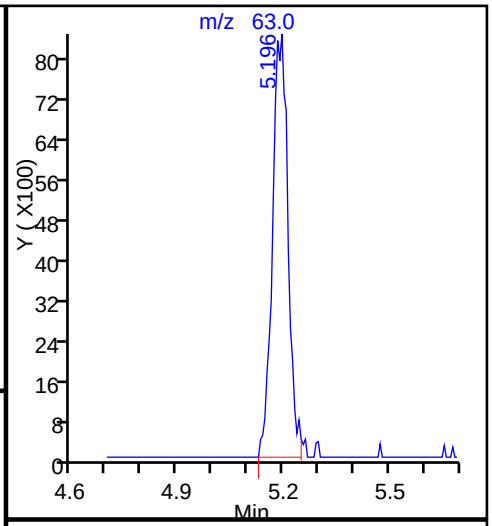
Purge Vol: 5.000 mL Dil. Factor: 2.0000

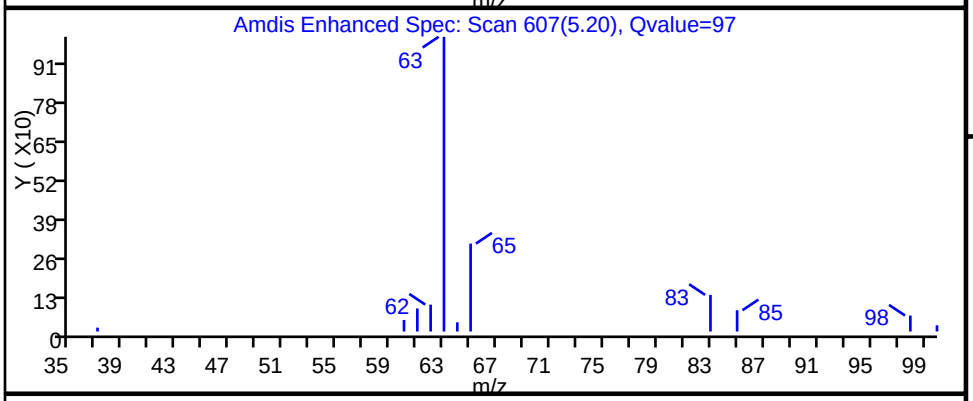
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

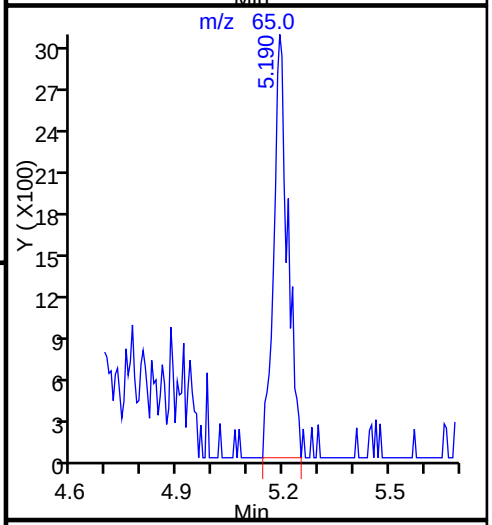
Column: DB-624 (0.18 mm) Detector MS SCAN

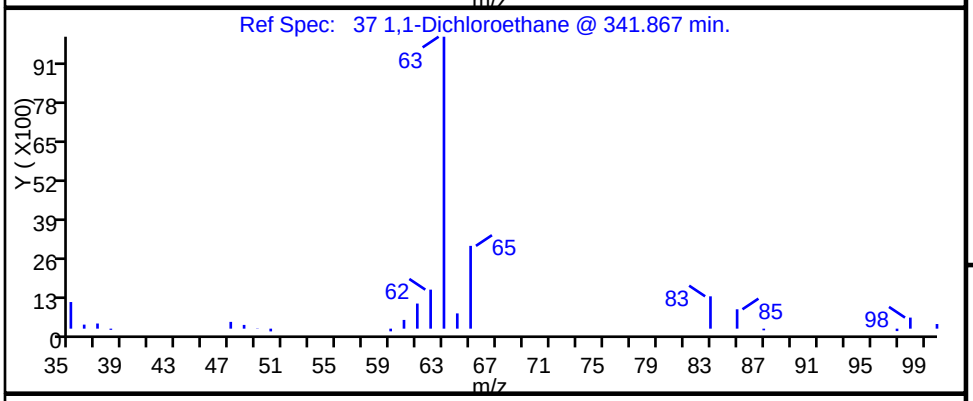
37 1,1-Dichloroethane, CAS: 75-34-3

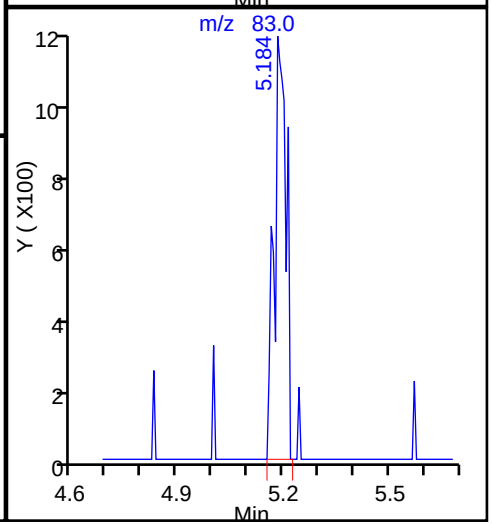


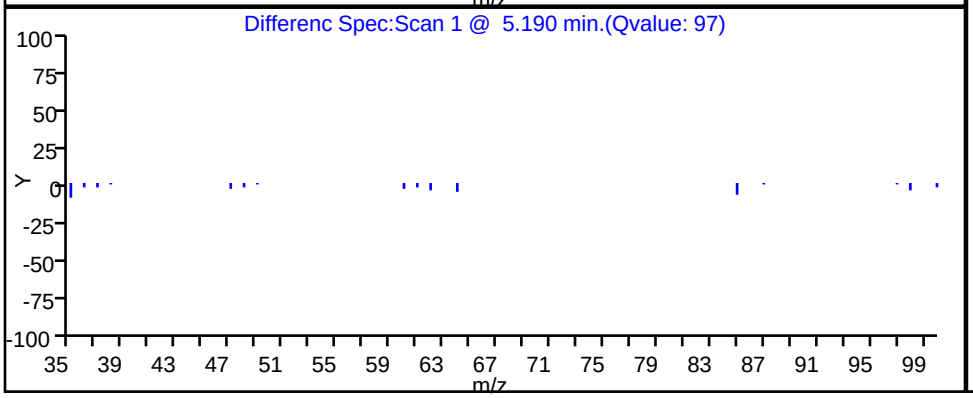












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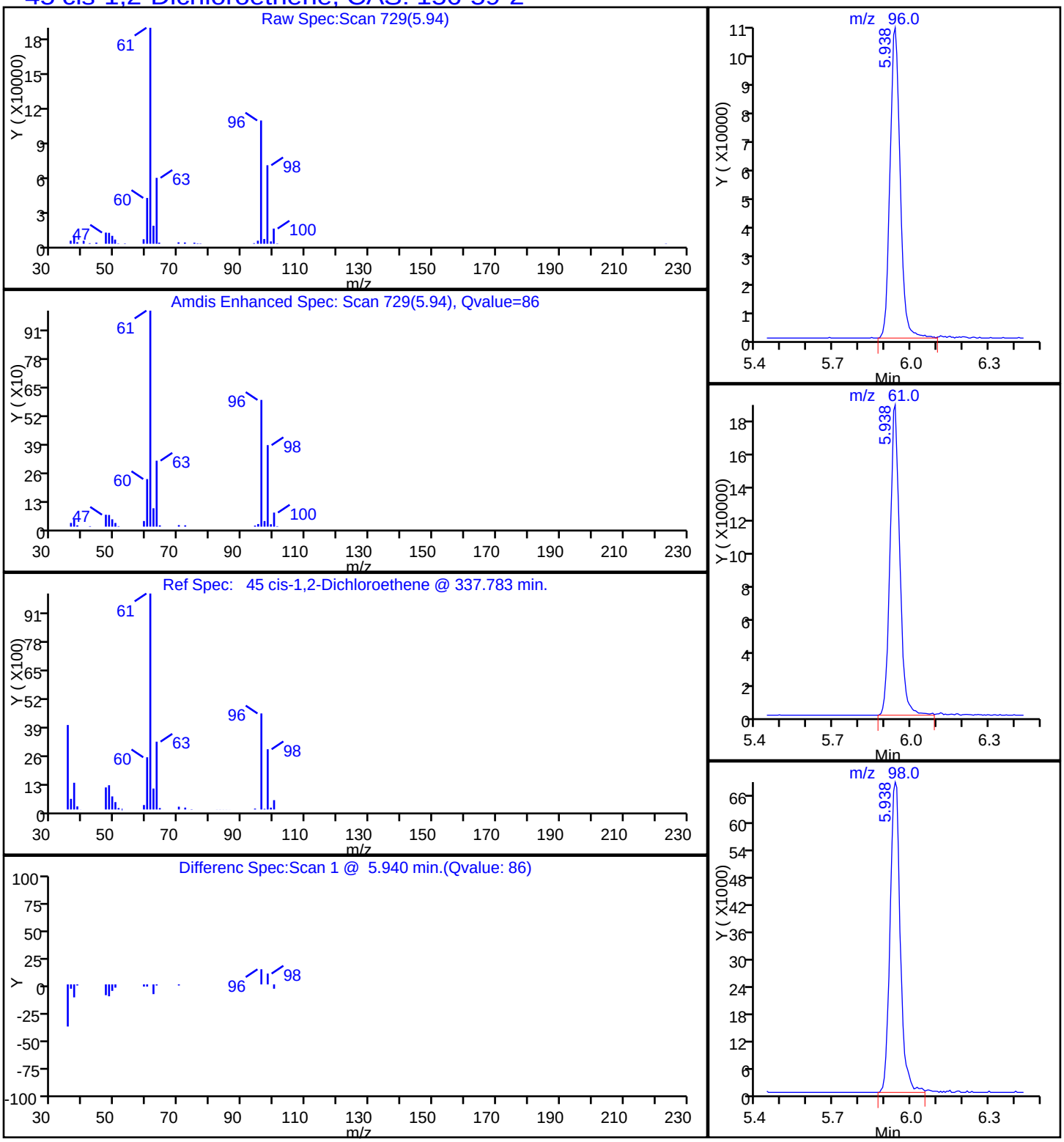
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101017.D

Injection Date:	01-Nov-2016 16:15:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-12	Lab Sample ID:	180-60202-12		
Client ID:	HD-QC3-0/1-1				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



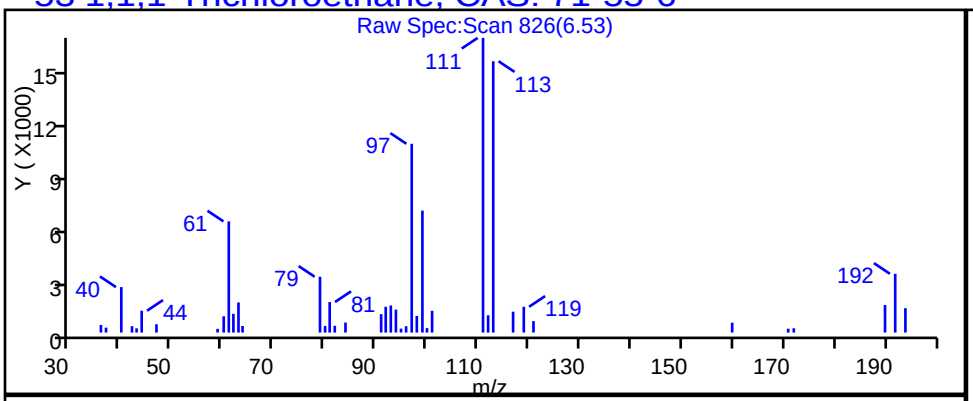
Report Date: 02-Nov-2016 07:20:30 Chrom Revision: 2.2 17-Oct-2016 09:27:18

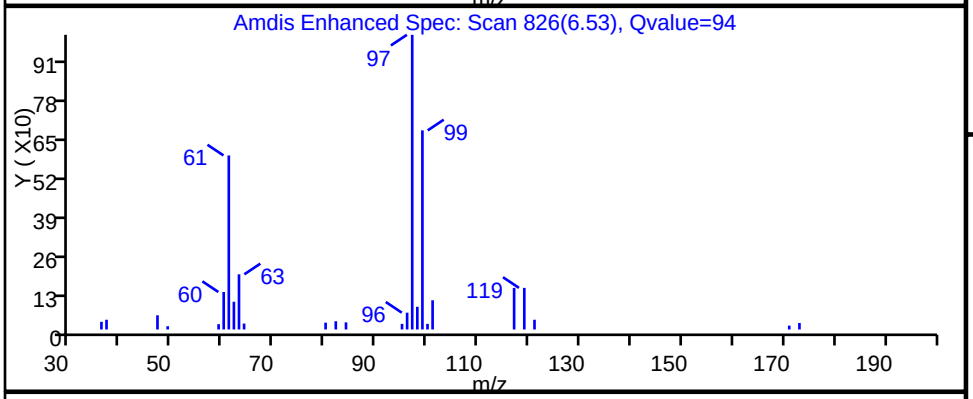
TestAmerica Pittsburgh

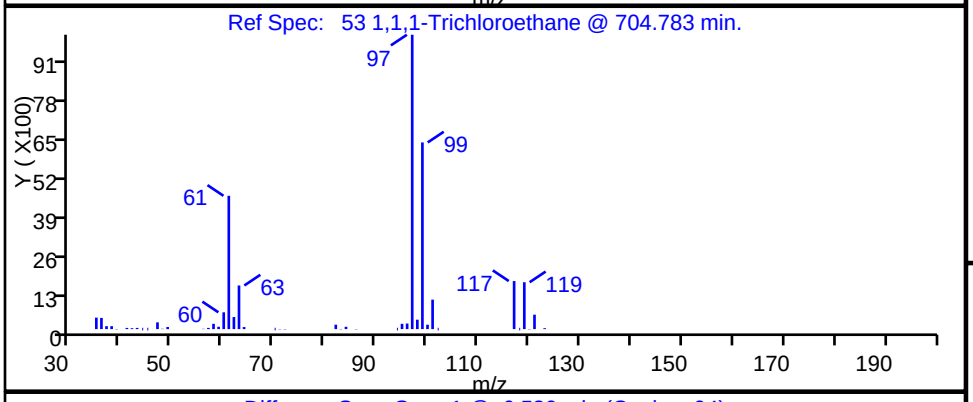
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101017.D

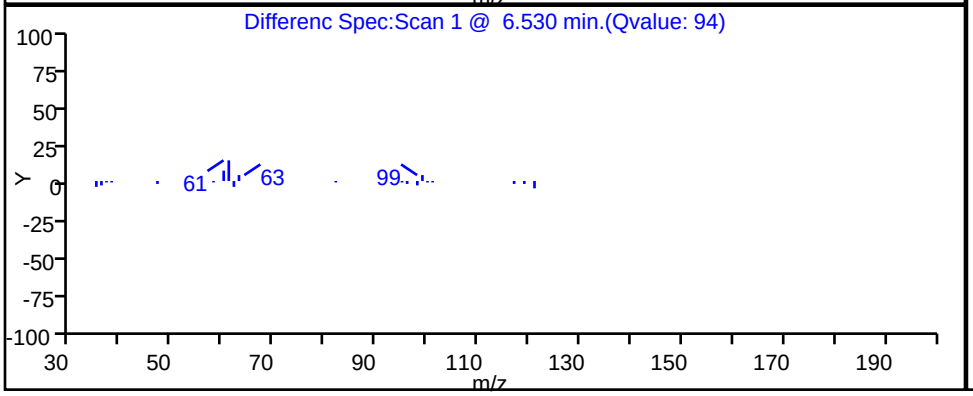
Injection Date:	01-Nov-2016 16:15:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-12	Lab Sample ID:	180-60202-12		
Client ID:	HD-QC3-0/1-1				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

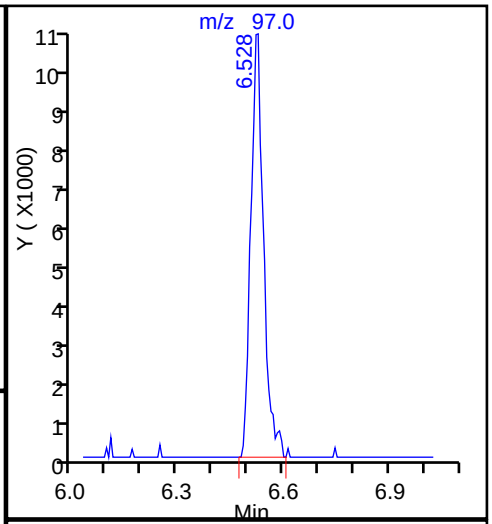
53 1,1,1-Trichloroethane, CAS: 71-55-6

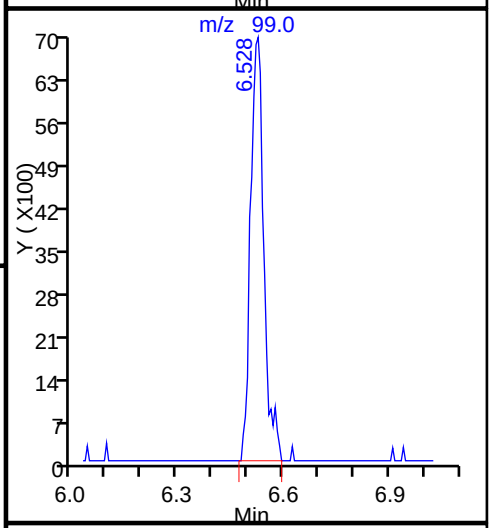


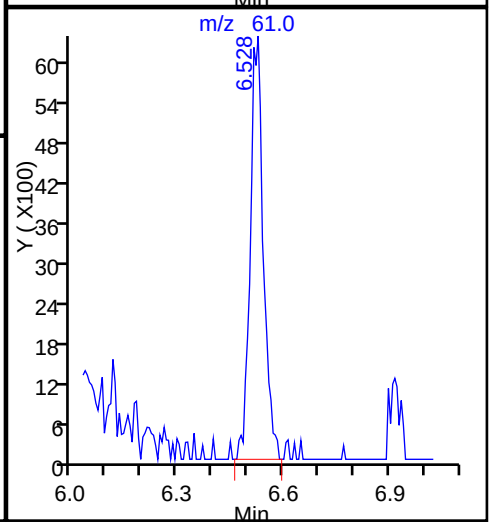












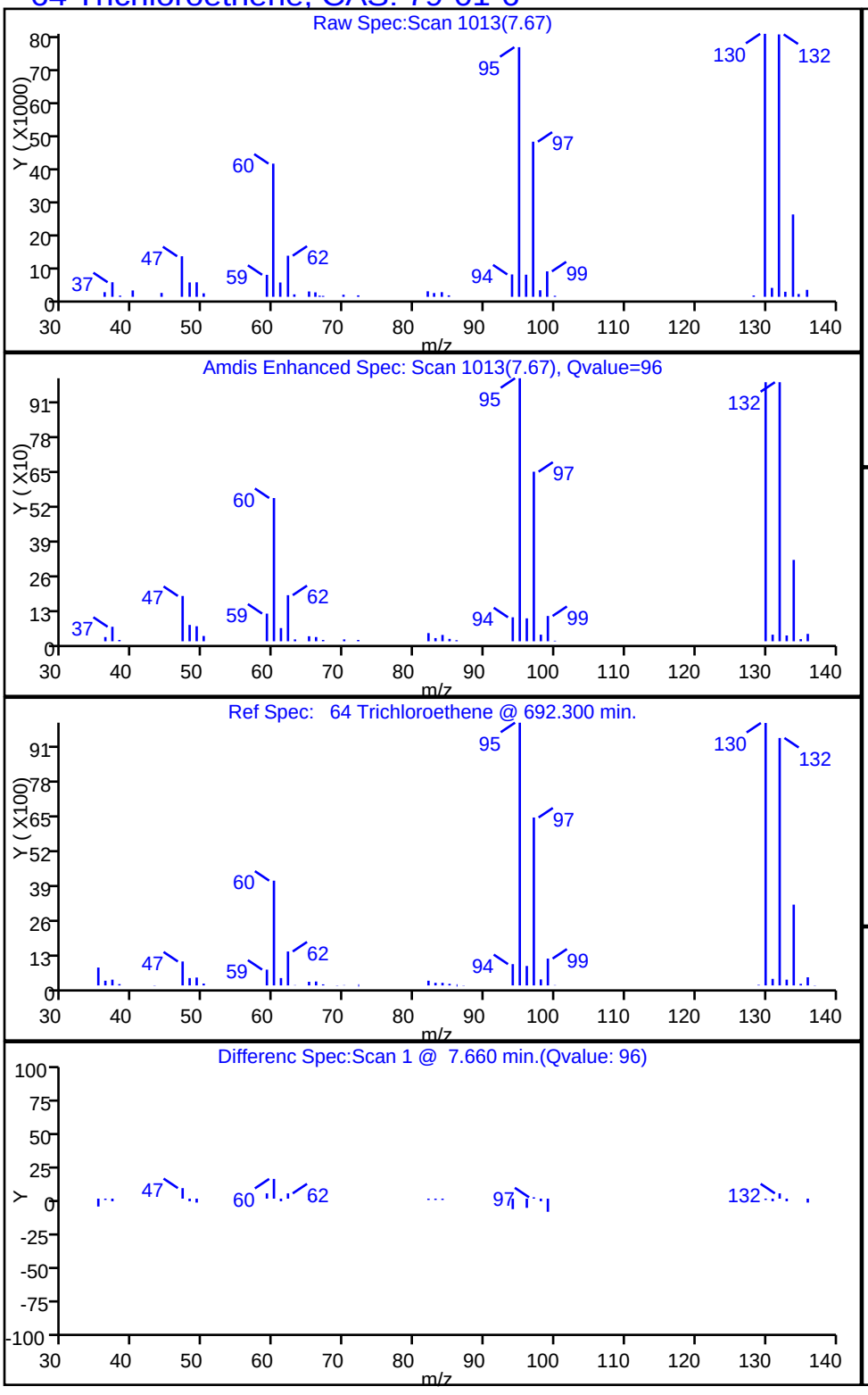
Report Date: 02-Nov-2016 07:20:30 Chrom Revision: 2.2 17-Oct-2016 09:27:18

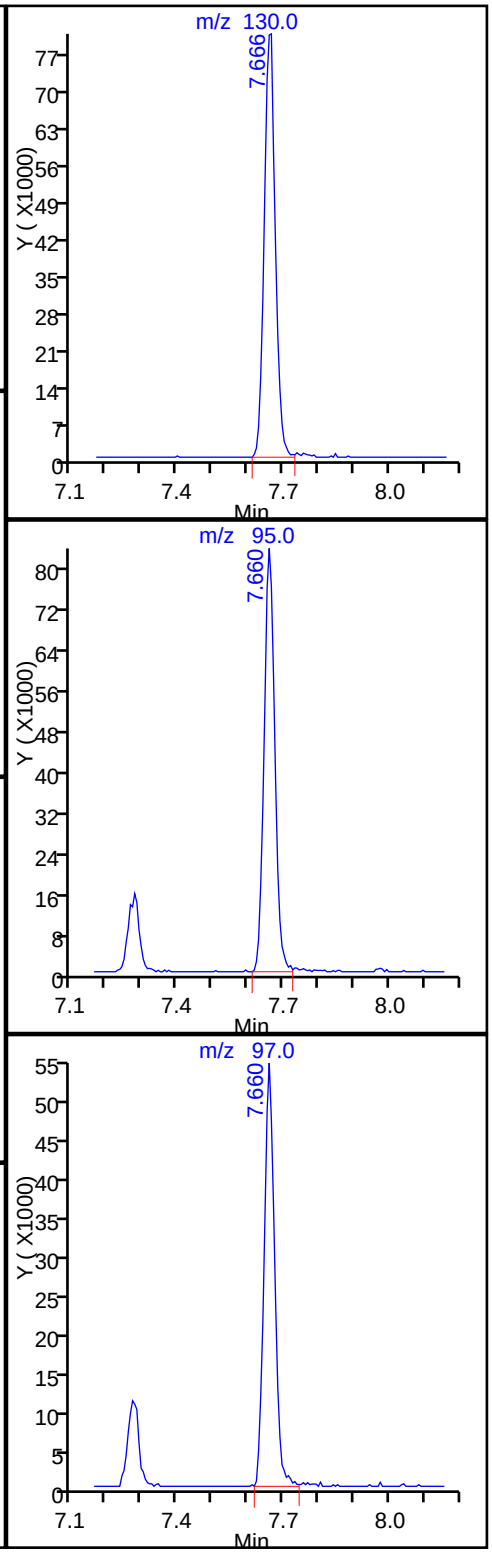
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101017.D

Injection Date:	01-Nov-2016 16:15:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-12	Lab Sample ID:	180-60202-12		
Client ID:	HD-QC3-0/1-1				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6





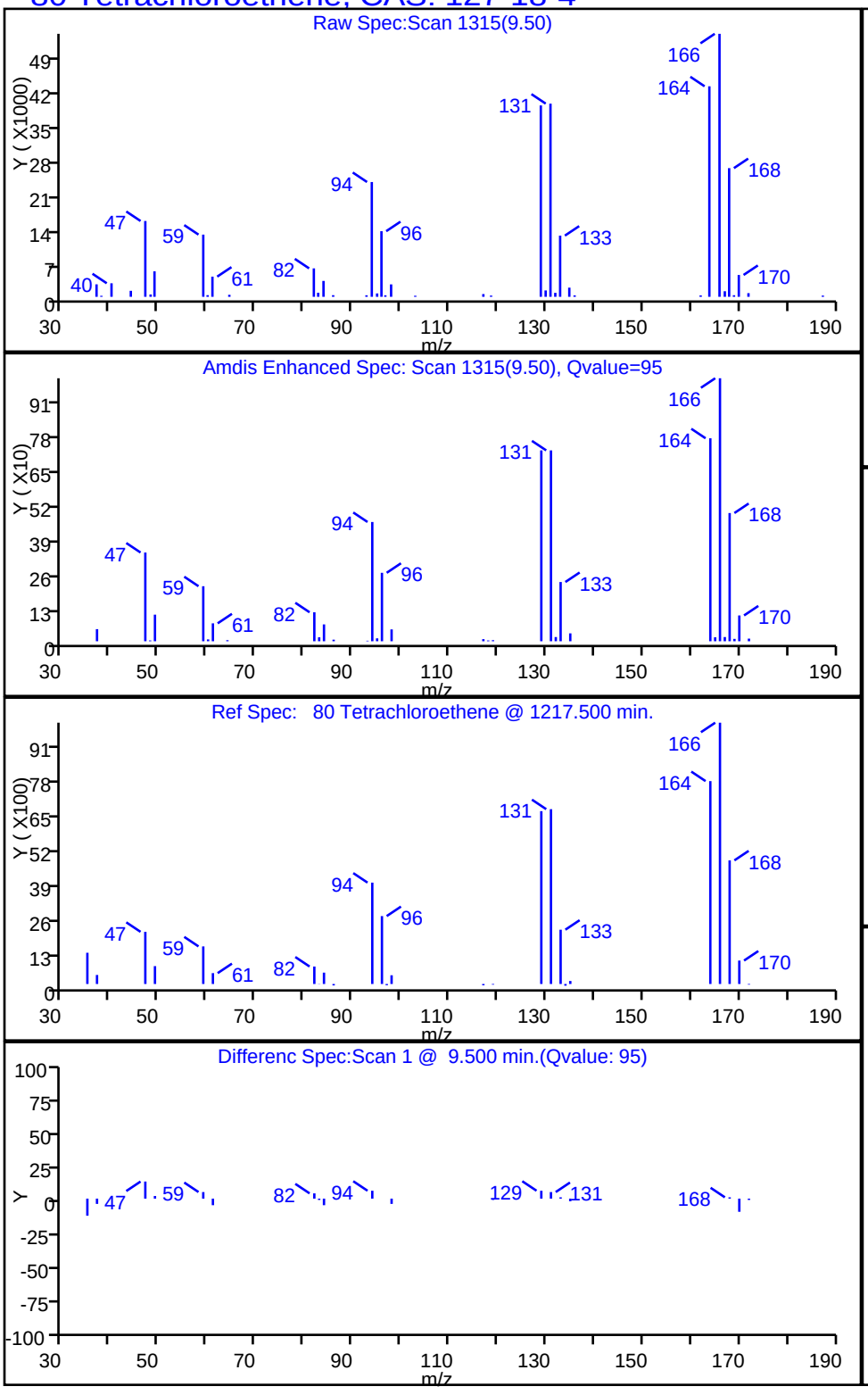
Report Date: 02-Nov-2016 07:20:30 Chrom Revision: 2.2 17-Oct-2016 09:27:18

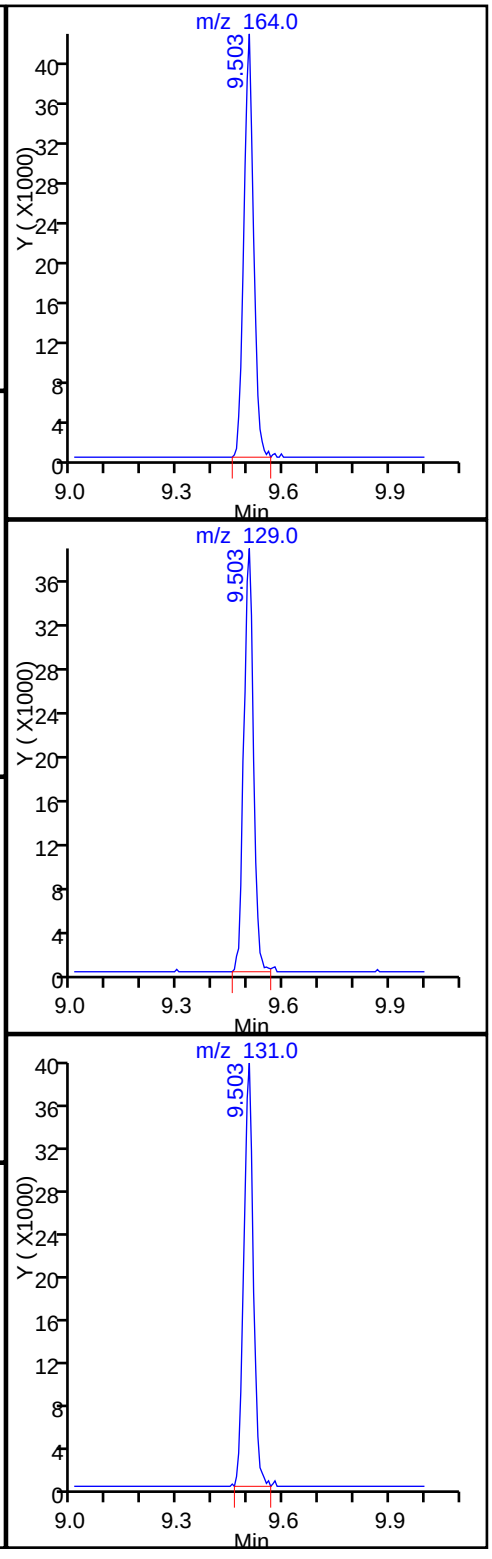
TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101017.D

Injection Date:	01-Nov-2016 16:15:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-12	Lab Sample ID:	180-60202-12
Client ID:	HD-QC3-0/1-1		
Operator ID:	001562	ALS Bottle#:	14 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

80 Tetrachloroethene, CAS: 127-18-4





Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

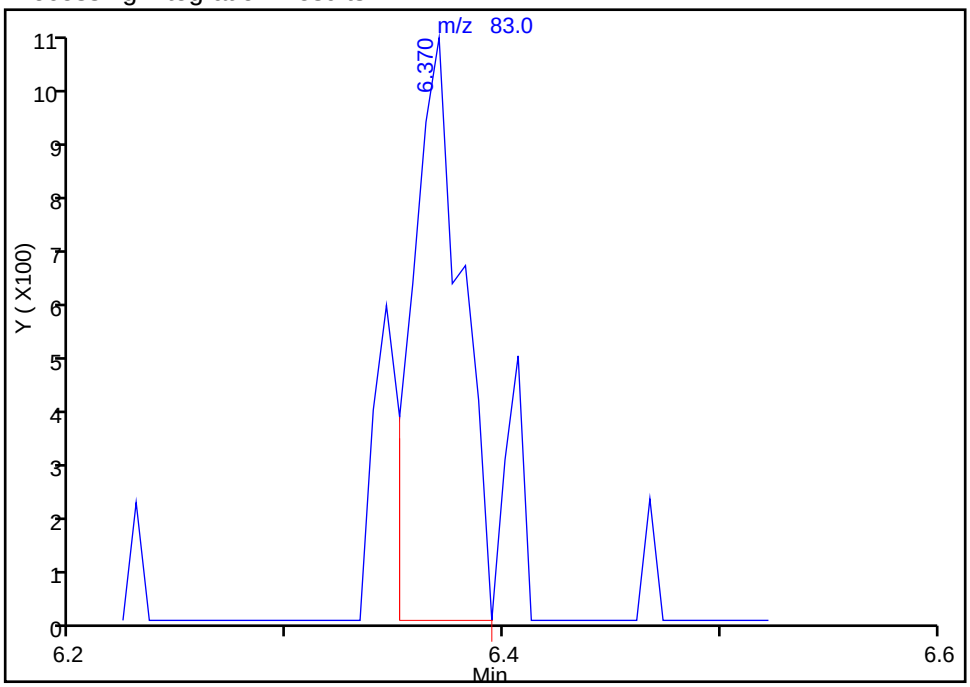
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101017.D				
Injection Date:	01-Nov-2016 16:15:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-12	Lab Sample ID:	180-60202-12		
Client ID:	HD-QC3-0/1-1				
Operator ID:	001562	ALS Bottle#:	14	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

Signal: 1

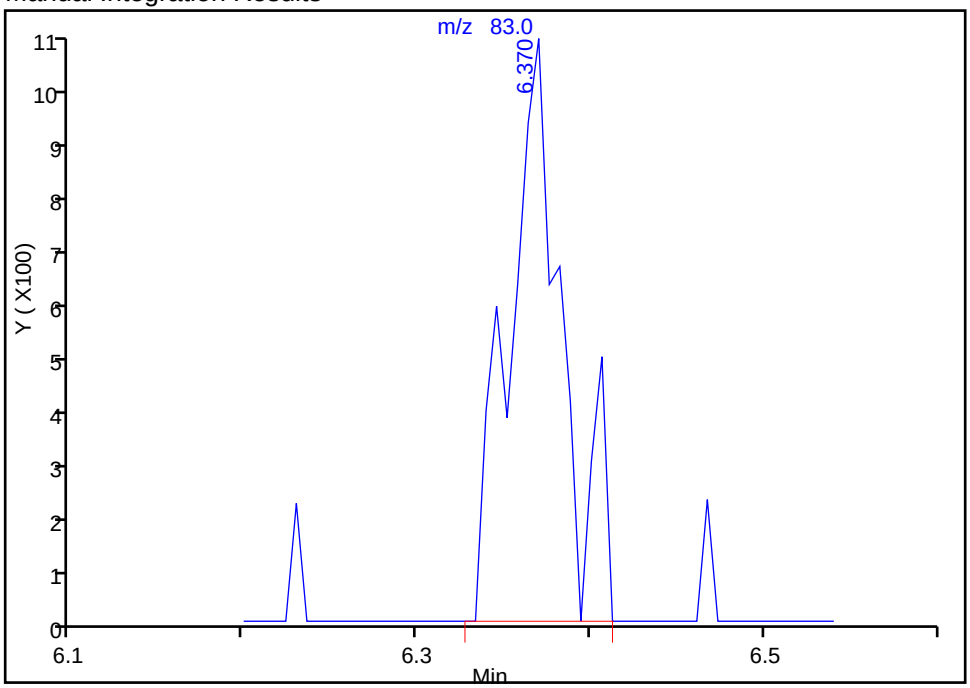
Processing Integration Results

RT: 6.37
Area: 1741
Amount: 0.470820
Amount Units: ng



Manual Integration Results

RT: 6.37
Area: 2394
Amount: 0.647411
Amount Units: ng



Reviewer: fergusond, 02-Nov-2016 07:20:28

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: INFLUENT TO #003 GWTS | Lab Sample ID: 180-60202-13

Matrix: Water | Lab File ID: 51101018.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 16:39

Soil Aliquot Vol: | Dilution Factor: 25

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

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

Analysis Batch No.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	25	U	25	5.7
75-01-4	Vinyl chloride	25	U	25	7.9
74-83-9	Bromomethane	25	U	25	9.1
75-00-3	Chloroethane	25	U	25	6.5
75-35-4	1,1-Dichloroethene	22	J	25	7.2
67-64-1	Acetone	130	U	130	63
75-15-0	Carbon disulfide	25	U ^c	25	4.6
75-09-2	Methylene Chloride	11	J	25	9.1
156-60-5	trans-1,2-Dichloroethene	25	U	25	7.2
1634-04-4	Methyl tert-butyl ether	25	U	25	6.1
75-34-3	1,1-Dichloroethane	6.8	J	25	5.9
156-59-2	cis-1,2-Dichloroethene	210		25	7.2
74-97-5	Bromochloromethane	25	U	25	9.4
78-93-3	2-Butanone (MEK)	130	U	130	29
67-66-3	Chloroform	25	U	25	6.9
71-55-6	1,1,1-Trichloroethane	87		25	5.6
56-23-5	Carbon tetrachloride	25	U	25	6.1
71-43-2	Benzene	25	U	25	6.4
107-06-2	1,2-Dichloroethane	25	U	25	6.1
79-01-6	Trichloroethene	280		25	6.5
78-87-5	1,2-Dichloropropane	25	U	25	5.7
75-27-4	Bromodichloromethane	25	U	25	5.8
10061-01-5	cis-1,3-Dichloropropene	25	U	25	5.2
108-10-1	4-Methyl-2-pentanone (MIBK)	130	U	130	15
108-88-3	Toluene	25	U	25	7.0
10061-02-6	trans-1,3-Dichloropropene	25	U	25	6.0
79-00-5	1,1,2-Trichloroethane	25	U	25	8.7
127-18-4	Tetrachloroethene	600		25	6.7
591-78-6	2-Hexanone	130	U	130	19
124-48-1	Dibromochloromethane	25	U	25	9.9
106-93-4	1,2-Dibromoethane (EDB)	25	U	25	7.2
108-90-7	Chlorobenzene	25	U	25	7.8
630-20-6	1,1,1,2-Tetrachloroethane	25	U	25	4.9
100-41-4	Ethylbenzene	25	U	25	6.9
1330-20-7	Xylenes, Total	50	U	50	12
100-42-5	Styrene	25	U	25	6.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: INFLUENT TO #003 GWTS | Lab Sample ID: 180-60202-13

Matrix: Water | Lab File ID: 51101018.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 16:39

Soil Aliquot Vol: | Dilution Factor: 25

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

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

Analysis Batch No.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	25	U ^c	25	7.4
79-34-5	1,1,2,2-Tetrachloroethane	25	U	25	8.6
107-13-1	Acrylonitrile	500	U	500	69
123-91-1	1,4-Dioxane	5000	U	5000	190

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-134
2037-26-5	Toluene-d8 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		72-120
1868-53-7	Dibromofluoromethane (Surr)	96		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101018.D
Lims ID: 180-60202-B-13
Client ID: INFLUENT TO #003 GWTS
Sample Type: Client
Inject. Date: 01-Nov-2016 16:39:30 ALS Bottle#: 15 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 25.0000
Sample Info: 180-0014130-018
Misc. Info.: 180-60202-B-13, 25x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:21:26 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:21:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.272	4.275	-0.003	0	121676	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.274	-0.003	97	372754	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.377	-0.003	91	94874	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.719	-0.003	97	145586	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.541	6.550	-0.009	92	86039	48.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.921	-0.003	0	126788	49.2	
$ 7 Toluene-d8 (Surr)	98	8.920	8.923	-0.003	95	361456	50.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.557	0.003	86	139485	48.2	
12 Chloromethane	50		1.763				ND	
13 Vinyl chloride	62		1.909				ND	
15 Bromomethane	94		2.231				ND	
16 Chloroethane	64		2.377				ND	
22 1,1-Dichloroethene	96	3.347	3.338	0.009	89	8152	4.33	
24 Acetone	43		3.442				ND	
26 Carbon disulfide	76		3.618				ND	
31 Methylene Chloride	84	4.132	4.123	0.009	92	4979	2.11	
33 Acrylonitrile	53		4.512				ND	
34 trans-1,2-Dichloroethene	96		4.549				ND	
35 Methyl tert-butyl ether	73		4.573				ND	
37 1,1-Dichloroethane	63	5.191	5.188	0.003	36	6244	1.36	
45 cis-1,2-Dichloroethene	96	5.939	5.936	0.003	86	93871	41.4	
46 2-Butanone (MEK)	43		5.948				ND	
49 Chlorobromomethane	128		6.222				ND	
52 Chloroform	83		6.368				ND	
53 1,1,1-Trichloroethane	97	6.523	6.526	-0.003	91	44755	17.5	
56 Carbon tetrachloride	117		6.696				ND	
58 Benzene	78		6.927				ND	
59 1,2-Dichloroethane	62		7.000				ND	
64 Trichloroethene	130	7.661	7.657	0.004	95	117553	56.4	
67 1,2-Dichloropropane	63		7.937				ND	
70 1,4-Dioxane	88		8.016				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.217				ND	
74 cis-1,3-Dichloropropene	75		8.661				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.813				ND	
76 Toluene	91		8.990				ND	
77 trans-1,3-Dichloropropene	75		9.239				ND	
79 1,1,2-Trichloroethane	97		9.434				ND	
80 Tetrachloroethene	164	9.498	9.501	-0.003	96	205356	119.8	
82 2-Hexanone	43		9.647				ND	
84 Chlorodibromomethane	129		9.805				ND	
85 Ethylene Dibromide	107		9.914				ND	
87 Chlorobenzene	112		10.401				ND	
89 1,1,1,2-Tetrachloroethane	131		10.498				ND	
90 Ethylbenzene	106		10.498				ND	
91 m-Xylene & p-Xylene	106		10.638				ND	
92 o-Xylene	106		11.015				ND	
93 Styrene	104		11.034				ND	
94 Bromoform	173		11.222				ND	
99 1,1,2,2-Tetrachloroethane	83		11.703				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

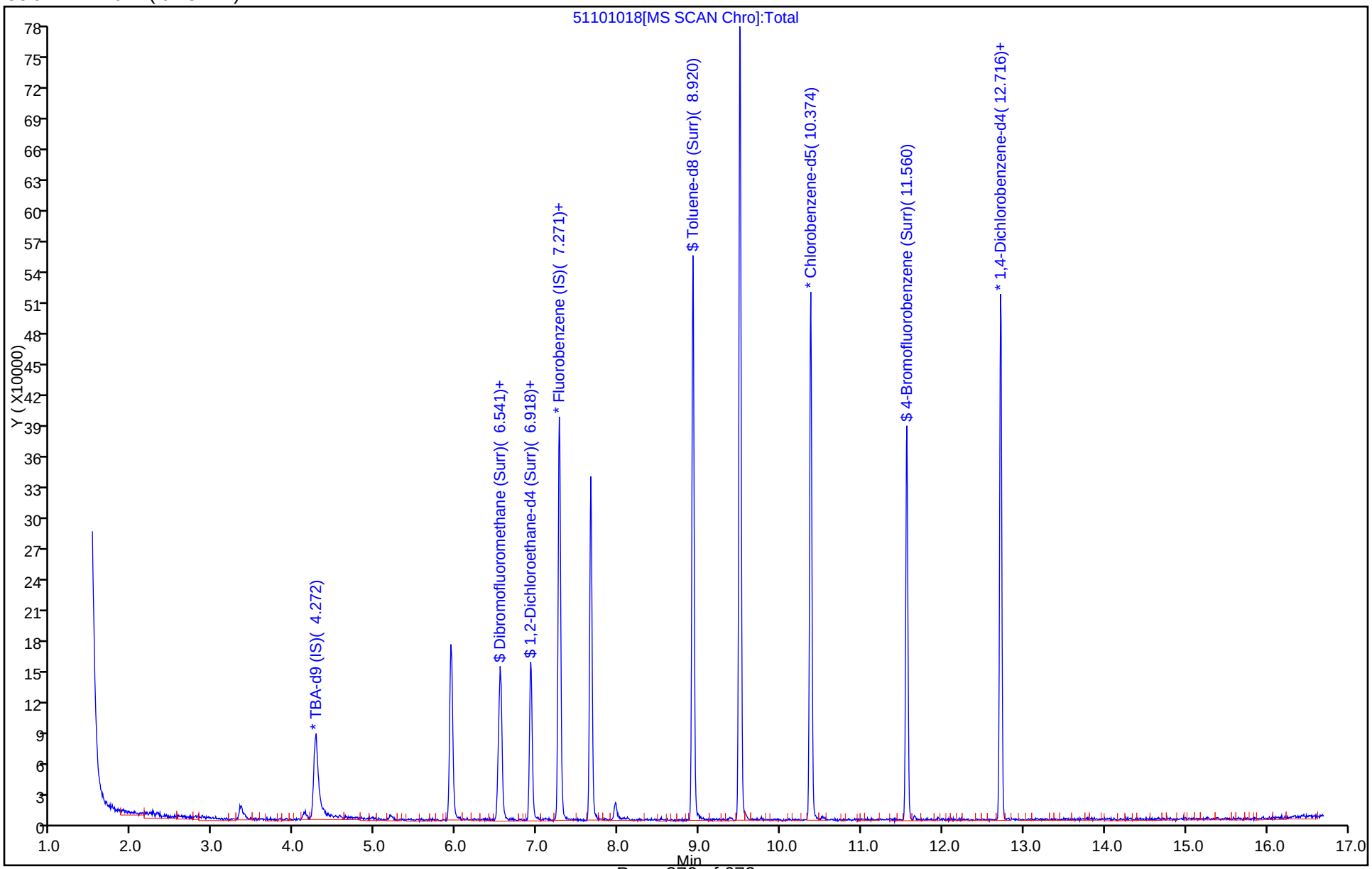
Report Date: 02-Nov-2016 07:21:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101018.D

Injection Date:	01-Nov-2016 16:39:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-B-13	Lab Sample ID:	180-60202-13	Worklist Smp#:	18
Client ID:	INFLUENT TO #003 GWTS				
Purge Vol:	5.000 mL	Dil. Factor:	25.0000	ALS Bottle#:	15
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101018.D				
Lims ID:	180-60202-B-13				
Client ID:	INFLUENT TO #003 GWTS				
Sample Type:	Client				
Inject. Date:	01-Nov-2016 16:39:30	ALS Bottle#:	15	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	25.0000		
Sample Info:	180-0014130-018				
Misc. Info.:	180-60202-B-13, 25x				
Operator ID:	001562	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	02-Nov-2016 07:21:26	Calib Date:	22-Oct-2016 17:46:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK014				

First Level Reviewer: fergusond Date: 02-Nov-2016 07:21:26

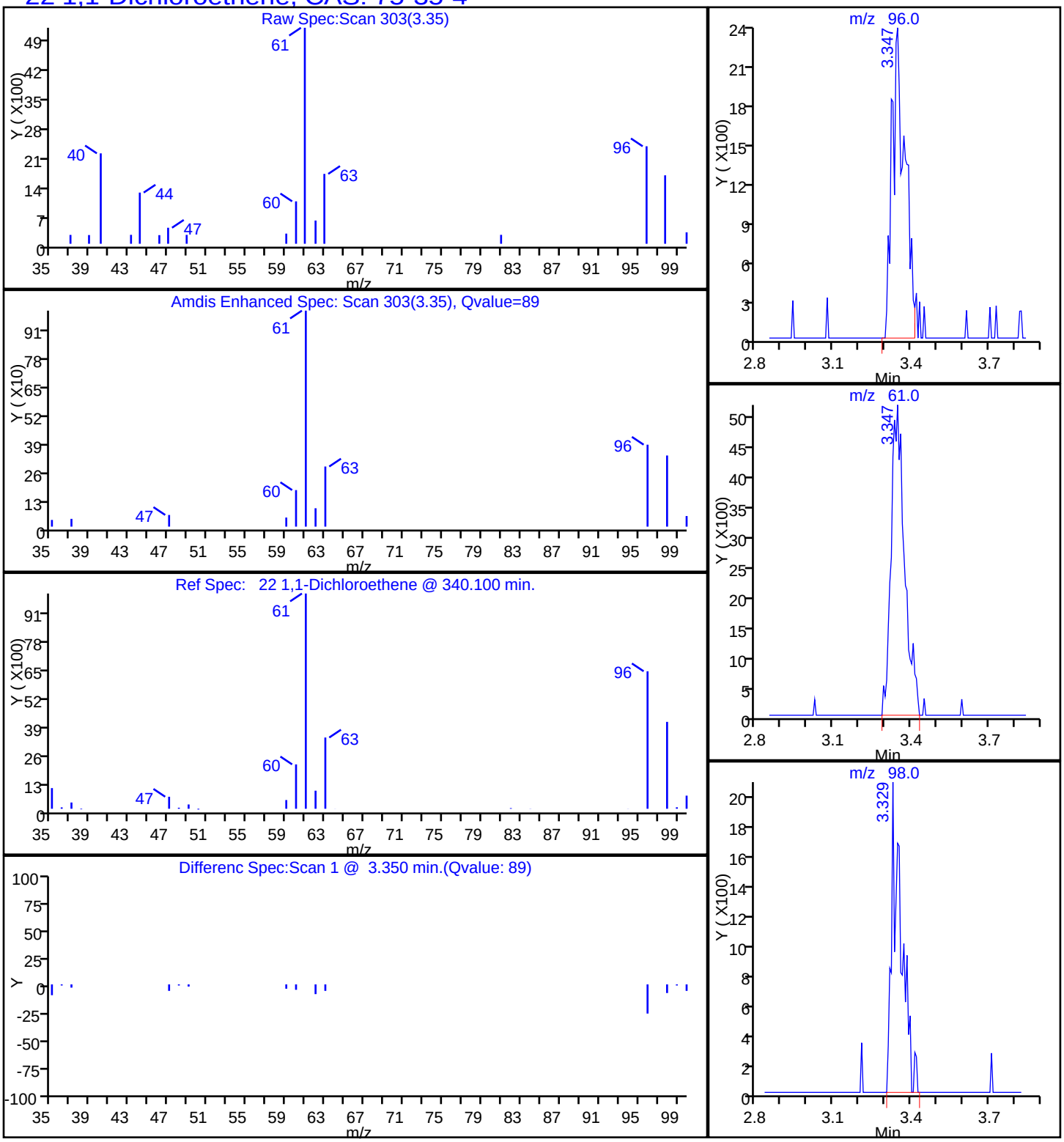
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.2	96.49
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.2	98.49
$ 7 Toluene-d8 (Surr)	50.0	50.5	100.96
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.2	96.36

Report Date: 02-Nov-2016 07:21:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101018.D		
Injection Date:	01-Nov-2016 16:39:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-13	Lab Sample ID:	180-60202-13
Client ID:	INFLUENT TO #003 GWTS		
Operator ID:	001562	ALS Bottle#:	15 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	25.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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

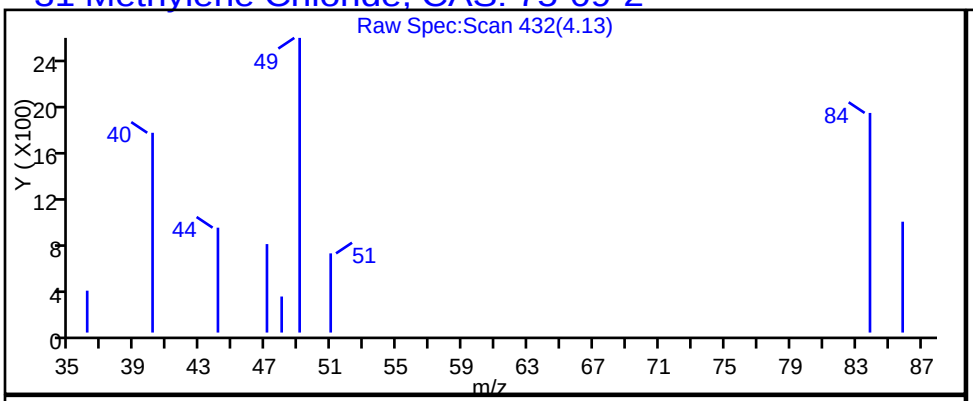


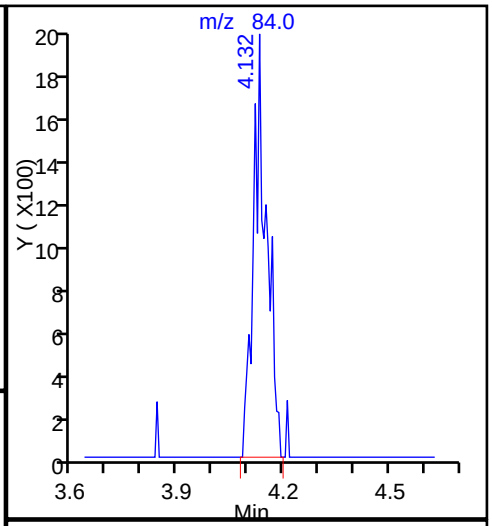
Report Date: 02-Nov-2016 07:21:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

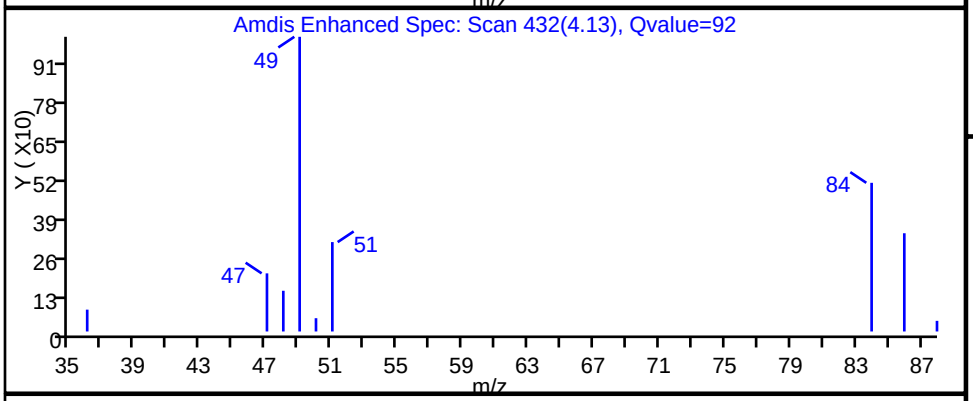
TestAmerica Pittsburgh

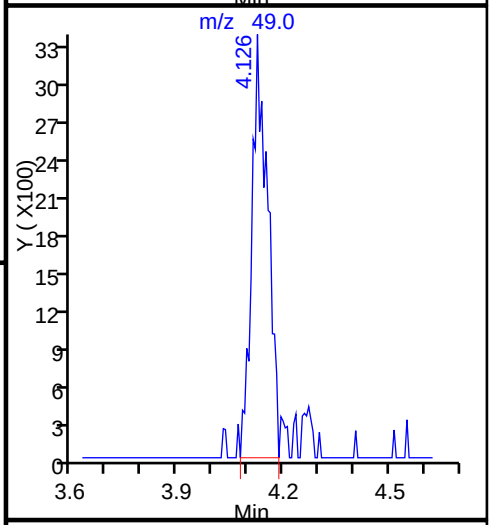
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101018.D		
Injection Date:	01-Nov-2016 16:39:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-13	Lab Sample ID:	180-60202-13
Client ID:	INFLUENT TO #003 GWTS		
Operator ID:	001562	ALS Bottle#:	15 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	25.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

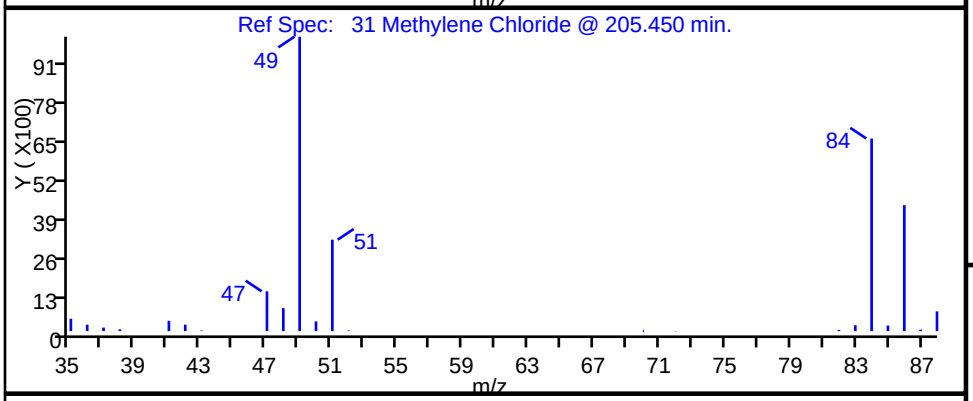
31 Methylene Chloride, CAS: 75-09-2

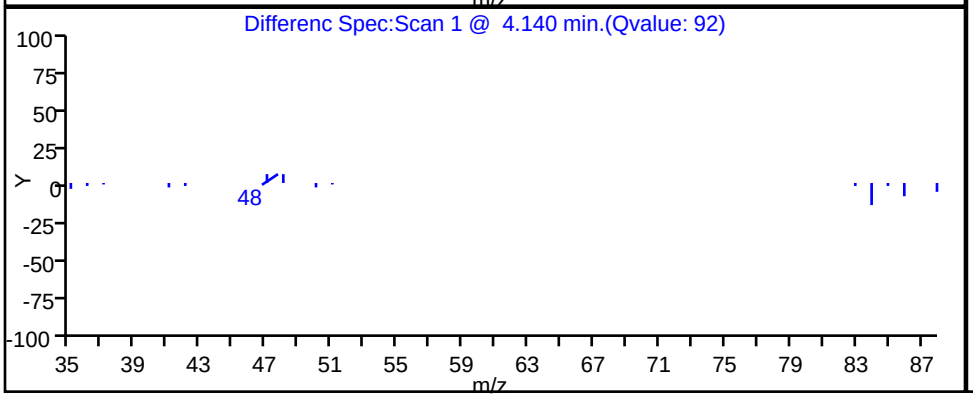


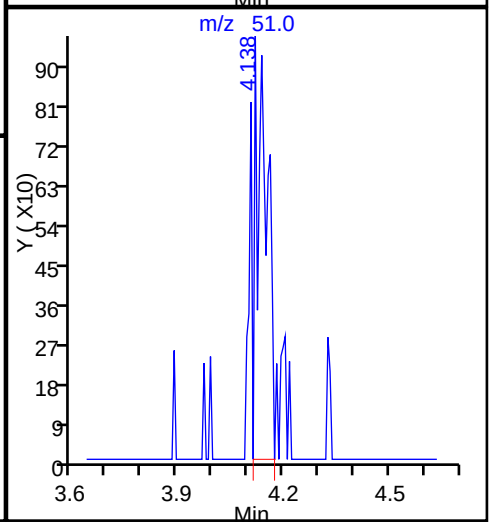










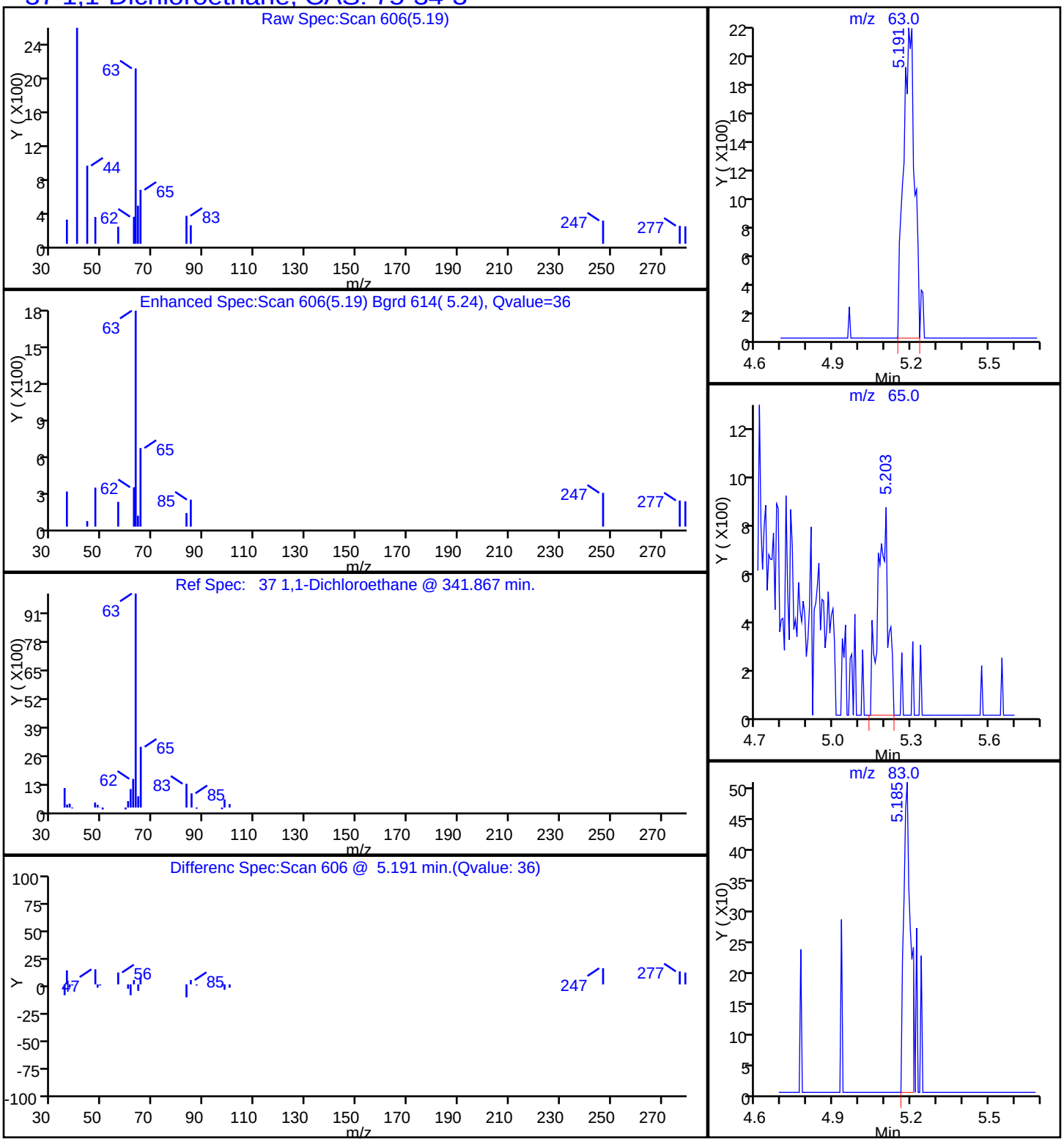


Report Date: 02-Nov-2016 07:21:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101018.D				
Injection Date:	01-Nov-2016 16:39:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-13	Lab Sample ID:	180-60202-13		
Client ID:	INFLUENT TO #003 GWTS				
Operator ID:	001562	ALS Bottle#:	15	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	25.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

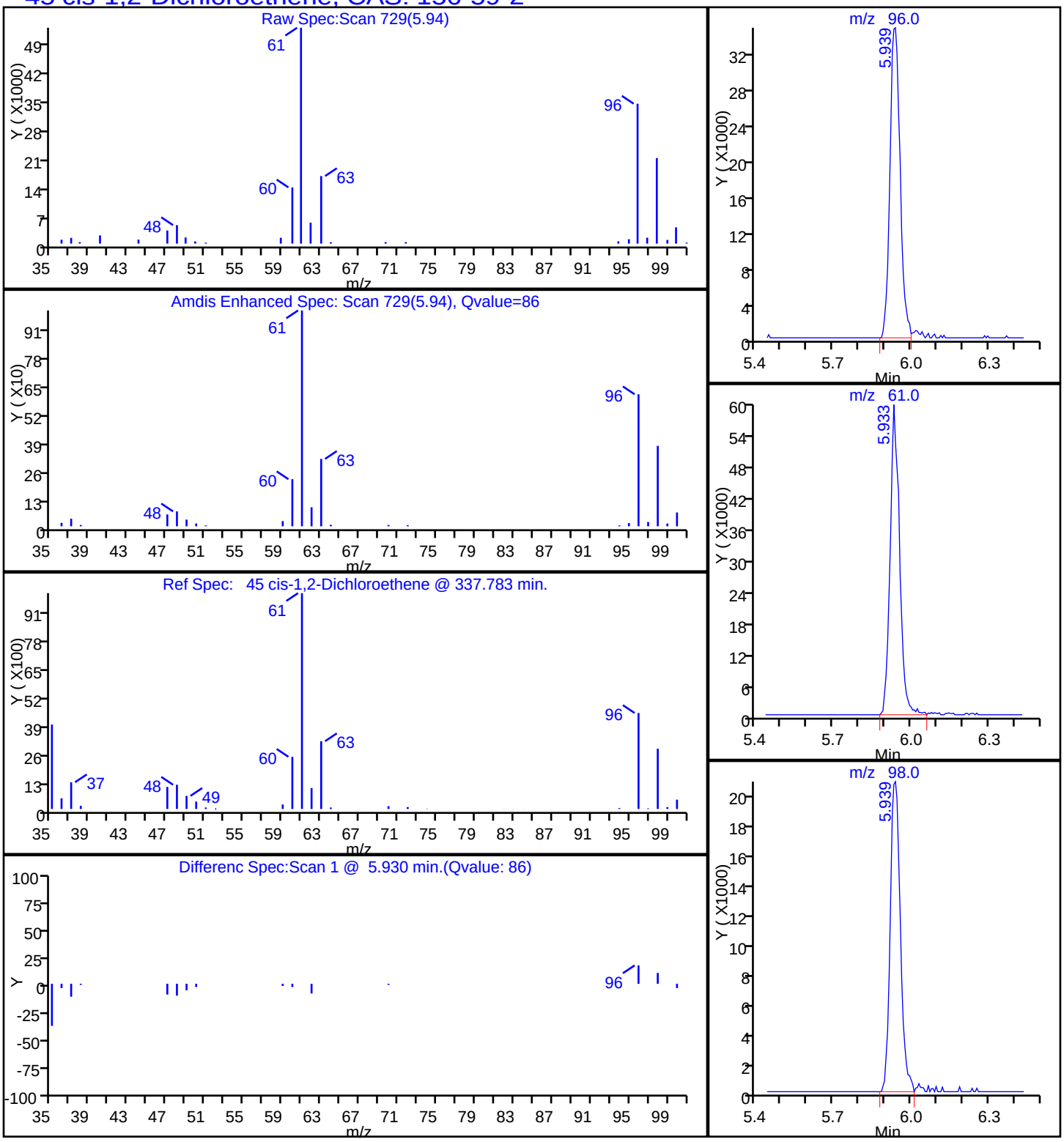


Report Date: 02-Nov-2016 07:21:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101018.D				
Injection Date:	01-Nov-2016 16:39:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-13	Lab Sample ID:	180-60202-13		
Client ID:	INFLUENT TO #003 GWTS				
Operator ID:	001562	ALS Bottle#:	15	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	25.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

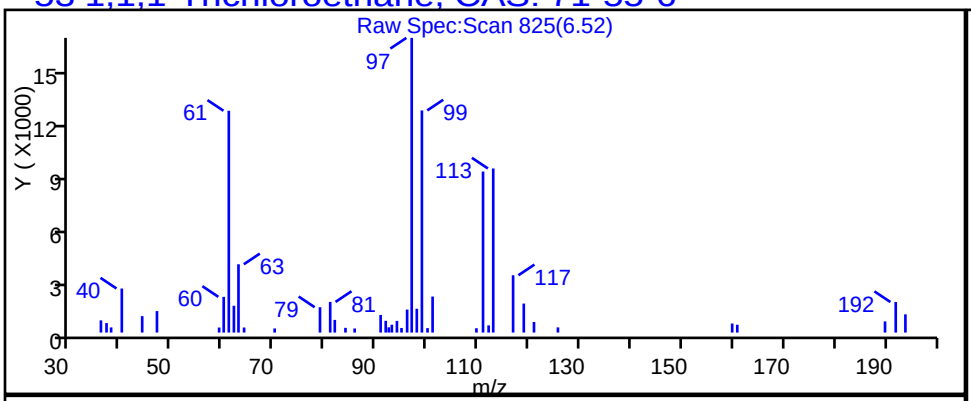


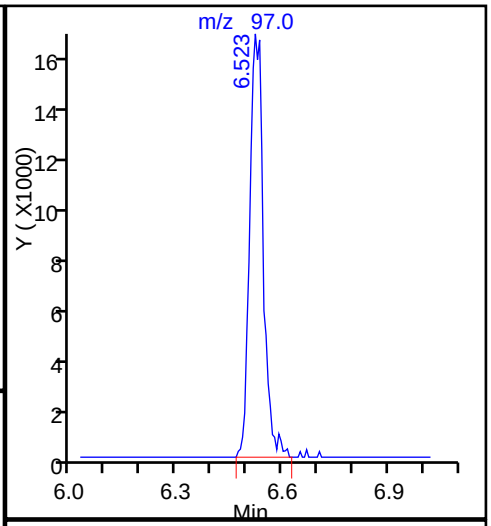
Report Date: 02-Nov-2016 07:21:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

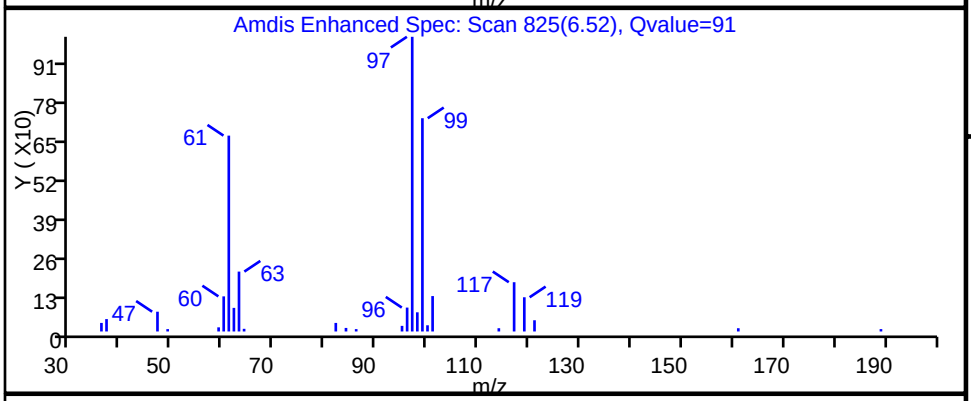
TestAmerica Pittsburgh

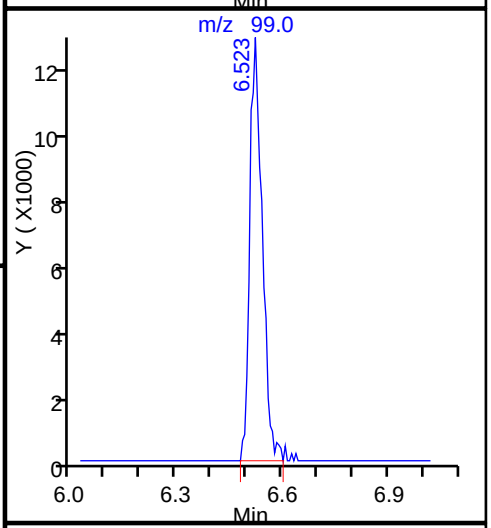
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101018.D		
Injection Date:	01-Nov-2016 16:39:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-13	Lab Sample ID:	180-60202-13
Client ID:	INFLUENT TO #003 GWTS		
Operator ID:	001562	ALS Bottle#:	15 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	25.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

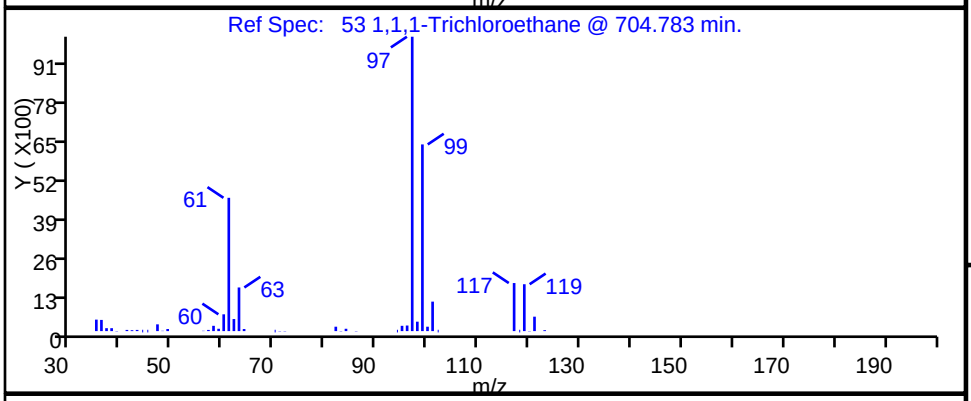
53 1,1,1-Trichloroethane, CAS: 71-55-6

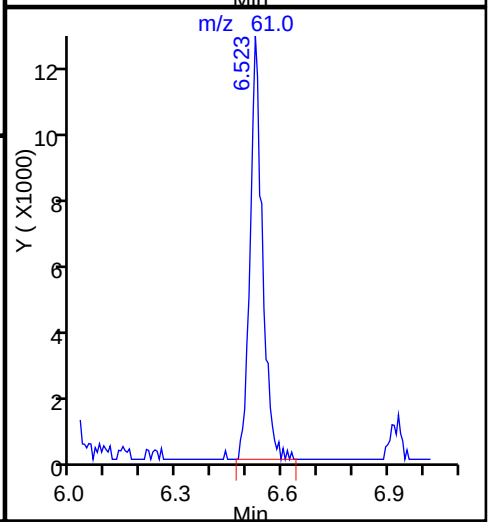


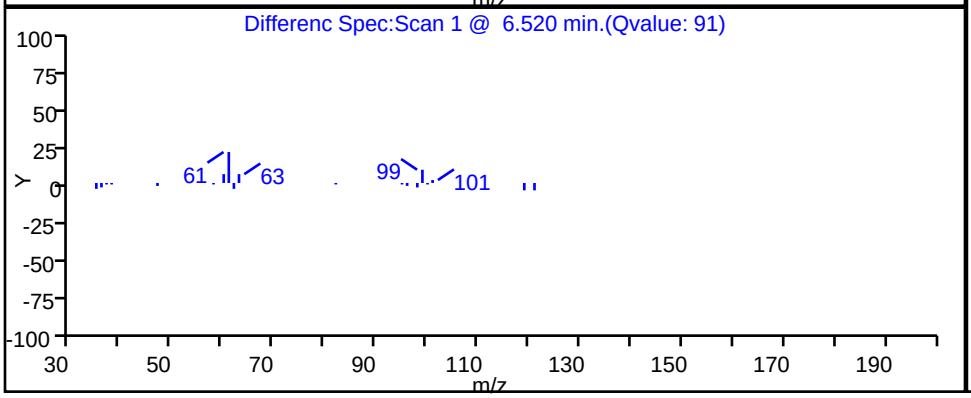












Report Date: 02-Nov-2016 07:21:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101018.D

Injection Date: 01-Nov-2016 16:39:30 Instrument ID: CHHP5

Lims ID: 180-60202-B-13 Lab Sample ID: 180-60202-13

Client ID: INFLUENT TO #003 GWTS

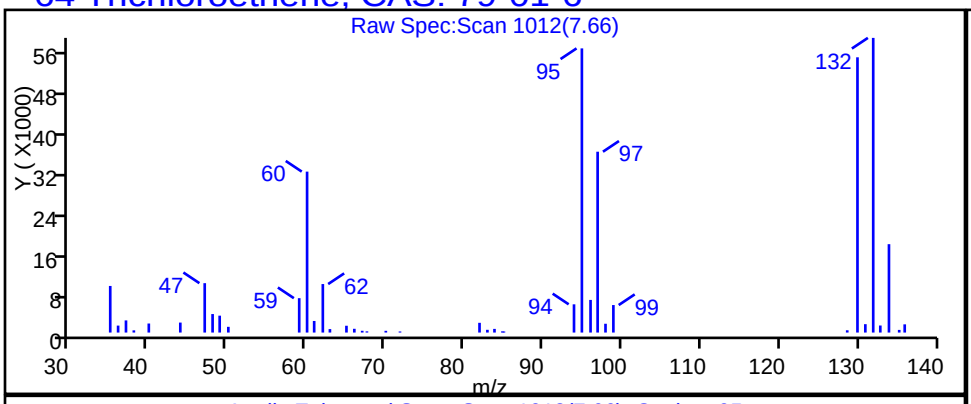
Operator ID: 001562 ALS Bottle#: 15 Worklist Smp#: 18

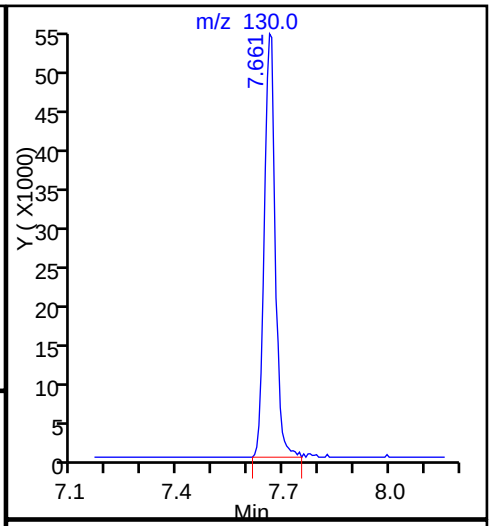
Purge Vol: 5.000 mL Dil. Factor: 25.0000

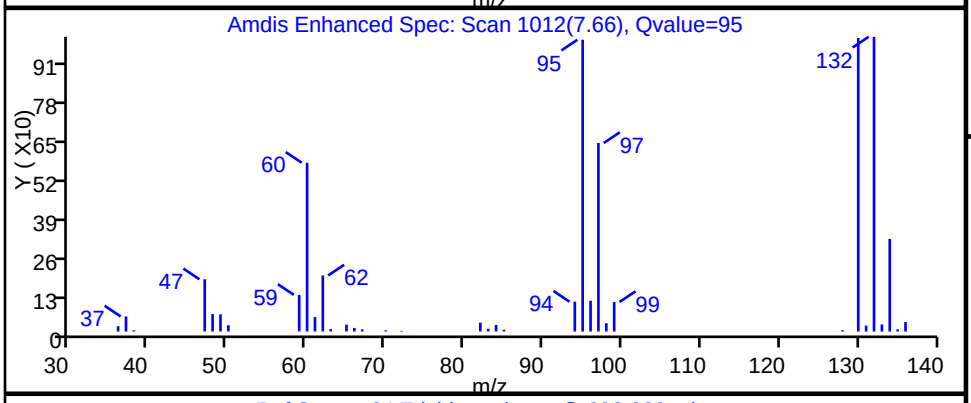
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

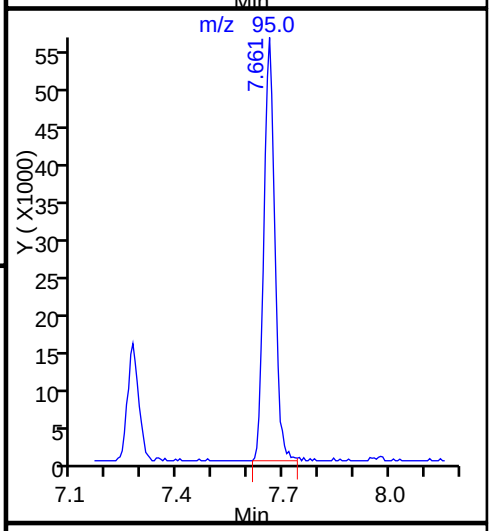
Column: DB-624 (0.18 mm) Detector MS SCAN

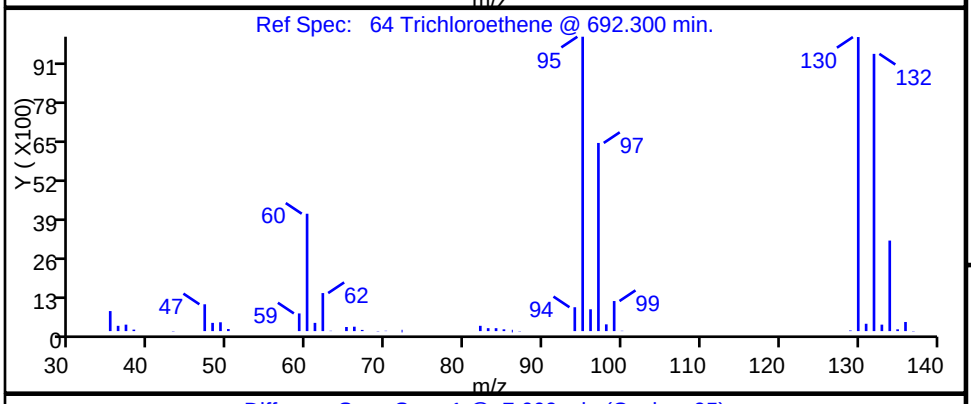
64 Trichloroethene, CAS: 79-01-6

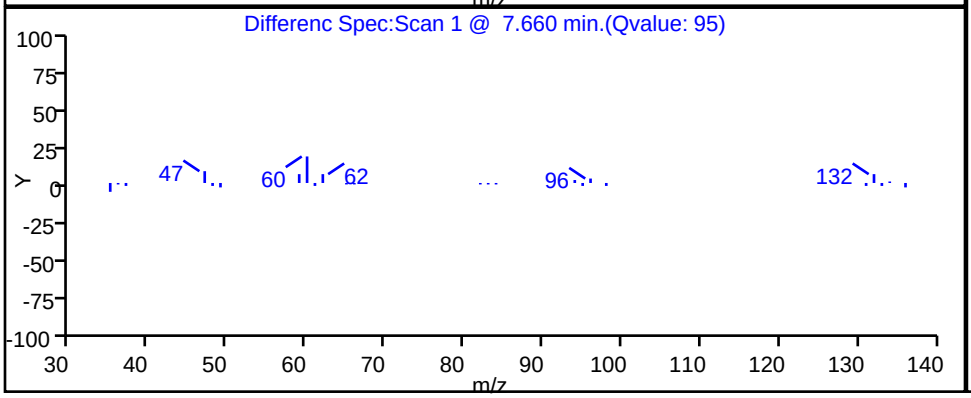


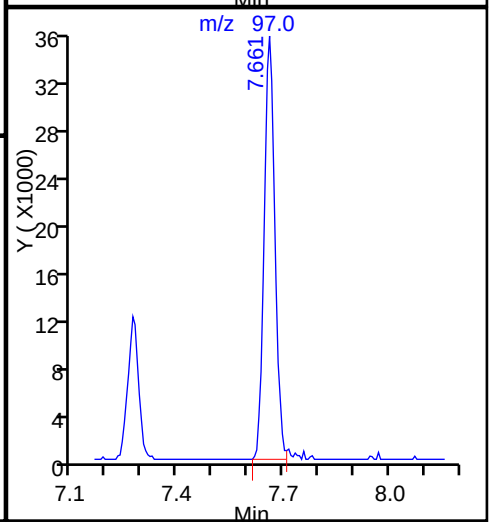












Report Date: 02-Nov-2016 07:21:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101018.D

Injection Date: 01-Nov-2016 16:39:30 Instrument ID: CHHP5

Lims ID: 180-60202-B-13 Lab Sample ID: 180-60202-13

Client ID: INFLUENT TO #003 GWTS

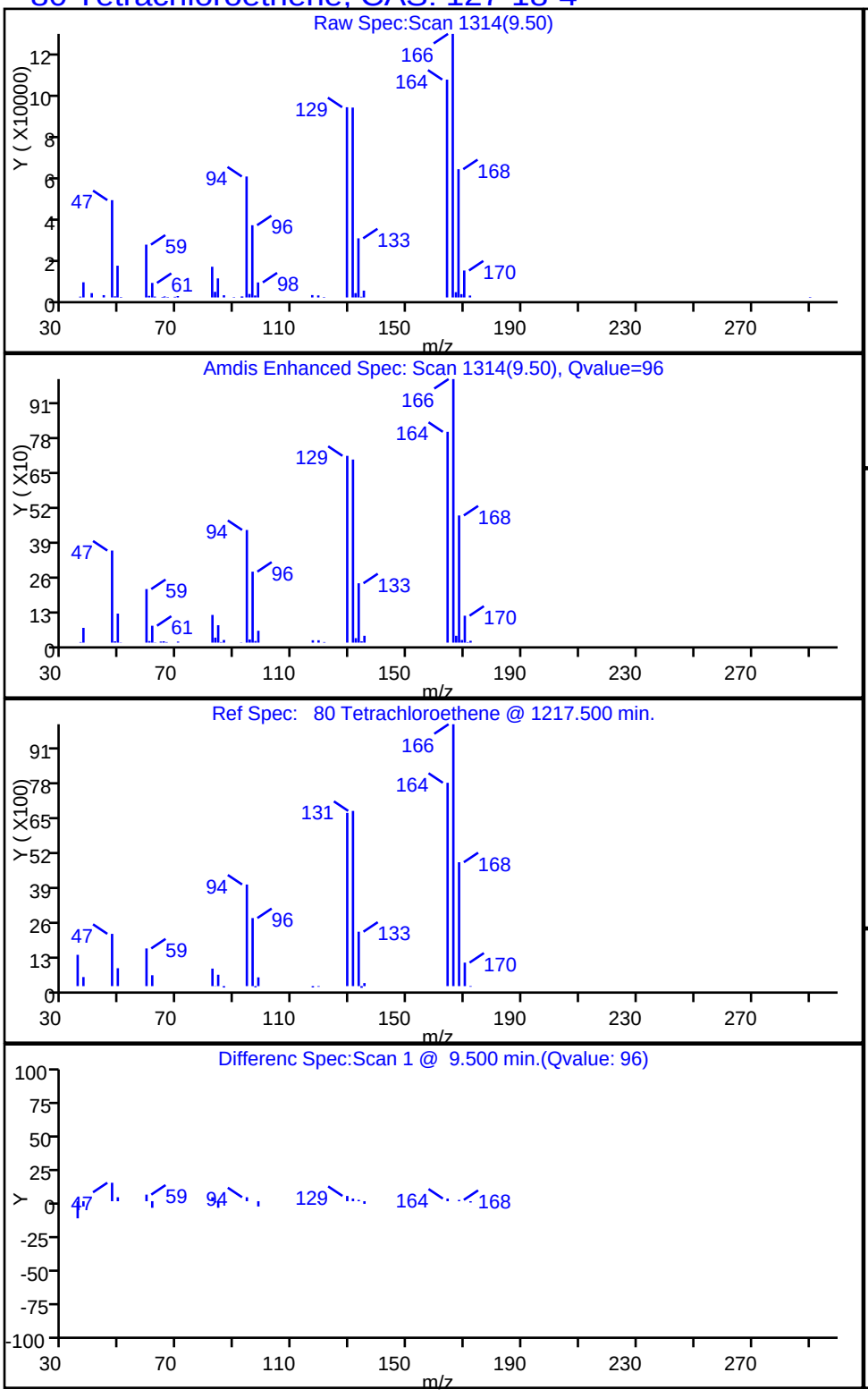
Operator ID: 001562 ALS Bottle#: 15 Worklist Smp#: 18

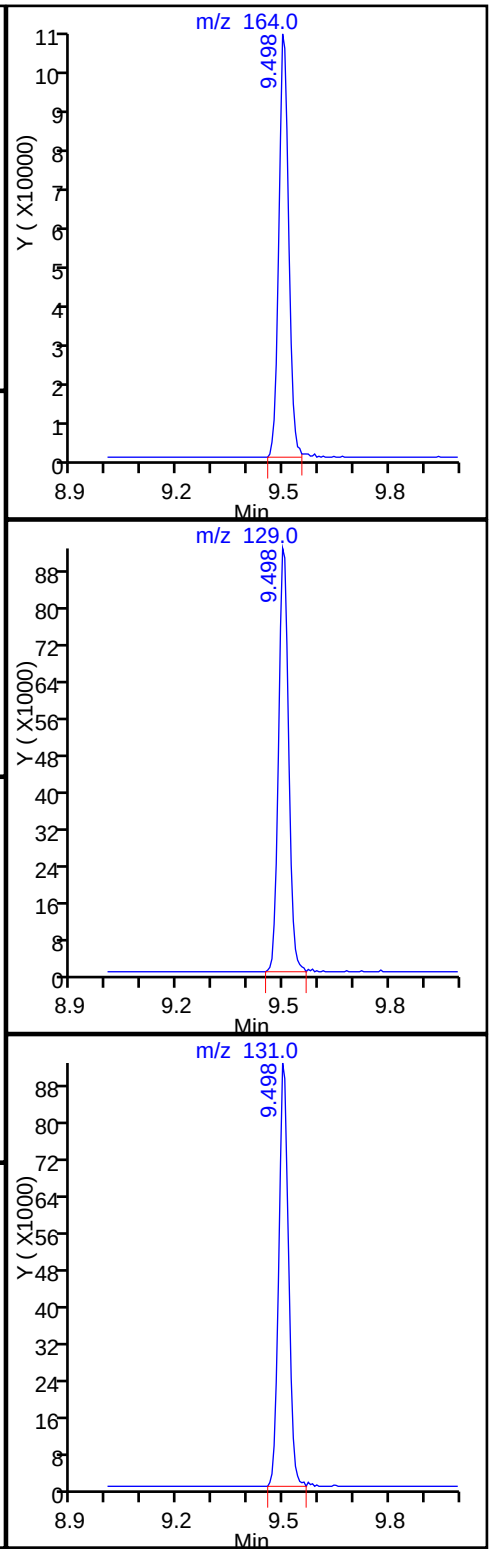
Purge Vol: 5.000 mL Dil. Factor: 25.0000

Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

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

80 Tetrachloroethene, CAS: 127-18-4





FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: OUTFALL #003 GWTS | Lab Sample ID: 180-60202-14

Matrix: Water | Lab File ID: 51101019.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:20

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 17:03

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.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U ^c	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	1.0	U	1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	1.0	U	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: OUTFALL #003 GWTS | Lab Sample ID: 180-60202-14

Matrix: Water | Lab File ID: 51101019.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:20

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 17:03

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.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	0.31	J ^c	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		72-134
2037-26-5	Toluene-d8 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	101		72-120
1868-53-7	Dibromofluoromethane (Surr)	96		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101019.D
Lims ID: 180-60202-B-14
Client ID: OUTFALL #003 GWTS
Sample Type: Client
Inject. Date: 01-Nov-2016 17:03:30 ALS Bottle#: 16 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-019
Misc. Info.: 180-60202-B-14
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:24:06 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:24:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.275	-0.009	0	130862	1000.0	
* 2 Fluorobenzene (IS)	96	7.272	7.274	-0.002	97	355834	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.377	-0.003	91	91484	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.719	-0.003	96	140876	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.548	6.550	-0.002	94	81993	48.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.919	6.921	-0.002	0	119498	48.6	
$ 7 Toluene-d8 (Surr)	98	8.920	8.923	-0.003	96	334984	48.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.557	0.003	87	140453	50.3	
12 Chloromethane	50	1.766	1.763	0.003	1	1766	0.4302	M
13 Vinyl chloride	62		1.909				ND	
15 Bromomethane	94		2.231				ND	
16 Chloroethane	64		2.377				ND	
22 1,1-Dichloroethene	96		3.338				ND	
24 Acetone	43		3.442				ND	
26 Carbon disulfide	76		3.618				ND	
31 Methylene Chloride	84		4.123				ND	
33 Acrylonitrile	53		4.512				ND	
34 trans-1,2-Dichloroethene	96		4.549				ND	
35 Methyl tert-butyl ether	73		4.573				ND	
37 1,1-Dichloroethane	63		5.188				ND	
45 cis-1,2-Dichloroethene	96	5.939	5.936	0.003	16	2140	0.9895	
46 2-Butanone (MEK)	43		5.948				ND	
49 Chlorobromomethane	128		6.222				ND	
52 Chloroform	83		6.368				ND	
53 1,1,1-Trichloroethane	97		6.526				ND	
56 Carbon tetrachloride	117		6.696				ND	
58 Benzene	78		6.927				ND	
59 1,2-Dichloroethane	62		7.000				ND	
64 Trichloroethene	130	7.661	7.657	0.004	14	1207	0.6066	
67 1,2-Dichloropropane	63		7.937				ND	
70 1,4-Dioxane	88	8.008	8.016	-0.008	1	614	31.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83	8.221	8.217	0.004	12	946	0.4127	
74 cis-1,3-Dichloropropene	75		8.661				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.813				ND	
76 Toluene	91		8.990				ND	
77 trans-1,3-Dichloropropene	75		9.239				ND	
79 1,1,2-Trichloroethane	97		9.434				ND	
80 Tetrachloroethene	164	9.504	9.501	0.003	90	1491	0.9022	
82 2-Hexanone	43		9.647				ND	
84 Chlorodibromomethane	129	9.808	9.805	0.003	1	837	0.5837	
85 Ethylene Dibromide	107		9.914				ND	
87 Chlorobenzene	112		10.401				ND	
89 1,1,1,2-Tetrachloroethane	131		10.498				ND	
90 Ethylbenzene	106		10.498				ND	
91 m-Xylene & p-Xylene	106		10.638				ND	
92 o-Xylene	106		11.015				ND	
93 Styrene	104		11.034				ND	
94 Bromoform	173	11.214	11.222	-0.008	0	1358	1.57	
99 1,1,2,2-Tetrachloroethane	83		11.703				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

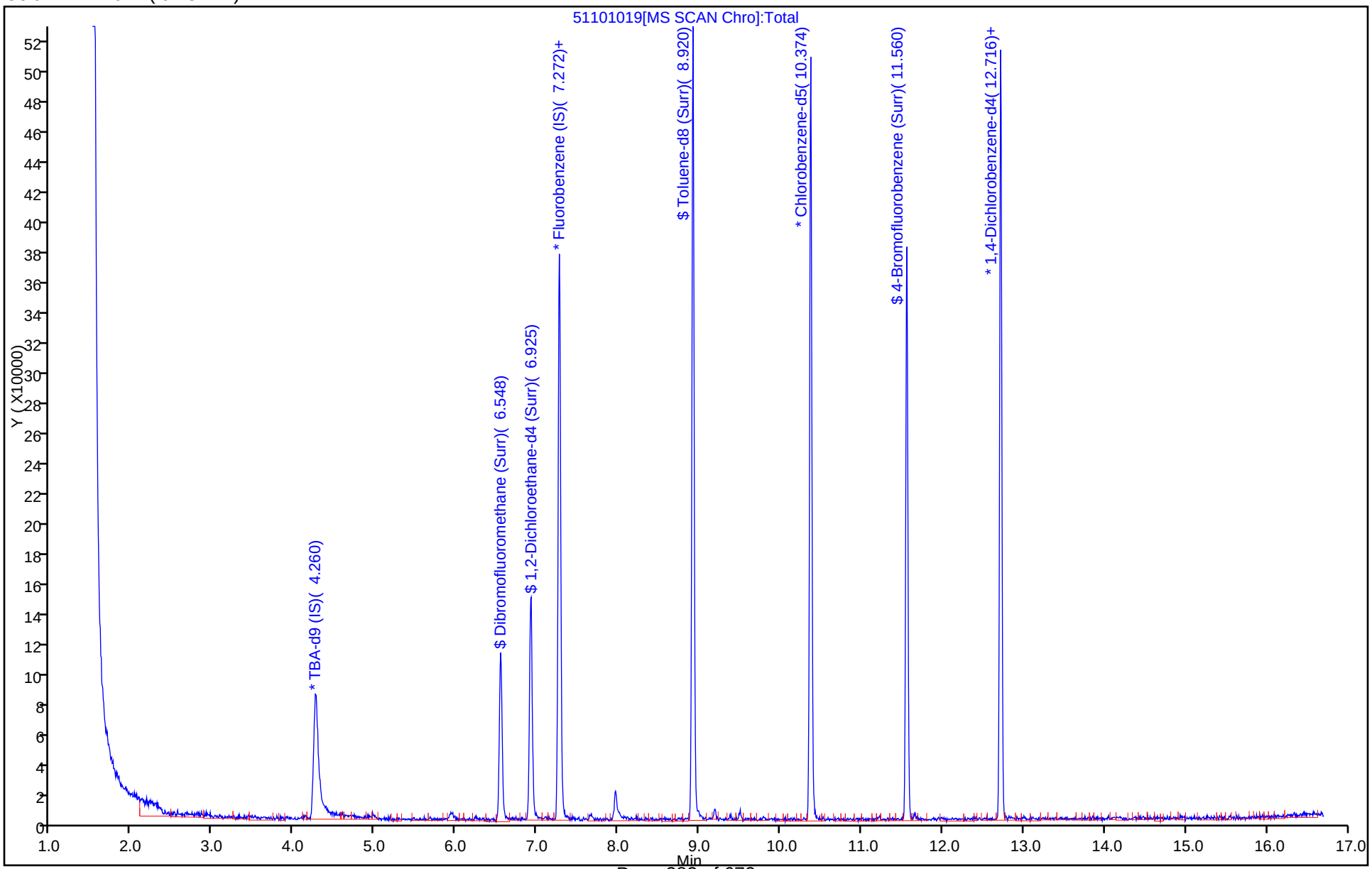
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 02-Nov-2016 07:24:06 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101019.D				
Injection Date:	01-Nov-2016 17:03:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-B-14	Lab Sample ID:	180-60202-14	Worklist Smp#:	19
Client ID:	OUTFALL #003 GWTS				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101019.D
Lims ID: 180-60202-B-14
Client ID: OUTFALL #003 GWTS
Sample Type: Client
Inject. Date: 01-Nov-2016 17:03:30 ALS Bottle#: 16 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-019
Misc. Info.: 180-60202-B-14
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:24:06 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:24:06

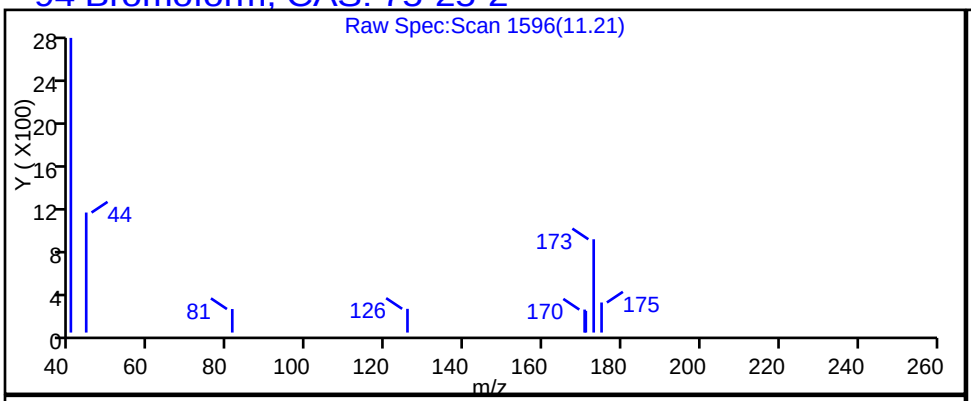
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.2	96.32
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.6	97.24
$ 7 Toluene-d8 (Surr)	50.0	48.5	97.03
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.3	100.63

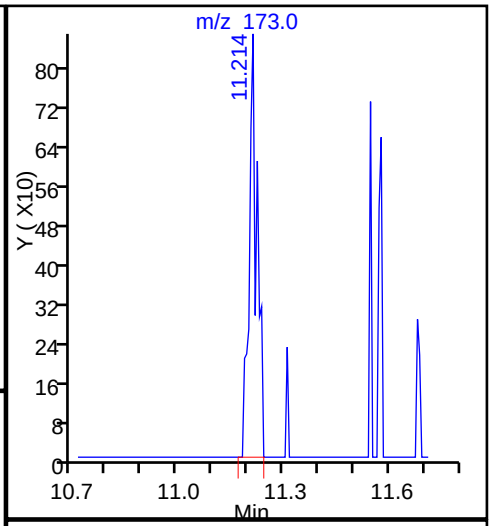
Report Date: 02-Nov-2016 07:24:07 Chrom Revision: 2.2 17-Oct-2016 09:27:18

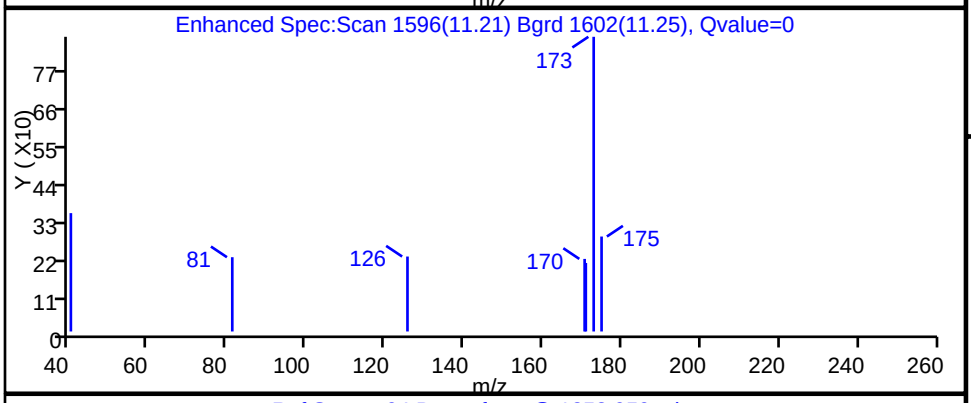
TestAmerica Pittsburgh

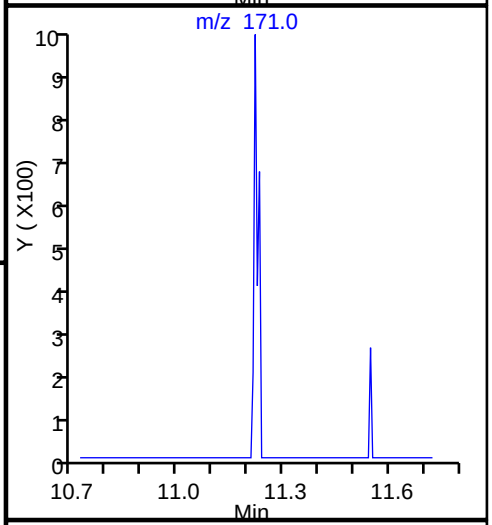
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101019.D				
Injection Date:	01-Nov-2016 17:03:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-14	Lab Sample ID:	180-60202-14		
Client ID:	OUTFALL #003 GWTS				
Operator ID:	001562	ALS Bottle#:	16	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

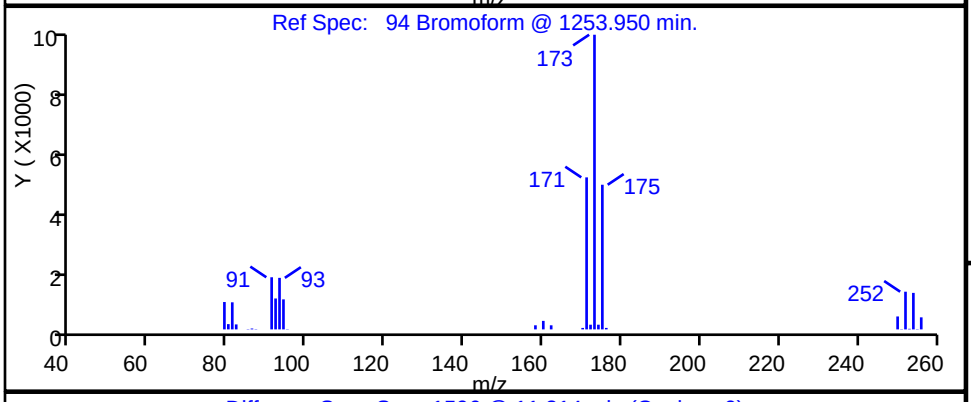
94 Bromoform, CAS: 75-25-2

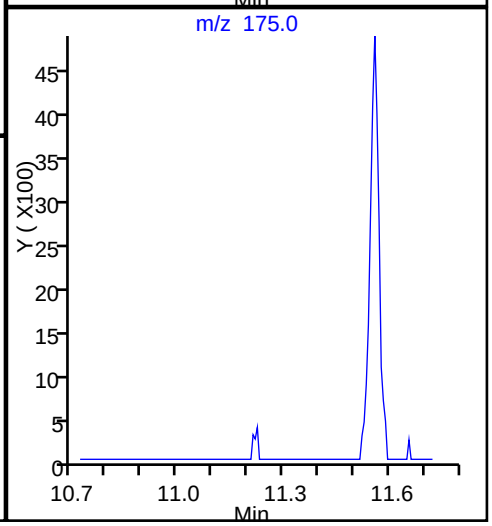


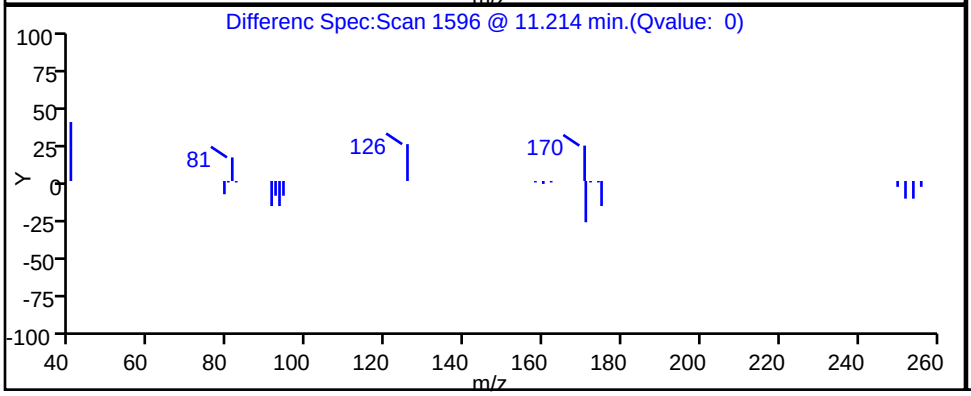












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

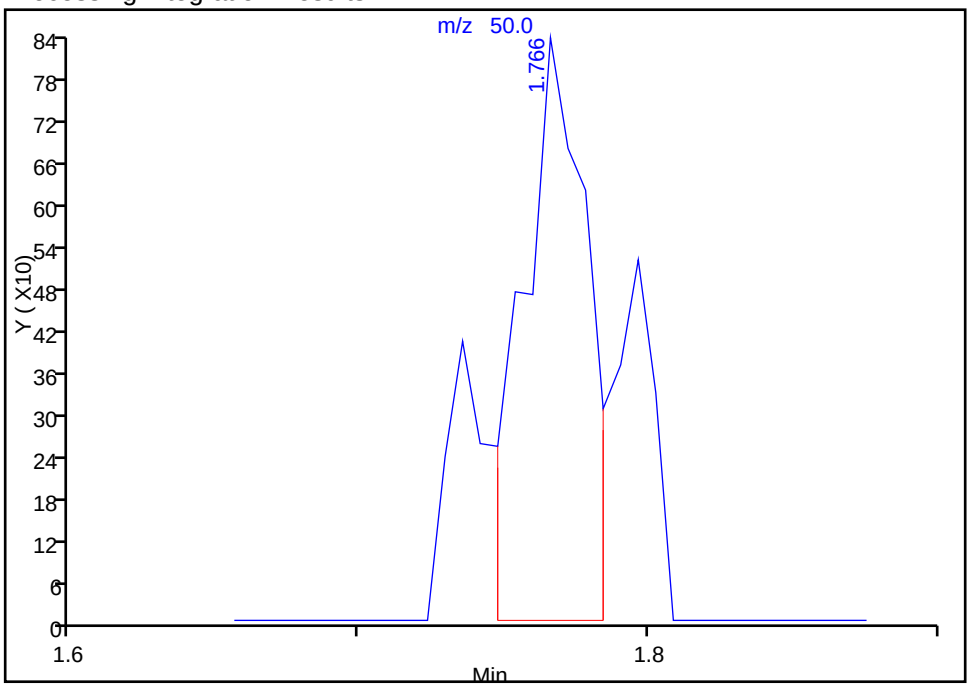
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101019.D				
Injection Date:	01-Nov-2016 17:03:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-14	Lab Sample ID:	180-60202-14		
Client ID:	OUTFALL #003 GWTS				
Operator ID:	001562	ALS Bottle#:	16	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Chloromethane, CAS: 74-87-3

Signal: 1

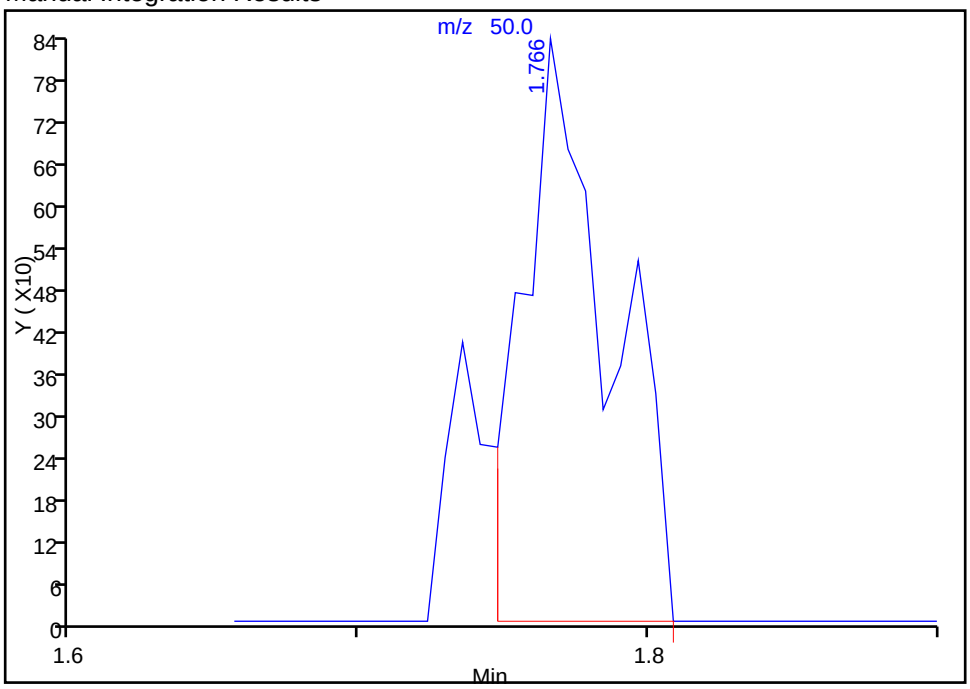
Processing Integration Results

RT: 1.77
Area: 1324
Amount: 0.322512
Amount Units: ng



Manual Integration Results

RT: 1.77
Area: 1766
Amount: 0.430179
Amount Units: ng



Reviewer: fergusond, 02-Nov-2016 07:24:06

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-6-0/1-0 | Lab Sample ID: 180-60202-15

Matrix: Water | Lab File ID: 51101020.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 17:27

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.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U ^c	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	35		1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	11		1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	46		1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-6-0/1-0 | Lab Sample ID: 180-60202-15

Matrix: Water | Lab File ID: 51101020.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 17:27

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.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U ^c	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		72-134
2037-26-5	Toluene-d8 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		72-120
1868-53-7	Dibromofluoromethane (Surr)	100		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101020.D
Lims ID: 180-60202-B-15
Client ID: HD-CW-6-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2016 17:27:30 ALS Bottle#: 17 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-020
Misc. Info.: 180-60202-B-15
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:25:26 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:25:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.275	-0.009	0	148052	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.274	-0.003	97	355897	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.377	-0.004	91	91582	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.719	-0.003	98	137505	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.553	6.550	0.003	94	85077	50.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.921	-0.003	0	127227	51.8	
$ 7 Toluene-d8 (Surr)	98	8.920	8.923	-0.003	95	336091	48.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.557	0.003	84	138560	49.6	
12 Chloromethane	50		1.763				ND	
13 Vinyl chloride	62		1.909				ND	
15 Bromomethane	94		2.231				ND	
16 Chloroethane	64		2.377				ND	
22 1,1-Dichloroethene	96		3.338				ND	
24 Acetone	43	3.463	3.442	0.021	84	6129	6.69	
26 Carbon disulfide	76		3.618				ND	
31 Methylene Chloride	84	4.144	4.123	0.021	42	1136	0.5045	
33 Acrylonitrile	53		4.512				ND	
34 trans-1,2-Dichloroethene	96	4.539	4.549	-0.010	1	579	0.2955	
35 Methyl tert-butyl ether	73		4.573				ND	
37 1,1-Dichloroethane	63		5.188				ND	
45 cis-1,2-Dichloroethene	96	5.939	5.936	0.003	85	381393	176.3	
46 2-Butanone (MEK)	43		5.948				ND	
49 Chlorobromomethane	128		6.222				ND	
52 Chloroform	83		6.368				ND	
53 1,1,1-Trichloroethane	97		6.526				ND	
56 Carbon tetrachloride	117		6.696				ND	
58 Benzene	78		6.927				ND	
59 1,2-Dichloroethane	62		7.000				ND	
64 Trichloroethene	130	7.660	7.657	0.003	96	109546	55.0	
67 1,2-Dichloropropane	63		7.937				ND	
70 1,4-Dioxane	88		8.016				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.217				ND	
74 cis-1,3-Dichloropropene	75		8.661				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.813				ND	
76 Toluene	91		8.990				ND	
77 trans-1,3-Dichloropropene	75		9.239				ND	
79 1,1,2-Trichloroethane	97		9.434				ND	
80 Tetrachloroethene	164	9.504	9.501	0.003	97	384049	232.1	
82 2-Hexanone	43		9.647				ND	
84 Chlorodibromomethane	129		9.805				ND	
85 Ethylene Dibromide	107		9.914				ND	
87 Chlorobenzene	112		10.401				ND	
89 1,1,1,2-Tetrachloroethane	131		10.498				ND	
90 Ethylbenzene	106		10.498				ND	
91 m-Xylene & p-Xylene	106		10.638				ND	
92 o-Xylene	106		11.015				ND	
93 Styrene	104		11.034				ND	
94 Bromoform	173		11.222				ND	
99 1,1,2,2-Tetrachloroethane	83		11.703				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

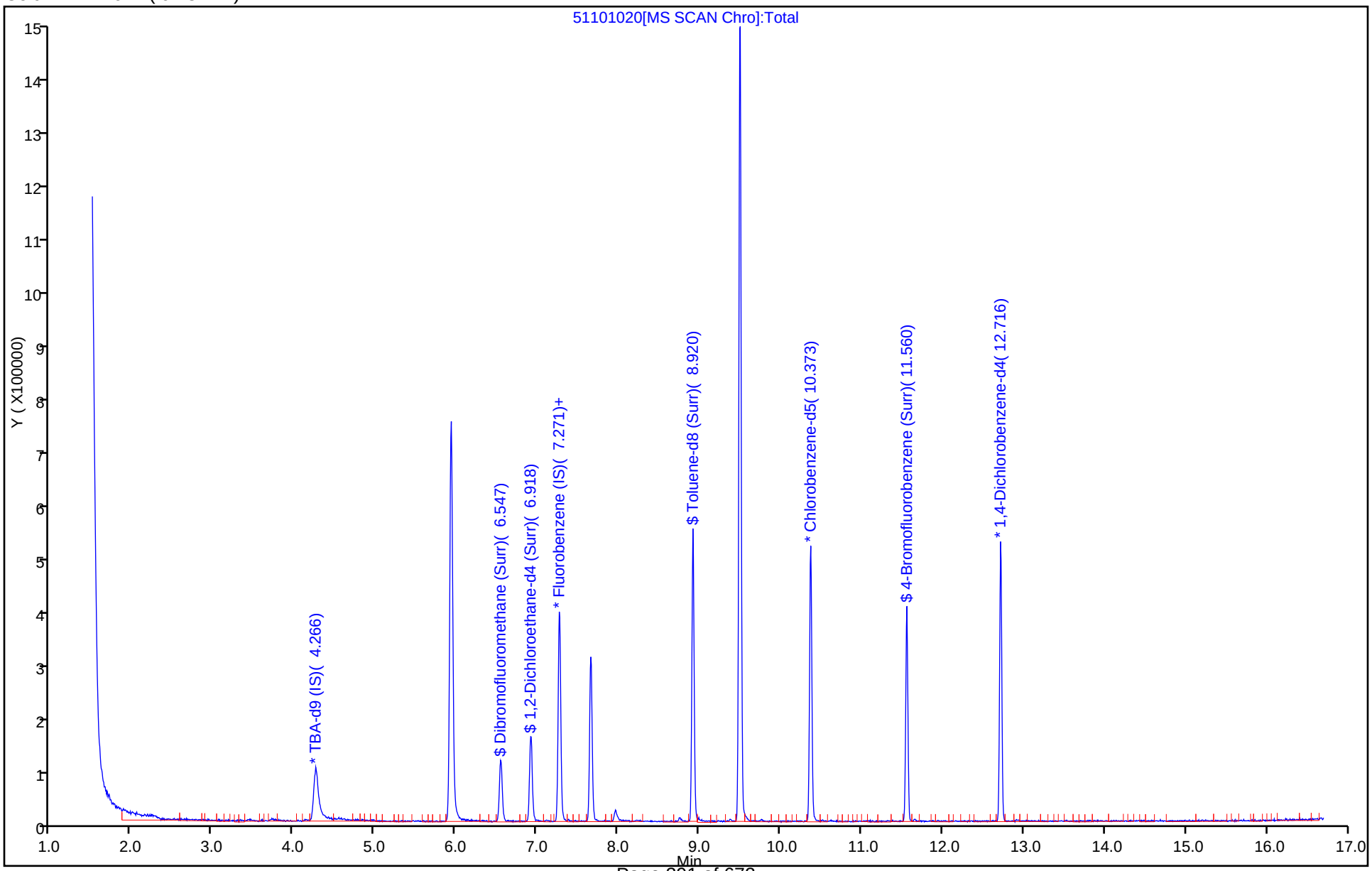
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 02-Nov-2016 07:25:26 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101020.D				
Injection Date:	01-Nov-2016 17:27:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-B-15	Lab Sample ID:	180-60202-15	Worklist Smp#:	20
Client ID:	HD-CW-6-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101020.D
Lims ID: 180-60202-B-15
Client ID: HD-CW-6-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2016 17:27:30 ALS Bottle#: 17 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-020
Misc. Info.: 180-60202-B-15
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:25:26 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:25:26

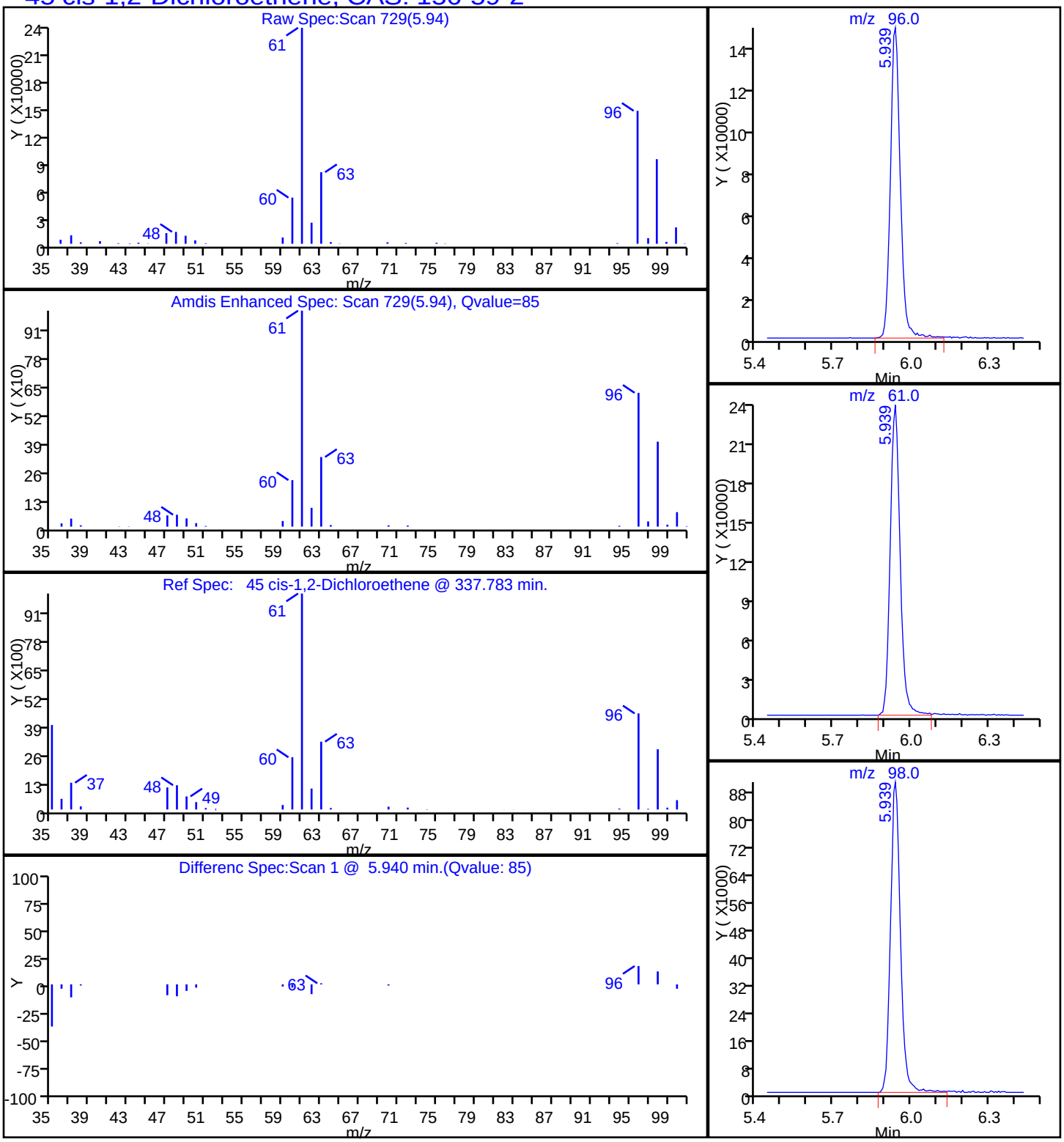
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.0	99.93
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	51.8	103.51
$ 7 Toluene-d8 (Surr)	50.0	48.6	97.25
$ 8 4-Bromofluorobenzene (Surr)	50.0	49.6	99.16

Report Date: 02-Nov-2016 07:25:26 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101020.D				
Injection Date:	01-Nov-2016 17:27:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-15	Lab Sample ID:	180-60202-15		
Client ID:	HD-CW-6-0/1-0				
Operator ID:	001562	ALS Bottle#:	17	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



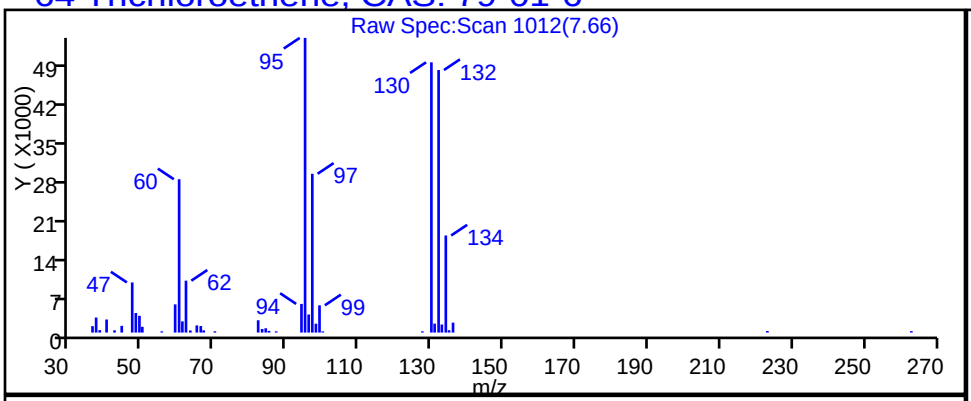
Report Date: 02-Nov-2016 07:25:26 Chrom Revision: 2.2 17-Oct-2016 09:27:18

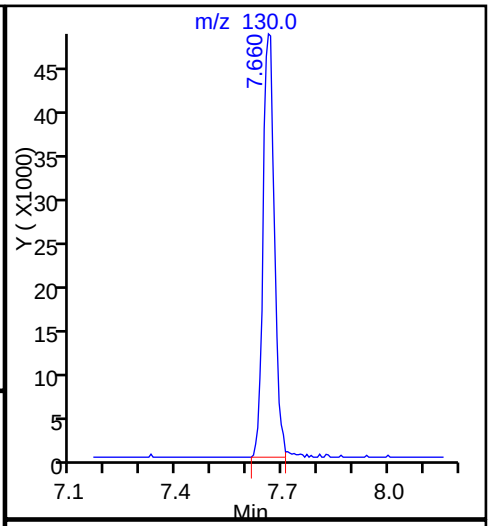
TestAmerica Pittsburgh

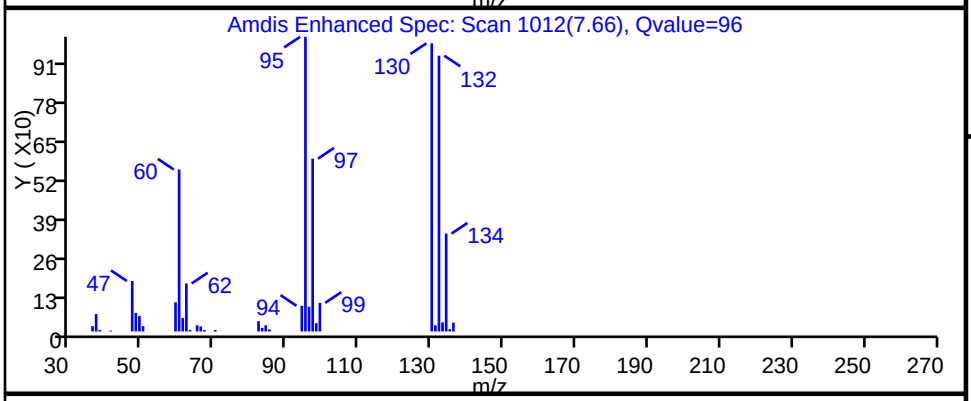
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101020.D

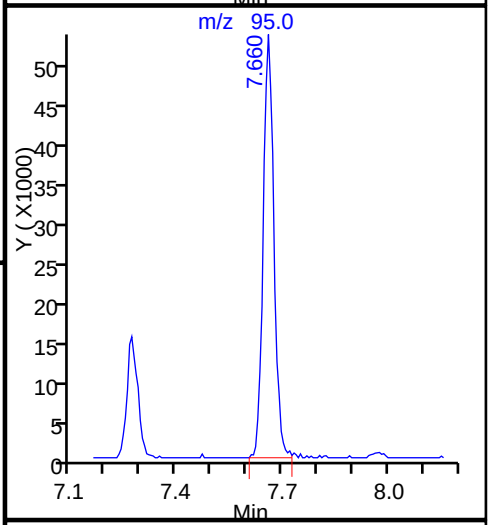
Injection Date:	01-Nov-2016 17:27:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-15	Lab Sample ID:	180-60202-15		
Client ID:	HD-CW-6-0/1-0				
Operator ID:	001562	ALS Bottle#:	17	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

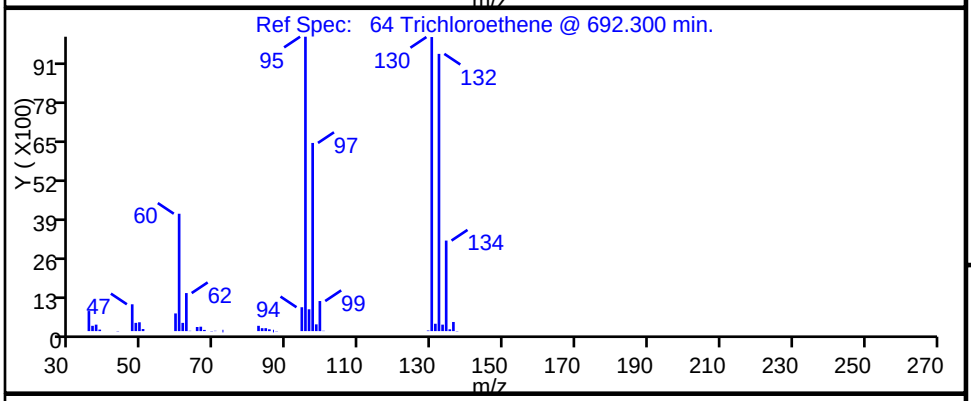
64 Trichloroethene, CAS: 79-01-6

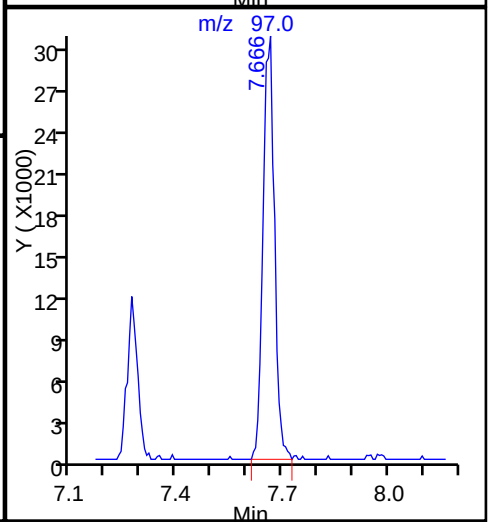


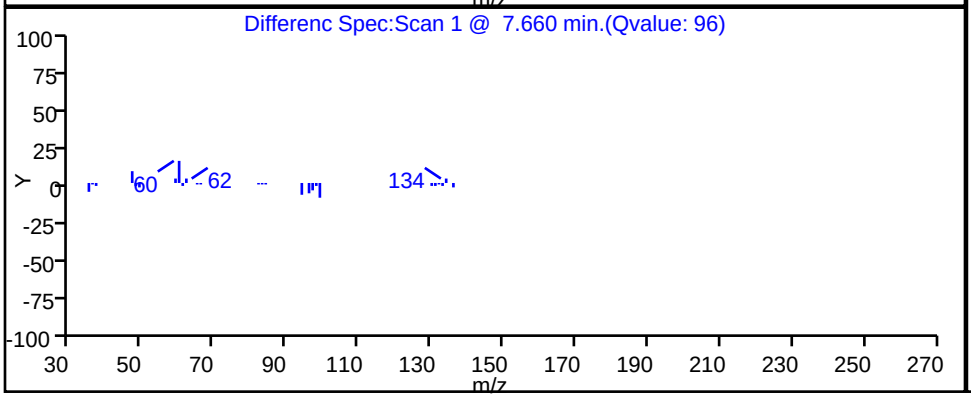












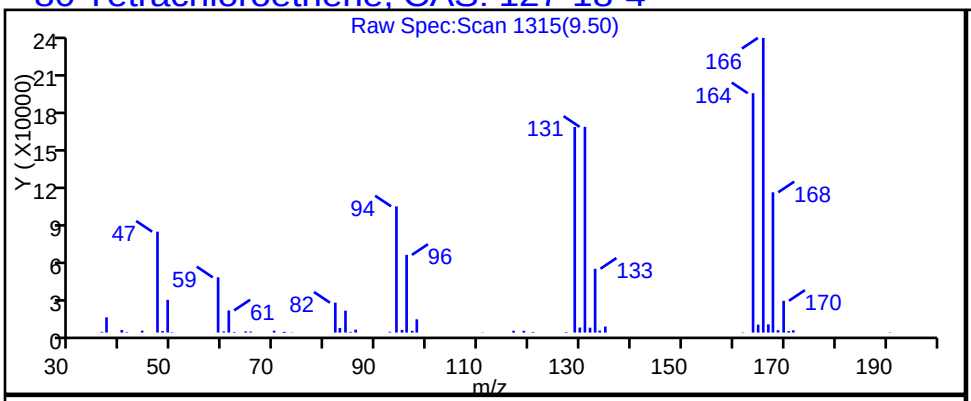
Report Date: 02-Nov-2016 07:25:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

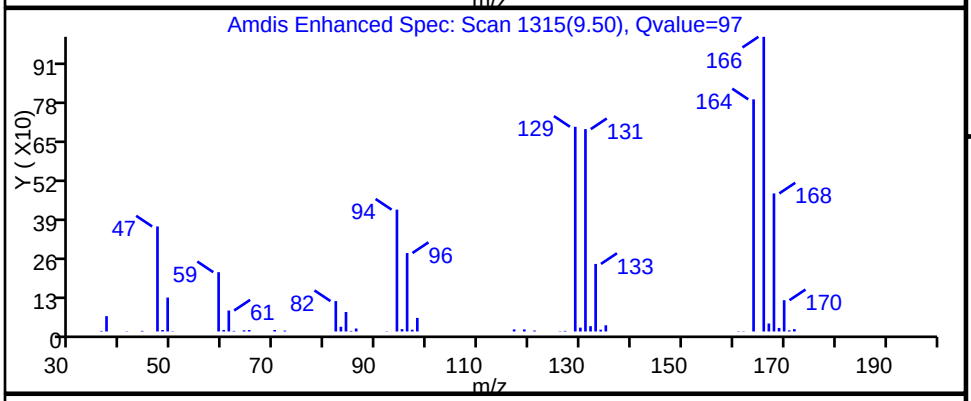
TestAmerica Pittsburgh

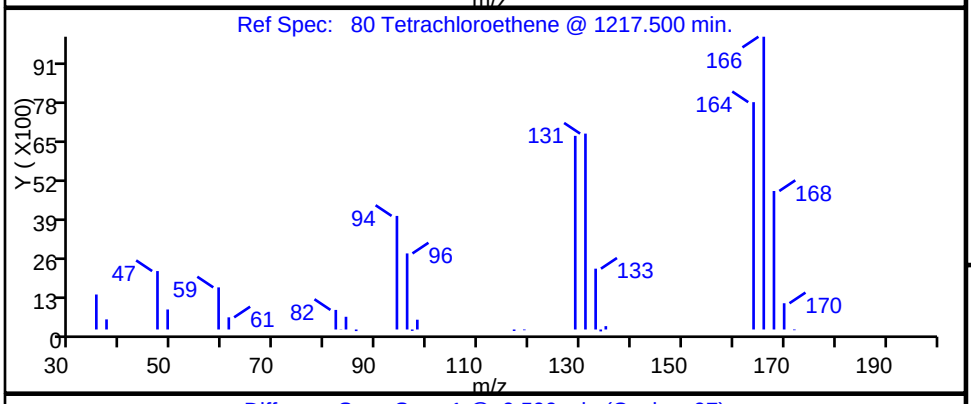
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101020.D

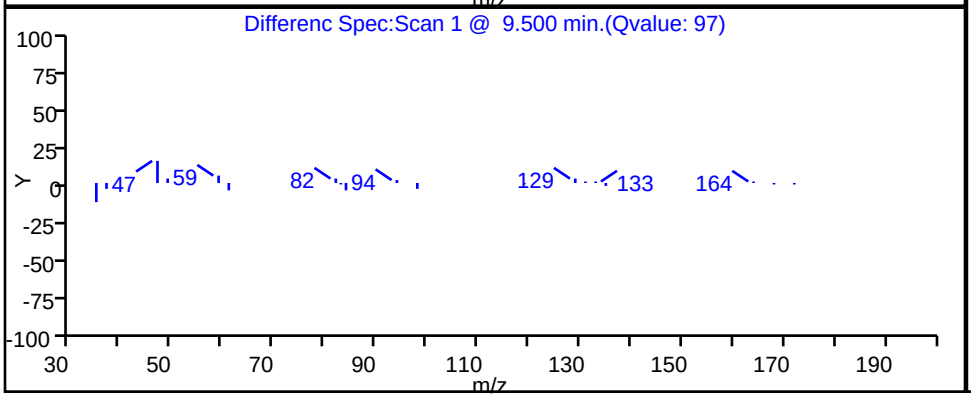
Injection Date:	01-Nov-2016 17:27:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-15	Lab Sample ID:	180-60202-15
Client ID:	HD-CW-6-0/1-0		
Operator ID:	001562	ALS Bottle#:	17 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

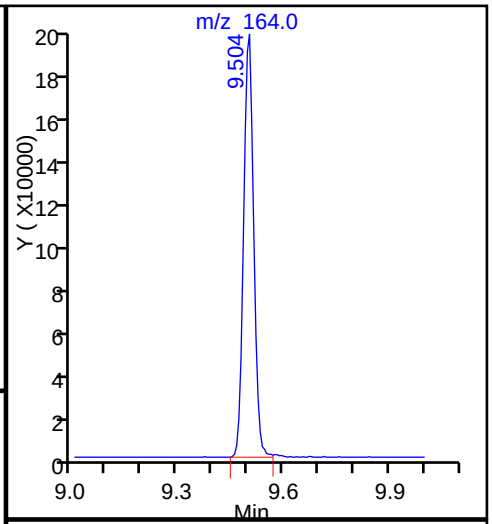
80 Tetrachloroethene, CAS: 127-18-4

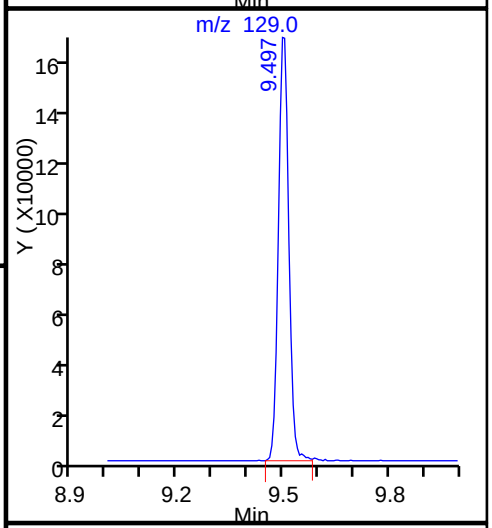


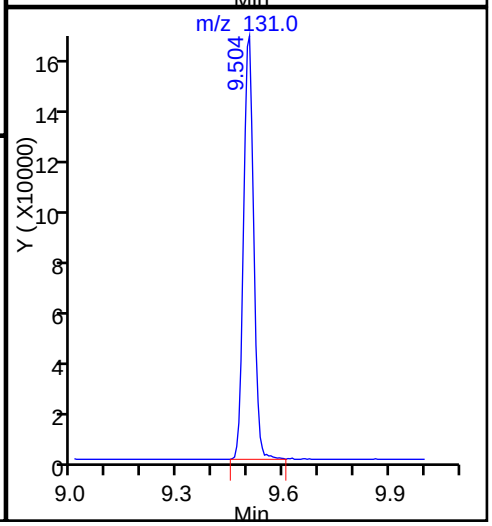












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-4-0/1-0 | Lab Sample ID: 180-60202-16

Matrix: Water | Lab File ID: 51101022.D

Analysis Method: 8260C | Date Collected: 10/26/2016 09:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 18:15

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.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U ^c	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	33		1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	2.7		1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	0.52	J	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-4-0/1-0 | Lab Sample ID: 180-60202-16

Matrix: Water | Lab File ID: 51101022.D

Analysis Method: 8260C | Date Collected: 10/26/2016 09:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 18:15

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.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U ^c	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		72-134
2037-26-5	Toluene-d8 (Surr)	95		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		72-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101022.D
Lims ID: 180-60202-A-16
Client ID: HD-CW-4-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2016 18:15:30 ALS Bottle#: 19 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-022
Misc. Info.: 180-60202-A-16
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:27:39 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:27:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.268	4.275	-0.007	0	160964	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.274	-0.001	97	353219	50.0	
* 3 Chlorobenzene-d5	119	10.376	10.377	-0.001	91	91804	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.718	12.719	-0.001	96	141380	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.549	6.550	-0.001	92	85714	50.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.920	6.921	-0.001	0	120968	49.6	
$ 7 Toluene-d8 (Surr)	98	8.922	8.923	-0.001	95	329581	47.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.556	11.557	-0.001	87	140511	50.2	
12 Chloromethane	50	1.761	1.763	-0.002	1	3025	0.7423	M
13 Vinyl chloride	62		1.909				ND	
15 Bromomethane	94		2.231				ND	
16 Chloroethane	64		2.377				ND	
22 1,1-Dichloroethene	96		3.338				ND	
24 Acetone	43	3.440	3.442	-0.002	64	4223	4.64	
26 Carbon disulfide	76		3.618				ND	
31 Methylene Chloride	84	4.110	4.123	-0.013	4	1391	0.6225	
33 Acrylonitrile	53		4.512				ND	
34 trans-1,2-Dichloroethene	96		4.549				ND	
35 Methyl tert-butyl ether	73	4.566	4.573	-0.007	40	2043	0.4045	
37 1,1-Dichloroethane	63		5.188				ND	
45 cis-1,2-Dichloroethene	96	5.935	5.936	-0.001	85	354550	165.2	
46 2-Butanone (MEK)	43		5.948				ND	
49 Chlorobromomethane	128		6.222				ND	
52 Chloroform	83		6.368				ND	
53 1,1,1-Trichloroethane	97		6.526				ND	
56 Carbon tetrachloride	117		6.696				ND	
58 Benzene	78		6.927				ND	
59 1,2-Dichloroethane	62		7.000				ND	
64 Trichloroethene	130	7.656	7.657	-0.001	95	26781	13.6	
67 1,2-Dichloropropane	63		7.937				ND	
70 1,4-Dioxane	88		8.016				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.217				ND	
74 cis-1,3-Dichloropropene	75		8.661				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.813				ND	
76 Toluene	91		8.990				ND	
77 trans-1,3-Dichloropropene	75		9.239				ND	
79 1,1,2-Trichloroethane	97		9.434				ND	
80 Tetrachloroethene	164	9.512	9.501	0.011	69	4317	2.60	
82 2-Hexanone	43		9.647				ND	
84 Chlorodibromomethane	129		9.805				ND	
85 Ethylene Dibromide	107		9.914				ND	
87 Chlorobenzene	112		10.401				ND	
89 1,1,1,2-Tetrachloroethane	131		10.498				ND	
90 Ethylbenzene	106		10.498				ND	
91 m-Xylene & p-Xylene	106		10.638				ND	
92 o-Xylene	106		11.015				ND	
93 Styrene	104		11.034				ND	
94 Bromoform	173		11.222				ND	
99 1,1,2,2-Tetrachloroethane	83		11.703				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

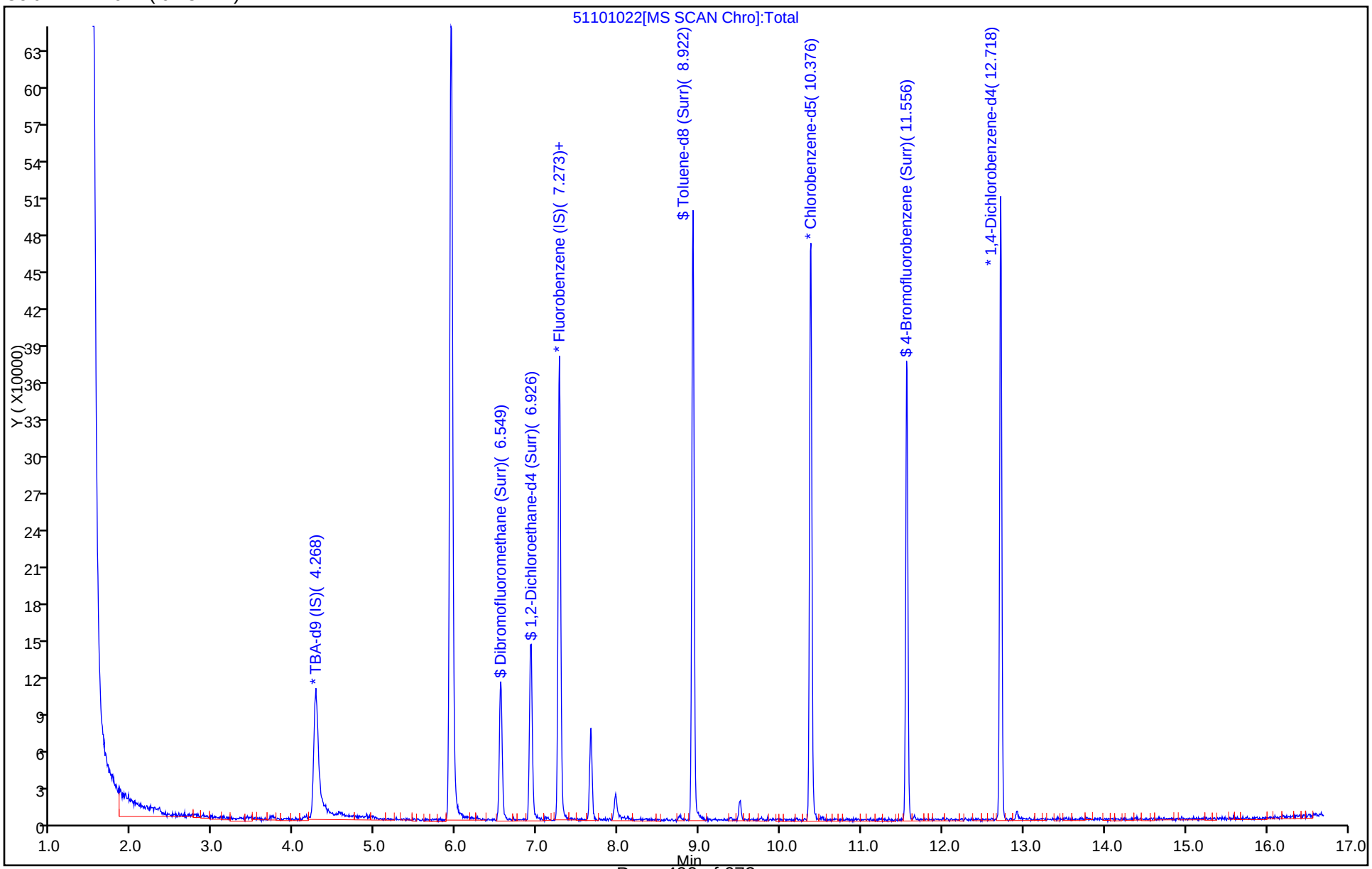
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 02-Nov-2016 07:27:40 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101022.D				
Injection Date:	01-Nov-2016 18:15:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-A-16	Lab Sample ID:	180-60202-16	Worklist Smp#:	22
Client ID:	HD-CW-4-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101022.D				
Lims ID:	180-60202-A-16				
Client ID:	HD-CW-4-0/1-0				
Sample Type:	Client				
Inject. Date:	01-Nov-2016 18:15:30	ALS Bottle#:	19	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	180-0014130-022				
Misc. Info.:	180-60202-A-16				
Operator ID:	001562	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	02-Nov-2016 07:27:39	Calib Date:	22-Oct-2016 17:46:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK014				

First Level Reviewer: fergusond Date: 02-Nov-2016 07:27:39

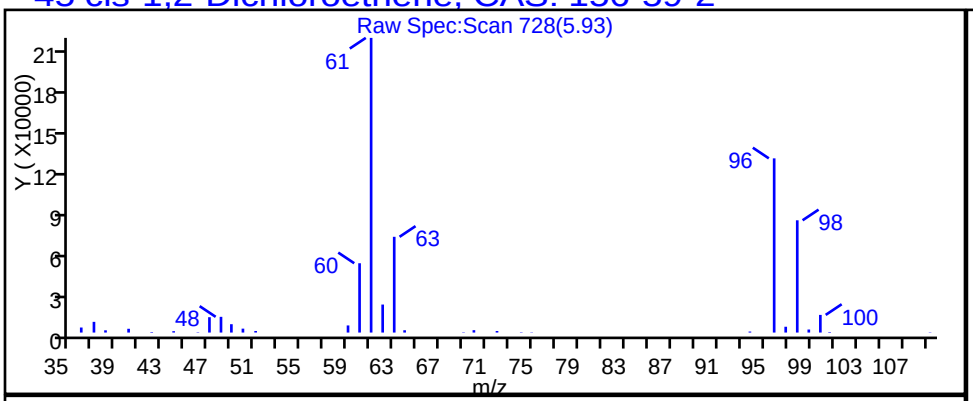
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.7	101.44
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.6	99.17
$ 7 Toluene-d8 (Surr)	50.0	47.6	95.13
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.2	100.32

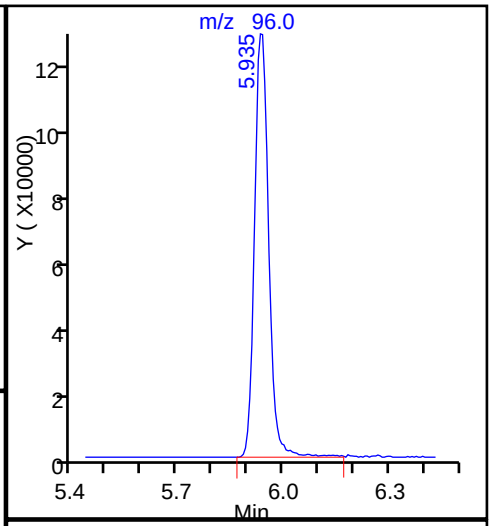
Report Date: 02-Nov-2016 07:27:40 Chrom Revision: 2.2 17-Oct-2016 09:27:18

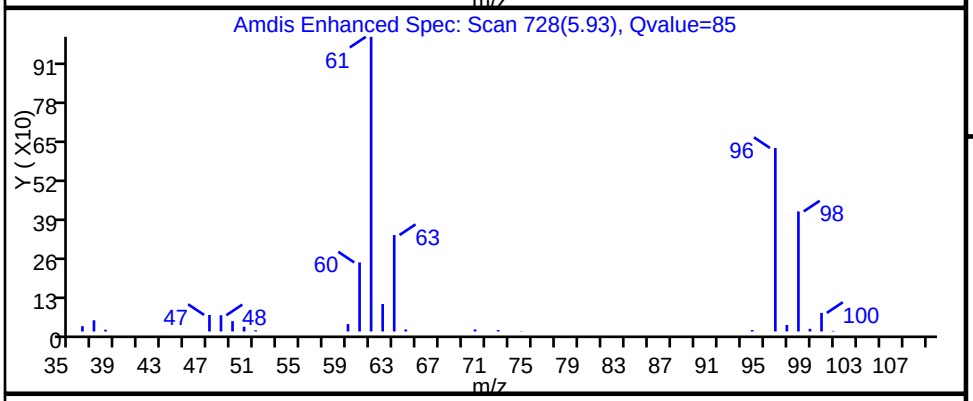
TestAmerica Pittsburgh

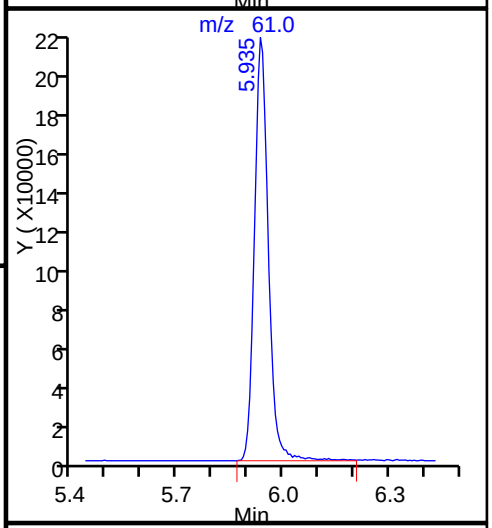
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101022.D				
Injection Date:	01-Nov-2016 18:15:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-16	Lab Sample ID:	180-60202-16		
Client ID:	HD-CW-4-0/1-0				
Operator ID:	001562	ALS Bottle#:	19	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

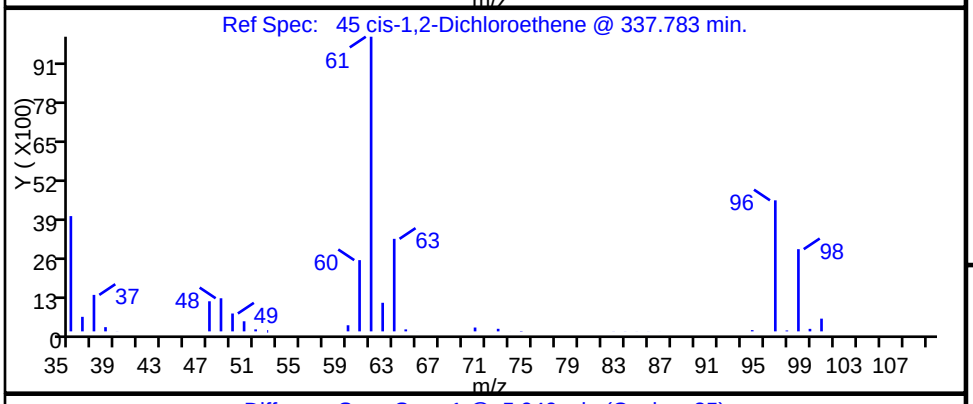
45 cis-1,2-Dichloroethene, CAS: 156-59-2

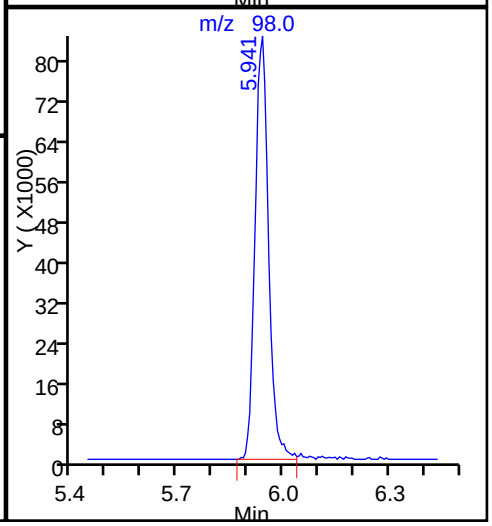


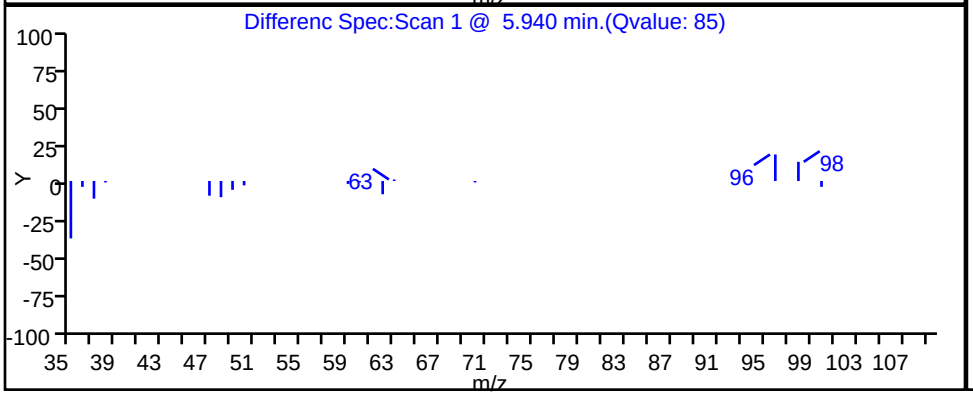












Report Date: 02-Nov-2016 07:27:40 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101022.D

Injection Date: 01-Nov-2016 18:15:30 Instrument ID: CHHP5

Lims ID: 180-60202-A-16 Lab Sample ID: 180-60202-16

Client ID: HD-CW-4-0/1-0

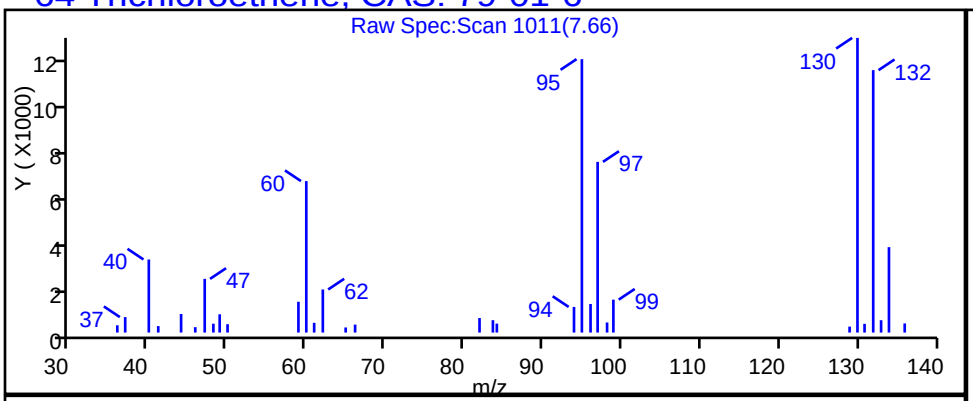
Operator ID: 001562 ALS Bottle#: 19 Worklist Smp#: 22

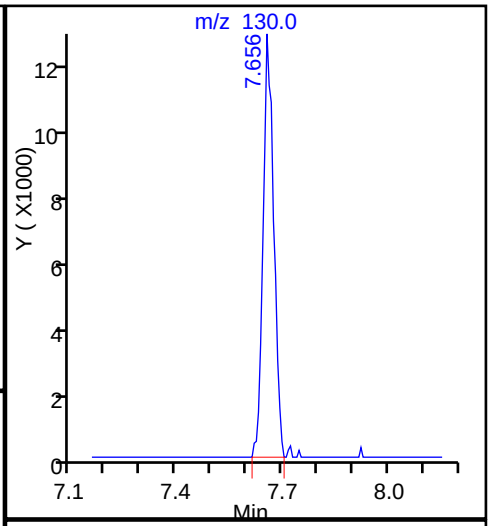
Purge Vol: 5.000 mL Dil. Factor: 1.0000

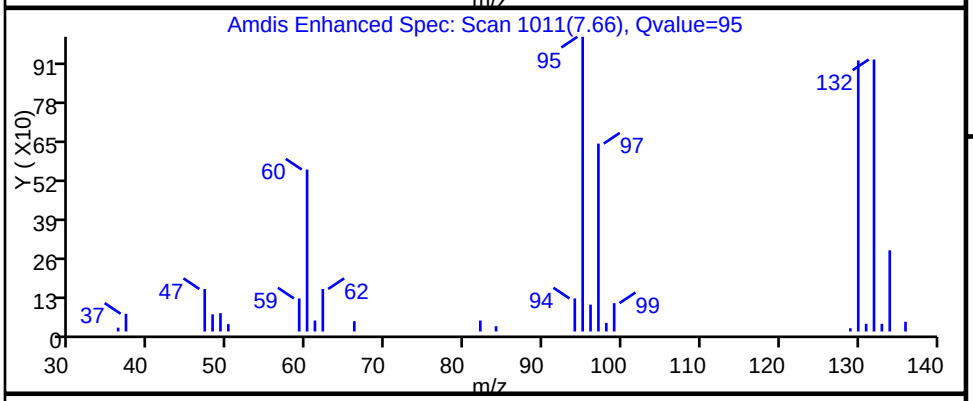
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL

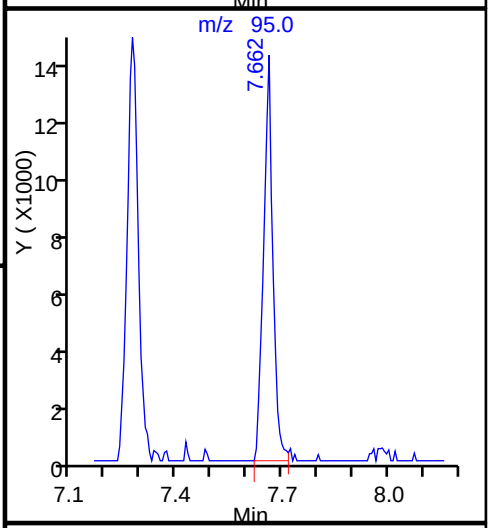
Column: DB-624 (0.18 mm) Detector MS SCAN

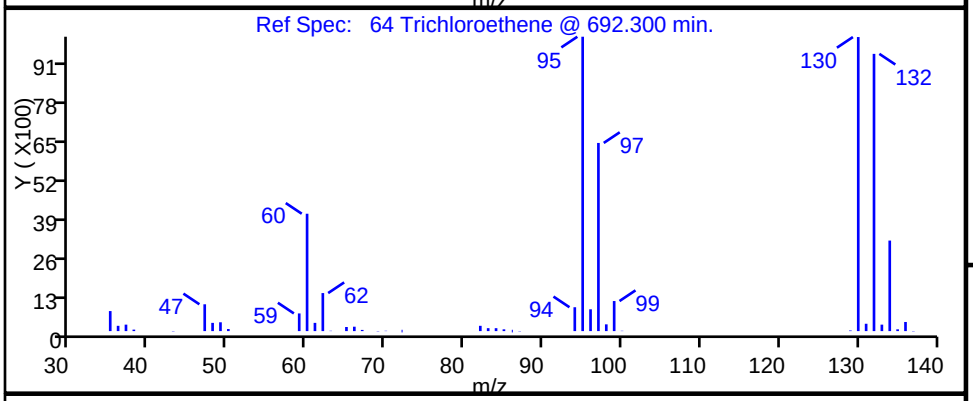
64 Trichloroethene, CAS: 79-01-6

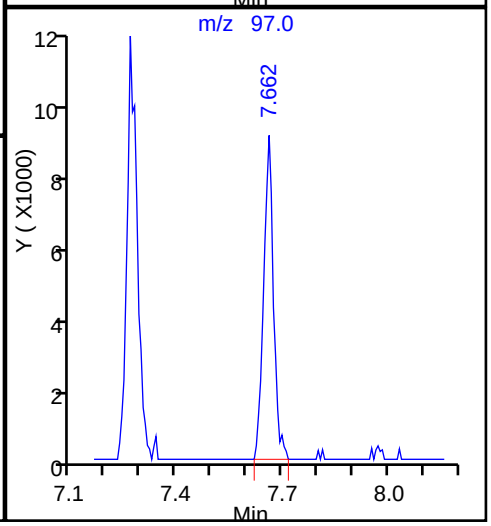


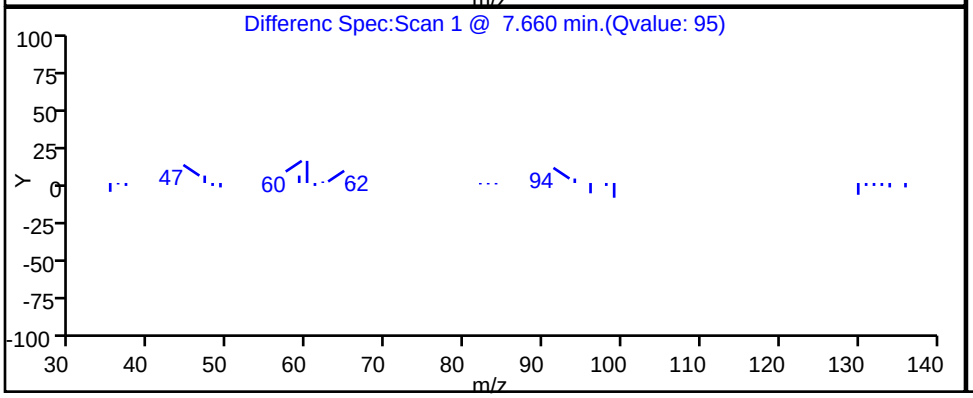












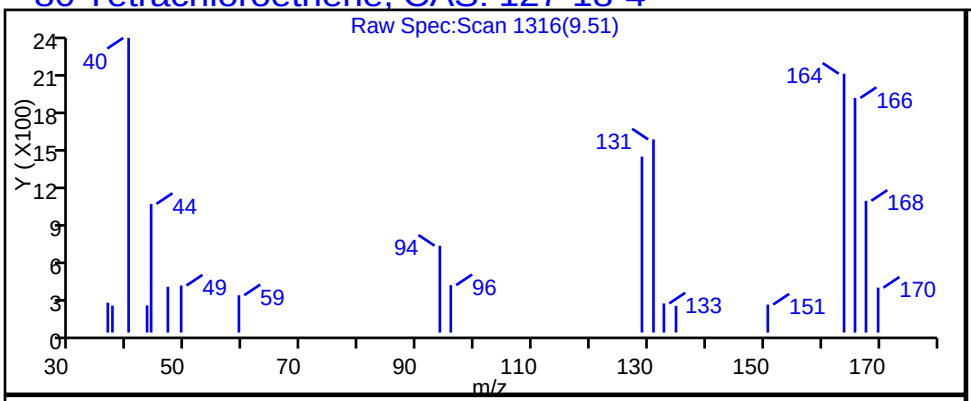
Report Date: 02-Nov-2016 07:27:40 Chrom Revision: 2.2 17-Oct-2016 09:27:18

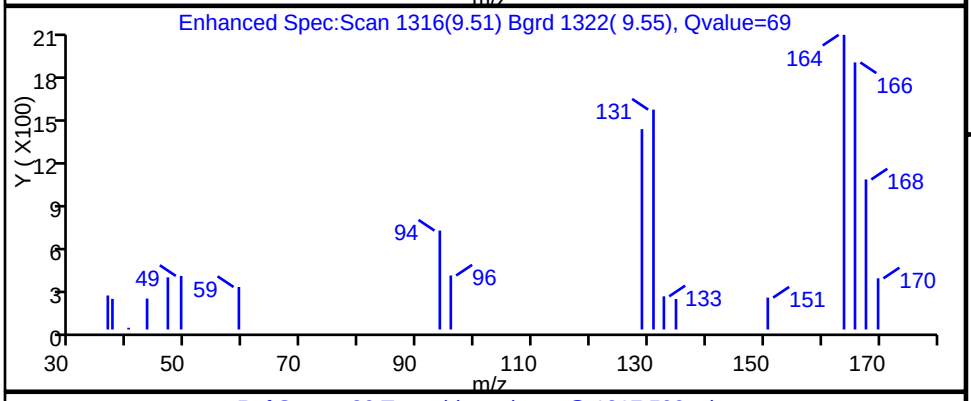
TestAmerica Pittsburgh

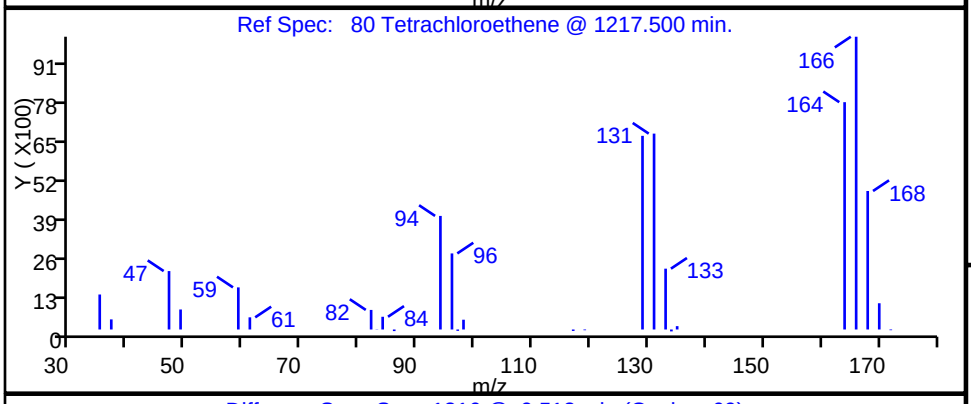
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101022.D

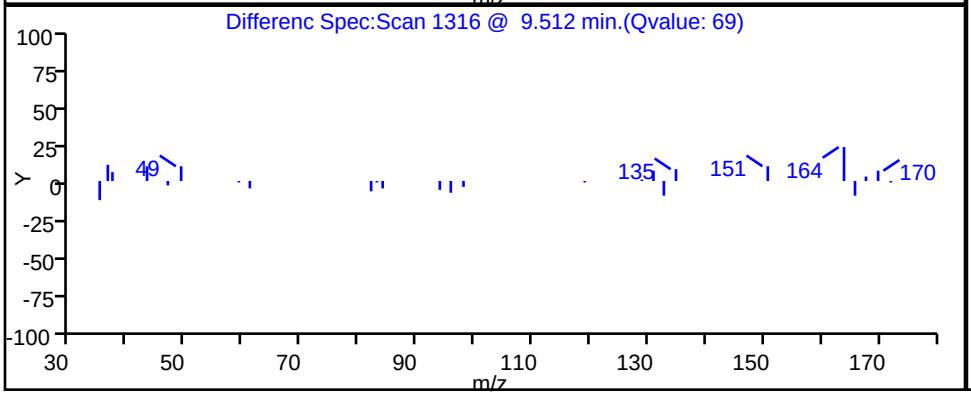
Injection Date:	01-Nov-2016 18:15:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-16	Lab Sample ID:	180-60202-16		
Client ID:	HD-CW-4-0/1-0				
Operator ID:	001562	ALS Bottle#:	19	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

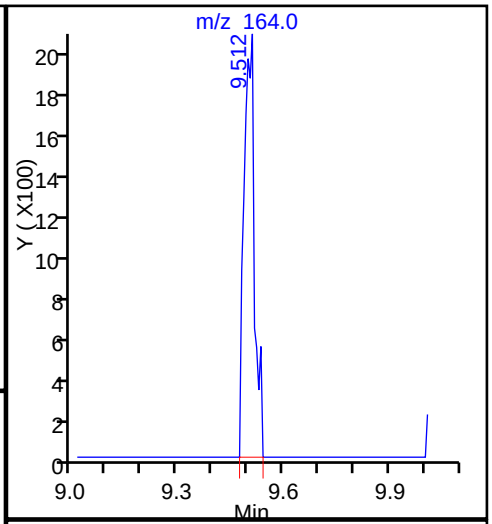
80 Tetrachloroethene, CAS: 127-18-4

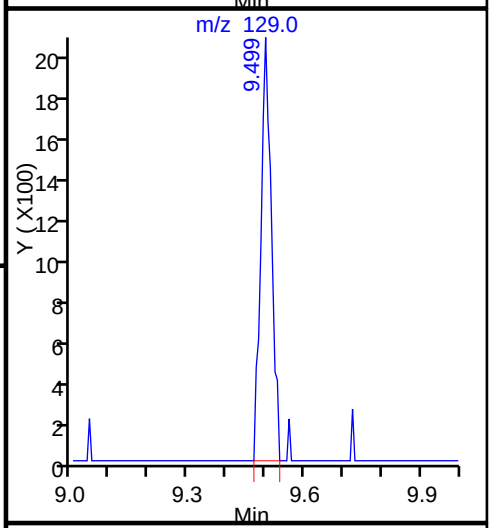


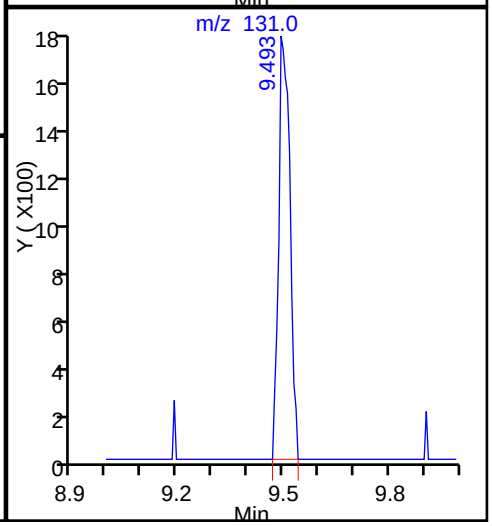












Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

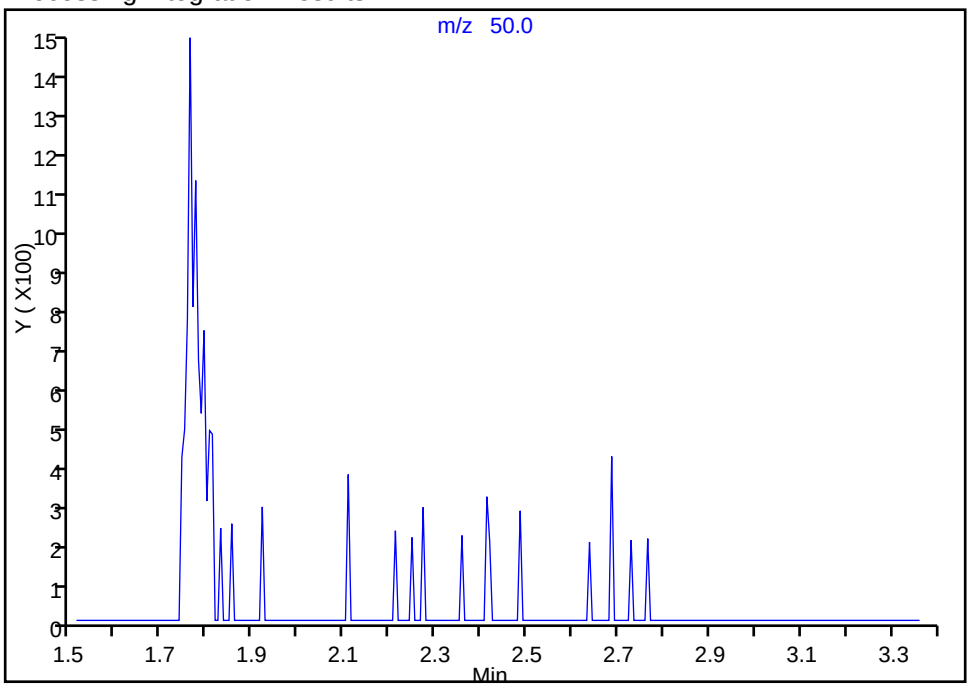
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101022.D				
Injection Date:	01-Nov-2016 18:15:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-16	Lab Sample ID:	180-60202-16		
Client ID:	HD-CW-4-0/1-0				
Operator ID:	001562	ALS Bottle#:	19	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Chloromethane, CAS: 74-87-3

Signal: 1

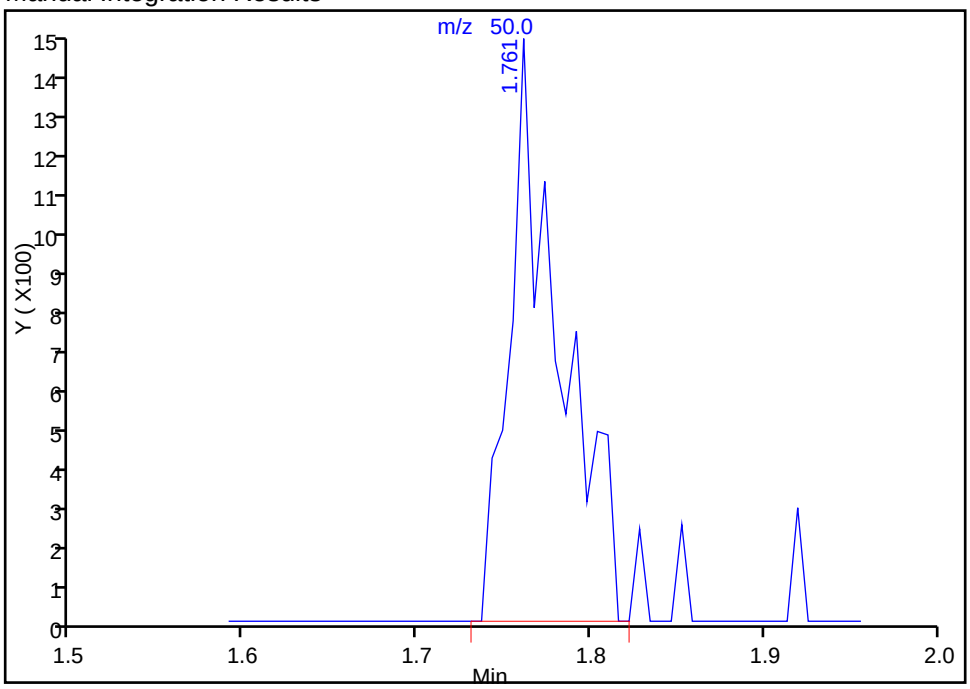
Not Detected
Expected RT: 1.76

Processing Integration Results



Manual Integration Results

RT: 1.76
Area: 3025
Amount: 0.742313
Amount Units: ng



Reviewer: fergusond, 02-Nov-2016 07:27:39
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

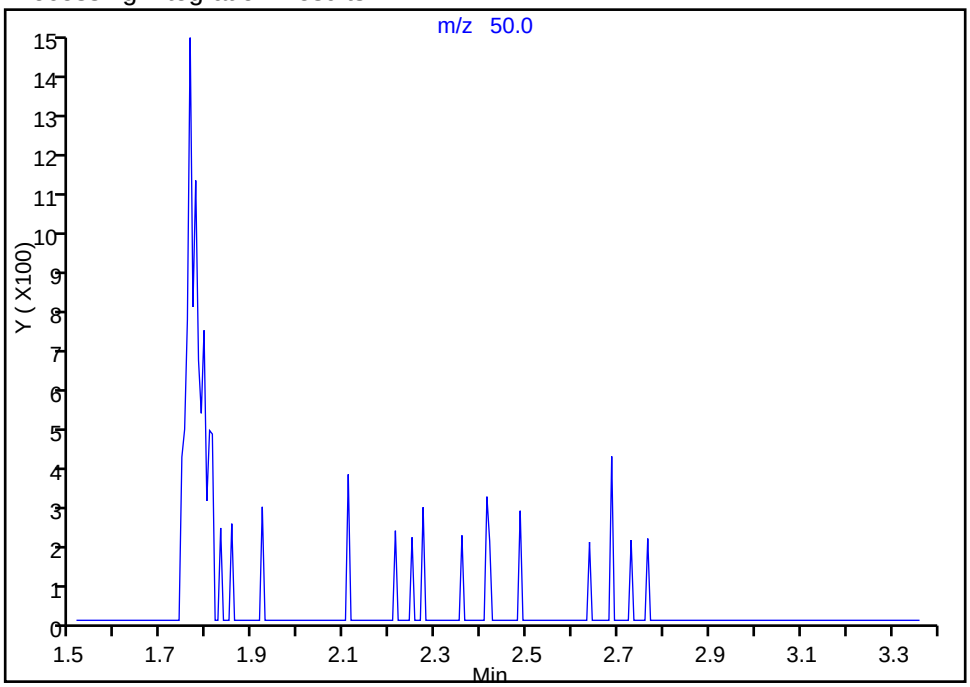
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101022.D				
Injection Date:	01-Nov-2016 18:15:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-16	Lab Sample ID:	180-60202-16		
Client ID:	HD-CW-4-0/1-0				
Operator ID:	001562	ALS Bottle#:	19	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Chloromethane, CAS: 74-87-3

Signal: 1

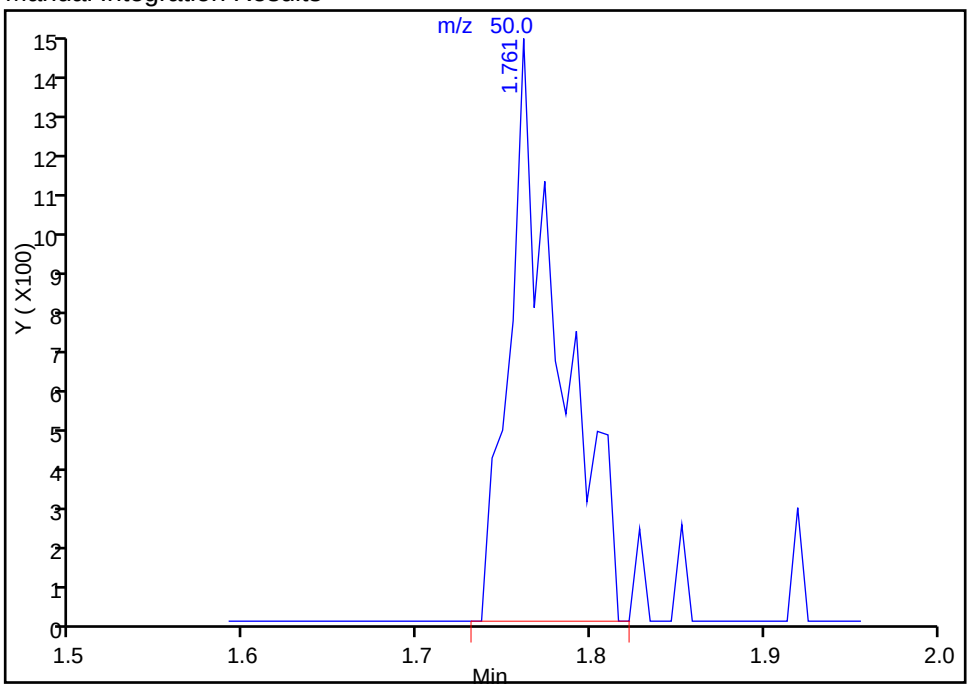
Not Detected
Expected RT: 1.76

Processing Integration Results



Manual Integration Results

RT: 1.76
Area: 3025
Amount: 0.742313
Amount Units: ng



Reviewer: fergusond, 02-Nov-2016 07:27:39
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-5-0/1-0 | Lab Sample ID: 180-60202-17

Matrix: Water | Lab File ID: 51101023.D

Analysis Method: 8260C | Date Collected: 10/26/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 18:39

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.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U ^c	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	12		1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	12		1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	41		1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-5-0/1-0 | Lab Sample ID: 180-60202-17

Matrix: Water | Lab File ID: 51101023.D

Analysis Method: 8260C | Date Collected: 10/26/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 18:39

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.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U ^c	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-134
2037-26-5	Toluene-d8 (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		72-120
1868-53-7	Dibromofluoromethane (Surr)	98		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101023.D
Lims ID: 180-60202-B-17
Client ID: HD-CW-5-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2016 18:39:30 ALS Bottle#: 20 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-023
Misc. Info.: 180-60202-B-17
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:29:18 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:29:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.274	4.275	-0.001	0	145457	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.274	0.000	97	367283	50.0	
* 3 Chlorobenzene-d5	119	10.370	10.377	-0.007	91	95031	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.718	12.719	-0.001	97	149330	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.550	6.550	0.000	94	86251	49.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.921	6.921	0.000	0	124170	48.9	
$ 7 Toluene-d8 (Surr)	98	8.922	8.923	-0.001	95	345264	48.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.556	11.557	-0.001	86	144858	50.0	
12 Chloromethane	50		1.763				ND	
13 Vinyl chloride	62		1.909				ND	
15 Bromomethane	94		2.231				ND	
16 Chloroethane	64		2.377				ND	
22 1,1-Dichloroethene	96		3.338				ND	
24 Acetone	43	3.459	3.442	0.017	81	4594	4.86	
26 Carbon disulfide	76		3.618				ND	
31 Methylene Chloride	84	4.128	4.123	0.005	2	751	0.3232	
33 Acrylonitrile	53		4.512				ND	
34 trans-1,2-Dichloroethene	96	4.554	4.549	0.005	1	1564	0.7736	M
35 Methyl tert-butyl ether	73		4.573				ND	
37 1,1-Dichloroethane	63		5.188				ND	
45 cis-1,2-Dichloroethene	96	5.935	5.936	-0.001	86	138327	62.0	
46 2-Butanone (MEK)	43		5.948				ND	
49 Chlorobromomethane	128		6.222				ND	
52 Chloroform	83	6.367	6.368	-0.001	22	942	0.2626	
53 1,1,1-Trichloroethane	97		6.526				ND	
56 Carbon tetrachloride	117		6.696				ND	
58 Benzene	78		6.927				ND	
59 1,2-Dichloroethane	62		7.000				ND	
64 Trichloroethene	130	7.657	7.657	0.000	95	124047	60.4	
67 1,2-Dichloropropane	63		7.937				ND	
70 1,4-Dioxane	88		8.016				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.217				ND	
74 cis-1,3-Dichloropropene	75		8.661				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.813				ND	
76 Toluene	91		8.990				ND	
77 trans-1,3-Dichloropropene	75		9.239				ND	
79 1,1,2-Trichloroethane	97		9.434				ND	
80 Tetrachloroethene	164	9.500	9.501	-0.001	96	353284	205.8	
82 2-Hexanone	43		9.647				ND	
84 Chlorodibromomethane	129		9.805				ND	
85 Ethylene Dibromide	107		9.914				ND	
87 Chlorobenzene	112		10.401				ND	
89 1,1,1,2-Tetrachloroethane	131		10.498				ND	
90 Ethylbenzene	106		10.498				ND	
91 m-Xylene & p-Xylene	106		10.638				ND	
92 o-Xylene	106		11.015				ND	
93 Styrene	104		11.034				ND	
94 Bromoform	173		11.222				ND	
99 1,1,2,2-Tetrachloroethane	83		11.703				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

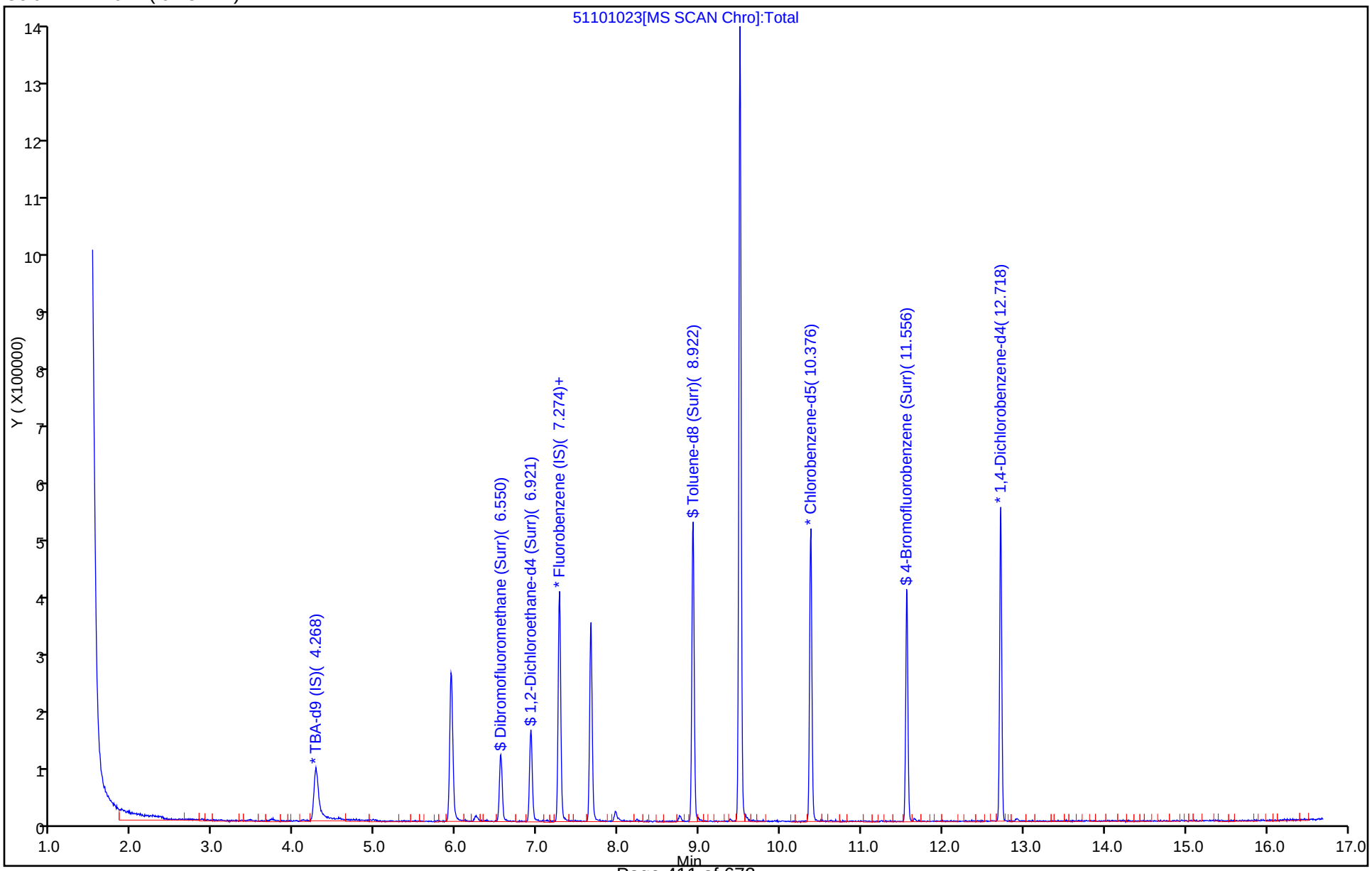
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 02-Nov-2016 07:29:18 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101023.D				
Injection Date:	01-Nov-2016 18:39:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-B-17	Lab Sample ID:	180-60202-17	Worklist Smp#:	23
Client ID:	HD-CW-5-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101023.D
Lims ID: 180-60202-B-17
Client ID: HD-CW-5-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2016 18:39:30 ALS Bottle#: 20 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-023
Misc. Info.: 180-60202-B-17
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2016 07:29:18 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: fergusond Date: 02-Nov-2016 07:29:18

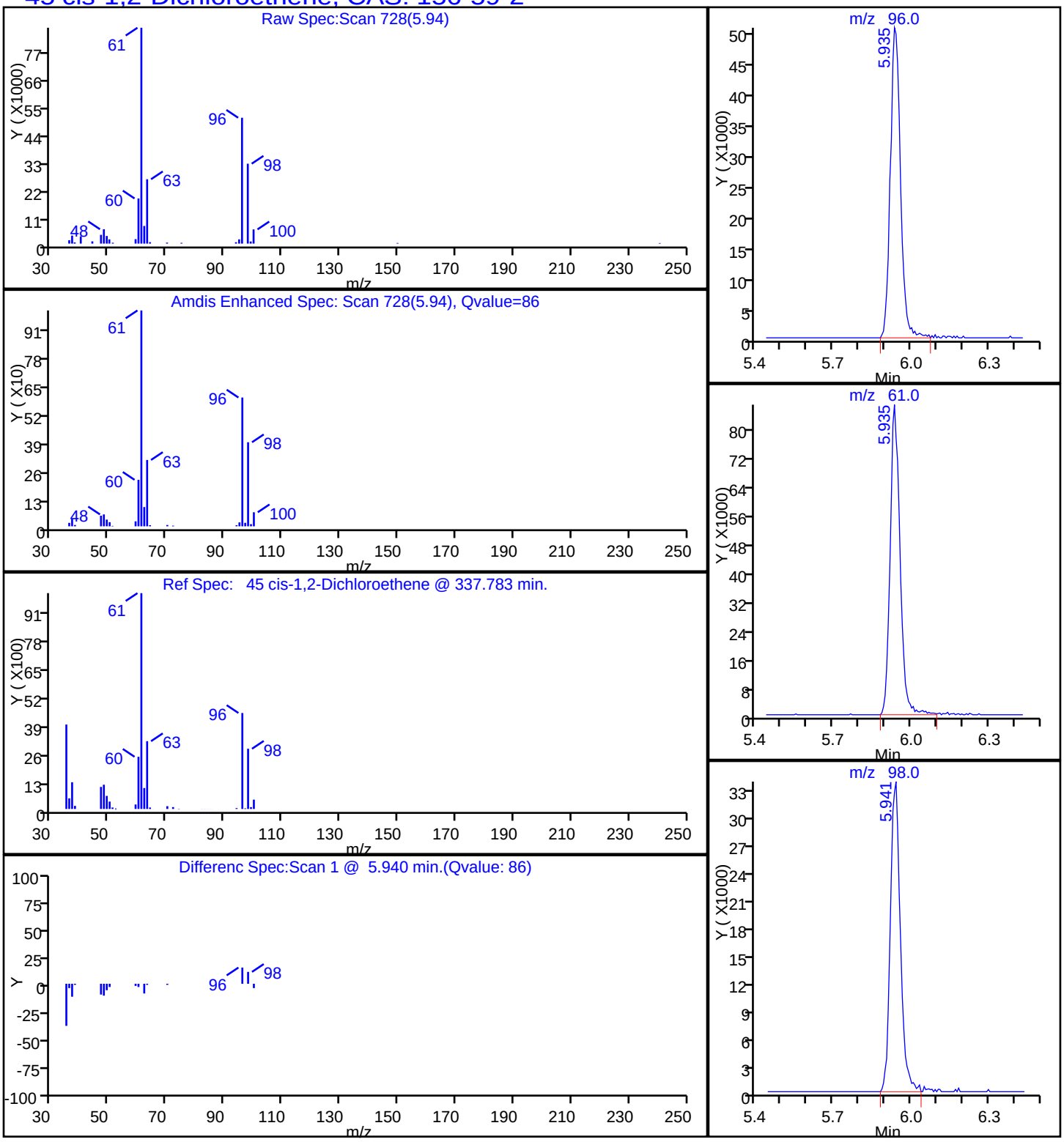
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.1	98.17
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.9	97.89
$ 7 Toluene-d8 (Surr)	50.0	48.1	96.27
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.0	99.91

Report Date: 02-Nov-2016 07:29:18 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101023.D				
Injection Date:	01-Nov-2016 18:39:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-17	Lab Sample ID:	180-60202-17		
Client ID:	HD-CW-5-0/1-0				
Operator ID:	001562	ALS Bottle#:	20	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

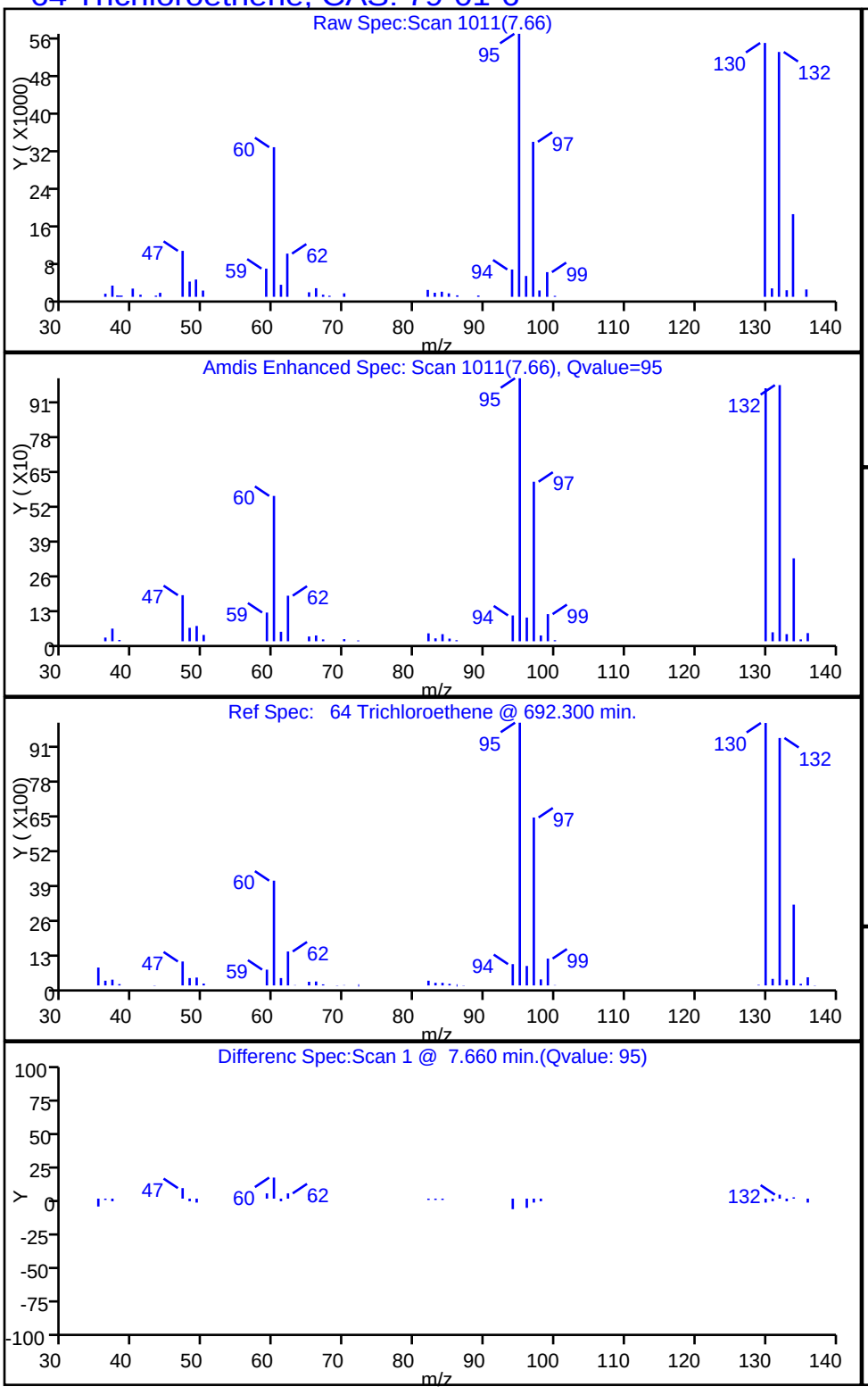


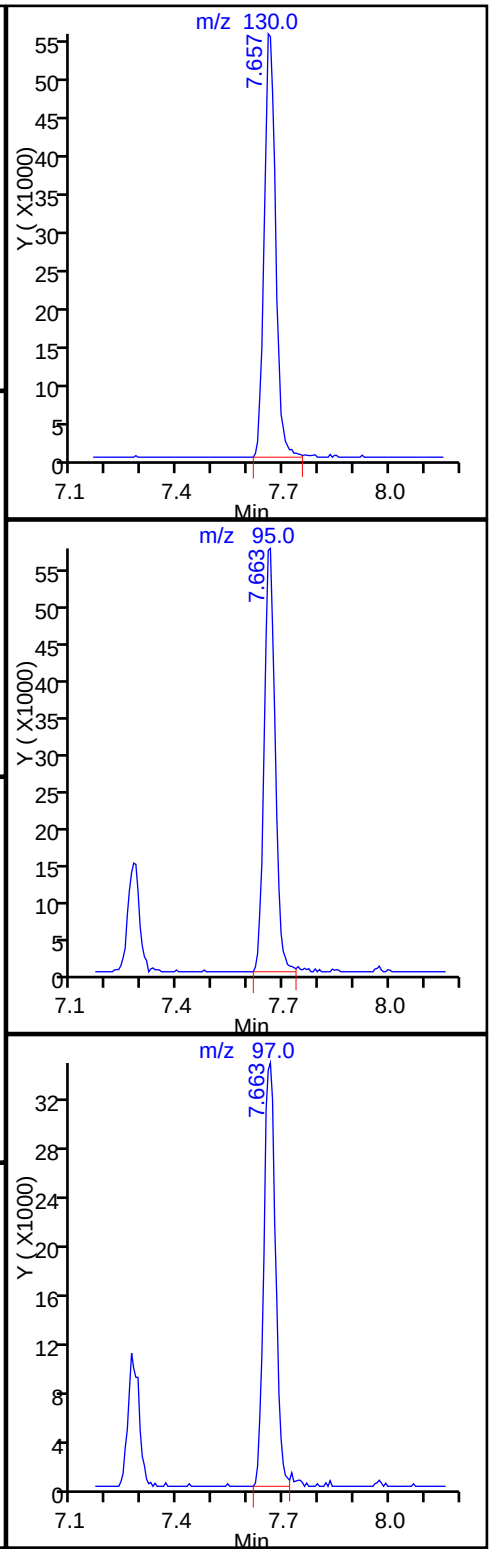
Report Date: 02-Nov-2016 07:29:18 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101023.D				
Injection Date:	01-Nov-2016 18:39:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-17	Lab Sample ID:	180-60202-17		
Client ID:	HD-CW-5-0/1-0				
Operator ID:	001562	ALS Bottle#:	20	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



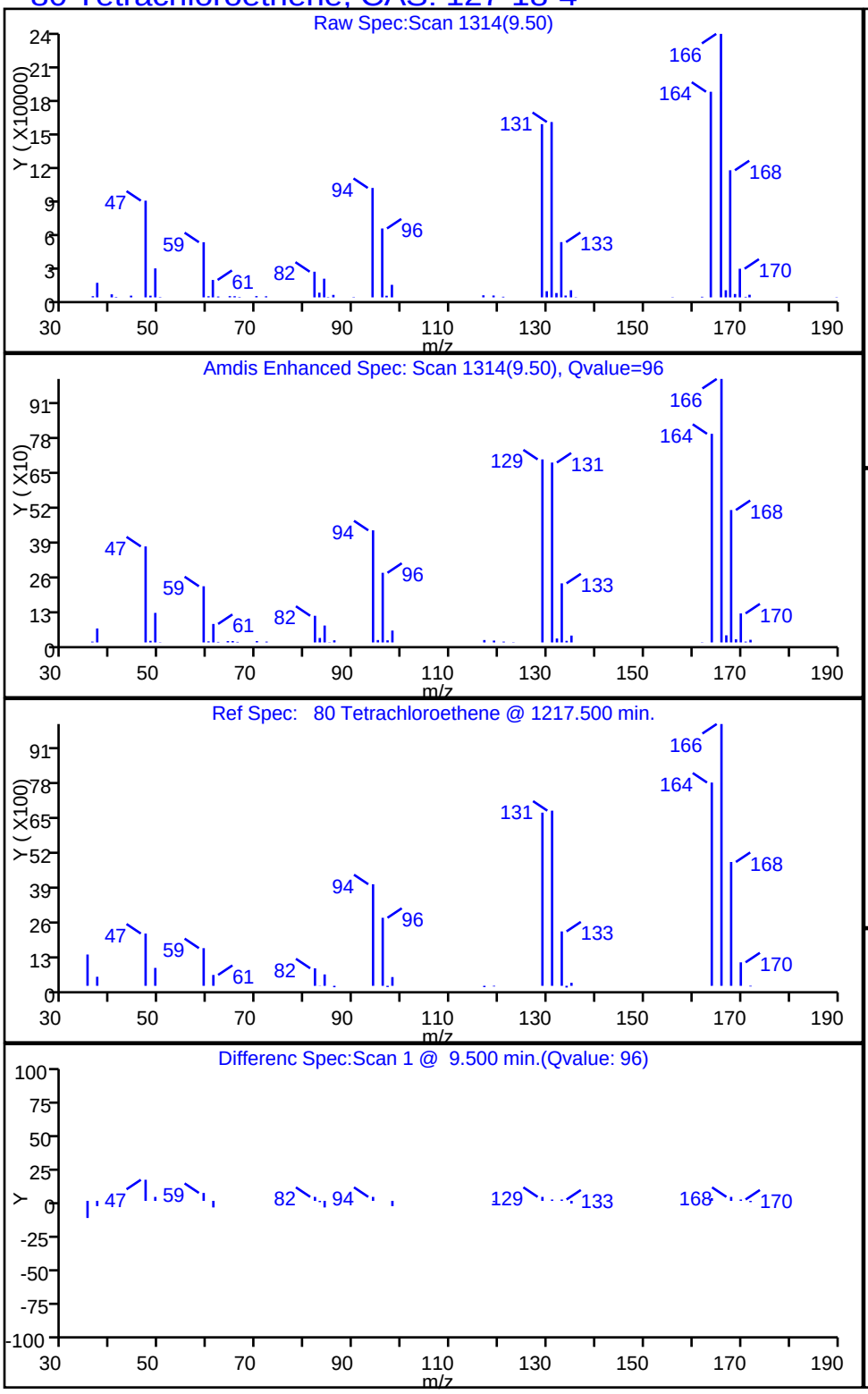


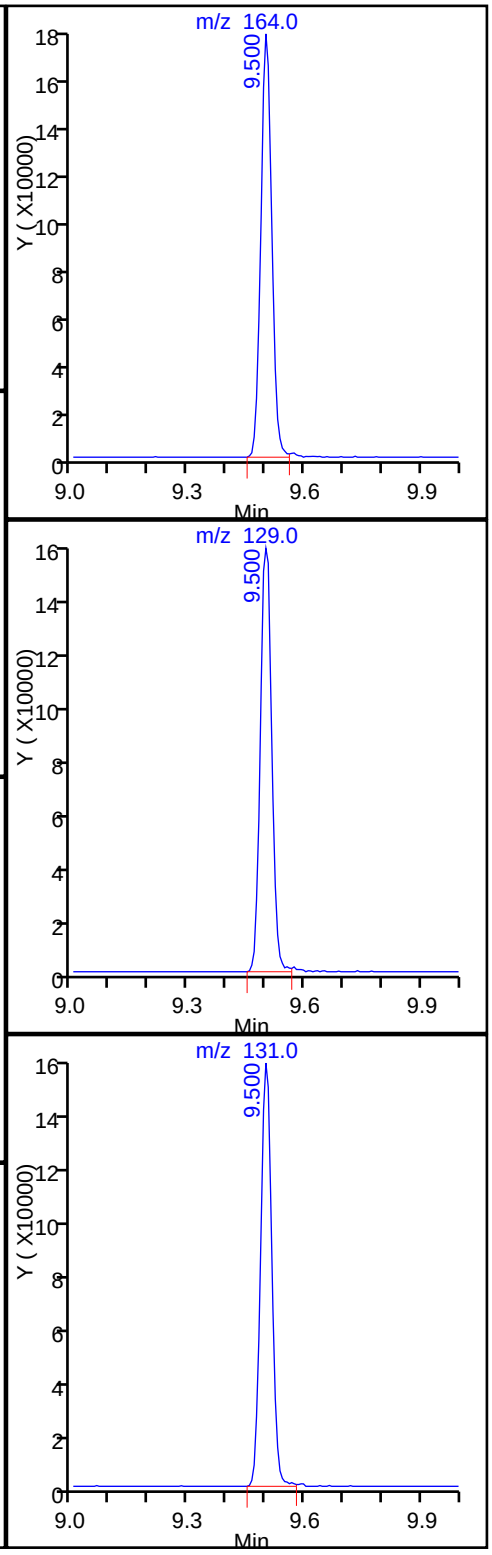
Report Date: 02-Nov-2016 07:29:18 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101023.D		
Injection Date:	01-Nov-2016 18:39:30	Instrument ID:	CHHP5
Lims ID:	180-60202-B-17	Lab Sample ID:	180-60202-17
Client ID:	HD-CW-5-0/1-0		
Operator ID:	001562	ALS Bottle#:	20 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

80 Tetrachloroethene, CAS: 127-18-4





Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

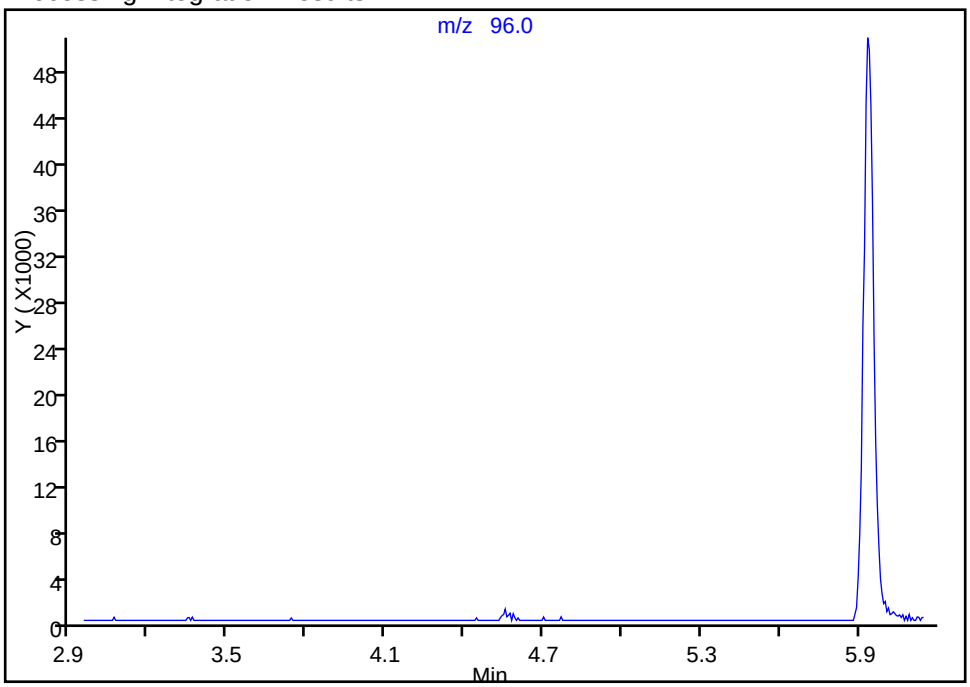
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101023.D				
Injection Date:	01-Nov-2016 18:39:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-17	Lab Sample ID:	180-60202-17		
Client ID:	HD-CW-5-0/1-0				
Operator ID:	001562	ALS Bottle#:	20	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

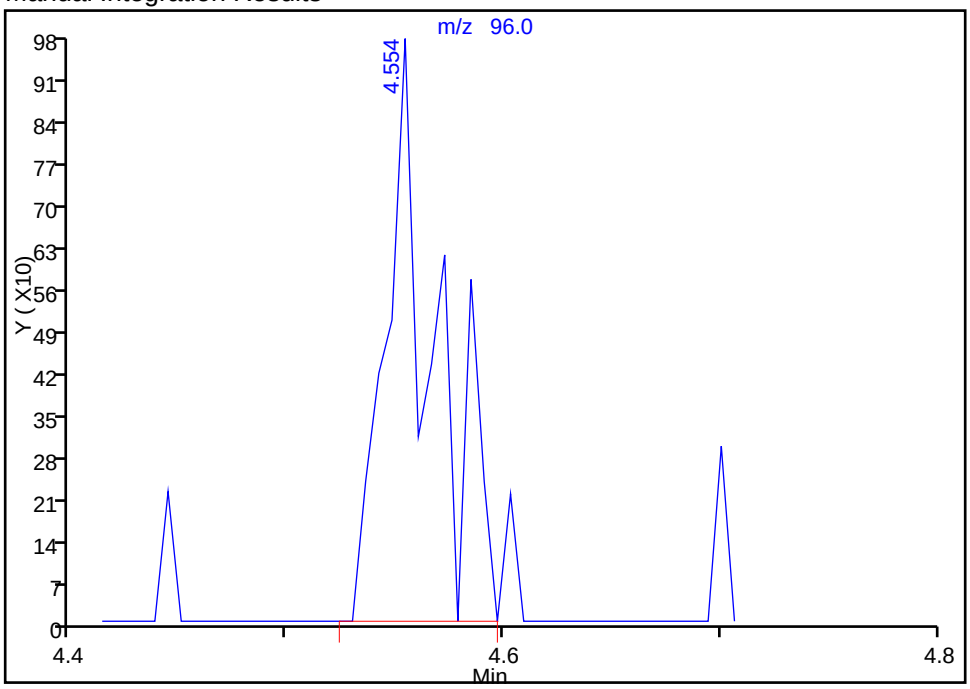
Not Detected
Expected RT: 4.55

Processing Integration Results



Manual Integration Results

RT: 4.55
Area: 1564
Amount: 0.773573
Amount Units: ng



Reviewer: fergusond, 02-Nov-2016 07:29:18
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

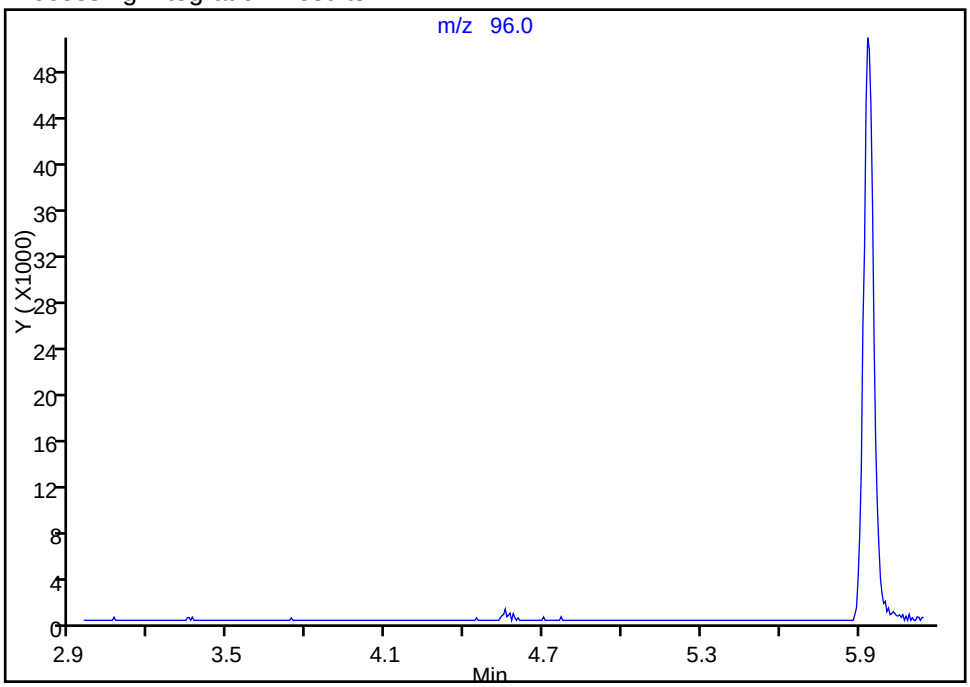
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101023.D				
Injection Date:	01-Nov-2016 18:39:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-B-17	Lab Sample ID:	180-60202-17		
Client ID:	HD-CW-5-0/1-0				
Operator ID:	001562	ALS Bottle#:	20	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

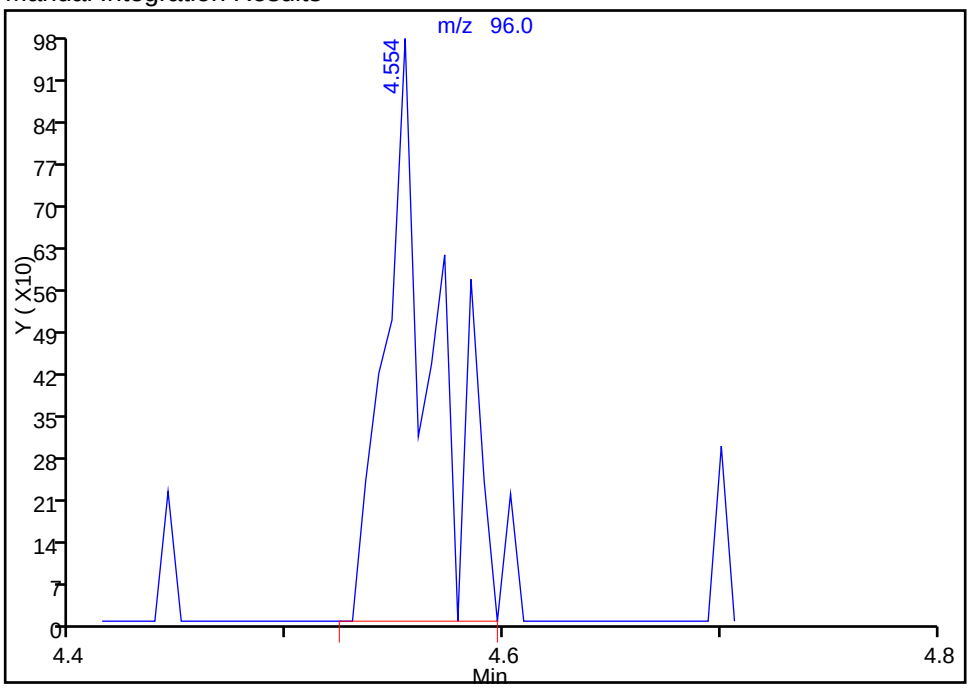
Processing Integration Results

Not Detected
Expected RT: 4.55



Manual Integration Results

RT: 4.55
Area: 1564
Amount: 0.773573
Amount Units: ng



Reviewer: fergusond, 02-Nov-2016 07:29:18
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-QC8-0/1-2 | Lab Sample ID: 180-60202-18

Matrix: Water | Lab File ID: 51031007.D

Analysis Method: 8260C | Date Collected: 10/26/2016 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 12:08

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.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	3.7	J	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	0.53	J	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	1.0	U	1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	1.0	U	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-QC8-0/1-2 | Lab Sample ID: 180-60202-18

Matrix: Water | Lab File ID: 51031007.D

Analysis Method: 8260C | Date Collected: 10/26/2016 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 12:08

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.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U ^c	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-134
2037-26-5	Toluene-d8 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	103		72-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031007.D
Lims ID: 180-60202-A-18
Client ID: HD-QC8-0/1-2
Sample Type: Client
Inject. Date: 31-Oct-2016 12:08:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014116-007
Misc. Info.: 180-60202-A-18
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2016 12:51:15 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: fergusond Date: 31-Oct-2016 12:51:15

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.272	4.279	-0.007	0	89450	1000.0	
*	2 Fluorobenzene (IS)	96	7.271	7.272	-0.001	97	333828	50.0	
*	3 Chlorobenzene-d5	119	10.374	10.375	-0.001	92	80685	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.722	12.723	-0.001	98	121924	50.0	
$	5 Dibromofluoromethane (Surr	113	6.553	6.548	0.005	93	81477	51.0	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.919	-0.001	0	113117	49.1	
$	7 Toluene-d8 (Surr)	98	8.920	8.921	-0.001	95	304840	50.1	
$	8 4-Bromofluorobenzene (Surr	95	11.560	11.561	-0.001	85	126575	51.4	
	12 Chloromethane	50		1.767				ND	
	13 Vinyl chloride	62		1.900				ND	
	15 Bromomethane	94		2.229				ND	
	16 Chloroethane	64		2.375				ND	
	22 1,1-Dichloroethene	96		3.330				ND	
	24 Acetone	43	3.445	3.440	0.005	98	15783	18.4	
	26 Carbon disulfide	76		3.616				ND	
	31 Methylene Chloride	84	4.126	4.121	0.005	89	5575	2.64	
	33 Acrylonitrile	53		4.516				ND	
	34 trans-1,2-Dichloroethene	96		4.553				ND	
	35 Methyl tert-butyl ether	73		4.565				ND	
	37 1,1-Dichloroethane	63		5.186				ND	
	45 cis-1,2-Dichloroethene	96	5.939	5.934	0.005	39	1319	0.6501	
	46 2-Butanone (MEK)	43		5.952				ND	
	49 Chlorobromomethane	128		6.220				ND	
	52 Chloroform	83		6.360				ND	
	53 1,1,1-Trichloroethane	97		6.524				ND	
	56 Carbon tetrachloride	117		6.700				ND	
	58 Benzene	78		6.925				ND	
	59 1,2-Dichloroethane	62		7.005				ND	
	64 Trichloroethene	130	7.654	7.662	-0.008	1	727	0.3894	
	67 1,2-Dichloropropane	63		7.935				ND	
	70 1,4-Dioxane	88		8.014				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.215				ND	
74 cis-1,3-Dichloropropene	75		8.659				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.817				ND	
76 Toluene	91		8.988				ND	
77 trans-1,3-Dichloropropene	75		9.243				ND	
79 1,1,2-Trichloroethane	97		9.432				ND	
80 Tetrachloroethene	164	9.498	9.505	-0.007	12	706	0.4844	
82 2-Hexanone	43		9.645				ND	
84 Chlorodibromomethane	129		9.809				ND	
85 Ethylene Dibromide	107		9.918				ND	
87 Chlorobenzene	112		10.405				ND	
89 1,1,1,2-Tetrachloroethane	131		10.503				ND	
90 Ethylbenzene	106		10.503				ND	
91 m-Xylene & p-Xylene	106		10.636				ND	
92 o-Xylene	106		11.020				ND	
93 Styrene	104		11.038				ND	
94 Bromoform	173		11.220				ND	
99 1,1,2,2-Tetrachloroethane	83		11.695				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

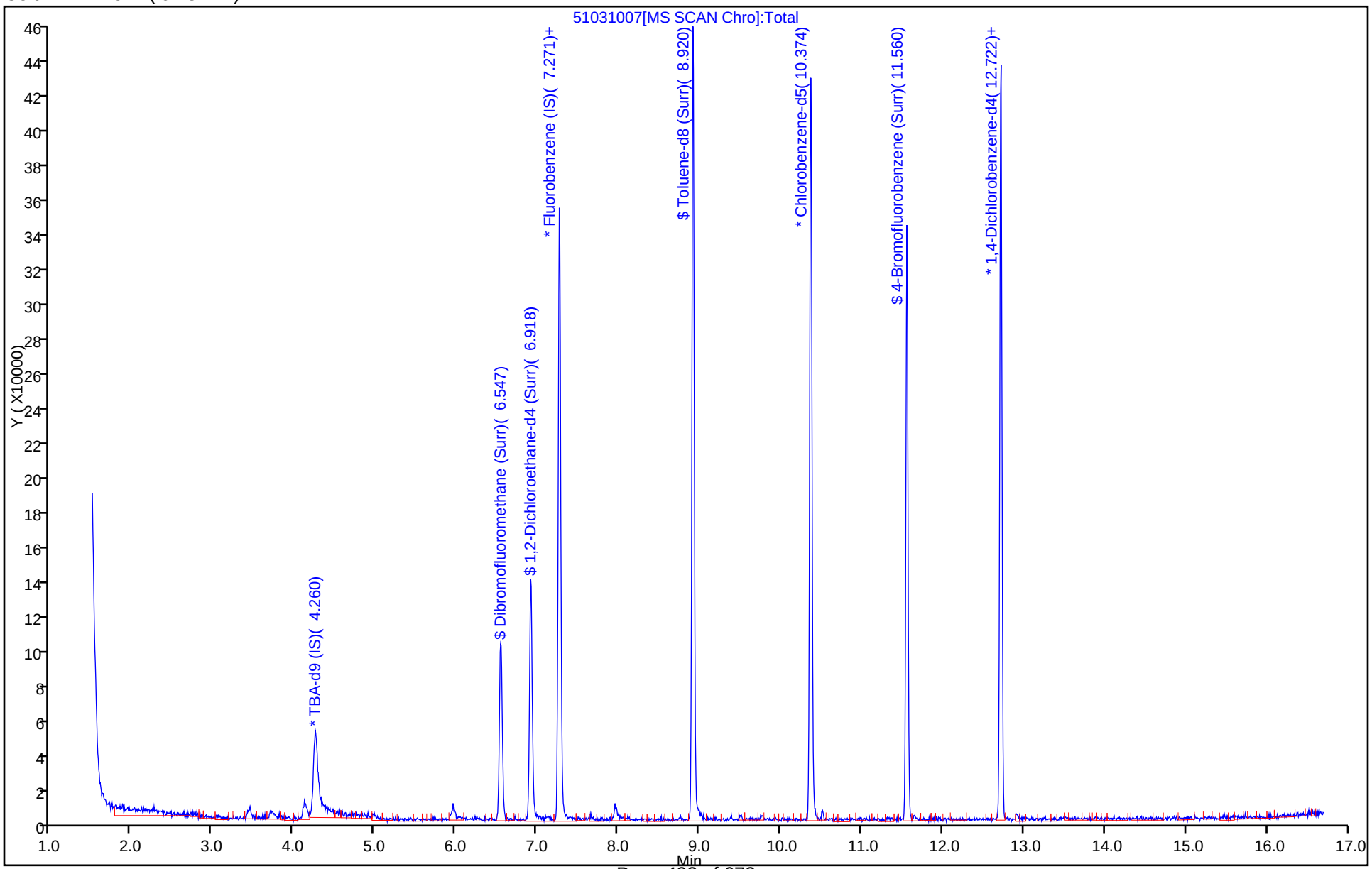
Report Date: 31-Oct-2016 12:51:16 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031007.D

Injection Date:	31-Oct-2016 12:08:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-A-18	Lab Sample ID:	180-60202-18	Worklist Smp#:	7
Client ID:	HD-QC8-0/1-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031007.D
Lims ID: 180-60202-A-18
Client ID: HD-QC8-0/1-2
Sample Type: Client
Inject. Date: 31-Oct-2016 12:08:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014116-007
Misc. Info.: 180-60202-A-18
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2016 12:51:15 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: fergusond Date: 31-Oct-2016 12:51:15

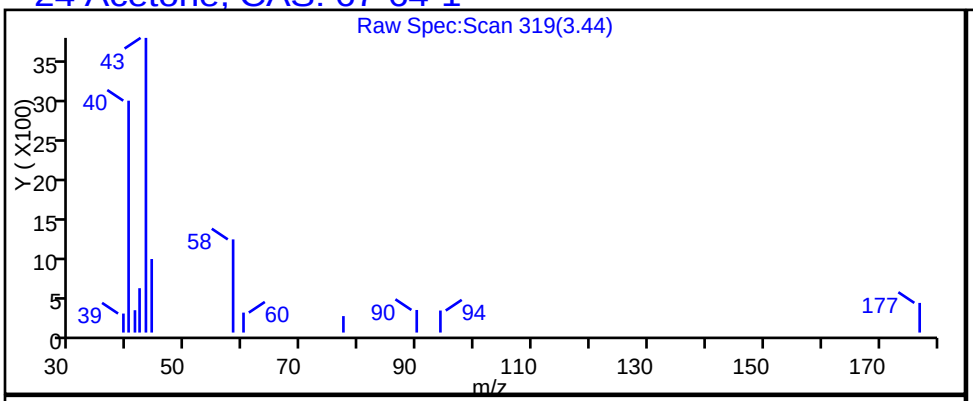
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.0	102.02
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.1	98.12
$ 7 Toluene-d8 (Surr)	50.0	50.1	100.12
$ 8 4-Bromofluorobenzene (Surr)	50.0	51.4	102.82

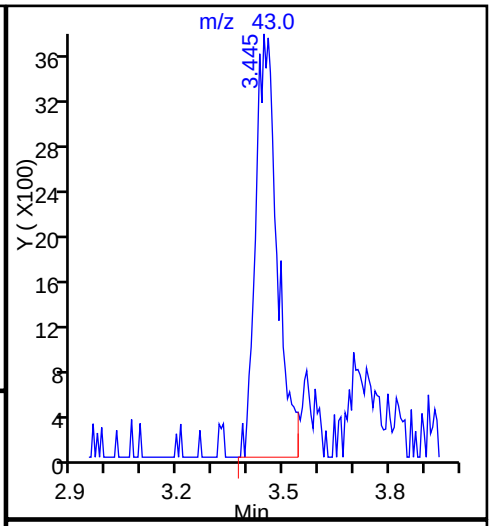
Report Date: 31-Oct-2016 12:51:16 Chrom Revision: 2.2 17-Oct-2016 09:27:18

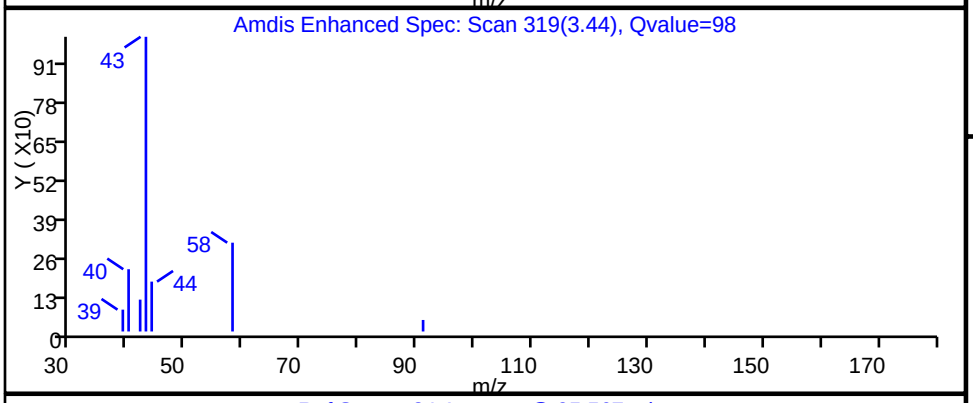
TestAmerica Pittsburgh

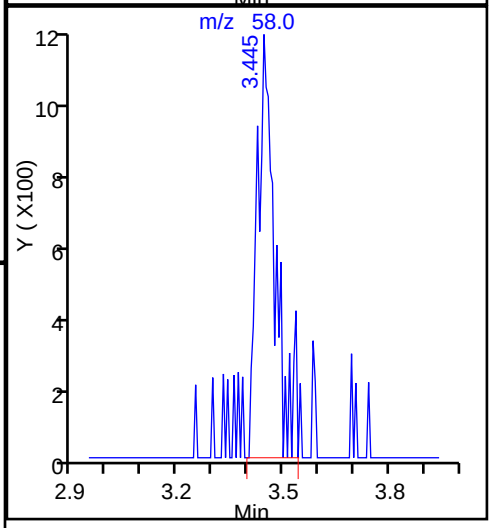
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031007.D		
Injection Date:	31-Oct-2016 12:08:30	Instrument ID:	CHHP5
Lims ID:	180-60202-A-18	Lab Sample ID:	180-60202-18
Client ID:	HD-QC8-0/1-2		
Operator ID:	001562	ALS Bottle#:	6 Worklist Smp#: 7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

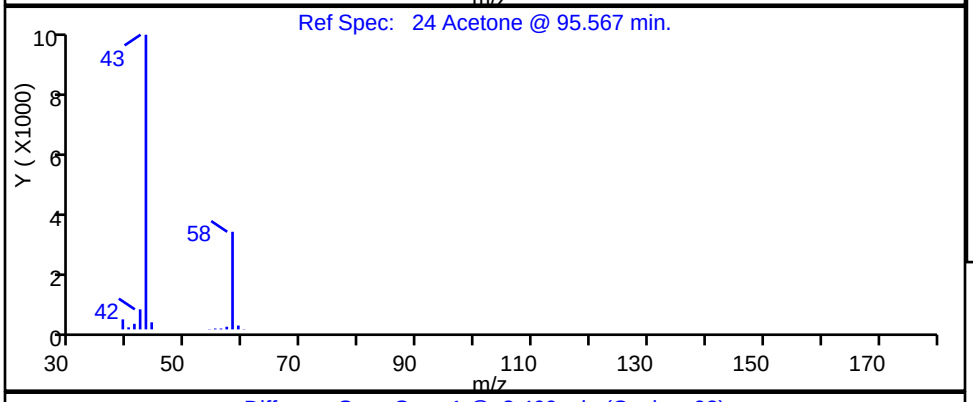
24 Acetone, CAS: 67-64-1

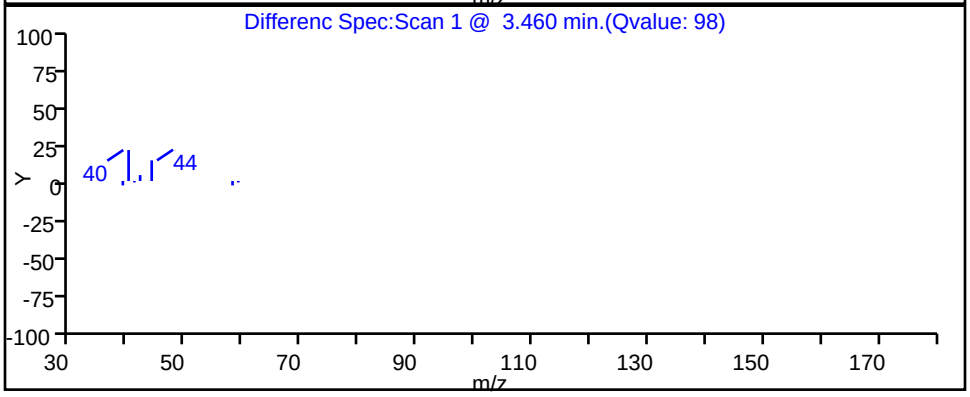










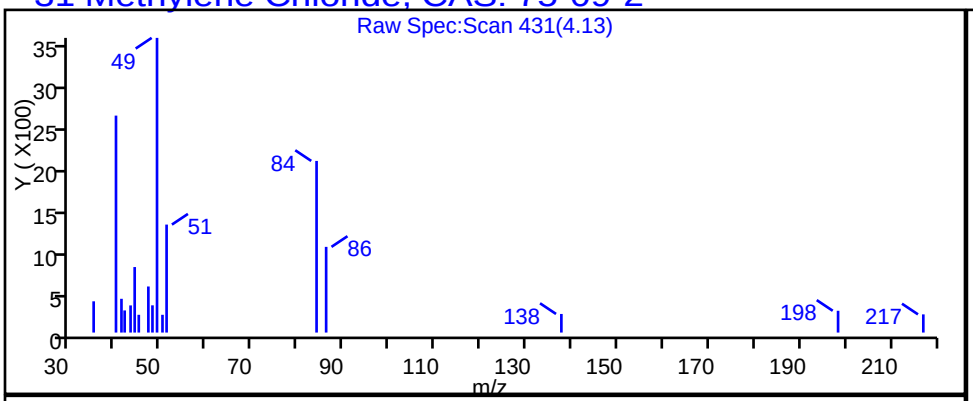


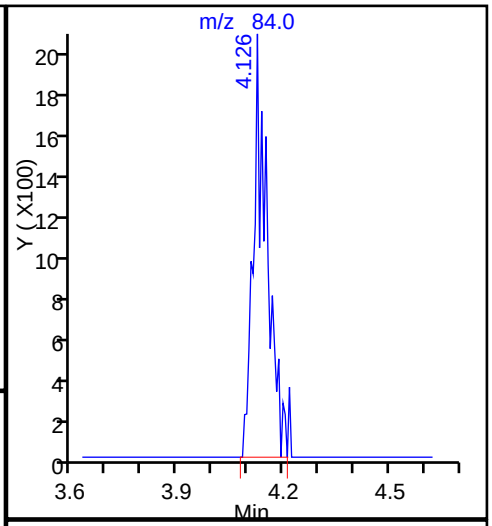
Report Date: 31-Oct-2016 12:51:16 Chrom Revision: 2.2 17-Oct-2016 09:27:18

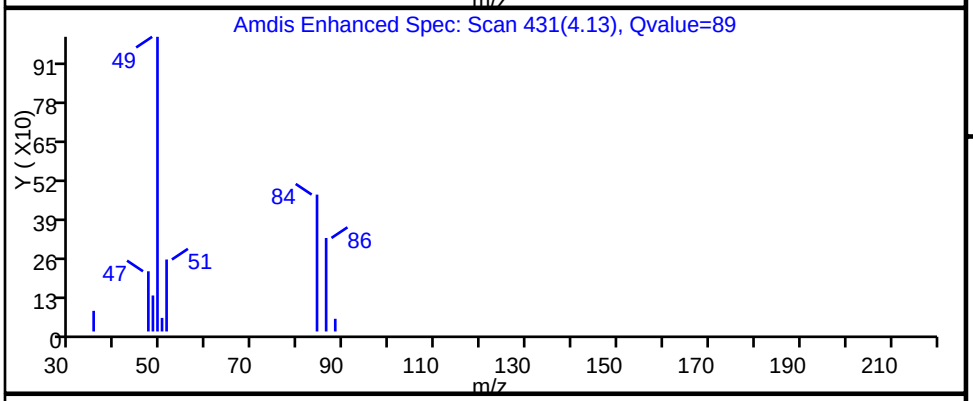
TestAmerica Pittsburgh

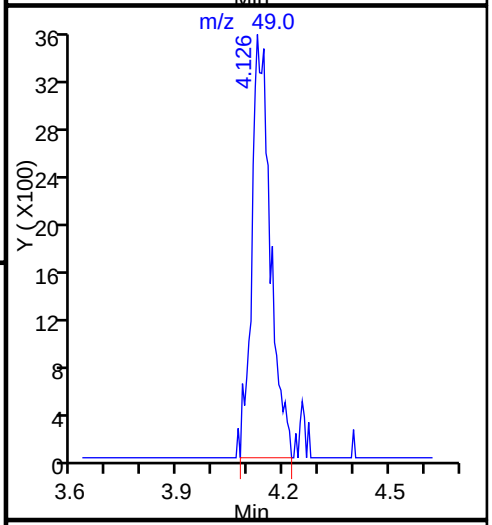
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031007.D				
Injection Date:	31-Oct-2016 12:08:30	Instrument ID:	CHHP5		
Lims ID:	180-60202-A-18	Lab Sample ID:	180-60202-18		
Client ID:	HD-QC8-0/1-2				
Operator ID:	001562	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

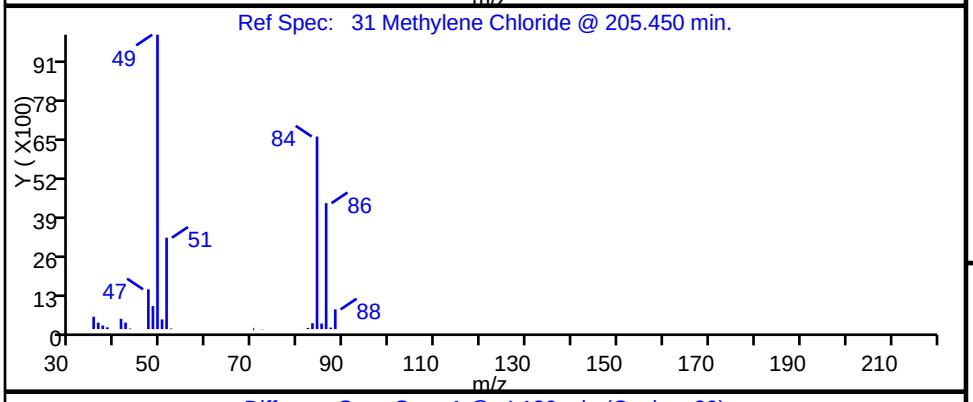
31 Methylene Chloride, CAS: 75-09-2

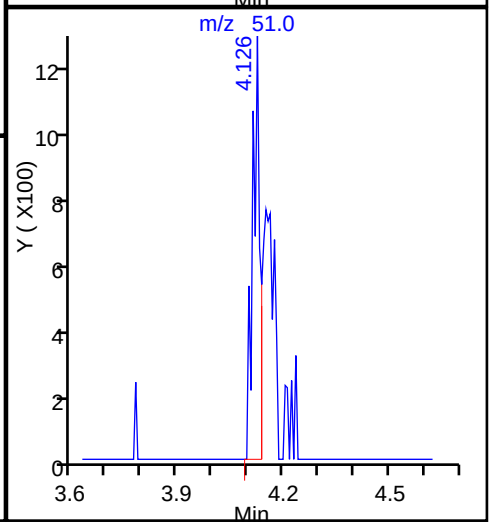


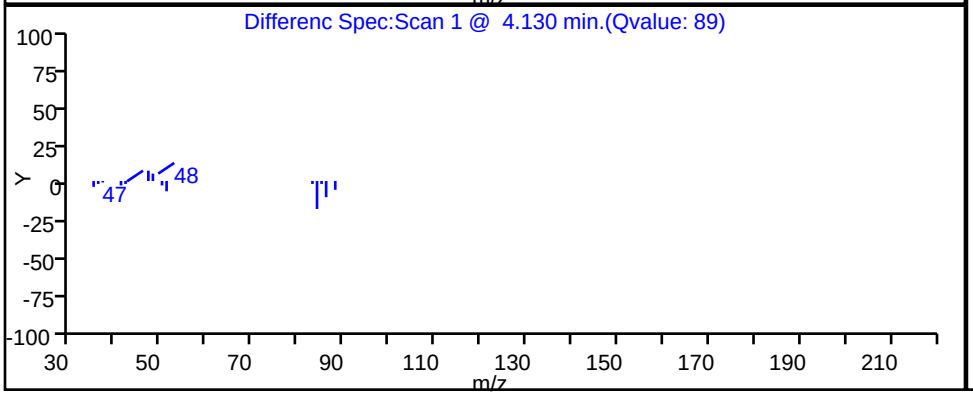












FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-192047/3	51022003.D
Level 2	IC 180-192047/4	51022004.D
Level 3	ICIS 180-192047/5	51022005.D
Level 4	IC 180-192047/6	51022006.D
Level 5	IC 180-192047/7	51022007.D
Level 6	IC 180-192047/8	51022008.D
Level 7	IC 180-192047/9	51022009.D
Level 8	IC 180-192047/10	51022010.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	0.3396 0.2989	0.2868 0.2937	0.2917 0.2822	0.2979	0.2871	Ave		0.2972			0.1000	6.1		20.0			
Chloromethane	0.6342 0.5716	0.5501 0.5684	0.5598 0.5533	0.6068	0.5705	Ave		0.5769			0.1000	5.0		20.0			
Vinyl chloride	0.4349 0.3874	0.3643 0.3864	0.3705 0.3653	0.3847	0.3648	Ave		0.3823			0.1000	6.2		20.0			
1,3-Butadiene	0.7121 0.5487	0.5383 0.5382	0.5514 0.5289	0.5682	0.5357	Ave		0.5652			0.0100	10.7		20.0			
Bromomethane	0.1150 0.0890	0.0961 0.0936	0.0962 0.0792	0.1057	0.0888	Ave		0.0955			0.0500	11.5		20.0			
Chloroethane	0.1982 0.1648	0.1722 0.1581	0.1780 0.1388	0.1829	0.1707	Ave		0.1705			0.0500	10.3		20.0			
Dichlorofluoromethane	0.4658 0.4066	0.3780 0.4041	0.3902 0.3822	0.4435	0.3901	Ave		0.4075			0.0100	7.7		20.0			
Trichlorofluoromethane	0.3453 0.3244	0.3056 0.3222	0.3292 0.3061	0.3289	0.3235	Ave		0.3231			0.1000	4.0		20.0			
Ethyl ether	0.3264 0.3146	0.3181 0.3215	0.3217 0.3002	0.3460	0.3219	Ave		0.3213			0.0100	4.0		20.0			
Acrolein	0.0761 0.0756	0.0700 0.0757	0.0753 0.0776	0.0816	0.0718	Ave		0.0755			0.0100	4.6		20.0			
1,1-Dichloroethene	0.2754 0.2606	0.2172 0.2610	0.2469 0.2499	0.2524	0.2576	Ave		0.2526			0.1000	6.6		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3118 0.2758	0.2556 0.2716	0.2697 0.2710	0.2852	0.2625	Ave		0.2754			0.1000	6.2		20.0			
Acetone	0.1398 0.1314	0.1300 0.1317	0.1226 0.1275	0.1255	0.1212	Ave		0.1287			0.0500	4.6		20.0			
Iodomethane	0.3667 0.3752	0.3603 0.3850	0.3729 0.3661	0.4050	0.3751	Ave		0.3758			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.: 180-60202-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

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	0.7277 0.6790	0.5932 0.6842	0.6293 0.6615	0.6792	0.6369	Ave		0.6614			0.1000	6.2		20.0			
Allyl chloride	0.1618 0.1619	0.1327 0.1688	0.1507 0.1631	0.1574	0.1596	Ave		0.1570			0.0100	7.1		20.0			
Methyl acetate	0.3415 0.3299	0.3139 0.3375	0.3202 0.3263	0.3560	0.3391	Ave		0.3331			0.1000	4.0		20.0			
Methylene Chloride	0.4428 0.2898	0.2966 0.2989	0.2962 0.2846	0.3219	0.2998	Ave		0.3163			0.1000	16.5		20.0			
tert-Butyl alcohol	1.2280 1.1962	1.1839 1.1425	1.0694 1.3883	1.1975	1.4199	Ave		1.2282			0.0100	9.7		20.0			
Acrylonitrile	0.1591 0.1614	0.1523 0.1626	0.1534 0.1570	0.1682	0.1597	Ave		0.1592			0.0100	3.2		20.0			
trans-1,2-Dichloroethene	0.2879 0.2754	0.2586 0.2774	0.2754 0.2709	0.2859	0.2705	Ave		0.2752			0.1000	3.4		20.0			
Methyl tert-butyl ether	0.7186 0.7197	0.6489 0.7564	0.6960 0.7036	0.7593	0.7169	Ave		0.7149			0.1000	4.9		20.0			
Hexane	0.5903 0.5908	0.5055 0.5964	0.5817 0.5821	0.5902	0.5681	Ave		0.5756			0.0100	5.1		20.0			
1,1-Dichloroethane	0.6483 0.6049	0.5845 0.6244	0.6067 0.5978	0.6400	0.6084	Ave		0.6144			0.2000	3.5		20.0			
Vinyl acetate	0.6046 0.7435	0.5972 0.7342	0.6801 0.7000	0.7176	0.6815	Ave		0.6823			0.0100	8.1		20.0			
2,2-Dichloropropane	0.0559 0.0521	0.0453 0.0527	0.0480 0.0531	0.0518	0.0507	Ave		0.0512			0.0100	6.4		20.0			
cis-1,2-Dichloroethene	0.3118 0.3036	0.2848 0.3075	0.2987 0.2967	0.3289	0.2991	Ave		0.3039			0.1000	4.3		20.0			
2-Butanone (MEK)	0.1913 0.2076	0.2012 0.2118	0.1937 0.2039	0.2199	0.2108	Ave		0.2050			0.0500	4.7		20.0			
Bromochloromethane	0.1292 0.1318	0.1176 0.1319	0.1276 0.1260	0.1337	0.1289	Ave		0.1283			0.0100	3.9		20.0			
Tetrahydrofuran	0.1665 0.1401	0.1187 0.1421	0.1336 0.1384	0.1498	0.1342	Ave		0.1404			0.0100	9.8		20.0			
Chloroform	0.5274 0.4762	0.4633 0.4870	0.4858 0.4686	0.5191	0.4792	Ave		0.4883			0.2000	4.7		20.0			
1,1,1-Trichloroethane	0.3693 0.3496	0.3168 0.3541	0.3350 0.3368	0.3552	0.3322	Ave		0.3436			0.1000	4.8		20.0			
Cyclohexane	0.8084 0.7701	0.6800 0.7668	0.7439 0.7546	0.7709	0.7423	Ave		0.7546			0.1000	4.9		20.0			
Carbon tetrachloride	0.3014 0.2994	0.2607 0.3031	0.2727 0.2877	0.2954	0.2808	Ave		0.2876			0.1000	5.3		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.: 180-60202-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

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	0.4299 0.4124	0.3740 0.4160	0.3936 0.4046	0.4117	0.4025	Ave		0.4056			0.0100	4.1		20.0			
Benzene	1.2535 1.1427	1.0908 1.1701	1.1744 1.1167	1.2329	1.1615	Ave		1.1678			0.5000	4.7		20.0			
Isobutyl alcohol	0.0082 0.0106	0.0082 0.0106	0.0086 0.0108	0.0101	0.0102	Ave		0.0097		*	0.0100	11.8		20.0			
1,2-Dichloroethane	0.4615 0.4331	0.4170 0.4395	0.4378 0.4196	0.4717	0.4332	Ave		0.4392			0.1000	4.3		20.0			
n-Heptane	0.6083 0.5839	0.5082 0.5788	0.5598 0.5772	0.5692	0.5456	Ave		0.5664			0.0100	5.3		20.0			
Trichloroethene	0.2951 0.2802	0.2609 0.2839	0.2784 0.2770	0.2862	0.2753	Ave		0.2796			0.2000	3.5		20.0			
Methylcyclohexane	0.4646 0.5024	0.4142 0.5093	0.4769 0.4895	0.5061	0.4777	Ave		0.4801			0.1000	6.4		20.0			
1,2-Dichloropropane	0.3849 0.3449	0.3181 0.3575	0.3386 0.3457	0.3645	0.3525	Ave		0.3508			0.1000	5.6		20.0			
Dibromomethane	0.1355 0.1464	0.1397 0.1568	0.1456 0.1470	0.1642	0.1534	Ave		0.1486			0.0100	6.2		20.0			
1,4-Dioxane	0.0025 0.0029	0.0024 0.0029	0.0026 0.0031	0.0031	0.0029	Ave		0.0028		*	0.0100	9.5		20.0			
Bromodichloromethane	0.3390 0.3211	0.2844 0.3368	0.3185 0.3202	0.3417	0.3147	Ave		0.3221			0.2000	5.7		20.0			
2-Chloroethyl vinyl ether	0.1520 0.1868	0.1636 0.2012	0.1847 0.1926	0.1980	0.1927	Ave		0.1839			0.0100	9.4		20.0			
cis-1,3-Dichloropropene	0.3434 0.4049	0.3244 0.4217	0.3659 0.4042	0.4020	0.3836	Ave		0.3813			0.2000	8.9		20.0			
4-Methyl-2-pentanone (MIBK)	1.3337 1.5938	1.4333 1.5432	1.5183 1.5597	1.6973	1.5781	Ave		1.5322			0.1000	7.1		20.0			
Toluene	5.2711 4.4434	4.6335 4.2134	4.5477 4.1515	4.9189	4.5306	Ave		4.5888			0.4000	8.0		20.0			
trans-1,3-Dichloropropene	1.0919 1.2314	1.0010 1.2291	1.0768 1.2390	1.2405	1.1978	Ave		1.1634			0.1000	8.0		20.0			
Ethyl methacrylate	1.0004 1.3464	1.0798 1.3138	1.1802 1.3430	1.3761	1.3357	Ave		1.2469			0.0100	11.4		20.0			
1,1,2-Trichloroethane	0.9042 0.8392	0.9140 0.8083	0.8366 0.8223	0.9083	0.8707	Ave		0.8630			0.1000	4.9		20.0			
Tetrachloroethene	1.0441 0.8859	0.8849 0.8441	0.8770 0.8511	0.9540	0.8849	Ave		0.9033			0.2000	7.3		20.0			
1,3-Dichloropropane	1.7938 1.6308	1.6509 1.5905	1.6277 1.5764	1.7695	1.6617	Ave		1.6627			0.0100	4.7		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.: 180-60202-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

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-Hexanone	0.9625 1.2204	1.0823 1.1836	1.1235 1.1903	1.2807	1.2516	Ave		1.1618			0.1000	8.9		20.0			
Dibromochloromethane	0.7827 0.7972	0.7732 0.7711	0.7522 0.7692	0.8430	0.7806	Ave		0.7837			0.1000	3.5		20.0			
1,2-Dibromoethane (EDB)	0.9879 0.8808	0.8848 0.8541	0.8553 0.8552	0.9460	0.8890	Ave		0.8942			0.1000	5.4		20.0			
3-Chlorobenzotrifluoride	1.9157 1.7261	1.6827 1.6878	1.6583 1.5672	1.8126	1.6624	Ave		1.7141			0.0100	6.2		20.0			
Chlorobenzene	3.4137 2.9353	2.9493 2.8119	2.9482 2.7968	3.2426	2.9840	Ave		3.0102			0.5000	7.1		20.0			
4-Chlorobenzotrifluoride	1.7275 1.6178	1.5244 1.5687	1.5274 1.4758	1.6607	1.5504	Ave		1.5816			0.0100	5.2		20.0			
1,1,1,2-Tetrachloroethane	0.9467 0.9296	0.8738 0.8699	0.8606 0.8862	0.9570	0.9080	Ave		0.9040			0.0100	4.1		20.0			
Ethylbenzene	1.6892 1.7026	1.6675 1.6484	1.6675 1.6286	1.8596	1.7003	Ave		1.6955			0.1000	4.2		20.0			
m-Xylene & p-Xylene	2.0807 2.1462	2.0968 2.0426	2.0837 2.0391	2.3051	2.1227	Ave		2.1146			0.1000	4.0		20.0			
o-Xylene	1.9470 2.0584	1.9598 1.9600	1.9876 1.9373	2.2213	2.0352	Ave		2.0133			0.3000	4.7		20.0			
Styrene	3.2744 3.4065	3.3740 3.2744	3.4152 3.2151	3.8196	3.4682	Ave		3.4059			0.3000	5.5		20.0			
Bromoform	0.4539 0.4966	0.4322 0.4805	0.4310 0.4824	0.5173	0.4868	Ave		0.4726			0.1000	6.5		20.0			
2-Chlorobenzotrifluoride	1.8818 1.6787	1.6471 1.6389	1.5983 1.5325	1.7815	1.5827	Ave		1.6677			0.0100	6.8		20.0			
Isopropylbenzene	5.4383 5.1298	5.1766 4.8056	5.1640 4.7236	5.7043	5.2035	Ave		5.1682			0.1000	6.1		20.0			
1,1,2,2-Tetrachloroethane	1.3065 1.2328	1.2039 1.1849	1.1389 1.1758	1.3085	1.2120	Ave		1.2204			0.3000	5.0		20.0			
Bromobenzene	0.8467 0.8393	0.7965 0.8491	0.8594 0.8240	0.9054	0.8347	Ave		0.8444			0.0100	3.7		20.0			
trans-1,4-Dichloro-2-butene	0.2767 0.3099	0.2357 0.3152	0.2812 0.3171	0.3036	0.2878	Ave		0.2909			0.0100	9.3		20.0			
1,2,3-Trichloropropane	0.2857 0.2758	0.2635 0.2734	0.2736 0.2718	0.2972	0.2658	Ave		0.2759			0.0100	4.0		20.0			
N-Propylbenzene	0.9880 0.9920	0.9397 0.9774	0.9730 0.9983	1.0148	0.9434	Ave		0.9783			0.0100	2.7		20.0			
2-Chlorotoluene	0.8774 0.8331	0.8213 0.8319	0.8003 0.8214	0.9075	0.8038	Ave		0.8371			0.0100	4.4		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

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								
3-Chlorotoluene	0.9618 0.8983	0.8516 0.9075	0.8736 0.8636	0.9354	0.8434	Ave		0.8919			0.0100	4.7		20.0			
1,3,5-Trimethylbenzene	3.0649 2.9182	2.8725 2.8638	3.0008 2.8251	3.2027	2.8961	Ave		2.9555			0.0100	4.3		20.0			
4-Chlorotoluene	0.9124 0.8913	0.8557 0.9055	0.8888 0.8942	0.9640	0.8552	Ave		0.8959			0.0100	3.9		20.0			
tert-Butylbenzene	2.4259 2.4211	2.2521 2.3815	2.4044 2.3509	2.6281	2.3647	Ave		2.4036			0.0100	4.4		20.0			
1,2,4-Trimethylbenzene	2.9530 2.9989	2.9332 2.9414	3.0648 2.8662	3.2794	2.9337	Ave		2.9963			0.0100	4.3		20.0			
3,4-Dichlorobenzotrifluoride	0.8682 0.8456	0.7917 0.8590	0.8153 0.8242	0.8648	0.7785	Ave		0.8309			0.0100	4.1		20.0			
sec-Butylbenzene	3.6596 3.4346	3.3643 3.3822	3.5845 3.3147	3.6875	3.3843	Ave		3.4765			0.0100	4.2		20.0			
1,3-Dichlorobenzene	1.7603 1.5701	1.5326 1.5590	1.6148 1.5601	1.6959	1.5565	Ave		1.6062			0.6000	5.0		20.0			
4-Isopropyltoluene	2.8431 2.9394	2.7443 2.8745	2.9210 2.8115	3.1308	2.8590	Ave		2.8904			0.0100	4.0		20.0			
1,4-Dichlorobenzene	1.7952 1.6182	1.5639 1.5848	1.6147 1.5901	1.7615	1.5995	Ave		1.6410			0.5000	5.3		20.0			
2,4-Dichlorobenzotrifluoride	0.8456 0.7964	0.7893 0.8050	0.7576 0.7647	0.8073	0.7396	Ave		0.7882			0.0100	4.3		20.0			
2,5-Dichlorobenzotrifluoride	1.0173 0.9043	0.8344 0.9241	0.8702 0.8522	0.9510	0.8357	Ave		0.8986			0.0100	7.1		20.0			
n-Butylbenzene	2.4853 2.5372	2.2717 2.5074	2.4977 2.4722	2.6399	2.4590	Ave		2.4838			0.0100	4.1		20.0			
1,2-Dichlorobenzene	1.5509 1.4674	1.4031 1.4529	1.4782 1.4481	1.5859	1.4465	Ave		1.4791			0.4000	4.1		20.0			
1,2-Dibromo-3-Chloropropane	0.1541 0.1371	0.1189 0.1387	0.1142 0.1384	0.1410	0.1255	Ave		0.1335			0.0500	9.8		20.0			
2,4- & 2,5- & 2,6- Dichlorotoluene	1.0072 1.0615	0.9833 1.0735	1.0273 1.0076	1.1136	1.0120	Ave		1.0357			0.0100	4.2		20.0			
2,3- & 3,4- Dichlorotoluene	0.8882 1.0429	0.9420 1.0817	1.0259 1.0091	1.0936	0.9854	Ave		1.0086			0.0100	6.9		20.0			
1,2,4-Trichlorobenzene	0.7501 0.7508	0.6469 0.7573	0.6874 0.7373	0.7870	0.7257	Ave		0.7303			0.2000	6.0		20.0			
Hexachlorobutadiene	0.3398 0.3198	0.2903 0.3156	0.3060 0.3130	0.3250	0.2942	Ave		0.3130			0.0100	5.2		20.0			
Naphthalene	1.3750 1.9792	1.5958 1.9659	1.7582 1.9476	2.0386	1.8631	Ave		1.8154			0.0100	12.6		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.: 180-60202-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

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								
1,2,3-Trichlorobenzene	0.4946 0.5988	0.5115 0.6141	0.5587 0.5824	0.6166	0.5682	Ave		0.5681			0.0100	8.0		20.0			
2,4,5-Trichlorotoluene	0.1263 0.2205	0.1579 +++++	0.1841 +++++	0.2057	0.1876	Ave		0.1803			0.0100	18.8		20.0			
2,3,6-Trichlorotoluene	0.1585 0.2044	0.1426 0.2257	0.1679 0.2115	0.1998	0.1810	Ave		0.1864			0.0100	15.4		20.0			
Dibromofluoromethane (Surr)	0.2655 0.2344	0.2342 0.2353	0.2475 0.2218	0.2496	0.2254	Ave		0.2392				6.0		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3671 0.3325	0.3495 0.3399	0.3636 0.3183	0.3634	0.3286	Ave		0.3454				5.3		20.0			
Toluene-d8 (Surr)	4.4374 3.6414	3.9342 3.4262	3.8388 3.3349	4.0018	3.5754	Ave		3.7738				9.5		20.0			
4-Bromofluorobenzene (Surr)	1.7010 1.5162	1.5759 1.4352	1.5292 1.3822	1.6175	1.4485	Ave		1.5257				6.9		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.: 180-60202-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-192047/3	51022003.D
Level 2	IC 180-192047/4	51022004.D
Level 3	ICIS 180-192047/5	51022005.D
Level 4	IC 180-192047/6	51022006.D
Level 5	IC 180-192047/7	51022007.D
Level 6	IC 180-192047/8	51022008.D
Level 7	IC 180-192047/9	51022009.D
Level 8	IC 180-192047/10	51022010.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	13031 387646	53788 429182	109895 528854	153504	215461	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	24338 741257	103169 830573	210870 1036936	312655	428182	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	16691 502328	68313 564533	139567 684522	198206	273768	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	27329 711589	100950 786444	207700 991146	292779	402090	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Ave	4415 115398	18023 136780	36244 148486	54487	66676	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	7605 213775	32300 231064	67056 260074	94249	128149	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	17875 527240	70880 590488	146976 716202	228494	292782	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Ave	13250 420691	57303 470795	123993 573682	169474	242761	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	12525 407915	59659 469809	121171 562470	178296	241616	5.00 175	25.0 200	50.0 250	75.0	100
Acrolein	FB	Ave	58441 126054	65675 138202	85057 159873	98109	107734	100 225	125 250	150 275	175	200
1,1-Dichloroethene	FB	Ave	10570 337941	40740 381419	92995 468351	130074	193304	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	11965 357669	47934 396910	101601 507801	146948	197014	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	26826 340715	48746 384850	92348 478009	129287	181978	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	14073 486595	67567 562493	140487 686097	208665	281549	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	27927 880574	111241 999685	237079 1239529	349970	478017	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.: 180-60202-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

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	6211 209891	24893 246656	56753 305567	81119	119809	5.00 175	25.0 200	50.0 250	75.0	100
Methyl acetate	FB	Ave	65534 2139103	294366 2465695	603025 3057092	917155	1272643	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Ave	16993 375770	55631 436687	111596 533332	165834	225032	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBAd9	Ave	6491 262285	33341 300575	65650 480778	107688	174156	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	61065 2092798	285590 2376180	577960 2943037	866579	1198880	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	11047 357112	48499 405331	103732 507564	147333	202984	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	27578 933266	121688 1105174	262198 1318423	391228	538029	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	22652 766179	94805 871474	219125 1090775	304104	426391	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	24880 784476	109614 912372	228544 1120170	329739	456615	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	23202 964118	111997 1072697	256186 1311690	369725	511473	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	2147 67579	8504 77067	18068 99511	26675	38082	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	11966 393767	53404 449345	112534 555908	169464	224503	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	36705 538326	75482 619027	145907 764110	226627	316479	25.0 350	50.0 400	100 500	150	200
Bromochloromethane	FB	Ave	4959 170915	22047 192697	48054 236063	68912	96736	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	12780 363332	44526 415338	100632 518694	154418	201495	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	20238 617527	86882 711575	182998 878210	267440	359653	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	14174 453368	59420 517321	126207 631074	183039	249353	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	31025 998701	127529 1120418	280237 1414113	397193	557095	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	11566 388240	48891 442875	102720 539131	152202	210724	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	16498 534817	70145 607876	148289 758129	212138	302113	5.00 175	25.0 200	50.0 250	75.0	100
Benzene	FB	Ave	48106 1481843	204563 1709623	442388 2092563	635243	871727	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.: 180-60202-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

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
Isobutyl alcohol	FB	Ave	7842 344432	38336 387004	81233 506048	130706	192078	125 4375	625 5000	1250 6250	1875	2500
1,2-Dichloroethane	FB	Ave	17709 561654	78202 642222	164925 786249	243043	325151	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	23346 757194	95302 845753	210895 1081576	293294	409522	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	11325 363296	48922 414767	104866 519062	147466	206655	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	17831 651506	77679 744113	179654 917304	260774	358556	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	14770 447322	59648 522348	127539 647909	187825	264588	5.00 175	25.0 200	50.0 250	75.0	100
Dibromomethane	FB	Ave	5199 189826	26191 229137	54833 275422	84591	115152	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	1884 74760	8964 84058	19666 114687	31890	43028	100 3500	500 4000	1000 5000	1500	2000
Bromodichloromethane	FB	Ave	13009 416437	53335 492086	119981 600131	176068	236201	5.00 175	25.0 200	50.0 250	75.0	100
2-Chloroethyl vinyl ether	FB	Ave	11668 484364	61357 587972	139172 721849	204021	289200	10.0 350	50.0 400	100 500	150	200
cis-1,3-Dichloropropene	FB	Ave	13177 525078	60832 616111	137855 757503	207121	287940	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	60345 1071790	128845 1255774	299144 1562723	446448	614369	25.0 350	50.0 400	100 500	150	200
Toluene	CBNZ d5	Ave	47701 1493978	208264 1714356	447990 2079772	646939	881918	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBNZ d5	Ave	9881 414030	44992 500081	106076 620726	163144	233154	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBNZ d5	Ave	9053 452684	48533 534579	116263 672788	180987	260008	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBNZ d5	Ave	8183 282152	41081 328867	82417 411935	119460	169494	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBNZ d5	Ave	9449 297871	39774 343465	86393 426359	125468	172257	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBNZ d5	Ave	16233 548319	74206 647160	160344 789714	232723	323471	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBNZ d5	Ave	43550 820647	97293 963136	221352 1192579	336871	487269	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBNZ d5	Ave	7083 268037	34755 313753	74102 385352	110875	151944	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBNZ d5	Ave	8940 296148	39770 347518	84260 428449	124423	173047	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.: 180-60202-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

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-Chlorobenzotrifluoride	CBNZ d5	Ave	17336 580353	75635 686732	163361 785098	238396	323599	5.00 175	25.0 200	50.0 250	75.0	100
Chlorobenzene	CBNZ d5	Ave	30892 986925	132564 1144110	290427 1401132	426466	580865	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBNZ d5	Ave	15633 543962	68517 638282	150461 739313	218415	301799	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	8567 312552	39274 353938	84776 443976	125859	176750	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBNZ d5	Ave	15286 572466	74948 670720	164268 815861	244573	330980	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBNZ d5	Ave	18829 721601	94244 831099	205264 1021507	303162	413204	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBNZ d5	Ave	17619 692079	88088 797469	195801 970548	292141	396170	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBNZ d5	Ave	29632 1145359	151654 1332303	336427 1610677	502358	675122	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBNZ d5	Ave	4108 166982	19425 195502	42456 241663	68040	94753	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBNZ d5	Ave	17029 564416	74032 666819	157447 767761	234305	308077	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBNZ d5	Ave	49214 1724768	232676 1955310	508707 2366385	750229	1012899	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	11823 414517	54112 482112	112189 589029	172092	235918	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCBd 4	Ave	10864 405838	53105 483285	118874 569568	174267	238406	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	3550 149838	15715 179384	38901 219200	58424	82199	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCBd 4	Ave	3666 133377	17572 155618	37848 187868	57210	75921	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCBd 4	Ave	12678 479706	62656 556273	134580 690007	195314	269458	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCBd 4	Ave	11258 402855	54765 473480	110690 567755	174662	229591	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCBd 4	Ave	12341 434398	56784 516505	120831 596946	180033	240888	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCBd 4	Ave	39328 1411132	191530 1629974	415056 1952749	616418	827180	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCBd 4	Ave	11707 430992	57056 515374	122940 618106	185529	244260	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCBd 4	Ave	31128 1170728	150165 1355432	332570 1624983	505812	675400	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.: 180-60202-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

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
1,2,4-Trimethylbenzene	DCBd 4	Ave	37892 1450154	195574 1674135	423909 1981171	631181	837908	5.00 175	25.0 200	50.0 250	75.0	100
3,4-Dichlorobenzotrifluoride	DCBd 4	Ave	11140 408895	52787 488889	112772 569684	166454	222355	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCBd 4	Ave	46959 1660807	224321 1925023	495792 2291141	709717	966624	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCBd 4	Ave	22587 759244	102187 887299	223357 1078386	326397	444553	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCBd 4	Ave	36482 1421342	182983 1636065	404023 1943351	602571	816569	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCBd 4	Ave	23035 782506	104279 902000	223333 1099124	339028	456853	5.00 175	25.0 200	50.0 250	75.0	100
2,4-Dichlorobenzotrifluoride	DCBd 4	Ave	10850 385108	52627 458166	104791 528566	155381	211243	5.00 175	25.0 200	50.0 250	75.0	100
2,5-Dichlorobenzotrifluoride	DCBd 4	Ave	13053 437274	55632 525934	120365 589060	183028	238687	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCBd 4	Ave	31891 1226876	151470 1427132	345469 1708798	508098	702329	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCBd 4	Ave	19901 709578	93554 826915	204460 1000919	305229	413142	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1977 66283	7931 78936	15791 95655	27147	35855	5.00 175	25.0 200	50.0 250	75.0	100
2,4- & 2,5- & 2,6- Dichlorotoluene	DCBd 4	Ave	38771 1539823	196684 1832958	426263 2089504	643007	867174	15.0 525	75.0 600	150 750	225	300
2,3- & 3,4- Dichlorotoluene	DCBd 4	Ave	22793 1008562	125614 1231331	283810 1395064	420945	562883	10.0 350	50.0 400	100 500	150	200
1,2,4-Trichlorobenzene	DCBd 4	Ave	9625 363075	43136 431004	95083 509601	151471	207275	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCBd 4	Ave	4360 154651	19359 179638	42328 216370	62543	84030	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCBd 4	Ave	17643 957033	106400 1118920	243193 1346243	392356	532144	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCBd 4	Ave	6346 289565	34103 349524	77279 402589	118676	162280	5.00 175	25.0 200	50.0 250	75.0	100
2,4,5-Trichlorotoluene	DCBd 4	Ave	1621 106630	10527 +++++	25468 +++++	39585	53573	5.00 175	25.0 +++++	50.0 +++++	75.0	100
2,3,6-Trichlorotoluene	DCBd 4	Ave	2034 98818	9509 128474	23217 146221	38449	51697	5.00 175	25.0 200	50.0 250	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	10190 303965	43928 343798	93249 415623	128589	169199	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	14089 431135	65548 496655	136959 596400	187235	246609	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.: 180-60202-1 Analy Batch No.: 192047

SDG No.:

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

Calibration Start Date: 10/22/2016 14:57 Calibration End Date: 10/22/2016 17:46 Calibration ID: 33332

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
Toluene-d8 (Surr)	CBNZ d5	Ave	40156 1224337	176832 1394043	378163 1670672	526313	695986	5.00 175	25.0 200	50.0 250	75.0	100
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	15393 509793	70832 583947	150646 692444	212729	281954	5.00 175	25.0 200	50.0 250	75.0	100

Curve Type Legend:
Ave = Average ISTD

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022003.D
Lims ID: IC VSTD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 22-Oct-2016 14:57:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-003
Misc. Info.: IC VSTD1
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:13:26 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: fergusond Date: 23-Oct-2016 08:55:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.278	4.278	0.000	0	105715	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.265	7.265	0.000	97	383762	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.373	0.000	92	90495	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.722	0.000	97	128316	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.541	6.541	0.000	90	10190	5.00	5.55	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.918	0.000	0	14089	5.00	5.32	
$ 7 Toluene-d8 (Surr)	98	8.919	8.919	0.000	96	40156	5.00	5.88	
$ 8 4-Bromofluorobenzene (Surr	95	11.554	11.554	0.000	84	15393	5.00	5.57	
11 Dichlorodifluoromethane	85	1.607	1.607	0.000	95	13031	5.00	5.71	
12 Chloromethane	50	1.771	1.771	0.000	99	24338	5.00	5.50	
13 Vinyl chloride	62	1.899	1.899	0.000	94	16691	5.00	5.69	
14 Butadiene	39	1.929	1.929	0.000	97	27329	5.00	6.30	
15 Bromomethane	94	2.228	2.228	0.000	55	4415	5.00	6.02	
16 Chloroethane	64	2.374	2.374	0.000	92	7605	5.00	5.81	
17 Dichlorofluoromethane	67	2.659	2.659	0.000	95	17875	5.00	5.71	
18 Trichlorofluoromethane	101	2.672	2.672	0.000	51	13250	5.00	5.34	M
20 Ethyl ether	59	3.043	3.043	0.000	90	12525	5.00	5.08	
21 Acrolein	56	3.225	3.225	0.000	98	58441	100.0	100.9	
22 1,1-Dichloroethene	96	3.329	3.329	0.000	89	10570	5.00	5.45	
23 1,1,2-Trichloro-1,2,2-trif	101	3.389	3.389	0.000	72	11965	5.00	5.66	
24 Acetone	43	3.438	3.438	0.000	88	26826	25.0	27.2	
25 Iodomethane	142	3.517	3.517	0.000	94	14073	5.00	4.88	
26 Carbon disulfide	76	3.608	3.608	0.000	99	27927	5.00	5.50	
28 3-Chloro-1-propene	76	3.913	3.913	0.000	86	6211	5.00	5.15	
30 Methyl acetate	43	3.937	3.937	0.000	99	65534	25.0	25.6	
31 Methylene Chloride	84	4.132	4.132	0.000	92	16993	5.00	7.00	
32 2-Methyl-2-propanol	59	4.405	4.405	0.000	48	6491	50.0	50.0	
33 Acrylonitrile	53	4.521	4.521	0.000	99	61065	50.0	50.0	
34 trans-1,2-Dichloroethene	96	4.545	4.545	0.000	92	11047	5.00	5.23	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	90	27578	5.00	5.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.959	4.959	0.000	87	22652	5.00	5.13	
37 1,1-Dichloroethane	63	5.184	5.184	0.000	95	24880	5.00	5.28	
38 Vinyl acetate	43	5.233	5.233	0.000	97	23202	5.00	4.43	
44 2,2-Dichloropropane	97	5.926	5.926	0.000	56	2147	5.00	5.46	M
45 cis-1,2-Dichloroethene	96	5.932	5.932	0.000	87	11966	5.00	5.13	
46 2-Butanone (MEK)	43	5.951	5.951	0.000	97	36705	25.0	23.3	
49 Chlorobromomethane	128	6.218	6.218	0.000	86	4959	5.00	5.03	
51 Tetrahydrofuran	42	6.237	6.237	0.000	93	12780	10.0	11.9	
52 Chloroform	83	6.364	6.364	0.000	97	20238	5.00	5.40	
53 1,1,1-Trichloroethane	97	6.522	6.522	0.000	92	14174	5.00	5.37	
54 Cyclohexane	56	6.595	6.595	0.000	97	31025	5.00	5.36	
56 Carbon tetrachloride	117	6.699	6.699	0.000	93	11566	5.00	5.24	
55 1,1-Dichloropropene	75	6.705	6.705	0.000	85	16498	5.00	5.30	
58 Benzene	78	6.924	6.924	0.000	92	48106	5.00	5.37	
57 Isobutyl alcohol	41	6.924	6.924	0.000	41	7842	125.0	119.6	
59 1,2-Dichloroethane	62	7.003	7.003	0.000	94	17709	5.00	5.25	
62 n-Heptane	43	7.283	7.283	0.000	42	23346	5.00	5.37	
64 Trichloroethene	130	7.660	7.660	0.000	90	11325	5.00	5.28	
66 Methylcyclohexane	83	7.885	7.885	0.000	93	17831	5.00	4.84	
67 1,2-Dichloropropane	63	7.934	7.934	0.000	90	14770	5.00	5.48	
70 1,4-Dioxane	88	8.037	8.037	0.000	41	1884	100.0	89.1	
68 Dibromomethane	93	8.025	8.025	0.000	92	5199	5.00	4.56	
71 Dichlorobromomethane	83	8.220	8.220	0.000	92	13009	5.00	5.26	
73 2-Chloroethyl vinyl ether	63	8.506	8.506	0.000	85	11668	10.0	8.26	
74 cis-1,3-Dichloropropene	75	8.664	8.664	0.000	84	13177	5.00	4.50	
75 4-Methyl-2-pentanone (MIBK	43	8.816	8.816	0.000	98	60345	25.0	21.8	
76 Toluene	91	8.992	8.992	0.000	95	47701	5.00	5.74	
77 trans-1,3-Dichloropropene	75	9.242	9.242	0.000	93	9881	5.00	4.69	
78 Ethyl methacrylate	69	9.303	9.303	0.000	91	9053	5.00	4.01	
79 1,1,2-Trichloroethane	97	9.430	9.430	0.000	95	8183	5.00	5.24	
80 Tetrachloroethene	164	9.497	9.497	0.000	92	9449	5.00	5.78	
81 1,3-Dichloropropane	76	9.589	9.589	0.000	91	16233	5.00	5.39	
82 2-Hexanone	43	9.649	9.649	0.000	96	43550	25.0	20.7	
84 Chlorodibromomethane	129	9.801	9.801	0.000	90	7083	5.00	4.99	
85 Ethylene Dibromide	107	9.911	9.911	0.000	93	8940	5.00	5.52	
86 3-Chlorobenzotrifluoride	180	10.373	10.373	0.000	56	17336	5.00	5.59	
87 Chlorobenzene	112	10.404	10.404	0.000	89	30892	5.00	5.67	
88 4-Chlorobenzotrifluoride	180	10.465	10.465	0.000	95	15633	5.00	5.46	
89 1,1,1,2-Tetrachloroethane	131	10.495	10.495	0.000	42	8567	5.00	5.24	
90 Ethylbenzene	106	10.501	10.501	0.000	98	15286	5.00	4.98	
91 m-Xylene & p-Xylene	106	10.635	10.635	0.000	0	18829	5.00	4.92	
92 o-Xylene	106	11.012	11.012	0.000	98	17619	5.00	4.84	
93 Styrene	104	11.030	11.030	0.000	89	29632	5.00	4.81	
94 Bromoform	173	11.219	11.219	0.000	93	4108	5.00	4.80	
96 2-Chlorobenzotrifluoride	180	11.286	11.286	0.000	97	17029	5.00	5.64	
97 Isopropylbenzene	105	11.383	11.383	0.000	96	49214	5.00	5.26	
100 Bromobenzene	156	11.700	11.700	0.000	95	10864	5.00	5.01	
99 1,1,2,2-Tetrachloroethane	83	11.693	11.693	0.000	73	11823	5.00	5.35	
102 trans-1,4-Dichloro-2-buten	53	11.736	11.736	0.000	61	3550	5.00	4.76	
101 1,2,3-Trichloropropane	110	11.754	11.754	0.000	91	3666	5.00	5.18	
103 N-Propylbenzene	120	11.797	11.797	0.000	99	12678	5.00	5.05	
104 2-Chlorotoluene	126	11.882	11.882	0.000	94	11258	5.00	5.24	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.949	11.949	0.000	97	12341	5.00	5.39	
106 1,3,5-Trimethylbenzene	105	11.985	11.985	0.000	92	39328	5.00	5.19	
107 4-Chlorotoluene	126	12.010	12.010	0.000	99	11707	5.00	5.09	
108 tert-Butylbenzene	119	12.302	12.302	0.000	93	31128	5.00	5.05	
110 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	37892	5.00	4.93	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.399	0.000	93	11140	5.00	5.22	
112 sec-Butylbenzene	105	12.521	12.521	0.000	95	46959	5.00	5.26	
113 1,3-Dichlorobenzene	146	12.642	12.642	0.000	96	22587	5.00	5.48	
114 4-Isopropyltoluene	119	12.673	12.673	0.000	97	36482	5.00	4.92	
115 1,4-Dichlorobenzene	146	12.740	12.740	0.000	94	23035	5.00	5.47	
116 2,4-Dichloro-1-(triflourom	214	12.776	12.776	0.000	92	10850	5.00	5.36	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.813	0.000	0	13053	5.00	5.66	
120 n-Butylbenzene	91	13.087	13.087	0.000	99	31891	5.00	5.00	
121 1,2-Dichlorobenzene	146	13.099	13.099	0.000	92	19901	5.00	5.24	
122 1,2-Dibromo-3-Chloropropan	75	13.896	13.896	0.000	65	1977	5.00	5.77	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.036	14.036	0.000	0	38771	15.0	14.6	
125 2,3- & 3,4- Dichlorotoluen	125	14.455	14.455	0.000	0	22793	10.0	8.81	
126 1,2,4-Trichlorobenzene	180	14.717	14.717	0.000	91	9625	5.00	5.14	
127 Hexachlorobutadiene	225	14.857	14.857	0.000	91	4360	5.00	5.43	
128 Naphthalene	128	14.979	14.979	0.000	98	17643	5.00	3.79	
129 1,2,3-Trichlorobenzene	180	15.210	15.210	0.000	93	6346	5.00	4.35	
131 2,4,5-Trichlorotoluene	159	15.988	15.988	0.000	0	1621	5.00	3.50	
130 2,3,6-Trichlorotoluene	159	16.080	16.080	0.000	85	2034	5.00	4.25	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		10.0	10.4	
S 133 Xylenes, Total	106				0		10.0	9.75	
S 135 1,3-Dichloropropene, Total	1				0		10.0	9.20	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00217	Amount Added:	0.20	Units: uL	
voaWKetPriRes_00002	Amount Added:	0.80	Units: uL	
voaWEEmixRest_00001	Amount Added:	0.20	Units: uL	
voaW2cleveRes_00002	Amount Added:	0.20	Units: uL	
voaWVA1stRest_00009	Amount Added:	0.20	Units: uL	
VOAACROPRI_00007	Amount Added:	4.00	Units: uL	
VOA8260SURR_00060	Amount Added:	0.20	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

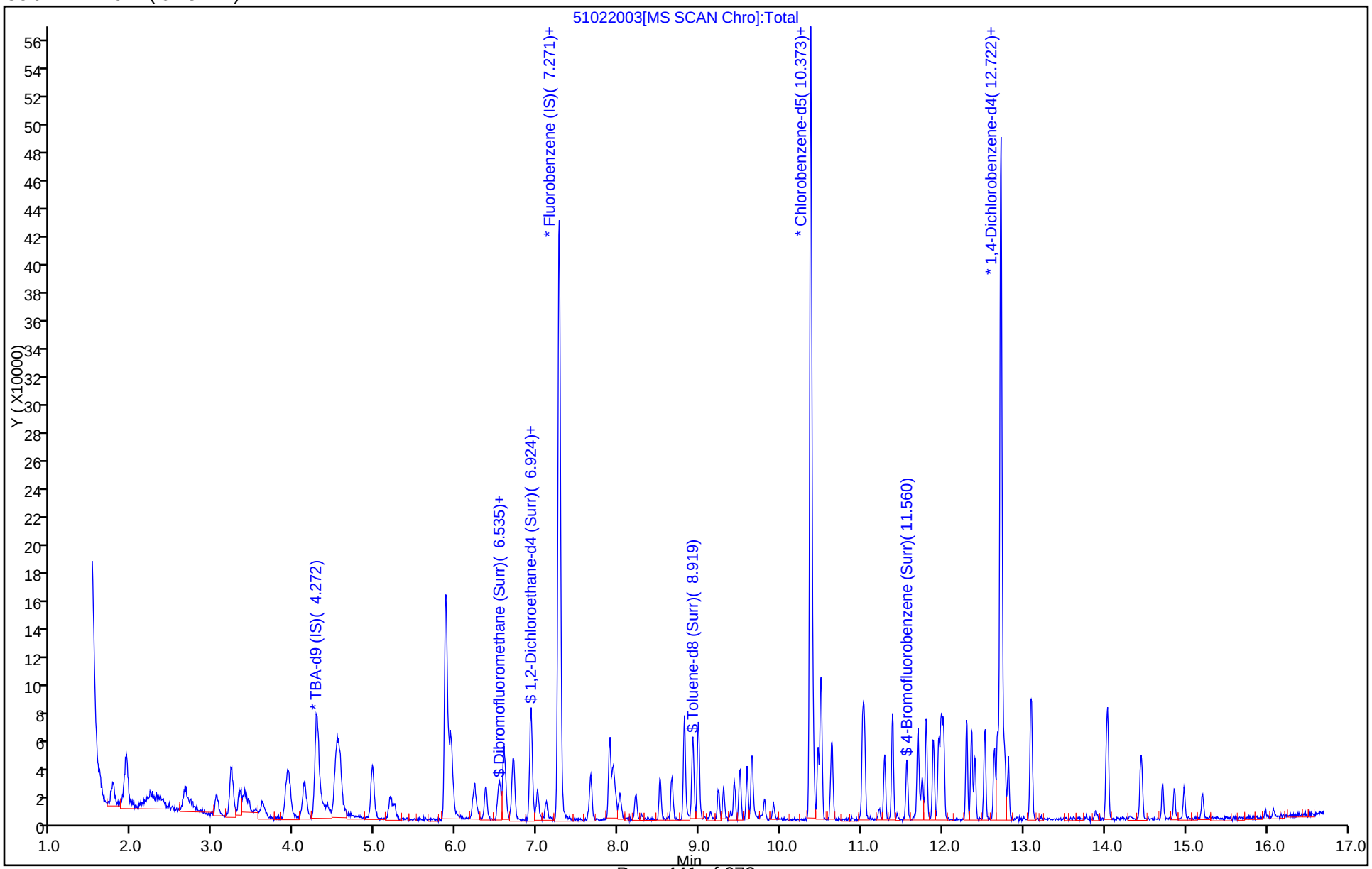
Report Date: 23-Oct-2016 13:13:27 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022003.D

Injection Date:	22-Oct-2016 14:57:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD1			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

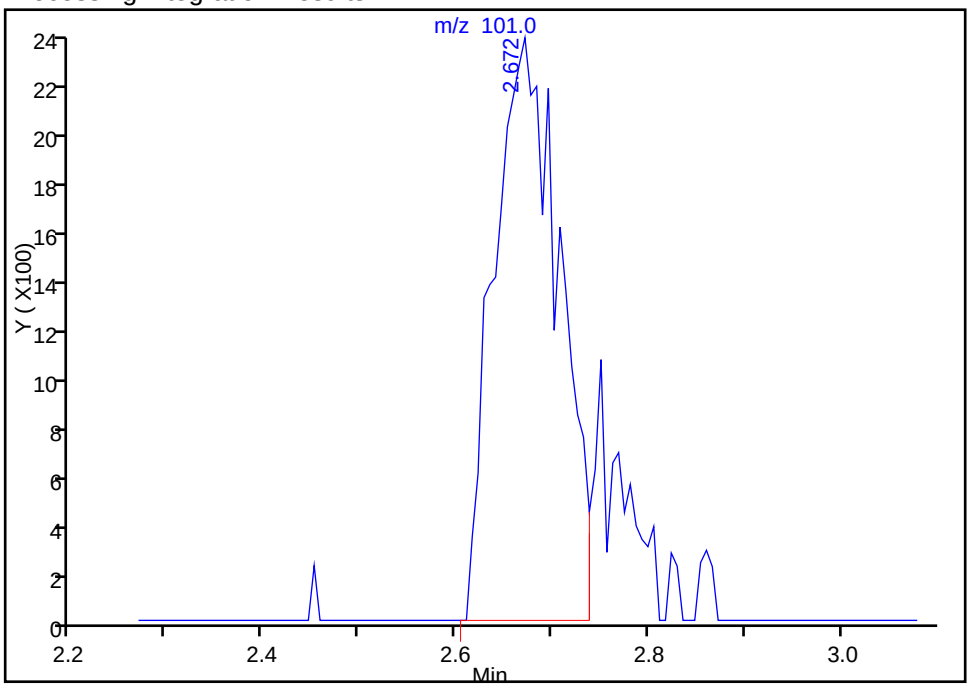
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022003.D
Injection Date: 22-Oct-2016 14:57:30 Instrument ID: CHHP5
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

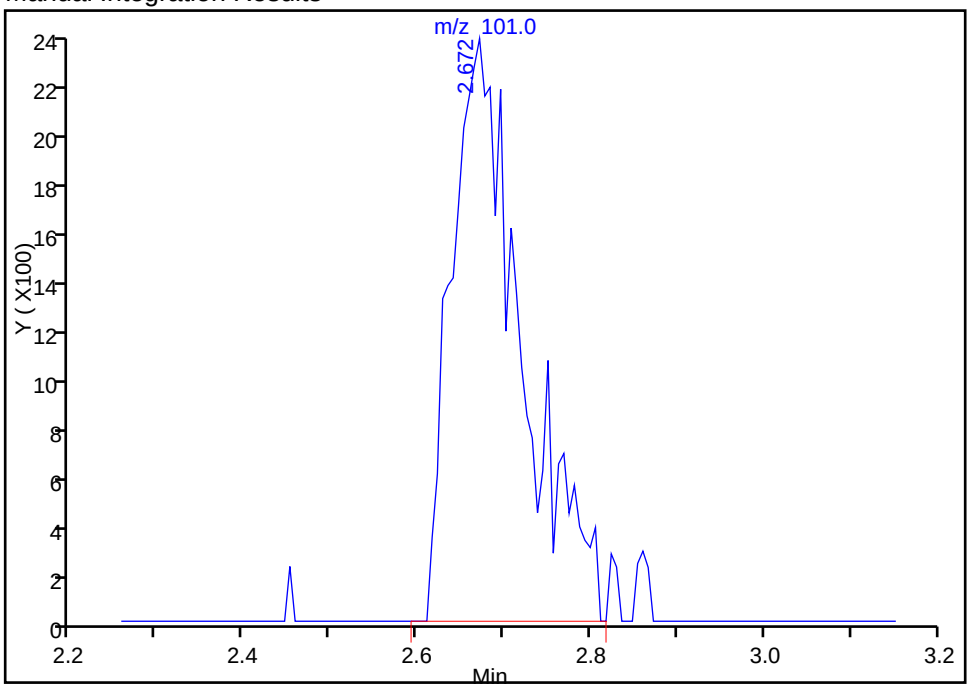
Processing Integration Results

RT: 2.67
Area: 11192
Amount: 4.623871
Amount Units: ng



Manual Integration Results

RT: 2.67
Area: 13250
Amount: 5.342390
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 09:39:58
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

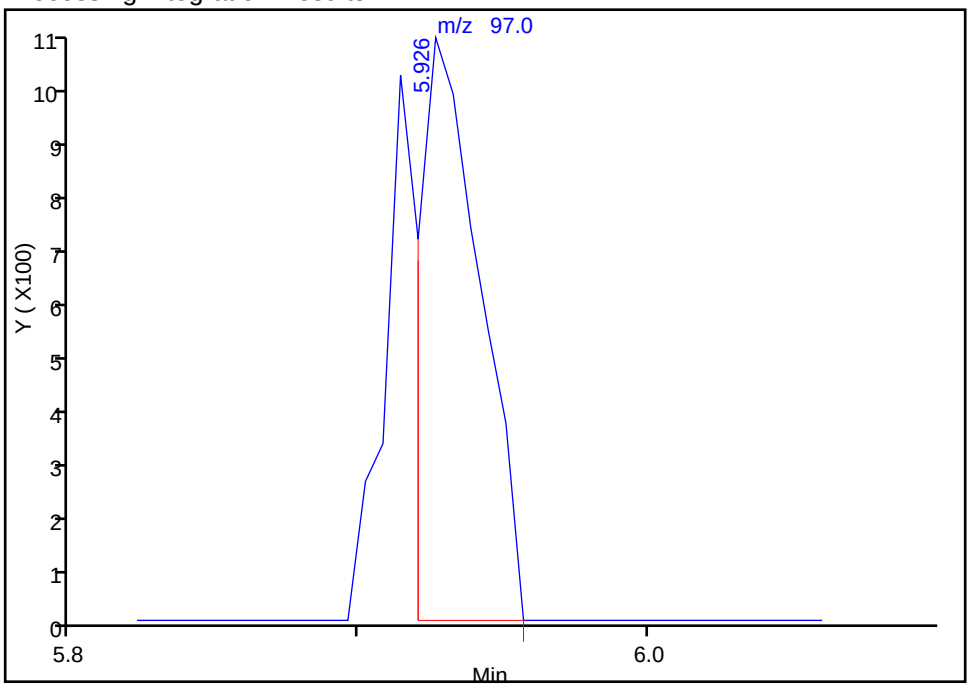
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022003.D				
Injection Date:	22-Oct-2016 14:57:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	001562	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

44 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

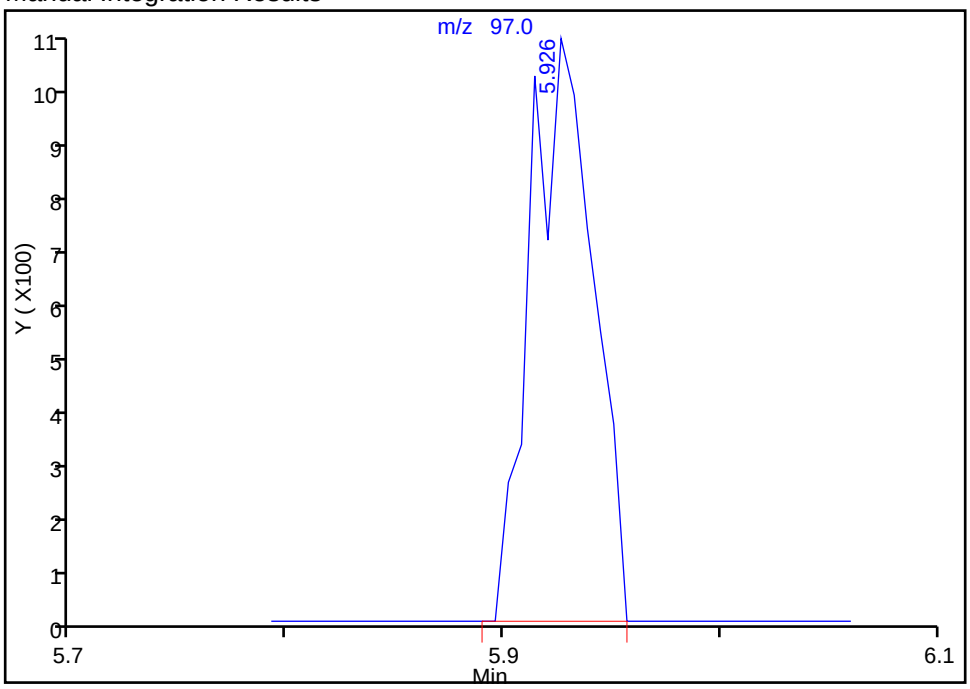
Processing Integration Results

RT: 5.93
Area: 1575
Amount: 4.157934
Amount Units: ng



Manual Integration Results

RT: 5.93
Area: 2147
Amount: 5.461800
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 09:39:58

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022004.D
Lims ID: IC VSTD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 22-Oct-2016 15:21:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-004
Misc. Info.: IC VSTD5
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:13:28 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: fergusond Date: 23-Oct-2016 09:41:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.287	4.278	0.009	0	112651	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.267	7.265	0.002	96	375068	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.376	10.373	0.003	91	89895	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.718	12.722	-0.004	96	133354	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.544	6.541	0.003	93	43928	25.0	24.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.921	6.918	0.003	0	65548	25.0	25.3	
$ 7 Toluene-d8 (Surr)	98	8.916	8.919	-0.003	96	176832	25.0	26.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.562	11.554	0.008	85	70832	25.0	25.8	
11 Dichlorodifluoromethane	85	1.604	1.607	-0.003	98	53788	25.0	24.1	
12 Chloromethane	50	1.768	1.771	-0.003	99	103169	25.0	23.8	
13 Vinyl chloride	62	1.902	1.899	0.003	97	68313	25.0	23.8	
14 Butadiene	39	1.932	1.929	0.003	99	100950	25.0	23.8	
15 Bromomethane	94	2.230	2.228	0.002	91	18023	25.0	25.2	
16 Chloroethane	64	2.376	2.374	0.002	95	32300	25.0	25.3	
17 Dichlorofluoromethane	67	2.656	2.659	-0.003	96	70880	25.0	23.2	
18 Trichlorofluoromethane	101	2.687	2.672	0.015	77	57303	25.0	23.6	M
20 Ethyl ether	59	3.039	3.043	-0.004	98	59659	25.0	24.8	
21 Acrolein	56	3.228	3.225	0.003	100	65675	125.0	116.0	
22 1,1-Dichloroethene	96	3.325	3.329	-0.004	91	40740	25.0	21.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.398	3.389	0.009	95	47934	25.0	23.2	
24 Acetone	43	3.441	3.438	0.003	95	48746	50.0	50.5	
25 Iodomethane	142	3.538	3.517	0.021	98	67567	25.0	24.0	
26 Carbon disulfide	76	3.611	3.608	0.003	100	111241	25.0	22.4	
28 3-Chloro-1-propene	76	3.903	3.913	-0.010	86	24893	25.0	21.1	
30 Methyl acetate	43	3.934	3.937	-0.003	100	294366	125.0	117.8	
31 Methylene Chloride	84	4.122	4.132	-0.010	92	55631	25.0	23.4	
32 2-Methyl-2-propanol	59	4.414	4.405	0.009	86	33341	250.0	241.0	
33 Acrylonitrile	53	4.512	4.521	-0.009	99	285590	250.0	239.1	
34 trans-1,2-Dichloroethene	96	4.548	4.545	0.003	91	48499	25.0	23.5	
35 Methyl tert-butyl ether	73	4.572	4.570	0.002	94	121688	25.0	22.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.968	4.959	0.009	95	94805	25.0	22.0	
37 1,1-Dichloroethane	63	5.181	5.184	-0.003	97	109614	25.0	23.8	
38 Vinyl acetate	43	5.229	5.233	-0.004	97	111997	25.0	21.9	
44 2,2-Dichloropropane	97	5.929	5.926	0.003	54	8504	25.0	22.1	
45 cis-1,2-Dichloroethene	96	5.935	5.932	0.003	88	53404	25.0	23.4	
46 2-Butanone (MEK)	43	5.947	5.951	-0.004	92	75482	50.0	49.1	
49 Chlorobromomethane	128	6.221	6.218	0.003	84	22047	25.0	22.9	
51 Tetrahydrofuran	42	6.239	6.237	0.002	93	44526	50.0	42.3	
52 Chloroform	83	6.367	6.364	0.003	96	86882	25.0	23.7	
53 1,1,1-Trichloroethane	97	6.519	6.522	-0.003	93	59420	25.0	23.1	
54 Cyclohexane	56	6.592	6.595	-0.003	96	127529	25.0	22.5	
56 Carbon tetrachloride	117	6.690	6.699	-0.009	92	48891	25.0	22.7	
55 1,1-Dichloropropene	75	6.708	6.705	0.003	85	70145	25.0	23.1	
58 Benzene	78	6.921	6.924	-0.003	93	204563	25.0	23.4	
57 Isobutyl alcohol	41	6.927	6.924	0.003	49	38336	625.0	598.2	
59 1,2-Dichloroethane	62	7.006	7.003	0.003	95	78202	25.0	23.7	
62 n-Heptane	43	7.286	7.283	0.003	97	95302	25.0	22.4	
64 Trichloroethene	130	7.657	7.660	-0.003	97	48922	25.0	23.3	
66 Methylcyclohexane	83	7.894	7.885	0.009	96	77679	25.0	21.6	
67 1,2-Dichloropropane	63	7.931	7.934	-0.003	93	59648	25.0	22.7	
70 1,4-Dioxane	88	8.016	8.037	-0.021	49	8964	500.0	433.7	
68 Dibromomethane	93	8.016	8.025	-0.009	92	26191	25.0	23.5	
71 Dichlorobromomethane	83	8.210	8.220	-0.010	96	53335	25.0	22.1	
73 2-Chloroethyl vinyl ether	63	8.521	8.506	0.015	86	61357	50.0	44.5	
74 cis-1,3-Dichloropropene	75	8.661	8.664	-0.003	85	60832	25.0	21.3	
75 4-Methyl-2-pentanone (MIBK	43	8.813	8.816	-0.003	98	128845	50.0	46.8	
76 Toluene	91	8.989	8.992	-0.003	96	208264	25.0	25.2	
77 trans-1,3-Dichloropropene	75	9.239	9.242	-0.004	91	44992	25.0	21.5	
78 Ethyl methacrylate	69	9.299	9.303	-0.004	92	48533	25.0	21.6	
79 1,1,2-Trichloroethane	97	9.433	9.430	0.003	93	41081	25.0	26.5	
80 Tetrachloroethene	164	9.500	9.497	0.003	97	39774	25.0	24.5	
81 1,3-Dichloropropane	76	9.591	9.589	0.002	94	74206	25.0	24.8	
82 2-Hexanone	43	9.646	9.649	-0.003	97	97293	50.0	46.6	
84 Chlorodibromomethane	129	9.804	9.801	0.003	88	34755	25.0	24.7	
85 Ethylene Dibromide	107	9.914	9.911	0.003	97	39770	25.0	24.7	
86 3-Chlorobenzotrifluoride	180	10.376	10.373	0.003	68	75635	25.0	24.5	
87 Chlorobenzene	112	10.400	10.404	-0.004	91	132564	25.0	24.5	
88 4-Chlorobenzotrifluoride	180	10.461	10.465	-0.004	96	68517	25.0	24.1	
89 1,1,1,2-Tetrachloroethane	131	10.498	10.495	0.003	88	39274	25.0	24.2	
90 Ethylbenzene	106	10.504	10.501	0.003	99	74948	25.0	24.6	
91 m-Xylene & p-Xylene	106	10.638	10.635	0.003	0	94244	25.0	24.8	
92 o-Xylene	106	11.015	11.012	0.003	98	88088	25.0	24.3	
93 Styrene	104	11.039	11.030	0.009	93	151654	25.0	24.8	
94 Bromoform	173	11.222	11.219	0.003	94	19425	25.0	22.9	
96 2-Chlorobenzotrifluoride	180	11.283	11.286	-0.003	95	74032	25.0	24.7	
97 Isopropylbenzene	105	11.386	11.383	0.003	97	232676	25.0	25.0	
100 Bromobenzene	156	11.696	11.700	-0.004	95	53105	25.0	23.6	
99 1,1,2,2-Tetrachloroethane	83	11.696	11.693	0.003	75	54112	25.0	24.7	
102 trans-1,4-Dichloro-2-buten	53	11.733	11.736	-0.003	60	15715	25.0	20.3	
101 1,2,3-Trichloropropane	110	11.751	11.754	-0.003	90	17572	25.0	23.9	
103 N-Propylbenzene	120	11.800	11.797	0.003	99	62656	25.0	24.0	
104 2-Chlorotoluene	126	11.885	11.882	0.003	95	54765	25.0	24.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.952	11.949	0.003	97	56784	25.0	23.9	
106 1,3,5-Trimethylbenzene	105	11.982	11.985	-0.003	94	191530	25.0	24.3	
107 4-Chlorotoluene	126	12.013	12.010	0.003	98	57056	25.0	23.9	
108 tert-Butylbenzene	119	12.298	12.302	-0.004	96	150165	25.0	23.4	
110 1,2,4-Trimethylbenzene	105	12.359	12.357	0.002	98	195574	25.0	24.5	
111 1,2-dichloro-4-(trifluorom	214	12.402	12.399	0.003	97	52787	25.0	23.8	
112 sec-Butylbenzene	105	12.524	12.521	0.003	95	224321	25.0	24.2	
113 1,3-Dichlorobenzene	146	12.639	12.642	-0.003	96	102187	25.0	23.9	
114 4-Isopropyltoluene	119	12.676	12.673	0.003	98	182983	25.0	23.7	
115 1,4-Dichlorobenzene	146	12.743	12.740	0.003	93	104279	25.0	23.8	
116 2,4-Dichloro-1-(triflourom	214	12.773	12.776	-0.003	95	52627	25.0	25.0	
118 2,5-Dichlorobenzotrifluori	214	12.810	12.813	-0.003	0	55632	25.0	23.2	
120 n-Butylbenzene	91	13.089	13.087	0.002	97	151470	25.0	22.9	
121 1,2-Dichlorobenzene	146	13.102	13.099	0.003	94	93554	25.0	23.7	
122 1,2-Dibromo-3-Chloropropan	75	13.886	13.896	-0.010	69	7931	25.0	22.3	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.032	14.036	-0.004	0	196684	75.0	71.2	
125 2,3- & 3,4- Dichlorotoluen	125	14.452	14.455	-0.003	0	125614	50.0	46.7	
126 1,2,4-Trichlorobenzene	180	14.714	14.717	-0.003	94	43136	25.0	22.1	
127 Hexachlorobutadiene	225	14.860	14.857	0.003	96	19359	25.0	23.2	
128 Naphthalene	128	14.981	14.979	0.003	97	106400	25.0	22.0	
129 1,2,3-Trichlorobenzene	180	15.206	15.210	-0.004	95	34103	25.0	22.5	
131 2,4,5-Trichlorotoluene	159	15.985	15.988	-0.003	0	10527	25.0	21.9	
130 2,3,6-Trichlorotoluene	159	16.082	16.080	0.002	94	9509	25.0	19.1	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		50.0	46.9	
S 133 Xylenes, Total	106				0		50.0	49.1	
S 135 1,3-Dichloropropene, Total	1				0		50.0	42.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00060	Amount Added:	1.00	Units: uL	
VOA8260VOAPRI_00217	Amount Added:	1.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	1.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	1.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	1.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	1.00	Units: uL	
VOAACROPRI_00007	Amount Added:	5.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

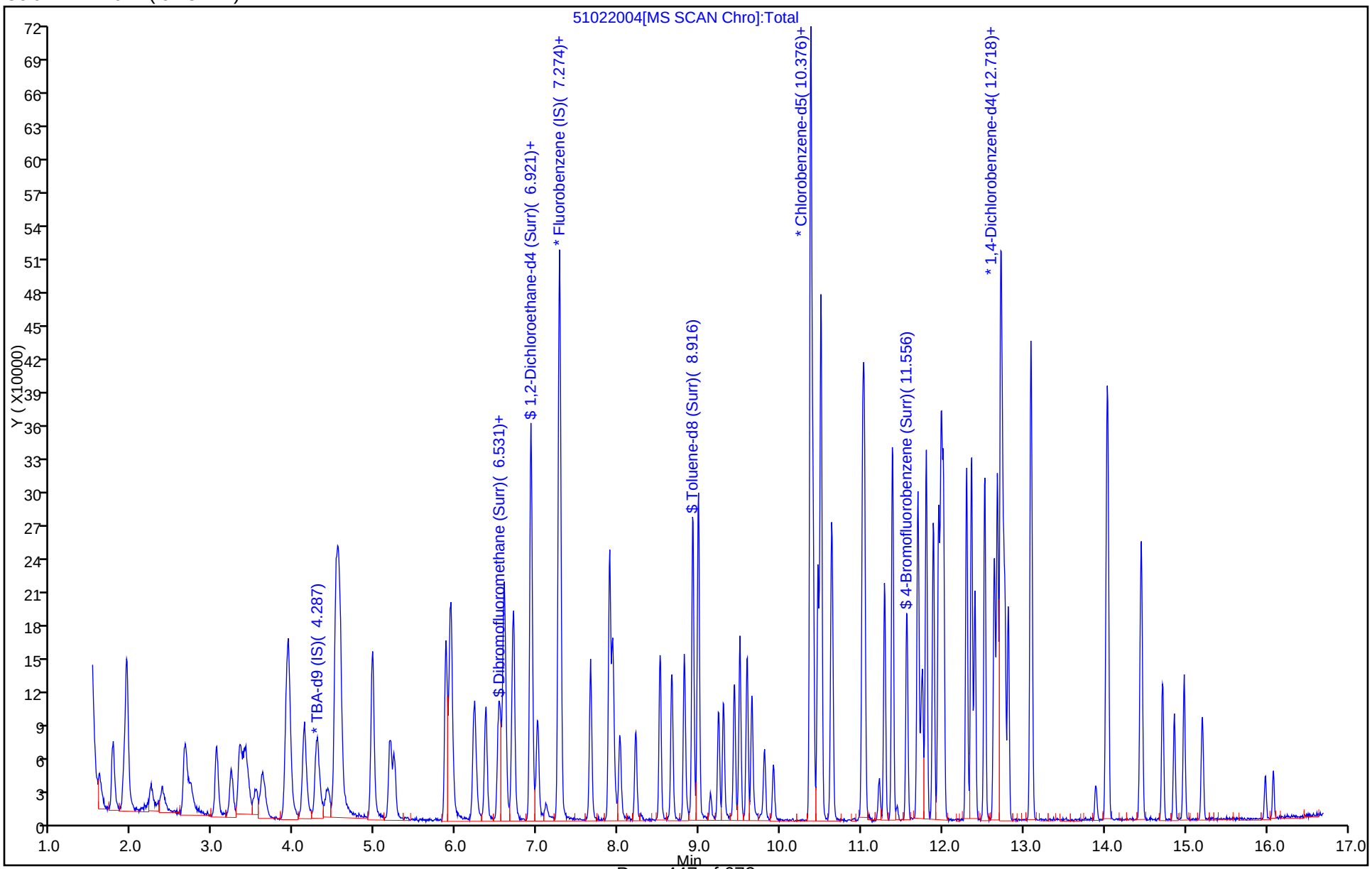
Report Date: 23-Oct-2016 13:13:29 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022004.D

Injection Date:	22-Oct-2016 15:21:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD5			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

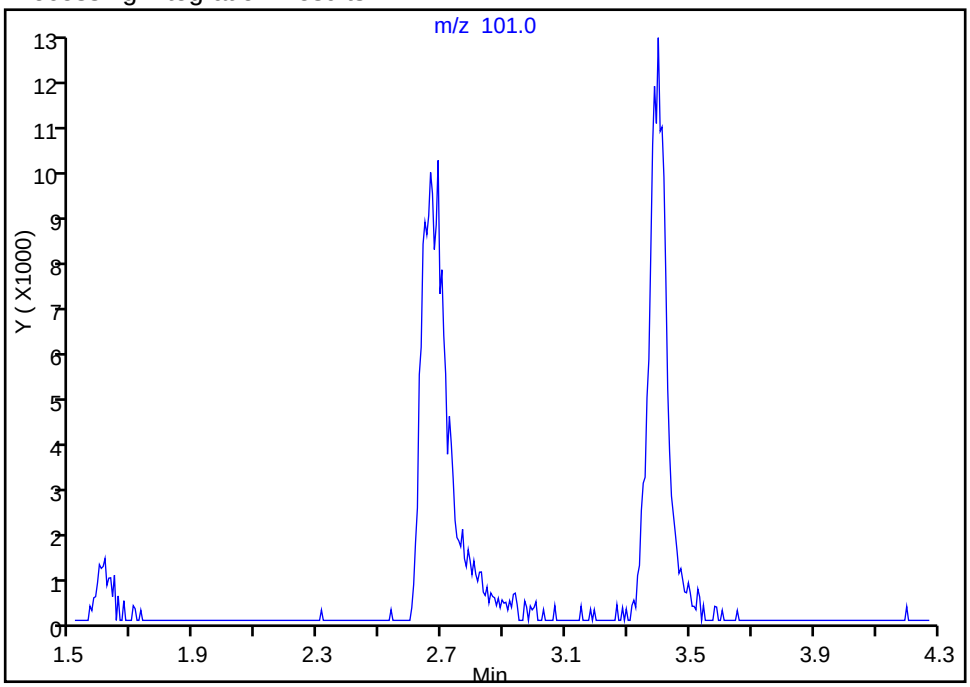
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022004.D				
Injection Date:	22-Oct-2016 15:21:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD5				
Client ID:					
Operator ID:	001562	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

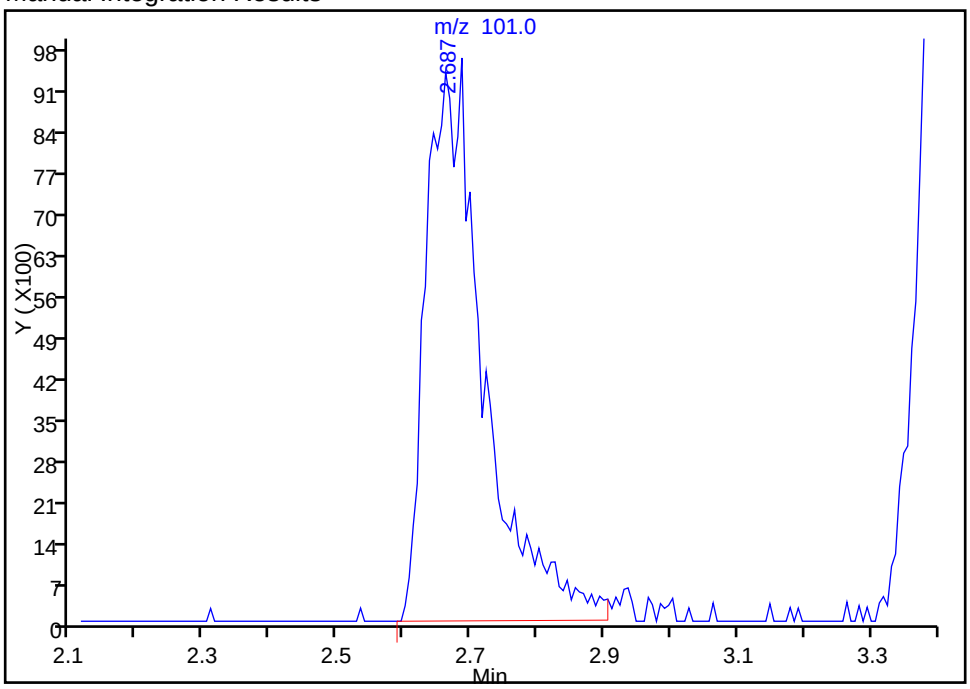
Not Detected
Expected RT: 2.67

Processing Integration Results



Manual Integration Results

RT: 2.69
Area: 57303
Amount: 23.640086
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 09:59:09
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

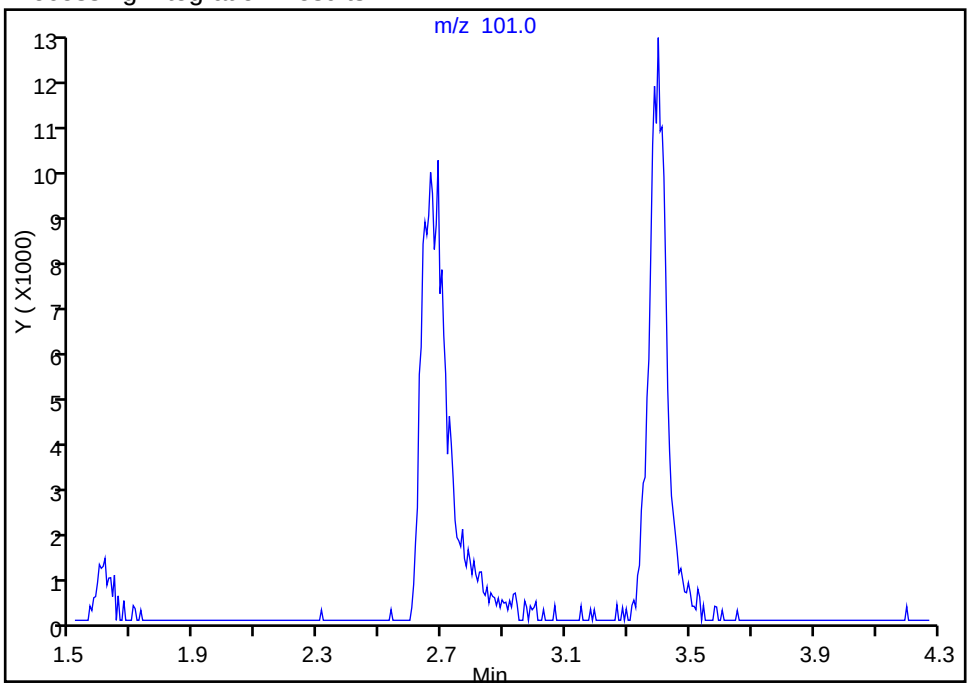
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022004.D
Injection Date: 22-Oct-2016 15:21:30 Instrument ID: CHHP5
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

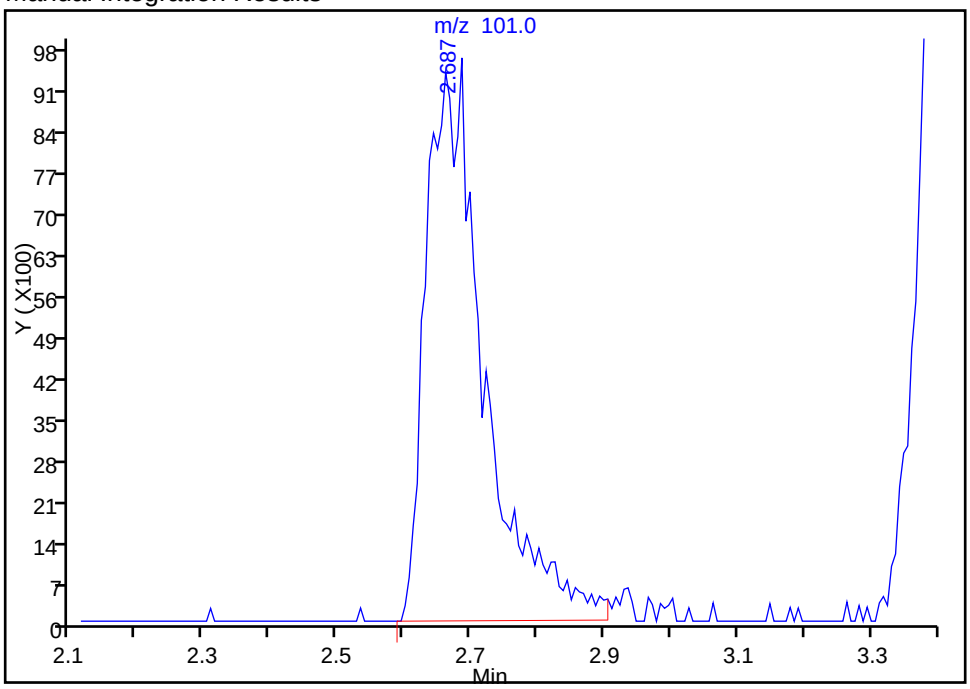
Not Detected
Expected RT: 2.67

Processing Integration Results



Manual Integration Results

RT: 2.69
Area: 57303
Amount: 23.640086
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 09:59:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022005.D
Lims ID: ICIS VSTD10
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 22-Oct-2016 15:45:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-005
Misc. Info.: ICIS VSTD10
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:33:19 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: fergusond Date: 23-Oct-2016 13:27:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.278	4.278	0.000	0	122774	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	95	376706	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	91	98510	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.716	0.000	94	138316	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.541	6.541	0.000	93	93249	50.0	51.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.919	6.919	0.000	0	136959	50.0	52.6	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	96	378163	50.0	50.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	86	150646	50.0	50.1	
11 Dichlorodifluoromethane	85	1.602	1.602	0.000	98	109895	50.0	49.1	
12 Chloromethane	50	1.766	1.766	0.000	99	210870	50.0	48.5	
13 Vinyl chloride	62	1.912	1.912	0.000	98	139567	50.0	48.5	
14 Butadiene	39	1.936	1.936	0.000	96	207700	50.0	48.8	
15 Bromomethane	94	2.234	2.234	0.000	89	36244	50.0	50.4	
16 Chloroethane	64	2.374	2.374	0.000	98	67056	50.0	52.2	
17 Dichlorofluoromethane	67	2.660	2.660	0.000	97	146976	50.0	47.9	
18 Trichlorofluoromethane	101	2.660	2.660	0.000	60	123993	50.0	50.9	M
20 Ethyl ether	59	3.043	3.043	0.000	96	121171	50.0	50.1	
21 Acrolein	56	3.220	3.220	0.000	97	85057	150.0	149.6	
22 1,1-Dichloroethene	96	3.329	3.329	0.000	92	92995	50.0	48.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.408	3.408	0.000	93	101601	50.0	49.0	
24 Acetone	43	3.451	3.451	0.000	97	92348	100.0	95.2	
25 Iodomethane	142	3.530	3.530	0.000	98	140487	50.0	49.6	
26 Carbon disulfide	76	3.615	3.615	0.000	98	237079	50.0	47.6	
28 3-Chloro-1-propene	76	3.901	3.901	0.000	87	56753	50.0	48.0	
30 Methyl acetate	43	3.938	3.938	0.000	100	603025	250.0	240.3	
31 Methylene Chloride	84	4.126	4.126	0.000	91	111596	50.0	46.8	
32 2-Methyl-2-propanol	59	4.406	4.406	0.000	84	65650	500.0	435.4	
33 Acrylonitrile	53	4.516	4.516	0.000	97	577960	500.0	481.8	
34 trans-1,2-Dichloroethene	96	4.552	4.552	0.000	92	103732	50.0	50.0	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	93	262198	50.0	48.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.966	4.966	0.000	97	219125	50.0	50.5	
37 1,1-Dichloroethane	63	5.191	5.191	0.000	97	228544	50.0	49.4	
38 Vinyl acetate	43	5.239	5.239	0.000	97	256186	50.0	49.8	
45 cis-1,2-Dichloroethene	96	5.933	5.933	0.000	87	112534	50.0	49.2	
44 2,2-Dichloropropane	97	5.933	5.933	0.000	55	18068	50.0	46.8	
46 2-Butanone (MEK)	43	5.945	5.945	0.000	97	145907	100.0	94.5	
49 Chlorobromomethane	128	6.219	6.219	0.000	85	48054	50.0	49.7	
51 Tetrahydrofuran	42	6.237	6.237	0.000	95	100632	100.0	95.1	
52 Chloroform	83	6.365	6.365	0.000	99	182998	50.0	49.7	
53 1,1,1-Trichloroethane	97	6.523	6.523	0.000	94	126207	50.0	48.7	
54 Cyclohexane	56	6.590	6.590	0.000	96	280237	50.0	49.3	
56 Carbon tetrachloride	117	6.693	6.693	0.000	95	102720	50.0	47.4	
55 1,1-Dichloropropene	75	6.706	6.706	0.000	84	148289	50.0	48.5	
58 Benzene	78	6.925	6.925	0.000	94	442388	50.0	50.3	
57 Isobutyl alcohol	41	6.925	6.925	0.000	44	81233	1250.0	1114.7	
59 1,2-Dichloroethane	62	7.004	7.004	0.000	95	164925	50.0	49.8	
62 n-Heptane	43	7.284	7.284	0.000	97	210895	50.0	49.4	
64 Trichloroethene	130	7.661	7.661	0.000	95	104866	50.0	49.8	
66 Methylcyclohexane	83	7.892	7.892	0.000	97	179654	50.0	49.7	
67 1,2-Dichloropropane	63	7.934	7.934	0.000	96	127539	50.0	48.2	
68 Dibromomethane	93	8.020	8.020	0.000	94	54833	50.0	49.0	
70 1,4-Dioxane	88	8.020	8.020	0.000	46	19666	1000.0	939.2	M
71 Dichlorobromomethane	83	8.214	8.214	0.000	96	119981	50.0	49.4	
73 2-Chloroethyl vinyl ether	63	8.518	8.518	0.000	86	139172	100.0	100.4	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	85	137855	50.0	48.0	
75 4-Methyl-2-pentanone (MIBK	43	8.817	8.817	0.000	98	299144	100.0	99.1	
76 Toluene	91	8.987	8.987	0.000	97	447990	50.0	49.6	
77 trans-1,3-Dichloropropene	75	9.236	9.236	0.000	92	106076	50.0	46.3	
78 Ethyl methacrylate	69	9.297	9.297	0.000	91	116263	50.0	47.3	
79 1,1,2-Trichloroethane	97	9.431	9.431	0.000	94	82417	50.0	48.5	
80 Tetrachloroethene	164	9.504	9.504	0.000	97	86393	50.0	48.5	
81 1,3-Dichloropropane	76	9.589	9.589	0.000	93	160344	50.0	48.9	
82 2-Hexanone	43	9.644	9.644	0.000	98	221352	100.0	96.7	
84 Chlorodibromomethane	129	9.802	9.802	0.000	89	74102	50.0	48.0	
85 Ethylene Dibromide	107	9.912	9.912	0.000	98	84260	50.0	47.8	
86 3-Chlorobenzotrifluoride	180	10.380	10.380	0.000	92	163361	50.0	48.4	
87 Chlorobenzene	112	10.398	10.398	0.000	90	290427	50.0	49.0	
88 4-Chlorobenzotrifluoride	180	10.465	10.465	0.000	96	150461	50.0	48.3	
89 1,1,1,2-Tetrachloroethane	131	10.496	10.496	0.000	88	84776	50.0	47.6	
90 Ethylbenzene	106	10.502	10.502	0.000	98	164268	50.0	49.2	
91 m-Xylene & p-Xylene	106	10.636	10.636	0.000	0	205264	50.0	49.3	
92 o-Xylene	106	11.013	11.013	0.000	98	195801	50.0	49.4	
93 Styrene	104	11.037	11.037	0.000	93	336427	50.0	50.1	
94 Bromoform	173	11.220	11.220	0.000	96	42456	50.0	45.6	
96 2-Chlorobenzotrifluoride	180	11.286	11.286	0.000	97	157447	50.0	47.9	
97 Isopropylbenzene	105	11.384	11.384	0.000	97	508707	50.0	50.0	
99 1,1,2,2-Tetrachloroethane	83	11.700	11.700	0.000	95	112189	50.0	46.7	
100 Bromobenzene	156	11.694	11.694	0.000	97	118874	50.0	50.9	
102 trans-1,4-Dichloro-2-buten	53	11.731	11.731	0.000	60	38901	50.0	48.3	
101 1,2,3-Trichloropropane	110	11.755	11.755	0.000	92	37848	50.0	49.6	
103 N-Propylbenzene	120	11.804	11.804	0.000	99	134580	50.0	49.7	
104 2-Chlorotoluene	126	11.889	11.889	0.000	95	110690	50.0	47.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.950	11.950	0.000	97	120831	50.0	49.0	
106 1,3,5-Trimethylbenzene	105	11.980	11.980	0.000	95	415056	50.0	50.8	
107 4-Chlorotoluene	126	12.010	12.010	0.000	99	122940	50.0	49.6	
108 tert-Butylbenzene	119	12.296	12.296	0.000	96	332570	50.0	50.0	
110 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	423909	50.0	51.1	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	96	112772	50.0	49.1	
112 sec-Butylbenzene	105	12.521	12.521	0.000	95	495792	50.0	51.6	
113 1,3-Dichlorobenzene	146	12.637	12.637	0.000	97	223357	50.0	50.3	
114 4-Isopropyltoluene	119	12.680	12.680	0.000	97	404023	50.0	50.5	
115 1,4-Dichlorobenzene	146	12.746	12.746	0.000	93	223333	50.0	49.2	
116 2,4-Dichloro-1-(triflourom	214	12.771	12.771	0.000	95	104791	50.0	48.1	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.807	0.000	0	120365	50.0	48.4	
120 n-Butylbenzene	91	13.087	13.087	0.000	98	345469	50.0	50.3	
121 1,2-Dichlorobenzene	146	13.099	13.099	0.000	97	204460	50.0	50.0	
122 1,2-Dibromo-3-Chloropropan	75	13.890	13.890	0.000	73	15791	50.0	42.8	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.030	14.030	0.000	0	426263	150.0	148.8	
125 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	0	283810	100.0	101.7	
126 1,2,4-Trichlorobenzene	180	14.711	14.711	0.000	93	95083	50.0	47.1	
127 Hexachlorobutadiene	225	14.864	14.864	0.000	95	42328	50.0	48.9	
128 Naphthalene	128	14.985	14.985	0.000	97	243193	50.0	48.4	
129 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	95	77279	50.0	49.2	
131 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	25468	50.0	51.0	
130 2,3,6-Trichlorotoluene	159	16.080	16.080	0.000	92	23217	50.0	45.0	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	98.6	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	94.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACROPRI_00007	Amount Added:	6.00	Units: uL	
VOA8260VOAPRI_00217	Amount Added:	2.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	2.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	2.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	2.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	2.00	Units: uL	
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

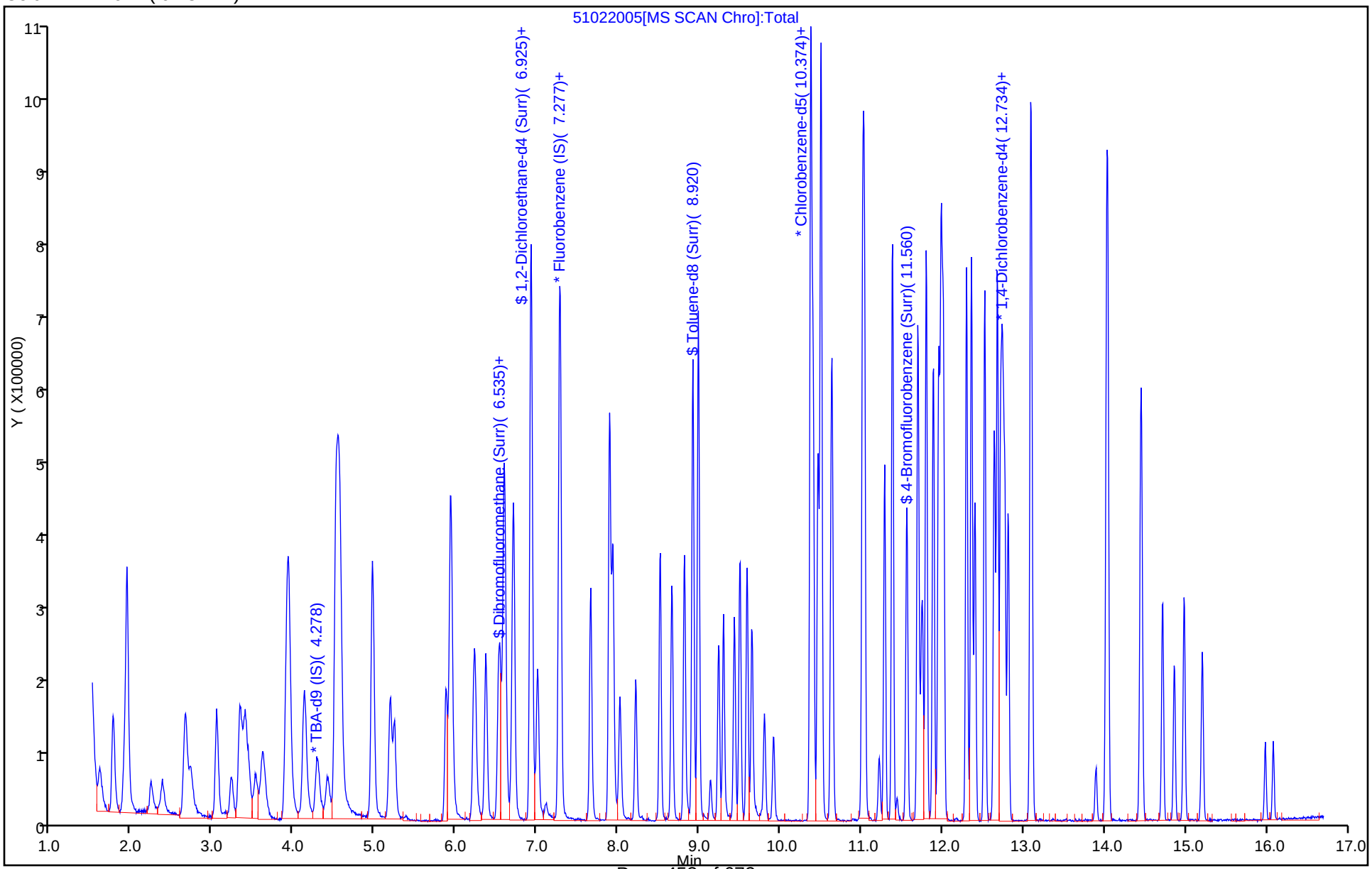
Report Date: 23-Oct-2016 13:33:20 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022005.D

Injection Date:	22-Oct-2016 15:45:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	ICIS VSTD10			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

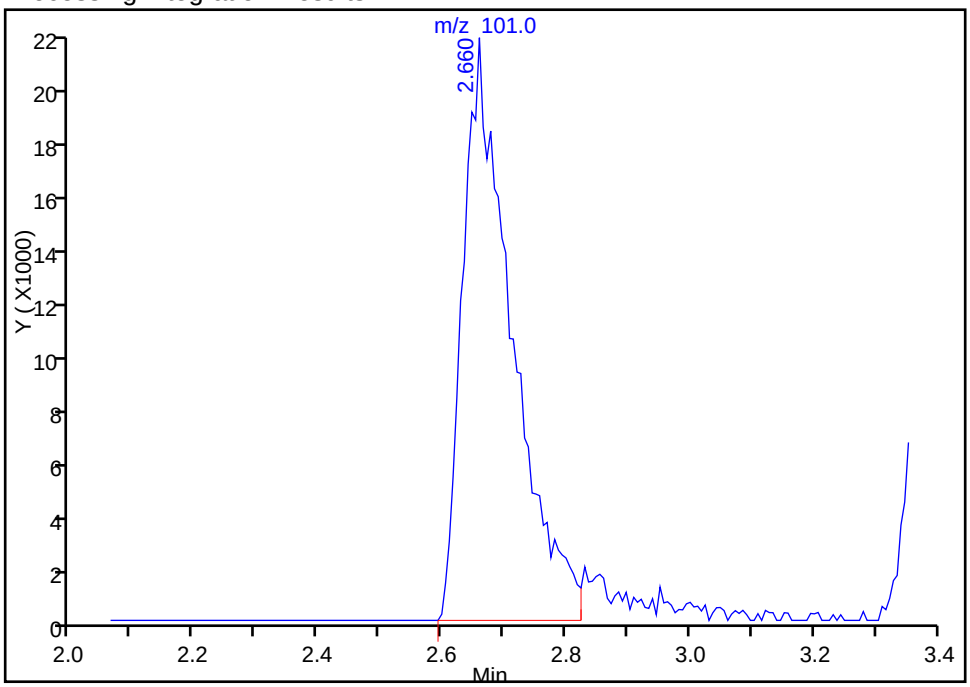
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022005.D				
Injection Date:	22-Oct-2016 15:45:30	Instrument ID:	CHHP5		
Lims ID:	ICIS VSTD10				
Client ID:					
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

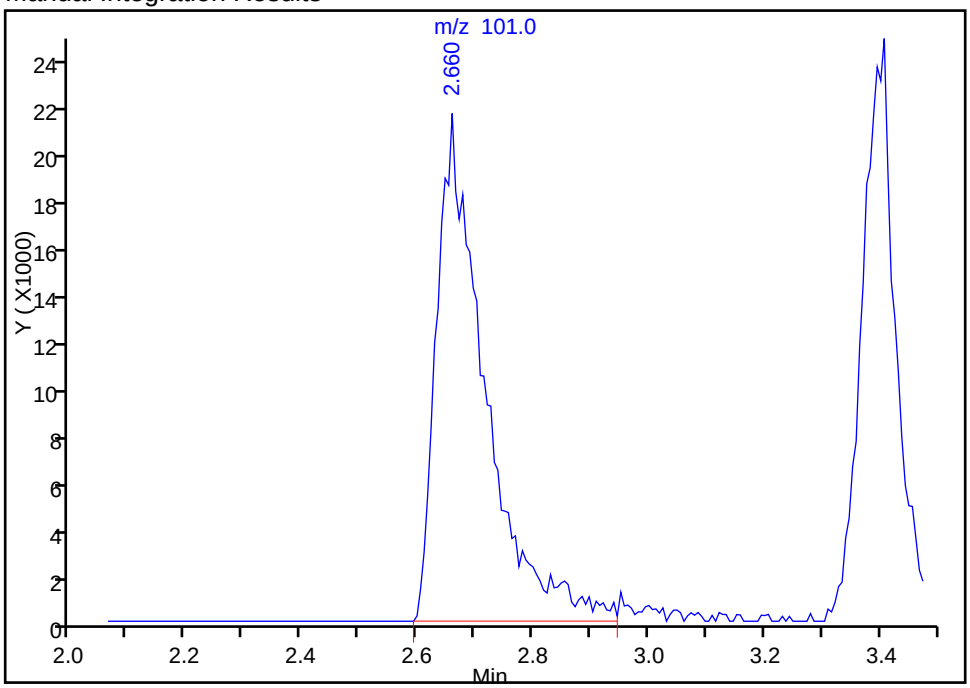
Processing Integration Results

RT: 2.66
Area: 117069
Amount: 48.430616
Amount Units: ng



Manual Integration Results

RT: 2.66
Area: 123993
Amount: 50.930312
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 13:13:22

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

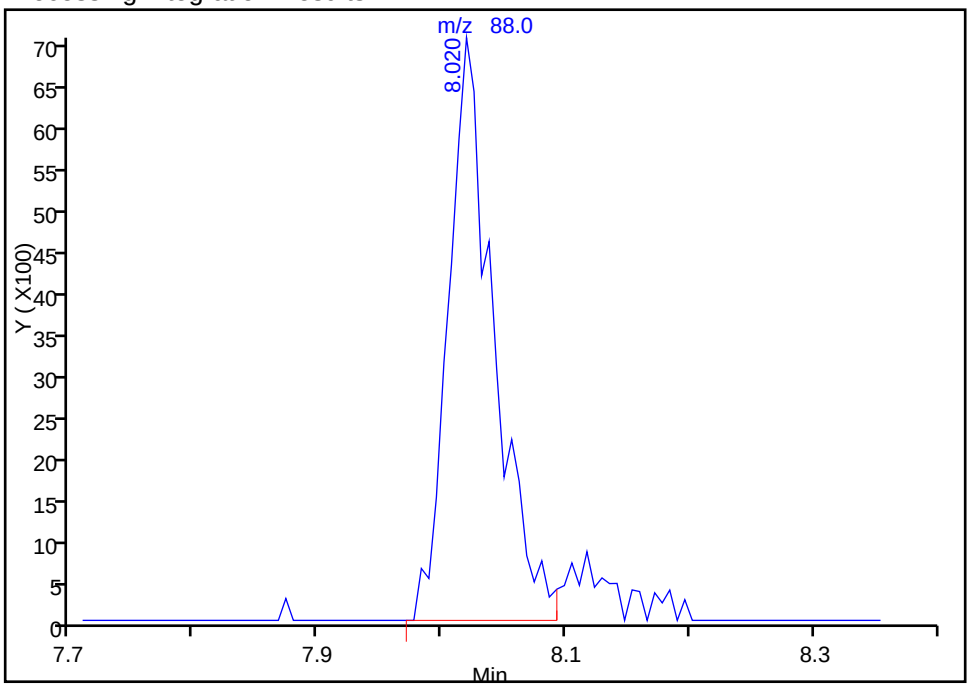
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022005.D				
Injection Date:	22-Oct-2016 15:45:30	Instrument ID:	CHHP5		
Lims ID:	ICIS VSTD10				
Client ID:					
Operator ID:	001562	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Signal: 1

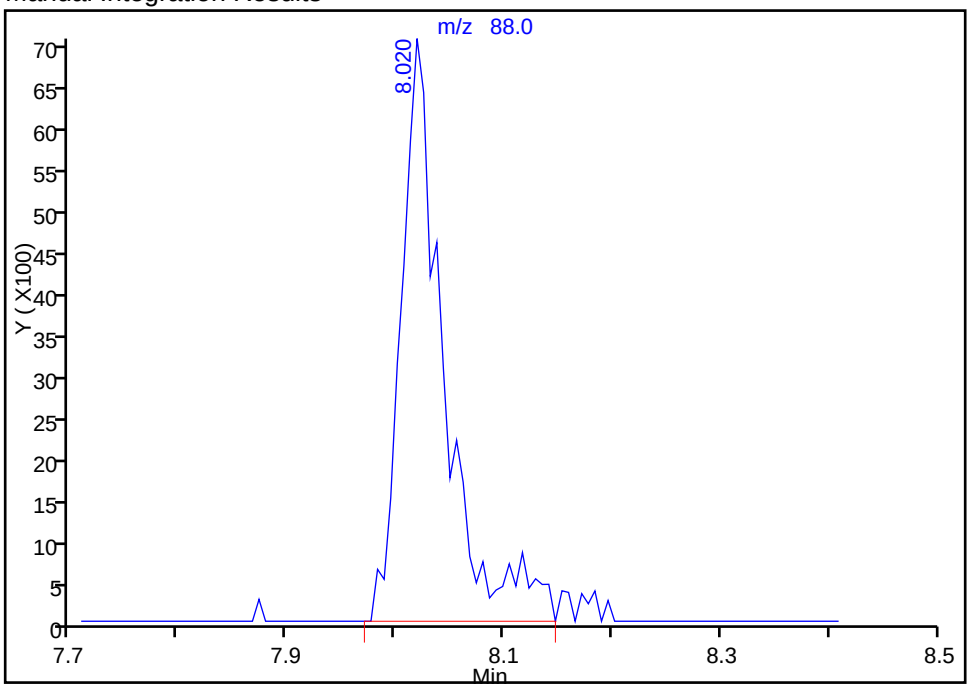
Processing Integration Results

RT: 8.02
Area: 18131
Amount: 881.6129
Amount Units: ng



Manual Integration Results

RT: 8.02
Area: 19666
Amount: 939.1522
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 13:13:22

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022006.D
Lims ID: IC VSTD15
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 22-Oct-2016 16:09:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-006
Misc. Info.: IC VSTD15
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:15:26 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: fergusond Date: 23-Oct-2016 13:15:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.284	4.284	0.000	0	119902	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	96	343498	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	90	87680	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.716	0.000	96	128311	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.548	6.548	0.000	94	128589	75.0	78.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.919	6.919	0.000	0	187235	75.0	78.9	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	95	526313	75.0	79.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	87	212729	75.0	79.5	
11 Dichlorodifluoromethane	85	1.602	1.602	0.000	98	153504	75.0	75.2	
12 Chloromethane	50	1.766	1.766	0.000	99	312655	75.0	78.9	
13 Vinyl chloride	62	1.912	1.912	0.000	97	198206	75.0	75.5	
14 Butadiene	39	1.936	1.936	0.000	99	292779	75.0	75.4	
15 Bromomethane	94	2.234	2.234	0.000	91	54487	75.0	83.1	
16 Chloroethane	64	2.368	2.368	0.000	96	94249	75.0	80.5	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	96	228494	75.0	81.6	
18 Trichlorofluoromethane	101	2.654	2.654	0.000	65	169474	75.0	76.3	
20 Ethyl ether	59	3.043	3.043	0.000	97	178296	75.0	80.8	
21 Acrolein	56	3.226	3.226	0.000	96	98109	175.0	189.3	
22 1,1-Dichloroethene	96	3.335	3.335	0.000	92	130074	75.0	74.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.390	3.390	0.000	94	146948	75.0	77.7	
24 Acetone	43	3.451	3.451	0.000	98	129287	150.0	146.2	
25 Iodomethane	142	3.524	3.524	0.000	98	208665	75.0	80.8	
26 Carbon disulfide	76	3.615	3.615	0.000	99	349970	75.0	77.0	
28 3-Chloro-1-propene	76	3.907	3.907	0.000	88	81119	75.0	75.2	
30 Methyl acetate	43	3.932	3.932	0.000	100	917155	375.0	400.8	
31 Methylene Chloride	84	4.132	4.132	0.000	92	165834	75.0	76.3	
32 2-Methyl-2-propanol	59	4.418	4.418	0.000	89	107688	750.0	731.3	
33 Acrylonitrile	53	4.522	4.522	0.000	97	866579	750.0	792.2	
34 trans-1,2-Dichloroethene	96	4.546	4.546	0.000	91	147333	75.0	77.9	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	93	391228	75.0	79.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.972	4.972	0.000	96	304104	75.0	76.9	
37 1,1-Dichloroethane	63	5.185	5.185	0.000	97	329739	75.0	78.1	
38 Vinyl acetate	43	5.240	5.240	0.000	97	369725	75.0	78.9	
44 2,2-Dichloropropane	97	5.927	5.927	0.000	68	26675	75.0	75.8	
45 cis-1,2-Dichloroethene	96	5.927	5.927	0.000	88	169464	75.0	81.2	
46 2-Butanone (MEK)	43	5.951	5.951	0.000	97	226627	150.0	160.9	
49 Chlorobromomethane	128	6.225	6.225	0.000	85	68912	75.0	78.2	
51 Tetrahydrofuran	42	6.237	6.237	0.000	93	154418	150.0	160.1	
52 Chloroform	83	6.365	6.365	0.000	96	267440	75.0	79.7	
53 1,1,1-Trichloroethane	97	6.517	6.517	0.000	94	183039	75.0	77.5	
54 Cyclohexane	56	6.590	6.590	0.000	97	397193	75.0	76.6	
56 Carbon tetrachloride	117	6.694	6.694	0.000	93	152202	75.0	77.0	
55 1,1-Dichloropropene	75	6.712	6.712	0.000	86	212138	75.0	76.1	
58 Benzene	78	6.925	6.925	0.000	96	635243	75.0	79.2	
57 Isobutyl alcohol	41	6.925	6.925	0.000	63	130706	1875.0	1967.0	
59 1,2-Dichloroethane	62	7.004	7.004	0.000	96	243043	75.0	80.6	
62 n-Heptane	43	7.284	7.284	0.000	97	293294	75.0	75.4	
64 Trichloroethene	130	7.661	7.661	0.000	95	147466	75.0	76.8	
66 Methylcyclohexane	83	7.892	7.892	0.000	97	260774	75.0	79.1	
67 1,2-Dichloropropane	63	7.935	7.935	0.000	95	187825	75.0	77.9	
68 Dibromomethane	93	8.020	8.020	0.000	96	84591	75.0	82.9	
70 1,4-Dioxane	88	8.020	8.020	0.000	54	31890	1500.0	1684.8	
71 Dichlorobromomethane	83	8.220	8.220	0.000	96	176068	75.0	79.6	
73 2-Chloroethyl vinyl ether	63	8.512	8.512	0.000	87	204021	150.0	161.5	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	85	207121	75.0	79.1	
75 4-Methyl-2-pentanone (MIBK	43	8.817	8.817	0.000	98	446448	150.0	166.2	
76 Toluene	91	8.987	8.987	0.000	97	646939	75.0	80.4	
77 trans-1,3-Dichloropropene	75	9.236	9.236	0.000	93	163144	75.0	80.0	
78 Ethyl methacrylate	69	9.297	9.297	0.000	91	180987	75.0	82.8	
79 1,1,2-Trichloroethane	97	9.431	9.431	0.000	94	119460	75.0	78.9	
80 Tetrachloroethene	164	9.504	9.504	0.000	96	125468	75.0	79.2	
81 1,3-Dichloropropane	76	9.589	9.589	0.000	95	232723	75.0	79.8	
82 2-Hexanone	43	9.650	9.650	0.000	98	336871	150.0	165.3	
84 Chlorodibromomethane	129	9.802	9.802	0.000	89	110875	75.0	80.7	
85 Ethylene Dibromide	107	9.912	9.912	0.000	97	124423	75.0	79.4	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	93	238396	75.0	79.3	
87 Chlorobenzene	112	10.404	10.404	0.000	90	426466	75.0	80.8	
88 4-Chlorobenzotrifluoride	180	10.465	10.465	0.000	96	218415	75.0	78.8	
89 1,1,1,2-Tetrachloroethane	131	10.502	10.502	0.000	89	125859	75.0	79.4	
90 Ethylbenzene	106	10.502	10.502	0.000	98	244573	75.0	82.3	
91 m-Xylene & p-Xylene	106	10.630	10.630	0.000	0	303162	75.0	81.8	
92 o-Xylene	106	11.013	11.013	0.000	97	292141	75.0	82.7	
93 Styrene	104	11.037	11.037	0.000	94	502358	75.0	84.1	
94 Bromoform	173	11.220	11.220	0.000	96	68040	75.0	82.1	
96 2-Chlorobenzotrifluoride	180	11.287	11.287	0.000	96	234305	75.0	80.1	
97 Isopropylbenzene	105	11.384	11.384	0.000	97	750229	75.0	82.8	
99 1,1,2,2-Tetrachloroethane	83	11.694	11.694	0.000	95	172092	75.0	80.4	
100 Bromobenzene	156	11.700	11.700	0.000	96	174267	75.0	80.4	
102 trans-1,4-Dichloro-2-buten	53	11.737	11.737	0.000	72	58424	75.0	78.3	
101 1,2,3-Trichloropropane	110	11.749	11.749	0.000	90	57210	75.0	80.8	
103 N-Propylbenzene	120	11.798	11.798	0.000	99	195314	75.0	77.8	
104 2-Chlorotoluene	126	11.889	11.889	0.000	95	174662	75.0	81.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.956	11.956	0.000	96	180033	75.0	78.7	
106 1,3,5-Trimethylbenzene	105	11.986	11.986	0.000	96	616418	75.0	81.3	
107 4-Chlorotoluene	126	12.010	12.010	0.000	99	185529	75.0	80.7	
108 tert-Butylbenzene	119	12.296	12.296	0.000	96	505812	75.0	82.0	
110 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	631181	75.0	82.1	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	98	166454	75.0	78.1	
112 sec-Butylbenzene	105	12.521	12.521	0.000	96	709717	75.0	79.6	
113 1,3-Dichlorobenzene	146	12.637	12.637	0.000	96	326397	75.0	79.2	
114 4-Isopropyltoluene	119	12.680	12.680	0.000	97	602571	75.0	81.2	
115 1,4-Dichlorobenzene	146	12.747	12.747	0.000	93	339028	75.0	80.5	
116 2,4-Dichloro-1-(triflourom	214	12.771	12.771	0.000	95	155381	75.0	76.8	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.813	0.000	0	183028	75.0	79.4	
120 n-Butylbenzene	91	13.087	13.087	0.000	97	508098	75.0	79.7	
121 1,2-Dichlorobenzene	146	13.099	13.099	0.000	97	305229	75.0	80.4	
122 1,2-Dibromo-3-Chloropropan	75	13.890	13.890	0.000	70	27147	75.0	79.2	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.030	14.030	0.000	0	643007	225.0	241.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	0	420945	150.0	162.6	
126 1,2,4-Trichlorobenzene	180	14.718	14.718	0.000	94	151471	75.0	80.8	
127 Hexachlorobutadiene	225	14.858	14.858	0.000	96	62543	75.0	77.9	
128 Naphthalene	128	14.979	14.979	0.000	97	392356	75.0	84.2	
129 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	96	118676	75.0	81.4	
131 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	39585	75.0	85.5	
130 2,3,6-Trichlorotoluene	159	16.080	16.080	0.000	94	38449	75.0	80.4	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		150.0	159.1	
S 133 Xylenes, Total	106				0		150.0	164.5	
S 135 1,3-Dichloropropene, Total	1				0		150.0	159.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOAPRI_00217	Amount Added:	3.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	3.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	3.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	3.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	3.00	Units: uL	
VOA8260SURR_00060	Amount Added:	3.00	Units: uL	
VOAACROPRI_00007	Amount Added:	7.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

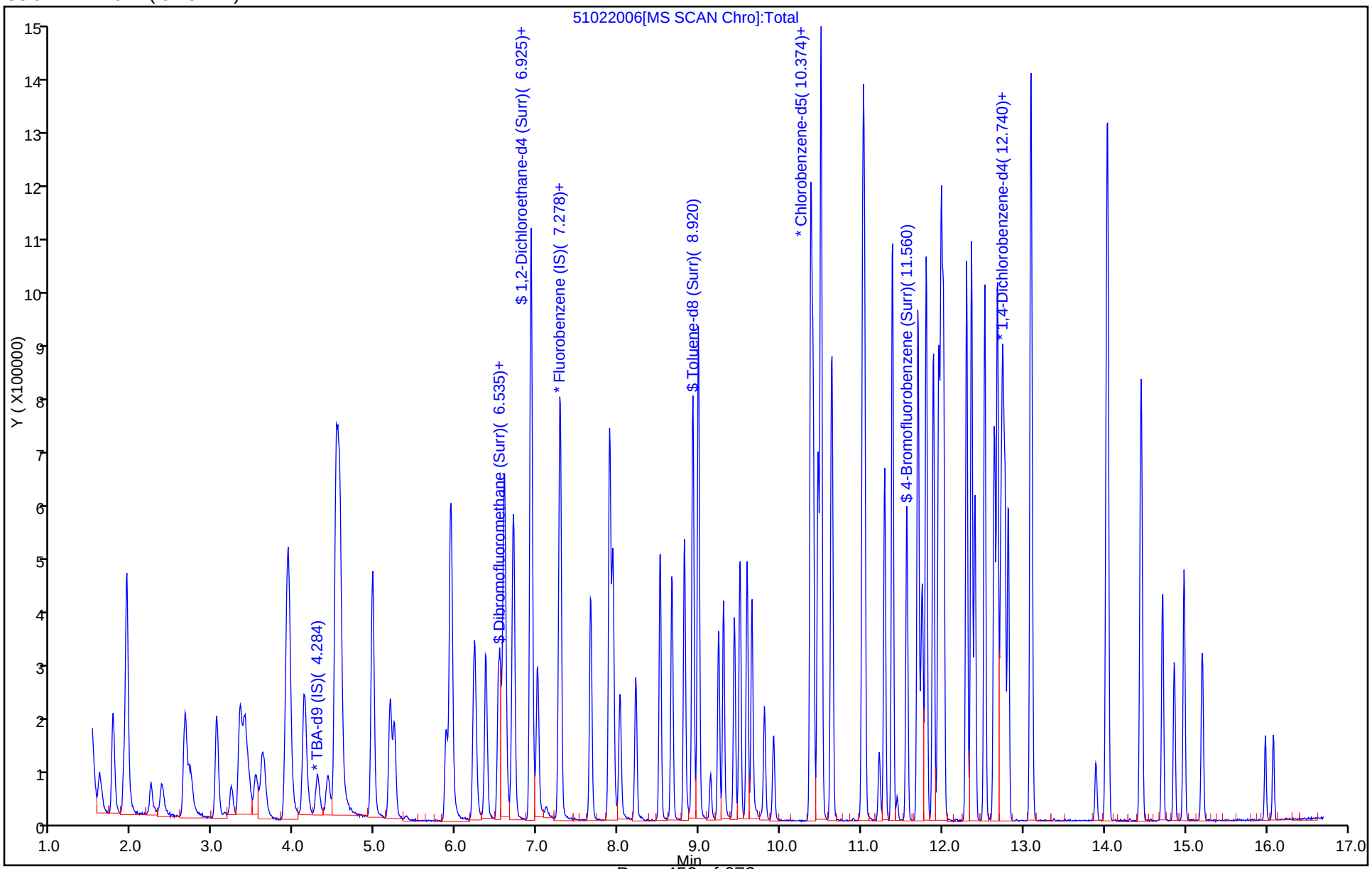
Report Date: 23-Oct-2016 13:15:29 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022006.D

Injection Date:	22-Oct-2016 16:09:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD15			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022007.D
Lims ID: IC VSTD20
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 22-Oct-2016 16:33:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-007
Misc. Info.: IC VSTD20
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:17:19 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: fergusond Date: 23-Oct-2016 13:17:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.291	4.284	0.007	0	122658	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.272	7.271	0.001	97	375267	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	91	97329	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.716	0.000	93	142809	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.548	6.548	0.000	94	169199	100.0	94.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.919	6.919	0.000	0	246609	100.0	95.1	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	95	695986	100.0	94.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	85	281954	100.0	94.9	
11 Dichlorodifluoromethane	85	1.596	1.602	-0.006	98	215461	100.0	96.6	
12 Chloromethane	50	1.766	1.766	0.000	99	428182	100.0	98.9	
13 Vinyl chloride	62	1.906	1.912	-0.006	98	273768	100.0	95.4	
14 Butadiene	39	1.936	1.936	0.000	98	402090	100.0	94.8	
15 Bromomethane	94	2.235	2.234	0.000	90	66676	100.0	93.0	
16 Chloroethane	64	2.374	2.368	0.006	98	128149	100.0	100.2	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	96	292782	100.0	95.7	
18 Trichlorofluoromethane	101	2.660	2.654	0.006	55	242761	100.0	100.1	
20 Ethyl ether	59	3.044	3.043	0.001	94	241616	100.0	100.2	
21 Acrolein	56	3.226	3.226	0.000	99	107734	200.0	190.2	
22 1,1-Dichloroethene	96	3.330	3.335	-0.005	93	193304	100.0	101.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.403	3.390	0.013	94	197014	100.0	95.3	
24 Acetone	43	3.451	3.451	0.000	98	181978	200.0	188.4	
25 Iodomethane	142	3.530	3.524	0.006	98	281549	100.0	99.8	
26 Carbon disulfide	76	3.615	3.615	0.000	99	478017	100.0	96.3	
28 3-Chloro-1-propene	76	3.907	3.907	0.000	88	119809	100.0	101.7	
30 Methyl acetate	43	3.938	3.932	0.006	100	1272643	500.0	509.1	
31 Methylene Chloride	84	4.120	4.132	-0.012	93	225032	100.0	94.8	
32 2-Methyl-2-propanol	59	4.412	4.418	-0.006	87	174156	1000.0	1156.0	
33 Acrylonitrile	53	4.522	4.522	0.000	98	1198880	1000.0	1003.2	
34 trans-1,2-Dichloroethene	96	4.546	4.546	0.000	92	202984	100.0	98.3	
35 Methyl tert-butyl ether	73	4.564	4.570	-0.006	92	538029	100.0	100.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.966	4.972	-0.006	97	426391	100.0	98.7	
37 1,1-Dichloroethane	63	5.185	5.185	0.000	97	456615	100.0	99.0	
38 Vinyl acetate	43	5.240	5.240	0.000	97	511473	100.0	99.9	
45 cis-1,2-Dichloroethene	96	5.933	5.927	0.006	88	224503	100.0	98.4	
44 2,2-Dichloropropane	97	5.927	5.927	0.000	73	38082	100.0	99.1	
46 2-Butanone (MEK)	43	5.952	5.951	0.001	98	316479	200.0	205.7	
49 Chlorobromomethane	128	6.219	6.225	-0.006	86	96736	100.0	100.4	
51 Tetrahydrofuran	42	6.244	6.237	0.007	94	201495	200.0	191.2	
52 Chloroform	83	6.365	6.365	0.000	97	359653	100.0	98.1	
53 1,1,1-Trichloroethane	97	6.517	6.517	0.000	95	249353	100.0	96.7	
54 Cyclohexane	56	6.590	6.590	0.000	96	557095	100.0	98.4	
56 Carbon tetrachloride	117	6.694	6.694	0.000	94	210724	100.0	97.6	
55 1,1-Dichloropropene	75	6.706	6.712	-0.006	86	302113	100.0	99.2	
58 Benzene	78	6.925	6.925	0.000	95	871727	100.0	99.5	
57 Isobutyl alcohol	41	6.919	6.925	-0.006	48	192078	2500.0	2645.8	
59 1,2-Dichloroethane	62	7.004	7.004	0.000	95	325151	100.0	98.6	
62 n-Heptane	43	7.284	7.284	0.000	97	409522	100.0	96.3	
64 Trichloroethene	130	7.661	7.661	0.000	96	206655	100.0	98.5	
66 Methylcyclohexane	83	7.892	7.892	0.000	97	358556	100.0	99.5	
67 1,2-Dichloropropane	63	7.929	7.935	-0.006	97	264588	100.0	100.5	
68 Dibromomethane	93	8.020	8.020	0.000	96	115152	100.0	103.3	
70 1,4-Dioxane	88	8.014	8.020	-0.006	49	43028	2000.0	2062.7	M
71 Dichlorobromomethane	83	8.215	8.220	-0.005	96	236201	100.0	97.7	
73 2-Chloroethyl vinyl ether	63	8.513	8.512	0.001	86	289200	200.0	209.5	
74 cis-1,3-Dichloropropene	75	8.659	8.658	0.001	85	287940	100.0	100.6	
75 4-Methyl-2-pentanone (MIBK	43	8.817	8.817	0.000	99	614369	200.0	206.0	
76 Toluene	91	8.987	8.987	0.000	97	881918	100.0	98.7	
77 trans-1,3-Dichloropropene	75	9.237	9.236	0.001	94	233154	100.0	103.0	
78 Ethyl methacrylate	69	9.297	9.297	0.000	92	260008	100.0	107.1	
79 1,1,2-Trichloroethane	97	9.431	9.431	0.000	95	169494	100.0	100.9	
80 Tetrachloroethene	164	9.498	9.504	-0.006	96	172257	100.0	98.0	
81 1,3-Dichloropropane	76	9.589	9.589	0.000	94	323471	100.0	99.9	
82 2-Hexanone	43	9.650	9.650	0.000	98	487269	200.0	215.5	
84 Chlorodibromomethane	129	9.802	9.802	0.000	90	151944	100.0	99.6	
85 Ethylene Dibromide	107	9.918	9.912	0.006	98	173047	100.0	99.4	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	92	323599	100.0	97.0	
87 Chlorobenzene	112	10.405	10.404	0.001	91	580865	100.0	99.1	
88 4-Chlorobenzotrifluoride	180	10.465	10.465	0.000	96	301799	100.0	98.0	
89 1,1,1,2-Tetrachloroethane	131	10.496	10.502	-0.006	90	176750	100.0	100.4	
90 Ethylbenzene	106	10.502	10.502	0.000	98	330980	100.0	100.3	
91 m-Xylene & p-Xylene	106	10.636	10.630	0.006	0	413204	100.0	100.4	
92 o-Xylene	106	11.013	11.013	0.000	98	396170	100.0	101.1	
93 Styrene	104	11.037	11.037	0.000	93	675122	100.0	101.8	
94 Bromoform	173	11.220	11.220	0.000	96	94753	100.0	103.0	
96 2-Chlorobenzotrifluoride	180	11.287	11.287	0.000	96	308077	100.0	94.9	
97 Isopropylbenzene	105	11.384	11.384	0.000	97	1012899	100.0	100.7	
100 Bromobenzene	156	11.694	11.700	-0.006	96	238406	100.0	98.9	
99 1,1,2,2-Tetrachloroethane	83	11.694	11.694	0.000	92	235918	100.0	99.3	
102 trans-1,4-Dichloro-2-buten	53	11.731	11.737	-0.006	71	82199	100.0	98.9	
101 1,2,3-Trichloropropane	110	11.755	11.749	0.006	92	75921	100.0	96.4	
103 N-Propylbenzene	120	11.798	11.798	0.000	99	269458	100.0	96.4	
104 2-Chlorotoluene	126	11.889	11.889	0.000	95	229591	100.0	96.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.956	11.956	0.000	96	240888	100.0	94.6	
106 1,3,5-Trimethylbenzene	105	11.980	11.986	-0.006	94	827180	100.0	98.0	
107 4-Chlorotoluene	126	12.011	12.010	0.001	98	244260	100.0	95.5	
108 tert-Butylbenzene	119	12.297	12.296	0.001	96	675400	100.0	98.4	
110 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	99	837908	100.0	97.9	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	97	222355	100.0	93.7	
112 sec-Butylbenzene	105	12.522	12.521	0.001	96	966624	100.0	97.3	
113 1,3-Dichlorobenzene	146	12.637	12.637	0.000	96	444553	100.0	96.9	
114 4-Isopropyltoluene	119	12.674	12.680	-0.006	97	816569	100.0	98.9	
115 1,4-Dichlorobenzene	146	12.741	12.747	-0.006	93	456853	100.0	97.5	
116 2,4-Dichloro-1-(triflourom	214	12.771	12.771	0.000	95	211243	100.0	93.8	
118 2,5-Dichlorobenzotrifluori	214	12.814	12.813	0.001	0	238687	100.0	93.0	
120 n-Butylbenzene	91	13.087	13.087	0.000	98	702329	100.0	99.0	
121 1,2-Dichlorobenzene	146	13.100	13.099	0.001	95	413142	100.0	97.8	
122 1,2-Dibromo-3-Chloropropan	75	13.890	13.890	0.000	72	35855	100.0	94.0	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.030	14.030	0.000	0	867174	300.0	293.1	
125 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	0	562883	200.0	195.4	
126 1,2,4-Trichlorobenzene	180	14.712	14.718	-0.006	94	207275	100.0	99.4	
127 Hexachlorobutadiene	225	14.864	14.858	0.006	96	84030	100.0	94.0	
128 Naphthalene	128	14.979	14.979	0.000	98	532144	100.0	102.6	
129 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	95	162280	100.0	100.0	
131 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	53573	100.0	104.0	
130 2,3,6-Trichlorotoluene	159	16.080	16.080	0.000	95	51697	100.0	97.1	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		200.0	201.5	
S 134 1,2-Dichloroethene, Total	96				0		200.0	196.7	
S 135 1,3-Dichloropropene, Total	1				0		200.0	203.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACROPRI_00007	Amount Added:	8.00	Units: uL	
VOA8260SURR_00060	Amount Added:	4.00	Units: uL	
VOA8260VOAPRI_00217	Amount Added:	4.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	4.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	4.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	4.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	4.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

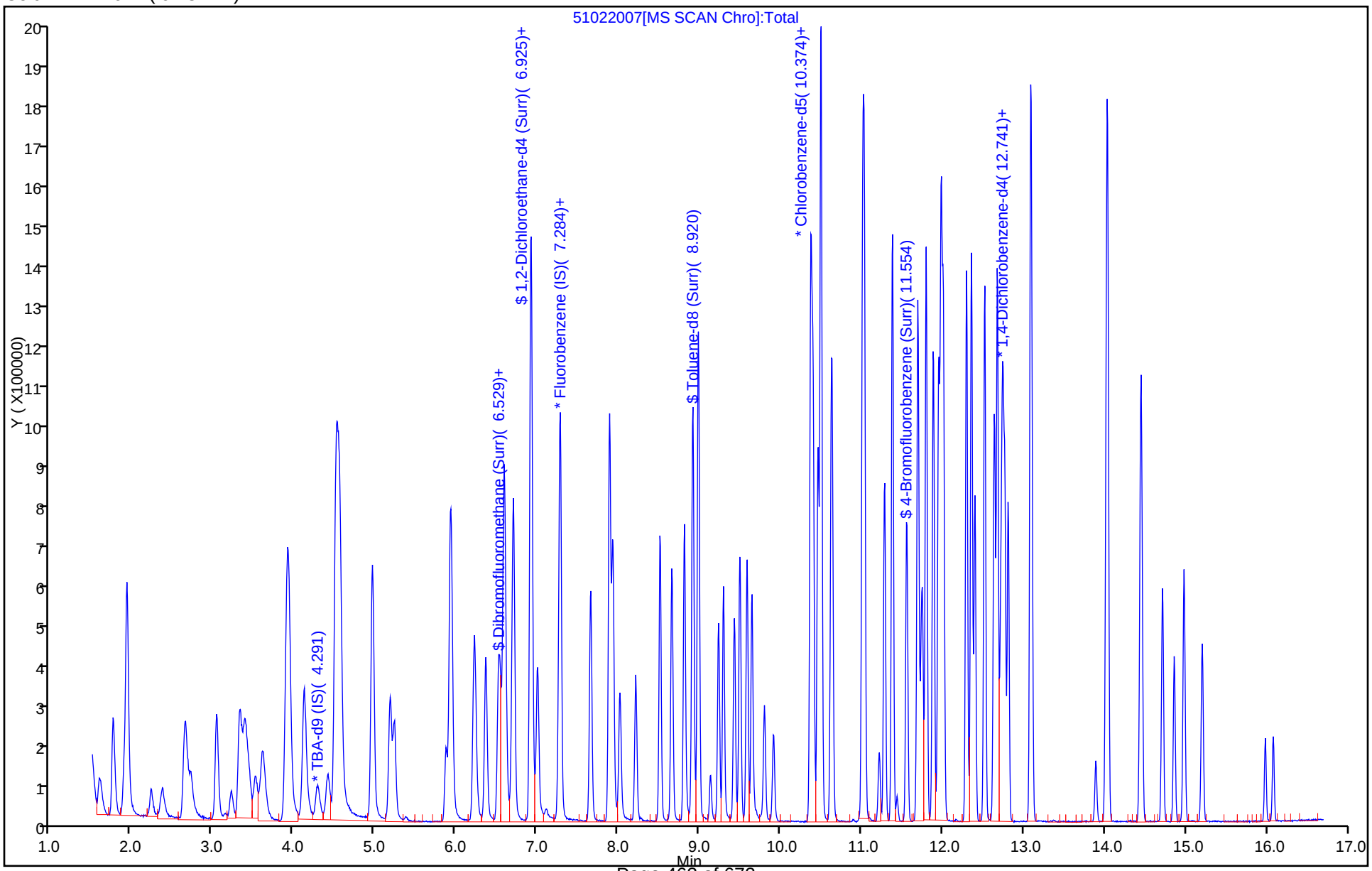
Report Date: 23-Oct-2016 13:17:20 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022007.D

Injection Date:	22-Oct-2016 16:33:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD20			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

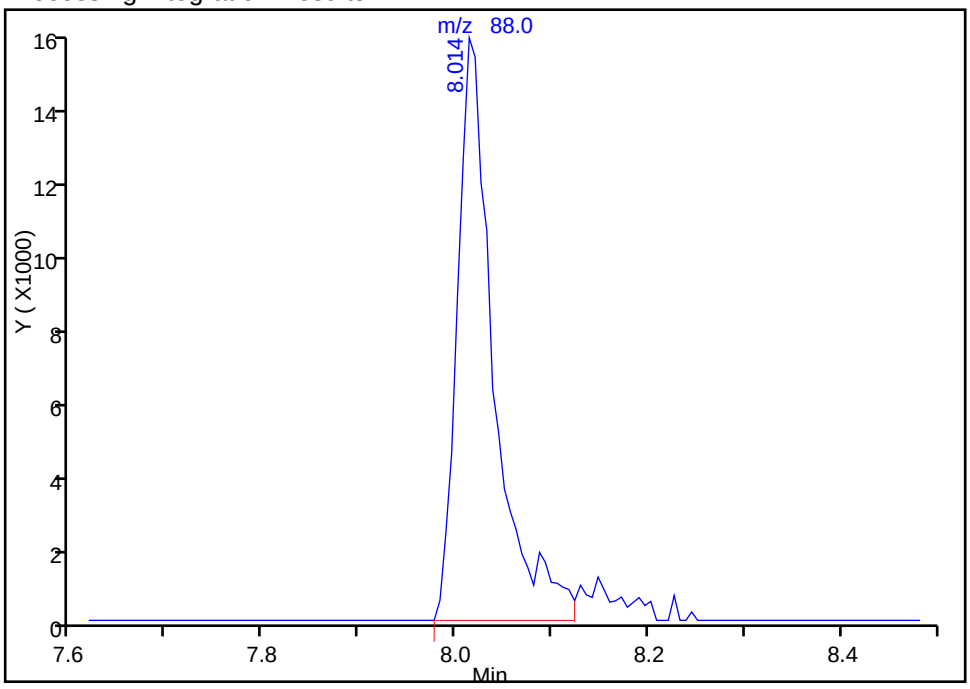
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022007.D				
Injection Date:	22-Oct-2016 16:33:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD20				
Client ID:					
Operator ID:	001562	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Signal: 1

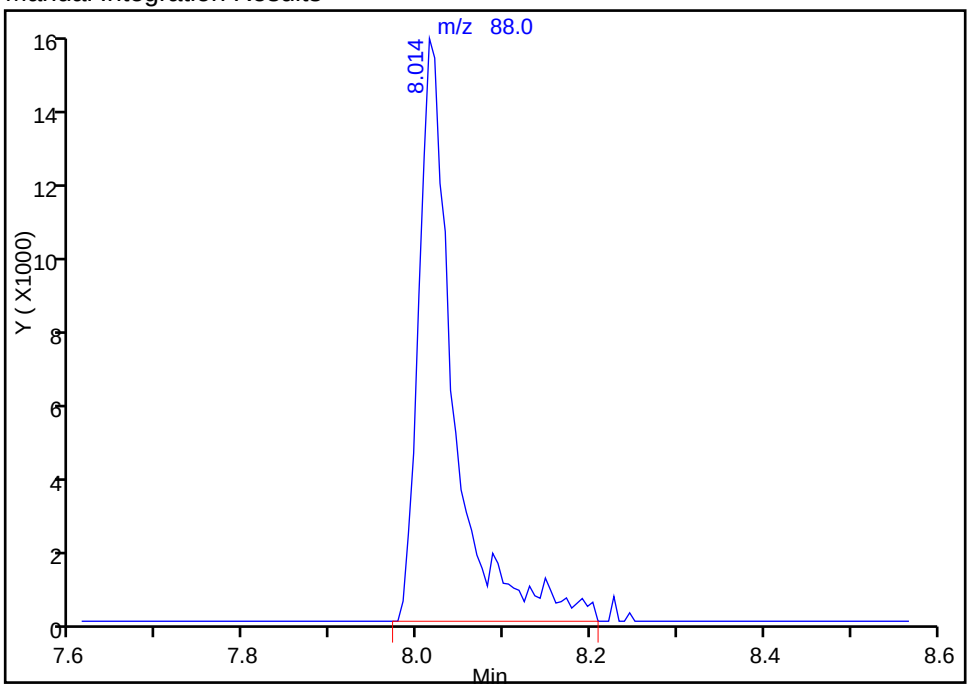
Processing Integration Results

RT: 8.01
Area: 40118
Amount: 1940.1017
Amount Units: ng



Manual Integration Results

RT: 8.01
Area: 43028
Amount: 2062.6867
Amount Units: ng



Reviewer: fergusond, 23-Oct-2016 13:17:18

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022008.D
Lims ID: IC VSTD35
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 22-Oct-2016 16:57:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-008
Misc. Info.: IC VSTD35
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:18:46 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: fergusond Date: 23-Oct-2016 13:18:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.297	4.284	0.013	0	125294	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.265	7.271	-0.006	97	370510	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.374	-0.006	90	96065	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.716	0.006	92	138159	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.541	6.548	-0.007	94	303965	175.0	171.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.912	6.919	-0.007	0	431135	175.0	168.5	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	95	1224337	175.0	168.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	86	509793	175.0	173.9	
11 Dichlorodifluoromethane	85	1.602	1.602	0.000	98	387646	175.0	176.0	
12 Chloromethane	50	1.766	1.766	0.000	100	741257	175.0	173.4	
13 Vinyl chloride	62	1.912	1.912	0.000	98	502328	175.0	177.3	
14 Butadiene	39	1.936	1.936	0.000	98	711589	175.0	169.9	
15 Bromomethane	94	2.234	2.234	0.000	90	115398	175.0	163.1	
16 Chloroethane	64	2.356	2.368	-0.012	98	213775	175.0	169.2	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	97	527240	175.0	174.6	
18 Trichlorofluoromethane	101	2.654	2.654	0.000	92	420691	175.0	175.7	
20 Ethyl ether	59	3.043	3.043	0.000	95	407915	175.0	171.3	
21 Acrolein	56	3.220	3.226	-0.006	99	126054	225.0	225.4	
22 1,1-Dichloroethene	96	3.323	3.335	-0.012	92	337941	175.0	180.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.390	3.390	0.000	94	357669	175.0	175.3	
24 Acetone	43	3.439	3.451	-0.012	98	340715	350.0	357.2	
25 Iodomethane	142	3.518	3.524	-0.006	98	486595	175.0	174.7	
26 Carbon disulfide	76	3.609	3.615	-0.006	99	880574	175.0	179.7	
28 3-Chloro-1-propene	76	3.895	3.907	-0.012	87	209891	175.0	180.4	
30 Methyl acetate	43	3.932	3.932	0.000	100	2139103	875.0	866.7	
31 Methylene Chloride	84	4.126	4.132	-0.006	92	375770	175.0	160.3	
32 2-Methyl-2-propanol	59	4.424	4.418	0.006	85	262285	1750.0	1704.4	
33 Acrylonitrile	53	4.516	4.522	-0.006	98	2092798	1750.0	1773.7	
34 trans-1,2-Dichloroethene	96	4.546	4.546	0.000	92	357112	175.0	175.1	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	93	933266	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	4.966	4.972	-0.006	96	766179	175.0	179.6	
37 1,1-Dichloroethane	63	5.179	5.185	-0.006	96	784476	175.0	172.3	
38 Vinyl acetate	43	5.233	5.240	-0.007	97	964118	175.0	190.7	
44 2,2-Dichloropropane	97	5.927	5.927	0.000	66	67579	175.0	178.1	
45 cis-1,2-Dichloroethene	96	5.933	5.927	0.006	88	393767	175.0	174.9	
46 2-Butanone (MEK)	43	5.951	5.951	0.000	97	538326	350.0	354.3	
49 Chlorobromomethane	128	6.213	6.225	-0.012	86	170915	175.0	179.7	
51 Tetrahydrofuran	42	6.237	6.237	0.000	94	363332	350.0	349.1	
52 Chloroform	83	6.365	6.365	0.000	96	617527	175.0	170.7	
53 1,1,1-Trichloroethane	97	6.523	6.517	0.006	95	453368	175.0	178.0	
54 Cyclohexane	56	6.590	6.590	0.000	97	998701	175.0	178.6	
56 Carbon tetrachloride	117	6.693	6.694	-0.001	93	388240	175.0	182.1	
55 1,1-Dichloropropene	75	6.706	6.712	-0.006	86	534817	175.0	177.9	
58 Benzene	78	6.925	6.925	0.000	96	1481843	175.0	171.2	
57 Isobutyl alcohol	41	6.925	6.925	0.000	51	344432	4375.0	4805.4	
59 1,2-Dichloroethane	62	7.004	7.004	0.000	96	561654	175.0	172.6	
62 n-Heptane	43	7.284	7.284	0.000	98	757194	175.0	180.4	
64 Trichloroethene	130	7.655	7.661	-0.006	96	363296	175.0	175.3	
66 Methylcyclohexane	83	7.892	7.892	0.000	96	651506	175.0	183.1	
67 1,2-Dichloropropane	63	7.934	7.935	-0.001	95	447322	175.0	172.1	
70 1,4-Dioxane	88	8.014	8.020	-0.006	47	74760	3500.0	3629.9	
68 Dibromomethane	93	8.014	8.020	-0.006	97	189826	175.0	172.4	
71 Dichlorobromomethane	83	8.214	8.220	-0.006	96	416437	175.0	174.5	
73 2-Chloroethyl vinyl ether	63	8.512	8.512	0.000	87	484364	350.0	355.4	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	86	525078	175.0	185.9	
75 4-Methyl-2-pentanone (MIBK	43	8.817	8.817	0.000	99	1071790	350.0	364.1	
76 Toluene	91	8.987	8.987	0.000	97	1493978	175.0	169.5	
77 trans-1,3-Dichloropropene	75	9.236	9.236	0.000	93	414030	175.0	185.2	
78 Ethyl methacrylate	69	9.297	9.297	0.000	91	452684	175.0	189.0	
79 1,1,2-Trichloroethane	97	9.431	9.431	0.000	95	282152	175.0	170.2	
80 Tetrachloroethene	164	9.498	9.504	-0.006	96	297871	175.0	171.6	
81 1,3-Dichloropropane	76	9.589	9.589	0.000	93	548319	175.0	171.6	
82 2-Hexanone	43	9.650	9.650	0.000	98	820647	350.0	367.6	
84 Chlorodibromomethane	129	9.802	9.802	0.000	90	268037	175.0	178.0	
85 Ethylene Dibromide	107	9.918	9.912	0.006	98	296148	175.0	172.4	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	93	580353	175.0	176.2	
87 Chlorobenzene	112	10.404	10.404	0.000	90	986925	175.0	170.6	
88 4-Chlorobenzotrifluoride	180	10.465	10.465	0.000	96	543962	175.0	179.0	
90 Ethylbenzene	106	10.502	10.502	0.000	98	572466	175.0	175.7	
89 1,1,1,2-Tetrachloroethane	131	10.496	10.502	-0.006	91	312552	175.0	180.0	
91 m-Xylene & p-Xylene	106	10.636	10.630	0.006	0	721601	175.0	177.6	
92 o-Xylene	106	11.013	11.013	0.000	97	692079	175.0	178.9	
93 Styrene	104	11.037	11.037	0.000	93	1145359	175.0	175.0	
94 Bromoform	173	11.220	11.220	0.000	95	166982	175.0	183.9	
96 2-Chlorobenzotrifluoride	180	11.286	11.287	-0.001	96	564416	175.0	176.2	
97 Isopropylbenzene	105	11.384	11.384	0.000	97	1724768	175.0	173.7	
99 1,1,2,2-Tetrachloroethane	83	11.694	11.694	0.000	95	414517	175.0	176.8	
100 Bromobenzene	156	11.694	11.700	-0.006	96	405838	175.0	173.9	
102 trans-1,4-Dichloro-2-buten	53	11.737	11.737	0.000	71	149838	175.0	186.4	
101 1,2,3-Trichloropropane	110	11.755	11.749	0.006	91	133377	175.0	175.0	
103 N-Propylbenzene	120	11.797	11.798	-0.001	98	479706	175.0	177.5	
104 2-Chlorotoluene	126	11.889	11.889	0.000	95	402855	175.0	174.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.950	11.956	-0.006	96	434398	175.0	176.3	
106 1,3,5-Trimethylbenzene	105	11.986	11.986	0.000	94	1411132	175.0	172.8	
107 4-Chlorotoluene	126	12.010	12.010	0.000	98	430992	175.0	174.1	
108 tert-Butylbenzene	119	12.296	12.296	0.000	95	1170728	175.0	176.3	
110 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	1450154	175.0	175.2	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	97	408895	175.0	178.1	
112 sec-Butylbenzene	105	12.521	12.521	0.000	96	1660807	175.0	172.9	
113 1,3-Dichlorobenzene	146	12.637	12.637	0.000	96	759244	175.0	171.1	
114 4-Isopropyltoluene	119	12.680	12.680	0.000	97	1421342	175.0	178.0	
115 1,4-Dichlorobenzene	146	12.740	12.747	-0.007	91	782506	175.0	172.6	
116 2,4-Dichloro-1-(triflourom	214	12.771	12.771	0.000	97	385108	175.0	176.8	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.813	0.000	0	437274	175.0	176.1	
120 n-Butylbenzene	91	13.087	13.087	0.000	96	1226876	175.0	178.8	
121 1,2-Dichlorobenzene	146	13.099	13.099	0.000	94	709578	175.0	173.6	
122 1,2-Dibromo-3-Chloropropan	75	13.890	13.890	0.000	73	66283	175.0	179.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.030	14.030	0.000	0	1539823	525.0	538.0	
125 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	0	1008562	350.0	361.9	
126 1,2,4-Trichlorobenzene	180	14.718	14.718	0.000	94	363075	175.0	179.9	
127 Hexachlorobutadiene	225	14.857	14.858	-0.001	96	154651	175.0	178.8	
128 Naphthalene	128	14.979	14.979	0.000	98	957033	175.0	190.8	
129 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	94	289565	175.0	184.5	
131 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	106630	175.0	214.0	
130 2,3,6-Trichlorotoluene	159	16.080	16.080	0.000	93	98818	175.0	191.8	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		350.0	350.0	
S 133 Xylenes, Total	106				0		350.0	356.5	
S 135 1,3-Dichloropropene, Total	1				0		350.0	371.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOAPRI_00217	Amount Added:	7.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	7.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	7.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	7.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	7.00	Units: uL	
VOA8260SURR_00060	Amount Added:	7.00	Units: uL	
VOAACROPRI_00007	Amount Added:	9.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

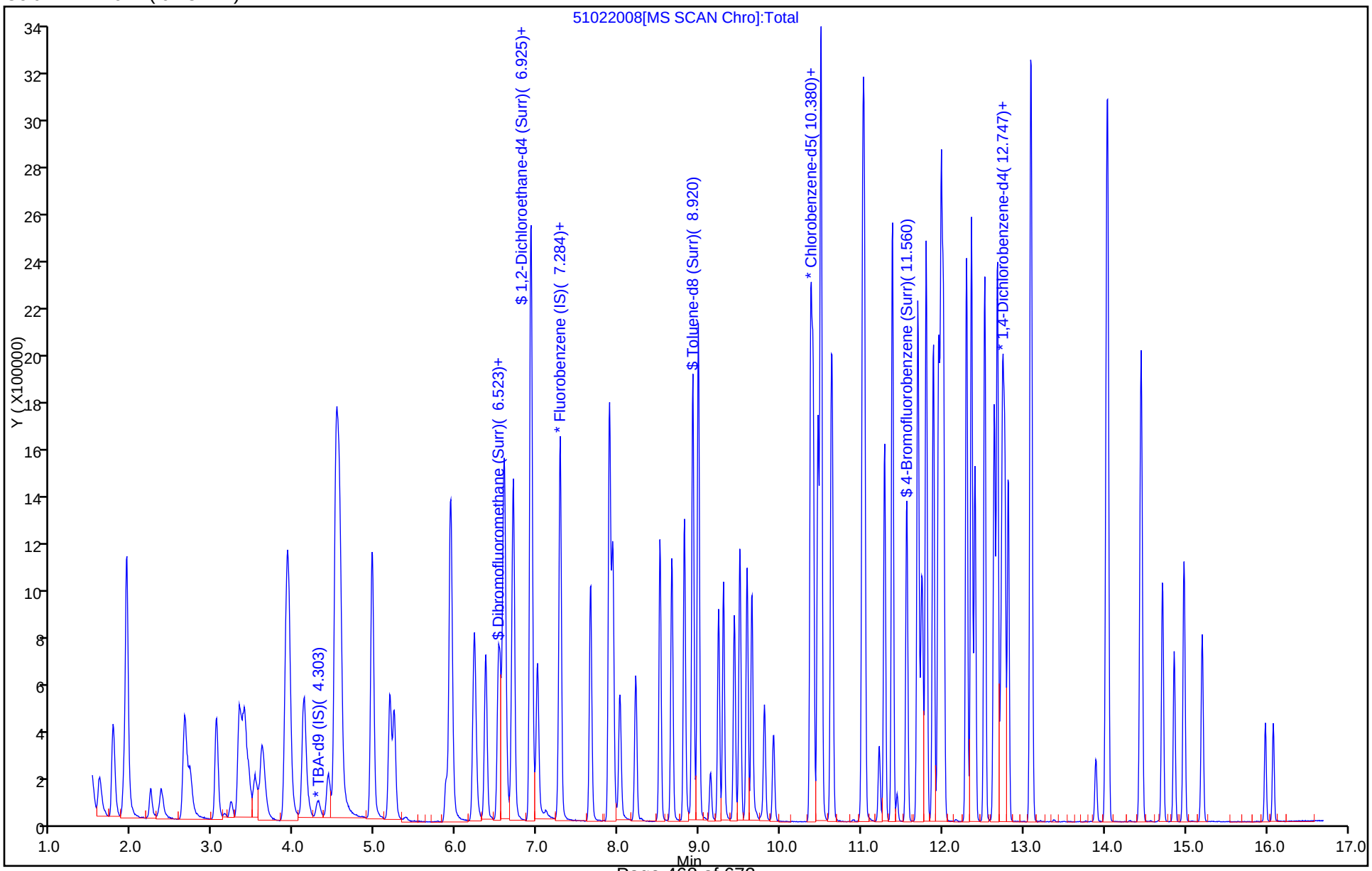
Report Date: 23-Oct-2016 13:18:47 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022008.D

Injection Date:	22-Oct-2016 16:57:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD35			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022009.D
Lims ID: IC VSTD40
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 22-Oct-2016 17:22:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-009
Misc. Info.: IC VSTD40
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:21:08 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: fergusond Date: 23-Oct-2016 13:21:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.302	4.284	0.018	0	131542	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	91	365282	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	89	101720	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.716	0.000	93	142290	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.548	-0.001	94	343798	200.0	196.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.919	-0.001	0	496655	200.0	196.8	
$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	95	1394043	200.0	181.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	86	583947	200.0	188.1	
11 Dichlorodifluoromethane	85	1.601	1.602	-0.001	98	429182	200.0	197.6	
12 Chloromethane	50	1.766	1.766	0.000	99	830573	200.0	197.1	
13 Vinyl chloride	62	1.912	1.912	0.000	98	564533	200.0	202.1	
14 Butadiene	39	1.936	1.936	0.000	97	786444	200.0	190.5	
15 Bromomethane	94	2.228	2.234	-0.006	91	136780	200.0	196.1	
16 Chloroethane	64	2.356	2.368	-0.012	98	231064	200.0	185.5	
17 Dichlorofluoromethane	67	2.648	2.654	-0.006	97	590488	200.0	198.3	
18 Trichlorofluoromethane	101	2.654	2.654	0.000	58	470795	200.0	199.4	
20 Ethyl ether	59	3.043	3.043	0.000	96	469809	200.0	200.2	
21 Acrolein	56	3.232	3.226	0.006	99	138202	250.0	250.7	
22 1,1-Dichloroethene	96	3.329	3.335	-0.006	92	381419	200.0	206.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.378	3.390	-0.012	93	396910	200.0	197.3	
24 Acetone	43	3.445	3.451	-0.006	98	384850	400.0	409.3	
25 Iodomethane	142	3.524	3.524	0.000	98	562493	200.0	204.9	
26 Carbon disulfide	76	3.609	3.615	-0.006	99	999685	200.0	206.9	
28 3-Chloro-1-propene	76	3.901	3.907	-0.006	88	246656	200.0	215.0	
30 Methyl acetate	43	3.937	3.932	0.005	100	2465695	1000.0	1013.4	
31 Methylene Chloride	84	4.126	4.132	-0.006	92	436687	200.0	189.0	
32 2-Methyl-2-propanol	59	4.424	4.418	0.006	86	300575	2000.0	1860.4	
33 Acrylonitrile	53	4.515	4.522	-0.007	97	2376180	2000.0	2042.7	
34 trans-1,2-Dichloroethene	96	4.546	4.546	0.000	92	405331	200.0	201.6	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	94	1105174	200.0	211.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.959	4.972	-0.013	97	871474	200.0	207.2	
37 1,1-Dichloroethane	63	5.185	5.185	-0.001	96	912372	200.0	203.3	
38 Vinyl acetate	43	5.233	5.240	-0.007	97	1072697	200.0	215.2	
45 cis-1,2-Dichloroethene	96	5.933	5.927	0.006	88	449345	200.0	202.4	
44 2,2-Dichloropropane	97	5.933	5.927	0.006	72	77067	200.0	206.0	
46 2-Butanone (MEK)	43	5.951	5.951	0.000	97	619027	400.0	413.3	
49 Chlorobromomethane	128	6.219	6.225	-0.006	85	192697	200.0	205.5	
51 Tetrahydrofuran	42	6.237	6.237	0.000	94	415338	400.0	404.8	
52 Chloroform	83	6.365	6.365	0.000	97	711575	200.0	199.5	
53 1,1,1-Trichloroethane	97	6.517	6.517	0.000	94	517321	200.0	206.1	
54 Cyclohexane	56	6.590	6.590	0.000	97	1120418	200.0	203.2	
56 Carbon tetrachloride	117	6.693	6.694	-0.001	93	442875	200.0	210.8	
55 1,1-Dichloropropene	75	6.705	6.712	-0.007	86	607876	200.0	205.1	
58 Benzene	78	6.924	6.925	-0.001	96	1709623	200.0	200.4	
57 Isobutyl alcohol	41	6.924	6.925	-0.001	51	387004	5000.0	5476.6	
59 1,2-Dichloroethane	62	7.003	7.004	-0.001	95	642222	200.0	200.2	
62 n-Heptane	43	7.283	7.284	-0.001	98	845753	200.0	204.4	
64 Trichloroethene	130	7.660	7.661	-0.001	95	414767	200.0	203.0	
66 Methylcyclohexane	83	7.892	7.892	0.000	96	744113	200.0	212.2	
67 1,2-Dichloropropane	63	7.934	7.935	-0.001	95	522348	200.0	203.8	
68 Dibromomethane	93	8.019	8.020	-0.001	97	229137	200.0	211.1	
70 1,4-Dioxane	88	8.019	8.020	-0.001	47	84058	4000.0	4139.7	
71 Dichlorobromomethane	83	8.214	8.220	-0.006	96	492086	200.0	209.1	
73 2-Chloroethyl vinyl ether	63	8.512	8.512	0.000	87	587972	400.0	437.5	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	86	616111	200.0	221.2	
75 4-Methyl-2-pentanone (MIBK	43	8.816	8.817	-0.001	99	1255774	400.0	402.9	
76 Toluene	91	8.987	8.987	0.000	97	1714356	200.0	183.6	
77 trans-1,3-Dichloropropene	75	9.236	9.236	0.000	93	500081	200.0	211.3	
78 Ethyl methacrylate	69	9.297	9.297	0.000	91	534579	200.0	210.7	
79 1,1,2-Trichloroethane	97	9.431	9.431	0.000	95	328867	200.0	187.3	
80 Tetrachloroethene	164	9.498	9.504	-0.006	96	343465	200.0	186.9	
81 1,3-Dichloropropane	76	9.589	9.589	0.000	93	647160	200.0	191.3	
82 2-Hexanone	43	9.650	9.650	0.000	99	963136	400.0	407.5	
84 Chlorodibromomethane	129	9.802	9.802	0.000	90	313753	200.0	196.8	
85 Ethylene Dibromide	107	9.911	9.912	-0.001	98	347518	200.0	191.0	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	95	686732	200.0	196.9	
87 Chlorobenzene	112	10.404	10.404	0.000	92	1144110	200.0	186.8	
88 4-Chlorobenzotrifluoride	180	10.465	10.465	0.000	95	638282	200.0	198.4	
89 1,1,1,2-Tetrachloroethane	131	10.495	10.502	-0.007	91	353938	200.0	192.5	
90 Ethylbenzene	106	10.501	10.502	-0.001	97	670720	200.0	194.5	
91 m-Xylene & p-Xylene	106	10.635	10.630	0.005	0	831099	200.0	193.2	
92 o-Xylene	106	11.012	11.013	-0.001	97	797469	200.0	194.7	
93 Styrene	104	11.037	11.037	0.000	93	1332303	200.0	192.3	
94 Bromoform	173	11.219	11.220	-0.001	96	195502	200.0	203.3	
96 2-Chlorobenzotrifluoride	180	11.286	11.287	-0.001	96	666819	200.0	196.5	
97 Isopropylbenzene	105	11.384	11.384	0.000	97	1955310	200.0	186.0	
99 1,1,2,2-Tetrachloroethane	83	11.694	11.694	0.000	94	482112	200.0	194.2	
100 Bromobenzene	156	11.694	11.700	-0.006	96	483285	200.0	201.1	
102 trans-1,4-Dichloro-2-buten	53	11.736	11.737	-0.001	68	179384	200.0	216.7	
101 1,2,3-Trichloropropane	110	11.755	11.749	0.006	91	155618	200.0	198.2	
103 N-Propylbenzene	120	11.797	11.798	-0.001	98	556273	200.0	199.8	
104 2-Chlorotoluene	126	11.888	11.889	-0.001	95	473480	200.0	198.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.955	11.956	-0.001	96	516505	200.0	203.5	
106 1,3,5-Trimethylbenzene	105	11.986	11.986	0.000	95	1629974	200.0	193.8	
107 4-Chlorotoluene	126	12.010	12.010	0.000	98	515374	200.0	202.1	
108 tert-Butylbenzene	119	12.296	12.296	0.000	95	1355432	200.0	198.2	
110 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	1674135	200.0	196.3	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.400	-0.001	98	488889	200.0	206.8	
112 sec-Butylbenzene	105	12.521	12.521	0.000	96	1925023	200.0	194.6	
113 1,3-Dichlorobenzene	146	12.637	12.637	0.000	96	887299	200.0	194.1	
114 4-Isopropyltoluene	119	12.679	12.680	-0.001	96	1636065	200.0	198.9	
115 1,4-Dichlorobenzene	146	12.740	12.747	-0.007	92	902000	200.0	193.2	
116 2,4-Dichloro-1-(triflourom	214	12.771	12.771	0.000	95	458166	200.0	204.3	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.813	0.000	0	525934	200.0	205.7	
120 n-Butylbenzene	91	13.087	13.087	0.000	97	1427132	200.0	201.9	
121 1,2-Dichlorobenzene	146	13.099	13.099	0.000	94	826915	200.0	196.5	
122 1,2-Dibromo-3-Chloropropan	75	13.896	13.890	0.006	75	78936	200.0	207.8	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.036	14.030	0.006	0	1832958	600.0	621.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	0	1231331	400.0	429.0	
126 1,2,4-Trichlorobenzene	180	14.717	14.718	-0.001	95	431004	200.0	207.4	
127 Hexachlorobutadiene	225	14.857	14.858	-0.001	97	179638	200.0	201.7	
128 Naphthalene	128	14.979	14.979	0.000	98	1118920	200.0	216.6	
129 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	96	349524	200.0	216.2	
131 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	141484	200.0	275.7	
130 2,3,6-Trichlorotoluene	159	16.086	16.080	0.006	96	128474	200.0	242.2	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		400.0	387.9	
S 134 1,2-Dichloroethene, Total	96				0		400.0	404.0	
S 135 1,3-Dichloropropene, Total	1				0		400.0	432.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOAACROPRI_00007	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00217	Amount Added:	8.00	Units: uL	
voaWKetPriRes_00002	Amount Added:	8.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	8.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	8.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	8.00	Units: uL	
VOA8260SURR_00060	Amount Added:	8.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

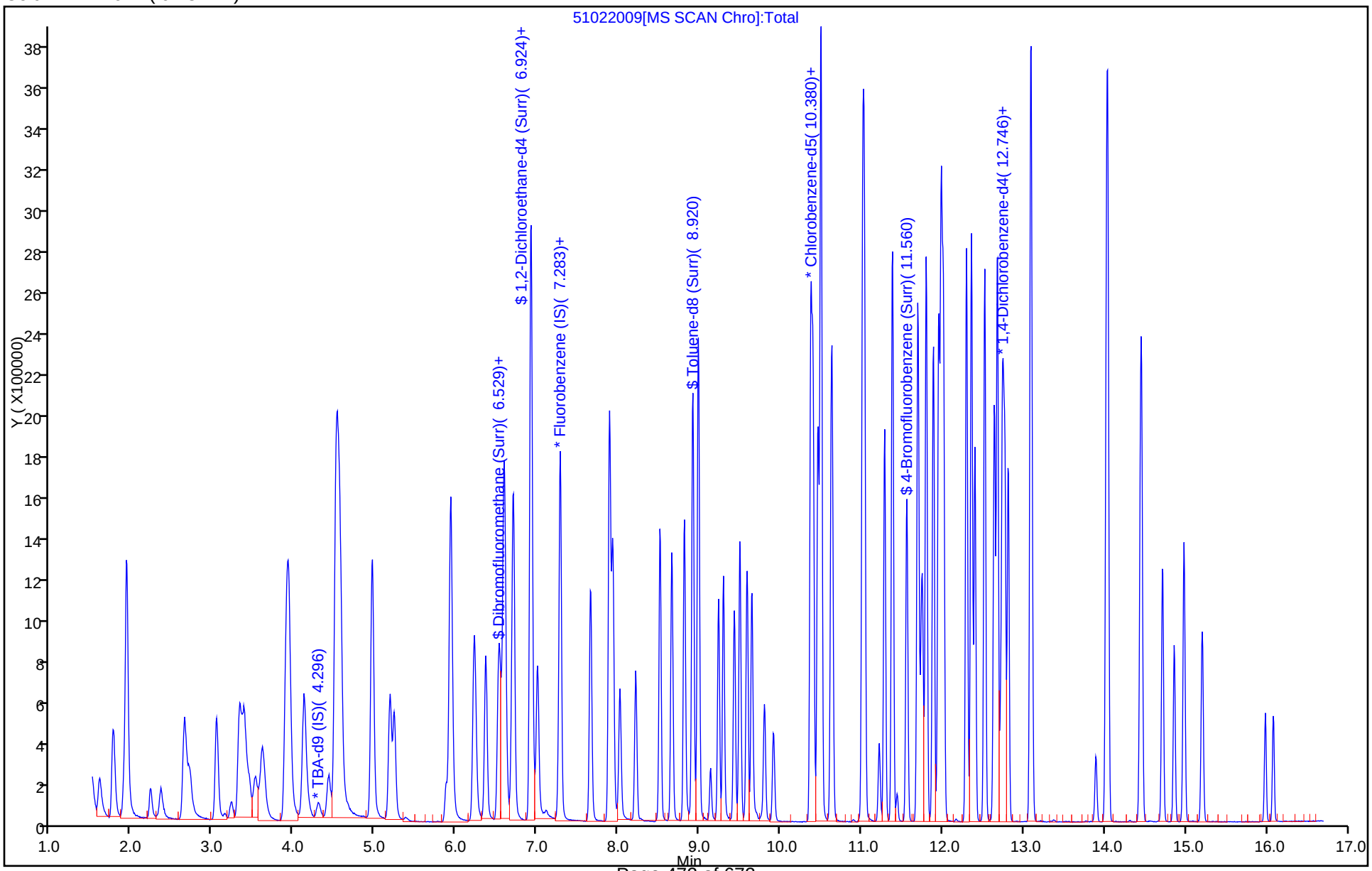
Report Date: 23-Oct-2016 13:21:08 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022009.D

Injection Date:	22-Oct-2016 17:22:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD40			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D
Lims ID: IC VSTD50
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 22-Oct-2016 17:46:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0013995-010
Misc. Info.: IC VSTD50
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Oct-2016 13:25:10 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: fergusond Date: 23-Oct-2016 13:25:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.310	4.284	0.026	0	138520	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.266	7.271	-0.005	92	374790	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.369	10.374	-0.005	56	100194	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.717	12.716	0.001	92	138243	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.543	6.548	-0.005	93	415623	250.0	231.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.914	6.919	-0.005	0	596400	250.0	230.4	
$ 7 Toluene-d8 (Surr)	98	8.921	8.920	0.001	95	1670672	250.0	220.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.555	11.560	-0.005	86	692444	250.0	226.5	
11 Dichlorodifluoromethane	85	1.597	1.602	-0.005	98	528854	250.0	237.4	
12 Chloromethane	50	1.767	1.766	0.001	99	1036936	250.0	239.8	
13 Vinyl chloride	62	1.913	1.912	0.001	98	684522	250.0	238.9	
14 Butadiene	39	1.937	1.936	0.001	97	991146	250.0	233.9	
15 Bromomethane	94	2.229	2.234	-0.005	91	148486	250.0	207.5	
16 Chloroethane	64	2.357	2.368	-0.011	98	260074	250.0	203.5	
17 Dichlorofluoromethane	67	2.643	2.654	-0.011	96	716202	250.0	234.4	
18 Trichlorofluoromethane	101	2.643	2.654	-0.011	57	573682	250.0	236.8	
20 Ethyl ether	59	3.038	3.043	-0.005	96	562470	250.0	233.5	
21 Acrolein	56	3.221	3.226	-0.005	100	159873	275.0	282.7	
22 1,1-Dichloroethene	96	3.318	3.335	-0.017	93	468351	250.0	247.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.385	3.390	-0.005	94	507801	250.0	246.0	
24 Acetone	43	3.452	3.451	0.001	99	478009	500.0	495.5	
25 Iodomethane	142	3.513	3.524	-0.011	98	686097	250.0	243.6	
26 Carbon disulfide	76	3.598	3.615	-0.017	99	1239529	250.0	250.0	
28 3-Chloro-1-propene	76	3.896	3.907	-0.011	88	305567	250.0	259.6	
30 Methyl acetate	43	3.933	3.932	0.001	100	3057092	1250.0	1224.5	
31 Methylene Chloride	84	4.121	4.132	-0.011	92	533332	250.0	224.9	
32 2-Methyl-2-propanol	59	4.432	4.418	0.014	85	480778	2500.0	2825.9	
33 Acrylonitrile	53	4.517	4.522	-0.005	97	2943037	2500.0	2465.8	
34 trans-1,2-Dichloroethene	96	4.541	4.546	-0.005	92	507564	250.0	246.0	
35 Methyl tert-butyl ether	73	4.565	4.570	-0.005	94	1318423	250.0	246.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.961	4.972	-0.011	97	1090775	250.0	252.8	
37 1,1-Dichloroethane	63	5.180	5.185	-0.005	96	1120170	250.0	243.2	
38 Vinyl acetate	43	5.235	5.240	-0.005	97	1311690	250.0	256.5	
45 cis-1,2-Dichloroethene	96	5.928	5.927	0.001	88	555908	250.0	244.0	
44 2,2-Dichloropropane	97	5.922	5.927	-0.005	73	99511	250.0	259.2	
46 2-Butanone (MEK)	43	5.946	5.951	-0.005	97	764110	500.0	497.2	
49 Chlorobromomethane	128	6.214	6.225	-0.011	86	236063	250.0	245.4	
51 Tetrahydrofuran	42	6.238	6.237	0.001	94	518694	500.0	492.7	
52 Chloroform	83	6.360	6.365	-0.005	96	878210	250.0	239.9	
53 1,1,1-Trichloroethane	97	6.518	6.517	0.001	96	631074	250.0	245.0	
54 Cyclohexane	56	6.585	6.590	-0.005	97	1414113	250.0	250.0	
56 Carbon tetrachloride	117	6.689	6.694	-0.005	93	539131	250.0	250.1	
55 1,1-Dichloropropene	75	6.707	6.712	-0.005	87	758129	250.0	249.4	
58 Benzene	78	6.920	6.925	-0.005	94	2092563	250.0	239.0	
57 Isobutyl alcohol	41	6.926	6.925	0.001	95	506048	6250.0	6979.6	
59 1,2-Dichloroethane	62	7.005	7.004	0.001	95	786249	250.0	238.8	
62 n-Heptane	43	7.285	7.284	0.001	98	1081576	250.0	254.8	
64 Trichloroethene	130	7.656	7.661	-0.005	95	519062	250.0	247.7	
66 Methylcyclohexane	83	7.893	7.892	0.001	97	917304	250.0	254.9	
67 1,2-Dichloropropane	63	7.930	7.935	-0.005	96	647909	250.0	246.4	
68 Dibromomethane	93	8.015	8.020	-0.005	97	275422	250.0	247.3	
70 1,4-Dioxane	88	8.021	8.020	0.001	48	114687	5000.0	5504.9	
71 Dichlorobromomethane	83	8.215	8.220	-0.005	96	600131	250.0	248.6	
73 2-Chloroethyl vinyl ether	63	8.514	8.512	0.002	87	721849	500.0	523.5	
74 cis-1,3-Dichloropropene	75	8.660	8.658	0.002	87	757503	250.0	265.1	
75 4-Methyl-2-pentanone (MIBK	43	8.812	8.817	-0.005	99	1562723	500.0	509.0	
76 Toluene	91	8.988	8.987	0.001	96	2079772	250.0	226.2	
77 trans-1,3-Dichloropropene	75	9.238	9.236	0.002	93	620726	250.0	266.3	
78 Ethyl methacrylate	69	9.298	9.297	0.001	92	672788	250.0	269.3	
79 1,1,2-Trichloroethane	97	9.432	9.431	0.001	95	411935	250.0	238.2	
80 Tetrachloroethene	164	9.499	9.504	-0.005	96	426359	250.0	235.6	
81 1,3-Dichloropropane	76	9.590	9.589	0.001	94	789714	250.0	237.0	
82 2-Hexanone	43	9.645	9.650	-0.005	99	1192579	500.0	512.2	
84 Chlorodibromomethane	129	9.803	9.802	0.001	89	385352	250.0	245.4	
85 Ethylene Dibromide	107	9.913	9.912	0.001	100	428449	250.0	239.1	
86 3-Chlorobenzotrifluoride	180	10.375	10.374	0.001	93	785098	250.0	228.6	
87 Chlorobenzene	112	10.399	10.404	-0.005	89	1401132	250.0	232.3	
88 4-Chlorobenzotrifluoride	180	10.460	10.465	-0.005	96	739313	250.0	233.3	
89 1,1,1,2-Tetrachloroethane	131	10.497	10.502	-0.005	91	443976	250.0	245.1	
90 Ethylbenzene	106	10.503	10.502	0.001	97	815861	250.0	240.1	
91 m-Xylene & p-Xylene	106	10.631	10.630	0.001	0	1021507	250.0	241.1	
92 o-Xylene	106	11.014	11.013	0.001	95	970548	250.0	240.6	
93 Styrene	104	11.038	11.037	0.001	92	1610677	250.0	236.0	
94 Bromoform	173	11.221	11.220	0.001	96	241663	250.0	255.2	
96 2-Chlorobenzotrifluoride	180	11.288	11.287	0.001	96	767761	250.0	229.7	
97 Isopropylbenzene	105	11.379	11.384	-0.005	98	2366385	250.0	228.5	
99 1,1,2,2-Tetrachloroethane	83	11.695	11.694	0.001	96	589029	250.0	240.9	
100 Bromobenzene	156	11.695	11.700	-0.005	96	569568	250.0	244.0	
102 trans-1,4-Dichloro-2-buten	53	11.732	11.737	-0.005	72	219200	250.0	272.5	
101 1,2,3-Trichloropropane	110	11.750	11.749	0.001	90	187868	250.0	246.3	
103 N-Propylbenzene	120	11.799	11.798	0.001	97	690007	250.0	255.1	
104 2-Chlorotoluene	126	11.890	11.889	0.001	95	567755	250.0	245.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.951	11.956	-0.005	97	596946	250.0	242.1	
106 1,3,5-Trimethylbenzene	105	11.981	11.986	-0.005	96	1952749	250.0	239.0	
107 4-Chlorotoluene	126	12.012	12.010	0.002	98	618106	250.0	249.5	
108 tert-Butylbenzene	119	12.297	12.296	0.001	95	1624983	250.0	244.5	
110 1,2,4-Trimethylbenzene	105	12.358	12.357	0.001	98	1981171	250.0	239.1	
111 1,2-dichloro-4-(trifluorom	214	12.401	12.400	0.001	97	569684	250.0	248.0	
112 sec-Butylbenzene	105	12.523	12.521	0.002	96	2291141	250.0	238.4	
113 1,3-Dichlorobenzene	146	12.638	12.637	0.001	96	1078386	250.0	242.8	
114 4-Isopropyltoluene	119	12.675	12.680	-0.005	96	1943351	250.0	243.2	
115 1,4-Dichlorobenzene	146	12.742	12.747	-0.005	91	1099124	250.0	242.3	
116 2,4-Dichloro-1-(triflourom	214	12.772	12.771	0.001	95	528566	250.0	242.5	
118 2,5-Dichlorobenzotrifluori	214	12.808	12.813	-0.005	0	589060	250.0	237.1	
120 n-Butylbenzene	91	13.088	13.087	0.001	96	1708798	250.0	248.8	
121 1,2-Dichlorobenzene	146	13.101	13.099	0.001	94	1000919	250.0	244.8	
122 1,2-Dibromo-3-Chloropropan	75	13.891	13.890	0.001	72	95655	250.0	259.2	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.031	14.030	0.001	0	2089504	750.0	729.7	
125 2,3- & 3,4- Dichlorotoluen	125	14.451	14.450	0.001	0	1395064	500.0	500.3	
126 1,2,4-Trichlorobenzene	180	14.713	14.718	-0.005	94	509601	250.0	252.4	
127 Hexachlorobutadiene	225	14.859	14.858	0.001	97	216370	250.0	250.0	
128 Naphthalene	128	14.980	14.979	0.001	98	1346243	250.0	268.2	
129 1,2,3-Trichlorobenzene	180	15.205	15.204	0.001	95	402589	250.0	256.3	
131 2,4,5-Trichlorotoluene	159	15.984	15.983	0.001	0	155278	250.0	311.4	
130 2,3,6-Trichlorotoluene	159	16.081	16.080	0.001	95	146221	250.0	283.7	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		500.0	481.6	
S 134 1,2-Dichloroethene, Total	96				0		500.0	490.1	
S 135 1,3-Dichloropropene, Total	1				0		500.0	531.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWKetPriRes_00002	Amount Added:	10.00	Units: uL	
voaWEEmixRest_00001	Amount Added:	10.00	Units: uL	
voaW2cleveRes_00002	Amount Added:	10.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	10.00	Units: uL	
VOA8260SURR_00060	Amount Added:	10.00	Units: uL	
VOA8260VOAPRI_00217	Amount Added:	10.00	Units: uL	
VOAACROPRI_00007	Amount Added:	11.00	Units: uL	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

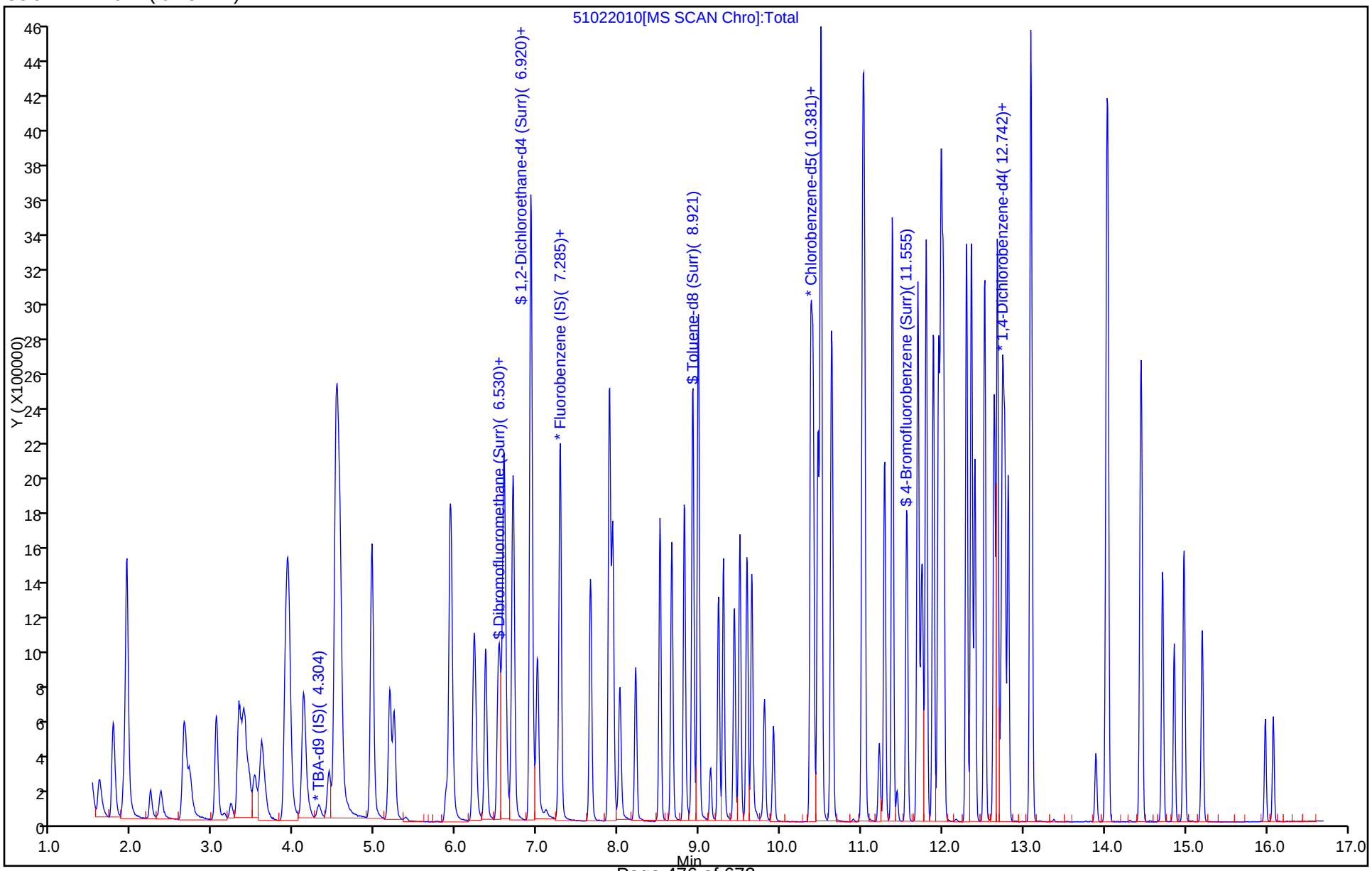
Report Date: 23-Oct-2016 13:25:10 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Injection Date:	22-Oct-2016 17:46:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	IC VSTD50			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab Sample ID: CCVIS 180-192841/2 Calibration Date: 10/31/2016 10:11

Instrument ID: CHHP5 Calib Start Date: 10/22/2016 14:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/22/2016 17:46

Lab File ID: 51031002.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	0.2972	0.2825	0.1000	9.50	10.0	-5.0	20.0
Chloromethane	Ave	0.5769	0.5335	0.1000	9.25	10.0	-7.5	20.0
Vinyl chloride	Ave	0.3823	0.3637	0.1000	9.51	10.0	-4.9	20.0
1,3-Butadiene	Ave	0.5652	0.5722	0.0100	10.1	10.0	1.2	20.0
Bromomethane	Ave	0.0955	0.0912	0.0500	9.55	10.0	-4.5	20.0
Chloroethane	Ave	0.1705	0.1781	0.0500	10.4	10.0	4.4	20.0
Trichlorofluoromethane	Ave	0.3231	0.3119	0.1000	9.65	10.0	-3.5	20.0
Dichlorofluoromethane	Ave	0.4075	0.3966	0.0100	9.73	10.0	-2.7	20.0
Ethyl ether	Ave	0.3213	0.2933	0.0100	9.13	10.0	-8.7	20.0
Acrolein	Ave	0.0755	0.0673	0.0100	26.7	30.0	-10.9	20.0
1,1-Dichloroethene	Ave	0.2526	0.2521	0.1000	9.98	10.0	-0.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2754	0.2601	0.1000	9.44	10.0	-5.6	20.0
Acetone	Ave	0.1287	0.1164	0.0500	18.1	20.0	-9.6	20.0
Iodomethane	Ave	0.3758	0.3637	0.0100	9.68	10.0	-3.2	20.0
Carbon disulfide	Ave	0.6614	0.5851	0.1000	8.85	10.0	-11.5	20.0
Allyl chloride	Ave	0.1570	0.1415	0.0100	9.01	10.0	-9.9	20.0
Methyl acetate	Ave	0.3331	0.3040	0.1000	45.6	50.0	-8.7	20.0
Methylene Chloride	Ave	0.3163	0.2834	0.1000	8.96	10.0	-10.4	20.0
tert-Butyl alcohol	Ave	1.228	1.151	0.0100	93.7	100	-6.3	20.0
Acrylonitrile	Ave	0.1592	0.1424	0.0100	89.4	100	-10.6	20.0
trans-1,2-Dichloroethene	Ave	0.2752	0.2662	0.1000	9.67	10.0	-3.3	20.0
Methyl tert-butyl ether	Ave	0.7149	0.6249	0.1000	8.74	10.0	-12.6	20.0
Hexane	Ave	0.5756	0.5358	0.0100	9.31	10.0	-6.9	20.0
1,1-Dichloroethane	Ave	0.6144	0.5503	0.2000	8.96	10.0	-10.4	20.0
Vinyl acetate	Ave	0.6823	0.6571	0.0100	9.63	10.0	-3.7	20.0
2,2-Dichloropropane	Ave	0.0512	0.0509	0.0100	9.94	10.0	-0.6	20.0
cis-1,2-Dichloroethene	Ave	0.3039	0.2851	0.1000	9.38	10.0	-6.2	20.0
2-Butanone (MEK)	Ave	0.2050	0.1816	0.0500	17.7	20.0	-11.5	20.0
Bromochloromethane	Ave	0.1283	0.1188	0.0100	9.25	10.0	-7.5	20.0
Tetrahydrofuran	Ave	0.1404	0.1192	0.0100	17.0	20.0	-15.1	20.0
Chloroform	Ave	0.4883	0.4431	0.2000	9.07	10.0	-9.3	20.0
1,1,1-Trichloroethane	Ave	0.3436	0.3250	0.1000	9.46	10.0	-5.4	20.0
Cyclohexane	Ave	0.7546	0.7133	0.1000	9.45	10.0	-5.5	20.0
Carbon tetrachloride	Ave	0.2876	0.2800	0.1000	9.73	10.0	-2.7	20.0
1,1-Dichloropropene	Ave	0.4056	0.3778	0.0100	9.31	10.0	-6.9	20.0
Isobutyl alcohol	Ave	0.0097	0.0083*	0.0100	213	250	-14.7	20.0
Benzene	Ave	1.168	1.107	0.5000	9.48	10.0	-5.2	20.0
1,2-Dichloroethane	Ave	0.4392	0.4006	0.1000	9.12	10.0	-8.8	20.0
n-Heptane	Ave	0.5664	0.5515	0.0100	9.74	10.0	-2.6	20.0
Trichloroethene	Ave	0.2796	0.2649	0.2000	9.47	10.0	-5.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab Sample ID: CCVIS 180-192841/2 Calibration Date: 10/31/2016 10:11

Instrument ID: CHHP5 Calib Start Date: 10/22/2016 14:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/22/2016 17:46

Lab File ID: 51031002.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	0.4801	0.4407	0.1000	9.18	10.0	-8.2	20.0
1,2-Dichloropropane	Ave	0.3508	0.3192	0.1000	9.10	10.0	-9.0	20.0
1,4-Dioxane	Ave	0.0028	0.0022*	0.0100	157	200	-21.5*	20.0
Dibromomethane	Ave	0.1486	0.1397	0.0100	9.40	10.0	-6.0	20.0
Bromodichloromethane	Ave	0.3221	0.2793	0.2000	8.67	10.0	-13.3	20.0
2-Chloroethyl vinyl ether	Ave	0.1839	0.1694	0.0100	18.4	20.0	-7.9	20.0
cis-1,3-Dichloropropene	Ave	0.3813	0.3465	0.2000	9.09	10.0	-9.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.532	1.435	0.1000	18.7	20.0	-6.3	20.0
Toluene	Ave	4.589	4.707	0.4000	10.3	10.0	2.6	20.0
trans-1,3-Dichloropropene	Ave	1.163	1.096	0.1000	9.42	10.0	-5.8	20.0
Ethyl methacrylate	Ave	1.247	1.140	0.0100	9.14	10.0	-8.6	20.0
1,1,2-Trichloroethane	Ave	0.8630	0.8506	0.1000	9.86	10.0	-1.4	20.0
Tetrachloroethene	Ave	0.9033	0.9264	0.2000	10.3	10.0	2.6	20.0
1,3-Dichloropropane	Ave	1.663	1.647	0.0100	9.90	10.0	-1.0	20.0
2-Hexanone	Ave	1.162	1.038	0.1000	17.9	20.0	-10.7	20.0
Dibromochloromethane	Ave	0.7837	0.7205	0.1000	9.19	10.0	-8.1	20.0
1,2-Dibromoethane (EDB)	Ave	0.8942	0.8314	0.1000	9.30	10.0	-7.0	20.0
3-Chlorobenzotrifluoride	Ave	1.714	1.777	0.0100	10.4	10.0	3.7	20.0
Chlorobenzene	Ave	3.010	2.966	0.5000	9.85	10.0	-1.5	20.0
4-Chlorobenzotrifluoride	Ave	1.582	1.680	0.0100	10.6	10.0	6.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9040	0.8862	0.0100	9.80	10.0	-2.0	20.0
Ethylbenzene	Ave	1.695	1.656	0.1000	9.77	10.0	-2.3	20.0
m-Xylene & p-Xylene	Ave	2.115	2.114	0.1000	10.0	10.0	-0.0	20.0
o-Xylene	Ave	2.013	2.001	0.3000	9.94	10.0	-0.6	20.0
Styrene	Ave	3.406	3.425	0.3000	10.1	10.0	0.6	20.0
Bromoform	Ave	0.4726	0.4252	0.1000	9.00	10.0	-10.0	20.0
2-Chlorobenzotrifluoride	Ave	1.668	1.734	0.0100	10.4	10.0	4.0	20.0
Isopropylbenzene	Ave	5.168	5.140	0.1000	9.95	10.0	-0.5	20.0
1,1,2,2-Tetrachloroethane	Ave	1.220	1.171	0.3000	9.59	10.0	-4.1	20.0
Bromobenzene	Ave	0.8444	0.8189	0.0100	9.70	10.0	-3.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2909	0.1960	0.0100	6.74	10.0	-32.6*	20.0
1,2,3-Trichloropropane	Ave	0.2759	0.2478	0.0100	8.98	10.0	-10.2	20.0
N-Propylbenzene	Ave	0.9783	0.9669	0.0100	9.88	10.0	-1.2	20.0
2-Chlorotoluene	Ave	0.8371	0.7951	0.0100	9.50	10.0	-5.0	20.0
3-Chlorotoluene	Ave	0.8919	0.9173	0.0100	10.3	10.0	2.8	20.0
1,3,5-Trimethylbenzene	Ave	2.956	2.891	0.0100	9.78	10.0	-2.2	20.0
4-Chlorotoluene	Ave	0.8959	0.9045	0.0100	10.1	10.0	1.0	20.0
tert-Butylbenzene	Ave	2.404	2.355	0.0100	9.80	10.0	-2.0	20.0
1,2,4-Trimethylbenzene	Ave	2.996	2.965	0.0100	9.90	10.0	-1.0	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8309	0.8966	0.0100	10.8	10.0	7.9	20.0
sec-Butylbenzene	Ave	3.476	3.451	0.0100	9.93	10.0	-0.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab Sample ID: CCVIS 180-192841/2 Calibration Date: 10/31/2016 10:11

Instrument ID: CHHP5 Calib Start Date: 10/22/2016 14:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/22/2016 17:46

Lab File ID: 51031002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3-Dichlorobenzene	Ave	1.606	1.547	0.6000	9.63	10.0	-3.7	20.0
4-Isopropyltoluene	Ave	2.890	2.868	0.0100	9.92	10.0	-0.8	20.0
1,4-Dichlorobenzene	Ave	1.641	1.572	0.5000	9.58	10.0	-4.2	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7882	0.8041	0.0100	10.2	10.0	2.0	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8986	0.9222	0.0100	10.3	10.0	2.6	20.0
n-Butylbenzene	Ave	2.484	2.415	0.0100	9.72	10.0	-2.8	20.0
1,2-Dichlorobenzene	Ave	1.479	1.423	0.4000	9.62	10.0	-3.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1335	0.1031	0.0500	7.72	10.0	-22.8*	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.036	1.036	0.0100	30.0	30.0	0.0	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.009	0.9834	0.0100	19.5	20.0	-2.5	20.0
1,2,4-Trichlorobenzene	Ave	0.7303	0.6603	0.2000	9.04	10.0	-9.6	20.0
Hexachlorobutadiene	Ave	0.3130	0.3071	0.0100	9.81	10.0	-1.9	20.0
Naphthalene	Ave	1.815	1.521	0.0100	8.38	10.0	-16.2	20.0
1,2,3-Trichlorobenzene	Ave	0.5681	0.5046	0.0100	8.88	10.0	-11.2	20.0
2,4,5-Trichlorotoluene	Ave	0.1803	0.1569	0.0100	8.70	10.0	-13.0	20.0
2,3,6-Trichlorotoluene	Ave	0.1864	0.1544	0.0100	8.28	10.0	-17.2	20.0
Dibromofluoromethane (Surr)	Ave	0.2392	0.2271		9.49	10.0	-5.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3454	0.3272		9.48	10.0	-5.2	20.0
Toluene-d8 (Surr)	Ave	3.774	3.978		10.5	10.0	5.4	20.0
4-Bromofluorobenzene (Surr)	Ave	1.526	1.523		9.98	10.0	-0.2	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 31-Oct-2016 10:11:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014116-002
Misc. Info.: CCVIS
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2016 11:34:02 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: fergusond Date: 31-Oct-2016 10:37:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.279	4.279	0.000	0	107694	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.272	7.272	0.000	95	383792	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.375	10.375	0.000	93	92805	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.723	12.723	0.000	96	132882	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.548	6.548	0.000	94	87170	50.0	47.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.919	6.919	0.000	0	125592	50.0	47.4	
$ 7 Toluene-d8 (Surr)	98	8.921	8.921	0.000	96	369145	50.0	52.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.561	11.561	0.000	86	141327	50.0	49.9	
11 Dichlorodifluoromethane	85	1.608	1.608	0.000	97	108427	50.0	47.5	
12 Chloromethane	50	1.767	1.767	0.000	99	204768	50.0	46.2	
13 Vinyl chloride	62	1.900	1.900	0.000	97	139583	50.0	47.6	
14 Butadiene	39	1.937	1.937	0.000	97	219621	50.0	50.6	
15 Bromomethane	94	2.229	2.229	0.000	92	34991	50.0	47.7	
16 Chloroethane	64	2.375	2.375	0.000	97	68333	50.0	52.2	
18 Trichlorofluoromethane	101	2.655	2.655	0.000	57	119706	50.0	48.3	
17 Dichlorofluoromethane	67	2.661	2.661	0.000	96	152209	50.0	48.7	
20 Ethyl ether	59	3.044	3.044	0.000	96	112560	50.0	45.6	
21 Acrolein	56	3.227	3.227	0.000	99	77430	150.0	133.7	
22 1,1-Dichloroethene	96	3.330	3.330	0.000	93	96771	50.0	49.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.409	3.409	0.000	95	99821	50.0	47.2	
24 Acetone	43	3.440	3.440	0.000	97	89328	100.0	90.4	
25 Iodomethane	142	3.525	3.525	0.000	99	139584	50.0	48.4	
26 Carbon disulfide	76	3.616	3.616	0.000	99	224568	50.0	44.2	
28 3-Chloro-1-propene	76	3.908	3.908	0.000	88	54288	50.0	45.0	
30 Methyl acetate	43	3.932	3.932	0.000	100	583380	250.0	228.2	
31 Methylene Chloride	84	4.121	4.121	0.000	92	108749	50.0	44.8	
32 2-Methyl-2-propanol	59	4.401	4.401	0.000	87	61969	500.0	468.5	
33 Acrylonitrile	53	4.516	4.516	0.000	98	546486	500.0	447.1	
34 trans-1,2-Dichloroethene	96	4.553	4.553	0.000	93	102152	50.0	48.4	
35 Methyl tert-butyl ether	73	4.565	4.565	0.000	93	239843	50.0	43.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.973	4.973	0.000	96	205650	50.0	46.5	
37 1,1-Dichloroethane	63	5.186	5.186	0.000	96	211209	50.0	44.8	
38 Vinyl acetate	43	5.234	5.234	0.000	97	252174	50.0	48.1	
44 2,2-Dichloropropane	97	5.922	5.922	0.000	61	19545	50.0	49.7	
45 cis-1,2-Dichloroethene	96	5.934	5.934	0.000	88	109413	50.0	46.9	
46 2-Butanone (MEK)	43	5.952	5.952	0.000	97	139354	100.0	88.5	
49 Chlorobromomethane	128	6.220	6.220	0.000	85	45579	50.0	46.3	
51 Tetrahydrofuran	42	6.238	6.238	0.000	93	91526	100.0	84.9	
52 Chloroform	83	6.360	6.360	0.000	97	170043	50.0	45.4	
53 1,1,1-Trichloroethane	97	6.524	6.524	0.000	95	124746	50.0	47.3	
54 Cyclohexane	56	6.591	6.591	0.000	97	273750	50.0	47.3	
56 Carbon tetrachloride	117	6.700	6.700	0.000	94	107453	50.0	48.7	
55 1,1-Dichloropropene	75	6.713	6.713	0.000	88	144980	50.0	46.6	
57 Isobutyl alcohol	41	6.919	6.919	0.000	44	79204	1250.0	1066.8	
58 Benzene	78	6.925	6.925	0.000	94	424984	50.0	47.4	
59 1,2-Dichloroethane	62	7.005	7.005	0.000	95	153763	50.0	45.6	
62 n-Heptane	43	7.290	7.290	0.000	96	211642	50.0	48.7	
64 Trichloroethene	130	7.662	7.662	0.000	96	101678	50.0	47.4	
66 Methylcyclohexane	83	7.893	7.893	0.000	94	169141	50.0	45.9	
67 1,2-Dichloropropane	63	7.935	7.935	0.000	94	122505	50.0	45.5	
70 1,4-Dioxane	88	8.014	8.014	0.000	46	16751	1000.0	785.2	M
68 Dibromomethane	93	8.014	8.014	0.000	94	53603	50.0	47.0	
71 Dichlorobromomethane	83	8.215	8.215	0.000	97	107174	50.0	43.4	
73 2-Chloroethyl vinyl ether	63	8.519	8.519	0.000	86	130027	100.0	92.1	
74 cis-1,3-Dichloropropene	75	8.659	8.659	0.000	86	132963	50.0	45.4	
75 4-Methyl-2-pentanone (MIBK	43	8.817	8.817	0.000	99	266388	100.0	93.7	
76 Toluene	91	8.988	8.988	0.000	97	436845	50.0	51.3	
77 trans-1,3-Dichloropropene	75	9.243	9.243	0.000	94	101702	50.0	47.1	
78 Ethyl methacrylate	69	9.298	9.298	0.000	92	105801	50.0	45.7	
79 1,1,2-Trichloroethane	97	9.432	9.432	0.000	94	78944	50.0	49.3	
80 Tetrachloroethene	164	9.505	9.505	0.000	95	85972	50.0	51.3	
81 1,3-Dichloropropane	76	9.590	9.590	0.000	95	152806	50.0	49.5	
82 2-Hexanone	43	9.645	9.645	0.000	98	192605	100.0	89.3	
84 Chlorodibromomethane	129	9.809	9.809	0.000	92	66870	50.0	46.0	
85 Ethylene Dibromide	107	9.918	9.918	0.000	97	77155	50.0	46.5	
86 3-Chlorobenzotrifluoride	180	10.381	10.381	0.000	90	164927	50.0	51.8	
87 Chlorobenzene	112	10.405	10.405	0.000	92	275277	50.0	49.3	
88 4-Chlorobenzotrifluoride	180	10.466	10.466	0.000	96	155926	50.0	53.1	
90 Ethylbenzene	106	10.503	10.503	0.000	99	153684	50.0	48.8	
89 1,1,1,2-Tetrachloroethane	131	10.503	10.503	0.000	90	82245	50.0	49.0	
91 m-Xylene & p-Xylene	106	10.636	10.636	0.000	0	196206	50.0	50.0	
92 o-Xylene	106	11.020	11.020	0.000	97	185724	50.0	49.7	
93 Styrene	104	11.038	11.038	0.000	94	317894	50.0	50.3	
94 Bromoform	173	11.220	11.220	0.000	97	39458	50.0	45.0	
96 2-Chlorobenzotrifluoride	180	11.287	11.287	0.000	97	160921	50.0	52.0	
97 Isopropylbenzene	105	11.385	11.385	0.000	97	477016	50.0	49.7	
99 1,1,2,2-Tetrachloroethane	83	11.695	11.695	0.000	75	108667	50.0	48.0	
100 Bromobenzene	156	11.701	11.701	0.000	96	108819	50.0	48.5	
102 trans-1,4-Dichloro-2-buten	53	11.737	11.737	0.000	62	26039	50.0	33.7	
101 1,2,3-Trichloropropane	110	11.756	11.756	0.000	89	32932	50.0	44.9	
103 N-Propylbenzene	120	11.804	11.804	0.000	99	128489	50.0	49.4	
104 2-Chlorotoluene	126	11.890	11.890	0.000	95	105655	50.0	47.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.956	11.956	0.000	96	121889	50.0	51.4	
106 1,3,5-Trimethylbenzene	105	11.987	11.987	0.000	96	384199	50.0	48.9	
107 4-Chlorotoluene	126	12.017	12.017	0.000	99	120196	50.0	50.5	
108 tert-Butylbenzene	119	12.297	12.297	0.000	96	313001	50.0	49.0	
110 1,2,4-Trimethylbenzene	105	12.358	12.358	0.000	98	394013	50.0	49.5	
111 1,2-dichloro-4-(trifluorom	214	12.401	12.401	0.000	99	119144	50.0	54.0	
112 sec-Butylbenzene	105	12.522	12.522	0.000	95	458572	50.0	49.6	
113 1,3-Dichlorobenzene	146	12.644	12.644	0.000	97	205506	50.0	48.1	
114 4-Isopropyltoluene	119	12.680	12.680	0.000	97	381084	50.0	49.6	
115 1,4-Dichlorobenzene	146	12.747	12.747	0.000	94	208827	50.0	47.9	
116 2,4-Dichloro-1-(triflourom	214	12.772	12.772	0.000	95	106844	50.0	51.0	
118 2,5-Dichlorobenzotrifluori	214	12.814	12.814	0.000	0	122544	50.0	51.3	
120 n-Butylbenzene	91	13.088	13.088	0.000	98	320932	50.0	48.6	
121 1,2-Dichlorobenzene	146	13.100	13.100	0.000	95	189103	50.0	48.1	
122 1,2-Dibromo-3-Chloropropan	75	13.891	13.891	0.000	75	13702	50.0	38.6	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.031	14.031	0.000	0	413024	150.0	150.0	
125 2,3- & 3,4- Dichlorotoluen	125	14.451	14.451	0.000	0	261352	100.0	97.5	
126 1,2,4-Trichlorobenzene	180	14.718	14.718	0.000	93	87745	50.0	45.2	
127 Hexachlorobutadiene	225	14.858	14.858	0.000	96	40803	50.0	49.1	
128 Naphthalene	128	14.986	14.986	0.000	98	202071	50.0	41.9	
129 1,2,3-Trichlorobenzene	180	15.205	15.205	0.000	95	67046	50.0	44.4	
131 2,4,5-Trichlorotoluene	159	15.984	15.984	0.000	0	20844	50.0	43.5	
130 2,3,6-Trichlorotoluene	159	16.081	16.081	0.000	94	20519	50.0	41.4	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	99.7	
S 134 1,2-Dichloroethene, Total	96				0		100.0	95.3	
S 135 1,3-Dichloropropene, Total	1				0		100.0	92.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaW2cleveRes_00003	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00218	Amount Added:	2.00	Units: uL	
voaWVA1stRest_00009	Amount Added:	2.00	Units: uL	
voaWKet2ndRes_00014	Amount Added:	2.00	Units: uL	
VOAACROPRI_00007	Amount Added:	6.00	Units: uL	
voaWEE1st Res_00001	Amount Added:	2.00	Units: uL	
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

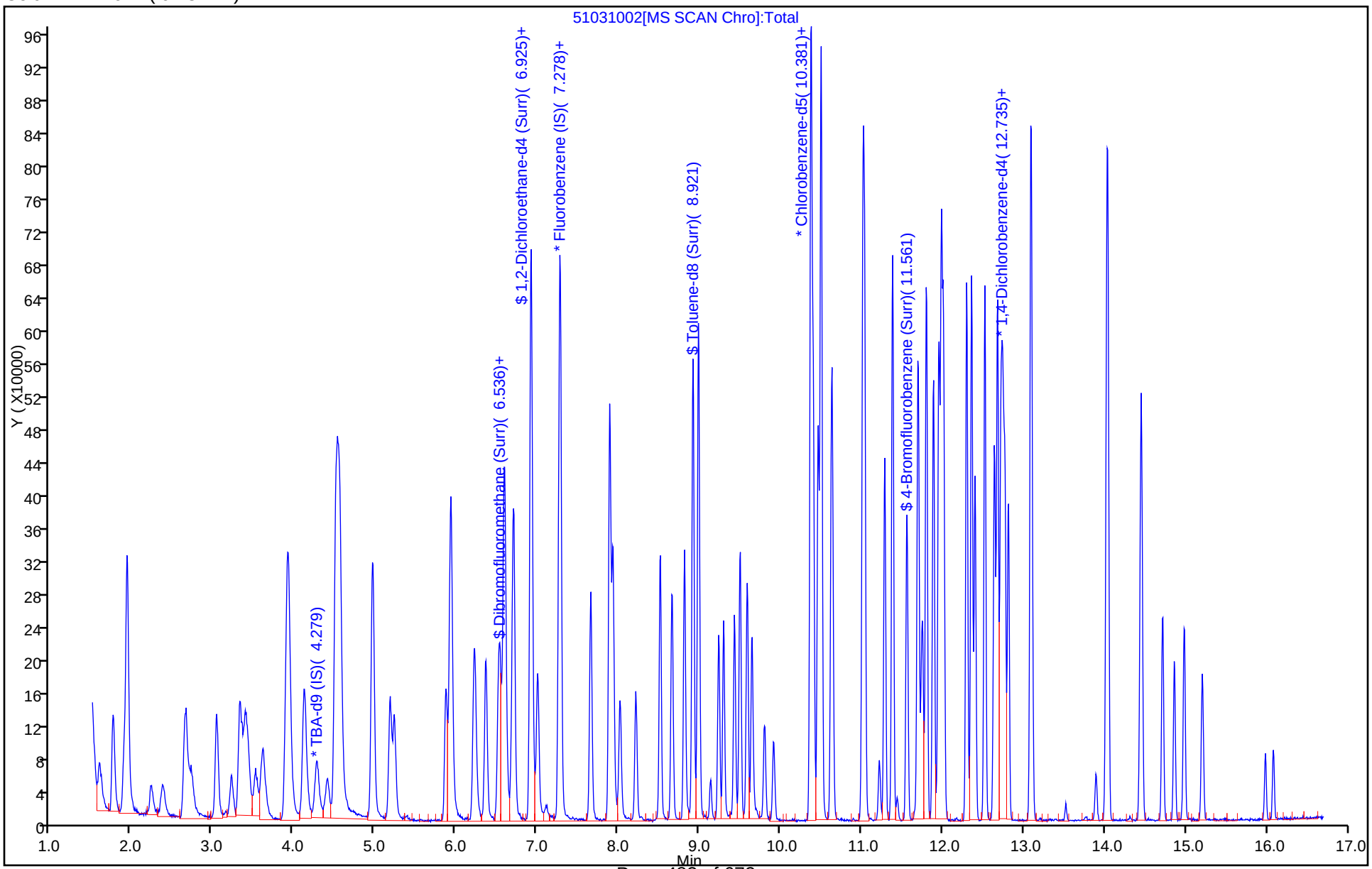
Report Date: 31-Oct-2016 11:34:03 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031002.D

Injection Date:	31-Oct-2016 10:11:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

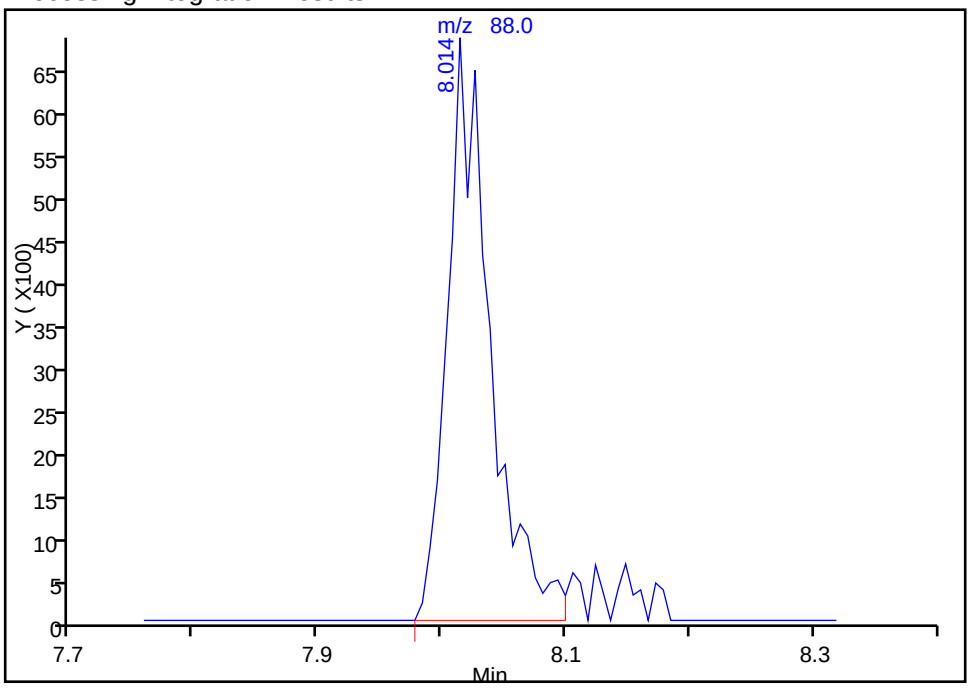
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031002.D				
Injection Date:	31-Oct-2016 10:11:30	Instrument ID:	CHHP5		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	001562	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Signal: 1

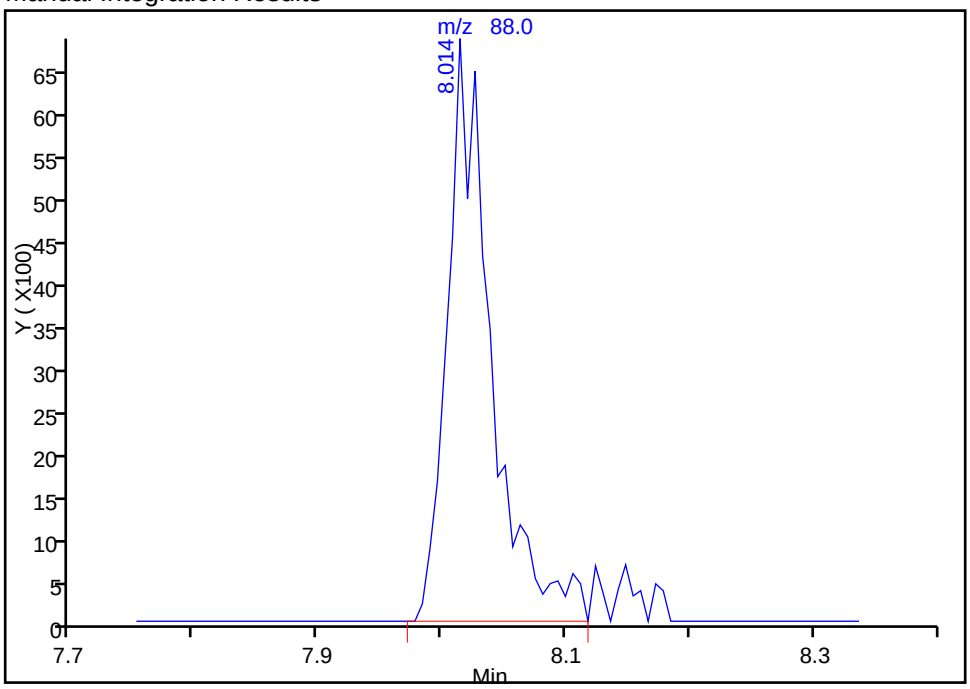
Processing Integration Results

RT: 8.01
Area: 16384
Amount: 767.9740
Amount Units: ng



Manual Integration Results

RT: 8.01
Area: 16751
Amount: 785.1765
Amount Units: ng



Reviewer: fergusond, 31-Oct-2016 10:37:15

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab Sample ID: CCVIS 180-192920/2 Calibration Date: 11/01/2016 10:35

Instrument ID: CHHP5 Calib Start Date: 10/22/2016 14:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/22/2016 17:46

Lab File ID: 51101002.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	0.2972	0.2978	0.1000	10.0	10.0	0.2	20.0
Chloromethane	Ave	0.5769	0.5653	0.1000	9.80	10.0	-2.0	20.0
Vinyl chloride	Ave	0.3823	0.3857	0.1000	10.1	10.0	0.9	20.0
1,3-Butadiene	Ave	0.5652	0.6178	0.0100	10.9	10.0	9.3	20.0
Bromomethane	Ave	0.0955	0.1007	0.0500	10.5	10.0	5.5	20.0
Chloroethane	Ave	0.1705	0.1792	0.0500	10.5	10.0	5.1	20.0
Dichlorofluoromethane	Ave	0.4075	0.4179	0.0100	10.3	10.0	2.5	20.0
Trichlorofluoromethane	Ave	0.3231	0.3227	0.1000	9.99	10.0	-0.1	20.0
Ethyl ether	Ave	0.3213	0.3083	0.0100	9.59	10.0	-4.1	20.0
Acrolein	Ave	0.0755	0.0715	0.0100	28.4	30.0	-5.3	20.0
1,1-Dichloroethene	Ave	0.2526	0.2600	0.1000	10.3	10.0	2.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2754	0.2791	0.1000	10.1	10.0	1.3	20.0
Acetone	Ave	0.1287	0.1195	0.0500	18.6	20.0	-7.2	20.0
Iodomethane	Ave	0.3758	0.3755	0.0100	9.99	10.0	-0.0	20.0
Carbon disulfide	Ave	0.6614	0.5037	0.1000	7.62	10.0	-23.8*	20.0
Allyl chloride	Ave	0.1570	0.1381	0.0100	8.80	10.0	-12.0	20.0
Methyl acetate	Ave	0.3331	0.3203	0.1000	48.1	50.0	-3.8	20.0
Methylene Chloride	Ave	0.3163	0.3057	0.1000	9.66	10.0	-3.4	20.0
tert-Butyl alcohol	Ave	1.228	1.153	0.0100	93.9	100	-6.1	20.0
Acrylonitrile	Ave	0.1592	0.1540	0.0100	96.7	100	-3.3	20.0
trans-1,2-Dichloroethene	Ave	0.2752	0.2782	0.1000	10.1	10.0	1.1	20.0
Methyl tert-butyl ether	Ave	0.7149	0.6394	0.1000	8.94	10.0	-10.6	20.0
Hexane	Ave	0.5756	0.5925	0.0100	10.3	10.0	2.9	20.0
1,1-Dichloroethane	Ave	0.6144	0.5940	0.2000	9.67	10.0	-3.3	20.0
Vinyl acetate	Ave	0.6823	0.6955	0.0100	10.2	10.0	1.9	20.0
2,2-Dichloropropane	Ave	0.0512	0.0486	0.0100	9.48	10.0	-5.2	20.0
cis-1,2-Dichloroethene	Ave	0.3039	0.3013	0.1000	9.91	10.0	-0.9	20.0
2-Butanone (MEK)	Ave	0.2050	0.2095	0.0500	20.4	20.0	2.2	20.0
Bromochloromethane	Ave	0.1283	0.1212	0.0100	9.44	10.0	-5.6	20.0
Tetrahydrofuran	Ave	0.1404	0.1196	0.0100	17.0	20.0	-14.9	20.0
Chloroform	Ave	0.4883	0.4746	0.2000	9.72	10.0	-2.8	20.0
1,1,1-Trichloroethane	Ave	0.3436	0.3348	0.1000	9.74	10.0	-2.6	20.0
Cyclohexane	Ave	0.7546	0.7678	0.1000	10.2	10.0	1.7	20.0
Carbon tetrachloride	Ave	0.2876	0.2689	0.1000	9.35	10.0	-6.5	20.0
1,1-Dichloropropene	Ave	0.4056	0.4088	0.0100	10.1	10.0	0.8	20.0
Isobutyl alcohol	Ave	0.0097	0.0080*	0.0100	206	250	-17.5	20.0
Benzene	Ave	1.168	1.169	0.5000	10.0	10.0	0.0	20.0
1,2-Dichloroethane	Ave	0.4392	0.4174	0.1000	9.50	10.0	-5.0	20.0
n-Heptane	Ave	0.5664	0.5755	0.0100	10.2	10.0	1.6	20.0
Trichloroethene	Ave	0.2796	0.2751	0.2000	9.84	10.0	-1.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab Sample ID: CCVIS 180-192920/2 Calibration Date: 11/01/2016 10:35

Instrument ID: CHHP5 Calib Start Date: 10/22/2016 14:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/22/2016 17:46

Lab File ID: 51101002.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	0.4801	0.4926	0.1000	10.3	10.0	2.6	20.0
1,2-Dichloropropane	Ave	0.3508	0.3313	0.1000	9.44	10.0	-5.6	20.0
1,4-Dioxane	Ave	0.0028	0.0024*	0.0100	170	200	-15.1	20.0
Dibromomethane	Ave	0.1486	0.1418	0.0100	9.54	10.0	-4.6	20.0
Bromodichloromethane	Ave	0.3221	0.2666	0.2000	8.28	10.0	-17.2	20.0
2-Chloroethyl vinyl ether	Ave	0.1839	0.1665	0.0100	18.1	20.0	-9.5	20.0
cis-1,3-Dichloropropene	Ave	0.3813	0.3363	0.2000	8.82	10.0	-11.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.532	1.474	0.1000	19.2	20.0	-3.8	20.0
Toluene	Ave	4.589	4.926	0.4000	10.7	10.0	7.4	20.0
trans-1,3-Dichloropropene	Ave	1.163	1.079	0.1000	9.28	10.0	-7.2	20.0
Ethyl methacrylate	Ave	1.247	1.237	0.0100	9.92	10.0	-0.8	20.0
1,1,2-Trichloroethane	Ave	0.8630	0.8696	0.1000	10.1	10.0	0.8	20.0
Tetrachloroethene	Ave	0.9033	0.9944	0.2000	11.0	10.0	10.1	20.0
1,3-Dichloropropane	Ave	1.663	1.712	0.0100	10.3	10.0	3.0	20.0
2-Hexanone	Ave	1.162	1.191	0.1000	20.5	20.0	2.5	20.0
Dibromochloromethane	Ave	0.7837	0.6608	0.1000	8.43	10.0	-15.7	20.0
1,2-Dibromoethane (EDB)	Ave	0.8942	0.8572	0.1000	9.59	10.0	-4.1	20.0
3-Chlorobenzotrifluoride	Ave	1.714	1.904	0.0100	11.1	10.0	11.1	20.0
Chlorobenzene	Ave	3.010	3.148	0.5000	10.5	10.0	4.6	20.0
4-Chlorobenzotrifluoride	Ave	1.582	1.752	0.0100	11.1	10.0	10.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9040	0.8801	0.0100	9.74	10.0	-2.6	20.0
Ethylbenzene	Ave	1.695	1.842	0.1000	10.9	10.0	8.6	20.0
m-Xylene & p-Xylene	Ave	2.115	2.247	0.1000	10.6	10.0	6.3	20.0
o-Xylene	Ave	2.013	2.124	0.3000	10.5	10.0	5.5	20.0
Styrene	Ave	3.406	3.605	0.3000	10.6	10.0	5.9	20.0
Bromoform	Ave	0.4726	0.3374	0.1000	7.14	10.0	-28.6*	20.0
2-Chlorobenzotrifluoride	Ave	1.668	1.822	0.0100	10.9	10.0	9.3	20.0
Isopropylbenzene	Ave	5.168	5.503	0.1000	10.6	10.0	6.5	20.0
Bromobenzene	Ave	0.8444	0.8370	0.0100	9.91	10.0	-0.9	20.0
1,1,2,2-Tetrachloroethane	Ave	1.220	1.211	0.3000	9.92	10.0	-0.8	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2909	0.1811	0.0100	6.23	10.0	-37.7*	20.0
1,2,3-Trichloropropane	Ave	0.2759	0.2718	0.0100	9.85	10.0	-1.5	20.0
N-Propylbenzene	Ave	0.9783	1.006	0.0100	10.3	10.0	2.8	20.0
2-Chlorotoluene	Ave	0.8371	0.8494	0.0100	10.1	10.0	1.5	20.0
3-Chlorotoluene	Ave	0.8919	0.9004	0.0100	10.1	10.0	0.9	20.0
1,3,5-Trimethylbenzene	Ave	2.956	3.102	0.0100	10.5	10.0	4.9	20.0
4-Chlorotoluene	Ave	0.8959	0.8996	0.0100	10.0	10.0	0.4	20.0
tert-Butylbenzene	Ave	2.404	2.479	0.0100	10.3	10.0	3.2	20.0
1,2,4-Trimethylbenzene	Ave	2.996	3.089	0.0100	10.3	10.0	3.1	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8309	0.9019	0.0100	10.9	10.0	8.5	20.0
sec-Butylbenzene	Ave	3.476	3.669	0.0100	10.6	10.0	5.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab Sample ID: CCVIS 180-192920/2 Calibration Date: 11/01/2016 10:35

Instrument ID: CHHP5 Calib Start Date: 10/22/2016 14:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 10/22/2016 17:46

Lab File ID: 51101002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3-Dichlorobenzene	Ave	1.606	1.577	0.6000	9.82	10.0	-1.8	20.0
4-Isopropyltoluene	Ave	2.890	2.998	0.0100	10.4	10.0	3.7	20.0
1,4-Dichlorobenzene	Ave	1.641	1.628	0.5000	9.92	10.0	-0.8	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7882	0.7796	0.0100	9.89	10.0	-1.1	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8986	0.9745	0.0100	10.8	10.0	8.4	20.0
n-Butylbenzene	Ave	2.484	2.538	0.0100	10.2	10.0	2.2	20.0
1,2-Dichlorobenzene	Ave	1.479	1.473	0.4000	9.96	10.0	-0.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1335	0.0941	0.0500	7.05	10.0	-29.5*	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.036	1.065	0.0100	30.9	30.0	2.8	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.009	1.020	0.0100	20.2	20.0	1.1	20.0
1,2,4-Trichlorobenzene	Ave	0.7303	0.7056	0.2000	9.66	10.0	-3.4	20.0
Hexachlorobutadiene	Ave	0.3130	0.3177	0.0100	10.1	10.0	1.5	20.0
Naphthalene	Ave	1.815	1.681	0.0100	9.26	10.0	-7.4	20.0
1,2,3-Trichlorobenzene	Ave	0.5681	0.5634	0.0100	9.92	10.0	-0.8	20.0
2,4,5-Trichlorotoluene	Ave	0.1803	0.1764	0.0100	9.78	10.0	-2.2	20.0
2,3,6-Trichlorotoluene	Ave	0.1864	0.1700	0.0100	9.12	10.0	-8.8	20.0
Dibromofluoromethane (Surr)	Ave	0.2392	0.2211		9.24	10.0	-7.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3454	0.3273		9.48	10.0	-5.2	20.0
Toluene-d8 (Surr)	Ave	3.774	4.008		10.6	10.0	6.2	20.0
4-Bromofluorobenzene (Surr)	Ave	1.526	1.496		9.81	10.0	-1.9	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101002.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 01-Nov-2016 10:35:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-002
Misc. Info.: CCVIS
Operator ID: 001562 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 11:40:51 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 11:02:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.275	4.275	0.000	0	115749	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.274	0.000	97	396125	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.377	10.377	0.000	90	94552	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.719	12.719	0.000	94	136902	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.550	6.550	0.000	94	87586	50.0	46.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.921	6.921	0.000	0	129644	50.0	47.4	
$ 7 Toluene-d8 (Surr)	98	8.923	8.923	0.000	95	378942	50.0	53.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.557	11.557	0.000	86	141481	50.0	49.0	
11 Dichlorodifluoromethane	85	1.598	1.598	0.000	98	117967	50.0	50.1	
12 Chloromethane	50	1.763	1.763	0.000	99	223934	50.0	49.0	
13 Vinyl chloride	62	1.909	1.909	0.000	98	152770	50.0	50.4	
14 Butadiene	39	1.939	1.939	0.000	97	244718	50.0	54.7	
15 Bromomethane	94	2.231	2.231	0.000	91	39889	50.0	52.7	
16 Chloroethane	64	2.377	2.377	0.000	97	70998	50.0	52.6	
17 Dichlorofluoromethane	67	2.651	2.651	0.000	97	165536	50.0	51.3	
18 Trichlorofluoromethane	101	2.663	2.663	0.000	88	127830	50.0	49.9	
20 Ethyl ether	59	3.046	3.046	0.000	96	122117	50.0	48.0	
21 Acrolein	56	3.229	3.229	0.000	99	84949	150.0	142.1	
22 1,1-Dichloroethene	96	3.338	3.338	0.000	94	102973	50.0	51.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.399	3.399	0.000	93	110545	50.0	50.7	
24 Acetone	43	3.442	3.442	0.000	97	94640	100.0	92.8	
25 Iodomethane	142	3.527	3.527	0.000	98	148744	50.0	50.0	
26 Carbon disulfide	76	3.618	3.618	0.000	100	199521	50.0	38.1	
28 3-Chloro-1-propene	76	3.910	3.910	0.000	88	54714	50.0	44.0	
30 Methyl acetate	43	3.934	3.934	0.000	100	634383	250.0	240.4	
31 Methylene Chloride	84	4.123	4.123	0.000	91	121086	50.0	48.3	
32 2-Methyl-2-propanol	59	4.403	4.403	0.000	89	66748	500.0	469.5	
33 Acrylonitrile	53	4.512	4.512	0.000	97	609916	500.0	483.5	
34 trans-1,2-Dichloroethene	96	4.549	4.549	0.000	92	110182	50.0	50.5	
35 Methyl tert-butyl ether	73	4.573	4.573	0.000	91	253270	50.0	44.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.969	4.969	0.000	96	234689	50.0	51.5	
37 1,1-Dichloroethane	63	5.188	5.188	0.000	96	235284	50.0	48.3	
38 Vinyl acetate	43	5.236	5.236	0.000	97	275508	50.0	51.0	
44 2,2-Dichloropropane	97	5.924	5.924	0.000	61	19243	50.0	47.4	
45 cis-1,2-Dichloroethene	96	5.936	5.936	0.000	87	119343	50.0	49.6	
46 2-Butanone (MEK)	43	5.948	5.948	0.000	97	165940	100.0	102.2	
49 Chlorobromomethane	128	6.222	6.222	0.000	84	47995	50.0	47.2	
51 Tetrahydrofuran	42	6.240	6.240	0.000	93	94725	100.0	85.1	
52 Chloroform	83	6.368	6.368	0.000	96	188009	50.0	48.6	
53 1,1,1-Trichloroethane	97	6.526	6.526	0.000	95	132610	50.0	48.7	
54 Cyclohexane	56	6.593	6.593	0.000	96	304141	50.0	50.9	
56 Carbon tetrachloride	117	6.696	6.696	0.000	91	106513	50.0	46.7	
55 1,1-Dichloropropene	75	6.708	6.708	0.000	88	161949	50.0	50.4	
57 Isobutyl alcohol	41	6.915	6.915	0.000	54	79054	1250.0	1031.6	
58 Benzene	78	6.927	6.927	0.000	97	463015	50.0	50.0	
59 1,2-Dichloroethane	62	7.000	7.000	0.000	95	165352	50.0	47.5	
62 n-Heptane	43	7.286	7.286	0.000	97	227951	50.0	50.8	
64 Trichloroethene	130	7.657	7.657	0.000	96	108972	50.0	49.2	
66 Methylcyclohexane	83	7.895	7.895	0.000	96	195114	50.0	51.3	
67 1,2-Dichloropropane	63	7.937	7.937	0.000	95	131249	50.0	47.2	
70 1,4-Dioxane	88	8.016	8.016	0.000	43	18690	1000.0	848.8	M
68 Dibromomethane	93	8.022	8.022	0.000	95	56151	50.0	47.7	
71 Dichlorobromomethane	83	8.217	8.217	0.000	96	105591	50.0	41.4	
73 2-Chloroethyl vinyl ether	63	8.515	8.515	0.000	86	131873	100.0	90.5	
74 cis-1,3-Dichloropropene	75	8.661	8.661	0.000	87	133218	50.0	44.1	
75 4-Methyl-2-pentanone (MIBK	43	8.813	8.813	0.000	99	278669	100.0	96.2	
76 Toluene	91	8.990	8.990	0.000	97	465801	50.0	53.7	
77 trans-1,3-Dichloropropene	75	9.239	9.239	0.000	94	102040	50.0	46.4	
78 Ethyl methacrylate	69	9.300	9.300	0.000	93	116935	50.0	49.6	
79 1,1,2-Trichloroethane	97	9.434	9.434	0.000	94	82219	50.0	50.4	
80 Tetrachloroethene	164	9.501	9.501	0.000	97	94024	50.0	55.0	
81 1,3-Dichloropropane	76	9.592	9.592	0.000	94	161874	50.0	51.5	
82 2-Hexanone	43	9.647	9.647	0.000	98	225137	100.0	102.5	
84 Chlorodibromomethane	129	9.805	9.805	0.000	92	62481	50.0	42.2	
85 Ethylene Dibromide	107	9.914	9.914	0.000	100	81046	50.0	47.9	
86 3-Chlorobenzotrifluoride	180	10.377	10.377	0.000	88	179994	50.0	55.5	
87 Chlorobenzene	112	10.401	10.401	0.000	91	297637	50.0	52.3	
88 4-Chlorobenzotrifluoride	180	10.468	10.468	0.000	96	165622	50.0	55.4	
90 Ethylbenzene	106	10.498	10.498	0.000	99	174121	50.0	54.3	
89 1,1,1,2-Tetrachloroethane	131	10.498	10.498	0.000	89	83213	50.0	48.7	
91 m-Xylene & p-Xylene	106	10.638	10.638	0.000	0	212460	50.0	53.1	
92 o-Xylene	106	11.015	11.015	0.000	97	200802	50.0	52.7	
93 Styrene	104	11.034	11.034	0.000	93	340902	50.0	52.9	
94 Bromoform	173	11.222	11.222	0.000	96	31900	50.0	35.7	
96 2-Chlorobenzotrifluoride	180	11.289	11.289	0.000	97	172281	50.0	54.6	
97 Isopropylbenzene	105	11.380	11.380	0.000	97	520307	50.0	53.2	
100 Bromobenzene	156	11.697	11.697	0.000	96	114584	50.0	49.6	
99 1,1,2,2-Tetrachloroethane	83	11.703	11.703	0.000	91	114456	50.0	49.6	
102 trans-1,4-Dichloro-2-buten	53	11.733	11.733	0.000	69	24799	50.0	31.1	
101 1,2,3-Trichloropropane	110	11.752	11.752	0.000	91	37204	50.0	49.3	
103 N-Propylbenzene	120	11.800	11.800	0.000	99	137745	50.0	51.4	
104 2-Chlorotoluene	126	11.892	11.892	0.000	95	116290	50.0	50.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.952	11.952	0.000	96	123261	50.0	50.5	
106 1,3,5-Trimethylbenzene	105	11.983	11.983	0.000	94	424604	50.0	52.5	
107 4-Chlorotoluene	126	12.013	12.013	0.000	98	123158	50.0	50.2	
108 tert-Butylbenzene	119	12.299	12.299	0.000	95	339445	50.0	51.6	
110 1,2,4-Trimethylbenzene	105	12.360	12.360	0.000	98	422838	50.0	51.5	
111 1,2-dichloro-4-(trifluorom	214	12.403	12.403	0.000	97	123472	50.0	54.3	
112 sec-Butylbenzene	105	12.518	12.518	0.000	95	502307	50.0	52.8	
113 1,3-Dichlorobenzene	146	12.640	12.640	0.000	97	215904	50.0	49.1	
114 4-Isopropyltoluene	119	12.676	12.676	0.000	97	410492	50.0	51.9	
115 1,4-Dichlorobenzene	146	12.743	12.743	0.000	94	222880	50.0	49.6	
116 2,4-Dichloro-1-(triflourom	214	12.768	12.768	0.000	97	106729	50.0	49.5	
118 2,5-Dichlorobenzotrifluori	214	12.810	12.810	0.000	0	133406	50.0	54.2	
120 n-Butylbenzene	91	13.084	13.084	0.000	98	347456	50.0	51.1	
121 1,2-Dichlorobenzene	146	13.102	13.102	0.000	95	201689	50.0	49.8	
122 1,2-Dibromo-3-Chloropropan	75	13.887	13.887	0.000	72	12887	50.0	35.3	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.033	14.033	0.000	0	437504	150.0	154.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.453	14.453	0.000	0	279146	100.0	101.1	
126 1,2,4-Trichlorobenzene	180	14.714	14.714	0.000	94	96593	50.0	48.3	
127 Hexachlorobutadiene	225	14.860	14.860	0.000	96	43487	50.0	50.7	
128 Naphthalene	128	14.982	14.982	0.000	97	230124	50.0	46.3	
129 1,2,3-Trichlorobenzene	180	15.207	15.207	0.000	95	77130	50.0	49.6	
131 2,4,5-Trichlorotoluene	159	15.986	15.986	0.000	0	24151	50.0	48.9	
130 2,3,6-Trichlorotoluene	159	16.083	16.083	0.000	92	23269	50.0	45.6	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	105.9	
S 134 1,2-Dichloroethene, Total	96				0		100.0	100.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	90.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaW2cleveRes_00003	Amount Added:	2.00	Units: uL		
VOA8260VOAPRI_00218	Amount Added:	2.00	Units: uL		
voaWVA1stRest_00009	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00014	Amount Added:	2.00	Units: uL		
VOAACROPRI_00008	Amount Added:	6.00	Units: uL		
voaWEE1st Res_00001	Amount Added:	2.00	Units: uL		
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent	

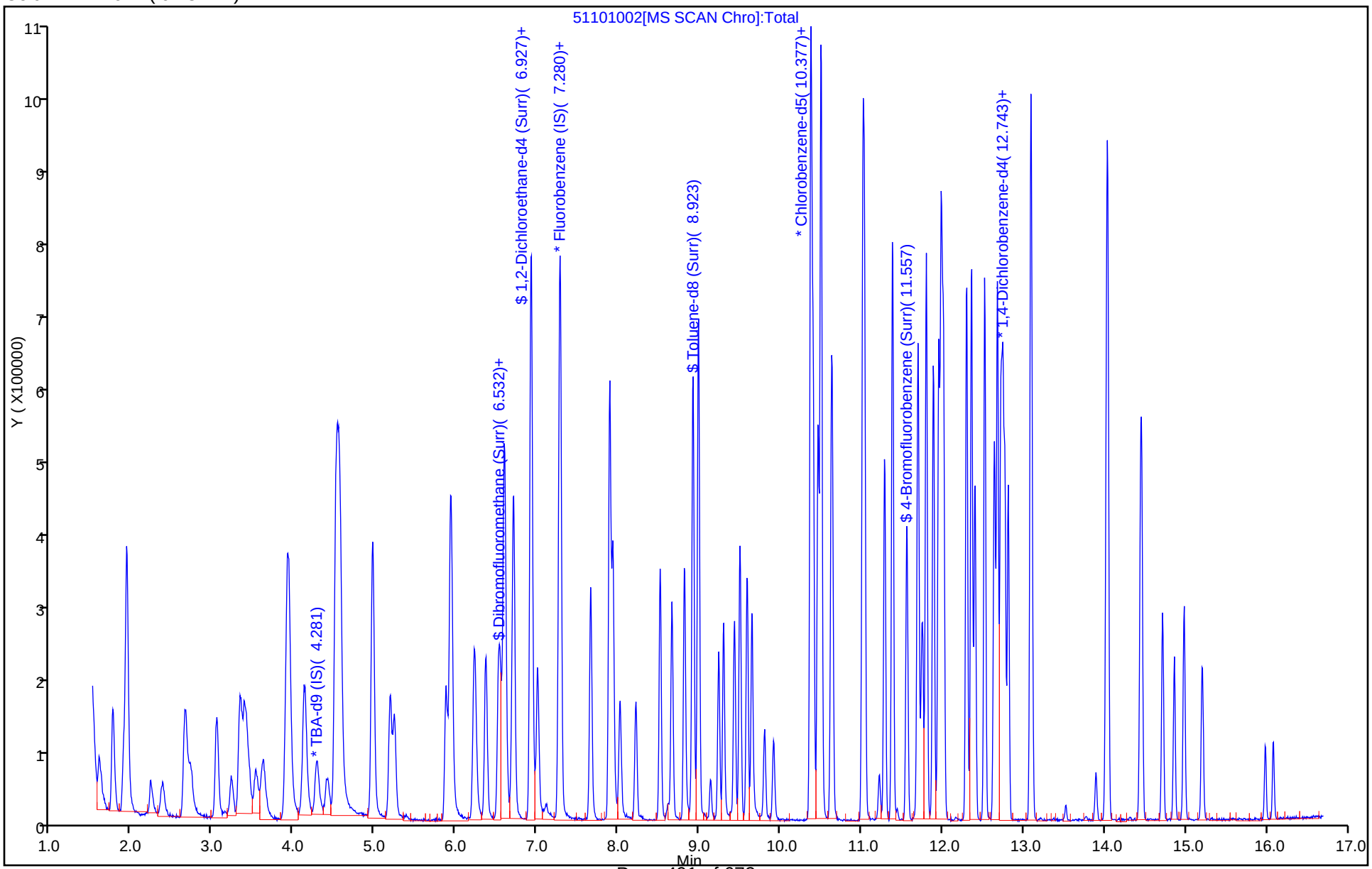
Report Date: 01-Nov-2016 11:40:51 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101002.D

Injection Date:	01-Nov-2016 10:35:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

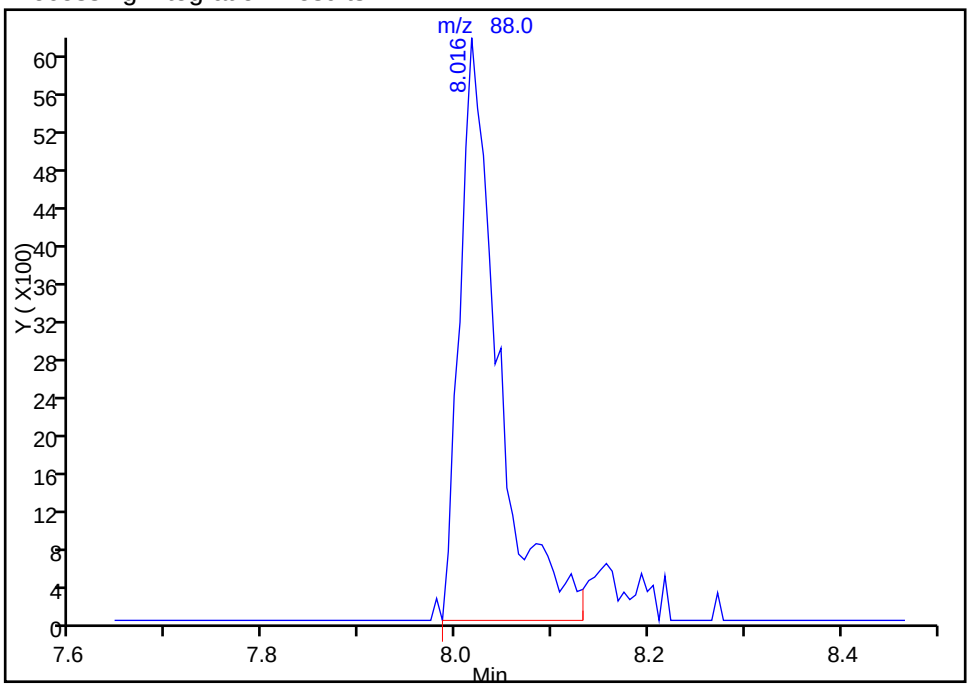
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101002.D				
Injection Date:	01-Nov-2016 10:35:30	Instrument ID:	CHHP5		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	001562	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Signal: 1

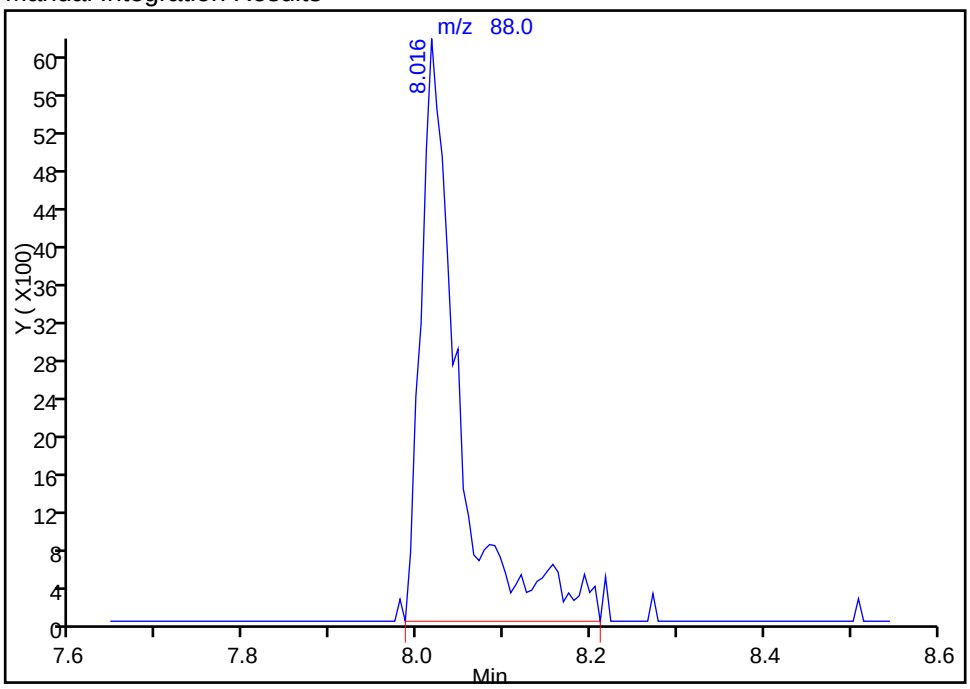
Processing Integration Results

RT: 8.02
Area: 16975
Amount: 770.9035
Amount Units: ng



Manual Integration Results

RT: 8.02
Area: 18690
Amount: 848.7886
Amount Units: ng



Reviewer: fergusond, 01-Nov-2016 11:02:18

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022001.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	22-Oct-2016 12:45:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0013995-001				
Misc. Info.:	BFB				
Operator ID:	001562	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	23-Oct-2016 13:13:24	Calib Date:	22-Oct-2016 17:46:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK002				
First Level Reviewer: fergusond		Date:	22-Oct-2016 13:10:03		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.366	8.366	0.000	0	57959	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

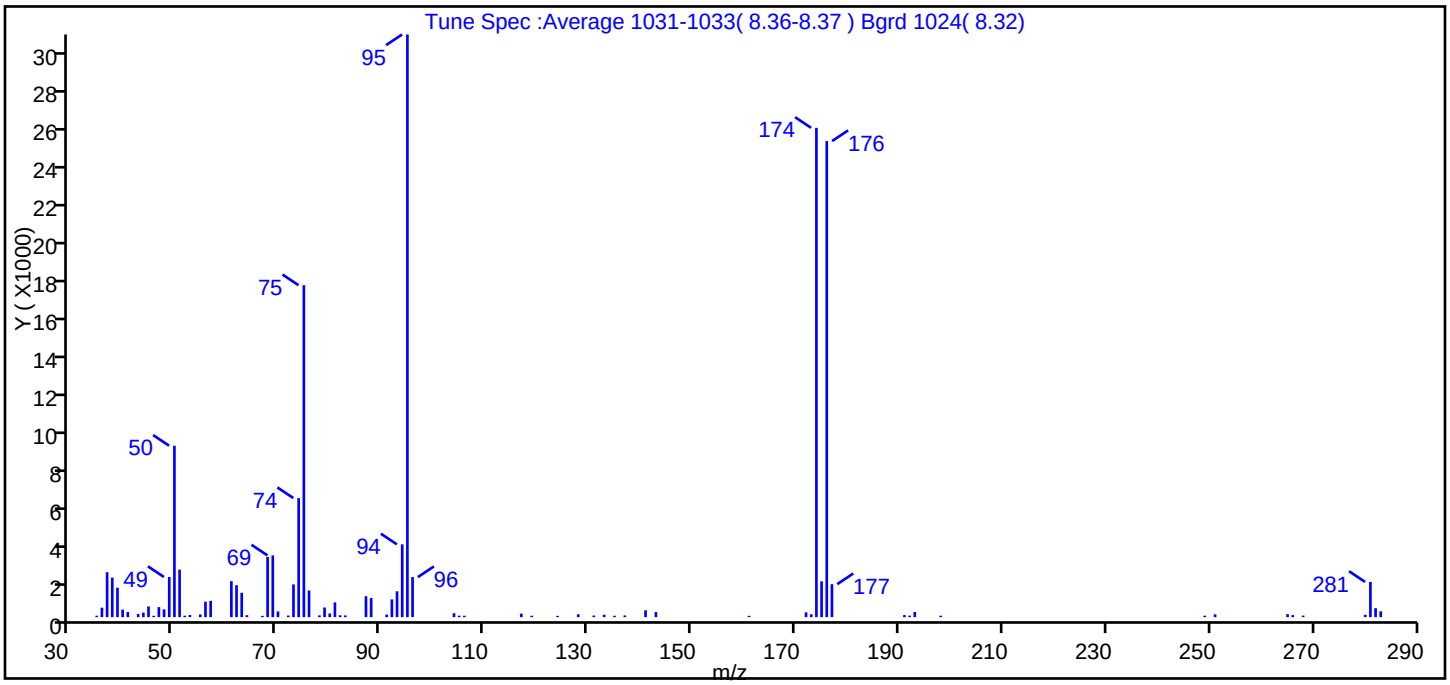
VOABFB25_00080 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022001.D				
Injection Date:	22-Oct-2016 12:45:30	Instrument ID:	CHHP5		
Lims ID:	BFB				
Client ID:					
Operator ID:	001562	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Tune Method:	BFB Method 8260				

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	29.4
75	30 to 60% of m/z 95	57.0
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	84.0
175	5 to 9% of m/z 174	6.1 (7.3)
176	Greater than 95% but less than 101% of m/z 174	81.7 (97.3)
177	5 to 9% of m/z 176	5.7 (6.9)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022001.D\MSVOA_LL_CHHP5.rslt\spect
Injection Date: 22-Oct-2016 12:45:30
Spectrum: Tune Spec :Average 1031-1033(8.36-8.37) Bgrd 1024(8.32)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 81

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	76	61.00	1893	91.00	136	173.00	149
36.00	498	62.00	1680	92.00	933	174.00	25744
37.00	2364	63.00	1280	93.00	1360	175.00	1882
38.00	2080	64.00	103	94.00	3830	176.00	25048
39.00	1550	67.00	68	95.00	30656	177.00	1736
40.00	397	68.00	3167	96.00	2107	191.00	107
41.00	268	69.00	3247	104.00	206	192.00	79
43.00	168	70.00	302	105.00	76	193.00	273
44.00	237	72.00	84	106.00	74	198.00	74
45.00	562	73.00	1723	117.00	183	249.00	76
46.00	72	74.00	6265	119.00	73	251.00	148
47.00	527	75.00	17464	124.00	68	265.00	157
48.00	411	76.00	1402	128.00	151	266.00	106
49.00	2113	78.00	90	131.00	85	268.00	82
50.00	9020	79.00	508	133.00	126	280.00	124
51.00	2498	80.00	191	135.00	73	281.00	1854
52.00	75	81.00	776	137.00	89	282.00	472
53.00	112	82.00	98	141.00	360	283.00	306
55.00	143	83.00	90	143.00	266		
56.00	814	87.00	1102	161.00	69		
57.00	857	88.00	1004	172.00	252		

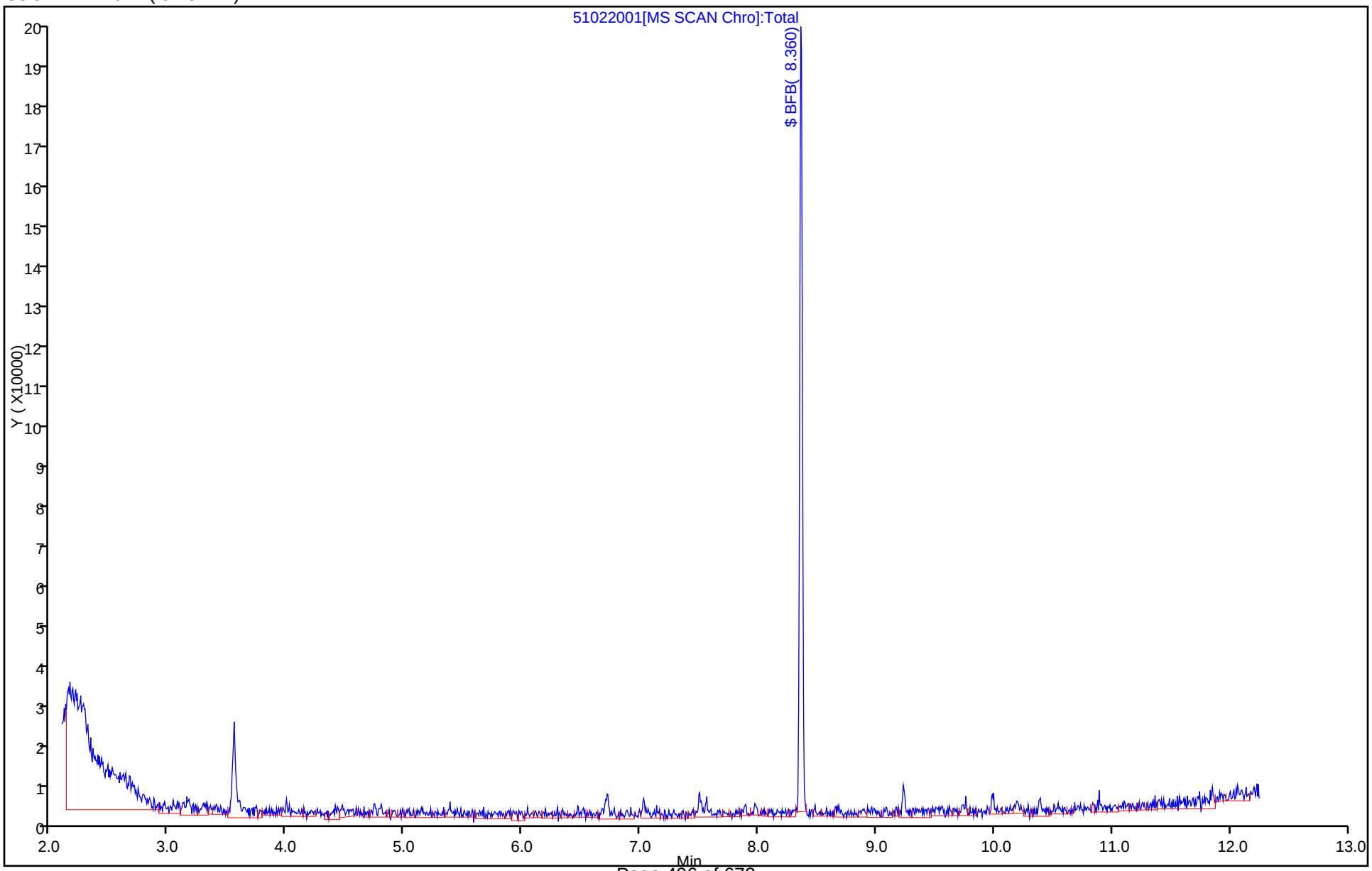
Report Date: 23-Oct-2016 13:13:25 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022001.D

Injection Date:	22-Oct-2016 12:45:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031004.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	31-Oct-2016 09:32:30	ALS Bottle#:	1	Worklist Smp#:	4
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0014116-004				
Misc. Info.:	BFB				
Operator ID:	001562	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	31-Oct-2016 11:33:56	Calib Date:	22-Oct-2016 17:46:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK007				
First Level Reviewer: fergusond		Date:	31-Oct-2016 10:07:41		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.356	8.356	0.000	0	71071	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

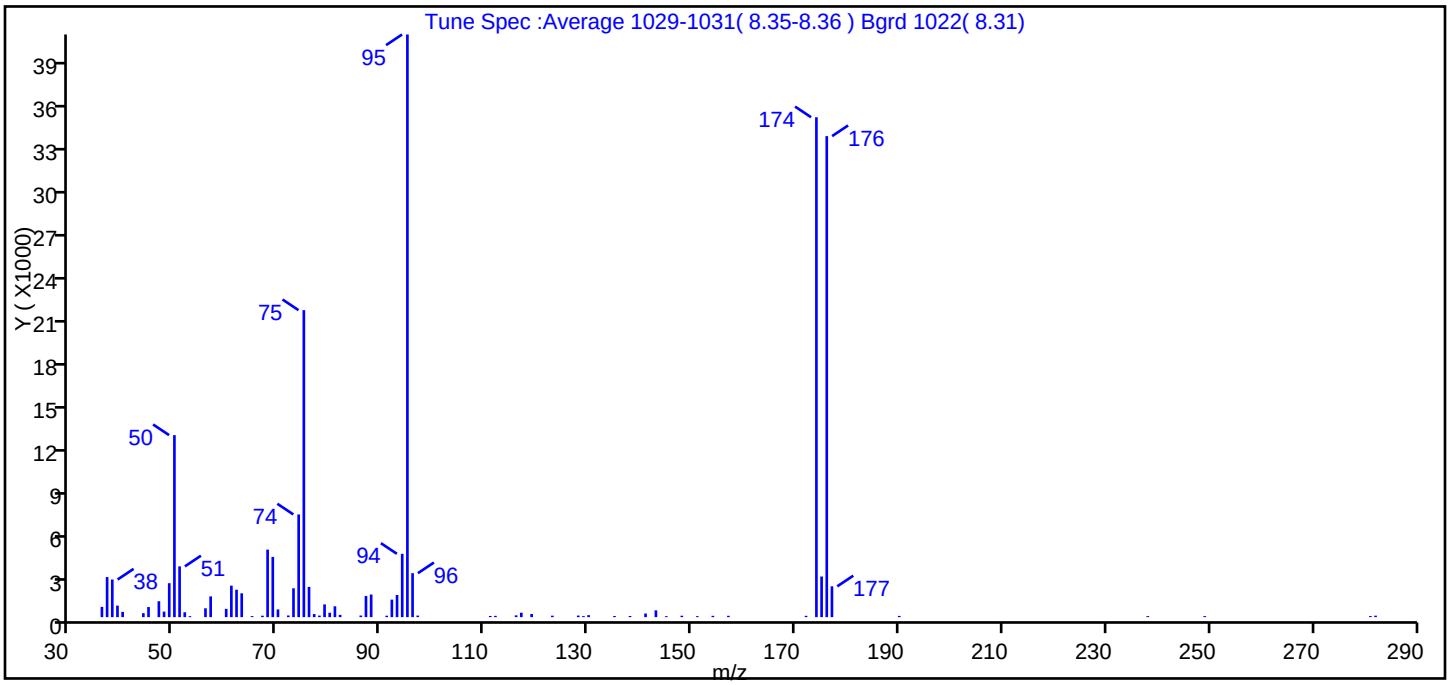
VOABFB25_00081 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031004.D				
Injection Date:	31-Oct-2016 09:32:30	Instrument ID:	CHHP5		
Lims ID:	BFB				
Client ID:					
Operator ID:	001562	ALS Bottle#:	1	Worklist Smp#:	4
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Tune Method:	BFB Method 8260				

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	31.2
75	30 to 60% of m/z 95	52.7
96	5 to 9% of m/z 95	7.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	85.8
175	5 to 9% of m/z 174	7.0 (8.1)
176	Greater than 95% but less than 101% of m/z 174	82.6 (96.2)
177	5 to 9% of m/z 176	5.3 (6.4)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031004.D\MSVOA_LL_CHHP5.rslt\spect
Injection Date: 31-Oct-2016 09:32:30
Spectrum: Tune Spec :Average 1029-1031(8.35-8.36) Bgrd 1022(8.31)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	713	63.00	1656	88.00	1572	141.00	251
37.00	2787	65.00	72	91.00	100	143.00	472
38.00	2615	67.00	100	92.00	1216	145.00	68
39.00	800	68.00	4695	93.00	1539	148.00	99
40.00	365	69.00	4185	94.00	4401	151.00	69
44.00	277	70.00	537	95.00	40496	154.00	92
45.00	702	72.00	114	96.00	3055	157.00	93
47.00	1107	73.00	2006	97.00	108	172.00	93
48.00	385	74.00	7138	111.00	82	174.00	34744
49.00	2360	75.00	21336	112.00	91	175.00	2824
50.00	12651	76.00	2102	116.00	125	176.00	33432
51.00	3529	77.00	213	117.00	308	177.00	2141
52.00	339	78.00	107	119.00	221	190.00	86
53.00	67	79.00	887	123.00	101	238.00	72
56.00	616	80.00	305	128.00	110	249.00	72
57.00	1441	81.00	755	129.00	70	281.00	75
60.00	575	82.00	158	130.00	141	282.00	103
61.00	2190	86.00	112	135.00	80		
62.00	1905	87.00	1472	138.00	80		

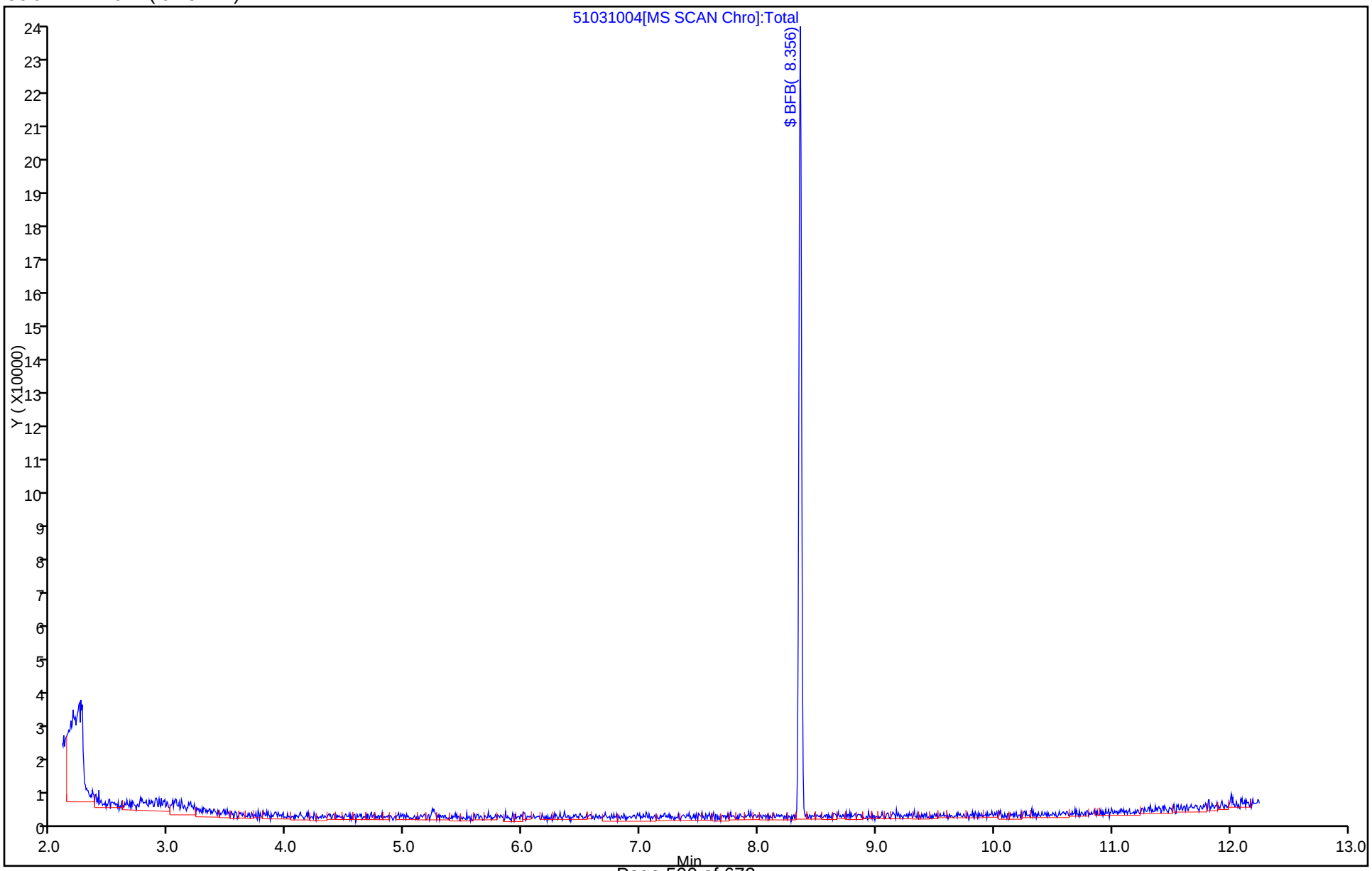
Report Date: 31-Oct-2016 11:33:56 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031004.D

Injection Date:	31-Oct-2016 09:32:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101005.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 01-Nov-2016 10:01:30 ALS Bottle#: 1 Worklist Smp#: 5
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-005
Misc. Info.: BFB
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 11:40:49 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 10:16:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.355	8.355	0.000	0	73531	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

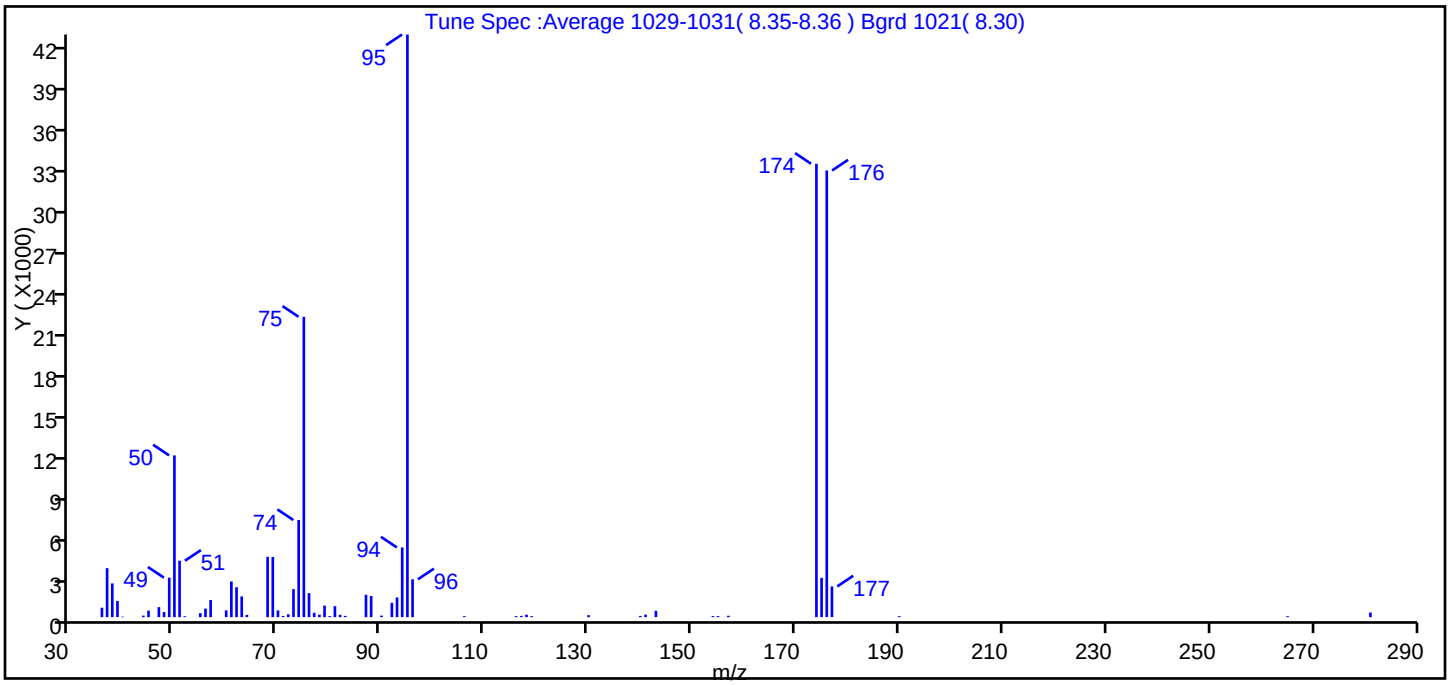
VOABFB25_00081 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101005.D
Injection Date: 01-Nov-2016 10:01:30 Instrument ID: CHHP5
Lims ID: BFB
Client ID:
Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 5
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	27.8
75	30 to 60% of m/z 95	51.6
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	77.8
175	5 to 9% of m/z 174	6.7 (8.7)
176	Greater than 95% but less than 101% of m/z 174	76.7 (98.5)
177	5 to 9% of m/z 176	5.3 (6.9)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101005.D\MSVOA_LL_CHHP5.rslt\spect
Injection Date: 01-Nov-2016 10:01:30
Spectrum: Tune Spec :Average 1029-1031(8.35-8.36) Bgrd 1021(8.30)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 64

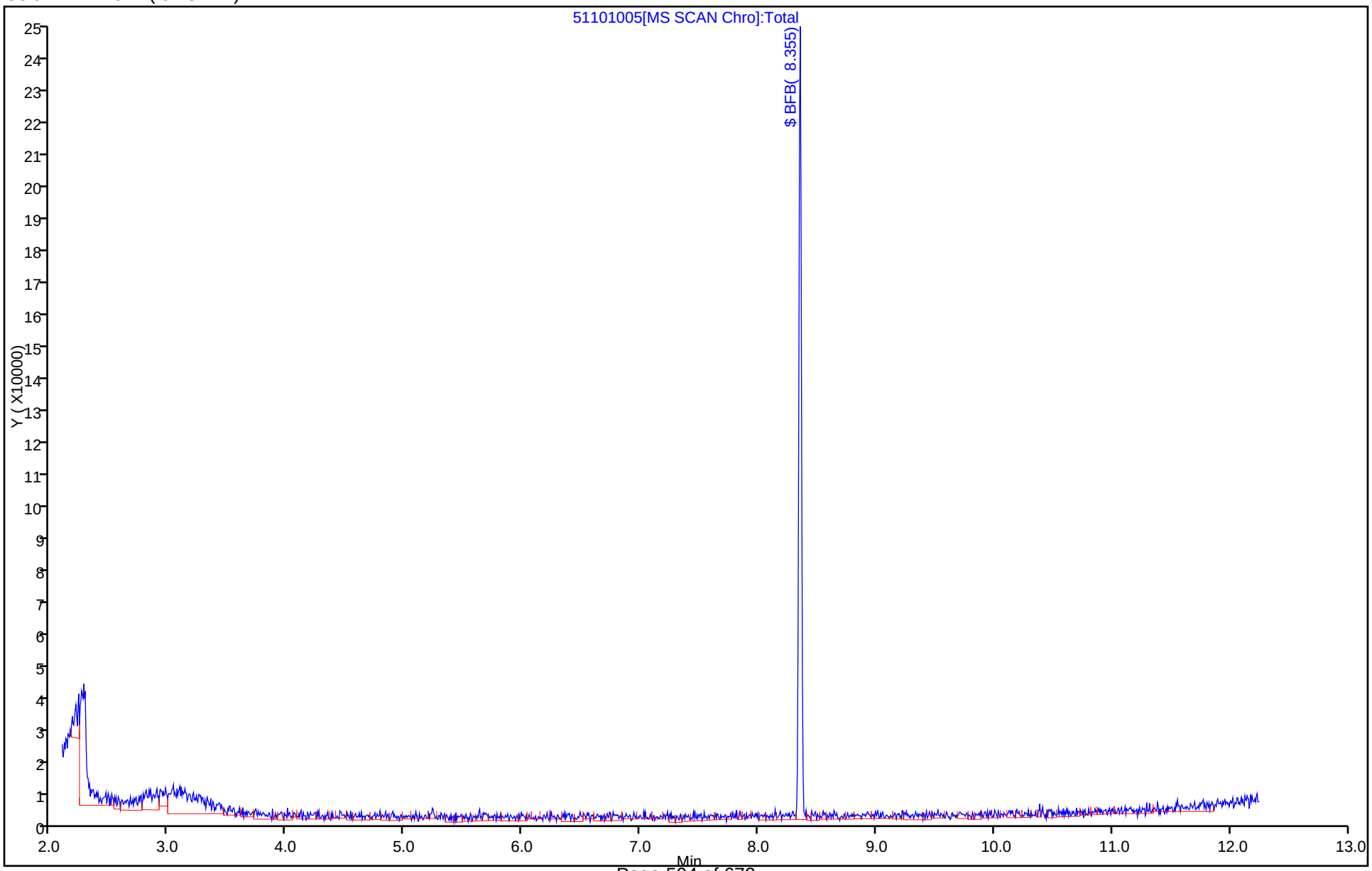
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	683	60.00	492	79.00	836	118.00	179
37.00	3552	61.00	2588	80.00	75	119.00	73
38.00	2444	62.00	2166	81.00	796	130.00	143
39.00	1173	63.00	1501	82.00	166	140.00	91
40.00	37	64.00	166	83.00	91	141.00	181
44.00	111	68.00	4374	87.00	1623	143.00	453
45.00	471	69.00	4359	88.00	1531	154.00	77
47.00	725	70.00	489	90.00	113	155.00	77
48.00	368	71.00	82	92.00	1033	157.00	101
49.00	2861	72.00	205	93.00	1427	174.00	32856
50.00	11722	73.00	2032	94.00	5051	175.00	2847
51.00	4086	74.00	7038	95.00	42224	176.00	32368
52.00	67	75.00	21768	96.00	2741	177.00	2227
55.00	285	76.00	1735	106.00	73	190.00	74
56.00	620	77.00	316	116.00	75	265.00	69
57.00	1241	78.00	177	117.00	91	281.00	335

Report Date: 01-Nov-2016 11:40:50 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101005.D				
Injection Date:	01-Nov-2016 10:01:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	BFB			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-192841/5

Matrix: Water | Lab File ID: 51031005.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 11:09

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.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	1.0	U	1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	1.0	U	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-192841/5

Matrix: Water Lab File ID: 51031005.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/31/2016 11:09

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.: 192841 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		72-134
2037-26-5	Toluene-d8 (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	101		72-120
1868-53-7	Dibromofluoromethane (Surr)	94		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031005.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 31-Oct-2016 11:09:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014116-005
Misc. Info.: MB
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2016 11:40:24 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: fergusond Date: 31-Oct-2016 11:40:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.260	4.279	-0.019	0	111698	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.272	-0.001	97	356869	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.375	-0.001	91	90574	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.723	-0.001	97	144567	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.548	-0.001	93	80634	50.0	47.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.924	6.919	0.005	0	117673	50.0	47.7	
$ 7 Toluene-d8 (Surr)	98	8.926	8.921	0.005	95	327660	50.0	47.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.561	-0.001	90	139677	50.0	50.5	
11 Dichlorodifluoromethane	85		1.608					ND	
12 Chloromethane	50		1.767					ND	
13 Vinyl chloride	62		1.900					ND	
14 Butadiene	39		1.937					ND	
15 Bromomethane	94		2.229					ND	
16 Chloroethane	64		2.375					ND	
18 Trichlorofluoromethane	101		2.655					ND	
17 Dichlorofluoromethane	67		2.661					ND	
19 Ethanol	45		2.952					ND	
20 Ethyl ether	59		3.044					ND	
21 Acrolein	56		3.227					ND	
22 1,1-Dichloroethene	96		3.330					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.409					ND	
24 Acetone	43		3.440					ND	
25 Iodomethane	142		3.525					ND	
26 Carbon disulfide	76		3.616					ND	
27 Isopropyl alcohol	45		3.724					ND	
29 Acetonitrile	41		3.876					ND	
28 3-Chloro-1-propene	76		3.908					ND	
30 Methyl acetate	43		3.932					ND	
31 Methylene Chloride	84	4.120	4.121	-0.001	33	1701		0.7534	
32 2-Methyl-2-propanol	59		4.401					ND	
33 Acrylonitrile	53		4.516					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		4.553					ND	
35 Methyl tert-butyl ether	73		4.565					ND	
36 Hexane	57		4.973					ND	
37 1,1-Dichloroethane	63		5.186					ND	
38 Vinyl acetate	43		5.234					ND	
39 2-Chloro-1,3-butadiene	53		5.281					ND	
41 Isopropyl ether	45		5.281					ND	
40 Isopropyl ether TIC	45		5.410					ND	
42 Tert-butyl ethyl ether	59		5.762					ND	
44 2,2-Dichloropropane	97		5.922					ND	
45 cis-1,2-Dichloroethene	96		5.934					ND	
46 2-Butanone (MEK)	43		5.952					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
47 Propionitrile	54		6.024					ND	
48 Ethyl acetate	43		6.024					ND	
50 Methacrylonitrile	41		6.200					ND	
49 Chlorobromomethane	128		6.220					ND	
51 Tetrahydrofuran	42		6.238					ND	
52 Chloroform	83		6.360					ND	
53 1,1,1-Trichloroethane	97		6.524					ND	
54 Cyclohexane	56		6.591					ND	
56 Carbon tetrachloride	117		6.700					ND	
55 1,1-Dichloropropene	75		6.713					ND	
57 Isobutyl alcohol	41		6.919					ND	
58 Benzene	78		6.925					ND	
59 1,2-Dichloroethane	62		7.005					ND	
151 Isooctane	57		7.082					ND	
61 Tert-amyl methyl ether	73		7.107					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43		7.290					ND	
63 n-Butanol	56		7.630					ND	
64 Trichloroethene	130		7.662					ND	
65 Ethyl acrylate	55		7.782					ND	
66 Methylcyclohexane	83		7.893					ND	
67 1,2-Dichloropropane	63		7.935					ND	
70 1,4-Dioxane	88		8.014					ND	
68 Dibromomethane	93		8.014					ND	
69 Methyl methacrylate	69		8.019					ND	
71 Dichlorobromomethane	83		8.215					ND	
72 2-Nitropropane	41		8.445					ND	
73 2-Chloroethyl vinyl ether	63		8.519					ND	
74 cis-1,3-Dichloropropene	75		8.659					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.817					ND	
76 Toluene	91		8.988					ND	
77 trans-1,3-Dichloropropene	75		9.243					ND	
78 Ethyl methacrylate	69		9.298					ND	
79 1,1,2-Trichloroethane	97		9.432					ND	
80 Tetrachloroethene	164		9.505					ND	
81 1,3-Dichloropropane	76		9.590					ND	
82 2-Hexanone	43		9.645					ND	
83 n-Butyl acetate	43		9.771					ND	
84 Chlorodibromomethane	129		9.809					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 Ethylene Dibromide	107		9.918					ND	
86 3-Chlorobenzotrifluoride	180		10.381					ND	
87 Chlorobenzene	112		10.405					ND	
88 4-Chlorobenzotrifluoride	180		10.466					ND	
90 Ethylbenzene	106		10.503					ND	
89 1,1,1,2-Tetrachloroethane	131		10.503					ND	
91 m-Xylene & p-Xylene	106		10.636					ND	
92 o-Xylene	106		11.020					ND	
93 Styrene	104		11.038					ND	
94 Bromoform	173		11.220					ND	
95 Cyclohexanol	57		11.244					ND	
96 2-Chlorobenzotrifluoride	180		11.287					ND	
97 Isopropylbenzene	105		11.385					ND	
98 Cyclohexanone	55		11.474					ND	
99 1,1,2,2-Tetrachloroethane	83		11.695					ND	
100 Bromobenzene	156		11.701					ND	
102 trans-1,4-Dichloro-2-buten	53		11.737					ND	
101 1,2,3-Trichloropropane	110		11.756					ND	
103 N-Propylbenzene	120		11.804					ND	
104 2-Chlorotoluene	126		11.890					ND	
105 3-Chlorotoluene	126		11.956					ND	
106 1,3,5-Trimethylbenzene	105		11.987					ND	
107 4-Chlorotoluene	126		12.017					ND	
108 tert-Butylbenzene	119		12.297					ND	
110 1,2,4-Trimethylbenzene	105		12.358					ND	
111 1,2-dichloro-4-(trifluorom	214		12.401					ND	
109 Pentachloroethane	167		12.402					ND	
112 sec-Butylbenzene	105		12.522					ND	
113 1,3-Dichlorobenzene	146		12.644					ND	
114 4-Isopropyltoluene	119		12.680					ND	
115 1,4-Dichlorobenzene	146		12.747					ND	
117 1,2,3-Trimethylbenzene	105		12.770					ND	
116 2,4-Dichloro-1-(triflourom	214		12.772					ND	
118 2,5-Dichlorobenzotrifluori	214		12.814					ND	
119 Benzyl chloride	91		12.855					ND	
120 n-Butylbenzene	91		13.088					ND	
121 1,2-Dichlorobenzene	146		13.100					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.891					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.031					ND	
124 1,3,5-Trichlorobenzene	180		14.078					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.451					ND	
126 1,2,4-Trichlorobenzene	180		14.718					ND	
127 Hexachlorobutadiene	225		14.858					ND	
128 Naphthalene	128		14.986					ND	
129 1,2,3-Trichlorobenzene	180		15.205					ND	
131 2,4,5-Trichlorotoluene	159		15.984					ND	
130 2,3,6-Trichlorotoluene	159		16.081					ND	
132 2-Methylnaphthalene	142		16.098					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
146 2,5-Dichlorotoluene	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
147 2,4-Dichlorotoluene	1		0.000					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	
T 137 Tetrahydrofuran TIC	42		6.253					ND	
T 153 1,2 Epoxybutane TIC	42		6.253					ND	

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

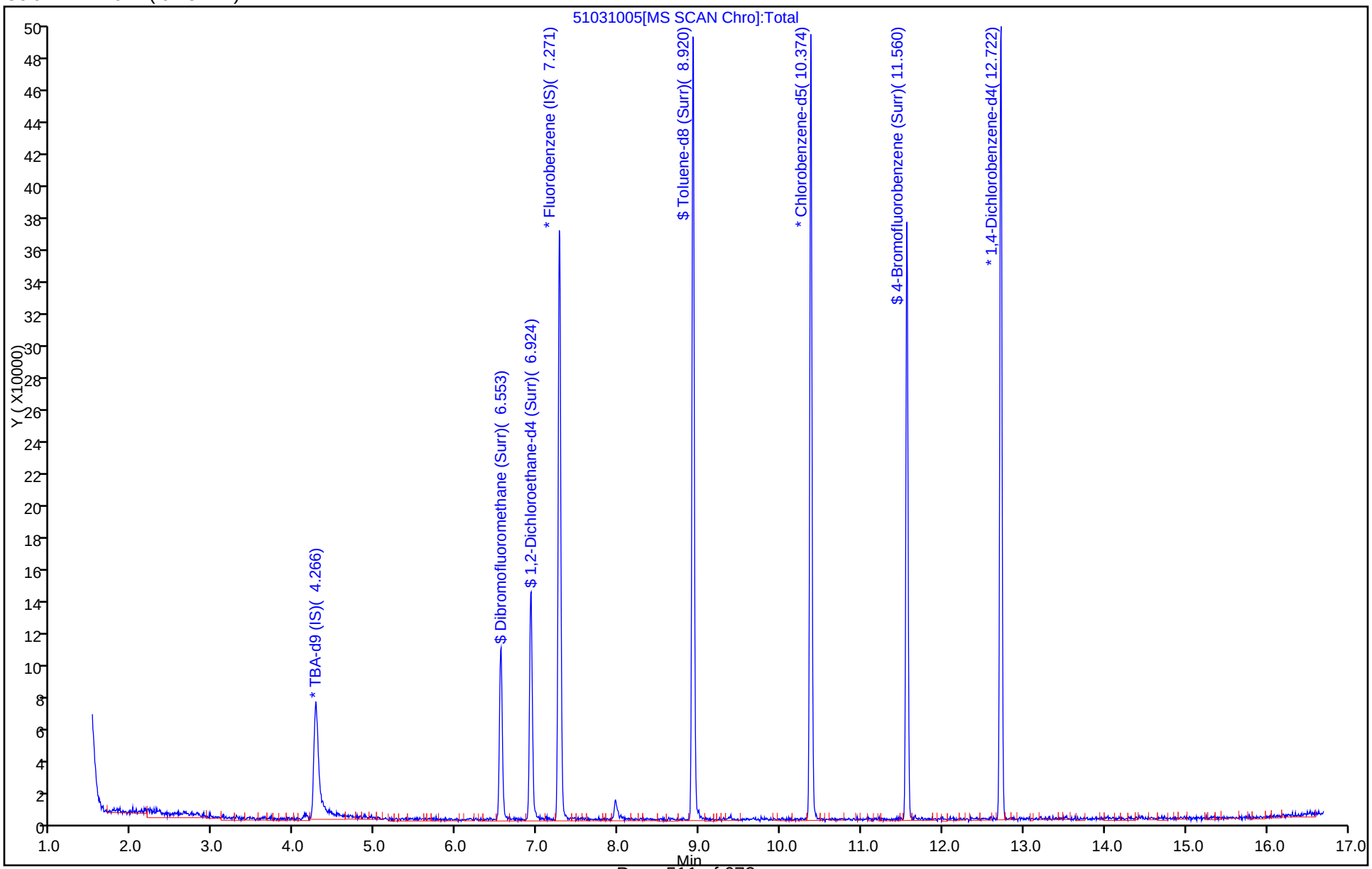
Report Date: 31-Oct-2016 11:40:24 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031005.D

Injection Date:	31-Oct-2016 11:09:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	MB			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031005.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 31-Oct-2016 11:09:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014116-005
Misc. Info.: MB
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2016 11:40:24 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: fergusond Date: 31-Oct-2016 11:40:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	47.2	94.45
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.7	95.48
$ 7 Toluene-d8 (Surr)	50.0	47.9	95.86
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.5	101.08

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-192920/6

Matrix: Water | Lab File ID: 51101006.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 11:35

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.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.23
75-01-4	Vinyl chloride	1.0	U	1.0	0.32
74-83-9	Bromomethane	1.0	U	1.0	0.36
75-00-3	Chloroethane	1.0	U	1.0	0.26
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.29
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.18
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.24
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.29
74-97-5	Bromochloromethane	1.0	U	1.0	0.38
78-93-3	2-Butanone (MEK)	5.0	U	5.0	1.2
67-66-3	Chloroform	1.0	U	1.0	0.27
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.24
71-43-2	Benzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.25
79-01-6	Trichloroethene	1.0	U	1.0	0.26
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.23
75-27-4	Bromodichloromethane	1.0	U	1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.59
108-88-3	Toluene	1.0	U	1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.35
127-18-4	Tetrachloroethene	1.0	U	1.0	0.27
591-78-6	2-Hexanone	5.0	U	5.0	0.74
124-48-1	Dibromochloromethane	1.0	U	1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.29
108-90-7	Chlorobenzene	1.0	U	1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.20
100-41-4	Ethylbenzene	1.0	U	1.0	0.27
1330-20-7	Xylenes, Total	2.0	U	2.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-192920/6

Matrix: Water Lab File ID: 51101006.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/01/2016 11:35

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.: 192920 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.35
107-13-1	Acrylonitrile	20	U	20	2.8
123-91-1	1,4-Dioxane	200	U	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-134
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		72-120
1868-53-7	Dibromofluoromethane (Surr)	97		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101006.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 01-Nov-2016 11:35:30 ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-006
Misc. Info.: MB
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 11:59:27 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 11:59:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.274	4.275	-0.001	0	135837	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.274	-0.001	97	364627	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.376	10.377	-0.001	92	93580	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.718	12.719	-0.001	96	148761	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.555	6.550	0.005	94	84767	50.0	48.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.920	6.921	-0.001	0	122809	50.0	48.8	
$ 7 Toluene-d8 (Surr)	98	8.922	8.923	-0.001	95	347344	50.0	49.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.556	11.557	-0.001	85	139682	50.0	48.9	
11 Dichlorodifluoromethane	85		1.598					ND	
12 Chloromethane	50		1.763					ND	
13 Vinyl chloride	62		1.909					ND	
14 Butadiene	39		1.939					ND	
15 Bromomethane	94		2.231					ND	
16 Chloroethane	64		2.377					ND	
17 Dichlorofluoromethane	67		2.651					ND	
18 Trichlorofluoromethane	101		2.663					ND	
19 Ethanol	45		2.952					ND	
20 Ethyl ether	59		3.046					ND	
21 Acrolein	56		3.229					ND	
22 1,1-Dichloroethene	96		3.338					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.399					ND	
24 Acetone	43		3.442					ND	
25 Iodomethane	142		3.527					ND	
26 Carbon disulfide	76		3.618					ND	
27 Isopropyl alcohol	45		3.724					ND	
29 Acetonitrile	41		3.876					ND	
28 3-Chloro-1-propene	76		3.910					ND	
30 Methyl acetate	43		3.934					ND	
31 Methylene Chloride	84	4.152	4.123	0.029	24	1660		0.7196	
32 2-Methyl-2-propanol	59		4.403					ND	
33 Acrylonitrile	53		4.512					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		4.549					ND	
35 Methyl tert-butyl ether	73		4.573					ND	
36 Hexane	57		4.969					ND	
37 1,1-Dichloroethane	63		5.188					ND	
38 Vinyl acetate	43		5.236					ND	
39 2-Chloro-1,3-butadiene	53		5.281					ND	
41 Isopropyl ether	45		5.281					ND	
40 Isopropyl ether TIC	45		5.410					ND	
42 Tert-butyl ethyl ether	59		5.762					ND	
44 2,2-Dichloropropane	97		5.924					ND	
45 cis-1,2-Dichloroethene	96		5.936					ND	
46 2-Butanone (MEK)	43		5.948					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
47 Propionitrile	54		6.024					ND	
48 Ethyl acetate	43		6.024					ND	
50 Methacrylonitrile	41		6.200					ND	
49 Chlorobromomethane	128		6.222					ND	
51 Tetrahydrofuran	42		6.240					ND	
52 Chloroform	83		6.368					ND	
53 1,1,1-Trichloroethane	97		6.526					ND	
54 Cyclohexane	56		6.593					ND	
56 Carbon tetrachloride	117		6.696					ND	
55 1,1-Dichloropropene	75		6.708					ND	
57 Isobutyl alcohol	41		6.915					ND	
58 Benzene	78		6.927					ND	
59 1,2-Dichloroethane	62		7.000					ND	
151 Isooctane	57		7.082					ND	
61 Tert-amyl methyl ether	73		7.107					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43		7.286					ND	
63 n-Butanol	56		7.630					ND	
64 Trichloroethene	130		7.657					ND	
65 Ethyl acrylate	55		7.782					ND	
66 Methylcyclohexane	83		7.895					ND	
67 1,2-Dichloropropane	63		7.937					ND	
70 1,4-Dioxane	88		8.016					ND	
69 Methyl methacrylate	69		8.019					ND	
68 Dibromomethane	93		8.022					ND	
71 Dichlorobromomethane	83		8.217					ND	
72 2-Nitropropane	41		8.445					ND	
73 2-Chloroethyl vinyl ether	63		8.515					ND	
74 cis-1,3-Dichloropropene	75		8.661					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.813					ND	
76 Toluene	91		8.990					ND	
77 trans-1,3-Dichloropropene	75		9.239					ND	
78 Ethyl methacrylate	69		9.300					ND	
79 1,1,2-Trichloroethane	97		9.434					ND	
80 Tetrachloroethene	164		9.501					ND	
81 1,3-Dichloropropane	76		9.592					ND	
82 2-Hexanone	43		9.647					ND	
83 n-Butyl acetate	43		9.771					ND	
84 Chlorodibromomethane	129		9.805					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 Ethylene Dibromide	107		9.914					ND	
86 3-Chlorobenzotrifluoride	180		10.377					ND	
87 Chlorobenzene	112		10.401					ND	
88 4-Chlorobenzotrifluoride	180		10.468					ND	
90 Ethylbenzene	106		10.498					ND	
89 1,1,1,2-Tetrachloroethane	131		10.498					ND	
91 m-Xylene & p-Xylene	106		10.638					ND	
92 o-Xylene	106		11.015					ND	
93 Styrene	104		11.034					ND	
94 Bromoform	173		11.222					ND	
95 Cyclohexanol	57		11.244					ND	
96 2-Chlorobenzotrifluoride	180		11.289					ND	
97 Isopropylbenzene	105		11.380					ND	
98 Cyclohexanone	55		11.474					ND	
100 Bromobenzene	156		11.697					ND	
99 1,1,2,2-Tetrachloroethane	83		11.703					ND	
102 trans-1,4-Dichloro-2-buten	53		11.733					ND	
101 1,2,3-Trichloropropane	110		11.752					ND	
103 N-Propylbenzene	120		11.800					ND	
104 2-Chlorotoluene	126		11.892					ND	
105 3-Chlorotoluene	126		11.952					ND	
106 1,3,5-Trimethylbenzene	105		11.983					ND	
107 4-Chlorotoluene	126		12.013					ND	
108 tert-Butylbenzene	119		12.299					ND	
110 1,2,4-Trimethylbenzene	105		12.360					ND	
109 Pentachloroethane	167		12.402					ND	
111 1,2-dichloro-4-(trifluorom	214		12.403					ND	
112 sec-Butylbenzene	105		12.518					ND	
113 1,3-Dichlorobenzene	146		12.640					ND	
114 4-Isopropyltoluene	119		12.676					ND	
115 1,4-Dichlorobenzene	146		12.743					ND	
116 2,4-Dichloro-1-(triflourom	214		12.768					ND	
117 1,2,3-Trimethylbenzene	105		12.770					ND	
118 2,5-Dichlorobenzotrifluori	214		12.810					ND	
119 Benzyl chloride	91		12.855					ND	
120 n-Butylbenzene	91		13.084					ND	
121 1,2-Dichlorobenzene	146		13.102					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.887					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.033					ND	
124 1,3,5-Trichlorobenzene	180		14.078					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.453					ND	
126 1,2,4-Trichlorobenzene	180		14.714					ND	
127 Hexachlorobutadiene	225		14.860					ND	
128 Naphthalene	128		14.982					ND	
129 1,2,3-Trichlorobenzene	180		15.207					ND	
131 2,4,5-Trichlorotoluene	159		15.986					ND	
130 2,3,6-Trichlorotoluene	159		16.083					ND	
132 2-Methylnaphthalene	142		16.098					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
147 2,4-Dichlorotoluene	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
148 2,3-Dichlorotoluene	1		0.000					ND	
146 2,5-Dichlorotoluene	1		0.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	
T 137 Tetrahydrofuran TIC	42		6.253					ND	
T 153 1,2 Epoxybutane TIC	42		6.253					ND	

Reagents:

VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

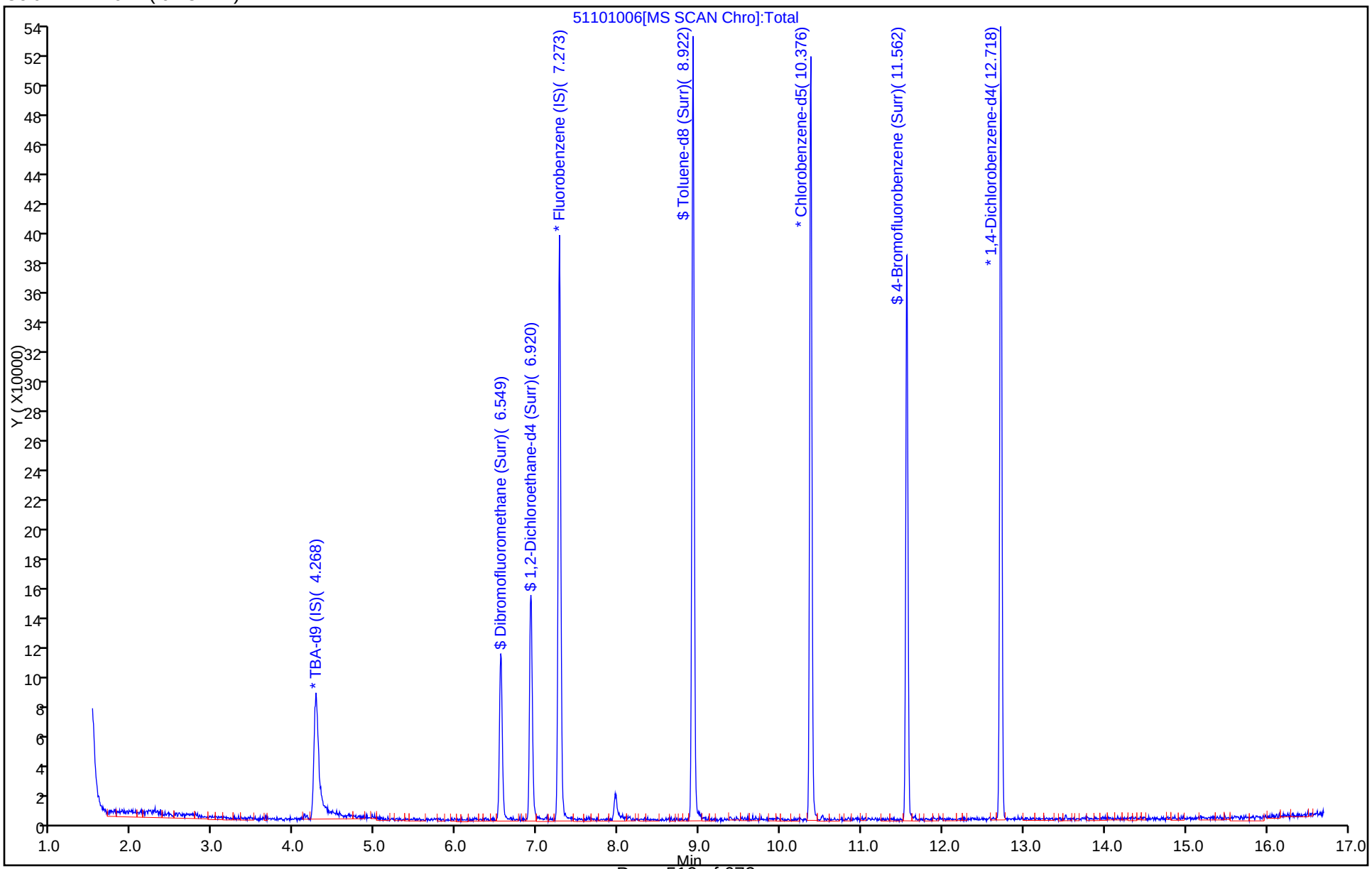
Report Date: 01-Nov-2016 11:59:28 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101006.D

Injection Date:	01-Nov-2016 11:35:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101006.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 01-Nov-2016 11:35:30 ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-006
Misc. Info.: MB
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 11:59:27 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 11:59:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.6	97.18
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.8	97.53
$ 7 Toluene-d8 (Surr)	50.0	49.2	98.36
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.9	97.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-192841/8

Matrix: Water | Lab File ID: 51031008.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 12:32

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10.4		1.0	0.23
75-01-4	Vinyl chloride	10.1		1.0	0.32
74-83-9	Bromomethane	9.83		1.0	0.36
75-00-3	Chloroethane	10.3		1.0	0.26
75-35-4	1,1-Dichloroethene	9.96		1.0	0.29
67-64-1	Acetone	15.2		5.0	2.5
75-15-0	Carbon disulfide	8.90		1.0	0.18
75-09-2	Methylene Chloride	9.13		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	10.0		1.0	0.29
1634-04-4	Methyl tert-butyl ether	8.90		1.0	0.24
75-34-3	1,1-Dichloroethane	9.36		1.0	0.24
156-59-2	cis-1,2-Dichloroethene	9.43		1.0	0.29
74-97-5	Bromochloromethane	9.35		1.0	0.38
78-93-3	2-Butanone (MEK)	18.3		5.0	1.2
67-66-3	Chloroform	9.34		1.0	0.27
71-55-6	1,1,1-Trichloroethane	9.75		1.0	0.22
56-23-5	Carbon tetrachloride	9.69		1.0	0.24
71-43-2	Benzene	9.56		1.0	0.26
107-06-2	1,2-Dichloroethane	8.74		1.0	0.25
79-01-6	Trichloroethene	9.69		1.0	0.26
78-87-5	1,2-Dichloropropane	8.86		1.0	0.23
75-27-4	Bromodichloromethane	8.88		1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	8.65		1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	18.4		5.0	0.59
108-88-3	Toluene	10.4		1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	9.28		1.0	0.24
79-00-5	1,1,2-Trichloroethane	9.45		1.0	0.35
127-18-4	Tetrachloroethene	10.9		1.0	0.27
591-78-6	2-Hexanone	17.8		5.0	0.74
124-48-1	Dibromochloromethane	8.83		1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	9.76		1.0	0.29
108-90-7	Chlorobenzene	10.5		1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	9.97		1.0	0.20
100-41-4	Ethylbenzene	10.3		1.0	0.27
1330-20-7	Xylenes, Total	20.9		2.0	0.48
100-42-5	Styrene	10.2		1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-192841/8

Matrix: Water | Lab File ID: 51031008.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 12:32

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	8.64		1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	9.54		1.0	0.35
107-13-1	Acrylonitrile	93.6		20	2.8
123-91-1	1,4-Dioxane	147	J	200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		72-134
2037-26-5	Toluene-d8 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		72-120
1868-53-7	Dibromofluoromethane (Surr)	94		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031008.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 31-Oct-2016 12:32:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014116-008
Misc. Info.: LCS
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:52:41 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 31-Oct-2016 12:55:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.297	4.279	0.018	0	105529	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.272	-0.001	97	379139	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.375	-0.001	90	89087	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.723	-0.007	95	135610	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.548	-0.001	93	84888	50.0	46.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.919	6.919	0.000	0	116135	50.0	44.3	
$ 7 Toluene-d8 (Surr)	98	8.920	8.921	-0.001	95	356383	50.0	53.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.554	11.561	-0.007	86	135683	50.0	49.9	
11 Dichlorodifluoromethane	85	1.602	1.608	-0.006	98	108305	50.0	48.1	
12 Chloromethane	50	1.766	1.767	-0.001	100	227445	50.0	52.0	
13 Vinyl chloride	62	1.906	1.900	0.006	97	146378	50.0	50.5	
14 Butadiene	39	1.936	1.937	-0.001	97	206530	50.0	48.2	
15 Bromomethane	94	2.234	2.229	0.005	90	35595	50.0	49.2	
16 Chloroethane	64	2.374	2.375	-0.001	98	66830	50.0	51.7	
18 Trichlorofluoromethane	101	2.672	2.655	0.017	87	124522	50.0	50.8	
17 Dichlorofluoromethane	67	2.660	2.661	-0.001	97	147027	50.0	47.6	
20 Ethyl ether	59	3.043	3.044	-0.001	98	113065	50.0	46.4	
21 Acrolein	56	3.226	3.227	-0.001	100	77240	150.0	135.0	
22 1,1-Dichloroethene	96	3.329	3.330	-0.001	93	95415	50.0	49.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.396	3.409	-0.013	93	102348	50.0	49.0	
24 Acetone	43	3.445	3.440	0.005	98	74296	100.0	76.1	
25 Iodomethane	142	3.530	3.525	0.005	98	142725	50.0	50.1	
26 Carbon disulfide	76	3.621	3.616	0.005	99	223128	50.0	44.5	
28 3-Chloro-1-propene	76	3.913	3.908	0.005	87	51500	50.0	43.3	
30 Methyl acetate	43	3.938	3.932	0.006	100	558808	250.0	221.3	
31 Methylene Chloride	84	4.126	4.121	0.005	91	109475	50.0	45.6	
32 2-Methyl-2-propanol	59	4.418	4.401	0.017	85	65991	500.0	509.1	
33 Acrylonitrile	53	4.522	4.516	0.006	99	564968	500.0	467.9	
34 trans-1,2-Dichloroethene	96	4.558	4.553	0.005	91	104638	50.0	50.1	
35 Methyl tert-butyl ether	73	4.570	4.565	0.005	94	241273	50.0	44.5	
36 Hexane	57	4.972	4.973	-0.001	97	213590	50.0	48.9	

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	5.186	0.005	96	218075	50.0	46.8	
38 Vinyl acetate	43	5.240	5.234	0.006	97	239877	50.0	46.4	
44 2,2-Dichloropropane	97	5.933	5.922	0.011	56	19056	50.0	49.1	
45 cis-1,2-Dichloroethene	96	5.939	5.934	0.005	87	108701	50.0	47.2	
46 2-Butanone (MEK)	43	5.951	5.952	-0.001	97	142377	100.0	91.6	
49 Chlorobromomethane	128	6.225	6.220	0.005	85	45498	50.0	46.8	
51 Tetrahydrofuran	42	6.243	6.238	0.005	95	91548	100.0	86.0	
52 Chloroform	83	6.365	6.360	0.005	98	172871	50.0	46.7	
53 1,1,1-Trichloroethane	97	6.523	6.524	-0.001	94	127065	50.0	48.8	
54 Cyclohexane	56	6.590	6.591	-0.001	95	278546	50.0	48.7	
56 Carbon tetrachloride	117	6.693	6.700	-0.007	93	105703	50.0	48.5	
55 1,1-Dichloropropene	75	6.706	6.713	-0.006	90	149760	50.0	48.7	
57 Isobutyl alcohol	41	6.925	6.919	0.006	43	73228	1250.0	998.4	
58 Benzene	78	6.931	6.925	0.006	94	423065	50.0	47.8	
59 1,2-Dichloroethane	62	7.004	7.005	-0.001	95	145465	50.0	43.7	
62 n-Heptane	43	7.290	7.290	0.000	96	200301	50.0	46.6	
64 Trichloroethene	130	7.661	7.662	-0.001	95	102756	50.0	48.5	
66 Methylcyclohexane	83	7.898	7.893	0.005	97	178671	50.0	49.1	
67 1,2-Dichloropropane	63	7.934	7.935	-0.001	93	117793	50.0	44.3	
68 Dibromomethane	93	8.026	8.014	0.012	97	51260	50.0	45.5	
70 1,4-Dioxane	88	8.020	8.014	0.006	43	15450	1000.0	733.1	M
71 Dichlorobromomethane	83	8.214	8.215	-0.001	96	108377	50.0	44.4	
73 2-Chloroethyl vinyl ether	63	8.519	8.519	-0.001	88	117187	100.0	84.0	
74 cis-1,3-Dichloropropene	75	8.658	8.659	-0.001	86	125032	50.0	43.2	
75 4-Methyl-2-pentanone (MIBK	43	8.817	8.817	0.000	98	251656	100.0	92.2	
76 Toluene	91	8.987	8.988	-0.001	97	423637	50.0	51.8	
77 trans-1,3-Dichloropropene	75	9.236	9.243	-0.007	95	96151	50.0	46.4	
78 Ethyl methacrylate	69	9.297	9.298	-0.001	92	104731	50.0	47.1	
79 1,1,2-Trichloroethane	97	9.431	9.432	-0.001	94	72653	50.0	47.3	
80 Tetrachloroethene	164	9.498	9.505	-0.007	96	87845	50.0	54.6	
81 1,3-Dichloropropane	76	9.589	9.590	-0.001	94	140972	50.0	47.6	
82 2-Hexanone	43	9.650	9.645	0.005	99	184502	100.0	89.1	
84 Chlorodibromomethane	129	9.802	9.809	-0.007	90	61611	50.0	44.1	
85 Ethylene Dibromide	107	9.912	9.918	-0.006	99	77735	50.0	48.8	
86 3-Chlorobenzotrifluoride	180	10.374	10.381	-0.007	87	163432	50.0	53.5	
87 Chlorobenzene	112	10.404	10.405	-0.001	91	280954	50.0	52.4	
88 4-Chlorobenzotrifluoride	180	10.465	10.466	-0.001	96	154943	50.0	55.0	
89 1,1,1,2-Tetrachloroethane	131	10.496	10.503	-0.006	90	80260	50.0	49.8	
90 Ethylbenzene	106	10.502	10.503	0.000	98	156196	50.0	51.7	
91 m-Xylene & p-Xylene	106	10.629	10.636	-0.007	0	197702	50.0	52.5	
92 o-Xylene	106	11.013	11.020	-0.007	98	186168	50.0	51.9	
93 Styrene	104	11.037	11.038	-0.001	94	309345	50.0	51.0	
94 Bromoform	173	11.220	11.220	0.000	97	36375	50.0	43.2	
96 2-Chlorobenzotrifluoride	180	11.286	11.287	-0.001	97	163399	50.0	55.0	
97 Isopropylbenzene	105	11.384	11.385	-0.001	97	480223	50.0	52.2	
99 1,1,2,2-Tetrachloroethane	83	11.700	11.695	0.005	93	103717	50.0	47.7	
100 Bromobenzene	156	11.694	11.701	-0.007	96	108206	50.0	47.2	
102 trans-1,4-Dichloro-2-buten	53	11.737	11.737	0.000	66	26360	50.0	33.4	
101 1,2,3-Trichloropropane	110	11.755	11.756	-0.001	89	33986	50.0	45.4	
103 N-Propylbenzene	120	11.798	11.804	-0.006	99	129409	50.0	48.8	
104 2-Chlorotoluene	126	11.889	11.890	-0.001	95	106709	50.0	47.0	
105 3-Chlorotoluene	126	11.956	11.956	0.000	96	120820	50.0	49.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.986	11.987	-0.001	93	392277	50.0	48.9	
107 4-Chlorotoluene	126	12.010	12.017	-0.007	98	117968	50.0	48.6	
108 tert-Butylbenzene	119	12.296	12.297	-0.001	95	317956	50.0	48.8	
110 1,2,4-Trimethylbenzene	105	12.357	12.358	-0.001	98	389005	50.0	47.9	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.401	-0.001	98	117475	50.0	52.1	
112 sec-Butylbenzene	105	12.521	12.522	-0.001	95	466322	50.0	49.5	
113 1,3-Dichlorobenzene	146	12.637	12.644	-0.007	97	206757	50.0	47.5	
114 4-Isopropyltoluene	119	12.680	12.680	0.000	97	389460	50.0	49.7	
115 1,4-Dichlorobenzene	146	12.747	12.747	0.000	94	209699	50.0	47.1	
116 2,4-Dichloro-1-(triflourom	214	12.771	12.772	-0.001	96	104875	50.0	49.1	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.814	-0.001	0	119115	50.0	48.9	
120 n-Butylbenzene	91	13.087	13.088	-0.001	98	321566	50.0	47.7	
121 1,2-Dichlorobenzene	146	13.099	13.100	-0.001	95	194334	50.0	48.4	
122 1,2-Dibromo-3-Chloropropan	75	13.890	13.891	-0.001	74	13910	50.0	38.4	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.030	14.031	-0.001	0	406859	150.0	144.8	
125 2,3- & 3,4- Dichlorotoluen	125	14.450	14.451	-0.001	0	263752	100.0	96.4	
126 1,2,4-Trichlorobenzene	180	14.711	14.718	-0.007	94	89045	50.0	45.0	
127 Hexachlorobutadiene	225	14.857	14.858	-0.001	97	41669	50.0	49.1	
128 Naphthalene	128	14.979	14.986	-0.007	97	214718	50.0	43.6	
129 1,2,3-Trichlorobenzene	180	15.204	15.205	-0.001	96	70280	50.0	45.6	
131 2,4,5-Trichlorotoluene	159	15.983	15.984	-0.001	0	23328	50.0	47.7	
130 2,3,6-Trichlorotoluene	159	16.080	16.081	-0.001	91	22307	50.0	44.1	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	97.3	
S 133 Xylenes, Total	106				0		100.0	104.4	
S 135 1,3-Dichloropropene, Total	1				0		100.0	89.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaW2cleveRes_00003	Amount Added:	2.00	Units: uL		
voaWVA1stRest_00009	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00014	Amount Added:	2.00	Units: uL		
VOA8260VOA2ND_00211	Amount Added:	2.00	Units: uL		
voaWEE1st Res_00001	Amount Added:	2.00	Units: uL		
voaWacro2ndRe_00008	Amount Added:	6.00	Units: uL		
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent	

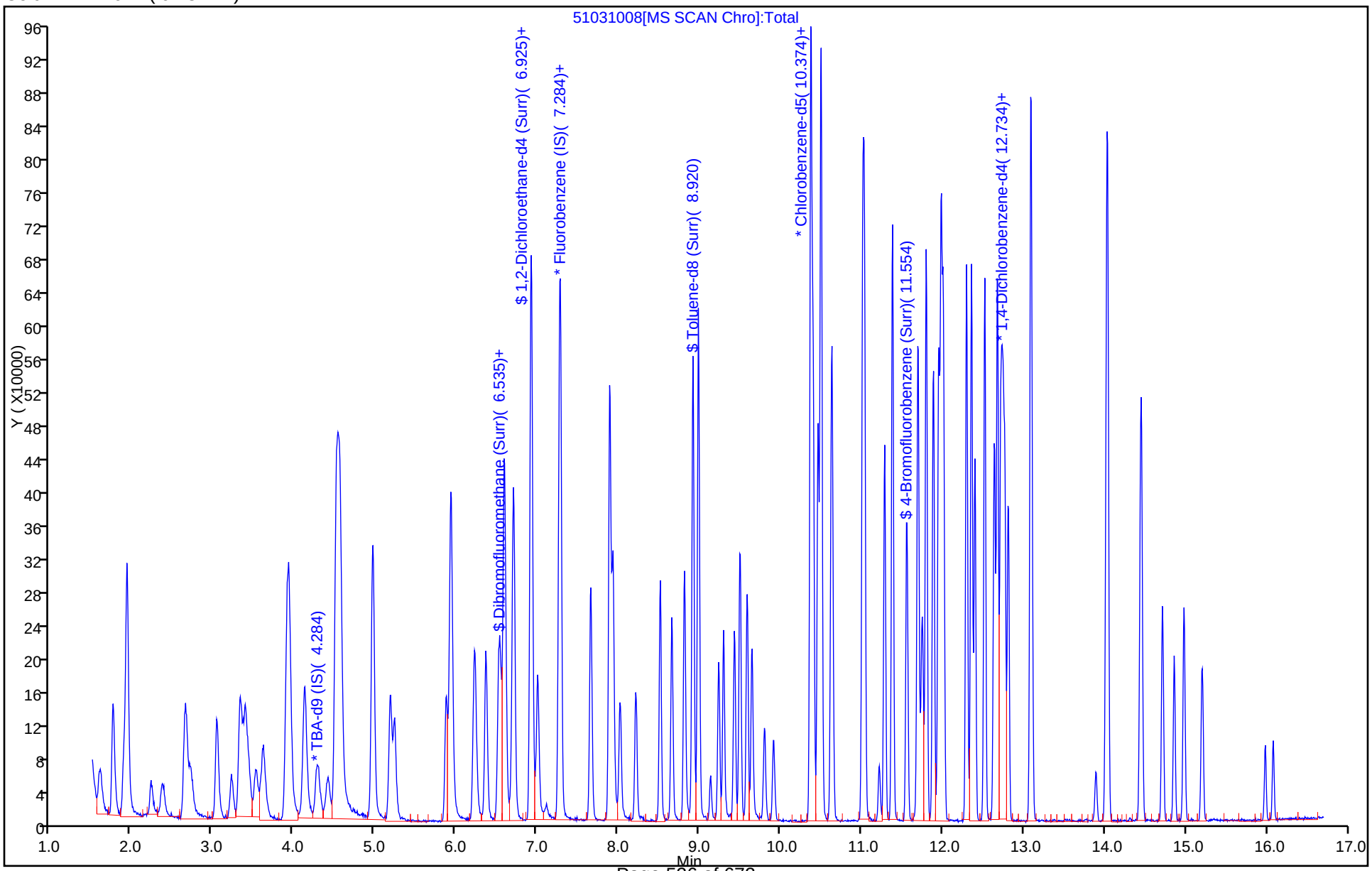
Report Date: 01-Nov-2016 08:40:22 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031008.D

Injection Date:	31-Oct-2016 12:32:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031008.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 31-Oct-2016 12:32:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014116-008
Misc. Info.: LCS
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 07:52:41 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 31-Oct-2016 12:55:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	46.8	93.59
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	44.3	88.70
$ 7 Toluene-d8 (Surr)	50.0	53.0	106.01
$ 8 4-Bromofluorobenzene (Surr)	50.0	49.9	99.83

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

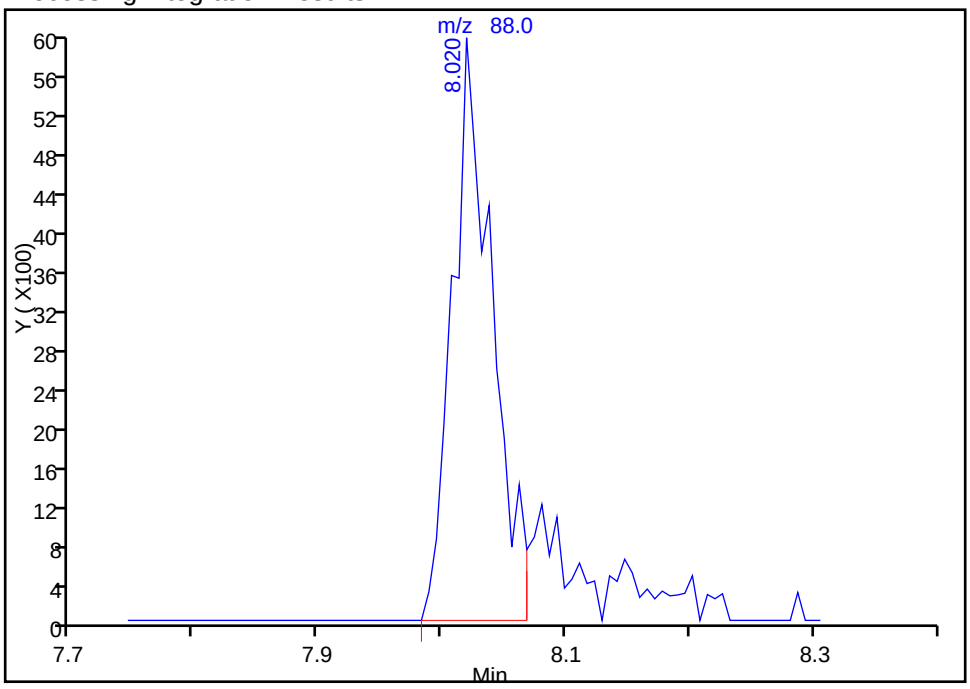
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031008.D
Injection Date: 31-Oct-2016 12:32:30 Instrument ID: CHHP5
Lims ID: LCS
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

Signal: 1

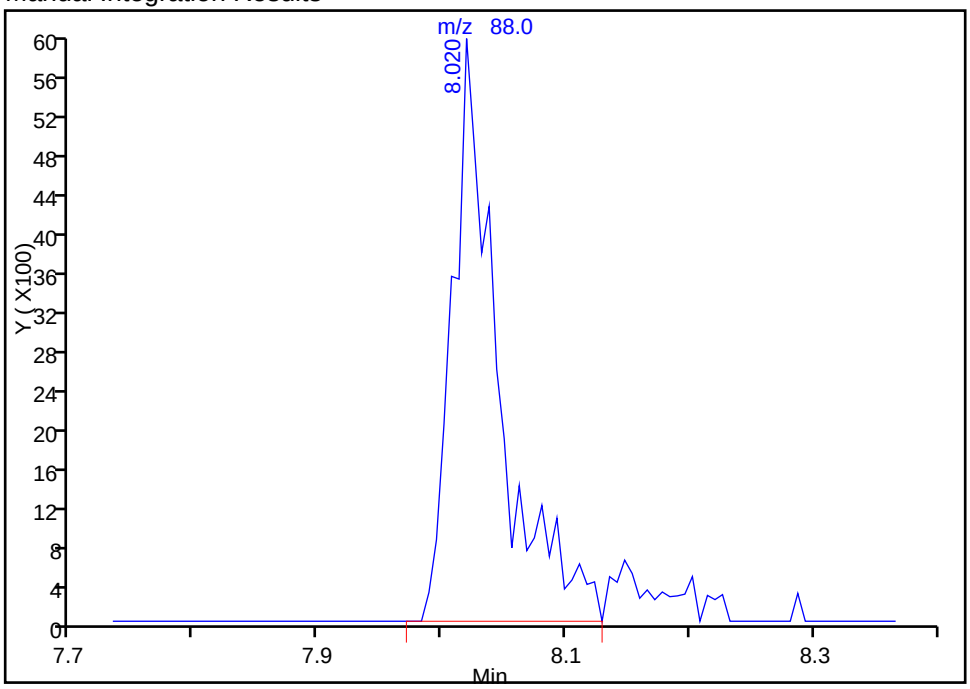
Processing Integration Results

RT: 8.02
Area: 13300
Amount: 631.0673
Amount Units: ng



Manual Integration Results

RT: 8.02
Area: 15450
Amount: 733.0819
Amount Units: ng



Reviewer: fergusond, 31-Oct-2016 12:55:43
Audit Action: Manually Integrated Audit Reason: Other

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-192920/10

Matrix: Water | Lab File ID: 51101010.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2016 13:25

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.: 192920 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	11.3		1.0	0.23
75-01-4	Vinyl chloride	10.9		1.0	0.32
74-83-9	Bromomethane	11.1		1.0	0.36
75-00-3	Chloroethane	10.7		1.0	0.26
75-35-4	1,1-Dichloroethene	10.9		1.0	0.29
67-64-1	Acetone	21.0		5.0	2.5
75-15-0	Carbon disulfide	8.43		1.0	0.18
75-09-2	Methylene Chloride	10.5		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	11.0		1.0	0.29
1634-04-4	Methyl tert-butyl ether	10.4		1.0	0.24
75-34-3	1,1-Dichloroethane	10.9		1.0	0.24
156-59-2	cis-1,2-Dichloroethene	10.9		1.0	0.29
74-97-5	Bromochloromethane	10.7		1.0	0.38
78-93-3	2-Butanone (MEK)	21.2		5.0	1.2
67-66-3	Chloroform	10.5		1.0	0.27
71-55-6	1,1,1-Trichloroethane	10.2		1.0	0.22
56-23-5	Carbon tetrachloride	10.3		1.0	0.24
71-43-2	Benzene	11.0		1.0	0.26
107-06-2	1,2-Dichloroethane	10.3		1.0	0.25
79-01-6	Trichloroethene	10.8		1.0	0.26
78-87-5	1,2-Dichloropropane	10.6		1.0	0.23
75-27-4	Bromodichloromethane	9.56		1.0	0.23
10061-01-5	cis-1,3-Dichloropropene	9.93		1.0	0.21
108-10-1	4-Methyl-2-pentanone (MIBK)	23.2		5.0	0.59
108-88-3	Toluene	11.5		1.0	0.28
10061-02-6	trans-1,3-Dichloropropene	10.7		1.0	0.24
79-00-5	1,1,2-Trichloroethane	11.5		1.0	0.35
127-18-4	Tetrachloroethene	11.5		1.0	0.27
591-78-6	2-Hexanone	21.3		5.0	0.74
124-48-1	Dibromochloromethane	9.88		1.0	0.40
106-93-4	1,2-Dibromoethane (EDB)	11.4		1.0	0.29
108-90-7	Chlorobenzene	11.8		1.0	0.31
630-20-6	1,1,1,2-Tetrachloroethane	10.9		1.0	0.20
100-41-4	Ethylbenzene	11.5		1.0	0.27
1330-20-7	Xylenes, Total	23.2		2.0	0.48
100-42-5	Styrene	11.4		1.0	0.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-192920/10

Matrix: Water Lab File ID: 51101010.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/01/2016 13:25

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.: 192920 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.22		1.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	11.4		1.0	0.35
107-13-1	Acrylonitrile	112		20	2.8
123-91-1	1,4-Dioxane	200		200	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		72-134
2037-26-5	Toluene-d8 (Surr)	113		80-120
460-00-4	4-Bromofluorobenzene (Surr)	108		72-120
1868-53-7	Dibromofluoromethane (Surr)	104		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101010.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Nov-2016 13:25:30 ALS Bottle#: 7 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-010
Misc. Info.: LCS
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 13:48:39 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 13:48:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.278	4.275	0.003	0	125629	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.274	-0.003	95	358485	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.377	-0.003	90	85780	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.716	12.719	-0.003	93	128003	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.550	-0.003	94	89040	50.0	51.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.921	-0.003	0	126530	50.0	51.1	
$ 7 Toluene-d8 (Surr)	98	8.920	8.923	-0.003	96	366903	50.0	56.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.557	0.003	87	140874	50.0	53.8	
11 Dichlorodifluoromethane	85	1.601	1.598	0.003	98	117452	50.0	55.1	
12 Chloromethane	50	1.778	1.763	0.015	99	233589	50.0	56.5	
13 Vinyl chloride	62	1.906	1.909	-0.003	98	149609	50.0	54.6	
14 Butadiene	39	1.942	1.939	0.003	96	198082	50.0	48.9	
15 Bromomethane	94	2.240	2.231	0.009	91	38028	50.0	55.6	
16 Chloroethane	64	2.386	2.377	0.009	97	65128	50.0	53.3	
17 Dichlorofluoromethane	67	2.666	2.651	0.015	96	152384	50.0	52.2	
18 Trichlorofluoromethane	101	2.678	2.663	0.015	57	124551	50.0	53.8	
20 Ethyl ether	59	3.043	3.046	-0.003	96	126952	50.0	55.1	
21 Acrolein	56	3.232	3.229	0.003	99	88159	150.0	163.0	
22 1,1-Dichloroethene	96	3.329	3.338	-0.009	93	98783	50.0	54.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.408	3.399	0.009	92	105607	50.0	53.5	
24 Acetone	43	3.451	3.442	0.009	97	96977	100.0	105.1	
25 Iodomethane	142	3.536	3.527	0.009	97	147364	50.0	54.7	
26 Carbon disulfide	76	3.621	3.618	0.003	99	199881	50.0	42.2	
28 3-Chloro-1-propene	76	3.907	3.910	-0.003	87	55390	50.0	49.2	
30 Methyl acetate	43	3.938	3.934	0.004	100	641795	250.0	268.8	
31 Methylene Chloride	84	4.132	4.123	0.009	92	118971	50.0	52.5	
32 2-Methyl-2-propanol	59	4.406	4.403	0.003	86	75443	500.0	488.9	
33 Acrylonitrile	53	4.522	4.512	0.010	98	640160	500.0	560.8	
34 trans-1,2-Dichloroethene	96	4.552	4.549	0.003	91	108444	50.0	55.0	
35 Methyl tert-butyl ether	73	4.570	4.573	-0.003	92	266171	50.0	51.9	
36 Hexane	57	4.972	4.969	0.003	97	223722	50.0	54.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.191	5.188	0.003	96	239531	50.0	54.4	
38 Vinyl acetate	43	5.239	5.236	0.003	97	271233	50.0	55.4	
44 2,2-Dichloropropane	97	5.939	5.924	0.015	52	18539	50.0	50.5	
45 cis-1,2-Dichloroethene	96	5.933	5.936	-0.003	87	118687	50.0	54.5	
46 2-Butanone (MEK)	43	5.945	5.948	-0.003	97	156038	100.0	106.1	
49 Chlorobromomethane	128	6.219	6.222	-0.003	86	49051	50.0	53.3	
51 Tetrahydrofuran	42	6.243	6.240	0.003	94	101833	100.0	101.1	
52 Chloroform	83	6.365	6.368	-0.003	97	183129	50.0	52.3	
53 1,1,1-Trichloroethane	97	6.523	6.526	-0.003	94	125153	50.0	50.8	
54 Cyclohexane	56	6.590	6.593	-0.003	95	285337	50.0	52.7	
56 Carbon tetrachloride	117	6.693	6.696	-0.003	94	106153	50.0	51.5	
55 1,1-Dichloropropene	75	6.712	6.708	0.004	88	153477	50.0	52.8	
57 Isobutyl alcohol	41	6.925	6.915	0.009	47	80949	1250.0	1167.3	
58 Benzene	78	6.925	6.927	-0.003	97	462342	50.0	55.2	
59 1,2-Dichloroethane	62	7.004	7.000	0.004	95	161686	50.0	51.3	
62 n-Heptane	43	7.290	7.286	0.004	96	208639	50.0	51.4	
64 Trichloroethene	130	7.655	7.657	-0.002	96	108711	50.0	54.2	
66 Methylcyclohexane	83	7.892	7.895	-0.003	95	183184	50.0	53.2	
67 1,2-Dichloropropane	63	7.934	7.937	-0.003	94	133471	50.0	53.1	
70 1,4-Dioxane	88	8.020	8.016	0.004	44	19911	1000.0	999.2	M
68 Dibromomethane	93	8.020	8.022	-0.002	95	57394	50.0	53.9	
71 Dichlorobromomethane	83	8.214	8.217	-0.003	96	110402	50.0	47.8	
73 2-Chloroethyl vinyl ether	63	8.518	8.515	0.003	86	139344	100.0	105.7	
74 cis-1,3-Dichloropropene	75	8.664	8.661	0.003	87	135744	50.0	49.7	
75 4-Methyl-2-pentanone (MIBK	43	8.816	8.813	0.003	98	304902	100.0	116.0	
76 Toluene	91	8.987	8.990	-0.003	97	451765	50.0	57.4	
77 trans-1,3-Dichloropropene	75	9.236	9.239	-0.003	96	106641	50.0	53.4	
78 Ethyl methacrylate	69	9.297	9.300	-0.003	92	116825	50.0	54.6	
79 1,1,2-Trichloroethane	97	9.431	9.434	-0.003	94	85337	50.0	57.6	
80 Tetrachloroethene	164	9.504	9.501	0.003	97	88925	50.0	57.4	
81 1,3-Dichloropropane	76	9.589	9.592	-0.003	95	162673	50.0	57.0	
82 2-Hexanone	43	9.650	9.647	0.003	98	212730	100.0	106.7	
84 Chlorodibromomethane	129	9.802	9.805	-0.003	89	66410	50.0	49.4	
85 Ethylene Dibromide	107	9.918	9.914	0.004	96	87112	50.0	56.8	
86 3-Chlorobenzotrifluoride	180	10.374	10.377	-0.003	88	165631	50.0	56.3	
87 Chlorobenzene	112	10.404	10.401	0.003	91	304736	50.0	59.0	
88 4-Chlorobenzotrifluoride	180	10.465	10.468	-0.003	96	157158	50.0	57.9	
89 1,1,1,2-Tetrachloroethane	131	10.502	10.498	0.004	89	84473	50.0	54.5	
90 Ethylbenzene	106	10.502	10.498	0.004	98	167539	50.0	57.6	
91 m-Xylene & p-Xylene	106	10.629	10.638	-0.009	0	212919	50.0	58.7	
92 o-Xylene	106	11.013	11.015	-0.002	98	199063	50.0	57.6	
93 Styrene	104	11.037	11.034	0.003	94	333459	50.0	57.1	
94 Bromoform	173	11.219	11.222	-0.003	94	37376	50.0	46.1	
96 2-Chlorobenzotrifluoride	180	11.286	11.289	-0.003	97	162204	50.0	56.7	
97 Isopropylbenzene	105	11.384	11.380	0.004	97	507742	50.0	57.3	
100 Bromobenzene	156	11.694	11.697	-0.003	97	116470	50.0	53.9	
99 1,1,2,2-Tetrachloroethane	83	11.700	11.703	-0.003	94	118865	50.0	56.8	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.733	-0.003	72	32215	50.0	43.3	
101 1,2,3-Trichloropropane	110	11.749	11.752	-0.003	90	38631	50.0	54.7	
103 N-Propylbenzene	120	11.797	11.800	-0.003	99	134494	50.0	53.7	
104 2-Chlorotoluene	126	11.889	11.892	-0.003	95	113560	50.0	53.0	
105 3-Chlorotoluene	126	11.949	11.952	-0.003	96	127173	50.0	55.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.986	11.983	0.003	95	409422	50.0	54.1	
107 4-Chlorotoluene	126	12.010	12.013	-0.003	98	121482	50.0	53.0	
108 tert-Butylbenzene	119	12.296	12.299	-0.003	96	324461	50.0	52.7	
110 1,2,4-Trimethylbenzene	105	12.357	12.360	-0.003	98	410252	50.0	53.5	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.403	-0.003	97	113915	50.0	53.6	
112 sec-Butylbenzene	105	12.521	12.518	0.003	95	471231	50.0	52.9	
113 1,3-Dichlorobenzene	146	12.637	12.640	-0.003	96	224240	50.0	54.5	
114 4-Isopropyltoluene	119	12.679	12.676	0.003	97	395674	50.0	53.5	
115 1,4-Dichlorobenzene	146	12.746	12.743	0.003	95	227779	50.0	54.2	
116 2,4-Dichloro-1-(triflourom	214	12.771	12.768	0.003	96	106621	50.0	52.8	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.810	-0.003	0	121930	50.0	53.0	
120 n-Butylbenzene	91	13.087	13.084	0.003	98	325492	50.0	51.2	
121 1,2-Dichlorobenzene	146	13.099	13.102	-0.003	95	203847	50.0	53.8	
122 1,2-Dibromo-3-Chloropropan	75	13.890	13.887	0.003	72	16658	50.0	48.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.030	14.033	-0.003	0	419599	150.0	158.2	
125 2,3- & 3,4- Dichlorotoluen	125	14.450	14.453	-0.003	0	272644	100.0	105.6	
126 1,2,4-Trichlorobenzene	180	14.711	14.714	-0.003	93	94073	50.0	50.3	
127 Hexachlorobutadiene	225	14.857	14.860	-0.003	94	42038	50.0	52.5	
128 Naphthalene	128	14.979	14.982	-0.003	98	230128	50.0	49.5	
129 1,2,3-Trichlorobenzene	180	15.198	15.207	-0.009	94	73086	50.0	50.3	
131 2,4,5-Trichlorotoluene	159	15.983	15.986	-0.003	0	21474	50.0	46.5	
130 2,3,6-Trichlorotoluene	159	16.080	16.083	-0.003	95	21641	50.0	45.3	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	109.4	
S 133 Xylenes, Total	106				0		100.0	116.3	
S 135 1,3-Dichloropropene, Total	1				0		100.0	103.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACROPRI_00008	Amount Added:	6.00	Units: uL		
VOA8260VOA2ND_00211	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00014	Amount Added:	2.00	Units: uL		
voaWEE1st Res_00001	Amount Added:	2.00	Units: uL		
voaWva2ndRest_00008	Amount Added:	2.00	Units: uL		
voaW2cleveRes_00003	Amount Added:	2.00	Units: uL		
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent	

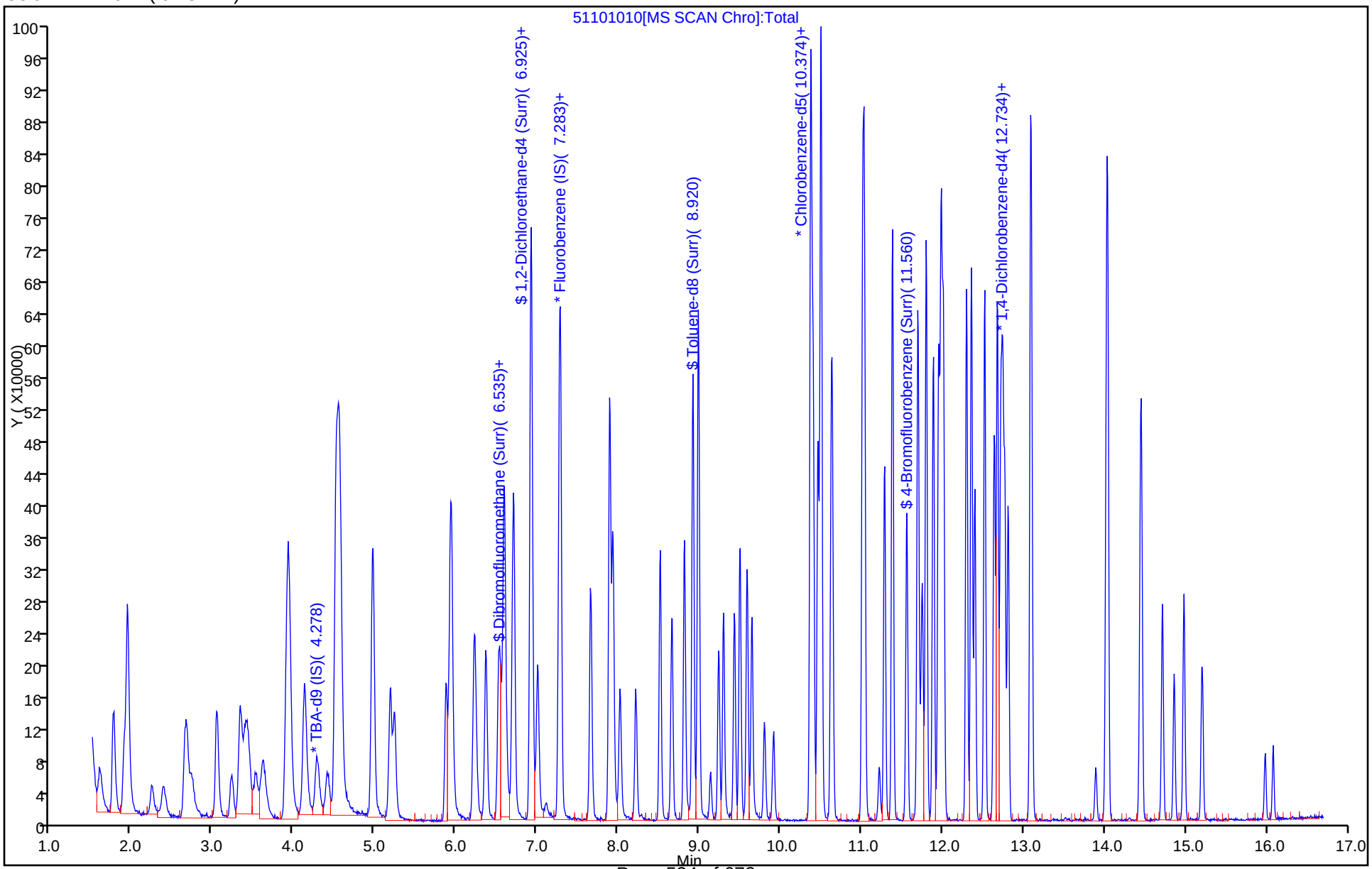
Report Date: 01-Nov-2016 13:48:41 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101010.D

Injection Date:	01-Nov-2016 13:25:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	LCS			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101010.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Nov-2016 13:25:30 ALS Bottle#: 7 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0014130-010
Misc. Info.: LCS
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2016 13:48:39 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: fergusond Date: 01-Nov-2016 13:48:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.9	103.83
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	51.1	102.20
$ 7 Toluene-d8 (Surr)	50.0	56.7	113.34
$ 8 4-Bromofluorobenzene (Surr)	50.0	53.8	107.64

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

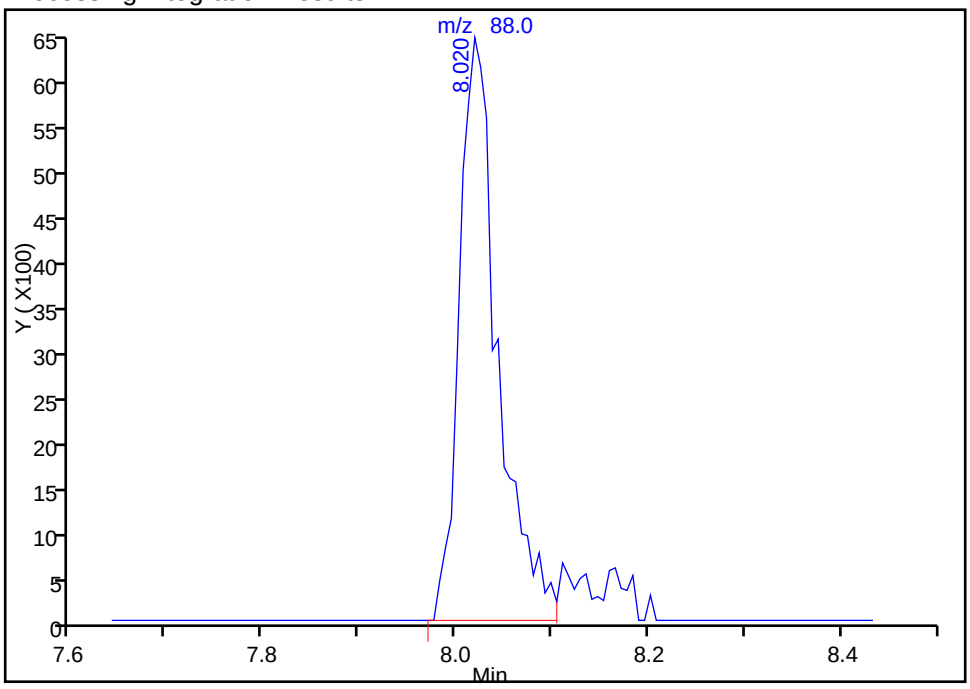
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161101-14130.b\51101010.D
Injection Date: 01-Nov-2016 13:25:30 Instrument ID: CHHP5
Lims ID: LCS
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

Signal: 1

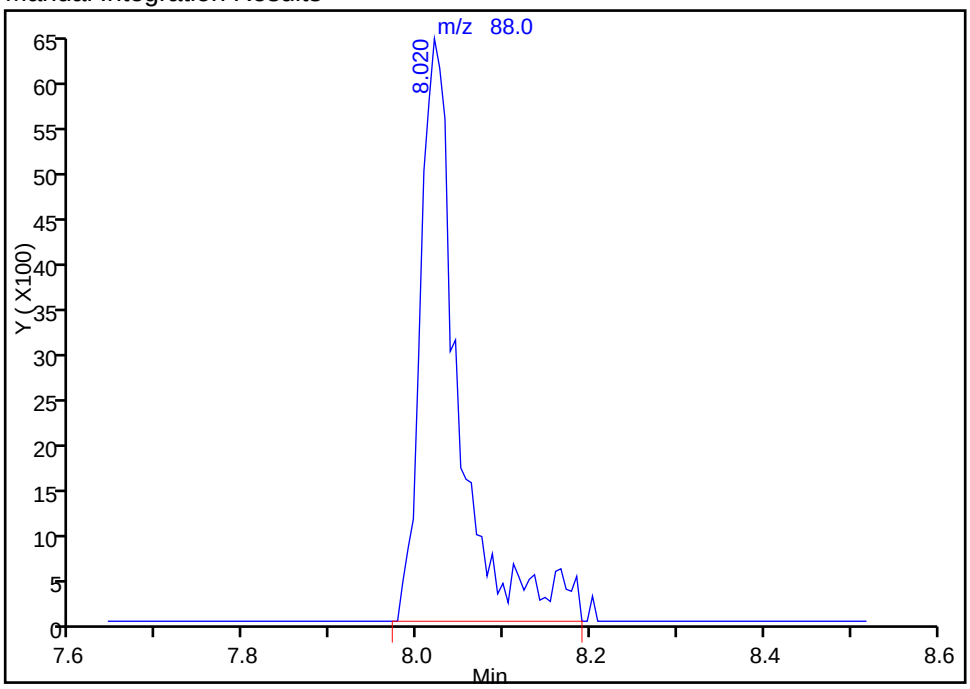
Processing Integration Results

RT: 8.02
Area: 17913
Amount: 898.9175
Amount Units: ng



Manual Integration Results

RT: 8.02
Area: 19911
Amount: 999.1819
Amount Units: ng



Reviewer: fergusond, 01-Nov-2016 13:48:39
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-17-0/1-0 MS | Lab Sample ID: 180-60202-11 MS

Matrix: Water | Lab File ID: 51031009.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 12:56

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	21.8		2.0	0.46
75-01-4	Vinyl chloride	21.7		2.0	0.63
74-83-9	Bromomethane	21.3		2.0	0.72
75-00-3	Chloroethane	22.2		2.0	0.52
75-35-4	1,1-Dichloroethene	24.2		2.0	0.57
67-64-1	Acetone	41.8		10	5.0
75-15-0	Carbon disulfide	18.7		2.0	0.37
75-09-2	Methylene Chloride	19.7		2.0	0.72
156-60-5	trans-1,2-Dichloroethene	21.2		2.0	0.57
1634-04-4	Methyl tert-butyl ether	20.9		2.0	0.49
75-34-3	1,1-Dichloroethane	22.7		2.0	0.47
156-59-2	cis-1,2-Dichloroethene	68.8		2.0	0.57
74-97-5	Bromochloromethane	21.5		2.0	0.75
78-93-3	2-Butanone (MEK)	43.0		10	2.3
67-66-3	Chloroform	21.0		2.0	0.55
71-55-6	1,1,1-Trichloroethane	24.6		2.0	0.44
56-23-5	Carbon tetrachloride	21.1		2.0	0.49
71-43-2	Benzene	21.0		2.0	0.51
107-06-2	1,2-Dichloroethane	19.4		2.0	0.49
79-01-6	Trichloroethene	50.5		2.0	0.52
78-87-5	1,2-Dichloropropane	20.0		2.0	0.45
75-27-4	Bromodichloromethane	19.0		2.0	0.47
10061-01-5	cis-1,3-Dichloropropene	19.3		2.0	0.41
108-10-1	4-Methyl-2-pentanone (MIBK)	42.0		10	1.2
108-88-3	Toluene	21.9		2.0	0.56
10061-02-6	trans-1,3-Dichloropropene	20.7		2.0	0.48
79-00-5	1,1,2-Trichloroethane	22.2		2.0	0.70
127-18-4	Tetrachloroethene	40.8		2.0	0.54
591-78-6	2-Hexanone	39.2		10	1.5
124-48-1	Dibromochloromethane	19.4		2.0	0.79
106-93-4	1,2-Dibromoethane (EDB)	21.2		2.0	0.58
108-90-7	Chlorobenzene	21.9		2.0	0.63
630-20-6	1,1,1,2-Tetrachloroethane	21.7		2.0	0.39
100-41-4	Ethylbenzene	22.0		2.0	0.55
1330-20-7	Xylenes, Total	44.6		4.0	0.97
100-42-5	Styrene	22.0		2.0	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-17-0/1-0 MS | Lab Sample ID: 180-60202-11 MS

Matrix: Water | Lab File ID: 51031009.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 12:56

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	18.0		2.0	0.59
79-34-5	1,1,2,2-Tetrachloroethane	22.3		2.0	0.69
107-13-1	Acrylonitrile	214		40	5.5
123-91-1	1,4-Dioxane	384	J	400	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-134
2037-26-5	Toluene-d8 (Surr)	109		80-120
460-00-4	4-Bromofluorobenzene (Surr)	105		72-120
1868-53-7	Dibromofluoromethane (Surr)	102		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031009.D
Lims ID: 180-60202-C-11 MS
Client ID: HD-CW-17-0/1-0
Sample Type: MS
Inject. Date: 31-Oct-2016 12:56:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0014116-009
Misc. Info.: 180-60202-C-11 MS, 2x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2016 13:26:20 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: fergusond Date: 31-Oct-2016 13:26:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.290	4.279	0.011	0	117487	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.272	-0.001	97	345389	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.375	-0.002	89	83970	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.715	12.723	-0.008	94	127672	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.553	6.548	0.005	94	84598	50.0	51.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.919	-0.001	0	116762	50.0	48.9	
$ 7 Toluene-d8 (Surr)	98	8.919	8.921	-0.002	95	344303	50.0	54.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.559	11.561	-0.002	86	134895	50.0	52.6	
11 Dichlorodifluoromethane	85	1.613	1.608	0.005	36	105590	50.0	51.4	
12 Chloromethane	50	1.771	1.767	0.004	99	217353	50.0	54.5	
13 Vinyl chloride	62	1.905	1.900	0.005	98	143542	50.0	54.4	
14 Butadiene	39	1.941	1.937	0.004	98	199692	50.0	51.1	
15 Bromomethane	94	2.240	2.229	0.011	90	35142	50.0	53.3	
16 Chloroethane	64	2.386	2.375	0.011	98	65331	50.0	55.5	
18 Trichlorofluoromethane	101	2.678	2.655	0.023	54	114865	50.0	51.5	
17 Dichlorofluoromethane	67	2.659	2.661	-0.002	96	141876	50.0	50.4	
20 Ethyl ether	59	3.055	3.044	0.011	96	116472	50.0	52.5	
21 Acrolein	56	3.231	3.227	0.004	98	81770	150.0	156.9	
22 1,1-Dichloroethene	96	3.335	3.330	0.005	94	105696	50.0	60.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.401	3.409	-0.008	93	98461	50.0	51.8	
24 Acetone	43	3.450	3.440	0.010	99	92975	100.0	104.6	
25 Iodomethane	142	3.541	3.525	0.016	96	141420	50.0	54.5	
26 Carbon disulfide	76	3.620	3.616	0.004	99	213438	50.0	46.7	
28 3-Chloro-1-propene	76	3.912	3.908	0.004	88	55541	50.0	51.2	
30 Methyl acetate	43	3.937	3.932	0.005	100	591844	250.0	257.2	
31 Methylene Chloride	84	4.131	4.121	0.010	92	107646	50.0	49.3	
32 2-Methyl-2-propanol	59	4.411	4.401	0.010	89	67573	500.0	468.3	
33 Acrylonitrile	53	4.521	4.516	0.005	98	587548	500.0	534.2	
34 trans-1,2-Dichloroethene	96	4.557	4.553	0.004	92	100743	50.0	53.0	
35 Methyl tert-butyl ether	73	4.576	4.565	0.011	94	258152	50.0	52.3	
36 Hexane	57	4.971	4.973	-0.002	97	214940	50.0	54.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.190	5.186	0.004	96	240647	50.0	56.7	
38 Vinyl acetate	43	5.239	5.234	0.005	97	250768	50.0	53.2	
44 2,2-Dichloropropane	97	5.932	5.922	0.010	59	28928	50.0	81.8	
45 cis-1,2-Dichloroethene	96	5.932	5.934	-0.002	85	361058	50.0	172.0	
46 2-Butanone (MEK)	43	5.956	5.952	0.004	97	152218	100.0	107.5	
49 Chlorobromomethane	128	6.224	6.220	0.004	86	47750	50.0	53.9	
51 Tetrahydrofuran	42	6.242	6.238	0.004	94	86411	100.0	89.1	
52 Chloroform	83	6.364	6.360	0.004	96	177398	50.0	52.6	
53 1,1,1-Trichloroethane	97	6.528	6.524	0.004	95	145713	50.0	61.4	
54 Cyclohexane	56	6.595	6.591	0.004	95	274816	50.0	52.7	
56 Carbon tetrachloride	117	6.699	6.700	-0.001	93	104842	50.0	52.8	
55 1,1-Dichloropropene	75	6.711	6.713	-0.001	87	144921	50.0	51.7	
57 Isobutyl alcohol	41	6.918	6.919	-0.001	44	74250	1250.0	1111.3	
58 Benzene	78	6.924	6.925	-0.001	94	424175	50.0	52.6	
59 1,2-Dichloroethane	62	7.003	7.005	-0.002	95	147420	50.0	48.6	
62 n-Heptane	43	7.289	7.290	-0.001	97	200122	50.0	51.1	
64 Trichloroethene	130	7.660	7.662	-0.002	95	244077	50.0	126.4	
66 Methylcyclohexane	83	7.897	7.893	0.004	97	177371	50.0	53.5	
67 1,2-Dichloropropane	63	7.934	7.935	-0.001	94	121444	50.0	50.1	
68 Dibromomethane	93	8.019	8.014	0.005	93	50782	50.0	49.5	
70 1,4-Dioxane	88	8.025	8.014	0.011	45	18432	1000.0	960.0	
71 Dichlorobromomethane	83	8.213	8.215	-0.002	97	105878	50.0	47.6	
74 cis-1,3-Dichloropropene	75	8.664	8.659	0.005	87	127230	50.0	48.3	
75 4-Methyl-2-pentanone (MIBK	43	8.816	8.817	-0.001	99	270248	100.0	105.0	
76 Toluene	91	8.992	8.988	0.004	97	421454	50.0	54.7	
77 trans-1,3-Dichloropropene	75	9.242	9.243	-0.001	96	101085	50.0	51.7	
78 Ethyl methacrylate	69	9.302	9.298	0.004	93	106274	50.0	50.7	
79 1,1,2-Trichloroethane	97	9.436	9.432	0.004	93	80266	50.0	55.4	
80 Tetrachloroethene	164	9.503	9.505	-0.002	97	154877	50.0	102.1	
81 1,3-Dichloropropane	76	9.588	9.590	-0.002	98	150145	50.0	53.8	
82 2-Hexanone	43	9.649	9.645	0.004	98	191023	100.0	97.9	
84 Chlorodibromomethane	129	9.807	9.809	-0.002	91	63931	50.0	48.6	
85 Ethylene Dibromide	107	9.917	9.918	-0.001	98	79502	50.0	52.9	
86 3-Chlorobenzotrifluoride	180	10.373	10.381	-0.008	88	162165	50.0	56.3	
87 Chlorobenzene	112	10.404	10.405	-0.001	91	276744	50.0	54.7	
88 4-Chlorobenzotrifluoride	180	10.464	10.466	-0.002	95	149964	50.0	56.5	
89 1,1,1,2-Tetrachloroethane	131	10.495	10.503	-0.007	90	82303	50.0	54.2	
90 Ethylbenzene	106	10.501	10.503	-0.001	98	156786	50.0	55.1	
91 m-Xylene & p-Xylene	106	10.635	10.636	-0.001	0	194704	50.0	54.8	
92 o-Xylene	106	11.018	11.020	-0.002	97	191856	50.0	56.7	
93 Styrene	104	11.036	11.038	-0.002	94	315045	50.0	55.1	
94 Bromoform	173	11.225	11.220	0.005	95	35697	50.0	45.0	
96 2-Chlorobenzotrifluoride	180	11.286	11.287	-0.001	97	156845	50.0	56.0	
97 Isopropylbenzene	105	11.383	11.385	-0.002	97	478831	50.0	55.2	
99 1,1,2,2-Tetrachloroethane	83	11.699	11.695	0.004	74	114394	50.0	55.8	
100 Bromobenzene	156	11.699	11.701	-0.002	95	113900	50.0	52.8	
102 trans-1,4-Dichloro-2-buten	53	11.736	11.737	-0.001	70	26108	50.0	35.1	
101 1,2,3-Trichloropropane	110	11.754	11.756	-0.002	91	35772	50.0	50.8	
103 N-Propylbenzene	120	11.797	11.804	-0.007	99	131780	50.0	52.8	
104 2-Chlorotoluene	126	11.888	11.890	-0.002	95	109664	50.0	51.3	
105 3-Chlorotoluene	126	11.955	11.956	-0.001	96	122796	50.0	53.9	
106 1,3,5-Trimethylbenzene	105	11.985	11.987	-0.002	94	392291	50.0	52.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 4-Chlorotoluene	126	12.016	12.017	-0.001	98	115345	50.0	50.4	
108 tert-Butylbenzene	119	12.295	12.297	-0.002	96	321273	50.0	52.3	
110 1,2,4-Trimethylbenzene	105	12.356	12.358	-0.002	99	396764	50.0	51.9	
111 1,2-dichloro-4-(trifluorom	214	12.405	12.401	0.004	98	113515	50.0	53.5	
112 sec-Butylbenzene	105	12.521	12.522	-0.001	95	454402	50.0	51.2	
113 1,3-Dichlorobenzene	146	12.642	12.644	-0.002	97	210941	50.0	51.4	
114 4-Isopropyltoluene	119	12.679	12.680	-0.001	97	378663	50.0	51.3	
115 1,4-Dichlorobenzene	146	12.746	12.747	-0.001	93	212927	50.0	50.8	
116 2,4-Dichloro-1-(triflourom	214	12.770	12.772	-0.002	95	103237	50.0	51.3	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.814	-0.001	0	120668	50.0	52.6	
120 n-Butylbenzene	91	13.086	13.088	-0.002	98	324027	50.0	51.1	
121 1,2-Dichlorobenzene	146	13.098	13.100	-0.002	95	195259	50.0	51.7	
122 1,2-Dibromo-3-Chloropropan	75	13.895	13.891	0.004	70	15899	50.0	46.6	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.035	14.031	0.004	0	406772	150.0	153.8	
125 2,3- & 3,4- Dichlorotoluen	125	14.449	14.451	-0.002	0	264155	100.0	102.6	
126 1,2,4-Trichlorobenzene	180	14.717	14.718	-0.001	94	91996	50.0	49.3	
127 Hexachlorobutadiene	225	14.857	14.858	-0.001	96	39537	50.0	49.5	
128 Naphthalene	128	14.978	14.986	-0.008	98	225953	50.0	48.7	
129 1,2,3-Trichlorobenzene	180	15.203	15.205	-0.002	94	70603	50.0	48.7	
131 2,4,5-Trichlorotoluene	159	15.982	15.984	-0.002	0	23508	50.0	51.0	
130 2,3,6-Trichlorotoluene	159	16.079	16.081	-0.002	95	23692	50.0	49.8	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	225.0	
S 133 Xylenes, Total	106				0		100.0	111.6	
S 135 1,3-Dichloropropene, Total	1				0		100.0	100.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWacro2ndRe_00008	Amount Added:	6.00	Units: uL		
VOA8260VOA2ND_00211	Amount Added:	2.00	Units: uL		
voaWva2ndRest_00008	Amount Added:	2.00	Units: uL		
voaWEE1st Res_00001	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00014	Amount Added:	2.00	Units: uL		
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent	

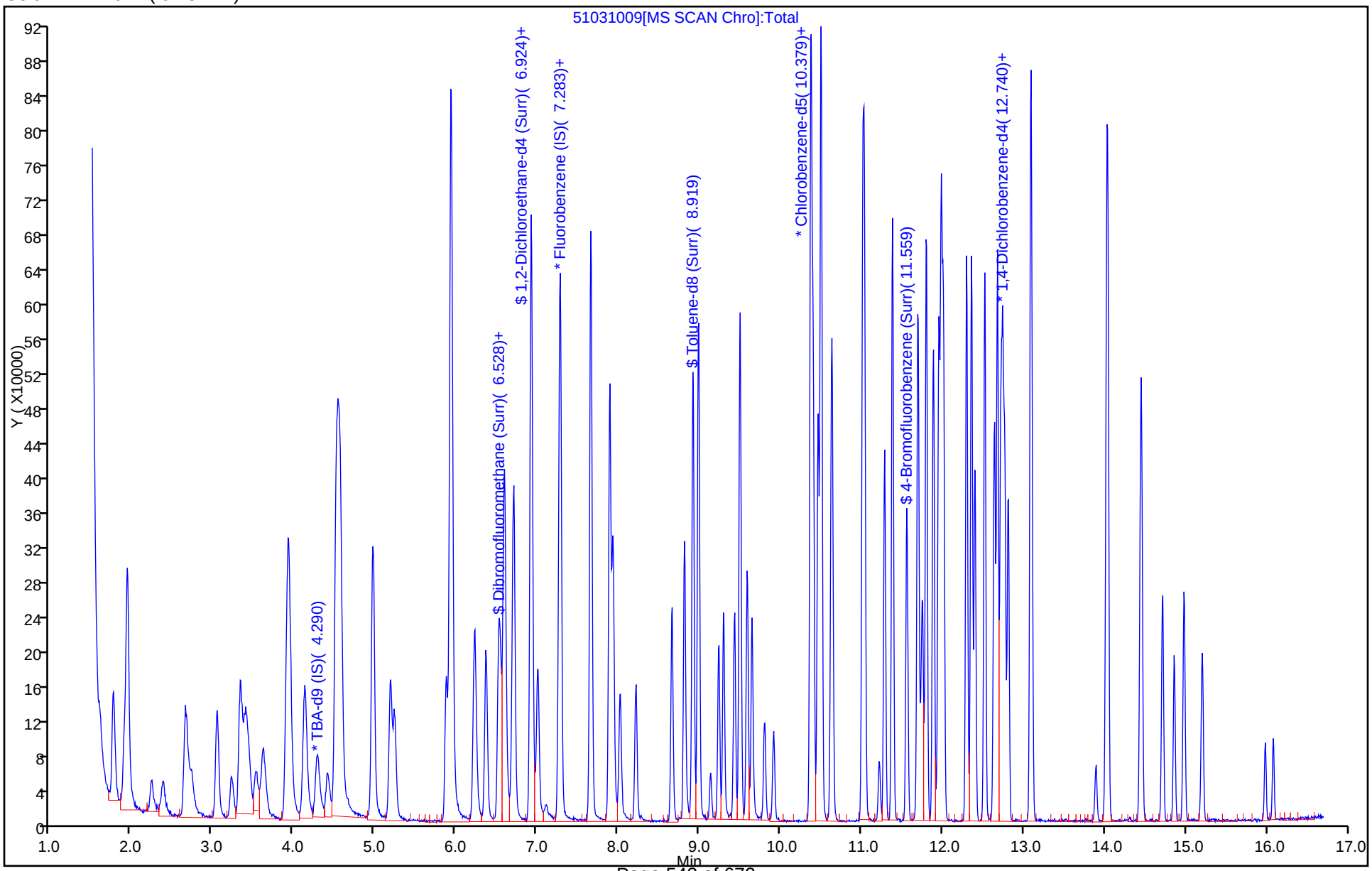
Report Date: 31-Oct-2016 13:26:20 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031009.D

Injection Date:	31-Oct-2016 12:56:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-C-11 MS			Worklist Smp#:	9
Client ID:	HD-CW-17-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031009.D
Lims ID: 180-60202-C-11 MS
Client ID: HD-CW-17-0/1-0
Sample Type: MS
Inject. Date: 31-Oct-2016 12:56:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0014116-009
Misc. Info.: 180-60202-C-11 MS, 2x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2016 13:26:20 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: fergusond Date: 31-Oct-2016 13:26:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.2	102.39
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.9	97.89
$ 7 Toluene-d8 (Surr)	50.0	54.3	108.65
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.6	105.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-17-0/1-0 MSD | Lab Sample ID: 180-60202-11 MSD

Matrix: Water | Lab File ID: 51031010.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 13:20

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	22.1		2.0	0.46
75-01-4	Vinyl chloride	22.2		2.0	0.63
74-83-9	Bromomethane	22.6		2.0	0.72
75-00-3	Chloroethane	22.7		2.0	0.52
75-35-4	1,1-Dichloroethene	25.0		2.0	0.57
67-64-1	Acetone	45.3		10	5.0
75-15-0	Carbon disulfide	19.1		2.0	0.37
75-09-2	Methylene Chloride	20.2		2.0	0.72
156-60-5	trans-1,2-Dichloroethene	22.6		2.0	0.57
1634-04-4	Methyl tert-butyl ether	21.5		2.0	0.49
75-34-3	1,1-Dichloroethane	23.5		2.0	0.47
156-59-2	cis-1,2-Dichloroethene	70.2		2.0	0.57
74-97-5	Bromochloromethane	21.8		2.0	0.75
78-93-3	2-Butanone (MEK)	43.2		10	2.3
67-66-3	Chloroform	21.2		2.0	0.55
71-55-6	1,1,1-Trichloroethane	25.3		2.0	0.44
56-23-5	Carbon tetrachloride	21.4		2.0	0.49
71-43-2	Benzene	22.0		2.0	0.51
107-06-2	1,2-Dichloroethane	20.2		2.0	0.49
79-01-6	Trichloroethene	53.7		2.0	0.52
78-87-5	1,2-Dichloropropane	21.3		2.0	0.45
75-27-4	Bromodichloromethane	19.3		2.0	0.47
10061-01-5	cis-1,3-Dichloropropene	20.3		2.0	0.41
108-10-1	4-Methyl-2-pentanone (MIBK)	46.3		10	1.2
108-88-3	Toluene	23.0		2.0	0.56
10061-02-6	trans-1,3-Dichloropropene	22.0		2.0	0.48
79-00-5	1,1,2-Trichloroethane	22.7		2.0	0.70
127-18-4	Tetrachloroethene	41.1		2.0	0.54
591-78-6	2-Hexanone	43.8		10	1.5
124-48-1	Dibromochloromethane	20.4		2.0	0.79
106-93-4	1,2-Dibromoethane (EDB)	22.7		2.0	0.58
108-90-7	Chlorobenzene	23.0		2.0	0.63
630-20-6	1,1,1,2-Tetrachloroethane	22.6		2.0	0.39
100-41-4	Ethylbenzene	22.8		2.0	0.55
1330-20-7	Xylenes, Total	46.1		4.0	0.97
100-42-5	Styrene	23.1		2.0	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-17-0/1-0 MSD | Lab Sample ID: 180-60202-11 MSD

Matrix: Water | Lab File ID: 51031010.D

Analysis Method: 8260C | Date Collected: 10/26/2016 07:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2016 13:20

Soil Aliquot Vol: | Dilution Factor: 2

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

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

Analysis Batch No.: 192841 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	19.5		2.0	0.59
79-34-5	1,1,2,2-Tetrachloroethane	24.0		2.0	0.69
107-13-1	Acrylonitrile	219		40	5.5
123-91-1	1,4-Dioxane	392	J	400	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		72-134
2037-26-5	Toluene-d8 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	102		72-120
1868-53-7	Dibromofluoromethane (Surr)	99		77-127

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031010.D
Lims ID: 180-60202-A-11 MSD
Client ID: HD-CW-17-0/1-0
Sample Type: MSD
Inject. Date: 31-Oct-2016 13:20:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0014116-010
Misc. Info.: 180-60202-A-11 MSD, 2x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2016 12:05:46 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: fergusond Date: 31-Oct-2016 14:17:48

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.284	4.279	0.005	0	120569	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.271	7.272	-0.001	97	346392	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.373	10.375	-0.002	90	84585	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.722	12.723	-0.001	94	127079	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.541	6.548	-0.007	93	81709	50.0	49.3	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.924	6.919	0.005	0	119771	50.0	50.1	
$	7 Toluene-d8 (Surr)	98	8.920	8.921	-0.001	95	338177	50.0	53.0	
$	8 4-Bromofluorobenzene (Surr	95	11.560	11.561	-0.001	86	131793	50.0	51.1	
	11 Dichlorodifluoromethane	85	1.601	1.608	-0.007	98	112993	50.0	54.9	
	12 Chloromethane	50	1.765	1.767	-0.002	99	221118	50.0	55.3	
	13 Vinyl chloride	62	1.905	1.900	0.005	97	146717	50.0	55.4	
	14 Butadiene	39	1.936	1.937	-0.001	98	205448	50.0	52.5	
	15 Bromomethane	94	2.240	2.229	0.011	88	37354	50.0	56.5	
	16 Chloroethane	64	2.386	2.375	0.011	98	66946	50.0	56.7	
	18 Trichlorofluoromethane	101	2.678	2.655	0.023	65	122430	50.0	54.7	
	17 Dichlorofluoromethane	67	2.660	2.661	-0.001	96	150408	50.0	53.3	
	20 Ethyl ether	59	3.043	3.044	-0.001	98	120379	50.0	54.1	
	21 Acrolein	56	3.232	3.227	0.005	99	80679	150.0	154.3	
	22 1,1-Dichloroethene	96	3.335	3.330	0.005	92	109468	50.0	62.5	
	23 1,1,2-Trichloro-1,2,2-trif	101	3.396	3.409	-0.013	93	105855	50.0	55.5	
	24 Acetone	43	3.444	3.440	0.004	98	100942	100.0	113.2	
	25 Iodomethane	142	3.530	3.525	0.005	97	144840	50.0	55.6	
	26 Carbon disulfide	76	3.621	3.616	0.005	100	218273	50.0	47.6	
	28 3-Chloro-1-propene	76	3.907	3.908	-0.001	88	54389	50.0	50.0	
	30 Methyl acetate	43	3.937	3.932	0.005	100	600330	250.0	260.2	
	31 Methylene Chloride	84	4.132	4.121	0.011	92	110717	50.0	50.5	
	32 2-Methyl-2-propanol	59	4.412	4.401	0.011	89	76611	500.0	517.3	
	33 Acrylonitrile	53	4.521	4.516	0.005	99	603793	500.0	547.4	
	34 trans-1,2-Dichloroethene	96	4.552	4.553	-0.001	92	107545	50.0	56.4	
	35 Methyl tert-butyl ether	73	4.570	4.565	0.005	94	266011	50.0	53.7	
	36 Hexane	57	4.971	4.973	-0.002	97	221036	50.0	55.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.184	5.186	-0.002	97	249802	50.0	58.7	
38 Vinyl acetate	43	5.239	5.234	0.005	97	254610	50.0	53.9	
44 2,2-Dichloropropane	97	5.933	5.922	0.011	39	27468	50.0	77.4	
45 cis-1,2-Dichloroethene	96	5.933	5.934	-0.001	86	369343	50.0	175.4	
46 2-Butanone (MEK)	43	5.945	5.952	-0.007	97	153259	100.0	107.9	
49 Chlorobromomethane	128	6.218	6.220	-0.002	87	48507	50.0	54.6	
51 Tetrahydrofuran	42	6.243	6.238	0.005	94	102024	100.0	104.9	
52 Chloroform	83	6.371	6.360	0.011	97	179713	50.0	53.1	
53 1,1,1-Trichloroethane	97	6.523	6.524	-0.001	95	150314	50.0	63.1	
54 Cyclohexane	56	6.596	6.591	0.005	95	285851	50.0	54.7	
56 Carbon tetrachloride	117	6.693	6.700	-0.007	90	106490	50.0	53.4	
55 1,1-Dichloropropene	75	6.711	6.713	-0.001	88	151238	50.0	53.8	
57 Isobutyl alcohol	41	6.918	6.919	-0.001	62	82197	1250.0	1226.6	
58 Benzene	78	6.930	6.925	0.005	95	444919	50.0	55.0	
59 1,2-Dichloroethane	62	7.003	7.005	-0.002	95	153972	50.0	50.6	
62 n-Heptane	43	7.289	7.290	-0.001	97	215231	50.0	54.9	
64 Trichloroethene	130	7.660	7.662	-0.002	96	260202	50.0	134.3	
66 Methylcyclohexane	83	7.891	7.893	-0.002	96	184365	50.0	55.4	
67 1,2-Dichloropropane	63	7.934	7.935	-0.001	95	129690	50.0	53.4	
68 Dibromomethane	93	8.019	8.014	0.005	95	53228	50.0	51.7	
70 1,4-Dioxane	88	8.019	8.014	0.005	44	18864	1000.0	979.7	
71 Dichlorobromomethane	83	8.220	8.215	0.005	95	107704	50.0	48.3	
74 cis-1,3-Dichloropropene	75	8.658	8.659	-0.001	87	133823	50.0	50.7	
75 4-Methyl-2-pentanone (MIBK	43	8.816	8.817	-0.001	99	299781	100.0	115.7	
76 Toluene	91	8.993	8.988	0.005	98	446129	50.0	57.5	
77 trans-1,3-Dichloropropene	75	9.236	9.243	-0.007	96	108164	50.0	55.0	
78 Ethyl methacrylate	69	9.297	9.298	-0.001	93	121750	50.0	57.7	
79 1,1,2-Trichloroethane	97	9.431	9.432	-0.001	95	82855	50.0	56.8	
80 Tetrachloroethene	164	9.504	9.505	-0.001	95	157130	50.0	102.8	
81 1,3-Dichloropropane	76	9.589	9.590	-0.001	97	161499	50.0	57.4	
82 2-Hexanone	43	9.650	9.645	0.005	97	215276	100.0	109.5	
84 Chlorodibromomethane	129	9.808	9.809	-0.001	90	67760	50.0	51.1	
85 Ethylene Dibromide	107	9.917	9.918	-0.001	99	85983	50.0	56.8	
86 3-Chlorobenzotrifluoride	180	10.380	10.381	-0.001	89	164582	50.0	56.8	
87 Chlorobenzene	112	10.404	10.405	-0.001	91	292574	50.0	57.5	
88 4-Chlorobenzotrifluoride	180	10.465	10.466	-0.001	95	155848	50.0	58.2	
89 1,1,1,2-Tetrachloroethane	131	10.501	10.503	-0.001	90	86562	50.0	56.6	
90 Ethylbenzene	106	10.501	10.503	-0.001	99	163806	50.0	57.1	
91 m-Xylene & p-Xylene	106	10.635	10.636	-0.001	0	206402	50.0	57.7	
92 o-Xylene	106	11.012	11.020	-0.008	97	195829	50.0	57.5	
93 Styrene	104	11.037	11.038	-0.001	94	332606	50.0	57.7	
94 Bromoform	173	11.219	11.220	-0.001	96	38971	50.0	48.7	
96 2-Chlorobenzotrifluoride	180	11.286	11.287	-0.001	97	161897	50.0	57.4	
97 Isopropylbenzene	105	11.383	11.385	-0.002	97	506343	50.0	57.9	
99 1,1,2,2-Tetrachloroethane	83	11.700	11.695	0.005	75	123816	50.0	60.0	
100 Bromobenzene	156	11.700	11.701	-0.001	95	120807	50.0	56.3	
102 trans-1,4-Dichloro-2-buten	53	11.736	11.737	-0.001	65	30160	50.0	40.8	
101 1,2,3-Trichloropropane	110	11.754	11.756	-0.002	90	38832	50.0	55.4	
103 N-Propylbenzene	120	11.803	11.804	-0.001	99	134857	50.0	54.2	
104 2-Chlorotoluene	126	11.888	11.890	-0.002	95	117016	50.0	55.0	
105 3-Chlorotoluene	126	11.955	11.956	-0.001	97	123261	50.0	54.4	
106 1,3,5-Trimethylbenzene	105	11.986	11.987	-0.001	94	409054	50.0	54.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 4-Chlorotoluene	126	12.010	12.017	-0.007	99	118555	50.0	52.1	
108 tert-Butylbenzene	119	12.296	12.297	-0.001	96	330298	50.0	54.1	
110 1,2,4-Trimethylbenzene	105	12.357	12.358	-0.001	98	409742	50.0	53.8	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.401	-0.002	98	111555	50.0	52.8	
112 sec-Butylbenzene	105	12.521	12.522	-0.001	95	475281	50.0	53.8	
113 1,3-Dichlorobenzene	146	12.643	12.644	-0.001	97	221046	50.0	54.1	
114 4-Isopropyltoluene	119	12.679	12.680	-0.001	97	396385	50.0	54.0	
115 1,4-Dichlorobenzene	146	12.746	12.747	-0.001	94	225677	50.0	54.1	
116 2,4-Dichloro-1-(triflourom	214	12.770	12.772	-0.002	94	103864	50.0	51.8	
118 2,5-Dichlorobenzotrifluori	214	12.813	12.814	-0.001	0	118984	50.0	52.1	
120 n-Butylbenzene	91	13.087	13.088	-0.001	98	325794	50.0	51.6	
121 1,2-Dichlorobenzene	146	13.099	13.100	-0.001	96	207899	50.0	55.3	
122 1,2-Dibromo-3-Chloropropan	75	13.884	13.891	-0.007	73	17821	50.0	52.5	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.030	14.031	-0.001	0	416321	150.0	158.2	
125 2,3- & 3,4- Dichlorotoluen	125	14.449	14.451	-0.002	0	264654	100.0	103.2	
126 1,2,4-Trichlorobenzene	180	14.717	14.718	-0.001	94	95193	50.0	51.3	
127 Hexachlorobutadiene	225	14.863	14.858	0.005	97	41142	50.0	51.7	
128 Naphthalene	128	14.979	14.986	-0.007	98	255914	50.0	55.5	
129 1,2,3-Trichlorobenzene	180	15.204	15.205	-0.001	95	76960	50.0	53.3	
131 2,4,5-Trichlorotoluene	159	15.982	15.984	-0.002	0	24855	50.0	54.2	
130 2,3,6-Trichlorotoluene	159	16.080	16.081	-0.001	94	24552	50.0	51.8	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	231.8	
S 133 Xylenes, Total	106				0		100.0	115.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	105.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWva2ndRest_00008	Amount Added:	2.00	Units: uL	
voaWEE1st Res_00001	Amount Added:	2.00	Units: uL	
voaWKet2ndRes_00014	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00211	Amount Added:	2.00	Units: uL	
voaWacro2ndRe_00008	Amount Added:	6.00	Units: uL	
VOA8260SURR_00060	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00062	Amount Added:	2.00	Units: uL	Run Reagent

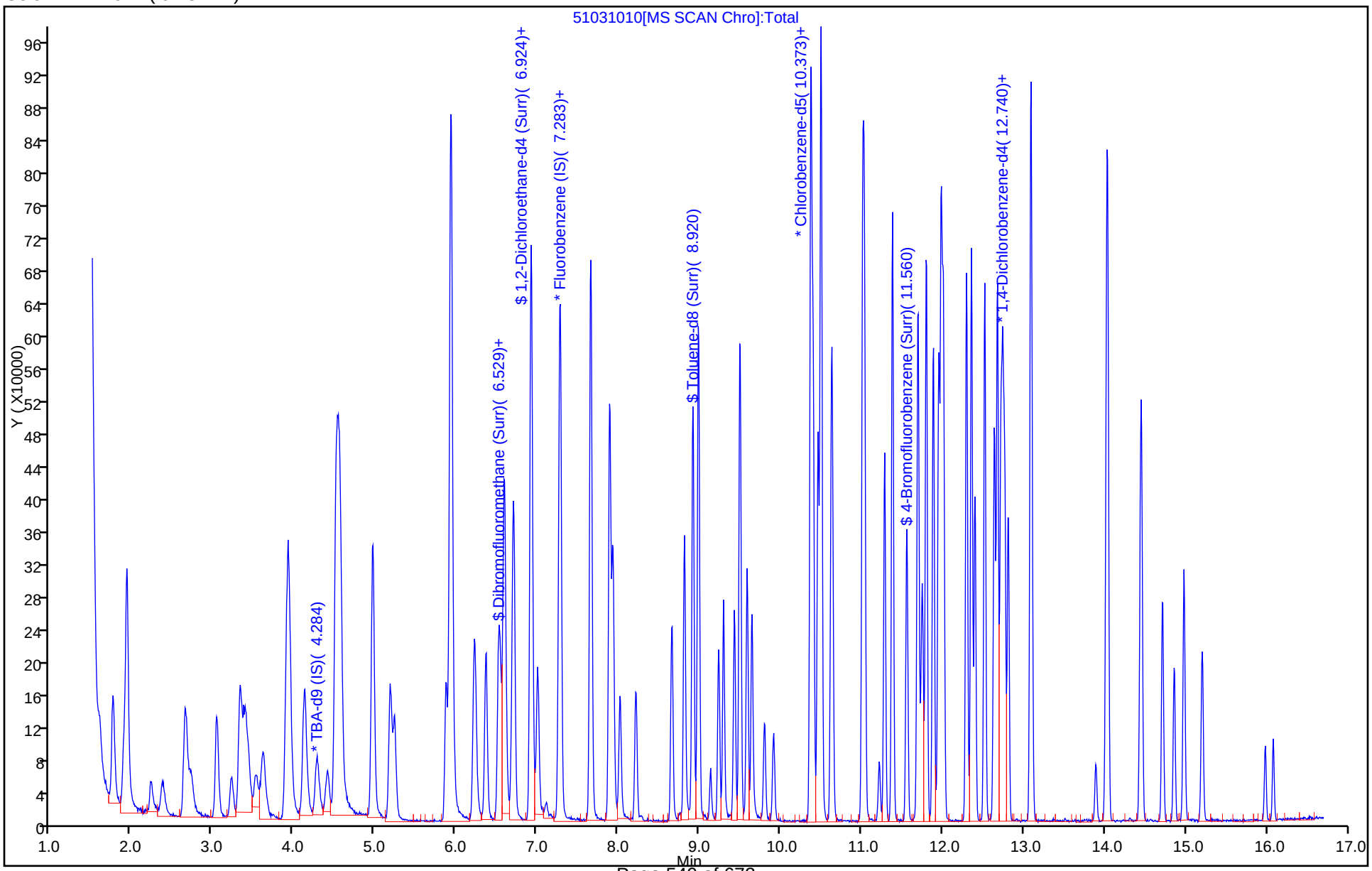
Report Date: 31-Oct-2016 14:17:49 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031010.D

Injection Date:	31-Oct-2016 13:20:30	Instrument ID:	CHHP5	Operator ID:	001562
Lims ID:	180-60202-A-11 MSD			Worklist Smp#:	10
Client ID:	HD-CW-17-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\51031010.D
Lims ID: 180-60202-A-11 MSD
Client ID: HD-CW-17-0/1-0
Sample Type: MSD
Inject. Date: 31-Oct-2016 13:20:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0014116-010
Misc. Info.: 180-60202-A-11 MSD, 2x
Operator ID: 001562 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161031-14116.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2016 12:05:46 Calib Date: 22-Oct-2016 17:46:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20161022-13995.b\51022010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: fergusond Date: 31-Oct-2016 14:17:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.3	98.60
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.1	100.12
$ 7 Toluene-d8 (Surr)	50.0	53.0	105.94
$ 8 4-Bromofluorobenzene (Surr)	50.0	51.1	102.12

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Instrument ID: CHHP5 Start Date: 10/22/2016 12:45

Analysis Batch Number: 192047 End Date: 10/22/2016 17:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-192047/1		10/22/2016 12:45	1	51022001.D	DB-624 0.18(mm)
IC 180-192047/3		10/22/2016 14:57	1	51022003.D	DB-624 0.18(mm)
IC 180-192047/4		10/22/2016 15:21	1	51022004.D	DB-624 0.18(mm)
ICIS 180-192047/5		10/22/2016 15:45	1	51022005.D	DB-624 0.18(mm)
IC 180-192047/6		10/22/2016 16:09	1	51022006.D	DB-624 0.18(mm)
IC 180-192047/7		10/22/2016 16:33	1	51022007.D	DB-624 0.18(mm)
IC 180-192047/8		10/22/2016 16:57	1	51022008.D	DB-624 0.18(mm)
IC 180-192047/9		10/22/2016 17:22	1	51022009.D	DB-624 0.18(mm)
IC 180-192047/10		10/22/2016 17:46	1	51022010.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Instrument ID: CHHP5 Start Date: 10/31/2016 09:32

Analysis Batch Number: 192841 End Date: 10/31/2016 21:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-192841/4		10/31/2016 09:32	1	51031004.D	DB-624 0.18(mm)
CCVIS 180-192841/2		10/31/2016 10:11	1	51031002.D	DB-624 0.18(mm)
ZZZZZ		10/31/2016 10:45	1		DB-624 0.18(mm)
MB 180-192841/5		10/31/2016 11:09	1	51031005.D	DB-624 0.18(mm)
180-60202-11		10/31/2016 11:44	2	51031006.D	DB-624 0.18(mm)
180-60202-18		10/31/2016 12:08	1	51031007.D	DB-624 0.18(mm)
LCS 180-192841/8		10/31/2016 12:32	1	51031008.D	DB-624 0.18(mm)
180-60202-11 MS		10/31/2016 12:56	2	51031009.D	DB-624 0.18(mm)
180-60202-11 MSD		10/31/2016 13:20	2	51031010.D	DB-624 0.18(mm)
ZZZZZ		10/31/2016 14:33	1		DB-624 0.18(mm)
ZZZZZ		10/31/2016 14:57	1		DB-624 0.18(mm)
ZZZZZ		10/31/2016 15:21	1		DB-624 0.18(mm)
ZZZZZ		10/31/2016 15:45	1		DB-624 0.18(mm)
ZZZZZ		10/31/2016 16:09	1		DB-624 0.18(mm)
ZZZZZ		10/31/2016 16:33	1		DB-624 0.18(mm)
180-60202-3		10/31/2016 16:57	1	51031019.D	DB-624 0.18(mm)
180-60202-4		10/31/2016 17:22	1	51031020.D	DB-624 0.18(mm)
180-60202-1		10/31/2016 18:34	2	51031023.D	DB-624 0.18(mm)
180-60202-2 DL		10/31/2016 19:22	20	51031025.D	DB-624 0.18(mm)
180-60202-7		10/31/2016 19:46	12.5	51031026.D	DB-624 0.18(mm)
180-60202-8		10/31/2016 20:10	50	51031027.D	DB-624 0.18(mm)
180-60202-9		10/31/2016 20:34	20	51031028.D	DB-624 0.18(mm)
180-60202-10		10/31/2016 20:59	500	51031029.D	DB-624 0.18(mm)
180-60202-2		10/31/2016 21:23	2	51031030.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Instrument ID: CHHP5 Start Date: 11/01/2016 10:01

Analysis Batch Number: 192920 End Date: 11/01/2016 19:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-192920/5		11/01/2016 10:01	1	51101005.D	DB-624 0.18(mm)
CCVIS 180-192920/2		11/01/2016 10:35	1	51101002.D	DB-624 0.18(mm)
ZZZZZ		11/01/2016 11:11	1		DB-624 0.18(mm)
MB 180-192920/6		11/01/2016 11:35	1	51101006.D	DB-624 0.18(mm)
ZZZZZ		11/01/2016 12:33	1		DB-624 0.18(mm)
LCS 180-192920/10		11/01/2016 13:25	1	51101010.D	DB-624 0.18(mm)
180-60202-4 DL		11/01/2016 15:02	2	51101014.D	DB-624 0.18(mm)
180-60202-5		11/01/2016 15:26	1	51101015.D	DB-624 0.18(mm)
180-60202-6		11/01/2016 15:50	1	51101016.D	DB-624 0.18(mm)
180-60202-12		11/01/2016 16:15	2	51101017.D	DB-624 0.18(mm)
180-60202-13		11/01/2016 16:39	25	51101018.D	DB-624 0.18(mm)
180-60202-14		11/01/2016 17:03	1	51101019.D	DB-624 0.18(mm)
180-60202-15		11/01/2016 17:27	1	51101020.D	DB-624 0.18(mm)
180-60202-16		11/01/2016 18:15	1	51101022.D	DB-624 0.18(mm)
180-60202-17		11/01/2016 18:39	1	51101023.D	DB-624 0.18(mm)
ZZZZZ		11/01/2016 19:03	1		DB-624 0.18(mm)
ZZZZZ		11/01/2016 19:28	250		DB-624 0.18(mm)

Method 8270D Low Level

Semivolatile Organic Compounds (GC/MS) Low Level by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rxi-5SilMS ID: 0.32(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHL #
HD-CW-15A-0/1-0	180-60202-10	38	45	41	36	56	62
	MB 180-192646/1-A	64	62	60	58	69	60
	LCS 180-192646/2-A	75	70	67	62	74	66
	LCSD 180-192646/3-A	74	68	69	65	76	67

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	20-100
PHL = Phenol-d5 (Surr)	21-100
NBZ = Nitrobenzene-d5 (Surr)	25-105
FBP = 2-Fluorobiphenyl	24-100
TBP = 2,4,6-Tribromophenol (Surr)	22-118
TPHL = Terphenyl-d14 (Surr)	20-124

Column to be used to flag recovery values

FORM II 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Matrix: Water Level: Low Lab File ID: D10310018.D

Lab ID: LCS 180-192646/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	20.0	14.9	74	25-106	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Matrix: Water Level: Low Lab File ID: D10310019.D

Lab ID: LCSD 180-192646/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	20.0	14.9	74	0	16	25-106	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab File ID: D10310017.D Lab Sample ID: MB 180-192646/1-A

Matrix: Water Date Extracted: 10/28/2016 07:25

Instrument ID: CH732 Date Analyzed: 10/31/2016 14:40

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-192646/2-A	D10310018.D	10/31/2016 15:07
	LCSD 180-192646/3-A	D10310019.D	10/31/2016 15:34
HD-CW-15A-0/1-0	180-60202-10	D10310020.D	10/31/2016 16:01

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab File ID: D09280002.D DFTPP Injection Date: 09/28/2016

Instrument ID: CH732 DFTPP Injection Time: 05:12

Analysis Batch No.: 189377

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	36.2	
68	Less than 2.0 % of mass 69	0.4	(1.2) 1
69	Mass 69 relative abundance	35.5	
70	Less than 2.0 % of mass 69	0.3	(0.7) 1
127	40.0 - 60.0 % of mass 198	45.2	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.8	
275	10.0 - 30.0 % of mass 198	20.2	
365	Greater than 1.0 % of mass 198	1.8	
441	Present but less than mass 443	6.6	(75.3) 3
442	Greater than 40.0 % of mass 198	44.5	
443	17.0 - 23.0 % of mass 442	8.8	(19.8) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

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 180-189377/3	D09280003.D	09/28/2016	05:28
	IC 180-189377/4	D09280004.D	09/28/2016	05:55
	IC 180-189377/5	D09280005.D	09/28/2016	06:22
	ICIS 180-189377/6	D09280006.D	09/28/2016	06:49
	IC 180-189377/7	D09280007.D	09/28/2016	07:17
	IC 180-189377/8	D09280008.D	09/28/2016	07:44
	IC 180-189377/9	D09280009.D	09/28/2016	08:11
	IC 180-189377/10	D09280010.D	09/28/2016	08:39

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab File ID: D10310002.D DFTPP Injection Date: 10/31/2016

Instrument ID: CH732 DFTPP Injection Time: 07:46

Analysis Batch No.: 192814

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	35.6	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	35.1	
70	Less than 2.0 % of mass 69	0.1	(0.4) 1
127	40.0 - 60.0 % of mass 198	43.8	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.5	
275	10.0 - 30.0 % of mass 198	21.7	
365	Greater than 1.0 % of mass 198	1.8	
441	Present but less than mass 443	8.3	(74.7) 3
442	Greater than 40.0 % of mass 198	54.9	
443	17.0 - 23.0 % of mass 442	11.2	(20.3) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

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 180-192814/3	D10310003.D	10/31/2016	08:02
	MB 180-192646/1-A	D10310017.D	10/31/2016	14:40
	LCS 180-192646/2-A	D10310018.D	10/31/2016	15:07
	LCSD 180-192646/3-A	D10310019.D	10/31/2016	15:34
HD-CW-15A-0/1-0	180-60202-10	D10310020.D	10/31/2016	16:01

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Sample No.: CCVIS 180-192814/3 Date Analyzed: 10/31/2016 08:02

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): D10310003.D Heated Purge: (Y/N) N

Calibration ID: 32988

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		108752	6.21	467385	7.48	311996	9.18
UPPER LIMIT		217504	6.71	934770	7.98	623992	9.68
LOWER LIMIT		54376	5.71	233693	6.98	155998	8.68
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-192646/1-A		126111	6.20	571246	7.48	390197	9.19
LCS 180-192646/2-A		107553	6.20	476246	7.48	331852	9.19
LCSD 180-192646/3-A		110979	6.20	474827	7.48	318345	9.19
180-60202-10	HD-CW-15A-0/1-0	120457	6.19	530504	7.48	363787	9.19

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

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 8270D LL

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Sample No.: CCVIS 180-192814/3 Date Analyzed: 10/31/2016 08:02

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): D10310003.D Heated Purge: (Y/N) N

Calibration ID: 32988

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		579434	10.62	513091	14.36	430273	17.25
UPPER LIMIT		1158868	11.12	1026182	14.86	860546	17.75
LOWER LIMIT		289717	10.12	256546	13.86	215137	16.75
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-192646/1-A		720888	10.63	666553	14.40	530997	17.30
LCS 180-192646/2-A		615387	10.63	569576	14.40	509252	17.30
LCSD 180-192646/3-A		602601	10.63	530985	14.41	471085	17.30
180-60202-10	HD-CW-15A-0/1-0	662683	10.63	626944	14.40	493149	17.29

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

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 8270D LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: HD-CW-15A-0/1-0 | Lab Sample ID: 180-60202-10

Matrix: Water | Lab File ID: D10310020.D

Analysis Method: 8270D LL | Date Collected: 10/26/2016 07:00

Extract. Method: 3520C | Date Extracted: 10/28/2016 07:25

Sample wt/vol: 260(mL) | Date Analyzed: 10/31/2016 16:01

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 10

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 192814 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	120		19	0.50

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	36		24-100
367-12-4	2-Fluorophenol (Surr)	38		20-100
118-79-6	2,4,6-Tribromophenol (Surr)	56		22-118
4165-60-0	Nitrobenzene-d5 (Surr)	41		25-105
4165-62-2	Phenol-d5 (Surr)	45		21-100
1718-51-0	Terphenyl-d14 (Surr)	62		20-124

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310020.D
Lims ID: 180-60202-D-10-A
Client ID: HD-CW-15A-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 16:01:30 ALS Bottle#: 19 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 10.0000
Sample Info: 180-0014113-020
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Nov-2016 06:10:50 Calib Date: 31-Oct-2016 11:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310011.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: piccolinov Date: 01-Nov-2016 05:39:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.193	6.209	-0.016	96	120457	8.00	
* 2 Naphthalene-d8	136	7.475	7.480	-0.005	99	530504	8.00	
* 3 Acenaphthene-d10	164	9.185	9.185	0.000	92	363787	8.00	
* 4 Phenanthrene-d10	188	10.627	10.622	0.005	97	662683	8.00	
* 5 Chrysene-d12	240	14.399	14.372	0.027	97	626944	8.00	
* 6 Perylene-d12	264	17.289	17.262	0.027	96	493149	8.00	
$ 7 2-Fluorophenol	112	4.761	4.788	-0.027	93	22603	1.51	
$ 8 Phenol-d5	99	5.819	5.840	-0.021	98	40506	1.78	
$ 9 Nitrobenzene-d5	82	6.754	6.765	-0.011	89	35354	1.66	
$ 10 2-Fluorobiphenyl	172	8.517	8.517	0.000	99	82255	1.46	
$ 11 2,4,6-Tribromophenol	330	9.938	9.932	0.006	89	12379	2.24	
$ 12 Terphenyl-d14	244	12.561	12.534	0.027	99	160782	2.50	
13 1,4-Dioxane	88	1.604	1.636	-0.032	93	108670	24.5	

Reagents:

SVTAPITINTRNi_00012 Amount Added: 1.00 Units: uL Run Reagent

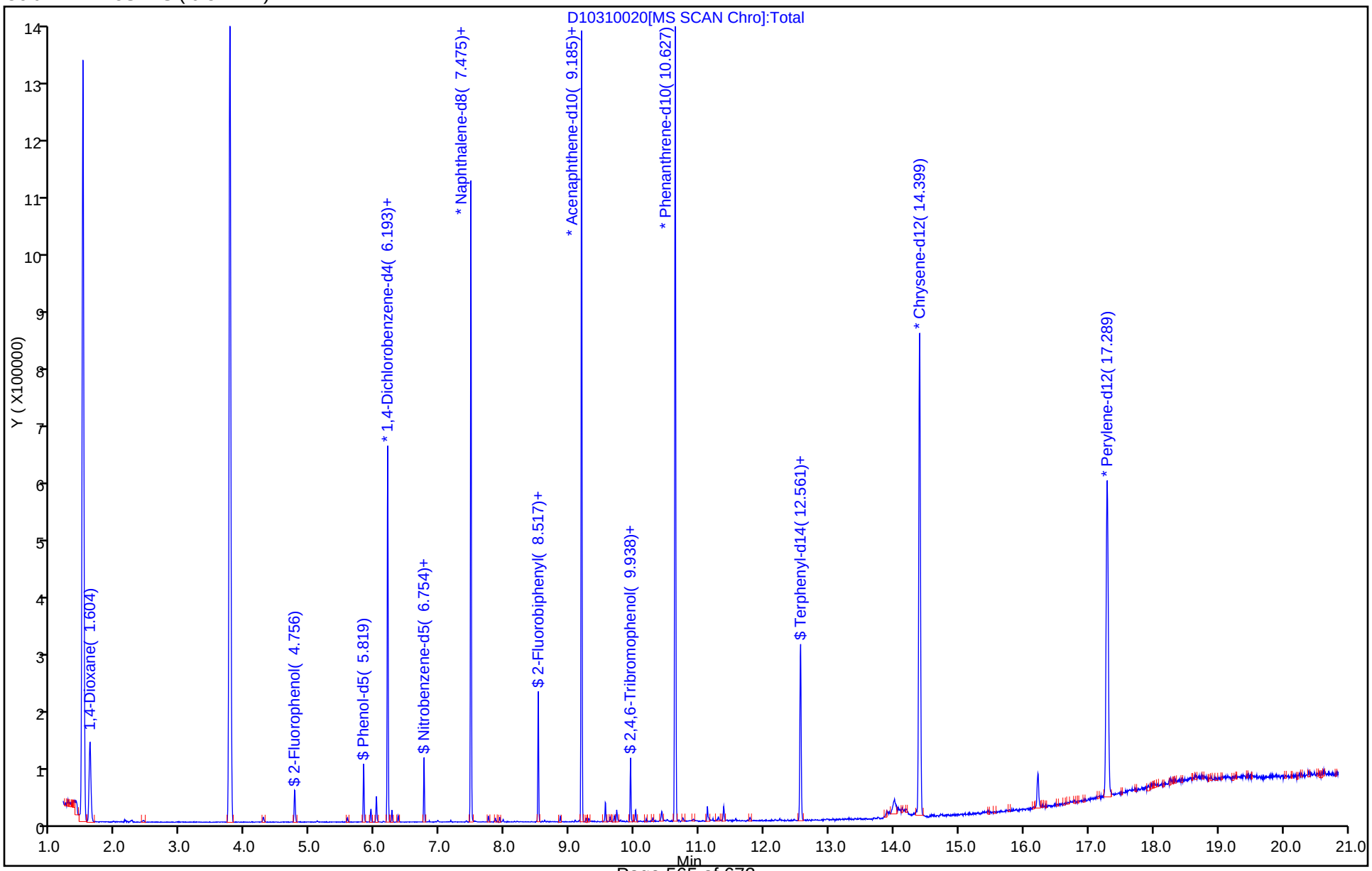
Report Date: 01-Nov-2016 06:12:53 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310020.D

Injection Date:	31-Oct-2016 16:01:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	180-60202-D-10-A	Lab Sample ID:	180-60202-10	Worklist Smp#:	20
Client ID:	HD-CW-15A-0/1-0				
Injection Vol:	2.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	19
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310020.D
Lims ID: 180-60202-D-10-A
Client ID: HD-CW-15A-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2016 16:01:30 ALS Bottle#: 19 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 10.0000
Sample Info: 180-0014113-020
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Nov-2016 06:10:50 Calib Date: 31-Oct-2016 11:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310011.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: piccolinov Date: 01-Nov-2016 05:39:01

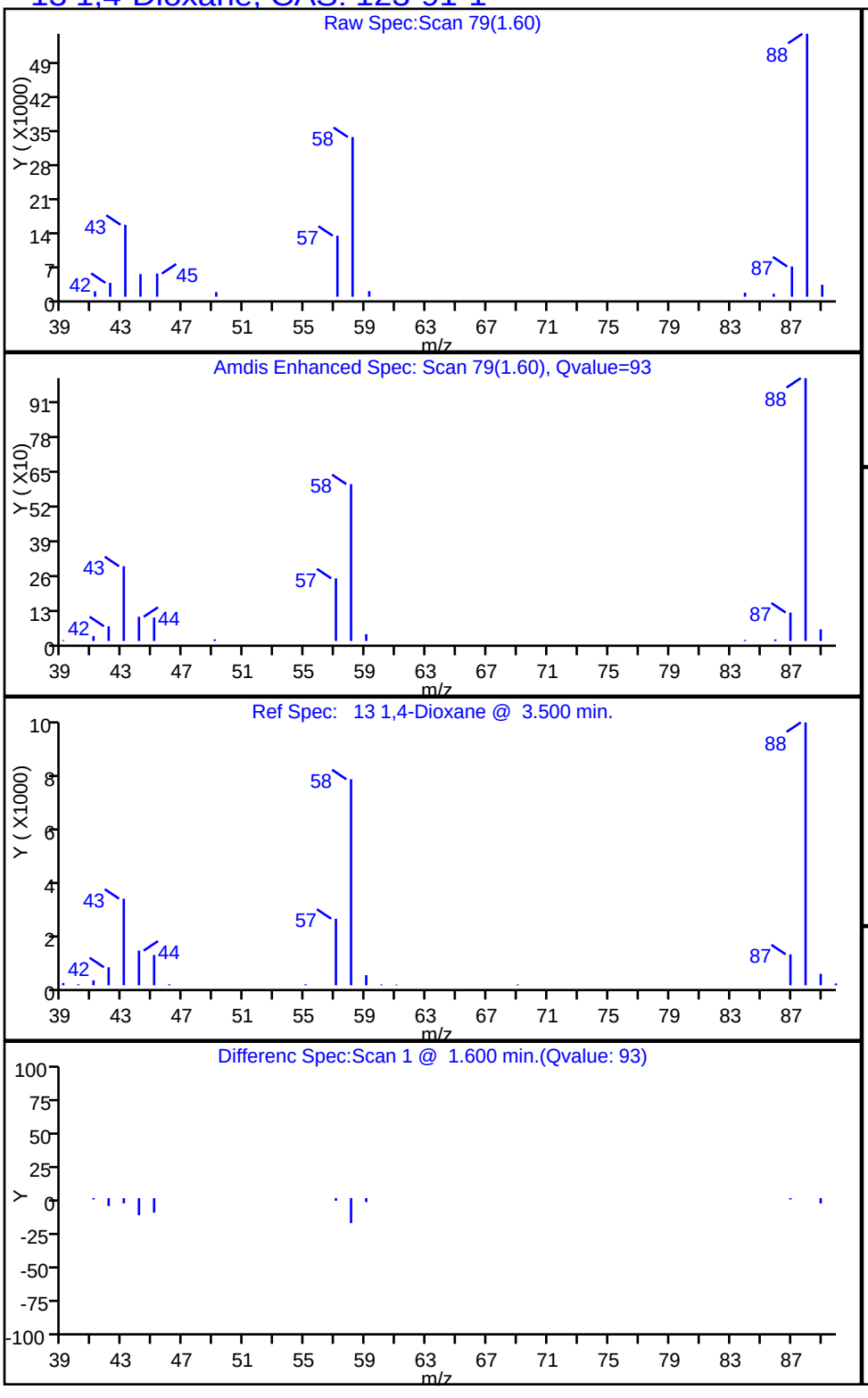
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	40.0	1.51	37.75
$ 8 Phenol-d5	40.0	1.78	44.62
$ 9 Nitrobenzene-d5	40.0	1.66	41.44
$ 10 2-Fluorobiphenyl	40.0	1.46	36.47
$ 11 2,4,6-Tribromophenol	40.0	2.24	56.05
$ 12 Terphenyl-d14	40.0	2.50	62.43

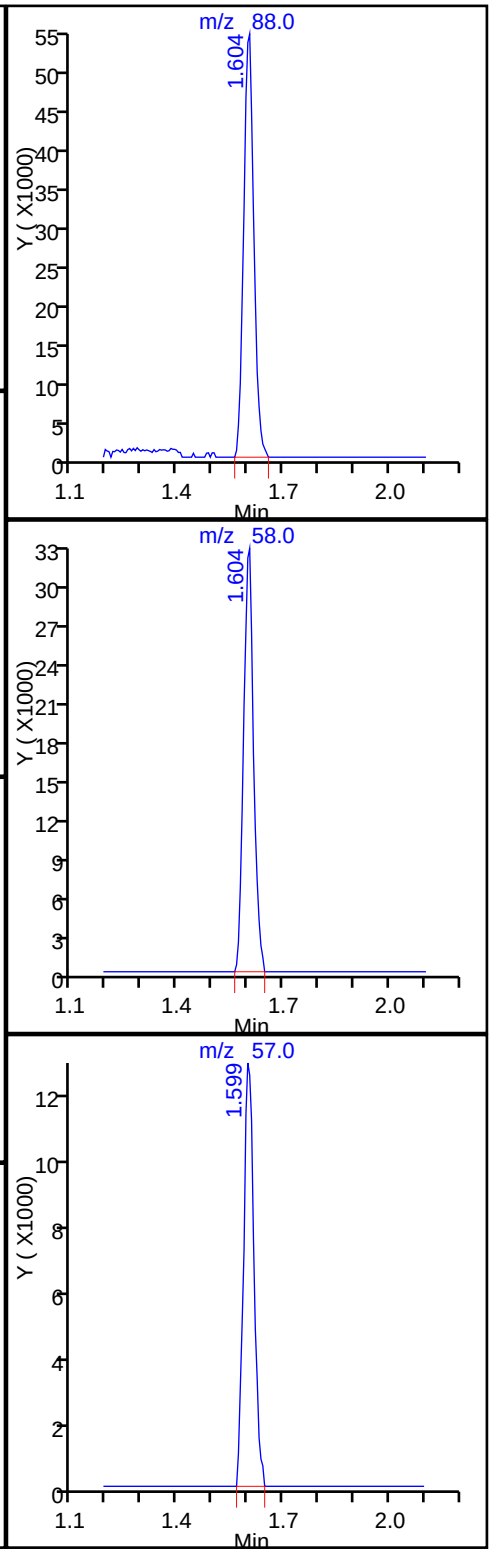
Report Date: 01-Nov-2016 06:12:53 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310020.D				
Injection Date:	31-Oct-2016 16:01:30	Instrument ID:	CH732		
Lims ID:	180-60202-D-10-A	Lab Sample ID:	180-60202-10		
Client ID:	HD-CW-15A-0/1-0				
Operator ID:	003200	ALS Bottle#:	19	Worklist Smp#:	20
Injection Vol:	2.0 ul	Dil. Factor:	10.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

13 1,4-Dioxane, CAS: 123-91-1





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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 189377

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2016 05:28 Calibration End Date: 09/28/2016 08:39 Calibration ID: 32988

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-189377/3	D09280003.D
Level 2	IC 180-189377/4	D09280004.D
Level 3	IC 180-189377/5	D09280005.D
Level 4	ICIS 180-189377/6	D09280006.D
Level 5	IC 180-189377/7	D09280007.D
Level 6	IC 180-189377/8	D09280008.D
Level 7	IC 180-189377/9	D09280009.D
Level 8	IC 180-189377/10	D09280010.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								
1,4-Dioxane	0.2567 0.3081	0.2907 0.2942	0.3074 0.2996	0.2927	0.3118	Ave		0.2951			0.0100	5.9		20.0			
N-Nitrosodimethylamine	+++++ 0.4262	0.1826 0.4132	0.4197 0.4251	0.4098	0.4231	Lin1	-0.318	0.4291			0.0100				0.9980		0.9900
Pyridine	+++++ 0.7959	0.6579 0.7578	0.7466 0.7951	0.7871	0.8020	Ave		0.7632			0.0100	6.7		20.0			
Methyl methanesulfonate	0.4284 0.5721	0.5020 0.5614	0.5633 0.5607	0.5742	0.5866	Ave		0.5436			0.0100	9.7		20.0			
Benzaldehyde	0.8549 0.8794	0.8480 0.7308	0.8386 0.6725	0.8479	1.0002	Ave		0.8340			0.0100	11.8		20.0			
Phenol	1.5731 1.6075	1.7496 1.5183	1.8034 1.4450	1.7092	1.7428	Ave		1.6436			0.8000	7.7		20.0			
Aniline	1.4562 1.7227	1.7200 1.6368	1.8451 1.5449	1.7583	1.8435	Ave		1.6910			0.0100	8.1		20.0			
Bis(2-chloroethyl)ether	1.1813 1.2197	1.2825 1.1640	1.3243 1.1513	1.2775	1.2646	Ave		1.2332			0.7000	5.1		20.0			
2-Chlorophenol	1.2655 1.2706	1.3416 1.2172	1.3799 1.2153	1.3082	1.3277	Ave		1.2908			0.8000	4.6		20.0			
n-Decane	1.4367 1.1971	1.3604 1.1009	1.3802 1.0593	1.3111	1.2895	Ave		1.2669				10.7		20.0			
1,3-Dichlorobenzene	1.5705 1.5109	1.5497 1.4092	1.6464 1.3966	1.5854	1.5752	Ave		1.5305			0.0100	5.7		20.0			
1,4-Dichlorobenzene	1.5739 1.5117	1.6444 1.4279	1.6613 1.4024	1.5901	1.5879	Ave		1.5500			0.0100	6.1		20.0			
Benzyl alcohol	0.7025 0.8428	0.8434 0.8119	0.8521 0.8095	0.8825	0.8703	Ave		0.8269			0.0100	6.8		20.0			
1,2-Dichlorobenzene	1.5183 1.4775	1.5934 1.3997	1.6413 1.3565	1.5483	1.5511	Ave		1.5108			0.0100	6.3		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 189377

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2016 05:28 Calibration End Date: 09/28/2016 08:39 Calibration ID: 32988

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-Methylphenol	1.1670 1.1356	1.2353 1.0577	1.2991 1.0022	1.2157	1.2284	Ave		1.1676			0.7000	8.5		20.0			
Indene	2.4338 2.1677	2.5074 1.9967	2.5634 1.8933	2.3893	2.3724	Ave		2.2905			0.0100	10.7		20.0			
2,2'-oxybis[1-chloropropane]	1.8274 1.6486	1.8969 1.5271	1.9239 1.4535	1.7915	1.7382	Ave		1.7259			0.0100	9.9		20.0			
N-Nitrosopyrrolidine	0.5311 0.6380	0.5868 0.6237	0.6466 0.6201	0.5918	0.6375	Ave		0.6094			0.0100	6.3		20.0			
Acetophenone	1.7794 1.5919	1.9171 1.4702	1.9543 1.3756	1.8117	1.8203	Ave		1.7151			0.0100	12.3		20.0			
Methylphenol, 3 & 4	1.2274 1.1051	1.3513 1.0024	1.3604 0.9851	1.2579	1.2530	Ave		1.1928			0.6000	12.2		20.0			
N-Nitrosodi-n-propylamine	0.9477 0.7787	0.9383 0.6994	0.9677 0.6670	0.8819	0.8958	Ave		0.8471			0.5000	13.8		20.0			
Hexachloroethane	0.7125 0.6449	0.6703 0.6136	0.6783 0.5915	0.6524	0.6786	Ave		0.6553			0.3000	5.9		20.0			
Nitrobenzene	0.3258 0.3093	0.3241 0.3053	0.3461 0.2932	0.3301	0.3264	Ave		0.3200			0.2000	5.2		20.0			
Isophorone	0.5723 0.5929	0.6252 0.5817	0.6354 0.5566	0.6191	0.6207	Ave		0.6005			0.4000	4.8		20.0			
2-Nitrophenol	+++++ 0.1706	0.1608 0.1693	0.1637 0.1683	0.1682	0.1774	Ave		0.1683			0.1000	3.1		20.0			
2,4-Dimethylphenol	0.2874 0.2972	0.3219 0.2884	0.3314 0.2774	0.3200	0.3170	Ave		0.3051			0.2000	6.5		20.0			
Benzoic acid	0.1861 0.1712	0.1675 0.1755	0.1438 0.1850	0.1489	0.1677	Ave		0.1682			0.0100	9.1		20.0			
Bis(2-chloroethoxy)methane	0.3913 0.3745	0.4196 0.3598	0.4265 0.3421	0.4175	0.4052	Ave		0.3921			0.3000	7.8		20.0			
2,4-Dichlorophenol	0.2624 0.2765	0.2771 0.2704	0.2913 0.2607	0.2975	0.2893	Ave		0.2782			0.2000	4.9		20.0			
1,2,4-Trichlorobenzene	0.3489 0.3215	0.3397 0.3071	0.3635 0.2932	0.3520	0.3331	Ave		0.3324			0.0100	7.2		20.0			
Naphthalene	1.0288 0.9363	1.0802 0.9125	1.0950 0.8641	1.0516	1.0061	Ave		0.9968			0.7000	8.4		20.0			
4-Chloroaniline	0.3894 0.3992	0.4322 0.3970	0.4438 0.3778	0.4446	0.4285	Ave		0.4141			0.0100	6.3		20.0			
2,6-Dichlorophenol	0.2606 0.2623	0.2898 0.2571	0.3040 0.2425	0.2872	0.2785	Ave		0.2727			0.0100	7.5		20.0			
Hexachlorobutadiene	0.1859 0.1821	0.1937 0.1787	0.2021 0.1731	0.1963	0.1897	Ave		0.1877			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 SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 189377

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2016 05:28 Calibration End Date: 09/28/2016 08:39 Calibration ID: 32988

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								
Caprolactam	+++++ 0.0998	0.0779 0.1068	0.0879 0.1028	0.0986	0.1022	Ave		0.0966			0.0100	10.5		20.0			
4-Chloro-3-methylphenol	0.2618 0.2804	0.2719 0.2769	0.2941 0.2670	0.2891	0.2934	Ave		0.2793			0.2000	4.4		20.0			
2-Methylnaphthalene	0.7166 0.6583	0.7245 0.6401	0.7564 0.6026	0.7180	0.7057	Ave		0.6903			0.4000	7.4		20.0			
1-Methylnaphthalene	0.6834 0.6153	0.6940 0.6001	0.7241 0.5695	0.6808	0.6686	Ave		0.6545			0.0100	8.1		20.0			
Hexachlorocyclopentadiene	0.2446 0.3014	0.3089 0.2873	0.3236 0.2760	0.3205	0.3078	Ave		0.2963			0.0500	8.8		20.0			
1,2,4,5-Tetrachlorobenzene	0.5804 0.4822	0.5888 0.4567	0.5806 0.4293	0.5498	0.5175	Ave		0.5232			0.0100	11.8		20.0			
2,4,6-Trichlorophenol	0.3077 0.3497	0.3471 0.3329	0.3621 0.3277	0.3580	0.3535	Ave		0.3424			0.2000	5.3		20.0			
2,4,5-Trichlorophenol	0.3182 0.3504	0.3732 0.3456	0.3642 0.3361	0.3631	0.3664	Ave		0.3521			0.2000	5.2		20.0			
1,1'-Biphenyl	1.3970 1.2574	1.4128 1.1870	1.4381 1.1271	1.3915	1.3354	Ave		1.3183			0.0100	8.7		20.0			
2-Chloronaphthalene	1.0938 1.0166	1.1813 0.9476	1.1865 0.9131	1.1318	1.0714	Ave		1.0678			0.8000	9.5		20.0			
2-Nitroaniline	0.2356 0.2980	0.2865 0.2942	0.3044 0.2880	0.3118	0.3109	Ave		0.2912			0.0100	8.4		20.0			
Dimethyl phthalate	1.0733 1.1229	1.1773 1.0949	1.2229 1.0555	1.1939	1.1667	Ave		1.1384			0.0100	5.3		20.0			
1,3-Dinitrobenzene	+++++ 0.1859	0.1433 0.1877	0.1617 0.1857	0.1788	0.1854	Ave		0.1755			0.0100	9.6		20.0			
2,6-Dinitrotoluene	+++++ 0.2622	0.2589 0.2608	0.2688 0.2542	0.2742	0.2752	Ave		0.2649			0.2000	3.0		20.0			
Acenaphthylene	1.5511 1.5666	1.7170 1.4926	1.7591 1.4191	1.7124	1.6547	Ave		1.6091			0.9000	7.5		20.0			
3-Nitroaniline	0.2333 0.3114	0.2945 0.3108	0.3065 0.3051	0.3081	0.3181	Ave		0.2985			0.0100	9.1		20.0			
Acenaphthene	1.1276 0.9566	1.1453 +++++	1.1427 +++++	1.1081	1.0403	Ave		1.0868			0.9000	6.9		20.0			
2,4-Dinitrophenol	0.0942 0.1589	0.1062 0.1620	0.1133 0.1554	0.1323	0.1522	Ave		0.1343			0.0100	19.8		20.0			
4-Nitrophenol	0.0931 0.1311	0.1244 0.1352	0.1257 0.1310	0.1333	0.1364	Ave		0.1263			0.0100	11.1		20.0			
2,4-Dinitrotoluene	+++++ 0.3596	0.3073 0.3626	0.3484 0.3551	0.3606	0.3682	Ave		0.3517			0.2000	5.8		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 189377

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2016 05:28 Calibration End Date: 09/28/2016 08:39 Calibration ID: 32988

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								
Dibenzofuran	1.4990 1.4716	1.6546 1.3926	1.6705 1.3257	1.6087	1.5700	Ave		1.5241			0.8000	8.1		20.0			
2,3,5,6-Tetrachlorophenol	0.2643 0.3028	0.2955 0.3079	0.3002 0.2998	0.2987	0.3055	Ave		0.2968			0.0100	4.6		20.0			
2,3,4,6-Tetrachlorophenol	0.2621 0.2990	0.2901 0.2956	0.2995 0.2962	0.3017	0.2842	Ave		0.2911			0.0100	4.5		20.0			
2-Naphthylamine	0.9761 1.0903	1.2069 1.0496	1.2228 0.9957	1.1980	1.1669	Ave		1.1133			0.0100	8.9		20.0			
Diethyl phthalate	1.0487 1.0072	1.1885 0.9610	1.1725 0.8922	1.1354	1.1071	Ave		1.0641			0.0100	9.9		20.0			
Hexadecane	0.5545 0.4701	0.5987 0.4192	0.6123 +++++	0.5739	0.5452	Ave		0.5391				13.0		20.0			
4-Chlorophenyl phenyl ether	0.6226 0.6048	0.6626 0.5885	0.6569 0.5641	0.6442	0.6284	Ave		0.6215			0.4000	5.5		20.0			
4-Nitroaniline	0.2530 0.2919	0.2946 0.2806	0.3154 0.2622	0.3231	0.3191	Ave		0.2925			0.0100	8.9		20.0			
Fluorene	1.1984 1.1477	1.3429 1.0924	1.3394 1.0319	1.2884	1.2217	Ave		1.2078			0.9000	9.4		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1273	0.0864 0.1271	0.0944 0.1253	0.1138	0.1220	Ave		0.1138			0.0100	14.7		20.0			
N-Nitrosodiphenylamine	0.5205 0.5209	0.5632 0.5095	0.5655 0.4817	0.5632	0.5290	Ave		0.5317			0.0100	5.7		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.7757 0.7205	0.8205 0.6882	0.8071 0.6323	0.7972	0.7424	Ave		0.7480			0.0100	8.7		20.0			
4-Bromophenyl phenyl ether	0.1960 0.1956	0.2039 0.1924	0.2091 0.1836	0.2049	0.1977	Ave		0.1979			0.1000	4.1		20.0			
Hexachlorobenzene	0.2000 0.1805	0.2031 0.1745	0.1923 0.1679	0.1877	0.1830	Ave		0.1861			0.1000	6.5		20.0			
Atrazine	0.1679 0.1864	0.1918 0.1808	0.1984 0.1679	0.1964	0.1930	Ave		0.1853			0.0100	6.5		20.0			
Pentachlorophenol	0.1395 0.1137	0.1088 0.1126	0.0940 0.1055	0.1068	0.1114	Ave		0.1115			0.0500	11.5		20.0			
n-Octadecane	2.6298 2.3380	2.6749 2.1265	2.8563 1.9127	2.6934	2.7264	Ave		2.4948				13.3		20.0			
Phenanthrene	1.0349 1.0070	1.0849 0.9916	1.0847 0.9248	1.0669	1.0397	Ave		1.0293			0.7000	5.3		20.0			
Anthracene	1.0387 1.0506	1.1382 1.0388	1.1233 0.9594	1.1240	1.0861	Ave		1.0699			0.7000	5.6		20.0			
Carbazole	0.9481 0.9755	1.0258 0.9672	1.0457 0.9016	1.0420	1.0228	Ave		0.9911			0.0100	5.2		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 189377

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2016 05:28 Calibration End Date: 09/28/2016 08:39 Calibration ID: 32988

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								
Di-n-butyl phthalate	1.0326 1.1070	1.1251 1.1112	1.1364 1.0300	1.1574	1.1461	Ave		1.1057			0.0100	4.4		20.0			
Fluoranthene	1.0802 1.1184	1.1673 1.1262	1.1690 1.0519	1.1680	1.1567	Ave		1.1297			0.6000	3.9		20.0			
Benzidine	0.4706 0.6730	0.5053 0.6231	0.5506 0.5833	0.6069	0.7118	Ave		0.5906			0.0100	13.7		20.0			
Pyrene	1.3367 1.3162	1.3352 1.2606	1.3903 1.2099	1.3498	1.3039	Ave		1.3128			0.6000	4.3		20.0			
Butyl benzyl phthalate	0.5604 0.5295	0.5027 0.5205	0.5136 0.5079	0.5292	0.5256	Ave		0.5237			0.0100	3.4		20.0			
3,3'-Dichlorobenzidine	0.3325 0.4148	0.3716 0.4216	0.3710 0.4147	0.3788	0.4043	Ave		0.3887			0.0100	7.9		20.0			
Bis(2-ethylhexyl) phthalate	0.6626 0.6796	0.6831 0.6635	0.6807 0.6374	0.6956	0.6803	Ave		0.6729			0.0100	2.7		20.0			
Benzo[a]anthracene	1.1720 1.1307	1.1727 1.1038	1.1765 1.0819	1.1650	1.1362	Ave		1.1424			0.8000	3.1		20.0			
Chrysene	1.0328 1.0949	1.0834 1.1123	1.1307 1.0691	1.1005	1.1023	Ave		1.0907			0.7000	2.7		20.0			
Di-n-octyl phthalate	+++++ 1.4226	1.9698 1.4183	1.4117 1.4109	1.3853	1.3823	Ave		1.4858			0.0100	14.4		20.0			
7,12-Dimethylbenz(a)anthracene	0.6088 0.6185	0.6044 0.6145	0.6217 0.6027	0.6185	0.5982	Ave		0.6109			0.0100	1.4		20.0			
Benzo[b]fluoranthene	1.3632 1.2931	1.2706 1.3037	1.3266 1.2703	1.3280	1.3112	Ave		1.3083			0.7000	2.4		20.0			
Benzo[k]fluoranthene	1.2849 1.3110	1.2946 1.2778	1.3353 1.2880	1.2767	1.2380	Ave		1.2883			0.7000	2.2		20.0			
Benzo[e]pyrene	1.2449 1.2123	1.1954 1.2057	1.2349 1.2043	1.2054	1.1908	Ave		1.2117			0.0100	1.6		20.0			
Benzo[a]pyrene	1.2829 1.2010	1.2380 1.2143	1.2510 1.2067	1.1903	1.1793	Ave		1.2204			0.7000	2.8		20.0			
Indeno[1,2,3-cd]pyrene	1.2030 1.2219	1.1899 1.2291	1.2145 1.1975	1.1801	1.1906	Ave		1.2033			0.5000	1.4		20.0			
Dibenz(a,h)anthracene	1.0140 1.0138	0.9889 1.0467	0.9932 1.0190	0.9848	0.9936	Ave		1.0068			0.4000	2.1		20.0			
Benzo[g,h,i]perylene	1.0025 1.0400	1.0233 1.0653	1.0412 1.0360	1.0200	1.0189	Ave		1.0309			0.5000	1.8		20.0			
2-Fluorophenol (Surr)	0.9146 1.0113	1.0094 0.9634	1.0137 0.9779	1.0256	1.0370	Ave		0.9941				4.0		20.0			
Phenol-d5 (Surr)	1.4088 1.5184	1.5462 1.4494	1.6172 1.3979	1.5419	1.5789	Ave		1.5073				5.3		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 189377

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2016 05:28 Calibration End Date: 09/28/2016 08:39 Calibration ID: 32988

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								
Nitrobenzene-d5 (Surr)	0.3071 0.3162	0.3377 0.3112	0.3378 0.3019	0.3306	0.3305	Ave		0.3216				4.4		20.0			
2-Fluorobiphenyl	1.2854 1.1821	1.3463 1.1119	1.3777 1.0617	1.3004	1.2544	Ave		1.2400				9.0		20.0			
2,4,6-Tribromophenol (Surr)	0.0582 0.0710	0.0657 0.0707	0.0638 0.0690	0.0675	0.0674	Ave		0.0667			0.0100	6.3		20.0			
Terphenyl-d14 (Surr)	0.7793 0.8336	0.8344 0.8172	0.8502 0.7936	0.8447	0.8194	Ave		0.8216				3.0		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 189377

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2016 05:28 Calibration End Date: 09/28/2016 08:39 Calibration ID: 32988

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-189377/3	D09280003.D
Level 2	IC 180-189377/4	D09280004.D
Level 3	IC 180-189377/5	D09280005.D
Level 4	ICIS 180-189377/6	D09280006.D
Level 5	IC 180-189377/7	D09280007.D
Level 6	IC 180-189377/8	D09280008.D
Level 7	IC 180-189377/9	D09280009.D
Level 8	IC 180-189377/10	D09280010.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
1,4-Dioxane	DCBd 4	Ave	1804 177975	10268 238886	20954 320687	46953	87992	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodimethylamine	DCBd 4	Lin1	+++++ 246244	6451 335523	28605 455105	65752	119394	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyridine	DCBd 4	Ave	+++++ 459788	23238 615341	50890 851149	126276	226325	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methyl methanesulfonate	DCBd 4	Ave	3010 330525	17733 455848	38395 600212	92122	165534	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzaldehyde	DCBd 4	Ave	6007 508058	29953 593416	57162 719944	136029	282236	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol	DCBd 4	Ave	11053 928718	61800 1232805	122921 1546910	274210	491796	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Aniline	DCBd 4	Ave	10232 995284	60755 1329090	125767 1653840	282090	520205	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethyl)ether	DCBd 4	Ave	8300 704659	45303 945161	90269 1232482	204955	356860	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chlorophenol	DCBd 4	Ave	8892 734084	47389 988359	94053 1301010	209873	374674	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
n-Decane	DCBd 4	Ave	10095 691593	48055 893879	94075 1133970	210342	363877	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	11035 872905	54740 1144254	112220 1495129	254339	444498	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	11059 873373	58086 1159419	113238 1501271	255107	448092	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzyl alcohol	DCBd 4	Ave	4936 486939	29791 659275	58077 866556	141573	245600	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	10668 853579	56283 1136577	111876 1452194	248400	437697	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Methylphenol	DCBd 4	Ave	8200 656069	43634 858828	88550 1072835	195029	346649	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 189377

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2016 05:28 Calibration End Date: 09/28/2016 08:39 Calibration ID: 32988

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
Indene	DCBd 4	Ave	17101 1252339	88570 1621310	174727 2026843	383323	669456	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,2'-oxybis[1-chloropropane]	DCBd 4	Ave	12840 952455	67005 1239959	131135 1556035	287411	490508	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosopyrrolidine	DCBd 4	Ave	3732 368570	20728 506440	44073 663798	94946	179881	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acetophenone	DCBd 4	Ave	12503 919675	67719 1193748	133204 1472600	290647	513670	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methylphenol, 3 & 4	DCBd 4	Ave	8624 638471	47734 813972	92727 1054569	201807	353574	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodi-n-propylamine	DCBd 4	Ave	6659 449851	33143 567938	65959 714007	141485	252791	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachloroethane	DCBd 4	Ave	5006 372592	23676 498264	46231 633175	104658	191505	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene	NPT	Ave	9987 818116	50731 1107918	104095 1423510	235468	425606	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Isophorone	NPT	Ave	17544 1568316	97868 2111014	191078 2702671	441561	809441	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitrophenol	NPT	Ave	+++++ 451268	25173 614434	49239 817219	119986	231332	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dimethylphenol	NPT	Ave	8810 786202	50397 1046610	99657 1346849	228239	413329	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzoic acid	NPT	Ave	5703 452924	26215 637010	43240 898095	106202	218741	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethoxy)methane	NPT	Ave	11994 990771	65684 1305705	128253 1661027	297798	528360	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dichlorophenol	NPT	Ave	8042 731402	43381 981341	87596 1265954	212217	377301	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4-Trichlorobenzene	NPT	Ave	10696 850400	53177 1114551	109322 1423856	251035	434324	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Naphthalene	NPT	Ave	31535 2476726	169107 3311597	329300 4195638	750023	1311957	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloroaniline	NPT	Ave	11935 1055895	67655 1441021	133478 1834688	317114	558706	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dichlorophenol	NPT	Ave	7988 693781	45373 933013	91434 1177279	204858	363143	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobutadiene	NPT	Ave	5697 481802	30319 648712	60769 840675	140029	247402	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Caprolactam	NPT	Ave	+++++ 264023	12193 387679	26426 499273	70348	133277	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloro-3-methylphenol	NPT	Ave	8024 741845	42566 1005130	88446 1296273	206220	382578	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 189377

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2016 05:28 Calibration End Date: 09/28/2016 08:39 Calibration ID: 32988

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
2-Methylnaphthalene	NPT	Ave	21966 1741541	113422 2323111	227495 2926046	512081	920186	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1-Methylnaphthalene	NPT	Ave	20948 1627674	108647 2177899	217773 2765477	485595	871867	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorocyclopentadiene	ANT	Ave	4820 519466	30631 704128	63003 900121	146754	267310	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4,5-Tetrachlorobenzene	ANT	Ave	11437 831013	58375 1119068	113052 1400122	251786	449373	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Trichlorophenol	ANT	Ave	6062 602693	34417 815899	70500 1068974	163943	307011	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,5-Trichlorophenol	ANT	Ave	6269 603837	36998 847004	70906 1096275	166297	318147	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,1'-Biphenyl	ANT	Ave	27527 2167016	140078 2908847	280001 3676144	637189	1159722	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chloronaphthalene	ANT	Ave	21553 1752043	117125 2322222	231016 2978253	518303	930395	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitroaniline	ANT	Ave	4642 513568	28406 720959	59269 939450	142788	269950	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dimethyl phthalate	ANT	Ave	21148 1935335	116723 2683067	238099 3442526	546717	1013178	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dinitrobenzene	ANT	Ave	+++++ 320443	14205 459982	31474 605737	81894	161037	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dinitrotoluene	ANT	Ave	+++++ 451904	25667 639209	52327 829004	125572	239024	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthylene	ANT	Ave	30563 2699988	170237 3657793	342511 4628682	784147	1436982	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3-Nitroaniline	ANT	Ave	4597 536724	29195 761531	59668 995213	141090	276225	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthene	ANT	Ave	22219 1648654	113548 +++++	222488 +++++	507451	903383	0.380 40.0	2.00 +++++	4.00 +++++	10.0	20.0
2,4-Dinitrophenol	ANT	Ave	3714 547604	21063 794024	44126 1013407	121149	264371	0.760 80.0	4.00 120	8.00 160	20.0	40.0
4-Nitrophenol	ANT	Ave	3668 451808	24673 662771	48952 854537	122061	236982	0.760 80.0	4.00 120	8.00 160	20.0	40.0
2,4-Dinitrotoluene	ANT	Ave	+++++ 619758	30470 888551	67836 1158279	165144	319710	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenzofuran	ANT	Ave	29536 2536147	164045 3412591	325244 4324011	736673	1363437	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,5,6-Tetrachlorophenol	ANT	Ave	5207 521851	29299 754574	58450 977797	136801	265328	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	5164 515304	28761 724464	58308 966231	138162	246804	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 189377

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2016 05:28 Calibration End Date: 09/28/2016 08:39 Calibration ID: 32988

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
2-Naphthylamine	ANT	Ave	19232 1879136	119661 2572013	238089 3247703	548580	1013338	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Diethyl phthalate	ANT	Ave	20664 1735803	117835 2354938	228292 2910101	519948	961406	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexadecane	NPT	Ave	16998 1243624	93728 1521552	184145 +++++	409300	710963	0.380 40.0	2.00 60.0	4.00 +++++	10.0	20.0
4-Chlorophenyl phenyl ether	ANT	Ave	12267 1042268	65693 1442080	127910 1839824	294998	545713	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitroaniline	ANT	Ave	4986 503011	29211 687696	61401 855264	147958	277082	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluorene	ANT	Ave	23613 1978080	133140 2677009	260781 3365563	590015	1060916	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4,6-Dinitro-2-methylphenol	PHN	Ave	+++++ 773164	29802 1114076	64368 1487532	182107	383685	+++++ 80.0	4.00 120	8.00 160	20.0	40.0
N-Nitrosodiphenylamine	PHN	Ave	17356 1581935	97110 2232895	192756 2859188	450727	831562	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	25866 2188172	141468 3016301	275099 3753343	637959	1166974	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Bromophenyl phenyl ether	PHN	Ave	6536 594089	35165 843341	71270 1089543	163949	310708	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobenzene	PHN	Ave	6668 548219	35016 764591	65543 996723	150173	287611	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Atrazine	PHN	Ave	5599 566267	33069 792270	67638 996796	157189	303419	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pentachlorophenol	PHN	Ave	9301 690467	37514 987066	64047 1252437	171012	350304	0.760 80.0	4.00 120	8.00 160	20.0	40.0
n-Octadecane	DCBd 4	Ave	18478 1350707	94487 1726719	194687 2047551	432107	769369	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenanthrene	PHN	Ave	34509 3058407	187058 4345835	369708 5489584	853767	1634313	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Anthracene	PHN	Ave	34637 3190835	196252 4552533	382844 5694856	899465	1707259	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Carbazole	PHN	Ave	31616 2962799	176861 4239011	356423 5351682	833865	1607817	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-butyl phthalate	PHN	Ave	34434 3362298	193993 4869978	387335 6113667	926207	1801628	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluoranthene	PHN	Ave	36022 3396708	201269 4935871	398419 6243665	934748	1818370	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzidine	CRY	Ave	13117 1771302	76695 2492957	160115 3061966	424711	1007188	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyrene	CRY	Ave	37259 3464304	202646 5043358	404308 6350780	944650	1845141	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 189377

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2016 05:28 Calibration End Date: 09/28/2016 08:39 Calibration ID: 32988

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
Butyl benzyl phthalate	CRY	Ave	15619 1393596	76298 2082516	149362 2666094	370353	743784	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3,3'-Dichlorobenzidine	CRY	Ave	9269 1091724	56393 1686601	107874 2176920	265129	572173	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	18469 1788805	103672 2654467	197946 3345932	486813	962663	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]anthracene	CRY	Ave	32668 2975905	177985 4415957	342130 5679084	815354	1607815	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Chrysene	CRY	Ave	28787 2881623	164427 4449818	328818 5611426	770227	1559829	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-octyl phthalate	PRY	Ave	+++++ 3143808	243367 4867828	331169 6269452	798049	1649080	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
7,12-Dimethylbenz(a)anthracene	PRY	Ave	13590 1366843	74677 2109082	145844 2678227	356283	713638	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[b]fluoranthene	PRY	Ave	30432 2857774	156982 4474369	311204 5644866	765003	1564351	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[k]fluoranthene	PRY	Ave	28683 2897157	159946 4385602	313254 5723698	735493	1476959	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[e]pyrene	PRY	Ave	27791 2679039	147684 4137863	289699 5351502	694376	1420622	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]pyrene	PRY	Ave	28638 2654259	152956 4167589	293485 5362195	685688	1406956	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Indeno[1,2,3-cd]pyrene	PRY	Ave	26855 2700448	147003 4218376	284911 5321311	679804	1420467	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenz(a,h)anthracene	PRY	Ave	22635 2240452	122173 3592365	233000 4528365	567321	1185430	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[g,h,i]perylene	PRY	Ave	22380 2298339	126424 3656329	244253 4603726	587576	1215621	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorophenol (Surr)	DCBd 4	Ave	6426 584279	35655 782287	69096 1046877	164529	292626	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol-d5 (Surr)	DCBd 4	Ave	9899 877232	54618 1176888	110231 1496463	247374	445543	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene-d5 (Surr)	NPT	Ave	9413 836375	52861 1129531	101577 1466092	235812	430975	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorobiphenyl	ANT	Ave	25327 2037297	133480 2724827	268238 3462753	595508	1089314	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Tribromophenol (Surr)	PHN	Ave	1940 215624	11324 310002	21740 409478	54053	105932	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Terphenyl-d14 (Surr)	CRY	Ave	21722 2194036	126646 3269300	247241 4165441	591144	1159568	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 189377

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2016 05:28 Calibration End Date: 09/28/2016 08:39 Calibration ID: 32988

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1 Analy Batch No.: 189377

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2016 05:28 Calibration End Date: 09/28/2016 08:39 Calibration ID: 32988

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-189377/3	D09280003.D
Level 2	IC 180-189377/4	D09280004.D
Level 3	IC 180-189377/5	D09280005.D
Level 4	ICIS 180-189377/6	D09280006.D
Level 5	IC 180-189377/7	D09280007.D
Level 6	IC 180-189377/8	D09280008.D
Level 7	IC 180-189377/9	D09280009.D
Level 8	IC 180-189377/10	D09280010.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
N-Nitrosodimethylamine	+++++ -2.5	-20.3 0.0	16.4	2.9	2.3	1.2	30	30 30	30	30	30	30

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280003.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 28-Sep-2016 05:28:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0013626-003
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 28-Sep-2016 10:33:25 Calib Date: 28-Sep-2016 08:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: piccolinov Date: 28-Sep-2016 06:56:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.155	6.155	0.000	95	147924	8.00	8.00	
* 2 Naphthalene-d8	136	7.438	7.438	0.000	99	645323	8.00	8.00	
* 3 Acenaphthene-d10	164	9.136	9.136	0.000	93	414818	8.00	8.00	
* 4 Phenanthrene-d10	188	10.568	10.568	0.000	97	702026	8.00	8.00	
* 5 Chrysene-d12	240	14.297	14.297	0.000	97	586799	8.00	8.00	
* 6 Perylene-d12	264	17.166	17.166	0.000	95	469965	8.00	8.00	
$ 7 2-Fluorophenol	112	4.713	4.713	0.000	89	6426	0.3800	0.3496	
$ 8 Phenol-d5	99	5.776	5.776	0.000	96	9899	0.3800	0.3552	
$ 9 Nitrobenzene-d5	82	6.716	6.716	0.000	89	9413	0.3800	0.3628	
$ 10 2-Fluorobiphenyl	172	8.474	8.474	0.000	99	25327	0.3800	0.3939	
$ 11 2,4,6-Tribromophenol	330	9.890	9.890	0.000	82	1940	0.3800	0.3316	
$ 12 Terphenyl-d14	244	12.481	12.481	0.000	98	21722	0.3800	0.3605	
13 1,4-Dioxane	88	1.566	1.566	0.000	1	1804	0.3800	0.3306	M
14 N-Nitrosodimethylamine	74	2.186	2.186	0.000	91	1879	0.3800	0.9790	M
15 Pyridine	79	2.309	2.309	0.000	0	290	0.3800	0.0206	M
21 Methyl methanesulfonate	80	4.489	4.489	0.000	0	3010	0.3800	0.2995	M
25 Benzaldehyde	77	5.696	5.696	0.000	92	6007	0.3800	0.3895	
26 Phenol	94	5.787	5.787	0.000	98	11053	0.3800	0.3637	
27 Aniline	93	5.814	5.814	0.000	94	10232	0.3800	0.3273	
29 Bis(2-chloroethyl)ether	93	5.878	5.878	0.000	93	8300	0.3800	0.3640	
30 2-Chlorophenol	128	5.936	5.936	0.000	94	8892	0.3800	0.3726	
31 n-Decane	43	6.001	6.001	0.000	91	10095	0.3800	0.4309	
32 1,3-Dichlorobenzene	146	6.097	6.097	0.000	96	11035	0.3800	0.3899	
33 1,4-Dichlorobenzene	146	6.177	6.177	0.000	34	11059	0.3800	0.3859	
34 Benzyl alcohol	108	6.300	6.300	0.000	83	4936	0.3800	0.3228	
35 1,2-Dichlorobenzene	146	6.332	6.332	0.000	95	10668	0.3800	0.3819	
36 2-Methylphenol	108	6.412	6.412	0.000	92	8200	0.3800	0.3798	
37 Indene	116	6.423	6.423	0.000	92	17101	0.3800	0.4038	
38 2,2'-oxybis[1-chloropropan	45	6.439	6.439	0.000	95	12840	0.3800	0.4023	
39 N-Nitrosopyrrolidine	100	6.540	6.540	0.000	80	3732	0.3800	0.3312	
40 Acetophenone	105	6.561	6.561	0.000	86	12503	0.3800	0.3943	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.561	6.561	0.000	66	8624	0.3800	0.3910	
41 N-Nitrosodi-n-propylamine	70	6.567	6.567	0.000	82	6659	0.3800	0.4252	
45 Hexachloroethane	117	6.684	6.684	0.000	93	5006	0.3800	0.4132	
46 Nitrobenzene	77	6.732	6.732	0.000	87	9987	0.3800	0.3869	
48 Isophorone	82	6.978	6.978	0.000	99	17544	0.3800	0.3622	
49 2-Nitrophenol	139	7.058	7.058	0.000	89	4091	0.3800	0.3013	
50 2,4-Dimethylphenol	107	7.090	7.090	0.000	92	8810	0.3800	0.3580	
52 Benzoic acid	122	7.117	7.117	0.000	85	5703	0.3800	0.4203	
53 Bis(2-chloroethoxy)methane	93	7.181	7.181	0.000	96	11994	0.3800	0.3793	
54 2,4-Dichlorophenol	162	7.293	7.293	0.000	90	8042	0.3800	0.3584	
56 1,2,4-Trichlorobenzene	180	7.379	7.379	0.000	93	10696	0.3800	0.3989	
58 Naphthalene	128	7.459	7.459	0.000	95	31535	0.3800	0.3922	
59 4-Chloroaniline	127	7.502	7.502	0.000	96	11935	0.3800	0.3573	
60 2,6-Dichlorophenol	162	7.512	7.512	0.000	97	7988	0.3800	0.3631	
62 Hexachlorobutadiene	225	7.582	7.582	0.000	93	5697	0.3800	0.3763	
64 Caprolactam	113	7.828	7.828	0.000	67	956	0.3800	0.1227	
67 4-Chloro-3-methylphenol	107	7.950	7.950	0.000	95	8024	0.3800	0.3561	
69 2-Methylnaphthalene	142	8.127	8.127	0.000	92	21966	0.3800	0.3945	
71 1-Methylnaphthalene	142	8.228	8.228	0.000	94	20948	0.3800	0.3968	
72 Hexachlorocyclopentadiene	237	8.287	8.287	0.000	90	4820	0.3800	0.3138	
73 1,2,4,5-Tetrachlorobenzene	216	8.292	8.292	0.000	95	11437	0.3800	0.4216	
74 2,4,6-Trichlorophenol	196	8.394	8.394	0.000	87	6062	0.3800	0.3415	
75 2,4,5-Trichlorophenol	196	8.431	8.431	0.000	94	6269	0.3800	0.3433	
76 1,1'-Biphenyl	154	8.570	8.570	0.000	95	27527	0.3800	0.4027	
77 2-Chloronaphthalene	162	8.602	8.602	0.000	96	21553	0.3800	0.3893	
79 2-Nitroaniline	65	8.682	8.682	0.000	78	4642	0.3800	0.3075	
82 Dimethyl phthalate	163	8.843	8.843	0.000	98	21148	0.3800	0.3583	
83 1,3-Dinitrobenzene	168	8.875	8.875	0.000	77	2095	0.3800	0.2302	
84 2,6-Dinitrotoluene	165	8.901	8.901	0.000	88	3277	0.3800	0.2386	
85 Acenaphthylene	152	9.003	9.003	0.000	99	30563	0.3800	0.3663	
86 3-Nitroaniline	138	9.067	9.067	0.000	92	4597	0.3800	0.2970	
87 2,4-Dinitrophenol	184	9.168	9.168	0.000	61	3714	0.7600	0.5333	
88 Acenaphthene	153	9.168	9.168	0.000	94	22219	0.3800	0.3943	
89 4-Nitrophenol	109	9.201	9.201	0.000	90	3668	0.7600	0.5602	
91 2,4-Dinitrotoluene	165	9.291	9.291	0.000	90	3997	0.3800	0.2192	
93 Dibenzofuran	168	9.329	9.329	0.000	97	29536	0.3800	0.3737	
95 2,3,5,6-Tetrachlorophenol	232	9.398	9.398	0.000	85	5207	0.3800	0.3383	
96 2,3,4,6-Tetrachlorophenol	232	9.441	9.441	0.000	67	5164	0.3800	0.3422	
97 2-Naphthylamine	143	9.473	9.473	0.000	95	19232	0.3800	0.3332	
98 Diethyl phthalate	149	9.505	9.505	0.000	98	20664	0.3800	0.3745	
99 Hexadecane	57	9.516	9.516	0.000	90	16998	0.3800	0.3908	
100 4-Chlorophenyl phenyl ethe	204	9.639	9.639	0.000	91	12267	0.3800	0.3807	
101 4-Nitroaniline	138	9.649	9.649	0.000	85	4986	0.3800	0.3288	
103 Fluorene	166	9.660	9.660	0.000	92	23613	0.3800	0.3770	
104 4,6-Dinitro-2-methylphenol	198	9.687	9.687	0.000	2	3452	0.7600	0.3458	
105 N-Nitrosodiphenylamine	169	9.745	9.745	0.000	61	17356	0.3800	0.3720	
90 1,2-Diphenylhydrazine	77	9.794	9.794	0.000	97	25866	0.3800	0.3941	
57 Azobenzene	77	9.794	9.794	0.000	97	25866	0.3800	0.3941	
110 4-Bromophenyl phenyl ether	248	10.109	10.109	0.000	66	6536	0.3800	0.3764	
112 Hexachlorobenzene	284	10.194	10.194	0.000	89	6668	0.3800	0.4083	
113 Atrazine	200	10.226	10.226	0.000	89	5599	0.3800	0.3442	
116 Pentachlorophenol	266	10.370	10.370	0.000	90	9301	0.7600	0.9503	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.381	10.381	0.000	91	18478	0.3800	0.4006	
121 Phenanthrene	178	10.595	10.595	0.000	95	34509	0.3800	0.3821	
122 Anthracene	178	10.648	10.648	0.000	97	34637	0.3800	0.3689	
124 Carbazole	167	10.793	10.793	0.000	95	31616	0.3800	0.3635	
126 Di-n-butyl phthalate	149	11.124	11.124	0.000	99	34434	0.3800	0.3549	
131 Fluoranthene	202	11.984	11.984	0.000	98	36022	0.3800	0.3634	
132 Benzidine	184	12.117	12.117	0.000	97	13117	0.3800	0.3028	
133 Pyrene	202	12.304	12.304	0.000	97	37259	0.3800	0.3869	
138 Butyl benzyl phthalate	149	13.223	13.223	0.000	96	15619	0.3800	0.4066	
144 3,3'-Dichlorobenzidine	252	14.206	14.206	0.000	74	9269	0.3800	0.3251	
145 Bis(2-ethylhexyl) phthalat	149	14.265	14.265	0.000	77	18469	0.3800	0.3742	
146 Benzo[a]anthracene	228	14.281	14.281	0.000	90	32668	0.3800	0.3899	
147 Chrysene	228	14.345	14.345	0.000	56	28787	0.3800	0.3598	
150 Di-n-octyl phthalate	149	15.563	15.563	0.000	98	68627	0.3800	0.7862	
151 7,12-Dimethylbenz(a)anthra	256	16.381	16.381	0.000	79	13590	0.3800	0.3787	
152 Benzo[b]fluoranthene	252	16.397	16.397	0.000	96	30432	0.3800	0.3959	
153 Benzo[k]fluoranthene	252	16.450	16.450	0.000	97	28683	0.3800	0.3790	
219 Benzo[e]pyrene	252	16.957	16.957	0.000	0	27791	0.3800	0.3904	
154 Benzo[a]pyrene	252	17.054	17.054	0.000	81	28638	0.3800	0.3994	
157 Indeno[1,2,3-cd]pyrene	276	19.495	19.495	0.000	72	26855	0.3800	0.3799	
158 Dibenz(a,h)anthracene	278	19.527	19.527	0.000	47	22635	0.3800	0.3827	M
159 Benzo[g,h,i]perylene	276	20.152	20.152	0.000	0	22380	0.3800	0.3695	M
S 197 Methyl Phenols,Total	108				0		0.7600	0.7708	
S 199 Total Cresols	108				0		0.7600	0.7708	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD0.38i_00001 Amount Added: 1.00 Units: mL

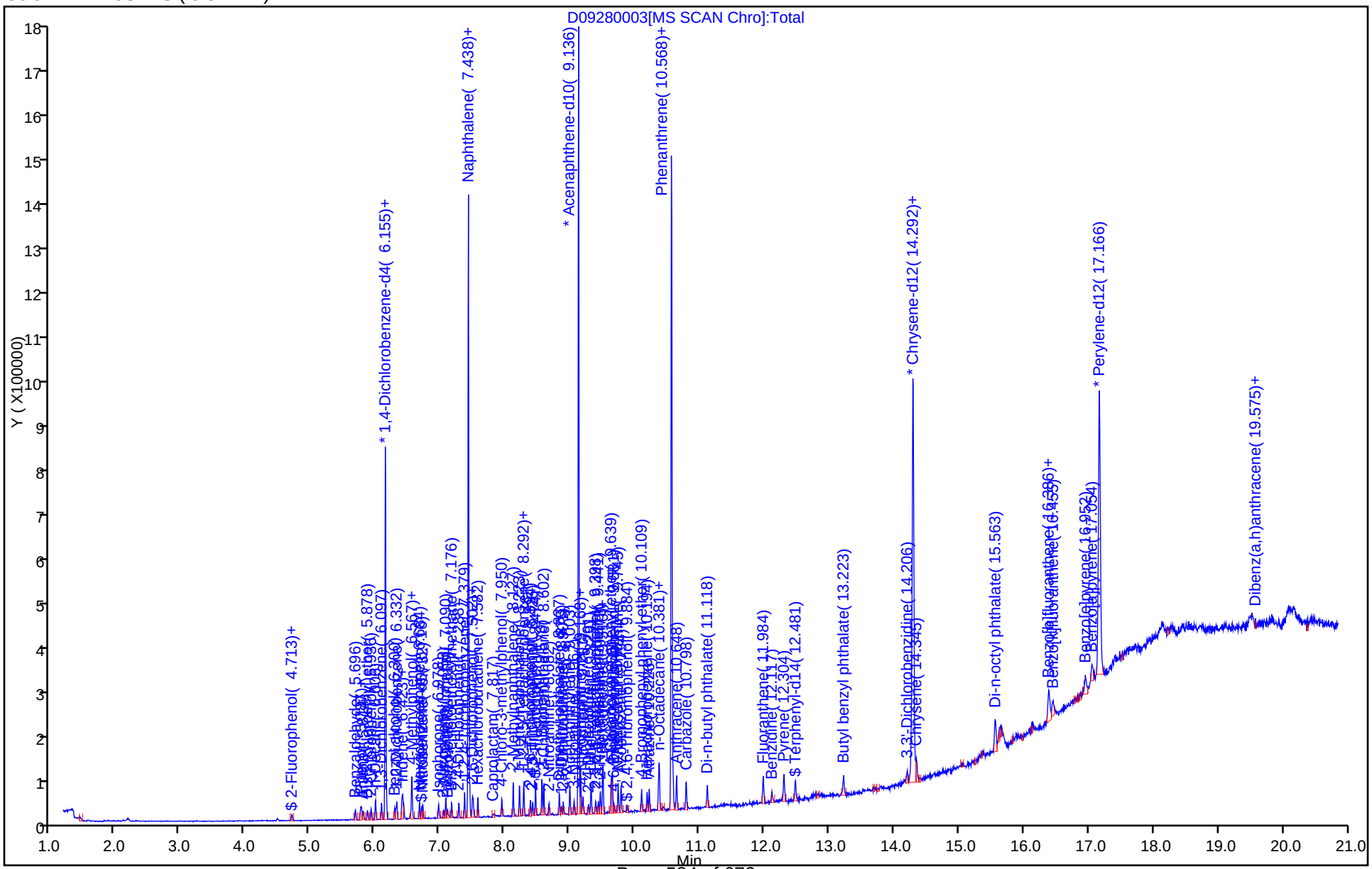
Report Date: 28-Sep-2016 10:33:26 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280003.D

Injection Date:	28-Sep-2016 05:28:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

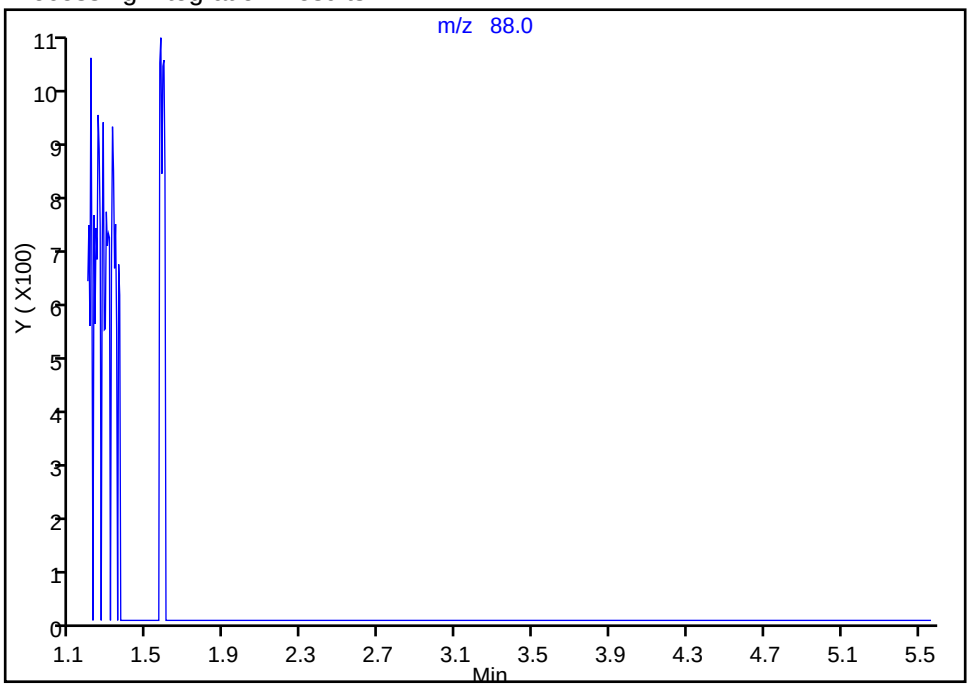
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280003.D
Injection Date: 28-Sep-2016 05:28:30 Instrument ID: CH732
Lims ID: IC
Client ID:
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL
Column: Rxi-5SilMS (0.32 mm) Detector MS SCAN

13 1,4-Dioxane, CAS: 123-91-1

Signal: 1

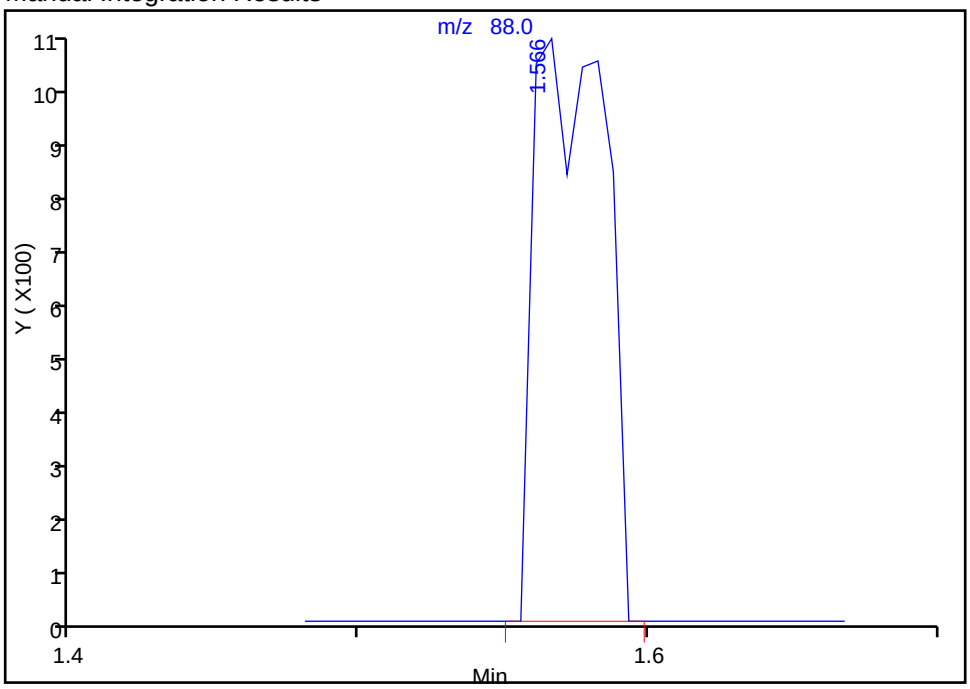
Not Detected
Expected RT: 1.57

Processing Integration Results



Manual Integration Results

RT: 1.57
Area: 1804
Amount: 0.330562
Amount Units: ng



Reviewer: piccolinov, 28-Sep-2016 06:56:43
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

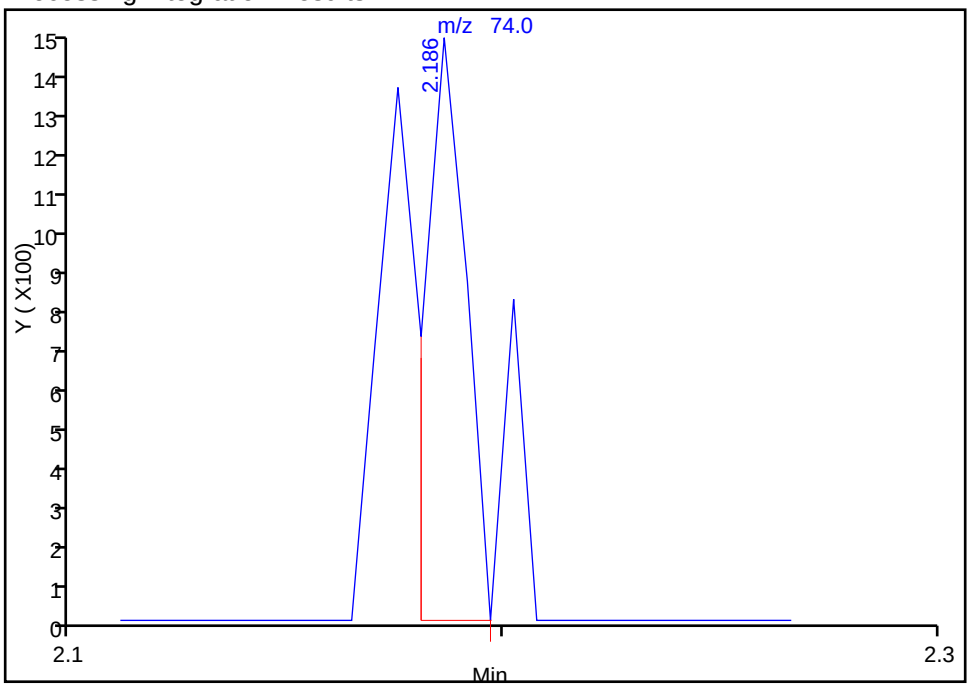
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280003.D				
Injection Date:	28-Sep-2016 05:28:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

14 N-Nitrosodimethylamine, CAS: 62-75-9

Signal: 1

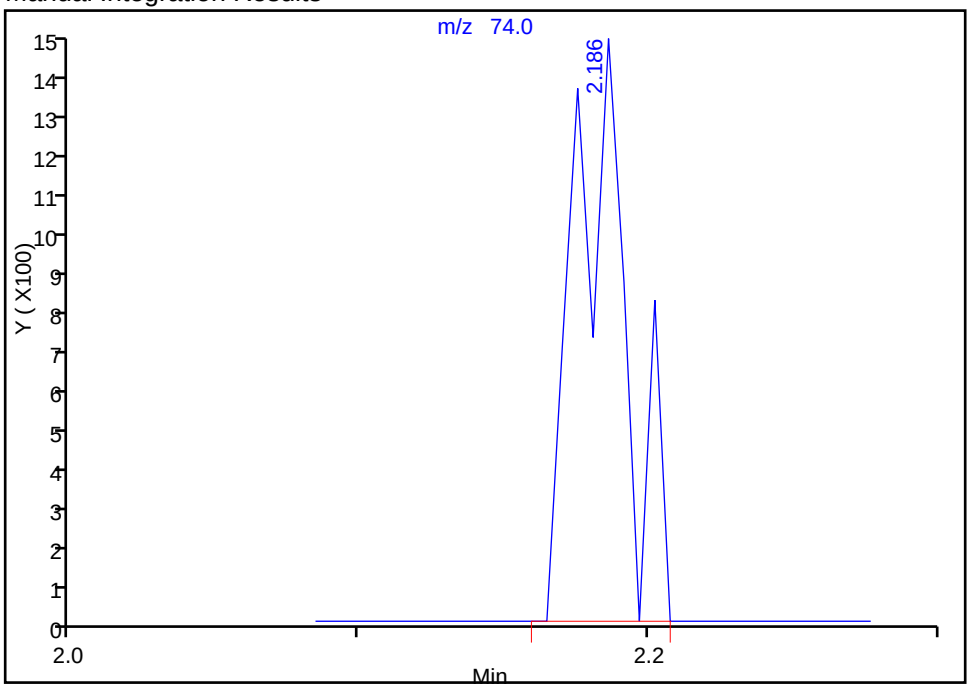
Processing Integration Results

RT: 2.19
Area: 970
Amount: 0.212574
Amount Units: ng



Manual Integration Results

RT: 2.19
Area: 1879
Amount: 0.979032
Amount Units: ng



Reviewer: piccolinov, 28-Sep-2016 06:56:43

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

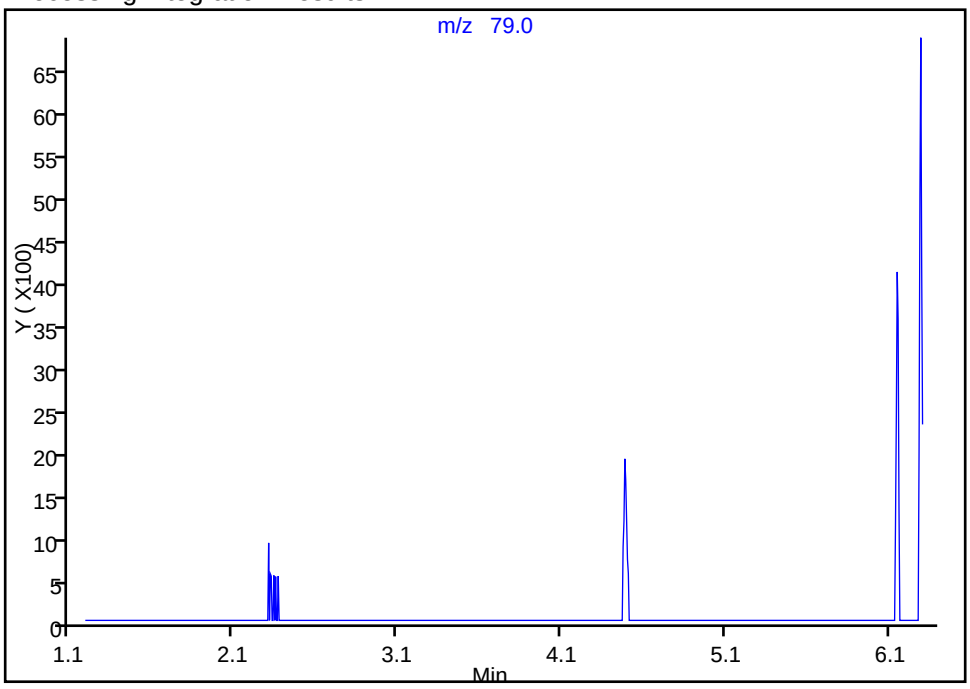
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280003.D				
Injection Date:	28-Sep-2016 05:28:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

Signal: 1

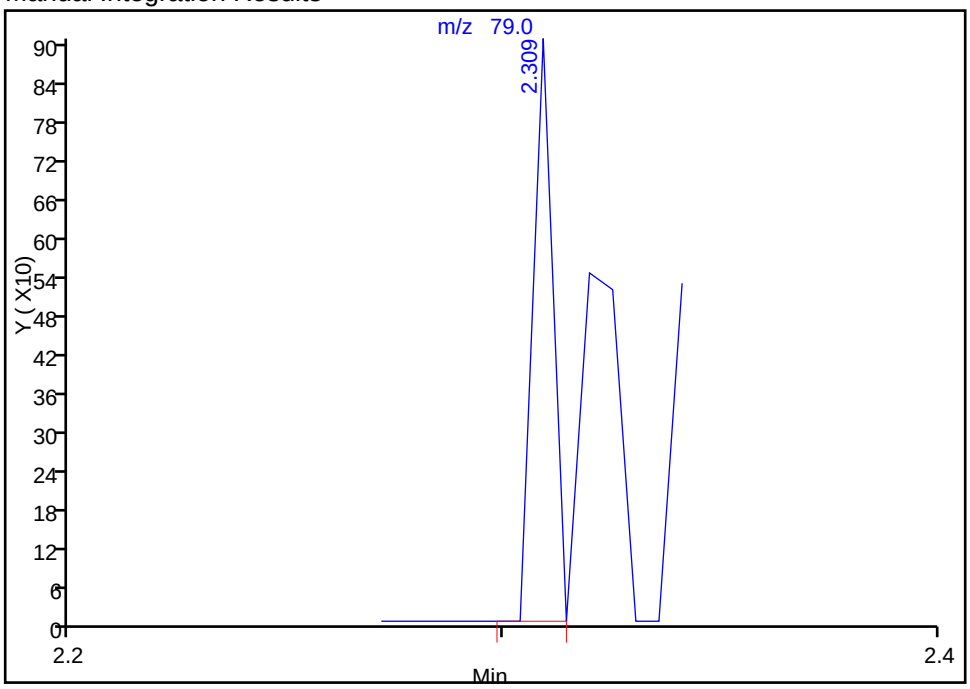
Not Detected
Expected RT: 2.31

Processing Integration Results



Manual Integration Results

RT: 2.31
Area: 290
Amount: 0.020550
Amount Units: ng



Reviewer: piccolinov, 28-Sep-2016 06:56:43
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

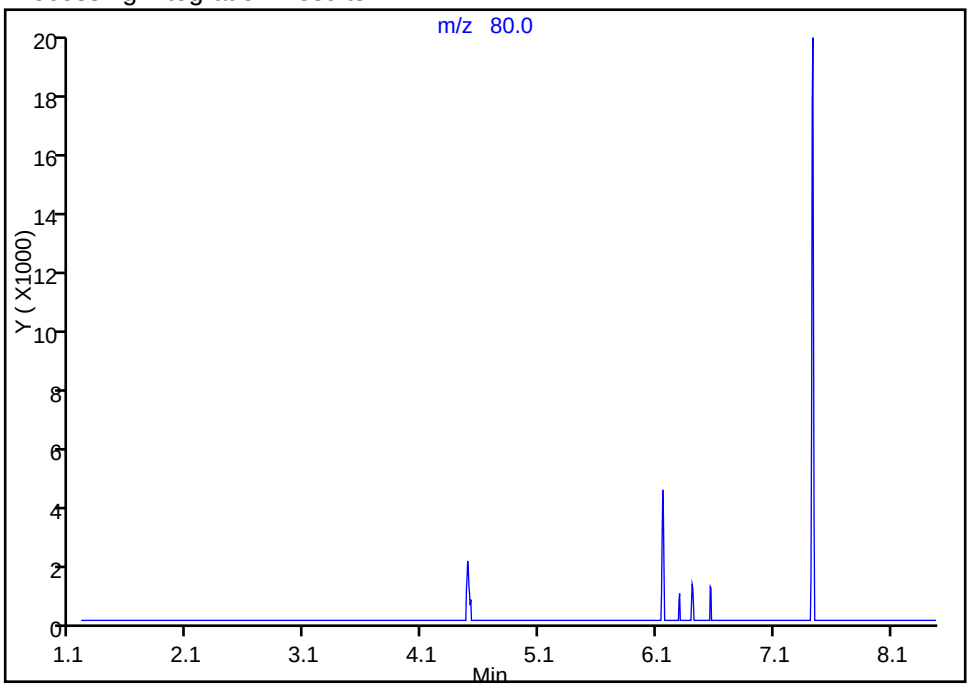
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280003.D				
Injection Date:	28-Sep-2016 05:28:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

21 Methyl methanesulfonate, CAS: 66-27-3

Signal: 1

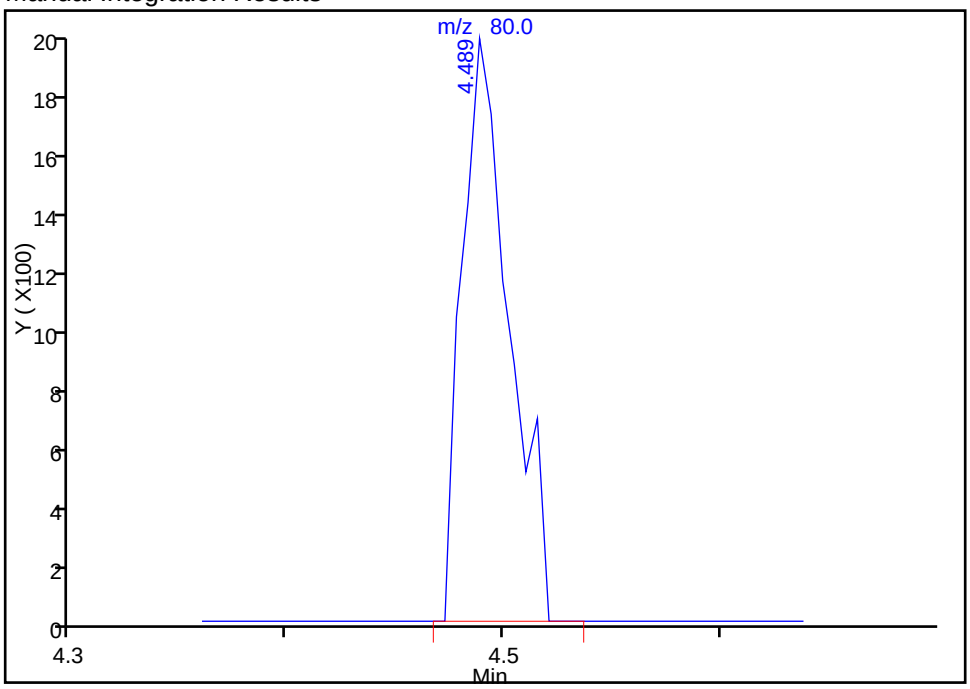
Not Detected
Expected RT: 4.49

Processing Integration Results



Manual Integration Results

RT: 4.49
Area: 3010
Amount: 0.299466
Amount Units: ng



Reviewer: piccolinov, 28-Sep-2016 06:56:43
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

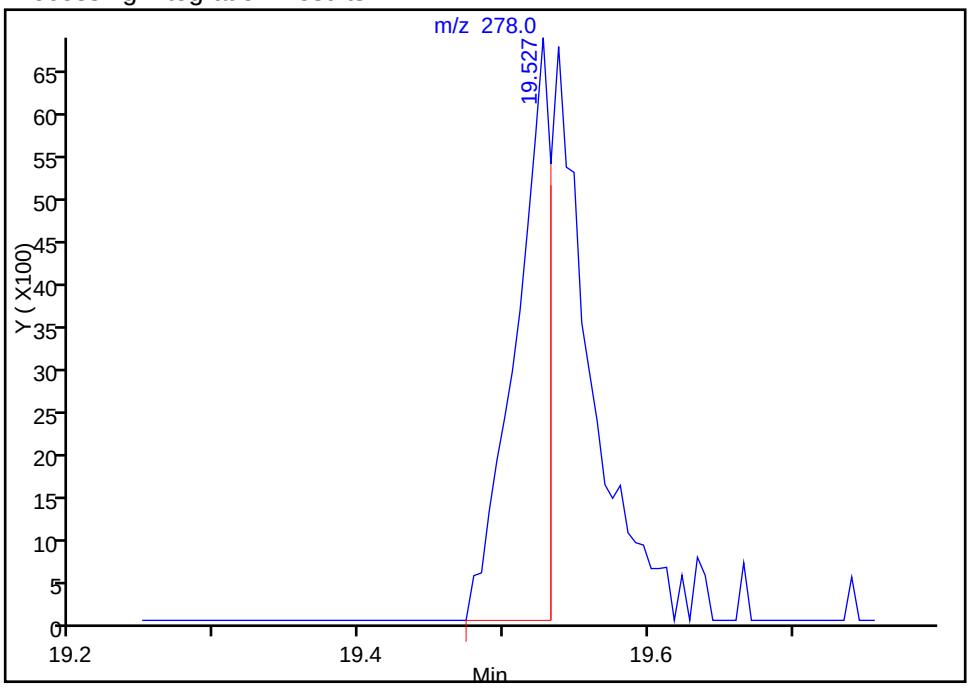
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280003.D				
Injection Date:	28-Sep-2016 05:28:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

158 Dibenz(a,h)anthracene, CAS: 53-70-3

Signal: 1

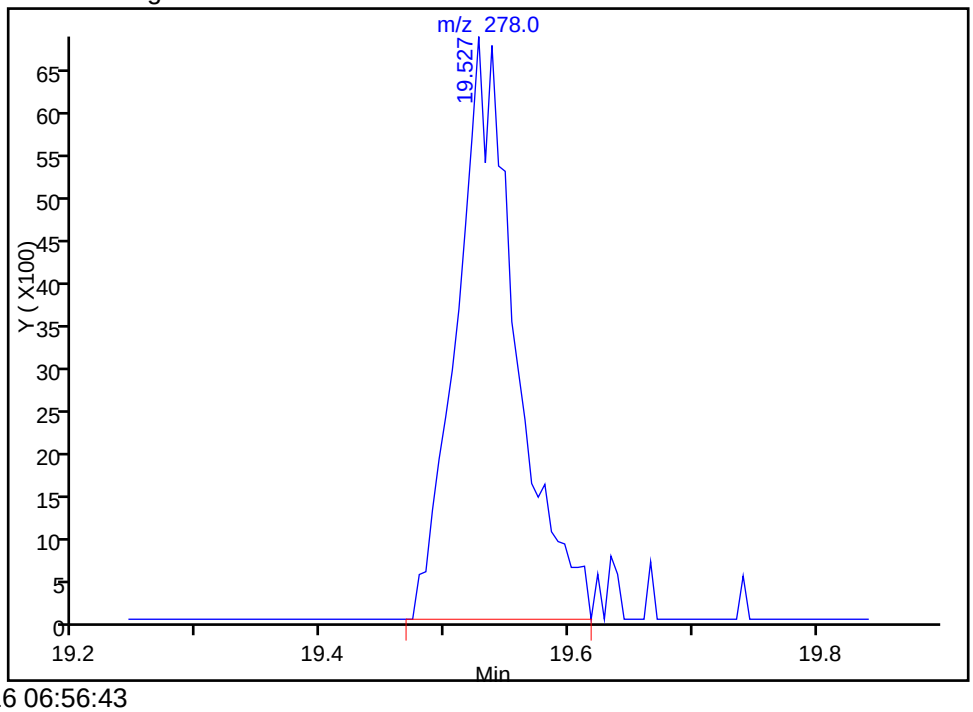
Processing Integration Results

RT: 19.53
Area: 11373
Amount: 0.233104
Amount Units: ng



Manual Integration Results

RT: 19.53
Area: 22635
Amount: 0.382720
Amount Units: ng



Reviewer: piccolinov, 28-Sep-2016 06:56:43

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

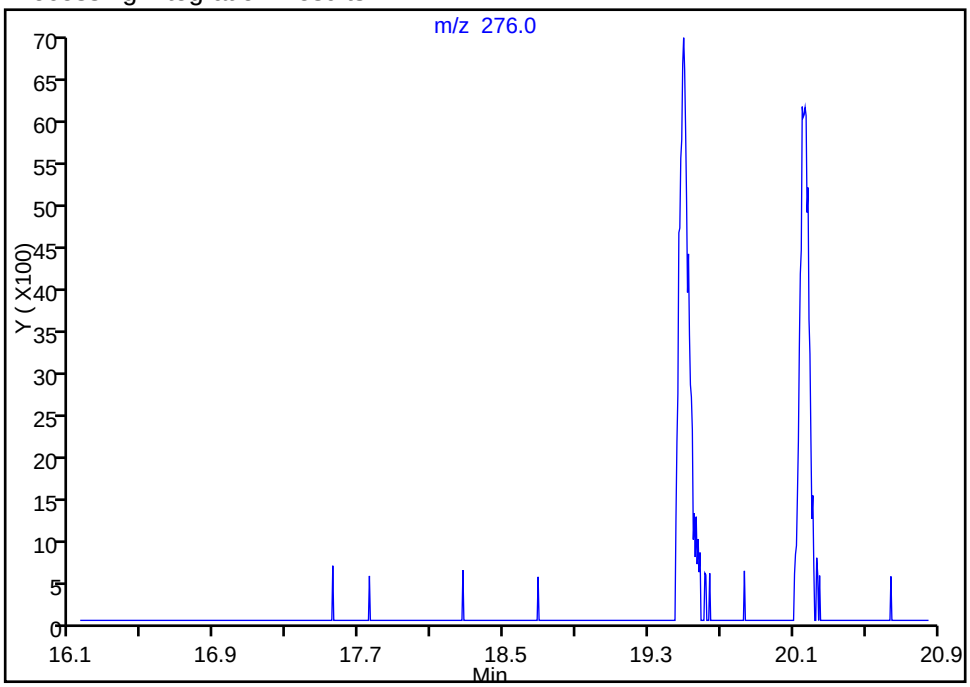
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280003.D				
Injection Date:	28-Sep-2016 05:28:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

159 Benzo[g,h,i]perylene, CAS: 191-24-2

Signal: 1

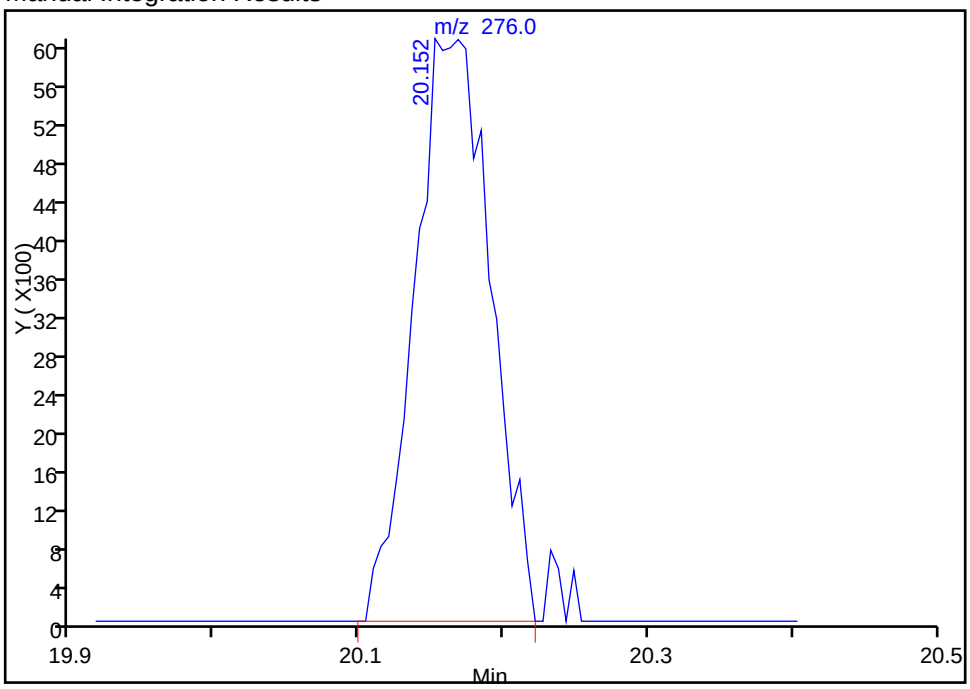
Processing Integration Results

Not Detected
Expected RT: 20.15



Manual Integration Results

RT: 20.15
Area: 22380
Amount: 0.369543
Amount Units: ng



Reviewer: piccolinov, 28-Sep-2016 06:56:43
Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280004.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 28-Sep-2016 05:55:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0013626-004
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 28-Sep-2016 10:33:34 Calib Date: 28-Sep-2016 08:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: piccolinov Date: 28-Sep-2016 07:01:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.161	6.155	0.006	95	141293	8.00	8.00	
* 2 Naphthalene-d8	136	7.443	7.438	0.005	99	626181	8.00	8.00	
* 3 Acenaphthene-d10	164	9.147	9.136	0.011	92	396584	8.00	8.00	
* 4 Phenanthrene-d10	188	10.584	10.568	0.016	97	689682	8.00	8.00	
* 5 Chrysene-d12	240	14.319	14.297	0.022	96	607105	8.00	8.00	
* 6 Perylene-d12	264	17.198	17.166	0.032	95	494188	8.00	8.00	
$ 7 2-Fluorophenol	112	4.713	4.713	0.000	91	35655	2.00	2.03	
$ 8 Phenol-d5	99	5.776	5.776	0.000	99	54618	2.00	2.05	
$ 9 Nitrobenzene-d5	82	6.722	6.716	0.006	88	52861	2.00	2.10	
$ 10 2-Fluorobiphenyl	172	8.480	8.474	0.006	99	133480	2.00	2.17	
$ 11 2,4,6-Tribromophenol	330	9.901	9.890	0.011	87	11324	2.00	1.97	
$ 12 Terphenyl-d14	244	12.497	12.481	0.016	99	126646	2.00	2.03	
13 1,4-Dioxane	88	1.551	1.566	-0.015	90	10268	2.00	1.97	
14 N-Nitrosodimethylamine	74	2.149	2.186	-0.037	72	6451	2.00	1.59	
15 Pyridine	79	2.234	2.309	-0.075	97	23238	2.00	1.72	M
21 Methyl methanesulfonate	80	4.478	4.489	-0.011	88	17733	2.00	1.85	
25 Benzaldehyde	77	5.696	5.696	0.000	94	29953	2.00	2.03	
26 Phenol	94	5.792	5.787	0.005	94	61800	2.00	2.13	
27 Aniline	93	5.814	5.814	0.000	97	60755	2.00	2.03	
29 Bis(2-chloroethyl)ether	93	5.883	5.878	0.005	95	45303	2.00	2.08	
30 2-Chlorophenol	128	5.942	5.936	0.006	95	47389	2.00	2.08	
31 n-Decane	43	6.011	6.001	0.010	91	48055	2.00	2.15	
32 1,3-Dichlorobenzene	146	6.102	6.097	0.005	98	54740	2.00	2.03	
33 1,4-Dichlorobenzene	146	6.177	6.177	0.000	96	58086	2.00	2.12	
34 Benzyl alcohol	108	6.300	6.300	0.000	94	29791	2.00	2.04	
35 1,2-Dichlorobenzene	146	6.337	6.332	0.005	97	56283	2.00	2.11	
36 2-Methylphenol	108	6.412	6.412	0.000	94	43634	2.00	2.12	
37 Indene	116	6.428	6.423	0.005	90	88570	2.00	2.19	
38 2,2'-oxybis[1-chloropropan	45	6.444	6.439	0.005	95	67005	2.00	2.20	
39 N-Nitrosopyrrolidine	100	6.535	6.540	-0.005	93	20728	2.00	1.93	
40 Acetophenone	105	6.567	6.561	0.006	90	67719	2.00	2.24	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.567	6.561	0.006	72	47734	2.00	2.27	
41 N-Nitrosodi-n-propylamine	70	6.567	6.567	0.000	83	33143	2.00	2.22	
45 Hexachloroethane	117	6.690	6.684	0.006	94	23676	2.00	2.05	
46 Nitrobenzene	77	6.738	6.732	0.006	87	50731	2.00	2.03	
48 Isophorone	82	6.978	6.978	0.000	99	97868	2.00	2.08	
49 2-Nitrophenol	139	7.064	7.058	0.006	91	25173	2.00	1.91	
50 2,4-Dimethylphenol	107	7.096	7.090	0.006	95	50397	2.00	2.11	
52 Benzoic acid	122	7.123	7.117	0.006	87	26215	2.00	1.99	
53 Bis(2-chloroethoxy)methane	93	7.187	7.181	0.006	99	65684	2.00	2.14	
54 2,4-Dichlorophenol	162	7.294	7.293	0.001	93	43381	2.00	1.99	
56 1,2,4-Trichlorobenzene	180	7.384	7.379	0.005	93	53177	2.00	2.04	
58 Naphthalene	128	7.465	7.459	0.005	97	169107	2.00	2.17	
59 4-Chloroaniline	127	7.507	7.502	0.005	97	67655	2.00	2.09	
60 2,6-Dichlorophenol	162	7.518	7.512	0.006	98	45373	2.00	2.13	
62 Hexachlorobutadiene	225	7.587	7.582	0.005	96	30319	2.00	2.06	
64 Caprolactam	113	7.806	7.828	-0.022	81	12193	2.00	1.61	
67 4-Chloro-3-methylphenol	107	7.961	7.950	0.011	95	42566	2.00	1.95	
69 2-Methylnaphthalene	142	8.138	8.127	0.011	92	113422	2.00	2.10	
71 1-Methylnaphthalene	142	8.234	8.228	0.006	93	108647	2.00	2.12	
72 Hexachlorocyclopentadiene	237	8.298	8.287	0.011	95	30631	2.00	2.09	
73 1,2,4,5-Tetrachlorobenzene	216	8.303	8.292	0.011	96	58375	2.00	2.25	
74 2,4,6-Trichlorophenol	196	8.399	8.394	0.005	91	34417	2.00	2.03	
75 2,4,5-Trichlorophenol	196	8.437	8.431	0.006	96	36998	2.00	2.12	
76 1,1'-Biphenyl	154	8.581	8.570	0.011	95	140078	2.00	2.14	
77 2-Chloronaphthalene	162	8.608	8.602	0.006	95	117125	2.00	2.21	
79 2-Nitroaniline	65	8.688	8.682	0.006	84	28406	2.00	1.97	
82 Dimethyl phthalate	163	8.848	8.843	0.005	99	116723	2.00	2.07	
83 1,3-Dinitrobenzene	168	8.880	8.875	0.005	86	14205	2.00	1.63	
84 2,6-Dinitrotoluene	165	8.912	8.901	0.011	96	25667	2.00	1.95	
85 Acenaphthylene	152	9.008	9.003	0.005	99	170237	2.00	2.13	
86 3-Nitroaniline	138	9.078	9.067	0.011	94	29195	2.00	1.97	
87 2,4-Dinitrophenol	184	9.174	9.168	0.006	61	21063	4.00	3.16	
88 Acenaphthene	153	9.174	9.168	0.006	93	113548	2.00	2.11	
89 4-Nitrophenol	109	9.211	9.201	0.010	88	24673	4.00	3.94	
91 2,4-Dinitrotoluene	165	9.297	9.291	0.006	93	30470	2.00	1.75	
93 Dibenzofuran	168	9.340	9.329	0.011	98	164045	2.00	2.17	
95 2,3,5,6-Tetrachlorophenol	232	9.414	9.398	0.016	93	29299	2.00	1.99	
96 2,3,4,6-Tetrachlorophenol	232	9.452	9.441	0.011	72	28761	2.00	1.99	
97 2-Naphthylamine	143	9.479	9.473	0.006	97	119661	2.00	2.17	
98 Diethyl phthalate	149	9.516	9.505	0.011	99	117835	2.00	2.23	
99 Hexadecane	57	9.521	9.516	0.005	91	93728	2.00	2.22	
100 4-Chlorophenyl phenyl ethe	204	9.649	9.639	0.010	89	65693	2.00	2.13	
101 4-Nitroaniline	138	9.660	9.649	0.011	85	29211	2.00	2.01	
103 Fluorene	166	9.671	9.660	0.011	94	133140	2.00	2.22	
104 4,6-Dinitro-2-methylphenol	198	9.692	9.687	0.005	90	29802	4.00	3.04	
105 N-Nitrosodiphenylamine	169	9.756	9.745	0.011	61	97110	2.00	2.12	
90 1,2-Diphenylhydrazine	77	9.799	9.794	0.005	98	141468	2.00	2.19	
57 Azobenzene	77	9.799	9.794	0.005	98	141468	2.00	2.19	
110 4-Bromophenyl phenyl ether	248	10.120	10.109	0.011	67	35165	2.00	2.06	
112 Hexachlorobenzene	284	10.205	10.194	0.011	93	35016	2.00	2.18	
113 Atrazine	200	10.237	10.226	0.011	91	33069	2.00	2.07	
116 Pentachlorophenol	266	10.381	10.370	0.011	91	37514	4.00	3.90	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.392	10.381	0.011	95	94487	2.00	2.14	
121 Phenanthrene	178	10.606	10.595	0.011	97	187058	2.00	2.11	
122 Anthracene	178	10.659	10.648	0.011	97	196252	2.00	2.13	
124 Carbazole	167	10.809	10.793	0.016	95	176861	2.00	2.07	
126 Di-n-butyl phthalate	149	11.135	11.124	0.011	100	193993	2.00	2.04	
131 Fluoranthene	202	12.005	11.984	0.021	98	201269	2.00	2.07	
132 Benzidine	184	12.144	12.117	0.027	100	76695	2.00	1.71	
133 Pyrene	202	12.321	12.304	0.017	97	202646	2.00	2.03	
138 Butyl benzyl phthalate	149	13.245	13.223	0.022	97	76298	2.00	1.92	
144 3,3'-Dichlorobenzidine	252	14.228	14.206	0.022	75	56393	2.00	1.91	
145 Bis(2-ethylhexyl) phthalat	149	14.287	14.265	0.022	97	103672	2.00	2.03	
146 Benzo[a]anthracene	228	14.297	14.281	0.016	99	177985	2.00	2.05	
147 Chrysene	228	14.367	14.345	0.022	98	164427	2.00	1.99	
150 Di-n-octyl phthalate	149	15.585	15.563	0.022	99	243367	2.00	2.65	
151 7,12-Dimethylbenz(a)anthra	256	16.407	16.381	0.026	93	74677	2.00	1.98	
152 Benzo[b]fluoranthene	252	16.423	16.397	0.026	98	156982	2.00	1.94	
153 Benzo[k]fluoranthene	252	16.482	16.450	0.032	99	159946	2.00	2.01	
219 Benzo[e]pyrene	252	16.984	16.957	0.027	0	147684	2.00	1.97	
154 Benzo[a]pyrene	252	17.086	17.054	0.032	79	152956	2.00	2.03	
157 Indeno[1,2,3-cd]pyrene	276	19.533	19.495	0.038	95	147003	2.00	1.98	
158 Dibenz(a,h)anthracene	278	19.581	19.527	0.054	90	122173	2.00	1.96	
159 Benzo[g,h,i]perylene	276	20.206	20.152	0.054	94	126424	2.00	1.99	
S 197 Methyl Phenols,Total	108				0		4.00	4.38	
S 199 Total Cresols	108				0		4.00	4.38	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD2.0i_00011 Amount Added: 1.00 Units: mL

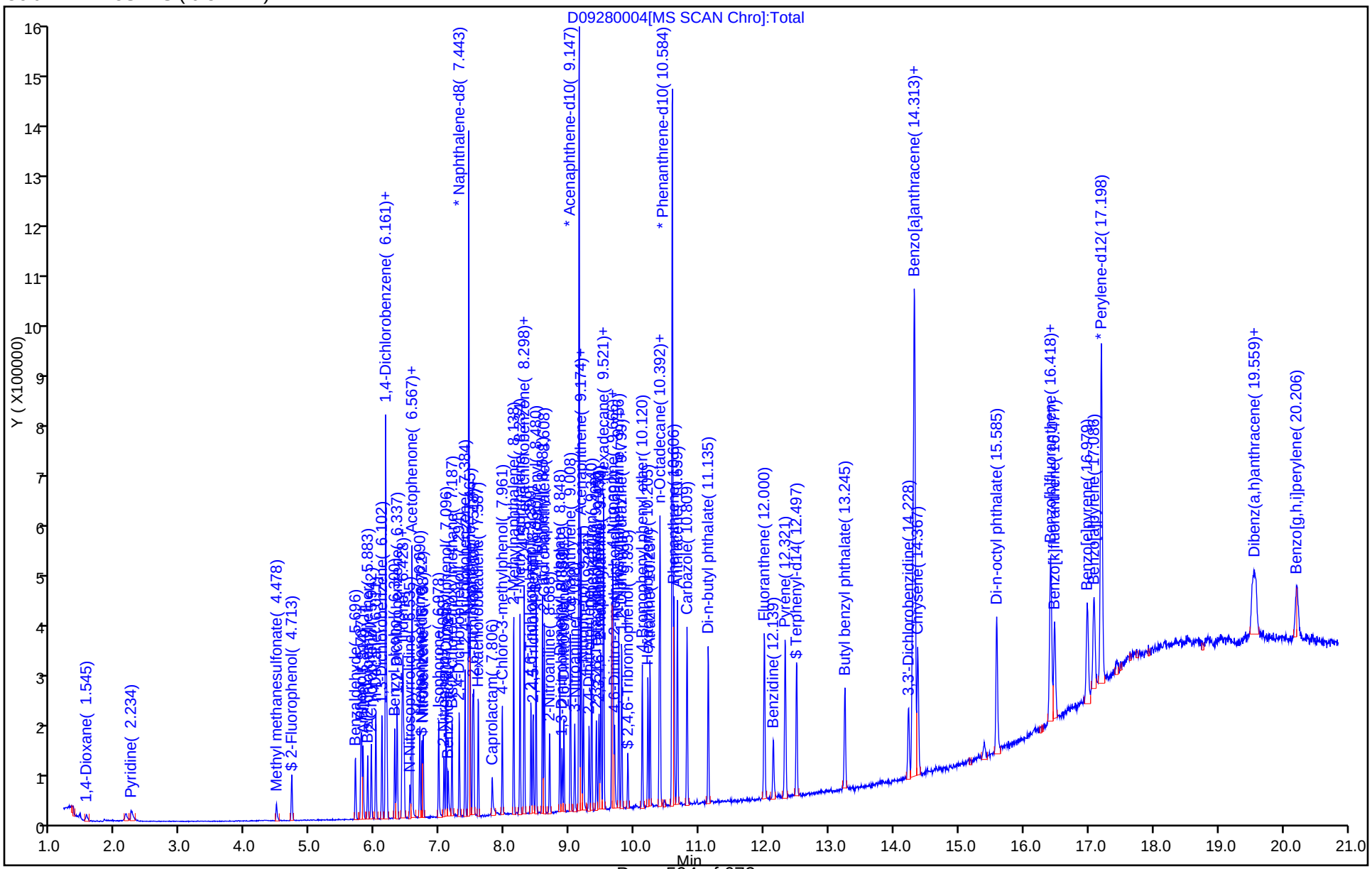
Report Date: 28-Sep-2016 10:33:35 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280004.D

Injection Date:	28-Sep-2016 05:55:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

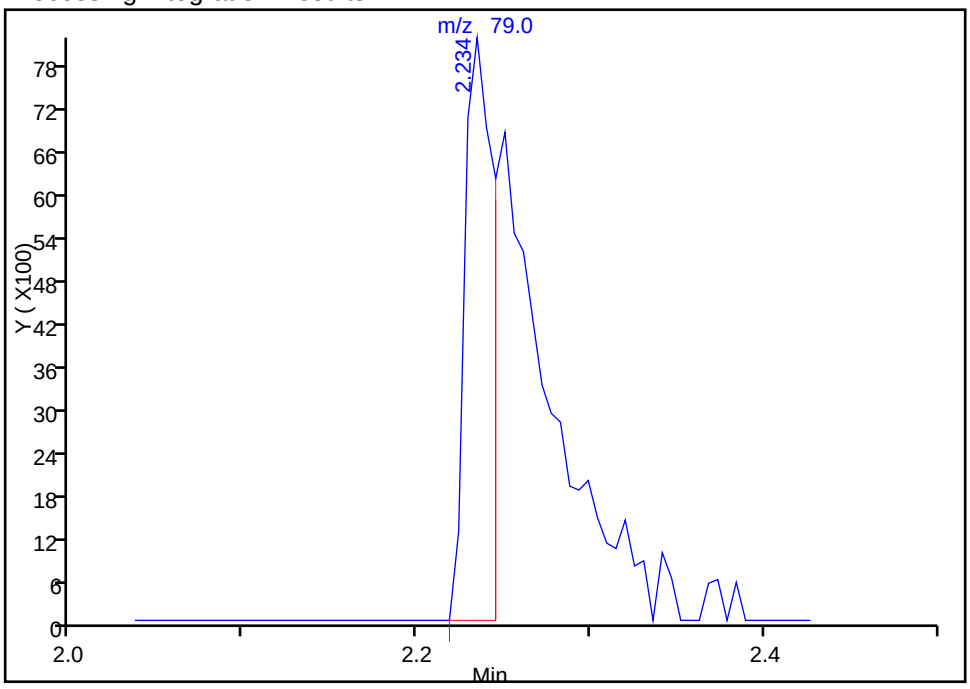
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280004.D				
Injection Date:	28-Sep-2016 05:55:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

Signal: 1

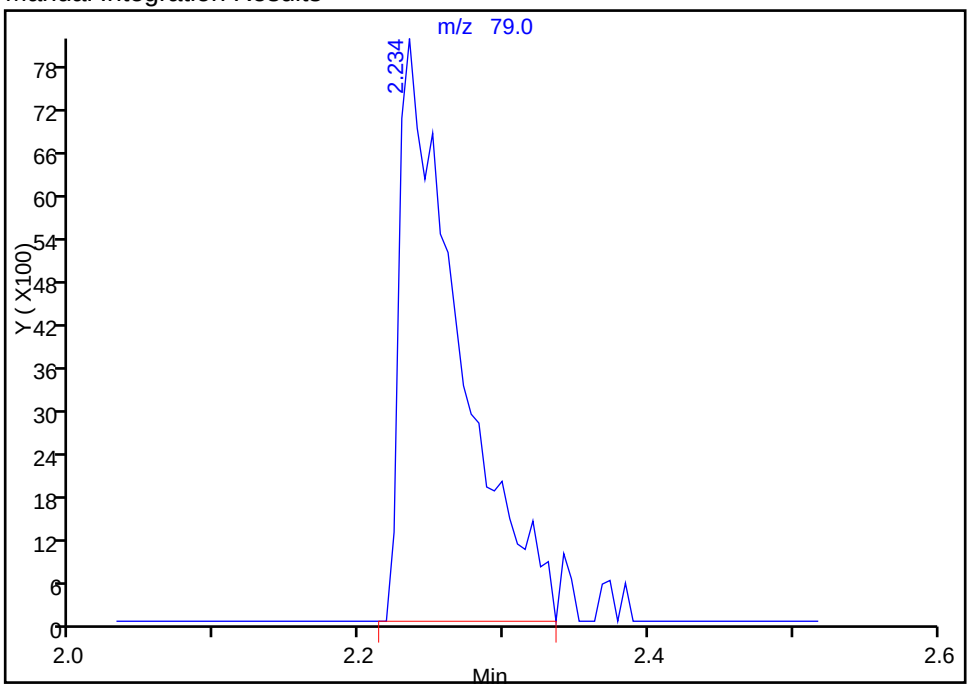
Processing Integration Results

RT: 2.23
Area: 9484
Amount: 1.057985
Amount Units: ng



Manual Integration Results

RT: 2.23
Area: 23238
Amount: 1.723978
Amount Units: ng



Reviewer: piccolinov, 28-Sep-2016 07:01:51

Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280005.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 28-Sep-2016 06:22:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0013626-005
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 28-Sep-2016 10:33:40 Calib Date: 28-Sep-2016 08:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: piccolinov Date: 28-Sep-2016 07:03:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.161	6.155	0.006	95	136322	8.00	8.00	
* 2 Naphthalene-d8	136	7.443	7.438	0.005	99	601481	8.00	8.00	
* 3 Acenaphthene-d10	164	9.147	9.136	0.011	92	389407	8.00	8.00	
* 4 Phenanthrene-d10	188	10.584	10.568	0.016	97	681664	8.00	8.00	
* 5 Chrysene-d12	240	14.318	14.297	0.021	97	581600	8.00	8.00	
* 6 Perylene-d12	264	17.198	17.166	0.032	97	469182	8.00	8.00	
$ 7 2-Fluorophenol	112	4.713	4.713	0.000	92	69096	4.00	4.08	
$ 8 Phenol-d5	99	5.776	5.776	0.000	97	110231	4.00	4.29	
$ 9 Nitrobenzene-d5	82	6.722	6.716	0.006	86	101577	4.00	4.20	
$ 10 2-Fluorobiphenyl	172	8.479	8.474	0.005	100	268238	4.00	4.44	
$ 11 2,4,6-Tribromophenol	330	9.900	9.890	0.010	88	21740	4.00	3.83	
$ 12 Terphenyl-d14	244	12.502	12.481	0.021	99	247241	4.00	4.14	
13 1,4-Dioxane	88	1.551	1.566	-0.015	91	20954	4.00	4.17	
14 N-Nitrosodimethylamine	74	2.149	2.186	-0.037	95	28605	4.00	4.65	
15 Pyridine	79	2.224	2.309	-0.085	97	50890	4.00	3.91	
21 Methyl methanesulfonate	80	4.473	4.489	-0.016	87	38395	4.00	4.15	
25 Benzaldehyde	77	5.691	5.696	-0.005	94	57162	4.00	4.02	
26 Phenol	94	5.792	5.787	0.005	96	122921	4.00	4.39	
27 Aniline	93	5.808	5.814	-0.006	97	125767	4.00	4.36	
29 Bis(2-chloroethyl)ether	93	5.883	5.878	0.005	96	90269	4.00	4.30	
30 2-Chlorophenol	128	5.937	5.936	0.000	96	94053	4.00	4.28	
31 n-Decane	43	6.006	6.001	0.005	90	94075	4.00	4.36	
32 1,3-Dichlorobenzene	146	6.102	6.097	0.005	98	112220	4.00	4.30	
33 1,4-Dichlorobenzene	146	6.177	6.177	0.000	95	113238	4.00	4.29	
34 Benzyl alcohol	108	6.300	6.300	0.000	93	58077	4.00	4.12	
35 1,2-Dichlorobenzene	146	6.337	6.332	0.005	98	111876	4.00	4.35	
36 2-Methylphenol	108	6.412	6.412	0.000	94	88550	4.00	4.45	
37 Indene	116	6.428	6.423	0.005	91	174727	4.00	4.48	
38 2,2'-oxybis[1-chloropropan	45	6.444	6.439	0.005	95	131135	4.00	4.46	
39 N-Nitrosopyrrolidine	100	6.535	6.540	-0.005	95	44073	4.00	4.24	
40 Acetophenone	105	6.567	6.561	0.006	86	133204	4.00	4.56	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.567	6.561	0.006	70	92727	4.00	4.56	
41 N-Nitrosodi-n-propylamine	70	6.567	6.567	0.000	69	65959	4.00	4.57	
45 Hexachloroethane	117	6.684	6.684	0.000	95	46231	4.00	4.14	
46 Nitrobenzene	77	6.738	6.732	0.006	86	104095	4.00	4.33	
48 Isophorone	82	6.978	6.978	0.000	99	191078	4.00	4.23	
49 2-Nitrophenol	139	7.058	7.058	0.000	94	49239	4.00	3.89	
50 2,4-Dimethylphenol	107	7.090	7.090	0.000	95	99657	4.00	4.34	
52 Benzoic acid	122	7.128	7.117	0.011	87	43240	4.00	3.42	M
53 Bis(2-chloroethoxy)methane	93	7.181	7.181	0.000	98	128253	4.00	4.35	
54 2,4-Dichlorophenol	162	7.293	7.293	0.000	94	87596	4.00	4.19	
56 1,2,4-Trichlorobenzene	180	7.384	7.379	0.005	94	109322	4.00	4.37	
58 Naphthalene	128	7.464	7.459	0.005	97	329300	4.00	4.39	
59 4-Chloroaniline	127	7.502	7.502	0.000	97	133478	4.00	4.29	
60 2,6-Dichlorophenol	162	7.518	7.512	0.006	98	91434	4.00	4.46	
62 Hexachlorobutadiene	225	7.587	7.582	0.005	95	60769	4.00	4.31	
64 Caprolactam	113	7.801	7.828	-0.027	82	26426	4.00	3.64	
67 4-Chloro-3-methylphenol	107	7.961	7.950	0.011	96	88446	4.00	4.21	
69 2-Methylnaphthalene	142	8.132	8.127	0.005	93	227495	4.00	4.38	
71 1-Methylnaphthalene	142	8.234	8.228	0.006	94	217773	4.00	4.43	
72 Hexachlorocyclopentadiene	237	8.292	8.287	0.005	94	63003	4.00	4.37	
73 1,2,4,5-Tetrachlorobenzene	216	8.303	8.292	0.011	96	113052	4.00	4.44	
74 2,4,6-Trichlorophenol	196	8.399	8.394	0.005	92	70500	4.00	4.23	
75 2,4,5-Trichlorophenol	196	8.437	8.431	0.006	95	70906	4.00	4.14	
76 1,1'-Biphenyl	154	8.581	8.570	0.011	95	280001	4.00	4.36	
77 2-Chloronaphthalene	162	8.608	8.602	0.006	95	231016	4.00	4.44	
79 2-Nitroaniline	65	8.688	8.682	0.006	85	59269	4.00	4.18	
82 Dimethyl phthalate	163	8.848	8.843	0.005	99	238099	4.00	4.30	
83 1,3-Dinitrobenzene	168	8.880	8.875	0.005	85	31474	4.00	3.68	
84 2,6-Dinitrotoluene	165	8.912	8.901	0.011	96	52327	4.00	4.06	
85 Acenaphthylene	152	9.008	9.003	0.005	99	342511	4.00	4.37	
86 3-Nitroaniline	138	9.078	9.067	0.011	97	59668	4.00	4.11	
88 Acenaphthene	153	9.174	9.168	0.006	93	222488	4.00	4.21	
87 2,4-Dinitrophenol	184	9.174	9.168	0.006	71	44126	8.00	6.75	
89 4-Nitrophenol	109	9.211	9.201	0.010	87	48952	8.00	7.96	
91 2,4-Dinitrotoluene	165	9.297	9.291	0.006	95	67836	4.00	3.96	
93 Dibenzofuran	168	9.340	9.329	0.011	98	325244	4.00	4.38	
95 2,3,5,6-Tetrachlorophenol	232	9.409	9.398	0.011	93	58450	4.00	4.05	
96 2,3,4,6-Tetrachlorophenol	232	9.452	9.441	0.011	72	58308	4.00	4.12	
97 2-Naphthylamine	143	9.478	9.473	0.005	97	238089	4.00	4.39	
98 Diethyl phthalate	149	9.516	9.505	0.011	98	228292	4.00	4.41	
99 Hexadecane	57	9.526	9.516	0.010	91	184145	4.00	4.54	
100 4-Chlorophenyl phenyl ethe	204	9.649	9.639	0.010	91	127910	4.00	4.23	
101 4-Nitroaniline	138	9.660	9.649	0.011	88	61401	4.00	4.31	
103 Fluorene	166	9.671	9.660	0.011	94	260781	4.00	4.44	
104 4,6-Dinitro-2-methylphenol	198	9.692	9.687	0.005	90	64368	8.00	6.64	
105 N-Nitrosodiphenylamine	169	9.756	9.745	0.011	61	192756	4.00	4.25	
90 1,2-Diphenylhydrazine	77	9.799	9.794	0.005	97	275099	4.00	4.32	
57 Azobenzene	77	9.799	9.794	0.005	97	275099	4.00	4.32	
110 4-Bromophenyl phenyl ether	248	10.119	10.109	0.010	66	71270	4.00	4.23	
112 Hexachlorobenzene	284	10.205	10.194	0.011	93	65543	4.00	4.13	
113 Atrazine	200	10.242	10.226	0.016	93	67638	4.00	4.28	
116 Pentachlorophenol	266	10.381	10.370	0.011	91	64047	8.00	6.74	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.392	10.381	0.011	93	194687	4.00	4.58	
121 Phenanthrene	178	10.606	10.595	0.011	97	369708	4.00	4.22	
122 Anthracene	178	10.659	10.648	0.011	98	382844	4.00	4.20	
124 Carbazole	167	10.809	10.793	0.016	95	356423	4.00	4.22	
126 Di-n-butyl phthalate	149	11.140	11.124	0.016	100	387335	4.00	4.11	
131 Fluoranthene	202	12.000	11.984	0.016	98	398419	4.00	4.14	
132 Benzidine	184	12.139	12.117	0.022	100	160115	4.00	3.73	
133 Pyrene	202	12.326	12.304	0.022	97	404308	4.00	4.24	
138 Butyl benzyl phthalate	149	13.245	13.223	0.022	98	149362	4.00	3.92	
144 3,3'-Dichlorobenzidine	252	14.228	14.206	0.022	75	107874	4.00	3.82	
145 Bis(2-ethylhexyl) phthalat	149	14.286	14.265	0.021	98	197946	4.00	4.05	
146 Benzo[a]anthracene	228	14.302	14.281	0.021	99	342130	4.00	4.12	
147 Chrysene	228	14.372	14.345	0.027	98	328818	4.00	4.15	
150 Di-n-octyl phthalate	149	15.590	15.563	0.027	99	331169	4.00	3.80	
151 7,12-Dimethylbenz(a)anthra	256	16.413	16.381	0.032	91	145844	4.00	4.07	
152 Benzo[b]fluoranthene	252	16.423	16.397	0.026	98	311204	4.00	4.06	
153 Benzo[k]fluoranthene	252	16.487	16.450	0.037	98	313254	4.00	4.15	
219 Benzo[e]pyrene	252	16.990	16.957	0.033	0	289699	4.00	4.08	
154 Benzo[a]pyrene	252	17.086	17.054	0.032	80	293485	4.00	4.10	
157 Indeno[1,2,3-cd]pyrene	276	19.549	19.495	0.054	96	284911	4.00	4.04	
158 Dibenz(a,h)anthracene	278	19.575	19.527	0.048	92	233000	4.00	3.95	
159 Benzo[g,h,i]perylene	276	20.211	20.152	0.059	94	244253	4.00	4.04	
S 197 Methyl Phenols,Total	108				0		8.00	9.01	
S 199 Total Cresols	108				0		8.00	9.01	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD4.0i_00011 Amount Added: 1.00 Units: mL

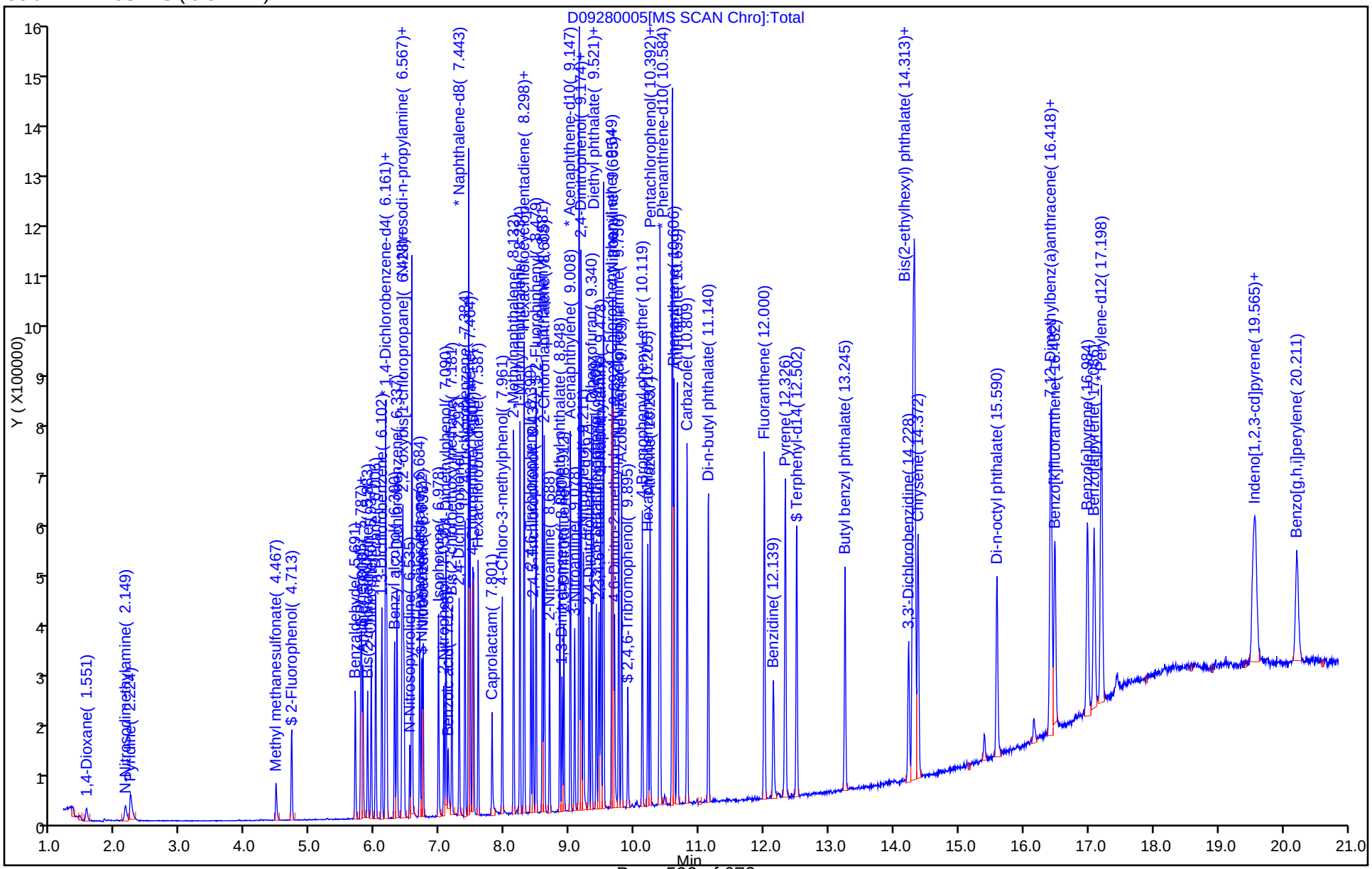
Report Date: 28-Sep-2016 10:33:41 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280005.D

Injection Date:	28-Sep-2016 06:22:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

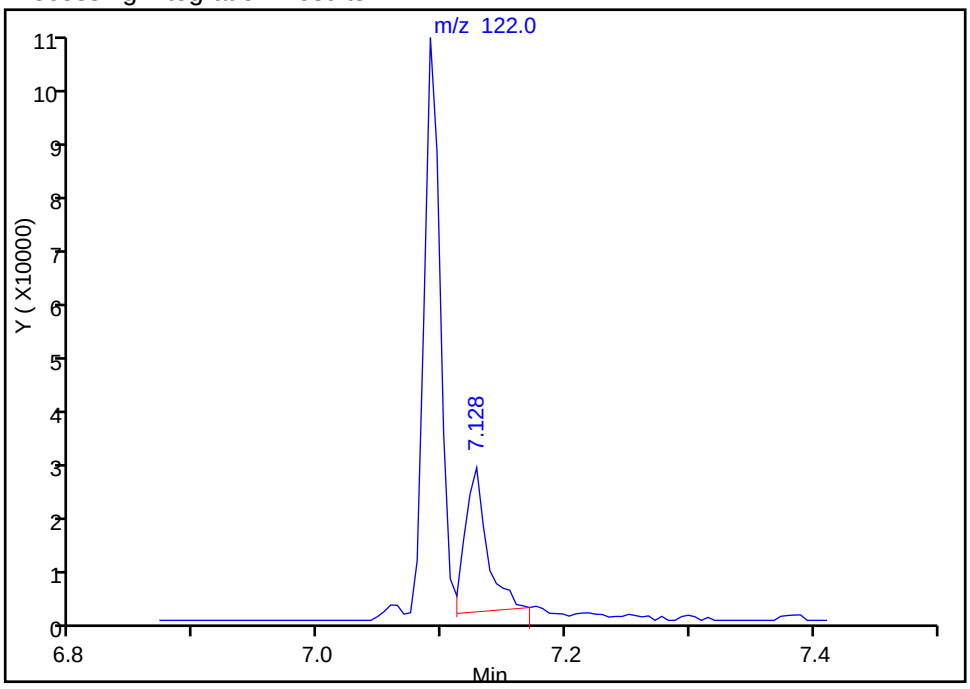
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280005.D				
Injection Date:	28-Sep-2016 06:22:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

52 Benzoic acid, CAS: 65-85-0

Signal: 1

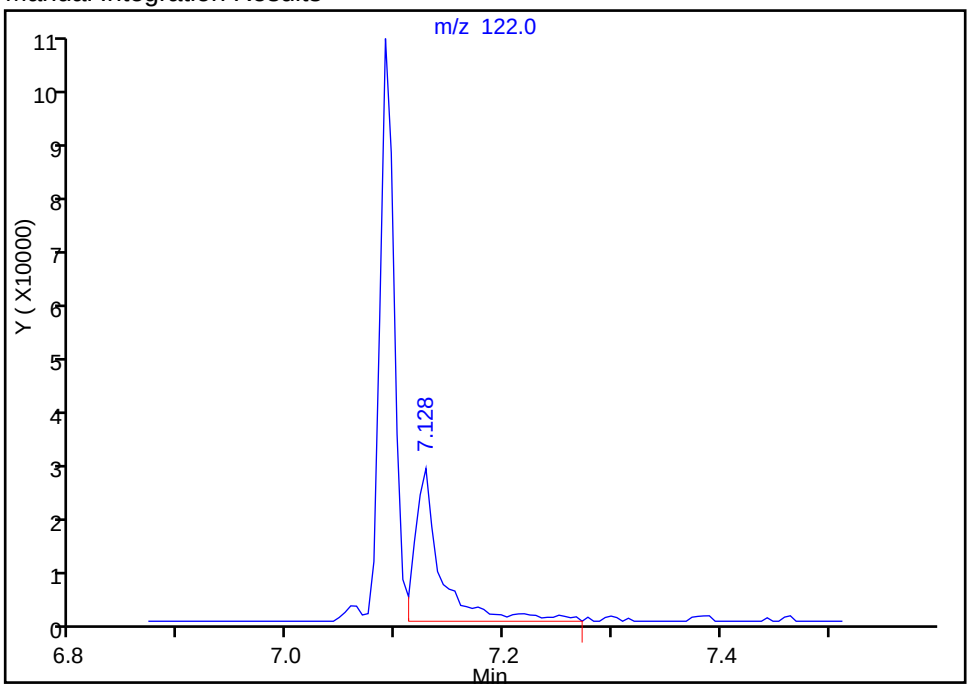
Processing Integration Results

RT: 7.13
Area: 30410
Amount: 2.669007
Amount Units: ng



Manual Integration Results

RT: 7.13
Area: 43240
Amount: 3.419150
Amount Units: ng



Reviewer: piccolinov, 28-Sep-2016 07:03:18

Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280006.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 28-Sep-2016 06:49:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0013626-006
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 28-Sep-2016 10:33:45 Calib Date: 28-Sep-2016 08:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: piccolinov Date: 28-Sep-2016 08:11:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.161	6.161	0.000	95	128344	8.00	8.00	
* 2 Naphthalene-d8	136	7.443	7.443	0.000	99	570590	8.00	8.00	
* 3 Acenaphthene-d10	164	9.147	9.147	0.000	92	366344	8.00	8.00	
* 4 Phenanthrene-d10	188	10.584	10.584	0.000	97	640212	8.00	8.00	
* 5 Chrysene-d12	240	14.324	14.324	0.000	96	559888	8.00	8.00	
* 6 Perylene-d12	264	17.209	17.209	0.000	95	460860	8.00	8.00	
$ 7 2-Fluorophenol	112	4.713	4.713	0.000	92	164529	10.0	10.3	
$ 8 Phenol-d5	99	5.776	5.776	0.000	98	247374	10.0	10.2	
$ 9 Nitrobenzene-d5	82	6.722	6.722	0.000	87	235812	10.0	10.3	
$ 10 2-Fluorobiphenyl	172	8.485	8.485	0.000	99	595508	10.0	10.5	
$ 11 2,4,6-Tribromophenol	330	9.901	9.901	0.000	89	54053	10.0	10.1	
$ 12 Terphenyl-d14	244	12.508	12.508	0.000	99	591144	10.0	10.3	
13 1,4-Dioxane	88	1.545	1.545	0.000	95	46953	10.0	9.92	
14 N-Nitrosodimethylamine	74	2.138	2.138	0.000	94	65752	10.0	10.3	
15 Pyridine	79	2.213	2.213	0.000	98	126276	10.0	10.3	
21 Methyl methanesulfonate	80	4.468	4.468	0.000	87	92122	10.0	10.6	
25 Benzaldehyde	77	5.691	5.691	0.000	95	136029	10.0	10.2	
26 Phenol	94	5.792	5.792	0.000	98	274210	10.0	10.4	
27 Aniline	93	5.814	5.814	0.000	97	282090	10.0	10.4	
29 Bis(2-chloroethyl)ether	93	5.883	5.883	0.000	95	204955	10.0	10.4	
30 2-Chlorophenol	128	5.942	5.942	0.000	96	209873	10.0	10.1	
31 n-Decane	43	6.011	6.011	0.000	91	210342	10.0	10.3	
32 1,3-Dichlorobenzene	146	6.102	6.102	0.000	98	254339	10.0	10.4	
33 1,4-Dichlorobenzene	146	6.182	6.182	0.000	95	255107	10.0	10.3	
34 Benzyl alcohol	108	6.300	6.300	0.000	93	141573	10.0	10.7	
35 1,2-Dichlorobenzene	146	6.337	6.337	0.000	98	248400	10.0	10.2	
36 2-Methylphenol	108	6.417	6.417	0.000	94	195029	10.0	10.4	
37 Indene	116	6.428	6.428	0.000	90	383323	10.0	10.4	
38 2,2'-oxybis[1-chloropropan	45	6.444	6.444	0.000	95	287411	10.0	10.4	
39 N-Nitrosopyrrolidine	100	6.535	6.535	0.000	93	94946	10.0	9.71	
40 Acetophenone	105	6.567	6.567	0.000	83	290647	10.0	10.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.567	6.567	0.000	69	201807	10.0	10.5	
41 N-Nitrosodi-n-propylamine	70	6.567	6.567	0.000	67	141485	10.0	10.4	
45 Hexachloroethane	117	6.690	6.690	0.000	95	104658	10.0	9.96	
46 Nitrobenzene	77	6.743	6.743	0.000	86	235468	10.0	10.3	
48 Isophorone	82	6.978	6.978	0.000	99	441561	10.0	10.3	
49 2-Nitrophenol	139	7.064	7.064	0.000	93	119986	10.0	10.0	
50 2,4-Dimethylphenol	107	7.096	7.096	0.000	94	228239	10.0	10.5	
52 Benzoic acid	122	7.139	7.139	0.000	89	106202	10.0	8.85	
53 Bis(2-chloroethoxy)methane	93	7.187	7.187	0.000	99	297798	10.0	10.6	
54 2,4-Dichlorophenol	162	7.299	7.299	0.000	92	212217	10.0	10.7	
56 1,2,4-Trichlorobenzene	180	7.390	7.390	0.000	94	251035	10.0	10.6	
58 Naphthalene	128	7.465	7.465	0.000	97	750023	10.0	10.5	
59 4-Chloroaniline	127	7.507	7.507	0.000	97	317114	10.0	10.7	
60 2,6-Dichlorophenol	162	7.518	7.518	0.000	98	204858	10.0	10.5	
62 Hexachlorobutadiene	225	7.593	7.593	0.000	95	140029	10.0	10.5	
64 Caprolactam	113	7.806	7.806	0.000	81	70348	10.0	10.2	
67 4-Chloro-3-methylphenol	107	7.961	7.961	0.000	96	206220	10.0	10.4	
69 2-Methylnaphthalene	142	8.138	8.138	0.000	93	512081	10.0	10.4	
71 1-Methylnaphthalene	142	8.234	8.234	0.000	94	485595	10.0	10.4	
72 Hexachlorocyclopentadiene	237	8.298	8.298	0.000	94	146754	10.0	10.8	
73 1,2,4,5-Tetrachlorobenzene	216	8.303	8.303	0.000	96	251786	10.0	10.5	
74 2,4,6-Trichlorophenol	196	8.405	8.405	0.000	92	163943	10.0	10.5	
75 2,4,5-Trichlorophenol	196	8.437	8.437	0.000	96	166297	10.0	10.3	
76 1,1'-Biphenyl	154	8.581	8.581	0.000	95	637189	10.0	10.6	
77 2-Chloronaphthalene	162	8.613	8.613	0.000	95	518303	10.0	10.6	
79 2-Nitroaniline	65	8.693	8.693	0.000	87	142788	10.0	10.7	
82 Dimethyl phthalate	163	8.854	8.854	0.000	99	546717	10.0	10.5	
83 1,3-Dinitrobenzene	168	8.886	8.886	0.000	87	81894	10.0	10.2	
84 2,6-Dinitrotoluene	165	8.912	8.912	0.000	95	125572	10.0	10.4	
85 Acenaphthylene	152	9.014	9.014	0.000	99	784147	10.0	10.6	
86 3-Nitroaniline	138	9.078	9.078	0.000	96	141090	10.0	10.3	
88 Acenaphthene	153	9.179	9.179	0.000	93	507451	10.0	10.2	
87 2,4-Dinitrophenol	184	9.179	9.179	0.000	64	121149	20.0	19.7	
89 4-Nitrophenol	109	9.217	9.217	0.000	88	122061	20.0	21.1	
91 2,4-Dinitrotoluene	165	9.302	9.302	0.000	95	165144	10.0	10.3	
93 Dibenzofuran	168	9.340	9.340	0.000	98	736673	10.0	10.6	
95 2,3,5,6-Tetrachlorophenol	232	9.414	9.414	0.000	94	136801	10.0	10.1	
96 2,3,4,6-Tetrachlorophenol	232	9.452	9.452	0.000	71	138162	10.0	10.4	
97 2-Naphthylamine	143	9.484	9.484	0.000	97	548580	10.0	10.8	
98 Diethyl phthalate	149	9.516	9.516	0.000	98	519948	10.0	10.7	
99 Hexadecane	57	9.527	9.527	0.000	90	409300	10.0	10.6	
100 4-Chlorophenyl phenyl ethe	204	9.655	9.655	0.000	89	294998	10.0	10.4	
101 4-Nitroaniline	138	9.666	9.666	0.000	90	147958	10.0	11.0	
103 Fluorene	166	9.671	9.671	0.000	94	590015	10.0	10.7	
104 4,6-Dinitro-2-methylphenol	198	9.698	9.698	0.000	90	182107	20.0	20.0	
105 N-Nitrosodiphenylamine	169	9.762	9.762	0.000	60	450727	10.0	10.6	
90 1,2-Diphenylhydrazine	77	9.804	9.804	0.000	97	637959	10.0	10.7	
57 Azobenzene	77	9.804	9.804	0.000	97	637959	10.0	10.7	
110 4-Bromophenyl phenyl ether	248	10.125	10.125	0.000	66	163949	10.0	10.4	
112 Hexachlorobenzene	284	10.210	10.210	0.000	93	150173	10.0	10.1	
113 Atrazine	200	10.243	10.243	0.000	92	157189	10.0	10.6	
116 Pentachlorophenol	266	10.381	10.381	0.000	92	171012	20.0	19.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.397	10.397	0.000	94	432107	10.0	10.8	
121 Phenanthrene	178	10.611	10.611	0.000	97	853767	10.0	10.4	
122 Anthracene	178	10.665	10.665	0.000	98	899465	10.0	10.5	
124 Carbazole	167	10.814	10.814	0.000	95	833865	10.0	10.5	
126 Di-n-butyl phthalate	149	11.140	11.140	0.000	100	926207	10.0	10.5	
131 Fluoranthene	202	12.005	12.005	0.000	98	934748	10.0	10.3	
132 Benzidine	184	12.150	12.150	0.000	100	424711	10.0	10.3	
133 Pyrene	202	12.331	12.331	0.000	97	944650	10.0	10.3	
138 Butyl benzyl phthalate	149	13.250	13.250	0.000	98	370353	10.0	10.1	
144 3,3'-Dichlorobenzidine	252	14.233	14.233	0.000	75	265129	10.0	9.75	
145 Bis(2-ethylhexyl) phthalat	149	14.297	14.297	0.000	97	486813	10.0	10.3	
146 Benzo[a]anthracene	228	14.308	14.308	0.000	99	815354	10.0	10.2	
147 Chrysene	228	14.377	14.377	0.000	98	770227	10.0	10.1	
150 Di-n-octyl phthalate	149	15.595	15.595	0.000	99	798049	10.0	9.32	
151 7,12-Dimethylbenz(a)anthra	256	16.423	16.423	0.000	91	356283	10.0	10.1	
152 Benzo[b]fluoranthene	252	16.440	16.440	0.000	99	765003	10.0	10.1	
153 Benzo[k]fluoranthene	252	16.493	16.493	0.000	99	735493	10.0	9.91	
219 Benzo[e]pyrene	252	16.995	16.995	0.000	0	694376	10.0	9.95	
154 Benzo[a]pyrene	252	17.097	17.097	0.000	80	685688	10.0	9.75	
157 Indeno[1,2,3-cd]pyrene	276	19.549	19.549	0.000	96	679804	10.0	9.81	
158 Dibenz(a,h)anthracene	278	19.591	19.591	0.000	90	567321	10.0	9.78	
159 Benzo[g,h,i]perylene	276	20.233	20.233	0.000	96	587576	10.0	9.89	
S 197 Methyl Phenols,Total	108				0		20.0	21.0	
S 199 Total Cresols	108				0		20.0	21.0	

Reagents:

SVTAPSTD10i_00187 Amount Added: 1.00 Units: mL

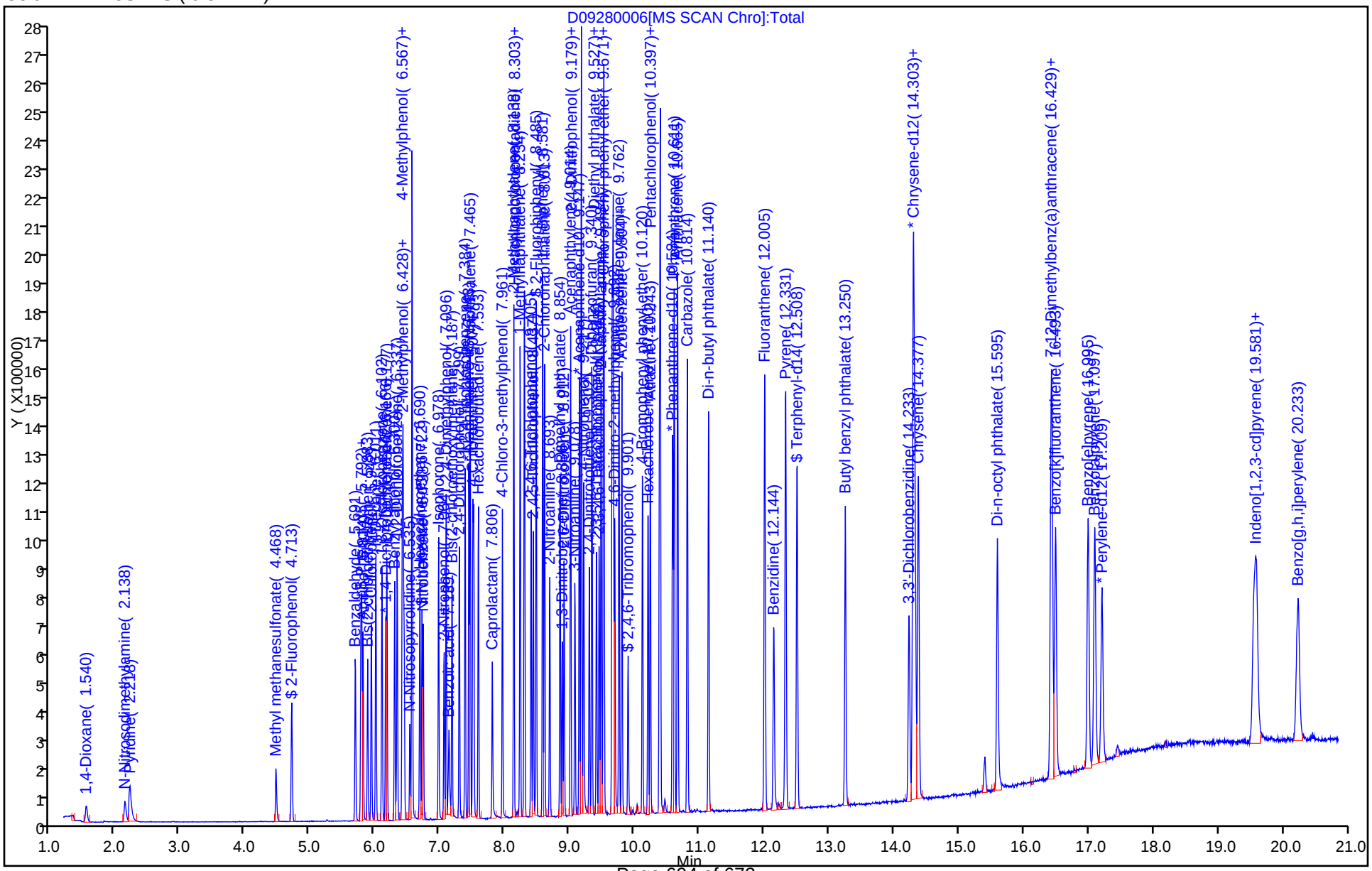
Report Date: 28-Sep-2016 10:33:46 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280006.D

Injection Date:	28-Sep-2016 06:49:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	ICIS			Worklist Smp#:	6
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280007.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 28-Sep-2016 07:17:30 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0013626-007
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 28-Sep-2016 10:33:51 Calib Date: 28-Sep-2016 08:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: piccolinov Date: 28-Sep-2016 08:11:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.161	6.161	0.000	96	112875	8.00	8.00	
* 2 Naphthalene-d8	136	7.443	7.443	0.000	99	521601	8.00	8.00	
* 3 Acenaphthene-d10	164	9.147	9.147	0.000	91	347366	8.00	8.00	
* 4 Phenanthrene-d10	188	10.584	10.584	0.000	97	628786	8.00	8.00	
* 5 Chrysene-d12	240	14.329	14.324	0.005	97	566023	8.00	8.00	
* 6 Perylene-d12	264	17.209	17.209	0.000	95	477215	8.00	8.00	
$ 7 2-Fluorophenol	112	4.713	4.713	0.000	92	292626	20.0	20.9	
$ 8 Phenol-d5	99	5.782	5.776	0.006	98	445543	20.0	20.9	
$ 9 Nitrobenzene-d5	82	6.722	6.722	0.000	87	430975	20.0	20.6	
$ 10 2-Fluorobiphenyl	172	8.485	8.485	0.000	99	1089314	20.0	20.2	
$ 11 2,4,6-Tribromophenol	330	9.900	9.901	-0.001	90	105932	20.0	20.2	
$ 12 Terphenyl-d14	244	12.508	12.508	0.000	99	1159568	20.0	19.9	
13 1,4-Dioxane	88	1.545	1.545	0.000	91	87992	20.0	21.1	
14 N-Nitrosodimethylamine	74	2.138	2.138	0.000	93	119394	20.0	20.5	
15 Pyridine	79	2.213	2.213	0.000	98	226325	20.0	21.0	
21 Methyl methanesulfonate	80	4.467	4.468	-0.001	87	165534	20.0	21.6	
25 Benzaldehyde	77	5.696	5.691	0.005	96	282236	20.0	24.0	
26 Phenol	94	5.792	5.792	0.000	98	491796	20.0	21.2	
27 Aniline	93	5.814	5.814	0.000	98	520205	20.0	21.8	
29 Bis(2-chloroethyl)ether	93	5.883	5.883	0.000	96	356860	20.0	20.5	
30 2-Chlorophenol	128	5.942	5.942	0.000	97	374674	20.0	20.6	
31 n-Decane	43	6.011	6.011	0.000	91	363877	20.0	20.4	
32 1,3-Dichlorobenzene	146	6.108	6.102	0.006	98	444498	20.0	20.6	
33 1,4-Dichlorobenzene	146	6.182	6.182	0.000	95	448092	20.0	20.5	
34 Benzyl alcohol	108	6.300	6.300	0.000	93	245600	20.0	21.1	
35 1,2-Dichlorobenzene	146	6.337	6.337	0.000	98	437697	20.0	20.5	
36 2-Methylphenol	108	6.417	6.417	0.000	95	346649	20.0	21.0	
37 Indene	116	6.428	6.428	0.000	91	669456	20.0	20.7	
38 2,2'-oxybis[1-chloropropan	45	6.449	6.444	0.005	94	490508	20.0	20.1	
39 N-Nitrosopyrrolidine	100	6.535	6.535	0.000	94	179881	20.0	20.9	
40 Acetophenone	105	6.567	6.567	0.000	84	513670	20.0	21.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.572	6.567	0.005	71	353574	20.0	21.0	
41 N-Nitrosodi-n-propylamine	70	6.567	6.567	0.000	70	252791	20.0	21.2	
45 Hexachloroethane	117	6.690	6.690	0.000	96	191505	20.0	20.7	
46 Nitrobenzene	77	6.743	6.743	0.000	86	425606	20.0	20.4	
48 Isophorone	82	6.978	6.978	0.000	99	809441	20.0	20.7	
49 2-Nitrophenol	139	7.064	7.064	0.000	91	231332	20.0	21.1	
50 2,4-Dimethylphenol	107	7.096	7.096	0.000	94	413329	20.0	20.8	
52 Benzoic acid	122	7.155	7.139	0.016	87	218741	20.0	19.9	
53 Bis(2-chloroethoxy)methane	93	7.187	7.187	0.000	99	528360	20.0	20.7	
54 2,4-Dichlorophenol	162	7.299	7.299	0.000	92	377301	20.0	20.8	
56 1,2,4-Trichlorobenzene	180	7.390	7.390	0.000	94	434324	20.0	20.0	
58 Naphthalene	128	7.464	7.465	-0.001	97	1311957	20.0	20.2	
59 4-Chloroaniline	127	7.507	7.507	0.000	97	558706	20.0	20.7	
60 2,6-Dichlorophenol	162	7.523	7.518	0.005	98	363143	20.0	20.4	
62 Hexachlorobutadiene	225	7.593	7.593	0.000	95	247402	20.0	20.2	
64 Caprolactam	113	7.812	7.806	0.006	80	133277	20.0	21.2	
67 4-Chloro-3-methylphenol	107	7.961	7.961	0.000	96	382578	20.0	21.0	
69 2-Methylnaphthalene	142	8.138	8.138	0.000	94	920186	20.0	20.4	
71 1-Methylnaphthalene	142	8.234	8.234	0.000	94	871867	20.0	20.4	
72 Hexachlorocyclopentadiene	237	8.298	8.298	0.000	95	267310	20.0	20.8	
73 1,2,4,5-Tetrachlorobenzene	216	8.303	8.303	0.000	96	449373	20.0	19.8	
74 2,4,6-Trichlorophenol	196	8.405	8.405	0.000	91	307011	20.0	20.7	
75 2,4,5-Trichlorophenol	196	8.437	8.437	0.000	96	318147	20.0	20.8	
76 1,1'-Biphenyl	154	8.581	8.581	0.000	94	1159722	20.0	20.3	
77 2-Chloronaphthalene	162	8.613	8.613	0.000	95	930395	20.0	20.1	
79 2-Nitroaniline	65	8.693	8.693	0.000	86	269950	20.0	21.4	
82 Dimethyl phthalate	163	8.853	8.854	-0.001	99	1013178	20.0	20.5	
83 1,3-Dinitrobenzene	168	8.885	8.886	-0.001	88	161037	20.0	21.1	
84 2,6-Dinitrotoluene	165	8.912	8.912	0.000	95	239024	20.0	20.8	
85 Acenaphthylene	152	9.014	9.014	0.000	99	1436982	20.0	20.6	
86 3-Nitroaniline	138	9.078	9.078	0.000	96	276225	20.0	21.3	
88 Acenaphthene	153	9.179	9.179	0.000	90	903383	20.0	19.1	
87 2,4-Dinitrophenol	184	9.179	9.179	0.000	66	264371	40.0	45.3	
89 4-Nitrophenol	109	9.217	9.217	0.000	86	236982	40.0	43.2	
91 2,4-Dinitrotoluene	165	9.302	9.302	0.000	95	319710	20.0	20.9	
93 Dibenzofuran	168	9.340	9.340	0.000	98	1363437	20.0	20.6	
95 2,3,5,6-Tetrachlorophenol	232	9.414	9.414	0.000	93	265328	20.0	20.6	
96 2,3,4,6-Tetrachlorophenol	232	9.452	9.452	0.000	72	246804	20.0	19.5	
97 2-Naphthylamine	143	9.484	9.484	0.000	97	1013338	20.0	21.0	
98 Diethyl phthalate	149	9.516	9.516	0.000	98	961406	20.0	20.8	
99 Hexadecane	57	9.527	9.527	0.000	91	710963	20.0	20.2	
100 4-Chlorophenyl phenyl ethe	204	9.655	9.655	0.000	88	545713	20.0	20.2	
101 4-Nitroaniline	138	9.665	9.666	-0.001	89	277082	20.0	21.8	
103 Fluorene	166	9.671	9.671	0.000	94	1060916	20.0	20.2	
104 4,6-Dinitro-2-methylphenol	198	9.697	9.698	-0.001	91	383685	40.0	42.9	
105 N-Nitrosodiphenylamine	169	9.762	9.762	0.000	60	831562	20.0	19.9	
90 1,2-Diphenylhydrazine	77	9.804	9.804	0.000	97	1166974	20.0	19.8	
57 Azobenzene	77	9.804	9.804	0.000	97	1166974	20.0	19.8	
110 4-Bromophenyl phenyl ether	248	10.120	10.125	-0.005	66	310708	20.0	20.0	
112 Hexachlorobenzene	284	10.210	10.210	0.000	94	287611	20.0	19.7	
113 Atrazine	200	10.242	10.243	0.000	93	303419	20.0	20.8	
116 Pentachlorophenol	266	10.381	10.381	0.000	92	350304	40.0	40.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.397	10.397	0.000	93	769369	20.0	21.9	
121 Phenanthrene	178	10.611	10.611	0.000	97	1634313	20.0	20.2	
122 Anthracene	178	10.664	10.665	-0.001	97	1707259	20.0	20.3	
124 Carbazole	167	10.814	10.814	0.000	95	1607817	20.0	20.6	
126 Di-n-butyl phthalate	149	11.140	11.140	0.000	100	1801628	20.0	20.7	
131 Fluoranthene	202	12.005	12.005	0.000	98	1818370	20.0	20.5	
132 Benzidine	184	12.144	12.150	-0.006	100	1007188	20.0	24.1	
133 Pyrene	202	12.331	12.331	0.000	97	1845141	20.0	19.9	
138 Butyl benzyl phthalate	149	13.250	13.250	0.000	98	743784	20.0	20.1	
144 3,3'-Dichlorobenzidine	252	14.233	14.233	0.000	74	572173	20.0	20.8	
145 Bis(2-ethylhexyl) phthalat	149	14.292	14.297	-0.005	97	962663	20.0	20.2	
146 Benzo[a]anthracene	228	14.308	14.308	0.000	99	1607815	20.0	19.9	
147 Chrysene	228	14.377	14.377	0.000	98	1559829	20.0	20.2	
150 Di-n-octyl phthalate	149	15.595	15.595	0.000	99	1649080	20.0	18.6	
151 7,12-Dimethylbenz(a)anthra	256	16.423	16.423	0.000	94	713638	20.0	19.6	
152 Benzo[b]fluoranthene	252	16.439	16.440	-0.001	98	1564351	20.0	20.0	
153 Benzo[k]fluoranthene	252	16.493	16.493	0.000	99	1476959	20.0	19.2	
219 Benzo[e]pyrene	252	16.995	16.995	0.000	0	1420622	20.0	19.7	
154 Benzo[a]pyrene	252	17.096	17.097	-0.001	79	1406956	20.0	19.3	
157 Indeno[1,2,3-cd]pyrene	276	19.554	19.549	0.005	97	1420467	20.0	19.8	
158 Dibenz(a,h)anthracene	278	19.591	19.591	0.000	88	1185430	20.0	19.7	
159 Benzo[g,h,i]perylene	276	20.232	20.233	0.000	94	1215621	20.0	19.8	
S 197 Methyl Phenols,Total	108				0		40.0	42.0	
S 199 Total Cresols	108				0		40.0	42.0	

Reagents:

SVTAPSTD20i_00010 Amount Added: 1.00 Units: mL

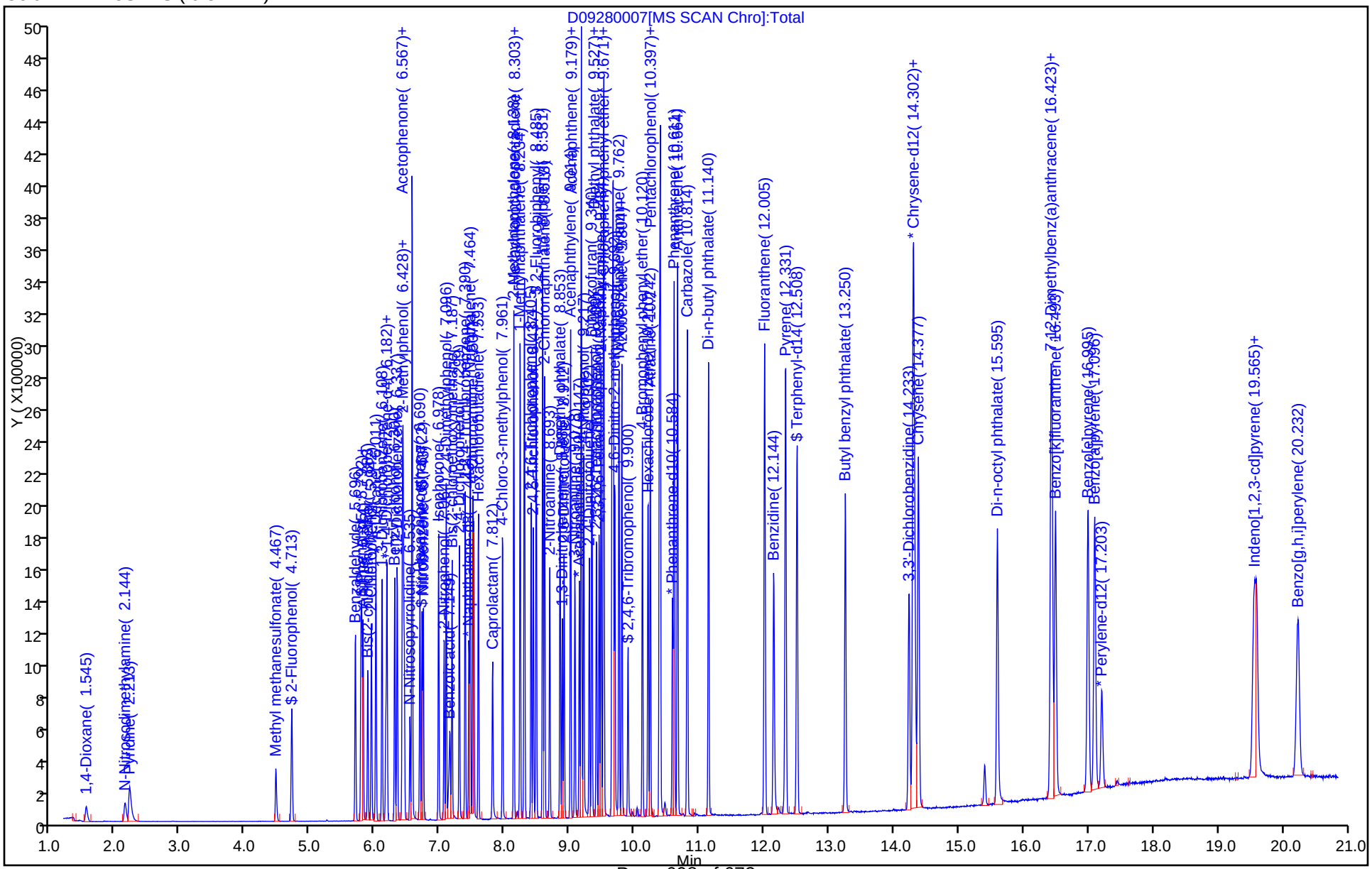
Report Date: 28-Sep-2016 10:33:52 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280007.D

Injection Date:	28-Sep-2016 07:17:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	7
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280008.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 28-Sep-2016 07:44:30 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0013626-008
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 28-Sep-2016 10:33:57 Calib Date: 28-Sep-2016 08:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: piccolinov Date: 28-Sep-2016 08:13:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.161	6.161	0.000	95	115546	8.00	8.00	
* 2 Naphthalene-d8	136	7.448	7.443	0.005	99	529063	8.00	8.00	
* 3 Acenaphthene-d10	164	9.147	9.147	0.000	91	344689	8.00	8.00	
* 4 Phenanthrene-d10	188	10.590	10.584	0.006	97	607440	8.00	8.00	
* 5 Chrysene-d12	240	14.334	14.324	0.010	96	526395	8.00	8.00	
* 6 Perylene-d12	264	17.214	17.209	0.005	95	441993	8.00	8.00	
$ 7 2-Fluorophenol	112	4.713	4.713	0.000	91	584279	40.0	40.7	
$ 8 Phenol-d5	99	5.782	5.776	0.006	99	877232	40.0	40.3	
$ 9 Nitrobenzene-d5	82	6.722	6.722	0.000	87	836375	40.0	39.3	
$ 10 2-Fluorobiphenyl	172	8.485	8.485	0.000	100	2037297	40.0	38.1	
$ 11 2,4,6-Tribromophenol	330	9.906	9.901	0.005	92	215624	40.0	42.6	
$ 12 Terphenyl-d14	244	12.507	12.508	-0.001	99	2194036	40.0	40.6	
13 1,4-Dioxane	88	1.540	1.545	-0.005	91	177975	40.0	41.8	
14 N-Nitrosodimethylamine	74	2.138	2.138	0.000	94	246244	40.0	40.5	
15 Pyridine	79	2.208	2.213	-0.005	98	459788	40.0	41.7	
21 Methyl methanesulfonate	80	4.467	4.468	-0.001	87	330525	40.0	42.1	
25 Benzaldehyde	77	5.691	5.691	0.000	97	508058	40.0	42.2	
26 Phenol	94	5.798	5.792	0.006	97	928718	40.0	39.1	
27 Aniline	93	5.814	5.814	0.000	98	995284	40.0	40.8	
29 Bis(2-chloroethyl)ether	93	5.883	5.883	0.000	96	704659	40.0	39.6	
30 2-Chlorophenol	128	5.942	5.942	0.000	97	734084	40.0	39.4	
31 n-Decane	43	6.011	6.011	0.000	90	691593	40.0	37.8	
32 1,3-Dichlorobenzene	146	6.107	6.102	0.005	98	872905	40.0	39.5	
33 1,4-Dichlorobenzene	146	6.182	6.182	0.000	95	873373	40.0	39.0	
34 Benzyl alcohol	108	6.300	6.300	0.000	93	486939	40.0	40.8	
35 1,2-Dichlorobenzene	146	6.337	6.337	0.000	98	853579	40.0	39.1	
36 2-Methylphenol	108	6.423	6.417	0.006	95	656069	40.0	38.9	
37 Indene	116	6.428	6.428	0.000	91	1252339	40.0	37.9	
38 2,2'-oxybis[1-chloropropan	45	6.449	6.444	0.005	95	952455	40.0	38.2	
39 N-Nitrosopyrrolidine	100	6.540	6.535	0.005	96	368570	40.0	41.9	
40 Acetophenone	105	6.572	6.567	0.005	83	919675	40.0	37.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.572	6.567	0.005	71	638471	40.0	37.1	
41 N-Nitrosodi-n-propylamine	70	6.572	6.567	0.005	67	449851	40.0	36.8	
45 Hexachloroethane	117	6.690	6.690	0.000	96	372592	40.0	39.4	
46 Nitrobenzene	77	6.743	6.743	0.000	86	818116	40.0	38.7	
48 Isophorone	82	6.978	6.978	0.000	99	1568316	40.0	39.5	
49 2-Nitrophenol	139	7.064	7.064	0.000	92	451268	40.0	40.5	
50 2,4-Dimethylphenol	107	7.096	7.096	0.000	94	786202	40.0	39.0	
52 Benzoic acid	122	7.171	7.139	0.032	88	452924	40.0	40.7	
53 Bis(2-chloroethoxy)methane	93	7.187	7.187	0.000	98	990771	40.0	38.2	
54 2,4-Dichlorophenol	162	7.299	7.299	0.000	92	731402	40.0	39.8	
56 1,2,4-Trichlorobenzene	180	7.390	7.390	0.000	94	850400	40.0	38.7	
58 Naphthalene	128	7.464	7.465	-0.001	97	2476726	40.0	37.6	
59 4-Chloroaniline	127	7.507	7.507	0.000	97	1055895	40.0	38.6	
60 2,6-Dichlorophenol	162	7.523	7.518	0.005	98	693781	40.0	38.5	
62 Hexachlorobutadiene	225	7.593	7.593	0.000	95	481802	40.0	38.8	
64 Caprolactam	113	7.817	7.806	0.011	81	264023	40.0	41.3	
67 4-Chloro-3-methylphenol	107	7.967	7.961	0.006	96	741845	40.0	40.2	
69 2-Methylnaphthalene	142	8.137	8.138	-0.001	93	1741541	40.0	38.1	
71 1-Methylnaphthalene	142	8.239	8.234	0.005	94	1627674	40.0	37.6	
72 Hexachlorocyclopentadiene	237	8.298	8.298	0.000	95	519466	40.0	40.7	
73 1,2,4,5-Tetrachlorobenzene	216	8.303	8.303	0.000	96	831013	40.0	36.9	
74 2,4,6-Trichlorophenol	196	8.405	8.405	0.000	91	602693	40.0	40.9	
75 2,4,5-Trichlorophenol	196	8.442	8.437	0.005	96	603837	40.0	39.8	
76 1,1'-Biphenyl	154	8.581	8.581	0.000	94	2167016	40.0	38.2	
77 2-Chloronaphthalene	162	8.613	8.613	0.000	95	1752043	40.0	38.1	
79 2-Nitroaniline	65	8.693	8.693	0.000	88	513568	40.0	40.9	
82 Dimethyl phthalate	163	8.853	8.854	-0.001	99	1935335	40.0	39.5	
83 1,3-Dinitrobenzene	168	8.885	8.886	-0.001	88	320443	40.0	42.4	
84 2,6-Dinitrotoluene	165	8.917	8.912	0.005	96	451904	40.0	39.6	
85 Acenaphthylene	152	9.014	9.014	0.000	98	2699988	40.0	38.9	
86 3-Nitroaniline	138	9.083	9.078	0.005	97	536724	40.0	41.7	
87 2,4-Dinitrophenol	184	9.179	9.179	0.000	67	547604	80.0	94.6	
88 Acenaphthene	153	9.179	9.179	0.000	89	1648654	40.0	35.2	
89 4-Nitrophenol	109	9.222	9.217	0.005	87	451808	80.0	83.0	
91 2,4-Dinitrotoluene	165	9.302	9.302	0.000	95	619758	40.0	40.9	
93 Dibenzofuran	168	9.345	9.340	0.005	98	2536147	40.0	38.6	
95 2,3,5,6-Tetrachlorophenol	232	9.414	9.414	0.000	93	521851	40.0	40.8	
96 2,3,4,6-Tetrachlorophenol	232	9.457	9.452	0.005	71	515304	40.0	41.1	
97 2-Naphthylamine	143	9.489	9.484	0.005	97	1879136	40.0	39.2	
98 Diethyl phthalate	149	9.521	9.516	0.005	99	1735803	40.0	37.9	
99 Hexadecane	57	9.526	9.527	-0.001	91	1243624	40.0	34.9	
100 4-Chlorophenyl phenyl ethe	204	9.655	9.655	0.000	89	1042268	40.0	38.9	
101 4-Nitroaniline	138	9.665	9.666	-0.001	89	503011	40.0	39.9	
103 Fluorene	166	9.676	9.671	0.005	95	1978080	40.0	38.0	
104 4,6-Dinitro-2-methylphenol	198	9.697	9.698	-0.001	92	773164	80.0	89.5	
105 N-Nitrosodiphenylamine	169	9.762	9.762	0.000	66	1581935	40.0	39.2	
90 1,2-Diphenylhydrazine	77	9.804	9.804	0.000	98	2188172	40.0	38.5	
57 Azobenzene	77	9.804	9.804	0.000	98	2188172	40.0	38.5	
110 4-Bromophenyl phenyl ether	248	10.125	10.125	0.000	65	594089	40.0	39.5	
112 Hexachlorobenzene	284	10.210	10.210	0.000	94	548219	40.0	38.8	
113 Atrazine	200	10.248	10.243	0.006	94	566267	40.0	40.2	
116 Pentachlorophenol	266	10.387	10.381	0.006	93	690467	80.0	81.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.397	10.397	0.000	94	1350707	40.0	37.5	
121 Phenanthrene	178	10.616	10.611	0.005	97	3058407	40.0	39.1	
122 Anthracene	178	10.664	10.665	-0.001	97	3190835	40.0	39.3	
124 Carbazole	167	10.814	10.814	0.000	95	2962799	40.0	39.4	
126 Di-n-butyl phthalate	149	11.145	11.140	0.005	100	3362298	40.0	40.0	
131 Fluoranthene	202	12.011	12.005	0.006	98	3396708	40.0	39.6	
132 Benzidine	184	12.150	12.150	0.000	100	1771302	40.0	45.6	
133 Pyrene	202	12.331	12.331	0.000	97	3464304	40.0	40.1	
138 Butyl benzyl phthalate	149	13.255	13.250	0.005	98	1393596	40.0	40.4	
144 3,3'-Dichlorobenzidine	252	14.238	14.233	0.005	74	1091724	40.0	42.7	
145 Bis(2-ethylhexyl) phthalat	149	14.297	14.297	0.000	97	1788805	40.0	40.4	
146 Benzo[a]anthracene	228	14.313	14.308	0.005	99	2975905	40.0	39.6	
147 Chrysene	228	14.383	14.377	0.006	98	2881623	40.0	40.2	
150 Di-n-octyl phthalate	149	15.601	15.595	0.006	99	3143808	40.0	38.3	
151 7,12-Dimethylbenz(a)anthra	256	16.429	16.423	0.006	93	1366843	40.0	40.5	
152 Benzo[b]fluoranthene	252	16.450	16.440	0.010	99	2857774	40.0	39.5	
153 Benzo[k]fluoranthene	252	16.503	16.493	0.010	99	2897157	40.0	40.7	
219 Benzo[e]pyrene	252	17.000	16.995	0.005	0	2679039	40.0	40.0	
154 Benzo[a]pyrene	252	17.102	17.097	0.005	81	2654259	40.0	39.4	
157 Indeno[1,2,3-cd]pyrene	276	19.570	19.549	0.021	93	2700448	40.0	40.6	M
158 Dibenz(a,h)anthracene	278	19.602	19.591	0.011	91	2240452	40.0	40.3	
159 Benzo[g,h,i]perylene	276	20.248	20.233	0.016	95	2298339	40.0	40.4	
S 197 Methyl Phenols,Total	108				0		80.0	76.0	
S 199 Total Cresols	108				0		80.0	76.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD40i_00010 Amount Added: 1.00 Units: mL

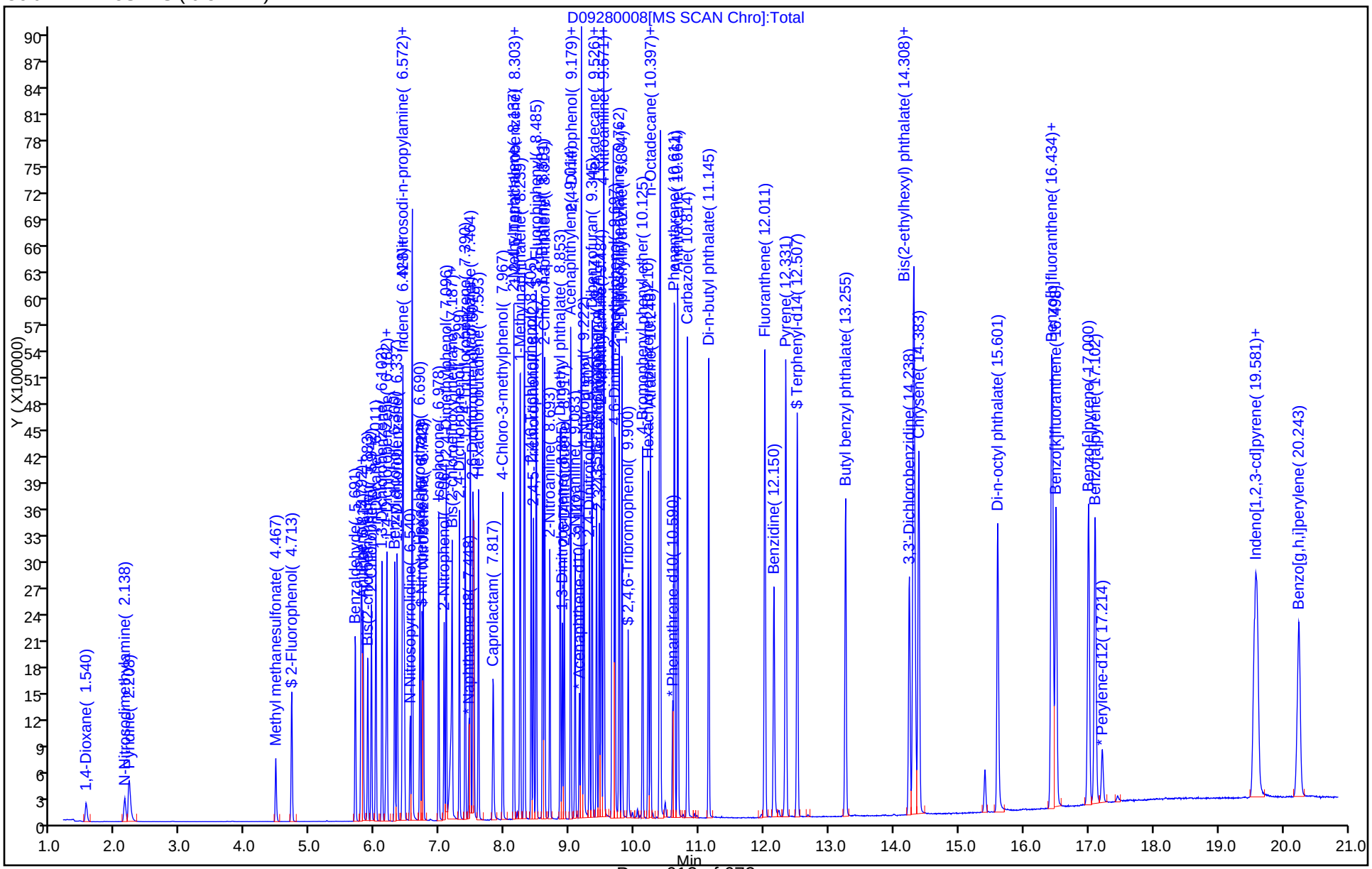
Report Date: 28-Sep-2016 10:33:58 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280008.D

Injection Date:	28-Sep-2016 07:44:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

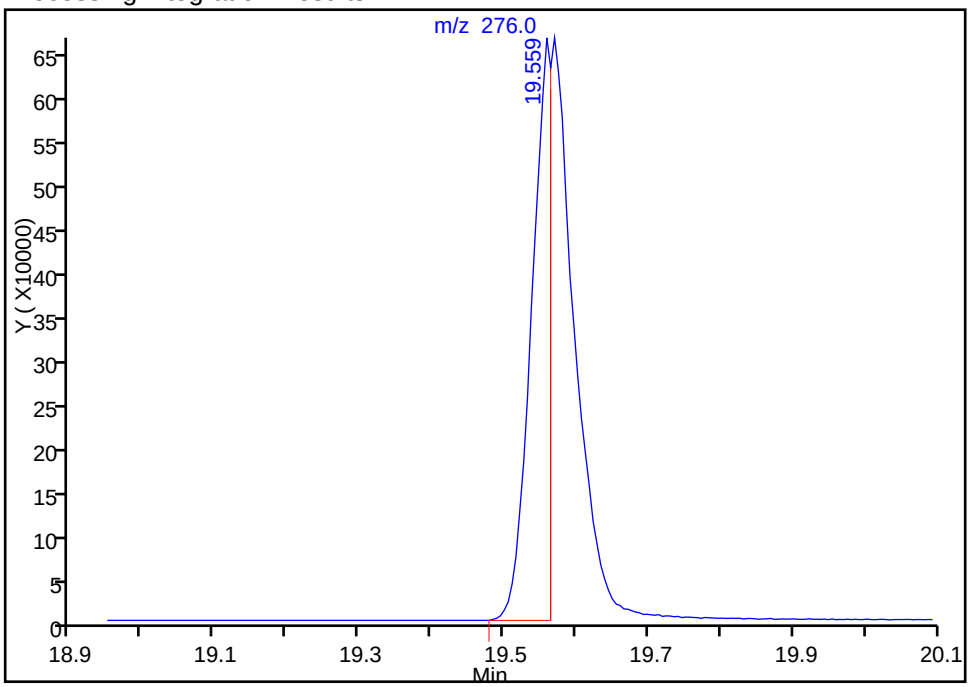
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280008.D				
Injection Date:	28-Sep-2016 07:44:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

157 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

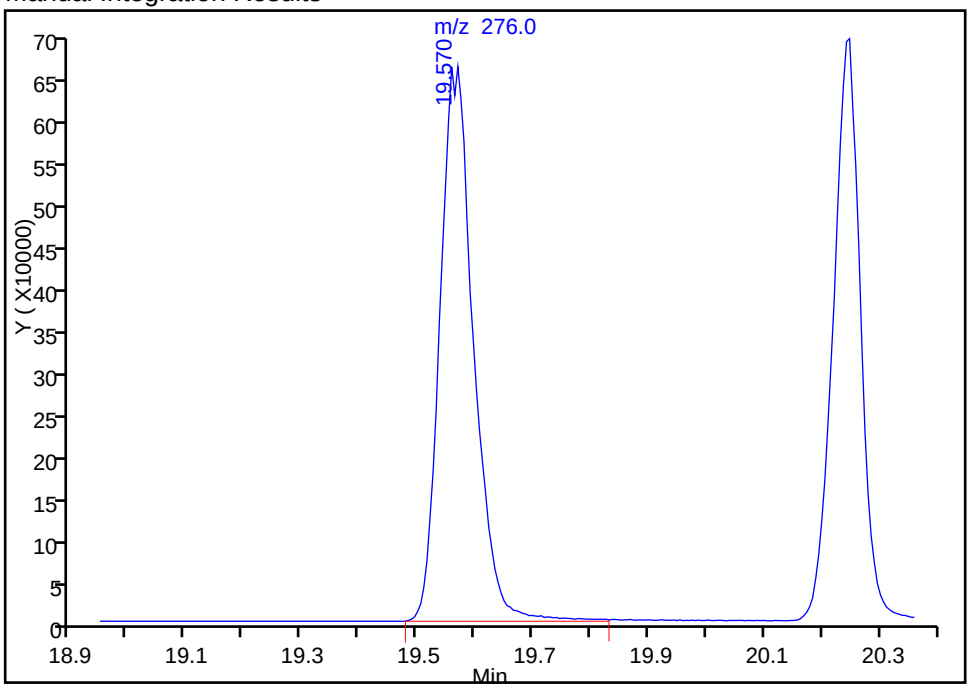
Processing Integration Results

RT: 19.56
Area: 1261695
Amount: 20.922223
Amount Units: ng



Manual Integration Results

RT: 19.57
Area: 2700448
Amount: 40.618878
Amount Units: ng



Reviewer: piccolinov, 28-Sep-2016 08:13:05

Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280009.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 28-Sep-2016 08:11:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0013626-009
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 28-Sep-2016 10:34:04 Calib Date: 28-Sep-2016 08:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: piccolinov Date: 28-Sep-2016 09:07:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.166	6.161	0.005	93	108265	8.00	8.00	
* 2 Naphthalene-d8	136	7.448	7.443	0.005	99	483910	8.00	8.00	
* 3 Acenaphthene-d10	164	9.153	9.147	0.005	92	326742	8.00	8.00	
* 4 Phenanthrene-d10	188	10.590	10.584	0.006	97	584354	8.00	8.00	
* 5 Chrysene-d12	240	14.345	14.324	0.021	96	533424	8.00	8.00	
* 6 Perylene-d12	264	17.219	17.209	0.010	95	457606	8.00	8.00	
$ 7 2-Fluorophenol	112	4.713	4.713	0.000	91	782287	60.0	58.1	
$ 8 Phenol-d5	99	5.782	5.776	0.006	99	1176888	60.0	57.7	
$ 9 Nitrobenzene-d5	82	6.727	6.722	0.005	87	1129531	60.0	58.1	
$ 10 2-Fluorobiphenyl	172	8.485	8.485	0.000	100	2724827	60.0	53.8	
$ 11 2,4,6-Tribromophenol	330	9.906	9.901	0.005	91	310002	60.0	63.7	
$ 12 Terphenyl-d14	244	12.513	12.508	0.005	98	3269300	60.0	59.7	
13 1,4-Dioxane	88	1.534	1.545	-0.011	91	238886	60.0	59.8	
14 N-Nitrosodimethylamine	74	2.138	2.138	0.000	94	335523	60.0	58.5	
15 Pyridine	79	2.197	2.213	-0.016	97	615341	60.0	59.6	
21 Methyl methanesulfonate	80	4.467	4.468	-0.001	87	455848	60.0	62.0	
25 Benzaldehyde	77	5.696	5.691	0.005	95	593416	60.0	52.6	
26 Phenol	94	5.798	5.792	0.006	98	1232805	60.0	55.4	
27 Aniline	93	5.814	5.814	0.000	91	1329090	60.0	58.1	
29 Bis(2-chloroethyl)ether	93	5.883	5.883	0.000	96	945161	60.0	56.6	
30 2-Chlorophenol	128	5.942	5.942	0.000	96	988359	60.0	56.6	
31 n-Decane	43	6.011	6.011	0.000	89	893879	60.0	52.1	
32 1,3-Dichlorobenzene	146	6.107	6.102	0.005	98	1144254	60.0	55.2	
33 1,4-Dichlorobenzene	146	6.182	6.182	0.000	94	1159419	60.0	55.3	
34 Benzyl alcohol	108	6.305	6.300	0.005	93	659275	60.0	58.9	
35 1,2-Dichlorobenzene	146	6.342	6.337	0.005	98	1136577	60.0	55.6	
36 2-Methylphenol	108	6.423	6.417	0.006	95	858828	60.0	54.4	
37 Indene	116	6.433	6.428	0.005	91	1621310	60.0	52.3	
38 2,2'-oxybis[1-chloropropan	45	6.449	6.444	0.005	95	1239959	60.0	53.1	
39 N-Nitrosopyrrolidine	100	6.545	6.535	0.010	94	506440	60.0	61.4	
40 Acetophenone	105	6.572	6.567	0.005	93	1193748	60.0	51.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.572	6.567	0.005	79	813972	60.0	50.4	
41 N-Nitrosodi-n-propylamine	70	6.572	6.567	0.005	79	567938	60.0	49.5	
45 Hexachloroethane	117	6.690	6.690	0.000	96	498264	60.0	56.2	
46 Nitrobenzene	77	6.743	6.743	0.000	86	1107918	60.0	57.2	
48 Isophorone	82	6.978	6.978	0.000	99	2111014	60.0	58.1	
49 2-Nitrophenol	139	7.064	7.064	0.000	92	614434	60.0	60.3	
50 2,4-Dimethylphenol	107	7.096	7.096	0.000	95	1046610	60.0	56.7	
52 Benzoic acid	122	7.181	7.139	0.042	89	637010	60.0	62.6	
53 Bis(2-chloroethoxy)methane	93	7.187	7.187	0.000	99	1305705	60.0	55.1	
54 2,4-Dichlorophenol	162	7.299	7.299	0.000	93	981341	60.0	58.3	
56 1,2,4-Trichlorobenzene	180	7.390	7.390	0.000	93	1114551	60.0	55.4	
58 Naphthalene	128	7.470	7.465	0.005	97	3311597	60.0	54.9	
59 4-Chloroaniline	127	7.512	7.507	0.005	97	1441021	60.0	57.5	
60 2,6-Dichlorophenol	162	7.523	7.518	0.005	97	933013	60.0	56.6	
62 Hexachlorobutadiene	225	7.593	7.593	0.000	95	648712	60.0	57.1	
64 Caprolactam	113	7.828	7.806	0.022	81	387679	60.0	66.4	
67 4-Chloro-3-methylphenol	107	7.972	7.961	0.011	96	1005130	60.0	59.5	
69 2-Methylnaphthalene	142	8.143	8.138	0.005	94	2323111	60.0	55.6	
71 1-Methylnaphthalene	142	8.239	8.234	0.005	94	2177899	60.0	55.0	
72 Hexachlorocyclopentadiene	237	8.298	8.298	0.000	95	704128	60.0	58.2	
73 1,2,4,5-Tetrachlorobenzene	216	8.308	8.303	0.005	96	1119068	60.0	52.4	
74 2,4,6-Trichlorophenol	196	8.410	8.405	0.005	91	815899	60.0	58.4	
75 2,4,5-Trichlorophenol	196	8.442	8.437	0.005	96	847004	60.0	58.9	
76 1,1'-Biphenyl	154	8.586	8.581	0.005	94	2908847	60.0	54.0	
77 2-Chloronaphthalene	162	8.618	8.613	0.005	94	2322222	60.0	53.2	
79 2-Nitroaniline	65	8.698	8.693	0.005	87	720959	60.0	60.6	
82 Dimethyl phthalate	163	8.859	8.854	0.005	99	2683067	60.0	57.7	
83 1,3-Dinitrobenzene	168	8.891	8.886	0.005	87	459982	60.0	64.2	
84 2,6-Dinitrotoluene	165	8.917	8.912	0.005	97	639209	60.0	59.1	
85 Acenaphthylene	152	9.019	9.014	0.005	99	3657793	60.0	55.7	
86 3-Nitroaniline	138	9.088	9.078	0.010	97	761531	60.0	62.5	
87 2,4-Dinitrophenol	184	9.185	9.179	0.006	68	794024	120.0	144.7	
88 Acenaphthene	153	9.185	9.179	0.006	88	2155050	60.0	48.6	
89 4-Nitrophenol	109	9.227	9.217	0.010	86	662771	120.0	128.5	
91 2,4-Dinitrotoluene	165	9.307	9.302	0.005	96	888551	60.0	61.9	
93 Dibenzofuran	168	9.345	9.340	0.005	97	3412591	60.0	54.8	
95 2,3,5,6-Tetrachlorophenol	232	9.420	9.414	0.006	92	754574	60.0	62.2	
96 2,3,4,6-Tetrachlorophenol	232	9.457	9.452	0.005	71	724464	60.0	60.9	
97 2-Naphthylamine	143	9.489	9.484	0.005	97	2572013	60.0	56.6	
98 Diethyl phthalate	149	9.526	9.516	0.010	99	2354938	60.0	54.2	
99 Hexadecane	57	9.532	9.527	0.005	91	1521552	60.0	46.7	
100 4-Chlorophenyl phenyl ethe	204	9.655	9.655	0.000	90	1442080	60.0	56.8	
101 4-Nitroaniline	138	9.671	9.666	0.005	88	687696	60.0	57.6	
103 Fluorene	166	9.676	9.671	0.005	95	2677009	60.0	54.3	
104 4,6-Dinitro-2-methylphenol	198	9.703	9.698	0.005	92	1114076	120.0	134.1	
105 N-Nitrosodiphenylamine	169	9.767	9.762	0.005	59	2232895	60.0	57.5	
90 1,2-Diphenylhydrazine	77	9.810	9.804	0.006	97	3016301	60.0	55.2	
57 Azobenzene	77	9.810	9.804	0.006	97	3016301	60.0	55.2	
110 4-Bromophenyl phenyl ether	248	10.125	10.125	0.000	64	843341	60.0	58.3	
112 Hexachlorobenzene	284	10.216	10.210	0.006	94	764591	60.0	56.2	
113 Atrazine	200	10.253	10.243	0.011	94	792270	60.0	58.5	
116 Pentachlorophenol	266	10.392	10.381	0.011	93	987066	120.0	121.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.403	10.397	0.006	94	1726719	60.0	51.1	
121 Phenanthrene	178	10.616	10.611	0.005	97	4345835	60.0	57.8	
122 Anthracene	178	10.670	10.665	0.005	97	4552533	60.0	58.3	
124 Carbazole	167	10.819	10.814	0.005	95	4239011	60.0	58.6	
126 Di-n-butyl phthalate	149	11.145	11.140	0.005	100	4869978	60.0	60.3	
131 Fluoranthene	202	12.016	12.005	0.011	98	4935871	60.0	59.8	
132 Benzidine	184	12.155	12.150	0.005	99	2492957	60.0	63.3	
133 Pyrene	202	12.336	12.331	0.005	97	5043358	60.0	57.6	
138 Butyl benzyl phthalate	149	13.261	13.250	0.011	97	2082516	60.0	59.6	
144 3,3'-Dichlorobenzidine	252	14.249	14.233	0.016	67	1686601	60.0	65.1	
145 Bis(2-ethylhexyl) phthalat	149	14.308	14.297	0.011	95	2654467	60.0	59.2	
146 Benzo[a]anthracene	228	14.324	14.308	0.016	98	4415957	60.0	58.0	
147 Chrysene	228	14.393	14.377	0.016	95	4449818	60.0	61.2	
150 Di-n-octyl phthalate	149	15.611	15.595	0.016	99	4867828	60.0	57.3	
151 7,12-Dimethylbenz(a)anthra	256	16.445	16.423	0.022	74	2109082	60.0	60.4	
152 Benzo[b]fluoranthene	252	16.461	16.440	0.021	95	4474369	60.0	59.8	
153 Benzo[k]fluoranthene	252	16.514	16.493	0.021	95	4385602	60.0	59.5	
219 Benzo[e]pyrene	252	17.016	16.995	0.021	0	4137863	60.0	59.7	
154 Benzo[a]pyrene	252	17.123	17.097	0.026	75	4167589	60.0	59.7	
157 Indeno[1,2,3-cd]pyrene	276	19.591	19.549	0.042	91	4218376	60.0	61.3	
158 Dibenz(a,h)anthracene	278	19.623	19.591	0.032	73	3592365	60.0	62.4	
159 Benzo[g,h,i]perylene	276	20.264	20.233	0.032	94	3656329	60.0	62.0	
S 197 Methyl Phenols,Total	108				0		120.0	104.8	
S 199 Total Cresols	108				0		120.0	104.8	

Reagents:

SVTAPSTD60i_00010 Amount Added: 1.00 Units: mL

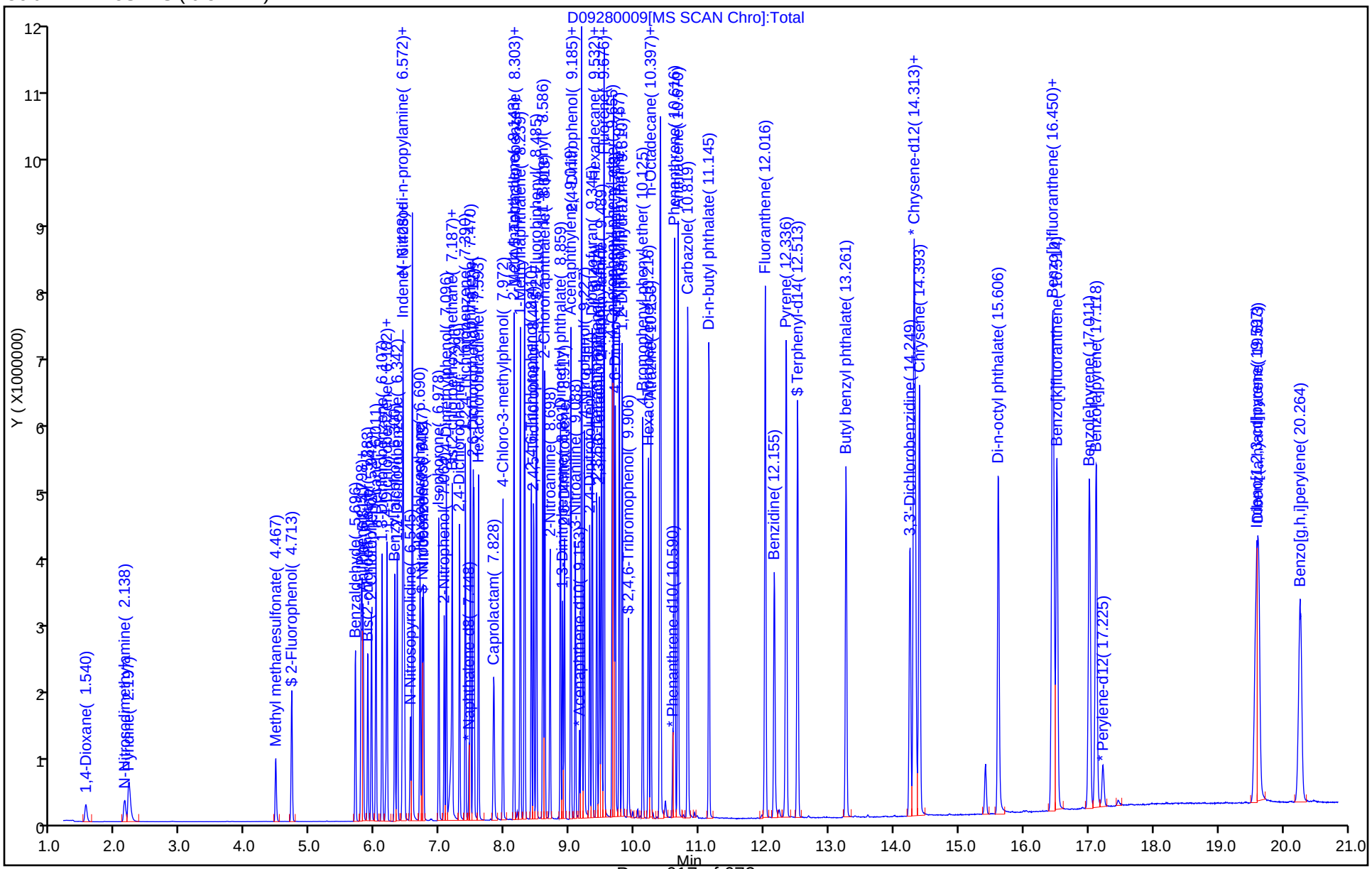
Report Date: 28-Sep-2016 10:34:05 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280009.D

Injection Date:	28-Sep-2016 08:11:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280010.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 28-Sep-2016 08:39:30 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0013626-010
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 28-Sep-2016 10:34:12 Calib Date: 28-Sep-2016 08:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: piccolinov Date: 28-Sep-2016 09:06:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.166	6.161	0.005	95	107053	8.00	8.00	
* 2 Naphthalene-d8	136	7.448	7.443	0.005	99	485566	8.00	8.00	
* 3 Acenaphthene-d10	164	9.153	9.147	0.006	92	326159	8.00	8.00	
* 4 Phenanthrene-d10	188	10.595	10.584	0.011	97	593579	8.00	8.00	
* 5 Chrysene-d12	240	14.345	14.324	0.021	97	524894	8.00	8.00	
* 6 Perylene-d12	264	17.230	17.209	0.021	95	444374	8.00	8.00	
$ 7 2-Fluorophenol	112	4.708	4.713	-0.005	92	1046877	80.0	78.7	
$ 8 Phenol-d5	99	5.782	5.776	0.006	99	1496463	80.0	74.2	
$ 9 Nitrobenzene-d5	82	6.727	6.722	0.005	87	1466092	80.0	75.1	
$ 10 2-Fluorobiphenyl	172	8.490	8.485	0.005	99	3462753	80.0	68.5	
$ 11 2,4,6-Tribromophenol	330	9.911	9.901	0.010	92	409478	80.0	82.8	
$ 12 Terphenyl-d14	244	12.518	12.508	0.010	99	4165441	80.0	77.3	
13 1,4-Dioxane	88	1.529	1.545	-0.016	91	320687	80.0	81.2	
14 N-Nitrosodimethylamine	74	2.128	2.138	-0.010	93	455105	80.0	80.0	
15 Pyridine	79	2.192	2.213	-0.021	98	851149	80.0	83.3	
21 Methyl methanesulfonate	80	4.468	4.468	0.000	87	600212	80.0	82.5	
25 Benzaldehyde	77	5.691	5.691	0.000	96	719944	80.0	64.5	
26 Phenol	94	5.798	5.792	0.006	98	1546910	80.0	70.3	
27 Aniline	93	5.814	5.814	0.000	98	1653840	80.0	73.1	
29 Bis(2-chloroethyl)ether	93	5.889	5.883	0.006	97	1232482	80.0	74.7	
30 2-Chlorophenol	128	5.942	5.942	0.000	96	1301010	80.0	75.3	
31 n-Decane	43	6.011	6.011	0.000	89	1133970	80.0	66.9	
32 1,3-Dichlorobenzene	146	6.108	6.102	0.006	98	1495129	80.0	73.0	
33 1,4-Dichlorobenzene	146	6.182	6.182	0.000	95	1501271	80.0	72.4	
34 Benzyl alcohol	108	6.305	6.300	0.005	94	866556	80.0	78.3	
35 1,2-Dichlorobenzene	146	6.343	6.337	0.006	98	1452194	80.0	71.8	
36 2-Methylphenol	108	6.428	6.417	0.011	92	1072835	80.0	68.7	
37 Indene	116	6.433	6.428	0.005	91	2026843	80.0	66.1	
38 2,2'-oxybis[1-chloropropan	45	6.449	6.444	0.005	95	1556035	80.0	67.4	
39 N-Nitrosopyrrolidine	100	6.546	6.535	0.011	94	663798	80.0	81.4	
40 Acetophenone	105	6.572	6.567	0.005	85	1472600	80.0	64.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.578	6.567	0.011	74	1054569	80.0	66.1	
41 N-Nitrosodi-n-propylamine	70	6.578	6.567	0.011	63	714007	80.0	63.0	
45 Hexachloroethane	117	6.690	6.690	0.000	96	633175	80.0	72.2	
46 Nitrobenzene	77	6.749	6.743	0.006	86	1423510	80.0	73.3	
48 Isophorone	82	6.984	6.978	0.006	99	2702671	80.0	74.2	
49 2-Nitrophenol	139	7.064	7.064	0.000	93	817219	80.0	80.0	
50 2,4-Dimethylphenol	107	7.101	7.096	0.005	94	1346849	80.0	72.7	
52 Benzoic acid	122	7.197	7.139	0.058	88	898095	80.0	88.0	
53 Bis(2-chloroethoxy)methane	93	7.192	7.187	0.005	99	1661027	80.0	69.8	
54 2,4-Dichlorophenol	162	7.304	7.299	0.005	92	1265954	80.0	75.0	
56 1,2,4-Trichlorobenzene	180	7.390	7.390	0.000	94	1423856	80.0	70.6	
58 Naphthalene	128	7.470	7.465	0.005	97	4195638	80.0	69.3	
59 4-Chloroaniline	127	7.513	7.507	0.006	97	1834688	80.0	73.0	
60 2,6-Dichlorophenol	162	7.529	7.518	0.011	98	1177279	80.0	71.1	
62 Hexachlorobutadiene	225	7.593	7.593	0.000	95	840675	80.0	73.8	
64 Caprolactam	113	7.838	7.806	0.032	82	499273	80.0	85.2	
67 4-Chloro-3-methylphenol	107	7.972	7.961	0.011	96	1296273	80.0	76.5	
69 2-Methylnaphthalene	142	8.143	8.138	0.005	93	2926046	80.0	69.8	
71 1-Methylnaphthalene	142	8.239	8.234	0.005	94	2765477	80.0	69.6	
72 Hexachlorocyclopentadiene	237	8.303	8.298	0.005	94	900121	80.0	74.5	
73 1,2,4,5-Tetrachlorobenzene	216	8.309	8.303	0.006	96	1400122	80.0	65.6	
74 2,4,6-Trichlorophenol	196	8.410	8.405	0.005	91	1068974	80.0	76.6	
75 2,4,5-Trichlorophenol	196	8.447	8.437	0.010	95	1096275	80.0	76.4	
76 1,1'-Biphenyl	154	8.586	8.581	0.005	94	3676144	80.0	68.4	
77 2-Chloronaphthalene	162	8.618	8.613	0.005	95	2978253	80.0	68.4	
79 2-Nitroaniline	65	8.699	8.693	0.006	87	939450	80.0	79.1	
82 Dimethyl phthalate	163	8.859	8.854	0.005	100	3442526	80.0	74.2	
83 1,3-Dinitrobenzene	168	8.896	8.886	0.010	89	605737	80.0	84.7	
84 2,6-Dinitrotoluene	165	8.923	8.912	0.011	96	829004	80.0	76.8	
85 Acenaphthylene	152	9.019	9.014	0.005	99	4628682	80.0	70.6	
86 3-Nitroaniline	138	9.089	9.078	0.011	97	995213	80.0	81.8	
87 2,4-Dinitrophenol	184	9.190	9.179	0.011	84	1013407	160.0	185.1	
88 Acenaphthene	153	9.185	9.179	0.006	92	2681240	80.0	60.5	
89 4-Nitrophenol	109	9.227	9.217	0.010	86	854537	160.0	166.0	
91 2,4-Dinitrotoluene	165	9.313	9.302	0.011	96	1158279	80.0	80.8	
93 Dibenzofuran	168	9.350	9.340	0.010	97	4324011	80.0	69.6	
95 2,3,5,6-Tetrachlorophenol	232	9.420	9.414	0.006	92	977797	80.0	80.8	
96 2,3,4,6-Tetrachlorophenol	232	9.462	9.452	0.010	70	966231	80.0	81.4	
97 2-Naphthylamine	143	9.495	9.484	0.011	97	3247703	80.0	71.6	
98 Diethyl phthalate	149	9.527	9.516	0.011	99	2910101	80.0	67.1	
99 Hexadecane	57	9.537	9.527	0.010	91	1808651	80.0	55.3	
100 4-Chlorophenyl phenyl ethe	204	9.660	9.655	0.005	87	1839824	80.0	72.6	
101 4-Nitroaniline	138	9.676	9.666	0.010	78	855264	80.0	71.7	
103 Fluorene	166	9.676	9.671	0.005	95	3365563	80.0	68.3	
104 4,6-Dinitro-2-methylphenol	198	9.708	9.698	0.010	93	1487532	160.0	176.2	
105 N-Nitrosodiphenylamine	169	9.767	9.762	0.005	59	2859188	80.0	72.5	
90 1,2-Diphenylhydrazine	77	9.810	9.804	0.006	97	3753343	80.0	67.6	
57 Azobenzene	77	9.810	9.804	0.006	97	3753343	80.0	67.6	
110 4-Bromophenyl phenyl ether	248	10.130	10.125	0.005	63	1089543	80.0	74.2	
112 Hexachlorobenzene	284	10.216	10.210	0.006	94	996723	80.0	72.2	
113 Atrazine	200	10.253	10.243	0.011	95	996796	80.0	72.5	
116 Pentachlorophenol	266	10.392	10.381	0.011	93	1252437	160.0	151.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.403	10.397	0.006	94	2047551	80.0	61.3	
121 Phenanthrene	178	10.622	10.611	0.011	97	5489584	80.0	71.9	
122 Anthracene	178	10.675	10.665	0.010	97	5694856	80.0	71.7	
124 Carbazole	167	10.825	10.814	0.011	95	5351682	80.0	72.8	
126 Di-n-butyl phthalate	149	11.151	11.140	0.011	100	6113667	80.0	74.5	
131 Fluoranthene	202	12.016	12.005	0.011	98	6243665	80.0	74.5	
132 Benzidine	184	12.160	12.150	0.010	99	3061966	80.0	79.0	
133 Pyrene	202	12.342	12.331	0.011	97	6350780	80.0	73.7	
138 Butyl benzyl phthalate	149	13.266	13.250	0.016	97	2666094	80.0	77.6	
144 3,3'-Dichlorobenzidine	252	14.254	14.233	0.021	66	2176920	80.0	85.4	
145 Bis(2-ethylhexyl) phthalat	149	14.308	14.297	0.011	95	3345932	80.0	75.8	
146 Benzo[a]anthracene	228	14.329	14.308	0.021	96	5679084	80.0	75.8	
147 Chrysene	228	14.399	14.377	0.022	94	5611426	80.0	78.4	
150 Di-n-octyl phthalate	149	15.617	15.595	0.022	99	6269452	80.0	76.0	
151 7,12-Dimethylbenz(a)anthra	256	16.450	16.423	0.027	75	2678227	80.0	78.9	
152 Benzo[b]fluoranthene	252	16.472	16.440	0.032	94	5644866	80.0	77.7	
153 Benzo[k]fluoranthene	252	16.520	16.493	0.027	94	5723698	80.0	80.0	
219 Benzo[e]pyrene	252	17.022	16.995	0.027	0	5351502	80.0	79.5	
154 Benzo[a]pyrene	252	17.129	17.097	0.032	73	5362195	80.0	79.1	
157 Indeno[1,2,3-cd]pyrene	276	19.602	19.549	0.053	95	5321311	80.0	79.6	
158 Dibenz(a,h)anthracene	278	19.629	19.591	0.038	71	4528365	80.0	81.0	
159 Benzo[g,h,i]perylene	276	20.281	20.233	0.049	93	4603726	80.0	80.4	
S 197 Methyl Phenols,Total	108				0		160.0	134.7	
S 199 Total Cresols	108				0		160.0	134.7	

Reagents:

SVTAPSTD80i_00010 Amount Added: 1.00 Units: mL

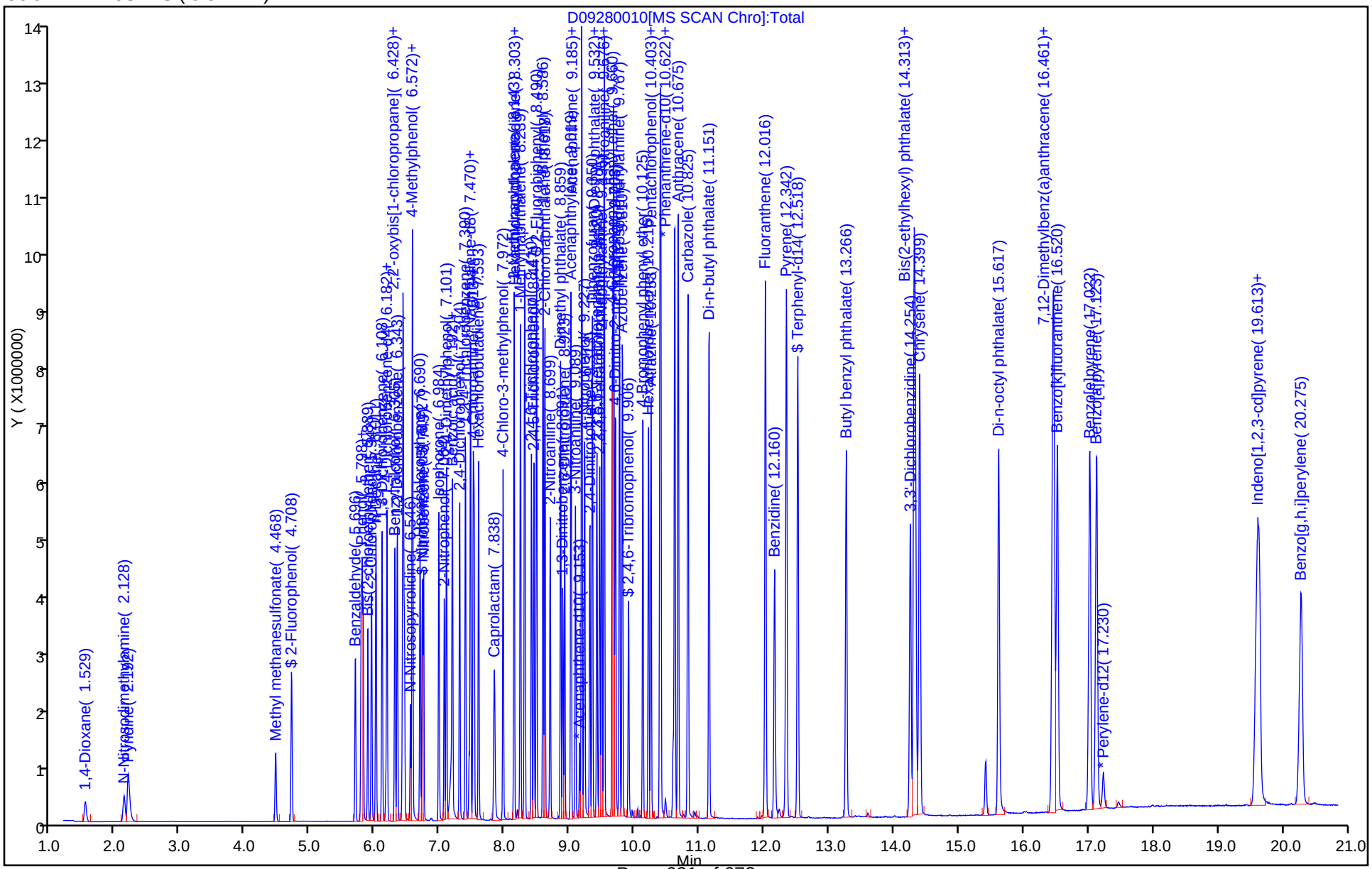
Report Date: 28-Sep-2016 10:34:13 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280010.D

Injection Date:	28-Sep-2016 08:39:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab Sample ID: CCVIS 180-192814/3 Calibration Date: 10/31/2016 08:02

Instrument ID: CH732 Calib Start Date: 09/28/2016 05:28

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 09/28/2016 08:39

Lab File ID: D10310003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.2951	0.3359	0.0100	5.69	5.00	13.8	20.0
N-Nitrosodimethylamine	Lin1		0.4639	0.0100	5.78	5.00	15.5	20.0
Pyridine	Ave	0.7632	0.8529	0.0100	5.59	5.00	11.7	20.0
Methyl methanesulfonate	Ave	0.5436	0.6175	0.0100	5.68	5.00	13.6	20.0
Benzaldehyde	Ave	0.8340	0.9273	0.0100	5.56	5.00	11.2	20.0
Phenol	Ave	1.644	1.709	0.8000	5.20	5.00	3.9	20.0
Aniline	Ave	1.691	1.927	0.0100	5.70	5.00	14.0	20.0
Bis(2-chloroethyl)ether	Ave	1.233	1.245	0.7000	5.05	5.00	1.0	20.0
2-Chlorophenol	Ave	1.291	1.313	0.8000	5.09	5.00	1.7	20.0
n-Decane	Ave	1.267	1.339		5.28	5.00	5.7	20.0
1,3-Dichlorobenzene	Ave	1.530	1.553	0.0100	5.07	5.00	1.5	20.0
1,4-Dichlorobenzene	Ave	1.550	1.529	0.0100	4.93	5.00	-1.3	20.0
Benzyl alcohol	Ave	0.8269	0.7053	0.0100	4.27	5.00	-14.7	20.0
1,2-Dichlorobenzene	Ave	1.511	1.487	0.0100	4.92	5.00	-1.6	20.0
2-Methylphenol	Ave	1.168	1.156	0.7000	4.95	5.00	-1.0	20.0
Indene	Ave	2.291	2.285	0.0100	4.99	5.00	-0.2	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.726	1.982	0.0100	5.74	5.00	14.9	20.0
N-Nitrosopyrrolidine	Ave	0.6094	0.5867	0.0100	4.81	5.00	-3.7	20.0
Acetophenone	Ave	1.715	1.742	0.0100	5.08	5.00	1.6	20.0
N-Nitrosodi-n-propylamine	Ave	0.8471	0.8870	0.5000	5.24	5.00	4.7	20.0
Methylphenol, 3 & 4	Ave	1.193	1.197	0.6000	5.02	5.00	0.4	20.0
Hexachloroethane	Ave	0.6553	0.6334	0.3000	4.83	5.00	-3.3	20.0
Nitrobenzene	Ave	0.3200	0.3336	0.2000	5.21	5.00	4.2	20.0
Isophorone	Ave	0.6005	0.6069	0.4000	5.05	5.00	1.1	20.0
2-Nitrophenol	Ave	0.1683	0.1750	0.1000	5.20	5.00	4.0	20.0
2,4-Dimethylphenol	Ave	0.3051	0.3199	0.2000	5.24	5.00	4.9	20.0
Benzoic acid	Ave	0.1682	0.1726	0.0100	5.13	5.00	2.6	20.0
Bis(2-chloroethoxy)methane	Ave	0.3921	0.3843	0.3000	4.90	5.00	-2.0	20.0
2,4-Dichlorophenol	Ave	0.2782	0.2904	0.2000	5.22	5.00	4.4	20.0
1,2,4-Trichlorobenzene	Ave	0.3324	0.3449	0.0100	5.19	5.00	3.8	20.0
Naphthalene	Ave	0.997	0.995	0.7000	4.99	5.00	-0.1	20.0
4-Chloroaniline	Ave	0.4141	0.3978	0.0100	4.80	5.00	-3.9	20.0
2,6-Dichlorophenol	Ave	0.2727	0.2908	0.0100	5.33	5.00	6.6	20.0
Hexachlorobutadiene	Ave	0.1877	0.2003	0.0100	5.33	5.00	6.7	20.0
Caprolactam	Ave	0.0966	0.1007	0.0100	5.21	5.00	4.2	20.0
4-Chloro-3-methylphenol	Ave	0.2793	0.2852	0.2000	5.10	5.00	2.1	20.0
2-Methylnaphthalene	Ave	0.6903	0.7009	0.4000	5.08	5.00	1.5	20.0
1-Methylnaphthalene	Ave	0.6545	0.6579	0.0100	5.03	5.00	0.5	20.0
Hexachlorocyclopentadiene	Ave	0.2963	0.3129	0.0500	5.28	5.00	5.6	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5232	0.5345	0.0100	5.11	5.00	2.2	20.0
2,4,6-Trichlorophenol	Ave	0.3424	0.3507	0.2000	5.12	5.00	2.4	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab Sample ID: CCVIS 180-192814/3 Calibration Date: 10/31/2016 08:02

Instrument ID: CH732 Calib Start Date: 09/28/2016 05:28

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 09/28/2016 08:39

Lab File ID: D10310003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4,5-Trichlorophenol	Ave	0.3521	0.3577	0.2000	5.08	5.00	1.6	20.0
1,1'-Biphenyl	Ave	1.318	1.310	0.0100	4.97	5.00	-0.6	20.0
2-Chloronaphthalene	Ave	1.068	1.040	0.8000	4.87	5.00	-2.6	20.0
2-Nitroaniline	Ave	0.2912	0.2979	0.0100	5.11	5.00	2.3	20.0
Dimethyl phthalate	Ave	1.138	1.139	0.0100	5.00	5.00	0.0	20.0
1,3-Dinitrobenzene	Ave	0.1755	0.1763	0.0100	5.02	5.00	0.4	20.0
2,6-Dinitrotoluene	Ave	0.2649	0.2627	0.2000	4.96	5.00	-0.8	20.0
Acenaphthylene	Ave	1.609	1.608	0.9000	5.00	5.00	-0.0	20.0
3-Nitroaniline	Ave	0.2985	0.2886	0.0100	4.83	5.00	-3.3	20.0
2,4-Dinitrophenol	Ave	0.1343	0.1469	0.0100	10.9	10.0	9.4	20.0
Acenaphthene	Ave	1.087	1.023	0.9000	4.71	5.00	-5.8	20.0
4-Nitrophenol	Ave	0.1263	0.1279	0.0100	10.1	10.0	1.3	20.0
2,4-Dinitrotoluene	Ave	0.3517	0.3509	0.2000	4.99	5.00	-0.2	20.0
Dibenzofuran	Ave	1.524	1.531	0.8000	5.02	5.00	0.5	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.2968	0.3144	0.0100	5.30	5.00	5.9	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2911	0.3081	0.0100	5.29	5.00	5.8	20.0
2-Naphthylamine	Ave	1.113	0.9939	0.0100	4.46	5.00	-10.7	20.0
Diethyl phthalate	Ave	1.064	1.082	0.0100	5.08	5.00	1.7	20.0
Hexadecane	Ave	0.5391	0.5597		5.19	5.00	3.8	20.0
4-Chlorophenyl phenyl ether	Ave	0.6215	0.6407	0.4000	5.15	5.00	3.1	20.0
4-Nitroaniline	Ave	0.2925	0.2867	0.0100	4.90	5.00	-2.0	20.0
Fluorene	Ave	1.208	1.216	0.9000	5.03	5.00	0.7	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1138	0.1190	0.0100	10.5	10.0	4.6	20.0
N-Nitrosodiphenylamine	Ave	0.5317	0.5018	0.0100	4.72	5.00	-5.6	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.7480	0.8003	0.0100	5.35	5.00	7.0	20.0
4-Bromophenyl phenyl ether	Ave	0.1979	0.2019	0.1000	5.10	5.00	2.0	20.0
Hexachlorobenzene	Ave	0.1861	0.1837	0.1000	4.94	5.00	-1.3	20.0
Atrazine	Ave	0.1853	0.1906	0.0100	5.14	5.00	2.9	20.0
n-Octadecane	Ave	2.495	2.550		5.11	5.00	2.2	20.0
Pentachlorophenol	Ave	0.1115	0.1168	0.0500	10.5	10.0	4.7	20.0
Phenanthrene	Ave	1.029	1.001	0.7000	4.86	5.00	-2.7	20.0
Anthracene	Ave	1.070	1.020	0.7000	4.77	5.00	-4.7	20.0
Carbazole	Ave	0.9911	0.9270	0.0100	4.68	5.00	-6.5	20.0
Di-n-butyl phthalate	Ave	1.106	1.093	0.0100	4.94	5.00	-1.1	20.0
Fluoranthene	Ave	1.130	1.136	0.6000	5.03	5.00	0.5	20.0
Benzidine	Ave	0.5906	0.5534	0.0100	20.0	5.00	-6.3	20.0
Pyrene	Ave	1.313	1.273	0.6000	4.85	5.00	-3.0	20.0
Butyl benzyl phthalate	Ave	0.5237	0.5168	0.0100	4.93	5.00	-1.3	20.0
3,3'-Dichlorobenzidine	Ave	0.3887	0.4001	0.0100	5.15	5.00	2.9	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6729	0.6937	0.0100	5.15	5.00	3.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Lab Sample ID: CCVIS 180-192814/3 Calibration Date: 10/31/2016 08:02

Instrument ID: CH732 Calib Start Date: 09/28/2016 05:28

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 09/28/2016 08:39

Lab File ID: D10310003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]anthracene	Ave	1.142	1.094	0.8000	4.79	5.00	-4.2	20.0
Chrysene	Ave	1.091	1.029	0.7000	4.72	5.00	-5.6	20.0
Di-n-octyl phthalate	Ave	1.486	1.395	0.0100	4.70	5.00	-6.1	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.6109	0.5518	0.0100	4.52	5.00	-9.7	20.0
Benzo[b]fluoranthene	Ave	1.308	1.247	0.7000	4.77	5.00	-4.7	20.0
Benzo[k]fluoranthene	Ave	1.288	1.154	0.7000	4.48	5.00	-10.4	20.0
Benzo[e]pyrene	Ave	1.212	1.127	0.0100	4.65	5.00	-7.0	20.0
Benzo[a]pyrene	Ave	1.220	1.147	0.7000	4.70	5.00	-6.0	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.203	1.109	0.5000	4.61	5.00	-7.8	20.0
Dibenz(a,h)anthracene	Ave	1.007	0.9356	0.4000	4.65	5.00	-7.1	20.0
Benzo[g,h,i]perylene	Ave	1.031	0.9499	0.5000	4.61	5.00	-7.9	20.0
2-Fluorophenol (Surr)	Ave	0.9941	1.104		5.55	5.00	11.0	20.0
Phenol-d5 (Surr)	Ave	1.507	1.580		5.24	5.00	4.8	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3216	0.3324		5.17	5.00	3.4	20.0
2-Fluorobiphenyl	Ave	1.240	1.258		5.07	5.00	1.4	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.0667	0.0713	0.0100	5.34	5.00	6.9	20.0
Terphenyl-d14 (Surr)	Ave	0.8216	0.8220		5.00	5.00	0.0	20.0

Report Date: 31-Oct-2016 11:59:47 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310003.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 31-Oct-2016 08:02:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0014113-003
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 31-Oct-2016 11:59:46 Calib Date: 31-Oct-2016 11:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310011.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: piccolinov Date: 31-Oct-2016 11:58:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.209	6.209	0.000	95	108752	8.00	8.00	
* 2 Naphthalene-d8	136	7.480	7.480	0.000	99	467385	8.00	8.00	
* 3 Acenaphthene-d10	164	9.179	9.179	0.000	92	311996	8.00	8.00	
* 4 Phenanthrene-d10	188	10.616	10.616	0.000	97	579434	8.00	8.00	
* 5 Chrysene-d12	240	14.361	14.361	0.000	97	513091	8.00	8.00	
* 6 Perylene-d12	264	17.246	17.246	0.000	97	430273	8.00	8.00	
$ 7 2-Fluorophenol	112	4.788	4.788	0.000	92	150061	10.0	11.1	
$ 8 Phenol-d5	99	5.840	5.840	0.000	98	214750	10.0	10.5	
$ 9 Nitrobenzene-d5	82	6.765	6.765	0.000	88	194202	10.0	10.3	
$ 10 2-Fluorobiphenyl	172	8.517	8.517	0.000	99	490423	10.0	10.1	
$ 11 2,4,6-Tribromophenol	330	9.932	9.932	0.000	89	51608	10.0	10.7	
$ 12 Terphenyl-d14	244	12.534	12.534	0.000	100	527219	10.0	10.0	
13 1,4-Dioxane	88	1.636	1.636	0.000	93	45659	10.0	11.4	
14 N-Nitrosodimethylamine	74	2.250	2.250	0.000	93	63061	10.0	11.6	
15 Pyridine	79	2.341	2.341	0.000	98	115936	10.0	11.2	
21 Methyl methanesulfonate	80	4.537	4.537	0.000	87	83942	10.0	11.4	
25 Benzaldehyde	77	5.744	5.744	0.000	95	126054	10.0	11.1	
26 Phenol	94	5.856	5.856	0.000	97	232256	10.0	10.4	
27 Aniline	93	5.862	5.862	0.000	98	261987	10.0	11.4	
29 Bis(2-chloroethyl)ether	93	5.931	5.931	0.000	96	169258	10.0	10.1	
30 2-Chlorophenol	128	5.995	5.995	0.000	97	178535	10.0	10.2	
31 n-Decane	43	6.049	6.049	0.000	90	181974	10.0	10.6	
32 1,3-Dichlorobenzene	146	6.150	6.150	0.000	99	211100	10.0	10.1	
33 1,4-Dichlorobenzene	146	6.225	6.225	0.000	94	207870	10.0	9.87	
34 Benzyl alcohol	108	6.348	6.348	0.000	92	95882	10.0	8.53	
35 1,2-Dichlorobenzene	146	6.380	6.380	0.000	98	202171	10.0	9.84	
36 2-Methylphenol	108	6.465	6.465	0.000	93	157193	10.0	9.90	
37 Indene	116	6.471	6.471	0.000	91	310639	10.0	9.98	
38 2,2'-oxybis[1-chloropropan	45	6.487	6.487	0.000	94	269474	10.0	11.5	
39 N-Nitrosopyrrolidine	100	6.583	6.583	0.000	91	79758	10.0	9.63	
41 N-Nitrosodi-n-propylamine	70	6.610	6.610	0.000	84	120572	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.610	6.610	0.000	90	236852	10.0	10.2	
42 4-Methylphenol	108	6.615	6.615	0.000	92	162757	10.0	10.0	
45 Hexachloroethane	117	6.727	6.727	0.000	95	86110	10.0	9.67	
46 Nitrobenzene	77	6.781	6.781	0.000	88	194903	10.0	10.4	
48 Isophorone	82	7.021	7.021	0.000	100	354553	10.0	10.1	
49 2-Nitrophenol	139	7.101	7.101	0.000	96	102232	10.0	10.4	
50 2,4-Dimethylphenol	107	7.133	7.133	0.000	96	186911	10.0	10.5	
52 Benzoic acid	122	7.197	7.197	0.000	89	100826	10.0	10.3	
53 Bis(2-chloroethoxy)methane	93	7.219	7.219	0.000	98	224501	10.0	9.80	
54 2,4-Dichlorophenol	162	7.342	7.342	0.000	93	169630	10.0	10.4	
56 1,2,4-Trichlorobenzene	180	7.422	7.422	0.000	95	201487	10.0	10.4	
58 Naphthalene	128	7.502	7.502	0.000	97	581535	10.0	9.99	
59 4-Chloroaniline	127	7.545	7.545	0.000	96	232387	10.0	9.61	
60 2,6-Dichlorophenol	162	7.561	7.561	0.000	98	169880	10.0	10.7	
62 Hexachlorobutadiene	225	7.625	7.625	0.000	95	117006	10.0	10.7	
64 Caprolactam	113	7.865	7.865	0.000	79	58804	10.0	10.4	
67 4-Chloro-3-methylphenol	107	8.004	8.004	0.000	97	166619	10.0	10.2	
69 2-Methylnaphthalene	142	8.170	8.170	0.000	93	409462	10.0	10.2	
71 1-Methylnaphthalene	142	8.271	8.271	0.000	93	384384	10.0	10.1	
72 Hexachlorocyclopentadiene	237	8.330	8.330	0.000	95	122037	10.0	10.6	
73 1,2,4,5-Tetrachlorobenzene	216	8.335	8.335	0.000	97	208464	10.0	10.2	
74 2,4,6-Trichlorophenol	196	8.437	8.437	0.000	92	136784	10.0	10.2	
75 2,4,5-Trichlorophenol	196	8.474	8.474	0.000	95	139490	10.0	10.2	
76 1,1'-Biphenyl	154	8.613	8.613	0.000	94	510825	10.0	9.94	
77 2-Chloronaphthalene	162	8.645	8.645	0.000	95	405748	10.0	9.74	
79 2-Nitroaniline	65	8.725	8.725	0.000	85	116168	10.0	10.2	
82 Dimethyl phthalate	163	8.880	8.880	0.000	99	444185	10.0	10.0	
83 1,3-Dinitrobenzene	168	8.917	8.917	0.000	86	68741	10.0	10.0	
84 2,6-Dinitrotoluene	165	8.944	8.944	0.000	95	102440	10.0	9.92	
85 Acenaphthylene	152	9.046	9.046	0.000	98	627208	10.0	10.0	
86 3-Nitroaniline	138	9.115	9.115	0.000	95	112556	10.0	9.67	
87 2,4-Dinitrophenol	184	9.211	9.211	0.000	66	114570	20.0	21.9	
88 Acenaphthene	153	9.211	9.211	0.000	90	399153	10.0	9.42	
89 4-Nitrophenol	109	9.259	9.259	0.000	90	99778	20.0	20.3	
91 2,4-Dinitrotoluene	165	9.334	9.334	0.000	95	136835	10.0	9.98	
93 Dibenzofuran	168	9.372	9.372	0.000	97	597058	10.0	10.0	
95 2,3,5,6-Tetrachlorophenol	232	9.446	9.446	0.000	93	122623	10.0	10.6	
96 2,3,4,6-Tetrachlorophenol	232	9.489	9.489	0.000	72	120143	10.0	10.6	
97 2-Naphthylamine	143	9.516	9.516	0.000	96	387600	10.0	8.93	
98 Diethyl phthalate	149	9.548	9.548	0.000	98	421981	10.0	10.2	
99 Hexadecane	57	9.548	9.548	0.000	91	327017	10.0	10.4	
100 4-Chlorophenyl phenyl ethe	204	9.681	9.681	0.000	90	249867	10.0	10.3	
101 4-Nitroaniline	138	9.697	9.697	0.000	89	111809	10.0	9.80	
103 Fluorene	166	9.703	9.703	0.000	94	474298	10.0	10.1	
104 4,6-Dinitro-2-methylphenol	198	9.724	9.724	0.000	91	172429	20.0	20.9	
105 N-Nitrosodiphenylamine	169	9.788	9.788	0.000	60	363434	10.0	9.44	
57 Azobenzene	77	9.831	9.831	0.000	98	579663	10.0	10.7	
90 1,2-Diphenylhydrazine	77	9.831	9.831	0.000	98	579663	10.0	10.7	
110 4-Bromophenyl phenyl ether	248	10.152	10.152	0.000	64	146218	10.0	10.2	
112 Hexachlorobenzene	284	10.237	10.237	0.000	94	133049	10.0	9.87	
113 Atrazine	200	10.269	10.269	0.000	93	138072	10.0	10.3	
115 n-Octadecane	57	10.413	10.413	0.000	93	346702	10.0	10.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.413	10.413	0.000	91	169213	20.0	20.9	
121 Phenanthrene	178	10.643	10.643	0.000	97	725375	10.0	9.73	
122 Anthracene	178	10.696	10.696	0.000	97	738746	10.0	9.53	
124 Carbazole	167	10.846	10.846	0.000	95	671390	10.0	9.35	
126 Di-n-butyl phthalate	149	11.161	11.161	0.000	100	791727	10.0	9.89	
131 Fluoranthene	202	12.037	12.037	0.000	97	822744	10.0	10.1	
132 Benzidine	184	12.176	12.176	0.000	100	354942	10.0	9.37	
133 Pyrene	202	12.363	12.363	0.000	98	816640	10.0	9.70	
138 Butyl benzyl phthalate	149	13.271	13.271	0.000	98	331464	10.0	9.87	
144 3,3'-Dichlorobenzidine	252	14.265	14.265	0.000	76	256627	10.0	10.3	
145 Bis(2-ethylhexyl) phthalat	149	14.313	14.313	0.000	96	444894	10.0	10.3	
146 Benzo[a]anthracene	228	14.345	14.345	0.000	98	701533	10.0	9.58	
147 Chrysene	228	14.409	14.409	0.000	97	660164	10.0	9.44	
150 Di-n-octyl phthalate	149	15.606	15.606	0.000	99	750549	10.0	9.39	
151 7,12-Dimethylbenz(a)anthra	256	16.455	16.455	0.000	92	296797	10.0	9.03	
152 Benzo[b]fluoranthene	252	16.477	16.477	0.000	98	670691	10.0	9.53	
153 Benzo[k]fluoranthene	252	16.530	16.530	0.000	99	620623	10.0	8.96	
219 Benzo[e]pyrene	252	17.032	17.032	0.000	0	606160	10.0	9.30	
154 Benzo[a]pyrene	252	17.134	17.134	0.000	82	616870	10.0	9.40	
157 Indeno[1,2,3-cd]pyrene	276	19.597	19.597	0.000	98	596393	10.0	9.22	
158 Dibenz(a,h)anthracene	278	19.634	19.634	0.000	91	503211	10.0	9.29	
159 Benzo[g,h,i]perylene	276	20.280	20.280	0.000	97	510899	10.0	9.21	
S 197 Methyl Phenols,Total	108				0		20.0	19.9	
S 199 Total Cresols	108				0		20.0	19.9	

Reagents:

SVTAPSTD10i_00193 Amount Added: 1.00 Units: mL

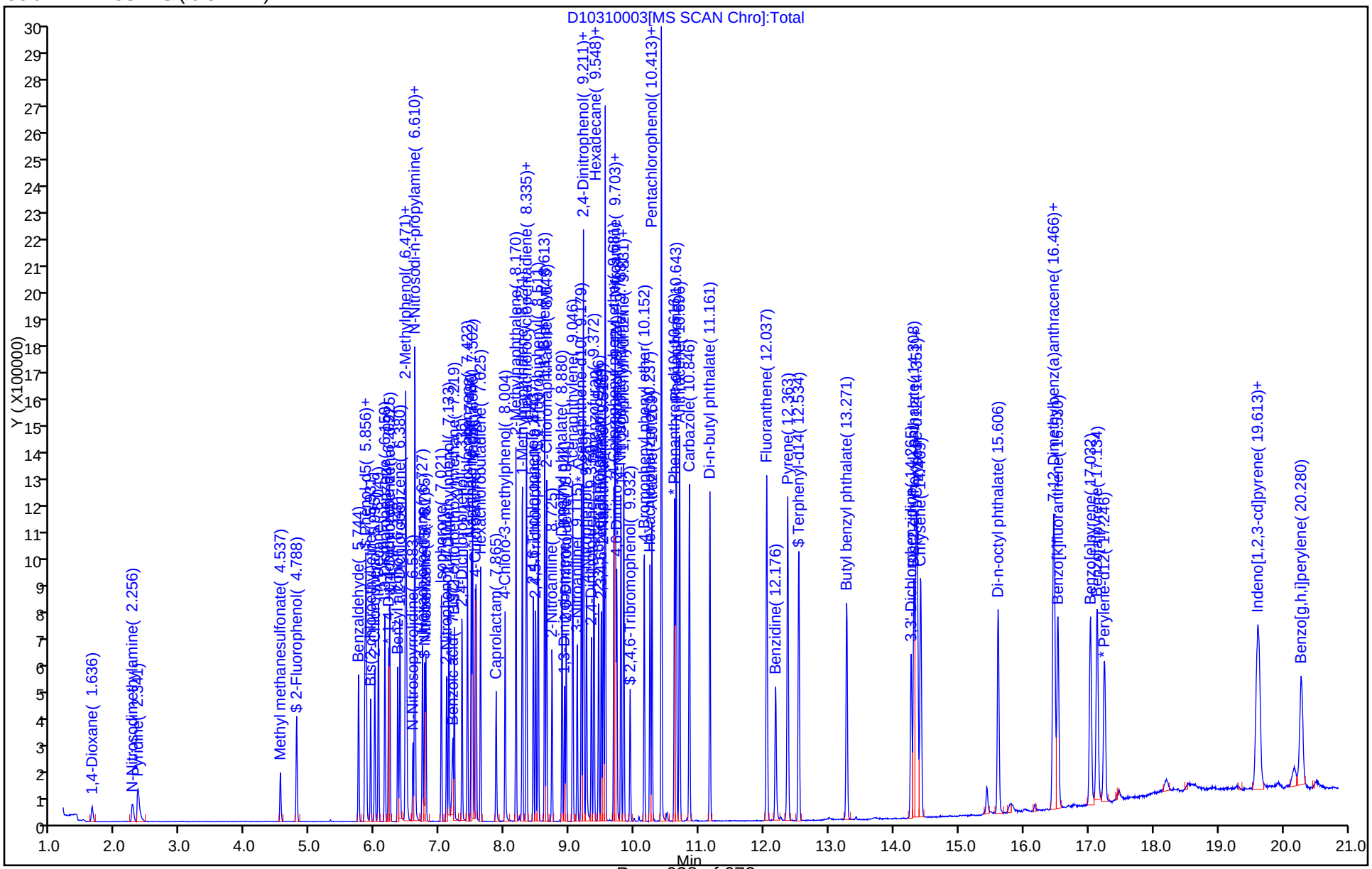
Report Date: 31-Oct-2016 11:59:48 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310003.D

Injection Date:	31-Oct-2016 08:02:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 28-Sep-2016 05:12:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0013626-002
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 28-Sep-2016 10:33:21 Calib Date: 28-Sep-2016 08:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: piccolinov Date: 28-Sep-2016 05:50:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.469	5.469	0.000	93	645592	NR	NR	
190 DFTPP									
191 Benzidine_T	184	8.129	8.129	0.000	100	5033671	NR	NR	
192 4,4'-DDE	246		8.600					ND	
193 4,4'-DDD	235		9.326					ND	
194 4,4'-DDT	235	9.785	9.785	0.000	99	1975081	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

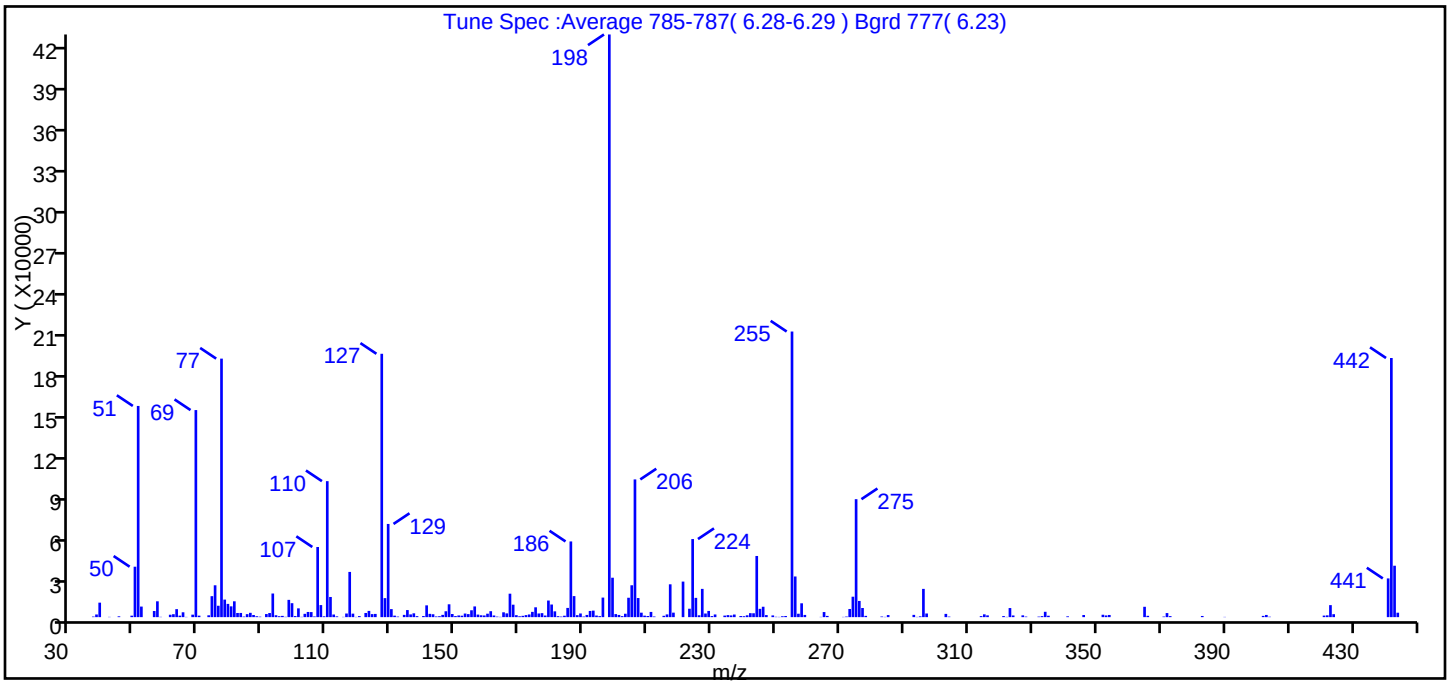
SVDFTPP50i_00025 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280002.D
Injection Date: 28-Sep-2016 05:12:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL
Tune Method: DFTPP Method 8270

190 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	36.2
68	<2% of mass 69	0.4 (1.2)
69	Present	35.5
70	<2% of mass 69	0.3 (0.7)
127	40-60% of mass 198	45.2
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.8
275	10-30% of mass 198	20.2
365	>1% of mass 198	1.8
441	Present but less than mass 443	6.6 (75.3)
442	>40% of mass 198	44.5
443	17-23% of mass 442	8.8 (19.8)

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280002.D\BNA_CH732.rslt\spectra.d
Injection Date: 28-Sep-2016 05:12:30
Spectrum: Tune Spec :Average 785-787(6.28-6.29) Bgrd 777(6.23)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 248

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	425	116.00	2646	182.00	704	255.00	207808
38.00	1942	117.00	32904	183.00	397	256.00	29584
39.00	10541	118.00	2550	184.00	1033	257.00	2479
42.00	191	119.00	168	185.00	6708	258.00	10075
45.00	596	120.00	759	186.00	55080	259.00	1618
49.00	1063	122.00	3028	187.00	15308	264.00	181
50.00	36696	123.00	4542	188.00	1448	265.00	3709
51.00	153664	124.00	2207	189.00	2671	266.00	898
52.00	7690	125.00	2345	190.00	413	271.00	173
56.00	4457	127.00	191616	191.00	1609	272.00	418
57.00	11528	128.00	13836	192.00	4499	273.00	5935
58.00	210	129.00	67808	193.00	4743	274.00	14866
61.00	1751	130.00	5838	194.00	1164	275.00	85832
62.00	2136	131.00	1089	195.00	735	276.00	11787
63.00	5826	132.00	407	196.00	14228	277.00	6645
64.00	1090	134.00	1649	198.00	423936	278.00	932
65.00	3539	135.00	5150	199.00	28680	283.00	443
66.00	167	136.00	1992	200.00	2218	284.00	178
68.00	1804	137.00	2781	201.00	1593	285.00	1522
69.00	150656	138.00	719	202.00	739	293.00	1649
70.00	1089	140.00	796	203.00	2480	294.00	173
73.00	1337	141.00	8580	204.00	14107	295.00	555
74.00	15260	142.00	2393	205.00	23184	296.00	20560
75.00	23176	143.00	2105	206.00	100208	297.00	2656
76.00	8290	144.00	486	207.00	13907	303.00	2368
77.00	188096	145.00	682	208.00	3249	304.00	392
78.00	12763	146.00	1652	209.00	1081	314.00	758
79.00	9641	147.00	4282	210.00	832	315.00	2043
80.00	7855	148.00	9350	211.00	3795	316.00	1287
81.00	11524	149.00	2278	212.00	461	321.00	771
82.00	3030	150.00	773	215.00	975	322.00	189
83.00	3054	151.00	1224	216.00	1979	323.00	6614
84.00	416	152.00	1059	217.00	23888	324.00	1209

Report Date: 28-Sep-2016 10:33:22 Chrom Revision: 2.2 08-Sep-2016 14:45:52
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280002.D\BNA_CH732.rslt\spectra.d
Injection Date: 28-Sep-2016 05:12:30
Spectrum: Tune Spec :Average 785-787(6.28-6.29) Bgrd 777(6.23)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 248

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	2169	153.00	2618	218.00	3269	327.00	1307
86.00	3143	154.00	2198	221.00	25872	328.00	398
87.00	1566	155.00	5002	223.00	6115	332.00	389
88.00	649	156.00	7795	224.00	56816	333.00	722
89.00	341	157.00	1854	225.00	14020	334.00	3891
91.00	2250	158.00	1361	226.00	1351	335.00	1024
92.00	2988	159.00	1214	227.00	20560	341.00	585
93.00	17192	160.00	2505	228.00	2645	346.00	1540
94.00	1376	161.00	4321	229.00	4512	352.00	1742
95.00	683	162.00	1208	230.00	768	353.00	1238
96.00	916	163.00	383	231.00	1949	354.00	1581
97.00	225	164.00	194	234.00	1125	365.00	7533
98.00	12575	165.00	3524	235.00	1470	366.00	965
99.00	10150	166.00	2744	236.00	1255	371.00	423
100.00	780	167.00	17064	237.00	1898	372.00	2967
101.00	6399	168.00	9062	239.00	799	373.00	745
102.00	207	169.00	1435	240.00	671	383.00	852
103.00	2412	170.00	636	241.00	1333	390.00	173
104.00	3771	171.00	968	242.00	2896	402.00	921
105.00	3684	172.00	1478	243.00	2823	403.00	1598
106.00	485	173.00	1947	244.00	44504	404.00	309
107.00	51040	174.00	3834	245.00	6043	421.00	1130
108.00	8777	175.00	7158	246.00	7565	422.00	1311
109.00	588	176.00	2668	247.00	1503	423.00	8742
110.00	98944	177.00	2905	249.00	1255	424.00	2155
111.00	14677	178.00	1172	250.00	262	441.00	28176
112.00	1915	179.00	12076	251.00	181	442.00	188544
113.00	566	180.00	9188	252.00	653	443.00	37408
115.00	187	181.00	4217	253.00	841	444.00	3222

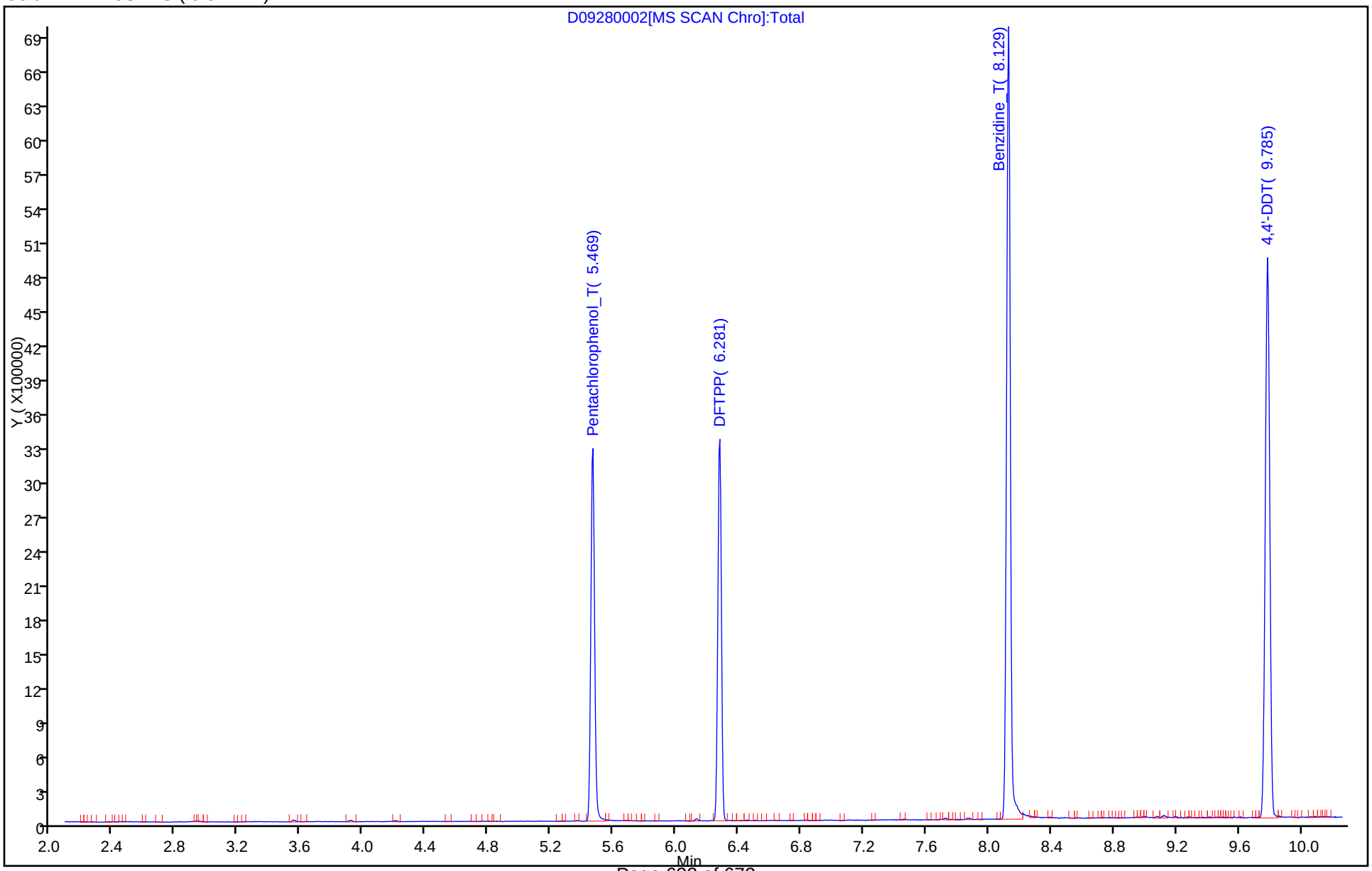
Report Date: 28-Sep-2016 10:33:22 Chrom Revision: 2.2 08-Sep-2016 14:45:52

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280002.D

Injection Date:	28-Sep-2016 05:12:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	DFTPP			Worklist Smp#:	2
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

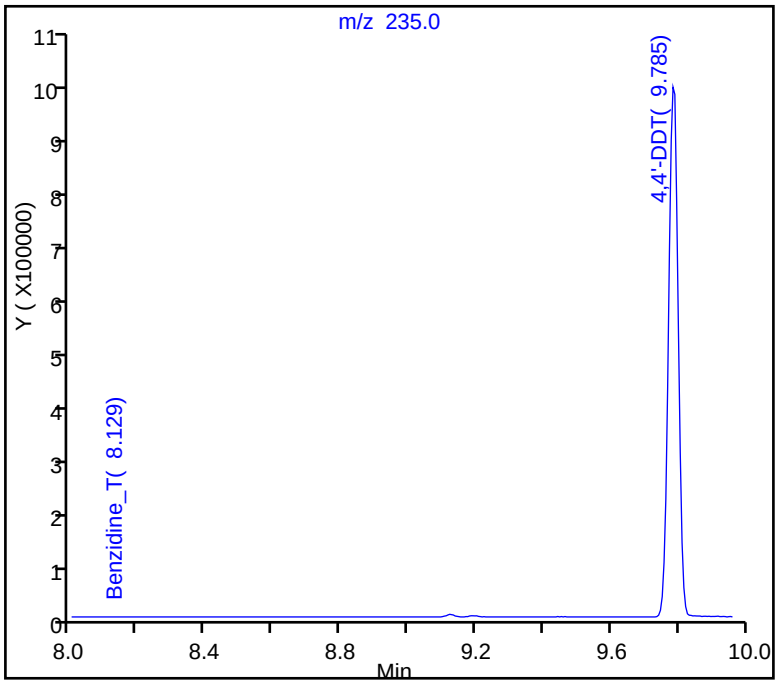


Breakdown Report

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280002.D				
Injection Date:	28-Sep-2016 05:12:30	Instrument ID:	CH732		
Lims ID:	DFTPP				
Client ID:					
Operator ID:	003200	ALS Bottle#:	1	Worklist Smp#:	2
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

194 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

194 4,4'-DDT, Area = 1975081
192 4,4'-DDE, Area = 0
193 4,4'-DDD, Area = 0

%Breakdown: 0.00%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

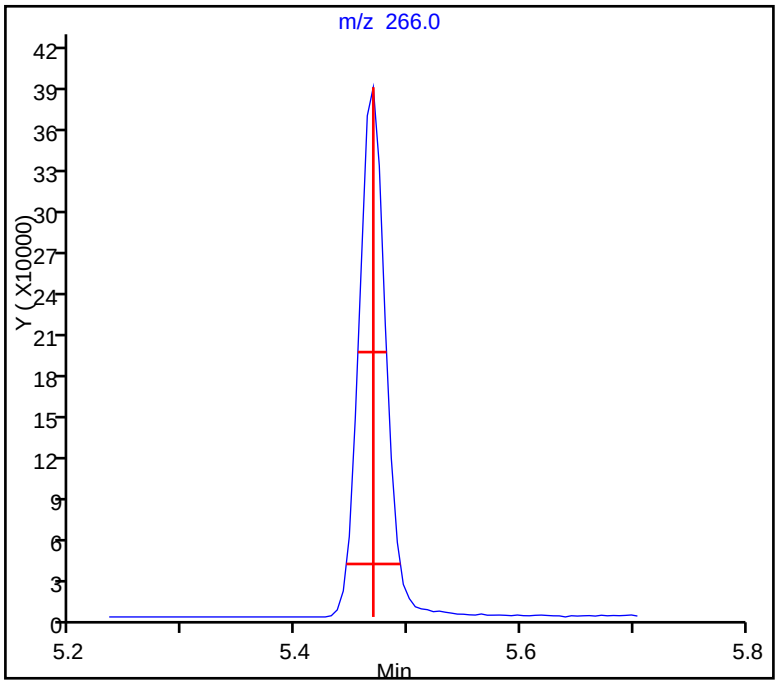
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280002.D
Injection Date: 28-Sep-2016 05:12:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

189 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.024 (min.)
Front Width = 0.024 (min.)

Tailing Factor = 1.0, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

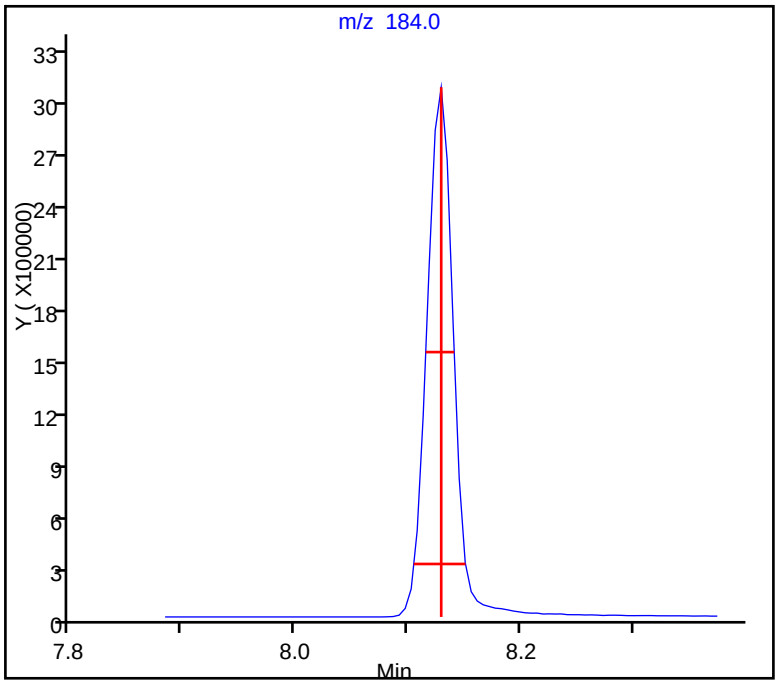
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20160928-13626.b\D09280002.D
Injection Date: 28-Sep-2016 05:12:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

191 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.022 (min.)
Front Width = 0.024 (min.)

Tailing Factor = 0.9, Max. Tailing < 2.00
Passed



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 31-Oct-2016 07:46:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0014113-002
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Nov-2016 05:33:12 Calib Date: 31-Oct-2016 11:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310011.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: piccolinov Date: 01-Nov-2016 05:33:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.549	5.549	0.000	92	328001	NR	NR	
190 DFTPP									
191 Benzidine_T	184	8.204	8.204	0.000	100	2638128	NR	NR	
192 4,4'-DDE	246		8.573					ND	
193 4,4'-DDD	235	9.267	9.267	0.000	1	1819		NR	
194 4,4'-DDT	235	9.871	9.871	0.000	99	1138394	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

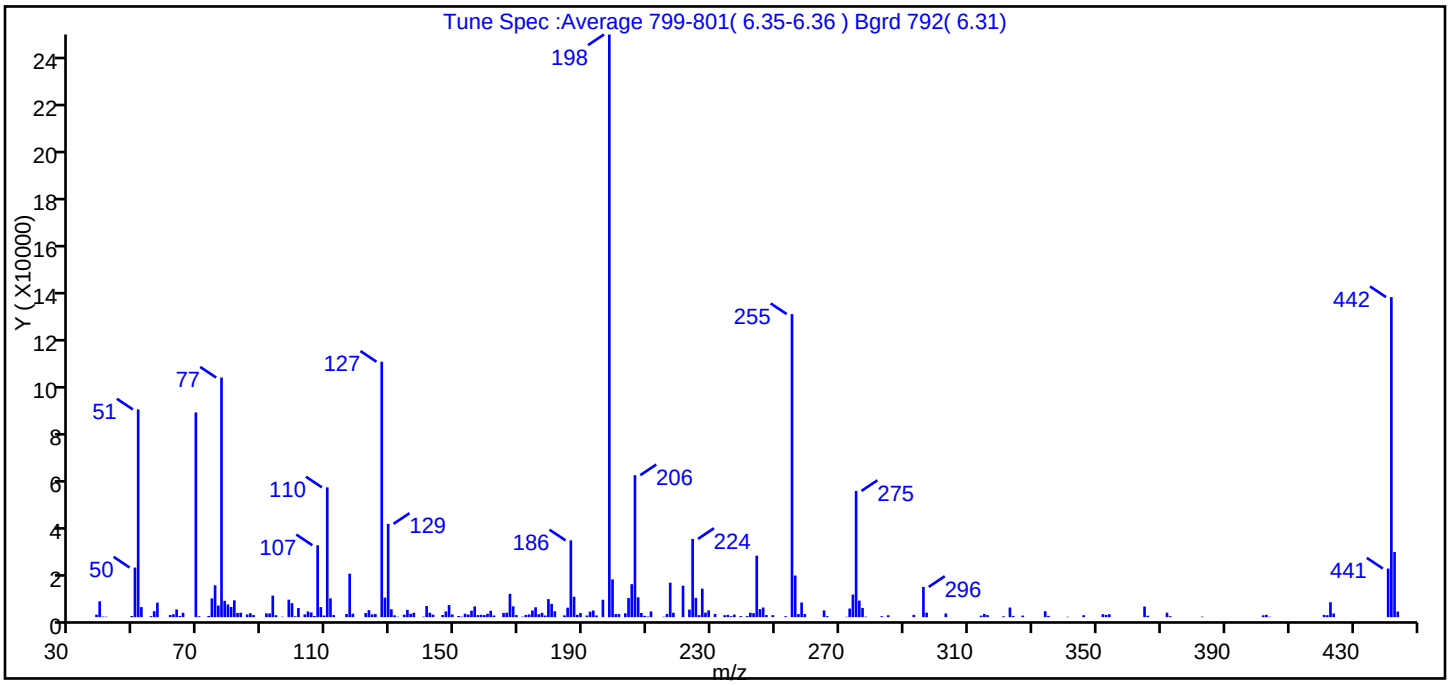
SVDFTPP50i_00025 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310002.D
Injection Date: 31-Oct-2016 07:46:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL
Tune Method: DFTPP Method 8270

190 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	35.6
68	<2% of mass 69	0.0 (0.0)
69	Present	35.1
70	<2% of mass 69	0.1 (0.4)
127	40-60% of mass 198	43.8
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.5
275	10-30% of mass 198	21.7
365	>1% of mass 198	1.8
441	Present but less than mass 443	8.3 (74.7)
442	>40% of mass 198	54.9
443	17-23% of mass 442	11.2 (20.3)

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310002.D\BNA_CH732.rslt\spectra.d
Injection Date: 31-Oct-2016 07:46:30
Spectrum: Tune Spec :Average 799-801(6.35-6.36) Bgrd 792(6.31)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 205

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	1044	117.00	18344	184.00	748	256.00	17576
39.00	6679	118.00	1461	185.00	4003	257.00	1288
40.00	252	122.00	1728	186.00	32408	258.00	6185
41.00	189	123.00	2950	187.00	8600	259.00	1307
49.00	468	124.00	1156	188.00	980	265.00	2842
50.00	20944	125.00	1305	189.00	1732	266.00	413
51.00	87680	127.00	107824	191.00	707	272.00	167
52.00	4240	128.00	8257	192.00	2345	273.00	3645
55.00	411	129.00	39376	193.00	2810	274.00	9540
56.00	2520	130.00	3330	194.00	698	275.00	53272
57.00	6139	131.00	769	196.00	7338	276.00	6973
61.00	934	132.00	181	198.00	245952	277.00	3874
62.00	1193	134.00	1044	199.00	15952	278.00	225
63.00	3239	135.00	3065	200.00	1282	283.00	404
64.00	469	136.00	1387	201.00	1299	285.00	803
65.00	1834	137.00	1861	203.00	1625	293.00	964
69.00	86424	140.00	211	204.00	8064	296.00	12762
70.00	352	141.00	4694	205.00	13911	297.00	1882
73.00	519	142.00	1865	206.00	59928	303.00	1545
74.00	7919	143.00	1068	207.00	8363	314.00	631
75.00	13432	146.00	890	208.00	1745	315.00	1330
76.00	4897	147.00	2401	209.00	551	316.00	855
77.00	101120	148.00	5105	210.00	263	321.00	360
78.00	6888	149.00	1124	211.00	2428	323.00	4075
79.00	5341	151.00	490	215.00	187	324.00	521
80.00	4299	152.00	222	216.00	1347	327.00	660
81.00	7096	153.00	1438	217.00	14554	334.00	2505
82.00	1752	154.00	1098	218.00	1876	335.00	530
83.00	1888	155.00	2742	221.00	13281	341.00	178
85.00	1120	156.00	4533	223.00	3180	346.00	827
86.00	1659	157.00	862	224.00	33024	352.00	1245
87.00	876	158.00	1004	225.00	8150	353.00	930
91.00	1626	159.00	864	226.00	843	354.00	1209

Report Date: 01-Nov-2016 05:33:17 Chrom Revision: 2.2 17-Oct-2016 09:27:18
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310002.D\BNA_CH732.rslt\spectra.d
Injection Date: 31-Oct-2016 07:46:30
Spectrum: Tune Spec :Average 799-801(6.35-6.36) Bgrd 792(6.31)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 205

m/z	Y	m/z	Y	m/z	Y	m/z	Y
92.00	1589	160.00	1445	227.00	12032	365.00	4475
93.00	9101	161.00	2719	228.00	1915	366.00	585
94.00	804	162.00	691	229.00	2855	372.00	1903
96.00	173	165.00	1772	231.00	1332	373.00	421
98.00	7376	166.00	1878	234.00	826	383.00	223
99.00	5868	167.00	9831	235.00	968	402.00	785
100.00	350	168.00	4563	236.00	390	403.00	967
101.00	3854	169.00	858	237.00	1099	404.00	176
103.00	1167	171.00	230	239.00	432	421.00	936
104.00	2403	172.00	951	241.00	433	422.00	806
105.00	1960	173.00	1147	242.00	1837	423.00	6282
106.00	487	174.00	2818	243.00	1675	424.00	1521
107.00	30352	175.00	4176	244.00	25968	441.00	20520
108.00	4243	176.00	1231	245.00	3357	442.00	135104
109.00	672	177.00	1811	246.00	4073	443.00	27480
110.00	54776	178.00	673	247.00	880	444.00	2359
111.00	7919	179.00	7608	249.00	846		
112.00	875	180.00	5601	253.00	391		
116.00	1342	181.00	2494	255.00	127928		

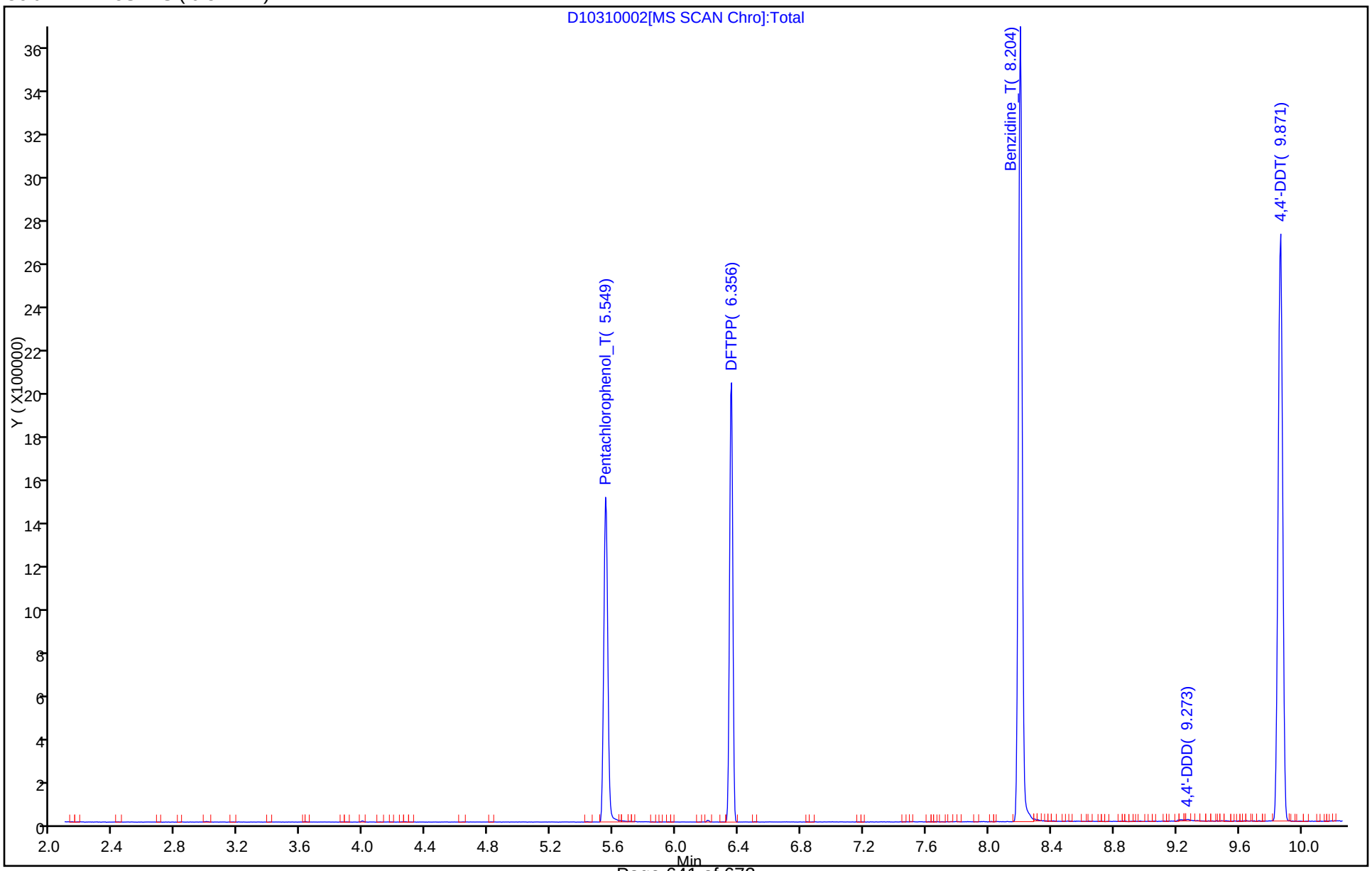
Report Date: 01-Nov-2016 05:33:17 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310002.D

Injection Date:	31-Oct-2016 07:46:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	DFTPP			Worklist Smp#:	2
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

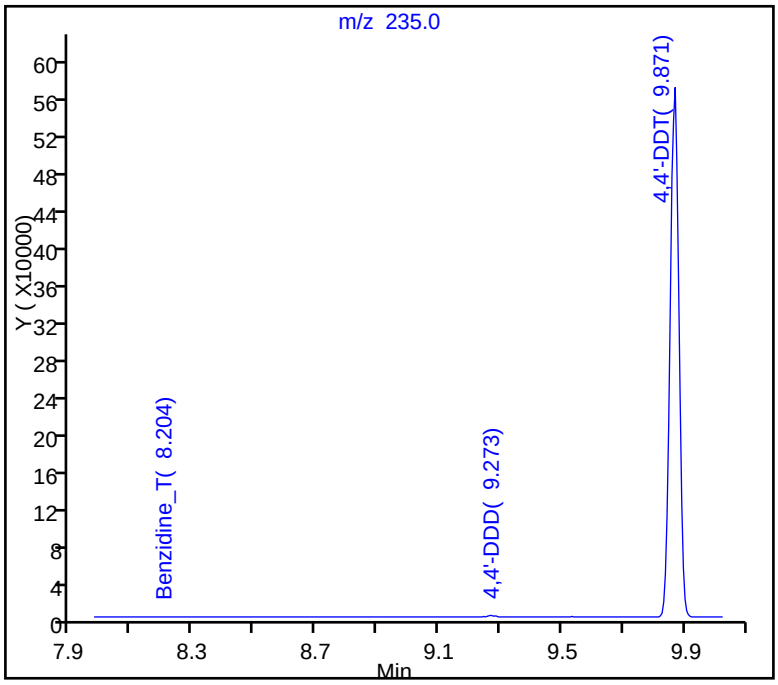


Breakdown Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310002.D
Injection Date: 31-Oct-2016 07:46:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

194 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

194 4,4'-DDT, Area = 1138394
192 4,4'-DDE, Area = 0
193 4,4'-DDD, Area = 1819

%Breakdown: 0.16%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

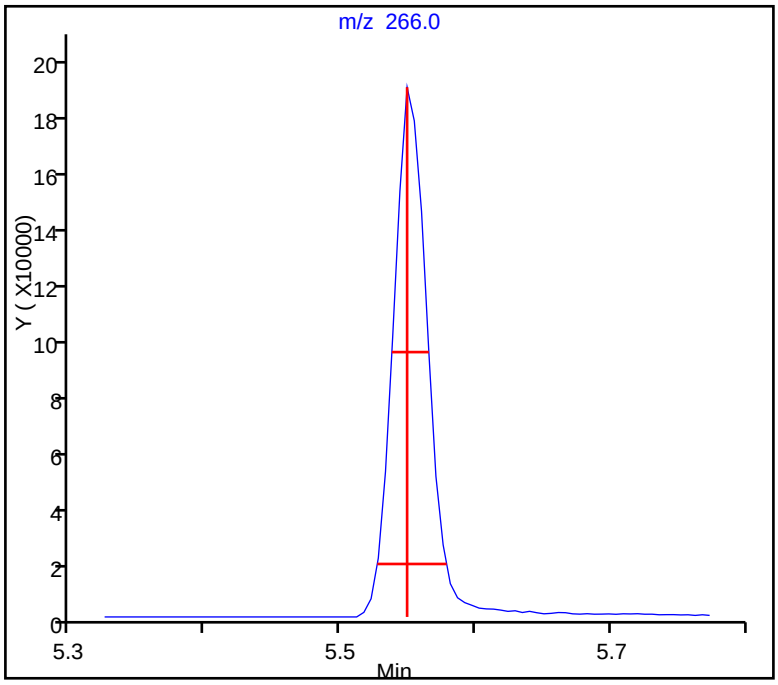
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310002.D
Injection Date: 31-Oct-2016 07:46:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

189 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.029 (min.)
Front Width = 0.022 (min.)

Tailing Factor = 1.3, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

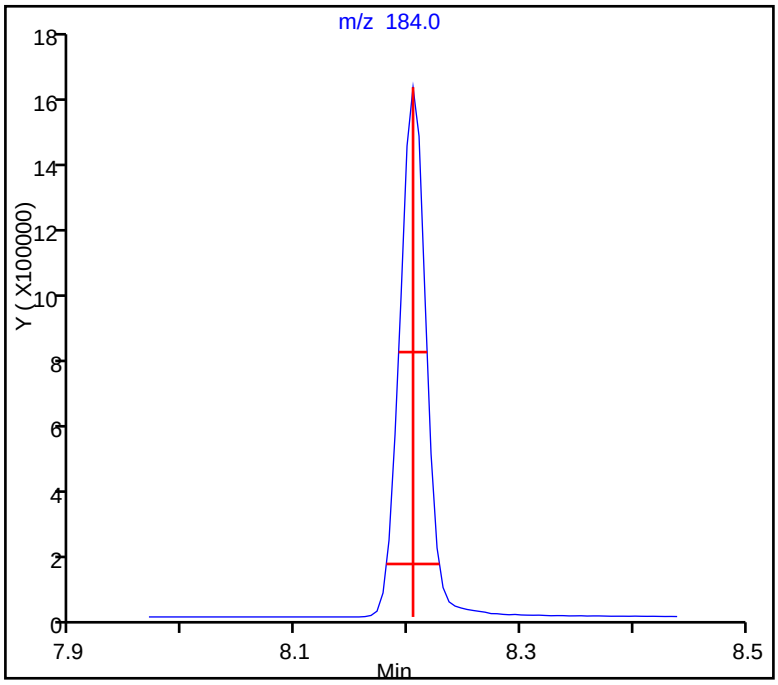
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310002.D
Injection Date: 31-Oct-2016 07:46:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

191 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.024 (min.)
Front Width = 0.024 (min.)

Tailing Factor = 1.0, Max. Tailing < 2.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-192646/1-A

Matrix: Water | Lab File ID: D10310017.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/28/2016 07:25

Sample wt/vol: 250(mL) | Date Analyzed: 10/31/2016 14:40

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 192814 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.052

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	58		24-100
367-12-4	2-Fluorophenol (Surr)	64		20-100
118-79-6	2,4,6-Tribromophenol (Surr)	69		22-118
4165-60-0	Nitrobenzene-d5 (Surr)	60		25-105
4165-62-2	Phenol-d5 (Surr)	62		21-100
1718-51-0	Terphenyl-d14 (Surr)	60		20-124

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310017.D
Lims ID: MB 180-192646/1-A
Client ID:
Sample Type: MB
Inject. Date: 31-Oct-2016 14:40:30 ALS Bottle#: 16 Worklist Smp#: 17
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0014113-017
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Nov-2016 06:10:50 Calib Date: 31-Oct-2016 11:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310011.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: piccolinov Date: 01-Nov-2016 05:36:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.198	6.209	-0.011	96	126111	8.00	8.00	
* 2 Naphthalene-d8	136	7.480	7.480	0.000	99	571246	8.00	8.00	
* 3 Acenaphthene-d10	164	9.190	9.185	0.005	92	390197	8.00	8.00	
* 4 Phenanthrene-d10	188	10.632	10.622	0.010	97	720888	8.00	8.00	
* 5 Chrysene-d12	240	14.404	14.372	0.032	97	666553	8.00	8.00	
* 6 Perylene-d12	264	17.299	17.262	0.037	97	530997	8.00	8.00	
$ 7 2-Fluorophenol	112	4.767	4.788	-0.021	92	401678	40.0	25.6	
$ 8 Phenol-d5	99	5.830	5.840	-0.010	98	586409	40.0	24.7	
$ 9 Nitrobenzene-d5	82	6.759	6.765	-0.006	88	555518	40.0	24.2	
$ 10 2-Fluorobiphenyl	172	8.522	8.517	0.005	99	1410804	40.0	23.3	
$ 11 2,4,6-Tribromophenol	330	9.943	9.932	0.011	91	166477	40.0	27.7	
$ 12 Terphenyl-d14	244	12.566	12.534	0.032	99	1656197	40.0	24.2	
13 1,4-Dioxane	88		1.636					ND	
14 N-Nitrosodimethylamine	74		2.250					ND	
15 Pyridine	79		2.341					ND	
18 2-Picoline	93		4.030					ND	
19 N-Nitrosomethylethylamine	88		4.233					ND	
21 Methyl methanesulfonate	80		4.537					ND	
20 Acrylamide	71	4.767	4.689	0.078	30	1430			NC
23 N-Nitrosodiethylamine	102		5.115					ND	
24 Ethyl methanesulfonate	79		5.256					ND	
25 Benzaldehyde	77		5.744					ND	
28 Pentachloroethane	167		5.806					ND	
26 Phenol	94		5.856					ND	
27 Aniline	93		5.862					ND	
29 Bis(2-chloroethyl)ether	93		5.931					ND	
30 2-Chlorophenol	128		5.995					ND	
31 n-Decane	43		6.049					ND	
32 1,3-Dichlorobenzene	146		6.150					ND	
33 1,4-Dichlorobenzene	146		6.225					ND	
34 Benzyl alcohol	108		6.348					ND	
35 1,2-Dichlorobenzene	146		6.380					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 2-Methylphenol	108		6.465					ND	
37 Indene	116		6.471					ND	
38 2,2'-oxybis[1-chloropropan	45		6.487					ND	
39 N-Nitrosopyrrolidine	100		6.583					ND	
41 N-Nitrosodi-n-propylamine	70		6.610					ND	
40 Acetophenone	105		6.610					ND	
42 4-Methylphenol	108		6.615					ND	
43 N-Nitrosomorpholine	116		6.632					ND	
44 2-Toluidine	106		6.664					ND	
45 Hexachloroethane	117		6.727					ND	
46 Nitrobenzene	77		6.781					ND	
47 N-Nitrosopiperidine	114		6.926					ND	
48 Isophorone	82		7.021					ND	
49 2-Nitrophenol	139		7.101					ND	
50 2,4-Dimethylphenol	107		7.133					ND	
51 o,o',o''-Triethylphosphoro	198		7.182					ND	
52 Benzoic acid	122		7.197					ND	
53 Bis(2-chloroethoxy)methane	93		7.219					ND	
54 2,4-Dichlorophenol	162		7.342					ND	
56 1,2,4-Trichlorobenzene	180		7.422					ND	
66 p-Phenylene diamine	108	7.480	7.435	0.045	48	54575			NC
55 alpha,alpha-Dimethyl phene	58		7.435					ND	
58 Naphthalene	128		7.502					ND	
61 Hexachloropropene	213		7.526					ND	
59 4-Chloroaniline	127		7.545					ND	
60 2,6-Dichlorophenol	162		7.561					ND	
62 Hexachlorobutadiene	225		7.625					ND	
63 Quinoline	129		7.786					ND	
65 N-Nitrosodi-n-butylamine	84		7.818					ND	
64 Caprolactam	113		7.865					ND	
67 4-Chloro-3-methylphenol	107		8.004					ND	
68 Safrole, Total	162		8.026					ND	
69 2-Methylnaphthalene	142		8.170					ND	
71 1-Methylnaphthalene	142		8.271					ND	
72 Hexachlorocyclopentadiene	237		8.330					ND	
73 1,2,4,5-Tetrachlorobenzene	216		8.335					ND	
74 2,4,6-Trichlorophenol	196		8.437					ND	
75 2,4,5-Trichlorophenol	196		8.474					ND	
81 1,4-Dinitrobenzene	168	8.522	8.477	0.045	30	17115			NC
80 1,4-Naphthoquinone	158	8.517	8.477	0.040	44	2345			NC
180 Isosafrole	162		8.514					ND	
76 1,1'-Biphenyl	154		8.613					ND	
78 1-Chloronaphthalene	162		8.616					ND	
77 2-Chloronaphthalene	162		8.645					ND	
79 2-Nitroaniline	65		8.725					ND	
82 Dimethyl phthalate	163		8.880					ND	
83 1,3-Dinitrobenzene	168		8.917					ND	
84 2,6-Dinitrotoluene	165		8.944					ND	
85 Acenaphthylene	152		9.046					ND	
86 3-Nitroaniline	138		9.115					ND	
87 2,4-Dinitrophenol	184		9.211					ND	
88 Acenaphthene	153		9.211					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
89 4-Nitrophenol	109		9.259					ND	
92 Pentachlorobenzene	250		9.294					ND	
91 2,4-Dinitrotoluene	165		9.334					ND	
94 1-Naphthylamine	143		9.340					ND	
93 Dibenzofuran	168		9.372					ND	
95 2,3,5,6-Tetrachlorophenol	232		9.446					ND	
96 2,3,4,6-Tetrachlorophenol	232		9.489					ND	
97 2-Naphthylamine	143		9.516					ND	
98 Diethyl phthalate	149	9.553	9.548	0.005	98	16039		0.3090	
99 Hexadecane	57		9.548					ND	
100 4-Chlorophenyl phenyl ethe	204		9.681					ND	
101 4-Nitroaniline	138		9.697					ND	
103 Fluorene	166		9.703					ND	
104 4,6-Dinitro-2-methylphenol	198		9.724					ND	
105 N-Nitrosodiphenylamine	169		9.788					ND	
57 Azobenzene	77		9.831					ND	
90 1,2-Diphenylhydrazine	77		9.831					ND	
107 1,3,5-Trinitrobenzene	213		9.896					ND	
117 Pronamide	173		9.898					ND	
102 N-Nitro-o-toluidine	152	9.943	9.898	0.045	41	3317			NC
114 4-Aminobiphenyl	169	9.943	9.898	0.045	57	7662			NC
108 Phenacetin	108		9.939					ND	
109 Phorate	121		9.944					ND	
111 Dimethoate	87		10.099					ND	
110 4-Bromophenyl phenyl ether	248		10.152					ND	
112 Hexachlorobenzene	284		10.237					ND	
113 Atrazine	200		10.269					ND	
118 Pentachloronitrobenzene	237		10.302					ND	
115 n-Octadecane	57		10.413					ND	
116 Pentachlorophenol	266		10.413					ND	
119 Disulfoton	88		10.419					ND	
120 Dinoseb	211		10.545					ND	
123 Hexachlorophene TIC	198		10.600					ND	
121 Phenanthrene	178		10.643					ND	
122 Anthracene	178		10.696					ND	
125 Methyl parathion	109		10.793					ND	
124 Carbazole	167		10.846					ND	
126 Di-n-butyl phthalate	149		11.161					ND	
127 Ethyl Parathion	109		11.189					ND	
128 4-Nitroquinoline-1-oxide	190		11.263					ND	
129 Methapyrilene	58		11.317					ND	
70 Diphenamid	167		11.567					ND	
106 Diphenylamine	167		11.620					ND	
130 Isodrin	193		11.821					ND	
131 Fluoranthene	202		12.037					ND	
132 Benzidine	184		12.176					ND	
133 Pyrene	202		12.363					ND	
134 1,2,3,4 -Tetrachlorobenzen	216		12.511					ND	
139 3,3'-Dimethylbenzidine	212	12.566	12.511	0.055	56	114337			NC
135 p-Dimethylamino azobenzene	225	12.566	12.516	0.050	42	9583			NC
136 Chlorobenzilate	139		12.783					ND	
137 Famphur	218		12.850					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
140 Kepone	272		13.030					ND	
138 Butyl benzyl phthalate	149		13.271					ND	
141 2-Acetylaminofluorene	181		13.363					ND	
142 Thionazin	97		13.789					ND	
143 4,4'-Methylene bis(2-chlor	231		13.881					ND	
144 3,3'-Dichlorobenzidine	252		14.265					ND	
145 Bis(2-ethylhexyl) phthalat	149		14.313					ND	
146 Benzo[a]anthracene	228		14.345					ND	
147 Chrysene	228		14.409					ND	
148 Sulfotepp	97		14.530					ND	
149 6-Methylchrysene	242		14.907					ND	
150 Di-n-octyl phthalate	149		15.606					ND	
151 7,12-Dimethylbenz(a)anthra	256		16.455					ND	
152 Benzo[b]fluoranthene	252		16.477					ND	
153 Benzo[k]fluoranthene	252		16.530					ND	
219 Benzo[e]pyrene	252		17.032					ND	
154 Benzo[a]pyrene	252		17.134					ND	
155 3-Methylcholanthrene	268		17.524					ND	
156 Dibenz[a,h]acridine	279		18.636					ND	
220 Dibenz[a,j]acridine	279		19.247					ND	
157 Indeno[1,2,3-cd]pyrene	276		19.597					ND	
158 Dibenz(a,h)anthracene	278		19.634					ND	
159 Benzo[g,h,i]perylene	276		20.280					ND	
218 Benzotrichloride TIC	1		0.000					ND	
170 4-tert-Octylphenol	135		0.000					ND	
212 2,3,7,8-TCDD TIC	1		0.000					ND	
169 Octachlorostyrene	308		0.000					ND	
173 Octachlorocyclopentene	307		0.000					ND	
178 Trifluralin	306		0.000					ND	
177 1,2,3,4-Tetrahydronaphthal	104		0.000					ND	
215 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
182 4-Chlorophenol	128		0.000					ND	
176 Dimethylformamide	73		0.000					ND	
187 1,2-Dibromo-3-Chloropropan	157		0.000					ND	
175 1,2,3-Trimethylbenzene	105		0.000					ND	
181 4-Chlorobenzoic Acid	139		0.000					ND	
163 Diallate Peak 2	86		0.000					ND	
167 Phthalic anhydride	104		0.000					ND	
185 4-Nitrobiphenyl	199		0.000					ND	
179 2,5-Dichlorophenol	162		0.000					ND	
188 2-Bromonaphthalene	127		0.000					ND	
162 3-Chlorobenzoic Acid	139		0.000					ND	
160 n,n'-Dimethylaniline	120		0.000					ND	
172 Carbaryl	144		0.000					ND	
171 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
164 Aramite Peak 2	185		0.000					ND	
166 4-Chloro-3-nitro-alpha,alp	179		0.000					ND	
184 Diallate Peak 1	86		0.000					ND	
168 Aramite Peak 1	185		0.000					ND	
161 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
186 o-Phenylphenol	1		0.000					ND	
174 2-Chlorobenzoic Acid	139		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
165 Benzotrichloride	159		0.000					ND	
183 2,3-Dichlorophenol	162		0.000					ND	
214 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
213 3-Methylphenol	1		0.000					ND	
222 2-Butoxyethanol	1		0.000					ND	
223 2,6-Dichlorotoluene	1		0.000					ND	
189 Pentachlorophenol_T	266		5.549					ND	
191 Benzidine_T	184		8.204					ND	
192 4,4'-DDE	246		8.573					ND	
193 4,4'-DDD	235		9.267					ND	
194 4,4'-DDT	235		9.871					ND	
S 195 Aramite, Total	185		1.000					ND	
S 196 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
S 197 Methyl Phenols,Total	108		0.000					ND	
S 198 Diallate	86		0.000					ND	
S 199 Total Cresols	108		0.000					ND	
T 216 1-Phenyl-1-(2,4-dimethylph	195		9.600					ND	
T 217 1-Phenyl-1-(4-methylphenyl	181		9.700					ND	
T 221 Phenyl ether TIC	170	9.943	11.514	-1.557	0	22681		0.4650	
T 200 Quinoline TIC	129		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SVTAPITINTRNi_00012 Amount Added: 1.00 Units: uL Run Reagent

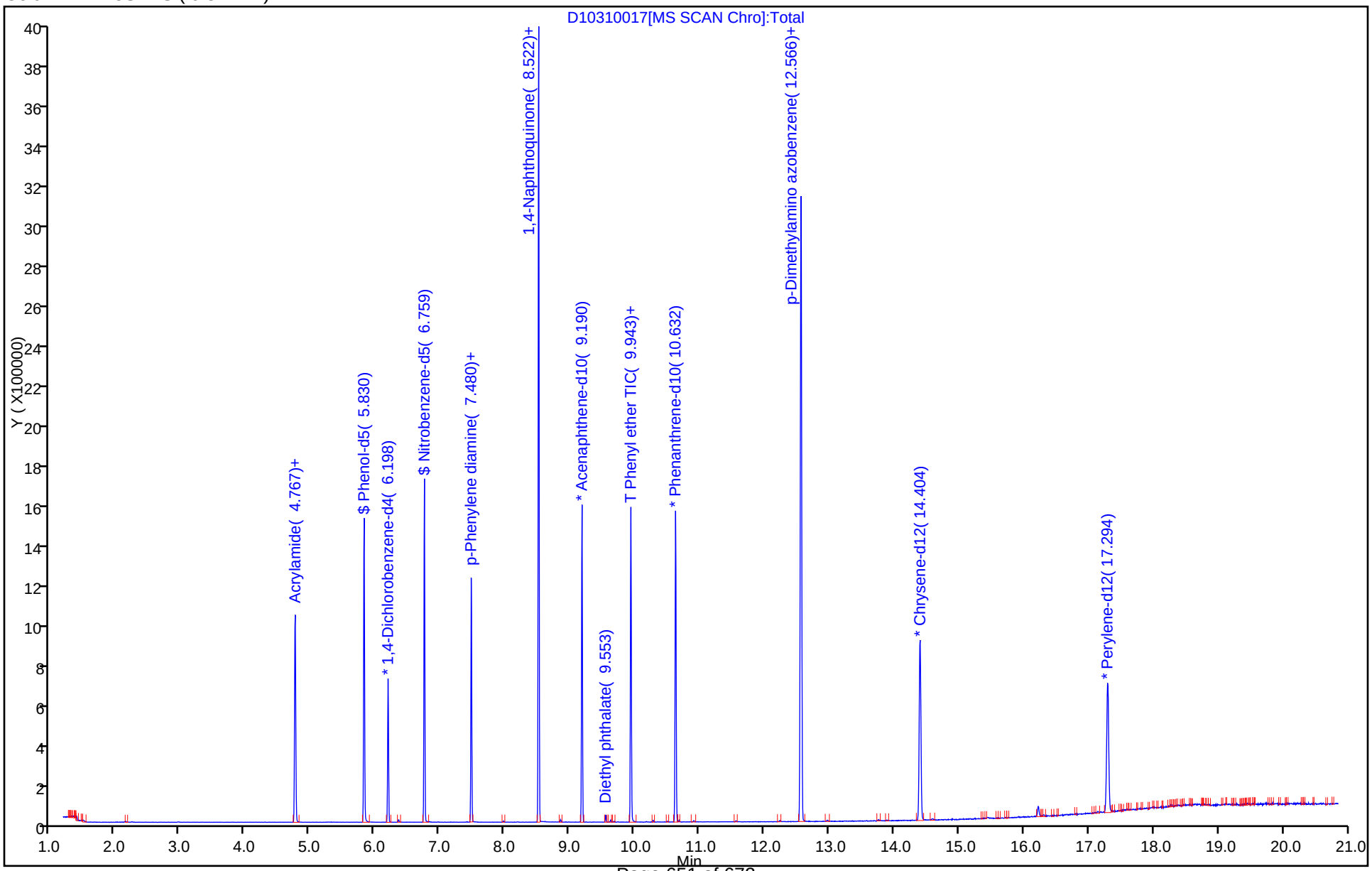
Report Date: 01-Nov-2016 06:12:48 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310017.D

Injection Date:	31-Oct-2016 14:40:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	MB 180-192646/1-A			Worklist Smp#:	17
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310017.D
Lims ID: MB 180-192646/1-A
Client ID:
Sample Type: MB
Inject. Date: 31-Oct-2016 14:40:30 ALS Bottle#: 16 Worklist Smp#: 17
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0014113-017
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Nov-2016 06:10:50 Calib Date: 31-Oct-2016 11:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310011.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: piccolinov Date: 01-Nov-2016 05:36:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	40.0	25.6	64.08
$ 8 Phenol-d5	40.0	24.7	61.70
$ 9 Nitrobenzene-d5	40.0	24.2	60.47
$ 10 2-Fluorobiphenyl	40.0	23.3	58.32
$ 11 2,4,6-Tribromophenol	40.0	27.7	69.29
$ 12 Terphenyl-d14	40.0	24.2	60.49

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-192646/2-A

Matrix: Water | Lab File ID: D10310018.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/28/2016 07:25

Sample wt/vol: 250(mL) | Date Analyzed: 10/31/2016 15:07

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 192814 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	14.9		2.0	0.052

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	62		24-100
367-12-4	2-Fluorophenol (Surr)	75		20-100
118-79-6	2,4,6-Tribromophenol (Surr)	74		22-118
4165-60-0	Nitrobenzene-d5 (Surr)	67		25-105
4165-62-2	Phenol-d5 (Surr)	70		21-100
1718-51-0	Terphenyl-d14 (Surr)	66		20-124

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310018.D
Lims ID: LCS 180-192646/2-A
Client ID:
Sample Type: LCS
Inject. Date: 31-Oct-2016 15:07:30 ALS Bottle#: 17 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0014113-018
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Nov-2016 06:10:50 Calib Date: 31-Oct-2016 11:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310011.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: piccolinov Date: 01-Nov-2016 05:38:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.198	6.209	-0.011	95	107553	8.00	8.00	
* 2 Naphthalene-d8	136	7.480	7.480	0.000	99	476246	8.00	8.00	
* 3 Acenaphthene-d10	164	9.190	9.185	0.005	91	331852	8.00	8.00	
* 4 Phenanthrene-d10	188	10.632	10.622	0.010	97	615387	8.00	8.00	
* 5 Chrysene-d12	240	14.404	14.372	0.032	97	569576	8.00	8.00	
* 6 Perylene-d12	264	17.299	17.262	0.037	97	509252	8.00	8.00	
$ 7 2-Fluorophenol	112	4.766	4.788	-0.022	92	400127	40.0	29.9	
$ 8 Phenol-d5	99	5.830	5.840	-0.010	99	563818	40.0	27.8	
$ 9 Nitrobenzene-d5	82	6.759	6.765	-0.006	88	512845	40.0	26.8	
$ 10 2-Fluorobiphenyl	172	8.522	8.517	0.005	99	1275030	40.0	24.8	
$ 11 2,4,6-Tribromophenol	330	9.948	9.932	0.016	92	152620	40.0	29.8	
$ 12 Terphenyl-d14	244	12.566	12.534	0.032	99	1552042	40.0	26.5	
13 1,4-Dioxane	88	1.604	1.636	-0.032	92	117875	40.0	29.7	
14 N-Nitrosodimethylamine	74	2.213	2.250	-0.037	94	174213	40.0	30.9	
15 Pyridine	79	2.288	2.341	-0.053	98	317645	40.0	31.0	
25 Benzaldehyde	77	5.728	5.744	-0.016	96	335169	40.0	29.9	
26 Phenol	94	5.846	5.856	-0.010	97	575297	40.0	26.0	
27 Aniline	93	5.851	5.862	-0.011	92	554218	40.0	24.4	
29 Bis(2-chloroethyl)ether	93	5.920	5.931	-0.011	96	423377	40.0	25.5	
30 2-Chlorophenol	128	5.984	5.995	-0.011	97	455904	40.0	26.3	
31 n-Decane	43	6.038	6.049	-0.011	90	412118	40.0	24.2	
32 1,3-Dichlorobenzene	146	6.139	6.150	-0.011	99	514767	40.0	25.0	
33 1,4-Dichlorobenzene	146	6.220	6.225	-0.005	95	516418	40.0	24.8	
34 Benzyl alcohol	108	6.342	6.348	-0.006	93	269195	40.0	24.2	
35 1,2-Dichlorobenzene	146	6.374	6.380	-0.006	98	499476	40.0	24.6	
36 2-Methylphenol	108	6.460	6.465	-0.005	97	405265	40.0	25.8	
37 Indene	116	6.465	6.471	-0.006	90	760857	40.0	24.7	
38 2,2'-oxybis[1-chloropropan	45	6.481	6.487	-0.006	94	583972	40.0	25.2	
41 N-Nitrosodi-n-propylamine	70	6.604	6.610	-0.006	90	302452	40.0	26.6	
40 Acetophenone	105	6.604	6.610	-0.006	85	520637	40.0	22.6	
42 4-Methylphenol	108	6.610	6.615	-0.005	93	427156	40.0	26.6	
45 Hexachloroethane	117	6.722	6.727	-0.005	96	214986	40.0	24.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
46 Nitrobenzene	77	6.780	6.781	-0.001	88	498453	40.0	26.2	
48 Isophorone	82	7.016	7.021	-0.005	100	888588	40.0	24.9	
49 2-Nitrophenol	139	7.101	7.101	0.000	93	280739	40.0	28.0	
50 2,4-Dimethylphenol	107	7.133	7.133	0.000	95	485618	40.0	26.7	
52 Benzoic acid	122	7.219	7.197	0.022	89	306374	40.0	30.6	
53 Bis(2-chloroethoxy)methane	93	7.219	7.219	0.000	98	571853	40.0	24.5	
54 2,4-Dichlorophenol	162	7.341	7.342	-0.001	93	453342	40.0	27.4	
56 1,2,4-Trichlorobenzene	180	7.422	7.422	0.000	94	505024	40.0	25.5	
58 Naphthalene	128	7.502	7.502	0.000	97	1469598	40.0	24.8	
59 4-Chloroaniline	127	7.544	7.545	-0.001	97	576013	40.0	23.4	
60 2,6-Dichlorophenol	162	7.560	7.561	-0.001	98	426949	40.0	26.3	
62 Hexachlorobutadiene	225	7.625	7.625	0.000	94	304201	40.0	27.2	
64 Caprolactam	113	7.865	7.865	0.000	79	151561	40.0	26.4	
67 4-Chloro-3-methylphenol	107	8.009	8.004	0.005	97	466274	40.0	28.0	
69 2-Methylnaphthalene	142	8.175	8.170	0.005	93	1050396	40.0	25.6	
71 1-Methylnaphthalene	142	8.276	8.271	0.005	93	977195	40.0	25.1	
72 Hexachlorocyclopentadiene	237	8.335	8.330	0.005	95	332644	40.0	27.1	
73 1,2,4,5-Tetrachlorobenzene	216	8.346	8.335	0.011	97	519532	40.0	23.9	
74 2,4,6-Trichlorophenol	196	8.447	8.437	0.010	91	369554	40.0	26.0	
75 2,4,5-Trichlorophenol	196	8.485	8.474	0.011	95	396442	40.0	27.1	
76 1,1'-Biphenyl	154	8.624	8.613	0.011	94	1316837	40.0	24.1	
77 2-Chloronaphthalene	162	8.650	8.645	0.005	95	1055326	40.0	23.8	
79 2-Nitroaniline	65	8.736	8.725	0.011	86	320490	40.0	26.5	
82 Dimethyl phthalate	163	8.891	8.880	0.011	99	1226091	40.0	26.0	
83 1,3-Dinitrobenzene	168	8.928	8.917	0.011	87	199650	40.0	27.4	
84 2,6-Dinitrotoluene	165	8.955	8.944	0.011	95	285626	40.0	26.0	
85 Acenaphthylene	152	9.056	9.046	0.010	98	1691970	40.0	25.3	
86 3-Nitroaniline	138	9.126	9.115	0.011	95	310411	40.0	25.1	
87 2,4-Dinitrophenol	184	9.222	9.211	0.011	87	345299	80.0	62.0	
88 Acenaphthene	153	9.222	9.211	0.011	90	1005279	40.0	22.3	
89 4-Nitrophenol	109	9.270	9.259	0.011	90	295536	80.0	56.4	
91 2,4-Dinitrotoluene	165	9.345	9.334	0.011	95	389921	40.0	26.7	
93 Dibenzofuran	168	9.387	9.372	0.015	97	1558807	40.0	24.7	
96 2,3,4,6-Tetrachlorophenol	232	9.500	9.489	0.011	72	330417	40.0	27.4	
98 Diethyl phthalate	149	9.558	9.548	0.010	99	1126828	40.0	25.5	
99 Hexadecane	57	9.564	9.548	0.016	91	780339	40.0	24.3	
100 4-Chlorophenyl phenyl ethe	204	9.692	9.681	0.011	90	665416	40.0	25.8	
101 4-Nitroaniline	138	9.713	9.697	0.016	86	293442	40.0	24.2	
103 Fluorene	166	9.713	9.703	0.010	94	1225520	40.0	24.5	
104 4,6-Dinitro-2-methylphenol	198	9.740	9.724	0.016	91	503296	80.0	57.5	
105 N-Nitrosodiphenylamine	169	9.804	9.788	0.016	60	974943	40.0	23.8	
57 Azobenzene	77	9.847	9.831	0.016	97	1275042	40.0	22.2	
90 1,2-Diphenylhydrazine	77	9.847	9.831	0.016	97	1275042	40.0	22.2	
110 4-Bromophenyl phenyl ether	248	10.162	10.152	0.010	65	387906	40.0	25.5	
112 Hexachlorobenzene	284	10.253	10.237	0.016	94	359616	40.0	25.1	
113 Atrazine	200	10.285	10.269	0.016	94	175990	40.0	12.3	
115 n-Octadecane	57	10.435	10.413	0.022	94	824451	40.0	24.6	
116 Pentachlorophenol	266	10.429	10.413	0.016	93	423822	80.0	49.4	
121 Phenanthrene	178	10.659	10.643	0.016	97	1922368	40.0	24.3	
122 Anthracene	178	10.712	10.696	0.016	97	1963465	40.0	23.9	
124 Carbazole	167	10.862	10.846	0.016	95	1852348	40.0	24.3	
126 Di-n-butyl phthalate	149	11.182	11.161	0.021	100	2233065	40.0	26.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Fluoranthene	202	12.069	12.037	0.032	97	2247723	40.0	25.9	
132 Benzidine	184	12.208	12.176	0.032	100	442215	40.0	10.5	
133 Pyrene	202	12.395	12.363	0.032	98	2253568	40.0	24.1	
138 Butyl benzyl phthalate	149	13.309	13.271	0.038	97	960772	40.0	25.8	
144 3,3'-Dichlorobenzidine	252	14.308	14.265	0.043	74	727291	40.0	26.3	
145 Bis(2-ethylhexyl) phthalat	149	14.356	14.313	0.043	96	1290191	40.0	26.9	
146 Benzo[a]anthracene	228	14.388	14.345	0.043	98	1964065	40.0	24.1	
147 Chrysene	228	14.457	14.409	0.048	97	1933223	40.0	24.9	
150 Di-n-octyl phthalate	149	15.659	15.606	0.053	99	2234422	40.0	23.6	
152 Benzo[b]fluoranthene	252	16.525	16.477	0.048	98	1930235	40.0	23.2	
153 Benzo[k]fluoranthene	252	16.583	16.530	0.053	97	1934600	40.0	23.6	
154 Benzo[a]pyrene	252	17.187	17.134	0.053	78	1859197	40.0	23.9	
157 Indeno[1,2,3-cd]pyrene	276	19.682	19.597	0.085	98	1878052	40.0	24.5	
158 Dibenz(a,h)anthracene	278	19.714	19.634	0.080	96	1574739	40.0	24.6	
159 Benzo[g,h,i]perylene	276	20.371	20.280	0.091	96	1605323	40.0	24.5	
S 197 Methyl Phenols,Total	108				0		80.0	52.5	
S 199 Total Cresols	108				0		80.0	52.5	

Reagents:

SVTAPITINTRNi_00012 Amount Added: 1.00 Units: uL Run Reagent

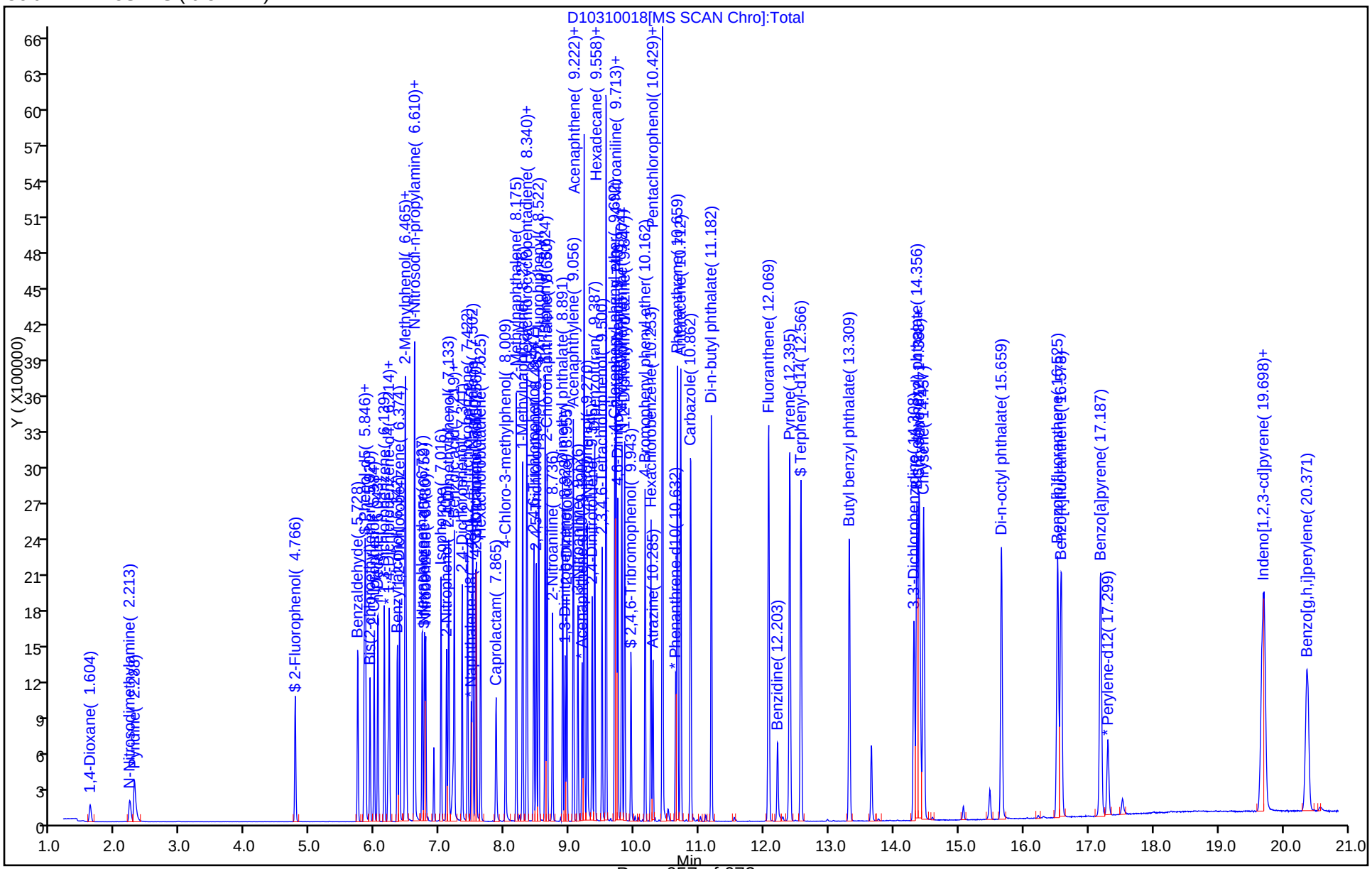
Report Date: 01-Nov-2016 06:12:50 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310018.D

Injection Date:	31-Oct-2016 15:07:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	LCS 180-192646/2-A			Worklist Smp#:	18
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310018.D
Lims ID: LCS 180-192646/2-A
Client ID:
Sample Type: LCS
Inject. Date: 31-Oct-2016 15:07:30 ALS Bottle#: 17 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0014113-018
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Nov-2016 06:10:50 Calib Date: 31-Oct-2016 11:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310011.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: piccolinov Date: 01-Nov-2016 05:38:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	40.0	29.9	74.85
$ 8 Phenol-d5	40.0	27.8	69.56
$ 9 Nitrobenzene-d5	40.0	26.8	66.96
$ 10 2-Fluorobiphenyl	40.0	24.8	61.97
$ 11 2,4,6-Tribromophenol	40.0	29.8	74.41
$ 12 Terphenyl-d14	40.0	26.5	66.34

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-60202-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-192646/3-A

Matrix: Water | Lab File ID: D10310019.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/28/2016 07:25

Sample wt/vol: 250(mL) | Date Analyzed: 10/31/2016 15:34

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 192814 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	14.9		2.0	0.052

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	65		24-100
367-12-4	2-Fluorophenol (Surr)	74		20-100
118-79-6	2,4,6-Tribromophenol (Surr)	76		22-118
4165-60-0	Nitrobenzene-d5 (Surr)	69		25-105
4165-62-2	Phenol-d5 (Surr)	68		21-100
1718-51-0	Terphenyl-d14 (Surr)	67		20-124

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310019.D
Lims ID: LCSD 180-192646/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 31-Oct-2016 15:34:30 ALS Bottle#: 18 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0014113-019
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Nov-2016 06:10:50 Calib Date: 31-Oct-2016 11:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310011.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: piccolinov Date: 01-Nov-2016 05:38:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.198	6.209	-0.011	95	110979	8.00	8.00	
* 2 Naphthalene-d8	136	7.480	7.480	0.000	99	474827	8.00	8.00	
* 3 Acenaphthene-d10	164	9.190	9.185	0.005	92	318345	8.00	8.00	
* 4 Phenanthrene-d10	188	10.632	10.622	0.010	97	602601	8.00	8.00	
* 5 Chrysene-d12	240	14.409	14.372	0.037	97	530985	8.00	8.00	
* 6 Perylene-d12	264	17.299	17.262	0.037	97	471085	8.00	8.00	
$ 7 2-Fluorophenol	112	4.761	4.788	-0.027	92	409013	40.0	29.7	
$ 8 Phenol-d5	99	5.830	5.840	-0.010	97	571730	40.0	27.3	
$ 9 Nitrobenzene-d5	82	6.759	6.765	-0.006	88	523072	40.0	27.4	
$ 10 2-Fluorobiphenyl	172	8.522	8.517	0.005	99	1276281	40.0	25.9	
$ 11 2,4,6-Tribromophenol	330	9.949	9.932	0.017	93	151642	40.0	30.2	
$ 12 Terphenyl-d14	244	12.566	12.534	0.032	99	1470251	40.0	27.0	
13 1,4-Dioxane	88	1.604	1.636	-0.032	91	121848	40.0	29.8	
14 N-Nitrosodimethylamine	74	2.208	2.250	-0.042	93	174635	40.0	30.1	
15 Pyridine	79	2.282	2.341	-0.059	98	328991	40.0	31.1	
25 Benzaldehyde	77	5.728	5.744	-0.016	96	344072	40.0	29.7	
26 Phenol	94	5.840	5.856	-0.016	98	587700	40.0	25.8	
27 Aniline	93	5.851	5.862	-0.011	98	567422	40.0	24.2	
29 Bis(2-chloroethyl)ether	93	5.921	5.931	-0.010	97	431443	40.0	25.2	
30 2-Chlorophenol	128	5.979	5.995	-0.016	97	464558	40.0	25.9	
31 n-Decane	43	6.038	6.049	-0.011	91	430375	40.0	24.5	
32 1,3-Dichlorobenzene	146	6.140	6.150	-0.010	98	528039	40.0	24.9	
33 1,4-Dichlorobenzene	146	6.214	6.225	-0.011	94	529994	40.0	24.6	
34 Benzyl alcohol	108	6.337	6.348	-0.011	93	273258	40.0	23.8	
35 1,2-Dichlorobenzene	146	6.375	6.380	-0.005	98	516383	40.0	24.6	
36 2-Methylphenol	108	6.460	6.465	-0.005	92	410386	40.0	25.3	
37 Indene	116	6.465	6.471	-0.006	90	771121	40.0	24.3	
38 2,2'-oxybis[1-chloropropan	45	6.476	6.487	-0.011	93	581777	40.0	24.3	
41 N-Nitrosodi-n-propylamine	70	6.604	6.610	-0.006	78	302696	40.0	25.8	
40 Acetophenone	105	6.604	6.610	-0.006	93	515744	40.0	21.7	
42 4-Methylphenol	108	6.610	6.615	-0.005	94	419807	40.0	25.4	
45 Hexachloroethane	117	6.722	6.727	-0.005	94	215320	40.0	23.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
46 Nitrobenzene	77	6.775	6.781	-0.006	88	508899	40.0	26.8	
48 Isophorone	82	7.016	7.021	-0.005	99	876110	40.0	24.6	
49 2-Nitrophenol	139	7.101	7.101	0.000	94	280450	40.0	28.1	
50 2,4-Dimethylphenol	107	7.133	7.133	0.000	95	493527	40.0	27.3	
52 Benzoic acid	122	7.219	7.197	0.022	89	301838	40.0	30.2	
53 Bis(2-chloroethoxy)methane	93	7.219	7.219	0.000	99	584760	40.0	25.1	
54 2,4-Dichlorophenol	162	7.342	7.342	0.000	93	454602	40.0	27.5	
56 1,2,4-Trichlorobenzene	180	7.422	7.422	0.000	94	508026	40.0	25.8	
58 Naphthalene	128	7.502	7.502	0.000	97	1491460	40.0	25.2	
59 4-Chloroaniline	127	7.545	7.545	0.000	96	569426	40.0	23.2	
60 2,6-Dichlorophenol	162	7.561	7.561	0.000	98	436882	40.0	27.0	
62 Hexachlorobutadiene	225	7.625	7.625	0.000	94	308555	40.0	27.7	
64 Caprolactam	113	7.865	7.865	0.000	79	152121	40.0	26.5	
67 4-Chloro-3-methylphenol	107	8.009	8.004	0.005	97	464898	40.0	28.0	
69 2-Methylnaphthalene	142	8.175	8.170	0.005	92	1046472	40.0	25.5	
71 1-Methylnaphthalene	142	8.271	8.271	0.000	93	987206	40.0	25.4	
72 Hexachlorocyclopentadiene	237	8.335	8.330	0.005	95	336513	40.0	28.5	
73 1,2,4,5-Tetrachlorobenzene	216	8.341	8.335	0.006	97	526975	40.0	25.3	
74 2,4,6-Trichlorophenol	196	8.442	8.437	0.005	92	373288	40.0	27.4	
75 2,4,5-Trichlorophenol	196	8.479	8.474	0.005	95	386231	40.0	27.6	
76 1,1'-Biphenyl	154	8.618	8.613	0.005	95	1322236	40.0	25.2	
77 2-Chloronaphthalene	162	8.650	8.645	0.005	95	1050456	40.0	24.7	
79 2-Nitroaniline	65	8.736	8.725	0.011	86	317808	40.0	27.4	
82 Dimethyl phthalate	163	8.891	8.880	0.011	99	1207997	40.0	26.7	
83 1,3-Dinitrobenzene	168	8.928	8.917	0.011	88	199633	40.0	28.6	
84 2,6-Dinitrotoluene	165	8.955	8.944	0.011	95	282168	40.0	26.8	
85 Acenaphthylene	152	9.056	9.046	0.010	98	1654081	40.0	25.8	
86 3-Nitroaniline	138	9.126	9.115	0.011	96	305946	40.0	25.8	
87 2,4-Dinitrophenol	184	9.222	9.211	0.011	68	337811	80.0	63.2	
88 Acenaphthene	153	9.222	9.211	0.011	89	1008911	40.0	23.3	
89 4-Nitrophenol	109	9.270	9.259	0.011	90	289932	80.0	57.7	
91 2,4-Dinitrotoluene	165	9.345	9.334	0.011	96	381231	40.0	27.2	
93 Dibenzofuran	168	9.382	9.372	0.010	97	1560463	40.0	25.7	
96 2,3,4,6-Tetrachlorophenol	232	9.494	9.489	0.005	72	328398	40.0	28.4	
98 Diethyl phthalate	149	9.559	9.548	0.011	99	1121951	40.0	26.5	
99 Hexadecane	57	9.564	9.548	0.016	91	782003	40.0	24.4	
100 4-Chlorophenyl phenyl ethe	204	9.692	9.681	0.011	90	665912	40.0	26.9	
101 4-Nitroaniline	138	9.714	9.697	0.017	85	288752	40.0	24.8	
103 Fluorene	166	9.714	9.703	0.011	94	1207908	40.0	25.1	
104 4,6-Dinitro-2-methylphenol	198	9.740	9.724	0.016	91	490277	80.0	57.2	
105 N-Nitrosodiphenylamine	169	9.804	9.788	0.016	59	980278	40.0	24.5	
57 Azobenzene	77	9.847	9.831	0.016	98	1271440	40.0	22.6	
90 1,2-Diphenylhydrazine	77	9.847	9.831	0.016	98	1271440	40.0	22.6	
110 4-Bromophenyl phenyl ether	248	10.162	10.152	0.010	64	392691	40.0	26.3	
112 Hexachlorobenzene	284	10.253	10.237	0.016	94	356561	40.0	25.4	
113 Atrazine	200	10.285	10.269	0.016	94	173242	40.0	12.4	
115 n-Octadecane	57	10.429	10.413	0.016	95	827833	40.0	23.9	
116 Pentachlorophenol	266	10.429	10.413	0.016	92	437514	80.0	52.1	
121 Phenanthrene	178	10.659	10.643	0.016	97	1909633	40.0	24.6	
122 Anthracene	178	10.713	10.696	0.016	97	1950254	40.0	24.2	
124 Carbazole	167	10.867	10.846	0.021	95	1811146	40.0	24.3	
126 Di-n-butyl phthalate	149	11.188	11.161	0.027	100	2209138	40.0	26.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Fluoranthene	202	12.069	12.037	0.032	97	2190850	40.0	25.7	
132 Benzidine	184	12.203	12.176	0.027	100	418597	40.0	10.7	
133 Pyrene	202	12.395	12.363	0.032	98	2191108	40.0	25.1	
138 Butyl benzyl phthalate	149	13.314	13.271	0.043	97	937555	40.0	27.0	
144 3,3'-Dichlorobenzidine	252	14.313	14.265	0.048	73	708224	40.0	27.5	
145 Bis(2-ethylhexyl) phthalat	149	14.356	14.313	0.043	96	1251360	40.0	28.0	
146 Benzo[a]anthracene	228	14.393	14.345	0.048	98	1895767	40.0	25.0	
147 Chrysene	228	14.457	14.409	0.048	97	1835527	40.0	25.4	
150 Di-n-octyl phthalate	149	15.659	15.606	0.053	99	2116152	40.0	24.2	
152 Benzo[b]fluoranthene	252	16.525	16.477	0.048	98	1901193	40.0	24.7	
153 Benzo[k]fluoranthene	252	16.578	16.530	0.048	99	1776432	40.0	23.4	
154 Benzo[a]pyrene	252	17.187	17.134	0.053	78	1777090	40.0	24.7	
157 Indeno[1,2,3-cd]pyrene	276	19.677	19.597	0.080	98	1803028	40.0	25.4	
158 Dibenz(a,h)anthracene	278	19.714	19.634	0.080	90	1505558	40.0	25.4	
159 Benzo[g,h,i]perylene	276	20.377	20.280	0.097	96	1538302	40.0	25.3	
S 197 Methyl Phenols,Total	108				0		80.0	50.7	
S 199 Total Cresols	108				0		80.0	50.7	

Reagents:

SVTAPITINTRNi_00012 Amount Added: 1.00 Units: uL Run Reagent

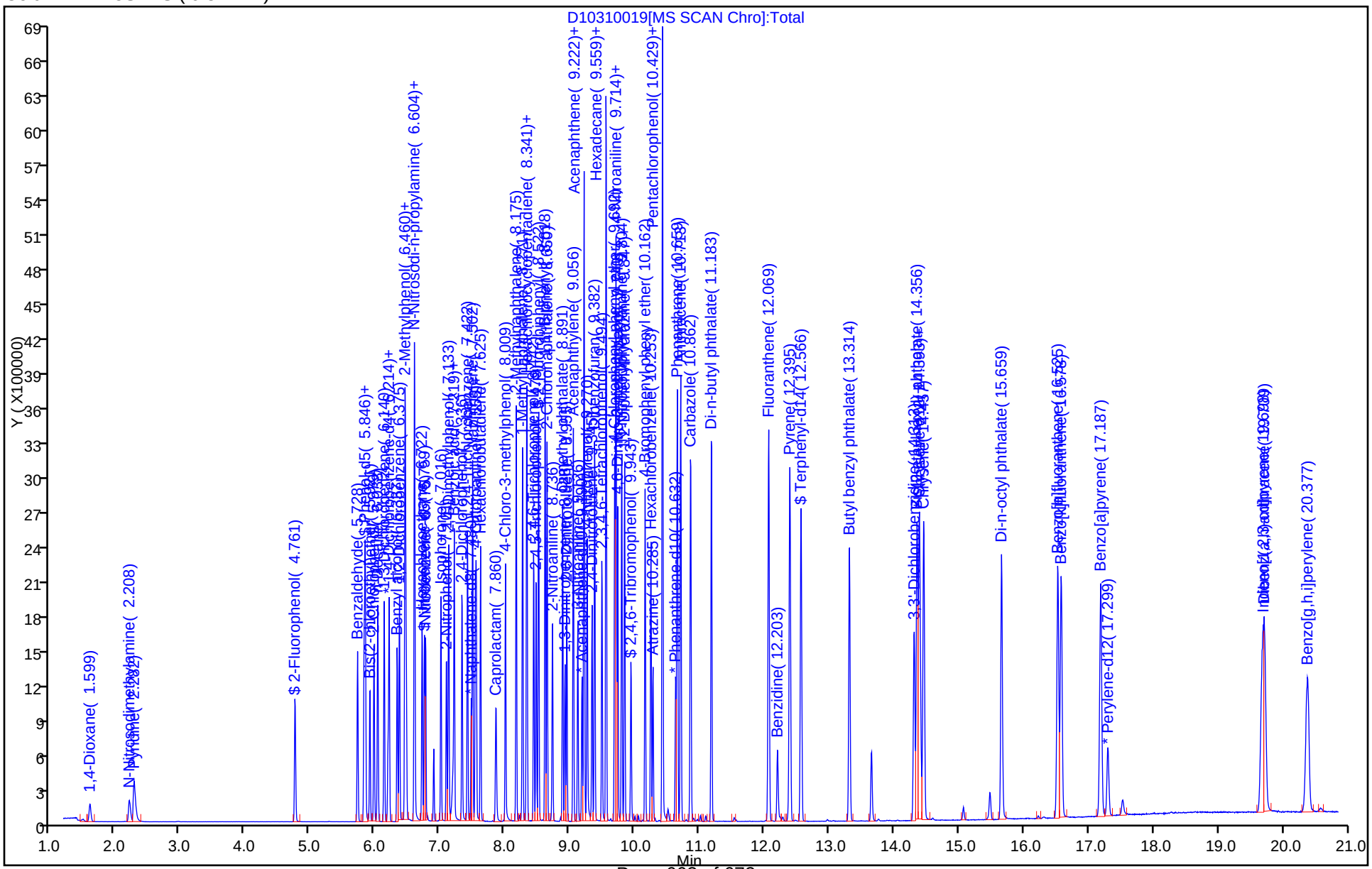
Report Date: 01-Nov-2016 06:12:52 Chrom Revision: 2.2 17-Oct-2016 09:27:18

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310019.D

Injection Date:	31-Oct-2016 15:34:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	LCSD 180-192646/3-A			Worklist Smp#:	19
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310019.D
Lims ID: LCSD 180-192646/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 31-Oct-2016 15:34:30 ALS Bottle#: 18 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0014113-019
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Nov-2016 06:10:50 Calib Date: 31-Oct-2016 11:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20161031-14113.b\D10310011.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: piccolinov Date: 01-Nov-2016 05:38:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	40.0	29.7	74.15
$ 8 Phenol-d5	40.0	27.3	68.35
$ 9 Nitrobenzene-d5	40.0	27.4	68.50
$ 10 2-Fluorobiphenyl	40.0	25.9	64.66
$ 11 2,4,6-Tribromophenol	40.0	30.2	75.50
$ 12 Terphenyl-d14	40.0	27.0	67.41

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Instrument ID: CH732 Start Date: 09/28/2016 05:12

Analysis Batch Number: 189377 End Date: 09/28/2016 09:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-189377/2		09/28/2016 05:12	1	D09280002.D	Rxi-5SilMS 0.32(mm)
IC 180-189377/3		09/28/2016 05:28	1	D09280003.D	Rxi-5SilMS 0.32(mm)
IC 180-189377/4		09/28/2016 05:55	1	D09280004.D	Rxi-5SilMS 0.32(mm)
IC 180-189377/5		09/28/2016 06:22	1	D09280005.D	Rxi-5SilMS 0.32(mm)
ICIS 180-189377/6		09/28/2016 06:49	1	D09280006.D	Rxi-5SilMS 0.32(mm)
IC 180-189377/7		09/28/2016 07:17	1	D09280007.D	Rxi-5SilMS 0.32(mm)
IC 180-189377/8		09/28/2016 07:44	1	D09280008.D	Rxi-5SilMS 0.32(mm)
IC 180-189377/9		09/28/2016 08:11	1	D09280009.D	Rxi-5SilMS 0.32(mm)
IC 180-189377/10		09/28/2016 08:39	1	D09280010.D	Rxi-5SilMS 0.32(mm)
ICV 180-189377/11		09/28/2016 09:06	1		Rxi-5SilMS 0.32(mm)
ICV 180-189377/12		09/28/2016 09:33	1		Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Instrument ID: CH732 Start Date: 10/31/2016 07:46

Analysis Batch Number: 192814 End Date: 10/31/2016 18:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-192814/2		10/31/2016 07:46	1	D10310002.D	Rxi-5SilMS 0.32(mm)
CCVIS 180-192814/3		10/31/2016 08:02	1	D10310003.D	Rxi-5SilMS 0.32(mm)
MB 180-192646/1-A		10/31/2016 14:40	1	D10310017.D	Rxi-5SilMS 0.32(mm)
LCS 180-192646/2-A		10/31/2016 15:07	1	D10310018.D	Rxi-5SilMS 0.32(mm)
LCSD 180-192646/3-A		10/31/2016 15:34	1	D10310019.D	Rxi-5SilMS 0.32(mm)
180-60202-10		10/31/2016 16:01	10	D10310020.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		10/31/2016 17:21	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/31/2016 17:48	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/31/2016 18:15	1		Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-60202-1

SDG No.:

Batch Number: 192646 Batch Start Date: 10/28/16 12:10 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 10/29/16 06:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	OPLVISPKMIX1i 00052	OPQL8270SURi 00048
MB 180-192646/1		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2 SU		25 uL
LCS 180-192646/2		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2 SU	25 uL	25 uL
LCSD 180-192646/3		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2 SU	25 uL	25 uL
180-60202-D-10	HD-CW-15A-0/1-0	3520C, 8270D LL	T	7 SU	260 mL	0.25 mL	2 SU		25 uL

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid Used for pH Adjustment ID	2091553
Analyst ID - Concentration	cdm
Extraction 1 End Time	0635
Extraction 1 Start Time	1210
N-evap ID	1
Na2SO4 ID	1998534
pH Paper ID	Ph paper HC581117
Prep Solvent ID	2112981
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	100 mL
Person's name who did the prep	BT
Uncorrected N-evap Temperature	26 Degrees C
Uncorrected Temperature	75 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

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. UBF

Client Contact	Project Manager: Christopher D. O'neil	Site Contact: ~~Jennifer S. Reese~~ CDO	DateSubmitted: 10/26/16	COC No: TAP2016 ~~[illegible]~~ (10260)
Groundwater Sciences Corporation	Tel/Fax: 717-901-8176 / (717) 657-1611	Lab Contact: Carrie Gamber	Carrier: FEDEX	1 of 2 COCs
2601 Market Place St. Suite 310	Analysis Turnaround Time			Job No. 10012.30
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: 2016 Comprehensive Event	☐ 1 week			
Site: Harley-Davidson, York PA	☐ 5 days			
Quote # 18000557	☐ 1 day			

180-60202 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260C)	Select List Total Metals by ICP MS (SW846 6020/SW846 7470A)	Select List Dissolved Metals by ICP MS (SW846 6020/SW846 7470A)	1,4-Dioxane (SW846 8270D LL)
HD-CW-7A-0/1-0	10/25/16	0725	GW	W	3	X			
HD-CW-3-0/1-0	10/25/16	0805				X			
HD-CW-1-0/1-0	10/25/16	0945				X			
HD-CW-1A-0/1-0	10/26/16	0605				X			
HD-CW-2-0/1-0	10/26/16	0610				X			
HD-CW-7-0/1-0	10/26/16	0612				X			
HD-CW-9-0/1-0	10/26/16	0645				X			
HD-CW-20-0/1-0	10/26/16	0650				X			
HD-CW-13-0/1-0	10/26/16	0655				X			
HD-CW-15A-0/1-0	10/26/16	0700			5	X			X
HD-CW-17-0/1-0	10/26/16	0705			3	X			
HD-CW-17-0/1-0 MS	10/26/16	0705				X			
HD-CW-17-0/1-0 MSD	10/26/16	0705				X			
HD-QC3-0/1-1	10/26/16	0800				X			
Influent to #003 GWTS	10/26/16	0710				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

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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 A☐e For _____ Months

Special Instructions/QC Requirements & Comments: CLP Like Deliverables

Relinquished by (Print and Sign):	Company: ~~GSC~~	Date/Time:	Received by:	Company:	Date/Time:
Emily Wade	Leidos	10/26/16 1300	UBF	GSC	10/26/16 1300
Relinquished by:	Company:	Date/Time:	Received by: Dellwe Watson	Company: TAP	Date/Time: 10-27-16 7:00
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

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: Christopher D. O'neil	Site Contact: ~~Jennifer S. Reese~~ CDO	DateSubmitted: 10/26/16
Groundwater Sciences Corporation	Tel/Fax: 717-901-8176 / (717) 657-1611	Lab Contact: Carrie Gamber	Carrier: FEDEX
2601 Market Place St Suite 310	Analysis Turnaround Time		COC No: TAP2016102602
Harrisburg, PA 17110	Calendar (C) or Work Days (W)		2 of 2 COCs
(717) 901-8180 Phone	TAT if different from Below: Standard		Job No. 10012.30
(717) 657-1611 FAX	■ 2 weeks		Container No. 1
Project Name: 2016 Comprehensive Event	☐ 1 week		SDG No.
Site: Harley-Davidson, York PA	☐ 5 days		
Quote # 18000557	☐ 1 day		

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260C)	Select List Total Metals by ICP MS (SW846 6020/SW846 7470A)	Select List Dissolved Metals by ICP MS (SW846 6020/SW846 7470A)	1,4-Dioxane (SW846 8270D LL)	Sample Specific Notes:
Outfall #003 GWTS	10/26/16	0720	GW	W	3	X				
HD-CW-6-0/1-0	10/26/16	0745	GW	W	↓	X				
HD-CW-4-0/1-0	10/26/16	0910	GW	W	↓	X				
HD-CW-5-0/1-0	10/26/16	1045	GW	W	↓	X				
HD-QCS-0/1-2	10/26/16	1200	Trip Blank	W	2	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:	Date/Time:	Received by:	Company:	Date/Time:
Emily Wade [signature]	~~GSC~~ Leidos	10/26/16 1300	[signature] VBK	GSC	10/26/16 1300
Relinquished by:	Company:	Date/Time:	Received by: [signature]	Company: TAP	Date/Time: 10/27/16 9:00
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

00026

00052

FedEx Express **NEW** Package US Airbill

FedEx Tracking Number 8996 8118 2000

Form ID No. 0215 **Recipient's Copy**

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.

Date 10/26/16 FedEx Tracking Number 899681182000

Sender's Name STAFF MEMBER - INSERT N Phone 717 652-6832

Company GROUNDWATER SCIENCES CORP

Address 2601 MARKET PL STE 310 Dept./Floor/Suite/Room

City HARRISBURG State PA ZIP 17110-9340

2 Your Internal Billing Reference

3 To

Recipient's Name Sample Receiving Phone 412 963-7058

Company Anexa Pittsburgh

Address 301 Alpha Drive

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address RIDC Park

Use this line for the HOLD location address or for continuation of your shipping address.

City Pittsburgh State PA 15238-2907

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

10246

Uncorrected temp 2.0/1.5 °C

Thermometer ID 9

CF -0.5 Initials TS

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

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.

For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☑ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- ☐ **NEW** FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☑ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?

One box must be checked.

☐ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. ☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

☐ Sender Acct. No. in Section 1 will be billed [redacted] ☐ h/Check [redacted]

Total Packages

180-60202 Waybill

†Our liability is limited to $1

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fedex.com 1.800.GoFedEx 1.800.463.3339

fedex.com 1.800.GoFedEx 1.800.463.3339

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-60202-1

Login Number: 60202
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 (excluding tests with immediate HTs)	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	