TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

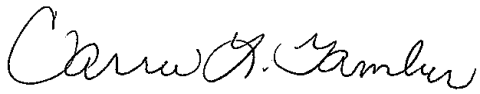
ANALYTICAL REPORT

Job Number: 180-71829-1

Job Description: Harley Davidson

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

Attention: Christopher O'Neil



Approved for release.
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11/13/2017 9:56 AM

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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.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
E	Result exceeded calibration range.
X	Surrogate is outside control limits

GC/MS Semi VOA

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

General Chemistry

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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: 180-71829-1

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 10/27/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.6 C.

VOLATILES

The following sample was diluted to bring the concentration of target analytes within the calibration range: HD-MW-136A-356/356.5-0 (180-71829-8), HD-MW-136A-372.5/373-0 (180-71829-9), HD-MW-136A-434/434.5-0 (180-71829-10), HD-MW-136A-270/348-0 (180-71829-11), HD-MW-91-0/1-0 (180-71829-12), HD-MW-2-0/1-0 (180-71829-14), HD-MW-185-0/1-0 (180-71829-15), HD-MW-15-0/1-0 (180-71829-17), HD-MW-16S-0/1-0 (180-71829-18) and HD-MW-12-0/1-0 (180-71829-19). Elevated reporting limits (RLs) are provided.

Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: HD-MW-136A-270/348-0 (180-71829-11).

Surrogate recovery for Toluene-d8 (Surr) was outside acceptance limits for the following sample. The parent and matrix spike duplicate sample's surrogate recoveries were within limits. The matrix spike sample has been qualified and reported: HD-MW-16D-0/1-0MS (180-71829-13MS).

The laboratory control sample (LCS) for analytical batch 180-227768 recovered outside control limits for the following analytes: 1,1-Dichloroethene and Vinyl chloride. A low-level LCS (LLCS), spiked at the reporting limit (RL), was prepared with this batch. The affected target analytes recovered within acceptance limits; therefore, the LLCS demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. Since the affected target compounds were not detected in the samples, the data have been reported and qualified.

The laboratory control sample (LCS) for analytical batch 180-227871 recovered outside control limits for the following analytes: Acetone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for analytical batch 180-228278 recovered outside control limits for the following analytes: Acetone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Vinyl chloride failed the recovery criteria low for the MS of sample HD-MW-16D-0/1-0 (180-71829-13) in batch 180-227768. Trichloroethene and Vinyl chloride failed the recovery criteria low for the MSD of sample HD-MW-16D-0/1-0 (180-71829-13) in batch 180-227768.

Several analytes failed the recovery criteria low for the MS of sample HD-MW-43D-0/1-0 (180-71829-1) in batch 180-227642. 1,4-Dioxane, Tetrachloroethene and Xylenes, Total exceeded the RPD limit for the MSD of sample HD-MW-43D-0/1-0 (180-71829-1) in batch 180-227642.

Due to the time change, the CCVIS has time/date of 11/5/17 at 00:00. The correct date/time should be 11/6/17 at 00:00: (CCVIS 180-228044/2)

The continuing calibration verification (CCV) analyzed in batch 180-227642 was outside the method criteria for the following analytes: 1,2-Dichloroethane, 1,4-Dioxane, Bromomethane and Vinyl chloride (LOW) & 4-Methyl-2-pentanone and Toluene (HIGH). 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 is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-228533 was outside the method criteria for the following analytes:

Bromomethane, Acetone, 1,4-Dioxane, 1,2-Dichloroethane-d4, Chloromethane and Vinyl chloride (LOW) & 4-Methyl-2-pentanone, Bromoform, Naphthalene and Toluene (HIGH). 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 is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-228278 was outside the method criteria for the following analytes: 1,4-Dioxane, Acetone, Acrylonitrile, Chloromethane and Vinyl chloride. 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 is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-228044 was outside the method criteria for the following analytes: 1,4-Dioxane, Acetone, Bromomethane, Chloroethane and Chloromethane. 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 is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-227871 was outside the method criteria for the following analytes: 1,4-Dioxane, 2-Butanone (MEK), Acetone, Bromomethane and Trichloroethene. 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 is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-227760 was outside the method criteria for the following analytes: 1,4-Dioxane, Acetone and Chloromethane. 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 is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-227768 was outside the method criteria for the following analytes: 1,2-Dichloroethane, 1,1-Dichloroethene, Acetone, Bromomethane, Chloromethane, Vinyl chloride and 1,2-Dichloroethane-d4 and 1,4-Dioxane (LOW). 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 is considered estimated.

SEMIVOLATILES

The continuing calibration verification (CCV) analyzed in 180-228094 was outside the method criteria for the following analyte: 2,4,6-Tribromophenol (Surr). As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

GENERAL CHEMISTRY

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

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-71829-1

Client Sample ID: HD-MW-43D-0/1-0 — Lab Sample ID: 180-71829-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.2		1.0	0.71	ug/L	1		8260C	Total/NA
Trichloroethene	5.9	F1	1.0	0.69	ug/L	1		8260C	Total/NA
Tetrachloroethene	7.5	F2 F1	1.0	0.47	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-43S-0/1-0 — Lab Sample ID: 180-71829-2

No Detections.

Client Sample ID: HD-QC3-0/1-1 — Lab Sample ID: 180-71829-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	16		1.0	0.71	ug/L	1		8260C	Total/NA
Trichloroethene	4.7		1.0	0.69	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-18D-0/1-0 — Lab Sample ID: 180-71829-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	14		1.0	0.71	ug/L	1		8260C	Total/NA
Trichloroethene	3.8		1.0	0.69	ug/L	1		8260C	Total/NA

Client Sample ID: HD-QC5-0/1-2 — Lab Sample ID: 180-71829-5

No Detections.

Client Sample ID: HD-QC3-0/1-4 — Lab Sample ID: 180-71829-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.9		5.0	3.4	ug/L	1		8260C	Total/NA

Client Sample ID: HD-QC3-0/1-3 — Lab Sample ID: 180-71829-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.8		5.0	3.4	ug/L	1		8260C	Total/NA
2-Butanone (MEK)	2.8	J	5.0	2.6	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-136A-356/356.5-0 — Lab Sample ID: 180-71829-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	30	J	50	18	ug/L	50		8260C	Total/NA
cis-1,2-Dichloroethene	1200		50	35	ug/L	50		8260C	Total/NA
Trichloroethene	3900	E	50	34	ug/L	50		8260C	Total/NA
Tetrachloroethene	1500		50	23	ug/L	50		8260C	Total/NA
cis-1,2-Dichloroethene - DL	1500		500	350	ug/L	500		8260C	Total/NA
Trichloroethene - DL	5600		500	340	ug/L	500		8260C	Total/NA
Tetrachloroethene - DL	1600		500	230	ug/L	500		8260C	Total/NA
1,4-Dioxane	0.88	J	2.0	0.37	ug/L	1		8270D LL	Total/NA

Client Sample ID: HD-MW-136A-372.5/373-0 — Lab Sample ID: 180-71829-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	120		50	18	ug/L	50		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-MW-136A-372.5/373-0 (Continued) — Lab Sample ID: 180-71829-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5500	E	50	35	ug/L	50		8260C	Total/NA
Trichloroethene	5100	E	50	34	ug/L	50		8260C	Total/NA
Tetrachloroethene	2000		50	23	ug/L	50		8260C	Total/NA
cis-1,2-Dichloroethene - DL	6900		500	350	ug/L	500		8260C	Total/NA
Trichloroethene - DL	7200		500	340	ug/L	500		8260C	Total/NA
Tetrachloroethene - DL	2400		500	230	ug/L	500		8260C	Total/NA
1,4-Dioxane	1.3	J	1.9	0.36	ug/L	1		8270D LL	Total/NA

Client Sample ID: HD-MW-136A-434/434.5-0 — Lab Sample ID: 180-71829-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	120		100	36	ug/L	100		8260C	Total/NA
cis-1,2-Dichloroethene	13000	E	100	71	ug/L	100		8260C	Total/NA
Trichloroethene	1200		100	69	ug/L	100		8260C	Total/NA
Tetrachloroethene	180		100	47	ug/L	100		8260C	Total/NA
cis-1,2-Dichloroethene - DL	36000		1000	710	ug/L	1000		8260C	Total/NA
Trichloroethene - DL	10000		1000	690	ug/L	1000		8260C	Total/NA
Tetrachloroethene - DL	3900		1000	470	ug/L	1000		8260C	Total/NA

Client Sample ID: HD-MW-136A-270/348-0 — Lab Sample ID: 180-71829-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	8.2		5.0	1.8	ug/L	5		8260C	Total/NA
cis-1,2-Dichloroethene	410	E	5.0	3.5	ug/L	5		8260C	Total/NA
Chloroform	3.1	J	5.0	3.0	ug/L	5		8260C	Total/NA
Trichloroethene	79		5.0	3.4	ug/L	5		8260C	Total/NA
Tetrachloroethene	39		5.0	2.3	ug/L	5		8260C	Total/NA
cis-1,2-Dichloroethene - DL	600		50	35	ug/L	50		8260C	Total/NA
Trichloroethene - DL	93		50	34	ug/L	50		8260C	Total/NA
1,4-Dioxane - DL	790	J	10000	680	ug/L	50		8260C	Total/NA

Client Sample ID: HD-MW-91-0/1-0 — Lab Sample ID: 180-71829-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.7		1.0	0.69	ug/L	1		8260C	Total/NA
Tetrachloroethene	110	E	1.0	0.47	ug/L	1		8260C	Total/NA
Methylene Chloride - DL	4.3	J	10	3.6	ug/L	10		8260C	Total/NA
Tetrachloroethene - DL	150		10	4.7	ug/L	10		8260C	Total/NA

Client Sample ID: HD-MW-16D-0/1-0 — Lab Sample ID: 180-71829-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	7.0		1.0	0.71	ug/L	1		8260C	Total/NA
Trichloroethene	8.7	F1	1.0	0.69	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-2-0/1-0 — Lab Sample ID: 180-71829-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.5		1.0	0.69	ug/L	1		8260C	Total/NA
Tetrachloroethene	140	E	1.0	0.47	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-MW-2-0/1-0 (Continued) — Lab Sample ID: 180-71829-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene - DL	35		2.0	0.93	ug/L	2		8260C	Total/NA
Cyanide, Total	360		10	3.0	ug/L	1		9014	Total/NA
Cyanide, Available	0.0069		0.0020	0.00036	mg/L	1		OIA-1677	Total/NA

Client Sample ID: HD-MW-185-0/1-0 — Lab Sample ID: 180-71829-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.2		2.0	1.4	ug/L	2		8260C	Total/NA
Tetrachloroethene	42		2.0	0.93	ug/L	2		8260C	Total/NA

Client Sample ID: HD-MW-82-0/1-0 — Lab Sample ID: 180-71829-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	15		1.0	0.71	ug/L	1		8260C	Total/NA
Trichloroethene	5.4		1.0	0.69	ug/L	1		8260C	Total/NA
Tetrachloroethene	1.3		1.0	0.47	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-15-0/1-0 — Lab Sample ID: 180-71829-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.8	J	2.0	1.4	ug/L	2		8260C	Total/NA
Tetrachloroethene	140	E	2.0	0.93	ug/L	2		8260C	Total/NA
Tetrachloroethene - DL	140		5.0	2.3	ug/L	5		8260C	Total/NA

Client Sample ID: HD-MW-16S-0/1-0 — Lab Sample ID: 180-71829-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	12		2.0	1.4	ug/L	2		8260C	Total/NA
Trichloroethene	7.7	^c	2.0	1.4	ug/L	2		8260C	Total/NA
Tetrachloroethene	1.7	J	2.0	0.93	ug/L	2		8260C	Total/NA

Client Sample ID: HD-MW-12-0/1-0 — Lab Sample ID: 180-71829-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	46		2.0	1.4	ug/L	2		8260C	Total/NA
Trichloroethene	61		2.0	1.4	ug/L	2		8260C	Total/NA
Tetrachloroethene	2.7		2.0	0.93	ug/L	2		8260C	Total/NA

Client Sample ID: HD-TATE (S-6)-0/1-0 — Lab Sample ID: 180-71829-20

No Detections.

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: HD-MW-43D-0/1-0
Date Collected: 10/26/17 14:25
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.90	ug/L			11/01/17 12:15	1
Vinyl chloride	1.0	U ^c F1	1.0	0.88	ug/L			11/01/17 12:15	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			11/01/17 12:15	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/01/17 12:15	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/01/17 12:15	1
Acetone	5.0	U	5.0	3.4	ug/L			11/01/17 12:15	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/01/17 12:15	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/17 12:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/01/17 12:15	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/01/17 12:15	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/01/17 12:15	1
cis-1,2-Dichloroethene	**5.2**		1.0	0.71	ug/L			11/01/17 12:15	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/01/17 12:15	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/01/17 12:15	1
Chloroform	1.0	U F1	1.0	0.60	ug/L			11/01/17 12:15	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 12:15	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/01/17 12:15	1
Benzene	1.0	U	1.0	0.60	ug/L			11/01/17 12:15	1
1,2-Dichloroethane	1.0	U ^c F1	1.0	0.57	ug/L			11/01/17 12:15	1
Trichloroethene	**5.9**	**F1**	1.0	0.69	ug/L			11/01/17 12:15	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/01/17 12:15	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/01/17 12:15	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/01/17 12:15	1
4-Methyl-2-pentanone (MIBK)	5.0	U ^c	5.0	3.1	ug/L			11/01/17 12:15	1
Toluene	1.0	U ^c	1.0	0.46	ug/L			11/01/17 12:15	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/01/17 12:15	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/01/17 12:15	1
Tetrachloroethene	**7.5**	**F2 F1**	1.0	0.47	ug/L			11/01/17 12:15	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/01/17 12:15	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/01/17 12:15	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/01/17 12:15	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/01/17 12:15	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 12:15	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/01/17 12:15	1
Xylenes, Total	2.0	U F2	2.0	0.89	ug/L			11/01/17 12:15	1
Styrene	1.0	U	1.0	0.47	ug/L			11/01/17 12:15	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/01/17 12:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 12:15	1
Acrylonitrile	20	U	20	7.8	ug/L			11/01/17 12:15	1
1,4-Dioxane	200	U F2	200	14	ug/L			11/01/17 12:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*68*		*65 - 121*		*11/01/17 12:15*	*1*
Toluene-d8 (Surr)	*106*		*73 - 120*		*11/01/17 12:15*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*11/01/17 12:15*	*1*
Dibromofluoromethane (Surr)	*79*		*73 - 120*		*11/01/17 12:15*	*1*

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

Client Sample ID: HD-MW-43S-0/1-0
Date Collected: 10/26/17 13:20
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.90	ug/L			11/01/17 12:43	1
Vinyl chloride	1.0	U ^c	1.0	0.88	ug/L			11/01/17 12:43	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			11/01/17 12:43	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/01/17 12:43	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/01/17 12:43	1
Acetone	5.0	U	5.0	3.4	ug/L			11/01/17 12:43	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/01/17 12:43	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/17 12:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/01/17 12:43	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/01/17 12:43	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/01/17 12:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/01/17 12:43	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/01/17 12:43	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/01/17 12:43	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/01/17 12:43	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 12:43	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/01/17 12:43	1
Benzene	1.0	U	1.0	0.60	ug/L			11/01/17 12:43	1
1,2-Dichloroethane	1.0	U ^c	1.0	0.57	ug/L			11/01/17 12:43	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			11/01/17 12:43	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/01/17 12:43	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/01/17 12:43	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/01/17 12:43	1
4-Methyl-2-pentanone (MIBK)	5.0	U ^c	5.0	3.1	ug/L			11/01/17 12:43	1
Toluene	1.0	U ^c	1.0	0.46	ug/L			11/01/17 12:43	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/01/17 12:43	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/01/17 12:43	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/01/17 12:43	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/01/17 12:43	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/01/17 12:43	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/01/17 12:43	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/01/17 12:43	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 12:43	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/01/17 12:43	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/01/17 12:43	1
Styrene	1.0	U	1.0	0.47	ug/L			11/01/17 12:43	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/01/17 12:43	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 12:43	1
Acrylonitrile	20	U	20	7.8	ug/L			11/01/17 12:43	1
1,4-Dioxane	200	U	200	14	ug/L			11/01/17 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*74*		*65 - 121*		*11/01/17 12:43*	*1*
Toluene-d8 (Surr)	*109*		*73 - 120*		*11/01/17 12:43*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*11/01/17 12:43*	*1*
Dibromofluoromethane (Surr)	*84*		*73 - 120*		*11/01/17 12:43*	*1*

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

Client Sample ID: HD-QC3-0/1-1
Date Collected: 10/26/17 08:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.90	ug/L			11/01/17 15:54	1
Vinyl chloride	1.0	U ^c	1.0	0.88	ug/L			11/01/17 15:54	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			11/01/17 15:54	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/01/17 15:54	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/01/17 15:54	1
Acetone	5.0	U	5.0	3.4	ug/L			11/01/17 15:54	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/01/17 15:54	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/17 15:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/01/17 15:54	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/01/17 15:54	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/01/17 15:54	1
cis-1,2-Dichloroethene	**16**		1.0	0.71	ug/L			11/01/17 15:54	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/01/17 15:54	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/01/17 15:54	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/01/17 15:54	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 15:54	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/01/17 15:54	1
Benzene	1.0	U	1.0	0.60	ug/L			11/01/17 15:54	1
1,2-Dichloroethane	1.0	U ^c	1.0	0.57	ug/L			11/01/17 15:54	1
Trichloroethene	**4.7**		1.0	0.69	ug/L			11/01/17 15:54	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/01/17 15:54	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/01/17 15:54	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/01/17 15:54	1
4-Methyl-2-pentanone (MIBK)	5.0	U ^c	5.0	3.1	ug/L			11/01/17 15:54	1
Toluene	1.0	U ^c	1.0	0.46	ug/L			11/01/17 15:54	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/01/17 15:54	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/01/17 15:54	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/01/17 15:54	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/01/17 15:54	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/01/17 15:54	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/01/17 15:54	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/01/17 15:54	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 15:54	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/01/17 15:54	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/01/17 15:54	1
Styrene	1.0	U	1.0	0.47	ug/L			11/01/17 15:54	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/01/17 15:54	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 15:54	1
Acrylonitrile	20	U	20	7.8	ug/L			11/01/17 15:54	1
1,4-Dioxane	200	U	200	14	ug/L			11/01/17 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*65 - 121*		*11/01/17 15:54*	*1*
Toluene-d8 (Surr)	*108*		*73 - 120*		*11/01/17 15:54*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/01/17 15:54*	*1*
Dibromofluoromethane (Surr)	*87*		*73 - 120*		*11/01/17 15:54*	*1*

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

Client Sample ID: HD-MW-18D-0/1-0
Date Collected: 10/26/17 11:30
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U ^c	1.0	0.90	ug/L			11/02/17 13:20	1
Vinyl chloride	1.0	U ^c *	1.0	0.88	ug/L			11/02/17 13:20	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			11/02/17 13:20	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/02/17 13:20	1
1,1-Dichloroethene	1.0	U ^c *	1.0	0.55	ug/L			11/02/17 13:20	1
Acetone	5.0	U ^c	5.0	3.4	ug/L			11/02/17 13:20	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/02/17 13:20	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/02/17 13:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/02/17 13:20	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/02/17 13:20	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/02/17 13:20	1
cis-1,2-Dichloroethene	**14**		1.0	0.71	ug/L			11/02/17 13:20	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/02/17 13:20	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/02/17 13:20	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/02/17 13:20	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 13:20	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/02/17 13:20	1
Benzene	1.0	U	1.0	0.60	ug/L			11/02/17 13:20	1
1,2-Dichloroethane	1.0	U ^c	1.0	0.57	ug/L			11/02/17 13:20	1
Trichloroethene	**3.8**		1.0	0.69	ug/L			11/02/17 13:20	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/02/17 13:20	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/02/17 13:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/02/17 13:20	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/02/17 13:20	1
Toluene	1.0	U	1.0	0.46	ug/L			11/02/17 13:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/02/17 13:20	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/02/17 13:20	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/02/17 13:20	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/02/17 13:20	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/02/17 13:20	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/02/17 13:20	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/02/17 13:20	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/02/17 13:20	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/02/17 13:20	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/02/17 13:20	1
Styrene	1.0	U	1.0	0.47	ug/L			11/02/17 13:20	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/02/17 13:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 13:20	1
Acrylonitrile	20	U	20	7.8	ug/L			11/02/17 13:20	1
1,4-Dioxane	200	U	200	14	ug/L			11/02/17 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*75*	*^c*	*65 - 121*		*11/02/17 13:20*	*1*
Toluene-d8 (Surr)	*108*		*73 - 120*		*11/02/17 13:20*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*11/02/17 13:20*	*1*
Dibromofluoromethane (Surr)	*83*		*73 - 120*		*11/02/17 13:20*	*1*

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

Client Sample ID: HD-QC5-0/1-2
Date Collected: 10/25/17 12:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.90	ug/L			11/01/17 16:51	1
Vinyl chloride	1.0	U ^c	1.0	0.88	ug/L			11/01/17 16:51	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			11/01/17 16:51	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/01/17 16:51	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/01/17 16:51	1
Acetone	5.0	U	5.0	3.4	ug/L			11/01/17 16:51	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/01/17 16:51	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/17 16:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/01/17 16:51	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/01/17 16:51	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/01/17 16:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/01/17 16:51	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/01/17 16:51	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/01/17 16:51	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/01/17 16:51	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 16:51	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/01/17 16:51	1
Benzene	1.0	U	1.0	0.60	ug/L			11/01/17 16:51	1
1,2-Dichloroethane	1.0	U ^c	1.0	0.57	ug/L			11/01/17 16:51	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			11/01/17 16:51	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/01/17 16:51	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/01/17 16:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/01/17 16:51	1
4-Methyl-2-pentanone (MIBK)	5.0	U ^c	5.0	3.1	ug/L			11/01/17 16:51	1
Toluene	1.0	U ^c	1.0	0.46	ug/L			11/01/17 16:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/01/17 16:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/01/17 16:51	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/01/17 16:51	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/01/17 16:51	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/01/17 16:51	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/01/17 16:51	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/01/17 16:51	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 16:51	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/01/17 16:51	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/01/17 16:51	1
Styrene	1.0	U	1.0	0.47	ug/L			11/01/17 16:51	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/01/17 16:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 16:51	1
Acrylonitrile	20	U	20	7.8	ug/L			11/01/17 16:51	1
1,4-Dioxane	200	U	200	14	ug/L			11/01/17 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*66*		*65 - 121*		*11/01/17 16:51*	*1*
Toluene-d8 (Surr)	*98*		*73 - 120*		*11/01/17 16:51*	*1*
4-Bromofluorobenzene (Surr)	*82*		*80 - 120*		*11/01/17 16:51*	*1*
Dibromofluoromethane (Surr)	*77*		*73 - 120*		*11/01/17 16:51*	*1*

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

Client Sample ID: HD-QC3-0/1-4
Date Collected: 10/26/17 14:45
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.90	ug/L			11/01/17 11:46	1
Vinyl chloride	1.0	U ^c	1.0	0.88	ug/L			11/01/17 11:46	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			11/01/17 11:46	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/01/17 11:46	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/01/17 11:46	1
Acetone	**8.9**		5.0	3.4	ug/L			11/01/17 11:46	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/01/17 11:46	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/17 11:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/01/17 11:46	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/01/17 11:46	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/01/17 11:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/01/17 11:46	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/01/17 11:46	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/01/17 11:46	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/01/17 11:46	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 11:46	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/01/17 11:46	1
Benzene	1.0	U	1.0	0.60	ug/L			11/01/17 11:46	1
1,2-Dichloroethane	1.0	U ^c	1.0	0.57	ug/L			11/01/17 11:46	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			11/01/17 11:46	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/01/17 11:46	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/01/17 11:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/01/17 11:46	1
4-Methyl-2-pentanone (MIBK)	5.0	U ^c	5.0	3.1	ug/L			11/01/17 11:46	1
Toluene	1.0	U ^c	1.0	0.46	ug/L			11/01/17 11:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/01/17 11:46	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/01/17 11:46	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/01/17 11:46	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/01/17 11:46	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/01/17 11:46	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/01/17 11:46	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/01/17 11:46	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 11:46	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/01/17 11:46	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/01/17 11:46	1
Styrene	1.0	U	1.0	0.47	ug/L			11/01/17 11:46	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/01/17 11:46	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 11:46	1
Acrylonitrile	20	U	20	7.8	ug/L			11/01/17 11:46	1
1,4-Dioxane	200	U	200	14	ug/L			11/01/17 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*73*		*65 - 121*		*11/01/17 11:46*	*1*
Toluene-d8 (Surr)	*102*		*73 - 120*		*11/01/17 11:46*	*1*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*11/01/17 11:46*	*1*
Dibromofluoromethane (Surr)	*86*		*73 - 120*		*11/01/17 11:46*	*1*

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

Client Sample ID: HD-QC3-0/1-3
Date Collected: 10/26/17 14:35
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.90	ug/L			11/01/17 16:23	1
Vinyl chloride	1.0	U ^c	1.0	0.88	ug/L			11/01/17 16:23	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			11/01/17 16:23	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/01/17 16:23	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/01/17 16:23	1
Acetone	**8.8**		5.0	3.4	ug/L			11/01/17 16:23	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/01/17 16:23	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/17 16:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/01/17 16:23	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/01/17 16:23	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/01/17 16:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/01/17 16:23	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/01/17 16:23	1
2-Butanone (MEK)	**2.8**	**J**	5.0	2.6	ug/L			11/01/17 16:23	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/01/17 16:23	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 16:23	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/01/17 16:23	1
Benzene	1.0	U	1.0	0.60	ug/L			11/01/17 16:23	1
1,2-Dichloroethane	1.0	U ^c	1.0	0.57	ug/L			11/01/17 16:23	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			11/01/17 16:23	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/01/17 16:23	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/01/17 16:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/01/17 16:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U ^c	5.0	3.1	ug/L			11/01/17 16:23	1
Toluene	1.0	U ^c	1.0	0.46	ug/L			11/01/17 16:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/01/17 16:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/01/17 16:23	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/01/17 16:23	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/01/17 16:23	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/01/17 16:23	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/01/17 16:23	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/01/17 16:23	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 16:23	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/01/17 16:23	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/01/17 16:23	1
Styrene	1.0	U	1.0	0.47	ug/L			11/01/17 16:23	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/01/17 16:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 16:23	1
Acrylonitrile	20	U	20	7.8	ug/L			11/01/17 16:23	1
1,4-Dioxane	200	U	200	14	ug/L			11/01/17 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*67*		*65 - 121*		*11/01/17 16:23*	*1*
Toluene-d8 (Surr)	*97*		*73 - 120*		*11/01/17 16:23*	*1*
4-Bromofluorobenzene (Surr)	*84*		*80 - 120*		*11/01/17 16:23*	*1*
Dibromofluoromethane (Surr)	*77*		*73 - 120*		*11/01/17 16:23*	*1*

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

Client Sample ID: HD-MW-136A-356/356.5-0
Date Collected: 10/25/17 11:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	50	U ^c	50	45	ug/L			11/02/17 14:45	50
Vinyl chloride	50	U ^c *	50	44	ug/L			11/02/17 14:45	50
Bromomethane	50	U ^c	50	44	ug/L			11/02/17 14:45	50
Chloroethane	50	U	50	45	ug/L			11/02/17 14:45	50
1,1-Dichloroethene	50	U ^c *	50	28	ug/L			11/02/17 14:45	50
Acetone	250	U ^c	250	170	ug/L			11/02/17 14:45	50
Carbon disulfide	50	U	50	44	ug/L			11/02/17 14:45	50
Methylene Chloride	**30**	**J**	50	18	ug/L			11/02/17 14:45	50
trans-1,2-Dichloroethene	50	U	50	34	ug/L			11/02/17 14:45	50
Methyl tert-butyl ether	50	U	50	30	ug/L			11/02/17 14:45	50
1,1-Dichloroethane	50	U	50	31	ug/L			11/02/17 14:45	50
cis-1,2-Dichloroethene	**1200**		50	35	ug/L			11/02/17 14:45	50
Bromochloromethane	50	U	50	31	ug/L			11/02/17 14:45	50
2-Butanone (MEK)	250	U	250	130	ug/L			11/02/17 14:45	50
Chloroform	50	U	50	30	ug/L			11/02/17 14:45	50
1,1,1-Trichloroethane	50	U	50	30	ug/L			11/02/17 14:45	50
Carbon tetrachloride	50	U	50	44	ug/L			11/02/17 14:45	50
Benzene	50	U	50	30	ug/L			11/02/17 14:45	50
1,2-Dichloroethane	50	U ^c	50	29	ug/L			11/02/17 14:45	50
Trichloroethene	**3900**	**E**	50	34	ug/L			11/02/17 14:45	50
1,2-Dichloropropane	50	U	50	33	ug/L			11/02/17 14:45	50
Bromodichloromethane	50	U	50	32	ug/L			11/02/17 14:45	50
cis-1,3-Dichloropropene	50	U	50	30	ug/L			11/02/17 14:45	50
4-Methyl-2-pentanone (MIBK)	250	U	250	150	ug/L			11/02/17 14:45	50
Toluene	50	U	50	23	ug/L			11/02/17 14:45	50
trans-1,3-Dichloropropene	50	U	50	29	ug/L			11/02/17 14:45	50
1,1,2-Trichloroethane	50	U	50	23	ug/L			11/02/17 14:45	50
Tetrachloroethene	**1500**		50	23	ug/L			11/02/17 14:45	50
2-Hexanone	250	U	250	160	ug/L			11/02/17 14:45	50
Dibromochloromethane	50	U	50	42	ug/L			11/02/17 14:45	50
1,2-Dibromoethane (EDB)	50	U	50	25	ug/L			11/02/17 14:45	50
Chlorobenzene	50	U	50	25	ug/L			11/02/17 14:45	50
1,1,1,2-Tetrachloroethane	50	U	50	29	ug/L			11/02/17 14:45	50
Ethylbenzene	50	U	50	25	ug/L			11/02/17 14:45	50
Xylenes, Total	100	U	100	45	ug/L			11/02/17 14:45	50
Styrene	50	U	50	24	ug/L			11/02/17 14:45	50
Bromoform	50	U	50	49	ug/L			11/02/17 14:45	50
1,1,2,2-Tetrachloroethane	50	U	50	30	ug/L			11/02/17 14:45	50
Acrylonitrile	1000	U	1000	390	ug/L			11/02/17 14:45	50
1,4-Dioxane	10000	U	10000	680	ug/L			11/02/17 14:45	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*	*^c*	*65 - 121*		*11/02/17 14:45*	*50*
Toluene-d8 (Surr)	*116*		*73 - 120*		*11/02/17 14:45*	*50*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*11/02/17 14:45*	*50*
Dibromofluoromethane (Surr)	*89*		*73 - 120*		*11/02/17 14:45*	*50*

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

Client Sample ID: HD-MW-136A-372.5/373-0
Date Collected: 10/25/17 12:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	50	U ^c	50	45	ug/L			11/02/17 16:14	50
Vinyl chloride	50	U ^c *	50	44	ug/L			11/02/17 16:14	50
Bromomethane	50	U ^c	50	44	ug/L			11/02/17 16:14	50
Chloroethane	50	U	50	45	ug/L			11/02/17 16:14	50
1,1-Dichloroethene	50	U ^c *	50	28	ug/L			11/02/17 16:14	50
Acetone	250	U ^c	250	170	ug/L			11/02/17 16:14	50
Carbon disulfide	50	U	50	44	ug/L			11/02/17 16:14	50
Methylene Chloride	**120**		50	18	ug/L			11/02/17 16:14	50
trans-1,2-Dichloroethene	50	U	50	34	ug/L			11/02/17 16:14	50
Methyl tert-butyl ether	50	U	50	30	ug/L			11/02/17 16:14	50
1,1-Dichloroethane	50	U	50	31	ug/L			11/02/17 16:14	50
cis-1,2-Dichloroethene	**5500**	**E**	50	35	ug/L			11/02/17 16:14	50
Bromochloromethane	50	U	50	31	ug/L			11/02/17 16:14	50
2-Butanone (MEK)	250	U	250	130	ug/L			11/02/17 16:14	50
Chloroform	50	U	50	30	ug/L			11/02/17 16:14	50
1,1,1-Trichloroethane	50	U	50	30	ug/L			11/02/17 16:14	50
Carbon tetrachloride	50	U	50	44	ug/L			11/02/17 16:14	50
Benzene	50	U	50	30	ug/L			11/02/17 16:14	50
1,2-Dichloroethane	50	U ^c	50	29	ug/L			11/02/17 16:14	50
Trichloroethene	**5100**	**E**	50	34	ug/L			11/02/17 16:14	50
1,2-Dichloropropane	50	U	50	33	ug/L			11/02/17 16:14	50
Bromodichloromethane	50	U	50	32	ug/L			11/02/17 16:14	50
cis-1,3-Dichloropropene	50	U	50	30	ug/L			11/02/17 16:14	50
4-Methyl-2-pentanone (MIBK)	250	U	250	150	ug/L			11/02/17 16:14	50
Toluene	50	U	50	23	ug/L			11/02/17 16:14	50
trans-1,3-Dichloropropene	50	U	50	29	ug/L			11/02/17 16:14	50
1,1,2-Trichloroethane	50	U	50	23	ug/L			11/02/17 16:14	50
Tetrachloroethene	**2000**		50	23	ug/L			11/02/17 16:14	50
2-Hexanone	250	U	250	160	ug/L			11/02/17 16:14	50
Dibromochloromethane	50	U	50	42	ug/L			11/02/17 16:14	50
1,2-Dibromoethane (EDB)	50	U	50	25	ug/L			11/02/17 16:14	50
Chlorobenzene	50	U	50	25	ug/L			11/02/17 16:14	50
1,1,1,2-Tetrachloroethane	50	U	50	29	ug/L			11/02/17 16:14	50
Ethylbenzene	50	U	50	25	ug/L			11/02/17 16:14	50
Xylenes, Total	100	U	100	45	ug/L			11/02/17 16:14	50
Styrene	50	U	50	24	ug/L			11/02/17 16:14	50
Bromoform	50	U	50	49	ug/L			11/02/17 16:14	50
1,1,2,2-Tetrachloroethane	50	U	50	30	ug/L			11/02/17 16:14	50
Acrylonitrile	1000	U	1000	390	ug/L			11/02/17 16:14	50
1,4-Dioxane	10000	U	10000	680	ug/L			11/02/17 16:14	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*	*^c*	*65 - 121*		*11/02/17 16:14*	*50*
Toluene-d8 (Surr)	*112*		*73 - 120*		*11/02/17 16:14*	*50*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*11/02/17 16:14*	*50*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*11/02/17 16:14*	*50*

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

Client Sample ID: HD-MW-136A-434/434.5-0
Date Collected: 10/25/17 13:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	100	U ^c	100	90	ug/L			11/02/17 15:46	100
Vinyl chloride	100	U ^c *	100	88	ug/L			11/02/17 15:46	100
Bromomethane	100	U ^c	100	89	ug/L			11/02/17 15:46	100
Chloroethane	100	U	100	90	ug/L			11/02/17 15:46	100
1,1-Dichloroethene	100	U ^c *	100	55	ug/L			11/02/17 15:46	100
Acetone	500	U ^c	500	340	ug/L			11/02/17 15:46	100
Carbon disulfide	100	U	100	88	ug/L			11/02/17 15:46	100
Methylene Chloride	**120**		100	36	ug/L			11/02/17 15:46	100
trans-1,2-Dichloroethene	100	U	100	67	ug/L			11/02/17 15:46	100
Methyl tert-butyl ether	100	U	100	59	ug/L			11/02/17 15:46	100
1,1-Dichloroethane	100	U	100	63	ug/L			11/02/17 15:46	100
cis-1,2-Dichloroethene	**13000**	**E**	100	71	ug/L			11/02/17 15:46	100
Bromochloromethane	100	U	100	63	ug/L			11/02/17 15:46	100
2-Butanone (MEK)	500	U	500	260	ug/L			11/02/17 15:46	100
Chloroform	100	U	100	60	ug/L			11/02/17 15:46	100
1,1,1-Trichloroethane	100	U	100	60	ug/L			11/02/17 15:46	100
Carbon tetrachloride	100	U	100	88	ug/L			11/02/17 15:46	100
Benzene	100	U	100	60	ug/L			11/02/17 15:46	100
1,2-Dichloroethane	100	U ^c	100	57	ug/L			11/02/17 15:46	100
Trichloroethene	**1200**		100	69	ug/L			11/02/17 15:46	100
1,2-Dichloropropane	100	U	100	66	ug/L			11/02/17 15:46	100
Bromodichloromethane	100	U	100	64	ug/L			11/02/17 15:46	100
cis-1,3-Dichloropropene	100	U	100	59	ug/L			11/02/17 15:46	100
4-Methyl-2-pentanone (MIBK)	500	U	500	310	ug/L			11/02/17 15:46	100
Toluene	100	U	100	46	ug/L			11/02/17 15:46	100
trans-1,3-Dichloropropene	100	U	100	58	ug/L			11/02/17 15:46	100
1,1,2-Trichloroethane	100	U	100	45	ug/L			11/02/17 15:46	100
Tetrachloroethene	**180**		100	47	ug/L			11/02/17 15:46	100
2-Hexanone	500	U	500	330	ug/L			11/02/17 15:46	100
Dibromochloromethane	100	U	100	84	ug/L			11/02/17 15:46	100
1,2-Dibromoethane (EDB)	100	U	100	50	ug/L			11/02/17 15:46	100
Chlorobenzene	100	U	100	50	ug/L			11/02/17 15:46	100
1,1,1,2-Tetrachloroethane	100	U	100	57	ug/L			11/02/17 15:46	100
Ethylbenzene	100	U	100	51	ug/L			11/02/17 15:46	100
Xylenes, Total	200	U	200	89	ug/L			11/02/17 15:46	100
Styrene	100	U	100	47	ug/L			11/02/17 15:46	100
Bromoform	100	U	100	98	ug/L			11/02/17 15:46	100
1,1,2,2-Tetrachloroethane	100	U	100	60	ug/L			11/02/17 15:46	100
Acrylonitrile	2000	U	2000	780	ug/L			11/02/17 15:46	100
1,4-Dioxane	20000	U	20000	1400	ug/L			11/02/17 15:46	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*	*^c*	*65 - 121*		*11/02/17 15:46*	*100*
Toluene-d8 (Surr)	*117*		*73 - 120*		*11/02/17 15:46*	*100*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*11/02/17 15:46*	*100*
Dibromofluoromethane (Surr)	*92*		*73 - 120*		*11/02/17 15:46*	*100*

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

Client Sample ID: HD-MW-136A-270/348-0
Date Collected: 10/26/17 10:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	5.0	U ^c	5.0	4.5	ug/L			11/02/17 15:18	5
Vinyl chloride	5.0	U ^c *	5.0	4.4	ug/L			11/02/17 15:18	5
Bromomethane	5.0	U ^c	5.0	4.4	ug/L			11/02/17 15:18	5
Chloroethane	5.0	U	5.0	4.5	ug/L			11/02/17 15:18	5
1,1-Dichloroethene	5.0	U ^c *	5.0	2.8	ug/L			11/02/17 15:18	5
Acetone	25	U ^c	25	17	ug/L			11/02/17 15:18	5
Carbon disulfide	5.0	U	5.0	4.4	ug/L			11/02/17 15:18	5
Methylene Chloride	**8.2**		5.0	1.8	ug/L			11/02/17 15:18	5
trans-1,2-Dichloroethene	5.0	U	5.0	3.4	ug/L			11/02/17 15:18	5
Methyl tert-butyl ether	5.0	U	5.0	3.0	ug/L			11/02/17 15:18	5
1,1-Dichloroethane	5.0	U	5.0	3.1	ug/L			11/02/17 15:18	5
cis-1,2-Dichloroethene	**410**	**E**	5.0	3.5	ug/L			11/02/17 15:18	5
Bromochloromethane	5.0	U	5.0	3.1	ug/L			11/02/17 15:18	5
2-Butanone (MEK)	25	U	25	13	ug/L			11/02/17 15:18	5
Chloroform	**3.1**	**J**	5.0	3.0	ug/L			11/02/17 15:18	5
1,1,1-Trichloroethane	5.0	U	5.0	3.0	ug/L			11/02/17 15:18	5
Carbon tetrachloride	5.0	U	5.0	4.4	ug/L			11/02/17 15:18	5
Benzene	5.0	U	5.0	3.0	ug/L			11/02/17 15:18	5
1,2-Dichloroethane	5.0	U ^c	5.0	2.9	ug/L			11/02/17 15:18	5
Trichloroethene	**79**		5.0	3.4	ug/L			11/02/17 15:18	5
1,2-Dichloropropane	5.0	U	5.0	3.3	ug/L			11/02/17 15:18	5
Bromodichloromethane	5.0	U	5.0	3.2	ug/L			11/02/17 15:18	5
cis-1,3-Dichloropropene	5.0	U	5.0	3.0	ug/L			11/02/17 15:18	5
4-Methyl-2-pentanone (MIBK)	25	U	25	15	ug/L			11/02/17 15:18	5
Toluene	5.0	U	5.0	2.3	ug/L			11/02/17 15:18	5
trans-1,3-Dichloropropene	5.0	U	5.0	2.9	ug/L			11/02/17 15:18	5
1,1,2-Trichloroethane	5.0	U	5.0	2.3	ug/L			11/02/17 15:18	5
Tetrachloroethene	**39**		5.0	2.3	ug/L			11/02/17 15:18	5
2-Hexanone	25	U	25	16	ug/L			11/02/17 15:18	5
Dibromochloromethane	5.0	U	5.0	4.2	ug/L			11/02/17 15:18	5
1,2-Dibromoethane (EDB)	5.0	U	5.0	2.5	ug/L			11/02/17 15:18	5
Chlorobenzene	5.0	U	5.0	2.5	ug/L			11/02/17 15:18	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	2.9	ug/L			11/02/17 15:18	5
Ethylbenzene	5.0	U	5.0	2.5	ug/L			11/02/17 15:18	5
Xylenes, Total	10	U	10	4.5	ug/L			11/02/17 15:18	5
Styrene	5.0	U	5.0	2.4	ug/L			11/02/17 15:18	5
Bromoform	5.0	U	5.0	4.9	ug/L			11/02/17 15:18	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	3.0	ug/L			11/02/17 15:18	5
Acrylonitrile	100	U	100	39	ug/L			11/02/17 15:18	5
1,4-Dioxane	1000	U	1000	68	ug/L			11/02/17 15:18	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*73*	*^c*	*65 - 121*		*11/02/17 15:18*	*5*
Toluene-d8 (Surr)	*109*		*73 - 120*		*11/02/17 15:18*	*5*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/02/17 15:18*	*5*
Dibromofluoromethane (Surr)	*87*		*73 - 120*		*11/02/17 15:18*	*5*

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

Client Sample ID: HD-MW-91-0/1-0
Date Collected: 10/25/17 13:43
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U ^c	1.0	0.90	ug/L			11/02/17 14:17	1
Vinyl chloride	1.0	U ^c *	1.0	0.88	ug/L			11/02/17 14:17	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			11/02/17 14:17	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/02/17 14:17	1
1,1-Dichloroethene	1.0	U ^c *	1.0	0.55	ug/L			11/02/17 14:17	1
Acetone	5.0	U ^c	5.0	3.4	ug/L			11/02/17 14:17	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/02/17 14:17	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/02/17 14:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/02/17 14:17	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/02/17 14:17	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/02/17 14:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/02/17 14:17	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/02/17 14:17	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/02/17 14:17	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/02/17 14:17	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 14:17	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/02/17 14:17	1
Benzene	1.0	U	1.0	0.60	ug/L			11/02/17 14:17	1
1,2-Dichloroethane	1.0	U ^c	1.0	0.57	ug/L			11/02/17 14:17	1
Trichloroethene	**1.7**		1.0	0.69	ug/L			11/02/17 14:17	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/02/17 14:17	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/02/17 14:17	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/02/17 14:17	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/02/17 14:17	1
Toluene	1.0	U	1.0	0.46	ug/L			11/02/17 14:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/02/17 14:17	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/02/17 14:17	1
Tetrachloroethene	**110**	**E**	1.0	0.47	ug/L			11/02/17 14:17	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/02/17 14:17	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/02/17 14:17	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/02/17 14:17	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/02/17 14:17	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/02/17 14:17	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/02/17 14:17	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/02/17 14:17	1
Styrene	1.0	U	1.0	0.47	ug/L			11/02/17 14:17	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/02/17 14:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 14:17	1
Acrylonitrile	20	U	20	7.8	ug/L			11/02/17 14:17	1
1,4-Dioxane	200	U	200	14	ug/L			11/02/17 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*77*	*^c*	*65 - 121*		*11/02/17 14:17*	*1*
Toluene-d8 (Surr)	*109*		*73 - 120*		*11/02/17 14:17*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*11/02/17 14:17*	*1*
Dibromofluoromethane (Surr)	*87*		*73 - 120*		*11/02/17 14:17*	*1*

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

Client Sample ID: HD-MW-16D-0/1-0
Date Collected: 10/25/17 13:45
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U ^c	1.0	0.90	ug/L			11/02/17 07:57	1
Vinyl chloride	1.0	U F1 ^c *	1.0	0.88	ug/L			11/02/17 07:57	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			11/02/17 07:57	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/02/17 07:57	1
1,1-Dichloroethene	1.0	U ^c *	1.0	0.55	ug/L			11/02/17 07:57	1
Acetone	5.0	U ^c	5.0	3.4	ug/L			11/02/17 07:57	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/02/17 07:57	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/02/17 07:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/02/17 07:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/02/17 07:57	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/02/17 07:57	1
cis-1,2-Dichloroethene	**7.0**		1.0	0.71	ug/L			11/02/17 07:57	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/02/17 07:57	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/02/17 07:57	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/02/17 07:57	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 07:57	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/02/17 07:57	1
Benzene	1.0	U	1.0	0.60	ug/L			11/02/17 07:57	1
1,2-Dichloroethane	1.0	U ^c	1.0	0.57	ug/L			11/02/17 07:57	1
Trichloroethene	**8.7**	**F1**	1.0	0.69	ug/L			11/02/17 07:57	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/02/17 07:57	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/02/17 07:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/02/17 07:57	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/02/17 07:57	1
Toluene	1.0	U	1.0	0.46	ug/L			11/02/17 07:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/02/17 07:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/02/17 07:57	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/02/17 07:57	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/02/17 07:57	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/02/17 07:57	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/02/17 07:57	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/02/17 07:57	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/02/17 07:57	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/02/17 07:57	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/02/17 07:57	1
Styrene	1.0	U	1.0	0.47	ug/L			11/02/17 07:57	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/02/17 07:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 07:57	1
Acrylonitrile	20	U	20	7.8	ug/L			11/02/17 07:57	1
1,4-Dioxane	200	U	200	14	ug/L			11/02/17 07:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*	*^c*	*65 - 121*		*11/02/17 07:57*	*1*
Toluene-d8 (Surr)	*112*		*73 - 120*		*11/02/17 07:57*	*1*
4-Bromofluorobenzene (Surr)	*112*		*80 - 120*		*11/02/17 07:57*	*1*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*11/02/17 07:57*	*1*

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

Client Sample ID: HD-MW-2-0/1-0
Date Collected: 10/26/17 10:47
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U ^c	1.0	0.90	ug/L			11/02/17 04:32	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			11/02/17 04:32	1
Bromomethane	1.0	U	1.0	0.89	ug/L			11/02/17 04:32	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/02/17 04:32	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/02/17 04:32	1
Acetone	5.0	U ^c	5.0	3.4	ug/L			11/02/17 04:32	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/02/17 04:32	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/02/17 04:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/02/17 04:32	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/02/17 04:32	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/02/17 04:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/02/17 04:32	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/02/17 04:32	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/02/17 04:32	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/02/17 04:32	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 04:32	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/02/17 04:32	1
Benzene	1.0	U	1.0	0.60	ug/L			11/02/17 04:32	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			11/02/17 04:32	1
Trichloroethene	**1.5**		1.0	0.69	ug/L			11/02/17 04:32	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/02/17 04:32	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/02/17 04:32	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/02/17 04:32	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/02/17 04:32	1
Toluene	1.0	U	1.0	0.46	ug/L			11/02/17 04:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/02/17 04:32	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/02/17 04:32	1
Tetrachloroethene	**140**	**E**	1.0	0.47	ug/L			11/02/17 04:32	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/02/17 04:32	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/02/17 04:32	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/02/17 04:32	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/02/17 04:32	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/02/17 04:32	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/02/17 04:32	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/02/17 04:32	1
Styrene	1.0	U	1.0	0.47	ug/L			11/02/17 04:32	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/02/17 04:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 04:32	1
Acrylonitrile	20	U	20	7.8	ug/L			11/02/17 04:32	1
1,4-Dioxane	200	U	200	14	ug/L			11/02/17 04:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*65 - 121*		*11/02/17 04:32*	*1*
Toluene-d8 (Surr)	*90*		*73 - 120*		*11/02/17 04:32*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*11/02/17 04:32*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*11/02/17 04:32*	*1*

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

Client Sample ID: HD-MW-185-0/1-0
Date Collected: 10/26/17 08:46
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	2.0	U ^c	2.0	1.8	ug/L			11/06/17 05:25	2
Vinyl chloride	2.0	U	2.0	1.8	ug/L			11/06/17 05:25	2
Bromomethane	2.0	U ^c	2.0	1.8	ug/L			11/06/17 05:25	2
Chloroethane	2.0	U ^c	2.0	1.8	ug/L			11/06/17 05:25	2
1,1-Dichloroethene	2.0	U	2.0	1.1	ug/L			11/06/17 05:25	2
Acetone	10	U ^c	10	6.9	ug/L			11/06/17 05:25	2
Carbon disulfide	2.0	U	2.0	1.8	ug/L			11/06/17 05:25	2
Methylene Chloride	2.0	U	2.0	0.72	ug/L			11/06/17 05:25	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.3	ug/L			11/06/17 05:25	2
Methyl tert-butyl ether	2.0	U	2.0	1.2	ug/L			11/06/17 05:25	2
1,1-Dichloroethane	2.0	U	2.0	1.3	ug/L			11/06/17 05:25	2
cis-1,2-Dichloroethene	2.0	U	2.0	1.4	ug/L			11/06/17 05:25	2
Bromochloromethane	2.0	U	2.0	1.3	ug/L			11/06/17 05:25	2
2-Butanone (MEK)	10	U	10	5.2	ug/L			11/06/17 05:25	2
Chloroform	2.0	U	2.0	1.2	ug/L			11/06/17 05:25	2
1,1,1-Trichloroethane	2.0	U	2.0	1.2	ug/L			11/06/17 05:25	2
Carbon tetrachloride	2.0	U	2.0	1.8	ug/L			11/06/17 05:25	2
Benzene	2.0	U	2.0	1.2	ug/L			11/06/17 05:25	2
1,2-Dichloroethane	2.0	U	2.0	1.1	ug/L			11/06/17 05:25	2
Trichloroethene	**2.2**		2.0	1.4	ug/L			11/06/17 05:25	2
1,2-Dichloropropane	2.0	U	2.0	1.3	ug/L			11/06/17 05:25	2
Bromodichloromethane	2.0	U	2.0	1.3	ug/L			11/06/17 05:25	2
cis-1,3-Dichloropropene	2.0	U	2.0	1.2	ug/L			11/06/17 05:25	2
4-Methyl-2-pentanone (MIBK)	10	U	10	6.2	ug/L			11/06/17 05:25	2
Toluene	2.0	U	2.0	0.91	ug/L			11/06/17 05:25	2
trans-1,3-Dichloropropene	2.0	U	2.0	1.2	ug/L			11/06/17 05:25	2
1,1,2-Trichloroethane	2.0	U	2.0	0.91	ug/L			11/06/17 05:25	2
Tetrachloroethene	**42**		2.0	0.93	ug/L			11/06/17 05:25	2
2-Hexanone	10	U	10	6.6	ug/L			11/06/17 05:25	2
Dibromochloromethane	2.0	U	2.0	1.7	ug/L			11/06/17 05:25	2
1,2-Dibromoethane (EDB)	2.0	U	2.0	1.0	ug/L			11/06/17 05:25	2
Chlorobenzene	2.0	U	2.0	1.0	ug/L			11/06/17 05:25	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	1.1	ug/L			11/06/17 05:25	2
Ethylbenzene	2.0	U	2.0	1.0	ug/L			11/06/17 05:25	2
Xylenes, Total	4.0	U	4.0	1.8	ug/L			11/06/17 05:25	2
Styrene	2.0	U	2.0	0.94	ug/L			11/06/17 05:25	2
Bromoform	2.0	U	2.0	2.0	ug/L			11/06/17 05:25	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	1.2	ug/L			11/06/17 05:25	2
Acrylonitrile	40	U	40	16	ug/L			11/06/17 05:25	2
1,4-Dioxane	400	U	400	27	ug/L			11/06/17 05:25	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*65 - 121*		*11/06/17 05:25*	*2*
Toluene-d8 (Surr)	*88*		*73 - 120*		*11/06/17 05:25*	*2*
4-Bromofluorobenzene (Surr)	*81*		*80 - 120*		*11/06/17 05:25*	*2*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*11/06/17 05:25*	*2*

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

Client Sample ID: HD-MW-82-0/1-0
Date Collected: 10/26/17 12:15
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U ^c	1.0	0.90	ug/L			11/02/17 01:39	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			11/02/17 01:39	1
Bromomethane	1.0	U	1.0	0.89	ug/L			11/02/17 01:39	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/02/17 01:39	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/02/17 01:39	1
Acetone	5.0	U ^c	5.0	3.4	ug/L			11/02/17 01:39	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/02/17 01:39	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/02/17 01:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/02/17 01:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/02/17 01:39	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/02/17 01:39	1
cis-1,2-Dichloroethene	**15**		1.0	0.71	ug/L			11/02/17 01:39	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/02/17 01:39	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/02/17 01:39	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/02/17 01:39	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 01:39	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/02/17 01:39	1
Benzene	1.0	U	1.0	0.60	ug/L			11/02/17 01:39	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			11/02/17 01:39	1
Trichloroethene	**5.4**		1.0	0.69	ug/L			11/02/17 01:39	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/02/17 01:39	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/02/17 01:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/02/17 01:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/02/17 01:39	1
Toluene	1.0	U	1.0	0.46	ug/L			11/02/17 01:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/02/17 01:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/02/17 01:39	1
Tetrachloroethene	**1.3**		1.0	0.47	ug/L			11/02/17 01:39	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/02/17 01:39	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/02/17 01:39	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/02/17 01:39	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/02/17 01:39	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/02/17 01:39	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/02/17 01:39	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/02/17 01:39	1
Styrene	1.0	U	1.0	0.47	ug/L			11/02/17 01:39	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/02/17 01:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 01:39	1
Acrylonitrile	20	U	20	7.8	ug/L			11/02/17 01:39	1
1,4-Dioxane	200	U	200	14	ug/L			11/02/17 01:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*65 - 121*		*11/02/17 01:39*	*1*
Toluene-d8 (Surr)	*93*		*73 - 120*		*11/02/17 01:39*	*1*
4-Bromofluorobenzene (Surr)	*84*		*80 - 120*		*11/02/17 01:39*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*11/02/17 01:39*	*1*

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

Client Sample ID: HD-MW-15-0/1-0
Date Collected: 10/26/17 08:24
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-17
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	2.0	U ^c	2.0	1.8	ug/L			11/02/17 06:07	2
Vinyl chloride	2.0	U	2.0	1.8	ug/L			11/02/17 06:07	2
Bromomethane	2.0	U	2.0	1.8	ug/L			11/02/17 06:07	2
Chloroethane	2.0	U	2.0	1.8	ug/L			11/02/17 06:07	2
1,1-Dichloroethene	2.0	U	2.0	1.1	ug/L			11/02/17 06:07	2
Acetone	10	U ^c	10	6.9	ug/L			11/02/17 06:07	2
Carbon disulfide	2.0	U	2.0	1.8	ug/L			11/02/17 06:07	2
Methylene Chloride	2.0	U	2.0	0.72	ug/L			11/02/17 06:07	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.3	ug/L			11/02/17 06:07	2
Methyl tert-butyl ether	2.0	U	2.0	1.2	ug/L			11/02/17 06:07	2
1,1-Dichloroethane	2.0	U	2.0	1.3	ug/L			11/02/17 06:07	2
cis-1,2-Dichloroethene	2.0	U	2.0	1.4	ug/L			11/02/17 06:07	2
Bromochloromethane	2.0	U	2.0	1.3	ug/L			11/02/17 06:07	2
2-Butanone (MEK)	10	U	10	5.2	ug/L			11/02/17 06:07	2
Chloroform	2.0	U	2.0	1.2	ug/L			11/02/17 06:07	2
1,1,1-Trichloroethane	2.0	U	2.0	1.2	ug/L			11/02/17 06:07	2
Carbon tetrachloride	2.0	U	2.0	1.8	ug/L			11/02/17 06:07	2
Benzene	2.0	U	2.0	1.2	ug/L			11/02/17 06:07	2
1,2-Dichloroethane	2.0	U	2.0	1.1	ug/L			11/02/17 06:07	2
Trichloroethene	**1.8**	**J**	2.0	1.4	ug/L			11/02/17 06:07	2
1,2-Dichloropropane	2.0	U	2.0	1.3	ug/L			11/02/17 06:07	2
Bromodichloromethane	2.0	U	2.0	1.3	ug/L			11/02/17 06:07	2
cis-1,3-Dichloropropene	2.0	U	2.0	1.2	ug/L			11/02/17 06:07	2
4-Methyl-2-pentanone (MIBK)	10	U	10	6.2	ug/L			11/02/17 06:07	2
Toluene	2.0	U	2.0	0.91	ug/L			11/02/17 06:07	2
trans-1,3-Dichloropropene	2.0	U	2.0	1.2	ug/L			11/02/17 06:07	2
1,1,2-Trichloroethane	2.0	U	2.0	0.91	ug/L			11/02/17 06:07	2
Tetrachloroethene	**140**	**E**	2.0	0.93	ug/L			11/02/17 06:07	2
2-Hexanone	10	U	10	6.6	ug/L			11/02/17 06:07	2
Dibromochloromethane	2.0	U	2.0	1.7	ug/L			11/02/17 06:07	2
1,2-Dibromoethane (EDB)	2.0	U	2.0	1.0	ug/L			11/02/17 06:07	2
Chlorobenzene	2.0	U	2.0	1.0	ug/L			11/02/17 06:07	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	1.1	ug/L			11/02/17 06:07	2
Ethylbenzene	2.0	U	2.0	1.0	ug/L			11/02/17 06:07	2
Xylenes, Total	4.0	U	4.0	1.8	ug/L			11/02/17 06:07	2
Styrene	2.0	U	2.0	0.94	ug/L			11/02/17 06:07	2
Bromoform	2.0	U	2.0	2.0	ug/L			11/02/17 06:07	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	1.2	ug/L			11/02/17 06:07	2
Acrylonitrile	40	U	40	16	ug/L			11/02/17 06:07	2
1,4-Dioxane	400	U	400	27	ug/L			11/02/17 06:07	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*65 - 121*		*11/02/17 06:07*	*2*
Toluene-d8 (Surr)	*89*		*73 - 120*		*11/02/17 06:07*	*2*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*11/02/17 06:07*	*2*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*11/02/17 06:07*	*2*

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

Client Sample ID: HD-MW-16S-0/1-0
Date Collected: 10/25/17 12:45
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-18
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	2.0	U	2.0	1.8	ug/L			11/03/17 08:47	2
Vinyl chloride	2.0	U	2.0	1.8	ug/L			11/03/17 08:47	2
Bromomethane	2.0	U ^c	2.0	1.8	ug/L			11/03/17 08:47	2
Chloroethane	2.0	U	2.0	1.8	ug/L			11/03/17 08:47	2
1,1-Dichloroethene	2.0	U	2.0	1.1	ug/L			11/03/17 08:47	2
Acetone	10	U ^c *	10	6.9	ug/L			11/03/17 08:47	2
Carbon disulfide	2.0	U	2.0	1.8	ug/L			11/03/17 08:47	2
Methylene Chloride	2.0	U	2.0	0.72	ug/L			11/03/17 08:47	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.3	ug/L			11/03/17 08:47	2
Methyl tert-butyl ether	2.0	U	2.0	1.2	ug/L			11/03/17 08:47	2
1,1-Dichloroethane	2.0	U	2.0	1.3	ug/L			11/03/17 08:47	2
cis-1,2-Dichloroethene	**12**		2.0	1.4	ug/L			11/03/17 08:47	2
Bromochloromethane	2.0	U	2.0	1.3	ug/L			11/03/17 08:47	2
2-Butanone (MEK)	10	U ^c	10	5.2	ug/L			11/03/17 08:47	2
Chloroform	2.0	U	2.0	1.2	ug/L			11/03/17 08:47	2
1,1,1-Trichloroethane	2.0	U	2.0	1.2	ug/L			11/03/17 08:47	2
Carbon tetrachloride	2.0	U	2.0	1.8	ug/L			11/03/17 08:47	2
Benzene	2.0	U	2.0	1.2	ug/L			11/03/17 08:47	2
1,2-Dichloroethane	2.0	U	2.0	1.1	ug/L			11/03/17 08:47	2
Trichloroethene	**7.7**	**^c**	2.0	1.4	ug/L			11/03/17 08:47	2
1,2-Dichloropropane	2.0	U	2.0	1.3	ug/L			11/03/17 08:47	2
Bromodichloromethane	2.0	U	2.0	1.3	ug/L			11/03/17 08:47	2
cis-1,3-Dichloropropene	2.0	U	2.0	1.2	ug/L			11/03/17 08:47	2
4-Methyl-2-pentanone (MIBK)	10	U	10	6.2	ug/L			11/03/17 08:47	2
Toluene	2.0	U	2.0	0.91	ug/L			11/03/17 08:47	2
trans-1,3-Dichloropropene	2.0	U	2.0	1.2	ug/L			11/03/17 08:47	2
1,1,2-Trichloroethane	2.0	U	2.0	0.91	ug/L			11/03/17 08:47	2
Tetrachloroethene	**1.7**	**J**	2.0	0.93	ug/L			11/03/17 08:47	2
2-Hexanone	10	U	10	6.6	ug/L			11/03/17 08:47	2
Dibromochloromethane	2.0	U	2.0	1.7	ug/L			11/03/17 08:47	2
1,2-Dibromoethane (EDB)	2.0	U	2.0	1.0	ug/L			11/03/17 08:47	2
Chlorobenzene	2.0	U	2.0	1.0	ug/L			11/03/17 08:47	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	1.1	ug/L			11/03/17 08:47	2
Ethylbenzene	2.0	U	2.0	1.0	ug/L			11/03/17 08:47	2
Xylenes, Total	4.0	U	4.0	1.8	ug/L			11/03/17 08:47	2
Styrene	2.0	U	2.0	0.94	ug/L			11/03/17 08:47	2
Bromoform	2.0	U	2.0	2.0	ug/L			11/03/17 08:47	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	1.2	ug/L			11/03/17 08:47	2
Acrylonitrile	40	U	40	16	ug/L			11/03/17 08:47	2
1,4-Dioxane	400	U	400	27	ug/L			11/03/17 08:47	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*65 - 121*		*11/03/17 08:47*	*2*
Toluene-d8 (Surr)	*90*		*73 - 120*		*11/03/17 08:47*	*2*
4-Bromofluorobenzene (Surr)	*80*		*80 - 120*		*11/03/17 08:47*	*2*
Dibromofluoromethane (Surr)	*113*		*73 - 120*		*11/03/17 08:47*	*2*

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

Client Sample ID: HD-MW-12-0/1-0
Date Collected: 10/25/17 08:20
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-19
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	2.0	U ^c	2.0	1.8	ug/L			11/02/17 06:55	2
Vinyl chloride	2.0	U	2.0	1.8	ug/L			11/02/17 06:55	2
Bromomethane	2.0	U	2.0	1.8	ug/L			11/02/17 06:55	2
Chloroethane	2.0	U	2.0	1.8	ug/L			11/02/17 06:55	2
1,1-Dichloroethene	2.0	U	2.0	1.1	ug/L			11/02/17 06:55	2
Acetone	10	U ^c	10	6.9	ug/L			11/02/17 06:55	2
Carbon disulfide	2.0	U	2.0	1.8	ug/L			11/02/17 06:55	2
Methylene Chloride	2.0	U	2.0	0.72	ug/L			11/02/17 06:55	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.3	ug/L			11/02/17 06:55	2
Methyl tert-butyl ether	2.0	U	2.0	1.2	ug/L			11/02/17 06:55	2
1,1-Dichloroethane	2.0	U	2.0	1.3	ug/L			11/02/17 06:55	2
cis-1,2-Dichloroethene	**46**		2.0	1.4	ug/L			11/02/17 06:55	2
Bromochloromethane	2.0	U	2.0	1.3	ug/L			11/02/17 06:55	2
2-Butanone (MEK)	10	U	10	5.2	ug/L			11/02/17 06:55	2
Chloroform	2.0	U	2.0	1.2	ug/L			11/02/17 06:55	2
1,1,1-Trichloroethane	2.0	U	2.0	1.2	ug/L			11/02/17 06:55	2
Carbon tetrachloride	2.0	U	2.0	1.8	ug/L			11/02/17 06:55	2
Benzene	2.0	U	2.0	1.2	ug/L			11/02/17 06:55	2
1,2-Dichloroethane	2.0	U	2.0	1.1	ug/L			11/02/17 06:55	2
Trichloroethene	**61**		2.0	1.4	ug/L			11/02/17 06:55	2
1,2-Dichloropropane	2.0	U	2.0	1.3	ug/L			11/02/17 06:55	2
Bromodichloromethane	2.0	U	2.0	1.3	ug/L			11/02/17 06:55	2
cis-1,3-Dichloropropene	2.0	U	2.0	1.2	ug/L			11/02/17 06:55	2
4-Methyl-2-pentanone (MIBK)	10	U	10	6.2	ug/L			11/02/17 06:55	2
Toluene	2.0	U	2.0	0.91	ug/L			11/02/17 06:55	2
trans-1,3-Dichloropropene	2.0	U	2.0	1.2	ug/L			11/02/17 06:55	2
1,1,2-Trichloroethane	2.0	U	2.0	0.91	ug/L			11/02/17 06:55	2
Tetrachloroethene	**2.7**		2.0	0.93	ug/L			11/02/17 06:55	2
2-Hexanone	10	U	10	6.6	ug/L			11/02/17 06:55	2
Dibromochloromethane	2.0	U	2.0	1.7	ug/L			11/02/17 06:55	2
1,2-Dibromoethane (EDB)	2.0	U	2.0	1.0	ug/L			11/02/17 06:55	2
Chlorobenzene	2.0	U	2.0	1.0	ug/L			11/02/17 06:55	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	1.1	ug/L			11/02/17 06:55	2
Ethylbenzene	2.0	U	2.0	1.0	ug/L			11/02/17 06:55	2
Xylenes, Total	4.0	U	4.0	1.8	ug/L			11/02/17 06:55	2
Styrene	2.0	U	2.0	0.94	ug/L			11/02/17 06:55	2
Bromoform	2.0	U	2.0	2.0	ug/L			11/02/17 06:55	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	1.2	ug/L			11/02/17 06:55	2
Acrylonitrile	40	U	40	16	ug/L			11/02/17 06:55	2
1,4-Dioxane	400	U	400	27	ug/L			11/02/17 06:55	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*65 - 121*		*11/02/17 06:55*	*2*
Toluene-d8 (Surr)	*95*		*73 - 120*		*11/02/17 06:55*	*2*
4-Bromofluorobenzene (Surr)	*87*		*80 - 120*		*11/02/17 06:55*	*2*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*11/02/17 06:55*	*2*

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

Client Sample ID: HD-TATE (S-6)-0/1-0
Date Collected: 10/26/17 09:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-20
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U ^c	1.0	0.90	ug/L			11/02/17 05:44	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			11/02/17 05:44	1
Bromomethane	1.0	U	1.0	0.89	ug/L			11/02/17 05:44	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/02/17 05:44	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/02/17 05:44	1
Acetone	5.0	U ^c	5.0	3.4	ug/L			11/02/17 05:44	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/02/17 05:44	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/02/17 05:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/02/17 05:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/02/17 05:44	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/02/17 05:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/02/17 05:44	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/02/17 05:44	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/02/17 05:44	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/02/17 05:44	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 05:44	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/02/17 05:44	1
Benzene	1.0	U	1.0	0.60	ug/L			11/02/17 05:44	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			11/02/17 05:44	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			11/02/17 05:44	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/02/17 05:44	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/02/17 05:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/02/17 05:44	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/02/17 05:44	1
Toluene	1.0	U	1.0	0.46	ug/L			11/02/17 05:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/02/17 05:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/02/17 05:44	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/02/17 05:44	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/02/17 05:44	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/02/17 05:44	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/02/17 05:44	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/02/17 05:44	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/02/17 05:44	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/02/17 05:44	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/02/17 05:44	1
Styrene	1.0	U	1.0	0.47	ug/L			11/02/17 05:44	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/02/17 05:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 05:44	1
Acrylonitrile	20	U	20	7.8	ug/L			11/02/17 05:44	1
1,4-Dioxane	200	U	200	14	ug/L			11/02/17 05:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*65 - 121*		*11/02/17 05:44*	*1*
Toluene-d8 (Surr)	*90*		*73 - 120*		*11/02/17 05:44*	*1*
4-Bromofluorobenzene (Surr)	*85*		*80 - 120*		*11/02/17 05:44*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*11/02/17 05:44*	*1*

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

Client Sample ID: HD-MW-136A-356/356.5-0
Date Collected: 10/25/17 11:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	500	U ^c	500	450	ug/L			11/02/17 09:17	500
Vinyl chloride	500	U ^c *	500	440	ug/L			11/02/17 09:17	500
Bromomethane	500	U ^c	500	440	ug/L			11/02/17 09:17	500
Chloroethane	500	U	500	450	ug/L			11/02/17 09:17	500
1,1-Dichloroethene	500	U ^c *	500	280	ug/L			11/02/17 09:17	500
Acetone	2500	U ^c	2500	1700	ug/L			11/02/17 09:17	500
Carbon disulfide	500	U	500	440	ug/L			11/02/17 09:17	500
Methylene Chloride	500	U	500	180	ug/L			11/02/17 09:17	500
trans-1,2-Dichloroethene	500	U	500	340	ug/L			11/02/17 09:17	500
Methyl tert-butyl ether	500	U	500	300	ug/L			11/02/17 09:17	500
1,1-Dichloroethane	500	U	500	310	ug/L			11/02/17 09:17	500
cis-1,2-Dichloroethene	**1500**		500	350	ug/L			11/02/17 09:17	500
Bromochloromethane	500	U	500	310	ug/L			11/02/17 09:17	500
2-Butanone (MEK)	2500	U	2500	1300	ug/L			11/02/17 09:17	500
Chloroform	500	U	500	300	ug/L			11/02/17 09:17	500
1,1,1-Trichloroethane	500	U	500	300	ug/L			11/02/17 09:17	500
Carbon tetrachloride	500	U	500	440	ug/L			11/02/17 09:17	500
Benzene	500	U	500	300	ug/L			11/02/17 09:17	500
1,2-Dichloroethane	500	U ^c	500	290	ug/L			11/02/17 09:17	500
Trichloroethene	**5600**		500	340	ug/L			11/02/17 09:17	500
1,2-Dichloropropane	500	U	500	330	ug/L			11/02/17 09:17	500
Bromodichloromethane	500	U	500	320	ug/L			11/02/17 09:17	500
cis-1,3-Dichloropropene	500	U	500	300	ug/L			11/02/17 09:17	500
4-Methyl-2-pentanone (MIBK)	2500	U	2500	1500	ug/L			11/02/17 09:17	500
Toluene	500	U	500	230	ug/L			11/02/17 09:17	500
trans-1,3-Dichloropropene	500	U	500	290	ug/L			11/02/17 09:17	500
1,1,2-Trichloroethane	500	U	500	230	ug/L			11/02/17 09:17	500
Tetrachloroethene	**1600**		500	230	ug/L			11/02/17 09:17	500
2-Hexanone	2500	U	2500	1600	ug/L			11/02/17 09:17	500
Dibromochloromethane	500	U	500	420	ug/L			11/02/17 09:17	500
1,2-Dibromoethane (EDB)	500	U	500	250	ug/L			11/02/17 09:17	500
Chlorobenzene	500	U	500	250	ug/L			11/02/17 09:17	500
1,1,1,2-Tetrachloroethane	500	U	500	290	ug/L			11/02/17 09:17	500
Ethylbenzene	500	U	500	250	ug/L			11/02/17 09:17	500
Xylenes, Total	1000	U	1000	450	ug/L			11/02/17 09:17	500
Styrene	500	U	500	240	ug/L			11/02/17 09:17	500
Bromoform	500	U	500	490	ug/L			11/02/17 09:17	500
1,1,2,2-Tetrachloroethane	500	U	500	300	ug/L			11/02/17 09:17	500
Acrylonitrile	10000	U	10000	3900	ug/L			11/02/17 09:17	500
1,4-Dioxane	100000	U	100000	6800	ug/L			11/02/17 09:17	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*	*^c*	*65 - 121*		*11/02/17 09:17*	*500*
Toluene-d8 (Surr)	*108*		*73 - 120*		*11/02/17 09:17*	*500*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*11/02/17 09:17*	*500*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*11/02/17 09:17*	*500*

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

Client Sample ID: HD-MW-136A-372.5/373-0
Date Collected: 10/25/17 12:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	500	U ^c	500	450	ug/L			11/02/17 13:49	500
Vinyl chloride	500	U ^c *	500	440	ug/L			11/02/17 13:49	500
Bromomethane	500	U ^c	500	440	ug/L			11/02/17 13:49	500
Chloroethane	500	U	500	450	ug/L			11/02/17 13:49	500
1,1-Dichloroethene	500	U ^c *	500	280	ug/L			11/02/17 13:49	500
Acetone	2500	U ^c	2500	1700	ug/L			11/02/17 13:49	500
Carbon disulfide	500	U	500	440	ug/L			11/02/17 13:49	500
Methylene Chloride	500	U	500	180	ug/L			11/02/17 13:49	500
trans-1,2-Dichloroethene	500	U	500	340	ug/L			11/02/17 13:49	500
Methyl tert-butyl ether	500	U	500	300	ug/L			11/02/17 13:49	500
1,1-Dichloroethane	500	U	500	310	ug/L			11/02/17 13:49	500
cis-1,2-Dichloroethene	**6900**		500	350	ug/L			11/02/17 13:49	500
Bromochloromethane	500	U	500	310	ug/L			11/02/17 13:49	500
2-Butanone (MEK)	2500	U	2500	1300	ug/L			11/02/17 13:49	500
Chloroform	500	U	500	300	ug/L			11/02/17 13:49	500
1,1,1-Trichloroethane	500	U	500	300	ug/L			11/02/17 13:49	500
Carbon tetrachloride	500	U	500	440	ug/L			11/02/17 13:49	500
Benzene	500	U	500	300	ug/L			11/02/17 13:49	500
1,2-Dichloroethane	500	U ^c	500	290	ug/L			11/02/17 13:49	500
Trichloroethene	**7200**		500	340	ug/L			11/02/17 13:49	500
1,2-Dichloropropane	500	U	500	330	ug/L			11/02/17 13:49	500
Bromodichloromethane	500	U	500	320	ug/L			11/02/17 13:49	500
cis-1,3-Dichloropropene	500	U	500	300	ug/L			11/02/17 13:49	500
4-Methyl-2-pentanone (MIBK)	2500	U	2500	1500	ug/L			11/02/17 13:49	500
Toluene	500	U	500	230	ug/L			11/02/17 13:49	500
trans-1,3-Dichloropropene	500	U	500	290	ug/L			11/02/17 13:49	500
1,1,2-Trichloroethane	500	U	500	230	ug/L			11/02/17 13:49	500
Tetrachloroethene	**2400**		500	230	ug/L			11/02/17 13:49	500
2-Hexanone	2500	U	2500	1600	ug/L			11/02/17 13:49	500
Dibromochloromethane	500	U	500	420	ug/L			11/02/17 13:49	500
1,2-Dibromoethane (EDB)	500	U	500	250	ug/L			11/02/17 13:49	500
Chlorobenzene	500	U	500	250	ug/L			11/02/17 13:49	500
1,1,1,2-Tetrachloroethane	500	U	500	290	ug/L			11/02/17 13:49	500
Ethylbenzene	500	U	500	250	ug/L			11/02/17 13:49	500
Xylenes, Total	1000	U	1000	450	ug/L			11/02/17 13:49	500
Styrene	500	U	500	240	ug/L			11/02/17 13:49	500
Bromoform	500	U	500	490	ug/L			11/02/17 13:49	500
1,1,2,2-Tetrachloroethane	500	U	500	300	ug/L			11/02/17 13:49	500
Acrylonitrile	10000	U	10000	3900	ug/L			11/02/17 13:49	500
1,4-Dioxane	100000	U	100000	6800	ug/L			11/02/17 13:49	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*	*^c*	*65 - 121*		*11/02/17 13:49*	*500*
Toluene-d8 (Surr)	*107*		*73 - 120*		*11/02/17 13:49*	*500*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*11/02/17 13:49*	*500*
Dibromofluoromethane (Surr)	*94*		*73 - 120*		*11/02/17 13:49*	*500*

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

Client Sample ID: HD-MW-136A-434/434.5-0
Date Collected: 10/25/17 13:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1000	U ^c	1000	900	ug/L			11/02/17 11:26	1000
Vinyl chloride	1000	U ^c *	1000	880	ug/L			11/02/17 11:26	1000
Bromomethane	1000	U ^c	1000	890	ug/L			11/02/17 11:26	1000
Chloroethane	1000	U	1000	900	ug/L			11/02/17 11:26	1000
1,1-Dichloroethene	1000	U ^c *	1000	550	ug/L			11/02/17 11:26	1000
Acetone	5000	U ^c	5000	3400	ug/L			11/02/17 11:26	1000
Carbon disulfide	1000	U	1000	880	ug/L			11/02/17 11:26	1000
Methylene Chloride	1000	U	1000	360	ug/L			11/02/17 11:26	1000
trans-1,2-Dichloroethene	1000	U	1000	670	ug/L			11/02/17 11:26	1000
Methyl tert-butyl ether	1000	U	1000	590	ug/L			11/02/17 11:26	1000
1,1-Dichloroethane	1000	U	1000	630	ug/L			11/02/17 11:26	1000
cis-1,2-Dichloroethene	**36000**		1000	710	ug/L			11/02/17 11:26	1000
Bromochloromethane	1000	U	1000	630	ug/L			11/02/17 11:26	1000
2-Butanone (MEK)	5000	U	5000	2600	ug/L			11/02/17 11:26	1000
Chloroform	1000	U	1000	600	ug/L			11/02/17 11:26	1000
1,1,1-Trichloroethane	1000	U	1000	600	ug/L			11/02/17 11:26	1000
Carbon tetrachloride	1000	U	1000	880	ug/L			11/02/17 11:26	1000
Benzene	1000	U	1000	600	ug/L			11/02/17 11:26	1000
1,2-Dichloroethane	1000	U ^c	1000	570	ug/L			11/02/17 11:26	1000
Trichloroethene	**10000**		1000	690	ug/L			11/02/17 11:26	1000
1,2-Dichloropropane	1000	U	1000	660	ug/L			11/02/17 11:26	1000
Bromodichloromethane	1000	U	1000	640	ug/L			11/02/17 11:26	1000
cis-1,3-Dichloropropene	1000	U	1000	590	ug/L			11/02/17 11:26	1000
4-Methyl-2-pentanone (MIBK)	5000	U	5000	3100	ug/L			11/02/17 11:26	1000
Toluene	1000	U	1000	460	ug/L			11/02/17 11:26	1000
trans-1,3-Dichloropropene	1000	U	1000	580	ug/L			11/02/17 11:26	1000
1,1,2-Trichloroethane	1000	U	1000	450	ug/L			11/02/17 11:26	1000
Tetrachloroethene	**3900**		1000	470	ug/L			11/02/17 11:26	1000
2-Hexanone	5000	U	5000	3300	ug/L			11/02/17 11:26	1000
Dibromochloromethane	1000	U	1000	840	ug/L			11/02/17 11:26	1000
1,2-Dibromoethane (EDB)	1000	U	1000	500	ug/L			11/02/17 11:26	1000
Chlorobenzene	1000	U	1000	500	ug/L			11/02/17 11:26	1000
1,1,1,2-Tetrachloroethane	1000	U	1000	570	ug/L			11/02/17 11:26	1000
Ethylbenzene	1000	U	1000	510	ug/L			11/02/17 11:26	1000
Xylenes, Total	2000	U	2000	890	ug/L			11/02/17 11:26	1000
Styrene	1000	U	1000	470	ug/L			11/02/17 11:26	1000
Bromoform	1000	U	1000	980	ug/L			11/02/17 11:26	1000
1,1,2,2-Tetrachloroethane	1000	U	1000	600	ug/L			11/02/17 11:26	1000
Acrylonitrile	20000	U	20000	7800	ug/L			11/02/17 11:26	1000
1,4-Dioxane	200000	U	200000	14000	ug/L			11/02/17 11:26	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*	*^c*	*65 - 121*		*11/02/17 11:26*	*1000*
Toluene-d8 (Surr)	*109*		*73 - 120*		*11/02/17 11:26*	*1000*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*11/02/17 11:26*	*1000*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*11/02/17 11:26*	*1000*

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

Client Sample ID: HD-MW-136A-270/348-0
Date Collected: 10/26/17 10:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	50	U ^c	50	45	ug/L			11/02/17 12:52	50
Vinyl chloride	50	U ^c *	50	44	ug/L			11/02/17 12:52	50
Bromomethane	50	U ^c	50	44	ug/L			11/02/17 12:52	50
Chloroethane	50	U	50	45	ug/L			11/02/17 12:52	50
1,1-Dichloroethene	50	U ^c *	50	28	ug/L			11/02/17 12:52	50
Acetone	250	U ^c	250	170	ug/L			11/02/17 12:52	50
Carbon disulfide	50	U	50	44	ug/L			11/02/17 12:52	50
Methylene Chloride	50	U	50	18	ug/L			11/02/17 12:52	50
trans-1,2-Dichloroethene	50	U	50	34	ug/L			11/02/17 12:52	50
Methyl tert-butyl ether	50	U	50	30	ug/L			11/02/17 12:52	50
1,1-Dichloroethane	50	U	50	31	ug/L			11/02/17 12:52	50
cis-1,2-Dichloroethene	**600**		50	35	ug/L			11/02/17 12:52	50
Bromochloromethane	50	U	50	31	ug/L			11/02/17 12:52	50
2-Butanone (MEK)	250	U	250	130	ug/L			11/02/17 12:52	50
Chloroform	50	U	50	30	ug/L			11/02/17 12:52	50
1,1,1-Trichloroethane	50	U	50	30	ug/L			11/02/17 12:52	50
Carbon tetrachloride	50	U	50	44	ug/L			11/02/17 12:52	50
Benzene	50	U	50	30	ug/L			11/02/17 12:52	50
1,2-Dichloroethane	50	U ^c	50	29	ug/L			11/02/17 12:52	50
Trichloroethene	**93**		50	34	ug/L			11/02/17 12:52	50
1,2-Dichloropropane	50	U	50	33	ug/L			11/02/17 12:52	50
Bromodichloromethane	50	U	50	32	ug/L			11/02/17 12:52	50
cis-1,3-Dichloropropene	50	U	50	30	ug/L			11/02/17 12:52	50
4-Methyl-2-pentanone (MIBK)	250	U	250	150	ug/L			11/02/17 12:52	50
Toluene	50	U	50	23	ug/L			11/02/17 12:52	50
trans-1,3-Dichloropropene	50	U	50	29	ug/L			11/02/17 12:52	50
1,1,2-Trichloroethane	50	U	50	23	ug/L			11/02/17 12:52	50
Tetrachloroethene	50	U	50	23	ug/L			11/02/17 12:52	50
2-Hexanone	250	U	250	160	ug/L			11/02/17 12:52	50
Dibromochloromethane	50	U	50	42	ug/L			11/02/17 12:52	50
1,2-Dibromoethane (EDB)	50	U	50	25	ug/L			11/02/17 12:52	50
Chlorobenzene	50	U	50	25	ug/L			11/02/17 12:52	50
1,1,1,2-Tetrachloroethane	50	U	50	29	ug/L			11/02/17 12:52	50
Ethylbenzene	50	U	50	25	ug/L			11/02/17 12:52	50
Xylenes, Total	100	U	100	45	ug/L			11/02/17 12:52	50
Styrene	50	U	50	24	ug/L			11/02/17 12:52	50
Bromoform	50	U	50	49	ug/L			11/02/17 12:52	50
1,1,2,2-Tetrachloroethane	50	U	50	30	ug/L			11/02/17 12:52	50
Acrylonitrile	1000	U	1000	390	ug/L			11/02/17 12:52	50
1,4-Dioxane	**790**	**J**	10000	680	ug/L			11/02/17 12:52	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*	*^c*	*65 - 121*		*11/02/17 12:52*	*50*
Toluene-d8 (Surr)	*110*		*73 - 120*		*11/02/17 12:52*	*50*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*11/02/17 12:52*	*50*
Dibromofluoromethane (Surr)	*93*		*73 - 120*		*11/02/17 12:52*	*50*

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

Client Sample ID: HD-MW-91-0/1-0
Date Collected: 10/25/17 13:43
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	10	U ^c	10	9.0	ug/L			11/02/17 09:46	10
Vinyl chloride	10	U ^c *	10	8.8	ug/L			11/02/17 09:46	10
Bromomethane	10	U ^c	10	8.9	ug/L			11/02/17 09:46	10
Chloroethane	10	U	10	9.0	ug/L			11/02/17 09:46	10
1,1-Dichloroethene	10	U ^c *	10	5.5	ug/L			11/02/17 09:46	10
Acetone	50	U ^c	50	34	ug/L			11/02/17 09:46	10
Carbon disulfide	10	U	10	8.8	ug/L			11/02/17 09:46	10
Methylene Chloride	**4.3**	**J**	10	3.6	ug/L			11/02/17 09:46	10
trans-1,2-Dichloroethene	10	U	10	6.7	ug/L			11/02/17 09:46	10
Methyl tert-butyl ether	10	U	10	5.9	ug/L			11/02/17 09:46	10
1,1-Dichloroethane	10	U	10	6.3	ug/L			11/02/17 09:46	10
cis-1,2-Dichloroethene	10	U	10	7.1	ug/L			11/02/17 09:46	10
Bromochloromethane	10	U	10	6.3	ug/L			11/02/17 09:46	10
2-Butanone (MEK)	50	U	50	26	ug/L			11/02/17 09:46	10
Chloroform	10	U	10	6.0	ug/L			11/02/17 09:46	10
1,1,1-Trichloroethane	10	U	10	6.0	ug/L			11/02/17 09:46	10
Carbon tetrachloride	10	U	10	8.8	ug/L			11/02/17 09:46	10
Benzene	10	U	10	6.0	ug/L			11/02/17 09:46	10
1,2-Dichloroethane	10	U ^c	10	5.7	ug/L			11/02/17 09:46	10
Trichloroethene	10	U	10	6.9	ug/L			11/02/17 09:46	10
1,2-Dichloropropane	10	U	10	6.6	ug/L			11/02/17 09:46	10
Bromodichloromethane	10	U	10	6.4	ug/L			11/02/17 09:46	10
cis-1,3-Dichloropropene	10	U	10	5.9	ug/L			11/02/17 09:46	10
4-Methyl-2-pentanone (MIBK)	50	U	50	31	ug/L			11/02/17 09:46	10
Toluene	10	U	10	4.6	ug/L			11/02/17 09:46	10
trans-1,3-Dichloropropene	10	U	10	5.8	ug/L			11/02/17 09:46	10
1,1,2-Trichloroethane	10	U	10	4.5	ug/L			11/02/17 09:46	10
Tetrachloroethene	**150**		10	4.7	ug/L			11/02/17 09:46	10
2-Hexanone	50	U	50	33	ug/L			11/02/17 09:46	10
Dibromochloromethane	10	U	10	8.4	ug/L			11/02/17 09:46	10
1,2-Dibromoethane (EDB)	10	U	10	5.0	ug/L			11/02/17 09:46	10
Chlorobenzene	10	U	10	5.0	ug/L			11/02/17 09:46	10
1,1,1,2-Tetrachloroethane	10	U	10	5.7	ug/L			11/02/17 09:46	10
Ethylbenzene	10	U	10	5.1	ug/L			11/02/17 09:46	10
Xylenes, Total	20	U	20	8.9	ug/L			11/02/17 09:46	10
Styrene	10	U	10	4.7	ug/L			11/02/17 09:46	10
Bromoform	10	U	10	9.8	ug/L			11/02/17 09:46	10
1,1,2,2-Tetrachloroethane	10	U	10	6.0	ug/L			11/02/17 09:46	10
Acrylonitrile	200	U	200	78	ug/L			11/02/17 09:46	10
1,4-Dioxane	2000	U	2000	140	ug/L			11/02/17 09:46	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*	*^c*	*65 - 121*		*11/02/17 09:46*	*10*
Toluene-d8 (Surr)	*110*		*73 - 120*		*11/02/17 09:46*	*10*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*11/02/17 09:46*	*10*
Dibromofluoromethane (Surr)	*115*		*73 - 120*		*11/02/17 09:46*	*10*

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

Client Sample ID: HD-MW-2-0/1-0
Date Collected: 10/26/17 10:47
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	2.0	U ^c	2.0	1.8	ug/L			11/08/17 05:29	2
Vinyl chloride	2.0	U ^c	2.0	1.8	ug/L			11/08/17 05:29	2
Bromomethane	2.0	U	2.0	1.8	ug/L			11/08/17 05:29	2
Chloroethane	2.0	U	2.0	1.8	ug/L			11/08/17 05:29	2
1,1-Dichloroethene	2.0	U	2.0	1.1	ug/L			11/08/17 05:29	2
Acetone	10	U ^c *	10	6.9	ug/L			11/08/17 05:29	2
Carbon disulfide	2.0	U	2.0	1.8	ug/L			11/08/17 05:29	2
Methylene Chloride	2.0	U	2.0	0.72	ug/L			11/08/17 05:29	2
trans-1,2-Dichloroethene	2.0	U	2.0	1.3	ug/L			11/08/17 05:29	2
Methyl tert-butyl ether	2.0	U	2.0	1.2	ug/L			11/08/17 05:29	2
1,1-Dichloroethane	2.0	U	2.0	1.3	ug/L			11/08/17 05:29	2
cis-1,2-Dichloroethene	2.0	U	2.0	1.4	ug/L			11/08/17 05:29	2
Bromochloromethane	2.0	U	2.0	1.3	ug/L			11/08/17 05:29	2
2-Butanone (MEK)	10	U	10	5.2	ug/L			11/08/17 05:29	2
Chloroform	2.0	U	2.0	1.2	ug/L			11/08/17 05:29	2
1,1,1-Trichloroethane	2.0	U	2.0	1.2	ug/L			11/08/17 05:29	2
Carbon tetrachloride	2.0	U	2.0	1.8	ug/L			11/08/17 05:29	2
Benzene	2.0	U	2.0	1.2	ug/L			11/08/17 05:29	2
1,2-Dichloroethane	2.0	U	2.0	1.1	ug/L			11/08/17 05:29	2
Trichloroethene	2.0	U	2.0	1.4	ug/L			11/08/17 05:29	2
1,2-Dichloropropane	2.0	U	2.0	1.3	ug/L			11/08/17 05:29	2
Bromodichloromethane	2.0	U	2.0	1.3	ug/L			11/08/17 05:29	2
cis-1,3-Dichloropropene	2.0	U	2.0	1.2	ug/L			11/08/17 05:29	2
4-Methyl-2-pentanone (MIBK)	10	U	10	6.2	ug/L			11/08/17 05:29	2
Toluene	2.0	U	2.0	0.91	ug/L			11/08/17 05:29	2
trans-1,3-Dichloropropene	2.0	U	2.0	1.2	ug/L			11/08/17 05:29	2
1,1,2-Trichloroethane	2.0	U	2.0	0.91	ug/L			11/08/17 05:29	2
Tetrachloroethene	**35**		2.0	0.93	ug/L			11/08/17 05:29	2
2-Hexanone	10	U	10	6.6	ug/L			11/08/17 05:29	2
Dibromochloromethane	2.0	U	2.0	1.7	ug/L			11/08/17 05:29	2
1,2-Dibromoethane (EDB)	2.0	U	2.0	1.0	ug/L			11/08/17 05:29	2
Chlorobenzene	2.0	U	2.0	1.0	ug/L			11/08/17 05:29	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	1.1	ug/L			11/08/17 05:29	2
Ethylbenzene	2.0	U	2.0	1.0	ug/L			11/08/17 05:29	2
Xylenes, Total	4.0	U	4.0	1.8	ug/L			11/08/17 05:29	2
Styrene	2.0	U	2.0	0.94	ug/L			11/08/17 05:29	2
Bromoform	2.0	U	2.0	2.0	ug/L			11/08/17 05:29	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	1.2	ug/L			11/08/17 05:29	2
Acrylonitrile	40	U ^c	40	16	ug/L			11/08/17 05:29	2
1,4-Dioxane	400	U	400	27	ug/L			11/08/17 05:29	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*65 - 121*		*11/08/17 05:29*	*2*
Toluene-d8 (Surr)	*91*		*73 - 120*		*11/08/17 05:29*	*2*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*11/08/17 05:29*	*2*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*11/08/17 05:29*	*2*

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

Client Sample ID: HD-MW-15-0/1-0
Date Collected: 10/26/17 08:24
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-17
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	5.0	U ^c	5.0	4.5	ug/L			11/09/17 13:31	5
Vinyl chloride	5.0	U ^c	5.0	4.4	ug/L			11/09/17 13:31	5
Bromomethane	5.0	U ^c	5.0	4.4	ug/L			11/09/17 13:31	5
Chloroethane	5.0	U	5.0	4.5	ug/L			11/09/17 13:31	5
1,1-Dichloroethene	5.0	U	5.0	2.8	ug/L			11/09/17 13:31	5
Acetone	25	U ^c	25	17	ug/L			11/09/17 13:31	5
Carbon disulfide	5.0	U	5.0	4.4	ug/L			11/09/17 13:31	5
Methylene Chloride	5.0	U	5.0	1.8	ug/L			11/09/17 13:31	5
trans-1,2-Dichloroethene	5.0	U	5.0	3.4	ug/L			11/09/17 13:31	5
Methyl tert-butyl ether	5.0	U	5.0	3.0	ug/L			11/09/17 13:31	5
1,1-Dichloroethane	5.0	U	5.0	3.1	ug/L			11/09/17 13:31	5
cis-1,2-Dichloroethene	5.0	U	5.0	3.5	ug/L			11/09/17 13:31	5
Bromochloromethane	5.0	U	5.0	3.1	ug/L			11/09/17 13:31	5
2-Butanone (MEK)	25	U	25	13	ug/L			11/09/17 13:31	5
Chloroform	5.0	U	5.0	3.0	ug/L			11/09/17 13:31	5
1,1,1-Trichloroethane	5.0	U	5.0	3.0	ug/L			11/09/17 13:31	5
Carbon tetrachloride	5.0	U	5.0	4.4	ug/L			11/09/17 13:31	5
Benzene	5.0	U	5.0	3.0	ug/L			11/09/17 13:31	5
1,2-Dichloroethane	5.0	U	5.0	2.9	ug/L			11/09/17 13:31	5
Trichloroethene	5.0	U	5.0	3.4	ug/L			11/09/17 13:31	5
1,2-Dichloropropane	5.0	U	5.0	3.3	ug/L			11/09/17 13:31	5
Bromodichloromethane	5.0	U	5.0	3.2	ug/L			11/09/17 13:31	5
cis-1,3-Dichloropropene	5.0	U	5.0	3.0	ug/L			11/09/17 13:31	5
4-Methyl-2-pentanone (MIBK)	25	U ^c	25	15	ug/L			11/09/17 13:31	5
Toluene	5.0	U ^c	5.0	2.3	ug/L			11/09/17 13:31	5
trans-1,3-Dichloropropene	5.0	U	5.0	2.9	ug/L			11/09/17 13:31	5
1,1,2-Trichloroethane	5.0	U	5.0	2.3	ug/L			11/09/17 13:31	5
Tetrachloroethene	**140**		5.0	2.3	ug/L			11/09/17 13:31	5
2-Hexanone	25	U	25	16	ug/L			11/09/17 13:31	5
Dibromochloromethane	5.0	U	5.0	4.2	ug/L			11/09/17 13:31	5
1,2-Dibromoethane (EDB)	5.0	U	5.0	2.5	ug/L			11/09/17 13:31	5
Chlorobenzene	5.0	U	5.0	2.5	ug/L			11/09/17 13:31	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	2.9	ug/L			11/09/17 13:31	5
Ethylbenzene	5.0	U	5.0	2.5	ug/L			11/09/17 13:31	5
Xylenes, Total	10	U	10	4.5	ug/L			11/09/17 13:31	5
Styrene	5.0	U	5.0	2.4	ug/L			11/09/17 13:31	5
Bromoform	5.0	U ^c	5.0	4.9	ug/L			11/09/17 13:31	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	3.0	ug/L			11/09/17 13:31	5
Acrylonitrile	100	U	100	39	ug/L			11/09/17 13:31	5
1,4-Dioxane	1000	U ^c	1000	68	ug/L			11/09/17 13:31	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*	*^c*	*65 - 121*		*11/09/17 13:31*	*5*
Toluene-d8 (Surr)	*108*		*73 - 120*		*11/09/17 13:31*	*5*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*11/09/17 13:31*	*5*
Dibromofluoromethane (Surr)	*84*		*73 - 120*		*11/09/17 13:31*	*5*

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

Client Sample ID: HD-MW-136A-356/356.5-0
Date Collected: 10/25/17 11:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.88**	**J**	2.0	0.37	ug/L		11/01/17 09:35	11/06/17 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*26 - 103*	*11/01/17 09:35*	*11/06/17 17:54*	*1*
2-Fluorophenol (Surr)	*58*		*27 - 100*	*11/01/17 09:35*	*11/06/17 17:54*	*1*
2,4,6-Tribromophenol (Surr)	*85*	*^c*	*28 - 134*	*11/01/17 09:35*	*11/06/17 17:54*	*1*
Nitrobenzene-d5 (Surr)	*66*		*30 - 101*	*11/01/17 09:35*	*11/06/17 17:54*	*1*
Phenol-d5 (Surr)	*60*		*27 - 101*	*11/01/17 09:35*	*11/06/17 17:54*	*1*
Terphenyl-d14 (Surr)	*85*		*20 - 119*	*11/01/17 09:35*	*11/06/17 17:54*	*1*

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

Client Sample ID: HD-MW-136A-372.5/373-0
Date Collected: 10/25/17 12:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**	**J**	1.9	0.36	ug/L		11/01/17 09:35	11/06/17 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*91*		*26 - 103*	*11/01/17 09:35*	*11/06/17 18:17*	*1*
2-Fluorophenol (Surr)	*72*		*27 - 100*	*11/01/17 09:35*	*11/06/17 18:17*	*1*
2,4,6-Tribromophenol (Surr)	*110*	*^c*	*28 - 134*	*11/01/17 09:35*	*11/06/17 18:17*	*1*
Nitrobenzene-d5 (Surr)	*88*		*30 - 101*	*11/01/17 09:35*	*11/06/17 18:17*	*1*
Phenol-d5 (Surr)	*74*		*27 - 101*	*11/01/17 09:35*	*11/06/17 18:17*	*1*
Terphenyl-d14 (Surr)	*100*		*20 - 119*	*11/01/17 09:35*	*11/06/17 18:17*	*1*

General Chemistry

Client Sample ID: HD-MW-2-0/1-0
Date Collected: 10/26/17 10:47
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**360**		10	3.0	ug/L		10/31/17 13:24	10/31/17 17:20	1
Cyanide, Available	**0.0069**		0.0020	0.00036	mg/L			10/30/17 08:45	1

Default Detection Limits

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-71829-1

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

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	1.0	0.57	ug/L	8260C
1,1,1-Trichloroethane	1.0	0.60	ug/L	8260C
1,1,2,2-Tetrachloroethane	1.0	0.60	ug/L	8260C
1,1,2-Trichloroethane	1.0	0.45	ug/L	8260C
1,1-Dichloroethane	1.0	0.63	ug/L	8260C
1,1-Dichloroethene	1.0	0.55	ug/L	8260C
1,2-Dibromoethane (EDB)	1.0	0.50	ug/L	8260C
1,2-Dichloroethane	1.0	0.57	ug/L	8260C
1,2-Dichloropropane	1.0	0.66	ug/L	8260C
1,4-Dioxane	200	14	ug/L	8260C
2-Butanone (MEK)	5.0	2.6	ug/L	8260C
2-Hexanone	5.0	3.3	ug/L	8260C
4-Methyl-2-pentanone (MIBK)	5.0	3.1	ug/L	8260C
Acetone	5.0	3.4	ug/L	8260C
Acrylonitrile	20	7.8	ug/L	8260C
Benzene	1.0	0.60	ug/L	8260C
Bromochloromethane	1.0	0.63	ug/L	8260C
Bromodichloromethane	1.0	0.64	ug/L	8260C
Bromoform	1.0	0.98	ug/L	8260C
Bromomethane	1.0	0.89	ug/L	8260C
Carbon disulfide	1.0	0.88	ug/L	8260C
Carbon tetrachloride	1.0	0.88	ug/L	8260C
Chlorobenzene	1.0	0.50	ug/L	8260C
Chloroethane	1.0	0.90	ug/L	8260C
Chloroform	1.0	0.60	ug/L	8260C
Chloromethane	1.0	0.90	ug/L	8260C
cis-1,2-Dichloroethene	1.0	0.71	ug/L	8260C
cis-1,3-Dichloropropene	1.0	0.59	ug/L	8260C
Dibromochloromethane	1.0	0.84	ug/L	8260C
Ethylbenzene	1.0	0.51	ug/L	8260C
Methyl tert-butyl ether	1.0	0.59	ug/L	8260C
Methylene Chloride	1.0	0.36	ug/L	8260C
Styrene	1.0	0.47	ug/L	8260C
Tetrachloroethene	1.0	0.47	ug/L	8260C
Toluene	1.0	0.46	ug/L	8260C
trans-1,2-Dichloroethene	1.0	0.67	ug/L	8260C
trans-1,3-Dichloropropene	1.0	0.58	ug/L	8260C
Trichloroethene	1.0	0.69	ug/L	8260C
Vinyl chloride	1.0	0.88	ug/L	8260C
Xylenes, Total	2.0	0.89	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	0.37	ug/L	8270D LL

General Chemistry

Analyte	RL	MDL	Units	Method
Cyanide, Available	0.0020	0.00036	mg/L	OIA-1677

Default Detection Limits

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-71829-1

General Chemistry

Prep: 9010C

Analyte	RL	MDL	Units	Method
Cyanide, Total	10	3.0	ug/L	9014

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-71829-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (65-121)	TOL (73-120)	BFB (80-120)	DBFM (73-120)
180-71829-1	HD-MW-43D-0/1-0	68	106	91	79
180-71829-1 MS	HD-MW-43D-0/1-0	70	99	90	80
180-71829-1 MSD	HD-MW-43D-0/1-0	73	107	100	89
180-71829-2	HD-MW-43S-0/1-0	74	109	97	84
180-71829-3	HD-QC3-0/1-1	76	108	99	87
180-71829-4	HD-MW-18D-0/1-0	75 ^c	108	94	83
180-71829-5	HD-QC5-0/1-2	66	98	82	77
180-71829-6	HD-QC3-0/1-4	73	102	88	86
180-71829-7	HD-QC3-0/1-3	67	97	84	77
180-71829-8 - DL	HD-MW-136A-356/356.5-0	81 ^c	108	98	94
180-71829-8	HD-MW-136A-356/356.5-0	79 ^c	116	108	89
180-71829-9 - DL	HD-MW-136A-372.5/373-0	80 ^c	107	97	94
180-71829-9	HD-MW-136A-372.5/373-0	84 ^c	112	104	92
180-71829-10 - DL	HD-MW-136A-434/434.5-0	87 ^c	109	106	100
180-71829-10	HD-MW-136A-434/434.5-0	84 ^c	117	105	92
180-71829-11 - DL	HD-MW-136A-270/348-0	82 ^c	110	106	93
180-71829-11	HD-MW-136A-270/348-0	73 ^c	109	102	87
180-71829-12 - DL	HD-MW-91-0/1-0	112 ^c	110	97	115
180-71829-12	HD-MW-91-0/1-0	77 ^c	109	97	87
180-71829-13	HD-MW-16D-0/1-0	83 ^c	112	112	93
180-71829-13 MS	HD-MW-16D-0/1-0	91	127 X	118	106
180-71829-13 MSD	HD-MW-16D-0/1-0	72	94	89	84
180-71829-14	HD-MW-2-0/1-0	114	90	92	106
180-71829-14 - DL	HD-MW-2-0/1-0	109	91	88	105
180-71829-15	HD-MW-185-0/1-0	121	88	81	112
180-71829-16	HD-MW-82-0/1-0	111	93	84	101
180-71829-16 MS	HD-MW-82-0/1-0	111	110	105	102
180-71829-17	HD-MW-15-0/1-0	118	89	89	109
180-71829-17 - DL	HD-MW-15-0/1-0	76 ^c	108	93	84
180-71829-18	HD-MW-16S-0/1-0	120	90	80	113
180-71829-19	HD-MW-12-0/1-0	118	95	87	105
180-71829-20	HD-TATE (S-6)-0/1-0	118	90	85	106
LCS 180-227642/4	Lab Control Sample	86	107	100	100
LCS 180-227760/3	Lab Control Sample	106	110	102	98
LCS 180-227768/4	Lab Control Sample	70	102	95	81
LCS 180-227871/3	Lab Control Sample	109	116	110	103
LCS 180-228044/3	Lab Control Sample	106	110	101	99
LCS 180-228278/3	Lab Control Sample	99	112	106	97
LCS 180-228533/4	Lab Control Sample	83	95	94	94
MB 180-227642/7	Method Blank	79	118	105	97
MB 180-227760/5	Method Blank	115	94	91	101
MB 180-227768/6	Method Blank	89	116	106	100
MB 180-227871/5	Method Blank	113	92	86	102
MB 180-228044/5	Method Blank	110	91	88	105
MB 180-228278/5	Method Blank	107	90	91	97
MB 180-228533/8	Method Blank	87	113	99	91

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	(26-103)	(27-100)	(28-134)	(30-101)	(27-101)	(20-119)
180-71829-8	HD-MW-136A-356/356.5-0	67	58	85 ^c	66	60	85
180-71829-9	HD-MW-136A-372.5/373-0	91	72	110 ^c	88	74	100
LCS 180-227668/2-A	Lab Control Sample	65	62	80	66	58	68
MB 180-227668/1-A	Method Blank	67	60	77	66	58	72

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

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

Lab Sample ID: MB 180-227642/7
Matrix: Water
Analysis Batch: 227642

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	0.90	ug/L			11/01/17 10:49	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			11/01/17 10:49	1
Bromomethane	1.0	U	1.0	0.89	ug/L			11/01/17 10:49	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/01/17 10:49	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/01/17 10:49	1
Acetone	5.0	U	5.0	3.4	ug/L			11/01/17 10:49	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/01/17 10:49	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/17 10:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/01/17 10:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/01/17 10:49	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/01/17 10:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/01/17 10:49	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/01/17 10:49	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/01/17 10:49	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/01/17 10:49	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 10:49	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/01/17 10:49	1
Benzene	1.0	U	1.0	0.60	ug/L			11/01/17 10:49	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 10:49	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			11/01/17 10:49	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/01/17 10:49	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/01/17 10:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/01/17 10:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/01/17 10:49	1
Toluene	1.0	U	1.0	0.46	ug/L			11/01/17 10:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/01/17 10:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/01/17 10:49	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/01/17 10:49	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/01/17 10:49	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/01/17 10:49	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/01/17 10:49	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/01/17 10:49	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 10:49	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/01/17 10:49	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/01/17 10:49	1
Styrene	1.0	U	1.0	0.47	ug/L			11/01/17 10:49	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/01/17 10:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 10:49	1
Acrylonitrile	20	U	20	7.8	ug/L			11/01/17 10:49	1
1,4-Dioxane	200	U	200	14	ug/L			11/01/17 10:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*65 - 121*		*11/01/17 10:49*	*1*
Toluene-d8 (Surr)	*118*		*73 - 120*		*11/01/17 10:49*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*11/01/17 10:49*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*11/01/17 10:49*	*1*

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

Lab Sample ID: LCS 180-227642/4
Matrix: Water
Analysis Batch: 227642

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	8.12		ug/L		81	49 - 135
Vinyl chloride	10.0	6.80		ug/L		68	52 - 136
Bromomethane	10.0	8.50		ug/L		85	37 - 150
Chloroethane	10.0	9.22		ug/L		92	44 - 139
1,1-Dichloroethene	10.0	7.00		ug/L		70	64 - 131
Acetone	20.0	18.0		ug/L		90	24 - 150
Carbon disulfide	10.0	10.2		ug/L		102	20 - 150
Methylene Chloride	10.0	10.6		ug/L		106	66 - 123
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	70 - 123
Methyl tert-butyl ether	10.0	8.69		ug/L		87	66 - 130
1,1-Dichloroethane	10.0	9.10		ug/L		91	66 - 122
cis-1,2-Dichloroethene	10.0	10.0		ug/L		100	73 - 120
Bromochloromethane	10.0	9.26		ug/L		93	73 - 122
2-Butanone (MEK)	20.0	22.9		ug/L		115	37 - 150
Chloroform	10.0	8.51		ug/L		85	72 - 123
1,1,1-Trichloroethane	10.0	9.01		ug/L		90	66 - 129
Carbon tetrachloride	10.0	9.53		ug/L		95	58 - 145
Benzene	10.0	11.3		ug/L		113	75 - 123
1,2-Dichloroethane	10.0	7.48		ug/L		75	63 - 130
Trichloroethene	10.0	10.5		ug/L		105	74 - 121
1,2-Dichloropropane	10.0	10.4		ug/L		104	67 - 119
Bromodichloromethane	10.0	8.83		ug/L		88	62 - 127
cis-1,3-Dichloropropene	10.0	9.42		ug/L		94	61 - 127
4-Methyl-2-pentanone (MIBK)	20.0	25.8		ug/L		129	41 - 135
Toluene	10.0	12.3		ug/L		123	76 - 129
trans-1,3-Dichloropropene	10.0	8.66		ug/L		87	61 - 136
1,1,2-Trichloroethane	10.0	11.1		ug/L		111	74 - 126
Tetrachloroethene	10.0	9.36		ug/L		94	76 - 128
2-Hexanone	20.0	24.3		ug/L		121	37 - 150
Dibromochloromethane	10.0	10.6		ug/L		106	63 - 131
1,2-Dibromoethane (EDB)	10.0	9.73		ug/L		97	76 - 128
Chlorobenzene	10.0	11.8		ug/L		118	79 - 124
1,1,1,2-Tetrachloroethane	10.0	9.70		ug/L		97	70 - 130
Ethylbenzene	10.0	10.5		ug/L		105	77 - 124
Xylenes, Total	20.0	20.9		ug/L		105	76 - 124
Styrene	10.0	10.4		ug/L		104	80 - 125
Bromoform	10.0	11.1		ug/L		111	54 - 136
1,1,2,2-Tetrachloroethane	10.0	10.8		ug/L		108	72 - 128
Acrylonitrile	100	110		ug/L		110	60 - 130
1,4-Dioxane	200	215		ug/L		107	26 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*65 - 121*
Toluene-d8 (Surr)	*107*		*73 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*73 - 120*

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

Lab Sample ID: 180-71829-1 MS
Matrix: Water
Analysis Batch: 227642

Client Sample ID: HD-MW-43D-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	1.0	U	10.0	5.19		ug/L		52	49 - 135
Vinyl chloride	1.0	U ^c F1	10.0	4.99	F1	ug/L		50	52 - 136
Bromomethane	1.0	U ^c	10.0	5.20		ug/L		52	37 - 150
Chloroethane	1.0	U	10.0	7.32		ug/L		73	44 - 139
1,1-Dichloroethene	1.0	U	10.0	6.86		ug/L		69	64 - 131
Acetone	5.0	U	20.0	13.4		ug/L		67	24 - 150
Carbon disulfide	1.0	U	10.0	9.46		ug/L		95	20 - 150
Methylene Chloride	1.0	U	10.0	8.35		ug/L		84	66 - 123
trans-1,2-Dichloroethene	1.0	U	10.0	9.11		ug/L		91	70 - 123
Methyl tert-butyl ether	1.0	U	10.0	6.70		ug/L		67	66 - 130
1,1-Dichloroethane	1.0	U	10.0	7.54		ug/L		75	66 - 122
cis-1,2-Dichloroethene	5.2		10.0	12.5		ug/L		74	73 - 120
Bromochloromethane	1.0	U	10.0	7.38		ug/L		74	73 - 122
2-Butanone (MEK)	5.0	U	20.0	17.1		ug/L		85	37 - 150
Chloroform	1.0	U F1	10.0	7.01	F1	ug/L		70	72 - 123
1,1,1-Trichloroethane	1.0	U	10.0	7.76		ug/L		78	66 - 129
Carbon tetrachloride	1.0	U	10.0	7.86		ug/L		79	58 - 145
Benzene	1.0	U	10.0	8.13		ug/L		81	75 - 123
1,2-Dichloroethane	1.0	U ^c F1	10.0	5.98	F1	ug/L		60	63 - 130
Trichloroethene	5.9	F1	10.0	13.0	F1	ug/L		71	74 - 121
1,2-Dichloropropane	1.0	U	10.0	8.30		ug/L		83	67 - 119
Bromodichloromethane	1.0	U	10.0	7.13		ug/L		71	62 - 127
cis-1,3-Dichloropropene	1.0	U	10.0	7.45		ug/L		74	61 - 127
4-Methyl-2-pentanone (MIBK)	5.0	U ^c	20.0	20.0		ug/L		100	41 - 135
Toluene	1.0	U ^c	10.0	9.37		ug/L		94	76 - 129
trans-1,3-Dichloropropene	1.0	U	10.0	7.29		ug/L		73	61 - 136
1,1,2-Trichloroethane	1.0	U	10.0	8.84		ug/L		88	74 - 126
Tetrachloroethene	7.5	F2 F1	10.0	13.6	F1	ug/L		62	76 - 128
2-Hexanone	5.0	U	20.0	19.0		ug/L		95	37 - 150
Dibromochloromethane	1.0	U	10.0	8.55		ug/L		85	63 - 131
1,2-Dibromoethane (EDB)	1.0	U	10.0	8.17		ug/L		82	76 - 128
Chlorobenzene	1.0	U	10.0	8.55		ug/L		85	79 - 124
1,1,1,2-Tetrachloroethane	1.0	U	10.0	8.51		ug/L		85	70 - 130
Ethylbenzene	1.0	U	10.0	9.31		ug/L		93	77 - 124
Xylenes, Total	2.0	U F2	20.0	17.9		ug/L		90	76 - 124
Styrene	1.0	U	10.0	8.90		ug/L		89	80 - 125
Bromoform	1.0	U	10.0	9.16		ug/L		92	54 - 136
1,1,2,2-Tetrachloroethane	1.0	U	10.0	8.39		ug/L		84	72 - 128
Acrylonitrile	20	U	100	82.8		ug/L		83	60 - 130
1,4-Dioxane	200	U F2	200	145	J	ug/L		72	26 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*70*		*65 - 121*
Toluene-d8 (Surr)	*99*		*73 - 120*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*
Dibromofluoromethane (Surr)	*80*		*73 - 120*

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

Lab Sample ID: 180-71829-1 MSD
Matrix: Water
Analysis Batch: 227642

Client Sample ID: HD-MW-43D-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane	1.0	U	10.0	5.85		ug/L		58	49 - 135	12	20
Vinyl chloride	1.0	U ^c F1	10.0	5.81		ug/L		58	52 - 136	15	19
Bromomethane	1.0	U ^c	10.0	6.07		ug/L		61	37 - 150	15	23
Chloroethane	1.0	U	10.0	8.59		ug/L		86	44 - 139	16	19
1,1-Dichloroethene	1.0	U	10.0	8.10		ug/L		81	64 - 131	17	20
Acetone	5.0	U	20.0	16.2		ug/L		81	24 - 150	19	35
Carbon disulfide	1.0	U	10.0	11.0		ug/L		110	20 - 150	15	21
Methylene Chloride	1.0	U	10.0	9.69		ug/L		97	66 - 123	15	22
trans-1,2-Dichloroethene	1.0	U	10.0	10.8		ug/L		108	70 - 123	17	19
Methyl tert-butyl ether	1.0	U	10.0	7.79		ug/L		78	66 - 130	15	23
1,1-Dichloroethane	1.0	U	10.0	8.76		ug/L		88	66 - 122	15	20
cis-1,2-Dichloroethene	5.2		10.0	14.7		ug/L		95	73 - 120	16	23
Bromochloromethane	1.0	U	10.0	8.56		ug/L		86	73 - 122	15	24
2-Butanone (MEK)	5.0	U	20.0	18.9		ug/L		94	37 - 150	10	35
Chloroform	1.0	U F1	10.0	8.20		ug/L		82	72 - 123	16	20
1,1,1-Trichloroethane	1.0	U	10.0	9.18		ug/L		92	66 - 129	17	21
Carbon tetrachloride	1.0	U	10.0	9.49		ug/L		95	58 - 145	19	22
Benzene	1.0	U	10.0	9.72		ug/L		97	75 - 123	18	20
1,2-Dichloroethane	1.0	U ^c F1	10.0	7.19		ug/L		72	63 - 130	18	21
Trichloroethene	5.9	F1	10.0	15.6		ug/L		97	74 - 121	18	20
1,2-Dichloropropane	1.0	U	10.0	9.49		ug/L		95	67 - 119	13	21
Bromodichloromethane	1.0	U	10.0	8.40		ug/L		84	62 - 127	16	19
cis-1,3-Dichloropropene	1.0	U	10.0	8.78		ug/L		88	61 - 127	16	22
4-Methyl-2-pentanone (MIBK)	5.0	U ^c	20.0	22.4		ug/L		112	41 - 135	11	35
Toluene	1.0	U ^c	10.0	11.0		ug/L		110	76 - 129	16	18
trans-1,3-Dichloropropene	1.0	U	10.0	8.51		ug/L		85	61 - 136	15	17
1,1,2-Trichloroethane	1.0	U	10.0	10.1		ug/L		101	74 - 126	13	20
Tetrachloroethene	7.5	F2 F1	10.0	16.9	F2	ug/L		94	76 - 128	21	20
2-Hexanone	5.0	U	20.0	21.2		ug/L		106	37 - 150	11	35
Dibromochloromethane	1.0	U	10.0	10.2		ug/L		102	63 - 131	18	20
1,2-Dibromoethane (EDB)	1.0	U	10.0	9.10		ug/L		91	76 - 128	11	21
Chlorobenzene	1.0	U	10.0	9.97		ug/L		100	79 - 124	15	16
1,1,1,2-Tetrachloroethane	1.0	U	10.0	10.1		ug/L		101	70 - 130	17	17
Ethylbenzene	1.0	U	10.0	11.0		ug/L		110	77 - 124	16	16
Xylenes, Total	2.0	U F2	20.0	21.7	F2	ug/L		109	76 - 124	19	17
Styrene	1.0	U	10.0	10.6		ug/L		106	80 - 125	17	18
Bromoform	1.0	U	10.0	10.8		ug/L		108	54 - 136	16	23
1,1,2,2-Tetrachloroethane	1.0	U	10.0	9.92		ug/L		99	72 - 128	17	24
Acrylonitrile	20	U	100	95.2		ug/L		95	60 - 130	14	32
1,4-Dioxane	200	U F2	200	229	F2	ug/L		114	26 - 150	45	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*73*		*65 - 121*
Toluene-d8 (Surr)	*107*		*73 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*89*		*73 - 120*

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

Lab Sample ID: MB 180-227760/5
Matrix: Water
Analysis Batch: 227760

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	0.90	ug/L			11/02/17 01:06	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			11/02/17 01:06	1
Bromomethane	1.0	U	1.0	0.89	ug/L			11/02/17 01:06	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/02/17 01:06	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/02/17 01:06	1
Acetone	5.0	U	5.0	3.4	ug/L			11/02/17 01:06	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/02/17 01:06	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/02/17 01:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/02/17 01:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/02/17 01:06	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/02/17 01:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/02/17 01:06	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/02/17 01:06	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/02/17 01:06	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/02/17 01:06	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 01:06	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/02/17 01:06	1
Benzene	1.0	U	1.0	0.60	ug/L			11/02/17 01:06	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			11/02/17 01:06	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			11/02/17 01:06	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/02/17 01:06	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/02/17 01:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/02/17 01:06	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/02/17 01:06	1
Toluene	1.0	U	1.0	0.46	ug/L			11/02/17 01:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/02/17 01:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/02/17 01:06	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/02/17 01:06	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/02/17 01:06	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/02/17 01:06	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/02/17 01:06	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/02/17 01:06	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/02/17 01:06	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/02/17 01:06	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/02/17 01:06	1
Styrene	1.0	U	1.0	0.47	ug/L			11/02/17 01:06	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/02/17 01:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 01:06	1
Acrylonitrile	20	U	20	7.8	ug/L			11/02/17 01:06	1
1,4-Dioxane	200	U	200	14	ug/L			11/02/17 01:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*65 - 121*		*11/02/17 01:06*	*1*
Toluene-d8 (Surr)	*94*		*73 - 120*		*11/02/17 01:06*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*11/02/17 01:06*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*11/02/17 01:06*	*1*

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

Lab Sample ID: LCS 180-227760/3
Matrix: Water
Analysis Batch: 227760

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	13.5		ug/L		135	49 - 135
Vinyl chloride	10.0	11.3		ug/L		113	52 - 136
Bromomethane	10.0	8.70		ug/L		87	37 - 150
Chloroethane	10.0	10.8		ug/L		108	44 - 139
1,1-Dichloroethene	10.0	10.4		ug/L		104	64 - 131
Acetone	20.0	28.3		ug/L		141	24 - 150
Carbon disulfide	10.0	10.5		ug/L		105	20 - 150
Methylene Chloride	10.0	9.72		ug/L		97	66 - 123
trans-1,2-Dichloroethene	10.0	9.62		ug/L		96	70 - 123
Methyl tert-butyl ether	10.0	9.60		ug/L		96	66 - 130
1,1-Dichloroethane	10.0	10.5		ug/L		105	66 - 122
cis-1,2-Dichloroethene	10.0	9.60		ug/L		96	73 - 120
Bromochloromethane	10.0	9.42		ug/L		94	73 - 122
2-Butanone (MEK)	20.0	22.2		ug/L		111	37 - 150
Chloroform	10.0	9.24		ug/L		92	72 - 123
1,1,1-Trichloroethane	10.0	10.2		ug/L		102	66 - 129
Carbon tetrachloride	10.0	10.5		ug/L		105	58 - 145
Benzene	10.0	9.31		ug/L		93	75 - 123
1,2-Dichloroethane	10.0	10.5		ug/L		105	63 - 130
Trichloroethene	10.0	8.70		ug/L		87	74 - 121
1,2-Dichloropropane	10.0	9.81		ug/L		98	67 - 119
Bromodichloromethane	10.0	8.96		ug/L		90	62 - 127
cis-1,3-Dichloropropene	10.0	8.72		ug/L		87	61 - 127
4-Methyl-2-pentanone (MIBK)	20.0	18.1		ug/L		91	41 - 135
Toluene	10.0	10.4		ug/L		104	76 - 129
trans-1,3-Dichloropropene	10.0	10.1		ug/L		101	61 - 136
1,1,2-Trichloroethane	10.0	9.85		ug/L		98	74 - 126
Tetrachloroethene	10.0	9.85		ug/L		99	76 - 128
2-Hexanone	20.0	21.0		ug/L		105	37 - 150
Dibromochloromethane	10.0	9.76		ug/L		98	63 - 131
1,2-Dibromoethane (EDB)	10.0	9.27		ug/L		93	76 - 128
Chlorobenzene	10.0	9.68		ug/L		97	79 - 124
1,1,1,2-Tetrachloroethane	10.0	10.1		ug/L		101	70 - 130
Ethylbenzene	10.0	9.74		ug/L		97	77 - 124
Xylenes, Total	20.0	19.5		ug/L		97	76 - 124
Styrene	10.0	9.70		ug/L		97	80 - 125
Bromoform	10.0	8.33		ug/L		83	54 - 136
1,1,2,2-Tetrachloroethane	10.0	9.14		ug/L		91	72 - 128
Acrylonitrile	100	110		ug/L		110	60 - 130
1,4-Dioxane	200	178	J	ug/L		89	26 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*65 - 121*
Toluene-d8 (Surr)	*110*		*73 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*73 - 120*

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

Lab Sample ID: 180-71829-16 MS
Matrix: Water
Analysis Batch: 227760

Client Sample ID: HD-MW-82-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	1.0	U ^c	10.0	12.3		ug/L		123	49 - 135
Vinyl chloride	1.0	U	10.0	10.0		ug/L		100	52 - 136
Bromomethane	1.0	U	10.0	10.7		ug/L		107	37 - 150
Chloroethane	1.0	U	10.0	11.9		ug/L		119	44 - 139
1,1-Dichloroethene	1.0	U	10.0	9.70		ug/L		97	64 - 131
Acetone	5.0	U ^c	20.0	20.6		ug/L		103	24 - 150
Carbon disulfide	1.0	U	10.0	10.0		ug/L		100	20 - 150
Methylene Chloride	1.0	U	10.0	9.16		ug/L		92	66 - 123
trans-1,2-Dichloroethene	1.0	U	10.0	9.14		ug/L		91	70 - 123
Methyl tert-butyl ether	1.0	U	10.0	9.58		ug/L		96	66 - 130
1,1-Dichloroethane	1.0	U	10.0	10.3		ug/L		103	66 - 122
cis-1,2-Dichloroethene	15		10.0	23.2		ug/L		80	73 - 120
Bromochloromethane	1.0	U	10.0	9.54		ug/L		95	73 - 122
2-Butanone (MEK)	5.0	U	20.0	20.4		ug/L		102	37 - 150
Chloroform	1.0	U	10.0	9.21		ug/L		92	72 - 123
1,1,1-Trichloroethane	1.0	U	10.0	9.66		ug/L		97	66 - 129
Carbon tetrachloride	1.0	U	10.0	9.49		ug/L		95	58 - 145
Benzene	1.0	U	10.0	8.98		ug/L		90	75 - 123
1,2-Dichloroethane	1.0	U	10.0	10.7		ug/L		107	63 - 130
Trichloroethene	5.4		10.0	13.0		ug/L		76	74 - 121
1,2-Dichloropropane	1.0	U	10.0	9.71		ug/L		97	67 - 119
Bromodichloromethane	1.0	U	10.0	9.23		ug/L		92	62 - 127
cis-1,3-Dichloropropene	1.0	U	10.0	8.53		ug/L		85	61 - 127
4-Methyl-2-pentanone (MIBK)	5.0	U	20.0	22.2		ug/L		111	41 - 135
Toluene	1.0	U	10.0	9.71		ug/L		97	76 - 129
trans-1,3-Dichloropropene	1.0	U	10.0	9.74		ug/L		97	61 - 136
1,1,2-Trichloroethane	1.0	U	10.0	9.92		ug/L		99	74 - 126
Tetrachloroethene	1.3		10.0	9.99		ug/L		87	76 - 128
2-Hexanone	5.0	U	20.0	20.5		ug/L		103	37 - 150
Dibromochloromethane	1.0	U	10.0	10.2		ug/L		102	63 - 131
1,2-Dibromoethane (EDB)	1.0	U	10.0	9.49		ug/L		95	76 - 128
Chlorobenzene	1.0	U	10.0	9.18		ug/L		92	79 - 124
1,1,1,2-Tetrachloroethane	1.0	U	10.0	9.76		ug/L		98	70 - 130
Ethylbenzene	1.0	U	10.0	8.73		ug/L		87	77 - 124
Xylenes, Total	2.0	U	20.0	17.7		ug/L		89	76 - 124
Styrene	1.0	U	10.0	9.20		ug/L		92	80 - 125
Bromoform	1.0	U	10.0	9.56		ug/L		96	54 - 136
1,1,2,2-Tetrachloroethane	1.0	U	10.0	9.38		ug/L		94	72 - 128
Acrylonitrile	20	U	100	116		ug/L		116	60 - 130
1,4-Dioxane	200	U	200	193	J	ug/L		97	26 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*65 - 121*
Toluene-d8 (Surr)	*110*		*73 - 120*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*73 - 120*

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

Lab Sample ID: MB 180-227768/6
Matrix: Water
Analysis Batch: 227768

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	0.90	ug/L			11/02/17 06:59	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			11/02/17 06:59	1
Bromomethane	1.0	U	1.0	0.89	ug/L			11/02/17 06:59	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/02/17 06:59	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/02/17 06:59	1
Acetone	5.0	U	5.0	3.4	ug/L			11/02/17 06:59	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/02/17 06:59	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/02/17 06:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/02/17 06:59	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/02/17 06:59	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/02/17 06:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/02/17 06:59	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/02/17 06:59	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/02/17 06:59	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/02/17 06:59	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 06:59	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/02/17 06:59	1
Benzene	1.0	U	1.0	0.60	ug/L			11/02/17 06:59	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			11/02/17 06:59	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			11/02/17 06:59	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/02/17 06:59	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/02/17 06:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/02/17 06:59	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/02/17 06:59	1
Toluene	1.0	U	1.0	0.46	ug/L			11/02/17 06:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/02/17 06:59	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/02/17 06:59	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/02/17 06:59	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/02/17 06:59	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/02/17 06:59	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/02/17 06:59	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/02/17 06:59	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/02/17 06:59	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/02/17 06:59	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/02/17 06:59	1
Styrene	1.0	U	1.0	0.47	ug/L			11/02/17 06:59	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/02/17 06:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/02/17 06:59	1
Acrylonitrile	20	U	20	7.8	ug/L			11/02/17 06:59	1
1,4-Dioxane	200	U	200	14	ug/L			11/02/17 06:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*65 - 121*		*11/02/17 06:59*	*1*
Toluene-d8 (Surr)	*116*		*73 - 120*		*11/02/17 06:59*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*11/02/17 06:59*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*11/02/17 06:59*	*1*

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

Lab Sample ID: LCS 180-227768/4
Matrix: Water
Analysis Batch: 227768

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	5.73		ug/L		57	49 - 135
Vinyl chloride	10.0	5.02	*	ug/L		50	52 - 136
Bromomethane	10.0	6.96		ug/L		70	37 - 150
Chloroethane	10.0	8.08		ug/L		81	44 - 139
1,1-Dichloroethene	10.0	5.66	*	ug/L		57	64 - 131
Acetone	20.0	13.8		ug/L		69	24 - 150
Carbon disulfide	10.0	10.3		ug/L		103	20 - 150
Methylene Chloride	10.0	8.96		ug/L		90	66 - 123
trans-1,2-Dichloroethene	10.0	9.06		ug/L		91	70 - 123
Methyl tert-butyl ether	10.0	7.91		ug/L		79	66 - 130
1,1-Dichloroethane	10.0	8.36		ug/L		84	66 - 122
cis-1,2-Dichloroethene	10.0	8.83		ug/L		88	73 - 120
Bromochloromethane	10.0	8.50		ug/L		85	73 - 122
2-Butanone (MEK)	20.0	17.8		ug/L		89	37 - 150
Chloroform	10.0	7.90		ug/L		79	72 - 123
1,1,1-Trichloroethane	10.0	9.06		ug/L		91	66 - 129
Carbon tetrachloride	10.0	9.70		ug/L		97	58 - 145
Benzene	10.0	8.95		ug/L		90	75 - 123
1,2-Dichloroethane	10.0	7.12		ug/L		71	63 - 130
Trichloroethene	10.0	8.49		ug/L		85	74 - 121
1,2-Dichloropropane	10.0	9.12		ug/L		91	67 - 119
Bromodichloromethane	10.0	8.41		ug/L		84	62 - 127
cis-1,3-Dichloropropene	10.0	8.48		ug/L		85	61 - 127
4-Methyl-2-pentanone (MIBK)	20.0	21.7		ug/L		109	41 - 135
Toluene	10.0	10.9		ug/L		109	76 - 129
trans-1,3-Dichloropropene	10.0	9.00		ug/L		90	61 - 136
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	74 - 126
Tetrachloroethene	10.0	9.37		ug/L		94	76 - 128
2-Hexanone	20.0	21.1		ug/L		105	37 - 150
Dibromochloromethane	10.0	10.8		ug/L		108	63 - 131
1,2-Dibromoethane (EDB)	10.0	9.64		ug/L		96	76 - 128
Chlorobenzene	10.0	9.95		ug/L		99	79 - 124
1,1,1,2-Tetrachloroethane	10.0	10.3		ug/L		103	70 - 130
Ethylbenzene	10.0	9.92		ug/L		99	77 - 124
Xylenes, Total	20.0	20.4		ug/L		102	76 - 124
Styrene	10.0	10.0		ug/L		100	80 - 125
Bromoform	10.0	12.3		ug/L		123	54 - 136
1,1,2,2-Tetrachloroethane	10.0	10.7		ug/L		107	72 - 128
Acrylonitrile	100	100		ug/L		100	60 - 130
1,4-Dioxane	200	233		ug/L		116	26 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*70*		*65 - 121*
Toluene-d8 (Surr)	*102*		*73 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*81*		*73 - 120*

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

Lab Sample ID: 180-71829-13 MS
Matrix: Water
Analysis Batch: 227768

Client Sample ID: HD-MW-16D-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	1.0	U ^c	10.0	5.73		ug/L		57	49 - 135
Vinyl chloride	1.0	U F1 ^c *	10.0	4.95	F1	ug/L		49	52 - 136
Bromomethane	1.0	U ^c	10.0	4.77		ug/L		48	37 - 150
Chloroethane	1.0	U	10.0	7.32		ug/L		73	44 - 139
1,1-Dichloroethene	1.0	U ^c *	10.0	8.03		ug/L		80	64 - 131
Acetone	5.0	U ^c	20.0	13.9		ug/L		70	24 - 150
Carbon disulfide	1.0	U	10.0	10.7		ug/L		107	20 - 150
Methylene Chloride	1.0	U	10.0	11.0		ug/L		110	66 - 123
trans-1,2-Dichloroethene	1.0	U	10.0	9.81		ug/L		98	70 - 123
Methyl tert-butyl ether	1.0	U	10.0	8.32		ug/L		83	66 - 130
1,1-Dichloroethane	1.0	U	10.0	8.88		ug/L		89	66 - 122
cis-1,2-Dichloroethene	7.0		10.0	15.8		ug/L		88	73 - 120
Bromochloromethane	1.0	U	10.0	9.13		ug/L		91	73 - 122
2-Butanone (MEK)	5.0	U	20.0	17.0		ug/L		85	37 - 150
Chloroform	1.0	U	10.0	8.61		ug/L		86	72 - 123
1,1,1-Trichloroethane	1.0	U	10.0	9.82		ug/L		98	66 - 129
Carbon tetrachloride	1.0	U	10.0	10.2		ug/L		102	58 - 145
Benzene	1.0	U	10.0	9.95		ug/L		99	75 - 123
1,2-Dichloroethane	1.0	U ^c	10.0	7.58		ug/L		76	63 - 130
Trichloroethene	8.7	F1	10.0	16.7		ug/L		80	74 - 121
1,2-Dichloropropane	1.0	U	10.0	9.84		ug/L		98	67 - 119
Bromodichloromethane	1.0	U	10.0	9.13		ug/L		91	62 - 127
cis-1,3-Dichloropropene	1.0	U	10.0	8.99		ug/L		90	61 - 127
4-Methyl-2-pentanone (MIBK)	5.0	U	20.0	19.6		ug/L		98	41 - 135
Toluene	1.0	U	10.0	11.4		ug/L		114	76 - 129
trans-1,3-Dichloropropene	1.0	U	10.0	9.48		ug/L		95	61 - 136
1,1,2-Trichloroethane	1.0	U	10.0	10.6		ug/L		106	74 - 126
Tetrachloroethene	1.0	U	10.0	10.0		ug/L		100	76 - 128
2-Hexanone	5.0	U	20.0	19.3		ug/L		97	37 - 150
Dibromochloromethane	1.0	U	10.0	11.0		ug/L		110	63 - 131
1,2-Dibromoethane (EDB)	1.0	U	10.0	10.1		ug/L		101	76 - 128
Chlorobenzene	1.0	U	10.0	10.5		ug/L		105	79 - 124
1,1,1,2-Tetrachloroethane	1.0	U	10.0	10.9		ug/L		109	70 - 130
Ethylbenzene	1.0	U	10.0	11.2		ug/L		112	77 - 124
Xylenes, Total	2.0	U	20.0	22.3		ug/L		112	76 - 124
Styrene	1.0	U	10.0	11.0		ug/L		110	80 - 125
Bromoform	1.0	U	10.0	11.6		ug/L		116	54 - 136
1,1,2,2-Tetrachloroethane	1.0	U	10.0	10.8		ug/L		108	72 - 128
Acrylonitrile	20	U	100	102		ug/L		102	60 - 130
1,4-Dioxane	200	U	200	204		ug/L		102	26 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*65 - 121*
Toluene-d8 (Surr)	*127*	*X*	*73 - 120*
4-Bromofluorobenzene (Surr)	*118*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*73 - 120*

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

Lab Sample ID: 180-71829-13 MSD
Matrix: Water
Analysis Batch: 227768

Client Sample ID: HD-MW-16D-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane	1.0	U ^c	10.0	5.51		ug/L		55	49 - 135	4	20
Vinyl chloride	1.0	U F1 ^c *	10.0	4.62	F1	ug/L		46	52 - 136	7	19
Bromomethane	1.0	U ^c	10.0	4.35		ug/L		44	37 - 150	9	23
Chloroethane	1.0	U	10.0	6.24		ug/L		62	44 - 139	16	19
1,1-Dichloroethene	1.0	U ^c *	10.0	7.66		ug/L		77	64 - 131	5	20
Acetone	5.0	U ^c	20.0	13.2		ug/L		66	24 - 150	5	35
Carbon disulfide	1.0	U	10.0	9.94		ug/L		99	20 - 150	7	21
Methylene Chloride	1.0	U	10.0	10.5		ug/L		105	66 - 123	5	22
trans-1,2-Dichloroethene	1.0	U	10.0	9.50		ug/L		95	70 - 123	3	19
Methyl tert-butyl ether	1.0	U	10.0	7.97		ug/L		80	66 - 130	4	23
1,1-Dichloroethane	1.0	U	10.0	8.68		ug/L		87	66 - 122	2	20
cis-1,2-Dichloroethene	7.0		10.0	15.3		ug/L		83	73 - 120	3	23
Bromochloromethane	1.0	U	10.0	8.84		ug/L		88	73 - 122	3	24
2-Butanone (MEK)	5.0	U	20.0	15.9		ug/L		80	37 - 150	6	35
Chloroform	1.0	U	10.0	8.16		ug/L		82	72 - 123	5	20
1,1,1-Trichloroethane	1.0	U	10.0	8.77		ug/L		88	66 - 129	11	21
Carbon tetrachloride	1.0	U	10.0	9.38		ug/L		94	58 - 145	9	22
Benzene	1.0	U	10.0	9.58		ug/L		96	75 - 123	4	20
1,2-Dichloroethane	1.0	U ^c	10.0	7.41		ug/L		74	63 - 130	2	21
Trichloroethene	8.7	F1	10.0	15.3	F1	ug/L		66	74 - 121	9	20
1,2-Dichloropropane	1.0	U	10.0	9.45		ug/L		94	67 - 119	4	21
Bromodichloromethane	1.0	U	10.0	8.74		ug/L		87	62 - 127	4	19
cis-1,3-Dichloropropene	1.0	U	10.0	8.70		ug/L		87	61 - 127	3	22
4-Methyl-2-pentanone (MIBK)	5.0	U	20.0	17.7		ug/L		88	41 - 135	10	35
Toluene	1.0	U	10.0	10.4		ug/L		104	76 - 129	9	18
trans-1,3-Dichloropropene	1.0	U	10.0	8.51		ug/L		85	61 - 136	11	17
1,1,2-Trichloroethane	1.0	U	10.0	10.3		ug/L		103	74 - 126	3	20
Tetrachloroethene	1.0	U	10.0	9.30		ug/L		93	76 - 128	8	20
2-Hexanone	5.0	U	20.0	16.8		ug/L		84	37 - 150	14	35
Dibromochloromethane	1.0	U	10.0	10.3		ug/L		103	63 - 131	7	20
1,2-Dibromoethane (EDB)	1.0	U	10.0	9.25		ug/L		92	76 - 128	8	21
Chlorobenzene	1.0	U	10.0	9.79		ug/L		98	79 - 124	7	16
1,1,1,2-Tetrachloroethane	1.0	U	10.0	9.83		ug/L		98	70 - 130	11	17
Ethylbenzene	1.0	U	10.0	9.94		ug/L		99	77 - 124	12	16
Xylenes, Total	2.0	U	20.0	20.0		ug/L		100	76 - 124	11	17
Styrene	1.0	U	10.0	10.3		ug/L		103	80 - 125	7	18
Bromoform	1.0	U	10.0	11.5		ug/L		115	54 - 136	1	23
1,1,2,2-Tetrachloroethane	1.0	U	10.0	10.0		ug/L		100	72 - 128	7	24
Acrylonitrile	20	U	100	98.1		ug/L		98	60 - 130	4	32
1,4-Dioxane	200	U	200	240		ug/L		120	26 - 150	16	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*72*		*65 - 121*
Toluene-d8 (Surr)	*94*		*73 - 120*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*
Dibromofluoromethane (Surr)	*84*		*73 - 120*

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

Lab Sample ID: MB 180-227871/5
Matrix: Water
Analysis Batch: 227871

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	0.90	ug/L			11/03/17 00:58	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			11/03/17 00:58	1
Bromomethane	1.0	U	1.0	0.89	ug/L			11/03/17 00:58	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/03/17 00:58	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/03/17 00:58	1
Acetone	5.0	U	5.0	3.4	ug/L			11/03/17 00:58	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/03/17 00:58	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/03/17 00:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/03/17 00:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/03/17 00:58	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/03/17 00:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/03/17 00:58	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/03/17 00:58	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/03/17 00:58	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/03/17 00:58	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/03/17 00:58	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/03/17 00:58	1
Benzene	1.0	U	1.0	0.60	ug/L			11/03/17 00:58	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			11/03/17 00:58	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			11/03/17 00:58	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/03/17 00:58	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/03/17 00:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/03/17 00:58	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/03/17 00:58	1
Toluene	1.0	U	1.0	0.46	ug/L			11/03/17 00:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/03/17 00:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/03/17 00:58	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/03/17 00:58	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/03/17 00:58	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/03/17 00:58	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/03/17 00:58	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/03/17 00:58	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/03/17 00:58	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/03/17 00:58	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/03/17 00:58	1
Styrene	1.0	U	1.0	0.47	ug/L			11/03/17 00:58	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/03/17 00:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/03/17 00:58	1
Acrylonitrile	20	U	20	7.8	ug/L			11/03/17 00:58	1
1,4-Dioxane	200	U	200	14	ug/L			11/03/17 00:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*65 - 121*		*11/03/17 00:58*	*1*
Toluene-d8 (Surr)	*92*		*73 - 120*		*11/03/17 00:58*	*1*
4-Bromofluorobenzene (Surr)	*86*		*80 - 120*		*11/03/17 00:58*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 120*		*11/03/17 00:58*	*1*

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

Lab Sample ID: LCS 180-227871/3
Matrix: Water
Analysis Batch: 227871

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	12.9		ug/L		129	49 - 135
Vinyl chloride	10.0	11.0		ug/L		110	52 - 136
Bromomethane	10.0	10.7		ug/L		107	37 - 150
Chloroethane	10.0	12.8		ug/L		128	44 - 139
1,1-Dichloroethene	10.0	10.1		ug/L		101	64 - 131
Acetone	20.0	30.4	*	ug/L		152	24 - 150
Carbon disulfide	10.0	10.9		ug/L		109	20 - 150
Methylene Chloride	10.0	9.30		ug/L		93	66 - 123
trans-1,2-Dichloroethene	10.0	9.51		ug/L		95	70 - 123
Methyl tert-butyl ether	10.0	9.19		ug/L		92	66 - 130
1,1-Dichloroethane	10.0	10.2		ug/L		102	66 - 122
cis-1,2-Dichloroethene	10.0	9.18		ug/L		92	73 - 120
Bromochloromethane	10.0	9.37		ug/L		94	73 - 122
2-Butanone (MEK)	20.0	26.0		ug/L		130	37 - 150
Chloroform	10.0	9.12		ug/L		91	72 - 123
1,1,1-Trichloroethane	10.0	10.1		ug/L		101	66 - 129
Carbon tetrachloride	10.0	10.4		ug/L		104	58 - 145
Benzene	10.0	9.04		ug/L		90	75 - 123
1,2-Dichloroethane	10.0	10.3		ug/L		103	63 - 130
Trichloroethene	10.0	8.71		ug/L		87	74 - 121
1,2-Dichloropropane	10.0	9.50		ug/L		95	67 - 119
Bromodichloromethane	10.0	9.00		ug/L		90	62 - 127
cis-1,3-Dichloropropene	10.0	8.52		ug/L		85	61 - 127
4-Methyl-2-pentanone (MIBK)	20.0	24.4		ug/L		122	41 - 135
Toluene	10.0	10.2		ug/L		102	76 - 129
trans-1,3-Dichloropropene	10.0	10.1		ug/L		101	61 - 136
1,1,2-Trichloroethane	10.0	9.79		ug/L		98	74 - 126
Tetrachloroethene	10.0	9.70		ug/L		97	76 - 128
2-Hexanone	20.0	24.3		ug/L		121	37 - 150
Dibromochloromethane	10.0	10.3		ug/L		103	63 - 131
1,2-Dibromoethane (EDB)	10.0	9.43		ug/L		94	76 - 128
Chlorobenzene	10.0	9.21		ug/L		92	79 - 124
1,1,1,2-Tetrachloroethane	10.0	10.1		ug/L		101	70 - 130
Ethylbenzene	10.0	9.44		ug/L		94	77 - 124
Xylenes, Total	20.0	18.3		ug/L		91	76 - 124
Styrene	10.0	9.56		ug/L		96	80 - 125
Bromoform	10.0	8.89		ug/L		89	54 - 136
1,1,2,2-Tetrachloroethane	10.0	9.09		ug/L		91	72 - 128
Acrylonitrile	100	111		ug/L		111	60 - 130
1,4-Dioxane	200	169	J	ug/L		85	26 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*65 - 121*
Toluene-d8 (Surr)	*116*		*73 - 120*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*73 - 120*

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

Lab Sample ID: MB 180-228044/5
Matrix: Water
Analysis Batch: 228044

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	0.90	ug/L			11/06/17 02:14	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			11/06/17 02:14	1
Bromomethane	1.0	U	1.0	0.89	ug/L			11/06/17 02:14	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/06/17 02:14	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/06/17 02:14	1
Acetone	5.0	U	5.0	3.4	ug/L			11/06/17 02:14	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/06/17 02:14	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/06/17 02:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/06/17 02:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/06/17 02:14	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/06/17 02:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/06/17 02:14	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/06/17 02:14	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/06/17 02:14	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/06/17 02:14	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/06/17 02:14	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/06/17 02:14	1
Benzene	1.0	U	1.0	0.60	ug/L			11/06/17 02:14	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			11/06/17 02:14	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			11/06/17 02:14	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/06/17 02:14	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/06/17 02:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/06/17 02:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/06/17 02:14	1
Toluene	1.0	U	1.0	0.46	ug/L			11/06/17 02:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/06/17 02:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/06/17 02:14	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/06/17 02:14	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/06/17 02:14	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/06/17 02:14	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/06/17 02:14	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/06/17 02:14	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/06/17 02:14	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/06/17 02:14	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/06/17 02:14	1
Styrene	1.0	U	1.0	0.47	ug/L			11/06/17 02:14	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/06/17 02:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/06/17 02:14	1
Acrylonitrile	20	U	20	7.8	ug/L			11/06/17 02:14	1
1,4-Dioxane	200	U	200	14	ug/L			11/06/17 02:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*65 - 121*		*11/06/17 02:14*	*1*
Toluene-d8 (Surr)	*91*		*73 - 120*		*11/06/17 02:14*	*1*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*11/06/17 02:14*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*11/06/17 02:14*	*1*

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

Lab Sample ID: LCS 180-228044/3
Matrix: Water
Analysis Batch: 228044

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	12.8		ug/L		128	49 - 135
Vinyl chloride	10.0	10.4		ug/L		104	52 - 136
Bromomethane	10.0	10.8		ug/L		108	37 - 150
Chloroethane	10.0	12.3		ug/L		123	44 - 139
1,1-Dichloroethene	10.0	8.99		ug/L		90	64 - 131
Acetone	20.0	27.6		ug/L		138	24 - 150
Carbon disulfide	10.0	9.56		ug/L		96	20 - 150
Methylene Chloride	10.0	8.46		ug/L		85	66 - 123
trans-1,2-Dichloroethene	10.0	8.18		ug/L		82	70 - 123
Methyl tert-butyl ether	10.0	8.79		ug/L		88	66 - 130
1,1-Dichloroethane	10.0	9.21		ug/L		92	66 - 122
cis-1,2-Dichloroethene	10.0	8.27		ug/L		83	73 - 120
Bromochloromethane	10.0	8.22		ug/L		82	73 - 122
2-Butanone (MEK)	20.0	23.1		ug/L		116	37 - 150
Chloroform	10.0	8.18		ug/L		82	72 - 123
1,1,1-Trichloroethane	10.0	8.81		ug/L		88	66 - 129
Carbon tetrachloride	10.0	8.97		ug/L		90	58 - 145
Benzene	10.0	8.02		ug/L		80	75 - 123
1,2-Dichloroethane	10.0	9.50		ug/L		95	63 - 130
Trichloroethene	10.0	7.71		ug/L		77	74 - 121
1,2-Dichloropropane	10.0	8.82		ug/L		88	67 - 119
Bromodichloromethane	10.0	7.87		ug/L		79	62 - 127
cis-1,3-Dichloropropene	10.0	8.07		ug/L		81	61 - 127
4-Methyl-2-pentanone (MIBK)	20.0	22.6		ug/L		113	41 - 135
Toluene	10.0	8.86		ug/L		89	76 - 129
trans-1,3-Dichloropropene	10.0	9.69		ug/L		97	61 - 136
1,1,2-Trichloroethane	10.0	9.07		ug/L		91	74 - 126
Tetrachloroethene	10.0	8.57		ug/L		86	76 - 128
2-Hexanone	20.0	22.4		ug/L		112	37 - 150
Dibromochloromethane	10.0	9.23		ug/L		92	63 - 131
1,2-Dibromoethane (EDB)	10.0	8.73		ug/L		87	76 - 128
Chlorobenzene	10.0	8.50		ug/L		85	79 - 124
1,1,1,2-Tetrachloroethane	10.0	9.47		ug/L		95	70 - 130
Ethylbenzene	10.0	8.32		ug/L		83	77 - 124
Xylenes, Total	20.0	16.3		ug/L		81	76 - 124
Styrene	10.0	8.53		ug/L		85	80 - 125
Bromoform	10.0	8.52		ug/L		85	54 - 136
1,1,2,2-Tetrachloroethane	10.0	8.61		ug/L		86	72 - 128
Acrylonitrile	100	104		ug/L		104	60 - 130
1,4-Dioxane	200	200		ug/L		100	26 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*65 - 121*
Toluene-d8 (Surr)	*110*		*73 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*73 - 120*

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

Lab Sample ID: MB 180-228278/5
Matrix: Water
Analysis Batch: 228278

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	0.90	ug/L			11/08/17 02:29	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			11/08/17 02:29	1
Bromomethane	1.0	U	1.0	0.89	ug/L			11/08/17 02:29	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/08/17 02:29	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/08/17 02:29	1
Acetone	5.0	U	5.0	3.4	ug/L			11/08/17 02:29	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/08/17 02:29	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/08/17 02:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/08/17 02:29	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/08/17 02:29	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/08/17 02:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/08/17 02:29	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/08/17 02:29	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/08/17 02:29	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/08/17 02:29	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/08/17 02:29	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/08/17 02:29	1
Benzene	1.0	U	1.0	0.60	ug/L			11/08/17 02:29	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			11/08/17 02:29	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			11/08/17 02:29	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/08/17 02:29	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/08/17 02:29	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/08/17 02:29	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/08/17 02:29	1
Toluene	1.0	U	1.0	0.46	ug/L			11/08/17 02:29	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/08/17 02:29	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/08/17 02:29	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/08/17 02:29	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/08/17 02:29	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/08/17 02:29	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/08/17 02:29	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/08/17 02:29	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/08/17 02:29	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/08/17 02:29	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/08/17 02:29	1
Styrene	1.0	U	1.0	0.47	ug/L			11/08/17 02:29	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/08/17 02:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/08/17 02:29	1
Acrylonitrile	20	U	20	7.8	ug/L			11/08/17 02:29	1
1,4-Dioxane	200	U	200	14	ug/L			11/08/17 02:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*65 - 121*		*11/08/17 02:29*	*1*
Toluene-d8 (Surr)	*90*		*73 - 120*		*11/08/17 02:29*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*11/08/17 02:29*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*11/08/17 02:29*	*1*

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

Lab Sample ID: LCS 180-228278/3
Matrix: Water
Analysis Batch: 228278

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	12.4		ug/L		124	49 - 135
Vinyl chloride	10.0	10.1		ug/L		101	52 - 136
Bromomethane	10.0	6.46		ug/L		65	37 - 150
Chloroethane	10.0	8.54		ug/L		85	44 - 139
1,1-Dichloroethene	10.0	8.67		ug/L		87	64 - 131
Acetone	20.0	31.4	*	ug/L		157	24 - 150
Carbon disulfide	10.0	9.12		ug/L		91	20 - 150
Methylene Chloride	10.0	8.54		ug/L		85	66 - 123
trans-1,2-Dichloroethene	10.0	8.48		ug/L		85	70 - 123
Methyl tert-butyl ether	10.0	9.44		ug/L		94	66 - 130
1,1-Dichloroethane	10.0	8.83		ug/L		88	66 - 122
cis-1,2-Dichloroethene	10.0	8.07		ug/L		81	73 - 120
Bromochloromethane	10.0	8.61		ug/L		86	73 - 122
2-Butanone (MEK)	20.0	26.7		ug/L		134	37 - 150
Chloroform	10.0	8.14		ug/L		81	72 - 123
1,1,1-Trichloroethane	10.0	8.26		ug/L		83	66 - 129
Carbon tetrachloride	10.0	8.37		ug/L		84	58 - 145
Benzene	10.0	8.06		ug/L		81	75 - 123
1,2-Dichloroethane	10.0	9.57		ug/L		96	63 - 130
Trichloroethene	10.0	7.44		ug/L		74	74 - 121
1,2-Dichloropropane	10.0	8.48		ug/L		85	67 - 119
Bromodichloromethane	10.0	7.89		ug/L		79	62 - 127
cis-1,3-Dichloropropene	10.0	8.20		ug/L		82	61 - 127
4-Methyl-2-pentanone (MIBK)	20.0	22.7		ug/L		114	41 - 135
Toluene	10.0	8.81		ug/L		88	76 - 129
trans-1,3-Dichloropropene	10.0	9.61		ug/L		96	61 - 136
1,1,2-Trichloroethane	10.0	9.46		ug/L		95	74 - 126
Tetrachloroethene	10.0	8.12		ug/L		81	76 - 128
2-Hexanone	20.0	24.1		ug/L		121	37 - 150
Dibromochloromethane	10.0	9.19		ug/L		92	63 - 131
1,2-Dibromoethane (EDB)	10.0	9.09		ug/L		91	76 - 128
Chlorobenzene	10.0	8.60		ug/L		86	79 - 124
1,1,1,2-Tetrachloroethane	10.0	9.14		ug/L		91	70 - 130
Ethylbenzene	10.0	8.38		ug/L		84	77 - 124
Xylenes, Total	20.0	16.9		ug/L		85	76 - 124
Styrene	10.0	8.44		ug/L		84	80 - 125
Bromoform	10.0	8.34		ug/L		83	54 - 136
1,1,2,2-Tetrachloroethane	10.0	9.11		ug/L		91	72 - 128
Acrylonitrile	100	116		ug/L		116	60 - 130
1,4-Dioxane	200	196	J	ug/L		98	26 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*65 - 121*
Toluene-d8 (Surr)	*112*		*73 - 120*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*73 - 120*

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

Lab Sample ID: MB 180-228533/8
Matrix: Water
Analysis Batch: 228533

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	0.90	ug/L			11/09/17 11:36	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			11/09/17 11:36	1
Bromomethane	1.0	U	1.0	0.89	ug/L			11/09/17 11:36	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/09/17 11:36	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/09/17 11:36	1
Acetone	5.0	U	5.0	3.4	ug/L			11/09/17 11:36	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/09/17 11:36	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/09/17 11:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/09/17 11:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/09/17 11:36	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/09/17 11:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/09/17 11:36	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/09/17 11:36	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/09/17 11:36	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/09/17 11:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/09/17 11:36	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/09/17 11:36	1
Benzene	1.0	U	1.0	0.60	ug/L			11/09/17 11:36	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			11/09/17 11:36	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			11/09/17 11:36	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/09/17 11:36	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/09/17 11:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/09/17 11:36	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/09/17 11:36	1
Toluene	1.0	U	1.0	0.46	ug/L			11/09/17 11:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/09/17 11:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/09/17 11:36	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/09/17 11:36	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/09/17 11:36	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/09/17 11:36	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/09/17 11:36	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/09/17 11:36	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/09/17 11:36	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/09/17 11:36	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/09/17 11:36	1
Styrene	1.0	U	1.0	0.47	ug/L			11/09/17 11:36	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/09/17 11:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/09/17 11:36	1
Acrylonitrile	20	U	20	7.8	ug/L			11/09/17 11:36	1
1,4-Dioxane	200	U	200	14	ug/L			11/09/17 11:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*65 - 121*		*11/09/17 11:36*	*1*
Toluene-d8 (Surr)	*113*		*73 - 120*		*11/09/17 11:36*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/09/17 11:36*	*1*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*11/09/17 11:36*	*1*

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

Lab Sample ID: LCS 180-228533/4
Matrix: Water
Analysis Batch: 228533

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	7.53		ug/L		75	49 - 135
Vinyl chloride	10.0	6.63		ug/L		66	52 - 136
Bromomethane	10.0	7.80		ug/L		78	37 - 150
Chloroethane	10.0	9.19		ug/L		92	44 - 139
1,1-Dichloroethene	10.0	6.67		ug/L		67	64 - 131
Acetone	20.0	16.7		ug/L		84	24 - 150
Carbon disulfide	10.0	10.2		ug/L		102	20 - 150
Methylene Chloride	10.0	11.1		ug/L		111	66 - 123
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	70 - 123
Methyl tert-butyl ether	10.0	9.70		ug/L		97	66 - 130
1,1-Dichloroethane	10.0	8.98		ug/L		90	66 - 122
cis-1,2-Dichloroethene	10.0	9.89		ug/L		99	73 - 120
Bromochloromethane	10.0	9.52		ug/L		95	73 - 122
2-Butanone (MEK)	20.0	23.5		ug/L		118	37 - 150
Chloroform	10.0	8.98		ug/L		90	72 - 123
1,1,1-Trichloroethane	10.0	9.28		ug/L		93	66 - 129
Carbon tetrachloride	10.0	10.4		ug/L		104	58 - 145
Benzene	10.0	11.3		ug/L		113	75 - 123
1,2-Dichloroethane	10.0	8.53		ug/L		85	63 - 130
Trichloroethene	10.0	10.3		ug/L		103	74 - 121
1,2-Dichloropropane	10.0	10.6		ug/L		106	67 - 119
Bromodichloromethane	10.0	9.48		ug/L		95	62 - 127
cis-1,3-Dichloropropene	10.0	10.1		ug/L		101	61 - 127
4-Methyl-2-pentanone (MIBK)	20.0	25.2		ug/L		126	41 - 135
Toluene	10.0	12.4		ug/L		124	76 - 129
trans-1,3-Dichloropropene	10.0	10.0		ug/L		100	61 - 136
1,1,2-Trichloroethane	10.0	11.4		ug/L		114	74 - 126
Tetrachloroethene	10.0	9.48		ug/L		95	76 - 128
2-Hexanone	20.0	24.2		ug/L		121	37 - 150
Dibromochloromethane	10.0	11.3		ug/L		113	63 - 131
1,2-Dibromoethane (EDB)	10.0	11.1		ug/L		111	76 - 128
Chlorobenzene	10.0	11.6		ug/L		116	79 - 124
1,1,1,2-Tetrachloroethane	10.0	10.7		ug/L		107	70 - 130
Ethylbenzene	10.0	10.4		ug/L		104	77 - 124
Xylenes, Total	20.0	20.5		ug/L		103	76 - 124
Styrene	10.0	11.1		ug/L		111	80 - 125
Bromoform	10.0	12.7		ug/L		127	54 - 136
1,1,2,2-Tetrachloroethane	10.0	11.7		ug/L		117	72 - 128
Acrylonitrile	100	120		ug/L		120	60 - 130
1,4-Dioxane	200	229		ug/L		114	26 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*65 - 121*
Toluene-d8 (Surr)	*95*		*73 - 120*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*94*		*73 - 120*

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

Lab Sample ID: MB 180-227668/1-A
Matrix: Water
Analysis Batch: 228094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 227668

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.37	ug/L		11/01/17 09:35	11/06/17 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*26 - 103*	*11/01/17 09:35*	*11/06/17 11:20*	*1*
2-Fluorophenol (Surr)	*60*		*27 - 100*	*11/01/17 09:35*	*11/06/17 11:20*	*1*
2,4,6-Tribromophenol (Surr)	*77*		*28 - 134*	*11/01/17 09:35*	*11/06/17 11:20*	*1*
Nitrobenzene-d5 (Surr)	*66*		*30 - 101*	*11/01/17 09:35*	*11/06/17 11:20*	*1*
Phenol-d5 (Surr)	*58*		*27 - 101*	*11/01/17 09:35*	*11/06/17 11:20*	*1*
Terphenyl-d14 (Surr)	*72*		*20 - 119*	*11/01/17 09:35*	*11/06/17 11:20*	*1*

Lab Sample ID: LCS 180-227668/2-A
Matrix: Water
Analysis Batch: 228094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 227668

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	20.0	11.9		ug/L		59	41 - 107

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*65*		*26 - 103*
2-Fluorophenol (Surr)	*62*		*27 - 100*
2,4,6-Tribromophenol (Surr)	*80*		*28 - 134*
Nitrobenzene-d5 (Surr)	*66*		*30 - 101*
Phenol-d5 (Surr)	*58*		*27 - 101*
Terphenyl-d14 (Surr)	*68*		*20 - 119*

Method: 9014 - Cyanide

Lab Sample ID: MB 180-227594/4-A
Matrix: Water
Analysis Batch: 227666

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 227594

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	10	U	10	3.0	ug/L		10/31/17 13:24	10/31/17 16:49	1

Lab Sample ID: HLCS 180-227594/2-A
Matrix: Water
Analysis Batch: 227666

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 227594

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	250	250		ug/L		100	90 - 110

Lab Sample ID: LCS 180-227594/3-A
Matrix: Water
Analysis Batch: 227666

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 227594

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	200	211		ug/L		105	85 - 115

Method: 9014 - Cyanide (Continued)

Lab Sample ID: LLCS 180-227594/1-A
Matrix: Water
Analysis Batch: 227666

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 227594

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	50.0	47.8		ug/L		96	90 - 110

Method: OIA-1677 - Cyanide, Available (Flow Injection)

Lab Sample ID: MB 180-227415/45
Matrix: Water
Analysis Batch: 227415

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Available	0.0020	U	0.0020	0.00036	mg/L			10/30/17 08:39	1

Lab Sample ID: LCS 180-227415/43
Matrix: Water
Analysis Batch: 227415

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Available	0.0501	0.0526		mg/L		105	82 - 132

Lab Sample ID: LCSD 180-227415/44
Matrix: Water
Analysis Batch: 227415

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Available	0.0501	0.0534		mg/L		107	82 - 132	1	20

GC/MS VOA

Analysis Batch: 227642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71829-1	HD-MW-43D-0/1-0	Total/NA	Water	8260C	
180-71829-2	HD-MW-43S-0/1-0	Total/NA	Water	8260C	
180-71829-3	HD-QC3-0/1-1	Total/NA	Water	8260C	
180-71829-5	HD-QC5-0/1-2	Total/NA	Water	8260C	
180-71829-6	HD-QC3-0/1-4	Total/NA	Water	8260C	
180-71829-7	HD-QC3-0/1-3	Total/NA	Water	8260C	
MB 180-227642/7	Method Blank	Total/NA	Water	8260C	
LCS 180-227642/4	Lab Control Sample	Total/NA	Water	8260C	
180-71829-1 MS	HD-MW-43D-0/1-0	Total/NA	Water	8260C	
180-71829-1 MSD	HD-MW-43D-0/1-0	Total/NA	Water	8260C	

Analysis Batch: 227760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71829-14	HD-MW-2-0/1-0	Total/NA	Water	8260C	
180-71829-16	HD-MW-82-0/1-0	Total/NA	Water	8260C	
180-71829-17	HD-MW-15-0/1-0	Total/NA	Water	8260C	
180-71829-19	HD-MW-12-0/1-0	Total/NA	Water	8260C	
180-71829-20	HD-TATE (S-6)-0/1-0	Total/NA	Water	8260C	
MB 180-227760/5	Method Blank	Total/NA	Water	8260C	
LCS 180-227760/3	Lab Control Sample	Total/NA	Water	8260C	
180-71829-16 MS	HD-MW-82-0/1-0	Total/NA	Water	8260C	

Analysis Batch: 227768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71829-4	HD-MW-18D-0/1-0	Total/NA	Water	8260C	
180-71829-8 - DL	HD-MW-136A-356/356.5-0	Total/NA	Water	8260C	
180-71829-8	HD-MW-136A-356/356.5-0	Total/NA	Water	8260C	
180-71829-9 - DL	HD-MW-136A-372.5/373-0	Total/NA	Water	8260C	
180-71829-9	HD-MW-136A-372.5/373-0	Total/NA	Water	8260C	
180-71829-10 - DL	HD-MW-136A-434/434.5-0	Total/NA	Water	8260C	
180-71829-10	HD-MW-136A-434/434.5-0	Total/NA	Water	8260C	
180-71829-11 - DL	HD-MW-136A-270/348-0	Total/NA	Water	8260C	
180-71829-11	HD-MW-136A-270/348-0	Total/NA	Water	8260C	
180-71829-12 - DL	HD-MW-91-0/1-0	Total/NA	Water	8260C	
180-71829-12	HD-MW-91-0/1-0	Total/NA	Water	8260C	
180-71829-13	HD-MW-16D-0/1-0	Total/NA	Water	8260C	
MB 180-227768/6	Method Blank	Total/NA	Water	8260C	
LCS 180-227768/4	Lab Control Sample	Total/NA	Water	8260C	
180-71829-13 MS	HD-MW-16D-0/1-0	Total/NA	Water	8260C	
180-71829-13 MSD	HD-MW-16D-0/1-0	Total/NA	Water	8260C	

Analysis Batch: 227871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71829-18	HD-MW-16S-0/1-0	Total/NA	Water	8260C	
MB 180-227871/5	Method Blank	Total/NA	Water	8260C	
LCS 180-227871/3	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 228044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71829-15	HD-MW-185-0/1-0	Total/NA	Water	8260C	
MB 180-228044/5	Method Blank	Total/NA	Water	8260C	

GC/MS VOA (Continued)

Analysis Batch: 228044 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-228044/3	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 228278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71829-14 - DL	HD-MW-2-0/1-0	Total/NA	Water	8260C	
MB 180-228278/5	Method Blank	Total/NA	Water	8260C	
LCS 180-228278/3	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 228533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71829-17 - DL	HD-MW-15-0/1-0	Total/NA	Water	8260C	
MB 180-228533/8	Method Blank	Total/NA	Water	8260C	
LCS 180-228533/4	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 227668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71829-8	HD-MW-136A-356/356.5-0	Total/NA	Water	3520C	
180-71829-9	HD-MW-136A-372.5/373-0	Total/NA	Water	3520C	
MB 180-227668/1-A	Method Blank	Total/NA	Water	3520C	
LCS 180-227668/2-A	Lab Control Sample	Total/NA	Water	3520C	

Analysis Batch: 228094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71829-8	HD-MW-136A-356/356.5-0	Total/NA	Water	8270D LL	227668
180-71829-9	HD-MW-136A-372.5/373-0	Total/NA	Water	8270D LL	227668
MB 180-227668/1-A	Method Blank	Total/NA	Water	8270D LL	227668
LCS 180-227668/2-A	Lab Control Sample	Total/NA	Water	8270D LL	227668

General Chemistry

Analysis Batch: 227415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71829-14	HD-MW-2-0/1-0	Total/NA	Water	OIA-1677	
MB 180-227415/45	Method Blank	Total/NA	Water	OIA-1677	
LCS 180-227415/43	Lab Control Sample	Total/NA	Water	OIA-1677	
LCSD 180-227415/44	Lab Control Sample Dup	Total/NA	Water	OIA-1677	

Prep Batch: 227594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71829-14	HD-MW-2-0/1-0	Total/NA	Water	9010C	
MB 180-227594/4-A	Method Blank	Total/NA	Water	9010C	
HLCS 180-227594/2-A	Lab Control Sample	Total/NA	Water	9010C	
LCS 180-227594/3-A	Lab Control Sample	Total/NA	Water	9010C	
LLCS 180-227594/1-A	Lab Control Sample	Total/NA	Water	9010C	

Analysis Batch: 227666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71829-14	HD-MW-2-0/1-0	Total/NA	Water	9014	227594

General Chemistry (Continued)

Analysis Batch: 227666 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-227594/4-A	Method Blank	Total/NA	Water	9014	227594
HLCS 180-227594/2-A	Lab Control Sample	Total/NA	Water	9014	227594
LCS 180-227594/3-A	Lab Control Sample	Total/NA	Water	9014	227594
LLCS 180-227594/1-A	Lab Control Sample	Total/NA	Water	9014	227594

Client Sample ID: HD-MW-43D-0/1-0
Date Collected: 10/26/17 14:25
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-1
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		1	5 mL	5 mL	227642	11/01/17 12:15	PJJ	TAL PIT
	Instrument ID: CHHP7									

Client Sample ID: HD-MW-43S-0/1-0
Date Collected: 10/26/17 13:20
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-2
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		1	5 mL	5 mL	227642	11/01/17 12:43	PJJ	TAL PIT
	Instrument ID: CHHP7									

Client Sample ID: HD-QC3-0/1-1
Date Collected: 10/26/17 08:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-3
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	227642	11/01/17 15:54	PJJ	TAL PIT
	Instrument ID: CHHP7									

Client Sample ID: HD-MW-18D-0/1-0
Date Collected: 10/26/17 11:30
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-4
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	227768	11/02/17 13:20	PJJ	TAL PIT
	Instrument ID: CHHP7									

Client Sample ID: HD-QC5-0/1-2
Date Collected: 10/25/17 12:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-5
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	227642	11/01/17 16:51	PJJ	TAL PIT
	Instrument ID: CHHP7									

Client Sample ID: HD-QC3-0/1-4
Date Collected: 10/26/17 14:45
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-6
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	227642	11/01/17 11:46	PJJ	TAL PIT
	Instrument ID: CHHP7									

Lab Chronicle

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-71829-1

Client Sample ID: HD-QC3-0/1-3

Lab Sample ID: 180-71829-7
Date Collected: 10/26/17 14:35
Matrix: Water
Date Received: 10/27/17 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	227642	11/01/17 16:23	PJJ	TAL PIT
	Instrument ID: CHHP7									

Client Sample ID: HD-MW-136A-356/356.5-0

Lab Sample ID: 180-71829-8
Date Collected: 10/25/17 11:00
Matrix: Water
Date Received: 10/27/17 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	DL	500	5 mL	5 mL	227768	11/02/17 09:17	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	8260C		50	5 mL	5 mL	227768	11/02/17 14:45	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Prep	3520C			250 mL	250 uL	227668	11/01/17 09:35	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	228094	11/06/17 17:54	VVP	TAL PIT
	Instrument ID: CH733									

Client Sample ID: HD-MW-136A-372.5/373-0

Lab Sample ID: 180-71829-9
Date Collected: 10/25/17 12:00
Matrix: Water
Date Received: 10/27/17 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	DL	500	5 mL	5 mL	227768	11/02/17 13:49	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	8260C		50	5 mL	5 mL	227768	11/02/17 16:14	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Prep	3520C			260 mL	250 uL	227668	11/01/17 09:35	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	228094	11/06/17 18:17	VVP	TAL PIT
	Instrument ID: CH733									

Client Sample ID: HD-MW-136A-434/434.5-0

Lab Sample ID: 180-71829-10
Date Collected: 10/25/17 13:00
Matrix: Water
Date Received: 10/27/17 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	DL	1000	5 mL	5 mL	227768	11/02/17 11:26	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	8260C		100	5 mL	5 mL	227768	11/02/17 15:46	PJJ	TAL PIT
	Instrument ID: CHHP7									

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

Lab Sample ID: 180-71829-11
Matrix: Water
Date Collected: 10/26/17 10:00
Date Received: 10/27/17 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	DL	50	5 mL	5 mL	227768	11/02/17 12:52	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	8260C		5	5 mL	5 mL	227768	11/02/17 15:18	PJJ	TAL PIT
	Instrument ID: CHHP7									

Client Sample ID: HD-MW-91-0/1-0

Lab Sample ID: 180-71829-12
Matrix: Water
Date Collected: 10/25/17 13:43
Date Received: 10/27/17 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	DL	10	5 mL	5 mL	227768	11/02/17 09:46	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	8260C		1	5 mL	5 mL	227768	11/02/17 14:17	PJJ	TAL PIT
	Instrument ID: CHHP7									

Client Sample ID: HD-MW-16D-0/1-0

Lab Sample ID: 180-71829-13
Matrix: Water
Date Collected: 10/25/17 13:45
Date Received: 10/27/17 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	227768	11/02/17 07:57	PJJ	TAL PIT
	Instrument ID: CHHP7									

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

Lab Sample ID: 180-71829-14
Matrix: Water
Date Collected: 10/26/17 10:47
Date Received: 10/27/17 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	227760	11/02/17 04:32	FBB	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	8260C	DL	2	5 mL	5 mL	228278	11/08/17 05:29	PJJ	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Prep	9010C			50 mL	50 mL	227594	10/31/17 13:24	JAS	TAL PIT
Total/NA	Analysis	9014		1			227666	10/31/17 17:20	JAS	TAL PIT
	Instrument ID: SEAL2									
Total/NA	Analysis	OIA-1677		1			227415	10/30/17 08:45	ANA	TAL PIT
	Instrument ID: ALPKEM2									

Client Sample ID: HD-MW-185-0/1-0

Lab Sample ID: 180-71829-15

Date Collected: 10/26/17 08:46

Matrix: Water

Date Received: 10/27/17 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	228044	11/06/17 05:25	FBB	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-MW-82-0/1-0

Lab Sample ID: 180-71829-16

Date Collected: 10/26/17 12:15

Matrix: Water

Date Received: 10/27/17 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	227760	11/02/17 01:39	FBB	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-MW-15-0/1-0

Lab Sample ID: 180-71829-17

Date Collected: 10/26/17 08:24

Matrix: Water

Date Received: 10/27/17 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	227760	11/02/17 06:07	FBB	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	8260C	DL	5	5 mL	5 mL	228533	11/09/17 13:31	PJJ	TAL PIT
	Instrument ID: CHHP7									

Client Sample ID: HD-MW-16S-0/1-0

Lab Sample ID: 180-71829-18

Date Collected: 10/25/17 12:45

Matrix: Water

Date Received: 10/27/17 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	227871	11/03/17 08:47	FBB	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-MW-12-0/1-0

Lab Sample ID: 180-71829-19

Date Collected: 10/25/17 08:20

Matrix: Water

Date Received: 10/27/17 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	227760	11/02/17 06:55	FBB	TAL PIT
	Instrument ID: CHHP5									

Lab Chronicle

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-71829-1

Client Sample ID: HD-TATE (S-6)-0/1-0

Date Collected: 10/26/17 09:00
Date Received: 10/27/17 09:00

Lab Sample ID: 180-71829-20

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	227760	11/02/17 05:44	FBB	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

JAS = Joshua Schmidt

Batch Type: Analysis

ANA = Alexis Anderson

FBB = Frank Bungard

JAS = Joshua Schmidt

PJJ = Patrick Journet

VVP = Vincent Piccolino

Accreditation/Certification Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-71829-1

Laboratory: TestAmerica Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Pennsylvania	NELAP	3	02-00416	04-30-18

Method Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-71829-1

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
9014	Cyanide	SW846	TAL PIT
OIA-1677	Cyanide, Available (Flow Injection)	OI CORP	TAL PIT

Protocol References:

OI CORP = OI Corporation Instrument Manual.

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: 180-71829-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-71829-1	HD-MW-43D-0/1-0	Water	10/26/17 14:25	10/27/17 09:00
180-71829-2	HD-MW-43S-0/1-0	Water	10/26/17 13:20	10/27/17 09:00
180-71829-3	HD-QC3-0/1-1	Water	10/26/17 08:00	10/27/17 09:00
180-71829-4	HD-MW-18D-0/1-0	Water	10/26/17 11:30	10/27/17 09:00
180-71829-5	HD-QC5-0/1-2	Water	10/25/17 12:00	10/27/17 09:00
180-71829-6	HD-QC3-0/1-4	Water	10/26/17 14:45	10/27/17 09:00
180-71829-7	HD-QC3-0/1-3	Water	10/26/17 14:35	10/27/17 09:00
180-71829-8	HD-MW-136A-356/356.5-0	Water	10/25/17 11:00	10/27/17 09:00
180-71829-9	HD-MW-136A-372.5/373-0	Water	10/25/17 12:00	10/27/17 09:00
180-71829-10	HD-MW-136A-434/434.5-0	Water	10/25/17 13:00	10/27/17 09:00
180-71829-11	HD-MW-136A-270/348-0	Water	10/26/17 10:00	10/27/17 09:00
180-71829-12	HD-MW-91-0/1-0	Water	10/25/17 13:43	10/27/17 09:00
180-71829-13	HD-MW-16D-0/1-0	Water	10/25/17 13:45	10/27/17 09:00
180-71829-14	HD-MW-2-0/1-0	Water	10/26/17 10:47	10/27/17 09:00
180-71829-15	HD-MW-185-0/1-0	Water	10/26/17 08:46	10/27/17 09:00
180-71829-16	HD-MW-82-0/1-0	Water	10/26/17 12:15	10/27/17 09:00
180-71829-17	HD-MW-15-0/1-0	Water	10/26/17 08:24	10/27/17 09:00
180-71829-18	HD-MW-16S-0/1-0	Water	10/25/17 12:45	10/27/17 09:00
180-71829-19	HD-MW-12-0/1-0	Water	10/25/17 08:20	10/27/17 09:00
180-71829-20	HD-TATE (S-6)-0/1-0	Water	10/26/17 09:00	10/27/17 09:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 218218

Lab Sample ID: IC 180-218218/2 Client Sample ID:

Date Analyzed: 07/27/17 00:51 Lab File ID: 50727D02.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.76	Poor chromatography	bungardf	07/27/17 03:06

Lab Sample ID: IC 180-218218/3 Client Sample ID:

Date Analyzed: 07/27/17 01:15 Lab File ID: 50727D03.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.75	Poor chromatography	bungardf	07/27/17 03:13
1,4-Dioxane	8.05	Poor chromatography	bungardf	07/27/17 03:14

Lab Sample ID: ICIS 180-218218/4 Client Sample ID:

Date Analyzed: 07/27/17 01:39 Lab File ID: 50727D04.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.75	Poor chromatography	bungardf	07/27/17 03:15
1,4-Dioxane	8.05	Poor chromatography	bungardf	07/27/17 03:15

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 227760

Lab Sample ID: LCS 180-227760/3 Client Sample ID:

Date Analyzed: 11/02/17 00:08 Lab File ID: 51101D03.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorobenzene (IS)	7.34	Poor chromatography	bungardf	11/02/17 00:28

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 227871

Lab Sample ID: CCVIS 180-227871/2 Client Sample ID:

Date Analyzed: 11/02/17 22:22 Lab File ID: 51102D02.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloropropene	6.78	Poor chromatography	bungardf	11/02/17 23:03

Lab Sample ID: MB 180-227871/5 Client Sample ID:

Date Analyzed: 11/03/17 00:58 Lab File ID: 51102D05.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.45	Poor chromatography	bungardf	11/03/17 01:28

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 228044

Lab Sample ID: CCVIS 180-228044/2 Client Sample ID:

Date Analyzed: 11/05/17 00:28 Lab File ID: 51105D02.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.90	Poor chromatography	bungardf	11/06/17 00:23
n-Butylbenzene	13.14	Poor chromatography	bungardf	11/06/17 00:22

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 228278

Lab Sample ID: CCVIS 180-228278/2 Client Sample ID:

Date Analyzed: 11/08/17 00:13 Lab File ID: 51107D02.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorobenzene (IS)	7.34	Poor chromatography	bungardf	11/08/17 03:34

Lab Sample ID: MB 180-228278/5 Client Sample ID:

Date Analyzed: 11/08/17 02:29 Lab File ID: 51107D05.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorobenzene (IS)	7.34	Poor chromatography	bungardf	11/08/17 03:34

Lab Sample ID: 180-71829-14 DL Client Sample ID: HD-MW-2-0/1-0 DL

Date Analyzed: 11/08/17 05:29 Lab File ID: 51107D12.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.44	Poor chromatography	bungardf	11/08/17 18:04
Fluorobenzene (IS)	7.34	Poor chromatography	bungardf	11/08/17 18:10

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 212441

Lab Sample ID: IC 180-212441/3 Client Sample ID:

Date Analyzed: 05/26/17 14:37 Lab File ID: 70526N03.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,2-Dichloropropane	5.94	Poor chromatography	journetp	05/26/17 15:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 227768

Lab Sample ID: 180-71829-8 DL Client Sample ID: HD-MW-136A-356/356.5-0 DL

Date Analyzed: 11/02/17 09:17 Lab File ID: 7110210.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	5.94	Poor chromatography	journetp	11/02/17 12:58

Lab Sample ID: 180-71829-10 Client Sample ID: HD-MW-136A-434/434.5-0

Date Analyzed: 11/02/17 15:46 Lab File ID: 7110223.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.37	Poor chromatography	journetp	11/03/17 07:04

Lab Sample ID: 180-71829-9 Client Sample ID: HD-MW-136A-372.5/373-0

Date Analyzed: 11/02/17 16:14 Lab File ID: 7110224.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.37	Poor chromatography	journetp	11/03/17 07:05

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CH733 Analysis Batch Number: 225310

Lab Sample ID: IC 180-225310/3 Client Sample ID:

Date Analyzed: 10/10/17 04:37 Lab File ID: N10100003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.43	Missed Peak	piccolinov	10/10/17 05:34
Pyridine	2.22	Poor chromatography	piccolinov	10/10/17 05:34
Benzidine	12.00	Poor chromatography	piccolinov	10/10/17 05:35

Lab Sample ID: IC 180-225310/4 Client Sample ID:

Date Analyzed: 10/10/17 05:03 Lab File ID: N10100004.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.17	Poor chromatography	piccolinov	10/10/17 05:36
Benzoic acid	7.21	Poor chromatography	piccolinov	10/10/17 05:36

Lab Sample ID: IC 180-225310/5 Client Sample ID:

Date Analyzed: 10/10/17 05:30 Lab File ID: N10100005.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.22	Poor chromatography	piccolinov	10/10/17 06:31

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
OPLVISPKMIX1i_00057	02/10/18	08/10/17	Methanol, Lot DK010	250 mL	SVLVstd1_00043	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.: 180-71829-1

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	400 ug/mL
							Total Cresols	400 ug/mL
					SVLVstd10_00007	25 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SVLVstd11_00009	25 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SVLVstd9_00008	25 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
.SVLVstd1_00043	06/30/18		Restek, Lot A0123736		(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.: 180-71829-1

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.: 180-71829-1

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	2000 ug/mL
							Total Cresols	2000 ug/mL
.SVLVstd10_00007	06/30/18		Restek, Lot A0123819		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
.SVLVstd11_00009	06/30/18		Restek, Lot A0123718		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.SVLVstd9_00008	06/30/18		Restek, Lot A0123497		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
OPQL8270SURi_00059	03/30/18	09/30/17	Methanol, Lot dk010	500 mL	SVLVSURRSPK_00021	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
.SVLVSURRSPK_00021	12/31/21		Restek, Lot A0123269		(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.: 180-71829-1

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
SVDFTPP50i_00029							4-Methyl-1-cyclohexanemethanol	
							Aramite, Total	
							Diallate	
							Methyl Phenols,Total	
							Tentatively Identified Compound	
					SVTUNINGMIXs_00006	500 uL	4,4'-DDD	0 ug/mL
							4,4'-DDE	0 ug/mL
							4,4'-DDT	50 ug/mL
							Benzidine_T	50 ug/mL
							DFTPP	50 ug/mL
							Pentachlorophenol_T	50 ug/mL
.SVTUNINGMIXs_00006	12/31/19		Restek, Lot A0123348		(Purchased Reagent)		4,4'-DDD	0 ug/mL
							4,4'-DDE	0 ug/mL
							4,4'-DDT	1000 ug/mL
							Benzidine_T	1000 ug/mL
							DFTPP	1000 ug/mL
							Pentachlorophenol_T	1000 ug/mL
SVTAPITINTRNi_00016	09/23/18	09/23/17	MeCl2, Lot 2383913	25 mL	SVLVIntstd_00008	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_00008	08/31/21		Restek, Lot A0120796		(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_00004	03/23/18	09/23/17	MeCl2, Lot 2422130	1 mL	SVTAPITINTRNi_00016	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_00017	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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	0.38 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_00016	09/23/18	09/23/17	MeCl2, Lot 2383913	25 mL	SVLVIntstd_00008	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_00008	08/31/21		Restek, Lot A0120796		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00017	03/23/18	09/23/17	MeCl2, Lot 2422130	20 mL	sv benzoepyre_00005	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00007	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00012	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00045	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
							Aniline	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	80 ug/mL
					SVLVstd10_00008	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00010	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00009	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURRSPK_00021	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00012	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00018	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00005	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00004	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00007	06/30/19		Ultra Scientific, Lot Ck-1617A		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00012	05/31/21		Absolute, Lot 053116		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00045	09/30/18		Restek, Lot A0125805		(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
							Acenaphthylene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	2000 ug/mL
..SVLVstd10_00008	06/30/18		Restek, Lot A0123819		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00010	06/30/18		Restek, Lot A0123718		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00009	06/30/18		Restek, Lot A0123497		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzidine	2000 ug/mL
..SVLVSURRSPK_00021	12/31/21	Restek, Lot A0123269			(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_00012	03/27/22	Absolute, Lot 032717			(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00018	12/28/19	absolute, Lot 122816			(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00240	10/10/17	10/02/17	MeCl2, Lot 2422130	1 mL	SVTAPITINTRNi_00016	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_00017	125 uL	Benzo[e]pyrene	5 ug/mL
							2,3,5,6-Tetrachlorophenol	5 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol	5 ug/mL
							Pyrene	5 ug/mL
							Pyridine	10 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
.SVTAPITINTRNi_00016	09/23/18	09/23/17	MeCl2, Lot 2383913	25 mL	SVLVIntstd_00008	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_00008	08/31/21	Restek, Lot A0120796			(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_00017	03/23/18	09/23/17	MeCl2, Lot 2422130	20 mL	sv benzoepyre_00005	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00007	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00012	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00045	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Hexachlorobutadiene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	80 ug/mL
					SVLVstd10_00008	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00010	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00009	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURRSPK_00021	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_00012	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00018	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00005	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00004	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00007	06/30/19		Ultra Scientific, Lot Ck-1617A		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00012	05/31/21		Absolute, Lot 053116		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00045	09/30/18		Restek, Lot A0125805		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Fluorene	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	2000 ug/mL
..SVLVstd10_00008	06/30/18		Restek, Lot A0123819		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00010	06/30/18		Restek, Lot A0123718		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00009	06/30/18		Restek, Lot A0123497		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURRSPK_00021	12/31/21		Restek, Lot A0123269		(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_00012	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00018	12/28/19		absolute, Lot 122816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00244	11/11/17	11/04/17	MeCl2, Lot 2543214	1 mL	SVTAPITINTRNi_00016	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_00016	09/23/18	09/23/17	MeCl2, Lot 2383913	25 mL	SVLVIntstd_00008	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_00008	08/31/21		Restek, Lot A0120796		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00244	11/11/17	11/04/17	MeCl2, Lot 2543214	1 mL	SVTAPITSTCKi_00017	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_00017	03/23/18	09/23/17	MeCl2, Lot 2422130	20 mL	SVLVstd1_00045	800 uL	1,4-Dioxane	40 ug/mL
					SVLVSURRSPK_00021	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
..SVLVstd1_00045	09/30/18		Restek, Lot A0125805		(Purchased Reagent)		1,4-Dioxane	1000 ug/mL
..SVLVSURRSPK_00021	12/31/21		Restek, Lot A0123269		(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_00015	03/23/18	09/23/17	MeCl2, Lot 2422130	1 mL	SVTAPITINTRNi_00016	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_00017	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

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	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Pyrene	1 ug/mL
							Pyridine	2 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_00016	09/23/18	09/23/17	MeCl2, Lot 2383913	25 mL	SVLVIntstd_00008	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_00008	08/31/21	Restek, Lot A0120796			(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_00017	03/23/18	09/23/17	MeCl2, Lot 2422130	20 mL	sv benzoepyre_00005	800 uL	Benzo[e]pyrene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SV2356TCPs_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00007	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00012	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00045	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	80 ug/mL
					SVLVstd10_00008	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00010	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00009	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURRSPK_00021	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_00012	800 uL	Methyl methanesulfonate	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SVNNITROPYROs_00018	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00005	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00004	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00007	06/30/19		Ultra Scientific, Lot Ck-1617A		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00012	05/31/21		Absolute, Lot 053116		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00045	09/30/18		Restek, Lot A0125805		(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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	2000 ug/mL
..SVLVstd10_00008	06/30/18		Restek, Lot A0123819		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00010	06/30/18		Restek, Lot A0123718		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00009	06/30/18		Restek, Lot A0123497		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURRSPK_00021	12/31/21		Restek, Lot A0123269		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00012	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00018	12/28/19		absolute, Lot 122816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD20i_00013	03/23/18	09/23/17	MeCl2, Lot 2422130	1 mL	SVTAPITINTRNi_00016	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_00017	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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	20 ug/mL
							Benzoic acid	10 ug/mL
							Indene	10 ug/mL
							Atrazine	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00016	09/23/18	09/23/17	MeCl2, Lot 2383913	25 mL	SVLVIntstd_00008	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_00008	08/31/21		Restek, Lot A0120796		(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_00017	03/23/18	09/23/17	MeCl2, Lot 2422130	20 mL	sv benzoepyre_00005	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00007	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00012	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00045	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	80 ug/mL
					SVLVstd10_00008	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00010	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00009	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURRSPK_00021	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_00012	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00018	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00005	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00004	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00007	06/30/19		Ultra Scientific, Lot Ck-1617A		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00012	05/31/21		Absolute, Lot 053116		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00045	09/30/18		Restek, Lot A0125805		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	2000 ug/mL
..SVLVstd10_00008	06/30/18		Restek, Lot A0123819		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00010	06/30/18		Restek, Lot A0123718		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00009	06/30/18		Restek, Lot A0123497		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURRSPK_00021	12/31/21		Restek, Lot A0123269		(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_00012	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00018	12/28/19		absolute, Lot 122816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD4.0i_00014	03/23/18	09/23/17	MeCl2, Lot 2422130	1 mL	SVTAPITINTRNi_00016	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_00017	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Phenanthrene	2 ug/mL
							Phenol	2 ug/mL
							Pyrene	2 ug/mL
							Pyridine	4 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_00016	09/23/18	09/23/17	MeCl2, Lot 2383913	25 mL	SVLVIntstd_00008	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_00008	08/31/21		Restek, Lot A0120796		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00017	03/23/18	09/23/17	MeCl2, Lot 2422130	20 mL	sv benzoepyre_00005	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00007	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00012	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00045	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	80 ug/mL
					SVLVstd10_00008	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00010	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00009	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURRSPK_00021	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.: 180-71829-1

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
					svmethylmetha_00012	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00018	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00005	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00004	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00007	06/30/19		Ultra Scientific, Lot Ck-1617A		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00012	05/31/21		Absolute, Lot 053116		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00045	09/30/18		Restek, Lot A0125805		(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
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	2000 ug/mL
..SVLVstd10_00008	06/30/18		Restek, Lot A0123819		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00010	06/30/18		Restek, Lot A0123718		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00009	06/30/18		Restek, Lot A0123497		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURRSPK_00021	12/31/21		Restek, Lot A0123269		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00012	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00018	12/28/19		absolute, Lot 122816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD40i_00013	03/23/18	09/23/17	MeCl2, Lot 2422130	1 mL	SVTAPITINTRNi_00016	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_00017	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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	40 ug/mL
							Benzoic acid	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00016	09/23/18	09/23/17	MeCl2, Lot 2383913	25 mL	SVLVIntstd_00008	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_00008	08/31/21		Restek, Lot A0120796		(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_00017	03/23/18	09/23/17	MeCl2, Lot 2422130	20 mL	sv benzoepyre_00005	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00007	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00012	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00045	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	80 ug/mL
					SVLVstd10_00008	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00010	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00009	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURRSPK_00021	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_00012	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00018	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00005	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00004	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00007	06/30/19		Ultra Scientific, Lot Ck-1617A		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00012	05/31/21		Absolute, Lot 053116		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00045	09/30/18		Restek, Lot A0125805		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	2000 ug/mL
..SVLVstd10_00008	06/30/18		Restek, Lot A0123819		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00010	06/30/18		Restek, Lot A0123718		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00009	06/30/18		Restek, Lot A0123497		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURRSPK_00021	12/31/21		Restek, Lot A0123269		(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_00012	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00018	12/28/19		absolute, Lot 122816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD60i_00013	03/23/18	09/23/17	MeCl2, Lot 2422130	1 mL	SVTAPITINTRNi_00016	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_00017	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Nitrobenzene	30 ug/mL
							Pentachlorophenol	60 ug/mL
							Phenanthrene	30 ug/mL
							Phenol	30 ug/mL
							Pyrene	30 ug/mL
							Pyridine	60 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_00016	09/23/18	09/23/17	MeCl2, Lot 2383913	25 mL	SVLVIntstd_00008	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_00008	08/31/21	Restek, Lot A0120796			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00017	03/23/18	09/23/17	MeCl2, Lot 2422130	20 mL	sv benzoepyre_00005	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00007	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00012	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00045	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
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	80 ug/mL
					SVLVstd10_00008	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00010	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00009	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURRSPK_00021	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00012	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00018	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00005	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00004	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00007	06/30/19		Ultra Scientific, Lot Ck-1617A		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00012	05/31/21		Absolute, Lot 053116		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00045	09/30/18		Restek, Lot A0125805		(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
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	2000 ug/mL
..SVLVstd10_00008	06/30/18		Restek, Lot A0123819		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00010	06/30/18		Restek, Lot A0123718		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00009	06/30/18		Restek, Lot A0123497		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURRSPK_00021	12/31/21		Restek, Lot A0123269		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00012	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00018	12/28/19		absolute, Lot 122816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD80i_00013	03/23/18	09/23/17	MeCl2, Lot 2422130	1 mL	SVTAPITINTRNi_00016	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_00017	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyridine	80 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_00016	09/23/18	09/23/17	MeCl2, Lot 2383913	25 mL	SVLVIntstd_00008	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_00008	08/31/21	Restek, Lot A0120796			(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_00017	03/23/18	09/23/17	MeCl2, Lot 2422130	20 mL	sv benzoepyre_00005	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2356TCPs_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00007	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00012	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLVstd1_00045	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Hexachloroethane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	80 ug/mL
					SVLVstd10_00008	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVstd11_00010	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd9_00009	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURRSPK_00021	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_00012	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00018	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00005	03/17/20		Absolute, Lot 031715		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2356TCPs_00004	09/21/20		Absolute, Lot 092115		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00007	06/30/19		Ultra Scientific, Lot Ck-1617A		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00012	05/31/21		Absolute, Lot 053116		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLVstd1_00045	09/30/18		Restek, Lot A0125805		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Hexachlorobutadiene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	2000 ug/mL
..SVLVstd10_00008	06/30/18		Restek, Lot A0123819		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVstd11_00010	06/30/18		Restek, Lot A0123718		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd9_00009	06/30/18		Restek, Lot A0123497		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURRSPK_00021	12/31/21		Restek, Lot A0123269		(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_00012	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00018	12/28/19		absolute, Lot 122816		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
VOA8260INT_00070	06/22/17	05/22/17	Methanol, Lot 127999	10 mL	VOA8260INTRES_00121	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_00121	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
VOA8260INT_00072	08/21/17	07/21/17	Methanol, Lot 2019055	10 mL	VOA8260INTRES_00123	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_00123	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							TBA-d9 (IS)	5000 ug/mL
VOA8260INT_00075	11/20/17	10/20/17	Methanol, Lot 2469125	10 mL	VOA8260INTRES_00136	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_00136	01/31/22		Restek, Lot A0124343		(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_00069	06/22/17	05/22/17	Methanol, Lot 127999	100 mL	VOA8260SURRES_00126	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_00126	10/31/20		Restek, Lot A0114901		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VOA8260SURR_00071	08/21/17	07/21/17	Methanol, Lot 2019055	100 mL	VOA8260SURRES_00118	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_00118	10/31/20		Restek, Lot A0114901		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VOA8260SURR_00074	11/20/17	10/20/17	Methanol, Lot 2469125	100 mL	VOA8260SURRES_00120	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_00120	10/31/20		Restek, Lot A0114901		(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_00270	11/01/17	10/25/17	Methanol, Lot 2469125	10 mL	VOA8260GAS2ND_00216	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00268	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
.VOA8260GAS2ND_00216	06/30/20		Restek, Lot A0128832		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOA2ND_00268	11/16/17	10/16/17	Methanol, Lot 2469120	10 mL	VOA8260MEGA2_00065	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
..VOA8260MEGA2_00065	12/31/18		Restek, Lot A0123775		(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
VOA8260VOA2ND_00271	11/13/17	11/06/17	Methanol, Lot 2469119	10 mL	VOA8260GAS2ND_00217	100 uL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					VOA8260VOA2ND_00268	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
.VOA8260GAS2ND_00217	06/30/20		Restek, Lot A0128832		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOA2ND_00268	11/16/17	10/16/17	Methanol, Lot 2469120	10 mL	VOA8260MEGA2_00065	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
..VOA8260MEGA2_00065	12/31/18		Restek, Lot A0123775		(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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VOA8260VOAPRI_00253	05/26/17	05/19/17	Methanol, Lot 136118	10 mL	VOA8260GAS1ST_00195	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00251	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

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
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	50 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_00195	01/31/20		Restek, Lot A0124278		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00251	06/09/17	05/09/17	Methanol, Lot 136118	10 mL	VOA8260KET1ST_00090	0.2 mL	2-Butanone (MEK)	250 ug/mL
							2-Hexanone	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

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)	250 ug/mL
							Acetone	250 ug/mL
					VOA8260MEGA1_00063	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	250 ug/mL
							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	500 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylcyclohexane	250 ug/mL
							Methylene Chloride	250 ug/mL
							n-Butylbenzene	250 ug/mL
							n-Heptane	250 ug/mL
							N-Propylbenzene	250 ug/mL
							Naphthalene	250 ug/mL
							o-Xylene	250 ug/mL
							sec-Butylbenzene	250 ug/mL
							Styrene	250 ug/mL
							tert-Butylbenzene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Tetrahydrofuran	500 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							trans-1,4-Dichloro-2-butene	250 ug/mL
							Trichloroethene	250 ug/mL
..VOA8260KET1ST_00090	01/31/20		Restek, Lot A0123890		(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_00063	12/31/18		Restek, Lot A0123711		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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	5000 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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00263	07/29/17	07/22/17	Methanol, Lot 2019055	10 mL	VOA8260GAS1ST_00203	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00260	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromobenzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	50 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_00203	01/31/20		Restek, Lot A0124278		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VOA8260VOAPRI_00260	08/06/17	07/06/17	Methanol, Lot 2019056	10 mL	VOA8260KET1ST_00100	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_00065	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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	500 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylcyclohexane	250 ug/mL
							Methylene Chloride	250 ug/mL
							n-Butylbenzene	250 ug/mL
							n-Heptane	250 ug/mL
							N-Propylbenzene	250 ug/mL
							Naphthalene	250 ug/mL
							o-Xylene	250 ug/mL
							sec-Butylbenzene	250 ug/mL
							Styrene	250 ug/mL
							tert-Butylbenzene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Tetrahydrofuran	500 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							trans-1,4-Dichloro-2-butene	250 ug/mL
							Trichloroethene	250 ug/mL
..VOA8260KET1ST_00100	01/31/20		Restek, Lot A0123890		(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_00065	12/31/18		Restek, Lot A0123711		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	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
							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	5000 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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00269	11/06/17	11/01/17	Methanol, Lot 2469119	10 mL	VOA8260GAS1ST_00207	100 uL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00264	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_00207	01/31/20		Restek, Lot A0124278		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00264	11/06/17	10/06/17	Methanol, Lot 2469120	10 mL	VOA8260MEGA1_00066	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
							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_00066	12/31/18		Restek, Lot A0123711		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
VOABFB25_00090							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Xylenes, Total	
					VOABFB50_00093	5 mL	BFB	25 ug/mL
.VOABFB50_00093	08/10/17	07/10/17	Methanol, Lot 2019056	50 mL	VOABFBRES_00058	1 mL	BFB	50 ug/mL
..VOABFBRES_00058	11/30/21		Restek, Lot A0122647		(Purchased Reagent)		BFB	2500 ug/mL
VOABFB25_00094							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Xylenes, Total	
					VOABFB50_00096	5 mL	BFB	25 ug/mL
.VOABFB50_00096	11/09/17	10/09/17	Methanol, Lot 2469125	50 mL	VOABFBRES_00055	1 mL	BFB	50 ug/mL
..VOABFBRES_00055	11/30/21		Restek, Lot A0122647		(Purchased Reagent)		BFB	2500 ug/mL
VOABFB50_00091							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Xylenes, Total	
					VOABFBRES_00052	1 mL	BFB	50 ug/mL
.VOABFBRES_00052	05/31/21		Restek, Lot A0119122		(Purchased Reagent)		BFB	2500 ug/mL
voaW2clev1stR_00013	07/31/17	07/24/17	Methanol, Lot 2019056	10 mL	VOACEVERES_00127	200 uL	2-Chloroethyl vinyl ether	50 ug/mL
.VOACEVERES_00127	01/31/20		Restek, Lot A0123891		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
voaWAcro1stRe_00016	08/17/17	07/17/17	Methanol, Lot 2019056	100 mL	VOAACRORES_00115	0.125 mL	Acrolein	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VOAACRORES_00115	09/30/17		Restek, Lot A0125560		(Purchased Reagent)		Acrolein	20000 ug/mL
voaWEEmix1stR_00009	08/03/17	07/03/17	Methanol, Lot 127999	25 mL	VOARESEE1ST_00045	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_00045	01/31/18		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_00022	11/16/17	10/16/17	Methanol, Lot 2469120	50 mL	VOA8260KET2ND_00103	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_00103	03/31/19		Restek, Lot A0123880		(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
voaWKetmix1st_00003	06/25/17	05/25/17	Methanol, Lot 2019054	50 mL	VOA8260KET1ST_00097	0.1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET1ST_00097	01/31/20		Restek, Lot A0123890		(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
voaWKetmix1st_00004	07/29/17	06/29/17	Methanol, Lot 2019054	50 mL	VOA8260KET1ST_00099	0.1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

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_00099	01/31/20		Restek, Lot A0123890		(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_00017	07/31/17	07/24/16	Methanol, Lot 2019067	25 mL	VOA8260VARES_00083	125 uL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00083	07/31/17		Restek, Lot A0124520		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
WAvCN 50 ICV_00065	10/31/17	10/30/17	DI Water, Lot N/A	250 mL	WAvCN10Si_00466	1.25 mL	Cyanide, Available	50 ug/L
.WAvCN10Si_00466	10/31/17	10/30/17	DI Water, Lot DI Water	100 mL	WAvCN1000S_00026	1 mL	Cyanide, Available	10000 ppb
..WAvCN1000S_00026	02/28/18		Ricca Chemical Co., Lot 4708N94		(Purchased Reagent)		Cyanide, Available	1000 ppm
WAvCN 50LCS_00066	10/31/17	10/30/17	DI Water, Lot N/A	500 mL	WHg210Pi_00508	2.5 mL	Cyanide, Available	50.058 ppb
.WHg210Pi_00508	10/31/17	10/30/17	DI Water, Lot DI water	100 mL	WHg2CN1000P_00026	1 mL	Cyanide, Available	10011.6 ug/L
..WHg2CN1000P_00026	03/18/18	09/18/17	DI Water, Lot DI Water	500 mL	WHg(II) CNP_00006	2.43 g	Cyanide, Available	1001.16 mg/L
...WHg(II) CNP_00006	01/20/21		Sigma-Aldrich, Lot SLBN7022V		(Purchased Reagent)		Cyanide, Available	0.206 g/g
WAvCN50 CCV_00071	10/31/17	10/30/17	DI Water, Lot N/A	500 mL	WAvCN10Pi_00479	2.5 mL	Cyanide, Available	50 ug/L
.WAvCN10Pi_00479	10/31/17	10/30/17	DI Water, Lot DI Water	100 mL	WAvCN1000P_00030	1 mL	Cyanide, Available	10000 ug/L
..WAvCN1000P_00030	01/05/18		LabChem Inc, Lot G186-01		(Purchased Reagent)		Cyanide, Available	1000 ppm
WCN0.1L3_00336	11/01/17	10/31/17	Sodium Hyroxide, Lot 4704D69	100 mL	WCN10Pi_00604	1 mL	Cyanide, Total	0.1 mg/L
.WCN10Pi_00604	11/01/17	10/25/17	Sodium Hyroxide, Lot 4704D69	100 mL	WCN1000P_00038	1 mL	Cyanide, Total	10 mg/L
..WCN1000P_00038	01/05/18		LabChem Inc., Lot G186-01		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN0.2ICV_00623	11/01/17	10/31/17	Sodium Hyroxide, Lot 4704D69	100 mL	WCN10Si_00606	2 mL	Cyanide, Total	0.2 mg/L
.WCN10Si_00606	11/01/17	10/25/17	Sodium Hyroxide, Lot 4704D69	100 mL	WCN1000S_00027	1 mL	Cyanide, Total	10 mg/L
..WCN1000S_00027	02/28/18		Ricca Chemical Co., Lot 4708N94		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN0.5L1_00784	11/01/17	10/31/17	Sodium Hyroxide, Lot 4704D69	100 mL	WCN10Pi_00604	5 mL	Cyanide, Total	0.5 mg/L
.WCN10Pi_00604	11/01/17	10/25/17	Sodium Hyroxide, Lot 4704D69	100 mL	WCN1000P_00038	1 mL	Cyanide, Total	10 mg/L
..WCN1000P_00038	01/05/18		LabChem Inc., Lot G186-01		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN10Pi_00604	11/01/17	10/25/17	Sodium Hyroxide, Lot 4704D69	100 mL	WCN1000P_00038	1 mL	Cyanide, Total	10 mg/L
.WCN1000P_00038	01/05/18		LabChem Inc., Lot G186-01		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCNLCS_00138	11/01/17	10/25/17	Sodium Hyroxide, Lot 4704D69	100 mL	WCNWSTOCK_00004	1 mL	Cyanide, Total	10 mg/L
.WCNWSTOCK_00004	01/31/18		ERA, Lot 190116		(Purchased Reagent)		Cyanide, Total	1000 mg/L

Reagent

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sv benzoepyre_00005

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ISO 17025-34-35-43 Accredited
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CERTIFIED WEIGHT REPORT

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

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

Solvent(s):	Lot#
Methylene chloride	72062

Formulated By: Paul Barron — 031715 DATE

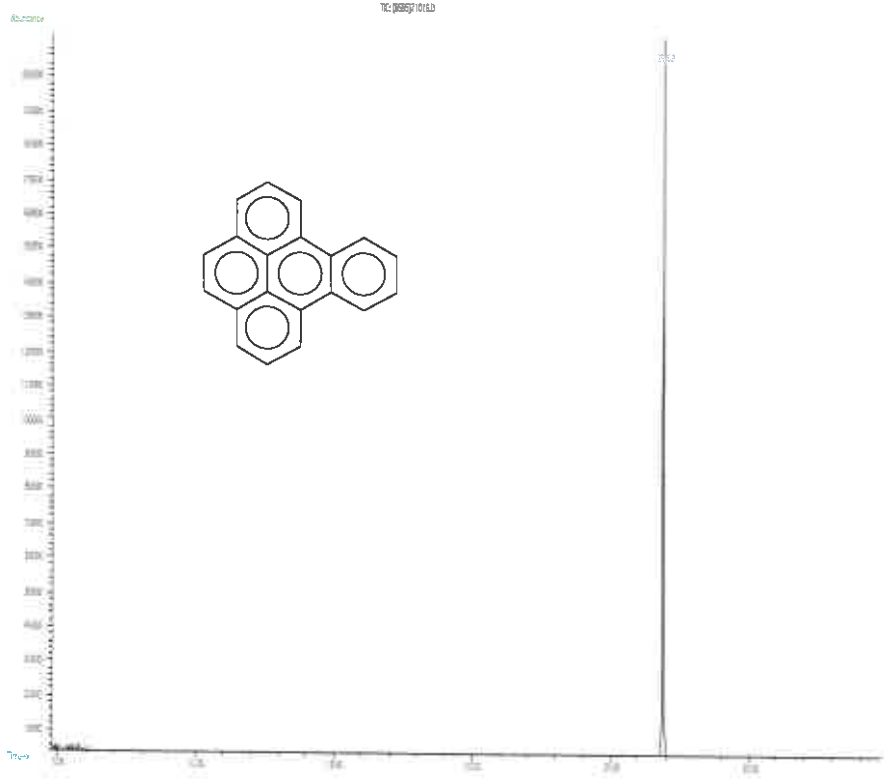
Reviewed By: Pedro L. Rentas — 031715 DATE

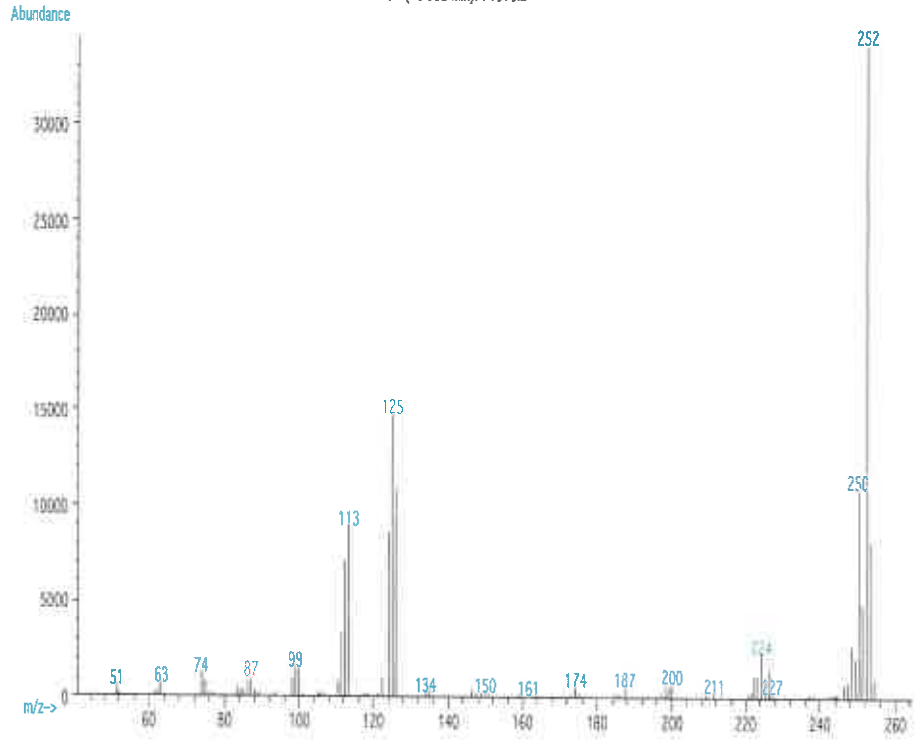
Weight(s) shown below were combined and diluted to (mL): 100.0

5E-05 Balance Uncertainty
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 (+/-) (µg/mL)	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	4.2	192-97-2	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_00004

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CERTIFIED WEIGHT REPORT

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

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

Solvent(s):	Lot#
Methylene chloride	72062

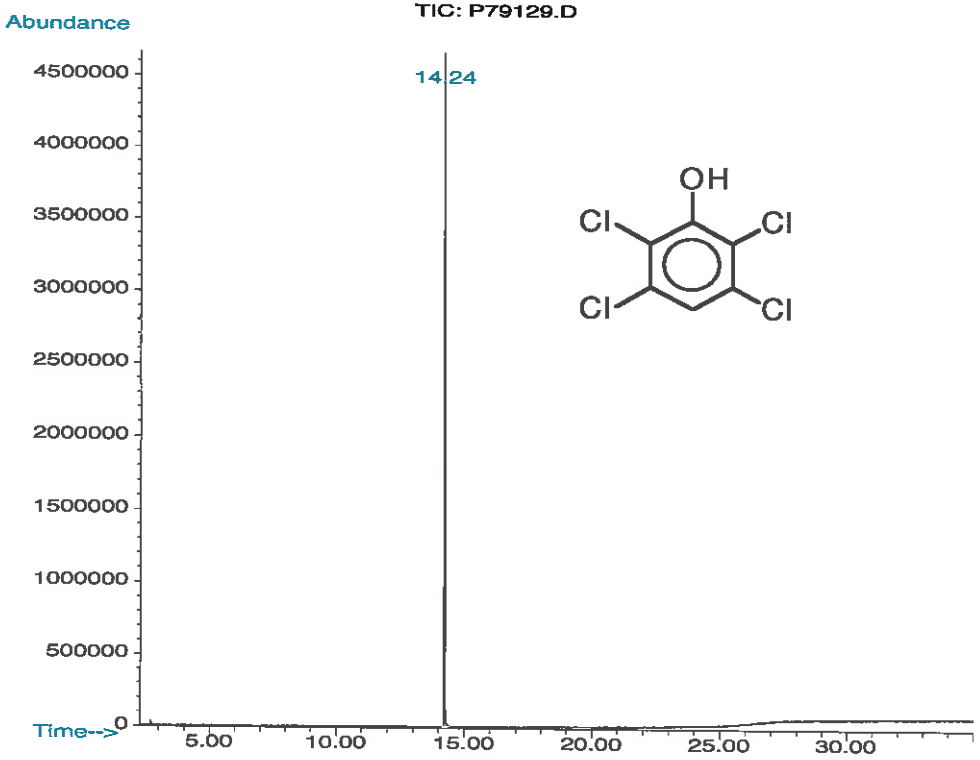
Weight(s) shown below were combined and diluted to (mL): 25.0

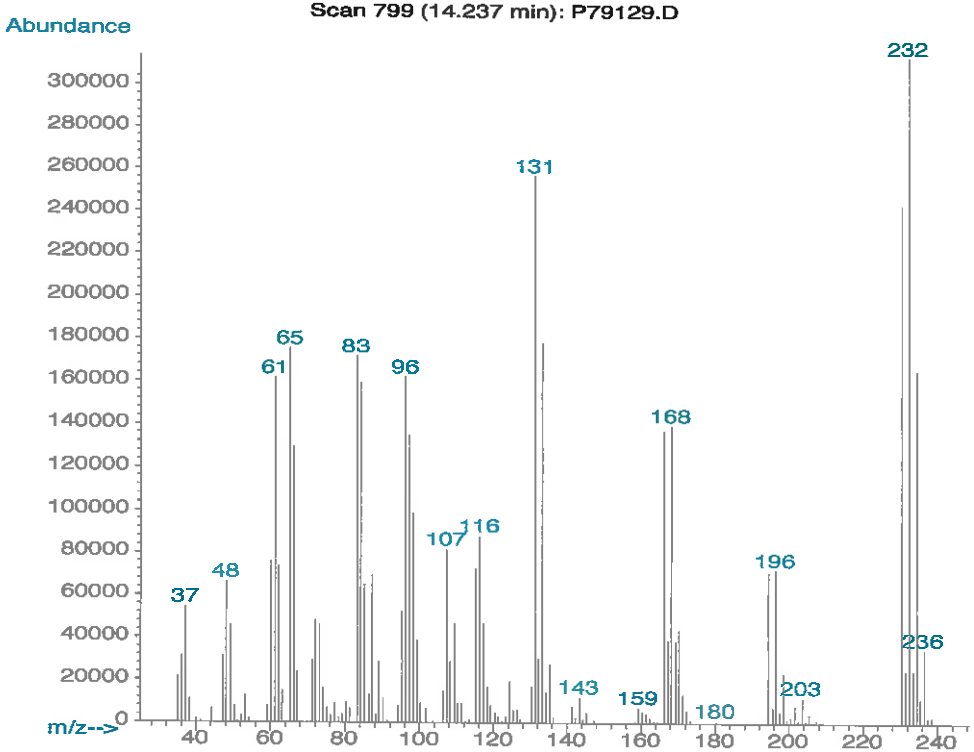
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By:	Paul Barron	092115 DATE
Reviewed By:	Pedro L. Rentas	092115 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_00007

Certificate of Analysis

2-Naphthylamine Solution

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

Lot Number: CK-1617A **Lot Issue Date:** 24-May-2016 **Expiration Date:** 30-Jun-2019

This ISO Guide 34 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° to 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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TUV USA, Inc.

Peter A. King, Ph.D.
VP, Technical Operations

Daniel J. Lamendola
Director of QA/RA

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Reagent

sv712dimbenza_00012

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CERTIFIED WEIGHT REPORT

Part Number: 70411
Lot Number: 053116
Description: 7,12-Dimethylbenz(a)anthracene

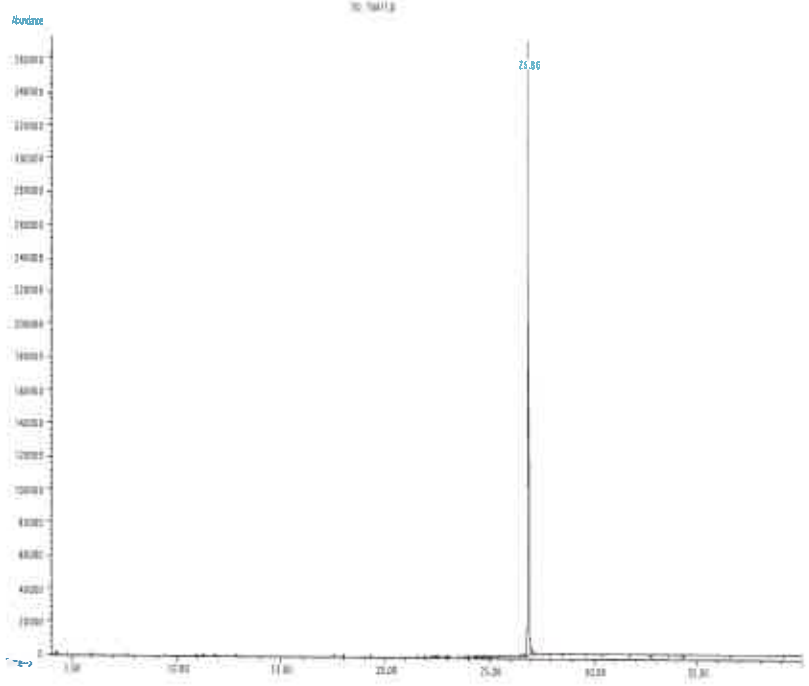
Solvent(s): **Lot#**
Methylene chloride 76782

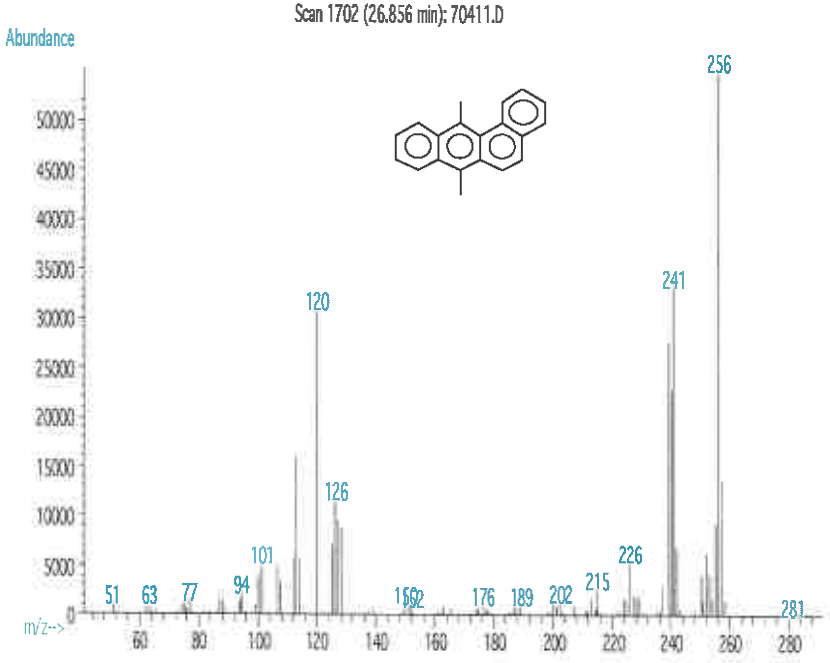
Expiration Date: 053121
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 822-275872-11 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.003 Flask Uncertainty

Formulated By:	053116 DATE
Reviewed By: Pedro L. Rentas	053116 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. 7,12-Dimethylbenz(a)anthracene	411	GGR4E-DC	1000	98	0.2	0.10205	0.10231	1002.5	4.2	57-97-6	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.





- 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

SVLVIntstd_00008

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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. : 567684 **Lot No.:** A0120796

Description : 8270 Internal Standard

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

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

Expiration Date : August 31, 2021 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	2,008.2 µg/mL	+/- 11.6758 +/- 90.4505 +/- 100.3660	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Naphthalene-d8 **CAS #** 1146-65-2 (Lot M-1452) **Purity** 99%	2,004.0 µg/mL	+/- 11.6514 +/- 90.2614 +/- 100.1561	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Acenaphthene-d10 **CAS #** 15067-26-2 (Lot PR-25444) **Purity** 99%	2,007.7 µg/mL	+/- 11.6729 +/- 90.4280 +/- 100.3410	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Phenanthrene-d10 **CAS #** 1517-22-2 (Lot PR-23065) **Purity** 99%	2,011.4 µg/mL	+/- 11.6945 +/- 90.5947 +/- 100.5260	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Chrysene-d12 **CAS #** 1719-03-5 (Lot PR-26678) **Purity** 98%	2,018.8 µg/mL	+/- 11.7375 +/- 90.9280 +/- 100.8958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Perylene-d12 **CAS #** 1520-96-3 (Lot PR-24113) **Purity** 99%	2,002.6 µg/mL	+/- 11.6433 +/- 90.1983 +/- 100.0862	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Reagent

SVLVstd1_00043

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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. : 571995 **Lot No.:** A0123736

Description : 8270 List 1 / Std #1 MegaMix (2017)

8270 List 1 / Std #1 MegaMix (2017) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : June 30, 2018 **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 SHBG6312V) **Purity** 99%	1,005.0 µg/mL	+/- 5.8567 µg/mL +/- 12.0204 µg/mL +/- 19.1240 µg/mL	Gravimetric Unstressed Stressed
2	N-Nitrosodimethylamine **CAS #** 62-75-9 (Lot 161108JLM) **Purity** 99%	1,000.0 µg/mL	+/- 5.8275 µg/mL +/- 11.9606 µg/mL +/- 19.0288 µg/mL	Gravimetric Unstressed Stressed
3	Pyridine **CAS #** 110-86-1 (Lot SHBC7174V) **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 µg/mL +/- 23.9081 µg/mL +/- 38.0494 µg/mL	Gravimetric Unstressed Stressed
4	Phenol **CAS #** 108-95-2 (Lot SHBF1351V) **Purity** 99%	1,000.6 µg/mL	+/- 5.8310 µg/mL +/- 11.9678 µg/mL +/- 19.0402 µg/mL	Gravimetric Unstressed Stressed
5	Aniline **CAS #** 62-53-3 (Lot K22Z462) **Purity** 99%	1,008.4 µg/mL	+/- 5.8765 µg/mL +/- 12.0611 µg/mL +/- 19.1887 µg/mL	Gravimetric Unstressed Stressed
6	Bis(2-chloroethyl)ether **CAS #** 111-44-4 (Lot 45296HKV) **Purity** 99%	1,001.6 µg/mL	+/- 5.8368 µg/mL +/- 11.9797 µg/mL +/- 19.0593 µg/mL	Gravimetric Unstressed Stressed
7	n-Decane (C10) **CAS #** 124-18-5 (Lot SHBD4608V) **Purity** 99%	1,001.2 µg/mL	+/- 5.8345 µg/mL +/- 11.9750 µg/mL +/- 19.0517 µg/mL	Gravimetric Unstressed Stressed

24	Bis(2-chloroethoxy)methane		1,002.4	µg/mL	+/-	5.8415	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 3299900)			+/-	11.9893	µg/mL	Unstressed
	Purity 99%				+/-	19.0745	µg/mL	Stressed
25	2,4-Dichlorophenol		1,001.0	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	11.9726	µg/mL	Unstressed
	Purity 99%				+/-	19.0478	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,000.6	µg/mL	+/-	5.8310	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBC5541V)			+/-	11.9678	µg/mL	Unstressed
	Purity 99%				+/-	19.0402	µg/mL	Stressed
27	Naphthalene		1,003.2	µg/mL	+/-	5.8462	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBW2603V)			+/-	11.9989	µg/mL	Unstressed
	Purity 99%				+/-	19.0897	µg/mL	Stressed
28	2,6-Dichlorophenol		1,000.2	µg/mL	+/-	5.8287	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKBP8620V)			+/-	11.9630	µg/mL	Unstressed
	Purity 99%				+/-	19.0326	µg/mL	Stressed
29	4-Chloroaniline		1,000.8	µg/mL	+/-	5.8322	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot BCBJ1580V)			+/-	11.9702	µg/mL	Unstressed
	Purity 99%				+/-	19.0440	µg/mL	Stressed
30	Hexachlorobutadiene		1,007.6	µg/mL	+/-	5.8720	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	12.0519	µg/mL	Unstressed
	Purity 98%				+/-	19.1741	µg/mL	Stressed
31	4-Chloro-3-methylphenol		1,004.2	µg/mL	+/-	5.8520	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC7309V)			+/-	12.0108	µg/mL	Unstressed
	Purity 99%				+/-	19.1087	µg/mL	Stressed
32	2-Methylnaphthalene		1,000.5	µg/mL	+/-	5.8307	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBF0201V)			+/-	11.9671	µg/mL	Unstressed
	Purity 95%				+/-	19.0391	µg/mL	Stressed
33	1-Methylnaphthalene		1,002.6	µg/mL	+/-	5.8427	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 525000-10)			+/-	11.9917	µg/mL	Unstressed
	Purity 99%				+/-	19.0783	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,003.4	µg/mL	+/-	5.8473	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot MKBW7717V)			+/-	12.0013	µg/mL	Unstressed
	Purity 99%				+/-	19.0935	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,006.0	µg/mL	+/-	5.8625	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 0012015)			+/-	12.0324	µg/mL	Unstressed
	Purity 99%				+/-	19.1430	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,004.2	µg/mL	+/-	5.8520	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBL4698V)			+/-	12.0108	µg/mL	Unstressed
	Purity 99%				+/-	19.1087	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,005.2	µg/mL	+/-	5.8578	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHM01)			+/-	12.0228	µg/mL	Unstressed
	Purity 99%				+/-	19.1278	µg/mL	Stressed
38	2-Chloronaphthalene		1,004.4	µg/mL	+/-	5.8532	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot AJ2UI)			+/-	12.0132	µg/mL	Unstressed
	Purity 99%				+/-	19.1125	µg/mL	Stressed
39	Biphenyl		1,003.4	µg/mL	+/-	5.8473	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot MKBV9808V)			+/-	12.0013	µg/mL	Unstressed
	Purity 99%				+/-	19.0935	µg/mL	Stressed

56	4-Nitroaniline		1,001.0	µg/mL	+/-	5.8332	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/-	11.9722	µg/mL	Unstressed
	Purity 98%				+/-	19.0473	µg/mL	Stressed
57	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,008.0	µg/mL	+/-	11.6747	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC18040V)			+/-	24.0038	µg/mL	Unstressed
	Purity 99%				+/-	38.2016	µg/mL	Stressed
58	Diphenylamine		850.2	µg/mL	+/-	4.9546	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot MKBN8295V)			+/-	10.1689	µg/mL	Unstressed
	Purity 99%				+/-	16.1783	µg/mL	Stressed
59	Azobenzene		1,001.2	µg/mL	+/-	5.8345	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot BCBQ0927V)			+/-	11.9750	µg/mL	Unstressed
	Purity 99%				+/-	19.0517	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,001.6	µg/mL	+/-	5.8366	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	11.9793	µg/mL	Unstressed
	Purity 98%				+/-	19.0585	µg/mL	Stressed
61	Hexachlorobenzene		1,000.2	µg/mL	+/-	5.8287	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LC19614V)			+/-	11.9630	µg/mL	Unstressed
	Purity 99%				+/-	19.0326	µg/mL	Stressed
62	Pentachlorophenol		2,005.4	µg/mL	+/-	11.6596	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 160412JLM)			+/-	23.9727	µg/mL	Unstressed
	Purity 99%				+/-	38.1522	µg/mL	Stressed
63	n-Octadecane (C18)		1,002.2	µg/mL	+/-	5.8403	µg/mL	Gravimetric
	CAS # 593-45-3	(Lot 27SOF)			+/-	11.9869	µg/mL	Unstressed
	Purity 99%				+/-	19.0707	µg/mL	Stressed
64	Phenanthrene		1,007.4	µg/mL	+/-	5.8706	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKCB1762V)			+/-	12.0491	µg/mL	Unstressed
	Purity 99%				+/-	19.1696	µg/mL	Stressed
65	Anthracene		1,002.2	µg/mL	+/-	5.8403	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBR2268V)			+/-	11.9869	µg/mL	Unstressed
	Purity 99%				+/-	19.0707	µg/mL	Stressed
66	Carbazole		1,001.0	µg/mL	+/-	5.8332	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot 5571400)			+/-	11.9722	µg/mL	Unstressed
	Purity 98%				+/-	19.0473	µg/mL	Stressed
67	Di-n-butylphthalate		1,005.0	µg/mL	+/-	5.8567	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBT0244V)			+/-	12.0204	µg/mL	Unstressed
	Purity 99%				+/-	19.1240	µg/mL	Stressed
68	Fluoranthene		1,003.7	µg/mL	+/-	5.8492	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	12.0050	µg/mL	Unstressed
	Purity 98%				+/-	19.0995	µg/mL	Stressed
69	Pyrene		1,004.6	µg/mL	+/-	5.8543	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBR9108V)			+/-	12.0156	µg/mL	Unstressed
	Purity 99%				+/-	19.1164	µg/mL	Stressed
70	Benzyl butyl phthalate		1,002.3	µg/mL	+/-	5.8412	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot MKBZ4553V)			+/-	11.9886	µg/mL	Unstressed
	Purity 98%				+/-	19.0734	µg/mL	Stressed
71	Benz(a)anthracene		1,003.4	µg/mL	+/-	5.8473	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER031412-01)			+/-	12.0013	µg/mL	Unstressed
	Purity 99%				+/-	19.0935	µg/mL	Stressed

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

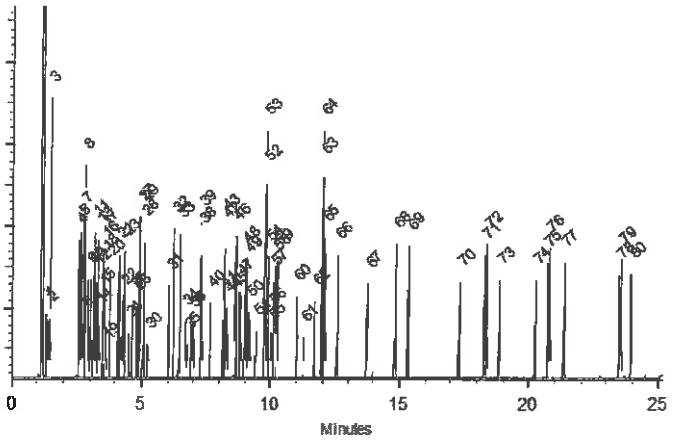
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:
250°C

Det. Temp:
340°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.

Rebecca Hauver

Date Mixed: 27-Dec-2016 **Balance:** 1128360905

Justine Albertson - Operations Tech-ARM QC

Date Passed: 03-Feb-2017

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

Reagent

SVLVstd1_00045

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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. : 571995 **Lot No.:** A0125805

Description : 8270 List 1 / Std #1 MegaMix (2017)

8270 List 1 / Std #1 MegaMix (2017) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : September 30, 2018 **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 **Purity** 99%	(Lot SHBG1461V)	1,000.6 µg/mL	+/- 5.8176 +/- 11.9612 +/- 19.0361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	N-Nitrosodimethylamine **CAS #** 62-75-9 **Purity** 99%	(Lot 170310JLM)	1,002.3 µg/mL	+/- 5.8275 +/- 11.9816 +/- 19.0685	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Pyridine **CAS #** 110-86-1 **Purity** 99%	(Lot SHBC7174V)	2,003.5 µg/mL	+/- 11.6485 +/- 23.9500 +/- 38.1160	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Phenol **CAS #** 108-95-2 **Purity** 99%	(Lot SHBF1351V)	1,000.7 µg/mL	+/- 5.8183 +/- 11.9628 +/- 19.0387	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Aniline **CAS #** 62-53-3 **Purity** 99%	(Lot K22Z462)	1,001.7 µg/mL	+/- 5.8238 +/- 11.9740 +/- 19.0564	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Bis(2-chloroethyl)ether **CAS #** 111-44-4 **Purity** 99%	(Lot SHBD4430V)	1,000.5 µg/mL	+/- 5.8172 +/- 11.9604 +/- 19.0349	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	n-Decane (C10) **CAS #** 124-18-5 **Purity** 99%	(Lot SHBD4608V)	1,001.3 µg/mL	+/- 5.8215 +/- 11.9692 +/- 19.0488	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	2-Chlorophenol **CAS #** 95-57-8 **Purity** 99%	(Lot MKBD3900V)	1,000.9	µg/mL	+/- 5.8191 +/- 11.9644 +/- 19.0412	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBM5751V)	1,001.2	µg/mL	+/- 5.8213 +/- 11.9688 +/- 19.0482	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS4401V)	1,001.6	µg/mL	+/- 5.8232 +/- 11.9728 +/- 19.0545	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Benzyl alcohol **CAS #** 100-51-6 **Purity** 99%	(Lot SHBC1850V)	1,000.8	µg/mL	+/- 5.8185 +/- 11.9632 +/- 19.0393	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBD7331V)	1,000.5	µg/mL	+/- 5.8168 +/- 11.9596 +/- 19.0336	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2-Methylphenol (o-cresol) **CAS #** 95-48-7 **Purity** 99%	(Lot SHBC1479V)	1,001.1	µg/mL	+/- 5.8207 +/- 11.9676 +/- 19.0463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2,2'-oxybis(1-chloropropane) **CAS #** 108-60-1 **Purity** 98%	(Lot 5922200)	1,000.7	µg/mL	+/- 5.8184 +/- 11.9629 +/- 19.0389	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Acetophenone **CAS #** 98-86-2 **Purity** 99%	(Lot MKBR7156V)	1,001.1	µg/mL	+/- 5.8203 +/- 11.9668 +/- 19.0450	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	3-Methylphenol (m-cresol) **CAS #** 108-39-4 **Purity** 99%	(Lot SHBD0627V)	501.0	µg/mL	+/- 2.9127 +/- 5.9886 +/- 9.5307	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	4-Methylphenol (p-cresol) **CAS #** 106-44-5 **Purity** 99%	(Lot 49396APV)	500.8	µg/mL	+/- 2.9115 +/- 5.9862 +/- 9.5269	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	N-Nitroso-di-n-propylamine **CAS #** 621-64-7 **Purity** 99%	(Lot NOPCF)	1,001.9	µg/mL	+/- 5.8253 +/- 11.9772 +/- 19.0615	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Hexachloroethane **CAS #** 67-72-1 **Purity** 99%	(Lot 4H3SF)	1,000.0	µg/mL	+/- 5.8139 +/- 11.9537 +/- 19.0241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBF2348V)	1,001.5	µg/mL	+/- 5.8230 +/- 11.9724 +/- 19.0539	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	Isophorone **CAS #** 78-59-1 **Purity** 98%	(Lot MKBG2442V)	981.1	µg/mL	+/- 5.7043 +/- 11.7283 +/- 18.6653	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	2-Nitrophenol **CAS #** 88-75-5 **Purity** 99%	(Lot BCBH7602V)	1,000.2	µg/mL	+/- 5.8152 +/- 11.9565 +/- 19.0285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	2,4-Dimethylphenol **CAS #** 105-67-9 **Purity** 99%	(Lot 10165155)	1,001.8	µg/mL	+/- 5.8244 +/- 11.9752 +/- 19.0583	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Bis(2-chloroethoxy)methane **CAS #** 111-91-1 **Purity** 99%	(Lot 5670100)	1,000.4	µg/mL	+/- 5.8162 +/- 11.9584 +/- 19.0317	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	2,4-Dichlorophenol **CAS #** 120-83-2 **Purity** 99%	(Lot BCBH1617V)	1,000.7	µg/mL	+/- 5.8180 +/- 11.9620 +/- 19.0374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBC5541V)	1,002.0	µg/mL	+/- 5.8259 +/- 11.9784 +/- 19.0634	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBW2603V)	1,001.8	µg/mL	+/- 5.8244 +/- 11.9752 +/- 19.0583	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	2,6-Dichlorophenol **CAS #** 87-65-0 **Purity** 99%	(Lot MKBP8620V)	1,001.0	µg/mL	+/- 5.8197 +/- 11.9656 +/- 19.0431	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	4-Chloroaniline **CAS #** 106-47-8 **Purity** 99%	(Lot BCBJ1580V)	1,000.6	µg/mL	+/- 5.8174 +/- 11.9608 +/- 19.0355	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 99%	(Lot J31X013)	1,000.2	µg/mL	+/- 5.8151 +/- 11.9561 +/- 19.0279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	4-Chloro-3-methylphenol **CAS #** 59-50-7 **Purity** 99%	(Lot STBC7309V)	1,002.0	µg/mL	+/- 5.8255 +/- 11.9776 +/- 19.0621	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	2-Methylnaphthalene **CAS #** 91-57-6 **Purity** 95%	(Lot STBF0201V)	1,000.4	µg/mL	+/- 5.8161 +/- 11.9582 +/- 19.0314	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	1-Methylnaphthalene **CAS #** 90-12-0 **Purity** 98%	(Lot 523400-9)	999.5	µg/mL	+/- 5.8110 +/- 11.9477 +/- 19.0146	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	1,2,4,5-Tetrachlorobenzene **CAS #** 95-94-3 **Purity** 99%	(Lot MKBW7717V)	1,000.7	µg/mL	+/- 5.8183 +/- 11.9628 +/- 19.0387	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Hexachlorocyclopentadiene **CAS #** 77-47-4 **Purity** 99%	(Lot 0012015)	1,000.0	µg/mL	+/- 5.8143 +/- 11.9545 +/- 19.0253	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	2,4,6-Trichlorophenol **CAS #** 88-06-2 **Purity** 99%	(Lot MKBL4698V)	1,001.1	µg/mL	+/- 5.8207 +/- 11.9676 +/- 19.0463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	2,4,5-Trichlorophenol **CAS #** 95-95-4 **Purity** 99%	(Lot FHN01)	1,000.5	µg/mL	+/- 5.8168 +/- 11.9596 +/- 19.0336	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	2-Chloronaphthalene **CAS #** 91-58-7 **Purity** 99%	(Lot AJ2UI)	1,000.4	µg/mL	+/- 5.8164 +/- 11.9588 +/- 19.0323	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Biphenyl **CAS #** 92-52-4 **Purity** 99%	(Lot MKBV9808V)	1,001.3	µg/mL	+/- 5.8218 +/- 11.9700 +/- 19.0501	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Nitroaniline **CAS #** 88-74-4 **Purity** 99%	(Lot MKBK7597V)	1,001.1	µg/mL	+/- 5.8205 +/- 11.9672 +/- 19.0456	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Acenaphthylene **CAS #** 208-96-8 **Purity** 98%	(Lot L18Q)	1,000.1	µg/mL	+/- 5.8146 +/- 11.9551 +/- 19.0264	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot BCBN4329V)	1,001.4	µg/mL	+/- 5.8220 +/- 11.9704 +/- 19.0507	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	Dimethylphthalate **CAS #** 131-11-3 **Purity** 99%	(Lot 10117699)	1,002.0	µg/mL	+/- 5.8255 +/- 11.9776 +/- 19.0621	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99%	(Lot BCBB8606V)	1,000.1	µg/mL	+/- 5.8145 +/- 11.9549 +/- 19.0260	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	3-Nitroaniline **CAS #** 99-09-2 **Purity** 99%	(Lot 12836338V)	1,000.6	µg/mL	+/- 5.8178 +/- 11.9616 +/- 19.0368	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	Acenaphthene **CAS #** 83-32-9 **Purity** 99%	(Lot MKBW9515V)	1,002.2	µg/mL	+/- 5.8267 +/- 11.9800 +/- 19.0659	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	2,4-Dinitrophenol **CAS #** 51-28-5 **Purity** 99%	(Lot STBF9439V)	2,001.9	µg/mL	+/- 11.6392 +/- 23.9308 +/- 38.0856	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Dibenzofuran **CAS #** 132-64-9 **Purity** 99%	(Lot MKBW2691V)	1,001.0	µg/mL	+/- 5.8201 +/- 11.9664 +/- 19.0444	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	4-Nitrophenol **CAS #** 100-02-7 **Purity** 99%	(Lot MKBV0501V)	2,000.4	µg/mL	+/- 11.6305 +/- 23.9129 +/- 38.0570	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690V)	1,000.7	µg/mL	+/- 5.8183 +/- 11.9628 +/- 19.0387	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	2,3,4,6-Tetrachlorophenol **CAS #** 58-90-2 **Purity** 99%	(Lot B16W09031)	1,005.4	µg/mL	+/- 5.8455 +/- 12.0186 +/- 19.1274	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Fluorene **CAS #** 86-73-7 **Purity** 99%	(Lot 10193329)	1,000.5	µg/mL	+/- 5.8170 +/- 11.9600 +/- 19.0342	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	n-Hexadecane (C16) **CAS #** 544-76-3 **Purity** 99%	(Lot SHBG9095V)	1,001.2	µg/mL	+/- 5.8209 +/- 11.9680 +/- 19.0469	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Diethylphthalate **CAS #** 84-66-2 **Purity** 99%	(Lot MKBV9622V)	1,002.4	µg/mL	+/- 5.8280 +/- 11.9828 +/- 19.0704	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	4-Chlorophenyl phenyl ether **CAS #** 7005-72-3 **Purity** 99%	(Lot MKBX5225V)	1,001.4	µg/mL	+/- 5.8224 +/- 11.9712 +/- 19.0520	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	4-Nitroaniline **CAS #** 100-01-6 **Purity** 98%	(Lot BCBG4702V)	1,000.2	µg/mL	+/- 5.8152 +/- 11.9563 +/- 19.0283	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) **CAS #** 534-52-1 **Purity** 98%	(Lot LC22071V)	2,000.6	µg/mL	+/- 11.6319 +/- 23.9157 +/- 38.0615	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	Diphenylamine **CAS #** 122-39-4 **Purity** 99%	(Lot MKBN8295V)	850.3	µg/mL	+/- 4.9435 +/- 10.1641 +/- 16.1761	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	Azobenzene **CAS #** 103-33-3 **Purity** 99%	(Lot BCBQ0927V)	1,001.6	µg/mL	+/- 5.8236 +/- 11.9736 +/- 19.0558	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	4-Bromophenyl phenyl ether **CAS #** 101-55-3 **Purity** 98%	(Lot STBB9729V)	1,000.1	µg/mL	+/- 5.8148 +/- 11.9555 +/- 19.0270	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	Hexachlorobenzene **CAS #** 118-74-1 **Purity** 99%	(Lot LC24211V)	1,001.0	µg/mL	+/- 5.8201 +/- 11.9664 +/- 19.0444	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	Pentachlorophenol **CAS #** 87-86-5 **Purity** 99%	(Lot 170306KJA)	2,007.3	µg/mL	+/- 11.6708 +/- 23.9958 +/- 38.1889	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	n-Octadecane (C18) **CAS #** 593-45-3 **Purity** 99%	(Lot 27SOF)	1,000.6	µg/mL	+/- 5.8176 +/- 11.9612 +/- 19.0361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	Phenanthrene **CAS #** 85-01-8 **Purity** 99%	(Lot MKCB1762V)	1,001.0	µg/mL	+/- 5.8199 +/- 11.9660 +/- 19.0437	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	Anthracene **CAS #** 120-12-7 **Purity** 99%	(Lot MKBV7759V)	1,001.7	µg/mL	+/- 5.8242 +/- 11.9748 +/- 19.0577	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	Carbazole **CAS #** 86-74-8 **Purity** 98%	(Lot 5571400)	1,000.7	µg/mL	+/- 5.8182 +/- 11.9626 +/- 19.0382	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	Di-n-butylphthalate **CAS #** 84-74-2 **Purity** 99%	(Lot MKBT0244V)	1,001.4	µg/mL	+/- 5.8224 +/- 11.9712 +/- 19.0520	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	Fluoranthene **CAS #** 206-44-0 **Purity** 98%	(Lot MKBQ6360V)	1,000.4	µg/mL	+/- 5.8163 +/- 11.9587 +/- 19.0320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	Pyrene **CAS #** 129-00-0 **Purity** 99%	(Lot BCBR9108V)	1,001.7	µg/mL	+/- 5.8240 +/- 11.9744 +/- 19.0571	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Benzyl butyl phthalate **CAS #** 85-68-7 **Purity** 98%	(Lot MKBZ4553V)	1,001.2	µg/mL	+/- 5.8209 +/- 11.9680 +/- 19.0469	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Benz(a)anthracene **CAS #** 56-55-3 **Purity** 99%	(Lot ER031412-01)	1,000.3	µg/mL	+/- 5.8158 +/- 11.9576 +/- 19.0304	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	Chrysene **CAS #** 218-01-9 **Purity** 99%	(Lot 012015)	1,001.4	µg/mL	+/- 5.8222 +/- 11.9708 +/- 19.0513	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
73	Bis(2-ethylhexyl)phthalate **CAS #** 117-81-7 **Purity** 99%	(Lot MKBZ3868V)	1,001.4	µg/mL	+/- 5.8220 +/- 11.9704 +/- 19.0507	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
74	Di-n-octyl phthalate **CAS #** 117-84-0 **Purity** 99%	(Lot 5555000)	1,002.6	µg/mL	+/- 5.8290 +/- 11.9847 +/- 19.0735	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
75	Benzo(b)fluoranthene **CAS #** 205-99-2 **Purity** 99%	(Lot ER03101401)	1,000.2	µg/mL	+/- 5.8151 +/- 11.9561 +/- 19.0279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
76	Benzo(k)fluoranthene **CAS #** 207-08-9 **Purity** 99%	(Lot 012012K)	1,000.9	µg/mL	+/- 5.8195 +/- 11.9652 +/- 19.0425	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
77	Benzo(a)pyrene **CAS #** 50-32-8 **Purity** 99%	(Lot ER071309-02)	1,000.4	µg/mL	+/- 5.8162 +/- 11.9584 +/- 19.0317	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
78	Indeno(1,2,3-cd)pyrene **CAS #** 193-39-5 **Purity** 99%	(Lot ER082107-02)	1,000.5	µg/mL	+/- 5.8170 +/- 11.9600 +/- 19.0342	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
79	Dibenz(a,h)anthracene **CAS #** 53-70-3 **Purity** 99%	(Lot ER032211-01)	1,001.6	µg/mL	+/- 5.8232 +/- 11.9728 +/- 19.0545	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
80	Benzo(g,h,i)perylene **CAS #** 191-24-2 **Purity** 99%	(Lot ER05121401)	1,000.5	µg/mL	+/- 5.8168 +/- 11.9596 +/- 19.0336	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

Specific Reference Material Notes:

N-nitrosodiphenylamine 1000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 855 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.
This lot was approved even though the %D for 4,6-DN-2-MP was greater than 10%.

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

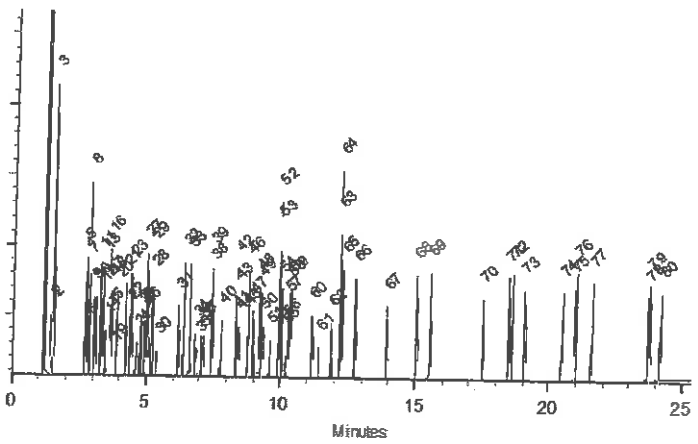
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:
250°C

Det. Temp:
340°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 Jozefick - Mix Technician

Date Mixed: 15-Mar-2017 **Balance:** 1128360905

Justine Albertson - Operations Tech-ARM QC

Date Passed: 30-Mar-2017

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- 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 31861, 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

SVLVstd10_00007

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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.:** A0123819

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 : June 30, 2018 **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		1,999.8	µg/mL	+/- 11.6272	µg/mL	Gravimetric
	CAS # 95-13-6	(Lot MKBT8433V)			+/- 112.1289	µg/mL	Unstressed
	Purity 98%				+/- 114.7525	µg/mL	Stressed
2	Benzoic acid		2,000.7	µg/mL	+/- 11.6320	µg/mL	Gravimetric
	CAS # 65-85-0	(Lot MKBV5544V)			+/- 112.1745	µg/mL	Unstressed
	Purity 99%				+/- 114.7992	µg/mL	Stressed

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

Reagent

SVLVstd10_00008

CTH 2460357 – 2460366

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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.:** A0123819

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 : June 30, 2018 **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 **CAS #** 95-13-6 **Purity** 98%	(Lot MKBT8433V)	1,999.8 µg/mL	+/- 11.6272 µg/mL +/- 112.1289 µg/mL +/- 114.7525 µg/mL		Gravimetric Unstressed Stressed
2	Benzoic acid **CAS #** 65-85-0 **Purity** 99%	(Lot MKBV5544V)	2,000.7 µg/mL	+/- 11.6320 µg/mL +/- 112.1745 µg/mL +/- 114.7992 µg/mL		Gravimetric Unstressed Stressed

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

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

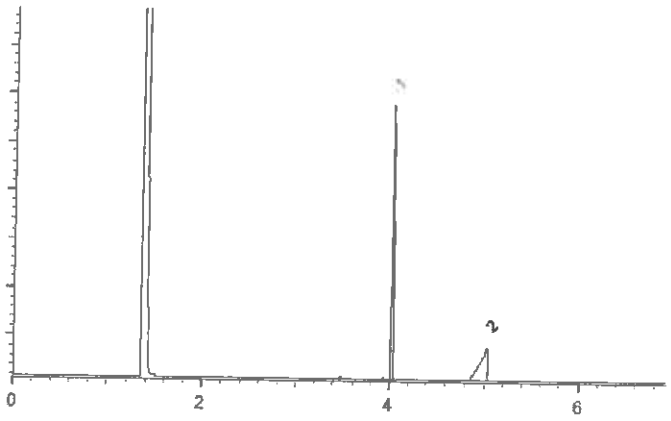
Carrier Gas:
hydrogen-constant pressure 10 psi.

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



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.

Cathleen Soltis - Mix Technician

Date Mixed: 29-Dec-2016 **Balance:** B442140311

Justina Albertson - Operations Tech-ARM QC

Date Passed: 06-Jan-2017

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- 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 31861, 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

SVLVstd11_00009

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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.:** A0123718

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 : June 30, 2018 **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 **CAS #** 100-52-7 **Purity** 99%	(Lot SHBG8690V)	2,005.3 µg/mL	+/- 11.6592 +/- 64.2823 +/- 74.7257	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	epsilon-Caprolactam **CAS #** 105-60-2 **Purity** 99%	(Lot I16X016)	2,002.5 µg/mL	+/- 11.6425 +/- 64.1904 +/- 74.6188	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Atrazine **CAS #** 1912-24-9 **Purity** 99%	(Lot P7XPN)	2,003.7 µg/mL	+/- 11.6499 +/- 64.2310 +/- 74.6660	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

Reagent

SVLVstd11_00010

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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.:** A0123718

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 : June 30, 2018 **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 **CAS #** 100-52-7 **Purity** 99%	(Lot SHBG8690V)	2,005.3 µg/mL	+/- 11.6592 µg/mL +/- 64.2823 µg/mL +/- 74.7257 µg/mL	Gravimetric Unstressed Stressed
2	epsilon-Caprolactam **CAS #** 105-60-2 **Purity** 99%	(Lot I16X016)	2,002.5 µg/mL	+/- 11.6425 µg/mL +/- 64.1904 µg/mL +/- 74.6188 µg/mL	Gravimetric Unstressed Stressed
3	Atrazine **CAS #** 1912-24-9 **Purity** 99%	(Lot P7XPN)	2,003.7 µg/mL	+/- 11.6499 µg/mL +/- 64.2310 µg/mL +/- 74.6660 µg/mL	Gravimetric Unstressed Stressed

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

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

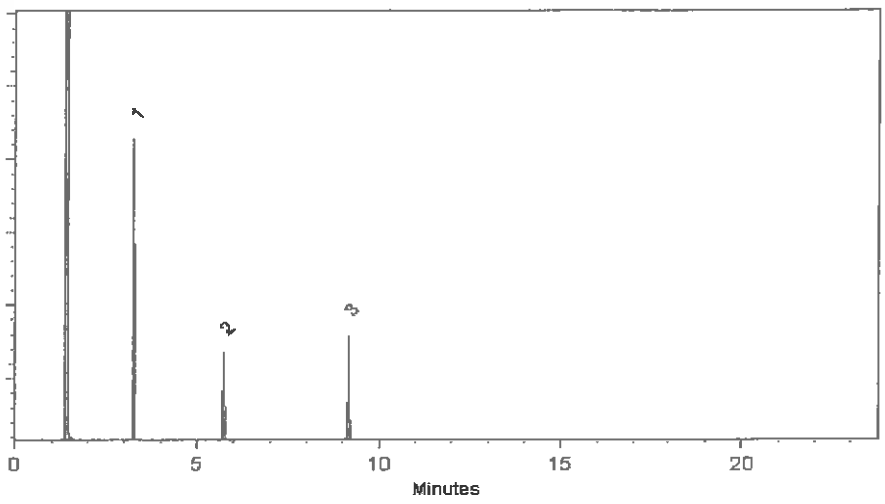
Carrier Gas:
hydrogen-constant pressure 10 psi.

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



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 Sawyer

Date Mixed: 22-Dec-2016 **Balance:** 1128360905

Amanda Miller - Operations Tech-ARM QC

Date Passed: 27-Dec-2016

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- 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 31861, 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

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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. : 569730 **Lot No.:** A0123497

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 : June 30, 2018 **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 **CAS #** 92-87-5 **Purity** 99%	(Lot 160809JLM)	1,981.3 µg/mL	+/- 11.5193 µg/mL +/- 23.6842 µg/mL +/- 37.6930 µg/mL	Gravimetric Unstressed Stressed
2	3,3'-Dichlorobenzidine **CAS #** 91-94-1 **Purity** 99%	(Lot 161027KJA)	2,009.8 µg/mL	+/- 11.6852 µg/mL +/- 24.0253 µg/mL +/- 38.2359 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

SVLVstd9_00009

CTH 260342-246351

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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. : 569730 **Lot No.:** A0123497

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 : June 30, 2018 **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		1,981.3 µg/mL	+/- 11.5193	µg/mL	Gravimetric
	CAS # 92-87-5	(Lot 160809JLM)		+/- 23.6842	µg/mL	Unstressed
	Purity 99%			+/- 37.6930	µg/mL	Stressed
2	3,3'-Dichlorobenzidine		2,009.8 µg/mL	+/- 11.6852	µg/mL	Gravimetric
	CAS # 91-94-1	(Lot 161027KJA)		+/- 24.0253	µg/mL	Unstressed
	Purity 99%			+/- 38.2359	µg/mL	Stressed

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

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

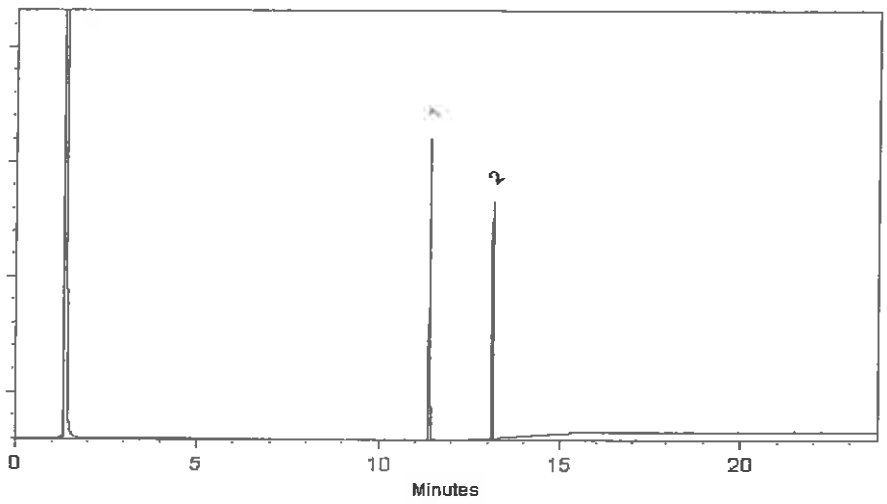
Carrier Gas:
hydrogen-constant pressure 10 psi.

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



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.

Dawn Brownson - Mix Technician

Date Mixed: 14-Dec-2016 **Balance:** 1128360905

Amanda Miller - Operations Tech-ARM QC

Date Passed: 28-Dec-2016

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- 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 31861, 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

SVLVSURRSPK_00021

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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. : 567685 **Lot No.:** A0123269

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 : December 31, 2021 **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 **CAS #** 367-12-4 (Lot STBD7945V) **Purity** 99%	5,017.0 µg/mL	+/- 29.1677 µg/mL +/- 146.4126 µg/mL +/- 177.6661 µg/mL	Gravimetric Unstressed Stressed
2	Phenol-d5 **CAS #** 4165-62-2 (Lot X-479) **Purity** 99%	4,965.4 µg/mL	+/- 28.8690 µg/mL +/- 144.9056 µg/mL +/- 175.8373 µg/mL	Gravimetric Unstressed Stressed
3	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-25462) **Purity** 99%	5,019.4 µg/mL	+/- 29.1814 µg/mL +/- 146.4812 µg/mL +/- 177.7494 µg/mL	Gravimetric Unstressed Stressed
4	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 10194342) **Purity** 99%	5,031.5 µg/mL	+/- 29.2518 µg/mL +/- 146.8343 µg/mL +/- 178.1779 µg/mL	Gravimetric Unstressed Stressed
5	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot 29699MJV) **Purity** 99%	5,026.7 µg/mL	+/- 29.2238 µg/mL +/- 146.6942 µg/mL +/- 178.0079 µg/mL	Gravimetric Unstressed Stressed
6	p-Terphenyl-d14 **CAS #** 1718-51-0 (Lot PR-21037) **Purity** 99%	5,029.2 µg/mL	+/- 29.2387 µg/mL +/- 146.7686 µg/mL +/- 178.0982 µg/mL	Gravimetric Unstressed Stressed

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

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

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

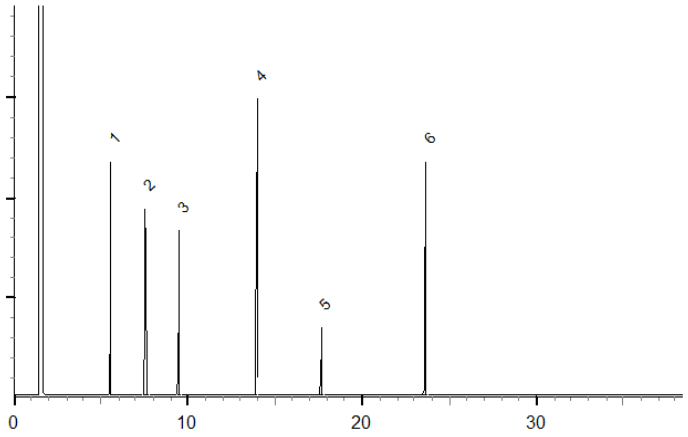
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°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.

Dawn Brownson - Mix Technician

Date Mixed: 06-Dec-2016 **Balance:** B345965662

Justine Albertson - Operations Tech-ARM QC

Date Passed: 08-Dec-2016

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- 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 31861, 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

svmethylmetha_00012

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

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:	032717
Description:	Methyl methane sulfonate
Expiration Date:	032722
Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	1000
NIST Test ID#:	822-275872-11

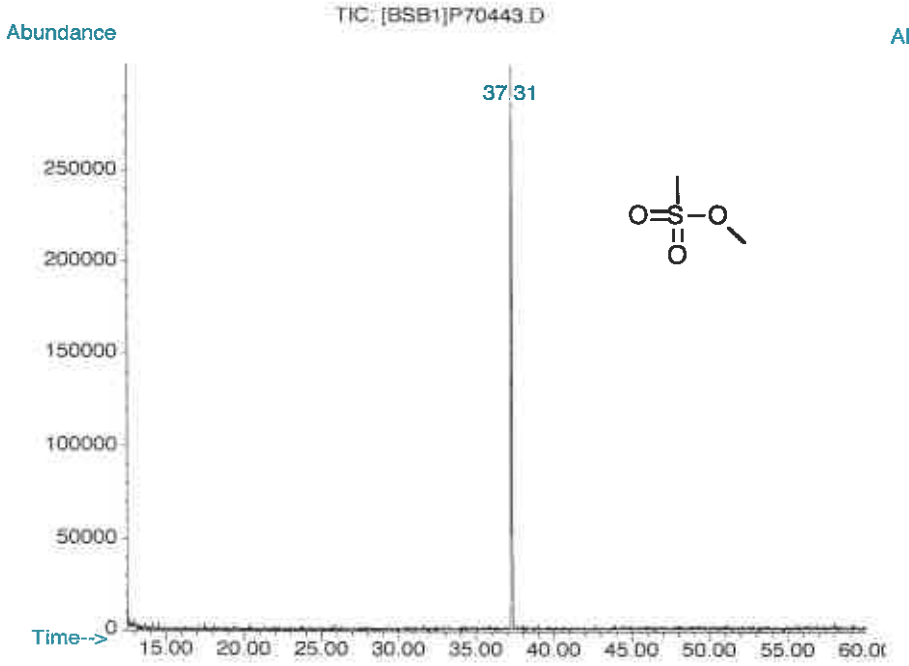
Solvent(s):	**Lot#**
Methylene chloride	76782

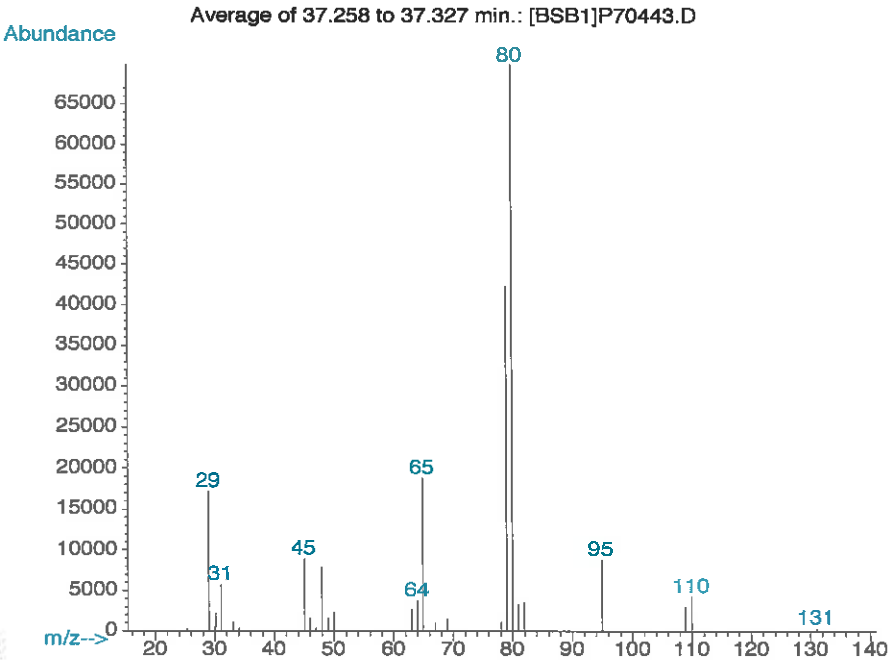
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

Formulated By:	Bryan Njeba	032717 DATE
Reviewed By:	Pedro L. Rentas	032717 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. Methyl methane sulfonate	443	07322PW	1000	99	0.2	0.02525	0.02527	1000.8	5.7	66-27-3	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.





- 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

SVNNITROPYROs_00018

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

Part Number: 70451
Lot Number: 122816
Description: N-Nitrosopyrrolidine

Expiration Date: 122819
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 822-275872-11

Weight(s) shown below were combined and diluted to (mL): 25.0

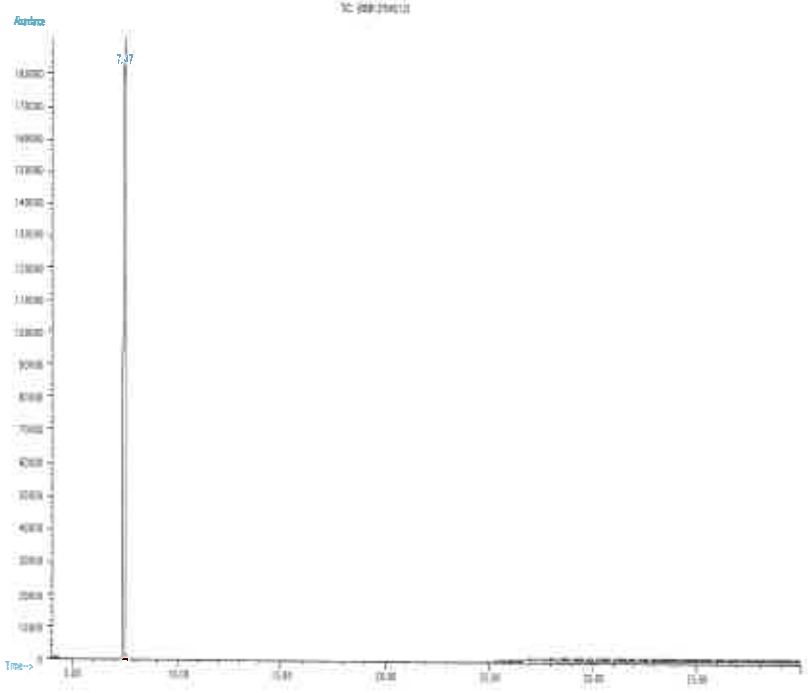
Solvent(s):	Lot#
Methylene chloride	76782

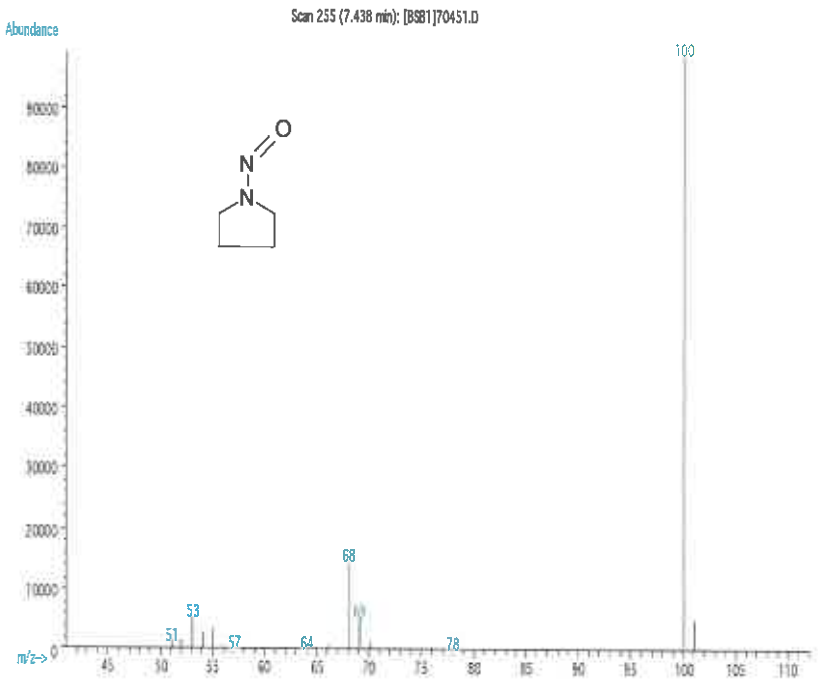
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By:	Paul Barron	122816 DATE
Reviewed By:	Pedro L. Rentas	122816 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	0.02528	1001.2	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

SVTUNINGMIXs_00006

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31615 **Lot No.:** A0123348

Description : GC/MS Tuning Mixture

GC/MS Tuning Mixture 1,000µg/mL, Methylene Chloride, 1mL/ampul

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

Expiration Date : December 31, 2019 **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	Pentachlorophenol **CAS #** 87-86-5 (Lot 160412JLM) **Purity** 99%	1,007.6 µg/mL	+/- 5.9132 µg/mL +/- 45.8954 µg/mL +/- 66.2667 µg/mL	Gravimetric Unstressed Stressed
2	DFTPP (Decafluorotriphenylphosphine) **CAS #** 5074-71-5 (Lot 10109917) **Purity** 99%	1,004.4 µg/mL	+/- 5.8944 µg/mL +/- 45.7496 µg/mL +/- 66.0563 µg/mL	Gravimetric Unstressed Stressed
3	Benzidine **CAS #** 92-87-5 (Lot 160809JLM) **Purity** 99%	1,009.6 µg/mL	+/- 5.9249 µg/mL +/- 45.9865 µg/mL +/- 66.3983 µg/mL	Gravimetric Unstressed Stressed
4	4,4'-DDT **CAS #** 50-29-3 (Lot ER012306-03) **Purity** 99%	1,002.0 µg/mL	+/- 5.8803 µg/mL +/- 45.6403 µg/mL +/- 65.8984 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260GAS1ST_00195

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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. : 569722 **Lot No.:** A0124278

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 : January 31, 2020 **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%	2,500.5 µg/mL	+/- 16.7232 µg/mL +/- 140.4412 µg/mL +/- 143.7161 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBG7976V) **Purity** 99%	2,498.7 µg/mL	+/- 17.4998 µg/mL +/- 140.4406 µg/mL +/- 143.7111 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 1026101231B1) **Purity** 99%	2,498.4 µg/mL	+/- 16.6753 µg/mL +/- 140.3203 µg/mL +/- 143.5926 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBF3387V) **Purity** 99%	2,496.9 µg/mL	+/- 17.0619 µg/mL +/- 140.2843 µg/mL +/- 143.5535 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.5 µg/mL	+/- 17.3456 µg/mL +/- 140.5211 µg/mL +/- 143.7944 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 23593) **Purity** 99%	2,500.5 µg/mL	+/- 16.8189 µg/mL +/- 140.4526 µg/mL +/- 143.7272 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 10.0499 µg/mL +/- 139.7786 µg/mL +/- 143.0675 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.5	µg/mL	+/-	16.5404	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBG7531V)			+/-	140.4793	µg/mL	Unstressed
	Purity 99%				+/-	143.7562	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)

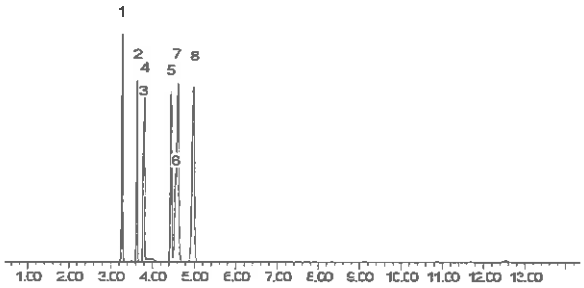
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Joseph Jaglowski - Mix Technician **Date Mixed:** 17-Jan-2017 **Balance:** 1125113331

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 24-Jan-2017

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

Reagent

VOA8260GAS1ST_00203

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

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569722 **Lot No.:** A0124278

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 : January 31, 2020 **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%	2,500.5 µg/mL	+/- 16.7232 µg/mL +/- 140.4412 µg/mL +/- 143.7161 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBG7976V) **Purity** 99%	2,498.7 µg/mL	+/- 17.4998 µg/mL +/- 140.4406 µg/mL +/- 143.7111 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 1026101231B1) **Purity** 99%	2,498.4 µg/mL	+/- 16.6753 µg/mL +/- 140.3203 µg/mL +/- 143.5926 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBF3387V) **Purity** 99%	2,496.9 µg/mL	+/- 17.0619 µg/mL +/- 140.2843 µg/mL +/- 143.5535 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.5 µg/mL	+/- 17.3456 µg/mL +/- 140.5211 µg/mL +/- 143.7944 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 23593) **Purity** 99%	2,500.5 µg/mL	+/- 16.8189 µg/mL +/- 140.4526 µg/mL +/- 143.7272 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 10.0499 µg/mL +/- 139.7786 µg/mL +/- 143.0675 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.5	µg/mL	+/-	16.5404	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBG7531V)			+/-	140.4793	µg/mL	Unstressed
	Purity 99%				+/-	143.7562	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)

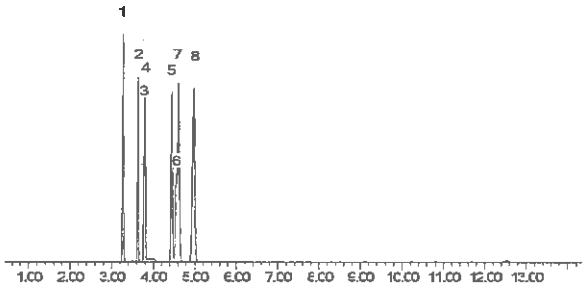
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Joseph Jaglowski - Mix Technician **Date Mixed:** 17-Jan-2017 **Balance:** 1125113331

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 24-Jan-2017

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

Reagent

VOA8260GAS1ST_00207

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Bellefonte, PA 16823-8812
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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 569722 **Lot No.:** A0124278

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 : January 31, 2020 **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%	2,500.5 µg/mL	+/- 16.7232 µg/mL +/- 140.4412 µg/mL +/- 143.7161 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBG7976V) **Purity** 99%	2,498.7 µg/mL	+/- 17.4998 µg/mL +/- 140.4406 µg/mL +/- 143.7111 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 1026101231B1) **Purity** 99%	2,498.4 µg/mL	+/- 16.6753 µg/mL +/- 140.3203 µg/mL +/- 143.5926 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBF3387V) **Purity** 99%	2,496.9 µg/mL	+/- 17.0619 µg/mL +/- 140.2843 µg/mL +/- 143.5535 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.5 µg/mL	+/- 17.3456 µg/mL +/- 140.5211 µg/mL +/- 143.7944 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 23593) **Purity** 99%	2,500.5 µg/mL	+/- 16.8189 µg/mL +/- 140.4526 µg/mL +/- 143.7272 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 10.0499 µg/mL +/- 139.7786 µg/mL +/- 143.0675 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.5	µg/mL	+/-	16.5404	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBG7531V)			+/-	140.4793	µg/mL	Unstressed
	Purity 99%				+/-	143.7562	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)

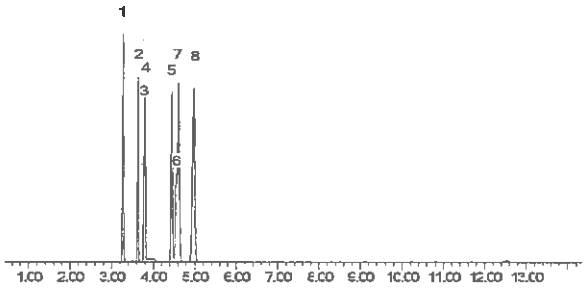
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Joseph Jaglowski - Mix Technician **Date Mixed:** 17-Jan-2017 **Balance:** 1125113331

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 24-Jan-2017

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

Reagent

VOA8260GAS2ND_00216

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 569722.SEC **Lot No.:** A0128832

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 : June 30, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,505.9 µg/mL	+/- 22.3986 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 23586)		+/- 141.5312 µg/mL	Unstressed
	Purity 99%		+/- 144.7955 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,503.7 µg/mL	+/- 24.8413 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 141.8153 µg/mL	Unstressed
	Purity 99%		+/- 145.0675 µg/mL	Stressed
3	Vinyl chloride	2,503.2 µg/mL	+/- 25.9197 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 141.9813 µg/mL	Unstressed
	Purity 99%		+/- 145.2285 µg/mL	Stressed
4	1,3-Butadiene	2,508.9 µg/mL	+/- 20.6969 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 24033)		+/- 141.4379 µg/mL	Unstressed
	Purity 99%		+/- 144.7121 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,502.6 µg/mL	+/- 26.2540 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/- 142.0076 µg/mL	Unstressed
	Purity 99%		+/- 145.2526 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,510.6 µg/mL	+/- 24.9094 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 142.2038 µg/mL	Unstressed
	Purity 99%		+/- 145.4650 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,510.9 µg/mL	+/- 25.6719 µg/mL	Gravimetric
	CAS # 75-43-4.SEC (Lot SHBC0858V)		+/- 142.3575 µg/mL	Unstressed
	Purity 99%		+/- 145.6160 µg/mL	Stressed

Reagent

VOA8260GAS2ND_00217

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Catalog No. : 569722.SEC **Lot No.:** A0128832

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 : June 30, 2020 **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 23586) **Purity** 99%	2,505.9 µg/mL	+/- 22.3986 µg/mL +/- 141.5312 µg/mL +/- 144.7955 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,503.7 µg/mL	+/- 24.8413 µg/mL +/- 141.8153 µg/mL +/- 145.0675 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,503.2 µg/mL	+/- 25.9197 µg/mL +/- 141.9813 µg/mL +/- 145.2285 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 24033) **Purity** 99%	2,508.9 µg/mL	+/- 20.6969 µg/mL +/- 141.4379 µg/mL +/- 144.7121 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	2,502.6 µg/mL	+/- 26.2540 µg/mL +/- 142.0076 µg/mL +/- 145.2526 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,510.6 µg/mL	+/- 24.9094 µg/mL +/- 142.2038 µg/mL +/- 145.4650 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4.SEC (Lot SHBC0858V) **Purity** 99%	2,510.9 µg/mL	+/- 25.6719 µg/mL +/- 142.3575 µg/mL +/- 145.6160 µg/mL	Gravimetric Unstressed Stressed

Reagent

VOA8260INTRES_00121

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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

VOA8260INTRES_00123

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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 +/- 106.0450 µg/mL +/- 106.5155 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 **Purity** 99% (Lot M276P24)	1,250.2 µg/mL	+/- 7.2688 µg/mL +/- 26.5135 µg/mL +/- 26.6311 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 **Purity** 99% (Lot BCBK8171V)	250.2 µg/mL	+/- 1.4580 µg/mL +/- 5.3070 µg/mL +/- 5.3305 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 **Purity** 98% (Lot I-19073)	5,000.6 µg/mL	+/- 29.0727 µg/mL +/- 106.0502 µg/mL +/- 106.5208 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 **Purity** 99% (Lot PR-23926)	250.4 µg/mL	+/- 1.4592 µg/mL +/- 5.3113 µg/mL +/- 5.3348 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 **Purity** 99% (Lot PR-18488)	250.0 µg/mL	+/- 1.4569 µg/mL +/- 5.3028 µg/mL +/- 5.3263 µg/mL	Gravimetric Unstressed Stressed

Reagent

VOA8260INTRES_00136

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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.:** A0124343

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 : January 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol		5,050.0 µg/mL	+/- 29.3596	µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot I-201)		+/- 108.1207	µg/mL	Unstressed
	Purity 99%			+/- 111.2640	µg/mL	Stressed
2	2-Butanone-d5		1,262.5 µg/mL	+/- 7.3403	µg/mL	Gravimetric
	CAS # 24313-50-6	(Lot M-276)		+/- 27.0303	µg/mL	Unstressed
	Purity 99%			+/- 27.8161	µg/mL	Stressed
3	Fluorobenzene		251.6 µg/mL	+/- 1.4664	µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBK8171V)		+/- 5.3884	µg/mL	Unstressed
	Purity 99%			+/- 5.5450	µg/mL	Stressed
4	1,4-Dioxane-d8		5,048.8 µg/mL	+/- 29.3526	µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot I-19942)		+/- 108.0950	µg/mL	Unstressed
	Purity 99%			+/- 111.2375	µg/mL	Stressed
5	Chlorobenzene-d5		251.5 µg/mL	+/- 1.4654	µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-23926)		+/- 5.3849	µg/mL	Unstressed
	Purity 99%			+/- 5.5413	µg/mL	Stressed
6	1,4-Dichlorobenzene-d4		252.5 µg/mL	+/- 1.4714	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)		+/- 5.4070	µg/mL	Unstressed
	Purity 99%			+/- 5.5641	µg/mL	Stressed

Reagent

VOA8260KET1ST_00090

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

Catalog No. : 569721 **Lot No.:** A0123890

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

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

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone		12,517.5 µg/mL	+/- 72.7778 µg/mL		Gravimetric
	CAS # 67-64-1	(Lot SHBH0922V)		+/- 755.2362 µg/mL		Unstressed
	Purity 99%			+/- 757.0293 µg/mL		Stressed
2	2-Butanone (MEK)		12,521.8 µg/mL	+/- 72.8025 µg/mL		Gravimetric
	CAS # 78-93-3	(Lot SHBF2461V)		+/- 755.4927 µg/mL		Unstressed
	Purity 99%			+/- 757.2863 µg/mL		Stressed
3	4-Methyl-2-pentanone (MIBK)		12,519.8 µg/mL	+/- 72.7909 µg/mL		Gravimetric
	CAS # 108-10-1	(Lot SHBG3630V)		+/- 755.3720 µg/mL		Unstressed
	Purity 99%			+/- 757.1654 µg/mL		Stressed
4	2-Hexanone		12,508.5 µg/mL	+/- 72.7255 µg/mL		Gravimetric
	CAS # 591-78-6	(Lot MKBW0198V)		+/- 754.6932 µg/mL		Unstressed
	Purity 99%			+/- 756.4850 µg/mL		Stressed

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

Reagent

VOA8260KET1ST_00097

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Catalog No. : 569721 **Lot No.:** A0123890

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

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

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

Expiration Date : January 31, 2020 **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 SHBH0922V)	12,517.5 µg/mL	+/- 72.7778 µg/mL +/- 755.2362 µg/mL +/- 757.0293 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) CAS # 78-93-3 Purity 99%	(Lot SHBF2461V)	12,521.8 µg/mL	+/- 72.8025 µg/mL +/- 755.4927 µg/mL +/- 757.2863 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 Purity 99%	(Lot SHBG3630V)	12,519.8 µg/mL	+/- 72.7909 µg/mL +/- 755.3720 µg/mL +/- 757.1654 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone CAS # 591-78-6 Purity 99%	(Lot MKBW0198V)	12,508.5 µg/mL	+/- 72.7255 µg/mL +/- 754.6932 µg/mL +/- 756.4850 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

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Catalog No. : 569721 **Lot No.:** A0123890

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

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

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

Expiration Date : January 31, 2020 **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 SHBH0922V)	12,517.5 µg/mL	+/- 72.7778 µg/mL +/- 755.2362 µg/mL +/- 757.0293 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) CAS # 78-93-3 Purity 99%	(Lot SHBF2461V)	12,521.8 µg/mL	+/- 72.8025 µg/mL +/- 755.4927 µg/mL +/- 757.2863 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 Purity 99%	(Lot SHBG3630V)	12,519.8 µg/mL	+/- 72.7909 µg/mL +/- 755.3720 µg/mL +/- 757.1654 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone CAS # 591-78-6 Purity 99%	(Lot MKBW0198V)	12,508.5 µg/mL	+/- 72.7255 µg/mL +/- 754.6932 µg/mL +/- 756.4850 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260KET1ST_00100

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Catalog No. : 569721 **Lot No.:** A0123890

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

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L. K=2)	
1	Acetone CAS # 67-64-1 (Lot SHBH0922V) Purity 99%	12,517.5 µg/mL	+/- 72.7778 µg/mL +/- 755.2362 µg/mL +/- 757.0293 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) CAS # 78-93-3 (Lot SHBF2461V) Purity 99%	12,521.8 µg/mL	+/- 72.8025 µg/mL +/- 755.4927 µg/mL +/- 757.2863 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 (Lot SHBG3630V) Purity 99%	12,519.8 µg/mL	+/- 72.7909 µg/mL +/- 755.3720 µg/mL +/- 757.1654 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone CAS # 591-78-6 (Lot MKBW0198V) Purity 99%	12,508.5 µg/mL	+/- 72.7255 µg/mL +/- 754.6932 µg/mL +/- 756.4850 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260KET2ND_00103

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

Catalog No. : 569721.sec **Lot No.:** A0123880

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

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

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone		12,501.6 µg/mL	+/- 73.1996 µg/mL		Gravimetric
	CAS # 67-64-1.SEC	(Lot P14A572)		+/- 754.3267 µg/mL		Unstressed
	Purity 99%			+/- 756.1173 µg/mL		Stressed
2	2-Butanone (MEK)		12,503.6 µg/mL	+/- 73.2113 µg/mL		Gravimetric
	CAS # 78-93-3.SEC	(Lot RA58J)		+/- 754.4473 µg/mL		Unstressed
	Purity 99%			+/- 756.2383 µg/mL		Stressed
3	4-Methyl-2-pentanone (MIBK)		12,506.0 µg/mL	+/- 73.2254 µg/mL		Gravimetric
	CAS # 108-10-1.SEC	(Lot E29T040)		+/- 754.5921 µg/mL		Unstressed
	Purity 99%			+/- 756.3834 µg/mL		Stressed
4	2-Hexanone		12,504.0 µg/mL	+/- 73.2137 µg/mL		Gravimetric
	CAS # 591-78-6.SEC	(Lot V3NRA)		+/- 754.4715 µg/mL		Unstressed
	Purity 99%			+/- 756.2625 µg/mL		Stressed

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

Reagent

VOA8260MEGA1_00063

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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. : 571992 **Lot No.:** A0123711

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : December 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 (Lot SHBG1462V) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 µg/mL +/- 150.9115 µg/mL +/- 151.2698 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,505.1 µg/mL	+/- 14.5650 µg/mL +/- 151.1453 µg/mL +/- 151.5041 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,511.5 µg/mL	+/- 14.6021 µg/mL +/- 151.5299 µg/mL +/- 151.8897 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBF0688V) **Purity** 99%	25,001.8 µg/mL	+/- 145.3547 µg/mL +/- 1,508.4656 µg/mL +/- 1,512.0470 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.5 µg/mL	+/- 29.0733 µg/mL +/- 301.7023 µg/mL +/- 302.4186 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBF2149V) **Purity** 99%	2,502.9 µg/mL	+/- 14.5519 µg/mL +/- 151.0095 µg/mL +/- 151.3681 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot SHBF8133V) **Purity** 99%	2,517.1 µg/mL	+/- 14.6348 µg/mL +/- 151.8693 µg/mL +/- 152.2299 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBH2578V)	2,502.1	µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot S20A856)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot T07B2030)	25,001.3	µg/mL	+/- 145.3518 +/- 1,508.4355 +/- 1,512.0167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBG2655V)	2,505.3	µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 98%	(Lot MKBV2831V)	2,500.5	µg/mL	+/- 14.5379 +/- 150.8644 +/- 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBG2674V)	2,503.8	µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 00008621)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 98%	(Lot BCBR0622V)	2,501.0	µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot 09431AEV)	2,503.8	µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBG8201V)	62,512.5	µg/mL	+/- 363.4341 +/- 3,771.6543 +/- 3,780.6088	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot MKBV2089V)	2,501.9	µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 99%	(Lot 00004559)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBG2910V)	5,001.3	µg/mL	+/- 29.0777 +/- 301.7476 +/- 302.4640	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKBX4768V)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 160727JLM)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG1763V)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBG6171V)	2.505.5	µg/mL	+/- 14.5672 +/- 151.1679 +/- 151.5268	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBF9313V)	2,504.8	µg/mL	+/- 14.5628 +/- 151.1227 +/- 151.4815	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBH2056V)	2,506.9	µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2.502.4	µg/mL	+/- 14.5490 +/- 150.9794 +/- 151.3378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 98%	(Lot SHBG0634V)	2.500.3	µg/mL	+/- 14.5372 +/- 150.8570 +/- 151.2152	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,503.0	µg/mL	+/- 14.5527 +/- 151.0171 +/- 151.3756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBH2584V)	50,011.4	µg/mL	+/- 290.7552 +/- 3,017.4064 +/- 3,024.5702	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 98%	(Lot 10183283)	2.501.9	µg/mL	+/- 14.5465 +/- 150.9531 +/- 151.3115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 22622)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBH1932V)	2,504.3	µg/mL	+/- 14.5599 +/- 151.0925 +/- 151.4512	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBD9190V)	2,506.9	µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C584177)	2.503.6	µg/mL	+/- 14.5563 +/- 151.0548 +/- 151.4134	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2.503.5	µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD9374V)	2.500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKBW3597V)	2,500.2	µg/mL	+/- 14.5365 +/- 150.8497 +/- 151.2078	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBF0505V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBG4347V)	1,250.3	µg/mL	+/- 7.2691 +/- 75.4331 +/- 75.6122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBG3928V)	1,251.3	µg/mL	+/- 7.2749 +/- 75.4935 +/- 75.6727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBG5920V)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH3432V)	2,504.9	µg/mL	+/- 14.5636 +/- 151.1302 +/- 151.4890	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKBS7097V)	2,506.3	µg/mL	+/- 14.5716 +/- 151.2132 +/- 151.5722	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBD8459V)	2,502.9	µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 97%	(Lot MKBW5506V)	2,506.8	µg/mL	+/- 14.5750 +/- 151.2490 +/- 151.6081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,508.5	µg/mL	+/- 14.5846 +/- 151.3489 +/- 151.7082	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 95%	(Lot MKBP6041V)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8817 +/- 151.2399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot MKBJ0332V)	2,501.9	µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot MKBD4032V)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBQ2165V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
58	2-Chlorotoluene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
59	4-Chlorotoluene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
60	tert-Butylbenzene		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot S52237V)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)			+/-	150.8866	µg/mL	Unstressed
	Purity 98%				+/-	151.2448	µg/mL	Stressed
62	sec-Butylbenzene		2,505.4	µg/mL	+/-	14.5665	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	151.1604	µg/mL	Unstressed
	Purity 99%				+/-	151.5193	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,503.8	µg/mL	+/-	14.5570	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKBS2604V)			+/-	151.0623	µg/mL	Unstressed
	Purity 99%				+/-	151.4210	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBM5751V)			+/-	151.0699	µg/mL	Unstressed
	Purity 99%				+/-	151.4285	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.9	µg/mL	+/-	14.5926	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS1350V)			+/-	151.4319	µg/mL	Unstressed
	Purity 99%				+/-	151.7914	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		2,503.8	µg/mL	+/-	14.5570	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBD7331V)			+/-	151.0623	µg/mL	Unstressed
	Purity 99%				+/-	151.4210	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	151.1378	µg/mL	Unstressed
	Purity 99%				+/-	151.4966	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,505.3	µg/mL	+/-	14.5657	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBC5541V)			+/-	151.1528	µg/mL	Unstressed
	Purity 99%				+/-	151.5117	µg/mL	Stressed
70	Hexachlorobutadiene		2,506.5	µg/mL	+/-	14.5728	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	151.2266	µg/mL	Unstressed
	Purity 98%				+/-	151.5856	µg/mL	Stressed
71	Naphthalene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBW2603V)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,511.1 µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)		+/-	151.5073	µg/mL	Unstressed
	Purity 99%			+/-	151.8670	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)

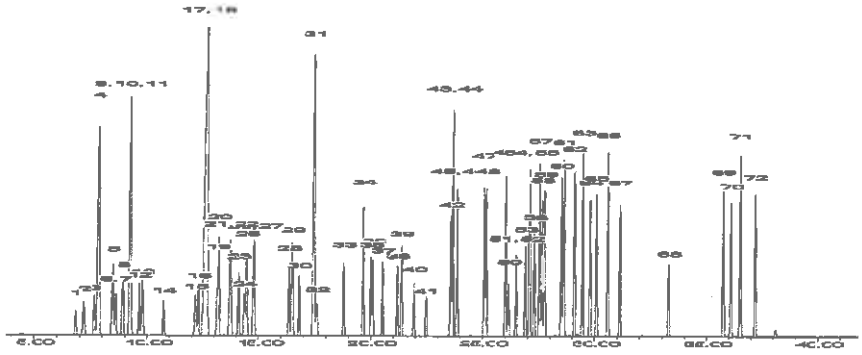
Carrier Gas:
helium-constant pressure 30 psi

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.

F. Joseph Tallon - Mix Technician

Date Mixed: 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jan-2017

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

Reagent

VOA8260MEGA1_00065

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

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. : 571992 **Lot No.:** A0123711

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : December 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 (Lot SHBG1462V) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 µg/mL +/- 150.9115 µg/mL +/- 151.2698 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,505.1 µg/mL	+/- 14.5650 µg/mL +/- 151.1453 µg/mL +/- 151.5041 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,511.5 µg/mL	+/- 14.6021 µg/mL +/- 151.5299 µg/mL +/- 151.8897 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBF0688V) **Purity** 99%	25,001.8 µg/mL	+/- 145.3547 µg/mL +/- 1,508.4656 µg/mL +/- 1,512.0470 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.5 µg/mL	+/- 29.0733 µg/mL +/- 301.7023 µg/mL +/- 302.4186 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBF2149V) **Purity** 99%	2,502.9 µg/mL	+/- 14.5519 µg/mL +/- 151.0095 µg/mL +/- 151.3681 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot SHBF8133V) **Purity** 99%	2,517.1 µg/mL	+/- 14.6348 µg/mL +/- 151.8693 µg/mL +/- 152.2299 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBH2578V)	2,502.1	µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot S20A856)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot T07B2030)	25,001.3	µg/mL	+/- 145.3518 +/- 1,508.4355 +/- 1,512.0167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBG2655V)	2,505.3	µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 98%	(Lot MKBV2831V)	2,500.5	µg/mL	+/- 14.5379 +/- 150.8644 +/- 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBG2674V)	2,503.8	µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 00008621)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 98%	(Lot BCBR0622V)	2,501.0	µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot 09431AEV)	2,503.8	µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBG8201V)	62,512.5	µg/mL	+/- 363.4341 +/- 3,771.6543 +/- 3,780.6088	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot MKBV2089V)	2,501.9	µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 99%	(Lot 00004559)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBG2910V)	5,001.3	µg/mL	+/- 29.0777 +/- 301.7476 +/- 302.4640	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKBX4768V)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 160727JLM)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG1763V)	2,503.3	µg/mL	+/- +/- +/-	14.5541 151.0322 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBG6171V)	2,505.5	µg/mL	+/- +/- +/-	14.5672 151.1679 151.5268	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBF9313V)	2,504.8	µg/mL	+/- +/- +/-	14.5628 151.1227 151.4815	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBH2056V)	2,506.9	µg/mL	+/- +/- +/-	14.5752 151.2509 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,502.4	µg/mL	+/- +/- +/-	14.5490 150.9794 151.3378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 98%	(Lot SHBG0634V)	2,500.3	µg/mL	+/- +/- +/-	14.5372 150.8570 151.2152	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,503.0	µg/mL	+/- +/- +/-	14.5527 151.0171 151.3756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBH2584V)	50,011.4	µg/mL	+/- +/- +/-	290.7552 3,017.4064 3,024.5702	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 98%	(Lot 10183283)	2,501.9	µg/mL	+/- +/- +/-	14.5465 150.9531 151.3115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 22622)	2,501.0	µg/mL	+/- +/- +/-	14.5410 150.8964 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBH1932V)	2,504.3	µg/mL	+/- +/- +/-	14.5599 151.0925 151.4512	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBD9190V)	2,506.9	µg/mL	+/- +/- +/-	14.5752 151.2509 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C584177)	2,503.6	µg/mL	+/- +/- +/-	14.5563 151.0548 151.4134	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,501.0	µg/mL	+/- +/- +/-	14.5410 150.8964 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,503.5	µg/mL	+/- +/- +/-	14.5556 151.0472 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD9374V)	2,500.9	µg/mL	+/- +/- +/-	14.5403 150.8889 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKBW3597V)	2,500.2	µg/mL	+/- 14.5365 +/- 150.8497 +/- 151.2078	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBF0505V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBG4347V)	1,250.3	µg/mL	+/- 7.2691 +/- 75.4331 +/- 75.6122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBG3928V)	1,251.3	µg/mL	+/- 7.2749 +/- 75.4935 +/- 75.6727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBG5920V)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH3432V)	2,504.9	µg/mL	+/- 14.5636 +/- 151.1302 +/- 151.4890	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKBS7097V)	2,506.3	µg/mL	+/- 14.5716 +/- 151.2132 +/- 151.5722	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBD8459V)	2,502.9	µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 97%	(Lot MKBW5506V)	2,506.8	µg/mL	+/- 14.5750 +/- 151.2490 +/- 151.6081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,508.5	µg/mL	+/- 14.5846 +/- 151.3489 +/- 151.7082	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 95%	(Lot MKBP6041V)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8817 +/- 151.2399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot MKBJ0332V)	2,501.9	µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot MKBD4032V)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBQ2165V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
58	2-Chlorotoluene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
59	4-Chlorotoluene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
60	tert-Butylbenzene		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot S52237V)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)			+/-	150.8866	µg/mL	Unstressed
	Purity 98%				+/-	151.2448	µg/mL	Stressed
62	sec-Butylbenzene		2,505.4	µg/mL	+/-	14.5665	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	151.1604	µg/mL	Unstressed
	Purity 99%				+/-	151.5193	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,503.8	µg/mL	+/-	14.5570	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKBS2604V)			+/-	151.0623	µg/mL	Unstressed
	Purity 99%				+/-	151.4210	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBM5751V)			+/-	151.0699	µg/mL	Unstressed
	Purity 99%				+/-	151.4285	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.9	µg/mL	+/-	14.5926	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS1350V)			+/-	151.4319	µg/mL	Unstressed
	Purity 99%				+/-	151.7914	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		2,503.8	µg/mL	+/-	14.5570	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBD7331V)			+/-	151.0623	µg/mL	Unstressed
	Purity 99%				+/-	151.4210	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	151.1378	µg/mL	Unstressed
	Purity 99%				+/-	151.4966	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,505.3	µg/mL	+/-	14.5657	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBC5541V)			+/-	151.1528	µg/mL	Unstressed
	Purity 99%				+/-	151.5117	µg/mL	Stressed
70	Hexachlorobutadiene		2,506.5	µg/mL	+/-	14.5728	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	151.2266	µg/mL	Unstressed
	Purity 98%				+/-	151.5856	µg/mL	Stressed
71	Naphthalene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBW2603V)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,511.1 µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)		+/-	151.5073	µg/mL	Unstressed
	Purity 99%			+/-	151.8670	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)

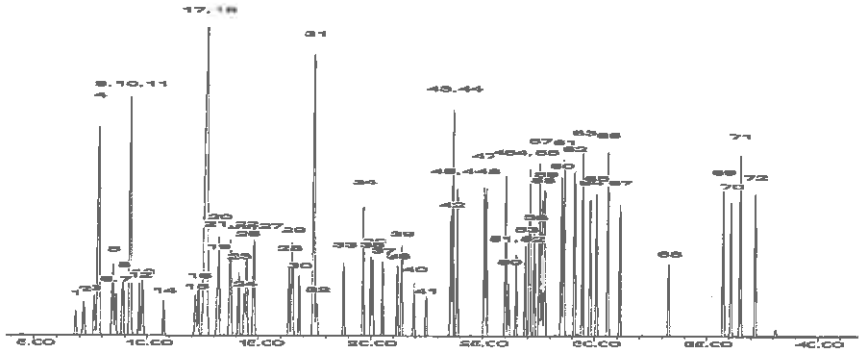
Carrier Gas:
helium-constant pressure 30 psi

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.

F. Joseph Tallon - Mix Technician

Date Mixed: 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jan-2017

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

Reagent

VOA8260MEGA1_00066

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

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. : 571992 **Lot No.:** A0123711

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : December 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 (Lot SHBG1462V) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 µg/mL +/- 150.9115 µg/mL +/- 151.2698 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,505.1 µg/mL	+/- 14.5650 µg/mL +/- 151.1453 µg/mL +/- 151.5041 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,511.5 µg/mL	+/- 14.6021 µg/mL +/- 151.5299 µg/mL +/- 151.8897 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBF0688V) **Purity** 99%	25,001.8 µg/mL	+/- 145.3547 µg/mL +/- 1,508.4656 µg/mL +/- 1,512.0470 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.5 µg/mL	+/- 29.0733 µg/mL +/- 301.7023 µg/mL +/- 302.4186 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBF2149V) **Purity** 99%	2,502.9 µg/mL	+/- 14.5519 µg/mL +/- 151.0095 µg/mL +/- 151.3681 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot SHBF8133V) **Purity** 99%	2,517.1 µg/mL	+/- 14.6348 µg/mL +/- 151.8693 µg/mL +/- 152.2299 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBH2578V)	2,502.1	µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot S20A856)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot T07B2030)	25,001.3	µg/mL	+/- 145.3518 +/- 1,508.4355 +/- 1,512.0167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBG2655V)	2,505.3	µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 98%	(Lot MKBV2831V)	2,500.5	µg/mL	+/- 14.5379 +/- 150.8644 +/- 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBG2674V)	2,503.8	µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 00008621)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 98%	(Lot BCBR0622V)	2,501.0	µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot 09431AEV)	2,503.8	µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBG8201V)	62,512.5	µg/mL	+/- 363.4341 +/- 3,771.6543 +/- 3,780.6088	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot MKBV2089V)	2,501.9	µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 99%	(Lot 00004559)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBG2910V)	5,001.3	µg/mL	+/- 29.0777 +/- 301.7476 +/- 302.4640	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKBX4768V)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 160727JLM)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG1763V)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBG6171V)	2.505.5	µg/mL	+/- 14.5672 +/- 151.1679 +/- 151.5268	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBF9313V)	2,504.8	µg/mL	+/- 14.5628 +/- 151.1227 +/- 151.4815	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBH2056V)	2,506.9	µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2.502.4	µg/mL	+/- 14.5490 +/- 150.9794 +/- 151.3378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 98%	(Lot SHBG0634V)	2.500.3	µg/mL	+/- 14.5372 +/- 150.8570 +/- 151.2152	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,503.0	µg/mL	+/- 14.5527 +/- 151.0171 +/- 151.3756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBH2584V)	50,011.4	µg/mL	+/- 290.7552 +/- 3,017.4064 +/- 3,024.5702	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 98%	(Lot 10183283)	2.501.9	µg/mL	+/- 14.5465 +/- 150.9531 +/- 151.3115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 22622)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBH1932V)	2,504.3	µg/mL	+/- 14.5599 +/- 151.0925 +/- 151.4512	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBD9190V)	2,506.9	µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C584177)	2.503.6	µg/mL	+/- 14.5563 +/- 151.0548 +/- 151.4134	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2.503.5	µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD9374V)	2.500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKBW3597V)	2,500.2	µg/mL	+/- 14.5365 +/- 150.8497 +/- 151.2078	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBF0505V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBG4347V)	1,250.3	µg/mL	+/- 7.2691 +/- 75.4331 +/- 75.6122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBG3928V)	1,251.3	µg/mL	+/- 7.2749 +/- 75.4935 +/- 75.6727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBG5920V)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH3432V)	2,504.9	µg/mL	+/- 14.5636 +/- 151.1302 +/- 151.4890	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKBS7097V)	2,506.3	µg/mL	+/- 14.5716 +/- 151.2132 +/- 151.5722	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBD8459V)	2,502.9	µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 97%	(Lot MKBW5506V)	2,506.8	µg/mL	+/- 14.5750 +/- 151.2490 +/- 151.6081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,508.5	µg/mL	+/- 14.5846 +/- 151.3489 +/- 151.7082	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 95%	(Lot MKBP6041V)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8817 +/- 151.2399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot MKBJ0332V)	2,501.9	µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot MKBD4032V)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBQ2165V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
58	2-Chlorotoluene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
59	4-Chlorotoluene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
60	tert-Butylbenzene		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot S52237V)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)			+/-	150.8866	µg/mL	Unstressed
	Purity 98%				+/-	151.2448	µg/mL	Stressed
62	sec-Butylbenzene		2,505.4	µg/mL	+/-	14.5665	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	151.1604	µg/mL	Unstressed
	Purity 99%				+/-	151.5193	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,503.8	µg/mL	+/-	14.5570	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKBS2604V)			+/-	151.0623	µg/mL	Unstressed
	Purity 99%				+/-	151.4210	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBM5751V)			+/-	151.0699	µg/mL	Unstressed
	Purity 99%				+/-	151.4285	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.9	µg/mL	+/-	14.5926	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS1350V)			+/-	151.4319	µg/mL	Unstressed
	Purity 99%				+/-	151.7914	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		2,503.8	µg/mL	+/-	14.5570	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBD7331V)			+/-	151.0623	µg/mL	Unstressed
	Purity 99%				+/-	151.4210	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	151.1378	µg/mL	Unstressed
	Purity 99%				+/-	151.4966	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,505.3	µg/mL	+/-	14.5657	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBC5541V)			+/-	151.1528	µg/mL	Unstressed
	Purity 99%				+/-	151.5117	µg/mL	Stressed
70	Hexachlorobutadiene		2,506.5	µg/mL	+/-	14.5728	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	151.2266	µg/mL	Unstressed
	Purity 98%				+/-	151.5856	µg/mL	Stressed
71	Naphthalene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBW2603V)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,511.1 µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)		+/-	151.5073	µg/mL	Unstressed
	Purity 99%			+/-	151.8670	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)

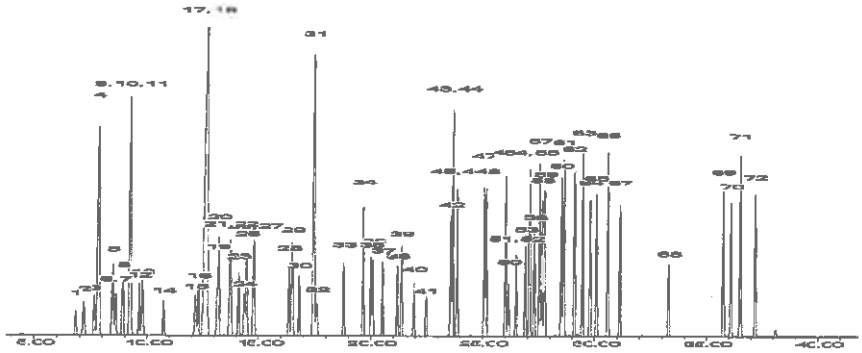
Carrier Gas:
helium-constant pressure 30 psi

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.

F. Joseph Tallon - Mix Technician **Date Mixed:** 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

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

Reagent

VOA8260MEGA2_00065

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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. : 571992.sec **Lot No.:** A0123775

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : December 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.SEC (Lot F23X068) **Purity** 98%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 150.9088 µg/mL +/- 151.2671 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 +/- 150.9040 µg/mL +/- 151.2622 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 2767000) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 µg/mL +/- 150.8662 µg/mL +/- 151.2244 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,003.1 µg/mL	+/- 145.3626 µg/mL +/- 1,508.5475 µg/mL +/- 1,512.1291 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot YDGVD) **Purity** 99%	5,000.4 µg/mL	+/- 29.0726 µg/mL +/- 301.6948 µg/mL +/- 302.4111 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,500.4 µg/mL	+/- 14.5374 µg/mL +/- 150.8587 µg/mL +/- 151.2169 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot VEBOC) **Purity** 98%	2,500.1 µg/mL	+/- 14.5358 µg/mL +/- 150.8423 µg/mL +/- 151.2004 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)	2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2.SEC (Lot FGM02)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%			+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide	2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 75-15-0.SEC (Lot MKBL1376V)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%			+/-	151.2471	µg/mL	Stressed
10	Acrylonitrile	25,000.9	µg/mL	+/-	145.3496	µg/mL	Gravimetric
	CAS # 107-13-1.SEC (Lot UERIL)			+/-	1,508.4128	µg/mL	Unstressed
	Purity 99%			+/-	1,511.9941	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)	2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC (Lot ZAQTA-MS)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%			+/-	151.1942	µg/mL	Stressed
12	cis-1,2-Dichloroethene	2,500.7	µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 156-59-2.SEC (Lot HGC01-BLKT)			+/-	150.8792	µg/mL	Unstressed
	Purity 98%			+/-	151.2374	µg/mL	Stressed
13	n-Hexane (C6)	2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 110-54-3.SEC (Lot 10188491)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%			+/-	151.2849	µg/mL	Stressed
14	1,1-Dichloroethane	2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 75-34-3.SEC (Lot 5379000)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%			+/-	151.2093	µg/mL	Stressed
15	2,2-Dichloropropane	2,500.1	µg/mL	+/-	14.5358	µg/mL	Gravimetric
	CAS # 594-20-7.SEC (Lot I7E8E)			+/-	150.8423	µg/mL	Unstressed
	Purity 98%			+/-	151.2004	µg/mL	Stressed
16	trans-1,2-Dichloroethene	2,500.2	µg/mL	+/-	14.5362	µg/mL	Gravimetric
	CAS # 156-60-5.SEC (Lot TS5UB)			+/-	150.8466	µg/mL	Unstressed
	Purity 97%			+/-	151.2048	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)	62,506.9	µg/mL	+/-	363.4014	µg/mL	Gravimetric
	CAS # 78-83-1.SEC (Lot 83NHH)			+/-	3,771.3149	µg/mL	Unstressed
	Purity 99%			+/-	3,780.2687	µg/mL	Stressed
18	Chloroform	2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 67-66-3.SEC (Lot 1297547)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%			+/-	151.2017	µg/mL	Stressed
19	Bromochloromethane	2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 74-97-5.SEC (Lot 5670200)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%			+/-	151.2622	µg/mL	Stressed
20	Tetrahydrofuran	5,002.3	µg/mL	+/-	29.0835	µg/mL	Gravimetric
	CAS # 109-99-9.SEC (Lot K3V7J-SJ)			+/-	301.8079	µg/mL	Unstressed
	Purity 99%			+/-	302.5245	µg/mL	Stressed
21	1,1,1-Trichloroethane	2,500.7	µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 71-55-6.SEC (Lot CS160712)			+/-	150.8792	µg/mL	Unstressed
	Purity 98%			+/-	151.2374	µg/mL	Stressed
22	Cyclohexane	2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 110-82-7.SEC (Lot YADRA)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%			+/-	151.2547	µg/mL	Stressed
23	1,1-Dichloropropene	2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 563-58-6.SEC (Lot 5221100)			+/-	150.9133	µg/mL	Unstressed
	Purity 96%			+/-	151.2716	µg/mL	Stressed

24	Carbon tetrachloride		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
25	n-Heptane (C7)		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot OGM01)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
26	1,2-Dichloroethane		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
27	Benzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
28	Trichloroethene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
29	Methylcyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot 24MSD-CD)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
30	1,2-Dichloropropane		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot OGG01)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
31	1,4-Dioxane		50,007.1	µg/mL	+/-	290.7305	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot MUFZH)			+/-	3,017.1500	µg/mL	Unstressed
	Purity 99%				+/-	3,024.3132	µg/mL	Stressed
32	Dibromomethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
34	Toluene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
35	Ethyl methacrylate		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot MLWYK-LS)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 5034600)			+/-	150.8866	µg/mL	Unstressed
	Purity 98%				+/-	151.2448	µg/mL	Stressed
38	1,3-Dichloropropane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
39	Tetrachloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10181507)	2,500.4	µg/mL	+/- +/- +/-	14.5376 150.8613 151.2194	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,501.0	µg/mL	+/- +/- +/-	14.5410 150.8964 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,250.9	µg/mL	+/- +/- +/-	7.2727 75.4708 75.6500	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,250.5	µg/mL	+/- +/- +/-	7.2705 75.4482 75.6273	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,500.9	µg/mL	+/- +/- +/-	14.5403 150.8889 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	(Lot GC01)	2,501.1	µg/mL	+/- +/- +/-	14.5418 150.9040 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01-KTPK)	2,500.9	µg/mL	+/- +/- +/-	14.5403 150.8889 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,500.4	µg/mL	+/- +/- +/-	14.5374 150.8587 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-IH)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 99%	(Lot 5139000)	2,502.3	µg/mL	+/- +/- +/-	14.5483 150.9718 151.3303	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 98%	(Lot 13780)	2,500.1	µg/mL	+/- +/- +/-	14.5358 150.8423 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,501.3	µg/mL	+/- +/- +/-	14.5425 150.9115 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 98%	(Lot OGI01)	2,500.1	µg/mL	+/- +/- +/-	14.5358 150.8423 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,501.0	µg/mL	+/- +/- +/-	14.5408 150.8940 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC-IT)	2,500.0	µg/mL	+/- +/- +/-	14.5352 150.8361 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot TOOOF)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
58	2-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
59	4-Chlorotoluene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot OGN01-CAI)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot SC7LO-QA)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
62	sec-Butylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 5221800)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
66	n-Butylbenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot OGN01-PNP)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,501.5	µg/mL	+/-	14.5436	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	150.9236	µg/mL	Unstressed
	Purity 98%				+/-	151.2819	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.4	µg/mL	+/-	14.5433	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	150.9198	µg/mL	Unstressed
	Purity 97%				+/-	151.2781	µg/mL	Stressed
71	Naphthalene		2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	150.9417	µg/mL	Unstressed
	Purity 99%				+/-	151.3000	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,500.7 µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.8792	µg/mL	Unstressed
	Purity 98%			+/-	151.2374	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)

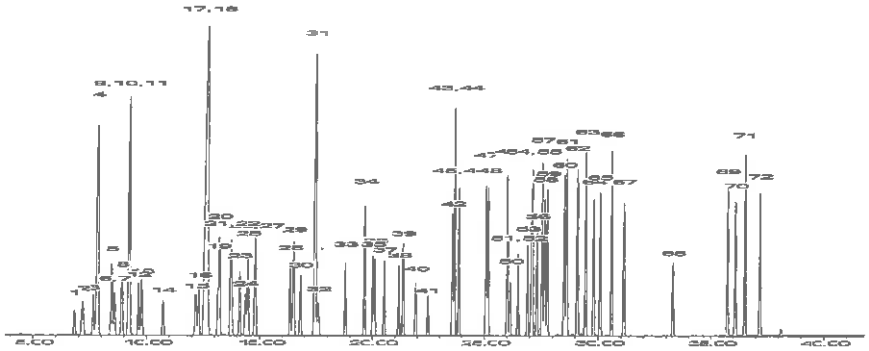
Carrier Gas:
helium-constant pressure 30 psi

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

Date Mixed: 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

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

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567650 **Lot No.:** A0114901

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 : October 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 (Lot 022012) **Purity** 99%	2,509.4 µg/mL	+/- 14.5899 µg/mL +/- 140.6996 µg/mL +/- 143.9918 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-25433) **Purity** 98%	2,509.0 µg/mL	+/- 14.5875 µg/mL +/- 140.6769 µg/mL +/- 143.9686 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-26282) **Purity** 99%	2,507.0 µg/mL	+/- 14.5759 µg/mL +/- 140.5650 µg/mL +/- 143.8540 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KOV) **Purity** 99%	2,503.6 µg/mL	+/- 14.5561 µg/mL +/- 140.3744 µg/mL +/- 143.6590 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260SURRES_00120

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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. : 567650 **Lot No.:** A0114901

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 : October 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 (Lot 022012) **Purity** 99%	2,509.4 µg/mL	+/- 14.5899 µg/mL +/- 140.6996 µg/mL +/- 143.9918 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-25433) **Purity** 98%	2,509.0 µg/mL	+/- 14.5875 µg/mL +/- 140.6769 µg/mL +/- 143.9686 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-26282) **Purity** 99%	2,507.0 µg/mL	+/- 14.5759 µg/mL +/- 140.5650 µg/mL +/- 143.8540 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KOV) **Purity** 99%	2,503.6 µg/mL	+/- 14.5561 µg/mL +/- 140.3744 µg/mL +/- 143.6590 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260SURRES_00126

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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. : 567650 **Lot No.:** A0114901

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 : October 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 (Lot 022012) **Purity** 99%	2,509.4 µg/mL	+/- 14.5899 µg/mL +/- 140.6996 µg/mL +/- 143.9918 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-25433) **Purity** 98%	2,509.0 µg/mL	+/- 14.5875 µg/mL +/- 140.6769 µg/mL +/- 143.9686 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-26282) **Purity** 99%	2,507.0 µg/mL	+/- 14.5759 µg/mL +/- 140.5650 µg/mL +/- 143.8540 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KOV) **Purity** 99%	2,503.6 µg/mL	+/- 14.5561 µg/mL +/- 140.3744 µg/mL +/- 143.6590 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260VARES_00083

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569724 **Lot No.:** A0124520

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

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

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

Expiration Date : July 31, 2017 **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	Vinyl acetate	5,027.0 µg/mL	+/- 29.5013	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBD7333V)		+/- 303.3277	µg/mL	Unstressed
	Purity 99%		+/- 304.0477	µg/mL	Stressed

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

Tech Tips:

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

Reagent

VOAACRORES_00115

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568720 **Lot No.:** A0125560

Description : 8260 List 1/Std #5 Acrolein High

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

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

Expiration Date : September 30, 2017 **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		19,779.0	µg/mL	+/- 115.8104	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot 170123JLM)			+/- 634.1769	µg/mL	Unstressed
	Purity 99%				+/- 737.1613	µg/mL	Stressed

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

Reagent

VOABFBRES_00052

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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. : 30067 **Lot No.:** A0119122

Description : 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : May 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,501.0 µg/mL	+/- 14.6773	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/- 140.2428	µg/mL	Unstressed
	Purity 99%		+/- 143.5236	µg/mL	Stressed

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

Reagent

VOABFBRES_00055

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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. : 30067 **Lot No.:** A0122647

Description : 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : November 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,524.0 µg/mL	+/- 14.8122	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/- 141.5325	µg/mL	Unstressed
	Purity 99%		+/- 144.8435	µg/mL	Stressed

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

Reagent

VOABFBRES_00058

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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. : 30067 **Lot No.:** A0122647

Description : 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : November 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,524.0 µg/mL	+/- 14.8122	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/- 141.5325	µg/mL	Unstressed
	Purity 99%		+/- 144.8435	µg/mL	Stressed

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

Reagent

VOACEVERES_00127

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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.

2406027
28
29
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Catalog No. : 569723 **Lot No.:** A0123891

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 : January 31, 2020 **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	2,503.5 µg/mL	+/- 14.5556 µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBS6526V)		+/- 53.6004 µg/mL	Unstressed
	Purity 98%		+/- 55.1587 µg/mL	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_00045

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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.

2396751

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

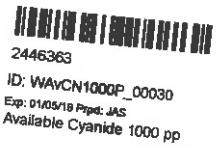
CERTIFIED VALUES

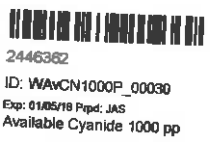
Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	3-Chlorobenzotrifluoride **CAS #** 98-15-7 **Purity** 99%	(Lot 21324DO)	5,025.0 µg/mL	+/- 29.4895 µg/mL +/- 281.7753 µg/mL +/- 288.3671 µg/mL	Gravimetric Unstressed Stressed
2	4-Chlorobenzotrifluoride **CAS #**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

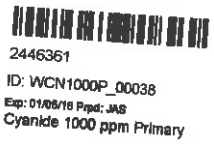
Reagent

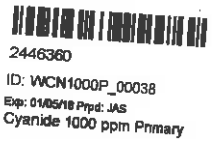
WAvCN1000P_00030

LabChem
performance through chemistry
Jackson's Pointe Commerce Park - Building 1000
1010 Jackson's Pointe Court, Zelienople, PA 16063
Ph: 412-826-5230 | Fax: 724-473-0647 | www.labchem.com









CERTIFICATE OF ANALYSIS

Description: CYANIDE STANDARD, 1000ppm (1ml = 1mg CN)

Mfg. Date: 07/05/2017

Catalog Number: LC13545

Exp. Date: 01/05/2018

Lot Number: G186-01

ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm CN	1000ppm +/- 10ppm	1009ppm
Concentration mg CN/mL	1.000mg/mL +/- 0.010 mg CN/mL	1.009 mg CN/mL
Traceable to NIST	Potassium Chloride	999b

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

Storage Information - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

Instructions for Handling and Use - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

Preparation - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor

An ISO9001:2008 certified company. Registration # 0306-01 08/03/2017 9:40 AM

Form #17.13 07/28/2016

Reagent

WAvCN1000S_00026

RICCA CHEMICAL COMPANY®

Arlington, TX 76012
Pocomoke City, MD 21851
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Cyanide Standard, 1000 ppm CN

Lot Number: 4708N94 **Product Number:** 2543

Manufacture Date: AUG 25, 2017
Expiration Date: FEB 2018

This standard is prepared using accurate volumetric techniques from material that has been assayed against Silver Nitrate solution certified traceable to NIST Standard Reference Material 999. The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is the combined uncertainty based on the stability of the assayed Potassium Cyanide, and the uncertainty in the mass and volume measurements.
Use 0.16% (w/v) (0.04 N) Sodium Hydroxide or 0.225 % (w/v) (0.04 N) Potassium Hydroxide to make dilutions of this standard. Restandardize weekly if extreme accuracy is required.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Cyanide	151-50-8	ACS
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result
Appearance	Colorless liquid	Passed
Cyanide (CN)	995-1005 ppm	1000 ppm

Specification	Reference
Stock Standard Cyanide Solution	APHA (4500-CN- F)
Stock Cyanide Solution	APHA (4500-CN- E)
Stock Cyanide Solution	APHA (4500-CN- K)
Stock Cyanide Solution	APHA (4500-CN- H)
Cyanide Reference Solution (1000 mg/L)	EPA (SW-846) (7.3.3.2)
Cyanide Calibration Stock Solution (1,000 mg/L CN-)	EPA (SW-846) (9213)
Stock Cyanide Solution	EPA (335.3)
Stock Cyanide Solution	EPA (335.2)
Cyanide Solution Stock	ASTM (D 4282)
Simple Cyanide Solution, Stock (1.0 g/L CN)	ASTM (D 4374)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
2543-16	500 mL amber poly	6 months
2543-32	1 L amber poly	6 months
2543-4	120 mL amber poly	6 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)

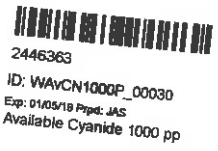
2514319
ID: WCN1000S_00027
Exp: 02/28/18 Prpd: JAS
Cyanide 1000 ppm Secondar

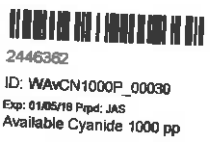
2514321
ID: WAvCN1000S_00026
Exp: 02/28/18 Prpd: JAS
Available Cyanide 1000 Se

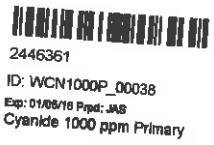
Reagent

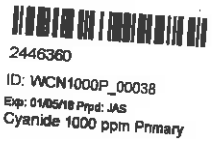
WCN1000P_00038

LabChem
performance through chemistry
Jackson's Pointe Commerce Park - Building 1000
1010 Jackson's Pointe Court, Zelienople, PA 16063
Ph: 412-826-5230 | Fax: 724-473-0647 | www.labchem.com









CERTIFICATE OF ANALYSIS

Description: CYANIDE STANDARD, 1000ppm (1ml = 1mg CN)

Mfg. Date: 07/05/2017

Catalog Number: LC13545

Exp. Date: 01/05/2018

Lot Number: G186-01

ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm CN	1000ppm +/- 10ppm	1009ppm
Concentration mg CN/mL	1.000mg/mL +/- 0.010 mg CN/mL	1.009 mg CN/mL
Traceable to NIST	Potassium Chloride	999b

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

Storage Information - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

Instructions for Handling and Use - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

Preparation - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor

An ISO9001:2008 certified company. Registration # 0306-01 08/03/2017 9:40 AM

Form #17.13 07/28/2016

Reagent

WCN1000S_00027

RICCA CHEMICAL COMPANY®

Arlington, TX 76012
Pocomoke City, MD 21851
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Cyanide Standard, 1000 ppm CN

Lot Number: 4708N94 **Product Number:** 2543

Manufacture Date: AUG 25, 2017
Expiration Date: FEB 2018

This standard is prepared using accurate volumetric techniques from material that has been assayed against Silver Nitrate solution certified traceable to NIST Standard Reference Material 999. The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is the combined uncertainty based on the stability of the assayed Potassium Cyanide, and the uncertainty in the mass and volume measurements.
Use 0.16% (w/v) (0.04 N) Sodium Hydroxide or 0.225 % (w/v) (0.04 N) Potassium Hydroxide to make dilutions of this standard. Restandardize weekly if extreme accuracy is required.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Cyanide	151-50-8	ACS
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result
Appearance	Colorless liquid	Passed
Cyanide (CN)	995-1005 ppm	1000 ppm

Specification	Reference
Stock Standard Cyanide Solution	APHA (4500-CN- F)
Stock Cyanide Solution	APHA (4500-CN- E)
Stock Cyanide Solution	APHA (4500-CN- K)
Stock Cyanide Solution	APHA (4500-CN- H)
Cyanide Reference Solution (1000 mg/L)	EPA (SW-846) (7.3.3.2)
Cyanide Calibration Stock Solution (1,000 mg/L CN-)	EPA (SW-846) (9213)
Stock Cyanide Solution	EPA (335.3)
Stock Cyanide Solution	EPA (335.2)
Cyanide Solution Stock	ASTM (D 4282)
Simple Cyanide Solution, Stock (1.0 g/L CN)	ASTM (D 4374)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
2543-16	500 mL amber poly	6 months
2543-32	1 L amber poly	6 months
2543-4	120 mL amber poly	6 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)

2514319
ID: WCN1000S_00027
Exp: 02/28/18 Prpd: JAS
Cyanide 1000 ppm Secondar

2514321
ID: WAvCN1000S_00026
Exp: 02/28/18 Prpd: JAS
Available Cyanide 1000 Se

Reagent

WCNWSTOCK_00004

ERA

A Waters Company

2225144
ID: WCNWSTOCK_00004
Exp: 01/31/18 Prpd: JAS
Total Cyanide Water LCS 1

Certificate of Analysis

PRODUCT:	1000 mg/L Complex Cyanide
CATALOG NUMBER:	049 – 125 mL; 998 – 500 mL
LOT NUMBER:	190116
ISSUE DATE:	February 18, 2016
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Ferrocyanide 3-Hydrate ($K_4Fe(CN)_6$-$3H_2O$)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.5%
MATRIX:	18 megohm deionized water and 0.25% (v/v) NaOH
DENSITY:	1.0038 ± 0.0006 g/mL at 22.5°C and 758 mm Hg
TRACEABILITY[3]:	NA
NIST/SRM:	NA
VERIFICATION METHOD:	Spectrophotometry
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability Recovery = ((% Recovery certified standard)/(% Recovery NIST SRM))*100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

This standard **expires 1/2018**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Brian Miller

ISO/IEC GUIDE 34:2009

ACCREDITED

REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005

ACCREDITED

CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1539.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

WHg(II) CNP_00006

1849392
ID: WHg(II) CNP_00006
Exp:01/20/21 Rpd:PGJ Opn:01/20/16
Mercury (II) Cyanide

SIGMA-ALDRICH®

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3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Mercury(II) cyanide - 99%

Product Number:	**208140**
Batch Number:	**SLBN7022V**
Brand:	ALDRICH
CAS Number:	592-04-1
MDL Number:	MFCD00011037
Formula:	Hg(CN)2
Formula Weight:	252.62 g/mol
Quality Release Date:	27 JUL 2015

$Hg(CN)_2$

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder to Crystals	Crystalline Powder
Titration by HCL (78.2%-80.6% Hg)	98.5 - 101.5 %	99.5 %
Identity Confirms Hg component	Confirmed	Conforms

Rodney Burbach, Manager
Analytical Services
St. Louis, Missouri US

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low

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

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-MW-43D-0/1-0	180-71829-1	79	68	106	91
HD-MW-43S-0/1-0	180-71829-2	84	74	109	97
HD-QC3-0/1-1	180-71829-3	87	76	108	99
HD-MW-18D-0/1-0	180-71829-4	83	75 ^c	108	94
HD-QC5-0/1-2	180-71829-5	77	66	98	82
HD-QC3-0/1-4	180-71829-6	86	73	102	88
HD-QC3-0/1-3	180-71829-7	77	67	97	84
HD-MW-136A-356/356.5-0	180-71829-8	89	79 ^c	116	108
HD-MW-136A-356/356.5-0 DL	180-71829-8 DL	94	81 ^c	108	98
HD-MW-136A-372.5/373-0	180-71829-9	92	84 ^c	112	104
HD-MW-136A-372.5/373-0 DL	180-71829-9 DL	94	80 ^c	107	97
HD-MW-136A-434/434.5-0	180-71829-10	92	84 ^c	117	105
HD-MW-136A-434/434.5-0 DL	180-71829-10 DL	100	87 ^c	109	106
HD-MW-136A-270/348-0	180-71829-11	87	73 ^c	109	102
HD-MW-136A-270/348-0 DL	180-71829-11 DL	93	82 ^c	110	106
HD-MW-91-0/1-0	180-71829-12	87	77 ^c	109	97
HD-MW-91-0/1-0 DL	180-71829-12 DL	115	112 ^c	110	97
HD-MW-16D-0/1-0	180-71829-13	93	83 ^c	112	112
HD-MW-2-0/1-0	180-71829-14	106	114	90	92
HD-MW-2-0/1-0 DL	180-71829-14 DL	105	109	91	88
HD-MW-185-0/1-0	180-71829-15	112	121	88	81
HD-MW-82-0/1-0	180-71829-16	101	111	93	84
HD-MW-15-0/1-0	180-71829-17	109	118	89	89
HD-MW-15-0/1-0 DL	180-71829-17 DL	84	76 ^c	108	93
HD-MW-16S-0/1-0	180-71829-18	113	120	90	80
HD-MW-12-0/1-0	180-71829-19	105	118	95	87
HD-TATE (S-6)-0/1-0	180-71829-20	106	118	90	85
	MB 180-227642/7	97	79	118	105
	MB 180-227760/5	101	115	94	91
	MB 180-227768/6	100	89	116	106
	MB 180-227871/5	102	113	92	86

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	73-120
DCA = 1,2-Dichloroethane-d4 (Surr)	65-121
TOL = Toluene-d8 (Surr)	73-120
BFB = 4-Bromofluorobenzene (Surr)	80-120

Column to be used to flag recovery values

FORM II 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

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 #
	MB 180-228044/5	105	110	91	88
	MB 180-228278/5	97	107	90	91
	MB 180-228533/8	91	87	113	99
	LCS 180-227642/4	100	86	107	100
	LCS 180-227760/3	98	106	110	102
	LCS 180-227768/4	81	70	102	95
	LCS 180-227871/3	103	109	116	110
	LCS 180-228044/3	99	106	110	101
	LCS 180-228278/3	97	99	112	106
	LCS 180-228533/4	94	83	95	94
HD-MW-43D-0/1-0 MS	180-71829-1 MS	80	70	99	90
HD-MW-16D-0/1-0 MS	180-71829-13 MS	106	91	127 X	118
HD-MW-82-0/1-0 MS	180-71829-16 MS	102	111	110	105
HD-MW-43D-0/1-0 MSD	180-71829-1 MSD	89	73	107	100
HD-MW-16D-0/1-0 MSD	180-71829-13 MSD	84	72	94	89

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	73-120
DCA = 1,2-Dichloroethane-d4 (Surr)	65-121
TOL = Toluene-d8 (Surr)	73-120
BFB = 4-Bromofluorobenzene (Surr)	80-120

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110104.D

Lab ID: LCS 180-227642/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	8.12	81	49-135	
Vinyl chloride	10.0	6.80	68	52-136	
Bromomethane	10.0	8.50	85	37-150	
Chloroethane	10.0	9.22	92	44-139	
1,1-Dichloroethene	10.0	7.00	70	64-131	
Acetone	20.0	18.0	90	24-150	
Carbon disulfide	10.0	10.2	102	20-150	
Methylene Chloride	10.0	10.6	106	66-123	
trans-1,2-Dichloroethene	10.0	10.4	104	70-123	
Methyl tert-butyl ether	10.0	8.69	87	66-130	
1,1-Dichloroethane	10.0	9.10	91	66-122	
cis-1,2-Dichloroethene	10.0	10.0	100	73-120	
Bromochloromethane	10.0	9.26	93	73-122	
2-Butanone (MEK)	20.0	22.9	115	37-150	
Chloroform	10.0	8.51	85	72-123	
1,1,1-Trichloroethane	10.0	9.01	90	66-129	
Carbon tetrachloride	10.0	9.53	95	58-145	
Benzene	10.0	11.3	113	75-123	
1,2-Dichloroethane	10.0	7.48	75	63-130	
Trichloroethene	10.0	10.5	105	74-121	
1,2-Dichloropropane	10.0	10.4	104	67-119	
Bromodichloromethane	10.0	8.83	88	62-127	
cis-1,3-Dichloropropene	10.0	9.42	94	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	25.8	129	41-135	
Toluene	10.0	12.3	123	76-129	
trans-1,3-Dichloropropene	10.0	8.66	87	61-136	
1,1,2-Trichloroethane	10.0	11.1	111	74-126	
Tetrachloroethene	10.0	9.36	94	76-128	
2-Hexanone	20.0	24.3	121	37-150	
Dibromochloromethane	10.0	10.6	106	63-131	
1,2-Dibromoethane (EDB)	10.0	9.73	97	76-128	
Chlorobenzene	10.0	11.8	118	79-124	
1,1,1,2-Tetrachloroethane	10.0	9.70	97	70-130	
Ethylbenzene	10.0	10.5	105	77-124	
Xylenes, Total	20.0	20.9	105	76-124	
Styrene	10.0	10.4	104	80-125	
Bromoform	10.0	11.1	111	54-136	
1,1,2,2-Tetrachloroethane	10.0	10.8	108	72-128	
Acrylonitrile	100	110	110	60-130	
1,4-Dioxane	200	215	107	26-150	

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51101D03.D

Lab ID: LCS 180-227760/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	13.5	135	49-135	
Vinyl chloride	10.0	11.3	113	52-136	
Bromomethane	10.0	8.70	87	37-150	
Chloroethane	10.0	10.8	108	44-139	
1,1-Dichloroethene	10.0	10.4	104	64-131	
Acetone	20.0	28.3	141	24-150	
Carbon disulfide	10.0	10.5	105	20-150	
Methylene Chloride	10.0	9.72	97	66-123	
trans-1,2-Dichloroethene	10.0	9.62	96	70-123	
Methyl tert-butyl ether	10.0	9.60	96	66-130	
1,1-Dichloroethane	10.0	10.5	105	66-122	
cis-1,2-Dichloroethene	10.0	9.60	96	73-120	
Bromochloromethane	10.0	9.42	94	73-122	
2-Butanone (MEK)	20.0	22.2	111	37-150	
Chloroform	10.0	9.24	92	72-123	
1,1,1-Trichloroethane	10.0	10.2	102	66-129	
Carbon tetrachloride	10.0	10.5	105	58-145	
Benzene	10.0	9.31	93	75-123	
1,2-Dichloroethane	10.0	10.5	105	63-130	
Trichloroethene	10.0	8.70	87	74-121	
1,2-Dichloropropane	10.0	9.81	98	67-119	
Bromodichloromethane	10.0	8.96	90	62-127	
cis-1,3-Dichloropropene	10.0	8.72	87	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	18.1	91	41-135	
Toluene	10.0	10.4	104	76-129	
trans-1,3-Dichloropropene	10.0	10.1	101	61-136	
1,1,2-Trichloroethane	10.0	9.85	98	74-126	
Tetrachloroethene	10.0	9.85	99	76-128	
2-Hexanone	20.0	21.0	105	37-150	
Dibromochloromethane	10.0	9.76	98	63-131	
1,2-Dibromoethane (EDB)	10.0	9.27	93	76-128	
Chlorobenzene	10.0	9.68	97	79-124	
1,1,1,2-Tetrachloroethane	10.0	10.1	101	70-130	
Ethylbenzene	10.0	9.74	97	77-124	
Xylenes, Total	20.0	19.5	97	76-124	
Styrene	10.0	9.70	97	80-125	
Bromoform	10.0	8.33	83	54-136	
1,1,2,2-Tetrachloroethane	10.0	9.14	91	72-128	
Acrylonitrile	100	110	110	60-130	
1,4-Dioxane	200	178 J	89	26-150	

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110204.D

Lab ID: LCS 180-227768/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	5.73	57	49-135	
Vinyl chloride	10.0	5.02	50	52-136	*
Bromomethane	10.0	6.96	70	37-150	
Chloroethane	10.0	8.08	81	44-139	
1,1-Dichloroethene	10.0	5.66	57	64-131	*
Acetone	20.0	13.8	69	24-150	
Carbon disulfide	10.0	10.3	103	20-150	
Methylene Chloride	10.0	8.96	90	66-123	
trans-1,2-Dichloroethene	10.0	9.06	91	70-123	
Methyl tert-butyl ether	10.0	7.91	79	66-130	
1,1-Dichloroethane	10.0	8.36	84	66-122	
cis-1,2-Dichloroethene	10.0	8.83	88	73-120	
Bromochloromethane	10.0	8.50	85	73-122	
2-Butanone (MEK)	20.0	17.8	89	37-150	
Chloroform	10.0	7.90	79	72-123	
1,1,1-Trichloroethane	10.0	9.06	91	66-129	
Carbon tetrachloride	10.0	9.70	97	58-145	
Benzene	10.0	8.95	90	75-123	
1,2-Dichloroethane	10.0	7.12	71	63-130	
Trichloroethene	10.0	8.49	85	74-121	
1,2-Dichloropropane	10.0	9.12	91	67-119	
Bromodichloromethane	10.0	8.41	84	62-127	
cis-1,3-Dichloropropene	10.0	8.48	85	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	21.7	109	41-135	
Toluene	10.0	10.9	109	76-129	
trans-1,3-Dichloropropene	10.0	9.00	90	61-136	
1,1,2-Trichloroethane	10.0	10.3	103	74-126	
Tetrachloroethene	10.0	9.37	94	76-128	
2-Hexanone	20.0	21.1	105	37-150	
Dibromochloromethane	10.0	10.8	108	63-131	
1,2-Dibromoethane (EDB)	10.0	9.64	96	76-128	
Chlorobenzene	10.0	9.95	99	79-124	
1,1,1,2-Tetrachloroethane	10.0	10.3	103	70-130	
Ethylbenzene	10.0	9.92	99	77-124	
Xylenes, Total	20.0	20.4	102	76-124	
Styrene	10.0	10.0	100	80-125	
Bromoform	10.0	12.3	123	54-136	
1,1,2,2-Tetrachloroethane	10.0	10.7	107	72-128	
Acrylonitrile	100	100	100	60-130	
1,4-Dioxane	200	233	116	26-150	

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51102D03.D

Lab ID: LCS 180-227871/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	12.9	129	49-135	
Vinyl chloride	10.0	11.0	110	52-136	
Bromomethane	10.0	10.7	107	37-150	
Chloroethane	10.0	12.8	128	44-139	
1,1-Dichloroethene	10.0	10.1	101	64-131	
Acetone	20.0	30.4	152	24-150	*
Carbon disulfide	10.0	10.9	109	20-150	
Methylene Chloride	10.0	9.30	93	66-123	
trans-1,2-Dichloroethene	10.0	9.51	95	70-123	
Methyl tert-butyl ether	10.0	9.19	92	66-130	
1,1-Dichloroethane	10.0	10.2	102	66-122	
cis-1,2-Dichloroethene	10.0	9.18	92	73-120	
Bromochloromethane	10.0	9.37	94	73-122	
2-Butanone (MEK)	20.0	26.0	130	37-150	
Chloroform	10.0	9.12	91	72-123	
1,1,1-Trichloroethane	10.0	10.1	101	66-129	
Carbon tetrachloride	10.0	10.4	104	58-145	
Benzene	10.0	9.04	90	75-123	
1,2-Dichloroethane	10.0	10.3	103	63-130	
Trichloroethene	10.0	8.71	87	74-121	
1,2-Dichloropropane	10.0	9.50	95	67-119	
Bromodichloromethane	10.0	9.00	90	62-127	
cis-1,3-Dichloropropene	10.0	8.52	85	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	24.4	122	41-135	
Toluene	10.0	10.2	102	76-129	
trans-1,3-Dichloropropene	10.0	10.1	101	61-136	
1,1,2-Trichloroethane	10.0	9.79	98	74-126	
Tetrachloroethene	10.0	9.70	97	76-128	
2-Hexanone	20.0	24.3	121	37-150	
Dibromochloromethane	10.0	10.3	103	63-131	
1,2-Dibromoethane (EDB)	10.0	9.43	94	76-128	
Chlorobenzene	10.0	9.21	92	79-124	
1,1,1,2-Tetrachloroethane	10.0	10.1	101	70-130	
Ethylbenzene	10.0	9.44	94	77-124	
Xylenes, Total	20.0	18.3	91	76-124	
Styrene	10.0	9.56	96	80-125	
Bromoform	10.0	8.89	89	54-136	
1,1,2,2-Tetrachloroethane	10.0	9.09	91	72-128	
Acrylonitrile	100	111	111	60-130	
1,4-Dioxane	200	169 J	85	26-150	

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51105D03.D

Lab ID: LCS 180-228044/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	12.8	128	49-135	
Vinyl chloride	10.0	10.4	104	52-136	
Bromomethane	10.0	10.8	108	37-150	
Chloroethane	10.0	12.3	123	44-139	
1,1-Dichloroethene	10.0	8.99	90	64-131	
Acetone	20.0	27.6	138	24-150	
Carbon disulfide	10.0	9.56	96	20-150	
Methylene Chloride	10.0	8.46	85	66-123	
trans-1,2-Dichloroethene	10.0	8.18	82	70-123	
Methyl tert-butyl ether	10.0	8.79	88	66-130	
1,1-Dichloroethane	10.0	9.21	92	66-122	
cis-1,2-Dichloroethene	10.0	8.27	83	73-120	
Bromochloromethane	10.0	8.22	82	73-122	
2-Butanone (MEK)	20.0	23.1	116	37-150	
Chloroform	10.0	8.18	82	72-123	
1,1,1-Trichloroethane	10.0	8.81	88	66-129	
Carbon tetrachloride	10.0	8.97	90	58-145	
Benzene	10.0	8.02	80	75-123	
1,2-Dichloroethane	10.0	9.50	95	63-130	
Trichloroethene	10.0	7.71	77	74-121	
1,2-Dichloropropane	10.0	8.82	88	67-119	
Bromodichloromethane	10.0	7.87	79	62-127	
cis-1,3-Dichloropropene	10.0	8.07	81	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	22.6	113	41-135	
Toluene	10.0	8.86	89	76-129	
trans-1,3-Dichloropropene	10.0	9.69	97	61-136	
1,1,2-Trichloroethane	10.0	9.07	91	74-126	
Tetrachloroethene	10.0	8.57	86	76-128	
2-Hexanone	20.0	22.4	112	37-150	
Dibromochloromethane	10.0	9.23	92	63-131	
1,2-Dibromoethane (EDB)	10.0	8.73	87	76-128	
Chlorobenzene	10.0	8.50	85	79-124	
1,1,1,2-Tetrachloroethane	10.0	9.47	95	70-130	
Ethylbenzene	10.0	8.32	83	77-124	
Xylenes, Total	20.0	16.3	81	76-124	
Styrene	10.0	8.53	85	80-125	
Bromoform	10.0	8.52	85	54-136	
1,1,2,2-Tetrachloroethane	10.0	8.61	86	72-128	
Acrylonitrile	100	104	104	60-130	
1,4-Dioxane	200	200	100	26-150	

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51107D03.D

Lab ID: LCS 180-228278/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	12.4	124	49-135	
Vinyl chloride	10.0	10.1	101	52-136	
Bromomethane	10.0	6.46	65	37-150	
Chloroethane	10.0	8.54	85	44-139	
1,1-Dichloroethene	10.0	8.67	87	64-131	
Acetone	20.0	31.4	157	24-150	*
Carbon disulfide	10.0	9.12	91	20-150	
Methylene Chloride	10.0	8.54	85	66-123	
trans-1,2-Dichloroethene	10.0	8.48	85	70-123	
Methyl tert-butyl ether	10.0	9.44	94	66-130	
1,1-Dichloroethane	10.0	8.83	88	66-122	
cis-1,2-Dichloroethene	10.0	8.07	81	73-120	
Bromochloromethane	10.0	8.61	86	73-122	
2-Butanone (MEK)	20.0	26.7	134	37-150	
Chloroform	10.0	8.14	81	72-123	
1,1,1-Trichloroethane	10.0	8.26	83	66-129	
Carbon tetrachloride	10.0	8.37	84	58-145	
Benzene	10.0	8.06	81	75-123	
1,2-Dichloroethane	10.0	9.57	96	63-130	
Trichloroethene	10.0	7.44	74	74-121	
1,2-Dichloropropane	10.0	8.48	85	67-119	
Bromodichloromethane	10.0	7.89	79	62-127	
cis-1,3-Dichloropropene	10.0	8.20	82	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	22.7	114	41-135	
Toluene	10.0	8.81	88	76-129	
trans-1,3-Dichloropropene	10.0	9.61	96	61-136	
1,1,2-Trichloroethane	10.0	9.46	95	74-126	
Tetrachloroethene	10.0	8.12	81	76-128	
2-Hexanone	20.0	24.1	121	37-150	
Dibromochloromethane	10.0	9.19	92	63-131	
1,2-Dibromoethane (EDB)	10.0	9.09	91	76-128	
Chlorobenzene	10.0	8.60	86	79-124	
1,1,1,2-Tetrachloroethane	10.0	9.14	91	70-130	
Ethylbenzene	10.0	8.38	84	77-124	
Xylenes, Total	20.0	16.9	85	76-124	
Styrene	10.0	8.44	84	80-125	
Bromoform	10.0	8.34	83	54-136	
1,1,2,2-Tetrachloroethane	10.0	9.11	91	72-128	
Acrylonitrile	100	116	116	60-130	
1,4-Dioxane	200	196 J	98	26-150	

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110904.D

Lab ID: LCS 180-228533/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	7.53	75	49-135	
Vinyl chloride	10.0	6.63	66	52-136	
Bromomethane	10.0	7.80	78	37-150	
Chloroethane	10.0	9.19	92	44-139	
1,1-Dichloroethene	10.0	6.67	67	64-131	
Acetone	20.0	16.7	84	24-150	
Carbon disulfide	10.0	10.2	102	20-150	
Methylene Chloride	10.0	11.1	111	66-123	
trans-1,2-Dichloroethene	10.0	10.3	103	70-123	
Methyl tert-butyl ether	10.0	9.70	97	66-130	
1,1-Dichloroethane	10.0	8.98	90	66-122	
cis-1,2-Dichloroethene	10.0	9.89	99	73-120	
Bromochloromethane	10.0	9.52	95	73-122	
2-Butanone (MEK)	20.0	23.5	118	37-150	
Chloroform	10.0	8.98	90	72-123	
1,1,1-Trichloroethane	10.0	9.28	93	66-129	
Carbon tetrachloride	10.0	10.4	104	58-145	
Benzene	10.0	11.3	113	75-123	
1,2-Dichloroethane	10.0	8.53	85	63-130	
Trichloroethene	10.0	10.3	103	74-121	
1,2-Dichloropropane	10.0	10.6	106	67-119	
Bromodichloromethane	10.0	9.48	95	62-127	
cis-1,3-Dichloropropene	10.0	10.1	101	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	25.2	126	41-135	
Toluene	10.0	12.4	124	76-129	
trans-1,3-Dichloropropene	10.0	10.0	100	61-136	
1,1,2-Trichloroethane	10.0	11.4	114	74-126	
Tetrachloroethene	10.0	9.48	95	76-128	
2-Hexanone	20.0	24.2	121	37-150	
Dibromochloromethane	10.0	11.3	113	63-131	
1,2-Dibromoethane (EDB)	10.0	11.1	111	76-128	
Chlorobenzene	10.0	11.6	116	79-124	
1,1,1,2-Tetrachloroethane	10.0	10.7	107	70-130	
Ethylbenzene	10.0	10.4	104	77-124	
Xylenes, Total	20.0	20.5	103	76-124	
Styrene	10.0	11.1	111	80-125	
Bromoform	10.0	12.7	127	54-136	
1,1,2,2-Tetrachloroethane	10.0	11.7	117	72-128	
Acrylonitrile	100	120	120	60-130	
1,4-Dioxane	200	229	114	26-150	

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110114.D

Lab ID: 180-71829-1 MS Client ID: HD-MW-43D-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloromethane	10.0	1.0 U	5.19	52	49-135	
Vinyl chloride	10.0	1.0 U	4.99	50	52-136	F1
Bromomethane	10.0	1.0 U	5.20	52	37-150	
Chloroethane	10.0	1.0 U	7.32	73	44-139	
1,1-Dichloroethene	10.0	1.0 U	6.86	69	64-131	
Acetone	20.0	5.0 U	13.4	67	24-150	
Carbon disulfide	10.0	1.0 U	9.46	95	20-150	
Methylene Chloride	10.0	1.0 U	8.35	84	66-123	
trans-1,2-Dichloroethene	10.0	1.0 U	9.11	91	70-123	
Methyl tert-butyl ether	10.0	1.0 U	6.70	67	66-130	
1,1-Dichloroethane	10.0	1.0 U	7.54	75	66-122	
cis-1,2-Dichloroethene	10.0	5.2	12.5	74	73-120	
Bromochloromethane	10.0	1.0 U	7.38	74	73-122	
2-Butanone (MEK)	20.0	5.0 U	17.1	85	37-150	
Chloroform	10.0	1.0 U	7.01	70	72-123	F1
1,1,1-Trichloroethane	10.0	1.0 U	7.76	78	66-129	
Carbon tetrachloride	10.0	1.0 U	7.86	79	58-145	
Benzene	10.0	1.0 U	8.13	81	75-123	
1,2-Dichloroethane	10.0	1.0 U	5.98	60	63-130	F1
Trichloroethene	10.0	5.9	13.0	71	74-121	F1
1,2-Dichloropropane	10.0	1.0 U	8.30	83	67-119	
Bromodichloromethane	10.0	1.0 U	7.13	71	62-127	
cis-1,3-Dichloropropene	10.0	1.0 U	7.45	74	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	5.0 U	20.0	100	41-135	
Toluene	10.0	1.0 U	9.37	94	76-129	
trans-1,3-Dichloropropene	10.0	1.0 U	7.29	73	61-136	
1,1,2-Trichloroethane	10.0	1.0 U	8.84	88	74-126	
Tetrachloroethene	10.0	7.5	13.6	62	76-128	F1
2-Hexanone	20.0	5.0 U	19.0	95	37-150	
Dibromochloromethane	10.0	1.0 U	8.55	85	63-131	
1,2-Dibromoethane (EDB)	10.0	1.0 U	8.17	82	76-128	
Chlorobenzene	10.0	1.0 U	8.55	85	79-124	
1,1,1,2-Tetrachloroethane	10.0	1.0 U	8.51	85	70-130	
Ethylbenzene	10.0	1.0 U	9.31	93	77-124	
Xylenes, Total	20.0	2.0 U	17.9	90	76-124	
Styrene	10.0	1.0 U	8.90	89	80-125	
Bromoform	10.0	1.0 U	9.16	92	54-136	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	8.39	84	72-128	
Acrylonitrile	100	20 U	82.8	83	60-130	
1,4-Dioxane	200	200 U	145 J	72	26-150	

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110215.D

Lab ID: 180-71829-13 MS Client ID: HD-MW-16D-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloromethane	10.0	1.0 U	5.73	57	49-135	
Vinyl chloride	10.0	1.0 U	4.95	49	52-136	F1
Bromomethane	10.0	1.0 U	4.77	48	37-150	
Chloroethane	10.0	1.0 U	7.32	73	44-139	
1,1-Dichloroethene	10.0	1.0 U	8.03	80	64-131	
Acetone	20.0	5.0 U	13.9	70	24-150	
Carbon disulfide	10.0	1.0 U	10.7	107	20-150	
Methylene Chloride	10.0	1.0 U	11.0	110	66-123	
trans-1,2-Dichloroethene	10.0	1.0 U	9.81	98	70-123	
Methyl tert-butyl ether	10.0	1.0 U	8.32	83	66-130	
1,1-Dichloroethane	10.0	1.0 U	8.88	89	66-122	
cis-1,2-Dichloroethene	10.0	7.0	15.8	88	73-120	
Bromochloromethane	10.0	1.0 U	9.13	91	73-122	
2-Butanone (MEK)	20.0	5.0 U	17.0	85	37-150	
Chloroform	10.0	1.0 U	8.61	86	72-123	
1,1,1-Trichloroethane	10.0	1.0 U	9.82	98	66-129	
Carbon tetrachloride	10.0	1.0 U	10.2	102	58-145	
Benzene	10.0	1.0 U	9.95	99	75-123	
1,2-Dichloroethane	10.0	1.0 U	7.58	76	63-130	
Trichloroethene	10.0	8.7	16.7	80	74-121	
1,2-Dichloropropane	10.0	1.0 U	9.84	98	67-119	
Bromodichloromethane	10.0	1.0 U	9.13	91	62-127	
cis-1,3-Dichloropropene	10.0	1.0 U	8.99	90	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	5.0 U	19.6	98	41-135	
Toluene	10.0	1.0 U	11.4	114	76-129	
trans-1,3-Dichloropropene	10.0	1.0 U	9.48	95	61-136	
1,1,2-Trichloroethane	10.0	1.0 U	10.6	106	74-126	
Tetrachloroethene	10.0	1.0 U	10.0	100	76-128	
2-Hexanone	20.0	5.0 U	19.3	97	37-150	
Dibromochloromethane	10.0	1.0 U	11.0	110	63-131	
1,2-Dibromoethane (EDB)	10.0	1.0 U	10.1	101	76-128	
Chlorobenzene	10.0	1.0 U	10.5	105	79-124	
1,1,1,2-Tetrachloroethane	10.0	1.0 U	10.9	109	70-130	
Ethylbenzene	10.0	1.0 U	11.2	112	77-124	
Xylenes, Total	20.0	2.0 U	22.3	112	76-124	
Styrene	10.0	1.0 U	11.0	110	80-125	
Bromoform	10.0	1.0 U	11.6	116	54-136	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	10.8	108	72-128	
Acrylonitrile	100	20 U	102	102	60-130	
1,4-Dioxane	200	200 U	204	102	26-150	

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51101D07.D

Lab ID: 180-71829-16 MS Client ID: HD-MW-82-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloromethane	10.0	1.0 U	12.3	123	49-135	
Vinyl chloride	10.0	1.0 U	10.0	100	52-136	
Bromomethane	10.0	1.0 U	10.7	107	37-150	
Chloroethane	10.0	1.0 U	11.9	119	44-139	
1,1-Dichloroethene	10.0	1.0 U	9.70	97	64-131	
Acetone	20.0	5.0 U	20.6	103	24-150	
Carbon disulfide	10.0	1.0 U	10.0	100	20-150	
Methylene Chloride	10.0	1.0 U	9.16	92	66-123	
trans-1,2-Dichloroethene	10.0	1.0 U	9.14	91	70-123	
Methyl tert-butyl ether	10.0	1.0 U	9.58	96	66-130	
1,1-Dichloroethane	10.0	1.0 U	10.3	103	66-122	
cis-1,2-Dichloroethene	10.0	15	23.2	80	73-120	
Bromochloromethane	10.0	1.0 U	9.54	95	73-122	
2-Butanone (MEK)	20.0	5.0 U	20.4	102	37-150	
Chloroform	10.0	1.0 U	9.21	92	72-123	
1,1,1-Trichloroethane	10.0	1.0 U	9.66	97	66-129	
Carbon tetrachloride	10.0	1.0 U	9.49	95	58-145	
Benzene	10.0	1.0 U	8.98	90	75-123	
1,2-Dichloroethane	10.0	1.0 U	10.7	107	63-130	
Trichloroethene	10.0	5.4	13.0	76	74-121	
1,2-Dichloropropane	10.0	1.0 U	9.71	97	67-119	
Bromodichloromethane	10.0	1.0 U	9.23	92	62-127	
cis-1,3-Dichloropropene	10.0	1.0 U	8.53	85	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	5.0 U	22.2	111	41-135	
Toluene	10.0	1.0 U	9.71	97	76-129	
trans-1,3-Dichloropropene	10.0	1.0 U	9.74	97	61-136	
1,1,2-Trichloroethane	10.0	1.0 U	9.92	99	74-126	
Tetrachloroethene	10.0	1.3	9.99	87	76-128	
2-Hexanone	20.0	5.0 U	20.5	103	37-150	
Dibromochloromethane	10.0	1.0 U	10.2	102	63-131	
1,2-Dibromoethane (EDB)	10.0	1.0 U	9.49	95	76-128	
Chlorobenzene	10.0	1.0 U	9.18	92	79-124	
1,1,1,2-Tetrachloroethane	10.0	1.0 U	9.76	98	70-130	
Ethylbenzene	10.0	1.0 U	8.73	87	77-124	
Xylenes, Total	20.0	2.0 U	17.7	89	76-124	
Styrene	10.0	1.0 U	9.20	92	80-125	
Bromoform	10.0	1.0 U	9.56	96	54-136	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	9.38	94	72-128	
Acrylonitrile	100	20 U	116	116	60-130	
1,4-Dioxane	200	200 U	193 J	97	26-150	

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110115.D

Lab ID: 180-71829-1 MSD Client ID: HD-MW-43D-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloromethane	10.0	5.85	58	12	20	49-135	
Vinyl chloride	10.0	5.81	58	15	19	52-136	
Bromomethane	10.0	6.07	61	15	23	37-150	
Chloroethane	10.0	8.59	86	16	19	44-139	
1,1-Dichloroethene	10.0	8.10	81	17	20	64-131	
Acetone	20.0	16.2	81	19	35	24-150	
Carbon disulfide	10.0	11.0	110	15	21	20-150	
Methylene Chloride	10.0	9.69	97	15	22	66-123	
trans-1,2-Dichloroethene	10.0	10.8	108	17	19	70-123	
Methyl tert-butyl ether	10.0	7.79	78	15	23	66-130	
1,1-Dichloroethane	10.0	8.76	88	15	20	66-122	
cis-1,2-Dichloroethene	10.0	14.7	95	16	23	73-120	
Bromochloromethane	10.0	8.56	86	15	24	73-122	
2-Butanone (MEK)	20.0	18.9	94	10	35	37-150	
Chloroform	10.0	8.20	82	16	20	72-123	
1,1,1-Trichloroethane	10.0	9.18	92	17	21	66-129	
Carbon tetrachloride	10.0	9.49	95	19	22	58-145	
Benzene	10.0	9.72	97	18	20	75-123	
1,2-Dichloroethane	10.0	7.19	72	18	21	63-130	
Trichloroethene	10.0	15.6	97	18	20	74-121	
1,2-Dichloropropane	10.0	9.49	95	13	21	67-119	
Bromodichloromethane	10.0	8.40	84	16	19	62-127	
cis-1,3-Dichloropropene	10.0	8.78	88	16	22	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	22.4	112	11	35	41-135	
Toluene	10.0	11.0	110	16	18	76-129	
trans-1,3-Dichloropropene	10.0	8.51	85	15	17	61-136	
1,1,2-Trichloroethane	10.0	10.1	101	13	20	74-126	
Tetrachloroethene	10.0	16.9	94	21	20	76-128	F2
2-Hexanone	20.0	21.2	106	11	35	37-150	
Dibromochloromethane	10.0	10.2	102	18	20	63-131	
1,2-Dibromoethane (EDB)	10.0	9.10	91	11	21	76-128	
Chlorobenzene	10.0	9.97	100	15	16	79-124	
1,1,1,2-Tetrachloroethane	10.0	10.1	101	17	17	70-130	
Ethylbenzene	10.0	11.0	110	16	16	77-124	
Xylenes, Total	20.0	21.7	109	19	17	76-124	F2
Styrene	10.0	10.6	106	17	18	80-125	
Bromoform	10.0	10.8	108	16	23	54-136	
1,1,2,2-Tetrachloroethane	10.0	9.92	99	17	24	72-128	
Acrylonitrile	100	95.2	95	14	32	60-130	
1,4-Dioxane	200	229	114	45	35	26-150	F2

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110216.D

Lab ID: 180-71829-13 MSD Client ID: HD-MW-16D-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloromethane	10.0	5.51	55	4	20	49-135	
Vinyl chloride	10.0	4.62	46	7	19	52-136	F1
Bromomethane	10.0	4.35	44	9	23	37-150	
Chloroethane	10.0	6.24	62	16	19	44-139	
1,1-Dichloroethene	10.0	7.66	77	5	20	64-131	
Acetone	20.0	13.2	66	5	35	24-150	
Carbon disulfide	10.0	9.94	99	7	21	20-150	
Methylene Chloride	10.0	10.5	105	5	22	66-123	
trans-1,2-Dichloroethene	10.0	9.50	95	3	19	70-123	
Methyl tert-butyl ether	10.0	7.97	80	4	23	66-130	
1,1-Dichloroethane	10.0	8.68	87	2	20	66-122	
cis-1,2-Dichloroethene	10.0	15.3	83	3	23	73-120	
Bromochloromethane	10.0	8.84	88	3	24	73-122	
2-Butanone (MEK)	20.0	15.9	80	6	35	37-150	
Chloroform	10.0	8.16	82	5	20	72-123	
1,1,1-Trichloroethane	10.0	8.77	88	11	21	66-129	
Carbon tetrachloride	10.0	9.38	94	9	22	58-145	
Benzene	10.0	9.58	96	4	20	75-123	
1,2-Dichloroethane	10.0	7.41	74	2	21	63-130	
Trichloroethene	10.0	15.3	66	9	20	74-121	F1
1,2-Dichloropropane	10.0	9.45	94	4	21	67-119	
Bromodichloromethane	10.0	8.74	87	4	19	62-127	
cis-1,3-Dichloropropene	10.0	8.70	87	3	22	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	17.7	88	10	35	41-135	
Toluene	10.0	10.4	104	9	18	76-129	
trans-1,3-Dichloropropene	10.0	8.51	85	11	17	61-136	
1,1,2-Trichloroethane	10.0	10.3	103	3	20	74-126	
Tetrachloroethene	10.0	9.30	93	8	20	76-128	
2-Hexanone	20.0	16.8	84	14	35	37-150	
Dibromochloromethane	10.0	10.3	103	7	20	63-131	
1,2-Dibromoethane (EDB)	10.0	9.25	92	8	21	76-128	
Chlorobenzene	10.0	9.79	98	7	16	79-124	
1,1,1,2-Tetrachloroethane	10.0	9.83	98	11	17	70-130	
Ethylbenzene	10.0	9.94	99	12	16	77-124	
Xylenes, Total	20.0	20.0	100	11	17	76-124	
Styrene	10.0	10.3	103	7	18	80-125	
Bromoform	10.0	11.5	115	1	23	54-136	
1,1,2,2-Tetrachloroethane	10.0	10.0	100	7	24	72-128	
Acrylonitrile	100	98.1	98	4	32	60-130	
1,4-Dioxane	200	240	120	16	35	26-150	

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.: 180-71829-1

SDG No.:

Lab File ID: 7110107.D Lab Sample ID: MB 180-227642/7

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

Instrument ID: CHHP7 Date Analyzed: 11/01/2017 10:49

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 180-227642/4	7110104.D	11/01/2017 09:24
HD-QC3-0/1-4	180-71829-6	7110109.D	11/01/2017 11:46
HD-MW-43D-0/1-0	180-71829-1	7110110.D	11/01/2017 12:15
HD-MW-43S-0/1-0	180-71829-2	7110111.D	11/01/2017 12:43
HD-MW-43D-0/1-0 MS	180-71829-1 MS	7110114.D	11/01/2017 14:11
HD-MW-43D-0/1-0 MSD	180-71829-1 MSD	7110115.D	11/01/2017 14:39
HD-QC3-0/1-1	180-71829-3	7110117.D	11/01/2017 15:54
HD-QC3-0/1-3	180-71829-7	7110118.D	11/01/2017 16:23
HD-QC5-0/1-2	180-71829-5	7110119.D	11/01/2017 16:51

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 51101D05.D Lab Sample ID: MB 180-227760/5

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

Instrument ID: CHHP5 Date Analyzed: 11/02/2017 01:06

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 180-227760/3	51101D03.D	11/02/2017 00:08
HD-MW-82-0/1-0	180-71829-16	51101D06.D	11/02/2017 01:39
HD-MW-82-0/1-0 MS	180-71829-16 MS	51101D07.D	11/02/2017 02:10
HD-MW-2-0/1-0	180-71829-14	51101D13.D	11/02/2017 04:32
HD-TATE (S-6)-0/1-0	180-71829-20	51101D16.D	11/02/2017 05:44
HD-MW-15-0/1-0	180-71829-17	51101D17.D	11/02/2017 06:07
HD-MW-12-0/1-0	180-71829-19	51101D19.D	11/02/2017 06:55

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 7110206.D Lab Sample ID: MB 180-227768/6

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

Instrument ID: CHHP7 Date Analyzed: 11/02/2017 06:59

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 180-227768/4	7110204.D	11/02/2017 05:57
HD-MW-16D-0/1-0	180-71829-13	7110208.D	11/02/2017 07:57
HD-MW-136A-356/356.5-0 DL	180-71829-8 DL	7110210.D	11/02/2017 09:17
HD-MW-91-0/1-0 DL	180-71829-12 DL	7110211.D	11/02/2017 09:46
HD-MW-136A-434/434.5-0 DL	180-71829-10 DL	7110214.D	11/02/2017 11:26
HD-MW-16D-0/1-0 MS	180-71829-13 MS	7110215.D	11/02/2017 11:55
HD-MW-16D-0/1-0 MSD	180-71829-13 MSD	7110216.D	11/02/2017 12:24
HD-MW-136A-270/348-0 DL	180-71829-11 DL	7110217.D	11/02/2017 12:52
HD-MW-18D-0/1-0	180-71829-4	7110218.D	11/02/2017 13:20
HD-MW-136A-372.5/373-0 DL	180-71829-9 DL	7110219.D	11/02/2017 13:49
HD-MW-91-0/1-0	180-71829-12	7110220.D	11/02/2017 14:17
HD-MW-136A-356/356.5-0	180-71829-8	7110221.D	11/02/2017 14:45
HD-MW-136A-270/348-0	180-71829-11	7110222.D	11/02/2017 15:18
HD-MW-136A-434/434.5-0	180-71829-10	7110223.D	11/02/2017 15:46
HD-MW-136A-372.5/373-0	180-71829-9	7110224.D	11/02/2017 16:14

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 51102D05.D Lab Sample ID: MB 180-227871/5

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

Instrument ID: CHHP5 Date Analyzed: 11/03/2017 00:58

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 180-227871/3	51102D03.D	11/02/2017 23:57
HD-MW-16S-0/1-0	180-71829-18	51102D24.D	11/03/2017 08:47

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 51105D05.D Lab Sample ID: MB 180-228044/5

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

Instrument ID: CHHP5 Date Analyzed: 11/06/2017 02:14

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 180-228044/3	51105D03.D	11/06/2017 01:16
HD-MW-185-0/1-0	180-71829-15	51105D12.D	11/06/2017 05:25

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 51107D05.D Lab Sample ID: MB 180-228278/5

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

Instrument ID: CHHP5 Date Analyzed: 11/08/2017 02:29

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 180-228278/3	51107D03.D	11/08/2017 01:32
HD-MW-2-0/1-0 DL	180-71829-14 DL	51107D12.D	11/08/2017 05:29

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 711090n8.D Lab Sample ID: MB 180-228533/8

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

Instrument ID: CHHP7 Date Analyzed: 11/09/2017 11:36

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 180-228533/4	7110904.D	11/09/2017 09:42
HD-MW-15-0/1-0 DL	180-71829-17 DL	7110912.D	11/09/2017 13:31

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 50727D01.D BFB Injection Date: 07/27/2017

Instrument ID: CHHP5 BFB Injection Time: 00:22

Analysis Batch No.: 218218

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.0	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.9	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	75.4	
175	5.0 - 9.0 % of mass 174	5.4	(7.2) 1
176	95.0 - 101.0 % of mass 174	74.0	(98.2) 1
177	5.0 - 9.0 % of mass 176	4.8	(6.5) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-218218/2	50727D02.D	07/27/2017	00:51
	IC 180-218218/3	50727D03.D	07/27/2017	01:15
	ICIS 180-218218/4	50727D04.D	07/27/2017	01:39
	IC 180-218218/5	50727D05.D	07/27/2017	02:02
	IC 180-218218/6	50727D06.D	07/27/2017	02:26
	IC 180-218218/8	50727D08.D	07/27/2017	03:13
	IC 180-218218/10	50727D10.D	07/27/2017	04:00
	IC 180-218218/11	50727D11.D	07/27/2017	04:24

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 51101D01.D BFB Injection Date: 11/01/2017

Instrument ID: CHHP5 BFB Injection Time: 22:20

Analysis Batch No.: 227760

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.6	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.7	
173	Less than 2.0 % of mass 174	1.2	(1.6) 1
174	50.0 - 120.00 % of mass 95	75.4	
175	5.0 - 9.0 % of mass 174	4.6	(6.2) 1
176	95.0 - 101.0 % of mass 174	74.1	(98.3) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.8) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-227760/2	51101D02.D	11/01/2017	23:32
	LCS 180-227760/3	51101D03.D	11/02/2017	00:08
	MB 180-227760/5	51101D05.D	11/02/2017	01:06
HD-MW-82-0/1-0	180-71829-16	51101D06.D	11/02/2017	01:39
HD-MW-82-0/1-0 MS	180-71829-16 MS	51101D07.D	11/02/2017	02:10
HD-MW-2-0/1-0	180-71829-14	51101D13.D	11/02/2017	04:32
HD-TATE (S-6)-0/1-0	180-71829-20	51101D16.D	11/02/2017	05:44
HD-MW-15-0/1-0	180-71829-17	51101D17.D	11/02/2017	06:07
HD-MW-12-0/1-0	180-71829-19	51101D19.D	11/02/2017	06:55

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 51102D01.D BFB Injection Date: 11/02/2017

Instrument ID: CHHP5 BFB Injection Time: 21:51

Analysis Batch No.: 227871

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.1	
75	30.0 - 60.0 % of mass 95	50.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.4	
173	Less than 2.0 % of mass 174	0.8	(1.0) 1
174	50.0 - 120.00 % of mass 95	74.1	
175	5.0 - 9.0 % of mass 174	5.3	(7.1) 1
176	95.0 - 101.0 % of mass 174	73.4	(99.1) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.1) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-227871/2	51102D02.D	11/02/2017	22:22
	LCS 180-227871/3	51102D03.D	11/02/2017	23:57
	MB 180-227871/5	51102D05.D	11/03/2017	00:58
HD-MW-16S-0/1-0	180-71829-18	51102D24.D	11/03/2017	08:47

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 51105D01.D BFB Injection Date: 11/05/2017

Instrument ID: CHHP5 BFB Injection Time: 00:00

Analysis Batch No.: 228044

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.9	
75	30.0 - 60.0 % of mass 95	47.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.7	(0.9) 1
174	50.0 - 120.00 % of mass 95	71.2	
175	5.0 - 9.0 % of mass 174	6.4	(9.0) 1
176	95.0 - 101.0 % of mass 174	69.0	(96.9) 1
177	5.0 - 9.0 % of mass 176	4.9	(7.1) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-228044/2	51105D02.D	11/05/2017	00:28
	LCS 180-228044/3	51105D03.D	11/06/2017	01:16
	MB 180-228044/5	51105D05.D	11/06/2017	02:14
HD-MW-185-0/1-0	180-71829-15	51105D12.D	11/06/2017	05:25

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 51107D01.D BFB Injection Date: 11/07/2017

Instrument ID: CHHP5 BFB Injection Time: 23:03

Analysis Batch No.: 228278

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.3	
75	30.0 - 60.0 % of mass 95	48.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.9	
173	Less than 2.0 % of mass 174	0.4	(0.6) 1
174	50.0 - 120.00 % of mass 95	67.8	
175	5.0 - 9.0 % of mass 174	5.4	(7.9) 1
176	95.0 - 101.0 % of mass 174	67.3	(99.2) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.7) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-228278/2	51107D02.D	11/08/2017	00:13
	LCS 180-228278/3	51107D03.D	11/08/2017	01:32
	MB 180-228278/5	51107D05.D	11/08/2017	02:29
HD-MW-2-0/1-0 DL	180-71829-14 DL	51107D12.D	11/08/2017	05:29

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 70526N01.D BFB Injection Date: 05/26/2017

Instrument ID: CHHP7 BFB Injection Time: 13:55

Analysis Batch No.: 212441

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.1	
75	30.0 - 60.0 % of mass 95	58.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	76.8	
175	5.0 - 9.0 % of mass 174	6.2	(8.1) 1
176	95.0 - 101.0 % of mass 174	75.9	(98.8) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.6) 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 180-212441/3	70526N03.D	05/26/2017	14:37
	IC 180-212441/4	70526N04.D	05/26/2017	15:06
	ICIS 180-212441/5	70526N05.D	05/26/2017	15:36
	IC 180-212441/6	70526N06.D	05/26/2017	16:06
	IC 180-212441/7	70526N07.D	05/26/2017	16:36
	IC 180-212441/8	70526N08.D	05/26/2017	17:05
	IC 180-212441/9	70526N09.D	05/26/2017	17:34
	IC 180-212441/10	70526N10.D	05/26/2017	18:04

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 7110101.D BFB Injection Date: 11/01/2017

Instrument ID: CHHP7 BFB Injection Time: 07:31

Analysis Batch No.: 227642

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.2	
75	30.0 - 60.0 % of mass 95	50.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	72.7	
175	5.0 - 9.0 % of mass 174	5.9	(8.1) 1
176	95.0 - 101.0 % of mass 174	69.9	(96.1) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.6) 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 180-227642/3	7110103.D	11/01/2017	08:57
	LCS 180-227642/4	7110104.D	11/01/2017	09:24
	MB 180-227642/7	7110107.D	11/01/2017	10:49
HD-QC3-0/1-4	180-71829-6	7110109.D	11/01/2017	11:46
HD-MW-43D-0/1-0	180-71829-1	7110110.D	11/01/2017	12:15
HD-MW-43S-0/1-0	180-71829-2	7110111.D	11/01/2017	12:43
HD-MW-43D-0/1-0 MS	180-71829-1 MS	7110114.D	11/01/2017	14:11
HD-MW-43D-0/1-0 MSD	180-71829-1 MSD	7110115.D	11/01/2017	14:39
HD-QC3-0/1-1	180-71829-3	7110117.D	11/01/2017	15:54
HD-QC3-0/1-3	180-71829-7	7110118.D	11/01/2017	16:23
HD-QC5-0/1-2	180-71829-5	7110119.D	11/01/2017	16:51

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 7110201.D BFB Injection Date: 11/02/2017

Instrument ID: CHHP7 BFB Injection Time: 04:44

Analysis Batch No.: 227768

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.8	
75	30.0 - 60.0 % of mass 95	51.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	71.6	
175	5.0 - 9.0 % of mass 174	5.8	(8.2) 1
176	95.0 - 101.0 % of mass 174	70.8	(99.0) 1
177	5.0 - 9.0 % of mass 176	5.0	(7.1) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-227768/2	7110202.D	11/02/2017	05:25
	LCS 180-227768/4	7110204.D	11/02/2017	05:57
	MB 180-227768/6	7110206.D	11/02/2017	06:59
HD-MW-16D-0/1-0	180-71829-13	7110208.D	11/02/2017	07:57
HD-MW-136A-356/356.5-0 DL	180-71829-8 DL	7110210.D	11/02/2017	09:17
HD-MW-91-0/1-0 DL	180-71829-12 DL	7110211.D	11/02/2017	09:46
HD-MW-136A-434/434.5-0 DL	180-71829-10 DL	7110214.D	11/02/2017	11:26
HD-MW-16D-0/1-0 MS	180-71829-13 MS	7110215.D	11/02/2017	11:55
HD-MW-16D-0/1-0 MSD	180-71829-13 MSD	7110216.D	11/02/2017	12:24
HD-MW-136A-270/348-0 DL	180-71829-11 DL	7110217.D	11/02/2017	12:52
HD-MW-18D-0/1-0	180-71829-4	7110218.D	11/02/2017	13:20
HD-MW-136A-372.5/373-0 DL	180-71829-9 DL	7110219.D	11/02/2017	13:49
HD-MW-91-0/1-0	180-71829-12	7110220.D	11/02/2017	14:17
HD-MW-136A-356/356.5-0	180-71829-8	7110221.D	11/02/2017	14:45
HD-MW-136A-270/348-0	180-71829-11	7110222.D	11/02/2017	15:18
HD-MW-136A-434/434.5-0	180-71829-10	7110223.D	11/02/2017	15:46
HD-MW-136A-372.5/373-0	180-71829-9	7110224.D	11/02/2017	16:14

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: 711090n1.D BFB Injection Date: 11/09/2017

Instrument ID: CHHP7 BFB Injection Time: 07:17

Analysis Batch No.: 228533

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.1	
75	30.0 - 60.0 % of mass 95	51.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	77.5	
175	5.0 - 9.0 % of mass 174	5.7	(7.3) 1
176	95.0 - 101.0 % of mass 174	75.9	(98.0) 1
177	5.0 - 9.0 % of mass 176	5.1	(6.8) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-228533/2	711090n3.D	11/09/2017	08:58
	LCS 180-228533/4	7110904.D	11/09/2017	09:42
	MB 180-228533/8	711090n8.D	11/09/2017	11:36
HD-MW-15-0/1-0 DL	180-71829-17 DL	7110912.D	11/09/2017	13:31

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-227760/2 Date Analyzed: 11/01/2017 23:32

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

Lab File ID (Standard): 51101D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		214228	4.39	508274	7.34	111735	10.43
UPPER LIMIT		428456	4.89	1016548	7.84	223470	10.93
LOWER LIMIT		107114	3.89	254137	6.84	55868	9.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227760/3		224233	4.39	532549	7.34	117593	10.43
MB 180-227760/5		227350	4.36	518269	7.34	122783	10.43
180-71829-16	HD-MW-82-0/1-0	228663	4.37	520212	7.35	125156	10.43
180-71829-16 MS	HD-MW-82-0/1-0 MS	216220	4.38	483881	7.34	108921	10.43
180-71829-14	HD-MW-2-0/1-0	248722	4.36	560863	7.34	143574	10.43
180-71829-20	HD-TATE (S-6)-0/1-0	206397	4.36	463373	7.34	117986	10.43
180-71829-17	HD-MW-15-0/1-0	218932	4.36	467516	7.34	116843	10.43
180-71829-19	HD-MW-12-0/1-0	212070	4.37	478657	7.34	112663	10.43

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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-227760/2 Date Analyzed: 11/01/2017 23:32

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

Lab File ID (Standard): 51101D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		165202	12.77				
UPPER LIMIT		330404	13.27				
LOWER LIMIT		82601	12.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227760/3		172302	12.77				
MB 180-227760/5		173668	12.77				
180-71829-16	HD-MW-82-0/1-0	175094	12.78				
180-71829-16 MS	HD-MW-82-0/1-0 MS	164005	12.77				
180-71829-14	HD-MW-2-0/1-0	206673	12.78				
180-71829-20	HD-TATE (S-6)-0/1-0	154378	12.77				
180-71829-17	HD-MW-15-0/1-0	158448	12.77				
180-71829-19	HD-MW-12-0/1-0	156401	12.77				

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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-227871/2 Date Analyzed: 11/02/2017 22:22

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

Lab File ID (Standard): 51102D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		191856	4.39	471598	7.34	105369	10.43
UPPER LIMIT		383712	4.89	943196	7.84	210738	10.93
LOWER LIMIT		95928	3.89	235799	6.84	52685	9.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227871/3		241036	4.38	521636	7.34	114496	10.43
MB 180-227871/5		241706	4.37	543946	7.34	131498	10.43
180-71829-18	HD-MW-16S-0/1-0	190737	4.37	453198	7.34	112484	10.43

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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-227871/2 Date Analyzed: 11/02/2017 22:22

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

Lab File ID (Standard): 51102D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		157848	12.77				
UPPER LIMIT		315696	13.27				
LOWER LIMIT		78924	12.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227871/3		166527	12.77				
MB 180-227871/5		185242	12.77				
180-71829-18	HD-MW-16S-0/1-0	147863	12.77				

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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-228044/2 Date Analyzed: 11/05/2017 00:28

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

Lab File ID (Standard): 51105D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		250601	4.38	535684	7.34	127084	10.43
UPPER LIMIT		501202	4.88	1071368	7.84	254168	10.93
LOWER LIMIT		125301	3.88	267842	6.84	63542	9.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-228044/3		261140	4.38	569714	7.34	126036	10.43
MB 180-228044/5		275258	4.36	579207	7.34	144472	10.43
180-71829-15	HD-MW-185-0/1-0	204531	4.37	495067	7.34	128638	10.43

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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-228044/2 Date Analyzed: 11/05/2017 00:28

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

Lab File ID (Standard): 51105D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		177650	12.77				
UPPER LIMIT		355300	13.27				
LOWER LIMIT		88825	12.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-228044/3		184179	12.78				
MB 180-228044/5		205573	12.78				
180-71829-15	HD-MW-185-0/1-0	175106	12.77				

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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-228278/2 Date Analyzed: 11/08/2017 00:13

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

Lab File ID (Standard): 51107D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		265706	4.38	569496	7.34	122941	10.43
UPPER LIMIT		531412	4.88	1138992	7.84	245882	10.93
LOWER LIMIT		132853	3.88	284748	6.84	61471	9.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-228278/3		261520	4.39	565705	7.34	124950	10.43
MB 180-228278/5		252842	4.37	562349	7.34	137042	10.43
180-71829-14 DL	HD-MW-2-0/1-0 DL	228614	4.36	536856	7.34	129372	10.43

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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-228278/2 Date Analyzed: 11/08/2017 00:13

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

Lab File ID (Standard): 51107D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		171348	12.77				
UPPER LIMIT		342696	13.27				
LOWER LIMIT		85674	12.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-228278/3		174005	12.77				
MB 180-228278/5		193669	12.77				
180-71829-14 DL	HD-MW-2-0/1-0 DL	174711	12.77				

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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-227642/3 Date Analyzed: 11/01/2017 08:57

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110103.D Heated Purge: (Y/N) N

Calibration ID: 34724

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		139039	4.26	154379	7.26	37861	10.36
UPPER LIMIT		278078	4.76	308758	7.76	75722	10.86
LOWER LIMIT		69520	3.76	77190	6.76	18931	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227642/4		139165	4.26	155101	7.27	37459	10.36
MB 180-227642/7		191653	4.26	245569	7.27	52719	10.36
180-71829-6	HD-QC3-0/1-4	173928	4.25	236243	7.27	51670	10.36
180-71829-1	HD-MW-43D-0/1-0	164565	4.25	220350	7.27	45868	10.36
180-71829-2	HD-MW-43S-0/1-0	163502	4.26	223659	7.27	47887	10.37
180-71829-1 MS	HD-MW-43D-0/1-0 MS	146633	4.26	206058	7.26	47324	10.36
180-71829-1 MSD	HD-MW-43D-0/1-0 MSD	142948	4.28	175361	7.27	40117	10.37
180-71829-3	HD-QC3-0/1-1	179704	4.25	267324	7.26	59810	10.37
180-71829-7	HD-QC3-0/1-3	156798	4.25	219207	7.27	47912	10.37
180-71829-5	HD-QC5-0/1-2	181973	4.25	245050	7.27	53029	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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-227642/3 Date Analyzed: 11/01/2017 08:57

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110103.D Heated Purge: (Y/N) N

Calibration ID: 34724

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		47819	12.71				
UPPER LIMIT		95638	13.21				
LOWER LIMIT		23910	12.21				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227642/4		46252	12.71				
MB 180-227642/7		75073	12.71				
180-71829-6	HD-QC3-0/1-4	72614	12.71				
180-71829-1	HD-MW-43D-0/1-0	68443	12.71				
180-71829-2	HD-MW-43S-0/1-0	69614	12.71				
180-71829-1 MS	HD-MW-43D-0/1-0 MS	56278	12.71				
180-71829-1 MSD	HD-MW-43D-0/1-0 MSD	51808	12.71				
180-71829-3	HD-QC3-0/1-1	85252	12.71				
180-71829-7	HD-QC3-0/1-3	64480	12.71				
180-71829-5	HD-QC5-0/1-2	72530	12.71				

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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-227768/2 Date Analyzed: 11/02/2017 05:25

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110202.D Heated Purge: (Y/N) N

Calibration ID: 34724

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		137649	4.25	166845	7.26	38718	10.37
UPPER LIMIT		275298	4.75	333690	7.76	77436	10.87
LOWER LIMIT		68825	3.75	83423	6.76	19359	9.87
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227768/4		135596	4.26	160097	7.26	35316	10.37
MB 180-227768/6		245668	4.26	254012	7.27	55974	10.36
180-71829-13	HD-MW-16D-0/1-0	144811	4.24	201056	7.27	46181	10.36
180-71829-8 DL	HD-MW-136A-356/356.5-0 DL	183509	4.26	231631	7.27	52850	10.37
180-71829-12 DL	HD-MW-91-0/1-0 DL	200414	4.26	152862	7.27	30963	10.36
180-71829-10 DL	HD-MW-136A-434/434.5-0 DL	196595	4.25	269000	7.27	63640	10.36
180-71829-13 MS	HD-MW-16D-0/1-0 MS	138688	4.26	180307	7.27	40980	10.36
180-71829-13 MSD	HD-MW-16D-0/1-0 MSD	179330	4.26	209218	7.26	50078	10.36
180-71829-11 DL	HD-MW-136A-270/348-0 DL	210314	4.26	258654	7.27	57291	10.36
180-71829-4	HD-MW-18D-0/1-0	159573	4.26	233498	7.27	50739	10.36
180-71829-9 DL	HD-MW-136A-372.5/373-0 DL	175952	4.26	231075	7.27	51450	10.36
180-71829-12	HD-MW-91-0/1-0	164100	4.26	221608	7.27	48492	10.37
180-71829-8	HD-MW-136A-356/356.5-0	178825	4.26	233829	7.27	48694	10.37
180-71829-11	HD-MW-136A-270/348-0	204990	4.25	317953	7.27	69427	10.36
180-71829-10	HD-MW-136A-434/434.5-0	190449	4.26	242194	7.27	52713	10.36
180-71829-9	HD-MW-136A-372.5/373-0	188597	4.26	220389	7.27	49494	10.36

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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-227768/2 Date Analyzed: 11/02/2017 05:25

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110202.D Heated Purge: (Y/N) N

Calibration ID: 34724

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		48963	12.71				
UPPER LIMIT		97926	13.21				
LOWER LIMIT		24482	12.21				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227768/4		46425	12.71				
MB 180-227768/6		81044	12.71				
180-71829-13	HD-MW-16D-0/1-0	61406	12.70				
180-71829-8 DL	HD-MW-136A-356/356.5-0 DL	73983	12.71				
180-71829-12 DL	HD-MW-91-0/1-0 DL	41641	12.71				
180-71829-10 DL	HD-MW-136A-434/434.5-0 DL	91128	12.71				
180-71829-13 MS	HD-MW-16D-0/1-0 MS	53056	12.71				
180-71829-13 MSD	HD-MW-16D-0/1-0 MSD	60195	12.71				
180-71829-11 DL	HD-MW-136A-270/348-0 DL	79921	12.71				
180-71829-4	HD-MW-18D-0/1-0	69665	12.71				
180-71829-9 DL	HD-MW-136A-372.5/373-0 DL	70570	12.71				
180-71829-12	HD-MW-91-0/1-0	68185	12.71				
180-71829-8	HD-MW-136A-356/356.5-0	70775	12.71				
180-71829-11	HD-MW-136A-270/348-0	101377*	12.71				
180-71829-10	HD-MW-136A-434/434.5-0	78037	12.71				
180-71829-9	HD-MW-136A-372.5/373-0	73054	12.71				

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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-228533/2 Date Analyzed: 11/09/2017 08:58

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 711090n3.D Heated Purge: (Y/N) N

Calibration ID: 34724

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		90540	4.25	124890	7.26	29539	10.37
UPPER LIMIT		181080	4.75	249780	7.76	59078	10.87
LOWER LIMIT		45270	3.75	62445	6.76	14770	9.87
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-228533/4		105721	4.26	119931	7.27	28985	10.36
MB 180-228533/8		164920	4.24	186269	7.27	40347	10.36
180-71829-17 DL	HD-MW-15-0/1-0 DL	157804	4.26	205532	7.27	43711	10.36

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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-228533/2 Date Analyzed: 11/09/2017 08:58

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 711090n3.D Heated Purge: (Y/N) N

Calibration ID: 34724

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		40796	12.71				
UPPER LIMIT		81592	13.21				
LOWER LIMIT		20398	12.21				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-228533/4		39802	12.71				
MB 180-228533/8		58263	12.71				
180-71829-17 DL	HD-MW-15-0/1-0 DL	61117	12.71				

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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-43D-0/1-0 | Lab Sample ID: 180-71829-1

Matrix: Water | Lab File ID: 7110110.D

Analysis Method: 8260C | Date Collected: 10/26/2017 14:25

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 12:15

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.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.90
75-01-4	Vinyl chloride	1.0	U ^c F1	1.0	0.88
74-83-9	Bromomethane	1.0	U ^c	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	5.2		1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U F1	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U ^c F1	1.0	0.57
79-01-6	Trichloroethene	5.9	F1	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U ^c	5.0	3.1
108-88-3	Toluene	1.0	U ^c	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	7.5	F2 F1	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U F2	2.0	0.89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-43D-0/1-0 Lab Sample ID: 180-71829-1

Matrix: Water Lab File ID: 7110110.D

Analysis Method: 8260C Date Collected: 10/26/2017 14:25

Sample wt/vol: 5(mL) Date Analyzed: 11/01/2017 12:15

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.: 227642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-42-5	Styrene	1.0	U	1.0	0.47
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U F2	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	68		65-121
2037-26-5	Toluene-d8 (Surr)	106		73-120
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120
1868-53-7	Dibromofluoromethane (Surr)	79		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110110.D
Lims ID: 180-71829-B-1
Client ID: HD-MW-43D-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2017 12:15:30 ALS Bottle#: 11 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-B-1
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 13:10:13 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 12:54:08

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.251	4.261	-0.010	99	164565	1000.0	
*	2 Fluorobenzene (IS)	96	7.268	7.261	0.007	98	220350	50.0	
*	3 Chlorobenzene-d5	119	10.364	10.363	0.001	90	45868	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.707	12.705	0.002	98	68443	50.0	
$	5 Dibromofluoromethane (Surr	113	6.544	6.543	0.001	93	43156	39.6	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.915	6.908	0.007	92	72388	34.1	
$	7 Toluene-d8 (Surr)	98	8.910	8.909	0.001	94	183766	52.9	
$	8 4-Bromofluorobenzene (Surr	95	11.551	11.549	0.002	86	68196	45.7	
	12 Chloromethane	50		1.786				ND	
	13 Vinyl chloride	62		1.919				ND	
	15 Bromomethane	94		2.254				ND	
	16 Chloroethane	64		2.412				ND	
	22 1,1-Dichloroethene	96		3.337				ND	
	24 Acetone	43	3.435	3.428	0.007	98	7140	7.04	
	26 Carbon disulfide	76		3.617				ND	
	31 Methylene Chloride	84		4.115				ND	
	33 Acrylonitrile	53		4.505				ND	
	34 trans-1,2-Dichloroethene	96		4.541				ND	
	35 Methyl tert-butyl ether	73		4.560				ND	
	37 1,1-Dichloroethane	63		5.180				ND	
	45 cis-1,2-Dichloroethene	96	5.930	5.928	0.002	84	37029	25.8	
	46 2-Butanone (MEK)	43		5.941				ND	
	49 Chlorobromomethane	128		6.214				ND	
	52 Chloroform	83		6.360				ND	
	53 1,1,1-Trichloroethane	97		6.512				ND	
	56 Carbon tetrachloride	117		6.689				ND	
	58 Benzene	78		6.920				ND	
	59 1,2-Dichloroethane	62		6.999				ND	
	64 Trichloroethene	130	7.657	7.656	0.001	97	39643	29.3	
	67 1,2-Dichloropropane	63		7.924				ND	
	70 1,4-Dioxane	88		8.003				ND	
	71 Dichlorobromomethane	83		8.210				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.648				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.800				ND	
76 Toluene	91		8.976				ND	
77 trans-1,3-Dichloropropene	75		9.232				ND	
79 1,1,2-Trichloroethane	97		9.420				ND	
80 Tetrachloroethene	164	9.494	9.493	0.001	94	29716	37.3	
82 2-Hexanone	43		9.633				ND	
84 Chlorodibromomethane	129		9.791				ND	
85 Ethylene Dibromide	107		9.901				ND	
87 Chlorobenzene	112		10.394				ND	
89 1,1,1,2-Tetrachloroethane	131		10.479				ND	
90 Ethylbenzene	106		10.485				ND	
91 m-Xylene & p-Xylene	106		10.619				ND	
92 o-Xylene	106		11.002				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.209				ND	
99 1,1,2,2-Tetrachloroethane	83		11.689				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

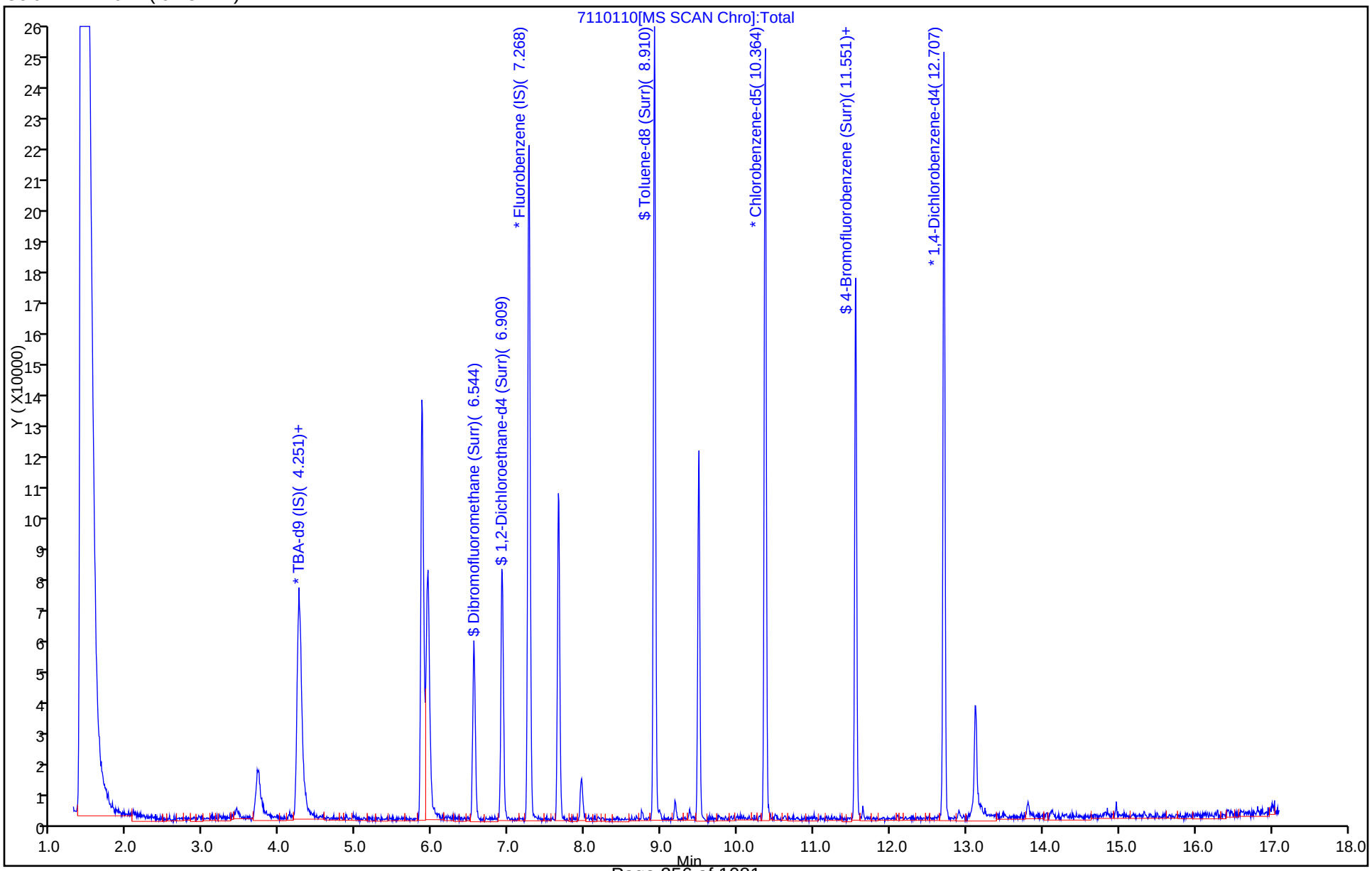
Report Date: 01-Nov-2017 13:24:51 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110110.D

Injection Date:	01-Nov-2017 12:15:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-B-1	Lab Sample ID:	180-71829-1	Worklist Smp#:	10
Client ID:	HD-MW-43D-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110110.D
Lims ID: 180-71829-B-1
Client ID: HD-MW-43D-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2017 12:15:30 ALS Bottle#: 11 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-B-1
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 13:10:13 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 12:54:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	39.6	79.16
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	34.1	68.27
$ 7 Toluene-d8 (Surr)	50.0	52.9	105.77
$ 8 4-Bromofluorobenzene (Surr)	50.0	45.7	91.35

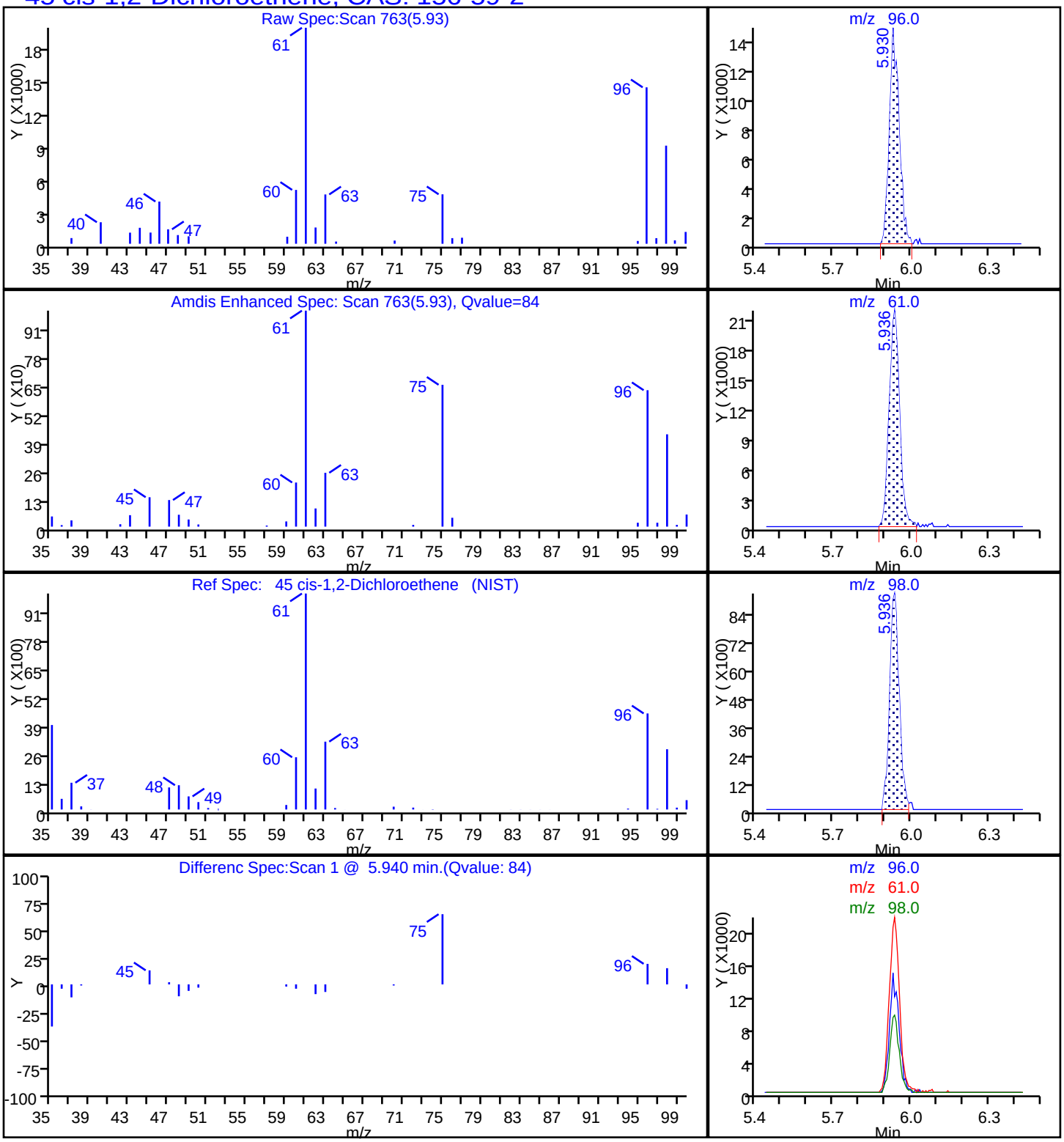
Report Date: 01-Nov-2017 13:24:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110110.D

Injection Date:	01-Nov-2017 12:15:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-1	Lab Sample ID:	180-71829-1		
Client ID:	HD-MW-43D-0/1-0				
Operator ID:	034635	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



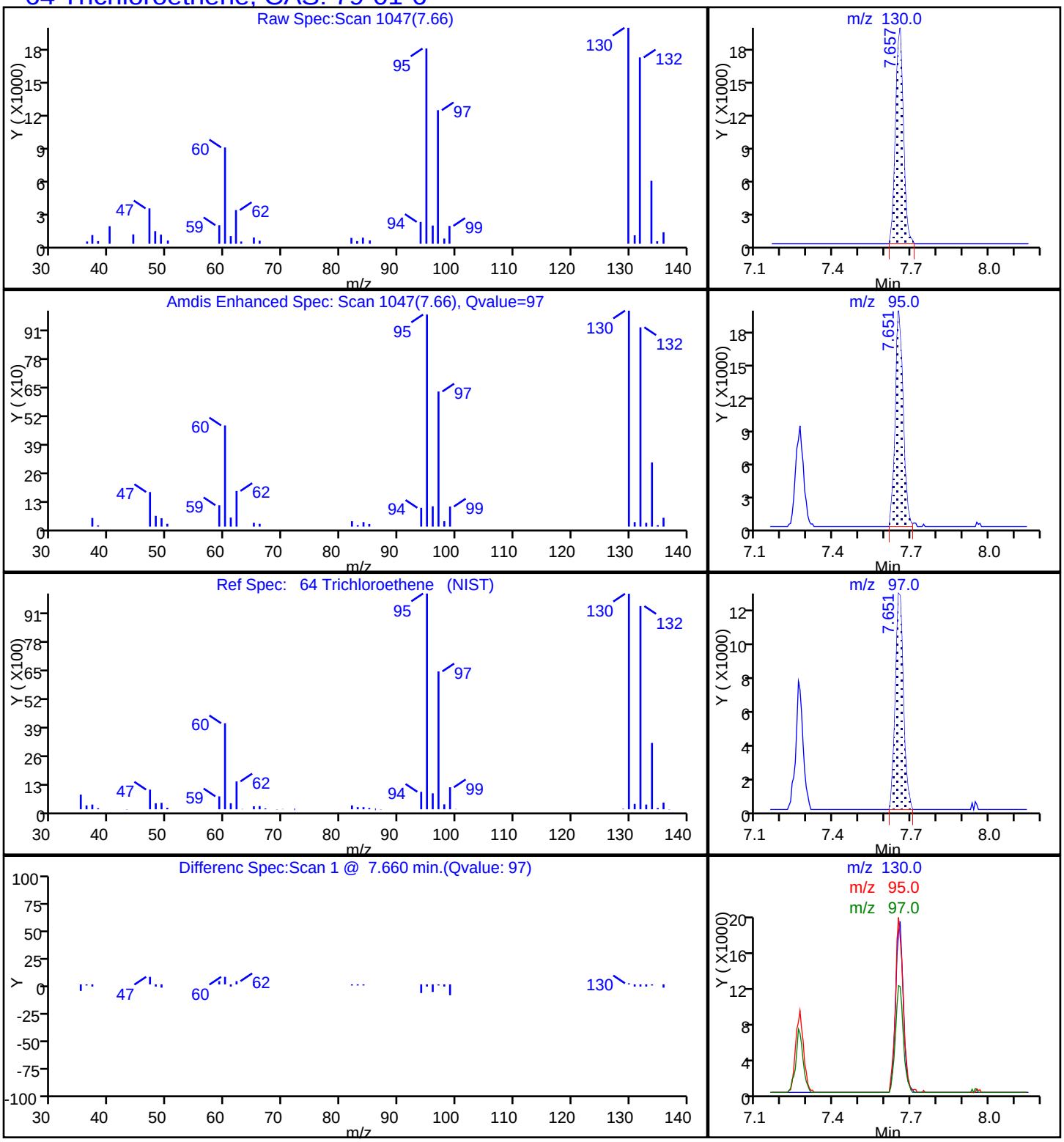
Report Date: 01-Nov-2017 13:24:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110110.D

Injection Date:	01-Nov-2017 12:15:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-1	Lab Sample ID:	180-71829-1		
Client ID:	HD-MW-43D-0/1-0				
Operator ID:	034635	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



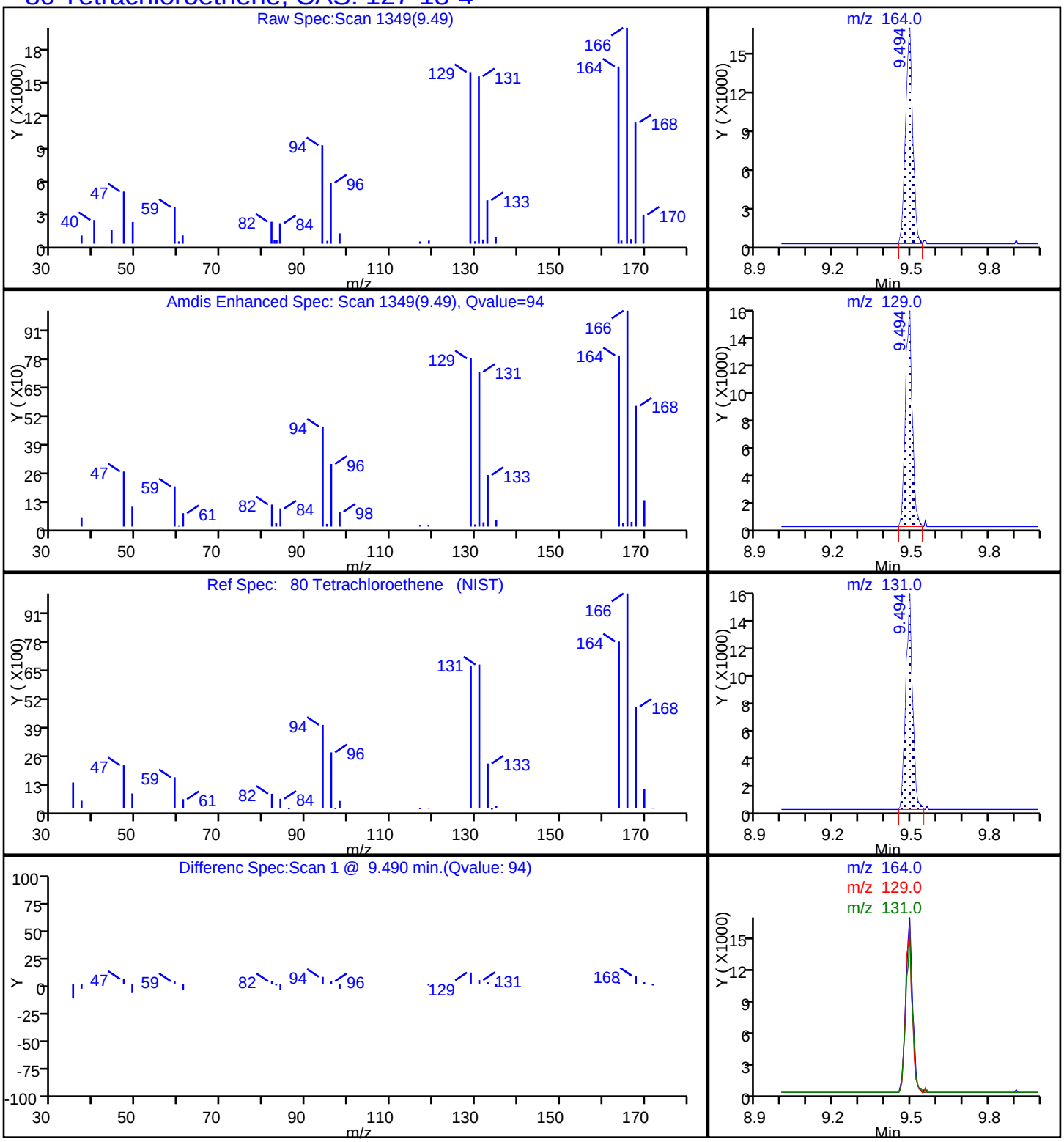
Report Date: 01-Nov-2017 13:24:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110110.D

Injection Date:	01-Nov-2017 12:15:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-1	Lab Sample ID:	180-71829-1		
Client ID:	HD-MW-43D-0/1-0				
Operator ID:	034635	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-43S-0/1-0 | Lab Sample ID: 180-71829-2

Matrix: Water | Lab File ID: 7110111.D

Analysis Method: 8260C | Date Collected: 10/26/2017 13:20

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 12:43

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.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.90
75-01-4	Vinyl chloride	1.0	U ^c	1.0	0.88
74-83-9	Bromomethane	1.0	U ^c	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U ^c	1.0	0.57
79-01-6	Trichloroethene	1.0	U	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U ^c	5.0	3.1
108-88-3	Toluene	1.0	U ^c	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-43S-0/1-0 | Lab Sample ID: 180-71829-2

Matrix: Water | Lab File ID: 7110111.D

Analysis Method: 8260C | Date Collected: 10/26/2017 13:20

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 12:43

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.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	74		65-121
2037-26-5	Toluene-d8 (Surr)	109		73-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	84		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110111.D
Lims ID: 180-71829-C-2
Client ID: HD-MW-43S-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2017 12:43:30 ALS Bottle#: 12 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-C-2
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 13:10:13 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 13:10:13

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.264	4.261	0.003	98	163502	1000.0	
*	2 Fluorobenzene (IS)	96	7.269	7.261	0.008	98	223659	50.0	
*	3 Chlorobenzene-d5	119	10.365	10.363	0.002	89	47887	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.707	12.705	0.002	97	69614	50.0	
$	5 Dibromofluoromethane (Surr	113	6.545	6.543	0.002	92	46379	41.9	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.916	6.908	0.008	93	79874	37.1	
$	7 Toluene-d8 (Surr)	98	8.911	8.909	0.002	94	197185	54.4	
$	8 4-Bromofluorobenzene (Surr	95	11.545	11.549	-0.004	86	75168	48.4	
	12 Chloromethane	50		1.786				ND	
	13 Vinyl chloride	62		1.919				ND	
	15 Bromomethane	94		2.254				ND	
	16 Chloroethane	64		2.412				ND	
	22 1,1-Dichloroethene	96		3.337				ND	
	24 Acetone	43		3.428				ND	
	26 Carbon disulfide	76		3.617				ND	
	31 Methylene Chloride	84		4.115				ND	
	33 Acrylonitrile	53		4.505				ND	
	34 trans-1,2-Dichloroethene	96		4.541				ND	
	35 Methyl tert-butyl ether	73		4.560				ND	
	37 1,1-Dichloroethane	63		5.180				ND	
	45 cis-1,2-Dichloroethene	96		5.928				ND	
	46 2-Butanone (MEK)	43		5.941				ND	
	49 Chlorobromomethane	128		6.214				ND	
	52 Chloroform	83		6.360				ND	
	53 1,1,1-Trichloroethane	97		6.512				ND	
	56 Carbon tetrachloride	117		6.689				ND	
	58 Benzene	78		6.920				ND	
	59 1,2-Dichloroethane	62		6.999				ND	
	64 Trichloroethene	130		7.656				ND	
	67 1,2-Dichloropropane	63		7.924				ND	
	70 1,4-Dioxane	88		8.003				ND	
	71 Dichlorobromomethane	83		8.210				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.648				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.800				ND	
76 Toluene	91		8.976				ND	
77 trans-1,3-Dichloropropene	75		9.232				ND	
79 1,1,2-Trichloroethane	97		9.420				ND	
80 Tetrachloroethene	164	9.495	9.493	0.002	87	439	0.5278	
82 2-Hexanone	43		9.633				ND	
84 Chlorodibromomethane	129		9.791				ND	
85 Ethylene Dibromide	107		9.901				ND	
87 Chlorobenzene	112		10.394				ND	
89 1,1,1,2-Tetrachloroethane	131		10.479				ND	
90 Ethylbenzene	106		10.485				ND	
91 m-Xylene & p-Xylene	106		10.619				ND	
92 o-Xylene	106		11.002				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.209				ND	
99 1,1,2,2-Tetrachloroethane	83		11.689				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

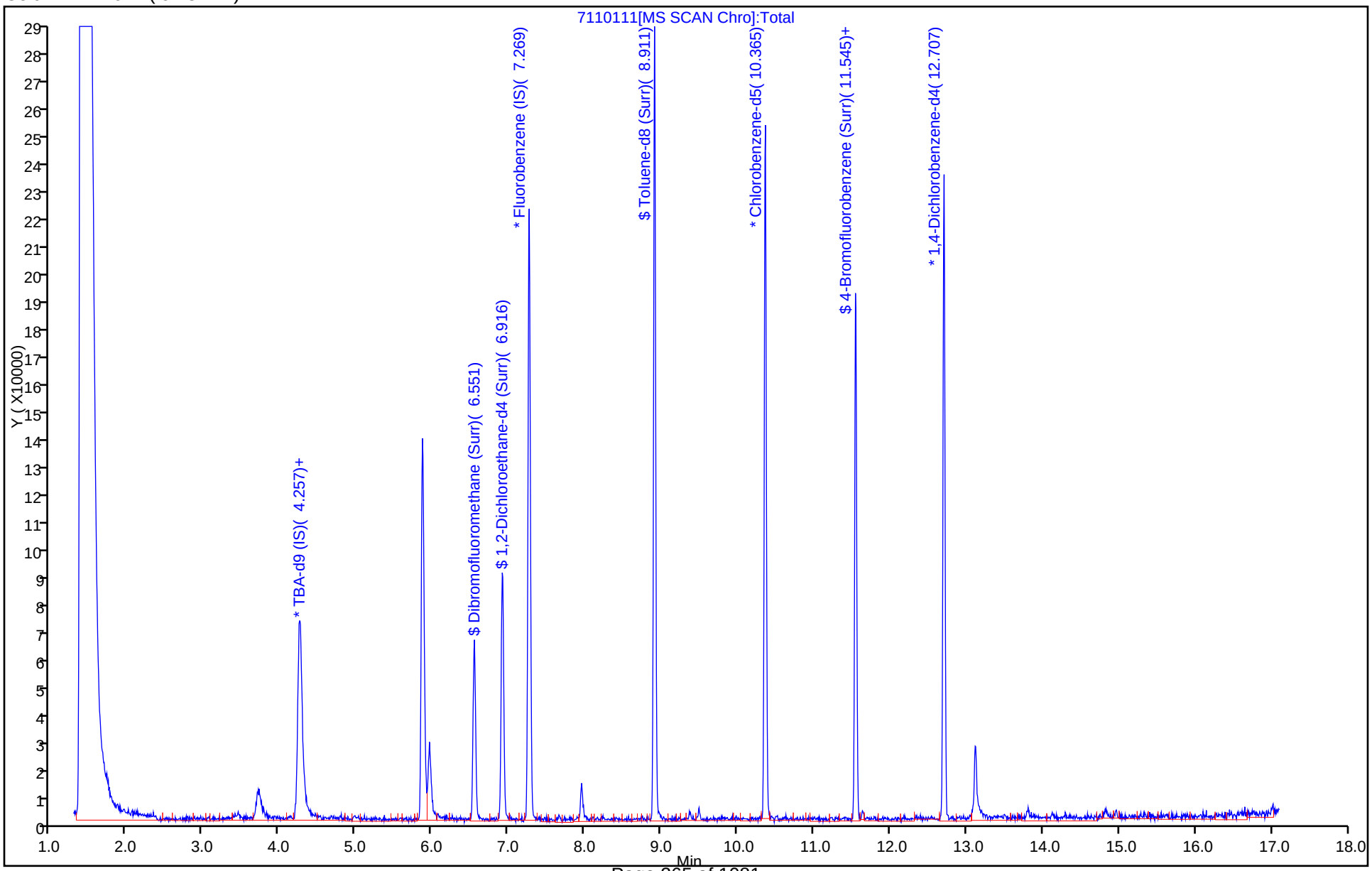
Report Date: 01-Nov-2017 13:24:50 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110111.D

Injection Date:	01-Nov-2017 12:43:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-C-2	Lab Sample ID:	180-71829-2	Worklist Smp#:	11
Client ID:	HD-MW-43S-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110111.D
Lims ID: 180-71829-C-2
Client ID: HD-MW-43S-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2017 12:43:30 ALS Bottle#: 12 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-C-2
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 13:10:13 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 13:10:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	41.9	83.81
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	37.1	74.21
$ 7 Toluene-d8 (Surr)	50.0	54.4	108.71
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.4	96.87

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-QC3-0/1-1 | Lab Sample ID: 180-71829-3

Matrix: Water | Lab File ID: 7110117.D

Analysis Method: 8260C | Date Collected: 10/26/2017 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 15:54

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.90
75-01-4	Vinyl chloride	1.0	U ^c	1.0	0.88
74-83-9	Bromomethane	1.0	U ^c	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	16		1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U ^c	1.0	0.57
79-01-6	Trichloroethene	4.7		1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U ^c	5.0	3.1
108-88-3	Toluene	1.0	U ^c	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-QC3-0/1-1 | Lab Sample ID: 180-71829-3

Matrix: Water | Lab File ID: 7110117.D

Analysis Method: 8260C | Date Collected: 10/26/2017 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 15:54

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	76		65-121
2037-26-5	Toluene-d8 (Surr)	108		73-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	87		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110117.D
Lims ID: 180-71829-C-3
Client ID: HD-QC3-0/1-1
Sample Type: Client
Inject. Date: 01-Nov-2017 15:54:30 ALS Bottle#: 18 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-C-3
Misc. Info.: 180-0019129-016
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 16:24:20 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 16:24:20

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.251	4.261	-0.010	98	179704	1000.0	
*	2 Fluorobenzene (IS)	96	7.262	7.261	0.001	98	267324	50.0	
*	3 Chlorobenzene-d5	119	10.365	10.363	0.001	90	59810	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.707	12.705	0.002	97	85252	50.0	
$	5 Dibromofluoromethane (Surr	113	6.544	6.543	0.001	94	57596	43.5	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.915	6.908	0.007	92	97587	37.9	
$	7 Toluene-d8 (Surr)	98	8.911	8.909	0.002	94	245370	54.2	
$	8 4-Bromofluorobenzene (Surr	95	11.545	11.549	-0.004	86	95475	49.3	
	12 Chloromethane	50		1.786				ND	
	13 Vinyl chloride	62	1.915	1.919	-0.004	21	2390	1.03	
	15 Bromomethane	94		2.254				ND	
	16 Chloroethane	64		2.412				ND	
	22 1,1-Dichloroethene	96		3.337				ND	
	24 Acetone	43	3.429	3.428	0.001	71	5496	4.47	
	26 Carbon disulfide	76		3.617				ND	
	31 Methylene Chloride	84		4.115				ND	
	33 Acrylonitrile	53		4.505				ND	
	34 trans-1,2-Dichloroethene	96		4.541				ND	
	35 Methyl tert-butyl ether	73		4.560				ND	
	37 1,1-Dichloroethane	63		5.180				ND	
	45 cis-1,2-Dichloroethene	96	5.930	5.928	0.002	83	135348	77.8	
	46 2-Butanone (MEK)	43		5.941				ND	
	49 Chlorobromomethane	128		6.214				ND	
	52 Chloroform	83		6.360				ND	
	53 1,1,1-Trichloroethane	97		6.512				ND	
	56 Carbon tetrachloride	117		6.689				ND	
	58 Benzene	78		6.920				ND	
	59 1,2-Dichloroethane	62		6.999				ND	
	64 Trichloroethene	130	7.657	7.656	0.001	95	38699	23.5	
	67 1,2-Dichloropropane	63		7.924				ND	
	70 1,4-Dioxane	88		8.003				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.210				ND	
74 cis-1,3-Dichloropropene	75		8.648				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.800				ND	
76 Toluene	91		8.976				ND	
77 trans-1,3-Dichloropropene	75		9.232				ND	
79 1,1,2-Trichloroethane	97		9.420				ND	
80 Tetrachloroethene	164		9.493				ND	
82 2-Hexanone	43		9.633				ND	
84 Chlorodibromomethane	129		9.791				ND	
85 Ethylene Dibromide	107		9.901				ND	
87 Chlorobenzene	112		10.394				ND	
89 1,1,1,2-Tetrachloroethane	131		10.479				ND	
90 Ethylbenzene	106		10.485				ND	
91 m-Xylene & p-Xylene	106		10.619				ND	
92 o-Xylene	106		11.002				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.209				ND	
99 1,1,2,2-Tetrachloroethane	83		11.689				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

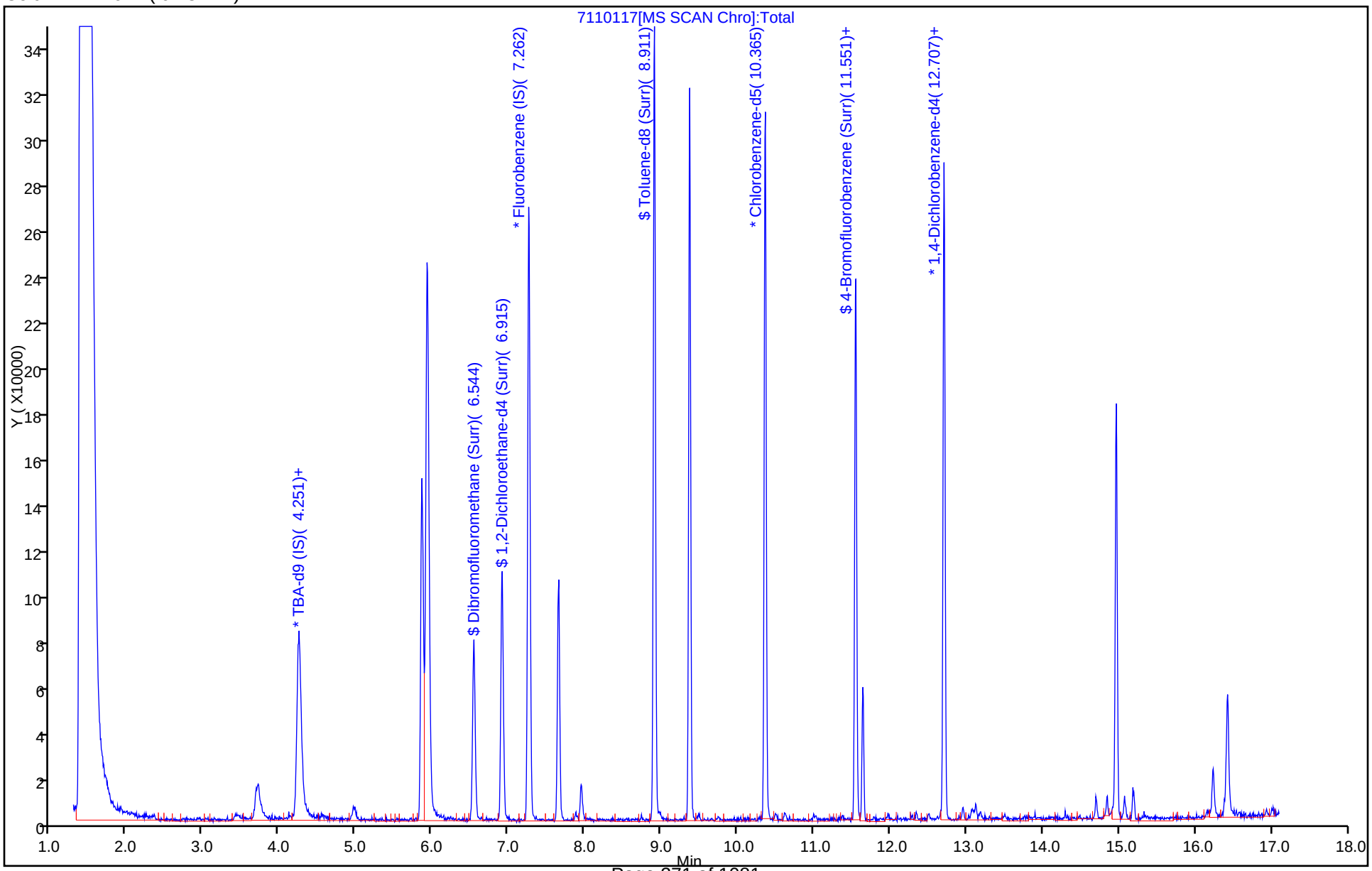
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 01-Nov-2017 16:28:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110117.D				
Injection Date:	01-Nov-2017 15:54:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-C-3	Lab Sample ID:	180-71829-3	Worklist Smp#:	17
Client ID:	HD-QC3-0/1-1				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110117.D
Lims ID: 180-71829-C-3
Client ID: HD-QC3-0/1-1
Sample Type: Client
Inject. Date: 01-Nov-2017 15:54:30 ALS Bottle#: 18 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-C-3
Misc. Info.: 180-0019129-016
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 16:24:20 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 16:24:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	43.5	87.08
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	37.9	75.86
$ 7 Toluene-d8 (Surr)	50.0	54.2	108.31
$ 8 4-Bromofluorobenzene (Surr)	50.0	49.3	98.64

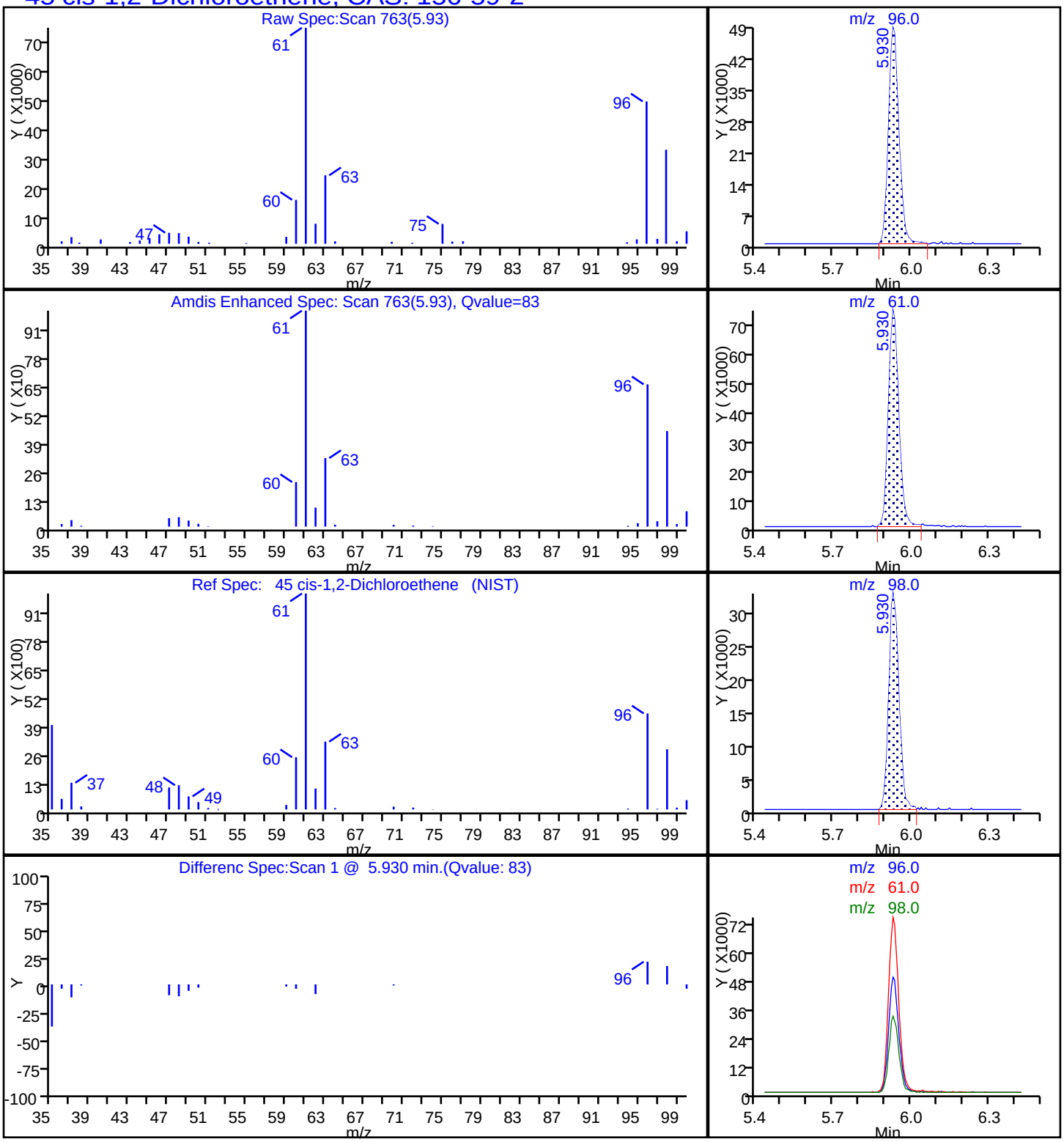
Report Date: 01-Nov-2017 16:28:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110117.D

Injection Date:	01-Nov-2017 15:54:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-3	Lab Sample ID:	180-71829-3		
Client ID:	HD-QC3-0/1-1				
Operator ID:	034635	ALS Bottle#:	18	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



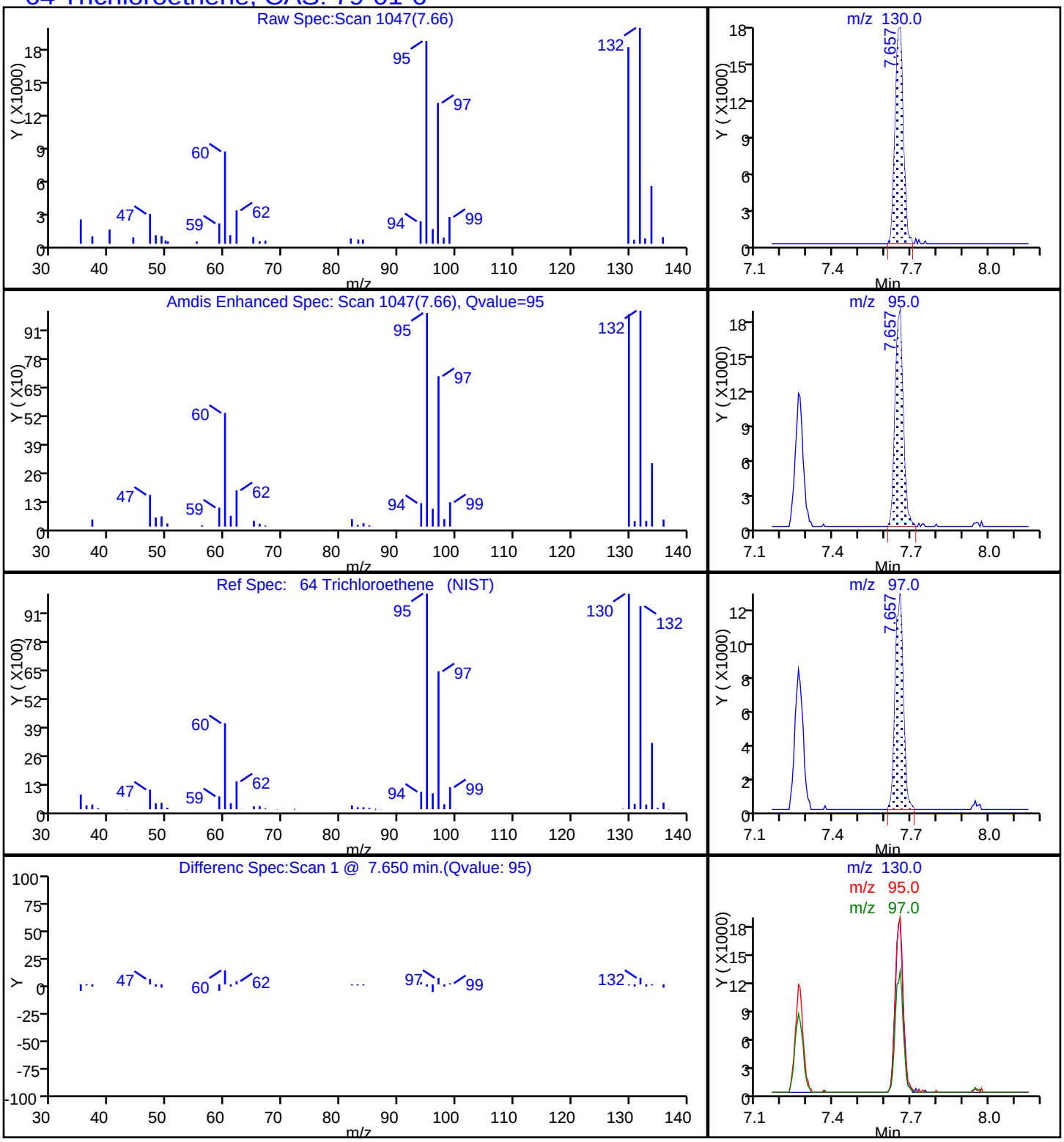
Report Date: 01-Nov-2017 16:28:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110117.D

Injection Date:	01-Nov-2017 15:54:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-3	Lab Sample ID:	180-71829-3		
Client ID:	HD-QC3-0/1-1				
Operator ID:	034635	ALS Bottle#:	18	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-18D-0/1-0 | Lab Sample ID: 180-71829-4

Matrix: Water | Lab File ID: 7110218.D

Analysis Method: 8260C | Date Collected: 10/26/2017 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 13:20

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U ^c	1.0	0.90
75-01-4	Vinyl chloride	1.0	U ^c *	1.0	0.88
74-83-9	Bromomethane	1.0	U ^c	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U ^c *	1.0	0.55
67-64-1	Acetone	5.0	U ^c	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	14		1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U ^c	1.0	0.57
79-01-6	Trichloroethene	3.8		1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1
108-88-3	Toluene	1.0	U	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-18D-0/1-0 | Lab Sample ID: 180-71829-4

Matrix: Water | Lab File ID: 7110218.D

Analysis Method: 8260C | Date Collected: 10/26/2017 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 13:20

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-42-5	Styrene	1.0	U	1.0	0.47
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	75	^c	65-121
2037-26-5	Toluene-d8 (Surr)	108		73-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	83		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110218.D
Lims ID: 180-71829-A-4
Client ID: HD-MW-18D-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 13:20:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-A-4
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 14:20:00 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 14:01:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.257	4.252	0.005	100	159573	1000.0	
* 2 Fluorobenzene (IS)	96	7.268	7.263	0.005	98	233498	50.0	
* 3 Chlorobenzene-d5	119	10.359	10.366	-0.007	90	50739	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.707	12.708	-0.001	97	69665	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.550	6.539	0.011	92	47819	41.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.921	6.910	0.011	92	84180	37.5	
$ 7 Toluene-d8 (Surr)	98	8.911	8.912	-0.001	93	207000	53.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.545	11.552	-0.007	88	77275	46.9	
12 Chloromethane	50		1.782				ND	
13 Vinyl chloride	62		1.928				ND	
15 Bromomethane	94		2.275				ND	
16 Chloroethane	64		2.415				ND	
22 1,1-Dichloroethene	96		3.339				ND	
24 Acetone	43	3.448	3.437	0.011	67	4335	4.04	
26 Carbon disulfide	76		3.625				ND	
31 Methylene Chloride	84		4.124				ND	
33 Acrylonitrile	53		4.507				ND	
34 trans-1,2-Dichloroethene	96		4.544				ND	
35 Methyl tert-butyl ether	73		4.562				ND	
37 1,1-Dichloroethane	63		5.183				ND	
45 cis-1,2-Dichloroethene	96	5.942	5.931	0.011	83	102737	67.6	
46 2-Butanone (MEK)	43		5.937				ND	
49 Chlorobromomethane	128		6.223				ND	
52 Chloroform	83		6.357				ND	
53 1,1,1-Trichloroethane	97		6.521				ND	
56 Carbon tetrachloride	117		6.691				ND	
58 Benzene	78		6.916				ND	
59 1,2-Dichloroethane	62		7.002				ND	
64 Trichloroethene	130	7.658	7.653	0.005	96	27442	19.1	
67 1,2-Dichloropropane	63		7.920				ND	
70 1,4-Dioxane	88		8.005				ND	
71 Dichlorobromomethane	83		8.212				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.650				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802				ND	
76 Toluene	91		8.979				ND	
77 trans-1,3-Dichloropropene	75		9.228				ND	
79 1,1,2-Trichloroethane	97		9.423				ND	
80 Tetrachloroethene	164		9.496				ND	
82 2-Hexanone	43		9.636				ND	
84 Chlorodibromomethane	129		9.794				ND	
85 Ethylene Dibromide	107		9.903				ND	
87 Chlorobenzene	112		10.390				ND	
89 1,1,1,2-Tetrachloroethane	131		10.481				ND	
90 Ethylbenzene	106		10.487				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		11.005				ND	
93 Styrene	104		11.029				ND	
94 Bromoform	173		11.211				ND	
99 1,1,2,2-Tetrachloroethane	83		11.686				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

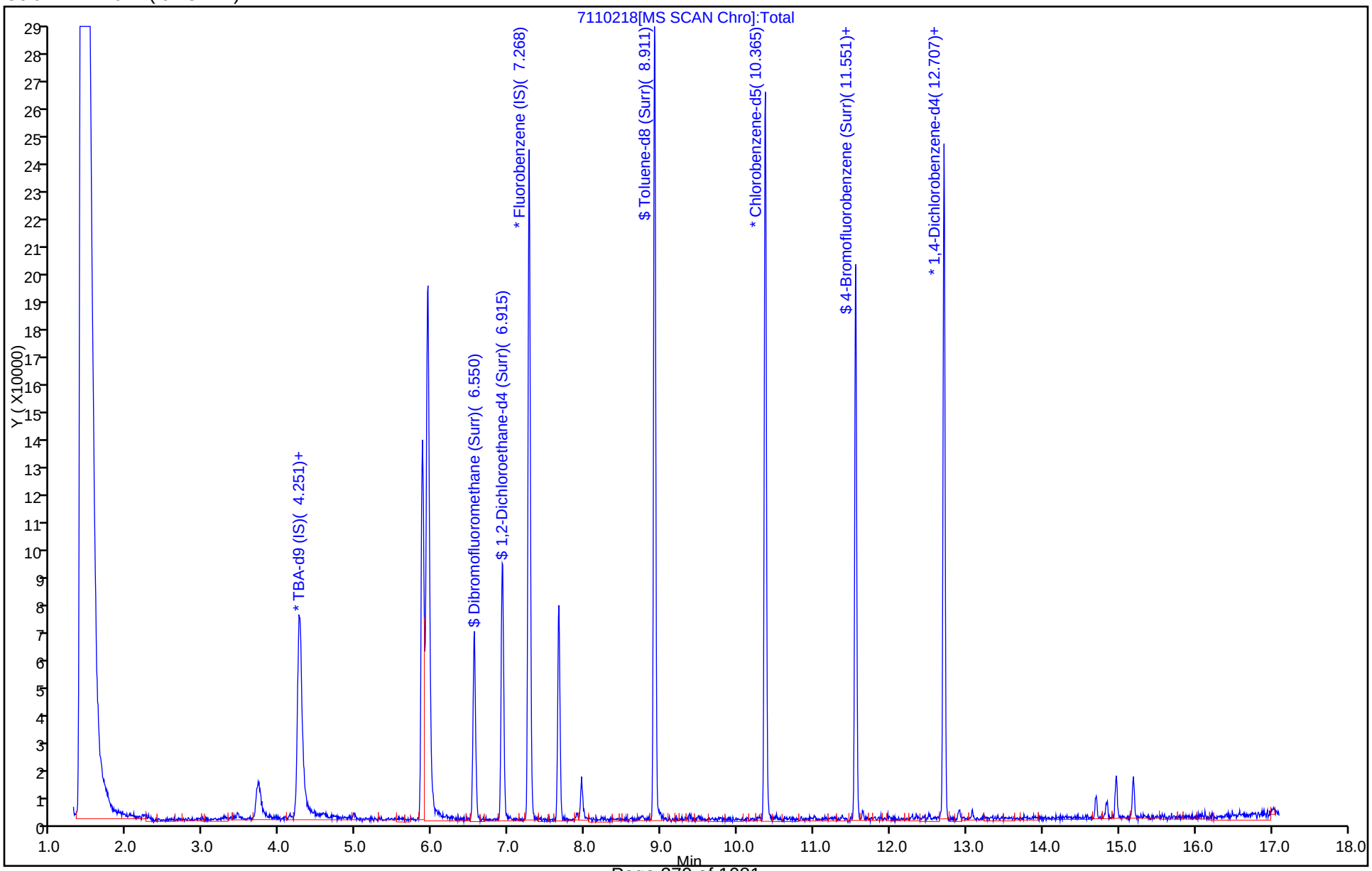
Report Date: 02-Nov-2017 14:20:04 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110218.D

Injection Date:	02-Nov-2017 13:20:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-A-4	Lab Sample ID:	180-71829-4	Worklist Smp#:	18
Client ID:	HD-MW-18D-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110218.D
Lims ID: 180-71829-A-4
Client ID: HD-MW-18D-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 13:20:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-A-4
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 14:20:00 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 14:01:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	41.4	82.77
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	37.5	74.92
$ 7 Toluene-d8 (Surr)	50.0	53.9	107.71
$ 8 4-Bromofluorobenzene (Surr)	50.0	46.9	93.76

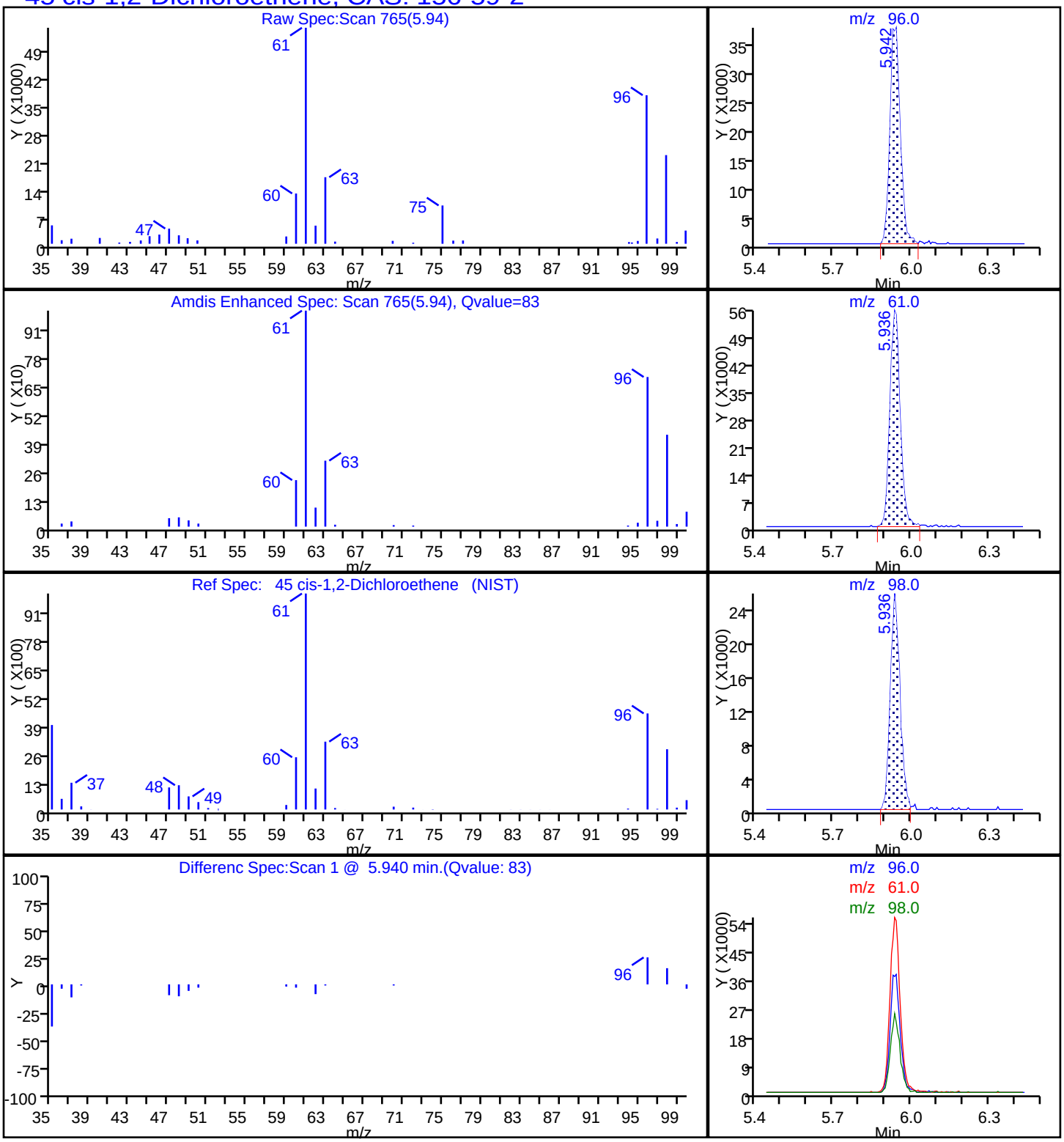
Report Date: 02-Nov-2017 14:20:04 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110218.D

Injection Date:	02-Nov-2017 13:20:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-A-4	Lab Sample ID:	180-71829-4		
Client ID:	HD-MW-18D-0/1-0				
Operator ID:	034635	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



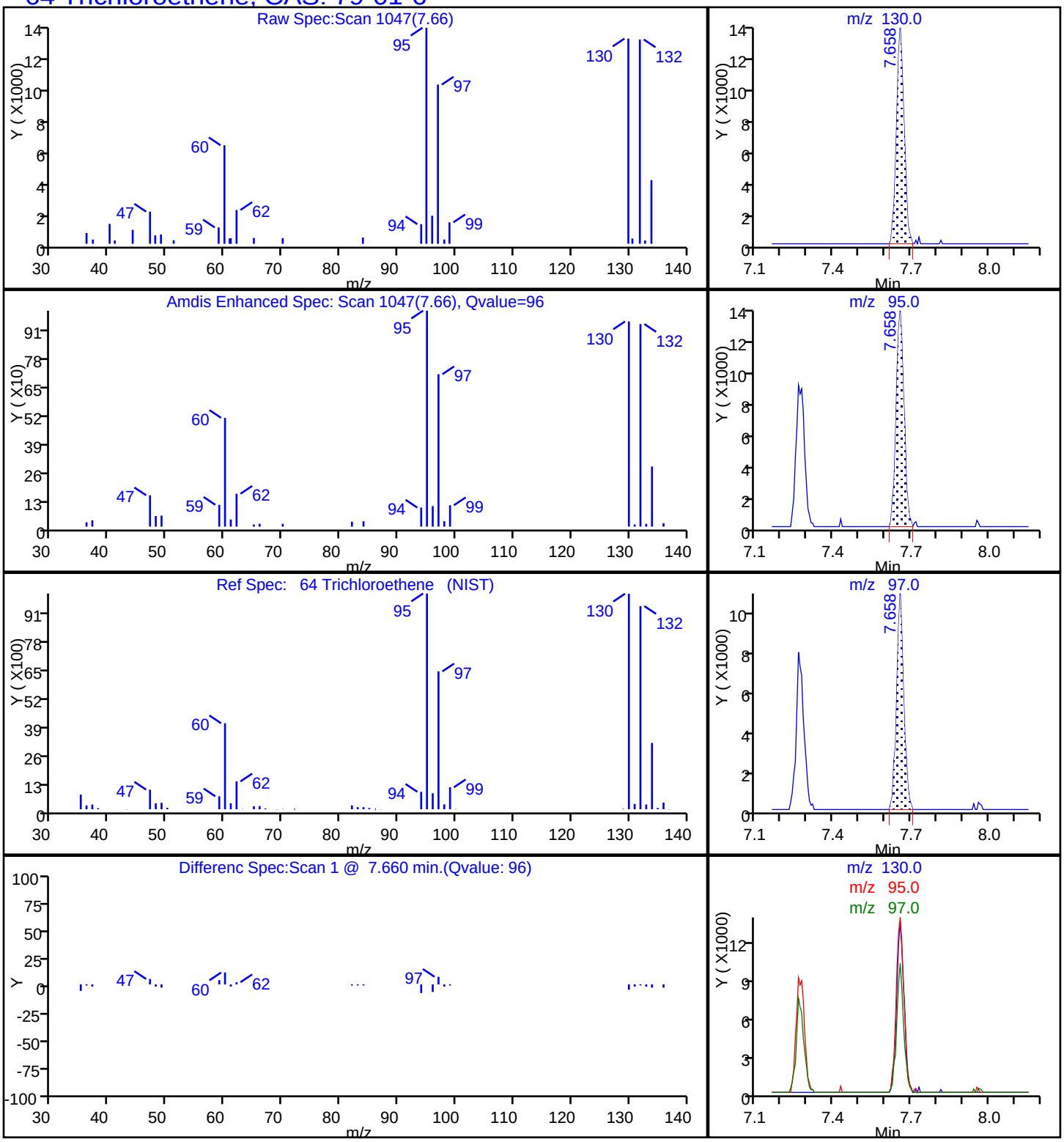
Report Date: 02-Nov-2017 14:20:04 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110218.D

Injection Date:	02-Nov-2017 13:20:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-A-4	Lab Sample ID:	180-71829-4		
Client ID:	HD-MW-18D-0/1-0				
Operator ID:	034635	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Client Sample ID: HD-QC5-0/1-2 | Lab Sample ID: 180-71829-5

Matrix: Water | Lab File ID: 7110119.D

Analysis Method: 8260C | Date Collected: 10/25/2017 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 16:51

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.90
75-01-4	Vinyl chloride	1.0	U ^c	1.0	0.88
74-83-9	Bromomethane	1.0	U ^c	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U ^c	1.0	0.57
79-01-6	Trichloroethene	1.0	U	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U ^c	5.0	3.1
108-88-3	Toluene	1.0	U ^c	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-QC5-0/1-2 | Lab Sample ID: 180-71829-5

Matrix: Water | Lab File ID: 7110119.D

Analysis Method: 8260C | Date Collected: 10/25/2017 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 16:51

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	66		65-121
2037-26-5	Toluene-d8 (Surr)	98		73-120
460-00-4	4-Bromofluorobenzene (Surr)	82		80-120
1868-53-7	Dibromofluoromethane (Surr)	77		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110119.D
Lims ID: 180-71829-A-5
Client ID: HD-QC5-0/1-2
Sample Type: Client
Inject. Date: 01-Nov-2017 16:51:30 ALS Bottle#: 20 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-A-5
Misc. Info.: 180-0019129-019
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 05:05:42 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 05:04:10

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.252	4.261	-0.009	98	181973	1000.0	
*	2 Fluorobenzene (IS)	96	7.269	7.261	0.008	98	245050	50.0	
*	3 Chlorobenzene-d5	119	10.365	10.363	0.002	90	53029	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.708	12.705	0.003	97	72530	50.0	
$	5 Dibromofluoromethane (Surr	113	6.551	6.543	0.008	94	46450	38.3	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.916	6.908	0.008	93	77955	33.1	
$	7 Toluene-d8 (Surr)	98	8.912	8.909	0.003	94	195925	48.8	
$	8 4-Bromofluorobenzene (Surr	95	11.546	11.549	-0.003	86	71190	40.9	
	12 Chloromethane	50		1.786				ND	
	13 Vinyl chloride	62		1.919				ND	
	15 Bromomethane	94		2.254				ND	
	16 Chloroethane	64		2.412				ND	
	22 1,1-Dichloroethene	96		3.337				ND	
	24 Acetone	43	3.430	3.428	0.002	62	5125	4.55	
	26 Carbon disulfide	76		3.617				ND	
	31 Methylene Chloride	84		4.115				ND	
	33 Acrylonitrile	53		4.505				ND	
	34 trans-1,2-Dichloroethene	96		4.541				ND	
	35 Methyl tert-butyl ether	73		4.560				ND	
	37 1,1-Dichloroethane	63		5.180				ND	
	45 cis-1,2-Dichloroethene	96		5.928				ND	
	46 2-Butanone (MEK)	43		5.941				ND	
	49 Chlorobromomethane	128		6.214				ND	
	52 Chloroform	83		6.360				ND	
	53 1,1,1-Trichloroethane	97		6.512				ND	
	56 Carbon tetrachloride	117		6.689				ND	
	58 Benzene	78		6.920				ND	
	59 1,2-Dichloroethane	62		6.999				ND	
	64 Trichloroethene	130		7.656				ND	
	67 1,2-Dichloropropane	63		7.924				ND	
	70 1,4-Dioxane	88		8.003				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.210				ND	
74 cis-1,3-Dichloropropene	75		8.648				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.800				ND	
76 Toluene	91		8.976				ND	
77 trans-1,3-Dichloropropene	75		9.232				ND	
79 1,1,2-Trichloroethane	97		9.420				ND	
80 Tetrachloroethene	164		9.493				ND	
82 2-Hexanone	43		9.633				ND	
84 Chlorodibromomethane	129		9.791				ND	
85 Ethylene Dibromide	107		9.901				ND	
87 Chlorobenzene	112		10.394				ND	
89 1,1,1,2-Tetrachloroethane	131		10.479				ND	
90 Ethylbenzene	106		10.485				ND	
91 m-Xylene & p-Xylene	106		10.619				ND	
92 o-Xylene	106		11.002				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.209				ND	
99 1,1,2,2-Tetrachloroethane	83		11.689				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

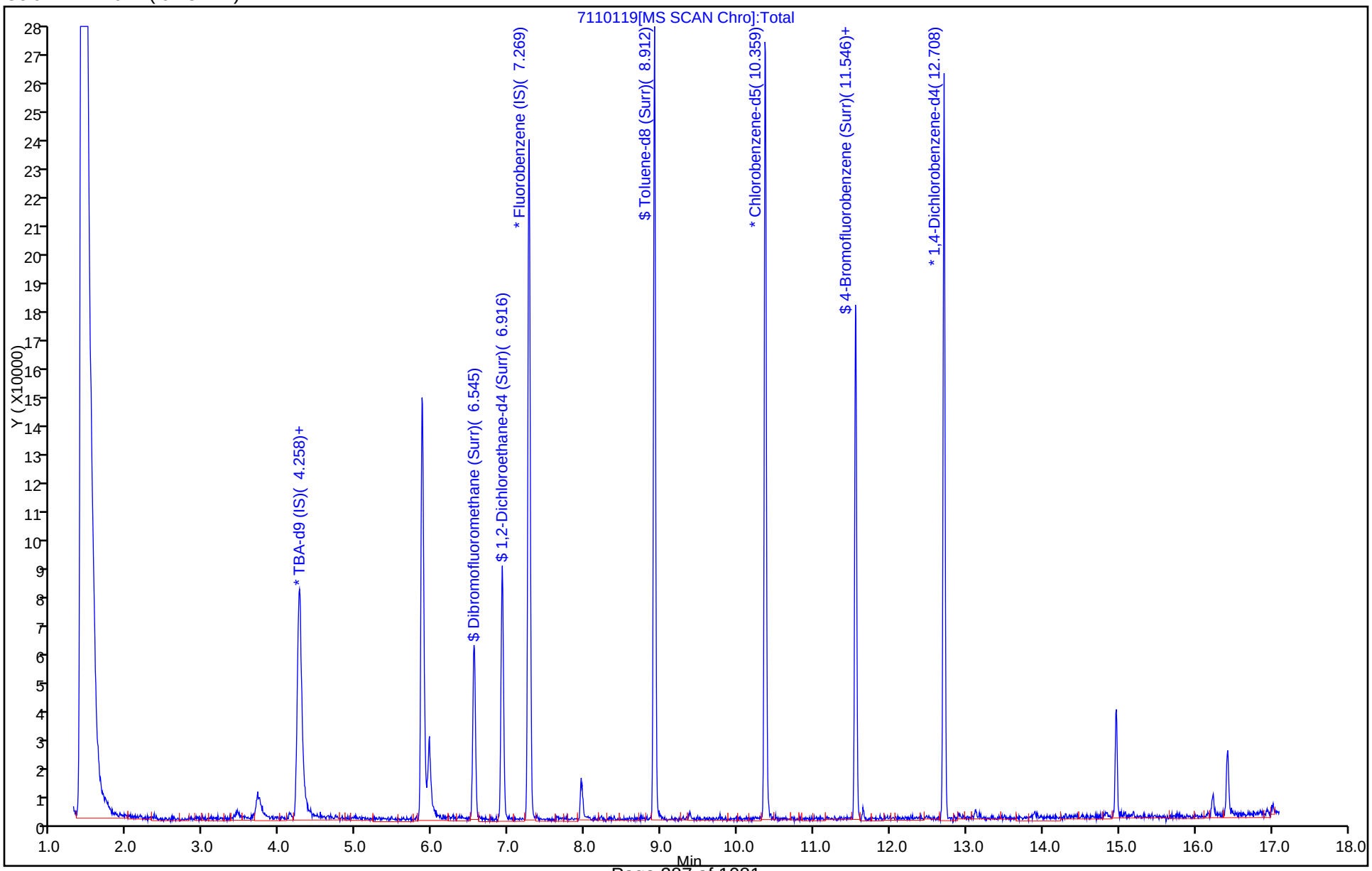
Report Date: 02-Nov-2017 05:13:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110119.D

Injection Date:	01-Nov-2017 16:51:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-A-5	Lab Sample ID:	180-71829-5	Worklist Smp#:	19
Client ID:	HD-QC5-0/1-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110119.D
Lims ID: 180-71829-A-5
Client ID: HD-QC5-0/1-2
Sample Type: Client
Inject. Date: 01-Nov-2017 16:51:30 ALS Bottle#: 20 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-A-5
Misc. Info.: 180-0019129-019
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 05:05:42 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 05:04:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	38.3	76.61
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	33.1	66.11
$ 7 Toluene-d8 (Surr)	50.0	48.8	97.54
$ 8 4-Bromofluorobenzene (Surr)	50.0	40.9	81.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-QC3-0/1-4 | Lab Sample ID: 180-71829-6

Matrix: Water | Lab File ID: 7110109.D

Analysis Method: 8260C | Date Collected: 10/26/2017 14:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 11:46

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.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.90
75-01-4	Vinyl chloride	1.0	U ^c	1.0	0.88
74-83-9	Bromomethane	1.0	U ^c	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	8.9		5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U ^c	1.0	0.57
79-01-6	Trichloroethene	1.0	U	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U ^c	5.0	3.1
108-88-3	Toluene	1.0	U ^c	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-QC3-0/1-4 | Lab Sample ID: 180-71829-6

Matrix: Water | Lab File ID: 7110109.D

Analysis Method: 8260C | Date Collected: 10/26/2017 14:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 11:46

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.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	73		65-121
2037-26-5	Toluene-d8 (Surr)	102		73-120
460-00-4	4-Bromofluorobenzene (Surr)	88		80-120
1868-53-7	Dibromofluoromethane (Surr)	86		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110109.D
Lims ID: 180-71829-B-6
Client ID: HD-QC3-0/1-4
Sample Type: Client
Inject. Date: 01-Nov-2017 11:46:30 ALS Bottle#: 10 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-B-6
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 13:10:13 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 12:14:53

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.250	4.261	-0.011	99	173928	1000.0	
*	2 Fluorobenzene (IS)	96	7.267	7.261	0.006	98	236243	50.0	
*	3 Chlorobenzene-d5	119	10.358	10.363	-0.005	90	51670	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.706	12.705	0.001	97	72614	50.0	
$	5 Dibromofluoromethane (Surr	113	6.543	6.543	0.000	93	50407	43.1	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.915	6.908	0.007	92	82647	36.3	
$	7 Toluene-d8 (Surr)	98	8.910	8.909	0.001	94	198919	50.8	
$	8 4-Bromofluorobenzene (Surr	95	11.550	11.549	0.001	85	74348	44.1	
	12 Chloromethane	50		1.786				ND	
	13 Vinyl chloride	62		1.919				ND	
	15 Bromomethane	94		2.254				ND	
	16 Chloroethane	64		2.412				ND	
	22 1,1-Dichloroethene	96		3.337				ND	
	24 Acetone	43	3.435	3.428	0.007	100	48610	44.7	
	26 Carbon disulfide	76		3.617				ND	
	31 Methylene Chloride	84		4.115				ND	
	33 Acrylonitrile	53		4.505				ND	
	34 trans-1,2-Dichloroethene	96		4.541				ND	
	35 Methyl tert-butyl ether	73		4.560				ND	
	37 1,1-Dichloroethane	63		5.180				ND	
	45 cis-1,2-Dichloroethene	96		5.928				ND	
	46 2-Butanone (MEK)	43		5.941				ND	
	49 Chlorobromomethane	128		6.214				ND	
	52 Chloroform	83		6.360				ND	
	53 1,1,1-Trichloroethane	97		6.512				ND	
	56 Carbon tetrachloride	117		6.689				ND	
	58 Benzene	78		6.920				ND	
	59 1,2-Dichloroethane	62		6.999				ND	
	64 Trichloroethene	130		7.656				ND	
	67 1,2-Dichloropropane	63		7.924				ND	
	70 1,4-Dioxane	88		8.003				ND	
	71 Dichlorobromomethane	83		8.210				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.648				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.800				ND	
76 Toluene	91		8.976				ND	
77 trans-1,3-Dichloropropene	75		9.232				ND	
79 1,1,2-Trichloroethane	97		9.420				ND	
80 Tetrachloroethene	164		9.493				ND	
82 2-Hexanone	43		9.633				ND	
84 Chlorodibromomethane	129		9.791				ND	
85 Ethylene Dibromide	107		9.901				ND	
87 Chlorobenzene	112		10.394				ND	
89 1,1,1,2-Tetrachloroethane	131		10.479				ND	
90 Ethylbenzene	106		10.485				ND	
91 m-Xylene & p-Xylene	106		10.619				ND	
92 o-Xylene	106		11.002				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.209				ND	
99 1,1,2,2-Tetrachloroethane	83		11.689				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

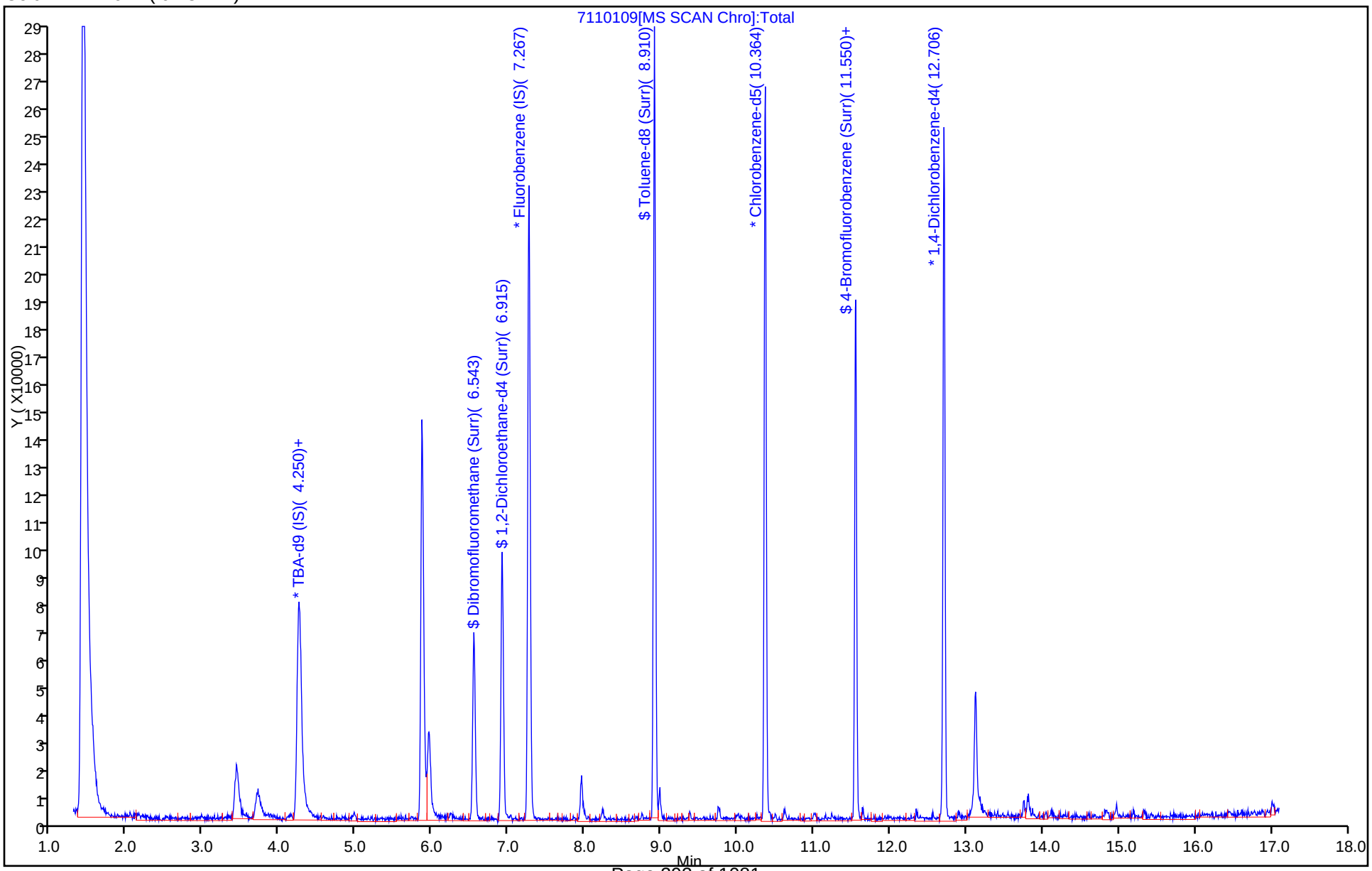
Report Date: 01-Nov-2017 13:24:53 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110109.D

Injection Date:	01-Nov-2017 11:46:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-B-6	Lab Sample ID:	180-71829-6	Worklist Smp#:	9
Client ID:	HD-QC3-0/1-4				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110109.D
Lims ID: 180-71829-B-6
Client ID: HD-QC3-0/1-4
Sample Type: Client
Inject. Date: 01-Nov-2017 11:46:30 ALS Bottle#: 10 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-B-6
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 13:10:13 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 12:14:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	43.1	86.24
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.3	72.70
$ 7 Toluene-d8 (Surr)	50.0	50.8	101.64
$ 8 4-Bromofluorobenzene (Surr)	50.0	44.1	88.16

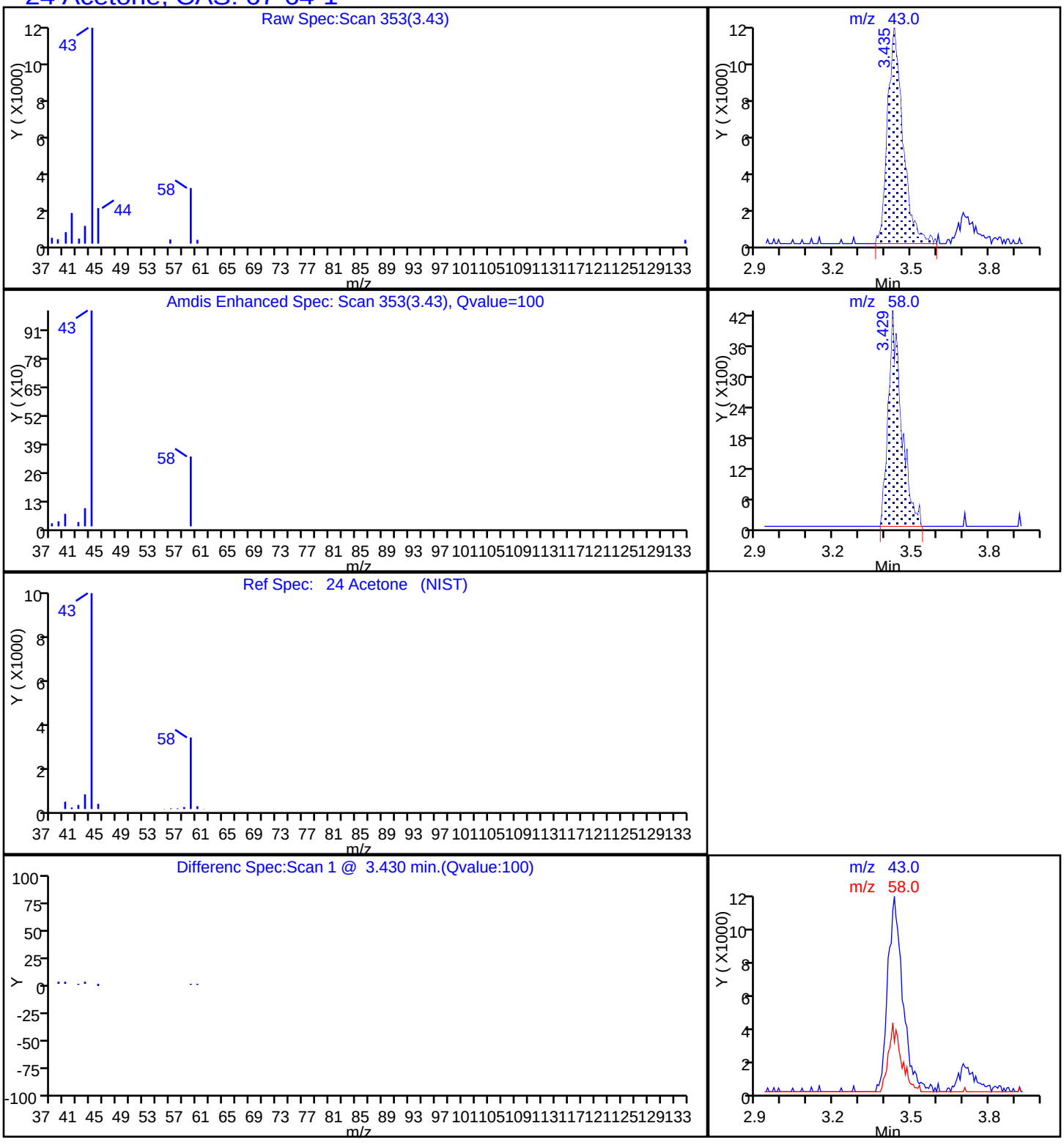
Report Date: 01-Nov-2017 13:24:53 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110109.D

Injection Date:	01-Nov-2017 11:46:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-6	Lab Sample ID:	180-71829-6		
Client ID:	HD-QC3-0/1-4				
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-QC3-0/1-3 | Lab Sample ID: 180-71829-7

Matrix: Water | Lab File ID: 7110118.D

Analysis Method: 8260C | Date Collected: 10/26/2017 14:35

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 16:23

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.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.90
75-01-4	Vinyl chloride	1.0	U ^c	1.0	0.88
74-83-9	Bromomethane	1.0	U ^c	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	8.8		5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	2.8	J	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U ^c	1.0	0.57
79-01-6	Trichloroethene	1.0	U	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U ^c	5.0	3.1
108-88-3	Toluene	1.0	U ^c	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-QC3-0/1-3 | Lab Sample ID: 180-71829-7

Matrix: Water | Lab File ID: 7110118.D

Analysis Method: 8260C | Date Collected: 10/26/2017 14:35

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 16:23

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.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	67		65-121
2037-26-5	Toluene-d8 (Surr)	97		73-120
460-00-4	4-Bromofluorobenzene (Surr)	84		80-120
1868-53-7	Dibromofluoromethane (Surr)	77		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110118.D
Lims ID: 180-71829-A-7
Client ID: HD-QC3-0/1-3
Sample Type: Client
Inject. Date: 01-Nov-2017 16:23:30 ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-A-7
Misc. Info.: 180-0019129-018
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 17:04:13 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 17:04:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.246	4.261	-0.015	99	156798	1000.0	
* 2 Fluorobenzene (IS)	96	7.270	7.261	0.009	98	219207	50.0	
* 3 Chlorobenzene-d5	119	10.366	10.363	0.003	90	47912	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.708	12.705	0.003	97	64480	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.552	6.543	0.009	92	41809	38.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.917	6.908	0.009	95	70465	33.4	
$ 7 Toluene-d8 (Surr)	98	8.912	8.909	0.003	93	175210	48.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.553	11.549	0.004	86	66067	42.1	
12 Chloromethane	50		1.786				ND	
13 Vinyl chloride	62		1.919				ND	
15 Bromomethane	94		2.254				ND	
16 Chloroethane	64		2.412				ND	
22 1,1-Dichloroethene	96		3.337				ND	
24 Acetone	43	3.425	3.428	-0.003	99	44491	44.1	
26 Carbon disulfide	76		3.617				ND	
31 Methylene Chloride	84		4.115				ND	
33 Acrylonitrile	53		4.505				ND	
34 trans-1,2-Dichloroethene	96		4.541				ND	
35 Methyl tert-butyl ether	73		4.560				ND	
37 1,1-Dichloroethane	63		5.180				ND	
45 cis-1,2-Dichloroethene	96		5.928				ND	
46 2-Butanone (MEK)	43	5.950	5.941	0.010	61	19054	14.1	
49 Chlorobromomethane	128		6.214				ND	
52 Chloroform	83		6.360				ND	
53 1,1,1-Trichloroethane	97		6.512				ND	
56 Carbon tetrachloride	117		6.689				ND	
58 Benzene	78		6.920				ND	
59 1,2-Dichloroethane	62		6.999				ND	
64 Trichloroethene	130		7.656				ND	
67 1,2-Dichloropropane	63		7.924				ND	
70 1,4-Dioxane	88		8.003				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.210				ND	
74 cis-1,3-Dichloropropene	75		8.648				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.800				ND	
76 Toluene	91		8.976				ND	
77 trans-1,3-Dichloropropene	75		9.232				ND	
79 1,1,2-Trichloroethane	97		9.420				ND	
80 Tetrachloroethene	164		9.493				ND	
82 2-Hexanone	43		9.633				ND	
84 Chlorodibromomethane	129		9.791				ND	
85 Ethylene Dibromide	107		9.901				ND	
87 Chlorobenzene	112		10.394				ND	
89 1,1,1,2-Tetrachloroethane	131		10.479				ND	
90 Ethylbenzene	106		10.485				ND	
91 m-Xylene & p-Xylene	106		10.619				ND	
92 o-Xylene	106		11.002				ND	
93 Styrene	104		11.026				ND	
94 Bromoform	173		11.209				ND	
99 1,1,2,2-Tetrachloroethane	83		11.689				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

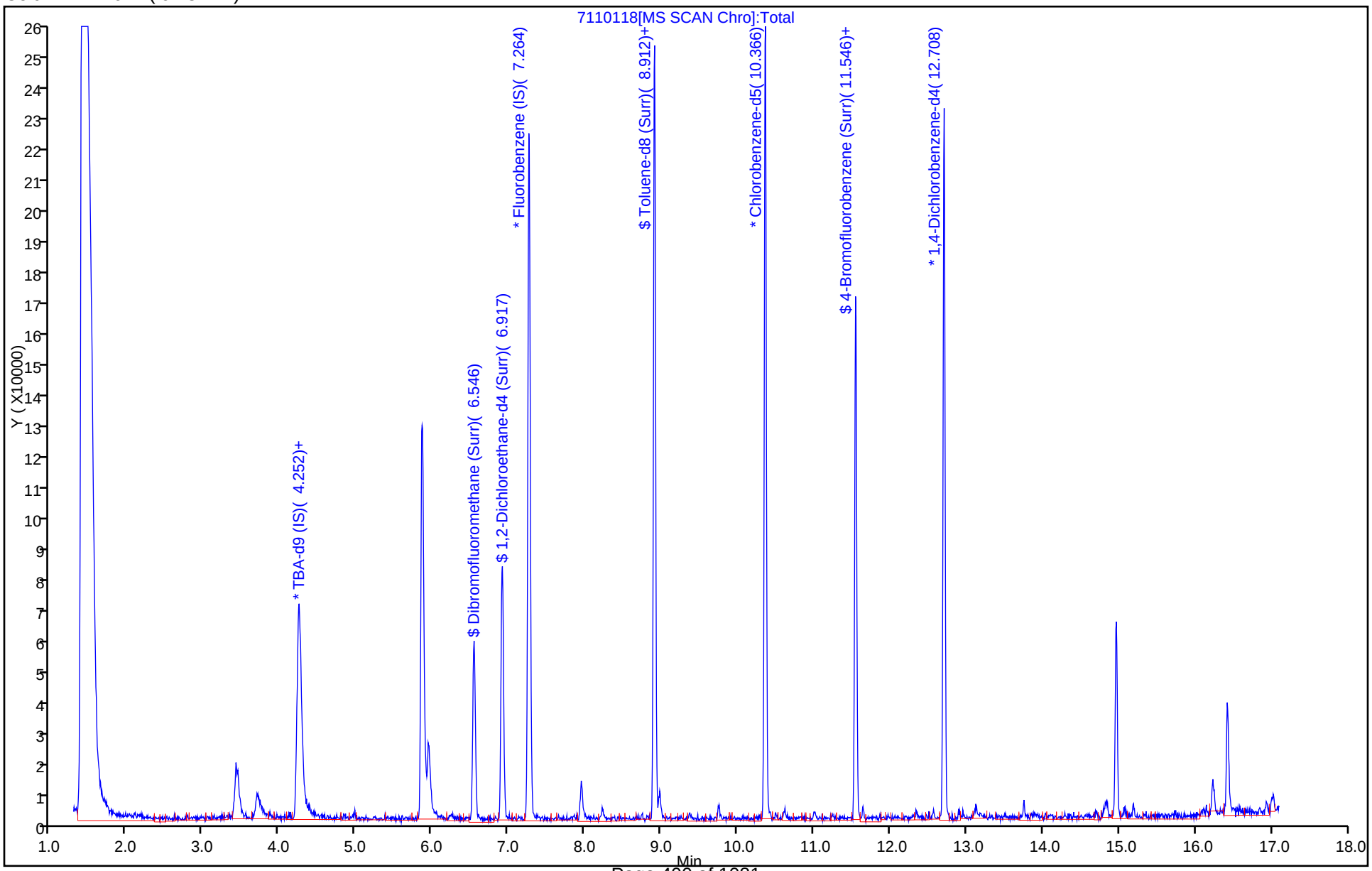
Report Date: 01-Nov-2017 17:04:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110118.D

Injection Date:	01-Nov-2017 16:23:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-A-7	Lab Sample ID:	180-71829-7	Worklist Smp#:	18
Client ID:	HD-QC3-0/1-3				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110118.D
Lims ID: 180-71829-A-7
Client ID: HD-QC3-0/1-3
Sample Type: Client
Inject. Date: 01-Nov-2017 16:23:30 ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-A-7
Misc. Info.: 180-0019129-018
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 17:04:13 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 17:04:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	38.5	77.09
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	33.4	66.80
$ 7 Toluene-d8 (Surr)	50.0	48.3	96.55
$ 8 4-Bromofluorobenzene (Surr)	50.0	42.1	84.17

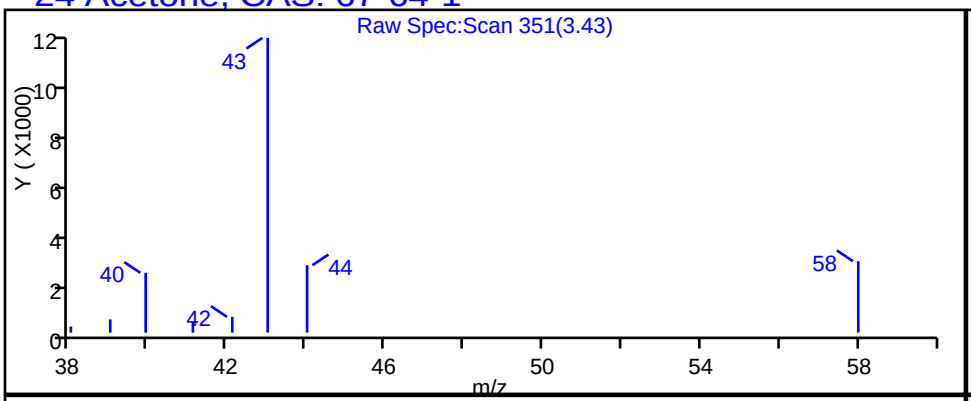
Report Date: 01-Nov-2017 17:04:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

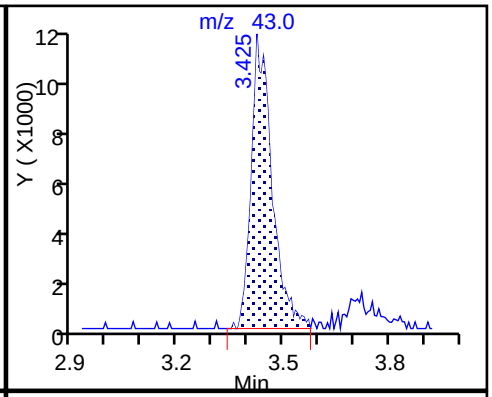
TestAmerica Pittsburgh

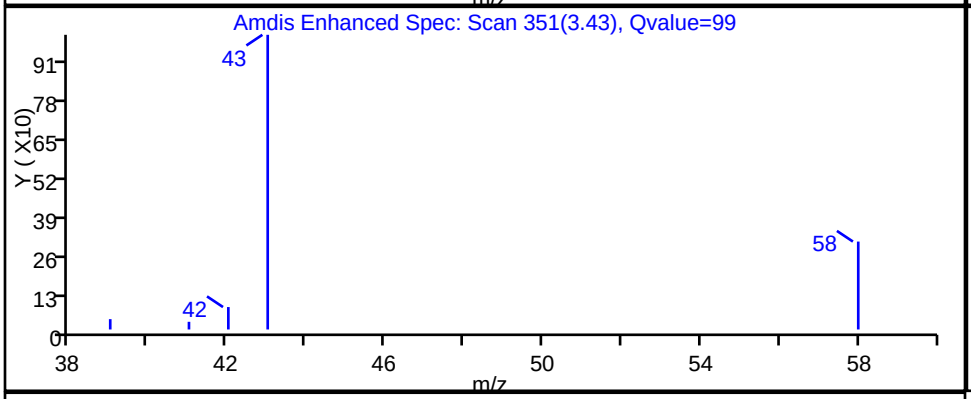
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110118.D

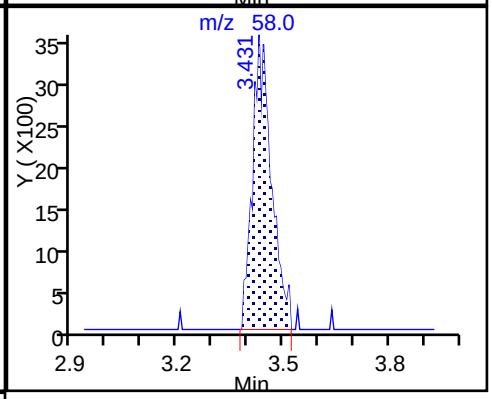
Injection Date:	01-Nov-2017 16:23:30	Instrument ID:	CHHP7
Lims ID:	180-71829-A-7	Lab Sample ID:	180-71829-7
Client ID:	HD-QC3-0/1-3		
Operator ID:	034635	ALS Bottle#:	19 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

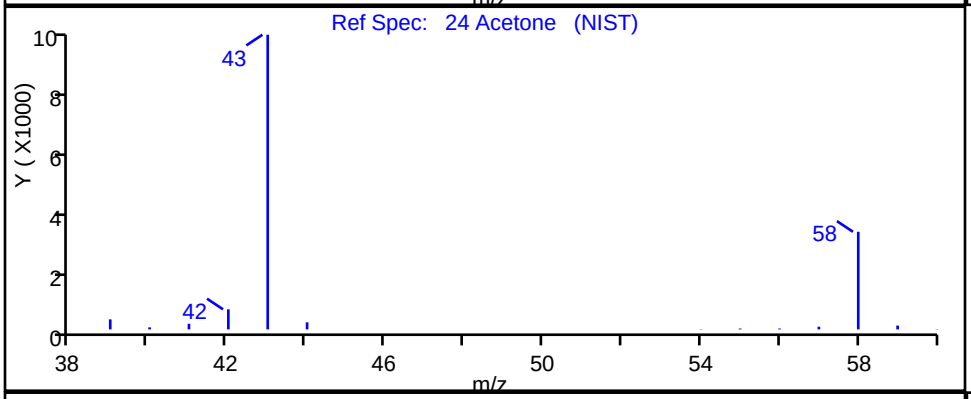
24 Acetone, CAS: 67-64-1

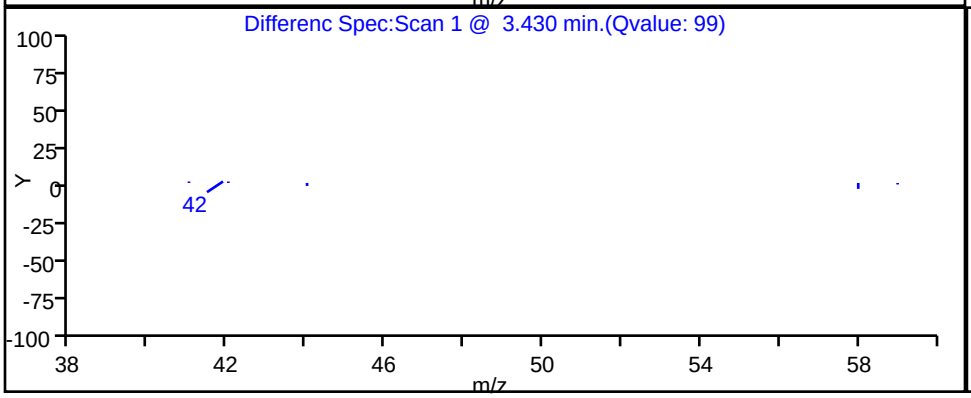


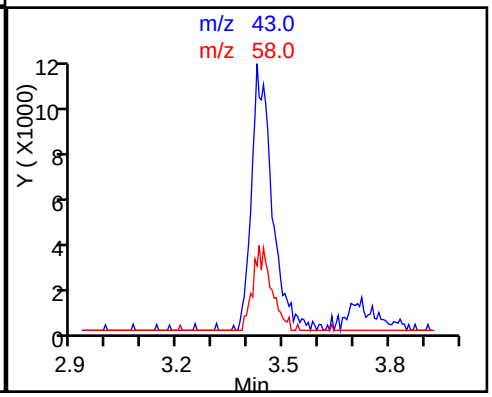












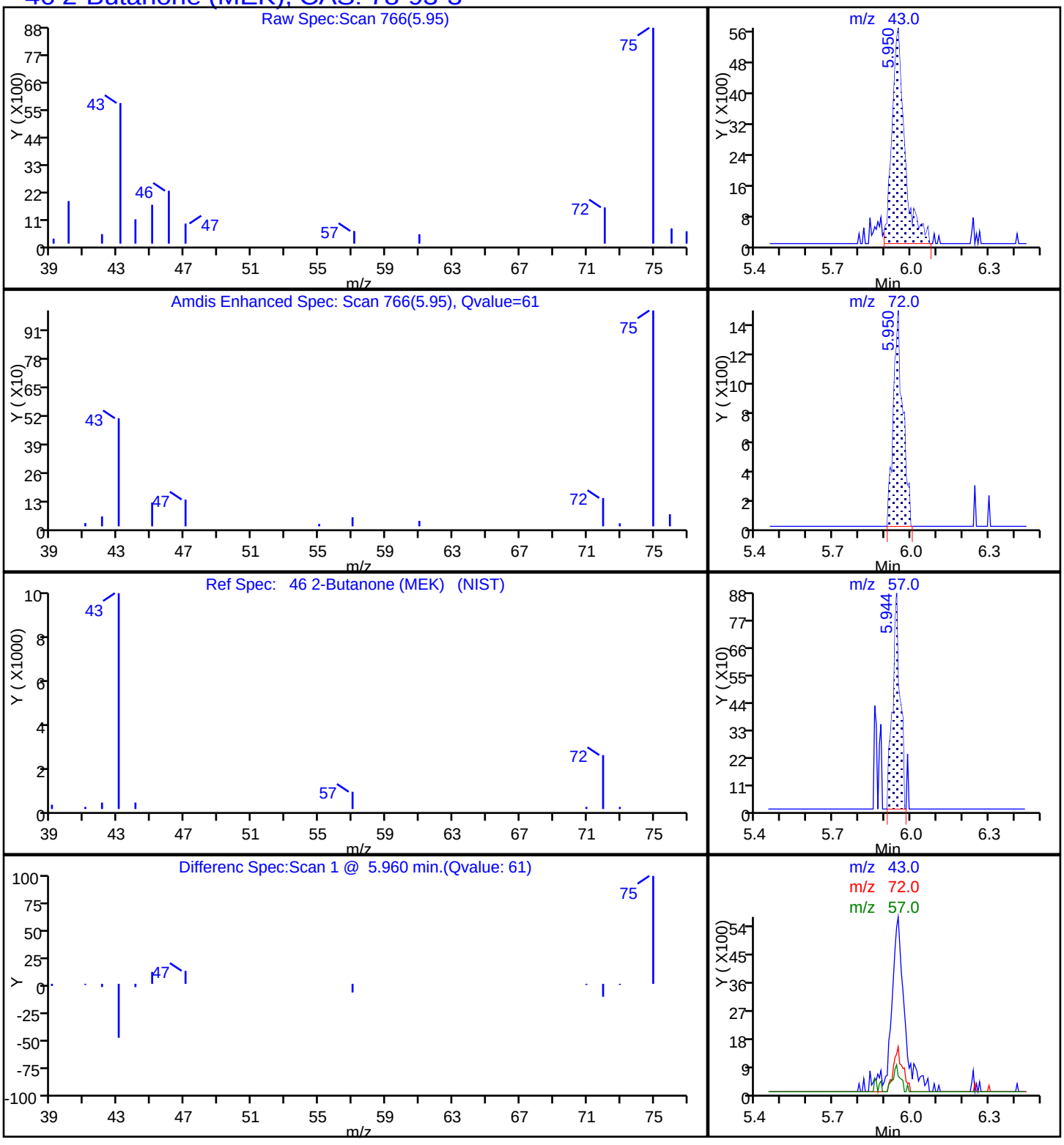
Report Date: 01-Nov-2017 17:04:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110118.D

Injection Date:	01-Nov-2017 16:23:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-A-7	Lab Sample ID:	180-71829-7		
Client ID:	HD-QC3-0/1-3				
Operator ID:	034635	ALS Bottle#:	19	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

46 2-Butanone (MEK), CAS: 78-93-3



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-356/356.5-0 | Lab Sample ID: 180-71829-8

Matrix: Water | Lab File ID: 7110221.D

Analysis Method: 8260C | Date Collected: 10/25/2017 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 14:45

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50	U ^c	50	45
75-01-4	Vinyl chloride	50	U ^c *	50	44
74-83-9	Bromomethane	50	U ^c	50	44
75-00-3	Chloroethane	50	U	50	45
75-35-4	1,1-Dichloroethene	50	U ^c *	50	28
67-64-1	Acetone	250	U ^c	250	170
75-15-0	Carbon disulfide	50	U	50	44
75-09-2	Methylene Chloride	30	J	50	18
156-60-5	trans-1,2-Dichloroethene	50	U	50	34
1634-04-4	Methyl tert-butyl ether	50	U	50	30
75-34-3	1,1-Dichloroethane	50	U	50	31
156-59-2	cis-1,2-Dichloroethene	1200		50	35
74-97-5	Bromochloromethane	50	U	50	31
78-93-3	2-Butanone (MEK)	250	U	250	130
67-66-3	Chloroform	50	U	50	30
71-55-6	1,1,1-Trichloroethane	50	U	50	30
56-23-5	Carbon tetrachloride	50	U	50	44
71-43-2	Benzene	50	U	50	30
107-06-2	1,2-Dichloroethane	50	U ^c	50	29
79-01-6	*Trichloroethene*	*3900*	*E*	*50*	*34*
78-87-5	1,2-Dichloropropane	50	U	50	33
75-27-4	Bromodichloromethane	50	U	50	32
10061-01-5	cis-1,3-Dichloropropene	50	U	50	30
108-10-1	4-Methyl-2-pentanone (MIBK)	250	U	250	150
108-88-3	Toluene	50	U	50	23
10061-02-6	trans-1,3-Dichloropropene	50	U	50	29
79-00-5	1,1,2-Trichloroethane	50	U	50	23
127-18-4	Tetrachloroethene	1500		50	23
591-78-6	2-Hexanone	250	U	250	160
124-48-1	Dibromochloromethane	50	U	50	42
106-93-4	1,2-Dibromoethane (EDB)	50	U	50	25
108-90-7	Chlorobenzene	50	U	50	25
630-20-6	1,1,1,2-Tetrachloroethane	50	U	50	29
100-41-4	Ethylbenzene	50	U	50	25
1330-20-7	Xylenes, Total	100	U	100	45

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-356/356.5-0 | Lab Sample ID: 180-71829-8

Matrix: Water | Lab File ID: 7110221.D

Analysis Method: 8260C | Date Collected: 10/25/2017 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 14:45

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-42-5	Styrene	50	U	50	24
75-25-2	Bromoform	50	U	50	49
79-34-5	1,1,2,2-Tetrachloroethane	50	U	50	30
107-13-1	Acrylonitrile	1000	U	1000	390
123-91-1	1,4-Dioxane	10000	U	10000	680

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79	^c	65-121
2037-26-5	Toluene-d8 (Surr)	116		73-120
460-00-4	4-Bromofluorobenzene (Surr)	108		80-120
1868-53-7	Dibromofluoromethane (Surr)	89		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110221.D
Lims ID: 180-71829-A-8
Client ID: HD-MW-136A-356/356.5-0
Sample Type: Client
Inject. Date: 02-Nov-2017 14:45:30 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 50.0000
Sample Info: 180-71829-A-8 ,50x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 15:34:10 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 15:34:10

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.264	4.252	0.012	98	178825	1000.0	
*	2 Fluorobenzene (IS)	96	7.269	7.263	0.006	98	233829	50.0	
*	3 Chlorobenzene-d5	119	10.365	10.366	-0.001	90	48694	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.708	12.708	0.000	97	70775	50.0	
$	5 Dibromofluoromethane (Surr	113	6.551	6.539	0.012	92	51605	44.6	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.916	6.910	0.006	92	88412	39.3	
$	7 Toluene-d8 (Surr)	98	8.912	8.912	0.000	93	213947	58.0	
$	8 4-Bromofluorobenzene (Surr	95	11.546	11.552	-0.006	87	84552	54.0	
	12 Chloromethane	50		1.782				ND	
	13 Vinyl chloride	62		1.928				ND	
	15 Bromomethane	94		2.275				ND	
	16 Chloroethane	64		2.415				ND	
	22 1,1-Dichloroethene	96		3.339				ND	
	24 Acetone	43		3.437				ND	
	26 Carbon disulfide	76		3.625				ND	
	31 Methylene Chloride	84	4.148	4.124	0.024	93	8937	3.04	
	33 Acrylonitrile	53		4.507				ND	
	34 trans-1,2-Dichloroethene	96		4.544				ND	
	35 Methyl tert-butyl ether	73		4.562				ND	
	37 1,1-Dichloroethane	63		5.183				ND	
	45 cis-1,2-Dichloroethene	96	5.943	5.931	0.012	83	188745	124.0	
	46 2-Butanone (MEK)	43		5.937				ND	
	49 Chlorobromomethane	128		6.223				ND	
	52 Chloroform	83	6.363	6.357	0.006	16	1701	0.5757	
	53 1,1,1-Trichloroethane	97	6.515	6.521	-0.006	1	1953	0.9777	
	56 Carbon tetrachloride	117		6.691				ND	
	58 Benzene	78		6.916				ND	
	59 1,2-Dichloroethane	62		7.002				ND	
	64 Trichloroethene	130	7.652	7.653	-0.001	96	554509	385.6	E
	67 1,2-Dichloropropane	63		7.920				ND	
	70 1,4-Dioxane	88		8.005				ND	
	71 Dichlorobromomethane	83		8.212				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.650				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802				ND	
76 Toluene	91		8.979				ND	
77 trans-1,3-Dichloropropene	75		9.228				ND	
79 1,1,2-Trichloroethane	97		9.423				ND	
80 Tetrachloroethene	164	9.496	9.496	0.000	94	129241	152.8	
82 2-Hexanone	43		9.636				ND	
84 Chlorodibromomethane	129		9.794				ND	
85 Ethylene Dibromide	107		9.903				ND	
87 Chlorobenzene	112		10.390				ND	
89 1,1,1,2-Tetrachloroethane	131		10.481				ND	
90 Ethylbenzene	106		10.487				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		11.005				ND	
93 Styrene	104		11.029				ND	
94 Bromoform	173		11.211				ND	
99 1,1,2,2-Tetrachloroethane	83		11.686				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

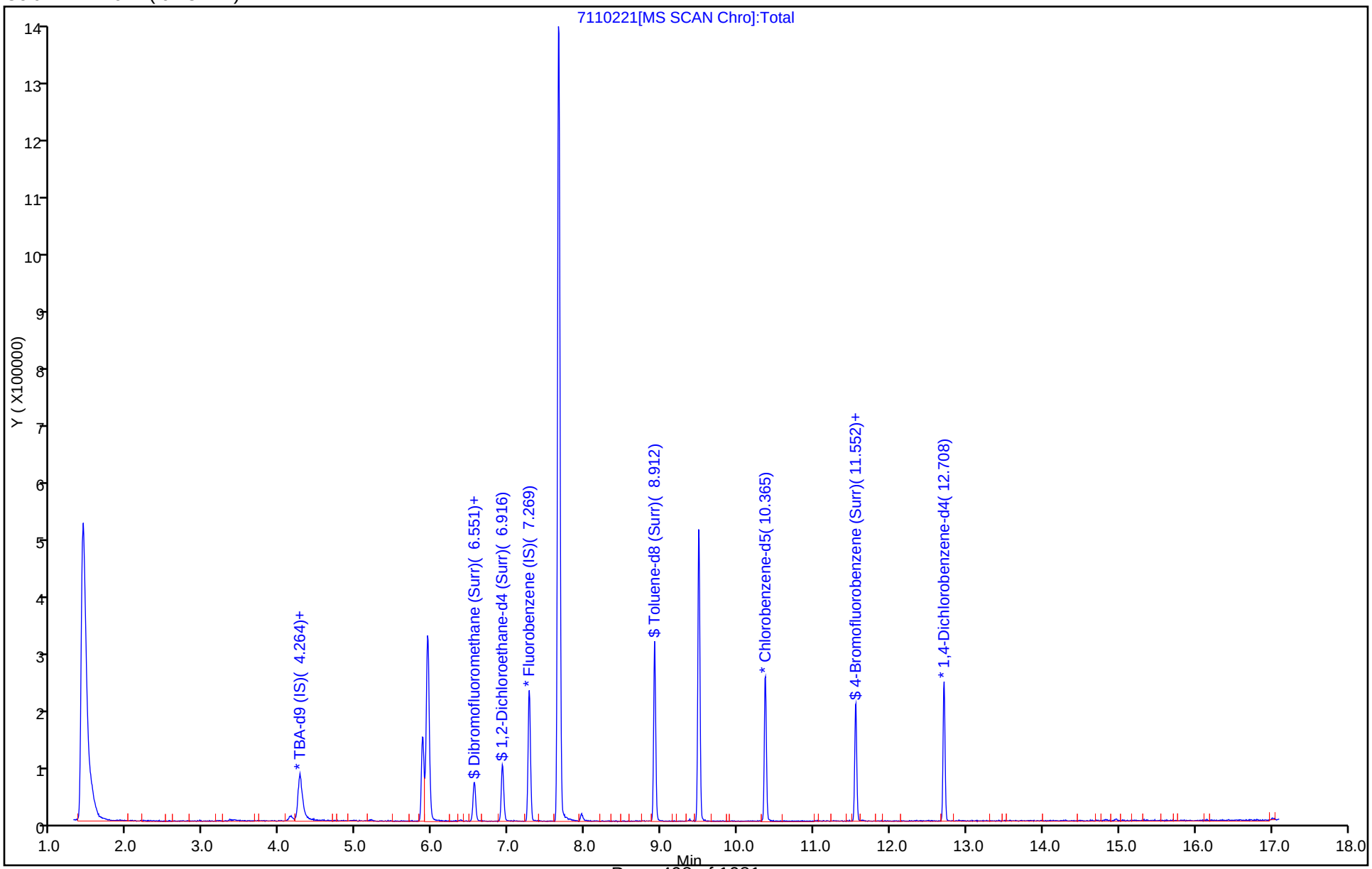
Report Date: 02-Nov-2017 15:34:17 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110221.D

Injection Date:	02-Nov-2017 14:45:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-A-8	Lab Sample ID:	180-71829-8	Worklist Smp#:	21
Client ID:	HD-MW-136A-356/356.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	50.0000	ALS Bottle#:	21
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110221.D
Lims ID: 180-71829-A-8
Client ID: HD-MW-136A-356/356.5-0
Sample Type: Client
Inject. Date: 02-Nov-2017 14:45:30 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 50.0000
Sample Info: 180-71829-A-8 ,50x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 15:34:10 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 15:34:10

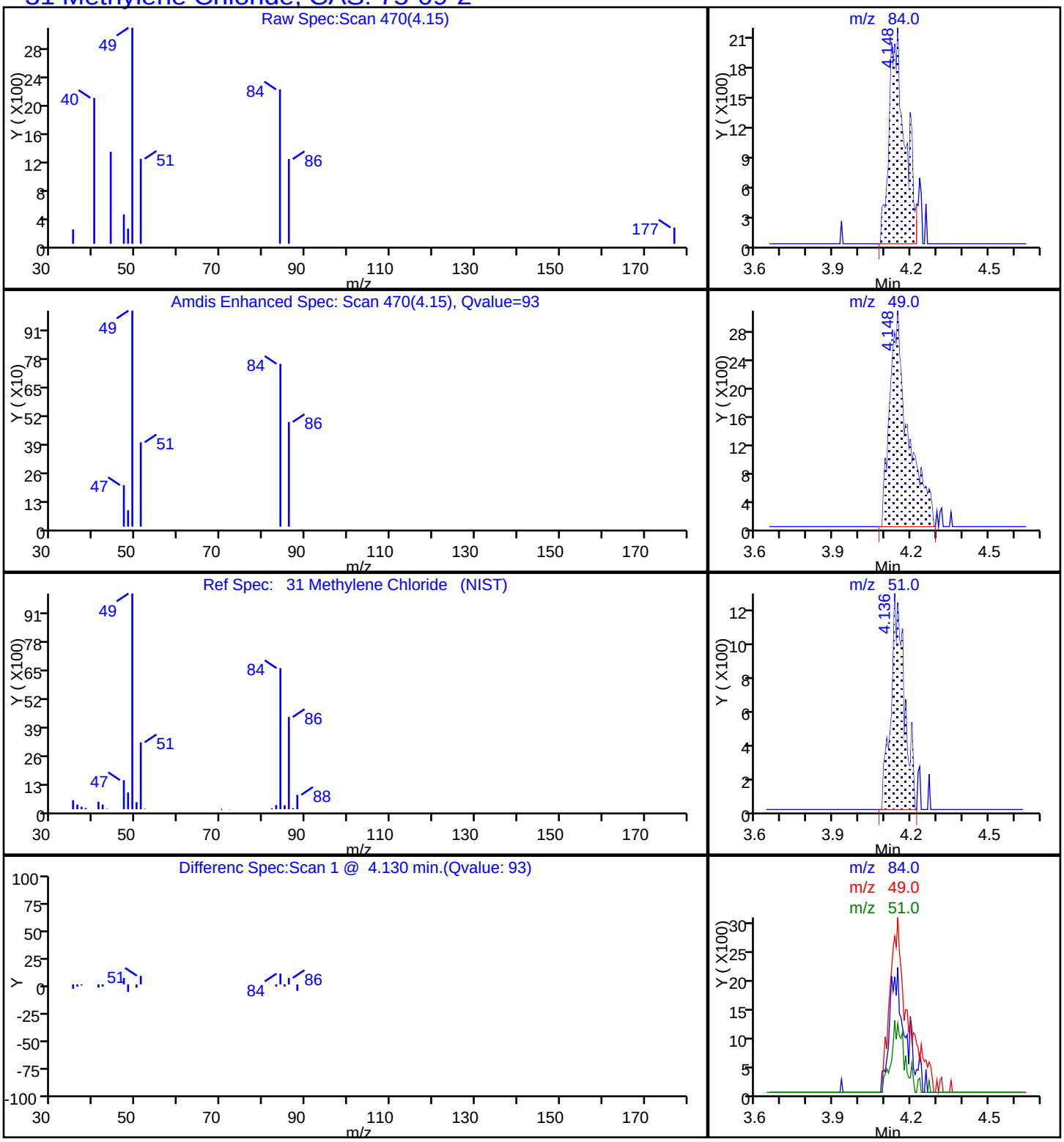
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	44.6	89.20
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	39.3	78.57
$ 7 Toluene-d8 (Surr)	50.0	58.0	116.00
$ 8 4-Bromofluorobenzene (Surr)	50.0	54.0	107.96

Report Date: 02-Nov-2017 15:34:17 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110221.D				
Injection Date:	02-Nov-2017 14:45:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-A-8	Lab Sample ID:	180-71829-8		
Client ID:	HD-MW-136A-356/356.5-0				
Operator ID:	034635	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



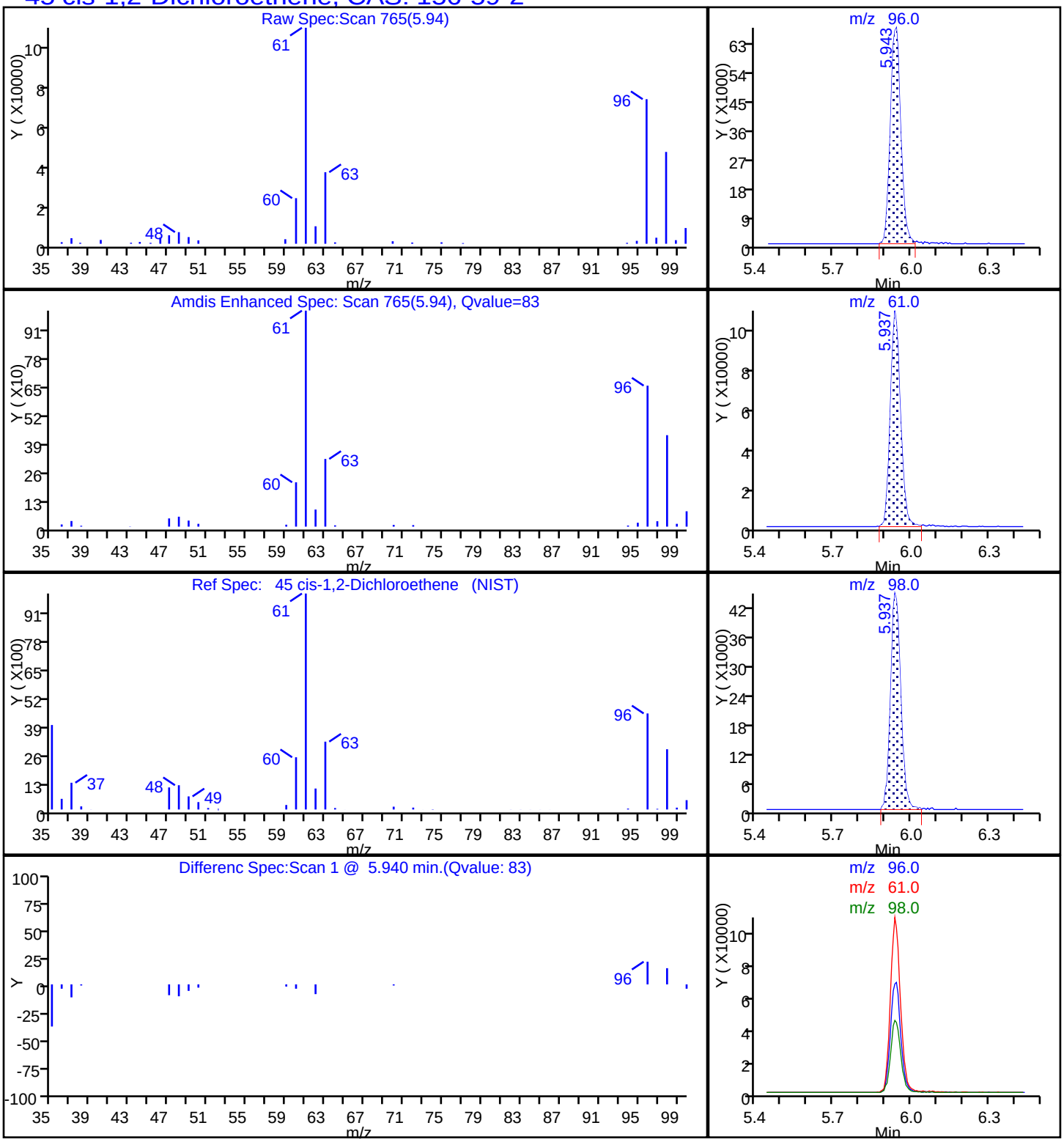
Report Date: 02-Nov-2017 15:34:17 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110221.D

Injection Date:	02-Nov-2017 14:45:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-A-8	Lab Sample ID:	180-71829-8		
Client ID:	HD-MW-136A-356/356.5-0				
Operator ID:	034635	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

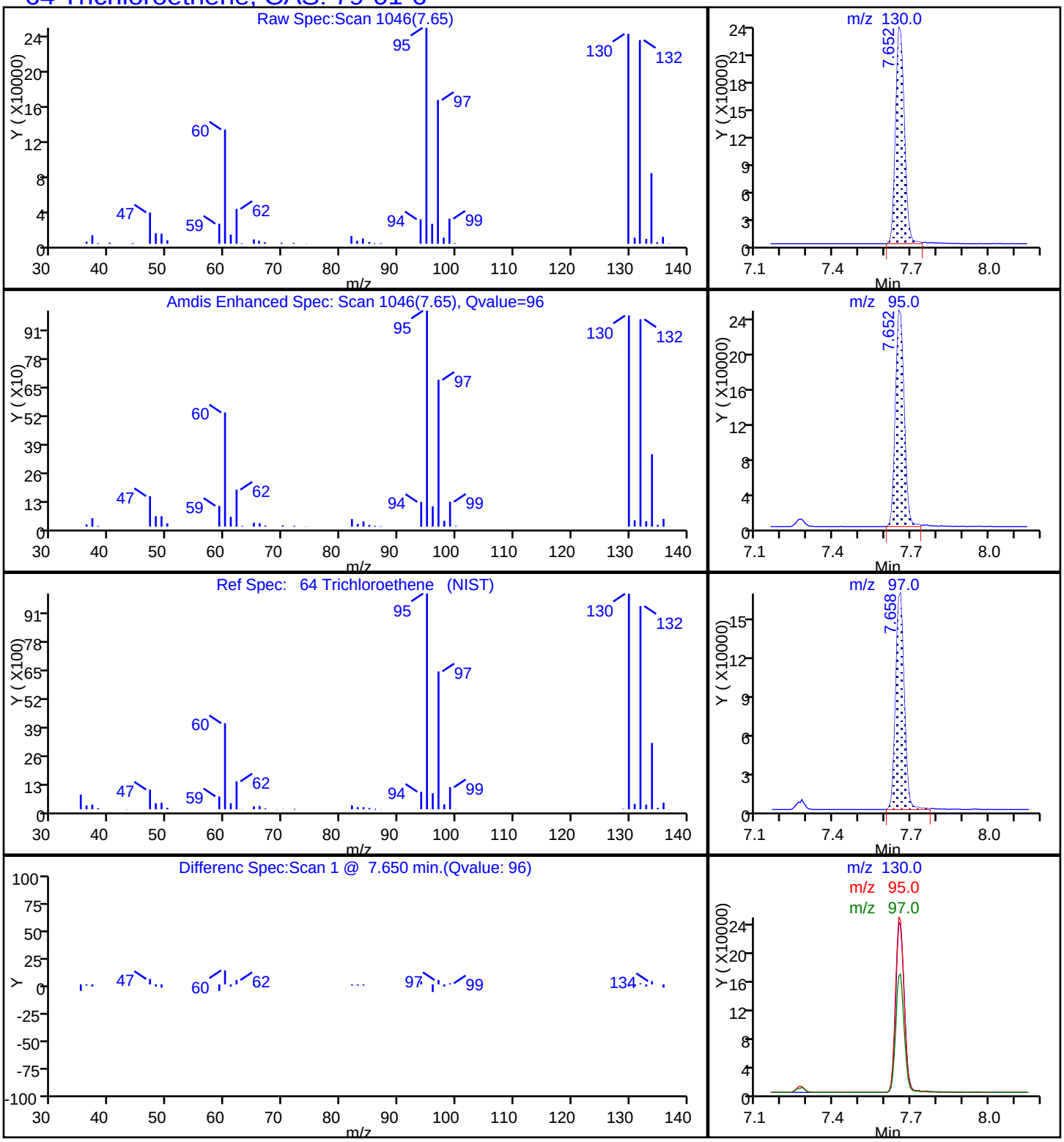


Report Date: 02-Nov-2017 15:34:18 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110221.D				
Injection Date:	02-Nov-2017 14:45:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-A-8	Lab Sample ID:	180-71829-8		
Client ID:	HD-MW-136A-356/356.5-0				
Operator ID:	034635	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



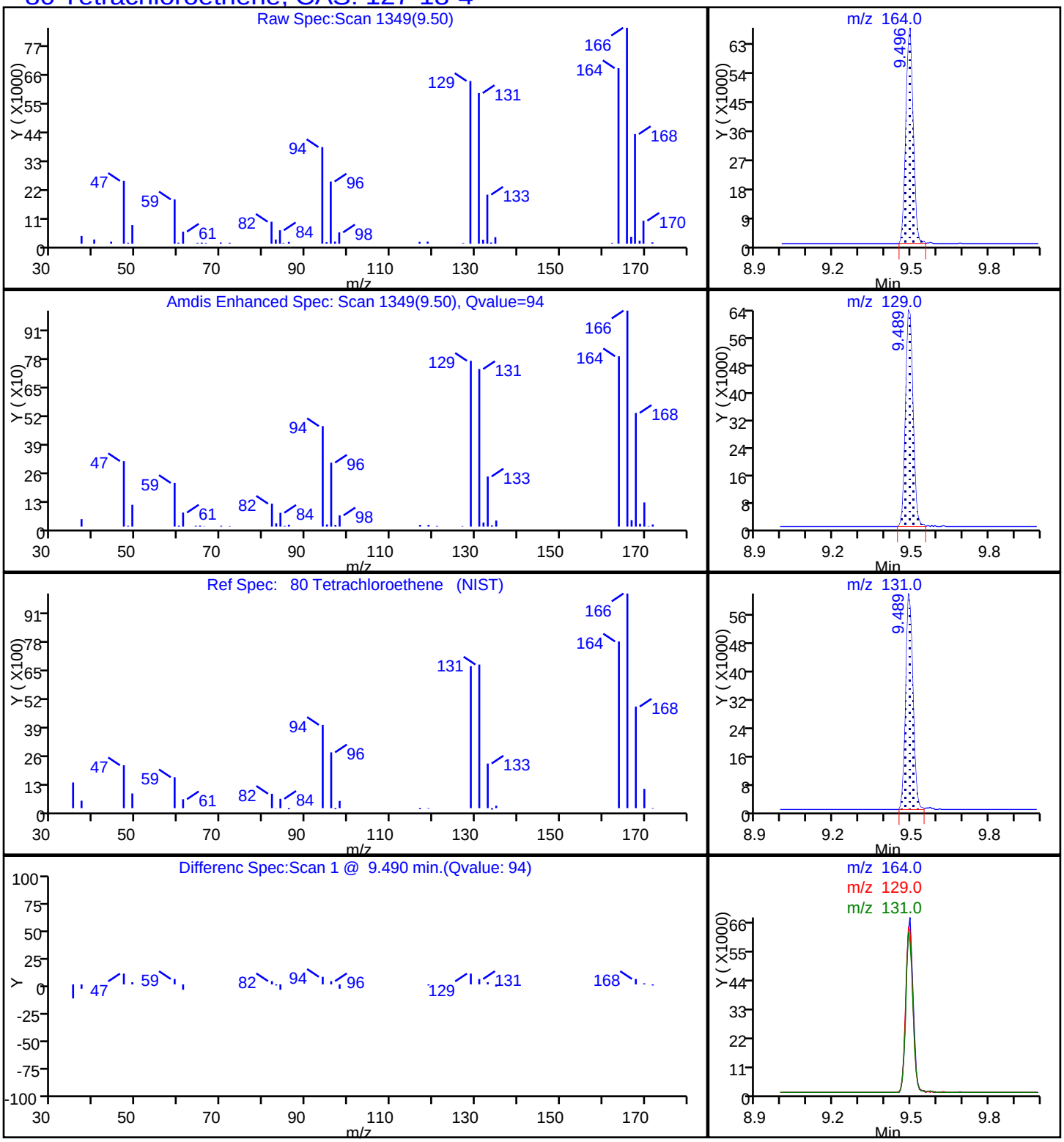
Report Date: 02-Nov-2017 15:34:18 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110221.D

Injection Date:	02-Nov-2017 14:45:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-A-8	Lab Sample ID:	180-71829-8		
Client ID:	HD-MW-136A-356/356.5-0				
Operator ID:	034635	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-356/356.5-0 DL | Lab Sample ID: 180-71829-8 DL

Matrix: Water | Lab File ID: 7110210.D

Analysis Method: 8260C | Date Collected: 10/25/2017 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 09:17

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	500	U ^c	500	450
75-01-4	Vinyl chloride	500	U ^c *	500	440
74-83-9	Bromomethane	500	U ^c	500	440
75-00-3	Chloroethane	500	U	500	450
75-35-4	1,1-Dichloroethene	500	U ^c *	500	280
67-64-1	Acetone	2500	U ^c	2500	1700
75-15-0	Carbon disulfide	500	U	500	440
75-09-2	Methylene Chloride	500	U	500	180
156-60-5	trans-1,2-Dichloroethene	500	U	500	340
1634-04-4	Methyl tert-butyl ether	500	U	500	300
75-34-3	1,1-Dichloroethane	500	U	500	310
156-59-2	cis-1,2-Dichloroethene	1500		500	350
74-97-5	Bromochloromethane	500	U	500	310
78-93-3	2-Butanone (MEK)	2500	U	2500	1300
67-66-3	Chloroform	500	U	500	300
71-55-6	1,1,1-Trichloroethane	500	U	500	300
56-23-5	Carbon tetrachloride	500	U	500	440
71-43-2	Benzene	500	U	500	300
107-06-2	1,2-Dichloroethane	500	U ^c	500	290
79-01-6	Trichloroethene	5600		500	340
78-87-5	1,2-Dichloropropane	500	U	500	330
75-27-4	Bromodichloromethane	500	U	500	320
10061-01-5	cis-1,3-Dichloropropene	500	U	500	300
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	U	2500	1500
108-88-3	Toluene	500	U	500	230
10061-02-6	trans-1,3-Dichloropropene	500	U	500	290
79-00-5	1,1,2-Trichloroethane	500	U	500	230
127-18-4	Tetrachloroethene	1600		500	230
591-78-6	2-Hexanone	2500	U	2500	1600
124-48-1	Dibromochloromethane	500	U	500	420
106-93-4	1,2-Dibromoethane (EDB)	500	U	500	250
108-90-7	Chlorobenzene	500	U	500	250
630-20-6	1,1,1,2-Tetrachloroethane	500	U	500	290
100-41-4	Ethylbenzene	500	U	500	250

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-356/356.5-0 DL Lab Sample ID: 180-71829-8 DL

Matrix: Water Lab File ID: 7110210.D

Analysis Method: 8260C Date Collected: 10/25/2017 11:00

Sample wt/vol: 5(mL) Date Analyzed: 11/02/2017 09:17

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.: 227768 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	*Xylenes, Total*	*1000*	*U*	*1000*	*450*
100-42-5	*Styrene*	*500*	*U*	*500*	*240*
75-25-2	*Bromoform*	*500*	*U*	*500*	*490*
79-34-5	*1,1,2,2-Tetrachloroethane*	*500*	*U*	*500*	*300*
107-13-1	*Acrylonitrile*	*10000*	*U*	*10000*	*3900*
123-91-1	*1,4-Dioxane*	*100000*	*U*	*100000*	*6800*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81	*^c*	65-121
2037-26-5	Toluene-d8 (Surr)	108		73-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110210.D
Lims ID: 180-71829-C-8
Client ID: HD-MW-136A-356/356.5-0
Sample Type: Client
Inject. Date: 02-Nov-2017 09:17:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 500.0000
Sample Info: 180-71829-C-8 ,500x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2017 07:09:33 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: journetp Date: 02-Nov-2017 10:07:40

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.258	4.252	0.006	99	183509	1000.0	
*	2 Fluorobenzene (IS)	96	7.269	7.263	0.006	98	231631	50.0	
*	3 Chlorobenzene-d5	119	10.366	10.366	0.000	90	52850	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.708	12.708	0.000	97	73983	50.0	
$	5 Dibromofluoromethane (Surr	113	6.551	6.539	0.012	94	53658	46.8	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.916	6.910	0.006	92	90529	40.6	
$	7 Toluene-d8 (Surr)	98	8.912	8.912	0.000	94	216297	54.0	
$	8 4-Bromofluorobenzene (Surr	95	11.552	11.552	0.000	85	83621	48.9	
	12 Chloromethane	50		1.782				ND	
	13 Vinyl chloride	62		1.928				ND	
	15 Bromomethane	94		2.275				ND	
	16 Chloroethane	64		2.415				ND	
	22 1,1-Dichloroethene	96		3.339				ND	
	24 Acetone	43		3.437				ND	
	26 Carbon disulfide	76		3.625				ND	
	31 Methylene Chloride	84		4.124				ND	
	33 Acrylonitrile	53		4.507				ND	
	34 trans-1,2-Dichloroethene	96		4.544				ND	
	35 Methyl tert-butyl ether	73		4.562				ND	
	37 1,1-Dichloroethane	63		5.183				ND	
	45 cis-1,2-Dichloroethene	96	5.943	5.931	0.012	82	22140	14.7	M
	46 2-Butanone (MEK)	43		5.937				ND	
	49 Chlorobromomethane	128		6.223				ND	
	52 Chloroform	83	6.375	6.357	0.018	1	1574	0.5378	
	53 1,1,1-Trichloroethane	97		6.521				ND	
	56 Carbon tetrachloride	117		6.691				ND	
	58 Benzene	78		6.916				ND	
	59 1,2-Dichloroethane	62		7.002				ND	
	64 Trichloroethene	130	7.659	7.653	0.006	96	79798	56.0	
	67 1,2-Dichloropropane	63		7.920				ND	
	70 1,4-Dioxane	88		8.005				ND	
	71 Dichlorobromomethane	83		8.212				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.650				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802				ND	
76 Toluene	91		8.979				ND	
77 trans-1,3-Dichloropropene	75		9.228				ND	
79 1,1,2-Trichloroethane	97		9.423				ND	
80 Tetrachloroethene	164	9.490	9.496	-0.006	96	14985	16.3	
82 2-Hexanone	43		9.636				ND	
84 Chlorodibromomethane	129		9.794				ND	
85 Ethylene Dibromide	107		9.903				ND	
87 Chlorobenzene	112		10.390				ND	
89 1,1,1,2-Tetrachloroethane	131		10.481				ND	
90 Ethylbenzene	106		10.487				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		11.005				ND	
93 Styrene	104		11.029				ND	
94 Bromoform	173		11.211				ND	
99 1,1,2,2-Tetrachloroethane	83		11.686				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

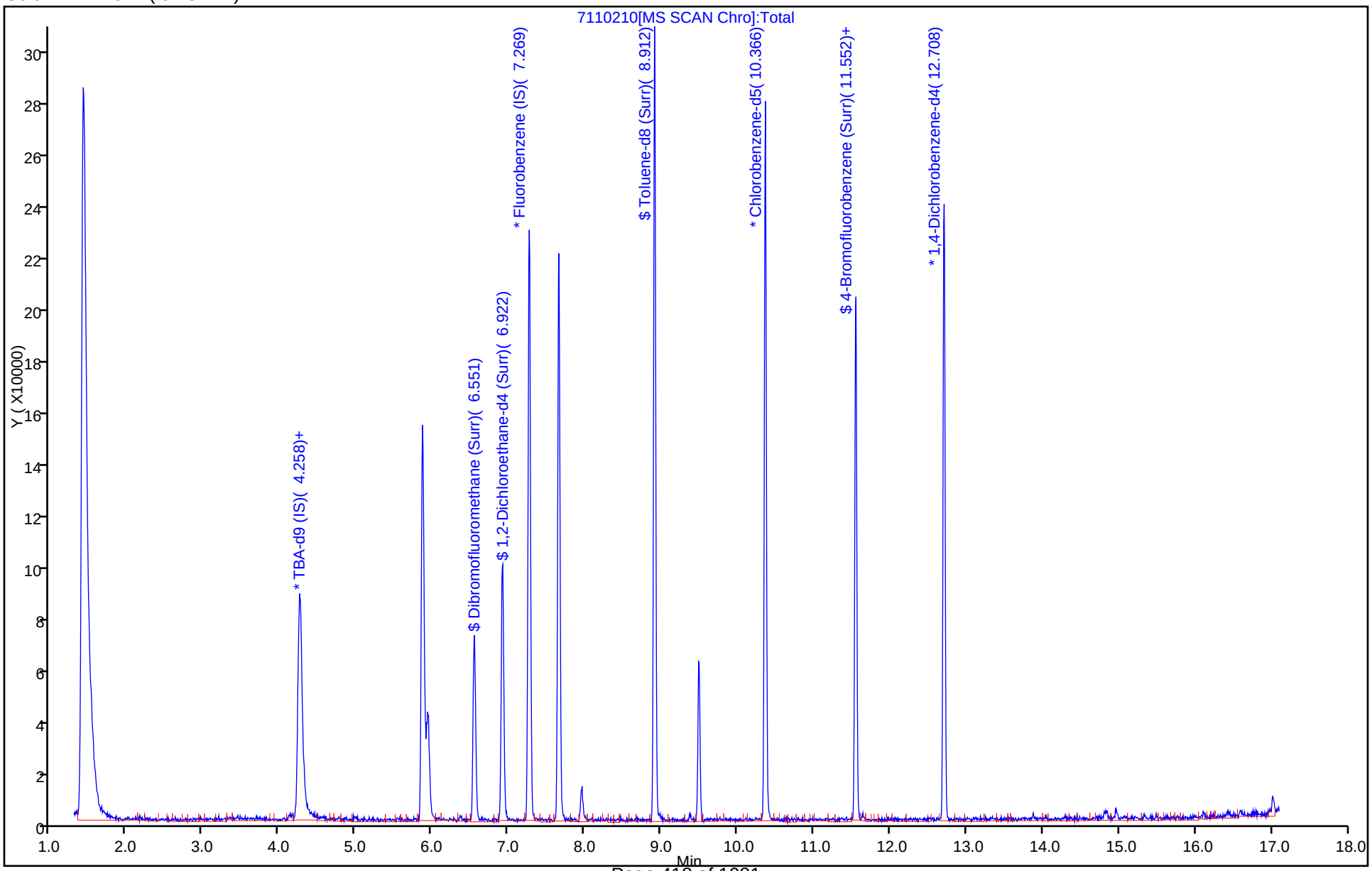
Report Date: 03-Nov-2017 07:09:38 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110210.D

Injection Date:	02-Nov-2017 09:17:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-C-8	Lab Sample ID:	180-71829-8	Worklist Smp#:	10
Client ID:	HD-MW-136A-356/356.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	500.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110210.D
Lims ID: 180-71829-C-8
Client ID: HD-MW-136A-356/356.5-0
Sample Type: Client
Inject. Date: 02-Nov-2017 09:17:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 500.0000
Sample Info: 180-71829-C-8 ,500x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2017 07:09:33 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: journetp Date: 02-Nov-2017 10:07:40

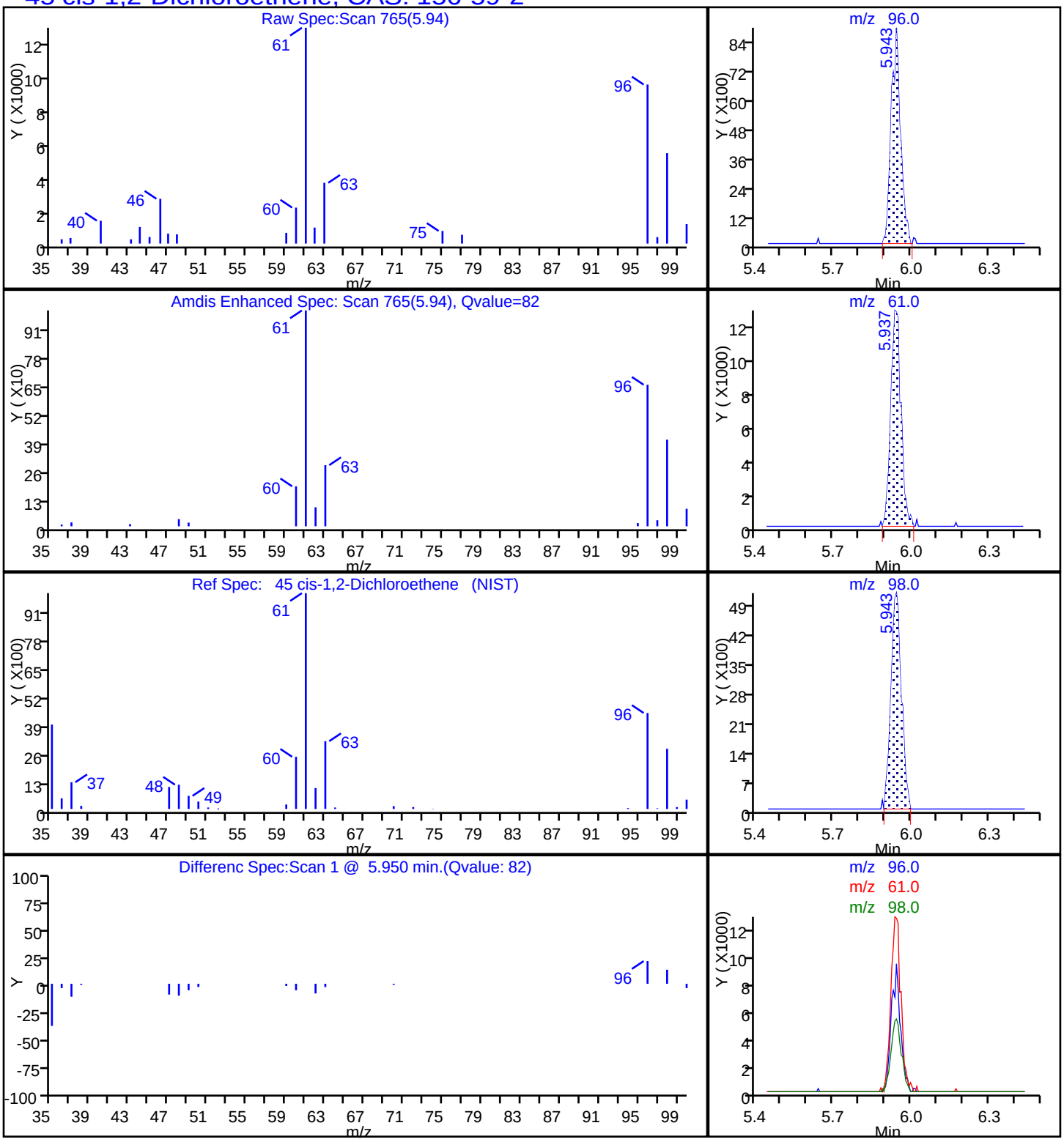
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	46.8	93.63
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	40.6	81.22
$ 7 Toluene-d8 (Surr)	50.0	54.0	108.05
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.9	97.70

Report Date: 03-Nov-2017 07:09:38 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110210.D				
Injection Date:	02-Nov-2017 09:17:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-8	Lab Sample ID:	180-71829-8		
Client ID:	HD-MW-136A-356/356.5-0				
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

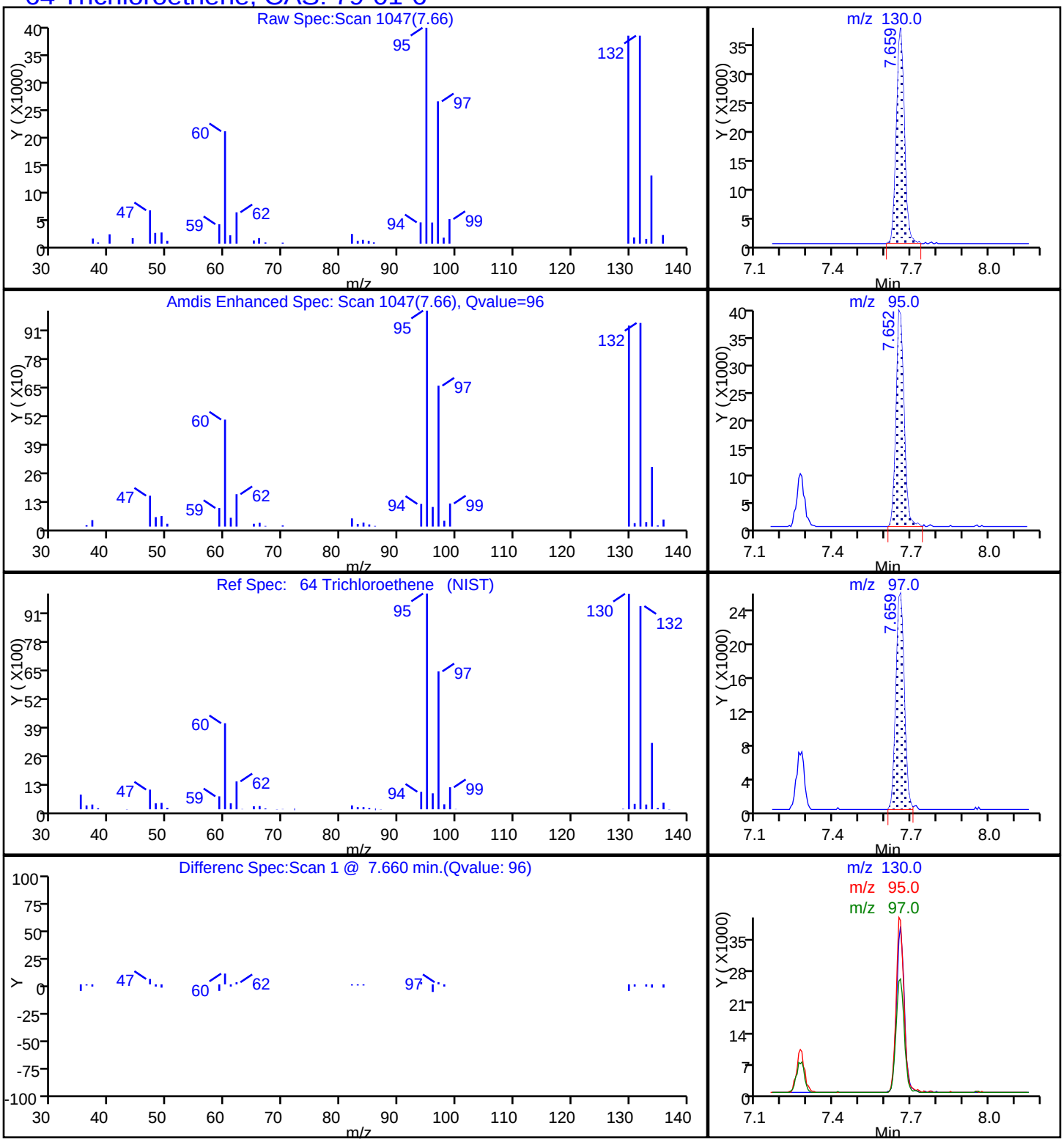


Report Date: 03-Nov-2017 07:09:38 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110210.D				
Injection Date:	02-Nov-2017 09:17:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-8	Lab Sample ID:	180-71829-8		
Client ID:	HD-MW-136A-356/356.5-0				
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



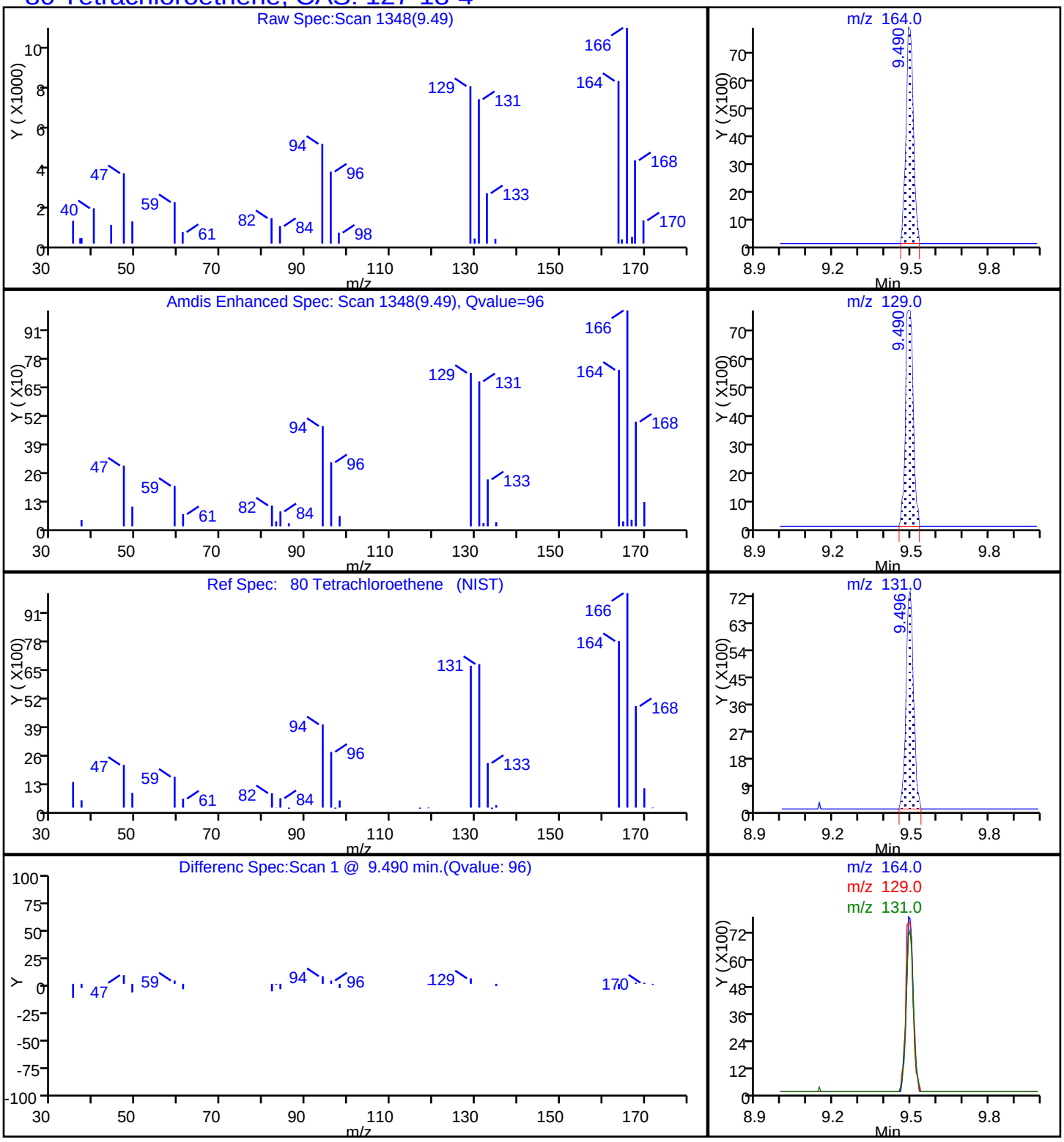
Report Date: 03-Nov-2017 07:09:38 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110210.D

Injection Date:	02-Nov-2017 09:17:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-8	Lab Sample ID:	180-71829-8		
Client ID:	HD-MW-136A-356/356.5-0				
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP7	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

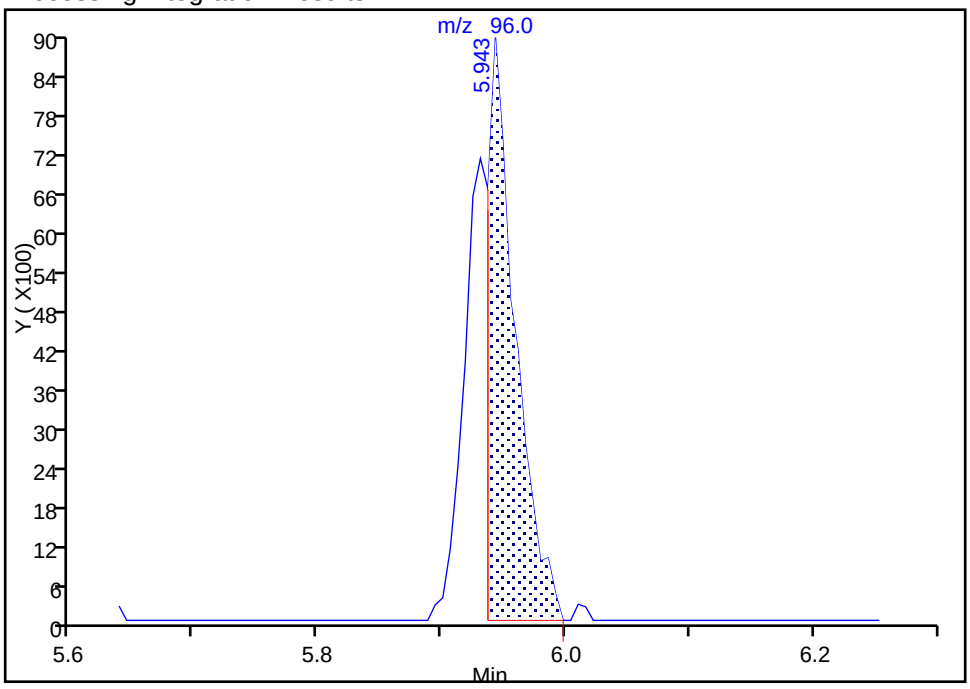
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110210.D				
Injection Date:	02-Nov-2017 09:17:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-8	Lab Sample ID:	180-71829-8		
Client ID:	HD-MW-136A-356/356.5-0				
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Signal: 1

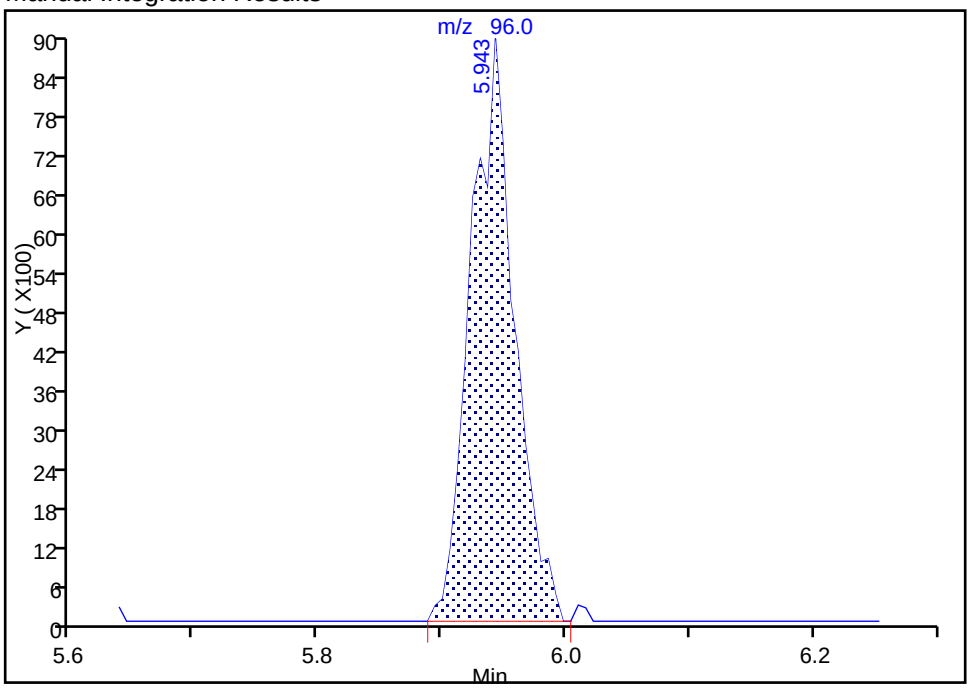
Processing Integration Results

RT: 5.94
Area: 14210
Amount: 9.422617
Amount Units: ng



Manual Integration Results

RT: 5.94
Area: 22140
Amount: 14.680980
Amount Units: ng



Reviewer: journetp, 02-Nov-2017 12:58:08

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-372.5/373-0 | Lab Sample ID: 180-71829-9

Matrix: Water | Lab File ID: 7110224.D

Analysis Method: 8260C | Date Collected: 10/25/2017 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 16:14

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50	U ^c	50	45
75-01-4	Vinyl chloride	50	U ^c *	50	44
74-83-9	Bromomethane	50	U ^c	50	44
75-00-3	Chloroethane	50	U	50	45
75-35-4	1,1-Dichloroethene	50	U ^c *	50	28
67-64-1	Acetone	250	U ^c	250	170
75-15-0	Carbon disulfide	50	U	50	44
75-09-2	Methylene Chloride	120		50	18
156-60-5	trans-1,2-Dichloroethene	50	U	50	34
1634-04-4	Methyl tert-butyl ether	50	U	50	30
75-34-3	1,1-Dichloroethane	50	U	50	31
156-59-2	*cis-1,2-Dichloroethene*	*5500*	*E*	*50*	*35*
74-97-5	Bromochloromethane	50	U	50	31
78-93-3	2-Butanone (MEK)	250	U	250	130
67-66-3	Chloroform	50	U	50	30
71-55-6	1,1,1-Trichloroethane	50	U	50	30
56-23-5	Carbon tetrachloride	50	U	50	44
71-43-2	Benzene	50	U	50	30
107-06-2	1,2-Dichloroethane	50	U ^c	50	29
79-01-6	*Trichloroethene*	*5100*	*E*	*50*	*34*
78-87-5	1,2-Dichloropropane	50	U	50	33
75-27-4	Bromodichloromethane	50	U	50	32
10061-01-5	cis-1,3-Dichloropropene	50	U	50	30
108-10-1	4-Methyl-2-pentanone (MIBK)	250	U	250	150
108-88-3	Toluene	50	U	50	23
10061-02-6	trans-1,3-Dichloropropene	50	U	50	29
79-00-5	1,1,2-Trichloroethane	50	U	50	23
127-18-4	Tetrachloroethene	2000		50	23
591-78-6	2-Hexanone	250	U	250	160
124-48-1	Dibromochloromethane	50	U	50	42
106-93-4	1,2-Dibromoethane (EDB)	50	U	50	25
108-90-7	Chlorobenzene	50	U	50	25
630-20-6	1,1,1,2-Tetrachloroethane	50	U	50	29
100-41-4	Ethylbenzene	50	U	50	25
1330-20-7	Xylenes, Total	100	U	100	45

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-372.5/373-0 | Lab Sample ID: 180-71829-9

Matrix: Water | Lab File ID: 7110224.D

Analysis Method: 8260C | Date Collected: 10/25/2017 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 16:14

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-42-5	Styrene	50	U	50	24
75-25-2	Bromoform	50	U	50	49
79-34-5	1,1,2,2-Tetrachloroethane	50	U	50	30
107-13-1	Acrylonitrile	1000	U	1000	390
123-91-1	1,4-Dioxane	10000	U	10000	680

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84	^c	65-121
2037-26-5	Toluene-d8 (Surr)	112		73-120
460-00-4	4-Bromofluorobenzene (Surr)	104		80-120
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110224.D
Lims ID: 180-71829-C-9
Client ID: HD-MW-136A-372.5/373-0
Sample Type: Client
Inject. Date: 02-Nov-2017 16:14:30 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 50.0000
Sample Info: 180-71829-C-9 ,50x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2017 07:06:25 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: journetp Date: 03-Nov-2017 07:06:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.259	4.252	0.007	99	188597	1000.0	
* 2 Fluorobenzene (IS)	96	7.265	7.263	0.002	98	220389	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.366	-0.005	90	49494	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.709	12.708	0.001	97	73054	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.541	6.539	0.002	93	50061	45.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.912	6.910	0.002	92	89267	42.1	
$ 7 Toluene-d8 (Surr)	98	8.913	8.912	0.001	94	209712	55.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.547	11.552	-0.005	86	82855	51.9	
12 Chloromethane	50		1.782				ND	
13 Vinyl chloride	62		1.928				ND	
15 Bromomethane	94		2.275				ND	
16 Chloroethane	64		2.415				ND	
22 1,1-Dichloroethene	96	3.353	3.339	0.014	13	1964	1.45	
24 Acetone	43		3.437				ND	
26 Carbon disulfide	76		3.625				ND	
31 Methylene Chloride	84	4.150	4.124	0.026	95	19454	11.5	
33 Acrylonitrile	53		4.507				ND	
34 trans-1,2-Dichloroethene	96		4.544				ND	
35 Methyl tert-butyl ether	73		4.562				ND	
37 1,1-Dichloroethane	63		5.183				ND	
45 cis-1,2-Dichloroethene	96	5.932	5.931	0.001	84	792994	552.7	E
46 2-Butanone (MEK)	43		5.937				ND	
49 Chlorobromomethane	128		6.223				ND	
52 Chloroform	83	6.370	6.357	0.013	32	1336	0.4798	M
53 1,1,1-Trichloroethane	97	6.529	6.521	0.007	35	4901	2.60	
56 Carbon tetrachloride	117		6.691				ND	
58 Benzene	78		6.916				ND	
59 1,2-Dichloroethane	62		7.002				ND	
64 Trichloroethene	130	7.654	7.653	0.001	96	695275	513.0	E
67 1,2-Dichloropropane	63		7.920				ND	
70 1,4-Dioxane	88		8.005				ND	
71 Dichlorobromomethane	83		8.212				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.650				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802				ND	
76 Toluene	91		8.979				ND	
77 trans-1,3-Dichloropropene	75		9.228				ND	
79 1,1,2-Trichloroethane	97		9.423				ND	
80 Tetrachloroethene	164	9.491	9.496	-0.005	95	175096	203.7	
82 2-Hexanone	43		9.636				ND	
84 Chlorodibromomethane	129		9.794				ND	
85 Ethylene Dibromide	107		9.903				ND	
87 Chlorobenzene	112		10.390				ND	
89 1,1,1,2-Tetrachloroethane	131		10.481				ND	
90 Ethylbenzene	106		10.487				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		11.005				ND	
93 Styrene	104		11.029				ND	
94 Bromoform	173		11.211				ND	
99 1,1,2,2-Tetrachloroethane	83		11.686				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

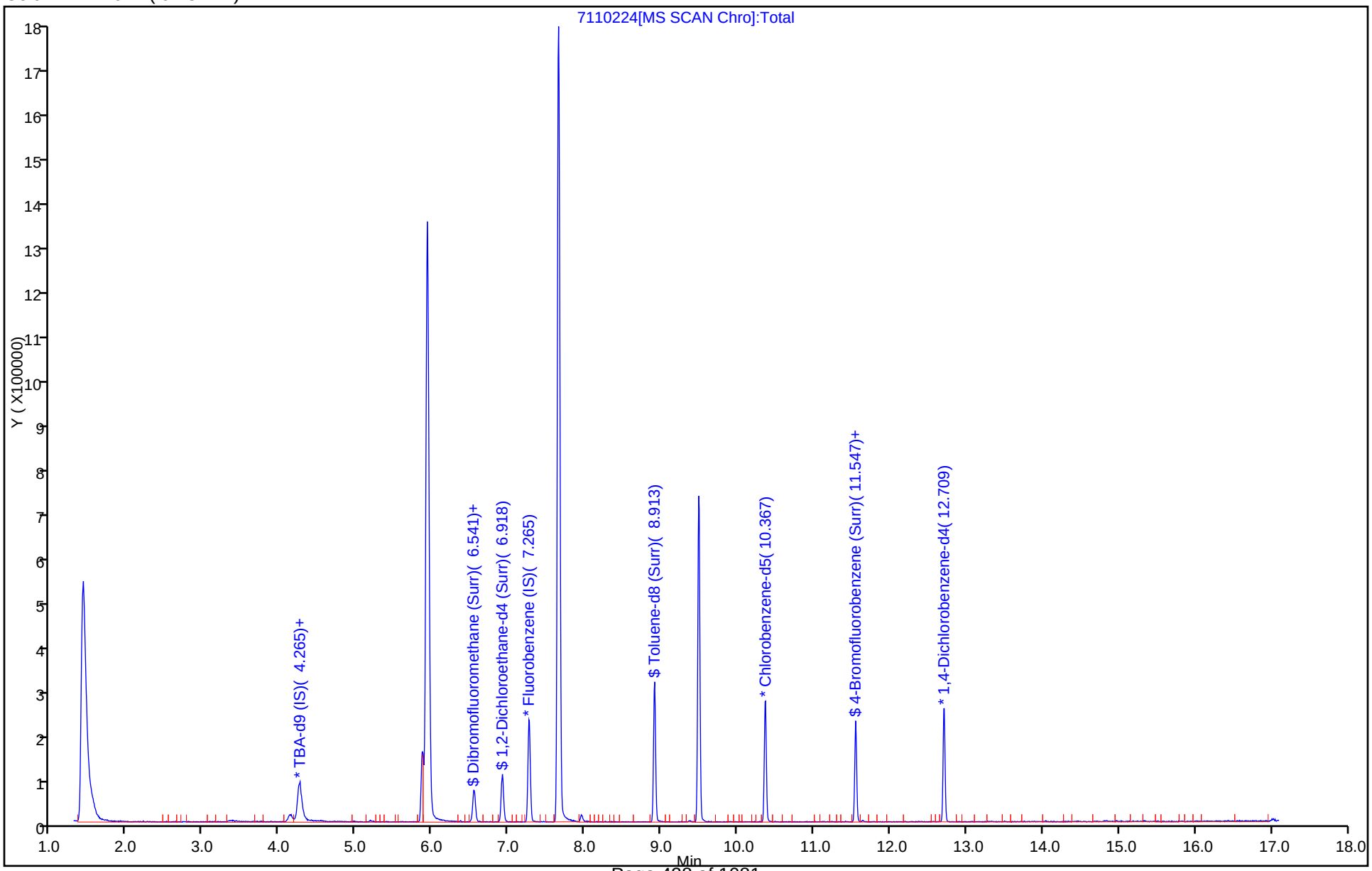
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 03-Nov-2017 07:06:31 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110224.D				
Injection Date:	02-Nov-2017 16:14:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-C-9	Lab Sample ID:	180-71829-9	Worklist Smp#:	24
Client ID:	HD-MW-136A-372.5/373-0				
Purge Vol:	5.000 mL	Dil. Factor:	50.0000	ALS Bottle#:	24
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110224.D
Lims ID: 180-71829-C-9
Client ID: HD-MW-136A-372.5/373-0
Sample Type: Client
Inject. Date: 02-Nov-2017 16:14:30 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 50.0000
Sample Info: 180-71829-C-9 ,50x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2017 07:06:25 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: journetp Date: 03-Nov-2017 07:06:25

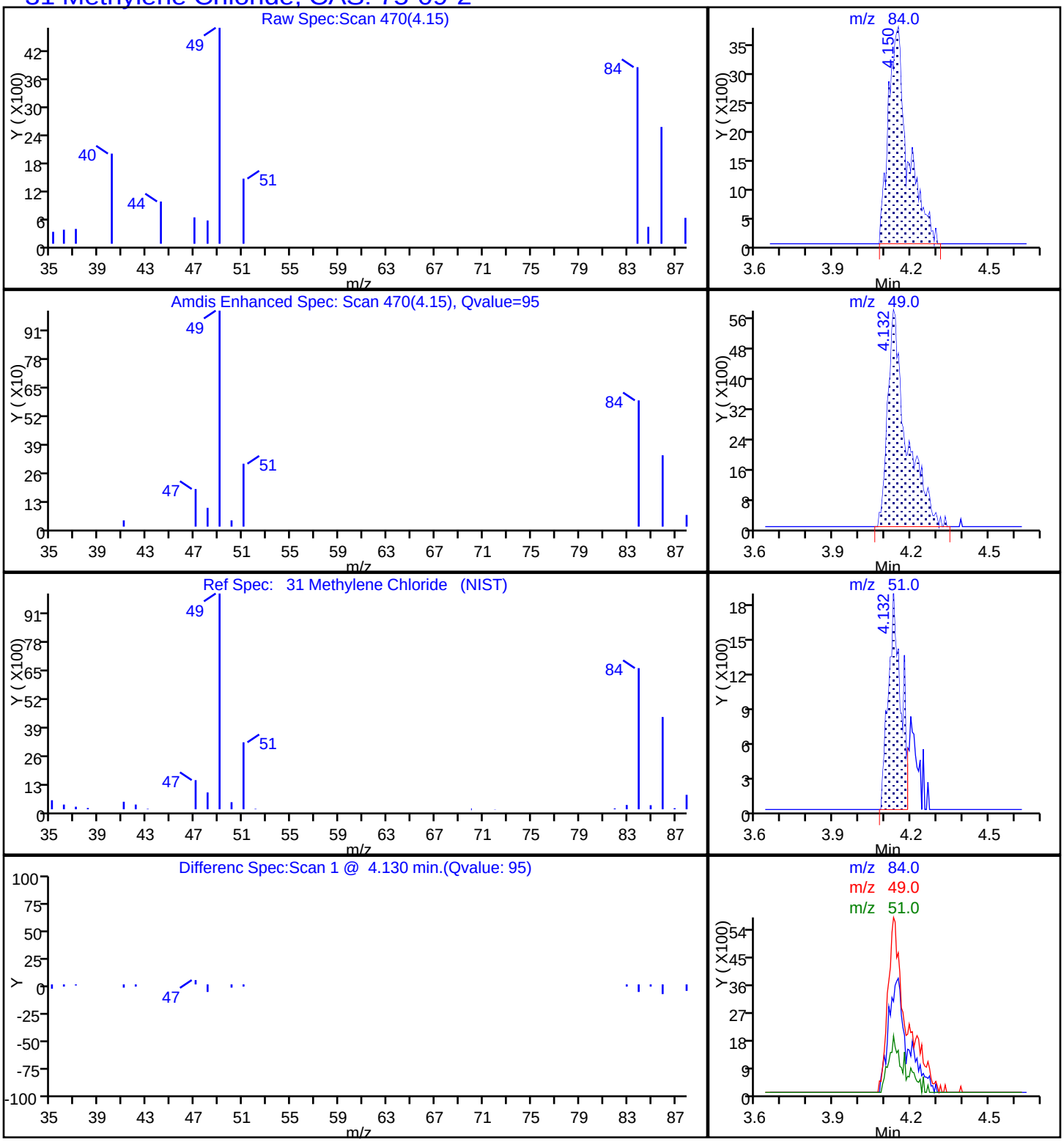
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	45.9	91.81
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	42.1	84.17
$ 7 Toluene-d8 (Surr)	50.0	55.9	111.86
$ 8 4-Bromofluorobenzene (Surr)	50.0	51.9	103.81

Report Date: 03-Nov-2017 07:06:31 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110224.D				
Injection Date:	02-Nov-2017 16:14:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-9	Lab Sample ID:	180-71829-9		
Client ID:	HD-MW-136A-372.5/373-0				
Operator ID:	034635	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

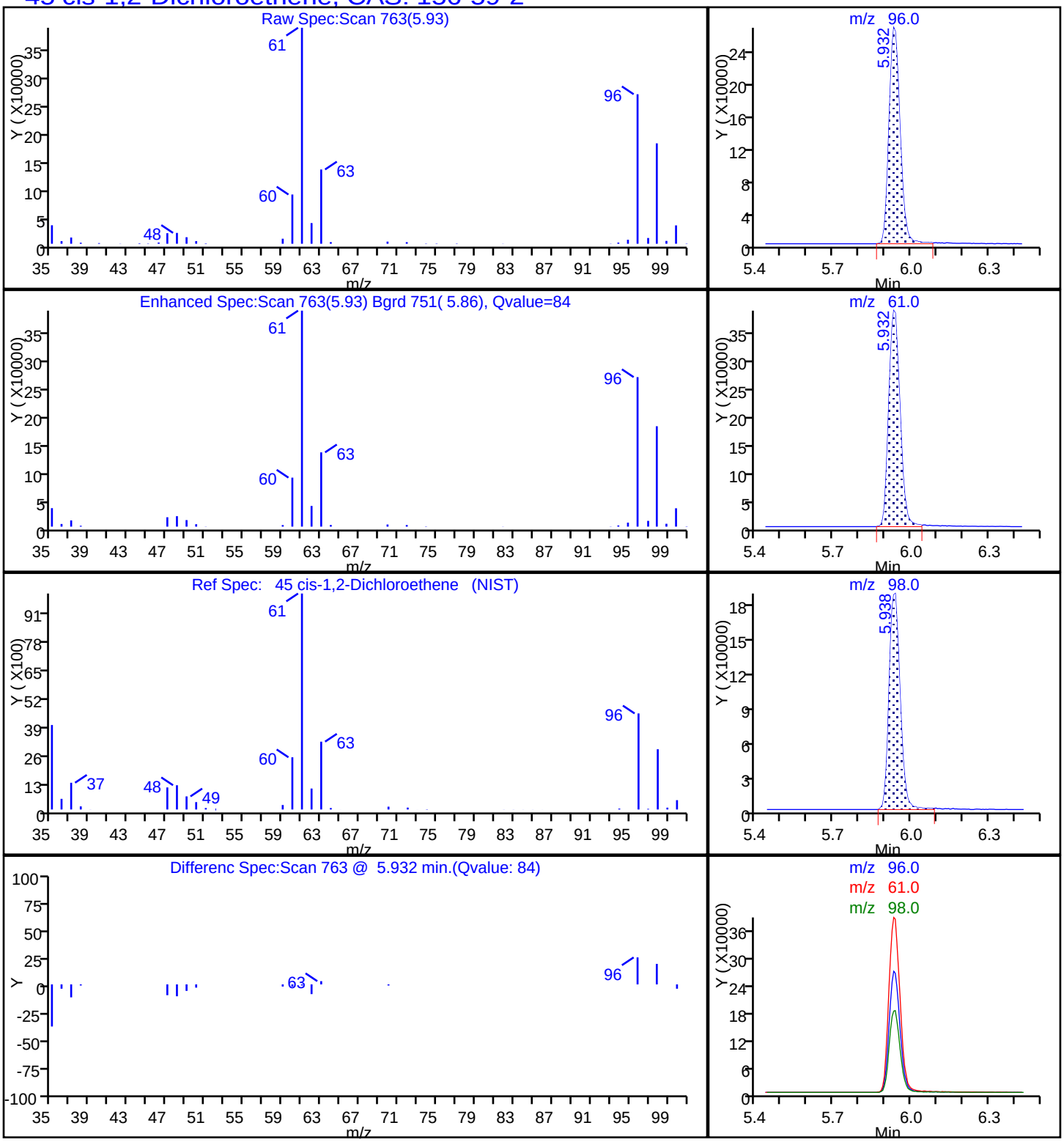


Report Date: 03-Nov-2017 07:06:31 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110224.D				
Injection Date:	02-Nov-2017 16:14:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-9	Lab Sample ID:	180-71829-9		
Client ID:	HD-MW-136A-372.5/373-0				
Operator ID:	034635	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

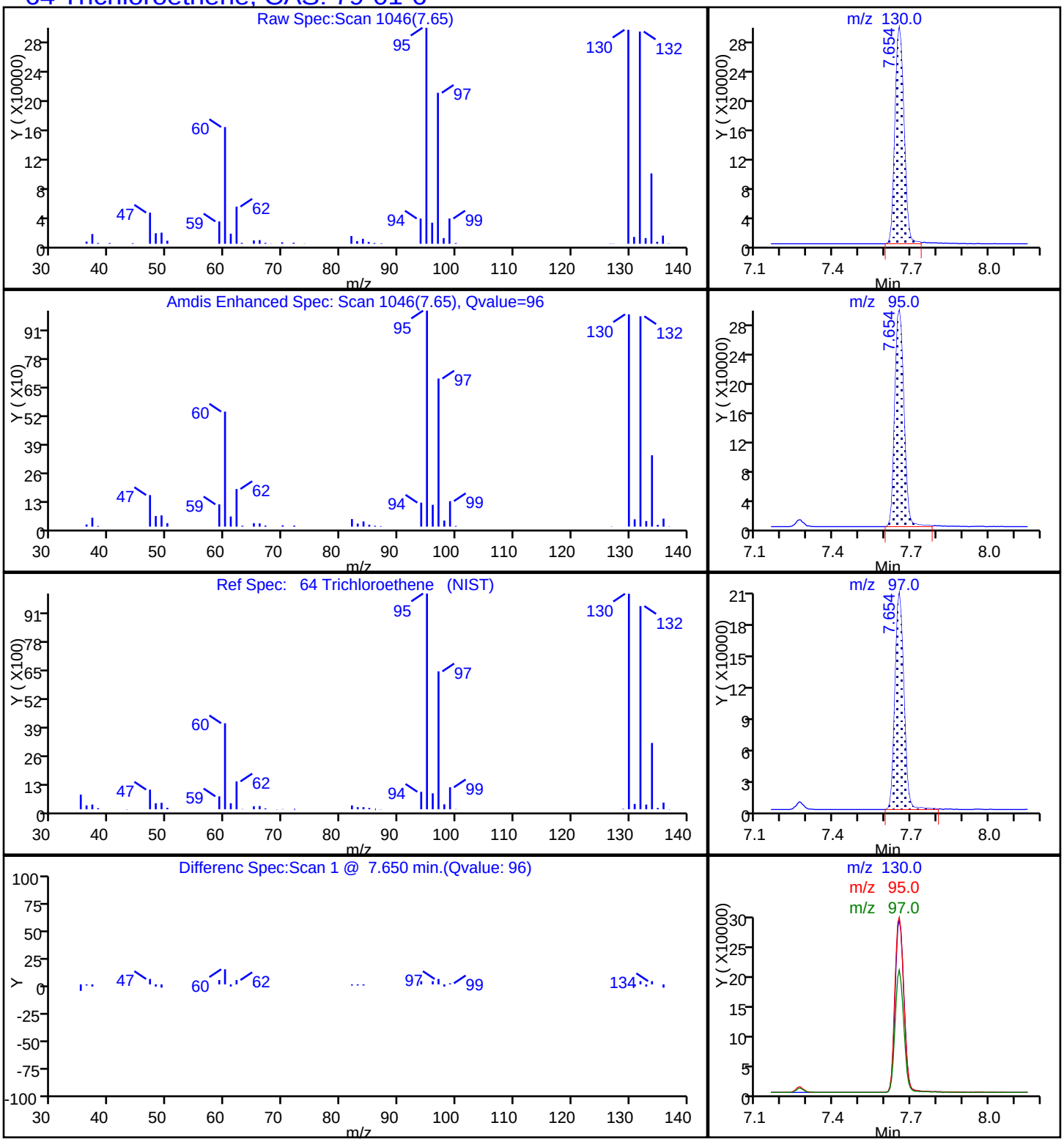


Report Date: 03-Nov-2017 07:06:31 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110224.D				
Injection Date:	02-Nov-2017 16:14:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-9	Lab Sample ID:	180-71829-9		
Client ID:	HD-MW-136A-372.5/373-0				
Operator ID:	034635	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



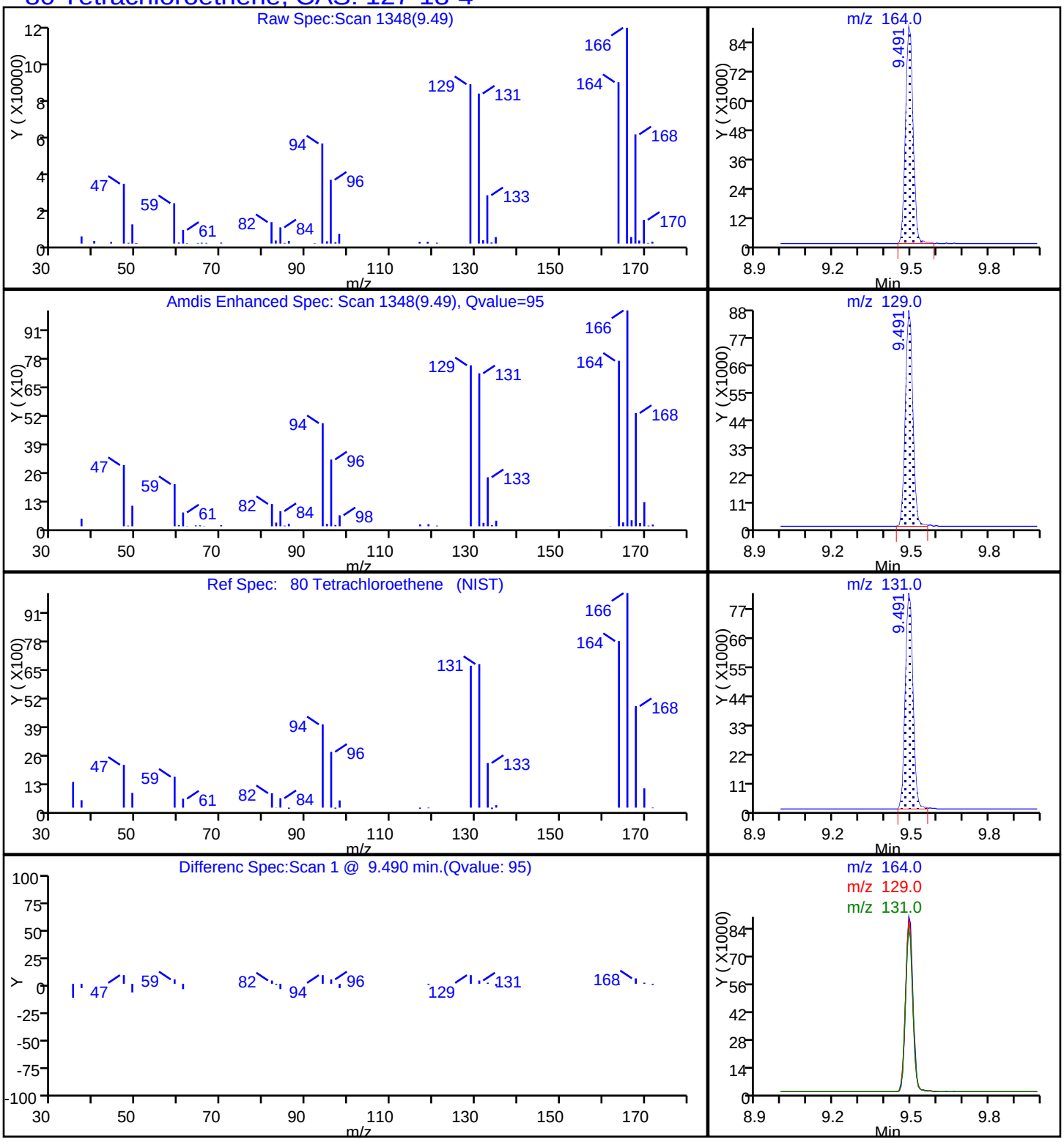
Report Date: 03-Nov-2017 07:06:31 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110224.D

Injection Date:	02-Nov-2017 16:14:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-9	Lab Sample ID:	180-71829-9		
Client ID:	HD-MW-136A-372.5/373-0				
Operator ID:	034635	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

80 Tetrachloroethene, CAS: 127-18-4



TestAmerica Pittsburgh

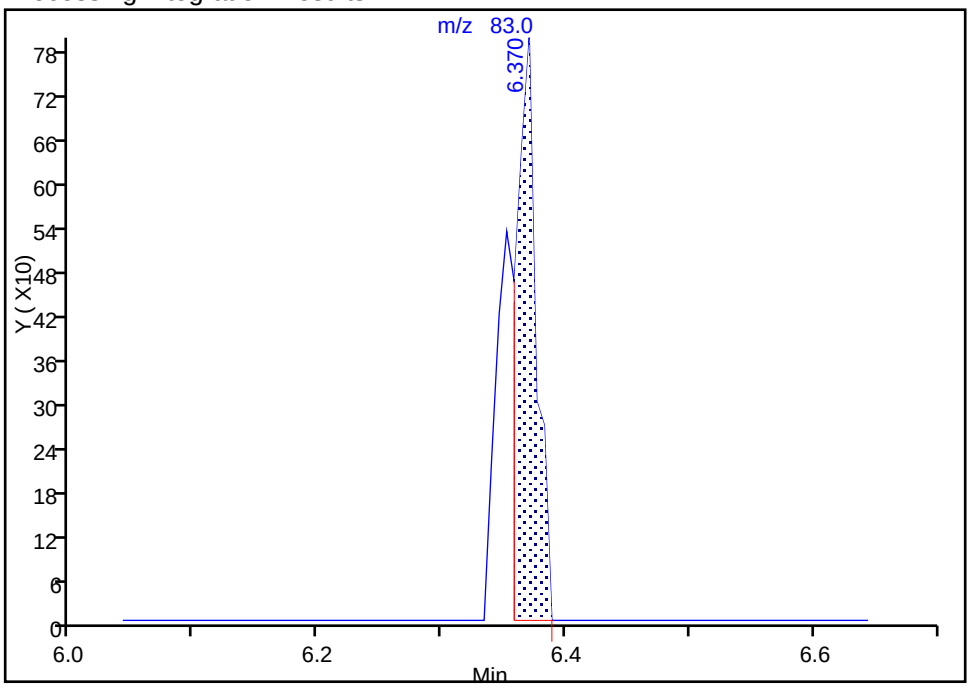
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110224.D				
Injection Date:	02-Nov-2017 16:14:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-9	Lab Sample ID:	180-71829-9		
Client ID:	HD-MW-136A-372.5/373-0				
Operator ID:	034635	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

Signal: 1

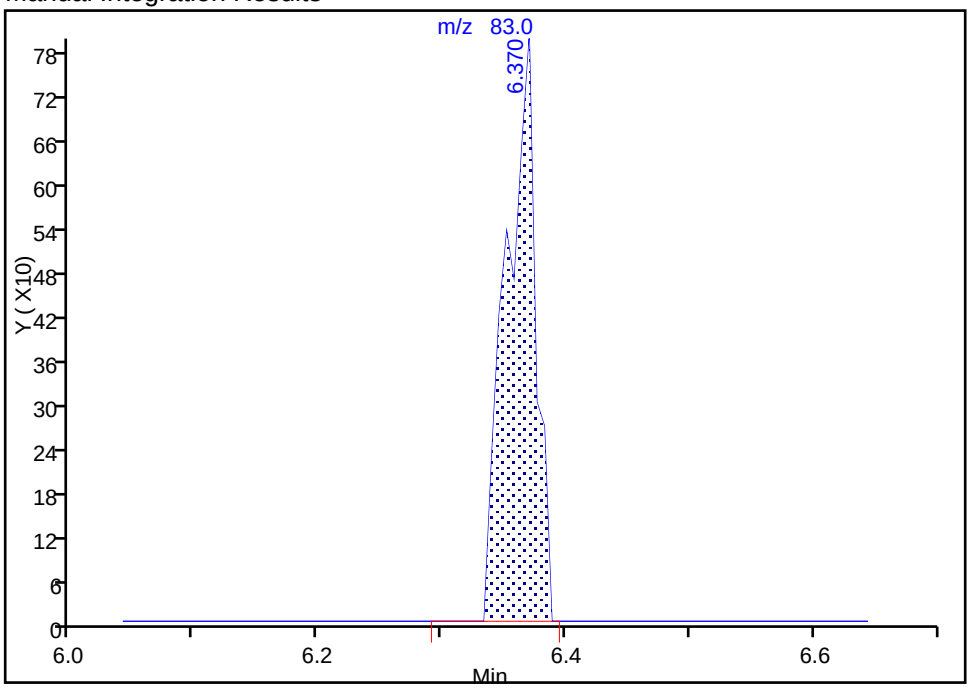
Processing Integration Results

RT: 6.37
Area: 906
Amount: 0.325355
Amount Units: ng



Manual Integration Results

RT: 6.37
Area: 1336
Amount: 0.479773
Amount Units: ng



Reviewer: journetp, 03-Nov-2017 07:05:15
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-372.5/373-0 DL | Lab Sample ID: 180-71829-9 DL

Matrix: Water | Lab File ID: 7110219.D

Analysis Method: 8260C | Date Collected: 10/25/2017 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 13:49

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	500	U ^c	500	450
75-01-4	Vinyl chloride	500	U ^c *	500	440
74-83-9	Bromomethane	500	U ^c	500	440
75-00-3	Chloroethane	500	U	500	450
75-35-4	1,1-Dichloroethene	500	U ^c *	500	280
67-64-1	Acetone	2500	U ^c	2500	1700
75-15-0	Carbon disulfide	500	U	500	440
75-09-2	Methylene Chloride	500	U	500	180
156-60-5	trans-1,2-Dichloroethene	500	U	500	340
1634-04-4	Methyl tert-butyl ether	500	U	500	300
75-34-3	1,1-Dichloroethane	500	U	500	310
156-59-2	cis-1,2-Dichloroethene	6900		500	350
74-97-5	Bromochloromethane	500	U	500	310
78-93-3	2-Butanone (MEK)	2500	U	2500	1300
67-66-3	Chloroform	500	U	500	300
71-55-6	1,1,1-Trichloroethane	500	U	500	300
56-23-5	Carbon tetrachloride	500	U	500	440
71-43-2	Benzene	500	U	500	300
107-06-2	1,2-Dichloroethane	500	U ^c	500	290
79-01-6	Trichloroethene	7200		500	340
78-87-5	1,2-Dichloropropane	500	U	500	330
75-27-4	Bromodichloromethane	500	U	500	320
10061-01-5	cis-1,3-Dichloropropene	500	U	500	300
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	U	2500	1500
108-88-3	Toluene	500	U	500	230
10061-02-6	trans-1,3-Dichloropropene	500	U	500	290
79-00-5	1,1,2-Trichloroethane	500	U	500	230
127-18-4	Tetrachloroethene	2400		500	230
591-78-6	2-Hexanone	2500	U	2500	1600
124-48-1	Dibromochloromethane	500	U	500	420
106-93-4	1,2-Dibromoethane (EDB)	500	U	500	250
108-90-7	Chlorobenzene	500	U	500	250
630-20-6	1,1,1,2-Tetrachloroethane	500	U	500	290
100-41-4	Ethylbenzene	500	U	500	250

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-372.5/373-0 DL | Lab Sample ID: 180-71829-9 DL

Matrix: Water | Lab File ID: 7110219.D

Analysis Method: 8260C | Date Collected: 10/25/2017 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 13:49

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	*Xylenes, Total*	*1000*	*U*	*1000*	*450*
100-42-5	*Styrene*	*500*	*U*	*500*	*240*
75-25-2	*Bromoform*	*500*	*U*	*500*	*490*
79-34-5	*1,1,2,2-Tetrachloroethane*	*500*	*U*	*500*	*300*
107-13-1	*Acrylonitrile*	*10000*	*U*	*10000*	*3900*
123-91-1	*1,4-Dioxane*	*100000*	*U*	*100000*	*6800*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80	*^c*	65-121
2037-26-5	Toluene-d8 (Surr)	107		73-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110219.D
Lims ID: 180-71829-B-9
Client ID: HD-MW-136A-372.5/373-0
Sample Type: Client
Inject. Date: 02-Nov-2017 13:49:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 500.0000
Sample Info: 180-71829-B-9 ,500x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2017 07:09:33 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: journetp Date: 02-Nov-2017 14:21:06

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.261	4.252	0.009	99	175952	1000.0	
*	2 Fluorobenzene (IS)	96	7.273	7.263	0.010	98	231075	50.0	
*	3 Chlorobenzene-d5	119	10.363	10.366	-0.003	90	51450	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.705	12.708	-0.003	97	70570	50.0	
$	5 Dibromofluoromethane (Surr	113	6.549	6.539	0.010	94	54007	47.2	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.920	6.910	0.010	93	88560	39.8	
$	7 Toluene-d8 (Surr)	98	8.915	8.912	0.003	93	208480	53.5	
$	8 4-Bromofluorobenzene (Surr	95	11.549	11.552	-0.003	85	81163	48.7	
	12 Chloromethane	50		1.782				ND	
	13 Vinyl chloride	62		1.928				ND	
	15 Bromomethane	94		2.275				ND	
	16 Chloroethane	64		2.415				ND	
	22 1,1-Dichloroethene	96		3.339				ND	
	24 Acetone	43		3.437				ND	
	26 Carbon disulfide	76		3.625				ND	
	31 Methylene Chloride	84		4.124				ND	
	33 Acrylonitrile	53		4.507				ND	
	34 trans-1,2-Dichloroethene	96		4.544				ND	
	35 Methyl tert-butyl ether	73		4.562				ND	
	37 1,1-Dichloroethane	63		5.183				ND	
	45 cis-1,2-Dichloroethene	96	5.940	5.931	0.009	83	103744	69.0	
	46 2-Butanone (MEK)	43		5.937				ND	
	49 Chlorobromomethane	128		6.223				ND	
	52 Chloroform	83		6.357				ND	
	53 1,1,1-Trichloroethane	97		6.521				ND	
	56 Carbon tetrachloride	117		6.691				ND	
	58 Benzene	78		6.916				ND	
	59 1,2-Dichloroethane	62		7.002				ND	
	64 Trichloroethene	130	7.662	7.653	0.009	96	102413	72.1	
	67 1,2-Dichloropropane	63		7.920				ND	
	70 1,4-Dioxane	88		8.005				ND	
	71 Dichlorobromomethane	83		8.212				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.650				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802				ND	
76 Toluene	91		8.979				ND	
77 trans-1,3-Dichloropropene	75		9.228				ND	
79 1,1,2-Trichloroethane	97		9.423				ND	
80 Tetrachloroethene	164	9.499	9.496	0.003	93	21123	23.6	
82 2-Hexanone	43		9.636				ND	
84 Chlorodibromomethane	129		9.794				ND	
85 Ethylene Dibromide	107		9.903				ND	
87 Chlorobenzene	112		10.390				ND	
89 1,1,1,2-Tetrachloroethane	131		10.481				ND	
90 Ethylbenzene	106		10.487				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		11.005				ND	
93 Styrene	104		11.029				ND	
94 Bromoform	173		11.211				ND	
99 1,1,2,2-Tetrachloroethane	83		11.686				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

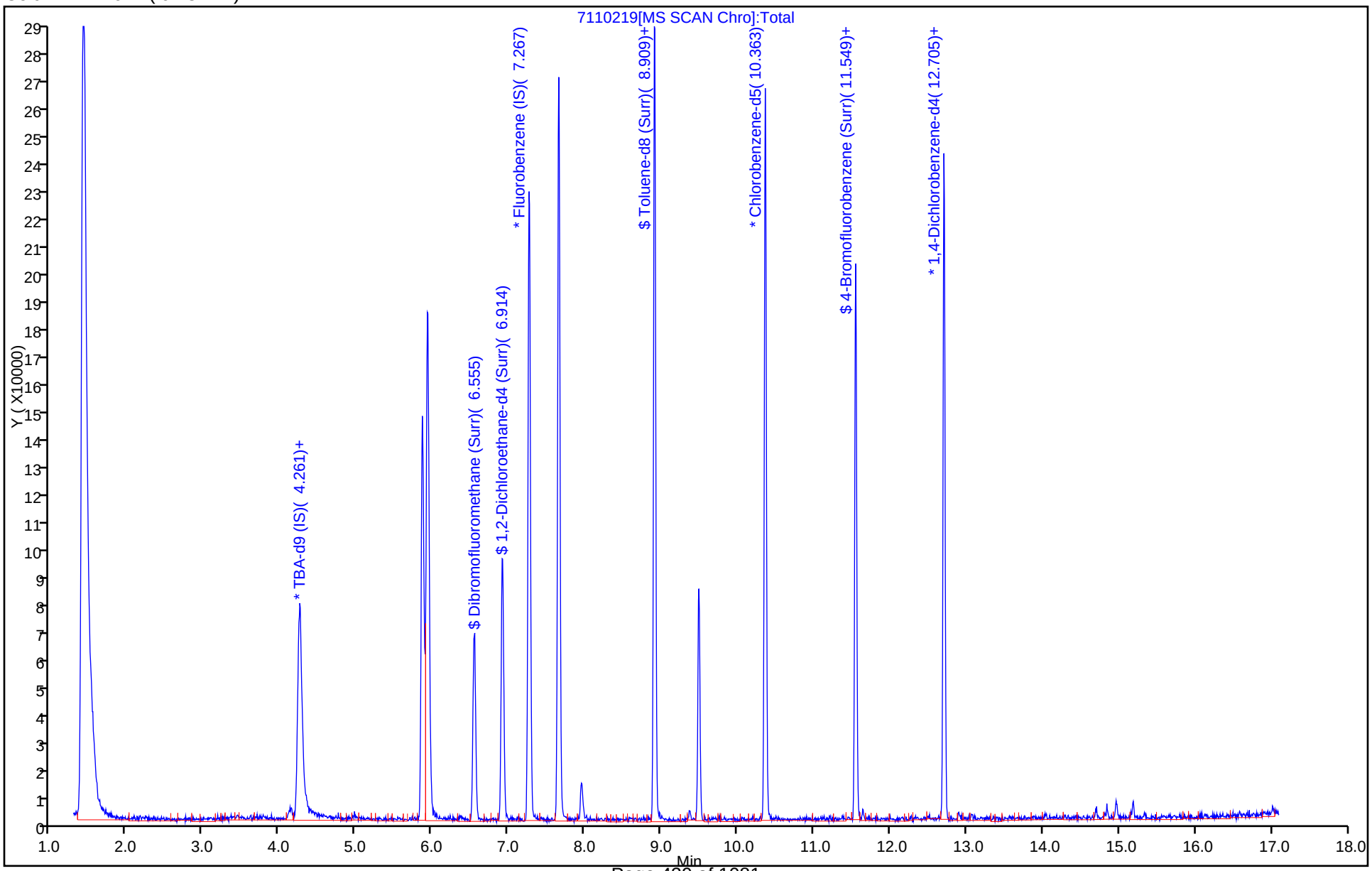
Report Date: 03-Nov-2017 07:09:36 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110219.D

Injection Date:	02-Nov-2017 13:49:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-B-9	Lab Sample ID:	180-71829-9	Worklist Smp#:	19
Client ID:	HD-MW-136A-372.5/373-0				
Purge Vol:	5.000 mL	Dil. Factor:	500.0000	ALS Bottle#:	19
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110219.D
Lims ID: 180-71829-B-9
Client ID: HD-MW-136A-372.5/373-0
Sample Type: Client
Inject. Date: 02-Nov-2017 13:49:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 500.0000
Sample Info: 180-71829-B-9 ,500x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2017 07:09:33 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: journetp Date: 02-Nov-2017 14:21:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	47.2	94.46
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	39.8	79.64
$ 7 Toluene-d8 (Surr)	50.0	53.5	106.98
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.7	97.39

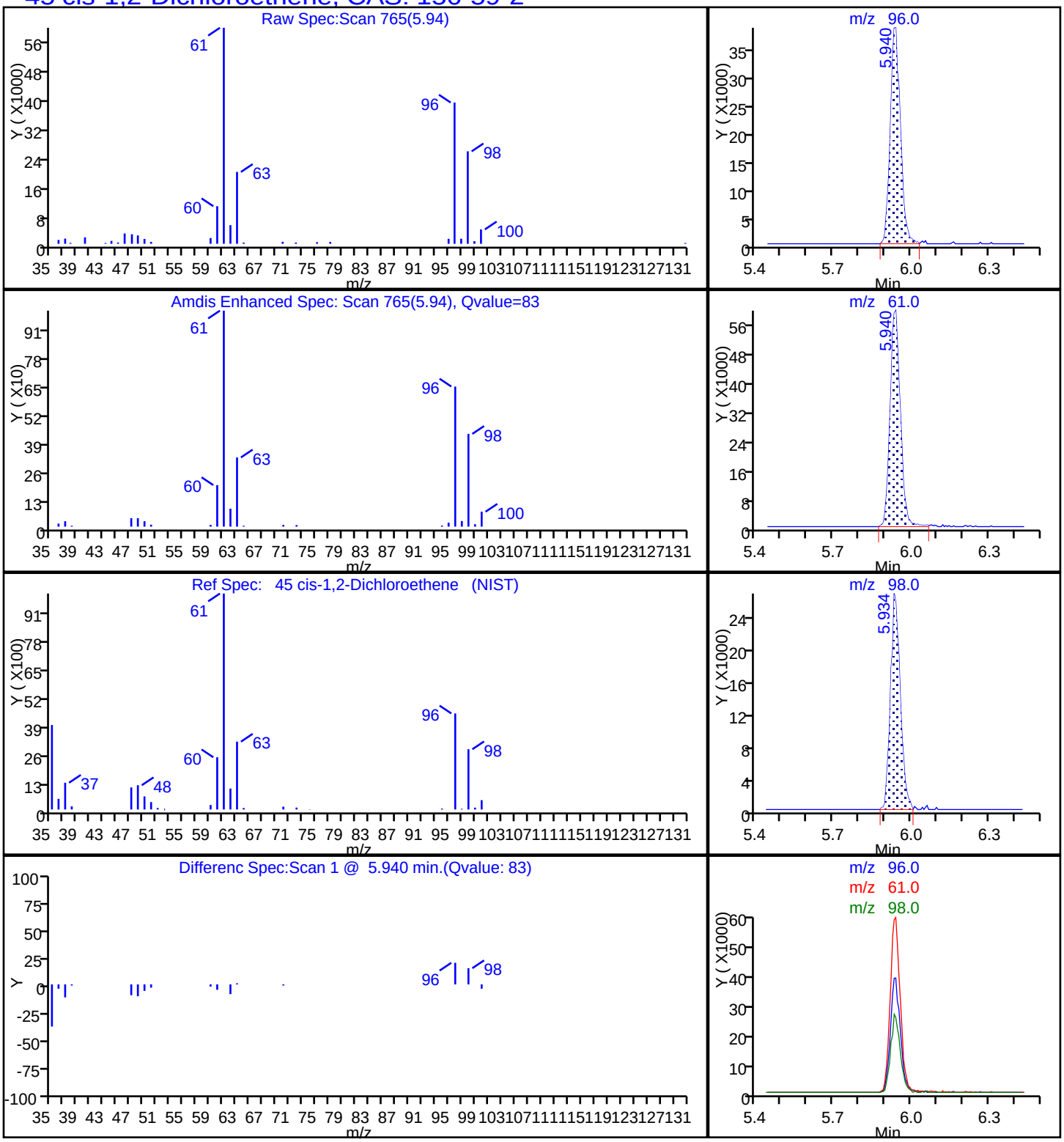
Report Date: 03-Nov-2017 07:09:36 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110219.D

Injection Date:	02-Nov-2017 13:49:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-9	Lab Sample ID:	180-71829-9		
Client ID:	HD-MW-136A-372.5/373-0				
Operator ID:	034635	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

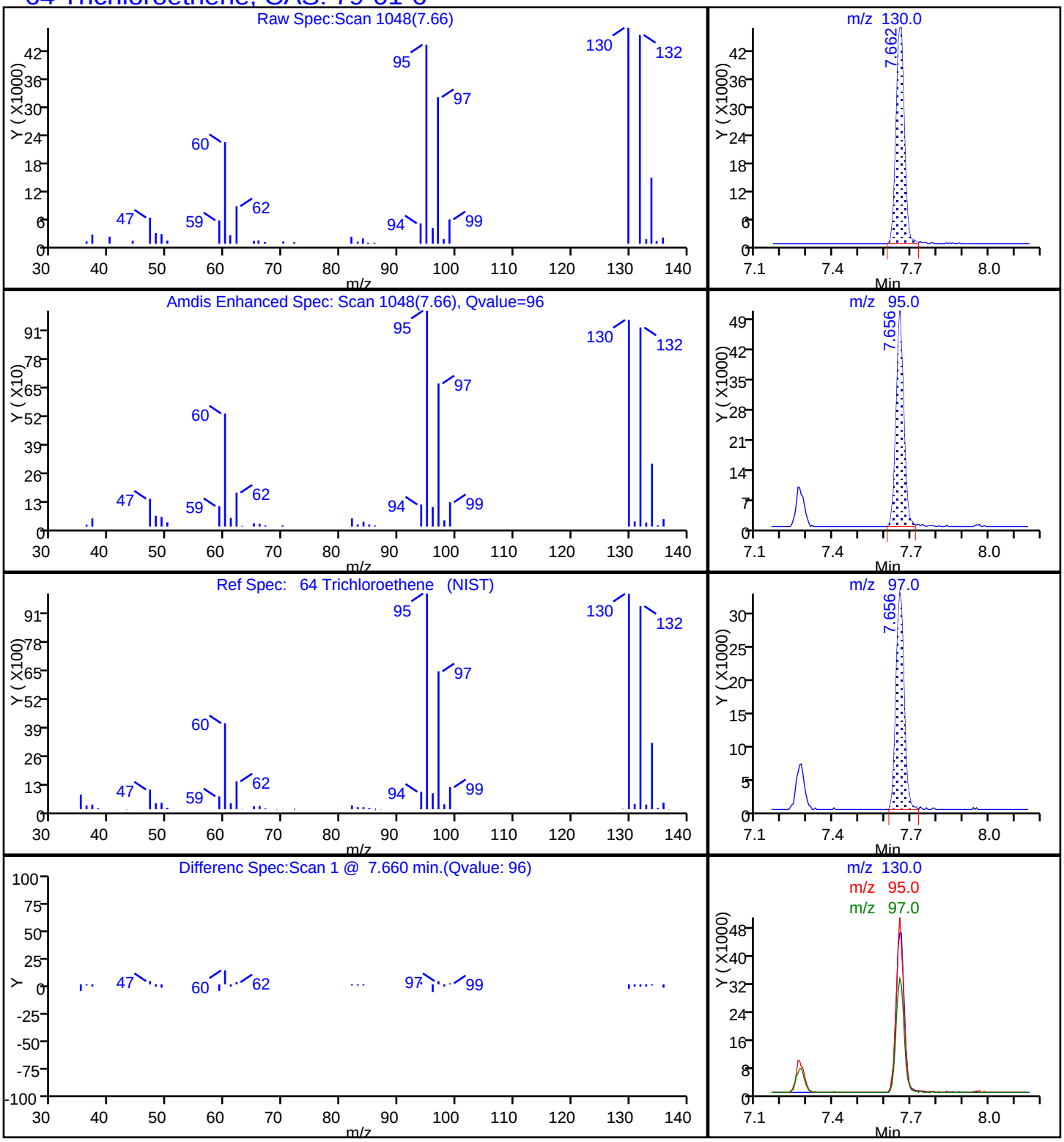


Report Date: 03-Nov-2017 07:09:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110219.D				
Injection Date:	02-Nov-2017 13:49:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-9	Lab Sample ID:	180-71829-9		
Client ID:	HD-MW-136A-372.5/373-0				
Operator ID:	034635	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



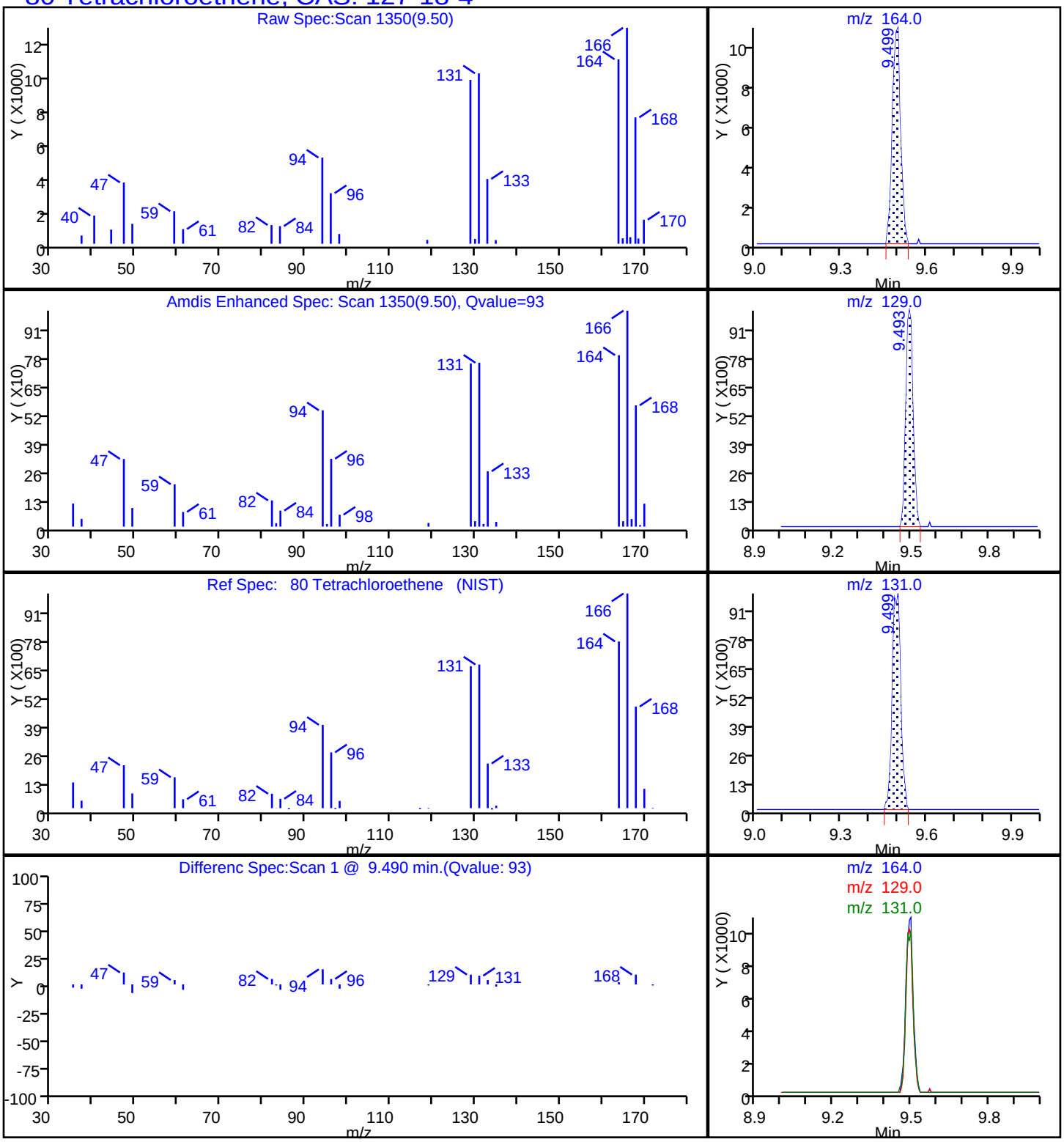
Report Date: 03-Nov-2017 07:09:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110219.D

Injection Date:	02-Nov-2017 13:49:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-9	Lab Sample ID:	180-71829-9		
Client ID:	HD-MW-136A-372.5/373-0				
Operator ID:	034635	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-434/434.5-0 Lab Sample ID: 180-71829-10

Matrix: Water Lab File ID: 7110223.D

Analysis Method: 8260C Date Collected: 10/25/2017 13:00

Sample wt/vol: 5(mL) Date Analyzed: 11/02/2017 15:46

Soil Aliquot Vol: Dilution Factor: 100

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 227768 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	100	U ^c	100	90
75-01-4	Vinyl chloride	100	U ^c *	100	88
74-83-9	Bromomethane	100	U ^c	100	89
75-00-3	Chloroethane	100	U	100	90
75-35-4	1,1-Dichloroethene	100	U ^c *	100	55
67-64-1	Acetone	500	U ^c	500	340
75-15-0	Carbon disulfide	100	U	100	88
75-09-2	Methylene Chloride	120		100	36
156-60-5	trans-1,2-Dichloroethene	100	U	100	67
1634-04-4	Methyl tert-butyl ether	100	U	100	59
75-34-3	1,1-Dichloroethane	100	U	100	63
156-59-2	*cis-1,2-Dichloroethene*	*13000*	*E*	*100*	*71*
74-97-5	Bromochloromethane	100	U	100	63
78-93-3	2-Butanone (MEK)	500	U	500	260
67-66-3	Chloroform	100	U	100	60
71-55-6	1,1,1-Trichloroethane	100	U	100	60
56-23-5	Carbon tetrachloride	100	U	100	88
71-43-2	Benzene	100	U	100	60
107-06-2	1,2-Dichloroethane	100	U ^c	100	57
79-01-6	Trichloroethene	1200		100	69
78-87-5	1,2-Dichloropropane	100	U	100	66
75-27-4	Bromodichloromethane	100	U	100	64
10061-01-5	cis-1,3-Dichloropropene	100	U	100	59
108-10-1	4-Methyl-2-pentanone (MIBK)	500	U	500	310
108-88-3	Toluene	100	U	100	46
10061-02-6	trans-1,3-Dichloropropene	100	U	100	58
79-00-5	1,1,2-Trichloroethane	100	U	100	45
127-18-4	Tetrachloroethene	180		100	47
591-78-6	2-Hexanone	500	U	500	330
124-48-1	Dibromochloromethane	100	U	100	84
106-93-4	1,2-Dibromoethane (EDB)	100	U	100	50
108-90-7	Chlorobenzene	100	U	100	50
630-20-6	1,1,1,2-Tetrachloroethane	100	U	100	57
100-41-4	Ethylbenzene	100	U	100	51
1330-20-7	Xylenes, Total	200	U	200	89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-434/434.5-0 | Lab Sample ID: 180-71829-10

Matrix: Water | Lab File ID: 7110223.D

Analysis Method: 8260C | Date Collected: 10/25/2017 13:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 15:46

Soil Aliquot Vol: | Dilution Factor: 100

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

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

Analysis Batch No.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-42-5	Styrene	100	U	100	47
75-25-2	Bromoform	100	U	100	98
79-34-5	1,1,2,2-Tetrachloroethane	100	U	100	60
107-13-1	Acrylonitrile	2000	U	2000	780
123-91-1	1,4-Dioxane	20000	U	20000	1400

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84	^c	65-121
2037-26-5	Toluene-d8 (Surr)	117		73-120
460-00-4	4-Bromofluorobenzene (Surr)	105		80-120
1868-53-7	Dibromofluoromethane (Surr)	92		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110223.D
Lims ID: 180-71829-C-10
Client ID: HD-MW-136A-434/434.5-0
Sample Type: Client
Inject. Date: 02-Nov-2017 15:46:30 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 100.0000
Sample Info: 180-71829-C-10 ,500x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2017 07:06:25 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: journetp Date: 03-Nov-2017 07:04:57

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.261	4.252	0.009	99	190449	1000.0	
*	2 Fluorobenzene (IS)	96	7.266	7.263	0.003	98	242194	50.0	
*	3 Chlorobenzene-d5	119	10.363	10.366	-0.003	91	52713	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.705	12.708	-0.003	97	78037	50.0	
$	5 Dibromofluoromethane (Surr	113	6.549	6.539	0.010	93	55093	46.0	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.920	6.910	0.010	92	97578	41.9	
$	7 Toluene-d8 (Surr)	98	8.909	8.912	-0.003	94	233621	58.5	
$	8 4-Bromofluorobenzene (Surr	95	11.549	11.552	-0.003	87	89456	52.7	
	12 Chloromethane	50		1.782				ND	
	13 Vinyl chloride	62		1.928				ND	
	15 Bromomethane	94		2.275				ND	
	16 Chloroethane	64		2.415				ND	
	22 1,1-Dichloroethene	96		3.339				ND	
	24 Acetone	43		3.437				ND	
	26 Carbon disulfide	76		3.625				ND	
	31 Methylene Chloride	84	4.139	4.124	0.015	97	13373	5.93	
	33 Acrylonitrile	53		4.507				ND	
	34 trans-1,2-Dichloroethene	96		4.544				ND	
	35 Methyl tert-butyl ether	73		4.562				ND	
	37 1,1-Dichloroethane	63		5.183				ND	
	45 cis-1,2-Dichloroethene	96	5.934	5.931	0.003	81	987766	626.4	E
	46 2-Butanone (MEK)	43		5.937				ND	
	49 Chlorobromomethane	128		6.223				ND	
	52 Chloroform	83	6.372	6.357	0.015	1	1253	0.4095	M
	53 1,1,1-Trichloroethane	97		6.521				ND	
	56 Carbon tetrachloride	117		6.691				ND	
	58 Benzene	78		6.916				ND	
	59 1,2-Dichloroethane	62		7.002				ND	
	64 Trichloroethene	130	7.656	7.653	0.003	97	90669	60.9	
	67 1,2-Dichloropropane	63		7.920				ND	
	70 1,4-Dioxane	88		8.005				ND	
	71 Dichlorobromomethane	83		8.212				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.650				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802				ND	
76 Toluene	91		8.979				ND	
77 trans-1,3-Dichloropropene	75		9.228				ND	
79 1,1,2-Trichloroethane	97		9.423				ND	
80 Tetrachloroethene	164	9.493	9.496	-0.003	95	8048	8.79	
82 2-Hexanone	43		9.636				ND	
84 Chlorodibromomethane	129		9.794				ND	
85 Ethylene Dibromide	107		9.903				ND	
87 Chlorobenzene	112		10.390				ND	
89 1,1,1,2-Tetrachloroethane	131		10.481				ND	
90 Ethylbenzene	106		10.487				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		11.005				ND	
93 Styrene	104		11.029				ND	
94 Bromoform	173		11.211				ND	
99 1,1,2,2-Tetrachloroethane	83		11.686				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

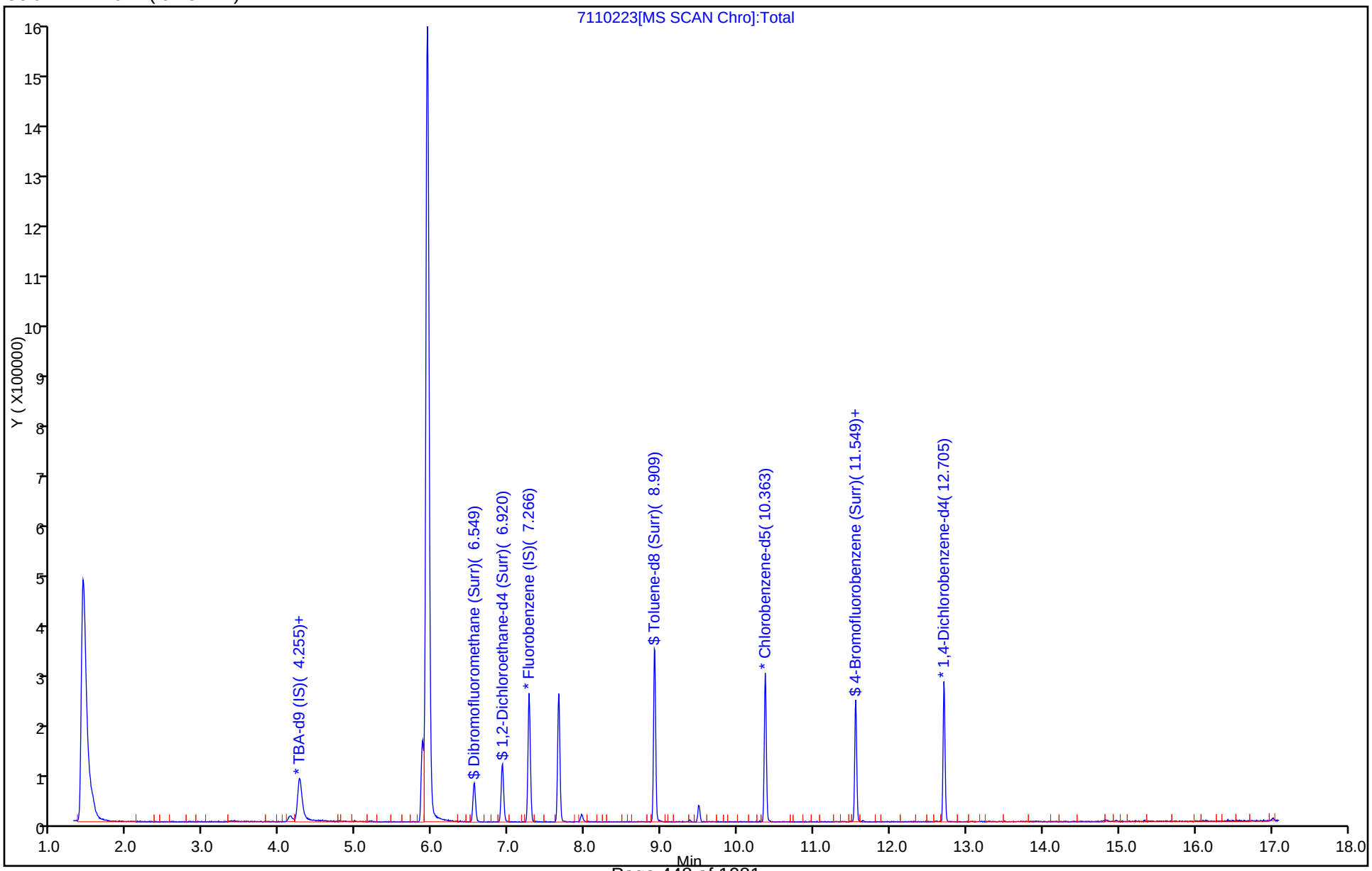
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 03-Nov-2017 07:06:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110223.D				
Injection Date:	02-Nov-2017 15:46:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-C-10	Lab Sample ID:	180-71829-10	Worklist Smp#:	23
Client ID:	HD-MW-136A-434/434.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	100.0000	ALS Bottle#:	23
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110223.D
Lims ID: 180-71829-C-10
Client ID: HD-MW-136A-434/434.5-0
Sample Type: Client
Inject. Date: 02-Nov-2017 15:46:30 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 100.0000
Sample Info: 180-71829-C-10 ,500x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2017 07:06:25 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: journetp Date: 03-Nov-2017 07:04:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	46.0	91.94
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	41.9	83.72
$ 7 Toluene-d8 (Surr)	50.0	58.5	117.01
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.7	105.34

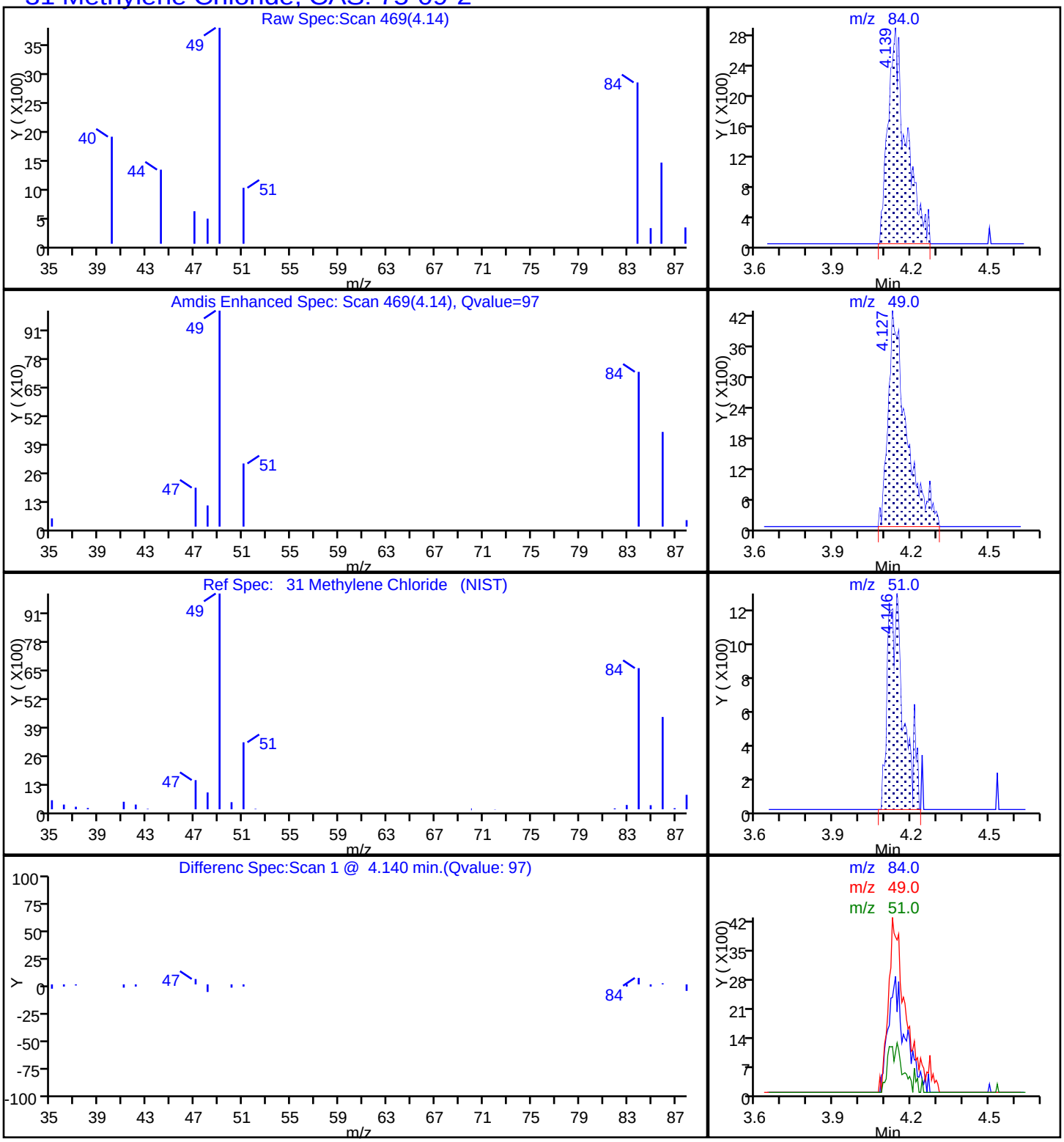
Report Date: 03-Nov-2017 07:06:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110223.D

Injection Date:	02-Nov-2017 15:46:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-10	Lab Sample ID:	180-71829-10		
Client ID:	HD-MW-136A-434/434.5-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

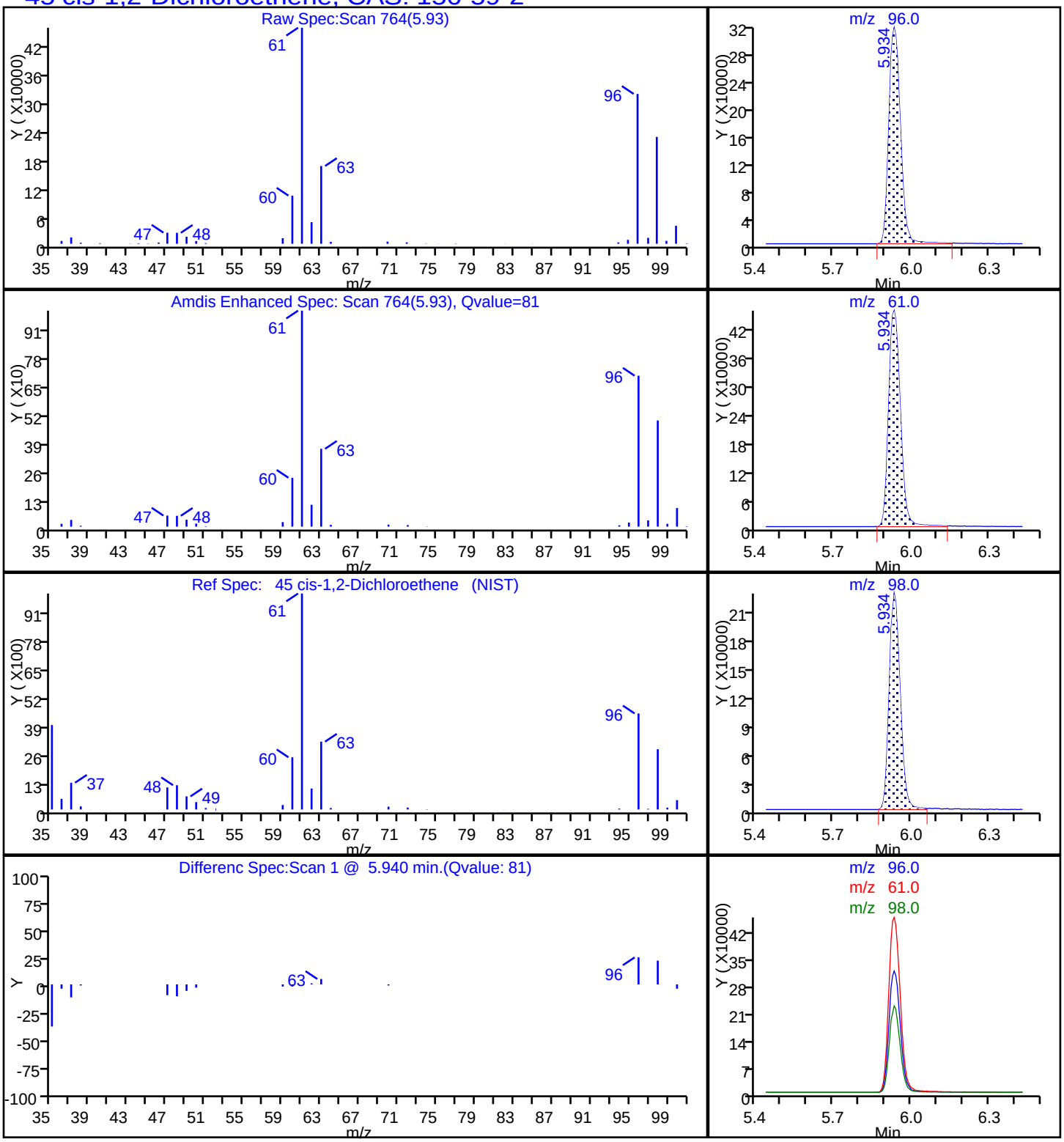


Report Date: 03-Nov-2017 07:06:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110223.D				
Injection Date:	02-Nov-2017 15:46:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-10	Lab Sample ID:	180-71829-10		
Client ID:	HD-MW-136A-434/434.5-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

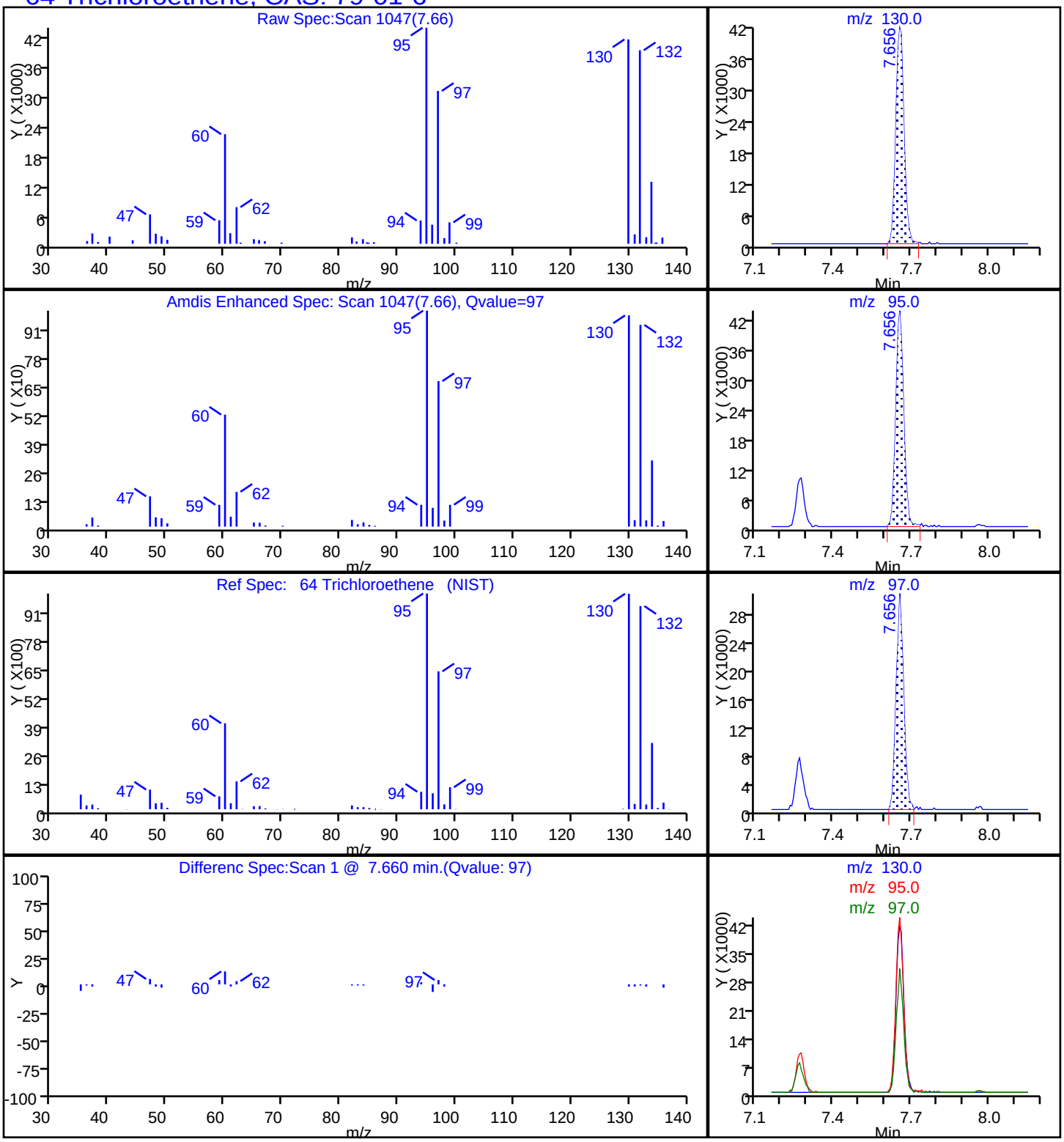


Report Date: 03-Nov-2017 07:06:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110223.D				
Injection Date:	02-Nov-2017 15:46:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-10	Lab Sample ID:	180-71829-10		
Client ID:	HD-MW-136A-434/434.5-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



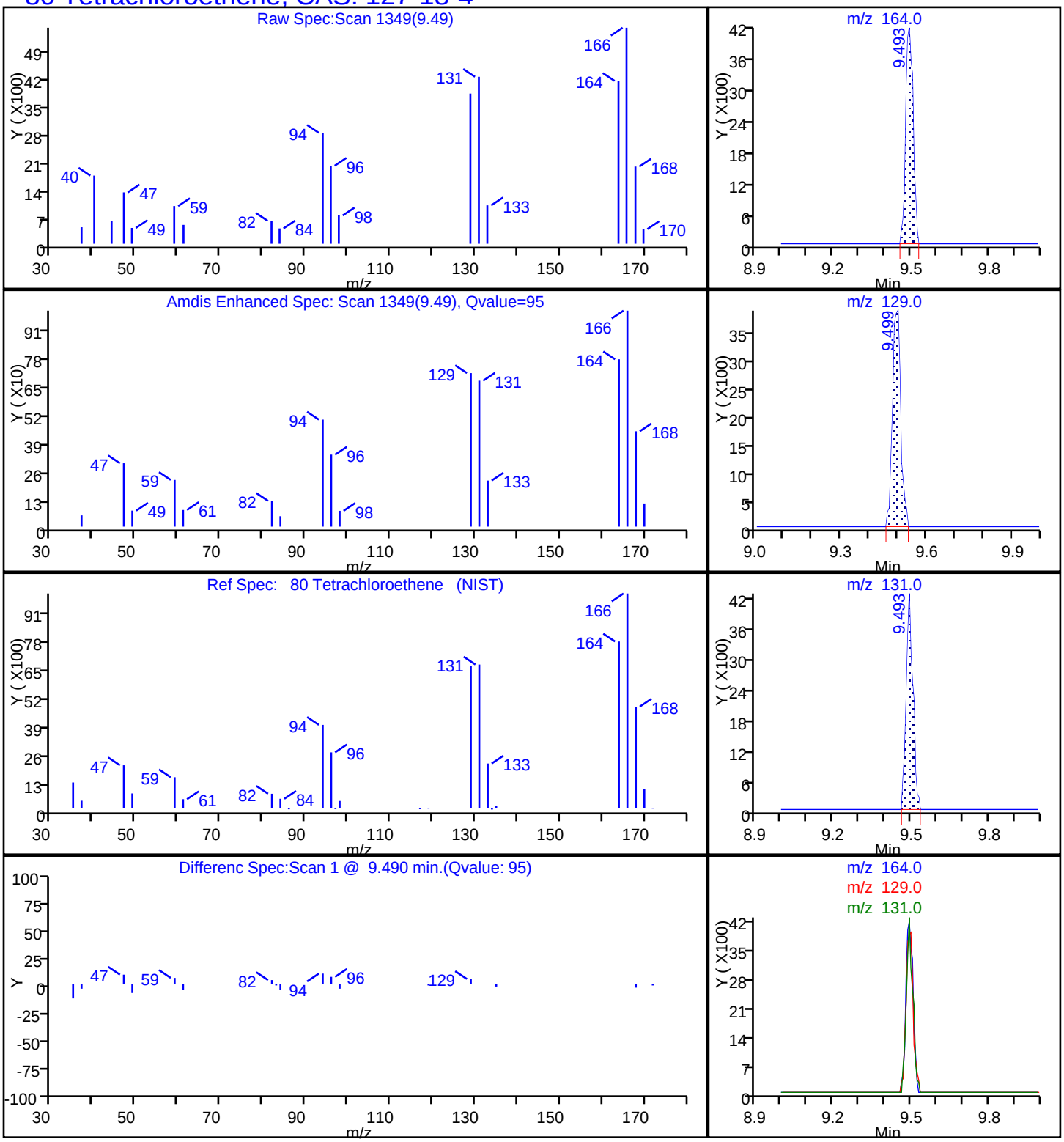
Report Date: 03-Nov-2017 07:06:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110223.D

Injection Date:	02-Nov-2017 15:46:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-10	Lab Sample ID:	180-71829-10		
Client ID:	HD-MW-136A-434/434.5-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	MSVOA_LL_CHHP7	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

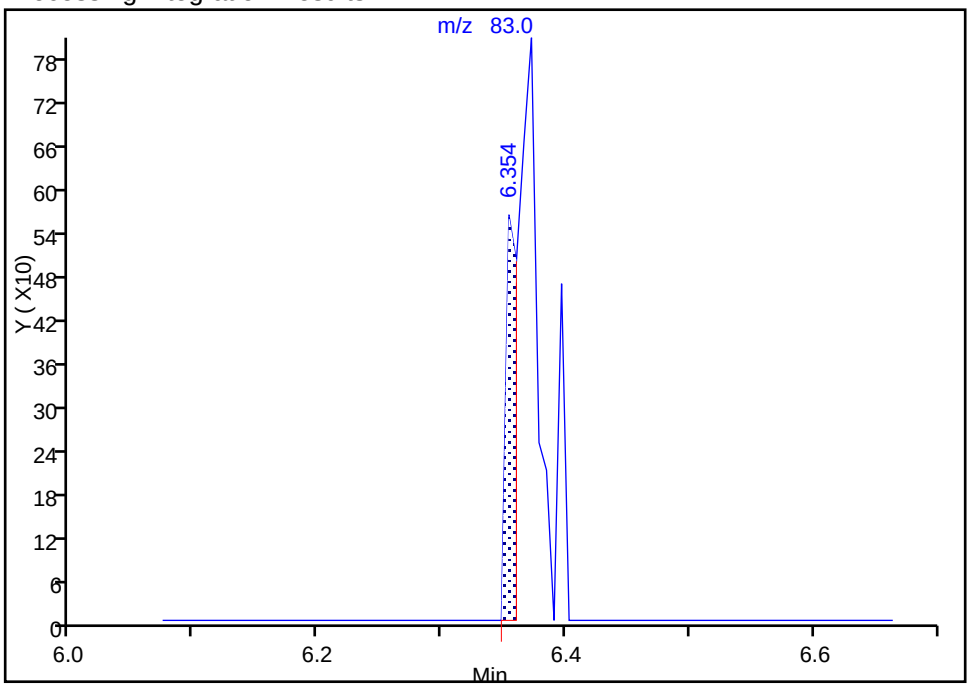
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110223.D				
Injection Date:	02-Nov-2017 15:46:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-10	Lab Sample ID:	180-71829-10		
Client ID:	HD-MW-136A-434/434.5-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

Signal: 1

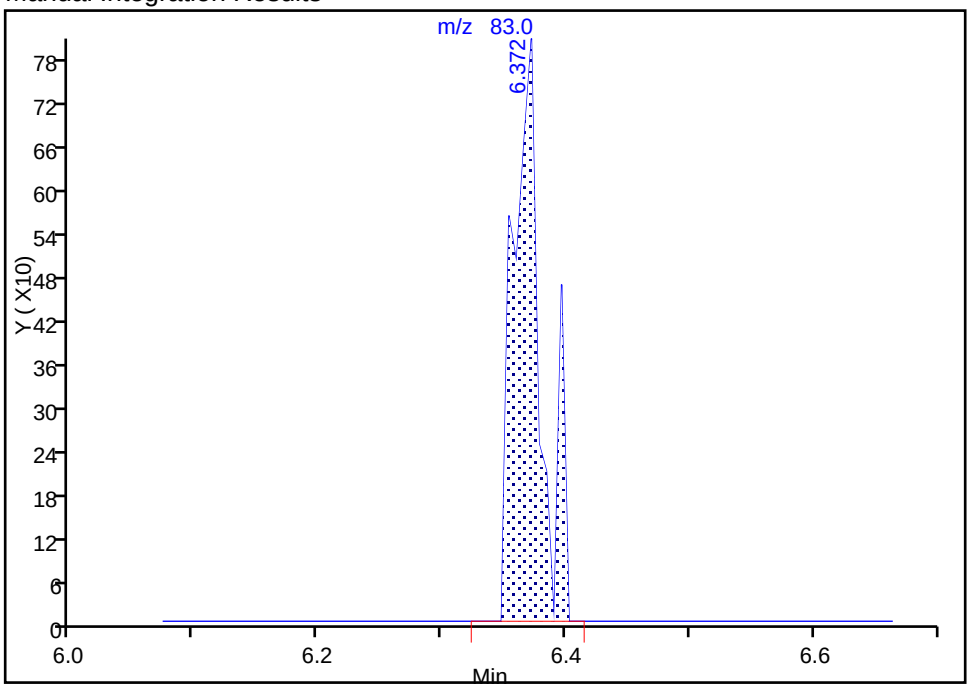
Processing Integration Results

RT: 6.35
Area: 385
Amount: 0.125810
Amount Units: ng



Manual Integration Results

RT: 6.37
Area: 1253
Amount: 0.409456
Amount Units: ng



Reviewer: journetp, 03-Nov-2017 07:04:43

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-434/434.5-0 DL | Lab Sample ID: 180-71829-10 DL

Matrix: Water | Lab File ID: 7110214.D

Analysis Method: 8260C | Date Collected: 10/25/2017 13:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 11:26

Soil Aliquot Vol: | Dilution Factor: 1000

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

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

Analysis Batch No.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1000	U ^c	1000	900
75-01-4	Vinyl chloride	1000	U ^c *	1000	880
74-83-9	Bromomethane	1000	U ^c	1000	890
75-00-3	Chloroethane	1000	U	1000	900
75-35-4	1,1-Dichloroethene	1000	U ^c *	1000	550
67-64-1	Acetone	5000	U ^c	5000	3400
75-15-0	Carbon disulfide	1000	U	1000	880
75-09-2	Methylene Chloride	1000	U	1000	360
156-60-5	trans-1,2-Dichloroethene	1000	U	1000	670
1634-04-4	Methyl tert-butyl ether	1000	U	1000	590
75-34-3	1,1-Dichloroethane	1000	U	1000	630
156-59-2	cis-1,2-Dichloroethene	36000		1000	710
74-97-5	Bromochloromethane	1000	U	1000	630
78-93-3	2-Butanone (MEK)	5000	U	5000	2600
67-66-3	Chloroform	1000	U	1000	600
71-55-6	1,1,1-Trichloroethane	1000	U	1000	600
56-23-5	Carbon tetrachloride	1000	U	1000	880
71-43-2	Benzene	1000	U	1000	600
107-06-2	1,2-Dichloroethane	1000	U ^c	1000	570
79-01-6	Trichloroethene	10000		1000	690
78-87-5	1,2-Dichloropropane	1000	U	1000	660
75-27-4	Bromodichloromethane	1000	U	1000	640
10061-01-5	cis-1,3-Dichloropropene	1000	U	1000	590
108-10-1	4-Methyl-2-pentanone (MIBK)	5000	U	5000	3100
108-88-3	Toluene	1000	U	1000	460
10061-02-6	trans-1,3-Dichloropropene	1000	U	1000	580
79-00-5	1,1,2-Trichloroethane	1000	U	1000	450
127-18-4	Tetrachloroethene	3900		1000	470
591-78-6	2-Hexanone	5000	U	5000	3300
124-48-1	Dibromochloromethane	1000	U	1000	840
106-93-4	1,2-Dibromoethane (EDB)	1000	U	1000	500
108-90-7	Chlorobenzene	1000	U	1000	500
630-20-6	1,1,1,2-Tetrachloroethane	1000	U	1000	570
100-41-4	Ethylbenzene	1000	U	1000	510

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-434/434.5-0 DL | Lab Sample ID: 180-71829-10 DL

Matrix: Water | Lab File ID: 7110214.D

Analysis Method: 8260C | Date Collected: 10/25/2017 13:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 11:26

Soil Aliquot Vol: | Dilution Factor: 1000

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

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

Analysis Batch No.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	*Xylenes, Total*	*2000*	*U*	*2000*	*890*
100-42-5	*Styrene*	*1000*	*U*	*1000*	*470*
75-25-2	*Bromoform*	*1000*	*U*	*1000*	*980*
79-34-5	*1,1,2,2-Tetrachloroethane*	*1000*	*U*	*1000*	*600*
107-13-1	*Acrylonitrile*	*20000*	*U*	*20000*	*7800*
123-91-1	*1,4-Dioxane*	*200000*	*U*	*200000*	*14000*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87	*^c*	65-121
2037-26-5	Toluene-d8 (Surr)	109		73-120
460-00-4	4-Bromofluorobenzene (Surr)	106		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110214.D
Lims ID: 180-71829-B-10
Client ID: HD-MW-136A-434/434.5-0
Sample Type: Client
Inject. Date: 02-Nov-2017 11:26:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1000.0000
Sample Info: 180-71829-B-10 ,1000x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2017 07:09:33 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: journetp Date: 02-Nov-2017 11:56:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.250	4.252	-0.002	98	196595	1000.0	
* 2 Fluorobenzene (IS)	96	7.267	7.263	0.004	98	269000	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.366	-0.002	91	63640	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.712	12.708	0.004	97	91128	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.543	6.539	0.004	94	66630	50.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.914	6.910	0.004	93	112893	43.6	
$ 7 Toluene-d8 (Surr)	98	8.910	8.912	-0.002	93	262000	54.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.550	11.552	-0.002	86	108296	52.8	
12 Chloromethane	50		1.782				ND	
13 Vinyl chloride	62		1.928				ND	
15 Bromomethane	94		2.275				ND	
16 Chloroethane	64		2.415				ND	
22 1,1-Dichloroethene	96		3.339				ND	
24 Acetone	43		3.437				ND	
26 Carbon disulfide	76		3.625				ND	
31 Methylene Chloride	84		4.124				ND	
33 Acrylonitrile	53		4.507				ND	
34 trans-1,2-Dichloroethene	96		4.544				ND	
35 Methyl tert-butyl ether	73		4.562				ND	
37 1,1-Dichloroethane	63		5.183				ND	
45 cis-1,2-Dichloroethene	96	5.935	5.931	0.004	83	312697	178.5	
46 2-Butanone (MEK)	43		5.937				ND	
49 Chlorobromomethane	128		6.223				ND	
52 Chloroform	83		6.357				ND	
53 1,1,1-Trichloroethane	97		6.521				ND	
56 Carbon tetrachloride	117		6.691				ND	
58 Benzene	78		6.916				ND	
59 1,2-Dichloroethane	62		7.002				ND	
64 Trichloroethene	130	7.651	7.653	-0.002	96	86763	52.4	
67 1,2-Dichloropropane	63		7.920				ND	
70 1,4-Dioxane	88		8.005				ND	
71 Dichlorobromomethane	83		8.212				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.650				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802				ND	
76 Toluene	91		8.979				ND	
77 trans-1,3-Dichloropropene	75		9.228				ND	
79 1,1,2-Trichloroethane	97		9.423				ND	
80 Tetrachloroethene	164	9.494	9.496	-0.002	92	21645	19.6	
82 2-Hexanone	43		9.636				ND	
84 Chlorodibromomethane	129		9.794				ND	
85 Ethylene Dibromide	107		9.903				ND	
87 Chlorobenzene	112		10.390				ND	
89 1,1,1,2-Tetrachloroethane	131		10.481				ND	
90 Ethylbenzene	106		10.487				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		11.005				ND	
93 Styrene	104		11.029				ND	
94 Bromoform	173		11.211				ND	
99 1,1,2,2-Tetrachloroethane	83		11.686				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

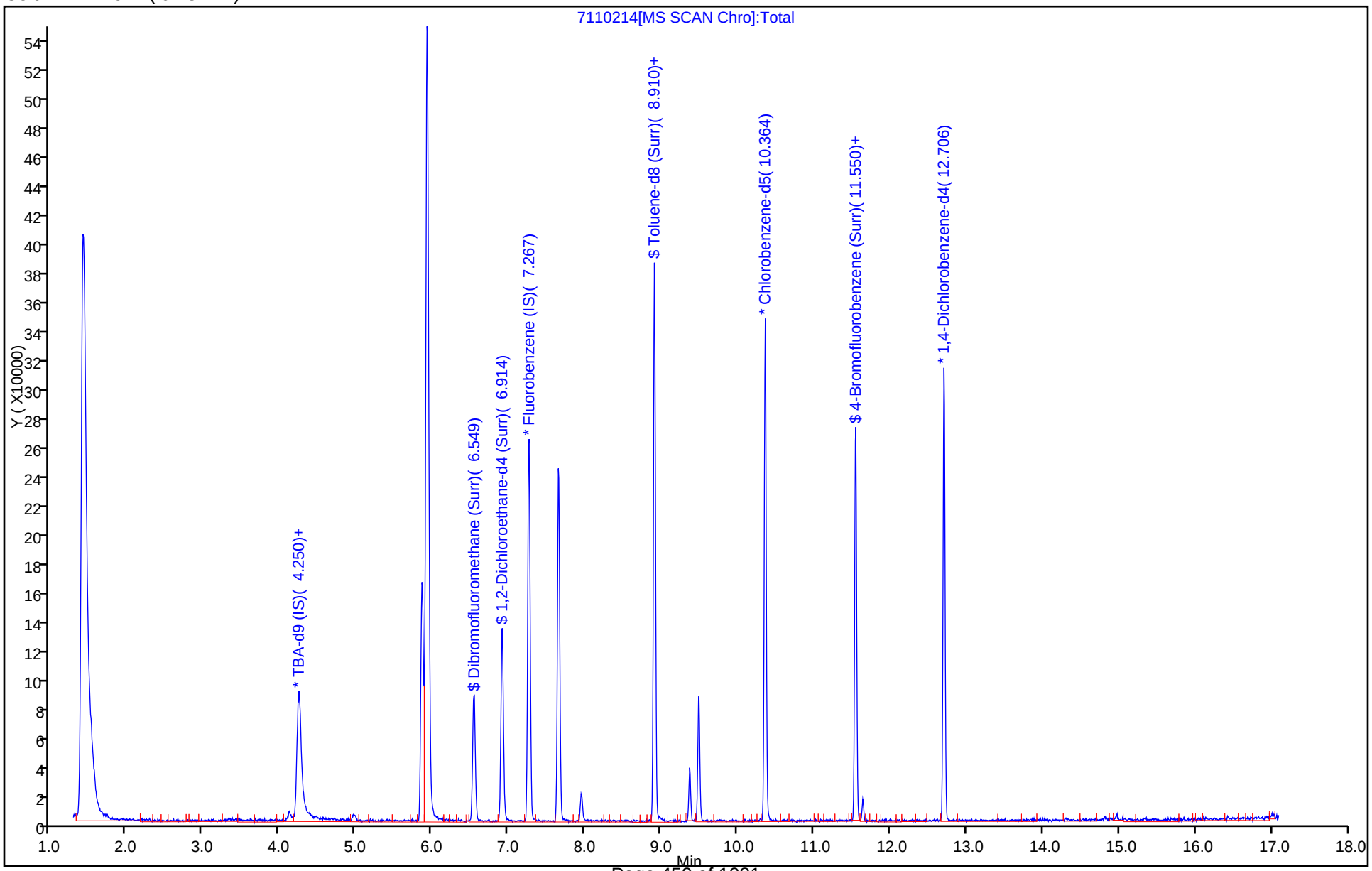
Report Date: 03-Nov-2017 07:09:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110214.D

Injection Date:	02-Nov-2017 11:26:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-B-10	Lab Sample ID:	180-71829-10	Worklist Smp#:	14
Client ID:	HD-MW-136A-434/434.5-0				
Purge Vol:	5.000 mL	Dil. Factor:	1000.0000	ALS Bottle#:	14
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110214.D
Lims ID: 180-71829-B-10
Client ID: HD-MW-136A-434/434.5-0
Sample Type: Client
Inject. Date: 02-Nov-2017 11:26:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1000.0000
Sample Info: 180-71829-B-10 ,1000x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2017 07:09:33 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: journetp Date: 02-Nov-2017 11:56:59

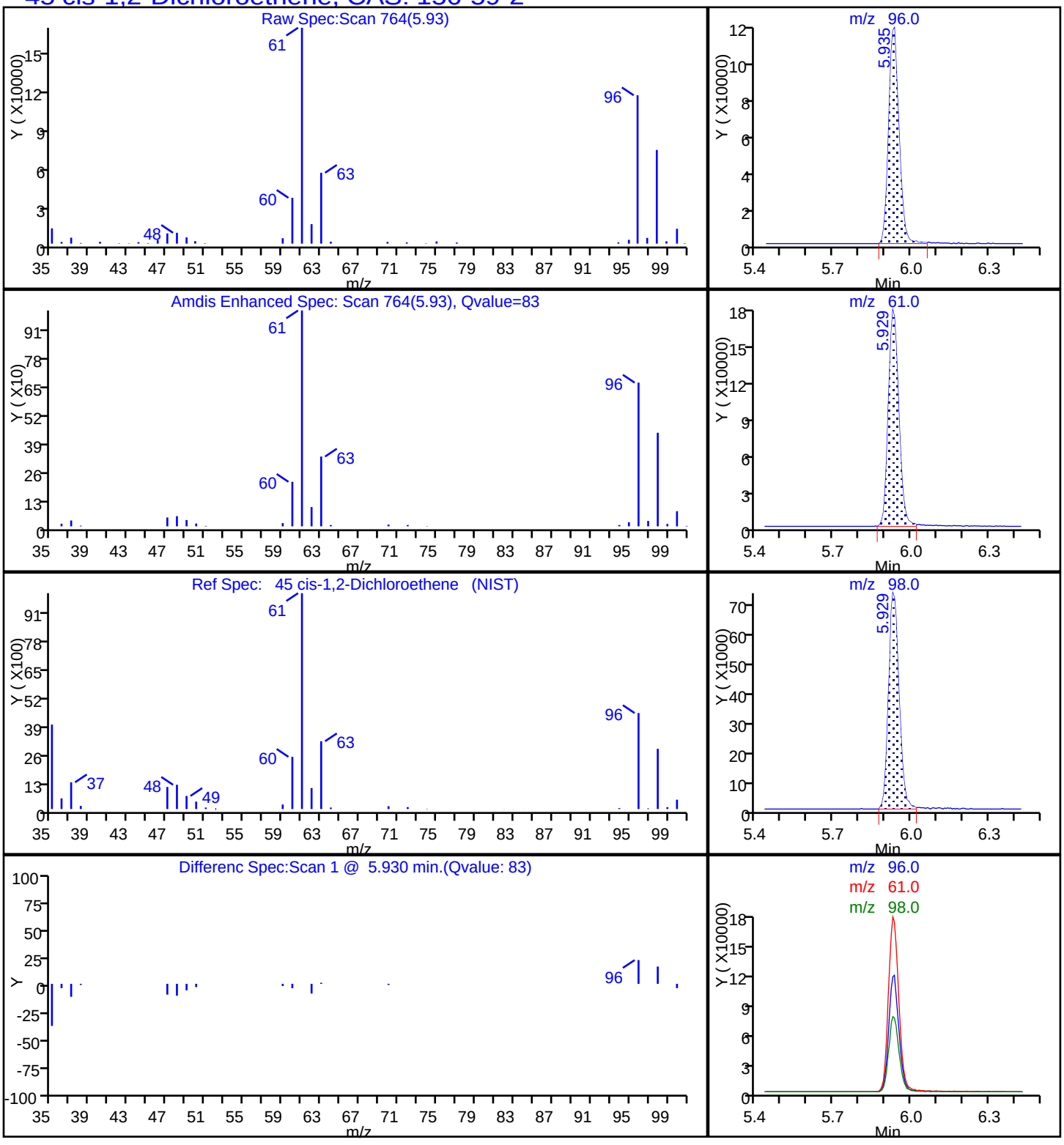
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.1	100.11
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	43.6	87.21
$ 7 Toluene-d8 (Surr)	50.0	54.3	108.69
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.8	105.65

Report Date: 03-Nov-2017 07:09:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110214.D				
Injection Date:	02-Nov-2017 11:26:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-10	Lab Sample ID:	180-71829-10		
Client ID:	HD-MW-136A-434/434.5-0				
Operator ID:	034635	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1000.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

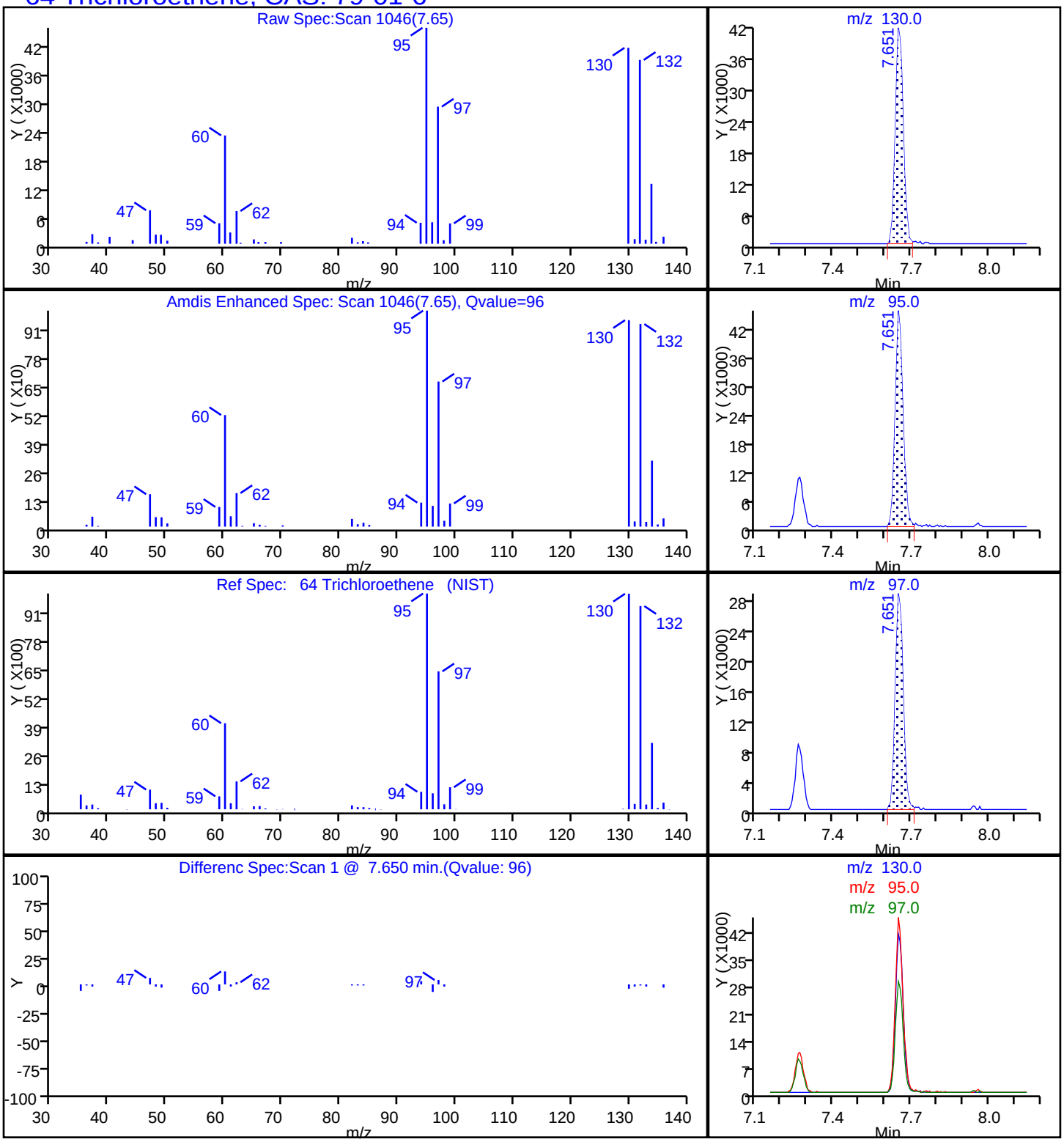


Report Date: 03-Nov-2017 07:09:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110214.D				
Injection Date:	02-Nov-2017 11:26:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-10	Lab Sample ID:	180-71829-10		
Client ID:	HD-MW-136A-434/434.5-0				
Operator ID:	034635	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1000.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



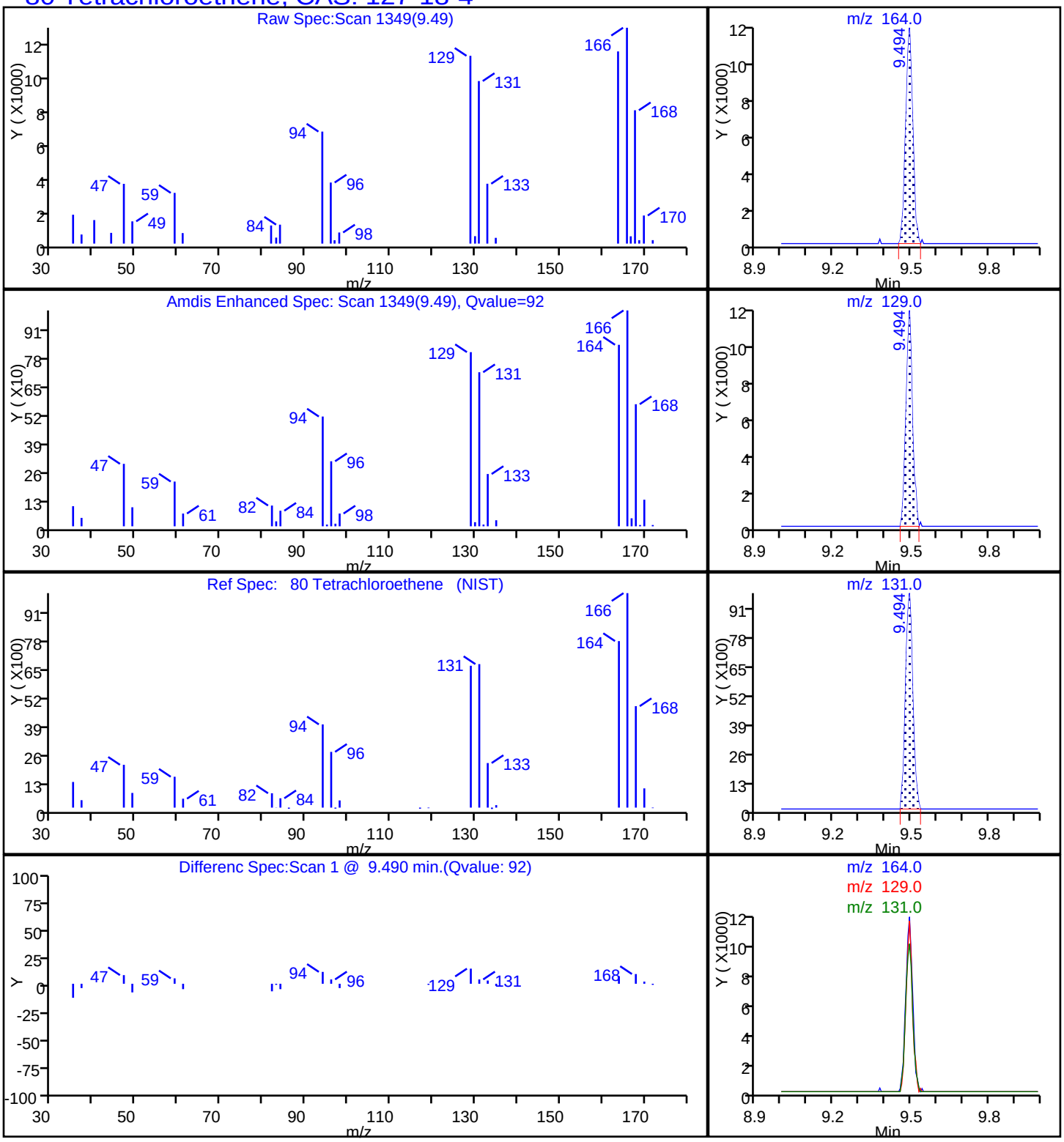
Report Date: 03-Nov-2017 07:09:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110214.D

Injection Date:	02-Nov-2017 11:26:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-10	Lab Sample ID:	180-71829-10		
Client ID:	HD-MW-136A-434/434.5-0				
Operator ID:	034635	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1000.0000		
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-270/348-0 | Lab Sample ID: 180-71829-11

Matrix: Water | Lab File ID: 7110222.D

Analysis Method: 8260C | Date Collected: 10/26/2017 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 15:18

Soil Aliquot Vol: | Dilution Factor: 5

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

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

Analysis Batch No.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.0	U ^c	5.0	4.5
75-01-4	Vinyl chloride	5.0	U ^c *	5.0	4.4
74-83-9	Bromomethane	5.0	U ^c	5.0	4.4
75-00-3	Chloroethane	5.0	U	5.0	4.5
75-35-4	1,1-Dichloroethene	5.0	U ^c *	5.0	2.8
67-64-1	Acetone	25	U ^c	25	17
75-15-0	Carbon disulfide	5.0	U	5.0	4.4
75-09-2	Methylene Chloride	8.2		5.0	1.8
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	3.4
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	3.0
75-34-3	1,1-Dichloroethane	5.0	U	5.0	3.1
156-59-2	*cis-1,2-Dichloroethene*	*410*	*E*	*5.0*	*3.5*
74-97-5	Bromochloromethane	5.0	U	5.0	3.1
78-93-3	2-Butanone (MEK)	25	U	25	13
67-66-3	Chloroform	3.1	J	5.0	3.0
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	3.0
56-23-5	Carbon tetrachloride	5.0	U	5.0	4.4
71-43-2	Benzene	5.0	U	5.0	3.0
107-06-2	1,2-Dichloroethane	5.0	U ^c	5.0	2.9
79-01-6	Trichloroethene	79		5.0	3.4
78-87-5	1,2-Dichloropropane	5.0	U	5.0	3.3
75-27-4	Bromodichloromethane	5.0	U	5.0	3.2
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	3.0
108-10-1	4-Methyl-2-pentanone (MIBK)	25	U	25	15
108-88-3	Toluene	5.0	U	5.0	2.3
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	2.9
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	2.3
127-18-4	Tetrachloroethene	39		5.0	2.3
591-78-6	2-Hexanone	25	U	25	16
124-48-1	Dibromochloromethane	5.0	U	5.0	4.2
106-93-4	1,2-Dibromoethane (EDB)	5.0	U	5.0	2.5
108-90-7	Chlorobenzene	5.0	U	5.0	2.5
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	2.9
100-41-4	Ethylbenzene	5.0	U	5.0	2.5
1330-20-7	Xylenes, Total	10	U	10	4.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-270/348-0 | Lab Sample ID: 180-71829-11

Matrix: Water | Lab File ID: 7110222.D

Analysis Method: 8260C | Date Collected: 10/26/2017 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 15:18

Soil Aliquot Vol: | Dilution Factor: 5

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

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

Analysis Batch No.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-42-5	Styrene	5.0	U	5.0	2.4
75-25-2	Bromoform	5.0	U	5.0	4.9
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	3.0
107-13-1	Acrylonitrile	100	U	100	39
123-91-1	1,4-Dioxane	1000	U	1000	68

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	73	^c	65-121
2037-26-5	Toluene-d8 (Surr)	109		73-120
460-00-4	4-Bromofluorobenzene (Surr)	102		80-120
1868-53-7	Dibromofluoromethane (Surr)	87		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110222.D
Lims ID: 180-71829-B-11
Client ID: HD-MW-136A-270/348-0
Sample Type: Client
Inject. Date: 02-Nov-2017 15:18:30 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 180-71829-B-11 ,5x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 15:49:18 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 15:49:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.249	4.252	-0.003	99	204990	1000.0	
* 2 Fluorobenzene (IS)	96	7.267	7.263	0.004	98	317953	50.0	
* 3 Chlorobenzene-d5	119	10.363	10.366	-0.003	90	69427	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.705	12.708	-0.003	98	101377	50.0	s
$ 5 Dibromofluoromethane (Surr	113	6.543	6.539	0.004	93	68381	43.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.914	6.910	0.004	92	111713	36.5	
$ 7 Toluene-d8 (Surr)	98	8.909	8.912	-0.003	93	285481	54.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.549	11.552	-0.003	85	114063	50.9	
12 Chloromethane	50		1.782				ND	
13 Vinyl chloride	62		1.928				ND	
15 Bromomethane	94		2.275				ND	
16 Chloroethane	64		2.415				ND	
22 1,1-Dichloroethene	96		3.339				ND	
24 Acetone	43	3.452	3.437	0.015	78	7133	4.88	
26 Carbon disulfide	76		3.625				ND	
31 Methylene Chloride	84	4.121	4.124	-0.003	95	21770	8.17	
33 Acrylonitrile	53		4.507				ND	
34 trans-1,2-Dichloroethene	96	4.541	4.544	-0.003	54	1655	1.04	
35 Methyl tert-butyl ether	73		4.562				ND	
37 1,1-Dichloroethane	63		5.183				ND	
45 cis-1,2-Dichloroethene	96	5.928	5.931	-0.003	82	847230	409.3	E
46 2-Butanone (MEK)	43		5.937				ND	
49 Chlorobromomethane	128		6.223				ND	
52 Chloroform	83	6.366	6.357	0.009	94	12435	3.10	
53 1,1,1-Trichloroethane	97		6.521				ND	
56 Carbon tetrachloride	117		6.691				ND	
58 Benzene	78		6.916				ND	
59 1,2-Dichloroethane	62		7.002				ND	
64 Trichloroethene	130	7.656	7.653	0.003	97	154583	79.1	
67 1,2-Dichloropropane	63		7.920				ND	
70 1,4-Dioxane	88		8.005				ND	
71 Dichlorobromomethane	83		8.212				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.650				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802				ND	
76 Toluene	91		8.979				ND	
77 trans-1,3-Dichloropropene	75		9.228				ND	
79 1,1,2-Trichloroethane	97		9.423				ND	
80 Tetrachloroethene	164	9.493	9.496	-0.003	92	46964	38.9	
82 2-Hexanone	43		9.636				ND	
84 Chlorodibromomethane	129		9.794				ND	
85 Ethylene Dibromide	107		9.903				ND	
87 Chlorobenzene	112		10.390				ND	
89 1,1,1,2-Tetrachloroethane	131		10.481				ND	
90 Ethylbenzene	106		10.487				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		11.005				ND	
93 Styrene	104		11.029				ND	
94 Bromoform	173		11.211				ND	
99 1,1,2,2-Tetrachloroethane	83		11.686				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

s - Failed ISTD Recovery Test

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

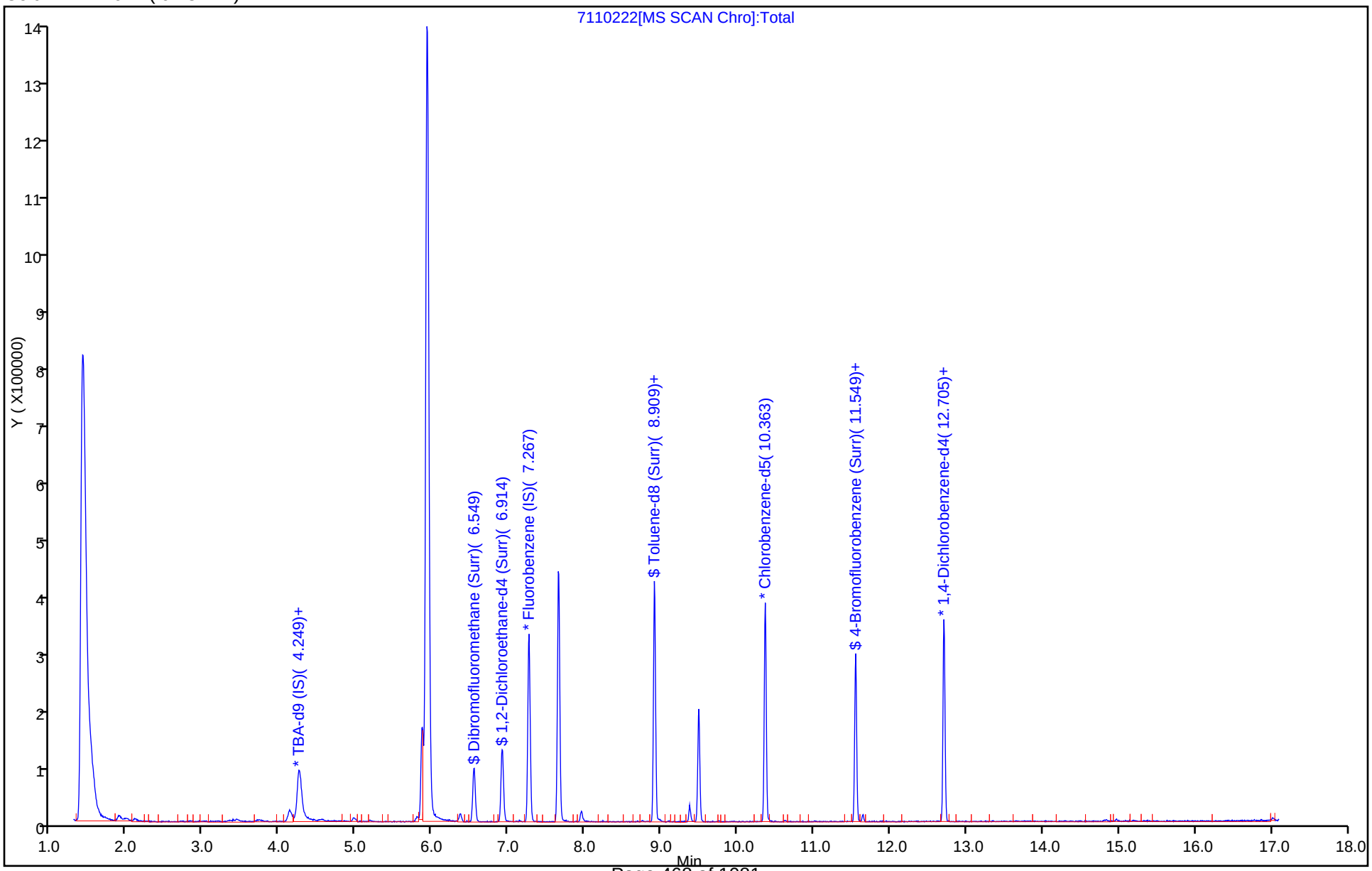
Report Date: 02-Nov-2017 15:52:25 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110222.D

Injection Date:	02-Nov-2017 15:18:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-B-11	Lab Sample ID:	180-71829-11	Worklist Smp#:	22
Client ID:	HD-MW-136A-270/348-0				
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	22
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110222.D
Lims ID: 180-71829-B-11
Client ID: HD-MW-136A-270/348-0
Sample Type: Client
Inject. Date: 02-Nov-2017 15:18:30 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 180-71829-B-11 ,5x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 15:49:18 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 15:49:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	43.5	86.92
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.5	73.01
$ 7 Toluene-d8 (Surr)	50.0	54.3	108.56
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.9	101.74

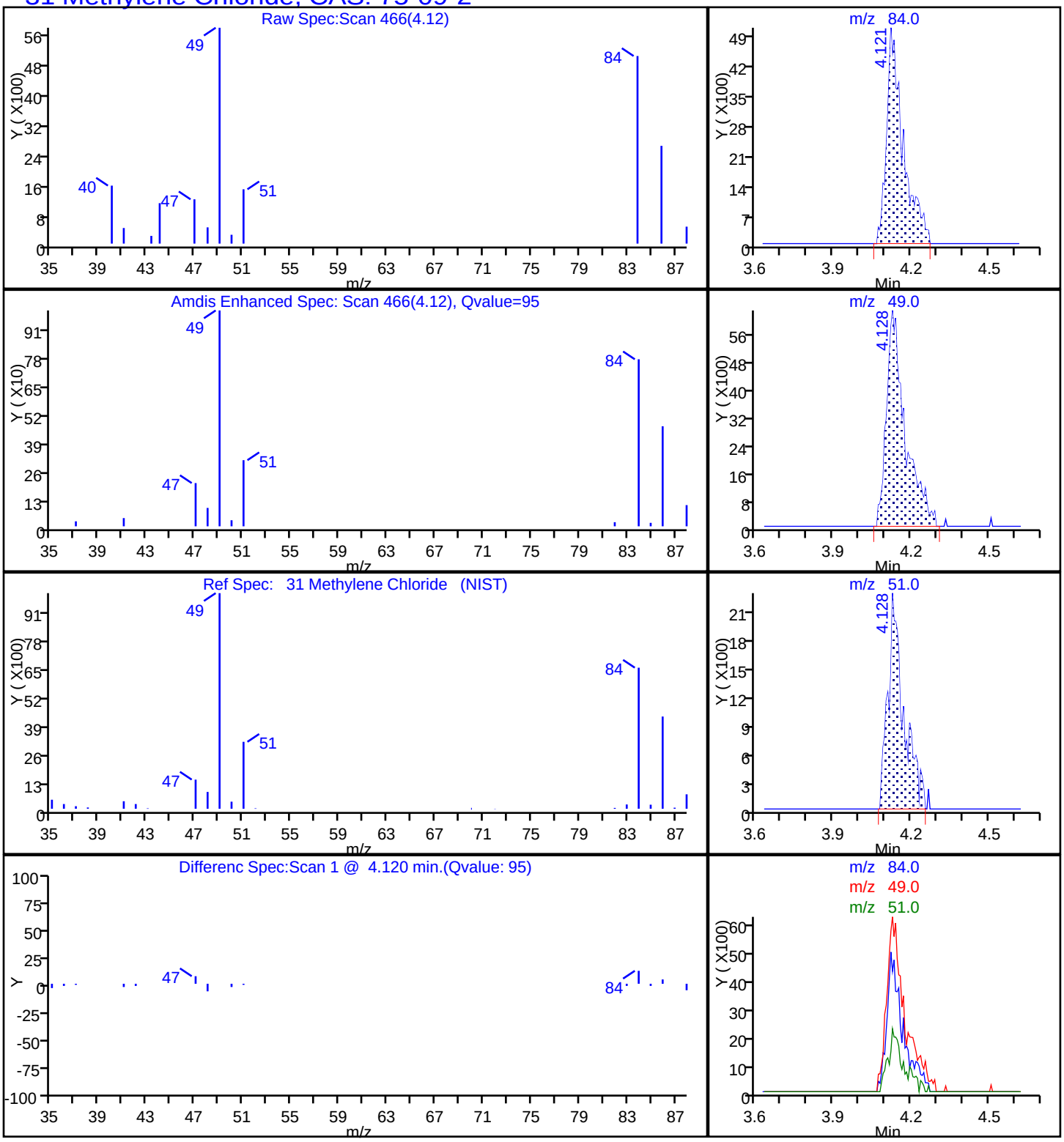
Report Date: 02-Nov-2017 15:52:25 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110222.D

Injection Date:	02-Nov-2017 15:18:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-11	Lab Sample ID:	180-71829-11		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	034635	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



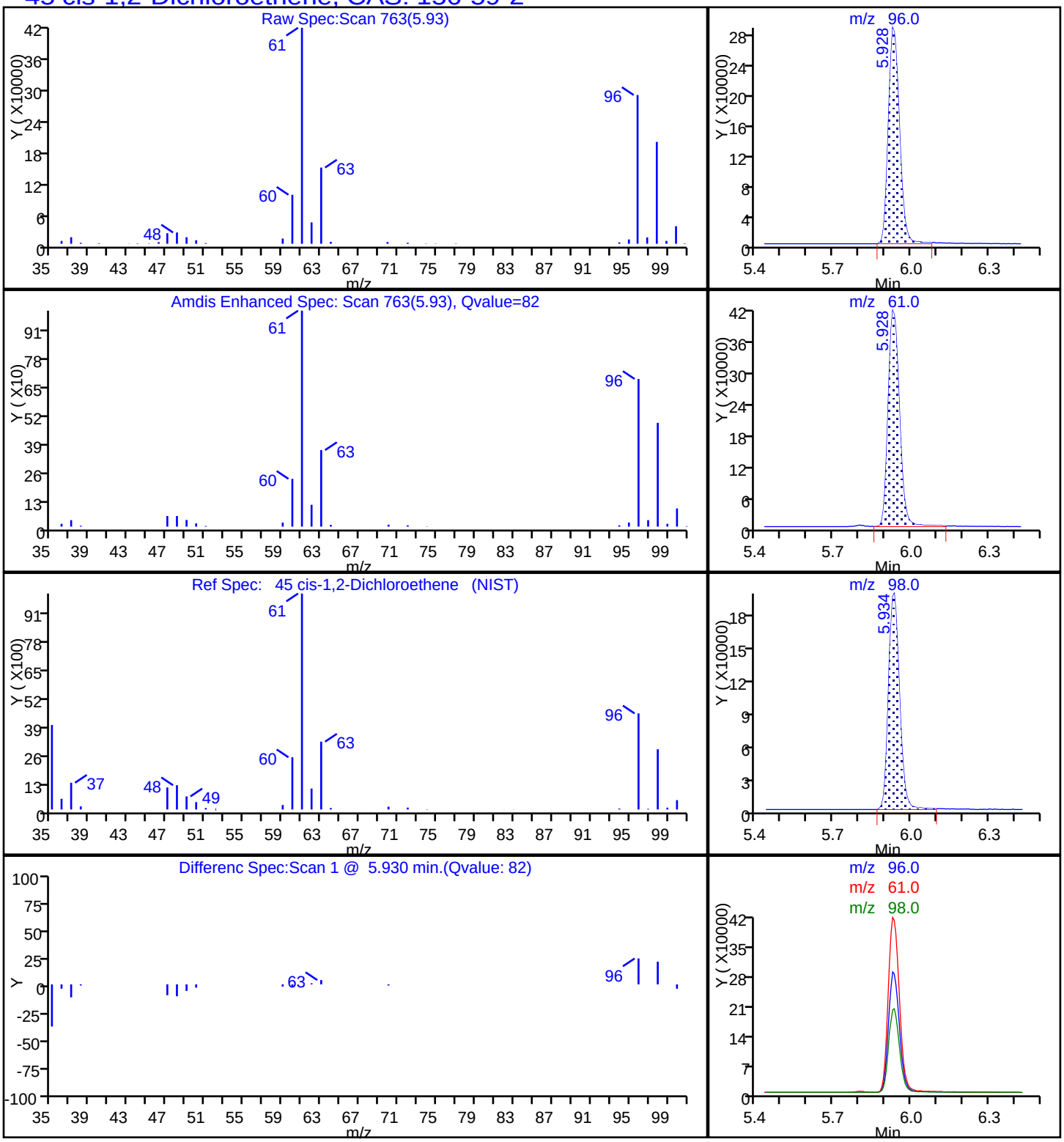
Report Date: 02-Nov-2017 15:52:25 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110222.D

Injection Date:	02-Nov-2017 15:18:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-11	Lab Sample ID:	180-71829-11		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	034635	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

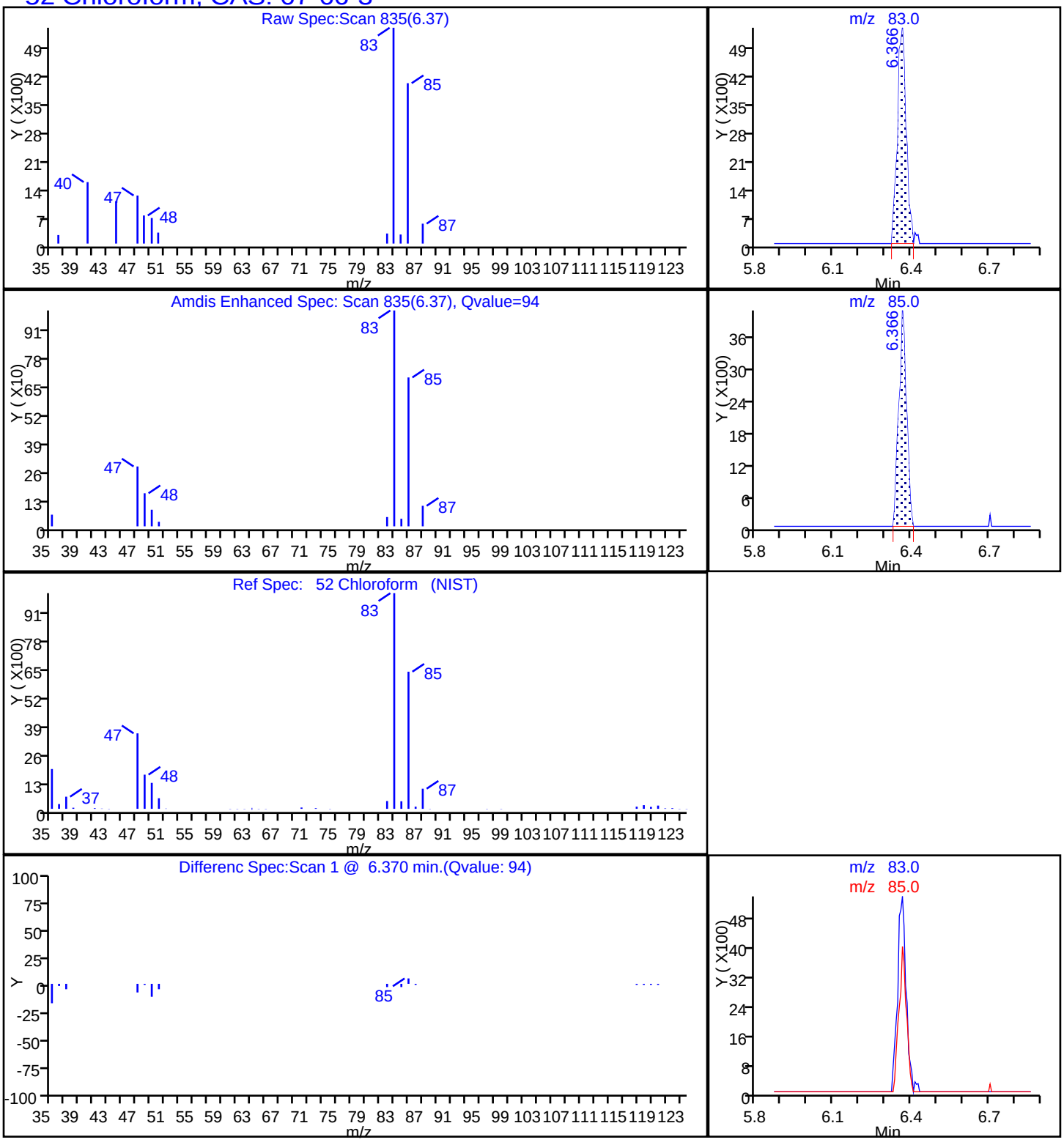


Report Date: 02-Nov-2017 15:52:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110222.D				
Injection Date:	02-Nov-2017 15:18:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-11	Lab Sample ID:	180-71829-11		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	034635	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3



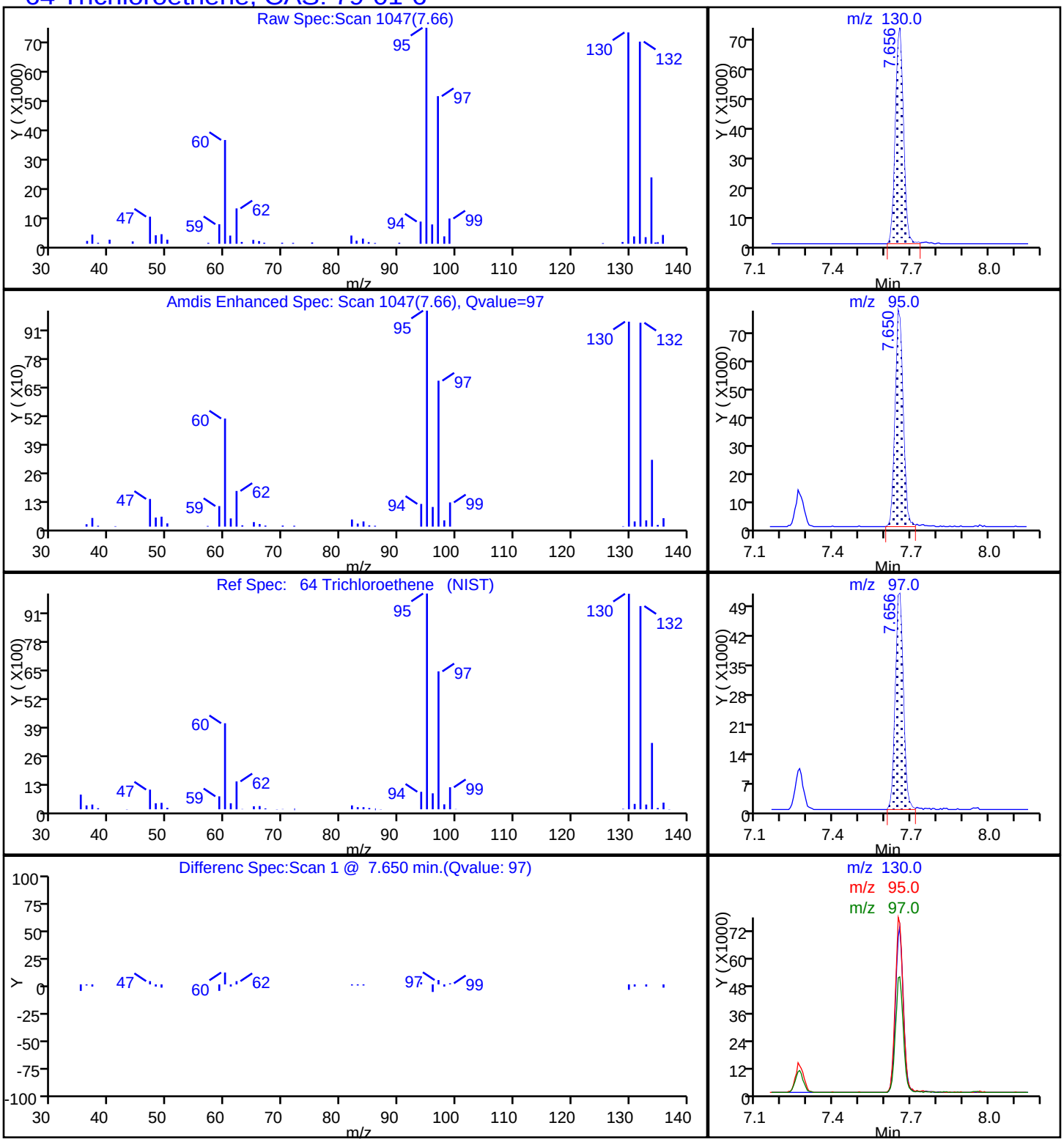
Report Date: 02-Nov-2017 15:52:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110222.D

Injection Date:	02-Nov-2017 15:18:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-11	Lab Sample ID:	180-71829-11		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	034635	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



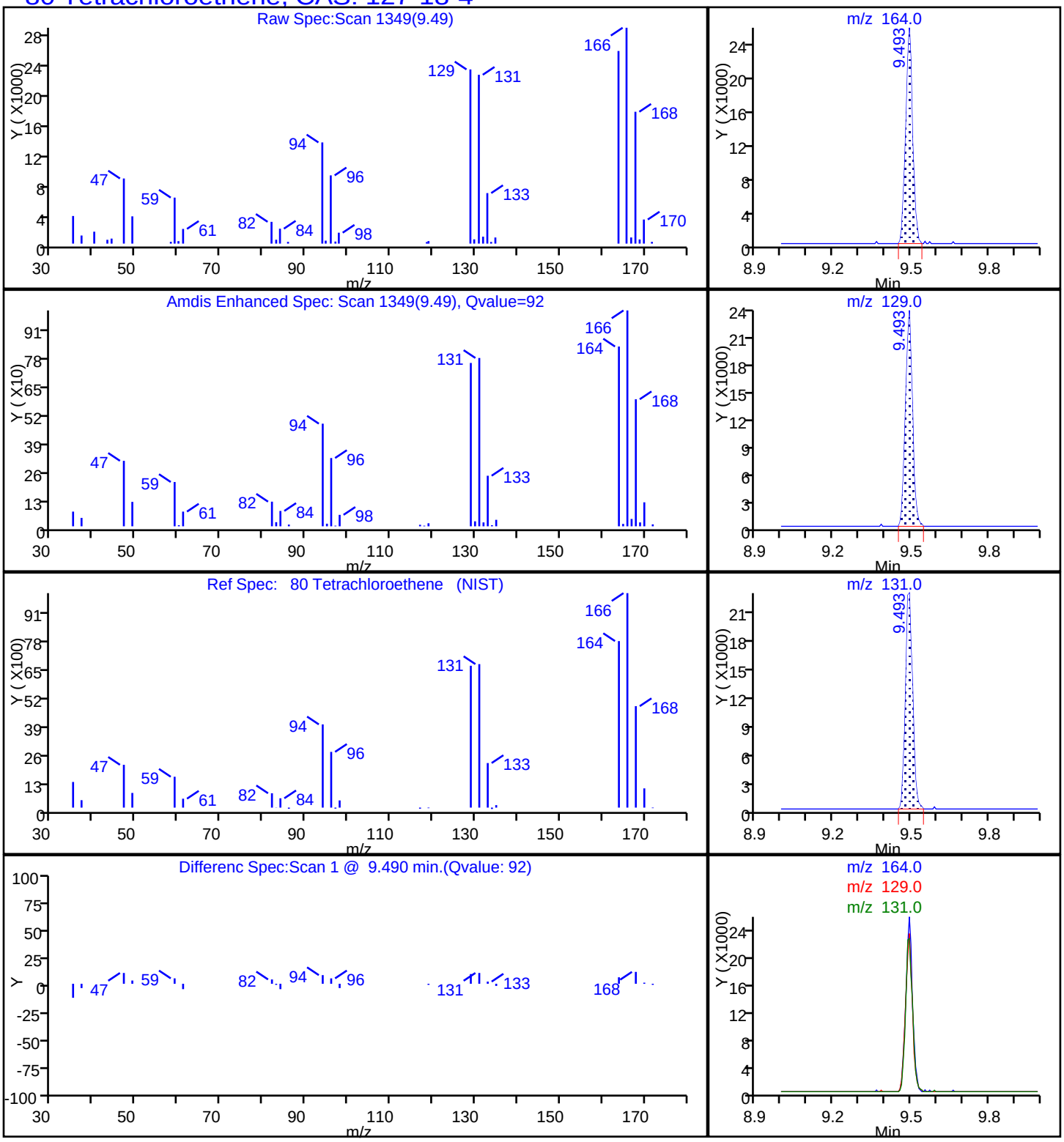
Report Date: 02-Nov-2017 15:52:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110222.D

Injection Date:	02-Nov-2017 15:18:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-11	Lab Sample ID:	180-71829-11		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	034635	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-270/348-0 DL | Lab Sample ID: 180-71829-11 DL

Matrix: Water | Lab File ID: 7110217.D

Analysis Method: 8260C | Date Collected: 10/26/2017 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 12:52

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50	U ^c	50	45
75-01-4	Vinyl chloride	50	U ^c *	50	44
74-83-9	Bromomethane	50	U ^c	50	44
75-00-3	Chloroethane	50	U	50	45
75-35-4	1,1-Dichloroethene	50	U ^c *	50	28
67-64-1	Acetone	250	U ^c	250	170
75-15-0	Carbon disulfide	50	U	50	44
75-09-2	Methylene Chloride	50	U	50	18
156-60-5	trans-1,2-Dichloroethene	50	U	50	34
1634-04-4	Methyl tert-butyl ether	50	U	50	30
75-34-3	1,1-Dichloroethane	50	U	50	31
156-59-2	cis-1,2-Dichloroethene	600		50	35
74-97-5	Bromochloromethane	50	U	50	31
78-93-3	2-Butanone (MEK)	250	U	250	130
67-66-3	Chloroform	50	U	50	30
71-55-6	1,1,1-Trichloroethane	50	U	50	30
56-23-5	Carbon tetrachloride	50	U	50	44
71-43-2	Benzene	50	U	50	30
107-06-2	1,2-Dichloroethane	50	U ^c	50	29
79-01-6	Trichloroethene	93		50	34
78-87-5	1,2-Dichloropropane	50	U	50	33
75-27-4	Bromodichloromethane	50	U	50	32
10061-01-5	cis-1,3-Dichloropropene	50	U	50	30
108-10-1	4-Methyl-2-pentanone (MIBK)	250	U	250	150
108-88-3	Toluene	50	U	50	23
10061-02-6	trans-1,3-Dichloropropene	50	U	50	29
79-00-5	1,1,2-Trichloroethane	50	U	50	23
127-18-4	Tetrachloroethene	50	U	50	23
591-78-6	2-Hexanone	250	U	250	160
124-48-1	Dibromochloromethane	50	U	50	42
106-93-4	1,2-Dibromoethane (EDB)	50	U	50	25
108-90-7	Chlorobenzene	50	U	50	25
630-20-6	1,1,1,2-Tetrachloroethane	50	U	50	29
100-41-4	Ethylbenzene	50	U	50	25

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-270/348-0 DL | Lab Sample ID: 180-71829-11 DL

Matrix: Water | Lab File ID: 7110217.D

Analysis Method: 8260C | Date Collected: 10/26/2017 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 12:52

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	*Xylenes, Total*	*100*	*U*	*100*	*45*
100-42-5	*Styrene*	*50*	*U*	*50*	*24*
75-25-2	*Bromoform*	*50*	*U*	*50*	*49*
79-34-5	*1,1,2,2-Tetrachloroethane*	*50*	*U*	*50*	*30*
107-13-1	*Acrylonitrile*	*1000*	*U*	*1000*	*390*
123-91-1	*1,4-Dioxane*	*790*	*J*	*10000*	*680*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82	*^c*	65-121
2037-26-5	Toluene-d8 (Surr)	110		73-120
460-00-4	4-Bromofluorobenzene (Surr)	106		80-120
1868-53-7	Dibromofluoromethane (Surr)	93		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110217.D
Lims ID: 180-71829-C-11
Client ID: HD-MW-136A-270/348-0
Sample Type: Client
Inject. Date: 02-Nov-2017 12:52:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 50.0000
Sample Info: 180-71829-C-11 ,50x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 15:59:08 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 13:28:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.262	4.252	0.010	99	210314	1000.0	
* 2 Fluorobenzene (IS)	96	7.268	7.263	0.005	98	258654	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.366	-0.002	90	57291	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.706	12.708	-0.002	97	79921	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.544	6.539	0.005	93	59746	46.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.921	6.910	0.011	91	101601	40.8	
$ 7 Toluene-d8 (Surr)	98	8.910	8.912	-0.002	94	237842	54.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.550	11.552	-0.002	86	98077	53.2	
12 Chloromethane	50		1.782				ND	
13 Vinyl chloride	62		1.928				ND	
15 Bromomethane	94		2.275				ND	
16 Chloroethane	64		2.415				ND	
22 1,1-Dichloroethene	96		3.339				ND	
24 Acetone	43		3.437				ND	
26 Carbon disulfide	76		3.625				ND	
31 Methylene Chloride	84		4.124				ND	
33 Acrylonitrile	53		4.507				ND	
34 trans-1,2-Dichloroethene	96		4.544				ND	
35 Methyl tert-butyl ether	73		4.562				ND	
37 1,1-Dichloroethane	63		5.183				ND	
45 cis-1,2-Dichloroethene	96	5.935	5.931	0.004	83	100436	59.6	
46 2-Butanone (MEK)	43		5.937				ND	
49 Chlorobromomethane	128		6.223				ND	
52 Chloroform	83	6.367	6.357	0.010	33	2263	0.6924	
53 1,1,1-Trichloroethane	97		6.521				ND	
56 Carbon tetrachloride	117		6.691				ND	
58 Benzene	78		6.916				ND	
59 1,2-Dichloroethane	62		7.002				ND	
64 Trichloroethene	130	7.657	7.653	0.004	94	14749	9.27	
67 1,2-Dichloropropane	63		7.920				ND	
70 1,4-Dioxane	88	8.022	8.005	0.017	27	1294	78.6	
71 Dichlorobromomethane	83		8.212				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.650				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802				ND	
76 Toluene	91		8.979				ND	
77 trans-1,3-Dichloropropene	75		9.228				ND	
79 1,1,2-Trichloroethane	97		9.423				ND	
80 Tetrachloroethene	164		9.496				ND	
82 2-Hexanone	43		9.636				ND	
84 Chlorodibromomethane	129		9.794				ND	
85 Ethylene Dibromide	107		9.903				ND	
87 Chlorobenzene	112		10.390				ND	
89 1,1,1,2-Tetrachloroethane	131		10.481				ND	
90 Ethylbenzene	106		10.487				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		11.005				ND	
93 Styrene	104		11.029				ND	
94 Bromoform	173		11.211				ND	
99 1,1,2,2-Tetrachloroethane	83		11.686				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

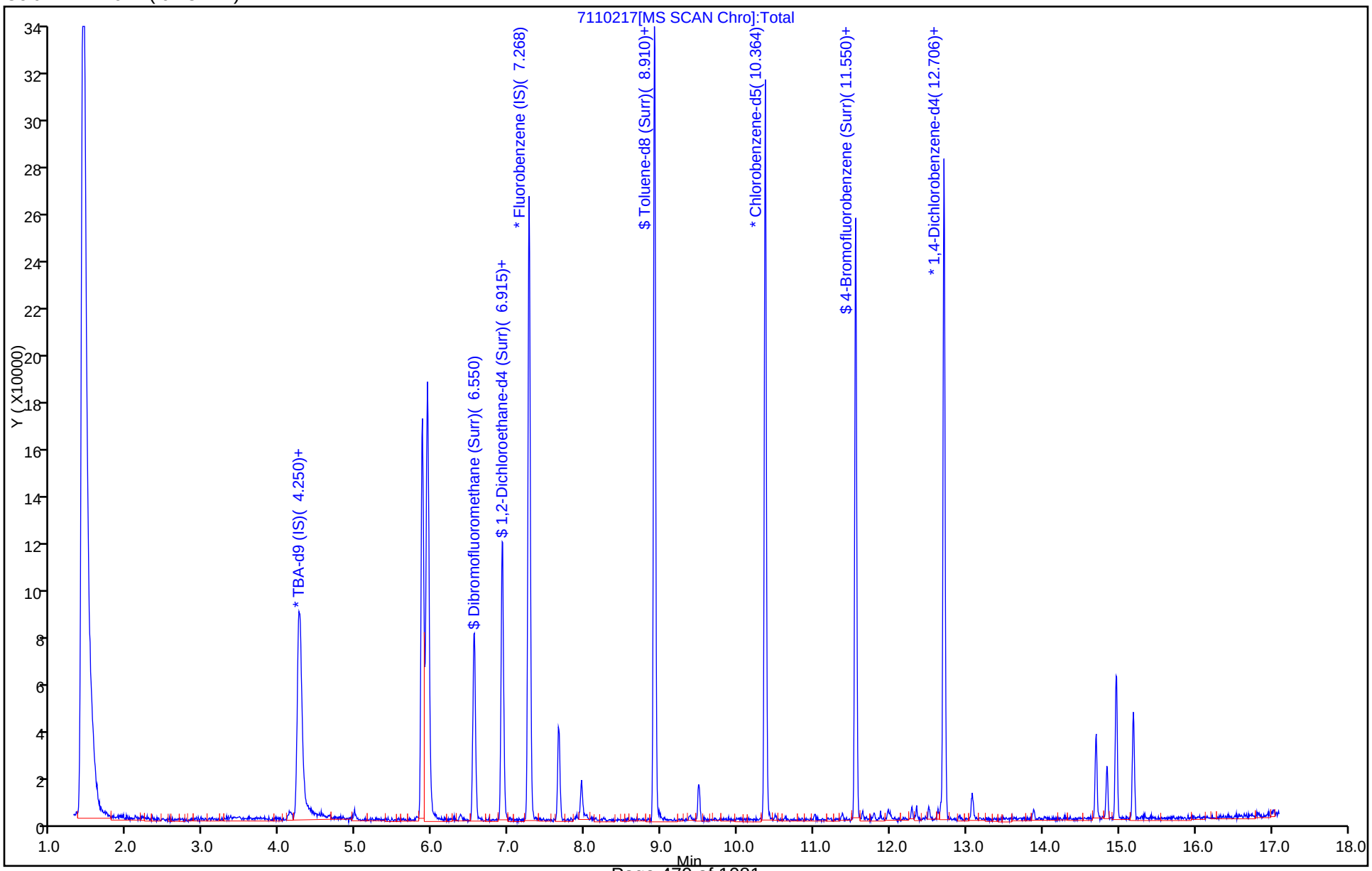
Report Date: 02-Nov-2017 15:59:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110217.D

Injection Date:	02-Nov-2017 12:52:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-C-11	Lab Sample ID:	180-71829-11	Worklist Smp#:	17
Client ID:	HD-MW-136A-270/348-0				
Purge Vol:	5.000 mL	Dil. Factor:	50.0000	ALS Bottle#:	17
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110217.D
Lims ID: 180-71829-C-11
Client ID: HD-MW-136A-270/348-0
Sample Type: Client
Inject. Date: 02-Nov-2017 12:52:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 50.0000
Sample Info: 180-71829-C-11 ,50x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 15:59:08 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 13:28:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	46.7	93.36
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	40.8	81.63
$ 7 Toluene-d8 (Surr)	50.0	54.8	109.60
$ 8 4-Bromofluorobenzene (Surr)	50.0	53.2	106.33

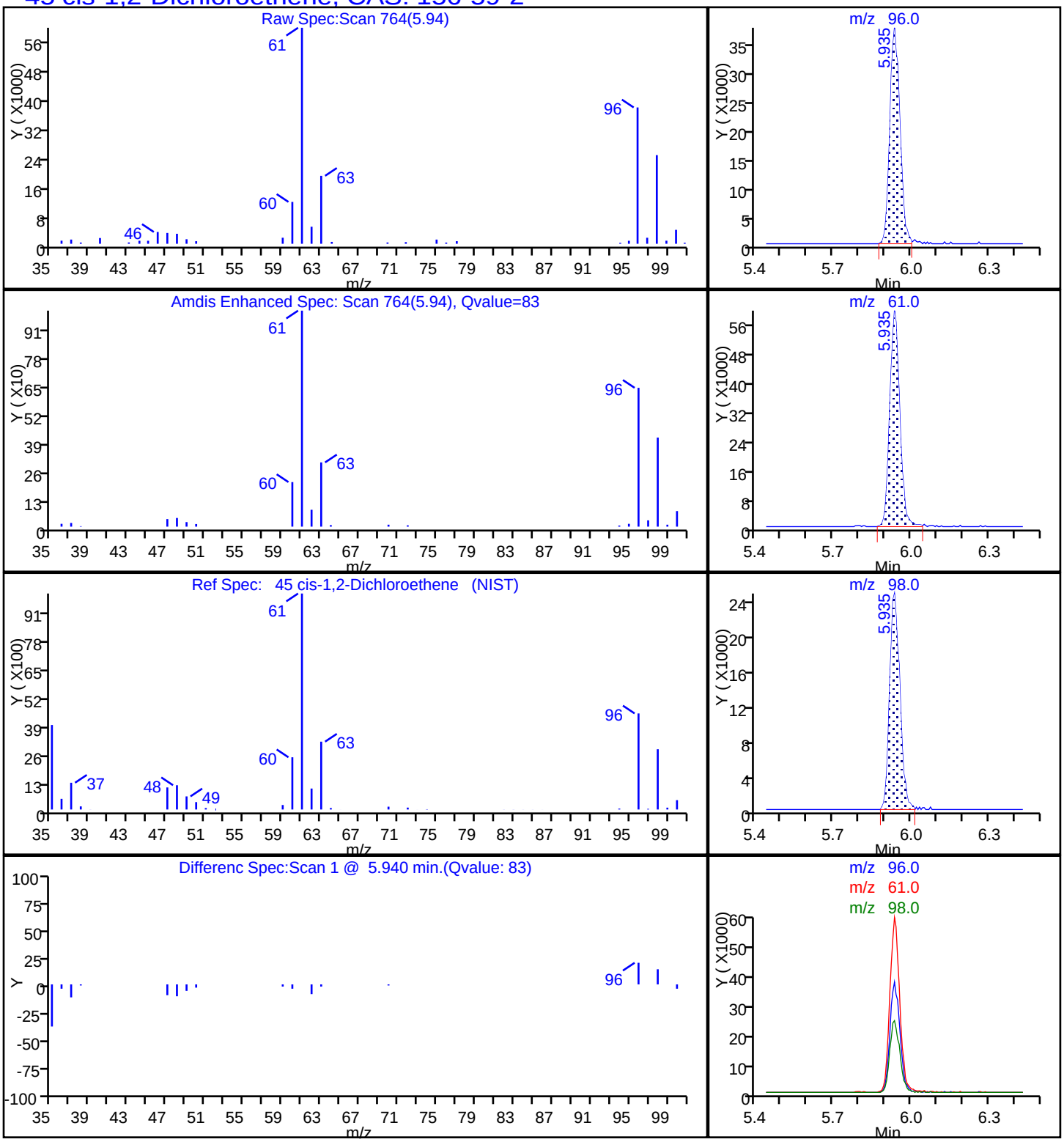
Report Date: 02-Nov-2017 15:59:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110217.D

Injection Date:	02-Nov-2017 12:52:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-11	Lab Sample ID:	180-71829-11		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	034635	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



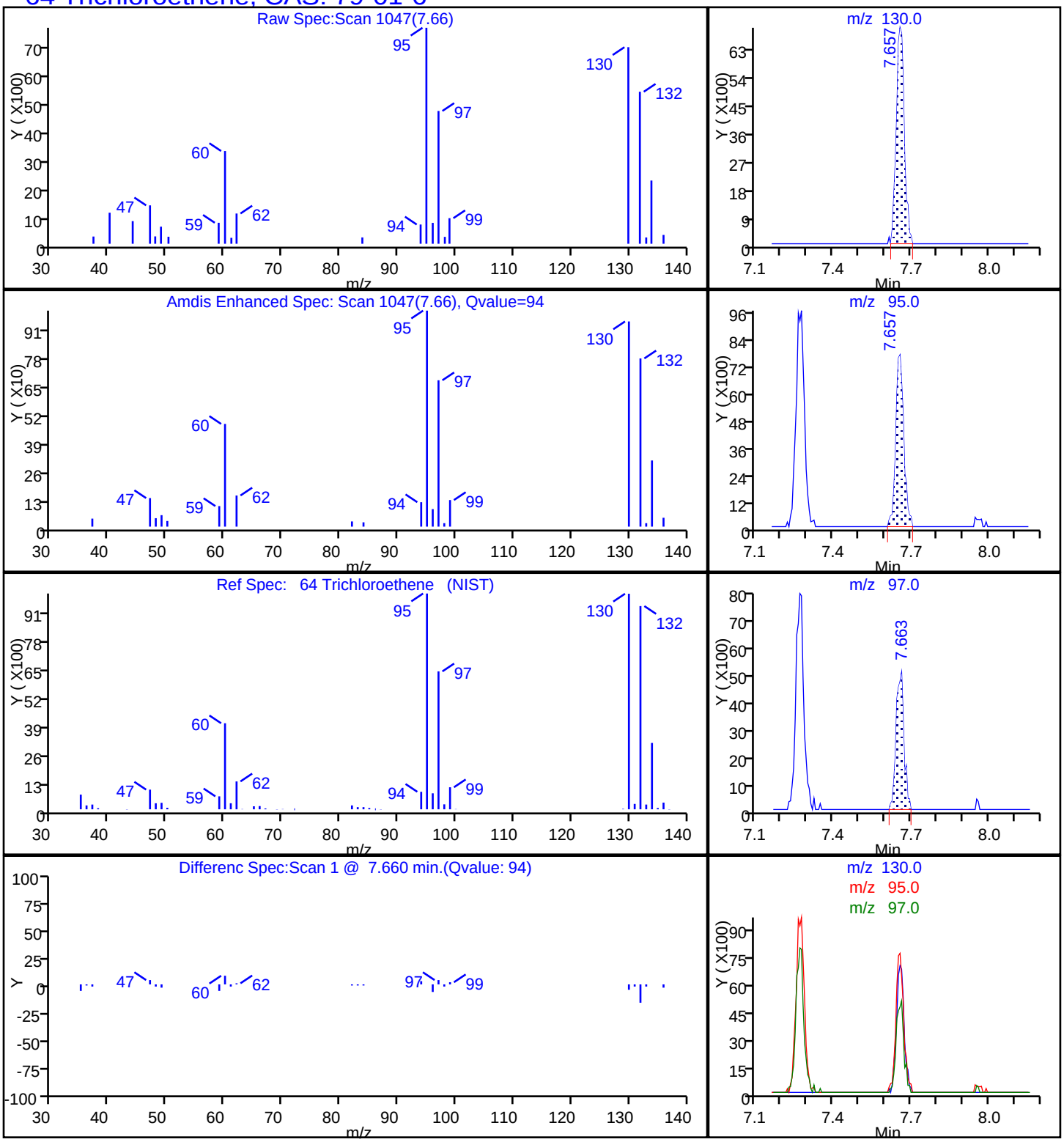
Report Date: 02-Nov-2017 15:59:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110217.D

Injection Date:	02-Nov-2017 12:52:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-11	Lab Sample ID:	180-71829-11		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	034635	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



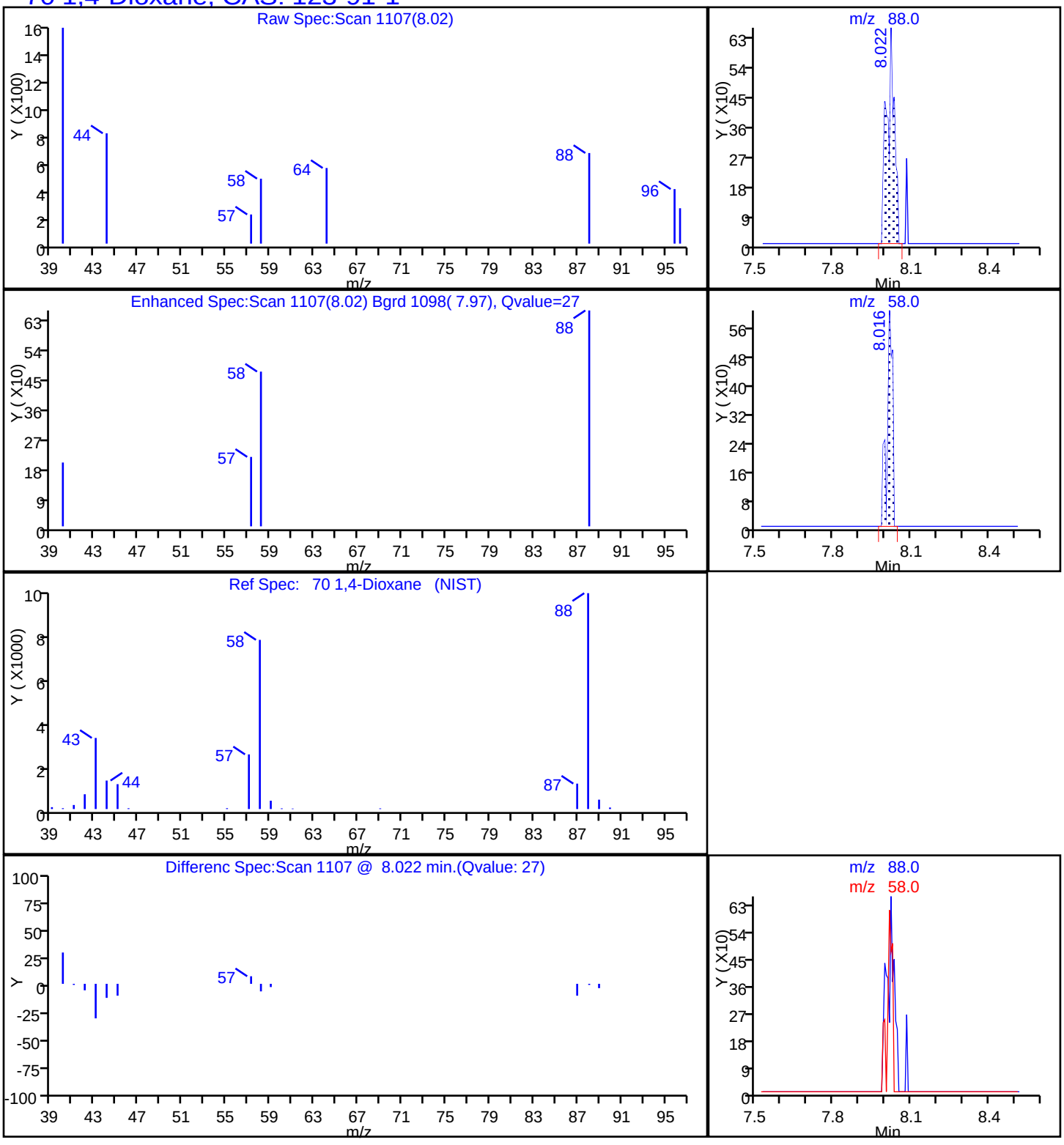
Report Date: 02-Nov-2017 15:59:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110217.D

Injection Date:	02-Nov-2017 12:52:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-11	Lab Sample ID:	180-71829-11		
Client ID:	HD-MW-136A-270/348-0				
Operator ID:	034635	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-91-0/1-0 | Lab Sample ID: 180-71829-12

Matrix: Water | Lab File ID: 7110220.D

Analysis Method: 8260C | Date Collected: 10/25/2017 13:43

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 14:17

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U ^c	1.0	0.90
75-01-4	Vinyl chloride	1.0	U ^c *	1.0	0.88
74-83-9	Bromomethane	1.0	U ^c	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U ^c *	1.0	0.55
67-64-1	Acetone	5.0	U ^c	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U ^c	1.0	0.57
79-01-6	Trichloroethene	1.7		1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1
108-88-3	Toluene	1.0	U	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	*Tetrachloroethene*	*110*	*E*	*1.0*	*0.47*
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-91-0/1-0 | Lab Sample ID: 180-71829-12

Matrix: Water | Lab File ID: 7110220.D

Analysis Method: 8260C | Date Collected: 10/25/2017 13:43

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 14:17

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-42-5	Styrene	1.0	U	1.0	0.47
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	77	^c	65-121
2037-26-5	Toluene-d8 (Surr)	109		73-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	87		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110220.D
Lims ID: 180-71829-C-12
Client ID: HD-MW-91-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 14:17:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-C-12
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 15:14:23 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 15:15:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.263	4.252	0.011	98	164100	1000.0	
* 2 Fluorobenzene (IS)	96	7.268	7.263	0.005	98	221608	50.0	
* 3 Chlorobenzene-d5	119	10.365	10.366	-0.001	90	48492	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.707	12.708	-0.001	98	68185	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.551	6.539	0.012	93	47700	43.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.916	6.910	0.006	92	81711	38.3	
$ 7 Toluene-d8 (Surr)	98	8.911	8.912	-0.001	95	200261	54.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.545	11.552	-0.007	85	76083	48.4	
12 Chloromethane	50		1.782				ND	
13 Vinyl chloride	62		1.928				ND	
15 Bromomethane	94		2.275				ND	
16 Chloroethane	64		2.415				ND	
22 1,1-Dichloroethene	96		3.339				ND	
24 Acetone	43		3.437				ND	
26 Carbon disulfide	76		3.625				ND	
31 Methylene Chloride	84		4.124				ND	
33 Acrylonitrile	53		4.507				ND	
34 trans-1,2-Dichloroethene	96		4.544				ND	
35 Methyl tert-butyl ether	73		4.562				ND	
37 1,1-Dichloroethane	63		5.183				ND	
45 cis-1,2-Dichloroethene	96		5.931				ND	
46 2-Butanone (MEK)	43		5.937				ND	
49 Chlorobromomethane	128		6.223				ND	
52 Chloroform	83	6.368	6.357	0.011	1	1615	0.5768	
53 1,1,1-Trichloroethane	97		6.521				ND	
56 Carbon tetrachloride	117		6.691				ND	
58 Benzene	78		6.916				ND	
59 1,2-Dichloroethane	62		7.002				ND	
64 Trichloroethene	130	7.658	7.653	0.005	94	11417	8.38	
67 1,2-Dichloropropane	63		7.920				ND	
70 1,4-Dioxane	88		8.005				ND	
71 Dichlorobromomethane	83		8.212				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.650				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802				ND	
76 Toluene	91		8.979				ND	
77 trans-1,3-Dichloropropene	75		9.228				ND	
79 1,1,2-Trichloroethane	97		9.423				ND	
80 Tetrachloroethene	164	9.495	9.496	-0.001	93	483725	574.3	E
82 2-Hexanone	43		9.636				ND	
84 Chlorodibromomethane	129		9.794				ND	
85 Ethylene Dibromide	107		9.903				ND	
87 Chlorobenzene	112		10.390				ND	
89 1,1,1,2-Tetrachloroethane	131		10.481				ND	
90 Ethylbenzene	106		10.487				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		11.005				ND	
93 Styrene	104		11.029				ND	
94 Bromoform	173		11.211				ND	
99 1,1,2,2-Tetrachloroethane	83		11.686				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

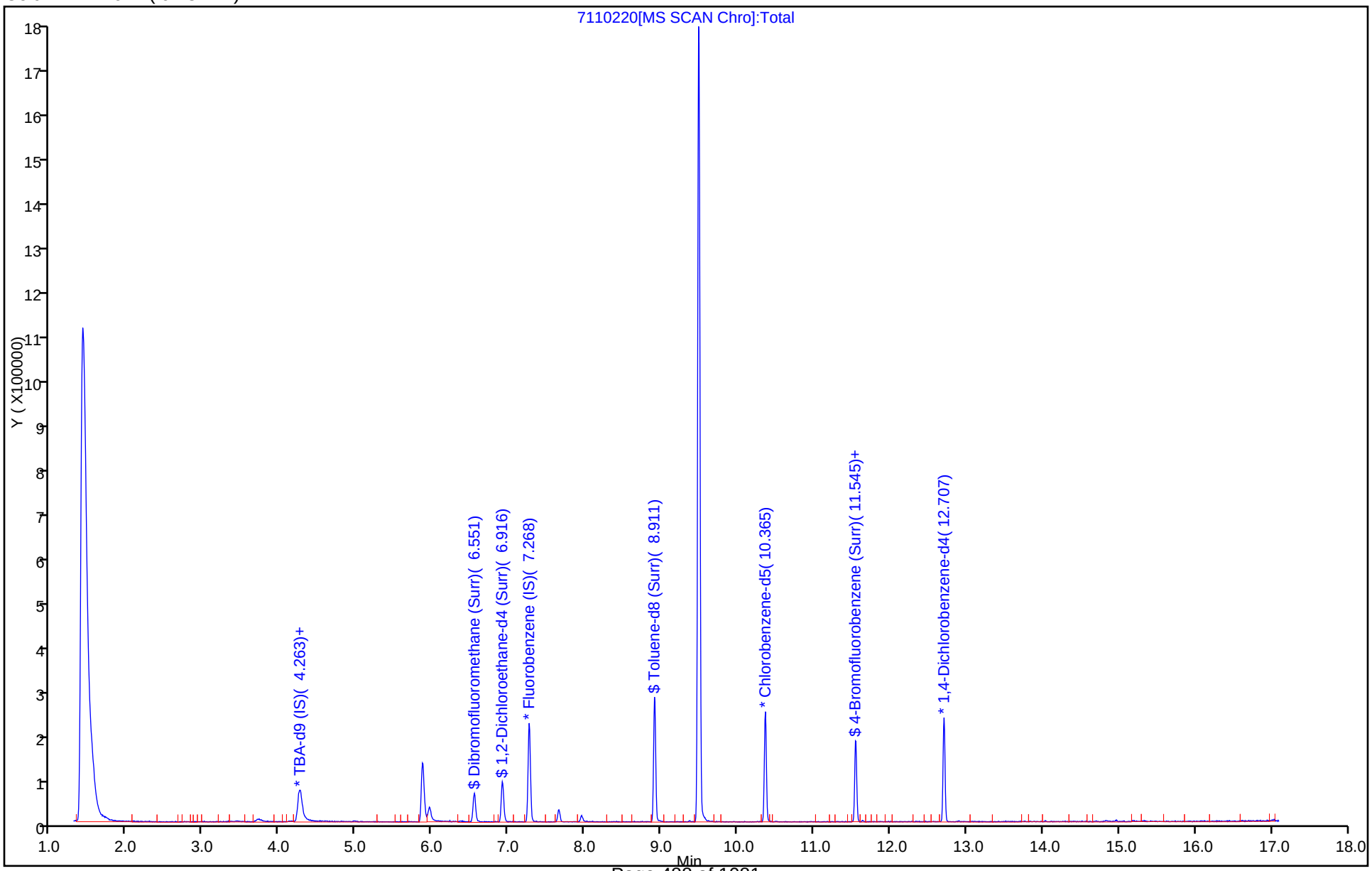
Report Date: 02-Nov-2017 15:15:12 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110220.D

Injection Date:	02-Nov-2017 14:17:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-C-12	Lab Sample ID:	180-71829-12	Worklist Smp#:	20
Client ID:	HD-MW-91-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110220.D
Lims ID: 180-71829-C-12
Client ID: HD-MW-91-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 14:17:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-C-12
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 15:14:23 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 15:15:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	43.5	87.00
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	38.3	76.62
$ 7 Toluene-d8 (Surr)	50.0	54.5	109.03
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.4	96.82

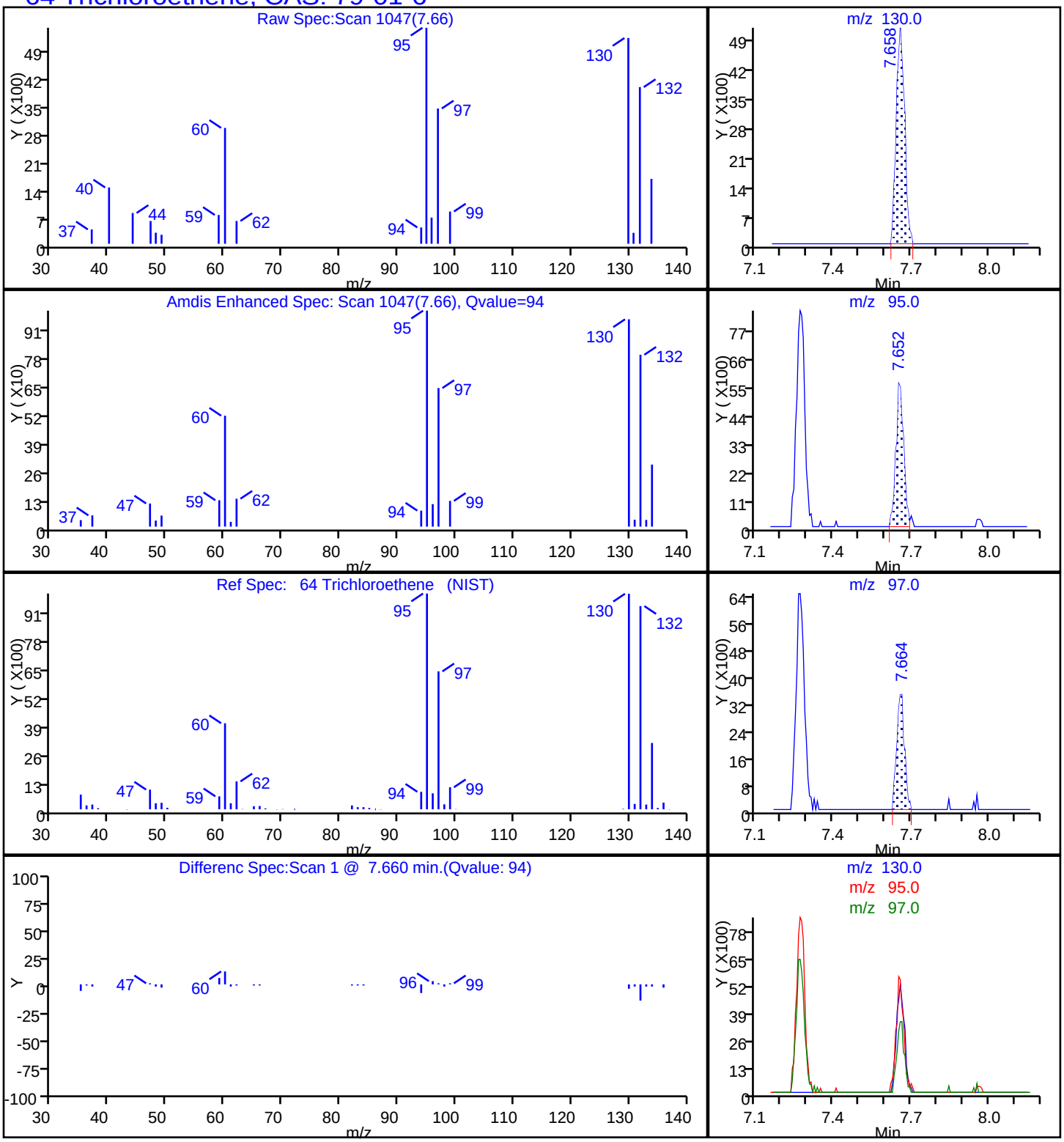
Report Date: 02-Nov-2017 15:15:12 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110220.D

Injection Date:	02-Nov-2017 14:17:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-12	Lab Sample ID:	180-71829-12		
Client ID:	HD-MW-91-0/1-0				
Operator ID:	034635	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



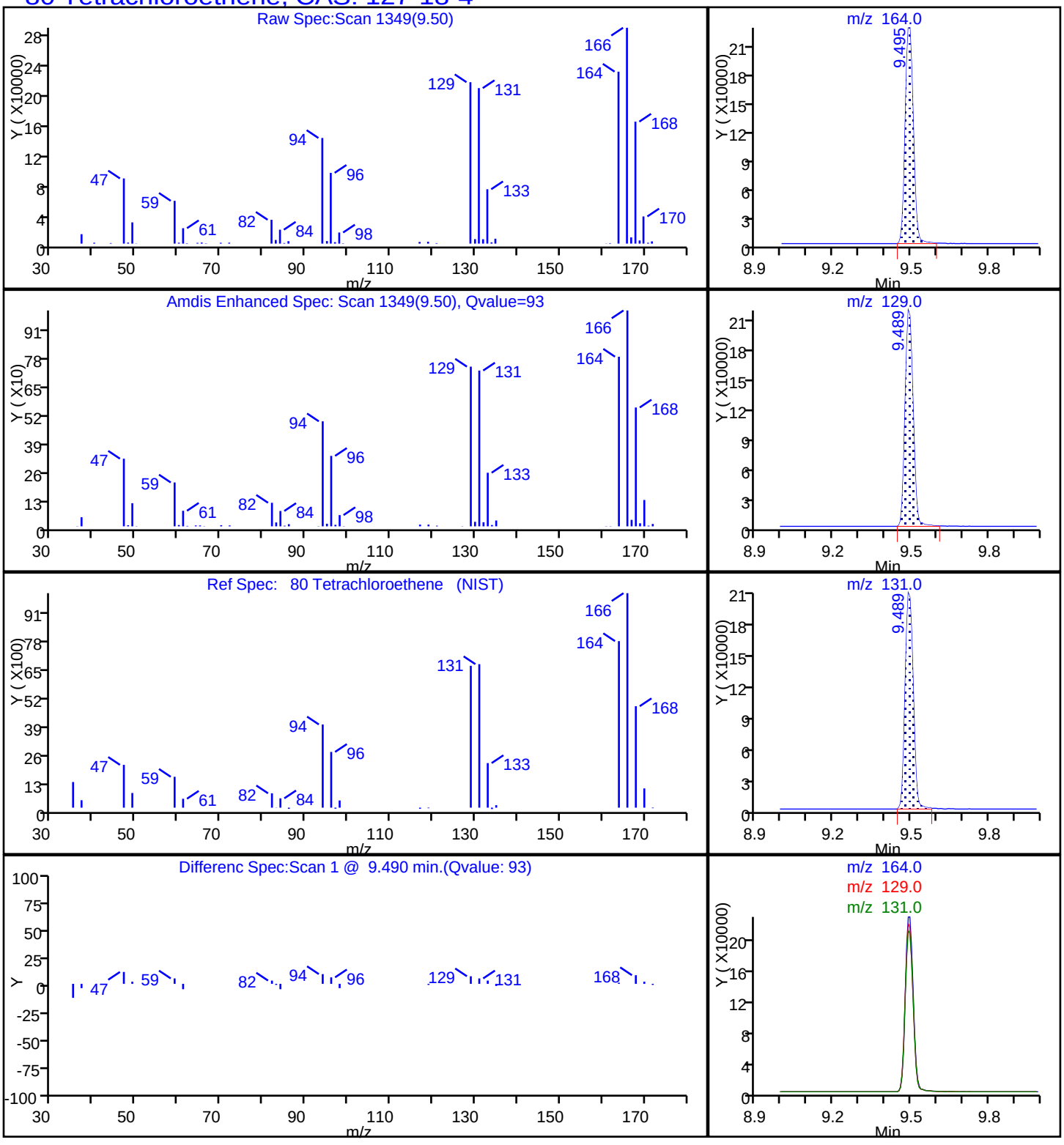
Report Date: 02-Nov-2017 15:15:12 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110220.D

Injection Date:	02-Nov-2017 14:17:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-12	Lab Sample ID:	180-71829-12		
Client ID:	HD-MW-91-0/1-0				
Operator ID:	034635	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-91-0/1-0 DL | Lab Sample ID: 180-71829-12 DL

Matrix: Water | Lab File ID: 7110211.D

Analysis Method: 8260C | Date Collected: 10/25/2017 13:43

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 09:46

Soil Aliquot Vol: | Dilution Factor: 10

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

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

Analysis Batch No.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10	U ^c	10	9.0
75-01-4	Vinyl chloride	10	U ^c *	10	8.8
74-83-9	Bromomethane	10	U ^c	10	8.9
75-00-3	Chloroethane	10	U	10	9.0
75-35-4	1,1-Dichloroethene	10	U ^c *	10	5.5
67-64-1	Acetone	50	U ^c	50	34
75-15-0	Carbon disulfide	10	U	10	8.8
75-09-2	Methylene Chloride	4.3	J	10	3.6
156-60-5	trans-1,2-Dichloroethene	10	U	10	6.7
1634-04-4	Methyl tert-butyl ether	10	U	10	5.9
75-34-3	1,1-Dichloroethane	10	U	10	6.3
156-59-2	cis-1,2-Dichloroethene	10	U	10	7.1
74-97-5	Bromochloromethane	10	U	10	6.3
78-93-3	2-Butanone (MEK)	50	U	50	26
67-66-3	Chloroform	10	U	10	6.0
71-55-6	1,1,1-Trichloroethane	10	U	10	6.0
56-23-5	Carbon tetrachloride	10	U	10	8.8
71-43-2	Benzene	10	U	10	6.0
107-06-2	1,2-Dichloroethane	10	U ^c	10	5.7
79-01-6	Trichloroethene	10	U	10	6.9
78-87-5	1,2-Dichloropropane	10	U	10	6.6
75-27-4	Bromodichloromethane	10	U	10	6.4
10061-01-5	cis-1,3-Dichloropropene	10	U	10	5.9
108-10-1	4-Methyl-2-pentanone (MIBK)	50	U	50	31
108-88-3	Toluene	10	U	10	4.6
10061-02-6	trans-1,3-Dichloropropene	10	U	10	5.8
79-00-5	1,1,2-Trichloroethane	10	U	10	4.5
127-18-4	Tetrachloroethene	150		10	4.7
591-78-6	2-Hexanone	50	U	50	33
124-48-1	Dibromochloromethane	10	U	10	8.4
106-93-4	1,2-Dibromoethane (EDB)	10	U	10	5.0
108-90-7	Chlorobenzene	10	U	10	5.0
630-20-6	1,1,1,2-Tetrachloroethane	10	U	10	5.7
100-41-4	Ethylbenzene	10	U	10	5.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-91-0/1-0 DL | Lab Sample ID: 180-71829-12 DL

Matrix: Water | Lab File ID: 7110211.D

Analysis Method: 8260C | Date Collected: 10/25/2017 13:43

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 09:46

Soil Aliquot Vol: | Dilution Factor: 10

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

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

Analysis Batch No.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	*Xylenes, Total*	*20*	*U*	*20*	*8.9*
100-42-5	*Styrene*	*10*	*U*	*10*	*4.7*
75-25-2	*Bromoform*	*10*	*U*	*10*	*9.8*
79-34-5	*1,1,2,2-Tetrachloroethane*	*10*	*U*	*10*	*6.0*
107-13-1	*Acrylonitrile*	*200*	*U*	*200*	*78*
123-91-1	*1,4-Dioxane*	*2000*	*U*	*2000*	*140*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112	*^c*	65-121
2037-26-5	Toluene-d8 (Surr)	110		73-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	115		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110211.D
Lims ID: 180-71829-B-12
Client ID: HD-MW-91-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 09:46:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 180-71829-B-12 ,10x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 11:36:19 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 10:12:15

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.256	4.252	0.004	99	200414	1000.0	
*	2 Fluorobenzene (IS)	96	7.268	7.263	0.005	98	152862	50.0	
*	3 Chlorobenzene-d5	119	10.364	10.366	-0.002	90	30963	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.706	12.708	-0.002	97	41641	50.0	
$	5 Dibromofluoromethane (Surr	113	6.550	6.539	0.011	93	43618	57.7	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.915	6.910	0.005	93	82485	56.1	
$	7 Toluene-d8 (Surr)	98	8.910	8.912	-0.002	94	129069	55.0	
$	8 4-Bromofluorobenzene (Surr	95	11.550	11.552	-0.002	84	48799	48.6	
	12 Chloromethane	50		1.782				ND	
	13 Vinyl chloride	62		1.928				ND	
	15 Bromomethane	94		2.275				ND	
	16 Chloroethane	64		2.415				ND	
	22 1,1-Dichloroethene	96		3.339				ND	
	24 Acetone	43		3.437				ND	
	26 Carbon disulfide	76		3.625				ND	
	31 Methylene Chloride	84	4.129	4.124	0.005	68	5016	2.13	
	33 Acrylonitrile	53		4.507				ND	
	34 trans-1,2-Dichloroethene	96		4.544				ND	
	35 Methyl tert-butyl ether	73		4.562				ND	
	37 1,1-Dichloroethane	63		5.183				ND	
	45 cis-1,2-Dichloroethene	96		5.931				ND	
	46 2-Butanone (MEK)	43		5.937				ND	
	49 Chlorobromomethane	128		6.223				ND	
	52 Chloroform	83	6.355	6.357	-0.002	1	321	0.1662	
	53 1,1,1-Trichloroethane	97		6.521				ND	
	56 Carbon tetrachloride	117		6.691				ND	
	58 Benzene	78		6.916				ND	
	59 1,2-Dichloroethane	62		7.002				ND	
	64 Trichloroethene	130		7.653				ND	
	67 1,2-Dichloropropane	63		7.920				ND	
	70 1,4-Dioxane	88		8.005				ND	
	71 Dichlorobromomethane	83		8.212				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.650				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802				ND	
76 Toluene	91		8.979				ND	
77 trans-1,3-Dichloropropene	75		9.228				ND	
79 1,1,2-Trichloroethane	97		9.423				ND	
80 Tetrachloroethene	164	9.494	9.496	-0.002	95	40615	75.5	
82 2-Hexanone	43		9.636				ND	
84 Chlorodibromomethane	129		9.794				ND	
85 Ethylene Dibromide	107		9.903				ND	
87 Chlorobenzene	112		10.390				ND	
89 1,1,1,2-Tetrachloroethane	131		10.481				ND	
90 Ethylbenzene	106		10.487				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		11.005				ND	
93 Styrene	104		11.029				ND	
94 Bromoform	173		11.211				ND	
99 1,1,2,2-Tetrachloroethane	83		11.686				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

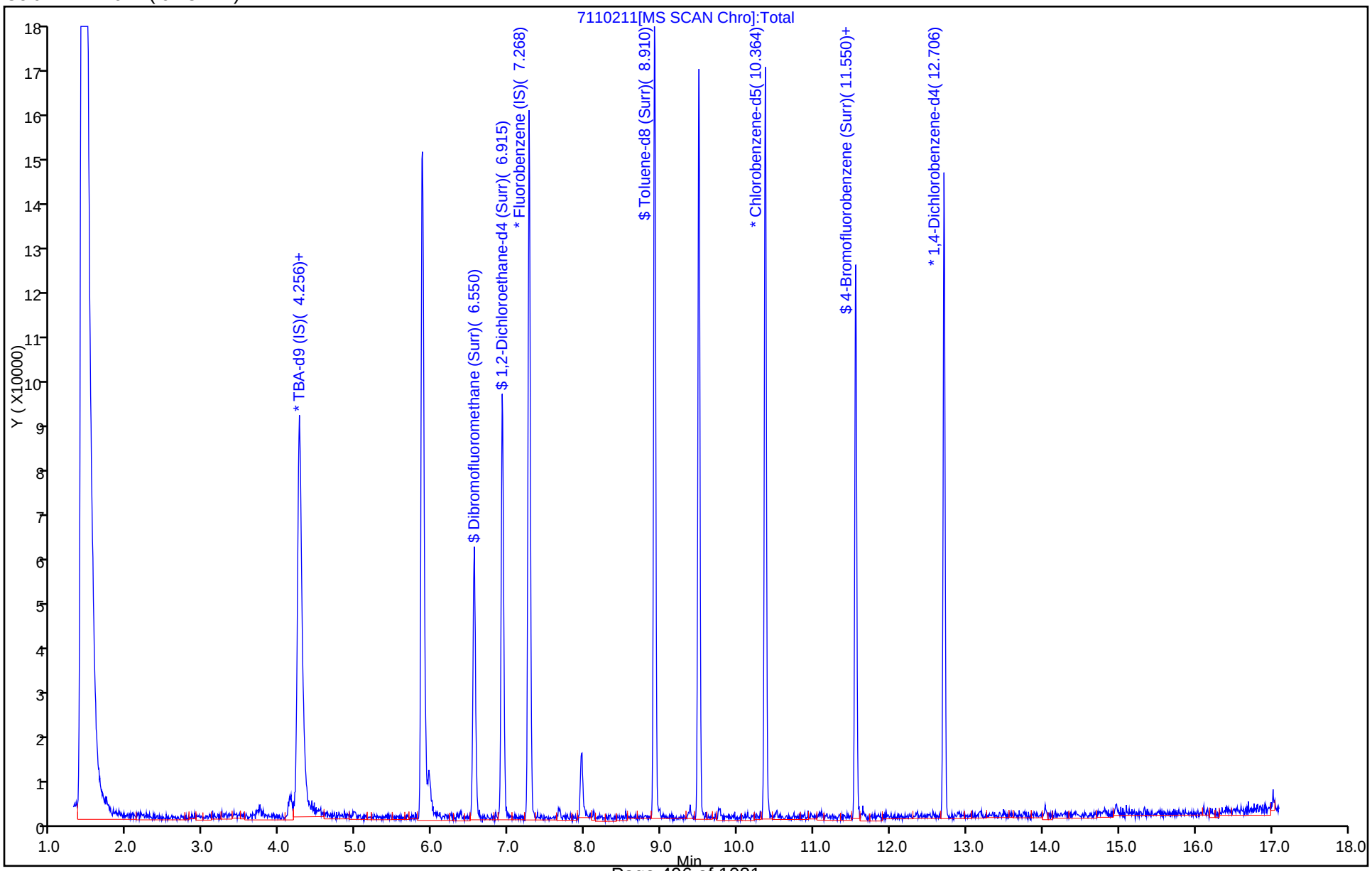
Report Date: 02-Nov-2017 11:36:53 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110211.D

Injection Date:	02-Nov-2017 09:46:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-B-12	Lab Sample ID:	180-71829-12	Worklist Smp#:	11
Client ID:	HD-MW-91-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	11
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110211.D
Lims ID: 180-71829-B-12
Client ID: HD-MW-91-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 09:46:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 180-71829-B-12 ,10x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 11:36:19 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 10:12:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	57.7	115.33
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	56.1	112.13
$ 7 Toluene-d8 (Surr)	50.0	55.0	110.05
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.6	97.29

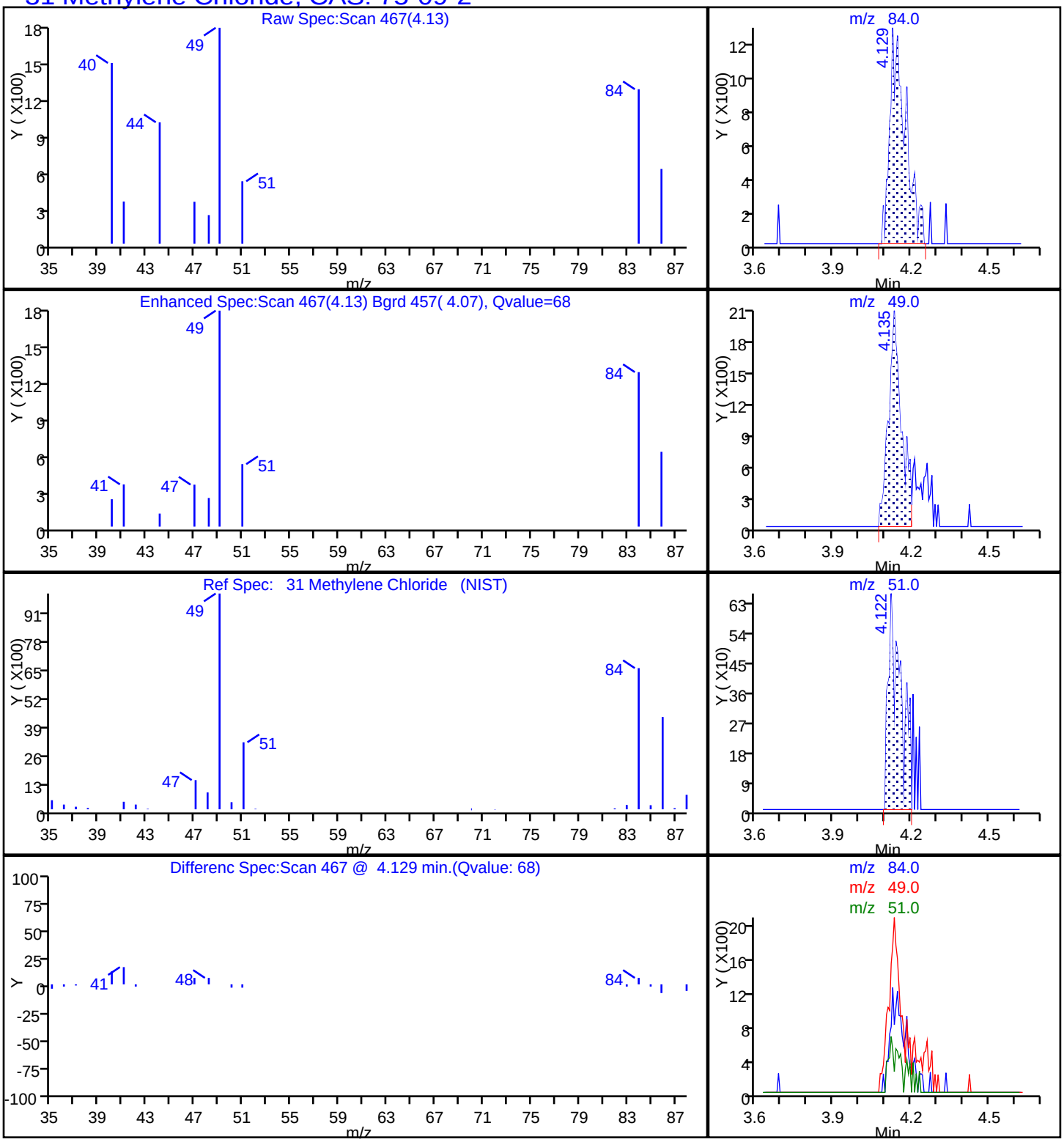
Report Date: 02-Nov-2017 11:36:53 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110211.D

Injection Date:	02-Nov-2017 09:46:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-12	Lab Sample ID:	180-71829-12		
Client ID:	HD-MW-91-0/1-0				
Operator ID:	034635	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



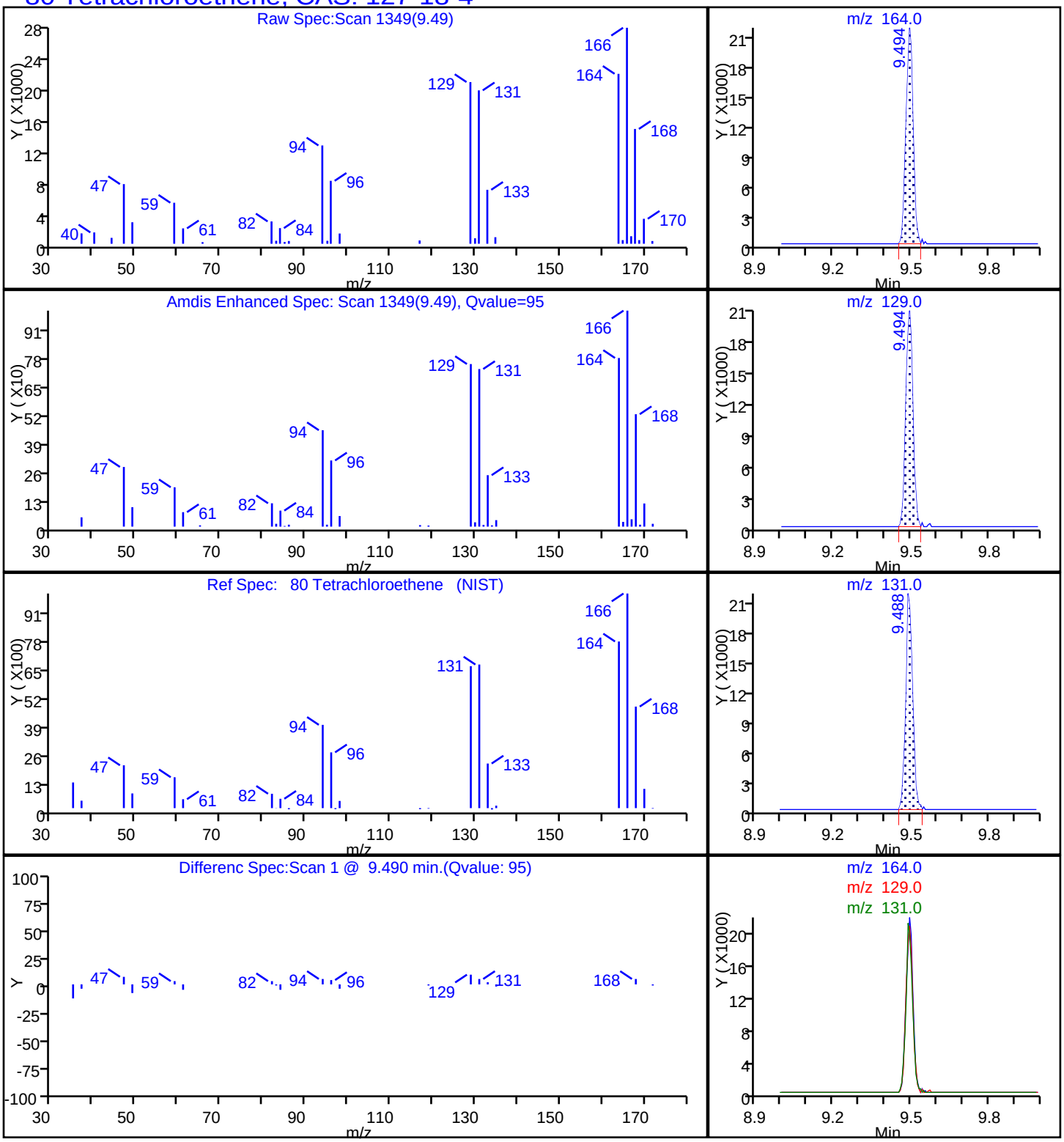
Report Date: 02-Nov-2017 11:36:54 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110211.D

Injection Date:	02-Nov-2017 09:46:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-12	Lab Sample ID:	180-71829-12		
Client ID:	HD-MW-91-0/1-0				
Operator ID:	034635	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-16D-0/1-0 | Lab Sample ID: 180-71829-13

Matrix: Water | Lab File ID: 7110208.D

Analysis Method: 8260C | Date Collected: 10/25/2017 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 07:57

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U ^c	1.0	0.90
75-01-4	Vinyl chloride	1.0	U F1 ^c *	1.0	0.88
74-83-9	Bromomethane	1.0	U ^c	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U ^c *	1.0	0.55
67-64-1	Acetone	5.0	U ^c	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	7.0		1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U ^c	1.0	0.57
79-01-6	Trichloroethene	8.7	F1	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1
108-88-3	Toluene	1.0	U	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-16D-0/1-0 | Lab Sample ID: 180-71829-13

Matrix: Water | Lab File ID: 7110208.D

Analysis Method: 8260C | Date Collected: 10/25/2017 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 07:57

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-42-5	Styrene	1.0	U	1.0	0.47
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83	^c	65-121
2037-26-5	Toluene-d8 (Surr)	112		73-120
460-00-4	4-Bromofluorobenzene (Surr)	112		80-120
1868-53-7	Dibromofluoromethane (Surr)	93		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110208.D
Lims ID: 180-71829-B-13
Client ID: HD-MW-16D-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 07:57:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-B-13
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 08:59:56 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 08:41:45

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.235	4.252	-0.017	99	144811	1000.0	
*	2 Fluorobenzene (IS)	96	7.265	7.263	0.002	97	201056	50.0	
*	3 Chlorobenzene-d5	119	10.361	10.366	-0.005	89	46181	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.703	12.708	-0.005	98	61406	50.0	
$	5 Dibromofluoromethane (Surr	113	6.541	6.539	0.002	92	46298	46.5	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.910	-0.004	92	80644	41.7	
$	7 Toluene-d8 (Surr)	98	8.907	8.912	-0.005	94	195851	56.0	
$	8 4-Bromofluorobenzene (Surr	95	11.547	11.552	-0.005	86	82730	55.8	
	12 Chloromethane	50		1.782				ND	
	13 Vinyl chloride	62		1.928				ND	
	15 Bromomethane	94		2.275				ND	
	16 Chloroethane	64		2.415				ND	
	22 1,1-Dichloroethene	96		3.339				ND	
	24 Acetone	43	3.420	3.437	-0.017	70	4575	4.95	
	26 Carbon disulfide	76		3.625				ND	
	31 Methylene Chloride	84		4.124				ND	
	33 Acrylonitrile	53		4.507				ND	
	34 trans-1,2-Dichloroethene	96		4.544				ND	
	35 Methyl tert-butyl ether	73		4.562				ND	
	37 1,1-Dichloroethane	63		5.183				ND	
	45 cis-1,2-Dichloroethene	96	5.926	5.931	-0.005	84	45989	35.1	
	46 2-Butanone (MEK)	43		5.937				ND	
	49 Chlorobromomethane	128		6.223				ND	
	52 Chloroform	83		6.357				ND	
	53 1,1,1-Trichloroethane	97		6.521				ND	
	56 Carbon tetrachloride	117		6.691				ND	
	58 Benzene	78		6.916				ND	
	59 1,2-Dichloroethane	62		7.002				ND	
	64 Trichloroethene	130	7.654	7.653	0.001	96	53794	43.5	
	67 1,2-Dichloropropane	63		7.920				ND	
	70 1,4-Dioxane	88		8.005				ND	
	71 Dichlorobromomethane	83		8.212				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.650				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802				ND	
76 Toluene	91		8.979				ND	
77 trans-1,3-Dichloropropene	75		9.228				ND	
79 1,1,2-Trichloroethane	97		9.423				ND	
80 Tetrachloroethene	164		9.496				ND	
82 2-Hexanone	43		9.636				ND	
84 Chlorodibromomethane	129		9.794				ND	
85 Ethylene Dibromide	107		9.903				ND	
87 Chlorobenzene	112		10.390				ND	
89 1,1,1,2-Tetrachloroethane	131		10.481				ND	
90 Ethylbenzene	106		10.487				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		11.005				ND	
93 Styrene	104		11.029				ND	
94 Bromoform	173		11.211				ND	
99 1,1,2,2-Tetrachloroethane	83		11.686				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

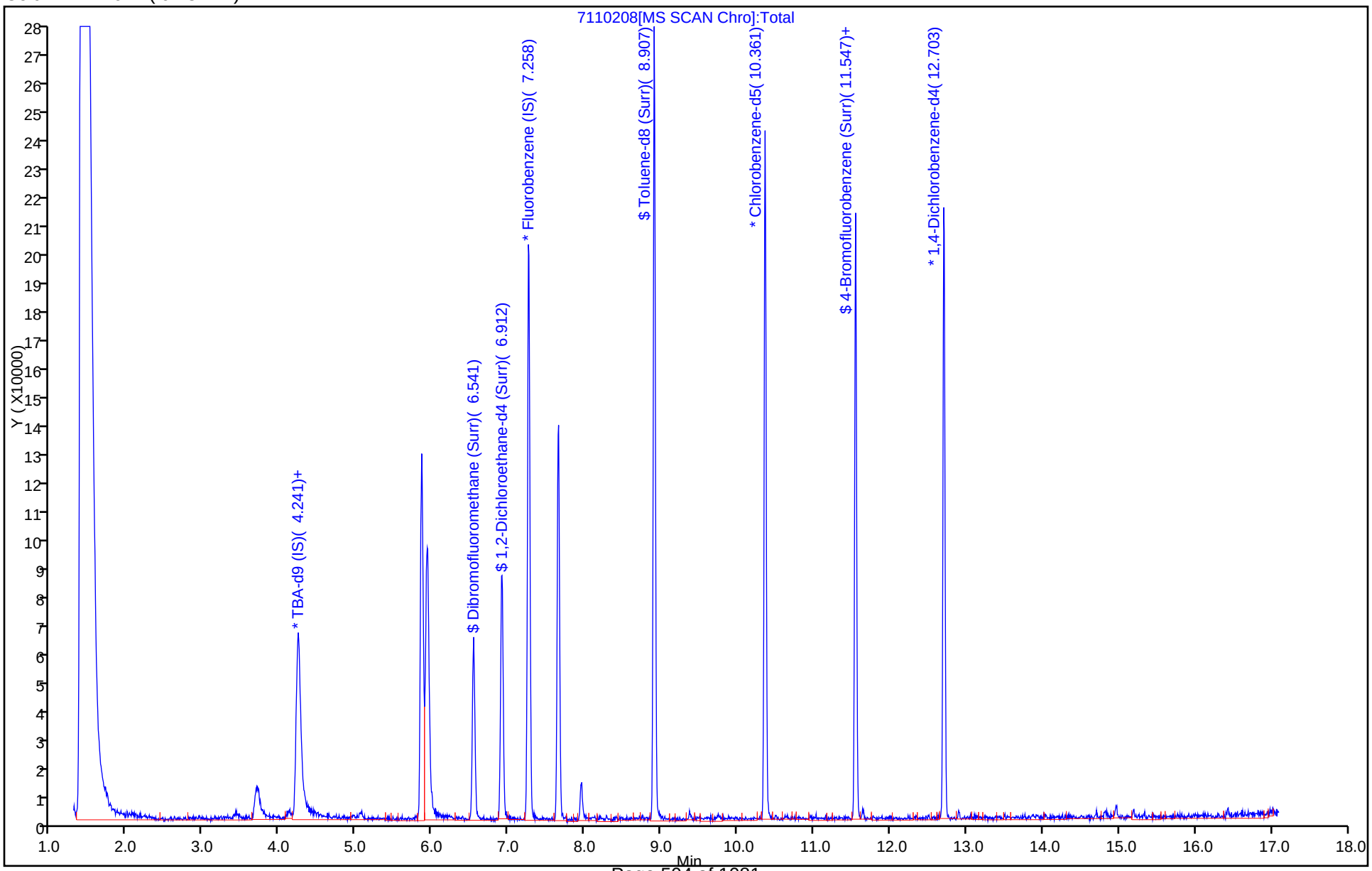
Report Date: 02-Nov-2017 09:21:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110208.D

Injection Date:	02-Nov-2017 07:57:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-B-13	Lab Sample ID:	180-71829-13	Worklist Smp#:	8
Client ID:	HD-MW-16D-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110208.D
Lims ID: 180-71829-B-13
Client ID: HD-MW-16D-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 07:57:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-B-13
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 08:59:56 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 08:41:45

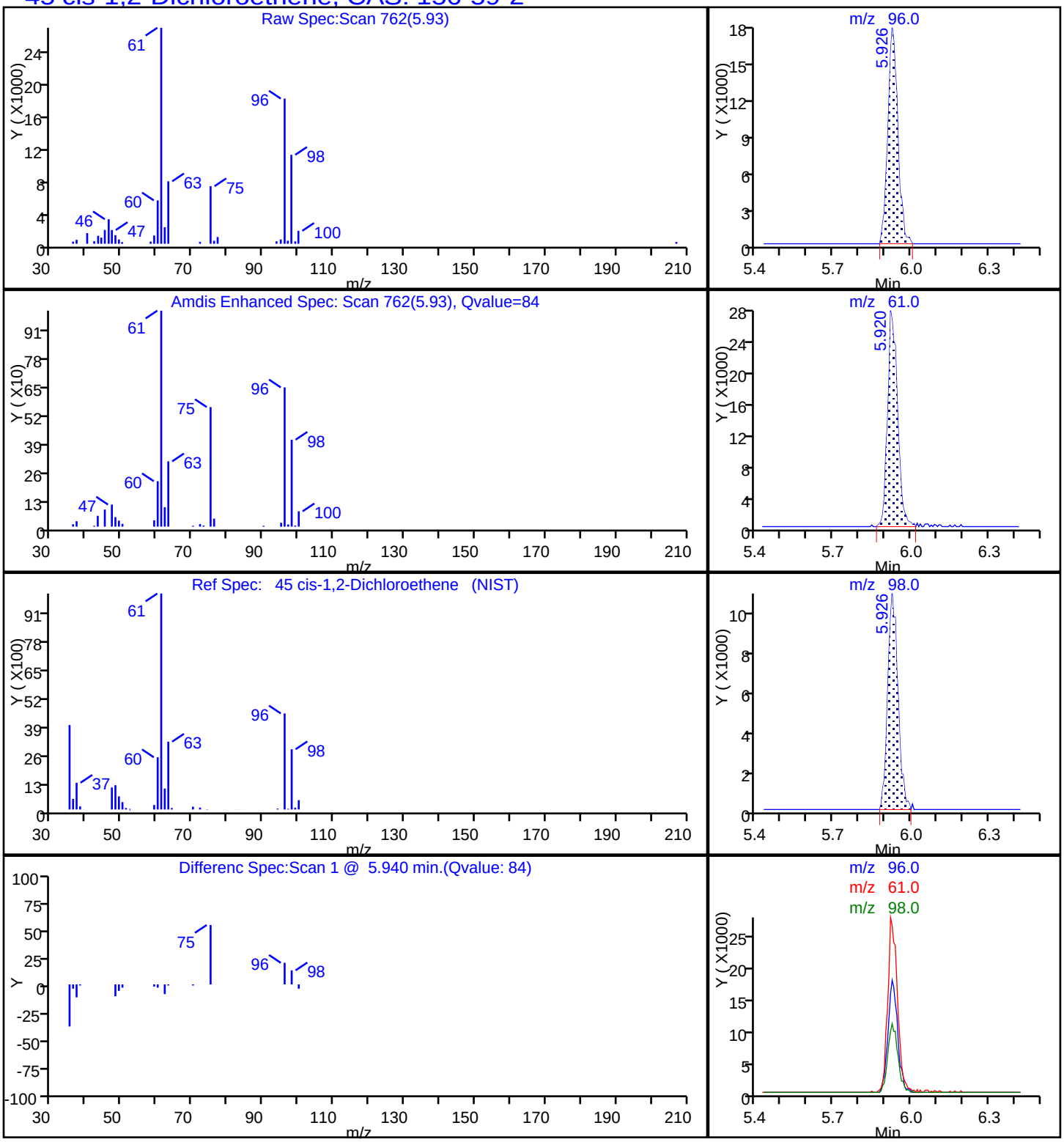
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	46.5	93.07
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	41.7	83.35
$ 7 Toluene-d8 (Surr)	50.0	56.0	111.97
$ 8 4-Bromofluorobenzene (Surr)	50.0	55.8	111.63

Report Date: 02-Nov-2017 09:21:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110208.D				
Injection Date:	02-Nov-2017 07:57:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-13	Lab Sample ID:	180-71829-13		
Client ID:	HD-MW-16D-0/1-0				
Operator ID:	034635	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

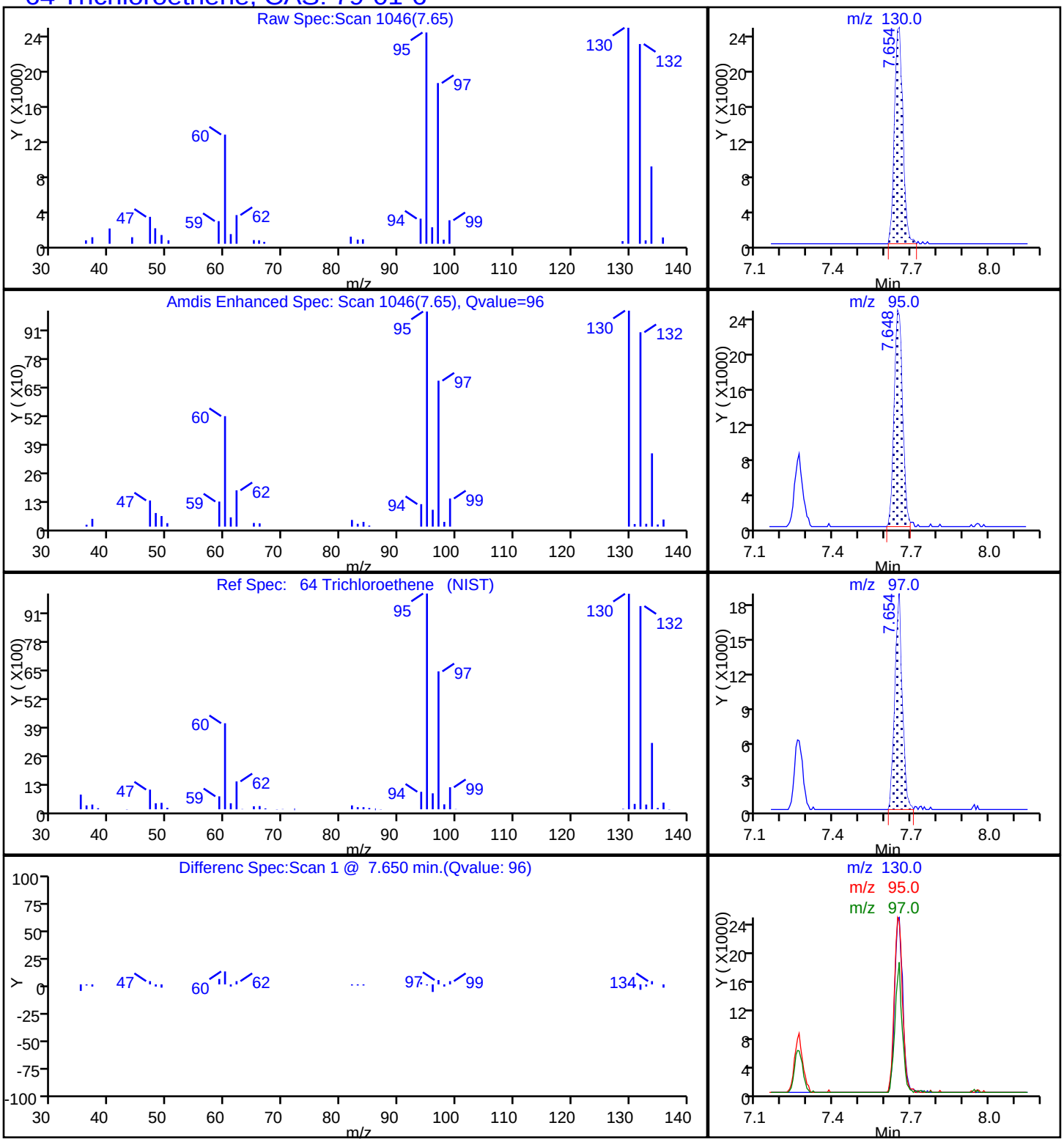


Report Date: 02-Nov-2017 09:21:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110208.D				
Injection Date:	02-Nov-2017 07:57:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-B-13	Lab Sample ID:	180-71829-13		
Client ID:	HD-MW-16D-0/1-0				
Operator ID:	034635	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-2-0/1-0 | Lab Sample ID: 180-71829-14

Matrix: Water | Lab File ID: 51101D13.D

Analysis Method: 8260C | Date Collected: 10/26/2017 10:47

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 04:32

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.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U ^c	1.0	0.90
75-01-4	Vinyl chloride	1.0	U	1.0	0.88
74-83-9	Bromomethane	1.0	U	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U ^c	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.57
79-01-6	Trichloroethene	1.5		1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1
108-88-3	Toluene	1.0	U	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	*Tetrachloroethene*	*140*	*E*	*1.0*	*0.47*
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-2-0/1-0 | Lab Sample ID: 180-71829-14

Matrix: Water | Lab File ID: 51101D13.D

Analysis Method: 8260C | Date Collected: 10/26/2017 10:47

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 04:32

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.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		65-121
2037-26-5	Toluene-d8 (Surr)	90		73-120
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D13.D
Lims ID: 180-71829-A-14
Client ID: HD-MW-2-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 04:32:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019138-013
Misc. Info.: 180-71829-A-14
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 20:24:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.364	4.394	-0.030	0	248722	1000.0	
* 2 Fluorobenzene (IS)	96	7.344	7.338	0.006	98	560863	50.0	
* 3 Chlorobenzene-d5	119	10.434	10.427	0.007	87	143574	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.775	12.768	0.007	97	206673	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.627	6.614	0.013	93	143172	53.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.998	6.985	0.013	0	188121	57.2	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	94	512055	44.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.613	0.000	85	189473	45.9	
12 Chloromethane	50		1.907				ND	
13 Vinyl chloride	62		2.023				ND	
15 Bromomethane	94		2.339				ND	
16 Chloroethane	64		2.430				ND	
22 1,1-Dichloroethene	96		3.415				ND	
24 Acetone	43	3.562	3.543	0.019	76	9147	6.24	
26 Carbon disulfide	76		3.701				ND	
31 Methylene Chloride	84		4.230				ND	
33 Acrylonitrile	53		4.613				ND	
34 trans-1,2-Dichloroethene	96		4.644				ND	
35 Methyl tert-butyl ether	73		4.662				ND	
37 1,1-Dichloroethane	63		5.270				ND	
45 cis-1,2-Dichloroethene	96		6.012				ND	
46 2-Butanone (MEK)	43		6.030				ND	
49 Chlorobromomethane	128		6.292				ND	
52 Chloroform	83	6.444	6.438	0.006	36	3967	0.7303	
53 1,1,1-Trichloroethane	97		6.596				ND	
56 Carbon tetrachloride	117		6.766				ND	
58 Benzene	78		6.997				ND	
59 1,2-Dichloroethane	62		7.070				ND	
64 Trichloroethene	130	7.727	7.727	0.000	98	26451	7.71	
67 1,2-Dichloropropane	63		7.995				ND	
70 1,4-Dioxane	88		8.086				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.274				ND	
74 cis-1,3-Dichloropropene	75		8.718				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.876				ND	
76 Toluene	91	9.053	9.047	0.006	53	2675	0.1869	
77 trans-1,3-Dichloropropene	75		9.296				ND	
79 1,1,2-Trichloroethane	97		9.491				ND	
80 Tetrachloroethene	164	9.558	9.558	0.000	91	1855554	679.6	E
82 2-Hexanone	43		9.710				ND	
84 Chlorodibromomethane	129		9.862				ND	
85 Ethylene Dibromide	107		9.971				ND	
87 Chlorobenzene	112	10.458	10.458	0.000	1	2988	0.3206	
89 1,1,1,2-Tetrachloroethane	131		10.555				ND	
90 Ethylbenzene	106		10.561				ND	
91 m-Xylene & p-Xylene	106		10.689				ND	
92 o-Xylene	106		11.072				ND	
93 Styrene	104		11.090				ND	
94 Bromoform	173		11.279				ND	
99 1,1,2,2-Tetrachloroethane	83		11.747				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

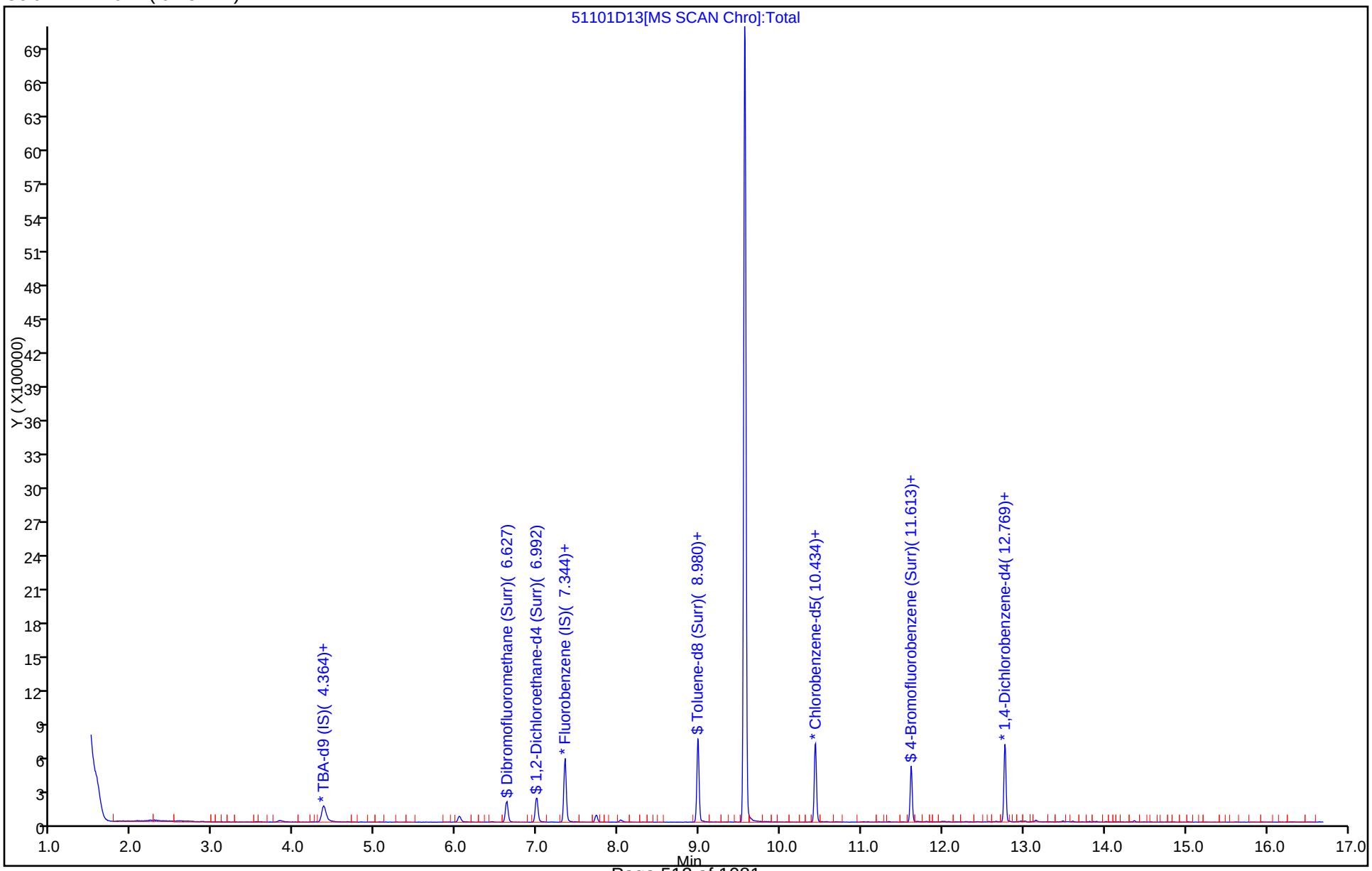
Report Date: 02-Nov-2017 20:42:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D13.D

Injection Date:	02-Nov-2017 04:32:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71829-A-14	Lab Sample ID:	180-71829-14	Worklist Smp#:	13
Client ID:	HD-MW-2-0/1-0				
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\20171101-19138.b\51101D13.D
Lims ID: 180-71829-A-14
Client ID: HD-MW-2-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 04:32:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019138-013
Misc. Info.: 180-71829-A-14
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 20:24:43

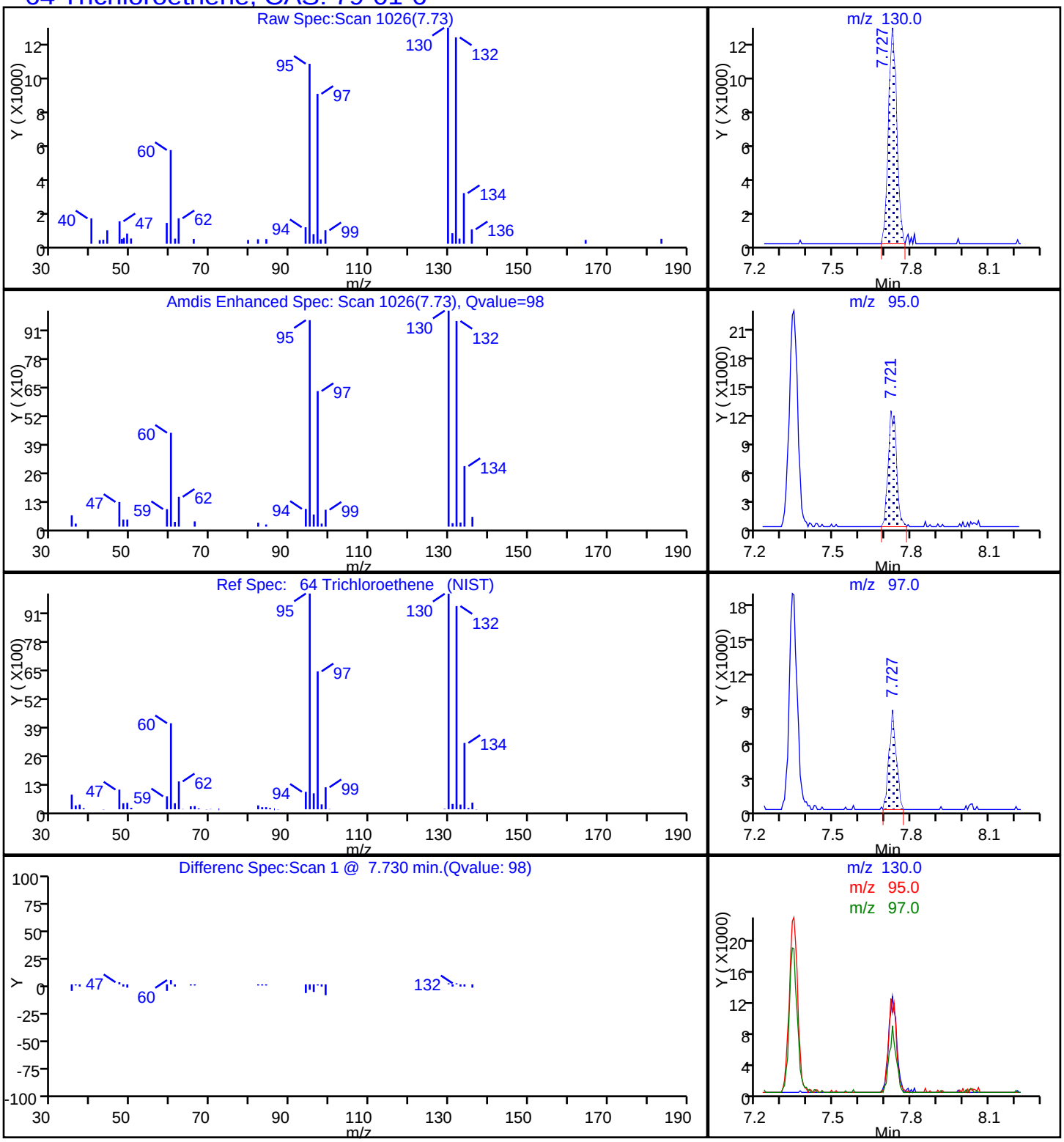
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	53.1	106.11
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	57.2	114.31
$ 7 Toluene-d8 (Surr)	50.0	44.8	89.62
$ 8 4-Bromofluorobenzene (Surr)	50.0	45.9	91.82

Report Date: 02-Nov-2017 20:42:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D13.D				
Injection Date:	02-Nov-2017 04:32:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-A-14	Lab Sample ID:	180-71829-14		
Client ID:	HD-MW-2-0/1-0				
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



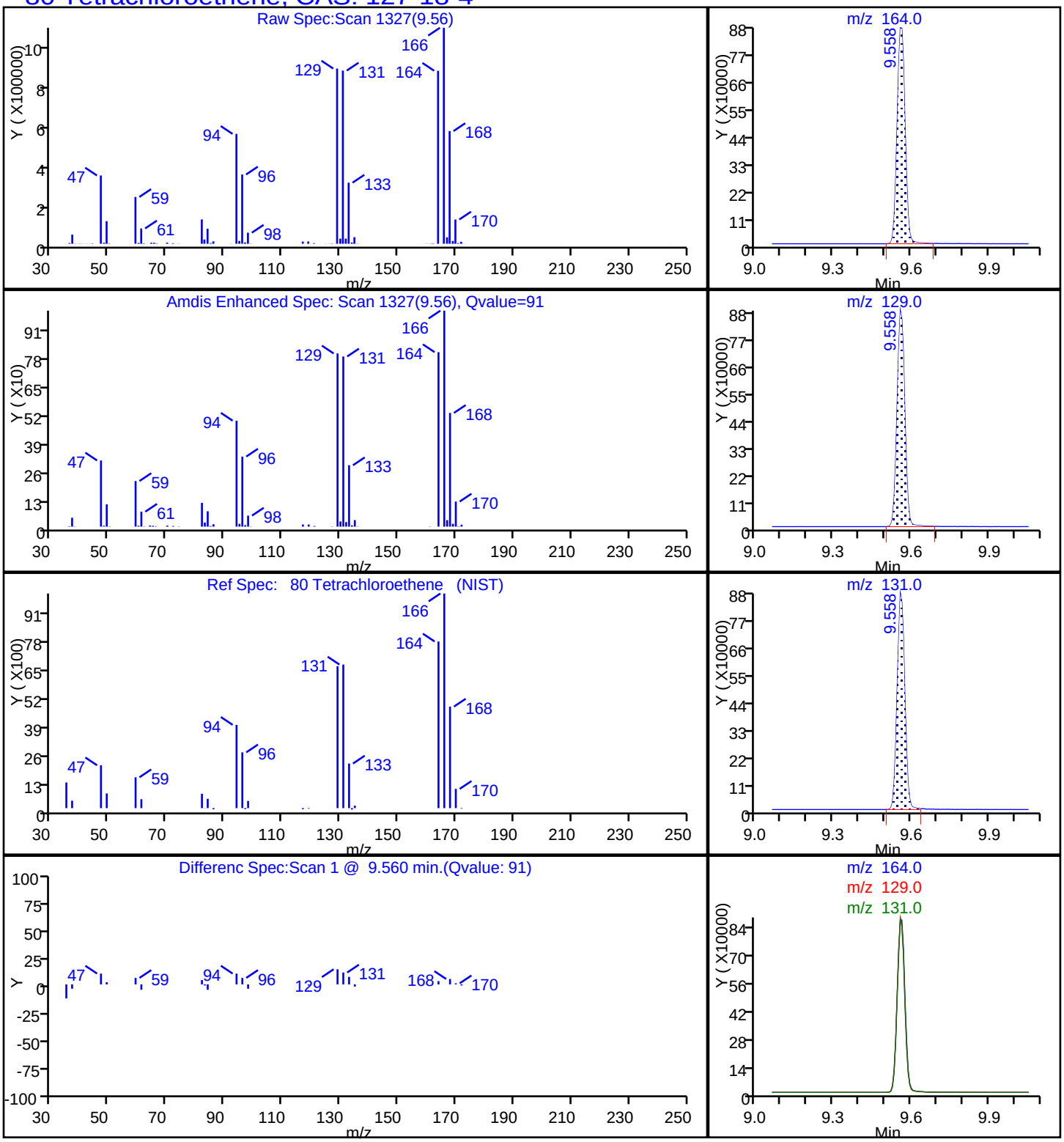
Report Date: 02-Nov-2017 20:42:33 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D13.D

Injection Date:	02-Nov-2017 04:32:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-A-14	Lab Sample ID:	180-71829-14		
Client ID:	HD-MW-2-0/1-0				
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

80 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-2-0/1-0 DL | Lab Sample ID: 180-71829-14 DL

Matrix: Water | Lab File ID: 51107D12.D

Analysis Method: 8260C | Date Collected: 10/26/2017 10:47

Sample wt/vol: 5(mL) | Date Analyzed: 11/08/2017 05:29

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.: 228278 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	*Chloromethane*	*2.0*	*U ^c*	*2.0*	*1.8*
75-01-4	*Vinyl chloride*	*2.0*	*U ^c*	*2.0*	*1.8*
74-83-9	*Bromomethane*	*2.0*	*U*	*2.0*	*1.8*
75-00-3	*Chloroethane*	*2.0*	*U*	*2.0*	*1.8*
75-35-4	*1,1-Dichloroethene*	*2.0*	*U*	*2.0*	*1.1*
67-64-1	*Acetone*	*10*	*U ^c *	*10*	*6.9*
75-15-0	*Carbon disulfide*	*2.0*	*U*	*2.0*	*1.8*
75-09-2	*Methylene Chloride*	*2.0*	*U*	*2.0*	*0.72*
156-60-5	*trans-1,2-Dichloroethene*	*2.0*	*U*	*2.0*	*1.3*
1634-04-4	*Methyl tert-butyl ether*	*2.0*	*U*	*2.0*	*1.2*
75-34-3	*1,1-Dichloroethane*	*2.0*	*U*	*2.0*	*1.3*
156-59-2	*cis-1,2-Dichloroethene*	*2.0*	*U*	*2.0*	*1.4*
74-97-5	*Bromochloromethane*	*2.0*	*U*	*2.0*	*1.3*
78-93-3	*2-Butanone (MEK)*	*10*	*U*	*10*	*5.2*
67-66-3	*Chloroform*	*2.0*	*U*	*2.0*	*1.2*
71-55-6	*1,1,1-Trichloroethane*	*2.0*	*U*	*2.0*	*1.2*
56-23-5	*Carbon tetrachloride*	*2.0*	*U*	*2.0*	*1.8*
71-43-2	*Benzene*	*2.0*	*U*	*2.0*	*1.2*
107-06-2	*1,2-Dichloroethane*	*2.0*	*U*	*2.0*	*1.1*
79-01-6	*Trichloroethene*	*2.0*	*U*	*2.0*	*1.4*
78-87-5	*1,2-Dichloropropane*	*2.0*	*U*	*2.0*	*1.3*
75-27-4	*Bromodichloromethane*	*2.0*	*U*	*2.0*	*1.3*
10061-01-5	*cis-1,3-Dichloropropene*	*2.0*	*U*	*2.0*	*1.2*
108-10-1	*4-Methyl-2-pentanone (MIBK)*	*10*	*U*	*10*	*6.2*
108-88-3	*Toluene*	*2.0*	*U*	*2.0*	*0.91*
10061-02-6	*trans-1,3-Dichloropropene*	*2.0*	*U*	*2.0*	*1.2*
79-00-5	*1,1,2-Trichloroethane*	*2.0*	*U*	*2.0*	*0.91*
127-18-4	Tetrachloroethene	35		2.0	0.93
591-78-6	*2-Hexanone*	*10*	*U*	*10*	*6.6*
124-48-1	*Dibromochloromethane*	*2.0*	*U*	*2.0*	*1.7*
106-93-4	*1,2-Dibromoethane (EDB)*	*2.0*	*U*	*2.0*	*1.0*
108-90-7	*Chlorobenzene*	*2.0*	*U*	*2.0*	*1.0*
630-20-6	*1,1,1,2-Tetrachloroethane*	*2.0*	*U*	*2.0*	*1.1*
100-41-4	*Ethylbenzene*	*2.0*	*U*	*2.0*	*1.0*
1330-20-7	*Xylenes, Total*	*4.0*	*U*	*4.0*	*1.8*

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-2-0/1-0 DL | Lab Sample ID: 180-71829-14 DL

Matrix: Water | Lab File ID: 51107D12.D

Analysis Method: 8260C | Date Collected: 10/26/2017 10:47

Sample wt/vol: 5(mL) | Date Analyzed: 11/08/2017 05:29

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.: 228278 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-42-5	*Styrene*	*2.0*	*U*	*2.0*	*0.94*
75-25-2	*Bromoform*	*2.0*	*U*	*2.0*	*2.0*
79-34-5	*1,1,2,2-Tetrachloroethane*	*2.0*	*U*	*2.0*	*1.2*
107-13-1	*Acrylonitrile*	*40*	*U ^c*	*40*	*16*
123-91-1	*1,4-Dioxane*	*400*	*U*	*400*	*27*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		65-121
2037-26-5	Toluene-d8 (Surr)	91		73-120
460-00-4	4-Bromofluorobenzene (Surr)	88		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D12.D
Lims ID: 180-71829-C-14
Client ID: HD-MW-2-0/1-0
Sample Type: Client
Inject. Date: 08-Nov-2017 05:29:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0019208-012
Misc. Info.: 180-71829-C-14
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Nov-2017 18:15:11 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: journetp Date: 08-Nov-2017 09:11:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.358	4.383	-0.025	0	228614	1000.0	
* 2 Fluorobenzene (IS)	96	7.344	7.338	0.006	98	536856	50.0	M
* 3 Chlorobenzene-d5	119	10.427	10.428	-0.001	86	129372	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.769	0.000	97	174711	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.621	6.621	-0.001	93	135237	52.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.986	0.005	0	172283	54.7	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	94	467887	45.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.613	0.000	84	163524	44.0	
12 Chloromethane	50		1.889				ND	
13 Vinyl chloride	62		2.017				ND	
15 Bromomethane	94		2.333				ND	
16 Chloroethane	64		2.431				ND	
22 1,1-Dichloroethene	96		3.428				ND	
24 Acetone	43	3.543	3.537	0.006	65	6744	4.80	
26 Carbon disulfide	76		3.708				ND	
31 Methylene Chloride	84		4.231				ND	
33 Acrylonitrile	53		4.608				ND	
34 trans-1,2-Dichloroethene	96		4.638				ND	
35 Methyl tert-butyl ether	73		4.656				ND	
37 1,1-Dichloroethane	63		5.271				ND	
45 cis-1,2-Dichloroethene	96		6.013				ND	
46 2-Butanone (MEK)	43		6.025				ND	
49 Chlorobromomethane	128		6.298				ND	
52 Chloroform	83	6.444	6.438	0.006	14	2643	0.5083	M
53 1,1,1-Trichloroethane	97		6.596				ND	
56 Carbon tetrachloride	117		6.767				ND	
58 Benzene	78		6.998				ND	
59 1,2-Dichloroethane	62		7.071				ND	
64 Trichloroethene	130	7.727	7.721	0.006	84	3845	1.17	
67 1,2-Dichloropropane	63		7.995				ND	
70 1,4-Dioxane	88		8.080				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.281				ND	
74 cis-1,3-Dichloropropene	75		8.719				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.877				ND	
76 Toluene	91		9.047				ND	
77 trans-1,3-Dichloropropene	75		9.296				ND	
79 1,1,2-Trichloroethane	97		9.491				ND	
80 Tetrachloroethene	164	9.558	9.558	0.000	95	216158	87.9	
82 2-Hexanone	43		9.704				ND	
84 Chlorodibromomethane	129		9.856				ND	
85 Ethylene Dibromide	107		9.971				ND	
87 Chlorobenzene	112		10.458				ND	
89 1,1,1,2-Tetrachloroethane	131		10.549				ND	
90 Ethylbenzene	106		10.555				ND	
91 m-Xylene & p-Xylene	106		10.689				ND	
92 o-Xylene	106		11.072				ND	
93 Styrene	104		11.090				ND	
94 Bromoform	173		11.273				ND	
99 1,1,2,2-Tetrachloroethane	83		11.753				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

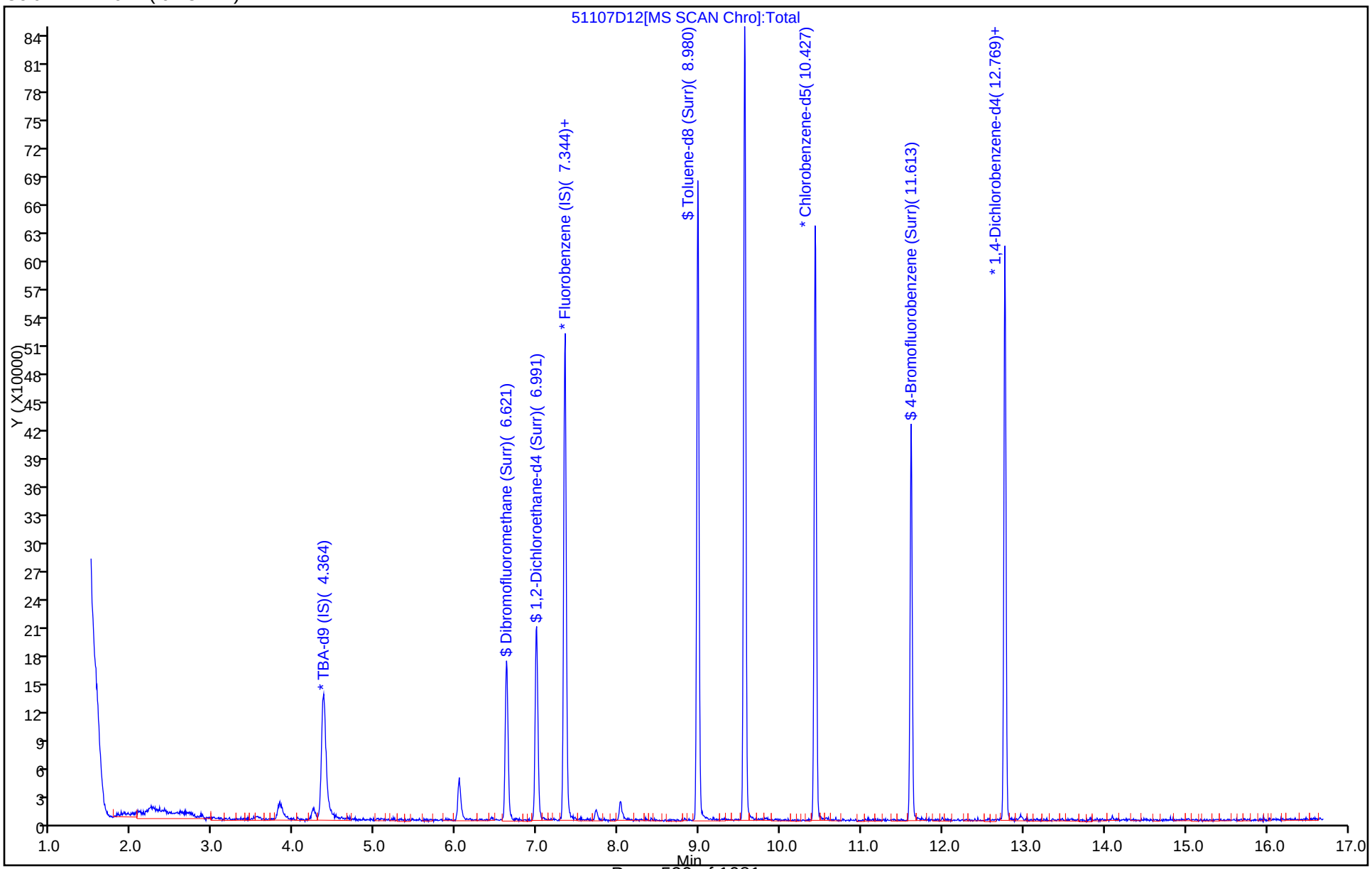
Report Date: 08-Nov-2017 18:16:11 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D12.D

Injection Date:	08-Nov-2017 05:29:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71829-C-14	Lab Sample ID:	180-71829-14	Worklist Smp#:	12
Client ID:	HD-MW-2-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	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\20171107-19208.b\51107D12.D
Lims ID: 180-71829-C-14
Client ID: HD-MW-2-0/1-0
Sample Type: Client
Inject. Date: 08-Nov-2017 05:29:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0019208-012
Misc. Info.: 180-71829-C-14
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Nov-2017 18:15:11 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: journetp Date: 08-Nov-2017 09:11:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	52.4	104.71
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	54.7	109.37
$ 7 Toluene-d8 (Surr)	50.0	45.4	90.88
$ 8 4-Bromofluorobenzene (Surr)	50.0	44.0	87.95

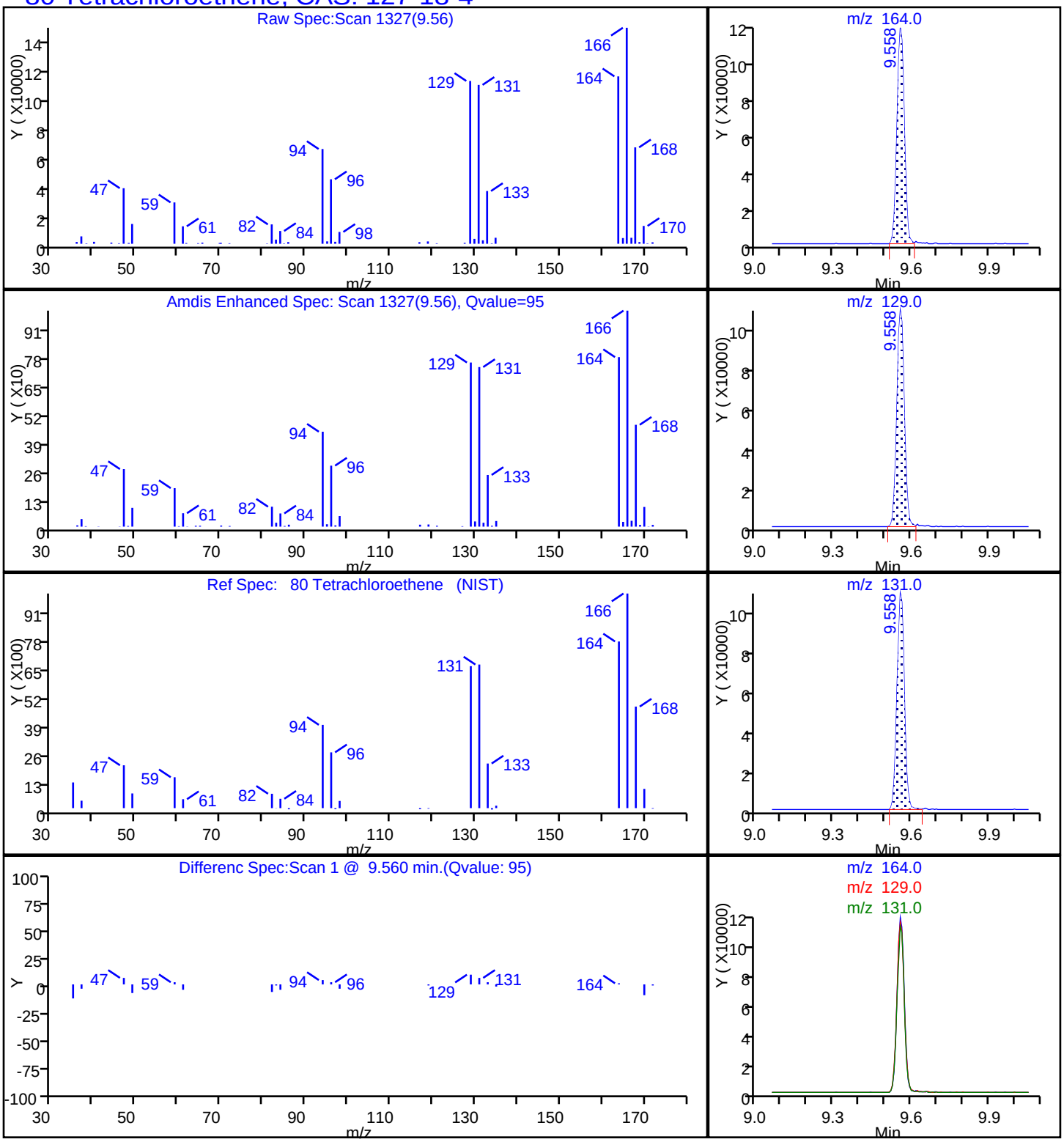
Report Date: 08-Nov-2017 18:16:12 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D12.D

Injection Date:	08-Nov-2017 05:29:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-C-14	Lab Sample ID:	180-71829-14		
Client ID:	HD-MW-2-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	12
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

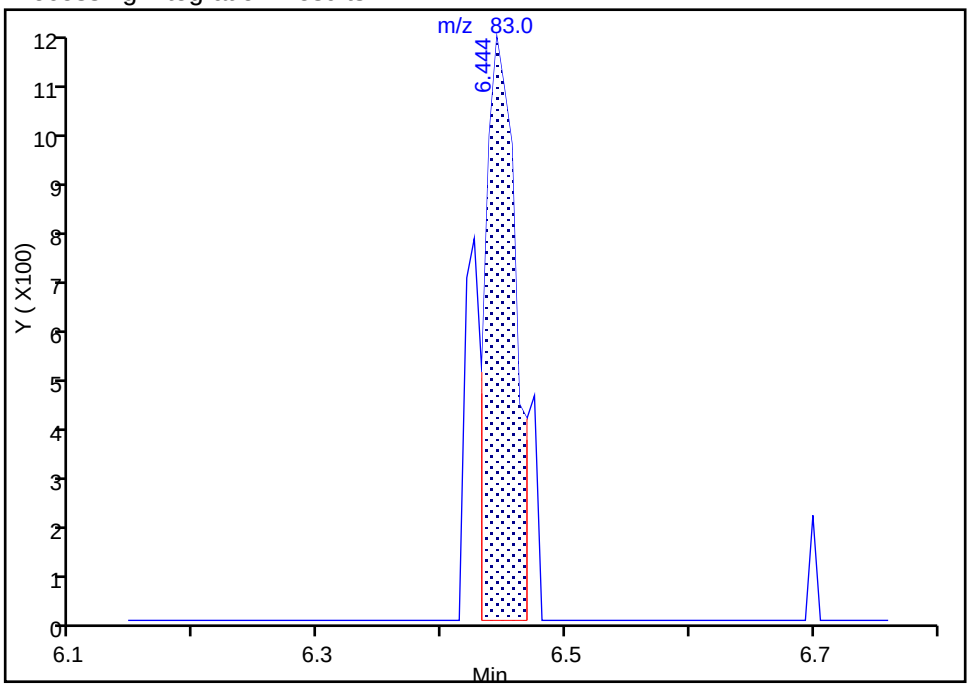
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D12.D				
Injection Date:	08-Nov-2017 05:29:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-C-14	Lab Sample ID:	180-71829-14		
Client ID:	HD-MW-2-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. 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

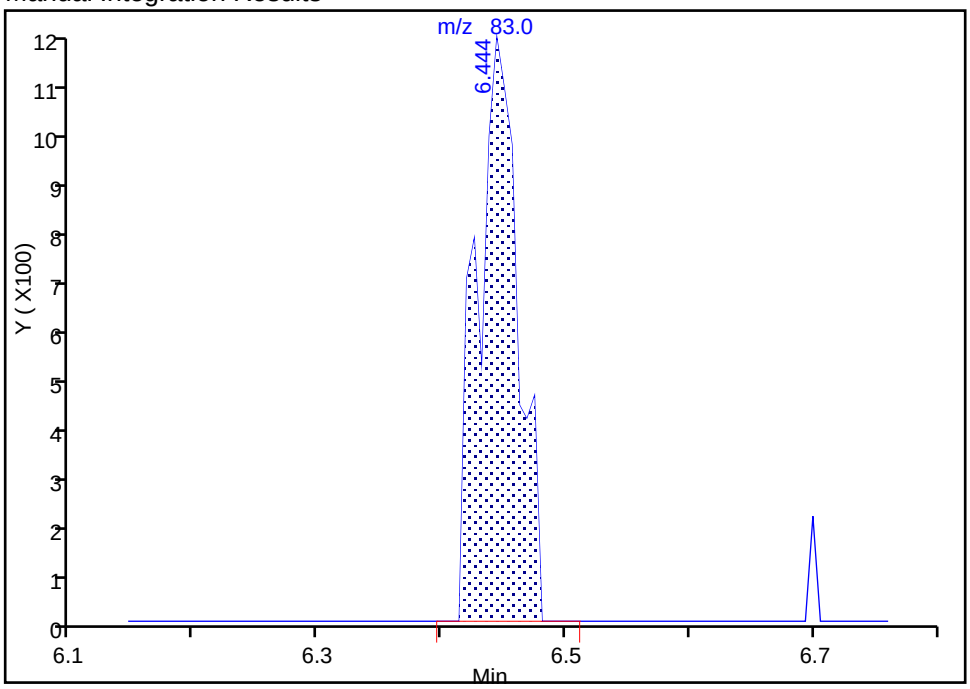
Processing Integration Results

RT: 6.44
Area: 1964
Amount: 0.381647
Amount Units: ng



Manual Integration Results

RT: 6.44
Area: 2643
Amount: 0.508286
Amount Units: ng



Reviewer: bungardf, 08-Nov-2017 18:04:32

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

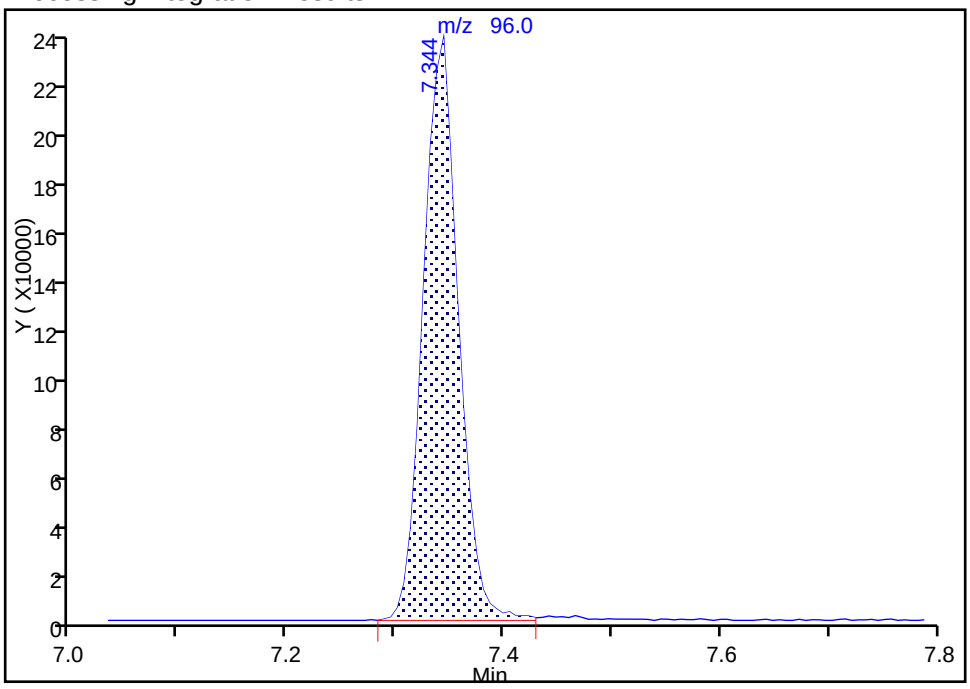
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D12.D				
Injection Date:	08-Nov-2017 05:29:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-C-14	Lab Sample ID:	180-71829-14		
Client ID:	HD-MW-2-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

* 2 Fluorobenzene (IS), CAS: 462-06-6

Signal: 1

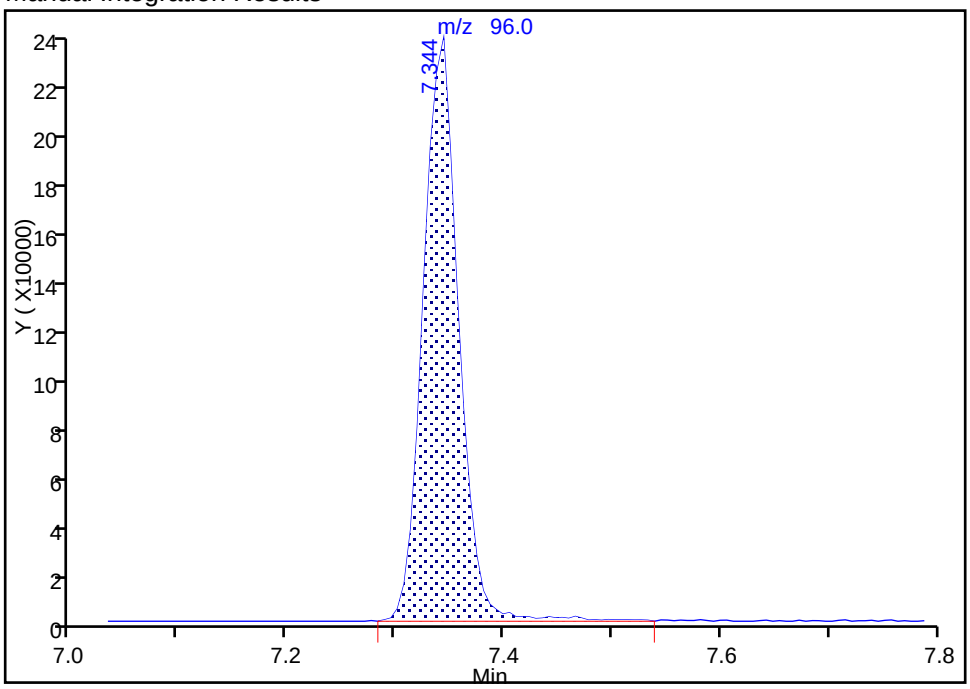
Processing Integration Results

RT: 7.34
Area: 531311
Amount: 50.000000
Amount Units: ng



Manual Integration Results

RT: 7.34
Area: 536856
Amount: 50.000000
Amount Units: ng



Reviewer: bungardf, 08-Nov-2017 18:10:26

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-185-0/1-0 | Lab Sample ID: 180-71829-15

Matrix: Water | Lab File ID: 51105D12.D

Analysis Method: 8260C | Date Collected: 10/26/2017 08:46

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2017 05:25

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.: 228044 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	2.0	U ^c	2.0	1.8
75-01-4	Vinyl chloride	2.0	U	2.0	1.8
74-83-9	Bromomethane	2.0	U ^c	2.0	1.8
75-00-3	Chloroethane	2.0	U ^c	2.0	1.8
75-35-4	1,1-Dichloroethene	2.0	U	2.0	1.1
67-64-1	Acetone	10	U ^c	10	6.9
75-15-0	Carbon disulfide	2.0	U	2.0	1.8
75-09-2	Methylene Chloride	2.0	U	2.0	0.72
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	1.3
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	1.2
75-34-3	1,1-Dichloroethane	2.0	U	2.0	1.3
156-59-2	cis-1,2-Dichloroethene	2.0	U	2.0	1.4
74-97-5	Bromochloromethane	2.0	U	2.0	1.3
78-93-3	2-Butanone (MEK)	10	U	10	5.2
67-66-3	Chloroform	2.0	U	2.0	1.2
71-55-6	1,1,1-Trichloroethane	2.0	U	2.0	1.2
56-23-5	Carbon tetrachloride	2.0	U	2.0	1.8
71-43-2	Benzene	2.0	U	2.0	1.2
107-06-2	1,2-Dichloroethane	2.0	U	2.0	1.1
79-01-6	Trichloroethene	2.2		2.0	1.4
78-87-5	1,2-Dichloropropane	2.0	U	2.0	1.3
75-27-4	Bromodichloromethane	2.0	U	2.0	1.3
10061-01-5	cis-1,3-Dichloropropene	2.0	U	2.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	6.2
108-88-3	Toluene	2.0	U	2.0	0.91
10061-02-6	trans-1,3-Dichloropropene	2.0	U	2.0	1.2
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	0.91
127-18-4	Tetrachloroethene	42		2.0	0.93
591-78-6	2-Hexanone	10	U	10	6.6
124-48-1	Dibromochloromethane	2.0	U	2.0	1.7
106-93-4	1,2-Dibromoethane (EDB)	2.0	U	2.0	1.0
108-90-7	Chlorobenzene	2.0	U	2.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	1.1
100-41-4	Ethylbenzene	2.0	U	2.0	1.0
1330-20-7	Xylenes, Total	4.0	U	4.0	1.8
100-42-5	Styrene	2.0	U	2.0	0.94

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-185-0/1-0 | Lab Sample ID: 180-71829-15

Matrix: Water | Lab File ID: 51105D12.D

Analysis Method: 8260C | Date Collected: 10/26/2017 08:46

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2017 05:25

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.: 228044 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	2.0	U	2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U	2.0	1.2
107-13-1	Acrylonitrile	40	U	40	16
123-91-1	1,4-Dioxane	400	U	400	27

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		65-121
2037-26-5	Toluene-d8 (Surr)	88		73-120
460-00-4	4-Bromofluorobenzene (Surr)	81		80-120
1868-53-7	Dibromofluoromethane (Surr)	112		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D12.D
Lims ID: 180-71829-C-15
Client ID: HD-MW-185-0/1-0
Sample Type: Client
Inject. Date: 06-Nov-2017 05:25:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0019180-012
Misc. Info.: 180-71829-C-15
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Nov-2017 20:28:31 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: bungardf Date: 06-Nov-2017 20:18:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.369	4.376	-0.007	0	204531	1000.0	
* 2 Fluorobenzene (IS)	96	7.343	7.344	-0.001	98	495067	50.0	
* 3 Chlorobenzene-d5	119	10.432	10.433	-0.001	86	128638	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.774	12.768	0.006	97	175106	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.619	6.620	-0.001	92	133926	56.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.990	6.991	-0.001	0	175317	60.3	
$ 7 Toluene-d8 (Surr)	98	8.985	8.980	0.005	94	448271	43.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.613	-0.001	86	150368	40.7	
12 Chloromethane	50		1.895				ND	
13 Vinyl chloride	62		2.017				ND	
15 Bromomethane	94		2.375				ND	
16 Chloroethane	64		2.461				ND	
22 1,1-Dichloroethene	96		3.434				ND	
24 Acetone	43	3.542	3.531	0.011	68	6816	5.26	
26 Carbon disulfide	76		3.719				ND	
31 Methylene Chloride	84		4.236				ND	
33 Acrylonitrile	53		4.619				ND	
34 trans-1,2-Dichloroethene	96		4.644				ND	
35 Methyl tert-butyl ether	73		4.662				ND	
37 1,1-Dichloroethane	63		5.282				ND	
45 cis-1,2-Dichloroethene	96	6.023	6.018	0.005	78	4567	1.45	
46 2-Butanone (MEK)	43		6.030				ND	
49 Chlorobromomethane	128		6.298				ND	
52 Chloroform	83		6.444				ND	
53 1,1,1-Trichloroethane	97		6.602				ND	
56 Carbon tetrachloride	117		6.766				ND	
58 Benzene	78		6.997				ND	
59 1,2-Dichloroethane	62		7.076				ND	
64 Trichloroethene	130	7.732	7.727	0.005	95	16943	5.59	
67 1,2-Dichloropropane	63		8.001				ND	
70 1,4-Dioxane	88		8.086				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.274				ND	
74 cis-1,3-Dichloropropene	75		8.724				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.876				ND	
76 Toluene	91		9.053				ND	
77 trans-1,3-Dichloropropene	75		9.296				ND	
79 1,1,2-Trichloroethane	97		9.491				ND	
80 Tetrachloroethene	164	9.563	9.563	0.000	95	257369	105.2	
82 2-Hexanone	43		9.703				ND	
84 Chlorodibromomethane	129		9.861				ND	
85 Ethylene Dibromide	107		9.971				ND	
87 Chlorobenzene	112		10.464				ND	
89 1,1,1,2-Tetrachloroethane	131		10.555				ND	
90 Ethylbenzene	106		10.561				ND	
91 m-Xylene & p-Xylene	106		10.689				ND	
92 o-Xylene	106		11.072				ND	
93 Styrene	104		11.090				ND	
94 Bromoform	173		11.272				ND	
99 1,1,2,2-Tetrachloroethane	83		11.747				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

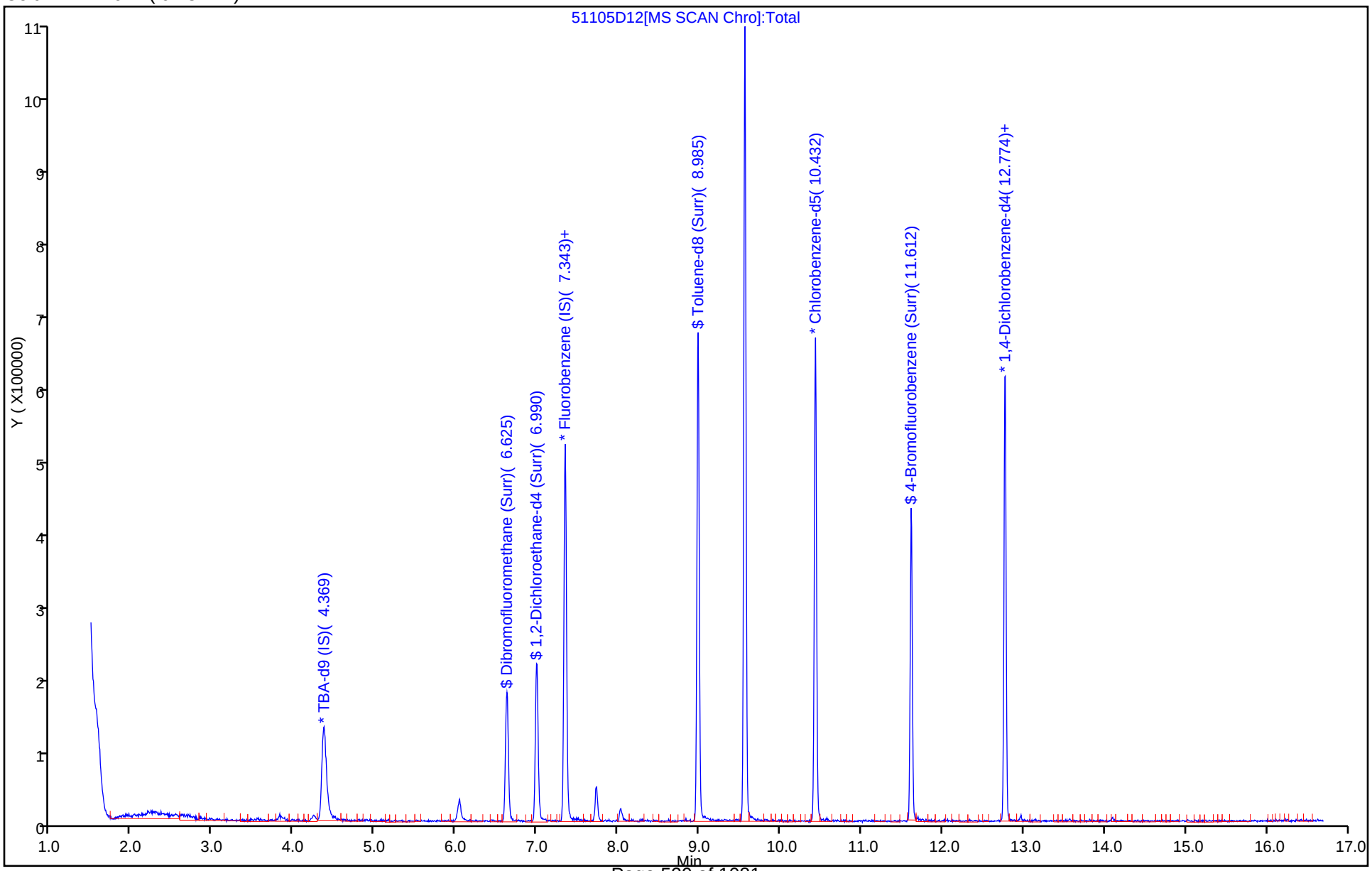
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 06-Nov-2017 20:28:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D12.D				
Injection Date:	06-Nov-2017 05:25:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71829-C-15	Lab Sample ID:	180-71829-15	Worklist Smp#:	12
Client ID:	HD-MW-185-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	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\20171105-19180.b\51105D12.D
Lims ID: 180-71829-C-15
Client ID: HD-MW-185-0/1-0
Sample Type: Client
Inject. Date: 06-Nov-2017 05:25:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0019180-012
Misc. Info.: 180-71829-C-15
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Nov-2017 20:28:31 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: bungardf Date: 06-Nov-2017 20:18:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	56.2	112.45
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	60.3	120.69
$ 7 Toluene-d8 (Surr)	50.0	43.8	87.57
$ 8 4-Bromofluorobenzene (Surr)	50.0	40.7	81.33

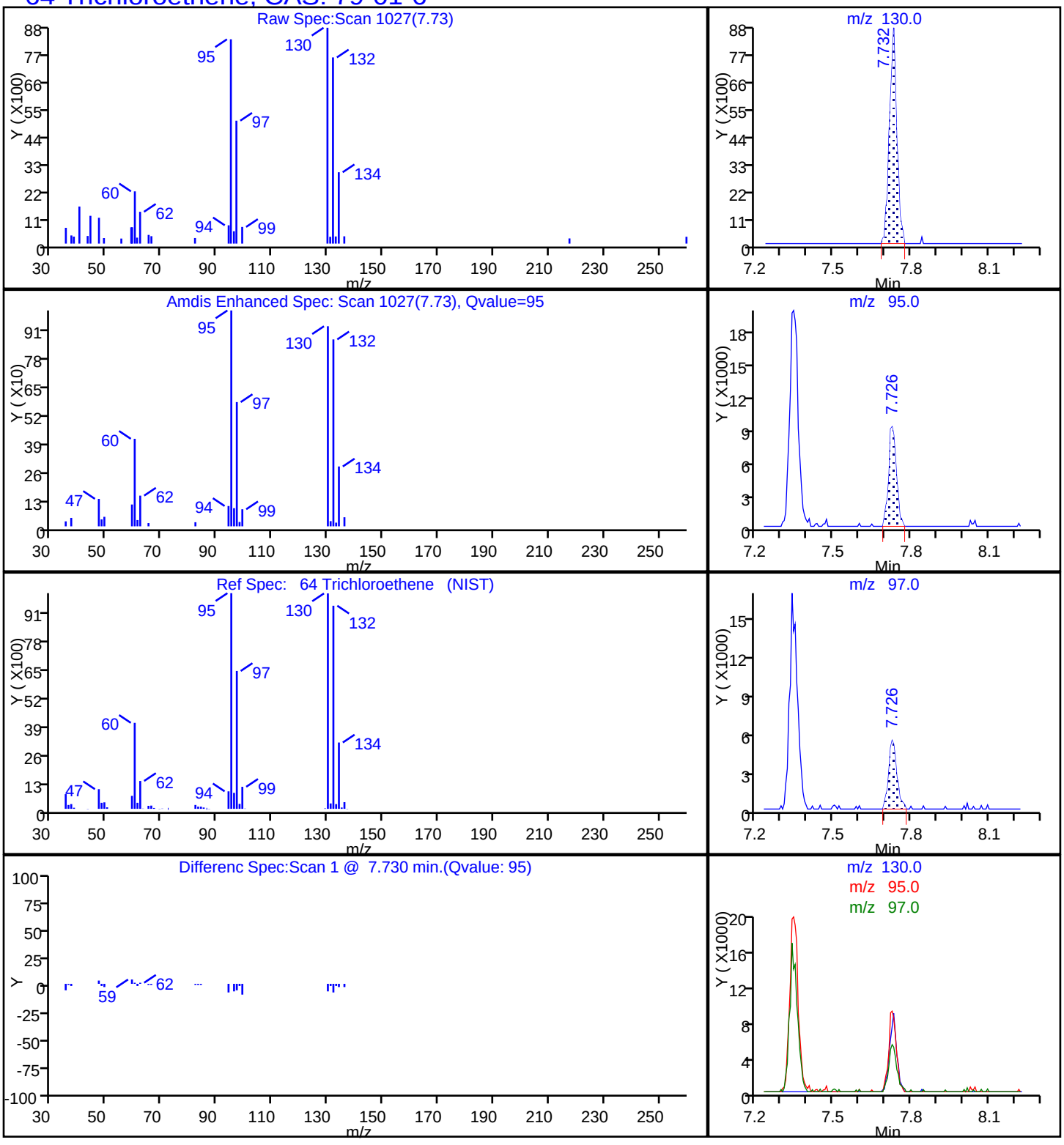
Report Date: 06-Nov-2017 20:28:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D12.D

Injection Date:	06-Nov-2017 05:25:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-C-15	Lab Sample ID:	180-71829-15		
Client ID:	HD-MW-185-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	12
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

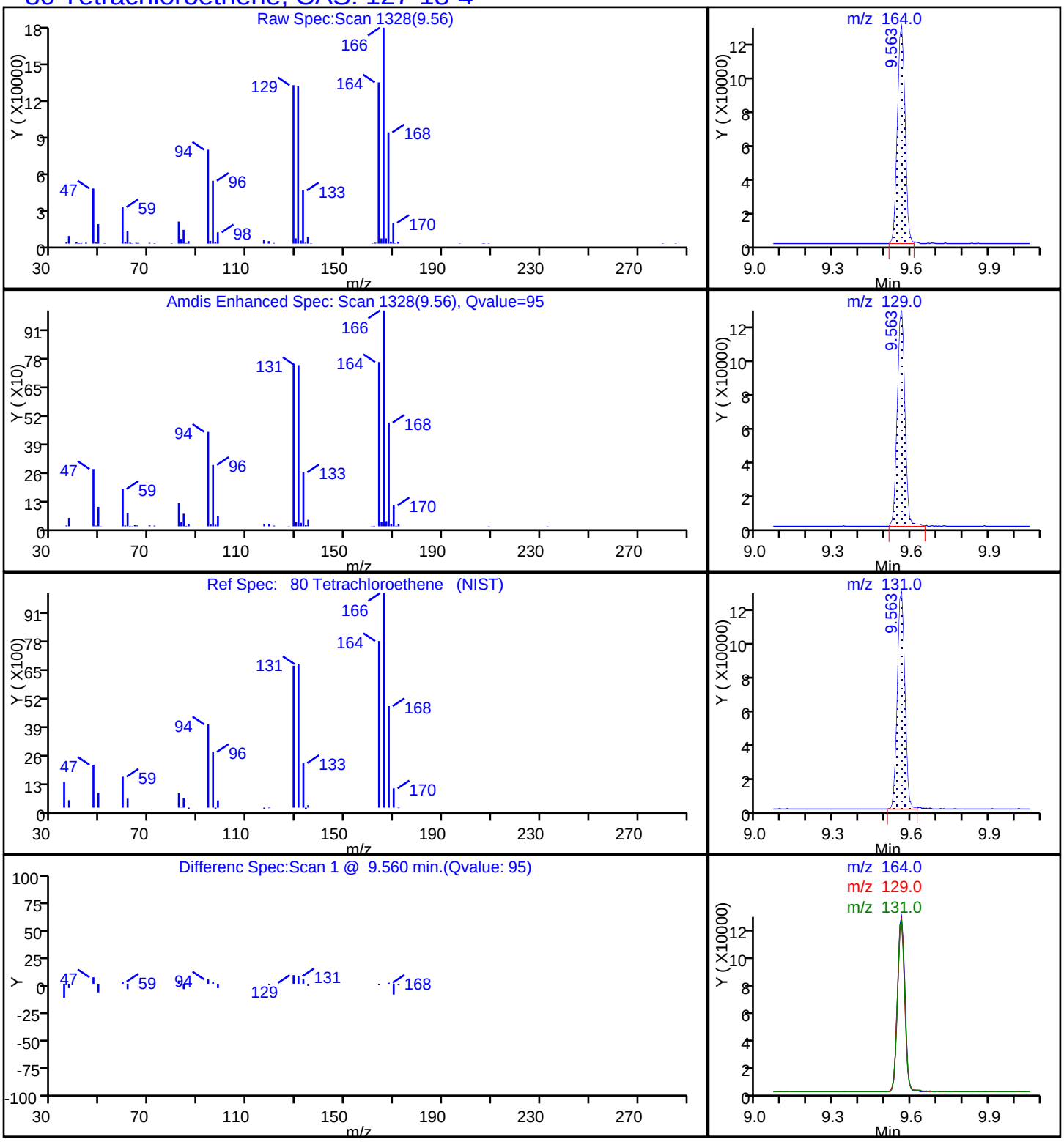


Report Date: 06-Nov-2017 20:28:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D12.D		
Injection Date:	06-Nov-2017 05:25:30	Instrument ID:	CHHP5
Lims ID:	180-71829-C-15	Lab Sample ID:	180-71829-15
Client ID:	HD-MW-185-0/1-0		
Operator ID:	034635	ALS Bottle#:	12 Worklist Smp#: 12
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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-82-0/1-0 | Lab Sample ID: 180-71829-16

Matrix: Water | Lab File ID: 51101D06.D

Analysis Method: 8260C | Date Collected: 10/26/2017 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 01:39

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.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U ^c	1.0	0.90
75-01-4	Vinyl chloride	1.0	U	1.0	0.88
74-83-9	Bromomethane	1.0	U	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U ^c	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	15		1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.57
79-01-6	Trichloroethene	5.4		1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1
108-88-3	Toluene	1.0	U	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.3		1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-82-0/1-0 | Lab Sample ID: 180-71829-16

Matrix: Water | Lab File ID: 51101D06.D

Analysis Method: 8260C | Date Collected: 10/26/2017 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 01:39

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.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		65-121
2037-26-5	Toluene-d8 (Surr)	93		73-120
460-00-4	4-Bromofluorobenzene (Surr)	84		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D06.D
Lims ID: 180-71829-C-16
Client ID: HD-MW-82-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 01:39:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019138-006
Misc. Info.: 180-71829-C-16
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 02:28:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.366	4.394	-0.028	0	228663	1000.0	
* 2 Fluorobenzene (IS)	96	7.345	7.338	0.007	99	520212	50.0	
* 3 Chlorobenzene-d5	119	10.429	10.427	0.002	87	125156	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.776	12.768	0.008	96	175094	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.622	6.614	0.008	93	126928	50.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.987	6.985	0.002	0	169298	55.5	
$ 7 Toluene-d8 (Surr)	98	8.981	8.980	0.001	94	462301	46.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.615	11.613	0.002	85	151664	42.2	
11 Dichlorodifluoromethane	85		1.688				ND	
12 Chloromethane	50		1.907				ND	
14 Butadiene	39		2.017				ND	
13 Vinyl chloride	62		2.023				ND	
15 Bromomethane	94		2.339				ND	
16 Chloroethane	64		2.430				ND	
17 Dichlorofluoromethane	67		2.752				ND	
18 Trichlorofluoromethane	101		2.765				ND	
19 Ethanol	45	2.833	2.821	0.012	1	475	NC	
20 Ethyl ether	59		3.130				ND	
21 Acrolein	56		3.318				ND	
22 1,1-Dichloroethene	96	3.435	3.415	0.020	24	4405	1.73	
23 1,1,2-Trichloro-1,2,2-trif	101		3.507				ND	
24 Acetone	43	3.545	3.543	0.002	81	10548	7.75	
25 Iodomethane	142		3.622				ND	
26 Carbon disulfide	76		3.701				ND	
27 Isopropyl alcohol	45	3.818	3.816	0.002	95	82732	410.7	
29 Acetonitrile	41		3.981				ND	
28 3-Chloro-1-propene	76		4.011				ND	
30 Methyl acetate	43		4.030				ND	
31 Methylene Chloride	84		4.230				ND	
32 2-Methyl-2-propanol	59		4.510				ND	
33 Acrylonitrile	53		4.613				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.644				ND	
35 Methyl tert-butyl ether	73		4.662				ND	
36 Hexane	57		5.051				ND	
37 1,1-Dichloroethane	63	5.266	5.270	-0.004	93	10754	2.13	
38 Vinyl acetate	43		5.319				ND	
41 Isopropyl ether	45		5.367				ND	
39 2-Chloro-1,3-butadiene	53		5.367				ND	
40 Isopropyl ether TIC	45		5.410				ND	
42 Tert-butyl ethyl ether	59		5.835				ND	
43 Tert-butyl ethyl ether (TI	59		5.961				ND	
44 2,2-Dichloropropane	97		6.000				ND	
45 cis-1,2-Dichloroethene	96	6.014	6.012	0.002	80	251898	75.9	
46 2-Butanone (MEK)	43		6.030				ND	
48 Ethyl acetate	43		6.097				ND	
47 Propionitrile	54		6.103				ND	
50 Methacrylonitrile	41		6.273				ND	
49 Chlorobromomethane	128		6.292				ND	
51 Tetrahydrofuran	42		6.310				ND	
52 Chloroform	83	6.439	6.438	0.001	31	2664	0.5287	
53 1,1,1-Trichloroethane	97		6.596				ND	
54 Cyclohexane	56		6.663				ND	
56 Carbon tetrachloride	117		6.766				ND	
55 1,1-Dichloropropene	75		6.784				ND	
57 Isobutyl alcohol	41		6.985				ND	
58 Benzene	78		6.997				ND	
59 1,2-Dichloroethane	62		7.070				ND	
151 Isooctane	57		7.149				ND	
61 Tert-amyl methyl ether	73		7.173				ND	
60 Tert-amyl methyl ether (TI	73		7.262				ND	
62 n-Heptane	43		7.350				ND	
63 n-Butanol	56		7.684				ND	
64 Trichloroethene	130	7.729	7.727	0.002	95	85427	26.8	
65 Ethyl acrylate	55		7.848				ND	
66 Methylcyclohexane	83		7.958				ND	
67 1,2-Dichloropropane	63		7.995				ND	
68 Dibromomethane	93		8.080				ND	
69 Methyl methacrylate	69		8.086				ND	
70 1,4-Dioxane	88		8.086				ND	
71 Dichlorobromomethane	83		8.274				ND	
73 2-Chloroethyl vinyl ether	63		8.578				ND	
74 cis-1,3-Dichloropropene	75		8.718				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.876				ND	
76 Toluene	91		9.047				ND	
77 trans-1,3-Dichloropropene	75		9.296				ND	
78 Ethyl methacrylate	69		9.357				ND	
79 1,1,2-Trichloroethane	97		9.491				ND	
80 Tetrachloroethene	164	9.565	9.558	0.007	96	15583	6.55	
81 1,3-Dichloropropane	76		9.649				ND	
82 2-Hexanone	43		9.710				ND	
83 n-Butyl acetate	43		9.825				ND	
84 Chlorodibromomethane	129		9.862				ND	
85 Ethylene Dibromide	107		9.971				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.433				ND	
87 Chlorobenzene	112		10.458				ND	
88 4-Chlorobenzotrifluoride	180		10.518				ND	
89 1,1,1,2-Tetrachloroethane	131		10.555				ND	
90 Ethylbenzene	106		10.561				ND	
91 m-Xylene & p-Xylene	106		10.689				ND	
92 o-Xylene	106		11.072				ND	
93 Styrene	104		11.090				ND	
94 Bromoform	173		11.279				ND	
95 Cyclohexanol	57		11.288				ND	
96 2-Chlorobenzotrifluoride	180		11.339				ND	
97 Isopropylbenzene	105		11.437				ND	
98 Cyclohexanone	55		11.528				ND	
99 1,1,2,2-Tetrachloroethane	83		11.747				ND	
100 Bromobenzene	156		11.753				ND	
102 trans-1,4-Dichloro-2-buten	53		11.783				ND	
101 1,2,3-Trichloropropane	110		11.808				ND	
103 N-Propylbenzene	120		11.856				ND	
104 2-Chlorotoluene	126		11.941				ND	
105 3-Chlorotoluene	126		12.008				ND	
106 1,3,5-Trimethylbenzene	105		12.039				ND	
107 4-Chlorotoluene	126		12.063				ND	
108 tert-Butylbenzene	119		12.349				ND	
110 1,2,4-Trimethylbenzene	105		12.410				ND	
111 1,2-dichloro-4-(trifluorom	214		12.452				ND	
112 sec-Butylbenzene	105		12.574				ND	
113 1,3-Dichlorobenzene	146	12.697	12.689	0.008	1	491	0.0809	
114 4-Isopropyltoluene	119		12.732				ND	
115 1,4-Dichlorobenzene	146		12.793				ND	
117 1,2,3-Trimethylbenzene	105		12.823				ND	
116 2,4-Dichloro-1-(triflourom	214		12.823				ND	
118 2,5-Dichlorobenzotrifluori	214		12.860				ND	
119 Benzyl chloride	91		12.908				ND	
120 n-Butylbenzene	91		13.139				ND	
121 1,2-Dichlorobenzene	146	13.147	13.152	-0.005	1	383	0.0662	
122 1,2-Dibromo-3-Chloropropan	75		13.942				ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.088				ND	
124 1,3,5-Trichlorobenzene	180		14.130				ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.502				ND	
126 1,2,4-Trichlorobenzene	180		14.769				ND	
127 Hexachlorobutadiene	225		14.915				ND	
128 Naphthalene	128		15.031				ND	
129 1,2,3-Trichlorobenzene	180		15.256				ND	
131 2,4,5-Trichlorotoluene	159		16.028				ND	
130 2,3,6-Trichlorotoluene	159		16.119				ND	
152 Formaldehyde TIC	1		0.000				ND	
149 3,4-Dichlorotoluene	1		0.000				ND	
S 133 Xylenes, Total	106		1.000				ND	
S 134 1,2-Dichloroethene, Total	96				0		75.9	
S 154 Total BTEX	106		1.000				ND	
S 135 1,3-Dichloropropene, Total	1		0.000				ND	
T 136 Mesityl oxide TIC	83		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
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	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

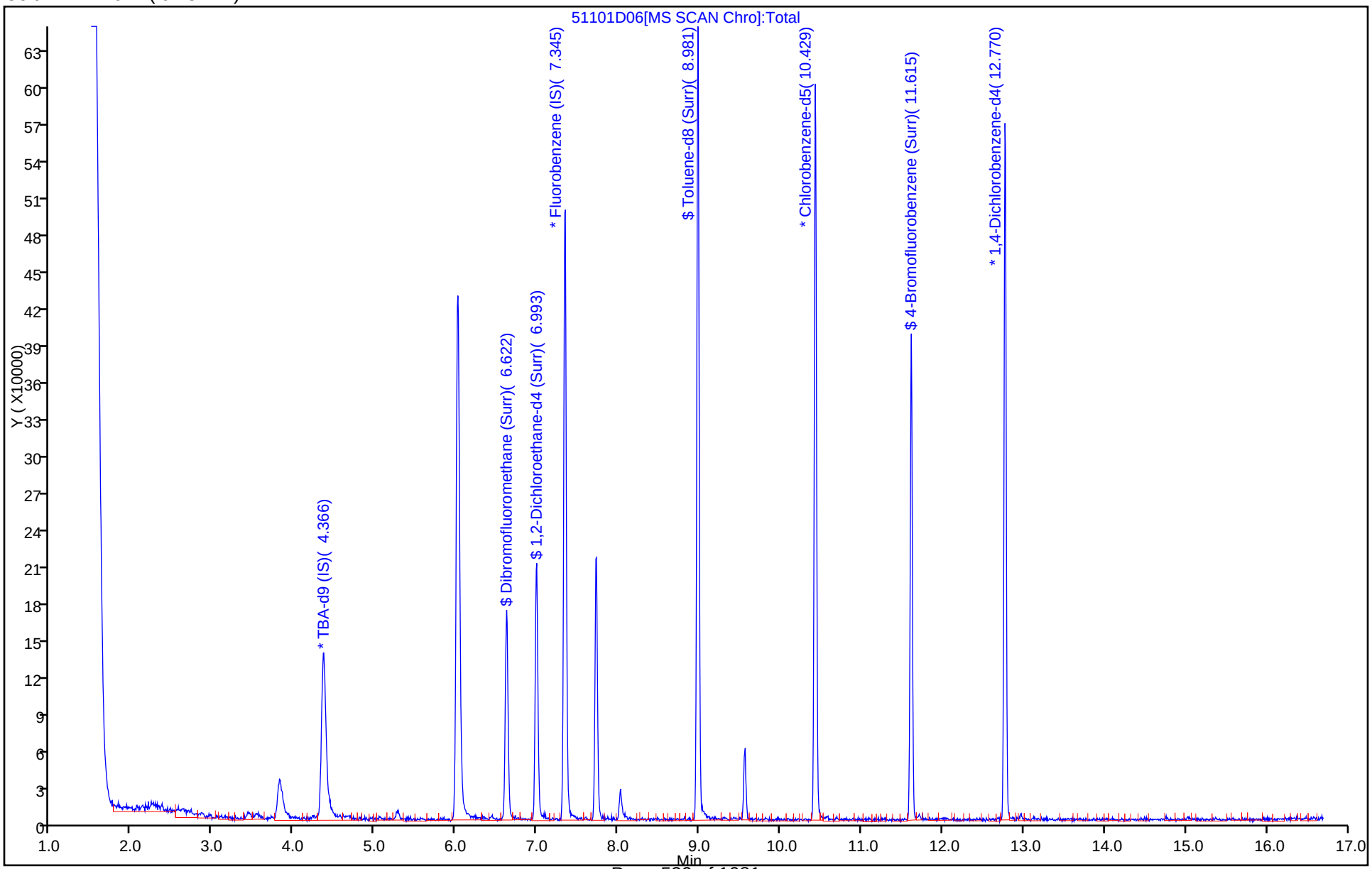
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 02-Nov-2017 20:42:24 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D06.D				
Injection Date:	02-Nov-2017 01:39:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71829-C-16	Lab Sample ID:	180-71829-16	Worklist Smp#:	6
Client ID:	HD-MW-82-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D06.D
Lims ID: 180-71829-C-16
Client ID: HD-MW-82-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 01:39:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019138-006
Misc. Info.: 180-71829-C-16
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 02:28:51

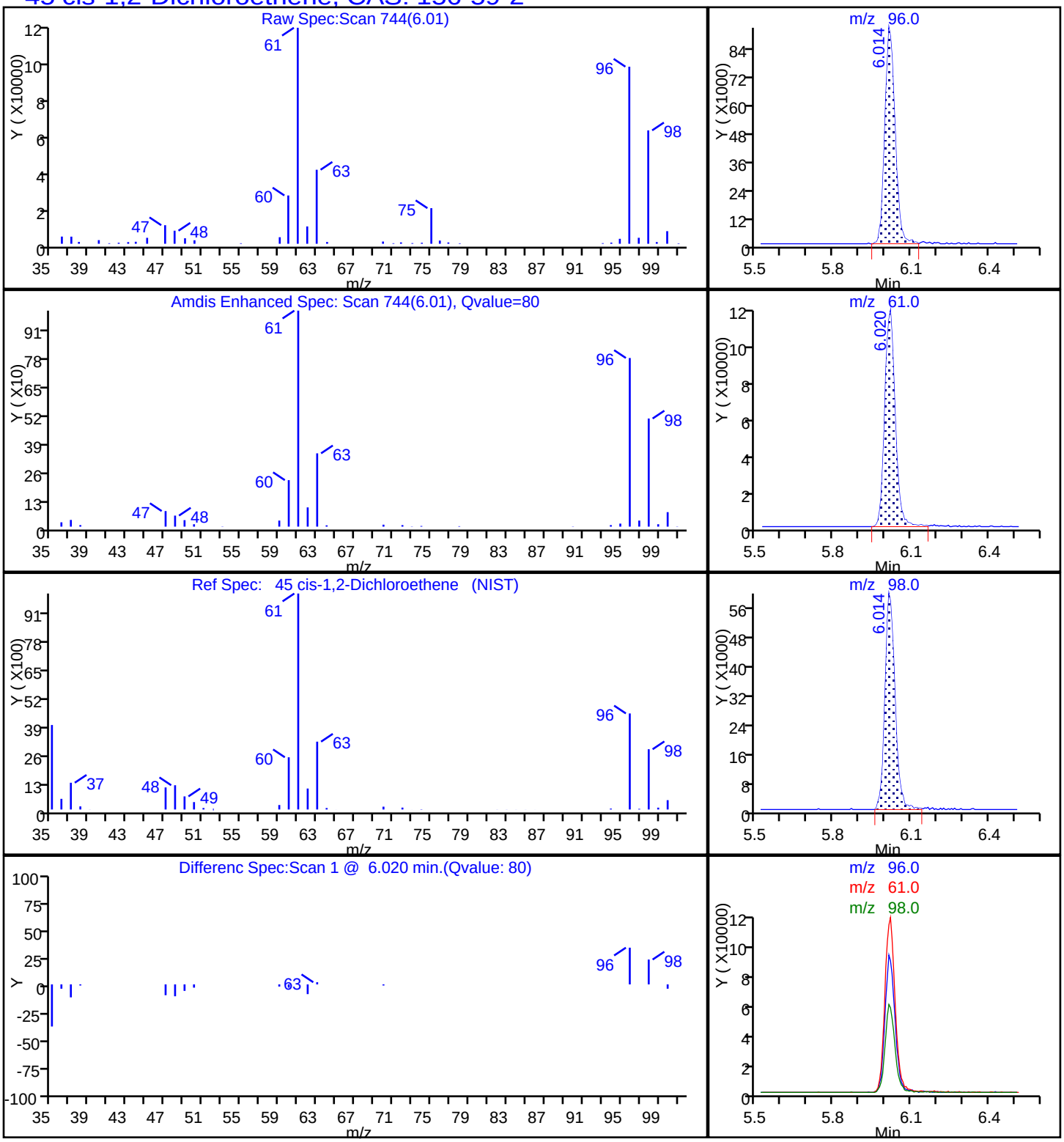
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.7	101.42
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	55.5	110.91
$ 7 Toluene-d8 (Surr)	50.0	46.4	92.82
$ 8 4-Bromofluorobenzene (Surr)	50.0	42.2	84.32

Report Date: 02-Nov-2017 20:42:24 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D06.D				
Injection Date:	02-Nov-2017 01:39:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-C-16	Lab Sample ID:	180-71829-16		
Client ID:	HD-MW-82-0/1-0				
Operator ID:	034635	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



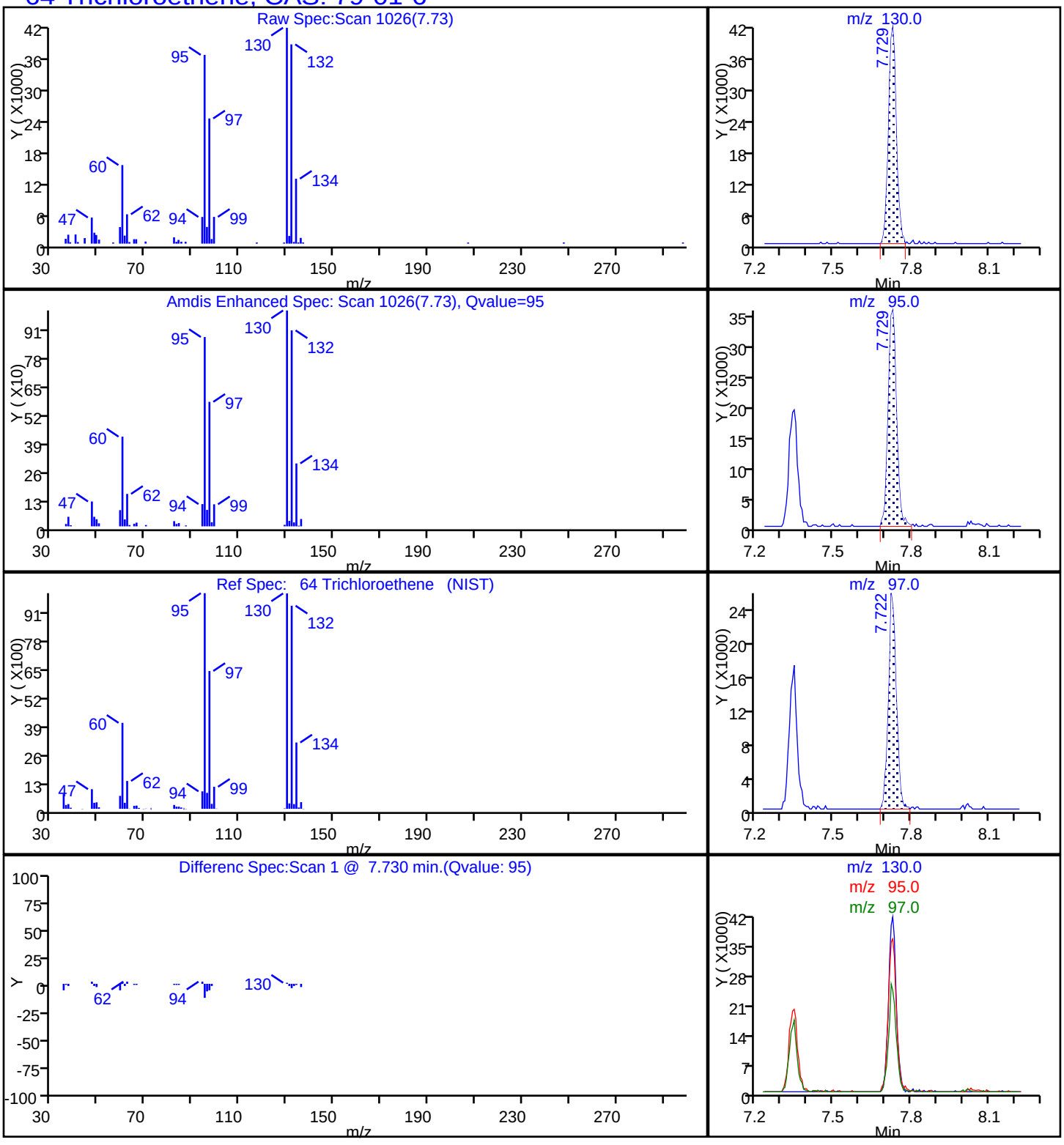
Report Date: 02-Nov-2017 20:42:24 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D06.D

Injection Date:	02-Nov-2017 01:39:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-C-16	Lab Sample ID:	180-71829-16		
Client ID:	HD-MW-82-0/1-0				
Operator ID:	034635	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



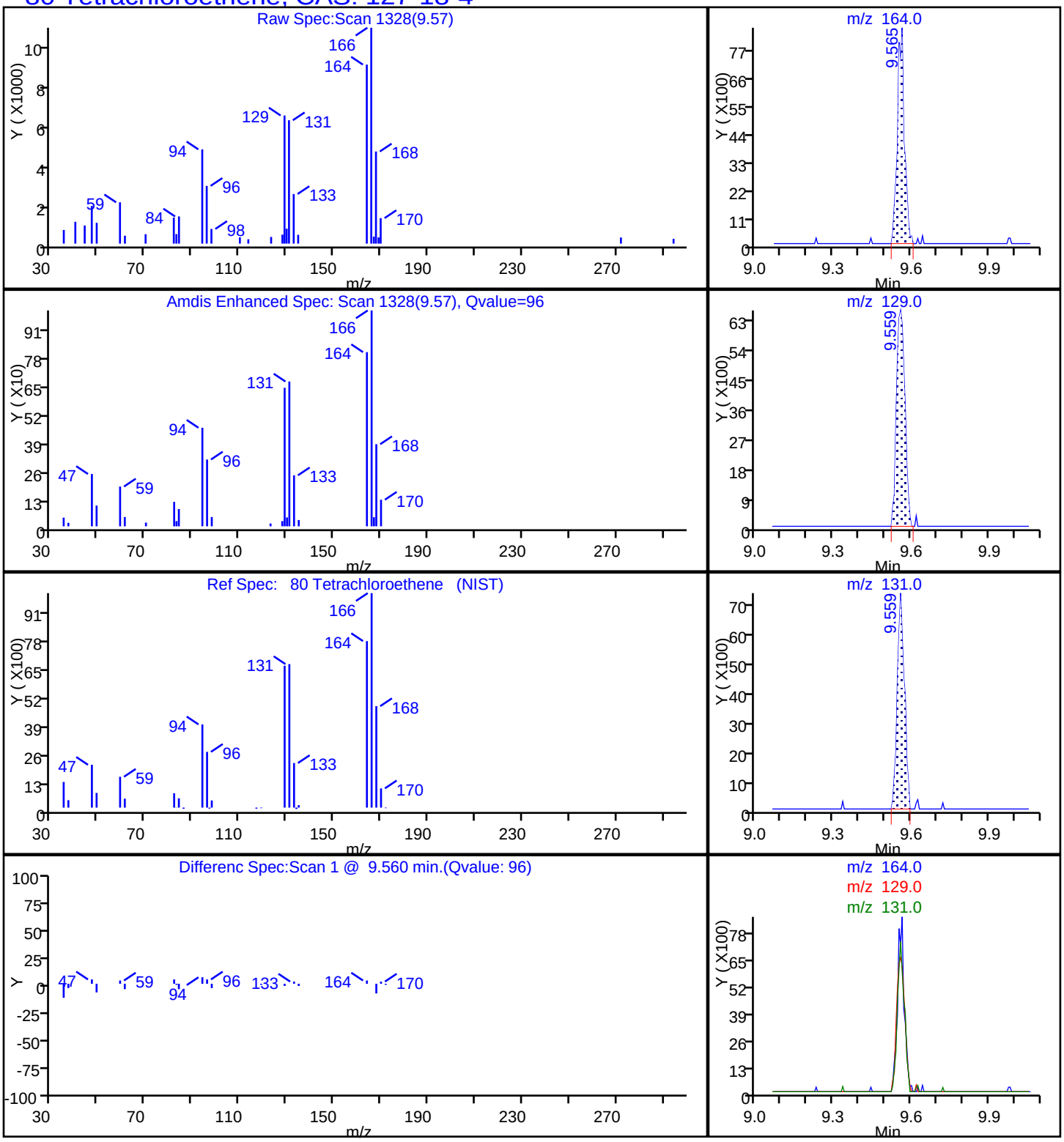
Report Date: 02-Nov-2017 20:42:24 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D06.D

Injection Date:	02-Nov-2017 01:39:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-C-16	Lab Sample ID:	180-71829-16		
Client ID:	HD-MW-82-0/1-0				
Operator ID:	034635	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

80 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-15-0/1-0 | Lab Sample ID: 180-71829-17

Matrix: Water | Lab File ID: 51101D17.D

Analysis Method: 8260C | Date Collected: 10/26/2017 08:24

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 06:07

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.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	2.0	U ^c	2.0	1.8
75-01-4	Vinyl chloride	2.0	U	2.0	1.8
74-83-9	Bromomethane	2.0	U	2.0	1.8
75-00-3	Chloroethane	2.0	U	2.0	1.8
75-35-4	1,1-Dichloroethene	2.0	U	2.0	1.1
67-64-1	Acetone	10	U ^c	10	6.9
75-15-0	Carbon disulfide	2.0	U	2.0	1.8
75-09-2	Methylene Chloride	2.0	U	2.0	0.72
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	1.3
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	1.2
75-34-3	1,1-Dichloroethane	2.0	U	2.0	1.3
156-59-2	cis-1,2-Dichloroethene	2.0	U	2.0	1.4
74-97-5	Bromochloromethane	2.0	U	2.0	1.3
78-93-3	2-Butanone (MEK)	10	U	10	5.2
67-66-3	Chloroform	2.0	U	2.0	1.2
71-55-6	1,1,1-Trichloroethane	2.0	U	2.0	1.2
56-23-5	Carbon tetrachloride	2.0	U	2.0	1.8
71-43-2	Benzene	2.0	U	2.0	1.2
107-06-2	1,2-Dichloroethane	2.0	U	2.0	1.1
79-01-6	Trichloroethene	1.8	J	2.0	1.4
78-87-5	1,2-Dichloropropane	2.0	U	2.0	1.3
75-27-4	Bromodichloromethane	2.0	U	2.0	1.3
10061-01-5	cis-1,3-Dichloropropene	2.0	U	2.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	6.2
108-88-3	Toluene	2.0	U	2.0	0.91
10061-02-6	trans-1,3-Dichloropropene	2.0	U	2.0	1.2
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	0.91
127-18-4	*Tetrachloroethene*	*140*	*E*	*2.0*	*0.93*
591-78-6	2-Hexanone	10	U	10	6.6
124-48-1	Dibromochloromethane	2.0	U	2.0	1.7
106-93-4	1,2-Dibromoethane (EDB)	2.0	U	2.0	1.0
108-90-7	Chlorobenzene	2.0	U	2.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	1.1
100-41-4	Ethylbenzene	2.0	U	2.0	1.0
1330-20-7	Xylenes, Total	4.0	U	4.0	1.8
100-42-5	Styrene	2.0	U	2.0	0.94

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-15-0/1-0 | Lab Sample ID: 180-71829-17

Matrix: Water | Lab File ID: 51101D17.D

Analysis Method: 8260C | Date Collected: 10/26/2017 08:24

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 06:07

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.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	2.0	U	2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U	2.0	1.2
107-13-1	Acrylonitrile	40	U	40	16
123-91-1	1,4-Dioxane	400	U	400	27

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		65-121
2037-26-5	Toluene-d8 (Surr)	89		73-120
460-00-4	4-Bromofluorobenzene (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	109		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D17.D
Lims ID: 180-71829-B-17
Client ID: HD-MW-15-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 06:07:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0019138-017
Misc. Info.: 180-71829-B-17
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 20:26:36

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.363	4.394	-0.031	0	218932	1000.0	
*	2 Fluorobenzene (IS)	96	7.343	7.338	0.005	98	467516	50.0	
*	3 Chlorobenzene-d5	119	10.433	10.427	0.006	86	116843	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.774	12.768	0.006	97	158448	50.0	
$	5 Dibromofluoromethane (Surr	113	6.626	6.614	0.012	93	122156	54.3	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.997	6.985	0.012	0	162048	59.1	
$	7 Toluene-d8 (Surr)	98	8.985	8.980	0.005	94	413130	44.4	
$	8 4-Bromofluorobenzene (Surr	95	11.612	11.613	-0.001	84	148876	44.3	
	12 Chloromethane	50		1.907				ND	
	13 Vinyl chloride	62		2.023				ND	
	15 Bromomethane	94		2.339				ND	
	16 Chloroethane	64		2.430				ND	
	22 1,1-Dichloroethene	96		3.415				ND	
	24 Acetone	43		3.543				ND	
	26 Carbon disulfide	76		3.701				ND	
	31 Methylene Chloride	84		4.230				ND	
	33 Acrylonitrile	53		4.613				ND	
	34 trans-1,2-Dichloroethene	96		4.644				ND	
	35 Methyl tert-butyl ether	73		4.662				ND	
	37 1,1-Dichloroethane	63		5.270				ND	
	45 cis-1,2-Dichloroethene	96		6.012				ND	
	46 2-Butanone (MEK)	43		6.030				ND	
	49 Chlorobromomethane	128		6.292				ND	
	52 Chloroform	83	6.437	6.438	-0.001	32	2758	0.6091	
	53 1,1,1-Trichloroethane	97		6.596				ND	
	56 Carbon tetrachloride	117		6.766				ND	
	58 Benzene	78		6.997				ND	
	59 1,2-Dichloroethane	62		7.070				ND	
	64 Trichloroethene	130	7.733	7.727	0.006	96	12820	4.48	
	67 1,2-Dichloropropane	63		7.995				ND	
	70 1,4-Dioxane	88		8.086				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.274				ND	
74 cis-1,3-Dichloropropene	75		8.718				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.876				ND	
76 Toluene	91		9.047				ND	
77 trans-1,3-Dichloropropene	75		9.296				ND	
79 1,1,2-Trichloroethane	97		9.491				ND	
80 Tetrachloroethene	164	9.557	9.558	-0.001	95	770830	346.9	E
82 2-Hexanone	43		9.710				ND	
84 Chlorodibromomethane	129		9.862				ND	
85 Ethylene Dibromide	107		9.971				ND	
87 Chlorobenzene	112		10.458				ND	
89 1,1,1,2-Tetrachloroethane	131		10.555				ND	
90 Ethylbenzene	106		10.561				ND	
91 m-Xylene & p-Xylene	106		10.689				ND	
92 o-Xylene	106		11.072				ND	
93 Styrene	104		11.090				ND	
94 Bromoform	173		11.279				ND	
99 1,1,2,2-Tetrachloroethane	83		11.747				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

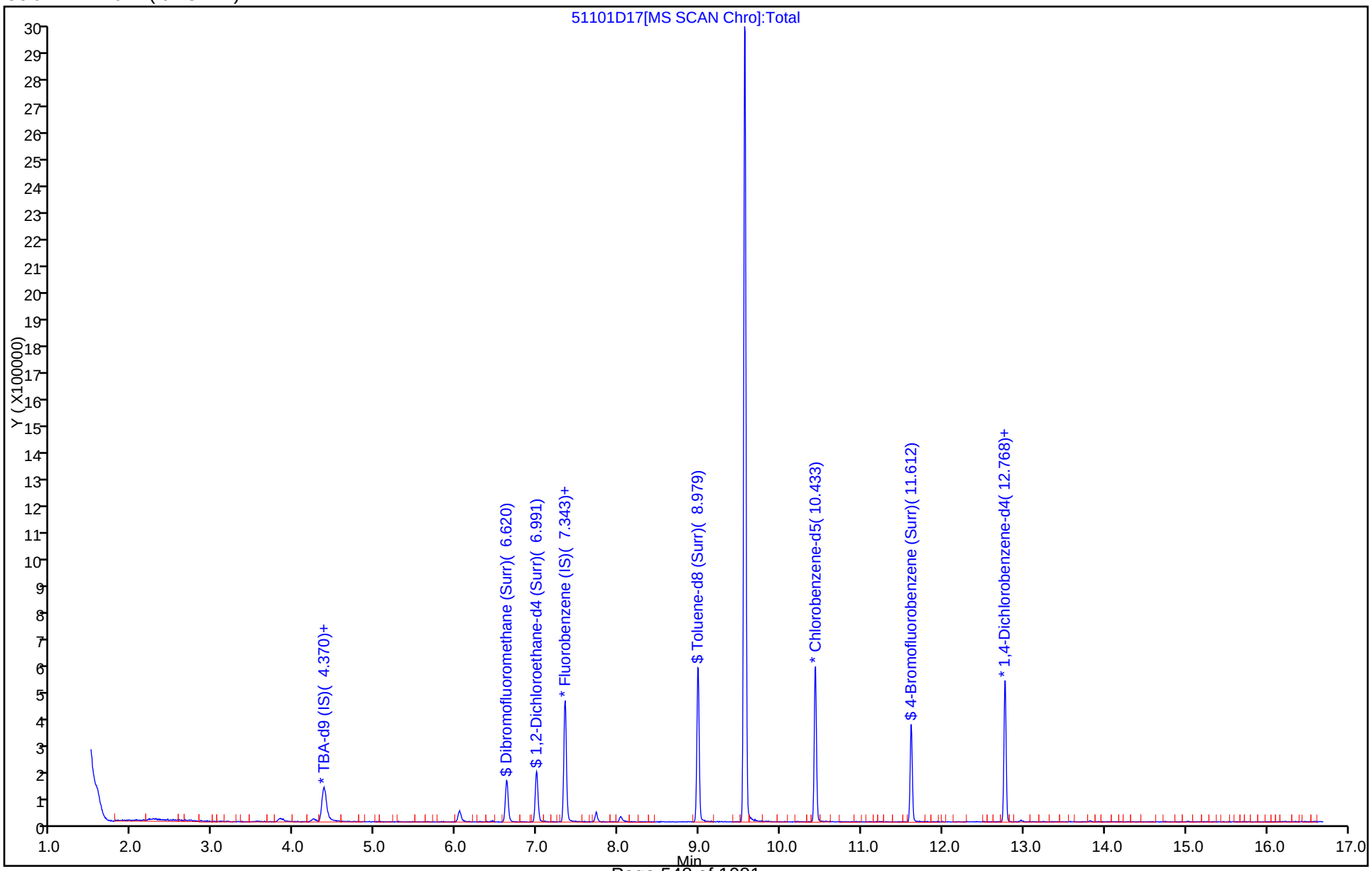
Report Date: 02-Nov-2017 20:42:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D17.D

Injection Date:	02-Nov-2017 06:07:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71829-B-17	Lab Sample ID:	180-71829-17	Worklist Smp#:	17
Client ID:	HD-MW-15-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	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\20171101-19138.b\51101D17.D
Lims ID: 180-71829-B-17
Client ID: HD-MW-15-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 06:07:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0019138-017
Misc. Info.: 180-71829-B-17
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 20:26:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	54.3	108.61
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	59.1	118.13
$ 7 Toluene-d8 (Surr)	50.0	44.4	88.85
$ 8 4-Bromofluorobenzene (Surr)	50.0	44.3	88.66

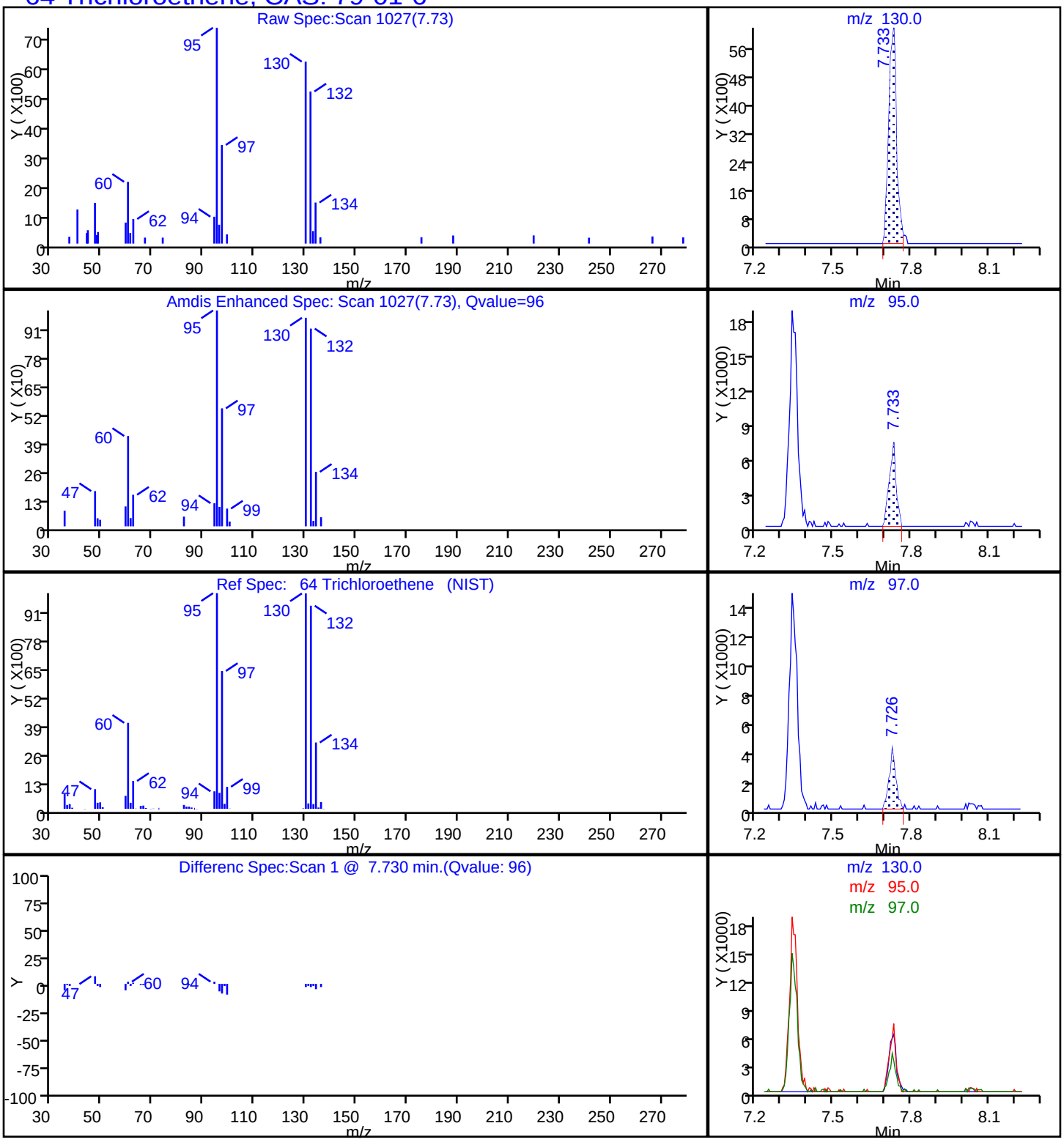
Report Date: 02-Nov-2017 20:42:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D17.D

Injection Date:	02-Nov-2017 06:07:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-B-17	Lab Sample ID:	180-71829-17		
Client ID:	HD-MW-15-0/1-0				
Operator ID:	034635	ALS Bottle#:	17	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



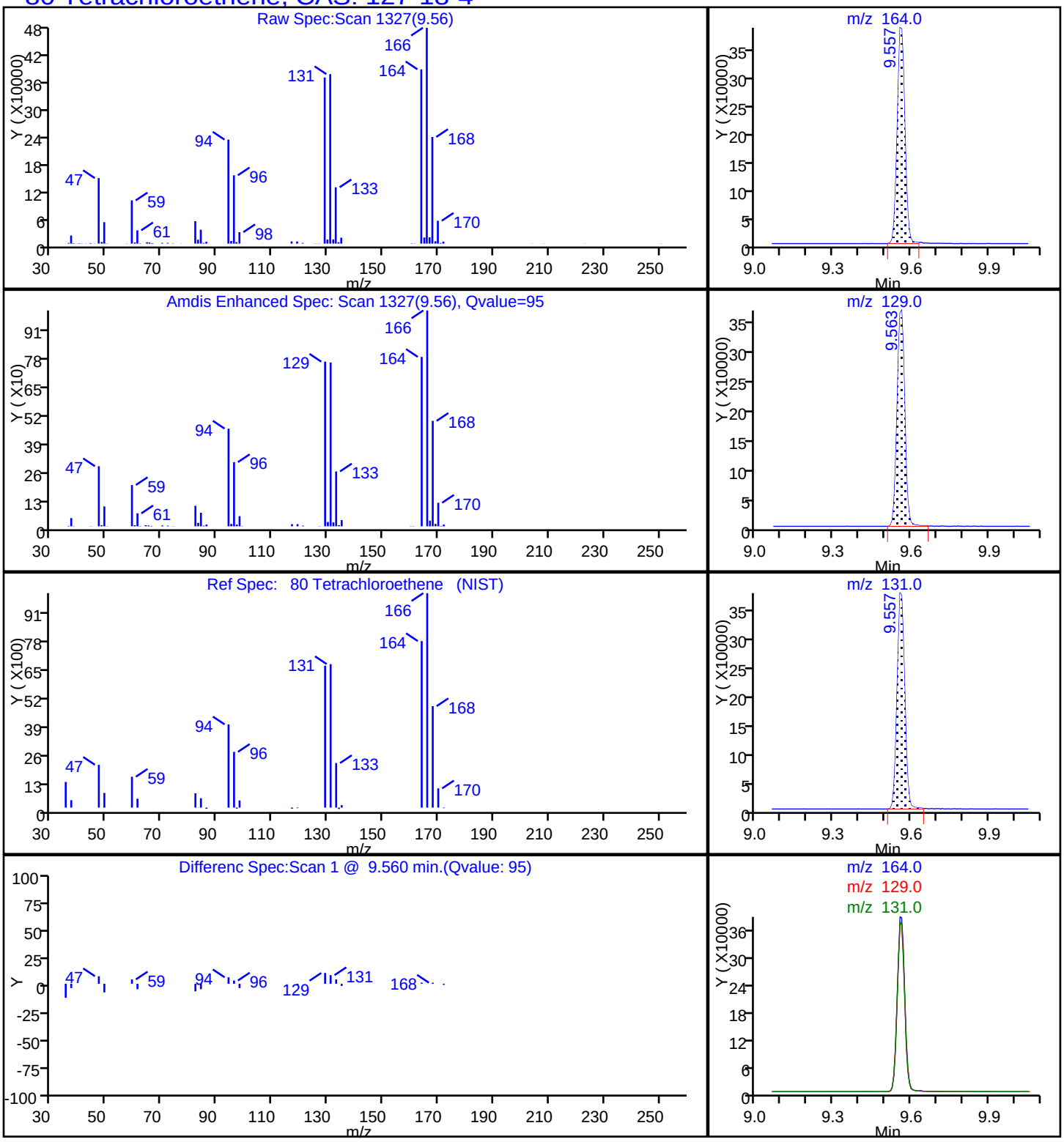
Report Date: 02-Nov-2017 20:42:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D17.D

Injection Date:	02-Nov-2017 06:07:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-B-17	Lab Sample ID:	180-71829-17		
Client ID:	HD-MW-15-0/1-0				
Operator ID:	034635	ALS Bottle#:	17	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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-15-0/1-0 DL | Lab Sample ID: 180-71829-17 DL

Matrix: Water | Lab File ID: 7110912.D

Analysis Method: 8260C | Date Collected: 10/26/2017 08:24

Sample wt/vol: 5(mL) | Date Analyzed: 11/09/2017 13:31

Soil Aliquot Vol: | Dilution Factor: 5

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

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

Analysis Batch No.: 228533 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.0	U ^c	5.0	4.5
75-01-4	Vinyl chloride	5.0	U ^c	5.0	4.4
74-83-9	Bromomethane	5.0	U ^c	5.0	4.4
75-00-3	Chloroethane	5.0	U	5.0	4.5
75-35-4	1,1-Dichloroethene	5.0	U	5.0	2.8
67-64-1	Acetone	25	U ^c	25	17
75-15-0	Carbon disulfide	5.0	U	5.0	4.4
75-09-2	Methylene Chloride	5.0	U	5.0	1.8
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	3.4
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	3.0
75-34-3	1,1-Dichloroethane	5.0	U	5.0	3.1
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	3.5
74-97-5	Bromochloromethane	5.0	U	5.0	3.1
78-93-3	2-Butanone (MEK)	25	U	25	13
67-66-3	Chloroform	5.0	U	5.0	3.0
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	3.0
56-23-5	Carbon tetrachloride	5.0	U	5.0	4.4
71-43-2	Benzene	5.0	U	5.0	3.0
107-06-2	1,2-Dichloroethane	5.0	U	5.0	2.9
79-01-6	Trichloroethene	5.0	U	5.0	3.4
78-87-5	1,2-Dichloropropane	5.0	U	5.0	3.3
75-27-4	Bromodichloromethane	5.0	U	5.0	3.2
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	3.0
108-10-1	4-Methyl-2-pentanone (MIBK)	25	U ^c	25	15
108-88-3	Toluene	5.0	U ^c	5.0	2.3
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	2.9
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	2.3
127-18-4	Tetrachloroethene	140		5.0	2.3
591-78-6	2-Hexanone	25	U	25	16
124-48-1	Dibromochloromethane	5.0	U	5.0	4.2
106-93-4	1,2-Dibromoethane (EDB)	5.0	U	5.0	2.5
108-90-7	Chlorobenzene	5.0	U	5.0	2.5
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	2.9
100-41-4	Ethylbenzene	5.0	U	5.0	2.5
1330-20-7	Xylenes, Total	10	U	10	4.5
100-42-5	Styrene	5.0	U	5.0	2.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-15-0/1-0 DL | Lab Sample ID: 180-71829-17 DL

Matrix: Water | Lab File ID: 7110912.D

Analysis Method: 8260C | Date Collected: 10/26/2017 08:24

Sample wt/vol: 5(mL) | Date Analyzed: 11/09/2017 13:31

Soil Aliquot Vol: | Dilution Factor: 5

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

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

Analysis Batch No.: 228533 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	*Bromoform*	*5.0*	*U ^c*	*5.0*	*4.9*
79-34-5	*1,1,2,2-Tetrachloroethane*	*5.0*	*U*	*5.0*	*3.0*
107-13-1	*Acrylonitrile*	*100*	*U*	*100*	*39*
123-91-1	*1,4-Dioxane*	*1000*	*U ^c*	*1000*	*68*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	76	*^c*	65-121
2037-26-5	Toluene-d8 (Surr)	108		73-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	84		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\7110912.D
Lims ID: 180-71829-C-17
Client ID: HD-MW-15-0/1-0
Sample Type: Client
Inject. Date: 09-Nov-2017 13:31:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 180-71829-C-17 ,5x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 09-Nov-2017 15:46:02 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 09-Nov-2017 15:43:55

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.255	4.251	0.004	98	157804	1000.0	
*	2 Fluorobenzene (IS)	96	7.267	7.263	0.004	98	205532	50.0	
*	3 Chlorobenzene-d5	119	10.363	10.365	-0.002	91	43711	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.705	12.707	-0.002	97	61117	50.0	
$	5 Dibromofluoromethane (Surr	113	6.549	6.539	0.010	94	42682	42.0	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.920	6.910	0.010	90	75023	37.9	
$	7 Toluene-d8 (Surr)	98	8.915	8.911	0.004	93	178907	54.0	
$	8 4-Bromofluorobenzene (Surr	95	11.543	11.545	-0.002	86	66327	46.7	
	12 Chloromethane	50		1.793				ND	
	13 Vinyl chloride	62		1.921				ND	
	15 Bromomethane	94		2.280				ND	
	16 Chloroethane	64		2.414				ND	
	22 1,1-Dichloroethene	96		3.345				ND	
	24 Acetone	43		3.436				ND	
	26 Carbon disulfide	76		3.625				ND	
	31 Methylene Chloride	84		4.123				ND	
	33 Acrylonitrile	53		4.507				ND	
	34 trans-1,2-Dichloroethene	96		4.555				ND	
	35 Methyl tert-butyl ether	73		4.561				ND	
	37 1,1-Dichloroethane	63		5.182				ND	
	45 cis-1,2-Dichloroethene	96		5.930				ND	
	46 2-Butanone (MEK)	43		5.936				ND	
	49 Chlorobromomethane	128		6.210				ND	
	52 Chloroform	83	6.366	6.362	0.004	1	1101	0.4240	
	53 1,1,1-Trichloroethane	97		6.514				ND	
	56 Carbon tetrachloride	117		6.691				ND	
	58 Benzene	78		6.922				ND	
	59 1,2-Dichloroethane	62		6.995				ND	
	64 Trichloroethene	130	7.662	7.646	0.016	93	1776	1.41	
	67 1,2-Dichloropropane	63		7.926				ND	
	70 1,4-Dioxane	88		8.011				ND	
	71 Dichlorobromomethane	83		8.205				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75		8.650				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802				ND	
76 Toluene	91		8.978				ND	
77 trans-1,3-Dichloropropene	75		9.227				ND	
79 1,1,2-Trichloroethane	97		9.422				ND	
80 Tetrachloroethene	164	9.493	9.495	-0.002	95	105791	139.3	
82 2-Hexanone	43		9.635				ND	
84 Chlorodibromomethane	129		9.787				ND	
85 Ethylene Dibromide	107		9.909				ND	
87 Chlorobenzene	112		10.389				ND	
89 1,1,1,2-Tetrachloroethane	131		10.481				ND	
90 Ethylbenzene	106		10.493				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		11.004				ND	
93 Styrene	104		11.022				ND	
94 Bromoform	173		11.211				ND	
99 1,1,2,2-Tetrachloroethane	83		11.685				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

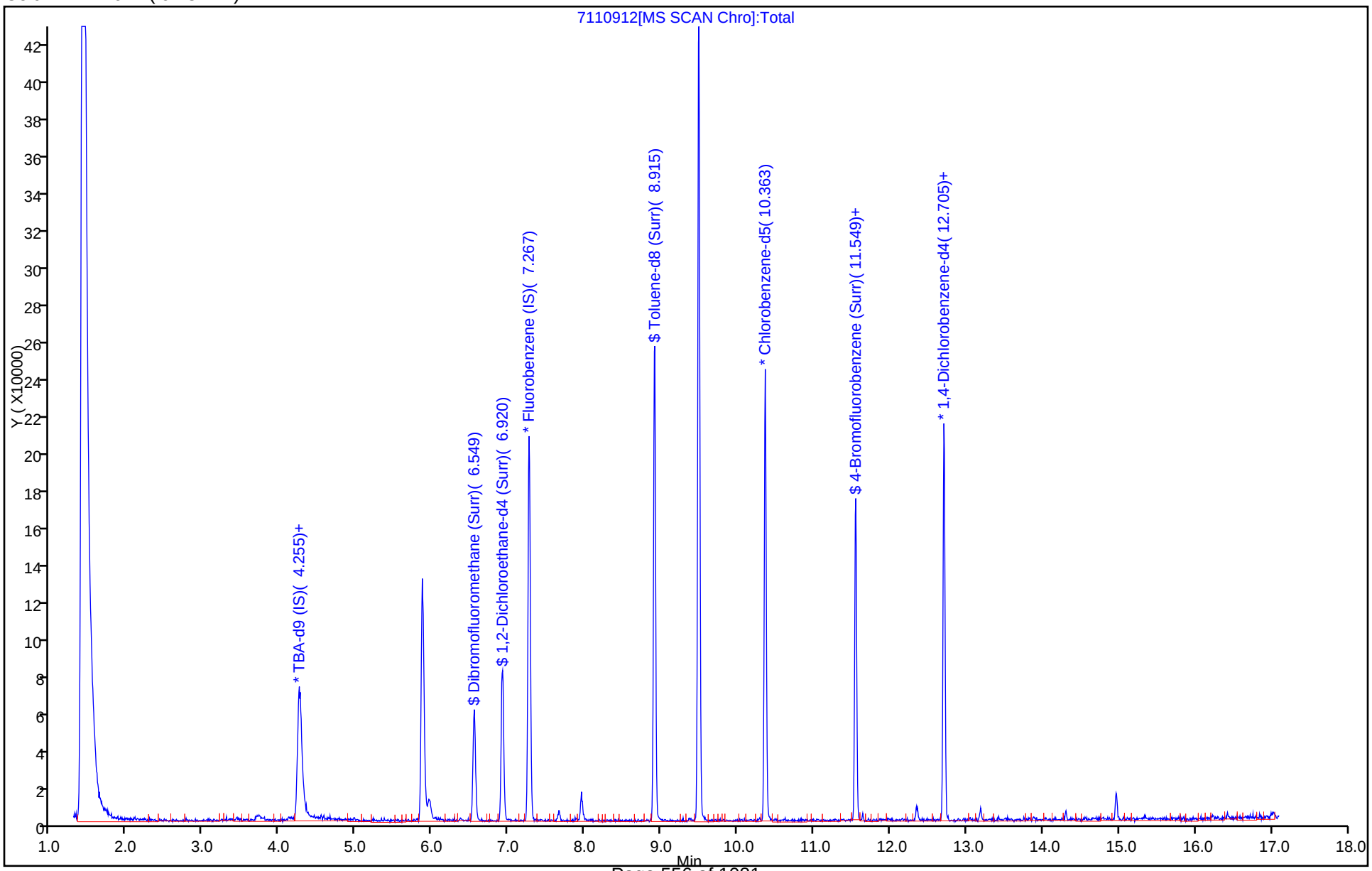
Report Date: 09-Nov-2017 15:46:11 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\7110912.D

Injection Date:	09-Nov-2017 13:31:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-C-17	Lab Sample ID:	180-71829-17	Worklist Smp#:	12
Client ID:	HD-MW-15-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	12
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\7110912.D
Lims ID: 180-71829-C-17
Client ID: HD-MW-15-0/1-0
Sample Type: Client
Inject. Date: 09-Nov-2017 13:31:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 180-71829-C-17 ,5x
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 09-Nov-2017 15:46:02 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 09-Nov-2017 15:43:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	42.0	83.93
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	37.9	75.85
$ 7 Toluene-d8 (Surr)	50.0	54.0	108.06
$ 8 4-Bromofluorobenzene (Surr)	50.0	46.7	93.39

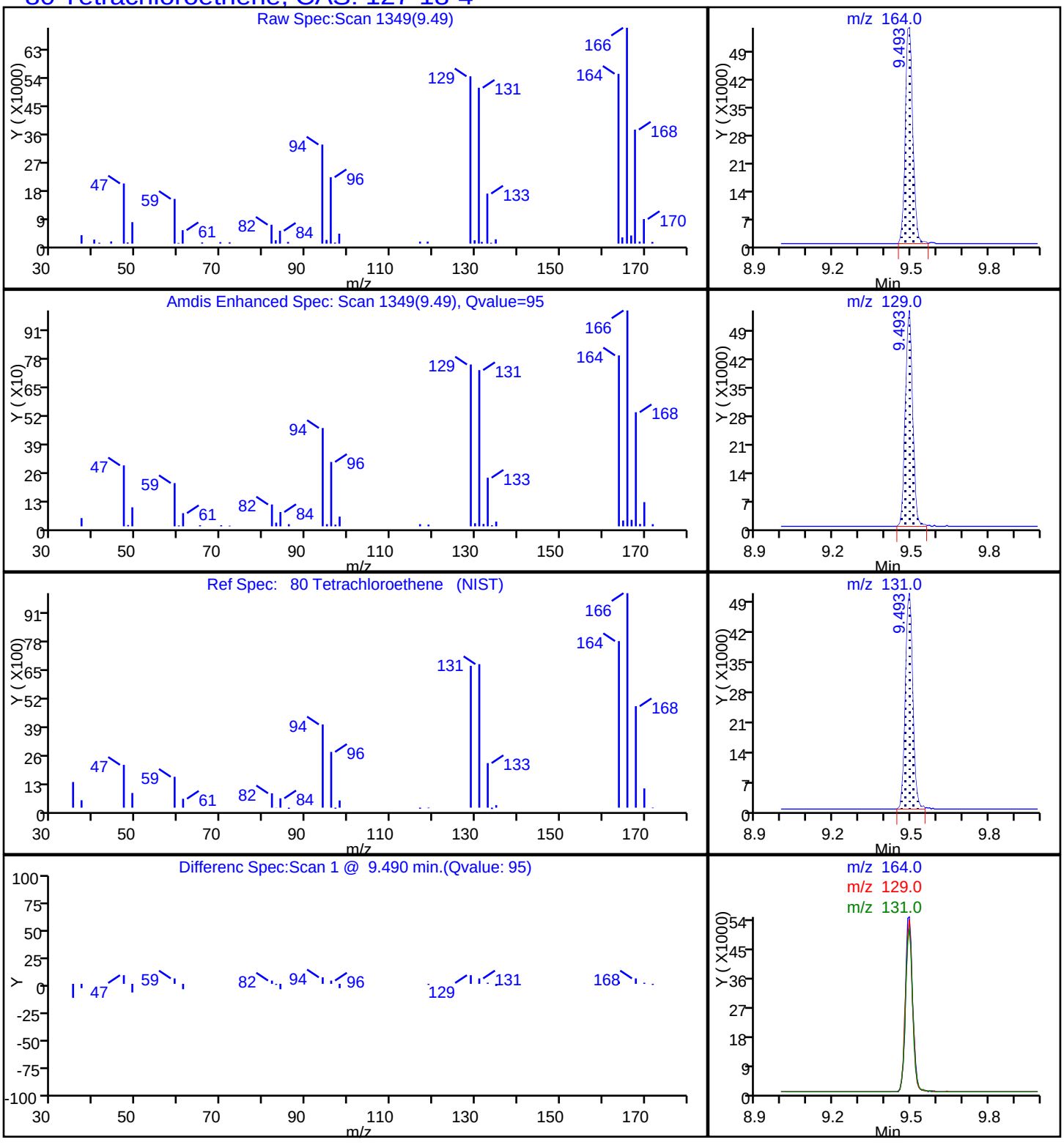
Report Date: 09-Nov-2017 15:46:11 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\7110912.D

Injection Date:	09-Nov-2017 13:31:30	Instrument ID:	CHHP7		
Lims ID:	180-71829-C-17	Lab Sample ID:	180-71829-17		
Client ID:	HD-MW-15-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-16S-0/1-0 | Lab Sample ID: 180-71829-18

Matrix: Water | Lab File ID: 51102D24.D

Analysis Method: 8260C | Date Collected: 10/25/2017 12:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2017 08:47

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.: 227871 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	2.0	U	2.0	1.8
75-01-4	Vinyl chloride	2.0	U	2.0	1.8
74-83-9	Bromomethane	2.0	U ^c	2.0	1.8
75-00-3	Chloroethane	2.0	U	2.0	1.8
75-35-4	1,1-Dichloroethene	2.0	U	2.0	1.1
67-64-1	Acetone	10	U ^c *	10	6.9
75-15-0	Carbon disulfide	2.0	U	2.0	1.8
75-09-2	Methylene Chloride	2.0	U	2.0	0.72
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	1.3
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	1.2
75-34-3	1,1-Dichloroethane	2.0	U	2.0	1.3
156-59-2	cis-1,2-Dichloroethene	12		2.0	1.4
74-97-5	Bromochloromethane	2.0	U	2.0	1.3
78-93-3	2-Butanone (MEK)	10	U ^c	10	5.2
67-66-3	Chloroform	2.0	U	2.0	1.2
71-55-6	1,1,1-Trichloroethane	2.0	U	2.0	1.2
56-23-5	Carbon tetrachloride	2.0	U	2.0	1.8
71-43-2	Benzene	2.0	U	2.0	1.2
107-06-2	1,2-Dichloroethane	2.0	U	2.0	1.1
79-01-6	Trichloroethene	7.7	^c	2.0	1.4
78-87-5	1,2-Dichloropropane	2.0	U	2.0	1.3
75-27-4	Bromodichloromethane	2.0	U	2.0	1.3
10061-01-5	cis-1,3-Dichloropropene	2.0	U	2.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	6.2
108-88-3	Toluene	2.0	U	2.0	0.91
10061-02-6	trans-1,3-Dichloropropene	2.0	U	2.0	1.2
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	0.91
127-18-4	Tetrachloroethene	1.7	J	2.0	0.93
591-78-6	2-Hexanone	10	U	10	6.6
124-48-1	Dibromochloromethane	2.0	U	2.0	1.7
106-93-4	1,2-Dibromoethane (EDB)	2.0	U	2.0	1.0
108-90-7	Chlorobenzene	2.0	U	2.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	1.1
100-41-4	Ethylbenzene	2.0	U	2.0	1.0
1330-20-7	Xylenes, Total	4.0	U	4.0	1.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-16S-0/1-0 | Lab Sample ID: 180-71829-18

Matrix: Water | Lab File ID: 51102D24.D

Analysis Method: 8260C | Date Collected: 10/25/2017 12:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2017 08:47

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.: 227871 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-42-5	Styrene	2.0	U	2.0	0.94
75-25-2	Bromoform	2.0	U	2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U	2.0	1.2
107-13-1	Acrylonitrile	40	U	40	16
123-91-1	1,4-Dioxane	400	U	400	27

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	120		65-121
2037-26-5	Toluene-d8 (Surr)	90		73-120
460-00-4	4-Bromofluorobenzene (Surr)	80		80-120
1868-53-7	Dibromofluoromethane (Surr)	113		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D24.D
Lims ID: 180-71829-B-18
Client ID: HD-MW-16S-0/1-0
Sample Type: Client
Inject. Date: 03-Nov-2017 08:47:30 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0019153-024
Misc. Info.: 180-71829-B-18
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Nov-2017 20:10:37 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

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

First Level Reviewer: bungardf Date: 05-Nov-2017 20:06:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.366	4.388	-0.022	0	190737	1000.0	
* 2 Fluorobenzene (IS)	96	7.340	7.337	0.003	99	453198	50.0	
* 3 Chlorobenzene-d5	119	10.429	10.433	-0.004	87	112484	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.770	12.768	0.002	97	147863	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.628	6.620	0.008	93	123742	56.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.993	6.991	0.002	0	159757	60.1	
$ 7 Toluene-d8 (Surr)	98	8.982	8.979	0.003	94	400743	44.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.609	11.612	-0.003	84	130016	40.2	
12 Chloromethane	50		1.888				ND	
13 Vinyl chloride	62		2.010				ND	
15 Bromomethane	94		2.332				ND	
16 Chloroethane	64		2.430				ND	
22 1,1-Dichloroethene	96		3.427				ND	
24 Acetone	43	3.551	3.536	0.015	77	4482	3.78	
26 Carbon disulfide	76		3.713				ND	
31 Methylene Chloride	84		4.236				ND	
33 Acrylonitrile	53		4.619				ND	
34 trans-1,2-Dichloroethene	96		4.643				ND	
35 Methyl tert-butyl ether	73		4.668				ND	
37 1,1-Dichloroethane	63		5.276				ND	
45 cis-1,2-Dichloroethene	96	6.014	6.012	0.002	81	85224	29.5	
46 2-Butanone (MEK)	43		6.030				ND	
49 Chlorobromomethane	128		6.297				ND	
52 Chloroform	83		6.437				ND	
53 1,1,1-Trichloroethane	97		6.595				ND	
56 Carbon tetrachloride	117		6.772				ND	
58 Benzene	78		6.997				ND	
59 1,2-Dichloroethane	62		7.076				ND	
64 Trichloroethene	130	7.729	7.727	0.003	97	53495	19.3	
67 1,2-Dichloropropane	63		8.000				ND	
70 1,4-Dioxane	88		8.085				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.274				ND	
74 cis-1,3-Dichloropropene	75		8.724				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.876				ND	
76 Toluene	91		9.046				ND	
77 trans-1,3-Dichloropropene	75		9.296				ND	
79 1,1,2-Trichloroethane	97		9.490				ND	
80 Tetrachloroethene	164	9.565	9.557	0.008	96	9022	4.22	
82 2-Hexanone	43		9.703				ND	
84 Chlorodibromomethane	129		9.855				ND	
85 Ethylene Dibromide	107		9.971				ND	
87 Chlorobenzene	112		10.457				ND	
89 1,1,1,2-Tetrachloroethane	131		10.554				ND	
90 Ethylbenzene	106		10.560				ND	
91 m-Xylene & p-Xylene	106		10.688				ND	
92 o-Xylene	106		11.071				ND	
93 Styrene	104		11.089				ND	
94 Bromoform	173		11.272				ND	
99 1,1,2,2-Tetrachloroethane	83		11.752				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

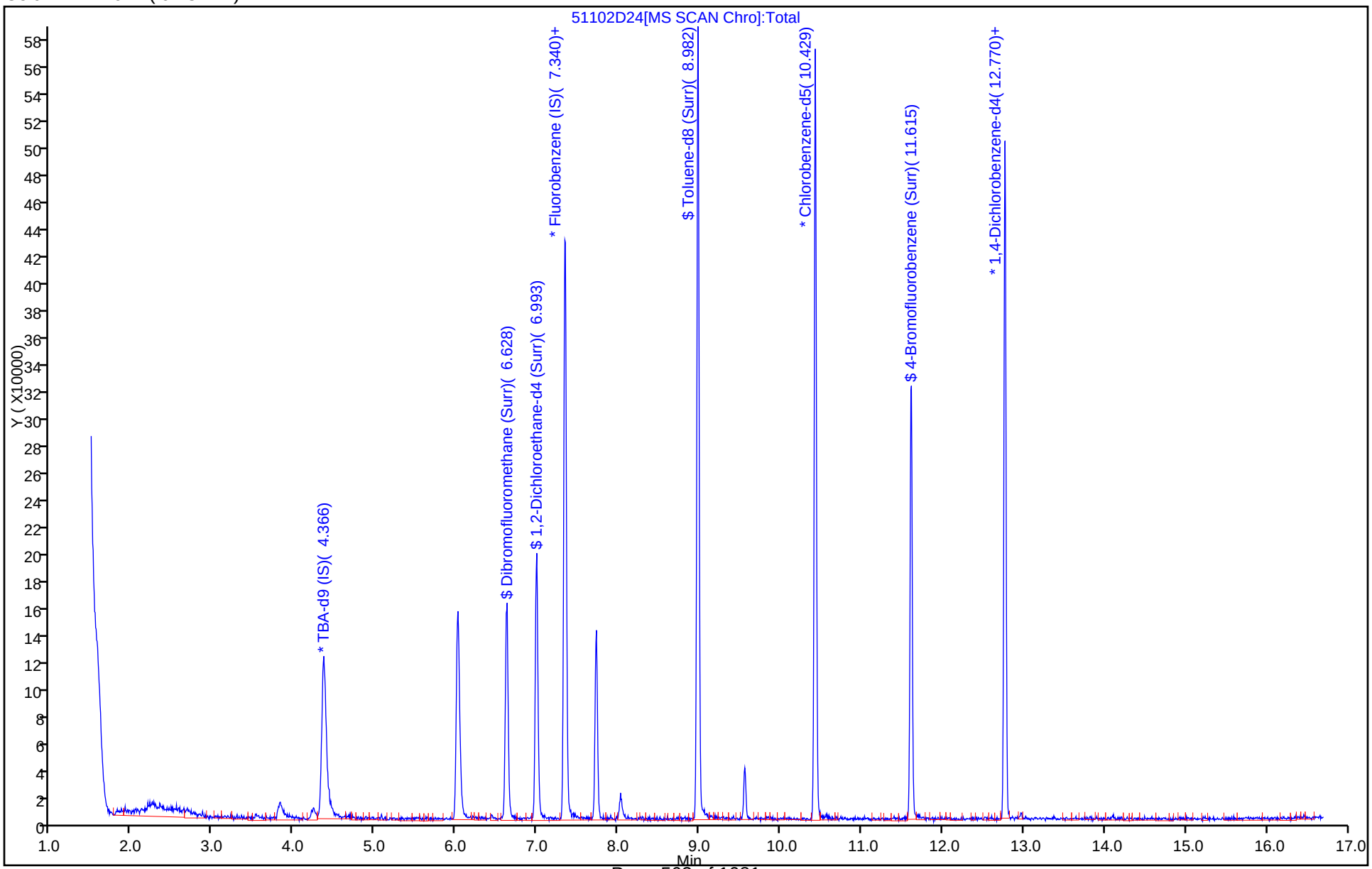
Report Date: 05-Nov-2017 20:11:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D24.D

Injection Date:	03-Nov-2017 08:47:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71829-B-18	Lab Sample ID:	180-71829-18	Worklist Smp#:	24
Client ID:	HD-MW-16S-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	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\20171102-19153.b\51102D24.D
Lims ID: 180-71829-B-18
Client ID: HD-MW-16S-0/1-0
Sample Type: Client
Inject. Date: 03-Nov-2017 08:47:30 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0019153-024
Misc. Info.: 180-71829-B-18
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Nov-2017 20:10:37 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

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

First Level Reviewer: bungardf Date: 05-Nov-2017 20:06:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	56.7	113.50
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	60.1	120.14
$ 7 Toluene-d8 (Surr)	50.0	44.8	89.53
$ 8 4-Bromofluorobenzene (Surr)	50.0	40.2	80.42

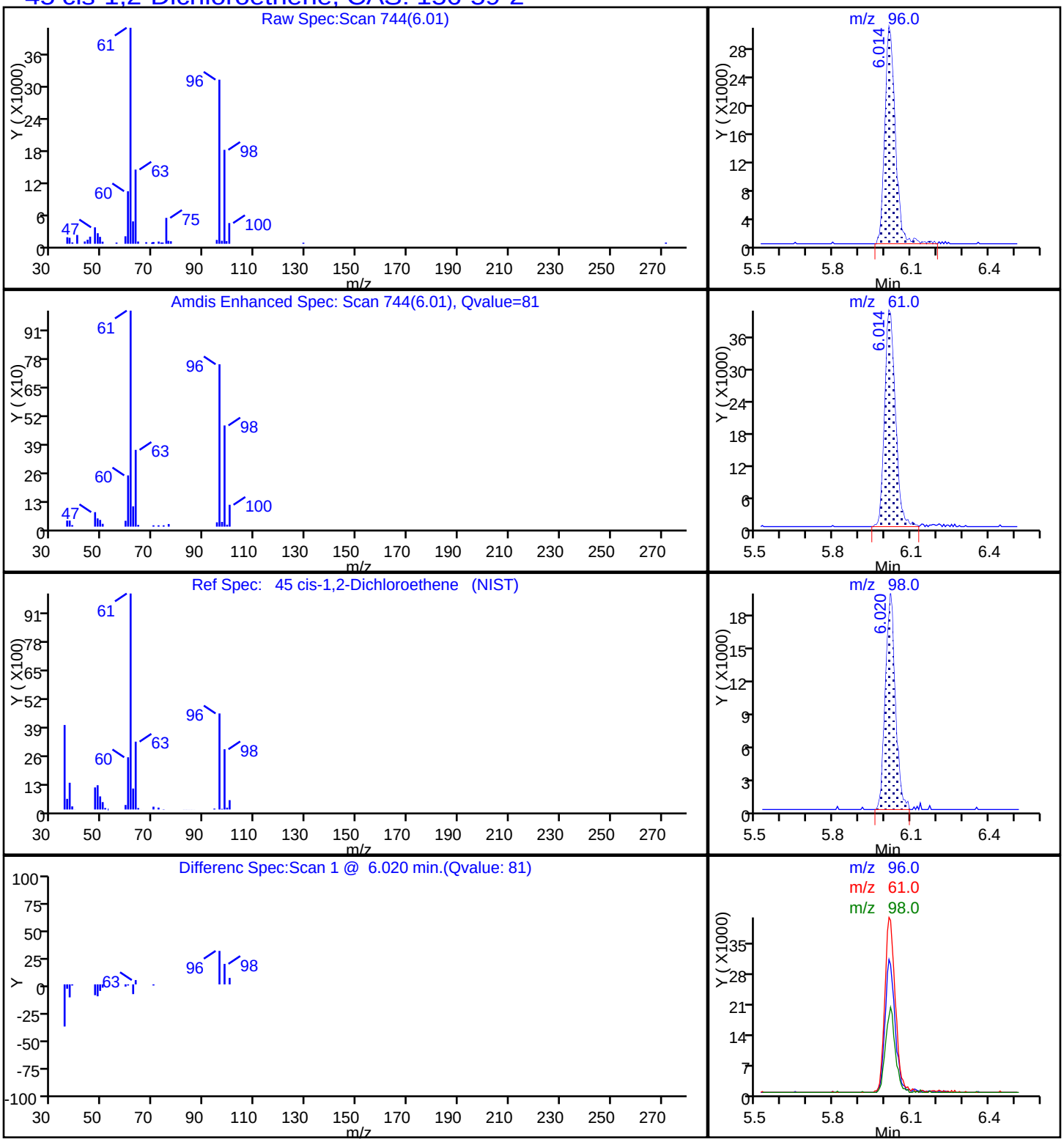
Report Date: 05-Nov-2017 20:11:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D24.D

Injection Date:	03-Nov-2017 08:47:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-B-18	Lab Sample ID:	180-71829-18		
Client ID:	HD-MW-16S-0/1-0				
Operator ID:	034635	ALS Bottle#:	24	Worklist Smp#:	24
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



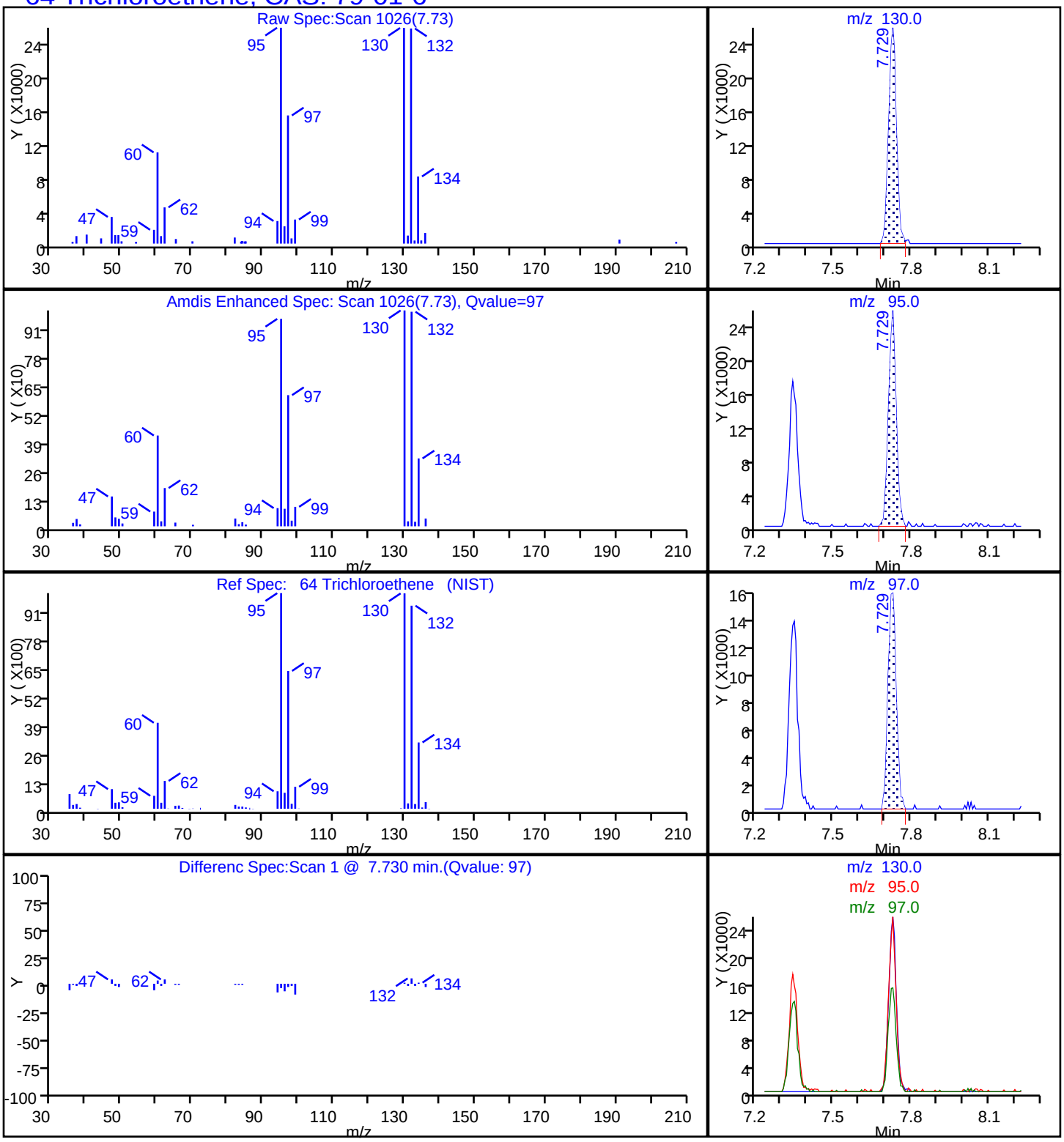
Report Date: 05-Nov-2017 20:11:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D24.D

Injection Date:	03-Nov-2017 08:47:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-B-18	Lab Sample ID:	180-71829-18		
Client ID:	HD-MW-16S-0/1-0				
Operator ID:	034635	ALS Bottle#:	24	Worklist Smp#:	24
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

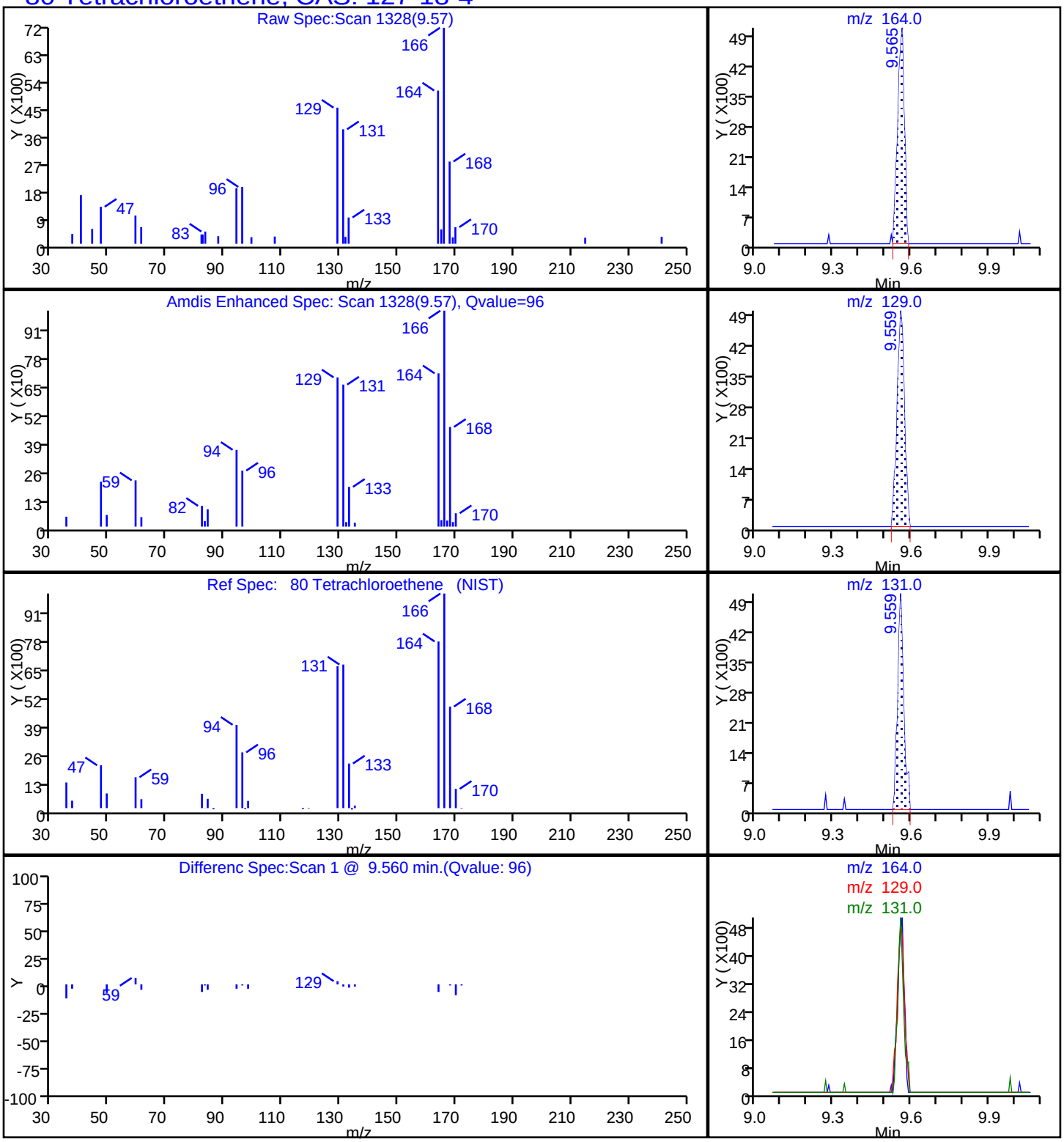


Report Date: 05-Nov-2017 20:11:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D24.D				
Injection Date:	03-Nov-2017 08:47:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-B-18	Lab Sample ID:	180-71829-18		
Client ID:	HD-MW-16S-0/1-0				
Operator ID:	034635	ALS Bottle#:	24	Worklist Smp#:	24
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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-12-0/1-0 | Lab Sample ID: 180-71829-19

Matrix: Water | Lab File ID: 51101D19.D

Analysis Method: 8260C | Date Collected: 10/25/2017 08:20

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 06:55

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.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	2.0	U ^c	2.0	1.8
75-01-4	Vinyl chloride	2.0	U	2.0	1.8
74-83-9	Bromomethane	2.0	U	2.0	1.8
75-00-3	Chloroethane	2.0	U	2.0	1.8
75-35-4	1,1-Dichloroethene	2.0	U	2.0	1.1
67-64-1	Acetone	10	U ^c	10	6.9
75-15-0	Carbon disulfide	2.0	U	2.0	1.8
75-09-2	Methylene Chloride	2.0	U	2.0	0.72
156-60-5	trans-1,2-Dichloroethene	2.0	U	2.0	1.3
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	1.2
75-34-3	1,1-Dichloroethane	2.0	U	2.0	1.3
156-59-2	cis-1,2-Dichloroethene	46		2.0	1.4
74-97-5	Bromochloromethane	2.0	U	2.0	1.3
78-93-3	2-Butanone (MEK)	10	U	10	5.2
67-66-3	Chloroform	2.0	U	2.0	1.2
71-55-6	1,1,1-Trichloroethane	2.0	U	2.0	1.2
56-23-5	Carbon tetrachloride	2.0	U	2.0	1.8
71-43-2	Benzene	2.0	U	2.0	1.2
107-06-2	1,2-Dichloroethane	2.0	U	2.0	1.1
79-01-6	Trichloroethene	61		2.0	1.4
78-87-5	1,2-Dichloropropane	2.0	U	2.0	1.3
75-27-4	Bromodichloromethane	2.0	U	2.0	1.3
10061-01-5	cis-1,3-Dichloropropene	2.0	U	2.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	6.2
108-88-3	Toluene	2.0	U	2.0	0.91
10061-02-6	trans-1,3-Dichloropropene	2.0	U	2.0	1.2
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	0.91
127-18-4	Tetrachloroethene	2.7		2.0	0.93
591-78-6	2-Hexanone	10	U	10	6.6
124-48-1	Dibromochloromethane	2.0	U	2.0	1.7
106-93-4	1,2-Dibromoethane (EDB)	2.0	U	2.0	1.0
108-90-7	Chlorobenzene	2.0	U	2.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	1.1
100-41-4	Ethylbenzene	2.0	U	2.0	1.0
1330-20-7	Xylenes, Total	4.0	U	4.0	1.8
100-42-5	Styrene	2.0	U	2.0	0.94

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-12-0/1-0 | Lab Sample ID: 180-71829-19

Matrix: Water | Lab File ID: 51101D19.D

Analysis Method: 8260C | Date Collected: 10/25/2017 08:20

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 06:55

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.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	2.0	U	2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U	2.0	1.2
107-13-1	Acrylonitrile	40	U	40	16
123-91-1	1,4-Dioxane	400	U	400	27

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		65-121
2037-26-5	Toluene-d8 (Surr)	95		73-120
460-00-4	4-Bromofluorobenzene (Surr)	87		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D19.D
Lims ID: 180-71829-A-19
Client ID: HD-MW-12-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 06:55:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0019138-019
Misc. Info.: 180-71829-A-19
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 20:28:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.370	4.394	-0.024	0	212070	1000.0	
* 2 Fluorobenzene (IS)	96	7.344	7.338	0.006	98	478657	50.0	
* 3 Chlorobenzene-d5	119	10.433	10.427	0.006	86	112663	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.768	0.000	97	156401	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.626	6.614	0.012	93	121441	52.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.985	0.006	0	165166	58.8	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	95	426621	47.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.613	0.000	85	140417	43.4	
12 Chloromethane	50		1.907				ND	
13 Vinyl chloride	62		2.023				ND	
15 Bromomethane	94		2.339				ND	
16 Chloroethane	64		2.430				ND	
22 1,1-Dichloroethene	96		3.415				ND	
24 Acetone	43		3.543				ND	
26 Carbon disulfide	76		3.701				ND	
31 Methylene Chloride	84		4.230				ND	
33 Acrylonitrile	53		4.613				ND	
34 trans-1,2-Dichloroethene	96		4.644				ND	
35 Methyl tert-butyl ether	73		4.662				ND	
37 1,1-Dichloroethane	63		5.270				ND	
45 cis-1,2-Dichloroethene	96	6.018	6.012	0.006	81	349408	114.4	
46 2-Butanone (MEK)	43		6.030				ND	
49 Chlorobromomethane	128		6.292				ND	
52 Chloroform	83		6.438				ND	
53 1,1,1-Trichloroethane	97		6.596				ND	
56 Carbon tetrachloride	117		6.766				ND	
58 Benzene	78		6.997				ND	
59 1,2-Dichloroethane	62		7.070				ND	
64 Trichloroethene	130	7.727	7.727	0.000	97	445848	152.2	
67 1,2-Dichloropropane	63		7.995				ND	
70 1,4-Dioxane	88		8.086				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.274				ND	
74 cis-1,3-Dichloropropene	75		8.718				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.876				ND	
76 Toluene	91		9.047				ND	
77 trans-1,3-Dichloropropene	75		9.296				ND	
79 1,1,2-Trichloroethane	97		9.491				ND	
80 Tetrachloroethene	164	9.563	9.558	0.005	93	14357	6.70	
82 2-Hexanone	43		9.710				ND	
84 Chlorodibromomethane	129		9.862				ND	
85 Ethylene Dibromide	107		9.971				ND	
87 Chlorobenzene	112		10.458				ND	
89 1,1,1,2-Tetrachloroethane	131		10.555				ND	
90 Ethylbenzene	106		10.561				ND	
91 m-Xylene & p-Xylene	106		10.689				ND	
92 o-Xylene	106		11.072				ND	
93 Styrene	104		11.090				ND	
94 Bromoform	173		11.279				ND	
99 1,1,2,2-Tetrachloroethane	83		11.747				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

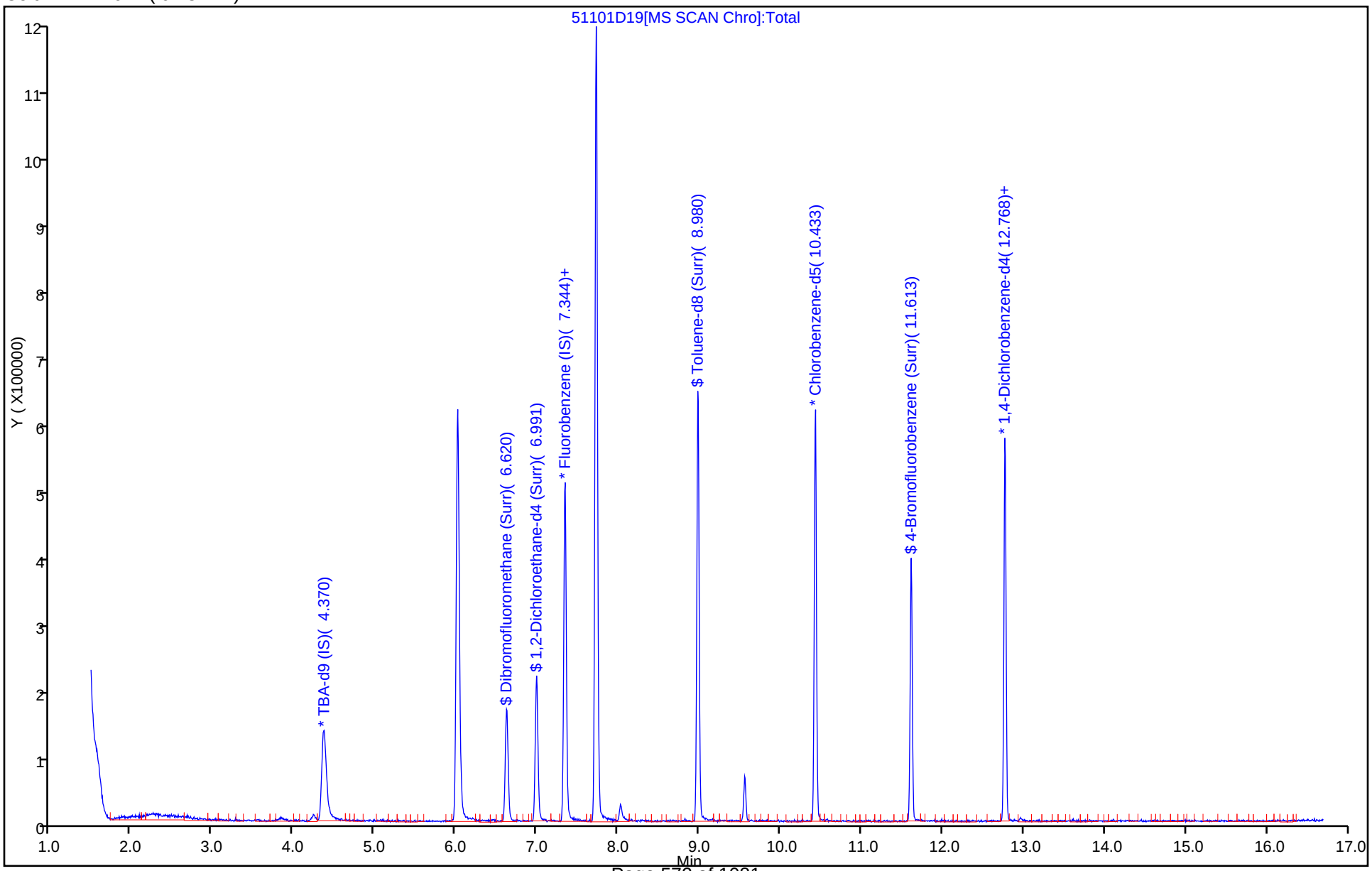
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 02-Nov-2017 20:42:36 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D19.D				
Injection Date:	02-Nov-2017 06:55:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71829-A-19	Lab Sample ID:	180-71829-19	Worklist Smp#:	19
Client ID:	HD-MW-12-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	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\20171101-19138.b\51101D19.D
Lims ID: 180-71829-A-19
Client ID: HD-MW-12-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 06:55:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 180-0019138-019
Misc. Info.: 180-71829-A-19
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 20:28:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	52.7	105.46
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	58.8	117.60
$ 7 Toluene-d8 (Surr)	50.0	47.6	95.16
$ 8 4-Bromofluorobenzene (Surr)	50.0	43.4	86.72

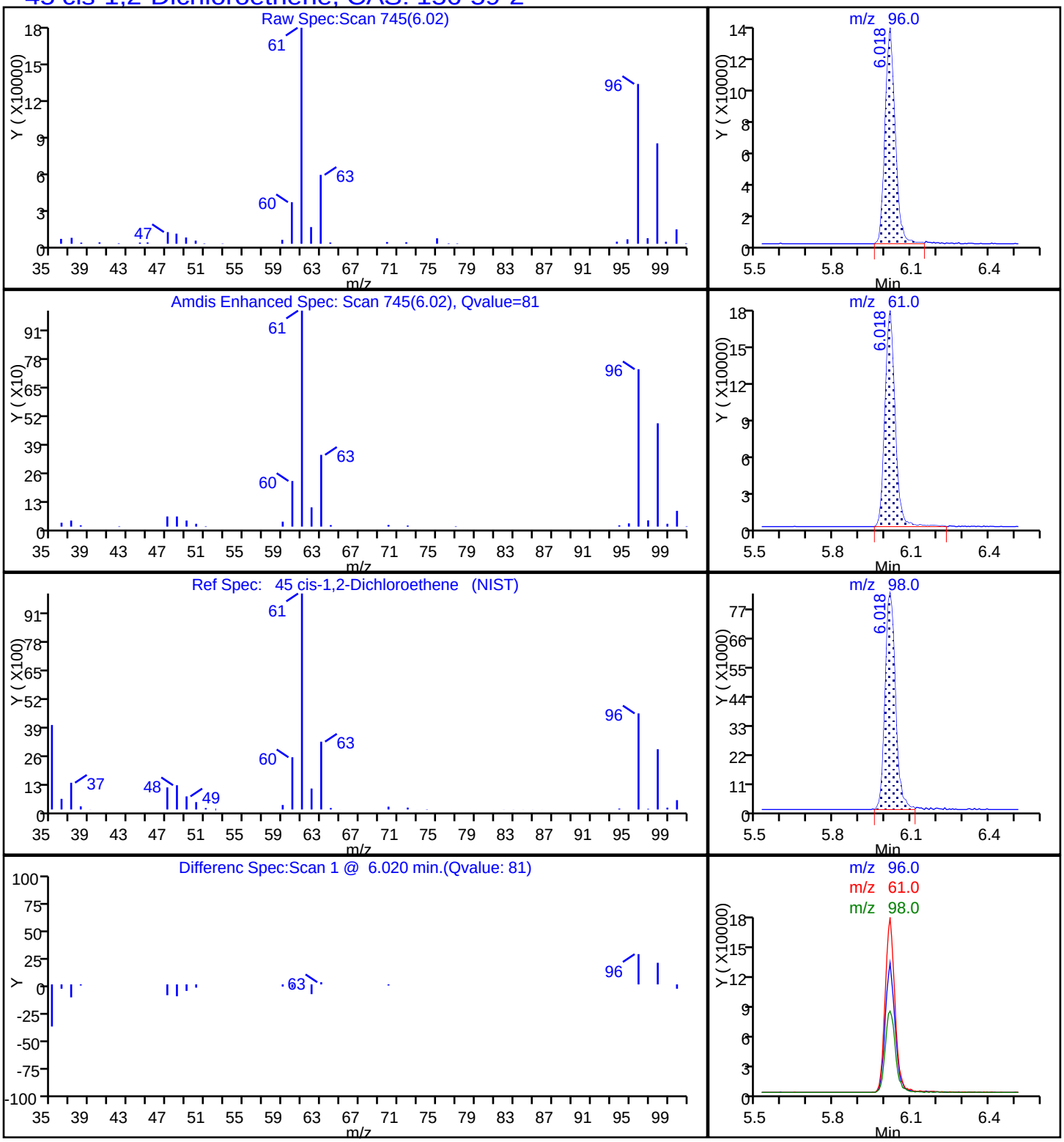
Report Date: 02-Nov-2017 20:42:36 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D19.D

Injection Date:	02-Nov-2017 06:55:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-A-19	Lab Sample ID:	180-71829-19		
Client ID:	HD-MW-12-0/1-0				
Operator ID:	034635	ALS Bottle#:	19	Worklist Smp#:	19
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



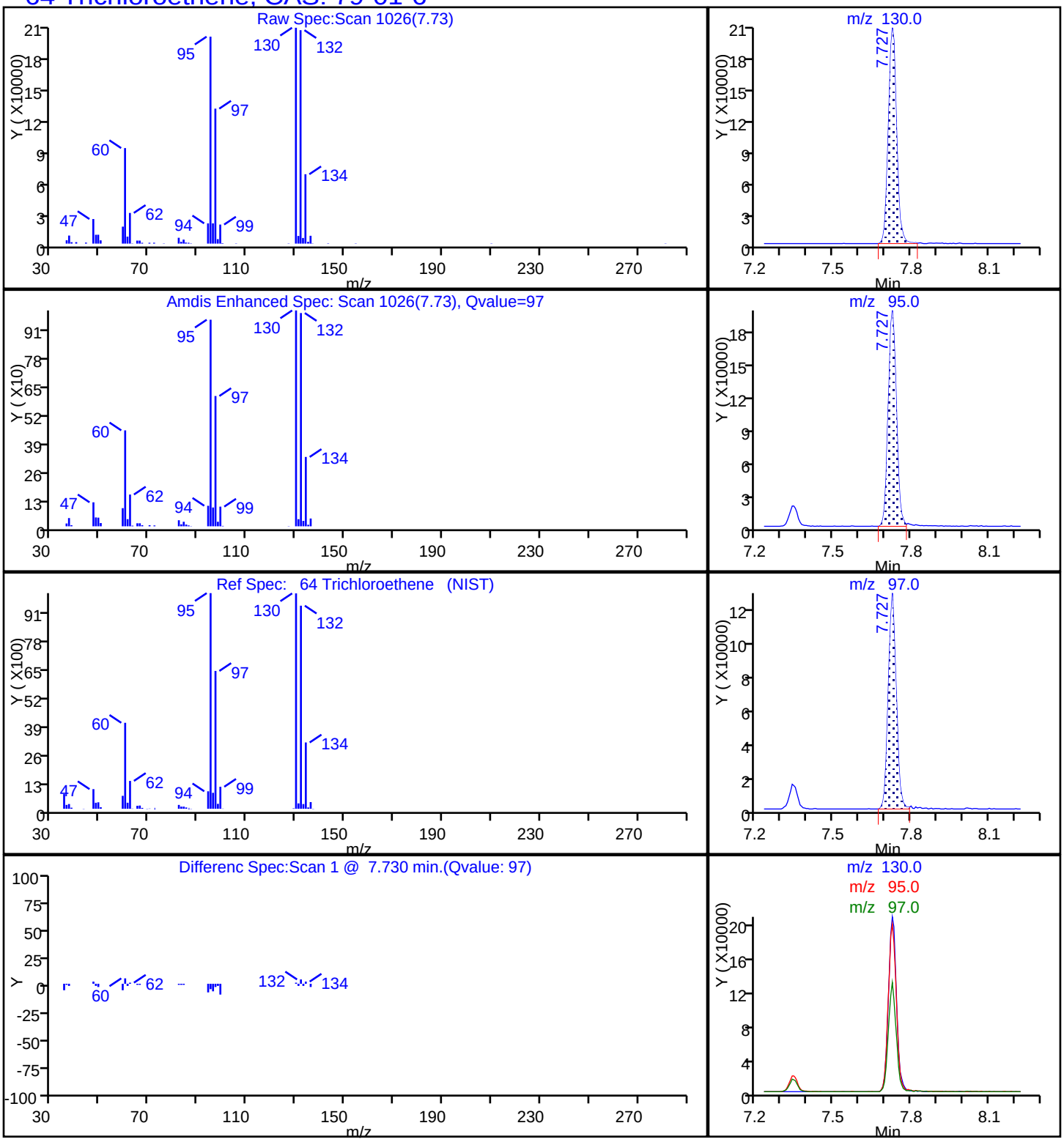
Report Date: 02-Nov-2017 20:42:36 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D19.D

Injection Date:	02-Nov-2017 06:55:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-A-19	Lab Sample ID:	180-71829-19		
Client ID:	HD-MW-12-0/1-0				
Operator ID:	034635	ALS Bottle#:	19	Worklist Smp#:	19
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



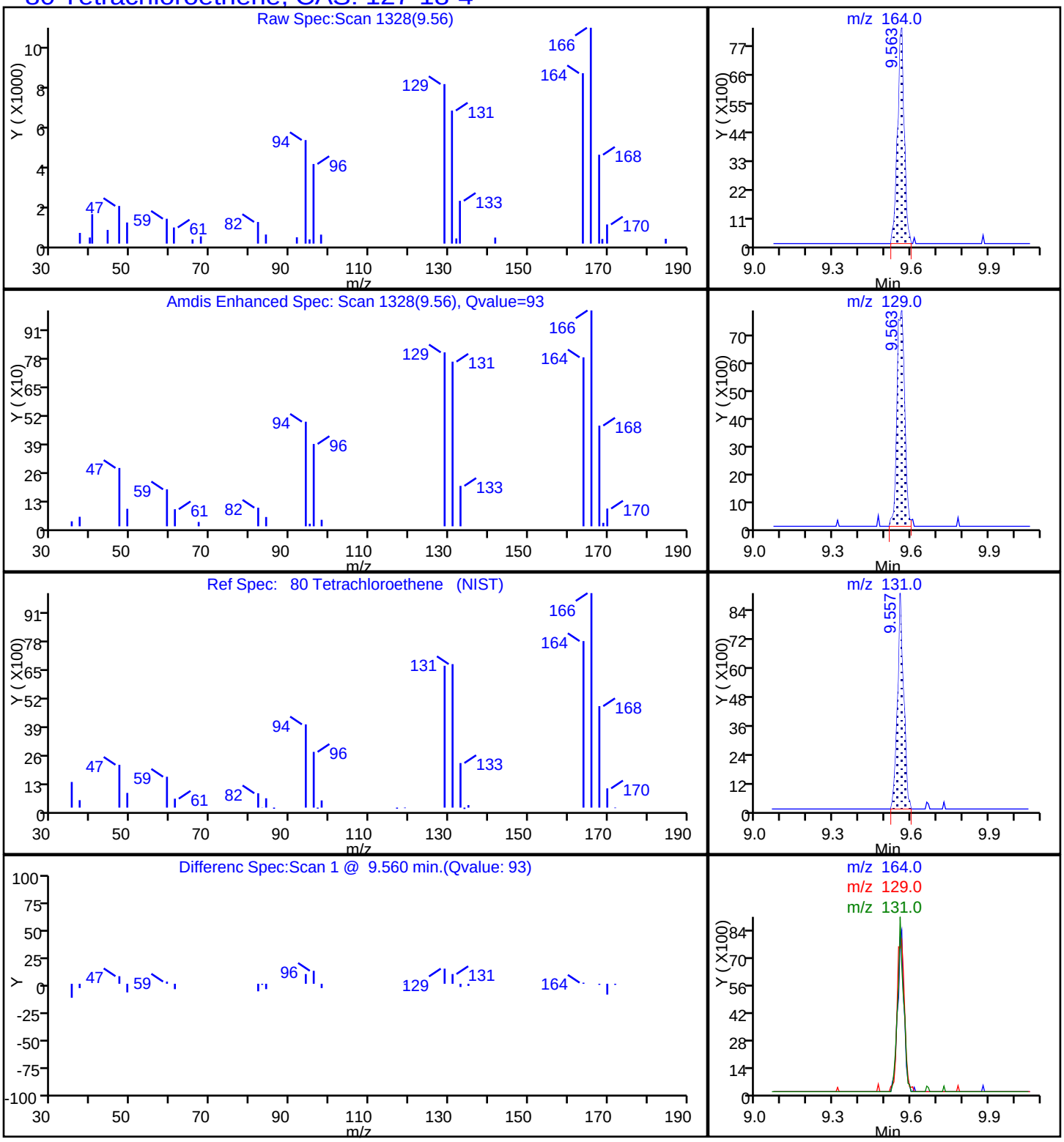
Report Date: 02-Nov-2017 20:42:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D19.D

Injection Date:	02-Nov-2017 06:55:30	Instrument ID:	CHHP5		
Lims ID:	180-71829-A-19	Lab Sample ID:	180-71829-19		
Client ID:	HD-MW-12-0/1-0				
Operator ID:	034635	ALS Bottle#:	19	Worklist Smp#:	19
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.: 180-71829-1

SDG No.:

Client Sample ID: HD-TATE (S-6)-0/1-0 | Lab Sample ID: 180-71829-20

Matrix: Water | Lab File ID: 51101D16.D

Analysis Method: 8260C | Date Collected: 10/26/2017 09:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 05:44

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.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U ^c	1.0	0.90
75-01-4	Vinyl chloride	1.0	U	1.0	0.88
74-83-9	Bromomethane	1.0	U	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U ^c	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.57
79-01-6	Trichloroethene	1.0	U	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1
108-88-3	Toluene	1.0	U	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-TATE (S-6)-0/1-0 | Lab Sample ID: 180-71829-20

Matrix: Water | Lab File ID: 51101D16.D

Analysis Method: 8260C | Date Collected: 10/26/2017 09:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 05:44

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.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		65-121
2037-26-5	Toluene-d8 (Surr)	90		73-120
460-00-4	4-Bromofluorobenzene (Surr)	85		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D16.D
Lims ID: 180-71829-C-20
Client ID: HD-TATE (S-6)-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 05:44:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019138-016
Misc. Info.: 180-71829-C-20
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 20:25:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.364	4.394	-0.030	0	206397	1000.0	
* 2 Fluorobenzene (IS)	96	7.343	7.338	0.005	98	463373	50.0	
* 3 Chlorobenzene-d5	119	10.433	10.427	0.006	87	117986	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.768	0.000	97	154378	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.620	6.614	0.006	92	118188	53.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.985	0.006	0	160139	58.9	
$ 7 Toluene-d8 (Surr)	98	8.979	8.980	-0.001	94	422641	45.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.613	-0.001	84	144079	42.5	
12 Chloromethane	50		1.907				ND	
13 Vinyl chloride	62		2.023				ND	
15 Bromomethane	94		2.339				ND	
16 Chloroethane	64		2.430				ND	
22 1,1-Dichloroethene	96		3.415				ND	
24 Acetone	43		3.543				ND	
26 Carbon disulfide	76		3.701				ND	
31 Methylene Chloride	84		4.230				ND	
33 Acrylonitrile	53		4.613				ND	
34 trans-1,2-Dichloroethene	96		4.644				ND	
35 Methyl tert-butyl ether	73		4.662				ND	
37 1,1-Dichloroethane	63		5.270				ND	
45 cis-1,2-Dichloroethene	96		6.012				ND	
46 2-Butanone (MEK)	43		6.030				ND	
49 Chlorobromomethane	128		6.292				ND	
52 Chloroform	83	6.437	6.438	-0.001	1	871	0.1941	
53 1,1,1-Trichloroethane	97		6.596				ND	
56 Carbon tetrachloride	117		6.766				ND	
58 Benzene	78		6.997				ND	
59 1,2-Dichloroethane	62		7.070				ND	
64 Trichloroethene	130		7.727				ND	
67 1,2-Dichloropropane	63		7.995				ND	
70 1,4-Dioxane	88		8.086				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.274				ND	
74 cis-1,3-Dichloropropene	75		8.718				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.876				ND	
76 Toluene	91		9.047				ND	
77 trans-1,3-Dichloropropene	75		9.296				ND	
79 1,1,2-Trichloroethane	97		9.491				ND	
80 Tetrachloroethene	164		9.558				ND	
82 2-Hexanone	43		9.710				ND	
84 Chlorodibromomethane	129		9.862				ND	
85 Ethylene Dibromide	107		9.971				ND	
87 Chlorobenzene	112		10.458				ND	
89 1,1,1,2-Tetrachloroethane	131		10.555				ND	
90 Ethylbenzene	106		10.561				ND	
91 m-Xylene & p-Xylene	106		10.689				ND	
92 o-Xylene	106		11.072				ND	
93 Styrene	104		11.090				ND	
94 Bromoform	173		11.279				ND	
99 1,1,2,2-Tetrachloroethane	83		11.747				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

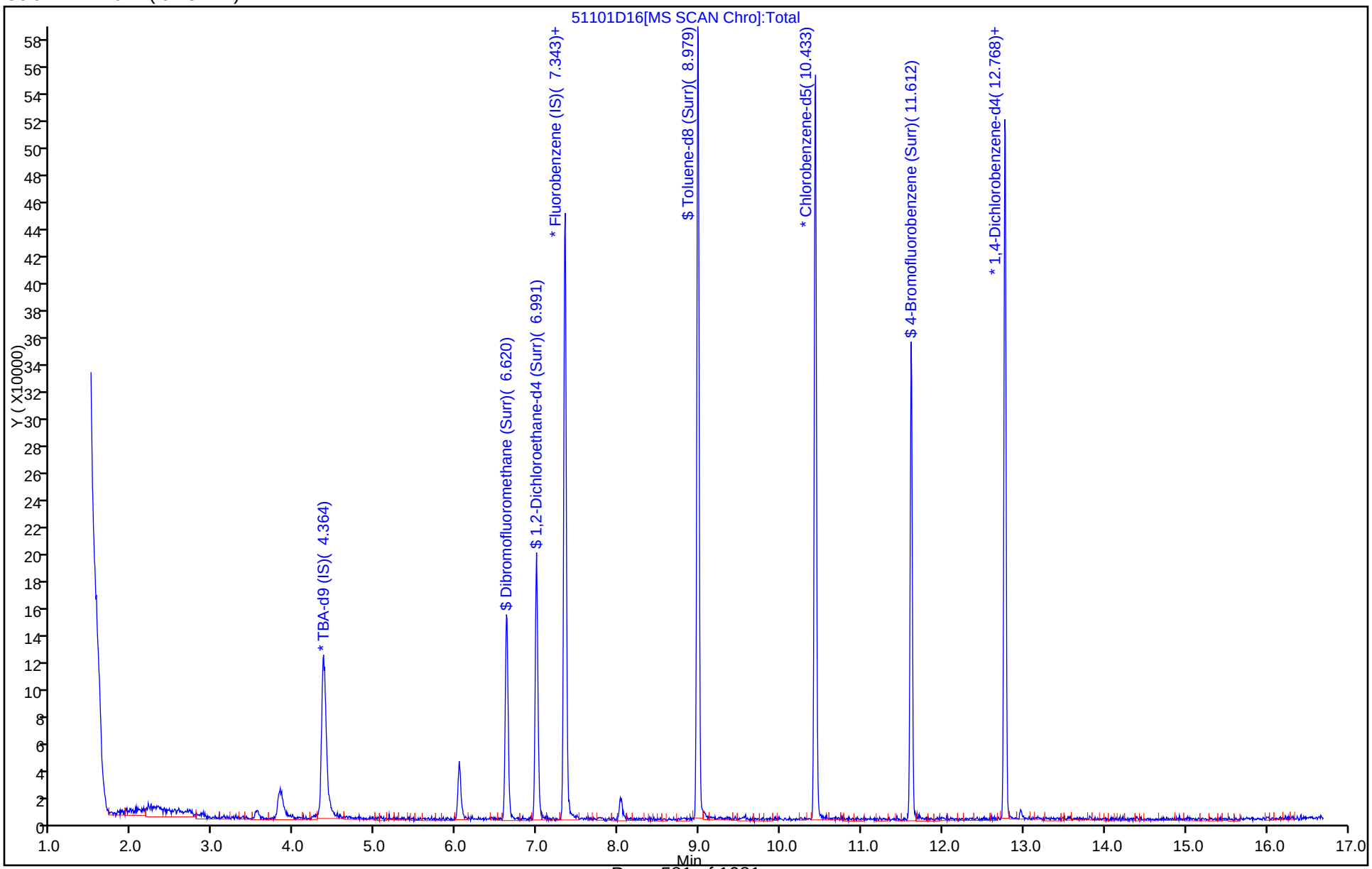
Report Date: 02-Nov-2017 20:42:34 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D16.D

Injection Date:	02-Nov-2017 05:44:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71829-C-20	Lab Sample ID:	180-71829-20	Worklist Smp#:	16
Client ID:	HD-TATE (S-6)-0/1-0				
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\20171101-19138.b\51101D16.D
Lims ID: 180-71829-C-20
Client ID: HD-TATE (S-6)-0/1-0
Sample Type: Client
Inject. Date: 02-Nov-2017 05:44:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019138-016
Misc. Info.: 180-71829-C-20
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 20:25:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	53.0	106.02
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	58.9	117.78
$ 7 Toluene-d8 (Surr)	50.0	45.0	90.02
$ 8 4-Bromofluorobenzene (Surr)	50.0	42.5	84.97

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-218218/2	50727D02.D
Level 2	IC 180-218218/3	50727D03.D
Level 3	ICIS 180-218218/4	50727D04.D
Level 4	IC 180-218218/5	50727D05.D
Level 5	IC 180-218218/6	50727D06.D
Level 6	IC 180-218218/10	50727D10.D
Level 7	IC 180-218218/8	50727D08.D
Level 8	IC 180-218218/11	50727D11.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	0.3099 0.3034	0.3143 0.2538	0.2964 0.2820	0.2910	0.2753	Ave		0.2907			0.1000	6.9		20.0			
Chloromethane	0.3638 0.2790	0.2935 0.2586	0.2871 0.2672	0.2979	0.2905	Ave		0.2922			0.1000	10.9		20.0			
Vinyl chloride	0.3612 0.2960	0.3073 0.2570	0.3014 0.2855	0.2838	0.2802	Ave		0.2965			0.1000	10.2		20.0			
1,3-Butadiene	0.3317 0.2714	0.2771 0.2281	0.2660 0.2684	0.2619	0.2505	Ave		0.2694			0.0100	10.9		20.0			
Bromomethane	0.1274 0.1338	0.1569 0.1290	0.1507 0.1244	0.1438	0.1556	Ave		0.1402			0.0500	9.4		20.0			
Chloroethane	0.1972 0.1593	0.1757 0.1437	0.1605 0.1363	0.1653	0.1659	Ave		0.1630			0.0500	11.5		20.0			
Trichlorofluoromethane	0.4130 0.3605	0.3896 0.3164	0.3801 0.3348	0.3631	0.3573	Ave		0.3643			0.1000	8.4		20.0			
Ethyl ether	0.2690 0.2226	0.2473 0.2272	0.2344 0.2016	0.2419	0.2520	Ave		0.2370			0.0100	8.6		20.0			
Acrolein	0.0588 0.0564	0.0546 0.0639	0.0629 0.0550	0.0633	0.0629	Ave		0.0597			0.0100	6.7		20.0			
1,1-Dichloroethene	0.2633 0.2529	0.2525 0.2180	0.2438 0.2452	0.2449	0.2377	Ave		0.2448			0.1000	5.4		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3346 0.2678	0.2745 0.2382	0.2615 0.2547	0.2644	0.2534	Ave		0.2686			0.1000	10.7		20.0			
Acetone	0.1396 0.1048	0.1447 0.1163	0.1388 0.1038	0.1460	0.1519	Ave		0.1308			0.0500	14.8		20.0			
Iodomethane	0.4213 0.3803	0.3860 0.3716	0.3712 0.3619	0.3906	0.3928	Ave		0.3845			0.0100	4.8		20.0			
Carbon disulfide	0.5698 +++++	0.4896 0.5397	0.4946 0.6108	0.5168	0.5392	Ave		0.5372			0.1000	8.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

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								
Allyl chloride	0.1501 0.1710	0.1485 0.1632	0.1541 0.1645	0.1561	0.1579	Ave		0.1582			0.0100	4.8		20.0			
Methyl acetate	0.2888 0.2364	0.2463 0.2614	0.2631 0.2382	0.2688	0.2686	Ave		0.2589			0.1000	6.8		20.0			
Methylene Chloride	0.4748 0.2821	0.3152 0.2910	0.3044 0.2676	0.3112	0.3108	Lin2	0.9532	0.2841			0.1000				0.9980		0.9900
tert-Butyl alcohol	1.3346 1.2872	1.1570 1.0277	1.1638 1.2343	1.1314	1.1253	Ave		1.1826			0.0100	8.3		20.0			
Acrylonitrile	0.1353 0.1106	0.1251 0.1245	0.1313 0.1150	0.1320	0.1333	Ave		0.1259			0.0100	7.1		20.0			
trans-1,2-Dichloroethene	0.3167 0.2789	0.2730 0.2547	0.2727 0.2653	0.2850	0.2851	Ave		0.2789			0.1000	6.6		20.0			
Methyl tert-butyl ether	0.7081 0.7482	0.7314 0.7800	0.7230 0.7142	0.7872	0.7909	Ave		0.7479			0.1000	4.5		20.0			
Hexane	0.4597 0.3561	0.3588 0.3156	0.3449 0.3625	0.3424	0.3242	Ave		0.3580			0.0100	12.4		20.0			
1,1-Dichloroethane	0.5228 0.4797	0.4979 0.4638	0.4852 0.4528	0.4864	0.4910	Ave		0.4850			0.2000	4.4		20.0			
Vinyl acetate	0.5018 0.5003	0.4274 0.5345	0.4556 0.5012	0.5130	0.5116	Ave		0.4932			0.0100	7.0		20.0			
2,2-Dichloropropane	0.0696 0.0640	0.0591 0.0559	0.0577 0.0619	0.0627	0.0632	Ave		0.0617			0.0100	6.9		20.0			
cis-1,2-Dichloroethene	0.3297 0.3143	0.3194 0.3060	0.3200 0.2963	0.3326	0.3338	Ave		0.3190			0.1000	4.1		20.0			
2-Butanone (MEK)	0.1854 0.1607	0.1969 0.1772	0.1989 0.1584	0.2064	0.2051	Ave		0.1861			0.0500	10.2		20.0			
Bromochloromethane	0.1517 0.1366	0.1414 0.1398	0.1402 0.1299	0.1453	0.1494	Ave		0.1418			0.0100	4.9		20.0			
Tetrahydrofuran	0.1371 0.0928	0.0982 0.1088	0.1088 0.1003	0.1130	0.1079	Ave		0.1084			0.0100	12.4		20.0			
Chloroform	0.5466 0.4636	0.4996 0.4621	0.4713 0.4342	0.4992	0.4977	Ave		0.4843			0.2000	7.0		20.0			
1,1,1-Trichloroethane	0.3786 0.3800	0.3677 0.3465	0.3637 0.3610	0.3661	0.3690	Ave		0.3666			0.1000	2.9		20.0			
Cyclohexane	0.4979 0.4744	0.4616 0.4108	0.4435 0.4590	0.4424	0.4292	Ave		0.4524			0.1000	6.0		20.0			
Carbon tetrachloride	0.3181 0.3198	0.2990 0.2880	0.3018 0.3038	0.3054	0.3047	Ave		0.3051			0.1000	3.3		20.0			
1,1-Dichloropropene	0.4064 0.4059	0.4083 0.3679	0.3990 0.3876	0.4006	0.3928	Ave		0.3961			0.0100	3.4		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.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

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								
Isobutyl alcohol	0.0097 0.0085	0.0091 0.0105	0.0102 0.0094	0.0111	0.0112	Ave		0.0099		*	0.0100	9.6		20.0			
Benzene	1.3787 1.1520	1.2628 1.1081	1.2398 1.0692	1.2590	1.2563	Ave		1.2157			0.5000	8.2		20.0			
1,2-Dichloroethane	0.3884 0.3320	0.3554 0.3421	0.3528 0.3189	0.3753	0.3703	Ave		0.3544			0.1000	6.5		20.0			
n-Heptane	0.3037 0.2967	0.3011 0.2552	0.2860 0.3036	0.2755	0.2684	Ave		0.2863			0.0100	6.4		20.0			
Trichloroethene	0.3229 0.3036	0.3087 0.2884	0.3052 0.2920	0.3101	0.3167	Ave		0.3059			0.2000	3.8		20.0			
Methylcyclohexane	0.4727 0.4875	0.4672 0.4232	0.4697 0.4715	0.4601	0.4491	Ave		0.4626			0.1000	4.2		20.0			
1,2-Dichloropropane	0.3012 0.2794	0.2779 0.2782	0.2782 0.2612	0.2913	0.2975	Ave		0.2831			0.1000	4.6		20.0			
1,4-Dioxane	0.0022 0.0027	0.0028 0.0030	0.0031 0.0031	0.0030	0.0032	Ave		0.0029		*	0.0100	11.4		20.0			
Dibromomethane	0.1595 0.1606	0.1708 0.1667	0.1638 0.1549	0.1734	0.1774	Ave		0.1659			0.0100	4.6		20.0			
Bromodichloromethane	0.3001 0.3336	0.3125 0.3351	0.3169 0.3110	0.3438	0.3519	Ave		0.3256			0.2000	5.6		20.0			
2-Chloroethyl vinyl ether	0.1669 0.2025	0.1917 0.2176	0.2032 0.2031	0.2200	0.2248	Ave		0.2037			0.0100	9.1		20.0			
cis-1,3-Dichloropropene	0.3596 0.4128	0.3596 0.4158	0.3786 0.3959	0.4116	0.4298	Ave		0.3955			0.2000	6.8		20.0			
4-Methyl-2-pentanone (MIBK)	1.3560 1.1652	1.2491 1.2232	1.3592 1.1532	1.3610	1.3926	Ave		1.2824			0.1000	7.5		20.0			
Toluene	6.1005 4.5990	5.6903 4.2081	5.2159 4.0277	5.0185	5.0243	Ave		4.9855			0.4000	14.1		20.0			
trans-1,3-Dichloropropene	1.2257 1.4397	1.2796 1.4086	1.2851 1.3247	1.3956	1.4937	Ave		1.3566			0.1000	6.8		20.0			
Ethyl methacrylate	1.3604 1.6673	1.5623 1.6591	1.6724 1.5738	1.7698	1.8222	Ave		1.6359			0.0100	8.7		20.0			
1,1,2-Trichloroethane	1.2522 0.9633	1.0992 0.9427	1.0403 0.8887	1.0530	1.0694	Ave		1.0386			0.1000	10.8		20.0			
Tetrachloroethene	1.1481 0.9182	1.0929 0.8058	0.9505 0.8459	0.9238	0.9211	Ave		0.9508			0.2000	12.2		20.0			
1,3-Dichloropropane	2.2370 1.7852	2.0694 1.7532	1.9307 1.6348	1.9958	1.9532	Ave		1.9199			0.0100	10.0		20.0			
2-Hexanone	0.9818 0.8998	0.9941 0.9190	1.0485 0.8780	1.0518	1.0958	Ave		0.9836			0.1000	8.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibromochloromethane	0.7989 0.9016	0.8620 0.8947	0.8650 0.8322	0.9093	0.9598	Ave		0.8779			0.1000	5.7		20.0			
1,2-Dibromoethane (EDB)	1.1425 1.0146	1.0956 1.0059	1.0726 0.9575	1.1227	1.1100	Ave		1.0652			0.1000	6.1		20.0			
3-Chlorobenzotrifluoride	2.1508 1.6103	1.7646 1.4397	1.6777 1.5967	1.7670	1.7382	Ave		1.7181			0.0100	12.0		20.0			
Chlorobenzene	4.0368 3.0317	3.5186 2.8231	3.2468 2.6869	3.3119	3.3091	Ave		3.2456			0.5000	13.0		20.0			
4-Chlorobenzotrifluoride	1.8614 1.5230	1.6468 1.3432	1.5641 1.5178	1.6419	1.5859	Ave		1.5855			0.0100	9.3		20.0			
1,1,1,2-Tetrachloroethane	1.0682 1.0211	1.0658 0.9781	1.0366 0.9303	1.0666	1.0896	Ave		1.0321			0.0100	5.2		20.0			
Ethylbenzene	1.9199 1.7723	1.9530 1.6113	1.8804 1.6150	1.8616	1.8815	Ave		1.8119			0.1000	7.3		20.0			
m-Xylene & p-Xylene	2.1686 2.2054	2.4439 2.0173	2.3106 1.9980	2.2675	2.3006	Ave		2.2140			0.1000	6.8		20.0			
o-Xylene	2.1421 2.0826	2.2379 1.9206	2.1746 1.8793	2.2085	2.2321	Ave		2.1097			0.3000	6.6		20.0			
Styrene	3.6332 3.4371	3.9143 3.2595	3.7554 3.0478	3.7413	3.7778	Ave		3.5708			0.3000	8.3		20.0			
Bromoform	0.5105 0.5727	0.4852 0.5813	0.5106 0.5484	0.5622	0.5938	Ave		0.5456			0.1000	7.2		20.0			
2-Chlorobenzotrifluoride	1.7885 1.5489	1.7322 1.4506	1.6281 1.5406	1.7502	1.7146	Ave		1.6442			0.0100	7.4		20.0			
Isopropylbenzene	5.5110 4.9386	5.7732 4.4163	5.4683 4.3345	5.4199	5.3367	Ave		5.1498			0.1000	10.3		20.0			
Bromobenzene	0.9987 0.9743	0.9872 0.9390	0.9377 0.9146	0.9980	1.0140	Ave		0.9704			0.0100	3.7		20.0			
1,1,2,2-Tetrachloroethane	1.7609 1.4046	1.6228 1.4415	1.5952 1.3351	1.5862	1.5551	Ave		1.5377			0.3000	8.9		20.0			
trans-1,4-Dichloro-2-butene	0.2598 0.2949	0.2743 0.2979	0.2825 0.3083	0.3195	0.3037	Ave		0.2926			0.0100	6.6		20.0			
1,2,3-Trichloropropane	0.4104 0.3768	0.3859 0.3949	0.4160 0.3815	0.4181	0.4204	Ave		0.4005			0.0100	4.4		20.0			
N-Propylbenzene	1.0871 1.1604	1.1279 1.0214	1.1341 1.0987	1.1152	1.1268	Ave		1.1089			0.0100	3.8		20.0			
2-Chlorotoluene	0.9007 0.9835	0.9855 0.9238	0.9604 0.9321	0.9790	1.0033	Ave		0.9585			0.0100	3.7		20.0			
3-Chlorotoluene	1.0064 1.0049	1.0309 0.9798	1.0614 1.0388	1.1086	1.1105	Ave		1.0427			0.0100	4.6		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.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,3,5-Trimethylbenzene	3.0303 3.1789	3.4364 2.8871	3.3130 2.9071	3.3121	3.3198	Ave		3.1731			0.0100	6.6		20.0			
4-Chlorotoluene	1.0553 1.0614	1.0524 0.9741	1.0341 0.9970	1.0305	1.0761	Ave		1.0351			0.0100	3.3		20.0			
tert-Butylbenzene	2.5746 2.7227	2.8017 2.3880	2.7530 2.5138	2.7587	2.7116	Ave		2.6530			0.0100	5.5		20.0			
1,2,4-Trimethylbenzene	3.1254 3.2212	3.4166 2.9826	3.3711 2.9395	3.3815	3.3664	Ave		3.2255			0.0100	5.9		20.0			
3,4-Dichlorobenzotrifluoride	0.9400 0.7764	0.7679 0.7160	0.7941 0.8232	0.8410	0.8065	Ave		0.8081			0.0100	8.1		20.0			
sec-Butylbenzene	3.7533 3.7112	3.9865 3.2645	3.8932 3.4225	3.8001	3.7790	Ave		3.7013			0.0100	6.5		20.0			
1,3-Dichlorobenzene	1.8909 1.6927	1.7949 1.6042	1.7488 1.5884	1.7678	1.7840	Ave		1.7340			0.6000	5.8		20.0			
4-Isopropyltoluene	2.9547 3.1220	3.2883 2.7812	3.2665 2.8873	3.2019	3.1605	Ave		3.0828			0.0100	6.0		20.0			
1,4-Dichlorobenzene	1.9782 1.7336	1.8319 1.6481	1.8074 1.6177	1.8136	1.8124	Ave		1.7804			0.5000	6.4		20.0			
2,4-Dichlorobenzotrifluoride	0.7762 0.7410	0.7684 0.6560	0.7174 0.7931	0.7890	0.7781	Ave		0.7524			0.0100	6.2		20.0			
2,5-Dichlorobenzotrifluoride	0.8709 0.7991	0.7991 0.7661	0.8033 0.8193	0.8304	0.8133	Ave		0.8127			0.0100	3.7		20.0			
n-Butylbenzene	2.4429 2.5807	2.6260 2.2815	2.6042 2.4382	2.5661	2.5760	Ave		2.5144			0.0100	4.7		20.0			
1,2-Dichlorobenzene	1.8724 1.5966	1.7261 1.5319	1.6636 1.4748	1.6744	1.6818	Ave		1.6527			0.4000	7.4		20.0			
1,2-Dibromo-3-Chloropropane	0.1676 0.1857	0.1676 0.2001	0.1774 0.1873	0.1829	0.1992	Ave		0.1835			0.0500	6.8		20.0			
2,4- & 2,5- & 2,6- Dichlorotoluene	0.9836 1.0182	1.0277 0.9802	1.0819 1.0447	1.1339	1.1166	Ave		1.0483			0.0100	5.5		20.0			
2,3- & 3,4- Dichlorotoluene	0.9469 1.0658	1.0253 1.0486	1.0886 1.1261	1.1868	1.1843	Ave		1.0841			0.0100	7.5		20.0			
1,2,4-Trichlorobenzene	0.7563 0.7556	0.7184 0.7286	0.7717 0.7766	0.7671	0.7765	Ave		0.7563			0.2000	2.9		20.0			
Hexachlorobutadiene	0.2941 0.2697	0.2848 0.2377	0.2809 0.2898	0.2829	0.2739	Ave		0.2767			0.0100	6.4		20.0			
Naphthalene	2.0979 2.6004	2.2731 2.6494	2.6660 2.6327	2.8062	2.8819	Ave		2.5759			0.0100	10.2		20.0			
1,2,3-Trichlorobenzene	0.7106 0.6701	0.6788 0.6564	0.6707 0.7130	0.7070	0.7206	Ave		0.6909			0.0100	3.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2,4,5-Trichlorotoluene	0.3224 0.3475	0.2818 0.3346	0.3064 +++++	0.3498	0.3564	Ave		0.3284			0.0100	8.2		20.0			
2,3,6-Trichlorotoluene	0.2545 0.3128	0.2731 0.3131	0.3085 +++++	0.3418	0.3347	Ave		0.3055			0.0100	10.3		20.0			
Dibromofluoromethane (Surr)	0.2565 0.2365	0.2433 0.2326	0.2366 0.2242	0.2475	0.2474	Ave		0.2406				4.2		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3401 0.2693	0.3050 0.2801	0.2948 0.2619	0.3004	0.2957	Ave		0.2934				8.3		20.0			
Toluene-d8 (Surr)	5.1161 3.6702	4.5030 3.3148	4.0781 3.3147	3.9154	3.9228	Ave		3.9794				15.2		20.0			
4-Bromofluorobenzene (Surr)	1.6317 1.3781	1.5302 1.3139	1.4390 1.2793	1.4518	1.4735	Ave		1.4372				8.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-218218/2	50727D02.D
Level 2	IC 180-218218/3	50727D03.D
Level 3	ICIS 180-218218/4	50727D04.D
Level 4	IC 180-218218/5	50727D05.D
Level 5	IC 180-218218/6	50727D06.D
Level 6	IC 180-218218/10	50727D10.D
Level 7	IC 180-218218/8	50727D08.D
Level 8	IC 180-218218/11	50727D11.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	16788 647803	84559 569791	159957 857078	226899	286388	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	19706 595751	78965 580608	154943 811941	232300	302276	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	19568 632153	82670 577090	162634 867536	221295	291558	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	17968 579584	74553 512032	143576 815610	204212	260580	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Ave	6901 285707	42224 289712	81346 377950	112119	161865	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	10685 340168	47273 322589	86601 414342	128899	172552	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Ave	22371 769762	104824 710415	205127 1017488	283194	371684	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	14571 475422	66542 510033	126496 612640	188662	262150	5.00 175	25.0 200	50.0 250	75.0	100
Acrolein	FB	Ave	63695 154738	73476 179414	101829 183852	115103	130923	100 225	125 250	150 275	175	200
1,1-Dichloroethene	FB	Ave	14263 540044	67928 489503	131576 745282	190985	247279	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	18126 571742	73846 534815	141127 774058	206212	263603	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	37823 447756	77890 522287	149782 630881	227784	316026	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	22822 811997	103869 834240	200342 1099819	304618	408622	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	30868 +++++	131730 1211678	266935 1856339	403056	561008	5.00 +++++	25.0 200	50.0 250	75.0	100
Allyl chloride	FB	Ave	8133 365237	39946 366340	83167 500032	121734	164305	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.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

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
Methyl acetate	FB	Ave	31286 1009713	132543 1173609	283974 1447736	419273	558912	10.0 350	50.0 400	100 500	150	200
Methylene Chloride	FB	Lin2	25720 602402	84822 653341	164284 813282	242665	323324	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBAd9	Ave	16447 524619	64738 519054	139891 568135	204334	283777	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	73302 2362587	336508 2794353	708552 3495451	1029651	1387354	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	17158 595572	73445 571864	147191 806194	222245	296608	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	38357 1597553	196780 1751345	390184 2170401	613933	822838	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	24902 760411	96542 708650	186124 1101558	266987	337300	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	28319 1024340	133976 1041269	261874 1376176	379320	510811	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	27185 1068205	115000 1200052	245879 1523056	400099	532250	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	3769 136605	15889 125406	31118 188250	48893	65750	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	17858 671208	85931 687049	172690 900432	259385	347303	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	50216 686266	105960 795793	214731 962704	321867	426755	25.0 350	50.0 400	100 500	150	200
Bromochloromethane	FB	Ave	8216 291754	38047 313977	75687 394763	113290	155416	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	14858 396477	52866 488432	117485 609910	176266	224432	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	29608 989929	134431 1037446	254354 1319564	389323	517765	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	20508 811476	98927 777880	196286 1097196	285488	383868	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	26974 1012965	124196 922281	239333 1394833	345041	446560	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	17231 682784	80446 646700	162849 923177	238173	317033	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	22014 866715	109851 825970	215336 1178056	312373	408627	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Ave	13122 452876	61305 587752	136973 715201	216532	290317	125 4375	625 5000	1250 6250	1875	2500
Benzene	FB	Ave	74686 2459963	339765 2487856	669098 3249284	981851	1307056	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.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

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-Dichloroethane	FB	Ave	21038 708898	95627 767974	190422 969148	292683	385206	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	16453 633483	81002 573064	154370 922592	214813	279216	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	17490 648262	83072 647404	164695 887332	241861	329499	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	25605 1041060	125697 950167	253511 1432791	358781	467268	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	16316 596512	74777 624637	150135 793667	227133	309491	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	2333 115916	15162 135844	33209 187034	46920	65688	100 3500	500 4000	1000 5000	1500	2000
Dibromomethane	FB	Ave	8641 342853	45949 374289	88395 470836	135198	184529	5.00 175	25.0 200	50.0 250	75.0	100
Bromodichloromethane	FB	Ave	16257 712434	84070 752352	171049 945026	268080	366097	5.00 175	25.0 200	50.0 250	75.0	100
2-Chloroethyl vinyl ether	FB	Ave	18086 864836	103158 977190	219328 1234429	343066	467677	10.0 350	50.0 400	100 500	150	200
cis-1,3-Dichloropropene	FB	Ave	19479 881560	96744 933591	204344 1203144	320956	447138	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	79892 1265241	154465 1476808	361112 1863520	542662	738839	25.0 350	50.0 400	100 500	150	200
Toluene	CBNZ d5	Ave	71883 2496911	351840 2540251	692901 3254284	1000479	1332783	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBNZ d5	Ave	14443 781619	79122 850338	170710 1070347	278226	396221	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBNZ d5	Ave	16030 905216	96602 1001550	222171 1271580	352819	483364	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBNZ d5	Ave	14755 523017	67966 569083	138196 718069	209928	283688	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBNZ d5	Ave	13528 498519	67579 486427	126273 683462	184171	244346	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBNZ d5	Ave	26359 969241	127957 1058308	256477 1320887	397870	518120	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBNZ d5	Ave	57842 977068	122936 1109580	278579 1418811	419354	581383	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBNZ d5	Ave	9414 489506	53302 540065	114911 672369	181267	254603	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBNZ d5	Ave	13462 550826	67745 607203	142489 773664	223815	294438	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorobenzotrifluoride	CBNZ d5	Ave	25343 874266	109109 869071	222871 1290067	352260	461082	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.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	47566 1645967	217561 1704167	431311 2170926	660247	877804	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBNZ d5	Ave	21933 826850	101825 810848	207774 1226371	327327	420704	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	12587 554351	65901 590452	137710 751692	212641	289044	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBNZ d5	Ave	22622 962208	120759 972676	249792 1304914	371119	499116	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBNZ d5	Ave	25553 1197380	151114 1217768	306948 1614353	452043	610286	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBNZ d5	Ave	25240 1130677	138375 1159372	288885 1518391	440285	592117	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBNZ d5	Ave	42810 1866053	242031 1967591	498873 2462559	745860	1002147	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBNZ d5	Ave	6015 310948	30000 350923	67829 443094	112077	157509	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBNZ d5	Ave	21074 840920	107103 875687	216286 1244752	348911	454842	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBNZ d5	Ave	64937 2681266	356966 2665903	726432 3502176	1080505	1415676	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCBd 4	Ave	16032 659984	83376 711710	163748 889999	261052	348475	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	20749 762601	100341 870164	211912 1078742	316221	412534	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	4170 199800	23168 225821	49334 299994	83561	104361	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCBd 4	Ave	6588 255265	32588 299299	72643 371250	109372	144469	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCBd 4	Ave	17451 786064	95261 774184	198029 1069171	291693	387234	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCBd 4	Ave	14458 666236	83234 700158	167713 907016	256066	344800	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCBd 4	Ave	16155 680717	87067 742625	185343 1010916	289960	381649	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCBd 4	Ave	48645 2153457	290219 2188229	578518 2828999	866332	1140888	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCBd 4	Ave	16940 719035	88877 738280	180584 970169	269544	369832	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCBd 4	Ave	41329 1844417	236619 1809964	480729 2446270	721573	931884	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCBd 4	Ave	50171 2182090	288545 2260604	588662 2860516	884487	1156912	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.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3,4-Dichlorobenzotrifluoride	DCBd 4	Ave	15090 525922	64854 542681	138659 801099	219982	277157	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCBd 4	Ave	60251 2514051	336681 2474312	679839 3330508	993968	1298722	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCBd 4	Ave	30355 1146674	151590 1215884	305374 1545747	462404	613101	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCBd 4	Ave	47431 2114911	277710 2107989	570403 2809716	837492	1086140	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCBd 4	Ave	31756 1174377	154714 1249173	315614 1574222	474362	622850	5.00 175	25.0 200	50.0 250	75.0	100
2,4-Dichlorobenzotrifluoride	DCBd 4	Ave	12460 501975	64892 497225	125268 771761	206368	267418	5.00 175	25.0 200	50.0 250	75.0	100
2,5-Dichlorobenzotrifluoride	DCBd 4	Ave	13980 541324	67486 580659	140272 797256	217211	279514	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCBd 4	Ave	39215 1748217	221777 1729209	454742 2372703	671190	885288	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCBd 4	Ave	30057 1081541	145778 1161072	290492 1435184	437966	577962	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	2690 125814	14158 151695	30986 182290	47827	68470	5.00 175	25.0 200	50.0 250	75.0	100
2,4- & 2,5- & 2,6- Dichlorotoluene	DCBd 4	Ave	47367 2069215	260387 2228710	566788 3049908	889724	1151252	15.0 525	75.0 600	150 750	225	300
2,3- & 3,4- Dichlorotoluene	DCBd 4	Ave	30402 1443949	173187 1589536	380181 2191624	620870	814032	10.0 350	50.0 400	100 500	150	200
1,2,4-Trichlorobenzene	DCBd 4	Ave	12140 511830	60672 552245	134753 755690	200638	266863	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCBd 4	Ave	4721 182711	24054 180140	49048 282046	73984	94134	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCBd 4	Ave	33677 1761559	191971 2008065	465533 2561966	733996	990398	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCBd 4	Ave	11407 453926	57325 497473	117120 693791	184932	247660	5.00 175	25.0 200	50.0 250	75.0	100
2,4,5-Trichlorotoluene	DCBd 4	Ave	5175 235417	23799 253594	53498 +++++	91488	122498	5.00 175	25.0 200	50.0 +++++	75.0	100
2,3,6-Trichlorotoluene	DCBd 4	Ave	4086 211883	23065 237299	53869 +++++	89402	115009	5.00 175	25.0 200	50.0 +++++	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	13893 505019	65453 522323	127700 681339	193042	257355	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	18421 575099	82071 628942	159071 795993	234269	307676	5.00 175	25.0 200	50.0 250	75.0	100
Toluene-d8 (Surr)	CBNZ d5	Ave	60283 1992609	278432 2000995	541748 2678162	780569	1040595	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.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	19227 748217	94618 793129	191158 1033645	289432	390879	5.00 175	25.0 200	50.0 250	75.0	100

Curve Type Legend:

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-218218/2	50727D02.D
Level 2	IC 180-218218/3	50727D03.D
Level 3	ICIS 180-218218/4	50727D04.D
Level 4	IC 180-218218/5	50727D05.D
Level 5	IC 180-218218/6	50727D06.D
Level 6	IC 180-218218/10	50727D10.D
Level 7	IC 180-218218/8	50727D08.D
Level 8	IC 180-218218/11	50727D11.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
Dichlorodifluoromethane	6.6 -12.7	8.1 -3.0	1.9	0.1	-5.3	4.3	50 30	30 30	30	30	30	30
Chloromethane	24.5 -11.5	0.4 -8.6	-1.7	1.9	-0.6	-4.5	50 30	30 30	30	30	30	30
Vinyl chloride	21.8 -13.3	3.6 -3.7	1.6	-4.3	-5.5	-0.2	50 30	30 30	30	30	30	30
1,3-Butadiene	23.1 -15.3	2.9 -0.4	-1.2	-2.8	-7.0	0.8	50 30	30 30	30	30	30	30
Bromomethane	-9.1 -8.0	11.9 -11.3	7.5	2.5	11.0	-4.6	50 30	30 30	30	30	30	30
Chloroethane	21.0 -11.8	7.8 -16.3	-1.5	1.4	1.8	-2.3	50 30	30 30	30	30	30	30
Trichlorofluoromethane	13.3 -13.2	6.9 -8.1	4.3	-0.3	-1.9	-1.1	50 30	30 30	30	30	30	30
Ethyl ether	13.5 -4.1	4.4 -14.9	-1.1	2.1	6.3	-6.1	50 30	30 30	30	30	30	30
Acrolein	-1.6 7.0	-8.5 -7.9	5.3	5.9	5.4	-5.6	50 30	30 30	30	30	30	30
1,1-Dichloroethene	7.6 -10.9	3.1 0.2	-0.4	0.0	-2.9	3.3	50 30	30 30	30	30	30	30
1,1,2-Trichloro-1,2,2-trifluoroethane	24.6 -11.3	2.2 -5.2	-2.7	-1.6	-5.7	-0.3	50 30	30 30	30	30	30	30
Acetone	6.8 -11.0	10.7 -20.6	6.1	11.7	16.2	-19.8	50 30	30 30	30	30	30	30
Iodomethane	9.6 -3.4	0.4 -5.9	-3.4	1.6	2.2	-1.1	50 30	30 30	30	30	30	30
Carbon disulfide	6.1 0.5	-8.9 13.7	-7.9	-3.8	0.4	+++++	50 30	30 30	30	30	30	
Allyl chloride	-5.1 3.1	-6.1 4.0	-2.6	-1.3	-0.2	8.1	50 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

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
Methyl acetate	11.5 0.9	-4.9 -8.0	1.6	3.8	3.7	-8.7	50 30	30 30	30	30	30	30
Methylene Chloride	0.0 0.7	-2.5 -7.2	0.4	5.0	6.0	-2.6	50 30	30 30	30	30	30	30
tert-Butyl alcohol	12.8 -13.1	-2.2 4.4	-1.6	-4.3	-4.9	8.8	50 30	30 30	30	30	30	30
Acrylonitrile	7.5 -1.1	-0.7 -8.6	4.3	4.9	5.9	-12.1	50 30	30 30	30	30	30	30
trans-1,2-Dichloroethene	13.6 -8.7	-2.1 -4.9	-2.2	2.2	2.2	0.0	50 30	30 30	30	30	30	30
Methyl tert-butyl ether	-5.3 4.3	-2.2 -4.5	-3.3	5.3	5.8	0.0	50 30	30 30	30	30	30	30
Hexane	28.4 -11.8	0.2 1.2	-3.7	-4.4	-9.4	-0.5	50 30	30 30	30	30	30	30
1,1-Dichloroethane	7.8 -4.4	2.7 -6.6	0.1	0.3	1.2	-1.1	50 30	30 30	30	30	30	30
Vinyl acetate	1.8 8.4	-13.3 1.6	-7.6	4.0	3.7	1.4	50 30	30 30	30	30	30	30
2,2-Dichloropropane	12.7 -9.5	-4.4 0.3	-6.6	1.5	2.4	3.6	50 30	30 30	30	30	30	30
cis-1,2-Dichloroethene	3.3 -4.1	0.1 -7.1	0.3	4.3	4.6	-1.5	50 30	30 30	30	30	30	30
2-Butanone (MEK)	-0.4 -4.8	5.8 -14.9	6.9	10.9	10.2	-13.7	50 30	30 30	30	30	30	30
Bromochloromethane	7.0 -1.4	-0.3 -8.4	-1.1	2.5	5.4	-3.6	50 30	30 30	30	30	30	30
Tetrahydrofuran	26.5 0.4	-9.4 -7.4	0.4	4.3	-0.5	-14.3	50 30	30 30	30	30	30	30
Chloroform	12.9 -4.6	3.2 -10.3	-2.7	3.1	2.8	-4.3	50 30	30 30	30	30	30	30
1,1,1-Trichloroethane	3.3 -5.5	0.3 -1.5	-0.8	-0.1	0.7	3.7	50 30	30 30	30	30	30	30
Cyclohexane	10.1 -9.2	2.0 1.5	-2.0	-2.2	-5.1	4.9	50 30	30 30	30	30	30	30
Carbon tetrachloride	4.3 -5.6	-2.0 -0.4	-1.1	0.1	-0.1	4.8	50 30	30 30	30	30	30	30
1,1-Dichloropropene	2.6 -7.1	3.1 -2.1	0.7	1.1	-0.8	2.5	50 30	30 30	30	30	30	30
Isobutyl alcohol	-2.6 5.2	-8.4 -5.4	2.0	11.6	12.2	-14.7	50 30	30 30	30	30	30	30
Benzene	13.4 -8.9	3.9 -12.1	2.0	3.6	3.3	-5.2	50 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

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
1,2-Dichloroethane	9.6 -3.5	0.3 -10.0	-0.4	5.9	4.5	-6.3	50 30	30 30	30	30	30	30
n-Heptane	6.1 -10.8	5.2 6.0	-0.1	-3.8	-6.2	3.6	50 30	30 30	30	30	30	30
Trichloroethene	5.5 -5.8	0.9 -4.6	-0.3	1.4	3.5	-0.8	50 30	30 30	30	30	30	30
Methylcyclohexane	2.2 -8.5	1.0 1.9	1.5	-0.6	-2.9	5.4	50 30	30 30	30	30	30	30
1,2-Dichloropropane	6.4 -1.7	-1.8 -7.7	-1.7	2.9	5.1	-1.3	50 30	30 30	30	30	30	30
1,4-Dioxane	-25.2 5.1	-2.1 6.9	6.9	4.5	9.7	-5.7	50 30	30 30	30	30	30	30
Dibromomethane	-3.8 0.5	3.0 -6.6	-1.3	4.5	6.9	-3.2	50 30	30 30	30	30	30	30
Bromodichloromethane	-7.8 2.9	-4.0 -4.5	-2.7	5.6	8.1	2.5	50 30	30 30	30	30	30	30
2-Chloroethyl vinyl ether	-18.1 6.8	-5.9 -0.3	-0.3	8.0	10.3	-0.6	50 30	30 30	30	30	30	30
cis-1,3-Dichloropropene	-9.1 5.1	-9.1 0.1	-4.3	4.1	8.7	4.4	50 30	30 30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	5.7 -4.6	-2.6 -10.1	6.0	6.1	8.6	-9.1	50 30	30 30	30	30	30	30
Toluene	22.4 -15.6	14.1 -19.2	4.6	0.7	0.8	-7.8	50 30	30 30	30	30	30	30
trans-1,3-Dichloropropene	-9.6 3.8	-5.7 -2.3	-5.3	2.9	10.1	6.1	50 30	30 30	30	30	30	30
Ethyl methacrylate	-16.8 1.4	-4.5 -3.8	2.2	8.2	11.4	1.9	50 30	30 30	30	30	30	30
1,1,2-Trichloroethane	20.6 -9.2	5.8 -14.4	0.2	1.4	3.0	-7.2	50 30	30 30	30	30	30	30
Tetrachloroethene	20.7 -15.3	14.9 -11.0	0.0	-2.8	-3.1	-3.4	50 30	30 30	30	30	30	30
1,3-Dichloropropane	16.5 -8.7	7.8 -14.8	0.6	4.0	1.7	-7.0	50 30	30 30	30	30	30	30
2-Hexanone	-0.2 -6.6	1.1 -10.7	6.6	6.9	11.4	-8.5	50 30	30 30	30	30	30	30
Dibromochloromethane	-9.0 1.9	-1.8 -5.2	-1.5	3.6	9.3	2.7	50 30	30 30	30	30	30	30
1,2-Dibromoethane (EDB)	7.3 -5.6	2.9 -10.1	0.7	5.4	4.2	-4.8	50 30	30 30	30	30	30	30
3-Chlorobenzotrifluoride	25.2 -16.2	2.7 -7.1	-2.4	2.8	1.2	-6.3	50 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

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
Chlorobenzene	24.4 -13.0	8.4 -17.2	0.0	2.0	2.0	-6.6	50 30	30 30	30	30	30	30
4-Chlorobenzotrifluoride	17.4 -15.3	3.9 -4.3	-1.4	3.6	0.0	-3.9	50 30	30 30	30	30	30	30
1,1,1,2-Tetrachloroethane	3.5 -5.2	3.3 -9.9	0.4	3.4	5.6	-1.1	50 30	30 30	30	30	30	30
Ethylbenzene	6.0 -11.1	7.8 -10.9	3.8	2.7	3.8	-2.2	50 30	30 30	30	30	30	30
m-Xylene & p-Xylene	-2.1 -8.9	10.4 -9.8	4.4	2.4	3.9	-0.4	50 30	30 30	30	30	30	30
o-Xylene	1.5 -9.0	6.1 -10.9	3.1	4.7	5.8	-1.3	50 30	30 30	30	30	30	30
Styrene	1.7 -8.7	9.6 -14.6	5.2	4.8	5.8	-3.7	50 30	30 30	30	30	30	30
Bromoform	-6.4 6.6	-11.1 0.5	-6.4	3.0	8.8	5.0	50 30	30 30	30	30	30	30
2-Chlorobenzotrifluoride	8.8 -11.8	5.3 -6.3	-1.0	6.4	4.3	-5.8	50 30	30 30	30	30	30	30
Isopropylbenzene	7.0 -14.2	12.1 -15.8	6.2	5.2	3.6	-4.1	50 30	30 30	30	30	30	30
Bromobenzene	2.9 -3.2	1.7 -5.8	-3.4	2.8	4.5	0.4	50 30	30 30	30	30	30	30
1,1,2,2-Tetrachloroethane	14.5 -6.3	5.5 -13.2	3.7	3.2	1.1	-8.7	50 30	30 30	30	30	30	30
trans-1,4-Dichloro-2-butene	-11.2 1.8	-6.3 5.4	-3.4	9.2	3.8	0.8	50 30	30 30	30	30	30	30
1,2,3-Trichloropropane	2.5 -1.4	-3.7 -4.7	3.9	4.4	5.0	-5.9	50 30	30 30	30	30	30	30
N-Propylbenzene	-2.0 -7.9	1.7 -0.9	2.3	0.6	1.6	4.6	50 30	30 30	30	30	30	30
2-Chlorotoluene	-6.0 -3.6	2.8 -2.8	0.2	2.1	4.7	2.6	50 30	30 30	30	30	30	30
3-Chlorotoluene	-3.5 -6.0	-1.1 -0.4	1.8	6.3	6.5	-3.6	50 30	30 30	30	30	30	30
1,3,5-Trimethylbenzene	-4.5 -9.0	8.3 -8.4	4.4	4.4	4.6	0.2	50 30	30 30	30	30	30	30
4-Chlorotoluene	1.9 -5.9	1.7 -3.7	-0.1	-0.4	4.0	2.5	50 30	30 30	30	30	30	30
tert-Butylbenzene	-3.0 -10.0	5.6 -5.2	3.8	4.0	2.2	2.6	50 30	30 30	30	30	30	30
1,2,4-Trimethylbenzene	-3.1 -7.5	5.9 -8.9	4.5	4.8	4.4	-0.1	50 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

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
3,4-Dichlorobenzotrifluoride	16.3 -11.4	-5.0 1.9	-1.7	4.1	-0.2	-3.9	50 30	30 30	30	30	30	30
sec-Butylbenzene	1.4 -11.8	7.7 -7.5	5.2	2.7	2.1	0.3	50 30	30 30	30	30	30	30
1,3-Dichlorobenzene	9.1 -7.5	3.5 -8.4	0.9	2.0	2.9	-2.4	50 30	30 30	30	30	30	30
4-Isopropyltoluene	-4.2 -9.8	6.7 -6.3	6.0	3.9	2.5	1.3	50 30	30 30	30	30	30	30
1,4-Dichlorobenzene	11.1 -7.4	2.9 -9.1	1.5	1.9	1.8	-2.6	50 30	30 30	30	30	30	30
2,4-Dichlorobenzotrifluoride	3.2 -12.8	2.1 5.4	-4.7	4.9	3.4	-1.5	50 30	30 30	30	30	30	30
2,5-Dichlorobenzotrifluoride	7.2 -5.7	-1.7 0.8	-1.2	2.2	0.1	-1.7	50 30	30 30	30	30	30	30
n-Butylbenzene	-2.8 -9.3	4.4 -3.0	3.6	2.1	2.4	2.6	50 30	30 30	30	30	30	30
1,2-Dichlorobenzene	13.3 -7.3	4.4 -10.8	0.7	1.3	1.8	-3.4	50 30	30 30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-8.7 9.1	-8.6 2.1	-3.3	-0.3	8.6	1.2	50 30	30 30	30	30	30	30
2,4- & 2,5- & 2,6- Dichlorotoluene	-6.2 -6.5	-2.0 -0.3	3.2	8.2	6.5	-2.9	50 30	30 30	30	30	30	30
2,3- & 3,4- Dichlorotoluene	-12.6 -3.3	-5.4 3.9	0.4	9.5	9.3	-1.7	50 30	30 30	30	30	30	30
1,2,4-Trichlorobenzene	0.0 -3.7	-5.0 2.7	2.0	1.4	2.7	-0.1	50 30	30 30	30	30	30	30
Hexachlorobutadiene	6.3 -14.1	2.9 4.7	1.5	2.2	-1.0	-2.5	50 30	30 30	30	30	30	30
Naphthalene	-18.6 2.9	-11.8 2.2	3.5	8.9	11.9	1.0	50 30	30 30	30	30	30	30
1,2,3-Trichlorobenzene	2.9 -5.0	-1.8 3.2	-2.9	2.3	4.3	-3.0	50 30	30 30	30	30	30	30
2,4,5-Trichlorotoluene	-1.8 1.9	-14.2 +++++	-6.7	6.5	8.5	5.8	50 30	30	30	30	30	30
2,3,6-Trichlorotoluene	-16.7 2.5	-10.6 +++++	1.0	11.9	9.5	2.4	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	6.6 -3.3	1.1 -6.8	-1.6	2.9	2.8	-1.7	50 30	30 30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	15.9 -4.5	4.0 -10.7	0.5	2.4	0.8	-8.2	50 30	30 30	30	30	30	30
Toluene-d8 (Surr)	28.6 -16.7	13.2 -16.7	2.5	-1.6	-1.4	-7.8	50 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 218218

SDG No.:

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

Calibration Start Date: 07/27/2017 00:51 Calibration End Date: 07/27/2017 04:24 Calibration ID: 35038

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
4-Bromofluorobenzene (Surr)	13.5 -8.6	6.5 -11.0	0.1	1.0	2.5	-4.1	50 30	30 30	30	30	30	30

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D02.D
Lims ID: IC VSTD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 27-Jul-2017 00:51:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0017756-002
Misc. Info.: IC VSTD1
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Jul-2017 01:04:45 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: bungardf Date: 27-Jul-2017 03:08:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.317	4.323	-0.006	0	246479	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.298	7.298	0.000	99	541701	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.406	10.406	0.000	85	117831	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.773	12.773	0.000	96	160528	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.574	6.574	0.000	90	13893	5.00	5.33	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.951	6.945	0.006	0	18421	5.00	5.79	
$ 7 Toluene-d8 (Surr)	98	8.946	8.946	0.000	92	60283	5.00	6.43	
$ 8 4-Bromofluorobenzene (Surr	95	11.599	11.599	0.000	87	19227	5.00	5.68	
11 Dichlorodifluoromethane	85	1.665	1.646	0.018	68	16788	5.00	5.33	
12 Chloromethane	50	1.804	1.804	0.000	97	19706	5.00	6.22	
13 Vinyl chloride	62	1.932	1.944	-0.012	95	19568	5.00	6.09	
14 Butadiene	39	1.963	1.969	-0.005	95	17968	5.00	6.16	
15 Bromomethane	94	2.273	2.254	0.019	90	6901	5.00	4.54	
16 Chloroethane	64	2.419	2.419	0.000	89	10685	5.00	6.05	
17 Dichlorofluoromethane	67	2.699	2.699	0.000	97	26531	5.00	5.94	
18 Trichlorofluoromethane	101	2.760	2.741	0.019	45	22371	5.00	5.67	M
20 Ethyl ether	59	3.076	3.076	0.000	88	14571	5.00	5.67	
21 Acrolein	56	3.252	3.252	0.000	99	63695	100.0	98.4	
22 1,1-Dichloroethene	96	3.368	3.368	0.000	77	14263	5.00	5.38	
23 1,1,2-Trichloro-1,2,2-trif	101	3.441	3.441	0.000	74	18126	5.00	6.23	
24 Acetone	43	3.483	3.477	0.006	99	37823	25.0	26.7	
25 Iodomethane	142	3.569	3.562	0.007	95	22822	5.00	5.48	
26 Carbon disulfide	76	3.654	3.648	0.006	98	30868	5.00	5.30	
28 3-Chloro-1-propene	76	3.940	3.946	-0.006	90	8133	5.00	4.75	
30 Methyl acetate	43	3.970	3.976	-0.006	95	31286	10.0	11.2	
31 Methylene Chloride	84	4.177	4.165	0.012	84	25720	5.00	5.00	
32 2-Methyl-2-propanol	59	4.432	4.451	-0.019	92	16447	50.0	56.4	
33 Acrylonitrile	53	4.554	4.554	0.000	98	73302	50.0	53.7	
34 trans-1,2-Dichloroethene	96	4.591	4.584	0.007	74	17158	5.00	5.68	
35 Methyl tert-butyl ether	73	4.603	4.603	0.000	84	38357	5.00	4.73	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.004	4.998	0.006	89	24902	5.00	6.42	
37 1,1-Dichloroethane	63	5.211	5.217	-0.006	96	28319	5.00	5.39	
38 Vinyl acetate	43	5.272	5.272	0.000	97	27185	5.00	5.09	
44 2,2-Dichloropropane	97	5.947	5.959	-0.012	46	3769	5.00	5.63	
45 cis-1,2-Dichloroethene	96	5.953	5.965	-0.012	79	17858	5.00	5.17	
46 2-Butanone (MEK)	43	5.984	5.978	0.006	98	50216	25.0	24.9	
49 Chlorobromomethane	128	6.245	6.245	0.000	93	8216	5.00	5.35	
51 Tetrahydrofuran	42	6.264	6.263	0.001	93	14858	10.0	12.7	
52 Chloroform	83	6.391	6.391	0.000	91	29608	5.00	5.64	
53 1,1,1-Trichloroethane	97	6.556	6.549	0.007	97	20508	5.00	5.16	
54 Cyclohexane	56	6.616	6.622	-0.006	87	26974	5.00	5.50	
56 Carbon tetrachloride	117	6.726	6.726	0.000	88	17231	5.00	5.21	
55 1,1-Dichloropropene	75	6.738	6.738	0.000	96	22014	5.00	5.13	
57 Isobutyl alcohol	41	6.951	6.945	0.006	43	13122	125.0	121.7	
58 Benzene	78	6.951	6.951	0.000	96	74686	5.00	5.67	
59 1,2-Dichloroethane	62	7.030	7.030	0.000	97	21038	5.00	5.48	
62 n-Heptane	43	7.316	7.316	0.000	56	16453	5.00	5.30	
64 Trichloroethene	130	7.681	7.687	-0.006	95	17490	5.00	5.28	
66 Methylcyclohexane	83	7.918	7.918	0.000	86	25605	5.00	5.11	
67 1,2-Dichloropropane	63	7.955	7.961	-0.006	93	16316	5.00	5.32	
68 Dibromomethane	93	8.046	8.046	0.000	90	8641	5.00	4.81	
70 1,4-Dioxane	88	8.040	8.052	-0.012	5	2333	100.0	74.8	
71 Dichlorobromomethane	83	8.241	8.241	0.000	99	16257	5.00	4.61	
73 2-Chloroethyl vinyl ether	63	8.551	8.545	0.006	92	18086	10.0	8.19	
74 cis-1,3-Dichloropropene	75	8.691	8.685	0.006	95	19479	5.00	4.55	
75 4-Methyl-2-pentanone (MIBK	43	8.843	8.843	0.000	96	79892	25.0	26.4	
76 Toluene	91	9.019	9.019	0.000	98	71883	5.00	6.12	
77 trans-1,3-Dichloropropene	75	9.263	9.269	-0.006	92	14443	5.00	4.52	
78 Ethyl methacrylate	69	9.330	9.330	0.000	90	16030	5.00	4.16	
79 1,1,2-Trichloroethane	97	9.457	9.457	0.000	89	14755	5.00	6.03	
80 Tetrachloroethene	164	9.530	9.530	0.000	95	13528	5.00	6.04	
81 1,3-Dichloropropane	76	9.616	9.615	0.001	90	26359	5.00	5.83	
82 2-Hexanone	43	9.683	9.682	0.000	98	57842	25.0	25.0	
84 Chlorodibromomethane	129	9.835	9.834	0.001	92	9414	5.00	4.55	
85 Ethylene Dibromide	107	9.944	9.944	0.000	98	13462	5.00	5.36	
86 3-Chlorobenzotrifluoride	180	10.413	10.412	0.001	90	25343	5.00	6.26	
87 Chlorobenzene	112	10.437	10.437	0.000	94	47566	5.00	6.22	
88 4-Chlorobenzotrifluoride	180	10.498	10.498	0.000	96	21933	5.00	5.87	
89 1,1,1,2-Tetrachloroethane	131	10.528	10.528	0.000	88	12587	5.00	5.18	
90 Ethylbenzene	106	10.534	10.534	0.000	98	22622	5.00	5.30	
91 m-Xylene & p-Xylene	106	10.668	10.668	0.000	0	25553	5.00	4.90	
92 o-Xylene	106	11.051	11.051	0.000	95	25240	5.00	5.08	
93 Styrene	104	11.076	11.069	0.007	93	42810	5.00	5.09	
94 Bromoform	173	11.252	11.252	0.000	92	6015	5.00	4.68	
96 2-Chlorobenzotrifluoride	180	11.325	11.325	0.000	96	21074	5.00	5.44	
97 Isopropylbenzene	105	11.422	11.422	0.000	96	64937	5.00	5.35	
100 Bromobenzene	156	11.739	11.739	0.000	93	16032	5.00	5.15	
99 1,1,2,2-Tetrachloroethane	83	11.739	11.745	-0.006	77	20749	5.00	5.73	
102 trans-1,4-Dichloro-2-buten	53	11.787	11.775	0.012	75	4170	5.00	4.44	
101 1,2,3-Trichloropropane	110	11.800	11.793	0.007	85	6588	5.00	5.12	
103 N-Propylbenzene	120	11.842	11.842	0.000	99	17451	5.00	4.90	
104 2-Chlorotoluene	126	11.927	11.927	0.000	96	14458	5.00	4.70	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.994	11.994	0.000	96	16155	5.00	4.83	
106 1,3,5-Trimethylbenzene	105	12.031	12.031	0.000	95	48645	5.00	4.78	
107 4-Chlorotoluene	126	12.061	12.055	0.006	96	16940	5.00	5.10	
108 tert-Butylbenzene	119	12.347	12.347	0.000	93	41329	5.00	4.85	
110 1,2,4-Trimethylbenzene	105	12.408	12.408	0.000	97	50171	5.00	4.84	
111 1,2-dichloro-4-(trifluorom	214	12.457	12.456	0.001	95	15090	5.00	5.82	
112 sec-Butylbenzene	105	12.572	12.572	0.000	94	60251	5.00	5.07	
113 1,3-Dichlorobenzene	146	12.694	12.688	0.006	96	30355	5.00	5.45	
114 4-Isopropyltoluene	119	12.736	12.730	0.006	97	47431	5.00	4.79	
115 1,4-Dichlorobenzene	146	12.797	12.797	0.000	95	31756	5.00	5.56	
116 2,4-Dichloro-1-(triflourom	214	12.840	12.828	0.012	94	12460	5.00	5.16	
118 2,5-Dichlorobenzotrifluori	214	12.882	12.870	0.012	0	13980	5.00	5.36	
120 n-Butylbenzene	91	13.156	13.150	0.006	96	39215	5.00	4.86	
121 1,2-Dichlorobenzene	146	13.162	13.156	0.006	85	30057	5.00	5.66	
122 1,2-Dibromo-3-Chloropropan	75	13.977	13.971	0.006	81	2690	5.00	4.57	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.130	14.117	0.013	0	47367	15.0	14.1	
125 2,3- & 3,4- Dichlorotoluen	125	14.561	14.555	0.006	0	30402	10.0	8.74	
126 1,2,4-Trichlorobenzene	180	14.847	14.829	0.018	92	12140	5.00	5.00	
127 Hexachlorobutadiene	225	15.012	14.993	0.019	91	4721	5.00	5.31	
128 Naphthalene	128	15.127	15.103	0.024	96	33677	5.00	4.07	
129 1,2,3-Trichlorobenzene	180	15.371	15.346	0.025	95	11407	5.00	5.14	
131 2,4,5-Trichlorotoluene	159	16.240	16.198	0.042	0	5175	5.00	4.91	
130 2,3,6-Trichlorotoluene	159	16.338	16.307	0.031	88	4086	5.00	4.17	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		10.0	9.97	
S 134 1,2-Dichloroethene, Total	96				0		10.0	10.8	
S 135 1,3-Dichloropropene, Total	1				0		10.0	9.06	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00072	Amount Added:	2.00	Units: uL
VOA8260SURR_00071	Amount Added:	0.20	Units: uL
VOA8260VOAPRI_00263	Amount Added:	0.20	Units: uL
voaWAcro1stRe_00016	Amount Added:	4.00	Units: uL
voaWVA1stRest_00017	Amount Added:	0.20	Units: uL
voaWEEmix1stR_00009	Amount Added:	0.20	Units: uL
voaW2clev1stR_00013	Amount Added:	0.20	Units: uL
voaWKetmix1st_00004	Amount Added:	0.80	Units: uL

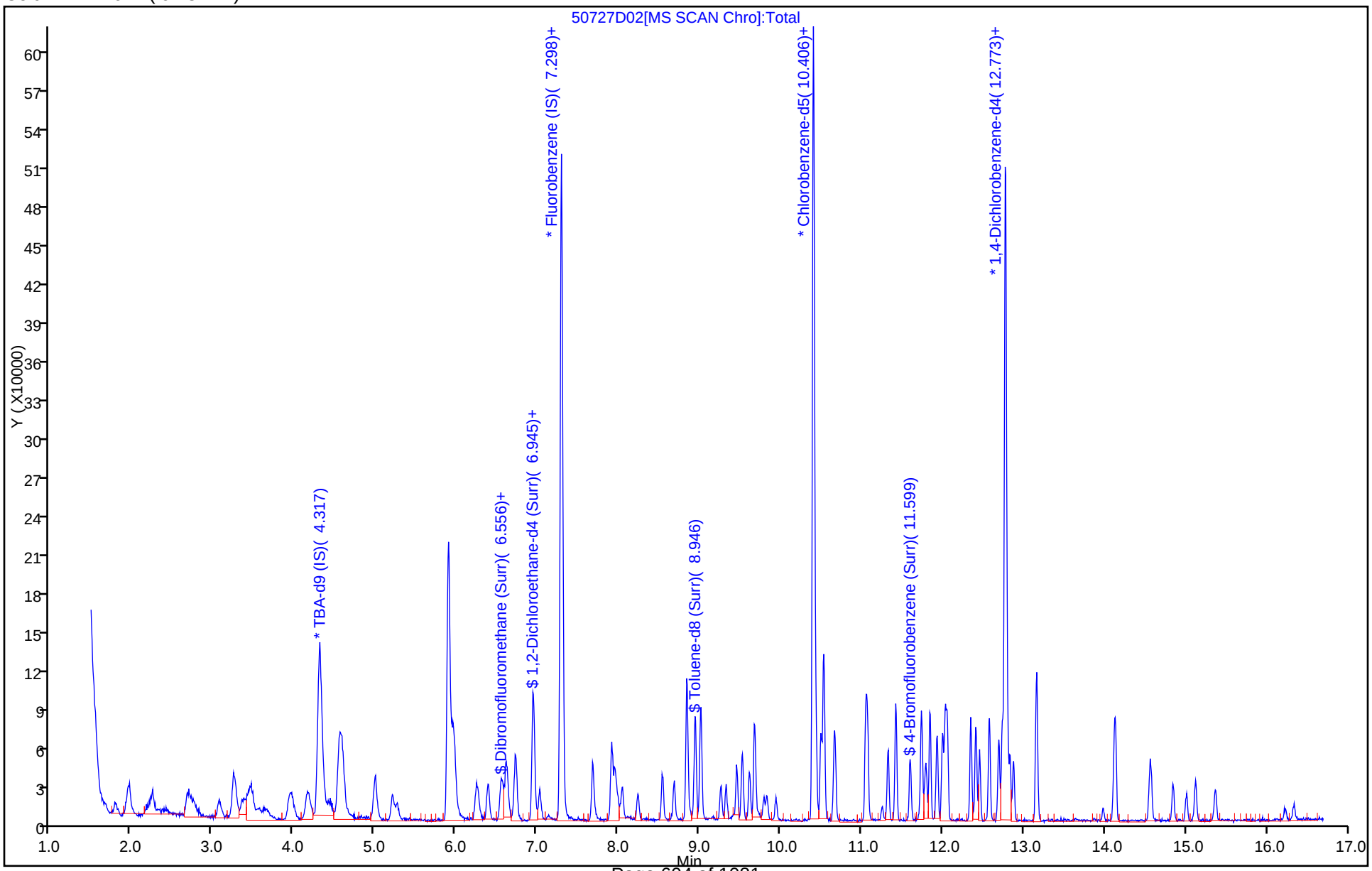
Report Date: 28-Jul-2017 01:04:45 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D02.D

Injection Date:	27-Jul-2017 00:51:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	IC VSTD1			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

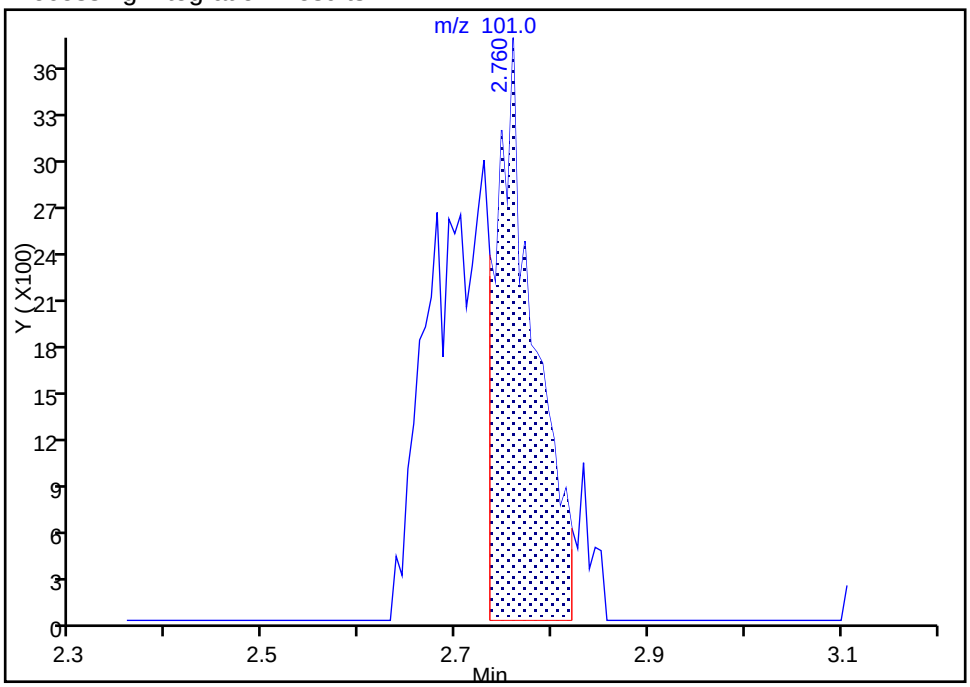
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D02.D				
Injection Date:	27-Jul-2017 00:51:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

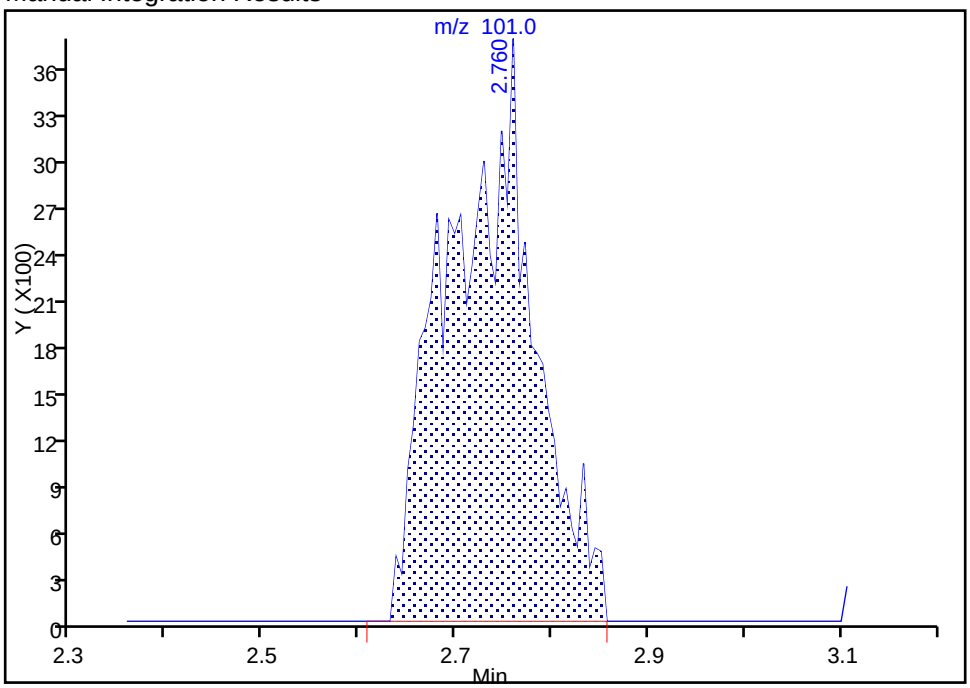
Processing Integration Results

RT: 2.76
Area: 10302
Amount: 3.465076
Amount Units: ng



Manual Integration Results

RT: 2.76
Area: 22371
Amount: 5.667373
Amount Units: ng



Reviewer: bungardf, 27-Jul-2017 03:06:53

Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D03.D
Lims ID: IC VSTD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 27-Jul-2017 01:15:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0017756-003
Misc. Info.: IC VSTD5
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Jul-2017 01:04:47 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: bungardf Date: 27-Jul-2017 03:14:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.319	4.323	-0.004	0	223811	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.299	7.298	0.001	98	538128	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.408	10.406	0.002	85	123664	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.775	12.773	0.002	94	168910	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.576	6.574	0.002	94	65453	25.0	25.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.947	6.945	0.002	0	82071	25.0	26.0	
$ 7 Toluene-d8 (Surr)	98	8.948	8.946	0.002	92	278432	25.0	28.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.600	11.599	0.001	87	94618	25.0	26.6	
11 Dichlorodifluoromethane	85	1.648	1.646	0.002	100	84559	25.0	27.0	
12 Chloromethane	50	1.794	1.804	-0.010	99	78965	25.0	25.1	
13 Vinyl chloride	62	1.946	1.944	0.002	98	82670	25.0	25.9	
14 Butadiene	39	1.964	1.969	-0.004	92	74553	25.0	25.7	
15 Bromomethane	94	2.262	2.254	0.008	91	42224	25.0	28.0	
16 Chloroethane	64	2.421	2.419	0.001	98	47273	25.0	26.9	
17 Dichlorofluoromethane	67	2.700	2.699	0.001	97	119855	25.0	27.0	
18 Trichlorofluoromethane	101	2.749	2.741	0.008	94	104824	25.0	26.7	M
20 Ethyl ether	59	3.084	3.076	0.008	87	66542	25.0	26.1	
21 Acrolein	56	3.266	3.252	0.014	98	73476	125.0	114.3	
22 1,1-Dichloroethene	96	3.376	3.368	0.008	96	67928	25.0	25.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.436	3.441	-0.005	93	73846	25.0	25.5	
24 Acetone	43	3.479	3.477	0.002	96	77890	50.0	55.3	
25 Iodomethane	142	3.570	3.562	0.008	98	103869	25.0	25.1	
26 Carbon disulfide	76	3.649	3.648	0.001	99	131730	25.0	22.8	
28 3-Chloro-1-propene	76	3.954	3.946	0.008	92	39946	25.0	23.5	
30 Methyl acetate	43	3.978	3.976	0.002	97	132543	50.0	47.6	
31 Methylene Chloride	84	4.166	4.165	0.001	88	84822	25.0	24.4	
32 2-Methyl-2-propanol	59	4.446	4.451	-0.005	92	64738	250.0	244.6	
33 Acrylonitrile	53	4.562	4.554	0.008	100	336508	250.0	248.3	
34 trans-1,2-Dichloroethene	96	4.580	4.584	-0.004	98	73445	25.0	24.5	
35 Methyl tert-butyl ether	73	4.604	4.603	0.001	96	196780	25.0	24.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.006	4.998	0.008	92	96542	25.0	25.1	
37 1,1-Dichloroethane	63	5.219	5.217	0.002	96	133976	25.0	25.7	
38 Vinyl acetate	43	5.268	5.272	-0.004	97	115000	25.0	21.7	
44 2,2-Dichloropropane	97	5.961	5.959	0.002	57	15889	25.0	23.9	
45 cis-1,2-Dichloroethene	96	5.961	5.965	-0.004	81	85931	25.0	25.0	
46 2-Butanone (MEK)	43	5.985	5.978	0.007	93	105960	50.0	52.9	
49 Chlorobromomethane	128	6.253	6.245	0.008	94	38047	25.0	24.9	
51 Tetrahydrofuran	42	6.271	6.263	0.008	86	52866	50.0	45.3	
52 Chloroform	83	6.393	6.391	0.002	93	134431	25.0	25.8	
53 1,1,1-Trichloroethane	97	6.557	6.549	0.008	98	98927	25.0	25.1	
54 Cyclohexane	56	6.618	6.622	-0.004	89	124196	25.0	25.5	
56 Carbon tetrachloride	117	6.722	6.726	-0.004	95	80446	25.0	24.5	
55 1,1-Dichloropropene	75	6.746	6.738	0.008	98	109851	25.0	25.8	
57 Isobutyl alcohol	41	6.947	6.945	0.002	82	61305	625.0	572.5	
58 Benzene	78	6.953	6.951	0.002	97	339765	25.0	26.0	
59 1,2-Dichloroethane	62	7.032	7.030	0.002	97	95627	25.0	25.1	
62 n-Heptane	43	7.318	7.316	0.002	90	81002	25.0	26.3	
64 Trichloroethene	130	7.689	7.687	0.002	98	83072	25.0	25.2	
66 Methylcyclohexane	83	7.920	7.918	0.002	86	125697	25.0	25.2	
67 1,2-Dichloropropane	63	7.963	7.961	0.002	94	74777	25.0	24.5	
68 Dibromomethane	93	8.048	8.046	0.002	95	45949	25.0	25.7	
70 1,4-Dioxane	88	8.048	8.052	-0.004	38	15162	500.0	489.4	M
71 Dichlorobromomethane	83	8.242	8.241	0.001	98	84070	25.0	24.0	
73 2-Chloroethyl vinyl ether	63	8.547	8.545	0.002	95	103158	50.0	47.0	
74 cis-1,3-Dichloropropene	75	8.686	8.685	0.001	96	96744	25.0	22.7	
75 4-Methyl-2-pentanone (MIBK	43	8.845	8.843	0.002	95	154465	50.0	48.7	
76 Toluene	91	9.015	9.019	-0.004	98	351840	25.0	28.5	
77 trans-1,3-Dichloropropene	75	9.270	9.269	0.001	92	79122	25.0	23.6	
78 Ethyl methacrylate	69	9.325	9.330	-0.005	88	96602	25.0	23.9	
79 1,1,2-Trichloroethane	97	9.465	9.457	0.008	90	67966	25.0	26.5	
80 Tetrachloroethene	164	9.532	9.530	0.002	97	67579	25.0	28.7	
81 1,3-Dichloropropane	76	9.617	9.615	0.002	89	127957	25.0	26.9	
82 2-Hexanone	43	9.678	9.682	-0.004	95	122936	50.0	50.5	
84 Chlorodibromomethane	129	9.836	9.834	0.002	89	53302	25.0	24.5	
85 Ethylene Dibromide	107	9.946	9.944	0.002	100	67745	25.0	25.7	
86 3-Chlorobenzotrifluoride	180	10.408	10.412	-0.004	95	109109	25.0	25.7	
87 Chlorobenzene	112	10.432	10.437	-0.005	95	217561	25.0	27.1	
88 4-Chlorobenzotrifluoride	180	10.499	10.498	0.001	95	101825	25.0	26.0	
89 1,1,1,2-Tetrachloroethane	131	10.530	10.528	0.002	92	65901	25.0	25.8	
90 Ethylbenzene	106	10.536	10.534	0.002	98	120759	25.0	26.9	
91 m-Xylene & p-Xylene	106	10.670	10.668	0.002	0	151114	25.0	27.6	
92 o-Xylene	106	11.053	11.051	0.002	96	138375	25.0	26.5	
93 Styrene	104	11.071	11.069	0.002	95	242031	25.0	27.4	
94 Bromoform	173	11.254	11.252	0.002	97	30000	25.0	22.2	
96 2-Chlorobenzotrifluoride	180	11.327	11.325	0.002	97	107103	25.0	26.3	
97 Isopropylbenzene	105	11.424	11.422	0.002	96	356966	25.0	28.0	
100 Bromobenzene	156	11.734	11.739	-0.005	95	83376	25.0	25.4	
99 1,1,2,2-Tetrachloroethane	83	11.740	11.745	-0.005	94	100341	25.0	26.4	
102 trans-1,4-Dichloro-2-buten	53	11.777	11.775	0.002	77	23168	25.0	23.4	
101 1,2,3-Trichloropropane	110	11.789	11.793	-0.004	86	32588	25.0	24.1	
103 N-Propylbenzene	120	11.838	11.842	-0.004	99	95261	25.0	25.4	
104 2-Chlorotoluene	126	11.929	11.927	0.002	96	83234	25.0	25.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.996	11.994	0.002	96	87067	25.0	24.7	
106 1,3,5-Trimethylbenzene	105	12.026	12.031	-0.005	95	290219	25.0	27.1	
107 4-Chlorotoluene	126	12.057	12.055	0.002	96	88877	25.0	25.4	
108 tert-Butylbenzene	119	12.349	12.347	0.002	93	236619	25.0	26.4	
110 1,2,4-Trimethylbenzene	105	12.410	12.408	0.002	97	288545	25.0	26.5	
111 1,2-dichloro-4-(trifluorom	214	12.452	12.456	-0.004	96	64854	25.0	23.8	
112 sec-Butylbenzene	105	12.574	12.572	0.002	94	336681	25.0	26.9	
113 1,3-Dichlorobenzene	146	12.689	12.688	0.001	97	151590	25.0	25.9	
114 4-Isopropyltoluene	119	12.732	12.730	0.002	97	277710	25.0	26.7	
115 1,4-Dichlorobenzene	146	12.799	12.797	0.002	95	154714	25.0	25.7	
116 2,4-Dichloro-1-(triflourom	214	12.829	12.828	0.001	96	64892	25.0	25.5	
118 2,5-Dichlorobenzotrifluori	214	12.872	12.870	0.002	0	67486	25.0	24.6	
120 n-Butylbenzene	91	13.152	13.150	0.002	98	221777	25.0	26.1	
121 1,2-Dichlorobenzene	146	13.158	13.156	0.002	98	145778	25.0	26.1	
122 1,2-Dibromo-3-Chloropropan	75	13.973	13.971	0.002	83	14158	25.0	22.8	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.119	14.117	0.002	0	260387	75.0	73.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.557	14.555	0.002	0	173187	50.0	47.3	
126 1,2,4-Trichlorobenzene	180	14.837	14.829	0.008	94	60672	25.0	23.7	
127 Hexachlorobutadiene	225	14.995	14.993	0.002	98	24054	25.0	25.7	
128 Naphthalene	128	15.111	15.103	0.008	97	191971	25.0	22.1	
129 1,2,3-Trichlorobenzene	180	15.348	15.346	0.002	95	57325	25.0	24.6	
131 2,4,5-Trichlorotoluene	159	16.200	16.198	0.002	0	23799	25.0	21.5	
130 2,3,6-Trichlorotoluene	159	16.309	16.307	0.002	95	23065	25.0	22.3	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		50.0	49.5	
S 133 Xylenes, Total	106				0		50.0	54.1	
S 135 1,3-Dichloropropene, Total	1				0		50.0	46.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00263	Amount Added:	1.00	Units: uL
voaW2clev1stR_00013	Amount Added:	1.00	Units: uL
voaWAcro1stRe_00016	Amount Added:	5.00	Units: uL
voaWVA1stRest_00017	Amount Added:	1.00	Units: uL
voaWEEmix1stR_00009	Amount Added:	1.00	Units: uL
VOA8260INT_00072	Amount Added:	2.00	Units: uL
VOA8260SURR_00071	Amount Added:	1.00	Units: uL
voaWKetmix1st_00004	Amount Added:	1.00	Units: uL

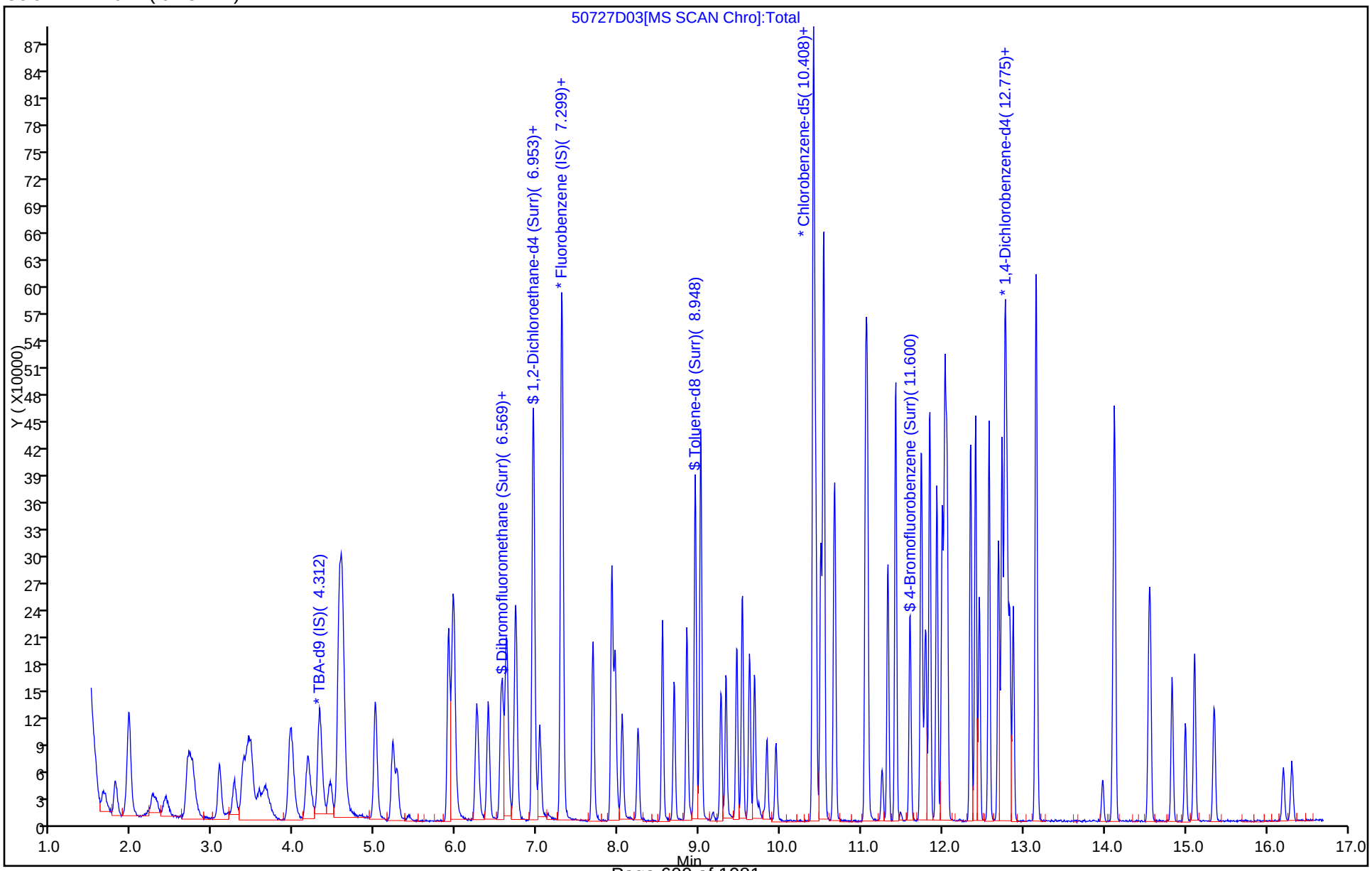
Report Date: 28-Jul-2017 01:04:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D03.D

Injection Date:	27-Jul-2017 01:15:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	IC VSTD5			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

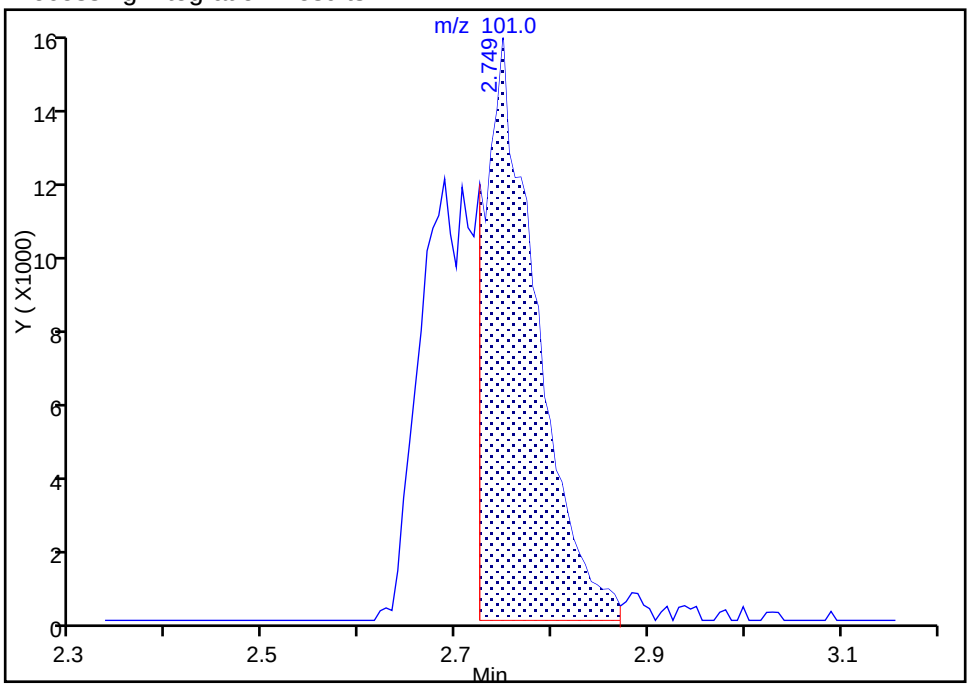
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D03.D				
Injection Date:	27-Jul-2017 01:15:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD5				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

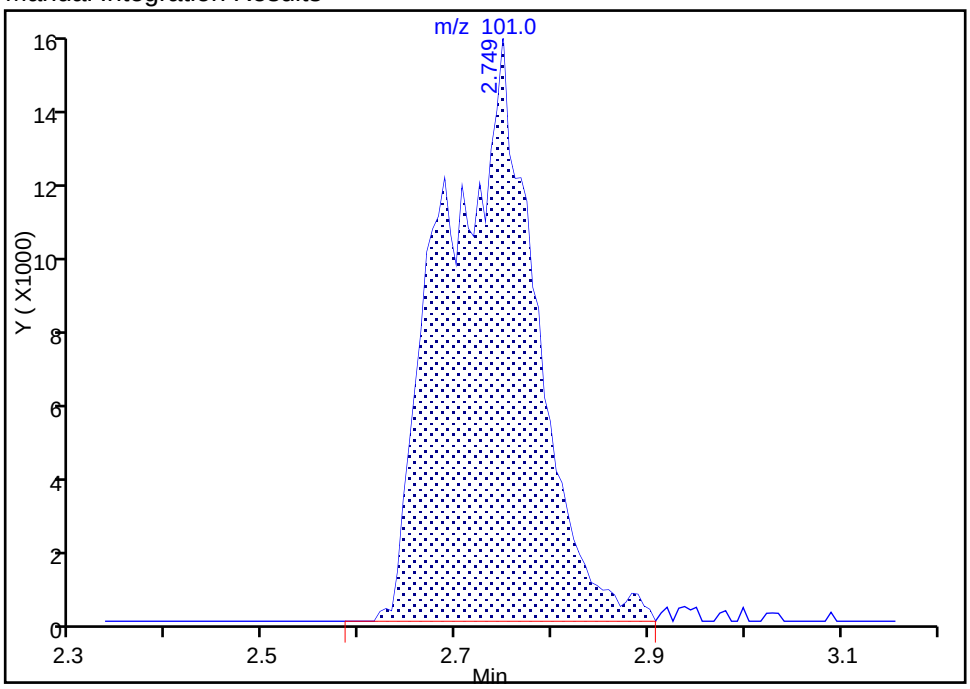
Processing Integration Results

RT: 2.75
Area: 59636
Amount: 17.371088
Amount Units: ng



Manual Integration Results

RT: 2.75
Area: 104824
Amount: 26.731985
Amount Units: ng



Reviewer: bungardf, 27-Jul-2017 03:13:52

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

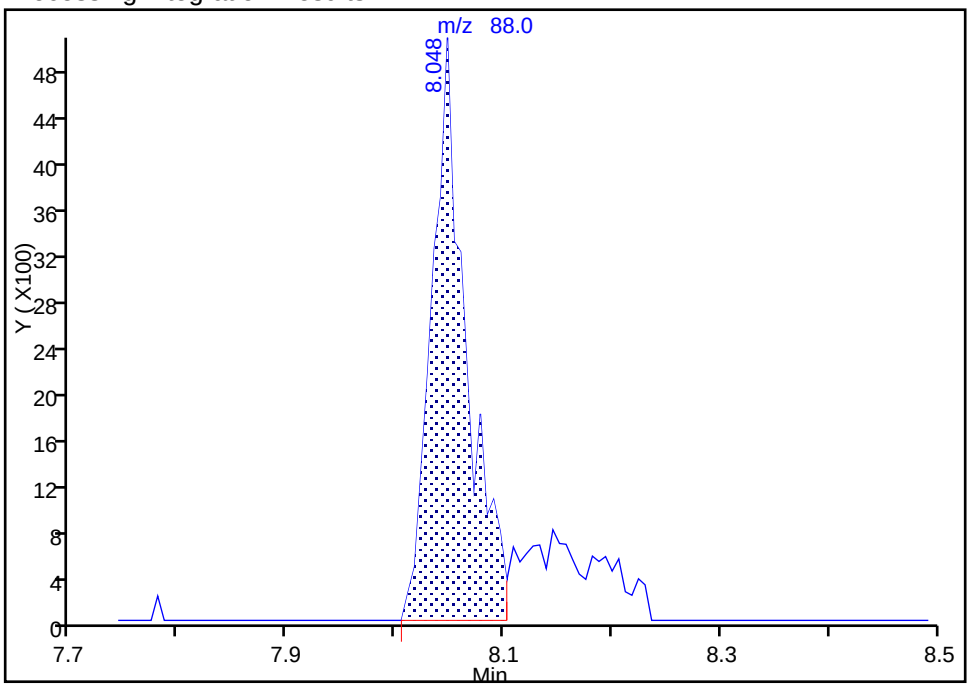
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D03.D
Injection Date: 27-Jul-2017 01:15:30 Instrument ID: CHHP5
Lims ID: IC VSTD5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

Signal: 1

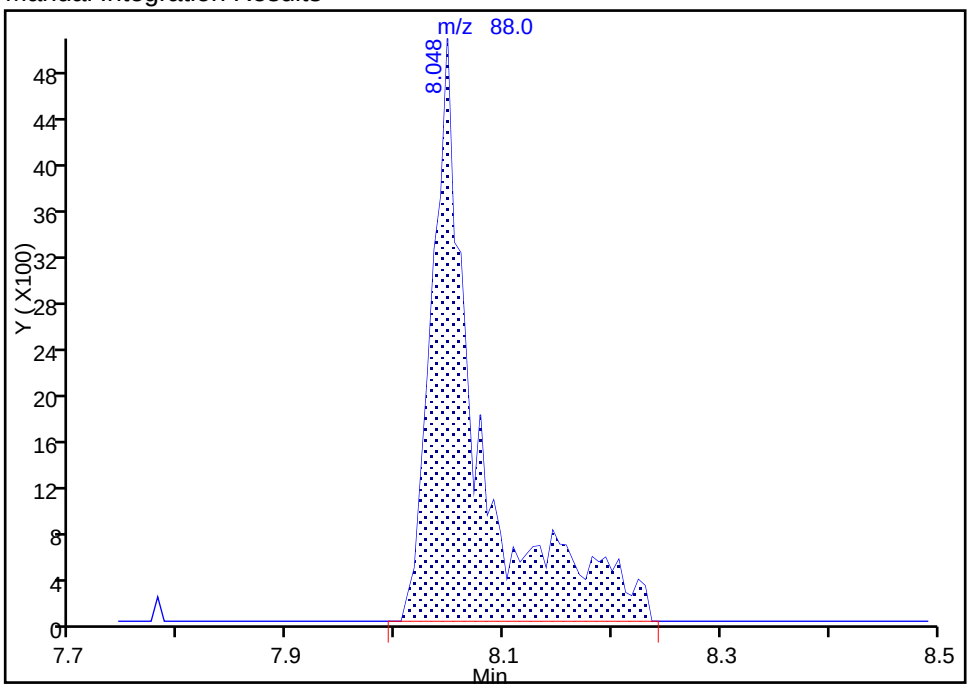
Processing Integration Results

RT: 8.05
Area: 11273
Amount: 403.3803
Amount Units: ng



Manual Integration Results

RT: 8.05
Area: 15162
Amount: 489.3788
Amount Units: ng



Reviewer: bungardf, 27-Jul-2017 03:14:22
Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D04.D
Lims ID: ICIS VSTD10
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 27-Jul-2017 01:39:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0017756-004
Misc. Info.: ICIS VSTD10
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Jul-2017 01:04:50 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: bungardf Date: 27-Jul-2017 03:16:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.328	4.328	0.000	0	240414	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.297	7.297	0.000	99	539679	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.405	10.405	0.000	86	132843	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.772	12.772	0.000	94	174621	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.573	6.573	0.000	94	127700	50.0	49.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.944	6.944	0.000	0	159071	50.0	50.2	
$ 7 Toluene-d8 (Surr)	98	8.951	8.951	0.000	92	541748	50.0	51.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.598	11.598	0.000	87	191158	50.0	50.1	
11 Dichlorodifluoromethane	85	1.663	1.663	0.000	99	159957	50.0	51.0	
12 Chloromethane	50	1.797	1.797	0.000	99	154943	50.0	49.1	
13 Vinyl chloride	62	1.955	1.955	0.000	98	162634	50.0	50.8	
14 Butadiene	39	1.968	1.968	0.000	94	143576	50.0	49.4	
15 Bromomethane	94	2.272	2.272	0.000	89	81346	50.0	53.8	
16 Chloroethane	64	2.424	2.424	0.000	98	86601	50.0	49.2	
17 Dichlorofluoromethane	67	2.710	2.710	0.000	96	224450	50.0	50.4	
18 Trichlorofluoromethane	101	2.746	2.746	0.000	97	205127	50.0	52.2	M
20 Ethyl ether	59	3.087	3.087	0.000	89	126496	50.0	49.4	
21 Acrolein	56	3.269	3.269	0.000	99	101829	150.0	158.0	
22 1,1-Dichloroethene	96	3.373	3.373	0.000	83	131576	50.0	49.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.440	3.440	0.000	91	141127	50.0	48.7	
24 Acetone	43	3.482	3.482	0.000	100	149782	100.0	106.1	
25 Iodomethane	142	3.580	3.580	0.000	99	200342	50.0	48.3	
26 Carbon disulfide	76	3.659	3.659	0.000	98	266935	50.0	46.0	
28 3-Chloro-1-propene	76	3.951	3.951	0.000	92	83167	50.0	48.7	
30 Methyl acetate	43	3.975	3.975	0.000	97	283974	100.0	101.6	
31 Methylene Chloride	84	4.170	4.170	0.000	90	164284	50.0	50.2	
32 2-Methyl-2-propanol	59	4.450	4.450	0.000	93	139891	500.0	492.0	
33 Acrylonitrile	53	4.559	4.559	0.000	99	708552	500.0	521.4	
34 trans-1,2-Dichloroethene	96	4.584	4.584	0.000	97	147191	50.0	48.9	
35 Methyl tert-butyl ether	73	4.608	4.608	0.000	96	390184	50.0	48.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.003	5.003	0.000	93	186124	50.0	48.2	
37 1,1-Dichloroethane	63	5.222	5.222	0.000	96	261874	50.0	50.0	
38 Vinyl acetate	43	5.271	5.271	0.000	97	245879	50.0	46.2	
44 2,2-Dichloropropane	97	5.958	5.958	0.000	72	31118	50.0	46.7	
45 cis-1,2-Dichloroethene	96	5.971	5.971	0.000	79	172690	50.0	50.2	
46 2-Butanone (MEK)	43	5.977	5.977	0.000	98	214731	100.0	106.9	
49 Chlorobromomethane	128	6.250	6.250	0.000	95	75687	50.0	49.5	
51 Tetrahydrofuran	42	6.269	6.269	0.000	89	117485	100.0	100.4	
52 Chloroform	83	6.396	6.396	0.000	92	254354	50.0	48.7	
53 1,1,1-Trichloroethane	97	6.555	6.555	0.000	98	196286	50.0	49.6	
54 Cyclohexane	56	6.621	6.621	0.000	89	239333	50.0	49.0	
56 Carbon tetrachloride	117	6.719	6.719	0.000	97	162849	50.0	49.5	
55 1,1-Dichloropropene	75	6.743	6.743	0.000	97	215336	50.0	50.4	
57 Isobutyl alcohol	41	6.950	6.950	0.000	84	136973	1250.0	1275.5	
58 Benzene	78	6.950	6.950	0.000	97	669098	50.0	51.0	
59 1,2-Dichloroethane	62	7.035	7.035	0.000	97	190422	50.0	49.8	
62 n-Heptane	43	7.315	7.315	0.000	86	154370	50.0	50.0	
64 Trichloroethene	130	7.692	7.692	0.000	98	164695	50.0	49.9	
66 Methylcyclohexane	83	7.917	7.917	0.000	86	253511	50.0	50.8	
67 1,2-Dichloropropane	63	7.960	7.960	0.000	94	150135	50.0	49.1	
68 Dibromomethane	93	8.045	8.045	0.000	95	88395	50.0	49.4	
70 1,4-Dioxane	88	8.051	8.051	0.000	40	33209	1000.0	1068.8	M
71 Dichlorobromomethane	83	8.246	8.246	0.000	99	171049	50.0	48.7	
73 2-Chloroethyl vinyl ether	63	8.544	8.544	0.000	92	219328	100.0	99.7	
74 cis-1,3-Dichloropropene	75	8.690	8.690	0.000	95	204344	50.0	47.9	
75 4-Methyl-2-pentanone (MIBK	43	8.848	8.848	0.000	96	361112	100.0	106.0	
76 Toluene	91	9.018	9.018	0.000	99	692901	50.0	52.3	
77 trans-1,3-Dichloropropene	75	9.268	9.268	0.000	93	170710	50.0	47.4	
78 Ethyl methacrylate	69	9.329	9.329	0.000	88	222171	50.0	51.1	
79 1,1,2-Trichloroethane	97	9.456	9.456	0.000	90	138196	50.0	50.1	
80 Tetrachloroethene	164	9.535	9.535	0.000	97	126273	50.0	50.0	
81 1,3-Dichloropropane	76	9.621	9.621	0.000	89	256477	50.0	50.3	
82 2-Hexanone	43	9.681	9.681	0.000	94	278579	100.0	106.6	
84 Chlorodibromomethane	129	9.834	9.834	0.000	90	114911	50.0	49.3	
85 Ethylene Dibromide	107	9.943	9.943	0.000	98	142489	50.0	50.3	
86 3-Chlorobenzotrifluoride	180	10.411	10.411	0.000	93	222871	50.0	48.8	
87 Chlorobenzene	112	10.436	10.436	0.000	95	431311	50.0	50.0	
88 4-Chlorobenzotrifluoride	180	10.497	10.497	0.000	96	207774	50.0	49.3	
89 1,1,1,2-Tetrachloroethane	131	10.533	10.533	0.000	94	137710	50.0	50.2	
90 Ethylbenzene	106	10.533	10.533	0.000	98	249792	50.0	51.9	
91 m-Xylene & p-Xylene	106	10.667	10.667	0.000	0	306948	50.0	52.2	
92 o-Xylene	106	11.050	11.050	0.000	96	288885	50.0	51.5	
93 Styrene	104	11.068	11.068	0.000	95	498873	50.0	52.6	
94 Bromoform	173	11.257	11.257	0.000	96	67829	50.0	46.8	
96 2-Chlorobenzotrifluoride	180	11.324	11.324	0.000	97	216286	50.0	49.5	
97 Isopropylbenzene	105	11.421	11.421	0.000	95	726432	50.0	53.1	
100 Bromobenzene	156	11.738	11.738	0.000	94	163748	50.0	48.3	
99 1,1,2,2-Tetrachloroethane	83	11.738	11.738	0.000	95	211912	50.0	51.9	
102 trans-1,4-Dichloro-2-buten	53	11.780	11.780	0.000	83	49334	50.0	48.3	
101 1,2,3-Trichloropropane	110	11.792	11.792	0.000	85	72643	50.0	51.9	
103 N-Propylbenzene	120	11.841	11.841	0.000	98	198029	50.0	51.1	
104 2-Chlorotoluene	126	11.926	11.926	0.000	97	167713	50.0	50.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.999	11.999	0.000	96	185343	50.0	50.9	
106 1,3,5-Trimethylbenzene	105	12.030	12.030	0.000	94	578518	50.0	52.2	
107 4-Chlorotoluene	126	12.054	12.054	0.000	96	180584	50.0	50.0	
108 tert-Butylbenzene	119	12.346	12.346	0.000	93	480729	50.0	51.9	
110 1,2,4-Trimethylbenzene	105	12.407	12.407	0.000	97	588662	50.0	52.3	
111 1,2-dichloro-4-(trifluorom	214	12.456	12.456	0.000	97	138659	50.0	49.1	
112 sec-Butylbenzene	105	12.571	12.571	0.000	94	679839	50.0	52.6	
113 1,3-Dichlorobenzene	146	12.687	12.687	0.000	97	305374	50.0	50.4	
114 4-Isopropyltoluene	119	12.735	12.735	0.000	97	570403	50.0	53.0	
115 1,4-Dichlorobenzene	146	12.796	12.796	0.000	95	315614	50.0	50.8	
116 2,4-Dichloro-1-(triflourom	214	12.827	12.827	0.000	95	125268	50.0	47.7	
118 2,5-Dichlorobenzotrifluori	214	12.875	12.875	0.000	0	140272	50.0	49.4	
120 n-Butylbenzene	91	13.149	13.149	0.000	98	454742	50.0	51.8	
121 1,2-Dichlorobenzene	146	13.161	13.161	0.000	98	290492	50.0	50.3	
122 1,2-Dibromo-3-Chloropropan	75	13.976	13.976	0.000	85	30986	50.0	48.4	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.122	14.122	0.000	0	566788	150.0	154.8	
125 2,3- & 3,4- Dichlorotoluen	125	14.554	14.554	0.000	0	380181	100.0	100.4	
126 1,2,4-Trichlorobenzene	180	14.834	14.834	0.000	93	134753	50.0	51.0	
127 Hexachlorobutadiene	225	14.992	14.992	0.000	97	49048	50.0	50.8	
128 Naphthalene	128	15.108	15.108	0.000	97	465533	50.0	51.7	
129 1,2,3-Trichlorobenzene	180	15.351	15.351	0.000	95	117120	50.0	48.5	
131 2,4,5-Trichlorotoluene	159	16.203	16.203	0.000	0	53498	50.0	46.6	
130 2,3,6-Trichlorotoluene	159	16.312	16.312	0.000	97	53869	50.0	50.5	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	103.7	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	95.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00072	Amount Added:	2.00	Units: uL
VOA8260SURR_00071	Amount Added:	2.00	Units: uL
VOA8260VOAPRI_00263	Amount Added:	2.00	Units: uL
voaW2clev1stR_00013	Amount Added:	2.00	Units: uL
voaWAcro1stRe_00016	Amount Added:	6.00	Units: uL
voaWVA1stRest_00017	Amount Added:	2.00	Units: uL
voaWEEmix1stR_00009	Amount Added:	2.00	Units: uL
voaWKetmix1st_00004	Amount Added:	2.00	Units: uL

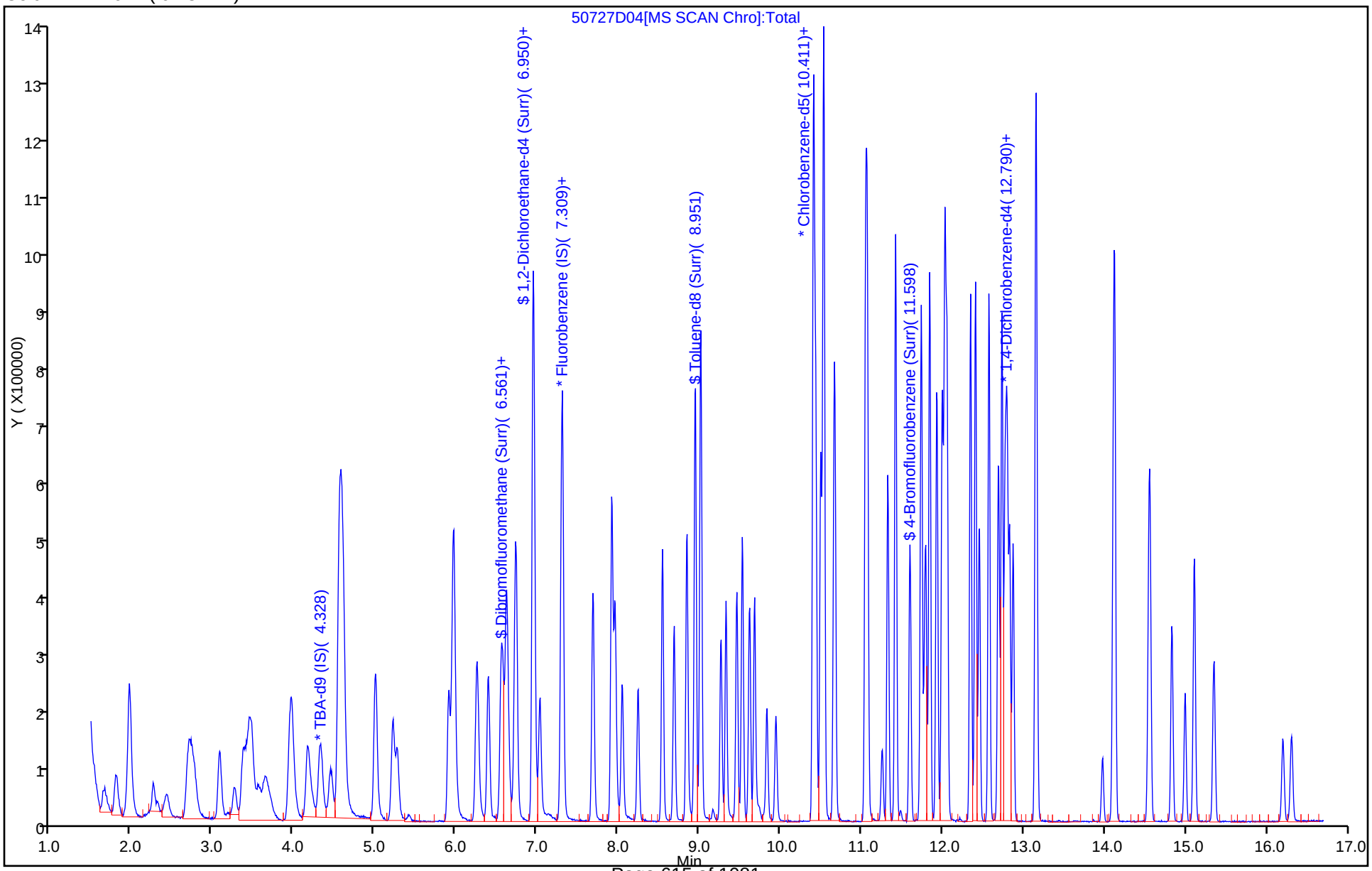
Report Date: 28-Jul-2017 01:04:50 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D04.D

Injection Date:	27-Jul-2017 01:39:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	ICIS VSTD10			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

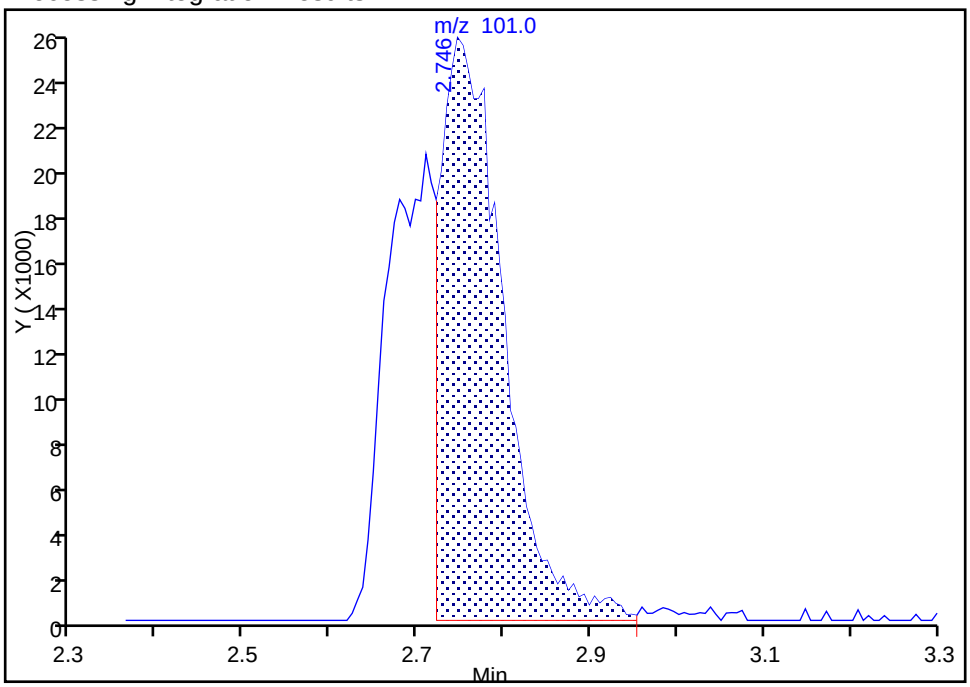
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D04.D				
Injection Date:	27-Jul-2017 01:39:30	Instrument ID:	CHHP5		
Lims ID:	ICIS VSTD10				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

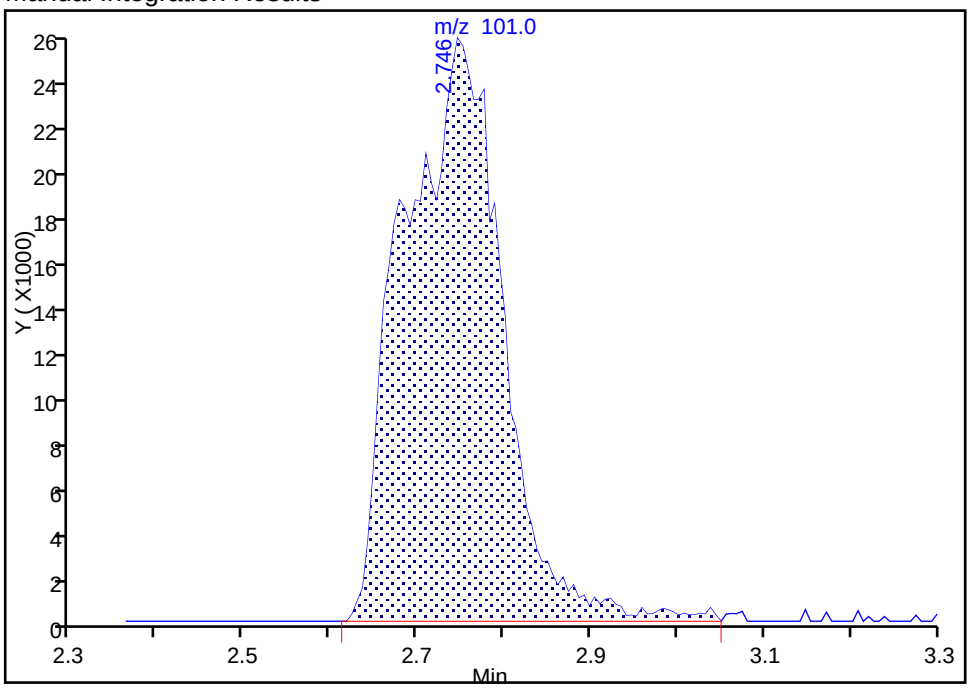
Processing Integration Results

RT: 2.75
Area: 129465
Amount: 34.020484
Amount Units: ng



Manual Integration Results

RT: 2.75
Area: 205127
Amount: 52.160696
Amount Units: ng



Reviewer: bungardf, 27-Jul-2017 03:15:11

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

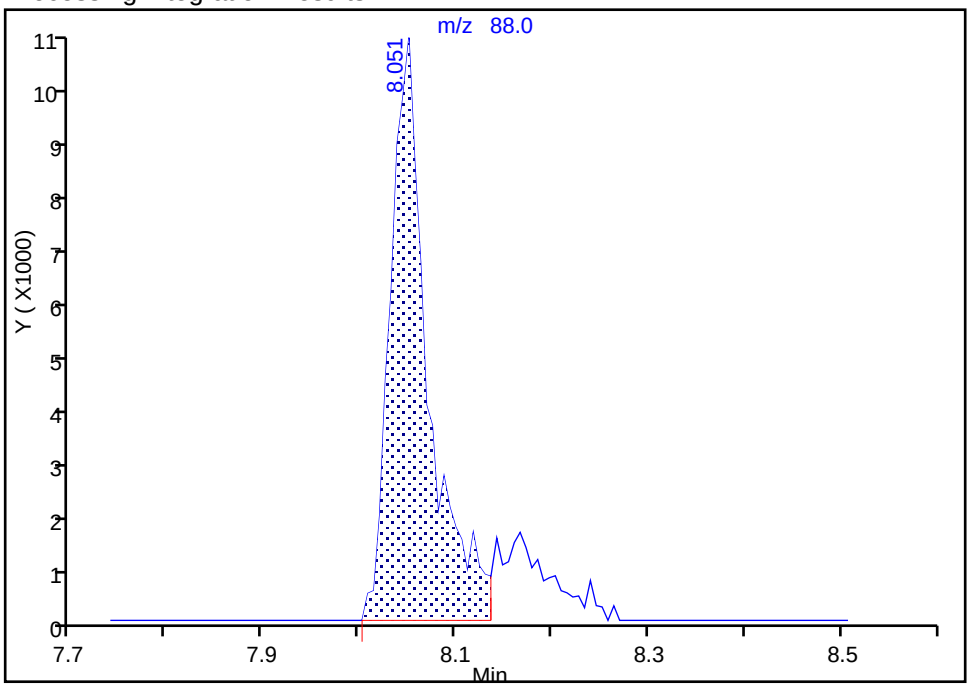
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D04.D				
Injection Date:	27-Jul-2017 01:39:30	Instrument ID:	CHHP5		
Lims ID:	ICIS VSTD10				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Signal: 1

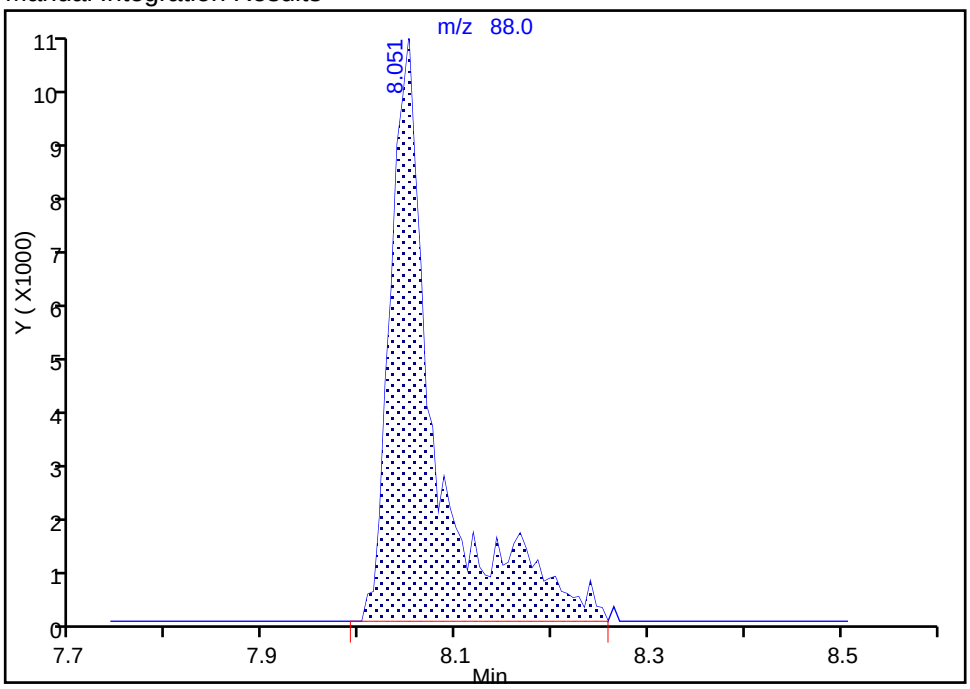
Processing Integration Results

RT: 8.05
Area: 27736
Amount: 937.4398
Amount Units: ng



Manual Integration Results

RT: 8.05
Area: 33209
Amount: 1068.7953
Amount Units: ng



Reviewer: bungardf, 27-Jul-2017 03:15:41

Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D05.D
Lims ID: IC VSTD15
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 27-Jul-2017 02:02:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0017756-005
Misc. Info.: IC VSTD15
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Jul-2017 01:04:55 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: bungardf Date: 27-Jul-2017 03:16:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.323	4.323	0.000	0	240814	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.298	7.298	0.000	98	519897	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.406	10.406	0.000	84	132905	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.773	12.773	0.000	91	174376	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.574	6.574	0.000	93	193042	75.0	77.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.945	6.945	0.000	0	234269	75.0	76.8	
$ 7 Toluene-d8 (Surr)	98	8.946	8.946	0.000	92	780569	75.0	73.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.599	11.599	0.000	88	289432	75.0	75.8	
11 Dichlorodifluoromethane	85	1.646	1.646	0.000	98	226899	75.0	75.1	
12 Chloromethane	50	1.804	1.804	0.000	99	232300	75.0	76.5	
13 Vinyl chloride	62	1.944	1.944	0.000	98	221295	75.0	71.8	
14 Butadiene	39	1.969	1.969	0.000	96	204212	75.0	72.9	
15 Bromomethane	94	2.254	2.254	0.000	90	112119	75.0	76.9	
16 Chloroethane	64	2.419	2.419	0.000	99	128899	75.0	76.1	
17 Dichlorofluoromethane	67	2.699	2.699	0.000	97	327021	75.0	76.3	
18 Trichlorofluoromethane	101	2.741	2.741	0.000	94	283194	75.0	74.8	
20 Ethyl ether	59	3.076	3.076	0.000	87	188662	75.0	76.6	
21 Acrolein	56	3.252	3.252	0.000	99	115103	175.0	185.4	
22 1,1-Dichloroethene	96	3.368	3.368	0.000	97	190985	75.0	75.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.441	3.441	0.000	92	206212	75.0	73.8	
24 Acetone	43	3.477	3.477	0.000	100	227784	150.0	167.5	
25 Iodomethane	142	3.562	3.562	0.000	96	304618	75.0	76.2	
26 Carbon disulfide	76	3.648	3.648	0.000	98	403056	75.0	72.2	
28 3-Chloro-1-propene	76	3.946	3.946	0.000	92	121734	75.0	74.0	
30 Methyl acetate	43	3.976	3.976	0.000	97	419273	150.0	155.7	
31 Methylene Chloride	84	4.165	4.165	0.000	87	242665	75.0	78.8	
32 2-Methyl-2-propanol	59	4.451	4.451	0.000	95	204334	750.0	717.5	
33 Acrylonitrile	53	4.554	4.554	0.000	98	1029651	750.0	786.5	
34 trans-1,2-Dichloroethene	96	4.584	4.584	0.000	97	222245	75.0	76.6	
35 Methyl tert-butyl ether	73	4.603	4.603	0.000	95	613933	75.0	78.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.998	4.998	0.000	93	266987	75.0	71.7	
37 1,1-Dichloroethane	63	5.217	5.217	0.000	96	379320	75.0	75.2	
38 Vinyl acetate	43	5.272	5.272	0.000	97	400099	75.0	78.0	
44 2,2-Dichloropropane	97	5.959	5.959	0.000	93	48893	75.0	76.2	
45 cis-1,2-Dichloroethene	96	5.965	5.965	0.000	79	259385	75.0	78.2	
46 2-Butanone (MEK)	43	5.978	5.978	0.000	98	321867	150.0	166.3	
49 Chlorobromomethane	128	6.245	6.245	0.000	94	113290	75.0	76.8	
51 Tetrahydrofuran	42	6.263	6.263	0.000	87	176266	150.0	156.4	
52 Chloroform	83	6.391	6.391	0.000	93	389323	75.0	77.3	
53 1,1,1-Trichloroethane	97	6.549	6.549	0.000	98	285488	75.0	74.9	
54 Cyclohexane	56	6.622	6.622	0.000	88	345041	75.0	73.4	
56 Carbon tetrachloride	117	6.726	6.726	0.000	97	238173	75.0	75.1	
55 1,1-Dichloropropene	75	6.738	6.738	0.000	98	312373	75.0	75.9	
57 Isobutyl alcohol	41	6.945	6.945	0.000	61	216532	1875.0	2093.1	
58 Benzene	78	6.951	6.951	0.000	97	981851	75.0	77.7	
59 1,2-Dichloroethane	62	7.030	7.030	0.000	98	292683	75.0	79.4	
62 n-Heptane	43	7.316	7.316	0.000	88	214813	75.0	72.2	
64 Trichloroethene	130	7.687	7.687	0.000	98	241861	75.0	76.0	
66 Methylcyclohexane	83	7.918	7.918	0.000	86	358781	75.0	74.6	
67 1,2-Dichloropropane	63	7.961	7.961	0.000	96	227133	75.0	77.2	
68 Dibromomethane	93	8.046	8.046	0.000	95	135198	75.0	78.4	
70 1,4-Dioxane	88	8.052	8.052	0.000	38	46920	1500.0	1567.5	
71 Dichlorobromomethane	83	8.241	8.241	0.000	99	268080	75.0	79.2	
73 2-Chloroethyl vinyl ether	63	8.545	8.545	0.000	92	343066	150.0	162.0	
74 cis-1,3-Dichloropropene	75	8.685	8.685	0.000	96	320956	75.0	78.1	
75 4-Methyl-2-pentanone (MIBK	43	8.843	8.843	0.000	95	542662	150.0	159.2	
76 Toluene	91	9.019	9.019	0.000	99	1000479	75.0	75.5	
77 trans-1,3-Dichloropropene	75	9.269	9.269	0.000	93	278226	75.0	77.2	
78 Ethyl methacrylate	69	9.330	9.330	0.000	87	352819	75.0	81.1	
79 1,1,2-Trichloroethane	97	9.457	9.457	0.000	91	209928	75.0	76.0	
80 Tetrachloroethene	164	9.530	9.530	0.000	97	184171	75.0	72.9	
81 1,3-Dichloropropane	76	9.615	9.615	0.000	88	397870	75.0	78.0	
82 2-Hexanone	43	9.682	9.682	0.000	93	419354	150.0	160.4	
84 Chlorodibromomethane	129	9.834	9.834	0.000	91	181267	75.0	77.7	
85 Ethylene Dibromide	107	9.944	9.944	0.000	97	223815	75.0	79.0	
86 3-Chlorobenzotrifluoride	180	10.412	10.412	0.000	93	352260	75.0	77.1	
87 Chlorobenzene	112	10.437	10.437	0.000	94	660247	75.0	76.5	
88 4-Chlorobenzotrifluoride	180	10.498	10.498	0.000	96	327327	75.0	77.7	
89 1,1,1,2-Tetrachloroethane	131	10.528	10.528	0.000	92	212641	75.0	77.5	
90 Ethylbenzene	106	10.534	10.534	0.000	98	371119	75.0	77.1	
91 m-Xylene & p-Xylene	106	10.668	10.668	0.000	0	452043	75.0	76.8	
92 o-Xylene	106	11.051	11.051	0.000	95	440285	75.0	78.5	
93 Styrene	104	11.069	11.069	0.000	94	745860	75.0	78.6	
94 Bromoform	173	11.252	11.252	0.000	96	112077	75.0	77.3	
96 2-Chlorobenzotrifluoride	180	11.325	11.325	0.000	97	348911	75.0	79.8	
97 Isopropylbenzene	105	11.422	11.422	0.000	96	1080505	75.0	78.9	
100 Bromobenzene	156	11.739	11.739	0.000	95	261052	75.0	77.1	
99 1,1,2,2-Tetrachloroethane	83	11.745	11.745	0.000	95	316221	75.0	77.4	
102 trans-1,4-Dichloro-2-buten	53	11.775	11.775	0.000	82	83561	75.0	81.9	
101 1,2,3-Trichloropropane	110	11.793	11.793	0.000	85	109372	75.0	78.3	
103 N-Propylbenzene	120	11.842	11.842	0.000	98	291693	75.0	75.4	
104 2-Chlorotoluene	126	11.927	11.927	0.000	97	256066	75.0	76.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.994	11.994	0.000	97	289960	75.0	79.7	
106 1,3,5-Trimethylbenzene	105	12.031	12.031	0.000	94	866332	75.0	78.3	
107 4-Chlorotoluene	126	12.055	12.055	0.000	96	269544	75.0	74.7	
108 tert-Butylbenzene	119	12.347	12.347	0.000	93	721573	75.0	78.0	
110 1,2,4-Trimethylbenzene	105	12.408	12.408	0.000	97	884487	75.0	78.6	
111 1,2-dichloro-4-(trifluorom	214	12.456	12.456	0.000	97	219982	75.0	78.1	
112 sec-Butylbenzene	105	12.572	12.572	0.000	94	993968	75.0	77.0	
113 1,3-Dichlorobenzene	146	12.688	12.688	0.000	97	462404	75.0	76.5	
114 4-Isopropyltoluene	119	12.730	12.730	0.000	96	837492	75.0	77.9	
115 1,4-Dichlorobenzene	146	12.797	12.797	0.000	96	474362	75.0	76.4	
116 2,4-Dichloro-1-(triflourom	214	12.828	12.828	0.000	94	206368	75.0	78.6	
118 2,5-Dichlorobenzotrifluori	214	12.870	12.870	0.000	0	217211	75.0	76.6	
120 n-Butylbenzene	91	13.150	13.150	0.000	98	671190	75.0	76.5	
121 1,2-Dichlorobenzene	146	13.156	13.156	0.000	98	437966	75.0	76.0	
122 1,2-Dibromo-3-Chloropropan	75	13.971	13.971	0.000	83	47827	75.0	74.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.117	14.117	0.000	0	889724	225.0	243.4	
125 2,3- & 3,4- Dichlorotoluen	125	14.555	14.555	0.000	0	620870	150.0	164.2	
126 1,2,4-Trichlorobenzene	180	14.829	14.829	0.000	94	200638	75.0	76.1	
127 Hexachlorobutadiene	225	14.993	14.993	0.000	98	73984	75.0	76.7	
128 Naphthalene	128	15.103	15.103	0.000	97	733996	75.0	81.7	
129 1,2,3-Trichlorobenzene	180	15.346	15.346	0.000	96	184932	75.0	76.8	
131 2,4,5-Trichlorotoluene	159	16.198	16.198	0.000	0	91488	75.0	79.9	
130 2,3,6-Trichlorotoluene	159	16.307	16.307	0.000	98	89402	75.0	83.9	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		150.0	154.8	
S 133 Xylenes, Total	106				0		150.0	155.3	
S 135 1,3-Dichloropropene, Total	1				0		150.0	155.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260INT_00072	Amount Added:	2.00	Units: uL
VOA8260SURR_00071	Amount Added:	3.00	Units: uL
VOA8260VOAPRI_00263	Amount Added:	3.00	Units: uL
voaW2clev1stR_00013	Amount Added:	3.00	Units: uL
voaWAcro1stRe_00016	Amount Added:	7.00	Units: uL
voaWVA1stRest_00017	Amount Added:	3.00	Units: uL
voaWEEmix1stR_00009	Amount Added:	3.00	Units: uL
voaWKetmix1st_00004	Amount Added:	3.00	Units: uL

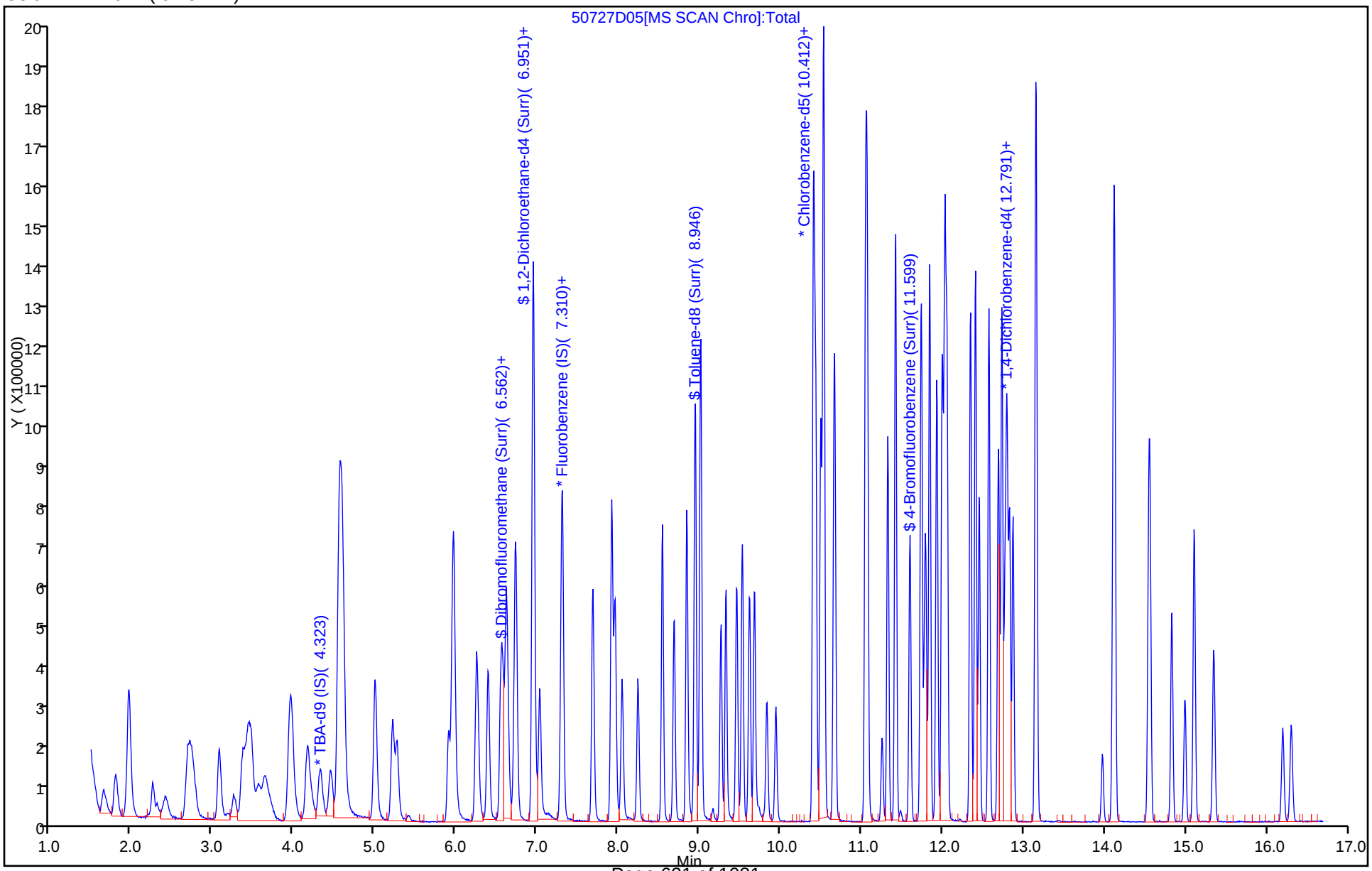
Report Date: 28-Jul-2017 01:04:56 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D05.D

Injection Date:	27-Jul-2017 02:02:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	IC VSTD15			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)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D06.D
Lims ID: IC VSTD20
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 27-Jul-2017 02:26:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0017756-006
Misc. Info.: IC VSTD20
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Jul-2017 01:04:58 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: bungardf Date: 27-Jul-2017 03:06:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.316	4.323	-0.007	0	252187	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.297	7.298	-0.001	98	520193	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.406	10.406	0.000	85	132635	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.772	12.773	-0.001	95	171832	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.573	6.574	-0.001	93	257355	100.0	102.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.944	6.945	-0.001	0	307676	100.0	100.8	
$ 7 Toluene-d8 (Surr)	98	8.945	8.946	-0.001	92	1040595	100.0	98.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.598	11.599	-0.001	87	390879	100.0	102.5	
11 Dichlorodifluoromethane	85	1.651	1.646	0.005	99	286388	100.0	94.7	
12 Chloromethane	50	1.797	1.804	-0.007	99	302276	100.0	99.4	
13 Vinyl chloride	62	1.949	1.944	0.005	98	291558	100.0	94.5	
14 Butadiene	39	1.962	1.969	-0.006	92	260580	100.0	93.0	
15 Bromomethane	94	2.260	2.254	0.006	90	161865	100.0	111.0	
16 Chloroethane	64	2.412	2.419	-0.007	99	172552	100.0	101.8	
17 Dichlorofluoromethane	67	2.710	2.699	0.011	97	436022	100.0	101.7	
18 Trichlorofluoromethane	101	2.734	2.741	-0.007	96	371684	100.0	98.1	
20 Ethyl ether	59	3.081	3.076	0.005	89	262150	100.0	106.3	
21 Acrolein	56	3.264	3.252	0.012	99	130923	200.0	210.7	
22 1,1-Dichloroethene	96	3.373	3.368	0.005	98	247279	100.0	97.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.446	3.441	0.005	93	263603	100.0	94.3	
24 Acetone	43	3.476	3.477	-0.001	100	316026	200.0	232.3	
25 Iodomethane	142	3.562	3.562	0.000	98	408622	100.0	102.2	
26 Carbon disulfide	76	3.647	3.648	-0.001	99	561008	100.0	100.4	
28 3-Chloro-1-propene	76	3.951	3.946	0.005	92	164305	100.0	99.8	
30 Methyl acetate	43	3.969	3.976	-0.007	97	558912	200.0	207.5	
31 Methylene Chloride	84	4.164	4.165	-0.001	93	323324	100.0	106.0	
32 2-Methyl-2-propanol	59	4.444	4.451	-0.007	94	283777	1000.0	951.5	
33 Acrylonitrile	53	4.553	4.554	-0.001	99	1387354	1000.0	1059.2	
34 trans-1,2-Dichloroethene	96	4.584	4.584	0.000	98	296608	100.0	102.2	
35 Methyl tert-butyl ether	73	4.602	4.603	-0.001	95	822838	100.0	105.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.003	4.998	0.005	92	337300	100.0	90.6	
37 1,1-Dichloroethane	63	5.210	5.217	-0.007	96	510811	100.0	101.2	
38 Vinyl acetate	43	5.265	5.272	-0.007	97	532250	100.0	103.7	
44 2,2-Dichloropropane	97	5.959	5.959	-0.001	57	65750	100.0	102.4	
45 cis-1,2-Dichloroethene	96	5.965	5.965	0.000	79	347303	100.0	104.6	
46 2-Butanone (MEK)	43	5.983	5.978	0.005	98	426755	200.0	220.4	
49 Chlorobromomethane	128	6.251	6.245	0.005	94	155416	100.0	105.4	
51 Tetrahydrofuran	42	6.263	6.263	0.000	86	224432	200.0	199.0	
52 Chloroform	83	6.390	6.391	-0.001	92	517765	100.0	102.8	
53 1,1,1-Trichloroethane	97	6.555	6.549	0.006	98	383868	100.0	100.7	
54 Cyclohexane	56	6.622	6.622	0.000	89	446560	100.0	94.9	
56 Carbon tetrachloride	117	6.725	6.726	-0.001	96	317033	100.0	99.9	
55 1,1-Dichloropropene	75	6.737	6.738	-0.001	98	408627	100.0	99.2	
58 Benzene	78	6.956	6.951	0.005	97	1307056	100.0	103.3	
57 Isobutyl alcohol	41	6.944	6.945	-0.001	91	290317	2500.0	2804.8	
59 1,2-Dichloroethane	62	7.029	7.030	-0.001	97	385206	100.0	104.5	
62 n-Heptane	43	7.315	7.316	-0.001	89	279216	100.0	93.8	
64 Trichloroethene	130	7.686	7.687	-0.001	98	329499	100.0	103.5	
66 Methylcyclohexane	83	7.917	7.918	-0.001	87	467268	100.0	97.1	
67 1,2-Dichloropropane	63	7.960	7.961	-0.001	96	309491	100.0	105.1	
68 Dibromomethane	93	8.051	8.046	0.005	96	184529	100.0	106.9	
70 1,4-Dioxane	88	8.045	8.052	-0.007	39	65688	2000.0	2193.3	
71 Dichlorobromomethane	83	8.240	8.241	-0.001	99	366097	100.0	108.1	
73 2-Chloroethyl vinyl ether	63	8.544	8.545	-0.001	92	467677	200.0	220.7	
74 cis-1,3-Dichloropropene	75	8.684	8.685	-0.001	96	447138	100.0	108.7	
75 4-Methyl-2-pentanone (MIBK	43	8.842	8.843	-0.001	95	738839	200.0	217.2	
76 Toluene	91	9.018	9.019	-0.001	99	1332783	100.0	100.8	
77 trans-1,3-Dichloropropene	75	9.268	9.269	-0.001	92	396221	100.0	110.1	
78 Ethyl methacrylate	69	9.329	9.330	-0.001	87	483364	100.0	111.4	
79 1,1,2-Trichloroethane	97	9.456	9.457	-0.001	90	283688	100.0	103.0	
80 Tetrachloroethene	164	9.529	9.530	-0.001	97	244346	100.0	96.9	
81 1,3-Dichloropropane	76	9.615	9.615	0.000	89	518120	100.0	101.7	
82 2-Hexanone	43	9.676	9.682	-0.006	94	581383	200.0	222.8	
84 Chlorodibromomethane	129	9.834	9.834	0.000	90	254603	100.0	109.3	
85 Ethylene Dibromide	107	9.943	9.944	-0.001	99	294438	100.0	104.2	
86 3-Chlorobenzotrifluoride	180	10.412	10.412	0.000	94	461082	100.0	101.2	
87 Chlorobenzene	112	10.436	10.437	-0.001	95	877804	100.0	102.0	
88 4-Chlorobenzotrifluoride	180	10.497	10.498	-0.001	96	420704	100.0	100.0	
90 Ethylbenzene	106	10.533	10.534	-0.001	98	499116	100.0	103.8	
89 1,1,1,2-Tetrachloroethane	131	10.527	10.528	-0.001	92	289044	100.0	105.6	
91 m-Xylene & p-Xylene	106	10.667	10.668	-0.001	0	610286	100.0	103.9	
92 o-Xylene	106	11.050	11.051	-0.001	95	592117	100.0	105.8	
93 Styrene	104	11.075	11.069	0.006	94	1002147	100.0	105.8	
94 Bromoform	173	11.251	11.252	-0.001	97	157509	100.0	108.8	
96 2-Chlorobenzotrifluoride	180	11.324	11.325	-0.001	97	454842	100.0	104.3	
97 Isopropylbenzene	105	11.421	11.422	-0.001	96	1415676	100.0	103.6	
99 1,1,2,2-Tetrachloroethane	83	11.738	11.745	-0.007	95	412534	100.0	101.1	
100 Bromobenzene	156	11.738	11.739	-0.001	95	348475	100.0	104.5	
102 trans-1,4-Dichloro-2-buten	53	11.774	11.775	-0.001	82	104361	100.0	103.8	
101 1,2,3-Trichloropropane	110	11.793	11.793	0.000	85	144469	100.0	105.0	
103 N-Propylbenzene	120	11.841	11.842	-0.001	98	387234	100.0	101.6	
104 2-Chlorotoluene	126	11.926	11.927	-0.001	97	344800	100.0	104.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.999	11.994	0.005	96	381649	100.0	106.5	
106 1,3,5-Trimethylbenzene	105	12.030	12.031	-0.001	94	1140888	100.0	104.6	
107 4-Chlorotoluene	126	12.054	12.055	-0.001	96	369832	100.0	104.0	
108 tert-Butylbenzene	119	12.346	12.347	-0.001	93	931884	100.0	102.2	
110 1,2,4-Trimethylbenzene	105	12.407	12.408	-0.001	97	1156912	100.0	104.4	
111 1,2-dichloro-4-(trifluorom	214	12.456	12.456	0.000	97	277157	100.0	99.8	
112 sec-Butylbenzene	105	12.571	12.572	-0.001	94	1298722	100.0	102.1	
113 1,3-Dichlorobenzene	146	12.687	12.688	-0.001	97	613101	100.0	102.9	
114 4-Isopropyltoluene	119	12.729	12.730	-0.001	96	1086140	100.0	102.5	
115 1,4-Dichlorobenzene	146	12.796	12.797	-0.001	94	622850	100.0	101.8	
116 2,4-Dichloro-1-(triflourom	214	12.827	12.828	-0.001	96	267418	100.0	103.4	
118 2,5-Dichlorobenzotrifluori	214	12.869	12.870	-0.001	0	279514	100.0	100.1	
120 n-Butylbenzene	91	13.149	13.150	-0.001	97	885288	100.0	102.4	
121 1,2-Dichlorobenzene	146	13.155	13.156	-0.001	97	577962	100.0	101.8	
122 1,2-Dibromo-3-Chloropropan	75	13.970	13.971	-0.001	85	68470	100.0	108.6	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.116	14.117	-0.001	0	1151252	300.0	319.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.548	14.555	-0.007	0	814032	200.0	218.5	
126 1,2,4-Trichlorobenzene	180	14.828	14.829	-0.001	95	266863	100.0	102.7	
127 Hexachlorobutadiene	225	14.992	14.993	-0.001	97	94134	100.0	99.0	
128 Naphthalene	128	15.102	15.103	-0.001	97	990398	100.0	111.9	
129 1,2,3-Trichlorobenzene	180	15.345	15.346	-0.001	97	247660	100.0	104.3	
131 2,4,5-Trichlorotoluene	159	16.197	16.198	-0.001	0	122498	100.0	108.5	
130 2,3,6-Trichlorotoluene	159	16.306	16.307	-0.001	96	115009	100.0	109.5	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		200.0	209.7	
S 134 1,2-Dichloroethene, Total	96				0		200.0	206.9	
S 135 1,3-Dichloropropene, Total	1				0		200.0	218.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260INT_00072	Amount Added:	2.00	Units: uL
VOA8260SURR_00071	Amount Added:	4.00	Units: uL
VOA8260VOAPRI_00263	Amount Added:	4.00	Units: uL
voaW2clev1stR_00013	Amount Added:	4.00	Units: uL
voaWAcro1stRe_00016	Amount Added:	8.00	Units: uL
voaWVA1stRest_00017	Amount Added:	4.00	Units: uL
voaWEEmix1stR_00009	Amount Added:	4.00	Units: uL
voaWKetmix1st_00004	Amount Added:	4.00	Units: uL

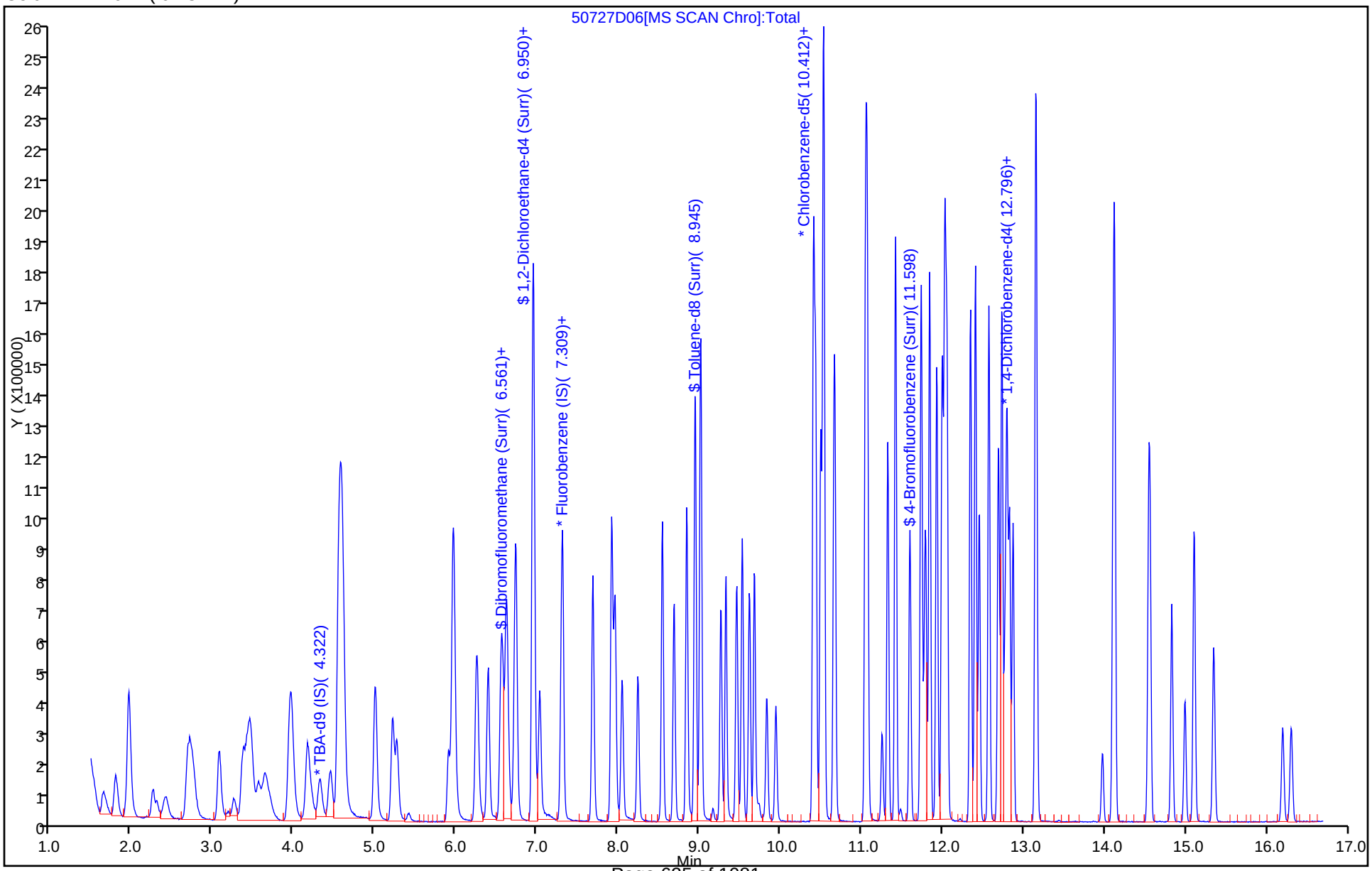
Report Date: 28-Jul-2017 01:04:59 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D06.D

Injection Date:	27-Jul-2017 02:26:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	IC VSTD20			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\20170726-17756.b\50727D08.D
Lims ID: IC VSTD40
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 27-Jul-2017 03:13:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0017756-008
Misc. Info.: IC VSTD40
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Jul-2017 01:05:02 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: bungardf Date: 27-Jul-2017 03:34:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.337	4.323	0.013	0	252542	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.299	7.298	0.001	99	561296	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.408	10.406	0.002	56	150914	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.773	-0.005	90	189484	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.575	6.574	0.001	94	522323	200.0	193.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.946	6.945	0.001	0	628942	200.0	190.9	
$ 7 Toluene-d8 (Surr)	98	8.948	8.946	0.002	92	2000995	200.0	166.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.594	11.599	-0.005	92	793129	200.0	182.8	
11 Dichlorodifluoromethane	85	1.654	1.646	0.008	99	569791	200.0	174.6	
12 Chloromethane	50	1.812	1.804	0.008	99	580608	200.0	177.0	
13 Vinyl chloride	62	1.958	1.944	0.014	97	577090	200.0	173.4	
14 Butadiene	39	1.970	1.969	0.002	94	512032	200.0	169.3	
15 Bromomethane	94	2.268	2.254	0.014	91	289712	200.0	184.1	
16 Chloroethane	64	2.426	2.419	0.007	99	322589	200.0	176.3	
17 Dichlorofluoromethane	67	2.706	2.699	0.007	97	819020	200.0	177.0	
18 Trichlorofluoromethane	101	2.761	2.741	0.020	97	710415	200.0	173.7	
20 Ethyl ether	59	3.077	3.076	0.001	88	510033	200.0	191.7	
21 Acrolein	56	3.260	3.252	0.008	100	179414	250.0	267.6	
22 1,1-Dichloroethene	96	3.369	3.368	0.001	96	489503	200.0	178.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.442	3.441	0.001	93	534815	200.0	177.3	
24 Acetone	43	3.485	3.477	0.008	100	522287	400.0	355.8	
25 Iodomethane	142	3.576	3.562	0.014	98	834240	200.0	193.3	
26 Carbon disulfide	76	3.649	3.648	0.001	99	1211678	200.0	200.9	
28 3-Chloro-1-propene	76	3.947	3.946	0.001	92	366340	200.0	206.3	
30 Methyl acetate	43	3.978	3.976	0.002	97	1173609	400.0	403.7	
31 Methylene Chloride	84	4.166	4.165	0.001	88	653341	200.0	201.5	
32 2-Methyl-2-propanol	59	4.464	4.451	0.013	93	519054	2000.0	1737.9	
33 Acrylonitrile	53	4.562	4.554	0.008	99	2794353	2000.0	1977.2	
34 trans-1,2-Dichloroethene	96	4.580	4.584	-0.004	97	571864	200.0	182.6	
35 Methyl tert-butyl ether	73	4.604	4.603	0.001	95	1751345	200.0	208.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.000	4.998	0.002	92	708650	200.0	176.3	
37 1,1-Dichloroethane	63	5.219	5.217	0.002	96	1041269	200.0	191.3	
38 Vinyl acetate	43	5.273	5.272	0.001	97	1200052	200.0	216.8	
44 2,2-Dichloropropane	97	5.961	5.959	0.002	88	125406	200.0	180.9	
45 cis-1,2-Dichloroethene	96	5.967	5.965	0.002	80	687049	200.0	191.8	
46 2-Butanone (MEK)	43	5.979	5.978	0.001	98	795793	400.0	380.9	
49 Chlorobromomethane	128	6.247	6.245	0.002	94	313977	200.0	197.3	
51 Tetrahydrofuran	42	6.265	6.263	0.002	86	488432	400.0	401.4	
52 Chloroform	83	6.393	6.391	0.002	93	1037446	200.0	190.8	
53 1,1,1-Trichloroethane	97	6.551	6.549	0.002	98	777880	200.0	189.0	
54 Cyclohexane	56	6.618	6.622	-0.004	90	922281	200.0	181.6	
56 Carbon tetrachloride	117	6.721	6.726	-0.005	97	646700	200.0	188.8	
55 1,1-Dichloropropene	75	6.739	6.738	0.001	97	825970	200.0	185.8	
57 Isobutyl alcohol	41	6.946	6.945	0.001	51	587752	5000.0	5262.5	
58 Benzene	78	6.952	6.951	0.001	97	2487856	200.0	182.3	
59 1,2-Dichloroethane	62	7.031	7.030	0.001	97	767974	200.0	193.0	
62 n-Heptane	43	7.311	7.316	-0.005	87	573064	200.0	178.3	
64 Trichloroethene	130	7.682	7.687	-0.005	98	647404	200.0	188.5	
66 Methylcyclohexane	83	7.920	7.918	0.002	87	950167	200.0	183.0	
67 1,2-Dichloropropane	63	7.962	7.961	0.001	96	624637	200.0	196.5	
68 Dibromomethane	93	8.047	8.046	0.001	95	374289	200.0	201.0	
70 1,4-Dioxane	88	8.041	8.052	-0.011	39	135844	4000.0	4203.6	
71 Dichlorobromomethane	83	8.242	8.241	0.001	99	752352	200.0	205.8	
73 2-Chloroethyl vinyl ether	63	8.546	8.545	0.001	93	977190	400.0	427.3	
74 cis-1,3-Dichloropropene	75	8.686	8.685	0.001	96	933591	200.0	210.3	
75 4-Methyl-2-pentanone (MIBK	43	8.844	8.843	0.001	95	1476808	400.0	381.5	
76 Toluene	91	9.015	9.019	-0.004	98	2540251	200.0	168.8	
77 trans-1,3-Dichloropropene	75	9.264	9.269	-0.005	92	850338	200.0	207.7	
78 Ethyl methacrylate	69	9.325	9.330	-0.005	88	1001550	200.0	202.8	
79 1,1,2-Trichloroethane	97	9.459	9.457	0.002	91	569083	200.0	181.5	
80 Tetrachloroethene	164	9.532	9.530	0.002	97	486427	200.0	169.5	
81 1,3-Dichloropropane	76	9.617	9.615	0.002	89	1058308	200.0	182.6	
82 2-Hexanone	43	9.678	9.682	-0.004	93	1109580	400.0	373.7	
84 Chlorodibromomethane	129	9.830	9.834	-0.004	89	540065	200.0	203.8	
85 Ethylene Dibromide	107	9.945	9.944	0.001	98	607203	200.0	188.9	
86 3-Chlorobenzotrifluoride	180	10.408	10.412	-0.004	93	869071	200.0	167.6	
87 Chlorobenzene	112	10.432	10.437	-0.005	93	1704167	200.0	174.0	
88 4-Chlorobenzotrifluoride	180	10.499	10.498	0.001	96	810848	200.0	169.4	
89 1,1,1,2-Tetrachloroethane	131	10.529	10.528	0.001	94	590452	200.0	189.5	
90 Ethylbenzene	106	10.536	10.534	0.002	98	972676	200.0	177.9	
91 m-Xylene & p-Xylene	106	10.669	10.668	0.001	0	1217768	200.0	182.2	
92 o-Xylene	106	11.053	11.051	0.002	95	1159372	200.0	182.1	
93 Styrene	104	11.071	11.069	0.002	94	1967591	200.0	182.6	
94 Bromoform	173	11.253	11.252	0.001	96	350923	200.0	213.1	
96 2-Chlorobenzotrifluoride	180	11.326	11.325	0.001	96	875687	200.0	176.5	
97 Isopropylbenzene	105	11.418	11.422	-0.004	96	2665903	200.0	171.5	
100 Bromobenzene	156	11.734	11.739	-0.005	95	711710	200.0	193.5	
99 1,1,2,2-Tetrachloroethane	83	11.740	11.745	-0.005	93	870164	200.0	187.5	
102 trans-1,4-Dichloro-2-buten	53	11.777	11.775	0.002	85	225821	200.0	203.6	
101 1,2,3-Trichloropropane	110	11.795	11.793	0.002	85	299299	200.0	197.2	
103 N-Propylbenzene	120	11.844	11.842	0.002	97	774184	200.0	184.2	
104 2-Chlorotoluene	126	11.929	11.927	0.002	97	700158	200.0	192.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.996	11.994	0.002	96	742625	200.0	187.9	
106 1,3,5-Trimethylbenzene	105	12.026	12.031	-0.005	94	2188229	200.0	182.0	
107 4-Chlorotoluene	126	12.056	12.055	0.001	95	738280	200.0	188.2	
108 tert-Butylbenzene	119	12.342	12.347	-0.005	93	1809964	200.0	180.0	
110 1,2,4-Trimethylbenzene	105	12.403	12.408	-0.005	97	2260604	200.0	184.9	
111 1,2-dichloro-4-(trifluorom	214	12.452	12.456	-0.004	97	542681	200.0	177.2	
112 sec-Butylbenzene	105	12.574	12.572	0.002	95	2474312	200.0	176.4	
113 1,3-Dichlorobenzene	146	12.689	12.688	0.001	97	1215884	200.0	185.0	
114 4-Isopropyltoluene	119	12.732	12.730	0.002	96	2107989	200.0	180.4	
115 1,4-Dichlorobenzene	146	12.799	12.797	0.002	95	1249173	200.0	185.1	
116 2,4-Dichloro-1-(triflourom	214	12.829	12.828	0.001	95	497225	200.0	174.4	
118 2,5-Dichlorobenzotrifluori	214	12.872	12.870	0.002	0	580659	200.0	188.5	
120 n-Butylbenzene	91	13.151	13.150	0.001	96	1729209	200.0	181.5	
121 1,2-Dichlorobenzene	146	13.158	13.156	0.002	97	1161072	200.0	185.4	
122 1,2-Dibromo-3-Chloropropan	75	13.973	13.971	0.002	85	151695	200.0	218.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.119	14.117	0.002	0	2228710	600.0	561.0	
125 2,3- & 3,4- Dichlorotoluen	125	14.551	14.555	-0.004	0	1589536	400.0	386.9	
126 1,2,4-Trichlorobenzene	180	14.830	14.829	0.001	94	552245	200.0	192.7	
127 Hexachlorobutadiene	225	14.995	14.993	0.002	98	180140	200.0	171.8	
128 Naphthalene	128	15.104	15.103	0.001	97	2008065	200.0	205.7	
129 1,2,3-Trichlorobenzene	180	15.348	15.346	0.002	96	497473	200.0	190.0	
131 2,4,5-Trichlorotoluene	159	16.199	16.198	0.001	0	253594	200.0	203.8	
130 2,3,6-Trichlorotoluene	159	16.303	16.307	-0.004	97	237299	200.0	205.0	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		400.0	374.5	
S 133 Xylenes, Total	106				0		400.0	364.3	
S 135 1,3-Dichloropropene, Total	1				0		400.0	418.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260INT_00072	Amount Added:	2.00	Units: uL
VOA8260SURR_00071	Amount Added:	8.00	Units: uL
VOA8260VOAPRI_00263	Amount Added:	8.00	Units: uL
voaW2clev1stR_00013	Amount Added:	8.00	Units: uL
voaWAcro1stRe_00016	Amount Added:	10.00	Units: uL
voaWVA1stRest_00017	Amount Added:	8.00	Units: uL
voaWEEmix1stR_00009	Amount Added:	8.00	Units: uL
voaWKetmix1st_00004	Amount Added:	8.00	Units: uL

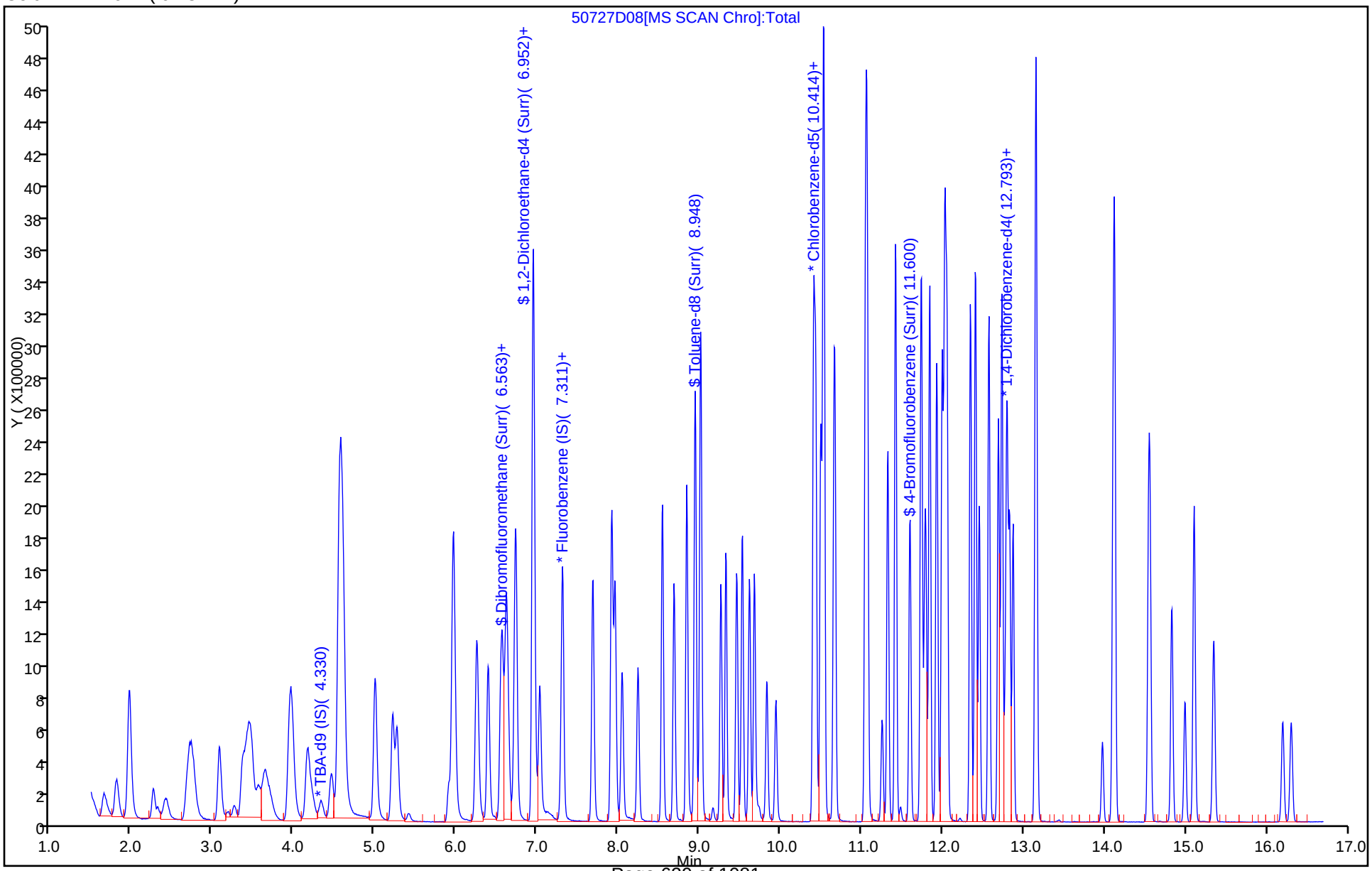
Report Date: 28-Jul-2017 01:05:03 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D08.D

Injection Date:	27-Jul-2017 03:13:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	IC VSTD40			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\20170726-17756.b\50727D10.D
Lims ID: IC VSTD35
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 27-Jul-2017 04:00:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0017756-010
Misc. Info.: IC VSTD35
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Jul-2017 01:05:06 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: bungardf Date: 27-Jul-2017 04:42:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.328	4.323	0.005	0	232894	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.296	7.298	-0.002	94	610088	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.405	10.406	-0.001	86	155120	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.771	12.773	-0.002	90	193547	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.572	6.574	-0.002	94	505019	175.0	172.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.943	6.945	-0.002	0	575099	175.0	160.6	
$ 7 Toluene-d8 (Surr)	98	8.951	8.946	0.005	92	1992609	175.0	161.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.597	11.599	-0.002	87	748217	175.0	167.8	
11 Dichlorodifluoromethane	85	1.651	1.646	0.005	99	647803	175.0	182.6	
12 Chloromethane	50	1.809	1.804	0.005	99	595751	175.0	167.1	
13 Vinyl chloride	62	1.961	1.944	0.017	98	632153	175.0	174.7	
14 Butadiene	39	1.967	1.969	-0.001	93	579584	175.0	176.3	
15 Bromomethane	94	2.265	2.254	0.011	91	285707	175.0	167.0	
16 Chloroethane	64	2.417	2.419	-0.002	99	340168	175.0	171.1	
17 Dichlorofluoromethane	67	2.703	2.699	0.004	97	845136	175.0	168.0	
18 Trichlorofluoromethane	101	2.746	2.741	0.005	96	769762	175.0	173.1	
20 Ethyl ether	59	3.074	3.076	-0.002	88	475422	175.0	164.4	
21 Acrolein	56	3.269	3.252	0.017	99	154738	225.0	212.3	
22 1,1-Dichloroethene	96	3.372	3.368	0.004	96	540044	175.0	180.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.452	3.441	0.011	92	571742	175.0	174.4	
24 Acetone	43	3.482	3.477	0.005	99	447756	350.0	280.6	
25 Iodomethane	142	3.561	3.562	-0.001	96	811997	175.0	173.1	
26 Carbon disulfide	76	3.646	3.648	-0.002	99	1310811	175.0	200.0	
28 3-Chloro-1-propene	76	3.944	3.946	-0.002	93	365237	175.0	189.2	
30 Methyl acetate	43	3.975	3.976	-0.001	97	1009713	350.0	319.6	
31 Methylene Chloride	84	4.163	4.165	-0.002	89	602402	175.0	170.4	
32 2-Methyl-2-propanol	59	4.455	4.451	0.004	93	524619	1750.0	1904.7	
33 Acrylonitrile	53	4.553	4.554	-0.001	99	2362587	1750.0	1538.0	
34 trans-1,2-Dichloroethene	96	4.577	4.584	-0.007	98	595572	175.0	175.0	
35 Methyl tert-butyl ether	73	4.601	4.603	-0.002	96	1597553	175.0	175.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.997	4.998	-0.001	91	760411	175.0	174.1	
37 1,1-Dichloroethane	63	5.216	5.217	-0.001	96	1024340	175.0	173.1	
38 Vinyl acetate	43	5.270	5.272	-0.002	97	1068205	175.0	177.5	
44 2,2-Dichloropropane	97	5.958	5.959	-0.001	91	136605	175.0	181.3	
45 cis-1,2-Dichloroethene	96	5.964	5.965	-0.001	79	671208	175.0	172.4	
46 2-Butanone (MEK)	43	5.982	5.978	0.004	100	686266	350.0	302.2	
49 Chlorobromomethane	128	6.250	6.245	0.005	95	291754	175.0	168.6	
51 Tetrahydrofuran	42	6.262	6.263	-0.001	87	396477	350.0	299.8	
52 Chloroform	83	6.396	6.391	0.005	92	989929	175.0	167.5	
53 1,1,1-Trichloroethane	97	6.554	6.549	0.005	98	811476	175.0	181.4	
54 Cyclohexane	56	6.621	6.622	-0.001	90	1012965	175.0	183.5	
56 Carbon tetrachloride	117	6.718	6.726	-0.008	97	682784	175.0	183.4	
55 1,1-Dichloropropene	75	6.737	6.738	-0.001	97	866715	175.0	179.4	
57 Isobutyl alcohol	41	6.950	6.945	0.005	91	452876	4375.0	3730.6	
58 Benzene	78	6.956	6.951	0.005	97	2459963	175.0	165.8	
59 1,2-Dichloroethane	62	7.029	7.030	-0.001	97	708898	175.0	163.9	
62 n-Heptane	43	7.315	7.316	-0.001	88	633483	175.0	181.4	
64 Trichloroethene	130	7.686	7.687	-0.001	98	648262	175.0	173.7	
66 Methylcyclohexane	83	7.917	7.918	-0.001	87	1041060	175.0	184.4	
67 1,2-Dichloropropane	63	7.959	7.961	-0.002	95	596512	175.0	172.7	
68 Dibromomethane	93	8.045	8.046	-0.001	96	342853	175.0	169.4	
70 1,4-Dioxane	88	8.045	8.052	-0.007	39	115916	3500.0	3300.1	
71 Dichlorobromomethane	83	8.239	8.241	-0.002	100	712434	175.0	179.3	
73 2-Chloroethyl vinyl ether	63	8.543	8.545	-0.002	92	864836	350.0	347.9	
74 cis-1,3-Dichloropropene	75	8.689	8.685	0.004	96	881560	175.0	182.7	
75 4-Methyl-2-pentanone (MIBK	43	8.841	8.843	-0.002	95	1265241	350.0	318.0	
76 Toluene	91	9.018	9.019	-0.001	98	2496911	175.0	161.4	
77 trans-1,3-Dichloropropene	75	9.267	9.269	-0.002	93	781619	175.0	185.7	
78 Ethyl methacrylate	69	9.328	9.330	-0.002	88	905216	175.0	178.4	
79 1,1,2-Trichloroethane	97	9.462	9.457	0.005	90	523017	175.0	162.3	
80 Tetrachloroethene	164	9.529	9.530	-0.001	97	498519	175.0	169.0	
81 1,3-Dichloropropane	76	9.620	9.615	0.005	89	969241	175.0	162.7	
82 2-Hexanone	43	9.681	9.682	-0.001	94	977068	350.0	320.2	
84 Chlorodibromomethane	129	9.833	9.834	-0.001	90	489506	175.0	179.7	
85 Ethylene Dibromide	107	9.943	9.944	-0.001	99	550826	175.0	166.7	
86 3-Chlorobenzotrifluoride	180	10.411	10.412	-0.001	93	874266	175.0	164.0	
87 Chlorobenzene	112	10.435	10.437	-0.002	94	1645967	175.0	163.5	
88 4-Chlorobenzotrifluoride	180	10.496	10.498	-0.002	95	826850	175.0	168.1	
89 1,1,1,2-Tetrachloroethane	131	10.527	10.528	-0.001	93	554351	175.0	173.1	
90 Ethylbenzene	106	10.533	10.534	-0.001	97	962208	175.0	171.2	
91 m-Xylene & p-Xylene	106	10.667	10.668	-0.001	0	1197380	175.0	174.3	
92 o-Xylene	106	11.050	11.051	-0.001	95	1130677	175.0	172.8	
93 Styrene	104	11.068	11.069	-0.001	94	1866053	175.0	168.4	
94 Bromoform	173	11.257	11.252	0.005	97	310948	175.0	183.7	
96 2-Chlorobenzotrifluoride	180	11.324	11.325	-0.001	96	840920	175.0	164.9	
97 Isopropylbenzene	105	11.421	11.422	-0.001	96	2681266	175.0	167.8	
100 Bromobenzene	156	11.737	11.739	-0.002	95	659984	175.0	175.7	
99 1,1,2,2-Tetrachloroethane	83	11.737	11.745	-0.008	94	762601	175.0	159.9	
102 trans-1,4-Dichloro-2-buten	53	11.774	11.775	-0.001	86	199800	175.0	176.4	
101 1,2,3-Trichloropropane	110	11.792	11.793	-0.001	85	255265	175.0	164.7	
103 N-Propylbenzene	120	11.841	11.842	-0.001	97	786064	175.0	183.1	
104 2-Chlorotoluene	126	11.926	11.927	-0.001	97	666236	175.0	179.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.993	11.994	-0.001	96	680717	175.0	168.7	
106 1,3,5-Trimethylbenzene	105	12.029	12.031	-0.002	94	2153457	175.0	175.3	
107 4-Chlorotoluene	126	12.054	12.055	-0.001	95	719035	175.0	179.5	
108 tert-Butylbenzene	119	12.346	12.347	-0.001	93	1844417	175.0	179.6	
110 1,2,4-Trimethylbenzene	105	12.406	12.408	-0.002	97	2182090	175.0	174.8	
111 1,2-dichloro-4-(trifluorom	214	12.455	12.456	-0.001	97	525922	175.0	168.1	
112 sec-Butylbenzene	105	12.571	12.572	-0.001	94	2514051	175.0	175.5	
113 1,3-Dichlorobenzene	146	12.692	12.688	0.004	96	1146674	175.0	170.8	
114 4-Isopropyltoluene	119	12.729	12.730	-0.001	96	2114911	175.0	177.2	
115 1,4-Dichlorobenzene	146	12.796	12.797	-0.001	95	1174377	175.0	170.4	
116 2,4-Dichloro-1-(triflourom	214	12.826	12.828	-0.002	96	501975	175.0	172.4	
118 2,5-Dichlorobenzotrifluori	214	12.875	12.870	0.005	0	541324	175.0	172.1	
120 n-Butylbenzene	91	13.149	13.150	-0.001	96	1748217	175.0	179.6	
121 1,2-Dichlorobenzene	146	13.161	13.156	0.005	97	1081541	175.0	169.1	
122 1,2-Dibromo-3-Chloropropan	75	13.970	13.971	-0.001	86	125814	175.0	177.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.116	14.117	-0.001	0	2069215	525.0	509.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.548	14.555	-0.007	0	1443949	350.0	344.1	
126 1,2,4-Trichlorobenzene	180	14.828	14.829	-0.001	95	511830	175.0	174.8	
127 Hexachlorobutadiene	225	14.992	14.993	-0.001	98	182711	175.0	170.6	
128 Naphthalene	128	15.101	15.103	-0.002	97	1761559	175.0	176.7	
129 1,2,3-Trichlorobenzene	180	15.345	15.346	-0.001	96	453926	175.0	169.7	
131 2,4,5-Trichlorotoluene	159	16.196	16.198	-0.002	0	235417	175.0	185.2	
130 2,3,6-Trichlorotoluene	159	16.306	16.307	-0.001	97	211883	175.0	179.2	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		350.0	347.1	
S 134 1,2-Dichloroethene, Total	96				0		350.0	347.4	
S 135 1,3-Dichloropropene, Total	1				0		350.0	368.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260INT_00072	Amount Added:	2.00	Units: uL
VOA8260VOAPRI_00263	Amount Added:	7.00	Units: uL
voaWAcro1stRe_00016	Amount Added:	9.00	Units: uL
voaWVA1stRest_00017	Amount Added:	7.00	Units: uL
voaWEEmix1stR_00009	Amount Added:	7.00	Units: uL
voaW2clev1stR_00013	Amount Added:	7.00	Units: uL
voaWKetmix1st_00004	Amount Added:	7.00	Units: uL
VOA8260SURR_00071	Amount Added:	7.00	Units: uL

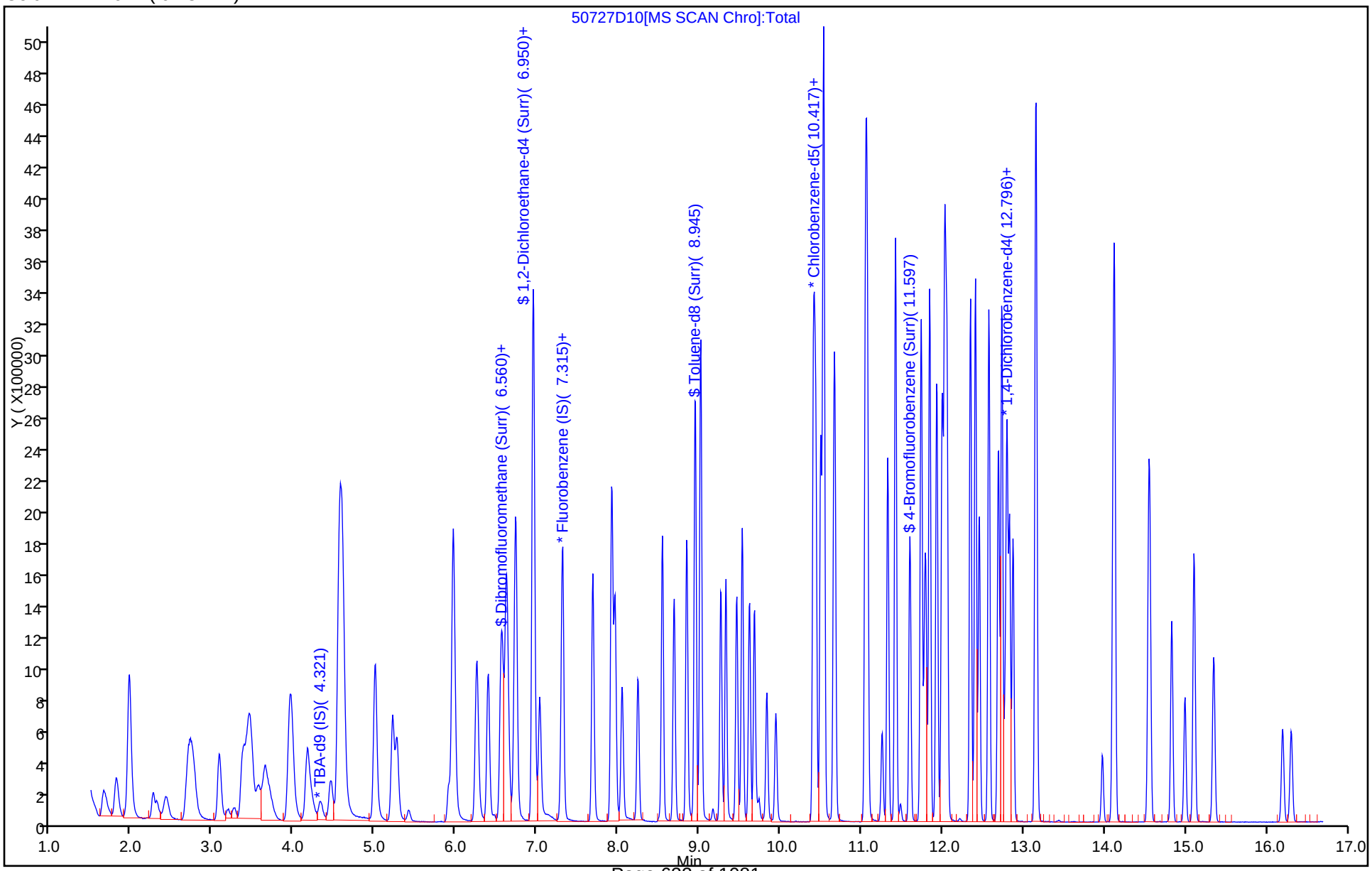
Report Date: 28-Jul-2017 01:05:07 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D10.D

Injection Date:	27-Jul-2017 04:00:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	IC VSTD35			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D
Lims ID: IC VSTD50
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 27-Jul-2017 04:24:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0017756-011
Misc. Info.: IC VSTD50
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 28-Jul-2017 01:05:08 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: bungardf Date: 27-Jul-2017 05:09:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.341	4.323	0.018	0	184114	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.297	7.298	-0.001	99	607808	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.406	10.406	0.000	85	161595	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.772	12.773	-0.001	89	194624	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.573	6.574	-0.001	94	681339	250.0	233.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.944	6.945	-0.001	0	795993	250.0	223.2	
$ 7 Toluene-d8 (Surr)	98	8.946	8.946	0.000	92	2678162	250.0	208.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.598	11.599	-0.001	87	1033645	250.0	222.5	
11 Dichlorodifluoromethane	85	1.652	1.646	0.006	99	857078	250.0	242.5	
12 Chloromethane	50	1.804	1.804	0.000	99	811941	250.0	228.6	
13 Vinyl chloride	62	1.956	1.944	0.012	98	867536	250.0	240.7	
14 Butadiene	39	1.968	1.969	0.000	94	815610	250.0	249.1	
15 Bromomethane	94	2.266	2.254	0.012	90	377950	250.0	221.8	
16 Chloroethane	64	2.406	2.419	-0.013	99	414342	250.0	209.1	
17 Dichlorofluoromethane	67	2.698	2.699	-0.001	97	1057272	250.0	211.0	
18 Trichlorofluoromethane	101	2.728	2.741	-0.013	97	1017488	250.0	229.7	
20 Ethyl ether	59	3.069	3.076	-0.007	88	612640	250.0	212.6	
21 Acrolein	56	3.264	3.252	0.012	98	183852	275.0	253.2	
22 1,1-Dichloroethene	96	3.367	3.368	-0.001	97	745282	250.0	250.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.428	3.441	-0.013	92	774058	250.0	237.0	
24 Acetone	43	3.483	3.477	0.006	100	630881	500.0	396.9	
25 Iodomethane	142	3.580	3.562	0.018	97	1099819	250.0	235.3	
26 Carbon disulfide	76	3.647	3.648	-0.001	99	1856339	250.0	284.2	
28 3-Chloro-1-propene	76	3.939	3.946	-0.007	93	500032	250.0	260.0	
30 Methyl acetate	43	3.976	3.976	0.000	97	1447736	500.0	459.9	
31 Methylene Chloride	84	4.164	4.165	-0.001	88	813282	250.0	232.1	
32 2-Methyl-2-propanol	59	4.468	4.451	0.017	94	568135	2500.0	2609.2	
33 Acrylonitrile	53	4.553	4.554	-0.001	98	3495451	2500.0	2284.0	
34 trans-1,2-Dichloroethene	96	4.578	4.584	-0.006	98	806194	250.0	237.8	
35 Methyl tert-butyl ether	73	4.602	4.603	-0.001	96	2170401	250.0	238.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.991	4.998	-0.007	92	1101558	250.0	253.1	
37 1,1-Dichloroethane	63	5.210	5.217	-0.007	96	1376176	250.0	233.4	
38 Vinyl acetate	43	5.271	5.272	-0.001	97	1523056	250.0	254.0	
44 2,2-Dichloropropane	97	5.959	5.959	0.000	91	188250	250.0	250.8	
45 cis-1,2-Dichloroethene	96	5.959	5.965	-0.006	79	900432	250.0	232.2	
46 2-Butanone (MEK)	43	5.983	5.978	0.005	98	962704	500.0	425.5	
49 Chlorobromomethane	128	6.245	6.245	0.000	94	394763	250.0	229.0	
51 Tetrahydrofuran	42	6.263	6.263	0.000	87	609910	500.0	462.9	
52 Chloroform	83	6.391	6.391	0.000	92	1319564	250.0	224.1	
53 1,1,1-Trichloroethane	97	6.549	6.549	0.000	98	1097196	250.0	246.2	
54 Cyclohexane	56	6.616	6.622	-0.006	90	1394833	250.0	253.7	
56 Carbon tetrachloride	117	6.719	6.726	-0.007	97	923177	250.0	248.9	
55 1,1-Dichloropropene	75	6.737	6.738	-0.001	96	1178056	250.0	244.7	
57 Isobutyl alcohol	41	6.950	6.945	0.005	68	715201	6250.0	5913.6	
58 Benzene	78	6.950	6.951	-0.001	97	3249284	250.0	219.9	
59 1,2-Dichloroethane	62	7.029	7.030	-0.001	97	969148	250.0	225.0	
62 n-Heptane	43	7.309	7.316	-0.007	89	922592	250.0	265.1	
64 Trichloroethene	130	7.686	7.687	-0.001	98	887332	250.0	238.6	
66 Methylcyclohexane	83	7.918	7.918	0.000	87	1432791	250.0	254.8	
67 1,2-Dichloropropane	63	7.960	7.961	-0.001	95	793667	250.0	230.6	
68 Dibromomethane	93	8.045	8.046	-0.001	97	470836	250.0	233.5	
70 1,4-Dioxane	88	8.039	8.052	-0.013	38	187034	5000.0	5344.8	
71 Dichlorobromomethane	83	8.240	8.241	-0.001	100	945026	250.0	238.8	
73 2-Chloroethyl vinyl ether	63	8.544	8.545	-0.001	92	1234429	500.0	498.5	
74 cis-1,3-Dichloropropene	75	8.684	8.685	-0.001	96	1203144	250.0	250.3	
75 4-Methyl-2-pentanone (MIBK	43	8.842	8.843	-0.001	94	1863520	500.0	449.6	
76 Toluene	91	9.019	9.019	0.000	97	3254284	250.0	202.0	
77 trans-1,3-Dichloropropene	75	9.268	9.269	-0.001	93	1070347	250.0	244.1	
78 Ethyl methacrylate	69	9.329	9.330	-0.001	88	1271580	250.0	240.5	
79 1,1,2-Trichloroethane	97	9.457	9.457	0.000	91	718069	250.0	213.9	
80 Tetrachloroethene	164	9.530	9.530	0.000	97	683462	250.0	222.4	
81 1,3-Dichloropropane	76	9.621	9.615	0.006	89	1320887	250.0	212.9	
82 2-Hexanone	43	9.676	9.682	-0.006	93	1418811	500.0	446.3	
84 Chlorodibromomethane	129	9.834	9.834	0.000	90	672369	250.0	237.0	
85 Ethylene Dibromide	107	9.943	9.944	-0.001	99	773664	250.0	224.7	
86 3-Chlorobenzotrifluoride	180	10.412	10.412	0.000	93	1290067	250.0	232.3	
87 Chlorobenzene	112	10.436	10.437	-0.001	95	2170926	250.0	207.0	
88 4-Chlorobenzotrifluoride	180	10.497	10.498	-0.001	96	1226371	250.0	239.3	
89 1,1,1,2-Tetrachloroethane	131	10.527	10.528	-0.001	94	751692	250.0	225.4	
90 Ethylbenzene	106	10.533	10.534	-0.001	97	1304914	250.0	222.8	
91 m-Xylene & p-Xylene	106	10.667	10.668	-0.001	0	1614353	250.0	225.6	
92 o-Xylene	106	11.051	11.051	0.000	95	1518391	250.0	222.7	
93 Styrene	104	11.069	11.069	0.000	94	2462559	250.0	213.4	
94 Bromoform	173	11.257	11.252	0.005	98	443094	250.0	251.3	
96 2-Chlorobenzotrifluoride	180	11.324	11.325	-0.001	95	1244752	250.0	234.2	
97 Isopropylbenzene	105	11.422	11.422	0.000	96	3502176	250.0	210.4	
100 Bromobenzene	156	11.738	11.739	-0.001	95	889999	250.0	235.6	
99 1,1,2,2-Tetrachloroethane	83	11.738	11.745	-0.007	95	1078742	250.0	217.1	
102 trans-1,4-Dichloro-2-buten	53	11.781	11.775	0.006	84	299994	250.0	263.4	
101 1,2,3-Trichloropropane	110	11.793	11.793	0.000	84	371250	250.0	238.1	
103 N-Propylbenzene	120	11.841	11.842	-0.001	96	1069171	250.0	247.7	
104 2-Chlorotoluene	126	11.927	11.927	0.000	97	907016	250.0	243.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.994	11.994	0.000	96	1010916	250.0	249.1	
106 1,3,5-Trimethylbenzene	105	12.030	12.031	-0.001	95	2828999	250.0	229.0	
107 4-Chlorotoluene	126	12.054	12.055	-0.001	96	970169	250.0	240.8	
108 tert-Butylbenzene	119	12.346	12.347	-0.001	92	2446270	250.0	236.9	
110 1,2,4-Trimethylbenzene	105	12.407	12.408	-0.001	97	2860516	250.0	227.8	
111 1,2-dichloro-4-(trifluorom	214	12.456	12.456	0.000	96	801099	250.0	254.7	
112 sec-Butylbenzene	105	12.571	12.572	-0.001	95	3330508	250.0	231.2	
113 1,3-Dichlorobenzene	146	12.687	12.688	-0.001	96	1545747	250.0	229.0	
114 4-Isopropyltoluene	119	12.730	12.730	0.000	95	2809716	250.0	234.1	
115 1,4-Dichlorobenzene	146	12.797	12.797	0.000	95	1574222	250.0	227.2	
116 2,4-Dichloro-1-(triflourom	214	12.827	12.828	-0.001	94	771761	250.0	263.5	
118 2,5-Dichlorobenzotrifluori	214	12.870	12.870	0.000	0	797256	250.0	252.0	
120 n-Butylbenzene	91	13.149	13.150	-0.001	95	2372703	250.0	242.4	
121 1,2-Dichlorobenzene	146	13.155	13.156	-0.001	96	1435184	250.0	223.1	
122 1,2-Dibromo-3-Chloropropan	75	13.971	13.971	0.000	86	182290	250.0	255.2	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.117	14.117	0.000	0	3049908	750.0	747.4	
125 2,3- & 3,4- Dichlorotoluen	125	14.555	14.555	0.000	0	2191624	500.0	519.4	
126 1,2,4-Trichlorobenzene	180	14.828	14.829	-0.001	95	755690	250.0	256.7	
127 Hexachlorobutadiene	225	14.993	14.993	0.000	98	282046	250.0	261.8	
128 Naphthalene	128	15.102	15.103	-0.001	98	2561966	250.0	255.5	
129 1,2,3-Trichlorobenzene	180	15.346	15.346	0.000	96	693791	250.0	258.0	
131 2,4,5-Trichlorotoluene	159	16.197	16.198	-0.001	0	452516	250.0	354.0	
130 2,3,6-Trichlorotoluene	159	16.301	16.307	-0.006	98	417201	250.0	350.8	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		500.0	470.0	
S 133 Xylenes, Total	106				0		500.0	448.3	
S 135 1,3-Dichloropropene, Total	1				0		500.0	494.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOAPRI_00263	Amount Added:	10.00	Units: uL
voaWAcro1stRe_00016	Amount Added:	11.00	Units: uL
voaWVA1stRest_00017	Amount Added:	10.00	Units: uL
voaWEEmix1stR_00009	Amount Added:	10.00	Units: uL
voaW2clev1stR_00013	Amount Added:	10.00	Units: uL
voaWKetmix1st_00004	Amount Added:	10.00	Units: uL
VOA8260INT_00072	Amount Added:	2.00	Units: uL
VOA8260SURR_00071	Amount Added:	10.00	Units: uL

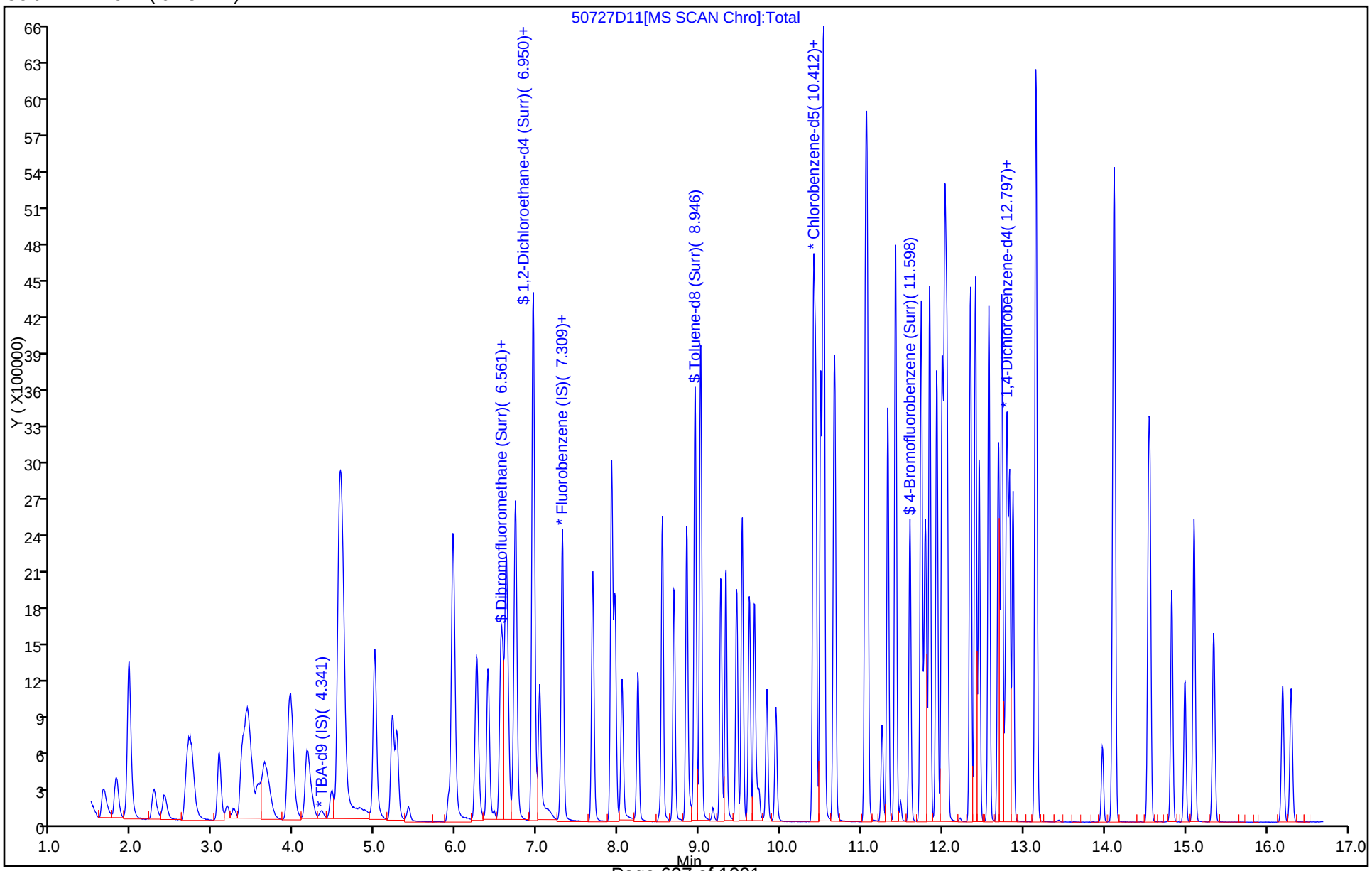
Report Date: 28-Jul-2017 01:05:09 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Injection Date:	27-Jul-2017 04:24:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	IC VSTD50			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-212441/3	70526N03.D
Level 2	IC 180-212441/4	70526N04.D
Level 3	ICIS 180-212441/5	70526N05.D
Level 4	IC 180-212441/6	70526N06.D
Level 5	IC 180-212441/7	70526N07.D
Level 6	IC 180-212441/8	70526N08.D
Level 7	IC 180-212441/9	70526N09.D
Level 8	IC 180-212441/10	70526N10.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	0.3587 0.3705	0.4335 0.3829	0.3548 0.4398	0.3719	0.3636	Ave		0.3845			0.1000	8.7		20.0			
Chloromethane	0.5030 0.5665	0.5923 0.5536	0.4796 0.5889	0.4979	0.5161	Ave		0.5372			0.1000	8.1		20.0			
Vinyl chloride	0.4169 0.4339	0.5006 0.4353	0.3760 0.4592	0.4282	0.4073	Ave		0.4322			0.1000	8.5		20.0			
1,3-Butadiene	0.2962 0.3173	0.3928 0.2392	0.3026 0.2891	0.2863	0.3107	Ave		0.3043			0.0100	14.1		20.0			
Bromomethane	0.2658 0.1670	0.2127 0.1511	0.1397 0.1503	0.1519	0.1555	Qua	0.2830	0.1601	-0.000037		0.0500				0.9940		0.9900
Chloroethane	0.1166 0.1568	0.1528 0.1837	0.1193 0.1623	0.1262	0.1437	Ave		0.1452			0.0500	16.1		20.0			
Trichlorofluoromethane	0.2553 0.4342	0.4066 0.4932	0.3406 0.4777	0.3653	0.3803	Qua	-0.779	0.3484	0.0005766		0.1000				0.9950		0.9900
Ethyl ether	0.3113 0.4160	0.4077 0.4328	0.2925 0.3832	0.3347	0.3586	Ave		0.3671			0.0100	14.0		20.0			
1,1-Dichloroethene	0.2640 0.3236	0.3750 0.3354	0.2835 0.3071	0.2875	0.2877	Ave		0.3080			0.1000	11.5		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2501 0.2461	0.2967 0.2519	0.2260 0.2425	0.2137	0.2194	Ave		0.2433			0.1000	10.7		20.0			
Acetone	0.2290 0.2642	0.2483 0.2851	0.1460 0.2303	0.2124	0.2245	Ave		0.2300			0.0500	18.0		20.0			
Iodomethane	0.2680 0.3109	0.2819 0.3076	0.2576 0.3293	0.2992	0.2851	Ave		0.2924			0.0100	8.1		20.0			
Carbon disulfide	0.7794 0.6934	0.7955 0.7635	0.6832 0.7624	0.7586	0.7001	Ave		0.7420			0.1000	5.8		20.0			
Allyl chloride	0.1409 0.1698	0.1813 0.1724	0.1641 0.1747	0.1792	0.1602	Ave		0.1678			0.0100	7.7		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.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

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								
Methyl acetate	0.4242 0.4254	0.4772 0.4239	0.3515 0.4317	0.4539	0.4457	Ave		0.4292			0.1000	8.5		20.0			
Methylene Chloride	0.4991 0.3140	0.3403 0.3011	0.2818 0.3100	0.3156	0.2992	Lin2	1.0133	0.2949			0.1000				0.9970		0.9900
tert-Butyl alcohol	1.5922 1.2193	1.3188 1.1671	1.0167 1.2886	1.1919	1.1832	Ave		1.2472			0.0100	13.3		20.0			
Acrylonitrile	0.2245 0.1734	0.2009 0.1709	0.1371 0.1784	0.1874	0.1917	Ave		0.1830			0.0100	13.8		20.0			
trans-1,2-Dichloroethene	0.2917 0.2246	0.3044 0.2306	0.2272 0.2295	0.2590	0.2281	Ave		0.2494			0.1000	12.9		20.0			
Methyl tert-butyl ether	1.1630 1.0601	1.2170 1.0109	0.9618 1.0330	1.0403	1.0650	Ave		1.0689			0.1000	7.7		20.0			
Hexane	0.3710 0.3185	0.3836 0.3407	0.3597 0.3639	0.3443	0.3143	Ave		0.3495			0.0100	7.0		20.0			
1,1-Dichloroethane	0.6821 0.6503	0.7321 0.6499	0.5818 0.6644	0.6288	0.6198	Ave		0.6511			0.2000	6.9		20.0			
2,2-Dichloropropane	0.0481 0.0629	0.0667 0.0634	0.0626 0.0690	0.0650	0.0610	Ave		0.0623			0.0100	10.1		20.0			
cis-1,2-Dichloroethene	0.3795 0.3145	0.3510 0.3139	0.2948 0.3322	0.3075	0.3108	Ave		0.3255			0.1000	8.5		20.0			
2-Butanone (MEK)	0.3268 0.3217	0.3347 0.3377	0.2166 0.3081	0.2856	0.3294	Ave		0.3076			0.0500	13.1		20.0			
Bromochloromethane	0.1681 0.1659	0.1791 0.1578	0.1491 0.1748	0.1459	0.1613	Ave		0.1627			0.0100	7.1		20.0			
Tetrahydrofuran	0.2288 0.1866	0.2024 0.1815	0.1404 0.2069	0.1768	0.1992	Ave		0.1903			0.0100	13.7		20.0			
Chloroform	0.6869 0.6134	0.7210 0.6269	0.5606 0.6681	0.5776	0.5996	Ave		0.6318			0.2000	8.8		20.0			
1,1,1-Trichloroethane	0.4693 0.4055	0.4845 0.4192	0.3835 0.4589	0.3977	0.3985	Ave		0.4271			0.1000	8.9		20.0			
Cyclohexane	0.5081 0.4222	0.5240 0.4447	0.4526 0.4891	0.4291	0.4196	Ave		0.4612			0.1000	8.8		20.0			
Carbon tetrachloride	0.2602 0.2980	0.3319 0.3173	0.2735 0.3257	0.2927	0.2942	Ave		0.2992			0.1000	8.3		20.0			
1,1-Dichloropropene	0.4844 0.3880	0.4840 0.4047	0.3851 0.4080	0.3970	0.3936	Ave		0.4181			0.0100	9.9		20.0			
Isobutyl alcohol	0.0260 0.0183	0.0201 0.0196	0.0137 0.0207	0.0191	0.0205	Lin1	0.2877	0.0193			0.0100				0.9900		0.9900
Benzene	1.7818 1.0597	1.4269 1.0345	1.1186 1.0547	1.0411	1.0622	Lin2	3.8043	1.0557			0.5000				0.9910		0.9900

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.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

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								
n-Heptane	0.4305 0.5965	0.6207 0.6269	0.4675 0.6780	0.5799	0.6290	Ave		0.5786			0.0100	14.8		20.0			
1,2-Dichloroethane	0.6436 0.6043	0.6973 0.5971	0.5453 0.6132	0.5616	0.5876	Ave		0.6063			0.1000	7.9		20.0			
Trichloroethene	0.3327 0.3036	0.3517 0.3049	0.2772 0.3201	0.2804	0.2895	Ave		0.3075			0.2000	8.5		20.0			
Methylcyclohexane	0.4437 0.3329	0.3855 0.3529	0.3732 0.4008	0.3315	0.3445	Ave		0.3707			0.1000	10.4		20.0			
1,2-Dichloropropane	0.3276 0.3220	0.3970 0.3138	0.2908 0.3369	0.3012	0.3238	Ave		0.3266			0.1000	9.8		20.0			
1,4-Dioxane	0.0033 0.0031	0.0034 0.0033	0.0025 0.0039	0.0028	0.0031	Ave		0.0032		*	0.0100	12.5		20.0			
Dibromomethane	0.2095 0.2090	0.2191 0.1999	0.1758 0.2203	0.1779	0.2025	Ave		0.2018			0.0100	8.4		20.0			
Bromodichloromethane	0.4222 0.4887	0.4589 0.4895	0.3866 0.5272	0.4163	0.4472	Ave		0.4546			0.2000	10.1		20.0			
cis-1,3-Dichloropropene	0.5241 0.5709	0.5321 0.5700	0.4681 0.6422	0.5051	0.5474	Ave		0.5450			0.2000	9.5		20.0			
4-Methyl-2-pentanone (MIBK)	2.4588 2.4961	2.6366 2.1815	1.7391 2.3022	2.2494	2.4822	Ave		2.3182			0.1000	12.0		20.0			
Toluene	6.3570 4.3334	5.2555 3.6912	4.0892 4.2871	4.2617	4.0488	Lin2	11.770	4.1020			0.4000				0.9920		0.9900
trans-1,3-Dichloropropene	1.9030 2.3687	2.0387 1.9734	1.7097 2.3042	1.9413	1.9675	Ave		2.0258			0.1000	10.6		20.0			
Ethyl methacrylate	2.7753 2.3634	2.4689 1.9556	1.8239 2.2123	2.0692	2.1319	Ave		2.2250			0.0100	13.7		20.0			
1,1,2-Trichloroethane	1.3946 1.2189	1.3030 1.0269	0.9847 1.1661	1.0635	1.0981	Ave		1.1570			0.1000	12.2		20.0			
Tetrachloroethene	1.1115 0.8298	1.0149 0.7811	0.8223 0.8484	0.8105	0.7295	Ave		0.8685			0.2000	14.7		20.0			
1,3-Dichloropropane	2.9033 2.3262	2.5678 2.0157	1.8805 2.1774	2.0460	2.0425	Ave		2.2449			0.0100	15.2		20.0			
2-Hexanone	1.9170 1.8203	1.9671 1.6288	1.2082 1.6405	1.5829	1.7080	Ave		1.6841			0.1000	14.1		20.0			
Dibromochloromethane	1.1302 1.2320	1.0427 1.0820	0.9076 1.2436	0.9865	0.9886	Ave		1.0766			0.1000	11.1		20.0			
1,2-Dibromoethane (EDB)	1.5430 1.4520	1.4451 1.2181	1.0684 1.4330	1.2244	1.2744	Ave		1.3323			0.1000	12.0		20.0			
Chlorobenzene	3.4174 3.1521	3.3209 2.8050	2.6307 3.5686	2.9821	2.7854	Ave		3.0828			0.5000	10.9		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
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

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								
1,1,1,2-Tetrachloroethane	0.9202 1.1021	1.0157 0.9418	0.8554 1.0947	0.9746	0.9454	Ave		0.9812			0.0100	8.7		20.0			
Ethylbenzene	1.8741 1.4926	1.7405 1.3484	1.3981 1.5760	1.5890	1.3860	Ave		1.5506			0.1000	11.9		20.0			
m-Xylene & p-Xylene	2.6942 1.9403	2.1708 1.7432	1.8415 2.0797	1.8805	1.6987	Lin2	4.3130	1.8454			0.1000				0.9930		0.9900
o-Xylene	2.5141 2.0722	2.4088 1.8257	1.8549 2.1595	1.9396	1.8187	Ave		2.0742			0.3000	13.0		20.0			
Styrene	4.0933 3.2821	3.9205 2.8452	3.1076 3.2821	3.1632	3.0621	Ave		3.3445			0.3000	13.0		20.0			
Bromoform	0.6412 0.8619	0.6740 0.7777	0.5370 0.9286	0.6388	0.7256	Ave		0.7231			0.1000	17.8		20.0			
Isopropylbenzene	6.6687 4.8690	5.9486 4.4638	4.6906 4.6834	4.7875	4.4911	Lin2	10.574	4.6814			0.1000				0.9930		0.9900
Bromobenzene	1.2123 1.0669	1.1100 1.0348	0.8727 1.1864	0.9346	0.9826	Ave		1.0500			0.0100	11.3		20.0			
1,1,2,2-Tetrachloroethane	2.1334 1.6799	1.8010 1.4555	1.2774 1.8179	1.4730	1.5640	Ave		1.6503			0.3000	16.2		20.0			
trans-1,4-Dichloro-2-butene	0.4121 0.5190	0.4940 0.4801	0.3333 0.5694	0.4040	0.4640	Ave		0.4595			0.0100	16.1		20.0			
1,2,3-Trichloropropane	0.5831 0.4496	0.4947 0.4436	0.3452 0.4858	0.4147	0.4351	Ave		0.4565			0.0100	15.1		20.0			
N-Propylbenzene	0.9102 0.8218	0.9849 0.8020	0.7977 0.9163	0.7888	0.7279	Ave		0.8437			0.0100	10.1		20.0			
2-Chlorotoluene	0.8289 0.7969	0.9182 0.7955	0.7148 0.8895	0.7442	0.7357	Ave		0.8030			0.0100	9.1		20.0			
1,3,5-Trimethylbenzene	3.2151 2.7831	3.3388 2.7620	2.9148 3.0921	2.8163	2.6407	Ave		2.9454			0.0100	8.3		20.0			
4-Chlorotoluene	0.9083 0.7893	0.9710 0.7625	0.7378 0.8554	0.7379	0.7528	Ave		0.8144			0.0100	10.8		20.0			
tert-Butylbenzene	2.6743 2.2327	2.4235 2.2638	2.1718 2.5671	2.1886	2.1011	Ave		2.3279			0.0100	8.8		20.0			
1,2,4-Trimethylbenzene	3.5367 2.9793	3.4299 2.9117	2.8071 3.0946	2.9197	2.7956	Ave		3.0593			0.0100	9.1		20.0			
sec-Butylbenzene	3.3958 2.7739	3.3437 2.9933	2.9961 3.2369	2.8532	2.7230	Ave		3.0395			0.0100	8.5		20.0			
1,3-Dichlorobenzene	1.7908 1.5351	1.7770 1.5180	1.3935 1.6421	1.4662	1.4531	Ave		1.5720			0.6000	9.5		20.0			
4-Isopropyltoluene	2.8280 2.1897	2.7391 2.3083	2.2478 2.4695	2.2669	2.1558	Ave		2.4006			0.0100	10.6		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.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

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-Dichlorobenzene	1.7355 1.4755	1.5754 1.4750	1.3233 1.8112	1.4197	1.3819	Ave		1.5247			0.5000	11.2		20.0			
n-Butylbenzene	2.3824 1.9718	2.0791 2.0035	1.9686 2.2526	2.0576	1.9600	Ave		2.1095			0.0100	7.4		20.0			
1,2-Dichlorobenzene	1.7476 1.4672	1.5353 1.4324	1.2701 1.5503	1.4204	1.4032	Ave		1.4783			0.4000	9.4		20.0			
1,2-Dibromo-3-Chloropropane	0.1996 0.2626	0.1870 0.2756	0.1488 0.3188	0.2096	0.2221	Qua	0.3798	0.1379	0.0007071		0.0500				0.9990		0.9900
1,2,4-Trichlorobenzene	0.7708 0.5949	0.4939 0.6775	0.5435 0.7024	0.5902	0.6049	Ave		0.6223			0.2000	14.4		20.0			
Hexachlorobutadiene	0.4462 0.2410	0.2453 +++++	0.2275 +++++	0.2779	0.2381	Qua	0.4830	0.2466	-0.000048		0.0100				0.9930		0.9900
Naphthalene	2.2050 1.5068	1.1467 1.7922	1.1750 +++++	1.3698	1.5021	Qua	4.8488	0.9910	0.0035264		0.0100				0.9910		0.9900
1,2,3-Trichlorobenzene	0.6760 0.3497	0.3095 +++++	0.3264 +++++	0.3682	0.3874	Lin1	1.2393	0.3432			0.0100				0.9890	*	0.9900
Dibromofluoromethane (Surr)	0.2570 0.2444	0.2380 0.2549	0.2282 0.2576	0.2438	0.2554	Ave		0.2474				4.3		20.0			
1,2-Dichloroethane-d4 (Surr)	0.5284 0.4823	0.5124 0.4789	0.4282 0.4450	0.4733	0.5011	Ave		0.4812				6.9		20.0			
Toluene-d8 (Surr)	4.6856 3.6381	3.9380 3.2778	3.4686 3.8543	3.8941	3.5452	Ave		3.7877				11.3		20.0			
4-Bromofluorobenzene (Surr)	2.6688 1.6371	1.6758 1.5956	1.4182 1.5689	1.6066	1.5513	Lin2	5.7112	1.5025							0.9950		0.9900

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.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-212441/3	70526N03.D
Level 2	IC 180-212441/4	70526N04.D
Level 3	ICIS 180-212441/5	70526N05.D
Level 4	IC 180-212441/6	70526N06.D
Level 5	IC 180-212441/7	70526N07.D
Level 6	IC 180-212441/8	70526N08.D
Level 7	IC 180-212441/9	70526N09.D
Level 8	IC 180-212441/10	70526N10.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	5069 137470	30882 155318	56679 216519	68910	81498	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	7109 210196	42194 224586	76626 289915	92241	115683	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	5891 160997	35662 176578	60070 226065	79328	91297	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	4186 117737	27978 97018	48344 142328	53045	69651	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Qua	3757 61977	15149 61279	22325 74005	28151	34863	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	1648 58181	10887 74530	19054 79902	23385	32202	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Qua	3608 161105	28963 200072	54419 235168	67687	85236	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	4400 154352	29045 175588	46723 188630	62014	80386	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethene	FB	Ave	3731 120080	26715 136045	45294 151207	53268	64477	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	3535 91330	21136 102172	36097 119369	39597	49182	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	16184 196065	35375 231306	46638 226780	78710	100632	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	3787 115375	20079 124772	41160 162111	55439	63893	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	11015 257287	56667 309717	109151 375325	140541	156914	5.00 175	25.0 200	50.0 250	75.0	100
Allyl chloride	FB	Ave	1991 63012	12914 69940	26221 86000	33209	35900	5.00 175	25.0 200	50.0 250	75.0	100
Methyl acetate	FB	Ave	11990 315650	67981 343928	112322 425089	168208	199788	10.0 350	50.0 400	100 500	150	200

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

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
Methylene Chloride	FB	Lin2	7053 116526	24241 122145	45012 152616	58472	67059	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBAd9	Ave	11963 210984	41395 269056	68534 362259	122140	150271	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	31722 643571	143075 693116	219093 878317	347239	429643	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	4122 83342	21684 93546	36304 112994	47991	51127	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	16435 393346	86694 410106	153649 508534	192739	238706	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	5243 118172	27325 138197	57464 179145	63785	70452	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	9640 241286	52152 263642	92939 327111	116494	138920	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	680 23338	4752 25715	9995 33974	12042	13674	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	5363 116703	25005 127360	47103 163545	56967	69654	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	23091 238738	47684 274021	69207 303365	105832	147644	25.0 350	50.0 400	100 500	150	200
Bromochloromethane	FB	Ave	2375 61559	12756 64013	23824 86045	27030	36156	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	6467 138476	28840 147259	44867 203719	65508	89279	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	9707 227600	51361 254314	89557 328912	107010	134396	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	6632 150444	34510 170047	61273 225944	73676	89330	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	7181 156665	37329 180420	72300 240769	79494	94053	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	3677 110583	23639 128735	43695 160338	54236	65945	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	6846 143974	34477 164195	61516 200850	73559	88223	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Lin1	9186 169660	35813 198821	54858 254669	88250	114829	125 4375	625 5000	1250 6250	1875	2500
Benzene	FB	Lin2	25181 393187	101644 419667	178694 519223	192886	238075	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	6084 221336	44217 254314	74693 333807	107438	140980	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane	FB	Ave	9096 224220	49673 242220	87120 301887	104059	131718	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.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

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
Trichloroethene	FB	Ave	4702 112644	25051 123693	44280 157592	51955	64879	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	6271 123537	27463 143178	59623 197301	61423	77226	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	4629 119473	28279 127304	46463 165852	55808	72576	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	938 22889	4776 26810	8066 38240	10541	14046	100 3500	500 4000	1000 5000	1500	2000
Dibromomethane	FB	Ave	2961 77532	15607 81114	28091 108447	32961	45388	5.00 175	25.0 200	50.0 250	75.0	100
Bromodichloromethane	FB	Ave	5967 181348	32688 198595	61761 259548	77135	100245	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Ave	7407 211834	37902 231221	74788 316151	93581	122705	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	38690 438844	93562 490495	146116 604880	198555	294883	25.0 350	50.0 400	100 500	150	200
Toluene	CBNZ d5	Lin2	20006 380931	93248 414985	171779 563195	188087	240501	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBNZ d5	Ave	5989 208220	36172 221853	71820 302697	85680	116869	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBNZ d5	Ave	8734 207753	43805 219854	76619 290626	91323	126635	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBNZ d5	Ave	4389 107153	23120 115443	41365 153191	46935	65225	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBNZ d5	Ave	3498 72941	18008 87816	34542 111456	35769	43333	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBNZ d5	Ave	9137 204490	45560 226616	78997 286043	90297	121326	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBNZ d5	Ave	30165 320031	69806 366229	101508 431038	139722	202909	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBNZ d5	Ave	3557 108301	18500 121642	38127 163369	43539	58722	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBNZ d5	Ave	4856 127642	25640 136944	44880 188259	54037	75700	5.00 175	25.0 200	50.0 250	75.0	100
Chlorobenzene	CBNZ d5	Ave	10755 277085	58922 315354	110511 468810	131615	165455	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	2896 96885	18022 105885	35932 143809	43013	56158	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBNZ d5	Ave	5898 131211	30881 151598	58733 207041	70129	82329	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBNZ d5	Lin2	8479 170565	38517 195979	77358 273207	82997	100905	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.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

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
o-Xylene	CBNZ d5	Ave	7912 182159	42740 205247	77919 283689	85604	108029	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBNZ d5	Ave	12882 288517	69561 319865	130546 431172	139607	181891	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBNZ d5	Ave	2018 75765	11958 87434	22558 121988	28192	43101	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBNZ d5	Lin2	20987 428018	105546 501841	197042 615261	211295	266769	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCBd 4	Ave	5678 122150	26678 141257	49787 191384	53955	74774	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	6714 147671	31956 163634	53661 238819	65012	92899	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1930 59414	11874 65545	19014 91845	23325	35308	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCBd 4	Ave	2731 51470	11891 60557	19694 78358	23942	33107	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCBd 4	Ave	4263 94092	23672 109486	45510 147810	45540	55392	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCBd 4	Ave	3882 91234	22070 108596	40783 143489	42962	55987	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCBd 4	Ave	15058 318634	80247 377047	166298 498791	162587	200949	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCBd 4	Ave	4254 90363	23337 104084	42095 137981	42599	57288	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCBd 4	Ave	12525 255613	58250 309031	123907 414092	126350	159889	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCBd 4	Ave	16564 341101	82437 397488	160152 499192	168557	212736	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCBd 4	Ave	15904 317584	80365 408616	170932 522151	164718	207217	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCBd 4	Ave	8387 175752	42711 207221	79502 264891	84645	110575	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCBd 4	Ave	13245 250701	65835 315106	128241 398348	130868	164053	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCBd 4	Ave	8128 168927	37865 201354	75498 292158	81962	105161	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCBd 4	Ave	11158 225754	49971 300798	112313 363366	118785	149155	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCBd 4	Ave	8185 167983	36902 195534	72463 250083	81999	106782	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCBd 4	Qua	935 30069	4494 37626	8491 51422	12102	16903	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.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

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-Trichlorobenzene	DCBd 4	Ave	3610 68109	11872 92484	31007 113308	34070	46031	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCBd 4	Qua	2090 27593	5896 +++++	12982 +++++	16041	18120	5.00 175	25.0 +++++	50.0 +++++	75.0	100
Naphthalene	DCBd 4	Qua	10327 172510	27560 244655	67034 +++++	79079	114310	5.00 175	25.0 200	50.0 +++++	75.0	100
1,2,3-Trichlorobenzene	DCBd 4	Lin1	3166 40042	7438 +++++	18623 +++++	21259	29478	5.00 175	25.0 +++++	50.0 +++++	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	3632 90698	16952 103405	36454 126830	45171	57245	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	7467 178959	36501 194286	68408 219098	87697	112329	5.00 175	25.0 200	50.0 250	75.0	100
Toluene-d8 (Surr)	CBNZ d5	Ave	14746 319810	69872 368509	145707 506344	171864	210583	5.00 175	25.0 200	50.0 250	75.0	100
4-Bromofluorobenzene (Surr)	CBNZ d5	Lin2	8399 143913	29734 179388	59576 206111	70905	92146	5.00 175	25.0 200	50.0 250	75.0	100

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-212441/3	70526N03.D
Level 2	IC 180-212441/4	70526N04.D
Level 3	ICIS 180-212441/5	70526N05.D
Level 4	IC 180-212441/6	70526N06.D
Level 5	IC 180-212441/7	70526N07.D
Level 6	IC 180-212441/8	70526N08.D
Level 7	IC 180-212441/9	70526N09.D
Level 8	IC 180-212441/10	70526N10.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
Dichlorodifluoromethane	-6.7 -0.4	12.8 14.4	-7.7	-3.3	-5.4	-3.6	50 30	30 30	30	30	30	30
Chloromethane	-6.4 3.0	10.3 9.6	-10.7	-7.3	-3.9	5.4	50 30	30 30	30	30	30	30
Vinyl chloride	-3.5 0.7	15.8 6.3	-13.0	-0.9	-5.8	0.4	50 30	30 30	30	30	30	30
1,3-Butadiene	-2.7 -21.4	29.1 -5.0	-0.5	-5.9	2.1	4.3	50 30	30 30	30	30	30	30
Bromomethane	30.9 -2.2	26.7 -1.2	-15.5	-6.0	-2.5	8.0	50 30	30 30	30	30	30	30
Chloroethane	-19.7 26.5	5.3 11.8	-17.8	-13.1	-1.0	8.0	50 30	30 30	30	30	30	30
Trichlorofluoromethane	16.9 5.7	19.7 -1.9	-5.2	-3.7	-3.9	-1.9	50 30	30 30	30	30	30	30
Ethyl ether	-15.2 17.9	11.1 4.4	-20.3	-8.8	-2.3	13.3	50 30	30 30	30	30	30	30
1,1-Dichloroethene	-14.3 8.9	21.8 -0.3	-7.9	-6.6	-6.6	5.1	50 30	30 30	30	30	30	30
1,1,2-Trichloro-1,2,2-trifluoroethane	2.8 3.5	22.0 -0.3	-7.1	-12.2	-9.8	1.2	50 30	30 30	30	30	30	30
Acetone	-0.4 24.0	8.0 0.1	-36.5 *	-7.6	-2.4	14.9	50 30	30 30	30	30	30	30
Iodomethane	-8.4 5.2	-3.6 12.6	-11.9	2.3	-2.5	6.3	50 30	30 30	30	30	30	30
Carbon disulfide	5.0 2.9	7.2 2.7	-7.9	2.2	-5.7	-6.5	50 30	30 30	30	30	30	30
Allyl chloride	-16.1 2.7	8.0 4.1	-2.2	6.8	-4.6	1.2	50 30	30 30	30	30	30	30
Methyl acetate	-1.2 -1.2	11.2 0.6	-18.1	5.8	3.8	-0.9	50 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
Methylene Chloride	0.5 0.4	1.7 3.8	-11.3	2.4	-2.0	4.5	50 30	30 30	30	30	30	30
tert-Butyl alcohol	27.7 -6.4	5.7 3.3	-18.5	-4.4	-5.1	-2.2	50 30	30 30	30	30	30	30
Acrylonitrile	22.6 -6.7	9.7 -2.5	-25.1	2.4	4.7	-5.2	50 30	30 30	30	30	30	30
trans-1,2-Dichloroethene	17.0 -7.5	22.1 -8.0	-8.9	3.9	-8.5	-9.9	50 30	30 30	30	30	30	30
Methyl tert-butyl ether	8.8 -5.4	13.9 -3.4	-10.0	-2.7	-0.4	-0.8	50 30	30 30	30	30	30	30
Hexane	6.2 -2.5	9.8 4.1	2.9	-1.5	-10.1	-8.9	50 30	30 30	30	30	30	30
1,1-Dichloroethane	4.8 -0.2	12.4 2.0	-10.7	-3.4	-4.8	-0.1	50 30	30 30	30	30	30	30
2,2-Dichloropropane	-22.8 1.7	7.0 10.7	0.4	4.3	-2.1	0.9	50 30	30 30	30	30	30	30
cis-1,2-Dichloroethene	16.6 -3.6	7.8 2.0	-9.4	-5.5	-4.5	-3.4	50 30	30 30	30	30	30	30
2-Butanone (MEK)	6.2 9.8	8.8 0.2	-29.6	-7.1	7.1	4.6	50 30	30 30	30	30	30	30
Bromochloromethane	3.3 -3.0	10.0 7.4	-8.4	-10.4	-0.9	1.9	50 30	30 30	30	30	30	30
Tetrahydrofuran	20.2 -4.6	6.4 8.7	-26.2	-7.1	4.6	-2.0	50 30	30 30	30	30	30	30
Chloroform	8.7 -0.8	14.1 5.8	-11.3	-8.6	-5.1	-2.9	50 30	30 30	30	30	30	30
1,1,1-Trichloroethane	9.9 -1.9	13.4 7.4	-10.2	-6.9	-6.7	-5.1	50 30	30 30	30	30	30	30
Cyclohexane	10.2 -3.6	13.6 6.0	-1.9	-7.0	-9.0	-8.4	50 30	30 30	30	30	30	30
Carbon tetrachloride	-13.0 6.1	10.9 8.9	-8.6	-2.2	-1.7	-0.4	50 30	30 30	30	30	30	30
1,1-Dichloropropene	15.9 -3.2	15.8 -2.4	-7.9	-5.0	-5.9	-7.2	50 30	30 30	30	30	30	30
Isobutyl alcohol	22.7 1.2	1.7 6.9	-30.1 *	-2.2	5.5	-5.7	50 30	30 30	30	30	30	30
Benzene	-3.3 -3.8	20.8 -1.5	-1.3	-6.2	-3.0	-1.7	50 30	30 30	30	30	30	30
n-Heptane	-25.6 8.3	7.3 17.2	-19.2	0.2	8.7	3.1	50 30	30 30	30	30	30	30
1,2-Dichloroethane	6.2 -1.5	15.0 1.1	-10.1	-7.4	-3.1	-0.3	50 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

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
Trichloroethene	8.2 -0.8	14.4 4.1	-9.9	-8.8	-5.9	-1.3	50 30	30 30	30	30	30	30
Methylcyclohexane	19.7 -4.8	4.0 8.1	0.7	-10.6	-7.0	-10.2	50 30	30 30	30	30	30	30
1,2-Dichloropropane	0.3 -3.9	21.5 3.1	-11.0	-7.8	-0.9	-1.4	50 30	30 30	30	30	30	30
1,4-Dioxane	4.3 3.9	5.4 22.1	-20.6	-10.6	-1.5	-3.0	50 30	30 30	30	30	30	30
Dibromomethane	3.8 -0.9	8.6 9.2	-12.8	-11.8	0.4	3.6	50 30	30 30	30	30	30	30
Bromodichloromethane	-7.1 7.7	0.9 16.0	-15.0	-8.4	-1.6	7.5	50 30	30 30	30	30	30	30
cis-1,3-Dichloropropene	-3.8 4.6	-2.4 17.8	-14.1	-7.3	0.4	4.8	50 30	30 30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	6.1 -5.9	13.7 -0.7	-25.0	-3.0	7.1	7.7	50 30	30 30	30	30	30	30
Toluene	-2.4 -11.4	16.6 3.4	-6.1	0.1	-4.2	4.0	50 30	30 30	30	30	30	30
trans-1,3-Dichloropropene	-6.1 -2.6	0.6 13.7	-15.6	-4.2	-2.9	16.9	50 30	30 30	30	30	30	30
Ethyl methacrylate	24.7 -12.1	11.0 -0.6	-18.0	-7.0	-4.2	6.2	50 30	30 30	30	30	30	30
1,1,2-Trichloroethane	20.5 -11.2	12.6 0.8	-14.9	-8.1	-5.1	5.4	50 30	30 30	30	30	30	30
Tetrachloroethene	28.0 -10.1	16.9 -2.3	-5.3	-6.7	-16.0	-4.5	50 30	30 30	30	30	30	30
1,3-Dichloropropane	29.3 -10.2	14.4 -3.0	-16.2	-8.9	-9.0	3.6	50 30	30 30	30	30	30	30
2-Hexanone	13.8 -3.3	16.8 -2.6	-28.3	-6.0	1.4	8.1	50 30	30 30	30	30	30	30
Dibromochloromethane	5.0 0.5	-3.2 15.5	-15.7	-8.4	-8.2	14.4	50 30	30 30	30	30	30	30
1,2-Dibromoethane (EDB)	15.8 -8.6	8.5 7.6	-19.8	-8.1	-4.3	9.0	50 30	30 30	30	30	30	30
Chlorobenzene	10.9 -9.0	7.7 15.8	-14.7	-3.3	-9.6	2.2	50 30	30 30	30	30	30	30
1,1,1,2-Tetrachloroethane	-6.2 -4.0	3.5 11.6	-12.8	-0.7	-3.7	12.3	50 30	30 30	30	30	30	30
Ethylbenzene	20.9 -13.0	12.2 1.6	-9.8	2.5	-10.6	-3.7	50 30	30 30	30	30	30	30
m-Xylene & p-Xylene	-0.7 -6.7	8.3 11.8	-4.9	-1.2	-10.3	3.8	50 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

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
o-Xylene	21.2 -12.0	16.1 4.1	-10.6	-6.5	-12.3	-0.1	50 30	30 30	30	30	30	30
Styrene	22.4 -14.9	17.2 -1.9	-7.1	-5.4	-8.4	-1.9	50 30	30 30	30	30	30	30
Bromoform	-11.3 7.6	-6.8 28.4	-25.7	-11.7	0.3	19.2	50 30	30 30	30	30	30	30
Isopropylbenzene	-2.7 -5.8	18.0 -0.9	-4.3	-0.7	-6.3	2.7	50 30	30 30	30	30	30	30
Bromobenzene	15.5 -1.5	5.7 13.0	-16.9	-11.0	-6.4	1.6	50 30	30 30	30	30	30	30
1,1,2,2-Tetrachloroethane	29.3 -11.8	9.1 10.2	-22.6	-10.7	-5.2	1.8	50 30	30 30	30	30	30	30
trans-1,4-Dichloro-2-butene	-10.3 4.5	7.5 23.9	-27.5	-12.1	1.0	12.9	50 30	30 30	30	30	30	30
1,2,3-Trichloropropane	27.7 -2.8	8.4 6.4	-24.4	-9.1	-4.7	-1.5	50 30	30 30	30	30	30	30
N-Propylbenzene	7.9 -4.9	16.7 8.6	-5.5	-6.5	-13.7	-2.6	50 30	30 30	30	30	30	30
2-Chlorotoluene	3.2 -0.9	14.4 10.8	-11.0	-7.3	-8.4	-0.8	50 30	30 30	30	30	30	30
1,3,5-Trimethylbenzene	9.2 -6.2	13.4 5.0	-1.0	-4.4	-10.3	-5.5	50 30	30 30	30	30	30	30
4-Chlorotoluene	11.5 -6.4	19.2 5.0	-9.4	-9.4	-7.6	-3.1	50 30	30 30	30	30	30	30
tert-Butylbenzene	14.9 -2.8	4.1 10.3	-6.7	-6.0	-9.7	-4.1	50 30	30 30	30	30	30	30
1,2,4-Trimethylbenzene	15.6 -4.8	12.1 1.2	-8.2	-4.6	-8.6	-2.6	50 30	30 30	30	30	30	30
sec-Butylbenzene	11.7 -1.5	10.0 6.5	-1.4	-6.1	-10.4	-8.7	50 30	30 30	30	30	30	30
1,3-Dichlorobenzene	13.9 -3.4	13.0 4.5	-11.4	-6.7	-7.6	-2.3	50 30	30 30	30	30	30	30
4-Isopropyltoluene	17.8 -3.8	14.1 2.9	-6.4	-5.6	-10.2	-8.8	50 30	30 30	30	30	30	30
1,4-Dichlorobenzene	13.8 -3.3	3.3 18.8	-13.2	-6.9	-9.4	-3.2	50 30	30 30	30	30	30	30
n-Butylbenzene	12.9 4.5	-1.4 6.8	-6.7	-2.5	-7.1	-6.5	50 30	30 30	30	30	30	30
1,2-Dichlorobenzene	18.2 -3.1	3.9 4.9	-14.1	-3.9	-5.1	-0.7	50 30	30 30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-12.3 -1.3	9.2 0.5	-15.8	5.5	3.4	-0.3	50 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 212441

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/26/2017 14:37 Calibration End Date: 05/26/2017 18:04 Calibration ID: 34724

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
1,2,4-Trichlorobenzene	23.9 8.9	-20.6 12.9	-12.7	-5.2	-2.8	-4.4	50 30	30 30	30	30	30	30
Hexachlorobutadiene	42.0 +++++	-7.9 +++++	-10.9	11.9	-3.6	0.0	50	30	30	30	30	30
Naphthalene	22.0 3.0	-10.9 +++++	-6.7	3.3	6.4	-5.9	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	24.8 +++++	-24.3 +++++	-12.1	2.5	9.3	-0.1	50	30	30	30	30	30
Dibromofluoromethane (Surr)	3.9 3.0	-3.8 4.1	-7.8	-1.5	3.2	-1.2	50 30	30 30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	9.8 -0.5	6.5 -7.5	-11.0	-1.6	4.1	0.2	50 30	30 30	30	30	30	30
Toluene-d8 (Surr)	23.7 -13.5	4.0 1.8	-8.4	2.8	-6.4	-4.0	50 30	30 30	30	30	30	30
4-Bromofluorobenzene (Surr)	1.6 4.3	-3.7 2.9	-13.2	1.9	-0.6	6.8	50 30	30 30	30	30	30	30

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N03.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 26-May-2017 14:37:30 ALS Bottle#: 8 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0016937-003
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 27-May-2017 10:43:49 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: journetp Date: 26-May-2017 15:05:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.268	4.268	0.000	98	150272	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.267	7.267	0.000	96	141321	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.364	0.000	93	31471	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.706	12.706	0.000	97	46835	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.550	6.550	0.000	89	3632	5.00	5.19	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.921	6.921	0.000	46	7467	5.00	5.49	
$ 7 Toluene-d8 (Surr)	98	8.916	8.916	0.000	96	14746	5.00	6.19	
$ 8 4-Bromofluorobenzene (Surr	95	11.544	11.544	0.000	86	8399	5.00	5.08	
11 Dichlorodifluoromethane	85	1.592	1.592	0.000	1	5069	5.00	4.66	
12 Chloromethane	50	1.792	1.792	0.000	95	7109	5.00	4.68	
13 Vinyl chloride	62	1.920	1.920	0.000	94	5891	5.00	4.82	
14 Butadiene	39	1.944	1.944	0.000	93	4186	5.00	4.87	
15 Bromomethane	94	2.291	2.291	0.000	6	3757	5.00	6.54	
16 Chloroethane	64	2.407	2.407	0.000	1	1648	5.00	4.02	
17 Dichlorofluoromethane	67	2.668	2.668	0.000	43	5307	5.00	4.44	
18 Trichlorofluoromethane	101	2.687	2.687	0.000	18	3608	5.00	5.84	
20 Ethyl ether	59	3.052	3.052	0.000	94	4400	5.00	4.24	
22 1,1-Dichloroethene	96	3.380	3.380	0.000	51	3731	5.00	4.29	
23 1,1,2-Trichloro-1,2,2-trif	101	3.429	3.429	0.000	39	3535	5.00	5.14	
24 Acetone	43	3.435	3.435	0.000	98	16184	25.0	24.9	
25 Iodomethane	142	3.550	3.550	0.000	16	3787	5.00	4.58	
26 Carbon disulfide	76	3.654	3.654	0.000	62	11015	5.00	5.25	
28 3-Chloro-1-propene	76	3.915	3.915	0.000	78	1991	5.00	4.20	
30 Methyl acetate	43	3.940	3.940	0.000	95	11990	10.0	9.88	
31 Methylene Chloride	84	4.177	4.177	0.000	95	7053	5.00	5.03	
32 2-Methyl-2-propanol	59	4.396	4.396	0.000	95	11963	50.0	63.8	
33 Acrylonitrile	53	4.518	4.518	0.000	99	31722	50.0	61.3	
34 trans-1,2-Dichloroethene	96	4.566	4.566	0.000	81	4122	5.00	5.85	
35 Methyl tert-butyl ether	73	4.579	4.579	0.000	96	16435	5.00	5.44	
36 Hexane	57	4.974	4.974	0.000	96	5243	5.00	5.31	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.181	5.181	0.000	27	9640	5.00	5.24	
44 2,2-Dichloropropane	97	5.935	5.923	0.012	51	680	5.00	3.86	M
45 cis-1,2-Dichloroethene	96	5.929	5.929	0.000	60	5363	5.00	5.83	
46 2-Butanone (MEK)	43	5.947	5.947	0.000	98	23091	25.0	26.6	
49 Chlorobromomethane	128	6.221	6.221	0.000	91	2375	5.00	5.16	
51 Tetrahydrofuran	42	6.239	6.239	0.000	78	6467	10.0	12.0	
52 Chloroform	83	6.361	6.361	0.000	94	9707	5.00	5.44	
53 1,1,1-Trichloroethane	97	6.519	6.519	0.000	82	6632	5.00	5.49	
54 Cyclohexane	56	6.592	6.592	0.000	88	7181	5.00	5.51	
56 Carbon tetrachloride	117	6.702	6.702	0.000	63	3677	5.00	4.35	
55 1,1-Dichloropropene	75	6.708	6.708	0.000	87	6846	5.00	5.79	
57 Isobutyl alcohol	41	6.921	6.921	0.000	92	9186	125.0	153.3	
58 Benzene	78	6.927	6.927	0.000	96	25181	5.00	4.84	
59 1,2-Dichloroethane	62	6.994	6.994	0.000	96	9096	5.00	5.31	
62 n-Heptane	43	7.103	7.103	0.000	67	6084	5.00	3.72	
64 Trichloroethene	130	7.657	7.657	0.000	93	4702	5.00	5.41	
66 Methylcyclohexane	83	7.894	7.894	0.000	89	6271	5.00	5.99	
67 1,2-Dichloropropane	63	7.924	7.924	0.000	73	4629	5.00	5.01	
68 Dibromomethane	93	8.010	8.010	0.000	92	2961	5.00	5.19	
70 1,4-Dioxane	88	8.022	8.022	0.000	49	938	100.0	104.3	
71 Dichlorobromomethane	83	8.210	8.210	0.000	95	5967	5.00	4.64	
74 cis-1,3-Dichloropropene	75	8.642	8.642	0.000	45	7407	5.00	4.81	
75 4-Methyl-2-pentanone (MIBK	43	8.800	8.800	0.000	97	38690	25.0	26.5	
76 Toluene	91	8.977	8.977	0.000	94	20006	5.00	4.88	
77 trans-1,3-Dichloropropene	75	9.232	9.232	0.000	95	5989	5.00	4.70	
78 Ethyl methacrylate	69	9.287	9.287	0.000	92	8734	5.00	6.24	
79 1,1,2-Trichloroethane	97	9.415	9.415	0.000	91	4389	5.00	6.03	
80 Tetrachloroethene	164	9.494	9.494	0.000	91	3498	5.00	6.40	
81 1,3-Dichloropropane	76	9.585	9.585	0.000	95	9137	5.00	6.47	
82 2-Hexanone	43	9.634	9.634	0.000	97	30165	25.0	28.5	
84 Chlorodibromomethane	129	9.792	9.792	0.000	88	3557	5.00	5.25	
85 Ethylene Dibromide	107	9.902	9.902	0.000	95	4856	5.00	5.79	
87 Chlorobenzene	112	10.394	10.394	0.000	89	10755	5.00	5.54	
90 Ethylbenzene	106	10.486	10.486	0.000	98	5898	5.00	6.04	
89 1,1,1,2-Tetrachloroethane	131	10.486	10.486	0.000	41	2896	5.00	4.69	
91 m-Xylene & p-Xylene	106	10.619	10.619	0.000	96	8479	5.00	4.96	
92 o-Xylene	106	11.003	11.003	0.000	97	7912	5.00	6.06	
93 Styrene	104	11.021	11.021	0.000	87	12882	5.00	6.12	
94 Bromoform	173	11.203	11.203	0.000	55	2018	5.00	4.43	
97 Isopropylbenzene	105	11.368	11.368	0.000	95	20987	5.00	4.86	
99 1,1,2,2-Tetrachloroethane	83	11.690	11.690	0.000	95	6714	5.00	6.46	
100 Bromobenzene	156	11.690	11.690	0.000	94	5678	5.00	5.77	
102 trans-1,4-Dichloro-2-buten	53	11.721	11.721	0.000	60	1930	5.00	4.48	
101 1,2,3-Trichloropropane	110	11.739	11.739	0.000	88	2731	5.00	6.39	
103 N-Propylbenzene	120	11.787	11.787	0.000	98	4263	5.00	5.39	
104 2-Chlorotoluene	126	11.873	11.873	0.000	94	3882	5.00	5.16	
106 1,3,5-Trimethylbenzene	105	11.970	11.970	0.000	92	15058	5.00	5.46	
107 4-Chlorotoluene	126	12.000	12.000	0.000	98	4254	5.00	5.58	
108 tert-Butylbenzene	119	12.286	12.286	0.000	90	12525	5.00	5.74	
110 1,2,4-Trimethylbenzene	105	12.341	12.341	0.000	96	16564	5.00	5.78	
112 sec-Butylbenzene	105	12.505	12.505	0.000	96	15904	5.00	5.59	
113 1,3-Dichlorobenzene	146	12.627	12.627	0.000	97	8387	5.00	5.70	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 4-Isopropyltoluene	119	12.663	12.663	0.000	96	13245	5.00	5.89	
115 1,4-Dichlorobenzene	146	12.724	12.724	0.000	92	8128	5.00	5.69	
120 n-Butylbenzene	91	13.065	13.065	0.000	97	11158	5.00	5.65	
121 1,2-Dichlorobenzene	146	13.089	13.089	0.000	93	8185	5.00	5.91	
122 1,2-Dibromo-3-Chloropropan	157	13.886	13.886	0.000	60	935	5.00	4.38	
126 1,2,4-Trichlorobenzene	180	14.695	14.695	0.000	87	3610	5.00	6.19	
127 Hexachlorobutadiene	225	14.841	14.841	0.000	82	2090	5.00	7.10	
128 Naphthalene	128	14.969	14.969	0.000	97	10327	5.00	6.10	
129 1,2,3-Trichlorobenzene	180	15.188	15.188	0.000	92	3166	5.00	6.24	
S 134 1,2-Dichloroethene, Total	96				0		10.0	11.7	
S 133 Xylenes, Total	106				0		10.0	11.0	
S 135 1,3-Dichloropropene, Total	1				0		10.0	9.51	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00069	Amount Added:	0.20	Units: uL
VOA8260INT_00070	Amount Added:	2.00	Units: uL
voaWKetmix1st_00003	Amount Added:	0.80	Units: uL
VOA8260VOAPRI_00253	Amount Added:	0.20	Units: uL

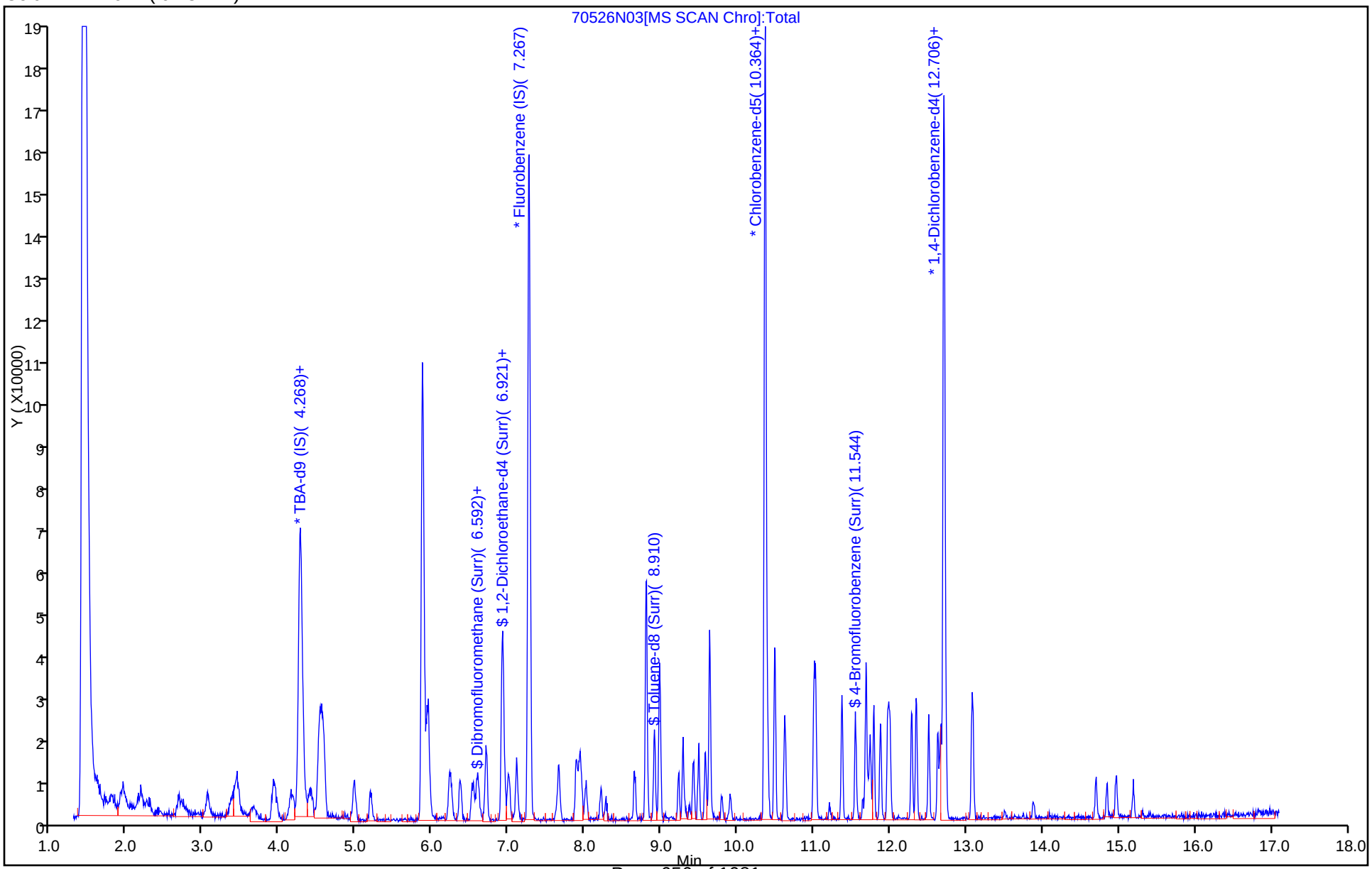
Report Date: 27-May-2017 10:43:49 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N03.D

Injection Date:	26-May-2017 14:37:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

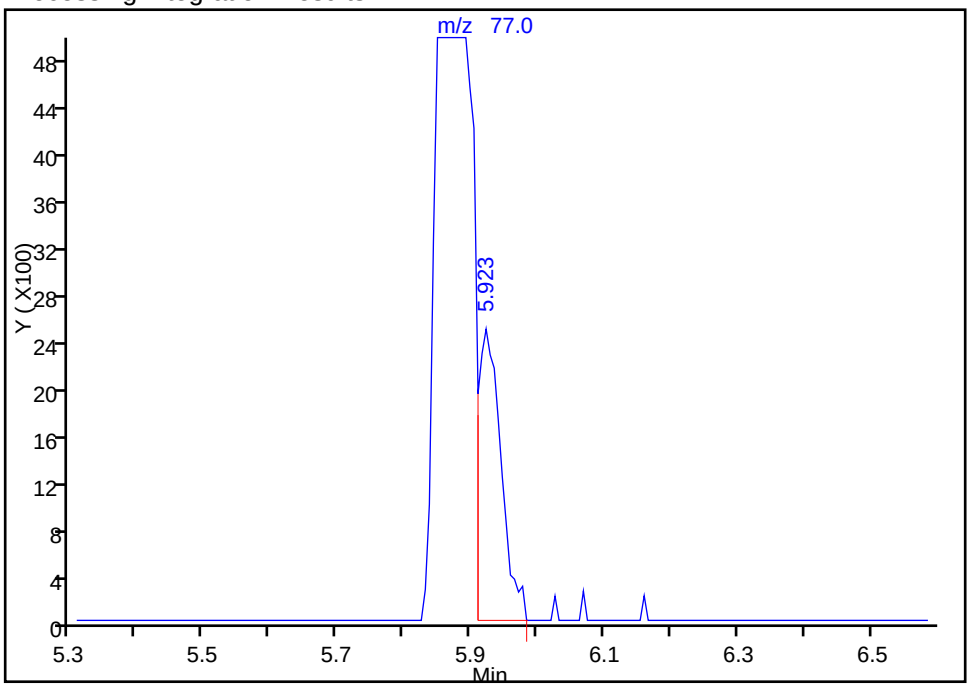
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N03.D				
Injection Date:	26-May-2017 14:37:30	Instrument ID:	CHHP7		
Lims ID:	IC				
Client ID:					
Operator ID:	034635	ALS Bottle#:	8	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

44 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

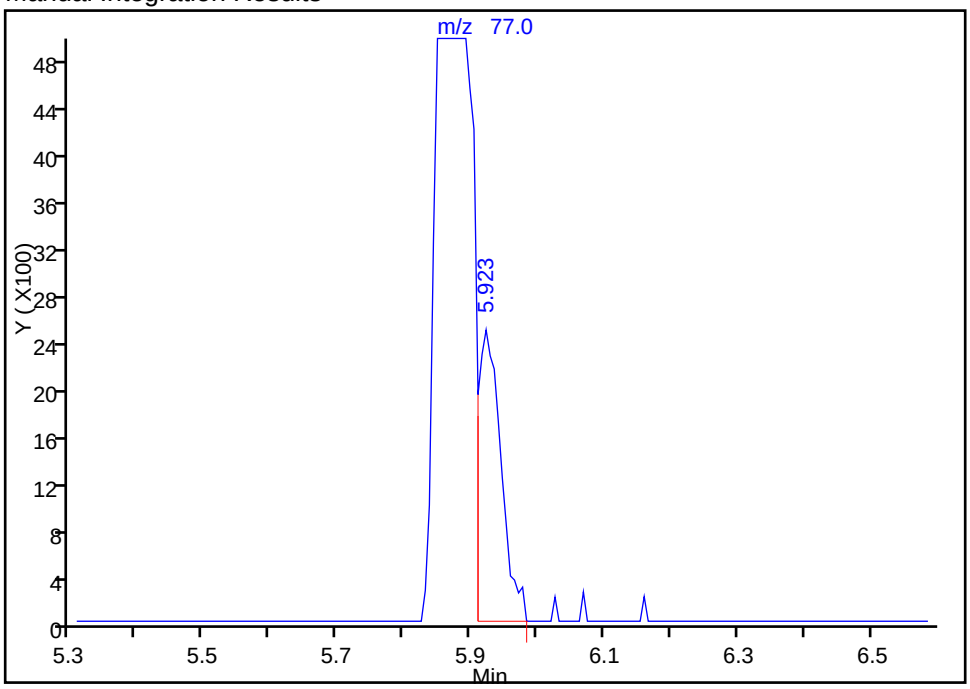
Processing Integration Results

RT: 5.92
Area: 5894
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 5.92
Area: 5894
Amount: 3.859507
Amount Units: ng



Reviewer: journetp, 26-May-2017 15:00:34
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

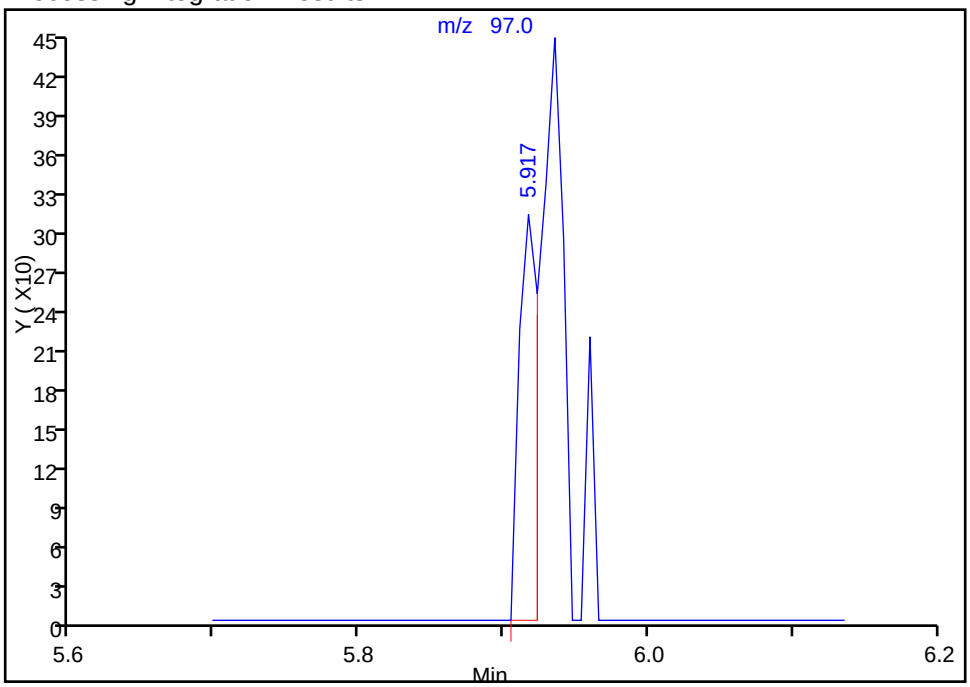
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N03.D				
Injection Date:	26-May-2017 14:37:30	Instrument ID:	CHHP7		
Lims ID:	IC				
Client ID:					
Operator ID:	034635	ALS Bottle#:	8	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

44 2,2-Dichloropropane, CAS: 594-20-7

Signal: 2

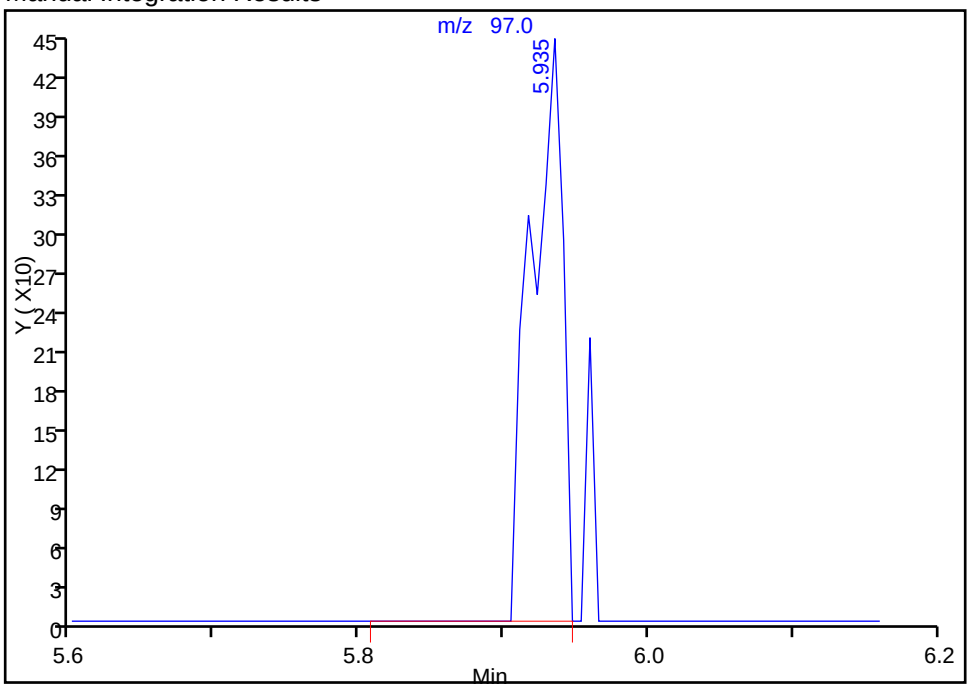
Processing Integration Results

RT: 5.92
Area: 287
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 5.94
Area: 680
Amount: 3.859507
Amount Units: ng



Reviewer: journetp, 26-May-2017 15:00:52

Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N04.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 26-May-2017 15:06:30 ALS Bottle#: 9 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0016937-004
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 27-May-2017 10:43:50 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: journetp Date: 26-May-2017 15:29:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.282	4.268	0.014	98	125556	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.269	7.267	0.002	96	142466	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.360	10.364	-0.004	94	35486	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.702	12.706	-0.004	96	48070	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.545	6.550	-0.005	91	16952	25.0	24.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.916	6.921	-0.005	71	36501	25.0	26.6	
$ 7 Toluene-d8 (Surr)	98	8.912	8.916	-0.004	96	69872	25.0	26.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.546	11.544	0.002	83	29734	25.0	24.1	
11 Dichlorodifluoromethane	85	1.605	1.592	0.013	98	30882	25.0	28.2	
12 Chloromethane	50	1.800	1.792	0.008	99	42194	25.0	27.6	
13 Vinyl chloride	62	1.922	1.920	0.002	98	35662	25.0	29.0	
14 Butadiene	39	1.964	1.944	0.020	91	27978	25.0	32.3	
15 Bromomethane	94	2.275	2.291	-0.016	93	15149	25.0	31.7	
16 Chloroethane	64	2.408	2.407	0.001	93	10887	25.0	26.3	
17 Dichlorofluoromethane	67	2.682	2.668	0.014	95	33913	25.0	28.2	
18 Trichlorofluoromethane	101	2.688	2.687	0.001	96	28963	25.0	29.9	
20 Ethyl ether	59	3.059	3.052	0.007	96	29045	25.0	27.8	
22 1,1-Dichloroethene	96	3.364	3.380	-0.016	92	26715	25.0	30.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.430	3.429	0.001	92	21136	25.0	30.5	
24 Acetone	43	3.437	3.435	0.002	96	35375	50.0	54.0	
25 Iodomethane	142	3.546	3.550	-0.004	96	20079	25.0	24.1	
26 Carbon disulfide	76	3.662	3.654	0.008	100	56667	25.0	26.8	
28 3-Chloro-1-propene	76	3.917	3.915	0.002	87	12914	25.0	27.0	
30 Methyl acetate	43	3.954	3.940	0.014	99	67981	50.0	55.6	
31 Methylene Chloride	84	4.167	4.177	-0.010	98	24241	25.0	25.4	
32 2-Methyl-2-propanol	59	4.398	4.396	0.002	99	41395	250.0	264.3	
33 Acrylonitrile	53	4.525	4.518	0.007	98	143075	250.0	274.3	
34 trans-1,2-Dichloroethene	96	4.562	4.566	-0.004	95	21684	25.0	30.5	
35 Methyl tert-butyl ether	73	4.580	4.579	0.001	99	86694	25.0	28.5	
36 Hexane	57	4.988	4.974	0.014	92	27325	25.0	27.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.201	5.181	0.020	96	52152	25.0	28.1	
44 2,2-Dichloropropane	97	5.931	5.923	0.008	53	4752	25.0	26.8	
45 cis-1,2-Dichloroethene	96	5.937	5.929	0.008	88	25005	25.0	27.0	
46 2-Butanone (MEK)	43	5.949	5.947	0.002	88	47684	50.0	54.4	
49 Chlorobromomethane	128	6.223	6.221	0.002	94	12756	25.0	27.5	
51 Tetrahydrofuran	42	6.241	6.239	0.002	90	28840	50.0	53.2	
52 Chloroform	83	6.363	6.361	0.002	95	51361	25.0	28.5	
53 1,1,1-Trichloroethane	97	6.521	6.519	0.002	97	34510	25.0	28.4	
54 Cyclohexane	56	6.594	6.592	0.002	96	37329	25.0	28.4	
56 Carbon tetrachloride	117	6.697	6.702	-0.005	71	23639	25.0	27.7	
55 1,1-Dichloropropene	75	6.716	6.708	0.008	88	34477	25.0	28.9	
57 Isobutyl alcohol	41	6.916	6.921	-0.005	84	35813	625.0	635.7	
58 Benzene	78	6.928	6.927	0.001	95	101644	25.0	30.2	
59 1,2-Dichloroethane	62	7.008	6.994	0.014	97	49673	25.0	28.8	
62 n-Heptane	43	6.916	7.103	-0.187	64	44217	25.0	26.8	
64 Trichloroethene	130	7.658	7.657	0.001	95	25051	25.0	28.6	
66 Methylcyclohexane	83	7.890	7.894	-0.004	94	27463	25.0	26.0	
67 1,2-Dichloropropane	63	7.926	7.924	0.002	93	28279	25.0	30.4	
68 Dibromomethane	93	8.017	8.010	0.007	93	15607	25.0	27.1	
70 1,4-Dioxane	88	8.017	8.022	-0.005	44	4776	500.0	527.0	
71 Dichlorobromomethane	83	8.212	8.210	0.002	98	32688	25.0	25.2	
74 cis-1,3-Dichloropropene	75	8.656	8.642	0.014	90	37902	25.0	24.4	
75 4-Methyl-2-pentanone (MIBK	43	8.802	8.800	0.002	98	93562	50.0	56.9	
76 Toluene	91	8.979	8.977	0.002	97	93248	25.0	29.2	
77 trans-1,3-Dichloropropene	75	9.228	9.232	-0.004	98	36172	25.0	25.2	
78 Ethyl methacrylate	69	9.289	9.287	0.002	92	43805	25.0	27.7	
79 1,1,2-Trichloroethane	97	9.423	9.415	0.008	93	23120	25.0	28.2	
80 Tetrachloroethene	164	9.496	9.494	0.002	91	18008	25.0	29.2	
81 1,3-Dichloropropane	76	9.581	9.585	-0.004	98	45560	25.0	28.6	
82 2-Hexanone	43	9.636	9.634	0.002	97	69806	50.0	58.4	
84 Chlorodibromomethane	129	9.788	9.792	-0.004	93	18500	25.0	24.2	
85 Ethylene Dibromide	107	9.909	9.902	0.007	94	25640	25.0	27.1	
87 Chlorobenzene	112	10.396	10.394	0.002	89	58922	25.0	26.9	
89 1,1,1,2-Tetrachloroethane	131	10.481	10.486	-0.005	87	18022	25.0	25.9	
90 Ethylbenzene	106	10.493	10.486	0.007	99	30881	25.0	28.1	
91 m-Xylene & p-Xylene	106	10.621	10.619	0.002	97	38517	25.0	27.1	
92 o-Xylene	106	11.004	11.003	0.001	99	42740	25.0	29.0	
93 Styrene	104	11.023	11.021	0.002	93	69561	25.0	29.3	
94 Bromoform	173	11.211	11.203	0.008	95	11958	25.0	23.3	
97 Isopropylbenzene	105	11.369	11.368	0.001	97	105546	25.0	29.5	
100 Bromobenzene	156	11.686	11.690	-0.004	97	26678	25.0	26.4	
99 1,1,2,2-Tetrachloroethane	83	11.686	11.690	-0.004	80	31956	25.0	27.3	
102 trans-1,4-Dichloro-2-buten	53	11.722	11.721	0.001	78	11874	25.0	26.9	
101 1,2,3-Trichloropropane	110	11.740	11.739	0.001	87	11891	25.0	27.1	
103 N-Propylbenzene	120	11.783	11.787	-0.004	99	23672	25.0	29.2	
104 2-Chlorotoluene	126	11.874	11.873	0.001	93	22070	25.0	28.6	
106 1,3,5-Trimethylbenzene	105	11.972	11.970	0.002	93	80247	25.0	28.3	
107 4-Chlorotoluene	126	12.002	12.000	0.002	99	23337	25.0	29.8	
108 tert-Butylbenzene	119	12.282	12.286	-0.004	92	58250	25.0	26.0	
110 1,2,4-Trimethylbenzene	105	12.343	12.341	0.002	97	82437	25.0	28.0	
112 sec-Butylbenzene	105	12.507	12.505	0.002	96	80365	25.0	27.5	
113 1,3-Dichlorobenzene	146	12.629	12.627	0.002	95	42711	25.0	28.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 4-Isopropyltoluene	119	12.665	12.663	0.002	97	65835	25.0	28.5	
115 1,4-Dichlorobenzene	146	12.732	12.724	0.008	90	37865	25.0	25.8	
120 n-Butylbenzene	91	13.073	13.065	0.008	98	49971	25.0	24.6	
121 1,2-Dichlorobenzene	146	13.091	13.089	0.002	91	36902	25.0	26.0	
122 1,2-Dibromo-3-Chloropropan	157	13.876	13.886	-0.010	74	4494	25.0	27.3	
126 1,2,4-Trichlorobenzene	180	14.697	14.695	0.002	91	11872	25.0	19.8	
127 Hexachlorobutadiene	225	14.843	14.841	0.002	93	5896	25.0	23.0	
128 Naphthalene	128	14.965	14.969	-0.004	98	27560	25.0	22.3	
129 1,2,3-Trichlorobenzene	180	15.190	15.188	0.002	86	7438	25.0	18.9	
S 133 Xylenes, Total	106				0		50.0	56.1	
S 134 1,2-Dichloroethene, Total	96				0		50.0	57.5	
S 135 1,3-Dichloropropene, Total	1				0		50.0	49.6	

Reagents:

VOA8260SURR_00069	Amount Added:	1.00	Units: uL
VOA8260VOAPRI_00253	Amount Added:	1.00	Units: uL
VOA8260INT_00070	Amount Added:	2.00	Units: uL
voaWKetmix1st_00003	Amount Added:	1.00	Units: uL

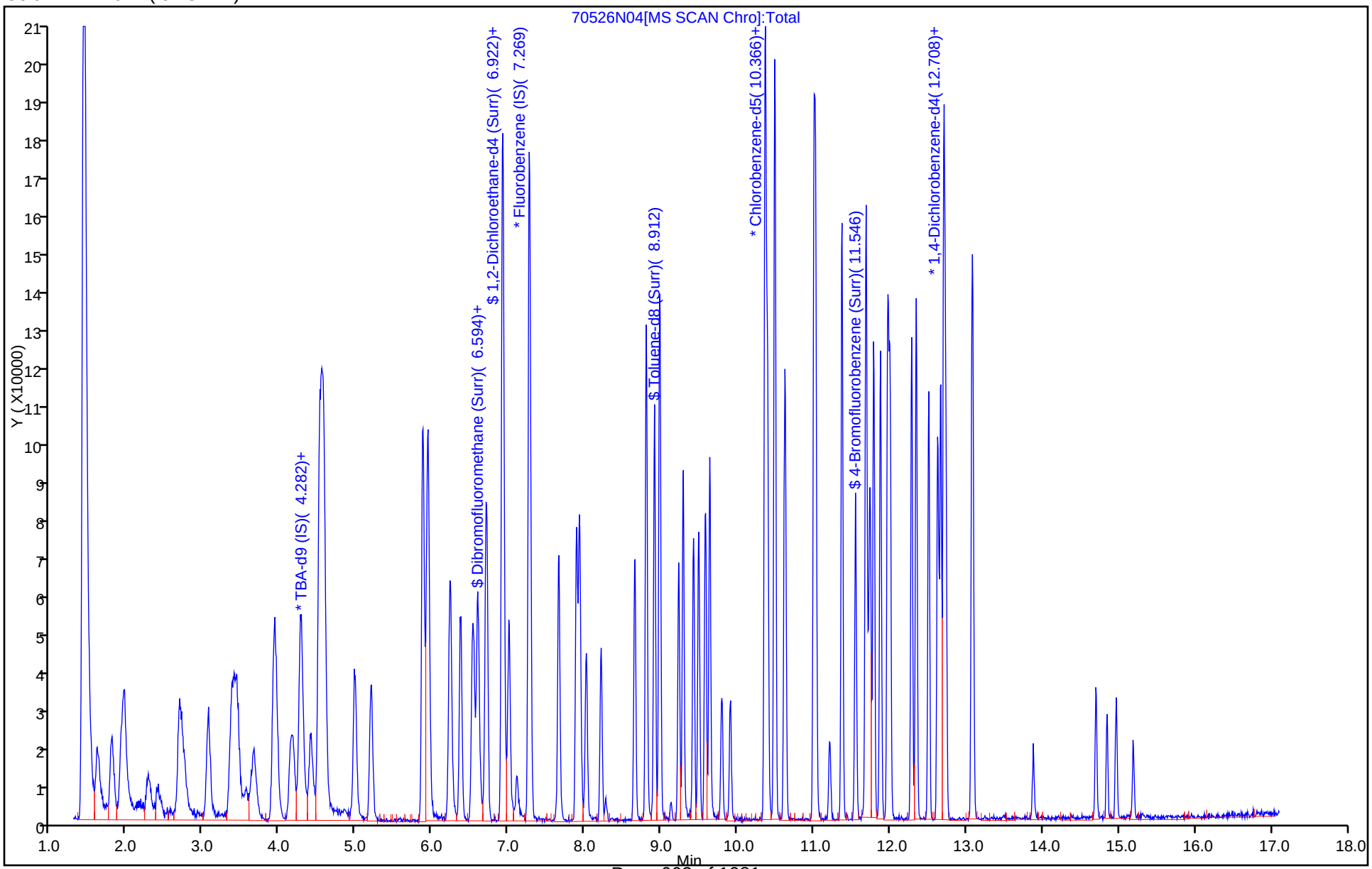
Report Date: 27-May-2017 10:43:51 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N04.D

Injection Date:	26-May-2017 15:06:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N05.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 26-May-2017 15:36:30 ALS Bottle#: 10 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Misc. Info.: 180-0016937-005
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 09-Oct-2017 14:09:46 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: journetp Date: 09-Oct-2017 14:09:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.263	4.263	0.000	98	134820	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.268	7.268	0.000	96	159755	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.358	10.358	0.000	93	42008	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.707	12.707	0.000	96	57052	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.550	6.550	0.000	93	36454	50.0	46.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.915	6.915	0.000	67	68408	50.0	44.5	
$ 7 Toluene-d8 (Surr)	98	8.911	8.911	0.000	95	145707	50.0	45.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.545	11.545	0.000	84	59576	50.0	43.4	
11 Dichlorodifluoromethane	85	1.610	1.610	0.000	99	56679	50.0	46.1	
12 Chloromethane	50	1.793	1.793	0.000	99	76626	50.0	44.6	
13 Vinyl chloride	62	1.921	1.921	0.000	98	60070	50.0	43.5	
14 Butadiene	39	1.957	1.957	0.000	97	48344	50.0	49.7	
15 Bromomethane	94	2.280	2.280	0.000	94	22325	50.0	42.3	
16 Chloroethane	64	2.401	2.401	0.000	98	19054	50.0	41.1	
17 Dichlorofluoromethane	67	2.681	2.681	0.000	93	59173	50.0	43.8	
18 Trichlorofluoromethane	101	2.693	2.693	0.000	96	54419	50.0	47.4	
20 Ethyl ether	59	3.058	3.058	0.000	97	46723	50.0	39.8	
22 1,1-Dichloroethene	96	3.381	3.381	0.000	91	45294	50.0	46.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.423	3.423	0.000	91	36097	50.0	46.4	
24 Acetone	43	3.442	3.442	0.000	97	46638	100.0	63.5	
25 Iodomethane	142	3.563	3.563	0.000	96	41160	50.0	44.0	
26 Carbon disulfide	76	3.654	3.654	0.000	99	109151	50.0	46.0	
28 3-Chloro-1-propene	76	3.916	3.916	0.000	89	26221	50.0	48.9	
30 Methyl acetate	43	3.940	3.940	0.000	98	112322	100.0	81.9	
31 Methylene Chloride	84	4.153	4.153	0.000	95	45012	50.0	44.3	
32 2-Methyl-2-propanol	59	4.403	4.403	0.000	98	68534	500.0	407.6	
33 Acrylonitrile	53	4.518	4.518	0.000	98	219093	500.0	374.6	
34 trans-1,2-Dichloroethene	96	4.561	4.561	0.000	62	36304	50.0	45.6	
35 Methyl tert-butyl ether	73	4.567	4.567	0.000	98	153649	50.0	45.0	
36 Hexane	57	4.981	4.981	0.000	96	57464	50.0	51.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.194	5.194	0.000	97	92939	50.0	44.7	
44 2,2-Dichloropropane	97	5.930	5.930	0.000	53	9995	50.0	50.2	
45 cis-1,2-Dichloroethene	96	5.936	5.936	0.000	88	47103	50.0	45.3	
46 2-Butanone (MEK)	43	5.948	5.948	0.000	85	69207	100.0	70.4	
49 Chlorobromomethane	128	6.222	6.222	0.000	94	23824	50.0	45.8	
51 Tetrahydrofuran	42	6.234	6.234	0.000	89	44867	100.0	73.8	
52 Chloroform	83	6.368	6.368	0.000	96	89557	50.0	44.4	
53 1,1,1-Trichloroethane	97	6.520	6.520	0.000	98	61273	50.0	44.9	
54 Cyclohexane	56	6.593	6.593	0.000	96	72300	50.0	49.1	
56 Carbon tetrachloride	117	6.690	6.690	0.000	95	43695	50.0	45.7	
55 1,1-Dichloropropene	75	6.708	6.708	0.000	90	61516	50.0	46.0	
57 Isobutyl alcohol	41	6.909	6.909	0.000	93	54858	1250.0	873.9	
62 n-Heptane	43	6.915	6.915	0.000	70	74693	50.0	40.4	
58 Benzene	78	6.921	6.921	0.000	98	178694	50.0	49.4	
59 1,2-Dichloroethane	62	7.000	7.000	0.000	98	87120	50.0	45.0	
64 Trichloroethene	130	7.651	7.651	0.000	95	44280	50.0	45.1	
66 Methylcyclohexane	83	7.889	7.889	0.000	97	59623	50.0	50.3	
67 1,2-Dichloropropane	63	7.925	7.925	0.000	93	46463	50.0	44.5	
70 1,4-Dioxane	88	8.004	8.004	0.000	41	8066	1000.0	793.7	
68 Dibromomethane	93	8.016	8.016	0.000	94	28091	50.0	43.6	
71 Dichlorobromomethane	83	8.211	8.211	0.000	97	61761	50.0	42.5	
74 cis-1,3-Dichloropropene	75	8.655	8.655	0.000	89	74788	50.0	42.9	
75 4-Methyl-2-pentanone (MIBK	43	8.801	8.801	0.000	98	146116	100.0	75.0	
76 Toluene	91	8.978	8.978	0.000	97	171779	50.0	47.0	
77 trans-1,3-Dichloropropene	75	9.227	9.227	0.000	99	71820	50.0	42.2	
78 Ethyl methacrylate	69	9.288	9.288	0.000	94	76619	50.0	41.0	
79 1,1,2-Trichloroethane	97	9.428	9.428	0.000	96	41365	50.0	42.6	
80 Tetrachloroethene	164	9.489	9.489	0.000	95	34542	50.0	47.3	
81 1,3-Dichloropropane	76	9.580	9.580	0.000	98	78997	50.0	41.9	
82 2-Hexanone	43	9.635	9.635	0.000	97	101508	100.0	71.7	
84 Chlorodibromomethane	129	9.793	9.793	0.000	90	38127	50.0	42.1	
85 Ethylene Dibromide	107	9.902	9.902	0.000	98	44880	50.0	40.1	
87 Chlorobenzene	112	10.395	10.395	0.000	89	110511	50.0	42.7	
89 1,1,1,2-Tetrachloroethane	131	10.480	10.480	0.000	88	35932	50.0	43.6	
90 Ethylbenzene	106	10.492	10.492	0.000	99	58733	50.0	45.1	
91 m-Xylene & p-Xylene	106	10.620	10.620	0.000	98	77358	50.0	47.6	
92 o-Xylene	106	11.003	11.003	0.000	97	77919	50.0	44.7	
93 Styrene	104	11.022	11.022	0.000	93	130546	50.0	46.5	
94 Bromoform	173	11.216	11.216	0.000	93	22558	50.0	37.1	
97 Isopropylbenzene	105	11.368	11.368	0.000	97	197042	50.0	47.8	
100 Bromobenzene	156	11.685	11.685	0.000	97	49787	50.0	41.6	
99 1,1,2,2-Tetrachloroethane	83	11.685	11.685	0.000	77	53661	50.0	38.7	
102 trans-1,4-Dichloro-2-buten	53	11.727	11.727	0.000	69	19014	50.0	36.3	
101 1,2,3-Trichloropropane	110	11.739	11.739	0.000	88	19694	50.0	37.8	
103 N-Propylbenzene	120	11.782	11.782	0.000	99	45510	50.0	47.3	
104 2-Chlorotoluene	126	11.873	11.873	0.000	93	40783	50.0	44.5	
106 1,3,5-Trimethylbenzene	105	11.971	11.971	0.000	92	166298	50.0	49.5	
107 4-Chlorotoluene	126	11.995	11.995	0.000	99	42095	50.0	45.3	
108 tert-Butylbenzene	119	12.281	12.281	0.000	93	123907	50.0	46.6	
110 1,2,4-Trimethylbenzene	105	12.342	12.342	0.000	98	160152	50.0	45.9	
112 sec-Butylbenzene	105	12.506	12.506	0.000	96	170932	50.0	49.3	
113 1,3-Dichlorobenzene	146	12.628	12.628	0.000	95	79502	50.0	44.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 4-Isopropyltoluene	119	12.664	12.664	0.000	96	128241	50.0	46.8	
115 1,4-Dichlorobenzene	146	12.731	12.731	0.000	91	75498	50.0	43.4	
120 n-Butylbenzene	91	13.072	13.072	0.000	98	112313	50.0	46.7	
121 1,2-Dichlorobenzene	146	13.084	13.084	0.000	91	72463	50.0	43.0	
122 1,2-Dibromo-3-Chloropropan	157	13.875	13.875	0.000	76	8491	50.0	42.1	
126 1,2,4-Trichlorobenzene	180	14.696	14.696	0.000	93	31007	50.0	43.7	
127 Hexachlorobutadiene	225	14.848	14.848	0.000	94	12982	50.0	44.6	
128 Naphthalene	128	14.964	14.964	0.000	99	67034	50.0	46.6	
129 1,2,3-Trichlorobenzene	180	15.195	15.195	0.000	93	18623	50.0	43.9	
S 134 1,2-Dichloroethene, Total	96				0		100.0	90.8	
S 133 Xylenes, Total	106				0		100.0	92.3	
S 135 1,3-Dichloropropene, Total	1				0		100.0	85.1	

Reagents:

VOA8260SURR_00069	Amount Added:	2.00	Units: uL
VOA8260VOAPRI_00253	Amount Added:	2.00	Units: uL
VOA8260INT_00070	Amount Added:	2.00	Units: uL
voaWKetmix1st_00003	Amount Added:	2.00	Units: uL

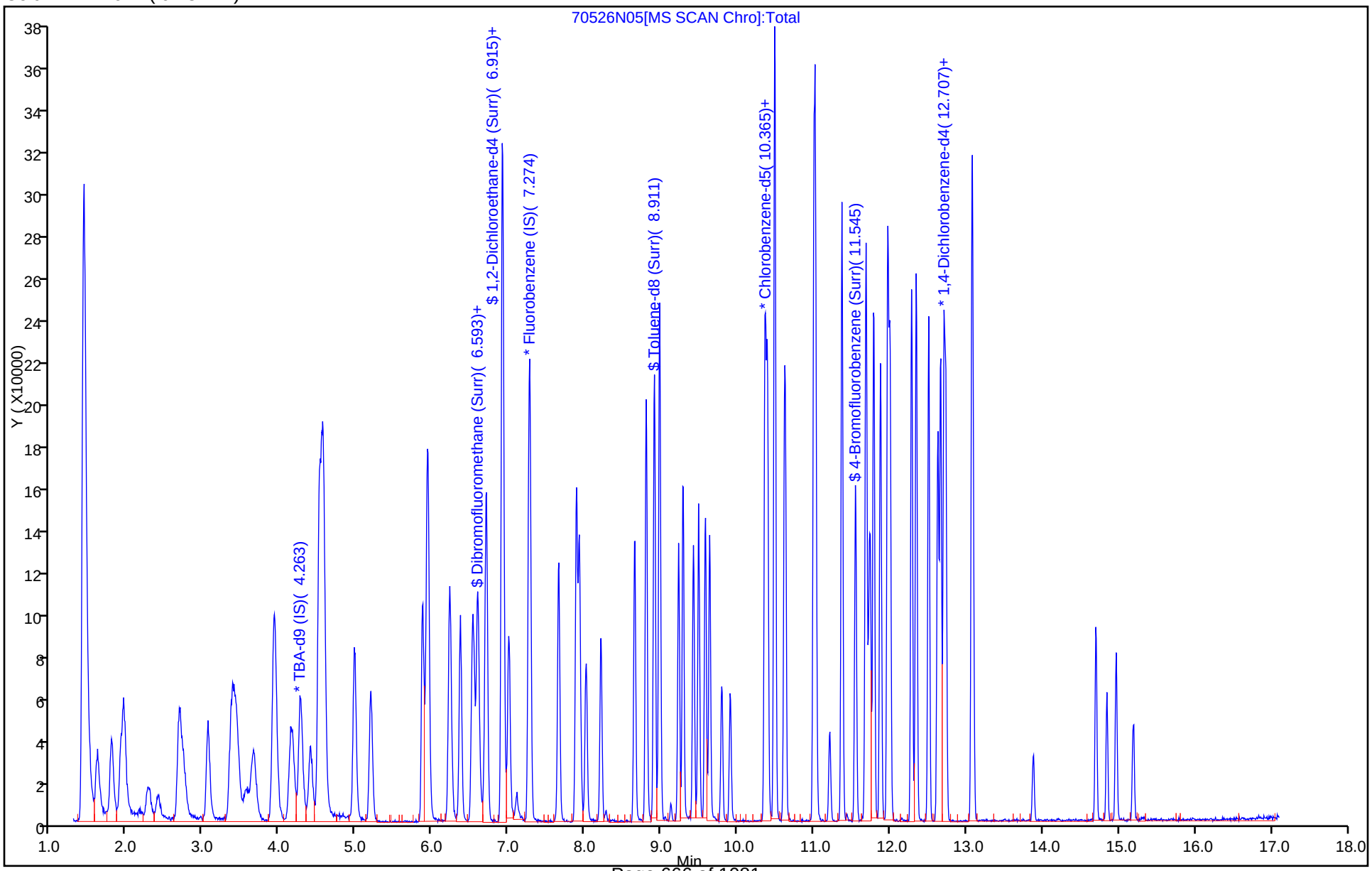
Report Date: 09-Oct-2017 14:09:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N05.D

Injection Date:	26-May-2017 15:36:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	ICIS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N06.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 26-May-2017 16:06:30 ALS Bottle#: 11 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0016937-006
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 27-May-2017 10:43:54 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: journetp Date: 26-May-2017 17:06:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.275	4.275	0.000	97	136639	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.268	7.268	0.000	96	123516	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.364	0.000	93	29423	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.706	12.706	0.000	94	38487	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.550	6.550	0.000	93	45171	75.0	73.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.915	6.915	0.000	62	87697	75.0	73.8	
$ 7 Toluene-d8 (Surr)	98	8.910	8.910	0.000	95	171864	75.0	77.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.544	11.544	0.000	86	70905	75.0	76.4	
11 Dichlorodifluoromethane	85	1.610	1.610	0.000	99	68910	75.0	72.6	
12 Chloromethane	50	1.799	1.799	0.000	99	92241	75.0	69.5	
13 Vinyl chloride	62	1.920	1.920	0.000	97	79328	75.0	74.3	
14 Butadiene	39	1.969	1.969	0.000	96	53045	75.0	70.6	
15 Bromomethane	94	2.279	2.279	0.000	92	28151	75.0	70.5	
16 Chloroethane	64	2.407	2.407	0.000	98	23385	75.0	65.2	
17 Dichlorofluoromethane	67	2.687	2.687	0.000	97	72136	75.0	69.1	
18 Trichlorofluoromethane	101	2.693	2.693	0.000	94	67687	75.0	72.2	
20 Ethyl ether	59	3.052	3.052	0.000	98	62014	75.0	68.4	
22 1,1-Dichloroethene	96	3.380	3.380	0.000	90	53268	75.0	70.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.423	3.423	0.000	95	39597	75.0	65.9	
24 Acetone	43	3.459	3.459	0.000	99	78710	150.0	138.5	
25 Iodomethane	142	3.569	3.569	0.000	99	55439	75.0	76.7	
26 Carbon disulfide	76	3.672	3.672	0.000	100	140541	75.0	76.7	
28 3-Chloro-1-propene	76	3.928	3.928	0.000	87	33209	75.0	80.1	
30 Methyl acetate	43	3.940	3.940	0.000	99	168208	150.0	158.7	
31 Methylene Chloride	84	4.141	4.141	0.000	96	58472	75.0	76.8	
32 2-Methyl-2-propanol	59	4.396	4.396	0.000	97	122140	750.0	716.7	
33 Acrylonitrile	53	4.518	4.518	0.000	98	347239	750.0	768.0	
34 trans-1,2-Dichloroethene	96	4.567	4.567	0.000	70	47991	75.0	77.9	
35 Methyl tert-butyl ether	73	4.573	4.573	0.000	100	192739	75.0	73.0	
36 Hexane	57	4.986	4.986	0.000	93	63785	75.0	73.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.199	5.199	0.000	97	116494	75.0	72.4	
44 2,2-Dichloropropane	97	5.929	5.935	-0.006	55	12042	75.0	78.2	
45 cis-1,2-Dichloroethene	96	5.942	5.942	0.000	86	56967	75.0	70.8	
46 2-Butanone (MEK)	43	5.948	5.948	0.000	92	105832	150.0	139.3	
49 Chlorobromomethane	128	6.227	6.227	0.000	90	27030	75.0	67.2	
51 Tetrahydrofuran	42	6.240	6.240	0.000	91	65508	150.0	139.3	
52 Chloroform	83	6.373	6.373	0.000	95	107010	75.0	68.6	
53 1,1,1-Trichloroethane	97	6.519	6.519	0.000	97	73676	75.0	69.8	
54 Cyclohexane	56	6.599	6.599	0.000	96	79494	75.0	69.8	
56 Carbon tetrachloride	117	6.696	6.696	0.000	94	54236	75.0	73.4	
55 1,1-Dichloropropene	75	6.708	6.708	0.000	87	73559	75.0	71.2	
57 Isobutyl alcohol	41	6.909	6.909	0.000	91	88250	1875.0	1834.3	
58 Benzene	78	6.921	6.921	0.000	96	192886	75.0	70.4	
59 1,2-Dichloroethane	62	7.006	7.006	0.000	98	104059	75.0	69.5	
62 n-Heptane	43	6.915	6.915	0.000	69	107438	75.0	75.2	
64 Trichloroethene	130	7.657	7.657	0.000	94	51955	75.0	68.4	
66 Methylcyclohexane	83	7.888	7.888	0.000	95	61423	75.0	67.1	
67 1,2-Dichloropropane	63	7.925	7.925	0.000	94	55808	75.0	69.2	
68 Dibromomethane	93	8.016	8.016	0.000	92	32961	75.0	66.1	
70 1,4-Dioxane	88	8.010	8.010	0.000	46	10541	1500.0	1341.5	
71 Dichlorobromomethane	83	8.211	8.211	0.000	98	77135	75.0	68.7	
74 cis-1,3-Dichloropropene	75	8.655	8.655	0.000	89	93581	75.0	69.5	
75 4-Methyl-2-pentanone (MIBK	43	8.801	8.801	0.000	98	198555	150.0	145.5	
76 Toluene	91	8.977	8.977	0.000	97	188087	75.0	75.1	
77 trans-1,3-Dichloropropene	75	9.227	9.227	0.000	99	85680	75.0	71.9	
78 Ethyl methacrylate	69	9.287	9.287	0.000	93	91323	75.0	69.7	
79 1,1,2-Trichloroethane	97	9.421	9.421	0.000	95	46935	75.0	68.9	
80 Tetrachloroethene	164	9.494	9.494	0.000	94	35769	75.0	70.0	
81 1,3-Dichloropropane	76	9.579	9.579	0.000	98	90297	75.0	68.4	
82 2-Hexanone	43	9.634	9.634	0.000	97	139722	150.0	141.0	
84 Chlorodibromomethane	129	9.798	9.798	0.000	90	43539	75.0	68.7	
85 Ethylene Dibromide	107	9.908	9.908	0.000	99	54037	75.0	68.9	
87 Chlorobenzene	112	10.395	10.395	0.000	87	131615	75.0	72.6	
89 1,1,1,2-Tetrachloroethane	131	10.486	10.486	0.000	87	43013	75.0	74.5	
90 Ethylbenzene	106	10.492	10.492	0.000	99	70129	75.0	76.9	
91 m-Xylene & p-Xylene	106	10.620	10.620	0.000	98	82997	75.0	74.1	
92 o-Xylene	106	11.003	11.003	0.000	98	85604	75.0	70.1	
93 Styrene	104	11.021	11.021	0.000	94	139607	75.0	70.9	
94 Bromoform	173	11.210	11.210	0.000	96	28192	75.0	66.3	
97 Isopropylbenzene	105	11.368	11.368	0.000	97	211295	75.0	74.4	
100 Bromobenzene	156	11.684	11.684	0.000	98	53955	75.0	66.8	
99 1,1,2,2-Tetrachloroethane	83	11.690	11.690	0.000	94	65012	75.0	66.9	
102 trans-1,4-Dichloro-2-buten	53	11.721	11.721	0.000	77	23325	75.0	65.9	
101 1,2,3-Trichloropropane	110	11.739	11.739	0.000	88	23942	75.0	68.1	
103 N-Propylbenzene	120	11.788	11.788	0.000	99	45540	75.0	70.1	
104 2-Chlorotoluene	126	11.879	11.879	0.000	93	42962	75.0	69.5	
106 1,3,5-Trimethylbenzene	105	11.970	11.970	0.000	92	162587	75.0	71.7	
107 4-Chlorotoluene	126	11.995	11.995	0.000	99	42599	75.0	68.0	
108 tert-Butylbenzene	119	12.280	12.280	0.000	92	126350	75.0	70.5	
110 1,2,4-Trimethylbenzene	105	12.341	12.341	0.000	97	168557	75.0	71.6	
112 sec-Butylbenzene	105	12.506	12.506	0.000	96	164718	75.0	70.4	
113 1,3-Dichlorobenzene	146	12.627	12.627	0.000	95	84645	75.0	70.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 4-Isopropyltoluene	119	12.664	12.664	0.000	96	130868	75.0	70.8	
115 1,4-Dichlorobenzene	146	12.731	12.731	0.000	90	81962	75.0	69.8	
120 n-Butylbenzene	91	13.071	13.071	0.000	98	118785	75.0	73.2	
121 1,2-Dichlorobenzene	146	13.084	13.084	0.000	93	81999	75.0	72.1	
122 1,2-Dibromo-3-Chloropropan	157	13.880	13.880	0.000	74	12102	75.0	79.1	
126 1,2,4-Trichlorobenzene	180	14.702	14.702	0.000	91	34070	75.0	71.1	
127 Hexachlorobutadiene	225	14.842	14.842	0.000	95	16041	75.0	83.9	
128 Naphthalene	128	14.963	14.963	0.000	98	79079	75.0	77.4	
129 1,2,3-Trichlorobenzene	180	15.188	15.188	0.000	95	21259	75.0	76.9	
S 133 Xylenes, Total	106				0		150.0	144.2	
S 134 1,2-Dichloroethene, Total	96				0		150.0	148.7	
S 135 1,3-Dichloropropene, Total	1				0		150.0	141.4	

Reagents:

VOA8260SURR_00069	Amount Added:	3.00	Units: uL
VOA8260VOAPRI_00253	Amount Added:	3.00	Units: uL
VOA8260INT_00070	Amount Added:	2.00	Units: uL
voaWKetmix1st_00003	Amount Added:	3.00	Units: uL

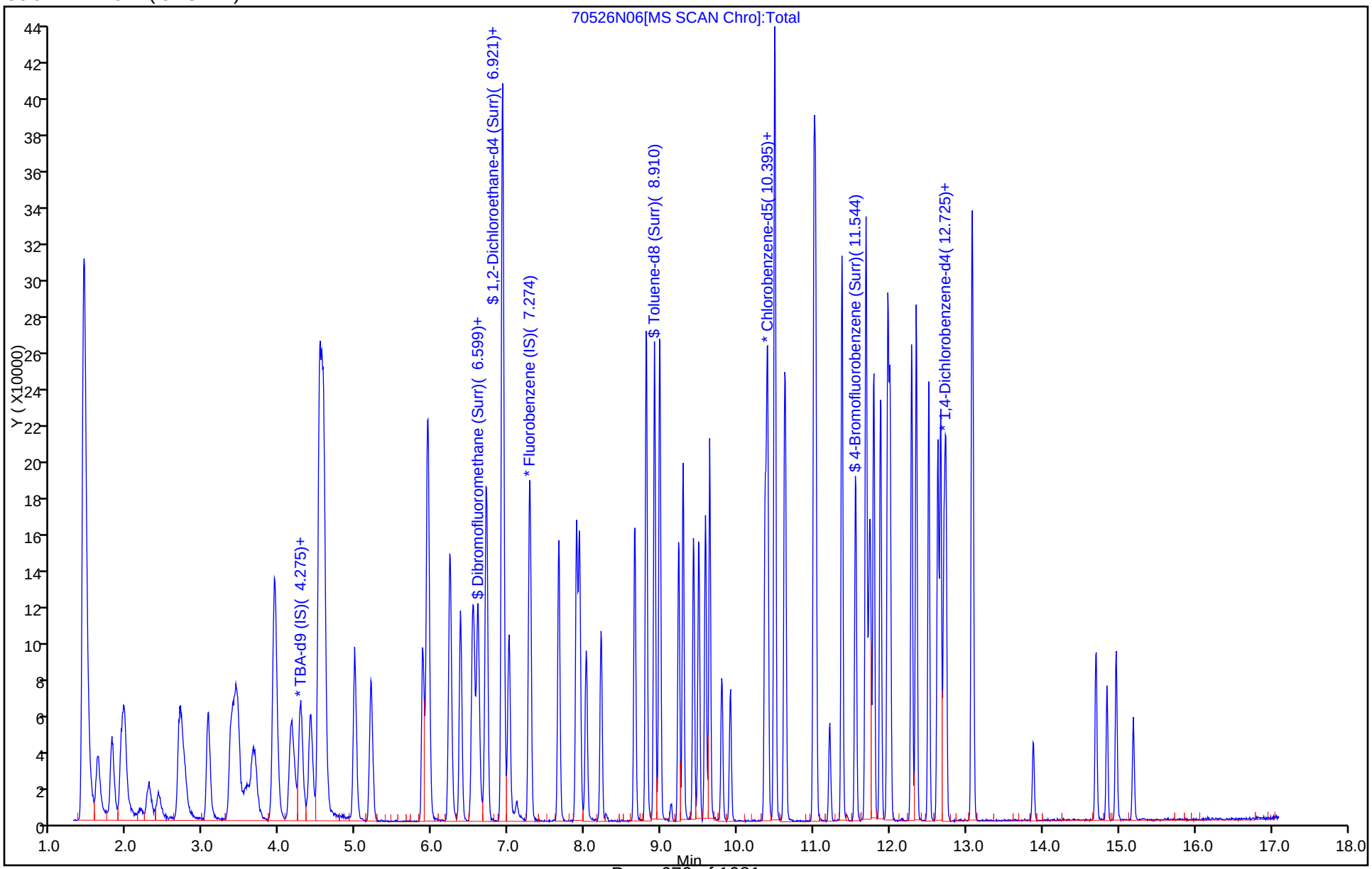
Report Date: 27-May-2017 10:43:55 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N06.D

Injection Date:	26-May-2017 16:06:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N07.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-May-2017 16:36:30 ALS Bottle#: 12 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0016937-007
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 09-Oct-2017 14:11:26 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: journetp Date: 09-Oct-2017 14:11:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.263	4.263	0.000	97	127006	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.268	7.268	0.000	97	112072	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.358	0.006	91	29700	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.706	12.707	-0.001	94	38049	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.544	6.550	-0.006	93	57245	100.0	103.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.921	6.915	0.006	61	112329	100.0	104.1	
$ 7 Toluene-d8 (Surr)	98	8.910	8.911	-0.001	94	210583	100.0	93.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.545	11.545	0.000	85	92146	100.0	99.4	
11 Dichlorodifluoromethane	85	1.610	1.610	0.000	98	81498	100.0	94.6	
12 Chloromethane	50	1.793	1.793	0.000	99	115683	100.0	96.1	
13 Vinyl chloride	62	1.920	1.921	-0.001	98	91297	100.0	94.2	
14 Butadiene	39	1.963	1.957	0.006	98	69651	100.0	102.1	
15 Bromomethane	94	2.279	2.280	-0.001	92	34863	100.0	97.5	
16 Chloroethane	64	2.395	2.401	-0.006	98	32202	100.0	99.0	
17 Dichlorofluoromethane	67	2.681	2.681	0.000	93	87004	100.0	91.9	
18 Trichlorofluoromethane	101	2.693	2.693	0.000	89	85236	100.0	96.1	
20 Ethyl ether	59	3.064	3.058	0.006	97	80386	100.0	97.7	
22 1,1-Dichloroethene	96	3.374	3.381	-0.007	90	64477	100.0	93.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.435	3.423	0.012	93	49182	100.0	90.2	
24 Acetone	43	3.447	3.442	0.005	97	100632	200.0	195.2	
25 Iodomethane	142	3.557	3.563	-0.006	99	63893	100.0	97.5	
26 Carbon disulfide	76	3.660	3.654	0.006	100	156914	100.0	94.3	
28 3-Chloro-1-propene	76	3.928	3.916	0.012	86	35900	100.0	95.4	
30 Methyl acetate	43	3.946	3.940	0.006	99	199788	200.0	207.7	
31 Methylene Chloride	84	4.165	4.153	0.012	98	67059	100.0	98.0	
32 2-Methyl-2-propanol	59	4.403	4.403	0.000	98	150271	1000.0	948.7	
33 Acrylonitrile	53	4.524	4.518	0.006	98	429643	1000.0	1047.2	
34 trans-1,2-Dichloroethene	96	4.567	4.561	0.006	54	51127	100.0	91.5	
35 Methyl tert-butyl ether	73	4.573	4.567	0.006	99	238706	100.0	99.6	
36 Hexane	57	4.980	4.981	-0.001	94	70452	100.0	89.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.193	5.194	-0.001	97	138920	100.0	95.2	
44 2,2-Dichloropropane	97	5.936	5.930	0.006	61	13674	100.0	97.9	
45 cis-1,2-Dichloroethene	96	5.936	5.936	0.000	87	69654	100.0	95.5	
46 2-Butanone (MEK)	43	5.954	5.948	0.006	98	147644	200.0	214.2	
49 Chlorobromomethane	128	6.221	6.222	-0.001	92	36156	100.0	99.1	
51 Tetrahydrofuran	42	6.234	6.234	0.000	89	89279	200.0	209.3	
52 Chloroform	83	6.367	6.368	-0.001	95	134396	100.0	94.9	
53 1,1,1-Trichloroethane	97	6.526	6.520	0.006	97	89330	100.0	93.3	
54 Cyclohexane	56	6.593	6.593	0.000	95	94053	100.0	91.0	
56 Carbon tetrachloride	117	6.702	6.690	0.012	95	65945	100.0	98.3	
55 1,1-Dichloropropene	75	6.714	6.708	0.006	89	88223	100.0	94.1	
57 Isobutyl alcohol	41	6.915	6.909	0.006	92	114829	2500.0	2637.0	
62 n-Heptane	43	6.915	6.915	0.000	69	140980	100.0	108.7	
58 Benzene	78	6.927	6.921	0.006	96	238075	100.0	97.0	
59 1,2-Dichloroethane	62	7.006	7.000	0.006	98	131718	100.0	96.9	
64 Trichloroethene	130	7.657	7.651	0.006	94	64879	100.0	94.1	
66 Methylcyclohexane	83	7.888	7.889	-0.001	96	77226	100.0	93.0	
67 1,2-Dichloropropane	63	7.925	7.925	0.000	93	72576	100.0	99.1	
70 1,4-Dioxane	88	8.010	8.004	0.006	44	14046	2000.0	1970.1	
68 Dibromomethane	93	8.016	8.016	0.000	91	45388	100.0	100.4	
71 Dichlorobromomethane	83	8.211	8.211	0.000	98	100245	100.0	98.4	
74 cis-1,3-Dichloropropene	75	8.649	8.655	-0.006	89	122705	100.0	100.4	
75 4-Methyl-2-pentanone (MIBK	43	8.801	8.801	0.000	98	294883	200.0	214.1	
76 Toluene	91	8.983	8.978	0.005	97	240501	100.0	95.8	
77 trans-1,3-Dichloropropene	75	9.233	9.227	0.006	99	116869	100.0	97.1	
78 Ethyl methacrylate	69	9.288	9.288	0.000	92	126635	100.0	95.8	
79 1,1,2-Trichloroethane	97	9.421	9.428	-0.007	95	65225	100.0	94.9	
80 Tetrachloroethene	164	9.494	9.489	0.005	93	43333	100.0	84.0	
81 1,3-Dichloropropane	76	9.580	9.580	0.000	98	121326	100.0	91.0	
82 2-Hexanone	43	9.634	9.635	-0.001	98	202909	200.0	202.8	
84 Chlorodibromomethane	129	9.799	9.793	0.006	90	58722	100.0	91.8	
85 Ethylene Dibromide	107	9.902	9.902	0.000	99	75700	100.0	95.7	
87 Chlorobenzene	112	10.395	10.395	0.000	88	165455	100.0	90.4	
89 1,1,1,2-Tetrachloroethane	131	10.486	10.480	0.006	89	56158	100.0	96.3	
90 Ethylbenzene	106	10.486	10.492	-0.006	99	82329	100.0	89.4	
91 m-Xylene & p-Xylene	106	10.626	10.620	0.006	97	100905	100.0	89.7	
92 o-Xylene	106	11.003	11.003	0.000	99	108029	100.0	87.7	
93 Styrene	104	11.021	11.022	-0.001	94	181891	100.0	91.6	
94 Bromoform	173	11.210	11.216	-0.006	96	43101	100.0	100.3	
97 Isopropylbenzene	105	11.368	11.368	0.000	98	266769	100.0	93.7	
99 1,1,2,2-Tetrachloroethane	83	11.691	11.685	0.006	97	92899	100.0	94.8	
100 Bromobenzene	156	11.691	11.685	0.006	97	74774	100.0	93.6	
102 trans-1,4-Dichloro-2-buten	53	11.727	11.727	0.000	82	35308	100.0	101.0	
101 1,2,3-Trichloropropane	110	11.739	11.739	0.000	87	33107	100.0	95.3	
103 N-Propylbenzene	120	11.788	11.782	0.006	99	55392	100.0	86.3	
104 2-Chlorotoluene	126	11.873	11.873	0.000	94	55987	100.0	91.6	
106 1,3,5-Trimethylbenzene	105	11.970	11.971	-0.001	92	200949	100.0	89.7	
107 4-Chlorotoluene	126	12.001	11.995	0.006	99	57288	100.0	92.4	
108 tert-Butylbenzene	119	12.281	12.281	0.000	92	159889	100.0	90.3	
110 1,2,4-Trimethylbenzene	105	12.341	12.342	-0.001	98	212736	100.0	91.4	
112 sec-Butylbenzene	105	12.506	12.506	0.000	96	207217	100.0	89.6	
113 1,3-Dichlorobenzene	146	12.627	12.628	-0.001	95	110575	100.0	92.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 4-Isopropyltoluene	119	12.664	12.664	0.000	97	164053	100.0	89.8	
115 1,4-Dichlorobenzene	146	12.731	12.731	0.000	89	105161	100.0	90.6	
120 n-Butylbenzene	91	13.071	13.072	-0.001	97	149155	100.0	92.9	
121 1,2-Dichlorobenzene	146	13.084	13.084	0.000	92	106782	100.0	94.9	
122 1,2-Dibromo-3-Chloropropan	157	13.881	13.875	0.006	73	16903	100.0	103.4	
126 1,2,4-Trichlorobenzene	180	14.696	14.696	0.000	93	46031	100.0	97.2	
127 Hexachlorobutadiene	225	14.848	14.848	0.000	93	18120	100.0	96.4	
128 Naphthalene	128	14.963	14.964	-0.001	98	114310	100.0	106.4	
129 1,2,3-Trichlorobenzene	180	15.189	15.195	-0.006	95	29478	100.0	109.3	
S 134 1,2-Dichloroethene, Total	96				0		200.0	186.9	
S 133 Xylenes, Total	106				0		200.0	177.4	
S 135 1,3-Dichloropropene, Total	1				0		200.0	197.6	

Reagents:

VOA8260SURR_00069	Amount Added:	4.00	Units: uL
VOA8260VOAPRI_00253	Amount Added:	4.00	Units: uL
VOA8260INT_00070	Amount Added:	2.00	Units: uL
voaWKetmix1st_00003	Amount Added:	4.00	Units: uL

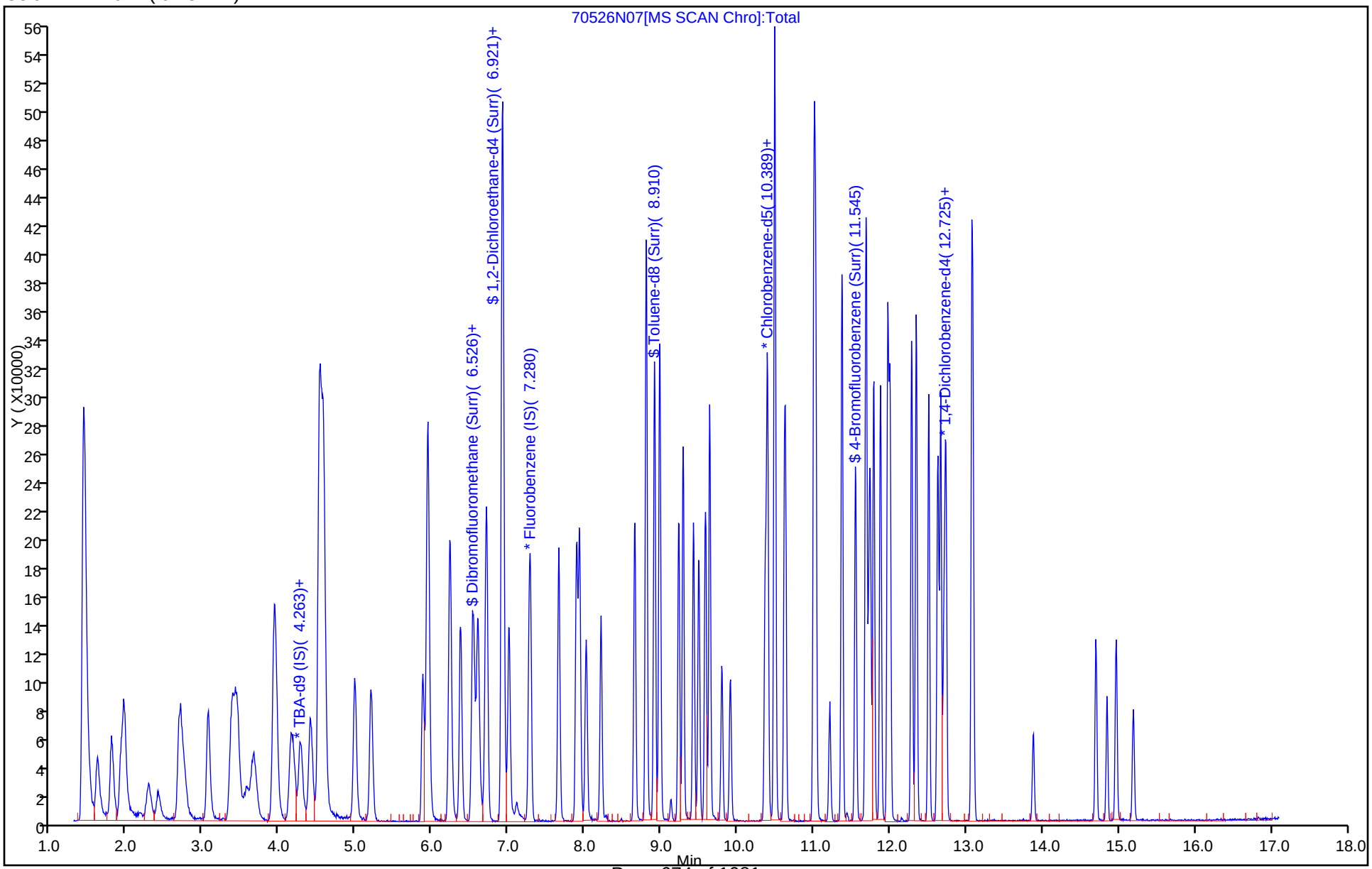
Report Date: 09-Oct-2017 14:11:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N07.D

Injection Date:	26-May-2017 16:36:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N08.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 26-May-2017 17:05:30 ALS Bottle#: 13 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0016937-008
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 27-May-2017 10:43:58 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: journetp Date: 26-May-2017 17:28:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.278	4.275	0.003	97	98876	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.268	0.003	97	106013	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.367	10.364	0.003	91	25116	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.703	12.706	-0.003	94	32711	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.550	-0.003	93	90698	175.0	172.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.912	6.915	-0.003	89	178959	175.0	175.4	
$ 7 Toluene-d8 (Surr)	98	8.913	8.910	0.003	95	319810	175.0	168.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.547	11.544	0.003	85	143913	175.0	186.9	
11 Dichlorodifluoromethane	85	1.607	1.610	-0.003	99	137470	175.0	168.6	
12 Chloromethane	50	1.796	1.799	-0.003	99	210196	175.0	184.5	
13 Vinyl chloride	62	1.917	1.920	-0.003	98	160997	175.0	175.7	
14 Butadiene	39	1.960	1.969	-0.009	94	117737	175.0	182.5	
15 Bromomethane	94	2.270	2.279	-0.009	93	61977	175.0	189.0	
16 Chloroethane	64	2.404	2.407	-0.003	99	58181	175.0	189.0	
17 Dichlorofluoromethane	67	2.684	2.687	-0.003	93	164714	175.0	183.8	
18 Trichlorofluoromethane	101	2.696	2.693	0.003	97	161105	175.0	171.6	
20 Ethyl ether	59	3.061	3.052	0.009	97	154352	175.0	198.3	
22 1,1-Dichloroethene	96	3.377	3.380	-0.003	92	120080	175.0	183.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.414	3.423	-0.009	93	91330	175.0	177.0	
24 Acetone	43	3.438	3.459	-0.021	98	196065	350.0	402.1	
25 Iodomethane	142	3.578	3.569	0.009	98	115375	175.0	186.1	
26 Carbon disulfide	76	3.657	3.672	-0.015	100	257287	175.0	163.5	
28 3-Chloro-1-propene	76	3.925	3.928	-0.003	86	63012	175.0	177.1	
30 Methyl acetate	43	3.949	3.940	0.009	99	315650	350.0	346.9	
31 Methylene Chloride	84	4.156	4.141	0.015	97	116526	175.0	182.9	
32 2-Methyl-2-propanol	59	4.405	4.396	0.009	98	210984	1750.0	1710.9	
33 Acrylonitrile	53	4.521	4.518	0.003	97	643571	1750.0	1658.3	
34 trans-1,2-Dichloroethene	96	4.570	4.567	0.003	91	83342	175.0	157.6	
35 Methyl tert-butyl ether	73	4.582	4.573	0.009	99	393346	175.0	173.6	
36 Hexane	57	4.983	4.986	-0.003	94	118172	175.0	159.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.196	5.199	-0.003	96	241286	175.0	174.8	
44 2,2-Dichloropropane	97	5.926	5.935	-0.009	82	23338	175.0	176.6	
45 cis-1,2-Dichloroethene	96	5.938	5.942	-0.004	87	116703	175.0	169.1	
46 2-Butanone (MEK)	43	5.951	5.948	0.003	98	238738	350.0	366.1	
49 Chlorobromomethane	128	6.224	6.227	-0.003	92	61559	175.0	178.4	
51 Tetrahydrofuran	42	6.237	6.240	-0.004	91	138476	350.0	343.2	
52 Chloroform	83	6.370	6.373	-0.003	95	227600	175.0	169.9	
53 1,1,1-Trichloroethane	97	6.529	6.519	0.009	96	150444	175.0	166.1	
54 Cyclohexane	56	6.602	6.599	0.003	96	156665	175.0	160.2	
56 Carbon tetrachloride	117	6.699	6.696	0.003	95	110583	175.0	174.3	
55 1,1-Dichloropropene	75	6.711	6.708	0.003	90	143974	175.0	162.4	
57 Isobutyl alcohol	41	6.912	6.909	0.003	97	169660	4375.0	4127.2	
62 n-Heptane	43	6.912	6.915	-0.003	72	221336	175.0	180.4	
58 Benzene	78	6.924	6.921	0.003	96	393187	175.0	172.1	
59 1,2-Dichloroethane	62	7.003	7.006	-0.003	98	224220	175.0	174.4	
64 Trichloroethene	130	7.654	7.657	-0.003	95	112644	175.0	172.8	
66 Methylcyclohexane	83	7.891	7.888	0.003	97	123537	175.0	157.2	
67 1,2-Dichloropropane	63	7.928	7.925	0.003	92	119473	175.0	172.5	
70 1,4-Dioxane	88	8.013	8.010	0.003	40	22889	3500.0	3394.0	
68 Dibromomethane	93	8.019	8.016	0.003	94	77532	175.0	181.2	
71 Dichlorobromomethane	83	8.208	8.211	-0.003	98	181348	175.0	188.1	
74 cis-1,3-Dichloropropene	75	8.652	8.655	-0.003	89	211834	175.0	183.3	
75 4-Methyl-2-pentanone (MIBK	43	8.804	8.801	0.003	97	438844	350.0	376.9	
76 Toluene	91	8.980	8.977	0.003	97	380931	175.0	182.0	
77 trans-1,3-Dichloropropene	75	9.230	9.227	0.003	98	208220	175.0	204.6	
78 Ethyl methacrylate	69	9.284	9.287	-0.003	93	207753	175.0	185.9	
79 1,1,2-Trichloroethane	97	9.424	9.421	0.003	96	107153	175.0	184.4	
80 Tetrachloroethene	164	9.491	9.494	-0.003	94	72941	175.0	167.2	
81 1,3-Dichloropropane	76	9.576	9.579	-0.003	98	204490	175.0	181.3	
82 2-Hexanone	43	9.637	9.634	0.003	98	320031	350.0	378.3	
84 Chlorodibromomethane	129	9.795	9.798	-0.003	90	108301	175.0	200.3	
85 Ethylene Dibromide	107	9.905	9.908	-0.003	99	127642	175.0	190.7	
87 Chlorobenzene	112	10.392	10.395	-0.003	87	277085	175.0	178.9	
89 1,1,1,2-Tetrachloroethane	131	10.483	10.486	-0.003	88	96885	175.0	196.6	
90 Ethylbenzene	106	10.489	10.492	-0.003	99	131211	175.0	168.5	
91 m-Xylene & p-Xylene	106	10.617	10.620	-0.003	98	170565	175.0	181.7	
92 o-Xylene	106	11.000	11.003	-0.003	98	182159	175.0	174.8	
93 Styrene	104	11.024	11.021	0.003	93	288517	175.0	171.7	
94 Bromoform	173	11.207	11.210	-0.003	96	75765	175.0	208.6	
97 Isopropylbenzene	105	11.365	11.368	-0.003	98	428018	175.0	179.8	
100 Bromobenzene	156	11.687	11.684	0.003	97	122150	175.0	177.8	
99 1,1,2,2-Tetrachloroethane	83	11.687	11.690	-0.003	95	147671	175.0	178.1	
102 trans-1,4-Dichloro-2-buten	53	11.724	11.721	0.003	72	59414	175.0	197.6	
101 1,2,3-Trichloropropane	110	11.742	11.739	0.003	88	51470	175.0	172.4	
103 N-Propylbenzene	120	11.785	11.788	-0.003	98	94092	175.0	170.5	
104 2-Chlorotoluene	126	11.876	11.879	-0.003	94	91234	175.0	173.7	
106 1,3,5-Trimethylbenzene	105	11.967	11.970	-0.003	92	318634	175.0	165.4	
107 4-Chlorotoluene	126	11.998	11.995	0.003	100	90363	175.0	169.6	
108 tert-Butylbenzene	119	12.283	12.280	0.003	92	255613	175.0	167.8	
110 1,2,4-Trimethylbenzene	105	12.344	12.341	0.003	98	341101	175.0	170.4	
112 sec-Butylbenzene	105	12.509	12.506	0.003	96	317584	175.0	159.7	
113 1,3-Dichlorobenzene	146	12.630	12.627	0.003	95	175752	175.0	170.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 4-Isopropyltoluene	119	12.661	12.664	-0.003	96	250701	175.0	159.6	
115 1,4-Dichlorobenzene	146	12.728	12.731	-0.003	89	168927	175.0	169.4	
120 n-Butylbenzene	91	13.068	13.071	-0.003	97	225754	175.0	163.6	
121 1,2-Dichlorobenzene	146	13.086	13.084	0.002	93	167983	175.0	173.7	
122 1,2-Dibromo-3-Chloropropan	157	13.877	13.880	-0.003	77	30069	175.0	174.5	
126 1,2,4-Trichlorobenzene	180	14.699	14.702	-0.003	94	68109	175.0	167.3	
127 Hexachlorobutadiene	225	14.845	14.842	0.003	95	27593	175.0	175.0	
128 Naphthalene	128	14.960	14.963	-0.003	98	172510	175.0	164.7	
129 1,2,3-Trichlorobenzene	180	15.185	15.188	-0.003	94	40042	175.0	174.7	
S 133 Xylenes, Total	106				0		350.0	356.5	
S 134 1,2-Dichloroethene, Total	96				0		350.0	326.7	
S 135 1,3-Dichloropropene, Total	1				0		350.0	387.9	

Reagents:

VOA8260SURR_00069	Amount Added:	7.00	Units: uL
VOA8260VOAPRI_00253	Amount Added:	7.00	Units: uL
VOA8260INT_00070	Amount Added:	2.00	Units: uL
voaWKetmix1st_00003	Amount Added:	7.00	Units: uL

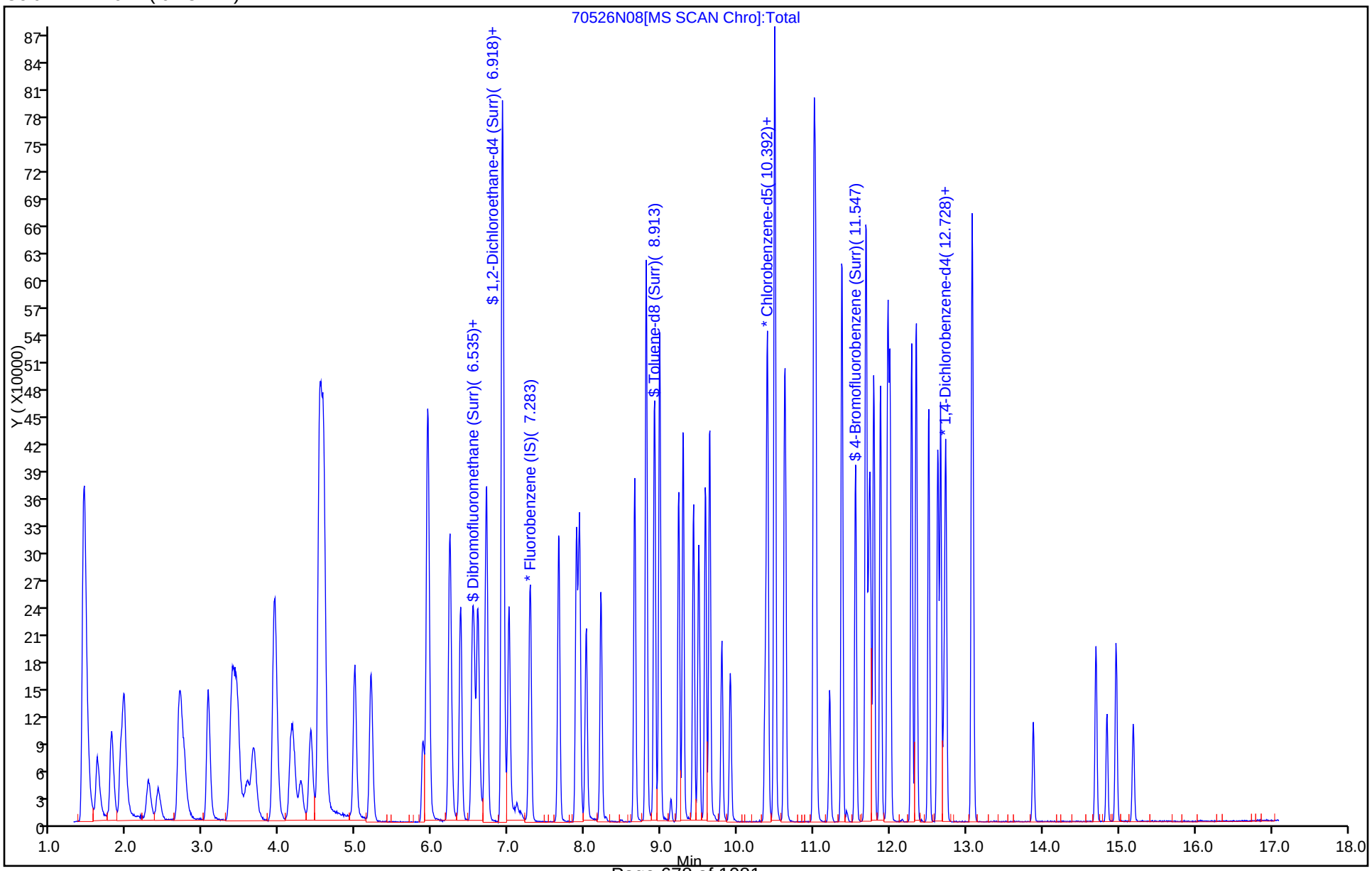
Report Date: 27-May-2017 10:43:59 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N08.D

Injection Date:	26-May-2017 17:05:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N09.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 26-May-2017 17:34:30 ALS Bottle#: 14 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0016937-009
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 27-May-2017 10:44:00 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: journetp Date: 27-May-2017 09:50:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.267	4.275	-0.008	97	115264	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.267	7.268	-0.001	97	101418	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.369	10.364	0.005	91	28106	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.705	12.706	-0.001	96	34128	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.549	6.550	-0.001	93	103405	200.0	206.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.920	6.915	0.005	61	194286	200.0	199.0	
$ 7 Toluene-d8 (Surr)	98	8.915	8.910	0.005	95	368509	200.0	173.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.543	11.544	-0.001	93	179388	200.0	208.6	
11 Dichlorodifluoromethane	85	1.609	1.610	-0.001	99	155318	200.0	199.2	
12 Chloromethane	50	1.791	1.799	-0.008	99	224586	200.0	206.1	
13 Vinyl chloride	62	1.919	1.920	-0.001	98	176578	200.0	201.4	
14 Butadiene	39	1.962	1.969	-0.007	97	97018	200.0	157.2	
15 Bromomethane	94	2.284	2.279	0.005	92	61279	200.0	195.7	
16 Chloroethane	64	2.412	2.407	0.005	98	74530	200.0	253.1	
17 Dichlorofluoromethane	67	2.680	2.687	-0.007	95	198650	200.0	231.8	
18 Trichlorofluoromethane	101	2.698	2.693	0.005	87	200072	200.0	211.4	
20 Ethyl ether	59	3.057	3.052	0.005	96	175588	200.0	235.8	
22 1,1-Dichloroethene	96	3.385	3.380	0.005	93	136045	200.0	217.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.416	3.423	-0.007	81	102172	200.0	207.0	
24 Acetone	43	3.446	3.459	-0.013	97	231306	400.0	495.9	
25 Iodomethane	142	3.574	3.569	0.005	100	124772	200.0	210.3	
26 Carbon disulfide	76	3.665	3.672	-0.007	99	309717	200.0	205.8	
28 3-Chloro-1-propene	76	3.927	3.928	-0.001	87	69940	200.0	205.5	
30 Methyl acetate	43	3.945	3.940	0.005	99	343928	400.0	395.1	
31 Methylene Chloride	84	4.164	4.141	0.023	97	122145	200.0	200.8	
32 2-Methyl-2-propanol	59	4.401	4.396	0.005	98	269056	2000.0	1871.6	
33 Acrylonitrile	53	4.523	4.518	0.005	98	693116	2000.0	1866.9	
34 trans-1,2-Dichloroethene	96	4.566	4.567	-0.001	89	93546	200.0	184.9	
35 Methyl tert-butyl ether	73	4.578	4.573	0.005	99	410106	200.0	189.2	
36 Hexane	57	4.985	4.986	-0.001	95	138197	200.0	194.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.198	5.199	-0.001	97	263642	200.0	199.6	
44 2,2-Dichloropropane	97	5.940	5.935	0.005	62	25715	200.0	203.4	
45 cis-1,2-Dichloroethene	96	5.946	5.942	0.004	88	127360	200.0	192.9	
46 2-Butanone (MEK)	43	5.946	5.948	-0.002	98	274021	400.0	439.2	
49 Chlorobromomethane	128	6.220	6.227	-0.007	92	64013	200.0	193.9	
51 Tetrahydrofuran	42	6.238	6.240	-0.002	90	147259	400.0	381.5	
52 Chloroform	83	6.372	6.373	-0.001	95	254314	200.0	198.5	
53 1,1,1-Trichloroethane	97	6.524	6.519	0.005	97	170047	200.0	196.3	
54 Cyclohexane	56	6.597	6.599	-0.002	95	180420	200.0	192.9	
56 Carbon tetrachloride	117	6.701	6.696	0.005	95	128735	200.0	212.1	
55 1,1-Dichloropropene	75	6.713	6.708	0.005	90	164195	200.0	193.6	
57 Isobutyl alcohol	41	6.914	6.909	0.005	94	198821	5000.0	5059.1	
62 n-Heptane	43	6.914	6.915	-0.001	70	254314	200.0	216.7	
58 Benzene	78	6.926	6.921	0.005	94	419667	200.0	192.4	
59 1,2-Dichloroethane	62	7.005	7.006	-0.001	98	242220	200.0	197.0	
64 Trichloroethene	130	7.662	7.657	0.005	95	123693	200.0	198.3	
66 Methylcyclohexane	83	7.893	7.888	0.005	96	143178	200.0	190.4	
67 1,2-Dichloropropane	63	7.930	7.925	0.005	93	127304	200.0	192.1	
70 1,4-Dioxane	88	8.009	8.010	-0.001	43	26810	4000.0	4155.5	
68 Dibromomethane	93	8.015	8.016	-0.001	95	81114	200.0	198.2	
71 Dichlorobromomethane	83	8.210	8.211	-0.001	98	198595	200.0	215.4	
74 cis-1,3-Dichloropropene	75	8.654	8.655	-0.001	89	231221	200.0	209.2	
75 4-Methyl-2-pentanone (MIBK	43	8.806	8.801	0.005	97	490495	400.0	376.4	
76 Toluene	91	8.982	8.977	0.005	97	414985	200.0	177.1	
77 trans-1,3-Dichloropropene	75	9.232	9.227	0.005	99	221853	200.0	194.8	
78 Ethyl methacrylate	69	9.286	9.287	-0.001	93	219854	200.0	175.8	
79 1,1,2-Trichloroethane	97	9.420	9.421	-0.001	95	115443	200.0	177.5	
80 Tetrachloroethene	164	9.493	9.494	-0.001	93	87816	200.0	179.9	
81 1,3-Dichloropropane	76	9.578	9.579	-0.001	99	226616	200.0	179.6	
82 2-Hexanone	43	9.633	9.634	-0.001	98	366229	400.0	386.9	
84 Chlorodibromomethane	129	9.797	9.798	-0.001	91	121642	200.0	201.0	
85 Ethylene Dibromide	107	9.907	9.908	-0.001	98	136944	200.0	182.9	
87 Chlorobenzene	112	10.393	10.395	-0.002	88	315354	200.0	182.0	
89 1,1,1,2-Tetrachloroethane	131	10.485	10.486	-0.001	88	105885	200.0	192.0	
90 Ethylbenzene	106	10.491	10.492	-0.001	99	151598	200.0	173.9	
91 m-Xylene & p-Xylene	106	10.619	10.620	-0.001	98	195979	200.0	186.6	
92 o-Xylene	106	11.002	11.003	-0.001	98	205247	200.0	176.0	
93 Styrene	104	11.026	11.021	0.005	93	319865	200.0	170.1	
94 Bromoform	173	11.209	11.210	-0.001	96	87434	200.0	215.1	
97 Isopropylbenzene	105	11.373	11.368	0.005	98	501841	200.0	188.4	
100 Bromobenzene	156	11.683	11.684	-0.001	98	141257	200.0	197.1	
99 1,1,2,2-Tetrachloroethane	83	11.689	11.690	-0.001	94	163634	200.0	176.4	
102 trans-1,4-Dichloro-2-buten	53	11.720	11.721	-0.001	81	65545	200.0	209.0	
101 1,2,3-Trichloropropane	110	11.738	11.739	-0.001	87	60557	200.0	194.4	
103 N-Propylbenzene	120	11.787	11.788	-0.001	98	109486	200.0	190.1	
104 2-Chlorotoluene	126	11.878	11.879	-0.001	94	108596	200.0	198.1	
106 1,3,5-Trimethylbenzene	105	11.969	11.970	-0.001	94	377047	200.0	187.5	
107 4-Chlorotoluene	126	12.000	11.995	0.005	100	104084	200.0	187.3	
108 tert-Butylbenzene	119	12.279	12.280	-0.001	92	309031	200.0	194.5	
110 1,2,4-Trimethylbenzene	105	12.346	12.341	0.005	99	397488	200.0	190.4	
112 sec-Butylbenzene	105	12.504	12.506	-0.002	96	408616	200.0	197.0	
113 1,3-Dichlorobenzene	146	12.626	12.627	-0.001	94	207221	200.0	193.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 4-Isopropyltoluene	119	12.663	12.664	-0.001	96	315106	200.0	192.3	
115 1,4-Dichlorobenzene	146	12.736	12.731	0.005	88	201354	200.0	193.5	
120 n-Butylbenzene	91	13.070	13.071	-0.001	97	300798	200.0	208.9	
121 1,2-Dichlorobenzene	146	13.088	13.084	0.004	92	195534	200.0	193.8	
122 1,2-Dibromo-3-Chloropropan	157	13.879	13.880	-0.001	76	37626	200.0	197.3	
126 1,2,4-Trichlorobenzene	180	14.694	14.702	-0.008	94	92484	200.0	217.7	
127 Hexachlorobutadiene	225	14.847	14.842	0.005	96	39382	200.0	243.5	
128 Naphthalene	128	14.962	14.963	-0.001	98	244655	200.0	205.9	
129 1,2,3-Trichlorobenzene	180	15.187	15.188	-0.001	95	64486	200.0	271.7	
S 134 1,2-Dichloroethene, Total	96				0		400.0	377.8	
S 133 Xylenes, Total	106				0		400.0	362.6	
S 135 1,3-Dichloropropene, Total	1				0		400.0	404.0	

Reagents:

VOA8260SURR_00069	Amount Added:	8.00	Units: uL
VOA8260VOAPRI_00253	Amount Added:	8.00	Units: uL
VOA8260INT_00070	Amount Added:	2.00	Units: uL
voaWKetmix1st_00003	Amount Added:	8.00	Units: uL

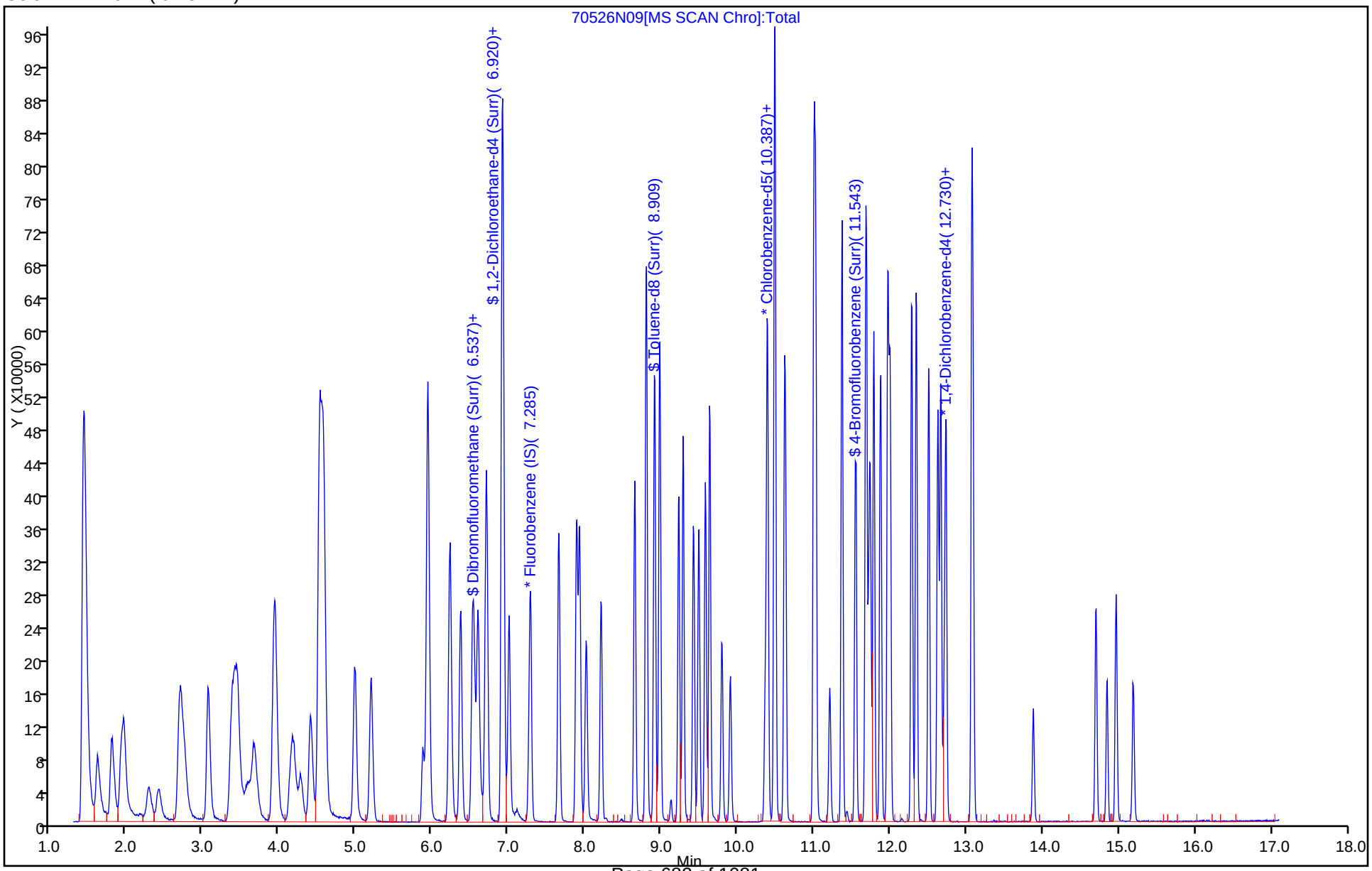
Report Date: 27-May-2017 10:44:01 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N09.D

Injection Date:	26-May-2017 17:34:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 26-May-2017 18:04:30 ALS Bottle#: 15 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0016927-010
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 27-May-2017 10:44:03 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: journetp Date: 27-May-2017 09:49:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.274	4.275	-0.001	98	112449	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.273	7.268	0.005	98	98462	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.363	10.364	-0.001	92	26274	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.705	12.706	-0.001	94	32262	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.549	6.550	-0.001	93	126830	250.0	260.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.920	6.915	0.005	94	219098	250.0	231.2	
$ 7 Toluene-d8 (Surr)	98	8.915	8.910	0.005	94	506344	250.0	254.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.550	11.544	0.006	85	206111	250.0	257.2	
11 Dichlorodifluoromethane	85	1.615	1.610	0.005	99	216519	250.0	286.0	
12 Chloromethane	50	1.804	1.799	0.005	100	289915	250.0	274.0	
13 Vinyl chloride	62	1.926	1.920	0.006	98	226065	250.0	265.6	
14 Butadiene	39	1.956	1.969	-0.013	95	142328	250.0	237.5	
15 Bromomethane	94	2.278	2.279	-0.001	92	74005	250.0	246.9	
16 Chloroethane	64	2.412	2.407	0.005	99	79902	250.0	279.5	
17 Dichlorofluoromethane	67	2.686	2.687	-0.001	94	220214	250.0	264.6	
18 Trichlorofluoromethane	101	2.698	2.693	0.005	89	235168	250.0	245.4	
20 Ethyl ether	59	3.063	3.052	0.011	97	188630	250.0	260.9	
22 1,1-Dichloroethene	96	3.386	3.380	0.006	93	151207	250.0	249.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.422	3.423	-0.001	72	119369	250.0	249.1	
24 Acetone	43	3.446	3.459	-0.013	97	226780	500.0	500.7	
25 Iodomethane	142	3.580	3.569	0.011	99	162111	250.0	281.5	
26 Carbon disulfide	76	3.659	3.672	-0.013	100	375325	250.0	256.9	
28 3-Chloro-1-propene	76	3.933	3.928	0.005	86	86000	250.0	260.2	
30 Methyl acetate	43	3.939	3.940	-0.001	99	425089	500.0	503.0	
31 Methylene Chloride	84	4.158	4.141	0.017	97	152616	250.0	259.4	
32 2-Methyl-2-propanol	59	4.414	4.396	0.018	98	362259	2500.0	2583.0	
33 Acrylonitrile	53	4.523	4.518	0.005	97	878317	2500.0	2436.8	
34 trans-1,2-Dichloroethene	96	4.566	4.567	-0.001	63	112994	250.0	230.1	
35 Methyl tert-butyl ether	73	4.584	4.573	0.011	99	508534	250.0	241.6	
36 Hexane	57	4.979	4.986	-0.007	94	179145	250.0	260.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.192	5.199	-0.007	96	327111	250.0	255.1	
44 2,2-Dichloropropane	97	5.935	5.935	0.000	93	33974	250.0	276.8	
45 cis-1,2-Dichloroethene	96	5.941	5.942	-0.001	89	163545	250.0	255.1	
46 2-Butanone (MEK)	43	5.953	5.948	0.005	98	303365	500.0	500.9	
49 Chlorobromomethane	128	6.220	6.227	-0.007	92	86045	250.0	268.5	
51 Tetrahydrofuran	42	6.239	6.240	-0.001	89	203719	500.0	543.5	
52 Chloroform	83	6.366	6.373	-0.007	95	328912	250.0	264.4	
53 1,1,1-Trichloroethane	97	6.525	6.519	0.006	97	225944	250.0	268.6	
54 Cyclohexane	56	6.598	6.599	-0.001	96	240769	250.0	265.1	
56 Carbon tetrachloride	117	6.701	6.696	0.005	96	160338	250.0	272.1	
55 1,1-Dichloropropene	75	6.713	6.708	0.005	89	200850	250.0	243.9	
57 Isobutyl alcohol	41	6.914	6.909	0.005	94	254669	6250.0	6679.4	
62 n-Heptane	43	6.914	6.915	-0.001	71	333807	250.0	292.9	
58 Benzene	78	6.926	6.921	0.005	97	519223	250.0	246.2	
59 1,2-Dichloroethane	62	7.005	7.006	-0.001	98	301887	250.0	252.9	
64 Trichloroethene	130	7.656	7.657	-0.001	95	157592	250.0	260.2	
66 Methylcyclohexane	83	7.893	7.888	0.005	96	197301	250.0	270.3	
67 1,2-Dichloropropane	63	7.930	7.925	0.005	93	165852	250.0	257.8	
70 1,4-Dioxane	88	8.009	8.010	-0.001	49	38240	5000.0	6105.0	
68 Dibromomethane	93	8.015	8.016	-0.001	94	108447	250.0	273.0	
71 Dichlorobromomethane	83	8.210	8.211	-0.001	98	259548	250.0	289.9	
74 cis-1,3-Dichloropropene	75	8.654	8.655	-0.001	90	316151	250.0	294.6	
75 4-Methyl-2-pentanone (MIBK	43	8.806	8.801	0.005	96	604880	500.0	496.5	
76 Toluene	91	8.982	8.977	0.005	97	563195	250.0	258.4	
77 trans-1,3-Dichloropropene	75	9.226	9.227	-0.001	98	302697	250.0	284.4	
78 Ethyl methacrylate	69	9.287	9.287	0.000	93	290626	250.0	248.6	
79 1,1,2-Trichloroethane	97	9.420	9.421	-0.001	95	153191	250.0	252.0	
80 Tetrachloroethene	164	9.493	9.494	-0.001	94	111456	250.0	244.2	
81 1,3-Dichloropropane	76	9.579	9.579	0.000	99	286043	250.0	242.5	
82 2-Hexanone	43	9.633	9.634	-0.001	98	431038	500.0	487.1	
84 Chlorodibromomethane	129	9.798	9.798	0.000	90	163369	250.0	288.8	
85 Ethylene Dibromide	107	9.907	9.908	-0.001	99	188259	250.0	268.9	
87 Chlorobenzene	112	10.394	10.395	-0.001	89	468810	250.0	289.4	
89 1,1,1,2-Tetrachloroethane	131	10.485	10.486	-0.001	89	143809	250.0	278.9	
90 Ethylbenzene	106	10.491	10.492	-0.001	98	207041	250.0	254.1	
91 m-Xylene & p-Xylene	106	10.619	10.620	-0.001	98	273207	250.0	279.4	
92 o-Xylene	106	11.002	11.003	-0.001	97	283689	250.0	260.3	
93 Styrene	104	11.026	11.021	0.005	93	431172	250.0	245.3	
94 Bromoform	173	11.209	11.210	-0.001	96	121988	250.0	321.0	
97 Isopropylbenzene	105	11.367	11.368	-0.001	98	615261	250.0	247.8	
100 Bromobenzene	156	11.683	11.684	-0.001	97	191384	250.0	282.5	
99 1,1,2,2-Tetrachloroethane	83	11.689	11.690	-0.001	96	238819	250.0	275.4	
102 trans-1,4-Dichloro-2-buten	53	11.720	11.721	-0.001	87	91845	250.0	309.8	
101 1,2,3-Trichloropropane	110	11.744	11.739	0.005	89	78358	250.0	266.0	
103 N-Propylbenzene	120	11.787	11.788	-0.001	98	147810	250.0	271.5	
104 2-Chlorotoluene	126	11.878	11.879	-0.001	94	143489	250.0	276.9	
106 1,3,5-Trimethylbenzene	105	11.969	11.970	-0.001	93	498791	250.0	262.5	
107 4-Chlorotoluene	126	12.000	11.995	0.005	100	137981	250.0	262.6	
108 tert-Butylbenzene	119	12.280	12.280	0.000	93	414092	250.0	275.7	
110 1,2,4-Trimethylbenzene	105	12.340	12.341	-0.001	99	499192	250.0	252.9	
112 sec-Butylbenzene	105	12.505	12.506	-0.001	96	522151	250.0	266.2	
113 1,3-Dichlorobenzene	146	12.626	12.627	-0.001	94	264891	250.0	261.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 4-Isopropyltoluene	119	12.663	12.664	-0.001	96	398348	250.0	257.2	
115 1,4-Dichlorobenzene	146	12.730	12.731	-0.001	91	292158	250.0	297.0	
120 n-Butylbenzene	91	13.070	13.071	-0.001	96	363366	250.0	267.0	
121 1,2-Dichlorobenzene	146	13.089	13.084	0.005	93	250083	250.0	262.2	
122 1,2-Dibromo-3-Chloropropan	157	13.880	13.880	0.000	77	51422	250.0	251.3	
126 1,2,4-Trichlorobenzene	180	14.701	14.702	-0.001	94	113308	250.0	282.2	
127 Hexachlorobutadiene	225	14.847	14.842	0.005	95	49775	250.0	332.2	
128 Naphthalene	128	14.962	14.963	-0.001	98	329868	250.0	263.6	
129 1,2,3-Trichlorobenzene	180	15.187	15.188	-0.001	94	70577	250.0	315.1	
S 133 Xylenes, Total	106				0		500.0	539.7	
S 134 1,2-Dichloroethene, Total	96				0		500.0	485.2	
S 135 1,3-Dichloropropene, Total	1				0		500.0	578.9	

Reagents:

VOA8260SURR_00069	Amount Added:	10.00	Units: uL
VOA8260VOAPRI_00253	Amount Added:	10.00	Units: uL
VOA8260INT_00070	Amount Added:	2.00	Units: uL
voaWKetmix1st_00003	Amount Added:	10.00	Units: uL

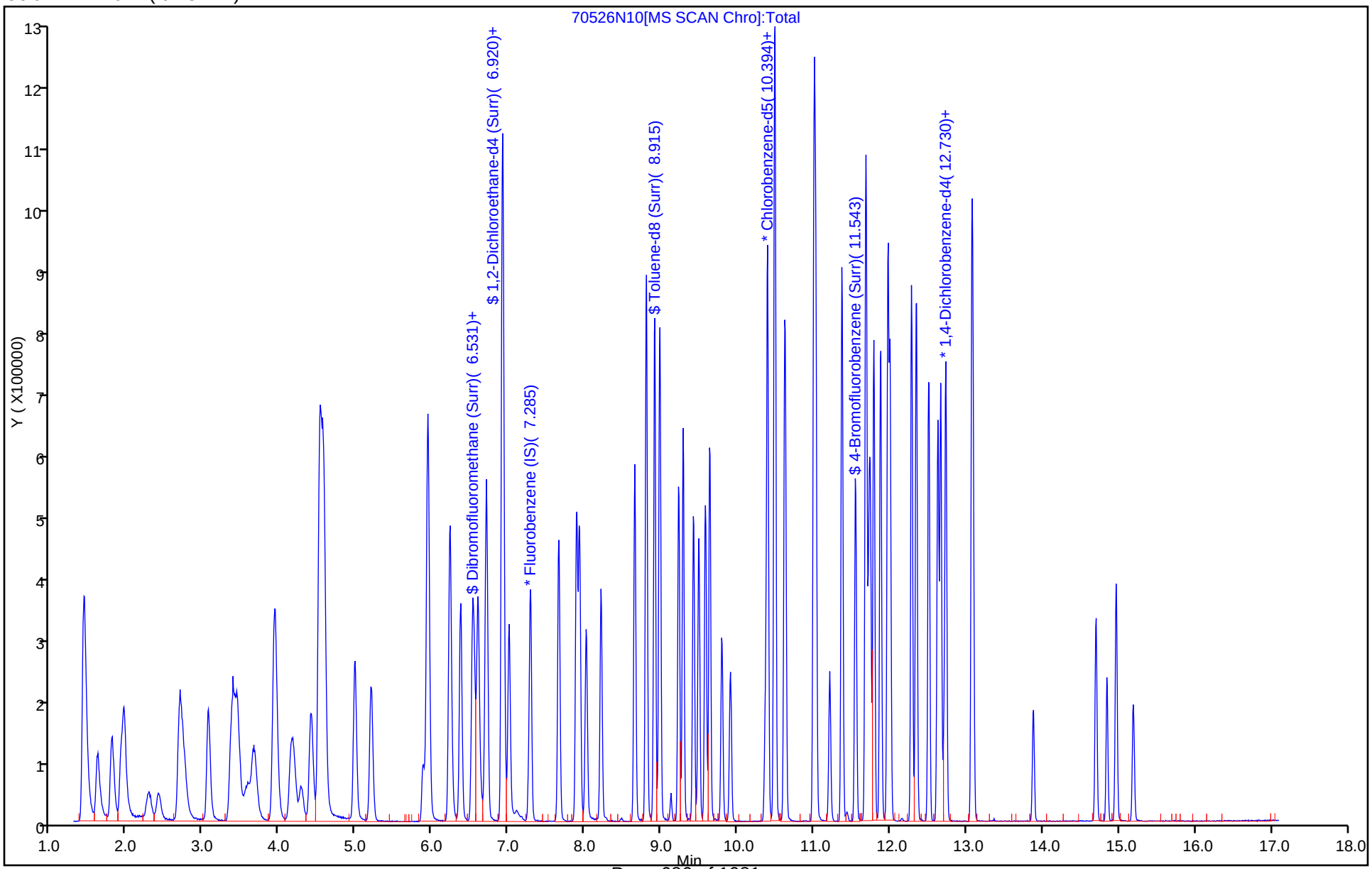
Report Date: 27-May-2017 10:44:03 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Injection Date:	26-May-2017 18:04:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-227760/2 Calibration Date: 11/01/2017 23:32

Instrument ID: CHHP5 Calib Start Date: 07/27/2017 00:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/27/2017 04:24

Lab File ID: 51101D02.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	0.2907	0.3051	0.1000	10.5	10.0	4.9	20.0
Chloromethane	Ave	0.2922	0.4198	0.1000	14.4	10.0	43.7*	20.0
1,3-Butadiene	Ave	0.2694	0.3961	0.0100	14.7	10.0	47.0*	20.0
Vinyl chloride	Ave	0.2965	0.3205	0.1000	10.8	10.0	8.1	20.0
Bromomethane	Ave	0.1402	0.1218	0.0500	8.69	10.0	-13.1	20.0
Chloroethane	Ave	0.1630	0.1587	0.0500	9.74	10.0	-2.6	20.0
Trichlorofluoromethane	Ave	0.3643	0.4043	0.1000	11.1	10.0	11.0	20.0
Ethyl ether	Ave	0.2370	0.2910	0.0100	12.3	10.0	22.8*	20.0
Acrolein	Ave	0.0597	0.0400	0.0100	20.1	30.0	-33.0*	20.0
1,1-Dichloroethene	Ave	0.2448	0.2377	0.1000	9.71	10.0	-2.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2686	0.2746	0.1000	10.2	10.0	2.2	20.0
Acetone	Ave	0.1308	0.1686	0.0500	25.8	20.0	28.9*	20.0
Iodomethane	Ave	0.3845	0.3869	0.0100	10.1	10.0	0.6	20.0
Carbon disulfide	Ave	0.5372	0.5143	0.1000	9.57	10.0	-4.3	20.0
Allyl chloride	Ave	0.1582	0.1447	0.0100	9.15	10.0	-8.5	20.0
Methyl acetate	Ave	0.2589	0.2919	0.1000	22.5	20.0	12.7	20.0
Methylene Chloride	Lin2		0.2980	0.1000	9.82	10.0	-1.8	20.0
tert-Butyl alcohol	Ave	1.183	1.245	0.0100	105	100	5.3	20.0
Acrylonitrile	Ave	0.1259	0.1428	0.0100	113	100	13.4	20.0
trans-1,2-Dichloroethene	Ave	0.2789	0.2609	0.1000	9.35	10.0	-6.5	20.0
Methyl tert-butyl ether	Ave	0.7479	0.7254	0.1000	9.70	10.0	-3.0	20.0
Hexane	Ave	0.3580	0.3694	0.0100	10.3	10.0	3.2	20.0
1,1-Dichloroethane	Ave	0.4850	0.4879	0.2000	10.1	10.0	0.6	20.0
Vinyl acetate	Ave	0.4932	0.6760	0.0100	13.7	10.0	37.1*	20.0
2,2-Dichloropropane	Ave	0.0617	0.0700	0.0100	11.3	10.0	13.3	20.0
cis-1,2-Dichloroethene	Ave	0.3190	0.2913	0.1000	9.13	10.0	-8.7	20.0
2-Butanone (MEK)	Ave	0.1861	0.2017	0.0500	21.7	20.0	8.4	20.0
Bromochloromethane	Ave	0.1418	0.1289	0.0100	9.09	10.0	-9.1	20.0
Tetrahydrofuran	Ave	0.1084	0.1078	0.0100	19.9	20.0	-0.6	20.0
Chloroform	Ave	0.4843	0.4495	0.2000	9.28	10.0	-7.2	20.0
1,1,1-Trichloroethane	Ave	0.3666	0.3454	0.1000	9.42	10.0	-5.8	20.0
Cyclohexane	Ave	0.4524	0.4634	0.1000	10.2	10.0	2.4	20.0
Carbon tetrachloride	Ave	0.3051	0.3051	0.1000	10.0	10.0	0.0	20.0
1,1-Dichloropropene	Ave	0.3961	0.3415	0.0100	8.62	10.0	-13.8	20.0
Isobutyl alcohol	Ave	0.0099	0.0110	0.0100	277	250	10.9	20.0
Benzene	Ave	1.216	1.092	0.5000	8.98	10.0	-10.2	20.0
1,2-Dichloroethane	Ave	0.3544	0.3747	0.1000	10.6	10.0	5.7	20.0
n-Heptane	Ave	0.2863	0.3323	0.0100	11.6	10.0	16.1	20.0
Trichloroethene	Ave	0.3059	0.2588	0.2000	8.46	10.0	-15.4	20.0
Methylcyclohexane	Ave	0.4626	0.3755	0.1000	8.12	10.0	-18.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-227760/2 Calibration Date: 11/01/2017 23:32

Instrument ID: CHHP5 Calib Start Date: 07/27/2017 00:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/27/2017 04:24

Lab File ID: 51101D02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2831	0.2644	0.1000	9.34	10.0	-6.6	20.0
Dibromomethane	Ave	0.1659	0.1521	0.0100	9.17	10.0	-8.3	20.0
1,4-Dioxane	Ave	0.0029	0.0027*	0.0100	184	200	-8.1	20.0
Bromodichloromethane	Ave	0.3256	0.2901	0.2000	8.91	10.0	-10.9	20.0
2-Chloroethyl vinyl ether	Ave	0.2037	0.1648	0.0100	16.2	20.0	-19.1	20.0
cis-1,3-Dichloropropene	Ave	0.3955	0.3415	0.2000	8.64	10.0	-13.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.282	1.104	0.1000	17.2	20.0	-13.9	20.0
Toluene	Ave	4.986	4.977	0.4000	9.98	10.0	-0.2	20.0
trans-1,3-Dichloropropene	Ave	1.357	1.312	0.1000	9.67	10.0	-3.3	20.0
Ethyl methacrylate	Ave	1.636	1.279	0.0100	7.82	10.0	-21.8*	20.0
1,1,2-Trichloroethane	Ave	1.039	1.038	0.1000	10.0	10.0	-0.0	20.0
Tetrachloroethene	Ave	0.9508	0.9028	0.2000	9.49	10.0	-5.1	20.0
1,3-Dichloropropane	Ave	1.920	1.755	0.0100	9.14	10.0	-8.6	20.0
2-Hexanone	Ave	0.9836	0.8908	0.1000	18.1	20.0	-9.4	20.0
Dibromochloromethane	Ave	0.8779	0.8477	0.1000	9.66	10.0	-3.4	20.0
1,2-Dibromoethane (EDB)	Ave	1.065	1.010	0.1000	9.48	10.0	-5.2	20.0
3-Chlorobenzotrifluoride	Ave	1.718	1.767	0.0100	10.3	10.0	2.8	20.0
Chlorobenzene	Ave	3.246	3.025	0.5000	9.32	10.0	-6.8	20.0
4-Chlorobenzotrifluoride	Ave	1.586	1.727	0.0100	10.9	10.0	8.9	20.0
1,1,1,2-Tetrachloroethane	Ave	1.032	1.050	0.0100	10.2	10.0	1.8	20.0
Ethylbenzene	Ave	1.812	1.651	0.1000	9.11	10.0	-8.9	20.0
m-Xylene & p-Xylene	Ave	2.214	1.994	0.1000	9.01	10.0	-9.9	20.0
o-Xylene	Ave	2.110	1.899	0.3000	9.00	10.0	-10.0	20.0
Styrene	Ave	3.571	3.329	0.3000	9.32	10.0	-6.8	20.0
Bromoform	Ave	0.5456	0.4778	0.1000	8.76	10.0	-12.4	20.0
2-Chlorobenzotrifluoride	Ave	1.644	1.714	0.0100	10.4	10.0	4.2	20.0
Isopropylbenzene	Ave	5.150	4.627	0.1000	8.99	10.0	-10.1	20.0
1,1,2,2-Tetrachloroethane	Ave	1.538	1.429	0.3000	9.29	10.0	-7.1	20.0
Bromobenzene	Ave	0.9704	0.8131	0.0100	8.38	10.0	-16.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2926	0.3402	0.0100	11.6	10.0	16.3	20.0
1,2,3-Trichloropropane	Ave	0.4005	0.3383	0.0100	8.45	10.0	-15.5	20.0
N-Propylbenzene	Ave	1.109	0.9023	0.0100	8.14	10.0	-18.6	20.0
2-Chlorotoluene	Ave	0.9585	0.7645	0.0100	7.98	10.0	-20.2*	20.0
3-Chlorotoluene	Ave	1.043	1.003	0.0100	9.62	10.0	-3.8	20.0
1,3,5-Trimethylbenzene	Ave	3.173	2.791	0.0100	8.79	10.0	-12.1	20.0
4-Chlorotoluene	Ave	1.035	0.8638	0.0100	8.35	10.0	-16.5	20.0
tert-Butylbenzene	Ave	2.653	2.081	0.0100	7.84	10.0	-21.6*	20.0
1,2,4-Trimethylbenzene	Ave	3.226	2.771	0.0100	8.59	10.0	-14.1	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8081	0.7263	0.0100	8.99	10.0	-10.1	20.0
sec-Butylbenzene	Ave	3.701	3.037	0.0100	8.21	10.0	-17.9	20.0
1,3-Dichlorobenzene	Ave	1.734	1.541	0.6000	8.89	10.0	-11.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-227760/2 Calibration Date: 11/01/2017 23:32

Instrument ID: CHHP5 Calib Start Date: 07/27/2017 00:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/27/2017 04:24

Lab File ID: 51101D02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	3.083	2.636	0.0100	8.55	10.0	-14.5	20.0
1,4-Dichlorobenzene	Ave	1.780	1.625	0.5000	9.13	10.0	-8.7	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7524	0.6299	0.0100	8.37	10.0	-16.3	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8127	0.7229	0.0100	8.90	10.0	-11.0	20.0
n-Butylbenzene	Ave	2.514	2.081	0.0100	8.28	10.0	-17.2	20.0
1,2-Dichlorobenzene	Ave	1.653	1.525	0.4000	9.23	10.0	-7.7	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1835	0.1563	0.0500	8.52	10.0	-14.8	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.048	1.109	0.0100	31.7	30.0	5.8	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.084	1.136	0.0100	21.0	20.0	4.8	20.0
1,2,4-Trichlorobenzene	Ave	0.7563	0.6774	0.2000	8.96	10.0	-10.4	20.0
Hexachlorobutadiene	Ave	0.2767	0.2487	0.0100	8.99	10.0	-10.1	20.0
Naphthalene	Ave	2.576	2.170	0.0100	8.42	10.0	-15.8	20.0
1,2,3-Trichlorobenzene	Ave	0.6909	0.6088	0.0100	8.81	10.0	-11.9	20.0
2,4,5-Trichlorotoluene	Ave	0.3284	0.2792	0.0100	8.50	10.0	-15.0	20.0
2,3,6-Trichlorotoluene	Ave	0.3055	0.3107	0.0100	10.2	10.0	1.7	20.0
Dibromofluoromethane (Surr)	Ave	0.2406	0.2419		10.1	10.0	0.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2934	0.3130		10.7	10.0	6.7	20.0
Toluene-d8 (Surr)	Ave	3.979	4.476		11.2	10.0	12.5	20.0
4-Bromofluorobenzene (Surr)	Ave	1.437	1.503		10.5	10.0	4.6	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D02.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 01-Nov-2017 23:32:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019138-002
Misc. Info.: CCVIS
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 01-Nov-2017 23:59:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.394	4.394	0.000	0	214228	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.338	7.338	0.000	97	508274	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.427	10.427	0.000	87	111735	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.768	0.000	93	165202	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.614	6.614	0.000	92	122938	50.0	50.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.985	6.985	0.000	0	159109	50.0	53.3	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	94	500100	50.0	56.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.613	0.000	86	167987	50.0	52.3	
11 Dichlorodifluoromethane	85	1.688	1.688	0.000	98	155085	50.0	52.5	
12 Chloromethane	50	1.907	1.907	0.000	99	213365	50.0	71.8	
14 Butadiene	39	2.017	2.017	0.000	93	201327	50.0	73.5	
13 Vinyl chloride	62	2.023	2.023	0.000	64	162905	50.0	54.0	
15 Bromomethane	94	2.339	2.339	0.000	91	61906	50.0	43.4	
16 Chloroethane	64	2.430	2.430	0.000	98	80663	50.0	48.7	
17 Dichlorofluoromethane	67	2.752	2.752	0.000	98	248620	50.0	59.3	
18 Trichlorofluoromethane	101	2.765	2.765	0.000	49	205481	50.0	55.5	
20 Ethyl ether	59	3.130	3.130	0.000	96	147910	50.0	61.4	
21 Acrolein	56	3.318	3.318	0.000	98	61006	150.0	100.5	
22 1,1-Dichloroethene	96	3.415	3.415	0.000	97	120806	50.0	48.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.507	3.507	0.000	93	139571	50.0	51.1	
24 Acetone	43	3.543	3.543	0.000	100	171346	100.0	128.9	
25 Iodomethane	142	3.622	3.622	0.000	99	196649	50.0	50.3	
26 Carbon disulfide	76	3.701	3.701	0.000	99	261416	50.0	47.9	
28 3-Chloro-1-propene	76	4.011	4.011	0.000	90	73554	50.0	45.7	
30 Methyl acetate	43	4.030	4.030	0.000	99	296714	100.0	112.7	
31 Methylene Chloride	84	4.230	4.230	0.000	97	151460	50.0	49.1	
32 2-Methyl-2-propanol	59	4.510	4.510	0.000	92	133376	500.0	526.4	
33 Acrylonitrile	53	4.613	4.613	0.000	99	725883	500.0	567.2	
34 trans-1,2-Dichloroethene	96	4.644	4.644	0.000	98	132596	50.0	46.8	
35 Methyl tert-butyl ether	73	4.662	4.662	0.000	97	368700	50.0	48.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.051	5.051	0.000	95	187753	50.0	51.6	
37 1,1-Dichloroethane	63	5.270	5.270	0.000	96	247971	50.0	50.3	
38 Vinyl acetate	43	5.319	5.319	0.000	97	343616	50.0	68.5	
44 2,2-Dichloropropane	97	6.000	6.000	0.000	65	35562	50.0	56.7	
45 cis-1,2-Dichloroethene	96	6.012	6.012	0.000	83	148049	50.0	45.7	
46 2-Butanone (MEK)	43	6.030	6.030	0.000	99	205009	100.0	108.4	
49 Chlorobromomethane	128	6.292	6.292	0.000	94	65519	50.0	45.5	
51 Tetrahydrofuran	42	6.310	6.310	0.000	91	109543	100.0	99.4	
52 Chloroform	83	6.438	6.438	0.000	94	228488	50.0	46.4	
53 1,1,1-Trichloroethane	97	6.596	6.596	0.000	97	175547	50.0	47.1	
54 Cyclohexane	56	6.663	6.663	0.000	95	235509	50.0	51.2	
56 Carbon tetrachloride	117	6.766	6.766	0.000	95	155089	50.0	50.0	
55 1,1-Dichloropropene	75	6.784	6.784	0.000	93	173581	50.0	43.1	
57 Isobutyl alcohol	41	6.985	6.985	0.000	90	140189	1250.0	1386.1	
58 Benzene	78	6.997	6.997	0.000	97	554936	50.0	44.9	
59 1,2-Dichloroethane	62	7.070	7.070	0.000	97	190458	50.0	52.9	
62 n-Heptane	43	7.350	7.350	0.000	94	168889	50.0	58.0	
64 Trichloroethene	130	7.727	7.727	0.000	97	131559	50.0	42.3	
66 Methylcyclohexane	83	7.958	7.958	0.000	94	190868	50.0	40.6	
67 1,2-Dichloropropane	63	7.995	7.995	0.000	94	134381	50.0	46.7	
68 Dibromomethane	93	8.080	8.080	0.000	97	77285	50.0	45.8	
70 1,4-Dioxane	88	8.086	8.086	0.000	47	26891	1000.0	918.9	
71 Dichlorobromomethane	83	8.274	8.274	0.000	99	147424	50.0	44.5	
73 2-Chloroethyl vinyl ether	63	8.578	8.578	0.000	92	167571	100.0	80.9	
74 cis-1,3-Dichloropropene	75	8.718	8.718	0.000	93	173571	50.0	43.2	
75 4-Methyl-2-pentanone (MIBK	43	8.876	8.876	0.000	99	246632	100.0	86.1	
76 Toluene	91	9.047	9.047	0.000	99	556072	50.0	49.9	
77 trans-1,3-Dichloropropene	75	9.296	9.296	0.000	98	146552	50.0	48.3	
78 Ethyl methacrylate	69	9.357	9.357	0.000	92	142954	50.0	39.1	
79 1,1,2-Trichloroethane	97	9.491	9.491	0.000	93	115993	50.0	50.0	
80 Tetrachloroethene	164	9.558	9.558	0.000	96	100873	50.0	47.5	
81 1,3-Dichloropropane	76	9.649	9.649	0.000	98	196070	50.0	45.7	
82 2-Hexanone	43	9.710	9.710	0.000	99	199075	100.0	90.6	
84 Chlorodibromomethane	129	9.862	9.862	0.000	90	94717	50.0	48.3	
85 Ethylene Dibromide	107	9.971	9.971	0.000	99	112839	50.0	47.4	
86 3-Chlorobenzotrifluoride	180	10.433	10.433	0.000	91	197441	50.0	51.4	
87 Chlorobenzene	112	10.458	10.458	0.000	94	337994	50.0	46.6	
88 4-Chlorobenzotrifluoride	180	10.518	10.518	0.000	96	192954	50.0	54.5	
89 1,1,1,2-Tetrachloroethane	131	10.555	10.555	0.000	94	117345	50.0	50.9	
90 Ethylbenzene	106	10.561	10.561	0.000	98	184520	50.0	45.6	
91 m-Xylene & p-Xylene	106	10.689	10.689	0.000	0	222841	50.0	45.0	
92 o-Xylene	106	11.072	11.072	0.000	97	212180	50.0	45.0	
93 Styrene	104	11.090	11.090	0.000	96	371918	50.0	46.6	
94 Bromoform	173	11.279	11.279	0.000	95	53386	50.0	43.8	
96 2-Chlorobenzotrifluoride	180	11.339	11.339	0.000	95	191462	50.0	52.1	
97 Isopropylbenzene	105	11.437	11.437	0.000	96	517018	50.0	44.9	
99 1,1,2,2-Tetrachloroethane	83	11.747	11.747	0.000	91	159684	50.0	46.5	
100 Bromobenzene	156	11.753	11.753	0.000	95	134319	50.0	41.9	
102 trans-1,4-Dichloro-2-buten	53	11.783	11.783	0.000	83	56200	50.0	58.1	
101 1,2,3-Trichloropropane	110	11.808	11.808	0.000	86	55887	50.0	42.2	
103 N-Propylbenzene	120	11.856	11.856	0.000	99	149066	50.0	40.7	
104 2-Chlorotoluene	126	11.941	11.941	0.000	96	126303	50.0	39.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	12.008	12.008	0.000	96	165664	50.0	48.1	
106 1,3,5-Trimethylbenzene	105	12.039	12.039	0.000	95	461030	50.0	44.0	
107 4-Chlorotoluene	126	12.063	12.063	0.000	97	142702	50.0	41.7	
108 tert-Butylbenzene	119	12.349	12.349	0.000	95	343754	50.0	39.2	
110 1,2,4-Trimethylbenzene	105	12.410	12.410	0.000	97	457787	50.0	43.0	
111 1,2-dichloro-4-(trifluorom	214	12.452	12.452	0.000	95	119988	50.0	44.9	
112 sec-Butylbenzene	105	12.574	12.574	0.000	94	501751	50.0	41.0	
113 1,3-Dichlorobenzene	146	12.689	12.689	0.000	98	254576	50.0	44.4	
114 4-Isopropyltoluene	119	12.732	12.732	0.000	97	435436	50.0	42.7	
115 1,4-Dichlorobenzene	146	12.793	12.793	0.000	96	268416	50.0	45.6	
116 2,4-Dichloro-1-(triflourom	214	12.823	12.823	0.000	91	104062	50.0	41.9	
118 2,5-Dichlorobenzotrifluori	214	12.860	12.860	0.000	0	119431	50.0	44.5	
120 n-Butylbenzene	91	13.139	13.139	0.000	98	343850	50.0	41.4	
121 1,2-Dichlorobenzene	146	13.152	13.152	0.000	96	251968	50.0	46.1	
122 1,2-Dibromo-3-Chloropropan	75	13.942	13.942	0.000	78	25818	50.0	42.6	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.088	14.088	0.000	0	549824	150.0	158.7	
125 2,3- & 3,4- Dichlorotoluen	125	14.502	14.502	0.000	0	375407	100.0	104.8	
126 1,2,4-Trichlorobenzene	180	14.769	14.769	0.000	93	111915	50.0	44.8	
127 Hexachlorobutadiene	225	14.915	14.915	0.000	95	41079	50.0	44.9	
128 Naphthalene	128	15.031	15.031	0.000	97	358432	50.0	42.1	
129 1,2,3-Trichlorobenzene	180	15.256	15.256	0.000	96	100572	50.0	44.1	
131 2,4,5-Trichlorotoluene	159	16.028	16.028	0.000	0	46125	50.0	42.5	
130 2,3,6-Trichlorotoluene	159	16.119	16.119	0.000	94	51328	50.0	50.9	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	90.0	
S 134 1,2-Dichloroethene, Total	96				0		100.0	92.4	
S 135 1,3-Dichloropropene, Total	1				0		100.0	91.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWEEmix1stR_00014	Amount Added:	2.00	Units: uL	
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL	
voaWAcro1stRe_00021	Amount Added:	6.00	Units: uL	
voaW2clev1stR_00024	Amount Added:	2.00	Units: uL	
voaWVA1stRest_00023	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00269	Amount Added:	2.00	Units: uL	
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

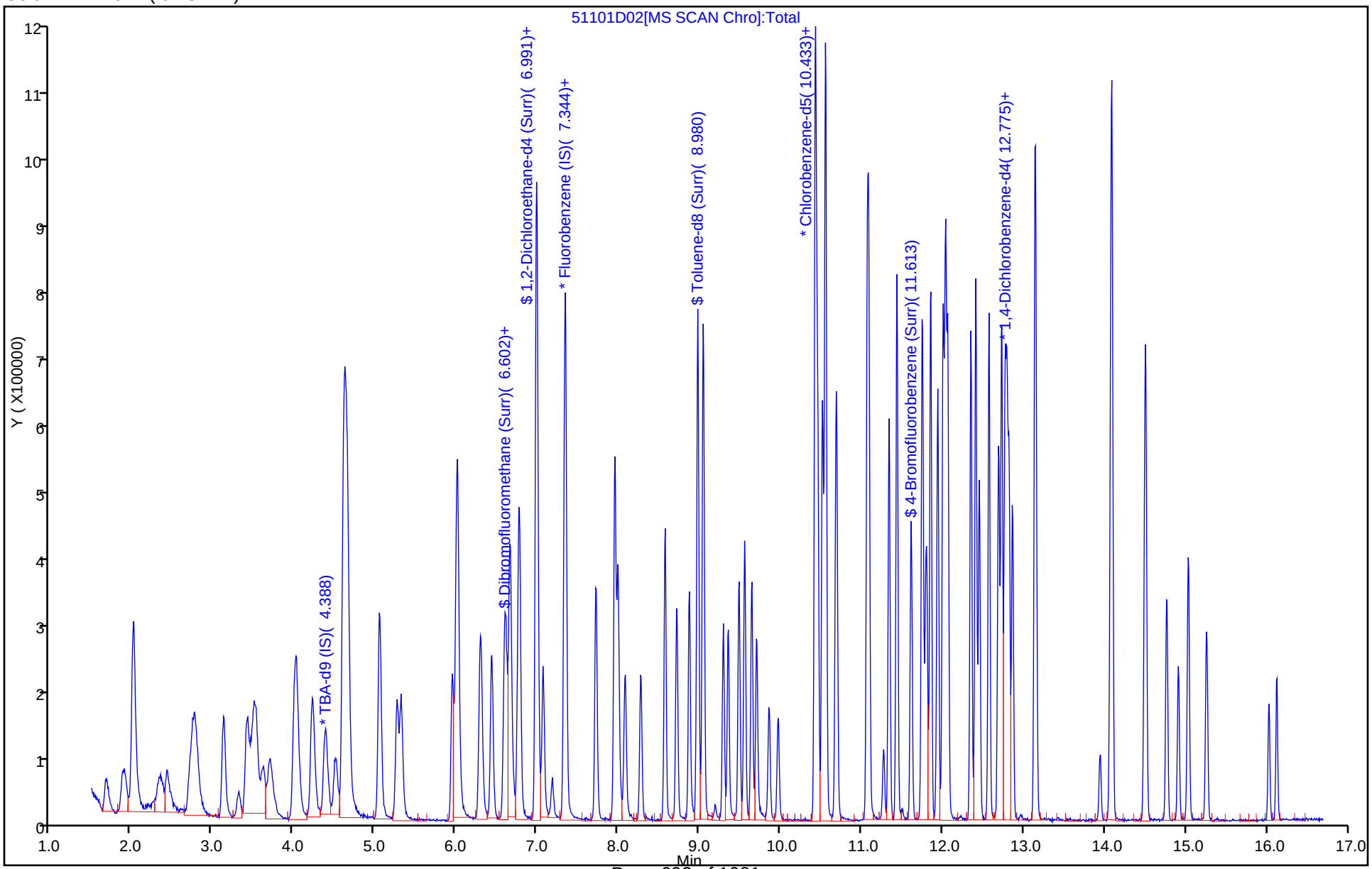
Report Date: 02-Nov-2017 20:42:16 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D02.D

Injection Date:	01-Nov-2017 23:32:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_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.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-227871/2 Calibration Date: 11/02/2017 22:22

Instrument ID: CHHP5 Calib Start Date: 07/27/2017 00:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/27/2017 04:24

Lab File ID: 51102D02.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	0.2907	0.2498	0.1000	8.59	10.0	-14.1	20.0
Chloromethane	Ave	0.2922	0.3475	0.1000	11.9	10.0	18.9	20.0
Vinyl chloride	Ave	0.2965	0.2874	0.1000	9.69	10.0	-3.1	20.0
1,3-Butadiene	Ave	0.2694	0.3468	0.0100	12.9	10.0	28.8*	20.0
Bromomethane	Ave	0.1402	0.1069	0.0500	7.62	10.0	-23.8*	20.0
Chloroethane	Ave	0.1630	0.1606	0.0500	9.85	10.0	-1.5	20.0
Trichlorofluoromethane	Ave	0.3643	0.4063	0.1000	11.2	10.0	11.5	20.0
Ethyl ether	Ave	0.2370	0.2865	0.0100	12.1	10.0	20.9*	20.0
Acrolein	Ave	0.0597	0.0369	0.0100	18.5	30.0	-38.2*	20.0
1,1-Dichloroethene	Ave	0.2448	0.2278	0.1000	9.30	10.0	-7.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2686	0.2521	0.1000	9.39	10.0	-6.1	20.0
Acetone	Ave	0.1308	0.2023	0.0500	30.9	20.0	54.7*	20.0
Iodomethane	Ave	0.3845	0.3524	0.0100	9.17	10.0	-8.3	20.0
Carbon disulfide	Ave	0.5372	0.4747	0.1000	8.84	10.0	-11.6	20.0
Allyl chloride	Ave	0.1582	0.1351	0.0100	8.54	10.0	-14.6	20.0
Methyl acetate	Ave	0.2589	0.3024	0.1000	23.4	20.0	16.8	20.0
Methylene Chloride	Lin2		0.2821	0.1000	9.26	10.0	-7.4	20.0
tert-Butyl alcohol	Ave	1.183	1.323	0.0100	112	100	11.9	20.0
Acrylonitrile	Ave	0.1259	0.1501	0.0100	119	100	19.2	20.0
trans-1,2-Dichloroethene	Ave	0.2789	0.2501	0.1000	8.96	10.0	-10.4	20.0
Methyl tert-butyl ether	Ave	0.7479	0.6939	0.1000	9.28	10.0	-7.2	20.0
Hexane	Ave	0.3580	0.3315	0.0100	9.26	10.0	-7.4	20.0
1,1-Dichloroethane	Ave	0.4850	0.4695	0.2000	9.68	10.0	-3.2	20.0
Vinyl acetate	Ave	0.4932	0.6948	0.0100	14.1	10.0	40.9*	20.0
cis-1,2-Dichloroethene	Ave	0.3190	0.2738	0.1000	8.58	10.0	-14.2	20.0
2,2-Dichloropropane	Ave	0.0617	0.0631	0.0100	10.2	10.0	2.1	20.0
2-Butanone (MEK)	Ave	0.1861	0.2357	0.0500	25.3	20.0	26.6*	20.0
Bromochloromethane	Ave	0.1418	0.1350	0.0100	9.52	10.0	-4.8	20.0
Tetrahydrofuran	Ave	0.1084	0.1064	0.0100	19.6	20.0	-1.8	20.0
Chloroform	Ave	0.4843	0.4259	0.2000	8.79	10.0	-12.1	20.0
1,1,1-Trichloroethane	Ave	0.3666	0.3387	0.1000	9.24	10.0	-7.6	20.0
Cyclohexane	Ave	0.4524	0.4200	0.1000	9.28	10.0	-7.2	20.0
Carbon tetrachloride	Ave	0.3051	0.2975	0.1000	9.75	10.0	-2.5	20.0
1,1-Dichloropropene	Ave	0.3961	0.3175	0.0100	8.02	10.0	-19.8	20.0
Isobutyl alcohol	Ave	0.0099	0.0108	0.0100	272	250	8.7	20.0
Benzene	Ave	1.216	1.076	0.5000	8.85	10.0	-11.5	20.0
1,2-Dichloroethane	Ave	0.3544	0.3759	0.1000	10.6	10.0	6.1	20.0
n-Heptane	Ave	0.2863	0.3010	0.0100	10.5	10.0	5.1	20.0
Trichloroethene	Ave	0.3059	0.2414	0.2000	7.89	10.0	-21.1*	20.0
Methylcyclohexane	Ave	0.4626	0.3345	0.1000	7.23	10.0	-27.7*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-227871/2 Calibration Date: 11/02/2017 22:22

Instrument ID: CHHP5 Calib Start Date: 07/27/2017 00:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/27/2017 04:24

Lab File ID: 51102D02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2831	0.2596	0.1000	9.17	10.0	-8.3	20.0
1,4-Dioxane	Ave	0.0029	0.0025*	0.0100	174	200	-12.8	20.0
Dibromomethane	Ave	0.1659	0.1582	0.0100	9.54	10.0	-4.6	20.0
Bromodichloromethane	Ave	0.3256	0.2819	0.2000	8.66	10.0	-13.4	20.0
2-Chloroethyl vinyl ether	Ave	0.2037	0.1760	0.0100	17.3	20.0	-13.6	20.0
cis-1,3-Dichloropropene	Ave	0.3955	0.3320	0.2000	8.39	10.0	-16.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.282	1.407	0.1000	21.9	20.0	9.7	20.0
Toluene	Ave	4.986	4.699	0.4000	9.42	10.0	-5.8	20.0
trans-1,3-Dichloropropene	Ave	1.357	1.298	0.1000	9.57	10.0	-4.3	20.0
Ethyl methacrylate	Ave	1.636	1.243	0.0100	7.60	10.0	-24.0*	20.0
1,1,2-Trichloroethane	Ave	1.039	1.011	0.1000	9.74	10.0	-2.6	20.0
Tetrachloroethene	Ave	0.9508	0.8371	0.2000	8.80	10.0	-12.0	20.0
1,3-Dichloropropane	Ave	1.920	1.725	0.0100	8.98	10.0	-10.2	20.0
2-Hexanone	Ave	0.9836	1.075	0.1000	21.9	20.0	9.3	20.0
Dibromochloromethane	Ave	0.8779	0.9051	0.1000	10.3	10.0	3.1	20.0
1,2-Dibromoethane (EDB)	Ave	1.065	0.9757	0.1000	9.16	10.0	-8.4	20.0
3-Chlorobenzotrifluoride	Ave	1.718	1.917	0.0100	11.2	10.0	11.6	20.0
Chlorobenzene	Ave	3.246	2.890	0.5000	8.90	10.0	-11.0	20.0
4-Chlorobenzotrifluoride	Ave	1.586	1.882	0.0100	11.9	10.0	18.7	20.0
1,1,1,2-Tetrachloroethane	Ave	1.032	1.038	0.0100	10.1	10.0	0.6	20.0
Ethylbenzene	Ave	1.812	1.547	0.1000	8.54	10.0	-14.6	20.0
m-Xylene & p-Xylene	Ave	2.214	1.899	0.1000	8.58	10.0	-14.2	20.0
o-Xylene	Ave	2.110	1.763	0.3000	8.36	10.0	-16.4	20.0
Styrene	Ave	3.571	3.141	0.3000	8.80	10.0	-12.0	20.0
Bromoform	Ave	0.5456	0.4824	0.1000	8.84	10.0	-11.6	20.0
2-Chlorobenzotrifluoride	Ave	1.644	1.908	0.0100	11.6	10.0	16.1	20.0
Isopropylbenzene	Ave	5.150	4.265	0.1000	8.28	10.0	-17.2	20.0
1,1,2,2-Tetrachloroethane	Ave	1.538	1.505	0.3000	9.79	10.0	-2.1	20.0
Bromobenzene	Ave	0.9704	0.7643	0.0100	7.88	10.0	-21.2*	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2926	0.3274	0.0100	11.2	10.0	11.9	20.0
1,2,3-Trichloropropane	Ave	0.4005	0.3361	0.0100	8.39	10.0	-16.1	20.0
N-Propylbenzene	Ave	1.109	0.8594	0.0100	7.75	10.0	-22.5*	20.0
2-Chlorotoluene	Ave	0.9585	0.7422	0.0100	7.74	10.0	-22.6*	20.0
3-Chlorotoluene	Ave	1.043	1.082	0.0100	10.4	10.0	3.8	20.0
1,3,5-Trimethylbenzene	Ave	3.173	2.675	0.0100	8.43	10.0	-15.7	20.0
4-Chlorotoluene	Ave	1.035	0.8441	0.0100	8.15	10.0	-18.5	20.0
tert-Butylbenzene	Ave	2.653	1.872	0.0100	7.05	10.0	-29.5*	20.0
1,2,4-Trimethylbenzene	Ave	3.226	2.595	0.0100	8.05	10.0	-19.5	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8081	0.7837	0.0100	9.70	10.0	-3.0	20.0
sec-Butylbenzene	Ave	3.701	2.789	0.0100	7.54	10.0	-24.6*	20.0
1,3-Dichlorobenzene	Ave	1.734	1.507	0.6000	8.69	10.0	-13.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-227871/2 Calibration Date: 11/02/2017 22:22

Instrument ID: CHHP5 Calib Start Date: 07/27/2017 00:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/27/2017 04:24

Lab File ID: 51102D02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	3.083	2.444	0.0100	7.93	10.0	-20.7*	20.0
1,4-Dichlorobenzene	Ave	1.780	1.566	0.5000	8.80	10.0	-12.0	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7524	0.6799	0.0100	9.04	10.0	-9.6	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8127	0.8138	0.0100	10.0	10.0	0.1	20.0
n-Butylbenzene	Ave	2.514	1.856	0.0100	7.38	10.0	-26.2*	20.0
1,2-Dichlorobenzene	Ave	1.653	1.495	0.4000	9.05	10.0	-9.5	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1835	0.1578	0.0500	8.60	10.0	-14.0	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.048	1.139	0.0100	32.6	30.0	8.7	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.084	1.157	0.0100	21.3	20.0	6.7	20.0
1,2,4-Trichlorobenzene	Ave	0.7563	0.6315	0.2000	8.35	10.0	-16.5	20.0
Hexachlorobutadiene	Ave	0.2767	0.2124	0.0100	7.68	10.0	-23.2*	20.0
Naphthalene	Ave	2.576	1.992	0.0100	7.73	10.0	-22.7*	20.0
1,2,3-Trichlorobenzene	Ave	0.6909	0.5719	0.0100	8.28	10.0	-17.2	20.0
2,4,5-Trichlorotoluene	Ave	0.3284	0.2719	0.0100	8.28	10.0	-17.2	20.0
2,3,6-Trichlorotoluene	Ave	0.3055	0.2920	0.0100	9.56	10.0	-4.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2406	0.2617		10.9	10.0	8.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2934	0.3350		11.4	10.0	14.2	20.0
Toluene-d8 (Surr)	Ave	3.979	4.537		11.4	10.0	14.0	20.0
4-Bromofluorobenzene (Surr)	Ave	1.437	1.543		10.7	10.0	7.4	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D02.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 02-Nov-2017 22:22:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019153-002
Misc. Info.: CCVIS
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Nov-2017 20:10:37 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

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

First Level Reviewer: bungardf Date: 02-Nov-2017 23:17:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.388	4.388	0.000	0	191856	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.337	7.337	0.000	97	471598	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.433	10.433	0.000	86	105369	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.768	0.000	93	157848	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.620	6.620	0.000	93	123427	50.0	54.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.991	0.000	0	157995	50.0	57.1	
$ 7 Toluene-d8 (Surr)	98	8.979	8.979	0.000	94	478085	50.0	57.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.612	0.000	85	162587	50.0	53.7	
11 Dichlorodifluoromethane	85	1.688	1.688	0.000	98	117791	50.0	43.0	
12 Chloromethane	50	1.888	1.888	0.000	99	163893	50.0	59.5	
13 Vinyl chloride	62	2.010	2.010	0.000	66	135533	50.0	48.5	
14 Butadiene	39	2.016	2.016	0.000	95	163564	50.0	64.4	
15 Bromomethane	94	2.332	2.332	0.000	87	50397	50.0	38.1	
16 Chloroethane	64	2.430	2.430	0.000	99	75723	50.0	49.3	
18 Trichlorofluoromethane	101	2.722	2.722	0.000	88	191618	50.0	55.8	
17 Dichlorofluoromethane	67	2.758	2.758	0.000	97	217538	50.0	55.9	
20 Ethyl ether	59	3.129	3.129	0.000	96	135114	50.0	60.4	
21 Acrolein	56	3.324	3.324	0.000	98	52197	150.0	92.7	
22 1,1-Dichloroethene	96	3.427	3.427	0.000	97	107408	50.0	46.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.488	3.488	0.000	93	118905	50.0	46.9	
24 Acetone	43	3.536	3.536	0.000	100	190786	100.0	154.7	
25 Iodomethane	142	3.622	3.622	0.000	97	166199	50.0	45.8	
26 Carbon disulfide	76	3.713	3.713	0.000	99	223885	50.0	44.2	
28 3-Chloro-1-propene	76	4.023	4.023	0.000	96	63726	50.0	42.7	
30 Methyl acetate	43	4.035	4.035	0.000	99	285206	100.0	116.8	
31 Methylene Chloride	84	4.236	4.236	0.000	98	133033	50.0	46.3	
32 2-Methyl-2-propanol	59	4.509	4.509	0.000	91	126936	500.0	559.4	
33 Acrylonitrile	53	4.619	4.619	0.000	100	708007	500.0	596.2	
34 trans-1,2-Dichloroethene	96	4.643	4.643	0.000	98	117924	50.0	44.8	
35 Methyl tert-butyl ether	73	4.668	4.668	0.000	97	327224	50.0	46.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.063	5.063	0.000	95	156323	50.0	46.3	
37 1,1-Dichloroethane	63	5.276	5.276	0.000	97	221410	50.0	48.4	
38 Vinyl acetate	43	5.324	5.324	0.000	97	327669	50.0	70.4	
45 cis-1,2-Dichloroethene	96	6.012	6.012	0.000	83	129126	50.0	42.9	
44 2,2-Dichloropropane	97	6.018	6.018	0.000	61	29732	50.0	51.1	
46 2-Butanone (MEK)	43	6.030	6.030	0.000	99	222287	100.0	126.6	
49 Chlorobromomethane	128	6.297	6.297	0.000	95	63679	50.0	47.6	
51 Tetrahydrofuran	42	6.310	6.310	0.000	92	100373	100.0	98.2	
52 Chloroform	83	6.437	6.437	0.000	94	200828	50.0	44.0	
53 1,1,1-Trichloroethane	97	6.595	6.595	0.000	97	159748	50.0	46.2	
54 Cyclohexane	56	6.662	6.662	0.000	95	198060	50.0	46.4	
56 Carbon tetrachloride	117	6.772	6.772	0.000	96	140295	50.0	48.8	
55 1,1-Dichloropropene	75	6.784	6.784	0.000	93	149721	50.0	40.1	M
57 Isobutyl alcohol	41	6.991	6.991	0.000	88	127534	1250.0	1359.1	
58 Benzene	78	6.997	6.997	0.000	96	507473	50.0	44.3	
59 1,2-Dichloroethane	62	7.076	7.076	0.000	97	177282	50.0	53.0	
62 n-Heptane	43	7.356	7.356	0.000	88	141927	50.0	52.6	
64 Trichloroethene	130	7.727	7.727	0.000	98	113828	50.0	39.4	
66 Methylcyclohexane	83	7.958	7.958	0.000	93	157757	50.0	36.2	
67 1,2-Dichloropropane	63	8.000	8.000	0.000	94	122412	50.0	45.8	
70 1,4-Dioxane	88	8.085	8.085	0.000	44	23666	1000.0	871.6	
68 Dibromomethane	93	8.085	8.085	0.000	97	74592	50.0	47.7	
71 Dichlorobromomethane	83	8.274	8.274	0.000	98	132921	50.0	43.3	
73 2-Chloroethyl vinyl ether	63	8.578	8.578	0.000	93	165972	100.0	86.4	
74 cis-1,3-Dichloropropene	75	8.724	8.724	0.000	93	156545	50.0	42.0	
75 4-Methyl-2-pentanone (MIBK	43	8.876	8.876	0.000	99	296478	100.0	109.7	
76 Toluene	91	9.046	9.046	0.000	98	495078	50.0	47.1	
77 trans-1,3-Dichloropropene	75	9.296	9.296	0.000	96	136769	50.0	47.8	
78 Ethyl methacrylate	69	9.356	9.356	0.000	91	130975	50.0	38.0	
79 1,1,2-Trichloroethane	97	9.490	9.490	0.000	93	106556	50.0	48.7	
80 Tetrachloroethene	164	9.557	9.557	0.000	96	88199	50.0	44.0	
81 1,3-Dichloropropane	76	9.648	9.648	0.000	98	181745	50.0	44.9	
82 2-Hexanone	43	9.703	9.703	0.000	99	226583	100.0	109.3	
84 Chlorodibromomethane	129	9.855	9.855	0.000	89	95367	50.0	51.5	
85 Ethylene Dibromide	107	9.971	9.971	0.000	97	102812	50.0	45.8	
86 3-Chlorobenzotrifluoride	180	10.433	10.433	0.000	90	201974	50.0	55.8	
87 Chlorobenzene	112	10.457	10.457	0.000	94	304504	50.0	44.5	
88 4-Chlorobenzotrifluoride	180	10.518	10.518	0.000	96	198252	50.0	59.3	
89 1,1,1,2-Tetrachloroethane	131	10.554	10.554	0.000	93	109420	50.0	50.3	
90 Ethylbenzene	106	10.560	10.560	0.000	98	163057	50.0	42.7	
91 m-Xylene & p-Xylene	106	10.688	10.688	0.000	0	200119	50.0	42.9	
92 o-Xylene	106	11.071	11.071	0.000	96	185764	50.0	41.8	
93 Styrene	104	11.089	11.089	0.000	95	331013	50.0	44.0	
94 Bromoform	173	11.272	11.272	0.000	93	50826	50.0	44.2	
96 2-Chlorobenzotrifluoride	180	11.339	11.339	0.000	96	201086	50.0	58.0	
97 Isopropylbenzene	105	11.436	11.436	0.000	96	449346	50.0	41.4	
99 1,1,2,2-Tetrachloroethane	83	11.752	11.752	0.000	86	158580	50.0	48.9	
100 Bromobenzene	156	11.752	11.752	0.000	96	120643	50.0	39.4	
102 trans-1,4-Dichloro-2-buten	53	11.789	11.789	0.000	80	51673	50.0	55.9	
101 1,2,3-Trichloropropane	110	11.807	11.807	0.000	87	53049	50.0	42.0	
103 N-Propylbenzene	120	11.856	11.856	0.000	99	135652	50.0	38.7	
104 2-Chlorotoluene	126	11.941	11.941	0.000	96	117154	50.0	38.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	12.008	12.008	0.000	98	170756	50.0	51.9	
106 1,3,5-Trimethylbenzene	105	12.038	12.038	0.000	96	422259	50.0	42.2	
107 4-Chlorotoluene	126	12.069	12.069	0.000	96	133241	50.0	40.8	
108 tert-Butylbenzene	119	12.348	12.348	0.000	94	295426	50.0	35.3	
110 1,2,4-Trimethylbenzene	105	12.409	12.409	0.000	96	409632	50.0	40.2	
111 1,2-dichloro-4-(trifluorom	214	12.452	12.452	0.000	93	123701	50.0	48.5	
112 sec-Butylbenzene	105	12.573	12.573	0.000	94	440276	50.0	37.7	
113 1,3-Dichlorobenzene	146	12.689	12.689	0.000	98	237871	50.0	43.5	
114 4-Isopropyltoluene	119	12.731	12.731	0.000	97	385831	50.0	39.6	
115 1,4-Dichlorobenzene	146	12.792	12.792	0.000	96	247245	50.0	44.0	
116 2,4-Dichloro-1-(triflourom	214	12.823	12.823	0.000	92	107315	50.0	45.2	
118 2,5-Dichlorobenzotrifluori	214	12.865	12.865	0.000	0	128461	50.0	50.1	
120 n-Butylbenzene	91	13.139	13.139	0.000	98	292966	50.0	36.9	
121 1,2-Dichlorobenzene	146	13.151	13.151	0.000	96	236040	50.0	45.2	
122 1,2-Dibromo-3-Chloropropan	75	13.942	13.942	0.000	75	24903	50.0	43.0	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.088	14.088	0.000	0	539467	150.0	163.0	
125 2,3- & 3,4- Dichlorotoluen	125	14.507	14.507	0.000	0	365125	100.0	106.7	
126 1,2,4-Trichlorobenzene	180	14.763	14.763	0.000	94	99675	50.0	41.7	
127 Hexachlorobutadiene	225	14.909	14.909	0.000	92	33534	50.0	38.4	
128 Naphthalene	128	15.030	15.030	0.000	97	314490	50.0	38.7	
129 1,2,3-Trichlorobenzene	180	15.261	15.261	0.000	95	90271	50.0	41.4	
131 2,4,5-Trichlorotoluene	159	16.028	16.028	0.000	0	42912	50.0	41.4	
130 2,3,6-Trichlorotoluene	159	16.125	16.125	0.000	96	46086	50.0	47.8	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	87.7	
S 133 Xylenes, Total	106				0		100.0	84.7	
S 135 1,3-Dichloropropene, Total	1				0		100.0	89.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWEEmix1stR_00014	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL		
voaWAcro1stRe_00021	Amount Added:	6.00	Units: uL		
voaW2clev1stR_00024	Amount Added:	2.00	Units: uL		
voaWVA1stRest_00023	Amount Added:	2.00	Units: uL		
VOA8260VOAPRI_00269	Amount Added:	2.00	Units: uL		
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent	

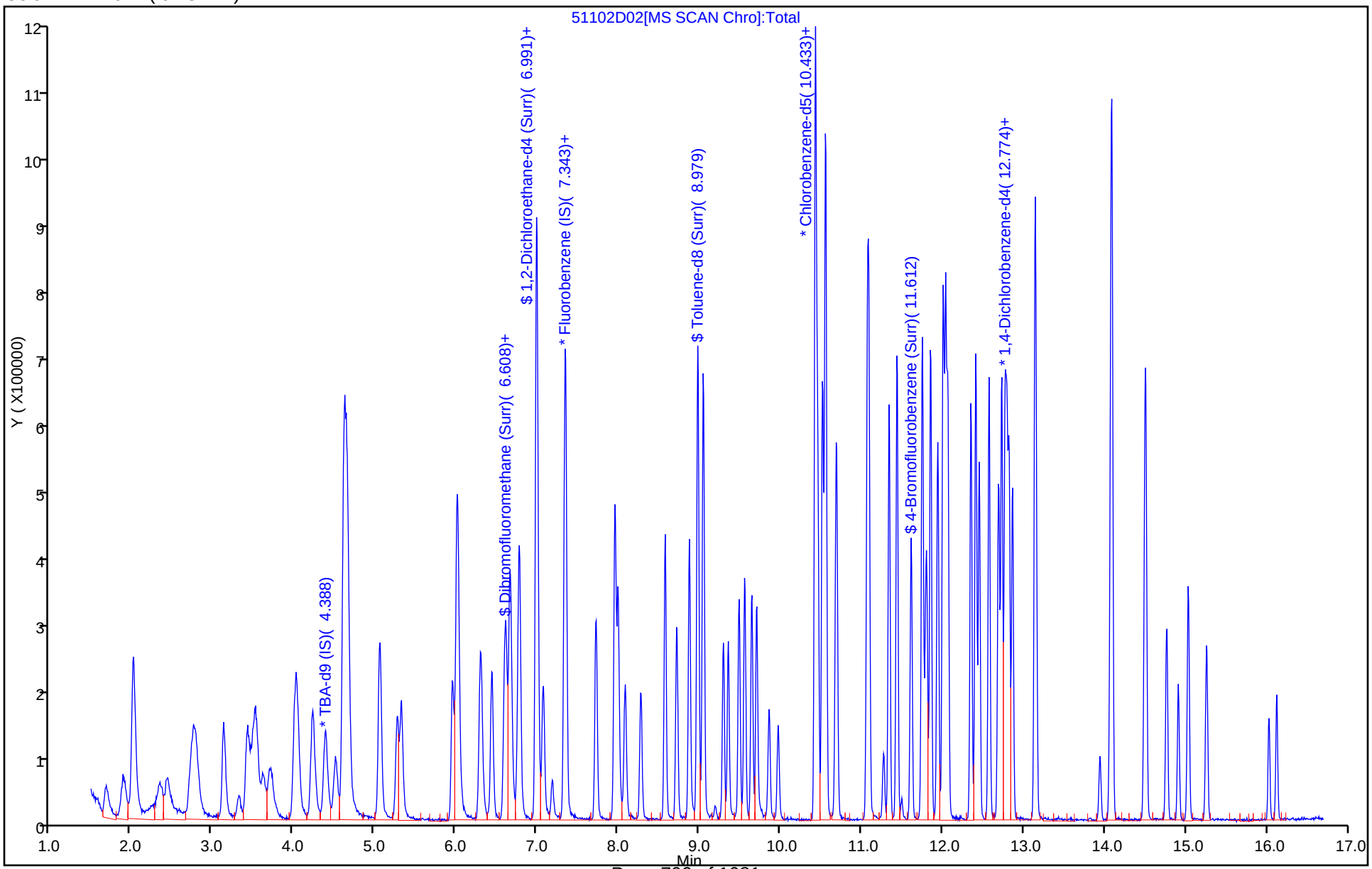
Report Date: 05-Nov-2017 20:10:38 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D02.D

Injection Date:	02-Nov-2017 22:22:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

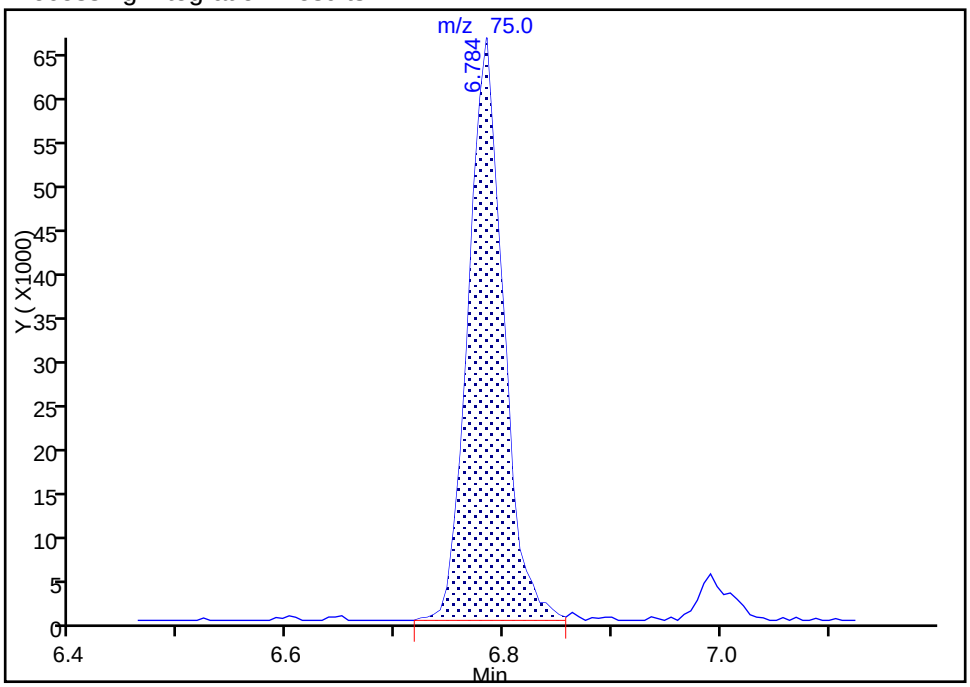
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D02.D
Injection Date: 02-Nov-2017 22:22:30 Instrument ID: CHHP5
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

55 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

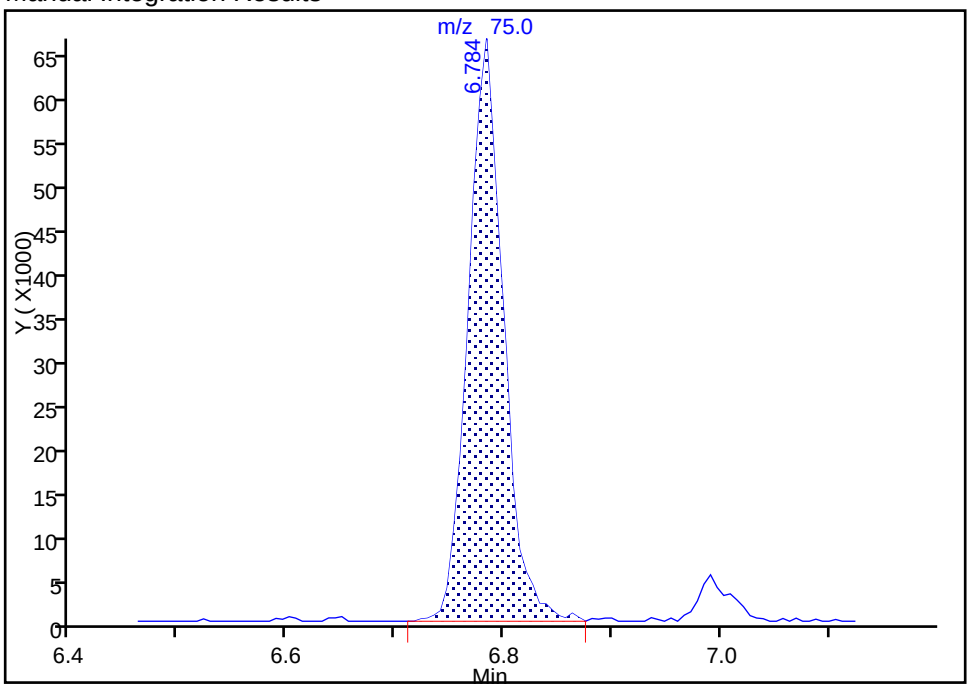
Processing Integration Results

RT: 6.78
Area: 149244
Amount: 39.952457
Amount Units: ng



Manual Integration Results

RT: 6.78
Area: 149721
Amount: 40.080150
Amount Units: ng



Reviewer: bungardf, 02-Nov-2017 23:03:28
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-228044/2 Calibration Date: 11/05/2017 00:28

Instrument ID: CHHP5 Calib Start Date: 07/27/2017 00:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/27/2017 04:24

Lab File ID: 51105D02.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	0.2907	0.3817	0.1000	13.1	10.0	31.3*	20.0
Chloromethane	Ave	0.2922	0.4220	0.1000	14.4	10.0	44.4*	20.0
1,3-Butadiene	Ave	0.2694	0.3976	0.0100	14.8	10.0	47.6*	20.0
Vinyl chloride	Ave	0.2965	0.3492	0.1000	11.8	10.0	17.7	20.0
Bromomethane	Ave	0.1402	0.1781	0.0500	12.7	10.0	27.0*	20.0
Chloroethane	Ave	0.1630	0.2294	0.0500	14.1	10.0	40.8*	20.0
Trichlorofluoromethane	Ave	0.3643	0.4345	0.1000	11.9	10.0	19.3	20.0
Ethyl ether	Ave	0.2370	0.2791	0.0100	11.8	10.0	17.8	20.0
Acrolein	Ave	0.0597	0.0766	0.0100	38.5	30.0	28.2*	20.0
1,1-Dichloroethene	Ave	0.2448	0.2410	0.1000	9.84	10.0	-1.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2686	0.2692	0.1000	10.0	10.0	0.2	20.0
Acetone	Ave	0.1308	0.1876	0.0500	28.7	20.0	43.5*	20.0
Iodomethane	Ave	0.3845	0.3801	0.0100	9.89	10.0	-1.1	20.0
Carbon disulfide	Ave	0.5372	0.5560	0.1000	10.3	10.0	3.5	20.0
Allyl chloride	Ave	0.1582	0.1440	0.0100	9.10	10.0	-9.0	20.0
Methyl acetate	Ave	0.2589	0.2903	0.1000	22.4	20.0	12.1	20.0
Methylene Chloride	Lin2		0.2756	0.1000	9.03	10.0	-9.7	20.0
tert-Butyl alcohol	Ave	1.183	1.325	0.0100	112	100	12.1	20.0
Acrylonitrile	Ave	0.1259	0.1431	0.0100	114	100	13.6	20.0
trans-1,2-Dichloroethene	Ave	0.2789	0.2584	0.1000	9.26	10.0	-7.4	20.0
Methyl tert-butyl ether	Ave	0.7479	0.7117	0.1000	9.52	10.0	-4.8	20.0
Hexane	Ave	0.3580	0.3717	0.0100	10.4	10.0	3.8	20.0
1,1-Dichloroethane	Ave	0.4850	0.4956	0.2000	10.2	10.0	2.2	20.0
Vinyl acetate	Ave	0.4932	0.6337	0.0100	12.8	10.0	28.5*	20.0
2,2-Dichloropropane	Ave	0.0617	0.0725	0.0100	11.7	10.0	17.4	20.0
cis-1,2-Dichloroethene	Ave	0.3190	0.2968	0.1000	9.30	10.0	-7.0	20.0
2-Butanone (MEK)	Ave	0.1861	0.2135	0.0500	22.9	20.0	14.7	20.0
Bromochloromethane	Ave	0.1418	0.1359	0.0100	9.58	10.0	-4.2	20.0
Tetrahydrofuran	Ave	0.1084	0.1050	0.0100	19.4	20.0	-3.1	20.0
Chloroform	Ave	0.4843	0.4486	0.2000	9.26	10.0	-7.4	20.0
1,1,1-Trichloroethane	Ave	0.3666	0.3636	0.1000	9.92	10.0	-0.8	20.0
Cyclohexane	Ave	0.4524	0.4601	0.1000	10.2	10.0	1.7	20.0
Carbon tetrachloride	Ave	0.3051	0.3108	0.1000	10.2	10.0	1.9	20.0
1,1-Dichloropropene	Ave	0.3961	0.3465	0.0100	8.75	10.0	-12.5	20.0
Isobutyl alcohol	Ave	0.0099	0.0121	0.0100	303	250	21.1*	20.0
Benzene	Ave	1.216	1.120	0.5000	9.21	10.0	-7.9	20.0
1,2-Dichloroethane	Ave	0.3544	0.3693	0.1000	10.4	10.0	4.2	20.0
n-Heptane	Ave	0.2863	0.3397	0.0100	11.9	10.0	18.7	20.0
Trichloroethene	Ave	0.3059	0.2611	0.2000	8.54	10.0	-14.6	20.0
Methylcyclohexane	Ave	0.4626	0.3675	0.1000	7.94	10.0	-20.6*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-228044/2 Calibration Date: 11/05/2017 00:28

Instrument ID: CHHP5 Calib Start Date: 07/27/2017 00:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/27/2017 04:24

Lab File ID: 51105D02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2831	0.2793	0.1000	9.86	10.0	-1.4	20.0
1,4-Dioxane	Ave	0.0029	0.0030*	0.0100	206	200	3.1	20.0
Dibromomethane	Ave	0.1659	0.1582	0.0100	9.54	10.0	-4.6	20.0
Bromodichloromethane	Ave	0.3256	0.2941	0.2000	9.03	10.0	-9.7	20.0
2-Chloroethyl vinyl ether	Ave	0.2037	0.1828	0.0100	17.9	20.0	-10.3	20.0
cis-1,3-Dichloropropene	Ave	0.3955	0.3633	0.2000	9.19	10.0	-8.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.282	1.278	0.1000	19.9	20.0	-0.3	20.0
Toluene	Ave	4.986	4.701	0.4000	9.43	10.0	-5.7	20.0
trans-1,3-Dichloropropene	Ave	1.357	1.304	0.1000	9.61	10.0	-3.9	20.0
Ethyl methacrylate	Ave	1.636	1.238	0.0100	7.57	10.0	-24.3*	20.0
1,1,2-Trichloroethane	Ave	1.039	0.9734	0.1000	9.37	10.0	-6.3	20.0
Tetrachloroethene	Ave	0.9508	0.8349	0.2000	8.78	10.0	-12.2	20.0
1,3-Dichloropropane	Ave	1.920	1.699	0.0100	8.85	10.0	-11.5	20.0
2-Hexanone	Ave	0.9836	1.041	0.1000	21.2	20.0	5.8	20.0
Dibromochloromethane	Ave	0.8779	0.8537	0.1000	9.72	10.0	-2.8	20.0
1,2-Dibromoethane (EDB)	Ave	1.065	0.9908	0.1000	9.30	10.0	-7.0	20.0
3-Chlorobenzotrifluoride	Ave	1.718	1.722	0.0100	10.0	10.0	0.2	20.0
Chlorobenzene	Ave	3.246	2.980	0.5000	9.18	10.0	-8.2	20.0
4-Chlorobenzotrifluoride	Ave	1.586	1.653	0.0100	10.4	10.0	4.2	20.0
1,1,1,2-Tetrachloroethane	Ave	1.032	0.996	0.0100	9.65	10.0	-3.5	20.0
Ethylbenzene	Ave	1.812	1.549	0.1000	8.55	10.0	-14.5	20.0
m-Xylene & p-Xylene	Ave	2.214	1.891	0.1000	8.54	10.0	-14.6	20.0
o-Xylene	Ave	2.110	1.829	0.3000	8.67	10.0	-13.3	20.0
Styrene	Ave	3.571	3.261	0.3000	9.13	10.0	-8.7	20.0
Bromoform	Ave	0.5456	0.4688	0.1000	8.59	10.0	-14.1	20.0
2-Chlorobenzotrifluoride	Ave	1.644	1.688	0.0100	10.3	10.0	2.6	20.0
Isopropylbenzene	Ave	5.150	4.368	0.1000	8.48	10.0	-15.2	20.0
1,1,2,2-Tetrachloroethane	Ave	1.538	1.408	0.3000	9.15	10.0	-8.5	20.0
Bromobenzene	Ave	0.9704	0.8189	0.0100	8.44	10.0	-15.6	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2926	0.3351	0.0100	11.5	10.0	14.5	20.0
1,2,3-Trichloropropane	Ave	0.4005	0.3541	0.0100	8.84	10.0	-11.6	20.0
N-Propylbenzene	Ave	1.109	0.9389	0.0100	8.47	10.0	-15.3	20.0
2-Chlorotoluene	Ave	0.9585	0.8195	0.0100	8.55	10.0	-14.5	20.0
3-Chlorotoluene	Ave	1.043	1.066	0.0100	10.2	10.0	2.2	20.0
1,3,5-Trimethylbenzene	Ave	3.173	2.765	0.0100	8.71	10.0	-12.9	20.0
4-Chlorotoluene	Ave	1.035	0.8847	0.0100	8.55	10.0	-14.5	20.0
tert-Butylbenzene	Ave	2.653	2.065	0.0100	7.78	10.0	-22.2*	20.0
1,2,4-Trimethylbenzene	Ave	3.226	2.778	0.0100	8.61	10.0	-13.9	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8081	0.7173	0.0100	8.88	10.0	-11.2	20.0
sec-Butylbenzene	Ave	3.701	2.991	0.0100	8.08	10.0	-19.2	20.0
1,3-Dichlorobenzene	Ave	1.734	1.555	0.6000	8.97	10.0	-10.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-228044/2 Calibration Date: 11/05/2017 00:28

Instrument ID: CHHP5 Calib Start Date: 07/27/2017 00:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/27/2017 04:24

Lab File ID: 51105D02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	3.083	2.564	0.0100	8.32	10.0	-16.8	20.0
1,4-Dichlorobenzene	Ave	1.780	1.630	0.5000	9.16	10.0	-8.4	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7524	0.6447	0.0100	8.57	10.0	-14.3	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8127	0.7467	0.0100	9.19	10.0	-8.1	20.0
n-Butylbenzene	Ave	2.514	2.025	0.0100	8.05	10.0	-19.5	20.0
1,2-Dichlorobenzene	Ave	1.653	1.541	0.4000	9.33	10.0	-6.7	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1835	0.1555	0.0500	8.47	10.0	-15.3	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.048	1.008	0.0100	28.8	30.0	-3.9	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.084	1.013	0.0100	18.7	20.0	-6.6	20.0
1,2,4-Trichlorobenzene	Ave	0.7563	0.5775	0.2000	7.64	10.0	-23.6*	20.0
Hexachlorobutadiene	Ave	0.2767	0.2265	0.0100	8.19	10.0	-18.1	20.0
Naphthalene	Ave	2.576	1.861	0.0100	7.23	10.0	-27.7*	20.0
1,2,3-Trichlorobenzene	Ave	0.6909	0.5214	0.0100	7.55	10.0	-24.5*	20.0
2,4,5-Trichlorotoluene	Ave	0.3284	0.2092	0.0100	6.37	10.0	-36.3*	20.0
2,3,6-Trichlorotoluene	Ave	0.3055	0.2135	0.0100	6.99	10.0	-30.1*	20.0
Dibromofluoromethane (Surr)	Ave	0.2406	0.2523		10.5	10.0	4.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2934	0.3278		11.2	10.0	11.7	20.0
Toluene-d8 (Surr)	Ave	3.979	4.150		10.4	10.0	4.3	20.0
4-Bromofluorobenzene (Surr)	Ave	1.437	1.407		9.79	10.0	-2.1	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D02.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 05-Nov-2017 00:28:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019180-002
Misc. Info.: CCVIS
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Nov-2017 20:28:31 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: bungardf Date: 06-Nov-2017 00:03:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.376	4.376	0.000	0	250601	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.344	7.344	0.000	97	535684	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.433	10.433	0.000	86	127084	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.768	0.000	95	177650	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.620	6.620	0.000	93	135164	50.0	52.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.991	0.000	0	175595	50.0	55.9	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	94	527436	50.0	52.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.613	0.000	85	178860	50.0	49.0	
11 Dichlorodifluoromethane	85	1.688	1.688	0.000	99	204490	50.0	65.6	
12 Chloromethane	50	1.895	1.895	0.000	98	226041	50.0	72.2	M
13 Vinyl chloride	62	2.017	2.017	0.000	65	187032	50.0	58.9	
14 Butadiene	39	2.017	2.017	0.000	94	213009	50.0	73.8	
15 Bromomethane	94	2.375	2.375	0.000	88	95409	50.0	63.5	
16 Chloroethane	64	2.461	2.461	0.000	98	122887	50.0	70.4	
17 Dichlorofluoromethane	67	2.771	2.771	0.000	98	269785	50.0	61.1	
18 Trichlorofluoromethane	101	2.801	2.801	0.000	95	232764	50.0	59.6	
20 Ethyl ether	59	3.136	3.136	0.000	96	149496	50.0	58.9	
21 Acrolein	56	3.318	3.318	0.000	98	123080	150.0	192.4	
22 1,1-Dichloroethene	96	3.434	3.434	0.000	97	129071	50.0	49.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.506	3.506	0.000	92	144192	50.0	50.1	
24 Acetone	43	3.531	3.531	0.000	99	201010	100.0	143.5	
25 Iodomethane	142	3.640	3.640	0.000	97	203599	50.0	49.4	
26 Carbon disulfide	76	3.719	3.719	0.000	100	297838	50.0	51.7	
28 3-Chloro-1-propene	76	4.017	4.017	0.000	90	77130	50.0	45.5	
30 Methyl acetate	43	4.042	4.042	0.000	99	311031	100.0	112.1	
31 Methylene Chloride	84	4.236	4.236	0.000	98	147645	50.0	45.1	
32 2-Methyl-2-propanol	59	4.510	4.510	0.000	94	166085	500.0	560.4	
33 Acrylonitrile	53	4.619	4.619	0.000	99	766441	500.0	568.2	
34 trans-1,2-Dichloroethene	96	4.644	4.644	0.000	97	138422	50.0	46.3	
35 Methyl tert-butyl ether	73	4.662	4.662	0.000	97	381226	50.0	47.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.063	5.063	0.000	95	199104	50.0	51.9	
37 1,1-Dichloroethane	63	5.282	5.282	0.000	97	265465	50.0	51.1	
38 Vinyl acetate	43	5.325	5.325	0.000	97	339453	50.0	64.2	
45 cis-1,2-Dichloroethene	96	6.018	6.018	0.000	82	158981	50.0	46.5	
44 2,2-Dichloropropane	97	6.018	6.018	0.000	64	38838	50.0	58.7	
46 2-Butanone (MEK)	43	6.030	6.030	0.000	99	228700	100.0	114.7	
49 Chlorobromomethane	128	6.298	6.298	0.000	96	72791	50.0	47.9	
51 Tetrahydrofuran	42	6.310	6.310	0.000	91	112541	100.0	96.9	
52 Chloroform	83	6.444	6.444	0.000	95	240285	50.0	46.3	
53 1,1,1-Trichloroethane	97	6.602	6.602	0.000	98	194766	50.0	49.6	
54 Cyclohexane	56	6.675	6.675	0.000	95	246449	50.0	50.9	
56 Carbon tetrachloride	117	6.766	6.766	0.000	95	166501	50.0	50.9	
55 1,1-Dichloropropene	75	6.784	6.784	0.000	93	185597	50.0	43.7	
57 Isobutyl alcohol	41	6.985	6.985	0.000	90	161308	1250.0	1513.3	
58 Benzene	78	6.997	6.997	0.000	97	600036	50.0	46.1	
59 1,2-Dichloroethane	62	7.076	7.076	0.000	97	197852	50.0	52.1	
62 n-Heptane	43	7.356	7.356	0.000	91	181968	50.0	59.3	
64 Trichloroethene	130	7.727	7.727	0.000	97	139890	50.0	42.7	
66 Methylcyclohexane	83	7.958	7.958	0.000	94	196852	50.0	39.7	
67 1,2-Dichloropropane	63	8.001	8.001	0.000	95	149596	50.0	49.3	
68 Dibromomethane	93	8.086	8.086	0.000	96	84762	50.0	47.7	
70 1,4-Dioxane	88	8.086	8.086	0.000	50	31807	1000.0	1031.3	
71 Dichlorobromomethane	83	8.274	8.274	0.000	97	157538	50.0	45.2	
73 2-Chloroethyl vinyl ether	63	8.578	8.578	0.000	93	195826	100.0	89.7	
74 cis-1,3-Dichloropropene	75	8.724	8.724	0.000	93	194618	50.0	45.9	
75 4-Methyl-2-pentanone (MIBK	43	8.876	8.876	0.000	98	324936	100.0	99.7	
76 Toluene	91	9.053	9.053	0.000	98	597470	50.0	47.2	
77 trans-1,3-Dichloropropene	75	9.296	9.296	0.000	97	165734	50.0	48.1	
78 Ethyl methacrylate	69	9.357	9.357	0.000	92	157317	50.0	37.8	
79 1,1,2-Trichloroethane	97	9.491	9.491	0.000	92	123705	50.0	46.9	
80 Tetrachloroethene	164	9.563	9.563	0.000	96	106096	50.0	43.9	
81 1,3-Dichloropropane	76	9.649	9.649	0.000	96	215870	50.0	44.2	
82 2-Hexanone	43	9.703	9.703	0.000	99	264507	100.0	105.8	
84 Chlorodibromomethane	129	9.861	9.861	0.000	92	108497	50.0	48.6	
85 Ethylene Dibromide	107	9.971	9.971	0.000	98	125908	50.0	46.5	
86 3-Chlorobenzotrifluoride	180	10.433	10.433	0.000	87	218882	50.0	50.1	
87 Chlorobenzene	112	10.464	10.464	0.000	95	378762	50.0	45.9	
88 4-Chlorobenzotrifluoride	180	10.518	10.518	0.000	95	210036	50.0	52.1	
89 1,1,1,2-Tetrachloroethane	131	10.555	10.555	0.000	93	126596	50.0	48.3	
90 Ethylbenzene	106	10.561	10.561	0.000	99	196916	50.0	42.8	
91 m-Xylene & p-Xylene	106	10.689	10.689	0.000	0	240373	50.0	42.7	
92 o-Xylene	106	11.072	11.072	0.000	96	232448	50.0	43.3	
93 Styrene	104	11.090	11.090	0.000	96	414442	50.0	45.7	
94 Bromoform	173	11.272	11.272	0.000	95	59577	50.0	43.0	
96 2-Chlorobenzotrifluoride	180	11.339	11.339	0.000	96	214486	50.0	51.3	
97 Isopropylbenzene	105	11.437	11.437	0.000	96	555074	50.0	42.4	
99 1,1,2,2-Tetrachloroethane	83	11.747	11.747	0.000	85	178877	50.0	45.8	
100 Bromobenzene	156	11.753	11.753	0.000	97	145473	50.0	42.2	
102 trans-1,4-Dichloro-2-buten	53	11.789	11.789	0.000	83	59522	50.0	57.3	
101 1,2,3-Trichloropropane	110	11.808	11.808	0.000	86	62900	50.0	44.2	
103 N-Propylbenzene	120	11.856	11.856	0.000	99	166786	50.0	42.3	
104 2-Chlorotoluene	126	11.941	11.941	0.000	96	145585	50.0	42.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	12.008	12.008	0.000	97	189319	50.0	51.1	
106 1,3,5-Trimethylbenzene	105	12.039	12.039	0.000	97	491261	50.0	43.6	
107 4-Chlorotoluene	126	12.063	12.063	0.000	96	157158	50.0	42.7	
108 tert-Butylbenzene	119	12.349	12.349	0.000	94	366897	50.0	38.9	
110 1,2,4-Trimethylbenzene	105	12.410	12.410	0.000	97	493525	50.0	43.1	
111 1,2-dichloro-4-(trifluorom	214	12.452	12.452	0.000	93	127436	50.0	44.4	
112 sec-Butylbenzene	105	12.574	12.574	0.000	94	531344	50.0	40.4	
113 1,3-Dichlorobenzene	146	12.689	12.689	0.000	98	276239	50.0	44.8	
114 4-Isopropyltoluene	119	12.732	12.732	0.000	97	455463	50.0	41.6	
115 1,4-Dichlorobenzene	146	12.793	12.793	0.000	96	289647	50.0	45.8	
116 2,4-Dichloro-1-(triflourom	214	12.823	12.823	0.000	94	114534	50.0	42.8	
118 2,5-Dichlorobenzotrifluori	214	12.866	12.866	0.000	0	132654	50.0	45.9	
120 n-Butylbenzene	91	13.139	13.139	0.000	97	359767	50.0	40.3	M
121 1,2-Dichlorobenzene	146	13.151	13.151	0.000	96	273798	50.0	46.6	
122 1,2-Dibromo-3-Chloropropan	75	13.942	13.942	0.000	74	27618	50.0	42.4	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.088	14.088	0.000	0	536967	150.0	144.2	
125 2,3- & 3,4- Dichlorotoluen	125	14.502	14.502	0.000	0	359849	100.0	93.4	
126 1,2,4-Trichlorobenzene	180	14.769	14.769	0.000	95	102597	50.0	38.2	
127 Hexachlorobutadiene	225	14.915	14.915	0.000	94	40238	50.0	40.9	
128 Naphthalene	128	15.031	15.031	0.000	97	330635	50.0	36.1	
129 1,2,3-Trichlorobenzene	180	15.256	15.256	0.000	95	92620	50.0	37.7	
131 2,4,5-Trichlorotoluene	159	16.028	16.028	0.000	0	37171	50.0	31.9	
130 2,3,6-Trichlorotoluene	159	16.125	16.125	0.000	97	37923	50.0	34.9	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	92.8	
S 133 Xylenes, Total	106				0		100.0	86.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	94.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWEEmix1stR_00014	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL		
voaWAcro1stRe_00022	Amount Added:	6.00	Units: uL		
voaW2clev1stR_00024	Amount Added:	2.00	Units: uL		
voaWVA1stRest_00023	Amount Added:	2.00	Units: uL		
VOA8260VOAPRI_00269	Amount Added:	2.00	Units: uL		
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent	

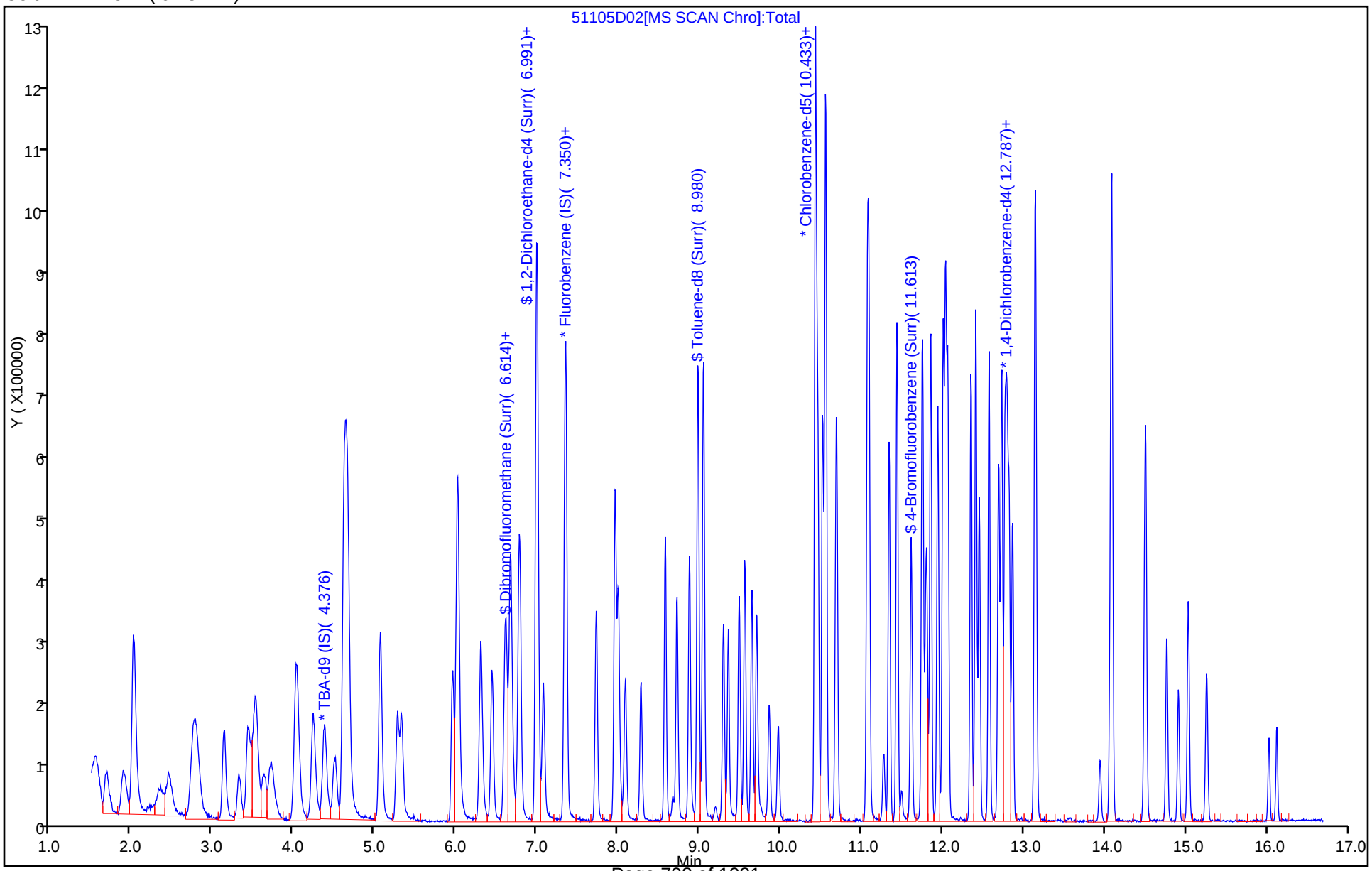
Report Date: 06-Nov-2017 20:28:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D02.D

Injection Date:	05-Nov-2017 00:28:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

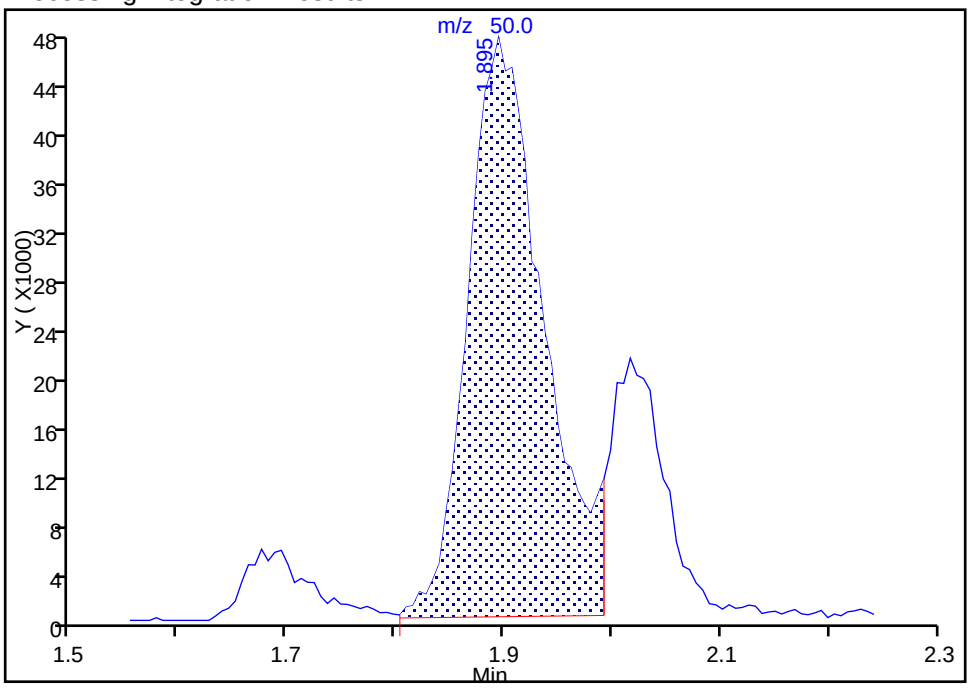
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D02.D
Injection Date: 05-Nov-2017 00:28:30 Instrument ID: CHHP5
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

12 Chloromethane, CAS: 74-87-3

Signal: 1

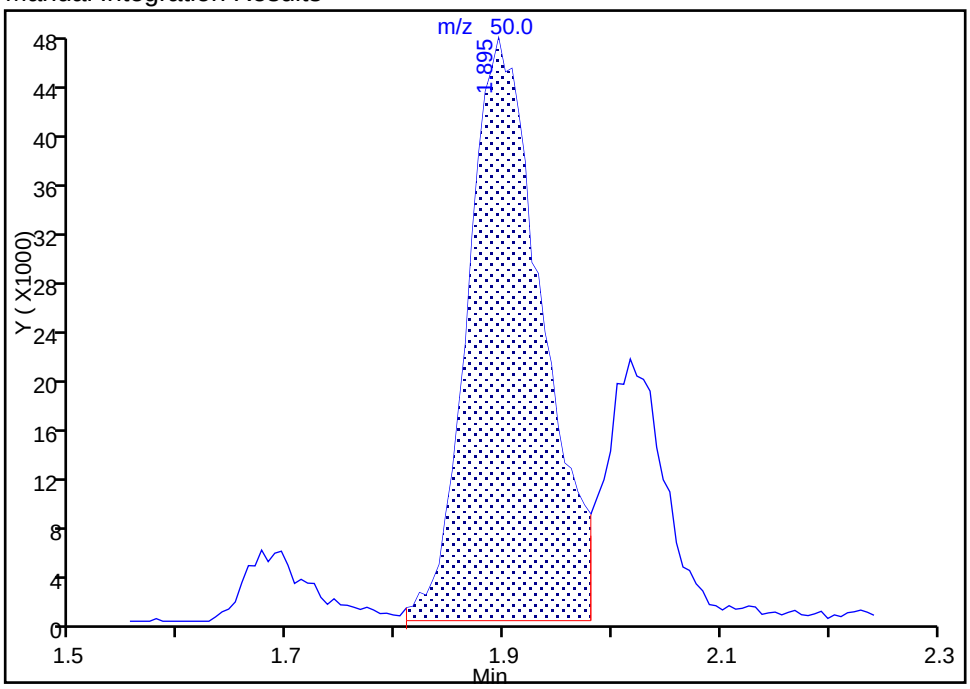
Processing Integration Results

RT: 1.89
Area: 231169
Amount: 73.844625
Amount Units: ng



Manual Integration Results

RT: 1.89
Area: 226041
Amount: 72.206537
Amount Units: ng



Reviewer: bungardf, 06-Nov-2017 00:23:36
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

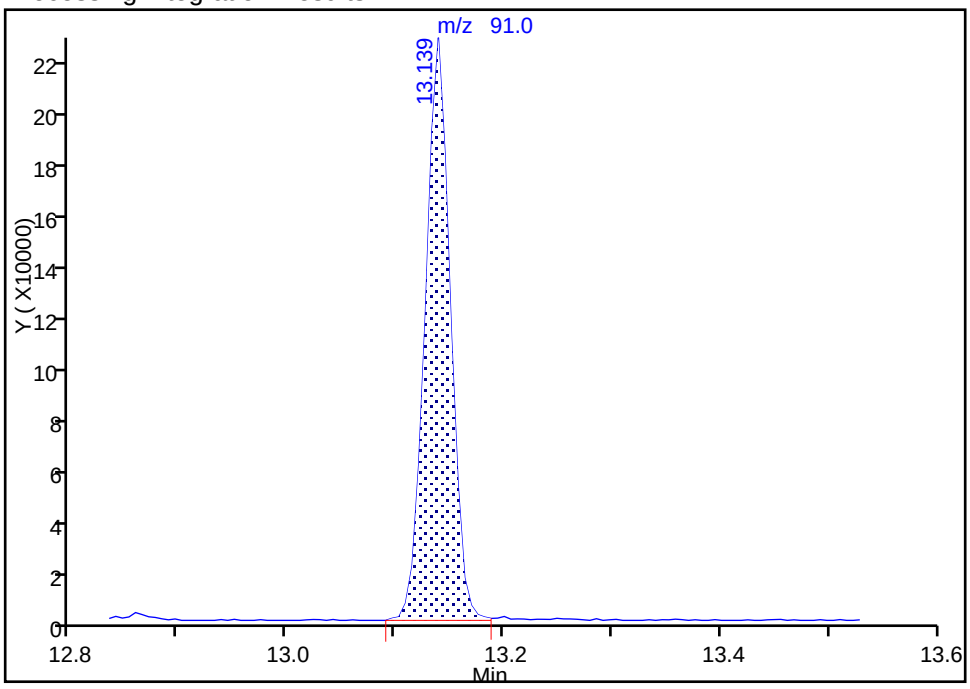
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D02.D				
Injection Date:	05-Nov-2017 00:28:30	Instrument ID:	CHHP5		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

120 n-Butylbenzene, CAS: 104-51-8

Signal: 1

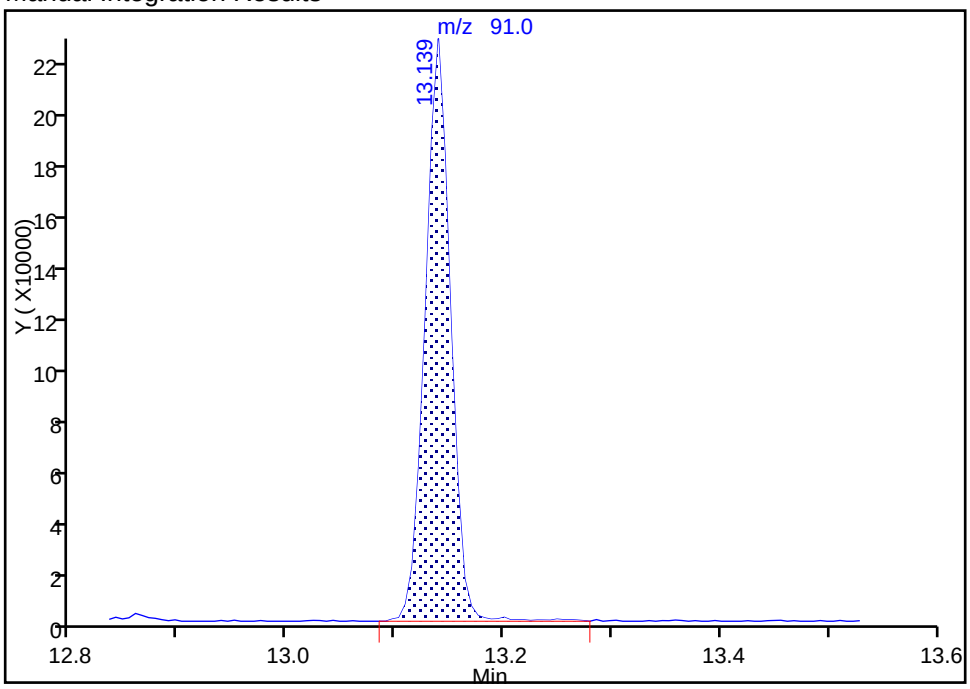
Processing Integration Results

RT: 13.14
Area: 356871
Amount: 39.946085
Amount Units: ng



Manual Integration Results

RT: 13.14
Area: 359767
Amount: 40.270247
Amount Units: ng



Reviewer: bungardf, 06-Nov-2017 00:22:59

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-228278/2 Calibration Date: 11/08/2017 00:13

Instrument ID: CHHP5 Calib Start Date: 07/27/2017 00:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/27/2017 04:24

Lab File ID: 51107D02.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	0.2907	0.3614	0.1000	12.4	10.0	24.3*	20.0
Chloromethane	Ave	0.2922	0.4067	0.1000	13.9	10.0	39.2*	20.0
1,3-Butadiene	Ave	0.2694	0.4368	0.0100	16.2	10.0	62.2*	20.0
Vinyl chloride	Ave	0.2965	0.3596	0.1000	12.1	10.0	21.3*	20.0
Bromomethane	Ave	0.1402	0.1241	0.0500	8.85	10.0	-11.5	20.0
Chloroethane	Ave	0.1630	0.1833	0.0500	11.2	10.0	12.5	20.0
Trichlorofluoromethane	Ave	0.3643	0.4355	0.1000	12.0	10.0	19.5	20.0
Ethyl ether	Ave	0.2370	0.2920	0.0100	12.3	10.0	23.2*	20.0
Acrolein	Ave	0.0597	0.0713	0.0100	35.8	30.0	19.3	20.0
1,1-Dichloroethene	Ave	0.2448	0.2542	0.1000	10.4	10.0	3.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2686	0.2845	0.1000	10.6	10.0	5.9	20.0
Acetone	Ave	0.1308	0.1649	0.0500	25.2	20.0	26.1*	20.0
Iodomethane	Ave	0.3845	0.3945	0.0100	10.3	10.0	2.6	20.0
Carbon disulfide	Ave	0.5372	0.5868	0.1000	10.9	10.0	9.2	20.0
Allyl chloride	Ave	0.1582	0.1520	0.0100	9.61	10.0	-3.9	20.0
Methyl acetate	Ave	0.2589	0.3208	0.1000	24.8	20.0	23.9*	20.0
Methylene Chloride	Lin2		0.2969	0.1000	9.78	10.0	-2.2	20.0
tert-Butyl alcohol	Ave	1.183	1.315	0.0100	111	100	11.2	20.0
Acrylonitrile	Ave	0.1259	0.1564	0.0100	124	100	24.3*	20.0
trans-1,2-Dichloroethene	Ave	0.2789	0.2804	0.1000	10.1	10.0	0.5	20.0
Methyl tert-butyl ether	Ave	0.7479	0.7973	0.1000	10.7	10.0	6.6	20.0
Hexane	Ave	0.3580	0.4199	0.0100	11.7	10.0	17.3	20.0
1,1-Dichloroethane	Ave	0.4850	0.5077	0.2000	10.5	10.0	4.7	20.0
Vinyl acetate	Ave	0.4932	0.6204	0.0100	12.6	10.0	25.8*	20.0
2,2-Dichloropropane	Ave	0.0617	0.0726	0.0100	11.8	10.0	17.6	20.0
cis-1,2-Dichloroethene	Ave	0.3190	0.3081	0.1000	9.66	10.0	-3.4	20.0
2-Butanone (MEK)	Ave	0.1861	0.2134	0.0500	22.9	20.0	14.6	20.0
Bromochloromethane	Ave	0.1418	0.1382	0.0100	9.75	10.0	-2.5	20.0
Tetrahydrofuran	Ave	0.1084	0.1145	0.0100	21.1	20.0	5.6	20.0
Chloroform	Ave	0.4843	0.4573	0.2000	9.44	10.0	-5.6	20.0
1,1,1-Trichloroethane	Ave	0.3666	0.3660	0.1000	9.99	10.0	-0.1	20.0
Cyclohexane	Ave	0.4524	0.5140	0.1000	11.4	10.0	13.6	20.0
Carbon tetrachloride	Ave	0.3051	0.3030	0.1000	9.93	10.0	-0.7	20.0
1,1-Dichloropropene	Ave	0.3961	0.3619	0.0100	9.14	10.0	-8.6	20.0
Isobutyl alcohol	Ave	0.0099	0.0118	0.0100	297	250	18.7	20.0
Benzene	Ave	1.216	1.145	0.5000	9.42	10.0	-5.8	20.0
1,2-Dichloroethane	Ave	0.3544	0.3725	0.1000	10.5	10.0	5.1	20.0
n-Heptane	Ave	0.2863	0.3575	0.0100	12.5	10.0	24.9*	20.0
Trichloroethene	Ave	0.3059	0.2674	0.2000	8.74	10.0	-12.6	20.0
Methylcyclohexane	Ave	0.4626	0.4097	0.1000	8.86	10.0	-11.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-228278/2 Calibration Date: 11/08/2017 00:13

Instrument ID: CHHP5 Calib Start Date: 07/27/2017 00:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/27/2017 04:24

Lab File ID: 51107D02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2831	0.2733	0.1000	9.65	10.0	-3.5	20.0
1,4-Dioxane	Ave	0.0029	0.0034*	0.0100	233	200	16.3	20.0
Dibromomethane	Ave	0.1659	0.1631	0.0100	9.83	10.0	-1.7	20.0
Bromodichloromethane	Ave	0.3256	0.2940	0.2000	9.03	10.0	-9.7	20.0
2-Chloroethyl vinyl ether	Ave	0.2037	0.1748	0.0100	17.2	20.0	-14.2	20.0
cis-1,3-Dichloropropene	Ave	0.3955	0.3695	0.2000	9.34	10.0	-6.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.282	1.296	0.1000	20.2	20.0	1.1	20.0
Toluene	Ave	4.986	5.241	0.4000	10.5	10.0	5.1	20.0
trans-1,3-Dichloropropene	Ave	1.357	1.486	0.1000	11.0	10.0	9.6	20.0
Ethyl methacrylate	Ave	1.636	1.448	0.0100	8.85	10.0	-11.5	20.0
1,1,2-Trichloroethane	Ave	1.039	1.088	0.1000	10.5	10.0	4.8	20.0
Tetrachloroethene	Ave	0.9508	0.8995	0.2000	9.46	10.0	-5.4	20.0
1,3-Dichloropropane	Ave	1.920	1.908	0.0100	9.94	10.0	-0.6	20.0
2-Hexanone	Ave	0.9836	1.023	0.1000	20.8	20.0	4.0	20.0
Dibromochloromethane	Ave	0.8779	0.9206	0.1000	10.5	10.0	4.9	20.0
1,2-Dibromoethane (EDB)	Ave	1.065	1.082	0.1000	10.2	10.0	1.6	20.0
3-Chlorobenzotrifluoride	Ave	1.718	1.875	0.0100	10.9	10.0	9.1	20.0
Chlorobenzene	Ave	3.246	3.231	0.5000	9.95	10.0	-0.5	20.0
4-Chlorobenzotrifluoride	Ave	1.586	1.833	0.0100	11.6	10.0	15.6	20.0
1,1,1,2-Tetrachloroethane	Ave	1.032	1.083	0.0100	10.5	10.0	4.9	20.0
Ethylbenzene	Ave	1.812	1.798	0.1000	9.92	10.0	-0.8	20.0
m-Xylene & p-Xylene	Ave	2.214	2.163	0.1000	9.77	10.0	-2.3	20.0
o-Xylene	Ave	2.110	2.050	0.3000	9.72	10.0	-2.8	20.0
Styrene	Ave	3.571	3.520	0.3000	9.86	10.0	-1.4	20.0
Bromoform	Ave	0.5456	0.5000	0.1000	9.16	10.0	-8.4	20.0
2-Chlorobenzotrifluoride	Ave	1.644	1.844	0.0100	11.2	10.0	12.2	20.0
Isopropylbenzene	Ave	5.150	5.015	0.1000	9.74	10.0	-2.6	20.0
1,1,2,2-Tetrachloroethane	Ave	1.538	1.483	0.3000	9.64	10.0	-3.6	20.0
Bromobenzene	Ave	0.9704	0.8746	0.0100	9.01	10.0	-9.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2926	0.3643	0.0100	12.4	10.0	24.5*	20.0
1,2,3-Trichloropropane	Ave	0.4005	0.3596	0.0100	8.98	10.0	-10.2	20.0
N-Propylbenzene	Ave	1.109	1.014	0.0100	9.14	10.0	-8.6	20.0
2-Chlorotoluene	Ave	0.9585	0.8759	0.0100	9.14	10.0	-8.6	20.0
3-Chlorotoluene	Ave	1.043	1.098	0.0100	10.5	10.0	5.3	20.0
1,3,5-Trimethylbenzene	Ave	3.173	2.997	0.0100	9.44	10.0	-5.6	20.0
4-Chlorotoluene	Ave	1.035	0.9783	0.0100	9.45	10.0	-5.5	20.0
tert-Butylbenzene	Ave	2.653	2.349	0.0100	8.85	10.0	-11.5	20.0
1,2,4-Trimethylbenzene	Ave	3.226	3.001	0.0100	9.30	10.0	-7.0	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8081	0.7918	0.0100	9.80	10.0	-2.0	20.0
sec-Butylbenzene	Ave	3.701	3.326	0.0100	8.99	10.0	-10.1	20.0
1,3-Dichlorobenzene	Ave	1.734	1.644	0.6000	9.48	10.0	-5.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-228278/2 Calibration Date: 11/08/2017 00:13

Instrument ID: CHHP5 Calib Start Date: 07/27/2017 00:51

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/27/2017 04:24

Lab File ID: 51107D02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	3.083	2.848	0.0100	9.24	10.0	-7.6	20.0
1,4-Dichlorobenzene	Ave	1.780	1.710	0.5000	9.61	10.0	-3.9	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7524	0.7365	0.0100	9.79	10.0	-2.1	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8127	0.8402	0.0100	10.3	10.0	3.4	20.0
n-Butylbenzene	Ave	2.514	2.243	0.0100	8.92	10.0	-10.8	20.0
1,2-Dichlorobenzene	Ave	1.653	1.650	0.4000	9.98	10.0	-0.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1835	0.1597	0.0500	8.70	10.0	-13.0	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.048	1.153	0.0100	33.0	30.0	9.9	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.084	1.199	0.0100	22.1	20.0	10.6	20.0
1,2,4-Trichlorobenzene	Ave	0.7563	0.7183	0.2000	9.50	10.0	-5.0	20.0
Hexachlorobutadiene	Ave	0.2767	0.2670	0.0100	9.65	10.0	-3.5	20.0
Naphthalene	Ave	2.576	2.426	0.0100	9.42	10.0	-5.8	20.0
1,2,3-Trichlorobenzene	Ave	0.6909	0.6433	0.0100	9.31	10.0	-6.9	20.0
2,4,5-Trichlorotoluene	Ave	0.3284	0.3191	0.0100	9.72	10.0	-2.8	20.0
2,3,6-Trichlorotoluene	Ave	0.3055	0.3129	0.0100	10.2	10.0	2.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2406	0.2353		9.78	10.0	-2.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2934	0.2947		10.0	10.0	0.4	20.0
Toluene-d8 (Surr)	Ave	3.979	4.375		11.0	10.0	9.9	20.0
4-Bromofluorobenzene (Surr)	Ave	1.437	1.475		10.3	10.0	2.7	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D02.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 08-Nov-2017 00:13:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019208-002
Misc. Info.: CCVIS
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub29

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Nov-2017 09:23:41 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

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

First Level Reviewer: bungardf Date: 08-Nov-2017 00:44:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.383	4.383	0.000	0	265706	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.338	7.338	0.000	97	569496	50.0	50.0	M
* 3 Chlorobenzene-d5	119	10.428	10.428	0.000	86	122941	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.769	0.000	93	171348	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.621	6.621	0.000	93	134016	50.0	48.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.986	6.986	0.000	0	167808	50.0	50.2	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	94	537806	50.0	55.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.613	0.000	87	181381	50.0	51.3	
11 Dichlorodifluoromethane	85	1.683	1.683	0.000	99	205806	50.0	62.1	
12 Chloromethane	50	1.889	1.889	0.000	99	231610	50.0	69.6	
14 Butadiene	39	2.011	2.011	0.000	94	248756	50.0	81.1	
13 Vinyl chloride	62	2.017	2.017	0.000	66	204816	50.0	60.6	
15 Bromomethane	94	2.333	2.333	0.000	89	70674	50.0	44.3	
16 Chloroethane	64	2.431	2.431	0.000	99	104398	50.0	56.2	
17 Dichlorofluoromethane	67	2.759	2.759	0.000	98	273453	50.0	58.2	
18 Trichlorofluoromethane	101	2.802	2.802	0.000	88	247989	50.0	59.8	
20 Ethyl ether	59	3.136	3.136	0.000	94	166270	50.0	61.6	
21 Acrolein	56	3.312	3.312	0.000	100	121745	150.0	179.0	
22 1,1-Dichloroethene	96	3.428	3.428	0.000	96	144787	50.0	51.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.501	3.501	0.000	95	162003	50.0	52.9	
24 Acetone	43	3.537	3.537	0.000	99	187794	100.0	126.1	
25 Iodomethane	142	3.610	3.610	0.000	98	224688	50.0	51.3	
26 Carbon disulfide	76	3.708	3.708	0.000	99	334170	50.0	54.6	
28 3-Chloro-1-propene	76	4.006	4.006	0.000	90	86586	50.0	48.1	
30 Methyl acetate	43	4.036	4.036	0.000	99	365427	100.0	123.9	
31 Methylene Chloride	84	4.231	4.231	0.000	99	169080	50.0	48.9	
32 2-Methyl-2-propanol	59	4.510	4.510	0.000	91	174733	500.0	556.1	
33 Acrylonitrile	53	4.608	4.608	0.000	100	890914	500.0	621.3	
34 trans-1,2-Dichloroethene	96	4.638	4.638	0.000	99	159667	50.0	50.3	
35 Methyl tert-butyl ether	73	4.656	4.656	0.000	98	454069	50.0	53.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.052	5.052	0.000	95	239144	50.0	58.6	
37 1,1-Dichloroethane	63	5.271	5.271	0.000	97	289131	50.0	52.3	
38 Vinyl acetate	43	5.319	5.319	0.000	97	353293	50.0	62.9	
44 2,2-Dichloropropane	97	6.006	6.006	0.000	64	41348	50.0	58.8	
45 cis-1,2-Dichloroethene	96	6.013	6.013	0.000	82	175464	50.0	48.3	
46 2-Butanone (MEK)	43	6.025	6.025	0.000	99	243043	100.0	114.6	
49 Chlorobromomethane	128	6.298	6.298	0.000	96	78692	50.0	48.7	
51 Tetrahydrofuran	42	6.310	6.310	0.000	94	130369	100.0	105.6	
52 Chloroform	83	6.438	6.438	0.000	94	260431	50.0	47.2	
53 1,1,1-Trichloroethane	97	6.596	6.596	0.000	99	208457	50.0	49.9	
54 Cyclohexane	56	6.657	6.657	0.000	95	292743	50.0	56.8	
56 Carbon tetrachloride	117	6.767	6.767	0.000	97	172541	50.0	49.7	
55 1,1-Dichloropropene	75	6.779	6.779	0.000	93	206074	50.0	45.7	
57 Isobutyl alcohol	41	6.986	6.986	0.000	91	168150	1250.0	1483.9	
58 Benzene	78	6.998	6.998	0.000	97	652043	50.0	47.1	
59 1,2-Dichloroethane	62	7.071	7.071	0.000	96	212123	50.0	52.6	
62 n-Heptane	43	7.350	7.350	0.000	94	203617	50.0	62.4	
64 Trichloroethene	130	7.721	7.721	0.000	97	152295	50.0	43.7	
66 Methylcyclohexane	83	7.959	7.959	0.000	95	233346	50.0	44.3	
67 1,2-Dichloropropane	63	7.995	7.995	0.000	93	155654	50.0	48.3	
70 1,4-Dioxane	88	8.080	8.080	0.000	48	38121	1000.0	1162.6	
68 Dibromomethane	93	8.086	8.086	0.000	95	92875	50.0	49.2	
71 Dichlorobromomethane	83	8.281	8.281	0.000	98	167413	50.0	45.1	
73 2-Chloroethyl vinyl ether	63	8.579	8.579	0.000	92	199134	100.0	85.8	
74 cis-1,3-Dichloropropene	75	8.719	8.719	0.000	93	210438	50.0	46.7	
75 4-Methyl-2-pentanone (MIBK	43	8.877	8.877	0.000	98	318736	100.0	101.1	
76 Toluene	91	9.047	9.047	0.000	98	644299	50.0	52.6	
77 trans-1,3-Dichloropropene	75	9.296	9.296	0.000	97	182724	50.0	54.8	
78 Ethyl methacrylate	69	9.357	9.357	0.000	92	177957	50.0	44.2	
79 1,1,2-Trichloroethane	97	9.491	9.491	0.000	91	133807	50.0	52.4	
80 Tetrachloroethene	164	9.558	9.558	0.000	94	110586	50.0	47.3	
81 1,3-Dichloropropane	76	9.649	9.649	0.000	96	234609	50.0	49.7	
82 2-Hexanone	43	9.704	9.704	0.000	99	251577	100.0	104.0	
84 Chlorodibromomethane	129	9.856	9.856	0.000	90	113181	50.0	52.4	
85 Ethylene Dibromide	107	9.971	9.971	0.000	98	133018	50.0	50.8	
86 3-Chlorobenzotrifluoride	180	10.434	10.434	0.000	93	230471	50.0	54.6	
87 Chlorobenzene	112	10.458	10.458	0.000	95	397197	50.0	49.8	
88 4-Chlorobenzotrifluoride	180	10.519	10.519	0.000	96	225405	50.0	57.8	
89 1,1,1,2-Tetrachloroethane	131	10.549	10.549	0.000	94	133127	50.0	52.5	
90 Ethylbenzene	106	10.555	10.555	0.000	98	221048	50.0	49.6	
91 m-Xylene & p-Xylene	106	10.689	10.689	0.000	0	265863	50.0	48.8	
92 o-Xylene	106	11.072	11.072	0.000	96	252082	50.0	48.6	
93 Styrene	104	11.090	11.090	0.000	95	432802	50.0	49.3	
94 Bromoform	173	11.273	11.273	0.000	94	61473	50.0	45.8	
96 2-Chlorobenzotrifluoride	180	11.346	11.346	0.000	96	226739	50.0	56.1	
97 Isopropylbenzene	105	11.437	11.437	0.000	96	616590	50.0	48.7	
99 1,1,2,2-Tetrachloroethane	83	11.753	11.753	0.000	85	182315	50.0	48.2	
100 Bromobenzene	156	11.753	11.753	0.000	93	149855	50.0	45.1	
102 trans-1,4-Dichloro-2-buten	53	11.790	11.790	0.000	82	62419	50.0	62.2	
101 1,2,3-Trichloropropane	110	11.802	11.802	0.000	87	61616	50.0	44.9	
103 N-Propylbenzene	120	11.857	11.857	0.000	99	173667	50.0	45.7	
104 2-Chlorotoluene	126	11.936	11.936	0.000	97	150079	50.0	45.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	12.003	12.003	0.000	97	188108	50.0	52.6	
106 1,3,5-Trimethylbenzene	105	12.033	12.033	0.000	94	513460	50.0	47.2	
107 4-Chlorotoluene	126	12.063	12.063	0.000	96	167636	50.0	47.3	
108 tert-Butylbenzene	119	12.349	12.349	0.000	94	402487	50.0	44.3	
110 1,2,4-Trimethylbenzene	105	12.410	12.410	0.000	97	514240	50.0	46.5	
111 1,2-dichloro-4-(trifluorom	214	12.453	12.453	0.000	94	135665	50.0	49.0	
112 sec-Butylbenzene	105	12.574	12.574	0.000	94	569862	50.0	44.9	
113 1,3-Dichlorobenzene	146	12.696	12.696	0.000	98	281755	50.0	47.4	
114 4-Isopropyltoluene	119	12.726	12.726	0.000	97	487935	50.0	46.2	
115 1,4-Dichlorobenzene	146	12.793	12.793	0.000	95	293064	50.0	48.0	
116 2,4-Dichloro-1-(triflourom	214	12.824	12.824	0.000	92	126196	50.0	48.9	
118 2,5-Dichlorobenzotrifluori	214	12.866	12.866	0.000	0	143963	50.0	51.7	
120 n-Butylbenzene	91	13.134	13.134	0.000	98	384351	50.0	44.6	
121 1,2-Dichlorobenzene	146	13.152	13.152	0.000	98	282711	50.0	49.9	
122 1,2-Dibromo-3-Chloropropan	75	13.943	13.943	0.000	79	27363	50.0	43.5	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.082	14.082	0.000	0	592445	150.0	164.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.502	14.502	0.000	0	410833	100.0	110.6	
126 1,2,4-Trichlorobenzene	180	14.764	14.764	0.000	93	123082	50.0	47.5	
127 Hexachlorobutadiene	225	14.910	14.910	0.000	93	45751	50.0	48.2	
128 Naphthalene	128	15.031	15.031	0.000	97	415670	50.0	47.1	
129 1,2,3-Trichlorobenzene	180	15.256	15.256	0.000	96	110226	50.0	46.6	
131 2,4,5-Trichlorotoluene	159	16.028	16.028	0.000	0	54673	50.0	48.6	
130 2,3,6-Trichlorotoluene	159	16.126	16.126	0.000	95	53610	50.0	51.2	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	98.5	
S 133 Xylenes, Total	106				0		100.0	97.4	
S 135 1,3-Dichloropropene, Total	1				0		100.0	101.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWEEmix1stR_00014	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL		
voaWAcro1stRe_00022	Amount Added:	6.00	Units: uL		
voaWVA1stRest_00023	Amount Added:	2.00	Units: uL		
VOA8260VOA2ND_00271	Amount Added:	2.00	Units: uL		
voaW2clev1stR_00025	Amount Added:	2.00	Units: uL		
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent	

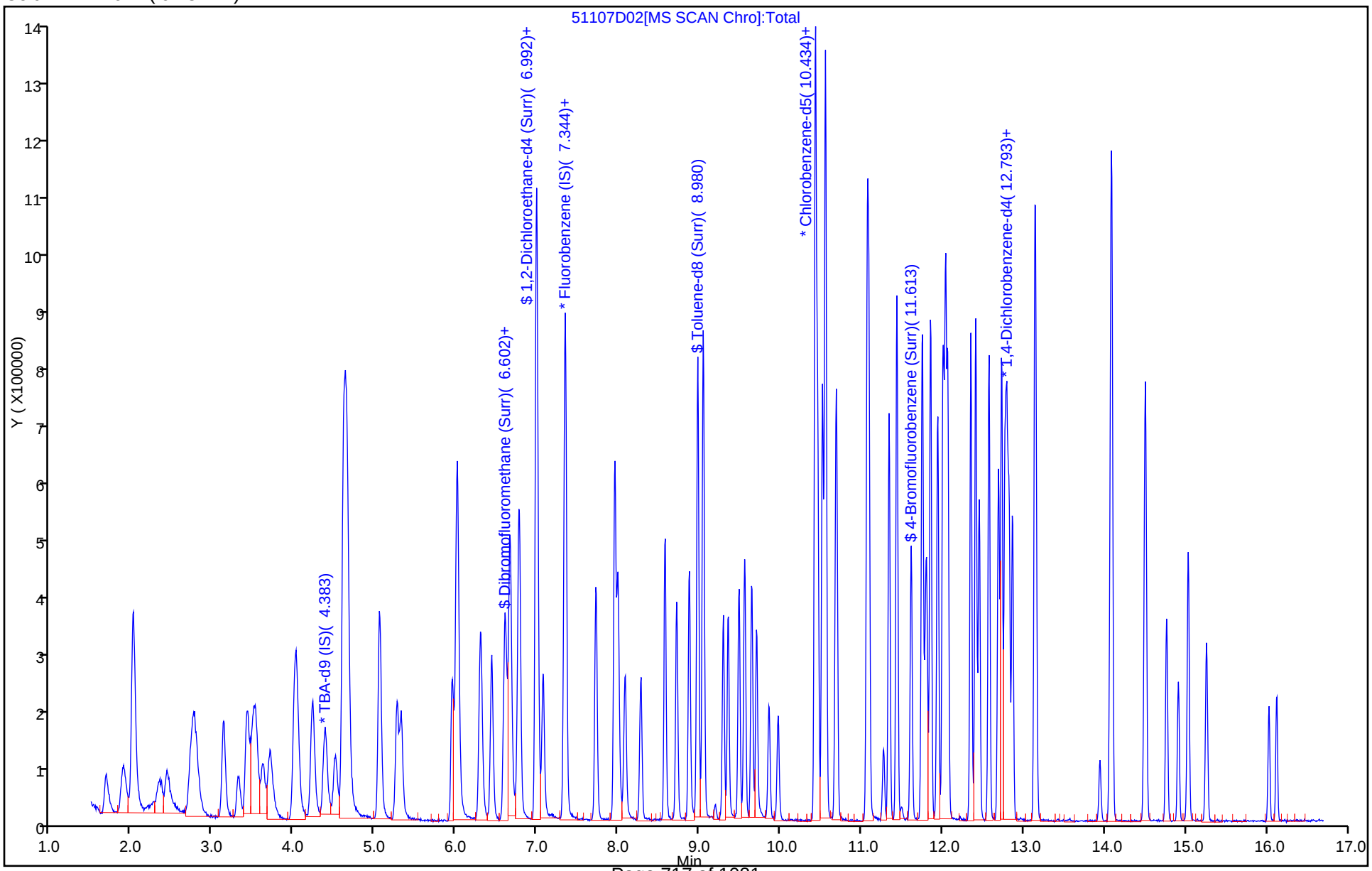
Report Date: 08-Nov-2017 09:23:42 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D02.D

Injection Date:	08-Nov-2017 00:13:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

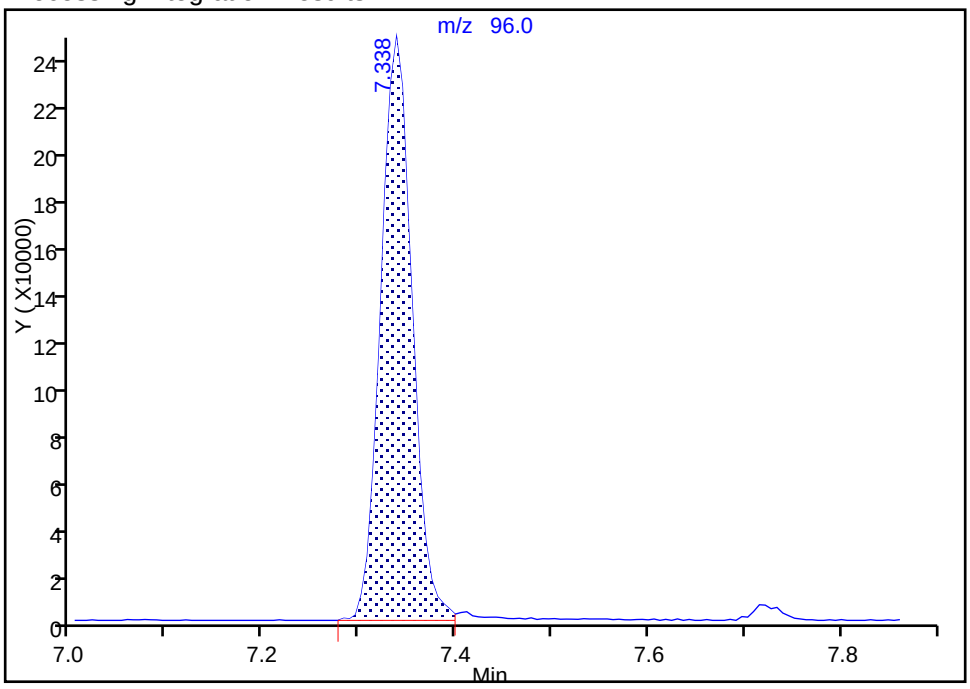
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D02.D				
Injection Date:	08-Nov-2017 00:13:30	Instrument ID:	CHHP5		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

* 2 Fluorobenzene (IS), CAS: 462-06-6

Signal: 1

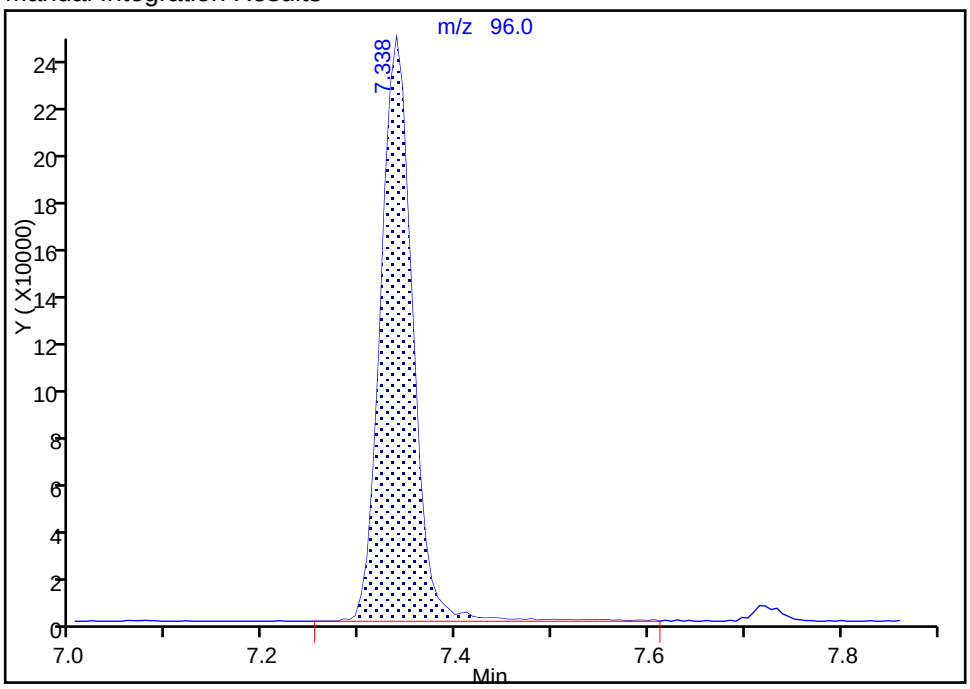
Processing Integration Results

RT: 7.34
Area: 558477
Amount: 50.000000
Amount Units: ng



Manual Integration Results

RT: 7.34
Area: 569496
Amount: 50.000000
Amount Units: ng



Reviewer: bungardf, 08-Nov-2017 03:34:49

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-227642/3 Calibration Date: 11/01/2017 08:57

Instrument ID: CHHP7 Calib Start Date: 05/26/2017 14:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/26/2017 18:04

Lab File ID: 7110103.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	0.3845	0.3246	0.1000	8.44	10.0	-15.6	20.0
Chloromethane	Ave	0.5372	0.4343	0.1000	8.08	10.0	-19.2	20.0
Vinyl chloride	Ave	0.4322	0.2870	0.1000	6.64	10.0	-33.6*	20.0
1,3-Butadiene	Ave	0.3043	0.3150	0.0100	10.4	10.0	3.5	20.0
Bromomethane	Qua		0.1169	0.0500	7.00	10.0	-30.0*	20.0
Chloroethane	Ave	0.1452	0.1294	0.0500	8.91	10.0	-10.9	20.0
Trichlorofluoromethane	Qua		0.3147	0.1000	8.83	10.0	-11.7	20.0
Ethyl ether	Ave	0.3671	0.2058	0.0100	5.61	10.0	-43.9*	20.0
1,1-Dichloroethene	Ave	0.3080	0.2483	0.1000	8.06	10.0	-19.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2433	0.2405	0.1000	9.88	10.0	-1.2	20.0
Acetone	Ave	0.2300	0.2029	0.0500	17.6	20.0	-11.8	20.0
Iodomethane	Ave	0.2924	0.3852	0.0100	13.2	10.0	31.7*	20.0
Carbon disulfide	Ave	0.7420	0.7622	0.1000	10.3	10.0	2.7	20.0
Allyl chloride	Ave	0.1678	0.1681	0.0100	10.0	10.0	0.2	20.0
Methyl acetate	Ave	0.4292	0.4116	0.1000	19.2	20.0	-4.1	20.0
Methylene Chloride	Lin2		0.3368	0.1000	10.7	10.0	7.3	20.0
tert-Butyl alcohol	Ave	1.247	1.113	0.0100	89.2	100	-10.8	20.0
Acrylonitrile	Ave	0.1830	0.2002	0.0100	109	100	9.4	20.0
trans-1,2-Dichloroethene	Ave	0.2494	0.2671	0.1000	10.7	10.0	7.1	20.0
Methyl tert-butyl ether	Ave	1.069	0.9167	0.1000	8.58	10.0	-14.2	20.0
Hexane	Ave	0.3495	0.3963	0.0100	11.3	10.0	13.4	20.0
1,1-Dichloroethane	Ave	0.6511	0.5872	0.2000	9.02	10.0	-9.8	20.0
2,2-Dichloropropane	Ave	0.0623	0.0582	0.0100	9.33	10.0	-6.7	20.0
cis-1,2-Dichloroethene	Ave	0.3255	0.3243	0.1000	9.96	10.0	-0.4	20.0
2-Butanone (MEK)	Ave	0.3076	0.3456	0.0500	22.5	20.0	12.4	20.0
Bromochloromethane	Ave	0.1627	0.1476	0.0100	9.07	10.0	-9.3	20.0
Tetrahydrofuran	Ave	0.1903	0.1966	0.0100	20.7	20.0	3.3	20.0
Chloroform	Ave	0.6318	0.5483	0.2000	8.68	10.0	-13.2	20.0
1,1,1-Trichloroethane	Ave	0.4271	0.3823	0.1000	8.95	10.0	-10.5	20.0
Cyclohexane	Ave	0.4612	0.5162	0.1000	11.2	10.0	11.9	20.0
Carbon tetrachloride	Ave	0.2992	0.2960	0.1000	9.89	10.0	-1.1	20.0
1,1-Dichloropropene	Ave	0.4181	0.3929	0.0100	9.40	10.0	-6.0	20.0
Isobutyl alcohol	Lin1		0.0148	0.0100	188	250	-24.7*	20.0
n-Heptane	Ave	0.5786	0.5440	0.0100	9.40	10.0	-6.0	20.0
Benzene	Lin2		1.245	0.5000	11.1	10.0	10.8	20.0
1,2-Dichloroethane	Ave	0.6063	0.4677	0.1000	7.71	10.0	-22.9*	20.0
Trichloroethene	Ave	0.3075	0.3221	0.2000	10.5	10.0	4.7	20.0
Methylcyclohexane	Ave	0.3707	0.4074	0.1000	11.0	10.0	9.9	20.0
1,2-Dichloropropane	Ave	0.3266	0.3484	0.1000	10.7	10.0	6.7	20.0
1,4-Dioxane	Ave	0.0032	0.0033*	0.0100	207	200	3.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-227642/3 Calibration Date: 11/01/2017 08:57

Instrument ID: CHHP7 Calib Start Date: 05/26/2017 14:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/26/2017 18:04

Lab File ID: 7110103.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
Dibromomethane	Ave	0.2018	0.1915	0.0100	9.49	10.0	-5.1	20.0
Bromodichloromethane	Ave	0.4546	0.4026	0.2000	8.86	10.0	-11.4	20.0
cis-1,3-Dichloropropene	Ave	0.5450	0.5140	0.2000	9.43	10.0	-5.7	20.0
4-Methyl-2-pentanone (MIBK)	Ave	2.318	2.907	0.1000	25.1	20.0	25.4*	20.0
Toluene	Lin2		5.195	0.4000	12.1	10.0	20.9*	20.0
trans-1,3-Dichloropropene	Ave	2.026	1.757	0.1000	8.67	10.0	-13.3	20.0
Ethyl methacrylate	Ave	2.225	2.139	0.0100	9.61	10.0	-3.9	20.0
1,1,2-Trichloroethane	Ave	1.157	1.166	0.1000	10.1	10.0	0.7	20.0
Tetrachloroethene	Ave	0.8685	0.8320	0.2000	9.58	10.0	-4.2	20.0
1,3-Dichloropropane	Ave	2.245	2.109	0.0100	9.39	10.0	-6.1	20.0
2-Hexanone	Ave	1.684	1.998	0.1000	23.7	20.0	18.6	20.0
Dibromochloromethane	Ave	1.077	1.092	0.1000	10.1	10.0	1.4	20.0
1,2-Dibromoethane (EDB)	Ave	1.332	1.264	0.1000	9.49	10.0	-5.1	20.0
Chlorobenzene	Ave	3.083	3.496	0.5000	11.3	10.0	13.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9812	0.9858	0.0100	10.0	10.0	0.5	20.0
Ethylbenzene	Ave	1.551	1.585	0.1000	10.2	10.0	2.2	20.0
m-Xylene & p-Xylene	Lin2		1.972	0.1000	10.2	10.0	2.2	20.0
o-Xylene	Ave	2.074	2.117	0.3000	10.2	10.0	2.1	20.0
Styrene	Ave	3.345	3.450	0.3000	10.3	10.0	3.1	20.0
Bromoform	Ave	0.7231	0.8390	0.1000	11.6	10.0	16.0	20.0
Isopropylbenzene	Lin2		5.027	0.1000	10.3	10.0	2.9	20.0
1,1,2,2-Tetrachloroethane	Ave	1.650	1.694	0.3000	10.3	10.0	2.7	20.0
Bromobenzene	Ave	1.050	0.9519	0.0100	9.07	10.0	-9.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.4595	0.4675	0.0100	10.2	10.0	1.7	20.0
1,2,3-Trichloropropane	Ave	0.4565	0.4442	0.0100	9.73	10.0	-2.7	20.0
N-Propylbenzene	Ave	0.8437	0.8931	0.0100	10.6	10.0	5.9	20.0
2-Chlorotoluene	Ave	0.8030	0.8316	0.0100	10.4	10.0	3.6	20.0
1,3,5-Trimethylbenzene	Ave	2.945	3.057	0.0100	10.4	10.0	3.8	20.0
4-Chlorotoluene	Ave	0.8144	0.8380	0.0100	10.3	10.0	2.9	20.0
tert-Butylbenzene	Ave	2.328	2.505	0.0100	10.8	10.0	7.6	20.0
1,2,4-Trimethylbenzene	Ave	3.059	3.200	0.0100	10.5	10.0	4.6	20.0
sec-Butylbenzene	Ave	3.039	3.462	0.0100	11.4	10.0	13.9	20.0
1,3-Dichlorobenzene	Ave	1.572	1.599	0.6000	10.2	10.0	1.7	20.0
4-Isopropyltoluene	Ave	2.401	2.697	0.0100	11.2	10.0	12.3	20.0
1,4-Dichlorobenzene	Ave	1.525	1.461	0.5000	9.58	10.0	-4.2	20.0
n-Butylbenzene	Ave	2.109	2.361	0.0100	11.2	10.0	11.9	20.0
1,2-Dichlorobenzene	Ave	1.478	1.444	0.4000	9.77	10.0	-2.3	20.0
1,2-Dibromo-3-Chloropropane	Qua		0.2200	0.0500	11.8	10.0	18.2	20.0
1,2,4-Trichlorobenzene	Ave	0.6223	0.6896	0.2000	11.1	10.0	10.8	20.0
Hexachlorobutadiene	Qua		0.3247	0.0100	12.9	10.0	29.4*	20.0
Naphthalene	Qua		1.966	0.0100	14.9	10.0	49.1*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-227642/3 Calibration Date: 11/01/2017 08:57

Instrument ID: CHHP7 Calib Start Date: 05/26/2017 14:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/26/2017 18:04

Lab File ID: 7110103.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Lin1		0.4472	0.0100	12.3	10.0	23.1*	20.0
Dibromofluoromethane (Surr)	Ave	0.2474	0.2476		10.0	10.0	0.0	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4812	0.4007		8.33	10.0	-16.7	20.0
Toluene-d8 (Surr)	Ave	3.788	3.992		10.5	10.0	5.4	20.0
4-Bromofluorobenzene (Surr)	Lin2		1.653		10.2	10.0	2.4	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110103.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 01-Nov-2017 08:57:30 ALS Bottle#: 4 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ccvIS
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub13

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 13:25:02 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 09:52:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.261	4.261	0.000	99	139039	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.261	7.261	0.000	97	154379	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.363	10.363	0.000	89	37861	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.705	12.705	0.000	95	47819	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.543	6.543	0.000	94	38219	50.0	50.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.908	6.908	0.000	69	61855	50.0	41.6	
$ 7 Toluene-d8 (Surr)	98	8.909	8.909	0.000	94	151150	50.0	52.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.549	11.549	0.000	87	62570	50.0	51.2	
11 Dichlorodifluoromethane	85	1.609	1.609	0.000	98	50105	50.0	42.2	
12 Chloromethane	50	1.786	1.786	0.000	99	67052	50.0	40.4	
13 Vinyl chloride	62	1.919	1.919	0.000	98	44304	50.0	33.2	
14 Butadiene	39	1.956	1.956	0.000	96	48636	50.0	51.8	
15 Bromomethane	94	2.254	2.254	0.000	93	18051	50.0	35.0	
16 Chloroethane	64	2.412	2.412	0.000	99	19978	50.0	44.6	
18 Trichlorofluoromethane	101	2.686	2.686	0.000	95	48583	50.0	44.2	
17 Dichlorofluoromethane	67	2.686	2.686	0.000	98	52253	50.0	40.1	
20 Ethyl ether	59	3.045	3.045	0.000	98	31767	50.0	28.0	
22 1,1-Dichloroethene	96	3.337	3.337	0.000	92	38329	50.0	40.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.422	3.422	0.000	80	37127	50.0	49.4	
24 Acetone	43	3.428	3.428	0.000	99	62657	100.0	88.2	
25 Iodomethane	142	3.525	3.525	0.000	97	59470	50.0	65.9	
26 Carbon disulfide	76	3.617	3.617	0.000	99	117662	50.0	51.4	
28 3-Chloro-1-propene	76	3.903	3.903	0.000	90	25950	50.0	50.1	
30 Methyl acetate	43	3.921	3.921	0.000	98	127079	100.0	95.9	
31 Methylene Chloride	84	4.115	4.115	0.000	99	51992	50.0	53.7	
32 2-Methyl-2-propanol	59	4.395	4.395	0.000	96	77349	500.0	446.0	
33 Acrylonitrile	53	4.505	4.505	0.000	99	309078	500.0	546.9	
34 trans-1,2-Dichloroethene	96	4.541	4.541	0.000	94	41239	50.0	53.6	
35 Methyl tert-butyl ether	73	4.560	4.560	0.000	98	141513	50.0	42.9	
36 Hexane	57	4.967	4.967	0.000	95	61181	50.0	56.7	
37 1,1-Dichloroethane	63	5.180	5.180	0.000	96	90650	50.0	45.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 2,2-Dichloropropane	97	5.922	5.916	0.006	61	8982	50.0	46.7	
45 cis-1,2-Dichloroethene	96	5.928	5.928	0.000	84	50066	50.0	49.8	
46 2-Butanone (MEK)	43	5.941	5.941	0.000	99	106706	100.0	112.4	
49 Chlorobromomethane	128	6.214	6.214	0.000	93	22782	50.0	45.3	
51 Tetrahydrofuran	42	6.226	6.226	0.000	93	60703	100.0	103.3	
52 Chloroform	83	6.360	6.360	0.000	93	84639	50.0	43.4	
53 1,1,1-Trichloroethane	97	6.512	6.512	0.000	98	59016	50.0	44.7	
54 Cyclohexane	56	6.585	6.585	0.000	95	79684	50.0	56.0	
56 Carbon tetrachloride	117	6.689	6.689	0.000	97	45696	50.0	49.5	
55 1,1-Dichloropropene	75	6.707	6.707	0.000	96	60655	50.0	47.0	
57 Isobutyl alcohol	41	6.908	6.908	0.000	93	57062	1250.0	941.8	
62 n-Heptane	43	6.908	6.908	0.000	71	83977	50.0	47.0	
58 Benzene	78	6.920	6.920	0.000	98	192257	50.0	55.4	
59 1,2-Dichloroethane	62	6.999	6.999	0.000	97	72195	50.0	38.6	
64 Trichloroethene	130	7.656	7.656	0.000	97	49719	50.0	52.4	
66 Methylcyclohexane	83	7.881	7.881	0.000	92	62894	50.0	55.0	
67 1,2-Dichloropropane	63	7.924	7.924	0.000	95	53783	50.0	53.3	
70 1,4-Dioxane	88	8.003	8.003	0.000	46	10156	1000.0	1034.1	
68 Dibromomethane	93	8.009	8.009	0.000	96	29566	50.0	47.5	
71 Dichlorobromomethane	83	8.210	8.210	0.000	98	62159	50.0	44.3	
74 cis-1,3-Dichloropropene	75	8.648	8.648	0.000	92	79348	50.0	47.2	
75 4-Methyl-2-pentanone (MIBK	43	8.800	8.800	0.000	98	220114	100.0	125.4	
76 Toluene	91	8.976	8.976	0.000	98	196693	50.0	60.5	
77 trans-1,3-Dichloropropene	75	9.232	9.232	0.000	97	66522	50.0	43.4	
78 Ethyl methacrylate	69	9.286	9.286	0.000	93	80987	50.0	48.1	
79 1,1,2-Trichloroethane	97	9.420	9.420	0.000	93	44127	50.0	50.4	
80 Tetrachloroethene	164	9.493	9.493	0.000	95	31501	50.0	47.9	
81 1,3-Dichloropropane	76	9.578	9.578	0.000	96	79838	50.0	47.0	
82 2-Hexanone	43	9.633	9.633	0.000	98	151262	100.0	118.6	
84 Chlorodibromomethane	129	9.791	9.791	0.000	91	41334	50.0	50.7	
85 Ethylene Dibromide	107	9.901	9.901	0.000	98	47855	50.0	47.4	
87 Chlorobenzene	112	10.394	10.394	0.000	91	132354	50.0	56.7	
89 1,1,1,2-Tetrachloroethane	131	10.479	10.479	0.000	90	37322	50.0	50.2	
90 Ethylbenzene	106	10.485	10.485	0.000	99	60006	50.0	51.1	
91 m-Xylene & p-Xylene	106	10.619	10.619	0.000	99	74656	50.0	51.1	
92 o-Xylene	106	11.002	11.002	0.000	97	80155	50.0	51.0	
93 Styrene	104	11.026	11.026	0.000	95	130615	50.0	51.6	
94 Bromoform	173	11.209	11.209	0.000	95	31767	50.0	58.0	
97 Isopropylbenzene	105	11.367	11.367	0.000	96	190334	50.0	51.4	
100 Bromobenzene	156	11.689	11.689	0.000	96	45520	50.0	45.3	
99 1,1,2,2-Tetrachloroethane	83	11.689	11.689	0.000	92	64147	50.0	51.3	
102 trans-1,4-Dichloro-2-buten	53	11.726	11.726	0.000	79	22356	50.0	50.9	
101 1,2,3-Trichloropropane	110	11.738	11.738	0.000	85	21241	50.0	48.7	
103 N-Propylbenzene	120	11.787	11.787	0.000	99	42707	50.0	52.9	
104 2-Chlorotoluene	126	11.878	11.878	0.000	95	39767	50.0	51.8	
106 1,3,5-Trimethylbenzene	105	11.969	11.969	0.000	94	146183	50.0	51.9	
107 4-Chlorotoluene	126	12.000	12.000	0.000	98	40071	50.0	51.4	
108 tert-Butylbenzene	119	12.286	12.286	0.000	94	119774	50.0	53.8	
110 1,2,4-Trimethylbenzene	105	12.346	12.346	0.000	98	152999	50.0	52.3	
112 sec-Butylbenzene	105	12.511	12.511	0.000	95	165566	50.0	57.0	
113 1,3-Dichlorobenzene	146	12.626	12.626	0.000	95	76449	50.0	50.9	
114 4-Isopropyltoluene	119	12.663	12.663	0.000	97	128970	50.0	56.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 1,4-Dichlorobenzene	146	12.730	12.730	0.000	91	69860	50.0	47.9	
120 n-Butylbenzene	91	13.070	13.070	0.000	97	112913	50.0	56.0	
121 1,2-Dichlorobenzene	146	13.089	13.089	0.000	93	69040	50.0	48.8	
122 1,2-Dibromo-3-Chloropropan	157	13.873	13.873	0.000	78	10519	50.0	59.1	
126 1,2,4-Trichlorobenzene	180	14.707	14.707	0.000	93	32974	50.0	55.4	
127 Hexachlorobutadiene	225	14.853	14.853	0.000	95	15525	50.0	64.7	
128 Naphthalene	128	14.968	14.968	0.000	98	94001	50.0	74.5	
129 1,2,3-Trichlorobenzene	180	15.187	15.187	0.000	94	21386	50.0	61.6	
S 133 Xylenes, Total	106				0		100.0	102.1	
S 134 1,2-Dichloroethene, Total	96				0		100.0	103.4	
S 135 1,3-Dichloropropene, Total	1				0		100.0	90.5	

Reagents:

voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL		
VOA8260VOA2ND_00270	Amount Added:	2.00	Units: uL		
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent	

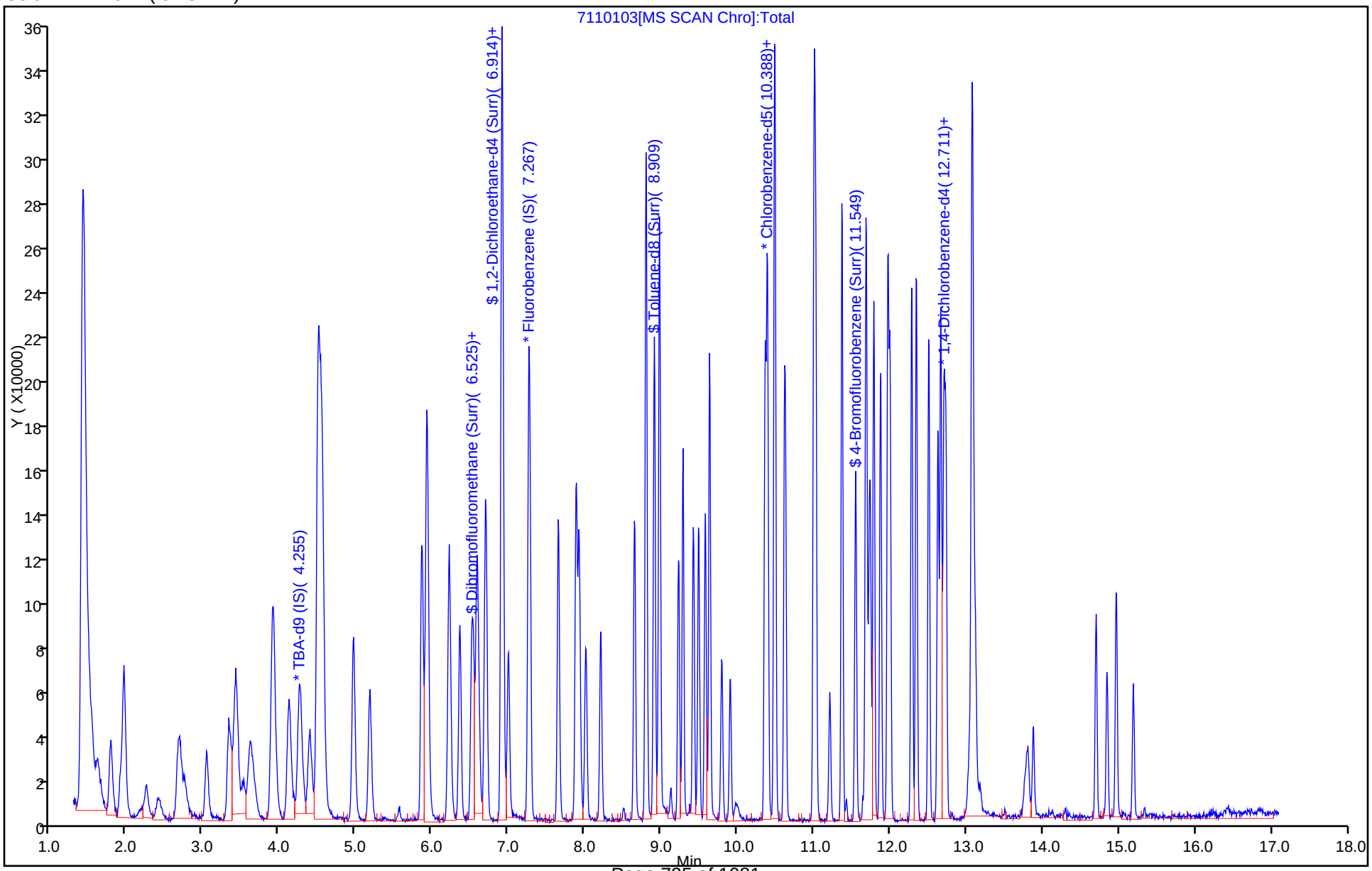
Report Date: 01-Nov-2017 13:25:03 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110103.D

Injection Date:	01-Nov-2017 08:57:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-227768/2 Calibration Date: 11/02/2017 05:25

Instrument ID: CHHP7 Calib Start Date: 05/26/2017 14:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/26/2017 18:04

Lab File ID: 7110202.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	0.3845	0.2985	0.1000	7.76	10.0	-22.4*	20.0
Chloromethane	Ave	0.5372	0.3304	0.1000	6.15	10.0	-38.5*	20.0
Vinyl chloride	Ave	0.4322	0.2373	0.1000	5.49	10.0	-45.1*	20.0
1,3-Butadiene	Ave	0.3043	0.2758	0.0100	9.06	10.0	-9.4	20.0
Bromomethane	Qua		0.1214	0.0500	7.29	10.0	-27.1*	20.0
Chloroethane	Ave	0.1452	0.1407	0.0500	9.69	10.0	-3.1	20.0
Trichlorofluoromethane	Qua		0.3193	0.1000	8.95	10.0	-10.5	20.0
Ethyl ether	Ave	0.3671	0.2002	0.0100	5.45	10.0	-45.5*	20.0
1,1-Dichloroethene	Ave	0.3080	0.2370	0.1000	7.70	10.0	-23.0*	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2433	0.2348	0.1000	9.65	10.0	-3.5	20.0
Acetone	Ave	0.2300	0.1659	0.0500	14.4	20.0	-27.9*	20.0
Iodomethane	Ave	0.2924	0.3843	0.0100	13.1	10.0	31.4*	20.0
Carbon disulfide	Ave	0.7420	0.8316	0.1000	11.2	10.0	12.1	20.0
Allyl chloride	Ave	0.1678	0.1836	0.0100	10.9	10.0	9.4	20.0
Methyl acetate	Ave	0.4292	0.4032	0.1000	18.8	20.0	-6.1	20.0
Methylene Chloride	Lin2		0.3095	0.1000	9.81	10.0	-1.9	20.0
tert-Butyl alcohol	Ave	1.247	1.371	0.0100	110	100	9.9	20.0
Acrylonitrile	Ave	0.1830	0.1953	0.0100	107	100	6.7	20.0
trans-1,2-Dichloroethene	Ave	0.2494	0.2455	0.1000	9.84	10.0	-1.6	20.0
Methyl tert-butyl ether	Ave	1.069	0.8825	0.1000	8.26	10.0	-17.4	20.0
Hexane	Ave	0.3495	0.3956	0.0100	11.3	10.0	13.2	20.0
1,1-Dichloroethane	Ave	0.6511	0.5493	0.2000	8.44	10.0	-15.6	20.0
2,2-Dichloropropane	Ave	0.0623	0.0630	0.0100	10.1	10.0	1.1	20.0
cis-1,2-Dichloroethene	Ave	0.3255	0.2971	0.1000	9.13	10.0	-8.7	20.0
2-Butanone (MEK)	Ave	0.3076	0.2633	0.0500	17.1	20.0	-14.4	20.0
Bromochloromethane	Ave	0.1627	0.1463	0.0100	8.99	10.0	-10.1	20.0
Tetrahydrofuran	Ave	0.1903	0.1863	0.0100	19.6	20.0	-2.1	20.0
Chloroform	Ave	0.6318	0.5270	0.2000	8.34	10.0	-16.6	20.0
1,1,1-Trichloroethane	Ave	0.4271	0.4091	0.1000	9.58	10.0	-4.2	20.0
Cyclohexane	Ave	0.4612	0.4992	0.1000	10.8	10.0	8.2	20.0
Carbon tetrachloride	Ave	0.2992	0.3081	0.1000	10.3	10.0	3.0	20.0
1,1-Dichloropropene	Ave	0.4181	0.3875	0.0100	9.27	10.0	-7.3	20.0
Isobutyl alcohol	Lin1		0.0182	0.0100	233	250	-7.0	20.0
n-Heptane	Ave	0.5786	0.6019	0.0100	10.4	10.0	4.0	20.0
Benzene	Lin2		1.085	0.5000	9.56	10.0	-4.4	20.0
1,2-Dichloroethane	Ave	0.6063	0.4554	0.1000	7.51	10.0	-24.9*	20.0
Trichloroethene	Ave	0.3075	0.2781	0.2000	9.04	10.0	-9.6	20.0
Methylcyclohexane	Ave	0.3707	0.4190	0.1000	11.3	10.0	13.1	20.0
1,2-Dichloropropane	Ave	0.3266	0.3118	0.1000	9.55	10.0	-4.5	20.0
1,4-Dioxane	Ave	0.0032	0.0033*	0.0100	210	200	5.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-227768/2 Calibration Date: 11/02/2017 05:25

Instrument ID: CHHP7 Calib Start Date: 05/26/2017 14:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/26/2017 18:04

Lab File ID: 7110202.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
Dibromomethane	Ave	0.2018	0.1796	0.0100	8.90	10.0	-11.0	20.0
Bromodichloromethane	Ave	0.4546	0.4090	0.2000	9.00	10.0	-10.0	20.0
cis-1,3-Dichloropropene	Ave	0.5450	0.4892	0.2000	8.98	10.0	-10.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	2.318	2.345	0.1000	20.2	20.0	1.2	20.0
Toluene	Lin2		4.743	0.4000	11.0	10.0	9.9	20.0
trans-1,3-Dichloropropene	Ave	2.026	1.872	0.1000	9.24	10.0	-7.6	20.0
Ethyl methacrylate	Ave	2.225	2.176	0.0100	9.78	10.0	-2.2	20.0
1,1,2-Trichloroethane	Ave	1.157	1.195	0.1000	10.3	10.0	3.3	20.0
Tetrachloroethene	Ave	0.8685	0.8469	0.2000	9.75	10.0	-2.5	20.0
1,3-Dichloropropane	Ave	2.245	2.171	0.0100	9.67	10.0	-3.3	20.0
2-Hexanone	Ave	1.684	1.677	0.1000	19.9	20.0	-0.4	20.0
Dibromochloromethane	Ave	1.077	1.157	0.1000	10.7	10.0	7.5	20.0
1,2-Dibromoethane (EDB)	Ave	1.332	1.257	0.1000	9.43	10.0	-5.7	20.0
Chlorobenzene	Ave	3.083	3.066	0.5000	9.95	10.0	-0.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9812	1.011	0.0100	10.3	10.0	3.0	20.0
Ethylbenzene	Ave	1.551	1.629	0.1000	10.5	10.0	5.0	20.0
m-Xylene & p-Xylene	Lin2		2.052	0.1000	10.7	10.0	6.5	20.0
o-Xylene	Ave	2.074	2.133	0.3000	10.3	10.0	2.8	20.0
Styrene	Ave	3.345	3.510	0.3000	10.5	10.0	4.9	20.0
Bromoform	Ave	0.7231	0.8677	0.1000	12.0	10.0	20.0	20.0
Isopropylbenzene	Lin2		5.229	0.1000	10.7	10.0	7.2	20.0
1,1,2,2-Tetrachloroethane	Ave	1.650	1.744	0.3000	10.6	10.0	5.7	20.0
Bromobenzene	Ave	1.050	0.9758	0.0100	9.29	10.0	-7.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.4595	0.5025	0.0100	10.9	10.0	9.4	20.0
1,2,3-Trichloropropane	Ave	0.4565	0.4462	0.0100	9.78	10.0	-2.2	20.0
N-Propylbenzene	Ave	0.8437	0.9198	0.0100	10.9	10.0	9.0	20.0
2-Chlorotoluene	Ave	0.8030	0.8369	0.0100	10.4	10.0	4.2	20.0
1,3,5-Trimethylbenzene	Ave	2.945	3.095	0.0100	10.5	10.0	5.1	20.0
4-Chlorotoluene	Ave	0.8144	0.8654	0.0100	10.6	10.0	6.3	20.0
tert-Butylbenzene	Ave	2.328	2.487	0.0100	10.7	10.0	6.8	20.0
1,2,4-Trimethylbenzene	Ave	3.059	3.238	0.0100	10.6	10.0	5.8	20.0
sec-Butylbenzene	Ave	3.039	3.365	0.0100	11.1	10.0	10.7	20.0
1,3-Dichlorobenzene	Ave	1.572	1.578	0.6000	10.0	10.0	0.4	20.0
4-Isopropyltoluene	Ave	2.401	2.733	0.0100	11.4	10.0	13.9	20.0
1,4-Dichlorobenzene	Ave	1.525	1.457	0.5000	9.55	10.0	-4.5	20.0
n-Butylbenzene	Ave	2.109	2.386	0.0100	11.3	10.0	13.1	20.0
1,2-Dichlorobenzene	Ave	1.478	1.510	0.4000	10.2	10.0	2.2	20.0
1,2-Dibromo-3-Chloropropane	Qua		0.2552	0.0500	13.4	10.0	33.7*	20.0
1,2,4-Trichlorobenzene	Ave	0.6223	0.5462	0.2000	8.78	10.0	-12.2	20.0
Hexachlorobutadiene	Qua		0.2690	0.0100	10.6	10.0	6.3	20.0
Naphthalene	Qua		1.641	0.0100	12.7	10.0	27.1*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-227768/2 Calibration Date: 11/02/2017 05:25

Instrument ID: CHHP7 Calib Start Date: 05/26/2017 14:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/26/2017 18:04

Lab File ID: 7110202.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Lin1		0.2759	0.0100	7.32	10.0	-26.8*	20.0
Dibromofluoromethane (Surr)	Ave	0.2474	0.1997		8.07	10.0	-19.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4812	0.3296		6.85	10.0	-31.5*	20.0
Toluene-d8 (Surr)	Ave	3.788	3.514		9.28	10.0	-7.2	20.0
4-Bromofluorobenzene (Surr)	Lin2		1.426		8.73	10.0	-12.7	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110202.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 02-Nov-2017 05:25:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ccvis
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub10

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 08:59:54 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 05:56:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.252	4.252	0.000	98	137649	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.263	7.263	0.000	97	166845	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.366	10.366	0.000	89	38718	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.708	12.708	0.000	96	48963	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.539	6.539	0.000	93	33325	50.0	40.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.910	6.910	0.000	46	54989	50.0	34.2	
$ 7 Toluene-d8 (Surr)	98	8.912	8.912	0.000	94	136036	50.0	46.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.552	11.552	0.000	85	55208	50.0	43.6	
11 Dichlorodifluoromethane	85	1.612	1.612	0.000	98	49800	50.0	38.8	
12 Chloromethane	50	1.782	1.782	0.000	98	55119	50.0	30.7	
13 Vinyl chloride	62	1.928	1.928	0.000	97	39594	50.0	27.5	
14 Butadiene	39	1.965	1.965	0.000	95	46010	50.0	45.3	
15 Bromomethane	94	2.275	2.275	0.000	93	20262	50.0	36.5	
16 Chloroethane	64	2.415	2.415	0.000	97	23466	50.0	48.4	
18 Trichlorofluoromethane	101	2.670	2.670	0.000	54	53281	50.0	44.8	
17 Dichlorofluoromethane	67	2.695	2.695	0.000	97	51826	50.0	36.8	
20 Ethyl ether	59	3.041	3.041	0.000	95	33396	50.0	27.3	
22 1,1-Dichloroethene	96	3.339	3.339	0.000	94	39544	50.0	38.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.431	3.431	0.000	73	39182	50.0	48.3	
24 Acetone	43	3.437	3.437	0.000	98	55368	100.0	72.1	
25 Iodomethane	142	3.528	3.528	0.000	99	64122	50.0	65.7	
26 Carbon disulfide	76	3.625	3.625	0.000	100	138743	50.0	56.0	
28 3-Chloro-1-propene	76	3.905	3.905	0.000	90	30628	50.0	54.7	
30 Methyl acetate	43	3.929	3.929	0.000	100	134548	100.0	93.9	
31 Methylene Chloride	84	4.124	4.124	0.000	99	51638	50.0	49.0	
32 2-Methyl-2-propanol	59	4.380	4.380	0.000	97	94364	500.0	549.7	
33 Acrylonitrile	53	4.507	4.507	0.000	98	325768	500.0	533.4	
34 trans-1,2-Dichloroethene	96	4.544	4.544	0.000	67	40960	50.0	49.2	
35 Methyl tert-butyl ether	73	4.562	4.562	0.000	98	147236	50.0	41.3	
36 Hexane	57	4.970	4.970	0.000	94	65999	50.0	56.6	
37 1,1-Dichloroethane	63	5.183	5.183	0.000	97	91645	50.0	42.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 2,2-Dichloropropane	97	5.925	5.919	0.006	55	10516	50.0	50.6	
45 cis-1,2-Dichloroethene	96	5.931	5.931	0.000	86	49570	50.0	45.6	
46 2-Butanone (MEK)	43	5.937	5.937	0.000	92	87873	100.0	85.6	
49 Chlorobromomethane	128	6.223	6.223	0.000	92	24410	50.0	44.9	
51 Tetrahydrofuran	42	6.229	6.229	0.000	91	62173	100.0	97.9	
52 Chloroform	83	6.357	6.357	0.000	94	87927	50.0	41.7	
53 1,1,1-Trichloroethane	97	6.521	6.521	0.000	97	68259	50.0	47.9	
54 Cyclohexane	56	6.594	6.594	0.000	94	83286	50.0	54.1	
56 Carbon tetrachloride	117	6.691	6.691	0.000	97	51406	50.0	51.5	
55 1,1-Dichloropropene	75	6.704	6.704	0.000	94	64645	50.0	46.3	
57 Isobutyl alcohol	41	6.904	6.904	0.000	93	75905	1250.0	1162.6	
62 n-Heptane	43	6.910	6.910	0.000	71	100419	50.0	52.0	
58 Benzene	78	6.916	6.916	0.000	98	180999	50.0	47.8	
59 1,2-Dichloroethane	62	7.002	7.002	0.000	97	75974	50.0	37.6	
64 Trichloroethene	130	7.653	7.653	0.000	96	46403	50.0	45.2	
66 Methylcyclohexane	83	7.884	7.884	0.000	94	69912	50.0	56.5	
67 1,2-Dichloropropane	63	7.920	7.920	0.000	94	52024	50.0	47.7	
70 1,4-Dioxane	88	8.005	8.005	0.000	53	11142	1000.0	1049.8	
68 Dibromomethane	93	8.018	8.018	0.000	97	29965	50.0	44.5	
71 Dichlorobromomethane	83	8.212	8.212	0.000	98	68235	50.0	45.0	
74 cis-1,3-Dichloropropene	75	8.650	8.650	0.000	92	81623	50.0	44.9	
75 4-Methyl-2-pentanone (MIBK	43	8.802	8.802	0.000	98	181600	100.0	101.2	
76 Toluene	91	8.979	8.979	0.000	98	183632	50.0	54.9	
77 trans-1,3-Dichloropropene	75	9.228	9.228	0.000	97	72480	50.0	46.2	
78 Ethyl methacrylate	69	9.283	9.283	0.000	93	84246	50.0	48.9	
79 1,1,2-Trichloroethane	97	9.423	9.423	0.000	93	46281	50.0	51.7	
80 Tetrachloroethene	164	9.496	9.496	0.000	92	32791	50.0	48.8	
81 1,3-Dichloropropane	76	9.581	9.581	0.000	97	84044	50.0	48.3	
82 2-Hexanone	43	9.636	9.636	0.000	98	129848	100.0	99.6	
84 Chlorodibromomethane	129	9.794	9.794	0.000	91	44807	50.0	53.7	
85 Ethylene Dibromide	107	9.903	9.903	0.000	99	48665	50.0	47.2	
87 Chlorobenzene	112	10.390	10.390	0.000	91	118720	50.0	49.7	
89 1,1,1,2-Tetrachloroethane	131	10.481	10.481	0.000	92	39129	50.0	51.5	
90 Ethylbenzene	106	10.487	10.487	0.000	99	63058	50.0	52.5	
91 m-Xylene & p-Xylene	106	10.621	10.621	0.000	99	79466	50.0	53.3	
92 o-Xylene	106	11.005	11.005	0.000	98	82572	50.0	51.4	
93 Styrene	104	11.029	11.029	0.000	95	135882	50.0	52.5	
94 Bromoform	173	11.211	11.211	0.000	96	33594	50.0	60.0	
97 Isopropylbenzene	105	11.370	11.370	0.000	96	202453	50.0	53.6	
100 Bromobenzene	156	11.686	11.686	0.000	96	47777	50.0	46.5	
99 1,1,2,2-Tetrachloroethane	83	11.686	11.686	0.000	89	67541	50.0	52.9	
102 trans-1,4-Dichloro-2-buten	53	11.722	11.722	0.000	81	24605	50.0	54.7	
101 1,2,3-Trichloropropane	110	11.741	11.741	0.000	86	21848	50.0	48.9	
103 N-Propylbenzene	120	11.789	11.789	0.000	99	45035	50.0	54.5	
104 2-Chlorotoluene	126	11.874	11.874	0.000	95	40975	50.0	52.1	
106 1,3,5-Trimethylbenzene	105	11.972	11.972	0.000	93	151519	50.0	52.5	
107 4-Chlorotoluene	126	11.996	11.996	0.000	98	42373	50.0	53.1	
108 tert-Butylbenzene	119	12.282	12.282	0.000	93	121757	50.0	53.4	
110 1,2,4-Trimethylbenzene	105	12.349	12.349	0.000	98	158533	50.0	52.9	
112 sec-Butylbenzene	105	12.507	12.507	0.000	95	164745	50.0	55.3	
113 1,3-Dichlorobenzene	146	12.629	12.629	0.000	96	77254	50.0	50.2	
114 4-Isopropyltoluene	119	12.665	12.665	0.000	97	133833	50.0	56.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 1,4-Dichlorobenzene	146	12.732	12.732	0.000	91	71319	50.0	47.8	
120 n-Butylbenzene	91	13.073	13.073	0.000	98	116822	50.0	56.6	
121 1,2-Dichlorobenzene	146	13.085	13.085	0.000	93	73956	50.0	51.1	
122 1,2-Dibromo-3-Chloropropan	157	13.876	13.876	0.000	78	12495	50.0	66.8	
126 1,2,4-Trichlorobenzene	180	14.697	14.697	0.000	92	26744	50.0	43.9	
127 Hexachlorobutadiene	225	14.843	14.843	0.000	95	13173	50.0	53.1	
128 Naphthalene	128	14.965	14.965	0.000	97	80352	50.0	63.5	
129 1,2,3-Trichlorobenzene	180	15.190	15.190	0.000	94	13510	50.0	36.6	
S 134 1,2-Dichloroethene, Total	96				0		100.0	94.9	
S 133 Xylenes, Total	106				0		100.0	104.7	
S 135 1,3-Dichloropropene, Total	1				0		100.0	91.1	

Reagents:

voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL		
VOA8260VOAPRI_00269	Amount Added:	2.00	Units: uL		
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent	

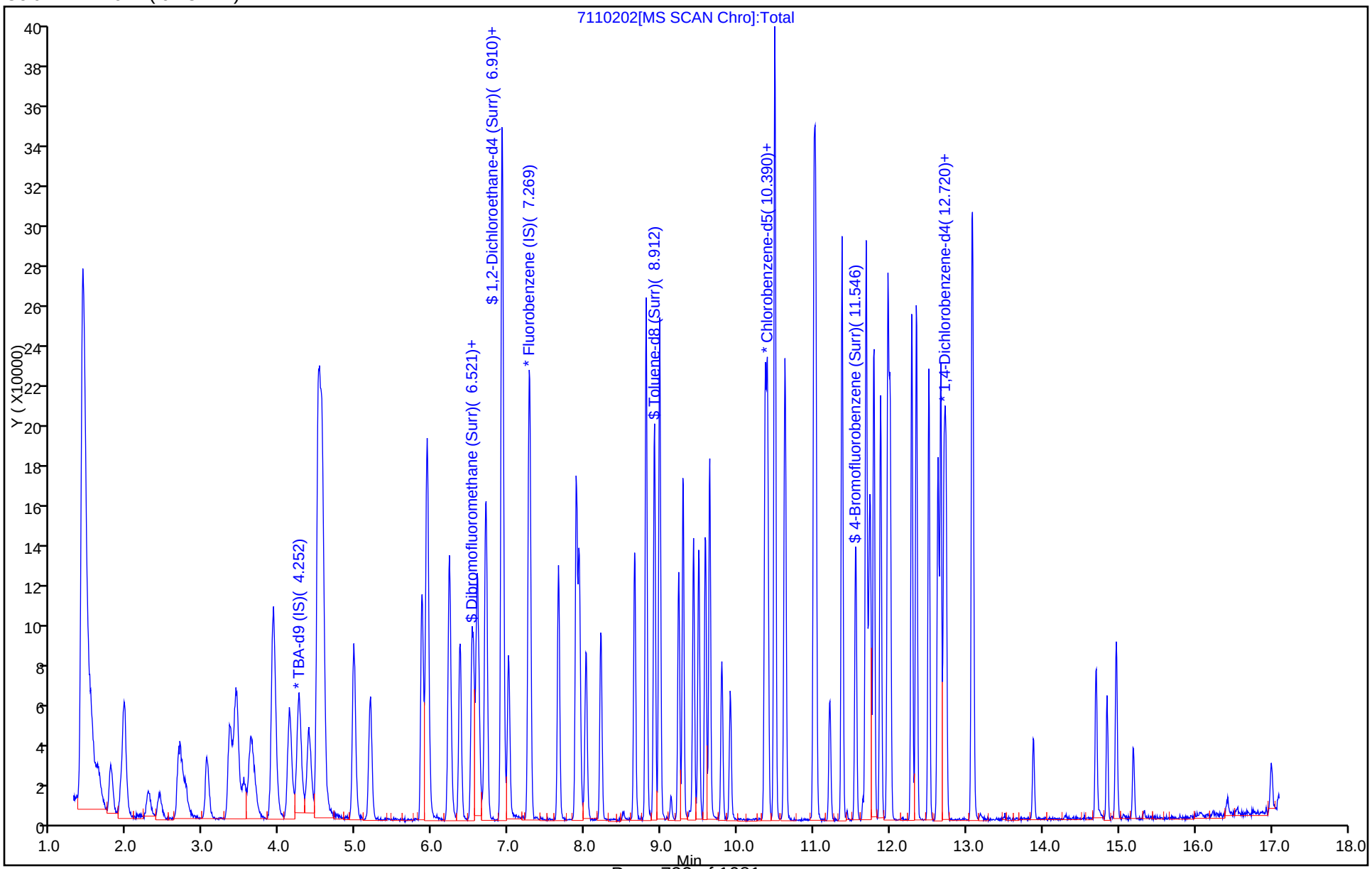
Report Date: 02-Nov-2017 08:59:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110202.D

Injection Date:	02-Nov-2017 05:25:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-228533/2 Calibration Date: 11/09/2017 08:58

Instrument ID: CHHP7 Calib Start Date: 05/26/2017 14:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/26/2017 18:04

Lab File ID: 711090n3.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	0.3845	0.4038	0.1000	10.5	10.0	5.0	20.0
Chloromethane	Ave	0.5372	0.3832	0.1000	7.13	10.0	-28.7*	20.0
Vinyl chloride	Ave	0.4322	0.2793	0.1000	6.46	10.0	-35.4*	20.0
1,3-Butadiene	Ave	0.3043	0.3076	0.0100	10.1	10.0	1.1	20.0
Bromomethane	Qua		0.1320	0.0500	7.96	10.0	-20.4*	20.0
Chloroethane	Ave	0.1452	0.1433	0.0500	9.87	10.0	-1.3	20.0
Trichlorofluoromethane	Qua		0.3938	0.1000	10.8	10.0	7.9	20.0
Ethyl ether	Ave	0.3671	0.2389	0.0100	6.51	10.0	-34.9*	20.0
1,1-Dichloroethene	Ave	0.3080	0.2804	0.1000	9.10	10.0	-9.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2433	0.2499	0.1000	10.3	10.0	2.7	20.0
Acetone	Ave	0.2300	0.1623	0.0500	14.1	20.0	-29.5*	20.0
Iodomethane	Ave	0.2924	0.3932	0.0100	13.4	10.0	34.4*	20.0
Carbon disulfide	Ave	0.7420	0.7927	0.1000	10.7	10.0	6.8	20.0
Allyl chloride	Ave	0.1678	0.1734	0.0100	10.3	10.0	3.3	20.0
Methyl acetate	Ave	0.4292	0.4397	0.1000	20.5	20.0	2.5	20.0
Methylene Chloride	Lin2		0.3192	0.1000	10.1	10.0	1.4	20.0
tert-Butyl alcohol	Ave	1.247	1.335	0.0100	107	100	7.0	20.0
Acrylonitrile	Ave	0.1830	0.2050	0.0100	112	100	12.0	20.0
trans-1,2-Dichloroethene	Ave	0.2494	0.2443	0.1000	9.80	10.0	-2.0	20.0
Methyl tert-butyl ether	Ave	1.069	0.9934	0.1000	9.29	10.0	-7.1	20.0
Hexane	Ave	0.3495	0.3710	0.0100	10.6	10.0	6.2	20.0
1,1-Dichloroethane	Ave	0.6511	0.5521	0.2000	8.48	10.0	-15.2	20.0
2,2-Dichloropropane	Ave	0.0623	0.0557	0.0100	8.93	10.0	-10.7	20.0
cis-1,2-Dichloroethene	Ave	0.3255	0.3018	0.1000	9.27	10.0	-7.3	20.0
2-Butanone (MEK)	Ave	0.3076	0.3186	0.0500	20.7	20.0	3.6	20.0
Bromochloromethane	Ave	0.1627	0.1525	0.0100	9.37	10.0	-6.3	20.0
Tetrahydrofuran	Ave	0.1903	0.1881	0.0100	19.8	20.0	-1.2	20.0
Chloroform	Ave	0.6318	0.5430	0.2000	8.59	10.0	-14.1	20.0
1,1,1-Trichloroethane	Ave	0.4271	0.4056	0.1000	9.50	10.0	-5.0	20.0
Cyclohexane	Ave	0.4612	0.4863	0.1000	10.5	10.0	5.5	20.0
Carbon tetrachloride	Ave	0.2992	0.3106	0.1000	10.4	10.0	3.8	20.0
1,1-Dichloropropene	Ave	0.4181	0.3757	0.0100	8.98	10.0	-10.2	20.0
Isobutyl alcohol	Lin1		0.0166	0.0100	212	250	-15.4	20.0
n-Heptane	Ave	0.5786	0.5582	0.0100	9.65	10.0	-3.5	20.0
Benzene	Lin2		1.238	0.5000	11.0	10.0	10.0	20.0
1,2-Dichloroethane	Ave	0.6063	0.4850	0.1000	8.00	10.0	-20.0	20.0
Trichloroethene	Ave	0.3075	0.3074	0.2000	10.0	10.0	-0.0	20.0
Methylcyclohexane	Ave	0.3707	0.3783	0.1000	10.2	10.0	2.1	20.0
1,2-Dichloropropane	Ave	0.3266	0.3351	0.1000	10.3	10.0	2.6	20.0
1,4-Dioxane	Ave	0.0032	0.0024*	0.0100	153	200	-23.6*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-228533/2 Calibration Date: 11/09/2017 08:58

Instrument ID: CHHP7 Calib Start Date: 05/26/2017 14:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/26/2017 18:04

Lab File ID: 711090n3.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
Dibromomethane	Ave	0.2018	0.1882	0.0100	9.33	10.0	-6.7	20.0
Bromodichloromethane	Ave	0.4546	0.4161	0.2000	9.15	10.0	-8.5	20.0
cis-1,3-Dichloropropene	Ave	0.5450	0.5369	0.2000	9.85	10.0	-1.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	2.318	2.890	0.1000	24.9	20.0	24.7*	20.0
Toluene	Lin2		5.341	0.4000	12.4	10.0	24.5*	20.0
trans-1,3-Dichloropropene	Ave	2.026	2.007	0.1000	9.91	10.0	-0.9	20.0
Ethyl methacrylate	Ave	2.225	2.421	0.0100	10.9	10.0	8.8	20.0
1,1,2-Trichloroethane	Ave	1.157	1.264	0.1000	10.9	10.0	9.2	20.0
Tetrachloroethene	Ave	0.8685	0.8756	0.2000	10.1	10.0	0.8	20.0
1,3-Dichloropropane	Ave	2.245	2.348	0.0100	10.5	10.0	4.6	20.0
2-Hexanone	Ave	1.684	1.950	0.1000	23.2	20.0	15.8	20.0
Dibromochloromethane	Ave	1.077	1.224	0.1000	11.4	10.0	13.7	20.0
1,2-Dibromoethane (EDB)	Ave	1.332	1.373	0.1000	10.3	10.0	3.0	20.0
Chlorobenzene	Ave	3.083	3.583	0.5000	11.6	10.0	16.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9812	1.114	0.0100	11.3	10.0	13.5	20.0
Ethylbenzene	Ave	1.551	1.638	0.1000	10.6	10.0	5.6	20.0
m-Xylene & p-Xylene	Lin2		2.009	0.1000	10.4	10.0	4.2	20.0
o-Xylene	Ave	2.074	2.138	0.3000	10.3	10.0	3.1	20.0
Styrene	Ave	3.345	3.614	0.3000	10.8	10.0	8.1	20.0
Bromoform	Ave	0.7231	0.9525	0.1000	13.2	10.0	31.7*	20.0
Isopropylbenzene	Lin2		5.098	0.1000	10.4	10.0	4.4	20.0
1,1,2,2-Tetrachloroethane	Ave	1.650	1.831	0.3000	11.1	10.0	11.0	20.0
Bromobenzene	Ave	1.050	0.9710	0.0100	9.25	10.0	-7.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.4595	0.5033	0.0100	11.0	10.0	9.5	20.0
1,2,3-Trichloropropane	Ave	0.4565	0.4605	0.0100	10.1	10.0	0.9	20.0
N-Propylbenzene	Ave	0.8437	0.8712	0.0100	10.3	10.0	3.3	20.0
2-Chlorotoluene	Ave	0.8030	0.7576	0.0100	9.43	10.0	-5.7	20.0
1,3,5-Trimethylbenzene	Ave	2.945	2.879	0.0100	9.77	10.0	-2.3	20.0
4-Chlorotoluene	Ave	0.8144	0.7961	0.0100	9.78	10.0	-2.2	20.0
tert-Butylbenzene	Ave	2.328	2.297	0.0100	9.87	10.0	-1.3	20.0
1,2,4-Trimethylbenzene	Ave	3.059	3.143	0.0100	10.3	10.0	2.7	20.0
sec-Butylbenzene	Ave	3.039	3.064	0.0100	10.1	10.0	0.8	20.0
1,3-Dichlorobenzene	Ave	1.572	1.507	0.6000	9.59	10.0	-4.1	20.0
4-Isopropyltoluene	Ave	2.401	2.541	0.0100	10.6	10.0	5.9	20.0
1,4-Dichlorobenzene	Ave	1.525	1.445	0.5000	9.48	10.0	-5.2	20.0
n-Butylbenzene	Ave	2.109	2.173	0.0100	10.3	10.0	3.0	20.0
1,2-Dichlorobenzene	Ave	1.478	1.468	0.4000	9.93	10.0	-0.7	20.0
1,2-Dibromo-3-Chloropropane	Qua		0.2019	0.0500	11.0	10.0	9.9	20.0
1,2,4-Trichlorobenzene	Ave	0.6223	0.5764	0.2000	9.26	10.0	-7.4	20.0
Hexachlorobutadiene	Qua		0.3051	0.0100	12.1	10.0	21.2*	20.0
Naphthalene	Qua		1.758	0.0100	13.5	10.0	35.1*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-228533/2 Calibration Date: 11/09/2017 08:58

Instrument ID: CHHP7 Calib Start Date: 05/26/2017 14:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/26/2017 18:04

Lab File ID: 711090n3.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Lin1		0.3157	0.0100	8.48	10.0	-15.2	20.0
Dibromofluoromethane (Surr)	Ave	0.2474	0.2258		9.13	10.0	-8.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4812	0.3827		7.95	10.0	-20.5*	20.0
Toluene-d8 (Surr)	Ave	3.788	3.774		9.97	10.0	-0.3	20.0
4-Bromofluorobenzene (Surr)	Lin2		1.551		9.56	10.0	-4.4	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\711090n3.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 09-Nov-2017 08:58:30 ALS Bottle#: 3 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ccvis
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub13

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 09-Nov-2017 15:51:20 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 09-Nov-2017 15:51:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.251	4.251	0.000	98	90540	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.263	7.263	0.000	97	124890	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.365	10.365	0.000	88	29539	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.707	12.707	0.000	95	40796	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.539	6.539	0.000	92	28201	50.0	45.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.910	6.910	0.000	57	47801	50.0	39.8	
$ 7 Toluene-d8 (Surr)	98	8.911	8.911	0.000	94	111494	50.0	49.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.545	11.545	0.000	86	45823	50.0	47.8	
11 Dichlorodifluoromethane	85	1.617	1.617	0.000	99	50432	50.0	52.5	
12 Chloromethane	50	1.793	1.793	0.000	99	47852	50.0	35.7	
13 Vinyl chloride	62	1.921	1.921	0.000	90	34879	50.0	32.3	
14 Butadiene	39	1.970	1.970	0.000	98	38421	50.0	50.6	
15 Bromomethane	94	2.280	2.280	0.000	88	16491	50.0	39.8	
16 Chloroethane	64	2.414	2.414	0.000	97	17901	50.0	49.4	
17 Dichlorofluoromethane	67	2.682	2.682	0.000	96	47763	50.0	45.3	
18 Trichlorofluoromethane	101	2.694	2.694	0.000	62	49178	50.0	53.9	
20 Ethyl ether	59	3.041	3.041	0.000	96	29831	50.0	32.5	
22 1,1-Dichloroethene	96	3.345	3.345	0.000	93	35017	50.0	45.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.430	3.430	0.000	88	31205	50.0	51.3	
24 Acetone	43	3.436	3.436	0.000	99	40526	100.0	70.5	
25 Iodomethane	142	3.533	3.533	0.000	100	49104	50.0	67.2	
26 Carbon disulfide	76	3.625	3.625	0.000	100	99000	50.0	53.4	
28 3-Chloro-1-propene	76	3.917	3.917	0.000	89	21660	50.0	51.7	
30 Methyl acetate	43	3.923	3.923	0.000	99	109839	100.0	102.5	
31 Methylene Chloride	84	4.123	4.123	0.000	97	39861	50.0	50.7	
32 2-Methyl-2-propanol	59	4.373	4.373	0.000	97	60415	500.0	535.0	
33 Acrylonitrile	53	4.507	4.507	0.000	100	256042	500.0	560.0	
34 trans-1,2-Dichloroethene	96	4.555	4.555	0.000	93	30512	50.0	49.0	
35 Methyl tert-butyl ether	73	4.561	4.561	0.000	99	124066	50.0	46.5	
36 Hexane	57	4.975	4.975	0.000	95	46335	50.0	53.1	
37 1,1-Dichloroethane	63	5.182	5.182	0.000	97	68953	50.0	42.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 cis-1,2-Dichloroethene	96	5.930	5.930	0.000	84	37694	50.0	46.4	
44 2,2-Dichloropropane	97	5.930	5.930	0.000	68	6952	50.0	44.6	
46 2-Butanone (MEK)	43	5.936	5.936	0.000	99	79574	100.0	103.6	
49 Chlorobromomethane	128	6.210	6.210	0.000	92	19050	50.0	46.9	
51 Tetrahydrofuran	42	6.228	6.228	0.000	91	46972	100.0	98.8	
52 Chloroform	83	6.362	6.362	0.000	96	67813	50.0	43.0	
53 1,1,1-Trichloroethane	97	6.514	6.514	0.000	97	50653	50.0	47.5	
54 Cyclohexane	56	6.587	6.587	0.000	95	60737	50.0	52.7	
56 Carbon tetrachloride	117	6.691	6.691	0.000	94	38795	50.0	51.9	
55 1,1-Dichloropropene	75	6.709	6.709	0.000	92	46916	50.0	44.9	
57 Isobutyl alcohol	41	6.904	6.904	0.000	89	51749	1250.0	1057.6	
62 n-Heptane	43	6.904	6.904	0.000	67	69710	50.0	48.2	
58 Benzene	78	6.922	6.922	0.000	97	154556	50.0	55.0	
59 1,2-Dichloroethane	62	6.995	6.995	0.000	98	60572	50.0	40.0	
64 Trichloroethene	130	7.646	7.646	0.000	96	38390	50.0	50.0	
66 Methylcyclohexane	83	7.889	7.889	0.000	96	47250	50.0	51.0	
67 1,2-Dichloropropane	63	7.926	7.926	0.000	95	41849	50.0	51.3	
70 1,4-Dioxane	88	8.011	8.011	0.000	39	6070	1000.0	764.0	
68 Dibromomethane	93	8.011	8.011	0.000	94	23502	50.0	46.6	
71 Dichlorobromomethane	83	8.205	8.205	0.000	99	51971	50.0	45.8	
74 cis-1,3-Dichloropropene	75	8.650	8.650	0.000	91	67056	50.0	49.3	
75 4-Methyl-2-pentanone (MIBK	43	8.802	8.802	0.000	98	170742	100.0	124.7	
76 Toluene	91	8.978	8.978	0.000	98	157760	50.0	62.2	
77 trans-1,3-Dichloropropene	75	9.227	9.227	0.000	95	59283	50.0	49.5	
78 Ethyl methacrylate	69	9.282	9.282	0.000	91	71505	50.0	54.4	
79 1,1,2-Trichloroethane	97	9.422	9.422	0.000	93	37327	50.0	54.6	
80 Tetrachloroethene	164	9.495	9.495	0.000	97	25864	50.0	50.4	
81 1,3-Dichloropropane	76	9.580	9.580	0.000	96	69344	50.0	52.3	
82 2-Hexanone	43	9.635	9.635	0.000	97	115203	100.0	115.8	
84 Chlorodibromomethane	129	9.787	9.787	0.000	93	36157	50.0	56.8	
85 Ethylene Dibromide	107	9.909	9.909	0.000	99	40549	50.0	51.5	
87 Chlorobenzene	112	10.389	10.389	0.000	91	105841	50.0	58.1	
89 1,1,1,2-Tetrachloroethane	131	10.481	10.481	0.000	90	32893	50.0	56.7	
90 Ethylbenzene	106	10.493	10.493	0.000	99	48375	50.0	52.8	
91 m-Xylene & p-Xylene	106	10.621	10.621	0.000	99	59343	50.0	52.1	
92 o-Xylene	106	11.004	11.004	0.000	97	63148	50.0	51.5	
93 Styrene	104	11.022	11.022	0.000	94	106747	50.0	54.0	
94 Bromoform	173	11.211	11.211	0.000	94	28137	50.0	65.9	
97 Isopropylbenzene	105	11.369	11.369	0.000	96	150591	50.0	52.2	
100 Bromobenzene	156	11.685	11.685	0.000	97	39611	50.0	46.2	
99 1,1,2,2-Tetrachloroethane	83	11.685	11.685	0.000	96	54092	50.0	55.5	
102 trans-1,4-Dichloro-2-buten	53	11.722	11.722	0.000	78	20533	50.0	54.8	
101 1,2,3-Trichloropropane	110	11.740	11.740	0.000	85	18785	50.0	50.4	
103 N-Propylbenzene	120	11.789	11.789	0.000	99	35543	50.0	51.6	
104 2-Chlorotoluene	126	11.874	11.874	0.000	95	30906	50.0	47.2	
106 1,3,5-Trimethylbenzene	105	11.971	11.971	0.000	93	117433	50.0	48.9	
107 4-Chlorotoluene	126	12.002	12.002	0.000	98	32476	50.0	48.9	
108 tert-Butylbenzene	119	12.281	12.281	0.000	93	93688	50.0	49.3	
110 1,2,4-Trimethylbenzene	105	12.342	12.342	0.000	98	128233	50.0	51.4	
112 sec-Butylbenzene	105	12.506	12.506	0.000	95	124982	50.0	50.4	
113 1,3-Dichlorobenzene	146	12.628	12.628	0.000	96	61490	50.0	47.9	
114 4-Isopropyltoluene	119	12.665	12.665	0.000	96	103671	50.0	52.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 1,4-Dichlorobenzene	146	12.732	12.732	0.000	90	58936	50.0	47.4	
120 n-Butylbenzene	91	13.072	13.072	0.000	98	88635	50.0	51.5	
121 1,2-Dichlorobenzene	146	13.090	13.090	0.000	94	59890	50.0	49.7	
122 1,2-Dibromo-3-Chloropropan	157	13.881	13.881	0.000	76	8236	50.0	54.9	
126 1,2,4-Trichlorobenzene	180	14.703	14.703	0.000	94	23513	50.0	46.3	
127 Hexachlorobutadiene	225	14.849	14.849	0.000	93	12445	50.0	60.6	
128 Naphthalene	128	14.964	14.964	0.000	98	71719	50.0	67.6	
129 1,2,3-Trichlorobenzene	180	15.195	15.195	0.000	93	12880	50.0	42.4	
S 133 Xylenes, Total	106				0		100.0	103.6	
S 134 1,2-Dichloroethene, Total	96				0		100.0	95.3	
S 135 1,3-Dichloropropene, Total	1				0		100.0	98.8	

Reagents:

voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL		
VOA8260VOA2ND_00271	Amount Added:	2.00	Units: uL		
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent	

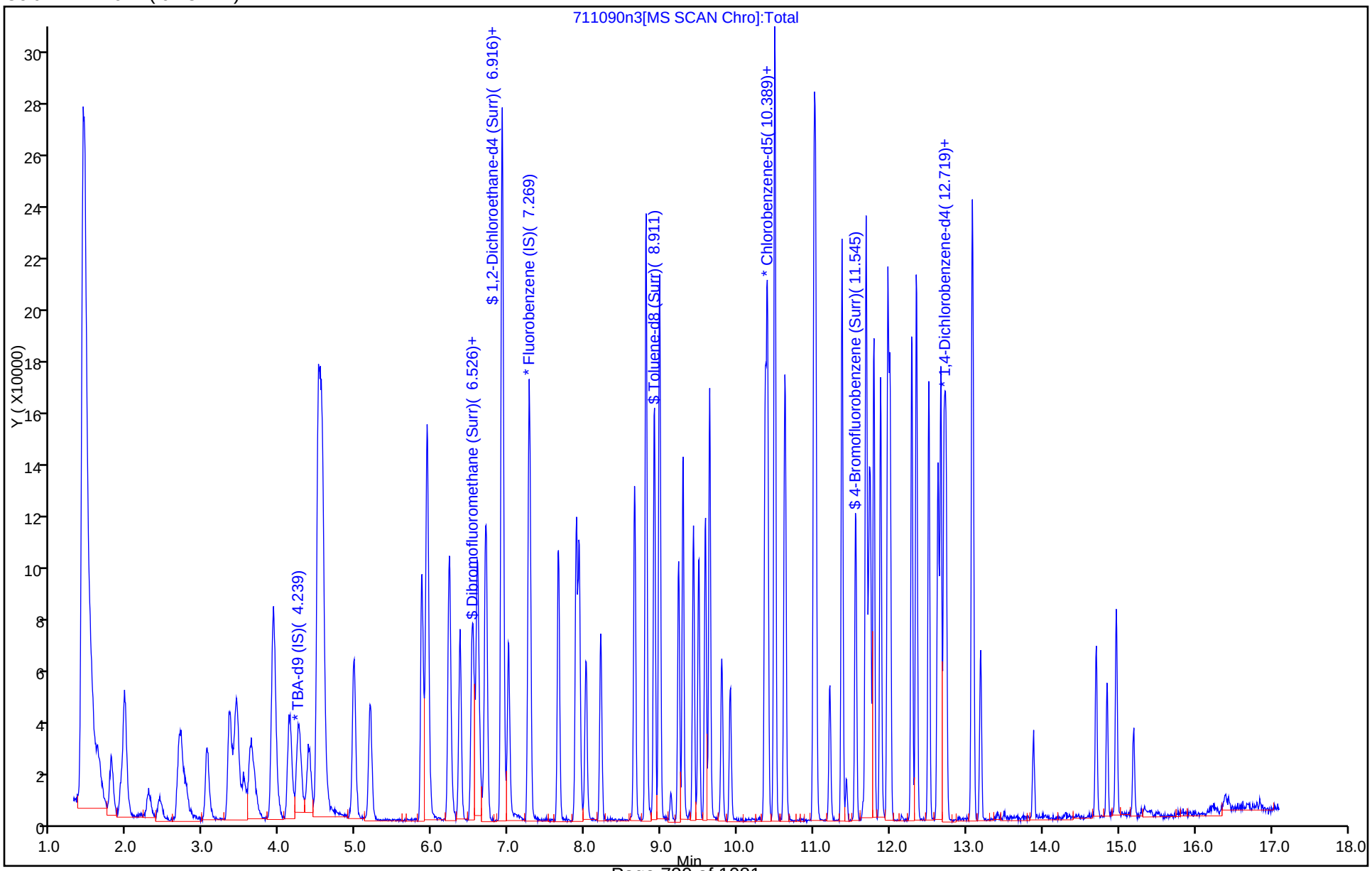
Report Date: 09-Nov-2017 15:51:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\711090n3.D

Injection Date:	09-Nov-2017 08:58:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	27-Jul-2017 00:22:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0017756-001				
Misc. Info.:	BFB				
Operator ID:	034635	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	28-Jul-2017 01:04:43	Calib Date:	27-Jul-2017 04:24:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK029				
First Level Reviewer: bungardf		Date:	27-Jul-2017 05:09:11		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.334	8.334	0.000	0	79656	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

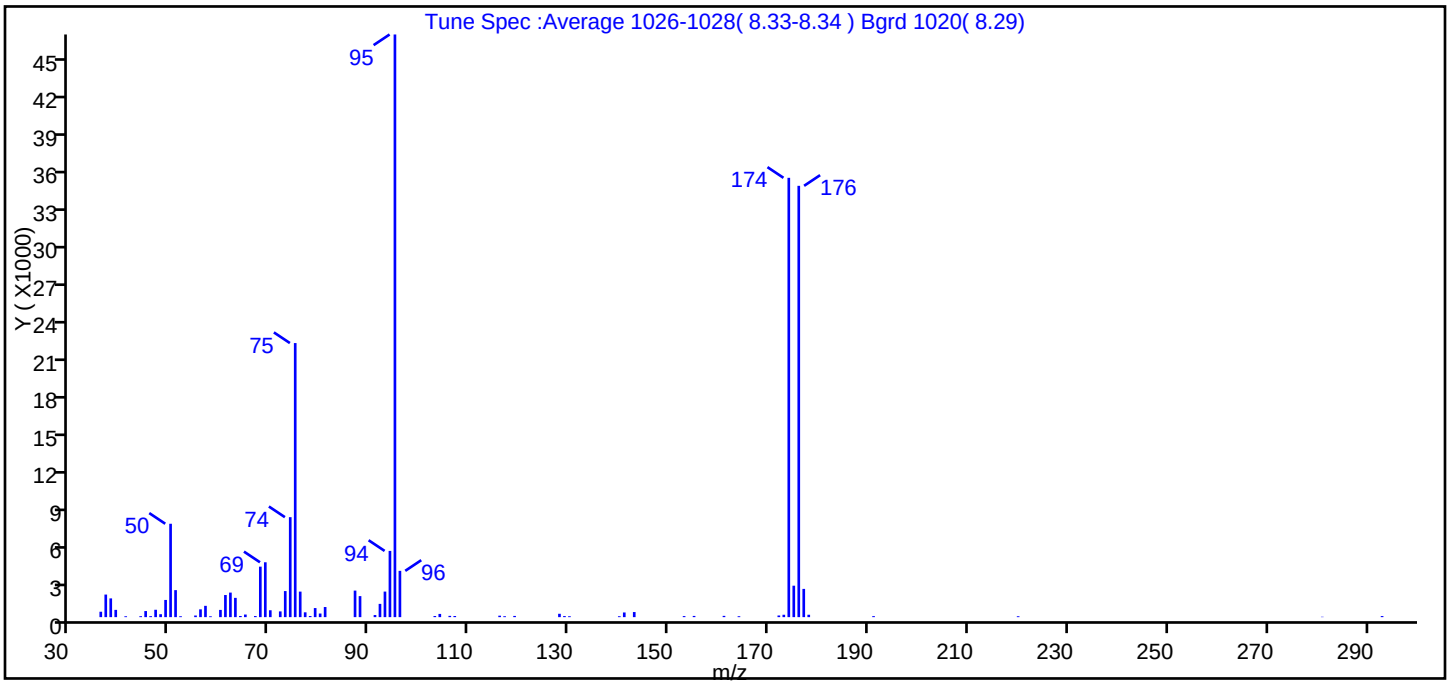
VOABFB25_00090 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D01.D
Injection Date: 27-Jul-2017 00:22:30 Instrument ID: CHHP5
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_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	16.0
75	30 to 60% of m/z 95	47.0
96	5 to 9% of m/z 95	7.9
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	75.4
175	5 to 9% of m/z 174	5.4 (7.2)
176	Greater than 95% but less than 101% of m/z 174	74.0 (98.2)
177	5 to 9% of m/z 176	4.8 (6.5)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D01.D\MSVOA_LL_CHHP5.rslt\spec
Injection Date: 27-Jul-2017 00:22:30
Spectrum: Tune Spec :Average 1026-1028(8.33-8.34) Bgrd 1020(8.29)
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	433	61.00	1769	87.00	2123	141.00	374
37.00	1806	62.00	1963	88.00	1682	143.00	408
38.00	1500	63.00	1542	91.00	169	153.00	84
39.00	582	64.00	92	92.00	1061	155.00	97
41.00	70	65.00	209	93.00	2045	161.00	102
44.00	76	67.00	88	94.00	5297	164.00	73
45.00	487	68.00	4038	95.00	46600	172.00	132
46.00	79	69.00	4388	96.00	3703	173.00	191
47.00	590	70.00	551	103.00	90	174.00	35136
48.00	235	72.00	459	104.00	258	175.00	2515
49.00	1375	73.00	2085	106.00	102	176.00	34496
50.00	7469	74.00	7996	107.00	90	177.00	2259
51.00	2160	75.00	21920	116.00	116	178.00	192
52.00	70	76.00	2042	117.00	73	191.00	80
55.00	130	77.00	386	119.00	97	220.00	71
56.00	624	78.00	89	128.00	269	281.00	30
57.00	904	79.00	726	129.00	86	293.00	87
58.00	67	80.00	290	130.00	72		
60.00	579	81.00	809	140.00	72		

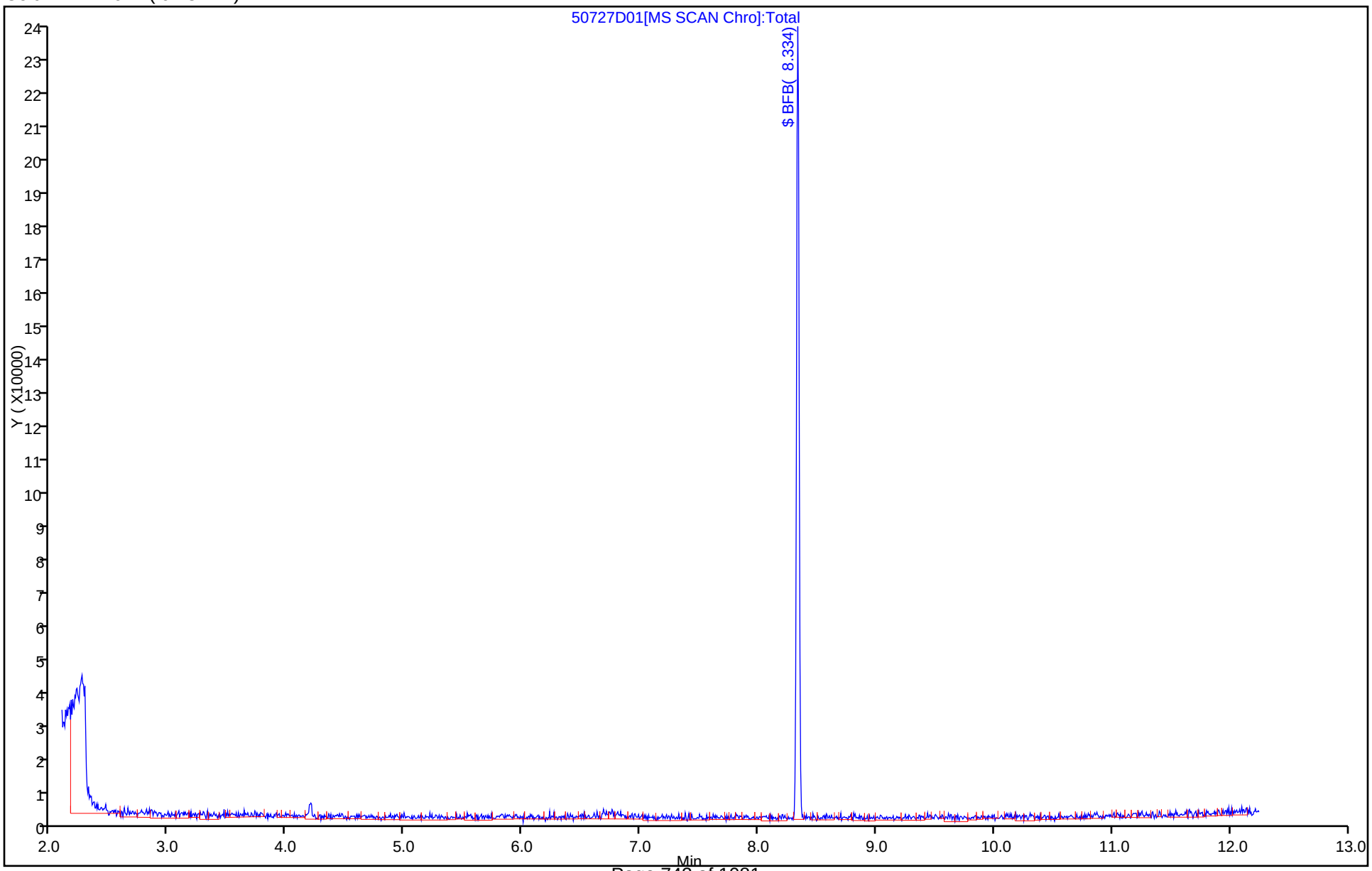
Report Date: 28-Jul-2017 01:04:43 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D01.D

Injection Date:	27-Jul-2017 00:22:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	01-Nov-2017 22:20:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0019138-001				
Misc. Info.:	BFB				
Operator ID:	034635	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	02-Nov-2017 20:42:14	Calib Date:	27-Jul-2017 04:24:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK011				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.341	8.341	0.000	0	64852	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

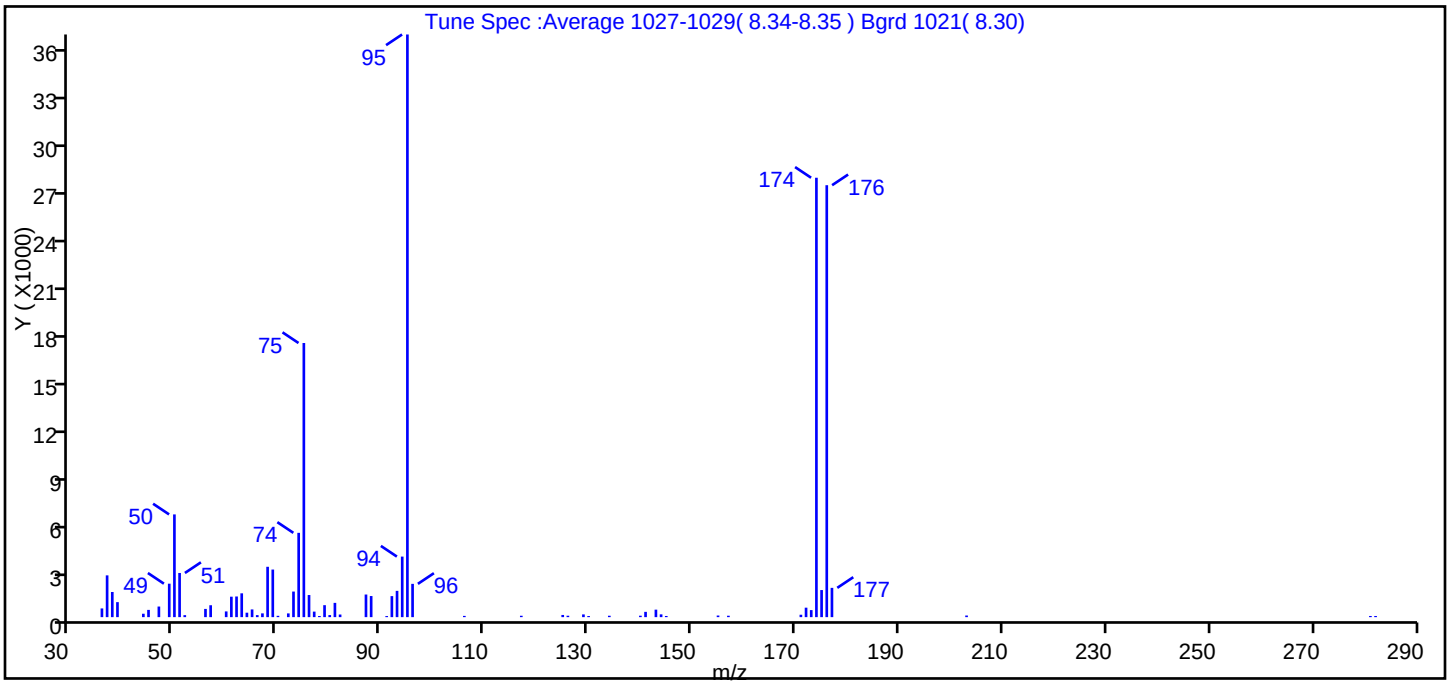
VOABFB25_00094 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D01.D				
Injection Date:	01-Nov-2017 22:20:30	Instrument ID:	CHHP5		
Lims ID:	BFB				
Client ID:					
Operator ID:	034635	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_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	17.6
75	30 to 60% of m/z 95	47.0
96	5 to 9% of m/z 95	5.7
173	Less than 2% of m/z 174	1.2 (1.6)
174	50 to 120% of m/z 95	75.4
175	5 to 9% of m/z 174	4.6 (6.2)
176	Greater than 95% but less than 101% of m/z 174	74.1 (98.3)
177	5 to 9% of m/z 176	5.0 (6.8)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D01.D\MSVOA_LL_CHHP5.rslt\spec
Injection Date: 01-Nov-2017 22:20:30
Spectrum: Tune Spec :Average 1027-1029(8.34-8.35) Bgrd 1021(8.30)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 67

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	551	64.00	281	82.00	166	141.00	335
37.00	2643	65.00	488	87.00	1431	143.00	474
38.00	1591	66.00	128	88.00	1335	144.00	176
39.00	949	67.00	239	91.00	69	145.00	73
44.00	216	68.00	3186	92.00	1330	155.00	102
45.00	459	69.00	3011	93.00	1662	157.00	90
47.00	671	70.00	84	94.00	3831	171.00	152
49.00	2117	72.00	237	95.00	36864	172.00	599
50.00	6500	73.00	1619	96.00	2106	173.00	446
51.00	2794	74.00	5334	106.00	79	174.00	27800
52.00	126	75.00	17344	117.00	88	175.00	1714
56.00	520	76.00	1399	125.00	138	176.00	27328
57.00	753	77.00	350	126.00	90	177.00	1853
60.00	363	78.00	71	129.00	173	203.00	103
61.00	1294	79.00	757	130.00	69	281.00	73
62.00	1307	80.00	130	134.00	89	282.00	73
63.00	1507	81.00	903	140.00	91		

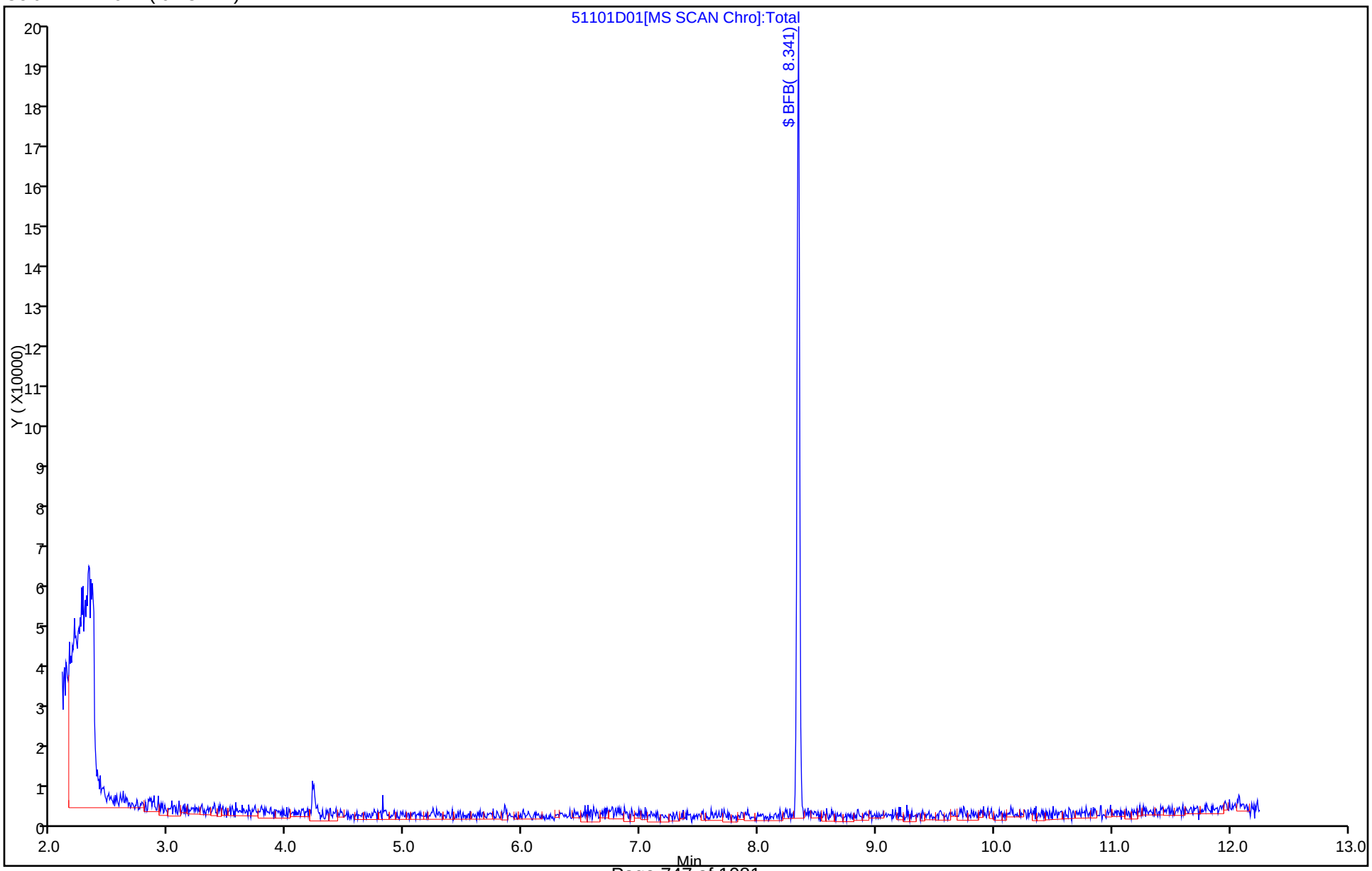
Report Date: 02-Nov-2017 20:42:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D01.D

Injection Date:	01-Nov-2017 22:20:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	02-Nov-2017 21:51:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0019153-001				
Misc. Info.:	BFB				
Operator ID:	034635	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	05-Nov-2017 20:10:35	Calib Date:	27-Jul-2017 04:24:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK012				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.342	8.342	0.000	0	14334	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

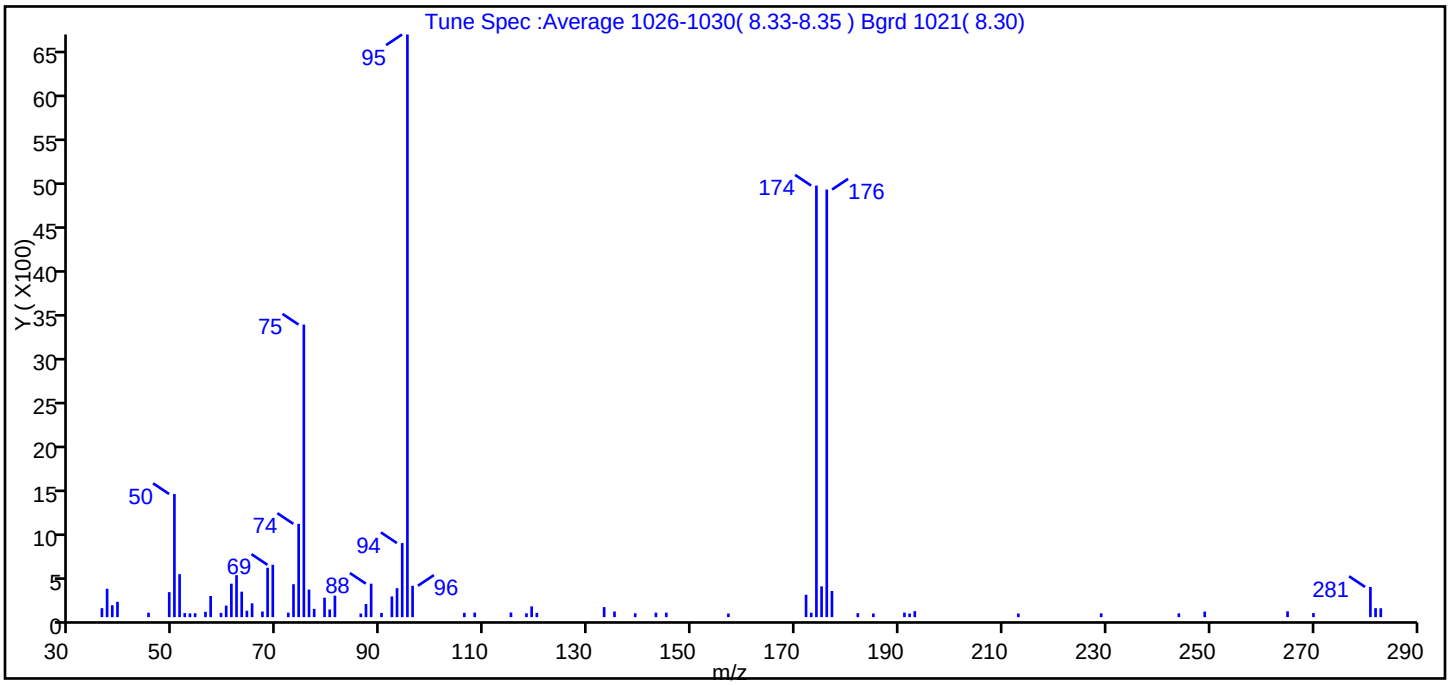
VOABFB25_00094 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D01.D				
Injection Date:	02-Nov-2017 21:51:30	Instrument ID:	CHHP5		
Lims ID:	BFB				
Client ID:					
Operator ID:	034635	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Tune Method:	BFB Method 8260				

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.1
75	30 to 60% of m/z 95	50.2
96	5 to 9% of m/z 95	5.4
173	Less than 2% of m/z 174	0.8 (1.0)
174	50 to 120% of m/z 95	74.1
175	5 to 9% of m/z 174	5.3 (7.1)
176	Greater than 95% but less than 101% of m/z 174	73.4 (99.1)
177	5 to 9% of m/z 176	4.5 (6.1)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D01.D\MSVOA_LL_CHHP5.rslt\spec
Injection Date: 02-Nov-2017 21:51:30
Spectrum: Tune Spec :Average 1026-1030(8.33-8.35) Bgrd 1021(8.30)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	102	65.00	157	94.00	841	176.00	4854
37.00	322	67.00	64	95.00	6614	177.00	297
38.00	135	68.00	561	96.00	356	182.00	45
39.00	174	69.00	594	106.00	49	185.00	41
45.00	50	72.00	51	108.00	52	191.00	52
49.00	284	73.00	374	115.00	53	192.00	41
50.00	1398	74.00	1059	118.00	44	193.00	68
51.00	488	75.00	3321	119.00	122	213.00	41
52.00	46	76.00	313	120.00	48	229.00	43
53.00	43	77.00	94	133.00	114	244.00	43
54.00	44	79.00	221	135.00	64	249.00	63
56.00	61	80.00	87	139.00	44	265.00	66
57.00	240	81.00	244	143.00	51	270.00	46
59.00	48	86.00	41	145.00	51	281.00	343
60.00	131	87.00	149	157.00	41	282.00	102
61.00	380	88.00	380	172.00	254	283.00	101
62.00	477	90.00	48	173.00	50		
63.00	289	92.00	235	174.00	4899		
64.00	73	93.00	329	175.00	349		

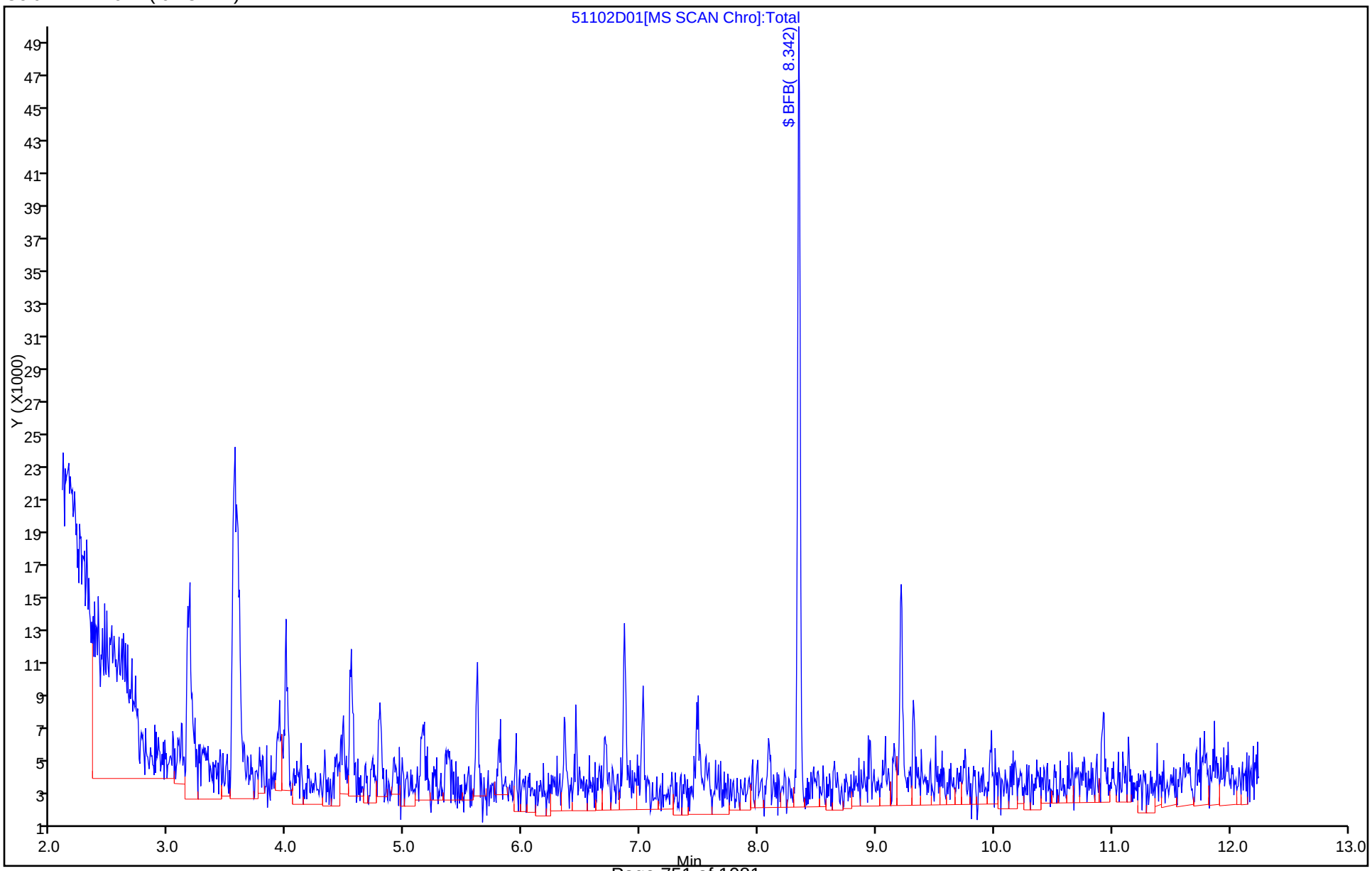
Report Date: 05-Nov-2017 20:10:36 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D01.D

Injection Date:	02-Nov-2017 21:51:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	05-Nov-2017 00:00:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0019180-001				
Misc. Info.:	BFB				
Operator ID:	034635	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	06-Nov-2017 20:28:29	Calib Date:	27-Jul-2017 04:24:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK003				
First Level Reviewer: bungardf		Date:	05-Nov-2017 23:38:02		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.338	8.338	0.000	0	71116	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

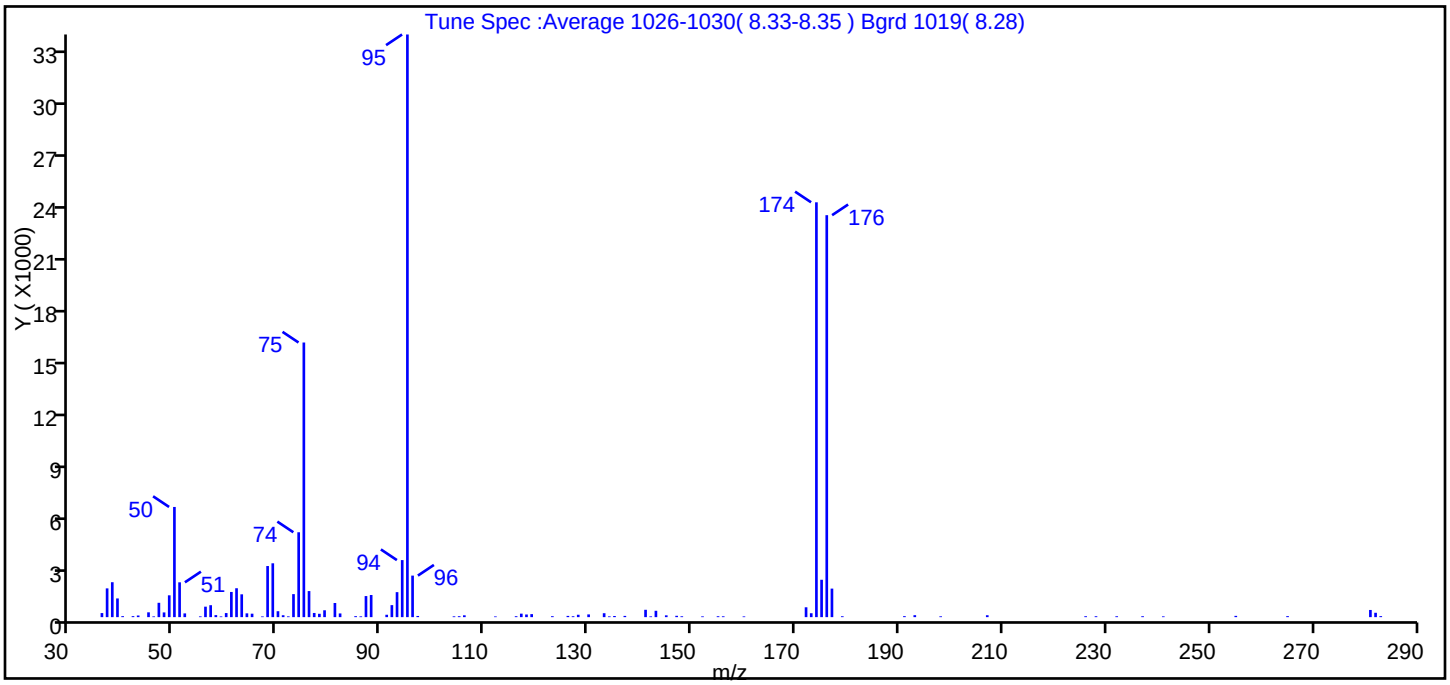
VOABFB25_00094 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D01.D
Injection Date: 05-Nov-2017 00:00:30 Instrument ID: CHHP5
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_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	18.9
75	30 to 60% of m/z 95	47.1
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.7 (0.9)
174	50 to 120% of m/z 95	71.2
175	5 to 9% of m/z 174	6.4 (9.0)
176	Greater than 95% but less than 101% of m/z 174	69.0 (96.9)
177	5 to 9% of m/z 176	4.9 (7.1)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D01.D\MSVOA_LL_CHHP5.rslt\spec
Injection Date: 05-Nov-2017 00:00:30
Spectrum: Tune Spec :Average 1026-1030(8.33-8.35) Bgrd 1019(8.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 100

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	235	65.00	200	96.00	2400	152.00	44
37.00	1662	67.00	41	97.00	68	155.00	52
38.00	2018	68.00	2953	104.00	46	156.00	48
39.00	1081	69.00	3111	105.00	54	160.00	42
40.00	57	70.00	343	106.00	106	172.00	570
42.00	58	71.00	110	112.00	41	173.00	226
43.00	95	72.00	44	116.00	54	174.00	23968
45.00	278	73.00	1330	117.00	202	175.00	2160
46.00	43	74.00	4904	118.00	153	176.00	23224
47.00	829	75.00	15867	119.00	175	177.00	1649
48.00	273	76.00	1506	123.00	54	179.00	51
49.00	1261	77.00	241	126.00	72	191.00	57
50.00	6366	78.00	194	127.00	51	193.00	113
51.00	2012	79.00	397	128.00	139	198.00	47
52.00	216	81.00	817	130.00	158	207.00	110
55.00	44	82.00	214	133.00	227	226.00	53
56.00	605	85.00	57	134.00	44	228.00	52
57.00	690	86.00	45	135.00	66	232.00	51
58.00	117	87.00	1218	137.00	72	237.00	52
59.00	41	88.00	1279	141.00	425	241.00	44
60.00	236	91.00	138	142.00	44	255.00	74
61.00	1455	92.00	694	143.00	367	265.00	58
62.00	1670	93.00	1444	145.00	104	281.00	415
63.00	1319	94.00	3296	147.00	78	282.00	252
64.00	219	95.00	33664	148.00	49	283.00	58

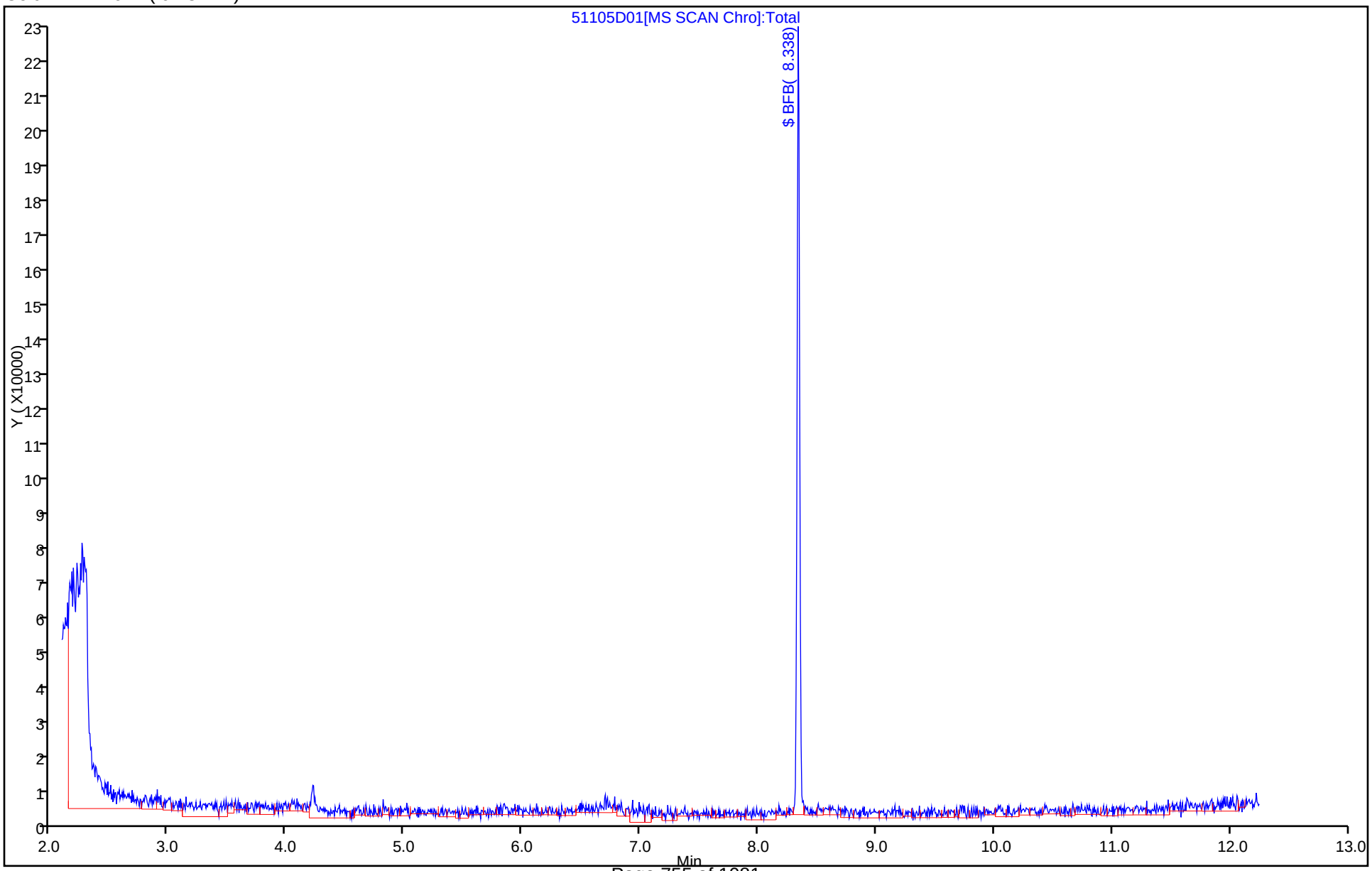
Report Date: 06-Nov-2017 20:28:29 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D01.D

Injection Date:	05-Nov-2017 00:00:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	07-Nov-2017 23:03:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0019208-001				
Misc. Info.:	BFB				
Operator ID:	034635	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	08-Nov-2017 08:55:39	Calib Date:	27-Jul-2017 04:24:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK018				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	8.335	8.335	0.000	0	99267	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

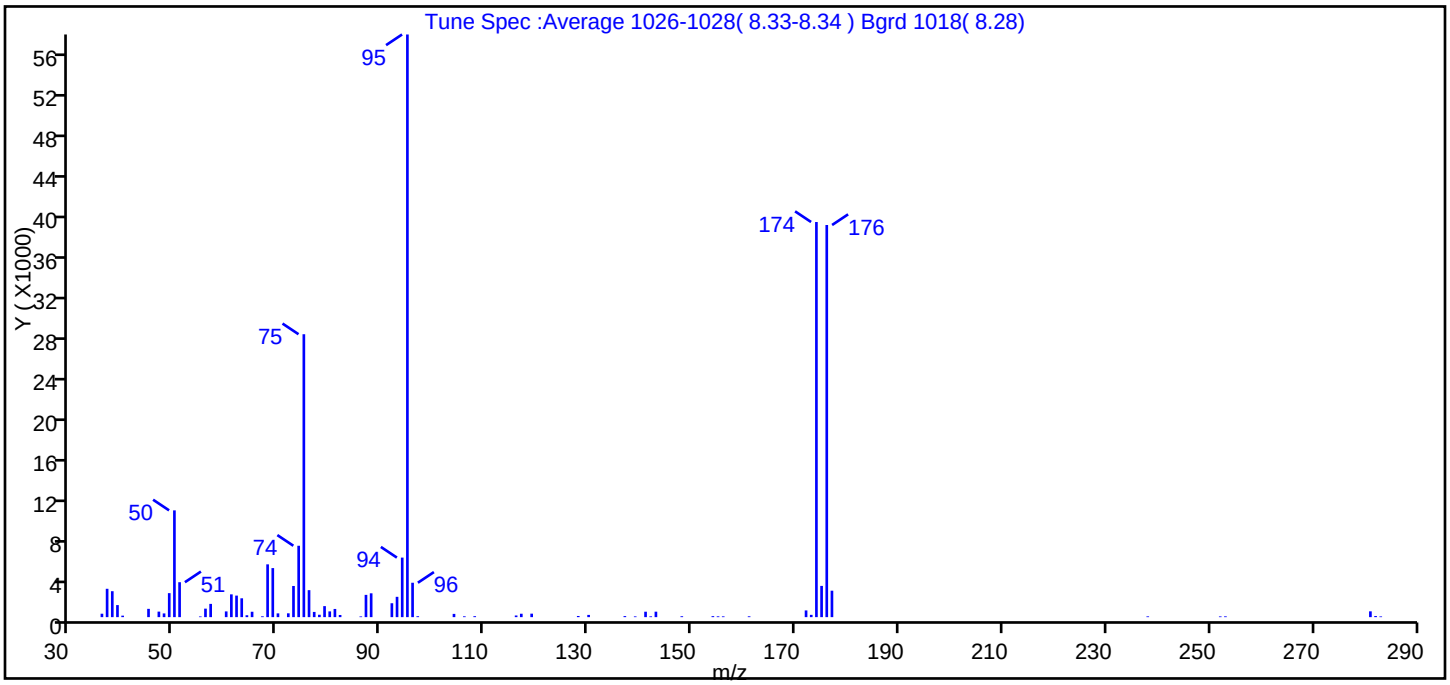
VOABFB25_00094 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D01.D
Injection Date: 07-Nov-2017 23:03:30 Instrument ID: CHHP5
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_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	18.3
75	30 to 60% of m/z 95	48.6
96	5 to 9% of m/z 95	5.9
173	Less than 2% of m/z 174	0.4 (0.6)
174	50 to 120% of m/z 95	67.8
175	5 to 9% of m/z 174	5.4 (7.9)
176	Greater than 95% but less than 101% of m/z 174	67.3 (99.2)
177	5 to 9% of m/z 176	4.5 (6.7)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D01.D\MSVOA_LL_CHHP5.rslt\spec
Injection Date: 07-Nov-2017 23:03:30
Spectrum: Tune Spec :Average 1026-1028(8.33-8.34) Bgrd 1018(8.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	339	65.00	534	92.00	1375	148.00	88
37.00	2804	67.00	82	93.00	2009	154.00	98
38.00	2565	68.00	5221	94.00	5888	155.00	80
39.00	1192	69.00	4850	95.00	57616	156.00	76
40.00	147	70.00	373	96.00	3402	161.00	82
45.00	820	72.00	379	97.00	89	172.00	664
47.00	547	73.00	3082	104.00	322	173.00	227
48.00	368	74.00	7059	106.00	81	174.00	39072
49.00	2373	75.00	27976	108.00	94	175.00	3089
50.00	10558	76.00	2668	116.00	164	176.00	38776
51.00	3454	77.00	515	117.00	337	177.00	2615
55.00	68	78.00	237	119.00	345	238.00	76
56.00	840	79.00	1090	128.00	114	252.00	72
57.00	1311	80.00	570	130.00	221	253.00	78
60.00	568	81.00	810	137.00	104	281.00	574
61.00	2253	82.00	213	139.00	74	282.00	110
62.00	2130	86.00	70	141.00	537	283.00	71
63.00	1864	87.00	2202	142.00	78		
64.00	187	88.00	2357	143.00	540		

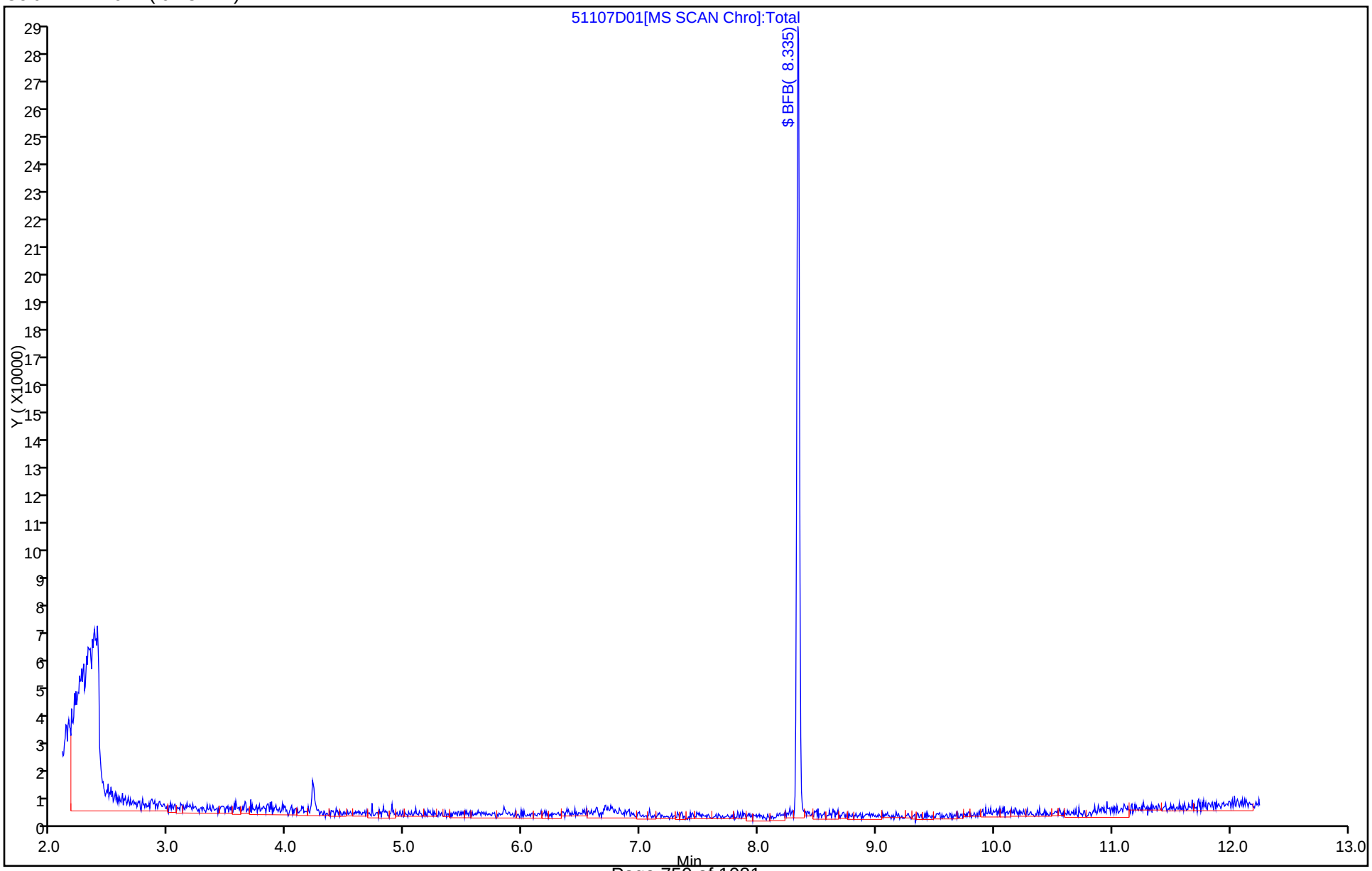
Report Date: 08-Nov-2017 08:55:40 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D01.D

Injection Date:	07-Nov-2017 23:03:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N01.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 26-May-2017 13:55:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 27-May-2017 10:43:47 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK014

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	11.543	11.543	0.000	0	380415	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

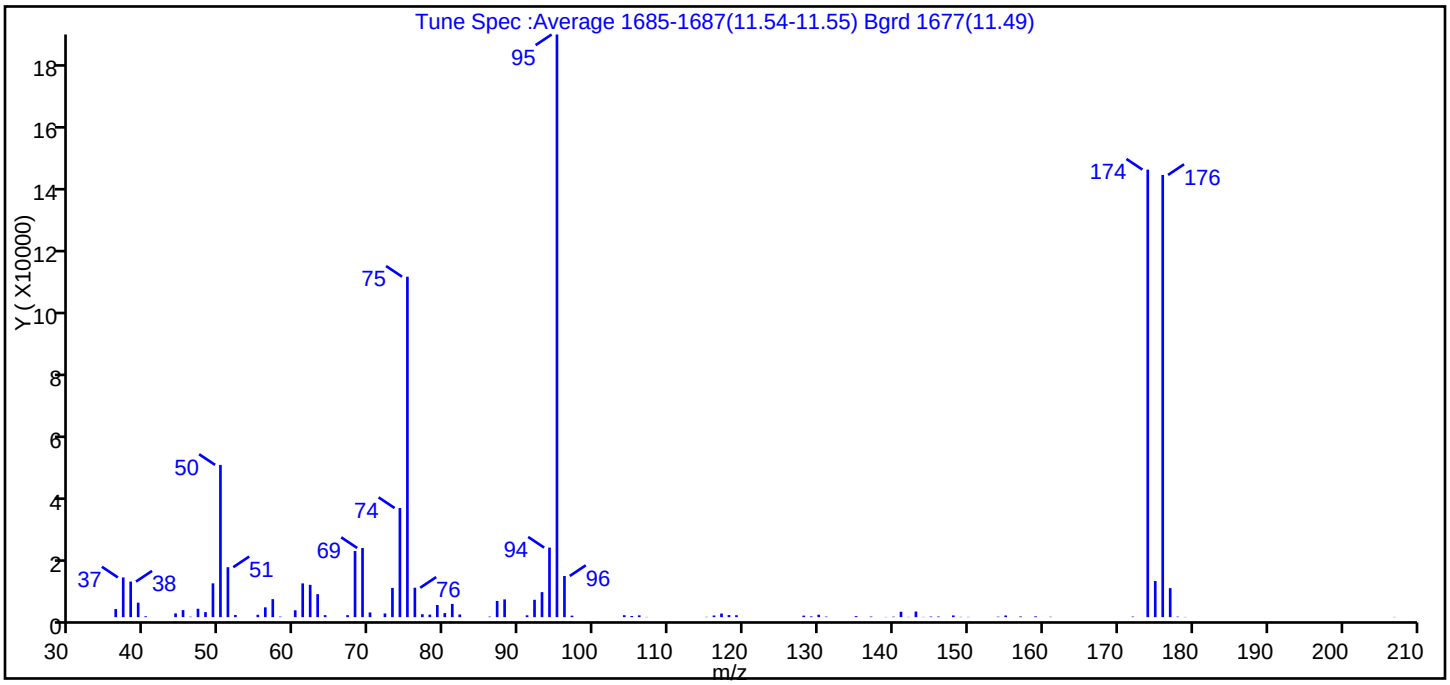
VOABFB50_00091 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N01.D
Injection Date: 26-May-2017 13:55:30 Instrument ID: CHHP7
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 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	26.1
75	30 to 60% of m/z 95	58.4
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	76.8
175	5 to 9% of m/z 174	6.2 (8.1)
176	Greater than 95% but less than 101% of m/z 174	75.9 (98.8)
177	5 to 9% of m/z 176	5.0 (6.6)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N01.D\MSVOA_LL_CHHP7.rslt\spec
Injection Date: 26-May-2017 13:55:30
Spectrum: Tune Spec :Average 1685-1687(11.54-11.55) Bgrd 1677(11.49)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 87

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2642	64.00	652	94.00	22656	142.00	79
37.00	12938	67.00	653	95.00	189824	143.00	1826
38.00	11589	68.00	21552	96.00	13405	144.00	74
39.00	4713	69.00	22528	97.00	489	145.00	189
40.00	286	70.00	1533	104.00	636	146.00	196
44.00	1231	72.00	1203	105.00	369	148.00	554
45.00	2303	73.00	9522	106.00	592	149.00	92
46.00	142	74.00	35544	107.00	74	150.00	83
47.00	2735	75.00	110912	115.00	99	154.00	151
48.00	1636	76.00	9578	116.00	546	155.00	541
49.00	11008	77.00	945	117.00	1182	157.00	218
50.00	49600	78.00	820	118.00	676	159.00	264
51.00	16273	79.00	3959	119.00	629	161.00	118
52.00	709	80.00	1332	128.00	494	172.00	180
55.00	776	81.00	4310	129.00	242	174.00	145792
56.00	3192	82.00	867	130.00	784	175.00	11773
57.00	5861	86.00	174	131.00	172	176.00	144064
58.00	163	87.00	5283	135.00	334	177.00	9450
60.00	2238	88.00	5778	137.00	191	178.00	159
61.00	11003	91.00	608	139.00	71	179.00	69
62.00	10519	92.00	5660	140.00	152	207.00	77
63.00	7487	93.00	8153	141.00	1765		

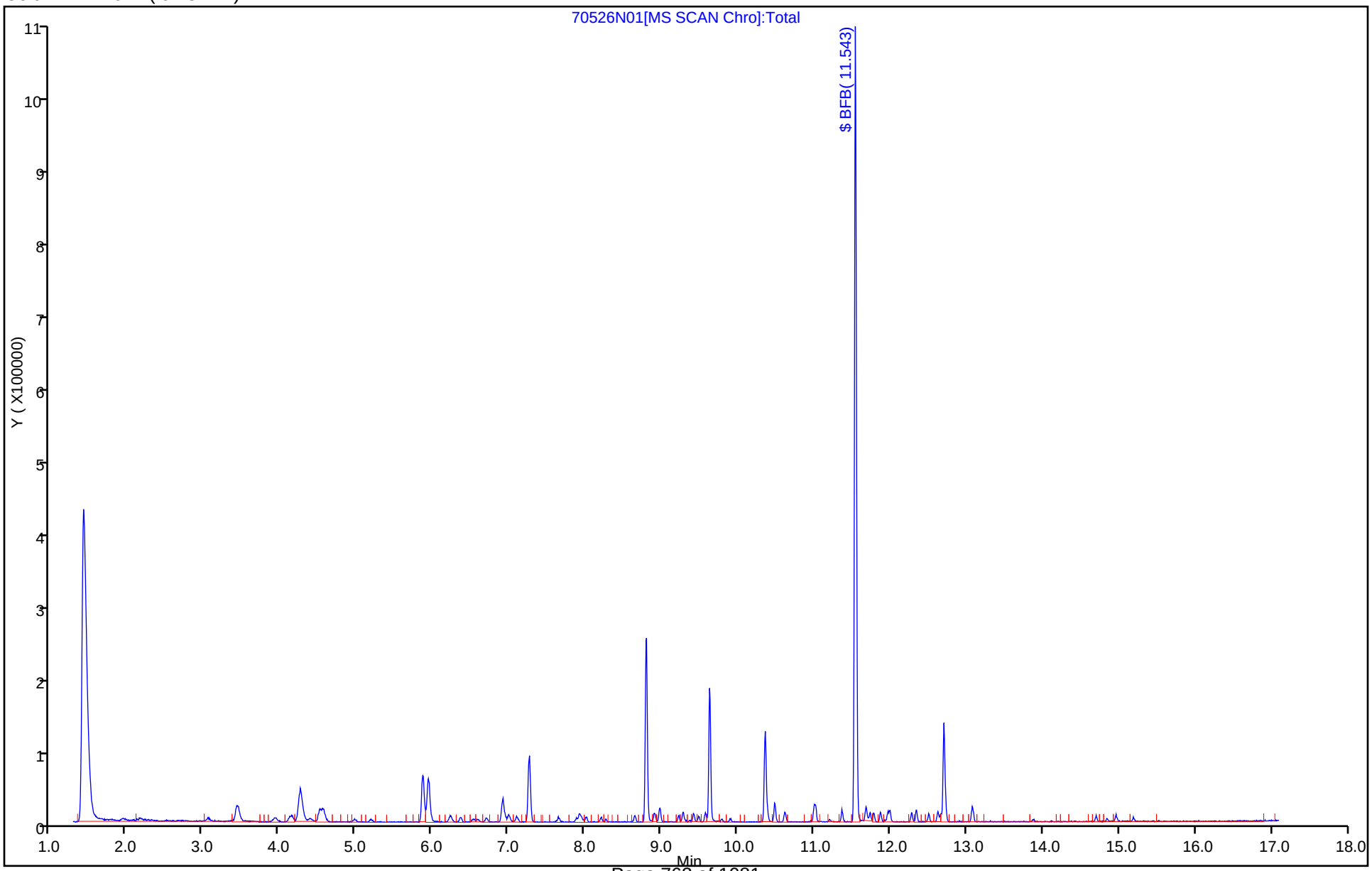
Report Date: 27-May-2017 10:43:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N01.D

Injection Date:	26-May-2017 13:55:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110101.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 01-Nov-2017 07:31:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 13:25:05 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	11.544	11.544	0.000	0	208766	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

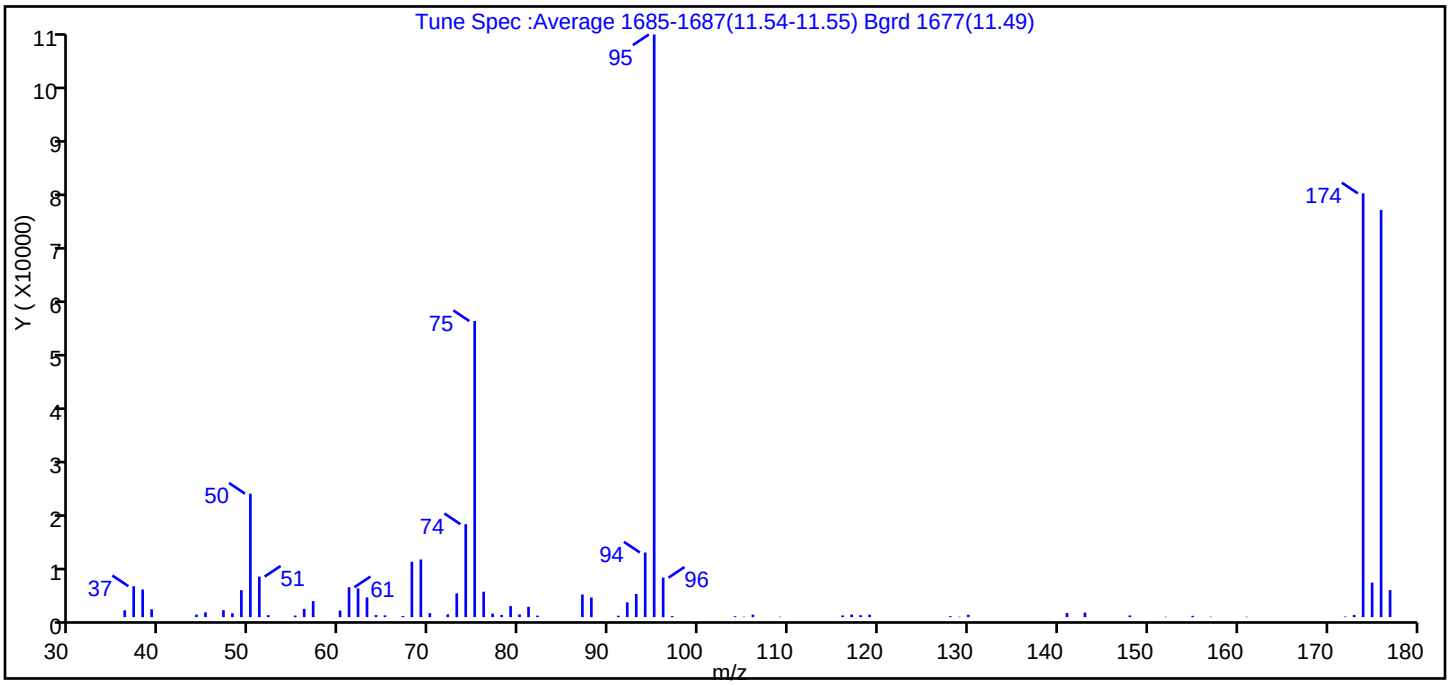
VOABFB25_00094 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110101.D
Injection Date: 01-Nov-2017 07:31:30 Instrument ID: CHHP7
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.2
75	30 to 60% of m/z 95	50.8
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	72.7
175	5 to 9% of m/z 174	5.9 (8.1)
176	Greater than 95% but less than 101% of m/z 174	69.9 (96.1)
177	5 to 9% of m/z 176	4.6 (6.6)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110101.D\MSVOA_LL_CHHP7.rslt\spectra
Injection Date: 01-Nov-2017 07:31:30
Spectrum: Tune Spec :Average 1685-1687(11.54-11.55) Bgrd 1677(11.49)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1212	63.00	3478	87.00	3998	129.00	70
37.00	5470	64.00	368	88.00	3468	130.00	419
38.00	4889	65.00	317	91.00	252	141.00	735
39.00	1390	67.00	213	92.00	2615	143.00	803
44.00	451	68.00	9787	93.00	4099	148.00	294
45.00	849	69.00	10189	94.00	11427	152.00	68
47.00	1237	70.00	697	95.00	102984	155.00	234
48.00	691	72.00	498	96.00	6972	157.00	75
49.00	4766	73.00	4190	97.00	194	161.00	75
50.00	21824	74.00	16432	104.00	162	172.00	113
51.00	7163	75.00	52328	105.00	76	173.00	393
52.00	356	76.00	4494	106.00	449	174.00	74904
55.00	283	77.00	622	109.00	75	175.00	6087
56.00	1468	78.00	388	116.00	301	176.00	71968
57.00	2837	79.00	1956	117.00	466	177.00	4775
60.00	1162	80.00	478	118.00	345		
61.00	5287	81.00	1826	119.00	431		
62.00	5087	82.00	271	128.00	170		

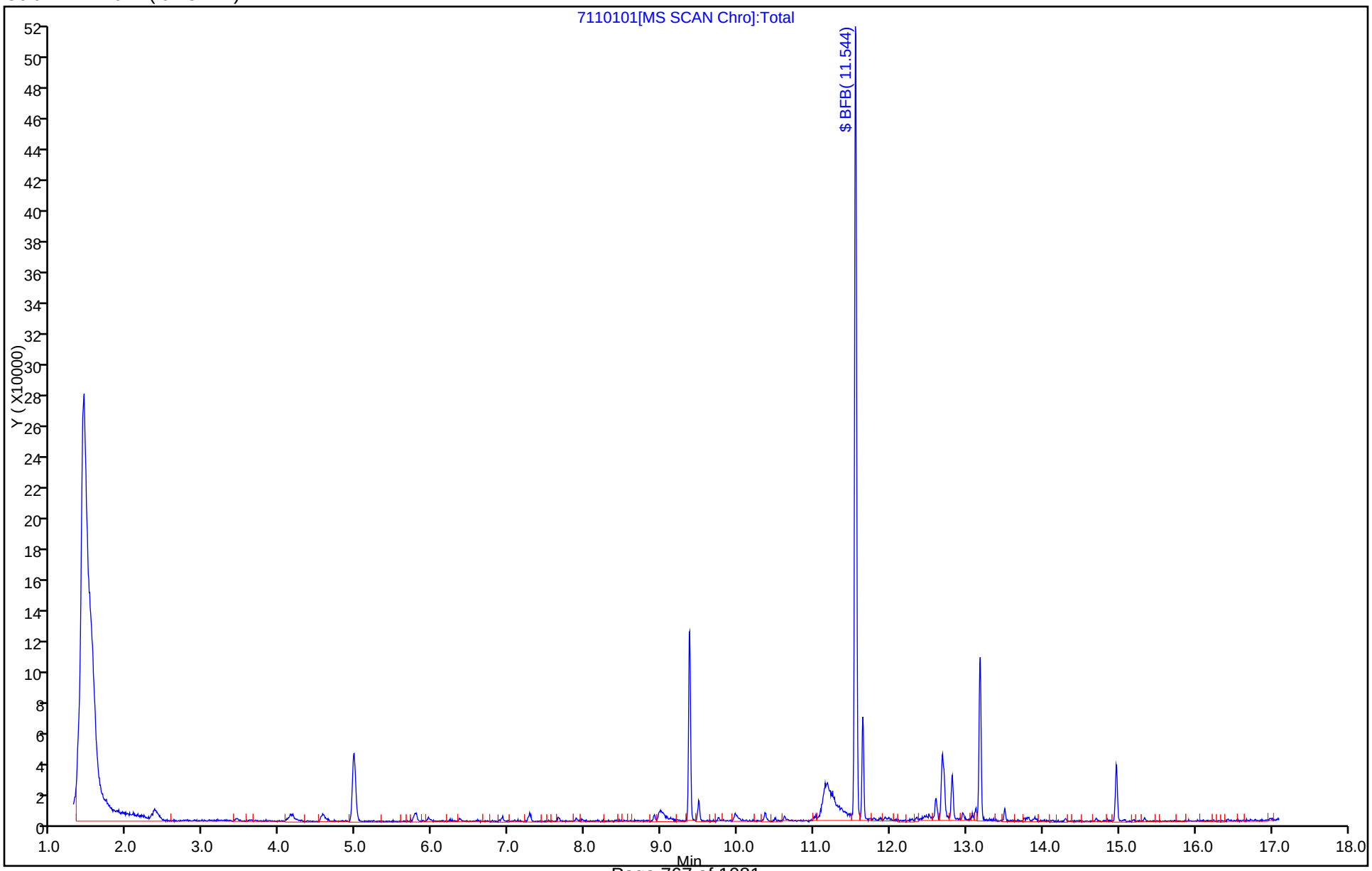
Report Date: 01-Nov-2017 13:25:06 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110101.D

Injection Date:	01-Nov-2017 07:31:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110201.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 02-Nov-2017 04:44:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 08:59:56 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 05:09:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	11.544	11.544	0.000	0	338807	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

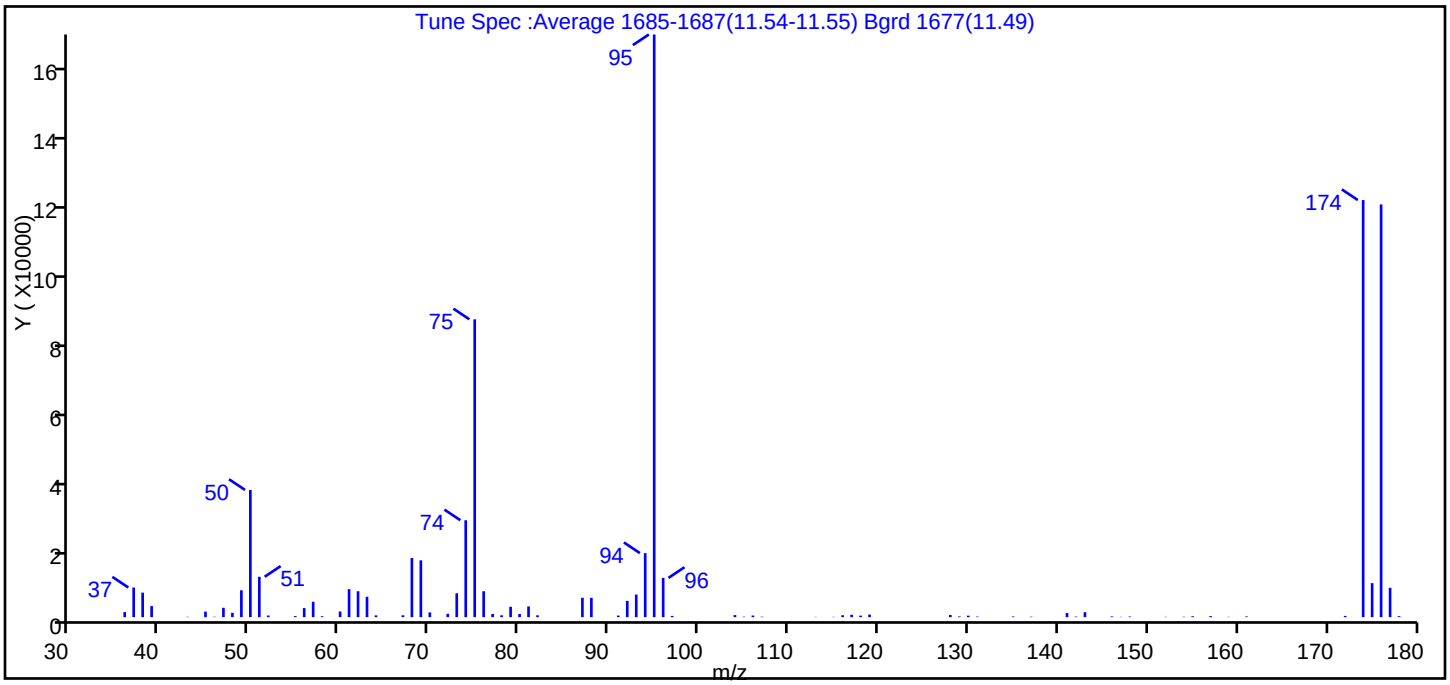
VOABFB25_00094 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110201.D				
Injection Date:	02-Nov-2017 04:44:30	Instrument ID:	CHHP7		
Lims ID:	BFB				
Client ID:					
Operator ID:	034635	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Tune Method:	BFB Method 8260				

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.8
75	30 to 60% of m/z 95	51.1
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	71.6
175	5 to 9% of m/z 174	5.8 (8.2)
176	Greater than 95% but less than 101% of m/z 174	70.8 (99.0)
177	5 to 9% of m/z 176	5.0 (7.1)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110201.D\MSVOA_LL_CHHP7.rslt\spectra
Injection Date: 02-Nov-2017 04:44:30
Spectrum: Tune Spec :Average 1685-1687(11.54-11.55) Bgrd 1677(11.49)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 80

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1415	63.00	5716	92.00	4559	135.00	187
37.00	8302	64.00	499	93.00	6332	137.00	131
38.00	6864	67.00	516	94.00	17960	141.00	1150
39.00	3100	68.00	16592	95.00	163392	142.00	162
43.00	96	69.00	15930	96.00	11008	143.00	1389
45.00	1547	70.00	1330	97.00	353	146.00	202
46.00	107	72.00	934	104.00	582	147.00	76
47.00	2625	73.00	6697	105.00	132	148.00	171
48.00	1203	74.00	27168	106.00	451	152.00	87
49.00	7540	75.00	83520	107.00	130	154.00	105
50.00	35672	76.00	7270	113.00	69	155.00	253
51.00	11321	77.00	895	115.00	76	157.00	292
52.00	456	78.00	515	116.00	539	159.00	88
55.00	298	79.00	2916	117.00	671	161.00	199
56.00	2542	80.00	882	118.00	426	172.00	342
57.00	4314	81.00	3002	119.00	708	174.00	116960
58.00	245	82.00	515	128.00	605	175.00	9539
60.00	1576	87.00	5427	129.00	198	176.00	115736
61.00	7843	88.00	5411	130.00	418	177.00	8231
62.00	7268	91.00	438	131.00	157	178.00	274

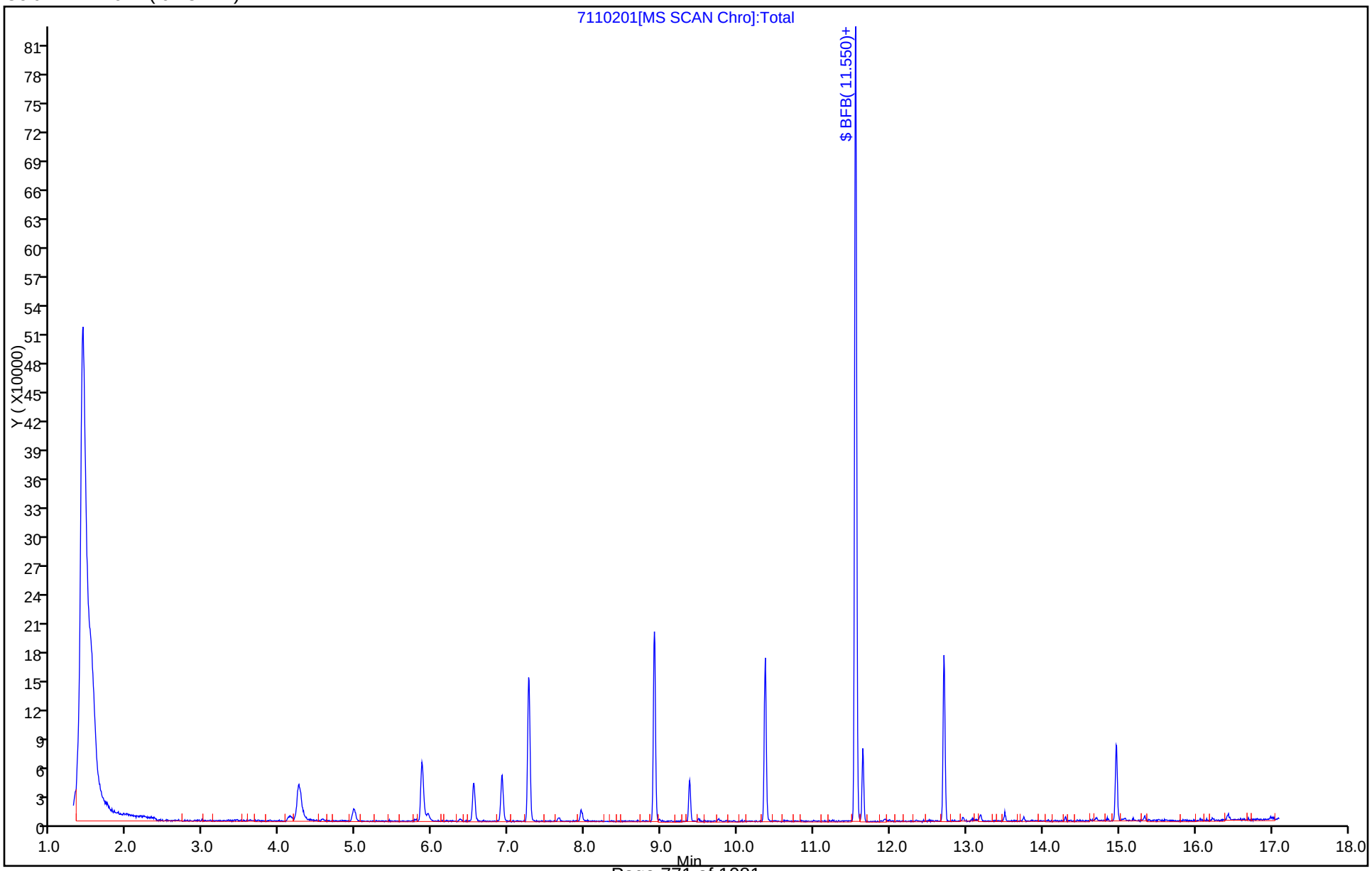
Report Date: 02-Nov-2017 08:59:57 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110201.D

Injection Date:	02-Nov-2017 04:44:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\711090n1.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 09-Nov-2017 07:17:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 09-Nov-2017 15:46:02 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	11.549	11.549	0.000	0	177458	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

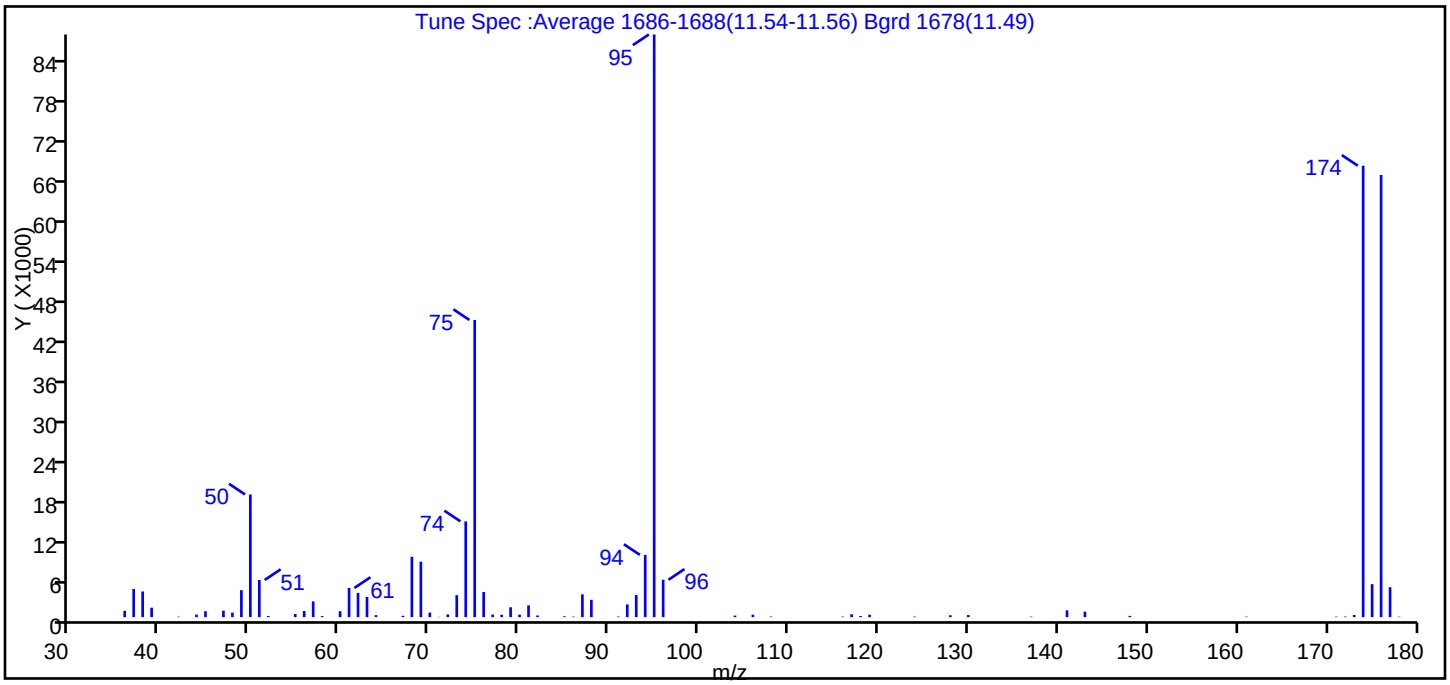
VOABFB25_00094 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\711090n1.D
Injection Date: 09-Nov-2017 07:17:30 Instrument ID: CHHP7
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.1
75	30 to 60% of m/z 95	51.0
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	77.5
175	5 to 9% of m/z 174	5.7 (7.3)
176	Greater than 95% but less than 101% of m/z 174	75.9 (98.0)
177	5 to 9% of m/z 176	5.1 (6.8)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\711090n1.D\MSVOA_LL_CHHP7.rslt\spect
Injection Date: 09-Nov-2017 07:17:30
Spectrum: Tune Spec :Average 1686-1688(11.54-11.56) Bgrd 1678(11.49)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	945	61.00	4392	81.00	1772	119.00	363
37.00	4237	62.00	3648	82.00	246	124.00	83
38.00	3860	63.00	3039	85.00	130	128.00	281
39.00	1425	64.00	298	86.00	82	130.00	312
42.00	69	67.00	201	87.00	3429	137.00	76
44.00	382	68.00	9071	88.00	2601	141.00	1021
45.00	882	69.00	8338	91.00	91	143.00	824
47.00	980	70.00	687	92.00	1910	148.00	187
48.00	683	71.00	42	93.00	3323	161.00	75
49.00	4061	72.00	399	94.00	9362	171.00	81
50.00	18448	73.00	3302	95.00	87616	172.00	93
51.00	5587	74.00	14403	96.00	5624	173.00	318
52.00	178	75.00	44688	104.00	235	174.00	67880
55.00	466	76.00	3778	106.00	363	175.00	4967
56.00	920	77.00	381	108.00	92	176.00	66496
57.00	2370	78.00	358	116.00	83	177.00	4503
58.00	161	79.00	1482	117.00	432	178.00	67
60.00	898	80.00	372	118.00	179		

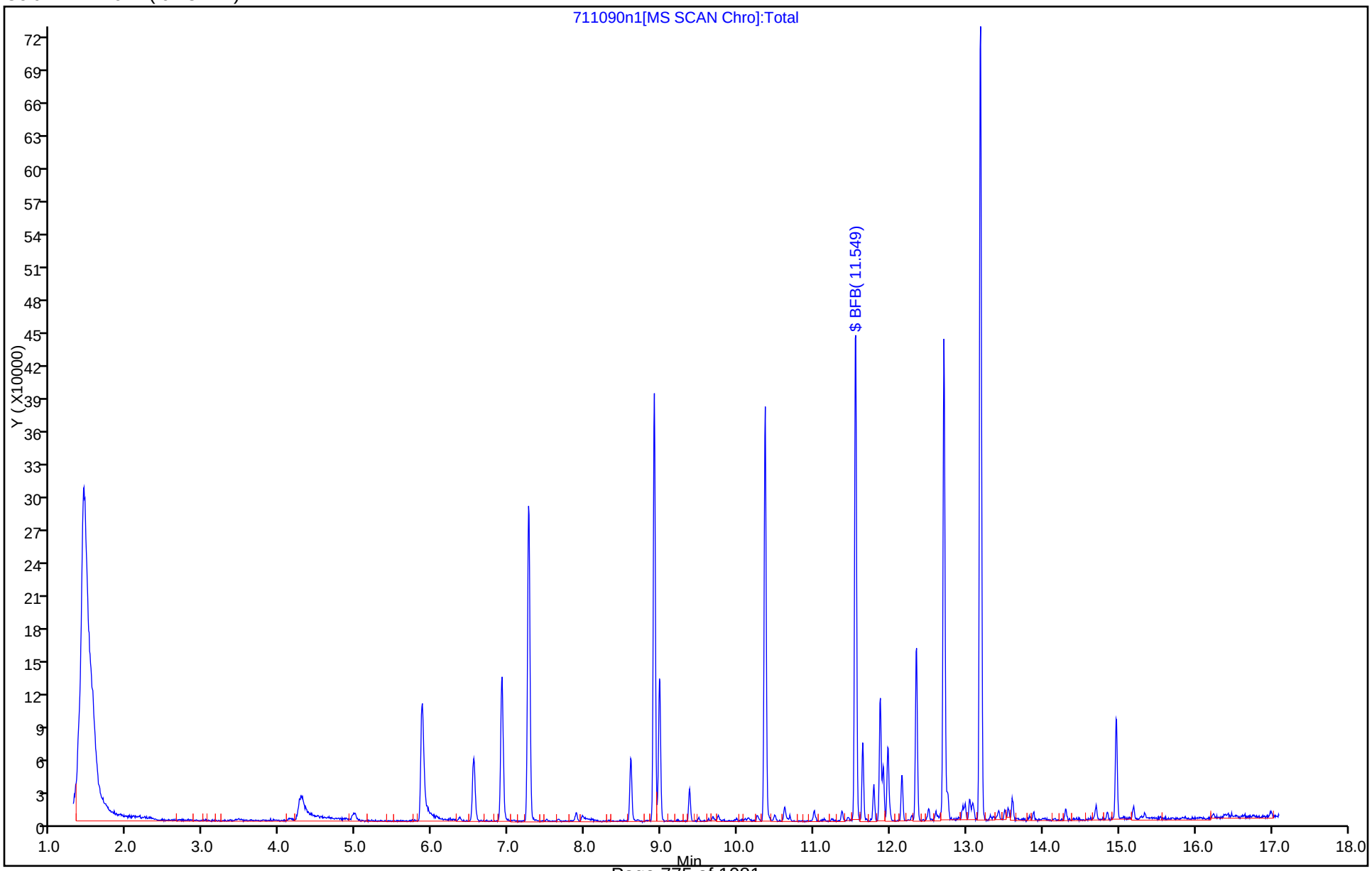
Report Date: 09-Nov-2017 15:46:03 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\711090n1.D

Injection Date:	09-Nov-2017 07:17:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP7	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.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-227642/7

Matrix: Water | Lab File ID: 7110107.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 10:49

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.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.90
75-01-4	Vinyl chloride	1.0	U	1.0	0.88
74-83-9	Bromomethane	1.0	U	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.57
79-01-6	Trichloroethene	1.0	U	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1
108-88-3	Toluene	1.0	U	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-227642/7

Matrix: Water Lab File ID: 7110107.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/01/2017 10:49

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.: 227642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		65-121
2037-26-5	Toluene-d8 (Surr)	118		73-120
460-00-4	4-Bromofluorobenzene (Surr)	105		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110107.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 01-Nov-2017 10:49:30 ALS Bottle#: 8 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 13:10:13 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 11:44:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.255	4.261	-0.006	99	191653	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.266	7.261	0.005	98	245569	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.363	10.363	0.000	90	52719	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.705	12.705	0.000	98	75073	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.542	6.543	-0.001	92	58687	50.0	48.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.920	6.908	0.012	93	93586	50.0	39.6	
$ 7 Toluene-d8 (Surr)	98	8.909	8.909	0.000	94	235989	50.0	59.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.549	11.549	0.000	85	89476	50.0	52.7	
11 Dichlorodifluoromethane	85		1.609					ND	
12 Chloromethane	50		1.786					ND	
13 Vinyl chloride	62		1.919					ND	
14 Butadiene	39		1.956					ND	
15 Bromomethane	94		2.254					ND	
16 Chloroethane	64		2.412					ND	
18 Trichlorofluoromethane	101		2.686					ND	
17 Dichlorofluoromethane	67		2.686					ND	
20 Ethyl ether	59		3.045					ND	
22 1,1-Dichloroethene	96		3.337					ND	
19 Ethanol	45		3.345					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.422					ND	
24 Acetone	43		3.428					ND	
25 Iodomethane	142		3.525					ND	
21 Acrolein	56		3.554					ND	
26 Carbon disulfide	76		3.617					ND	
28 3-Chloro-1-propene	76		3.903					ND	
30 Methyl acetate	43		3.921					ND	
31 Methylene Chloride	84		4.115					ND	
27 Isopropyl alcohol	45		4.270					ND	
29 Acetonitrile	40		4.276					ND	
32 2-Methyl-2-propanol	59		4.395					ND	
33 Acrylonitrile	53		4.505					ND	
34 trans-1,2-Dichloroethene	96		4.541					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Methyl tert-butyl ether	73		4.560					ND	
36 Hexane	57		4.967					ND	
37 1,1-Dichloroethane	63		5.180					ND	
39 2-Chloro-1,3-butadiene	53		5.484					ND	
40 Isopropyl ether TIC	45		5.492					ND	
38 Vinyl acetate	43		5.507					ND	
41 Isopropyl ether	45		5.602					ND	
44 2,2-Dichloropropane	97		5.916					ND	
45 cis-1,2-Dichloroethene	96		5.928					ND	
46 2-Butanone (MEK)	43		5.941					ND	
42 Tert-butyl ethyl ether	59		5.959					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
47 Propionitrile	54		6.114					ND	
49 Chlorobromomethane	128		6.214					ND	
51 Tetrahydrofuran	42		6.226					ND	
48 Ethyl acetate	43		6.338					ND	
52 Chloroform	83		6.360					ND	
50 Methacrylonitrile	41		6.403					ND	
53 1,1,1-Trichloroethane	97		6.512					ND	
54 Cyclohexane	56		6.585					ND	
56 Carbon tetrachloride	117		6.689					ND	
55 1,1-Dichloropropene	75		6.707					ND	
57 Isobutyl alcohol	41		6.908					ND	
62 n-Heptane	43		6.908					ND	
58 Benzene	78		6.920					ND	
59 1,2-Dichloroethane	62		6.999					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
61 Tert-amyl methyl ether	73		7.512					ND	
64 Trichloroethene	130		7.656					ND	
63 n-Butanol	56		7.677					ND	
66 Methylcyclohexane	83		7.881					ND	
65 Ethyl acrylate	55		7.890					ND	
67 1,2-Dichloropropane	63		7.924					ND	
70 1,4-Dioxane	88		8.003					ND	
68 Dibromomethane	93		8.009					ND	
69 Methyl methacrylate	69		8.181					ND	
71 Dichlorobromomethane	83		8.210					ND	
74 cis-1,3-Dichloropropene	75		8.648					ND	
73 2-Chloroethyl vinyl ether	63	8.909	8.765	0.144	6	177			NC
75 4-Methyl-2-pentanone (MIBK	43		8.800					ND	
76 Toluene	91		8.976					ND	
77 trans-1,3-Dichloropropene	75		9.232					ND	
78 Ethyl methacrylate	69		9.286					ND	
79 1,1,2-Trichloroethane	97		9.420					ND	
80 Tetrachloroethene	164		9.493					ND	
81 1,3-Dichloropropane	76		9.578					ND	
82 2-Hexanone	43		9.633					ND	
83 n-Butyl acetate	43		9.757					ND	
84 Chlorodibromomethane	129		9.791					ND	
85 Ethylene Dibromide	107		9.901					ND	
87 Chlorobenzene	112		10.394					ND	
89 1,1,1,2-Tetrachloroethane	131		10.479					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
90 Ethylbenzene	106		10.485					ND	
88 4-Chlorobenzotrifluoride	180		10.525					ND	
86 3-Chlorobenzotrifluoride	180		10.525					ND	
91 m-Xylene & p-Xylene	106		10.619					ND	
92 o-Xylene	106		11.002					ND	
93 Styrene	104		11.026					ND	
94 Bromoform	173		11.209					ND	
97 Isopropylbenzene	105		11.367					ND	
96 2-Chlorobenzotrifluoride	180		11.371					ND	
98 Cyclohexanone	55		11.423					ND	
95 Cyclohexanol	57	11.555	11.631	-0.076	0	2466			NC
100 Bromobenzene	156		11.689					ND	
99 1,1,2,2-Tetrachloroethane	83		11.689					ND	
102 trans-1,4-Dichloro-2-buten	53		11.726					ND	
101 1,2,3-Trichloropropane	110		11.738					ND	
103 N-Propylbenzene	120		11.787					ND	
104 2-Chlorotoluene	126		11.878					ND	
106 1,3,5-Trimethylbenzene	105		11.969					ND	
107 4-Chlorotoluene	126		12.000					ND	
105 3-Chlorotoluene	126		12.002					ND	
108 tert-Butylbenzene	119		12.286					ND	
110 1,2,4-Trimethylbenzene	105		12.346					ND	
111 1,2-dichloro-4-(trifluorom	214		12.490					ND	
112 sec-Butylbenzene	105		12.511					ND	
113 1,3-Dichlorobenzene	146		12.626					ND	
117 1,2,3-Trimethylbenzene	105		12.659					ND	
114 4-Isopropyltoluene	119		12.663					ND	
115 1,4-Dichlorobenzene	146		12.730					ND	
119 Benzyl chloride	91		12.891					ND	
116 2,4-Dichloro-1-(triflourom	214		12.904					ND	
118 2,5-Dichlorobenzotrifluori	214		12.904					ND	
120 n-Butylbenzene	91		13.070					ND	
121 1,2-Dichlorobenzene	146		13.089					ND	
122 1,2-Dibromo-3-Chloropropan	157		13.873					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.143					ND	
124 1,3,5-Trichlorobenzene	180		14.380					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.557					ND	
126 1,2,4-Trichlorobenzene	180		14.707					ND	
127 Hexachlorobutadiene	225		14.853					ND	
128 Naphthalene	128		14.968					ND	
129 1,2,3-Trichlorobenzene	180		15.187					ND	
130 2,3,6-Trichlorotoluene	159		15.980					ND	
131 2,4,5-Trichlorotoluene	159		16.333					ND	
146 3,4-Dichlorotoluene	1		0.000					ND	
147 Isooctane	57		0.000					ND	
149 Formaldehyde TIC	1		0.000					ND	
150 1,2 Epoxybutane TIC	1		0.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 148 Total BTEX	1		0.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 137 Tetrahydrofuran TIC	42		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

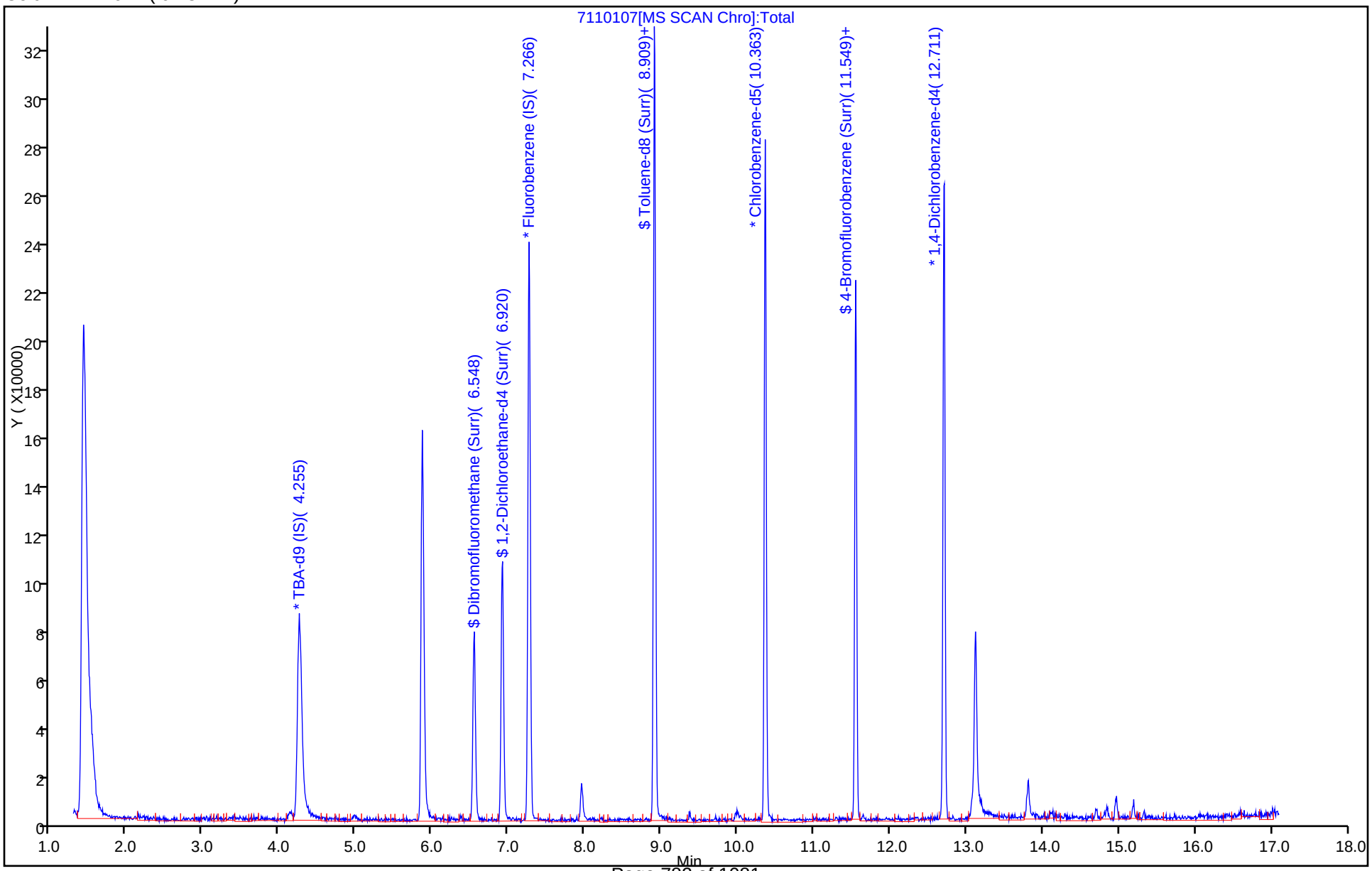
Report Date: 01-Nov-2017 13:24:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110107.D

Injection Date:	01-Nov-2017 10:49:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	mb			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110107.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 01-Nov-2017 10:49:30 ALS Bottle#: 8 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 13:10:13 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 11:44:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.3	96.59
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	39.6	79.19
$ 7 Toluene-d8 (Surr)	50.0	59.1	118.18
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.7	105.36

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-227760/5

Matrix: Water | Lab File ID: 51101D05.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 01:06

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.90
75-01-4	Vinyl chloride	1.0	U	1.0	0.88
74-83-9	Bromomethane	1.0	U	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.57
79-01-6	Trichloroethene	1.0	U	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1
108-88-3	Toluene	1.0	U	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-227760/5

Matrix: Water Lab File ID: 51101D05.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/02/2017 01:06

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 227760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		65-121
2037-26-5	Toluene-d8 (Surr)	94		73-120
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 02-Nov-2017 01:06:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019138-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 01:27:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.360	4.394	-0.034	0	227350	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.340	7.338	0.002	99	518269	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.429	10.427	0.002	87	122783	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.771	12.768	0.003	97	173668	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.622	6.614	0.008	93	125443	50.0	50.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.987	6.985	0.002	0	175492	50.0	57.7	
$ 7 Toluene-d8 (Surr)	98	8.982	8.980	0.002	94	459159	50.0	47.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.615	11.613	0.002	84	160748	50.0	45.5	
11 Dichlorodifluoromethane	85		1.688					ND	
12 Chloromethane	50		1.907					ND	
14 Butadiene	39		2.017					ND	
13 Vinyl chloride	62		2.023					ND	
15 Bromomethane	94		2.339					ND	
16 Chloroethane	64		2.430					ND	
17 Dichlorofluoromethane	67		2.752					ND	
18 Trichlorofluoromethane	101		2.765					ND	
19 Ethanol	45		2.821					ND	
20 Ethyl ether	59		3.130					ND	
21 Acrolein	56		3.318					ND	
22 1,1-Dichloroethene	96		3.415					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.507					ND	
24 Acetone	43		3.543					ND	
25 Iodomethane	142		3.622					ND	
26 Carbon disulfide	76		3.701					ND	
27 Isopropyl alcohol	45		3.816					ND	
29 Acetonitrile	41		3.981					ND	
28 3-Chloro-1-propene	76		4.011					ND	
30 Methyl acetate	43		4.030					ND	
31 Methylene Chloride	84		4.230					ND	
32 2-Methyl-2-propanol	59		4.510					ND	
33 Acrylonitrile	53		4.613					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		4.644					ND	
35 Methyl tert-butyl ether	73		4.662					ND	
36 Hexane	57		5.051					ND	
37 1,1-Dichloroethane	63		5.270					ND	
38 Vinyl acetate	43		5.319					ND	
41 Isopropyl ether	45		5.367					ND	
39 2-Chloro-1,3-butadiene	53		5.367					ND	
40 Isopropyl ether TIC	45		5.410					ND	
42 Tert-butyl ethyl ether	59		5.835					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
44 2,2-Dichloropropane	97		6.000					ND	
45 cis-1,2-Dichloroethene	96		6.012					ND	
46 2-Butanone (MEK)	43		6.030					ND	
48 Ethyl acetate	43		6.097					ND	
47 Propionitrile	54		6.103					ND	
50 Methacrylonitrile	41		6.273					ND	
49 Chlorobromomethane	128		6.292					ND	
51 Tetrahydrofuran	42		6.310					ND	
52 Chloroform	83		6.438					ND	
53 1,1,1-Trichloroethane	97		6.596					ND	
54 Cyclohexane	56		6.663					ND	
56 Carbon tetrachloride	117		6.766					ND	
55 1,1-Dichloropropene	75		6.784					ND	
57 Isobutyl alcohol	41		6.985					ND	
58 Benzene	78		6.997					ND	
59 1,2-Dichloroethane	62		7.070					ND	
151 Isooctane	57		7.149					ND	
61 Tert-amyl methyl ether	73		7.173					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43		7.350					ND	
63 n-Butanol	56		7.684					ND	
64 Trichloroethene	130		7.727					ND	
65 Ethyl acrylate	55		7.848					ND	
66 Methylcyclohexane	83		7.958					ND	
67 1,2-Dichloropropane	63		7.995					ND	
68 Dibromomethane	93		8.080					ND	
69 Methyl methacrylate	69		8.086					ND	
70 1,4-Dioxane	88		8.086					ND	
71 Dichlorobromomethane	83		8.274					ND	
73 2-Chloroethyl vinyl ether	63		8.578					ND	
74 cis-1,3-Dichloropropene	75		8.718					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.876					ND	
76 Toluene	91		9.047					ND	
77 trans-1,3-Dichloropropene	75		9.296					ND	
78 Ethyl methacrylate	69		9.357					ND	
79 1,1,2-Trichloroethane	97		9.491					ND	
80 Tetrachloroethene	164		9.558					ND	
81 1,3-Dichloropropane	76		9.649					ND	
82 2-Hexanone	43		9.710					ND	
83 n-Butyl acetate	43		9.825					ND	
84 Chlorodibromomethane	129		9.862					ND	
85 Ethylene Dibromide	107		9.971					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.433					ND	
87 Chlorobenzene	112		10.458					ND	
88 4-Chlorobenzotrifluoride	180		10.518					ND	
89 1,1,1,2-Tetrachloroethane	131		10.555					ND	
90 Ethylbenzene	106		10.561					ND	
91 m-Xylene & p-Xylene	106		10.689					ND	
92 o-Xylene	106		11.072					ND	
93 Styrene	104		11.090					ND	
94 Bromoform	173		11.279					ND	
95 Cyclohexanol	57		11.288					ND	
96 2-Chlorobenzotrifluoride	180		11.339					ND	
97 Isopropylbenzene	105		11.437					ND	
98 Cyclohexanone	55		11.528					ND	
99 1,1,2,2-Tetrachloroethane	83		11.747					ND	
100 Bromobenzene	156		11.753					ND	
102 trans-1,4-Dichloro-2-buten	53		11.783					ND	
101 1,2,3-Trichloropropane	110		11.808					ND	
103 N-Propylbenzene	120		11.856					ND	
104 2-Chlorotoluene	126		11.941					ND	
105 3-Chlorotoluene	126		12.008					ND	
106 1,3,5-Trimethylbenzene	105		12.039					ND	
107 4-Chlorotoluene	126		12.063					ND	
108 tert-Butylbenzene	119		12.349					ND	
110 1,2,4-Trimethylbenzene	105		12.410					ND	
111 1,2-dichloro-4-(trifluorom	214		12.452					ND	
112 sec-Butylbenzene	105		12.574					ND	
113 1,3-Dichlorobenzene	146		12.689					ND	
114 4-Isopropyltoluene	119		12.732					ND	
115 1,4-Dichlorobenzene	146		12.793					ND	
117 1,2,3-Trimethylbenzene	105		12.823					ND	
116 2,4-Dichloro-1-(triflourom	214		12.823					ND	
118 2,5-Dichlorobenzotrifluori	214		12.860					ND	
119 Benzyl chloride	91		12.908					ND	
120 n-Butylbenzene	91		13.139					ND	
121 1,2-Dichlorobenzene	146		13.152					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.942					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.088					ND	
124 1,3,5-Trichlorobenzene	180		14.130					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.502					ND	
126 1,2,4-Trichlorobenzene	180		14.769					ND	
127 Hexachlorobutadiene	225		14.915					ND	
128 Naphthalene	128		15.031					ND	
129 1,2,3-Trichlorobenzene	180		15.256					ND	
131 2,4,5-Trichlorotoluene	159		16.028					ND	
130 2,3,6-Trichlorotoluene	159		16.119					ND	
152 Formaldehyde TIC	1		0.000					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 154 Total BTEX	106		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
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:

VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

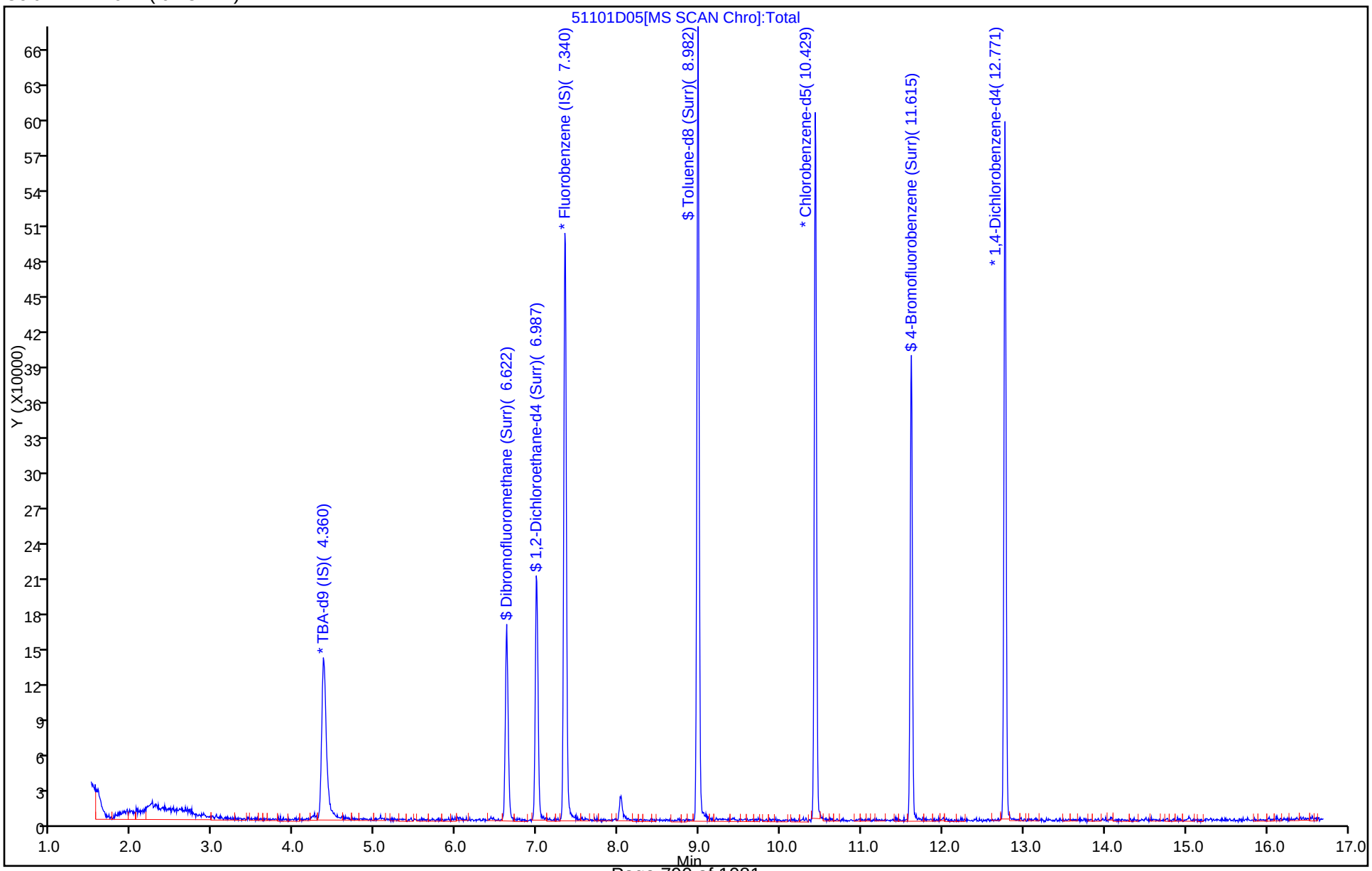
Report Date: 02-Nov-2017 20:42:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D05.D

Injection Date:	02-Nov-2017 01:06:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	MB			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)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 02-Nov-2017 01:06:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019138-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 01:27:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.3	100.61
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	57.7	115.40
$ 7 Toluene-d8 (Surr)	50.0	47.0	93.97
$ 8 4-Bromofluorobenzene (Surr)	50.0	45.5	91.09

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-227768/6

Matrix: Water | Lab File ID: 7110206.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 06:59

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.90
75-01-4	Vinyl chloride	1.0	U	1.0	0.88
74-83-9	Bromomethane	1.0	U	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.57
79-01-6	Trichloroethene	1.0	U	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1
108-88-3	Toluene	1.0	U	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-227768/6

Matrix: Water Lab File ID: 7110206.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/02/2017 06:59

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.: 227768 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		65-121
2037-26-5	Toluene-d8 (Surr)	116		73-120
460-00-4	4-Bromofluorobenzene (Surr)	106		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110206.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 02-Nov-2017 06:59:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 08:39:17 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 08:15:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.259	4.252	0.007	98	245668	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.263	0.008	98	254012	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.366	-0.005	90	55974	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.709	12.708	0.001	96	81044	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.547	6.539	0.008	92	63081	50.0	50.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.918	6.910	0.008	91	109272	50.0	44.7	
$ 7 Toluene-d8 (Surr)	98	8.913	8.912	0.001	94	245576	50.0	57.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.547	11.552	-0.005	85	95847	50.0	53.2	
11 Dichlorodifluoromethane	85		1.612					ND	
12 Chloromethane	50		1.782					ND	
13 Vinyl chloride	62		1.928					ND	
14 Butadiene	39		1.965					ND	
15 Bromomethane	94		2.275					ND	
16 Chloroethane	64		2.415					ND	
18 Trichlorofluoromethane	101		2.670					ND	
17 Dichlorofluoromethane	67		2.695					ND	
20 Ethyl ether	59		3.041					ND	
22 1,1-Dichloroethene	96		3.339					ND	
19 Ethanol	45		3.345					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.431					ND	
24 Acetone	43		3.437					ND	
25 Iodomethane	142		3.528					ND	
21 Acrolein	56		3.554					ND	
26 Carbon disulfide	76		3.625					ND	
28 3-Chloro-1-propene	76		3.905					ND	
30 Methyl acetate	43		3.929					ND	
31 Methylene Chloride	84		4.124					ND	
27 Isopropyl alcohol	45		4.270					ND	
29 Acetonitrile	40	4.259	4.276	-0.017	19	3802			NC
32 2-Methyl-2-propanol	59		4.380					ND	
33 Acrylonitrile	53		4.507					ND	
34 trans-1,2-Dichloroethene	96		4.544					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Methyl tert-butyl ether	73		4.562					ND	
36 Hexane	57		4.970					ND	
37 1,1-Dichloroethane	63		5.183					ND	
39 2-Chloro-1,3-butadiene	53		5.484					ND	
40 Isopropyl ether TIC	45		5.492					ND	
38 Vinyl acetate	43		5.507					ND	
41 Isopropyl ether	45		5.602					ND	
44 2,2-Dichloropropane	97		5.919					ND	
45 cis-1,2-Dichloroethene	96		5.931					ND	
46 2-Butanone (MEK)	43		5.937					ND	
42 Tert-butyl ethyl ether	59		5.959					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
47 Propionitrile	54		6.114					ND	
49 Chlorobromomethane	128		6.223					ND	
51 Tetrahydrofuran	42		6.229					ND	
48 Ethyl acetate	43		6.338					ND	
52 Chloroform	83		6.357					ND	
50 Methacrylonitrile	41		6.403					ND	
53 1,1,1-Trichloroethane	97		6.521					ND	
54 Cyclohexane	56		6.594					ND	
56 Carbon tetrachloride	117		6.691					ND	
55 1,1-Dichloropropene	75		6.704					ND	
57 Isobutyl alcohol	41		6.904					ND	
62 n-Heptane	43		6.910					ND	
58 Benzene	78		6.916					ND	
59 1,2-Dichloroethane	62		7.002					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
61 Tert-amyl methyl ether	73		7.512					ND	
64 Trichloroethene	130		7.653					ND	
63 n-Butanol	56		7.677					ND	
66 Methylcyclohexane	83		7.884					ND	
65 Ethyl acrylate	55		7.890					ND	
67 1,2-Dichloropropane	63		7.920					ND	
70 1,4-Dioxane	88		8.005					ND	
68 Dibromomethane	93		8.018					ND	
69 Methyl methacrylate	69		8.181					ND	
71 Dichlorobromomethane	83		8.212					ND	
74 cis-1,3-Dichloropropene	75		8.650					ND	
73 2-Chloroethyl vinyl ether	63		8.765					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802					ND	
76 Toluene	91		8.979					ND	
77 trans-1,3-Dichloropropene	75		9.228					ND	
78 Ethyl methacrylate	69		9.283					ND	
79 1,1,2-Trichloroethane	97		9.423					ND	
80 Tetrachloroethene	164		9.496					ND	
81 1,3-Dichloropropane	76		9.581					ND	
82 2-Hexanone	43		9.636					ND	
83 n-Butyl acetate	43		9.757					ND	
84 Chlorodibromomethane	129		9.794					ND	
85 Ethylene Dibromide	107		9.903					ND	
87 Chlorobenzene	112		10.390					ND	
89 1,1,1,2-Tetrachloroethane	131		10.481					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
90 Ethylbenzene	106		10.487					ND	
86 3-Chlorobenzotrifluoride	180		10.525					ND	
88 4-Chlorobenzotrifluoride	180		10.525					ND	
91 m-Xylene & p-Xylene	106		10.621					ND	
92 o-Xylene	106		11.005					ND	
93 Styrene	104		11.029					ND	
94 Bromoform	173		11.211					ND	
97 Isopropylbenzene	105		11.370					ND	
96 2-Chlorobenzotrifluoride	180		11.371					ND	
98 Cyclohexanone	55		11.423					ND	
95 Cyclohexanol	57	11.553	11.631	-0.078	0	2453			NC
100 Bromobenzene	156		11.686					ND	
99 1,1,2,2-Tetrachloroethane	83		11.686					ND	
102 trans-1,4-Dichloro-2-buten	53		11.722					ND	
101 1,2,3-Trichloropropane	110		11.741					ND	
103 N-Propylbenzene	120		11.789					ND	
104 2-Chlorotoluene	126		11.874					ND	
106 1,3,5-Trimethylbenzene	105		11.972					ND	
107 4-Chlorotoluene	126		11.996					ND	
105 3-Chlorotoluene	126		12.002					ND	
108 tert-Butylbenzene	119		12.282					ND	
110 1,2,4-Trimethylbenzene	105		12.349					ND	
111 1,2-dichloro-4-(trifluorom	214		12.490					ND	
112 sec-Butylbenzene	105		12.507					ND	
113 1,3-Dichlorobenzene	146		12.629					ND	
117 1,2,3-Trimethylbenzene	105		12.659					ND	
114 4-Isopropyltoluene	119		12.665					ND	
115 1,4-Dichlorobenzene	146		12.732					ND	
119 Benzyl chloride	91		12.891					ND	
116 2,4-Dichloro-1-(triflourom	214		12.904					ND	
118 2,5-Dichlorobenzotrifluori	214		12.904					ND	
120 n-Butylbenzene	91		13.073					ND	
121 1,2-Dichlorobenzene	146		13.085					ND	
122 1,2-Dibromo-3-Chloropropan	157		13.876					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.143					ND	
124 1,3,5-Trichlorobenzene	180		14.380					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.557					ND	
126 1,2,4-Trichlorobenzene	180	14.705	14.697	0.008	89	3384			3.36
127 Hexachlorobutadiene	225		14.843					ND	
128 Naphthalene	128		14.965					ND	
129 1,2,3-Trichlorobenzene	180		15.190					ND	
130 2,3,6-Trichlorotoluene	159		15.980					ND	
131 2,4,5-Trichlorotoluene	159		16.333					ND	
147 Isooctane	57		0.000					ND	
150 1,2 Epoxybutane TIC	1		0.000					ND	
149 Formaldehyde TIC	1		0.000					ND	
146 3,4-Dichlorotoluene	1		0.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
S 148 Total BTEX	1		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	
T 137 Tetrahydrofuran TIC	42		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

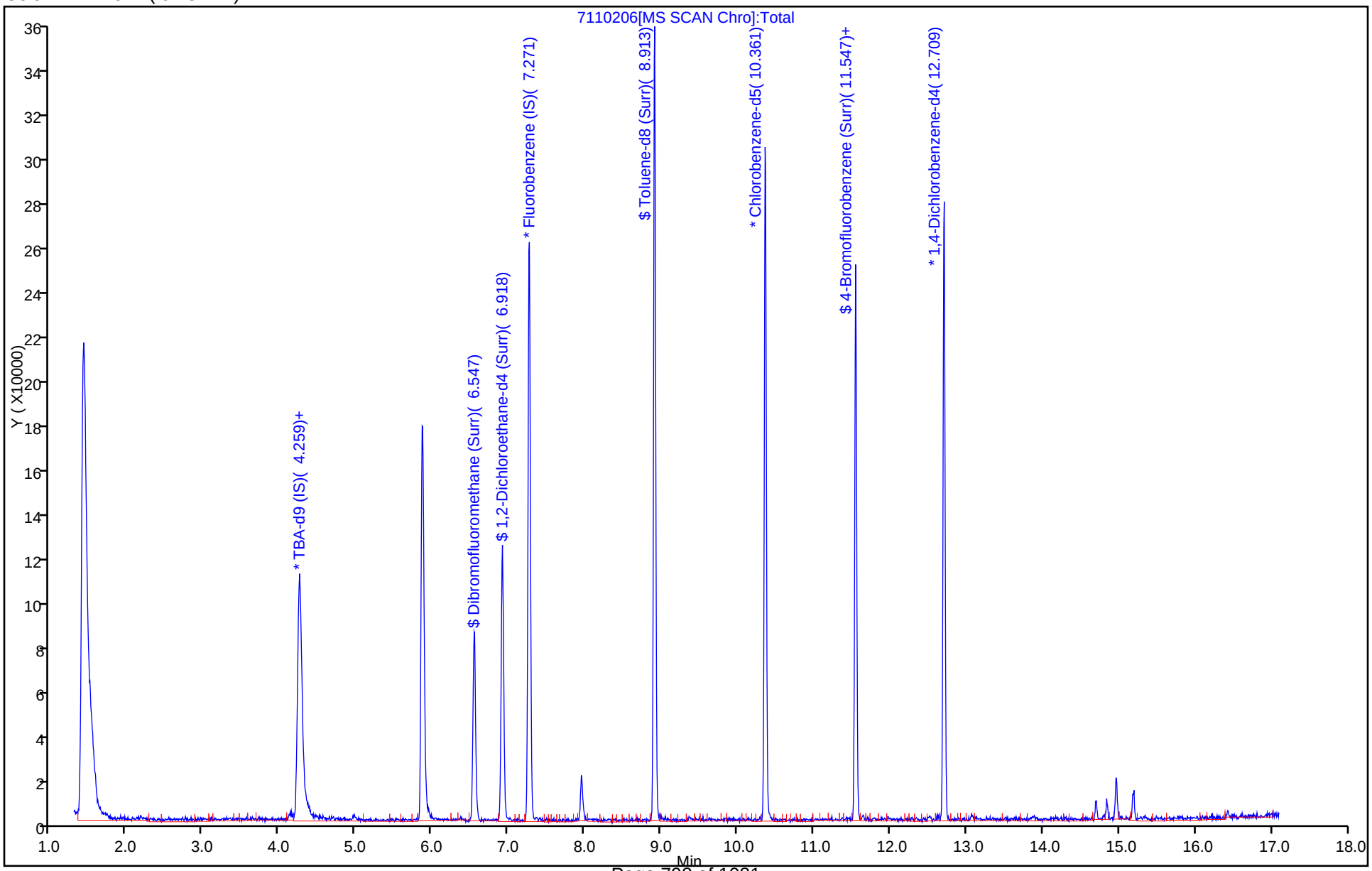
Report Date: 02-Nov-2017 08:59:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110206.D

Injection Date:	02-Nov-2017 06:59:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110206.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 02-Nov-2017 06:59:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 08:39:17 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 08:15:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.2	100.37
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	44.7	89.39
$ 7 Toluene-d8 (Surr)	50.0	57.9	115.83
$ 8 4-Bromofluorobenzene (Surr)	50.0	53.2	106.36

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-227871/5

Matrix: Water | Lab File ID: 51102D05.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2017 00:58

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227871 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.90
75-01-4	Vinyl chloride	1.0	U	1.0	0.88
74-83-9	Bromomethane	1.0	U	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.57
79-01-6	Trichloroethene	1.0	U	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1
108-88-3	Toluene	1.0	U	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-227871/5

Matrix: Water Lab File ID: 51102D05.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/03/2017 00:58

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 227871 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		65-121
2037-26-5	Toluene-d8 (Surr)	92		73-120
460-00-4	4-Bromofluorobenzene (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Nov-2017 00:58:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019153-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Nov-2017 20:10:37 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

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

First Level Reviewer: bungardf Date: 03-Nov-2017 01:29:20

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.366	4.388	-0.022	0	241706	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.340	7.337	0.003	98	543946	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.429	10.433	-0.004	87	131498	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.770	12.768	0.002	96	185242	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.622	6.620	0.002	93	133249	50.0	50.9	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.987	6.991	-0.004	0	179797	50.0	56.3	
$	7 Toluene-d8 (Surr)	98	8.981	8.979	0.002	94	481034	50.0	46.0	
$	8 4-Bromofluorobenzene (Surr	95	11.609	11.612	-0.003	86	163164	50.0	43.2	
	11 Dichlorodifluoromethane	85		1.688					ND	
	12 Chloromethane	50		1.888					ND	
	13 Vinyl chloride	62		2.010					ND	
	14 Butadiene	39		2.016					ND	
	15 Bromomethane	94		2.332					ND	
	16 Chloroethane	64		2.430					ND	
	18 Trichlorofluoromethane	101		2.722					ND	
	17 Dichlorofluoromethane	67		2.758					ND	
	19 Ethanol	45		2.821					ND	
	20 Ethyl ether	59		3.129					ND	
	21 Acrolein	56		3.324					ND	
	22 1,1-Dichloroethene	96		3.427					ND	
	23 1,1,2-Trichloro-1,2,2-trif	101		3.488					ND	
	24 Acetone	43		3.536					ND	
	25 Iodomethane	142		3.622					ND	
	26 Carbon disulfide	76		3.713					ND	
	27 Isopropyl alcohol	45		3.816					ND	
	29 Acetonitrile	41		3.981					ND	
	28 3-Chloro-1-propene	76		4.023					ND	
	30 Methyl acetate	43		4.035					ND	
	31 Methylene Chloride	84		4.236					ND	
	32 2-Methyl-2-propanol	59		4.509					ND	
	33 Acrylonitrile	53		4.619					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		4.643					ND	
35 Methyl tert-butyl ether	73		4.668					ND	
36 Hexane	57		5.063					ND	
37 1,1-Dichloroethane	63		5.276					ND	
38 Vinyl acetate	43		5.324					ND	
39 2-Chloro-1,3-butadiene	53		5.367					ND	
41 Isopropyl ether	45		5.367					ND	
40 Isopropyl ether TIC	45		5.410					ND	
42 Tert-butyl ethyl ether	59		5.835					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
45 cis-1,2-Dichloroethene	96		6.012					ND	
44 2,2-Dichloropropane	97		6.018					ND	
46 2-Butanone (MEK)	43		6.030					ND	
48 Ethyl acetate	43		6.097					ND	
47 Propionitrile	54		6.103					ND	
50 Methacrylonitrile	41		6.273					ND	
49 Chlorobromomethane	128		6.297					ND	
51 Tetrahydrofuran	42		6.310					ND	
52 Chloroform	83	6.452	6.437	0.015	7	2965		0.5628	M
53 1,1,1-Trichloroethane	97		6.595					ND	
54 Cyclohexane	56		6.662					ND	
56 Carbon tetrachloride	117		6.772					ND	
55 1,1-Dichloropropene	75		6.784					ND	
57 Isobutyl alcohol	41		6.991					ND	
58 Benzene	78		6.997					ND	
59 1,2-Dichloroethane	62		7.076					ND	
151 Isooctane	57		7.149					ND	
61 Tert-amyl methyl ether	73		7.173					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43		7.356					ND	
63 n-Butanol	56		7.684					ND	
64 Trichloroethene	130		7.727					ND	
65 Ethyl acrylate	55		7.848					ND	
66 Methylcyclohexane	83		7.958					ND	
67 1,2-Dichloropropane	63		8.000					ND	
70 1,4-Dioxane	88		8.085					ND	
68 Dibromomethane	93		8.085					ND	
69 Methyl methacrylate	69		8.086					ND	
71 Dichlorobromomethane	83		8.274					ND	
73 2-Chloroethyl vinyl ether	63		8.578					ND	
74 cis-1,3-Dichloropropene	75		8.724					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.876					ND	
76 Toluene	91		9.046					ND	
77 trans-1,3-Dichloropropene	75		9.296					ND	
78 Ethyl methacrylate	69		9.356					ND	
79 1,1,2-Trichloroethane	97		9.490					ND	
80 Tetrachloroethene	164		9.557					ND	
81 1,3-Dichloropropane	76		9.648					ND	
82 2-Hexanone	43		9.703					ND	
83 n-Butyl acetate	43		9.825					ND	
84 Chlorodibromomethane	129		9.855					ND	
85 Ethylene Dibromide	107		9.971					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.433					ND	
87 Chlorobenzene	112		10.457					ND	
88 4-Chlorobenzotrifluoride	180		10.518					ND	
89 1,1,1,2-Tetrachloroethane	131		10.554					ND	
90 Ethylbenzene	106		10.560					ND	
91 m-Xylene & p-Xylene	106		10.688					ND	
92 o-Xylene	106		11.071					ND	
93 Styrene	104		11.089					ND	
94 Bromoform	173		11.272					ND	
95 Cyclohexanol	57		11.288					ND	
96 2-Chlorobenzotrifluoride	180		11.339					ND	
97 Isopropylbenzene	105		11.436					ND	
98 Cyclohexanone	55		11.528					ND	
99 1,1,2,2-Tetrachloroethane	83		11.752					ND	
100 Bromobenzene	156		11.752					ND	
102 trans-1,4-Dichloro-2-buten	53		11.789					ND	
101 1,2,3-Trichloropropane	110		11.807					ND	
103 N-Propylbenzene	120		11.856					ND	
104 2-Chlorotoluene	126		11.941					ND	
105 3-Chlorotoluene	126		12.008					ND	
106 1,3,5-Trimethylbenzene	105		12.038					ND	
107 4-Chlorotoluene	126		12.069					ND	
108 tert-Butylbenzene	119		12.348					ND	
110 1,2,4-Trimethylbenzene	105		12.409					ND	
111 1,2-dichloro-4-(trifluorom	214		12.452					ND	
112 sec-Butylbenzene	105		12.573					ND	
113 1,3-Dichlorobenzene	146		12.689					ND	
114 4-Isopropyltoluene	119		12.731					ND	
115 1,4-Dichlorobenzene	146		12.792					ND	
116 2,4-Dichloro-1-(triflourom	214		12.823					ND	
117 1,2,3-Trimethylbenzene	105		12.823					ND	
118 2,5-Dichlorobenzotrifluori	214		12.865					ND	
119 Benzyl chloride	91		12.908					ND	
120 n-Butylbenzene	91		13.139					ND	
121 1,2-Dichlorobenzene	146		13.151					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.942					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.088					ND	
124 1,3,5-Trichlorobenzene	180		14.130					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.507					ND	
126 1,2,4-Trichlorobenzene	180		14.763					ND	
127 Hexachlorobutadiene	225		14.909					ND	
128 Naphthalene	128		15.030					ND	
129 1,2,3-Trichlorobenzene	180		15.261					ND	
131 2,4,5-Trichlorotoluene	159		16.028					ND	
130 2,3,6-Trichlorotoluene	159		16.125					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
S 154 Total BTEX	106		1.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
T 136 Mesityl oxide TIC	83		0.000					ND	
T 153 1,2 Epoxybutane TIC	42		6.253					ND	
T 137 Tetrahydrofuran TIC	42		6.253					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

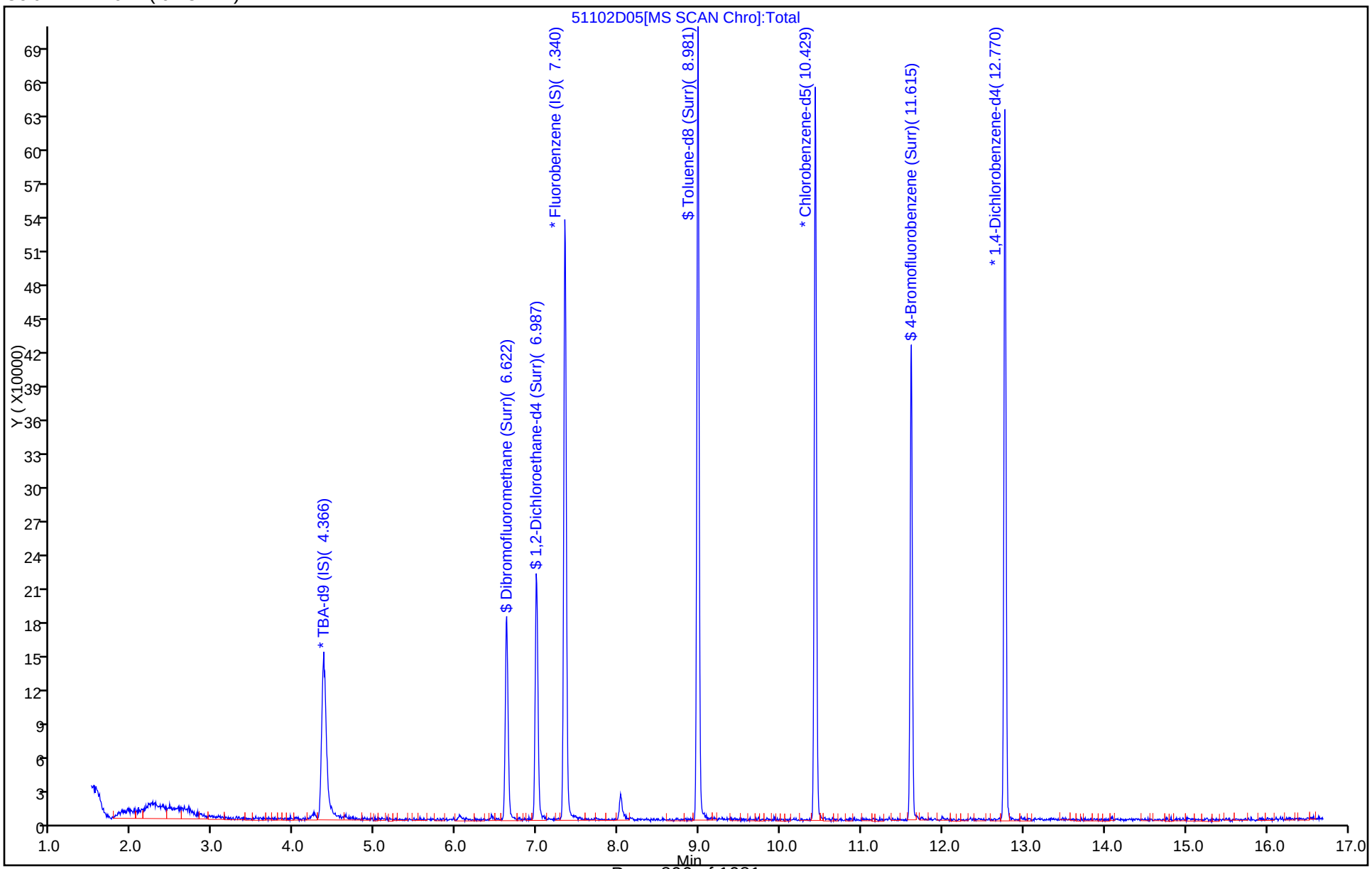
Report Date: 05-Nov-2017 20:10:50 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D05.D

Injection Date:	03-Nov-2017 00:58:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	MB			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)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Nov-2017 00:58:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019153-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Nov-2017 20:10:37 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

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

First Level Reviewer: bungardf Date: 03-Nov-2017 01:29:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.9	101.83
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	56.3	112.65
$ 7 Toluene-d8 (Surr)	50.0	46.0	91.93
$ 8 4-Bromofluorobenzene (Surr)	50.0	43.2	86.34

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

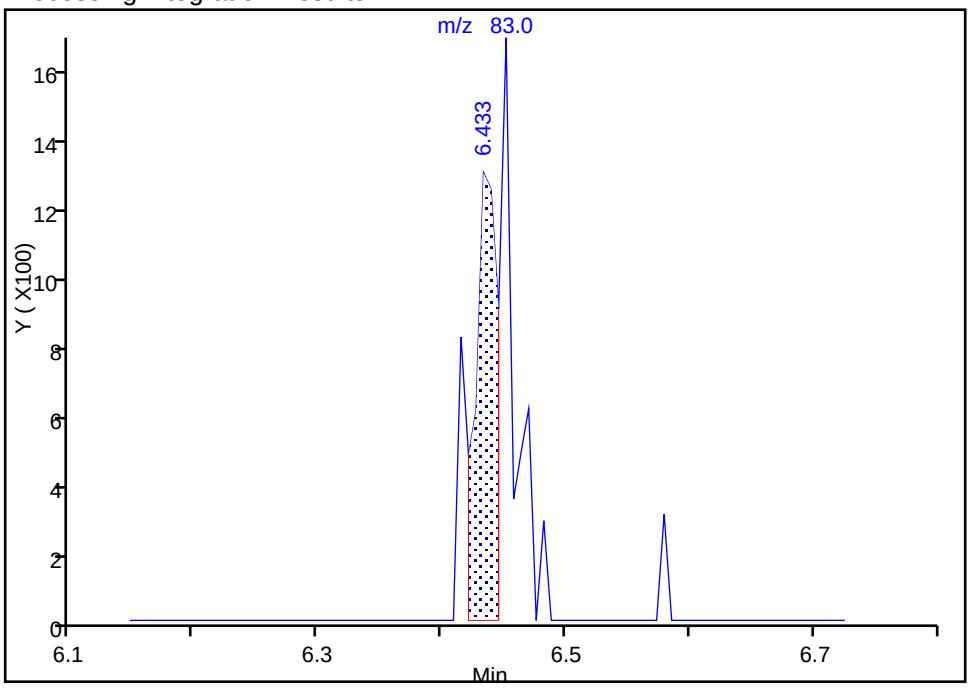
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D05.D
Injection Date: 03-Nov-2017 00:58:30 Instrument ID: CHHP5
Lims ID: MB
Client ID:
Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

52 Chloroform, CAS: 67-66-3

Signal: 1

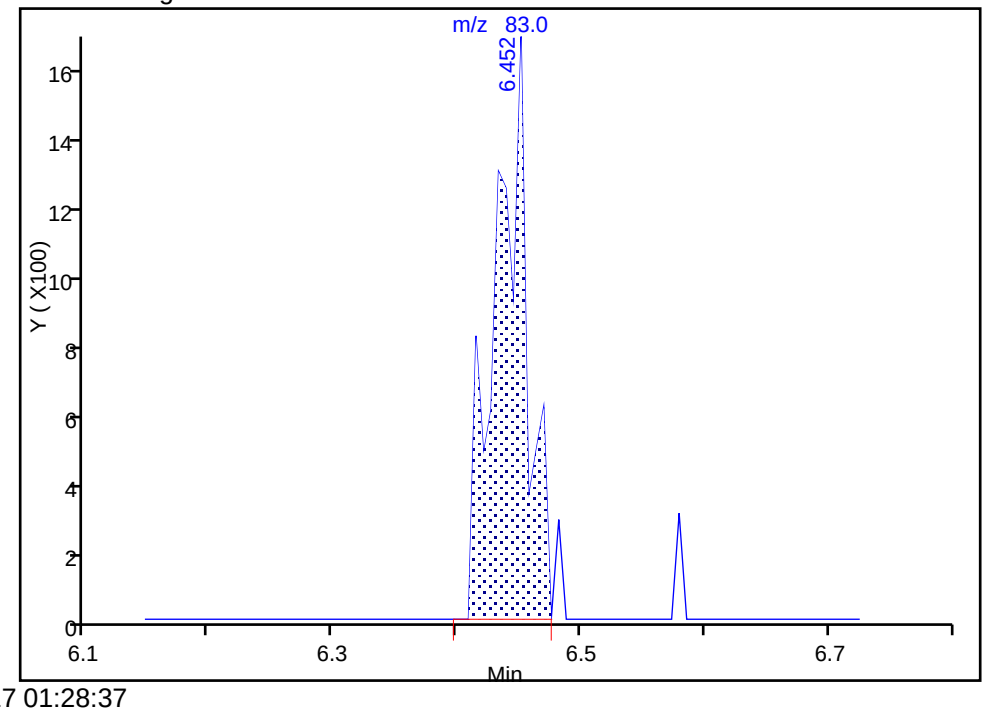
Processing Integration Results

RT: 6.43
Area: 1582
Amount: 0.300275
Amount Units: ng



Manual Integration Results

RT: 6.45
Area: 2965
Amount: 0.562779
Amount Units: ng



Reviewer: bungardf, 03-Nov-2017 01:28:37
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-228044/5

Matrix: Water | Lab File ID: 51105D05.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2017 02:14

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.: 228044 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.90
75-01-4	Vinyl chloride	1.0	U	1.0	0.88
74-83-9	Bromomethane	1.0	U	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.57
79-01-6	Trichloroethene	1.0	U	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1
108-88-3	Toluene	1.0	U	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-228044/5

Matrix: Water Lab File ID: 51105D05.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/06/2017 02:14

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.: 228044 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		65-121
2037-26-5	Toluene-d8 (Surr)	91		73-120
460-00-4	4-Bromofluorobenzene (Surr)	88		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 06-Nov-2017 02:14:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019180-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Nov-2017 20:28:31 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: bungardf Date: 06-Nov-2017 01:41:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.364	4.376	-0.012	0	275258	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.344	7.344	0.000	98	579207	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.433	10.433	0.000	87	144472	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.775	12.768	0.007	97	205573	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.626	6.620	0.006	92	146975	50.0	52.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.991	0.000	0	186687	50.0	54.9	
$ 7 Toluene-d8 (Surr)	98	8.986	8.980	0.006	95	523629	50.0	45.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.613	0.000	87	182419	50.0	43.9	
11 Dichlorodifluoromethane	85		1.688					ND	
12 Chloromethane	50		1.895					ND	
13 Vinyl chloride	62		2.017					ND	
14 Butadiene	39	2.199	2.017	0.182	1	1313		0.4208	
15 Bromomethane	94		2.375					ND	
16 Chloroethane	64		2.461					ND	
17 Dichlorofluoromethane	67		2.771					ND	
18 Trichlorofluoromethane	101		2.801					ND	
19 Ethanol	45		2.821					ND	
20 Ethyl ether	59		3.136					ND	
21 Acrolein	56		3.318					ND	
22 1,1-Dichloroethene	96		3.434					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.506					ND	
24 Acetone	43		3.531					ND	
25 Iodomethane	142		3.640					ND	
26 Carbon disulfide	76		3.719					ND	
27 Isopropyl alcohol	45		3.816					ND	
29 Acetonitrile	41		3.981					ND	
28 3-Chloro-1-propene	76		4.017					ND	
30 Methyl acetate	43		4.042					ND	
31 Methylene Chloride	84	4.242	4.236	0.006	63	3917		-2.16	
32 2-Methyl-2-propanol	59		4.510					ND	
33 Acrylonitrile	53		4.619					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		4.644					ND	
35 Methyl tert-butyl ether	73		4.662					ND	
36 Hexane	57		5.063					ND	
37 1,1-Dichloroethane	63		5.282					ND	
38 Vinyl acetate	43		5.325					ND	
39 2-Chloro-1,3-butadiene	53		5.367					ND	
41 Isopropyl ether	45		5.367					ND	
40 Isopropyl ether TIC	45		5.410					ND	
42 Tert-butyl ethyl ether	59		5.835					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
45 cis-1,2-Dichloroethene	96		6.018					ND	
44 2,2-Dichloropropane	97		6.018					ND	
46 2-Butanone (MEK)	43		6.030					ND	
48 Ethyl acetate	43	6.067	6.097	-0.030	1	533		0.0948	
47 Propionitrile	54		6.103					ND	
50 Methacrylonitrile	41		6.273					ND	
49 Chlorobromomethane	128		6.298					ND	
51 Tetrahydrofuran	42		6.310					ND	
52 Chloroform	83	6.450	6.444	0.006	3	1932		0.3444	
53 1,1,1-Trichloroethane	97		6.602					ND	
54 Cyclohexane	56		6.675					ND	
56 Carbon tetrachloride	117		6.766					ND	
55 1,1-Dichloropropene	75		6.784					ND	
57 Isobutyl alcohol	41		6.985					ND	
58 Benzene	78		6.997					ND	
59 1,2-Dichloroethane	62		7.076					ND	
151 Isooctane	57	7.338	7.149	0.189	33	20574		-0.3590	
61 Tert-amyl methyl ether	73		7.173					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43	7.368	7.356	0.012	1	274		0.0826	
63 n-Butanol	56		7.684					ND	
64 Trichloroethene	130		7.727					ND	
65 Ethyl acrylate	55		7.848					ND	
66 Methylcyclohexane	83		7.958					ND	
67 1,2-Dichloropropane	63		8.001					ND	
69 Methyl methacrylate	69		8.086					ND	
68 Dibromomethane	93		8.086					ND	
70 1,4-Dioxane	88		8.086					ND	
71 Dichlorobromomethane	83		8.274					ND	
73 2-Chloroethyl vinyl ether	63		8.578					ND	
74 cis-1,3-Dichloropropene	75		8.724					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.876					ND	
76 Toluene	91		9.053					ND	
77 trans-1,3-Dichloropropene	75		9.296					ND	
78 Ethyl methacrylate	69		9.357					ND	
79 1,1,2-Trichloroethane	97		9.491					ND	
80 Tetrachloroethene	164		9.563					ND	
81 1,3-Dichloropropane	76		9.649					ND	
82 2-Hexanone	43		9.703					ND	
83 n-Butyl acetate	43		9.825					ND	
84 Chlorodibromomethane	129		9.861					ND	
85 Ethylene Dibromide	107		9.971					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.433					ND	
87 Chlorobenzene	112		10.464					ND	
88 4-Chlorobenzotrifluoride	180		10.518					ND	
89 1,1,1,2-Tetrachloroethane	131		10.555					ND	
90 Ethylbenzene	106		10.561					ND	
91 m-Xylene & p-Xylene	106		10.689					ND	
92 o-Xylene	106		11.072					ND	
93 Styrene	104		11.090					ND	
94 Bromoform	173		11.272					ND	
95 Cyclohexanol	57		11.288					ND	
96 2-Chlorobenzotrifluoride	180		11.339					ND	
97 Isopropylbenzene	105		11.437					ND	
98 Cyclohexanone	55		11.528					ND	
99 1,1,2,2-Tetrachloroethane	83		11.747					ND	
100 Bromobenzene	156		11.753					ND	
102 trans-1,4-Dichloro-2-buten	53		11.789					ND	
101 1,2,3-Trichloropropane	110		11.808					ND	
103 N-Propylbenzene	120		11.856					ND	
104 2-Chlorotoluene	126		11.941					ND	
105 3-Chlorotoluene	126		12.008					ND	
106 1,3,5-Trimethylbenzene	105		12.039					ND	
107 4-Chlorotoluene	126		12.063					ND	
108 tert-Butylbenzene	119		12.349					ND	
110 1,2,4-Trimethylbenzene	105		12.410					ND	
111 1,2-dichloro-4-(trifluorom	214		12.452					ND	
112 sec-Butylbenzene	105		12.574					ND	
113 1,3-Dichlorobenzene	146		12.689					ND	
114 4-Isopropyltoluene	119		12.732					ND	
115 1,4-Dichlorobenzene	146		12.793					ND	
117 1,2,3-Trimethylbenzene	105		12.823					ND	
116 2,4-Dichloro-1-(triflourom	214		12.823					ND	
118 2,5-Dichlorobenzotrifluori	214		12.866					ND	
119 Benzyl chloride	91		12.908					ND	
120 n-Butylbenzene	91		13.139					ND	
121 1,2-Dichlorobenzene	146		13.151					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.942					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.088					ND	
124 1,3,5-Trichlorobenzene	180		14.130					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.502					ND	
126 1,2,4-Trichlorobenzene	180		14.769					ND	
127 Hexachlorobutadiene	225		14.915					ND	
128 Naphthalene	128		15.031					ND	
129 1,2,3-Trichlorobenzene	180		15.256					ND	
131 2,4,5-Trichlorotoluene	159		16.028					ND	
130 2,3,6-Trichlorotoluene	159		16.125					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
S 154 Total BTEX	106		1.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
T 136 Mesityl oxide TIC	83		0.000					ND	
T 153 1,2 Epoxybutane TIC	42		6.253					ND	
T 137 Tetrahydrofuran TIC	42		6.253					ND	

Reagents:

VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

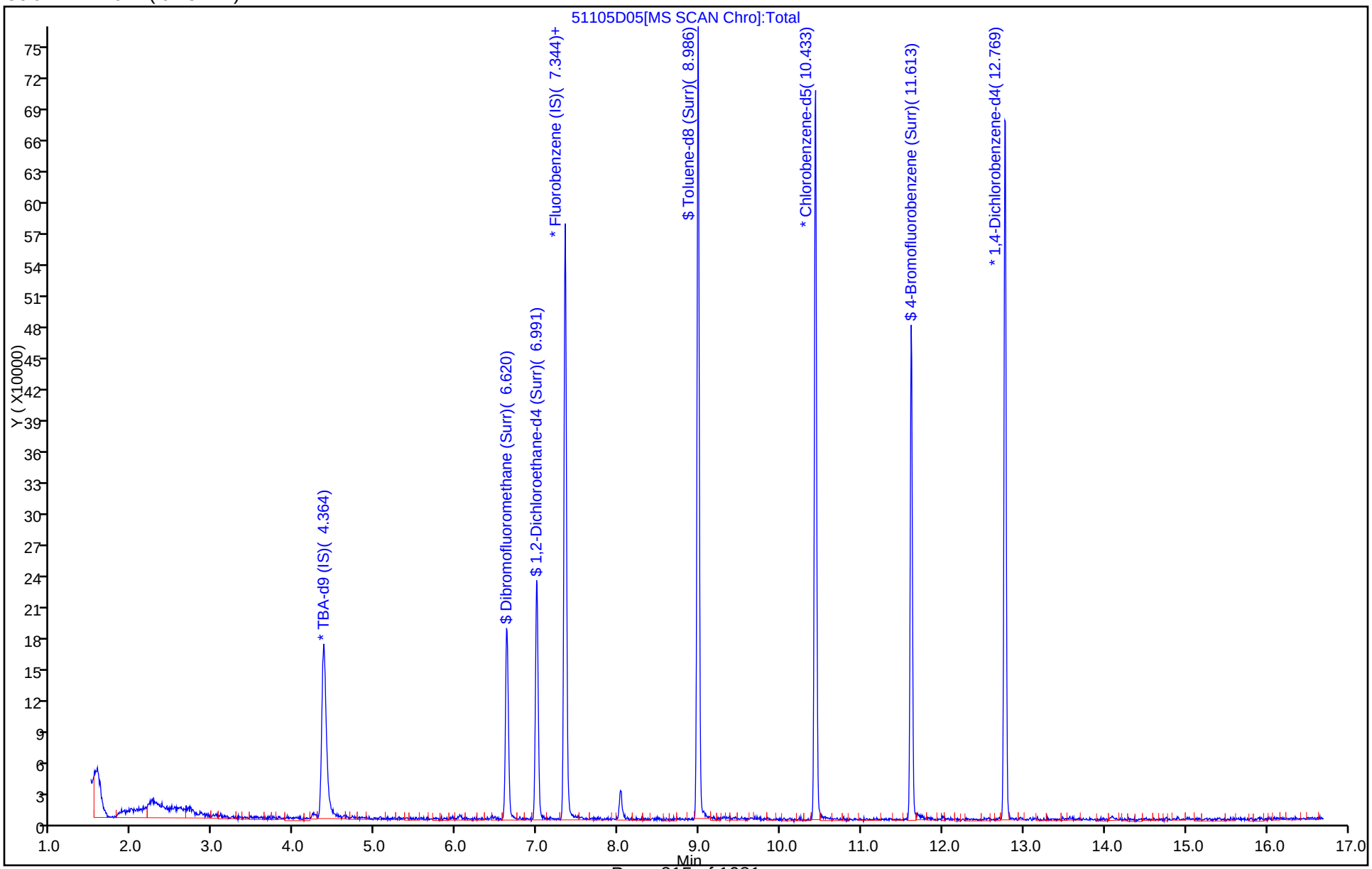
Report Date: 06-Nov-2017 20:28:41 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D05.D

Injection Date:	06-Nov-2017 02:14:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	MB			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)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 06-Nov-2017 02:14:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019180-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Nov-2017 20:28:31 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: bungardf Date: 06-Nov-2017 01:41:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	52.7	105.48
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	54.9	109.85
$ 7 Toluene-d8 (Surr)	50.0	45.5	91.08
$ 8 4-Bromofluorobenzene (Surr)	50.0	43.9	87.86

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-228278/5

Matrix: Water | Lab File ID: 51107D05.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/08/2017 02:29

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.: 228278 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.90
75-01-4	Vinyl chloride	1.0	U	1.0	0.88
74-83-9	Bromomethane	1.0	U	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.57
79-01-6	Trichloroethene	1.0	U	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1
108-88-3	Toluene	1.0	U	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-228278/5

Matrix: Water | Lab File ID: 51107D05.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/08/2017 02:29

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.: 228278 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		65-121
2037-26-5	Toluene-d8 (Surr)	90		73-120
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 08-Nov-2017 02:29:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019208-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Nov-2017 08:55:00 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

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

First Level Reviewer: bungardf Date: 08-Nov-2017 02:53:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.372	4.383	-0.011	0	252842	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.340	7.338	0.002	98	562349	50.0	50.0	M
* 3 Chlorobenzene-d5	119	10.429	10.428	0.001	86	137042	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.771	12.769	0.002	97	193669	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.622	6.621	0.001	92	130664	50.0	48.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.987	6.986	0.001	0	176333	50.0	53.4	
$ 7 Toluene-d8 (Surr)	98	8.982	8.980	0.002	94	492736	50.0	45.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.609	11.613	-0.004	83	180102	50.0	45.7	
11 Dichlorodifluoromethane	85		1.683					ND	
12 Chloromethane	50		1.889					ND	
14 Butadiene	39		2.011					ND	
13 Vinyl chloride	62		2.017					ND	
15 Bromomethane	94		2.333					ND	
16 Chloroethane	64		2.431					ND	
17 Dichlorofluoromethane	67		2.759					ND	
18 Trichlorofluoromethane	101		2.802					ND	
19 Ethanol	45		2.821					ND	
20 Ethyl ether	59		3.136					ND	
21 Acrolein	56		3.312					ND	
22 1,1-Dichloroethene	96		3.428					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.501					ND	
24 Acetone	43		3.537					ND	
25 Iodomethane	142		3.610					ND	
26 Carbon disulfide	76		3.708					ND	
27 Isopropyl alcohol	45		3.816					ND	
29 Acetonitrile	41		3.981					ND	
28 3-Chloro-1-propene	76		4.006					ND	
30 Methyl acetate	43		4.036					ND	
31 Methylene Chloride	84		4.231					ND	
32 2-Methyl-2-propanol	59		4.510					ND	
33 Acrylonitrile	53		4.608					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		4.638					ND	
35 Methyl tert-butyl ether	73		4.656					ND	
36 Hexane	57		5.052					ND	
37 1,1-Dichloroethane	63		5.271					ND	
38 Vinyl acetate	43		5.319					ND	
39 2-Chloro-1,3-butadiene	53		5.367					ND	
41 Isopropyl ether	45		5.367					ND	
40 Isopropyl ether TIC	45		5.410					ND	
42 Tert-butyl ethyl ether	59		5.835					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
44 2,2-Dichloropropane	97		6.006					ND	
45 cis-1,2-Dichloroethene	96		6.013					ND	
46 2-Butanone (MEK)	43		6.025					ND	
48 Ethyl acetate	43		6.097					ND	
47 Propionitrile	54		6.103					ND	
50 Methacrylonitrile	41		6.273					ND	
49 Chlorobromomethane	128		6.298					ND	
51 Tetrahydrofuran	42		6.310					ND	
52 Chloroform	83	6.434	6.438	-0.004	45	2991		0.5491	
53 1,1,1-Trichloroethane	97		6.596					ND	
54 Cyclohexane	56		6.657					ND	
56 Carbon tetrachloride	117		6.767					ND	
55 1,1-Dichloropropene	75		6.779					ND	
57 Isobutyl alcohol	41		6.986					ND	
58 Benzene	78		6.998					ND	
59 1,2-Dichloroethane	62		7.071					ND	
151 Isooctane	57		7.149					ND	
61 Tert-amyl methyl ether	73		7.173					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43		7.350					ND	
63 n-Butanol	56		7.684					ND	
64 Trichloroethene	130		7.721					ND	
65 Ethyl acrylate	55		7.848					ND	
66 Methylcyclohexane	83		7.959					ND	
67 1,2-Dichloropropane	63		7.995					ND	
70 1,4-Dioxane	88		8.080					ND	
69 Methyl methacrylate	69		8.086					ND	
68 Dibromomethane	93		8.086					ND	
71 Dichlorobromomethane	83		8.281					ND	
73 2-Chloroethyl vinyl ether	63		8.579					ND	
74 cis-1,3-Dichloropropene	75		8.719					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.877					ND	
76 Toluene	91		9.047					ND	
77 trans-1,3-Dichloropropene	75		9.296					ND	
78 Ethyl methacrylate	69		9.357					ND	
79 1,1,2-Trichloroethane	97		9.491					ND	
80 Tetrachloroethene	164		9.558					ND	
81 1,3-Dichloropropane	76		9.649					ND	
82 2-Hexanone	43		9.704					ND	
83 n-Butyl acetate	43		9.825					ND	
84 Chlorodibromomethane	129		9.856					ND	
85 Ethylene Dibromide	107		9.971					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.434					ND	
87 Chlorobenzene	112		10.458					ND	
88 4-Chlorobenzotrifluoride	180		10.519					ND	
89 1,1,1,2-Tetrachloroethane	131		10.549					ND	
90 Ethylbenzene	106		10.555					ND	
91 m-Xylene & p-Xylene	106		10.689					ND	
92 o-Xylene	106		11.072					ND	
93 Styrene	104		11.090					ND	
94 Bromoform	173		11.273					ND	
95 Cyclohexanol	57		11.288					ND	
96 2-Chlorobenzotrifluoride	180		11.346					ND	
97 Isopropylbenzene	105		11.437					ND	
98 Cyclohexanone	55		11.528					ND	
99 1,1,2,2-Tetrachloroethane	83		11.753					ND	
100 Bromobenzene	156		11.753					ND	
102 trans-1,4-Dichloro-2-buten	53		11.790					ND	
101 1,2,3-Trichloropropane	110		11.802					ND	
103 N-Propylbenzene	120		11.857					ND	
104 2-Chlorotoluene	126		11.936					ND	
105 3-Chlorotoluene	126		12.003					ND	
106 1,3,5-Trimethylbenzene	105		12.033					ND	
107 4-Chlorotoluene	126		12.063					ND	
108 tert-Butylbenzene	119		12.349					ND	
110 1,2,4-Trimethylbenzene	105		12.410					ND	
111 1,2-dichloro-4-(trifluorom	214		12.453					ND	
112 sec-Butylbenzene	105		12.574					ND	
113 1,3-Dichlorobenzene	146		12.696					ND	
114 4-Isopropyltoluene	119		12.726					ND	
115 1,4-Dichlorobenzene	146	12.795	12.793	0.002	1	1589		0.2304	
117 1,2,3-Trimethylbenzene	105		12.823					ND	
116 2,4-Dichloro-1-(triflourom	214		12.824					ND	
118 2,5-Dichlorobenzotrifluori	214		12.866					ND	
119 Benzyl chloride	91		12.908					ND	
120 n-Butylbenzene	91		13.134					ND	
121 1,2-Dichlorobenzene	146		13.152					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.943					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.082					ND	
124 1,3,5-Trichlorobenzene	180		14.130					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.502					ND	
126 1,2,4-Trichlorobenzene	180		14.764					ND	
127 Hexachlorobutadiene	225		14.910					ND	
128 Naphthalene	128	15.039	15.031	0.008	1	1130		0.1133	
129 1,2,3-Trichlorobenzene	180		15.256					ND	
131 2,4,5-Trichlorotoluene	159		16.028					ND	
130 2,3,6-Trichlorotoluene	159		16.126					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
S 154 Total BTEX	106		1.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
T 136 Mesityl oxide TIC	83		0.000					ND	
T 153 1,2 Epoxybutane TIC	42		6.253					ND	
T 137 Tetrahydrofuran TIC	42		6.253					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

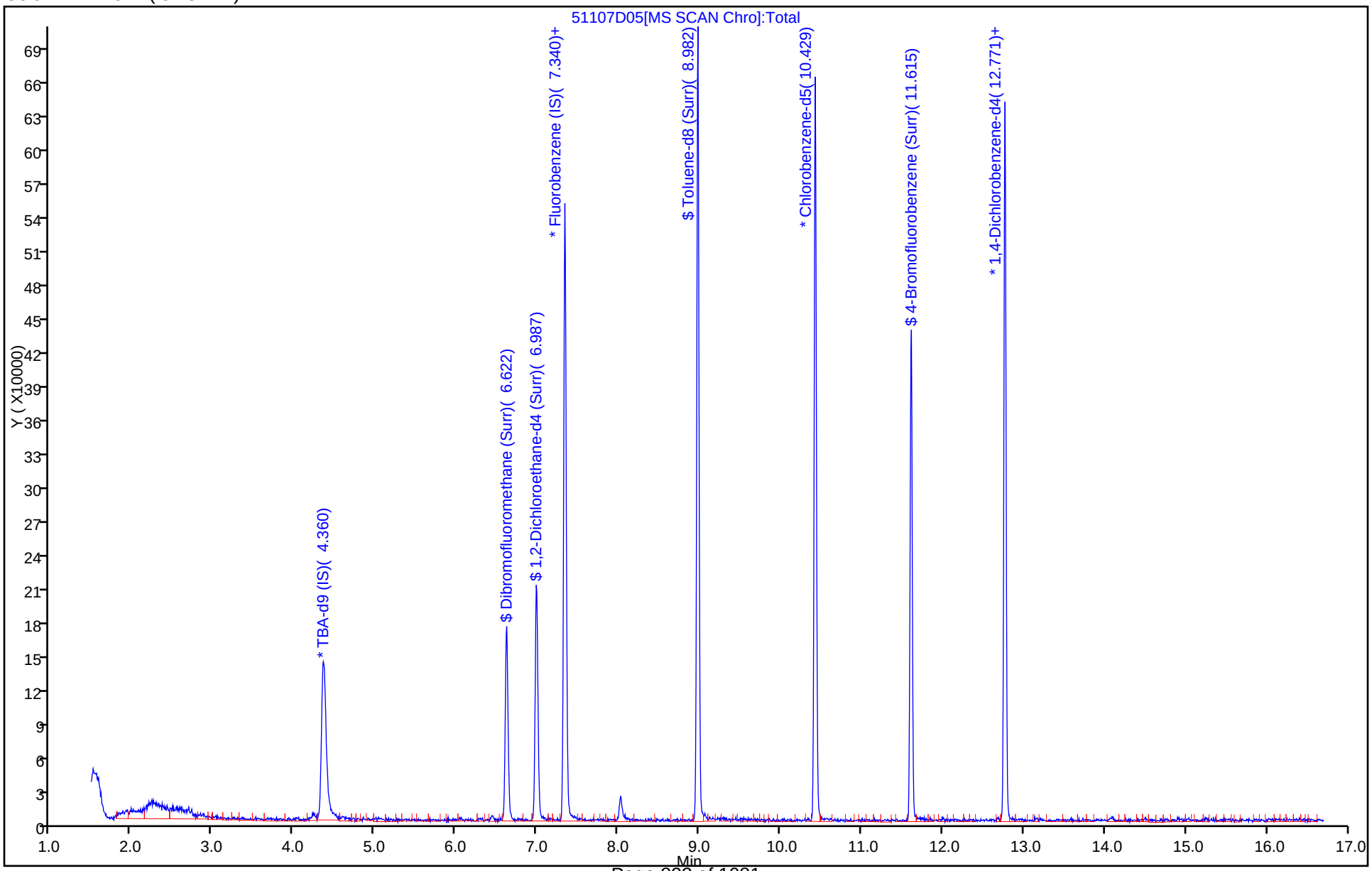
Report Date: 08-Nov-2017 08:55:25 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D05.D

Injection Date:	08-Nov-2017 02:29:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	MB			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)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 08-Nov-2017 02:29:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019208-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Nov-2017 08:55:00 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

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

First Level Reviewer: bungardf Date: 08-Nov-2017 02:53:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.3	96.58
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	53.4	106.87
$ 7 Toluene-d8 (Surr)	50.0	45.2	90.35
$ 8 4-Bromofluorobenzene (Surr)	50.0	45.7	91.44

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

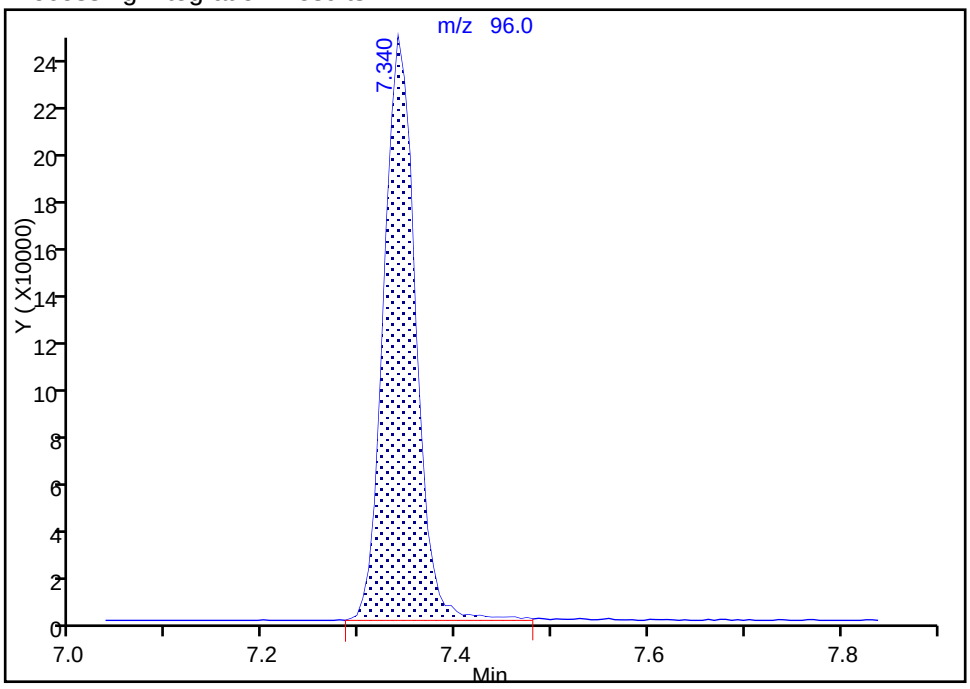
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D05.D				
Injection Date:	08-Nov-2017 02:29:30	Instrument ID:	CHHP5		
Lims ID:	MB				
Client ID:					
Operator ID:	034635	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

* 2 Fluorobenzene (IS), CAS: 462-06-6

Signal: 1

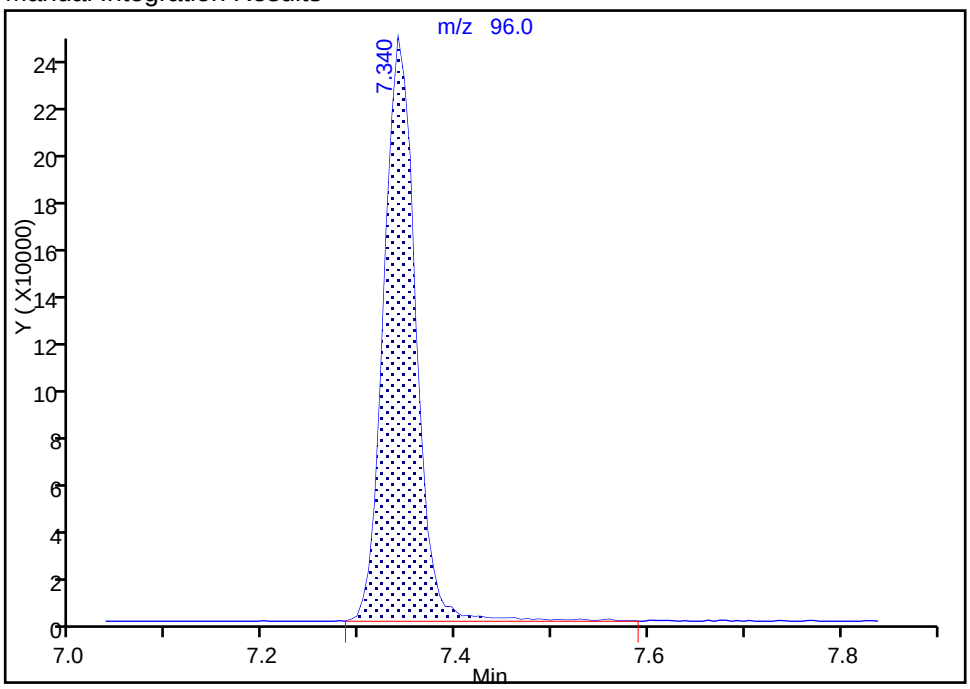
Processing Integration Results

RT: 7.34
Area: 559392
Amount: 50.000000
Amount Units: ng



Manual Integration Results

RT: 7.34
Area: 562349
Amount: 50.000000
Amount Units: ng



Reviewer: bungardf, 08-Nov-2017 03:34:26

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-228533/8

Matrix: Water | Lab File ID: 711090n8.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/09/2017 11:36

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.: 228533 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.90
75-01-4	Vinyl chloride	1.0	U	1.0	0.88
74-83-9	Bromomethane	1.0	U	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.55
67-64-1	Acetone	5.0	U	5.0	3.4
75-15-0	Carbon disulfide	1.0	U	1.0	0.88
75-09-2	Methylene Chloride	1.0	U	1.0	0.36
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.63
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.60
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.88
71-43-2	Benzene	1.0	U	1.0	0.60
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.57
79-01-6	Trichloroethene	1.0	U	1.0	0.69
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.66
75-27-4	Bromodichloromethane	1.0	U	1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1
108-88-3	Toluene	1.0	U	1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.58
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	0.47
591-78-6	2-Hexanone	5.0	U	5.0	3.3
124-48-1	Dibromochloromethane	1.0	U	1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50
108-90-7	Chlorobenzene	1.0	U	1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.51
1330-20-7	Xylenes, Total	2.0	U	2.0	0.89
100-42-5	Styrene	1.0	U	1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-228533/8

Matrix: Water Lab File ID: 711090n8.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/09/2017 11:36

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.: 228533 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60
107-13-1	Acrylonitrile	20	U	20	7.8
123-91-1	1,4-Dioxane	200	U	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		65-121
2037-26-5	Toluene-d8 (Surr)	113		73-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\711090n8.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 09-Nov-2017 11:36:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 09-Nov-2017 15:46:02 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 09-Nov-2017 15:44:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.244	4.251	-0.007	99	164920	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.267	7.263	0.004	98	186269	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.365	-0.001	90	40347	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.706	12.707	-0.001	97	58263	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.537	6.539	-0.002	92	41850	50.0	45.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.914	6.910	0.004	91	77571	50.0	43.3	
$ 7 Toluene-d8 (Surr)	98	8.910	8.911	-0.001	93	172299	50.0	56.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.544	11.545	-0.001	87	64395	50.0	49.3	
11 Dichlorodifluoromethane	85		1.617					ND	
12 Chloromethane	50		1.793					ND	
13 Vinyl chloride	62		1.921					ND	
14 Butadiene	39		1.970					ND	
15 Bromomethane	94		2.280					ND	
16 Chloroethane	64		2.414					ND	
17 Dichlorofluoromethane	67		2.682					ND	
18 Trichlorofluoromethane	101		2.694					ND	
20 Ethyl ether	59		3.041					ND	
22 1,1-Dichloroethene	96		3.345					ND	
19 Ethanol	45		3.345					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.430					ND	
24 Acetone	43		3.436					ND	
25 Iodomethane	142		3.533					ND	
21 Acrolein	56		3.554					ND	
26 Carbon disulfide	76		3.625					ND	
28 3-Chloro-1-propene	76		3.917					ND	
30 Methyl acetate	43		3.923					ND	
31 Methylene Chloride	84		4.123					ND	
27 Isopropyl alcohol	45		4.270					ND	
29 Acetonitrile	40		4.276					ND	
32 2-Methyl-2-propanol	59		4.373					ND	
33 Acrylonitrile	53		4.507					ND	
34 trans-1,2-Dichloroethene	96		4.555					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Methyl tert-butyl ether	73		4.561					ND	
36 Hexane	57		4.975					ND	
37 1,1-Dichloroethane	63		5.182					ND	
39 2-Chloro-1,3-butadiene	53		5.484					ND	
40 Isopropyl ether TIC	45		5.492					ND	
38 Vinyl acetate	43		5.507					ND	
41 Isopropyl ether	45		5.602					ND	
45 cis-1,2-Dichloroethene	96		5.930					ND	
44 2,2-Dichloropropane	97		5.930					ND	
46 2-Butanone (MEK)	43		5.936					ND	
42 Tert-butyl ethyl ether	59		5.959					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
47 Propionitrile	54		6.114					ND	
49 Chlorobromomethane	128		6.210					ND	
51 Tetrahydrofuran	42		6.228					ND	
48 Ethyl acetate	43		6.338					ND	
52 Chloroform	83		6.362					ND	
50 Methacrylonitrile	41		6.403					ND	
53 1,1,1-Trichloroethane	97		6.514					ND	
54 Cyclohexane	56		6.587					ND	
56 Carbon tetrachloride	117		6.691					ND	
55 1,1-Dichloropropene	75		6.709					ND	
57 Isobutyl alcohol	41		6.904					ND	
62 n-Heptane	43		6.904					ND	
58 Benzene	78		6.922					ND	
59 1,2-Dichloroethane	62		6.995					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
61 Tert-amyl methyl ether	73		7.512					ND	
64 Trichloroethene	130		7.646					ND	
63 n-Butanol	56		7.677					ND	
66 Methylcyclohexane	83		7.889					ND	
65 Ethyl acrylate	55		7.890					ND	
67 1,2-Dichloropropane	63		7.926					ND	
70 1,4-Dioxane	88		8.011					ND	
68 Dibromomethane	93		8.011					ND	
69 Methyl methacrylate	69		8.181					ND	
71 Dichlorobromomethane	83		8.205					ND	
74 cis-1,3-Dichloropropene	75		8.650					ND	
73 2-Chloroethyl vinyl ether	63		8.765					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.802					ND	
76 Toluene	91		8.978					ND	
77 trans-1,3-Dichloropropene	75		9.227					ND	
78 Ethyl methacrylate	69		9.282					ND	
79 1,1,2-Trichloroethane	97		9.422					ND	
80 Tetrachloroethene	164		9.495					ND	
81 1,3-Dichloropropane	76		9.580					ND	
82 2-Hexanone	43		9.635					ND	
83 n-Butyl acetate	43		9.757					ND	
84 Chlorodibromomethane	129		9.787					ND	
85 Ethylene Dibromide	107		9.909					ND	
87 Chlorobenzene	112		10.389					ND	
89 1,1,1,2-Tetrachloroethane	131		10.481					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
90 Ethylbenzene	106		10.493					ND	
88 4-Chlorobenzotrifluoride	180		10.525					ND	
86 3-Chlorobenzotrifluoride	180		10.525					ND	
91 m-Xylene & p-Xylene	106		10.621					ND	
92 o-Xylene	106		11.004					ND	
93 Styrene	104		11.022					ND	
94 Bromoform	173		11.211					ND	
97 Isopropylbenzene	105		11.369					ND	
96 2-Chlorobenzotrifluoride	180		11.371					ND	
98 Cyclohexanone	55		11.423					ND	
95 Cyclohexanol	57		11.631					ND	
100 Bromobenzene	156		11.685					ND	
99 1,1,2,2-Tetrachloroethane	83		11.685					ND	
102 trans-1,4-Dichloro-2-buten	53		11.722					ND	
101 1,2,3-Trichloropropane	110		11.740					ND	
103 N-Propylbenzene	120		11.789					ND	
104 2-Chlorotoluene	126		11.874					ND	
106 1,3,5-Trimethylbenzene	105		11.971					ND	
107 4-Chlorotoluene	126		12.002					ND	
105 3-Chlorotoluene	126		12.002					ND	
108 tert-Butylbenzene	119		12.281					ND	
110 1,2,4-Trimethylbenzene	105		12.342					ND	
111 1,2-dichloro-4-(trifluorom	214		12.490					ND	
112 sec-Butylbenzene	105		12.506					ND	
113 1,3-Dichlorobenzene	146		12.628					ND	
117 1,2,3-Trimethylbenzene	105		12.659					ND	
114 4-Isopropyltoluene	119		12.665					ND	
115 1,4-Dichlorobenzene	146		12.732					ND	
119 Benzyl chloride	91		12.891					ND	
116 2,4-Dichloro-1-(triflourom	214		12.904					ND	
118 2,5-Dichlorobenzotrifluori	214		12.904					ND	
120 n-Butylbenzene	91		13.072					ND	
121 1,2-Dichlorobenzene	146		13.090					ND	
122 1,2-Dibromo-3-Chloropropan	157		13.881					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.143					ND	
124 1,3,5-Trichlorobenzene	180		14.380					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.557					ND	
126 1,2,4-Trichlorobenzene	180		14.703					ND	
127 Hexachlorobutadiene	225		14.849					ND	
128 Naphthalene	128	14.963	14.964	-0.001	97	7500		1.59	
129 1,2,3-Trichlorobenzene	180		15.195					ND	
130 2,3,6-Trichlorotoluene	159		15.980					ND	
131 2,4,5-Trichlorotoluene	159		16.333					ND	
150 1,2 Epoxybutane TIC	1		0.000					ND	
146 3,4-Dichlorotoluene	1		0.000					ND	
149 Formaldehyde TIC	1		0.000					ND	
147 Isooctane	57		0.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 148 Total BTEX	1		0.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 137 Tetrahydrofuran TIC	42		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	

Reagents:

VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

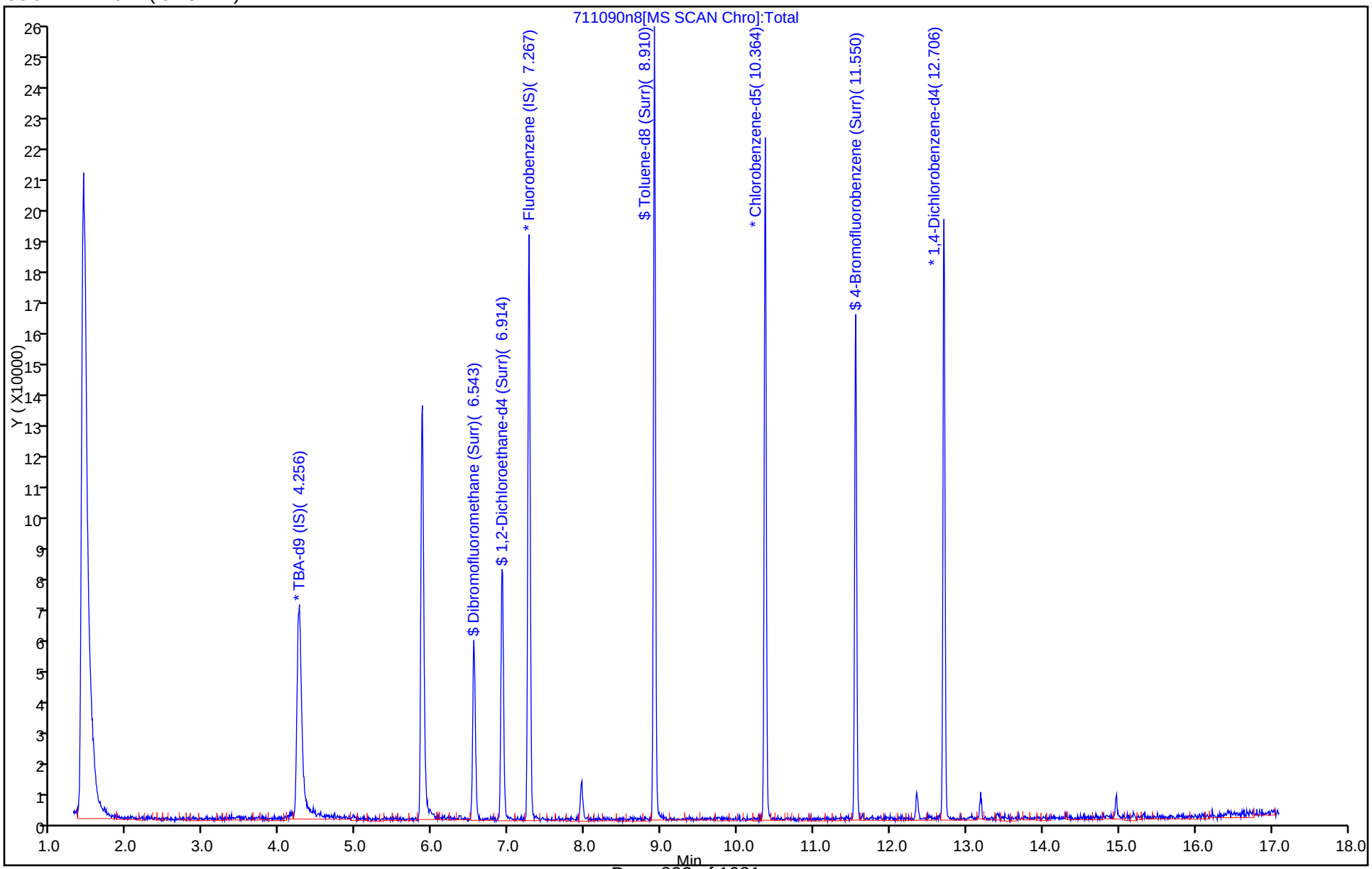
Report Date: 09-Nov-2017 15:46:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\711090n8.D

Injection Date:	09-Nov-2017 11:36:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	mb			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\711090n8.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 09-Nov-2017 11:36:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 09-Nov-2017 15:46:02 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 09-Nov-2017 15:44:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	45.4	90.81
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	43.3	86.54
$ 7 Toluene-d8 (Surr)	50.0	56.4	112.74
$ 8 4-Bromofluorobenzene (Surr)	50.0	49.3	98.62

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227642/4

Matrix: Water | Lab File ID: 7110104.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 09:24

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.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	8.12		1.0	0.90
75-01-4	Vinyl chloride	6.80		1.0	0.88
74-83-9	Bromomethane	8.50		1.0	0.89
75-00-3	Chloroethane	9.22		1.0	0.90
75-35-4	1,1-Dichloroethene	7.00		1.0	0.55
67-64-1	Acetone	18.0		5.0	3.4
75-15-0	Carbon disulfide	10.2		1.0	0.88
75-09-2	Methylene Chloride	10.6		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	10.4		1.0	0.67
1634-04-4	Methyl tert-butyl ether	8.69		1.0	0.59
75-34-3	1,1-Dichloroethane	9.10		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	10.0		1.0	0.71
74-97-5	Bromochloromethane	9.26		1.0	0.63
78-93-3	2-Butanone (MEK)	22.9		5.0	2.6
67-66-3	Chloroform	8.51		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.01		1.0	0.60
56-23-5	Carbon tetrachloride	9.53		1.0	0.88
71-43-2	Benzene	11.3		1.0	0.60
107-06-2	1,2-Dichloroethane	7.48		1.0	0.57
79-01-6	Trichloroethene	10.5		1.0	0.69
78-87-5	1,2-Dichloropropane	10.4		1.0	0.66
75-27-4	Bromodichloromethane	8.83		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	9.42		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	25.8		5.0	3.1
108-88-3	Toluene	12.3		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	8.66		1.0	0.58
79-00-5	1,1,2-Trichloroethane	11.1		1.0	0.45
127-18-4	Tetrachloroethene	9.36		1.0	0.47
591-78-6	2-Hexanone	24.3		5.0	3.3
124-48-1	Dibromochloromethane	10.6		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.73		1.0	0.50
108-90-7	Chlorobenzene	11.8		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.70		1.0	0.57
100-41-4	Ethylbenzene	10.5		1.0	0.51
1330-20-7	Xylenes, Total	20.9		2.0	0.89
100-42-5	Styrene	10.4		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-227642/4

Matrix: Water Lab File ID: 7110104.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/01/2017 09:24

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.: 227642 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	11.1		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	10.8		1.0	0.60
107-13-1	Acrylonitrile	110		20	7.8
123-91-1	1,4-Dioxane	215		200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		65-121
2037-26-5	Toluene-d8 (Surr)	107		73-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110104.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 01-Nov-2017 09:24:30 ALS Bottle#: 5 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 13:10:13 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 10:24:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.262	4.261	0.001	98	139165	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.267	7.261	0.006	97	155101	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.363	0.001	90	37459	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.706	12.705	0.001	94	46252	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.549	6.543	0.006	94	38336	50.0	49.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.914	6.908	0.006	67	64428	50.0	43.2	
$ 7 Toluene-d8 (Surr)	98	8.910	8.909	0.001	94	151482	50.0	53.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.550	11.549	0.001	86	60821	50.0	50.2	
11 Dichlorodifluoromethane	85	1.628	1.609	0.019	99	49559	50.0	41.6	
12 Chloromethane	50	1.786	1.786	0.000	100	67690	50.0	40.6	
13 Vinyl chloride	62	1.920	1.919	0.001	98	45595	50.0	34.0	
14 Butadiene	39	1.956	1.956	0.000	89	49240	50.0	52.2	
15 Bromomethane	94	2.242	2.254	-0.012	92	21795	50.0	42.5	
16 Chloroethane	64	2.425	2.412	0.013	96	20770	50.0	46.1	
18 Trichlorofluoromethane	101	2.723	2.686	0.037	76	49845	50.0	45.0	
17 Dichlorofluoromethane	67	2.686	2.686	0.000	97	57614	50.0	44.0	
20 Ethyl ether	59	3.039	3.045	-0.006	98	32597	50.0	28.6	
22 1,1-Dichloroethene	96	3.343	3.337	0.006	92	33444	50.0	35.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.435	3.422	0.013	81	36196	50.0	48.0	
24 Acetone	43	3.435	3.428	0.007	100	64103	100.0	89.9	
25 Iodomethane	142	3.526	3.525	0.001	98	59220	50.0	65.3	
26 Carbon disulfide	76	3.642	3.617	0.025	100	117115	50.0	50.9	
28 3-Chloro-1-propene	76	3.903	3.903	0.000	89	26948	50.0	51.8	
30 Methyl acetate	43	3.934	3.921	0.013	98	128738	100.0	96.7	
31 Methylene Chloride	84	4.140	4.115	0.025	98	51610	50.0	53.0	
32 2-Methyl-2-propanol	59	4.402	4.395	0.007	96	77014	500.0	443.7	
33 Acrylonitrile	53	4.512	4.505	0.007	99	311261	500.0	548.2	
34 trans-1,2-Dichloroethene	96	4.554	4.541	0.013	95	40175	50.0	51.9	
35 Methyl tert-butyl ether	73	4.572	4.560	0.012	98	144115	50.0	43.5	
36 Hexane	57	4.974	4.967	0.007	93	61050	50.0	56.3	
37 1,1-Dichloroethane	63	5.193	5.180	0.013	96	91925	50.0	45.5	
44 2,2-Dichloropropane	97	5.929	5.916	0.013	48	8781	50.0	45.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 cis-1,2-Dichloroethene	96	5.929	5.928	0.001	79	50494	50.0	50.0	
46 2-Butanone (MEK)	43	5.941	5.941	0.001	98	109334	100.0	114.6	
49 Chlorobromomethane	128	6.215	6.214	0.001	91	23376	50.0	46.3	
51 Tetrahydrofuran	42	6.233	6.226	0.007	92	60129	100.0	101.8	
52 Chloroform	83	6.367	6.360	0.007	95	83418	50.0	42.6	
53 1,1,1-Trichloroethane	97	6.525	6.512	0.013	97	59668	50.0	45.0	
54 Cyclohexane	56	6.592	6.585	0.007	94	79993	50.0	55.9	
56 Carbon tetrachloride	117	6.695	6.689	0.006	75	44202	50.0	47.6	
55 1,1-Dichloropropene	75	6.708	6.707	0.001	93	61438	50.0	47.4	
57 Isobutyl alcohol	41	6.914	6.908	0.006	97	56402	1250.0	926.3	
62 n-Heptane	43	6.914	6.908	0.006	72	87787	50.0	48.9	
58 Benzene	78	6.921	6.920	0.001	96	197071	50.0	56.6	
59 1,2-Dichloroethane	62	7.000	6.999	0.001	97	70383	50.0	37.4	
64 Trichloroethene	130	7.651	7.656	-0.005	94	50054	50.0	52.5	
66 Methylcyclohexane	83	7.894	7.881	0.013	92	63600	50.0	55.3	
67 1,2-Dichloropropane	63	7.924	7.924	0.000	94	52728	50.0	52.0	
70 1,4-Dioxane	88	8.010	8.003	0.007	47	10583	1000.0	1072.6	
68 Dibromomethane	93	8.016	8.009	0.007	94	28601	50.0	45.7	
71 Dichlorobromomethane	83	8.210	8.210	0.000	99	62241	50.0	44.1	
74 cis-1,3-Dichloropropene	75	8.654	8.648	0.006	92	79624	50.0	47.1	
75 4-Methyl-2-pentanone (MIBK	43	8.800	8.800	0.000	97	223773	100.0	128.8	
76 Toluene	91	8.977	8.976	0.001	98	197140	50.0	61.3	
77 trans-1,3-Dichloropropene	75	9.232	9.232	0.000	96	65720	50.0	43.3	
78 Ethyl methacrylate	69	9.287	9.286	0.001	92	83146	50.0	49.9	
79 1,1,2-Trichloroethane	97	9.427	9.420	0.007	91	48005	50.0	55.4	
80 Tetrachloroethene	164	9.488	9.493	-0.005	92	30460	50.0	46.8	
81 1,3-Dichloropropane	76	9.579	9.578	0.001	96	82476	50.0	49.0	
82 2-Hexanone	43	9.634	9.633	0.001	97	153017	100.0	121.3	
84 Chlorodibromomethane	129	9.798	9.791	0.007	90	42553	50.0	52.8	
85 Ethylene Dibromide	107	9.908	9.901	0.007	100	48578	50.0	48.7	
87 Chlorobenzene	112	10.394	10.394	0.000	91	135694	50.0	58.8	
89 1,1,1,2-Tetrachloroethane	131	10.485	10.479	0.006	93	35658	50.0	48.5	
90 Ethylbenzene	106	10.492	10.485	0.007	99	61123	50.0	52.6	
91 m-Xylene & p-Xylene	106	10.625	10.619	0.006	99	74477	50.0	51.5	
92 o-Xylene	106	11.003	11.002	0.001	97	82552	50.0	53.1	
93 Styrene	104	11.021	11.026	-0.005	95	130249	50.0	52.0	
94 Bromoform	173	11.209	11.209	0.000	96	30085	50.0	55.5	
97 Isopropylbenzene	105	11.374	11.367	0.007	96	189632	50.0	51.8	
100 Bromobenzene	156	11.684	11.689	-0.005	98	47739	50.0	49.1	
99 1,1,2,2-Tetrachloroethane	83	11.690	11.689	0.001	93	67023	50.0	54.2	
102 trans-1,4-Dichloro-2-buten	53	11.720	11.726	-0.006	68	21739	50.0	51.1	
101 1,2,3-Trichloropropane	110	11.745	11.738	0.007	86	21782	50.0	51.6	
103 N-Propylbenzene	120	11.787	11.787	0.000	99	43115	50.0	55.2	
104 2-Chlorotoluene	126	11.879	11.878	0.001	95	40878	50.0	55.0	
106 1,3,5-Trimethylbenzene	105	11.970	11.969	0.001	94	140656	50.0	51.6	
107 4-Chlorotoluene	126	12.000	12.000	0.000	98	39961	50.0	53.0	
108 tert-Butylbenzene	119	12.280	12.286	-0.006	93	121573	50.0	56.5	
110 1,2,4-Trimethylbenzene	105	12.347	12.346	0.001	97	149351	50.0	52.8	
112 sec-Butylbenzene	105	12.505	12.511	-0.006	95	162210	50.0	57.7	
113 1,3-Dichlorobenzene	146	12.627	12.626	0.001	95	74021	50.0	50.9	
114 4-Isopropyltoluene	119	12.663	12.663	0.000	97	128158	50.0	57.7	
115 1,4-Dichlorobenzene	146	12.730	12.730	0.000	92	71802	50.0	50.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
120 n-Butylbenzene	91	13.071	13.070	0.001	97	111434	50.0	57.1	
121 1,2-Dichlorobenzene	146	13.089	13.089	0.000	93	69691	50.0	51.0	
122 1,2-Dibromo-3-Chloropropan	157	13.880	13.873	0.007	80	11562	50.0	65.7	
126 1,2,4-Trichlorobenzene	180	14.701	14.707	-0.006	95	32128	50.0	55.8	
127 Hexachlorobutadiene	225	14.841	14.853	-0.012	95	15722	50.0	67.9	
128 Naphthalene	128	14.963	14.968	-0.005	97	93727	50.0	76.5	
129 1,2,3-Trichlorobenzene	180	15.194	15.187	0.007	95	24864	50.0	74.7	
S 133 Xylenes, Total	106				0		100.0	104.7	
S 134 1,2-Dichloroethene, Total	96				0		100.0	101.9	
S 135 1,3-Dichloropropene, Total	1				0		100.0	90.4	

Reagents:

voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00270	Amount Added:	2.00	Units: uL	
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

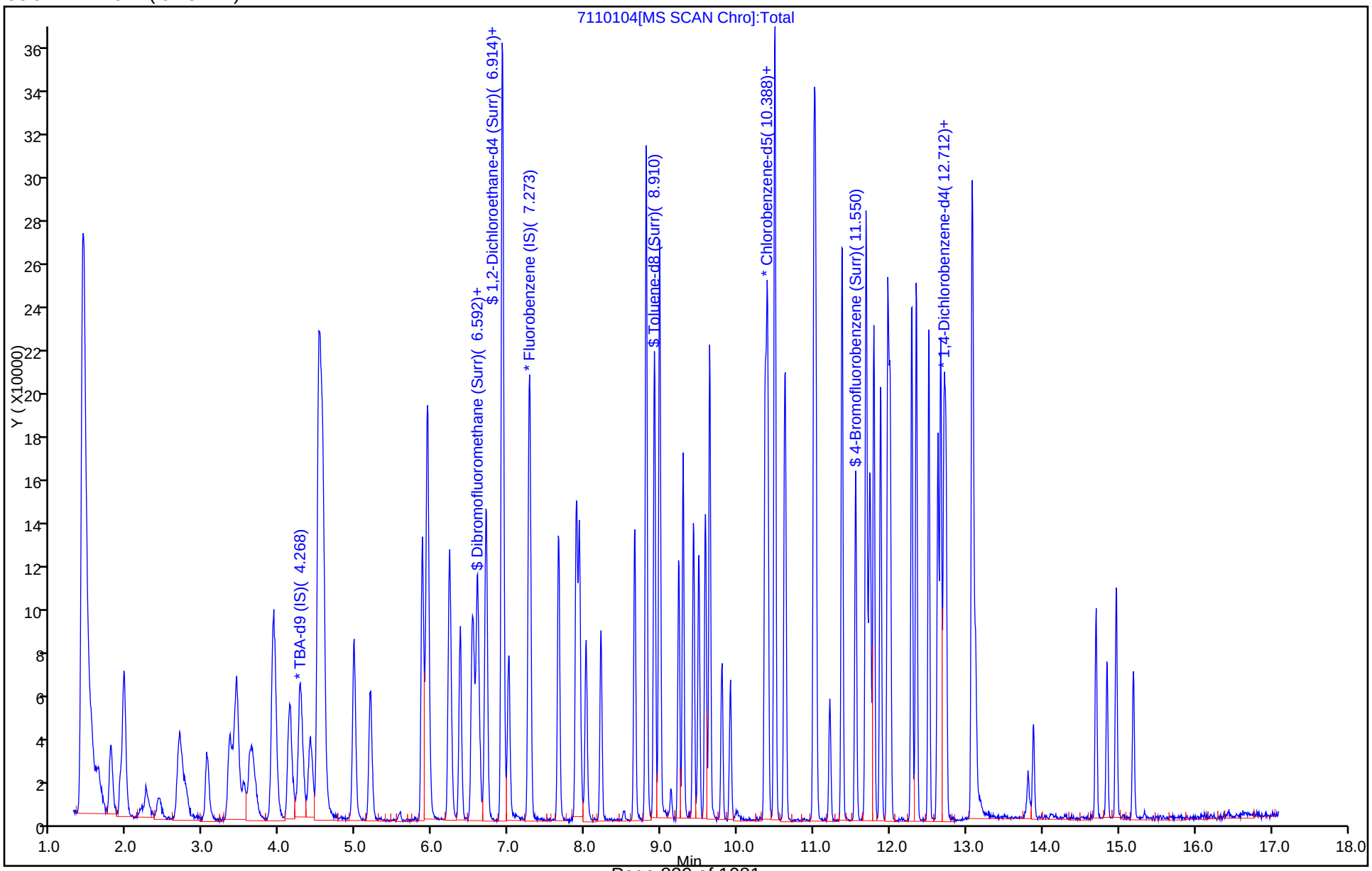
Report Date: 01-Nov-2017 13:25:01 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110104.D

Injection Date:	01-Nov-2017 09:24:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110104.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 01-Nov-2017 09:24:30 ALS Bottle#: 5 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 13:10:13 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 10:24:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.9	99.90
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	43.2	86.32
$ 7 Toluene-d8 (Surr)	50.0	53.4	106.76
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.2	100.46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227760/3

Matrix: Water | Lab File ID: 51101D03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 00:08

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.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	13.5		1.0	0.90
75-01-4	Vinyl chloride	11.3		1.0	0.88
74-83-9	Bromomethane	8.70		1.0	0.89
75-00-3	Chloroethane	10.8		1.0	0.90
75-35-4	1,1-Dichloroethene	10.4		1.0	0.55
67-64-1	Acetone	28.3		5.0	3.4
75-15-0	Carbon disulfide	10.5		1.0	0.88
75-09-2	Methylene Chloride	9.72		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	9.62		1.0	0.67
1634-04-4	Methyl tert-butyl ether	9.60		1.0	0.59
75-34-3	1,1-Dichloroethane	10.5		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	9.60		1.0	0.71
74-97-5	Bromochloromethane	9.42		1.0	0.63
78-93-3	2-Butanone (MEK)	22.2		5.0	2.6
67-66-3	Chloroform	9.24		1.0	0.60
71-55-6	1,1,1-Trichloroethane	10.2		1.0	0.60
56-23-5	Carbon tetrachloride	10.5		1.0	0.88
71-43-2	Benzene	9.31		1.0	0.60
107-06-2	1,2-Dichloroethane	10.5		1.0	0.57
79-01-6	Trichloroethene	8.70		1.0	0.69
78-87-5	1,2-Dichloropropane	9.81		1.0	0.66
75-27-4	Bromodichloromethane	8.96		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.72		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	18.1		5.0	3.1
108-88-3	Toluene	10.4		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	10.1		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.85		1.0	0.45
127-18-4	Tetrachloroethene	9.85		1.0	0.47
591-78-6	2-Hexanone	21.0		5.0	3.3
124-48-1	Dibromochloromethane	9.76		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.27		1.0	0.50
108-90-7	Chlorobenzene	9.68		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	10.1		1.0	0.57
100-41-4	Ethylbenzene	9.74		1.0	0.51
1330-20-7	Xylenes, Total	19.5		2.0	0.89
100-42-5	Styrene	9.70		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-227760/3

Matrix: Water Lab File ID: 51101D03.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/02/2017 00:08

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.: 227760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	8.33		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	9.14		1.0	0.60
107-13-1	Acrylonitrile	110		20	7.8
123-91-1	1,4-Dioxane	178	J	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		65-121
2037-26-5	Toluene-d8 (Surr)	110		73-120
460-00-4	4-Bromofluorobenzene (Surr)	102		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-Nov-2017 00:08:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019138-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 00:30:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.388	4.394	-0.006	0	224233	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.338	7.338	0.000	97	532549	50.0	50.0	M
* 3 Chlorobenzene-d5	119	10.433	10.427	0.006	86	117593	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.768	0.000	95	172302	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.614	6.614	0.000	93	125821	50.0	49.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.985	0.006	0	165455	50.0	52.9	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	93	514501	50.0	55.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.613	0.000	86	172528	50.0	51.0	
11 Dichlorodifluoromethane	85	1.694	1.688	0.006	99	172575	50.0	55.7	
12 Chloromethane	50	1.895	1.907	-0.012	99	210063	50.0	67.5	
14 Butadiene	39	2.017	2.017	0.000	95	209179	50.0	72.9	
13 Vinyl chloride	62	2.029	2.023	0.006	68	178146	50.0	56.4	
15 Bromomethane	94	2.339	2.339	0.000	91	64926	50.0	43.5	
16 Chloroethane	64	2.448	2.430	0.018	98	93744	50.0	54.0	
17 Dichlorofluoromethane	67	2.758	2.752	0.006	97	265956	50.0	60.6	
18 Trichlorofluoromethane	101	2.789	2.765	0.024	97	234651	50.0	60.5	M
20 Ethyl ether	59	3.129	3.130	-0.001	96	150607	50.0	59.7	
21 Acrolein	56	3.318	3.318	0.000	99	66647	150.0	104.8	
22 1,1-Dichloroethene	96	3.421	3.415	0.006	97	135931	50.0	52.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.506	3.507	-0.001	94	151138	50.0	52.8	
24 Acetone	43	3.531	3.543	-0.012	99	196911	100.0	141.4	
25 Iodomethane	142	3.610	3.622	-0.012	99	210435	50.0	51.4	
26 Carbon disulfide	76	3.713	3.701	0.012	100	300371	50.0	52.5	
28 3-Chloro-1-propene	76	4.011	4.011	0.000	90	80713	50.0	47.9	
30 Methyl acetate	43	4.042	4.030	0.012	99	295823	100.0	107.3	
31 Methylene Chloride	84	4.230	4.230	0.000	98	157199	50.0	48.6	
32 2-Methyl-2-propanol	59	4.516	4.510	0.006	92	140958	500.0	531.5	
33 Acrylonitrile	53	4.613	4.613	0.000	100	736075	500.0	548.9	
34 trans-1,2-Dichloroethene	96	4.638	4.644	-0.006	97	142847	50.0	48.1	
35 Methyl tert-butyl ether	73	4.656	4.662	-0.006	97	382494	50.0	48.0	
36 Hexane	57	5.057	5.051	0.006	96	220810	50.0	57.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.270	5.270	0.000	96	272334	50.0	52.7	
38 Vinyl acetate	43	5.325	5.319	0.006	98	340831	50.0	64.9	
44 2,2-Dichloropropane	97	6.006	6.000	0.006	62	37677	50.0	57.3	
45 cis-1,2-Dichloroethene	96	6.012	6.012	0.000	82	163112	50.0	48.0	
46 2-Butanone (MEK)	43	6.030	6.030	0.000	99	219812	100.0	110.9	
49 Chlorobromomethane	128	6.298	6.292	0.006	97	71151	50.0	47.1	
51 Tetrahydrofuran	42	6.310	6.310	0.000	93	110973	100.0	96.1	
52 Chloroform	83	6.438	6.438	0.000	94	238308	50.0	46.2	
53 1,1,1-Trichloroethane	97	6.596	6.596	0.000	98	198210	50.0	50.8	
54 Cyclohexane	56	6.669	6.663	0.006	94	271531	50.0	56.4	
56 Carbon tetrachloride	117	6.766	6.766	0.000	96	170999	50.0	52.6	
55 1,1-Dichloropropene	75	6.778	6.784	-0.006	93	195877	50.0	46.4	
57 Isobutyl alcohol	41	6.985	6.985	0.000	91	140577	1250.0	1326.6	
58 Benzene	78	6.997	6.997	0.000	97	603093	50.0	46.6	
59 1,2-Dichloroethane	62	7.076	7.070	0.006	97	198143	50.0	52.5	
62 n-Heptane	43	7.356	7.350	0.006	94	188312	50.0	61.8	
64 Trichloroethene	130	7.727	7.727	0.000	97	141815	50.0	43.5	
66 Methylcyclohexane	83	7.958	7.958	0.000	94	218347	50.0	44.3	
67 1,2-Dichloropropane	63	7.994	7.995	-0.001	96	147874	50.0	49.0	
68 Dibromomethane	93	8.086	8.080	0.006	90	84158	50.0	47.6	
70 1,4-Dioxane	88	8.086	8.086	0.000	46	27319	1000.0	891.0	
71 Dichlorobromomethane	83	8.274	8.274	0.000	98	155399	50.0	44.8	
73 2-Chloroethyl vinyl ether	63	8.578	8.578	0.000	92	188867	100.0	87.0	
74 cis-1,3-Dichloropropene	75	8.718	8.718	0.000	93	183669	50.0	43.6	
75 4-Methyl-2-pentanone (MIBK	43	8.876	8.876	0.000	98	273652	100.0	90.7	
76 Toluene	91	9.047	9.047	0.000	98	609318	50.0	52.0	
77 trans-1,3-Dichloropropene	75	9.296	9.296	0.000	97	161670	50.0	50.7	
78 Ethyl methacrylate	69	9.357	9.357	0.000	93	152738	50.0	39.7	
79 1,1,2-Trichloroethane	97	9.490	9.491	-0.001	91	120268	50.0	49.2	
80 Tetrachloroethene	164	9.563	9.558	0.005	96	110149	50.0	49.3	
81 1,3-Dichloropropane	76	9.643	9.649	-0.007	97	210751	50.0	46.7	
82 2-Hexanone	43	9.703	9.710	-0.007	99	243180	100.0	105.1	
84 Chlorodibromomethane	129	9.861	9.862	-0.001	91	100722	50.0	48.8	
85 Ethylene Dibromide	107	9.977	9.971	0.006	97	116157	50.0	46.4	
86 3-Chlorobenzotrifluoride	180	10.433	10.433	0.000	87	212322	50.0	52.5	
87 Chlorobenzene	112	10.463	10.458	0.005	94	369386	50.0	48.4	
88 4-Chlorobenzotrifluoride	180	10.518	10.518	0.000	96	201786	50.0	54.1	
89 1,1,1,2-Tetrachloroethane	131	10.555	10.555	0.000	92	122994	50.0	50.7	
90 Ethylbenzene	106	10.561	10.561	0.000	98	207515	50.0	48.7	
91 m-Xylene & p-Xylene	106	10.688	10.689	-0.001	0	259313	50.0	49.8	
92 o-Xylene	106	11.072	11.072	0.000	96	235857	50.0	47.5	
93 Styrene	104	11.090	11.090	0.000	95	407428	50.0	48.5	
94 Bromoform	173	11.278	11.279	-0.001	95	53467	50.0	41.7	
96 2-Chlorobenzotrifluoride	180	11.339	11.339	0.000	95	202439	50.0	52.4	
97 Isopropylbenzene	105	11.437	11.437	-0.001	96	598081	50.0	49.4	
99 1,1,2,2-Tetrachloroethane	83	11.753	11.747	0.006	93	165187	50.0	45.7	
100 Bromobenzene	156	11.753	11.753	0.000	94	146628	50.0	43.8	
102 trans-1,4-Dichloro-2-buten	53	11.789	11.783	0.006	70	54694	50.0	54.2	
101 1,2,3-Trichloropropane	110	11.807	11.808	-0.001	87	57422	50.0	41.6	
103 N-Propylbenzene	120	11.856	11.856	0.000	99	172393	50.0	45.1	
104 2-Chlorotoluene	126	11.941	11.941	0.000	96	149824	50.0	45.4	
105 3-Chlorotoluene	126	12.008	12.008	0.000	97	171580	50.0	47.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	12.039	12.039	0.000	95	500534	50.0	45.8	
107 4-Chlorotoluene	126	12.063	12.063	0.000	97	150505	50.0	42.2	
108 tert-Butylbenzene	119	12.349	12.349	0.000	94	393281	50.0	43.0	
110 1,2,4-Trimethylbenzene	105	12.410	12.410	0.000	97	508286	50.0	45.7	
111 1,2-dichloro-4-(trifluorom	214	12.458	12.452	0.006	94	118477	50.0	42.5	
112 sec-Butylbenzene	105	12.574	12.574	0.000	94	560208	50.0	43.9	
113 1,3-Dichlorobenzene	146	12.689	12.689	0.000	98	274581	50.0	46.0	
114 4-Isopropyltoluene	119	12.732	12.732	0.000	97	477863	50.0	45.0	
115 1,4-Dichlorobenzene	146	12.799	12.793	0.006	96	282159	50.0	46.0	
116 2,4-Dichloro-1-(triflourom	214	12.823	12.823	0.000	90	109841	50.0	42.4	
118 2,5-Dichlorobenzotrifluori	214	12.860	12.860	0.000	0	126074	50.0	45.0	
120 n-Butylbenzene	91	13.139	13.139	0.000	98	381191	50.0	44.0	
121 1,2-Dichlorobenzene	146	13.151	13.152	-0.001	97	271603	50.0	47.7	
122 1,2-Dibromo-3-Chloropropan	75	13.942	13.942	0.000	77	25858	50.0	40.9	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.082	14.088	-0.006	0	549826	150.0	152.2	
125 2,3- & 3,4- Dichlorotoluen	125	14.501	14.502	-0.001	0	378766	100.0	101.4	
126 1,2,4-Trichlorobenzene	180	14.769	14.769	0.000	94	116134	50.0	44.6	
127 Hexachlorobutadiene	225	14.909	14.915	-0.006	92	44831	50.0	47.0	
128 Naphthalene	128	15.031	15.031	0.000	97	363896	50.0	41.0	
129 1,2,3-Trichlorobenzene	180	15.262	15.256	0.006	97	106041	50.0	44.5	
131 2,4,5-Trichlorotoluene	159	16.028	16.028	0.000	0	50727	50.0	44.8	
130 2,3,6-Trichlorotoluene	159	16.119	16.119	0.000	96	53822	50.0	51.1	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	97.3	
S 134 1,2-Dichloroethene, Total	96				0		100.0	96.1	
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:

voaWEEmix1stR_00014	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL		
voaWAcro1stRe_00021	Amount Added:	6.00	Units: uL		
voaW2clev1stR_00024	Amount Added:	2.00	Units: uL		
voaWVA1stRest_00023	Amount Added:	2.00	Units: uL		
VOA8260VOAPRI_00269	Amount Added:	2.00	Units: uL		
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent	

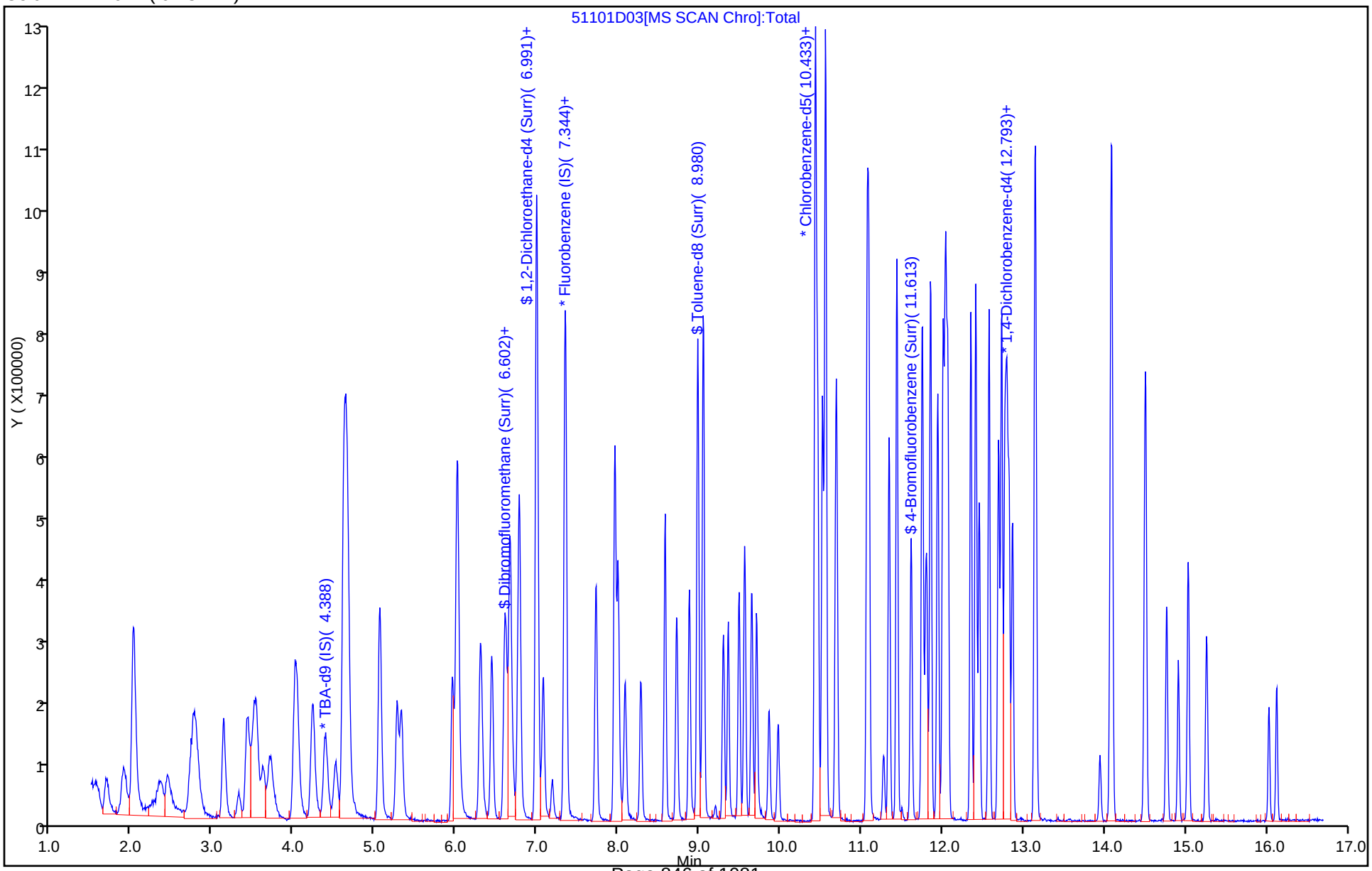
Report Date: 02-Nov-2017 20:42:19 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D03.D

Injection Date:	02-Nov-2017 00:08:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	LCS			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)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-Nov-2017 00:08:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019138-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 00:30:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.1	98.21
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	52.9	105.88
$ 7 Toluene-d8 (Surr)	50.0	55.0	109.95
$ 8 4-Bromofluorobenzene (Surr)	50.0	51.0	102.08

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

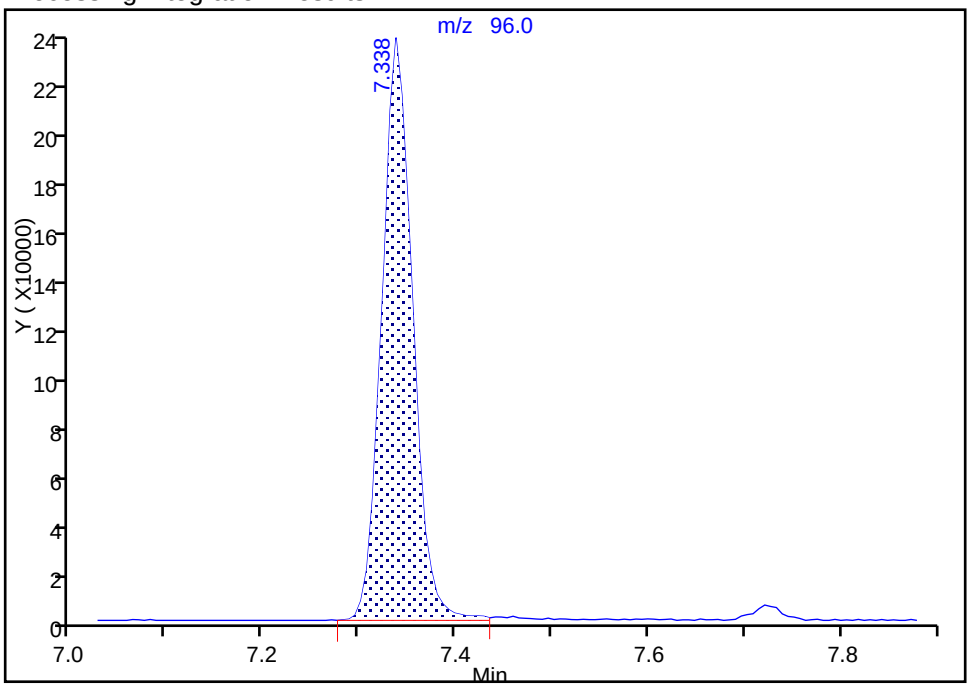
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D03.D				
Injection Date:	02-Nov-2017 00:08:30	Instrument ID:	CHHP5		
Lims ID:	LCS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

* 2 Fluorobenzene (IS), CAS: 462-06-6

Signal: 1

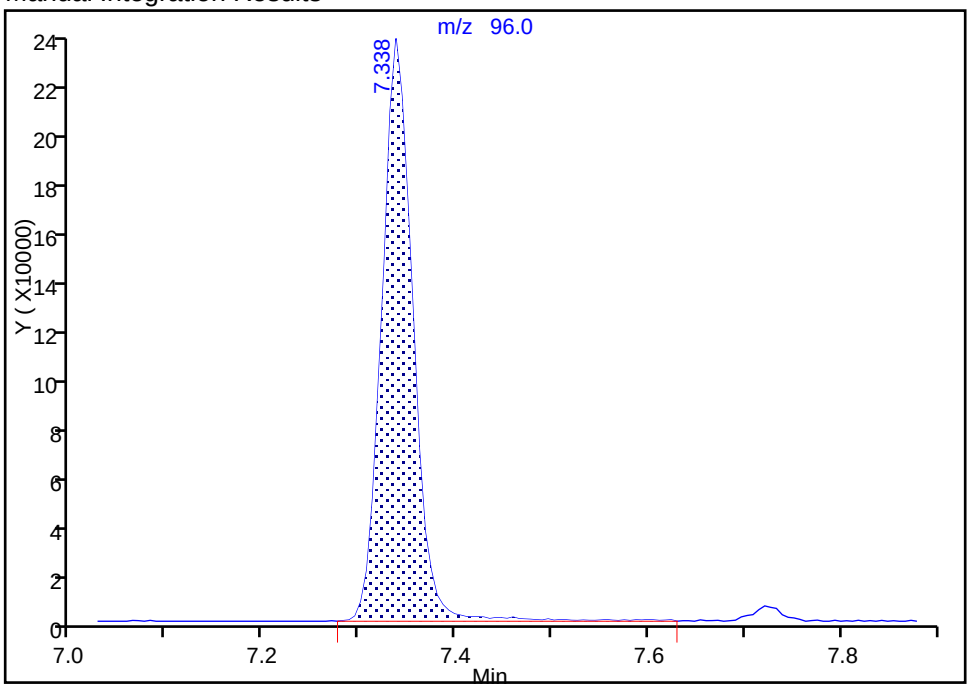
Processing Integration Results

RT: 7.34
Area: 525643
Amount: 50.000000
Amount Units: ng



Manual Integration Results

RT: 7.34
Area: 532549
Amount: 50.000000
Amount Units: ng



Reviewer: bungardf, 02-Nov-2017 00:28:24

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227768/4

Matrix: Water | Lab File ID: 7110204.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 05:57

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.73		1.0	0.90
75-01-4	Vinyl chloride	5.02		1.0	0.88
74-83-9	Bromomethane	6.96		1.0	0.89
75-00-3	Chloroethane	8.08		1.0	0.90
75-35-4	1,1-Dichloroethene	5.66		1.0	0.55
67-64-1	Acetone	13.8		5.0	3.4
75-15-0	Carbon disulfide	10.3		1.0	0.88
75-09-2	Methylene Chloride	8.96		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	9.06		1.0	0.67
1634-04-4	Methyl tert-butyl ether	7.91		1.0	0.59
75-34-3	1,1-Dichloroethane	8.36		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	8.83		1.0	0.71
74-97-5	Bromochloromethane	8.50		1.0	0.63
78-93-3	2-Butanone (MEK)	17.8		5.0	2.6
67-66-3	Chloroform	7.90		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.06		1.0	0.60
56-23-5	Carbon tetrachloride	9.70		1.0	0.88
71-43-2	Benzene	8.95		1.0	0.60
107-06-2	1,2-Dichloroethane	7.12		1.0	0.57
79-01-6	Trichloroethene	8.49		1.0	0.69
78-87-5	1,2-Dichloropropane	9.12		1.0	0.66
75-27-4	Bromodichloromethane	8.41		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.48		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	21.7		5.0	3.1
108-88-3	Toluene	10.9		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	9.00		1.0	0.58
79-00-5	1,1,2-Trichloroethane	10.3		1.0	0.45
127-18-4	Tetrachloroethene	9.37		1.0	0.47
591-78-6	2-Hexanone	21.1		5.0	3.3
124-48-1	Dibromochloromethane	10.8		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.64		1.0	0.50
108-90-7	Chlorobenzene	9.95		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	10.3		1.0	0.57
100-41-4	Ethylbenzene	9.92		1.0	0.51
1330-20-7	Xylenes, Total	20.4		2.0	0.89
100-42-5	Styrene	10.0		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227768/4

Matrix: Water | Lab File ID: 7110204.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 05:57

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	12.3		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	10.7		1.0	0.60
107-13-1	Acrylonitrile	100		20	7.8
123-91-1	1,4-Dioxane	233		200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	70		65-121
2037-26-5	Toluene-d8 (Surr)	102		73-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	81		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110204.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 02-Nov-2017 05:57:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 08:39:17 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.258	4.252	0.006	98	135596	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.264	7.263	0.001	97	160097	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.366	10.366	0.000	90	35316	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.708	12.708	0.000	95	46425	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.546	6.539	0.007	93	32154	50.0	40.6	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.911	6.910	0.001	48	54254	50.0	35.2	
$	7 Toluene-d8 (Surr)	98	8.912	8.912	0.000	94	136965	50.0	51.2	
$	8 4-Bromofluorobenzene (Surr	95	11.546	11.552	-0.006	86	54248	50.0	47.3	
	11 Dichlorodifluoromethane	85	1.618	1.612	0.006	98	43089	50.0	35.0	
	12 Chloromethane	50	1.782	1.782	0.000	99	49295	50.0	28.7	
	13 Vinyl chloride	62	1.922	1.928	-0.006	97	34726	50.0	25.1	
	14 Butadiene	39	1.959	1.965	-0.006	93	39282	50.0	40.3	
	15 Bromomethane	94	2.275	2.275	0.000	90	18609	50.0	34.8	
	16 Chloroethane	64	2.433	2.415	0.018	98	18790	50.0	40.4	
	18 Trichlorofluoromethane	101	2.701	2.670	0.031	58	46003	50.0	40.7	
	17 Dichlorofluoromethane	67	2.695	2.695	0.000	95	42925	50.0	31.7	
	20 Ethyl ether	59	3.042	3.041	0.001	96	29556	50.0	25.1	
	22 1,1-Dichloroethene	96	3.340	3.339	0.001	89	27894	50.0	28.3	
	23 1,1,2-Trichloro-1,2,2-trif	101	3.437	3.431	0.006	74	34165	50.0	43.9	
	24 Acetone	43	3.437	3.437	0.000	99	50803	100.0	69.0	
	25 Iodomethane	142	3.528	3.528	0.000	95	56583	50.0	60.4	
	26 Carbon disulfide	76	3.632	3.625	0.007	100	122133	50.0	51.4	
	28 3-Chloro-1-propene	76	3.906	3.905	0.001	90	25481	50.0	47.4	
	30 Methyl acetate	43	3.930	3.929	0.001	99	126074	100.0	91.7	
	31 Methylene Chloride	84	4.131	4.124	0.007	97	45554	50.0	44.8	
	32 2-Methyl-2-propanol	59	4.392	4.380	0.012	95	81052	500.0	479.3	
	33 Acrylonitrile	53	4.514	4.507	0.007	99	294144	500.0	501.9	
	34 trans-1,2-Dichloroethene	96	4.544	4.544	0.000	94	36170	50.0	45.3	
	35 Methyl tert-butyl ether	73	4.563	4.562	0.001	98	135282	50.0	39.5	
	36 Hexane	57	4.970	4.970	0.000	94	59765	50.0	53.4	
	37 1,1-Dichloroethane	63	5.183	5.183	0.000	96	87150	50.0	41.8	
	44 2,2-Dichloropropane	97	5.925	5.919	0.006	53	9689	50.0	48.5	
	45 cis-1,2-Dichloroethene	96	5.937	5.931	0.006	85	46017	50.0	44.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
46 2-Butanone (MEK)	43	5.937	5.937	0.000	97	87515	100.0	88.9	
49 Chlorobromomethane	128	6.217	6.223	-0.006	92	22136	50.0	42.5	
51 Tetrahydrofuran	42	6.229	6.229	0.000	91	55813	100.0	91.6	
52 Chloroform	83	6.363	6.357	0.006	94	79937	50.0	39.5	
53 1,1,1-Trichloroethane	97	6.521	6.521	0.000	98	61980	50.0	45.3	
54 Cyclohexane	56	6.588	6.594	-0.006	95	75057	50.0	50.8	
56 Carbon tetrachloride	117	6.692	6.691	0.001	97	46453	50.0	48.5	
55 1,1-Dichloropropene	75	6.710	6.704	0.006	95	56982	50.0	42.6	
57 Isobutyl alcohol	41	6.905	6.904	0.001	93	69817	1250.0	1113.8	
62 n-Heptane	43	6.905	6.910	-0.005	70	91445	50.0	49.4	
58 Benzene	78	6.923	6.916	0.007	97	163493	50.0	44.8	
59 1,2-Dichloroethane	62	6.996	7.002	-0.006	97	69133	50.0	35.6	
64 Trichloroethene	130	7.653	7.653	0.000	97	41773	50.0	42.4	
66 Methylcyclohexane	83	7.890	7.884	0.006	94	59483	50.0	50.1	
67 1,2-Dichloropropane	63	7.921	7.920	0.001	94	47676	50.0	45.6	
70 1,4-Dioxane	88	8.006	8.005	0.001	54	11855	1000.0	1164.0	
68 Dibromomethane	93	8.018	8.018	0.000	94	28278	50.0	43.8	
71 Dichlorobromomethane	83	8.213	8.212	0.001	99	61211	50.0	42.1	
74 cis-1,3-Dichloropropene	75	8.651	8.650	0.001	93	73984	50.0	42.4	
75 4-Methyl-2-pentanone (MIBK	43	8.803	8.802	0.001	97	177717	100.0	108.5	
76 Toluene	91	8.979	8.979	0.000	97	166846	50.0	54.7	
77 trans-1,3-Dichloropropene	75	9.229	9.228	0.001	97	64382	50.0	45.0	
78 Ethyl methacrylate	69	9.289	9.283	0.006	92	76969	50.0	49.0	
79 1,1,2-Trichloroethane	97	9.423	9.423	0.000	93	42077	50.0	51.5	
80 Tetrachloroethene	164	9.490	9.496	-0.006	94	28735	50.0	46.8	
81 1,3-Dichloropropane	76	9.581	9.581	0.000	95	77348	50.0	48.8	
82 2-Hexanone	43	9.636	9.636	0.000	98	125225	100.0	105.3	
84 Chlorodibromomethane	129	9.794	9.794	0.000	90	40892	50.0	53.8	
85 Ethylene Dibromide	107	9.904	9.903	0.001	98	45376	50.0	48.2	
87 Chlorobenzene	112	10.397	10.390	0.007	91	108279	50.0	49.7	
89 1,1,1,2-Tetrachloroethane	131	10.488	10.481	0.007	92	35532	50.0	51.3	
90 Ethylbenzene	106	10.488	10.487	0.001	99	54324	50.0	49.6	
91 m-Xylene & p-Xylene	106	10.622	10.621	0.001	98	68490	50.0	50.2	
92 o-Xylene	106	11.005	11.005	0.000	96	76503	50.0	52.2	
93 Styrene	104	11.023	11.029	-0.006	94	118507	50.0	50.2	
94 Bromoform	173	11.212	11.211	0.001	94	31453	50.0	61.6	
97 Isopropylbenzene	105	11.370	11.370	0.000	96	177309	50.0	51.4	
100 Bromobenzene	156	11.686	11.686	0.000	98	43644	50.0	44.8	
99 1,1,2,2-Tetrachloroethane	83	11.686	11.686	0.000	92	62513	50.0	53.6	
102 trans-1,4-Dichloro-2-buten	53	11.723	11.722	0.001	86	20628	50.0	48.4	
101 1,2,3-Trichloropropane	110	11.741	11.741	0.000	86	20089	50.0	47.4	
103 N-Propylbenzene	120	11.790	11.789	0.001	99	39361	50.0	50.2	
104 2-Chlorotoluene	126	11.875	11.874	0.001	95	36451	50.0	48.9	
106 1,3,5-Trimethylbenzene	105	11.972	11.972	0.000	92	138117	50.0	50.5	
107 4-Chlorotoluene	126	11.997	11.996	0.001	99	36354	50.0	48.1	
108 tert-Butylbenzene	119	12.282	12.282	0.000	93	106095	50.0	49.1	
110 1,2,4-Trimethylbenzene	105	12.343	12.349	-0.006	98	143169	50.0	50.4	
112 sec-Butylbenzene	105	12.508	12.507	0.001	95	150144	50.0	53.2	
113 1,3-Dichlorobenzene	146	12.623	12.629	-0.006	94	70649	50.0	48.4	
114 4-Isopropyltoluene	119	12.666	12.665	0.001	97	119842	50.0	53.8	
115 1,4-Dichlorobenzene	146	12.733	12.732	0.001	89	66145	50.0	46.7	
120 n-Butylbenzene	91	13.073	13.073	0.000	99	104920	50.0	53.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
121 1,2-Dichlorobenzene	146	13.085	13.085	0.000	93	65723	50.0	47.9	
122 1,2-Dibromo-3-Chloropropan	157	13.882	13.876	0.006	76	10143	50.0	58.7	
126 1,2,4-Trichlorobenzene	180	14.704	14.697	0.007	88	31857	50.0	55.1	
127 Hexachlorobutadiene	225	14.844	14.843	0.001	95	13879	50.0	59.3	
128 Naphthalene	128	14.965	14.965	0.000	98	91856	50.0	74.9	
129 1,2,3-Trichlorobenzene	180	15.190	15.190	0.000	94	21682	50.0	64.4	
S 134 1,2-Dichloroethene, Total	96				0		100.0	89.4	
S 133 Xylenes, Total	106				0		100.0	102.4	
S 135 1,3-Dichloropropene, Total	1				0		100.0	87.4	

Reagents:

voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00269	Amount Added:	2.00	Units: uL	
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

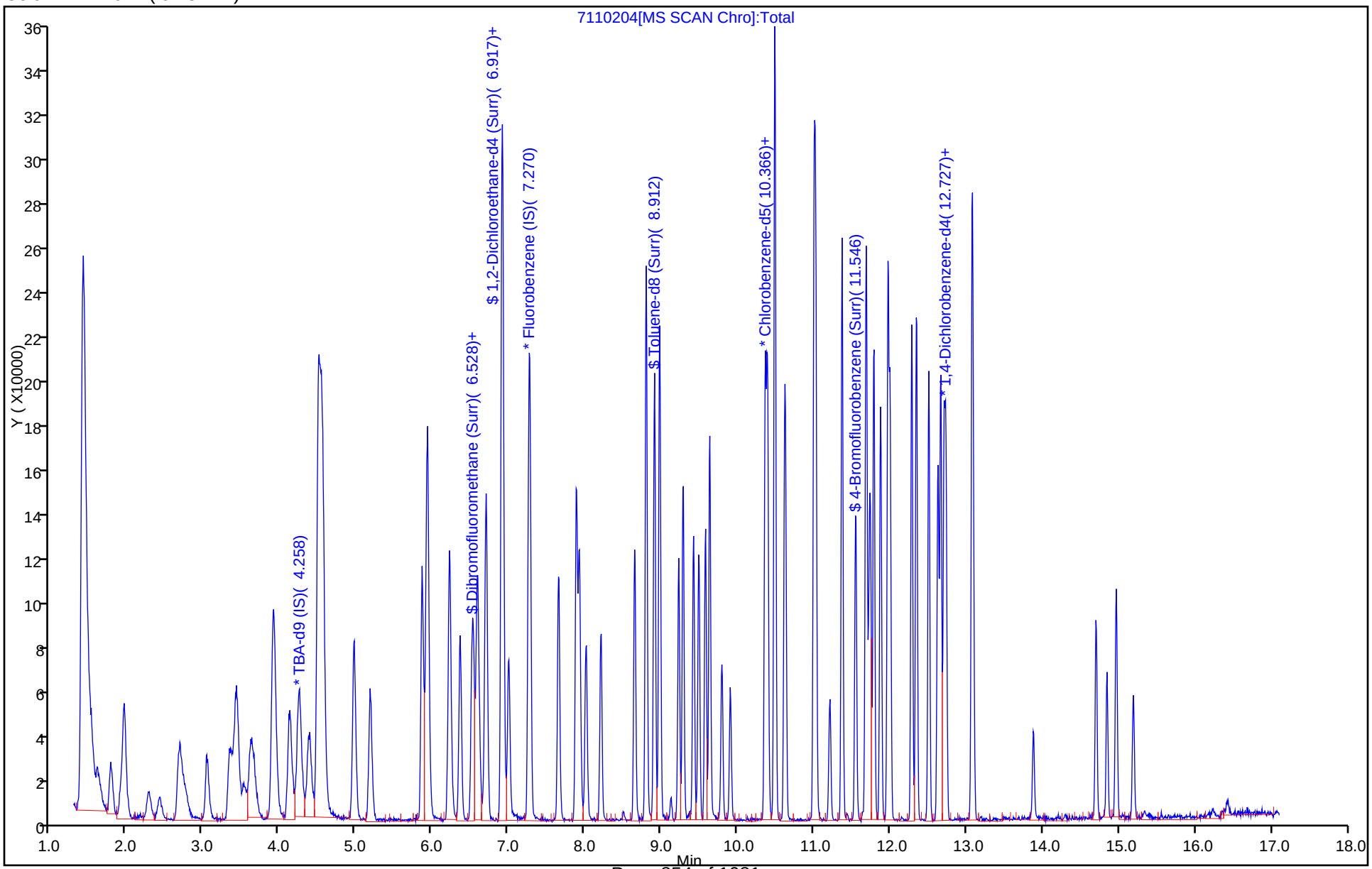
Report Date: 02-Nov-2017 08:59:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110204.D

Injection Date:	02-Nov-2017 05:57:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110204.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 02-Nov-2017 05:57:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 08:39:17 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	40.6	81.18
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	35.2	70.42
$ 7 Toluene-d8 (Surr)	50.0	51.2	102.39
$ 8 4-Bromofluorobenzene (Surr)	50.0	47.3	94.63

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227871/3

Matrix: Water | Lab File ID: 51102D03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 23:57

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.: 227871 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	12.9		1.0	0.90
75-01-4	Vinyl chloride	11.0		1.0	0.88
74-83-9	Bromomethane	10.7		1.0	0.89
75-00-3	Chloroethane	12.8		1.0	0.90
75-35-4	1,1-Dichloroethene	10.1		1.0	0.55
67-64-1	Acetone	30.4		5.0	3.4
75-15-0	Carbon disulfide	10.9		1.0	0.88
75-09-2	Methylene Chloride	9.30		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	9.51		1.0	0.67
1634-04-4	Methyl tert-butyl ether	9.19		1.0	0.59
75-34-3	1,1-Dichloroethane	10.2		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	9.18		1.0	0.71
74-97-5	Bromochloromethane	9.37		1.0	0.63
78-93-3	2-Butanone (MEK)	26.0		5.0	2.6
67-66-3	Chloroform	9.12		1.0	0.60
71-55-6	1,1,1-Trichloroethane	10.1		1.0	0.60
56-23-5	Carbon tetrachloride	10.4		1.0	0.88
71-43-2	Benzene	9.04		1.0	0.60
107-06-2	1,2-Dichloroethane	10.3		1.0	0.57
79-01-6	Trichloroethene	8.71		1.0	0.69
78-87-5	1,2-Dichloropropane	9.50		1.0	0.66
75-27-4	Bromodichloromethane	9.00		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.52		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	24.4		5.0	3.1
108-88-3	Toluene	10.2		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	10.1		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.79		1.0	0.45
127-18-4	Tetrachloroethene	9.70		1.0	0.47
591-78-6	2-Hexanone	24.3		5.0	3.3
124-48-1	Dibromochloromethane	10.3		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.43		1.0	0.50
108-90-7	Chlorobenzene	9.21		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	10.1		1.0	0.57
100-41-4	Ethylbenzene	9.44		1.0	0.51
1330-20-7	Xylenes, Total	18.3		2.0	0.89
100-42-5	Styrene	9.56		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-227871/3

Matrix: Water Lab File ID: 51102D03.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/02/2017 23:57

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.: 227871 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	8.89		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	9.09		1.0	0.60
107-13-1	Acrylonitrile	111		20	7.8
123-91-1	1,4-Dioxane	169	J	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		65-121
2037-26-5	Toluene-d8 (Surr)	116		73-120
460-00-4	4-Bromofluorobenzene (Surr)	110		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-Nov-2017 23:57:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019153-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Nov-2017 20:10:37 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

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

First Level Reviewer: bungardf Date: 03-Nov-2017 00:18:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.377	4.388	-0.011	0	241036	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.338	7.337	0.001	98	521636	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.428	10.433	-0.005	86	114496	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.768	0.001	95	166527	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.621	6.620	0.001	93	129643	50.0	51.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.986	6.991	-0.005	0	166864	50.0	54.5	
$ 7 Toluene-d8 (Surr)	98	8.980	8.979	0.001	94	529410	50.0	58.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.612	0.001	85	180535	50.0	54.9	
11 Dichlorodifluoromethane	85	1.695	1.688	0.007	99	148394	50.0	48.9	
12 Chloromethane	50	1.902	1.888	0.014	99	197090	50.0	64.7	
13 Vinyl chloride	62	2.023	2.010	0.013	64	169724	50.0	54.9	
14 Butadiene	39	2.023	2.016	0.007	95	209347	50.0	74.5	
15 Bromomethane	94	2.364	2.332	0.032	75	78527	50.0	53.7	
16 Chloroethane	64	2.473	2.430	0.043	98	109040	50.0	64.1	
18 Trichlorofluoromethane	101	2.741	2.722	0.019	89	231508	50.0	60.9	
17 Dichlorofluoromethane	67	2.759	2.758	0.001	98	264897	50.0	61.6	
20 Ethyl ether	59	3.130	3.129	0.001	96	138738	50.0	56.1	
21 Acrolein	56	3.318	3.324	-0.006	97	73343	150.0	117.7	
22 1,1-Dichloroethene	96	3.428	3.427	0.001	95	129551	50.0	50.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.507	3.488	0.019	91	138677	50.0	49.5	
24 Acetone	43	3.537	3.536	0.001	99	207604	100.0	152.2	
25 Iodomethane	142	3.623	3.622	0.001	97	194091	50.0	48.4	
26 Carbon disulfide	76	3.714	3.713	0.001	100	304665	50.0	54.4	
28 3-Chloro-1-propene	76	4.018	4.023	-0.005	90	79219	50.0	48.0	
30 Methyl acetate	43	4.036	4.035	0.001	98	296977	100.0	109.9	
31 Methylene Chloride	84	4.237	4.236	0.001	98	147829	50.0	46.5	
32 2-Methyl-2-propanol	59	4.510	4.509	0.001	92	132940	500.0	466.4	
33 Acrylonitrile	53	4.614	4.619	-0.005	100	730976	500.0	556.5	
34 trans-1,2-Dichloroethene	96	4.644	4.643	0.001	72	138429	50.0	47.6	
35 Methyl tert-butyl ether	73	4.662	4.668	-0.006	97	358604	50.0	46.0	
36 Hexane	57	5.058	5.063	-0.005	94	196329	50.0	52.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.277	5.276	0.001	96	257705	50.0	50.9	
38 Vinyl acetate	43	5.331	5.324	0.007	97	332450	50.0	64.6	
45 cis-1,2-Dichloroethene	96	6.013	6.012	0.000	83	152771	50.0	45.9	
44 2,2-Dichloropropane	97	6.019	6.018	0.001	80	37589	50.0	58.4	
46 2-Butanone (MEK)	43	6.025	6.030	-0.005	98	252473	100.0	130.0	
49 Chlorobromomethane	128	6.292	6.297	-0.005	95	69340	50.0	46.9	
51 Tetrahydrofuran	42	6.310	6.310	0.000	90	104464	100.0	92.4	
52 Chloroform	83	6.444	6.437	0.007	94	230461	50.0	45.6	
53 1,1,1-Trichloroethane	97	6.596	6.595	0.001	98	194053	50.0	50.7	
54 Cyclohexane	56	6.669	6.662	0.007	96	249961	50.0	53.0	
56 Carbon tetrachloride	117	6.767	6.772	-0.005	98	165219	50.0	51.9	
55 1,1-Dichloropropene	75	6.779	6.784	-0.005	93	186338	50.0	45.1	
57 Isobutyl alcohol	41	6.979	6.991	-0.012	92	142626	1250.0	1374.1	
58 Benzene	78	6.998	6.997	0.001	97	573380	50.0	45.2	
59 1,2-Dichloroethane	62	7.071	7.076	-0.005	97	190919	50.0	51.6	
62 n-Heptane	43	7.356	7.356	0.000	92	178263	50.0	59.7	
64 Trichloroethene	130	7.727	7.727	0.001	97	139039	50.0	43.6	
66 Methylcyclohexane	83	7.959	7.958	0.001	94	202876	50.0	42.0	
67 1,2-Dichloropropane	63	8.001	8.000	0.001	95	140233	50.0	47.5	
70 1,4-Dioxane	88	8.080	8.085	-0.005	45	25439	1000.0	847.0	
68 Dibromomethane	93	8.080	8.085	-0.005	96	79684	50.0	46.0	
71 Dichlorobromomethane	83	8.275	8.274	0.001	99	152939	50.0	45.0	
73 2-Chloroethyl vinyl ether	63	8.579	8.578	0.001	93	170583	100.0	80.3	
74 cis-1,3-Dichloropropene	75	8.719	8.724	-0.005	93	175792	50.0	42.6	
75 4-Methyl-2-pentanone (MIBK	43	8.877	8.876	0.001	98	358170	100.0	122.0	
76 Toluene	91	9.047	9.046	0.001	99	583577	50.0	51.1	
77 trans-1,3-Dichloropropene	75	9.296	9.296	0.000	96	156805	50.0	50.5	
78 Ethyl methacrylate	69	9.357	9.356	0.001	93	148020	50.0	39.5	
79 1,1,2-Trichloroethane	97	9.491	9.490	0.001	93	116466	50.0	49.0	
80 Tetrachloroethene	164	9.558	9.557	0.001	93	105618	50.0	48.5	
81 1,3-Dichloropropane	76	9.649	9.648	0.001	97	203210	50.0	46.2	
82 2-Hexanone	43	9.704	9.703	0.001	99	273111	100.0	121.3	
84 Chlorodibromomethane	129	9.856	9.855	0.001	89	103919	50.0	51.7	
85 Ethylene Dibromide	107	9.971	9.971	0.000	97	114971	50.0	47.1	
86 3-Chlorobenzotrifluoride	180	10.434	10.433	0.001	88	195750	50.0	49.8	
87 Chlorobenzene	112	10.458	10.457	0.001	93	342305	50.0	46.1	
88 4-Chlorobenzotrifluoride	180	10.519	10.518	0.001	96	191959	50.0	52.9	
89 1,1,1,2-Tetrachloroethane	131	10.549	10.554	-0.005	93	119231	50.0	50.5	
90 Ethylbenzene	106	10.561	10.560	0.001	98	195842	50.0	47.2	
91 m-Xylene & p-Xylene	106	10.695	10.688	0.007	0	233143	50.0	46.0	
92 o-Xylene	106	11.072	11.071	0.001	96	219425	50.0	45.4	
93 Styrene	104	11.090	11.089	0.001	95	390967	50.0	47.8	
94 Bromoform	173	11.273	11.272	0.001	94	55525	50.0	44.4	
96 2-Chlorobenzotrifluoride	180	11.340	11.339	0.001	94	191721	50.0	50.9	
97 Isopropylbenzene	105	11.437	11.436	0.001	96	539490	50.0	45.7	
99 1,1,2,2-Tetrachloroethane	83	11.747	11.752	-0.005	83	160108	50.0	45.5	
100 Bromobenzene	156	11.747	11.752	-0.005	96	134121	50.0	41.5	
102 trans-1,4-Dichloro-2-buten	53	11.790	11.789	0.001	72	56792	50.0	58.3	
101 1,2,3-Trichloropropane	110	11.808	11.807	0.001	84	54226	50.0	40.7	
103 N-Propylbenzene	120	11.851	11.856	-0.005	98	167108	50.0	45.2	
104 2-Chlorotoluene	126	11.942	11.941	0.001	96	136968	50.0	42.9	
105 3-Chlorotoluene	126	12.009	12.008	0.001	97	166589	50.0	48.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	12.039	12.038	0.001	94	467046	50.0	44.2	
107 4-Chlorotoluene	126	12.063	12.069	-0.006	98	148339	50.0	43.0	
108 tert-Butylbenzene	119	12.349	12.348	0.001	94	360771	50.0	40.8	
110 1,2,4-Trimethylbenzene	105	12.410	12.409	0.001	97	472545	50.0	44.0	
111 1,2-dichloro-4-(trifluorom	214	12.453	12.452	0.001	94	111369	50.0	41.4	
112 sec-Butylbenzene	105	12.574	12.573	0.001	94	526026	50.0	42.7	
113 1,3-Dichlorobenzene	146	12.690	12.689	0.001	98	255975	50.0	44.3	
114 4-Isopropyltoluene	119	12.732	12.731	0.001	97	449091	50.0	43.7	
115 1,4-Dichlorobenzene	146	12.793	12.792	0.001	95	264724	50.0	44.6	
116 2,4-Dichloro-1-(triflourom	214	12.824	12.823	0.001	93	103153	50.0	41.2	
118 2,5-Dichlorobenzotrifluori	214	12.866	12.865	0.001	0	109472	50.0	40.4	
120 n-Butylbenzene	91	13.140	13.139	0.001	98	343345	50.0	41.0	
121 1,2-Dichlorobenzene	146	13.152	13.151	0.001	97	247641	50.0	45.0	
122 1,2-Dibromo-3-Chloropropan	75	13.936	13.942	-0.006	78	24940	50.0	40.8	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.082	14.088	-0.006	0	491487	150.0	140.8	
125 2,3- & 3,4- Dichlorotoluen	125	14.502	14.507	-0.005	0	333290	100.0	92.3	
126 1,2,4-Trichlorobenzene	180	14.770	14.763	0.007	94	101496	50.0	40.3	
127 Hexachlorobutadiene	225	14.910	14.909	0.001	96	39575	50.0	42.9	
128 Naphthalene	128	15.031	15.030	0.001	97	319956	50.0	37.3	
129 1,2,3-Trichlorobenzene	180	15.256	15.261	-0.005	94	90416	50.0	39.3	
131 2,4,5-Trichlorotoluene	159	16.028	16.028	0.000	0	36174	50.0	33.1	
130 2,3,6-Trichlorotoluene	159	16.120	16.125	-0.005	95	38043	50.0	37.4	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	93.5	
S 133 Xylenes, Total	106				0		100.0	91.4	
S 135 1,3-Dichloropropene, Total	1				0		100.0	93.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWEEmix1stR_00014	Amount Added:	2.00	Units: uL	
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL	
voaWAcro1stRe_00021	Amount Added:	6.00	Units: uL	
voaW2clev1stR_00024	Amount Added:	2.00	Units: uL	
voaWVA1stRest_00023	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00269	Amount Added:	2.00	Units: uL	
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

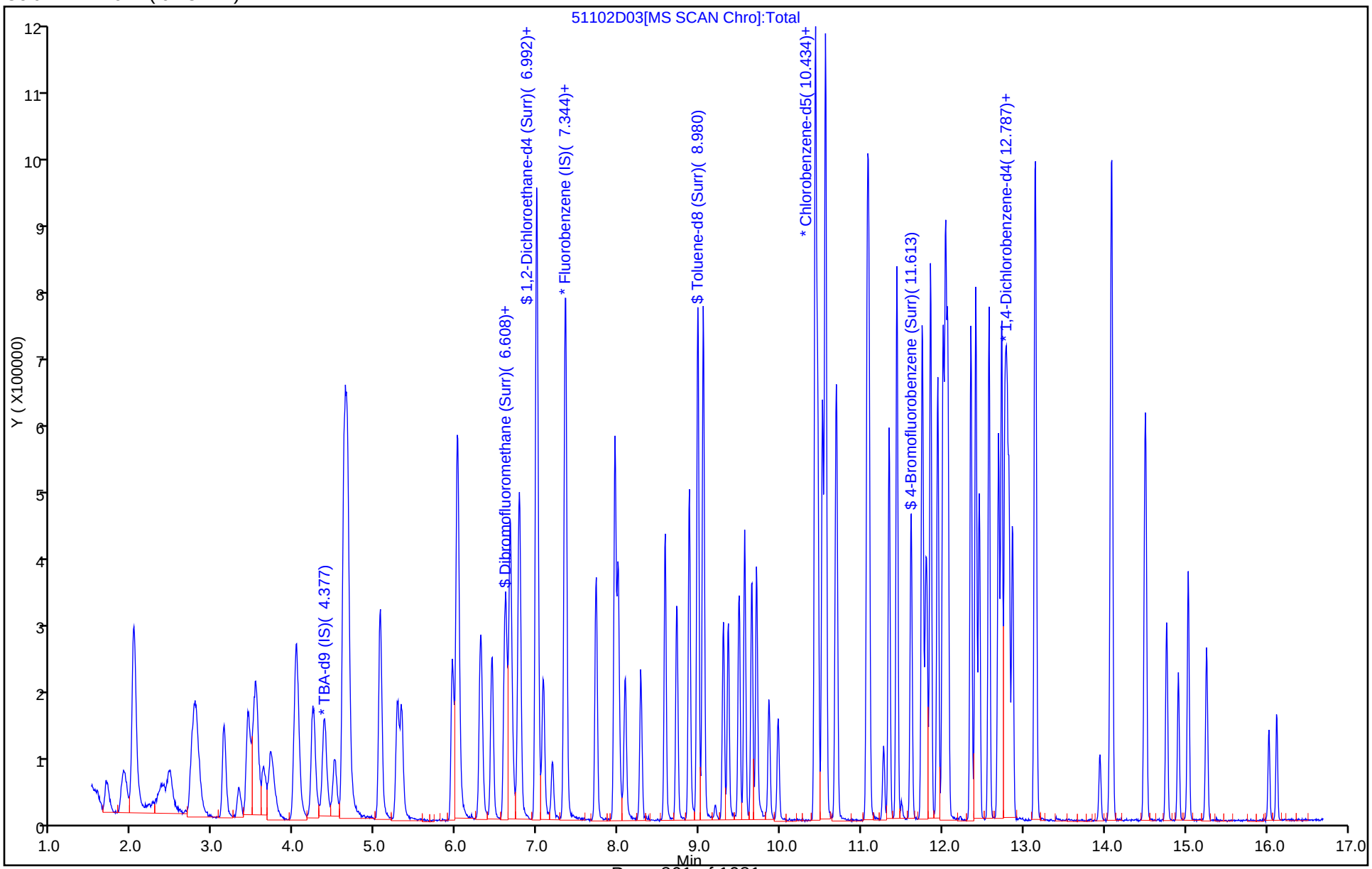
Report Date: 05-Nov-2017 20:10:44 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D03.D

Injection Date:	02-Nov-2017 23:57:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	LCS			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)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\51102D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-Nov-2017 23:57:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019153-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171102-19153.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 05-Nov-2017 20:10:37 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

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

First Level Reviewer: bungardf Date: 03-Nov-2017 00:18:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.7	103.31
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	54.5	109.02
$ 7 Toluene-d8 (Surr)	50.0	58.1	116.19
$ 8 4-Bromofluorobenzene (Surr)	50.0	54.9	109.71

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-228044/3

Matrix: Water | Lab File ID: 51105D03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2017 01:16

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 228044 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	12.8		1.0	0.90
75-01-4	Vinyl chloride	10.4		1.0	0.88
74-83-9	Bromomethane	10.8		1.0	0.89
75-00-3	Chloroethane	12.3		1.0	0.90
75-35-4	1,1-Dichloroethene	8.99		1.0	0.55
67-64-1	Acetone	27.6		5.0	3.4
75-15-0	Carbon disulfide	9.56		1.0	0.88
75-09-2	Methylene Chloride	8.46		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	8.18		1.0	0.67
1634-04-4	Methyl tert-butyl ether	8.79		1.0	0.59
75-34-3	1,1-Dichloroethane	9.21		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	8.27		1.0	0.71
74-97-5	Bromochloromethane	8.22		1.0	0.63
78-93-3	2-Butanone (MEK)	23.1		5.0	2.6
67-66-3	Chloroform	8.18		1.0	0.60
71-55-6	1,1,1-Trichloroethane	8.81		1.0	0.60
56-23-5	Carbon tetrachloride	8.97		1.0	0.88
71-43-2	Benzene	8.02		1.0	0.60
107-06-2	1,2-Dichloroethane	9.50		1.0	0.57
79-01-6	Trichloroethene	7.71		1.0	0.69
78-87-5	1,2-Dichloropropane	8.82		1.0	0.66
75-27-4	Bromodichloromethane	7.87		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.07		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	22.6		5.0	3.1
108-88-3	Toluene	8.86		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	9.69		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.07		1.0	0.45
127-18-4	Tetrachloroethene	8.57		1.0	0.47
591-78-6	2-Hexanone	22.4		5.0	3.3
124-48-1	Dibromochloromethane	9.23		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	8.73		1.0	0.50
108-90-7	Chlorobenzene	8.50		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.47		1.0	0.57
100-41-4	Ethylbenzene	8.32		1.0	0.51
1330-20-7	Xylenes, Total	16.3		2.0	0.89
100-42-5	Styrene	8.53		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-228044/3

Matrix: Water Lab File ID: 51105D03.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/06/2017 01:16

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 228044 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	8.52		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	8.61		1.0	0.60
107-13-1	Acrylonitrile	104		20	7.8
123-91-1	1,4-Dioxane	200		200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		65-121
2037-26-5	Toluene-d8 (Surr)	110		73-120
460-00-4	4-Bromofluorobenzene (Surr)	101		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 06-Nov-2017 01:16:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019180-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Nov-2017 20:28:31 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: bungardf Date: 06-Nov-2017 01:35:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.377	4.376	0.001	0	261140	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.338	7.344	-0.006	97	569714	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.434	10.433	0.001	86	126036	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.775	12.768	0.007	94	184179	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.621	6.620	0.001	92	135977	50.0	49.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.992	6.991	0.001	0	177154	50.0	53.0	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	94	549363	50.0	54.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.613	0.000	85	183370	50.0	50.6	
11 Dichlorodifluoromethane	85	1.677	1.688	-0.011	100	186134	50.0	56.2	
12 Chloromethane	50	1.895	1.895	0.000	99	212971	50.0	64.0	
13 Vinyl chloride	62	2.017	2.017	0.000	94	176402	50.0	52.2	
14 Butadiene	39	2.023	2.017	0.006	98	199380	50.0	65.0	
15 Bromomethane	94	2.388	2.375	0.013	90	86657	50.0	54.2	
16 Chloroethane	64	2.461	2.461	0.001	99	114515	50.0	61.7	
17 Dichlorofluoromethane	67	2.765	2.771	-0.006	98	255311	50.0	54.4	
18 Trichlorofluoromethane	101	2.796	2.801	-0.005	97	230232	50.0	55.5	M
20 Ethyl ether	59	3.130	3.136	-0.006	94	144596	50.0	53.5	
21 Acrolein	56	3.319	3.318	0.000	98	128510	150.0	188.9	
22 1,1-Dichloroethene	96	3.422	3.434	-0.012	95	125353	50.0	44.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.513	3.506	0.007	92	137689	50.0	45.0	
24 Acetone	43	3.537	3.531	0.006	100	205879	100.0	138.2	
25 Iodomethane	142	3.629	3.640	-0.011	96	193318	50.0	44.1	
26 Carbon disulfide	76	3.714	3.719	-0.005	99	292666	50.0	47.8	
28 3-Chloro-1-propene	76	4.012	4.017	-0.005	90	72800	50.0	40.4	
30 Methyl acetate	43	4.042	4.042	0.000	99	305664	100.0	103.6	
31 Methylene Chloride	84	4.237	4.236	0.001	96	147757	50.0	42.3	
32 2-Methyl-2-propanol	59	4.504	4.510	-0.006	92	150505	500.0	487.3	
33 Acrylonitrile	53	4.614	4.619	-0.005	99	748214	500.0	521.6	
34 trans-1,2-Dichloroethene	96	4.650	4.644	0.006	94	130001	50.0	40.9	
35 Methyl tert-butyl ether	73	4.662	4.662	0.000	97	374639	50.0	44.0	
36 Hexane	57	5.064	5.063	0.001	96	189626	50.0	46.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.283	5.282	0.001	96	254379	50.0	46.0	
38 Vinyl acetate	43	5.325	5.325	0.000	97	361168	50.0	64.3	
45 cis-1,2-Dichloroethene	96	6.013	6.018	-0.005	83	150341	50.0	41.4	
44 2,2-Dichloropropane	97	6.013	6.018	-0.005	70	35192	50.0	50.0	
46 2-Butanone (MEK)	43	6.025	6.030	-0.005	99	245258	100.0	115.6	
49 Chlorobromomethane	128	6.292	6.298	-0.006	93	66421	50.0	41.1	
51 Tetrahydrofuran	42	6.317	6.310	0.007	90	111040	100.0	89.9	
52 Chloroform	83	6.444	6.444	0.000	94	225629	50.0	40.9	
53 1,1,1-Trichloroethane	97	6.602	6.602	0.000	98	183919	50.0	44.0	
54 Cyclohexane	56	6.669	6.675	-0.006	97	236313	50.0	45.8	
56 Carbon tetrachloride	117	6.767	6.766	0.001	97	155937	50.0	44.9	
55 1,1-Dichloropropene	75	6.785	6.784	0.001	94	176286	50.0	39.1	
57 Isobutyl alcohol	41	6.986	6.985	0.001	93	155064	1250.0	1367.9	
58 Benzene	78	6.998	6.997	0.001	98	555790	50.0	40.1	
59 1,2-Dichloroethane	62	7.077	7.076	0.001	97	191730	50.0	47.5	
62 n-Heptane	43	7.357	7.356	0.001	93	169079	50.0	51.8	
64 Trichloroethene	130	7.721	7.727	-0.006	97	134346	50.0	38.5	
66 Methylcyclohexane	83	7.965	7.958	0.007	94	187450	50.0	35.6	
67 1,2-Dichloropropane	63	7.995	8.001	-0.006	94	142208	50.0	44.1	
68 Dibromomethane	93	8.086	8.086	0.000	97	78876	50.0	41.7	
70 1,4-Dioxane	88	8.080	8.086	-0.006	51	32858	1000.0	1001.7	
71 Dichlorobromomethane	83	8.275	8.274	0.001	97	146039	50.0	39.4	
73 2-Chloroethyl vinyl ether	63	8.579	8.578	0.001	92	174876	100.0	75.3	
74 cis-1,3-Dichloropropene	75	8.725	8.724	0.001	93	181752	50.0	40.3	
75 4-Methyl-2-pentanone (MIBK	43	8.877	8.876	0.001	99	364868	100.0	112.9	
76 Toluene	91	9.047	9.053	-0.006	99	557028	50.0	44.3	
77 trans-1,3-Dichloropropene	75	9.296	9.296	0.000	97	165634	50.0	48.4	
78 Ethyl methacrylate	69	9.357	9.357	0.000	92	150711	50.0	36.5	
79 1,1,2-Trichloroethane	97	9.491	9.491	0.000	92	118765	50.0	45.4	
80 Tetrachloroethene	164	9.558	9.563	-0.005	94	102643	50.0	42.8	
81 1,3-Dichloropropane	76	9.649	9.649	0.000	97	204823	50.0	42.3	
82 2-Hexanone	43	9.704	9.703	0.001	98	277201	100.0	111.8	
84 Chlorodibromomethane	129	9.862	9.861	0.001	91	102092	50.0	46.1	
85 Ethylene Dibromide	107	9.971	9.971	0.000	98	117253	50.0	43.7	
86 3-Chlorobenzotrifluoride	180	10.434	10.433	0.001	86	217547	50.0	50.2	
87 Chlorobenzene	112	10.458	10.464	-0.006	93	347745	50.0	42.5	
88 4-Chlorobenzotrifluoride	180	10.519	10.518	0.001	96	211144	50.0	52.8	
89 1,1,1,2-Tetrachloroethane	131	10.555	10.555	0.000	92	123160	50.0	47.3	
90 Ethylbenzene	106	10.555	10.561	-0.006	98	189913	50.0	41.6	
91 m-Xylene & p-Xylene	106	10.689	10.689	0.000	0	229182	50.0	41.1	
92 o-Xylene	106	11.066	11.072	-0.006	97	214833	50.0	40.4	
93 Styrene	104	11.090	11.090	0.000	95	383764	50.0	42.6	
94 Bromoform	173	11.279	11.272	0.007	95	58554	50.0	42.6	
96 2-Chlorobenzotrifluoride	180	11.346	11.339	0.007	96	216649	50.0	52.3	
97 Isopropylbenzene	105	11.437	11.437	0.000	96	533991	50.0	41.1	
99 1,1,2,2-Tetrachloroethane	83	11.747	11.747	0.000	85	166959	50.0	43.1	
100 Bromobenzene	156	11.747	11.753	-0.006	96	138414	50.0	38.7	
102 trans-1,4-Dichloro-2-buten	53	11.790	11.789	0.001	83	58684	50.0	54.4	
101 1,2,3-Trichloropropane	110	11.808	11.808	0.000	86	58480	50.0	39.6	
103 N-Propylbenzene	120	11.851	11.856	-0.005	98	159620	50.0	39.1	
104 2-Chlorotoluene	126	11.942	11.941	0.001	96	130978	50.0	37.1	
105 3-Chlorotoluene	126	12.003	12.008	-0.005	96	183232	50.0	47.7	

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	12.039	12.039	0.000	96	454865	50.0	38.9	
107 4-Chlorotoluene	126	12.063	12.063	0.000	96	149584	50.0	39.2	
108 tert-Butylbenzene	119	12.349	12.349	0.000	94	347221	50.0	35.5	
110 1,2,4-Trimethylbenzene	105	12.410	12.410	0.000	97	464711	50.0	39.1	
111 1,2-dichloro-4-(trifluorom	214	12.453	12.452	0.001	95	127782	50.0	42.9	
112 sec-Butylbenzene	105	12.574	12.574	0.000	94	502554	50.0	36.9	
113 1,3-Dichlorobenzene	146	12.690	12.689	0.001	98	261940	50.0	41.0	
114 4-Isopropyltoluene	119	12.732	12.732	0.000	97	417851	50.0	36.8	
115 1,4-Dichlorobenzene	146	12.793	12.793	0.000	96	268533	50.0	40.9	
116 2,4-Dichloro-1-(triflourom	214	12.824	12.823	0.001	91	112727	50.0	40.7	
118 2,5-Dichlorobenzotrifluori	214	12.866	12.866	0.000	0	129243	50.0	43.2	
120 n-Butylbenzene	91	13.140	13.139	0.001	97	327472	50.0	35.4	
121 1,2-Dichlorobenzene	146	13.152	13.151	0.001	97	253922	50.0	41.7	
122 1,2-Dibromo-3-Chloropropan	75	13.943	13.942	0.001	75	27597	50.0	40.8	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.082	14.088	-0.006	0	553762	150.0	143.4	
125 2,3- & 3,4- Dichlorotoluen	125	14.502	14.502	0.000	0	371051	100.0	92.9	
126 1,2,4-Trichlorobenzene	180	14.764	14.769	-0.005	94	103049	50.0	37.0	
127 Hexachlorobutadiene	225	14.910	14.915	-0.005	93	38917	50.0	38.2	
128 Naphthalene	128	15.031	15.031	0.000	97	321464	50.0	33.9	
129 1,2,3-Trichlorobenzene	180	15.262	15.256	0.006	96	92133	50.0	36.2	
131 2,4,5-Trichlorotoluene	159	16.029	16.028	0.001	0	38924	50.0	32.2	
130 2,3,6-Trichlorotoluene	159	16.126	16.125	0.001	97	40849	50.0	36.3	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	82.3	
S 133 Xylenes, Total	106				0		100.0	81.5	
S 135 1,3-Dichloropropene, Total	1				0		100.0	88.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

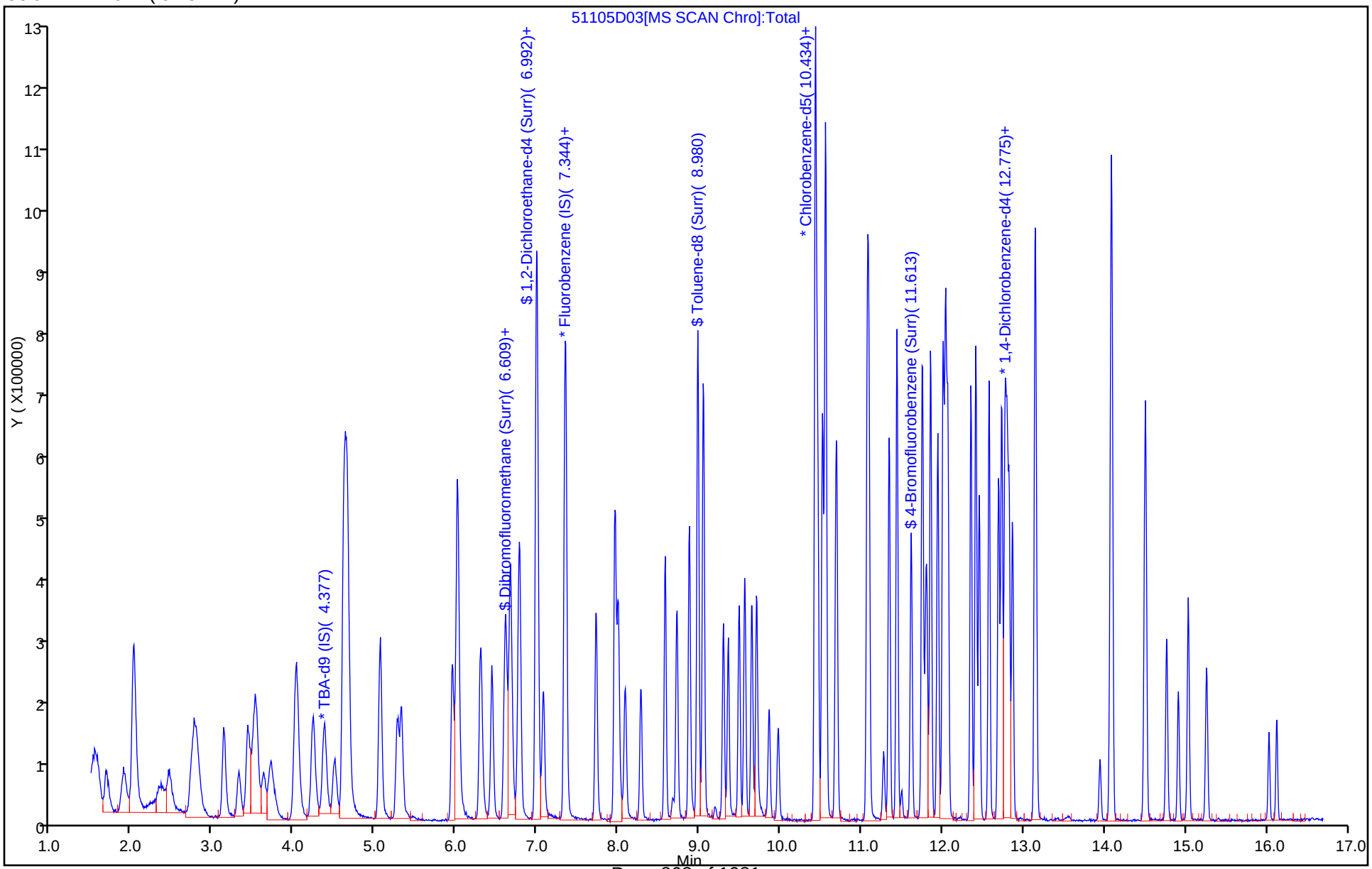
voaWEEmix1stR_00014	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL		
voaWAcro1stRe_00022	Amount Added:	6.00	Units: uL		
voaW2clev1stR_00024	Amount Added:	2.00	Units: uL		
voaWVA1stRest_00023	Amount Added:	2.00	Units: uL		
VOA8260VOAPRI_00269	Amount Added:	2.00	Units: uL		
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent	

Report Date: 06-Nov-2017 20:28:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D03.D				
Injection Date:	06-Nov-2017 01:16:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	LCS			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)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\51105D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 06-Nov-2017 01:16:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019180-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171105-19180.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Nov-2017 20:28:31 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: bungardf Date: 06-Nov-2017 01:35:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.6	99.21
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	53.0	105.98
$ 7 Toluene-d8 (Surr)	50.0	54.8	109.53
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.6	101.23

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-228278/3

Matrix: Water | Lab File ID: 51107D03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/08/2017 01:32

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.: 228278 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	12.4		1.0	0.90
75-01-4	Vinyl chloride	10.1		1.0	0.88
74-83-9	Bromomethane	6.46		1.0	0.89
75-00-3	Chloroethane	8.54		1.0	0.90
75-35-4	1,1-Dichloroethene	8.67		1.0	0.55
67-64-1	Acetone	31.4		5.0	3.4
75-15-0	Carbon disulfide	9.12		1.0	0.88
75-09-2	Methylene Chloride	8.54		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	8.48		1.0	0.67
1634-04-4	Methyl tert-butyl ether	9.44		1.0	0.59
75-34-3	1,1-Dichloroethane	8.83		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	8.07		1.0	0.71
74-97-5	Bromochloromethane	8.61		1.0	0.63
78-93-3	2-Butanone (MEK)	26.7		5.0	2.6
67-66-3	Chloroform	8.14		1.0	0.60
71-55-6	1,1,1-Trichloroethane	8.26		1.0	0.60
56-23-5	Carbon tetrachloride	8.37		1.0	0.88
71-43-2	Benzene	8.06		1.0	0.60
107-06-2	1,2-Dichloroethane	9.57		1.0	0.57
79-01-6	Trichloroethene	7.44		1.0	0.69
78-87-5	1,2-Dichloropropane	8.48		1.0	0.66
75-27-4	Bromodichloromethane	7.89		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.20		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	22.7		5.0	3.1
108-88-3	Toluene	8.81		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	9.61		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.46		1.0	0.45
127-18-4	Tetrachloroethene	8.12		1.0	0.47
591-78-6	2-Hexanone	24.1		5.0	3.3
124-48-1	Dibromochloromethane	9.19		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.09		1.0	0.50
108-90-7	Chlorobenzene	8.60		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.14		1.0	0.57
100-41-4	Ethylbenzene	8.38		1.0	0.51
1330-20-7	Xylenes, Total	16.9		2.0	0.89
100-42-5	Styrene	8.44		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-228278/3

Matrix: Water | Lab File ID: 51107D03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/08/2017 01:32

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.: 228278 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	8.34		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	9.11		1.0	0.60
107-13-1	Acrylonitrile	116		20	7.8
123-91-1	1,4-Dioxane	196	J	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		65-121
2037-26-5	Toluene-d8 (Surr)	112		73-120
460-00-4	4-Bromofluorobenzene (Surr)	106		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 08-Nov-2017 01:32:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019208-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Nov-2017 07:21:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

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

First Level Reviewer: bungardf Date: 08-Nov-2017 01:58:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.389	4.383	0.006	0	261520	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.338	7.338	0.000	97	565705	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.428	10.428	0.000	86	124950	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.769	0.000	94	174005	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.621	6.621	0.000	93	131643	50.0	48.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.986	6.986	0.000	0	163722	50.0	49.3	
$ 7 Toluene-d8 (Surr)	98	8.980	8.980	0.000	94	555030	50.0	55.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.614	11.613	0.001	84	189515	50.0	52.8	
11 Dichlorodifluoromethane	85	1.671	1.683	-0.012	99	175298	50.0	53.3	
12 Chloromethane	50	1.896	1.889	0.007	99	205406	50.0	62.1	
14 Butadiene	39	2.017	2.011	0.006	94	195945	50.0	64.3	
13 Vinyl chloride	62	2.011	2.017	-0.006	65	168863	50.0	50.3	
15 Bromomethane	94	2.333	2.333	0.000	90	51257	50.0	32.3	
16 Chloroethane	64	2.437	2.431	0.006	98	78762	50.0	42.7	
17 Dichlorofluoromethane	67	2.753	2.759	-0.006	98	240151	50.0	51.5	
18 Trichlorofluoromethane	101	2.771	2.802	-0.031	95	203757	50.0	49.4	
20 Ethyl ether	59	3.124	3.136	-0.012	96	154016	50.0	57.4	
21 Acrolein	56	3.313	3.312	0.001	99	123709	150.0	183.1	
22 1,1-Dichloroethene	96	3.422	3.428	-0.006	98	120091	50.0	43.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.495	3.501	-0.006	95	130495	50.0	42.9	
24 Acetone	43	3.544	3.537	0.007	100	232548	100.0	157.2	
25 Iodomethane	142	3.617	3.610	0.007	96	189844	50.0	43.6	
26 Carbon disulfide	76	3.708	3.708	0.000	99	277118	50.0	45.6	
28 3-Chloro-1-propene	76	4.006	4.006	0.000	91	76186	50.0	42.6	
30 Methyl acetate	43	4.042	4.036	0.006	99	339478	100.0	115.9	
31 Methylene Chloride	84	4.225	4.231	-0.006	98	148037	50.0	42.7	
32 2-Methyl-2-propanol	59	4.511	4.510	0.001	92	163544	500.0	528.8	
33 Acrylonitrile	53	4.608	4.608	0.000	100	826445	500.0	580.2	
34 trans-1,2-Dichloroethene	96	4.638	4.638	0.000	85	133847	50.0	42.4	
35 Methyl tert-butyl ether	73	4.669	4.656	0.013	97	399550	50.0	47.2	
36 Hexane	57	5.058	5.052	0.006	95	200939	50.0	49.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.271	5.271	0.000	96	242323	50.0	44.2	
38 Vinyl acetate	43	5.325	5.319	0.006	97	378109	50.0	67.8	
44 2,2-Dichloropropane	97	6.007	6.006	0.001	60	34836	50.0	49.9	
45 cis-1,2-Dichloroethene	96	6.013	6.013	0.001	84	145656	50.0	40.4	
46 2-Butanone (MEK)	43	6.025	6.025	0.000	100	281210	100.0	133.5	
49 Chlorobromomethane	128	6.292	6.298	-0.006	95	69066	50.0	43.1	
51 Tetrahydrofuran	42	6.305	6.310	-0.005	97	129746	100.0	105.8	
52 Chloroform	83	6.438	6.438	0.000	95	222954	50.0	40.7	
53 1,1,1-Trichloroethane	97	6.596	6.596	0.000	99	171244	50.0	41.3	
54 Cyclohexane	56	6.663	6.657	0.006	95	247563	50.0	48.4	
56 Carbon tetrachloride	117	6.767	6.767	0.000	97	144499	50.0	41.9	
55 1,1-Dichloropropene	75	6.779	6.779	0.000	92	172110	50.0	38.4	
57 Isobutyl alcohol	41	6.986	6.986	0.000	90	157160	1250.0	1396.2	
58 Benzene	78	6.998	6.998	0.000	97	554633	50.0	40.3	
59 1,2-Dichloroethane	62	7.071	7.071	0.000	96	191917	50.0	47.9	
62 n-Heptane	43	7.351	7.350	0.001	94	176450	50.0	54.5	
64 Trichloroethene	130	7.728	7.721	0.007	95	128699	50.0	37.2	
66 Methylcyclohexane	83	7.959	7.959	0.000	94	196113	50.0	37.5	
67 1,2-Dichloropropane	63	7.995	7.995	0.000	95	135798	50.0	42.4	
70 1,4-Dioxane	88	8.080	8.080	0.000	48	31931	1000.0	980.4	
68 Dibromomethane	93	8.080	8.086	-0.006	95	80511	50.0	42.9	
71 Dichlorobromomethane	83	8.275	8.281	-0.006	97	145240	50.0	39.4	
73 2-Chloroethyl vinyl ether	63	8.573	8.579	-0.006	92	195335	100.0	84.7	
74 cis-1,3-Dichloropropene	75	8.719	8.719	0.000	92	183440	50.0	41.0	
75 4-Methyl-2-pentanone (MIBK	43	8.877	8.877	0.000	98	363902	100.0	113.5	
76 Toluene	91	9.047	9.047	0.000	98	548611	50.0	44.0	
77 trans-1,3-Dichloropropene	75	9.297	9.296	0.001	97	162968	50.0	48.1	
78 Ethyl methacrylate	69	9.357	9.357	0.000	92	167290	50.0	40.9	
79 1,1,2-Trichloroethane	97	9.491	9.491	0.000	91	122816	50.0	47.3	
80 Tetrachloroethene	164	9.558	9.558	0.000	95	96485	50.0	40.6	
81 1,3-Dichloropropane	76	9.643	9.649	-0.006	97	209313	50.0	43.6	
82 2-Hexanone	43	9.704	9.704	0.000	99	296632	100.0	120.7	
84 Chlorodibromomethane	129	9.856	9.856	0.000	91	100847	50.0	46.0	
85 Ethylene Dibromide	107	9.972	9.971	0.001	98	120959	50.0	45.4	
86 3-Chlorobenzotrifluoride	180	10.434	10.434	0.000	88	215743	50.0	50.2	
87 Chlorobenzene	112	10.458	10.458	0.000	94	348727	50.0	43.0	
88 4-Chlorobenzotrifluoride	180	10.519	10.519	0.000	97	204418	50.0	51.6	
89 1,1,1,2-Tetrachloroethane	131	10.549	10.549	0.000	95	117843	50.0	45.7	
90 Ethylbenzene	106	10.555	10.555	0.000	98	189740	50.0	41.9	
91 m-Xylene & p-Xylene	106	10.689	10.689	0.000	0	234730	50.0	42.4	
92 o-Xylene	106	11.072	11.072	0.000	97	221981	50.0	42.1	
93 Styrene	104	11.091	11.090	0.001	95	376559	50.0	42.2	
94 Bromoform	173	11.267	11.273	-0.006	94	56864	50.0	41.7	
96 2-Chlorobenzotrifluoride	180	11.340	11.346	-0.006	94	211844	50.0	51.6	
97 Isopropylbenzene	105	11.437	11.437	0.000	96	527044	50.0	41.0	
99 1,1,2,2-Tetrachloroethane	83	11.747	11.753	-0.006	85	175043	50.0	45.6	
100 Bromobenzene	156	11.753	11.753	0.000	94	138628	50.0	41.0	
102 trans-1,4-Dichloro-2-buten	53	11.784	11.790	-0.006	82	58598	50.0	57.5	
101 1,2,3-Trichloropropane	110	11.802	11.802	0.000	85	61200	50.0	43.9	
103 N-Propylbenzene	120	11.851	11.857	-0.006	99	150290	50.0	38.9	
104 2-Chlorotoluene	126	11.942	11.936	0.006	97	132572	50.0	39.7	
105 3-Chlorotoluene	126	12.009	12.003	0.006	97	187047	50.0	51.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	12.033	12.033	0.000	95	454251	50.0	41.1	
107 4-Chlorotoluene	126	12.064	12.063	0.001	97	141099	50.0	39.2	
108 tert-Butylbenzene	119	12.349	12.349	0.000	94	350214	50.0	37.9	
110 1,2,4-Trimethylbenzene	105	12.410	12.410	0.000	97	457752	50.0	40.8	
111 1,2-dichloro-4-(trifluorom	214	12.453	12.453	0.000	94	121463	50.0	43.2	
112 sec-Butylbenzene	105	12.574	12.574	0.000	94	496878	50.0	38.6	
113 1,3-Dichlorobenzene	146	12.696	12.696	0.000	99	253791	50.0	42.1	
114 4-Isopropyltoluene	119	12.726	12.726	0.000	97	429409	50.0	40.0	
115 1,4-Dichlorobenzene	146	12.793	12.793	0.000	95	267147	50.0	43.1	
116 2,4-Dichloro-1-(triflourom	214	12.824	12.824	0.000	94	117237	50.0	44.8	
118 2,5-Dichlorobenzotrifluori	214	12.860	12.866	-0.006	0	125221	50.0	44.3	
120 n-Butylbenzene	91	13.134	13.134	0.000	97	337069	50.0	38.5	
121 1,2-Dichlorobenzene	146	13.152	13.152	0.000	97	256255	50.0	44.6	
122 1,2-Dibromo-3-Chloropropan	75	13.937	13.943	-0.006	79	27592	50.0	43.2	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.083	14.082	0.001	0	579728	150.0	158.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.502	14.502	0.000	0	395115	100.0	104.7	
126 1,2,4-Trichlorobenzene	180	14.764	14.764	0.000	94	110058	50.0	41.8	
127 Hexachlorobutadiene	225	14.910	14.910	0.000	94	39470	50.0	41.0	
128 Naphthalene	128	15.031	15.031	0.000	97	384251	50.0	42.9	
129 1,2,3-Trichlorobenzene	180	15.256	15.256	0.000	95	101952	50.0	42.4	
131 2,4,5-Trichlorotoluene	159	16.029	16.028	0.001	0	44788	50.0	39.2	
130 2,3,6-Trichlorotoluene	159	16.126	16.126	0.000	97	48866	50.0	46.0	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	82.8	
S 133 Xylenes, Total	106				0		100.0	84.5	
S 135 1,3-Dichloropropene, Total	1				0		100.0	89.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWEEmix1stR_00014	Amount Added:	2.00	Units: uL	
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL	
voaWAcro1stRe_00022	Amount Added:	6.00	Units: uL	
voaWVA1stRest_00023	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00271	Amount Added:	2.00	Units: uL	
voaW2clev1stR_00025	Amount Added:	2.00	Units: uL	
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

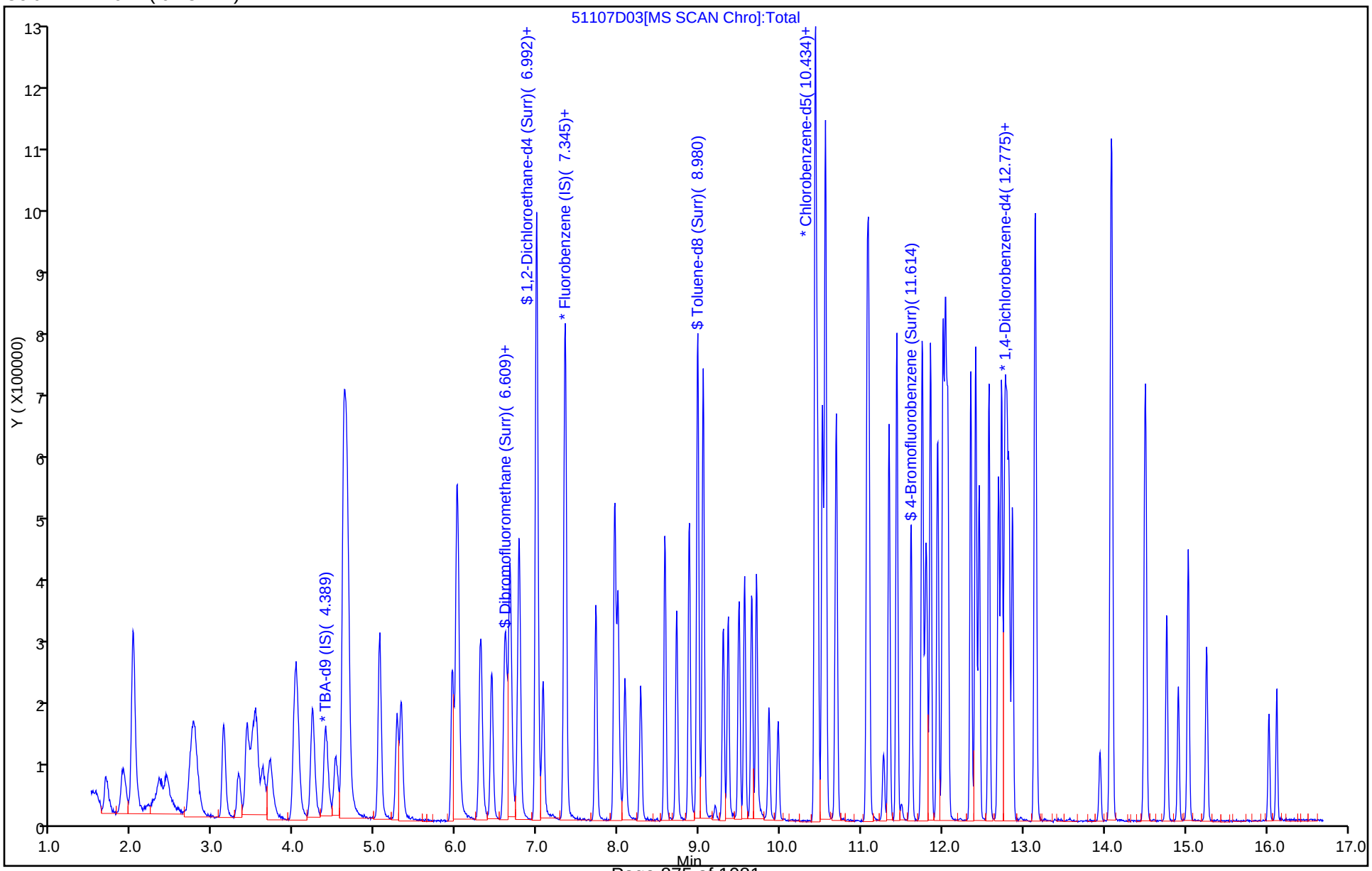
Report Date: 08-Nov-2017 09:23:39 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D03.D

Injection Date:	08-Nov-2017 01:32:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	LCS			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)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\51107D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 08-Nov-2017 01:32:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019208-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171107-19208.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Nov-2017 07:21:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

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

First Level Reviewer: bungardf Date: 08-Nov-2017 01:58:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.4	96.73
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.3	98.63
$ 7 Toluene-d8 (Surr)	50.0	55.8	111.63
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.8	105.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-228533/4

Matrix: Water | Lab File ID: 7110904.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/09/2017 09:42

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 228533 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	7.53		1.0	0.90
75-01-4	Vinyl chloride	6.63		1.0	0.88
74-83-9	Bromomethane	7.80		1.0	0.89
75-00-3	Chloroethane	9.19		1.0	0.90
75-35-4	1,1-Dichloroethene	6.67		1.0	0.55
67-64-1	Acetone	16.7		5.0	3.4
75-15-0	Carbon disulfide	10.2		1.0	0.88
75-09-2	Methylene Chloride	11.1		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	10.3		1.0	0.67
1634-04-4	Methyl tert-butyl ether	9.70		1.0	0.59
75-34-3	1,1-Dichloroethane	8.98		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	9.89		1.0	0.71
74-97-5	Bromochloromethane	9.52		1.0	0.63
78-93-3	2-Butanone (MEK)	23.5		5.0	2.6
67-66-3	Chloroform	8.98		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.28		1.0	0.60
56-23-5	Carbon tetrachloride	10.4		1.0	0.88
71-43-2	Benzene	11.3		1.0	0.60
107-06-2	1,2-Dichloroethane	8.53		1.0	0.57
79-01-6	Trichloroethene	10.3		1.0	0.69
78-87-5	1,2-Dichloropropane	10.6		1.0	0.66
75-27-4	Bromodichloromethane	9.48		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	10.1		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	25.2		5.0	3.1
108-88-3	Toluene	12.4		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	10.0		1.0	0.58
79-00-5	1,1,2-Trichloroethane	11.4		1.0	0.45
127-18-4	Tetrachloroethene	9.48		1.0	0.47
591-78-6	2-Hexanone	24.2		5.0	3.3
124-48-1	Dibromochloromethane	11.3		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	11.1		1.0	0.50
108-90-7	Chlorobenzene	11.6		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	10.7		1.0	0.57
100-41-4	Ethylbenzene	10.4		1.0	0.51
1330-20-7	Xylenes, Total	20.5		2.0	0.89
100-42-5	Styrene	11.1		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-228533/4

Matrix: Water Lab File ID: 7110904.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/09/2017 09:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 228533 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	12.7		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	11.7		1.0	0.60
107-13-1	Acrylonitrile	120		20	7.8
123-91-1	1,4-Dioxane	229		200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		65-121
2037-26-5	Toluene-d8 (Surr)	95		73-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	94		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\7110904.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 09-Nov-2017 09:42:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 09-Nov-2017 16:09:44 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 09-Nov-2017 16:10:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.255	4.251	0.004	97	105721	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.266	7.263	0.003	97	119931	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.363	10.365	-0.002	89	28985	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.711	12.707	0.004	95	39802	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.542	6.539	0.003	92	27873	50.0	47.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.914	6.910	0.004	47	48123	50.0	41.7	
$ 7 Toluene-d8 (Surr)	98	8.909	8.911	-0.002	94	104732	50.0	47.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.549	11.545	0.004	86	44308	50.0	47.1	
11 Dichlorodifluoromethane	85	1.627	1.617	0.010	99	49623	50.0	53.8	
12 Chloromethane	50	1.785	1.793	-0.008	100	48546	50.0	37.7	
13 Vinyl chloride	62	1.931	1.921	0.010	98	34345	50.0	33.1	
14 Butadiene	39	1.962	1.970	-0.008	98	36478	50.0	50.0	
15 Bromomethane	94	2.278	2.280	-0.002	89	15527	50.0	39.0	
16 Chloroethane	64	2.424	2.414	0.010	94	15998	50.0	45.9	
17 Dichlorofluoromethane	67	2.686	2.682	0.004	97	44988	50.0	44.4	
18 Trichlorofluoromethane	101	2.716	2.694	0.022	72	43093	50.0	49.7	
20 Ethyl ether	59	3.044	3.041	0.003	94	26752	50.0	30.4	
22 1,1-Dichloroethene	96	3.336	3.345	-0.009	88	24640	50.0	33.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.428	3.430	-0.002	61	25929	50.0	44.4	
24 Acetone	43	3.434	3.436	-0.002	97	46160	100.0	83.7	
25 Iodomethane	142	3.531	3.533	-0.002	96	47956	50.0	68.4	
26 Carbon disulfide	76	3.635	3.625	0.010	100	90561	50.0	50.9	
28 3-Chloro-1-propene	76	3.908	3.917	-0.009	79	21832	50.0	54.2	
30 Methyl acetate	43	3.920	3.923	-0.003	98	111278	100.0	108.1	
31 Methylene Chloride	84	4.115	4.123	-0.008	98	41612	50.0	55.4	
32 2-Methyl-2-propanol	59	4.389	4.373	0.016	97	69434	500.0	526.6	
33 Acrylonitrile	53	4.504	4.507	-0.003	100	263496	500.0	600.2	
34 trans-1,2-Dichloroethene	96	4.541	4.555	-0.014	97	30807	50.0	51.5	
35 Methyl tert-butyl ether	73	4.559	4.561	-0.002	98	124319	50.0	48.5	
36 Hexane	57	4.967	4.975	-0.008	94	43253	50.0	51.6	
37 1,1-Dichloroethane	63	5.180	5.182	-0.002	96	70162	50.0	44.9	
45 cis-1,2-Dichloroethene	96	5.934	5.930	0.004	80	38596	50.0	49.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 2,2-Dichloropropane	97	5.934	5.930	0.004	47	6622	50.0	44.3	
46 2-Butanone (MEK)	43	5.940	5.936	0.004	98	86738	100.0	117.6	
49 Chlorobromomethane	128	6.220	6.210	0.010	94	18579	50.0	47.6	
51 Tetrahydrofuran	42	6.232	6.228	0.004	92	51677	100.0	113.2	
52 Chloroform	83	6.360	6.362	-0.002	94	68032	50.0	44.9	
53 1,1,1-Trichloroethane	97	6.518	6.514	0.004	98	47523	50.0	46.4	
54 Cyclohexane	56	6.591	6.587	0.004	94	58241	50.0	52.6	
56 Carbon tetrachloride	117	6.682	6.691	-0.009	94	37490	50.0	52.2	
55 1,1-Dichloropropene	75	6.707	6.709	-0.002	94	45641	50.0	45.5	
57 Isobutyl alcohol	41	6.907	6.904	0.003	92	58972	1250.0	1257.8	
62 n-Heptane	43	6.907	6.904	0.003	70	77483	50.0	55.8	
58 Benzene	78	6.920	6.922	-0.002	98	152308	50.0	56.5	
59 1,2-Dichloroethane	62	6.999	6.995	0.004	97	62014	50.0	42.6	
64 Trichloroethene	130	7.656	7.646	0.010	94	38044	50.0	51.6	
66 Methylcyclohexane	83	7.887	7.889	-0.002	96	43943	50.0	49.4	
67 1,2-Dichloropropane	63	7.923	7.926	-0.003	94	41471	50.0	52.9	
70 1,4-Dioxane	88	8.009	8.011	-0.002	44	8723	1000.0	1143.3	
68 Dibromomethane	93	8.015	8.011	0.004	94	23746	50.0	49.1	
71 Dichlorobromomethane	83	8.209	8.205	0.004	98	51675	50.0	47.4	
74 cis-1,3-Dichloropropene	75	8.647	8.650	-0.003	93	66066	50.0	50.5	
75 4-Methyl-2-pentanone (MIBK	43	8.799	8.802	-0.003	98	169510	100.0	126.1	
76 Toluene	91	8.976	8.978	-0.002	97	154757	50.0	62.2	
77 trans-1,3-Dichloropropene	75	9.225	9.227	-0.002	96	58761	50.0	50.0	
78 Ethyl methacrylate	69	9.286	9.282	0.004	92	69322	50.0	53.7	
79 1,1,2-Trichloroethane	97	9.420	9.422	-0.002	95	38330	50.0	57.1	
80 Tetrachloroethene	164	9.493	9.495	-0.002	93	23874	50.0	47.4	
81 1,3-Dichloropropane	76	9.578	9.580	-0.002	97	66737	50.0	51.3	
82 2-Hexanone	43	9.633	9.635	-0.002	98	118121	100.0	121.0	
84 Chlorodibromomethane	129	9.791	9.787	0.004	92	35171	50.0	56.4	
85 Ethylene Dibromide	107	9.901	9.909	-0.009	96	42831	50.0	55.5	
87 Chlorobenzene	112	10.393	10.389	0.004	91	103775	50.0	58.1	
89 1,1,1,2-Tetrachloroethane	131	10.485	10.481	0.004	91	30340	50.0	53.3	
90 Ethylbenzene	106	10.491	10.493	-0.002	99	46659	50.0	51.9	
91 m-Xylene & p-Xylene	106	10.624	10.621	0.003	98	56963	50.0	50.9	
92 o-Xylene	106	11.002	11.004	-0.002	97	62013	50.0	51.6	
93 Styrene	104	11.026	11.022	0.004	94	107346	50.0	55.4	
94 Bromoform	173	11.208	11.211	-0.003	95	26672	50.0	63.6	
97 Isopropylbenzene	105	11.373	11.369	0.004	97	143587	50.0	50.7	
100 Bromobenzene	156	11.689	11.685	0.004	97	39754	50.0	47.6	
99 1,1,2,2-Tetrachloroethane	83	11.683	11.685	-0.002	95	55774	50.0	58.3	
102 trans-1,4-Dichloro-2-buten	53	11.726	11.722	0.004	82	19805	50.0	54.1	
101 1,2,3-Trichloropropane	110	11.744	11.740	0.004	86	19074	50.0	52.5	
103 N-Propylbenzene	120	11.786	11.789	-0.003	99	31614	50.0	47.1	
104 2-Chlorotoluene	126	11.878	11.874	0.004	94	30828	50.0	48.2	
106 1,3,5-Trimethylbenzene	105	11.969	11.971	-0.002	92	113175	50.0	48.3	
107 4-Chlorotoluene	126	11.999	12.002	-0.003	98	32309	50.0	49.8	
108 tert-Butylbenzene	119	12.285	12.281	0.004	93	88832	50.0	47.9	
110 1,2,4-Trimethylbenzene	105	12.346	12.342	0.004	98	124491	50.0	51.1	
112 sec-Butylbenzene	105	12.510	12.506	0.004	95	119015	50.0	49.2	
113 1,3-Dichlorobenzene	146	12.632	12.628	0.004	96	60193	50.0	48.1	
114 4-Isopropyltoluene	119	12.662	12.665	-0.003	97	98764	50.0	51.7	
115 1,4-Dichlorobenzene	146	12.735	12.732	0.003	92	60057	50.0	49.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
120 n-Butylbenzene	91	13.070	13.072	-0.002	97	81708	50.0	48.7	
121 1,2-Dichlorobenzene	146	13.088	13.090	-0.002	93	59005	50.0	50.1	
122 1,2-Dibromo-3-Chloropropan	157	13.879	13.881	-0.002	77	9830	50.0	65.1	
126 1,2,4-Trichlorobenzene	180	14.706	14.703	0.003	93	29593	50.0	59.7	
127 Hexachlorobutadiene	225	14.846	14.849	-0.003	95	11895	50.0	59.3	
128 Naphthalene	128	14.968	14.964	0.004	94	94910	50.0	87.9	
129 1,2,3-Trichlorobenzene	180	15.193	15.195	-0.002	96	21214	50.0	74.0	
S 133 Xylenes, Total	106				0		100.0	102.5	
S 134 1,2-Dichloroethene, Total	96				0		100.0	100.9	
S 135 1,3-Dichloropropene, Total	1				0		100.0	100.6	

Reagents:

voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00271	Amount Added:	2.00	Units: uL	
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

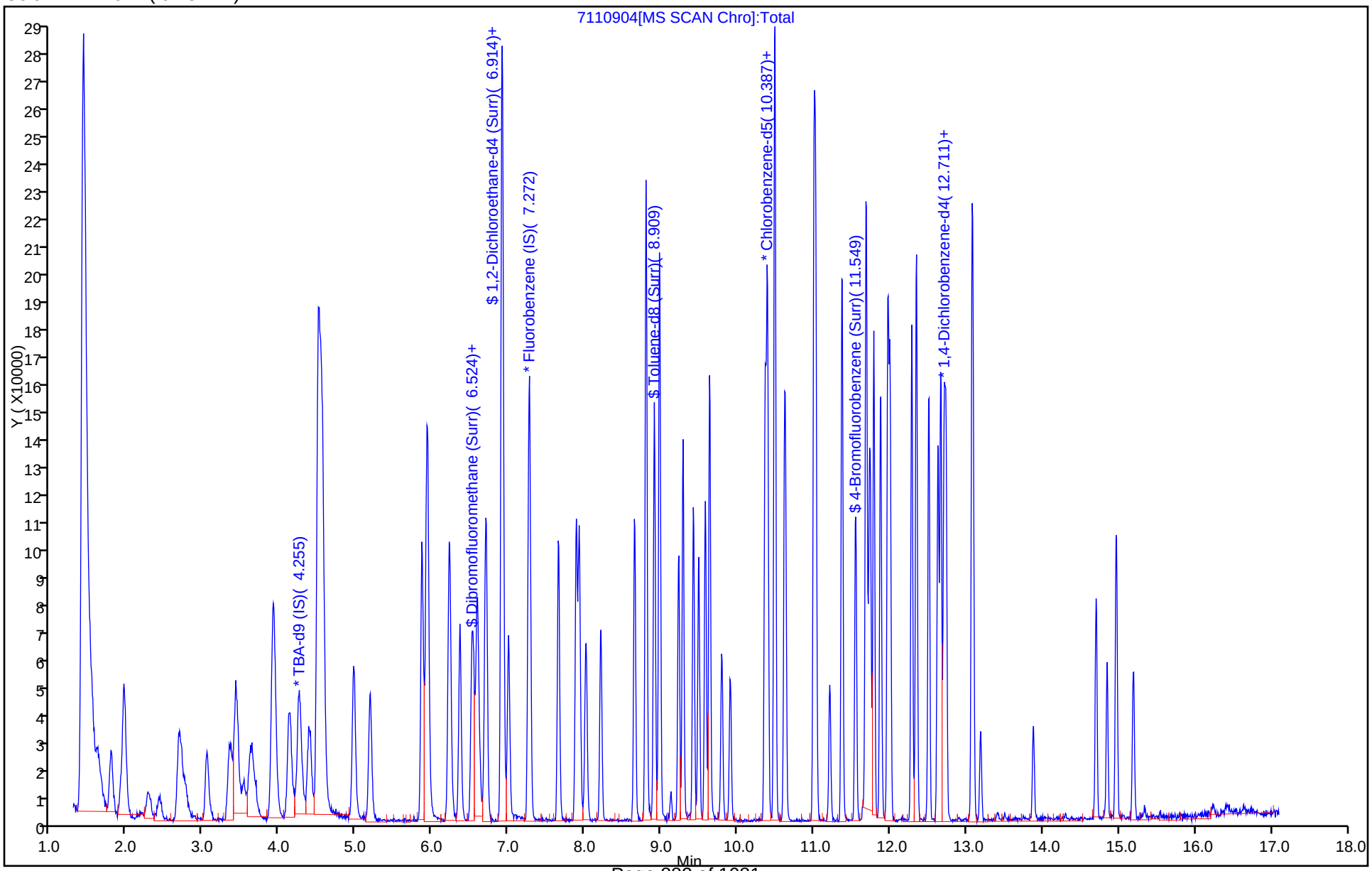
Report Date: 09-Nov-2017 16:10:07 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\7110904.D

Injection Date:	09-Nov-2017 09:42:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\7110904.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 09-Nov-2017 09:42:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171109-19243.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 09-Nov-2017 16:09:44 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 09-Nov-2017 16:10:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	47.0	93.93
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	41.7	83.38
$ 7 Toluene-d8 (Surr)	50.0	47.7	95.40
$ 8 4-Bromofluorobenzene (Surr)	50.0	47.1	94.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-43D-0/1-0 MS | Lab Sample ID: 180-71829-1 MS

Matrix: Water | Lab File ID: 7110114.D

Analysis Method: 8260C | Date Collected: 10/26/2017 14:25

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 14:11

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.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.19		1.0	0.90
75-01-4	Vinyl chloride	4.99		1.0	0.88
74-83-9	Bromomethane	5.20		1.0	0.89
75-00-3	Chloroethane	7.32		1.0	0.90
75-35-4	1,1-Dichloroethene	6.86		1.0	0.55
67-64-1	Acetone	13.4		5.0	3.4
75-15-0	Carbon disulfide	9.46		1.0	0.88
75-09-2	Methylene Chloride	8.35		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	9.11		1.0	0.67
1634-04-4	Methyl tert-butyl ether	6.70		1.0	0.59
75-34-3	1,1-Dichloroethane	7.54		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	12.5		1.0	0.71
74-97-5	Bromochloromethane	7.38		1.0	0.63
78-93-3	2-Butanone (MEK)	17.1		5.0	2.6
67-66-3	Chloroform	7.01		1.0	0.60
71-55-6	1,1,1-Trichloroethane	7.76		1.0	0.60
56-23-5	Carbon tetrachloride	7.86		1.0	0.88
71-43-2	Benzene	8.13		1.0	0.60
107-06-2	1,2-Dichloroethane	5.98		1.0	0.57
79-01-6	Trichloroethene	13.0		1.0	0.69
78-87-5	1,2-Dichloropropane	8.30		1.0	0.66
75-27-4	Bromodichloromethane	7.13		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	7.45		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	20.0		5.0	3.1
108-88-3	Toluene	9.37		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	7.29		1.0	0.58
79-00-5	1,1,2-Trichloroethane	8.84		1.0	0.45
127-18-4	Tetrachloroethene	13.6		1.0	0.47
591-78-6	2-Hexanone	19.0		5.0	3.3
124-48-1	Dibromochloromethane	8.55		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	8.17		1.0	0.50
108-90-7	Chlorobenzene	8.55		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	8.51		1.0	0.57
100-41-4	Ethylbenzene	9.31		1.0	0.51
1330-20-7	Xylenes, Total	17.9		2.0	0.89
100-42-5	Styrene	8.90		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-43D-0/1-0 MS | Lab Sample ID: 180-71829-1 MS

Matrix: Water | Lab File ID: 7110114.D

Analysis Method: 8260C | Date Collected: 10/26/2017 14:25

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 14:11

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.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.16		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	8.39		1.0	0.60
107-13-1	Acrylonitrile	82.8		20	7.8
123-91-1	1,4-Dioxane	145	J	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	70		65-121
2037-26-5	Toluene-d8 (Surr)	99		73-120
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	80		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110114.D
Lims ID: 180-71829-C-1 MS
Client ID: HD-MW-43D-0/1-0
Sample Type: MS
Inject. Date: 01-Nov-2017 14:11:30 ALS Bottle#: 15 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-C-1 MS
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 15:54:10 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 15:56:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.257	4.261	-0.004	98	146633	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.262	7.261	0.001	97	206058	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.358	10.363	-0.005	89	47324	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.707	12.705	0.002	95	56278	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.538	6.543	-0.005	85	40846	50.0	40.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.909	6.908	0.001	65	69841	50.0	35.2	
$ 7 Toluene-d8 (Surr)	98	8.911	8.909	0.002	94	178336	50.0	49.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.545	11.549	-0.004	86	69620	50.0	45.2	
12 Chloromethane	50	1.787	1.786	0.001	99	57433	50.0	25.9	
13 Vinyl chloride	62	1.921	1.919	0.002	95	44438	50.0	25.0	
15 Bromomethane	94	2.255	2.254	0.001	92	18208	50.0	26.0	
16 Chloroethane	64	2.426	2.412	0.014	98	21910	50.0	36.6	
22 1,1-Dichloroethene	96	3.338	3.337	0.001	93	43562	50.0	34.3	
24 Acetone	43	3.423	3.428	-0.005	98	63719	100.0	67.2	
26 Carbon disulfide	76	3.630	3.617	0.013	100	144656	50.0	47.3	
31 Methylene Chloride	84	4.123	4.115	0.008	98	54934	50.0	41.8	
33 Acrylonitrile	53	4.506	4.505	0.001	100	312285	500.0	414.0	
34 trans-1,2-Dichloroethene	96	4.549	4.541	0.008	94	46831	50.0	45.6	
35 Methyl tert-butyl ether	73	4.561	4.560	0.001	98	147616	50.0	33.5	
37 1,1-Dichloroethane	63	5.181	5.180	0.001	96	101113	50.0	37.7	
45 cis-1,2-Dichloroethene	96	5.930	5.928	0.002	84	84073	50.0	62.7	
46 2-Butanone (MEK)	43	5.936	5.941	-0.004	81	108296	100.0	85.4	
49 Chlorobromomethane	128	6.216	6.214	0.002	91	24742	50.0	36.9	
52 Chloroform	83	6.362	6.360	0.002	93	91243	50.0	35.0	
53 1,1,1-Trichloroethane	97	6.514	6.512	0.002	98	68304	50.0	38.8	
56 Carbon tetrachloride	117	6.690	6.689	0.001	96	48474	50.0	39.3	
58 Benzene	78	6.915	6.920	-0.005	98	192638	50.0	40.7	
59 1,2-Dichloroethane	62	7.000	6.999	0.001	97	74671	50.0	29.9	
64 Trichloroethene	130	7.645	7.656	-0.011	96	82176	50.0	64.8	
67 1,2-Dichloropropane	63	7.925	7.924	0.001	94	55884	50.0	41.5	
70 1,4-Dioxane	88	8.004	8.003	0.001	43	9496	1000.0	724.4	
71 Dichlorobromomethane	83	8.205	8.210	-0.005	97	66806	50.0	35.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75	8.649	8.648	0.001	93	83645	50.0	37.2	
75 4-Methyl-2-pentanone (MIBK	43	8.801	8.800	0.001	98	219415	100.0	100.0	
76 Toluene	91	8.978	8.976	0.002	97	193079	50.0	46.9	
77 trans-1,3-Dichloropropene	75	9.227	9.232	-0.005	95	69918	50.0	36.5	
79 1,1,2-Trichloroethane	97	9.416	9.420	-0.004	93	48421	50.0	44.2	
80 Tetrachloroethene	164	9.489	9.493	-0.004	95	56042	50.0	68.2	
82 2-Hexanone	43	9.635	9.633	0.002	98	151586	100.0	95.1	
84 Chlorodibromomethane	129	9.793	9.791	0.002	92	43559	50.0	42.7	
85 Ethylene Dibromide	107	9.902	9.901	0.001	97	51534	50.0	40.9	
87 Chlorobenzene	112	10.389	10.394	-0.005	91	124724	50.0	42.7	
89 1,1,1,2-Tetrachloroethane	131	10.486	10.479	0.007	91	39530	50.0	42.6	
90 Ethylbenzene	106	10.486	10.485	0.001	99	68318	50.0	46.6	
91 m-Xylene & p-Xylene	106	10.620	10.619	0.001	98	82841		45.1	
92 o-Xylene	106	11.003	11.002	0.001	97	87160		44.4	
93 Styrene	104	11.022	11.026	-0.004	95	140866	50.0	44.5	
94 Bromoform	173	11.210	11.209	0.001	96	31355	50.0	45.8	
99 1,1,2,2-Tetrachloroethane	83	11.685	11.689	-0.004	84	65501	50.0	41.9	
S 133 Xylenes, Total	106				0		100.0	89.5	

Reagents:

VOA8260VOA2ND_00270	Amount Added:	2.00	Units: uL	
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL	
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

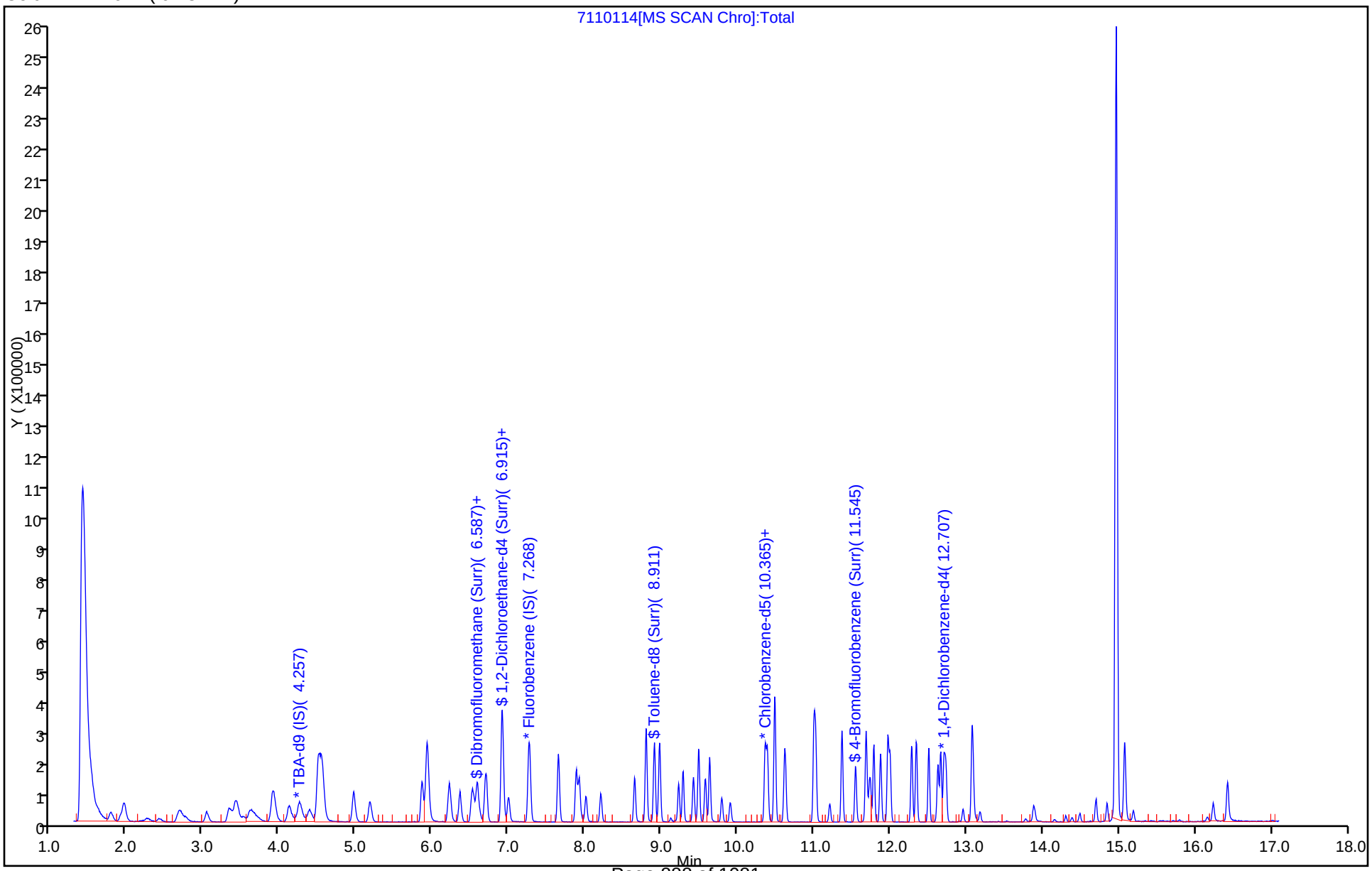
Report Date: 01-Nov-2017 15:56:23 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110114.D

Injection Date:	01-Nov-2017 14:11:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-C-1 MS			Worklist Smp#:	14
Client ID:	HD-MW-43D-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110114.D
Lims ID: 180-71829-C-1 MS
Client ID: HD-MW-43D-0/1-0
Sample Type: MS
Inject. Date: 01-Nov-2017 14:11:30 ALS Bottle#: 15 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-C-1 MS
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 15:54:10 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 15:56:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	40.1	80.12
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	35.2	70.43
$ 7 Toluene-d8 (Surr)	50.0	49.7	99.49
$ 8 4-Bromofluorobenzene (Surr)	50.0	45.2	90.31

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-16D-0/1-0 MS | Lab Sample ID: 180-71829-13 MS

Matrix: Water | Lab File ID: 7110215.D

Analysis Method: 8260C | Date Collected: 10/25/2017 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 11:55

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.73		1.0	0.90
75-01-4	Vinyl chloride	4.95		1.0	0.88
74-83-9	Bromomethane	4.77		1.0	0.89
75-00-3	Chloroethane	7.32		1.0	0.90
75-35-4	1,1-Dichloroethene	8.03		1.0	0.55
67-64-1	Acetone	13.9		5.0	3.4
75-15-0	Carbon disulfide	10.7		1.0	0.88
75-09-2	Methylene Chloride	11.0		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	9.81		1.0	0.67
1634-04-4	Methyl tert-butyl ether	8.32		1.0	0.59
75-34-3	1,1-Dichloroethane	8.88		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	15.8		1.0	0.71
74-97-5	Bromochloromethane	9.13		1.0	0.63
78-93-3	2-Butanone (MEK)	17.0		5.0	2.6
67-66-3	Chloroform	8.61		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.82		1.0	0.60
56-23-5	Carbon tetrachloride	10.2		1.0	0.88
71-43-2	Benzene	9.95		1.0	0.60
107-06-2	1,2-Dichloroethane	7.58		1.0	0.57
79-01-6	Trichloroethene	16.7		1.0	0.69
78-87-5	1,2-Dichloropropane	9.84		1.0	0.66
75-27-4	Bromodichloromethane	9.13		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.99		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	19.6		5.0	3.1
108-88-3	Toluene	11.4		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	9.48		1.0	0.58
79-00-5	1,1,2-Trichloroethane	10.6		1.0	0.45
127-18-4	Tetrachloroethene	10.0		1.0	0.47
591-78-6	2-Hexanone	19.3		5.0	3.3
124-48-1	Dibromochloromethane	11.0		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	10.1		1.0	0.50
108-90-7	Chlorobenzene	10.5		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	10.9		1.0	0.57
100-41-4	Ethylbenzene	11.2		1.0	0.51
1330-20-7	Xylenes, Total	22.3		2.0	0.89
100-42-5	Styrene	11.0		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-16D-0/1-0 MS | Lab Sample ID: 180-71829-13 MS

Matrix: Water | Lab File ID: 7110215.D

Analysis Method: 8260C | Date Collected: 10/25/2017 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 11:55

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	11.6		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	10.8		1.0	0.60
107-13-1	Acrylonitrile	102		20	7.8
123-91-1	1,4-Dioxane	204		200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		65-121
2037-26-5	Toluene-d8 (Surr)	127	X	73-120
460-00-4	4-Bromofluorobenzene (Surr)	118		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110215.D
Lims ID: 180-71829-A-13 MS
Client ID:
Sample Type: MS
Inject. Date: 02-Nov-2017 11:55:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-A-13 ms
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 14:20:00 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 12:52:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.256	4.252	0.004	99	138688	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.268	7.263	0.005	97	180307	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.366	-0.002	89	40980	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.706	12.708	-0.002	96	53056	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.544	6.539	0.005	93	47139	50.0	52.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.909	6.910	-0.001	57	79313	50.0	45.7	
$ 7 Toluene-d8 (Surr)	98	8.910	8.912	-0.002	94	196611	50.0	63.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.544	11.552	-0.008	85	77211	50.0	58.9	
12 Chloromethane	50	1.786	1.782	0.004	99	55544	50.0	28.7	
13 Vinyl chloride	62	1.920	1.928	-0.008	97	38549	50.0	24.7	
15 Bromomethane	94	2.267	2.275	-0.008	93	14729	50.0	23.9	
16 Chloroethane	64	2.431	2.415	0.016	96	19158	50.0	36.6	
22 1,1-Dichloroethene	96	3.344	3.339	0.005	93	44582	50.0	40.1	
24 Acetone	43	3.429	3.437	-0.008	98	57645	100.0	69.5	
26 Carbon disulfide	76	3.636	3.625	0.011	100	142891	50.0	53.4	
31 Methylene Chloride	84	4.122	4.124	-0.002	98	62389	50.0	55.2	
33 Acrylonitrile	53	4.506	4.507	-0.001	98	335338	500.0	508.1	
34 trans-1,2-Dichloroethene	96	4.548	4.544	0.004	93	44134	50.0	49.1	
35 Methyl tert-butyl ether	73	4.566	4.562	0.004	98	160298	50.0	41.6	
37 1,1-Dichloroethane	63	5.187	5.183	0.004	96	104284	50.0	44.4	
45 cis-1,2-Dichloroethene	96	5.923	5.931	-0.008	86	92815	50.0	79.1	
46 2-Butanone (MEK)	43	5.935	5.937	-0.002	61	94058	100.0	84.8	
49 Chlorobromomethane	128	6.221	6.223	-0.002	91	26788	50.0	45.6	
52 Chloroform	83	6.361	6.357	0.004	94	98059	50.0	43.0	
53 1,1,1-Trichloroethane	97	6.519	6.521	-0.002	98	75596	50.0	49.1	
56 Carbon tetrachloride	117	6.696	6.691	0.005	96	55094	50.0	51.1	
58 Benzene	78	6.921	6.916	0.005	97	203075	50.0	49.7	
59 1,2-Dichloroethane	62	7.000	7.002	-0.002	97	82852	50.0	37.9	
64 Trichloroethene	130	7.651	7.653	-0.002	98	92748	50.0	83.6	
67 1,2-Dichloropropane	63	7.925	7.920	0.005	94	57958	50.0	49.2	
70 1,4-Dioxane	88	8.010	8.005	0.005	43	11717	1000.0	1021.5	
71 Dichlorobromomethane	83	8.210	8.212	-0.002	98	74862	50.0	45.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75	8.655	8.650	0.005	92	88348	50.0	45.0	
75 4-Methyl-2-pentanone (MIBK	43	8.801	8.802	-0.001	98	186554	100.0	98.2	
76 Toluene	91	8.977	8.979	-0.002	98	202095	50.0	57.2	
77 trans-1,3-Dichloropropene	75	9.232	9.228	0.004	96	78686	50.0	47.4	
79 1,1,2-Trichloroethane	97	9.421	9.423	-0.002	94	50215	50.0	53.0	
80 Tetrachloroethene	164	9.494	9.496	-0.002	92	35735	50.0	50.2	
82 2-Hexanone	43	9.634	9.636	-0.002	98	133267	100.0	96.5	
84 Chlorodibromomethane	129	9.798	9.794	0.004	91	48728	50.0	55.2	
85 Ethylene Dibromide	107	9.908	9.903	0.005	99	54952	50.0	50.3	
87 Chlorobenzene	112	10.394	10.390	0.004	91	132324	50.0	52.4	
89 1,1,1,2-Tetrachloroethane	131	10.486	10.481	0.005	91	44001	50.0	54.7	
90 Ethylbenzene	106	10.492	10.487	0.005	99	71122	50.0	56.0	
91 m-Xylene & p-Xylene	106	10.620	10.621	-0.001	99	88345		56.1	
92 o-Xylene	106	11.003	11.005	-0.002	96	94442		55.6	
93 Styrene	104	11.027	11.029	-0.002	94	151209	50.0	55.2	
94 Bromoform	173	11.210	11.211	-0.001	94	34426	50.0	58.1	
99 1,1,2,2-Tetrachloroethane	83	11.684	11.686	-0.002	84	72800	50.0	53.8	
S 133 Xylenes, Total	106				0		100.0	111.6	

Reagents:

VOA8260VOAPRI_00269	Amount Added:	2.00	Units: uL	
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL	
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

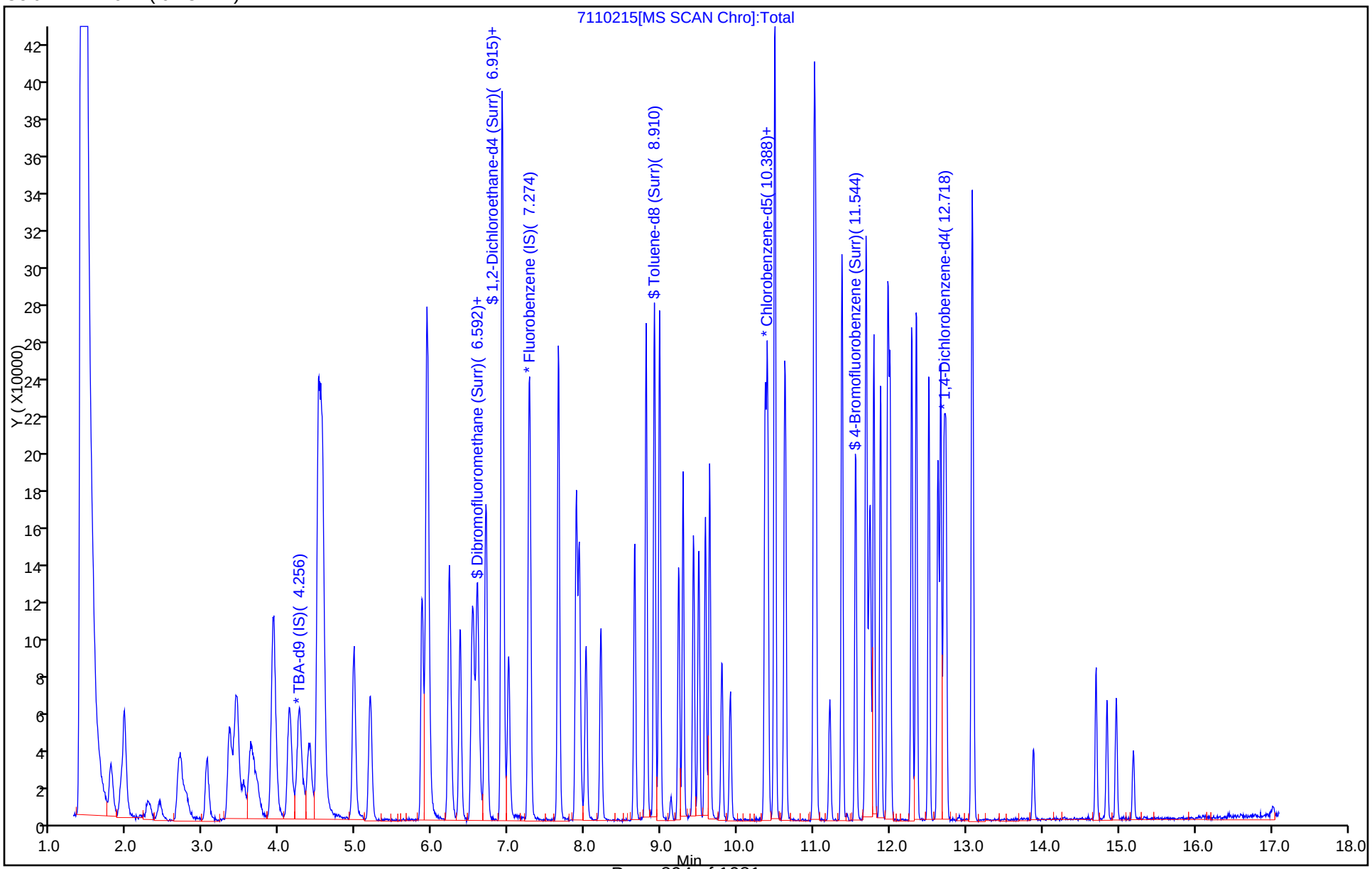
Report Date: 02-Nov-2017 14:20:12 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110215.D

Injection Date:	02-Nov-2017 11:55:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-A-13 MS			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110215.D
Lims ID: 180-71829-A-13 MS
Client ID:
Sample Type: MS
Inject. Date: 02-Nov-2017 11:55:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-A-13 ms
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 14:20:00 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

First Level Reviewer: journetp Date: 02-Nov-2017 12:52:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	52.8	105.67
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	45.7	91.41
$ 7 Toluene-d8 (Surr)	50.0	63.3	126.67
$ 8 4-Bromofluorobenzene (Surr)	50.0	58.9	117.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-82-0/1-0 MS | Lab Sample ID: 180-71829-16 MS

Matrix: Water | Lab File ID: 51101D07.D

Analysis Method: 8260C | Date Collected: 10/26/2017 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 02:10

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.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	12.3		1.0	0.90
75-01-4	Vinyl chloride	10.0		1.0	0.88
74-83-9	Bromomethane	10.7		1.0	0.89
75-00-3	Chloroethane	11.9		1.0	0.90
75-35-4	1,1-Dichloroethene	9.70		1.0	0.55
67-64-1	Acetone	20.6		5.0	3.4
75-15-0	Carbon disulfide	10.0		1.0	0.88
75-09-2	Methylene Chloride	9.16		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	9.14		1.0	0.67
1634-04-4	Methyl tert-butyl ether	9.58		1.0	0.59
75-34-3	1,1-Dichloroethane	10.3		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	23.2		1.0	0.71
74-97-5	Bromochloromethane	9.54		1.0	0.63
78-93-3	2-Butanone (MEK)	20.4		5.0	2.6
67-66-3	Chloroform	9.21		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.66		1.0	0.60
56-23-5	Carbon tetrachloride	9.49		1.0	0.88
71-43-2	Benzene	8.98		1.0	0.60
107-06-2	1,2-Dichloroethane	10.7		1.0	0.57
79-01-6	Trichloroethene	13.0		1.0	0.69
78-87-5	1,2-Dichloropropane	9.71		1.0	0.66
75-27-4	Bromodichloromethane	9.23		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.53		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	22.2		5.0	3.1
108-88-3	Toluene	9.71		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	9.74		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.92		1.0	0.45
127-18-4	Tetrachloroethene	9.99		1.0	0.47
591-78-6	2-Hexanone	20.5		5.0	3.3
124-48-1	Dibromochloromethane	10.2		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.49		1.0	0.50
108-90-7	Chlorobenzene	9.18		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.76		1.0	0.57
100-41-4	Ethylbenzene	8.73		1.0	0.51
1330-20-7	Xylenes, Total	17.7		2.0	0.89
100-42-5	Styrene	9.20		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-82-0/1-0 MS | Lab Sample ID: 180-71829-16 MS

Matrix: Water | Lab File ID: 51101D07.D

Analysis Method: 8260C | Date Collected: 10/26/2017 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 02:10

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.: 227760 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.56		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	9.38		1.0	0.60
107-13-1	Acrylonitrile	116		20	7.8
123-91-1	1,4-Dioxane	193	J	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		65-121
2037-26-5	Toluene-d8 (Surr)	110		73-120
460-00-4	4-Bromofluorobenzene (Surr)	105		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D07.D
Lims ID: 180-71829-B-16 MS
Client ID:
Sample Type: MS
Inject. Date: 02-Nov-2017 02:10:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019138-007
Misc. Info.: 180-71829-B-16 MS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 02:47:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.375	4.394	-0.019	0	216220	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.343	7.338	0.005	97	483881	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.432	10.427	0.005	87	108921	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.774	12.768	0.006	93	164005	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.625	6.614	0.011	93	119223	50.0	51.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.990	6.985	0.005	0	157138	50.0	55.3	
$ 7 Toluene-d8 (Surr)	98	8.985	8.980	0.005	93	476554	50.0	55.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.613	-0.001	85	163867	50.0	52.3	
11 Dichlorodifluoromethane	85	1.687	1.688	-0.001	99	132527	50.0	47.1	
12 Chloromethane	50	1.894	1.907	-0.013	99	174003	50.0	61.5	
14 Butadiene	39	2.016	2.017	-0.001	94	178365	50.0	68.4	
13 Vinyl chloride	62	2.022	2.023	-0.001	65	143750	50.0	50.1	
15 Bromomethane	94	2.381	2.339	0.042	89	72884	50.0	53.7	
16 Chloroethane	64	2.466	2.430	0.036	98	94090	50.0	59.7	
17 Dichlorofluoromethane	67	2.764	2.752	0.012	98	234264	50.0	58.7	
18 Trichlorofluoromethane	101	2.733	2.765	-0.032	83	202051	50.0	57.3	
20 Ethyl ether	59	3.135	3.130	0.005	94	133730	50.0	58.3	
21 Acrolein	56	3.311	3.318	-0.007	99	89481	150.0	154.8	
22 1,1-Dichloroethene	96	3.427	3.415	0.012	96	114941	50.0	48.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.512	3.507	0.005	94	127957	50.0	49.2	
24 Acetone	43	3.530	3.543	-0.013	100	130418	100.0	103.1	
25 Iodomethane	142	3.627	3.622	0.005	96	179654	50.0	48.3	
26 Carbon disulfide	76	3.725	3.701	0.024	100	259960	50.0	50.0	
28 3-Chloro-1-propene	76	4.023	4.011	0.012	89	67293	50.0	44.0	
30 Methyl acetate	43	4.053	4.030	0.023	99	273458	100.0	109.1	
31 Methylene Chloride	84	4.235	4.230	0.005	98	135149	50.0	45.8	
32 2-Methyl-2-propanol	59	4.491	4.510	-0.019	91	134249	500.0	525.0	
33 Acrylonitrile	53	4.612	4.613	-0.001	99	704905	500.0	578.6	
34 trans-1,2-Dichloroethene	96	4.643	4.644	-0.001	98	123420	50.0	45.7	
35 Methyl tert-butyl ether	73	4.661	4.662	-0.001	97	346854	50.0	47.9	
36 Hexane	57	5.069	5.051	0.018	95	166558	50.0	48.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.281	5.270	0.011	96	242129	50.0	51.6	
38 Vinyl acetate	43	5.324	5.319	0.005	97	328785	50.0	68.9	
44 2,2-Dichloropropane	97	6.005	6.000	0.005	42	43439	50.0	72.7	
45 cis-1,2-Dichloroethene	96	6.017	6.012	0.005	81	357413	50.0	115.8	
46 2-Butanone (MEK)	43	6.023	6.030	-0.007	100	183410	100.0	101.8	
49 Chlorobromomethane	128	6.303	6.292	0.011	95	65434	50.0	47.7	
51 Tetrahydrofuran	42	6.315	6.310	0.005	93	100074	100.0	95.4	
52 Chloroform	83	6.443	6.438	0.005	94	215783	50.0	46.0	
53 1,1,1-Trichloroethane	97	6.595	6.596	-0.001	97	171271	50.0	48.3	
54 Cyclohexane	56	6.668	6.663	0.005	94	217821	50.0	49.8	
56 Carbon tetrachloride	117	6.765	6.766	-0.001	72	140076	50.0	47.4	
55 1,1-Dichloropropene	75	6.784	6.784	0.000	93	161523	50.0	42.1	
57 Isobutyl alcohol	41	6.990	6.985	0.005	94	134694	1250.0	1398.9	
58 Benzene	78	6.996	6.997	-0.001	98	528213	50.0	44.9	
59 1,2-Dichloroethane	62	7.075	7.070	0.005	97	182990	50.0	53.4	
62 n-Heptane	43	7.355	7.350	0.005	94	150991	50.0	54.5	
64 Trichloroethene	130	7.726	7.727	-0.001	97	192539	50.0	65.0	
66 Methylcyclohexane	83	7.957	7.958	-0.001	96	167654	50.0	37.4	
67 1,2-Dichloropropane	63	7.994	7.995	-0.001	94	132977	50.0	48.5	
68 Dibromomethane	93	8.085	8.080	0.005	96	74632	50.0	46.5	
70 1,4-Dioxane	88	8.085	8.086	-0.001	48	26916	1000.0	966.2	
71 Dichlorobromomethane	83	8.280	8.274	0.006	99	145386	50.0	46.1	
73 2-Chloroethyl vinyl ether	63	8.578	8.578	0.000	93	36684	100.0	18.6	
74 cis-1,3-Dichloropropene	75	8.723	8.718	0.005	93	163218	50.0	42.6	
75 4-Methyl-2-pentanone (MIBK	43	8.876	8.876	0.000	98	309668	100.0	110.8	
76 Toluene	91	9.046	9.047	-0.001	98	527192	50.0	48.5	
77 trans-1,3-Dichloropropene	75	9.295	9.296	-0.001	98	143890	50.0	48.7	
78 Ethyl methacrylate	69	9.356	9.357	-0.001	93	141441	50.0	39.7	
79 1,1,2-Trichloroethane	97	9.490	9.491	-0.001	92	112259	50.0	49.6	
80 Tetrachloroethene	164	9.563	9.558	0.005	94	103487	50.0	50.0	
81 1,3-Dichloropropane	76	9.648	9.649	-0.001	98	188892	50.0	45.2	
82 2-Hexanone	43	9.709	9.710	-0.001	98	219688	100.0	102.5	
84 Chlorodibromomethane	129	9.861	9.862	-0.001	91	97157	50.0	50.8	
85 Ethylene Dibromide	107	9.970	9.971	-0.001	97	110116	50.0	47.5	
86 3-Chlorobenzotrifluoride	180	10.432	10.433	-0.001	87	184977	50.0	49.4	
87 Chlorobenzene	112	10.457	10.458	-0.001	95	324559	50.0	45.9	
88 4-Chlorobenzotrifluoride	180	10.517	10.518	-0.001	96	174964	50.0	50.7	
89 1,1,1,2-Tetrachloroethane	131	10.548	10.555	-0.007	92	109706	50.0	48.8	
90 Ethylbenzene	106	10.560	10.561	-0.001	98	172374	50.0	43.7	
91 m-Xylene & p-Xylene	106	10.688	10.689	-0.001	0	217948	50.0	45.2	
92 o-Xylene	106	11.071	11.072	-0.001	96	199778	50.0	43.5	
93 Styrene	104	11.089	11.090	-0.001	94	357809	50.0	46.0	
94 Bromoform	173	11.278	11.279	-0.001	96	56802	50.0	47.8	
96 2-Chlorobenzotrifluoride	180	11.338	11.339	-0.001	94	178256	50.0	49.8	
97 Isopropylbenzene	105	11.436	11.437	-0.001	96	485001	50.0	43.2	
99 1,1,2,2-Tetrachloroethane	83	11.752	11.747	0.005	86	157085	50.0	46.9	
100 Bromobenzene	156	11.752	11.753	-0.001	97	125944	50.0	39.6	
102 trans-1,4-Dichloro-2-buten	53	11.788	11.783	0.005	82	56314	50.0	58.7	
101 1,2,3-Trichloropropane	110	11.801	11.808	-0.007	88	57596	50.0	43.8	
103 N-Propylbenzene	120	11.855	11.856	-0.001	99	145348	50.0	40.0	
104 2-Chlorotoluene	126	11.940	11.941	-0.001	96	125057	50.0	39.8	
105 3-Chlorotoluene	126	12.007	12.008	-0.001	97	151475	50.0	44.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	12.038	12.039	-0.001	96	425903	50.0	40.9	
107 4-Chlorotoluene	126	12.062	12.063	-0.001	97	134818	50.0	39.7	
108 tert-Butylbenzene	119	12.354	12.349	0.005	94	314853	50.0	36.2	
110 1,2,4-Trimethylbenzene	105	12.409	12.410	-0.001	97	433408	50.0	41.0	
111 1,2-dichloro-4-(trifluorom	214	12.451	12.452	-0.001	94	103540	50.0	39.1	
112 sec-Butylbenzene	105	12.573	12.574	-0.001	94	456141	50.0	37.6	
113 1,3-Dichlorobenzene	146	12.689	12.689	-0.001	98	244375	50.0	43.0	
114 4-Isopropyltoluene	119	12.731	12.732	-0.001	97	391420	50.0	38.7	
115 1,4-Dichlorobenzene	146	12.792	12.793	-0.001	96	252870	50.0	43.3	
116 2,4-Dichloro-1-(triflourom	214	12.822	12.823	-0.001	93	93330	50.0	37.8	
118 2,5-Dichlorobenzotrifluori	214	12.865	12.860	0.005	0	111427	50.0	41.8	
120 n-Butylbenzene	91	13.139	13.139	0.000	98	302292	50.0	36.7	
121 1,2-Dichlorobenzene	146	13.151	13.152	-0.001	97	241330	50.0	44.5	
122 1,2-Dibromo-3-Chloropropan	75	13.941	13.942	-0.001	78	24645	50.0	40.9	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.087	14.088	-0.001	0	469615	150.0	136.6	
125 2,3- & 3,4- Dichlorotoluen	125	14.501	14.502	-0.001	0	336668	100.0	94.7	
126 1,2,4-Trichlorobenzene	180	14.762	14.769	-0.007	95	102273	50.0	41.2	
127 Hexachlorobutadiene	225	14.908	14.915	-0.007	92	36964	50.0	40.7	
128 Naphthalene	128	15.030	15.031	-0.001	97	327454	50.0	38.8	
129 1,2,3-Trichlorobenzene	180	15.261	15.256	0.005	95	92420	50.0	40.8	
131 2,4,5-Trichlorotoluene	159	16.027	16.028	-0.001	0	39973	50.0	37.1	
130 2,3,6-Trichlorotoluene	159	16.124	16.119	0.005	97	43014	50.0	42.9	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	88.7	
S 134 1,2-Dichloroethene, Total	96				0		100.0	161.5	
S 135 1,3-Dichloropropene, Total	1				0		100.0	91.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWEEmix1stR_00014	Amount Added:	2.00	Units: uL	
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL	
voaWAcro1stRe_00021	Amount Added:	6.00	Units: uL	
voaW2clev1stR_00024	Amount Added:	2.00	Units: uL	
voaWVA1stRest_00023	Amount Added:	2.00	Units: uL	
VOA8260VOAPRI_00269	Amount Added:	2.00	Units: uL	
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

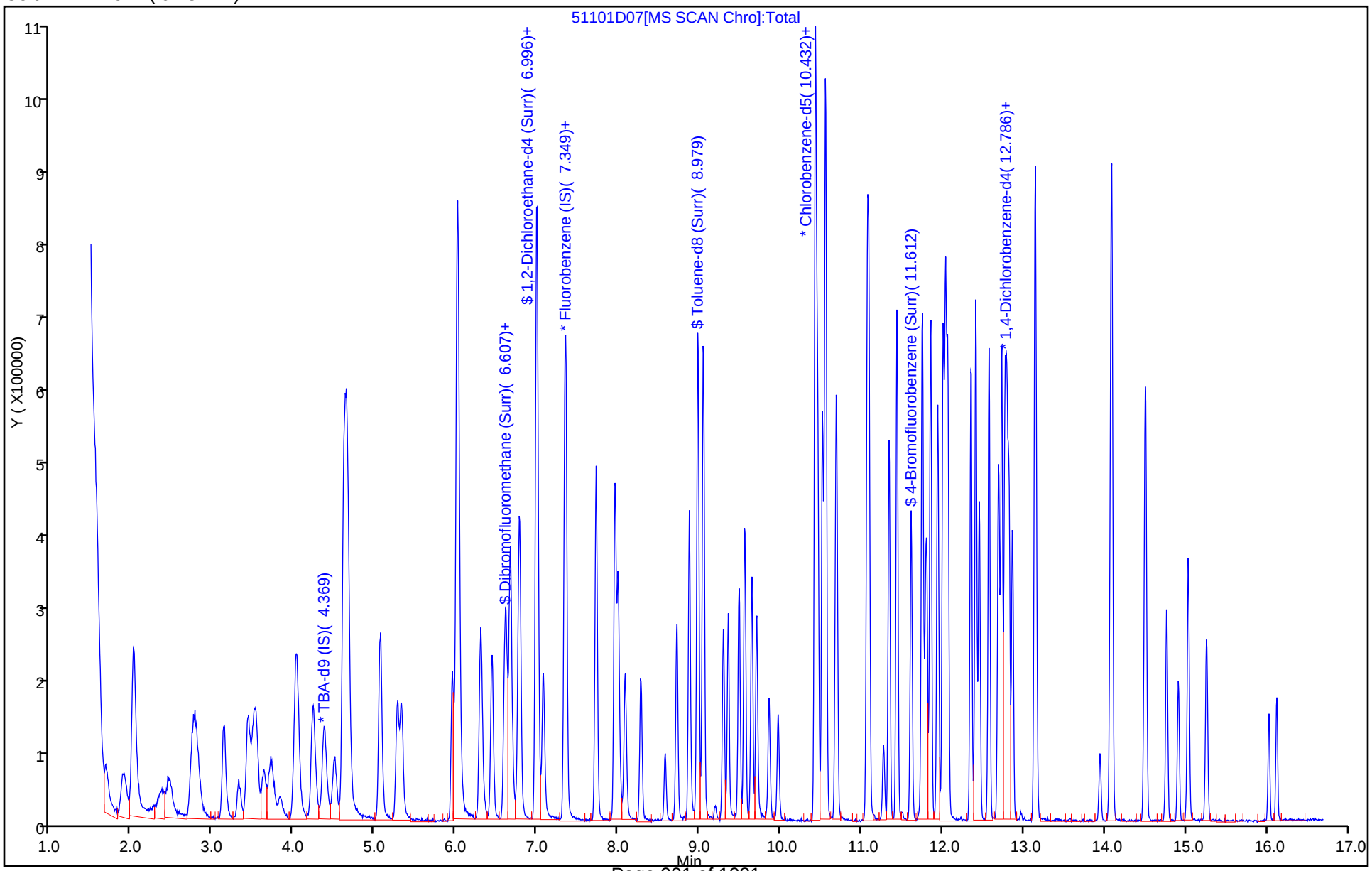
Report Date: 02-Nov-2017 20:42:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D07.D

Injection Date:	02-Nov-2017 02:10:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71829-B-16 MS			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)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\51101D07.D
Lims ID: 180-71829-B-16 MS
Client ID:
Sample Type: MS
Inject. Date: 02-Nov-2017 02:10:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019138-007
Misc. Info.: 180-71829-B-16 MS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171101-19138.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 20:42:15 Calib Date: 27-Jul-2017 04:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D11.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: bungardf Date: 02-Nov-2017 02:47:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.2	102.42
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	55.3	110.68
$ 7 Toluene-d8 (Surr)	50.0	55.0	109.95
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.3	104.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-43D-0/1-0 MSD | Lab Sample ID: 180-71829-1 MSD

Matrix: Water | Lab File ID: 7110115.D

Analysis Method: 8260C | Date Collected: 10/26/2017 14:25

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 14:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.85		1.0	0.90
75-01-4	Vinyl chloride	5.81		1.0	0.88
74-83-9	Bromomethane	6.07		1.0	0.89
75-00-3	Chloroethane	8.59		1.0	0.90
75-35-4	1,1-Dichloroethene	8.10		1.0	0.55
67-64-1	Acetone	16.2		5.0	3.4
75-15-0	Carbon disulfide	11.0		1.0	0.88
75-09-2	Methylene Chloride	9.69		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	10.8		1.0	0.67
1634-04-4	Methyl tert-butyl ether	7.79		1.0	0.59
75-34-3	1,1-Dichloroethane	8.76		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	14.7		1.0	0.71
74-97-5	Bromochloromethane	8.56		1.0	0.63
78-93-3	2-Butanone (MEK)	18.9		5.0	2.6
67-66-3	Chloroform	8.20		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.18		1.0	0.60
56-23-5	Carbon tetrachloride	9.49		1.0	0.88
71-43-2	Benzene	9.72		1.0	0.60
107-06-2	1,2-Dichloroethane	7.19		1.0	0.57
79-01-6	Trichloroethene	15.6		1.0	0.69
78-87-5	1,2-Dichloropropane	9.49		1.0	0.66
75-27-4	Bromodichloromethane	8.40		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.78		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	22.4		5.0	3.1
108-88-3	Toluene	11.0		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	8.51		1.0	0.58
79-00-5	1,1,2-Trichloroethane	10.1		1.0	0.45
127-18-4	Tetrachloroethene	16.9		1.0	0.47
591-78-6	2-Hexanone	21.2		5.0	3.3
124-48-1	Dibromochloromethane	10.2		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.10		1.0	0.50
108-90-7	Chlorobenzene	9.97		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	10.1		1.0	0.57
100-41-4	Ethylbenzene	11.0		1.0	0.51
1330-20-7	Xylenes, Total	21.7		2.0	0.89
100-42-5	Styrene	10.6		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-43D-0/1-0 MSD | Lab Sample ID: 180-71829-1 MSD

Matrix: Water | Lab File ID: 7110115.D

Analysis Method: 8260C | Date Collected: 10/26/2017 14:25

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 14:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227642 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.8		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	9.92		1.0	0.60
107-13-1	Acrylonitrile	95.2		20	7.8
123-91-1	1,4-Dioxane	229		200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	73		65-121
2037-26-5	Toluene-d8 (Surr)	107		73-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	89		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110115.D
Lims ID: 180-71829-A-1 MSD
Client ID: HD-MW-43D-0/1-0
Sample Type: MSD
Inject. Date: 01-Nov-2017 14:39:30 ALS Bottle#: 16 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-A-1 MSD
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 15:03:55 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 15:04:17

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	4.261	0.014	99	142948	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.268	7.261	0.007	98	175361	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.365	10.363	0.002	90	40117	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.707	12.705	0.002	95	51808	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.544	6.543	0.001	93	38479	50.0	44.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.915	6.908	0.007	63	61568	50.0	36.5	
$ 7 Toluene-d8 (Surr)	98	8.911	8.909	0.002	94	163102	50.0	53.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.545	11.549	-0.004	86	64900	50.0	50.0	
12 Chloromethane	50	1.793	1.786	0.007	99	55108	50.0	29.2	
13 Vinyl chloride	62	1.921	1.919	0.002	98	44045	50.0	29.1	
15 Bromomethane	94	2.268	2.254	0.014	87	17910	50.0	30.3	
16 Chloroethane	64	2.432	2.412	0.020	96	21870	50.0	43.0	
22 1,1-Dichloroethene	96	3.332	3.337	-0.005	92	43757	50.0	40.5	
24 Acetone	43	3.436	3.428	0.008	98	65519	100.0	81.2	
26 Carbon disulfide	76	3.649	3.617	0.032	100	143144	50.0	55.0	
31 Methylene Chloride	84	4.123	4.115	0.008	97	53636	50.0	48.4	
33 Acrylonitrile	53	4.512	4.505	0.007	99	305624	500.0	476.1	
34 trans-1,2-Dichloroethene	96	4.555	4.541	0.014	67	47258	50.0	54.0	
35 Methyl tert-butyl ether	73	4.567	4.560	0.007	99	146084	50.0	39.0	
37 1,1-Dichloroethane	63	5.194	5.180	0.014	96	100074	50.0	43.8	
45 cis-1,2-Dichloroethene	96	5.936	5.928	0.008	85	83779	50.0	73.4	
46 2-Butanone (MEK)	43	5.942	5.941	0.002	74	101756	100.0	94.3	
49 Chlorobromomethane	128	6.222	6.214	0.008	94	24432	50.0	42.8	
52 Chloroform	83	6.362	6.360	0.002	95	90833	50.0	41.0	
53 1,1,1-Trichloroethane	97	6.526	6.512	0.014	96	68795	50.0	45.9	
56 Carbon tetrachloride	117	6.696	6.689	0.007	97	49810	50.0	47.5	
58 Benzene	78	6.921	6.920	0.001	97	193376	50.0	48.6	
59 1,2-Dichloroethane	62	7.001	6.999	0.002	98	76489	50.0	36.0	
64 Trichloroethene	130	7.652	7.656	-0.004	95	84105	50.0	78.0	
67 1,2-Dichloropropane	63	7.925	7.924	0.001	94	54338	50.0	47.4	
70 1,4-Dioxane	88	8.010	8.003	0.007	48	12754	1000.0	1143.3	
71 Dichlorobromomethane	83	8.211	8.210	0.001	98	66990	50.0	42.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
74 cis-1,3-Dichloropropene	75	8.655	8.648	0.007	92	83880	50.0	43.9	
75 4-Methyl-2-pentanone (MIBK	43	8.801	8.800	0.001	98	208217	100.0	111.9	
76 Toluene	91	8.978	8.976	0.002	98	191011	50.0	55.2	
77 trans-1,3-Dichloropropene	75	9.227	9.232	-0.005	96	69139	50.0	42.5	
79 1,1,2-Trichloroethane	97	9.422	9.420	0.002	92	46754	50.0	50.4	
80 Tetrachloroethene	164	9.495	9.493	0.002	95	58729	50.0	84.3	
82 2-Hexanone	43	9.635	9.633	0.002	98	143360	100.0	106.1	
84 Chlorodibromomethane	129	9.799	9.791	0.008	90	44017	50.0	51.0	
85 Ethylene Dibromide	107	9.908	9.901	0.007	99	48636	50.0	45.5	
87 Chlorobenzene	112	10.395	10.394	0.001	91	123291	50.0	49.8	
89 1,1,1,2-Tetrachloroethane	131	10.486	10.479	0.007	90	39834	50.0	50.6	
90 Ethylbenzene	106	10.492	10.485	0.007	98	68289	50.0	54.9	
91 m-Xylene & p-Xylene	106	10.626	10.619	0.007	99	85766		55.6	
92 o-Xylene	106	11.003	11.002	0.001	97	88037		52.9	
93 Styrene	104	11.028	11.026	0.002	95	142087	50.0	52.9	
94 Bromoform	173	11.210	11.209	0.001	97	31315	50.0	54.0	
99 1,1,2,2-Tetrachloroethane	83	11.685	11.689	-0.004	95	65650	50.0	49.6	
S 133 Xylenes, Total	106				0		100.0	108.5	

Reagents:

VOA8260VOA2ND_00270	Amount Added:	2.00	Units: uL	
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL	
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent

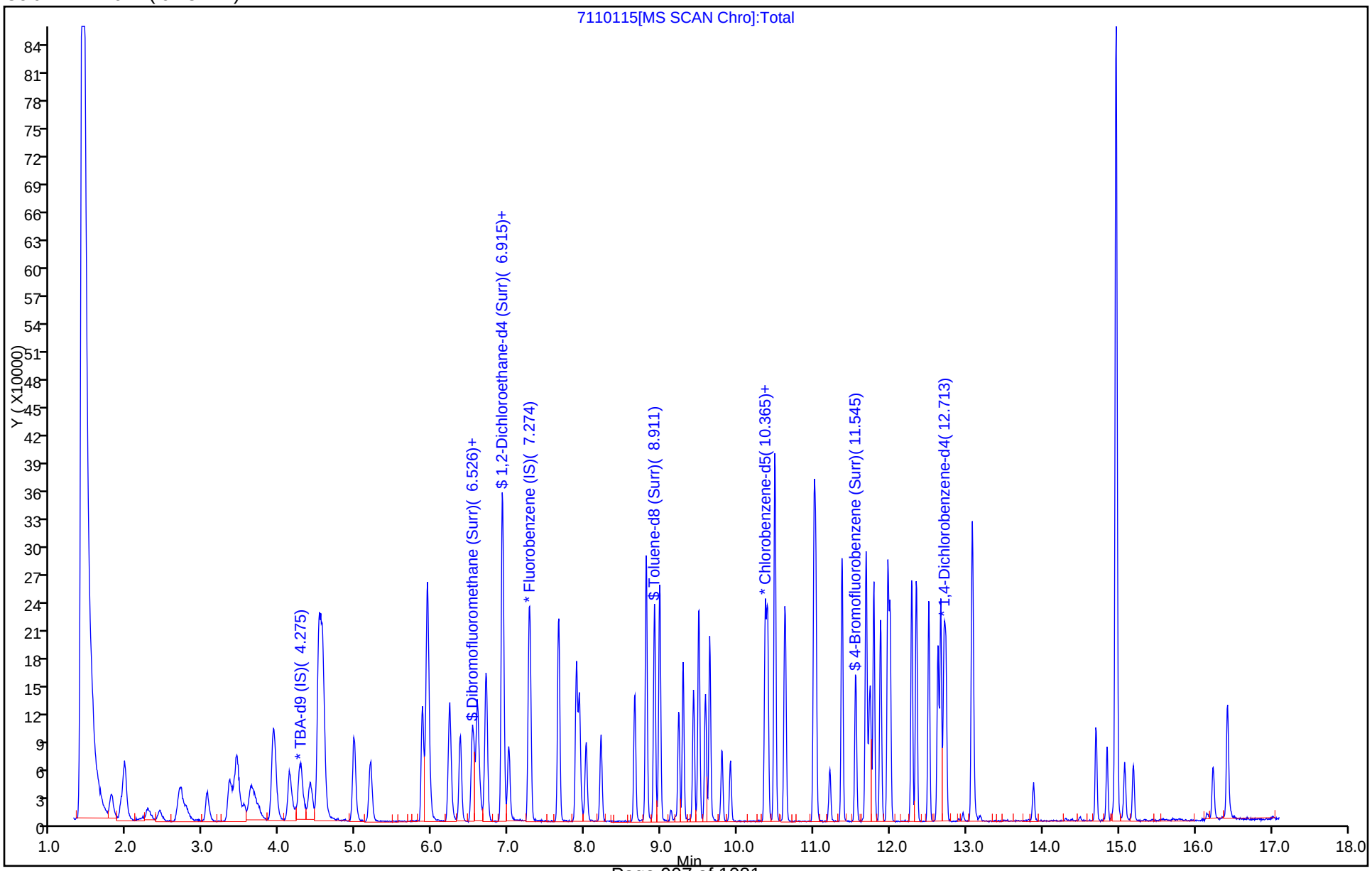
Report Date: 01-Nov-2017 15:05:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110115.D

Injection Date:	01-Nov-2017 14:39:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-A-1 MSD			Worklist Smp#:	15
Client ID:	HD-MW-43D-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\7110115.D
Lims ID: 180-71829-A-1 MSD
Client ID: HD-MW-43D-0/1-0
Sample Type: MSD
Inject. Date: 01-Nov-2017 14:39:30 ALS Bottle#: 16 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-A-1 MSD
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171101-19129.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 15:03:55 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: journetp Date: 01-Nov-2017 15:04:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	44.3	88.69
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.5	72.96
$ 7 Toluene-d8 (Surr)	50.0	53.7	107.34
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.0	100.07

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-16D-0/1-0 MSD | Lab Sample ID: 180-71829-13 MSD

Matrix: Water | Lab File ID: 7110216.D

Analysis Method: 8260C | Date Collected: 10/25/2017 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 12:24

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.51		1.0	0.90
75-01-4	Vinyl chloride	4.62		1.0	0.88
74-83-9	Bromomethane	4.35		1.0	0.89
75-00-3	Chloroethane	6.24		1.0	0.90
75-35-4	1,1-Dichloroethene	7.66		1.0	0.55
67-64-1	Acetone	13.2		5.0	3.4
75-15-0	Carbon disulfide	9.94		1.0	0.88
75-09-2	Methylene Chloride	10.5		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	9.50		1.0	0.67
1634-04-4	Methyl tert-butyl ether	7.97		1.0	0.59
75-34-3	1,1-Dichloroethane	8.68		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	15.3		1.0	0.71
74-97-5	Bromochloromethane	8.84		1.0	0.63
78-93-3	2-Butanone (MEK)	15.9		5.0	2.6
67-66-3	Chloroform	8.16		1.0	0.60
71-55-6	1,1,1-Trichloroethane	8.77		1.0	0.60
56-23-5	Carbon tetrachloride	9.38		1.0	0.88
71-43-2	Benzene	9.58		1.0	0.60
107-06-2	1,2-Dichloroethane	7.41		1.0	0.57
79-01-6	Trichloroethene	15.3		1.0	0.69
78-87-5	1,2-Dichloropropane	9.45		1.0	0.66
75-27-4	Bromodichloromethane	8.74		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.70		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	17.7		5.0	3.1
108-88-3	Toluene	10.4		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	8.51		1.0	0.58
79-00-5	1,1,2-Trichloroethane	10.3		1.0	0.45
127-18-4	Tetrachloroethene	9.30		1.0	0.47
591-78-6	2-Hexanone	16.8		5.0	3.3
124-48-1	Dibromochloromethane	10.3		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.25		1.0	0.50
108-90-7	Chlorobenzene	9.79		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.83		1.0	0.57
100-41-4	Ethylbenzene	9.94		1.0	0.51
1330-20-7	Xylenes, Total	20.0		2.0	0.89
100-42-5	Styrene	10.3		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-16D-0/1-0 MSD | Lab Sample ID: 180-71829-13 MSD

Matrix: Water | Lab File ID: 7110216.D

Analysis Method: 8260C | Date Collected: 10/25/2017 13:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2017 12:24

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.: 227768 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	11.5		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	10.0		1.0	0.60
107-13-1	Acrylonitrile	98.1		20	7.8
123-91-1	1,4-Dioxane	240		200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	72		65-121
2037-26-5	Toluene-d8 (Surr)	94		73-120
460-00-4	4-Bromofluorobenzene (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	84		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110216.D
Lims ID: 180-71829-C-13 MSD
Client ID:
Sample Type: MSD
Inject. Date: 02-Nov-2017 12:24:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-C-13 msd
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 14:20:00 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.262	4.252	0.010	98	179330	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.261	7.263	-0.002	97	209218	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.366	-0.002	89	50078	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.712	12.708	0.004	96	60195	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.543	6.539	0.004	93	43458	50.0	42.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.914	6.910	0.004	55	72483	50.0	36.0	
$ 7 Toluene-d8 (Surr)	98	8.910	8.912	-0.002	94	178184	50.0	47.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.550	11.552	-0.002	86	72945	50.0	44.7	
12 Chloromethane	50	1.786	1.782	0.004	99	61881	50.0	27.5	
13 Vinyl chloride	62	1.920	1.928	-0.008	97	41811	50.0	23.1	
15 Bromomethane	94	2.279	2.275	0.004	92	15696	50.0	21.8	
16 Chloroethane	64	2.431	2.415	0.016	97	18940	50.0	31.2	
22 1,1-Dichloroethene	96	3.343	3.339	0.004	94	49366	50.0	38.3	
24 Acetone	43	3.435	3.437	-0.002	99	63690	100.0	66.2	
26 Carbon disulfide	76	3.641	3.625	0.016	100	154290	50.0	49.7	
31 Methylene Chloride	84	4.122	4.124	-0.002	98	69042	50.0	52.5	
33 Acrylonitrile	53	4.505	4.507	-0.002	100	375628	500.0	490.5	
34 trans-1,2-Dichloroethene	96	4.548	4.544	0.004	94	49568	50.0	47.5	
35 Methyl tert-butyl ether	73	4.566	4.562	0.004	98	178314	50.0	39.9	
37 1,1-Dichloroethane	63	5.187	5.183	0.004	96	118261	50.0	43.4	
45 cis-1,2-Dichloroethene	96	5.935	5.931	0.004	84	104102	50.0	76.4	
46 2-Butanone (MEK)	43	5.941	5.937	0.004	68	102568	100.0	79.7	
49 Chlorobromomethane	128	6.215	6.223	-0.008	92	30084	50.0	44.2	
52 Chloroform	83	6.361	6.357	0.004	95	107854	50.0	40.8	
53 1,1,1-Trichloroethane	97	6.525	6.521	0.004	97	78357	50.0	43.8	
56 Carbon tetrachloride	117	6.695	6.691	0.004	77	58702	50.0	46.9	
58 Benzene	78	6.920	6.916	0.004	98	227557	50.0	47.9	
59 1,2-Dichloroethane	62	6.999	7.002	-0.003	97	94038	50.0	37.1	
64 Trichloroethene	130	7.656	7.653	0.003	97	98334	50.0	76.4	
67 1,2-Dichloropropane	63	7.924	7.920	0.004	95	64567	50.0	47.2	
70 1,4-Dioxane	88	8.009	8.005	0.004	48	15957	1000.0	1198.9	
71 Dichlorobromomethane	83	8.210	8.212	-0.002	98	83097	50.0	43.7	
74 cis-1,3-Dichloropropene	75	8.648	8.650	-0.002	92	99221	50.0	43.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK	43	8.800	8.802	-0.002	98	205320	100.0	88.4	
76 Toluene	91	8.977	8.979	-0.002	98	225848	50.0	52.1	
77 trans-1,3-Dichloropropene	75	9.226	9.228	-0.002	97	86297	50.0	42.5	
79 1,1,2-Trichloroethane	97	9.421	9.423	-0.002	92	59493	50.0	51.3	
80 Tetrachloroethene	164	9.494	9.496	-0.002	91	40456	50.0	46.5	
82 2-Hexanone	43	9.634	9.636	-0.002	98	141363	100.0	83.8	
84 Chlorodibromomethane	129	9.798	9.794	0.004	91	55777	50.0	51.7	
85 Ethylene Dibromide	107	9.907	9.903	0.004	99	61686	50.0	46.2	
87 Chlorobenzene	112	10.394	10.390	0.004	91	151120	50.0	48.9	
89 1,1,1,2-Tetrachloroethane	131	10.485	10.481	0.004	88	48312	50.0	49.2	
90 Ethylbenzene	106	10.491	10.487	0.004	99	77189	50.0	49.7	
91 m-Xylene & p-Xylene	106	10.619	10.621	-0.002	99	96364		49.8	
92 o-Xylene	106	11.002	11.005	-0.003	97	104245		50.2	
93 Styrene	104	11.027	11.029	-0.002	96	172487	50.0	51.5	
94 Bromoform	173	11.209	11.211	-0.002	95	41601	50.0	57.4	
99 1,1,2,2-Tetrachloroethane	83	11.684	11.686	-0.002	93	82912	50.0	50.2	
S 133 Xylenes, Total	106				0		100.0	100.0	

Reagents:

VOA8260VOAPRI_00269	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL		
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent	

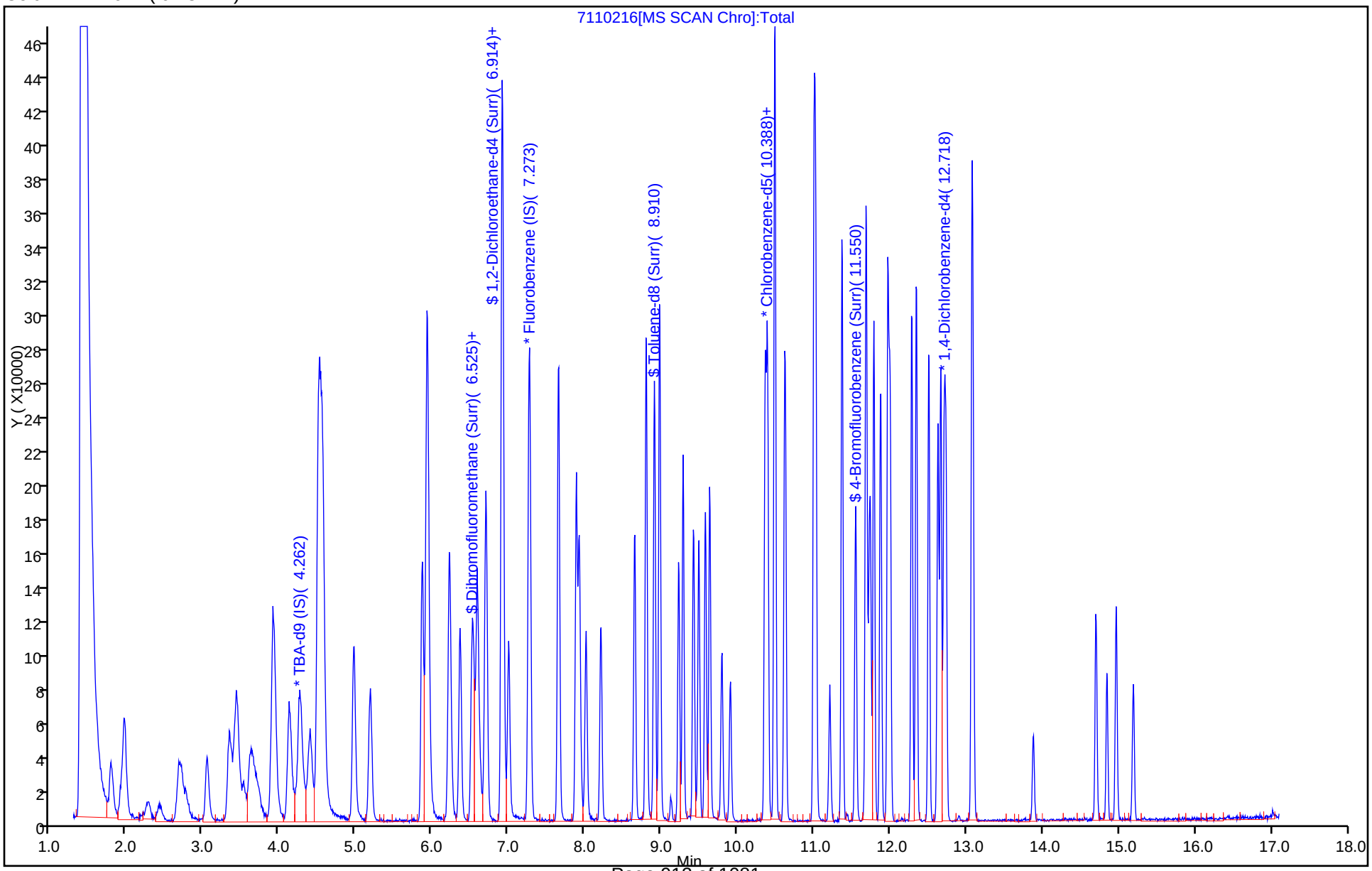
Report Date: 02-Nov-2017 14:20:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110216.D

Injection Date:	02-Nov-2017 12:24:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-71829-C-13 MSD			Worklist Smp#:	16
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\7110216.D
Lims ID: 180-71829-C-13 MSD
Client ID:
Sample Type: MSD
Inject. Date: 02-Nov-2017 12:24:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-71829-C-13 msd
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20171102-19141.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 02-Nov-2017 14:20:00 Calib Date: 26-May-2017 18:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20170526-16937.b\70526N10.D

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

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	42.0	83.95
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.0	71.99
$ 7 Toluene-d8 (Surr)	50.0	47.0	93.94
$ 8 4-Bromofluorobenzene (Surr)	50.0	44.7	89.34

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP7 Start Date: 05/26/2017 13:55

Analysis Batch Number: 212441 End Date: 05/27/2017 10:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-212441/1		05/26/2017 13:55	1	70526N01.D	DB-624 0.18(mm)
IC 180-212441/3		05/26/2017 14:37	1	70526N03.D	DB-624 0.18(mm)
IC 180-212441/4		05/26/2017 15:06	1	70526N04.D	DB-624 0.18(mm)
ICIS 180-212441/5		05/26/2017 15:36	1	70526N05.D	DB-624 0.18(mm)
IC 180-212441/6		05/26/2017 16:06	1	70526N06.D	DB-624 0.18(mm)
IC 180-212441/7		05/26/2017 16:36	1	70526N07.D	DB-624 0.18(mm)
IC 180-212441/8		05/26/2017 17:05	1	70526N08.D	DB-624 0.18(mm)
IC 180-212441/9		05/26/2017 17:34	1	70526N09.D	DB-624 0.18(mm)
IC 180-212441/10		05/26/2017 18:04	1	70526N10.D	DB-624 0.18(mm)
ZZZZZ		05/26/2017 20:01	1		DB-624 0.18(mm)
ICV 180-212441/14		05/27/2017 10:39	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP5 Start Date: 07/27/2017 00:22

Analysis Batch Number: 218218 End Date: 07/27/2017 05:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-218218/1		07/27/2017 00:22	1	50727D01.D	DB-624 0.18(mm)
IC 180-218218/2		07/27/2017 00:51	1	50727D02.D	DB-624 0.18(mm)
IC 180-218218/3		07/27/2017 01:15	1	50727D03.D	DB-624 0.18(mm)
ICIS 180-218218/4		07/27/2017 01:39	1	50727D04.D	DB-624 0.18(mm)
ZZZZZ		07/27/2017 01:39	1		DB-624 0.18(mm)
IC 180-218218/5		07/27/2017 02:02	1	50727D05.D	DB-624 0.18(mm)
IC 180-218218/6		07/27/2017 02:26	1	50727D06.D	DB-624 0.18(mm)
IC 180-218218/8		07/27/2017 03:13	1	50727D08.D	DB-624 0.18(mm)
IC 180-218218/10		07/27/2017 04:00	1	50727D10.D	DB-624 0.18(mm)
IC 180-218218/11		07/27/2017 04:24	1	50727D11.D	DB-624 0.18(mm)
ICV 180-218218/12		07/27/2017 05:03	1		DB-624 0.18(mm)
ZZZZZ		07/27/2017 05:50	1		DB-624 0.18(mm)
ZZZZZ		07/27/2017 05:50	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP7 Start Date: 11/01/2017 07:31

Analysis Batch Number: 227642 End Date: 11/01/2017 16:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-227642/1		11/01/2017 07:31	1	7110101.D	DB-624 0.18(mm)
CCVIS 180-227642/3		11/01/2017 08:57	1	7110103.D	DB-624 0.18(mm)
LCS 180-227642/4		11/01/2017 09:24	1	7110104.D	DB-624 0.18(mm)
ZZZZZ		11/01/2017 09:52	1		DB-624 0.18(mm)
MB 180-227642/7		11/01/2017 10:49	1	7110107.D	DB-624 0.18(mm)
180-71829-6		11/01/2017 11:46	1	7110109.D	DB-624 0.18(mm)
180-71829-1		11/01/2017 12:15	1	7110110.D	DB-624 0.18(mm)
180-71829-2		11/01/2017 12:43	1	7110111.D	DB-624 0.18(mm)
180-71829-1 MS		11/01/2017 14:11	1	7110114.D	DB-624 0.18(mm)
180-71829-1 MSD		11/01/2017 14:39	1	7110115.D	DB-624 0.18(mm)
180-71829-3		11/01/2017 15:54	1	7110117.D	DB-624 0.18(mm)
180-71829-7		11/01/2017 16:23	1	7110118.D	DB-624 0.18(mm)
180-71829-5		11/01/2017 16:51	1	7110119.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP5 Start Date: 11/01/2017 22:20

Analysis Batch Number: 227760 End Date: 11/02/2017 09:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-227760/1		11/01/2017 22:20	1	51101D01.D	DB-624 0.18(mm)
CCVIS 180-227760/2		11/01/2017 23:32	1	51101D02.D	DB-624 0.18(mm)
ZZZZZ		11/01/2017 23:32	1		DB-624 0.18(mm)
LCS 180-227760/3		11/02/2017 00:08	1	51101D03.D	DB-624 0.18(mm)
ZZZZZ		11/02/2017 00:42	1		DB-624 0.18(mm)
MB 180-227760/5		11/02/2017 01:06	1	51101D05.D	DB-624 0.18(mm)
180-71829-16		11/02/2017 01:39	1	51101D06.D	DB-624 0.18(mm)
180-71829-16 MS		11/02/2017 02:10	1	51101D07.D	DB-624 0.18(mm)
ZZZZZ		11/02/2017 02:58	1		DB-624 0.18(mm)
ZZZZZ		11/02/2017 03:21	1		DB-624 0.18(mm)
ZZZZZ		11/02/2017 03:45	1		DB-624 0.18(mm)
ZZZZZ		11/02/2017 04:09	5		DB-624 0.18(mm)
180-71829-14		11/02/2017 04:32	1	51101D13.D	DB-624 0.18(mm)
180-71829-20		11/02/2017 05:44	1	51101D16.D	DB-624 0.18(mm)
180-71829-17		11/02/2017 06:07	2	51101D17.D	DB-624 0.18(mm)
180-71829-19		11/02/2017 06:55	2	51101D19.D	DB-624 0.18(mm)
ZZZZZ		11/02/2017 07:19	1		DB-624 0.18(mm)
ZZZZZ		11/02/2017 08:55	1		DB-624 0.18(mm)
ZZZZZ		11/02/2017 09:19	1		DB-624 0.18(mm)
ZZZZZ		11/02/2017 09:43	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP7 Start Date: 11/02/2017 04:44

Analysis Batch Number: 227768 End Date: 11/02/2017 16:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-227768/1		11/02/2017 04:44	1	7110201.D	DB-624 0.18(mm)
CCVIS 180-227768/2		11/02/2017 05:25	1	7110202.D	DB-624 0.18(mm)
LCS 180-227768/4		11/02/2017 05:57	1	7110204.D	DB-624 0.18(mm)
ZZZZZ		11/02/2017 06:30	1		DB-624 0.18(mm)
MB 180-227768/6		11/02/2017 06:59	1	7110206.D	DB-624 0.18(mm)
180-71829-13		11/02/2017 07:57	1	7110208.D	DB-624 0.18(mm)
180-71829-8 DL		11/02/2017 09:17	500	7110210.D	DB-624 0.18(mm)
180-71829-12 DL		11/02/2017 09:46	10	7110211.D	DB-624 0.18(mm)
ZZZZZ		11/02/2017 10:15	100		DB-624 0.18(mm)
180-71829-10 DL		11/02/2017 11:26	1000	7110214.D	DB-624 0.18(mm)
180-71829-13 MS		11/02/2017 11:55	1	7110215.D	DB-624 0.18(mm)
180-71829-13 MSD		11/02/2017 12:24	1	7110216.D	DB-624 0.18(mm)
180-71829-11 DL		11/02/2017 12:52	50	7110217.D	DB-624 0.18(mm)
180-71829-4		11/02/2017 13:20	1	7110218.D	DB-624 0.18(mm)
180-71829-9 DL		11/02/2017 13:49	500	7110219.D	DB-624 0.18(mm)
180-71829-12		11/02/2017 14:17	1	7110220.D	DB-624 0.18(mm)
180-71829-8		11/02/2017 14:45	50	7110221.D	DB-624 0.18(mm)
180-71829-11		11/02/2017 15:18	5	7110222.D	DB-624 0.18(mm)
180-71829-10		11/02/2017 15:46	100	7110223.D	DB-624 0.18(mm)
180-71829-9		11/02/2017 16:14	50	7110224.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP5 Start Date: 11/02/2017 21:51

Analysis Batch Number: 227871 End Date: 11/03/2017 09:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-227871/1		11/02/2017 21:51	1	51102D01.D	DB-624 0.18(mm)
CCVIS 180-227871/2		11/02/2017 22:22	1	51102D02.D	DB-624 0.18(mm)
ZZZZZ		11/02/2017 22:22	1		DB-624 0.18(mm)
LCS 180-227871/3		11/02/2017 23:57	1	51102D03.D	DB-624 0.18(mm)
ZZZZZ		11/03/2017 00:34	1		DB-624 0.18(mm)
MB 180-227871/5		11/03/2017 00:58	1	51102D05.D	DB-624 0.18(mm)
ZZZZZ		11/03/2017 06:01	1		DB-624 0.18(mm)
ZZZZZ		11/03/2017 06:24	1		DB-624 0.18(mm)
ZZZZZ		11/03/2017 06:48	1		DB-624 0.18(mm)
ZZZZZ		11/03/2017 07:12	1		DB-624 0.18(mm)
ZZZZZ		11/03/2017 07:36	1		DB-624 0.18(mm)
ZZZZZ		11/03/2017 08:00	1		DB-624 0.18(mm)
180-71829-18		11/03/2017 08:47	2	51102D24.D	DB-624 0.18(mm)
ZZZZZ		11/03/2017 09:11	5		DB-624 0.18(mm)
ZZZZZ		11/03/2017 09:36	10		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP5 Start Date: 11/05/2017 00:00

Analysis Batch Number: 228044 End Date: 11/06/2017 10:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-228044/1		11/05/2017 00:00	1	51105D01.D	DB-624 0.18(mm)
CCVIS 180-228044/2		11/05/2017 00:28	1	51105D02.D	DB-624 0.18(mm)
ZZZZZ		11/05/2017 00:28	1		DB-624 0.18(mm)
LCS 180-228044/3		11/06/2017 01:16	1	51105D03.D	DB-624 0.18(mm)
ZZZZZ		11/06/2017 01:50	1		DB-624 0.18(mm)
MB 180-228044/5		11/06/2017 02:14	1	51105D05.D	DB-624 0.18(mm)
ZZZZZ		11/06/2017 02:50	1		DB-624 0.18(mm)
ZZZZZ		11/06/2017 04:37	1		DB-624 0.18(mm)
ZZZZZ		11/06/2017 05:01	10		DB-624 0.18(mm)
180-71829-15		11/06/2017 05:25	2	51105D12.D	DB-624 0.18(mm)
ZZZZZ		11/06/2017 05:49	1		DB-624 0.18(mm)
ZZZZZ		11/06/2017 06:13	5		DB-624 0.18(mm)
ZZZZZ		11/06/2017 06:37	12.5		DB-624 0.18(mm)
ZZZZZ		11/06/2017 10:13	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP5 Start Date: 11/07/2017 23:03

Analysis Batch Number: 228278 End Date: 11/08/2017 10:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-228278/1		11/07/2017 23:03	1	51107D01.D	DB-624 0.18(mm)
CCVIS 180-228278/2		11/08/2017 00:13	1	51107D02.D	DB-624 0.18(mm)
ZZZZZ		11/08/2017 00:13	1		DB-624 0.18(mm)
LCS 180-228278/3		11/08/2017 01:32	1	51107D03.D	DB-624 0.18(mm)
ZZZZZ		11/08/2017 02:06	1		DB-624 0.18(mm)
MB 180-228278/5		11/08/2017 02:29	1	51107D05.D	DB-624 0.18(mm)
ZZZZZ		11/08/2017 03:02	1		DB-624 0.18(mm)
ZZZZZ		11/08/2017 03:29	1		DB-624 0.18(mm)
ZZZZZ		11/08/2017 04:42	1		DB-624 0.18(mm)
ZZZZZ		11/08/2017 05:05	1		DB-624 0.18(mm)
180-71829-14 DL		11/08/2017 05:29	2	51107D12.D	DB-624 0.18(mm)
ZZZZZ		11/08/2017 05:53	2		DB-624 0.18(mm)
ZZZZZ		11/08/2017 06:16	1		DB-624 0.18(mm)
ZZZZZ		11/08/2017 06:40	2		DB-624 0.18(mm)
ZZZZZ		11/08/2017 07:04	1		DB-624 0.18(mm)
ZZZZZ		11/08/2017 07:52	1		DB-624 0.18(mm)
ZZZZZ		11/08/2017 08:15	1		DB-624 0.18(mm)
ZZZZZ		11/08/2017 08:39	1		DB-624 0.18(mm)
ZZZZZ		11/08/2017 09:03	1		DB-624 0.18(mm)
ZZZZZ		11/08/2017 09:27	1		DB-624 0.18(mm)
ZZZZZ		11/08/2017 09:50	2		DB-624 0.18(mm)
ZZZZZ		11/08/2017 10:14	2		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CHHP7 Start Date: 11/09/2017 07:17

Analysis Batch Number: 228533 End Date: 11/09/2017 17:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-228533/1		11/09/2017 07:17	1	711090n1.D	DB-624 0.18(mm)
CCVIS 180-228533/2		11/09/2017 08:58	1	711090n3.D	DB-624 0.18(mm)
LCS 180-228533/4		11/09/2017 09:42	1	7110904.D	DB-624 0.18(mm)
ZZZZZ		11/09/2017 10:10	1		DB-624 0.18(mm)
MB 180-228533/8		11/09/2017 11:36	1	711090n8.D	DB-624 0.18(mm)
180-71829-17 DL		11/09/2017 13:31	5	7110912.D	DB-624 0.18(mm)
ZZZZZ		11/09/2017 14:00	1		DB-624 0.18(mm)
ZZZZZ		11/09/2017 14:29	1		DB-624 0.18(mm)
ZZZZZ		11/09/2017 15:39	1		DB-624 0.18(mm)
ZZZZZ		11/09/2017 16:36	30		DB-624 0.18(mm)
ZZZZZ		11/09/2017 17:05	20		DB-624 0.18(mm)
ZZZZZ		11/09/2017 17:34	10		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.: 180-71829-1

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-MW-136A-356/356.5-0	180-71829-8	58	60	66	67	85 ^c	85
HD-MW-136A-372.5/373-0	180-71829-9	72	74	88	91	110 ^c	100
	MB 180-227668/1-A	60	58	66	67	77	72
	LCS 180-227668/2-A	62	58	66	65	80	68

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	27-100
PHL = Phenol-d5 (Surr)	27-101
NBZ = Nitrobenzene-d5 (Surr)	30-101
FBP = 2-Fluorobiphenyl	26-103
TBP = 2,4,6-Tribromophenol (Surr)	28-134
TPHL = Terphenyl-d14 (Surr)	20-119

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.: 180-71829-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N11060006.D

Lab ID: LCS 180-227668/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	20.0	11.9	59	41-107	

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.: 180-71829-1

SDG No.:

Lab File ID: N11060004.D Lab Sample ID: MB 180-227668/1-A

Matrix: Water Date Extracted: 11/01/2017 09:35

Instrument ID: CH733 Date Analyzed: 11/06/2017 11:20

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-227668/2-A	N11060006.D	11/06/2017 12:07
HD-MW-136A-356/356.5-0	180-71829-8	N11060021.D	11/06/2017 17:54
HD-MW-136A-372.5/373-0	180-71829-9	N11060022.D	11/06/2017 18:17

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: N10100002.D DFTPP Injection Date: 10/10/2017

Instrument ID: CH733 DFTPP Injection Time: 04:22

Analysis Batch No.: 225310

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	47.5	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	51.9	
70	Less than 2.0 % of mass 69	0.3	(0.6) 1
127	40.0 - 60.0 % of mass 198	51.2	
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	7.0	
275	10.0 - 30.0 % of mass 198	28.6	
365	Greater than 1.0 % of mass 198	3.0	
441	Present but less than mass 443	12.2	(79.6) 3
442	Greater than 40.0 % of mass 198	81.2	
443	17.0 - 23.0 % of mass 442	15.4	(18.9) 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 180-225310/3	N10100003.D	10/10/2017	04:37
	IC 180-225310/4	N10100004.D	10/10/2017	05:03
	IC 180-225310/5	N10100005.D	10/10/2017	05:30
	ICIS 180-225310/6	N10100006.D	10/10/2017	05:56
	IC 180-225310/7	N10100007.D	10/10/2017	06:23
	IC 180-225310/8	N10100008.D	10/10/2017	06:49
	IC 180-225310/9	N10100009.D	10/10/2017	07:16
	IC 180-225310/10	N10100010.D	10/10/2017	07:42

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab File ID: N11060002.D DFTPP Injection Date: 11/06/2017

Instrument ID: CH733 DFTPP Injection Time: 10:39

Analysis Batch No.: 228094

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	44.1	
68	Less than 2.0 % of mass 69	0.4	(0.8) 1
69	Mass 69 relative abundance	44.8	
70	Less than 2.0 % of mass 69	0.3	(0.6) 1
127	40.0 - 60.0 % of mass 198	46.1	
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	6.6	
275	10.0 - 30.0 % of mass 198	29.9	
365	Greater than 1.0 % of mass 198	4.5	
441	Present but less than mass 443	14.4	(76.2) 3
442	Greater than 40.0 % of mass 198	100.0	
443	17.0 - 23.0 % of mass 442	18.9	(18.9) 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 180-228094/3	N11060003.D	11/06/2017	10:54
	MB 180-227668/1-A	N11060004.D	11/06/2017	11:20
	LCS 180-227668/2-A	N11060006.D	11/06/2017	12:07
HD-MW-136A-356/356.5-0	180-71829-8	N11060021.D	11/06/2017	17:54
HD-MW-136A-372.5/373-0	180-71829-9	N11060022.D	11/06/2017	18:17

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-228094/3 Date Analyzed: 11/06/2017 10:54

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N11060003.D Heated Purge: (Y/N) N

Calibration ID: 35710

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		132813	6.35	469897	7.60	232175	9.24
UPPER LIMIT		265626	6.85	939794	8.10	464350	9.74
LOWER LIMIT		66407	5.85	234949	7.10	116088	8.74
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-227668/1-A		154742	6.35	547714	7.60	280635	9.24
LCS 180-227668/2-A		136101	6.35	447754	7.60	225103	9.24
180-71829-8	HD-MW-136A-356/356.5-0	129428	6.35	459792	7.60	233435	9.24
180-71829-9	HD-MW-136A-372.5/373-0	129032	6.35	448298	7.60	220363	9.24

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.: 180-71829-1

SDG No.:

Sample No.: CCVIS 180-228094/3 Date Analyzed: 11/06/2017 10:54

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N11060003.D Heated Purge: (Y/N) N

Calibration ID: 35710

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		414535	10.61	420670	14.20	372559	17.17
UPPER LIMIT		829070	11.11	841340	14.70	745118	17.67
LOWER LIMIT		207268	10.11	210335	13.70	186280	16.67
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-227668/1-A		519577	10.61	479156	14.20	429322	17.17
LCS 180-227668/2-A		413916	10.61	444073	14.21	397579	17.17
180-71829-8	HD-MW-136A-356/356.5-0	424872	10.61	412200	14.21	395051	17.18
180-71829-9	HD-MW-136A-372.5/373-0	413165	10.61	413684	14.21	424412	17.18

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.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-356/356.5-0 | Lab Sample ID: 180-71829-8

Matrix: Water | Lab File ID: N11060021.D

Analysis Method: 8270D LL | Date Collected: 10/25/2017 11:00

Extract. Method: 3520C | Date Extracted: 11/01/2017 09:35

Sample wt/vol: 250(mL) | Date Analyzed: 11/06/2017 17:54

Con. Extract Vol.: 250(uL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 228094 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.88	J	2.0	0.37

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	67		26-103
367-12-4	2-Fluorophenol (Surr)	58		27-100
118-79-6	2,4,6-Tribromophenol (Surr)	85	^c	28-134
4165-60-0	Nitrobenzene-d5 (Surr)	66		30-101
4165-62-2	Phenol-d5 (Surr)	60		27-101
1718-51-0	Terphenyl-d14 (Surr)	85		20-119

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060021.D
Lims ID: 180-71829-D-8-A
Client ID: HD-MW-136A-356/356.5-0
Sample Type: Client
Inject. Date: 06-Nov-2017 17:54:30 ALS Bottle#: 20 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019192-021
Operator ID: 03200 Instrument ID: CH733

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 07-Nov-2017 06:35:11 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: piccolinov Date: 07-Nov-2017 06:32:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.348	6.348	0.000	97	129428	8.00	
* 2 Naphthalene-d8	136	7.595	7.595	0.000	99	459792	8.00	
* 3 Acenaphthene-d10	164	9.236	9.236	0.000	95	233435	8.00	
* 4 Phenanthrene-d10	188	10.613	10.613	0.000	96	424872	8.00	
* 5 Chrysene-d12	240	14.213	14.201	0.012	98	412200	8.00	
* 6 Perylene-d12	264	17.177	17.165	0.012	99	395051	8.00	
$ 7 2-Fluorophenol	112	4.925	4.925	0.000	92	480545	23.0	
$ 8 Phenol-d5	99	5.978	5.978	0.000	94	596095	23.9	
$ 9 Nitrobenzene-d5	82	6.895	6.895	0.000	92	556646	26.6	
$ 10 2-Fluorobiphenyl	172	8.589	8.589	0.000	100	1257554	27.0	
$ 11 2,4,6-Tribromophenol	330	9.960	9.960	0.000	96	211910	34.0	
$ 12 Terphenyl-d14	244	12.419	12.413	0.005	99	1582216	34.1	
13 1,4-Dioxane	88	1.490	1.472	0.018	92	15746	1.75	

Reagents:

SVTAPITINTRNi_00016 Amount Added: 1.00 Units: uL Run Reagent

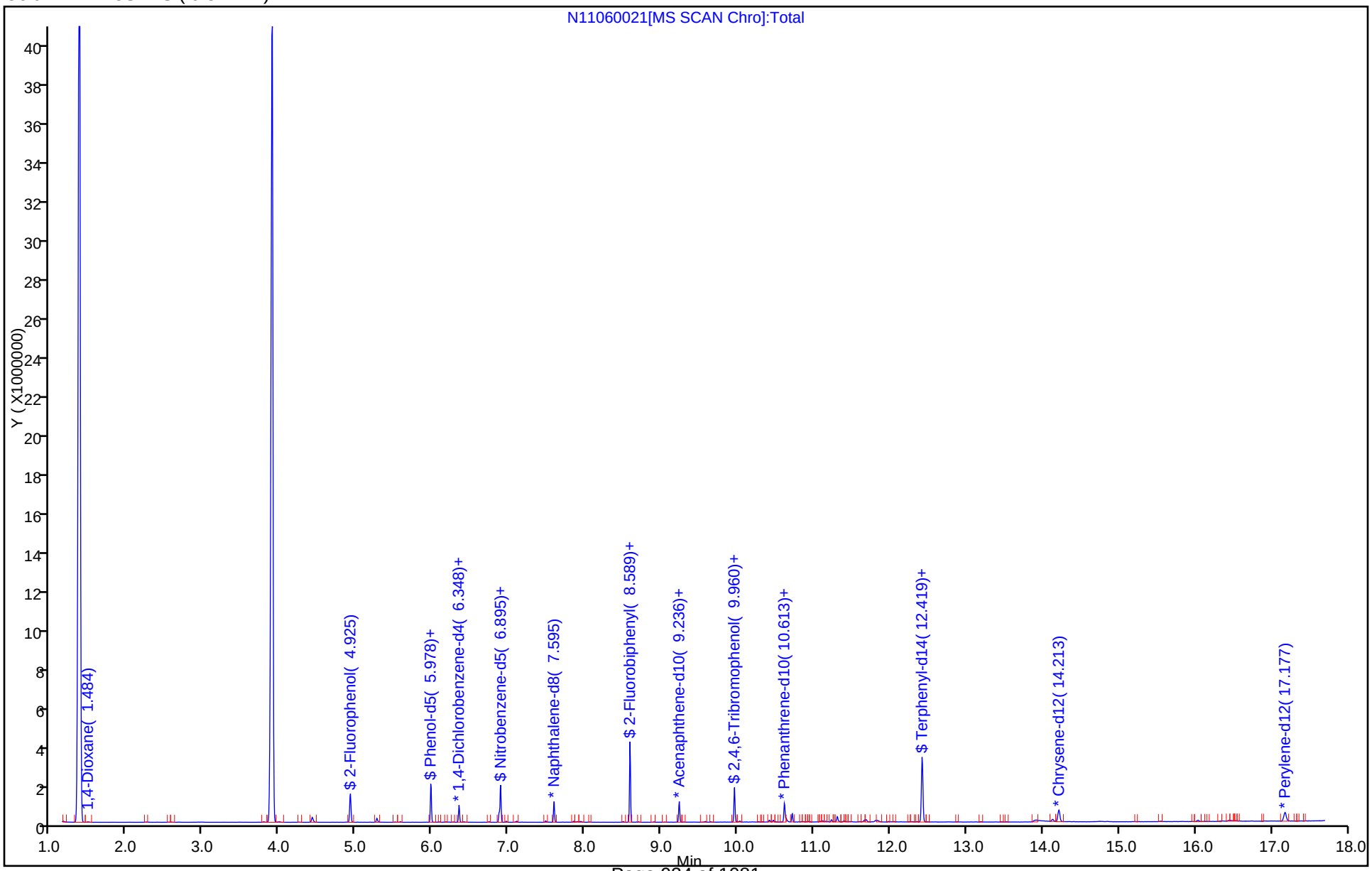
Report Date: 07-Nov-2017 06:36:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060021.D

Injection Date:	06-Nov-2017 17:54:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	180-71829-D-8-A	Lab Sample ID:	180-71829-8	Worklist Smp#:	21
Client ID:	HD-MW-136A-356/356.5-0				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060021.D
Lims ID: 180-71829-D-8-A
Client ID: HD-MW-136A-356/356.5-0
Sample Type: Client
Inject. Date: 06-Nov-2017 17:54:30 ALS Bottle#: 20 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019192-021
Operator ID: 03200 Instrument ID: CH733

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 07-Nov-2017 06:35:11 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: piccolinov Date: 07-Nov-2017 06:32:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	40.0	23.0	57.55
$ 8 Phenol-d5	40.0	23.9	59.66
$ 9 Nitrobenzene-d5	40.0	26.6	66.45
$ 10 2-Fluorobiphenyl	40.0	27.0	67.45
$ 11 2,4,6-Tribromophenol	40.0	34.0	85.10
$ 12 Terphenyl-d14	40.0	34.1	85.17

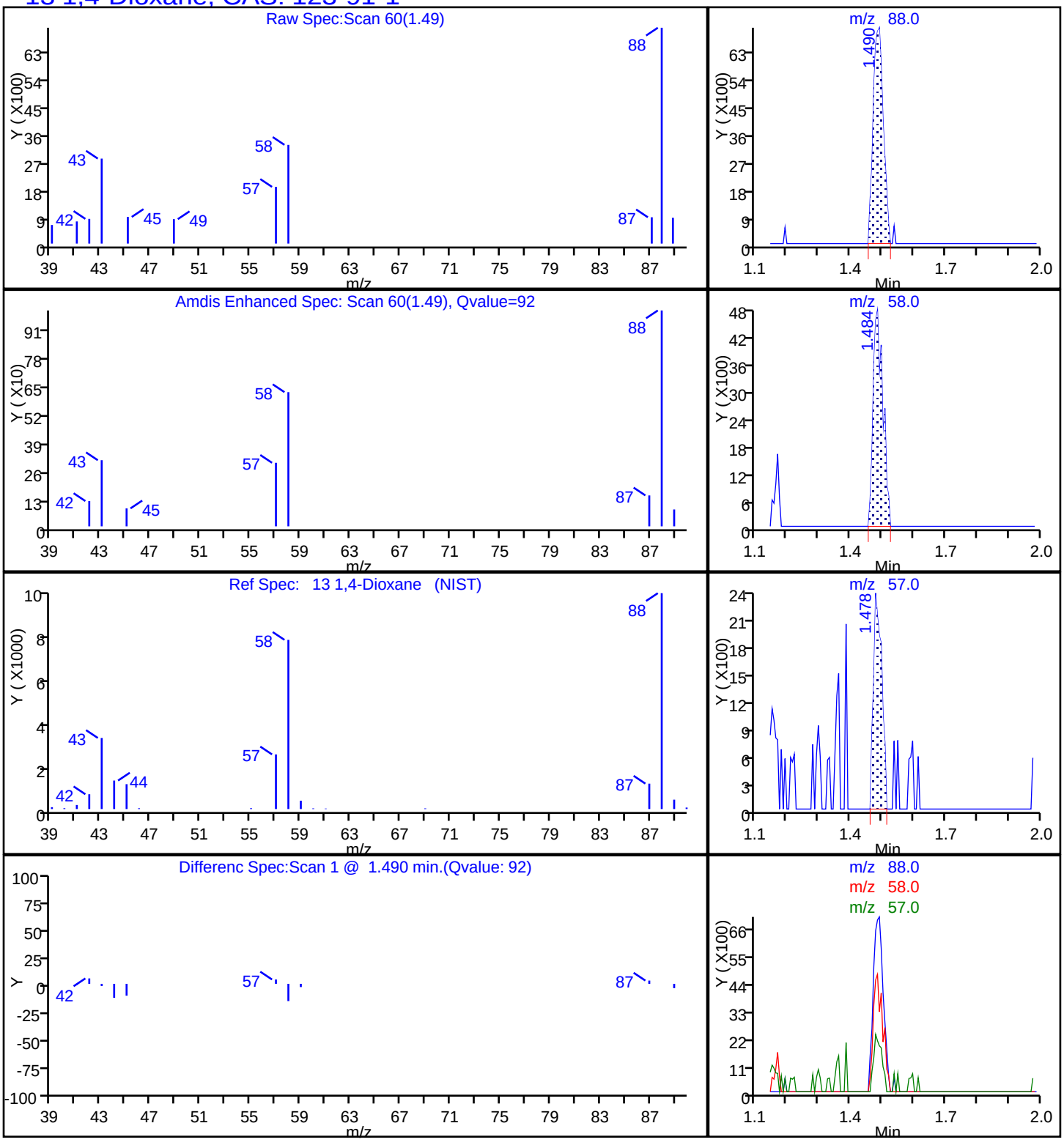
Report Date: 07-Nov-2017 06:36:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060021.D

Injection Date:	06-Nov-2017 17:54:30	Instrument ID:	CH733		
Lims ID:	180-71829-D-8-A	Lab Sample ID:	180-71829-8		
Client ID:	HD-MW-136A-356/356.5-0				
Operator ID:	03200	ALS Bottle#:	20	Worklist Smp#:	21
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

13 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: HD-MW-136A-372.5/373-0 | Lab Sample ID: 180-71829-9

Matrix: Water | Lab File ID: N11060022.D

Analysis Method: 8270D LL | Date Collected: 10/25/2017 12:00

Extract. Method: 3520C | Date Extracted: 11/01/2017 09:35

Sample wt/vol: 260(mL) | Date Analyzed: 11/06/2017 18:17

Con. Extract Vol.: 250(uL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 228094 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.3	J	1.9	0.36

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	91		26-103
367-12-4	2-Fluorophenol (Surr)	72		27-100
118-79-6	2,4,6-Tribromophenol (Surr)	110	^c	28-134
4165-60-0	Nitrobenzene-d5 (Surr)	88		30-101
4165-62-2	Phenol-d5 (Surr)	74		27-101
1718-51-0	Terphenyl-d14 (Surr)	100		20-119

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060022.D
Lims ID: 180-71829-D-9-A
Client ID: HD-MW-136A-372.5/373-0
Sample Type: Client
Inject. Date: 06-Nov-2017 18:17:30 ALS Bottle#: 21 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019192-022
Operator ID: 03200 Instrument ID: CH733

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 07-Nov-2017 06:35:11 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: piccolinov Date: 07-Nov-2017 06:32:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.348	6.348	0.000	97	129032	8.00	
* 2 Naphthalene-d8	136	7.595	7.595	0.000	99	448298	8.00	
* 3 Acenaphthene-d10	164	9.236	9.236	0.000	94	220363	8.00	
* 4 Phenanthrene-d10	188	10.613	10.613	0.000	96	413165	8.00	
* 5 Chrysene-d12	240	14.213	14.201	0.012	98	413684	8.00	
* 6 Perylene-d12	264	17.177	17.165	0.012	99	424412	8.00	
$ 7 2-Fluorophenol	112	4.925	4.925	0.000	92	597708	28.7	
$ 8 Phenol-d5	99	5.978	5.978	0.000	93	735673	29.5	
$ 9 Nitrobenzene-d5	82	6.895	6.895	0.000	93	717229	35.1	
$ 10 2-Fluorobiphenyl	172	8.589	8.589	0.000	100	1601563	36.4	
$ 11 2,4,6-Tribromophenol	330	9.960	9.960	0.000	95	265833	43.9	
$ 12 Terphenyl-d14	244	12.419	12.413	0.006	99	1857396	39.8	
13 1,4-Dioxane	88	1.484	1.472	0.012	92	23719	2.64	

Reagents:

SVTAPITINTRNi_00016 Amount Added: 1.00 Units: uL Run Reagent

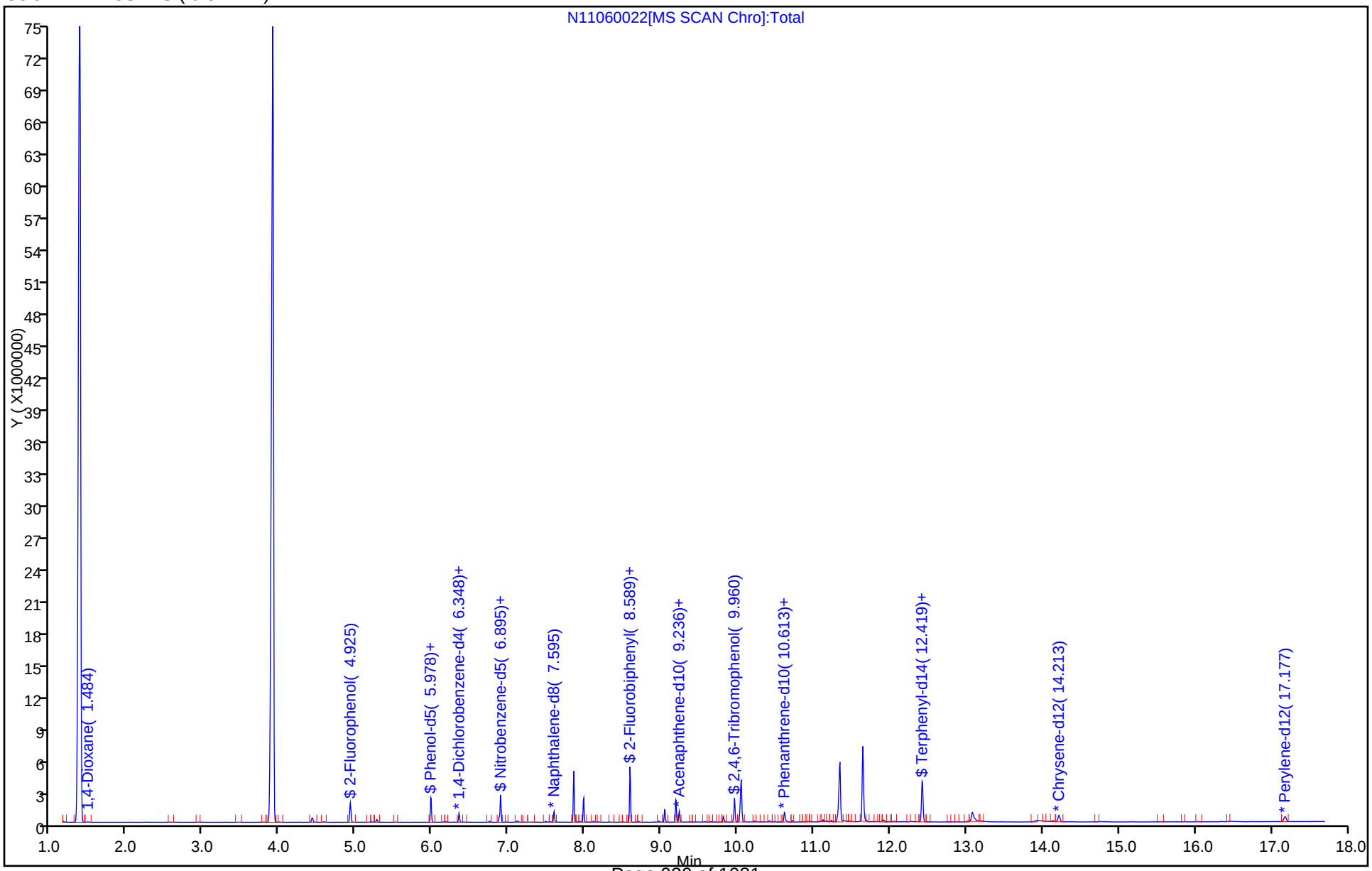
Report Date: 07-Nov-2017 06:37:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060022.D

Injection Date:	06-Nov-2017 18:17:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	180-71829-D-9-A	Lab Sample ID:	180-71829-9	Worklist Smp#:	22
Client ID:	HD-MW-136A-372.5/373-0				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060022.D
Lims ID: 180-71829-D-9-A
Client ID: HD-MW-136A-372.5/373-0
Sample Type: Client
Inject. Date: 06-Nov-2017 18:17:30 ALS Bottle#: 21 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019192-022
Operator ID: 03200 Instrument ID: CH733

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 07-Nov-2017 06:35:11 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: piccolinov Date: 07-Nov-2017 06:32:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	40.0	28.7	71.80
$ 8 Phenol-d5	40.0	29.5	73.85
$ 9 Nitrobenzene-d5	40.0	35.1	87.81
$ 10 2-Fluorobiphenyl	40.0	36.4	91.00
$ 11 2,4,6-Tribromophenol	40.0	43.9	109.78
$ 12 Terphenyl-d14	40.0	39.8	99.62

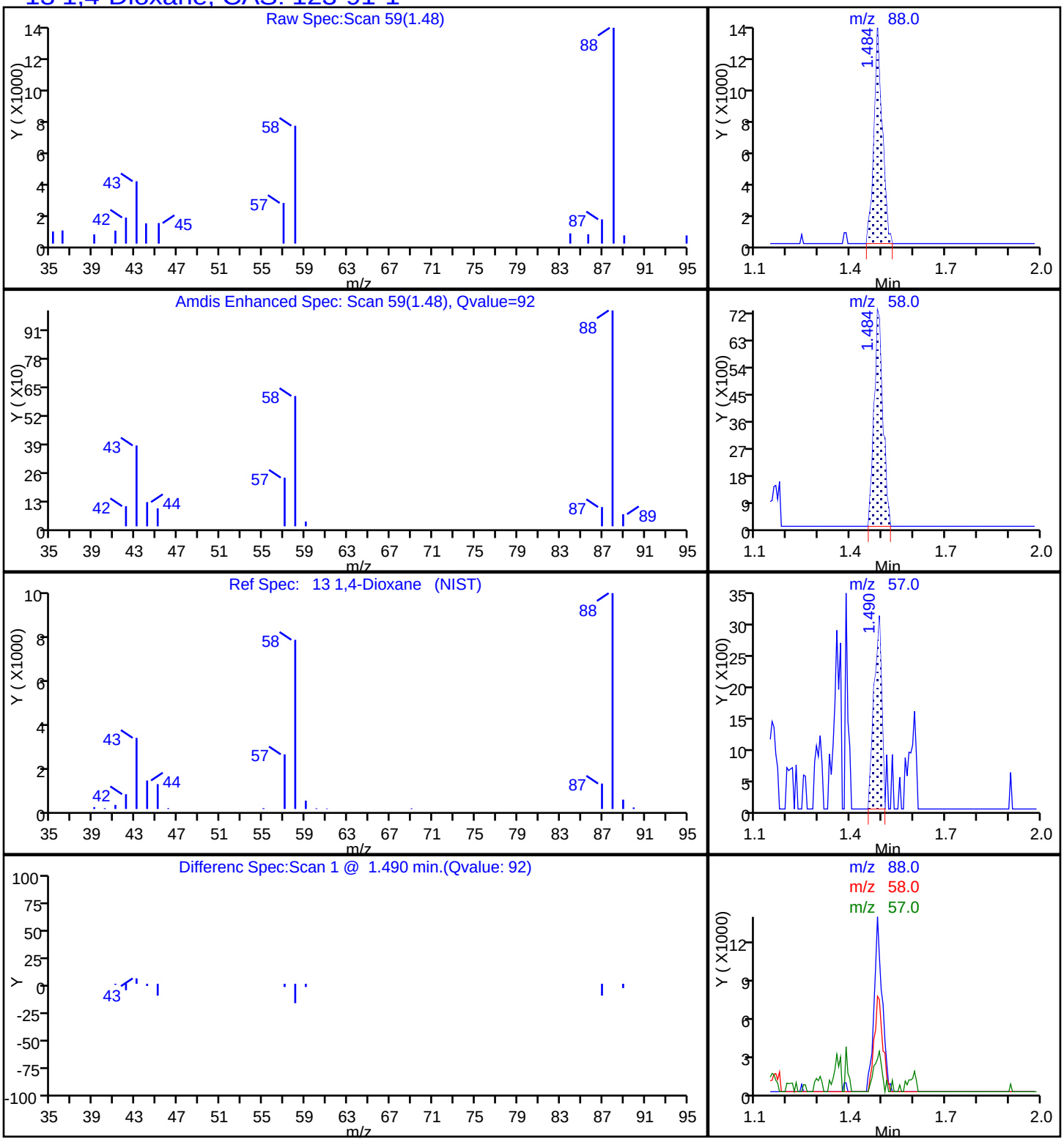
Report Date: 07-Nov-2017 06:37:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060022.D

Injection Date:	06-Nov-2017 18:17:30	Instrument ID:	CH733		
Lims ID:	180-71829-D-9-A	Lab Sample ID:	180-71829-9		
Client ID:	HD-MW-136A-372.5/373-0				
Operator ID:	03200	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH733	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.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-225310/3	N10100003.D
Level 2	IC 180-225310/4	N10100004.D
Level 3	IC 180-225310/5	N10100005.D
Level 4	ICIS 180-225310/6	N10100006.D
Level 5	IC 180-225310/7	N10100007.D
Level 6	IC 180-225310/8	N10100008.D
Level 7	IC 180-225310/9	N10100009.D
Level 8	IC 180-225310/10	N10100010.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	0.6142 0.5754	0.4992 0.5704	0.5278 0.5591	0.5367	0.5659	Ave		0.5561			0.0100	6.3		20.0			
N-Nitrosodimethylamine	0.7731 0.8351	0.6750 0.8095	0.7399 0.8117	0.7407	0.8004	Ave		0.7732			0.0100	6.8		20.0			
Pyridine	1.4925 1.5102	1.3976 1.5027	1.3775 1.4520	1.3481	1.4563	Ave		1.4421			0.0100	4.2		20.0			
Methyl methanesulfonate	0.7706 0.8508	0.8198 0.8468	0.8270 0.8256	0.7693	0.8298	Ave		0.8175			0.0100	3.8		20.0			
Benzaldehyde	0.9464 0.9594	0.8558 0.8643	0.8825 0.7837	0.8758	0.9737	Ave		0.8927			0.0100	7.1		20.0			
Phenol	1.6435 1.7835	1.6201 1.7795	1.6576 1.7520	1.6113	1.7224	Ave		1.6962			0.8000	4.2		20.0			
Aniline	2.0833 2.0584	1.8488 2.0501	1.9290 2.0022	1.8413	2.0061	Ave		1.9774			0.0100	4.8		20.0			
Bis(2-chloroethyl)ether	1.3247 1.2430	1.1463 1.2382	1.2393 1.2007	1.1608	1.2091	Ave		1.2203			0.7000	4.6		20.0			
2-Chlorophenol	1.4324 1.4138	1.2497 1.4235	1.3266 1.3771	1.3256	1.4119	Ave		1.3701			0.8000	4.7		20.0			
n-Decane	1.3839 1.3156	1.1353 1.2974	1.2275 1.2609	1.1961	1.2697	Ave		1.2608				6.0		20.0			
1,3-Dichlorobenzene	1.6738 1.6258	1.6010 1.6058	1.5280 1.5702	1.5528	1.5837	Ave		1.5926			0.0100	2.8		20.0			
1,4-Dichlorobenzene	1.6050 1.6241	1.6103 1.6025	1.5470 1.5790	1.5245	1.6163	Ave		1.5886			0.0100	2.2		20.0			
Benzyl alcohol	0.7996 0.8402	0.7099 0.8363	0.7290 0.8219	0.7698	0.8141	Ave		0.7901			0.0100	6.2		20.0			
1,2-Dichlorobenzene	1.5382 1.5160	1.4629 1.4859	1.4694 1.4714	1.4319	1.4653	Ave		1.4801			0.0100	2.2		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.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

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	1.2147 1.1785	1.0660 1.1977	1.0836 1.1628	1.1035	1.1640	Ave		1.1464			0.7000	4.8		20.0			
Indene	2.2289 2.3105	2.1473 2.3272	2.2697 2.3133	2.1690	2.2769	Ave		2.2554			0.0100	3.0		20.0			
2,2'-oxybis[1-chloropropane]	1.6585 1.4152	1.3215 1.3959	1.4190 1.3723	1.3600	1.3965	Ave		1.4174			0.0100	7.2		20.0			
N-Nitrosopyrrolidine	0.4357 0.5431	0.4757 0.5311	0.4965 0.5245	0.4987	0.5105	Ave		0.5020			0.0100	6.8		20.0			
Acetophenone	1.8164 1.8027	1.8154 1.8155	1.7185 1.7893	1.7015	1.7307	Ave		1.7737			0.0100	2.7		20.0			
Methylphenol, 3 & 4	1.2185 1.2627	1.1006 1.2423	1.2017 1.2405	1.1505	1.2000	Ave		1.2021			0.6000	4.4		20.0			
N-Nitrosodi-n-propylamine	0.8922 0.9167	0.8407 0.9150	0.8649 0.9006	0.8387	0.8931	Ave		0.8827			0.5000	3.5		20.0			
Hexachloroethane	0.6531 0.5991	0.5841 0.5882	0.5774 0.5736	0.5630	0.5910	Ave		0.5912			0.3000	4.6		20.0			
Nitrobenzene	0.3514 0.3664	0.3440 0.3756	0.3645 0.3670	0.3615	0.3679	Ave		0.3623			0.2000	2.8		20.0			
Isophorone	0.6113 0.6270	0.5622 0.6604	0.5829 0.6365	0.5941	0.6085	Ave		0.6104			0.4000	5.1		20.0			
2-Nitrophenol	0.1729 0.1996	0.1585 0.2122	0.1760 0.2033	0.1833	0.1931	Ave		0.1874			0.1000	9.5		20.0			
2,4-Dimethylphenol	0.3163 0.3641	0.3460 0.3777	0.3634 0.3687	0.3627	0.3608	Ave		0.3575			0.2000	5.3		20.0			
Benzoic acid	+++++ 0.1818	0.1273 0.2023	0.1977 0.2072	0.1508	0.1624	Lin1	-0.171	0.1990			0.0100				0.9920		0.9900
Bis(2-chloroethoxy)methane	0.3988 0.3724	0.3441 0.3881	0.3728 0.3848	0.3603	0.3652	Ave		0.3733			0.3000	4.6		20.0			
2,4-Dichlorophenol	0.2699 0.3090	0.2700 0.3243	0.3027 0.3125	0.2916	0.3047	Ave		0.2981			0.2000	6.6		20.0			
1,2,4-Trichlorobenzene	0.3802 0.3487	0.3484 0.3659	0.3660 0.3600	0.3578	0.3464	Ave		0.3592			0.0100	3.2		20.0			
Naphthalene	1.1467 1.0371	1.0148 1.0691	1.0551 1.0580	1.0208	1.0261	Ave		1.0534			0.7000	4.0		20.0			
4-Chloroaniline	0.4335 0.4355	0.4098 0.4530	0.4129 0.4436	0.4169	0.4322	Ave		0.4297			0.0100	3.6		20.0			
2,6-Dichlorophenol	0.2846 0.2960	0.2880 0.3111	0.2925 0.3062	0.2887	0.2952	Ave		0.2953			0.0100	3.1		20.0			
Hexachlorobutadiene	0.2405 0.2081	0.2146 0.2160	0.2124 0.2116	0.2066	0.2094	Ave		0.2149			0.0100	5.0		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
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

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	0.0743 0.0995	0.0740 0.1044	0.0846 0.1041	0.0899	0.0964	Ave		0.0909			0.0100	13.6		20.0			
4-Chloro-3-methylphenol	0.2655 0.3054	0.2700 0.3167	0.2844 0.3118	0.2926	0.2996	Ave		0.2933			0.2000	6.4		20.0			
2-Methylnaphthalene	0.7250 0.7282	0.6845 0.7541	0.7233 0.7465	0.7174	0.7090	Ave		0.7235			0.4000	3.0		20.0			
1-Methylnaphthalene	0.6647 0.6798	0.6662 0.7058	0.6875 0.6977	0.6761	0.6698	Ave		0.6810			0.0100	2.2		20.0			
Hexachlorocyclopentadiene	0.4310 0.5371	0.4421 0.5466	0.4661 0.5515	0.4783	0.5084	Ave		0.4951			0.0500	9.6		20.0			
1,2,4,5-Tetrachlorobenzene	0.7898 0.7275	0.7629 0.7479	0.7467 0.7317	0.7353	0.7056	Ave		0.7434			0.0100	3.4		20.0			
2,4,6-Trichlorophenol	0.3786 0.4658	0.4173 0.4768	0.4338 0.4629	0.4275	0.4591	Ave		0.4402			0.2000	7.4		20.0			
2,4,5-Trichlorophenol	0.3715 0.4858	0.4475 0.5061	0.4528 0.4884	0.4745	0.4685	Ave		0.4619			0.2000	8.9		20.0			
1,1'-Biphenyl	1.7277 1.7035	1.7360 1.7789	1.7137 1.7257	1.6685	1.6374	Ave		1.7114			0.0100	2.5		20.0			
2-Chloronaphthalene	1.1960 1.3126	1.3121 1.3609	1.3428 1.3318	1.2729	1.2818	Ave		1.3014			0.8000	4.0		20.0			
2-Nitroaniline	+++++ 0.3888	0.3030 0.3998	0.3296 0.3892	0.3544	0.3677	Ave		0.3618			0.0100	9.8		20.0			
Dimethyl phthalate	1.4258 1.4964	1.3563 1.5662	1.4366 1.5048	1.3919	1.4430	Ave		1.4526			0.0100	4.6		20.0			
1,3-Dinitrobenzene	+++++ 0.2519	0.1490 0.2725	0.1850 0.2598	0.2126	0.2379	Lin2	-0.234	0.2560			0.0100				0.9960		0.9900
2,6-Dinitrotoluene	+++++ 0.3518	0.2822 0.3617	0.3235 0.3491	0.3174	0.3259	Ave		0.3302			0.2000	8.2		20.0			
Acenaphthylene	1.7142 1.8989	1.7522 1.9707	1.8555 1.9309	1.7979	1.8317	Ave		1.8440			0.9000	4.8		20.0			
3-Nitroaniline	+++++ 0.3604	0.2709 0.3757	0.3325 0.3657	0.3343	0.3500	Ave		0.3413			0.0100	10.2		20.0			
2,4-Dinitrophenol	+++++ 0.2673	0.1656 0.2863	0.2134 0.2853	0.1980	0.2262	Lin1	-0.687	0.2814			0.0100				0.9940		0.9900
Acenaphthene	1.3545 1.3187	1.2849 1.3688	1.3174 1.3561	1.2515	1.2664	Ave		1.3148			0.9000	3.3		20.0			
4-Nitrophenol	+++++ 0.2453	0.2035 0.2535	0.2216 0.2467	0.2270	0.2328	Ave		0.2329			0.0100	7.4		20.0			
2,4-Dinitrotoluene	+++++ 0.4585	0.3615 0.4880	0.4017 0.4647	0.4143	0.4424	Ave		0.4330			0.2000	10.0		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
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

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	1.8752 1.8312	1.8223 1.9165	1.8880 1.8507	1.7566	1.8020	Ave		1.8428			0.8000	2.8		20.0			
2,3,5,6-Tetrachlorophenol	0.2871 0.4363	0.3786 0.4634	0.3956 0.4479	0.4075	0.4227	Ave		0.4049			0.0100	13.6		20.0			
2,3,4,6-Tetrachlorophenol	0.3994 0.4309	0.3958 0.4539	0.4213 0.4478	0.4152	0.4021	Ave		0.4208			0.0100	5.2		20.0			
2-Naphthylamine	1.1691 1.3324	1.2453 1.3760	1.2950 1.3037	1.2668	1.3076	Ave		1.2870			0.0100	4.8		20.0			
Diethyl phthalate	1.4713 1.4656	1.3577 1.5339	1.3871 1.4957	1.3516	1.3940	Ave		1.4321			0.0100	4.8		20.0			
Hexadecane	0.3838 0.3949	0.3613 0.4185	0.3778 0.4173	0.3751	0.3874	Ave		0.3895				5.2		20.0			
4-Chlorophenyl phenyl ether	0.7422 0.7719	0.7659 0.8111	0.7774 0.7832	0.7397	0.7512	Ave		0.7678			0.4000	3.1		20.0			
4-Nitroaniline	+++++ 0.3838	0.2997 0.4052	0.3435 0.3929	0.3398	0.3730	Ave		0.3626			0.0100	10.2		20.0			
Fluorene	1.4339 1.4839	1.4780 1.5330	1.4807 1.5217	1.3863	1.4117	Ave		1.4662			0.9000	3.5		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1581	0.0874 0.1622	0.1106 0.1672	0.1329	0.1465	Lin2	-0.315	0.1593			0.0100				0.9960		0.9900
N-Nitrosodiphenylamine	0.5129 0.5930	0.5636 0.5901	0.5891 0.6151	0.5679	0.5813	Ave		0.5766			0.0100	5.3		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.6689 0.7197	0.6554 0.7250	0.6930 0.7551	0.7023	0.7149	Ave		0.7043			0.0100	4.5		20.0			
4-Bromophenyl phenyl ether	0.2191 0.2571	0.2530 0.2572	0.2558 0.2646	0.2515	0.2484	Ave		0.2508			0.1000	5.5		20.0			
Hexachlorobenzene	0.2749 0.2664	0.2533 0.2652	0.2610 0.2718	0.2579	0.2566	Ave		0.2634			0.1000	2.9		20.0			
Atrazine	0.2267 0.2311	0.1993 0.2238	0.2218 0.2236	0.2236	0.2313	Ave		0.2226			0.0100	4.5		20.0			
Pentachlorophenol	0.1993 0.1897	0.1701 0.1970	0.1900 0.2066	0.1667	0.1789	Ave		0.1873			0.0500	7.6		20.0			
n-Octadecane	1.3538 1.5194	1.2428 1.5495	1.3169 1.5450	1.3054	1.4149	Ave		1.4060				8.5		20.0			
Phenanthrene	1.1320 1.1574	1.1371 1.1632	1.1187 1.1941	1.1243	1.1193	Ave		1.1433			0.7000	2.3		20.0			
Anthracene	1.1327 1.1852	1.1266 1.2188	1.1256 1.2538	1.1348	1.1611	Ave		1.1673			0.7000	4.1		20.0			
Carbazole	0.9175 1.0562	0.9376 1.0592	0.9978 1.0882	0.9936	1.0046	Ave		1.0068			0.0100	5.9		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.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

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	1.0015 1.2881	1.0151 1.3002	1.1229 1.3628	1.1702	1.2263	Ave		1.1859			0.0100	11.2		20.0			
Fluoranthene	1.0982 1.3312	1.1068 1.3554	1.2256 1.4066	1.2122	1.2791	Ave		1.2519			0.6000	9.0		20.0			
Benzidine	+++++ 0.6266	0.4020 0.5875	0.4443 0.5570	0.5149	0.6133	Lin2	-0.428	0.5934			0.0100				0.9950		0.9900
Pyrene	1.0981 1.2355	1.1539 1.2277	1.1849 1.2573	1.1939	1.2234	Ave		1.1968			0.6000	4.3		20.0			
Butyl benzyl phthalate	0.3626 0.5350	0.3919 0.5364	0.4467 0.5554	0.4780	0.5058	Ave		0.4765			0.0100	14.9		20.0			
3,3'-Dichlorobenzidine	+++++ 0.4860	0.3411 0.4963	0.3919 0.5137	0.4177	0.4437	Ave		0.4415			0.0100	14.1		20.0			
Bis(2-ethylhexyl) phthalate	0.5477 0.7383	0.5225 0.7480	0.6172 0.7741	0.6672	0.7099	Ave		0.6656			0.0100	14.2		20.0			
Benzo[a]anthracene	1.1657 1.2270	1.1385 1.2229	1.2072 1.2402	1.1951	1.2204	Ave		1.2021			0.8000	2.9		20.0			
Chrysene	1.1393 1.1542	1.1698 1.1392	1.1466 1.1771	1.1346	1.1494	Ave		1.1513			0.7000	1.3		20.0			
Di-n-octyl phthalate	+++++ 1.3661	0.9080 1.4258	0.9863 1.4275	1.1137	1.2416	Lin2	-1.044	1.3522			0.0100				0.9930		0.9900
7,12-Dimethylbenz(a)anthracene	0.6033 0.7198	0.5878 0.7407	0.6431 0.7426	0.6451	0.6688	Ave		0.6689			0.0100	9.0		20.0			
Benzo[b]fluoranthene	1.3449 1.4712	1.2547 1.4943	1.3830 1.4423	1.3357	1.3955	Ave		1.3902			0.7000	5.7		20.0			
Benzo[k]fluoranthene	1.2701 1.3761	1.1954 1.3972	1.3476 1.4235	1.3297	1.3473	Ave		1.3359			0.7000	5.5		20.0			
Benzo[e]pyrene	1.3032 1.2608	1.0701 1.2894	1.1817 1.2841	1.1735	1.2270	Ave		1.2237			0.0100	6.4		20.0			
Benzo[a]pyrene	1.1483 1.2861	1.0972 1.3192	1.1669 1.3026	1.1855	1.2582	Ave		1.2205			0.7000	6.7		20.0			
Indeno[1,2,3-cd]pyrene	1.2962 1.5087	1.2138 1.5693	1.3475 1.5524	1.3534	1.4261	Ave		1.4084			0.5000	9.1		20.0			
Dibenz(a,h)anthracene	1.0479 1.2639	1.0016 1.3031	1.1216 1.2916	1.1325	1.2016	Ave		1.1705			0.4000	9.7		20.0			
Benzo[g,h,i]perylene	1.1230 1.2443	1.0102 1.2881	1.1380 1.2760	1.1327	1.1889	Ave		1.1751			0.5000	7.9		20.0			
2-Fluorophenol (Surr)	1.2345 1.3733	1.2494 1.3658	1.1939 1.3339	1.2574	1.3141	Ave		1.2903				5.1		20.0			
Phenol-d5 (Surr)	1.5468 1.6262	1.4806 1.6194	1.4769 1.5846	1.4647	1.5531	Ave		1.5440				4.2		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.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

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)	0.3275 0.3754	0.3418 0.3909	0.3655 0.3802	0.3592	0.3745	Ave		0.3644				5.8		20.0			
2-Fluorobiphenyl	1.6349 1.5803	1.6128 1.6464	1.6132 1.6035	1.5519	1.5353	Ave		1.5973				2.4		20.0			
2,4,6-Tribromophenol (Surr)	0.0915 0.1286	0.0952 0.1293	0.1148 0.1357	0.1181	0.1244	Ave		0.1172			0.0100	13.8		20.0			
Terphenyl-d14 (Surr)	0.8586 0.9229	0.8691 0.9175	0.8952 0.9391	0.8902	0.9187	Ave		0.9014				3.1		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
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-225310/3	N10100003.D
Level 2	IC 180-225310/4	N10100004.D
Level 3	IC 180-225310/5	N10100005.D
Level 4	ICIS 180-225310/6	N10100006.D
Level 5	IC 180-225310/7	N10100007.D
Level 6	IC 180-225310/8	N10100008.D
Level 7	IC 180-225310/9	N10100009.D
Level 8	IC 180-225310/10	N10100010.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	4167 342949	17049 498441	36136 655814	91348	179887	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodimethylamine	DCBd 4	Ave	5245 497777	23054 707420	50658 951972	126064	254421	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyridine	DCBd 4	Ave	20251 1800391	95465 2626219	188627 3406121	458878	925779	0.760 80.0	4.00 120	8.00 160	20.0	40.0
Methyl methanesulfonate	DCBd 4	Ave	5228 507116	28000 739978	56621 968318	130934	263753	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzaldehyde	DCBd 4	Ave	6421 571895	29229 755306	60423 919171	149055	309494	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol	DCBd 4	Ave	11150 1063118	55332 1555054	113489 2054845	274228	547473	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Aniline	DCBd 4	Ave	14134 1226948	63142 1791493	132070 2348394	313371	637675	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethyl)ether	DCBd 4	Ave	8987 740899	39149 1081967	84852 1408225	197560	384334	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chlorophenol	DCBd 4	Ave	9718 842709	42680 1243882	90825 1615204	225612	448778	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
n-Decane	DCBd 4	Ave	9389 784175	38772 1133719	84038 1478830	203560	403579	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	11356 969069	54677 1403181	104612 1841671	264277	503403	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	10889 968086	54995 1400326	105912 1852025	259456	513768	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzyl alcohol	DCBd 4	Ave	5425 500792	24244 730828	49909 963956	131011	258764	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	10436 903650	49962 1298436	100601 1725736	243692	465759	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Methylphenol	DCBd 4	Ave	8241 702465	36408 1046578	74190 1363875	187813	369992	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.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

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	15122 1377231	73335 2033600	155392 2713189	369150	723755	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,2'-oxybis[1-chloropropane]	DCBd 4	Ave	11252 843554	45132 1219806	97153 1609551	231461	443888	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosopyrrolidine	DCBd 4	Ave	2956 323710	16246 464093	33992 615155	84872	162272	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acetophenone	DCBd 4	Ave	12323 1074551	62000 1586493	117656 2098679	289574	550115	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methylphenol, 3 & 4	DCBd 4	Ave	8267 752633	37590 1085582	82272 1455000	195808	381436	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodi-n-propylamine	DCBd 4	Ave	6053 546443	28713 799564	59215 1056323	142734	283873	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachloroethane	DCBd 4	Ave	4431 357103	19950 513963	39534 672718	95819	187846	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene	NPT	Ave	9103 796015	43070 1146082	89645 1494733	214665	421333	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Isophorone	NPT	Ave	15837 1362227	70388 2014752	143366 2592349	352810	696999	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitrophenol	NPT	Ave	4479 433634	19845 647322	43278 827898	108874	221200	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dimethylphenol	NPT	Ave	8194 791030	43326 1152272	89366 1501811	215378	413299	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzoic acid	NPT	Lin1	+++++ 395039	15943 617171	48612 843933	89543	186026	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethoxy)methane	NPT	Ave	10332 809142	43088 1184217	91699 1567174	213943	418287	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dichlorophenol	NPT	Ave	6993 671372	33805 989568	74459 1272603	173150	349020	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4-Trichlorobenzene	NPT	Ave	9849 757482	43622 1116260	90023 1466422	212444	396774	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Naphthalene	NPT	Ave	29709 2253138	127052 3261639	259489 4309332	606149	1175233	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloroaniline	NPT	Ave	11231 946162	51312 1382145	101561 1806799	247558	494990	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dichlorophenol	NPT	Ave	7374 643022	36057 949248	71930 1246992	171433	338069	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobutadiene	NPT	Ave	6230 452037	26871 659140	52229 861862	122699	239845	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Caprolactam	NPT	Ave	1924 216164	9270 318571	20809 423931	53389	110439	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloro-3-methylphenol	NPT	Ave	6879 663592	33804 966321	69955 1269779	173730	343191	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.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

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	18784 1582092	85702 2300666	177903 3040309	425975	812132	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1-Methylnaphthalene	NPT	Ave	17220 1476838	83411 2153484	169099 2841727	401459	767207	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorocyclopentadiene	ANT	Ave	5596 576301	26745 828585	56629 1122249	142817	291773	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4,5-Tetrachlorobenzene	ANT	Ave	10254 780628	46149 1133821	90723 1489049	219540	404976	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Trichlorophenol	ANT	Ave	4916 499769	25241 722868	52709 942024	127649	263472	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,5-Trichlorophenol	ANT	Ave	4823 521266	27072 767236	55014 993815	141671	268885	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,1'-Biphenyl	ANT	Ave	22432 1827861	105008 2696778	208203 3511722	498166	939732	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chloronaphthalene	ANT	Ave	15529 1408392	79367 2063149	163140 2710058	380062	735671	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitroaniline	ANT	Ave	+++++ 417144	18330 606069	40040 791915	105810	211056	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dimethyl phthalate	ANT	Ave	18513 1605633	82044 2374409	174535 3062173	415588	828143	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dinitrobenzene	ANT	Lin2	+++++ 270286	9013 413048	22477 528669	63476	136558	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dinitrotoluene	ANT	Ave	+++++ 377495	17070 548409	39301 710367	94763	187024	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthylene	ANT	Ave	22257 2037487	105993 2987493	225438 3929346	536789	1051216	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3-Nitroaniline	ANT	Ave	+++++ 386705	16385 569536	40391 744125	99812	200850	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dinitrophenol	ANT	Lin1	+++++ 573637	20036 868122	51848 1161122	118247	259671	+++++ 80.0	4.00 120	8.00 160	20.0	40.0
Acenaphthene	ANT	Ave	17586 1414969	77722 2075016	160052 2759506	373652	726807	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitrophenol	ANT	Ave	+++++ 526375	24614 768735	53853 1004094	135523	267185	+++++ 80.0	4.00 120	8.00 160	20.0	40.0
2,4-Dinitrotoluene	ANT	Ave	+++++ 491943	21869 739779	48802 945684	123710	253922	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenzofuran	ANT	Ave	24347 1964811	110229 2905421	229384 3766000	524462	1034199	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,5,6-Tetrachlorophenol	ANT	Ave	3728 468092	22900 702532	48062 911425	121660	242569	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	5186 462355	23944 688073	51182 911229	123973	230793	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.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

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	15180 1429605	75327 2085974	157332 2652865	378233	750461	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Diethyl phthalate	ANT	Ave	19103 1572519	82125 2325423	168520 3043664	403553	800041	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexadecane	NPT	Ave	9944 857862	45233 1276948	92927 1699698	222718	443690	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chlorophenyl phenyl ether	ANT	Ave	9637 828223	46332 1229579	94451 1593705	220852	431111	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitroaniline	ANT	Ave	+++++ 411842	18126 614208	41738 799424	101468	214094	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluorene	ANT	Ave	18617 1592254	89407 2324039	179891 3096561	413922	810198	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4,6-Dinitro-2-methylphenol	PHN	Lin2	+++++ 630612	19802 943905	50050 1229748	144088	306404	+++++ 80.0	4.00 120	8.00 160	20.0	40.0
N-Nitrosodiphenylamine	PHN	Ave	12140 1182794	63868 1716539	133258 2262678	307757	607809	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	15832 1435435	74268 2108860	156770 2777665	380601	747421	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Bromophenyl phenyl ether	PHN	Ave	5185 512781	28677 748109	57859 973397	136293	259763	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobenzene	PHN	Ave	6508 531300	28708 771408	59050 999942	139781	268324	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Atrazine	PHN	Ave	5366 460830	22585 651011	50171 822552	121197	241801	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pentachlorophenol	PHN	Ave	9433 756762	38546 1146034	85979 1519746	180660	374062	0.760 80.0	4.00 120	8.00 160	20.0	40.0
n-Octadecane	DCBd 4	Ave	9185 905683	42445 1354028	90161 1812104	222170	449755	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenanthrene	PHN	Ave	26796 2308459	128858 3383753	253065 4392407	609284	1170287	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Anthracene	PHN	Ave	26811 2363779	127676 3545561	254614 4612076	614993	1214005	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Carbazole	PHN	Ave	21717 2106492	106251 3081052	225708 4003041	538475	1050304	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-butyl phthalate	PHN	Ave	23705 2569159	115038 3782314	254002 5013053	634174	1282122	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluoranthene	PHN	Ave	25994 2655093	125429 3942915	277234 5174231	656961	1337316	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzidine	CRY	Lin2	+++++ 1354532	45766 1869154	104128 2262968	293953	677547	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyrene	CRY	Ave	25347 2670780	131382 3906180	277718 5107910	681597	1351596	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.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

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	8369 1156541	44623 1706526	104701 2256614	272918	558790	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3,3'-Dichlorobenzidine	CRY	Ave	+++++ 1050584	38841 1578988	91846 2087087	238480	490152	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	12642 1595878	59485 2379823	144650 3144856	380921	784308	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]anthracene	CRY	Ave	26908 2652324	129626 3890754	282936 5038504	682301	1348314	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Chrysene	CRY	Ave	26299 2494934	133192 3624559	268726 4782259	647760	1269876	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-octyl phthalate	PRY	Lin2	+++++ 2629602	96803 3981538	206460 5312324	581864	1237040	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
7,12-Dimethylbenz(a)anthracene	PRY	Ave	12500 1385619	62663 2068322	134615 2763476	337059	666389	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[b]fluoranthene	PRY	Ave	27864 2831886	133765 4172693	289500 5367386	697877	1390383	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[k]fluoranthene	PRY	Ave	26315 2648908	127450 3901422	282089 5297191	694704	1342328	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[e]pyrene	PRY	Ave	27000 2427032	114091 3600539	247367 4778444	613096	1222506	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]pyrene	PRY	Ave	23791 2475747	116973 3683690	244262 4847258	619372	1253598	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Indeno[1,2,3-cd]pyrene	PRY	Ave	26854 2904066	129408 4382236	282067 5776859	707100	1420868	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenz(a,h)anthracene	PRY	Ave	21711 2433013	106778 3638918	234778 4806448	591705	1197235	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[g,h,i]perylene	PRY	Ave	23266 2395166	107705 3596847	238226 4748352	591773	1184514	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorophenol (Surr)	DCBd 4	Ave	8375 818568	42669 1193513	81743 1564562	214005	417692	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol-d5 (Surr)	DCBd 4	Ave	10494 969350	50565 1415107	101116 1858547	249280	493672	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene-d5 (Surr)	NPT	Ave	8485 815690	42792 1192520	89895 1548725	213304	428916	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorobiphenyl	ANT	Ave	21227 1695651	97560 2495991	195999 3263007	463347	881146	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Tribromophenol (Surr)	PHN	Ave	2165 256561	10786 376116	25971 499320	64022	130109	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Terphenyl-d14 (Surr)	CRY	Ave	19818 1994952	98954 2919186	209807 3815147	508254	1014955	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.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-225310/3	N10100003.D
Level 2	IC 180-225310/4	N10100004.D
Level 3	IC 180-225310/5	N10100005.D
Level 4	ICIS 180-225310/6	N10100006.D
Level 5	IC 180-225310/7	N10100007.D
Level 6	IC 180-225310/8	N10100008.D
Level 7	IC 180-225310/9	N10100009.D
Level 8	IC 180-225310/10	N10100010.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
1,4-Dioxane	10.4 2.6	-10.2 0.5	-5.1	-3.5	1.8	3.5	50 30	30 30	30	30	30	30
N-Nitrosodimethylamine	0.0 4.7	-12.7 5.0	-4.3	-4.2	3.5	8.0	50 30	30 30	30	30	30	30
Pyridine	3.5 4.2	-3.1 0.7	-4.5	-6.5	1.0	4.7	50 30	30 30	30	30	30	30
Methyl methanesulfonate	-5.7 3.6	0.3 1.0	1.2	-5.9	1.5	4.1	50 30	30 30	30	30	30	30
Benzaldehyde	6.0 -3.2	-4.1 -12.2	-1.1	-1.9	9.1	7.5	50 30	30 30	30	30	30	30
Phenol	-3.1 4.9	-4.5 3.3	-2.3	-5.0	1.5	5.1	50 30	30 30	30	30	30	30
Aniline	5.4 3.7	-6.5 1.3	-2.4	-6.9	1.5	4.1	50 30	30 30	30	30	30	30
Bis(2-chloroethyl)ether	8.6 1.5	-6.1 -1.6	1.6	-4.9	-0.9	1.9	50 30	30 30	30	30	30	30
2-Chlorophenol	4.6 3.9	-8.8 0.5	-3.2	-3.2	3.1	3.2	50 30	30 30	30	30	30	30
n-Decane	9.8 2.9	-10.0 0.0	-2.6	-5.1	0.7	4.3	50 30	30 30	30	30	30	30
1,3-Dichlorobenzene	5.1 0.8	0.5 -1.4	-4.1	-2.5	-0.6	2.1	50 30	30 30	30	30	30	30
1,4-Dichlorobenzene	1.0 0.9	1.4 -0.6	-2.6	-4.0	1.7	2.2	50 30	30 30	30	30	30	30
Benzyl alcohol	1.2 5.9	-10.2 4.0	-7.7	-2.6	3.0	6.3	50 30	30 30	30	30	30	30
1,2-Dichlorobenzene	3.9 0.4	-1.2 -0.6	-0.7	-3.3	-1.0	2.4	50 30	30 30	30	30	30	30
2-Methylphenol	6.0 4.5	-7.0 1.4	-5.5	-3.7	1.5	2.8	50 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

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
Indene	-1.2 3.2	-4.8 2.6	0.6	-3.8	1.0	2.4	50 30	30 30	30	30	30	30
2,2'-oxybis[1-chloropropane]	17.0 -1.5	-6.8 -3.2	0.1	-4.0	-1.5	-0.2	50 30	30 30	30	30	30	30
N-Nitrosopyrrolidine	-13.2 5.8	-5.2 4.5	-1.1	-0.7	1.7	8.2	50 30	30 30	30	30	30	30
Acetophenone	2.4 2.4	2.3 0.9	-3.1	-4.1	-2.4	1.6	50 30	30 30	30	30	30	30
Methylphenol, 3 & 4	1.4 3.3	-8.4 3.2	0.0	-4.3	-0.2	5.0	50 30	30 30	30	30	30	30
N-Nitrosodi-n-propylamine	1.1 3.7	-4.8 2.0	-2.0	-5.0	1.2	3.9	50 30	30 30	30	30	30	30
Hexachloroethane	10.5 -0.5	-1.2 -3.0	-2.3	-4.8	0.0	1.3	50 30	30 30	30	30	30	30
Nitrobenzene	-3.0 3.7	-5.0 1.3	0.6	-0.2	1.5	1.1	50 30	30 30	30	30	30	30
Isophorone	0.2 8.2	-7.9 4.3	-4.5	-2.7	-0.3	2.7	50 30	30 30	30	30	30	30
2-Nitrophenol	-7.7 13.2	-15.4 8.5	-6.1	-2.1	3.1	6.5	50 30	30 30	30	30	30	30
2,4-Dimethylphenol	-11.5 5.7	-3.2 3.2	1.6	1.5	0.9	1.9	50 30	30 30	30	30	30	30
Benzoic acid	+++++ 3.1	7.1 5.2	20.9	-15.6	-14.1	-6.5	 30	50 30	30	30	30	30
Bis(2-chloroethoxy)methane	6.8 4.0	-7.8 3.1	-0.1	-3.5	-2.2	-0.2	50 30	30 30	30	30	30	30
2,4-Dichlorophenol	-9.5 8.8	-9.4 4.8	1.6	-2.2	2.2	3.7	50 30	30 30	30	30	30	30
1,2,4-Trichlorobenzene	5.8 1.9	-3.0 0.2	1.9	-0.4	-3.6	-2.9	50 30	30 30	30	30	30	30
Naphthalene	8.9 1.5	-3.7 0.4	0.2	-3.1	-2.6	-1.6	50 30	30 30	30	30	30	30
4-Chloroaniline	0.9 5.4	-4.6 3.2	-3.9	-3.0	0.6	1.4	50 30	30 30	30	30	30	30
2,6-Dichlorophenol	-3.6 5.4	-2.5 3.7	-1.0	-2.2	0.0	0.2	50 30	30 30	30	30	30	30
Hexachlorobutadiene	11.9 0.5	-0.1 -1.5	-1.2	-3.8	-2.6	-3.2	50 30	30 30	30	30	30	30
Caprolactam	-18.3 14.9	-18.6 14.5	-6.9	-1.1	6.1	9.5	50 30	30 30	30	30	30	30
4-Chloro-3-methylphenol	-9.5 8.0	-7.9 6.3	-3.0	-0.2	2.2	4.2	50 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

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
2-Methylnaphthalene	0.2 4.2	-5.4 3.2	0.0	-0.9	-2.0	0.7	50 30	30 30	30	30	30	30
1-Methylnaphthalene	-2.4 3.7	-2.2 2.5	1.0	-0.7	-1.6	-0.2	50 30	30 30	30	30	30	30
Hexachlorocyclopentadiene	-13.0 10.4	-10.7 11.4	-5.9	-3.4	2.7	8.5	50 30	30 30	30	30	30	30
1,2,4,5-Tetrachlorobenzene	6.2 0.6	2.6 -1.6	0.4	-1.1	-5.1	-2.1	50 30	30 30	30	30	30	30
2,4,6-Trichlorophenol	-14.0 8.3	-5.2 5.2	-1.5	-2.9	4.3	5.8	50 30	30 30	30	30	30	30
2,4,5-Trichlorophenol	-19.6 9.6	-3.1 5.7	-2.0	2.7	1.4	5.2	50 30	30 30	30	30	30	30
1,1'-Biphenyl	1.0 3.9	1.4 0.8	0.1	-2.5	-4.3	-0.5	50 30	30 30	30	30	30	30
2-Chloronaphthalene	-8.1 4.6	0.8 2.3	3.2	-2.2	-1.5	0.9	50 30	30 30	30	30	30	30
2-Nitroaniline	+++++ 10.5	-16.2 7.6	-8.9	-2.0	1.7	7.5	 30	50 30	30	30	30	30
Dimethyl phthalate	-1.8 7.8	-6.6 3.6	-1.1	-4.2	-0.7	3.0	50 30	30 30	30	30	30	30
1,3-Dinitrobenzene	+++++ 8.0	3.9 2.6	-4.9	-7.8	-2.5	0.7	 30	50 30	30	30	30	30
2,6-Dinitrotoluene	+++++ 9.5	-14.5 5.7	-2.0	-3.9	-1.3	6.5	 30	50 30	30	30	30	30
Acenaphthylene	-7.0 6.9	-5.0 4.7	0.6	-2.5	-0.7	3.0	50 30	30 30	30	30	30	30
3-Nitroaniline	+++++ 10.1	-20.6 7.1	-2.6	-2.1	2.5	5.6	 30	50 30	30	30	30	30
2,4-Dinitrophenol	+++++ 3.8	19.9 2.9	6.3	-17.4	-13.5	-2.0	 30	50 30	30	30	30	30
Acenaphthene	3.0 4.1	-2.3 3.1	0.2	-4.8	-3.7	0.3	50 30	30 30	30	30	30	30
4-Nitrophenol	+++++ 8.9	-12.6 5.9	-4.8	-2.6	-0.1	5.3	 30	50 30	30	30	30	30
2,4-Dinitrotoluene	+++++ 12.7	-16.5 7.3	-7.2	-4.3	2.2	5.9	 30	50 30	30	30	30	30
Dibenzofuran	1.8 4.0	-1.1 0.4	2.5	-4.7	-2.2	-0.6	50 30	30 30	30	30	30	30
2,3,5,6-Tetrachlorophenol	-29.1 14.5	-6.5 10.6	-2.3	0.6	4.4	7.8	50 30	30 30	30	30	30	30
2,3,4,6-Tetrachlorophenol	-5.1 7.9	-5.9 6.4	0.1	-1.3	-4.4	2.4	50 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

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
2-Naphthylamine	-9.2 6.9	-3.2 1.3	0.6	-1.6	1.6	3.5	50 30	30 30	30	30	30	30
Diethyl phthalate	2.7 7.1	-5.2 4.4	-3.1	-5.6	-2.7	2.3	50 30	30 30	30	30	30	30
Hexadecane	-1.5 7.5	-7.2 7.1	-3.0	-3.7	-0.5	1.4	50 30	30 30	30	30	30	30
4-Chlorophenyl phenyl ether	-3.3 5.6	-0.2 2.0	1.2	-3.7	-2.2	0.5	50 30	30 30	30	30	30	30
4-Nitroaniline	+++++ 11.7	-17.4 8.4	-5.2	-6.3	2.9	5.9	 30	50 30	30	30	30	30
Fluorene	-2.2 4.6	0.8 3.8	1.0	-5.4	-3.7	1.2	50 30	30 30	30	30	30	30
4,6-Dinitro-2-methylphenol	+++++ 3.5	4.2 6.2	-5.9	-6.7	-3.1	1.7	 30	50 30	30	30	30	30
N-Nitrosodiphenylamine	-11.1 2.3	-2.3 6.7	2.2	-1.5	0.8	2.8	50 30	30 30	30	30	30	30
1,2-Diphenylhydrazine(as Azobenzene)	-5.0 2.9	-6.9 7.2	-1.6	-0.3	1.5	2.2	50 30	30 30	30	30	30	30
4-Bromophenyl phenyl ether	-12.7 2.5	0.9 5.5	2.0	0.3	-1.0	2.5	50 30	30 30	30	30	30	30
Hexachlorobenzene	4.4 0.7	-3.8 3.2	-0.9	-2.1	-2.6	1.1	50 30	30 30	30	30	30	30
Atrazine	1.8 0.5	-10.5 0.4	-0.4	0.4	3.9	3.8	50 30	30 30	30	30	30	30
Pentachlorophenol	6.4 5.2	-9.2 10.3	1.5	-11.0	-4.5	1.3	50 30	30 30	30	30	30	30
n-Octadecane	-3.7 10.2	-11.6 9.9	-6.3	-7.2	0.6	8.1	50 30	30 30	30	30	30	30
Phenanthrene	-1.0 1.7	-0.5 4.4	-2.1	-1.7	-2.1	1.2	50 30	30 30	30	30	30	30
Anthracene	-3.0 4.4	-3.5 7.4	-3.6	-2.8	-0.5	1.5	50 30	30 30	30	30	30	30
Carbazole	-8.9 5.2	-6.9 8.1	-0.9	-1.3	-0.2	4.9	50 30	30 30	30	30	30	30
Di-n-butyl phthalate	-15.6 9.6	-14.4 14.9	-5.3	-1.3	3.4	8.6	50 30	30 30	30	30	30	30
Fluoranthene	-12.3 8.3	-11.6 12.4	-2.1	-3.2	2.2	6.3	50 30	30 30	30	30	30	30
Benzidine	+++++ 0.2	3.8 -5.2	-7.1	-6.0	6.9	7.4	 30	50 30	30	30	30	30
Pyrene	-8.2 2.6	-3.6 5.0	-1.0	-0.2	2.2	3.2	50 30	30 30	30	30	30	30

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1 Analy Batch No.: 225310

SDG No.:

Instrument ID: CH733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 04:37 Calibration End Date: 10/10/2017 07:42 Calibration ID: 35710

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
Butyl benzyl phthalate	-23.9 12.6	-17.7 16.6	-6.2	0.3	6.1	12.3	50 30	30 30	30	30	30	30
3,3'-Dichlorobenzidine	+++++ 12.4	-22.7 16.4	-11.2	-5.4	0.5	10.1	 30	50 30	30	30	30	30
Bis(2-ethylhexyl) phthalate	-17.7 12.4	-21.5 16.3	-7.3	0.2	6.7	10.9	50 30	30 30	30	30	30	30
Benzo[a]anthracene	-3.0 1.7	-5.3 3.2	0.4	-0.6	1.5	2.1	50 30	30 30	30	30	30	30
Chrysene	-1.0 -1.0	1.6 2.2	-0.4	-1.4	-0.2	0.3	50 30	30 30	30	30	30	30
Di-n-octyl phthalate	+++++ 6.7	5.8 6.5	-7.8	-9.9	-4.3	3.0	 30	50 30	30	30	30	30
7,12-Dimethylbenz(a)anthracene	-9.8 10.7	-12.1 11.0	-3.9	-3.6	0.0	7.6	50 30	30 30	30	30	30	30
Benzo[b]fluoranthene	-3.3 7.5	-9.7 3.8	-0.5	-3.9	0.4	5.8	50 30	30 30	30	30	30	30
Benzo[k]fluoranthene	-4.9 4.6	-10.5 6.6	0.9	-0.5	0.9	3.0	50 30	30 30	30	30	30	30
Benzo[e]pyrene	6.5 5.4	-12.6 4.9	-3.4	-4.1	0.3	3.0	50 30	30 30	30	30	30	30
Benzo[a]pyrene	-5.9 8.1	-10.1 6.7	-4.4	-2.9	3.1	5.4	50 30	30 30	30	30	30	30
Indeno[1,2,3-cd]pyrene	-8.0 11.4	-13.8 10.2	-4.3	-3.9	1.3	7.1	50 30	30 30	30	30	30	30
Dibenz(a,h)anthracene	-10.5 11.3	-14.4 10.3	-4.2	-3.2	2.7	8.0	50 30	30 30	30	30	30	30
Benzo[g,h,i]perylene	-4.4 9.6	-14.0 8.6	-3.2	-3.6	1.2	5.9	50 30	30 30	30	30	30	30
2-Fluorophenol (Surr)	-4.3 5.9	-3.2 3.4	-7.5	-2.5	1.8	6.4	50 30	30 30	30	30	30	30
Phenol-d5 (Surr)	0.2 4.9	-4.1 2.6	-4.3	-5.1	0.6	5.3	50 30	30 30	30	30	30	30
Nitrobenzene-d5 (Surr)	-10.1 7.3	-6.2 4.4	0.3	-1.4	2.8	3.0	50 30	30 30	30	30	30	30
2-Fluorobiphenyl	2.4 3.1	1.0 0.4	1.0	-2.8	-3.9	-1.1	50 30	30 30	30	30	30	30
2,4,6-Tribromophenol (Surr)	-22.0 10.3	-18.8 15.8	-2.1	0.8	6.2	9.7	50 30	30 30	30	30	30	30
Terphenyl-d14 (Surr)	-4.8 1.8	-3.6 4.2	-0.7	-1.2	1.9	2.4	50 30	30 30	30	30	30	30

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100003.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Oct-2017 04:37:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018792-003
Operator ID: 03200 Instrument ID: CH733
Sublist: chrom-BNA_CH733*sub2

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 10-Oct-2017 08:34:25 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: piccolinov Date: 10-Oct-2017 05:35:58

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	6.289	6.289	0.000	97	142829	8.00	8.00	
* 2 Naphthalene-d8	136	7.530	7.530	0.000	99	545425	8.00	8.00	
* 3 Acenaphthene-d10	164	9.166	9.166	0.000	94	273344	8.00	8.00	
* 4 Phenanthrene-d10	188	10.542	10.542	0.000	97	498323	8.00	8.00	
* 5 Chrysene-d12	240	14.101	14.101	0.000	99	485948	8.00	8.00	
* 6 Perylene-d12	264	17.042	17.042	0.000	99	436171	8.00	8.00	
$ 7 2-Fluorophenol	112	4.866	4.866	0.000	91	8375	0.3800	0.3636	
$ 8 Phenol-d5	99	5.919	5.919	0.000	94	10494	0.3800	0.3807	
$ 9 Nitrobenzene-d5	82	6.830	6.830	0.000	93	8485	0.3800	0.3415	
$ 10 2-Fluorobiphenyl	172	8.524	8.524	0.000	98	21227	0.3800	0.3889	
$ 11 2,4,6-Tribromophenol	330	9.889	9.889	0.000	81	2165	0.3800	0.2965	
$ 12 Terphenyl-d14	244	12.330	12.330	0.000	98	19818	0.3800	0.3619	
13 1,4-Dioxane	88	1.425	1.425	0.000	0	4167	0.3800	0.4197	M
14 N-Nitrosodimethylamine	74	2.101	2.101	0.000	95	5245	0.3800	0.3800	
15 Pyridine	79	2.219	2.219	0.000	74	20251	0.7600	0.7865	M
19 Methyl methanesulfonate	80	4.625	4.625	0.000	81	5228	0.3800	0.3582	
22 Benzaldehyde	77	5.830	5.830	0.000	91	6421	0.3800	0.4029	
24 Phenol	94	5.930	5.930	0.000	96	11150	0.3800	0.3682	
25 Aniline	93	5.948	5.948	0.000	69	14134	0.3800	0.4004	
26 Bis(2-chloroethyl)ether	93	6.019	6.019	0.000	91	8987	0.3800	0.4125	
27 2-Chlorophenol	128	6.072	6.072	0.000	94	9718	0.3800	0.3973	
28 n-Decane	43	6.142	6.142	0.000	87	9389	0.3800	0.4171	
29 1,3-Dichlorobenzene	146	6.230	6.230	0.000	94	11356	0.3800	0.3994	
30 1,4-Dichlorobenzene	146	6.307	6.307	0.000	85	10889	0.3800	0.3839	
31 Benzyl alcohol	108	6.425	6.425	0.000	88	5425	0.3800	0.3846	
32 1,2-Dichlorobenzene	146	6.460	6.460	0.000	89	10436	0.3800	0.3949	
33 2-Methylphenol	108	6.536	6.536	0.000	92	8241	0.3800	0.4027	
34 Indene	116	6.548	6.548	0.000	91	15122	0.3800	0.3756	
35 2,2'-oxybis[1-chloropropan	45	6.560	6.560	0.000	86	11252	0.3800	0.4447	
37 N-Nitrosopyrrolidine	100	6.648	6.648	0.000	73	2956	0.3800	0.3298	
40 4-Methylphenol	108	6.683	6.683	0.000	62	8267	0.3800	0.3852	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 N-Nitrosodi-n-propylamine	70	6.683	6.683	0.000	65	6053	0.3800	0.3841	
39 Acetophenone	105	6.683	6.683	0.000	76	12323	0.3800	0.3891	
41 Hexachloroethane	117	6.801	6.801	0.000	88	4431	0.3800	0.4198	
42 Nitrobenzene	77	6.848	6.848	0.000	89	9103	0.3800	0.3685	
44 Isophorone	82	7.077	7.077	0.000	97	15837	0.3800	0.3806	
46 2-Nitrophenol	139	7.160	7.160	0.000	89	4479	0.3800	0.3506	
47 2,4-Dimethylphenol	107	7.189	7.189	0.000	95	8194	0.3800	0.3362	
48 Benzoic acid	122	7.213	7.213	0.000	76	4153	0.3800	1.17	
49 Bis(2-chloroethoxy)methane	93	7.272	7.272	0.000	96	10332	0.3800	0.4059	
51 2,4-Dichlorophenol	162	7.383	7.383	0.000	94	6993	0.3800	0.3441	
52 1,2,4-Trichlorobenzene	180	7.472	7.472	0.000	92	9849	0.3800	0.4022	
53 Naphthalene	128	7.548	7.548	0.000	95	29709	0.3800	0.4136	
55 4-Chloroaniline	127	7.589	7.589	0.000	95	11231	0.3800	0.3834	
56 2,6-Dichlorophenol	162	7.601	7.601	0.000	91	7374	0.3800	0.3663	
57 Hexachlorobutadiene	225	7.666	7.666	0.000	89	6230	0.3800	0.4252	
61 Caprolactam	113	7.872	7.872	0.000	73	1924	0.3800	0.3104	
63 4-Chloro-3-methylphenol	107	8.024	8.024	0.000	93	6879	0.3800	0.3441	
65 2-Methylnaphthalene	142	8.195	8.195	0.000	92	18784	0.3800	0.3808	
66 1-Methylnaphthalene	142	8.289	8.289	0.000	92	17220	0.3800	0.3709	
67 Hexachlorocyclopentadiene	237	8.348	8.348	0.000	91	5596	0.3800	0.3308	
68 1,2,4,5-Tetrachlorobenzene	216	8.354	8.354	0.000	92	10254	0.3800	0.4037	
69 2,4,6-Trichlorophenol	196	8.448	8.448	0.000	89	4916	0.3800	0.3268	
70 2,4,5-Trichlorophenol	196	8.483	8.483	0.000	86	4823	0.3800	0.3056	
71 1,1'-Biphenyl	154	8.619	8.619	0.000	96	22432	0.3800	0.3836	
73 2-Chloronaphthalene	162	8.654	8.654	0.000	97	15529	0.3800	0.3492	
75 2-Nitroaniline	65	8.730	8.730	0.000	85	2975	0.3800	0.2407	
77 Dimethyl phthalate	163	8.877	8.877	0.000	98	18513	0.3800	0.3730	
78 1,3-Dinitrobenzene	168	8.913	8.913	0.000	83	1539	0.3800	1.09	
79 2,6-Dinitrotoluene	165	8.942	8.942	0.000	79	2381	0.3800	0.2110	
80 Acenaphthylene	152	9.042	9.042	0.000	97	22257	0.3800	0.3533	
81 3-Nitroaniline	138	9.107	9.107	0.000	17	2456	0.3800	0.2106	
82 2,4-Dinitrophenol	184	9.195	9.195	0.000	65	4612	0.7600	2.92	
83 Acenaphthene	153	9.201	9.201	0.000	90	17586	0.3800	0.3915	
84 4-Nitrophenol	109	9.230	9.230	0.000	93	3437	0.7600	0.4319	
87 2,4-Dinitrotoluene	165	9.313	9.313	0.000	87	3841	0.3800	0.2596	
88 Dibenzofuran	168	9.354	9.354	0.000	96	24347	0.3800	0.3867	
90 2,3,5,6-Tetrachlorophenol	232	9.419	9.419	0.000	81	3728	0.3800	0.2695	
91 2,3,4,6-Tetrachlorophenol	232	9.466	9.466	0.000	65	5186	0.3800	0.3607	
92 2-Naphthylamine	143	9.489	9.489	0.000	97	15180	0.3800	0.3452	
93 Diethyl phthalate	149	9.518	9.518	0.000	96	19103	0.3800	0.3904	
94 Hexadecane	57	9.524	9.524	0.000	88	9944	0.3800	0.3745	
96 4-Chlorophenyl phenyl ethe	204	9.654	9.654	0.000	92	9637	0.3800	0.3673	
97 4-Nitroaniline	138	9.666	9.666	0.000	42	3138	0.3800	0.2533	
98 Fluorene	166	9.671	9.671	0.000	97	18617	0.3800	0.3716	
99 4,6-Dinitro-2-methylphenol	198	9.689	9.689	0.000	3	2013	0.7600	2.18	
101 N-Nitrosodiphenylamine	169	9.754	9.754	0.000	67	12140	0.3800	0.3380	
103 1,2-Diphenylhydrazine	77	9.795	9.795	0.000	96	15832	0.3800	0.3609	
102 Azobenzene	77	9.795	9.795	0.000	96	15832	0.3800	0.3609	
108 4-Bromophenyl phenyl ether	248	10.101	10.101	0.000	68	5185	0.3800	0.3318	
109 Hexachlorobenzene	284	10.189	10.189	0.000	91	6508	0.3800	0.3966	
111 Atrazine	200	10.213	10.213	0.000	87	5366	0.3800	0.3869	
114 n-Octadecane	57	10.360	10.360	0.000	93	9185	0.3800	0.3659	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 Pentachlorophenol	266	10.360	10.360	0.000	85	9433	0.7600	0.8086	
118 Phenanthrene	178	10.565	10.565	0.000	95	26796	0.3800	0.3763	
119 Anthracene	178	10.618	10.618	0.000	96	26811	0.3800	0.3687	
121 Carbazole	167	10.760	10.760	0.000	96	21717	0.3800	0.3463	
122 Di-n-butyl phthalate	149	11.054	11.054	0.000	99	23705	0.3800	0.3209	
128 Fluoranthene	202	11.871	11.871	0.000	96	25994	0.3800	0.3333	
129 Benzidine	184	11.995	11.995	0.000	1	8336	0.3800	0.9528	M
131 Pyrene	202	12.177	12.177	0.000	97	25347	0.3800	0.3487	
137 Butyl benzyl phthalate	149	13.024	13.024	0.000	96	8369	0.3800	0.2892	
141 3,3'-Dichlorobenzidine	252	14.001	14.001	0.000	1	6918	0.3800	0.2580	
142 Bis(2-ethylhexyl) phthalat	149	14.036	14.036	0.000	58	12642	0.3800	0.3127	
143 Benzo[a]anthracene	228	14.077	14.077	0.000	95	26908	0.3800	0.3685	
144 Chrysene	228	14.153	14.153	0.000	94	26299	0.3800	0.3761	
147 Di-n-octyl phthalate	149	15.348	15.348	0.000	42	18432	0.3800	1.02	
148 7,12-Dimethylbenz(a)anthra	256	16.218	16.218	0.000	93	12500	0.3800	0.3427	
149 Benzo[b]fluoranthene	252	16.236	16.236	0.000	97	27864	0.3800	0.3676	
150 Benzo[k]fluoranthene	252	16.295	16.295	0.000	97	26315	0.3800	0.3613	
151 Benzo[e]pyrene	252	16.824	16.824	0.000	0	27000	0.3800	0.4047	
152 Benzo[a]pyrene	252	16.924	16.924	0.000	77	23791	0.3800	0.3575	
156 Indeno[1,2,3-cd]pyrene	276	19.283	19.283	0.000	85	26854	0.3800	0.3497	
157 Dibenz(a,h)anthracene	278	19.312	19.312	0.000	87	21711	0.3800	0.3402	
158 Benzo[g,h,i]perylene	276	19.888	19.888	0.000	89	23266	0.3800	0.3631	
S 203 Methyl Phenols,Total	108				0		0.7600	0.7878	
S 202 Total Cresols	108				0		0.7600	0.7878	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD0.38i_00004 Amount Added: 1.00 Units: mL

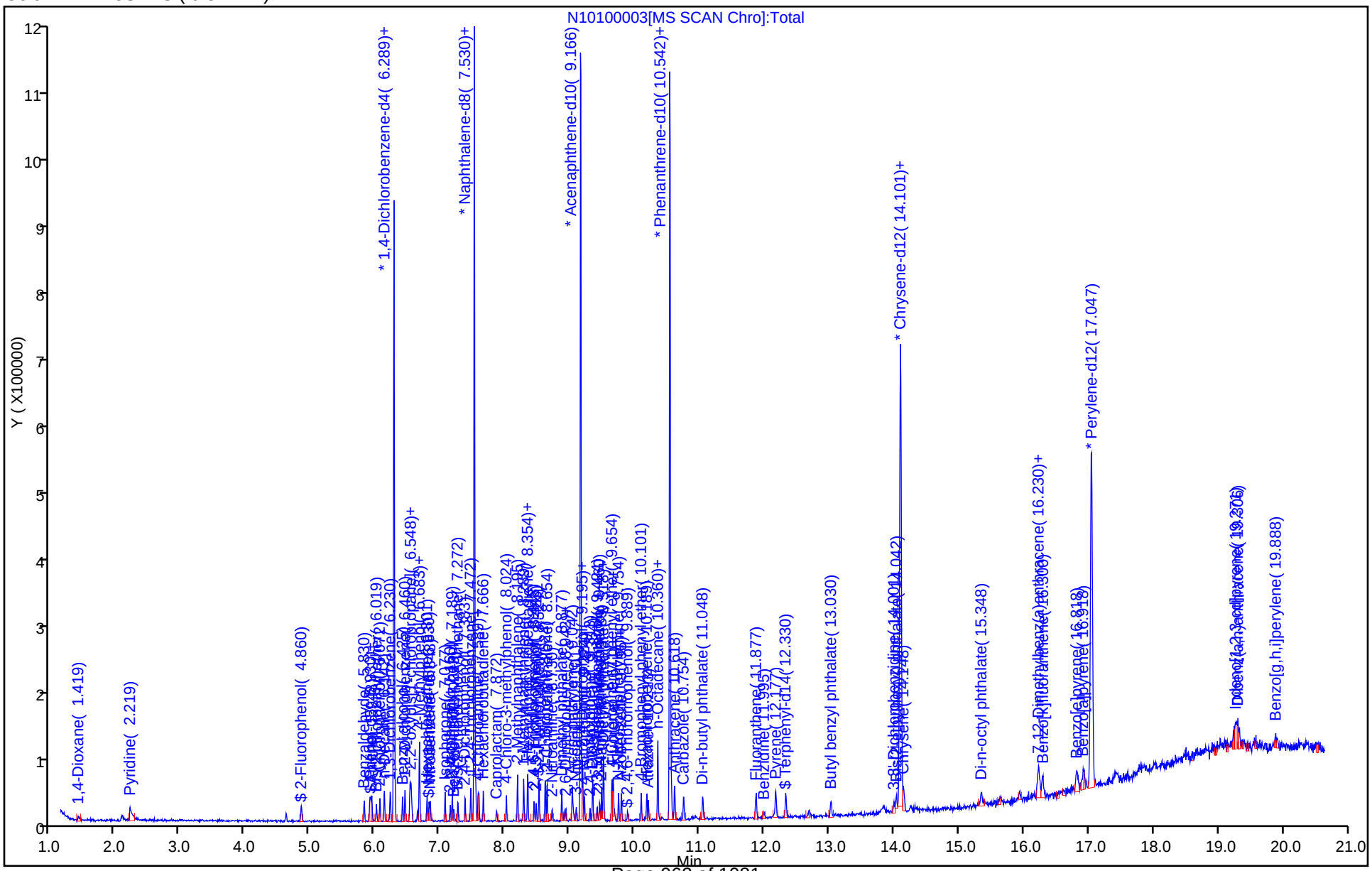
Report Date: 10-Oct-2017 08:34:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100003.D

Injection Date:	10-Oct-2017 04:37:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

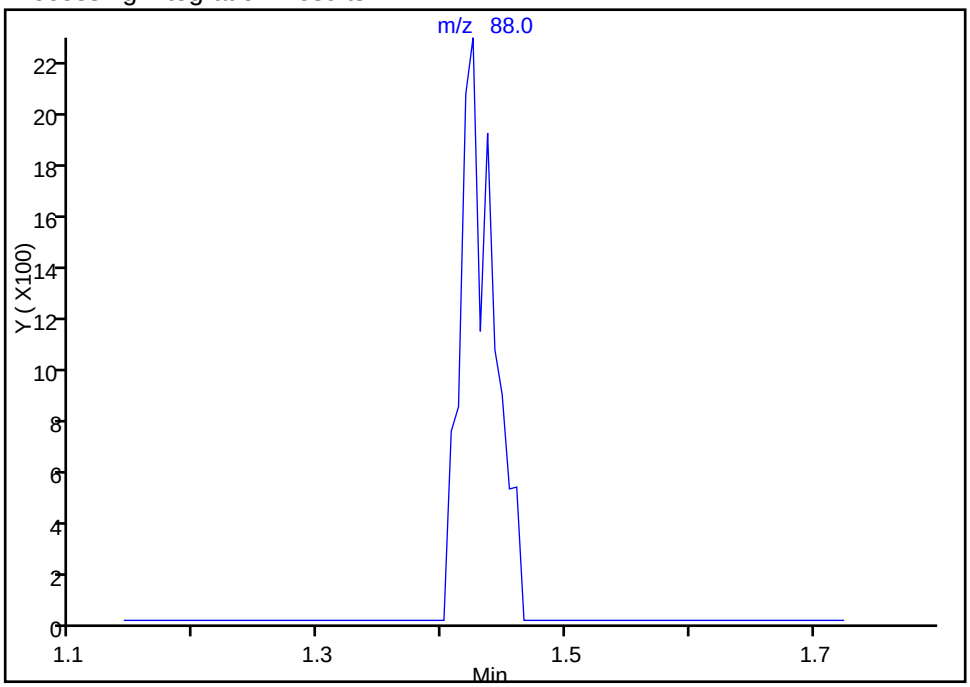
Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100003.D
Injection Date: 10-Oct-2017 04:37:30 Instrument ID: CH733
Lims ID: IC
Client ID:
Operator ID: 03200 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH733 Limit Group: BNA 8270D ICAL
Column: Rxi-5SilMS (0.32 mm) Detector MS SCAN

13 1,4-Dioxane, CAS: 123-91-1

Signal: 1

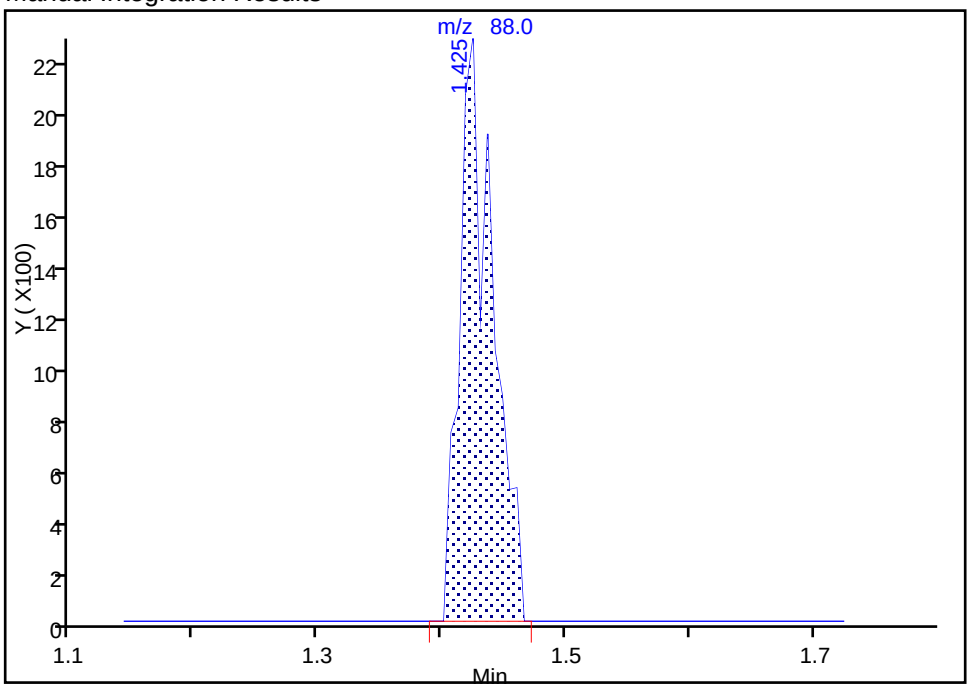
Not Detected
Expected RT: 1.42

Processing Integration Results



Manual Integration Results

RT: 1.42
Area: 4167
Amount: 0.419708
Amount Units: ng



Reviewer: piccolinov, 10-Oct-2017 05:34:23
Audit Action: Manually Integrated Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

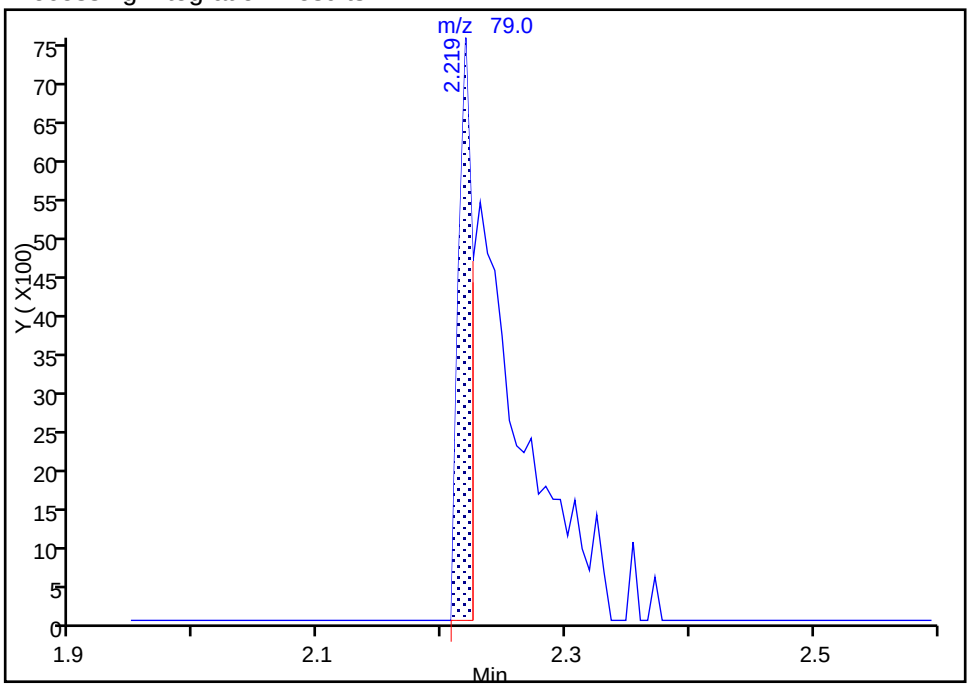
Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100003.D
Injection Date: 10-Oct-2017 04:37:30 Instrument ID: CH733
Lims ID: IC
Client ID:
Operator ID: 03200 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH733 Limit Group: BNA 8270D ICAL
Column: Rxi-5SilMS (0.32 mm) Detector MS SCAN

15 Pyridine, CAS: 110-86-1

Signal: 1

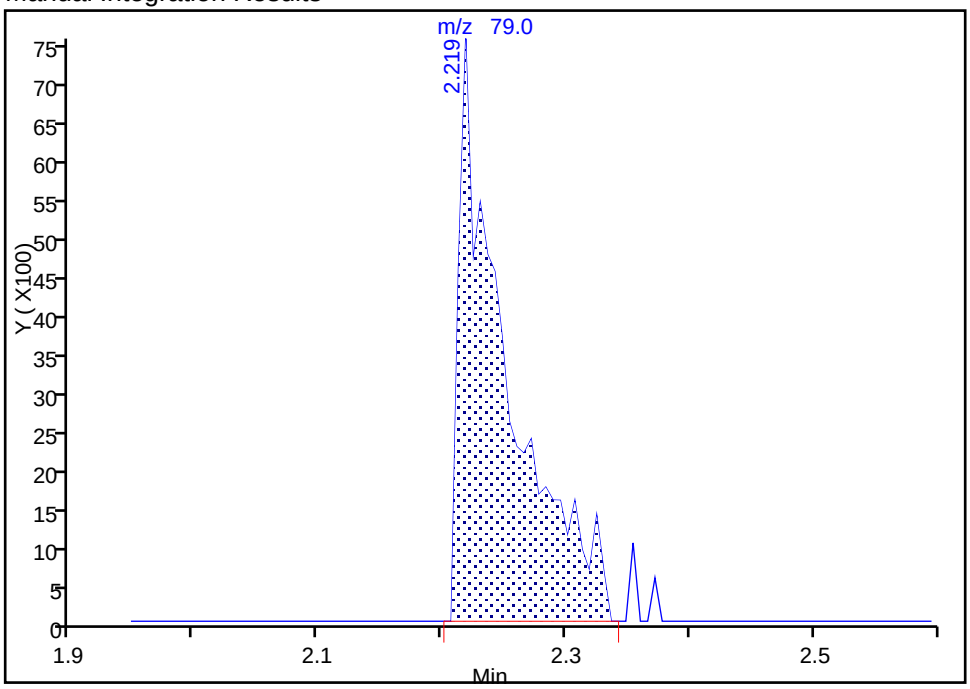
Processing Integration Results

RT: 2.22
Area: 5931
Amount: 0.401533
Amount Units: ng



Manual Integration Results

RT: 2.22
Area: 20251
Amount: 0.786537
Amount Units: ng



Reviewer: piccolinov, 10-Oct-2017 05:34:29
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

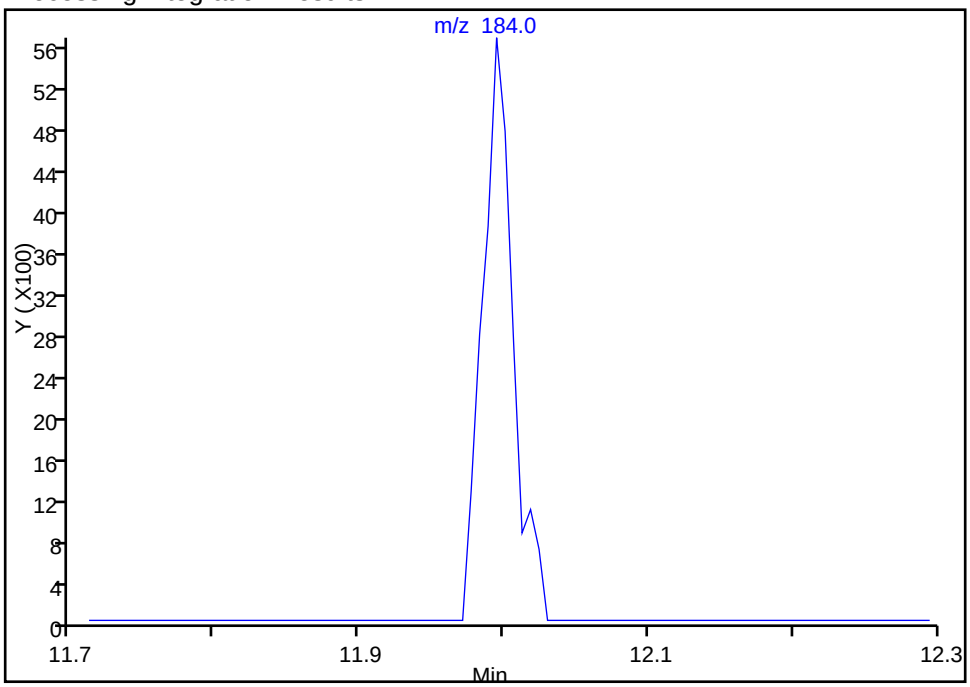
Data File:	\\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100003.D				
Injection Date:	10-Oct-2017 04:37:30	Instrument ID:	CH733		
Lims ID:	IC				
Client ID:					
Operator ID:	03200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

129 Benzidine, CAS: 92-87-5

Signal: 1

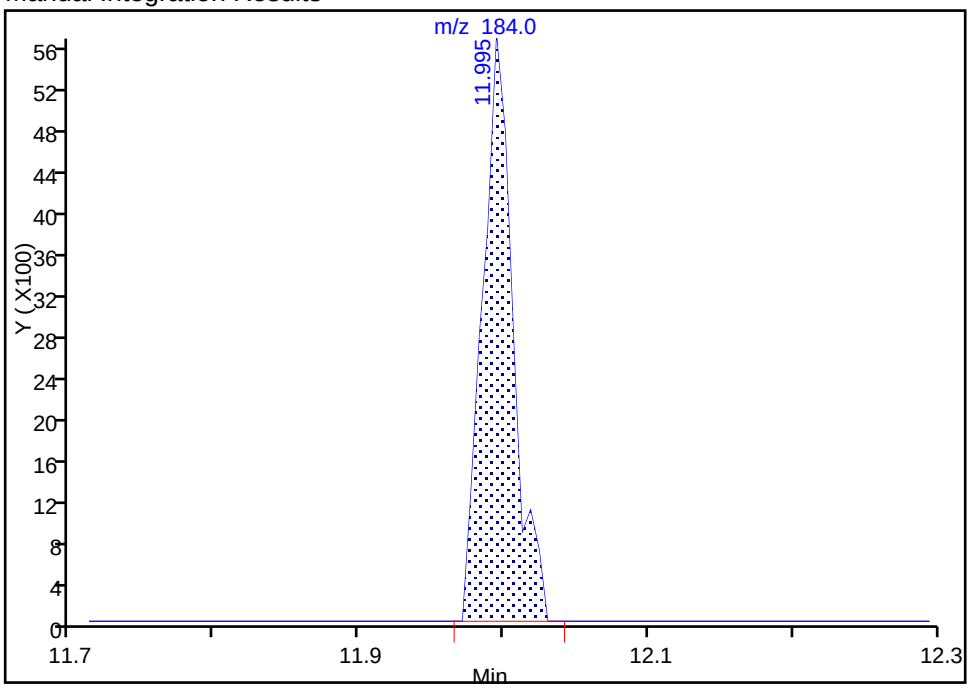
Not Detected
Expected RT: 11.99

Processing Integration Results



Manual Integration Results

RT: 11.99
Area: 8336
Amount: 0.952799
Amount Units: ng



Reviewer: piccolinov, 10-Oct-2017 05:35:15
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

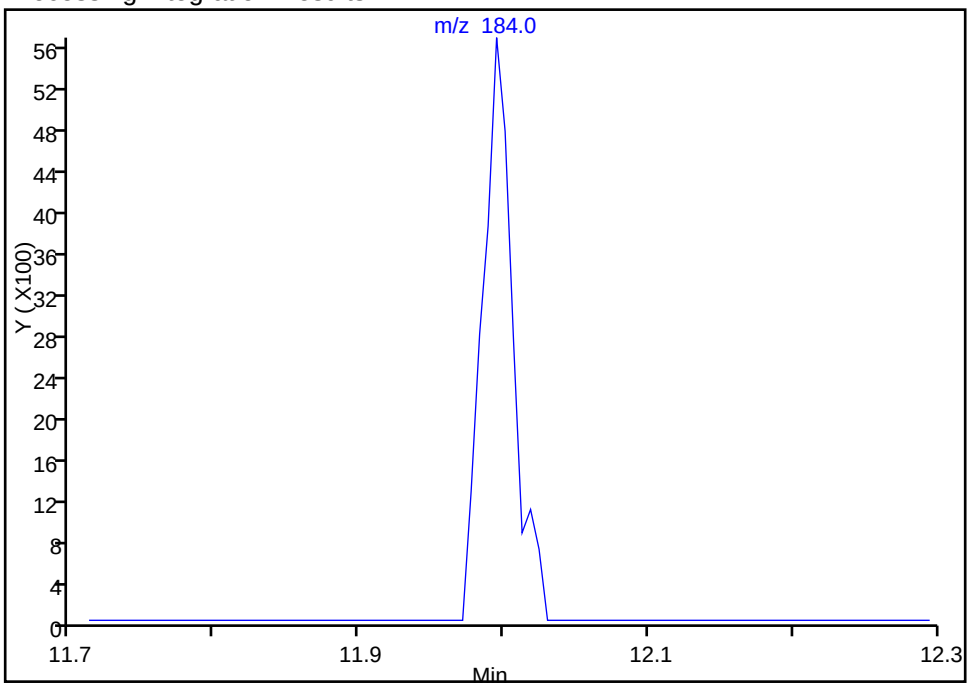
Data File:	\\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100003.D				
Injection Date:	10-Oct-2017 04:37:30	Instrument ID:	CH733		
Lims ID:	IC				
Client ID:					
Operator ID:	03200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

129 Benzidine, CAS: 92-87-5

Signal: 1

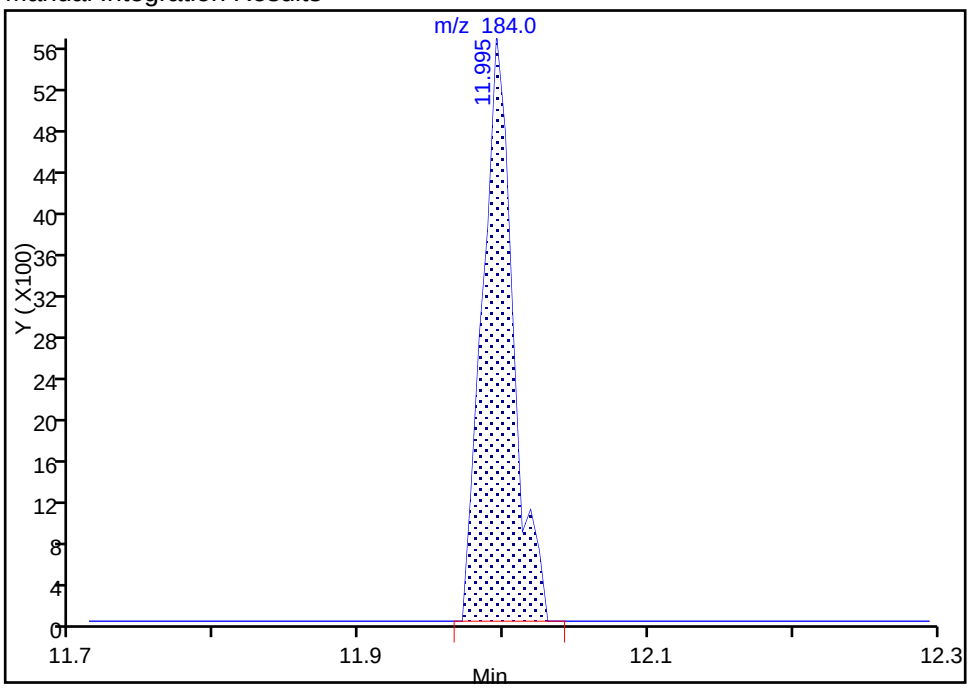
Not Detected
Expected RT: 11.99

Processing Integration Results



Manual Integration Results

RT: 11.99
Area: 8336
Amount: 0.952799
Amount Units: ng



Reviewer: piccolinov, 10-Oct-2017 05:35:18
Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100004.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Oct-2017 05:03:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018792-004
Operator ID: 03200 Instrument ID: CH733
Sublist: chrom-BNA_CH733*sub2

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 10-Oct-2017 08:34:28 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: piccolinov Date: 10-Oct-2017 05:37:11

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	6.278	6.289	-0.011	97	136611	8.00	8.00	
* 2 Naphthalene-d8	136	7.519	7.530	-0.011	99	500807	8.00	8.00	
* 3 Acenaphthene-d10	164	9.160	9.166	-0.006	95	241960	8.00	8.00	
* 4 Phenanthrene-d10	188	10.530	10.542	-0.012	97	453302	8.00	8.00	
* 5 Chrysene-d12	240	14.083	14.101	-0.018	98	455428	8.00	8.00	
* 6 Perylene-d12	264	17.024	17.042	-0.018	98	426451	8.00	8.00	
$ 7 2-Fluorophenol	112	4.848	4.866	-0.018	93	42669	2.00	1.94	
$ 8 Phenol-d5	99	5.907	5.919	-0.012	96	50565	2.00	1.92	
$ 9 Nitrobenzene-d5	82	6.819	6.830	-0.011	90	42792	2.00	1.88	
$ 10 2-Fluorobiphenyl	172	8.513	8.524	-0.011	99	97560	2.00	2.02	
$ 11 2,4,6-Tribromophenol	330	9.883	9.889	-0.006	93	10786	2.00	1.62	
$ 12 Terphenyl-d14	244	12.318	12.330	-0.012	99	98954	2.00	1.93	
13 1,4-Dioxane	88	1.425	1.425	0.000	94	17049	2.00	1.80	
14 N-Nitrosodimethylamine	74	2.084	2.101	-0.017	90	23054	2.00	1.75	
15 Pyridine	79	2.172	2.219	-0.047	95	95465	4.00	3.88	M
19 Methyl methanesulfonate	80	4.613	4.625	-0.012	89	28000	2.00	2.01	
22 Benzaldehyde	77	5.819	5.830	-0.011	94	29229	2.00	1.92	
24 Phenol	94	5.919	5.930	-0.011	95	55332	2.00	1.91	
25 Aniline	93	5.937	5.948	-0.012	95	63142	2.00	1.87	
26 Bis(2-chloroethyl)ether	93	6.007	6.019	-0.012	95	39149	2.00	1.88	
27 2-Chlorophenol	128	6.060	6.072	-0.012	94	42680	2.00	1.82	
28 n-Decane	43	6.131	6.142	-0.011	83	38772	2.00	1.80	
29 1,3-Dichlorobenzene	146	6.225	6.230	-0.005	96	54677	2.00	2.01	
30 1,4-Dichlorobenzene	146	6.295	6.307	-0.012	93	54995	2.00	2.03	
31 Benzyl alcohol	108	6.413	6.425	-0.012	89	24244	2.00	1.80	
32 1,2-Dichlorobenzene	146	6.448	6.460	-0.012	95	49962	2.00	1.98	
33 2-Methylphenol	108	6.525	6.536	-0.011	96	36408	2.00	1.86	
34 Indene	116	6.536	6.548	-0.012	92	73335	2.00	1.90	
35 2,2'-oxybis[1-chloropropan	45	6.548	6.560	-0.012	84	45132	2.00	1.86	
37 N-Nitrosopyrrolidine	100	6.642	6.648	-0.006	88	16246	2.00	1.90	
38 N-Nitrosodi-n-propylamine	70	6.672	6.683	-0.011	69	28713	2.00	1.90	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 4-Methylphenol	108	6.672	6.683	-0.011	62	37590	2.00	1.83	
39 Acetophenone	105	6.672	6.683	-0.011	81	62000	2.00	2.05	
41 Hexachloroethane	117	6.789	6.801	-0.012	92	19950	2.00	1.98	
42 Nitrobenzene	77	6.836	6.848	-0.012	89	43070	2.00	1.90	
44 Isophorone	82	7.066	7.077	-0.011	98	70388	2.00	1.84	
46 2-Nitrophenol	139	7.148	7.160	-0.012	98	19845	2.00	1.69	
47 2,4-Dimethylphenol	107	7.178	7.189	-0.011	96	43326	2.00	1.94	
48 Benzoic acid	122	7.207	7.213	-0.006	89	15943	2.00	2.14	M
49 Bis(2-chloroethoxy)methane	93	7.266	7.272	-0.006	98	43088	2.00	1.84	
51 2,4-Dichlorophenol	162	7.378	7.383	-0.005	94	33805	2.00	1.81	
52 1,2,4-Trichlorobenzene	180	7.466	7.472	-0.006	94	43622	2.00	1.94	
53 Naphthalene	128	7.536	7.548	-0.012	97	127052	2.00	1.93	
55 4-Chloroaniline	127	7.578	7.589	-0.011	96	51312	2.00	1.91	
56 2,6-Dichlorophenol	162	7.589	7.601	-0.012	96	36057	2.00	1.95	
57 Hexachlorobutadiene	225	7.660	7.666	-0.006	94	26871	2.00	2.00	
61 Caprolactam	113	7.860	7.872	-0.012	83	9270	2.00	1.63	
63 4-Chloro-3-methylphenol	107	8.013	8.024	-0.011	96	33804	2.00	1.84	
65 2-Methylnaphthalene	142	8.183	8.195	-0.012	91	85702	2.00	1.89	
66 1-Methylnaphthalene	142	8.278	8.289	-0.011	94	83411	2.00	1.96	
67 Hexachlorocyclopentadiene	237	8.336	8.348	-0.012	93	26745	2.00	1.79	
68 1,2,4,5-Tetrachlorobenzene	216	8.342	8.354	-0.012	97	46149	2.00	2.05	
69 2,4,6-Trichlorophenol	196	8.442	8.448	-0.006	92	25241	2.00	1.90	
70 2,4,5-Trichlorophenol	196	8.472	8.483	-0.011	95	27072	2.00	1.94	
71 1,1'-Biphenyl	154	8.613	8.619	-0.006	94	105008	2.00	2.03	
73 2-Chloronaphthalene	162	8.642	8.654	-0.012	96	79367	2.00	2.02	
75 2-Nitroaniline	65	8.719	8.730	-0.011	77	18330	2.00	1.68	
77 Dimethyl phthalate	163	8.866	8.877	-0.011	97	82044	2.00	1.87	
78 1,3-Dinitrobenzene	168	8.901	8.913	-0.012	81	9013	2.00	2.08	
79 2,6-Dinitrotoluene	165	8.930	8.942	-0.012	92	17070	2.00	1.71	
80 Acenaphthylene	152	9.030	9.042	-0.012	97	105993	2.00	1.90	
81 3-Nitroaniline	138	9.089	9.107	-0.018	95	16385	2.00	1.59	
83 Acenaphthene	153	9.189	9.201	-0.012	93	77722	2.00	1.95	
82 2,4-Dinitrophenol	184	9.183	9.195	-0.012	86	20036	4.00	4.80	
84 4-Nitrophenol	109	9.219	9.230	-0.011	95	24614	4.00	3.49	
87 2,4-Dinitrotoluene	165	9.301	9.313	-0.012	90	21869	2.00	1.67	
88 Dibenzofuran	168	9.342	9.354	-0.012	96	110229	2.00	1.98	
90 2,3,5,6-Tetrachlorophenol	232	9.413	9.419	-0.005	91	22900	2.00	1.87	
91 2,3,4,6-Tetrachlorophenol	232	9.448	9.466	-0.018	71	23944	2.00	1.88	
92 2-Naphthylamine	143	9.477	9.489	-0.012	96	75327	2.00	1.94	
93 Diethyl phthalate	149	9.507	9.518	-0.011	97	82125	2.00	1.90	
94 Hexadecane	57	9.513	9.524	-0.011	98	45233	2.00	1.86	
96 4-Chlorophenyl phenyl ethe	204	9.642	9.654	-0.012	89	46332	2.00	2.00	
97 4-Nitroaniline	138	9.654	9.666	-0.012	80	18126	2.00	1.65	
98 Fluorene	166	9.660	9.671	-0.011	94	89407	2.00	2.02	
99 4,6-Dinitro-2-methylphenol	198	9.683	9.689	-0.006	89	19802	4.00	4.17	
101 N-Nitrosodiphenylamine	169	9.742	9.754	-0.012	61	63868	2.00	1.95	
102 Azobenzene	77	9.783	9.795	-0.012	97	74268	2.00	1.86	
103 1,2-Diphenylhydrazine	77	9.783	9.795	-0.012	97	74268	2.00	1.86	
108 4-Bromophenyl phenyl ether	248	10.095	10.101	-0.006	65	28677	2.00	2.02	
109 Hexachlorobenzene	284	10.177	10.189	-0.012	94	28708	2.00	1.92	
111 Atrazine	200	10.201	10.213	-0.012	94	22585	2.00	1.79	
115 Pentachlorophenol	266	10.348	10.360	-0.012	91	38546	4.00	3.63	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 n-Octadecane	57	10.348	10.360	-0.012	95	42445	2.00	1.77	
118 Phenanthrene	178	10.554	10.565	-0.011	96	128858	2.00	1.99	
119 Anthracene	178	10.607	10.618	-0.011	96	127676	2.00	1.93	
121 Carbazole	167	10.748	10.760	-0.012	95	106251	2.00	1.86	
122 Di-n-butyl phthalate	149	11.042	11.054	-0.012	100	115038	2.00	1.71	
128 Fluoranthene	202	11.860	11.871	-0.011	96	125429	2.00	1.77	
129 Benzidine	184	11.983	11.995	-0.012	98	45766	2.00	2.08	
131 Pyrene	202	12.160	12.177	-0.017	98	131382	2.00	1.93	
137 Butyl benzyl phthalate	149	13.013	13.024	-0.011	98	44623	2.00	1.65	
141 3,3'-Dichlorobenzidine	252	13.983	14.001	-0.018	73	38841	2.00	1.55	
142 Bis(2-ethylhexyl) phthalat	149	14.018	14.036	-0.018	95	59485	2.00	1.57	
143 Benzo[a]anthracene	228	14.065	14.077	-0.012	97	129626	2.00	1.89	
144 Chrysene	228	14.136	14.153	-0.017	96	133192	2.00	2.03	
147 Di-n-octyl phthalate	149	15.336	15.348	-0.012	99	96803	2.00	2.12	
148 7,12-Dimethylbenz(a)anthra	256	16.201	16.218	-0.017	92	62663	2.00	1.76	
149 Benzo[b]fluoranthene	252	16.218	16.236	-0.018	96	133765	2.00	1.81	
150 Benzo[k]fluoranthene	252	16.277	16.295	-0.018	98	127450	2.00	1.79	
151 Benzo[e]pyrene	252	16.801	16.824	-0.024	0	114091	2.00	1.75	
152 Benzo[a]pyrene	252	16.906	16.924	-0.018	75	116973	2.00	1.80	
156 Indeno[1,2,3-cd]pyrene	276	19.259	19.283	-0.024	98	129408	2.00	1.72	
157 Dibenz(a,h)anthracene	278	19.289	19.312	-0.023	84	106778	2.00	1.71	
158 Benzo[g,h,i]perylene	276	19.871	19.888	-0.017	97	107705	2.00	1.72	
S 202 Total Cresols	108				0		4.00	3.69	
S 203 Methyl Phenols,Total	108				0		4.00	3.69	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD2.0i_00015 Amount Added: 1.00 Units: mL

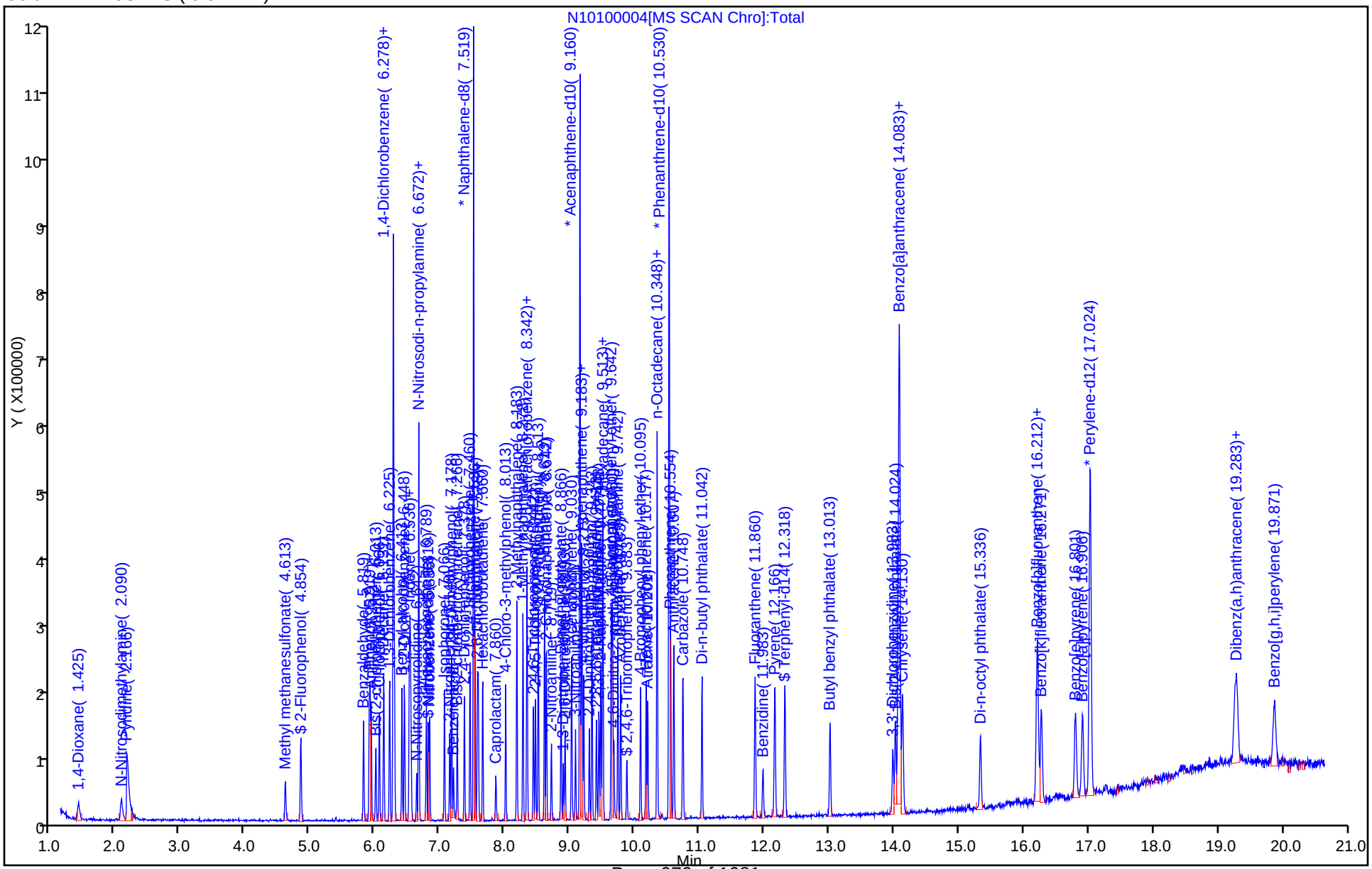
Report Date: 10-Oct-2017 08:34:29 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100004.D

Injection Date:	10-Oct-2017 05:03:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

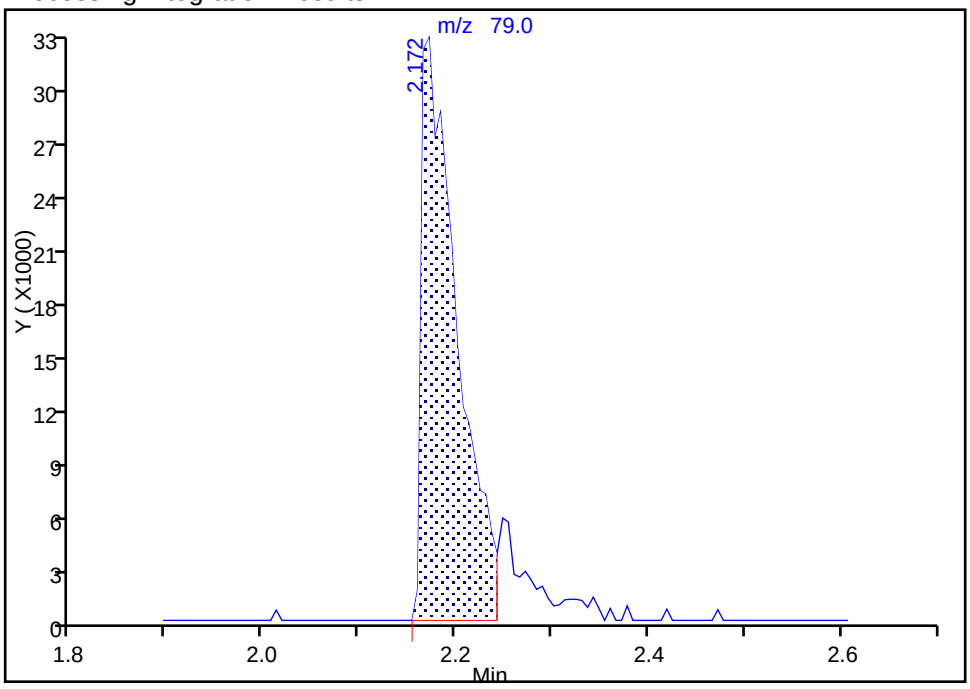
Data File:	\\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100004.D				
Injection Date:	10-Oct-2017 05:03:30	Instrument ID:	CH733		
Lims ID:	IC				
Client ID:					
Operator ID:	03200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

Signal: 1

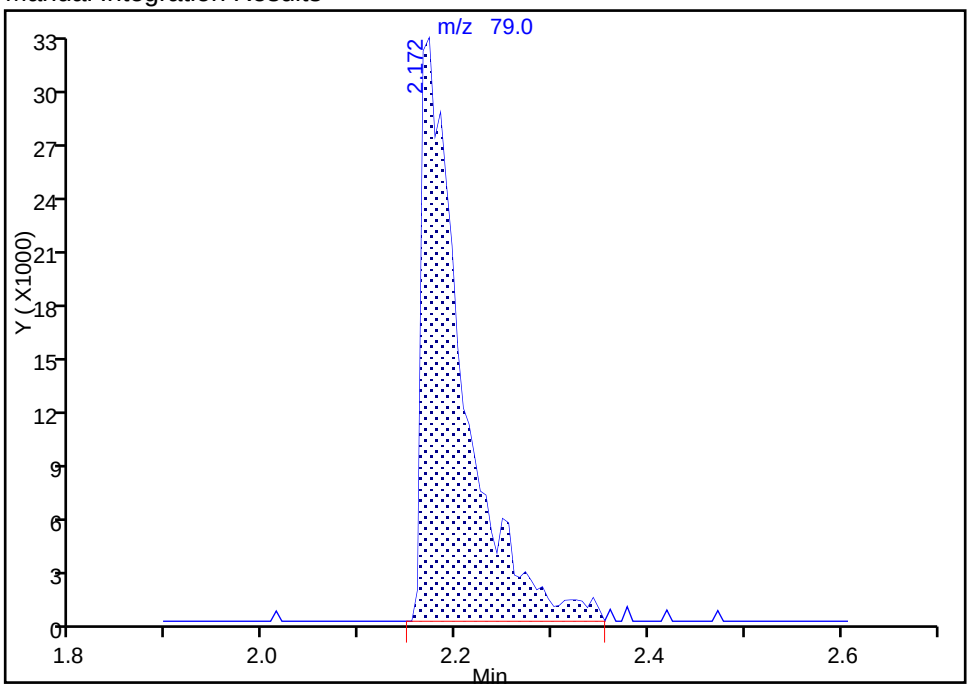
Processing Integration Results

RT: 2.17
Area: 83166
Amount: 3.594228
Amount Units: ng



Manual Integration Results

RT: 2.17
Area: 95465
Amount: 3.876571
Amount Units: ng



Reviewer: piccolinov, 10-Oct-2017 05:36:29

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

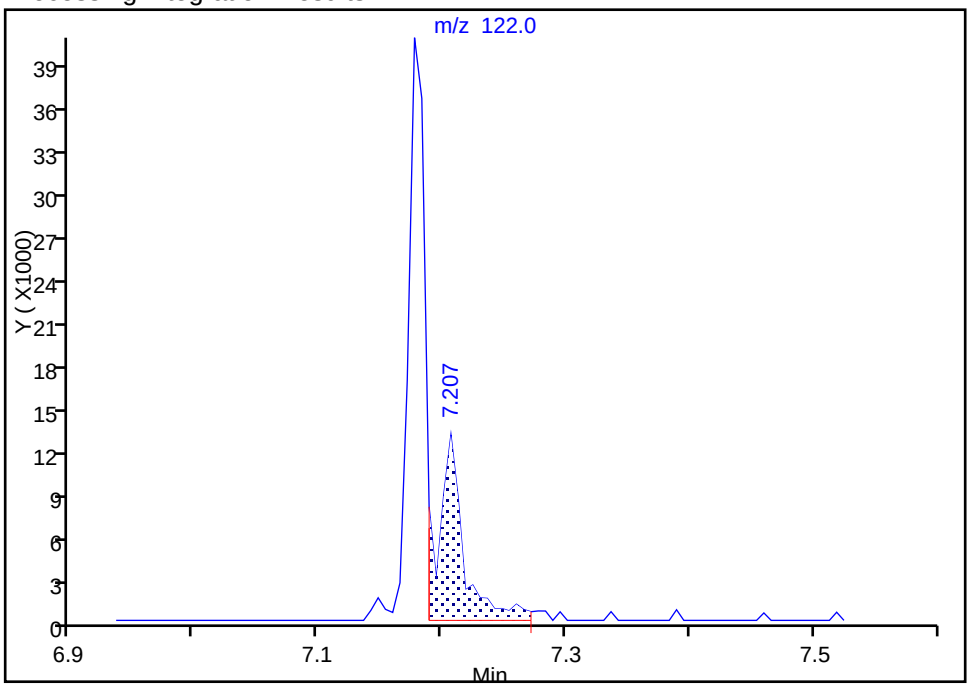
Data File:	\\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100004.D				
Injection Date:	10-Oct-2017 05:03:30	Instrument ID:	CH733		
Lims ID:	IC				
Client ID:					
Operator ID:	03200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

48 Benzoic acid, CAS: 65-85-0

Signal: 1

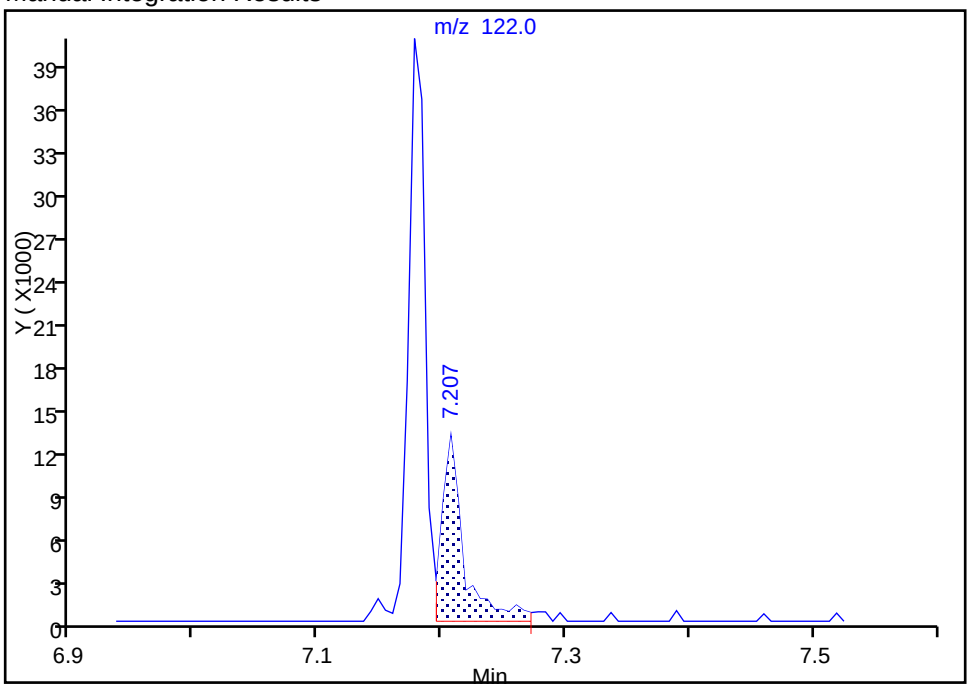
Processing Integration Results

RT: 7.21
Area: 18725
Amount: 1.930670
Amount Units: ng



Manual Integration Results

RT: 7.21
Area: 15943
Amount: 2.141346
Amount Units: ng



Reviewer: piccolinov, 10-Oct-2017 05:36:46

Audit Action: Split an Integrated Peak Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100005.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Oct-2017 05:30:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018792-005
Operator ID: 03200 Instrument ID: CH733
Sublist: chrom-BNA_CH733*sub2

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 10-Oct-2017 08:34:31 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: piccolinov Date: 10-Oct-2017 06:31:22

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	6.289	6.289	0.000	97	136930	8.00	8.00	
* 2 Naphthalene-d8	136	7.525	7.530	-0.005	99	491896	8.00	8.00	
* 3 Acenaphthene-d10	164	9.166	9.166	0.000	94	242988	8.00	8.00	
* 4 Phenanthrene-d10	188	10.542	10.542	0.000	96	452420	8.00	8.00	
* 5 Chrysene-d12	240	14.107	14.101	0.005	98	468746	8.00	8.00	
* 6 Perylene-d12	264	17.047	17.042	0.005	99	418666	8.00	8.00	
$ 7 2-Fluorophenol	112	4.860	4.866	-0.006	94	81743	4.00	3.70	
$ 8 Phenol-d5	99	5.913	5.919	-0.006	95	101116	4.00	3.83	
$ 9 Nitrobenzene-d5	82	6.831	6.830	0.000	90	89895	4.00	4.01	
$ 10 2-Fluorobiphenyl	172	8.525	8.524	0.001	99	195999	4.00	4.04	
$ 11 2,4,6-Tribromophenol	330	9.895	9.889	0.006	95	25971	4.00	3.92	
$ 12 Terphenyl-d14	244	12.330	12.330	0.000	99	209807	4.00	3.97	
13 1,4-Dioxane	88	1.407	1.425	-0.018	97	36136	4.00	3.80	
14 N-Nitrosodimethylamine	74	2.078	2.101	-0.023	88	50658	4.00	3.83	
15 Pyridine	79	2.148	2.219	-0.071	95	188627	8.00	7.64	
19 Methyl methanesulfonate	80	4.613	4.625	-0.012	89	56621	4.00	4.05	
22 Benzaldehyde	77	5.825	5.830	-0.005	93	60423	4.00	3.95	
24 Phenol	94	5.931	5.930	0.001	98	113489	4.00	3.91	
25 Aniline	93	5.942	5.948	-0.006	99	132070	4.00	3.90	
26 Bis(2-chloroethyl)ether	93	6.019	6.019	0.000	97	84852	4.00	4.06	
27 2-Chlorophenol	128	6.072	6.072	0.000	95	90825	4.00	3.87	
28 n-Decane	43	6.136	6.142	-0.006	86	84038	4.00	3.89	
29 1,3-Dichlorobenzene	146	6.231	6.230	0.001	96	104612	4.00	3.84	
30 1,4-Dichlorobenzene	146	6.301	6.307	-0.006	90	105912	4.00	3.90	
31 Benzyl alcohol	108	6.419	6.425	-0.006	89	49909	4.00	3.69	
32 1,2-Dichlorobenzene	146	6.460	6.460	0.000	96	100601	4.00	3.97	
33 2-Methylphenol	108	6.531	6.536	-0.005	97	74190	4.00	3.78	
34 Indene	116	6.548	6.548	0.000	91	155392	4.00	4.03	
35 2,2'-oxybis[1-chloropropan	45	6.560	6.560	0.000	85	97153	4.00	4.00	
37 N-Nitrosopyrrolidine	100	6.648	6.648	0.000	85	33992	4.00	3.96	
40 4-Methylphenol	108	6.678	6.683	-0.005	65	82272	4.00	4.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 N-Nitrosodi-n-propylamine	70	6.678	6.683	-0.005	71	59215	4.00	3.92	
39 Acetophenone	105	6.678	6.683	-0.005	78	117656	4.00	3.88	
41 Hexachloroethane	117	6.795	6.801	-0.006	91	39534	4.00	3.91	
42 Nitrobenzene	77	6.848	6.848	0.000	89	89645	4.00	4.02	
44 Isophorone	82	7.078	7.077	0.001	97	143366	4.00	3.82	
46 2-Nitrophenol	139	7.160	7.160	0.000	96	43278	4.00	3.76	
47 2,4-Dimethylphenol	107	7.189	7.189	0.000	96	89366	4.00	4.07	
48 Benzoic acid	122	7.219	7.213	0.006	91	48612	4.00	4.83	M
49 Bis(2-chloroethoxy)methane	93	7.272	7.272	0.000	99	91699	4.00	3.99	
51 2,4-Dichlorophenol	162	7.383	7.383	0.000	94	74459	4.00	4.06	
52 1,2,4-Trichlorobenzene	180	7.472	7.472	0.000	94	90023	4.00	4.08	
53 Naphthalene	128	7.548	7.548	0.000	97	259489	4.00	4.01	
55 4-Chloroaniline	127	7.583	7.589	-0.006	95	101561	4.00	3.84	
56 2,6-Dichlorophenol	162	7.601	7.601	0.000	97	71930	4.00	3.96	
57 Hexachlorobutadiene	225	7.666	7.666	0.000	95	52229	4.00	3.95	
61 Caprolactam	113	7.872	7.872	0.000	81	20809	4.00	3.72	
63 4-Chloro-3-methylphenol	107	8.019	8.024	-0.005	95	69955	4.00	3.88	
65 2-Methylnaphthalene	142	8.195	8.195	0.000	93	177903	4.00	4.00	
66 1-Methylnaphthalene	142	8.289	8.289	0.000	93	169099	4.00	4.04	
67 Hexachlorocyclopentadiene	237	8.348	8.348	0.000	94	56629	4.00	3.77	
68 1,2,4,5-Tetrachlorobenzene	216	8.354	8.354	0.000	97	90723	4.00	4.02	
69 2,4,6-Trichlorophenol	196	8.448	8.448	0.000	92	52709	4.00	3.94	
70 2,4,5-Trichlorophenol	196	8.483	8.483	0.000	94	55014	4.00	3.92	
71 1,1'-Biphenyl	154	8.619	8.619	0.000	95	208203	4.00	4.01	
73 2-Chloronaphthalene	162	8.648	8.654	-0.006	95	163140	4.00	4.13	
75 2-Nitroaniline	65	8.725	8.730	-0.006	82	40040	4.00	3.64	
77 Dimethyl phthalate	163	8.877	8.877	0.000	98	174535	4.00	3.96	
78 1,3-Dinitrobenzene	168	8.913	8.913	0.000	86	22477	4.00	3.80	
79 2,6-Dinitrotoluene	165	8.936	8.942	-0.006	95	39301	4.00	3.92	
80 Acenaphthylene	152	9.036	9.042	-0.006	98	225438	4.00	4.03	
81 3-Nitroaniline	138	9.101	9.107	-0.006	95	40391	4.00	3.90	
82 2,4-Dinitrophenol	184	9.195	9.195	0.000	80	51848	8.00	8.51	
83 Acenaphthene	153	9.195	9.201	-0.006	90	160052	4.00	4.01	
84 4-Nitrophenol	109	9.224	9.230	-0.006	95	53853	8.00	7.61	
87 2,4-Dinitrotoluene	165	9.313	9.313	0.000	92	48802	4.00	3.71	
88 Dibenzofuran	168	9.354	9.354	0.000	96	229384	4.00	4.10	
90 2,3,5,6-Tetrachlorophenol	232	9.419	9.419	0.001	92	48062	4.00	3.91	
91 2,3,4,6-Tetrachlorophenol	232	9.460	9.466	-0.006	71	51182	4.00	4.00	
92 2-Naphthylamine	143	9.489	9.489	0.000	96	157332	4.00	4.02	
93 Diethyl phthalate	149	9.519	9.518	0.001	98	168520	4.00	3.87	
94 Hexadecane	57	9.524	9.524	0.000	97	92927	4.00	3.88	
96 4-Chlorophenyl phenyl ethe	204	9.648	9.654	-0.006	91	94451	4.00	4.05	
97 4-Nitroaniline	138	9.660	9.666	-0.006	87	41738	4.00	3.79	
98 Fluorene	166	9.672	9.671	0.001	95	179891	4.00	4.04	
99 4,6-Dinitro-2-methylphenol	198	9.689	9.689	0.000	88	50050	8.00	7.53	
101 N-Nitrosodiphenylamine	169	9.754	9.754	0.000	61	133258	4.00	4.09	
103 1,2-Diphenylhydrazine	77	9.795	9.795	0.000	94	156770	4.00	3.94	
102 Azobenzene	77	9.795	9.795	0.000	94	156770	4.00	3.94	
108 4-Bromophenyl phenyl ether	248	10.101	10.101	0.000	65	57859	4.00	4.08	
109 Hexachlorobenzene	284	10.189	10.189	0.000	94	59050	4.00	3.96	
111 Atrazine	200	10.213	10.213	0.000	94	50171	4.00	3.98	
114 n-Octadecane	57	10.360	10.360	0.000	94	90161	4.00	3.75	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 Pentachlorophenol	266	10.354	10.360	-0.006	92	85979	8.00	8.12	
118 Phenanthrene	178	10.566	10.565	0.001	96	253065	4.00	3.91	
119 Anthracene	178	10.619	10.618	0.000	96	254614	4.00	3.86	
121 Carbazole	167	10.760	10.760	0.000	96	225708	4.00	3.96	
122 Di-n-butyl phthalate	149	11.054	11.054	0.000	100	254002	4.00	3.79	
128 Fluoranthene	202	11.871	11.871	0.000	96	277234	4.00	3.92	
129 Benzidine	184	11.995	11.995	0.000	98	104128	4.00	3.72	
131 Pyrene	202	12.177	12.177	0.000	98	277718	4.00	3.96	
137 Butyl benzyl phthalate	149	13.030	13.024	0.006	98	104701	4.00	3.75	
141 3,3'-Dichlorobenzidine	252	14.001	14.001	0.000	73	91846	4.00	3.55	
142 Bis(2-ethylhexyl) phthalat	149	14.042	14.036	0.006	94	144650	4.00	3.71	
143 Benzo[a]anthracene	228	14.083	14.077	0.006	96	282936	4.00	4.02	
144 Chrysene	228	14.154	14.153	0.001	96	268726	4.00	3.98	
147 Di-n-octyl phthalate	149	15.353	15.348	0.005	100	206460	4.00	3.69	
148 7,12-Dimethylbenz(a)anthra	256	16.230	16.218	0.012	93	134615	4.00	3.85	
149 Benzo[b]fluoranthene	252	16.242	16.236	0.006	96	289500	4.00	3.98	
150 Benzo[k]fluoranthene	252	16.295	16.295	0.000	98	282089	4.00	4.04	
151 Benzo[e]pyrene	252	16.830	16.824	0.006	0	247367	4.00	3.86	
152 Benzo[a]pyrene	252	16.936	16.924	0.012	75	244262	4.00	3.82	
156 Indeno[1,2,3-cd]pyrene	276	19.289	19.283	0.006	98	282067	4.00	3.83	
157 Dibenz(a,h)anthracene	278	19.318	19.312	0.006	89	234778	4.00	3.83	
158 Benzo[g,h,i]perylene	276	19.900	19.888	0.012	98	238226	4.00	3.87	
S 203 Methyl Phenols,Total	108				0		8.00	7.78	
S 202 Total Cresols	108				0		8.00	7.78	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD4.0i_00014 Amount Added: 1.00 Units: mL

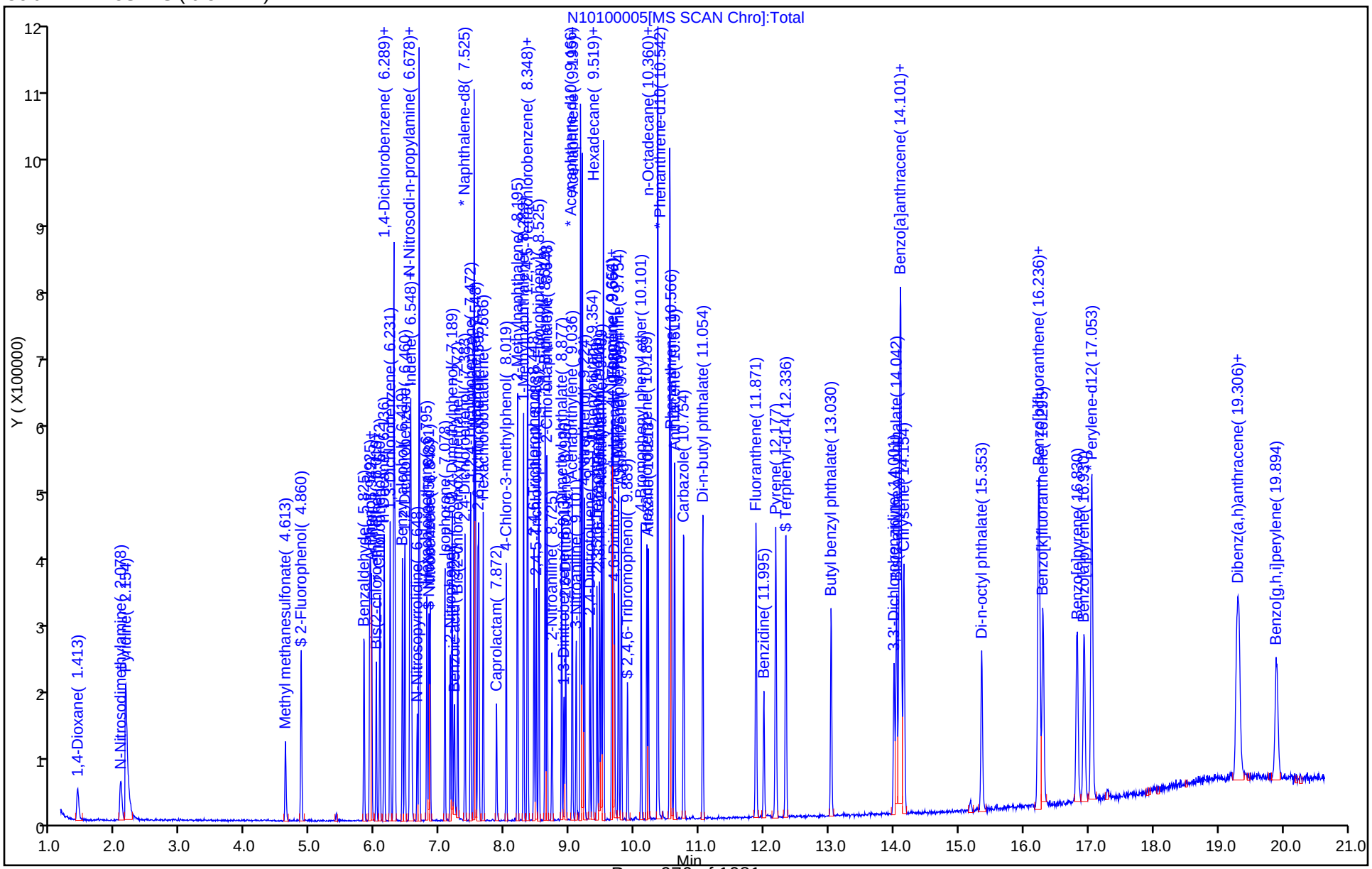
Report Date: 10-Oct-2017 08:34:32 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100005.D

Injection Date:	10-Oct-2017 05:30:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

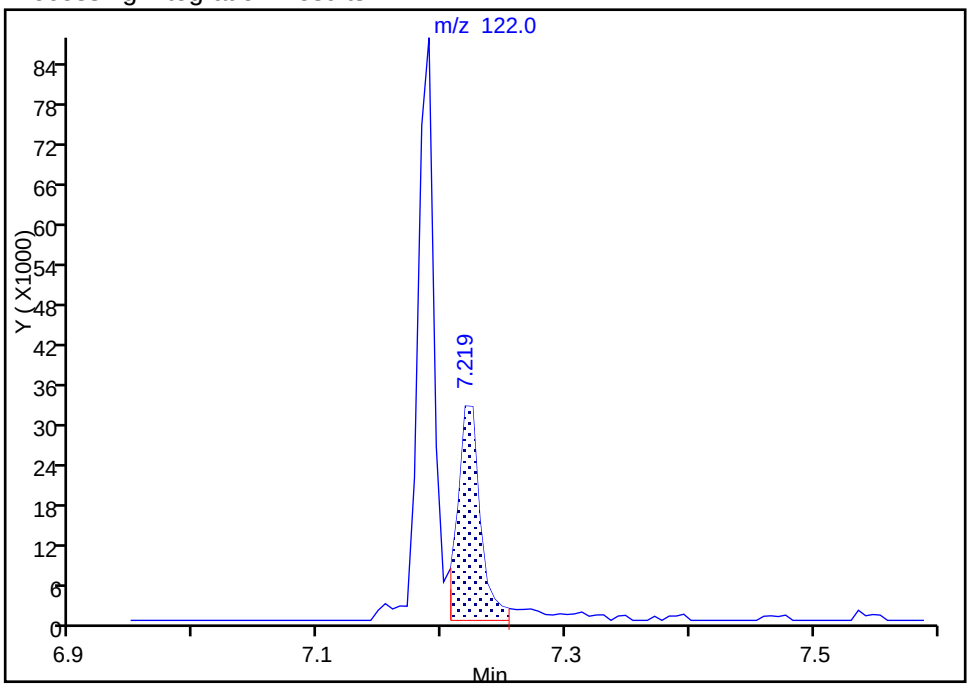
Data File:	\\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100005.D				
Injection Date:	10-Oct-2017 05:30:30	Instrument ID:	CH733		
Lims ID:	IC				
Client ID:					
Operator ID:	03200	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

48 Benzoic acid, CAS: 65-85-0

Signal: 1

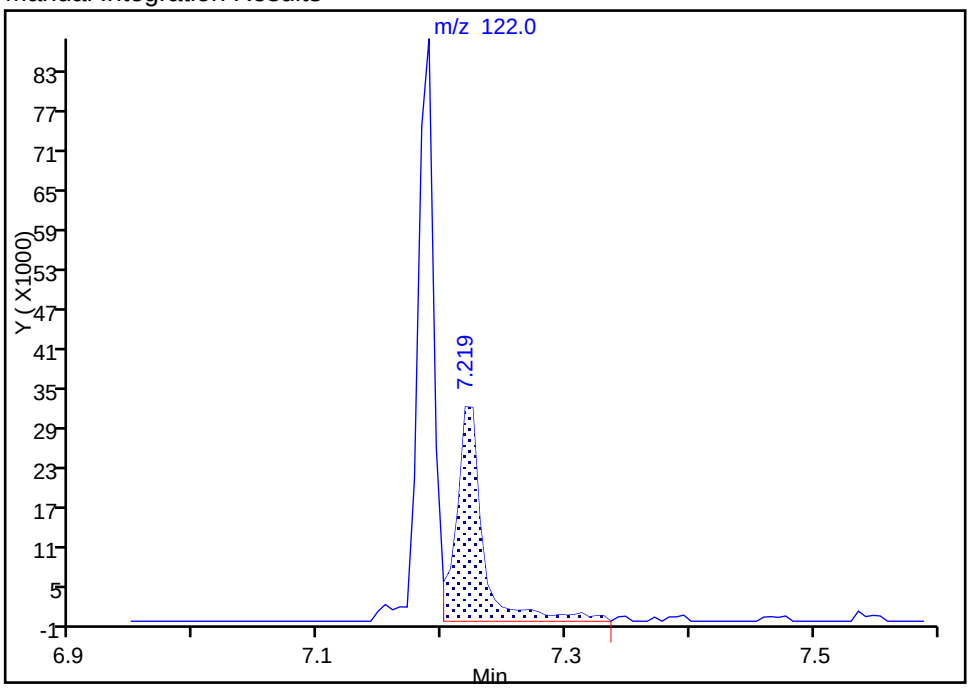
Processing Integration Results

RT: 7.22
Area: 41429
Amount: 3.499258
Amount Units: ng



Manual Integration Results

RT: 7.22
Area: 48612
Amount: 4.834150
Amount Units: ng



Reviewer: piccolinov, 10-Oct-2017 06:31:00

Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100006.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 10-Oct-2017 05:56:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018792-006
Operator ID: 03200 Instrument ID: CH733
Sublist: chrom-BNA_CH733*sub2

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 10-Oct-2017 08:34:34 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: piccolinov Date: 10-Oct-2017 07:15:01

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	6.289	6.289	0.000	96	136153	8.00	8.00	
* 2 Naphthalene-d8	136	7.525	7.525	0.000	99	475054	8.00	8.00	
* 3 Acenaphthene-d10	164	9.166	9.166	0.000	94	238858	8.00	8.00	
* 4 Phenanthrene-d10	188	10.548	10.548	0.000	96	433552	8.00	8.00	
* 5 Chrysene-d12	240	14.106	14.106	0.000	98	456734	8.00	8.00	
* 6 Perylene-d12	264	17.053	17.053	0.000	98	417972	8.00	8.00	
$ 7 2-Fluorophenol	112	4.860	4.860	0.000	93	214005	10.0	9.75	
$ 8 Phenol-d5	99	5.919	5.919	0.000	95	249280	10.0	9.49	
$ 9 Nitrobenzene-d5	82	6.830	6.830	0.000	91	213304	10.0	9.86	
$ 10 2-Fluorobiphenyl	172	8.524	8.524	0.000	100	463347	10.0	9.72	
$ 11 2,4,6-Tribromophenol	330	9.895	9.895	0.000	95	64022	10.0	10.1	
$ 12 Terphenyl-d14	244	12.336	12.336	0.000	99	508254	10.0	9.88	
13 1,4-Dioxane	88	1.401	1.401	0.000	97	91348	10.0	9.65	
14 N-Nitrosodimethylamine	74	2.066	2.066	0.000	88	126064	10.0	9.58	
15 Pyridine	79	2.143	2.143	0.000	95	458878	20.0	18.7	
19 Methyl methanesulfonate	80	4.613	4.613	0.000	89	130934	10.0	9.41	
22 Benzaldehyde	77	5.825	5.825	0.000	93	149055	10.0	9.81	
24 Phenol	94	5.931	5.931	0.000	96	274228	10.0	9.50	
25 Aniline	93	5.948	5.948	0.000	51	313371	10.0	9.31	
26 Bis(2-chloroethyl)ether	93	6.019	6.019	0.000	97	197560	10.0	9.51	
27 2-Chlorophenol	128	6.072	6.072	0.000	96	225612	10.0	9.68	
28 n-Decane	43	6.136	6.136	0.000	86	203560	10.0	9.49	
29 1,3-Dichlorobenzene	146	6.231	6.231	0.000	97	264277	10.0	9.75	
30 1,4-Dichlorobenzene	146	6.307	6.307	0.000	92	259456	10.0	9.60	
31 Benzyl alcohol	108	6.419	6.419	0.000	90	131011	10.0	9.74	
32 1,2-Dichlorobenzene	146	6.460	6.460	0.000	95	243692	10.0	9.67	
33 2-Methylphenol	108	6.536	6.536	0.000	96	187813	10.0	9.63	
34 Indene	116	6.548	6.548	0.000	90	369150	10.0	9.62	
35 2,2'-oxybis[1-chloropropan	45	6.560	6.560	0.000	88	231461	10.0	9.60	
37 N-Nitrosopyrrolidine	100	6.648	6.648	0.000	84	84872	10.0	9.93	
38 N-Nitrosodi-n-propylamine	70	6.678	6.678	0.000	72	142734	10.0	9.50	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 4-Methylphenol	108	6.678	6.678	0.000	67	195808	10.0	9.57	
39 Acetophenone	105	6.678	6.678	0.000	80	289574	10.0	9.59	
41 Hexachloroethane	117	6.795	6.795	0.000	91	95819	10.0	9.52	
42 Nitrobenzene	77	6.848	6.848	0.000	89	214665	10.0	9.98	
44 Isophorone	82	7.078	7.078	0.000	98	352810	10.0	9.73	
46 2-Nitrophenol	139	7.160	7.160	0.000	98	108874	10.0	9.79	
47 2,4-Dimethylphenol	107	7.189	7.189	0.000	97	215378	10.0	10.1	
48 Benzoic acid	122	7.230	7.230	0.000	89	89543	10.0	8.44	
49 Bis(2-chloroethoxy)methane	93	7.272	7.272	0.000	100	213943	10.0	9.65	
51 2,4-Dichlorophenol	162	7.383	7.383	0.000	95	173150	10.0	9.78	
52 1,2,4-Trichlorobenzene	180	7.472	7.472	0.000	94	212444	10.0	9.96	
53 Naphthalene	128	7.548	7.548	0.000	97	606149	10.0	9.69	
55 4-Chloroaniline	127	7.583	7.583	0.000	96	247558	10.0	9.70	
56 2,6-Dichlorophenol	162	7.601	7.601	0.000	97	171433	10.0	9.78	
57 Hexachlorobutadiene	225	7.666	7.666	0.000	96	122699	10.0	9.62	
61 Caprolactam	113	7.872	7.872	0.000	80	53389	10.0	9.89	
63 4-Chloro-3-methylphenol	107	8.025	8.025	0.000	96	173730	10.0	9.98	
65 2-Methylnaphthalene	142	8.195	8.195	0.000	93	425975	10.0	9.91	
66 1-Methylnaphthalene	142	8.289	8.289	0.000	94	401459	10.0	9.93	
67 Hexachlorocyclopentadiene	237	8.348	8.348	0.000	95	142817	10.0	9.66	
68 1,2,4,5-Tetrachlorobenzene	216	8.354	8.354	0.000	97	219540	10.0	9.89	
69 2,4,6-Trichlorophenol	196	8.448	8.448	0.000	92	127649	10.0	9.71	
70 2,4,5-Trichlorophenol	196	8.483	8.483	0.000	93	141671	10.0	10.3	
71 1,1'-Biphenyl	154	8.624	8.624	0.000	94	498166	10.0	9.75	
73 2-Chloronaphthalene	162	8.648	8.648	0.000	97	380062	10.0	9.78	
75 2-Nitroaniline	65	8.730	8.730	0.000	81	105810	10.0	9.80	
77 Dimethyl phthalate	163	8.877	8.877	0.000	98	415588	10.0	9.58	
78 1,3-Dinitrobenzene	168	8.913	8.913	0.000	84	63476	10.0	9.22	
79 2,6-Dinitrotoluene	165	8.942	8.942	0.000	94	94763	10.0	9.61	
80 Acenaphthylene	152	9.042	9.042	0.000	98	536789	10.0	9.75	
81 3-Nitroaniline	138	9.101	9.101	0.000	92	99812	10.0	9.79	
82 2,4-Dinitrophenol	184	9.195	9.195	0.000	80	118247	20.0	16.5	
83 Acenaphthene	153	9.195	9.195	0.000	91	373652	10.0	9.52	
84 4-Nitrophenol	109	9.224	9.224	0.000	94	135523	20.0	19.5	
87 2,4-Dinitrotoluene	165	9.313	9.313	0.000	93	123710	10.0	9.57	
88 Dibenzofuran	168	9.354	9.354	0.000	96	524462	10.0	9.53	
90 2,3,5,6-Tetrachlorophenol	232	9.419	9.419	0.000	93	121660	10.0	10.1	
91 2,3,4,6-Tetrachlorophenol	232	9.460	9.460	0.000	71	123973	10.0	9.87	
92 2-Naphthylamine	143	9.489	9.489	0.000	96	378233	10.0	9.84	
93 Diethyl phthalate	149	9.519	9.519	0.000	98	403553	10.0	9.44	
94 Hexadecane	57	9.524	9.524	0.000	97	222718	10.0	9.63	
96 4-Chlorophenyl phenyl ethe	204	9.654	9.654	0.000	89	220852	10.0	9.63	
97 4-Nitroaniline	138	9.660	9.660	0.000	80	101468	10.0	9.37	
98 Fluorene	166	9.671	9.671	0.000	95	413922	10.0	9.46	
99 4,6-Dinitro-2-methylphenol	198	9.695	9.695	0.000	86	144088	20.0	18.7	
101 N-Nitrosodiphenylamine	169	9.754	9.754	0.000	62	307757	10.0	9.85	
102 Azobenzene	77	9.795	9.795	0.000	97	380601	10.0	9.97	
103 1,2-Diphenylhydrazine	77	9.795	9.795	0.000	96	380601	10.0	9.97	
108 4-Bromophenyl phenyl ether	248	10.101	10.101	0.000	66	136293	10.0	10.0	
109 Hexachlorobenzene	284	10.189	10.189	0.000	96	139781	10.0	9.79	
111 Atrazine	200	10.213	10.213	0.000	94	121197	10.0	10.0	
115 Pentachlorophenol	266	10.360	10.360	0.000	93	180660	20.0	17.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 n-Octadecane	57	10.360	10.360	0.000	95	222170	10.0	9.28	
118 Phenanthrene	178	10.566	10.566	0.000	96	609284	10.0	9.83	
119 Anthracene	178	10.618	10.618	0.000	97	614993	10.0	9.72	
121 Carbazole	167	10.760	10.760	0.000	96	538475	10.0	9.87	
122 Di-n-butyl phthalate	149	11.054	11.054	0.000	100	634174	10.0	9.87	
128 Fluoranthene	202	11.877	11.877	0.000	96	656961	10.0	9.68	
129 Benzidine	184	11.995	11.995	0.000	99	293953	10.0	9.40	
131 Pyrene	202	12.177	12.177	0.000	99	681597	10.0	9.98	
137 Butyl benzyl phthalate	149	13.036	13.036	0.000	98	272918	10.0	10.0	
141 3,3'-Dichlorobenzidine	252	14.006	14.006	0.000	73	238480	10.0	9.46	
142 Bis(2-ethylhexyl) phthalat	149	14.048	14.048	0.000	95	380921	10.0	10.0	
143 Benzo[a]anthracene	228	14.089	14.089	0.000	96	682301	10.0	9.94	
144 Chrysene	228	14.159	14.159	0.000	96	647760	10.0	9.86	
147 Di-n-octyl phthalate	149	15.359	15.359	0.000	100	581864	10.0	9.01	
148 7,12-Dimethylbenz(a)anthra	256	16.230	16.230	0.000	93	337059	10.0	9.64	
149 Benzo[b]fluoranthene	252	16.248	16.248	0.000	96	697877	10.0	9.61	
150 Benzo[k]fluoranthene	252	16.306	16.306	0.000	97	694704	10.0	9.95	
151 Benzo[e]pyrene	252	16.830	16.830	0.000	0	613096	10.0	9.59	
152 Benzo[a]pyrene	252	16.942	16.942	0.000	75	619372	10.0	9.71	
156 Indeno[1,2,3-cd]pyrene	276	19.300	19.300	0.000	98	707100	10.0	9.61	
157 Dibenz(a,h)anthracene	278	19.324	19.324	0.000	86	591705	10.0	9.68	
158 Benzo[g,h,i]perylene	276	19.912	19.912	0.000	98	591773	10.0	9.64	
S 202 Total Cresols	108				0		20.0	19.2	
S 203 Methyl Phenols,Total	108				0		20.0	19.2	

Reagents:

SVTAPSTD10i_00240 Amount Added: 1.00 Units: mL

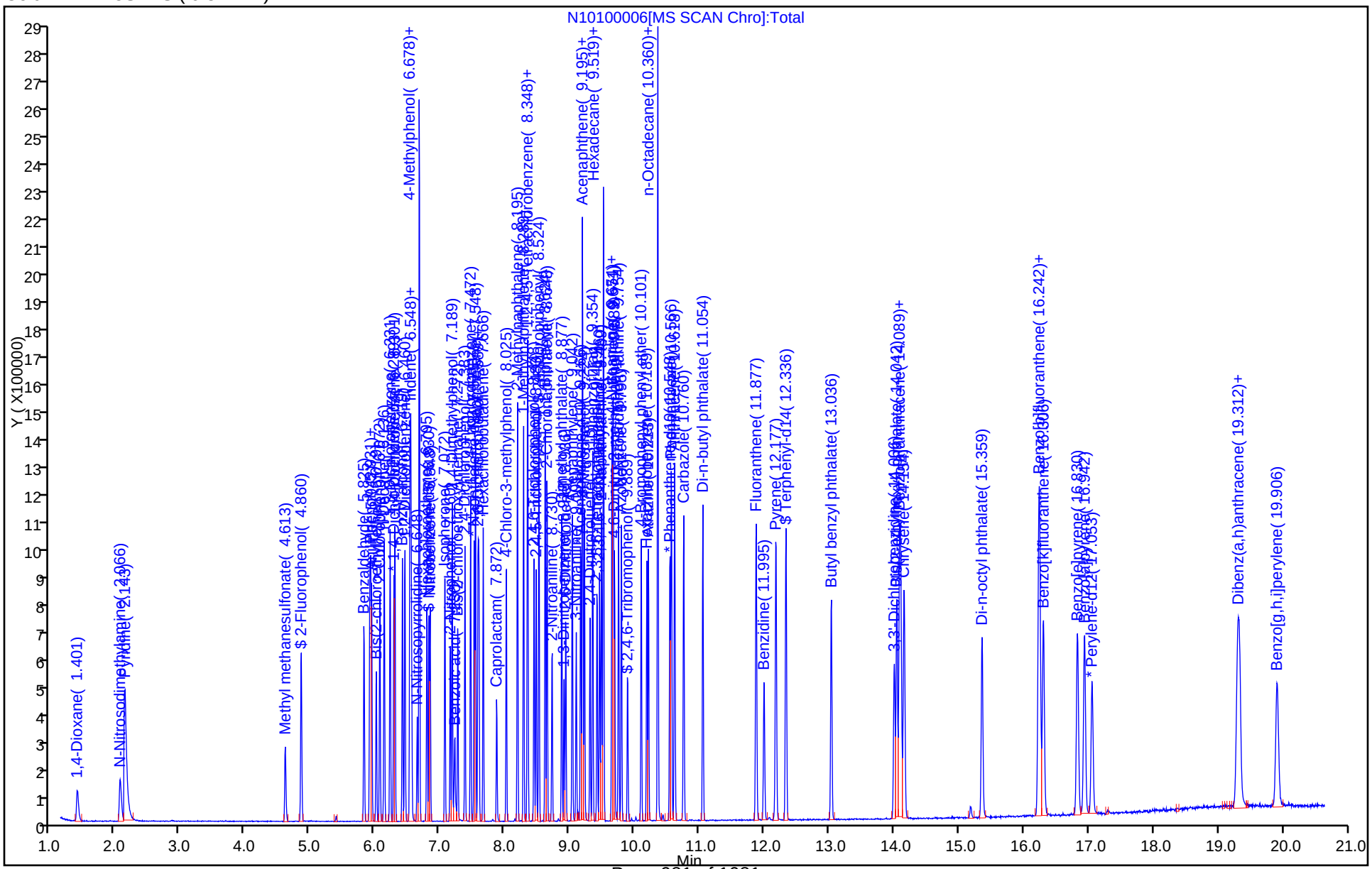
Report Date: 10-Oct-2017 08:34:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100006.D

Injection Date:	10-Oct-2017 05:56:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	ICIS			Worklist Smp#:	6
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100007.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Oct-2017 06:23:30 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018792-007
Operator ID: 03200 Instrument ID: CH733
Sublist: chrom-BNA_CH733*sub2

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 10-Oct-2017 08:34:38 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: piccolinov Date: 10-Oct-2017 07:15:50

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	6.284	6.289	-0.005	97	127145	8.00	8.00	
* 2 Naphthalene-d8	136	7.525	7.525	0.000	99	458153	8.00	8.00	
* 3 Acenaphthene-d10	164	9.166	9.166	0.000	93	229566	8.00	8.00	
* 4 Phenanthrene-d10	188	10.542	10.548	-0.006	96	418215	8.00	8.00	
* 5 Chrysene-d12	240	14.107	14.106	0.001	99	441923	8.00	8.00	
* 6 Perylene-d12	264	17.054	17.053	0.001	99	398532	8.00	8.00	
$ 7 2-Fluorophenol	112	4.854	4.860	-0.006	93	417692	20.0	20.4	
$ 8 Phenol-d5	99	5.913	5.919	-0.006	94	493672	20.0	20.1	
$ 9 Nitrobenzene-d5	82	6.825	6.830	-0.005	91	428916	20.0	20.6	
$ 10 2-Fluorobiphenyl	172	8.525	8.524	0.001	100	881146	20.0	19.2	
$ 11 2,4,6-Tribromophenol	330	9.889	9.895	-0.006	95	130109	20.0	21.2	
$ 12 Terphenyl-d14	244	12.336	12.336	0.000	99	1014955	20.0	20.4	
13 1,4-Dioxane	88	1.408	1.401	0.007	95	179887	20.0	20.4	
14 N-Nitrosodimethylamine	74	2.066	2.066	0.000	87	254421	20.0	20.7	
15 Pyridine	79	2.125	2.143	-0.018	95	925779	40.0	40.4	
19 Methyl methanesulfonate	80	4.607	4.613	-0.006	88	263753	20.0	20.3	
22 Benzaldehyde	77	5.825	5.825	0.000	93	309494	20.0	21.8	
24 Phenol	94	5.931	5.931	0.000	95	547473	20.0	20.3	
25 Aniline	93	5.943	5.948	-0.005	95	637675	20.0	20.3	
26 Bis(2-chloroethyl)ether	93	6.013	6.019	-0.006	97	384334	20.0	19.8	
27 2-Chlorophenol	128	6.072	6.072	0.000	96	448778	20.0	20.6	
28 n-Decane	43	6.137	6.136	0.001	85	403579	20.0	20.1	
29 1,3-Dichlorobenzene	146	6.231	6.231	0.000	97	503403	20.0	19.9	
30 1,4-Dichlorobenzene	146	6.301	6.307	-0.006	92	513768	20.0	20.3	
31 Benzyl alcohol	108	6.419	6.419	0.000	90	258764	20.0	20.6	
32 1,2-Dichlorobenzene	146	6.454	6.460	-0.006	96	465759	20.0	19.8	
33 2-Methylphenol	108	6.531	6.536	-0.005	97	369992	20.0	20.3	
34 Indene	116	6.542	6.548	-0.006	90	723755	20.0	20.2	
35 2,2'-oxybis[1-chloropropan	45	6.560	6.560	0.000	86	443888	20.0	19.7	
37 N-Nitrosopyrrolidine	100	6.648	6.648	0.000	84	162272	20.0	20.3	
40 4-Methylphenol	108	6.678	6.678	0.000	65	381436	20.0	20.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 N-Nitrosodi-n-propylamine	70	6.678	6.678	0.000	70	283873	20.0	20.2	
39 Acetophenone	105	6.678	6.678	0.000	81	550115	20.0	19.5	
41 Hexachloroethane	117	6.795	6.795	0.000	92	187846	20.0	20.0	
42 Nitrobenzene	77	6.842	6.848	-0.006	90	421333	20.0	20.3	
44 Isophorone	82	7.072	7.078	-0.006	98	696999	20.0	19.9	
46 2-Nitrophenol	139	7.154	7.160	-0.006	98	221200	20.0	20.6	
47 2,4-Dimethylphenol	107	7.184	7.189	-0.005	97	413299	20.0	20.2	
48 Benzoic acid	122	7.237	7.230	0.007	90	186026	20.0	17.2	
49 Bis(2-chloroethoxy)methane	93	7.272	7.272	0.000	99	418287	20.0	19.6	
51 2,4-Dichlorophenol	162	7.384	7.383	0.001	95	349020	20.0	20.4	
52 1,2,4-Trichlorobenzene	180	7.472	7.472	0.000	94	396774	20.0	19.3	
53 Naphthalene	128	7.542	7.548	-0.006	97	1175233	20.0	19.5	
55 4-Chloroaniline	127	7.584	7.583	0.001	96	494990	20.0	20.1	
56 2,6-Dichlorophenol	162	7.595	7.601	-0.006	97	338069	20.0	20.0	
57 Hexachlorobutadiene	225	7.666	7.666	0.000	96	239845	20.0	19.5	
61 Caprolactam	113	7.878	7.872	0.006	82	110439	20.0	21.2	
63 4-Chloro-3-methylphenol	107	8.019	8.025	-0.006	96	343191	20.0	20.4	
65 2-Methylnaphthalene	142	8.189	8.195	-0.006	92	812132	20.0	19.6	
66 1-Methylnaphthalene	142	8.284	8.289	-0.005	94	767207	20.0	19.7	
67 Hexachlorocyclopentadiene	237	8.342	8.348	-0.006	96	291773	20.0	20.5	
68 1,2,4,5-Tetrachlorobenzene	216	8.354	8.354	0.000	97	404976	20.0	19.0	
69 2,4,6-Trichlorophenol	196	8.448	8.448	0.000	93	263472	20.0	20.9	
70 2,4,5-Trichlorophenol	196	8.484	8.483	0.001	94	268885	20.0	20.3	
71 1,1'-Biphenyl	154	8.619	8.624	-0.005	94	939732	20.0	19.1	
73 2-Chloronaphthalene	162	8.648	8.648	0.000	96	735671	20.0	19.7	
75 2-Nitroaniline	65	8.725	8.730	-0.005	83	211056	20.0	20.3	
77 Dimethyl phthalate	163	8.878	8.877	0.001	99	828143	20.0	19.9	
78 1,3-Dinitrobenzene	168	8.913	8.913	0.000	89	136558	20.0	19.5	
79 2,6-Dinitrotoluene	165	8.936	8.942	-0.006	95	187024	20.0	19.7	
80 Acenaphthylene	152	9.036	9.042	-0.006	98	1051216	20.0	19.9	
81 3-Nitroaniline	138	9.101	9.101	0.000	94	200850	20.0	20.5	
82 2,4-Dinitrophenol	184	9.195	9.195	0.000	83	259671	40.0	34.6	
83 Acenaphthene	153	9.195	9.195	0.000	91	726807	20.0	19.3	
84 4-Nitrophenol	109	9.225	9.224	0.001	96	267185	40.0	40.0	
87 2,4-Dinitrotoluene	165	9.313	9.313	0.000	93	253922	20.0	20.4	
88 Dibenzofuran	168	9.354	9.354	0.000	96	1034199	20.0	19.6	
90 2,3,5,6-Tetrachlorophenol	232	9.419	9.419	0.000	92	242569	20.0	20.9	
91 2,3,4,6-Tetrachlorophenol	232	9.460	9.460	0.000	72	230793	20.0	19.1	
92 2-Naphthylamine	143	9.489	9.489	0.000	97	750461	20.0	20.3	
93 Diethyl phthalate	149	9.519	9.519	0.000	98	800041	20.0	19.5	
94 Hexadecane	57	9.519	9.524	-0.005	96	443690	20.0	19.9	
96 4-Chlorophenyl phenyl ethe	204	9.648	9.654	-0.006	93	431111	20.0	19.6	
97 4-Nitroaniline	138	9.660	9.660	0.000	85	214094	20.0	20.6	
98 Fluorene	166	9.672	9.671	0.001	96	810198	20.0	19.3	
99 4,6-Dinitro-2-methylphenol	198	9.689	9.695	-0.006	87	306404	40.0	38.8	
101 N-Nitrosodiphenylamine	169	9.754	9.754	0.000	62	607809	20.0	20.2	
103 1,2-Diphenylhydrazine	77	9.795	9.795	0.000	97	747421	20.0	20.3	
102 Azobenzene	77	9.795	9.795	0.000	97	747421	20.0	20.3	
108 4-Bromophenyl phenyl ether	248	10.101	10.101	0.000	65	259763	20.0	19.8	
109 Hexachlorobenzene	284	10.189	10.189	0.000	96	268324	20.0	19.5	
111 Atrazine	200	10.213	10.213	0.000	95	241801	20.0	20.8	
114 n-Octadecane	57	10.360	10.360	0.000	95	449755	20.0	20.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 Pentachlorophenol	266	10.354	10.360	-0.006	92	374062	40.0	38.2	
118 Phenanthrene	178	10.566	10.566	0.000	97	1170287	20.0	19.6	
119 Anthracene	178	10.619	10.618	0.001	96	1214005	20.0	19.9	
121 Carbazole	167	10.754	10.760	-0.006	96	1050304	20.0	20.0	
122 Di-n-butyl phthalate	149	11.054	11.054	0.000	100	1282122	20.0	20.7	
128 Fluoranthene	202	11.872	11.877	-0.005	96	1337316	20.0	20.4	
129 Benzidine	184	11.995	11.995	0.000	99	677547	20.0	21.4	
131 Pyrene	202	12.177	12.177	0.000	99	1351596	20.0	20.4	
137 Butyl benzyl phthalate	149	13.036	13.036	0.000	98	558790	20.0	21.2	
141 3,3'-Dichlorobenzidine	252	14.007	14.006	0.001	73	490152	20.0	20.1	
142 Bis(2-ethylhexyl) phthalat	149	14.042	14.048	-0.006	95	784308	20.0	21.3	
143 Benzo[a]anthracene	228	14.089	14.089	0.000	97	1348314	20.0	20.3	
144 Chrysene	228	14.160	14.159	0.001	96	1269876	20.0	20.0	
147 Di-n-octyl phthalate	149	15.360	15.359	0.001	100	1237040	20.0	19.1	
148 7,12-Dimethylbenz(a)anthra	256	16.236	16.230	0.006	91	666389	20.0	20.0	
149 Benzo[b]fluoranthene	252	16.248	16.248	0.000	96	1390383	20.0	20.1	
150 Benzo[k]fluoranthene	252	16.307	16.306	0.001	98	1342328	20.0	20.2	
151 Benzo[e]pyrene	252	16.830	16.830	0.000	0	1222506	20.0	20.1	
152 Benzo[a]pyrene	252	16.936	16.942	-0.006	75	1253598	20.0	20.6	
156 Indeno[1,2,3-cd]pyrene	276	19.295	19.300	-0.005	98	1420868	20.0	20.3	
157 Dibenz(a,h)anthracene	278	19.330	19.324	0.006	87	1197235	20.0	20.5	
158 Benzo[g,h,i]perylene	276	19.912	19.912	0.000	97	1184514	20.0	20.2	
S 203 Methyl Phenols,Total	108				0		40.0	40.3	
S 202 Total Cresols	108				0		40.0	40.3	

Reagents:

SVTAPSTD20i_00013 Amount Added: 1.00 Units: mL

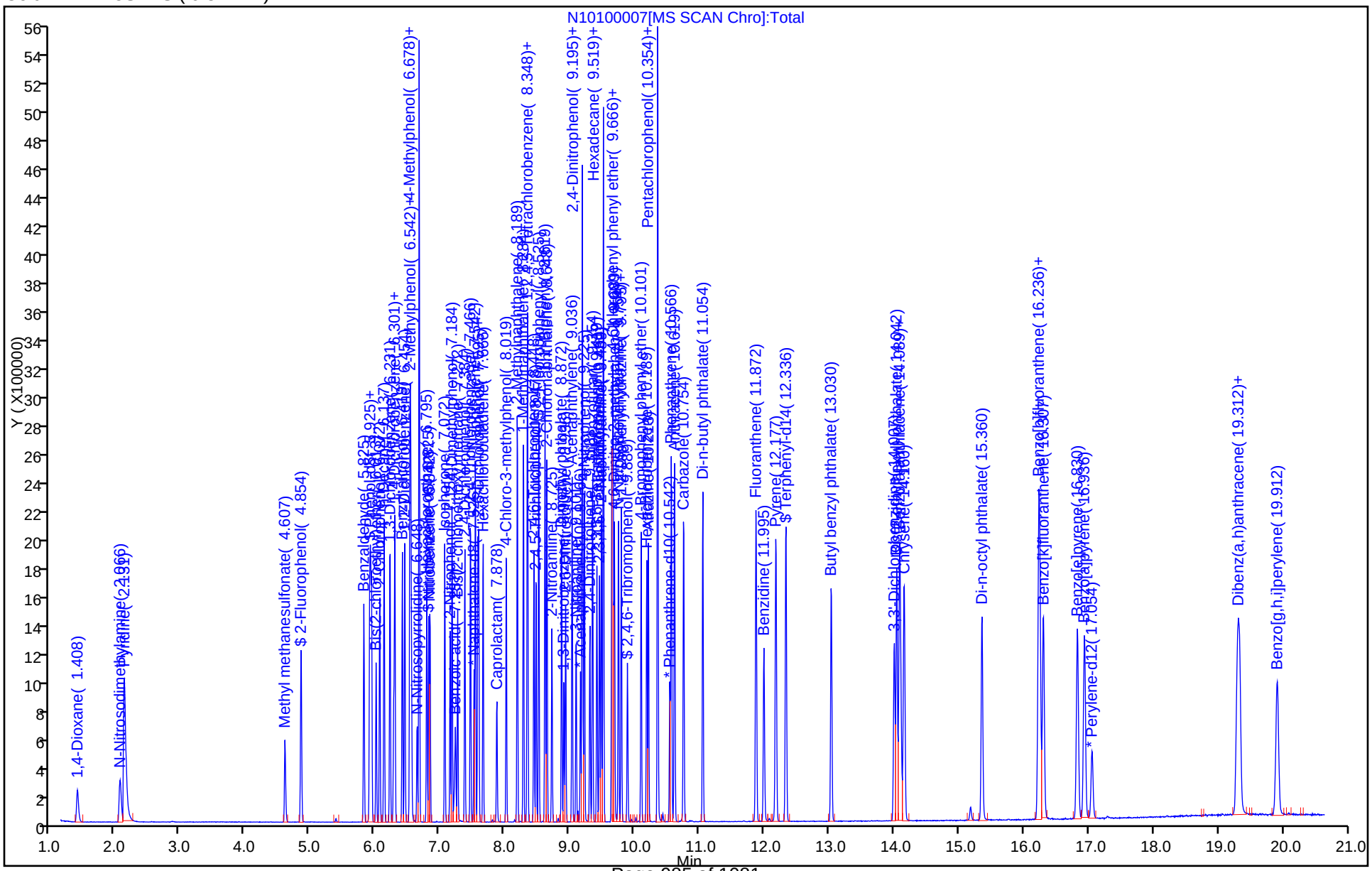
Report Date: 10-Oct-2017 08:34:39 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100007.D

Injection Date:	10-Oct-2017 06:23:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	IC			Worklist Smp#:	7
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100008.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Oct-2017 06:49:30 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018792-008
Operator ID: 03200 Instrument ID: CH733
Sublist: chrom-BNA_CH733*sub2

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 10-Oct-2017 08:34:41 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: piccolinov Date: 10-Oct-2017 07:16:36

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	6.289	6.289	0.000	97	119214	8.00	8.00	
* 2 Naphthalene-d8	136	7.531	7.525	0.006	99	434514	8.00	8.00	
* 3 Acenaphthene-d10	164	9.172	9.166	0.006	93	214597	8.00	8.00	
* 4 Phenanthrene-d10	188	10.548	10.548	0.000	97	398898	8.00	8.00	
* 5 Chrysene-d12	240	14.118	14.106	0.012	98	432330	8.00	8.00	
* 6 Perylene-d12	264	17.065	17.053	0.012	98	384987	8.00	8.00	
$ 7 2-Fluorophenol	112	4.860	4.860	0.000	93	818568	40.0	42.6	
$ 8 Phenol-d5	99	5.919	5.919	0.000	95	969350	40.0	42.1	
$ 9 Nitrobenzene-d5	82	6.831	6.830	0.001	90	815690	40.0	41.2	
$ 10 2-Fluorobiphenyl	172	8.525	8.524	0.001	100	1695651	40.0	39.6	
$ 11 2,4,6-Tribromophenol	330	9.895	9.895	0.000	95	256561	40.0	43.9	
$ 12 Terphenyl-d14	244	12.342	12.336	0.006	99	1994952	40.0	41.0	
13 1,4-Dioxane	88	1.402	1.401	0.001	96	342949	40.0	41.4	
14 N-Nitrosodimethylamine	74	2.060	2.066	-0.006	88	497777	40.0	43.2	
15 Pyridine	79	2.125	2.143	-0.018	95	1800391	80.0	83.8	
19 Methyl methanesulfonate	80	4.607	4.613	-0.006	90	507116	40.0	41.6	
22 Benzaldehyde	77	5.825	5.825	0.000	93	571895	40.0	43.0	
24 Phenol	94	5.931	5.931	0.000	97	1063118	40.0	42.1	
25 Aniline	93	5.948	5.948	0.000	79	1226948	40.0	41.6	
26 Bis(2-chloroethyl)ether	93	6.019	6.019	0.000	98	740899	40.0	40.7	
27 2-Chlorophenol	128	6.072	6.072	0.000	96	842709	40.0	41.3	
28 n-Decane	43	6.137	6.136	0.001	87	784175	40.0	41.7	
29 1,3-Dichlorobenzene	146	6.231	6.231	0.000	97	969069	40.0	40.8	
30 1,4-Dichlorobenzene	146	6.307	6.307	0.000	93	968086	40.0	40.9	
31 Benzyl alcohol	108	6.425	6.419	0.006	91	500792	40.0	42.5	
32 1,2-Dichlorobenzene	146	6.460	6.460	0.000	96	903650	40.0	41.0	
33 2-Methylphenol	108	6.537	6.536	0.000	96	702465	40.0	41.1	
34 Indene	116	6.548	6.548	0.000	92	1377231	40.0	41.0	
35 2,2'-oxybis[1-chloropropan	45	6.560	6.560	0.000	88	843554	40.0	39.9	
37 N-Nitrosopyrrolidine	100	6.654	6.648	0.006	84	323710	40.0	43.3	
38 N-Nitrosodi-n-propylamine	70	6.684	6.678	0.006	70	546443	40.0	41.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 4-Methylphenol	108	6.684	6.678	0.006	67	752633	40.0	42.0	
39 Acetophenone	105	6.684	6.678	0.006	82	1074551	40.0	40.7	
41 Hexachloroethane	117	6.795	6.795	0.000	93	357103	40.0	40.5	
42 Nitrobenzene	77	6.848	6.848	0.000	89	796015	40.0	40.5	
44 Isophorone	82	7.078	7.078	0.000	98	1362227	40.0	41.1	
46 2-Nitrophenol	139	7.160	7.160	0.000	97	433634	40.0	42.6	
47 2,4-Dimethylphenol	107	7.189	7.189	0.000	97	791030	40.0	40.7	
48 Benzoic acid	122	7.260	7.230	0.030	89	395039	40.0	37.4	
49 Bis(2-chloroethoxy)methane	93	7.278	7.272	0.006	99	809142	40.0	39.9	
51 2,4-Dichlorophenol	162	7.384	7.383	0.001	95	671372	40.0	41.5	
52 1,2,4-Trichlorobenzene	180	7.472	7.472	0.000	94	757482	40.0	38.8	
53 Naphthalene	128	7.548	7.548	0.000	97	2253138	40.0	39.4	
55 4-Chloroaniline	127	7.589	7.583	0.006	96	946162	40.0	40.5	
56 2,6-Dichlorophenol	162	7.601	7.601	0.000	98	643022	40.0	40.1	
57 Hexachlorobutadiene	225	7.666	7.666	0.000	96	452037	40.0	38.7	
61 Caprolactam	113	7.889	7.872	0.017	80	216164	40.0	43.8	
63 4-Chloro-3-methylphenol	107	8.025	8.025	0.000	96	663592	40.0	41.7	
65 2-Methylnaphthalene	142	8.195	8.195	0.000	93	1582092	40.0	40.3	
66 1-Methylnaphthalene	142	8.289	8.289	0.000	93	1476838	40.0	39.9	
67 Hexachlorocyclopentadiene	237	8.348	8.348	0.000	95	576301	40.0	43.4	
68 1,2,4,5-Tetrachlorobenzene	216	8.354	8.354	0.000	97	780628	40.0	39.1	
69 2,4,6-Trichlorophenol	196	8.454	8.448	0.006	92	499769	40.0	42.3	
70 2,4,5-Trichlorophenol	196	8.489	8.483	0.006	95	521266	40.0	42.1	
71 1,1'-Biphenyl	154	8.625	8.624	0.001	94	1827861	40.0	39.8	
73 2-Chloronaphthalene	162	8.654	8.648	0.006	96	1408392	40.0	40.3	
75 2-Nitroaniline	65	8.730	8.730	0.000	83	417144	40.0	43.0	
77 Dimethyl phthalate	163	8.878	8.877	0.001	98	1605633	40.0	41.2	
78 1,3-Dinitrobenzene	168	8.913	8.913	0.000	87	270286	40.0	40.3	
79 2,6-Dinitrotoluene	165	8.942	8.942	0.000	95	377495	40.0	42.6	
80 Acenaphthylene	152	9.042	9.042	0.000	98	2037487	40.0	41.2	
81 3-Nitroaniline	138	9.107	9.101	0.006	94	386705	40.0	42.2	
83 Acenaphthene	153	9.201	9.195	0.006	90	1414969	40.0	40.1	
82 2,4-Dinitrophenol	184	9.201	9.195	0.006	83	573637	80.0	78.4	
84 4-Nitrophenol	109	9.230	9.224	0.006	95	526375	80.0	84.3	
87 2,4-Dinitrotoluene	165	9.319	9.313	0.006	93	491943	40.0	42.4	
88 Dibenzofuran	168	9.360	9.354	0.006	96	1964811	40.0	39.7	
90 2,3,5,6-Tetrachlorophenol	232	9.425	9.419	0.006	93	468092	40.0	43.1	
91 2,3,4,6-Tetrachlorophenol	232	9.466	9.460	0.006	72	462355	40.0	41.0	
92 2-Naphthylamine	143	9.495	9.489	0.006	97	1429605	40.0	41.4	
93 Diethyl phthalate	149	9.525	9.519	0.006	98	1572519	40.0	40.9	
94 Hexadecane	57	9.525	9.524	0.001	98	857862	40.0	40.5	
96 4-Chlorophenyl phenyl ethe	204	9.654	9.654	0.000	91	828223	40.0	40.2	
97 4-Nitroaniline	138	9.666	9.660	0.006	85	411842	40.0	42.3	
98 Fluorene	166	9.677	9.671	0.006	95	1592254	40.0	40.5	
99 4,6-Dinitro-2-methylphenol	198	9.695	9.695	0.000	87	630612	80.0	81.4	
101 N-Nitrosodiphenylamine	169	9.760	9.754	0.006	62	1182794	40.0	41.1	
102 Azobenzene	77	9.801	9.795	0.006	97	1435435	40.0	40.9	
103 1,2-Diphenylhydrazine	77	9.801	9.795	0.006	96	1435435	40.0	40.9	
108 4-Bromophenyl phenyl ether	248	10.107	10.101	0.006	65	512781	40.0	41.0	
109 Hexachlorobenzene	284	10.195	10.189	0.006	96	531300	40.0	40.5	
111 Atrazine	200	10.219	10.213	0.006	94	460830	40.0	41.5	
115 Pentachlorophenol	266	10.360	10.360	0.000	93	756762	80.0	81.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 n-Octadecane	57	10.360	10.360	0.000	95	905683	40.0	43.2	
118 Phenanthrene	178	10.572	10.566	0.006	96	2308459	40.0	40.5	
119 Anthracene	178	10.624	10.618	0.006	96	2363779	40.0	40.6	
121 Carbazole	167	10.766	10.760	0.006	96	2106492	40.0	42.0	
122 Di-n-butyl phthalate	149	11.060	11.054	0.006	100	2569159	40.0	43.4	
128 Fluoranthene	202	11.883	11.877	0.006	96	2655093	40.0	42.5	
129 Benzidine	184	12.001	11.995	0.006	99	1354532	40.0	43.0	
131 Pyrene	202	12.189	12.177	0.012	99	2670780	40.0	41.3	
137 Butyl benzyl phthalate	149	13.042	13.036	0.006	98	1156541	40.0	44.9	
141 3,3'-Dichlorobenzidine	252	14.018	14.006	0.012	73	1050584	40.0	44.0	
142 Bis(2-ethylhexyl) phthalat	149	14.054	14.048	0.006	95	1595878	40.0	44.4	
143 Benzo[a]anthracene	228	14.101	14.089	0.012	96	2652324	40.0	40.8	
144 Chrysene	228	14.165	14.159	0.006	96	2494934	40.0	40.1	
147 Di-n-octyl phthalate	149	15.365	15.359	0.006	100	2629602	40.0	41.2	
148 7,12-Dimethylbenz(a)anthra	256	16.248	16.230	0.018	92	1385619	40.0	43.0	
149 Benzo[b]fluoranthene	252	16.265	16.248	0.017	96	2831886	40.0	42.3	
150 Benzo[k]fluoranthene	252	16.318	16.306	0.012	98	2648908	40.0	41.2	
151 Benzo[e]pyrene	252	16.848	16.830	0.018	0	2427032	40.0	41.2	
152 Benzo[a]pyrene	252	16.953	16.942	0.011	74	2475747	40.0	42.2	
156 Indeno[1,2,3-cd]pyrene	276	19.318	19.300	0.018	98	2904066	40.0	42.8	
157 Dibenz(a,h)anthracene	278	19.347	19.324	0.023	86	2433013	40.0	43.2	
158 Benzo[g,h,i]perylene	276	19.936	19.912	0.024	97	2395166	40.0	42.4	
S 202 Total Cresols	108				0		80.0	83.1	
S 203 Methyl Phenols,Total	108				0		80.0	83.1	

Reagents:

SVTAPSTD40i_00013 Amount Added: 1.00 Units: mL

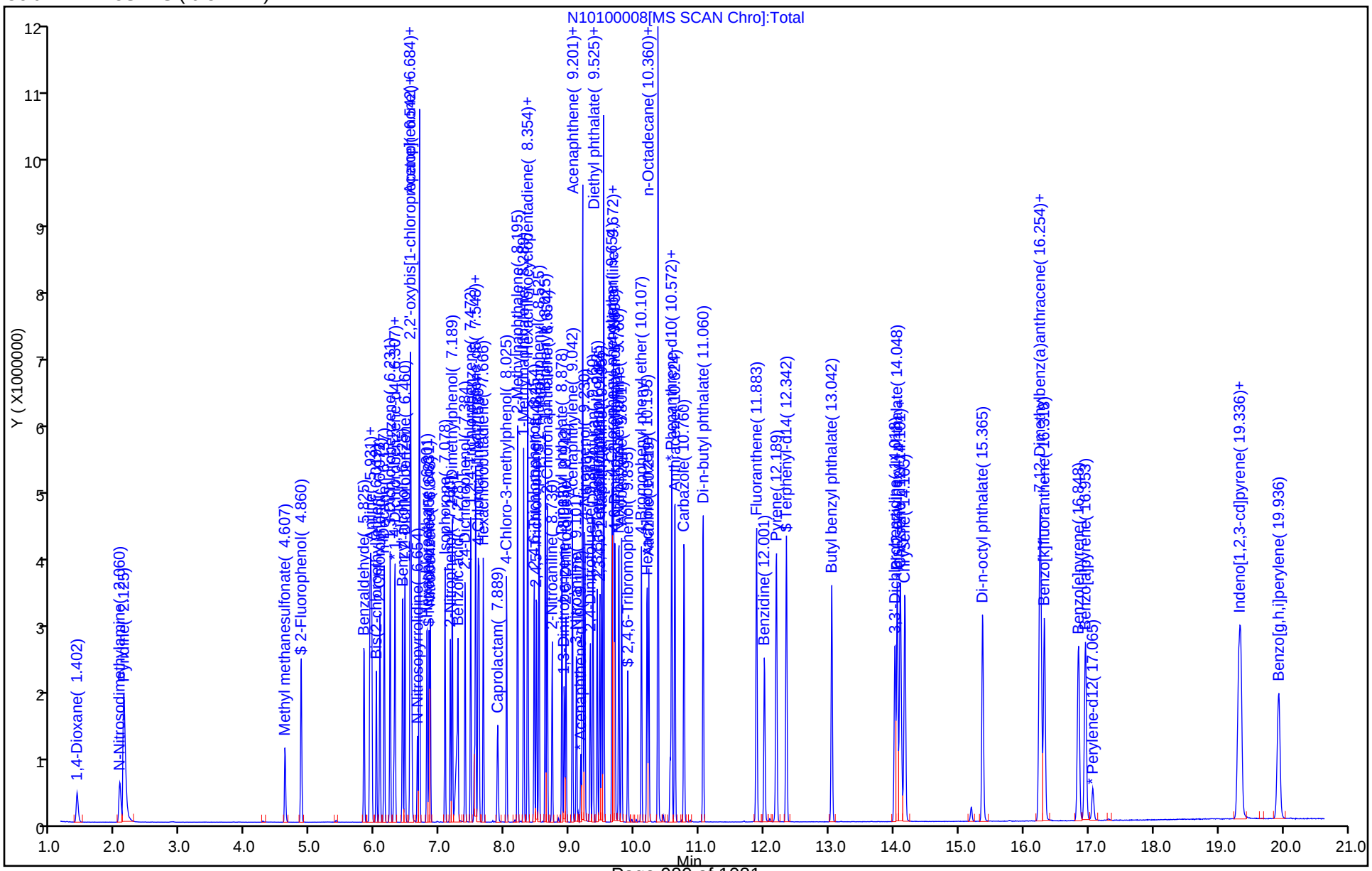
Report Date: 10-Oct-2017 08:34:42 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100008.D

Injection Date:	10-Oct-2017 06:49:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100009.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 10-Oct-2017 07:16:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018792-009
Operator ID: 03200 Instrument ID: CH733
Sublist: chrom-BNA_CH733*sub2

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 10-Oct-2017 08:34:44 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: piccolinov Date: 10-Oct-2017 07:38:20

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	6.284	6.289	-0.005	96	116513	8.00	8.00	
* 2 Naphthalene-d8	136	7.525	7.525	0.000	99	406792	8.00	8.00	
* 3 Acenaphthene-d10	164	9.172	9.166	0.006	93	202132	8.00	8.00	
* 4 Phenanthrene-d10	188	10.548	10.548	0.000	96	387863	8.00	8.00	
* 5 Chrysene-d12	240	14.118	14.106	0.012	98	424226	8.00	8.00	
* 6 Perylene-d12	264	17.071	17.053	0.018	99	372321	8.00	8.00	
$ 7 2-Fluorophenol	112	4.854	4.860	-0.006	93	1193513	60.0	63.5	
$ 8 Phenol-d5	99	5.919	5.919	0.000	96	1415107	60.0	62.9	
$ 9 Nitrobenzene-d5	82	6.831	6.830	0.001	90	1192520	60.0	64.4	
$ 10 2-Fluorobiphenyl	172	8.525	8.524	0.001	100	2495991	60.0	61.8	
$ 11 2,4,6-Tribromophenol	330	9.895	9.895	0.000	95	376116	60.0	66.2	
$ 12 Terphenyl-d14	244	12.342	12.336	0.006	100	2919186	60.0	61.1	
13 1,4-Dioxane	88	1.402	1.401	0.001	94	498441	60.0	61.5	
14 N-Nitrosodimethylamine	74	2.054	2.066	-0.012	87	707420	60.0	62.8	
15 Pyridine	79	2.113	2.143	-0.030	95	2626219	120.0	125.0	
19 Methyl methanesulfonate	80	4.607	4.613	-0.006	89	739978	60.0	62.2	
22 Benzaldehyde	77	5.825	5.825	0.000	93	755306	60.0	58.1	
24 Phenol	94	5.931	5.931	0.000	93	1555054	60.0	62.9	
25 Aniline	93	5.942	5.948	-0.006	96	1791493	60.0	62.2	
26 Bis(2-chloroethyl)ether	93	6.013	6.019	-0.006	98	1081967	60.0	60.9	
27 2-Chlorophenol	128	6.072	6.072	0.000	96	1243882	60.0	62.3	
28 n-Decane	43	6.136	6.136	0.000	86	1133719	60.0	61.7	
29 1,3-Dichlorobenzene	146	6.231	6.231	0.000	97	1403181	60.0	60.5	
30 1,4-Dichlorobenzene	146	6.301	6.307	-0.006	93	1400326	60.0	60.5	
31 Benzyl alcohol	108	6.419	6.419	0.000	91	730828	60.0	63.5	
32 1,2-Dichlorobenzene	146	6.454	6.460	-0.006	96	1298436	60.0	60.2	
33 2-Methylphenol	108	6.536	6.536	0.000	98	1046578	60.0	62.7	
34 Indene	116	6.542	6.548	-0.006	90	2033600	60.0	61.9	
35 2,2'-oxybis[1-chloropropan	45	6.560	6.560	0.000	87	1219806	60.0	59.1	
37 N-Nitrosopyrrolidine	100	6.654	6.648	0.006	84	464093	60.0	63.5	
40 4-Methylphenol	108	6.684	6.678	0.006	68	1085582	60.0	62.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 N-Nitrosodi-n-propylamine	70	6.684	6.678	0.006	71	799564	60.0	62.2	
39 Acetophenone	105	6.684	6.678	0.006	82	1586493	60.0	61.4	
41 Hexachloroethane	117	6.795	6.795	0.000	93	513963	60.0	59.7	
42 Nitrobenzene	77	6.848	6.848	0.000	89	1146082	60.0	62.2	
44 Isophorone	82	7.078	7.078	0.000	98	2014752	60.0	64.9	
46 2-Nitrophenol	139	7.160	7.160	0.000	96	647322	60.0	67.9	
47 2,4-Dimethylphenol	107	7.189	7.189	0.000	97	1152272	60.0	63.4	
48 Benzoic acid	122	7.272	7.230	0.042	90	617171	60.0	61.8	
49 Bis(2-chloroethoxy)methane	93	7.272	7.272	0.000	100	1184217	60.0	62.4	
51 2,4-Dichlorophenol	162	7.383	7.383	0.000	95	989568	60.0	65.3	
52 1,2,4-Trichlorobenzene	180	7.472	7.472	0.000	94	1116260	60.0	61.1	
53 Naphthalene	128	7.548	7.548	0.000	97	3261639	60.0	60.9	
55 4-Chloroaniline	127	7.583	7.583	0.000	96	1382145	60.0	63.3	
56 2,6-Dichlorophenol	162	7.601	7.601	0.000	97	949248	60.0	63.2	
57 Hexachlorobutadiene	225	7.666	7.666	0.000	95	659140	60.0	60.3	
61 Caprolactam	113	7.895	7.872	0.023	80	318571	60.0	68.9	
63 4-Chloro-3-methylphenol	107	8.025	8.025	0.000	96	966321	60.0	64.8	
65 2-Methylnaphthalene	142	8.195	8.195	0.000	92	2300666	60.0	62.5	
66 1-Methylnaphthalene	142	8.289	8.289	0.000	93	2153484	60.0	62.2	
67 Hexachlorocyclopentadiene	237	8.348	8.348	0.000	96	828585	60.0	66.2	
68 1,2,4,5-Tetrachlorobenzene	216	8.354	8.354	0.000	97	1133821	60.0	60.4	
69 2,4,6-Trichlorophenol	196	8.454	8.448	0.006	92	722868	60.0	65.0	
70 2,4,5-Trichlorophenol	196	8.489	8.483	0.006	94	767236	60.0	65.7	
71 1,1'-Biphenyl	154	8.625	8.624	0.001	94	2696778	60.0	62.4	
73 2-Chloronaphthalene	162	8.654	8.648	0.006	96	2063149	60.0	62.7	
75 2-Nitroaniline	65	8.730	8.730	0.000	83	606069	60.0	66.3	
77 Dimethyl phthalate	163	8.883	8.877	0.006	99	2374409	60.0	64.7	
78 1,3-Dinitrobenzene	168	8.919	8.913	0.006	88	413048	60.0	64.8	
79 2,6-Dinitrotoluene	165	8.942	8.942	0.000	95	548409	60.0	65.7	
80 Acenaphthylene	152	9.042	9.042	0.000	98	2987493	60.0	64.1	
81 3-Nitroaniline	138	9.107	9.101	0.006	94	569536	60.0	66.0	
82 2,4-Dinitrophenol	184	9.201	9.195	0.006	73	868122	120.0	124.5	
83 Acenaphthene	153	9.201	9.195	0.006	86	2075016	60.0	62.5	
84 4-Nitrophenol	109	9.236	9.224	0.012	95	768735	120.0	130.6	
87 2,4-Dinitrotoluene	165	9.319	9.313	0.006	94	739779	60.0	67.6	
88 Dibenzofuran	168	9.360	9.354	0.006	96	2905421	60.0	62.4	
90 2,3,5,6-Tetrachlorophenol	232	9.425	9.419	0.005	92	702532	60.0	68.7	
91 2,3,4,6-Tetrachlorophenol	232	9.466	9.460	0.006	72	688073	60.0	64.7	
92 2-Naphthylamine	143	9.495	9.489	0.006	97	2085974	60.0	64.1	
93 Diethyl phthalate	149	9.525	9.519	0.005	98	2325423	60.0	64.3	
94 Hexadecane	57	9.525	9.524	0.000	97	1276948	60.0	64.5	
96 4-Chlorophenyl phenyl ethe	204	9.654	9.654	0.000	91	1229579	60.0	63.4	
97 4-Nitroaniline	138	9.672	9.660	0.012	81	614208	60.0	67.0	
98 Fluorene	166	9.677	9.671	0.006	95	2324039	60.0	62.7	
99 4,6-Dinitro-2-methylphenol	198	9.701	9.695	0.006	89	943905	120.0	124.2	
101 N-Nitrosodiphenylamine	169	9.760	9.754	0.006	62	1716539	60.0	61.4	
103 1,2-Diphenylhydrazine	77	9.801	9.795	0.006	97	2108860	60.0	61.8	
102 Azobenzene	77	9.801	9.795	0.006	97	2108860	60.0	61.8	
108 4-Bromophenyl phenyl ether	248	10.107	10.101	0.006	65	748109	60.0	61.5	
109 Hexachlorobenzene	284	10.195	10.189	0.006	96	771408	60.0	60.4	
111 Atrazine	200	10.224	10.213	0.011	95	651011	60.0	60.3	
114 n-Octadecane	57	10.366	10.360	0.006	96	1354028	60.0	66.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 Pentachlorophenol	266	10.360	10.360	0.000	93	1146034	120.0	126.2	
118 Phenanthrene	178	10.571	10.566	0.005	97	3383753	60.0	61.0	
119 Anthracene	178	10.624	10.618	0.006	96	3545561	60.0	62.6	
121 Carbazole	167	10.766	10.760	0.006	96	3081052	60.0	63.1	
122 Di-n-butyl phthalate	149	11.060	11.054	0.006	100	3782314	60.0	65.8	
128 Fluoranthene	202	11.883	11.877	0.006	96	3942915	60.0	65.0	
129 Benzidine	184	12.007	11.995	0.012	99	1869154	60.0	60.1	
131 Pyrene	202	12.189	12.177	0.012	99	3906180	60.0	61.5	
137 Butyl benzyl phthalate	149	13.042	13.036	0.006	98	1706526	60.0	67.5	
141 3,3'-Dichlorobenzidine	252	14.018	14.006	0.012	73	1578988	60.0	67.4	
142 Bis(2-ethylhexyl) phthalat	149	14.054	14.048	0.006	95	2379823	60.0	67.4	
143 Benzo[a]anthracene	228	14.101	14.089	0.012	96	3890754	60.0	61.0	
144 Chrysene	228	14.171	14.159	0.012	96	3624559	60.0	59.4	
147 Di-n-octyl phthalate	149	15.371	15.359	0.012	100	3981538	60.0	64.0	
148 7,12-Dimethylbenz(a)anthra	256	16.253	16.230	0.023	93	2068322	60.0	66.4	
149 Benzo[b]fluoranthene	252	16.271	16.248	0.023	96	4172693	60.0	64.5	
150 Benzo[k]fluoranthene	252	16.330	16.306	0.024	98	3901422	60.0	62.8	
151 Benzo[e]pyrene	252	16.853	16.830	0.023	0	3600539	60.0	63.2	
152 Benzo[a]pyrene	252	16.959	16.942	0.017	75	3683690	60.0	64.9	
156 Indeno[1,2,3-cd]pyrene	276	19.330	19.300	0.030	98	4382236	60.0	66.9	
157 Dibenz(a,h)anthracene	278	19.359	19.324	0.035	89	3638918	60.0	66.8	
158 Benzo[g,h,i]perylene	276	19.941	19.912	0.029	98	3596847	60.0	65.8	
S 203 Methyl Phenols,Total	108				0		120.0	124.7	
S 202 Total Cresols	108				0		120.0	124.7	

Reagents:

SVTAPSTD60i_00013 Amount Added: 1.00 Units: mL

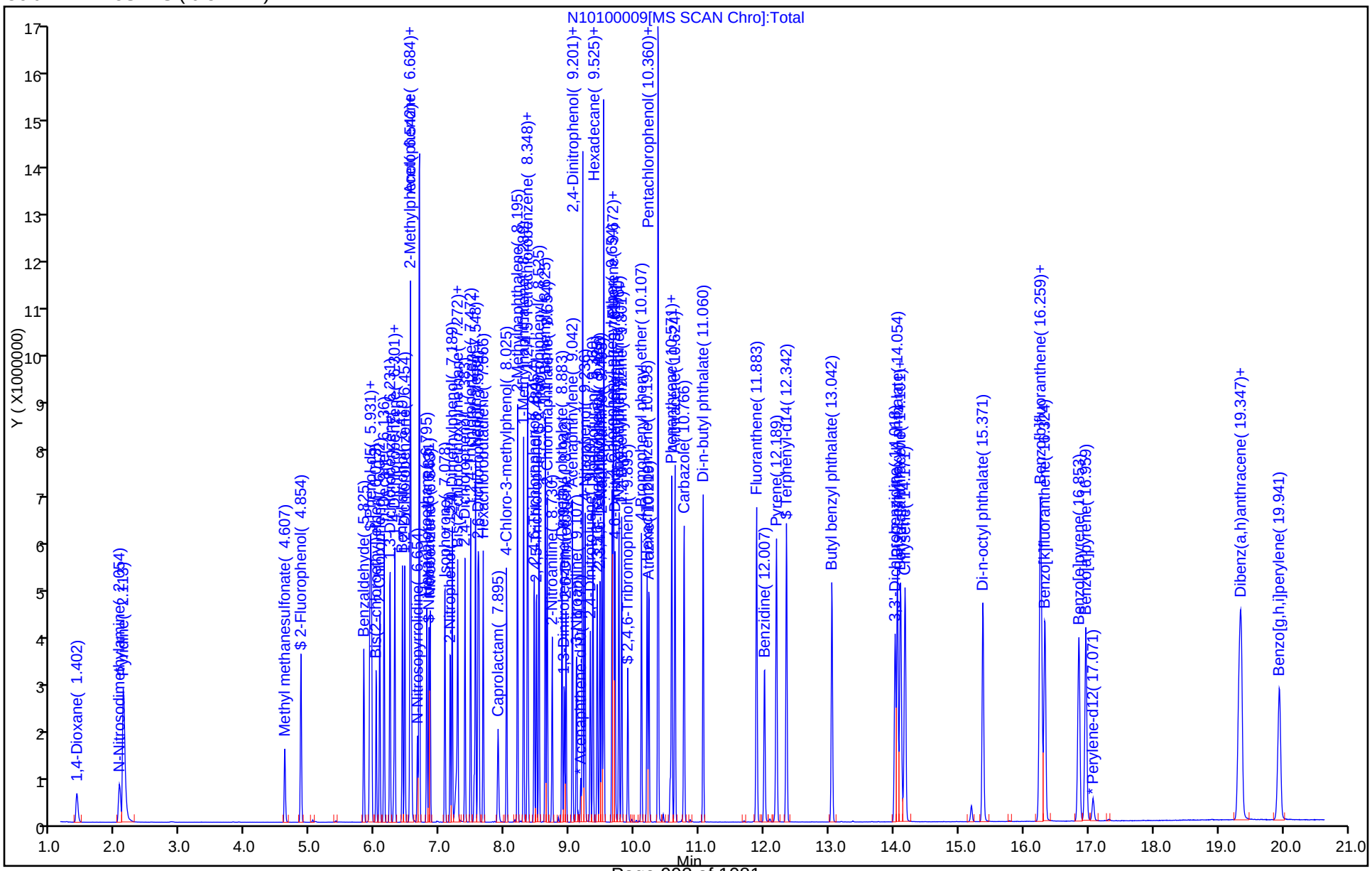
Report Date: 10-Oct-2017 08:34:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100009.D

Injection Date:	10-Oct-2017 07:16:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 10-Oct-2017 07:42:30 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018792-010
Operator ID: 03200 Instrument ID: CH733
Sublist: chrom-BNA_CH733*sub2

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 10-Oct-2017 08:34:47 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: piccolinov Date: 10-Oct-2017 08:06:35

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	6.290	6.289	0.001	96	117288	8.00	8.00	
* 2 Naphthalene-d8	136	7.531	7.525	0.006	99	407294	8.00	8.00	
* 3 Acenaphthene-d10	164	9.172	9.166	0.006	94	203493	8.00	8.00	
* 4 Phenanthrene-d10	188	10.548	10.548	0.000	96	367844	8.00	8.00	
* 5 Chrysene-d12	240	14.124	14.106	0.018	98	406271	8.00	8.00	
* 6 Perylene-d12	264	17.077	17.053	0.024	99	372132	8.00	8.00	
$ 7 2-Fluorophenol	112	4.854	4.860	-0.006	94	1564562	80.0	82.7	
$ 8 Phenol-d5	99	5.919	5.919	0.000	95	1858547	80.0	82.1	
$ 9 Nitrobenzene-d5	82	6.831	6.830	0.001	91	1548725	80.0	83.5	
$ 10 2-Fluorobiphenyl	172	8.531	8.524	0.007	100	3263007	80.0	80.3	
$ 11 2,4,6-Tribromophenol	330	9.901	9.895	0.006	95	499320	80.0	92.6	
$ 12 Terphenyl-d14	244	12.348	12.336	0.012	99	3815147	80.0	83.3	
13 1,4-Dioxane	88	1.402	1.401	0.001	94	655814	80.0	80.4	
14 N-Nitrosodimethylamine	74	2.060	2.066	-0.006	87	951972	80.0	84.0	
15 Pyridine	79	2.119	2.143	-0.024	94	3406121	160.0	161.1	
19 Methyl methanesulfonate	80	4.607	4.613	-0.006	89	968318	80.0	80.8	
22 Benzaldehyde	77	5.825	5.825	0.000	93	919171	80.0	70.2	
24 Phenol	94	5.931	5.931	0.000	99	2054845	80.0	82.6	
25 Aniline	93	5.948	5.948	0.000	98	2348394	80.0	81.0	
26 Bis(2-chloroethyl)ether	93	6.019	6.019	0.000	98	1408225	80.0	78.7	
27 2-Chlorophenol	128	6.072	6.072	0.000	96	1615204	80.0	80.4	
28 n-Decane	43	6.137	6.136	0.001	87	1478830	80.0	80.0	
29 1,3-Dichlorobenzene	146	6.231	6.231	0.000	97	1841671	80.0	78.9	
30 1,4-Dichlorobenzene	146	6.301	6.307	-0.006	94	1852025	80.0	79.5	
31 Benzyl alcohol	108	6.425	6.419	0.006	90	963956	80.0	83.2	
32 1,2-Dichlorobenzene	146	6.460	6.460	0.000	96	1725736	80.0	79.5	
33 2-Methylphenol	108	6.542	6.536	0.006	96	1363875	80.0	81.2	
34 Indene	116	6.548	6.548	0.000	90	2713189	80.0	82.1	
35 2,2'-oxybis[1-chloropropan	45	6.560	6.560	0.000	88	1609551	80.0	77.5	
37 N-Nitrosopyrrolidine	100	6.654	6.648	0.006	83	615155	80.0	83.6	
38 N-Nitrosodi-n-propylamine	70	6.684	6.678	0.006	69	1056323	80.0	81.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 4-Methylphenol	108	6.684	6.678	0.006	70	1455000	80.0	82.6	
39 Acetophenone	105	6.684	6.678	0.006	81	2098679	80.0	80.7	
41 Hexachloroethane	117	6.795	6.795	0.000	93	672718	80.0	77.6	
42 Nitrobenzene	77	6.848	6.848	0.000	89	1494733	80.0	81.0	
44 Isophorone	82	7.078	7.078	0.000	98	2592349	80.0	83.4	
46 2-Nitrophenol	139	7.160	7.160	0.000	98	827898	80.0	86.8	
47 2,4-Dimethylphenol	107	7.189	7.189	0.000	96	1501811	80.0	82.5	
48 Benzoic acid	122	7.278	7.230	0.048	91	843933	80.0	84.2	
49 Bis(2-chloroethoxy)methane	93	7.278	7.272	0.006	100	1567174	80.0	82.5	
51 2,4-Dichlorophenol	162	7.384	7.383	0.001	95	1272603	80.0	83.9	
52 1,2,4-Trichlorobenzene	180	7.472	7.472	0.000	94	1466422	80.0	80.2	
53 Naphthalene	128	7.548	7.548	0.000	97	4309332	80.0	80.3	
55 4-Chloroaniline	127	7.589	7.583	0.006	96	1806799	80.0	82.6	
56 2,6-Dichlorophenol	162	7.601	7.601	0.000	97	1246992	80.0	83.0	
57 Hexachlorobutadiene	225	7.666	7.666	0.000	96	861862	80.0	78.8	
61 Caprolactam	113	7.901	7.872	0.029	81	423931	80.0	91.6	
63 4-Chloro-3-methylphenol	107	8.031	8.025	0.006	96	1269779	80.0	85.0	
65 2-Methylnaphthalene	142	8.195	8.195	0.000	93	3040309	80.0	82.5	
66 1-Methylnaphthalene	142	8.289	8.289	0.000	93	2841727	80.0	82.0	
67 Hexachlorocyclopentadiene	237	8.348	8.348	0.000	96	1122249	80.0	89.1	
68 1,2,4,5-Tetrachlorobenzene	216	8.354	8.354	0.000	97	1489049	80.0	78.7	
69 2,4,6-Trichlorophenol	196	8.454	8.448	0.006	92	942024	80.0	84.1	
70 2,4,5-Trichlorophenol	196	8.489	8.483	0.006	94	993815	80.0	84.6	
71 1,1'-Biphenyl	154	8.625	8.624	0.001	94	3511722	80.0	80.7	
73 2-Chloronaphthalene	162	8.654	8.648	0.006	96	2710058	80.0	81.9	
75 2-Nitroaniline	65	8.731	8.730	0.001	83	791915	80.0	86.1	
77 Dimethyl phthalate	163	8.883	8.877	0.006	99	3062173	80.0	82.9	
78 1,3-Dinitrobenzene	168	8.919	8.913	0.006	87	528669	80.0	82.1	
79 2,6-Dinitrotoluene	165	8.942	8.942	0.000	95	710367	80.0	84.6	
80 Acenaphthylene	152	9.042	9.042	0.000	98	3929346	80.0	83.8	
81 3-Nitroaniline	138	9.107	9.101	0.006	93	744125	80.0	85.7	
83 Acenaphthene	153	9.201	9.195	0.006	85	2759506	80.0	82.5	
82 2,4-Dinitrophenol	184	9.201	9.195	0.006	73	1161122	160.0	164.6	
84 4-Nitrophenol	109	9.236	9.224	0.012	95	1004094	160.0	169.5	
87 2,4-Dinitrotoluene	165	9.319	9.313	0.006	94	945684	80.0	85.9	
88 Dibenzofuran	168	9.360	9.354	0.006	96	3766000	80.0	80.3	
90 2,3,5,6-Tetrachlorophenol	232	9.425	9.419	0.006	93	911425	80.0	88.5	
91 2,3,4,6-Tetrachlorophenol	232	9.466	9.460	0.006	72	911229	80.0	85.1	
92 2-Naphthylamine	143	9.495	9.489	0.006	97	2652865	80.0	81.0	
93 Diethyl phthalate	149	9.525	9.519	0.006	98	3043664	80.0	83.6	
94 Hexadecane	57	9.525	9.524	0.001	78	1699698	80.0	85.7	
96 4-Chlorophenyl phenyl ethe	204	9.654	9.654	0.000	92	1593705	80.0	81.6	
97 4-Nitroaniline	138	9.678	9.660	0.018	80	799424	80.0	86.7	
98 Fluorene	166	9.678	9.671	0.007	95	3096561	80.0	83.0	
99 4,6-Dinitro-2-methylphenol	198	9.701	9.695	0.006	89	1229748	160.0	169.9	
101 N-Nitrosodiphenylamine	169	9.760	9.754	0.006	62	2262678	80.0	85.3	
102 Azobenzene	77	9.801	9.795	0.006	98	2777665	80.0	85.8	
103 1,2-Diphenylhydrazine	77	9.801	9.795	0.006	97	2777665	80.0	85.8	
108 4-Bromophenyl phenyl ether	248	10.107	10.101	0.006	65	973397	80.0	84.4	
109 Hexachlorobenzene	284	10.195	10.189	0.006	96	999942	80.0	82.6	
111 Atrazine	200	10.225	10.213	0.012	95	822552	80.0	80.3	
115 Pentachlorophenol	266	10.366	10.360	0.006	93	1519746	160.0	176.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 n-Octadecane	57	10.366	10.360	0.006	96	1812104	80.0	87.9	
118 Phenanthrene	178	10.578	10.566	0.012	96	4392407	80.0	83.6	
119 Anthracene	178	10.625	10.618	0.007	96	4612076	80.0	85.9	
121 Carbazole	167	10.766	10.760	0.006	96	4003041	80.0	86.5	
122 Di-n-butyl phthalate	149	11.060	11.054	0.006	100	5013053	80.0	91.9	
128 Fluoranthene	202	11.883	11.877	0.006	96	5174231	80.0	89.9	
129 Benzidine	184	12.007	11.995	0.012	99	2262968	80.0	75.8	
131 Pyrene	202	12.189	12.177	0.012	99	5107910	80.0	84.0	
137 Butyl benzyl phthalate	149	13.048	13.036	0.012	98	2256614	80.0	93.3	
141 3,3'-Dichlorobenzidine	252	14.024	14.006	0.018	75	2087087	80.0	93.1	
142 Bis(2-ethylhexyl) phthalat	149	14.060	14.048	0.012	95	3144856	80.0	93.0	
143 Benzo[a]anthracene	228	14.107	14.089	0.018	96	5038504	80.0	82.5	
144 Chrysene	228	14.177	14.159	0.018	96	4782259	80.0	81.8	
147 Di-n-octyl phthalate	149	15.377	15.359	0.018	100	5312324	80.0	85.2	
148 7,12-Dimethylbenz(a)anthra	256	16.265	16.230	0.035	92	2763476	80.0	88.8	
149 Benzo[b]fluoranthene	252	16.283	16.248	0.035	97	5367386	80.0	83.0	
150 Benzo[k]fluoranthene	252	16.336	16.306	0.030	98	5297191	80.0	85.2	
151 Benzo[e]pyrene	252	16.859	16.830	0.029	0	4778444	80.0	83.9	
152 Benzo[a]pyrene	252	16.971	16.942	0.029	75	4847258	80.0	85.4	
156 Indeno[1,2,3-cd]pyrene	276	19.336	19.300	0.036	98	5776859	80.0	88.2	
157 Dibenz(a,h)anthracene	278	19.371	19.324	0.047	88	4806448	80.0	88.3	
158 Benzo[g,h,i]perylene	276	19.953	19.912	0.041	98	4748352	80.0	86.9	
S 202 Total Cresols	108				0		160.0	163.7	
S 203 Methyl Phenols,Total	108				0		160.0	163.7	

Reagents:

SVTAPSTD80i_00013 Amount Added: 1.00 Units: mL

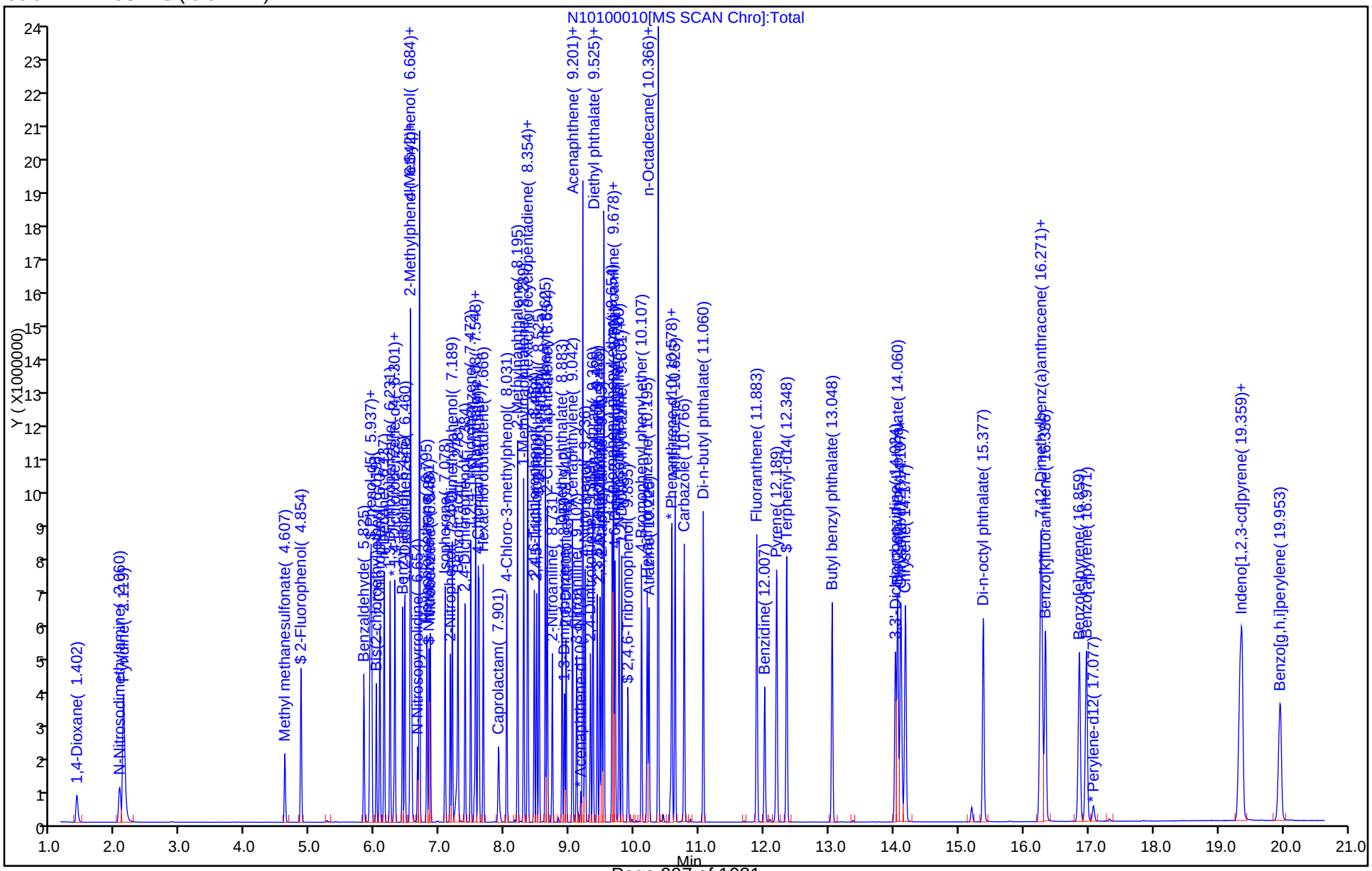
Report Date: 10-Oct-2017 08:34:48 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Injection Date:	10-Oct-2017 07:42:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	BNA_CH733	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.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-228094/3 Calibration Date: 11/06/2017 10:54

Instrument ID: CH733 Calib Start Date: 10/10/2017 04:37

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/10/2017 07:42

Lab File ID: N11060003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5561	0.5406	0.0100	4.86	5.00	-2.8	20.0
N-Nitrosodimethylamine	Ave	0.7732	0.7492	0.0100	4.84	5.00	-3.1	20.0
Pyridine	Ave	1.442	1.353	0.0100	9.38	10.0	-6.2	20.0
Methyl methanesulfonate	Ave	0.8175	0.8195	0.0100	5.01	5.00	0.3	20.0
Benzaldehyde	Ave	0.8927	0.8259	0.0100	4.63	5.00	-7.5	20.0
Phenol	Ave	1.696	1.617	0.8000	4.77	5.00	-4.7	20.0
Aniline	Ave	1.977	1.776	0.0100	4.49	5.00	-10.2	20.0
Bis(2-chloroethyl)ether	Ave	1.220	1.112	0.7000	4.56	5.00	-8.9	20.0
2-Chlorophenol	Ave	1.370	1.355	0.8000	4.95	5.00	-1.1	20.0
n-Decane	Ave	1.261	1.070		4.24	5.00	-15.1	20.0
1,3-Dichlorobenzene	Ave	1.593	1.617	0.0100	5.08	5.00	1.5	20.0
1,4-Dichlorobenzene	Ave	1.589	1.602	0.0100	5.04	5.00	0.8	20.0
Benzyl alcohol	Ave	0.7901	0.7553	0.0100	4.78	5.00	-4.4	20.0
1,2-Dichlorobenzene	Ave	1.480	1.521	0.0100	5.14	5.00	2.8	20.0
2-Methylphenol	Ave	1.146	1.120	0.7000	4.88	5.00	-2.3	20.0
Indene	Ave	2.255	2.190	0.0100	4.86	5.00	-2.9	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.417	1.233	0.0100	4.35	5.00	-13.0	20.0
N-Nitrosopyrrolidine	Ave	0.5020	0.4947	0.0100	4.93	5.00	-1.5	20.0
Acetophenone	Ave	1.774	1.732	0.0100	4.88	5.00	-2.4	20.0
Methylphenol, 3 & 4	Ave	1.202	1.123	0.6000	4.67	5.00	-6.6	20.0
N-Nitrosodi-n-propylamine	Ave	0.8827	0.7855	0.5000	4.45	5.00	-11.0	20.0
Hexachloroethane	Ave	0.5912	0.5987	0.3000	5.06	5.00	1.3	20.0
Nitrobenzene	Ave	0.3623	0.3545	0.2000	4.89	5.00	-2.1	20.0
Isophorone	Ave	0.6104	0.5758	0.4000	4.72	5.00	-5.7	20.0
2-Nitrophenol	Ave	0.1874	0.2032	0.1000	5.42	5.00	8.5	20.0
2,4-Dimethylphenol	Ave	0.3575	0.3510	0.2000	4.91	5.00	-1.8	20.0
Benzoic acid	Lin1		0.1927	0.0100	5.27	5.00	5.4	20.0
Bis(2-chloroethoxy)methane	Ave	0.3733	0.3396	0.3000	4.55	5.00	-9.0	20.0
2,4-Dichlorophenol	Ave	0.2981	0.3069	0.2000	5.15	5.00	2.9	20.0
1,2,4-Trichlorobenzene	Ave	0.3592	0.3811	0.0100	5.30	5.00	6.1	20.0
Naphthalene	Ave	1.053	1.024	0.7000	4.86	5.00	-2.8	20.0
4-Chloroaniline	Ave	0.4297	0.4128	0.0100	4.80	5.00	-3.9	20.0
2,6-Dichlorophenol	Ave	0.2953	0.3010	0.0100	5.10	5.00	1.9	20.0
Hexachlorobutadiene	Ave	0.2149	0.2403	0.0100	5.59	5.00	11.8	20.0
Caprolactam	Ave	0.0909	0.0821	0.0100	4.52	5.00	-9.6	20.0
4-Chloro-3-methylphenol	Ave	0.2933	0.2675	0.2000	4.56	5.00	-8.8	20.0
2-Methylnaphthalene	Ave	0.7235	0.7047	0.4000	4.87	5.00	-2.6	20.0
1-Methylnaphthalene	Ave	0.6810	0.6649	0.0100	4.88	5.00	-2.4	20.0
Hexachlorocyclopentadiene	Ave	0.4951	0.5743	0.0500	5.80	5.00	16.0	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7434	0.8218	0.0100	5.53	5.00	10.5	20.0
2,4,6-Trichlorophenol	Ave	0.4402	0.4704	0.2000	5.34	5.00	6.8	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-228094/3 Calibration Date: 11/06/2017 10:54

Instrument ID: CH733 Calib Start Date: 10/10/2017 04:37

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/10/2017 07:42

Lab File ID: N11060003.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	0.4619	0.4924	0.2000	5.33	5.00	6.6	20.0
1,1'-Biphenyl	Ave	1.711	1.692	0.0100	4.94	5.00	-1.1	20.0
2-Chloronaphthalene	Ave	1.301	1.347	0.8000	5.17	5.00	3.5	20.0
2-Nitroaniline	Ave	0.3618	0.3681	0.0100	5.09	5.00	1.7	20.0
Dimethyl phthalate	Ave	1.453	1.483	0.0100	5.10	5.00	2.1	20.0
1,3-Dinitrobenzene	Lin2		0.2352	0.0100	5.05	5.00	1.0	20.0
2,6-Dinitrotoluene	Ave	0.3302	0.3344	0.2000	5.06	5.00	1.3	20.0
Acenaphthylene	Ave	1.844	1.876	0.9000	5.09	5.00	1.7	20.0
3-Nitroaniline	Ave	0.3413	0.3281	0.0100	4.81	5.00	-3.9	20.0
2,4-Dinitrophenol	Lin1		0.2475	0.0100	10.0	10.0	0.2	20.0
Acenaphthene	Ave	1.315	1.267	0.9000	4.82	5.00	-3.6	20.0
4-Nitrophenol	Ave	0.2329	0.2450	0.0100	10.5	10.0	5.2	20.0
2,4-Dinitrotoluene	Ave	0.4330	0.4532	0.2000	5.23	5.00	4.7	20.0
Dibenzofuran	Ave	1.843	1.843	0.8000	5.00	5.00	0.0	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.4049	0.4444	0.0100	5.49	5.00	9.8	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.4208	0.4417	0.0100	5.25	5.00	5.0	20.0
2-Naphthylamine	Ave	1.287	1.240	0.0100	4.82	5.00	-3.6	20.0
Diethyl phthalate	Ave	1.432	1.402	0.0100	4.90	5.00	-2.1	20.0
Hexadecane	Ave	0.3895	0.3149		4.04	5.00	-19.2	20.0
4-Chlorophenyl phenyl ether	Ave	0.7678	0.7966	0.4000	5.19	5.00	3.7	20.0
4-Nitroaniline	Ave	0.3626	0.3284	0.0100	4.53	5.00	-9.4	20.0
Fluorene	Ave	1.466	1.463	0.9000	4.99	5.00	-0.2	20.0
4,6-Dinitro-2-methylphenol	Lin2		0.1439	0.0100	10.0	10.0	0.2	20.0
N-Nitrosodiphenylamine	Ave	0.5766	0.5941	0.0100	5.15	5.00	3.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.7043	0.6958	0.0100	4.94	5.00	-1.2	20.0
4-Bromophenyl phenyl ether	Ave	0.2508	0.2832	0.1000	5.65	5.00	12.9	20.0
Hexachlorobenzene	Ave	0.2634	0.2954	0.1000	5.61	5.00	12.2	20.0
Atrazine	Ave	0.2226	0.2464	0.0100	5.53	5.00	10.7	20.0
n-Octadecane	Ave	1.406	1.075		3.82	5.00	-23.5*	20.0
Pentachlorophenol	Ave	0.1873	0.2021	0.0500	10.8	10.0	7.9	20.0
Phenanthrene	Ave	1.143	1.124	0.7000	4.92	5.00	-1.7	20.0
Anthracene	Ave	1.167	1.161	0.7000	4.97	5.00	-0.5	20.0
Carbazole	Ave	1.007	0.9792	0.0100	4.86	5.00	-2.7	20.0
Di-n-butyl phthalate	Ave	1.186	1.188	0.0100	5.01	5.00	0.2	20.0
Fluoranthene	Ave	1.252	1.259	0.6000	5.03	5.00	0.5	20.0
Benzidine	Lin2		0.5518	0.0100	20.0	5.00	0.2	20.0
Pyrene	Ave	1.197	1.264	0.6000	5.28	5.00	5.6	20.0
Butyl benzyl phthalate	Ave	0.4765	0.5102	0.0100	5.35	5.00	7.1	20.0
3,3'-Dichlorobenzidine	Ave	0.4415	0.4739	0.0100	5.37	5.00	7.3	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6656	0.6743	0.0100	5.07	5.00	1.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Lab Sample ID: CCVIS 180-228094/3 Calibration Date: 11/06/2017 10:54

Instrument ID: CH733 Calib Start Date: 10/10/2017 04:37

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/10/2017 07:42

Lab File ID: N11060003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]anthracene	Ave	1.202	1.202	0.8000	5.00	5.00	0.0	20.0
Chrysene	Ave	1.151	1.155	0.7000	5.01	5.00	0.3	20.0
Di-n-octyl phthalate	Lin2		1.225	0.0100	4.92	5.00	-1.7	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.6689	0.6582	0.0100	4.92	5.00	-1.6	20.0
Benzo[b]fluoranthene	Ave	1.390	1.394	0.7000	5.01	5.00	0.3	20.0
Benzo[k]fluoranthene	Ave	1.336	1.326	0.7000	4.96	5.00	-0.8	20.0
Benzo[e]pyrene	Ave	1.224	1.224	0.0100	5.00	5.00	0.0	20.0
Benzo[a]pyrene	Ave	1.220	1.157	0.7000	4.74	5.00	-5.2	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.408	1.331	0.5000	4.72	5.00	-5.5	20.0
Dibenz(a,h)anthracene	Ave	1.170	1.120	0.4000	4.79	5.00	-4.3	20.0
Benzo[g,h,i]perylene	Ave	1.175	1.101	0.5000	4.68	5.00	-6.3	20.0
2-Fluorophenol (Surr)	Ave	1.290	1.249		4.84	5.00	-3.2	20.0
Phenol-d5 (Surr)	Ave	1.544	1.444		4.68	5.00	-6.5	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3644	0.3651		5.01	5.00	0.2	20.0
2-Fluorobiphenyl	Ave	1.597	1.608		5.03	5.00	0.6	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1172	0.1423	0.0100	6.07	5.00	21.4*	20.0
Terphenyl-d14 (Surr)	Ave	0.9014	0.9750		5.41	5.00	8.2	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060003.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 06-Nov-2017 10:54:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019192-003
Operator ID: 03200 Instrument ID: CH733
Sublist: chrom-BNA_CH733*sub2

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 07-Nov-2017 06:59:31 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: piccolinov Date: 06-Nov-2017 12:01:30

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	6.348	6.348	0.000	97	132813	8.00	8.00	
* 2 Naphthalene-d8	136	7.595	7.595	0.000	99	469897	8.00	8.00	
* 3 Acenaphthene-d10	164	9.236	9.236	0.000	93	232175	8.00	8.00	
* 4 Phenanthrene-d10	188	10.613	10.613	0.000	96	414535	8.00	8.00	
* 5 Chrysene-d12	240	14.201	14.201	0.000	97	420670	8.00	8.00	
* 6 Perylene-d12	264	17.165	17.165	0.000	98	372559	8.00	8.00	
$ 7 2-Fluorophenol	112	4.925	4.925	0.000	92	207411	10.0	9.68	
$ 8 Phenol-d5	99	5.978	5.978	0.000	93	239740	10.0	9.35	
$ 9 Nitrobenzene-d5	82	6.895	6.895	0.000	92	214466	10.0	10.0	
$ 10 2-Fluorobiphenyl	172	8.589	8.589	0.000	99	466536	10.0	10.1	
$ 11 2,4,6-Tribromophenol	330	9.960	9.960	0.000	95	73739	10.0	12.1	
$ 12 Terphenyl-d14	244	12.413	12.413	0.000	99	512682	10.0	10.8	
13 1,4-Dioxane	88	1.472	1.472	0.000	91	89743	10.0	9.72	
14 N-Nitrosodimethylamine	74	2.149	2.149	0.000	81	124375	10.0	9.69	
15 Pyridine	79	2.219	2.219	0.000	93	449257	20.0	18.8	
19 Methyl methanesulfonate	80	4.672	4.672	0.000	90	136053	10.0	10.0	
22 Benzaldehyde	77	5.889	5.889	0.000	90	137111	10.0	9.25	
24 Phenol	94	5.995	5.995	0.000	98	268402	10.0	9.53	
25 Aniline	93	6.007	6.007	0.000	96	294869	10.0	8.98	
26 Bis(2-chloroethyl)ether	93	6.078	6.078	0.000	98	184596	10.0	9.11	
27 2-Chlorophenol	128	6.137	6.137	0.000	95	225021	10.0	9.89	
28 n-Decane	43	6.195	6.195	0.000	82	177610	10.0	8.49	
29 1,3-Dichlorobenzene	146	6.289	6.289	0.000	97	268436	10.0	10.2	
30 1,4-Dichlorobenzene	146	6.366	6.366	0.000	92	265901	10.0	10.1	
31 Benzyl alcohol	108	6.484	6.484	0.000	89	125398	10.0	9.56	
32 1,2-Dichlorobenzene	146	6.519	6.519	0.000	95	252505	10.0	10.3	
33 2-Methylphenol	108	6.595	6.595	0.000	95	185880	10.0	9.77	
34 Indene	116	6.607	6.607	0.000	90	363624	10.0	9.71	
35 2,2'-oxybis[1-chloropropan	45	6.619	6.619	0.000	82	204639	10.0	8.70	
37 N-Nitrosopyrrolidine	100	6.713	6.713	0.000	78	82123	10.0	9.85	
39 Acetophenone	105	6.742	6.742	0.000	82	287498	10.0	9.76	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 N-Nitrosodi-n-propylamine	70	6.742	6.742	0.000	71	130397	10.0	8.90	
40 4-Methylphenol	108	6.742	6.742	0.000	62	186421	10.0	9.34	
41 Hexachloroethane	117	6.860	6.860	0.000	90	99400	10.0	10.1	
42 Nitrobenzene	77	6.913	6.913	0.000	92	208239	10.0	9.79	
44 Isophorone	82	7.142	7.142	0.000	96	338196	10.0	9.43	
46 2-Nitrophenol	139	7.225	7.225	0.000	97	119356	10.0	10.8	
47 2,4-Dimethylphenol	107	7.254	7.254	0.000	96	206157	10.0	9.82	
48 Benzoic acid	122	7.295	7.295	0.000	89	113177	10.0	10.5	
49 Bis(2-chloroethoxy)methane	93	7.336	7.336	0.000	98	199447	10.0	9.10	
51 2,4-Dichlorophenol	162	7.454	7.454	0.000	94	180232	10.0	10.3	
52 1,2,4-Trichlorobenzene	180	7.536	7.536	0.000	93	223817	10.0	10.6	
53 Naphthalene	128	7.613	7.613	0.000	97	601368	10.0	9.72	
55 4-Chloroaniline	127	7.654	7.654	0.000	95	242455	10.0	9.61	
56 2,6-Dichlorophenol	162	7.666	7.666	0.000	96	176789	10.0	10.2	
57 Hexachlorobutadiene	225	7.731	7.731	0.000	96	141151	10.0	11.2	
61 Caprolactam	113	7.942	7.942	0.000	80	48249	10.0	9.04	
63 4-Chloro-3-methylphenol	107	8.089	8.089	0.000	95	157121	10.0	9.12	
65 2-Methylnaphthalene	142	8.260	8.260	0.000	91	413917	10.0	9.74	
66 1-Methylnaphthalene	142	8.354	8.354	0.000	93	390542	10.0	9.76	
67 Hexachlorocyclopentadiene	237	8.413	8.413	0.000	97	166658	10.0	11.6	
68 1,2,4,5-Tetrachlorobenzene	216	8.419	8.419	0.000	97	238511	10.0	11.1	
69 2,4,6-Trichlorophenol	196	8.513	8.513	0.000	92	136506	10.0	10.7	
70 2,4,5-Trichlorophenol	196	8.548	8.548	0.000	93	142915	10.0	10.7	
71 1,1'-Biphenyl	154	8.683	8.683	0.000	94	491138	10.0	9.89	
73 2-Chloronaphthalene	162	8.719	8.719	0.000	97	390883	10.0	10.3	
75 2-Nitroaniline	65	8.795	8.795	0.000	81	106825	10.0	10.2	
77 Dimethyl phthalate	163	8.942	8.942	0.000	99	430350	10.0	10.2	
78 1,3-Dinitrobenzene	168	8.978	8.978	0.000	85	68249	10.0	10.1	
79 2,6-Dinitrotoluene	165	9.007	9.007	0.000	93	97037	10.0	10.1	
80 Acenaphthylene	152	9.107	9.107	0.000	97	544369	10.0	10.2	
81 3-Nitroaniline	138	9.166	9.166	0.000	91	95217	10.0	9.61	
82 2,4-Dinitrophenol	184	9.260	9.260	0.000	85	143678	20.0	20.0	
83 Acenaphthene	153	9.266	9.266	0.000	91	367646	10.0	9.64	
84 4-Nitrophenol	109	9.295	9.295	0.000	91	142202	20.0	21.0	
87 2,4-Dinitrotoluene	165	9.377	9.377	0.000	91	131520	10.0	10.5	
88 Dibenzofuran	168	9.419	9.419	0.000	96	534953	10.0	10.0	
90 2,3,5,6-Tetrachlorophenol	232	9.483	9.483	0.000	92	128964	10.0	11.0	
91 2,3,4,6-Tetrachlorophenol	232	9.525	9.525	0.000	73	128186	10.0	10.5	
92 2-Naphthylamine	143	9.554	9.554	0.000	96	360013	10.0	9.64	
94 Hexadecane	57	9.577	9.577	0.000	92	184951	10.0	8.08	
93 Diethyl phthalate	149	9.577	9.577	0.000	98	406958	10.0	9.79	
96 4-Chlorophenyl phenyl ethe	204	9.713	9.713	0.000	92	231180	10.0	10.4	
97 4-Nitroaniline	138	9.730	9.730	0.000	77	95320	10.0	9.06	
98 Fluorene	166	9.736	9.736	0.000	96	424543	10.0	9.98	
99 4,6-Dinitro-2-methylphenol	198	9.754	9.754	0.000	87	149090	20.0	20.0	
101 N-Nitrosodiphenylamine	169	9.819	9.819	0.000	62	307862	10.0	10.3	
102 Azobenzene	77	9.860	9.860	0.000	95	360519	10.0	9.88	
103 1,2-Diphenylhydrazine	77	9.860	9.860	0.000	94	360519	10.0	9.88	
108 4-Bromophenyl phenyl ether	248	10.166	10.166	0.000	65	146750	10.0	11.3	
109 Hexachlorobenzene	284	10.254	10.254	0.000	95	153083	10.0	11.2	
111 Atrazine	200	10.277	10.277	0.000	93	127679	10.0	11.1	
114 n-Octadecane	57	10.413	10.413	0.000	96	178453	10.0	7.65	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 Pentachlorophenol	266	10.419	10.419	0.000	93	209429	20.0	21.6	
118 Phenanthrene	178	10.636	10.636	0.000	96	582602	10.0	9.83	
119 Anthracene	178	10.683	10.683	0.000	96	601611	10.0	9.95	
121 Carbazole	167	10.824	10.824	0.000	96	507384	10.0	9.73	
122 Di-n-butyl phthalate	149	11.113	11.113	0.000	100	615642	10.0	10.0	
128 Fluoranthene	202	11.954	11.954	0.000	96	652154	10.0	10.1	
129 Benzidine	184	12.071	12.071	0.000	99	290175	10.0	10.0	
131 Pyrene	202	12.260	12.260	0.000	99	664517	10.0	10.6	
137 Butyl benzyl phthalate	149	13.113	13.113	0.000	98	268255	10.0	10.7	
141 3,3'-Dichlorobenzidine	252	14.101	14.101	0.000	73	249168	10.0	10.7	
142 Bis(2-ethylhexyl) phthalat	149	14.124	14.124	0.000	94	354569	10.0	10.1	
143 Benzo[a]anthracene	228	14.183	14.183	0.000	96	632147	10.0	10.0	
144 Chrysene	228	14.254	14.254	0.000	95	607084	10.0	10.0	
147 Di-n-octyl phthalate	149	15.436	15.436	0.000	99	570457	10.0	9.83	
148 7,12-Dimethylbenz(a)anthra	256	16.336	16.336	0.000	92	306507	10.0	9.84	
149 Benzo[b]fluoranthene	252	16.354	16.354	0.000	95	649354	10.0	10.0	
150 Benzo[k]fluoranthene	252	16.412	16.412	0.000	97	617289	10.0	9.92	
151 Benzo[e]pyrene	252	16.942	16.942	0.000	0	569977	10.0	10.0	
152 Benzo[a]pyrene	252	17.048	17.048	0.000	74	538800	10.0	9.48	
156 Indeno[1,2,3-cd]pyrene	276	19.424	19.424	0.000	97	619700	10.0	9.45	
157 Dibenz(a,h)anthracene	278	19.453	19.453	0.000	90	521673	10.0	9.57	
158 Benzo[g,h,i]perylene	276	20.047	20.047	0.000	96	512669	10.0	9.37	
S 202 Total Cresols	108				0		20.0	19.1	
S 203 Methyl Phenols,Total	108				0		20.0	19.1	

Reagents:

SVTAPSTD10i_00244 Amount Added: 1.00 Units: mL

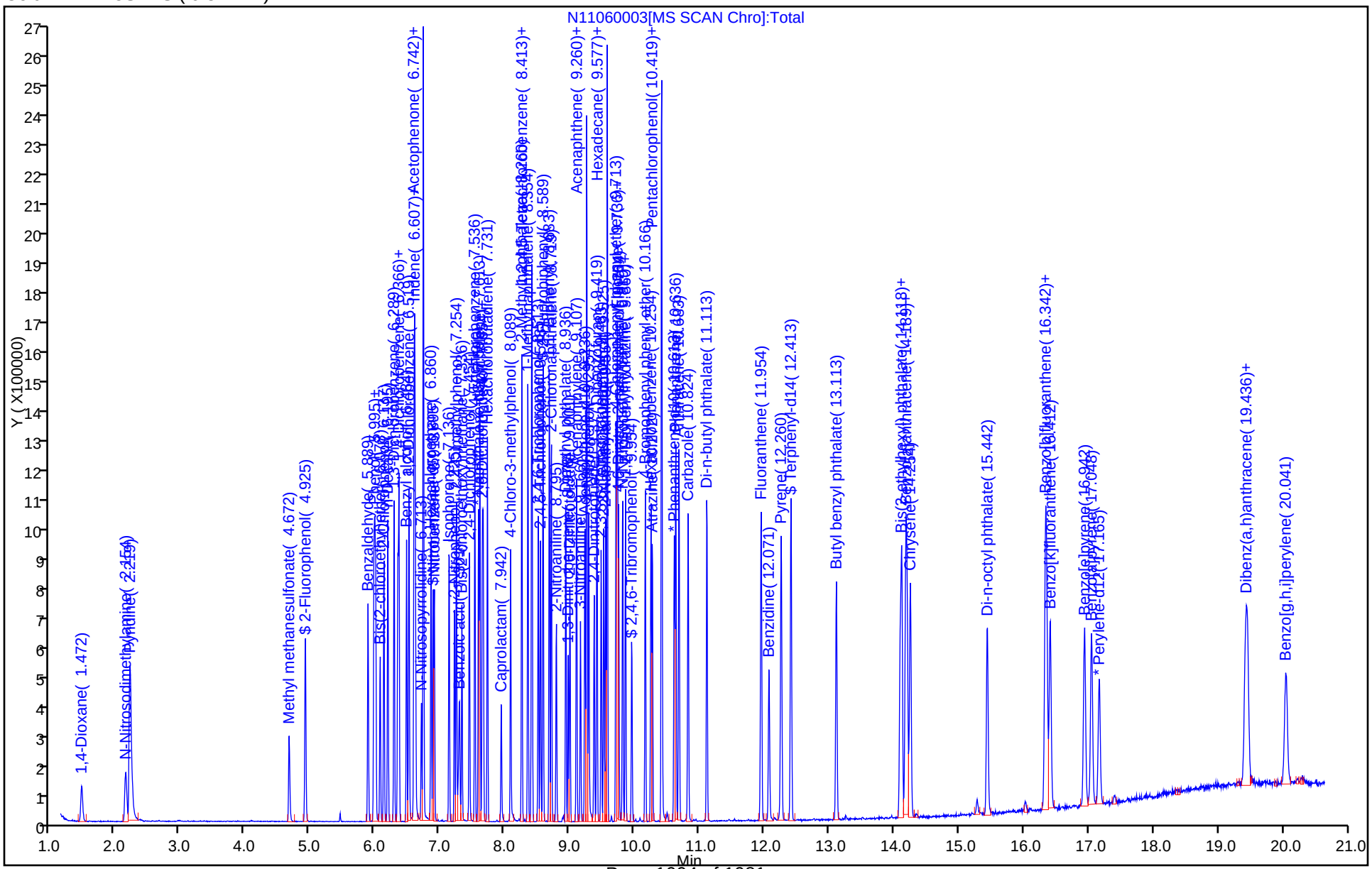
Report Date: 07-Nov-2017 06:59:31 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060003.D

Injection Date:	06-Nov-2017 10:54:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 10-Oct-2017 04:22:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018792-002
Operator ID: 03200 Instrument ID: CH733

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 10-Oct-2017 08:34:22 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: piccolinov Date: 10-Oct-2017 05:33:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
194 Pentachlorophenol_T	266	5.345	5.345	0.000	93	906005	NR	NR	
195 DFTPP									
196 Benzidine_T	184	8.028	8.028	0.000	99	5089864	NR	NR	
197 4,4'-DDE	246		9.086					ND	
198 4,4'-DDD	235		9.375					ND	
199 4,4'-DDT	235	9.586	9.586	0.000	99	2362824	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

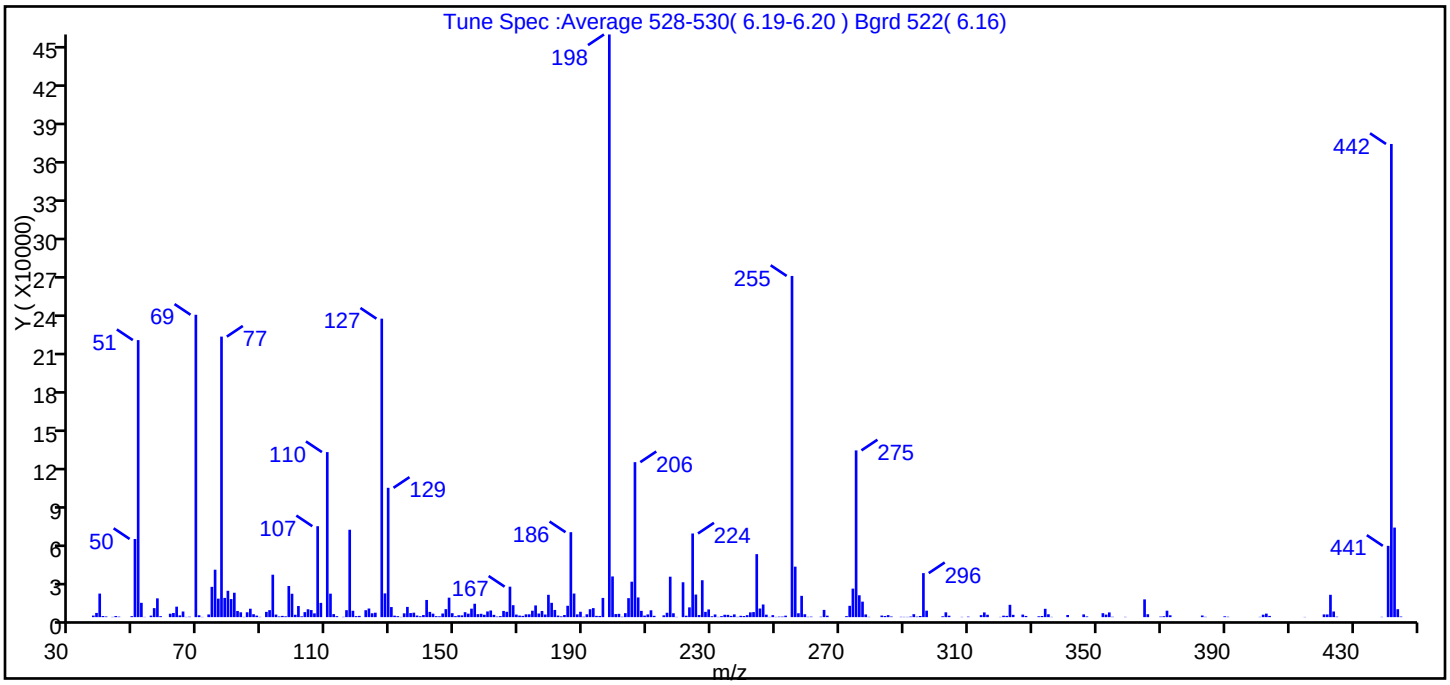
SVDFTPP50i_00029 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100002.D
Injection Date: 10-Oct-2017 04:22:30 Instrument ID: CH733
Lims ID: DFTPP
Client ID:
Operator ID: 03200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH733 Limit Group: BNA 8270D ICAL
Tune Method: DFTPP Method 8270

195 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	47.5
68	<2% of mass 69	0.0 (0.0)
69	Present	51.9
70	<2% of mass 69	0.3 (0.6)
127	40-60% of mass 198	51.2
197	<1% of mass 198	0.0
199	5-9% of mass 198	7.0
275	10-30% of mass 198	28.6
365	>1% of mass 198	3.0
441	Present but less than mass 443	12.2 (79.6)
442	>40% of mass 198	81.2
443	17-23% of mass 442	15.4 (18.9)

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100002.D\BNA_CH733.rslt\spectra.d
Injection Date: 10-Oct-2017 04:22:30
Spectrum: Tune Spec :Average 528-530(6.19-6.20) Bgrd 522(6.16)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 284

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	1238	120.00	998	193.00	7122	276.00	17240
38.00	3336	122.00	5470	194.00	1021	277.00	12215
39.00	18560	123.00	6793	195.00	936	278.00	2143
40.00	892	124.00	3054	196.00	15155	279.00	241
41.00	536	125.00	3503	198.00	459136	283.00	1258
43.00	202	127.00	235200	199.00	32072	284.00	916
44.00	871	128.00	18720	200.00	2408	285.00	1588
45.00	391	129.00	101912	201.00	2604	286.00	499
49.00	780	130.00	7955	202.00	322	289.00	250
50.00	61592	131.00	1159	203.00	3143	290.00	212
51.00	218304	132.00	769	204.00	14974	291.00	196
52.00	11283	133.00	182	205.00	27936	292.00	441
53.00	177	134.00	2986	206.00	122128	293.00	2330
55.00	1191	135.00	8069	207.00	15532	294.00	400
56.00	7097	136.00	3225	208.00	4962	295.00	902
57.00	14804	137.00	3519	209.00	1193	296.00	34688
58.00	763	138.00	1273	210.00	2131	297.00	5100
61.00	2692	139.00	688	211.00	5390	302.00	656
62.00	3281	140.00	1652	212.00	1041	303.00	3806
63.00	8262	141.00	13538	215.00	1422	304.00	1126
64.00	1370	142.00	4148	216.00	3467	308.00	205
65.00	4446	143.00	2735	217.00	31872	310.00	391
66.00	183	144.00	755	218.00	3064	314.00	1580
67.00	373	145.00	663	219.00	196	315.00	3722
69.00	238272	146.00	2867	221.00	27496	316.00	1887
70.00	1449	147.00	6305	222.00	1116	320.00	186
71.00	174	148.00	15336	223.00	7716	321.00	1145
73.00	2114	149.00	3120	224.00	65912	322.00	993
74.00	23872	150.00	800	225.00	17808	323.00	9719
75.00	37376	151.00	1499	226.00	1657	324.00	1821
76.00	14580	152.00	1395	227.00	29080	327.00	2022
77.00	221056	153.00	3887	228.00	4161	328.00	938
78.00	15164	154.00	2733	229.00	6074	332.00	676

Report Date: 10-Oct-2017 08:34:23 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100002.D\BNA_CH733.rslt\spectra.d
Injection Date: 10-Oct-2017 04:22:30
Spectrum: Tune Spec :Average 528-530(6.19-6.20) Bgrd 522(6.16)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 284

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	20768	155.00	6689	230.00	691	333.00	905
80.00	14242	156.00	10557	231.00	2101	334.00	6577
81.00	19224	157.00	2357	232.00	211	335.00	2271
82.00	4848	158.00	2635	233.00	808	336.00	206
83.00	3824	159.00	1872	234.00	1873	341.00	1704
84.00	191	160.00	4492	235.00	1826	346.00	2166
85.00	3845	161.00	5239	236.00	1002	347.00	552
86.00	6629	162.00	1821	237.00	2170	352.00	3111
87.00	2316	163.00	446	238.00	243	353.00	2009
88.00	1200	164.00	797	239.00	1057	354.00	3723
89.00	227	165.00	4890	240.00	862	355.00	297
91.00	4166	166.00	4219	241.00	1553	359.00	222
92.00	5526	167.00	24008	242.00	3762	365.00	14001
93.00	33432	168.00	9429	243.00	4003	366.00	2288
94.00	2024	169.00	2024	244.00	49656	370.00	444
95.00	541	170.00	1237	245.00	6796	371.00	723
96.00	982	171.00	1000	246.00	9979	372.00	5080
97.00	640	172.00	2204	247.00	1944	373.00	1460
98.00	24560	173.00	2242	248.00	194	383.00	1289
99.00	18440	174.00	5069	249.00	1570	384.00	250
100.00	1870	175.00	9227	250.00	201	390.00	664
101.00	8766	176.00	2858	251.00	409	391.00	320
102.00	638	177.00	4876	252.00	426	401.00	223
103.00	3951	178.00	2059	253.00	1162	402.00	1932
104.00	6210	179.00	17600	255.00	268864	403.00	2791
105.00	5596	180.00	11286	256.00	39784	404.00	974
106.00	2979	181.00	5675	257.00	3063	415.00	168
107.00	71656	182.00	1251	258.00	16776	421.00	2154
108.00	11237	183.00	616	259.00	2288	422.00	2128
110.00	130056	184.00	1680	260.00	264	423.00	17608
111.00	18504	185.00	8956	261.00	382	424.00	4457
112.00	2383	186.00	66944	264.00	339	425.00	369
113.00	784	187.00	18600	265.00	5717	439.00	232
115.00	246	188.00	2193	266.00	1161	441.00	56184

Report Date: 10-Oct-2017 08:34:23 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100002.D\BNA_CH733.rslt\spectra.d
Injection Date: 10-Oct-2017 04:22:30
Spectrum: Tune Spec :Average 528-530(6.19-6.20) Bgrd 522(6.16)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 284

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	5491	189.00	4245	272.00	806	442.00	372864
117.00	68872	190.00	329	273.00	8930	443.00	70576
118.00	5016	191.00	2246	274.00	22480	444.00	6267
119.00	804	192.00	6249	275.00	131392	445.00	467

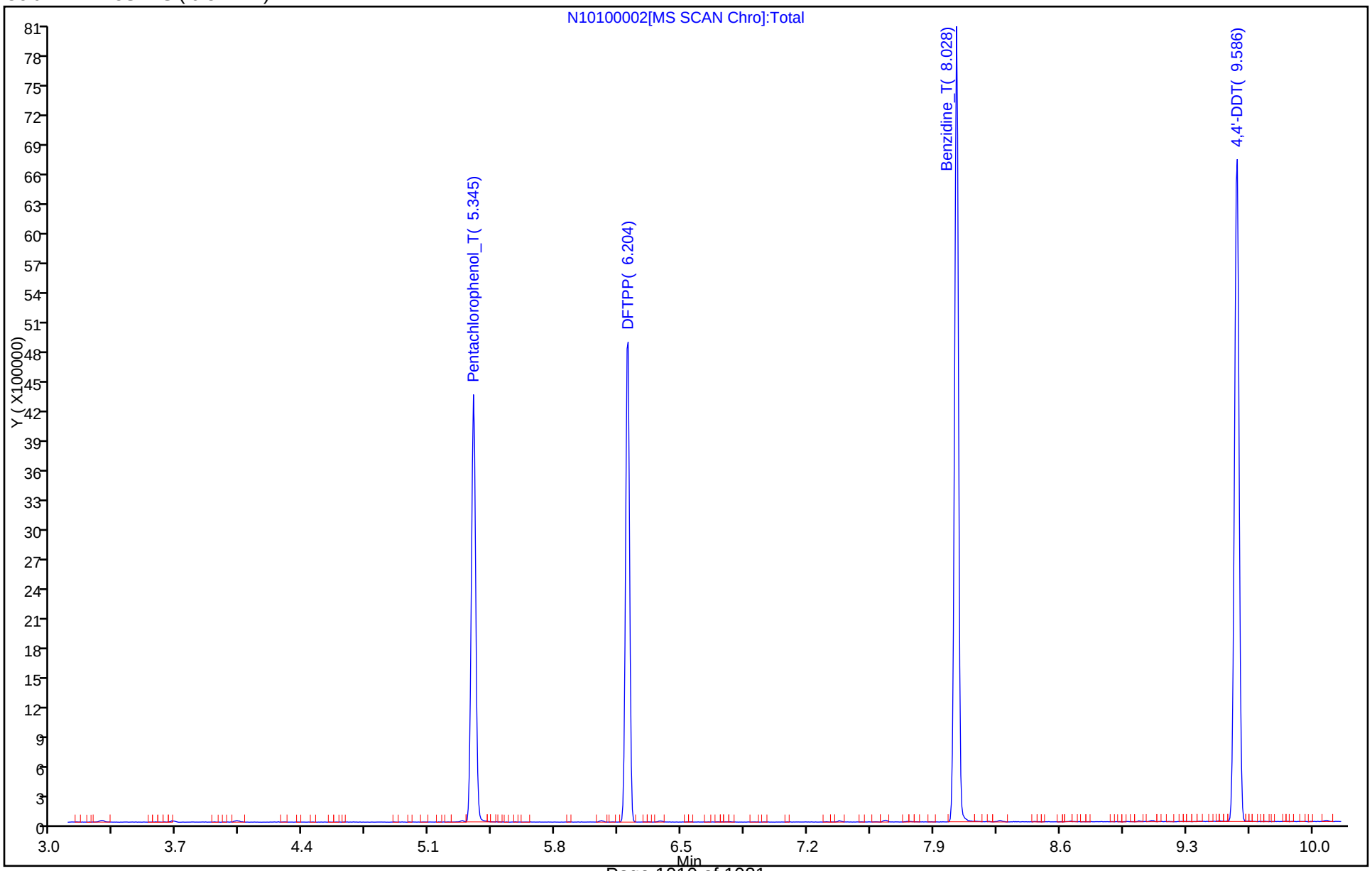
Report Date: 10-Oct-2017 08:34:23 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100002.D

Injection Date:	10-Oct-2017 04:22:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	DFTPP			Worklist Smp#:	2
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

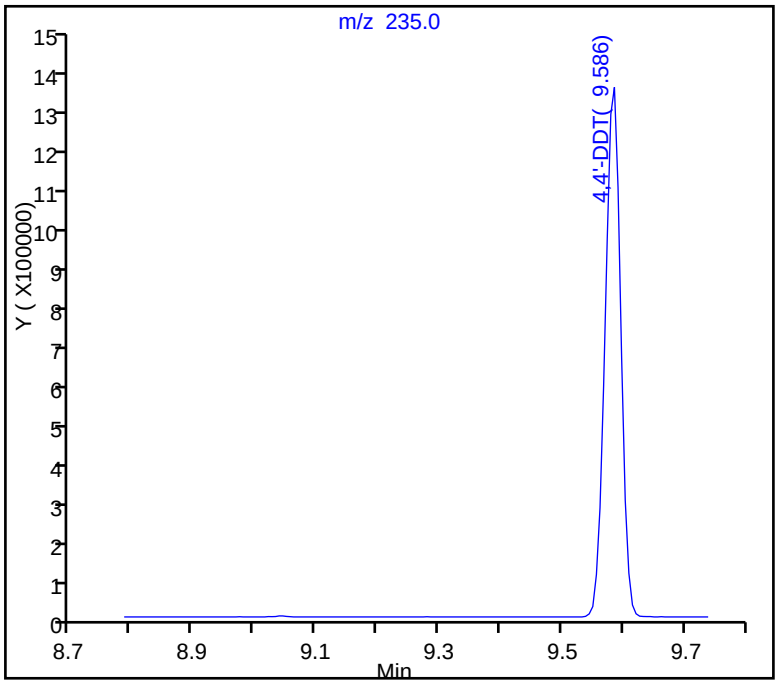


Breakdown Report

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100002.D				
Injection Date:	10-Oct-2017 04:22:30	Instrument ID:	CH733		
Lims ID:	DFTPP				
Client ID:					
Operator ID:	03200	ALS Bottle#:	1	Worklist Smp#:	2
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

199 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

199 4,4'-DDT, Area = 2362824
197 4,4'-DDE, Area = 0
198 4,4'-DDD, Area = 0

%Breakdown: 0.00%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

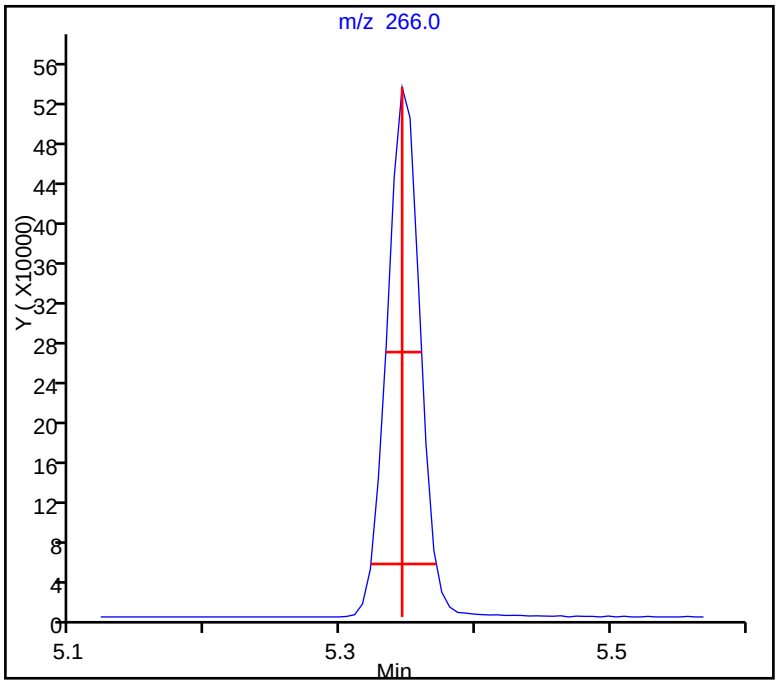
Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100002.D
Injection Date: 10-Oct-2017 04:22:30 Instrument ID: CH733
Lims ID: DFTPP
Client ID:
Operator ID: 03200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH733 Limit Group: BNA 8270D ICAL

194 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.025 (min.)
Front Width = 0.023 (min.)

Tailing Factor = 1.1, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

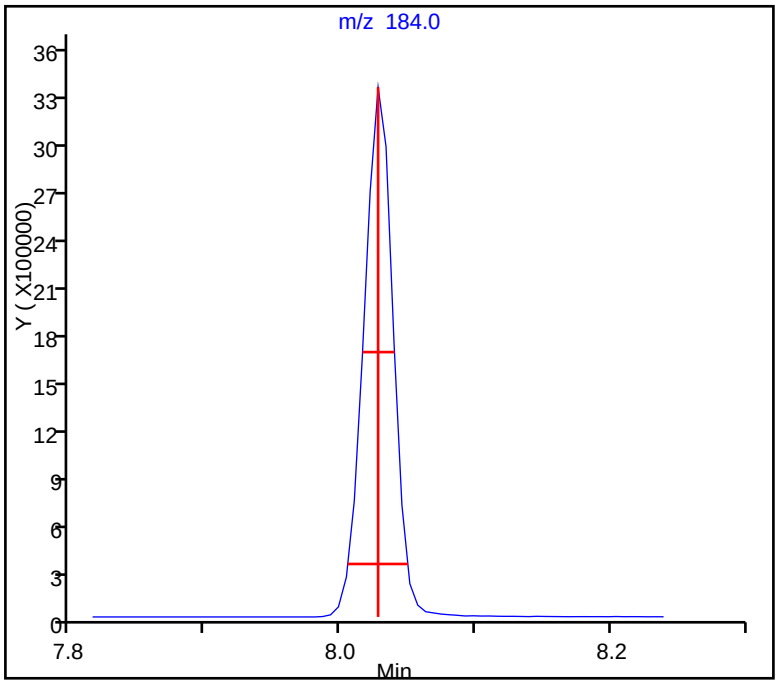
Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100002.D
Injection Date: 10-Oct-2017 04:22:30 Instrument ID: CH733
Lims ID: DFTPP
Client ID:
Operator ID: 03200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH733 Limit Group: BNA 8270D ICAL

196 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.022 (min.)
Front Width = 0.023 (min.)

Tailing Factor = 1.0, Max. Tailing < 2.00
Passed



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 06-Nov-2017 10:39:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019192-002
Operator ID: 03200 Instrument ID: CH733

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 07-Nov-2017 06:59:28 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: piccolinov Date: 06-Nov-2017 11:18:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
194 Pentachlorophenol_T	266	5.446	5.446	0.000	92	457789	NR	NR	
195 DFTPP									
196 Benzidine_T	184	8.134	8.134	0.000	98	2793156	NR	NR	
197 4,4'-DDE	246		9.086					ND	
198 4,4'-DDD	235	9.157	9.157	0.000	1	2377		NR	
199 4,4'-DDT	235	9.704	9.704	0.000	99	1450554	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

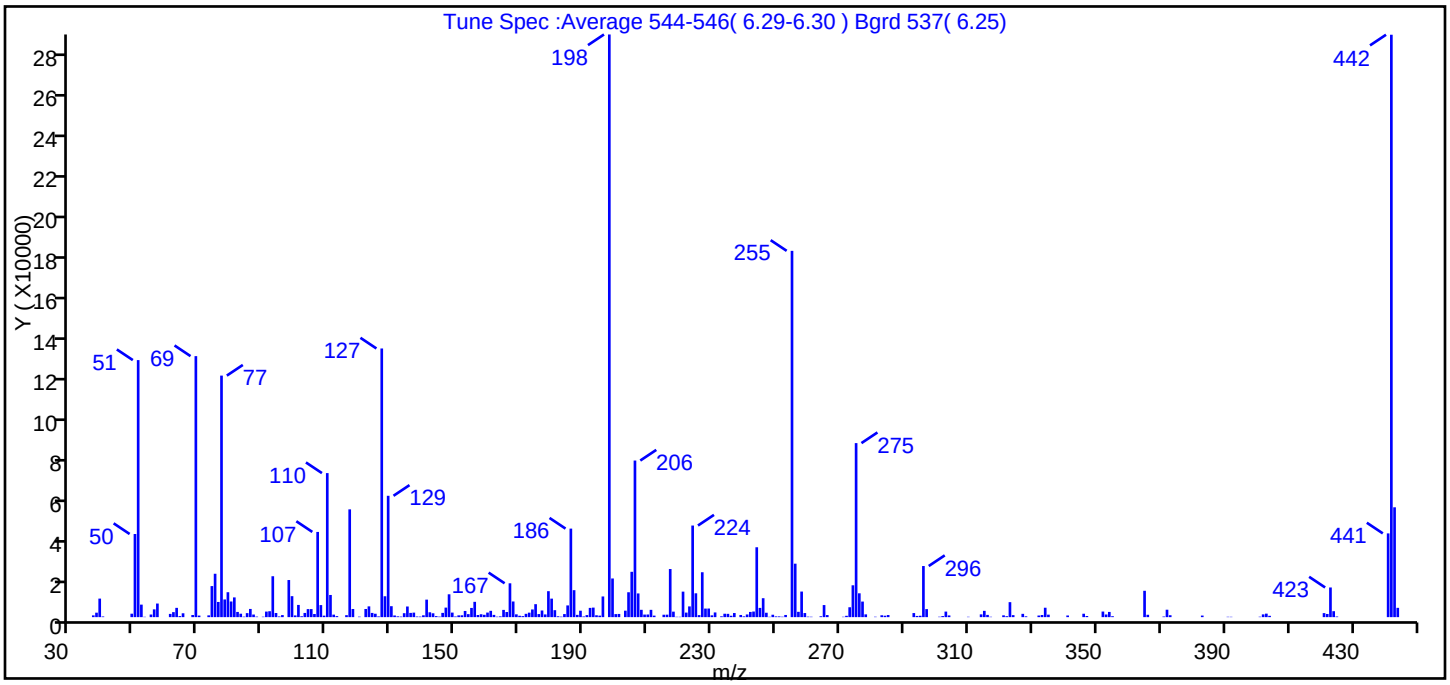
SVDFTPP50i_00029 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060002.D
Injection Date: 06-Nov-2017 10:39:30 Instrument ID: CH733
Lims ID: DFTPP
Client ID:
Operator ID: 03200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH733 Limit Group: BNA 8270D ICAL
Tune Method: DFTPP Method 8270

195 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	44.1
68	<2% of mass 69	0.4 (0.8)
69	Present	44.8
70	<2% of mass 69	0.3 (0.6)
127	40-60% of mass 198	46.1
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.6
275	10-30% of mass 198	29.9
365	>1% of mass 198	4.5
441	Present but less than mass 443	14.4 (76.2)
442	>40% of mass 198	100.0
443	17-23% of mass 442	18.9 (18.9)

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060002.D\BNA_CH733.rslt\spectra.d
Injection Date: 06-Nov-2017 10:39:30
Spectrum: Tune Spec :Average 544-546(6.29-6.30) Bgrd 537(6.25)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 263

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	877	125.00	1690	191.00	1012	266.00	1031
38.00	2217	126.00	356	192.00	4599	271.00	183
39.00	9211	127.00	133504	193.00	4741	272.00	670
40.00	334	128.00	10378	194.00	935	273.00	4916
49.00	1715	129.00	60304	195.00	749	274.00	15830
50.00	41312	130.00	5441	196.00	10278	275.00	86480
51.00	127728	131.00	828	198.00	289536	276.00	11845
52.00	6221	132.00	396	199.00	19216	277.00	7737
53.00	171	133.00	270	200.00	1515	278.00	1384
55.00	1302	134.00	1957	201.00	1591	281.00	206
56.00	3867	135.00	5292	203.00	3211	283.00	932
57.00	6763	136.00	2111	204.00	12370	284.00	711
61.00	1610	137.00	2243	205.00	22528	285.00	1046
62.00	2488	138.00	304	206.00	77816	293.00	2025
63.00	4615	139.00	265	207.00	11780	294.00	595
64.00	515	140.00	920	208.00	3643	295.00	691
65.00	1925	141.00	8704	209.00	1283	296.00	25400
68.00	1049	142.00	2416	210.00	1310	297.00	3997
69.00	129704	143.00	1914	211.00	3630	301.00	210
70.00	786	144.00	505	212.00	752	302.00	528
73.00	881	145.00	262	215.00	1203	303.00	2759
74.00	15433	146.00	2116	216.00	1232	304.00	849
75.00	21560	147.00	4736	217.00	23912	310.00	178
76.00	7546	148.00	11354	218.00	2734	314.00	1377
77.00	120024	149.00	2257	219.00	179	315.00	3131
78.00	8797	150.00	313	220.00	170	316.00	1118
79.00	12387	151.00	884	221.00	12679	317.00	186
80.00	7775	152.00	915	222.00	2262	321.00	898
81.00	9809	153.00	3068	223.00	5337	322.00	463
82.00	2588	154.00	1490	224.00	45520	323.00	7445
83.00	1707	155.00	4576	225.00	11850	324.00	995
84.00	245	156.00	7610	226.00	1006	327.00	1641
85.00	1993	157.00	1062	227.00	22312	328.00	404

Report Date: 07-Nov-2017 06:59:29 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060002.D\BNA_CH733.rslt\spectra.d
Injection Date: 06-Nov-2017 10:39:30
Spectrum: Tune Spec :Average 544-546(6.29-6.30) Bgrd 537(6.25)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 263

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	4076	158.00	1442	228.00	4254	332.00	804
87.00	1296	159.00	1171	229.00	4281	333.00	1050
88.00	266	160.00	2270	230.00	891	334.00	4677
90.00	223	161.00	3143	231.00	2334	335.00	1234
91.00	2765	162.00	1121	233.00	411	341.00	820
92.00	2941	163.00	230	234.00	1692	346.00	1694
93.00	20328	164.00	373	235.00	1642	347.00	559
94.00	2063	165.00	3604	236.00	693	352.00	2781
95.00	346	166.00	2545	237.00	2047	353.00	1322
96.00	1018	167.00	16816	239.00	1078	354.00	2589
98.00	18440	168.00	7780	240.00	381	355.00	466
99.00	10422	169.00	1396	241.00	1332	365.00	13096
100.00	854	170.00	683	242.00	2587	366.00	1174
101.00	6070	171.00	506	243.00	2786	371.00	302
102.00	438	172.00	1652	244.00	34728	372.00	3692
103.00	2088	173.00	2229	245.00	4593	373.00	951
104.00	3995	174.00	3819	246.00	9410	383.00	786
105.00	4003	175.00	6444	247.00	2185	391.00	181
106.00	1553	176.00	1532	248.00	174	392.00	168
107.00	42344	177.00	3305	249.00	1198	401.00	219
108.00	5988	178.00	1352	250.00	366	402.00	1374
109.00	738	179.00	12899	251.00	367	403.00	1741
110.00	71576	180.00	9202	252.00	215	404.00	660
111.00	11018	181.00	3460	253.00	1078	421.00	2006
112.00	1244	182.00	428	255.00	182016	422.00	1574
113.00	512	183.00	237	256.00	26568	423.00	14745
116.00	979	184.00	1524	257.00	2642	424.00	2961
117.00	53560	185.00	5825	258.00	12712	425.00	309
118.00	4050	186.00	43992	259.00	2036	441.00	41616
120.00	243	187.00	13400	260.00	251	442.00	289408
122.00	4052	188.00	1130	261.00	197	443.00	54584
123.00	5358	189.00	3191	264.00	420	444.00	4623
124.00	2098	190.00	325	265.00	6001		

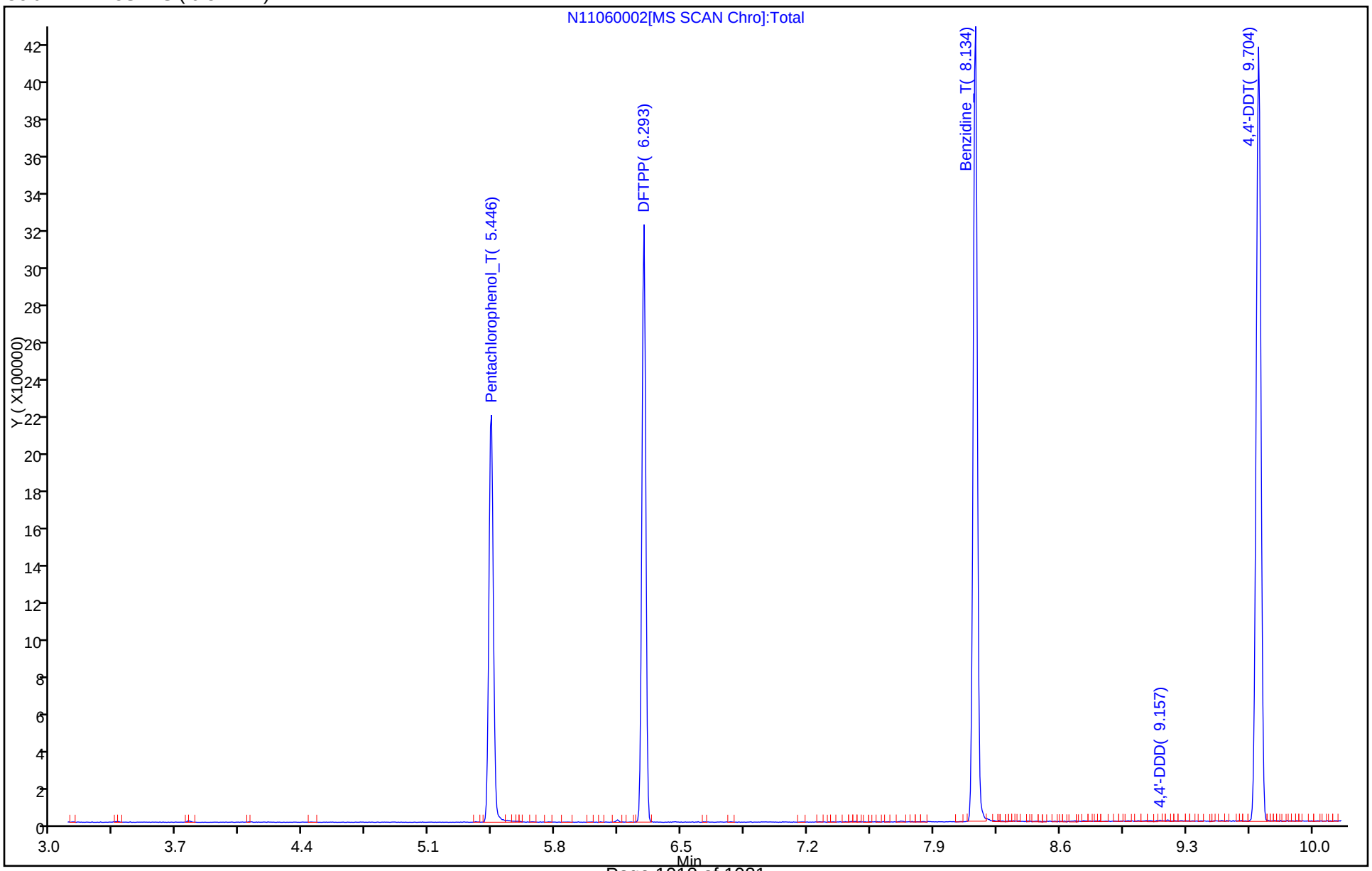
Report Date: 07-Nov-2017 06:59:29 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060002.D

Injection Date:	06-Nov-2017 10:39:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	DFTPP			Worklist Smp#:	2
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

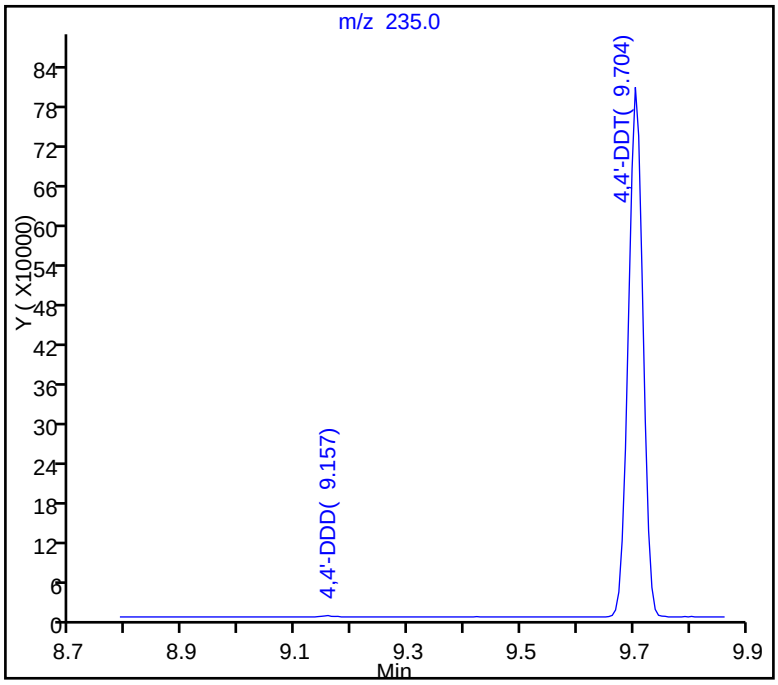


Breakdown Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060002.D
Injection Date: 06-Nov-2017 10:39:30 Instrument ID: CH733
Lims ID: DFTPP
Client ID:
Operator ID: 03200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH733 Limit Group: BNA 8270D ICAL

199 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

199 4,4'-DDT, Area = 1450554
197 4,4'-DDE, Area = 0
198 4,4'-DDD, Area = 2377

%Breakdown: 0.16%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

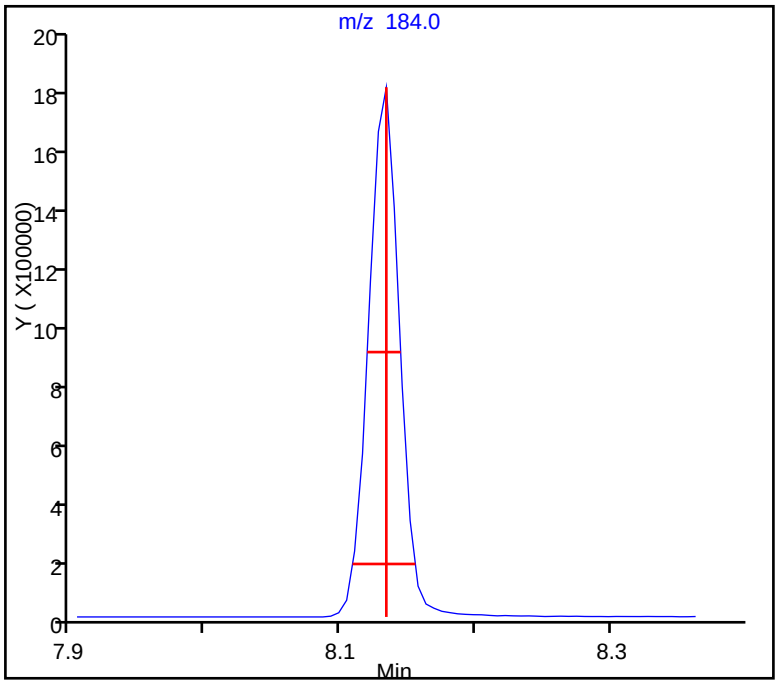
Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060002.D
Injection Date: 06-Nov-2017 10:39:30 Instrument ID: CH733
Lims ID: DFTPP
Client ID:
Operator ID: 03200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH733 Limit Group: BNA 8270D ICAL

196 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.022 (min.)
Front Width = 0.025 (min.)

Tailing Factor = 0.9, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

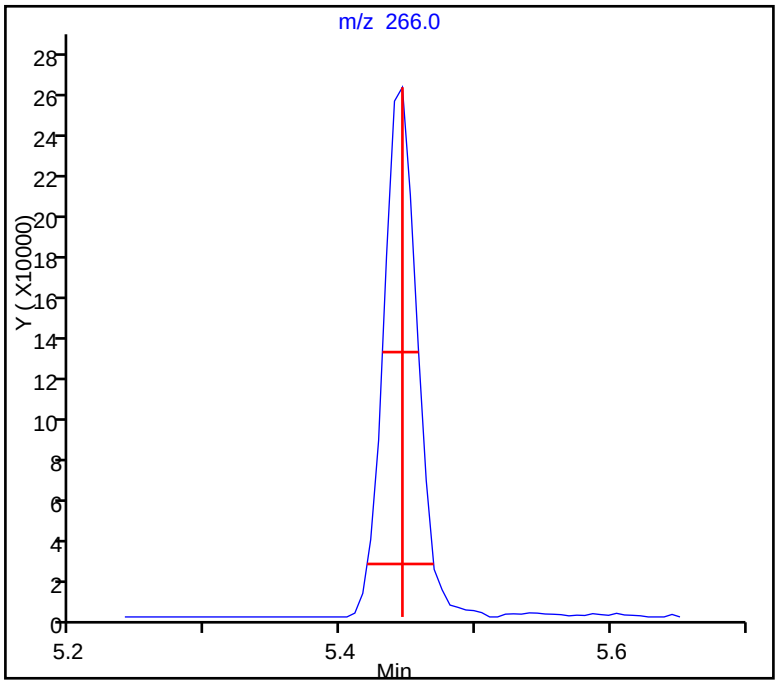
Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060002.D
Injection Date: 06-Nov-2017 10:39:30 Instrument ID: CH733
Lims ID: DFTPP
Client ID:
Operator ID: 03200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH733 Limit Group: BNA 8270D ICAL

194 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.023 (min.)
Front Width = 0.026 (min.)

Tailing Factor = 0.9, Max. Tailing < 2.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-227668/1-A

Matrix: Water | Lab File ID: N11060004.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/01/2017 09:35

Sample wt/vol: 250(mL) | Date Analyzed: 11/06/2017 11:20

Con. Extract Vol.: 250(uL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 228094 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.0	U	2.0	0.37

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	67		26-103
367-12-4	2-Fluorophenol (Surr)	60		27-100
118-79-6	2,4,6-Tribromophenol (Surr)	77		28-134
4165-60-0	Nitrobenzene-d5 (Surr)	66		30-101
4165-62-2	Phenol-d5 (Surr)	58		27-101
1718-51-0	Terphenyl-d14 (Surr)	72		20-119

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060004.D
Lims ID: MB 180-227668/1-A
Client ID:
Sample Type: MB
Inject. Date: 06-Nov-2017 11:20:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019192-004
Operator ID: 03200 Instrument ID: CH733

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 07-Nov-2017 06:35:11 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: piccolinov Date: 07-Nov-2017 06:28:28

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	6.348	6.348	0.000	98	154742	8.00	8.00	
* 2 Naphthalene-d8	136	7.595	7.595	0.000	99	547714	8.00	8.00	
* 3 Acenaphthene-d10	164	9.236	9.236	0.000	95	280635	8.00	8.00	
* 4 Phenanthrene-d10	188	10.613	10.613	0.000	96	519577	8.00	8.00	
* 5 Chrysene-d12	240	14.201	14.201	0.000	98	479156	8.00	8.00	
* 6 Perylene-d12	264	17.165	17.165	0.000	99	429322	8.00	8.00	
$ 7 2-Fluorophenol	112	4.925	4.925	0.000	92	598132	40.0	24.0	
$ 8 Phenol-d5	99	5.978	5.978	0.000	93	690479	40.0	23.1	
$ 9 Nitrobenzene-d5	82	6.895	6.895	0.000	93	661300	40.0	26.5	
$ 10 2-Fluorobiphenyl	172	8.589	8.589	0.000	100	1506965	40.0	26.9	
$ 11 2,4,6-Tribromophenol	330	9.960	9.960	0.000	95	234671	40.0	30.8	
$ 12 Terphenyl-d14	244	12.413	12.413	0.000	99	1562328	40.0	28.9	
13 1,4-Dioxane	88		1.472					ND	
14 N-Nitrosodimethylamine	74		2.149					ND	
15 Pyridine	79		2.219					ND	
16 2-Picoline	93		4.030					ND	
17 N-Nitrosomethylethylamine	88		4.233					ND	
18 Acrylamide	71		4.597					ND	
19 Methyl methanesulfonate	80		4.672					ND	
20 N-Nitrosodiethylamine	102		5.115					ND	
21 Ethyl methanesulfonate	79		5.445					ND	
22 Benzaldehyde	77		5.889					ND	
23 Pentachloroethane	167		5.979					ND	
24 Phenol	94		5.995					ND	
25 Aniline	93		6.007					ND	
26 Bis(2-chloroethyl)ether	93		6.078					ND	
27 2-Chlorophenol	128		6.137					ND	
28 n-Decane	43		6.195					ND	
29 1,3-Dichlorobenzene	146		6.289					ND	
30 1,4-Dichlorobenzene	146		6.366					ND	
31 Benzyl alcohol	108		6.484					ND	
32 1,2-Dichlorobenzene	146		6.519					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
33 2-Methylphenol	108		6.595					ND	
34 Indene	116		6.607					ND	
35 2,2'-oxybis[1-chloropropan	45		6.619					ND	
36 N-Nitrosomorpholine	116		6.632					ND	
37 N-Nitrosopyrrolidine	100		6.713					ND	
39 Acetophenone	105		6.742					ND	
38 N-Nitrosodi-n-propylamine	70		6.742					ND	
40 4-Methylphenol	108		6.742					ND	
41 Hexachloroethane	117		6.860					ND	
42 Nitrobenzene	77		6.913					ND	
43 N-Nitrosopiperidine	114		6.926					ND	
44 Isophorone	82		7.142					ND	
45 o,o',o''-Triethylphosphoro	198		7.182					ND	
46 2-Nitrophenol	139		7.225					ND	
47 2,4-Dimethylphenol	107		7.254					ND	
48 Benzoic acid	122		7.295					ND	
49 Bis(2-chloroethoxy)methane	93		7.336					ND	
50 alpha,alpha-Dimethyl phene	58		7.353					ND	
51 2,4-Dichlorophenol	162		7.454					ND	
52 1,2,4-Trichlorobenzene	180		7.536					ND	
53 Naphthalene	128		7.613					ND	
54 Hexachloropropene	213		7.630					ND	
55 4-Chloroaniline	127		7.654					ND	
56 2,6-Dichlorophenol	162		7.666					ND	
57 Hexachlorobutadiene	225		7.731					ND	
58 Quinoline	129		7.786					ND	
59 N-Nitrosodi-n-butylamine	84		7.818					ND	
60 p-Phenylene diamine	108		7.834					ND	
61 Caprolactam	113		7.942					ND	
62 Safrole, Total	162		8.026					ND	
63 4-Chloro-3-methylphenol	107		8.089					ND	
64 Diphenamid	168		8.200					ND	
65 2-Methylnaphthalene	142		8.260					ND	
66 1-Methylnaphthalene	142		8.354					ND	
67 Hexachlorocyclopentadiene	237		8.413					ND	
68 1,2,4,5-Tetrachlorobenzene	216		8.419					ND	
69 2,4,6-Trichlorophenol	196		8.513					ND	
70 2,4,5-Trichlorophenol	196		8.548					ND	
72 1-Chloronaphthalene	162		8.682					ND	
71 1,1'-Biphenyl	154		8.683					ND	
73 2-Chloronaphthalene	162		8.719					ND	
74 1,4-Dinitrobenzene	168		8.769					ND	
75 2-Nitroaniline	65		8.795					ND	
76 1,4-Naphthoquinone	158		8.810					ND	
77 Dimethyl phthalate	163		8.942					ND	
78 1,3-Dinitrobenzene	168		8.978					ND	
79 2,6-Dinitrotoluene	165		9.007					ND	
80 Acenaphthylene	152		9.107					ND	
81 3-Nitroaniline	138		9.166					ND	
82 2,4-Dinitrophenol	184		9.260					ND	
83 Acenaphthene	153		9.266					ND	
84 4-Nitrophenol	109		9.295					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 1-Naphthylamine	143		9.340					ND	
86 Pentachlorobenzene	250		9.345					ND	
87 2,4-Dinitrotoluene	165		9.377					ND	
88 Dibenzofuran	168		9.419					ND	
89 2-Toluidine	106		9.432					ND	
90 2,3,5,6-Tetrachlorophenol	232		9.483					ND	
91 2,3,4,6-Tetrachlorophenol	232		9.525					ND	
92 2-Naphthylamine	143		9.554					ND	
94 Hexadecane	57		9.577					ND	
93 Diethyl phthalate	149		9.577					ND	
95 N-Nitro-o-toluidine	152		9.586					ND	
96 4-Chlorophenyl phenyl ethe	204		9.713					ND	
97 4-Nitroaniline	138		9.730					ND	
98 Fluorene	166		9.736					ND	
99 4,6-Dinitro-2-methylphenol	198		9.754					ND	
100 Diphenylamine	169		9.778					ND	
101 N-Nitrosodiphenylamine	169		9.819					ND	
102 Azobenzene	77		9.860					ND	
103 1,2-Diphenylhydrazine	77		9.860					ND	
104 1,3,5-Trinitrobenzene	213		9.896					ND	
105 Phenacetin	108		9.939					ND	
106 Phorate	121		9.944					ND	
107 Dimethoate	87		10.099					ND	
108 4-Bromophenyl phenyl ether	248		10.166					ND	
109 Hexachlorobenzene	284		10.254					ND	
110 4-Aminobiphenyl	169		10.265					ND	
111 Atrazine	200		10.277					ND	
112 Pronamide	173		10.297					ND	
113 Pentachloronitrobenzene	237		10.302					ND	
226 PCB-14	222		10.319					ND	
114 n-Octadecane	57		10.413					ND	
115 Pentachlorophenol	266		10.419					ND	
116 Disulfoton	88		10.419					ND	
117 Hexachlorophene TIC	198		10.600					ND	
118 Phenanthrene	178		10.636					ND	
119 Anthracene	178		10.683					ND	
120 Methyl parathion	109		10.793					ND	
121 Carbazole	167		10.824					ND	
122 Di-n-butyl phthalate	149		11.113					ND	
234 PCB-36	256		11.154					ND	
123 Ethyl Parathion	109		11.189					ND	
124 4-Nitroquinoline-1-oxide	190		11.263					ND	
125 Methapyrilene	58		11.317					ND	
225 PCB-104	326		11.401					ND	
227 PCB-184	394		11.500					ND	
126 Dinoseb	211		11.715					ND	
127 Isodrin	193		11.765					ND	
228 PCB-121	326		11.836					ND	
128 Fluoranthene	202		11.954					ND	
235 PCB-155	360		11.977					ND	
129 Benzidine	184		12.071					ND	
130 1,2,3,4 -Tetrachlorobenzen	216		12.215					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Pyrene	202		12.260					ND	
229 PCB-78	290		12.289					ND	
132 p-Dimethylamino azobenzene	225		12.428					ND	
133 Chlorobenzilate	139		12.678					ND	
134 Famphur	218		12.850					ND	
135 3,3'-Dimethylbenzidine	212		12.936					ND	
233 PCB-142	360		12.966					ND	
136 Kepone	272		13.030					ND	
137 Butyl benzyl phthalate	149		13.113					ND	
138 2-Acetylaminofluorene	181		13.363					ND	
139 Thionazin	97		13.789					ND	
140 4,4'-Methylene bis(2-chlor	231		13.881					ND	
141 3,3'-Dichlorobenzidine	252		14.101					ND	
142 Bis(2-ethylhexyl) phthalat	149		14.124					ND	
143 Benzo[a]anthracene	228		14.183					ND	
230 PCB-204	428		14.210					ND	
231 PCB-192	384		14.250					ND	
144 Chrysene	228		14.254					ND	
145 Sulfotepp	97		14.530					ND	
146 6-Methylchrysene	242		14.907					ND	
147 Di-n-octyl phthalate	149		15.436					ND	
148 7,12-Dimethylbenz(a)anthra	256		16.336					ND	
149 Benzo[b]fluoranthene	252		16.354					ND	
150 Benzo[k]fluoranthene	252		16.412					ND	
151 Benzo[e]pyrene	252		16.942					ND	
152 Benzo[a]pyrene	252		17.048					ND	
153 3-Methylcholanthrene	268		17.524					ND	
154 Dibenz[a,h]acridine	279		18.636					ND	
155 Dibenz[a,j]acridine	279		19.204					ND	
156 Indeno[1,2,3-cd]pyrene	276		19.424					ND	
157 Dibenz(a,h)anthracene	278		19.453					ND	
158 Benzo[g,h,i]perylene	276		20.047					ND	
178 Octachlorostyrene	308		0.000					ND	
190 3-Methylphenol	1		0.000					ND	
186 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
176 4-Chlorobenzoic Acid	139		0.000					ND	
175 2-Chlorobenzoic Acid	139		0.000					ND	
179 1,2-Dibromo-3-Chloropropan	157		0.000					ND	
172 Trifluralin	306		0.000					ND	
162 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
166 Aramite Peak 2	185		0.000					ND	
163 Benzotrichloride TIC	1		0.000					ND	
232 DCB Decachlorobiphenyl	1		0.000					ND	
184 3-Chlorobenzoic Acid	139		0.000					ND	
182 4-Nitrobiphenyl	199		0.000					ND	
193 2,6-Dichlorotoluene	1		0.000					ND	
167 4-Chloro-3-nitro-alpha,alp	179		0.000					ND	
170 1,2,3,4-Tetrahydronaphthal	104		0.000					ND	
168 2,3-Dichlorophenol	162		0.000					ND	
187 Octachlorocyclopentene	307		0.000					ND	
164 Diallate Peak 2	86		0.000					ND	
191 2-Butoxyethanol	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
183 2,3,7,8-TCDD TIC	1		0.000					ND	
169 o-Phenylphenol	1		0.000					ND	
173 Aramite Peak 1	185		0.000					ND	
165 n,n'-Dimethylaniline	120		0.000					ND	
181 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
189 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
192 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
161 2,5-Dichlorophenol	162		0.000					ND	
185 Diallate Peak 1	86		0.000					ND	
180 Isosafrole	162		0.000					ND	
188 Phthalic anhydride	104		0.000					ND	
171 4-Chlorophenol	128		0.000					ND	
177 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
159 1,2,3-Trimethylbenzene	105		0.000					ND	
174 4-tert-Octylphenol	135		0.000					ND	
160 Dimethylformamide	73		0.000					ND	
194 Pentachlorophenol_T	266		5.446					ND	
196 Benzidine_T	184		8.134					ND	
197 4,4'-DDE	246		9.086					ND	
198 4,4'-DDD	235		9.157					ND	
199 4,4'-DDT	235		9.704					ND	
S 200 Aramite, Total	185		1.000					ND	
S 201 Diallate	86		0.000					ND	
S 202 Total Cresols	108		0.000					ND	
S 203 Methyl Phenols,Total	108		0.000					ND	
S 204 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
T 224 4-nonylphenol TIC	107		10.830					ND	
T 205 Phenyl ether TIC	170		11.500					ND	
T 206 Quinoline TIC	129		0.000					ND	

Reagents:

SVTAPITINTRNi_00016 Amount Added: 1.00 Units: uL Run Reagent

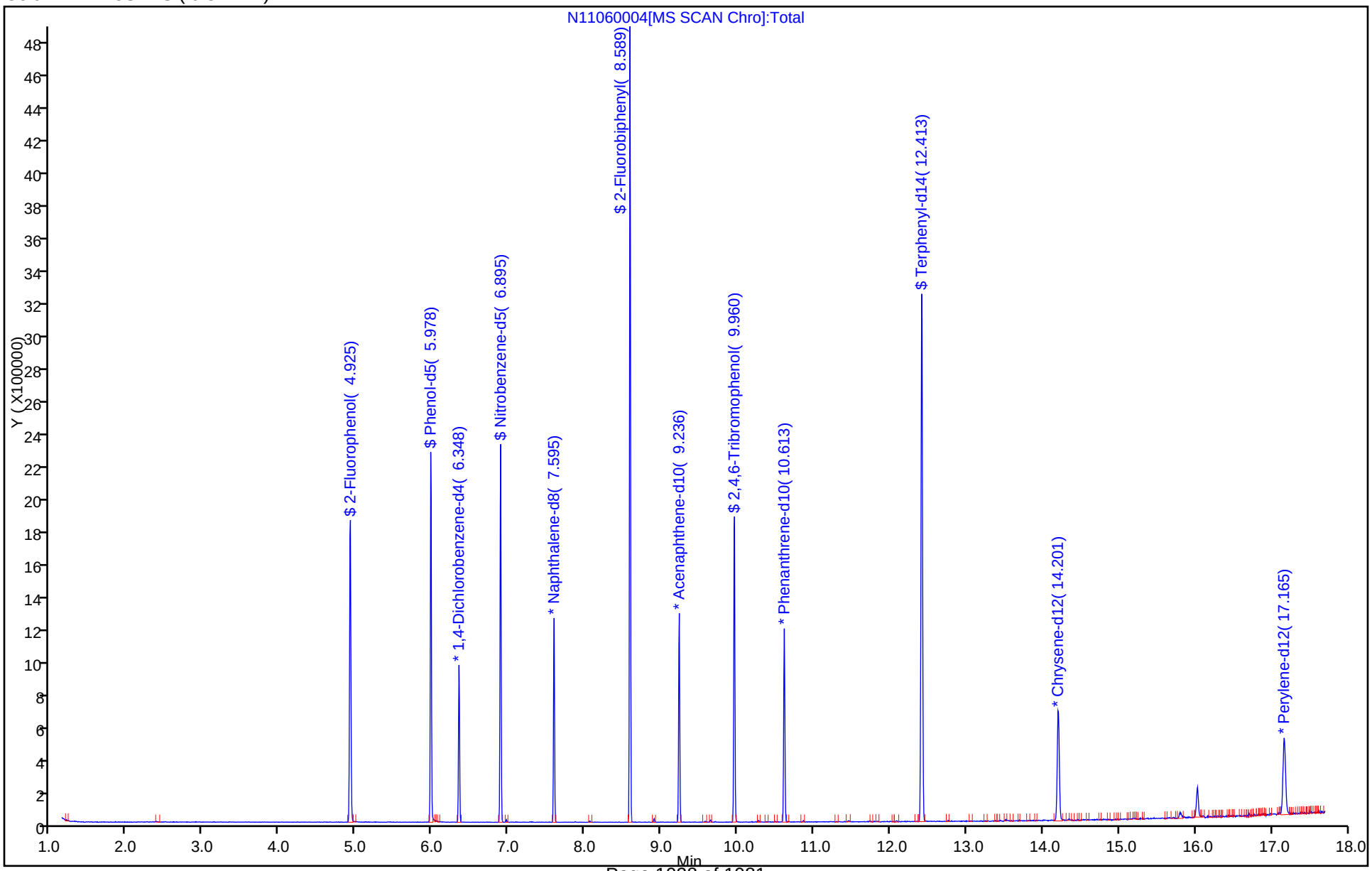
Report Date: 07-Nov-2017 06:37:02 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060004.D

Injection Date:	06-Nov-2017 11:20:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	MB 180-227668/1-A			Worklist Smp#:	4
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060004.D
Lims ID: MB 180-227668/1-A
Client ID:
Sample Type: MB
Inject. Date: 06-Nov-2017 11:20:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019192-004
Operator ID: 03200 Instrument ID: CH733

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 07-Nov-2017 06:35:11 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: piccolinov Date: 07-Nov-2017 06:28:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	40.0	24.0	59.91
$ 8 Phenol-d5	40.0	23.1	57.80
$ 9 Nitrobenzene-d5	40.0	26.5	66.27
$ 10 2-Fluorobiphenyl	40.0	26.9	67.24
$ 11 2,4,6-Tribromophenol	40.0	30.8	77.07
$ 12 Terphenyl-d14	40.0	28.9	72.34

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71829-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227668/2-A

Matrix: Water | Lab File ID: N11060006.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/01/2017 09:35

Sample wt/vol: 250(mL) | Date Analyzed: 11/06/2017 12:07

Con. Extract Vol.: 250(uL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 228094 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	11.9		2.0	0.37

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	65		26-103
367-12-4	2-Fluorophenol (Surr)	62		27-100
118-79-6	2,4,6-Tribromophenol (Surr)	80		28-134
4165-60-0	Nitrobenzene-d5 (Surr)	66		30-101
4165-62-2	Phenol-d5 (Surr)	58		27-101
1718-51-0	Terphenyl-d14 (Surr)	68		20-119

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060006.D
Lims ID: LCS 180-227668/2-A
Client ID:
Sample Type: LCS
Inject. Date: 06-Nov-2017 12:07:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019192-006
Operator ID: 03200 Instrument ID: CH733

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 07-Nov-2017 06:35:11 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: piccolinov Date: 07-Nov-2017 06:29:29

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	6.348	6.348	0.000	96	136101	8.00	8.00	
* 2 Naphthalene-d8	136	7.595	7.595	0.000	99	447754	8.00	8.00	
* 3 Acenaphthene-d10	164	9.236	9.236	0.000	93	225103	8.00	8.00	
* 4 Phenanthrene-d10	188	10.613	10.613	0.000	96	413916	8.00	8.00	
* 5 Chrysene-d12	240	14.212	14.201	0.011	98	444073	8.00	8.00	
* 6 Perylene-d12	264	17.171	17.165	0.006	98	397579	8.00	8.00	
$ 7 2-Fluorophenol	112	4.925	4.925	0.000	92	547833	40.0	25.0	
$ 8 Phenol-d5	99	5.983	5.978	0.005	93	607091	40.0	23.1	
$ 9 Nitrobenzene-d5	82	6.895	6.895	0.000	93	538353	40.0	26.4	
$ 10 2-Fluorobiphenyl	172	8.589	8.589	0.000	100	1175214	40.0	26.1	
$ 11 2,4,6-Tribromophenol	330	9.960	9.960	0.000	95	193574	40.0	31.9	
$ 12 Terphenyl-d14	244	12.418	12.413	0.005	99	1362705	40.0	27.2	
13 1,4-Dioxane	88	1.472	1.472	0.000	93	225073	40.0	23.8	
14 N-Nitrosodimethylamine	74	2.154	2.149	0.005	78	309277	40.0	23.5	
15 Pyridine	79	2.213	2.219	-0.006	93	1161094	80.0	47.3	
22 Benzaldehyde	77	5.889	5.889	0.000	91	328964	40.0	21.7	
24 Phenol	94	5.995	5.995	0.000	98	650574	40.0	22.5	
25 Aniline	93	6.007	6.007	0.000	97	717709	40.0	21.3	
26 Bis(2-chloroethyl)ether	93	6.078	6.078	0.000	99	475285	40.0	22.9	
27 2-Chlorophenol	128	6.136	6.137	-0.001	95	583509	40.0	25.0	
28 n-Decane	43	6.195	6.195	0.000	81	443924	40.0	20.7	
29 1,3-Dichlorobenzene	146	6.289	6.289	0.000	97	685443	40.0	25.3	
30 1,4-Dichlorobenzene	146	6.366	6.366	0.000	92	682091	40.0	25.2	
31 Benzyl alcohol	108	6.483	6.484	-0.001	88	265112	40.0	19.7	
32 1,2-Dichlorobenzene	146	6.519	6.519	0.000	95	630516	40.0	25.0	
33 2-Methylphenol	108	6.601	6.595	0.006	96	466842	40.0	23.9	
34 Indene	116	6.607	6.607	0.000	91	965465	40.0	25.2	
35 2,2'-oxybis[1-chloropropan	45	6.619	6.619	0.000	79	481771	40.0	20.0	
39 Acetophenone	105	6.742	6.742	0.000	88	672724	40.0	22.3	
38 N-Nitrosodi-n-propylamine	70	6.742	6.742	0.000	78	339212	40.0	22.6	
40 4-Methylphenol	108	6.748	6.742	0.006	78	493387	40.0	24.1	
41 Hexachloroethane	117	6.860	6.860	0.000	88	255120	40.0	25.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 Nitrobenzene	77	6.913	6.913	0.000	91	518044	40.0	25.5	
44 Isophorone	82	7.142	7.142	0.000	96	814241	40.0	23.8	
46 2-Nitrophenol	139	7.225	7.225	0.000	97	297612	40.0	28.4	
47 2,4-Dimethylphenol	107	7.254	7.254	0.000	97	494727	40.0	24.7	
48 Benzoic acid	122	7.319	7.295	0.024	92	314089	40.0	29.1	
49 Bis(2-chloroethoxy)methane	93	7.336	7.336	0.000	99	489912	40.0	23.4	
51 2,4-Dichlorophenol	162	7.454	7.454	0.000	94	458997	40.0	27.5	
52 1,2,4-Trichlorobenzene	180	7.536	7.536	0.000	94	553737	40.0	27.5	
53 Naphthalene	128	7.613	7.613	0.000	98	1517416	40.0	25.7	
55 4-Chloroaniline	127	7.654	7.654	0.000	96	610427	40.0	25.4	
56 2,6-Dichlorophenol	162	7.666	7.666	0.000	96	465019	40.0	28.1	
57 Hexachlorobutadiene	225	7.730	7.731	-0.001	96	368709	40.0	30.7	
61 Caprolactam	113	7.954	7.942	0.012	79	130271	40.0	25.6	
63 4-Chloro-3-methylphenol	107	8.089	8.089	0.000	94	408022	40.0	24.9	
65 2-Methylnaphthalene	142	8.260	8.260	0.000	92	1067769	40.0	26.4	
66 1-Methylnaphthalene	142	8.354	8.354	0.000	93	955730	40.0	25.1	
67 Hexachlorocyclopentadiene	237	8.413	8.413	0.000	96	441128	40.0	31.7	
68 1,2,4,5-Tetrachlorobenzene	216	8.419	8.419	0.000	98	584944	40.0	28.0	
69 2,4,6-Trichlorophenol	196	8.519	8.513	0.006	93	363144	40.0	29.3	
70 2,4,5-Trichlorophenol	196	8.554	8.548	0.006	93	353705	40.0	27.2	
71 1,1'-Biphenyl	154	8.689	8.683	0.006	94	1266919	40.0	26.3	
73 2-Chloronaphthalene	162	8.719	8.719	0.000	97	979327	40.0	26.7	
75 2-Nitroaniline	65	8.795	8.795	0.000	82	265911	40.0	26.1	
77 Dimethyl phthalate	163	8.942	8.942	0.000	98	1084422	40.0	26.5	
78 1,3-Dinitrobenzene	168	8.977	8.978	-0.001	85	184174	40.0	26.5	
79 2,6-Dinitrotoluene	165	9.007	9.007	0.000	92	248398	40.0	26.7	
80 Acenaphthylene	152	9.107	9.107	0.000	97	1434027	40.0	27.6	
81 3-Nitroaniline	138	9.171	9.166	0.005	93	244335	40.0	25.4	
82 2,4-Dinitrophenol	184	9.260	9.260	0.000	82	364275	80.0	48.4	
83 Acenaphthene	153	9.266	9.266	0.000	91	956296	40.0	25.8	
84 4-Nitrophenol	109	9.295	9.295	0.000	91	381255	80.0	58.2	
87 2,4-Dinitrotoluene	165	9.377	9.377	0.000	93	338393	40.0	27.8	
88 Dibenzofuran	168	9.419	9.419	-0.001	96	1387728	40.0	26.8	
91 2,3,4,6-Tetrachlorophenol	232	9.524	9.525	-0.001	72	329132	40.0	27.8	
94 Hexadecane	57	9.583	9.577	0.006	71	498131	40.0	22.8	
93 Diethyl phthalate	149	9.583	9.577	0.006	97	1077839	40.0	26.7	
96 4-Chlorophenyl phenyl ethe	204	9.713	9.713	0.000	93	599939	40.0	27.8	
97 4-Nitroaniline	138	9.730	9.730	0.000	85	255984	40.0	25.1	
98 Fluorene	166	9.736	9.736	0.000	95	1080184	40.0	26.2	
99 4,6-Dinitro-2-methylphenol	198	9.760	9.754	0.006	88	444995	80.0	56.0	
101 N-Nitrosodiphenylamine	169	9.818	9.819	-0.001	62	798402	40.0	26.8	
102 Azobenzene	77	9.860	9.860	0.000	94	906438	40.0	24.9	
103 1,2-Diphenylhydrazine	77	9.860	9.860	0.000	94	906438	40.0	24.9	
108 4-Bromophenyl phenyl ether	248	10.166	10.166	0.000	65	382595	40.0	29.5	
109 Hexachlorobenzene	284	10.254	10.254	0.000	96	397636	40.0	29.2	
111 Atrazine	200	10.277	10.277	0.000	94	201904	40.0	17.5	
114 n-Octadecane	57	10.418	10.413	0.005	90	498175	40.0	20.8	
115 Pentachlorophenol	266	10.424	10.419	0.005	92	487678	80.0	50.3	
118 Phenanthrene	178	10.636	10.636	0.000	96	1517574	40.0	25.7	
119 Anthracene	178	10.689	10.683	0.006	96	1574260	40.0	26.1	
121 Carbazole	167	10.830	10.824	0.006	96	1309604	40.0	25.1	
122 Di-n-butyl phthalate	149	11.118	11.113	0.005	100	1628880	40.0	26.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
128 Fluoranthene	202	11.954	11.954	0.000	96	1770380	40.0	27.3	
129 Benzidine	184	12.077	12.071	0.006	98	660119	40.0	20.8	
131 Pyrene	202	12.265	12.260	0.005	99	1737563	40.0	26.2	
137 Butyl benzyl phthalate	149	13.118	13.113	0.005	98	706373	40.0	26.7	
141 3,3'-Dichlorobenzidine	252	14.101	14.101	0.000	73	710807	40.0	29.0	
142 Bis(2-ethylhexyl) phthalat	149	14.124	14.124	0.000	94	963869	40.0	26.1	
143 Benzo[a]anthracene	228	14.189	14.183	0.006	96	1670715	40.0	25.0	
144 Chrysene	228	14.259	14.254	0.005	95	1550445	40.0	24.3	
147 Di-n-octyl phthalate	149	15.442	15.436	0.006	99	1572362	40.0	24.2	
149 Benzo[b]fluoranthene	252	16.359	16.354	0.005	95	1725758	40.0	25.0	
150 Benzo[k]fluoranthene	252	16.418	16.412	0.006	97	1726417	40.0	26.0	
152 Benzo[a]pyrene	252	17.053	17.048	0.005	73	1586649	40.0	26.2	
156 Indeno[1,2,3-cd]pyrene	276		19.424				ND	ND	
157 Dibenz(a,h)anthracene	278		19.453				ND	ND	
158 Benzo[g,h,i]perylene	276		20.047				ND	ND	
S 202 Total Cresols	108				0		80.0	48.1	
S 203 Methyl Phenols,Total	108				0		80.0	48.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPITINTRNi_00016 Amount Added: 1.00 Units: uL Run Reagent

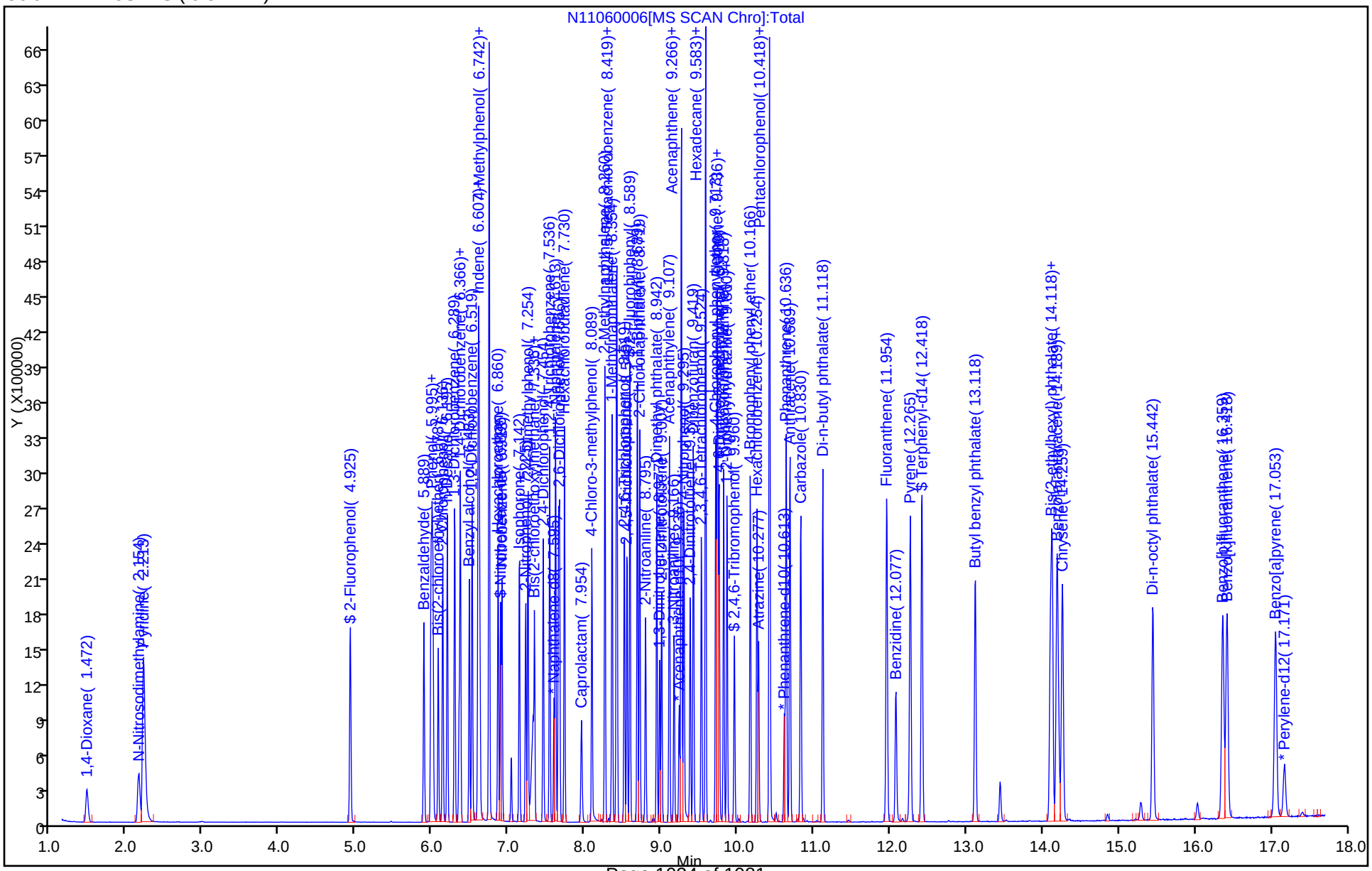
Report Date: 07-Nov-2017 06:37:04 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060006.D

Injection Date:	06-Nov-2017 12:07:30	Instrument ID:	CH733	Operator ID:	03200
Lims ID:	LCS 180-227668/2-A			Worklist Smp#:	6
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	BNA_CH733	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\N11060006.D
Lims ID: LCS 180-227668/2-A
Client ID:
Sample Type: LCS
Inject. Date: 06-Nov-2017 12:07:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019192-006
Operator ID: 03200 Instrument ID: CH733

Method: \\ChromNA\Pittsburgh\ChromData\CH733\20171106-19192.b\BNA_CH733.m
Limit Group: BNA 8270D ICAL
Last Update: 07-Nov-2017 06:35:11 Calib Date: 10-Oct-2017 07:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH733\20171010-18792.b\N10100010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: piccolinov Date: 07-Nov-2017 06:29:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	40.0	25.0	62.39
$ 8 Phenol-d5	40.0	23.1	57.78
$ 9 Nitrobenzene-d5	40.0	26.4	65.99
$ 10 2-Fluorobiphenyl	40.0	26.1	65.37
$ 11 2,4,6-Tribromophenol	40.0	31.9	79.80
$ 12 Terphenyl-d14	40.0	27.2	68.09

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CH733 Start Date: 10/10/2017 04:22

Analysis Batch Number: 225310 End Date: 10/10/2017 16:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-225310/2		10/10/2017 04:22	1	N10100002.D	Rxi-5SilMS 0.32(mm)
IC 180-225310/3		10/10/2017 04:37	1	N10100003.D	Rxi-5SilMS 0.32(mm)
IC 180-225310/4		10/10/2017 05:03	1	N10100004.D	Rxi-5SilMS 0.32(mm)
IC 180-225310/5		10/10/2017 05:30	1	N10100005.D	Rxi-5SilMS 0.32(mm)
ICIS 180-225310/6		10/10/2017 05:56	1	N10100006.D	Rxi-5SilMS 0.32(mm)
IC 180-225310/7		10/10/2017 06:23	1	N10100007.D	Rxi-5SilMS 0.32(mm)
IC 180-225310/8		10/10/2017 06:49	1	N10100008.D	Rxi-5SilMS 0.32(mm)
IC 180-225310/9		10/10/2017 07:16	1	N10100009.D	Rxi-5SilMS 0.32(mm)
IC 180-225310/10		10/10/2017 07:42	1	N10100010.D	Rxi-5SilMS 0.32(mm)
ICV 180-225310/11		10/10/2017 08:09	1		Rxi-5SilMS 0.32(mm)
ICV 180-225310/12		10/10/2017 08:35	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 09:02	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 09:29	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 09:55	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 10:22	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 10:48	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 11:41	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 12:08	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 12:34	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 13:01	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 13:27	15		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 13:54	25		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 14:20	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 15:40	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/10/2017 16:06	1		Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: CH733 Start Date: 11/06/2017 10:39

Analysis Batch Number: 228094 End Date: 11/06/2017 18:17

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-228094/2		11/06/2017 10:39	1	N11060002.D	Rxi-5SilMS 0.32(mm)
CCVIS 180-228094/3		11/06/2017 10:54	1	N11060003.D	Rxi-5SilMS 0.32(mm)
MB 180-227668/1-A		11/06/2017 11:20	1	N11060004.D	Rxi-5SilMS 0.32(mm)
LCS 180-227668/2-A		11/06/2017 12:07	1	N11060006.D	Rxi-5SilMS 0.32(mm)
180-71829-8		11/06/2017 17:54	1	N11060021.D	Rxi-5SilMS 0.32(mm)
180-71829-9		11/06/2017 18:17	1	N11060022.D	Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Batch Number: 227668 Batch Start Date: 11/01/17 14:40 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 11/02/17 09:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	OPLVISPKMIX1i 00057	OPQL8270SURi 00059
MB 180-227668/1		3520C, 8270D LL		5 SU	250 mL	250 uL	2 SU		25 uL
LCS 180-227668/2		3520C, 8270D LL		5 SU	250 mL	250 uL	2 SU	25 uL	25 uL
180-71829-D-8	HD-MW-136A-356/356.5-0	3520C, 8270D LL	T	7 SU	250 mL	250 uL	2		25 uL
180-71829-D-9	HD-MW-136A-372.5/373-0	3520C, 8270D LL	T	7 SU	260 mL	250 uL	2		25 uL

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid Used for pH Adjustment ID	2548536
Analyst ID - Concentration	cdm
Filter Paper ID	9792820
Extraction 1 End Time	0910
Extraction 1 Start Time	1440
N-evap ID	1
N-evap Temperature	25 Degrees C
Na2SO4 ID	2168777
pH Paper ID	Ph paper HC717803
Prep Solvent ID	2543214
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	100 mL
Person's name who did the prep	BT
Sufficient volume for MS/MSD?	Yes
Uncorrected N-evap Temperature	26 Degrees C
Uncorrected Temperature	65 Degrees C
Water Bath ID	1
Water Bath Temperature	65 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.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-71829-1

SDG No.:

Project: Harley Davidson

Client Sample ID	Lab Sample ID
HD-MW-2-0/1-0	180-71829-14

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HD-MW-2-0/1-0 Lab Sample ID: 180-71829-14

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG ID.:

Matrix: Water Date Sampled: 10/26/2017 10:47

Reporting Basis: WET Date Received: 10/27/2017 09:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Cyanide, Available	0.0069	0.0020	0.00036	mg/L			1	OIA-1677
57-12-5	Cyanide, Total	360	10	3.0	ug/L			1	9014

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Analyst: ANA Batch Start Date: 10/30/2017

Reporting Units: mg/L Analytical Batch No.: 227415

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
19	ICV	07:47	Cyanide, Available	0.0566	0.0500	113	85-115		WAvCN 50 ICV_00065
20	ICB	07:49	Cyanide, Available	0.0020				U	
40	CCV	08:29	Cyanide, Available	0.0513	0.0500	103	86-118		WAvCN50 CCV_00071
41	CCB	08:31	Cyanide, Available	0.0020				U	
52	CCV	08:53	Cyanide, Available	0.0519	0.0500	104	86-118		WAvCN50 CCV_00071
53	CCB	08:55	Cyanide, Available	0.0020				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Analyst: JAS Batch Start Date: 10/31/2017

Reporting Units: ug/L Analytical Batch No.: 227666

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
9	ICV	16:37	Cyanide, Total	205	200	102	90-110		WCN0.2ICV_00623
10	ICB	16:38	Cyanide, Total	10				U	
11	CCV	16:40	Cyanide, Total	98.9	100	99	90-110		WCN0.1L3_00336
12	CCB	16:42	Cyanide, Total	10				U	
23	CCV	17:01	Cyanide, Total	101	100	101	90-110		WCN0.1L3_00336
24	CCB	17:03	Cyanide, Total	10				U	
35	CCV	17:22	Cyanide, Total	99.2	100	99	90-110		WCN0.1L3_00336
36	CCB	17:24	Cyanide, Total	10				U	

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

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 227666	Date: 10/31/2017 16:49	Prep Batch: 227594	Date: 10/31/2017 13:24				
9014	MB 180-227594/4-A	Cyanide, Total	10	U	ug/L	10	1
Batch ID: 227415	Date: 10/30/2017 08:39						
OIA-1677	MB 180-227415/45	Cyanide, Available	0.0020	U	mg/L	0.0020	1

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 227666	Date: 10/31/2017 16:47		Prep Batch: 227594			Date: 10/31/2017 13:24					
						LCS Source: WCNLCS_00138					
9014	LCS 180-227594/3-A	Cyanide, Total	211		ug/L	200	105	85-115			
Batch ID: 227415	Date: 10/30/2017 08:35										
						LCS Source: WAvCN 50LCS_00066					
OIA-1677	LCS 180-227415/43	Cyanide, Available	0.0526		mg/L	0.0501	105	82-132	1	20	

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 227415 Date: 10/30/2017 08:37											
						LCSD Source: WAvCN 50LCS_00066					
OIA-1677	LCSD 180-227415/44	Cyanide, Available	0.0534		mg/L	0.0501	107	82-132	1	20	

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

FORM VIIA-IN

7A-IN
LOW LEVEL CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 227666	Date: 10/31/2017 16:44		Prep Batch: 227594			Date: 10/31/2017 13:24					
						LCS Source: WCN0.5L1_00784					
9014	LLCS 180-227594/1-A	Cyanide, Total	47.8		ug/L	50.0	96	90-110			

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

FORM VIIA-IN

7A-IN
HIGH LEVEL CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 227666	Date: 10/31/2017 16:45		Prep Batch: 227594		Date: 10/31/2017 13:24						
					LCS Source: WCN10Pi_00604						
9014	HLCS 180-227594/2-A	Cyanide, Total	250		ug/L	250	100	90-110			

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

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-71829-1

SDG Number:

Matrix: Water Instrument ID: ALPKEM2

Method: OIA-1677 MDL Date: 12/09/2016 10:35

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Cyanide, Available		0.002	0.00036

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-71829-1

SDG Number:

Matrix: Water Instrument ID: ALPKEM2

Method: OIA-1677 XMDL Date: 12/09/2016 10:36

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Cyanide, Available		0.002	0.00036

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-71829-1

SDG Number:

Matrix: Water Instrument ID: SEAL2

Method: 9014 MDL Date: 10/24/2017 13:26

Prep Method: 9010C

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Cyanide, Total		10	3.04

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-71829-1

SDG Number:

Matrix: Water Instrument ID: SEAL2

Method: 9014 XMDL Date: 10/24/2017 13:26

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Cyanide, Total		10	3.04

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Prep Method: 9010C

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LLCS 180-227594/1-A	10/31/2017 13:24	227594		50	50
HLCS 180-227594/2-A	10/31/2017 13:24	227594		50	50
LCS 180-227594/3-A	10/31/2017 13:24	227594		50	50
MB 180-227594/4-A	10/31/2017 13:24	227594		50	50
180-71829-14	10/31/2017 13:24	227594		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: ALPKEM2 Analysis Method: OIA-1677

Start Date: 10/30/2017 07:11 End Date: 10/30/2017 09:50

Lab Sample Id	D/F	Type	Time	Analytes																									
				CN-a																									
ZZZZZZ			07:11																										
ZZZZZZ			07:13																										
ZZZZZZ			07:15																										
ZZZZZZ			07:17																										
ZZZZZZ			07:19																										
ZZZZZZ			07:21																										
ZZZZZZ			07:23																										
ZZZZZZ			07:25																										
ZZZZZZ			07:27																										
ZZZZZZ			07:29																										
ZZZZZZ			07:31																										
ZZZZZZ			07:33																										
ZZZZZZ			07:35																										
ZZZZZZ			07:37																										
ZZZZZZ			07:39																										
ZZZZZZ			07:41																										
ZZZZZZ			07:43																										
ZZZZZZ			07:45																										
ICV 180-227415/19	1		07:47	X																									
ICB 180-227415/20	1		07:49	X																									
ZZZZZZ			07:51																										
ZZZZZZ			07:53																										
ZZZZZZ			07:55																										
ZZZZZZ			07:57																										
ZZZZZZ			07:59																										
ZZZZZZ			08:01																										
ZZZZZZ			08:03																										
ZZZZZZ			08:05																										
ZZZZZZ			08:07																										
ZZZZZZ			08:09																										
CCV 180-227415/31			08:11																										
CCB 180-227415/32			08:13																										
ZZZZZZ			08:15																										
ZZZZZZ			08:17																										
ZZZZZZ			08:19																										
ZZZZZZ			08:21																										
ZZZZZZ			08:23																										
ZZZZZZ			08:25																										
ZZZZZZ			08:27																										
CCV 180-227415/40	1		08:29	X																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: ALPKEM2 Analysis Method: OIA-1677

Start Date: 10/30/2017 07:11 End Date: 10/30/2017 09:50

Lab Sample Id	D/F	Type	Time	Analytes
				CN-a
CCB 180-227415/41	1		08:31	X
ZZZZZZ			08:33	
LCS 180-227415/43	1	T	08:35	X
LCSD 180-227415/44	1	T	08:37	X
MB 180-227415/45	1	T	08:39	X
ZZZZZZ			08:41	
ZZZZZZ			08:43	
180-71829-14	1	T	08:45	X
ZZZZZZ			08:47	
ZZZZZZ			08:49	
ZZZZZZ			08:51	
CCV 180-227415/52	1		08:53	X
CCB 180-227415/53	1		08:55	X
ZZZZZZ			08:57	
ZZZZZZ			08:59	
ZZZZZZ			09:01	
ZZZZZZ			09:03	
ZZZZZZ			09:05	
ZZZZZZ			09:07	
ZZZZZZ			09:09	
CCV 180-227415/61			09:11	
CCB 180-227415/62			09:13	
ZZZZZZ			09:15	
ZZZZZZ			09:17	
ZZZZZZ			09:19	
ZZZZZZ			09:21	
ZZZZZZ			09:23	
ZZZZZZ			09:25	
ZZZZZZ			09:27	
ZZZZZZ			09:29	
ZZZZZZ			09:31	
CCV 180-227415/72			09:33	
CCB 180-227415/73			09:35	
ZZZZZZ			09:37	
ZZZZZZ			09:42	
ZZZZZZ			09:44	
CCV 180-227415/77			09:46	
CCB 180-227415/78			09:48	
ZZZZZZ			09:50	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: ALPKEM2 Analysis Method: OIA-1677

Start Date: 10/30/2017 07:11 End Date: 10/30/2017 09:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				CN-a																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: SEAL2 Analysis Method: 9014

Start Date: 10/31/2017 16:23 End Date: 10/31/2017 18:16

Lab Sample Id	D/F	Type	Time	Analytes
				CN
ZZZZZZ			16:23	
ZZZZZZ			16:24	
ZZZZZZ			16:26	
ZZZZZZ			16:28	
ZZZZZZ			16:30	
ZZZZZZ			16:31	
ZZZZZZ			16:33	
ZZZZZZ			16:35	
ICV 180-227666/9	1		16:37	X
ICB 180-227666/10	1		16:38	X
CCV 180-227666/11	1		16:40	X
CCB 180-227666/12	1		16:42	X
LLCS 180-227594/1-A	1	T	16:44	X
HLCS 180-227594/2-A	1	T	16:45	X
LCS 180-227594/3-A	1	T	16:47	X
MB 180-227594/4-A	1	T	16:49	X
ZZZZZZ			16:51	
ZZZZZZ			16:52	
ZZZZZZ			16:54	
ZZZZZZ			16:56	
ZZZZZZ			16:58	
ZZZZZZ			16:59	
CCV 180-227666/23	1		17:01	X
CCB 180-227666/24	1		17:03	X
ZZZZZZ			17:05	
ZZZZZZ			17:06	
ZZZZZZ			17:08	
ZZZZZZ			17:10	
ZZZZZZ			17:12	
ZZZZZZ			17:13	
ZZZZZZ			17:15	
ZZZZZZ			17:17	
ZZZZZZ			17:19	
180-71829-14	1	T	17:20	X
CCV 180-227666/35	1		17:22	X
CCB 180-227666/36	1		17:24	X
ZZZZZZ			17:26	
ZZZZZZ			17:27	
ZZZZZZ			17:29	
ZZZZZZ			17:31	
ZZZZZZ			17:33	
ZZZZZZ			17:34	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Instrument ID: SEAL2 Analysis Method: 9014

Start Date: 10/31/2017 16:23 End Date: 10/31/2017 18:16

Lab Sample Id	D/F	Type	Time	Analytes																								
				CN																								
ZZZZZZ			17:36																									
ZZZZZZ			17:38																									
ZZZZZZ			17:40																									
ZZZZZZ			17:41																									
CCV 180-227666/47			17:43																									
CCB 180-227666/48			17:45																									
ZZZZZZ			17:47																									
ZZZZZZ			17:48																									
ZZZZZZ			17:50																									
ZZZZZZ			17:52																									
ZZZZZZ			17:54																									
ZZZZZZ			17:55																									
ZZZZZZ			17:57																									
ZZZZZZ			17:59																									
ZZZZZZ			18:01																									
ZZZZZZ			18:02																									
CCV 180-227666/59			18:04																									
CCB 180-227666/60			18:06																									
ZZZZZZ			18:07																									
ZZZZZZ			18:09																									
ZZZZZZ			18:11																									
ZZZZZZ			18:12																									
CCV 180-227666/65			18:14																									
CCB 180-227666/66			18:16																									

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Batch Number: 227415 Batch Start Date: 10/30/17 07:11 Batch Analyst: Anderson, Alexis N

Batch Method: OIA-1677 Batch End Date: 10/30/17 09:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	ChlorineCheck	pHChecked	SulfideCheck	WAvCN 50 ICV 00065	WAvCN 50LCS 00066
ICV 180-227415/19		OIA-1677		10 mL				10 mL	
CCV 180-227415/40		OIA-1677		10 mL					
LCS 180-227415/43		OIA-1677		10 mL					10 mL
LCSD 180-227415/44		OIA-1677		10 mL					10 mL
180-71829-D-14	HD-MW-2-0/1-0	OIA-1677	T		N	>12	N		
CCV 180-227415/52		OIA-1677		10 mL					

Lab Sample ID	Client Sample ID	Method Chain	Basis	WAvCN50 CCV 00071					
ICV 180-227415/19		OIA-1677							
CCV 180-227415/40		OIA-1677		10 mL					
LCS 180-227415/43		OIA-1677							
LCSD 180-227415/44		OIA-1677							
180-71829-D-14	HD-MW-2-0/1-0	OIA-1677	T						
CCV 180-227415/52		OIA-1677		10 mL					

Batch Notes	
Ascorbic Acid ID	1140591
Cadmiun Chloride ID	1432483
Sodium Hydroxide ID	2465897
Pipette ID	B524038476, 11K54327
WAD AR Solution ID	2536470
WAD Carrier Solution ID	2536472
WAD A ID	2464575
WAD B ID	2464583

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Batch Number: 227415 Batch Start Date: 10/30/17 07:11 Batch Analyst: Anderson, Alexis N

Batch Method: OIA-1677 Batch End Date: 10/30/17 09:50

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Batch Number: 227594 Batch Start Date: 10/31/17 13:24 Batch Analyst: Schmidt, Joshua A

Batch Method: 9010C Batch End Date: 10/31/17 14:54

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	SulfideCheck	ChlorineCheck	DistillpHCheck	WCN0.5L1 00784
LLCS 180-227594/1		9010C, 9014		50 mL	50 mL				5 mL
HLCS 180-227594/2		9010C, 9014		50 mL	50 mL				
LCS 180-227594/3		9010C, 9014		50 mL	50 mL				
MB 180-227594/4		9010C, 9014		50 mL	50 mL				
180-71829-E-14	HD-MW-2-0/1-0	9010C, 9014	T	50 mL	50 mL	N	N	>12	

Lab Sample ID	Client Sample ID	Method Chain	Basis	WCN10Pi 00604	WCNLCS 00138				
LLCS 180-227594/1		9010C, 9014							
HLCS 180-227594/2		9010C, 9014		1.25 mL					
LCS 180-227594/3		9010C, 9014			1 mL				
MB 180-227594/4		9010C, 9014							
180-71829-E-14	HD-MW-2-0/1-0	9010C, 9014	T						

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Batch Number: 227594 Batch Start Date: 10/31/17 13:24 Batch Analyst: Schmidt, Joshua A

Batch Method: 9010C Batch End Date: 10/31/17 14:54

Batch Notes	
Balance ID	1126472457
Batch Comment	PH STRIPS LOT#564992
Distillation Temperature	150 Degrees C
KI-Starch Paper Lot #	1276531
Lead Acetate Lot #	1276537
Magnesium Chloride Dispenser ID	02N42937
Magnesium Chloride ID	2111968
NaOH Dispenser ID	16E78374
Sodium Hydroxide ID	2540056
Pipette ID	B711828347
Sulfamic Acid ID	2502092
Sulfuric Acid Dispenser ID	21014
Sulfuric Acid Reagent ID Number	2509297
Telfon Chips ID	2061797

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71829-1

SDG No.:

Batch Number: 227666 Batch Start Date: 10/31/17 16:23 Batch Analyst: Schmidt, Joshua A

Batch Method: 9014 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	WCN0.1L3 00336	WCN0.2ICV 00623			
ICV 180-227666/9		9014		1 mL		1 mL			
CCV 180-227666/11		9014		1 mL	1 mL				
CCV 180-227666/23		9014		1 mL	1 mL				
CCV 180-227666/35		9014		1 mL	1 mL				

Batch Notes	
Buffer Reagent ID Number	2366772
Chloramine-T ID	2541723
Magnesium Chloride Dispenser ID	02N42937
NaOH Dispenser ID	16E78374
NaOH Lot #	2540056
Pipette ID	B711828347
Pyridine-Barbituric Acid ID	2427005
Sulfuric Acid Dispenser ID	21014

Basis	Basis Description

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.

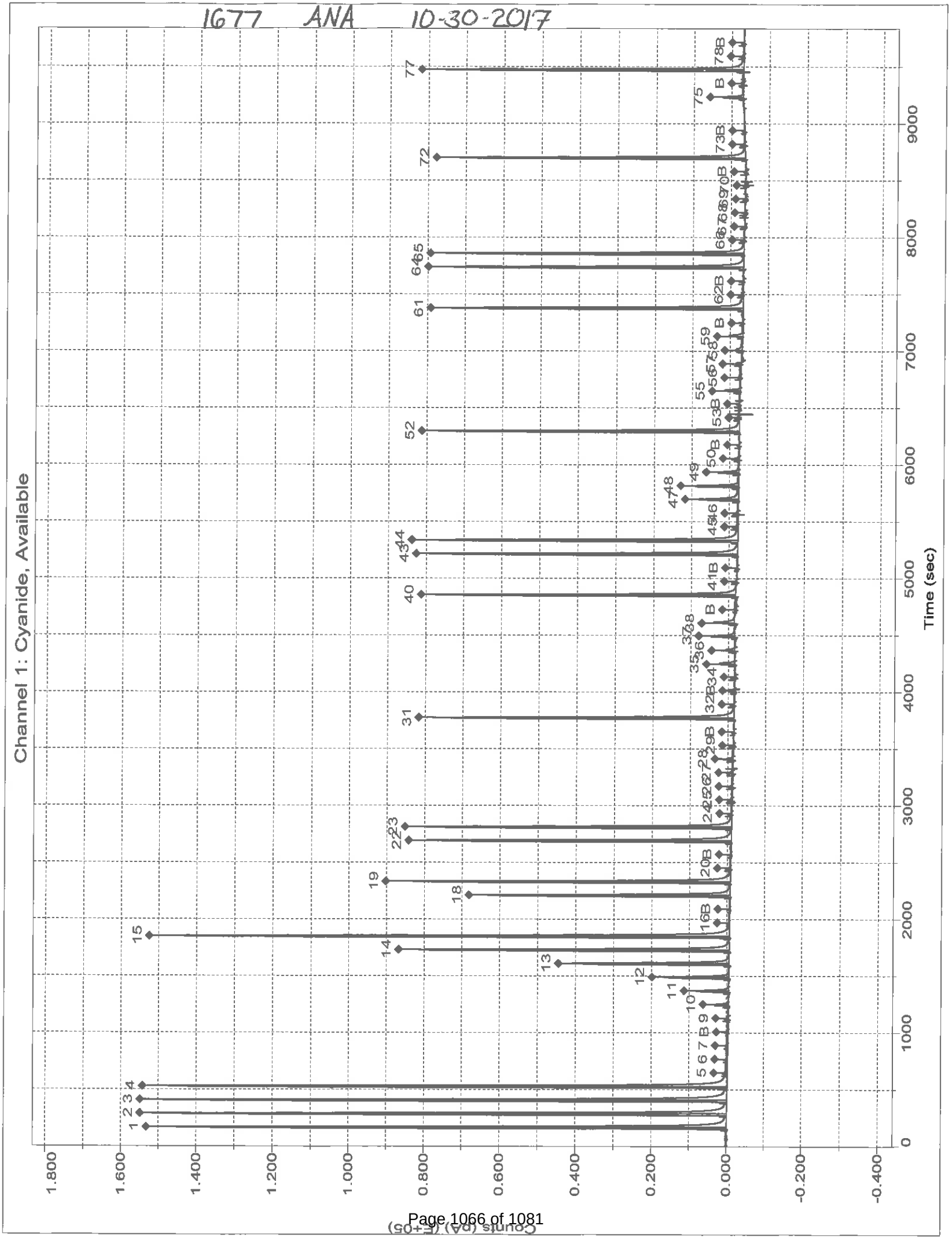
Peak Table:Cyanide, Available 1677 ANA 10-30-2017

File name: C:\FLOW_4\103017A.RST
Date: 30-Oct-17
Operator: ANA

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	7	System Conditioner	1	SYNC	1	1	150069	97.552055	
2	7	SYNC 100ppb	1	SYNC	1	1	151805	98.694511	
3	7	SYNC 100ppb	2	SYNC	1	1	151851	98.724892	
4	7	SYNC 100ppb	3	SYNC	1	1	151273	98.344551	
5	0	BLANK	1	BLNK	1	1	455	-0.888554	LO OL
6	0	BLANK	2	BLNK	1	1	245	-1.026482	LO
7	0	BLANK	3	BLNK	1	1	236	-1.032724	LO
B	0	READ BASELINE	1	RB	1	1	0	-1.187703	BL
9	1	Cal 0.000 ppb	1	C	1	1	195	-1.059160	LO
10	2	Cal 2.000 ppb	1	C	1	1	3647	1.211861	
11	3	Cal 5.000 ppb	1	C	1	1	8793	4.597641	
12	4	Cal 10.000 ppb	1	C	1	1	17323	10.210458	
13	5	Cal 25.000 ppb	1	C	1	1	41994	26.442778	
14	6	Cal 50.000 ppb	1	C	1	1	84272	54.259968	
15	7	Cal 100.000 ppb	1	C	1	1	150026	97.524155	
16	0	BLANK	1	U	1	1	179	-1.069811	LO
B	0	READ BASELINE	1	RB	1	1	0	-1.187703	BL
18	8	Ni(II)CN 50PPB	1	U	1	1	65857	42.143696	
19	9	ICV	1	U	1	1	87886	56.638195	
20	10	ICB	1	U	1	1	386	-0.934035	LO
B	0	BASELINE	1	RB	1	1	0	-1.187703	BL
22	11	LCS	1	U	1	1	82120	52.844238	
23	12	LCSD	1	U	1	1	83112	53.496948	
24	13	MB	1	U	1	1	109	-1.115961	LO
25	14	180-71740-a-1	1	U	1	1	291	-0.996219	LO
26	15	180-71740-a-2	1	U	1	1	487	-0.867171	LO
27	16	180-71768-a-1	1	U	1	1	659	-0.754234	LO
28	17	180-71635-c-2	1	U	1	1	1685	-0.079303	LO
29	18	180-71635-c-4	1	U	1	1	-279	-1.371267	LO
B	0	BASELINE	1	RB	1	1	0	-1.187703	BL
31	19	CCV	1	U	1	1	80085	51.505241	
32	20	CCB	1	U	1	1	134	-1.099465	LO
B	0	BASELINE	1	RB	1	1	0	-1.187703	BL
34	21	180-71635-c-6	1	U	1	1	-362	-1.426121	LO
35	22	180-71675-f-3	1	U	1	1	4322	1.656152	
36	23	180-71675-f-7	1	U	1	1	2868	0.699295	
37	24	600-155895-a-1	1	U	1	1	6304	2.960164	
38	25	600-155896-a-1	1	U	1	1	5492	2.425915	
B	0	BASELINE	1	RB	1	1	0	-1.187703	BL
40	26	CCV	1	U	1	1	79807	51.322075	
41	27	CCB	1	U	1	1	42	-1.160323	LO
B	0	BASELINE	1	RB	1	1	0	-1.187703	BL
43	28	LCS	1	U	1	1	81704	52.570328	
44	29	LCSD	1	U	1	1	82908	53.362404	
45	30	MB	1	U	1	1	416	-0.913911	LO
46	31	180-71674-a-1	1	U	1	1	425	-0.908141	LO
47	32	180-71674-a-2	1	U	1	1	11022	6.064488	
48	33	180-71829-d-14	1	U	1	1	12304	6.907776	
49	34	190-14730-b-2	1	U	1	1	5533	2.452544	
50	35	190-14772-b-6	1	U	1	1	1084	-0.474226	LO
B	0	BASELINE	1	RB	1	1	0	-1.187703	BL
52	36	CCV	1	U	1	1	80687	51.901508	
53	37	CCB	1	U	1	1	-372	-1.432741	LO
B	0	BASELINE	1	RB	1	1	0	-1.187703	BL
55	38	240-87084-a-1	1	U	1	1	4273	1.623557	
56	39	190-14761-c-2	1	U	1	1	1131	-0.443324	LO
57	40	190-14769-c-1	1	U	1	1	1804	-0.000866	LO
58	41	490-139435-h-4	1	U	1	1	1394	-0.270249	LO
59	42	MDL 1.0 PPB	1	U	1	1	3633	1.202430	
B	0	BASELINE	1	RB	1	1	0	-1.187703	BL UM
61	43	CCV	1	U	1	1	79392	51.049606	
62	44	CCB	1	U	1	1	159	-1.083261	LO
B	0	BASELINE	1	RB	1	1	0	-1.187703	BL

1677 ANA 10-30-2017

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
64	45	LCS	1	U	1	1	80061	51.489460	
65	46	LCSD	1	U	1	1	79591	51.180202	
66	47	MB	1	U	1	1	-5	-1.190933	LO
67	48	240-87068-d-1	1	U	1	1	-378	-1.436278	LO
68	49	240-87068-d-2	1	U	1	1	-460	-1.490477	LO
69	50	240-87068-d-3	1	U	1	1	-595	-1.579490	LO
70	51	240-87068-d-4	1	U	1	1	-748	-1.680046	LO
B	0	BASELINE	1	RB	1	1	0	-1.187703	BL
72	52	CCV	1	U	1	1	78371	50.377621	
73	53	CCB	1	U	1	1	173	-1.073994	LO
B	0	BASELINE	1	RB	1	1	0	-1.187703	BL
75	54	490-139429-e-1	1	U	1	1	5676	2.547089	
B	0	BASELINE	1	RB	1	1	0	-1.187703	BL
77	52	CCV	1	U	1	1	81766	52.611607	
78	53	CCB	1	U	1	1	331	-0.969823	LO
B	0	BASELINE	1	RB	1	1	0	-1.187703	BL


1677 ANA 10-30-2017
Channel 1: Cyanide, Available
Counts (pA) (E+05)
Time (sec)
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
0
1000
2000
3000
4000
5000
6000
7000
8000
9000

Cyanide, Available:Calibration 1: Peak 9-79

1677 ANA 10-30-2017

File name: C:\FLOW_4\103017A.RST
Date: 30-Oct-17
Operator: ANA

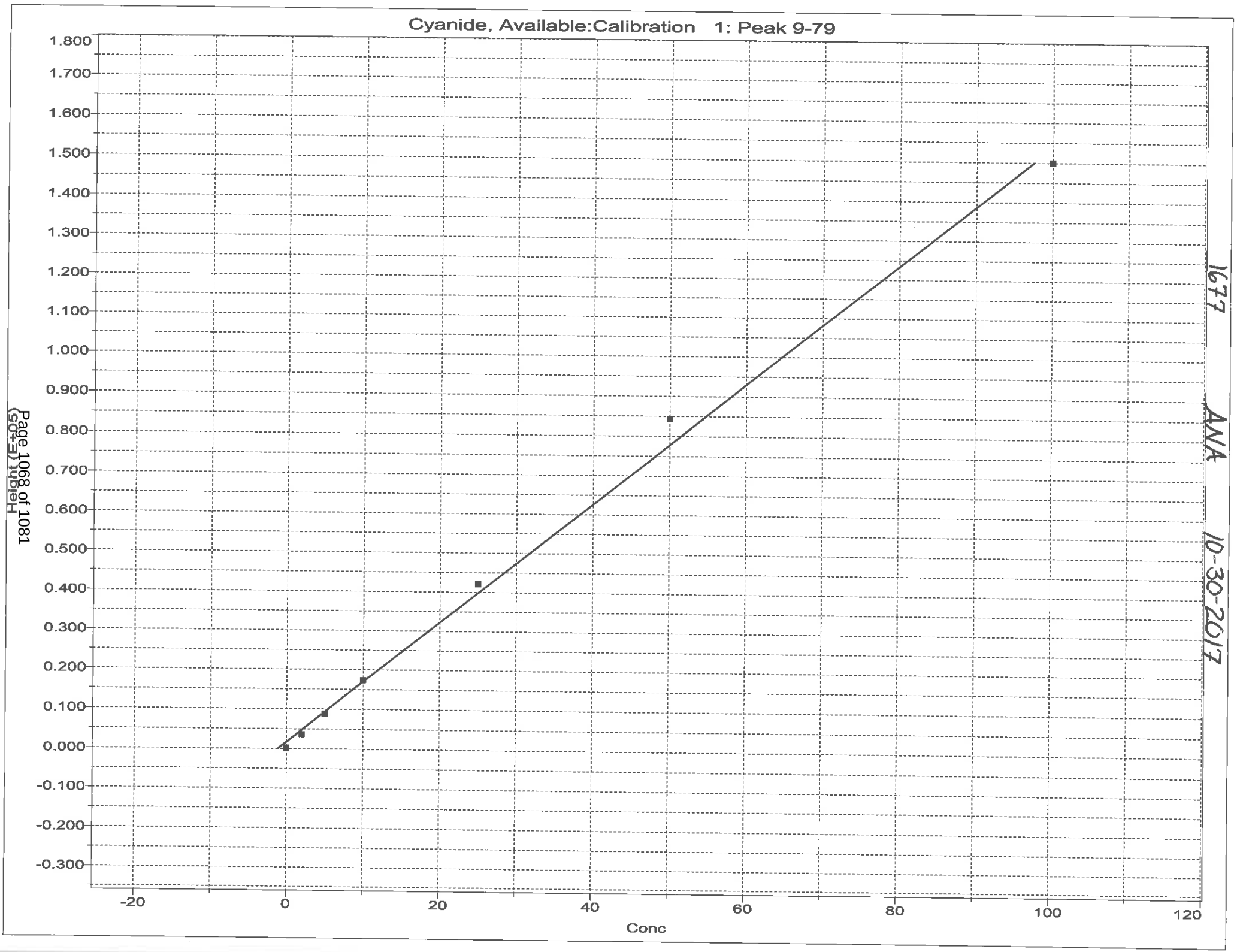
*	Name	Conc	Height
*	Cal 0.000 ppb	0.000000	195.364990
*	Cal 2.000 ppb	2.000000	3646.959229
*	Cal 5.000 ppb	5.000000	8792.809570
*	Cal 10.000 ppb	10.000000	17323.406250
*	Cal 25.000 ppb	25.000000	41993.972656
*	Cal 50.000 ppb	50.000000	84271.710938
*	Cal 100.000 ppb	100.000000	150026.453125

Calib Coef:
y=bx+a
a: (intercept) 1.8051e+03
b: 1.5198e+03

Corr Coef: 0.998286

Carryover: n/a

No Drift Peaks



1677 ANA 10-30-2017

Run Results Report 1677 ANA 10-30-2017

CYANIDE, AVAILABLE

Facility Name	
Facility Location	
Department	
Operator Name	ANA
Operator ID	ANA
Platform	FS 3000
Software Rev Code	220
Data system ID	57
Result path	C:\FLOW_4\103017A.RST
Sample table path	C:\FLOW_4\103017a.tbl
Method path	C:\FLOW_4\avcn1.mth
Date acquired	30-Oct-17
Time acquired	09:55

Date	Time	Cup	Name
30-Oct-17	07:11	7	System Conditioner
30-Oct-17	07:13	7	SYNC 100ppb
30-Oct-17	07:15	7	SYNC 100ppb
30-Oct-17	07:17	7	SYNC 100ppb (Statistics)
30-Oct-17	07:19	0	BLANK
30-Oct-17	07:21	0	BLANK
30-Oct-17	07:23	0	BLANK (Statistics)
30-Oct-17	07:25	0	READ BASELINE
30-Oct-17	07:27	1	Cal 0.000 ppb
30-Oct-17	07:29	2	Cal 2.000 ppb
30-Oct-17	07:31	3	Cal 5.000 ppb
30-Oct-17	07:33	4	Cal 10.000 ppb
30-Oct-17	07:35	5	Cal 25.000 ppb
30-Oct-17	07:37	6	Cal 50.000 ppb
30-Oct-17	07:39	7	Cal 100.000 ppb
30-Oct-17	07:41	0	BLANK
30-Oct-17	07:43	0	READ BASELINE
30-Oct-17	07:45	8	Ni(II)CN 50PPB
30-Oct-17	07:47	9	ICV
30-Oct-17	07:49	10	ICB
30-Oct-17	07:51	0	BASELINE
30-Oct-17	07:53	11	LCS
30-Oct-17	07:55	12	LCSD
30-Oct-17	07:57	13	MB
30-Oct-17	07:59	14	180-71740-a-1
30-Oct-17	08:01	15	180-71740-a-2
30-Oct-17	08:03	16	180-71768-a-1
30-Oct-17	08:05	17	180-71635-c-2
30-Oct-17	08:07	18	180-71635-c-4
30-Oct-17	08:09	0	BASELINE
30-Oct-17	08:11	19	CCV
30-Oct-17	08:13	20	CCB
30-Oct-17	08:15	0	BASELINE
30-Oct-17	08:17	21	180-71635-c-6
30-Oct-17	08:19	22	180-71675-f-3
30-Oct-17	08:21	23	180-71675-f-7
30-Oct-17	08:23	24	600-155895-a-1

1677 ANA 10-30-2017

Result path	C:\FLOW_4\103017A.RST
Sample table path	C:\FLOW_4\103017a.tbl
Method path	C:\FLOW_4\avcn1.mth
Date acquired	30-Oct-17
Time acquired	09:55

Date	Time	Cup	Name
30-Oct-17	08:25	25	600-155896-a-1
30-Oct-17	08:27	0	BASELINE
30-Oct-17	08:29	26	CCV
30-Oct-17	08:31	27	CCB
30-Oct-17	08:33	0	BASELINE
30-Oct-17	08:35	28	LCS
30-Oct-17	08:37	29	LCSD
30-Oct-17	08:39	30	MB
30-Oct-17	08:41	31	180-71674-a-1
30-Oct-17	08:43	32	180-71674-a-2
30-Oct-17	08:45	33	180-71829-d-14
30-Oct-17	08:47	34	190-14730-b-2
30-Oct-17	08:49	35	190-14772-b-6
30-Oct-17	08:51	0	BASELINE
30-Oct-17	08:53	36	CCV
30-Oct-17	08:55	37	CCB
30-Oct-17	08:57	0	BASELINE
30-Oct-17	08:59	38	240-87084-a-1
30-Oct-17	09:01	39	190-14761-c-2
30-Oct-17	09:03	40	190-14769-c-1
30-Oct-17	09:05	41	490-139435-h-4
30-Oct-17	09:07	42	MDL 1.0 PPB
30-Oct-17	09:09	0	BASELINE
30-Oct-17	09:11	43	CCV
30-Oct-17	09:13	44	CCB
30-Oct-17	09:15	0	BASELINE
30-Oct-17	09:17	45	LCS
30-Oct-17	09:19	46	LCSD
30-Oct-17	09:21	47	MB
30-Oct-17	09:23	48	240-87068-d-1
30-Oct-17	09:25	49	240-87068-d-2
30-Oct-17	09:27	50	240-87068-d-3
30-Oct-17	09:29	51	240-87068-d-4
30-Oct-17	09:31	0	BASELINE
30-Oct-17	09:33	52	CCV
30-Oct-17	09:35	53	CCB
30-Oct-17	09:37	0	BASELINE
30-Oct-17	09:42	54	490-139429-e-1
30-Oct-17	09:44	0	BASELINE
30-Oct-17	09:46	52	CCV
30-Oct-17	09:48	53	CCB
30-Oct-17	09:50	0	BASELINE

Run Results Report 1677 ANA 10-30-2017

CYANIDE, AVAILABLE

Facility Name	
Facility Location	
Department	
Operator Name	ANA
Operator ID	ANA
Platform	FS 3000
Software Rev Code	220
Data system ID	57
Result path	C:\FLOW_4\103017A.RST
Sample table path	C:\FLOW_4\103017a.tbl
Method path	C:\FLOW_4\avcn1.mth
Date acquired	30-Oct-17
Time acquired	09:55

	Cyanide, Available				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
System Conditioner	150069	97.552			
SYNC 100ppb	151805	98.695			
SYNC 100ppb	151851	98.725			
SYNC 100ppb	151273	98.345			
(Statistics)				151643	98.588
BLANK	455	-0.889	LO OL		
BLANK	245	-1.026	LO		
BLANK	236	-1.033	LO		
(Statistics)				240	-1.030
READ BASELINE	0	-1.188	BL		
Cal 0.000 ppb	195	-1.059	LO		
Cal 2.000 ppb	3647	1.212			
Cal 5.000 ppb	8793	4.598			
Cal 10.000 ppb	17323	10.210			
Cal 25.000 ppb	41994	26.443			
Cal 50.000 ppb	84272	54.260			
Cal 100.000 ppb	150026	97.524			
BLANK	179	-1.070	LO		
READ BASELINE	0	-1.188	BL		
Ni(II)CN 50PPB	65857	42.144			
ICV	87886	56.638			
ICB	386	-0.934	LO		
BASELINE	0	-1.188	BL		
LCS	82120	52.844			
LCSD	83112	53.497			
MB	109	-1.116	LO		
180-71740-a-1	291	-0.996	LO		
180-71740-a-2	487	-0.867	LO		
180-71768-a-1	659	-0.754	LO		
180-71635-c-2	1685	-0.079	LO		
180-71635-c-4	-279	-1.371	LO		
BASELINE	0	-1.188	BL		
CCV	80085	51.505			
CCB	134	-1.099	LO		
BASELINE	0	-1.188	BL		
180-71635-c-6	-362	-1.426	LO		
180-71675-f-3	4322	1.656			
180-71675-f-7	2868	0.699			
600-155895-a-1	6304	2.960			

1677 ANA 10-30-2017

Result path	C:\FLOW_4\103017A.RST
Sample table path	C:\FLOW_4\103017a.tbl
Method path	C:\FLOW_4\avcn1.mth
Date acquired	30-Oct-17
Time acquired	09:55

	Cyanide, Available				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
600-155896-a-1	5492	2.426			
BASELINE	0	-1.188	BL		
CCV	79807	51.322			
CCB	42	-1.160	LO		
BASELINE	0	-1.188	BL		
LCS	81704	52.570			
LCSD	82908	53.362			
MB	416	-0.914	LO		
180-71674-a-1	425	-0.908	LO		
180-71674-a-2	11022	6.064			
180-71829-d-14	12304	6.908			
190-14730-b-2	5533	2.453			
190-14772-b-6	1084	-0.474	LO		
BASELINE	0	-1.188	BL		
CCV	80687	51.902			
CCB	-372	-1.433	LO		
BASELINE	0	-1.188	BL		
240-87084-a-1	4273	1.624			
190-14761-c-2	1131	-0.443	LO		
190-14769-c-1	1804	-0.001	LO		
490-139435-h-4	1394	-0.270	LO		
MDL 1.0 PPB	3633	1.202			
BASELINE	0	-1.188	BL UM		
CCV	79392	51.050			
CCB	159	-1.083	LO		
BASELINE	0	-1.188	BL		
LCS	80061	51.489			
LCSD	79591	51.180			
MB	-5	-1.191	LO		
240-87068-d-1	-378	-1.436	LO		
240-87068-d-2	-460	-1.490	LO		
240-87068-d-3	-595	-1.579	LO		
240-87068-d-4	-748	-1.680	LO		
BASELINE	0	-1.188	BL		
CCV	78371	50.378			
CCB	173	-1.074	LO		
BASELINE	0	-1.188	BL		
490-139429-e-1	5676	2.547			
BASELINE	0	-1.188	BL		
CCV	81766	52.612			
CCB	331	-0.970	LO		
BASELINE	0	-1.188	BL		

*** Sample Table from Analysis *** 1677 ANA 10-30-2017

File name: *** Sample Table from Analysis ***
Date: 30-Oct-17

Cup	Name	Type	R	Dil	Wt	Comment
7	System Conditioner	SYNC	1	1	1	
7	SYNC 100ppb	SYNC	3	1	1	
0	BLANK	BLNK	1	1	1	
0	BLANK	BLNK	2	1	1	
0	READ BASELINE	RB	1	1	1	
1	Cal 0.000 ppb	C	1	1	1	
2	Cal 2.000 ppb	C	1	1	1	
3	Cal 5.000 ppb	C	1	1	1	
4	Cal 10.000 ppb	C	1	1	1	
5	Cal 25.000 ppb	C	1	1	1	
6	Cal 50.000 ppb	C	1	1	1	
7	Cal 100.000 ppb	C	1	1	1	
0	BLANK	U	1	1	1	
0	READ BASELINE	RB	1	1	1	
8	Ni(II)CN 50PPB	U	1	1	1	
9	ICV	U	1	1	1	
10	ICB	U	1	1	1	
0	BASELINE	RB	1	1	1	
11	LCS	U	1	1	1	
12	LCSD	U	1	1	1	
13	MB	U	1	1	1	
14	180-71740-a-1	U	1	1	1	Treated CdCl+Ascorbic Acid + Filtered
15	180-71740-a-2	U	1	1	1	Treated CdCl+Ascorbic Acid + Filtered
16	180-71768-a-1	U	1	1	1	Treated CdCl+Ascorbic Acid + Filtered
17	180-71635-c-2	U	1	1	1	
18	180-71635-c-4	U	1	1	1	
0	BASELINE	RB	1	1	1	
19	CCV	U	1	1	1	
20	CCB	U	1	1	1	
0	BASELINE	RB	1	1	1	
21	180-71635-c-6	U	1	1	1	
22	180-71675-f-3	U	1	1	1	
23	180-71675-f-7	U	1	1	1	
24	600-155895-a-1	U	1	1	1	
25	600-155896-a-1	U	1	1	1	
0	BASELINE	RB	1	1	1	
26	CCV	U	1	1	1	
27	CCB	U	1	1	1	
0	BASELINE	RB	1	1	1	
28	LCS	U	1	1	1	
29	LCSD	U	1	1	1	
30	MB	U	1	1	1	
31	180-71674-a-1	U	1	1	1	
32	180-71674-a-2	U	1	1	1	
33	180-71829-d-14	U	1	1	1	
34	190-14730-b-2	U	1	1	1	
35	190-14772-b-6	U	1	1	1	
0	BASELINE	RB	1	1	1	
36	CCV	U	1	1	1	
37	CCB	U	1	1	1	
0	BASELINE	RB	1	1	1	
38	240-87084-a-1	U	1	1	1	
39	190-14761-c-2	U	1	1	1	
40	190-14769-c-1	U	1	1	1	
41	490-139435-h-4	U	1	1	1	
42	MDL 1.0 PPB	U	1	1	1	

1677 ANA 10-30-2017

Cup	Name	Type	R	Dil	Wt	Comment
0	BASELINE	RB	1	1	1	
43	CCV	U	1	1	1	
44	CCB	U	1	1	1	
0	BASELINE	RB	1	1	1	
45	LCS	U	1	1	1	
46	LCSD	U	1	1	1	
47	MB	U	1	1	1	
48	240-87068-d-1	U	1	1	1	
49	240-87068-d-2	U	1	1	1	
50	240-87068-d-3	U	1	1	1	
51	240-87068-d-4	U	1	1	1	
0	BASELINE	RB	1	1	1	
52	CCV	U	1	1	1	
53	CCB	U	1	1	1	
0	BASELINE	RB	1	1	1	
54	490-139429-e-1	U	1	1	1	
0	BASELINE	RB	1	1	1	
52	CCV	U	1	1	1	
53	CCB	U	1	1	1	
0	BASELINE	RB	1	1	1	

AQ2 Report

Software Version:	2.1.4
Report Requested By:	TestAmerica
Date & Time:	2017-11-01 08:45:57
Tray Number:	1
Tray Name:	103117CNA

11-1-17

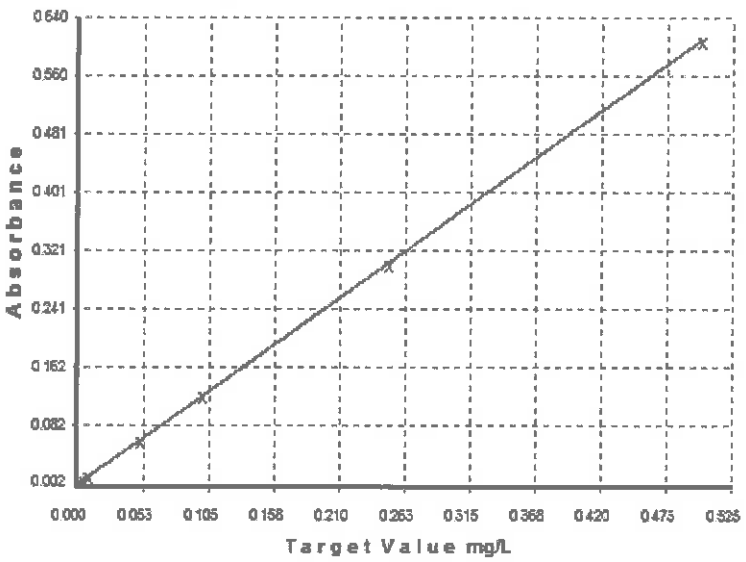
CYANIDE 4500-CN-E / 9014/9012B

Calibration Chart

Type	Absorbance	Calc mg/L	Target mg/L	% Error
*1	0.0024	-0.0019	0.0000	
S90	0.0116	0.0058	0.0050	15.58
S91	0.0159	0.0093	0.0100	-6.57
S92	0.0656	0.0505	0.0500	0.92
S93	0.1257	0.1002	0.1000	0.24
S94	0.3049	0.2485	0.2500	-0.59
S95	0.6095	0.5006	0.5000	0.13
S0	0.0027	-0.0016	0.0000	

Polynomial Order:	1
Correlation Coefficient:	1.0000
Carryover(%):	0.1
Calibration equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured absorbance
a =:	-3.825020E-003
b =:	8.276849E-001
Date & Time:	2017-10-31 16:35:25

Calibration Graph



Reagents

Name	Batch	Prepared By	Expiry Date
CN-PHOS BUFFER	2366772	TestAmerica	2018-05-18 00:00:00
CN-CHLORAMINE T	2541723	TestAmerica	2017-11-01 00:00:00
CN-PYRIDINE_BAR	2427005	TestAmerica	2018-01-18 00:00:00

Cup	Type	ID	Result	Units	QC Pro	Raw Data	Auto Dil.	Man Dil.	User	Time/Date
	S1	Standard 1	0.0024			0.002368			TA	2017-10-31 16:23:08
	S90	Standard 90	0.0116			0.011604			TA	2017-10-31 16:24:55
	S91	Standard 91	0.0159			0.015910			TA	2017-10-31 16:26:39
	S92	Standard 92	0.0656			0.065584			TA	2017-10-31 16:28:23
	S93	Standard 93	0.1257			0.125732			TA	2017-10-31 16:30:10
	S94	Standard 94	0.3049			0.304898			TA	2017-10-31 16:31:57
	S95	Standard 95	0.6095			0.609494			TA	2017-10-31 16:33:41
	S0	Standard 0	0.0027			0.002708			TA	2017-10-31 16:35:25
1	ICV	ICV	0.2047	mg/L		0.251897			TA	2017-10-31 16:37:09
2	ICB	ICB	-0.0017	mg/L		0.002555			TA	2017-10-31 16:38:54
	CCV	CCV	0.0989	mg/L		0.124096			TA	2017-10-31 16:40:38
	CCB	CCB	-0.0018	mg/L		0.002470			TA	2017-10-31 16:42:23
3	U1	LLCS 180-2275941-A	0.0478	mg/L		0.062318			TA	2017-10-31 16:44:08
4	U2	HLCS 180-2275942-A	0.2499	mg/L		0.306523			TA	2017-10-31 16:45:53
5	U3	LCS 180-2275943-A	0.2109	mg/L		0.259398			TA	2017-10-31 16:47:37
6	U4	MB 180-2275944-A	-0.0011	mg/L		0.003270			TA	2017-10-31 16:49:22
7	U5	180-71591-C-1-A	0.0124	mg/L		0.019559			TA	2017-10-31 16:51:09
8	U6	180-71591-C-1-B DU	0.0124	mg/L		0.019568			TA	2017-10-31 16:52:57
9	U7	180-71591-C-1-C MS	0.1079	mg/L		0.134929			TA	2017-10-31 16:54:42
10	U8	180-71591-C-1-D MSD	0.1096	mg/L		0.137012			TA	2017-10-31 16:56:27

11	U9	180-71678-D-4-A	-0.0003	mg/L	0.004244		TA	2017-10-31 16:58:12
12	U10	180-71679-D-4-A	0.0004	mg/L	0.005065		TA	2017-10-31 16:59:57
	CCV	CCV	0.1011	mg/L	0.126739		TA	2017-10-31 17:01:41
	CCB	CCB	-0.0018	mg/L	0.002470		TA	2017-10-31 17:03:27
13	U11	180-71677-D-2-A	-0.0000	mg/L	0.004577		TA	2017-10-31 17:05:12
14	U12	180-71722-N-1-A	0.0028	mg/L	0.007968		TA	2017-10-31 17:06:56
15	U13	180-71725-J-1-A	0.0017	mg/L	0.006660		TA	2017-10-31 17:08:40
16	U14	240-87084-B-1-A	0.0637	mg/L	0.081624		TA	2017-10-31 17:10:24
17	U15	180-71754-A-1-A	0.0034	mg/L	0.008736		TA	2017-10-31 17:12:11
18	U16	180-71761-P-1-A	0.0022	mg/L	0.007322		TA	2017-10-31 17:13:59
19	U17	180-71762-P-1-A	0.0032	mg/L	0.008451		TA	2017-10-31 17:15:43
20	U18	180-71752-C-6-A	0.0030	mg/L	0.008236		TA	2017-10-31 17:17:26
21	U19	180-71788-C-1-A	0.0009	mg/L	0.005733		TA	2017-10-31 17:19:13
22	U20	180-71829-E-14-A	0.3637	mg/L	0.443999		TA	2017-10-31 17:20:57
	CCV	CCV	0.0992	mg/L	0.124445		TA	2017-10-31 17:22:41
	CCB	CCB	-0.0007	mg/L	0.003740		TA	2017-10-31 17:24:26
23	U21	LLCS 180-2276001-A	0.0472	mg/L	0.061606		TA	2017-10-31 17:26:11
24	U22	HLCS 180-2276002-A	0.2557	mg/L	0.313556		TA	2017-10-31 17:27:54
25	U23	LCS 180-2276003-A	3.0084	mg/L	0.368092	x 10.000	TA	2017-10-31 17:29:38
26	U24	MB 180-2276004-A	-0.0006	mg/L	0.003859		TA	2017-10-31 17:31:22
27	U25	180-71634-A-1-I	0.1083	mg/L	0.135460		TA	2017-10-31 17:33:09
28	U26	180-71634-A-1-J MS	0.2924	mg/L	0.357864		TA	2017-10-31 17:34:56
29	U27	180-71634-A-1-K MSD	0.2614	mg/L	0.320404		TA	2017-10-31 17:36:40
30	U28	180-71634-A-2-I	0.0456	mg/L	0.059689		TA	2017-10-31 17:38:24
31	U29	180-71634-A-3-I	0.0204	mg/L	0.029236		TA	2017-10-31 17:40:08
32	U30	180-71634-A-4-I	0.0221	mg/L	0.031268		TA	2017-10-31 17:41:51
	CCV	CCV	0.1018	mg/L	0.127635		TA	2017-10-31 17:43:35
	CCB	CCB	0.0002	mg/L	0.004868		TA	2017-10-31 17:45:21
33	U31	180-71634-A-5-M	0.0425	mg/L	0.055986		TA	2017-10-31 17:47:07
34	U32	180-71634-A-6-K	0.0197	mg/L	0.028395		TA	2017-10-31 17:48:54
35	U33	180-71664-A-6-I	0.0039	mg/L	0.009289		TA	2017-10-31 17:50:38
36	U34	180-71664-A-7-I	0.0029	mg/L	0.008123		TA	2017-10-31 17:52:22
37	U35	180-71664-A-8-I	0.0487	mg/L	0.063434		TA	2017-10-31 17:54:09
38	U36	LLCS 180-2276011-A	0.0508	mg/L	0.066056		TA	2017-10-31 17:55:56
39	U37	HLCS 180-2276012-A	0.2536	mg/L	0.311072		TA	2017-10-31 17:57:41
40	U38	LCS 180-2276013-A	3.1267	mg/L	0.382388	x 10.000	TA	2017-10-31 17:59:25
41	U39	MB 180-2276014-A	-0.0001	mg/L	0.004534		TA	2017-10-31 18:01:09
42	U40	240-86753-B-1-A	0.0007	mg/L	0.005467		TA	2017-10-31 18:02:54
	CCV	CCV	0.1038	mg/L	0.130072		TA	2017-10-31 18:04:41
	CCB	CCB	-0.0001	mg/L	0.004500		TA	2017-10-31 18:06:30
43	U41	240-86753-B-1-B MS	0.0732	mg/L	0.093121		TA	2017-10-31 18:07:50
44	U42	240-86753-B-1-C MSD	0.0717	mg/L	0.091289		TA	2017-10-31 18:09:34
45	U43	180-71845-A-1-O	0.0042	mg/L	0.009652		TA	2017-10-31 18:11:11
46	U44	180-71845-A-2-L	0.0022	mg/L	0.007340		TA	2017-10-31 18:12:48
	CCV	CCV	0.1025	mg/L	0.128454		TA	2017-10-31 18:14:26
	CCB	CCB	0.0007	mg/L	0.005467		TA	2017-10-31 18:16:05

Shipping and Receiving Documents

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

Chain of Custody Record

450-KOP

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Christopher D. O'neil	Site Contact: Kaitlin B. Franssen	DateSubmitted: 10/26/17	COC No: TAP2017102601
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. 10012.32.0002
Harrisburg, PA 17110	Calendar (C) or Work Days (W)			
(717) 901-8180 Phone	TAT if different from Below: Standard			Container No.
(717) 657-1611 FAX	■ 2 weeks			SDG No.
Project Name: 2017 Comprehensive Event	☐ 1 week			
Site: Harley-Davidson, York PA	☐ 5 days			
Quote # 18000557	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260C)	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)	Total Cyanide (SW-846 9014)	Free Cyanide (EPA OIA-1677)	Sample Specific Notes:
HD-MW-430-0/1-0	10/26/17	1425	GW	W	3	3		*				
HD-MW-430-0/1-0MS	10/26/17	1425	GW	W	3	3						
HD-MW-430-0/1-0MSD	10/26/17	1425	GW	W	3	3						
HD-MW-435-0/1-0	10/26/17	1320	GW	W	3	3						
HD-QC3-0/1-1	10/26/17	0800	GW	W	3	3						
HD-MW-180-0/1-0	10/26/17	1030	GW	W	3	3						
HD-QC5-0/1-2	10/25/17	1200	Trip Blank	W	2	2						
HD-QC3-0/1-4	10/26/17	1445	Field Blank	W	3	3						
HD-QC3-0/1-3	10/26/17	1435	Rinse Blank	W	3	3						
Number of Containers						3	1	1	2	1	1	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Unpreserved 7=Zinc Acetate & NaOH						2	1	1	4	5	1	
Field Filter						N	N	Y	N	N	N	

180-71829 Chain of Custody

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

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

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

Relinquished by (Print and Sign):	Company: GSC	Date/Time: 10/26/17 1458	Received by:	Company: TA	Date/Time: 10/26/17 1450
Relinquished by:	Company: TA	Date/Time: 10/26/17 1636	Received by: Deedee Watson	Company: TA	Date/Time: 10-27-17 [illegible]
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

450-KOP

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Christopher D. O'neil	Site Contact: Kaitlin B. Franssen	DateSubmitted: 10/26/17	COC No: TAP2017102602.
Groundwater Sciences Corporation	Tel/Fax: 717-901-8176 / (717) 657-1611	Lab Contact: Carrie Gamber	Carrier: FEDEX	2 of 2 COCs
2601 Market Place St. Suite 310	Analysis Turnaround Time			Job No. 10012.32.0002
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: 2017 Comprehensive Event	☐ 1 week			
Site: Harley-Davidson, York PA	☐ 5 days			
Quote # 18000557	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260C)	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)	Total Cyanide (SW-846 9014)	Free Cyanide (EPA OIA-1677)	Sample Specific Notes:
HD-MW-136A-356/356.5-0	10/25/17	1100	GW	W	5	3			2			
HD-MW-136A-372.5/373-0	10/25/17	1200	GW	W	5	3			2			
HD-MW-136A-434/434.5-0	10/25/17	1300	GW	W	3	3						
HD-MW-136A-270/348-0	10/26/17	1000	GW	W	3	3						
HD-MW-91-D/1-0	10/25/17	1343	GW	W	3	3						
HD-MW-16D-0/1-0	10/25/17	1345	GW	W	3	3						
HD-MW-2-0/1-0	10/26/17	1047	GW	W	5	3				1	1	
HD-MW-185-0/1-0	10/26/17	0846	GW	W	3	3						
HD-MW-82-0/1-0	10/26/17	1215	GW	W	3	3						
HD-MW-15-0/1-0	10/26/17	0824	GW	W	3	3						
HD-MW-16S-0/1-0	10/25/17	1245	GW	W	3	3						
HD-MW-12-0/1-0	10/25/17	0820	GW	W	3	3						
HD-~~MW~~ TATE (5-6)-0/1-0	10/26/17	0900	GW	W	3	3						
Number of Containers						3	1	1	2	1	1	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Unpreserved 7=Zinc Acetate & NaOH						2	1	1	4	5	1	
Field Filter						N	N	Y	N	N	N	

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

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

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

Relinquished by (Print and Sign):	Company: GSC	Date/Time: 10/26/17 1458	Received by:	Company:	Date/Time: 10/26/17 1458
Relinquished by:	Company: TA	Date/Time: 10/26/17 1636	Received by: Deelia Watson	Company: TAP	Date/Time: 10-27-17 900
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

ORIGIN ID:KPDA (610) 337-9992
SAMPLE RECEIPT
TEST AMERICA
1010 WEST 9TH AVE
SUITE 50
KING OF PRUSSIA, PA 19406
UNITED STATES US

SHIP DATE: 26
ACTWGT: 47
CAD: 8490

BILL RECIPI

6 15:00 At 10:

RT 97
FZ B02

TO SAMPLE RECEIPT
TEST AMERICA - PITTSBURGH
301 ALPHA DR

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

FedEx Express

J172117091381uv

180-71829 Waybill

TRK# 0201

- 27 OCT 3:00P
STANDARD OVERNIGHT

E8 AGCA

15238
PA-US PIT

orrected temp 1.6 °C
nometer ID T5
8
Initials T5

01 effective 7/26/13

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-71829-1

Login Number: 71829
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.	N/A	
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	