TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 180-71580-1

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.
Carrie L Gamber
Senior Project Manager
11/2/2017 8:16 AM

Carrie L Gamber, Senior Project Manager
301 Alpha Drive, Pittsburgh, PA, 15238
(412)963-2428
carrie.gamber@testamericainc.com
11/02/2017

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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.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

GC/MS Semi VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	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: 180-71580-1

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 10/20/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.2 C.

VOLATILES
The following samples was diluted to bring the concentration of target analytes within the calibration range: HD-MW-127-0/1-0 (180-71580-2), HD-MW-87-0/1-0 (180-71580-3), HD-MW-77-0/1-0 (180-71580-4) and HD-MW-129-0/1-0 (180-71580-5). Elevated reporting limits (RLs) are provided.

The following analyte recovered outside control limits for the LCS associated with analytical batches 180-227010 and 180-227613: Chloromethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

The continuing calibration verification (CCV) analyzed in batch 180-227010 was outside the method criteria for the following analytes: 1,4-Dioxane and Bromomethane. 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 180-227152 was outside the method criteria for the following analytes: 1,4-Dioxane, Acetone, Bromomethane, Chloromethane and cis-1,3-Dichloropropene. 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
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: 180-71580-1

Client Sample ID: HD-QC2-0/1-2 — Lab Sample ID: 180-71580-1

No Detections.

Client Sample ID: HD-MW-127-0/1-0 — Lab Sample ID: 180-71580-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	200		10	7.1	ug/L	10		8260C	Total/NA
Trichloroethene	35		10	6.9	ug/L	10		8260C	Total/NA
Tetrachloroethene	8.5	J	10	4.7	ug/L	10		8260C	Total/NA
1,1-Dichloroethene - RA	2.8		1.0	0.55	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene - RA	1.3		1.0	0.67	ug/L	1		8260C	Total/NA
1,1-Dichloroethane - RA	4.4		1.0	0.63	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - RA	210	E	1.0	0.71	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane - RA	5.5		1.0	0.60	ug/L	1		8260C	Total/NA
Carbon tetrachloride - RA	1.6		1.0	0.88	ug/L	1		8260C	Total/NA
Trichloroethene - RA	49		1.0	0.69	ug/L	1		8260C	Total/NA
Tetrachloroethene - RA	14		1.0	0.47	ug/L	1		8260C	Total/NA
1,4-Dioxane	6.9		1.9	0.35	ug/L	1		8270D LL	Total/NA

Client Sample ID: HD-MW-87-0/1-0 — Lab Sample ID: 180-71580-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	250		10	7.1	ug/L	10		8260C	Total/NA
Trichloroethene	62		10	6.9	ug/L	10		8260C	Total/NA
Tetrachloroethene	12		10	4.7	ug/L	10		8260C	Total/NA
1,1-Dichloroethene - RA	3.4		1.0	0.55	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene - RA	1.7		1.0	0.67	ug/L	1		8260C	Total/NA
1,1-Dichloroethane - RA	6.3		1.0	0.63	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - RA	270	E	1.0	0.71	ug/L	1		8260C	Total/NA
Chloroform - RA	0.63	J	1.0	0.60	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane - RA	7.0		1.0	0.60	ug/L	1		8260C	Total/NA
Carbon tetrachloride - RA	2.2		1.0	0.88	ug/L	1		8260C	Total/NA
Trichloroethene - RA	86	E	1.0	0.69	ug/L	1		8260C	Total/NA
Tetrachloroethene - RA	20		1.0	0.47	ug/L	1		8260C	Total/NA
1,4-Dioxane	10		1.9	0.35	ug/L	1		8270D LL	Total/NA

Client Sample ID: HD-MW-77-0/1-0 — Lab Sample ID: 180-71580-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	200		25	15	ug/L	25		8260C	Total/NA
Benzene	460		25	15	ug/L	25		8260C	Total/NA
Toluene	18	J	25	11	ug/L	25		8260C	Total/NA
Ethylbenzene	31		25	13	ug/L	25		8260C	Total/NA
Methyl tert-butyl ether - RA	200	E	1.0	0.59	ug/L	1		8260C	Total/NA
Benzene - RA	210	E	1.0	0.60	ug/L	1		8260C	Total/NA
Toluene - RA	22		1.0	0.46	ug/L	1		8260C	Total/NA
Ethylbenzene - RA	53	E	1.0	0.51	ug/L	1		8260C	Total/NA
Xylenes, Total - RA	25		2.0	0.89	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-129-0/1-0 — Lab Sample ID: 180-71580-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	400		50	35	ug/L	50		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-MW-129-0/1-0 (Continued) — Lab Sample ID: 180-71580-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	780		50	34	ug/L	50		8260C	Total/NA
Tetrachloroethene	99		50	23	ug/L	50		8260C	Total/NA
1,1-Dichloroethene - RA	2.4		1.0	0.55	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene - RA	2.9		1.0	0.67	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - RA	310	E	1.0	0.71	ug/L	1		8260C	Total/NA
Trichloroethene - RA	590	E	1.0	0.69	ug/L	1		8260C	Total/NA
Tetrachloroethene - RA	170	E	1.0	0.47	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-142S-0/1-0 — Lab Sample ID: 180-71580-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.4		1.0	0.71	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-142D-0/1-0 — Lab Sample ID: 180-71580-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.79	J	1.0	0.71	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-143S-0/1-0 — Lab Sample ID: 180-71580-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.1		1.0	0.69	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.57	J	1.0	0.47	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-143D-0/1-0 — Lab Sample ID: 180-71580-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.74	J	1.0	0.71	ug/L	1		8260C	Total/NA

Client Sample ID: HD-MW-20S-0/1-0 — Lab Sample ID: 180-71580-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.95	J	1.0	0.71	ug/L	1		8260C	Total/NA
Chloroform	1.4		1.0	0.60	ug/L	1		8260C	Total/NA
Trichloroethene	32		1.0	0.69	ug/L	1		8260C	Total/NA
Tetrachloroethene	2.6		1.0	0.47	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: HD-QC2-0/1-2
Date Collected: 10/18/17 12:00
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U *	1.0	0.90	ug/L			10/26/17 04:56	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			10/26/17 04:56	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			10/26/17 04:56	1
Chloroethane	1.0	U	1.0	0.90	ug/L			10/26/17 04:56	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			10/26/17 04:56	1
Acetone	5.0	U	5.0	3.4	ug/L			10/26/17 04:56	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			10/26/17 04:56	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/26/17 04:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			10/26/17 04:56	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			10/26/17 04:56	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			10/26/17 04:56	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			10/26/17 04:56	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			10/26/17 04:56	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			10/26/17 04:56	1
Chloroform	1.0	U	1.0	0.60	ug/L			10/26/17 04:56	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 04:56	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			10/26/17 04:56	1
Benzene	1.0	U	1.0	0.60	ug/L			10/26/17 04:56	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 04:56	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			10/26/17 04:56	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			10/26/17 04:56	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			10/26/17 04:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			10/26/17 04:56	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			10/26/17 04:56	1
Toluene	1.0	U	1.0	0.46	ug/L			10/26/17 04:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			10/26/17 04:56	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			10/26/17 04:56	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			10/26/17 04:56	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			10/26/17 04:56	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			10/26/17 04:56	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			10/26/17 04:56	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			10/26/17 04:56	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 04:56	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			10/26/17 04:56	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			10/26/17 04:56	1
Styrene	1.0	U	1.0	0.47	ug/L			10/26/17 04:56	1
Bromoform	1.0	U	1.0	0.98	ug/L			10/26/17 04:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 04:56	1
Acrylonitrile	20	U	20	7.8	ug/L			10/26/17 04:56	1
1,4-Dioxane	200	U	200	14	ug/L			10/26/17 04:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*65 - 121*		*10/26/17 04:56*	*1*
Toluene-d8 (Surr)	*91*		*73 - 120*		*10/26/17 04:56*	*1*
4-Bromofluorobenzene (Surr)	*86*		*80 - 120*		*10/26/17 04:56*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*10/26/17 04:56*	*1*

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

Client Sample ID: HD-MW-127-0/1-0
Date Collected: 10/18/17 14:30
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	10	U *	10	9.0	ug/L			10/26/17 07:43	10
Vinyl chloride	10	U	10	8.8	ug/L			10/26/17 07:43	10
Bromomethane	10	U ^c	10	8.9	ug/L			10/26/17 07:43	10
Chloroethane	10	U	10	9.0	ug/L			10/26/17 07:43	10
1,1-Dichloroethene	10	U	10	5.5	ug/L			10/26/17 07:43	10
Acetone	50	U	50	34	ug/L			10/26/17 07:43	10
Carbon disulfide	10	U	10	8.8	ug/L			10/26/17 07:43	10
Methylene Chloride	10	U	10	3.6	ug/L			10/26/17 07:43	10
trans-1,2-Dichloroethene	10	U	10	6.7	ug/L			10/26/17 07:43	10
Methyl tert-butyl ether	10	U	10	5.9	ug/L			10/26/17 07:43	10
1,1-Dichloroethane	10	U	10	6.3	ug/L			10/26/17 07:43	10
cis-1,2-Dichloroethene	**200**		10	7.1	ug/L			10/26/17 07:43	10
Bromochloromethane	10	U	10	6.3	ug/L			10/26/17 07:43	10
2-Butanone (MEK)	50	U	50	26	ug/L			10/26/17 07:43	10
Chloroform	10	U	10	6.0	ug/L			10/26/17 07:43	10
1,1,1-Trichloroethane	10	U	10	6.0	ug/L			10/26/17 07:43	10
Carbon tetrachloride	10	U	10	8.8	ug/L			10/26/17 07:43	10
Benzene	10	U	10	6.0	ug/L			10/26/17 07:43	10
1,2-Dichloroethane	10	U	10	5.7	ug/L			10/26/17 07:43	10
Trichloroethene	**35**		10	6.9	ug/L			10/26/17 07:43	10
1,2-Dichloropropane	10	U	10	6.6	ug/L			10/26/17 07:43	10
Bromodichloromethane	10	U	10	6.4	ug/L			10/26/17 07:43	10
cis-1,3-Dichloropropene	10	U	10	5.9	ug/L			10/26/17 07:43	10
4-Methyl-2-pentanone (MIBK)	50	U	50	31	ug/L			10/26/17 07:43	10
Toluene	10	U	10	4.6	ug/L			10/26/17 07:43	10
trans-1,3-Dichloropropene	10	U	10	5.8	ug/L			10/26/17 07:43	10
1,1,2-Trichloroethane	10	U	10	4.5	ug/L			10/26/17 07:43	10
Tetrachloroethene	**8.5**	**J**	10	4.7	ug/L			10/26/17 07:43	10
2-Hexanone	50	U	50	33	ug/L			10/26/17 07:43	10
Dibromochloromethane	10	U	10	8.4	ug/L			10/26/17 07:43	10
1,2-Dibromoethane (EDB)	10	U	10	5.0	ug/L			10/26/17 07:43	10
Chlorobenzene	10	U	10	5.0	ug/L			10/26/17 07:43	10
1,1,1,2-Tetrachloroethane	10	U	10	5.7	ug/L			10/26/17 07:43	10
Ethylbenzene	10	U	10	5.1	ug/L			10/26/17 07:43	10
Xylenes, Total	20	U	20	8.9	ug/L			10/26/17 07:43	10
Styrene	10	U	10	4.7	ug/L			10/26/17 07:43	10
Bromoform	10	U	10	9.8	ug/L			10/26/17 07:43	10
1,1,2,2-Tetrachloroethane	10	U	10	6.0	ug/L			10/26/17 07:43	10
Acrylonitrile	200	U	200	78	ug/L			10/26/17 07:43	10
1,4-Dioxane	2000	U	2000	140	ug/L			10/26/17 07:43	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*65 - 121*		*10/26/17 07:43*	*10*
Toluene-d8 (Surr)	*90*		*73 - 120*		*10/26/17 07:43*	*10*
4-Bromofluorobenzene (Surr)	*84*		*80 - 120*		*10/26/17 07:43*	*10*
Dibromofluoromethane (Surr)	*111*		*73 - 120*		*10/26/17 07:43*	*10*

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

Client Sample ID: HD-MW-87-0/1-0
Date Collected: 10/18/17 13:30
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	10	U *	10	9.0	ug/L			10/26/17 08:07	10
Vinyl chloride	10	U	10	8.8	ug/L			10/26/17 08:07	10
Bromomethane	10	U ^c	10	8.9	ug/L			10/26/17 08:07	10
Chloroethane	10	U	10	9.0	ug/L			10/26/17 08:07	10
1,1-Dichloroethene	10	U	10	5.5	ug/L			10/26/17 08:07	10
Acetone	50	U	50	34	ug/L			10/26/17 08:07	10
Carbon disulfide	10	U	10	8.8	ug/L			10/26/17 08:07	10
Methylene Chloride	10	U	10	3.6	ug/L			10/26/17 08:07	10
trans-1,2-Dichloroethene	10	U	10	6.7	ug/L			10/26/17 08:07	10
Methyl tert-butyl ether	10	U	10	5.9	ug/L			10/26/17 08:07	10
1,1-Dichloroethane	10	U	10	6.3	ug/L			10/26/17 08:07	10
cis-1,2-Dichloroethene	**250**		10	7.1	ug/L			10/26/17 08:07	10
Bromochloromethane	10	U	10	6.3	ug/L			10/26/17 08:07	10
2-Butanone (MEK)	50	U	50	26	ug/L			10/26/17 08:07	10
Chloroform	10	U	10	6.0	ug/L			10/26/17 08:07	10
1,1,1-Trichloroethane	10	U	10	6.0	ug/L			10/26/17 08:07	10
Carbon tetrachloride	10	U	10	8.8	ug/L			10/26/17 08:07	10
Benzene	10	U	10	6.0	ug/L			10/26/17 08:07	10
1,2-Dichloroethane	10	U	10	5.7	ug/L			10/26/17 08:07	10
Trichloroethene	**62**		10	6.9	ug/L			10/26/17 08:07	10
1,2-Dichloropropane	10	U	10	6.6	ug/L			10/26/17 08:07	10
Bromodichloromethane	10	U	10	6.4	ug/L			10/26/17 08:07	10
cis-1,3-Dichloropropene	10	U	10	5.9	ug/L			10/26/17 08:07	10
4-Methyl-2-pentanone (MIBK)	50	U	50	31	ug/L			10/26/17 08:07	10
Toluene	10	U	10	4.6	ug/L			10/26/17 08:07	10
trans-1,3-Dichloropropene	10	U	10	5.8	ug/L			10/26/17 08:07	10
1,1,2-Trichloroethane	10	U	10	4.5	ug/L			10/26/17 08:07	10
Tetrachloroethene	**12**		10	4.7	ug/L			10/26/17 08:07	10
2-Hexanone	50	U	50	33	ug/L			10/26/17 08:07	10
Dibromochloromethane	10	U	10	8.4	ug/L			10/26/17 08:07	10
1,2-Dibromoethane (EDB)	10	U	10	5.0	ug/L			10/26/17 08:07	10
Chlorobenzene	10	U	10	5.0	ug/L			10/26/17 08:07	10
1,1,1,2-Tetrachloroethane	10	U	10	5.7	ug/L			10/26/17 08:07	10
Ethylbenzene	10	U	10	5.1	ug/L			10/26/17 08:07	10
Xylenes, Total	20	U	20	8.9	ug/L			10/26/17 08:07	10
Styrene	10	U	10	4.7	ug/L			10/26/17 08:07	10
Bromoform	10	U	10	9.8	ug/L			10/26/17 08:07	10
1,1,2,2-Tetrachloroethane	10	U	10	6.0	ug/L			10/26/17 08:07	10
Acrylonitrile	200	U	200	78	ug/L			10/26/17 08:07	10
1,4-Dioxane	2000	U	2000	140	ug/L			10/26/17 08:07	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*65 - 121*		*10/26/17 08:07*	*10*
Toluene-d8 (Surr)	*91*		*73 - 120*		*10/26/17 08:07*	*10*
4-Bromofluorobenzene (Surr)	*86*		*80 - 120*		*10/26/17 08:07*	*10*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*10/26/17 08:07*	*10*

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

Client Sample ID: HD-MW-77-0/1-0
Date Collected: 10/18/17 12:05
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	25	U *	25	22	ug/L			10/26/17 08:31	25
Vinyl chloride	25	U	25	22	ug/L			10/26/17 08:31	25
Bromomethane	25	U ^c	25	22	ug/L			10/26/17 08:31	25
Chloroethane	25	U	25	22	ug/L			10/26/17 08:31	25
1,1-Dichloroethene	25	U	25	14	ug/L			10/26/17 08:31	25
Acetone	130	U	130	86	ug/L			10/26/17 08:31	25
Carbon disulfide	25	U	25	22	ug/L			10/26/17 08:31	25
Methylene Chloride	25	U	25	9.0	ug/L			10/26/17 08:31	25
trans-1,2-Dichloroethene	25	U	25	17	ug/L			10/26/17 08:31	25
Methyl tert-butyl ether	**200**		25	15	ug/L			10/26/17 08:31	25
1,1-Dichloroethane	25	U	25	16	ug/L			10/26/17 08:31	25
cis-1,2-Dichloroethene	25	U	25	18	ug/L			10/26/17 08:31	25
Bromochloromethane	25	U	25	16	ug/L			10/26/17 08:31	25
2-Butanone (MEK)	130	U	130	65	ug/L			10/26/17 08:31	25
Chloroform	25	U	25	15	ug/L			10/26/17 08:31	25
1,1,1-Trichloroethane	25	U	25	15	ug/L			10/26/17 08:31	25
Carbon tetrachloride	25	U	25	22	ug/L			10/26/17 08:31	25
Benzene	**460**		25	15	ug/L			10/26/17 08:31	25
1,2-Dichloroethane	25	U	25	14	ug/L			10/26/17 08:31	25
Trichloroethene	25	U	25	17	ug/L			10/26/17 08:31	25
1,2-Dichloropropane	25	U	25	16	ug/L			10/26/17 08:31	25
Bromodichloromethane	25	U	25	16	ug/L			10/26/17 08:31	25
cis-1,3-Dichloropropene	25	U	25	15	ug/L			10/26/17 08:31	25
4-Methyl-2-pentanone (MIBK)	130	U	130	77	ug/L			10/26/17 08:31	25
Toluene	**18**	**J**	25	11	ug/L			10/26/17 08:31	25
trans-1,3-Dichloropropene	25	U	25	15	ug/L			10/26/17 08:31	25
1,1,2-Trichloroethane	25	U	25	11	ug/L			10/26/17 08:31	25
Tetrachloroethene	25	U	25	12	ug/L			10/26/17 08:31	25
2-Hexanone	130	U	130	82	ug/L			10/26/17 08:31	25
Dibromochloromethane	25	U	25	21	ug/L			10/26/17 08:31	25
1,2-Dibromoethane (EDB)	25	U	25	13	ug/L			10/26/17 08:31	25
Chlorobenzene	25	U	25	13	ug/L			10/26/17 08:31	25
1,1,1,2-Tetrachloroethane	25	U	25	14	ug/L			10/26/17 08:31	25
Ethylbenzene	**31**		25	13	ug/L			10/26/17 08:31	25
Xylenes, Total	50	U	50	22	ug/L			10/26/17 08:31	25
Styrene	25	U	25	12	ug/L			10/26/17 08:31	25
Bromoform	25	U	25	24	ug/L			10/26/17 08:31	25
1,1,2,2-Tetrachloroethane	25	U	25	15	ug/L			10/26/17 08:31	25
Acrylonitrile	500	U	500	200	ug/L			10/26/17 08:31	25
1,4-Dioxane	5000	U	5000	340	ug/L			10/26/17 08:31	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*65 - 121*		*10/26/17 08:31*	*25*
Toluene-d8 (Surr)	*96*		*73 - 120*		*10/26/17 08:31*	*25*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*10/26/17 08:31*	*25*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*10/26/17 08:31*	*25*

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

Client Sample ID: HD-MW-129-0/1-0
Date Collected: 10/18/17 09:35
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	50	U ^c	50	45	ug/L			10/27/17 07:59	50
Vinyl chloride	50	U	50	44	ug/L			10/27/17 07:59	50
Bromomethane	50	U ^c	50	44	ug/L			10/27/17 07:59	50
Chloroethane	50	U	50	45	ug/L			10/27/17 07:59	50
1,1-Dichloroethene	50	U	50	28	ug/L			10/27/17 07:59	50
Acetone	250	U ^c	250	170	ug/L			10/27/17 07:59	50
Carbon disulfide	50	U	50	44	ug/L			10/27/17 07:59	50
Methylene Chloride	50	U	50	18	ug/L			10/27/17 07:59	50
trans-1,2-Dichloroethene	50	U	50	34	ug/L			10/27/17 07:59	50
Methyl tert-butyl ether	50	U	50	30	ug/L			10/27/17 07:59	50
1,1-Dichloroethane	50	U	50	31	ug/L			10/27/17 07:59	50
cis-1,2-Dichloroethene	**400**		50	35	ug/L			10/27/17 07:59	50
Bromochloromethane	50	U	50	31	ug/L			10/27/17 07:59	50
2-Butanone (MEK)	250	U	250	130	ug/L			10/27/17 07:59	50
Chloroform	50	U	50	30	ug/L			10/27/17 07:59	50
1,1,1-Trichloroethane	50	U	50	30	ug/L			10/27/17 07:59	50
Carbon tetrachloride	50	U	50	44	ug/L			10/27/17 07:59	50
Benzene	50	U	50	30	ug/L			10/27/17 07:59	50
1,2-Dichloroethane	50	U	50	29	ug/L			10/27/17 07:59	50
Trichloroethene	**780**		50	34	ug/L			10/27/17 07:59	50
1,2-Dichloropropane	50	U	50	33	ug/L			10/27/17 07:59	50
Bromodichloromethane	50	U	50	32	ug/L			10/27/17 07:59	50
cis-1,3-Dichloropropene	50	U ^c	50	30	ug/L			10/27/17 07:59	50
4-Methyl-2-pentanone (MIBK)	250	U	250	150	ug/L			10/27/17 07:59	50
Toluene	50	U	50	23	ug/L			10/27/17 07:59	50
trans-1,3-Dichloropropene	50	U	50	29	ug/L			10/27/17 07:59	50
1,1,2-Trichloroethane	50	U	50	23	ug/L			10/27/17 07:59	50
Tetrachloroethene	**99**		50	23	ug/L			10/27/17 07:59	50
2-Hexanone	250	U	250	160	ug/L			10/27/17 07:59	50
Dibromochloromethane	50	U	50	42	ug/L			10/27/17 07:59	50
1,2-Dibromoethane (EDB)	50	U	50	25	ug/L			10/27/17 07:59	50
Chlorobenzene	50	U	50	25	ug/L			10/27/17 07:59	50
1,1,1,2-Tetrachloroethane	50	U	50	29	ug/L			10/27/17 07:59	50
Ethylbenzene	50	U	50	25	ug/L			10/27/17 07:59	50
Xylenes, Total	100	U	100	45	ug/L			10/27/17 07:59	50
Styrene	50	U	50	24	ug/L			10/27/17 07:59	50
Bromoform	50	U	50	49	ug/L			10/27/17 07:59	50
1,1,2,2-Tetrachloroethane	50	U	50	30	ug/L			10/27/17 07:59	50
Acrylonitrile	1000	U	1000	390	ug/L			10/27/17 07:59	50
1,4-Dioxane	10000	U	10000	680	ug/L			10/27/17 07:59	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*65 - 121*		*10/27/17 07:59*	*50*
Toluene-d8 (Surr)	*92*		*73 - 120*		*10/27/17 07:59*	*50*
4-Bromofluorobenzene (Surr)	*83*		*80 - 120*		*10/27/17 07:59*	*50*
Dibromofluoromethane (Surr)	*115*		*73 - 120*		*10/27/17 07:59*	*50*

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

Client Sample ID: HD-MW-142S-0/1-0
Date Collected: 10/18/17 14:42
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U *	1.0	0.90	ug/L			10/26/17 05:20	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			10/26/17 05:20	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			10/26/17 05:20	1
Chloroethane	1.0	U	1.0	0.90	ug/L			10/26/17 05:20	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			10/26/17 05:20	1
Acetone	5.0	U	5.0	3.4	ug/L			10/26/17 05:20	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			10/26/17 05:20	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/26/17 05:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			10/26/17 05:20	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			10/26/17 05:20	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			10/26/17 05:20	1
cis-1,2-Dichloroethene	**2.4**		1.0	0.71	ug/L			10/26/17 05:20	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			10/26/17 05:20	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			10/26/17 05:20	1
Chloroform	1.0	U	1.0	0.60	ug/L			10/26/17 05:20	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 05:20	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			10/26/17 05:20	1
Benzene	1.0	U	1.0	0.60	ug/L			10/26/17 05:20	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 05:20	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			10/26/17 05:20	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			10/26/17 05:20	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			10/26/17 05:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			10/26/17 05:20	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			10/26/17 05:20	1
Toluene	1.0	U	1.0	0.46	ug/L			10/26/17 05:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			10/26/17 05:20	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			10/26/17 05:20	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			10/26/17 05:20	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			10/26/17 05:20	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			10/26/17 05:20	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			10/26/17 05:20	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			10/26/17 05:20	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 05:20	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			10/26/17 05:20	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			10/26/17 05:20	1
Styrene	1.0	U	1.0	0.47	ug/L			10/26/17 05:20	1
Bromoform	1.0	U	1.0	0.98	ug/L			10/26/17 05:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 05:20	1
Acrylonitrile	20	U	20	7.8	ug/L			10/26/17 05:20	1
1,4-Dioxane	200	U	200	14	ug/L			10/26/17 05:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*65 - 121*		*10/26/17 05:20*	*1*
Toluene-d8 (Surr)	*91*		*73 - 120*		*10/26/17 05:20*	*1*
4-Bromofluorobenzene (Surr)	*85*		*80 - 120*		*10/26/17 05:20*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*10/26/17 05:20*	*1*

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

Client Sample ID: HD-MW-142D-0/1-0
Date Collected: 10/18/17 13:42
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U *	1.0	0.90	ug/L			10/26/17 05:44	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			10/26/17 05:44	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			10/26/17 05:44	1
Chloroethane	1.0	U	1.0	0.90	ug/L			10/26/17 05:44	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			10/26/17 05:44	1
Acetone	5.0	U	5.0	3.4	ug/L			10/26/17 05:44	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			10/26/17 05:44	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/26/17 05:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			10/26/17 05:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			10/26/17 05:44	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			10/26/17 05:44	1
cis-1,2-Dichloroethene	**0.79**	**J**	1.0	0.71	ug/L			10/26/17 05:44	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			10/26/17 05:44	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			10/26/17 05:44	1
Chloroform	1.0	U	1.0	0.60	ug/L			10/26/17 05:44	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 05:44	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			10/26/17 05:44	1
Benzene	1.0	U	1.0	0.60	ug/L			10/26/17 05:44	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 05:44	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			10/26/17 05:44	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			10/26/17 05:44	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			10/26/17 05:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			10/26/17 05:44	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			10/26/17 05:44	1
Toluene	1.0	U	1.0	0.46	ug/L			10/26/17 05:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			10/26/17 05:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			10/26/17 05:44	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			10/26/17 05:44	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			10/26/17 05:44	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			10/26/17 05:44	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			10/26/17 05:44	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			10/26/17 05:44	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 05:44	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			10/26/17 05:44	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			10/26/17 05:44	1
Styrene	1.0	U	1.0	0.47	ug/L			10/26/17 05:44	1
Bromoform	1.0	U	1.0	0.98	ug/L			10/26/17 05:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 05:44	1
Acrylonitrile	20	U	20	7.8	ug/L			10/26/17 05:44	1
1,4-Dioxane	200	U	200	14	ug/L			10/26/17 05:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*65 - 121*		*10/26/17 05:44*	*1*
Toluene-d8 (Surr)	*89*		*73 - 120*		*10/26/17 05:44*	*1*
4-Bromofluorobenzene (Surr)	*84*		*80 - 120*		*10/26/17 05:44*	*1*
Dibromofluoromethane (Surr)	*114*		*73 - 120*		*10/26/17 05:44*	*1*

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

Client Sample ID: HD-MW-143S-0/1-0
Date Collected: 10/18/17 11:05
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U *	1.0	0.90	ug/L			10/26/17 06:08	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			10/26/17 06:08	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			10/26/17 06:08	1
Chloroethane	1.0	U	1.0	0.90	ug/L			10/26/17 06:08	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			10/26/17 06:08	1
Acetone	5.0	U	5.0	3.4	ug/L			10/26/17 06:08	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			10/26/17 06:08	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/26/17 06:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			10/26/17 06:08	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			10/26/17 06:08	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			10/26/17 06:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			10/26/17 06:08	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			10/26/17 06:08	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			10/26/17 06:08	1
Chloroform	1.0	U	1.0	0.60	ug/L			10/26/17 06:08	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 06:08	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			10/26/17 06:08	1
Benzene	1.0	U	1.0	0.60	ug/L			10/26/17 06:08	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 06:08	1
Trichloroethene	**1.1**		1.0	0.69	ug/L			10/26/17 06:08	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			10/26/17 06:08	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			10/26/17 06:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			10/26/17 06:08	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			10/26/17 06:08	1
Toluene	1.0	U	1.0	0.46	ug/L			10/26/17 06:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			10/26/17 06:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			10/26/17 06:08	1
Tetrachloroethene	**0.57**	**J**	1.0	0.47	ug/L			10/26/17 06:08	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			10/26/17 06:08	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			10/26/17 06:08	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			10/26/17 06:08	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			10/26/17 06:08	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 06:08	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			10/26/17 06:08	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			10/26/17 06:08	1
Styrene	1.0	U	1.0	0.47	ug/L			10/26/17 06:08	1
Bromoform	1.0	U	1.0	0.98	ug/L			10/26/17 06:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 06:08	1
Acrylonitrile	20	U	20	7.8	ug/L			10/26/17 06:08	1
1,4-Dioxane	200	U	200	14	ug/L			10/26/17 06:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*65 - 121*		*10/26/17 06:08*	*1*
Toluene-d8 (Surr)	*95*		*73 - 120*		*10/26/17 06:08*	*1*
4-Bromofluorobenzene (Surr)	*84*		*80 - 120*		*10/26/17 06:08*	*1*
Dibromofluoromethane (Surr)	*112*		*73 - 120*		*10/26/17 06:08*	*1*

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

Client Sample ID: HD-MW-143D-0/1-0
Date Collected: 10/18/17 09:17
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U *	1.0	0.90	ug/L			10/26/17 06:32	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			10/26/17 06:32	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			10/26/17 06:32	1
Chloroethane	1.0	U	1.0	0.90	ug/L			10/26/17 06:32	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			10/26/17 06:32	1
Acetone	5.0	U	5.0	3.4	ug/L			10/26/17 06:32	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			10/26/17 06:32	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/26/17 06:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			10/26/17 06:32	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			10/26/17 06:32	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			10/26/17 06:32	1
cis-1,2-Dichloroethene	**0.74**	**J**	1.0	0.71	ug/L			10/26/17 06:32	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			10/26/17 06:32	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			10/26/17 06:32	1
Chloroform	1.0	U	1.0	0.60	ug/L			10/26/17 06:32	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 06:32	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			10/26/17 06:32	1
Benzene	1.0	U	1.0	0.60	ug/L			10/26/17 06:32	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 06:32	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			10/26/17 06:32	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			10/26/17 06:32	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			10/26/17 06:32	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			10/26/17 06:32	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			10/26/17 06:32	1
Toluene	1.0	U	1.0	0.46	ug/L			10/26/17 06:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			10/26/17 06:32	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			10/26/17 06:32	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			10/26/17 06:32	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			10/26/17 06:32	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			10/26/17 06:32	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			10/26/17 06:32	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			10/26/17 06:32	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 06:32	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			10/26/17 06:32	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			10/26/17 06:32	1
Styrene	1.0	U	1.0	0.47	ug/L			10/26/17 06:32	1
Bromoform	1.0	U	1.0	0.98	ug/L			10/26/17 06:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 06:32	1
Acrylonitrile	20	U	20	7.8	ug/L			10/26/17 06:32	1
1,4-Dioxane	200	U	200	14	ug/L			10/26/17 06:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*65 - 121*		*10/26/17 06:32*	*1*
Toluene-d8 (Surr)	*93*		*73 - 120*		*10/26/17 06:32*	*1*
4-Bromofluorobenzene (Surr)	*85*		*80 - 120*		*10/26/17 06:32*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 120*		*10/26/17 06:32*	*1*

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

Client Sample ID: HD-MW-20S-0/1-0
Date Collected: 10/19/17 13:50
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U *	1.0	0.90	ug/L			10/26/17 06:56	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			10/26/17 06:56	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			10/26/17 06:56	1
Chloroethane	1.0	U	1.0	0.90	ug/L			10/26/17 06:56	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			10/26/17 06:56	1
Acetone	5.0	U	5.0	3.4	ug/L			10/26/17 06:56	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			10/26/17 06:56	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/26/17 06:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			10/26/17 06:56	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			10/26/17 06:56	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			10/26/17 06:56	1
cis-1,2-Dichloroethene	**0.95**	**J**	1.0	0.71	ug/L			10/26/17 06:56	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			10/26/17 06:56	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			10/26/17 06:56	1
Chloroform	**1.4**		1.0	0.60	ug/L			10/26/17 06:56	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 06:56	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			10/26/17 06:56	1
Benzene	1.0	U	1.0	0.60	ug/L			10/26/17 06:56	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 06:56	1
Trichloroethene	**32**		1.0	0.69	ug/L			10/26/17 06:56	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			10/26/17 06:56	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			10/26/17 06:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			10/26/17 06:56	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			10/26/17 06:56	1
Toluene	1.0	U	1.0	0.46	ug/L			10/26/17 06:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			10/26/17 06:56	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			10/26/17 06:56	1
Tetrachloroethene	**2.6**		1.0	0.47	ug/L			10/26/17 06:56	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			10/26/17 06:56	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			10/26/17 06:56	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			10/26/17 06:56	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			10/26/17 06:56	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 06:56	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			10/26/17 06:56	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			10/26/17 06:56	1
Styrene	1.0	U	1.0	0.47	ug/L			10/26/17 06:56	1
Bromoform	1.0	U	1.0	0.98	ug/L			10/26/17 06:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 06:56	1
Acrylonitrile	20	U	20	7.8	ug/L			10/26/17 06:56	1
1,4-Dioxane	200	U	200	14	ug/L			10/26/17 06:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*65 - 121*		*10/26/17 06:56*	*1*
Toluene-d8 (Surr)	*90*		*73 - 120*		*10/26/17 06:56*	*1*
4-Bromofluorobenzene (Surr)	*84*		*80 - 120*		*10/26/17 06:56*	*1*
Dibromofluoromethane (Surr)	*108*		*73 - 120*		*10/26/17 06:56*	*1*

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

Client Sample ID: HD-MW-127-0/1-0
Date Collected: 10/18/17 14:30
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U ^c *	1.0	0.90	ug/L			11/01/17 11:24	1
Vinyl chloride	1.0	U ^c	1.0	0.88	ug/L			11/01/17 11:24	1
Bromomethane	1.0	U	1.0	0.89	ug/L			11/01/17 11:24	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/01/17 11:24	1
1,1-Dichloroethene	**2.8**		1.0	0.55	ug/L			11/01/17 11:24	1
Acetone	5.0	U ^c	5.0	3.4	ug/L			11/01/17 11:24	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/01/17 11:24	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/17 11:24	1
trans-1,2-Dichloroethene	**1.3**		1.0	0.67	ug/L			11/01/17 11:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/01/17 11:24	1
1,1-Dichloroethane	**4.4**		1.0	0.63	ug/L			11/01/17 11:24	1
cis-1,2-Dichloroethene	**210**	**E**	1.0	0.71	ug/L			11/01/17 11:24	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/01/17 11:24	1
2-Butanone (MEK)	5.0	U ^c	5.0	2.6	ug/L			11/01/17 11:24	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/01/17 11:24	1
1,1,1-Trichloroethane	**5.5**		1.0	0.60	ug/L			11/01/17 11:24	1
Carbon tetrachloride	**1.6**		1.0	0.88	ug/L			11/01/17 11:24	1
Benzene	1.0	U	1.0	0.60	ug/L			11/01/17 11:24	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 11:24	1
Trichloroethene	**49**		1.0	0.69	ug/L			11/01/17 11:24	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/01/17 11:24	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/01/17 11:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/01/17 11:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/01/17 11:24	1
Toluene	1.0	U	1.0	0.46	ug/L			11/01/17 11:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/01/17 11:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/01/17 11:24	1
Tetrachloroethene	**14**		1.0	0.47	ug/L			11/01/17 11:24	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/01/17 11:24	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/01/17 11:24	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/01/17 11:24	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/01/17 11:24	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 11:24	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/01/17 11:24	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/01/17 11:24	1
Styrene	1.0	U	1.0	0.47	ug/L			11/01/17 11:24	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/01/17 11:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 11:24	1
Acrylonitrile	20	U ^c	20	7.8	ug/L			11/01/17 11:24	1
1,4-Dioxane	200	U	200	14	ug/L			11/01/17 11:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*65 - 121*		*11/01/17 11:24*	*1*
Toluene-d8 (Surr)	*93*		*73 - 120*		*11/01/17 11:24*	*1*
4-Bromofluorobenzene (Surr)	*86*		*80 - 120*		*11/01/17 11:24*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*11/01/17 11:24*	*1*

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

Client Sample ID: HD-MW-87-0/1-0
Date Collected: 10/18/17 13:30
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U ^c *	1.0	0.90	ug/L			11/01/17 11:49	1
Vinyl chloride	1.0	U ^c	1.0	0.88	ug/L			11/01/17 11:49	1
Bromomethane	1.0	U	1.0	0.89	ug/L			11/01/17 11:49	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/01/17 11:49	1
1,1-Dichloroethene	**3.4**		1.0	0.55	ug/L			11/01/17 11:49	1
Acetone	5.0	U ^c	5.0	3.4	ug/L			11/01/17 11:49	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/01/17 11:49	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/17 11:49	1
trans-1,2-Dichloroethene	**1.7**		1.0	0.67	ug/L			11/01/17 11:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/01/17 11:49	1
1,1-Dichloroethane	**6.3**		1.0	0.63	ug/L			11/01/17 11:49	1
cis-1,2-Dichloroethene	**270**	**E**	1.0	0.71	ug/L			11/01/17 11:49	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/01/17 11:49	1
2-Butanone (MEK)	5.0	U ^c	5.0	2.6	ug/L			11/01/17 11:49	1
Chloroform	**0.63**	**J**	1.0	0.60	ug/L			11/01/17 11:49	1
1,1,1-Trichloroethane	**7.0**		1.0	0.60	ug/L			11/01/17 11:49	1
Carbon tetrachloride	**2.2**		1.0	0.88	ug/L			11/01/17 11:49	1
Benzene	1.0	U	1.0	0.60	ug/L			11/01/17 11:49	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 11:49	1
Trichloroethene	**86**	**E**	1.0	0.69	ug/L			11/01/17 11:49	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/01/17 11:49	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/01/17 11:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/01/17 11:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/01/17 11:49	1
Toluene	1.0	U	1.0	0.46	ug/L			11/01/17 11:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/01/17 11:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/01/17 11:49	1
Tetrachloroethene	**20**		1.0	0.47	ug/L			11/01/17 11:49	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/01/17 11:49	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/01/17 11:49	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/01/17 11:49	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/01/17 11:49	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 11:49	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/01/17 11:49	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/01/17 11:49	1
Styrene	1.0	U	1.0	0.47	ug/L			11/01/17 11:49	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/01/17 11:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 11:49	1
Acrylonitrile	20	U ^c	20	7.8	ug/L			11/01/17 11:49	1
1,4-Dioxane	200	U	200	14	ug/L			11/01/17 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*65 - 121*		*11/01/17 11:49*	*1*
Toluene-d8 (Surr)	*93*		*73 - 120*		*11/01/17 11:49*	*1*
4-Bromofluorobenzene (Surr)	*86*		*80 - 120*		*11/01/17 11:49*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*11/01/17 11:49*	*1*

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

Client Sample ID: HD-MW-77-0/1-0
Date Collected: 10/18/17 12:05
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.90	ug/L			10/31/17 07:27	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			10/31/17 07:27	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			10/31/17 07:27	1
Chloroethane	1.0	U	1.0	0.90	ug/L			10/31/17 07:27	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			10/31/17 07:27	1
Acetone	5.0	U	5.0	3.4	ug/L			10/31/17 07:27	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			10/31/17 07:27	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/31/17 07:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			10/31/17 07:27	1
Methyl tert-butyl ether	**200**	**E**	1.0	0.59	ug/L			10/31/17 07:27	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			10/31/17 07:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			10/31/17 07:27	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			10/31/17 07:27	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			10/31/17 07:27	1
Chloroform	1.0	U	1.0	0.60	ug/L			10/31/17 07:27	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			10/31/17 07:27	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			10/31/17 07:27	1
Benzene	**210**	**E**	1.0	0.60	ug/L			10/31/17 07:27	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			10/31/17 07:27	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			10/31/17 07:27	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			10/31/17 07:27	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			10/31/17 07:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			10/31/17 07:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			10/31/17 07:27	1
Toluene	**22**		1.0	0.46	ug/L			10/31/17 07:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			10/31/17 07:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			10/31/17 07:27	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			10/31/17 07:27	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			10/31/17 07:27	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			10/31/17 07:27	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			10/31/17 07:27	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			10/31/17 07:27	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			10/31/17 07:27	1
Ethylbenzene	**53**	**E**	1.0	0.51	ug/L			10/31/17 07:27	1
Xylenes, Total	**25**		2.0	0.89	ug/L			10/31/17 07:27	1
Styrene	1.0	U	1.0	0.47	ug/L			10/31/17 07:27	1
Bromoform	1.0	U	1.0	0.98	ug/L			10/31/17 07:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			10/31/17 07:27	1
Acrylonitrile	20	U	20	7.8	ug/L			10/31/17 07:27	1
1,4-Dioxane	200	U	200	14	ug/L			10/31/17 07:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*65 - 121*		*10/31/17 07:27*	*1*
Toluene-d8 (Surr)	*100*		*73 - 120*		*10/31/17 07:27*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*10/31/17 07:27*	*1*
Dibromofluoromethane (Surr)	*91*		*73 - 120*		*10/31/17 07:27*	*1*

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

Client Sample ID: HD-MW-129-0/1-0
Date Collected: 10/18/17 09:35
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.90	ug/L			10/31/17 08:14	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			10/31/17 08:14	1
Bromomethane	1.0	U ^c	1.0	0.89	ug/L			10/31/17 08:14	1
Chloroethane	1.0	U	1.0	0.90	ug/L			10/31/17 08:14	1
1,1-Dichloroethene	**2.4**		1.0	0.55	ug/L			10/31/17 08:14	1
Acetone	5.0	U	5.0	3.4	ug/L			10/31/17 08:14	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			10/31/17 08:14	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/31/17 08:14	1
trans-1,2-Dichloroethene	**2.9**		1.0	0.67	ug/L			10/31/17 08:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			10/31/17 08:14	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			10/31/17 08:14	1
cis-1,2-Dichloroethene	**310**	**E**	1.0	0.71	ug/L			10/31/17 08:14	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			10/31/17 08:14	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			10/31/17 08:14	1
Chloroform	1.0	U	1.0	0.60	ug/L			10/31/17 08:14	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			10/31/17 08:14	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			10/31/17 08:14	1
Benzene	1.0	U	1.0	0.60	ug/L			10/31/17 08:14	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			10/31/17 08:14	1
Trichloroethene	**590**	**E**	1.0	0.69	ug/L			10/31/17 08:14	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			10/31/17 08:14	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			10/31/17 08:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			10/31/17 08:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			10/31/17 08:14	1
Toluene	1.0	U	1.0	0.46	ug/L			10/31/17 08:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			10/31/17 08:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			10/31/17 08:14	1
Tetrachloroethene	**170**	**E**	1.0	0.47	ug/L			10/31/17 08:14	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			10/31/17 08:14	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			10/31/17 08:14	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			10/31/17 08:14	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			10/31/17 08:14	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			10/31/17 08:14	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			10/31/17 08:14	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			10/31/17 08:14	1
Styrene	1.0	U	1.0	0.47	ug/L			10/31/17 08:14	1
Bromoform	1.0	U	1.0	0.98	ug/L			10/31/17 08:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			10/31/17 08:14	1
Acrylonitrile	20	U	20	7.8	ug/L			10/31/17 08:14	1
1,4-Dioxane	200	U	200	14	ug/L			10/31/17 08:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*65 - 121*		*10/31/17 08:14*	*1*
Toluene-d8 (Surr)	*95*		*73 - 120*		*10/31/17 08:14*	*1*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*10/31/17 08:14*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*10/31/17 08:14*	*1*

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

Client Sample ID: HD-MW-127-0/1-0
Date Collected: 10/18/17 14:30
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.9		1.9	0.35	ug/L		10/25/17 11:21	10/28/17 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*26 - 103*	*10/25/17 11:21*	*10/28/17 14:05*	*1*
2-Fluorophenol (Surr)	*73*		*27 - 100*	*10/25/17 11:21*	*10/28/17 14:05*	*1*
2,4,6-Tribromophenol (Surr)	*84*		*28 - 134*	*10/25/17 11:21*	*10/28/17 14:05*	*1*
Nitrobenzene-d5 (Surr)	*77*		*30 - 101*	*10/25/17 11:21*	*10/28/17 14:05*	*1*
Phenol-d5 (Surr)	*78*		*27 - 101*	*10/25/17 11:21*	*10/28/17 14:05*	*1*
Terphenyl-d14 (Surr)	*85*		*20 - 119*	*10/25/17 11:21*	*10/28/17 14:05*	*1*

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

Client Sample ID: HD-MW-87-0/1-0
Date Collected: 10/18/17 13:30
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**10**		1.9	0.35	ug/L		10/25/17 11:21	10/28/17 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*26 - 103*	*10/25/17 11:21*	*10/28/17 14:31*	*1*
2-Fluorophenol (Surr)	*83*		*27 - 100*	*10/25/17 11:21*	*10/28/17 14:31*	*1*
2,4,6-Tribromophenol (Surr)	*92*		*28 - 134*	*10/25/17 11:21*	*10/28/17 14:31*	*1*
Nitrobenzene-d5 (Surr)	*94*		*30 - 101*	*10/25/17 11:21*	*10/28/17 14:31*	*1*
Phenol-d5 (Surr)	*89*		*27 - 101*	*10/25/17 11:21*	*10/28/17 14:31*	*1*
Terphenyl-d14 (Surr)	*105*		*20 - 119*	*10/25/17 11:21*	*10/28/17 14:31*	*1*

Default Detection Limits

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-71580-1

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

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-71580-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(65-121)	(73-120)	(80-120)	(73-120)
180-71580-1	HD-QC2-0/1-2	113	91	86	106
180-71580-2	HD-MW-127-0/1-0	115	90	84	111
180-71580-2 - RA	HD-MW-127-0/1-0	112	93	86	106
180-71580-3	HD-MW-87-0/1-0	116	91	86	107
180-71580-3 - RA	HD-MW-87-0/1-0	113	93	86	107
180-71580-4	HD-MW-77-0/1-0	105	96	96	97
180-71580-4 - RA	HD-MW-77-0/1-0	90	100	104	91
180-71580-5	HD-MW-129-0/1-0	119	92	83	115
180-71580-5 - RA	HD-MW-129-0/1-0	106	95	89	101
180-71580-6	HD-MW-142S-0/1-0	119	91	85	112
180-71580-7	HD-MW-142D-0/1-0	121	89	84	114
180-71580-8	HD-MW-143S-0/1-0	118	95	84	112
180-71580-9	HD-MW-143D-0/1-0	116	93	85	110
180-71580-10	HD-MW-20S-0/1-0	116	90	84	108
LCS 180-227010/3	Lab Control Sample	93	95	93	90
LCS 180-227152/3	Lab Control Sample	99	100	93	91
LCS 180-227508/3	Lab Control Sample	101	108	103	98
LCS 180-227613/3	Lab Control Sample	104	110	105	97
MB 180-227010/5	Method Blank	109	94	92	105
MB 180-227152/5	Method Blank	110	95	90	103
MB 180-227508/5	Method Blank	112	94	89	106
MB 180-227613/5	Method Blank	110	93	90	101

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)
180-71580-2	HD-MW-127-0/1-0	75	73	84	77	78	85
180-71580-3	HD-MW-87-0/1-0	92	83	92	94	89	105
LCS 180-226906/2-A	Lab Control Sample	68	85	78	78	76	76
LCSD 180-226906/3-A	Lab Control Sample Dup	68	84	79	71	76	74
MB 180-226906/1-A	Method Blank	70	76	72	74	73	73

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 180-227010/5
Matrix: Water
Analysis Batch: 227010

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			10/25/17 23:51	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			10/25/17 23:51	1
Bromomethane	1.0	U	1.0	0.89	ug/L			10/25/17 23:51	1
Chloroethane	1.0	U	1.0	0.90	ug/L			10/25/17 23:51	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			10/25/17 23:51	1
Acetone	5.0	U	5.0	3.4	ug/L			10/25/17 23:51	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			10/25/17 23:51	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/25/17 23:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			10/25/17 23:51	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			10/25/17 23:51	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			10/25/17 23:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			10/25/17 23:51	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			10/25/17 23:51	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			10/25/17 23:51	1
Chloroform	1.0	U	1.0	0.60	ug/L			10/25/17 23:51	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			10/25/17 23:51	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			10/25/17 23:51	1
Benzene	1.0	U	1.0	0.60	ug/L			10/25/17 23:51	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			10/25/17 23:51	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			10/25/17 23:51	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			10/25/17 23:51	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			10/25/17 23:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			10/25/17 23:51	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			10/25/17 23:51	1
Toluene	1.0	U	1.0	0.46	ug/L			10/25/17 23:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			10/25/17 23:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			10/25/17 23:51	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			10/25/17 23:51	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			10/25/17 23:51	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			10/25/17 23:51	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			10/25/17 23:51	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			10/25/17 23:51	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			10/25/17 23:51	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			10/25/17 23:51	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			10/25/17 23:51	1
Styrene	1.0	U	1.0	0.47	ug/L			10/25/17 23:51	1
Bromoform	1.0	U	1.0	0.98	ug/L			10/25/17 23:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			10/25/17 23:51	1
Acrylonitrile	20	U	20	7.8	ug/L			10/25/17 23:51	1
1,4-Dioxane	200	U	200	14	ug/L			10/25/17 23:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*65 - 121*		*10/25/17 23:51*	*1*
Toluene-d8 (Surr)	*94*		*73 - 120*		*10/25/17 23:51*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*10/25/17 23:51*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 120*		*10/25/17 23:51*	*1*

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

Lab Sample ID: LCS 180-227010/3
Matrix: Water
Analysis Batch: 227010

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	13.7	*	ug/L		137	49 - 135
Vinyl chloride	10.0	10.6		ug/L		106	52 - 136
Bromomethane	10.0	6.88		ug/L		69	37 - 150
Chloroethane	10.0	9.57		ug/L		96	44 - 139
1,1-Dichloroethene	10.0	10.2		ug/L		102	64 - 131
Acetone	20.0	26.4		ug/L		132	24 - 150
Carbon disulfide	10.0	10.0		ug/L		100	20 - 150
Methylene Chloride	10.0	9.78		ug/L		98	66 - 123
trans-1,2-Dichloroethene	10.0	10.0		ug/L		100	70 - 123
Methyl tert-butyl ether	10.0	9.29		ug/L		93	66 - 130
1,1-Dichloroethane	10.0	10.2		ug/L		102	66 - 122
cis-1,2-Dichloroethene	10.0	9.49		ug/L		95	73 - 120
Bromochloromethane	10.0	9.54		ug/L		95	73 - 122
2-Butanone (MEK)	20.0	23.5		ug/L		117	37 - 150
Chloroform	10.0	9.19		ug/L		92	72 - 123
1,1,1-Trichloroethane	10.0	9.70		ug/L		97	66 - 129
Carbon tetrachloride	10.0	9.92		ug/L		99	58 - 145
Benzene	10.0	9.20		ug/L		92	75 - 123
1,2-Dichloroethane	10.0	10.1		ug/L		101	63 - 130
Trichloroethene	10.0	8.92		ug/L		89	74 - 121
1,2-Dichloropropane	10.0	9.45		ug/L		95	67 - 119
Bromodichloromethane	10.0	8.92		ug/L		89	62 - 127
cis-1,3-Dichloropropene	10.0	8.58		ug/L		86	61 - 127
4-Methyl-2-pentanone (MIBK)	20.0	22.0		ug/L		110	41 - 135
Toluene	10.0	9.90		ug/L		99	76 - 129
trans-1,3-Dichloropropene	10.0	9.64		ug/L		96	61 - 136
1,1,2-Trichloroethane	10.0	9.41		ug/L		94	74 - 126
Tetrachloroethene	10.0	9.21		ug/L		92	76 - 128
2-Hexanone	20.0	21.8		ug/L		109	37 - 150
Dibromochloromethane	10.0	9.57		ug/L		96	63 - 131
1,2-Dibromoethane (EDB)	10.0	9.35		ug/L		94	76 - 128
Chlorobenzene	10.0	9.41		ug/L		94	79 - 124
1,1,1,2-Tetrachloroethane	10.0	9.79		ug/L		98	70 - 130
Ethylbenzene	10.0	9.66		ug/L		97	77 - 124
Xylenes, Total	20.0	19.0		ug/L		95	76 - 124
Styrene	10.0	9.79		ug/L		98	80 - 125
Bromoform	10.0	8.10		ug/L		81	54 - 136
1,1,2,2-Tetrachloroethane	10.0	8.53		ug/L		85	72 - 128
Acrylonitrile	100	106		ug/L		106	60 - 130
1,4-Dioxane	200	190	J	ug/L		95	26 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*65 - 121*
Toluene-d8 (Surr)	*95*		*73 - 120*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*90*		*73 - 120*

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

Lab Sample ID: MB 180-227152/5
Matrix: Water
Analysis Batch: 227152

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			10/26/17 23:22	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			10/26/17 23:22	1
Bromomethane	1.0	U	1.0	0.89	ug/L			10/26/17 23:22	1
Chloroethane	1.0	U	1.0	0.90	ug/L			10/26/17 23:22	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			10/26/17 23:22	1
Acetone	5.0	U	5.0	3.4	ug/L			10/26/17 23:22	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			10/26/17 23:22	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/26/17 23:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			10/26/17 23:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			10/26/17 23:22	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			10/26/17 23:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			10/26/17 23:22	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			10/26/17 23:22	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			10/26/17 23:22	1
Chloroform	1.0	U	1.0	0.60	ug/L			10/26/17 23:22	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 23:22	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			10/26/17 23:22	1
Benzene	1.0	U	1.0	0.60	ug/L			10/26/17 23:22	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 23:22	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			10/26/17 23:22	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			10/26/17 23:22	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			10/26/17 23:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			10/26/17 23:22	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			10/26/17 23:22	1
Toluene	1.0	U	1.0	0.46	ug/L			10/26/17 23:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			10/26/17 23:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			10/26/17 23:22	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			10/26/17 23:22	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			10/26/17 23:22	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			10/26/17 23:22	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			10/26/17 23:22	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			10/26/17 23:22	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			10/26/17 23:22	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			10/26/17 23:22	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			10/26/17 23:22	1
Styrene	1.0	U	1.0	0.47	ug/L			10/26/17 23:22	1
Bromoform	1.0	U	1.0	0.98	ug/L			10/26/17 23:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			10/26/17 23:22	1
Acrylonitrile	20	U	20	7.8	ug/L			10/26/17 23:22	1
1,4-Dioxane	200	U	200	14	ug/L			10/26/17 23:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*65 - 121*		*10/26/17 23:22*	*1*
Toluene-d8 (Surr)	*95*		*73 - 120*		*10/26/17 23:22*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*10/26/17 23:22*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 120*		*10/26/17 23:22*	*1*

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

Lab Sample ID: LCS 180-227152/3
Matrix: Water
Analysis Batch: 227152

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	12.6		ug/L		126	49 - 135
Vinyl chloride	10.0	9.92		ug/L		99	52 - 136
Bromomethane	10.0	7.44		ug/L		74	37 - 150
Chloroethane	10.0	8.59		ug/L		86	44 - 139
1,1-Dichloroethene	10.0	9.81		ug/L		98	64 - 131
Acetone	20.0	28.4		ug/L		142	24 - 150
Carbon disulfide	10.0	9.00		ug/L		90	20 - 150
Methylene Chloride	10.0	9.21		ug/L		92	66 - 123
trans-1,2-Dichloroethene	10.0	9.18		ug/L		92	70 - 123
Methyl tert-butyl ether	10.0	9.36		ug/L		94	66 - 130
1,1-Dichloroethane	10.0	9.62		ug/L		96	66 - 122
cis-1,2-Dichloroethene	10.0	9.19		ug/L		92	73 - 120
Bromochloromethane	10.0	8.88		ug/L		89	73 - 122
2-Butanone (MEK)	20.0	24.2		ug/L		121	37 - 150
Chloroform	10.0	8.84		ug/L		88	72 - 123
1,1,1-Trichloroethane	10.0	9.27		ug/L		93	66 - 129
Carbon tetrachloride	10.0	9.19		ug/L		92	58 - 145
Benzene	10.0	8.66		ug/L		87	75 - 123
1,2-Dichloroethane	10.0	10.0		ug/L		100	63 - 130
Trichloroethene	10.0	8.22		ug/L		82	74 - 121
1,2-Dichloropropane	10.0	9.25		ug/L		93	67 - 119
Bromodichloromethane	10.0	8.16		ug/L		82	62 - 127
cis-1,3-Dichloropropene	10.0	8.33		ug/L		83	61 - 127
4-Methyl-2-pentanone (MIBK)	20.0	22.0		ug/L		110	41 - 135
Toluene	10.0	9.64		ug/L		96	76 - 129
trans-1,3-Dichloropropene	10.0	9.31		ug/L		93	61 - 136
1,1,2-Trichloroethane	10.0	9.57		ug/L		96	74 - 126
Tetrachloroethene	10.0	8.87		ug/L		89	76 - 128
2-Hexanone	20.0	23.4		ug/L		117	37 - 150
Dibromochloromethane	10.0	9.00		ug/L		90	63 - 131
1,2-Dibromoethane (EDB)	10.0	9.21		ug/L		92	76 - 128
Chlorobenzene	10.0	9.23		ug/L		92	79 - 124
1,1,1,2-Tetrachloroethane	10.0	9.30		ug/L		93	70 - 130
Ethylbenzene	10.0	9.18		ug/L		92	77 - 124
Xylenes, Total	20.0	17.9		ug/L		90	76 - 124
Styrene	10.0	9.27		ug/L		93	80 - 125
Bromoform	10.0	8.02		ug/L		80	54 - 136
1,1,2,2-Tetrachloroethane	10.0	8.90		ug/L		89	72 - 128
Acrylonitrile	100	114		ug/L		114	60 - 130
1,4-Dioxane	200	204		ug/L		102	26 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*65 - 121*
Toluene-d8 (Surr)	*100*		*73 - 120*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*91*		*73 - 120*

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

Lab Sample ID: MB 180-227508/5
Matrix: Water
Analysis Batch: 227508

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			10/31/17 00:07	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			10/31/17 00:07	1
Bromomethane	1.0	U	1.0	0.89	ug/L			10/31/17 00:07	1
Chloroethane	1.0	U	1.0	0.90	ug/L			10/31/17 00:07	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			10/31/17 00:07	1
Acetone	5.0	U	5.0	3.4	ug/L			10/31/17 00:07	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			10/31/17 00:07	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			10/31/17 00:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			10/31/17 00:07	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			10/31/17 00:07	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			10/31/17 00:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			10/31/17 00:07	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			10/31/17 00:07	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			10/31/17 00:07	1
Chloroform	1.0	U	1.0	0.60	ug/L			10/31/17 00:07	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			10/31/17 00:07	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			10/31/17 00:07	1
Benzene	1.0	U	1.0	0.60	ug/L			10/31/17 00:07	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			10/31/17 00:07	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			10/31/17 00:07	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			10/31/17 00:07	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			10/31/17 00:07	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			10/31/17 00:07	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			10/31/17 00:07	1
Toluene	1.0	U	1.0	0.46	ug/L			10/31/17 00:07	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			10/31/17 00:07	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			10/31/17 00:07	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			10/31/17 00:07	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			10/31/17 00:07	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			10/31/17 00:07	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			10/31/17 00:07	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			10/31/17 00:07	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			10/31/17 00:07	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			10/31/17 00:07	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			10/31/17 00:07	1
Styrene	1.0	U	1.0	0.47	ug/L			10/31/17 00:07	1
Bromoform	1.0	U	1.0	0.98	ug/L			10/31/17 00:07	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			10/31/17 00:07	1
Acrylonitrile	20	U	20	7.8	ug/L			10/31/17 00:07	1
1,4-Dioxane	200	U	200	14	ug/L			10/31/17 00:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*65 - 121*		*10/31/17 00:07*	*1*
Toluene-d8 (Surr)	*94*		*73 - 120*		*10/31/17 00:07*	*1*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*10/31/17 00:07*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 120*		*10/31/17 00:07*	*1*

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

Lab Sample ID: LCS 180-227508/3
Matrix: Water
Analysis Batch: 227508

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	9.23		ug/L		92	49 - 135
Vinyl chloride	10.0	8.16		ug/L		82	52 - 136
Bromomethane	10.0	6.21		ug/L		62	37 - 150
Chloroethane	10.0	7.84		ug/L		78	44 - 139
1,1-Dichloroethene	10.0	8.72		ug/L		87	64 - 131
Acetone	20.0	24.3		ug/L		122	24 - 150
Carbon disulfide	10.0	8.40		ug/L		84	20 - 150
Methylene Chloride	10.0	8.61		ug/L		86	66 - 123
trans-1,2-Dichloroethene	10.0	8.45		ug/L		84	70 - 123
Methyl tert-butyl ether	10.0	9.01		ug/L		90	66 - 130
1,1-Dichloroethane	10.0	9.04		ug/L		90	66 - 122
cis-1,2-Dichloroethene	10.0	8.36		ug/L		84	73 - 120
Bromochloromethane	10.0	8.86		ug/L		89	73 - 122
2-Butanone (MEK)	20.0	21.7		ug/L		108	37 - 150
Chloroform	10.0	8.36		ug/L		84	72 - 123
1,1,1-Trichloroethane	10.0	9.12		ug/L		91	66 - 129
Carbon tetrachloride	10.0	8.86		ug/L		89	58 - 145
Benzene	10.0	8.15		ug/L		81	75 - 123
1,2-Dichloroethane	10.0	9.51		ug/L		95	63 - 130
Trichloroethene	10.0	7.87		ug/L		79	74 - 121
1,2-Dichloropropane	10.0	8.43		ug/L		84	67 - 119
Bromodichloromethane	10.0	7.92		ug/L		79	62 - 127
cis-1,3-Dichloropropene	10.0	7.94		ug/L		79	61 - 127
4-Methyl-2-pentanone (MIBK)	20.0	20.0		ug/L		100	41 - 135
Toluene	10.0	9.14		ug/L		91	76 - 129
trans-1,3-Dichloropropene	10.0	9.25		ug/L		93	61 - 136
1,1,2-Trichloroethane	10.0	9.39		ug/L		94	74 - 126
Tetrachloroethene	10.0	8.57		ug/L		86	76 - 128
2-Hexanone	20.0	19.5		ug/L		97	37 - 150
Dibromochloromethane	10.0	9.11		ug/L		91	63 - 131
1,2-Dibromoethane (EDB)	10.0	8.65		ug/L		87	76 - 128
Chlorobenzene	10.0	8.68		ug/L		87	79 - 124
1,1,1,2-Tetrachloroethane	10.0	9.57		ug/L		96	70 - 130
Ethylbenzene	10.0	8.60		ug/L		86	77 - 124
Xylenes, Total	20.0	17.1		ug/L		85	76 - 124
Styrene	10.0	8.50		ug/L		85	80 - 125
Bromoform	10.0	8.03		ug/L		80	54 - 136
1,1,2,2-Tetrachloroethane	10.0	8.77		ug/L		88	72 - 128
Acrylonitrile	100	105		ug/L		105	60 - 130
1,4-Dioxane	200	164	J	ug/L		82	26 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*65 - 121*
Toluene-d8 (Surr)	*108*		*73 - 120*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*73 - 120*

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

Lab Sample ID: MB 180-227613/5
Matrix: Water
Analysis Batch: 227613

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 03:10	1
Vinyl chloride	1.0	U	1.0	0.88	ug/L			11/01/17 03:10	1
Bromomethane	1.0	U	1.0	0.89	ug/L			11/01/17 03:10	1
Chloroethane	1.0	U	1.0	0.90	ug/L			11/01/17 03:10	1
1,1-Dichloroethene	1.0	U	1.0	0.55	ug/L			11/01/17 03:10	1
Acetone	5.0	U	5.0	3.4	ug/L			11/01/17 03:10	1
Carbon disulfide	1.0	U	1.0	0.88	ug/L			11/01/17 03:10	1
Methylene Chloride	1.0	U	1.0	0.36	ug/L			11/01/17 03:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.67	ug/L			11/01/17 03:10	1
Methyl tert-butyl ether	1.0	U	1.0	0.59	ug/L			11/01/17 03:10	1
1,1-Dichloroethane	1.0	U	1.0	0.63	ug/L			11/01/17 03:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.71	ug/L			11/01/17 03:10	1
Bromochloromethane	1.0	U	1.0	0.63	ug/L			11/01/17 03:10	1
2-Butanone (MEK)	5.0	U	5.0	2.6	ug/L			11/01/17 03:10	1
Chloroform	1.0	U	1.0	0.60	ug/L			11/01/17 03:10	1
1,1,1-Trichloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 03:10	1
Carbon tetrachloride	1.0	U	1.0	0.88	ug/L			11/01/17 03:10	1
Benzene	1.0	U	1.0	0.60	ug/L			11/01/17 03:10	1
1,2-Dichloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 03:10	1
Trichloroethene	1.0	U	1.0	0.69	ug/L			11/01/17 03:10	1
1,2-Dichloropropane	1.0	U	1.0	0.66	ug/L			11/01/17 03:10	1
Bromodichloromethane	1.0	U	1.0	0.64	ug/L			11/01/17 03:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.59	ug/L			11/01/17 03:10	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	3.1	ug/L			11/01/17 03:10	1
Toluene	1.0	U	1.0	0.46	ug/L			11/01/17 03:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.58	ug/L			11/01/17 03:10	1
1,1,2-Trichloroethane	1.0	U	1.0	0.45	ug/L			11/01/17 03:10	1
Tetrachloroethene	1.0	U	1.0	0.47	ug/L			11/01/17 03:10	1
2-Hexanone	5.0	U	5.0	3.3	ug/L			11/01/17 03:10	1
Dibromochloromethane	1.0	U	1.0	0.84	ug/L			11/01/17 03:10	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.50	ug/L			11/01/17 03:10	1
Chlorobenzene	1.0	U	1.0	0.50	ug/L			11/01/17 03:10	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.57	ug/L			11/01/17 03:10	1
Ethylbenzene	1.0	U	1.0	0.51	ug/L			11/01/17 03:10	1
Xylenes, Total	2.0	U	2.0	0.89	ug/L			11/01/17 03:10	1
Styrene	1.0	U	1.0	0.47	ug/L			11/01/17 03:10	1
Bromoform	1.0	U	1.0	0.98	ug/L			11/01/17 03:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.60	ug/L			11/01/17 03:10	1
Acrylonitrile	20	U	20	7.8	ug/L			11/01/17 03:10	1
1,4-Dioxane	200	U	200	14	ug/L			11/01/17 03:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*65 - 121*		*11/01/17 03:10*	*1*
Toluene-d8 (Surr)	*93*		*73 - 120*		*11/01/17 03:10*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*11/01/17 03:10*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 120*		*11/01/17 03:10*	*1*

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

Lab Sample ID: LCS 180-227613/3
Matrix: Water
Analysis Batch: 227613

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	14.0	*	ug/L		140	49 - 135
Vinyl chloride	10.0	11.5		ug/L		115	52 - 136
Bromomethane	10.0	8.03		ug/L		80	37 - 150
Chloroethane	10.0	8.85		ug/L		88	44 - 139
1,1-Dichloroethene	10.0	9.70		ug/L		97	64 - 131
Acetone	20.0	24.8		ug/L		124	24 - 150
Carbon disulfide	10.0	10.0		ug/L		100	20 - 150
Methylene Chloride	10.0	9.20		ug/L		92	66 - 123
trans-1,2-Dichloroethene	10.0	9.03		ug/L		90	70 - 123
Methyl tert-butyl ether	10.0	9.44		ug/L		94	66 - 130
1,1-Dichloroethane	10.0	9.77		ug/L		98	66 - 122
cis-1,2-Dichloroethene	10.0	8.86		ug/L		89	73 - 120
Bromochloromethane	10.0	9.17		ug/L		92	73 - 122
2-Butanone (MEK)	20.0	20.5		ug/L		102	37 - 150
Chloroform	10.0	8.50		ug/L		85	72 - 123
1,1,1-Trichloroethane	10.0	9.41		ug/L		94	66 - 129
Carbon tetrachloride	10.0	9.23		ug/L		92	58 - 145
Benzene	10.0	8.71		ug/L		87	75 - 123
1,2-Dichloroethane	10.0	9.94		ug/L		99	63 - 130
Trichloroethene	10.0	8.57		ug/L		86	74 - 121
1,2-Dichloropropane	10.0	9.29		ug/L		93	67 - 119
Bromodichloromethane	10.0	8.37		ug/L		84	62 - 127
cis-1,3-Dichloropropene	10.0	8.49		ug/L		85	61 - 127
4-Methyl-2-pentanone (MIBK)	20.0	17.9		ug/L		89	41 - 135
Toluene	10.0	9.63		ug/L		96	76 - 129
trans-1,3-Dichloropropene	10.0	9.98		ug/L		100	61 - 136
1,1,2-Trichloroethane	10.0	9.52		ug/L		95	74 - 126
Tetrachloroethene	10.0	9.06		ug/L		91	76 - 128
2-Hexanone	20.0	18.8		ug/L		94	37 - 150
Dibromochloromethane	10.0	9.25		ug/L		92	63 - 131
1,2-Dibromoethane (EDB)	10.0	9.50		ug/L		95	76 - 128
Chlorobenzene	10.0	9.30		ug/L		93	79 - 124
1,1,1,2-Tetrachloroethane	10.0	9.69		ug/L		97	70 - 130
Ethylbenzene	10.0	9.03		ug/L		90	77 - 124
Xylenes, Total	20.0	18.3		ug/L		91	76 - 124
Styrene	10.0	9.22		ug/L		92	80 - 125
Bromoform	10.0	8.51		ug/L		85	54 - 136
1,1,2,2-Tetrachloroethane	10.0	8.85		ug/L		88	72 - 128
Acrylonitrile	100	112		ug/L		112	60 - 130
1,4-Dioxane	200	202		ug/L		101	26 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*65 - 121*
Toluene-d8 (Surr)	*110*		*73 - 120*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*73 - 120*

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

Lab Sample ID: MB 180-226906/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 227303 — **Prep Batch: 226906**

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		10/25/17 11:21	10/28/17 10:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*26 - 103*	*10/25/17 11:21*	*10/28/17 10:59*	*1*
2-Fluorophenol (Surr)	*76*		*27 - 100*	*10/25/17 11:21*	*10/28/17 10:59*	*1*
2,4,6-Tribromophenol (Surr)	*72*		*28 - 134*	*10/25/17 11:21*	*10/28/17 10:59*	*1*
Nitrobenzene-d5 (Surr)	*74*		*30 - 101*	*10/25/17 11:21*	*10/28/17 10:59*	*1*
Phenol-d5 (Surr)	*73*		*27 - 101*	*10/25/17 11:21*	*10/28/17 10:59*	*1*
Terphenyl-d14 (Surr)	*73*		*20 - 119*	*10/25/17 11:21*	*10/28/17 10:59*	*1*

Lab Sample ID: LCS 180-226906/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 227303 — **Prep Batch: 226906**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			20.0	16.9		ug/L		85	41 - 107		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*26 - 103*
2-Fluorophenol (Surr)	*85*		*27 - 100*
2,4,6-Tribromophenol (Surr)	*78*		*28 - 134*
Nitrobenzene-d5 (Surr)	*78*		*30 - 101*
Phenol-d5 (Surr)	*76*		*27 - 101*
Terphenyl-d14 (Surr)	*76*		*20 - 119*

Lab Sample ID: LCSD 180-226906/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 227303 — **Prep Batch: 226906**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			20.0	16.8		ug/L		84	41 - 107	1	16

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*26 - 103*
2-Fluorophenol (Surr)	*84*		*27 - 100*
2,4,6-Tribromophenol (Surr)	*79*		*28 - 134*
Nitrobenzene-d5 (Surr)	*71*		*30 - 101*
Phenol-d5 (Surr)	*76*		*27 - 101*
Terphenyl-d14 (Surr)	*74*		*20 - 119*

GC/MS VOA

Analysis Batch: 227010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71580-1	HD-QC2-0/1-2	Total/NA	Water	8260C	
180-71580-2	HD-MW-127-0/1-0	Total/NA	Water	8260C	
180-71580-3	HD-MW-87-0/1-0	Total/NA	Water	8260C	
180-71580-4	HD-MW-77-0/1-0	Total/NA	Water	8260C	
180-71580-6	HD-MW-142S-0/1-0	Total/NA	Water	8260C	
180-71580-7	HD-MW-142D-0/1-0	Total/NA	Water	8260C	
180-71580-8	HD-MW-143S-0/1-0	Total/NA	Water	8260C	
180-71580-9	HD-MW-143D-0/1-0	Total/NA	Water	8260C	
180-71580-10	HD-MW-20S-0/1-0	Total/NA	Water	8260C	
MB 180-227010/5	Method Blank	Total/NA	Water	8260C	
LCS 180-227010/3	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 227152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71580-5	HD-MW-129-0/1-0	Total/NA	Water	8260C	
MB 180-227152/5	Method Blank	Total/NA	Water	8260C	
LCS 180-227152/3	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 227508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71580-4 - RA	HD-MW-77-0/1-0	Total/NA	Water	8260C	
180-71580-5 - RA	HD-MW-129-0/1-0	Total/NA	Water	8260C	
MB 180-227508/5	Method Blank	Total/NA	Water	8260C	
LCS 180-227508/3	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 227613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71580-2 - RA	HD-MW-127-0/1-0	Total/NA	Water	8260C	
180-71580-3 - RA	HD-MW-87-0/1-0	Total/NA	Water	8260C	
MB 180-227613/5	Method Blank	Total/NA	Water	8260C	
LCS 180-227613/3	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 226906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71580-2	HD-MW-127-0/1-0	Total/NA	Water	3520C	
180-71580-3	HD-MW-87-0/1-0	Total/NA	Water	3520C	
MB 180-226906/1-A	Method Blank	Total/NA	Water	3520C	
LCS 180-226906/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 180-226906/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 227303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-71580-2	HD-MW-127-0/1-0	Total/NA	Water	8270D LL	226906
180-71580-3	HD-MW-87-0/1-0	Total/NA	Water	8270D LL	226906
MB 180-226906/1-A	Method Blank	Total/NA	Water	8270D LL	226906
LCS 180-226906/2-A	Lab Control Sample	Total/NA	Water	8270D LL	226906
LCSD 180-226906/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	226906

Client Sample ID: HD-QC2-0/1-2

Lab Sample ID: 180-71580-1

Date Collected: 10/18/17 12:00

Matrix: Water

Date Received: 10/20/17 08:35

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	227010	10/26/17 04:56	FBB	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-MW-127-0/1-0

Lab Sample ID: 180-71580-2

Date Collected: 10/18/17 14:30

Matrix: Water

Date Received: 10/20/17 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	5 mL	5 mL	227010	10/26/17 07:43	FBB	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	8260C	RA	1	5 mL	5 mL	227613	11/01/17 11:24	KLG	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Prep	3520C			270 mL	250 uL	226906	10/25/17 11:21	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	227303	10/28/17 14:05	VVP	TAL PIT
	Instrument ID: CH732									

Client Sample ID: HD-MW-87-0/1-0

Lab Sample ID: 180-71580-3

Date Collected: 10/18/17 13:30

Matrix: Water

Date Received: 10/20/17 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	5 mL	5 mL	227010	10/26/17 08:07	FBB	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	8260C	RA	1	5 mL	5 mL	227613	11/01/17 11:49	KLG	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Prep	3520C			270 mL	250 uL	226906	10/25/17 11:21	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	1 mL	1 mL	227303	10/28/17 14:31	VVP	TAL PIT
	Instrument ID: CH732									

Client Sample ID: HD-MW-77-0/1-0

Lab Sample ID: 180-71580-4

Date Collected: 10/18/17 12:05

Matrix: Water

Date Received: 10/20/17 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		25	5 mL	5 mL	227010	10/26/17 08:31	FBB	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	8260C	RA	1	5 mL	5 mL	227508	10/31/17 07:27	KLG	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-MW-129-0/1-0
Lab Sample ID: 180-71580-5
Date Collected: 10/18/17 09:35
Matrix: Water
Date Received: 10/20/17 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	5 mL	5 mL	227152	10/27/17 07:59	FBB	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	8260C	RA	1	5 mL	5 mL	227508	10/31/17 08:14	KLG	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-MW-142S-0/1-0
Lab Sample ID: 180-71580-6
Date Collected: 10/18/17 14:42
Matrix: Water
Date Received: 10/20/17 08:35

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	227010	10/26/17 05:20	FBB	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-MW-142D-0/1-0
Lab Sample ID: 180-71580-7
Date Collected: 10/18/17 13:42
Matrix: Water
Date Received: 10/20/17 08:35

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	227010	10/26/17 05:44	FBB	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-MW-143S-0/1-0
Lab Sample ID: 180-71580-8
Date Collected: 10/18/17 11:05
Matrix: Water
Date Received: 10/20/17 08:35

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	227010	10/26/17 06:08	FBB	TAL PIT
	Instrument ID: CHHP5									

Client Sample ID: HD-MW-143D-0/1-0
Lab Sample ID: 180-71580-9
Date Collected: 10/18/17 09:17
Matrix: Water
Date Received: 10/20/17 08:35

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	227010	10/26/17 06:32	FBB	TAL PIT
	Instrument ID: CHHP5									

Lab Chronicle

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-71580-1

Client Sample ID: HD-MW-20S-0/1-0

Date Collected: 10/19/17 13:50
Date Received: 10/20/17 08:35

Lab Sample ID: 180-71580-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	227010	10/26/17 06:56	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

Batch Type: Analysis

FBB = Frank Bungard

KLG = Kathy Gordon

VVP = Vincent Piccolino

Accreditation/Certification Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-71580-1

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: 180-71580-1

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-71580-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-71580-1	HD-QC2-0/1-2	Water	10/18/17 12:00	10/20/17 08:35
180-71580-2	HD-MW-127-0/1-0	Water	10/18/17 14:30	10/20/17 08:35
180-71580-3	HD-MW-87-0/1-0	Water	10/18/17 13:30	10/20/17 08:35
180-71580-4	HD-MW-77-0/1-0	Water	10/18/17 12:05	10/20/17 08:35
180-71580-5	HD-MW-129-0/1-0	Water	10/18/17 09:35	10/20/17 08:35
180-71580-6	HD-MW-142S-0/1-0	Water	10/18/17 14:42	10/20/17 08:35
180-71580-7	HD-MW-142D-0/1-0	Water	10/18/17 13:42	10/20/17 08:35
180-71580-8	HD-MW-143S-0/1-0	Water	10/18/17 11:05	10/20/17 08:35
180-71580-9	HD-MW-143D-0/1-0	Water	10/18/17 09:17	10/20/17 08:35
180-71580-10	HD-MW-20S-0/1-0	Water	10/19/17 13:50	10/20/17 08:35

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

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.: 180-71580-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 227010

Lab Sample ID: CCVIS 180-227010/2 Client Sample ID:

Date Analyzed: 10/25/17 22:12 Lab File ID: 51025D02.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.34	Poor chromatography	bungardf	10/25/17 22:47
Trichlorofluoromethane	2.79	Poor chromatography	bungardf	10/25/17 22:46

Lab Sample ID: 180-71580-7 Client Sample ID: HD-MW-142D-0/1-0

Date Analyzed: 10/26/17 05:44 Lab File ID: 51025D19.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toluene	9.05	Poor chromatography	bungardf	10/26/17 20:24

Lab Sample ID: 180-71580-3 Client Sample ID: HD-MW-87-0/1-0

Date Analyzed: 10/26/17 08:07 Lab File ID: 51025D25.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.44	Poor chromatography	bungardf	10/26/17 20:35

Lab Sample ID: 180-71580-4 Client Sample ID: HD-MW-77-0/1-0

Date Analyzed: 10/26/17 08:31 Lab File ID: 51025D26.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.43	Poor chromatography	bungardf	10/26/17 20:36

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 227152

Lab Sample ID: CCVIS 180-227152/2 Client Sample ID:

Date Analyzed: 10/26/17 21:43 Lab File ID: 51026D02.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.79	Poor chromatography	bungardf	10/26/17 22:38

Lab Sample ID: MB 180-227152/5 Client Sample ID:

Date Analyzed: 10/26/17 23:22 Lab File ID: 51026D05.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.46	Poor chromatography	bungardf	10/26/17 23:59

Lab Sample ID: 180-71580-5 Client Sample ID: HD-MW-129-0/1-0

Date Analyzed: 10/27/17 07:59 Lab File ID: 51026D26.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.45	Poor chromatography	bungardf	10/29/17 21:11

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Instrument ID: CHHP5 Analysis Batch Number: 227613

Lab Sample ID: CCVIS 180-227613/2 Client Sample ID:

Date Analyzed: 11/01/17 01:29 Lab File ID: 51031D02.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethyl methacrylate	9.36	Poor chromatography	bungardf	11/01/17 02:16

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Instrument ID: CH732 Analysis Batch Number: 225193

Lab Sample ID: IC 180-225193/3 Client Sample ID:

Date Analyzed: 10/09/17 04:57 Lab File ID: D10090003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.63	Missed Peak	piccolinov	10/09/17 06:54
N-Nitrosodimethylamine	2.25	Missed Peak	piccolinov	10/09/17 06:54
Pyridine	2.34	Missed Peak	piccolinov	10/09/17 06:54
Benzidine	12.16	Poor chromatography	piccolinov	10/09/17 06:55
3,3'-Dichlorobenzidine	14.24	Poor chromatography	piccolinov	10/09/17 06:55
Di-n-octyl phthalate	15.59	Poor chromatography	piccolinov	10/09/17 06:55
Indeno[1,2,3-cd]pyrene	19.54	Poor chromatography	piccolinov	10/09/17 06:55
Dibenz(a,h)anthracene	19.59	Poor chromatography	piccolinov	10/09/17 08:40
Benzo[g,h,i]perylene	20.22	Poor chromatography	piccolinov	10/09/17 06:56

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Instrument ID: CH732 Analysis Batch Number: 225193

Lab Sample ID: IC 180-225193/4 Client Sample ID:

Date Analyzed: 10/09/17 05:23 Lab File ID: D10090004.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.31	Poor chromatography	piccolinov	10/09/17 06:13
Benzoic acid	7.15	Poor chromatography	piccolinov	10/09/17 06:13
Benzo[k]fluoranthene	16.49	Poor chromatography	piccolinov	10/09/17 06:14
Indeno[1,2,3-cd]pyrene	19.55	Poor chromatography	piccolinov	10/09/17 06:14
Dibenz(a,h)anthracene	19.58	Poor chromatography	piccolinov	10/09/17 06:14
Benzo[g,h,i]perylene	20.22	Poor chromatography	piccolinov	10/09/17 06:14

Lab Sample ID: IC 180-225193/5 Client Sample ID:

Date Analyzed: 10/09/17 05:50 Lab File ID: D10090005.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosodimethylamine	2.22	Poor chromatography	piccolinov	10/09/17 06:15
Pyridine	2.29	Poor chromatography	piccolinov	10/09/17 06:15
Benzoic acid	7.16	Poor chromatography	piccolinov	10/09/17 06:16
Indeno[1,2,3-cd]pyrene	19.55	Poor chromatography	piccolinov	10/09/17 06:16
Dibenz(a,h)anthracene	19.58	Poor chromatography	piccolinov	10/09/17 06:17
Benzo[g,h,i]perylene	20.21	Poor chromatography	piccolinov	10/09/17 06:17

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Instrument ID: CH732 Analysis Batch Number: 225193

Lab Sample ID: IC 180-225193/7 Client Sample ID:

Date Analyzed: 10/09/17 06:43 Lab File ID: D10090007.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[g,h,i]perylene	20.26	Poor chromatography	piccolino v	10/09/17 07:17

Lab Sample ID: IC 180-225193/8 Client Sample ID:

Date Analyzed: 10/09/17 07:09 Lab File ID: D10090008.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[g,h,i]perylene	20.26	Poor chromatography	piccolino v	10/09/17 07:37

Lab Sample ID: IC 180-225193/10 Client Sample ID:

Date Analyzed: 10/09/17 08:02 Lab File ID: D10090010.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.63	Poor chromatography	piccolino v	10/09/17 08:25

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Instrument ID: CH732 Analysis Batch Number: 227303

Lab Sample ID: CCVIS 180-227303/3 Client Sample ID:

Date Analyzed: 10/28/17 10:33 Lab File ID: D10280003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perylene-d12	17.24	Incomplete Integration	piccolinov	10/28/17 10:56

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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_00243	11/03/17	10/27/17	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.: 180-71580-1

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_00243	11/03/17	10/27/17	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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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.: 180-71580-1

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_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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

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
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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VOA8260VOAPRI_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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL
							3-Chloro-1-propene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	250 ug/mL
							2-Methyl-2-propanol	2500 ug/mL
							3-Chloro-1-propene	250 ug/mL
							4-Chlorotoluene	250 ug/mL
							4-Isopropyltoluene	250 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzene	250 ug/mL
							Bromobenzene	250 ug/mL
							Bromochloromethane	250 ug/mL
							Bromodichloromethane	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Cyclohexane	250 ug/mL
							Dibromochloromethane	250 ug/mL
							Dibromomethane	250 ug/mL
							Ethyl ether	250 ug/mL
							Ethyl methacrylate	250 ug/mL
							Ethylbenzene	250 ug/mL
							Hexachlorobutadiene	250 ug/mL
							Hexane	250 ug/mL
							Iodomethane	250 ug/mL
							Isobutyl alcohol	6250 ug/mL
							Isopropylbenzene	250 ug/mL
							m-Xylene & p-Xylene	250 ug/mL
							Methyl acetate	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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_00268	10/30/17	10/23/17	Methanol, Lot 2469119	10 mL	VOA8260GAS1ST_00206	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00206	01/31/20		Restek, Lot A0124278		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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
voaWKetmix1st_00006	10/25/17	09/25/17	Methanol, Lot 2469119	50 mL	VOA8260KET1ST_00102	100 uL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET1ST_00102	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

Reagent

sv benzoepyre_00005

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Certified Reference Material CRM

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

CERTIFIED WEIGHT REPORT

Part Number: 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

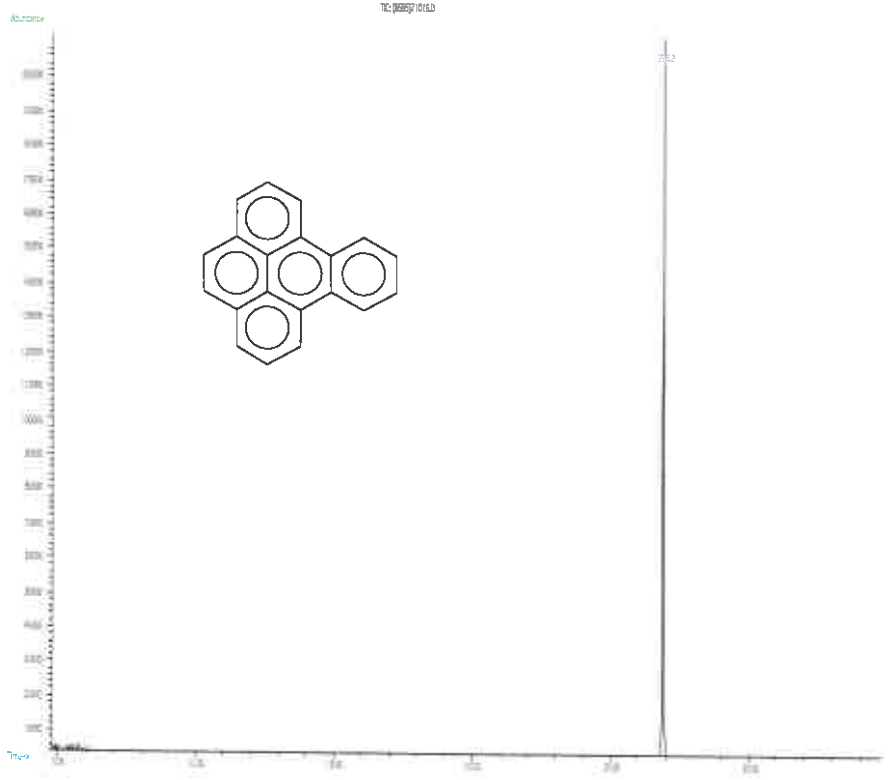
Reviewed By: Pedro L. Rentas — 031715 DATE

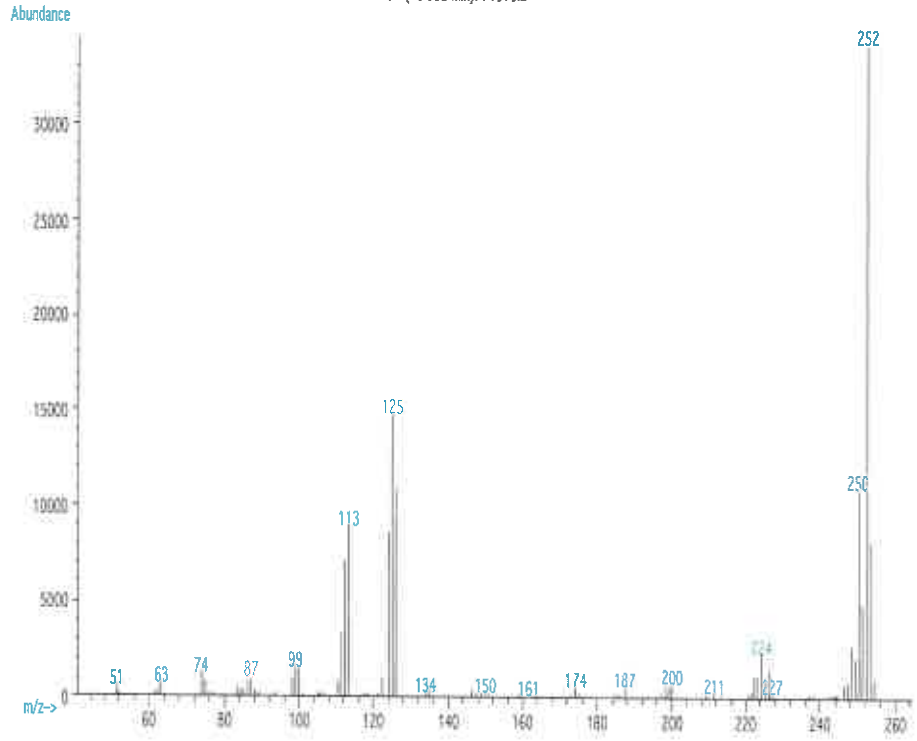
Weight(s) shown below were combined and diluted to (mL): 100.0

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 Reference Material CRM

ISO 9001 QS Registered
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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

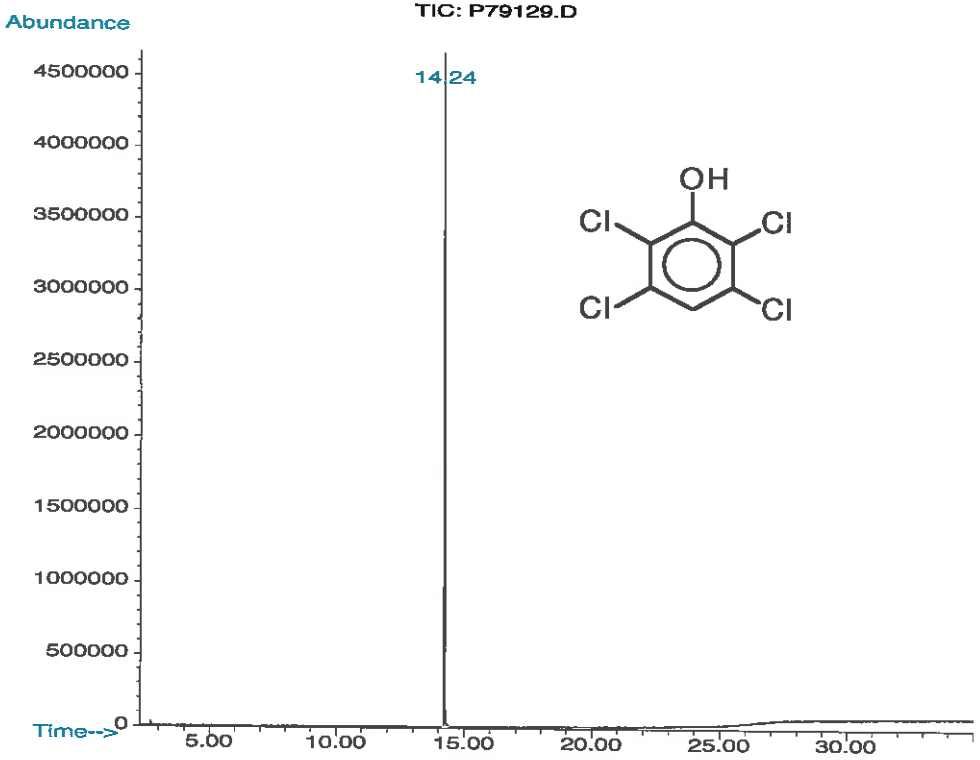
Weight(s) shown below were combined and diluted to (mL): 25.0

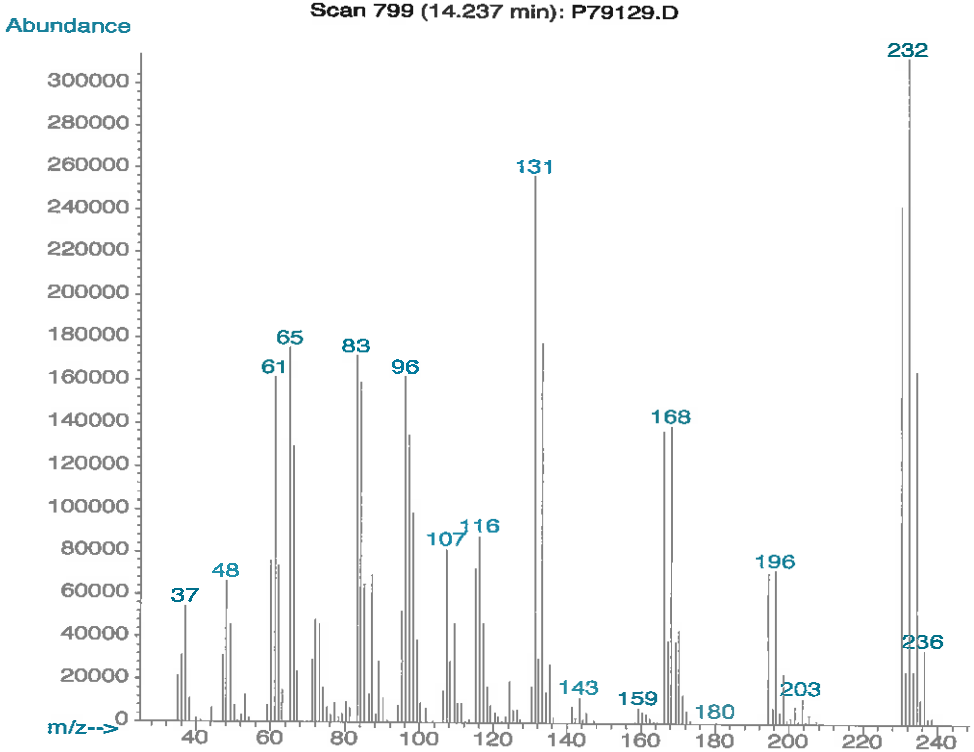
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

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.

ISO 9001
Registered
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

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

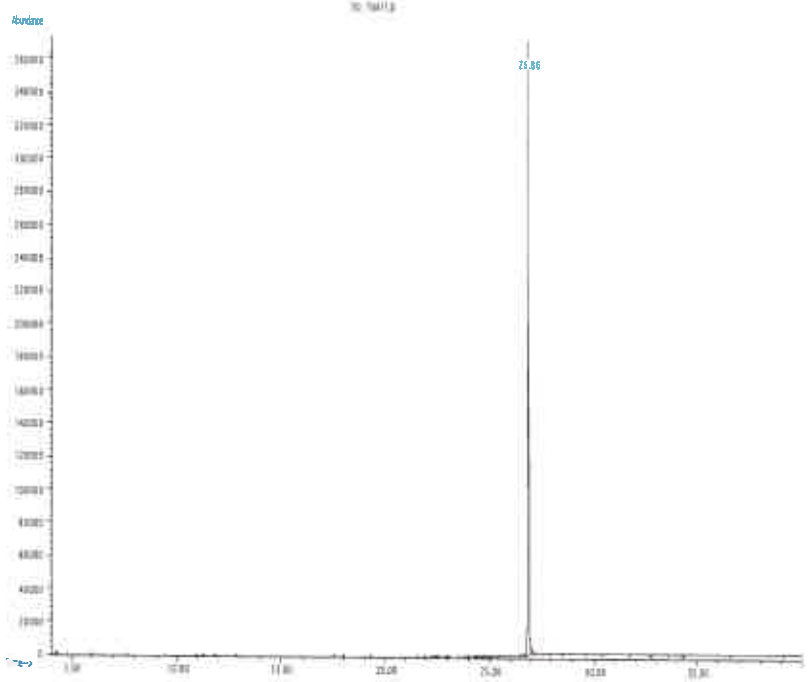
Solvent(s): **Lot#**
Methylene chloride 76782

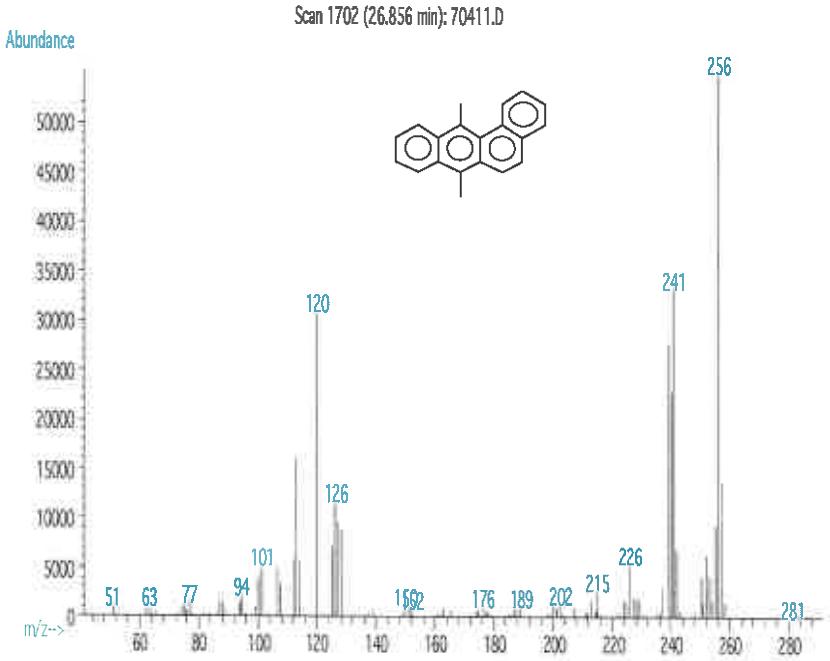
Expiration Date: 053121
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 822-275872-11 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.003 Flask Uncertainty

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

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 µg/mL +/- 90.4505 µg/mL +/- 100.3660 µg/mL	Gravimetric Unstressed Stressed
2	Naphthalene-d8 **CAS #** 1146-65-2 (Lot M-1452) **Purity** 99%	2,004.0 µg/mL	+/- 11.6514 µg/mL +/- 90.2614 µg/mL +/- 100.1561 µg/mL	Gravimetric Unstressed Stressed
3	Acenaphthene-d10 **CAS #** 15067-26-2 (Lot PR-25444) **Purity** 99%	2,007.7 µg/mL	+/- 11.6729 µg/mL +/- 90.4280 µg/mL +/- 100.3410 µg/mL	Gravimetric Unstressed Stressed
4	Phenanthrene-d10 **CAS #** 1517-22-2 (Lot PR-23065) **Purity** 99%	2,011.4 µg/mL	+/- 11.6945 µg/mL +/- 90.5947 µg/mL +/- 100.5260 µg/mL	Gravimetric Unstressed Stressed
5	Chrysene-d12 **CAS #** 1719-03-5 (Lot PR-26678) **Purity** 98%	2,018.8 µg/mL	+/- 11.7375 µg/mL +/- 90.9280 µg/mL +/- 100.8958 µg/mL	Gravimetric Unstressed Stressed
6	Perylene-d12 **CAS #** 1520-96-3 (Lot PR-24113) **Purity** 99%	2,002.6 µg/mL	+/- 11.6433 µg/mL +/- 90.1983 µg/mL +/- 100.0862 µg/mL	Gravimetric Unstressed Stressed

Reagent

SVLVstd1_00043

RESTEK
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CERTIFIED REFERENCE MATERIAL

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

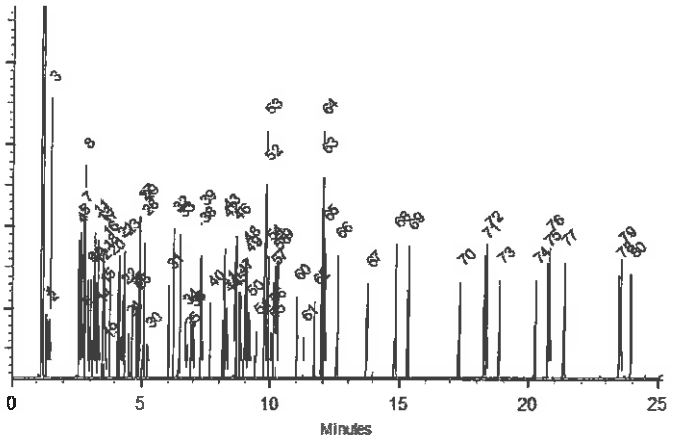
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

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

2460296 – 2460310

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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. : 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)

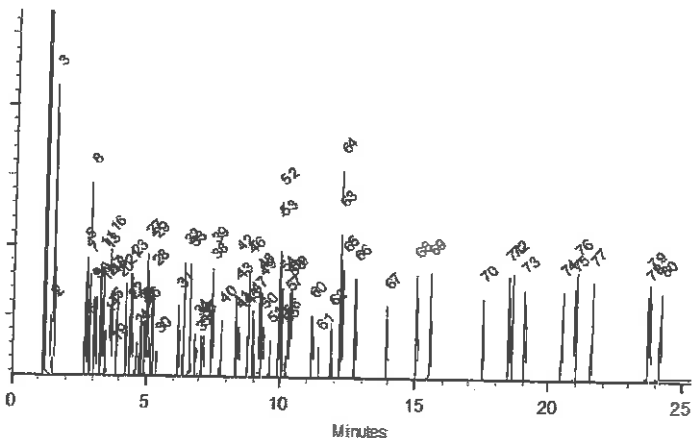
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

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

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. : 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

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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

Catalog No. : 569731 **Lot No.:** A0123819

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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)

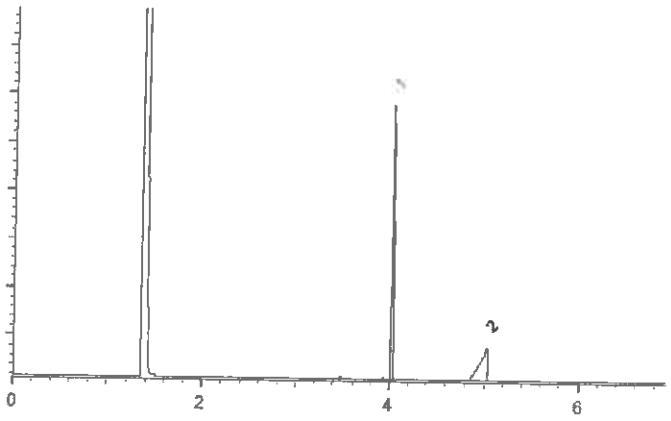
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

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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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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)

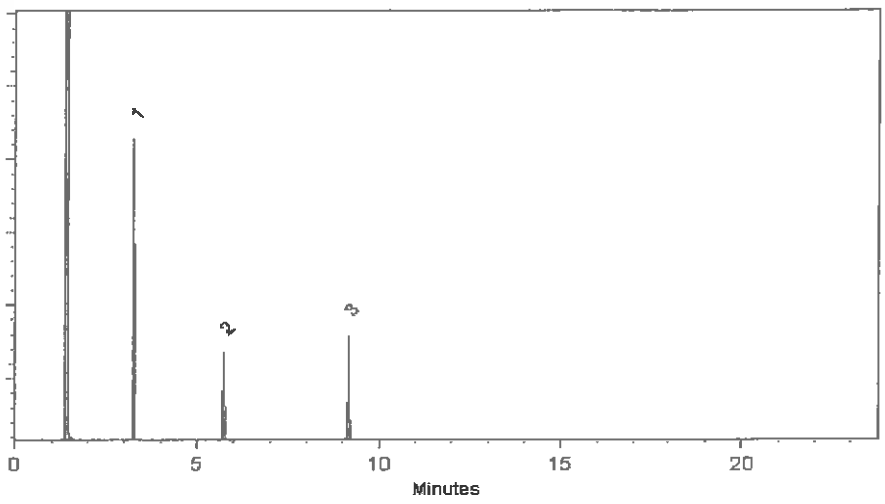
Carrier Gas:
hydrogen-constant pressure 10 psi.

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
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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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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. : 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 260342-246035

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

Catalog No. : 569730 **Lot No.:** 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)

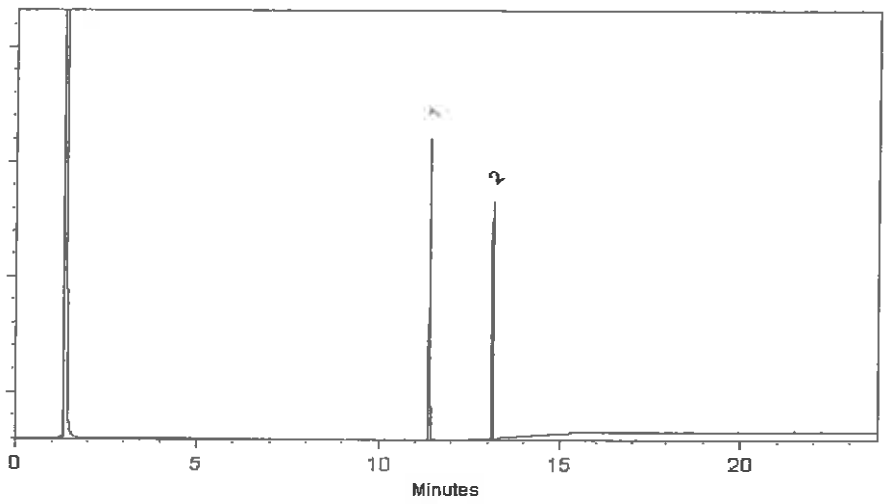
Carrier Gas:
hydrogen-constant pressure 10 psi.

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.
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- 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. : 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)

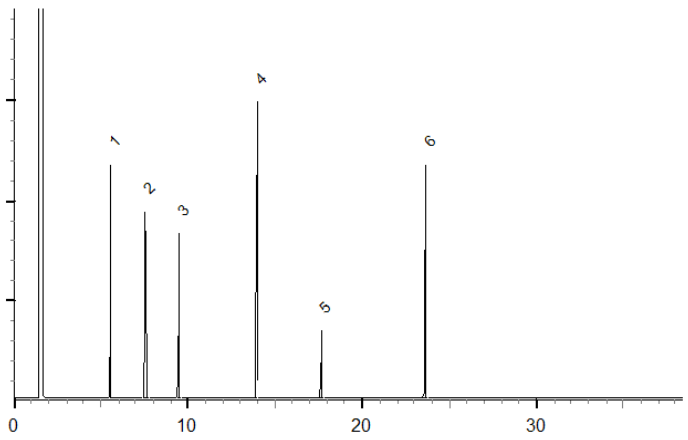
Carrier Gas:
hydrogen-constant pressure 10 psi.

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:

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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

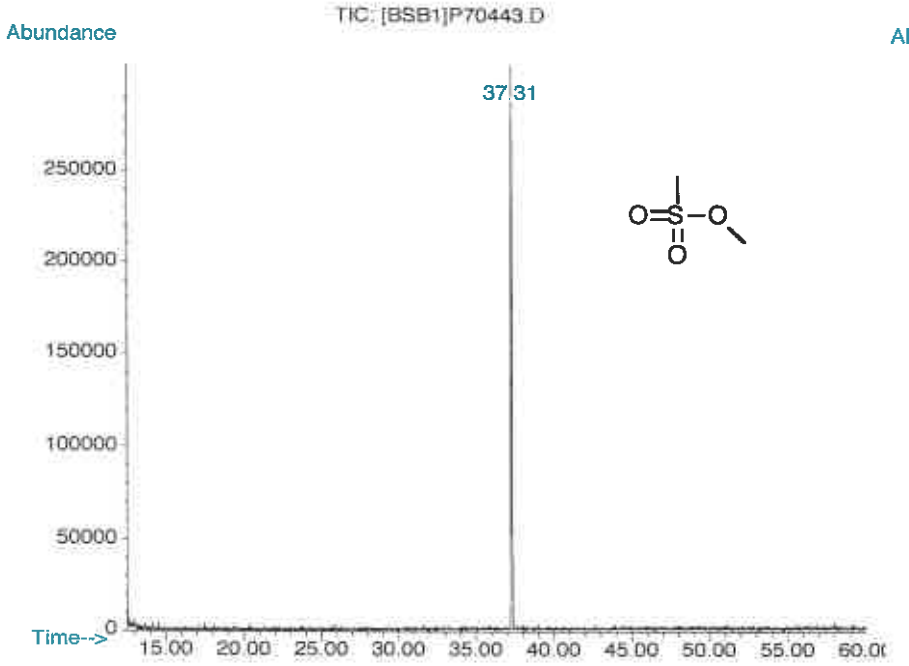
Solvent(s):	Lot#
Methylene chloride	76782

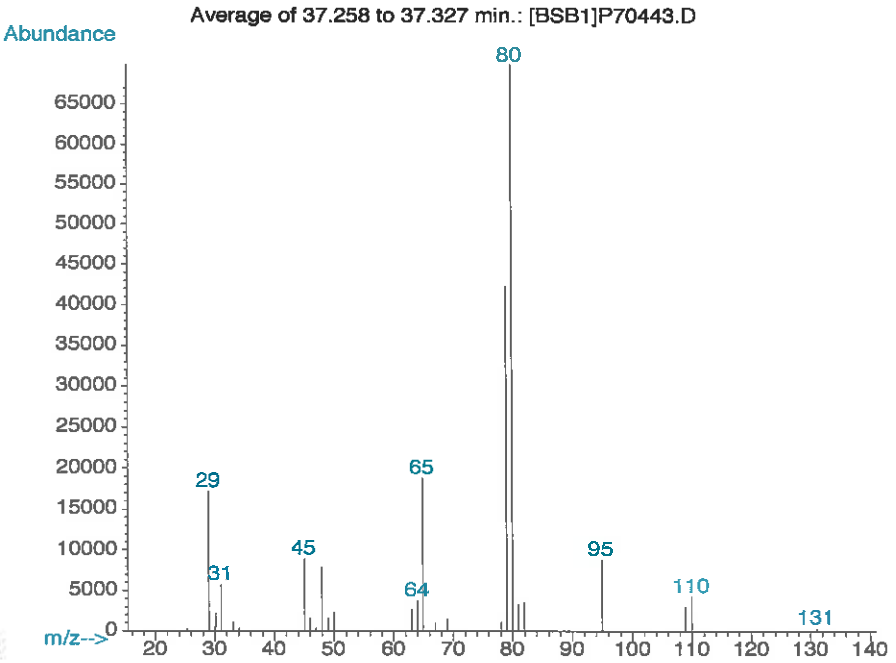
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

032717	
Formulated By: Bryan Njeba	DATE
032717	
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 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

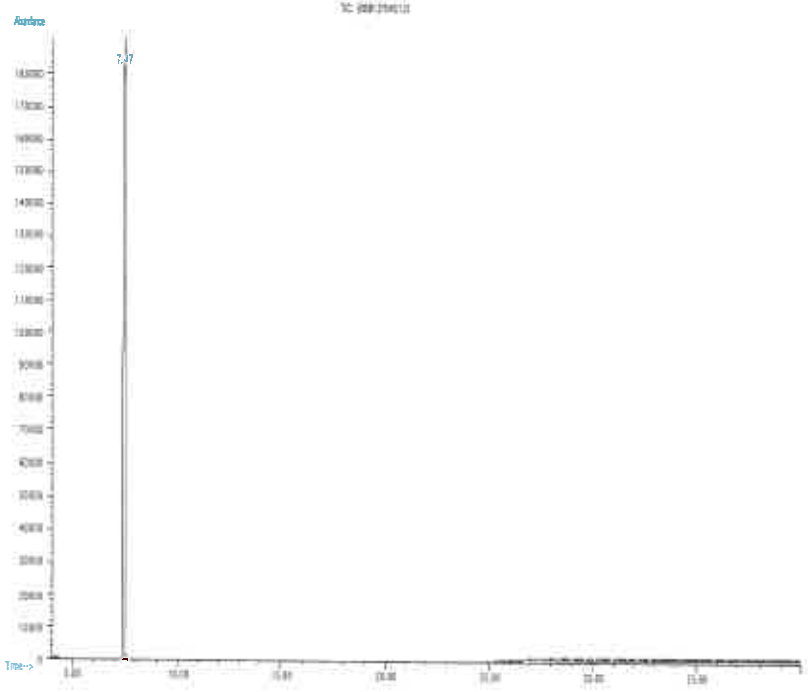
Solvent(s): **Lot#**
Methylene chloride 76782

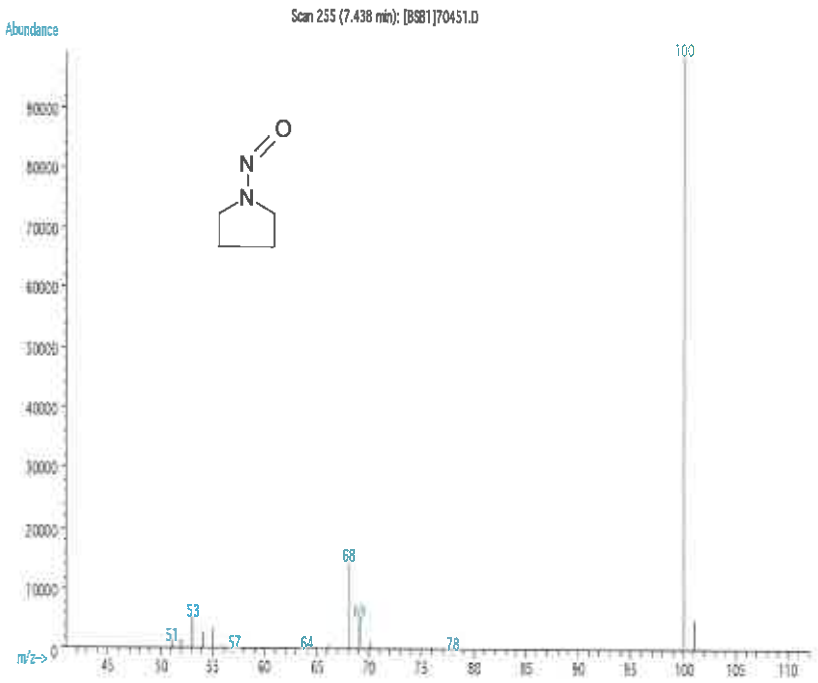
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

Formulated By:	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_00203

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569722 **Lot No.:** 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)		2,500.5	µg/mL	+/- 16.7232	µg/mL	Gravimetric
	CAS # 75-71-8	(Lot Q167-08)			+/- 140.4412	µg/mL	Unstressed
	Purity 99%				+/- 143.7161	µg/mL	Stressed
2	Chloromethane (methyl chloride)		2,498.7	µg/mL	+/- 17.4998	µg/mL	Gravimetric
	CAS # 74-87-3	(Lot SHBG7976V)			+/- 140.4406	µg/mL	Unstressed
	Purity 99%				+/- 143.7111	µg/mL	Stressed
3	Vinyl chloride		2,498.4	µg/mL	+/- 16.6753	µg/mL	Gravimetric
	CAS # 75-01-4	(Lot 1026101231B1)			+/- 140.3203	µg/mL	Unstressed
	Purity 99%				+/- 143.5926	µg/mL	Stressed
4	1,3-Butadiene		2,496.9	µg/mL	+/- 17.0619	µg/mL	Gravimetric
	CAS # 106-99-0	(Lot SHBF3387V)			+/- 140.2843	µg/mL	Unstressed
	Purity 99%				+/- 143.5535	µg/mL	Stressed
5	Bromomethane (methyl bromide)		2,500.5	µg/mL	+/- 17.3456	µg/mL	Gravimetric
	CAS # 74-83-9	(Lot 101604)			+/- 140.5211	µg/mL	Unstressed
	Purity 99%				+/- 143.7944	µg/mL	Stressed
6	Chloroethane (ethyl chloride)		2,500.5	µg/mL	+/- 16.8189	µg/mL	Gravimetric
	CAS # 75-00-3	(Lot 23593)			+/- 140.4526	µg/mL	Unstressed
	Purity 99%				+/- 143.7272	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)		2,500.0	µg/mL	+/- 10.0499	µg/mL	Gravimetric
	CAS # 75-43-4	(Lot 4938100)			+/- 139.7786	µg/mL	Unstressed
	Purity 99%				+/- 143.0675	µg/mL	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)

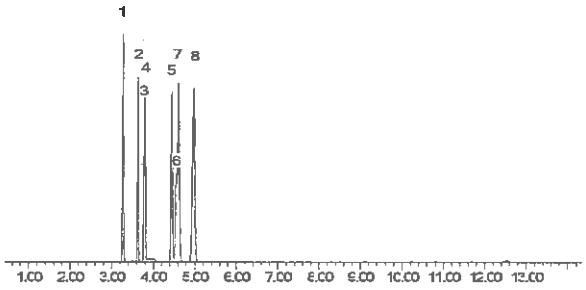
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_00206

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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)

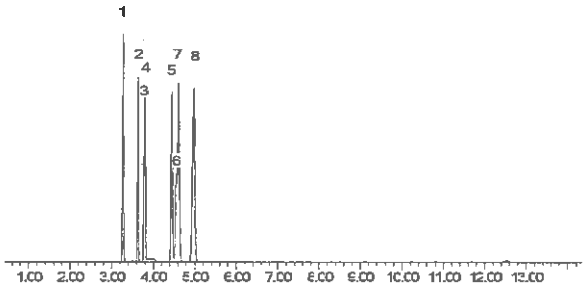
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

VOA8260GAS2ND_00216

RESTEK
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

VOA8260INTRES_00123

RESTEK CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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_00136

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Fax: (814)353-1309

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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_00099

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569721 **Lot No.:** 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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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 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_00102

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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

VOA8260KET2ND_00103

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569721.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_00065

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

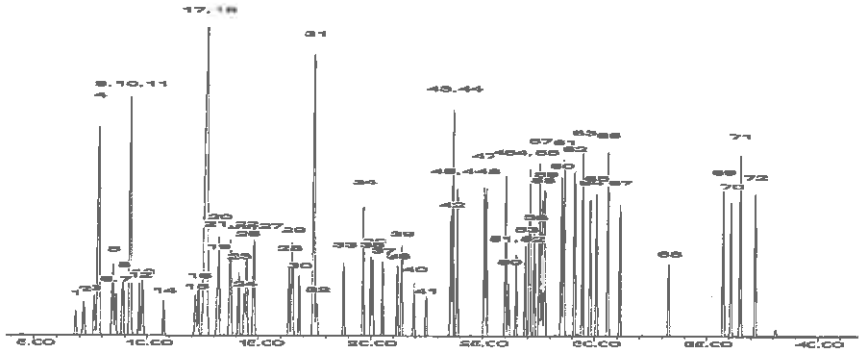
Carrier Gas:
helium-constant pressure 30 psi

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)

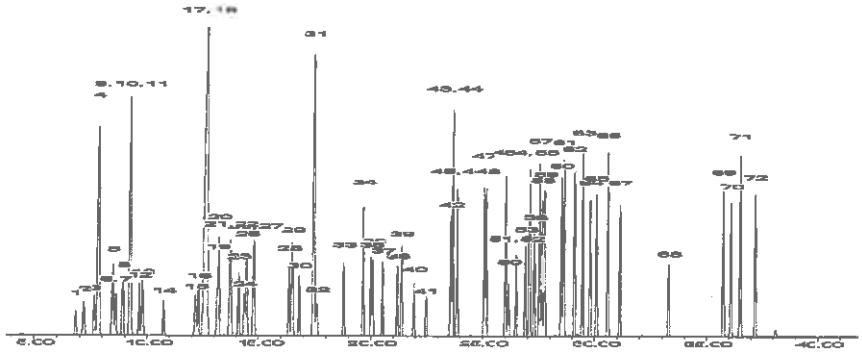
Carrier Gas:
helium-constant pressure 30 psi

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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		2,500.4	µg/mL	+/-	14.5376	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10181507)			+/-	150.8613	µg/mL	Unstressed
	Purity 97%				+/-	151.2194	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
42	Chlorobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
43	m-Xylene		1,250.9	µg/mL	+/-	7.2727	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	75.4708	µg/mL	Unstressed
	Purity 99%				+/-	75.6500	µg/mL	Stressed
44	p-Xylene		1,250.5	µg/mL	+/-	7.2705	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/-	75.4482	µg/mL	Unstressed
	Purity 99%				+/-	75.6273	µg/mL	Stressed
45	Ethylbenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
47	o-Xylene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01-KTPK)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
48	Styrene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
50	Bromoform		2,502.3	µg/mL	+/-	14.5483	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5139000)			+/-	150.9718	µg/mL	Unstressed
	Purity 99%				+/-	151.3303	µg/mL	Stressed
51	Bromodichloromethane		2,500.1	µg/mL	+/-	14.5358	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	150.8423	µg/mL	Unstressed
	Purity 98%				+/-	151.2004	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,500.1	µg/mL	+/-	14.5358	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot OGI01)			+/-	150.8423	µg/mL	Unstressed
	Purity 98%				+/-	151.2004	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,501.0	µg/mL	+/-	14.5408	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)			+/-	150.8940	µg/mL	Unstressed
	Purity 98%				+/-	151.2522	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC-IT)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	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)

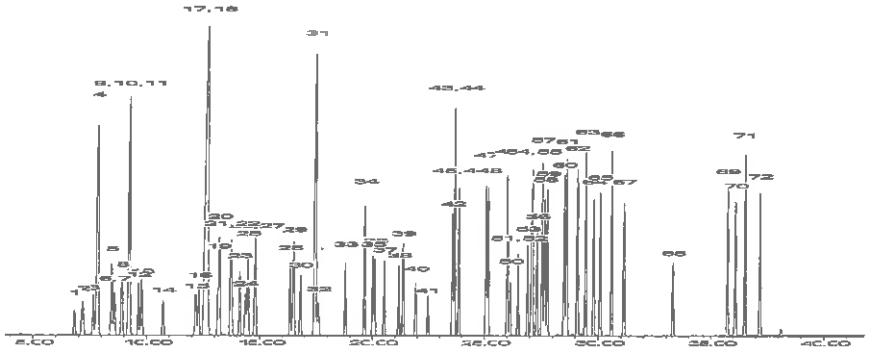
Carrier Gas:
helium-constant pressure 30 psi

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

Reagent

VOA8260SURRES_00118

RESTEK CERTIFIED REFERENCE MATERIAL

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

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Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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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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

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

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
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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_00055

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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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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.

2406027
28
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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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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.

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

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.: 180-71580-1

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-QC2-0/1-2	180-71580-1	106	113	91	86
HD-MW-127-0/1-0	180-71580-2	111	115	90	84
HD-MW-127-0/1-0 RA	180-71580-2 RA	106	112	93	86
HD-MW-87-0/1-0	180-71580-3	107	116	91	86
HD-MW-87-0/1-0 RA	180-71580-3 RA	107	113	93	86
HD-MW-77-0/1-0	180-71580-4	97	105	96	96
HD-MW-77-0/1-0 RA	180-71580-4 RA	91	90	100	104
HD-MW-129-0/1-0	180-71580-5	115	119	92	83
HD-MW-129-0/1-0 RA	180-71580-5 RA	101	106	95	89
HD-MW-142S-0/1-0	180-71580-6	112	119	91	85
HD-MW-142D-0/1-0	180-71580-7	114	121	89	84
HD-MW-143S-0/1-0	180-71580-8	112	118	95	84
HD-MW-143D-0/1-0	180-71580-9	110	116	93	85
HD-MW-20S-0/1-0	180-71580-10	108	116	90	84
	MB 180-227010/5	105	109	94	92
	MB 180-227152/5	103	110	95	90
	MB 180-227508/5	106	112	94	89
	MB 180-227613/5	101	110	93	90
	LCS 180-227010/3	90	93	95	93
	LCS 180-227152/3	91	99	100	93
	LCS 180-227508/3	98	101	108	103
	LCS 180-227613/3	97	104	110	105

	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.: 180-71580-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51025D03.D

Lab ID: LCS 180-227010/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	13.7	137	49-135	*
Vinyl chloride	10.0	10.6	106	52-136	
Bromomethane	10.0	6.88	69	37-150	
Chloroethane	10.0	9.57	96	44-139	
1,1-Dichloroethene	10.0	10.2	102	64-131	
Acetone	20.0	26.4	132	24-150	
Carbon disulfide	10.0	10.0	100	20-150	
Methylene Chloride	10.0	9.78	98	66-123	
trans-1,2-Dichloroethene	10.0	10.0	100	70-123	
Methyl tert-butyl ether	10.0	9.29	93	66-130	
1,1-Dichloroethane	10.0	10.2	102	66-122	
cis-1,2-Dichloroethene	10.0	9.49	95	73-120	
Bromochloromethane	10.0	9.54	95	73-122	
2-Butanone (MEK)	20.0	23.5	117	37-150	
Chloroform	10.0	9.19	92	72-123	
1,1,1-Trichloroethane	10.0	9.70	97	66-129	
Carbon tetrachloride	10.0	9.92	99	58-145	
Benzene	10.0	9.20	92	75-123	
1,2-Dichloroethane	10.0	10.1	101	63-130	
Trichloroethene	10.0	8.92	89	74-121	
1,2-Dichloropropane	10.0	9.45	95	67-119	
Bromodichloromethane	10.0	8.92	89	62-127	
cis-1,3-Dichloropropene	10.0	8.58	86	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	22.0	110	41-135	
Toluene	10.0	9.90	99	76-129	
trans-1,3-Dichloropropene	10.0	9.64	96	61-136	
1,1,2-Trichloroethane	10.0	9.41	94	74-126	
Tetrachloroethene	10.0	9.21	92	76-128	
2-Hexanone	20.0	21.8	109	37-150	
Dibromochloromethane	10.0	9.57	96	63-131	
1,2-Dibromoethane (EDB)	10.0	9.35	94	76-128	
Chlorobenzene	10.0	9.41	94	79-124	
1,1,1,2-Tetrachloroethane	10.0	9.79	98	70-130	
Ethylbenzene	10.0	9.66	97	77-124	
Xylenes, Total	20.0	19.0	95	76-124	
Styrene	10.0	9.79	98	80-125	
Bromoform	10.0	8.10	81	54-136	
1,1,2,2-Tetrachloroethane	10.0	8.53	85	72-128	
Acrylonitrile	100	106	106	60-130	
1,4-Dioxane	200	190 J	95	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.: 180-71580-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51026D03.D

Lab ID: LCS 180-227152/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	12.6	126	49-135	
Vinyl chloride	10.0	9.92	99	52-136	
Bromomethane	10.0	7.44	74	37-150	
Chloroethane	10.0	8.59	86	44-139	
1,1-Dichloroethene	10.0	9.81	98	64-131	
Acetone	20.0	28.4	142	24-150	
Carbon disulfide	10.0	9.00	90	20-150	
Methylene Chloride	10.0	9.21	92	66-123	
trans-1,2-Dichloroethene	10.0	9.18	92	70-123	
Methyl tert-butyl ether	10.0	9.36	94	66-130	
1,1-Dichloroethane	10.0	9.62	96	66-122	
cis-1,2-Dichloroethene	10.0	9.19	92	73-120	
Bromochloromethane	10.0	8.88	89	73-122	
2-Butanone (MEK)	20.0	24.2	121	37-150	
Chloroform	10.0	8.84	88	72-123	
1,1,1-Trichloroethane	10.0	9.27	93	66-129	
Carbon tetrachloride	10.0	9.19	92	58-145	
Benzene	10.0	8.66	87	75-123	
1,2-Dichloroethane	10.0	10.0	100	63-130	
Trichloroethene	10.0	8.22	82	74-121	
1,2-Dichloropropane	10.0	9.25	93	67-119	
Bromodichloromethane	10.0	8.16	82	62-127	
cis-1,3-Dichloropropene	10.0	8.33	83	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	22.0	110	41-135	
Toluene	10.0	9.64	96	76-129	
trans-1,3-Dichloropropene	10.0	9.31	93	61-136	
1,1,2-Trichloroethane	10.0	9.57	96	74-126	
Tetrachloroethene	10.0	8.87	89	76-128	
2-Hexanone	20.0	23.4	117	37-150	
Dibromochloromethane	10.0	9.00	90	63-131	
1,2-Dibromoethane (EDB)	10.0	9.21	92	76-128	
Chlorobenzene	10.0	9.23	92	79-124	
1,1,1,2-Tetrachloroethane	10.0	9.30	93	70-130	
Ethylbenzene	10.0	9.18	92	77-124	
Xylenes, Total	20.0	17.9	90	76-124	
Styrene	10.0	9.27	93	80-125	
Bromoform	10.0	8.02	80	54-136	
1,1,2,2-Tetrachloroethane	10.0	8.90	89	72-128	
Acrylonitrile	100	114	114	60-130	
1,4-Dioxane	200	204	102	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.: 180-71580-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51030D03.D

Lab ID: LCS 180-227508/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	9.23	92	49-135	
Vinyl chloride	10.0	8.16	82	52-136	
Bromomethane	10.0	6.21	62	37-150	
Chloroethane	10.0	7.84	78	44-139	
1,1-Dichloroethene	10.0	8.72	87	64-131	
Acetone	20.0	24.3	122	24-150	
Carbon disulfide	10.0	8.40	84	20-150	
Methylene Chloride	10.0	8.61	86	66-123	
trans-1,2-Dichloroethene	10.0	8.45	84	70-123	
Methyl tert-butyl ether	10.0	9.01	90	66-130	
1,1-Dichloroethane	10.0	9.04	90	66-122	
cis-1,2-Dichloroethene	10.0	8.36	84	73-120	
Bromochloromethane	10.0	8.86	89	73-122	
2-Butanone (MEK)	20.0	21.7	108	37-150	
Chloroform	10.0	8.36	84	72-123	
1,1,1-Trichloroethane	10.0	9.12	91	66-129	
Carbon tetrachloride	10.0	8.86	89	58-145	
Benzene	10.0	8.15	81	75-123	
1,2-Dichloroethane	10.0	9.51	95	63-130	
Trichloroethene	10.0	7.87	79	74-121	
1,2-Dichloropropane	10.0	8.43	84	67-119	
Bromodichloromethane	10.0	7.92	79	62-127	
cis-1,3-Dichloropropene	10.0	7.94	79	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	20.0	100	41-135	
Toluene	10.0	9.14	91	76-129	
trans-1,3-Dichloropropene	10.0	9.25	93	61-136	
1,1,2-Trichloroethane	10.0	9.39	94	74-126	
Tetrachloroethene	10.0	8.57	86	76-128	
2-Hexanone	20.0	19.5	97	37-150	
Dibromochloromethane	10.0	9.11	91	63-131	
1,2-Dibromoethane (EDB)	10.0	8.65	87	76-128	
Chlorobenzene	10.0	8.68	87	79-124	
1,1,1,2-Tetrachloroethane	10.0	9.57	96	70-130	
Ethylbenzene	10.0	8.60	86	77-124	
Xylenes, Total	20.0	17.1	85	76-124	
Styrene	10.0	8.50	85	80-125	
Bromoform	10.0	8.03	80	54-136	
1,1,2,2-Tetrachloroethane	10.0	8.77	88	72-128	
Acrylonitrile	100	105	105	60-130	
1,4-Dioxane	200	164 J	82	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.: 180-71580-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 51031D03.D

Lab ID: LCS 180-227613/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	14.0	140	49-135	*
Vinyl chloride	10.0	11.5	115	52-136	
Bromomethane	10.0	8.03	80	37-150	
Chloroethane	10.0	8.85	88	44-139	
1,1-Dichloroethene	10.0	9.70	97	64-131	
Acetone	20.0	24.8	124	24-150	
Carbon disulfide	10.0	10.0	100	20-150	
Methylene Chloride	10.0	9.20	92	66-123	
trans-1,2-Dichloroethene	10.0	9.03	90	70-123	
Methyl tert-butyl ether	10.0	9.44	94	66-130	
1,1-Dichloroethane	10.0	9.77	98	66-122	
cis-1,2-Dichloroethene	10.0	8.86	89	73-120	
Bromochloromethane	10.0	9.17	92	73-122	
2-Butanone (MEK)	20.0	20.5	102	37-150	
Chloroform	10.0	8.50	85	72-123	
1,1,1-Trichloroethane	10.0	9.41	94	66-129	
Carbon tetrachloride	10.0	9.23	92	58-145	
Benzene	10.0	8.71	87	75-123	
1,2-Dichloroethane	10.0	9.94	99	63-130	
Trichloroethene	10.0	8.57	86	74-121	
1,2-Dichloropropane	10.0	9.29	93	67-119	
Bromodichloromethane	10.0	8.37	84	62-127	
cis-1,3-Dichloropropene	10.0	8.49	85	61-127	
4-Methyl-2-pentanone (MIBK)	20.0	17.9	89	41-135	
Toluene	10.0	9.63	96	76-129	
trans-1,3-Dichloropropene	10.0	9.98	100	61-136	
1,1,2-Trichloroethane	10.0	9.52	95	74-126	
Tetrachloroethene	10.0	9.06	91	76-128	
2-Hexanone	20.0	18.8	94	37-150	
Dibromochloromethane	10.0	9.25	92	63-131	
1,2-Dibromoethane (EDB)	10.0	9.50	95	76-128	
Chlorobenzene	10.0	9.30	93	79-124	
1,1,1,2-Tetrachloroethane	10.0	9.69	97	70-130	
Ethylbenzene	10.0	9.03	90	77-124	
Xylenes, Total	20.0	18.3	91	76-124	
Styrene	10.0	9.22	92	80-125	
Bromoform	10.0	8.51	85	54-136	
1,1,2,2-Tetrachloroethane	10.0	8.85	88	72-128	
Acrylonitrile	100	112	112	60-130	
1,4-Dioxane	200	202	101	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.: 180-71580-1

SDG No.:

Lab File ID: 51025D05.D Lab Sample ID: MB 180-227010/5

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

Instrument ID: CHHP5 Date Analyzed: 10/25/2017 23:51

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 180-227010/3	51025D03.D	10/25/2017 22:51
HD-QC2-0/1-2	180-71580-1	51025D17.D	10/26/2017 04:56
HD-MW-142S-0/1-0	180-71580-6	51025D18.D	10/26/2017 05:20
HD-MW-142D-0/1-0	180-71580-7	51025D19.D	10/26/2017 05:44
HD-MW-143S-0/1-0	180-71580-8	51025D20.D	10/26/2017 06:08
HD-MW-143D-0/1-0	180-71580-9	51025D21.D	10/26/2017 06:32
HD-MW-20S-0/1-0	180-71580-10	51025D22.D	10/26/2017 06:56
HD-MW-127-0/1-0	180-71580-2	51025D24.D	10/26/2017 07:43
HD-MW-87-0/1-0	180-71580-3	51025D25.D	10/26/2017 08:07
HD-MW-77-0/1-0	180-71580-4	51025D26.D	10/26/2017 08:31

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab File ID: 51026D05.D Lab Sample ID: MB 180-227152/5

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

Instrument ID: CHHP5 Date Analyzed: 10/26/2017 23:22

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 180-227152/3	51026D03.D	10/26/2017 22:19
HD-MW-129-0/1-0	180-71580-5	51026D26.D	10/27/2017 07:59

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab File ID: 51030D05.D Lab Sample ID: MB 180-227508/5

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

Instrument ID: CHHP5 Date Analyzed: 10/31/2017 00:07

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 180-227508/3	51030D03.D	10/30/2017 23:08
HD-MW-77-0/1-0 RA	180-71580-4 RA	51030D23.D	10/31/2017 07:27
HD-MW-129-0/1-0 RA	180-71580-5 RA	51030D25.D	10/31/2017 08:14

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab File ID: 51031D05.D Lab Sample ID: MB 180-227613/5

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

Instrument ID: CHHP5 Date Analyzed: 11/01/2017 03:10

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 180-227613/3	51031D03.D	11/01/2017 02:09
HD-MW-127-0/1-0 RA	180-71580-2 RA	51031D25.D	11/01/2017 11:24
HD-MW-87-0/1-0 RA	180-71580-3 RA	51031D26.D	11/01/2017 11:49

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

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.: 180-71580-1

SDG No.:

Lab File ID: 51025D01.D BFB Injection Date: 10/25/2017

Instrument ID: CHHP5 BFB Injection Time: 21:39

Analysis Batch No.: 227010

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.7	
75	30.0 - 60.0 % of mass 95	45.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.2	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	75.6	
175	5.0 - 9.0 % of mass 174	5.1	(6.7) 1
176	95.0 - 101.0 % of mass 174	73.7	(97.4) 1
177	5.0 - 9.0 % of mass 176	5.3	(7.2) 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 180-227010/2	51025D02.D	10/25/2017	22:12
	LCS 180-227010/3	51025D03.D	10/25/2017	22:51
	MB 180-227010/5	51025D05.D	10/25/2017	23:51
HD-QC2-0/1-2	180-71580-1	51025D17.D	10/26/2017	04:56
HD-MW-142S-0/1-0	180-71580-6	51025D18.D	10/26/2017	05:20
HD-MW-142D-0/1-0	180-71580-7	51025D19.D	10/26/2017	05:44
HD-MW-143S-0/1-0	180-71580-8	51025D20.D	10/26/2017	06:08
HD-MW-143D-0/1-0	180-71580-9	51025D21.D	10/26/2017	06:32
HD-MW-20S-0/1-0	180-71580-10	51025D22.D	10/26/2017	06:56
HD-MW-127-0/1-0	180-71580-2	51025D24.D	10/26/2017	07:43
HD-MW-87-0/1-0	180-71580-3	51025D25.D	10/26/2017	08:07
HD-MW-77-0/1-0	180-71580-4	51025D26.D	10/26/2017	08:31

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab File ID: 51026D01.D BFB Injection Date: 10/26/2017

Instrument ID: CHHP5 BFB Injection Time: 21:11

Analysis Batch No.: 227152

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.6	
75	30.0 - 60.0 % of mass 95	48.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	8.0	
173	Less than 2.0 % of mass 174	0.6	(0.8) 1
174	50.0 - 120.00 % of mass 95	71.4	
175	5.0 - 9.0 % of mass 174	4.9	(6.9) 1
176	95.0 - 101.0 % of mass 174	68.1	(95.4) 1
177	5.0 - 9.0 % of mass 176	4.2	(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 180-227152/2	51026D02.D	10/26/2017	21:43
	LCS 180-227152/3	51026D03.D	10/26/2017	22:19
	MB 180-227152/5	51026D05.D	10/26/2017	23:22
HD-MW-129-0/1-0	180-71580-5	51026D26.D	10/27/2017	07:59

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab File ID: 51030D01.D BFB Injection Date: 10/30/2017

Instrument ID: CHHP5 BFB Injection Time: 21:19

Analysis Batch No.: 227508

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.2	
75	30.0 - 60.0 % of mass 95	53.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.0	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	76.8	
175	5.0 - 9.0 % of mass 174	5.5	(7.2) 1
176	95.0 - 101.0 % of mass 174	75.1	(97.8) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.9) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-227508/2	51030D02.D	10/30/2017	22:32
	LCS 180-227508/3	51030D03.D	10/30/2017	23:08
	MB 180-227508/5	51030D05.D	10/31/2017	00:07
HD-MW-77-0/1-0 RA	180-71580-4 RA	51030D23.D	10/31/2017	07:27
HD-MW-129-0/1-0 RA	180-71580-5 RA	51030D25.D	10/31/2017	08:14

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab File ID: 51031D01.D BFB Injection Date: 11/01/2017

Instrument ID: CHHP5 BFB Injection Time: 00:52

Analysis Batch No.: 227613

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.6	
75	30.0 - 60.0 % of mass 95	47.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.6	(0.9) 1
174	50.0 - 120.00 % of mass 95	68.7	
175	5.0 - 9.0 % of mass 174	5.1	(7.4) 1
176	95.0 - 101.0 % of mass 174	68.9	(100.3) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.5) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-227613/2	51031D02.D	11/01/2017	01:29
	LCS 180-227613/3	51031D03.D	11/01/2017	02:09
	MB 180-227613/5	51031D05.D	11/01/2017	03:10
HD-MW-127-0/1-0 RA	180-71580-2 RA	51031D25.D	11/01/2017	11:24
HD-MW-87-0/1-0 RA	180-71580-3 RA	51031D26.D	11/01/2017	11:49

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Sample No.: CCVIS 180-227010/2 Date Analyzed: 10/25/2017 22:12

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

Lab File ID (Standard): 51025D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		183590	4.38	526834	7.34	114566	10.43
UPPER LIMIT		367180	4.88	1053668	7.84	229132	10.93
LOWER LIMIT		91795	3.88	263417	6.84	57283	9.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227010/3		196941	4.39	509802	7.34	118325	10.43
MB 180-227010/5		204506	4.37	490132	7.34	118973	10.43
180-71580-1	HD-QC2-0/1-2	173672	4.35	431217	7.34	104395	10.43
180-71580-6	HD-MW-142S-0/1-0	166289	4.37	402114	7.34	101994	10.43
180-71580-7	HD-MW-142D-0/1-0	167704	4.37	392107	7.34	99935	10.43
180-71580-8	HD-MW-143S-0/1-0	172028	4.36	402594	7.34	97534	10.43
180-71580-9	HD-MW-143D-0/1-0	173387	4.36	430666	7.34	105386	10.43
180-71580-10	HD-MW-20S-0/1-0	170096	4.36	418486	7.34	104720	10.43
180-71580-2	HD-MW-127-0/1-0	166878	4.37	414837	7.34	101448	10.43
180-71580-3	HD-MW-87-0/1-0	168633	4.36	426604	7.34	103066	10.43
180-71580-4	HD-MW-77-0/1-0	178947	4.36	482014	7.34	105315	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.: 180-71580-1

SDG No.:

Sample No.: CCVIS 180-227010/2 Date Analyzed: 10/25/2017 22:12

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

Lab File ID (Standard): 51025D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		166995	12.77				
UPPER LIMIT		333990	13.27				
LOWER LIMIT		83498	12.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227010/3		167377	12.77				
MB 180-227010/5		173707	12.77				
180-71580-1	HD-QC2-0/1-2	139517	12.77				
180-71580-6	HD-MW-142S-0/1-0	145655	12.77				
180-71580-7	HD-MW-142D-0/1-0	140262	12.77				
180-71580-8	HD-MW-143S-0/1-0	139661	12.77				
180-71580-9	HD-MW-143D-0/1-0	153933	12.77				
180-71580-10	HD-MW-20S-0/1-0	145410	12.77				
180-71580-2	HD-MW-127-0/1-0	138906	12.77				
180-71580-3	HD-MW-87-0/1-0	137911	12.77				
180-71580-4	HD-MW-77-0/1-0	161751	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.: 180-71580-1

SDG No.:

Sample No.: CCVIS 180-227152/2 Date Analyzed: 10/26/2017 21:43

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

Lab File ID (Standard): 51026D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		199288	4.38	535925	7.34	119054	10.43
UPPER LIMIT		398576	4.88	1071850	7.84	238108	10.93
LOWER LIMIT		99644	3.88	267963	6.84	59527	9.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227152/3		220390	4.38	524723	7.34	118591	10.43
MB 180-227152/5		204654	4.37	472652	7.34	111234	10.43
180-71580-5	HD-MW-129-0/1-0	152155	4.36	400770	7.34	100483	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.: 180-71580-1

SDG No.:

Sample No.: CCVIS 180-227152/2 Date Analyzed: 10/26/2017 21:43

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

Lab File ID (Standard): 51026D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		171336	12.77				
UPPER LIMIT		342672	13.27				
LOWER LIMIT		85668	12.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227152/3		166817	12.77				
MB 180-227152/5		160607	12.77				
180-71580-5	HD-MW-129-0/1-0	134448	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.: 180-71580-1

SDG No.:

Sample No.: CCVIS 180-227508/2 Date Analyzed: 10/30/2017 22:32

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

Lab File ID (Standard): 51030D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		199245	4.39	544831	7.34	115360	10.43
UPPER LIMIT		398490	4.89	1089662	7.84	230720	10.93
LOWER LIMIT		99623	3.89	272416	6.84	57680	9.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227508/3		209310	4.39	527621	7.34	117034	10.43
MB 180-227508/5		217733	4.38	492120	7.34	116744	10.43
180-71580-4 RA	HD-MW-77-0/1-0 RA	367753	4.36	582718	7.34	142836	10.43
180-71580-5 RA	HD-MW-129-0/1-0 RA	203830	4.36	520436	7.34	127188	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.: 180-71580-1

SDG No.:

Sample No.: CCVIS 180-227508/2 Date Analyzed: 10/30/2017 22:32

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

Lab File ID (Standard): 51030D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		174808	12.77				
UPPER LIMIT		349616	13.27				
LOWER LIMIT		87404	12.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227508/3		168609	12.77				
MB 180-227508/5		167621	12.77				
180-71580-4 RA	HD-MW-77-0/1-0 RA	233834	12.77				
180-71580-5 RA	HD-MW-129-0/1-0 RA	173690	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.: 180-71580-1

SDG No.:

Sample No.: CCVIS 180-227613/2 Date Analyzed: 11/01/2017 01:29

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

Lab File ID (Standard): 51031D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		229283	4.38	502403	7.34	116077	10.43
UPPER LIMIT		458566	4.88	1004806	7.84	232154	10.93
LOWER LIMIT		114642	3.88	251202	6.84	58039	9.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227613/3		232581	4.38	525062	7.34	114165	10.43
MB 180-227613/5		240510	4.36	527640	7.34	127019	10.43
180-71580-2 RA	HD-MW-127-0/1-0 RA	206427	4.36	515009	7.35	126053	10.43
180-71580-3 RA	HD-MW-87-0/1-0 RA	210324	4.37	491630	7.34	119153	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.: 180-71580-1

SDG No.:

Sample No.: CCVIS 180-227613/2 Date Analyzed: 11/01/2017 01:29

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

Lab File ID (Standard): 51031D02.D Heated Purge: (Y/N) N

Calibration ID: 35038

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		155950	12.77				
UPPER LIMIT		311900	13.27				
LOWER LIMIT		77975	12.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-227613/3		158466	12.77				
MB 180-227613/5		181016	12.77				
180-71580-2 RA	HD-MW-127-0/1-0 RA	171535	12.77				
180-71580-3 RA	HD-MW-87-0/1-0 RA	164194	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 I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-QC2-0/1-2 | Lab Sample ID: 180-71580-1

Matrix: Water | Lab File ID: 51025D17.D

Analysis Method: 8260C | Date Collected: 10/18/2017 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 04:56

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.: 227010 | 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 ^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	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.: 180-71580-1

SDG No.:

Client Sample ID: HD-QC2-0/1-2 | Lab Sample ID: 180-71580-1

Matrix: Water | Lab File ID: 51025D17.D

Analysis Method: 8260C | Date Collected: 10/18/2017 12:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 04:56

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.: 227010 | 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)	91		73-120
460-00-4	4-Bromofluorobenzene (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D17.D
Lims ID: 180-71580-B-1
Client ID: HD-QC2-0/1-2
Sample Type: Client
Inject. Date: 26-Oct-2017 04:56:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-017
Misc. Info.: 180-71580-B-1
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:22:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.351	4.384	-0.033	0	173672	1000.0	
* 2 Fluorobenzene (IS)	96	7.337	7.340	-0.003	99	431217	50.0	
* 3 Chlorobenzene-d5	119	10.426	10.429	-0.003	87	104395	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.770	-0.002	98	139517	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.619	6.610	0.009	91	110147	53.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.990	6.987	0.003	0	143277	56.6	
$ 7 Toluene-d8 (Surr)	98	8.979	8.982	-0.003	94	379010	45.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.609	0.003	87	128557	42.8	
12 Chloromethane	50		1.891				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.335				ND	
16 Chloroethane	64		2.426				ND	
22 1,1-Dichloroethene	96		3.411				ND	
24 Acetone	43		3.539				ND	
26 Carbon disulfide	76		3.703				ND	
31 Methylene Chloride	84		4.226				ND	
33 Acrylonitrile	53		4.609				ND	
34 trans-1,2-Dichloroethene	96		4.640				ND	
35 Methyl tert-butyl ether	73		4.664				ND	
37 1,1-Dichloroethane	63		5.266				ND	
45 cis-1,2-Dichloroethene	96		6.008				ND	
46 2-Butanone (MEK)	43		6.026				ND	
49 Chlorobromomethane	128		6.288				ND	
52 Chloroform	83	6.449	6.434	0.015	1	1982	0.4745	
53 1,1,1-Trichloroethane	97		6.592				ND	
56 Carbon tetrachloride	117		6.762				ND	
58 Benzene	78		6.993				ND	
59 1,2-Dichloroethane	62		7.072				ND	
64 Trichloroethene	130		7.723				ND	
67 1,2-Dichloropropane	63		7.997				ND	
70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.276				ND	
74 cis-1,3-Dichloropropene	75		8.720				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872				ND	
76 Toluene	91		9.049				ND	
77 trans-1,3-Dichloropropene	75		9.298				ND	
79 1,1,2-Trichloroethane	97		9.486				ND	
80 Tetrachloroethene	164		9.559				ND	
82 2-Hexanone	43		9.705				ND	
84 Chlorodibromomethane	129		9.857				ND	
85 Ethylene Dibromide	107		9.967				ND	
87 Chlorobenzene	112		10.459				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106		10.557				ND	
91 m-Xylene & p-Xylene	106		10.684				ND	
92 o-Xylene	106		11.068				ND	
93 Styrene	104		11.092				ND	
94 Bromoform	173		11.274				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				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

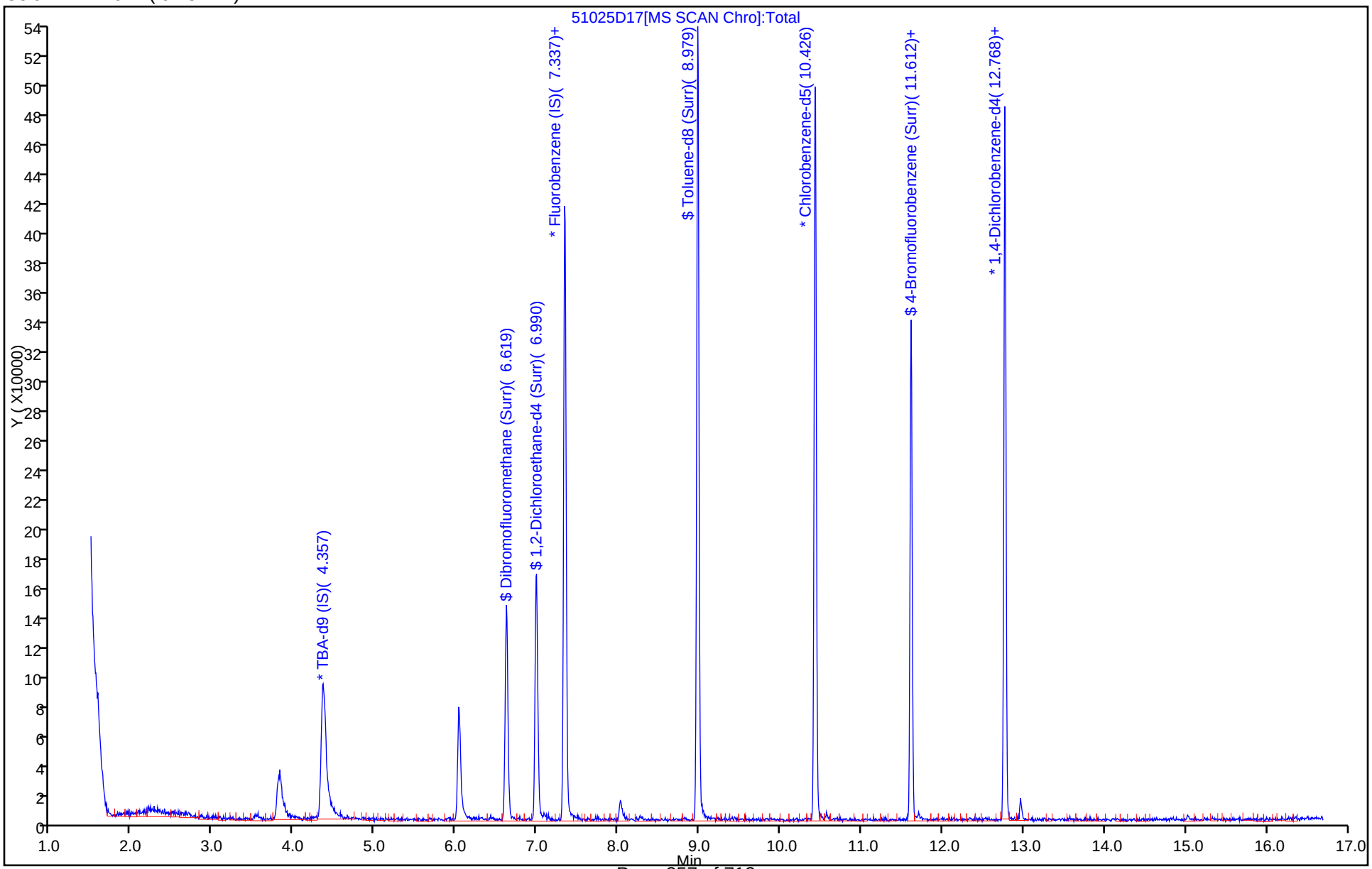
Report Date: 26-Oct-2017 20:41:36 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D17.D

Injection Date:	26-Oct-2017 04:56:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-B-1	Lab Sample ID:	180-71580-1	Worklist Smp#:	17
Client ID:	HD-QC2-0/1-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D17.D
Lims ID: 180-71580-B-1
Client ID: HD-QC2-0/1-2
Sample Type: Client
Inject. Date: 26-Oct-2017 04:56:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-017
Misc. Info.: 180-71580-B-1
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:22:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	53.1	106.18
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	56.6	113.24
$ 7 Toluene-d8 (Surr)	50.0	45.6	91.23
$ 8 4-Bromofluorobenzene (Surr)	50.0	42.8	85.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-127-0/1-0 RA | Lab Sample ID: 180-71580-2 RA

Matrix: Water | Lab File ID: 51031D25.D

Analysis Method: 8260C | Date Collected: 10/18/2017 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 11:24

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.: 227613 | 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	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	2.8		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	1.3		1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	4.4		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	210	E	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U ^c	5.0	2.6
67-66-3	Chloroform	1.0	U	1.0	0.60
71-55-6	1,1,1-Trichloroethane	5.5		1.0	0.60
56-23-5	Carbon tetrachloride	1.6		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	49		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	14		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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-127-0/1-0 RA | Lab Sample ID: 180-71580-2 RA

Matrix: Water | Lab File ID: 51031D25.D

Analysis Method: 8260C | Date Collected: 10/18/2017 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 11:24

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.: 227613 | 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 ^c*	*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)	112		65-121
2037-26-5	Toluene-d8 (Surr)	93		73-120
460-00-4	4-Bromofluorobenzene (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D25.D
Lims ID: 180-71580-B-2
Client ID: HD-MW-127-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2017 11:24:30 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019122-025
Misc. Info.: 180-71580-B-2
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 11:46:07 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: XAWRK031

First Level Reviewer: gordonk Date: 01-Nov-2017 11:46:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.359	4.384	-0.025	0	206427	1000.0	
* 2 Fluorobenzene (IS)	96	7.345	7.340	0.005	98	515009	50.0	
* 3 Chlorobenzene-d5	119	10.428	10.429	-0.001	87	126053	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.770	12.770	0.000	97	171535	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.615	6.616	-0.001	93	131870	53.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.992	6.987	0.005	0	168645	55.8	
$ 7 Toluene-d8 (Surr)	98	8.981	8.982	-0.001	94	466634	46.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.614	11.609	0.005	84	156436	43.2	
12 Chloromethane	50		1.891				ND	
13 Vinyl chloride	62		2.019				ND	
15 Bromomethane	94		2.341				ND	
16 Chloroethane	64		2.438				ND	
22 1,1-Dichloroethene	96	3.441	3.417	0.024	95	35753	14.2	
24 Acetone	43	3.538	3.533	0.005	71	5433	4.03	
26 Carbon disulfide	76		3.703				ND	
31 Methylene Chloride	84		4.232				ND	
33 Acrylonitrile	53		4.615				ND	
34 trans-1,2-Dichloroethene	96	4.657	4.646	0.011	99	19104	6.65	
35 Methyl tert-butyl ether	73	4.669	4.658	0.011	76	13612	1.77	
37 1,1-Dichloroethane	63	5.277	5.272	0.005	97	109306	21.9	
45 cis-1,2-Dichloroethene	96	6.013	6.008	0.005	78	3475174	1057.6	E
46 2-Butanone (MEK)	43		6.026				ND	
49 Chlorobromomethane	128		6.294				ND	
52 Chloroform	83	6.445	6.440	0.005	95	12657	2.54	
53 1,1,1-Trichloroethane	97	6.597	6.598	-0.001	97	104513	27.7	
56 Carbon tetrachloride	117	6.761	6.768	-0.007	91	25616	8.15	
58 Benzene	78		6.993				ND	
59 1,2-Dichloroethane	62	7.077	7.072	0.005	14	4136	1.13	
64 Trichloroethene	130	7.728	7.723	0.005	97	773158	245.3	
67 1,2-Dichloropropane	63		7.996				ND	
70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.276				ND	
74 cis-1,3-Dichloropropene	75		8.720				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872				ND	
76 Toluene	91	9.048	9.049	-0.001	39	3028	0.2409	
77 trans-1,3-Dichloropropene	75		9.292				ND	
79 1,1,2-Trichloroethane	97	9.486	9.486	0.000	36	3140	1.20	
80 Tetrachloroethene	164	9.559	9.559	0.000	94	169580	70.7	
82 2-Hexanone	43		9.705				ND	
84 Chlorodibromomethane	129		9.857				ND	
85 Ethylene Dibromide	107		9.973				ND	
87 Chlorobenzene	112		10.459				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106		10.557				ND	
91 m-Xylene & p-Xylene	106		10.690				ND	
92 o-Xylene	106		11.074				ND	
93 Styrene	104		11.092				ND	
94 Bromoform	173		11.274				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

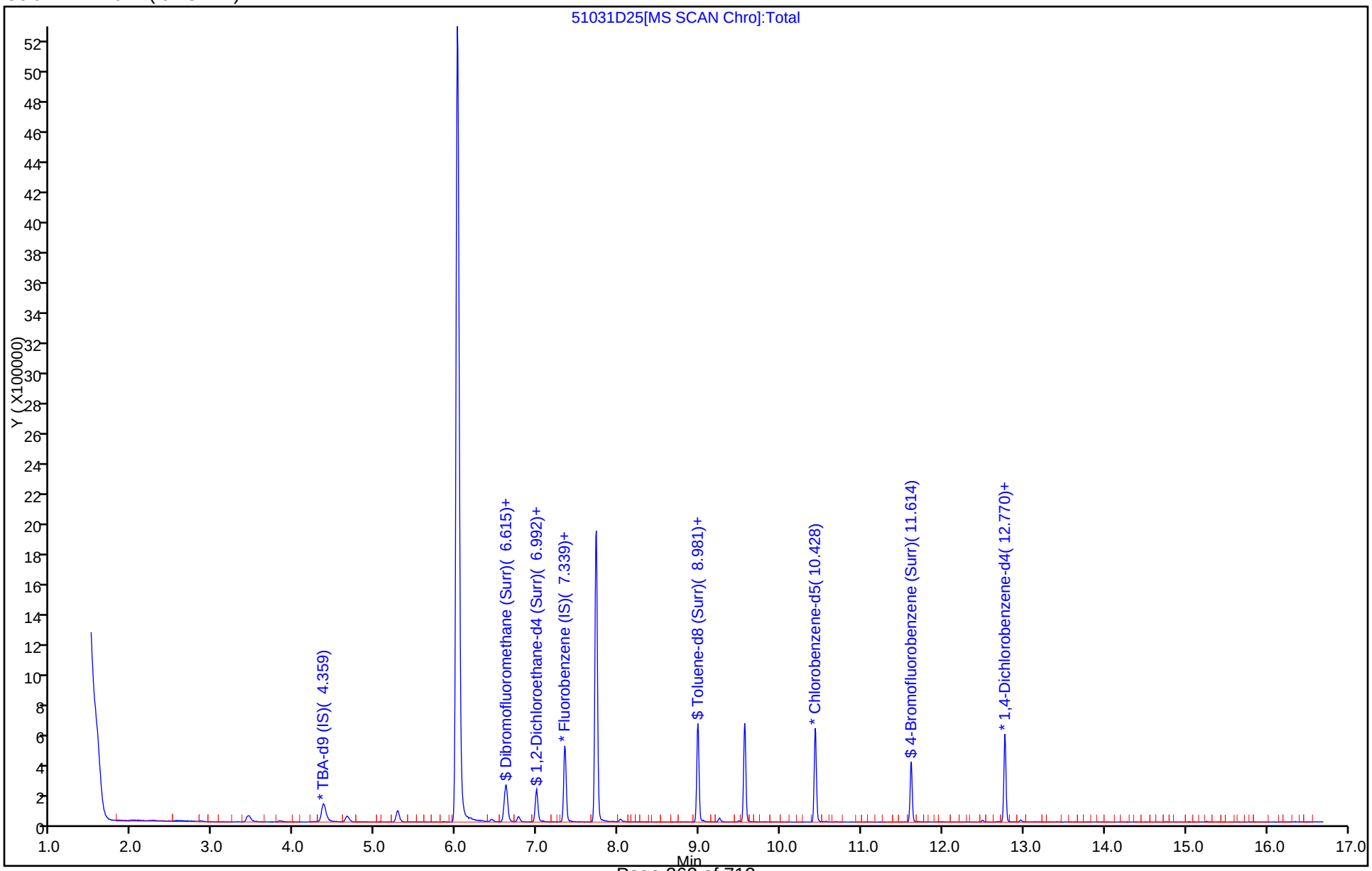
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 01-Nov-2017 11:46:07 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D25.D				
Injection Date:	01-Nov-2017 11:24:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-B-2	Lab Sample ID:	180-71580-2	Worklist Smp#:	25
Client ID:	HD-MW-127-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D25.D
Lims ID: 180-71580-B-2
Client ID: HD-MW-127-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2017 11:24:30 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019122-025
Misc. Info.: 180-71580-B-2
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 11:46:07 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: XAWRK031

First Level Reviewer: gordonk Date: 01-Nov-2017 11:46:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	53.2	106.43
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	55.8	111.60
$ 7 Toluene-d8 (Surr)	50.0	46.5	93.03
$ 8 4-Bromofluorobenzene (Surr)	50.0	43.2	86.35

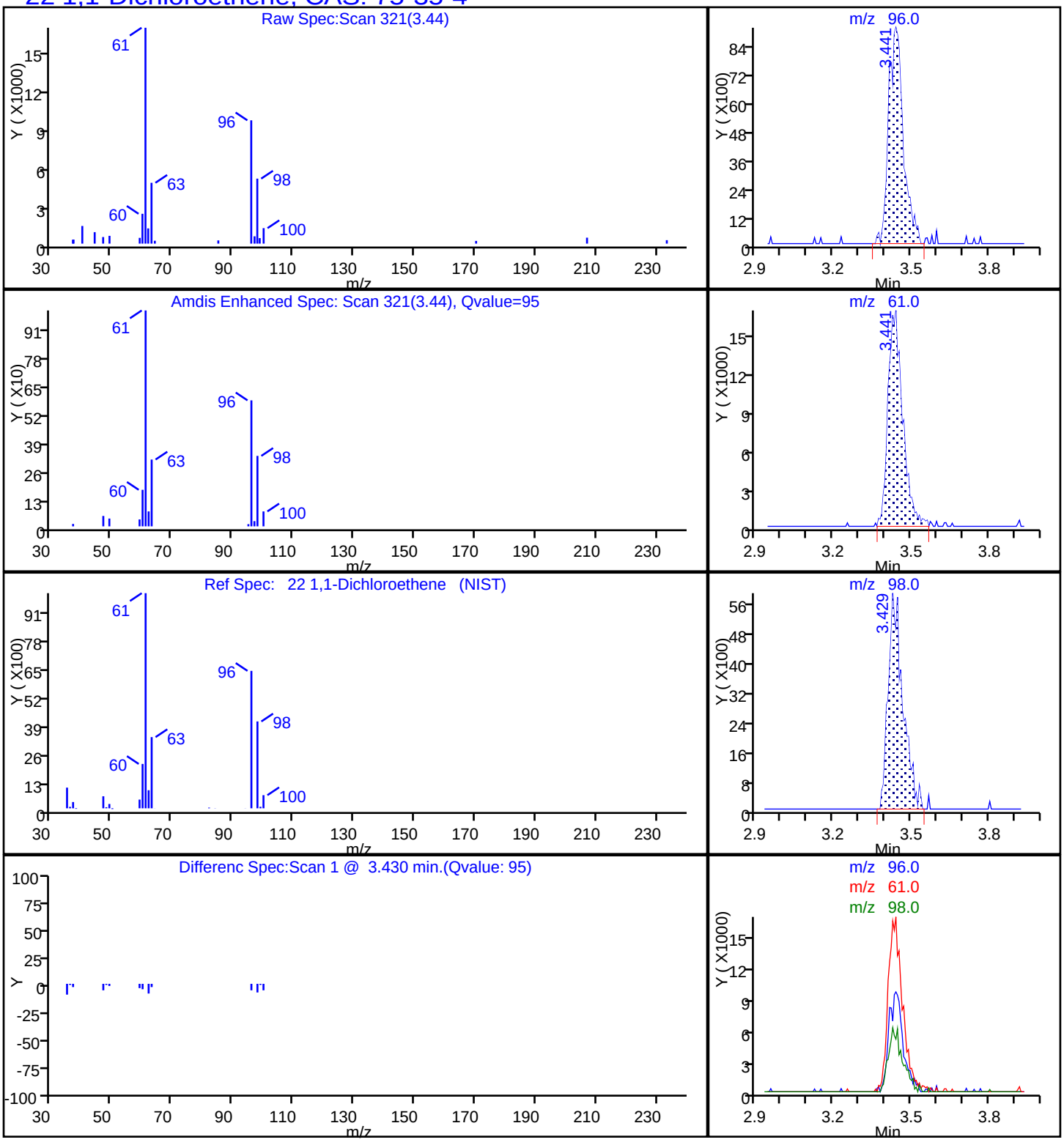
Report Date: 01-Nov-2017 11:46:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D25.D

Injection Date:	01-Nov-2017 11:24:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-2	Lab Sample ID:	180-71580-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
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		

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

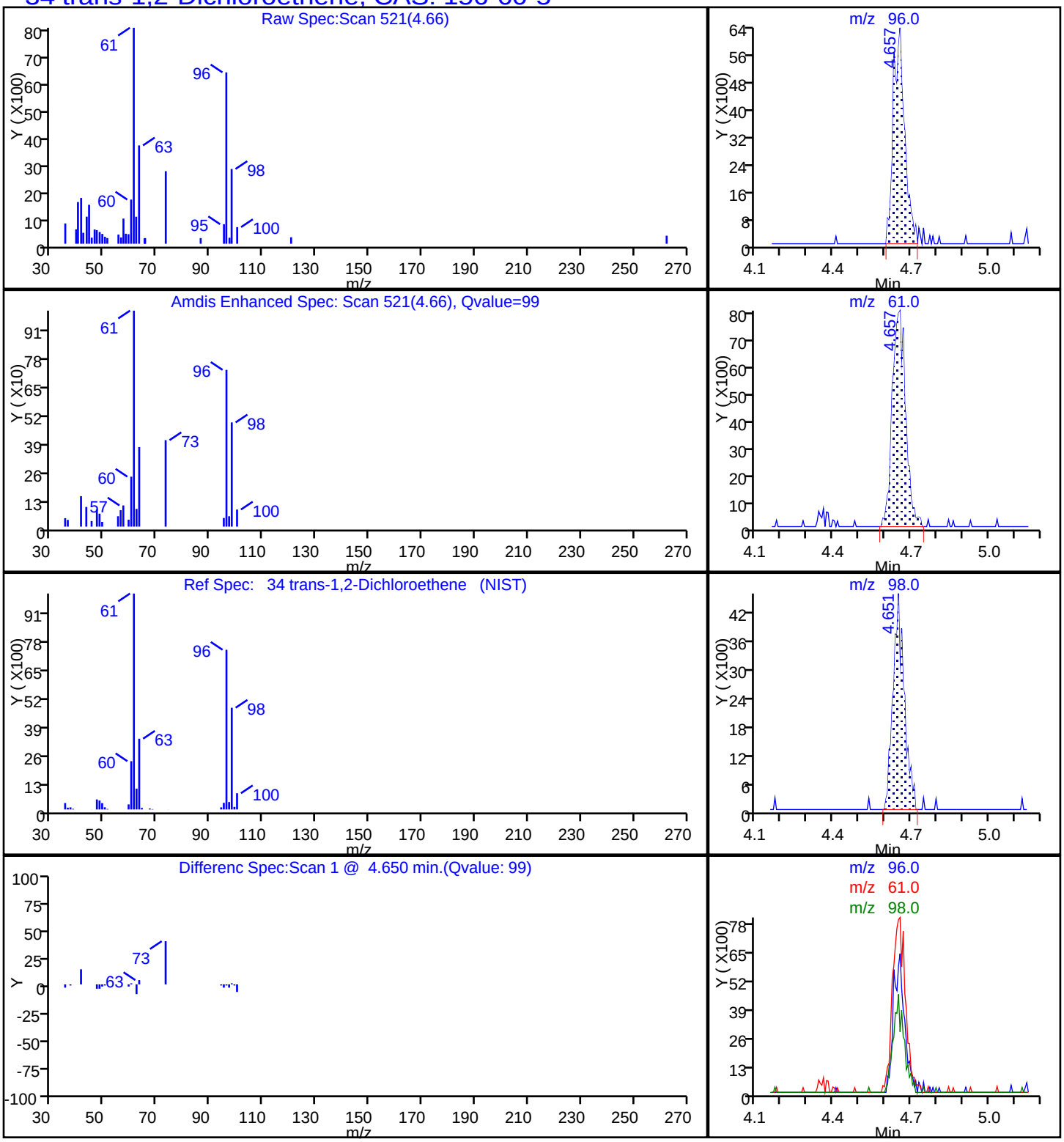


Report Date: 01-Nov-2017 11:46:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D25.D				
Injection Date:	01-Nov-2017 11:24:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-2	Lab Sample ID:	180-71580-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

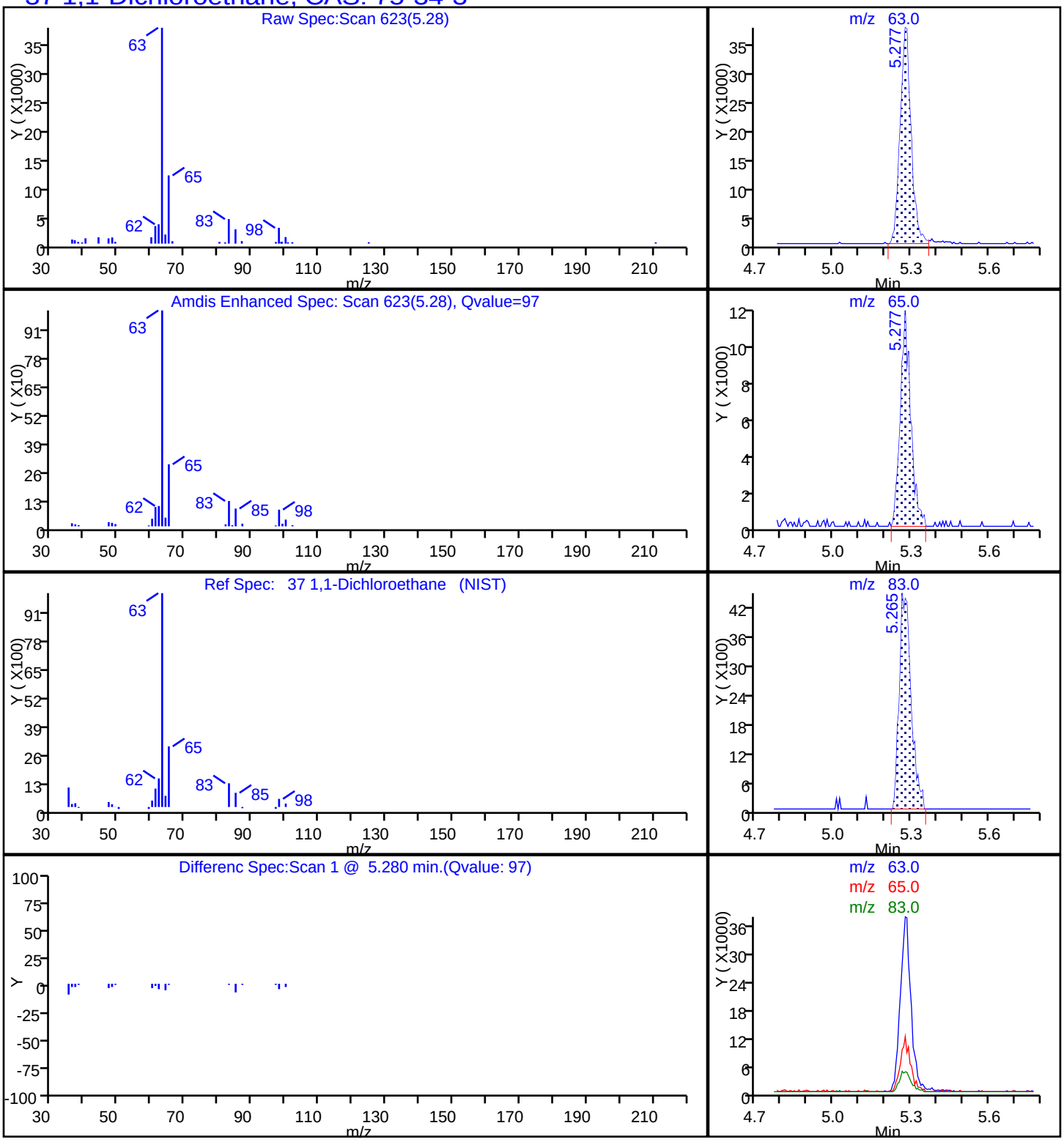


Report Date: 01-Nov-2017 11:46:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D25.D				
Injection Date:	01-Nov-2017 11:24:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-2	Lab Sample ID:	180-71580-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
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		

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

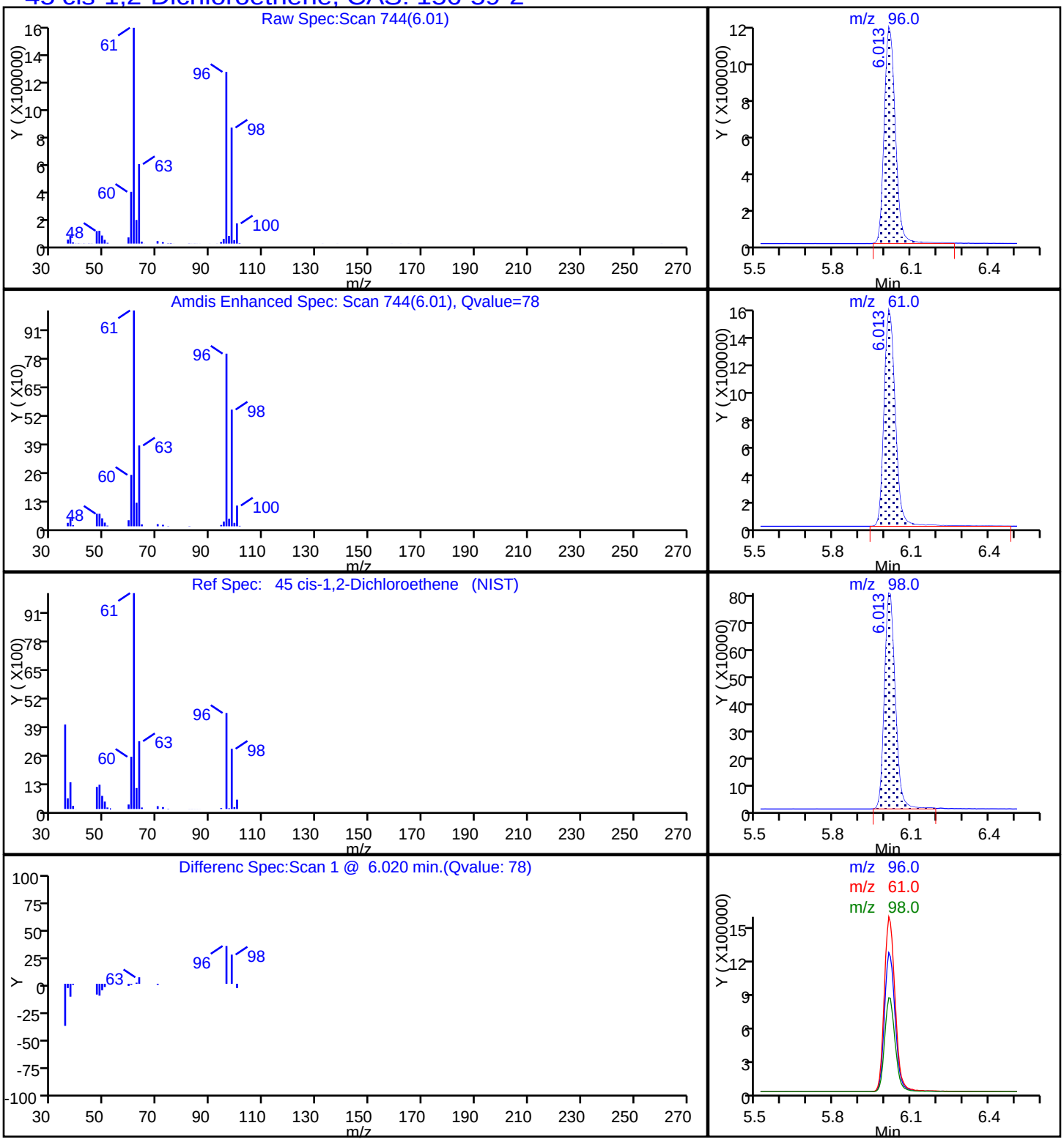


Report Date: 01-Nov-2017 11:46:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D25.D				
Injection Date:	01-Nov-2017 11:24:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-2	Lab Sample ID:	180-71580-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

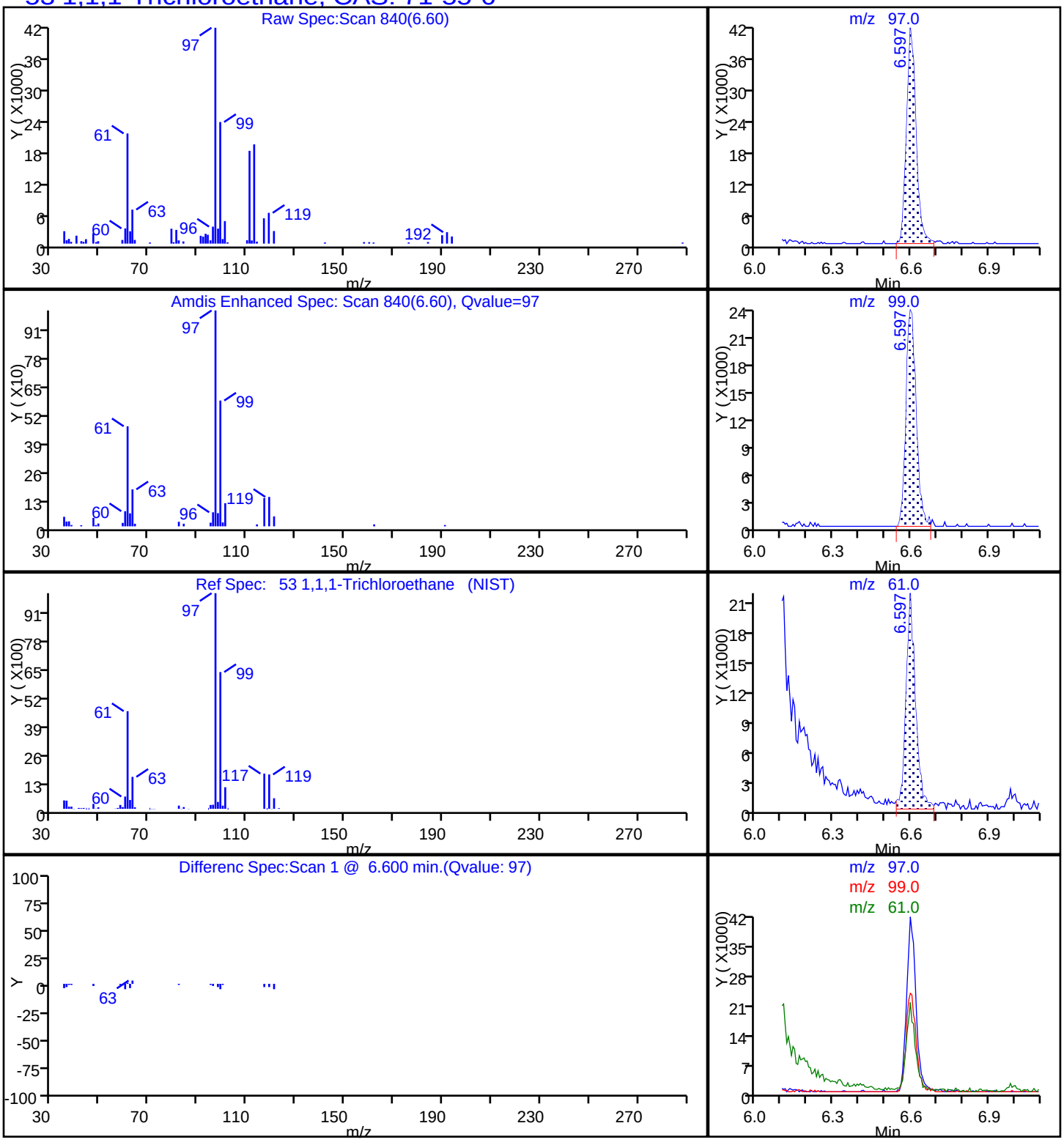


Report Date: 01-Nov-2017 11:46:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D25.D				
Injection Date:	01-Nov-2017 11:24:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-2	Lab Sample ID:	180-71580-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
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		

53 1,1,1-Trichloroethane, CAS: 71-55-6

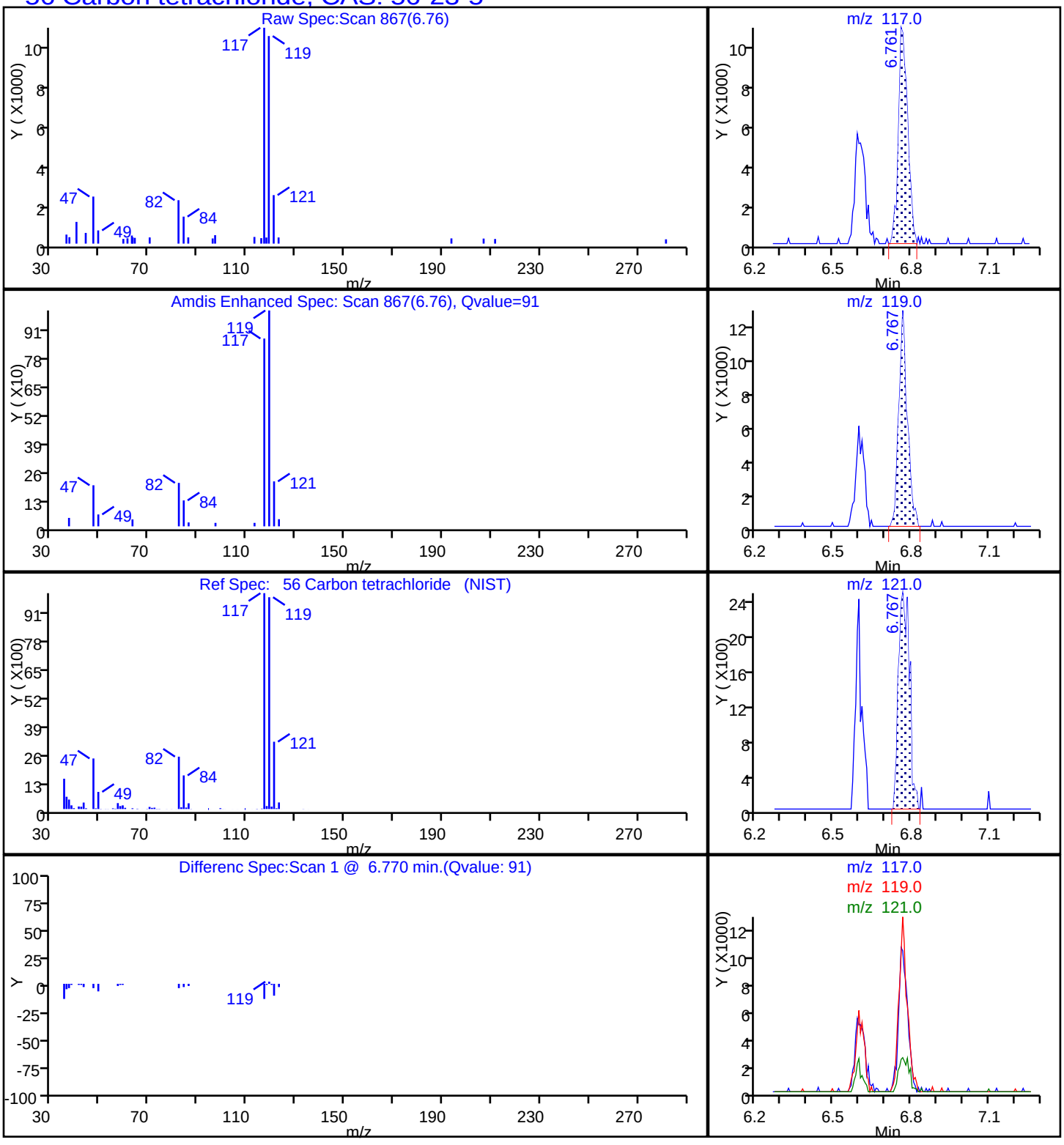


Report Date: 01-Nov-2017 11:46:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D25.D				
Injection Date:	01-Nov-2017 11:24:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-2	Lab Sample ID:	180-71580-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
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		

56 Carbon tetrachloride, CAS: 56-23-5

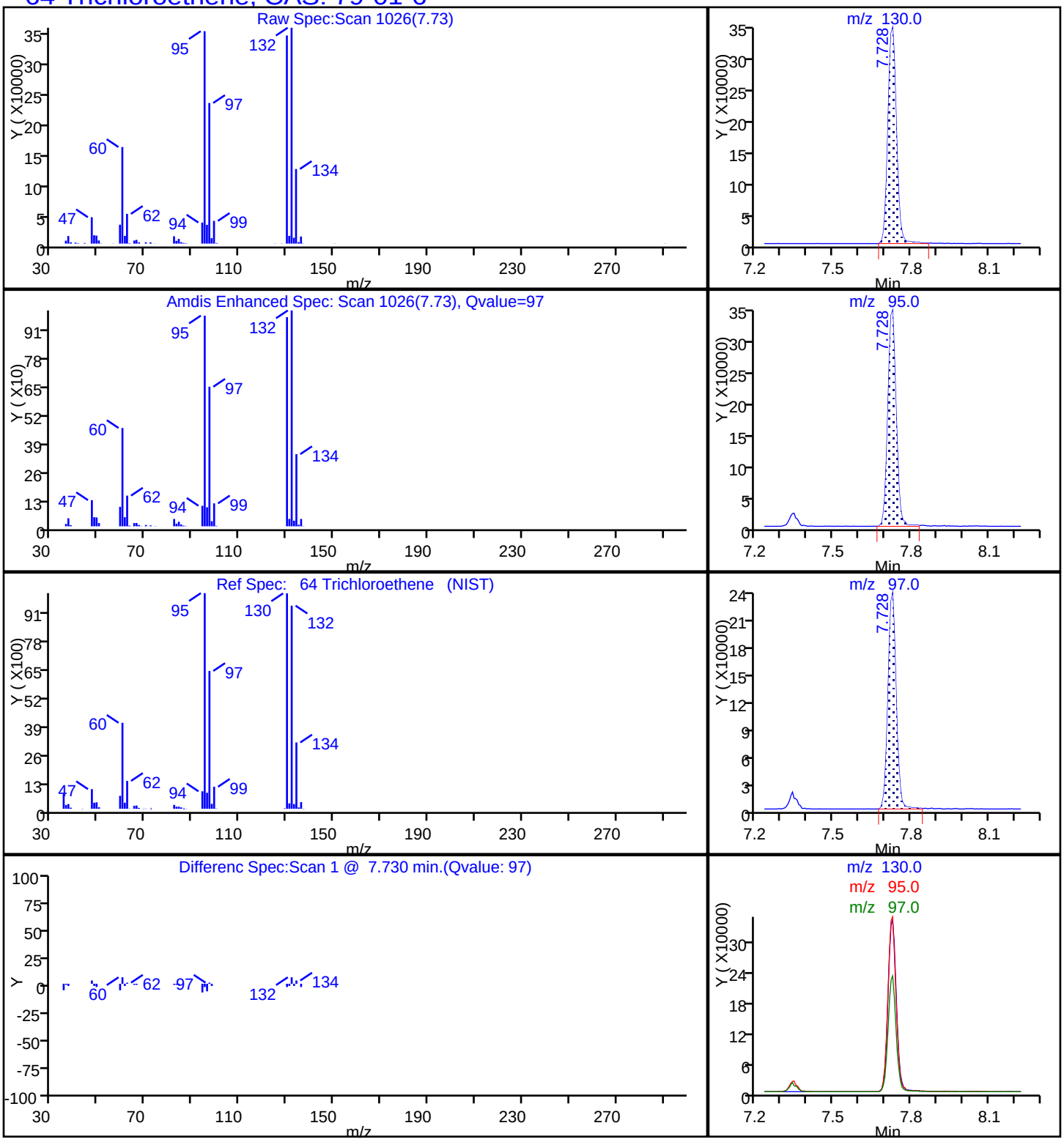


Report Date: 01-Nov-2017 11:46:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D25.D				
Injection Date:	01-Nov-2017 11:24:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-2	Lab Sample ID:	180-71580-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



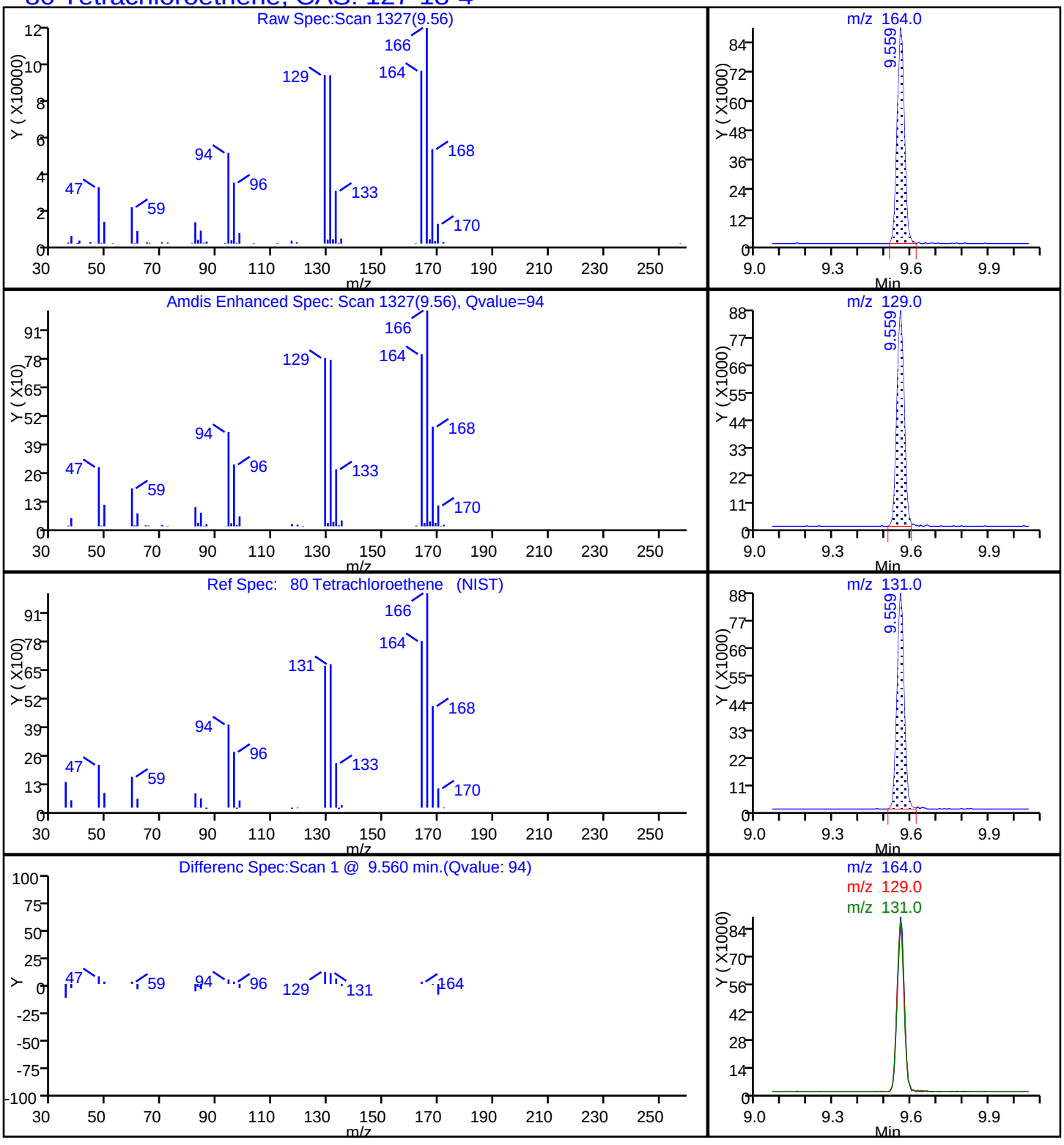
Report Date: 01-Nov-2017 11:46:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D25.D

Injection Date:	01-Nov-2017 11:24:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-2	Lab Sample ID:	180-71580-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-127-0/1-0 | Lab Sample ID: 180-71580-2

Matrix: Water | Lab File ID: 51025D24.D

Analysis Method: 8260C | Date Collected: 10/18/2017 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 07:43

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.: 227010 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10	U *	10	9.0
75-01-4	Vinyl chloride	10	U	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	10	5.5
67-64-1	Acetone	50	U	50	34
75-15-0	Carbon disulfide	10	U	10	8.8
75-09-2	Methylene Chloride	10	U	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	200		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	10	5.7
79-01-6	Trichloroethene	35		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	8.5	J	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
1330-20-7	Xylenes, Total	20	U	20	8.9
100-42-5	Styrene	10	U	10	4.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-127-0/1-0 | Lab Sample ID: 180-71580-2

Matrix: Water | Lab File ID: 51025D24.D

Analysis Method: 8260C | Date Collected: 10/18/2017 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 07:43

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.: 227010 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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)	115		65-121
2037-26-5	Toluene-d8 (Surr)	90		73-120
460-00-4	4-Bromofluorobenzene (Surr)	84		80-120
1868-53-7	Dibromofluoromethane (Surr)	111		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D24.D
Lims ID: 180-71580-A-2
Client ID: HD-MW-127-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 07:43:30 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 180-0019038-024
Misc. Info.: 180-71580-A-2
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:34:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.369	4.384	-0.015	0	166878	1000.0	
* 2 Fluorobenzene (IS)	96	7.337	7.340	-0.003	99	414837	50.0	
* 3 Chlorobenzene-d5	119	10.433	10.429	0.003	87	101448	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.774	12.770	0.004	96	138906	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.626	6.610	0.016	93	111027	55.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.990	6.987	0.003	0	140113	57.6	
$ 7 Toluene-d8 (Surr)	98	8.979	8.982	-0.003	94	363831	45.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.609	0.003	86	122980	42.2	
12 Chloromethane	50		1.891				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.335				ND	
16 Chloroethane	64		2.426				ND	
22 1,1-Dichloroethene	96	3.433	3.411	0.022	22	1485	0.7312	
24 Acetone	43		3.539				ND	
26 Carbon disulfide	76		3.703				ND	
31 Methylene Chloride	84		4.226				ND	
33 Acrylonitrile	53		4.609				ND	
34 trans-1,2-Dichloroethene	96		4.640				ND	
35 Methyl tert-butyl ether	73		4.664				ND	
37 1,1-Dichloroethane	63	5.276	5.266	0.010	92	8370	2.08	
45 cis-1,2-Dichloroethene	96	6.011	6.008	0.003	80	269662	101.9	
46 2-Butanone (MEK)	43		6.026				ND	
49 Chlorobromomethane	128		6.288				ND	
52 Chloroform	83		6.434				ND	M
53 1,1,1-Trichloroethane	97	6.595	6.592	0.003	35	5267	1.73	
56 Carbon tetrachloride	117		6.762				ND	
58 Benzene	78		6.993				ND	
59 1,2-Dichloroethane	62		7.072				ND	
64 Trichloroethene	130	7.720	7.723	-0.003	96	44343	17.5	
67 1,2-Dichloropropane	63		7.997				ND	
70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.276				ND	
74 cis-1,3-Dichloropropene	75		8.720				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872				ND	
76 Toluene	91		9.049				ND	
77 trans-1,3-Dichloropropene	75		9.298				ND	
79 1,1,2-Trichloroethane	97		9.486				ND	
80 Tetrachloroethene	164	9.563	9.559	0.004	94	8158	4.23	
82 2-Hexanone	43		9.705				ND	
84 Chlorodibromomethane	129		9.857				ND	
85 Ethylene Dibromide	107		9.967				ND	
87 Chlorobenzene	112		10.459				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106		10.557				ND	
91 m-Xylene & p-Xylene	106		10.684				ND	
92 o-Xylene	106		11.068				ND	
93 Styrene	104		11.092				ND	
94 Bromoform	173		11.274				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				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

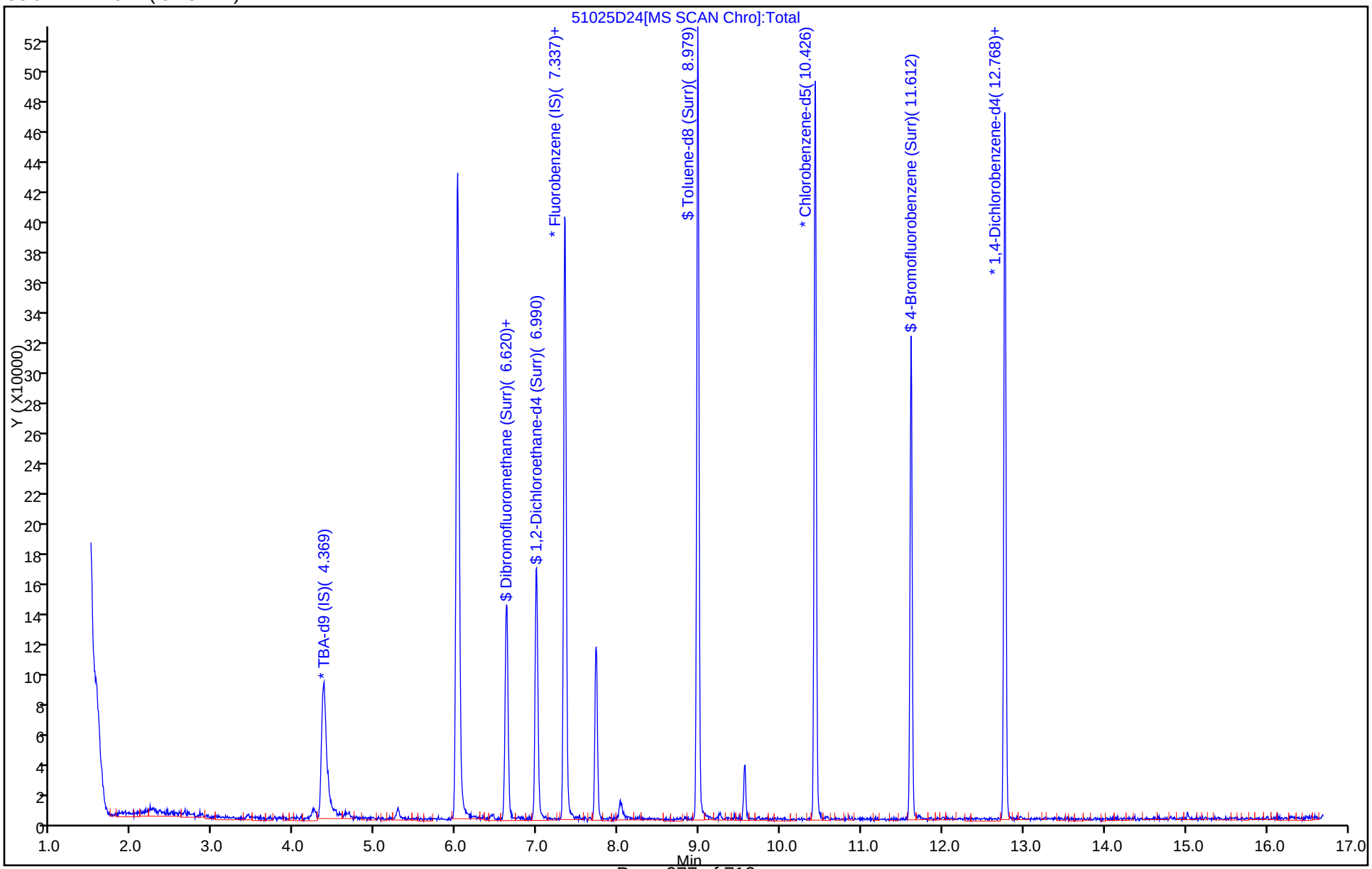
Report Date: 26-Oct-2017 20:41:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D24.D

Injection Date:	26-Oct-2017 07:43:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-A-2	Lab Sample ID:	180-71580-2	Worklist Smp#:	24
Client ID:	HD-MW-127-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	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\20171025-19038.b\51025D24.D
Lims ID: 180-71580-A-2
Client ID: HD-MW-127-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 07:43:30 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 180-0019038-024
Misc. Info.: 180-71580-A-2
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:34:46

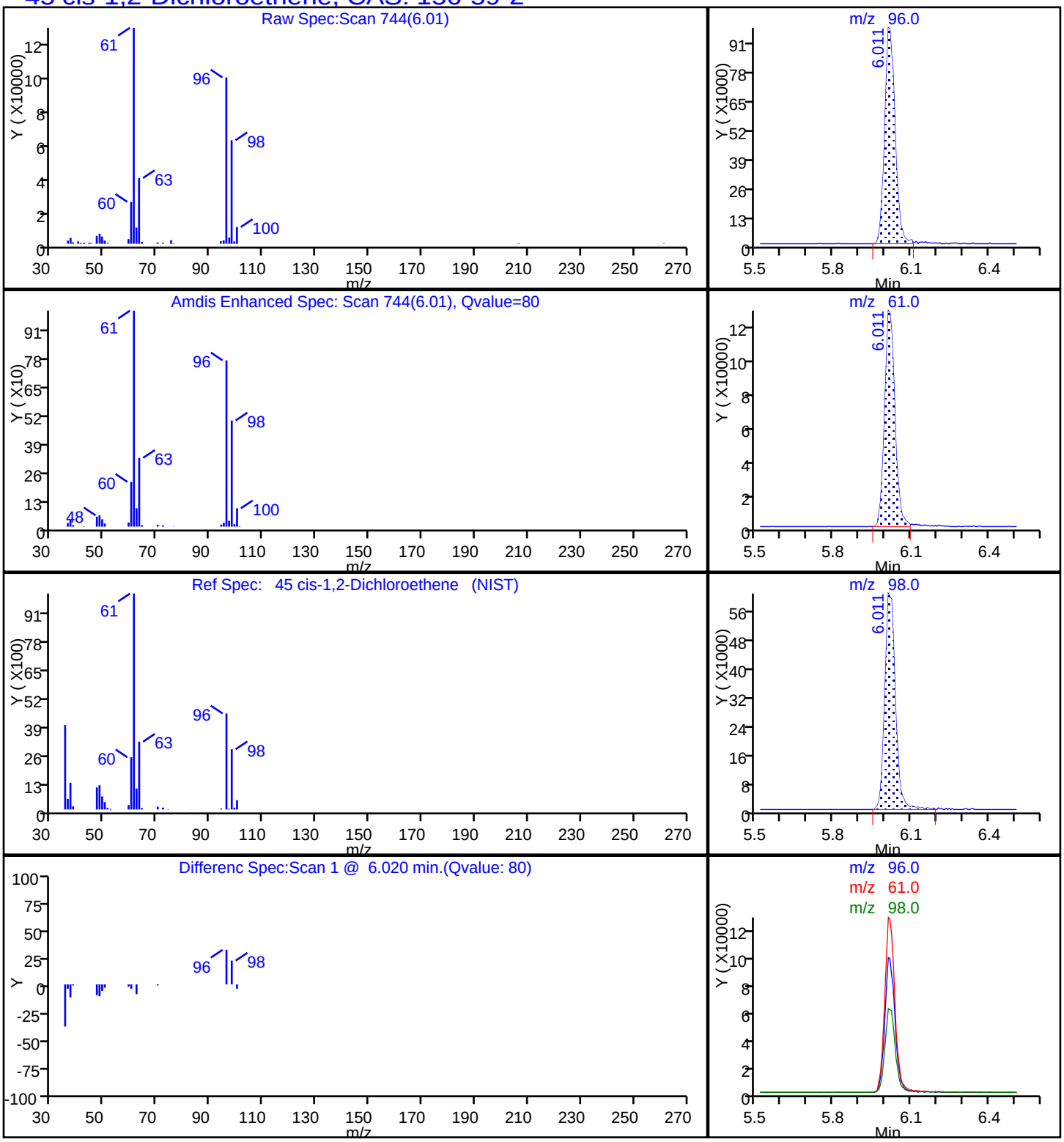
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	55.6	111.25
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	57.6	115.11
$ 7 Toluene-d8 (Surr)	50.0	45.1	90.12
$ 8 4-Bromofluorobenzene (Surr)	50.0	42.2	84.35

Report Date: 26-Oct-2017 20:41:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D24.D				
Injection Date:	26-Oct-2017 07:43:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-2	Lab Sample ID:	180-71580-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
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

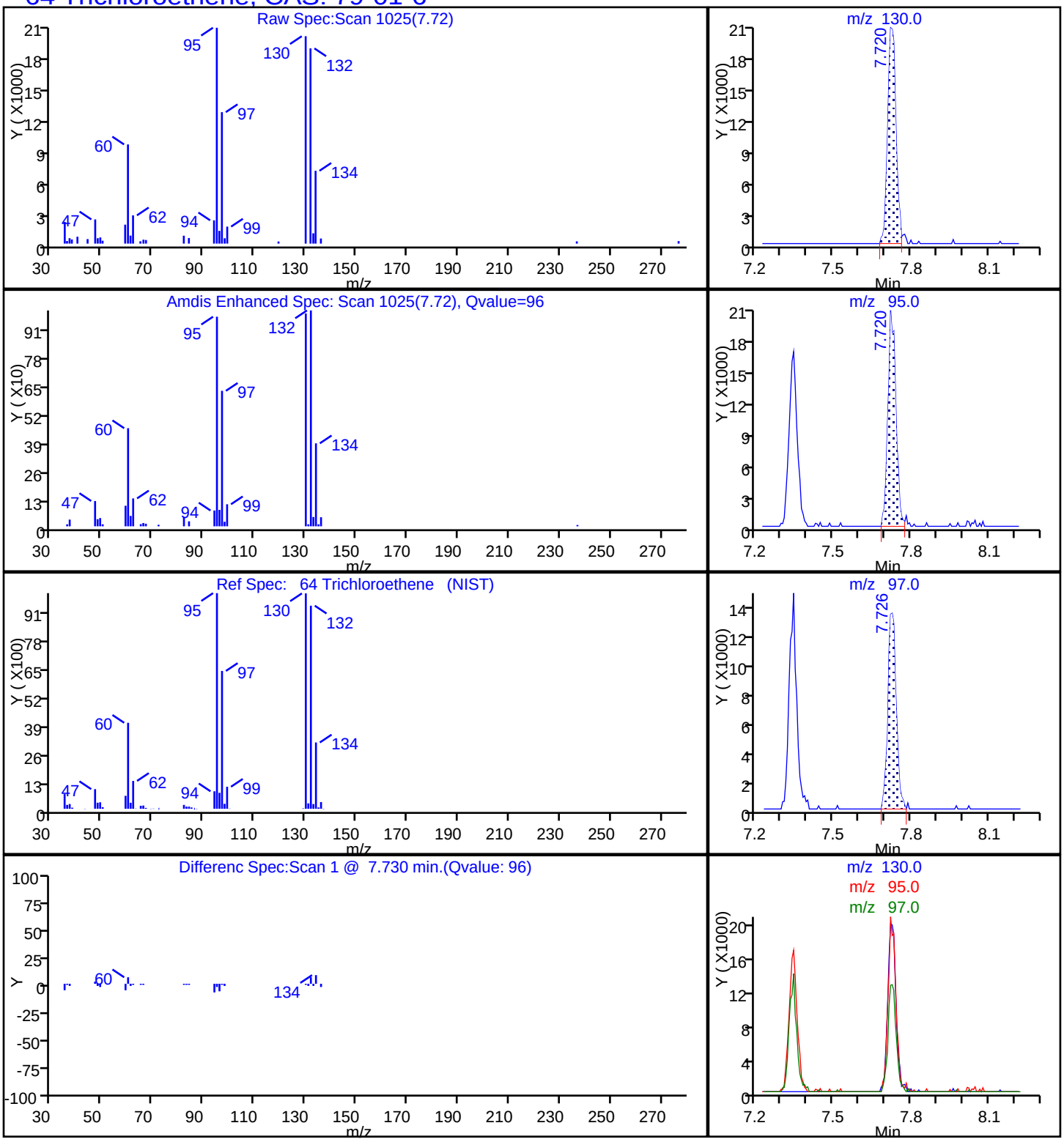


Report Date: 26-Oct-2017 20:41:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D24.D				
Injection Date:	26-Oct-2017 07:43:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-2	Lab Sample ID:	180-71580-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6

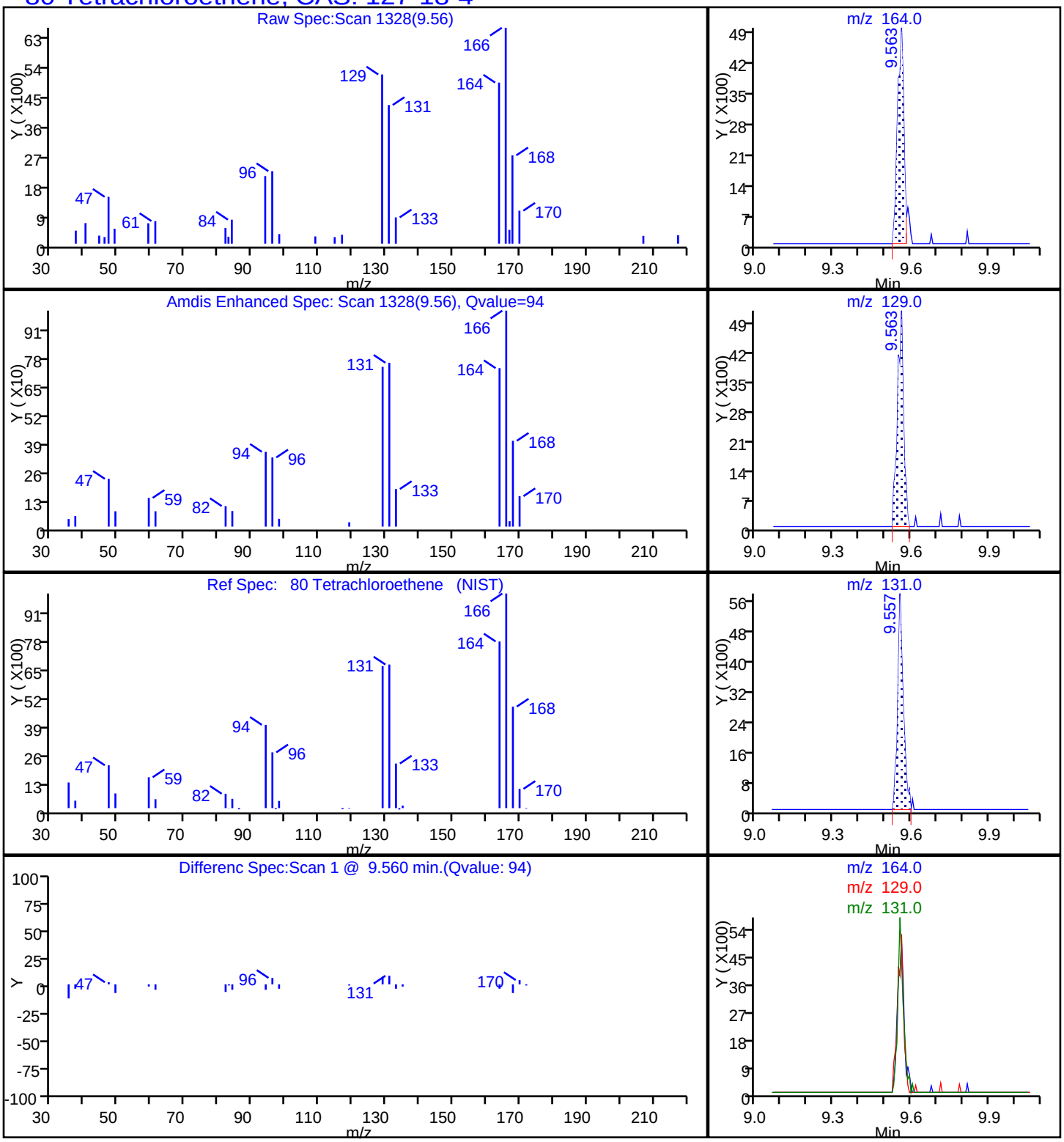


Report Date: 26-Oct-2017 20:41:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D24.D				
Injection Date:	26-Oct-2017 07:43:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-2	Lab Sample ID:	180-71580-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-87-0/1-0 RA | Lab Sample ID: 180-71580-3 RA

Matrix: Water | Lab File ID: 51031D26.D

Analysis Method: 8260C | Date Collected: 10/18/2017 13:30

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 11:49

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.: 227613 | 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	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	3.4		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	1.7		1.0	0.67
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.59
75-34-3	1,1-Dichloroethane	6.3		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	270	E	1.0	0.71
74-97-5	Bromochloromethane	1.0	U	1.0	0.63
78-93-3	2-Butanone (MEK)	5.0	U ^c	5.0	2.6
67-66-3	Chloroform	0.63	J	1.0	0.60
71-55-6	1,1,1-Trichloroethane	7.0		1.0	0.60
56-23-5	Carbon tetrachloride	2.2		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	86	E	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	20		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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-87-0/1-0 RA | Lab Sample ID: 180-71580-3 RA

Matrix: Water | Lab File ID: 51031D26.D

Analysis Method: 8260C | Date Collected: 10/18/2017 13:30

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 11:49

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.: 227613 | 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 ^c*	*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)	93		73-120
460-00-4	4-Bromofluorobenzene (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D26.D
Lims ID: 180-71580-A-3
Client ID: HD-MW-87-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2017 11:49:30 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019122-026
Misc. Info.: 180-71580-A-3
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 12:11:09 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: XAWRK031

First Level Reviewer: gordonk Date: 01-Nov-2017 12:11:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.366	4.384	-0.018	0	210324	1000.0	
* 2 Fluorobenzene (IS)	96	7.340	7.340	0.000	98	491630	50.0	
* 3 Chlorobenzene-d5	119	10.429	10.429	0.000	87	119153	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.770	12.770	0.000	97	164194	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.622	6.616	0.006	94	126694	53.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.993	6.987	0.006	0	162695	56.4	
$ 7 Toluene-d8 (Surr)	98	8.982	8.982	0.000	94	439705	46.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.615	11.609	0.006	85	146721	42.8	
12 Chloromethane	50		1.891				ND	
13 Vinyl chloride	62		2.019				ND	
15 Bromomethane	94		2.341				ND	
16 Chloroethane	64		2.438				ND	
22 1,1-Dichloroethene	96	3.436	3.417	0.019	93	40555	16.8	
24 Acetone	43		3.533				ND	
26 Carbon disulfide	76		3.703				ND	
31 Methylene Chloride	84		4.232				ND	
33 Acrylonitrile	53		4.615				ND	
34 trans-1,2-Dichloroethene	96	4.658	4.646	0.012	97	23025	8.40	
35 Methyl tert-butyl ether	73	4.676	4.658	0.018	94	18069	2.46	
37 1,1-Dichloroethane	63	5.284	5.272	0.012	96	149607	31.4	
45 cis-1,2-Dichloroethene	96	6.014	6.008	0.006	77	4238713	1351.3	E
46 2-Butanone (MEK)	43		6.026				ND	
49 Chlorobromomethane	128		6.294				ND	
52 Chloroform	83	6.446	6.440	0.006	93	15062	3.16	
53 1,1,1-Trichloroethane	97	6.604	6.598	0.006	98	125760	34.9	
56 Carbon tetrachloride	117	6.768	6.768	0.000	94	33702	11.2	
58 Benzene	78	6.999	6.993	0.006	43	9197	0.7694	
59 1,2-Dichloroethane	62	7.072	7.072	0.000	93	5034	1.44	
64 Trichloroethene	130	7.729	7.723	0.006	97	1294042	430.2	E
67 1,2-Dichloropropane	63		7.996				ND	
70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.276				ND	
74 cis-1,3-Dichloropropene	75		8.720				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872				ND	
76 Toluene	91		9.049				ND	
77 trans-1,3-Dichloropropene	75		9.292				ND	
79 1,1,2-Trichloroethane	97	9.499	9.486	0.013	83	3428	1.38	
80 Tetrachloroethene	164	9.559	9.559	0.000	95	221532	97.8	
82 2-Hexanone	43		9.705				ND	
84 Chlorodibromomethane	129		9.857				ND	
85 Ethylene Dibromide	107		9.973				ND	
87 Chlorobenzene	112		10.459				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106		10.557				ND	
91 m-Xylene & p-Xylene	106		10.690				ND	
92 o-Xylene	106		11.074				ND	
93 Styrene	104		11.092				ND	
94 Bromoform	173		11.274				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

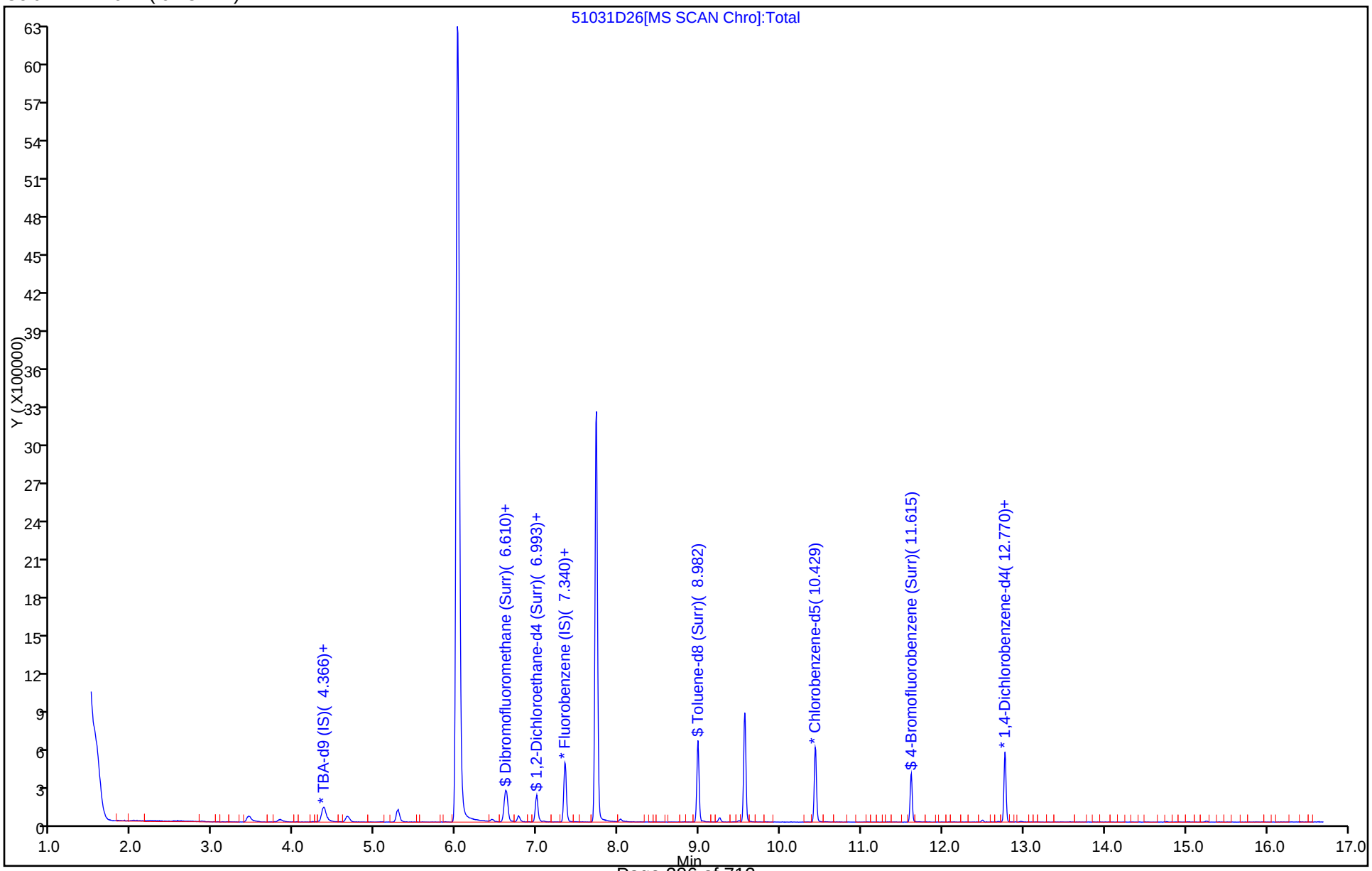
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 01-Nov-2017 12:11:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D26.D				
Injection Date:	01-Nov-2017 11:49:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-A-3	Lab Sample ID:	180-71580-3	Worklist Smp#:	26
Client ID:	HD-MW-87-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D26.D
Lims ID: 180-71580-A-3
Client ID: HD-MW-87-0/1-0
Sample Type: Client
Inject. Date: 01-Nov-2017 11:49:30 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019122-026
Misc. Info.: 180-71580-A-3
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 12:11:09 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: XAWRK031

First Level Reviewer: gordonk Date: 01-Nov-2017 12:11:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	53.6	107.12
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	56.4	112.78
$ 7 Toluene-d8 (Surr)	50.0	46.4	92.73
$ 8 4-Bromofluorobenzene (Surr)	50.0	42.8	85.68

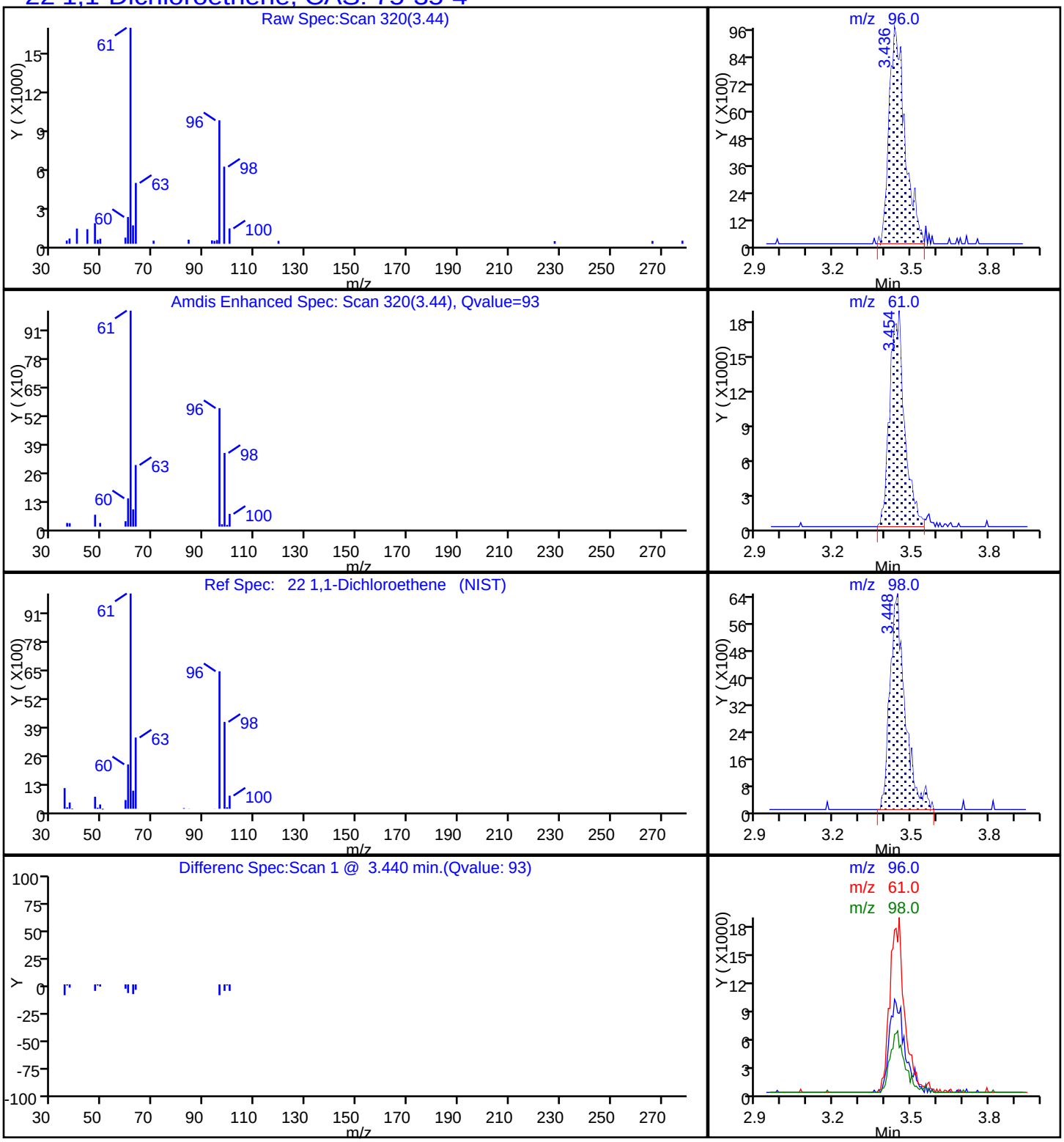
Report Date: 01-Nov-2017 12:11:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D26.D

Injection Date:	01-Nov-2017 11:49:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-3	Lab Sample ID:	180-71580-3		
Client ID:	HD-MW-87-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
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		

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

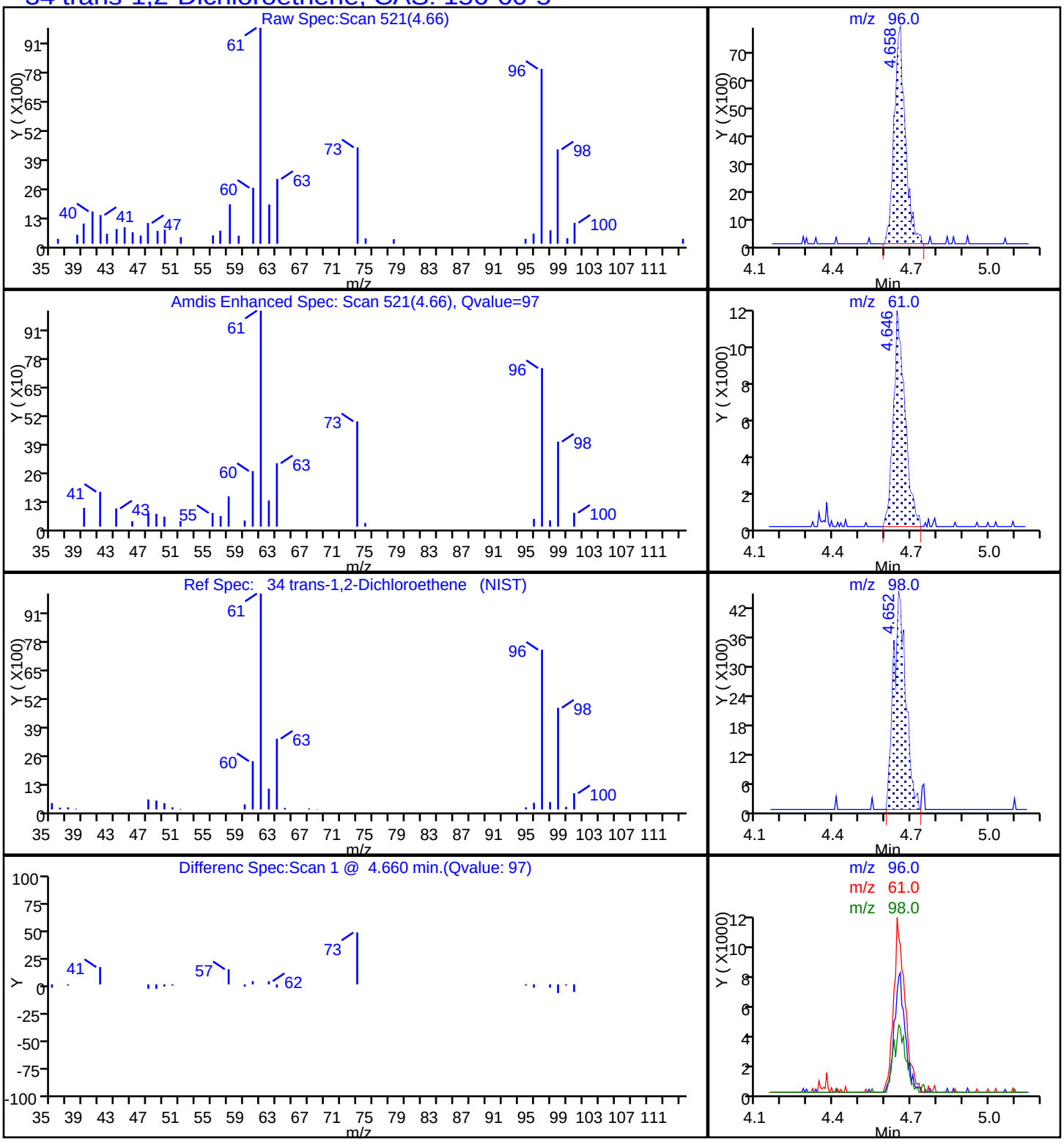


Report Date: 01-Nov-2017 12:11:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D26.D				
Injection Date:	01-Nov-2017 11:49:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-3	Lab Sample ID:	180-71580-3		
Client ID:	HD-MW-87-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



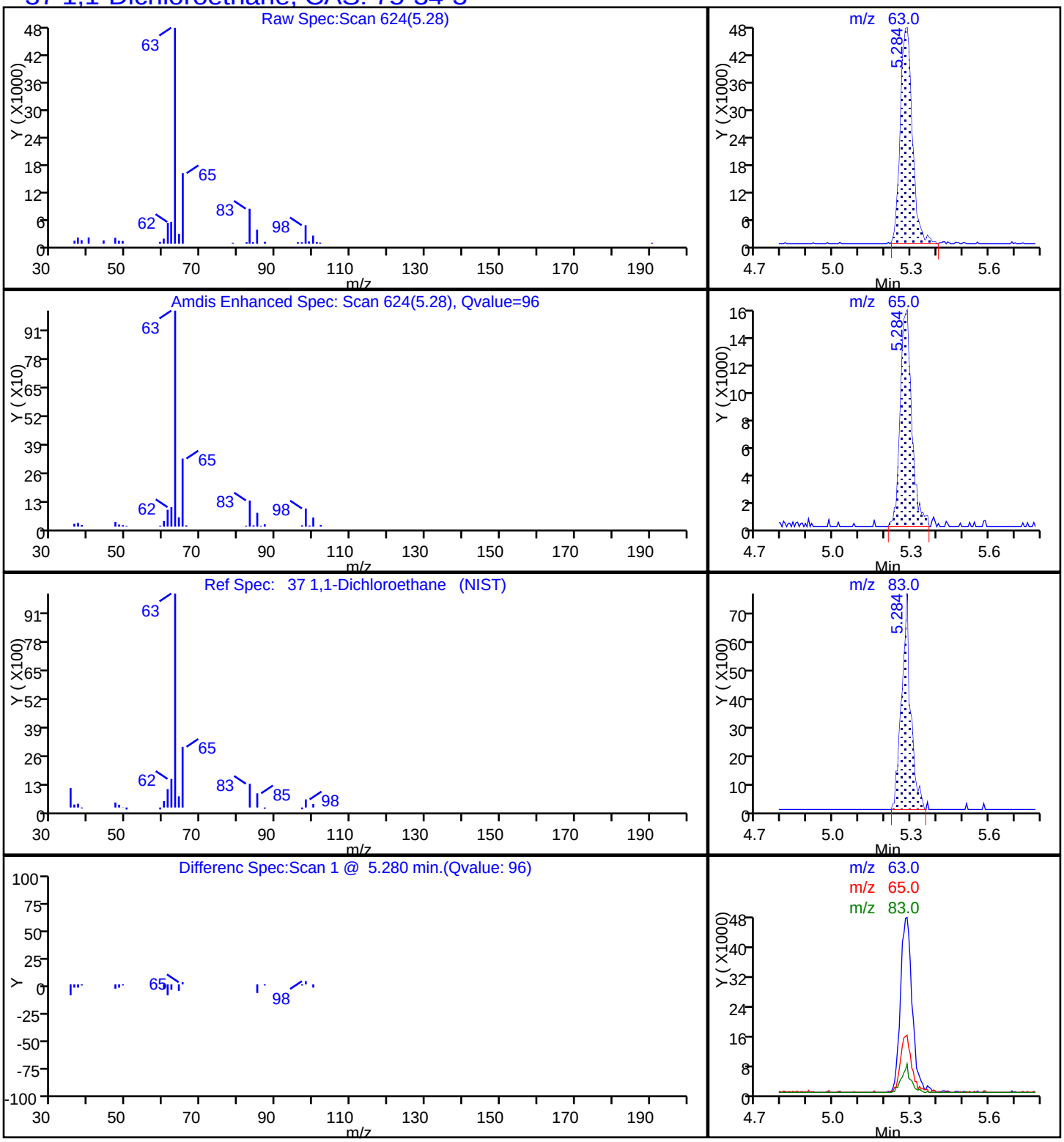
Report Date: 01-Nov-2017 12:11:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D26.D

Injection Date:	01-Nov-2017 11:49:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-3	Lab Sample ID:	180-71580-3		
Client ID:	HD-MW-87-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
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		

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

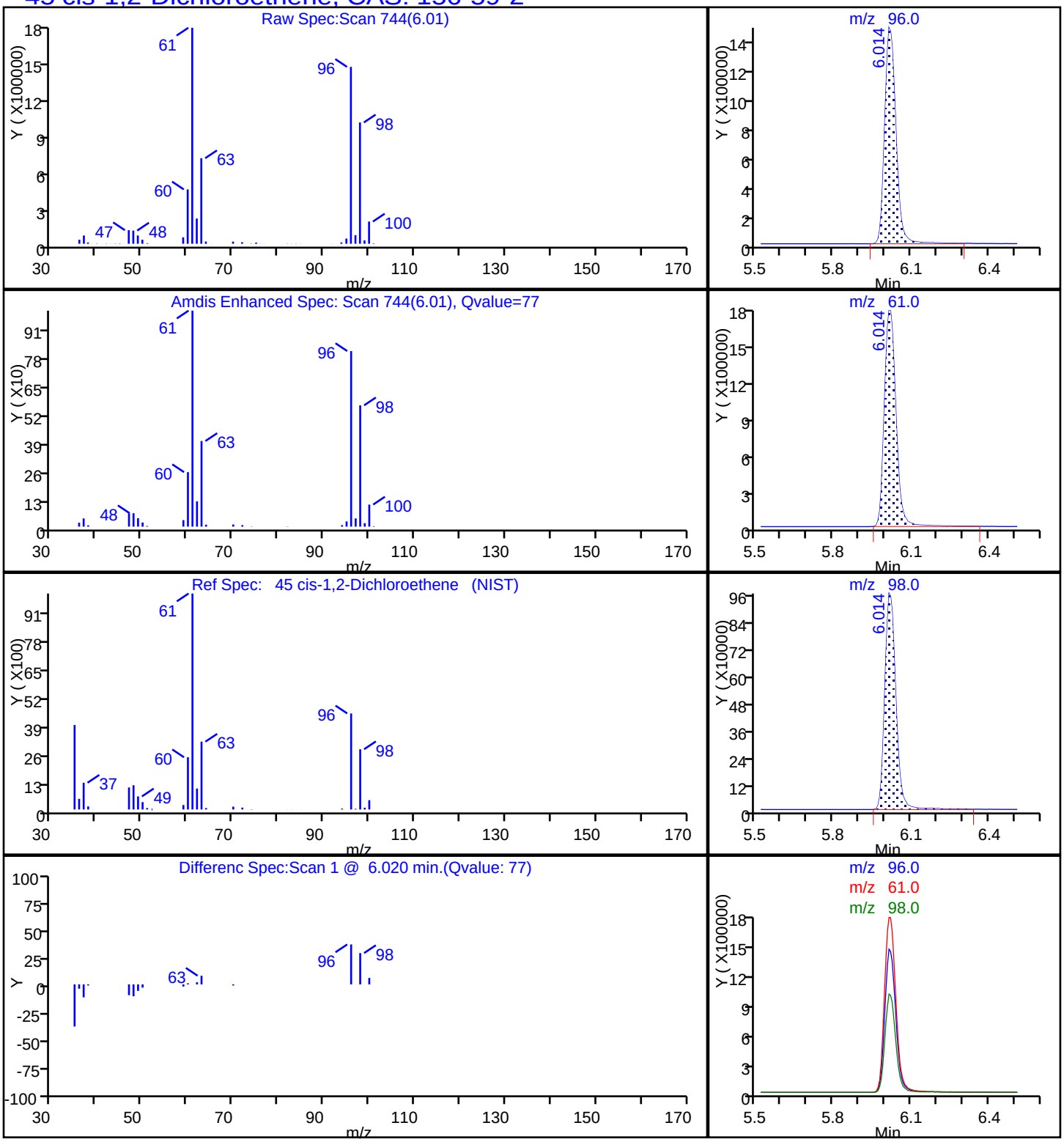


Report Date: 01-Nov-2017 12:11:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D26.D				
Injection Date:	01-Nov-2017 11:49:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-3	Lab Sample ID:	180-71580-3		
Client ID:	HD-MW-87-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



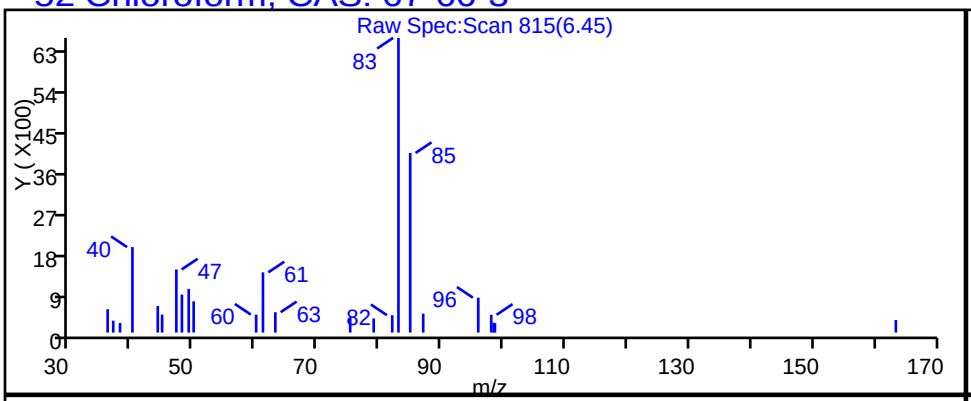
Report Date: 01-Nov-2017 12:11:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

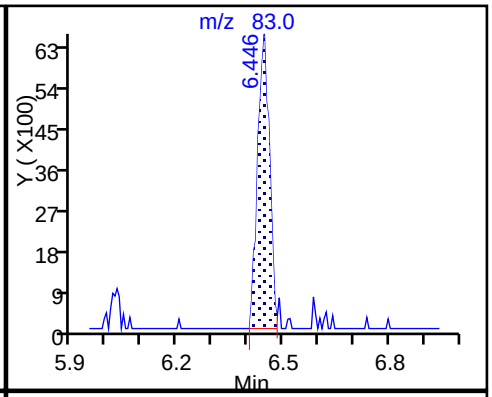
TestAmerica Pittsburgh

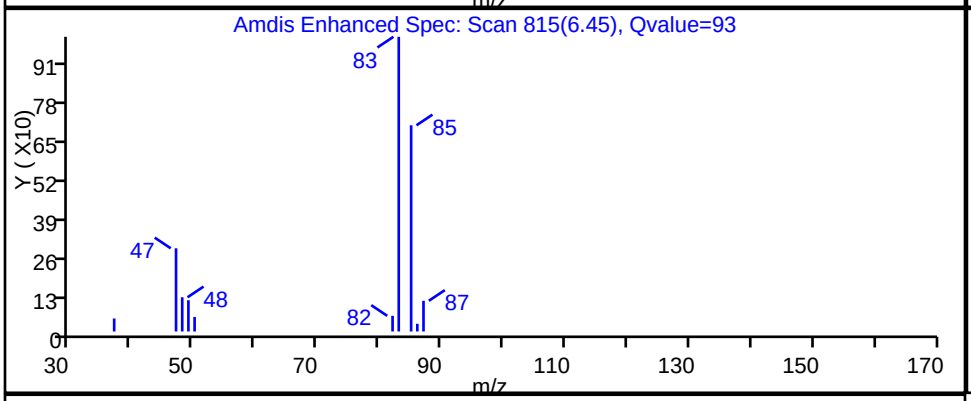
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D26.D

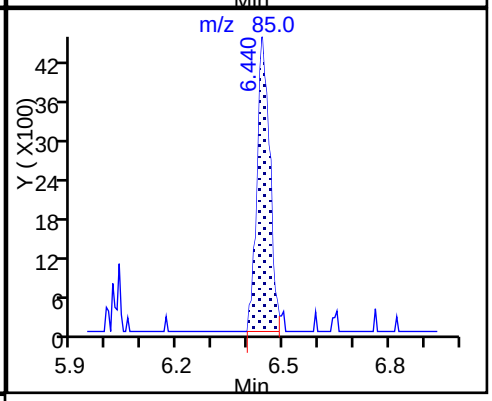
Injection Date:	01-Nov-2017 11:49:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-3	Lab Sample ID:	180-71580-3		
Client ID:	HD-MW-87-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

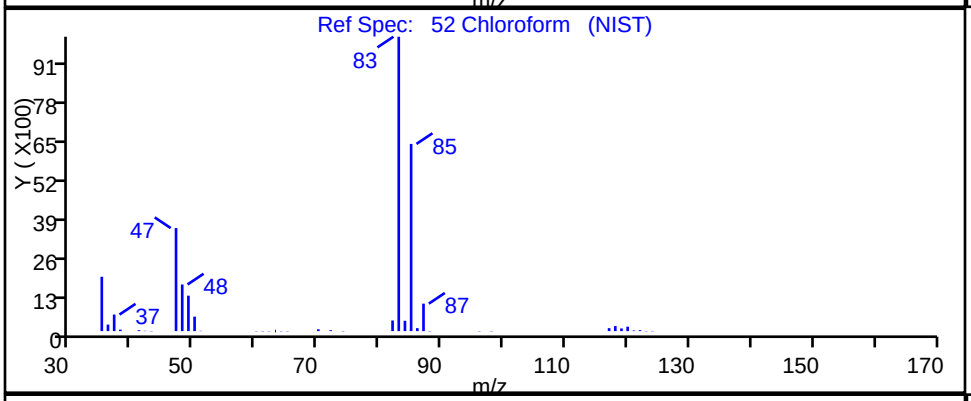
52 Chloroform, CAS: 67-66-3

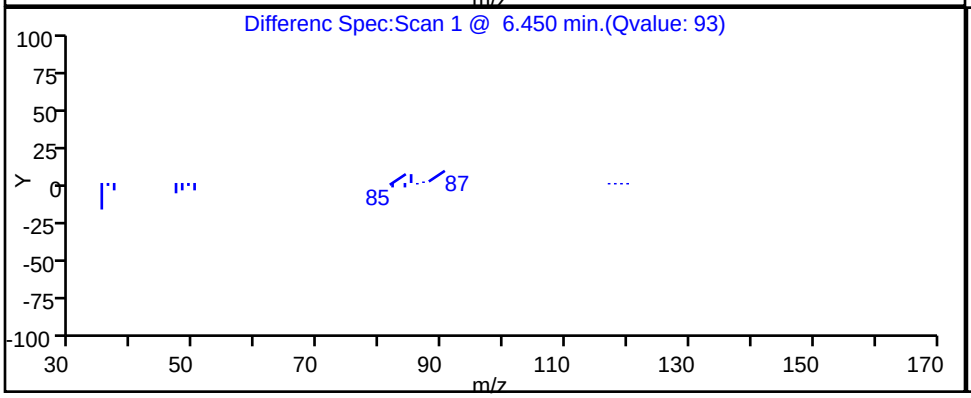


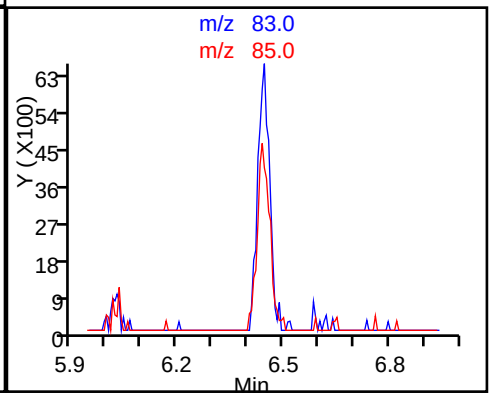










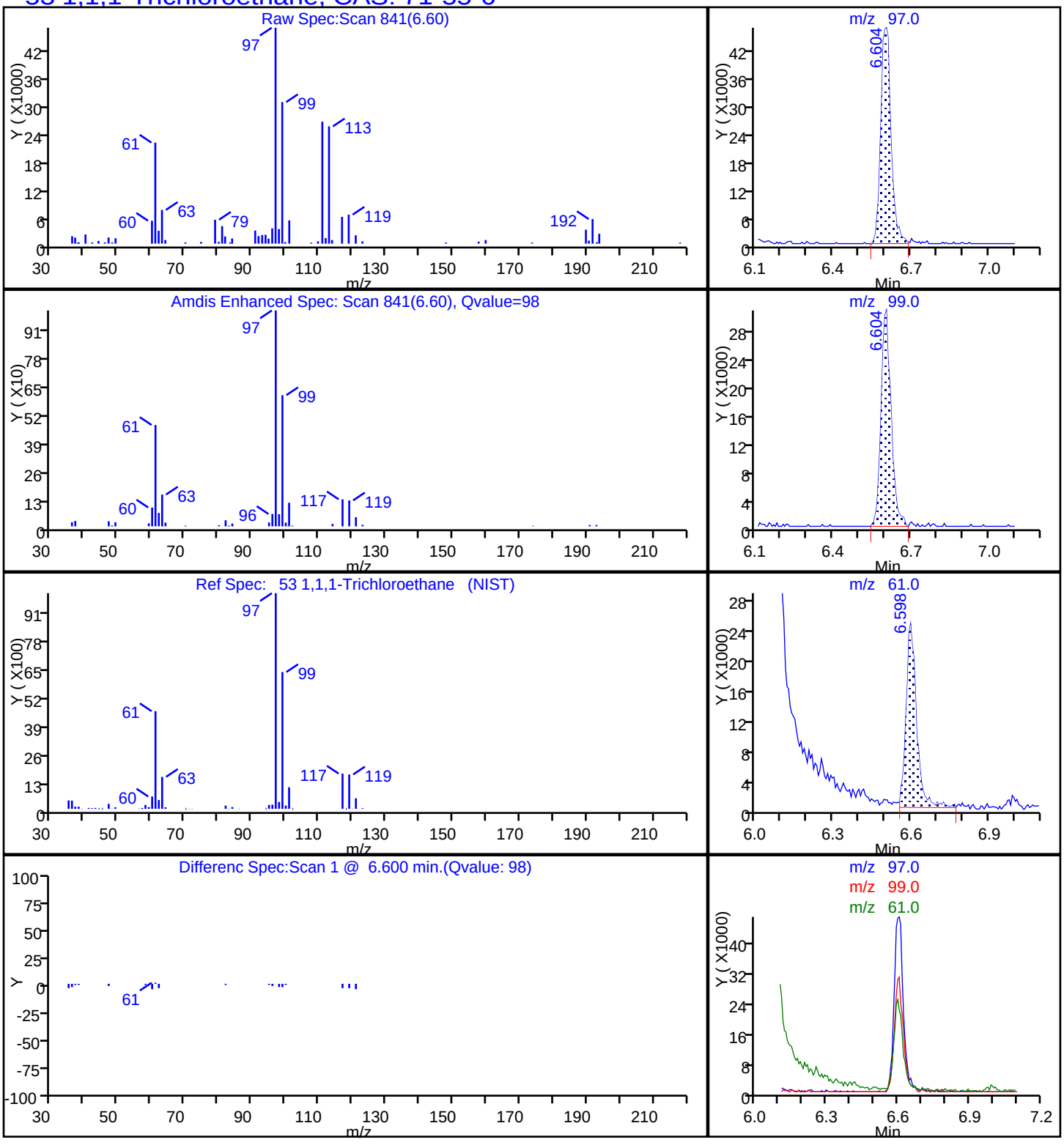


Report Date: 01-Nov-2017 12:11:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D26.D				
Injection Date:	01-Nov-2017 11:49:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-3	Lab Sample ID:	180-71580-3		
Client ID:	HD-MW-87-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
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		

53 1,1,1-Trichloroethane, CAS: 71-55-6



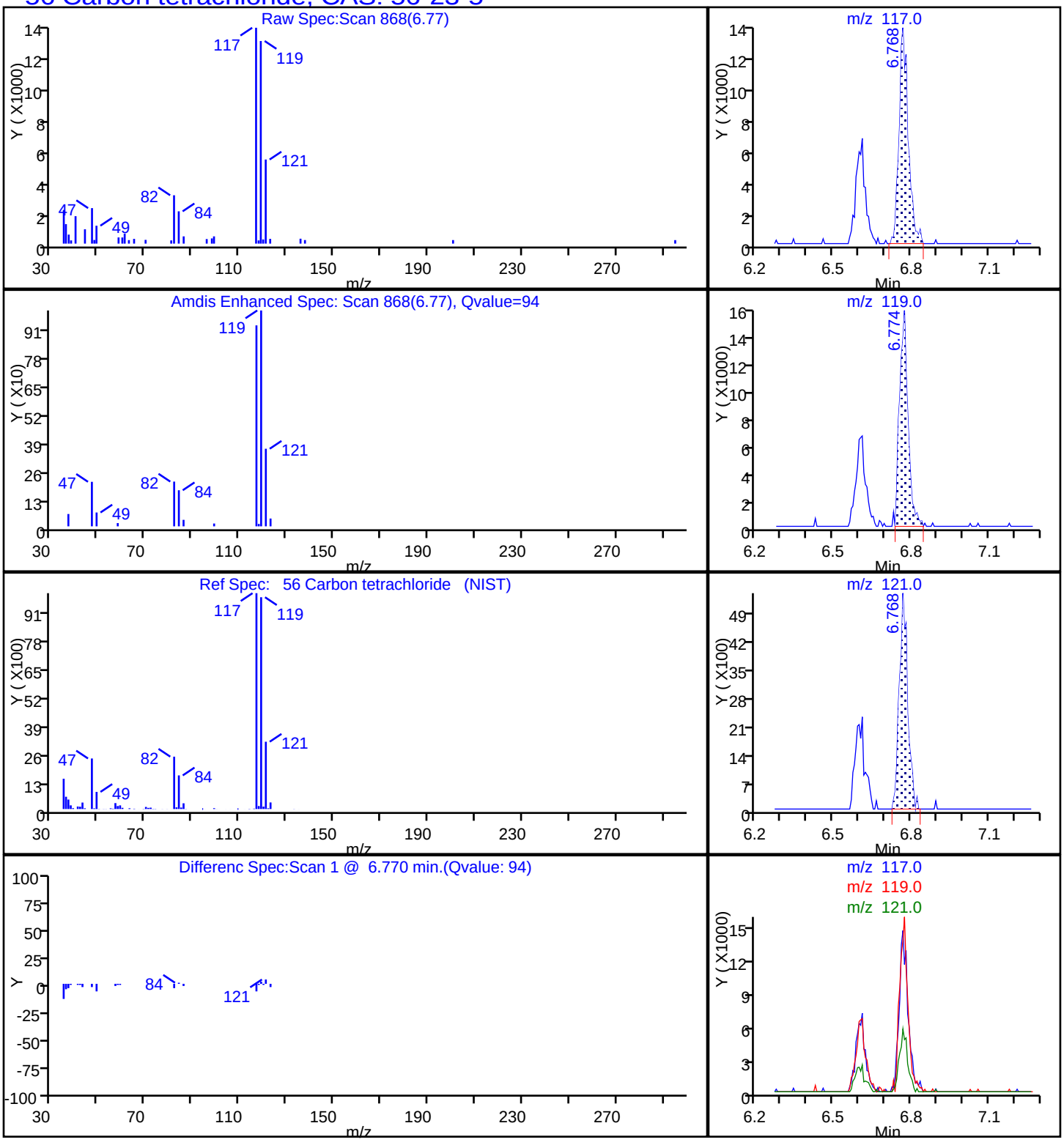
Report Date: 01-Nov-2017 12:11:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D26.D

Injection Date:	01-Nov-2017 11:49:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-3	Lab Sample ID:	180-71580-3		
Client ID:	HD-MW-87-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
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		

56 Carbon tetrachloride, CAS: 56-23-5



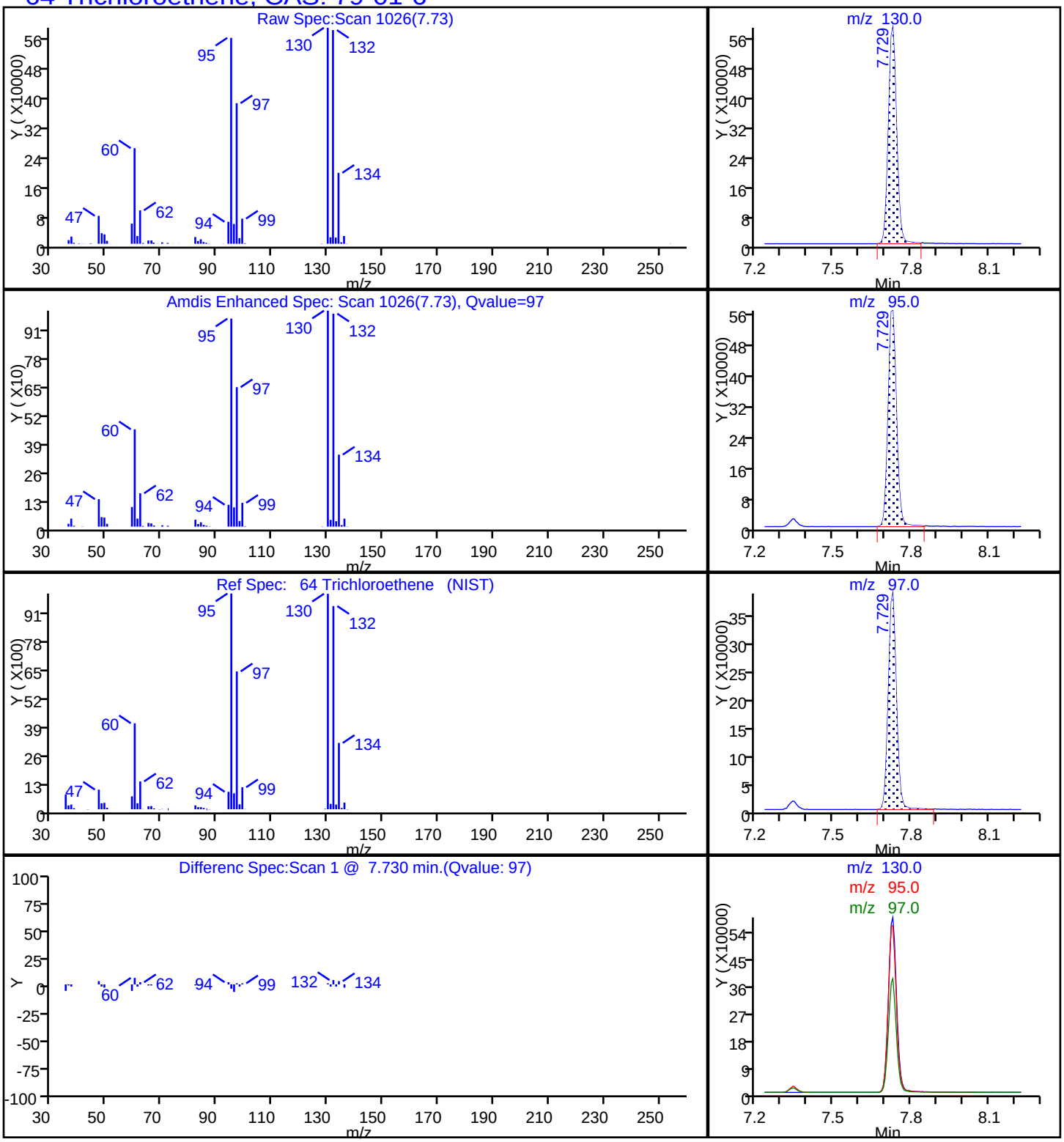
Report Date: 01-Nov-2017 12:11:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D26.D

Injection Date:	01-Nov-2017 11:49:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-3	Lab Sample ID:	180-71580-3		
Client ID:	HD-MW-87-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



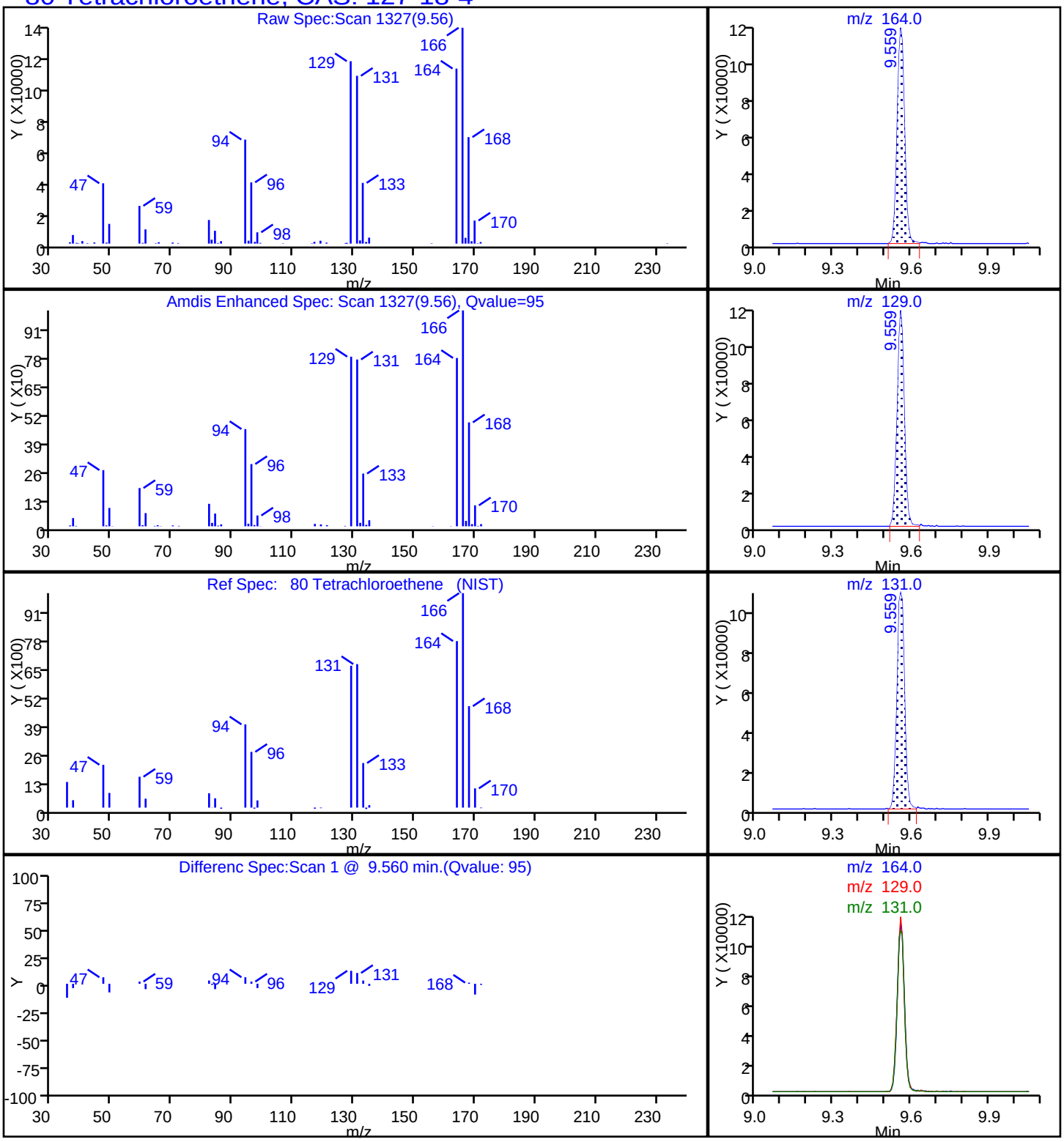
Report Date: 01-Nov-2017 12:11:10 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D26.D

Injection Date:	01-Nov-2017 11:49:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-3	Lab Sample ID:	180-71580-3		
Client ID:	HD-MW-87-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-87-0/1-0 | Lab Sample ID: 180-71580-3

Matrix: Water | Lab File ID: 51025D25.D

Analysis Method: 8260C | Date Collected: 10/18/2017 13:30

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 08:07

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.: 227010 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10	U *	10	9.0
75-01-4	Vinyl chloride	10	U	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	10	5.5
67-64-1	Acetone	50	U	50	34
75-15-0	Carbon disulfide	10	U	10	8.8
75-09-2	Methylene Chloride	10	U	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	250		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	10	5.7
79-01-6	Trichloroethene	62		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	12		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
1330-20-7	Xylenes, Total	20	U	20	8.9
100-42-5	Styrene	10	U	10	4.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-87-0/1-0 | Lab Sample ID: 180-71580-3

Matrix: Water | Lab File ID: 51025D25.D

Analysis Method: 8260C | Date Collected: 10/18/2017 13:30

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 08:07

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.: 227010 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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)	116		65-121
2037-26-5	Toluene-d8 (Surr)	91		73-120
460-00-4	4-Bromofluorobenzene (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D25.D
Lims ID: 180-71580-B-3
Client ID: HD-MW-87-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 08:07:30 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 180-0019038-025
Misc. Info.: 180-71580-B-3
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:35:44

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.364	4.384	-0.020	0	168633	1000.0	
*	2 Fluorobenzene (IS)	96	7.344	7.340	0.004	99	426604	50.0	
*	3 Chlorobenzene-d5	119	10.427	10.429	-0.002	87	103066	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.768	12.770	-0.002	97	137911	50.0	
$	5 Dibromofluoromethane (Surr	113	6.620	6.610	0.010	93	109839	53.5	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.985	6.987	-0.002	0	145590	58.2	
$	7 Toluene-d8 (Surr)	98	8.979	8.982	-0.003	94	375211	45.7	
$	8 4-Bromofluorobenzene (Surr	95	11.613	11.609	0.004	87	127969	43.2	
	12 Chloromethane	50		1.891				ND	
	13 Vinyl chloride	62		2.012				ND	
	15 Bromomethane	94		2.335				ND	
	16 Chloroethane	64		2.426				ND	
	22 1,1-Dichloroethene	96		3.411				ND	
	24 Acetone	43		3.539				ND	
	26 Carbon disulfide	76		3.703				ND	
	31 Methylene Chloride	84		4.226				ND	
	33 Acrylonitrile	53		4.609				ND	
	34 trans-1,2-Dichloroethene	96		4.640				ND	
	35 Methyl tert-butyl ether	73		4.664				ND	
	37 1,1-Dichloroethane	63	5.276	5.266	0.010	96	10408	2.52	
	45 cis-1,2-Dichloroethene	96	6.018	6.008	0.010	80	344266	126.5	
	46 2-Butanone (MEK)	43		6.026				ND	
	49 Chlorobromomethane	128		6.288				ND	
	52 Chloroform	83	6.437	6.434	0.003	18	3261	0.7892	M
	53 1,1,1-Trichloroethane	97		6.592				ND	
	56 Carbon tetrachloride	117	6.766	6.762	0.004	24	1988	0.7638	
	58 Benzene	78		6.993				ND	
	59 1,2-Dichloroethane	62		7.072				ND	
	64 Trichloroethene	130	7.721	7.723	-0.002	96	80940	31.0	
	67 1,2-Dichloropropane	63		7.997				ND	
	70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.276				ND	
74 cis-1,3-Dichloropropene	75		8.720				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872				ND	
76 Toluene	91		9.049				ND	
77 trans-1,3-Dichloropropene	75		9.298				ND	
79 1,1,2-Trichloroethane	97		9.486				ND	
80 Tetrachloroethene	164	9.557	9.559	-0.002	93	12065	6.16	
82 2-Hexanone	43		9.705				ND	
84 Chlorodibromomethane	129		9.857				ND	
85 Ethylene Dibromide	107		9.967				ND	
87 Chlorobenzene	112		10.459				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106		10.557				ND	
91 m-Xylene & p-Xylene	106		10.684				ND	
92 o-Xylene	106		11.068				ND	
93 Styrene	104		11.092				ND	
94 Bromoform	173		11.274				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				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

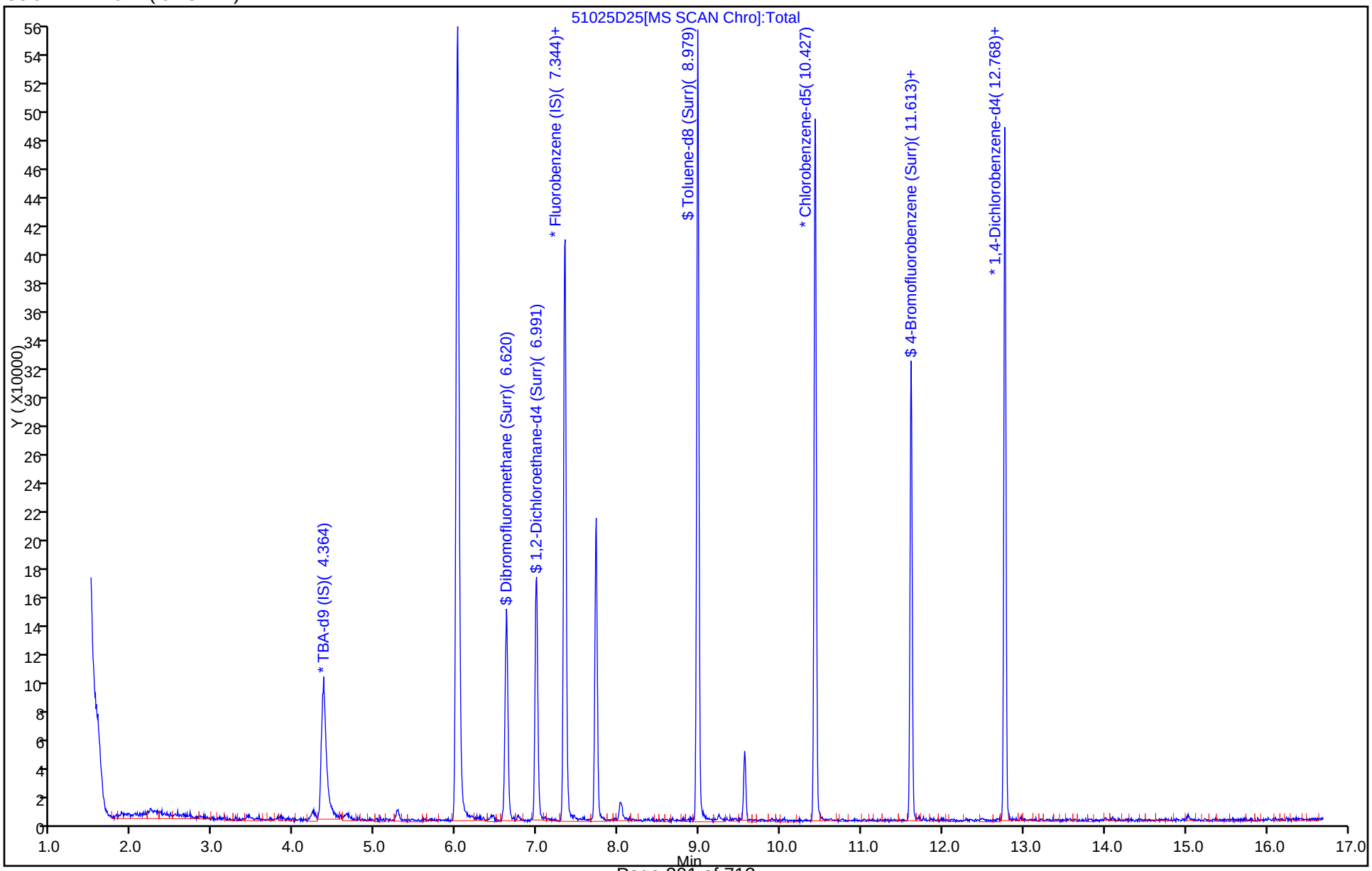
Report Date: 26-Oct-2017 20:41:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D25.D

Injection Date:	26-Oct-2017 08:07:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-B-3	Lab Sample ID:	180-71580-3	Worklist Smp#:	25
Client ID:	HD-MW-87-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	25
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D25.D				
Lims ID:	180-71580-B-3				
Client ID:	HD-MW-87-0/1-0				
Sample Type:	Client				
Inject. Date:	26-Oct-2017 08:07:30	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Sample Info:	180-0019038-025				
Misc. Info.:	180-71580-B-3				
Operator ID:	034635	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	26-Oct-2017 20:41:12	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:	XAWRK030				

First Level Reviewer: bungardf Date: 26-Oct-2017 20:35:44

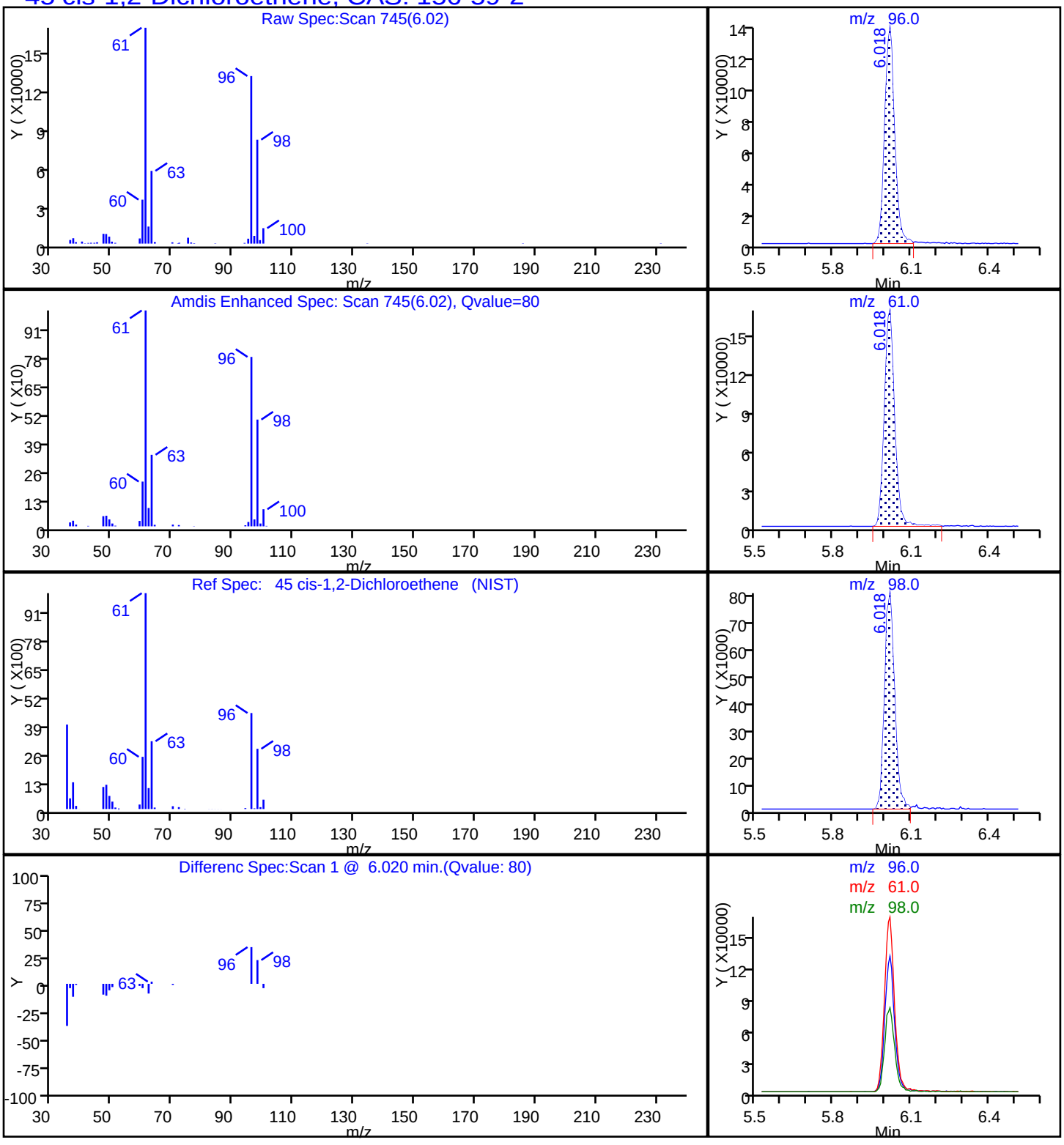
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	53.5	107.02
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	58.2	116.31
$ 7 Toluene-d8 (Surr)	50.0	45.7	91.48
$ 8 4-Bromofluorobenzene (Surr)	50.0	43.2	86.39

Report Date: 26-Oct-2017 20:41:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D25.D				
Injection Date:	26-Oct-2017 08:07:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-3	Lab Sample ID:	180-71580-3		
Client ID:	HD-MW-87-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
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



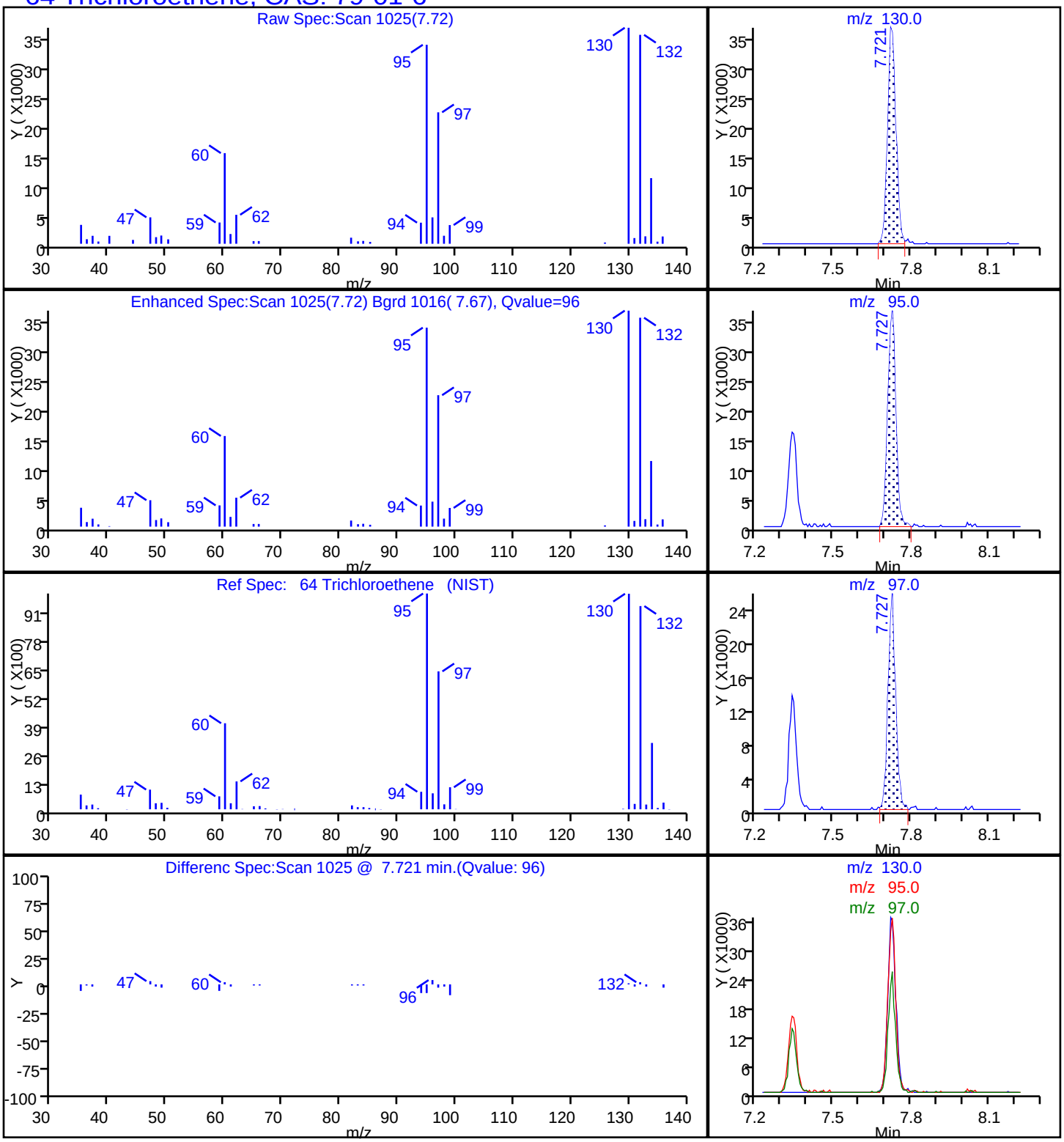
Report Date: 26-Oct-2017 20:41:48 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D25.D

Injection Date:	26-Oct-2017 08:07:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-3	Lab Sample ID:	180-71580-3		
Client ID:	HD-MW-87-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



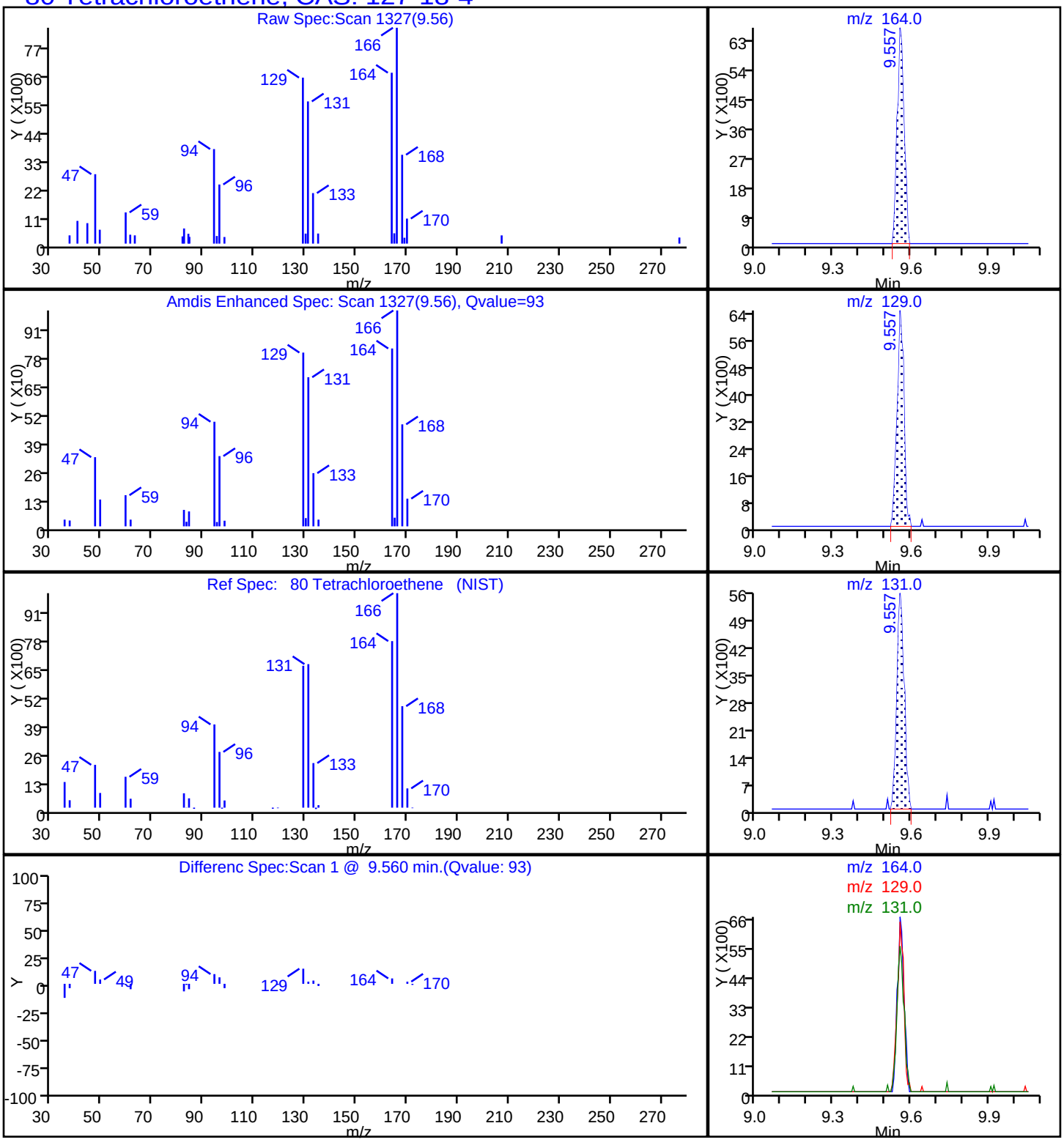
Report Date: 26-Oct-2017 20:41:48 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D25.D

Injection Date:	26-Oct-2017 08:07:30	Instrument ID:	CHHP5
Lims ID:	180-71580-B-3	Lab Sample ID:	180-71580-3
Client ID:	HD-MW-87-0/1-0		
Operator ID:	034635	ALS Bottle#:	25 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
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

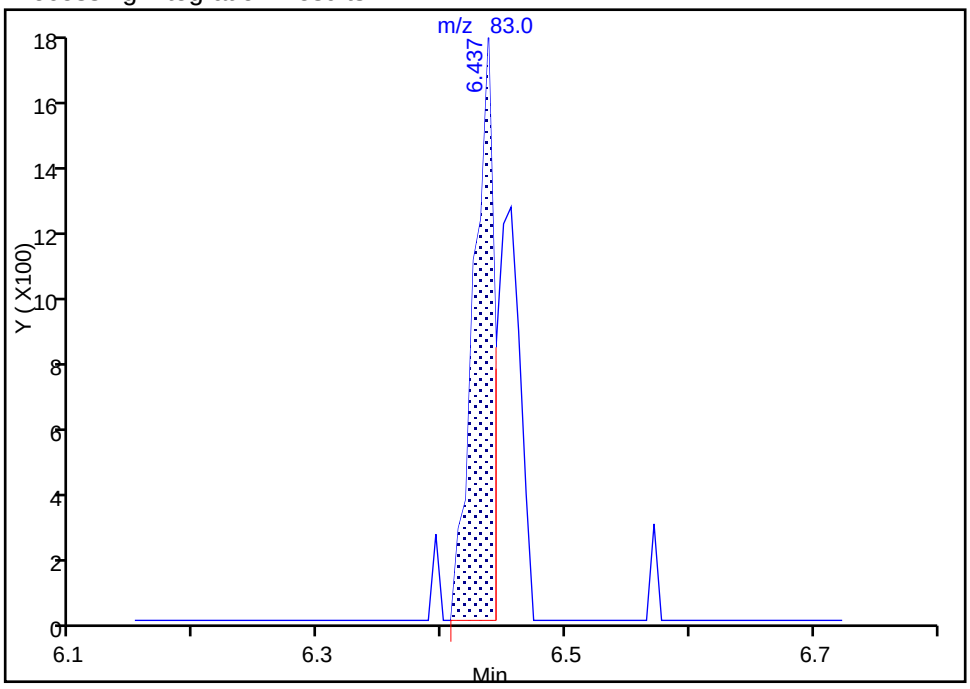
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D25.D				
Injection Date:	26-Oct-2017 08:07:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-3	Lab Sample ID:	180-71580-3		
Client ID:	HD-MW-87-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
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

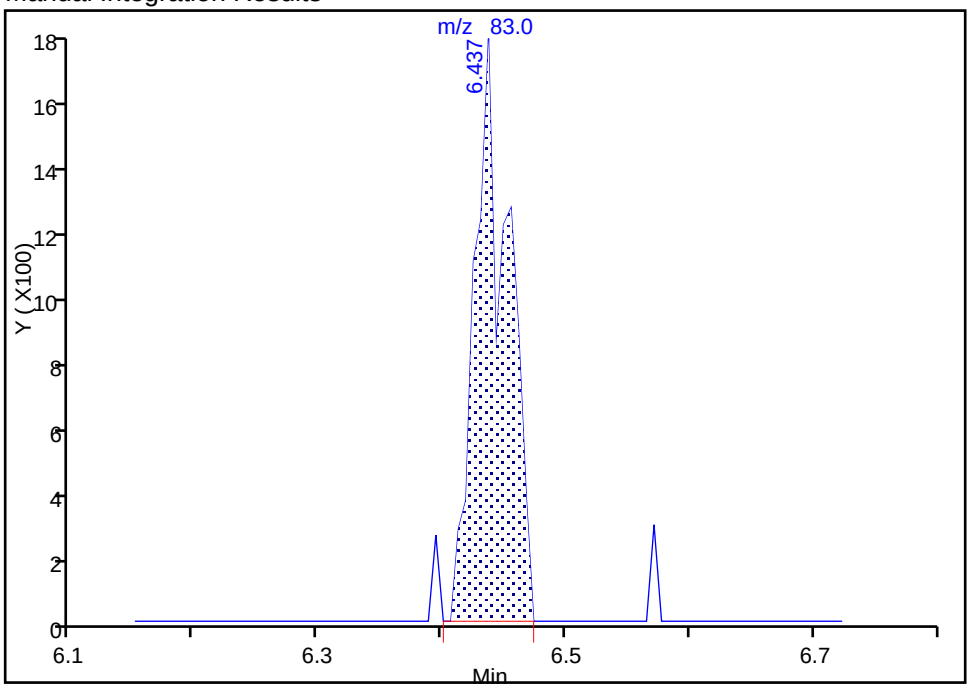
Processing Integration Results

RT: 6.44
Area: 1953
Amount: 0.472657
Amount Units: ng



Manual Integration Results

RT: 6.44
Area: 3261
Amount: 0.789214
Amount Units: ng



Reviewer: bungardf, 26-Oct-2017 20:35:22

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-77-0/1-0 RA | Lab Sample ID: 180-71580-4 RA

Matrix: Water | Lab File ID: 51030D23.D

Analysis Method: 8260C | Date Collected: 10/18/2017 12:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2017 07:27

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227508 | 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 ^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	200	E	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	210	E	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	22		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	53	E	1.0	0.51
1330-20-7	Xylenes, Total	25		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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-77-0/1-0 RA | Lab Sample ID: 180-71580-4 RA

Matrix: Water | Lab File ID: 51030D23.D

Analysis Method: 8260C | Date Collected: 10/18/2017 12:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2017 07:27

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227508 | 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)	90		65-121
2037-26-5	Toluene-d8 (Surr)	100		73-120
460-00-4	4-Bromofluorobenzene (Surr)	104		80-120
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D23.D
Lims ID: 180-71580-B-4
Client ID: HD-MW-77-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2017 07:27:30 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019107-023
Misc. Info.: 180-71580-B-4
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2017 08:25:46 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: XAWRK010

First Level Reviewer: gordonk Date: 31-Oct-2017 08:25:46

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.361	4.390	-0.029	0	367753	1000.0	
*	2 Fluorobenzene (IS)	96	7.341	7.340	0.001	97	582718	50.0	
*	3 Chlorobenzene-d5	119	10.430	10.429	0.001	86	142836	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.771	12.771	0.000	95	233834	50.0	
$	5 Dibromofluoromethane (Surr	113	6.623	6.616	0.007	92	127522	45.5	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.988	6.987	0.001	0	153965	45.0	
$	7 Toluene-d8 (Surr)	98	8.983	8.976	0.007	94	571168	50.2	
$	8 4-Bromofluorobenzene (Surr	95	11.610	11.615	-0.005	87	214374	52.2	
	12 Chloromethane	50		1.885				ND	
	13 Vinyl chloride	62		2.019				ND	
	15 Bromomethane	94		2.341				ND	
	16 Chloroethane	64		2.426				ND	
	22 1,1-Dichloroethene	96		3.411				ND	
	24 Acetone	43		3.539				ND	
	26 Carbon disulfide	76		3.697				ND	
	31 Methylene Chloride	84		4.226				ND	
	33 Acrylonitrile	53		4.615				ND	
	34 trans-1,2-Dichloroethene	96		4.640				ND	
	35 Methyl tert-butyl ether	73	4.659	4.664	-0.005	91	8583159	984.8	E
	37 1,1-Dichloroethane	63		5.272				ND	
	45 cis-1,2-Dichloroethene	96	6.021	6.008	0.013	45	8210	2.21	
	46 2-Butanone (MEK)	43		6.026				ND	
	49 Chlorobromomethane	128		6.294				ND	
	52 Chloroform	83		6.440				ND	
	53 1,1,1-Trichloroethane	97		6.598				ND	
	56 Carbon tetrachloride	117		6.762				ND	
	58 Benzene	78	7.000	6.993	0.007	70	14915145	1052.7	E
	59 1,2-Dichloroethane	62		7.072				ND	
	64 Trichloroethene	130		7.729				ND	
	67 1,2-Dichloropropane	63		7.997				ND	
	70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.276				ND	
74 cis-1,3-Dichloropropene	75		8.720				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872				ND	
76 Toluene	91	9.050	9.049	0.001	99	1598587	112.2	
77 trans-1,3-Dichloropropene	75		9.298				ND	
79 1,1,2-Trichloroethane	97		9.487				ND	
80 Tetrachloroethene	164		9.560				ND	
82 2-Hexanone	43		9.706				ND	
84 Chlorodibromomethane	129		9.864				ND	
85 Ethylene Dibromide	107		9.973				ND	
87 Chlorobenzene	112		10.460				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106	10.558	10.563	-0.005	97	1384236	267.4	E
91 m-Xylene & p-Xylene	106	10.692	10.691	0.001	0	458003	72.4	
92 o-Xylene	106	11.069	11.074	-0.005	97	331479	55.0	
93 Styrene	104		11.092				ND	
94 Bromoform	173		11.275				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				ND	
S 133 Xylenes, Total	106				0		127.4	

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

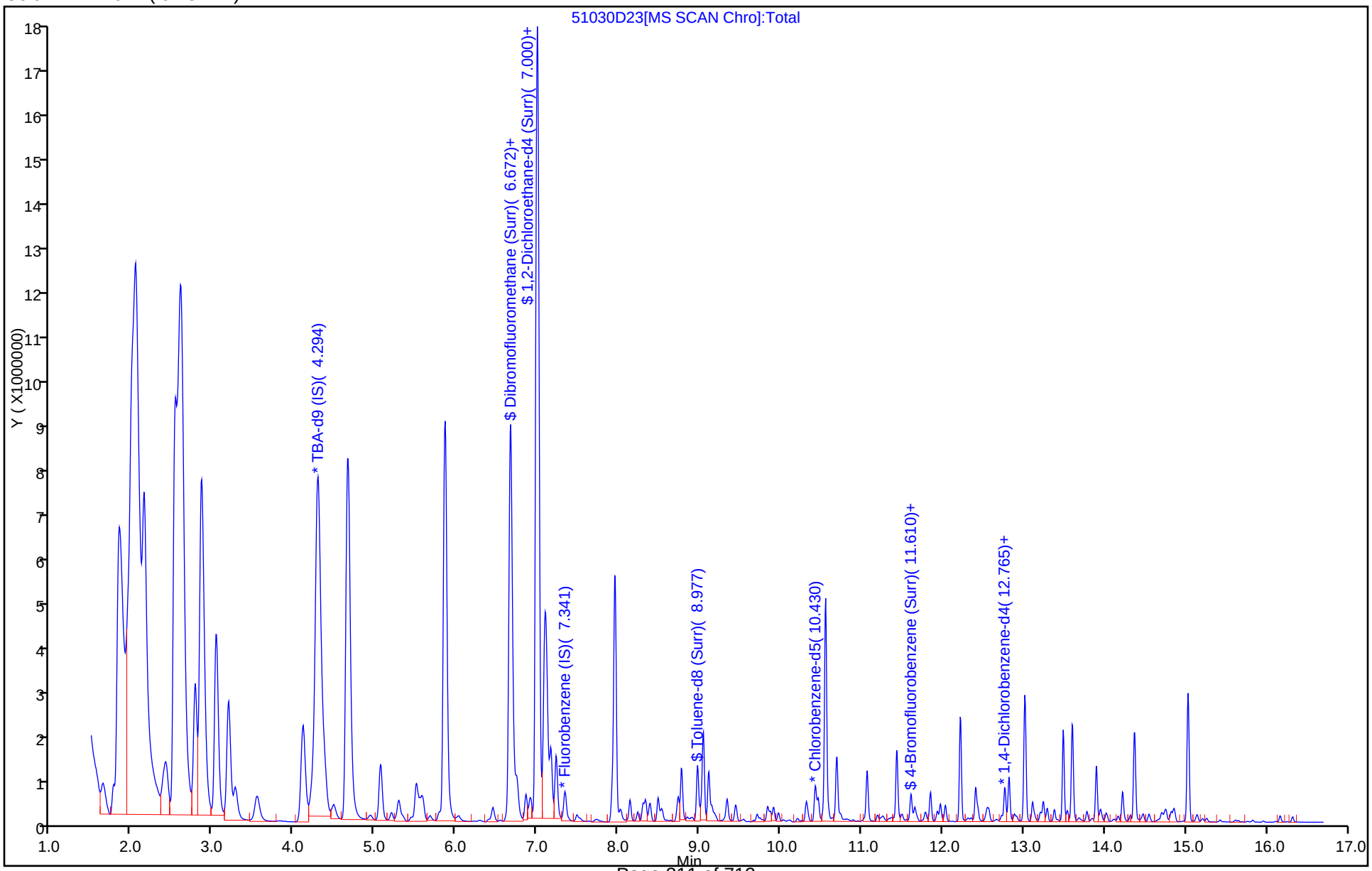
Report Date: 31-Oct-2017 08:25:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D23.D

Injection Date:	31-Oct-2017 07:27:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-B-4	Lab Sample ID:	180-71580-4	Worklist Smp#:	23
Client ID:	HD-MW-77-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
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\20171030-19107.b\51030D23.D
Lims ID: 180-71580-B-4
Client ID: HD-MW-77-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2017 07:27:30 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019107-023
Misc. Info.: 180-71580-B-4
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2017 08:25:46 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: XAWRK010

First Level Reviewer: gordonk Date: 31-Oct-2017 08:25:46

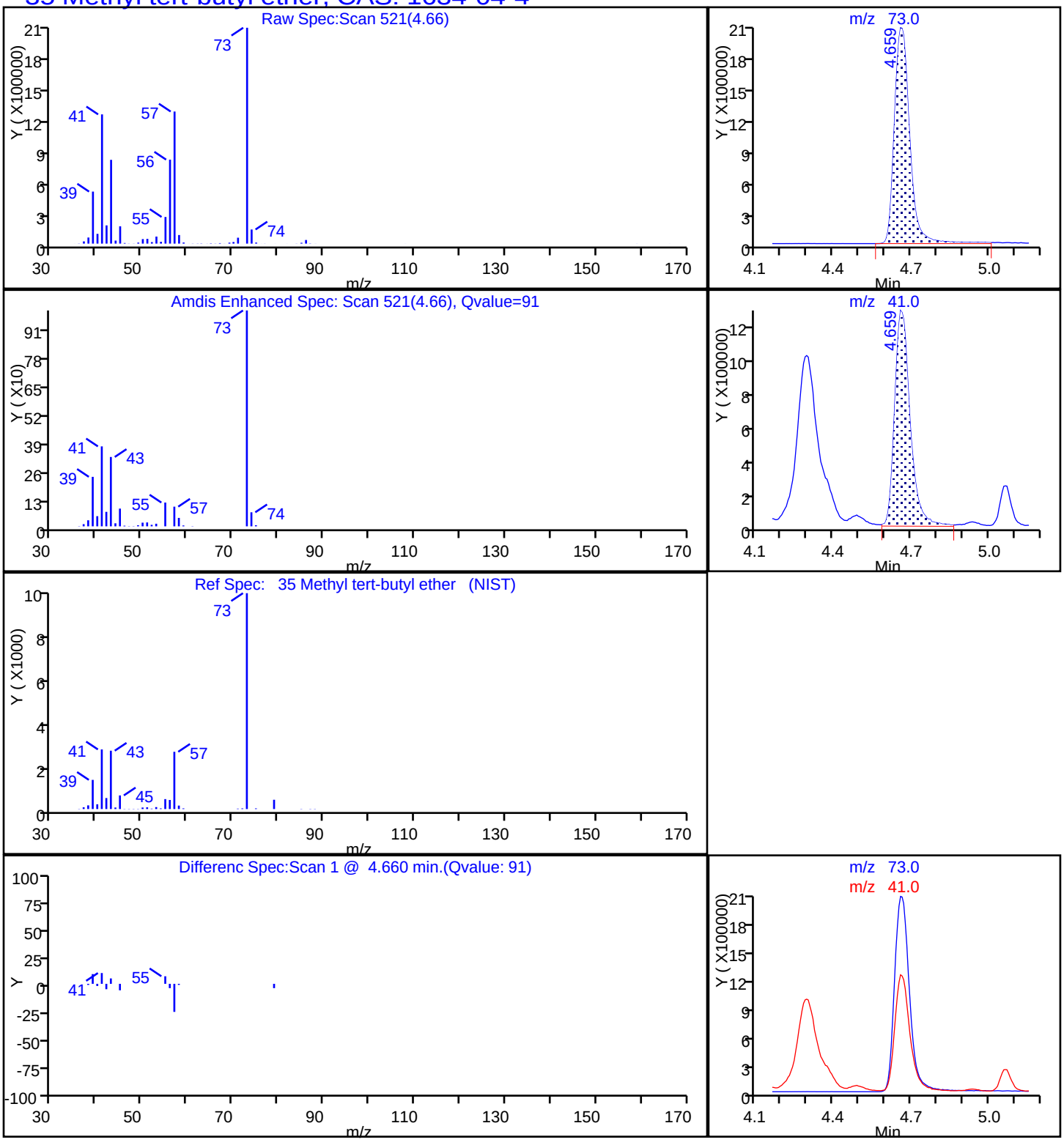
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	45.5	90.97
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	45.0	90.05
$ 7 Toluene-d8 (Surr)	50.0	50.2	100.49
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.2	104.43

Report Date: 31-Oct-2017 08:25:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D23.D				
Injection Date:	31-Oct-2017 07:27:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-4	Lab Sample ID:	180-71580-4		
Client ID:	HD-MW-77-0/1-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



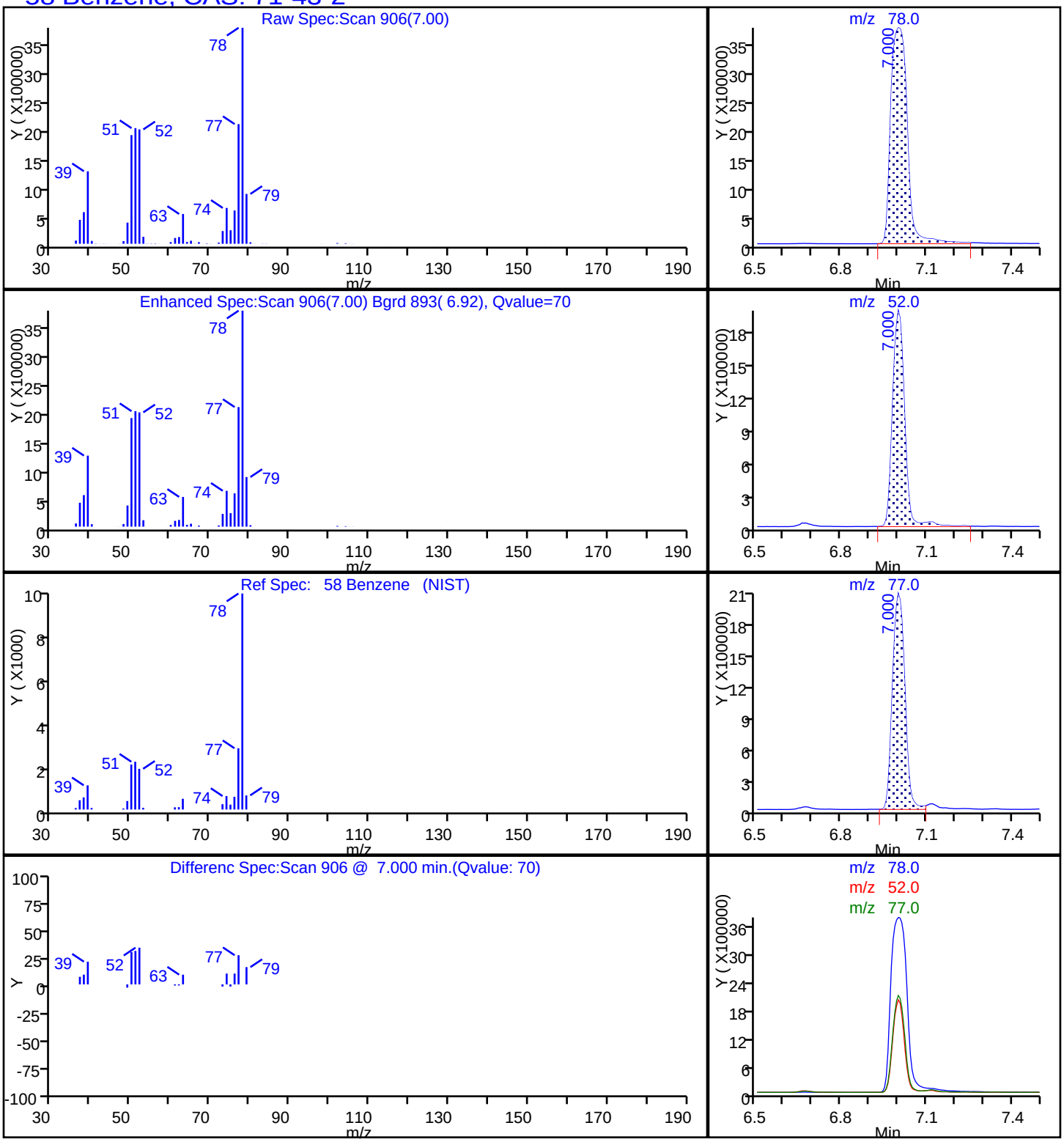
Report Date: 31-Oct-2017 08:25:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D23.D

Injection Date:	31-Oct-2017 07:27:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-4	Lab Sample ID:	180-71580-4		
Client ID:	HD-MW-77-0/1-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

58 Benzene, CAS: 71-43-2

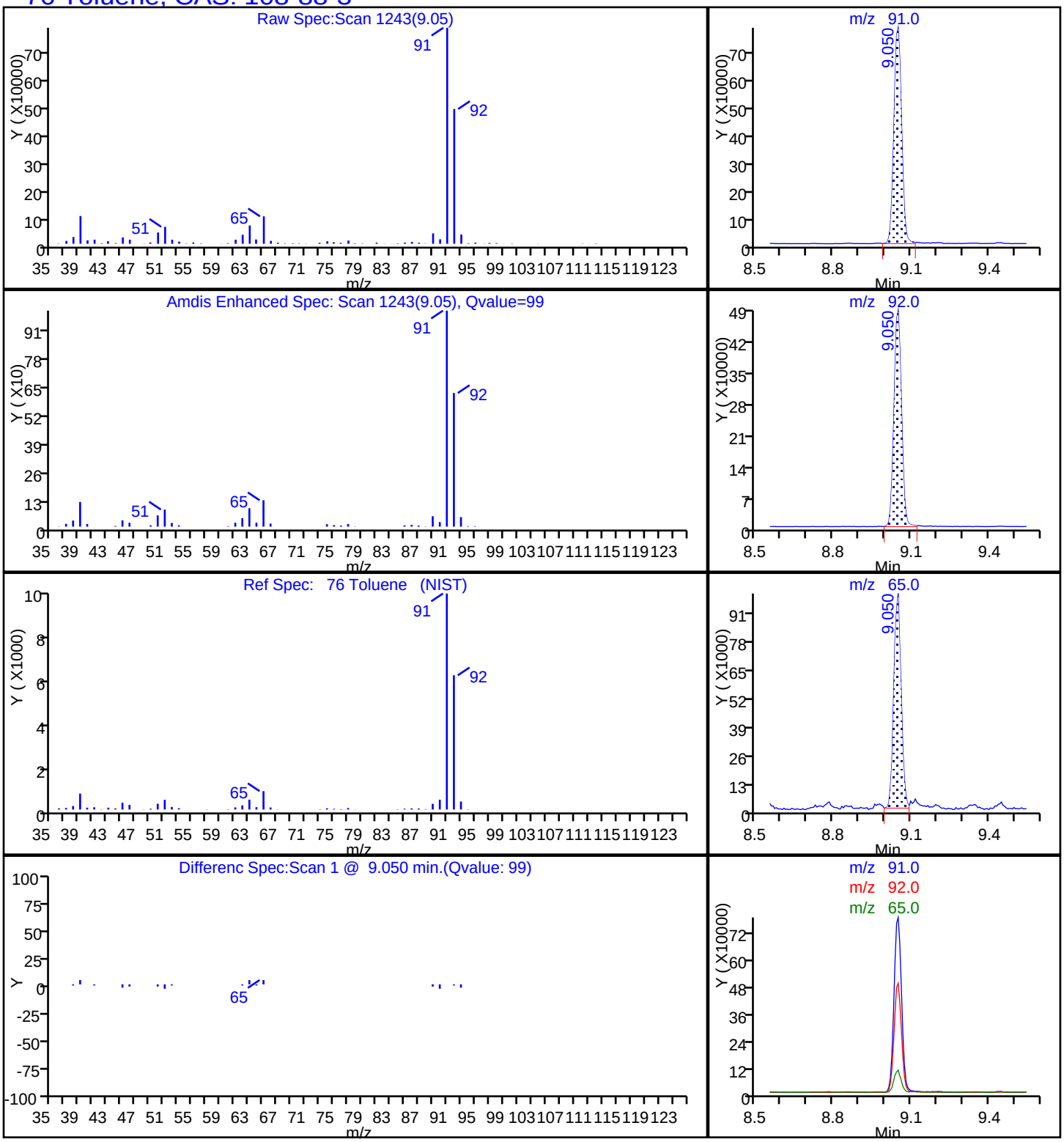


Report Date: 31-Oct-2017 08:25:48 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D23.D				
Injection Date:	31-Oct-2017 07:27:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-4	Lab Sample ID:	180-71580-4		
Client ID:	HD-MW-77-0/1-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

76 Toluene, CAS: 108-88-3

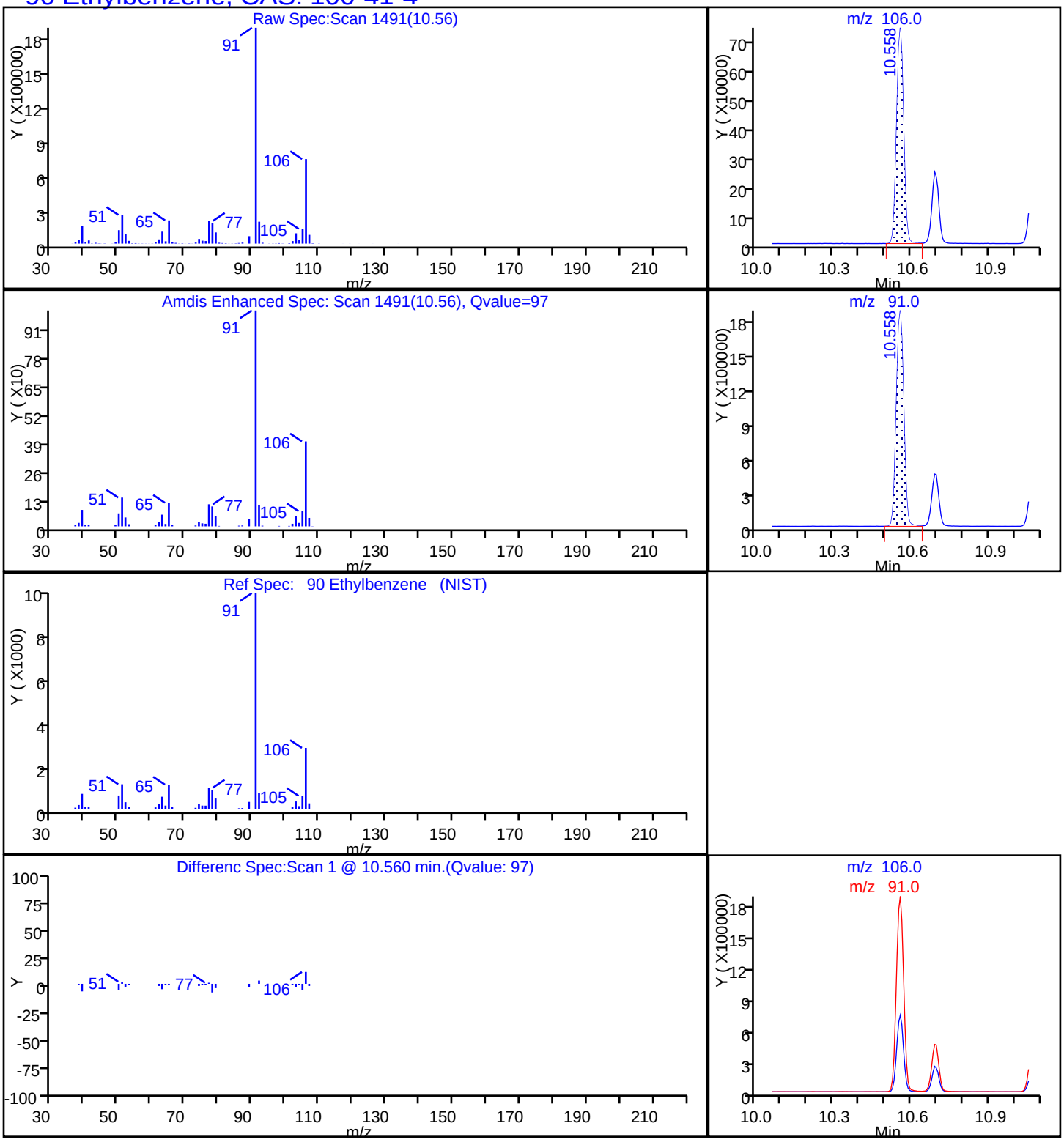


Report Date: 31-Oct-2017 08:25:48 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D23.D				
Injection Date:	31-Oct-2017 07:27:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-4	Lab Sample ID:	180-71580-4		
Client ID:	HD-MW-77-0/1-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

90 Ethylbenzene, CAS: 100-41-4

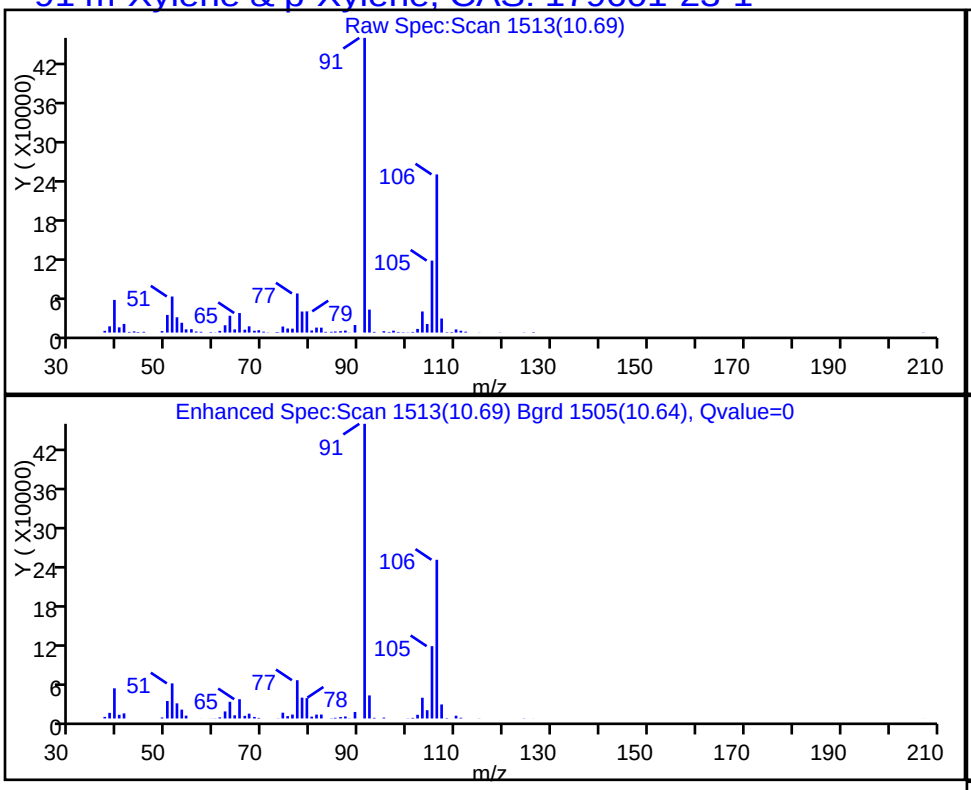


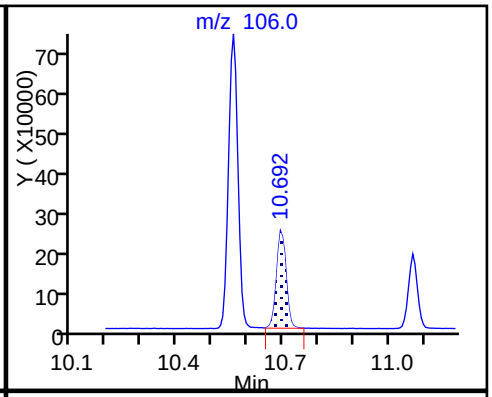
Report Date: 31-Oct-2017 08:25:48 Chrom Revision: 2.2 16-Aug-2017 16:24:46

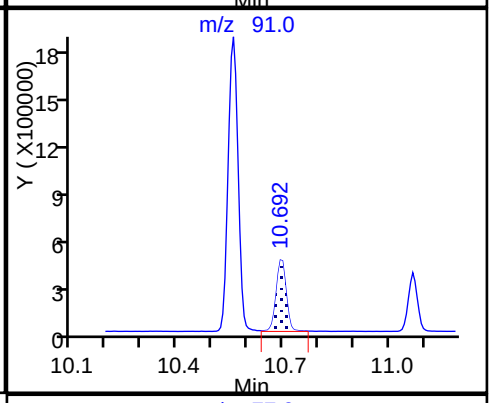
TestAmerica Pittsburgh

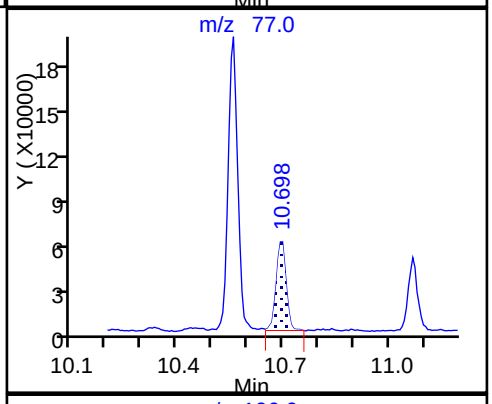
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D23.D				
Injection Date:	31-Oct-2017 07:27:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-4	Lab Sample ID:	180-71580-4		
Client ID:	HD-MW-77-0/1-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

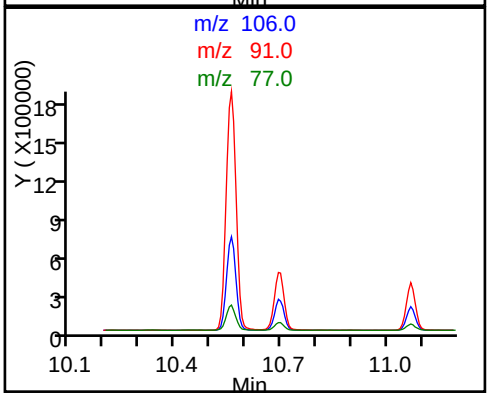
91 m-Xylene & p-Xylene, CAS: 179601-23-1









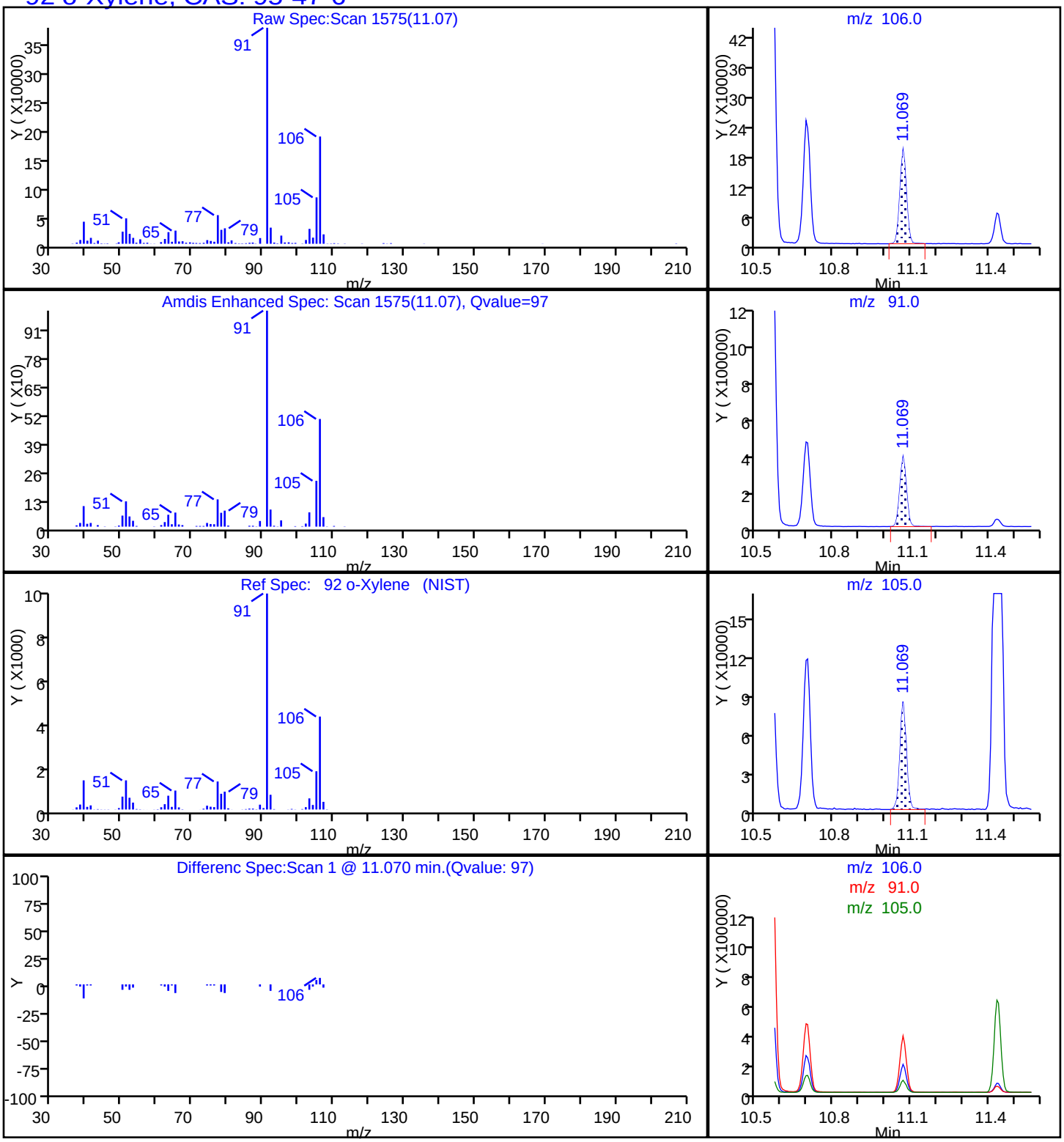


Report Date: 31-Oct-2017 08:25:48 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D23.D				
Injection Date:	31-Oct-2017 07:27:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-4	Lab Sample ID:	180-71580-4		
Client ID:	HD-MW-77-0/1-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

92 o-Xylene, CAS: 95-47-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-77-0/1-0 | Lab Sample ID: 180-71580-4

Matrix: Water | Lab File ID: 51025D26.D

Analysis Method: 8260C | Date Collected: 10/18/2017 12:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 08:31

Soil Aliquot Vol: | Dilution Factor: 25

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

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

Analysis Batch No.: 227010 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	25	U *	25	22
75-01-4	Vinyl chloride	25	U	25	22
74-83-9	Bromomethane	25	U ^c	25	22
75-00-3	Chloroethane	25	U	25	22
75-35-4	1,1-Dichloroethene	25	U	25	14
67-64-1	Acetone	130	U	130	86
75-15-0	Carbon disulfide	25	U	25	22
75-09-2	Methylene Chloride	25	U	25	9.0
156-60-5	trans-1,2-Dichloroethene	25	U	25	17
1634-04-4	Methyl tert-butyl ether	200		25	15
75-34-3	1,1-Dichloroethane	25	U	25	16
156-59-2	cis-1,2-Dichloroethene	25	U	25	18
74-97-5	Bromochloromethane	25	U	25	16
78-93-3	2-Butanone (MEK)	130	U	130	65
67-66-3	Chloroform	25	U	25	15
71-55-6	1,1,1-Trichloroethane	25	U	25	15
56-23-5	Carbon tetrachloride	25	U	25	22
71-43-2	Benzene	460		25	15
107-06-2	1,2-Dichloroethane	25	U	25	14
79-01-6	Trichloroethene	25	U	25	17
78-87-5	1,2-Dichloropropane	25	U	25	16
75-27-4	Bromodichloromethane	25	U	25	16
10061-01-5	cis-1,3-Dichloropropene	25	U	25	15
108-10-1	4-Methyl-2-pentanone (MIBK)	130	U	130	77
108-88-3	Toluene	18	J	25	11
10061-02-6	trans-1,3-Dichloropropene	25	U	25	15
79-00-5	1,1,2-Trichloroethane	25	U	25	11
127-18-4	Tetrachloroethene	25	U	25	12
591-78-6	2-Hexanone	130	U	130	82
124-48-1	Dibromochloromethane	25	U	25	21
106-93-4	1,2-Dibromoethane (EDB)	25	U	25	13
108-90-7	Chlorobenzene	25	U	25	13
630-20-6	1,1,1,2-Tetrachloroethane	25	U	25	14
100-41-4	Ethylbenzene	31		25	13
1330-20-7	Xylenes, Total	50	U	50	22
100-42-5	Styrene	25	U	25	12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-77-0/1-0 | Lab Sample ID: 180-71580-4

Matrix: Water | Lab File ID: 51025D26.D

Analysis Method: 8260C | Date Collected: 10/18/2017 12:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 08:31

Soil Aliquot Vol: | Dilution Factor: 25

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

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

Analysis Batch No.: 227010 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	25	U	25	24
79-34-5	1,1,2,2-Tetrachloroethane	25	U	25	15
107-13-1	Acrylonitrile	500	U	500	200
123-91-1	1,4-Dioxane	5000	U	5000	340

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		65-121
2037-26-5	Toluene-d8 (Surr)	96		73-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D26.D
Lims ID: 180-71580-C-4
Client ID: HD-MW-77-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 08:31:30 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 25.0000
Sample Info: 180-0019038-026
Misc. Info.: 180-71580-C-4
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:36:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.360	4.384	-0.024	0	178947	1000.0	
* 2 Fluorobenzene (IS)	96	7.340	7.340	0.000	98	482014	50.0	
* 3 Chlorobenzene-d5	119	10.429	10.429	0.000	86	105315	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.771	12.770	0.001	95	161751	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.623	6.610	0.013	93	112218	48.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.987	6.987	0.000	0	148931	52.7	
$ 7 Toluene-d8 (Surr)	98	8.982	8.982	0.000	94	403740	48.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.609	11.609	0.000	85	145542	48.1	
12 Chloromethane	50		1.891				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.335				ND	
16 Chloroethane	64		2.426				ND	
22 1,1-Dichloroethene	96		3.411				ND	
24 Acetone	43		3.539				ND	
26 Carbon disulfide	76		3.703				ND	
31 Methylene Chloride	84		4.226				ND	
33 Acrylonitrile	53		4.609				ND	
34 trans-1,2-Dichloroethene	96		4.640				ND	
35 Methyl tert-butyl ether	73	4.664	4.664	0.000	89	284721	39.5	
37 1,1-Dichloroethane	63		5.266				ND	
45 cis-1,2-Dichloroethene	96		6.008				ND	
46 2-Butanone (MEK)	43		6.026				ND	
49 Chlorobromomethane	128		6.288				ND	
52 Chloroform	83	6.428	6.434	-0.006	19	2567	0.5498	M
53 1,1,1-Trichloroethane	97		6.592				ND	
56 Carbon tetrachloride	117		6.762				ND	
58 Benzene	78	7.000	6.993	0.007	98	1082968	92.4	
59 1,2-Dichloroethane	62		7.072				ND	
64 Trichloroethene	130		7.723				ND	
67 1,2-Dichloropropane	63		7.997				ND	
70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.276				ND	
74 cis-1,3-Dichloropropene	75		8.720				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872				ND	
76 Toluene	91	9.049	9.049	0.000	99	38807	3.70	
77 trans-1,3-Dichloropropene	75		9.298				ND	
79 1,1,2-Trichloroethane	97		9.486				ND	
80 Tetrachloroethene	164		9.559				ND	
82 2-Hexanone	43		9.705				ND	
84 Chlorodibromomethane	129		9.857				ND	
85 Ethylene Dibromide	107		9.967				ND	
87 Chlorobenzene	112		10.459				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106	10.557	10.557	0.000	99	23977	6.28	
91 m-Xylene & p-Xylene	106	10.685	10.684	0.001	0	7982	1.71	
92 o-Xylene	106	11.068	11.068	0.000	92	5597	1.26	
93 Styrene	104		11.092				ND	
94 Bromoform	173		11.274				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				ND	
S 133 Xylenes, Total	106				0		2.97	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

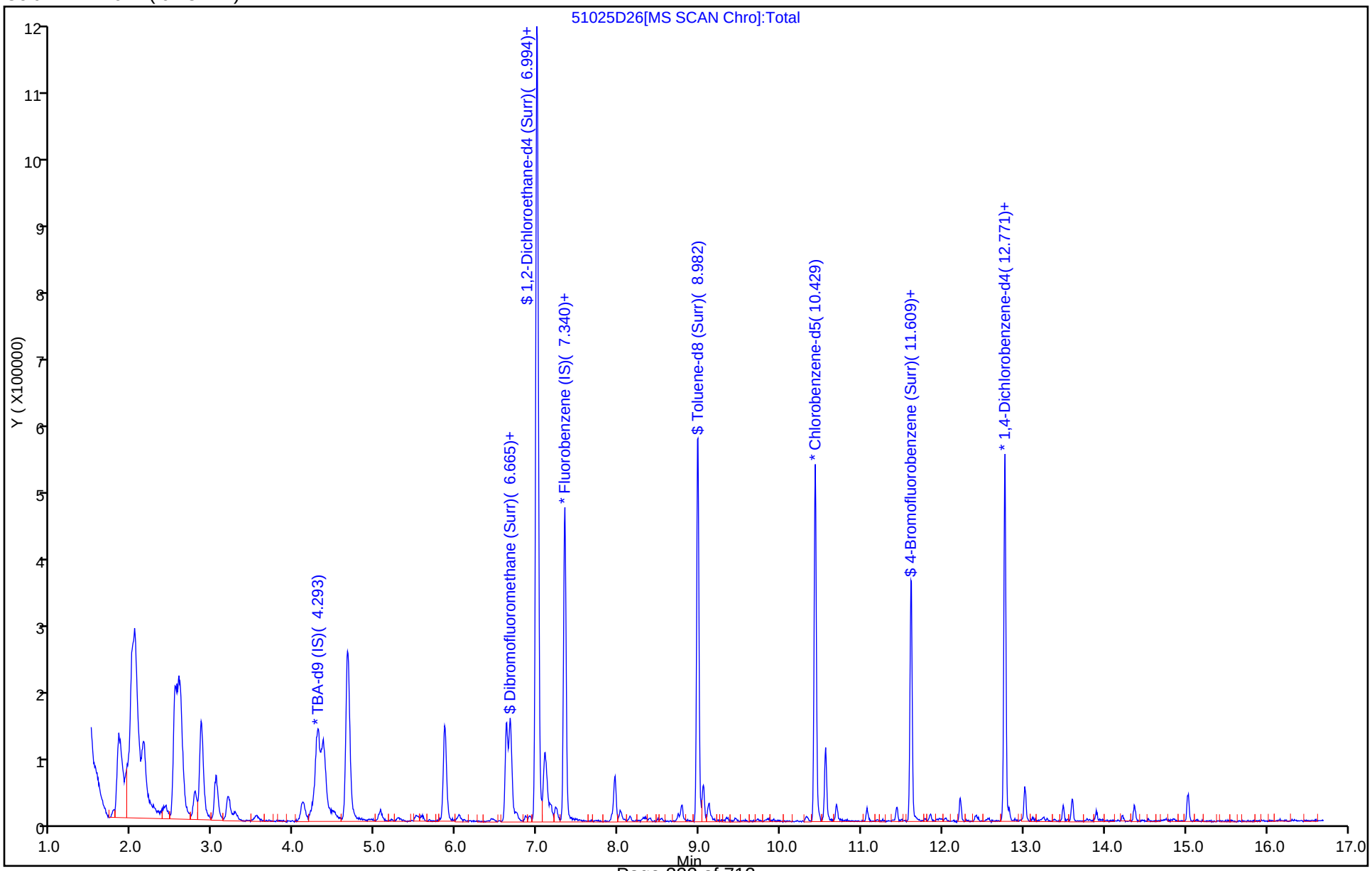
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 26-Oct-2017 20:41:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D26.D				
Injection Date:	26-Oct-2017 08:31:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-C-4	Lab Sample ID:	180-71580-4	Worklist Smp#:	26
Client ID:	HD-MW-77-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	25.0000	ALS Bottle#:	26
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D26.D
Lims ID: 180-71580-C-4
Client ID: HD-MW-77-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 08:31:30 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 25.0000
Sample Info: 180-0019038-026
Misc. Info.: 180-71580-C-4
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:36:54

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.4	96.77
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	52.7	105.30
$ 7 Toluene-d8 (Surr)	50.0	48.2	96.34
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.1	96.16

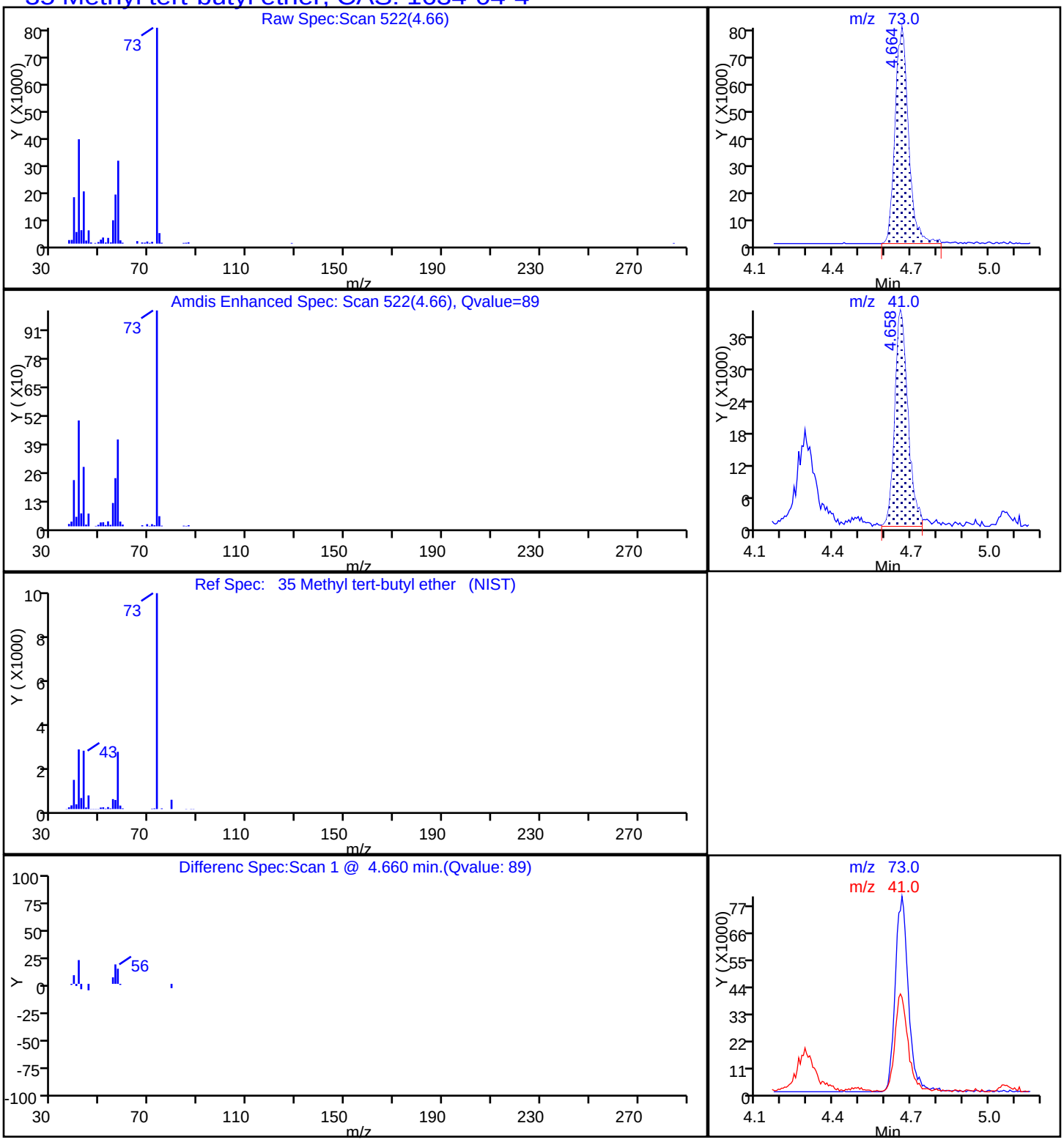
Report Date: 26-Oct-2017 20:41:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D26.D

Injection Date:	26-Oct-2017 08:31:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-C-4	Lab Sample ID:	180-71580-4		
Client ID:	HD-MW-77-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	25.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



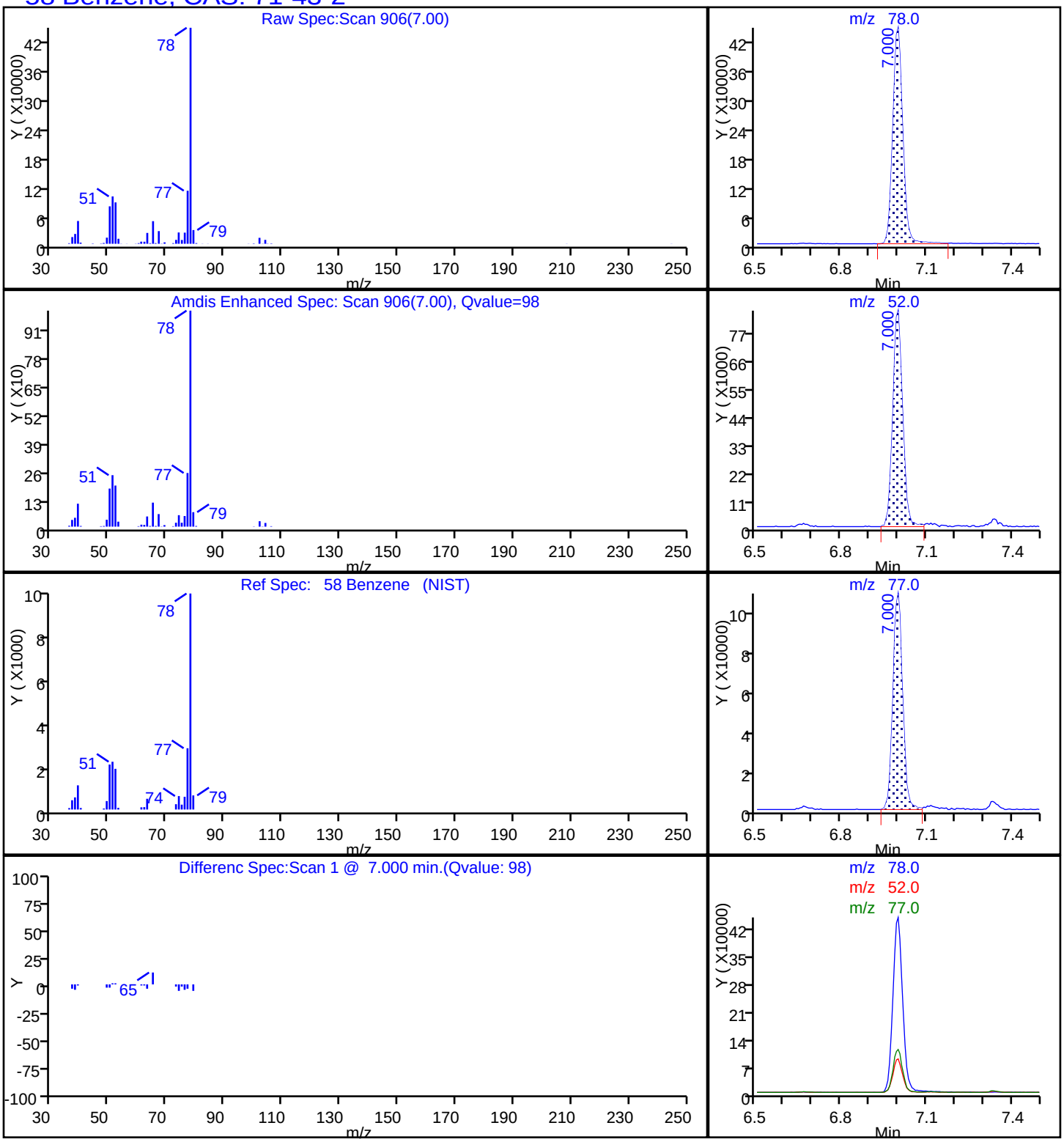
Report Date: 26-Oct-2017 20:41:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D26.D

Injection Date:	26-Oct-2017 08:31:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-C-4	Lab Sample ID:	180-71580-4		
Client ID:	HD-MW-77-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	25.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

58 Benzene, CAS: 71-43-2

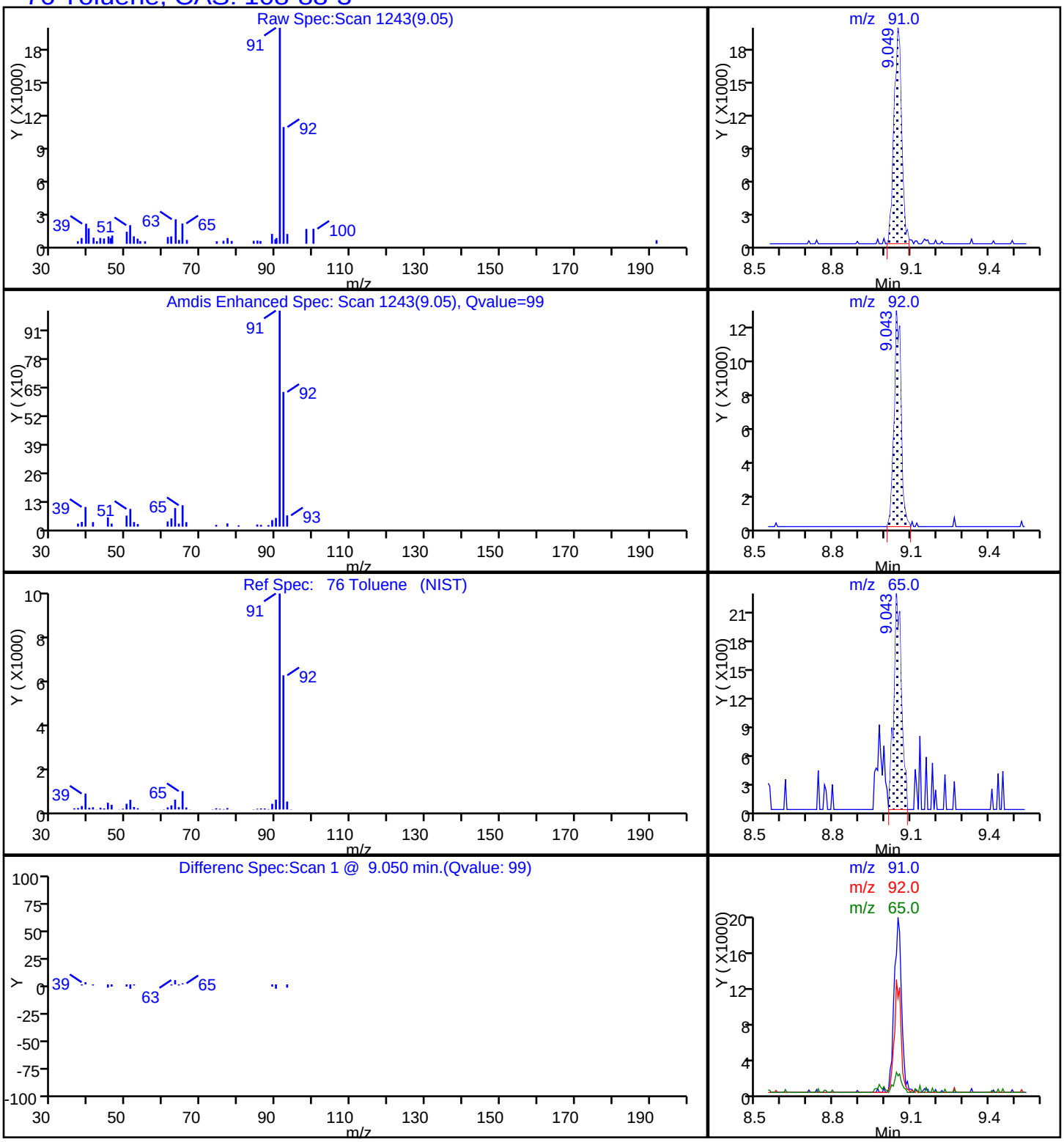


Report Date: 26-Oct-2017 20:41:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D26.D				
Injection Date:	26-Oct-2017 08:31:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-C-4	Lab Sample ID:	180-71580-4		
Client ID:	HD-MW-77-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	25.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

76 Toluene, CAS: 108-88-3

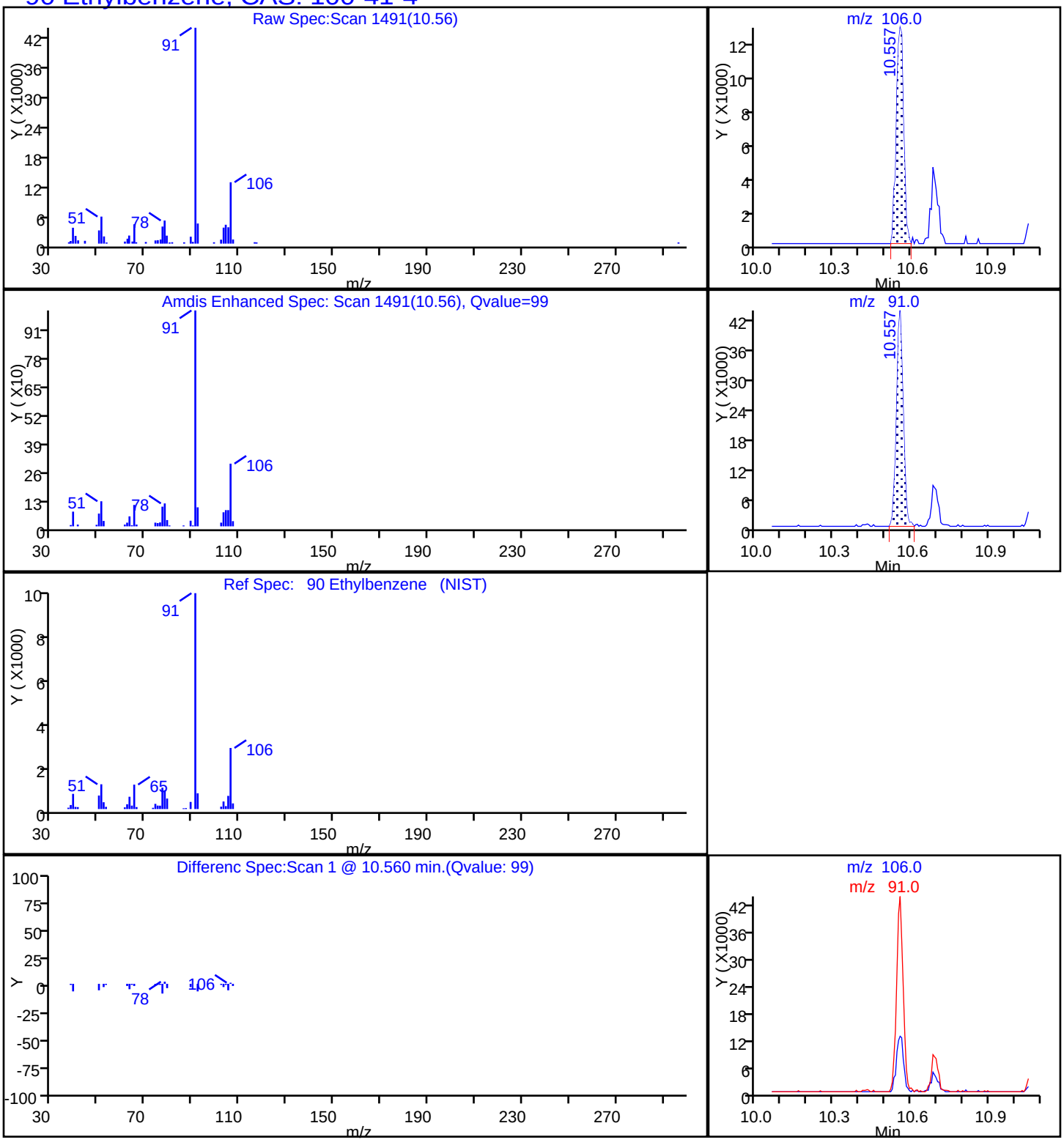


Report Date: 26-Oct-2017 20:41:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D26.D				
Injection Date:	26-Oct-2017 08:31:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-C-4	Lab Sample ID:	180-71580-4		
Client ID:	HD-MW-77-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	25.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

90 Ethylbenzene, CAS: 100-41-4



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

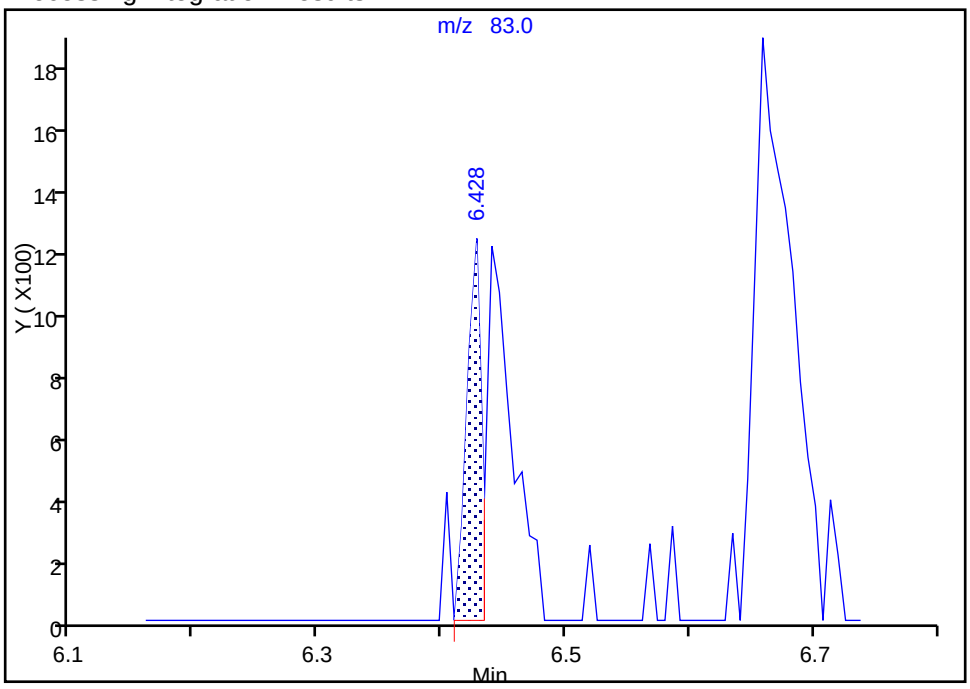
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D26.D				
Injection Date:	26-Oct-2017 08:31:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-C-4	Lab Sample ID:	180-71580-4		
Client ID:	HD-MW-77-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	25.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

Signal: 1

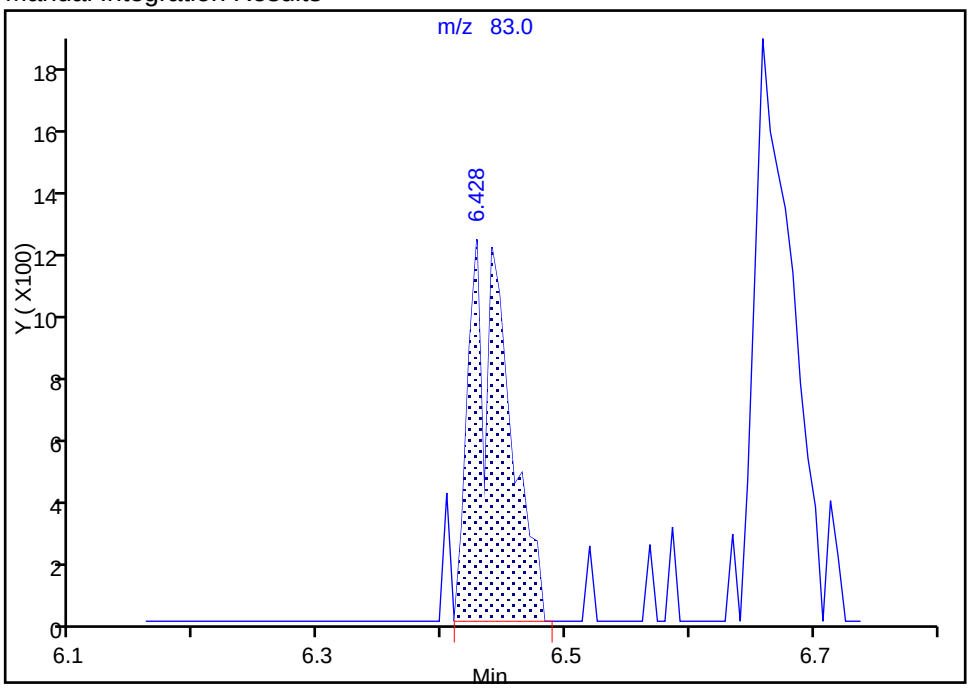
Processing Integration Results

RT: 6.43
Area: 995
Amount: 0.213124
Amount Units: ng



Manual Integration Results

RT: 6.43
Area: 2567
Amount: 0.549838
Amount Units: ng



Reviewer: bungardf, 26-Oct-2017 20:36:20

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-129-0/1-0 RA | Lab Sample ID: 180-71580-5 RA

Matrix: Water | Lab File ID: 51030D25.D

Analysis Method: 8260C | Date Collected: 10/18/2017 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2017 08:14

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.: 227508 | 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 ^c	1.0	0.89
75-00-3	Chloroethane	1.0	U	1.0	0.90
75-35-4	1,1-Dichloroethene	2.4		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	2.9		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	310	E	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	590	E	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	170	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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-129-0/1-0 RA | Lab Sample ID: 180-71580-5 RA

Matrix: Water | Lab File ID: 51030D25.D

Analysis Method: 8260C | Date Collected: 10/18/2017 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2017 08:14

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.: 227508 | 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)	106		65-121
2037-26-5	Toluene-d8 (Surr)	95		73-120
460-00-4	4-Bromofluorobenzene (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D25.D
Lims ID: 180-71580-A-5
Client ID: HD-MW-129-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2017 08:14:30 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019107-025
Misc. Info.: 180-71580-A-5
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2017 08:37:58 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: XAWRK010

First Level Reviewer: gordonk Date: 31-Oct-2017 08:37:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.361	4.390	-0.029	0	203830	1000.0	
* 2 Fluorobenzene (IS)	96	7.341	7.340	0.001	99	520436	50.0	
* 3 Chlorobenzene-d5	119	10.430	10.429	0.001	87	127188	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.772	12.771	0.001	96	173690	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.623	6.616	0.007	92	126740	50.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.994	6.987	0.007	0	162532	53.2	
$ 7 Toluene-d8 (Surr)	98	8.983	8.976	0.007	94	479681	47.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.610	11.615	-0.005	85	163319	44.7	
12 Chloromethane	50		1.885				ND	
13 Vinyl chloride	62	2.026	2.019	0.007	40	8526	2.76	
15 Bromomethane	94		2.341				ND	
16 Chloroethane	64		2.426				ND	
22 1,1-Dichloroethene	96	3.437	3.411	0.026	95	30433	11.9	
24 Acetone	43	3.546	3.539	0.007	77	8238	6.05	
26 Carbon disulfide	76		3.697				ND	
31 Methylene Chloride	84		4.226				ND	
33 Acrylonitrile	53		4.615				ND	
34 trans-1,2-Dichloroethene	96	4.659	4.640	0.019	97	41756	14.4	
35 Methyl tert-butyl ether	73		4.664				ND	
37 1,1-Dichloroethane	63		5.272				ND	
45 cis-1,2-Dichloroethene	96	6.015	6.008	0.007	76	5173194	1558.0	E
46 2-Butanone (MEK)	43		6.026				ND	
49 Chlorobromomethane	128		6.294				ND	
52 Chloroform	83	6.441	6.440	0.001	42	5920	1.17	
53 1,1,1-Trichloroethane	97		6.598				ND	
56 Carbon tetrachloride	117		6.762				ND	
58 Benzene	78		6.993				ND	
59 1,2-Dichloroethane	62		7.072				ND	
64 Trichloroethene	130	7.730	7.729	0.001	86	9347179	2935.2	E
67 1,2-Dichloropropane	63		7.997				ND	
70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.276				ND	
74 cis-1,3-Dichloropropene	75		8.720				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872				ND	
76 Toluene	91		9.049				ND	
77 trans-1,3-Dichloropropene	75		9.298				ND	
79 1,1,2-Trichloroethane	97	9.488	9.487	0.001	14	1025	0.3880	
80 Tetrachloroethene	164	9.561	9.560	0.001	91	2102882	869.5	E
82 2-Hexanone	43		9.706				ND	
84 Chlorodibromomethane	129		9.864				ND	
85 Ethylene Dibromide	107		9.973				ND	
87 Chlorobenzene	112		10.460				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106		10.563				ND	
91 m-Xylene & p-Xylene	106		10.691				ND	
92 o-Xylene	106		11.074				ND	
93 Styrene	104		11.092				ND	
94 Bromoform	173		11.275				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

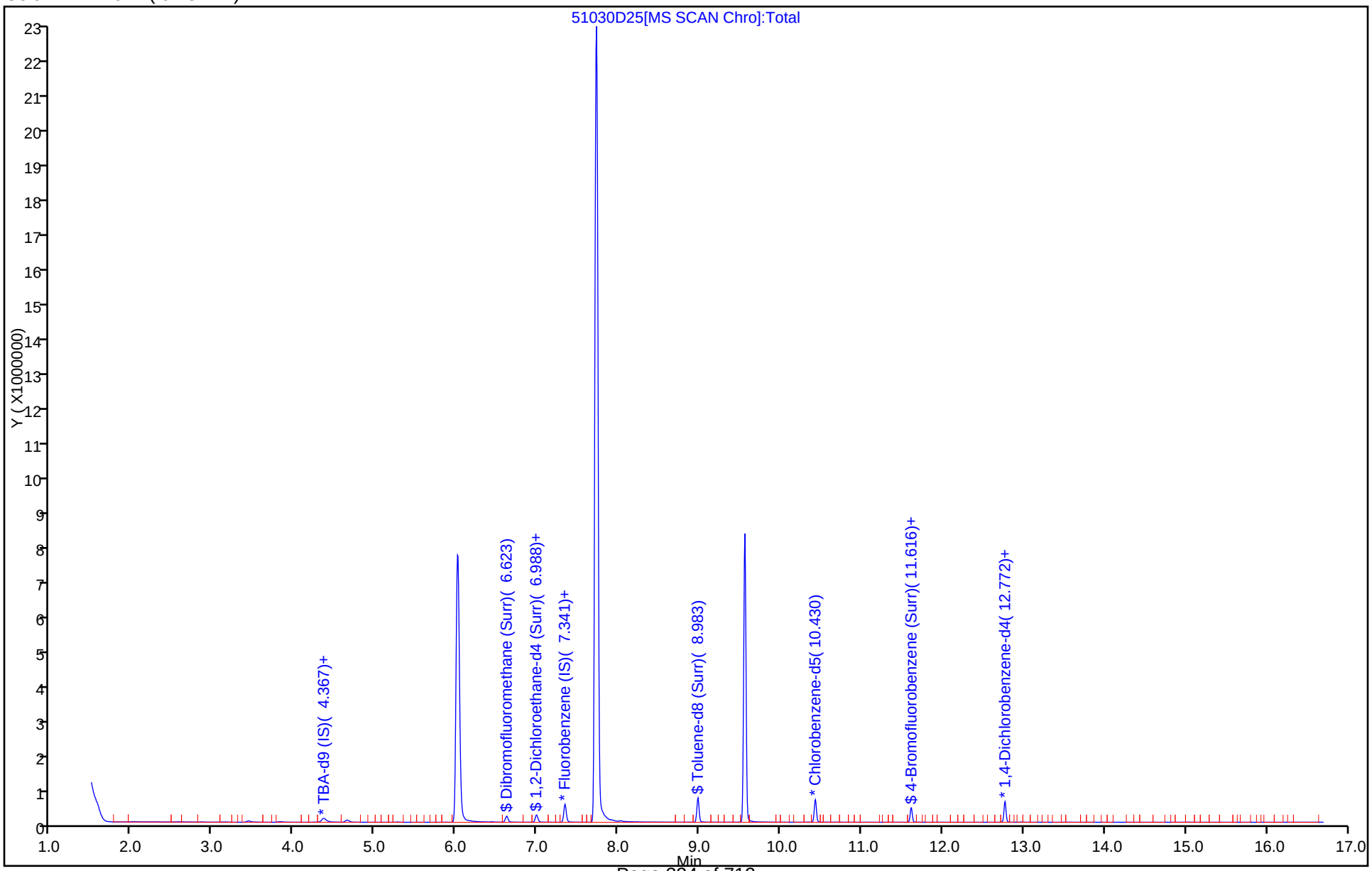
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 31-Oct-2017 08:37:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D25.D				
Injection Date:	31-Oct-2017 08:14:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-A-5	Lab Sample ID:	180-71580-5	Worklist Smp#:	25
Client ID:	HD-MW-129-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D25.D
Lims ID: 180-71580-A-5
Client ID: HD-MW-129-0/1-0
Sample Type: Client
Inject. Date: 31-Oct-2017 08:14:30 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019107-025
Misc. Info.: 180-71580-A-5
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2017 08:37:58 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: XAWRK010

First Level Reviewer: gordonk Date: 31-Oct-2017 08:37:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.6	101.23
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	53.2	106.43
$ 7 Toluene-d8 (Surr)	50.0	47.4	94.77
$ 8 4-Bromofluorobenzene (Surr)	50.0	44.7	89.35

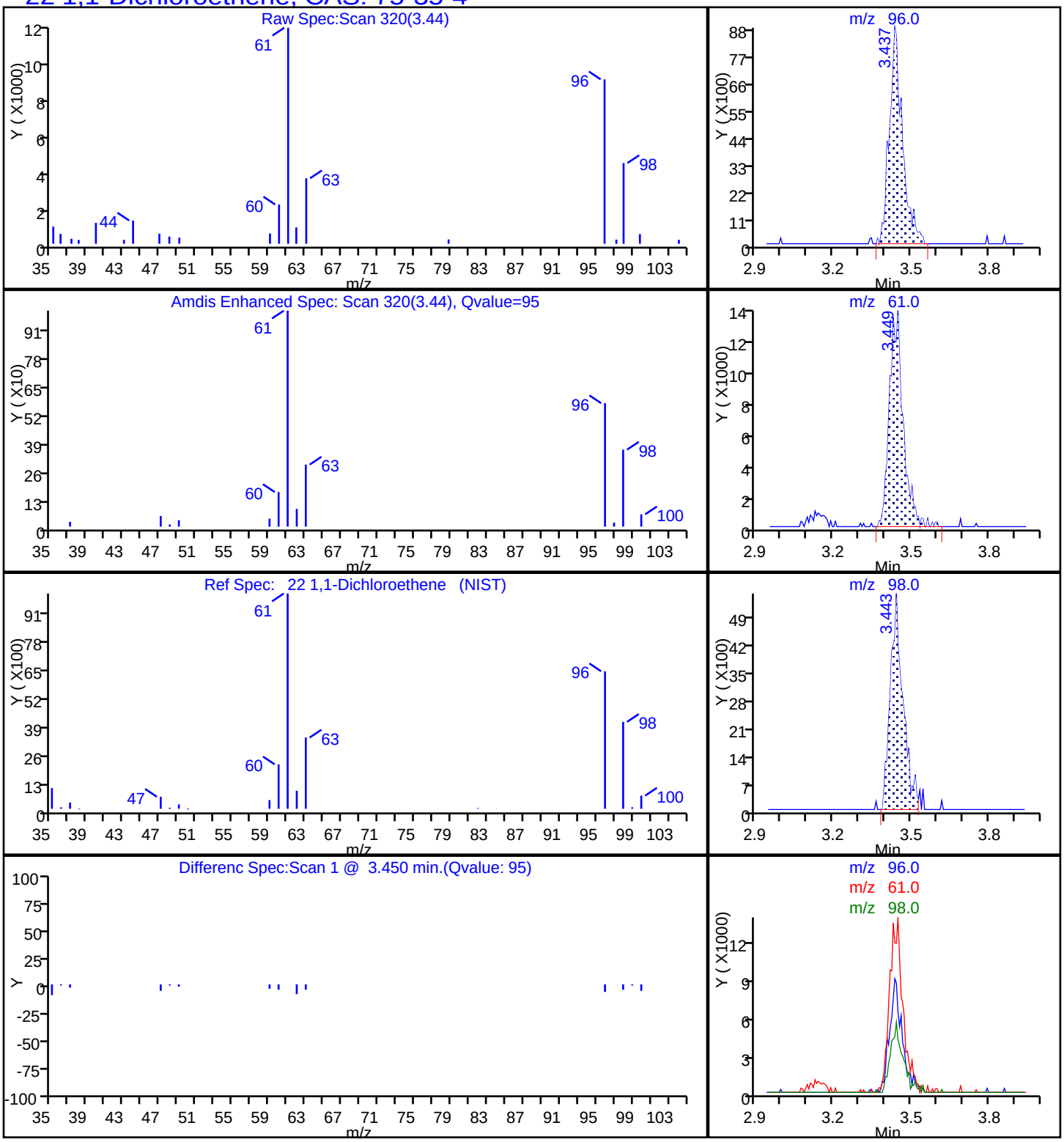
Report Date: 31-Oct-2017 08:37:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D25.D

Injection Date:	31-Oct-2017 08:14:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-5	Lab Sample ID:	180-71580-5		
Client ID:	HD-MW-129-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
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		

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

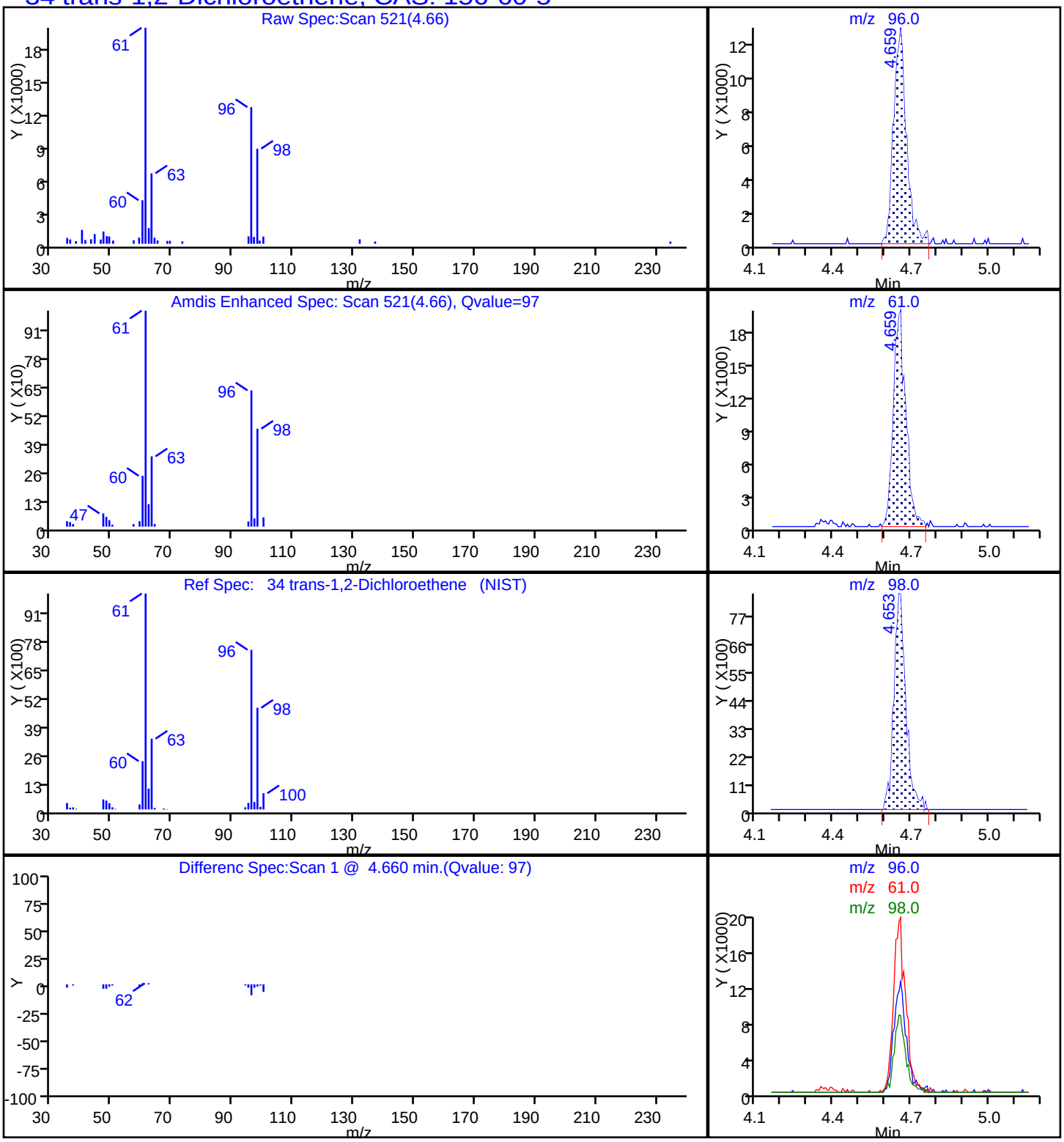


Report Date: 31-Oct-2017 08:37:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D25.D				
Injection Date:	31-Oct-2017 08:14:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-5	Lab Sample ID:	180-71580-5		
Client ID:	HD-MW-129-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

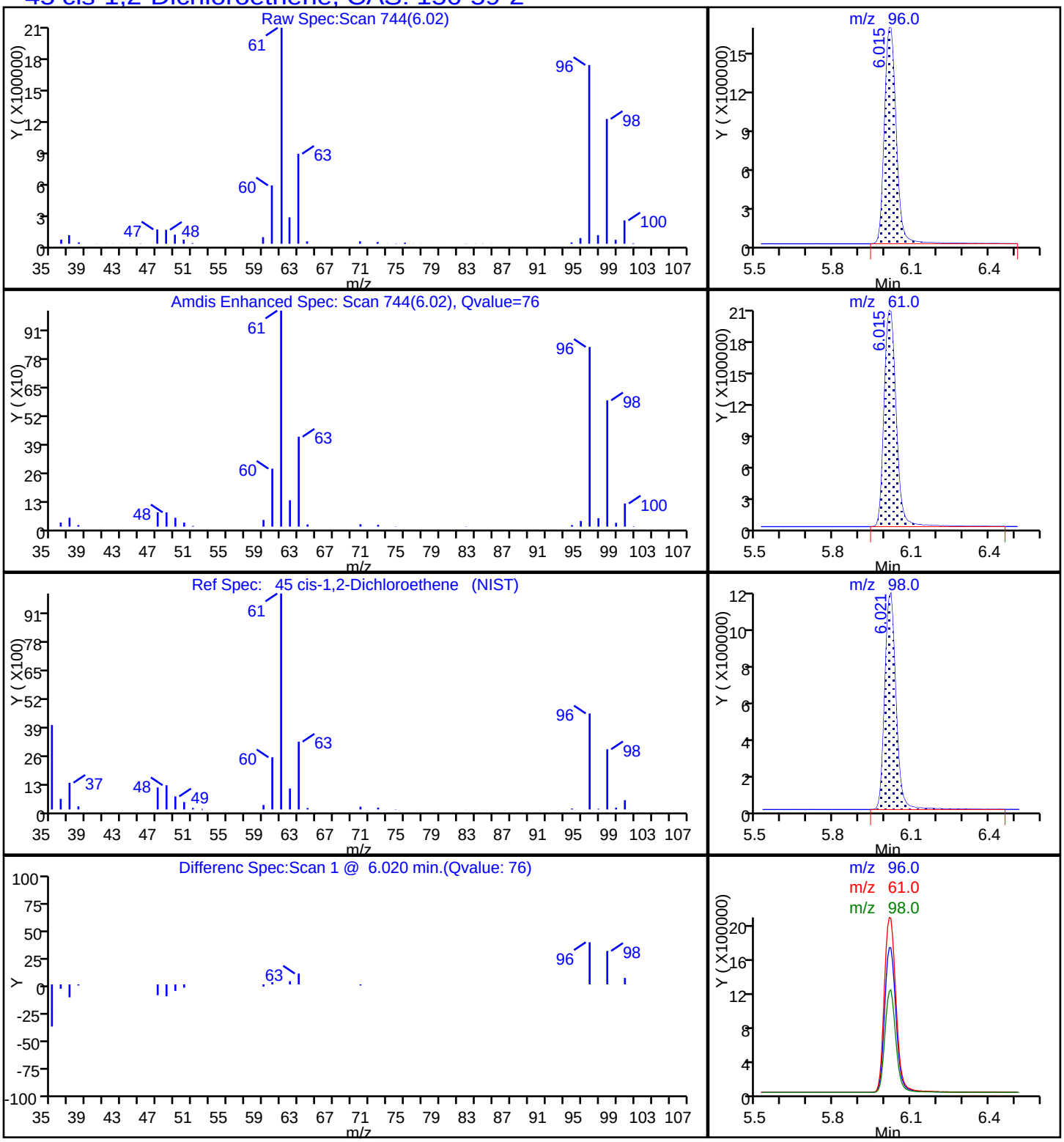


Report Date: 31-Oct-2017 08:37:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D25.D				
Injection Date:	31-Oct-2017 08:14:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-5	Lab Sample ID:	180-71580-5		
Client ID:	HD-MW-129-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
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

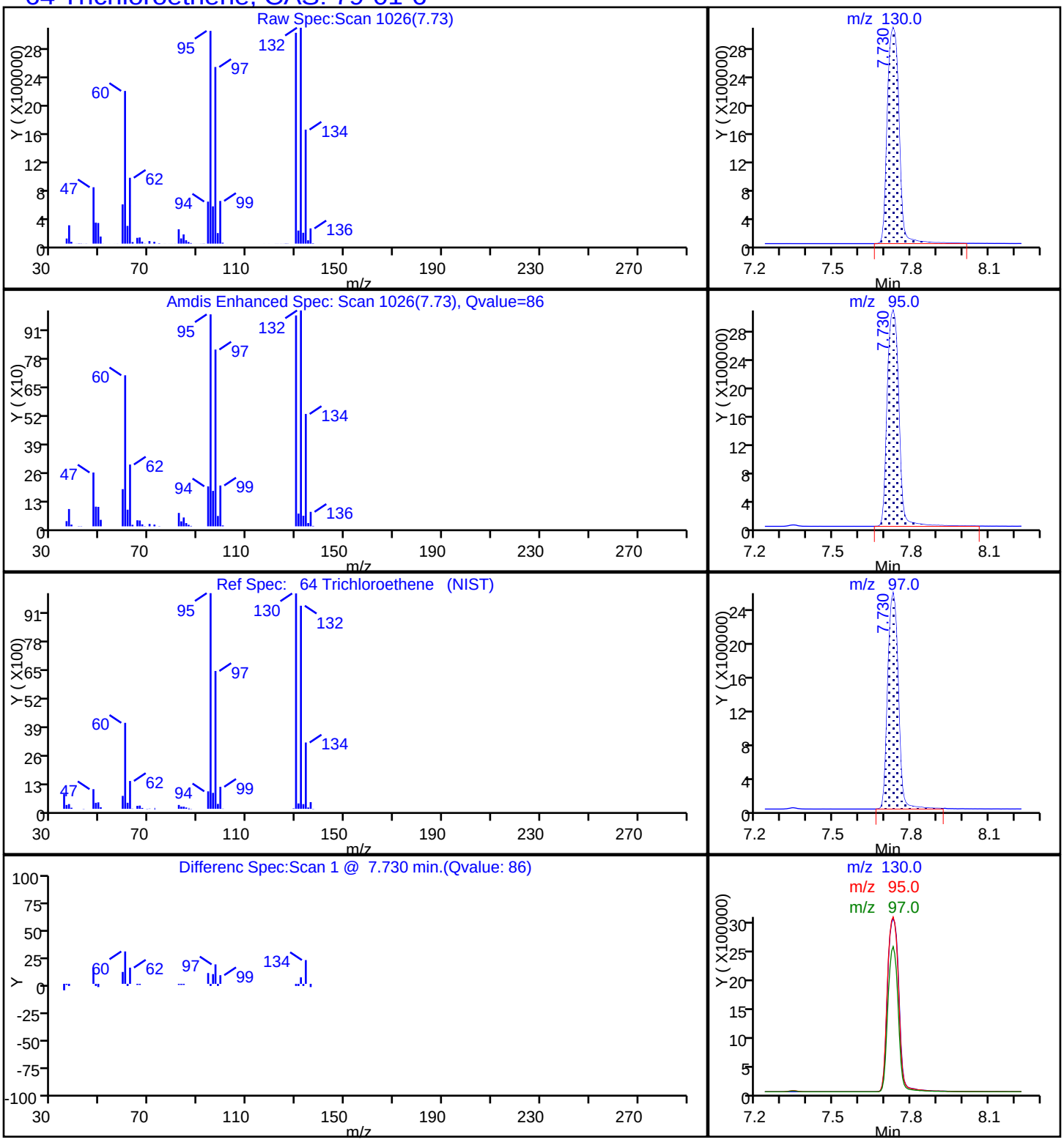


Report Date: 31-Oct-2017 08:37:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D25.D				
Injection Date:	31-Oct-2017 08:14:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-5	Lab Sample ID:	180-71580-5		
Client ID:	HD-MW-129-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
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



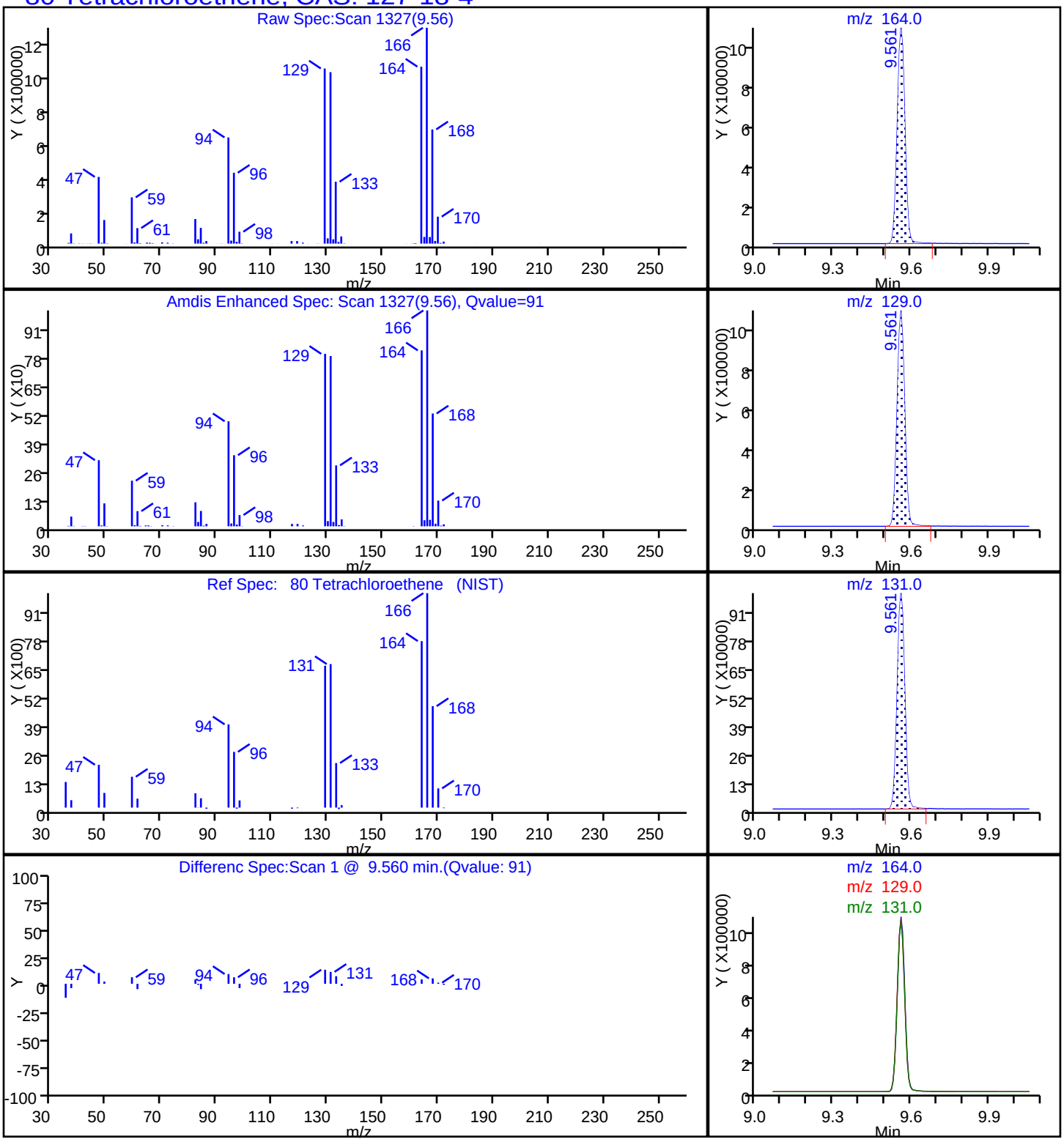
Report Date: 31-Oct-2017 08:38:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D25.D

Injection Date:	31-Oct-2017 08:14:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-5	Lab Sample ID:	180-71580-5		
Client ID:	HD-MW-129-0/1-0				
Operator ID:	034635	ALS Bottle#:	25	Worklist Smp#:	25
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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-129-0/1-0 | Lab Sample ID: 180-71580-5

Matrix: Water | Lab File ID: 51026D26.D

Analysis Method: 8260C | Date Collected: 10/18/2017 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 10/27/2017 07:59

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.: 227152 | 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	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	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	400		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	50	29
79-01-6	Trichloroethene	780		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 ^c	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	99		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
100-42-5	Styrene	50	U	50	24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-129-0/1-0 | Lab Sample ID: 180-71580-5

Matrix: Water | Lab File ID: 51026D26.D

Analysis Method: 8260C | Date Collected: 10/18/2017 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 10/27/2017 07:59

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.: 227152 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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)	119		65-121
2037-26-5	Toluene-d8 (Surr)	92		73-120
460-00-4	4-Bromofluorobenzene (Surr)	83		80-120
1868-53-7	Dibromofluoromethane (Surr)	115		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D26.D
Lims ID: 180-71580-B-5
Client ID: HD-MW-129-0/1-0
Sample Type: Client
Inject. Date: 27-Oct-2017 07:59:30 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 50.0000
Sample Info: 180-0019053-026
Misc. Info.: 180-71580-B-5
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Oct-2017 21:14:03 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: XAWRK007

First Level Reviewer: bungardf Date: 29-Oct-2017 21:11:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.359	4.379	-0.020	0	152155	1000.0	
* 2 Fluorobenzene (IS)	96	7.339	7.341	-0.001	98	400770	50.0	
* 3 Chlorobenzene-d5	119	10.429	10.430	-0.001	86	100483	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.770	12.771	-0.001	96	134448	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.622	6.617	0.005	93	110890	57.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.993	6.988	0.005	0	139850	59.5	
$ 7 Toluene-d8 (Surr)	98	8.981	8.982	-0.001	94	369102	46.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.614	11.610	0.004	85	119810	41.5	
12 Chloromethane	50		1.886				ND	
13 Vinyl chloride	62		2.025				ND	
15 Bromomethane	94		2.336				ND	
16 Chloroethane	64		2.439				ND	
22 1,1-Dichloroethene	96		3.412				ND	
24 Acetone	43		3.534				ND	
26 Carbon disulfide	76		3.710				ND	
31 Methylene Chloride	84		4.227				ND	
33 Acrylonitrile	53		4.616				ND	
34 trans-1,2-Dichloroethene	96		4.640				ND	
35 Methyl tert-butyl ether	73		4.665				ND	
37 1,1-Dichloroethane	63		5.273				ND	
45 cis-1,2-Dichloroethene	96	6.014	6.009	0.005	80	102126	39.9	
46 2-Butanone (MEK)	43		6.021				ND	
49 Chlorobromomethane	128		6.295				ND	
52 Chloroform	83	6.451	6.440	0.011	18	2476	0.6379	M
53 1,1,1-Trichloroethane	97		6.593				ND	
56 Carbon tetrachloride	117		6.769				ND	
58 Benzene	78		6.994				ND	
59 1,2-Dichloroethane	62		7.073				ND	
64 Trichloroethene	130	7.722	7.724	-0.002	97	192094	78.3	
67 1,2-Dichloropropane	63		7.997				ND	
70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.277				ND	
74 cis-1,3-Dichloropropene	75		8.721				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.873				ND	
76 Toluene	91		9.049				ND	
77 trans-1,3-Dichloropropene	75		9.293				ND	
79 1,1,2-Trichloroethane	97		9.487				ND	
80 Tetrachloroethene	164	9.559	9.560	-0.001	95	18958	9.92	
82 2-Hexanone	43		9.706				ND	
84 Chlorodibromomethane	129		9.858				ND	
85 Ethylene Dibromide	107		9.968				ND	
87 Chlorobenzene	112		10.460				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106		10.558				ND	
91 m-Xylene & p-Xylene	106		10.691				ND	
92 o-Xylene	106		11.068				ND	
93 Styrene	104		11.093				ND	
94 Bromoform	173		11.269				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				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

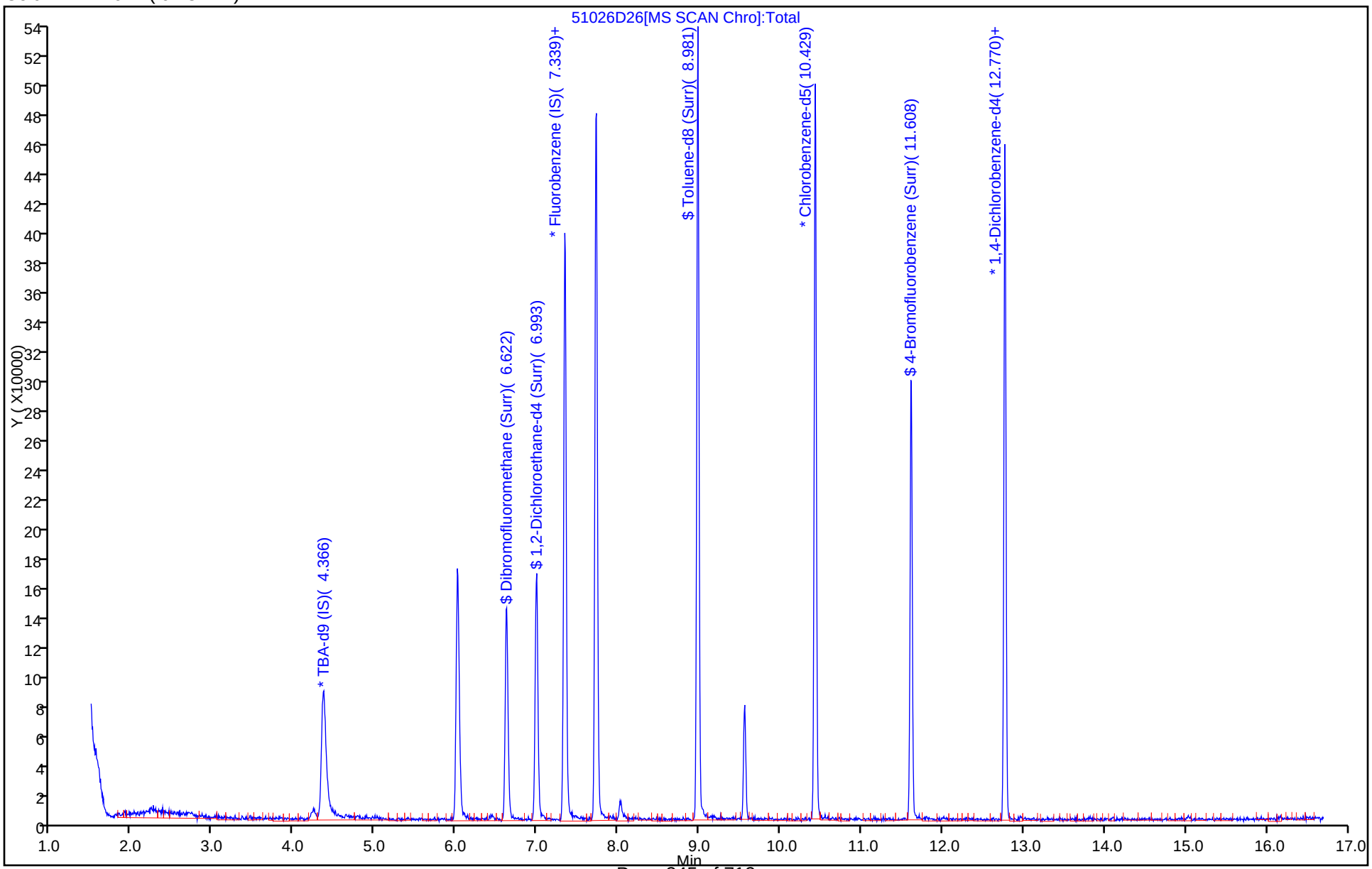
Report Date: 29-Oct-2017 21:14:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D26.D

Injection Date:	27-Oct-2017 07:59:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-B-5	Lab Sample ID:	180-71580-5	Worklist Smp#:	26
Client ID:	HD-MW-129-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	50.0000	ALS Bottle#:	26
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D26.D				
Lims ID:	180-71580-B-5				
Client ID:	HD-MW-129-0/1-0				
Sample Type:	Client				
Inject. Date:	27-Oct-2017 07:59:30	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Sample Info:	180-0019053-026				
Misc. Info.:	180-71580-B-5				
Operator ID:	034635	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	29-Oct-2017 21:14:03	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:	XAWRK007				

First Level Reviewer: bungardf Date: 29-Oct-2017 21:11:44

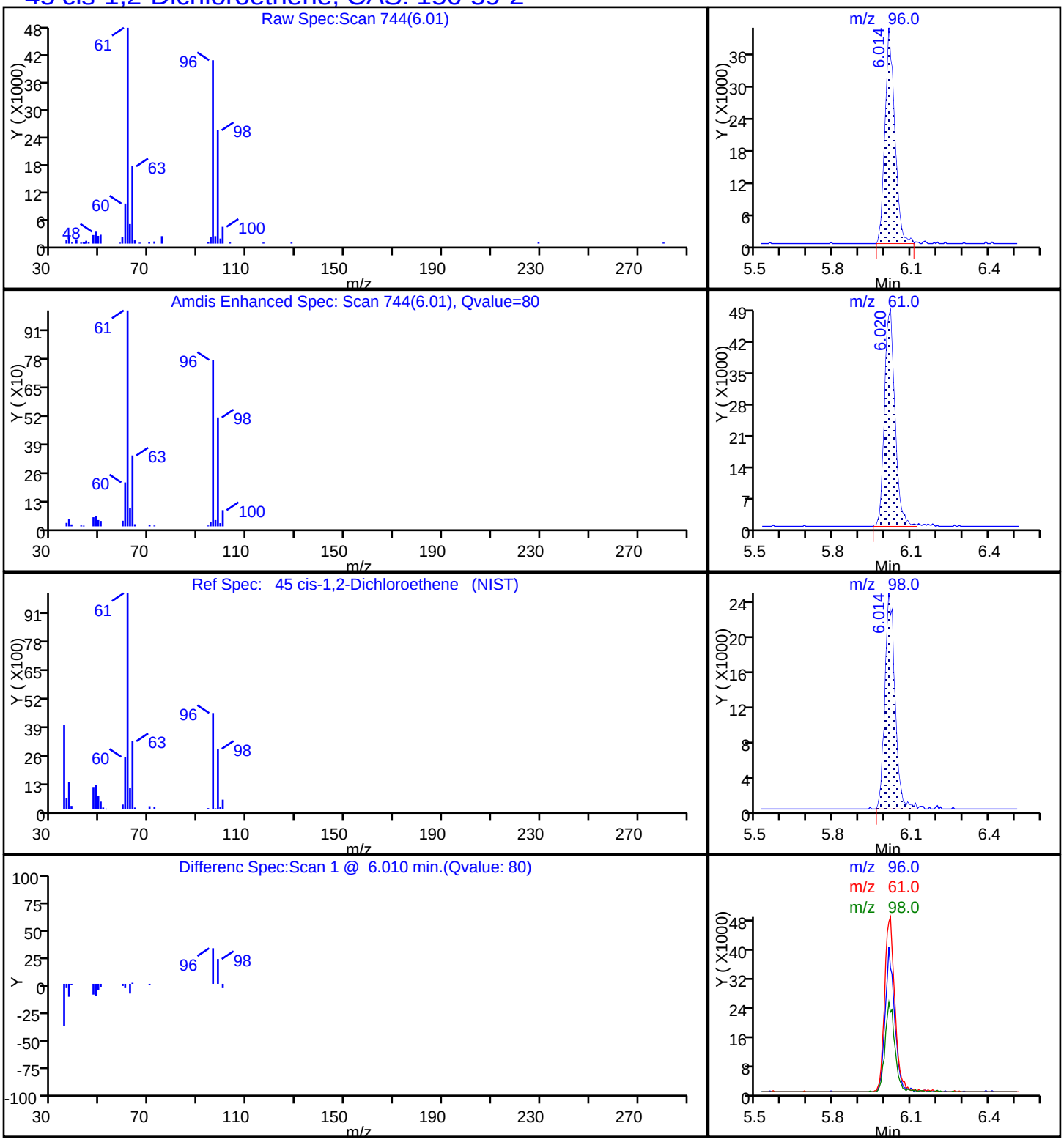
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	57.5	115.01
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	59.5	118.93
$ 7 Toluene-d8 (Surr)	50.0	46.2	92.31
$ 8 4-Bromofluorobenzene (Surr)	50.0	41.5	82.96

Report Date: 29-Oct-2017 21:14:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D26.D				
Injection Date:	27-Oct-2017 07:59:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-5	Lab Sample ID:	180-71580-5		
Client ID:	HD-MW-129-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



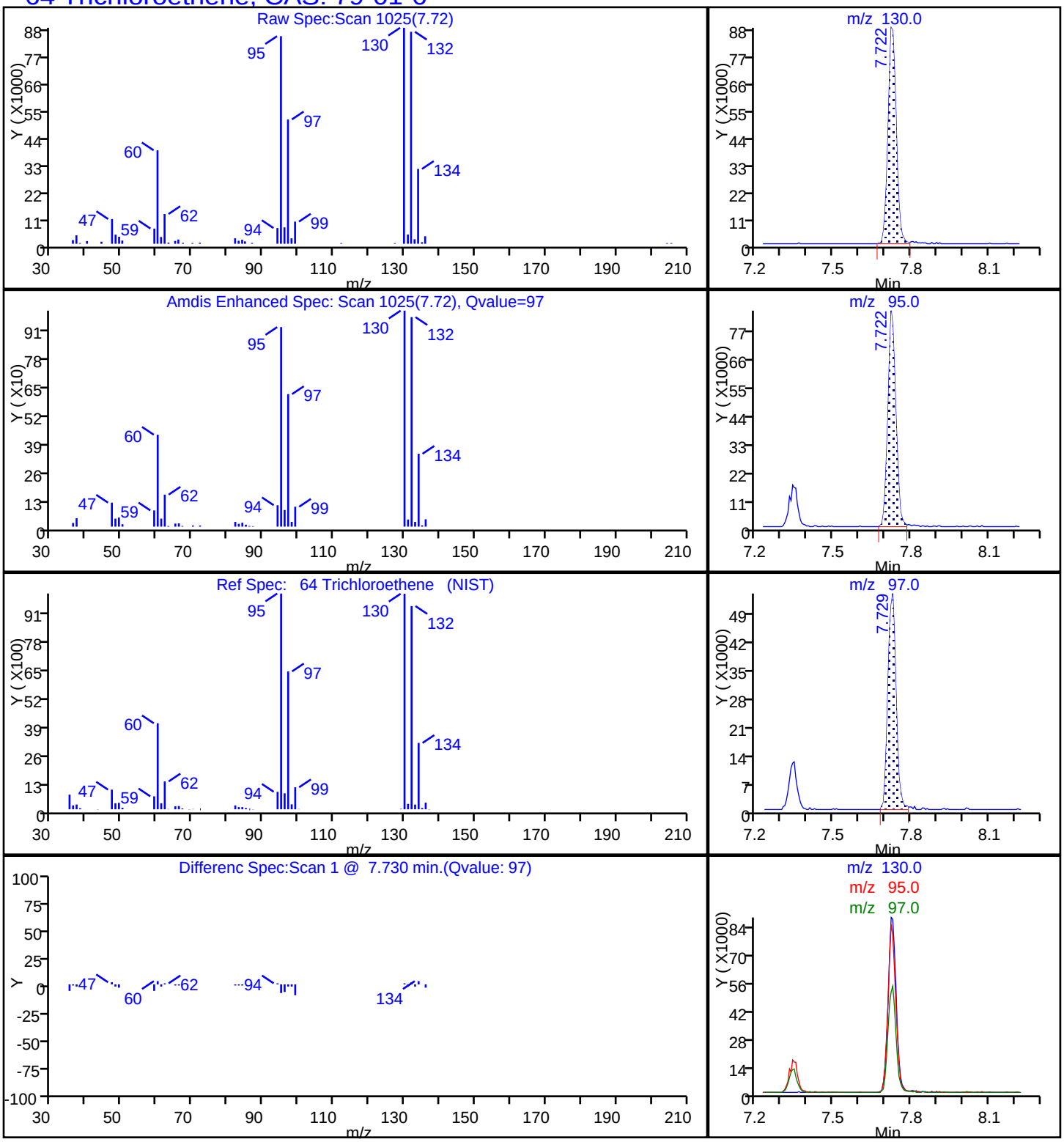
Report Date: 29-Oct-2017 21:14:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D26.D

Injection Date:	27-Oct-2017 07:59:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-5	Lab Sample ID:	180-71580-5		
Client ID:	HD-MW-129-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



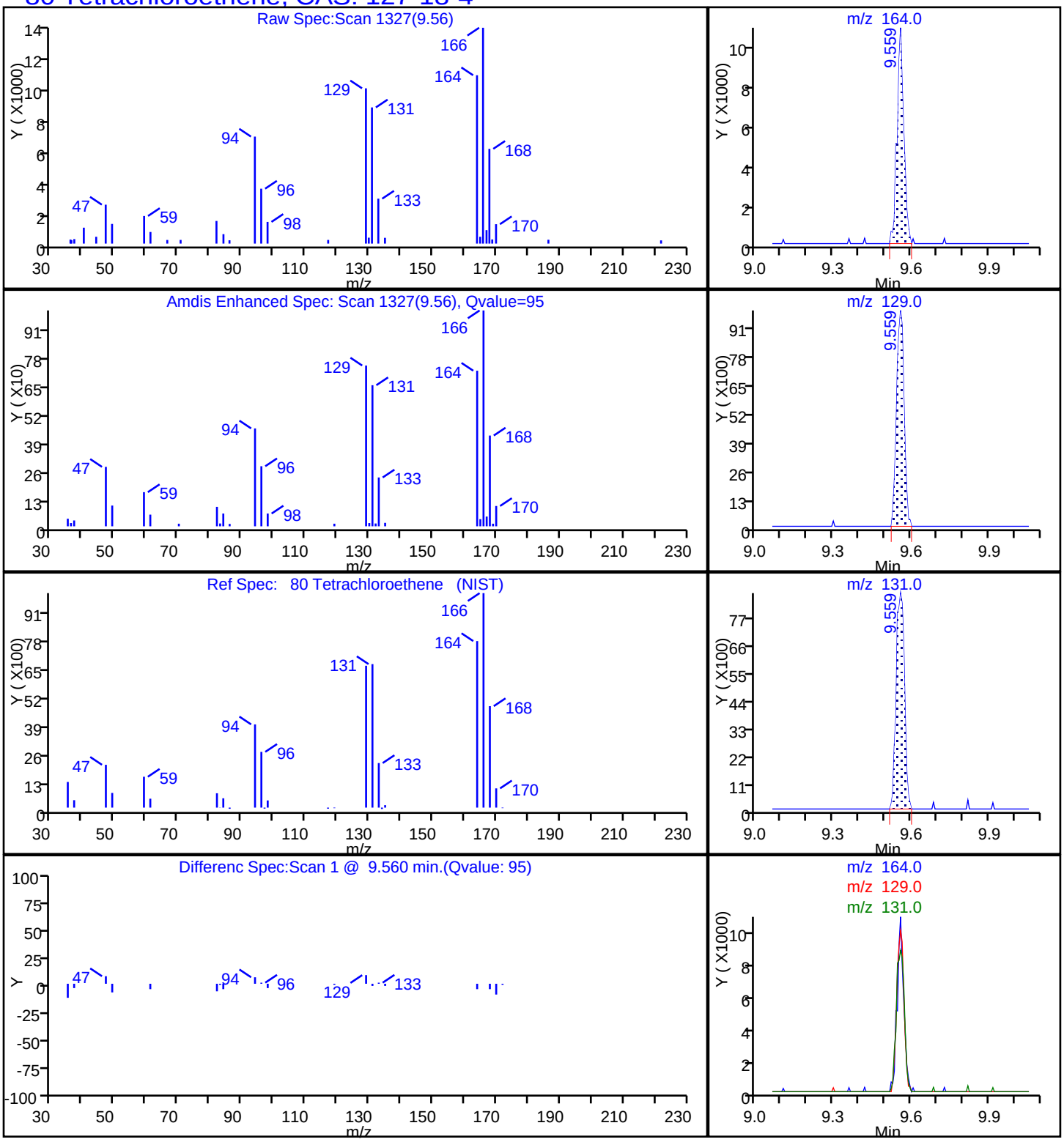
Report Date: 29-Oct-2017 21:14:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D26.D

Injection Date:	27-Oct-2017 07:59:30	Instrument ID:	CHHP5
Lims ID:	180-71580-B-5	Lab Sample ID:	180-71580-5
Client ID:	HD-MW-129-0/1-0		
Operator ID:	034635	ALS Bottle#:	26 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	50.0000
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

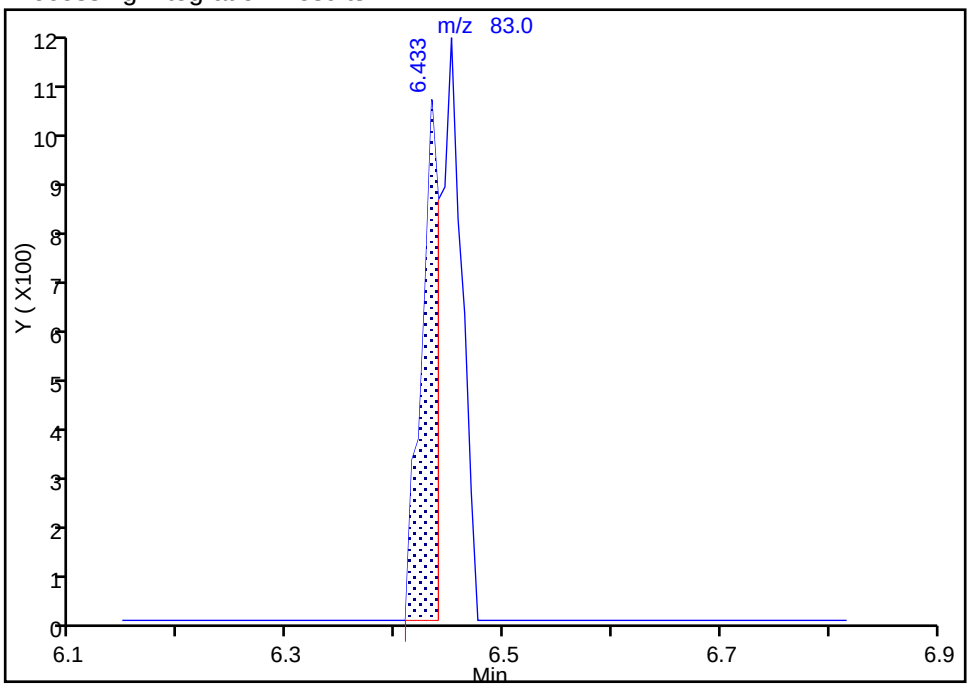
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D26.D				
Injection Date:	27-Oct-2017 07:59:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-5	Lab Sample ID:	180-71580-5		
Client ID:	HD-MW-129-0/1-0				
Operator ID:	034635	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

Signal: 1

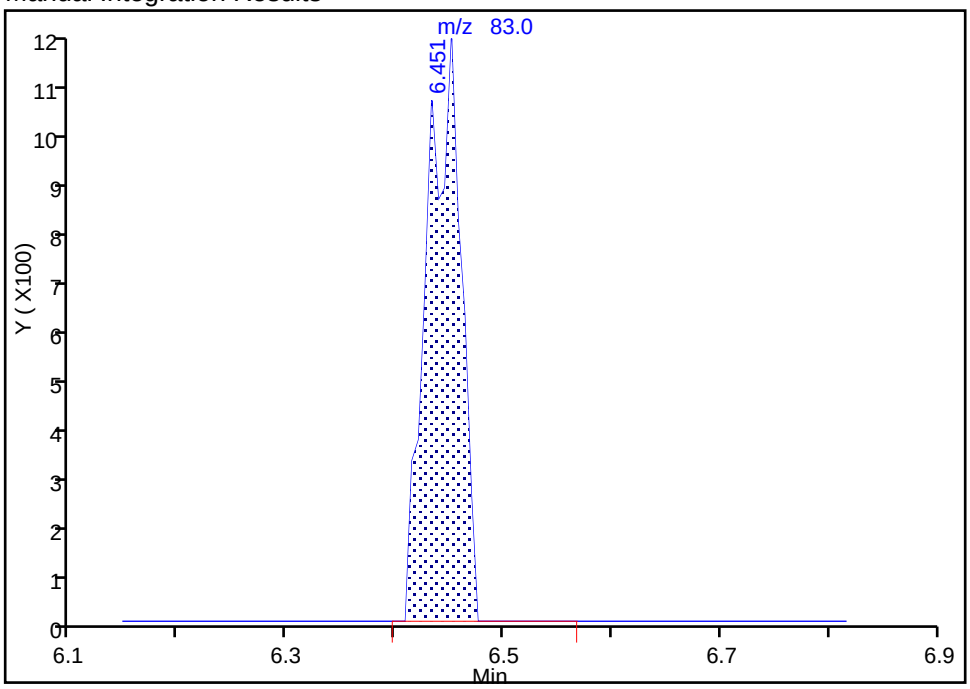
Processing Integration Results

RT: 6.43
Area: 1154
Amount: 0.297289
Amount Units: ng



Manual Integration Results

RT: 6.45
Area: 2476
Amount: 0.637858
Amount Units: ng



Reviewer: bungardf, 29-Oct-2017 21:11:24

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-142S-0/1-0 | Lab Sample ID: 180-71580-6

Matrix: Water | Lab File ID: 51025D18.D

Analysis Method: 8260C | Date Collected: 10/18/2017 14:42

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 05:20

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.: 227010 | 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 ^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	2.4		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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-142S-0/1-0 | Lab Sample ID: 180-71580-6

Matrix: Water | Lab File ID: 51025D18.D

Analysis Method: 8260C | Date Collected: 10/18/2017 14:42

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 05:20

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.: 227010 | 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)	119		65-121
2037-26-5	Toluene-d8 (Surr)	91		73-120
460-00-4	4-Bromofluorobenzene (Surr)	85		80-120
1868-53-7	Dibromofluoromethane (Surr)	112		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D18.D
Lims ID: 180-71580-C-6
Client ID: HD-MW-142S-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 05:20:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-018
Misc. Info.: 180-71580-C-6
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:23:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.366	4.384	-0.018	0	166289	1000.0	
* 2 Fluorobenzene (IS)	96	7.340	7.340	0.000	98	402114	50.0	
* 3 Chlorobenzene-d5	119	10.429	10.429	0.000	86	101994	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.770	12.770	0.000	96	145655	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.622	6.610	0.012	92	107918	55.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.987	6.987	0.000	0	140639	59.6	
$ 7 Toluene-d8 (Surr)	98	8.982	8.982	0.000	94	367862	45.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.615	11.609	0.006	85	124089	42.3	
12 Chloromethane	50		1.891				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.335				ND	
16 Chloroethane	64		2.426				ND	
22 1,1-Dichloroethene	96		3.411				ND	
24 Acetone	43	3.545	3.539	0.006	85	8181	7.78	
26 Carbon disulfide	76		3.703				ND	
31 Methylene Chloride	84		4.226				ND	
33 Acrylonitrile	53		4.609				ND	
34 trans-1,2-Dichloroethene	96		4.640				ND	
35 Methyl tert-butyl ether	73		4.664				ND	
37 1,1-Dichloroethane	63		5.266				ND	
45 cis-1,2-Dichloroethene	96	6.014	6.008	0.006	81	30345	11.8	
46 2-Butanone (MEK)	43		6.026				ND	
49 Chlorobromomethane	128		6.288				ND	
52 Chloroform	83		6.434				ND	
53 1,1,1-Trichloroethane	97		6.592				ND	
56 Carbon tetrachloride	117		6.762				ND	
58 Benzene	78		6.993				ND	
59 1,2-Dichloroethane	62		7.072				ND	
64 Trichloroethene	130		7.723				ND	
67 1,2-Dichloropropane	63		7.997				ND	
70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.276				ND	
74 cis-1,3-Dichloropropene	75		8.720				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872				ND	
76 Toluene	91		9.049				ND	
77 trans-1,3-Dichloropropene	75		9.298				ND	
79 1,1,2-Trichloroethane	97		9.486				ND	
80 Tetrachloroethene	164		9.559				ND	
82 2-Hexanone	43		9.705				ND	
84 Chlorodibromomethane	129		9.857				ND	
85 Ethylene Dibromide	107		9.967				ND	
87 Chlorobenzene	112		10.459				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106		10.557				ND	
91 m-Xylene & p-Xylene	106		10.684				ND	
92 o-Xylene	106		11.068				ND	
93 Styrene	104		11.092				ND	
94 Bromoform	173		11.274				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

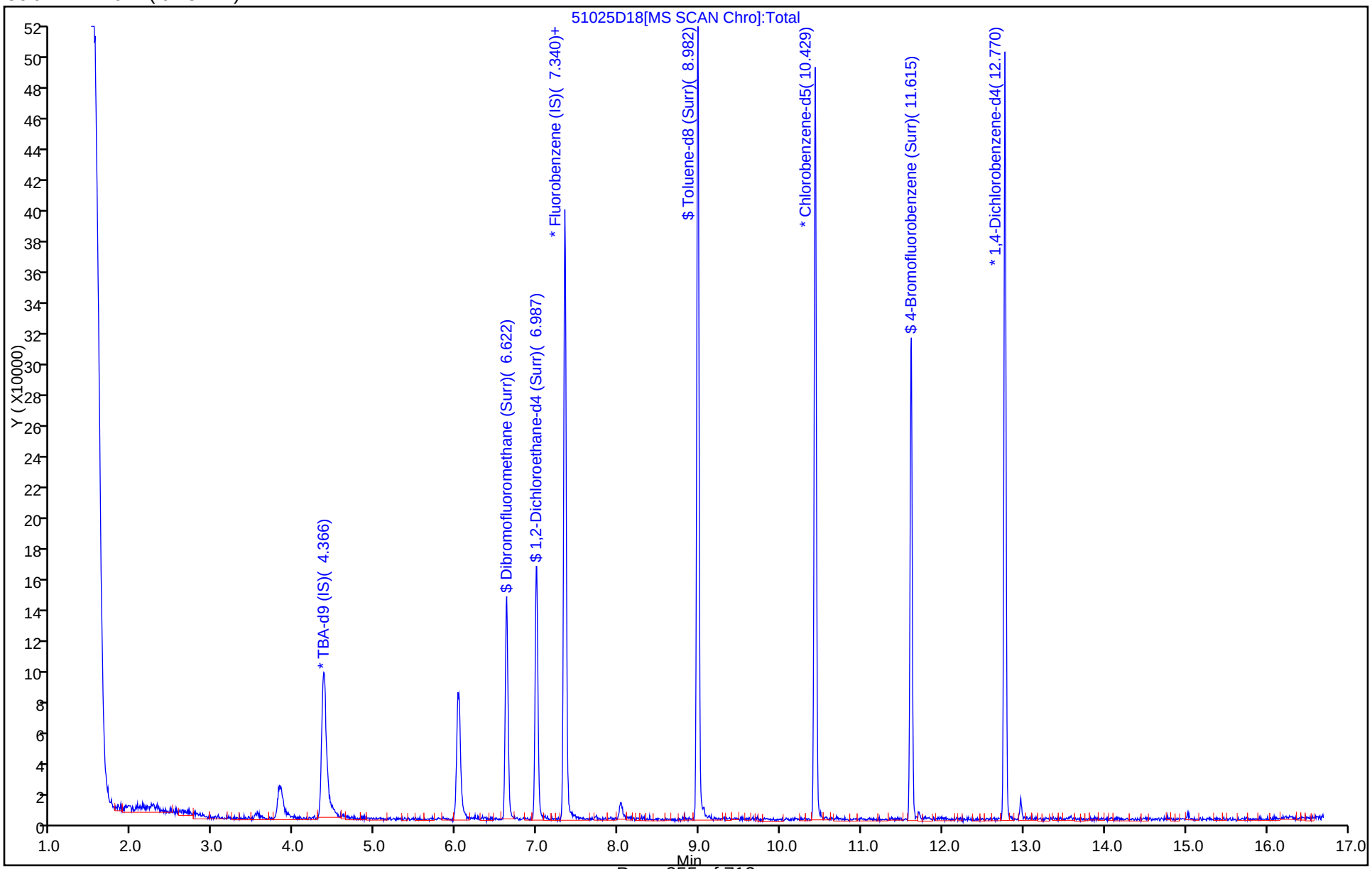
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 26-Oct-2017 20:41:38 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D18.D				
Injection Date:	26-Oct-2017 05:20:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-C-6	Lab Sample ID:	180-71580-6	Worklist Smp#:	18
Client ID:	HD-MW-142S-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D18.D				
Lims ID:	180-71580-C-6				
Client ID:	HD-MW-142S-0/1-0				
Sample Type:	Client				
Inject. Date:	26-Oct-2017 05:20:30	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	180-0019038-018				
Misc. Info.:	180-71580-C-6				
Operator ID:	034635	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	26-Oct-2017 20:41:12	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:	XAWRK030				

First Level Reviewer: bungardf Date: 26-Oct-2017 20:23:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	55.8	111.56
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	59.6	119.20
$ 7 Toluene-d8 (Surr)	50.0	45.3	90.63
$ 8 4-Bromofluorobenzene (Surr)	50.0	42.3	84.65

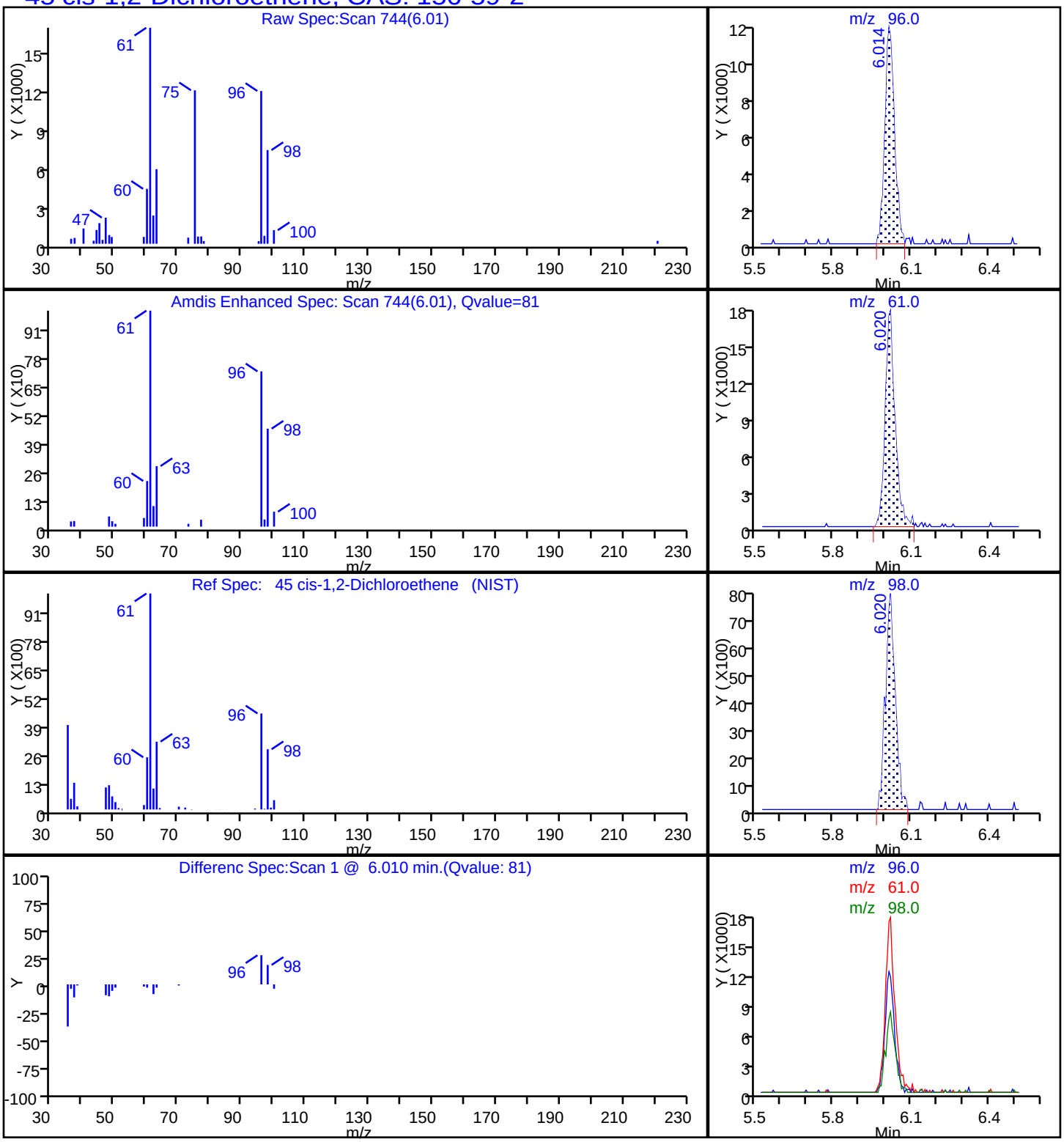
Report Date: 26-Oct-2017 20:41:38 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D18.D

Injection Date:	26-Oct-2017 05:20:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-C-6	Lab Sample ID:	180-71580-6		
Client ID:	HD-MW-142S-0/1-0				
Operator ID:	034635	ALS Bottle#:	18	Worklist Smp#:	18
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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-142D-0/1-0 | Lab Sample ID: 180-71580-7

Matrix: Water | Lab File ID: 51025D19.D

Analysis Method: 8260C | Date Collected: 10/18/2017 13:42

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 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.: 227010 | 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 ^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	0.79	J	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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-142D-0/1-0 | Lab Sample ID: 180-71580-7

Matrix: Water | Lab File ID: 51025D19.D

Analysis Method: 8260C | Date Collected: 10/18/2017 13:42

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 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.: 227010 | 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)	121		65-121
2037-26-5	Toluene-d8 (Surr)	89		73-120
460-00-4	4-Bromofluorobenzene (Surr)	84		80-120
1868-53-7	Dibromofluoromethane (Surr)	114		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D19.D
Lims ID: 180-71580-A-7
Client ID: HD-MW-142D-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 05:44:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-019
Misc. Info.: 180-71580-A-7
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:24:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.365	4.384	-0.019	0	167704	1000.0	
* 2 Fluorobenzene (IS)	96	7.339	7.340	-0.001	98	392107	50.0	
* 3 Chlorobenzene-d5	119	10.434	10.429	0.005	87	99935	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.770	-0.001	96	140262	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.615	6.610	0.005	92	107811	57.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.986	6.987	-0.001	0	139147	60.5	
$ 7 Toluene-d8 (Surr)	98	8.981	8.982	-0.001	94	353909	44.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.614	11.609	0.005	87	120420	41.9	
12 Chloromethane	50		1.891				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.335				ND	
16 Chloroethane	64		2.426				ND	
22 1,1-Dichloroethene	96		3.411				ND	
24 Acetone	43	3.538	3.539	-0.001	64	6747	6.58	
26 Carbon disulfide	76		3.703				ND	
31 Methylene Chloride	84		4.226				ND	
33 Acrylonitrile	53		4.609				ND	
34 trans-1,2-Dichloroethene	96		4.640				ND	
35 Methyl tert-butyl ether	73		4.664				ND	
37 1,1-Dichloroethane	63		5.266				ND	
45 cis-1,2-Dichloroethene	96	6.031	6.008	0.023	73	9863	3.94	
46 2-Butanone (MEK)	43		6.026				ND	
49 Chlorobromomethane	128		6.288				ND	
52 Chloroform	83		6.434				ND	
53 1,1,1-Trichloroethane	97		6.592				ND	
56 Carbon tetrachloride	117		6.762				ND	
58 Benzene	78		6.993				ND	
59 1,2-Dichloroethane	62		7.072				ND	
64 Trichloroethene	130		7.723				ND	
67 1,2-Dichloropropane	63		7.997				ND	
70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.276				ND	
74 cis-1,3-Dichloropropene	75		8.720				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872				ND	
76 Toluene	91	9.048	9.049	-0.001	51	3371	0.3383	M
77 trans-1,3-Dichloropropene	75		9.298				ND	
79 1,1,2-Trichloroethane	97		9.486				ND	
80 Tetrachloroethene	164		9.559				ND	
82 2-Hexanone	43		9.705				ND	
84 Chlorodibromomethane	129		9.857				ND	
85 Ethylene Dibromide	107		9.967				ND	
87 Chlorobenzene	112		10.459				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106		10.557				ND	
91 m-Xylene & p-Xylene	106		10.684				ND	
92 o-Xylene	106		11.068				ND	
93 Styrene	104		11.092				ND	
94 Bromoform	173		11.274				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				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

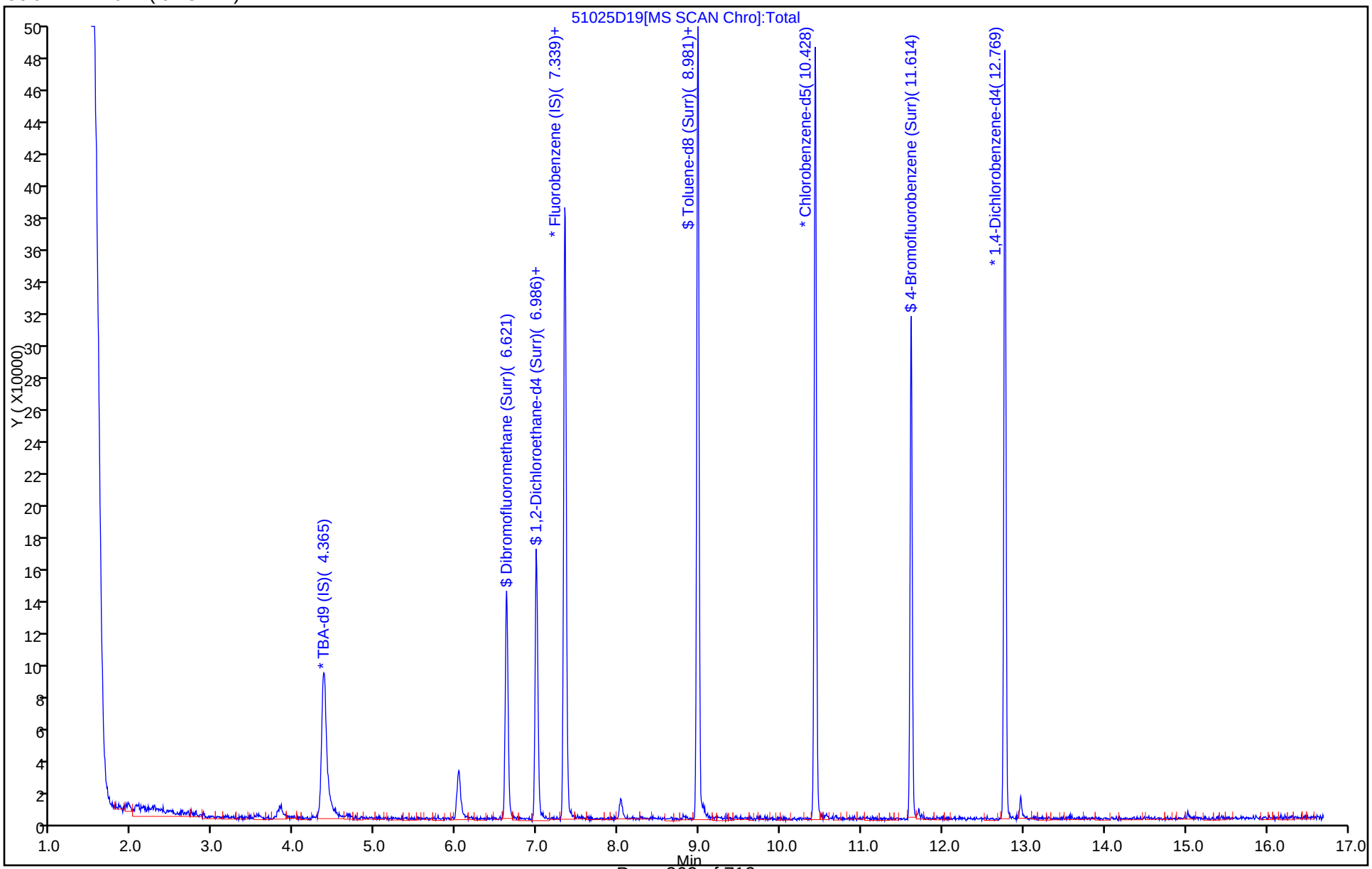
Report Date: 26-Oct-2017 20:41:39 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D19.D

Injection Date:	26-Oct-2017 05:44:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-A-7	Lab Sample ID:	180-71580-7	Worklist Smp#:	19
Client ID:	HD-MW-142D-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D19.D
Lims ID: 180-71580-A-7
Client ID: HD-MW-142D-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 05:44:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-019
Misc. Info.: 180-71580-A-7
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

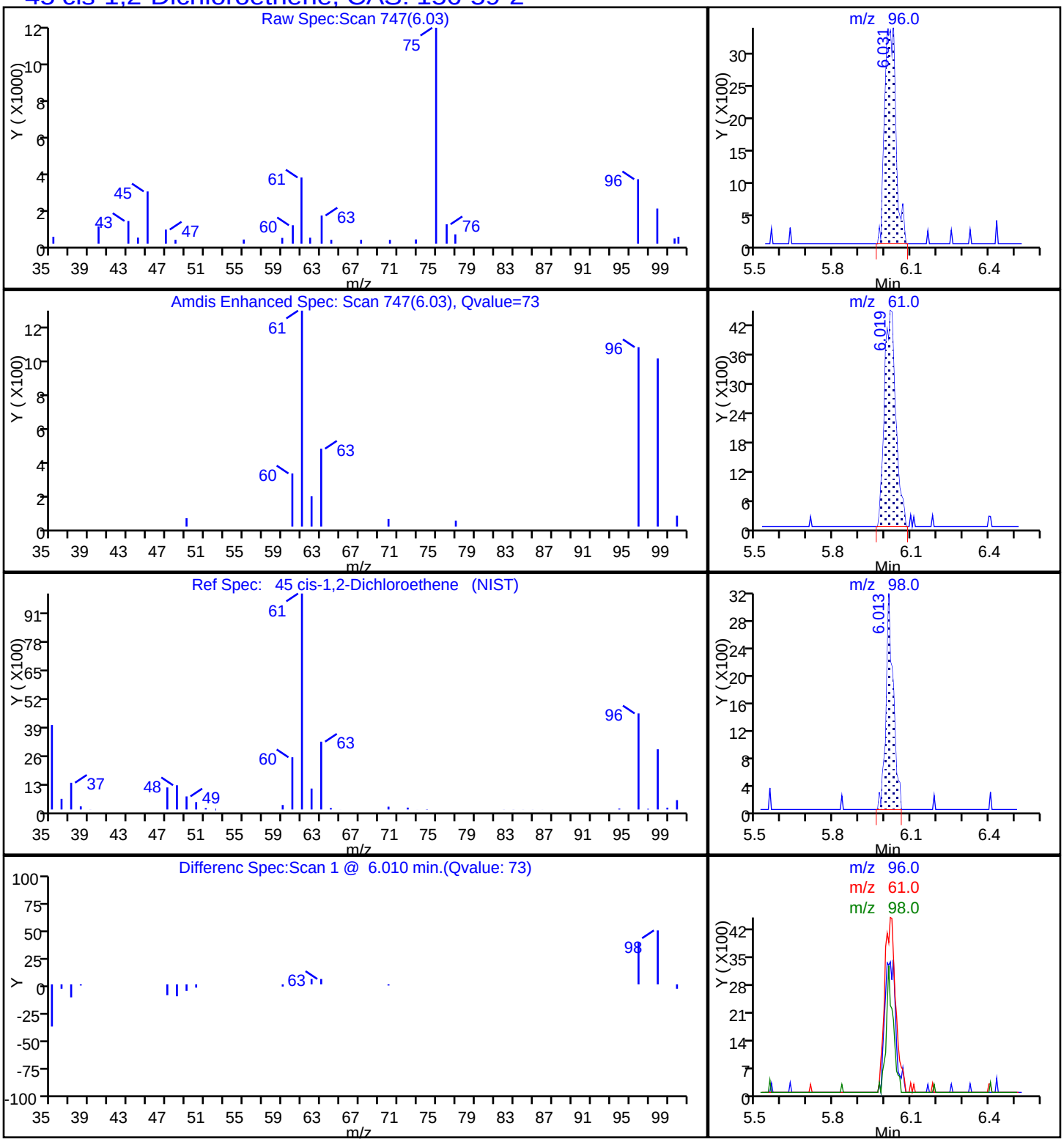
First Level Reviewer: bungardf Date: 26-Oct-2017 20:24:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	57.1	114.29
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	60.5	120.94
$ 7 Toluene-d8 (Surr)	50.0	44.5	88.99
$ 8 4-Bromofluorobenzene (Surr)	50.0	41.9	83.84

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D19.D				
Injection Date:	26-Oct-2017 05:44:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-7	Lab Sample ID:	180-71580-7		
Client ID:	HD-MW-142D-0/1-0				
Operator ID:	034635	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

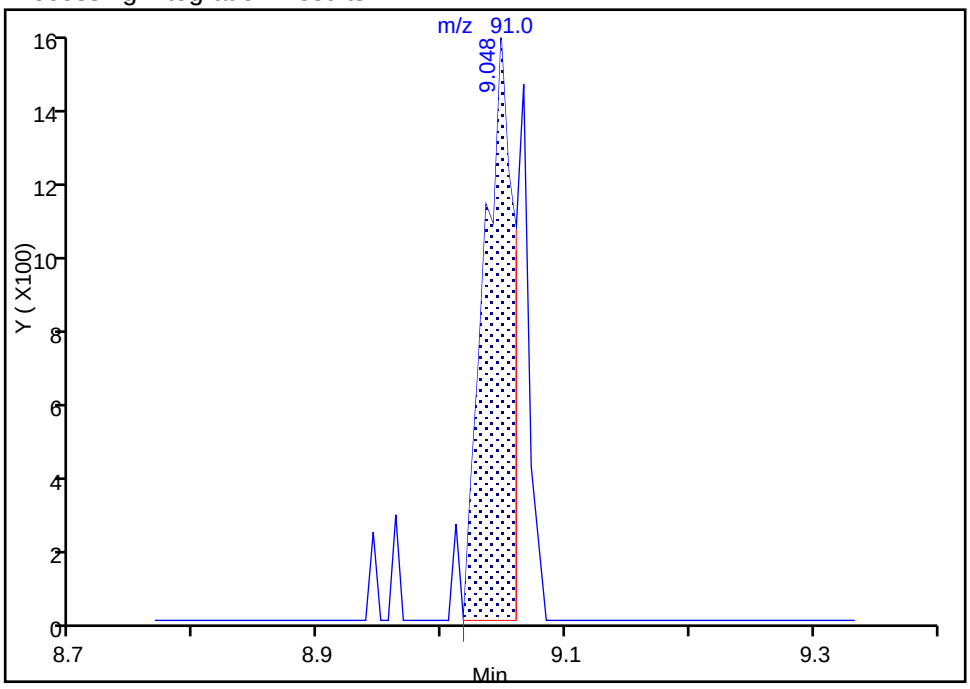
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D19.D				
Injection Date:	26-Oct-2017 05:44:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-7	Lab Sample ID:	180-71580-7		
Client ID:	HD-MW-142D-0/1-0				
Operator ID:	034635	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

76 Toluene, CAS: 108-88-3

Signal: 1

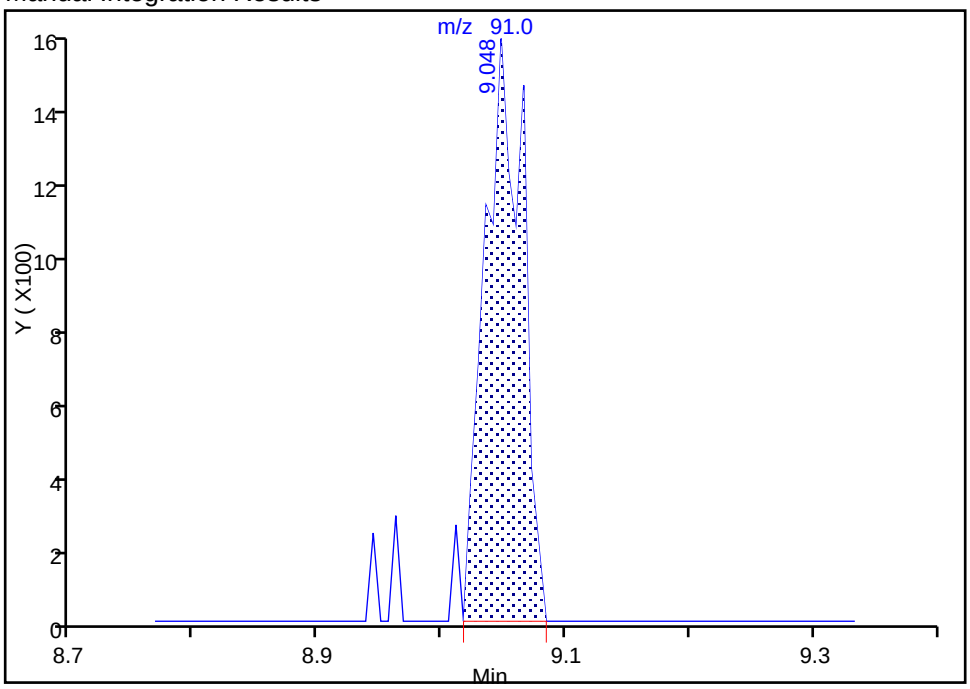
Processing Integration Results

RT: 9.05
Area: 2612
Amount: 0.262128
Amount Units: ng



Manual Integration Results

RT: 9.05
Area: 3371
Amount: 0.338297
Amount Units: ng



Reviewer: bungardf, 26-Oct-2017 20:24:18

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-143S-0/1-0 | Lab Sample ID: 180-71580-8

Matrix: Water | Lab File ID: 51025D20.D

Analysis Method: 8260C | Date Collected: 10/18/2017 11:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 06:08

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.: 227010 | 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 ^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	1.0	0.57
79-01-6	Trichloroethene	1.1		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	0.57	J	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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-143S-0/1-0 | Lab Sample ID: 180-71580-8

Matrix: Water | Lab File ID: 51025D20.D

Analysis Method: 8260C | Date Collected: 10/18/2017 11:05

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 06:08

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.: 227010 | 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)	95		73-120
460-00-4	4-Bromofluorobenzene (Surr)	84		80-120
1868-53-7	Dibromofluoromethane (Surr)	112		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D20.D
Lims ID: 180-71580-B-8
Client ID: HD-MW-143S-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 06:08:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-020
Misc. Info.: 180-71580-B-8
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:25:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.363	4.384	-0.021	0	172028	1000.0	
* 2 Fluorobenzene (IS)	96	7.337	7.340	-0.003	98	402594	50.0	
* 3 Chlorobenzene-d5	119	10.433	10.429	0.004	86	97534	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.774	12.770	0.004	96	139661	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.620	6.610	0.010	94	108696	56.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.985	6.987	-0.003	0	139279	59.0	
$ 7 Toluene-d8 (Surr)	98	8.979	8.982	-0.003	94	366869	47.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.609	0.003	87	117170	41.8	
12 Chloromethane	50		1.891				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.335				ND	
16 Chloroethane	64		2.426				ND	
22 1,1-Dichloroethene	96		3.411				ND	
24 Acetone	43	3.549	3.539	0.010	77	5773	5.48	
26 Carbon disulfide	76		3.703				ND	
31 Methylene Chloride	84		4.226				ND	
33 Acrylonitrile	53		4.609				ND	
34 trans-1,2-Dichloroethene	96		4.640				ND	
35 Methyl tert-butyl ether	73		4.664				ND	
37 1,1-Dichloroethane	63		5.266				ND	
45 cis-1,2-Dichloroethene	96		6.008				ND	
46 2-Butanone (MEK)	43		6.026				ND	
49 Chlorobromomethane	128		6.288				ND	
52 Chloroform	83	6.431	6.434	-0.003	1	537	0.1377	
53 1,1,1-Trichloroethane	97		6.592				ND	
56 Carbon tetrachloride	117		6.762				ND	
58 Benzene	78		6.993				ND	
59 1,2-Dichloroethane	62		7.072				ND	
64 Trichloroethene	130	7.726	7.723	0.003	95	13286	5.39	
67 1,2-Dichloropropane	63		7.997				ND	
70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.276				ND	
74 cis-1,3-Dichloropropene	75		8.720				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872				ND	
76 Toluene	91		9.049				ND	
77 trans-1,3-Dichloropropene	75		9.298				ND	
79 1,1,2-Trichloroethane	97		9.486				ND	
80 Tetrachloroethene	164	9.557	9.559	-0.002	91	5254	2.83	
82 2-Hexanone	43		9.705				ND	
84 Chlorodibromomethane	129		9.857				ND	
85 Ethylene Dibromide	107		9.967				ND	
87 Chlorobenzene	112		10.459				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106		10.557				ND	
91 m-Xylene & p-Xylene	106		10.684				ND	
92 o-Xylene	106		11.068				ND	
93 Styrene	104		11.092				ND	
94 Bromoform	173		11.274				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				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

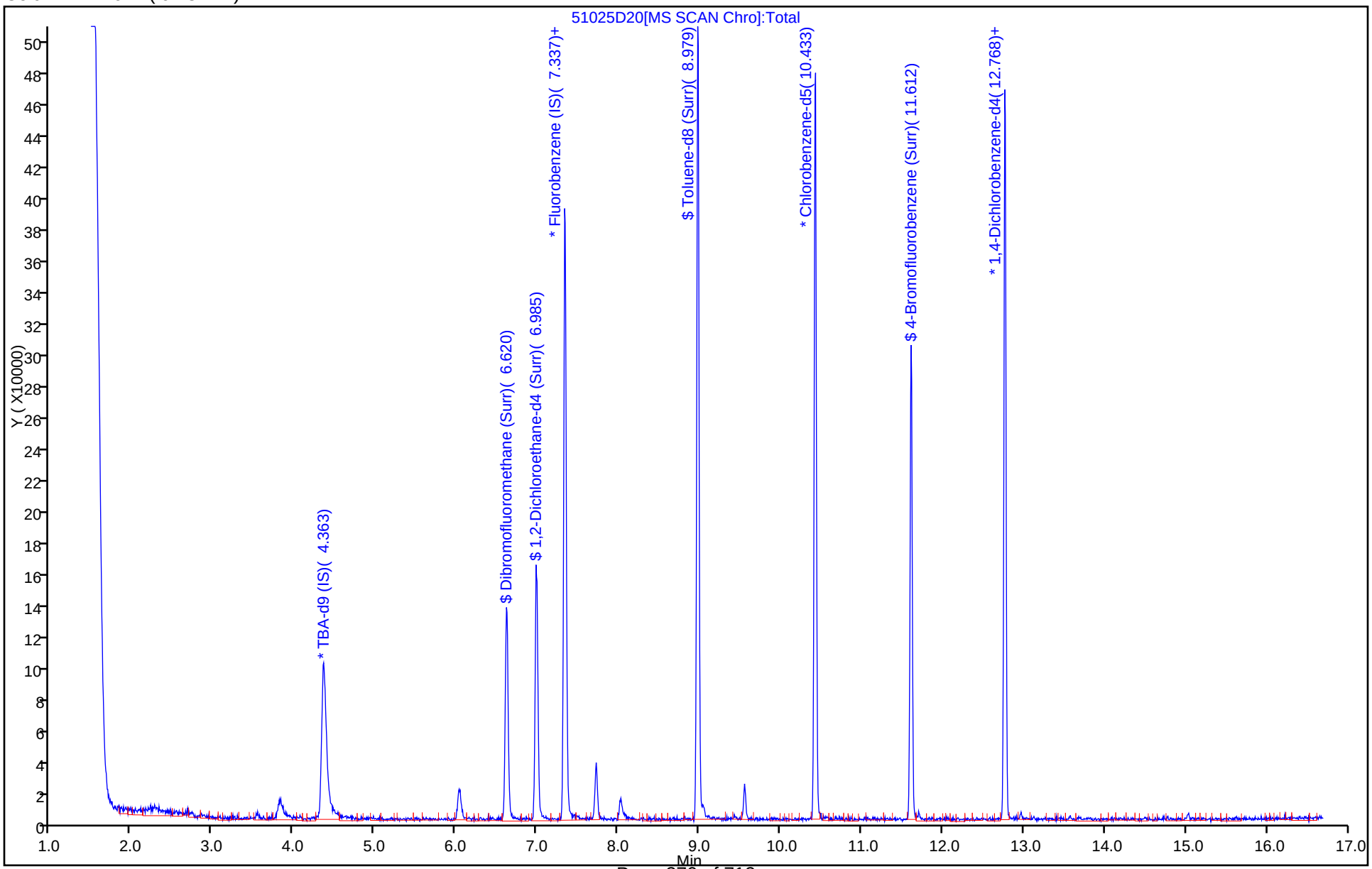
Report Date: 26-Oct-2017 20:41:41 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D20.D

Injection Date:	26-Oct-2017 06:08:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-B-8	Lab Sample ID:	180-71580-8	Worklist Smp#:	20
Client ID:	HD-MW-143S-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D20.D
Lims ID: 180-71580-B-8
Client ID: HD-MW-143S-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 06:08:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-020
Misc. Info.: 180-71580-B-8
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:25:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	56.1	112.23
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	59.0	117.90
$ 7 Toluene-d8 (Surr)	50.0	47.3	94.52
$ 8 4-Bromofluorobenzene (Surr)	50.0	41.8	83.59

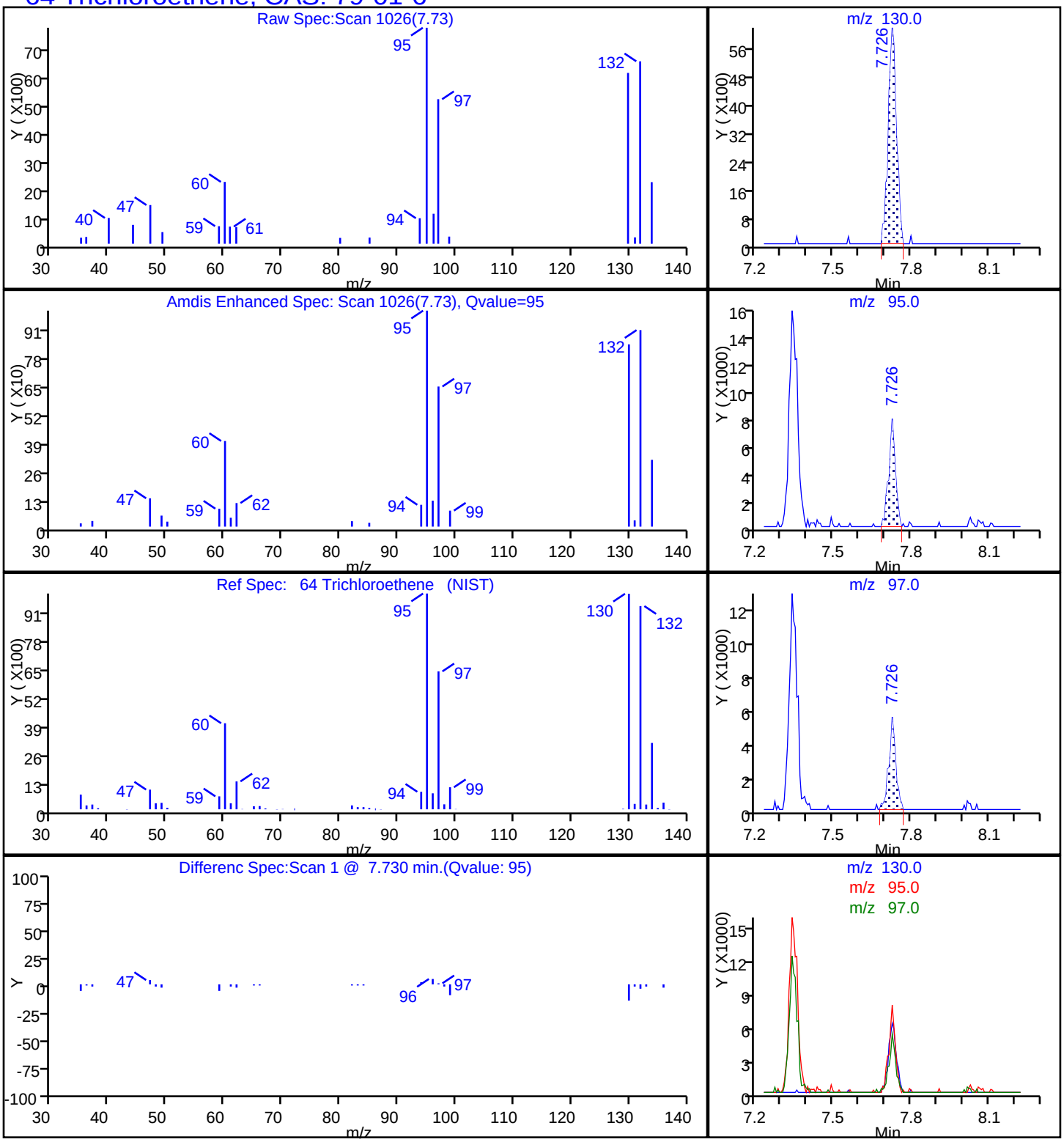
Report Date: 26-Oct-2017 20:41:41 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D20.D

Injection Date:	26-Oct-2017 06:08:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-8	Lab Sample ID:	180-71580-8		
Client ID:	HD-MW-143S-0/1-0				
Operator ID:	034635	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



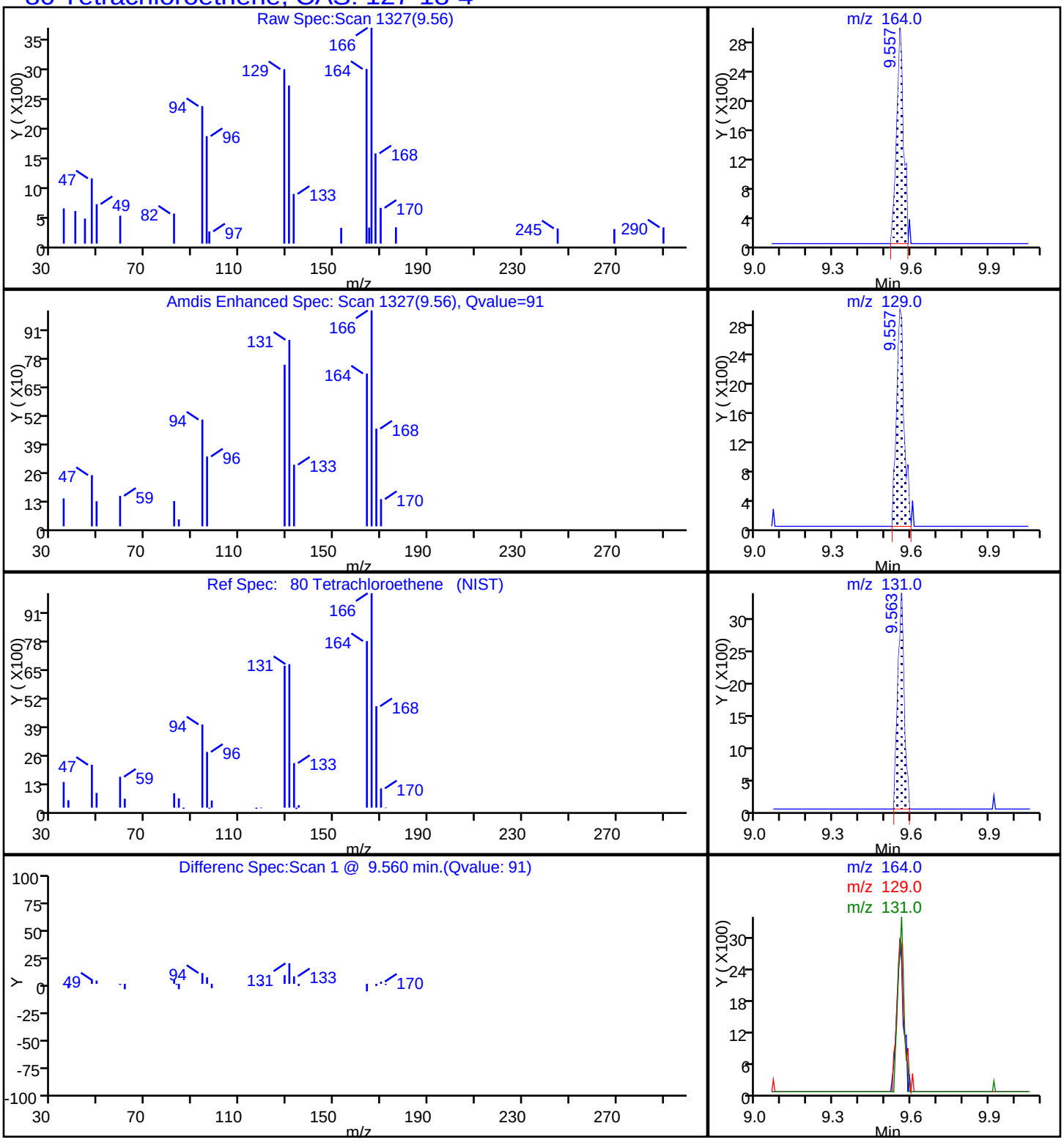
Report Date: 26-Oct-2017 20:41:41 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D20.D

Injection Date:	26-Oct-2017 06:08:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-B-8	Lab Sample ID:	180-71580-8		
Client ID:	HD-MW-143S-0/1-0				
Operator ID:	034635	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

80 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-143D-0/1-0 | Lab Sample ID: 180-71580-9

Matrix: Water | Lab File ID: 51025D21.D

Analysis Method: 8260C | Date Collected: 10/18/2017 09:17

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 06:32

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.: 227010 | 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 ^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	0.74	J	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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-143D-0/1-0 | Lab Sample ID: 180-71580-9

Matrix: Water | Lab File ID: 51025D21.D

Analysis Method: 8260C | Date Collected: 10/18/2017 09:17

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 06:32

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.: 227010 | 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)	116		65-121
2037-26-5	Toluene-d8 (Surr)	93		73-120
460-00-4	4-Bromofluorobenzene (Surr)	85		80-120
1868-53-7	Dibromofluoromethane (Surr)	110		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D21.D
Lims ID: 180-71580-A-9
Client ID: HD-MW-143D-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 06:32:30 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-021
Misc. Info.: 180-71580-A-9
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:26:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.363	4.384	-0.021	0	173387	1000.0	
* 2 Fluorobenzene (IS)	96	7.343	7.340	0.003	98	430666	50.0	
* 3 Chlorobenzene-d5	119	10.432	10.429	0.003	87	105386	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.767	12.770	-0.003	96	153933	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.619	6.610	0.009	93	114405	55.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.984	6.987	-0.003	0	146062	57.8	
$ 7 Toluene-d8 (Surr)	98	8.979	8.982	-0.004	93	390300	46.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.609	0.003	87	129272	42.7	
12 Chloromethane	50		1.891				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.335				ND	
16 Chloroethane	64		2.426				ND	
22 1,1-Dichloroethene	96		3.411				ND	
24 Acetone	43		3.539				ND	
26 Carbon disulfide	76		3.703				ND	
31 Methylene Chloride	84		4.226				ND	
33 Acrylonitrile	53		4.609				ND	
34 trans-1,2-Dichloroethene	96		4.640				ND	
35 Methyl tert-butyl ether	73		4.664				ND	
37 1,1-Dichloroethane	63		5.266				ND	
45 cis-1,2-Dichloroethene	96	6.011	6.008	0.003	57	10128	3.69	
46 2-Butanone (MEK)	43		6.026				ND	
49 Chlorobromomethane	128		6.288				ND	
52 Chloroform	83		6.434				ND	
53 1,1,1-Trichloroethane	97		6.592				ND	
56 Carbon tetrachloride	117		6.762				ND	
58 Benzene	78		6.993				ND	
59 1,2-Dichloroethane	62		7.072				ND	
64 Trichloroethene	130	7.732	7.723	0.009	94	1627	0.6174	
67 1,2-Dichloropropane	63		7.997				ND	
70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.276				ND	
74 cis-1,3-Dichloropropene	75		8.720				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872				ND	
76 Toluene	91	9.045	9.049	-0.004	96	2267	0.2157	
77 trans-1,3-Dichloropropene	75		9.298				ND	
79 1,1,2-Trichloroethane	97		9.486				ND	
80 Tetrachloroethene	164		9.559				ND	
82 2-Hexanone	43		9.705				ND	
84 Chlorodibromomethane	129		9.857				ND	
85 Ethylene Dibromide	107		9.967				ND	
87 Chlorobenzene	112		10.459				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106		10.557				ND	
91 m-Xylene & p-Xylene	106		10.684				ND	
92 o-Xylene	106		11.068				ND	
93 Styrene	104		11.092				ND	
94 Bromoform	173		11.274				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				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

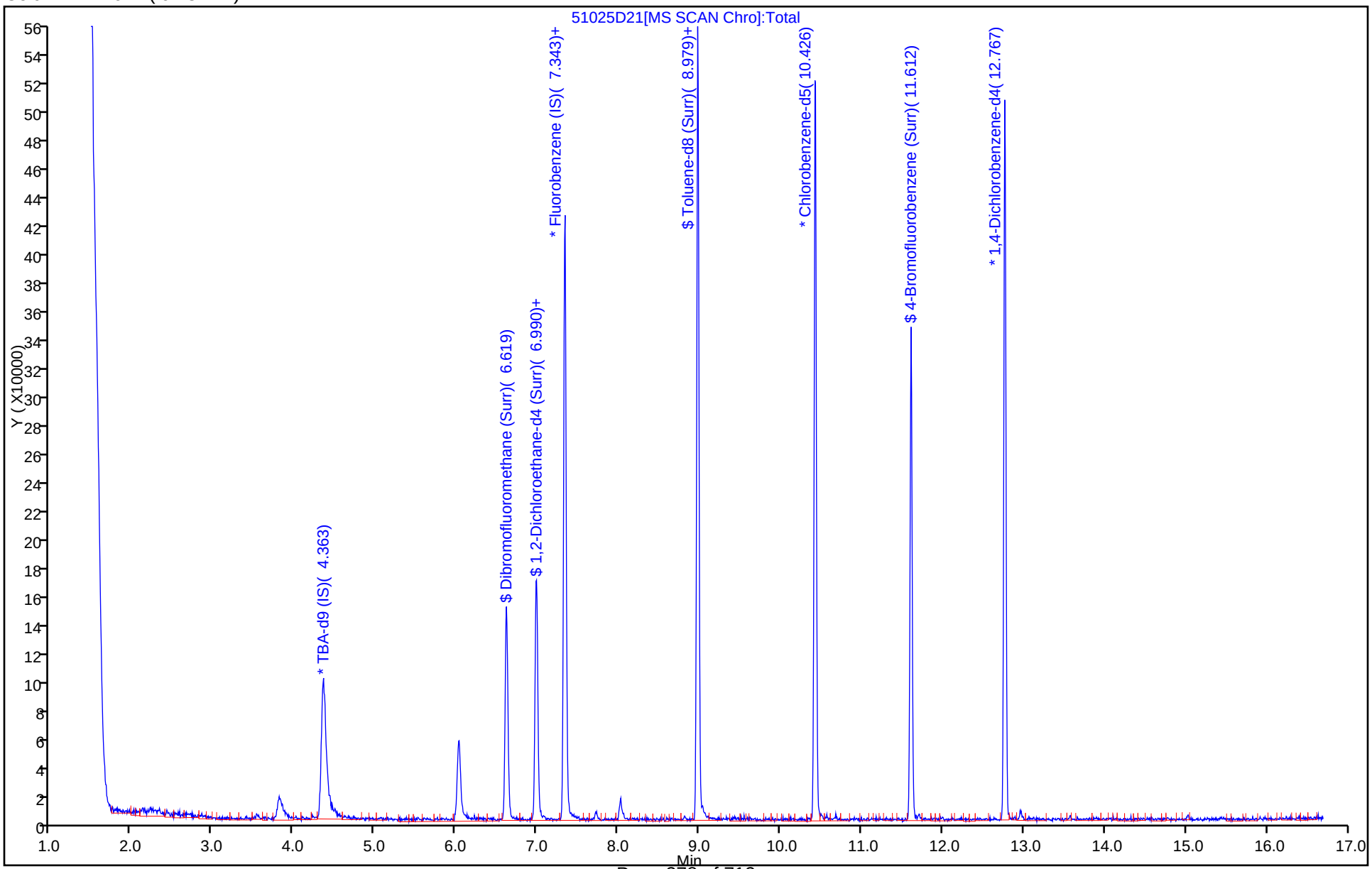
Report Date: 26-Oct-2017 20:41:43 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D21.D

Injection Date:	26-Oct-2017 06:32:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-A-9	Lab Sample ID:	180-71580-9	Worklist Smp#:	21
Client ID:	HD-MW-143D-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
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\20171025-19038.b\51025D21.D
Lims ID: 180-71580-A-9
Client ID: HD-MW-143D-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 06:32:30 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-021
Misc. Info.: 180-71580-A-9
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:26:37

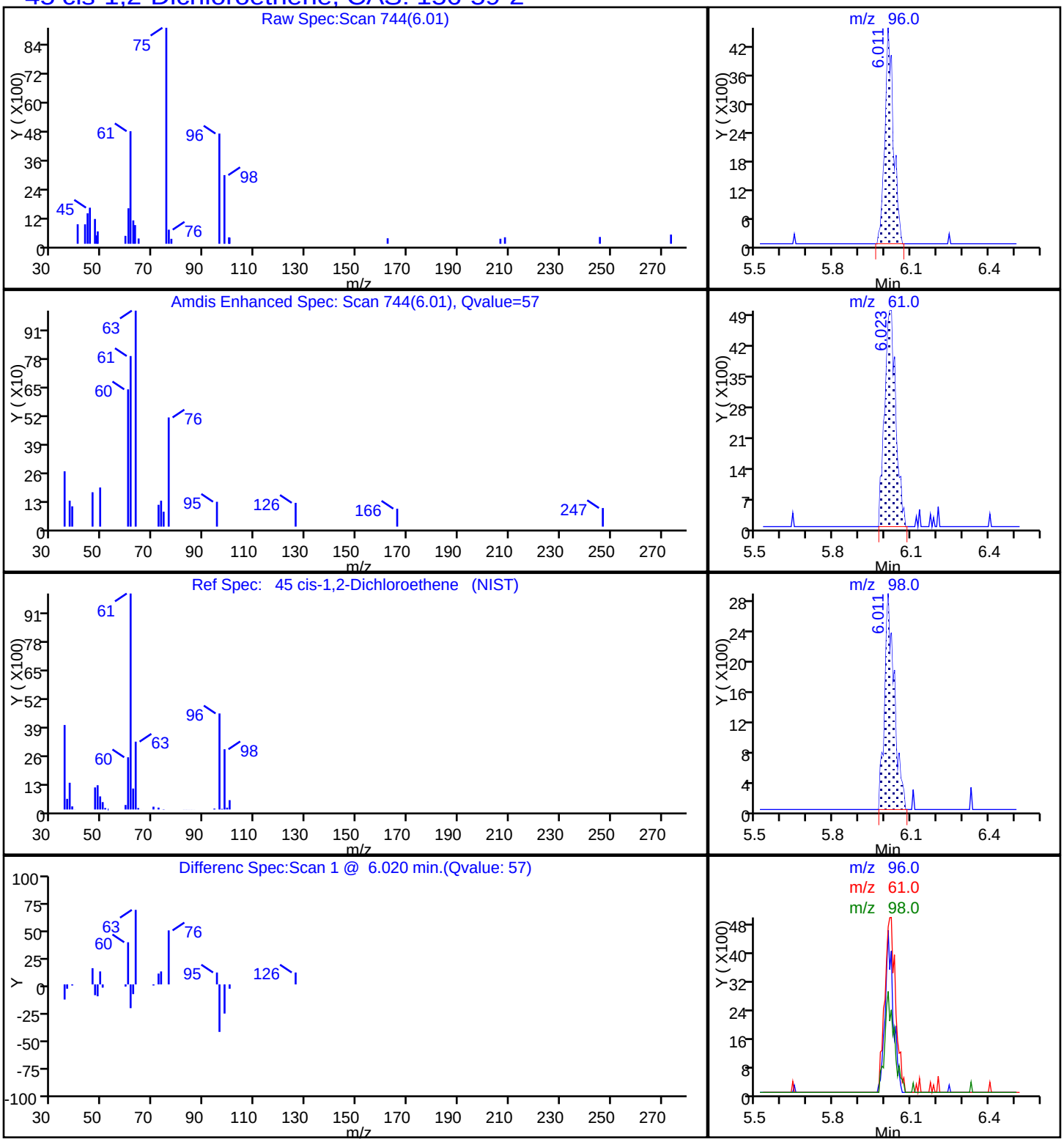
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	55.2	110.42
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	57.8	115.59
$ 7 Toluene-d8 (Surr)	50.0	46.5	93.07
$ 8 4-Bromofluorobenzene (Surr)	50.0	42.7	85.35

Report Date: 26-Oct-2017 20:41:43 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D21.D				
Injection Date:	26-Oct-2017 06:32:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-9	Lab Sample ID:	180-71580-9		
Client ID:	HD-MW-143D-0/1-0				
Operator ID:	034635	ALS Bottle#:	21	Worklist Smp#:	21
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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-20S-0/1-0 | Lab Sample ID: 180-71580-10

Matrix: Water | Lab File ID: 51025D22.D

Analysis Method: 8260C | Date Collected: 10/19/2017 13:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 06:56

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.: 227010 | 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 ^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	0.95	J	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	1.4		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	32		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	2.6		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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-20S-0/1-0 | Lab Sample ID: 180-71580-10

Matrix: Water | Lab File ID: 51025D22.D

Analysis Method: 8260C | Date Collected: 10/19/2017 13:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 06:56

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.: 227010 | 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)	116		65-121
2037-26-5	Toluene-d8 (Surr)	90		73-120
460-00-4	4-Bromofluorobenzene (Surr)	84		80-120
1868-53-7	Dibromofluoromethane (Surr)	108		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D22.D
Lims ID: 180-71580-A-10
Client ID: HD-MW-20S-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 06:56:30 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-022
Misc. Info.: 180-71580-A-10
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:27:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.357	4.384	-0.027	0	170096	1000.0	
* 2 Fluorobenzene (IS)	96	7.343	7.340	0.003	99	418486	50.0	
* 3 Chlorobenzene-d5	119	10.426	10.429	-0.003	86	104720	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.773	12.770	0.003	97	145410	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.613	6.610	0.003	92	108880	54.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.984	6.987	-0.003	0	142690	58.1	
$ 7 Toluene-d8 (Surr)	98	8.979	8.982	-0.003	94	373730	44.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.609	0.003	85	126613	42.1	
12 Chloromethane	50		1.891				ND	
13 Vinyl chloride	62		2.012				ND	
15 Bromomethane	94		2.335				ND	
16 Chloroethane	64		2.426				ND	
22 1,1-Dichloroethene	96		3.411				ND	
24 Acetone	43	3.542	3.539	0.003	69	9633	8.80	
26 Carbon disulfide	76		3.703				ND	
31 Methylene Chloride	84		4.226				ND	
33 Acrylonitrile	53		4.609				ND	
34 trans-1,2-Dichloroethene	96		4.640				ND	
35 Methyl tert-butyl ether	73		4.664				ND	
37 1,1-Dichloroethane	63		5.266				ND	
45 cis-1,2-Dichloroethene	96	6.017	6.008	0.009	70	12685	4.75	
46 2-Butanone (MEK)	43		6.026				ND	
49 Chlorobromomethane	128		6.288				ND	
52 Chloroform	83	6.443	6.434	0.009	94	28980	7.15	
53 1,1,1-Trichloroethane	97		6.592				ND	
56 Carbon tetrachloride	117		6.762				ND	
58 Benzene	78		6.993				ND	
59 1,2-Dichloroethane	62		7.072				ND	
64 Trichloroethene	130	7.726	7.723	0.003	97	405072	158.2	
67 1,2-Dichloropropane	63		7.997				ND	
70 1,4-Dioxane	88		8.082				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.276				ND	
74 cis-1,3-Dichloropropene	75		8.720				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872				ND	
76 Toluene	91	9.046	9.049	-0.003	51	3817	0.3656	
77 trans-1,3-Dichloropropene	75		9.298				ND	
79 1,1,2-Trichloroethane	97		9.486				ND	
80 Tetrachloroethene	164	9.556	9.559	-0.003	95	26370	13.2	
82 2-Hexanone	43		9.705				ND	
84 Chlorodibromomethane	129		9.857				ND	
85 Ethylene Dibromide	107		9.967				ND	
87 Chlorobenzene	112		10.459				ND	
89 1,1,1,2-Tetrachloroethane	131		10.551				ND	
90 Ethylbenzene	106		10.557				ND	
91 m-Xylene & p-Xylene	106		10.684				ND	
92 o-Xylene	106		11.068				ND	
93 Styrene	104		11.092				ND	
94 Bromoform	173		11.274				ND	
99 1,1,2,2-Tetrachloroethane	83		11.749				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

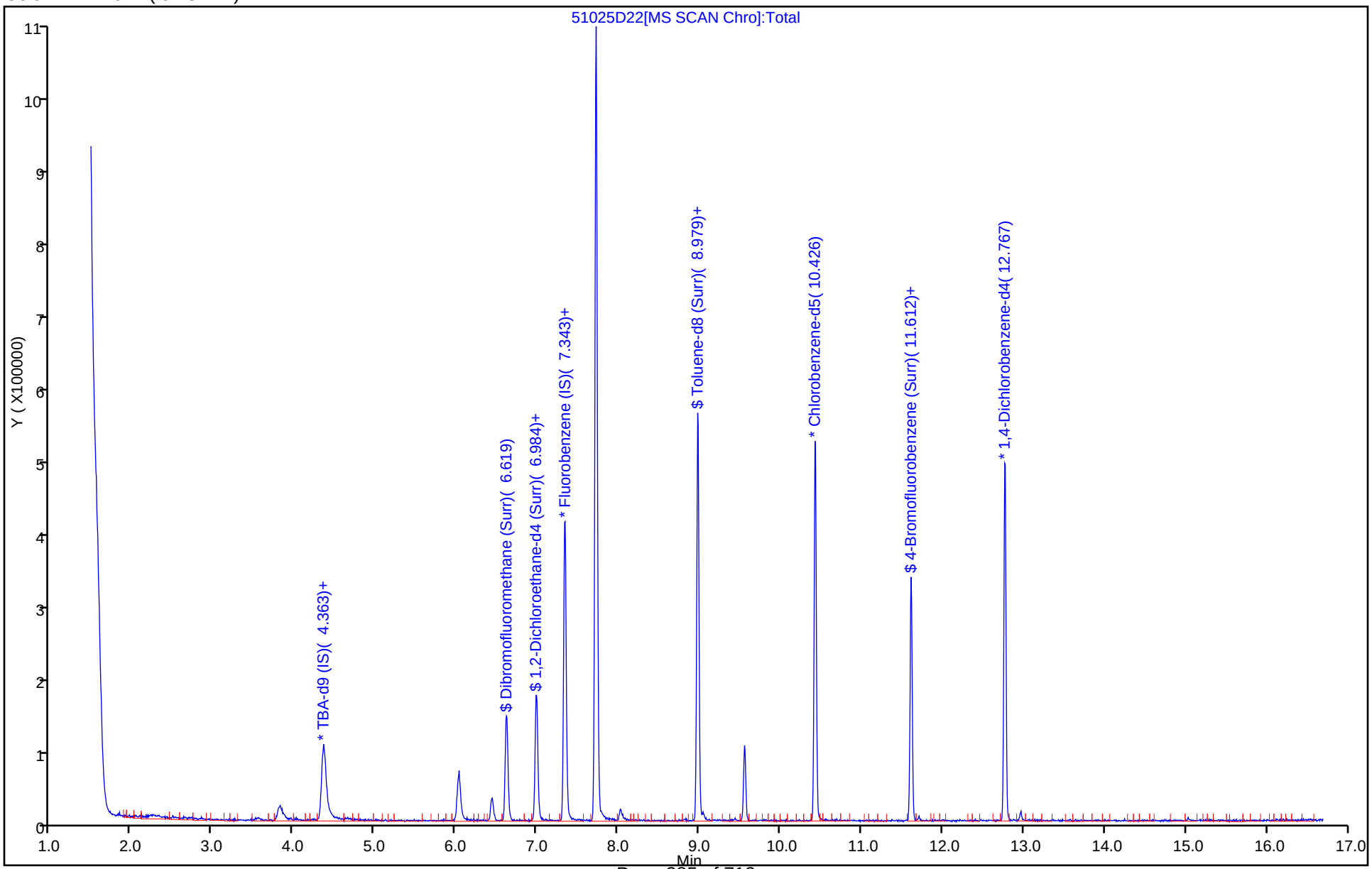
Report Date: 26-Oct-2017 20:41:44 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D22.D

Injection Date:	26-Oct-2017 06:56:30	Instrument ID:	CHHP5	Operator ID:	034635
Lims ID:	180-71580-A-10	Lab Sample ID:	180-71580-10	Worklist Smp#:	22
Client ID:	HD-MW-20S-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D22.D
Lims ID: 180-71580-A-10
Client ID: HD-MW-20S-0/1-0
Sample Type: Client
Inject. Date: 26-Oct-2017 06:56:30 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-022
Misc. Info.: 180-71580-A-10
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 20:27:29

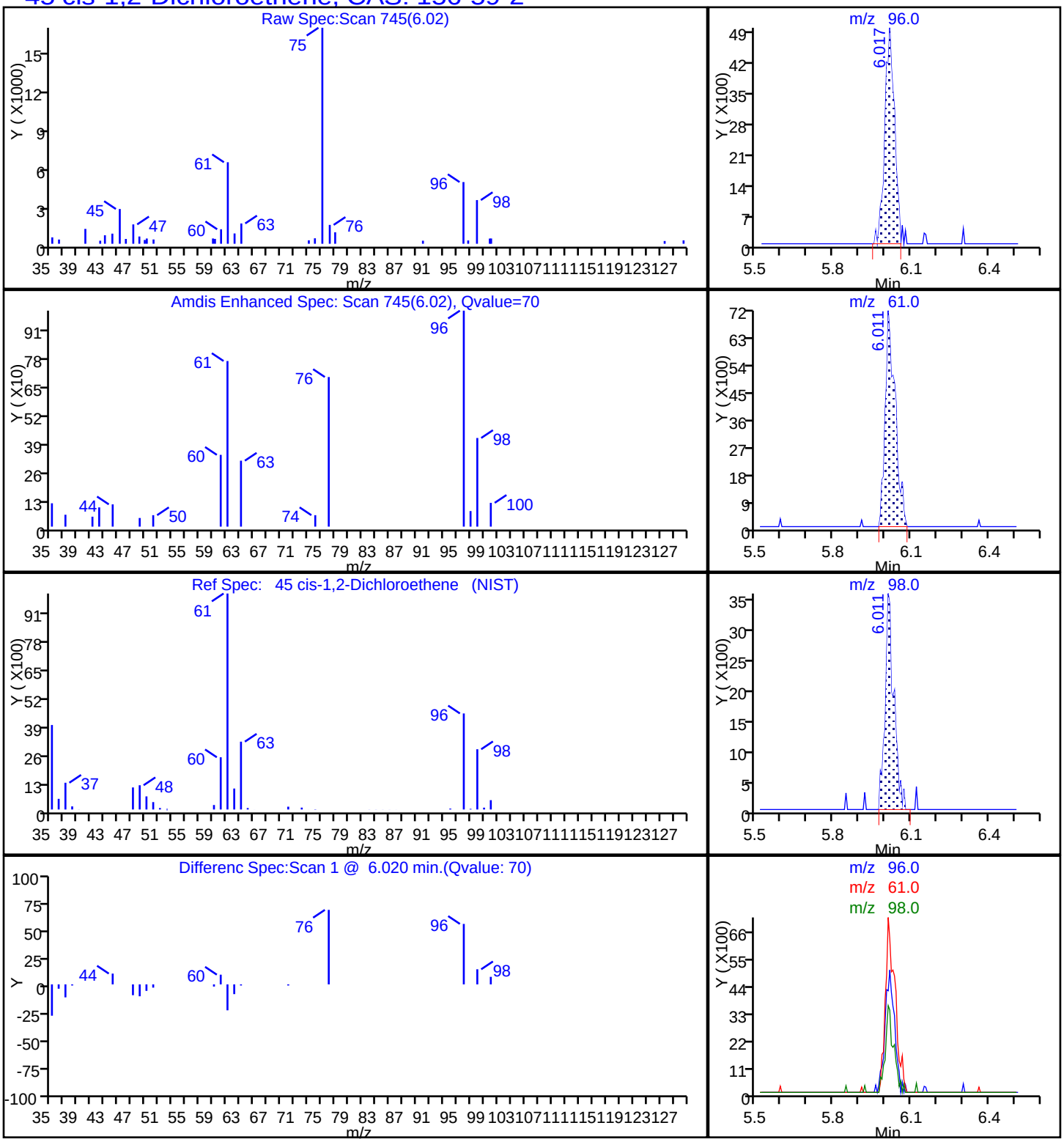
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	54.1	108.15
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	58.1	116.20
$ 7 Toluene-d8 (Surr)	50.0	44.8	89.68
$ 8 4-Bromofluorobenzene (Surr)	50.0	42.1	84.13

Report Date: 26-Oct-2017 20:41:44 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D22.D				
Injection Date:	26-Oct-2017 06:56:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-10	Lab Sample ID:	180-71580-10		
Client ID:	HD-MW-20S-0/1-0				
Operator ID:	034635	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



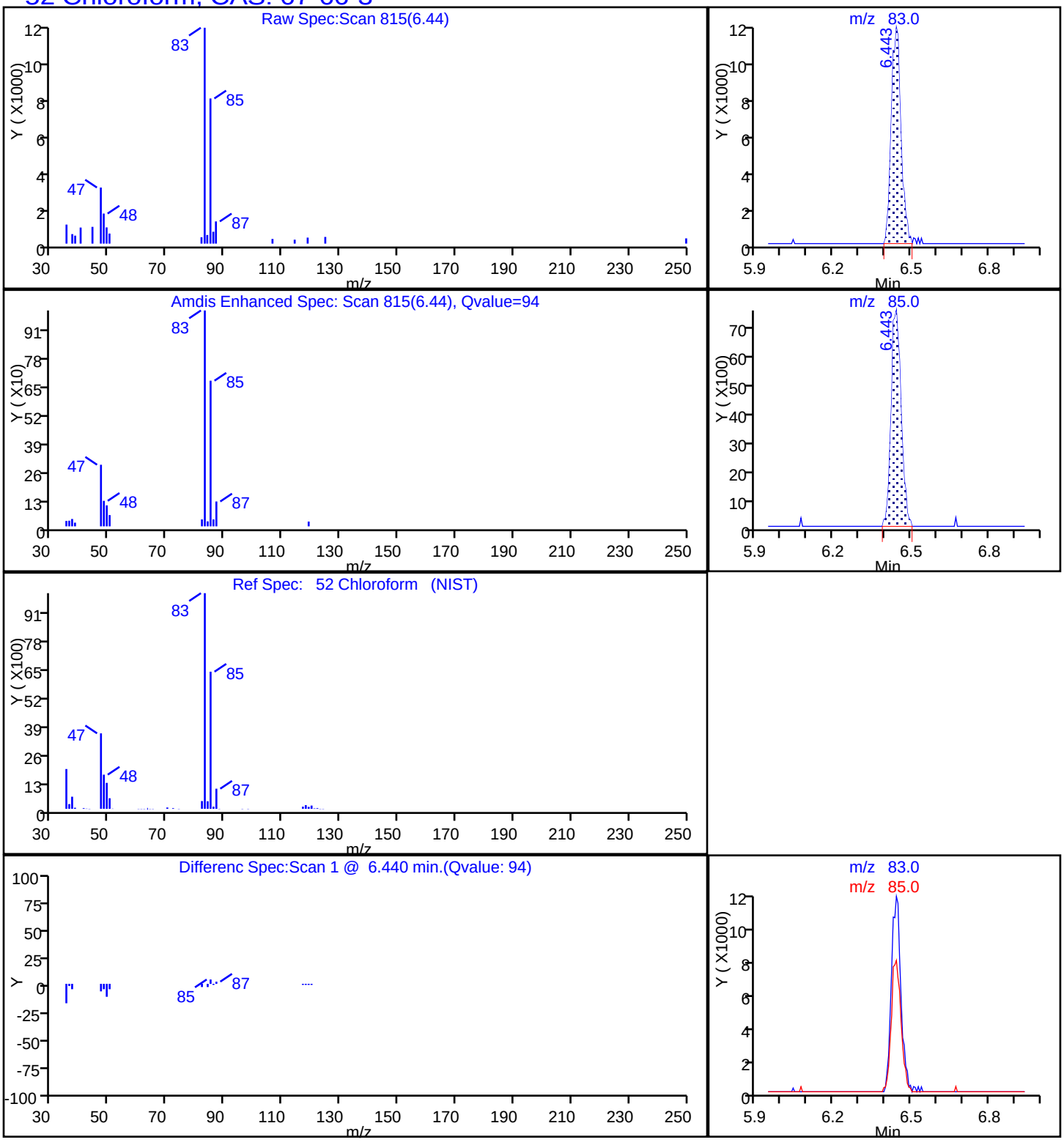
Report Date: 26-Oct-2017 20:41:44 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D22.D

Injection Date:	26-Oct-2017 06:56:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-10	Lab Sample ID:	180-71580-10		
Client ID:	HD-MW-20S-0/1-0				
Operator ID:	034635	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

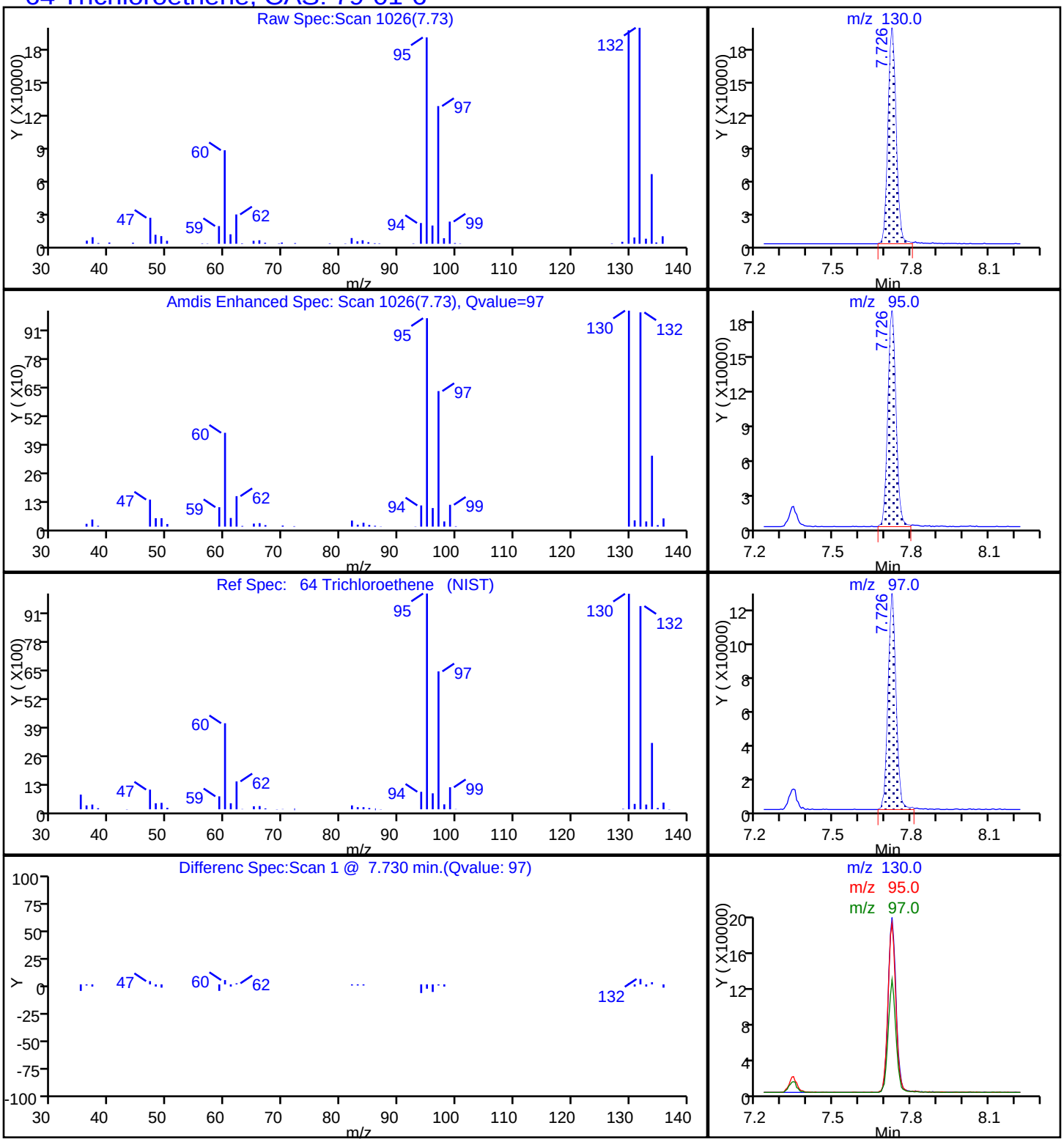


Report Date: 26-Oct-2017 20:41:44 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D22.D				
Injection Date:	26-Oct-2017 06:56:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-10	Lab Sample ID:	180-71580-10		
Client ID:	HD-MW-20S-0/1-0				
Operator ID:	034635	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6

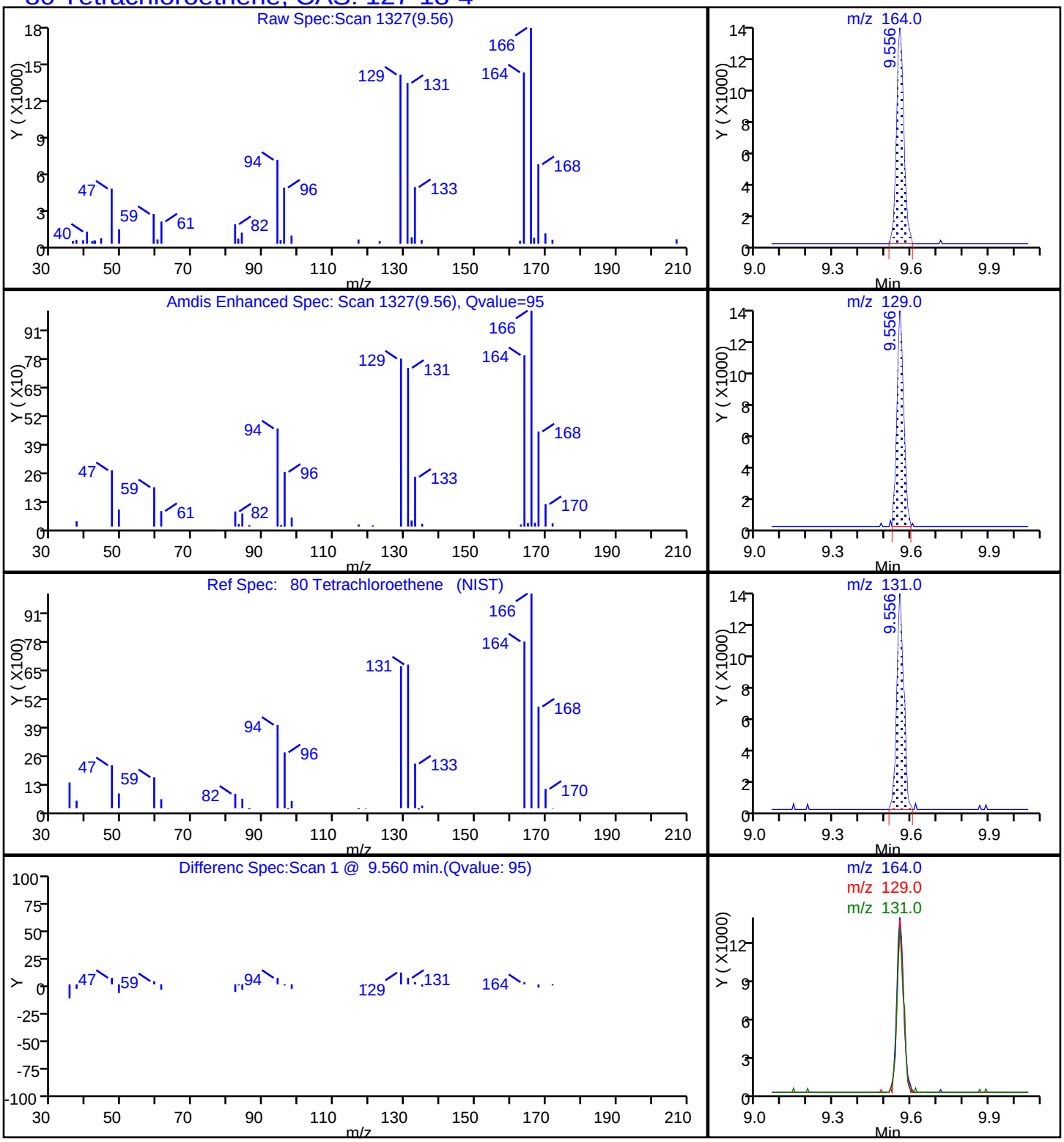


Report Date: 26-Oct-2017 20:41:44 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D22.D				
Injection Date:	26-Oct-2017 06:56:30	Instrument ID:	CHHP5		
Lims ID:	180-71580-A-10	Lab Sample ID:	180-71580-10		
Client ID:	HD-MW-20S-0/1-0				
Operator ID:	034635	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

80 Tetrachloroethene, CAS: 127-18-4



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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.: 180-71580-1 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

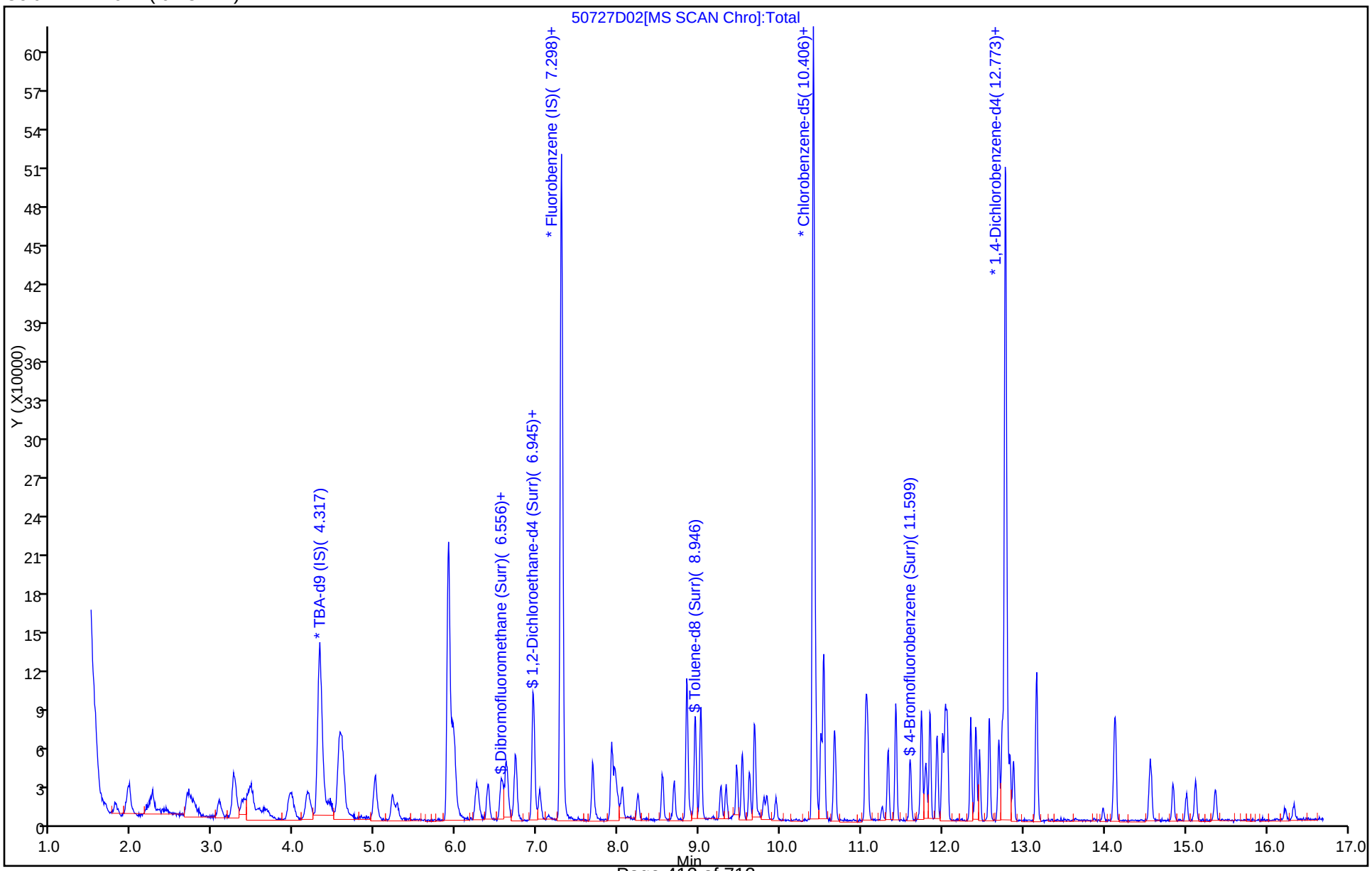
Report Date: 28-Jul-2017 01:04:45 Chrom Revision: 2.2 20-Jun-2017 07:42:38

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

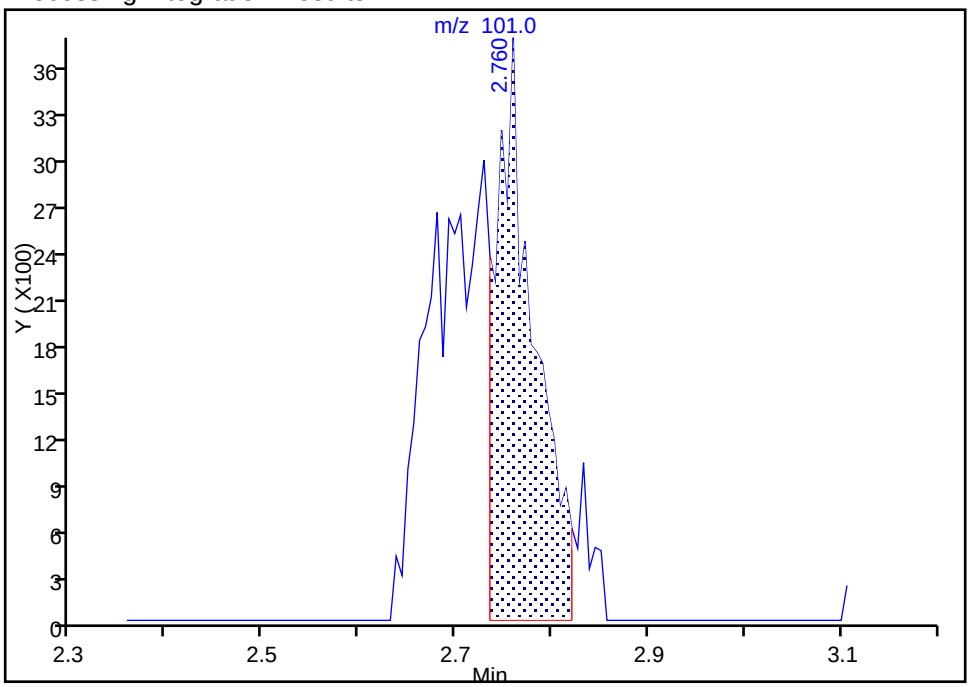
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D02.D				
Injection Date:	27-Jul-2017 00:51:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD1				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

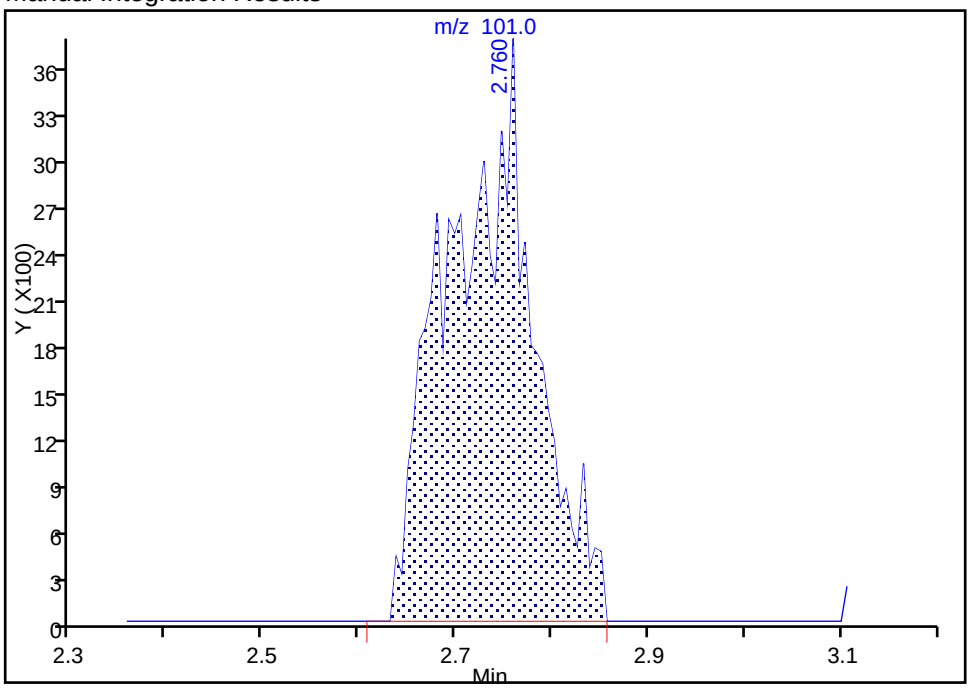
Processing Integration Results

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

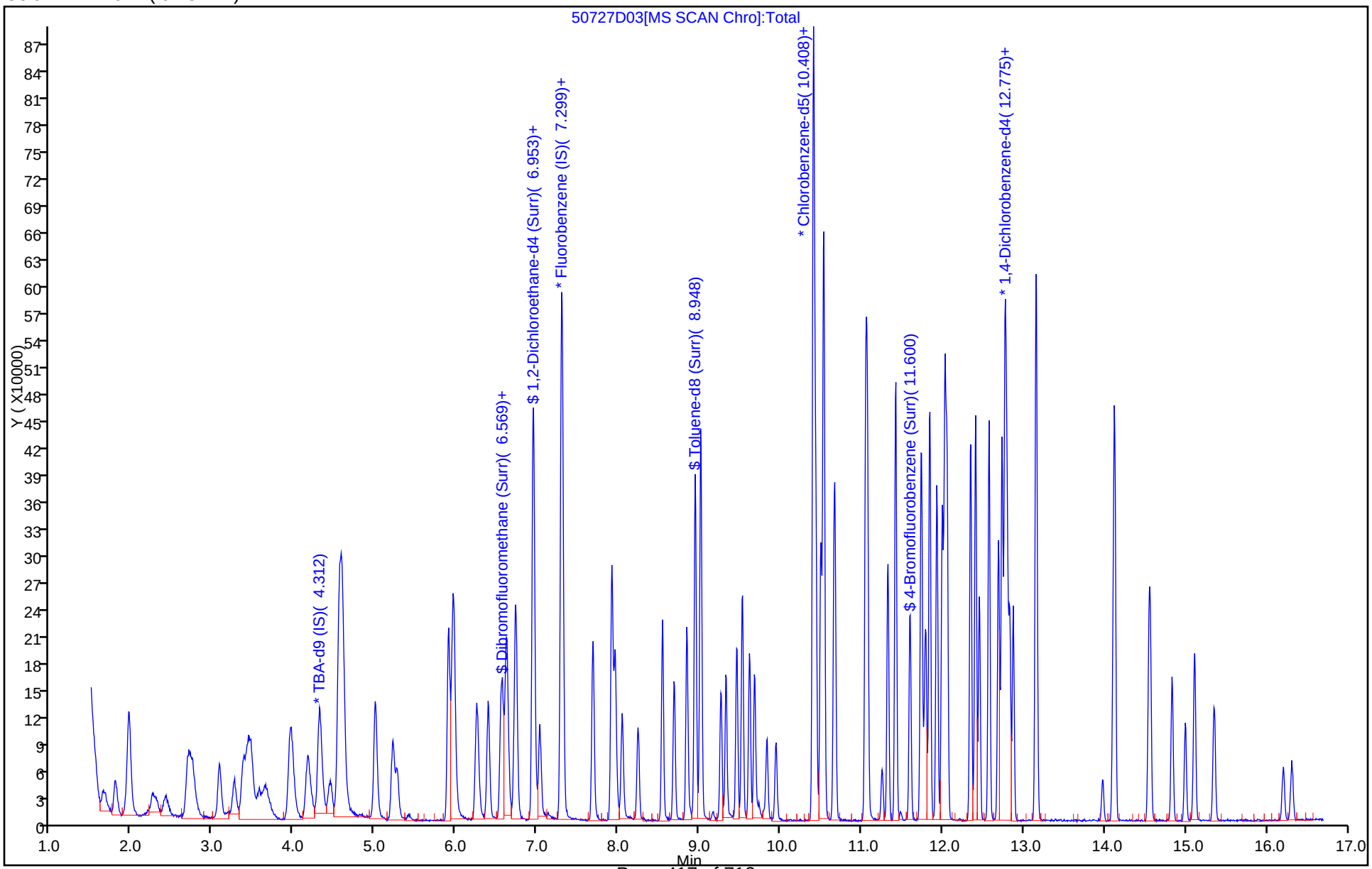
Report Date: 28-Jul-2017 01:04:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

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

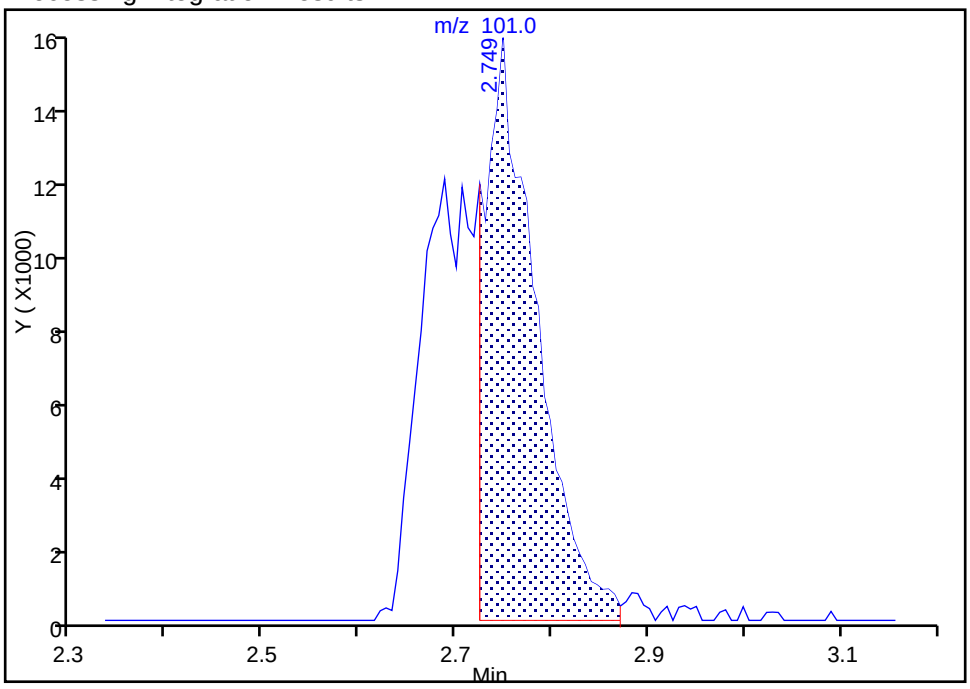
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D03.D				
Injection Date:	27-Jul-2017 01:15:30	Instrument ID:	CHHP5		
Lims ID:	IC VSTD5				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

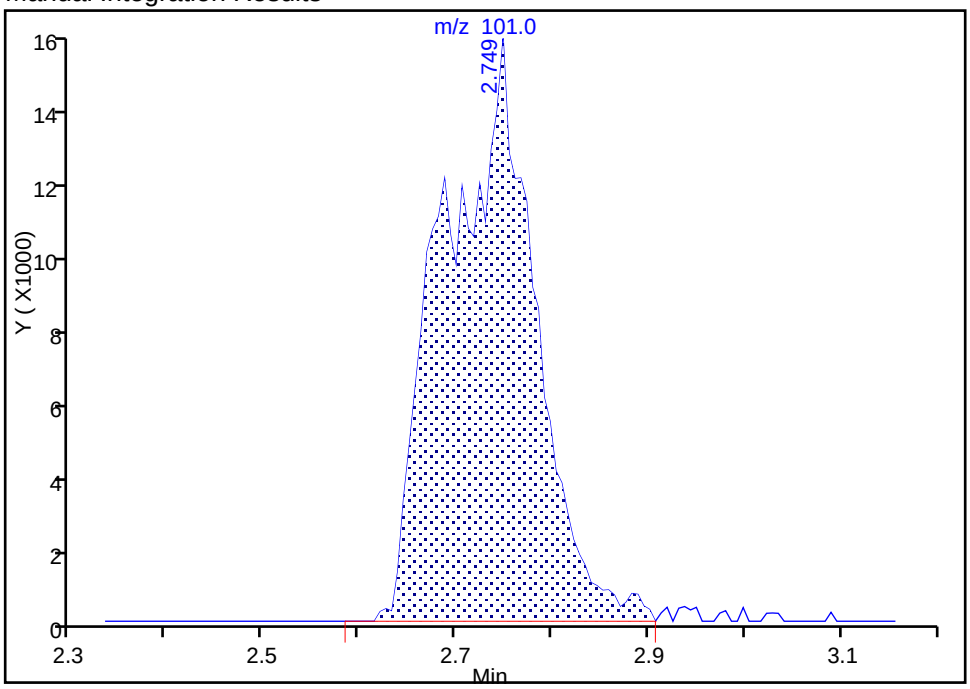
Processing Integration Results

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

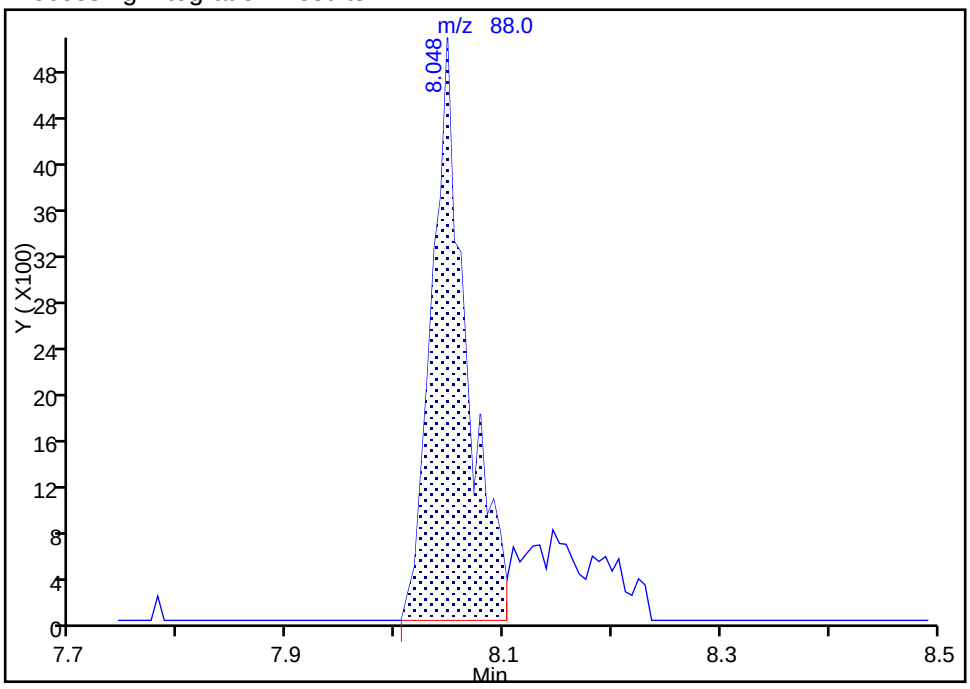
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D03.D
Injection Date: 27-Jul-2017 01:15:30 Instrument ID: CHHP5
Lims ID: IC VSTD5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

Signal: 1

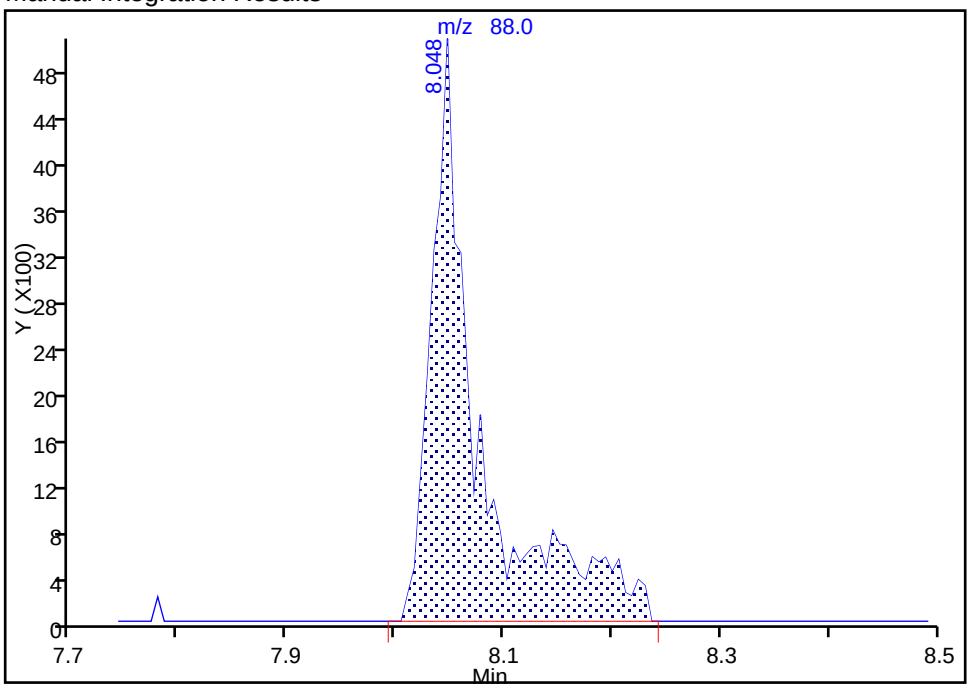
Processing Integration Results

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

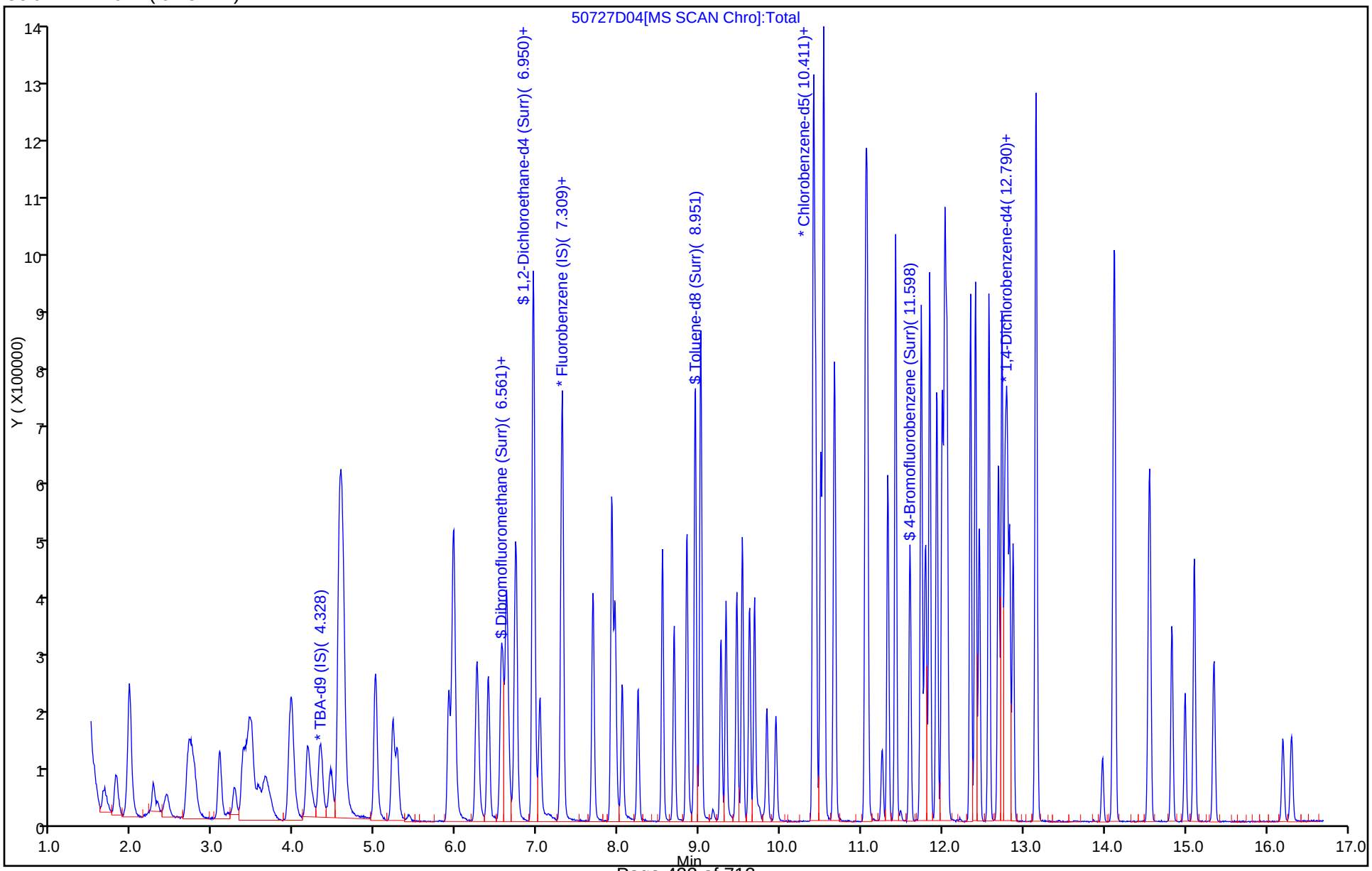
Report Date: 28-Jul-2017 01:04:50 Chrom Revision: 2.2 20-Jun-2017 07:42:38

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

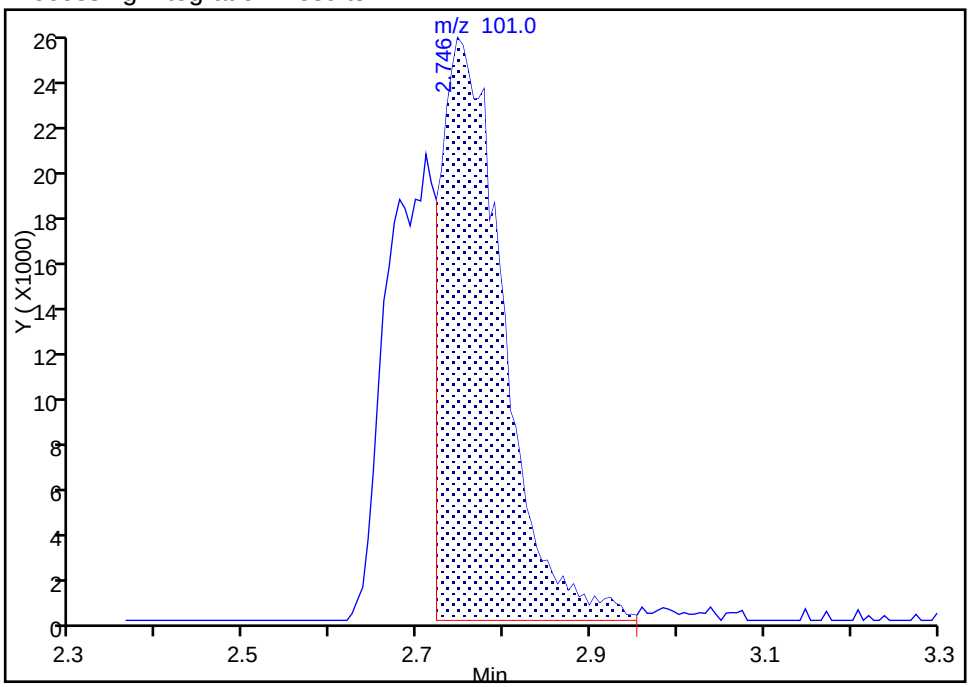
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D04.D				
Injection Date:	27-Jul-2017 01:39:30	Instrument ID:	CHHP5		
Lims ID:	ICIS VSTD10				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

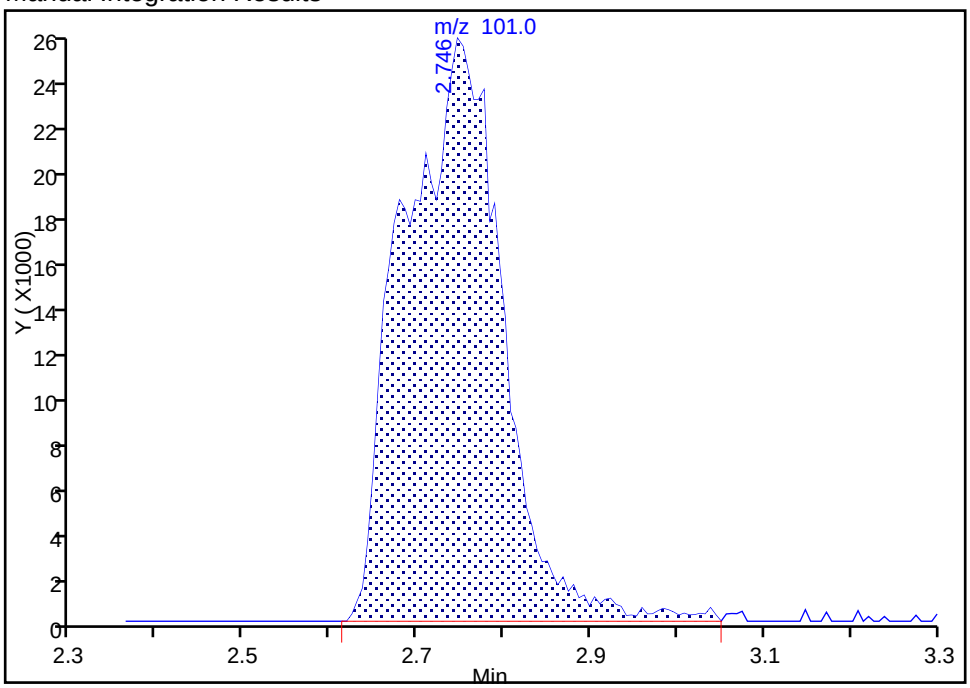
Processing Integration Results

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

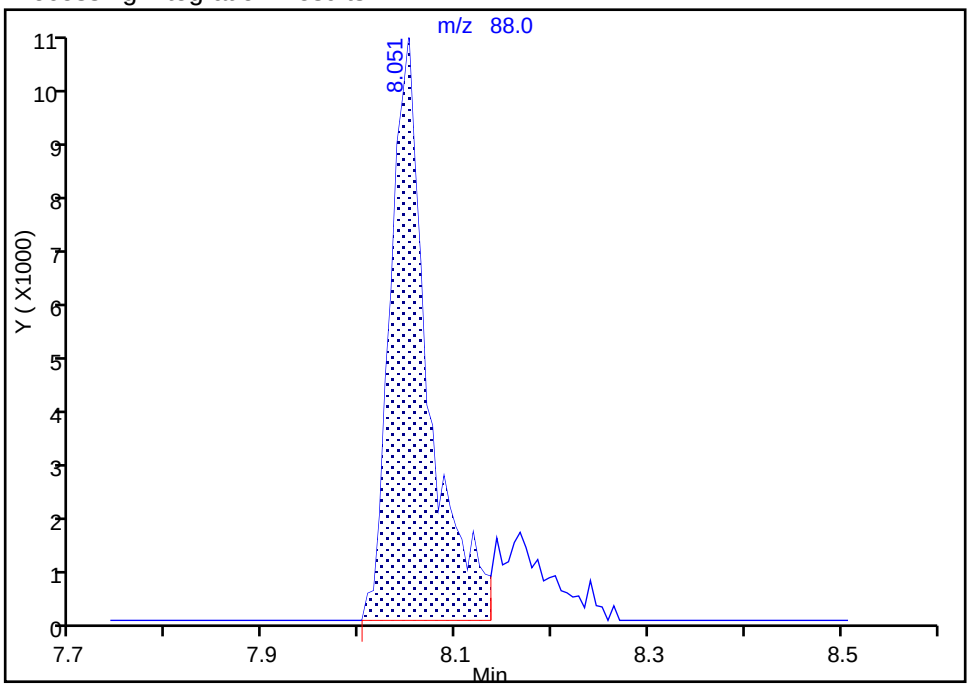
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20170726-17756.b\50727D04.D
Injection Date: 27-Jul-2017 01:39:30 Instrument ID: CHHP5
Lims ID: ICIS VSTD10
Client ID:
Operator ID: 034635 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

Signal: 1

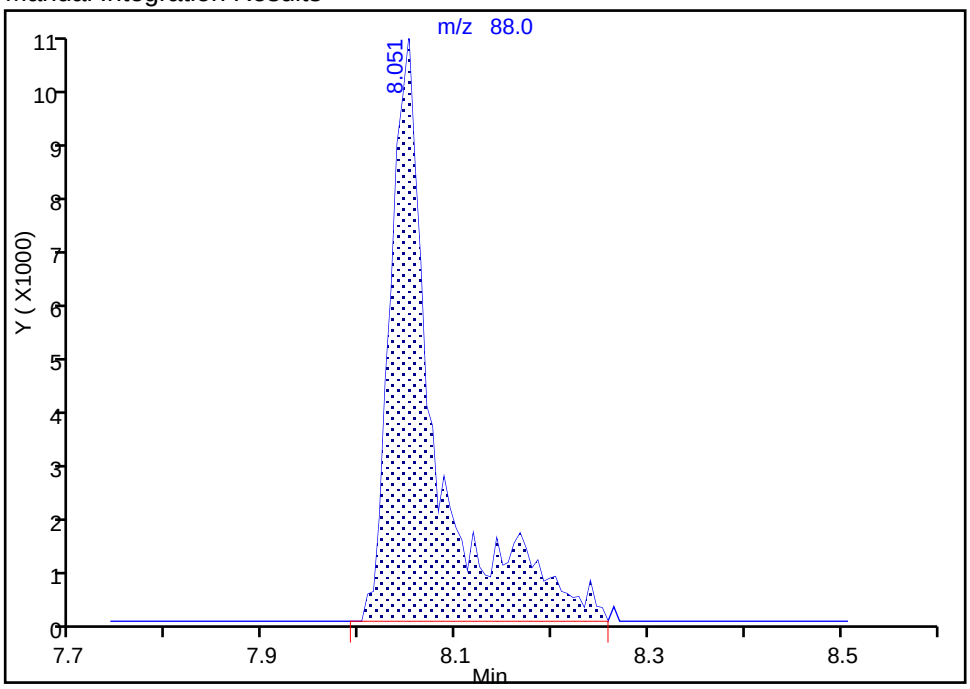
Processing Integration Results

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

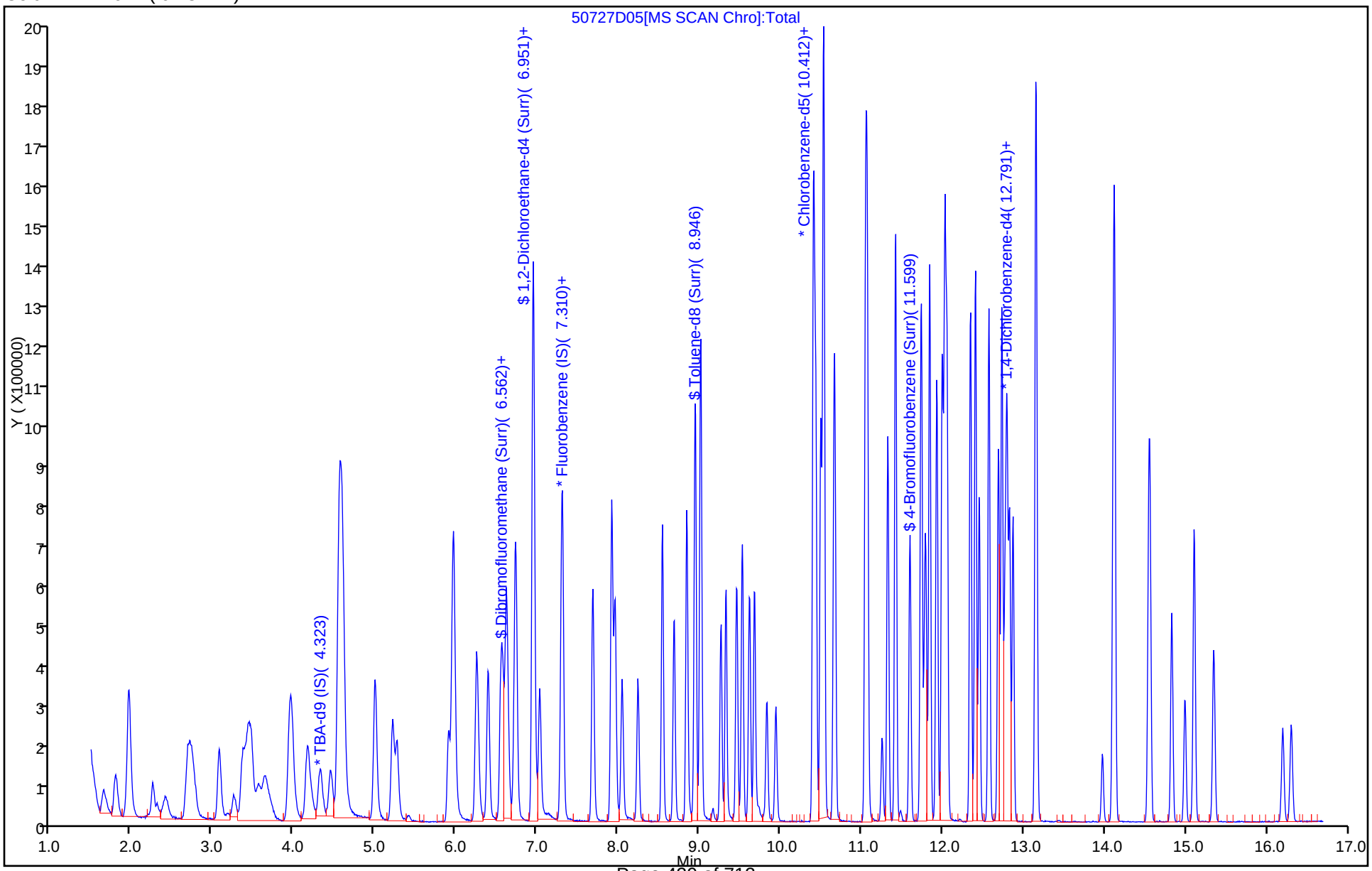
Report Date: 28-Jul-2017 01:04:56 Chrom Revision: 2.2 20-Jun-2017 07:42:38

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

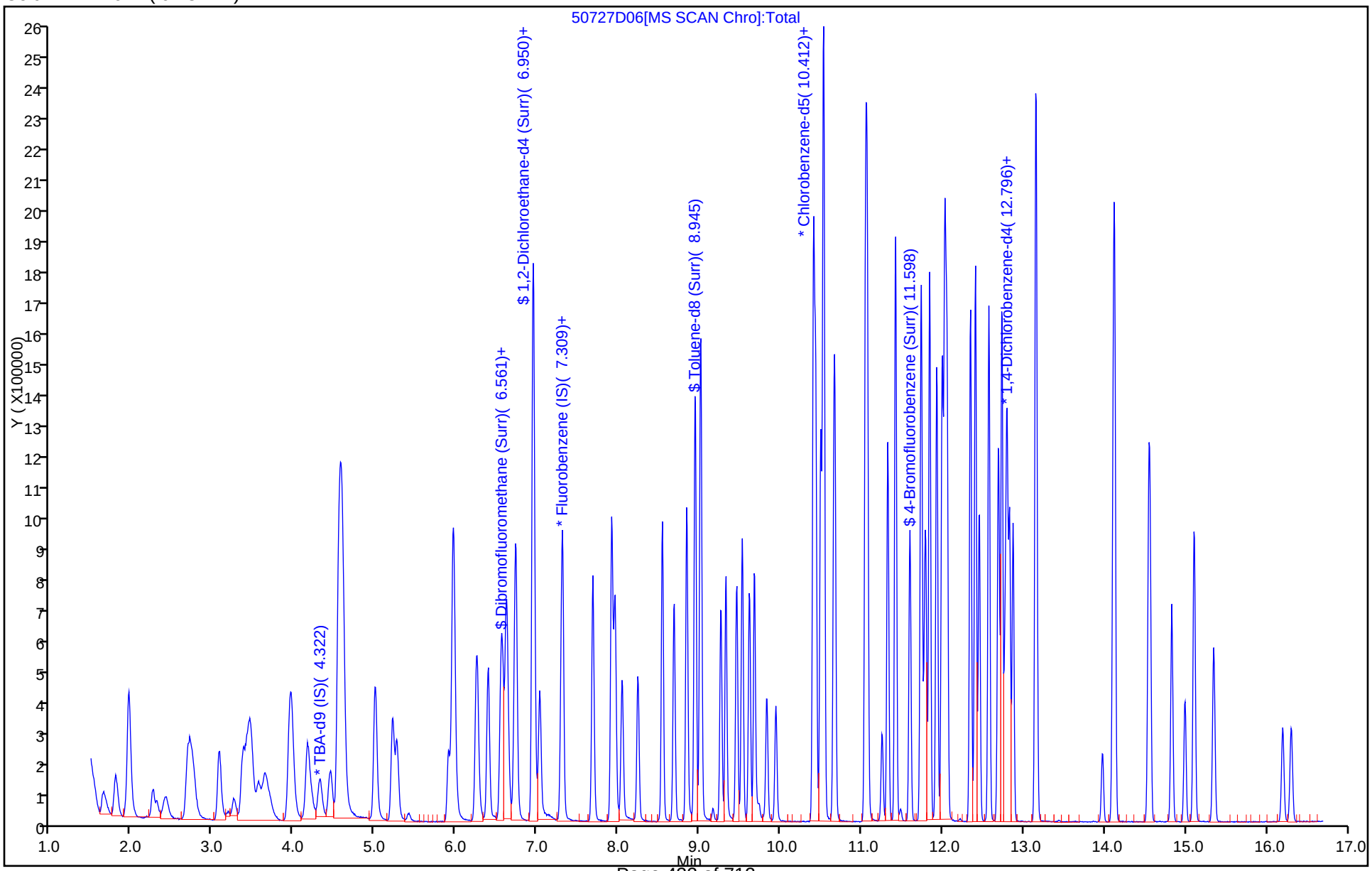
Report Date: 28-Jul-2017 01:04:59 Chrom Revision: 2.2 20-Jun-2017 07:42:38

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

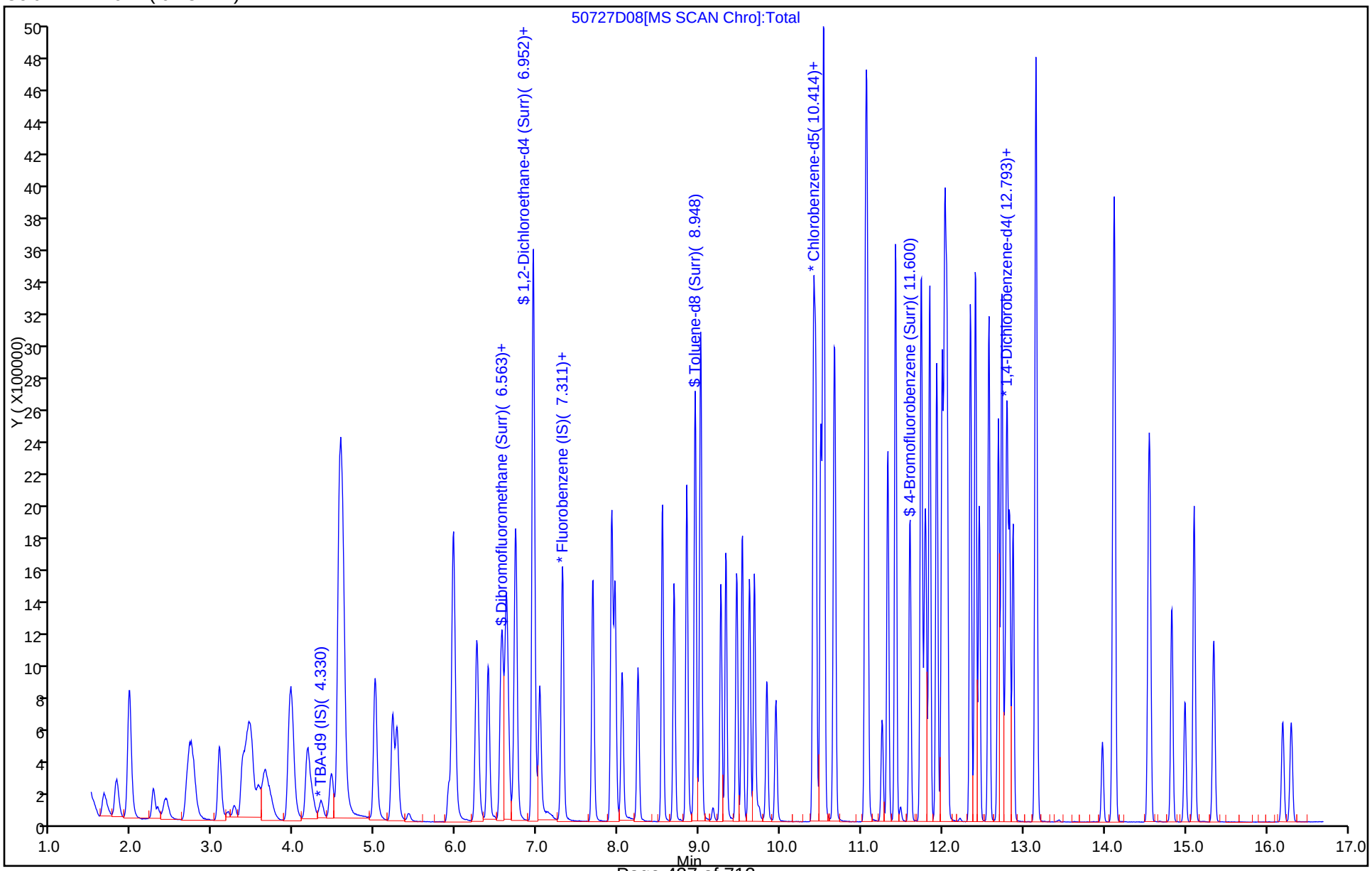
Report Date: 28-Jul-2017 01:05:03 Chrom Revision: 2.2 20-Jun-2017 07:42:38

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

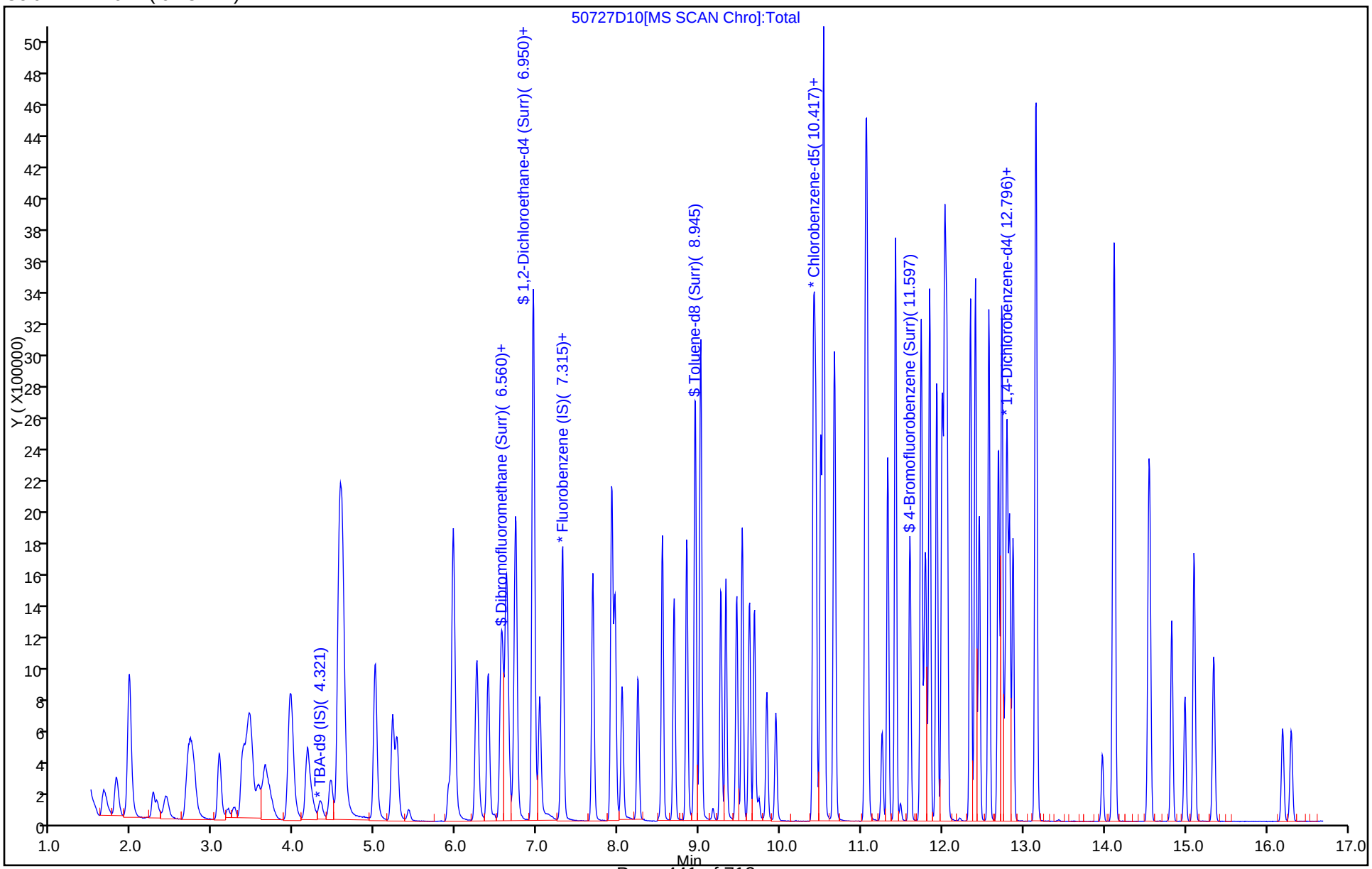
Report Date: 28-Jul-2017 01:05:07 Chrom Revision: 2.2 20-Jun-2017 07:42:38

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

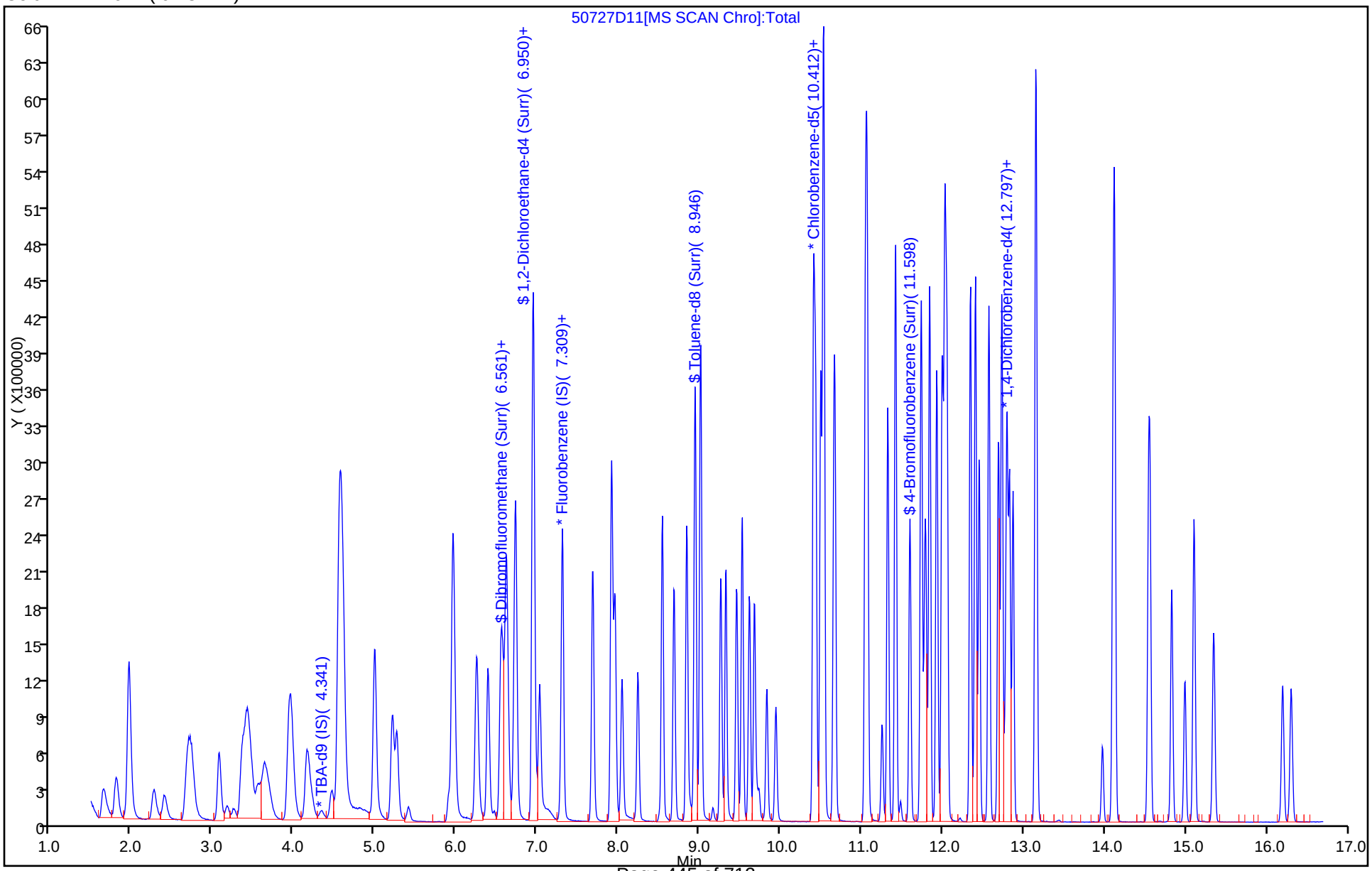
Report Date: 28-Jul-2017 01:05:09 Chrom Revision: 2.2 20-Jun-2017 07:42:38

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 VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227010/2 Calibration Date: 10/25/2017 22:12

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: 51025D02.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	0.3105	0.1000	10.7	10.0	6.8	20.0
Chloromethane	Ave	0.2922	0.3504	0.1000	12.0	10.0	19.9	20.0
1,3-Butadiene	Ave	0.2694	0.3536	0.0100	13.1	10.0	31.3*	20.0
Vinyl chloride	Ave	0.2965	0.3003	0.1000	10.1	10.0	1.3	20.0
Bromomethane	Ave	0.1402	0.1012	0.0500	7.22	10.0	-27.8*	20.0
Chloroethane	Ave	0.1630	0.1494	0.0500	9.17	10.0	-8.3	20.0
Trichlorofluoromethane	Ave	0.3643	0.3868	0.1000	10.6	10.0	6.2	20.0
Ethyl ether	Ave	0.2370	0.2681	0.0100	11.3	10.0	13.1	20.0
Acrolein	Ave	0.0597	0.0674	0.0100	33.9	30.0	12.9	20.0
1,1-Dichloroethene	Ave	0.2448	0.2455	0.1000	10.0	10.0	0.3	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2686	0.2578	0.1000	9.60	10.0	-4.0	20.0
Acetone	Ave	0.1308	0.1562	0.0500	23.9	20.0	19.4	20.0
Iodomethane	Ave	0.3845	0.3715	0.0100	9.66	10.0	-3.4	20.0
Carbon disulfide	Ave	0.5372	0.4722	0.1000	8.79	10.0	-12.1	20.0
Allyl chloride	Ave	0.1582	0.1370	0.0100	8.66	10.0	-13.4	20.0
Methyl acetate	Ave	0.2589	0.2804	0.1000	21.7	20.0	8.3	20.0
Methylene Chloride	Lin2		0.2745	0.1000	8.99	10.0	-10.1	20.0
tert-Butyl alcohol	Ave	1.183	1.340	0.0100	113	100	13.3	20.0
Acrylonitrile	Ave	0.1259	0.1282	0.0100	102	100	1.8	20.0
trans-1,2-Dichloroethene	Ave	0.2789	0.2487	0.1000	8.92	10.0	-10.8	20.0
Methyl tert-butyl ether	Ave	0.7479	0.6550	0.1000	8.76	10.0	-12.4	20.0
Hexane	Ave	0.3580	0.3693	0.0100	10.3	10.0	3.1	20.0
1,1-Dichloroethane	Ave	0.4850	0.4638	0.2000	9.56	10.0	-4.4	20.0
Vinyl acetate	Ave	0.4932	0.5407	0.0100	11.0	10.0	9.6	20.0
2,2-Dichloropropane	Ave	0.0617	0.0615	0.0100	9.97	10.0	-0.3	20.0
cis-1,2-Dichloroethene	Ave	0.3190	0.2777	0.1000	8.71	10.0	-12.9	20.0
2-Butanone (MEK)	Ave	0.1861	0.2039	0.0500	21.9	20.0	9.5	20.0
Bromochloromethane	Ave	0.1418	0.1266	0.0100	8.92	10.0	-10.8	20.0
Tetrahydrofuran	Ave	0.1084	0.1025	0.0100	18.9	20.0	-5.5	20.0
Chloroform	Ave	0.4843	0.4254	0.2000	8.78	10.0	-12.2	20.0
1,1,1-Trichloroethane	Ave	0.3666	0.3401	0.1000	9.28	10.0	-7.2	20.0
Cyclohexane	Ave	0.4524	0.4682	0.1000	10.4	10.0	3.5	20.0
Carbon tetrachloride	Ave	0.3051	0.2820	0.1000	9.24	10.0	-7.6	20.0
1,1-Dichloropropene	Ave	0.3961	0.3355	0.0100	8.47	10.0	-15.3	20.0
Isobutyl alcohol	Ave	0.0099	0.0110	0.0100	276	250	10.3	20.0
Benzene	Ave	1.216	1.066	0.5000	8.77	10.0	-12.3	20.0
1,2-Dichloroethane	Ave	0.3544	0.3541	0.1000	9.99	10.0	-0.0	20.0
n-Heptane	Ave	0.2863	0.3257	0.0100	11.4	10.0	13.8	20.0
Trichloroethene	Ave	0.3059	0.2541	0.2000	8.31	10.0	-16.9	20.0
Methylcyclohexane	Ave	0.4626	0.3661	0.1000	7.91	10.0	-20.9*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227010/2 Calibration Date: 10/25/2017 22:12

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: 51025D02.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	0.2552	0.1000	9.01	10.0	-9.9	20.0
1,4-Dioxane	Ave	0.0029	0.0027*	0.0100	189	200	-5.7	20.0
Dibromomethane	Ave	0.1659	0.1385	0.0100	8.35	10.0	-16.5	20.0
Bromodichloromethane	Ave	0.3256	0.2614	0.2000	8.03	10.0	-19.7	20.0
2-Chloroethyl vinyl ether	Ave	0.2037	0.1643	0.0100	16.1	20.0	-19.4	20.0
cis-1,3-Dichloropropene	Ave	0.3955	0.3176	0.2000	8.03	10.0	-19.7	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.282	1.446	0.1000	22.5	20.0	12.7	20.0
Toluene	Ave	4.986	4.996	0.4000	10.0	10.0	0.2	20.0
trans-1,3-Dichloropropene	Ave	1.357	1.289	0.1000	9.50	10.0	-5.0	20.0
Ethyl methacrylate	Ave	1.636	1.283	0.0100	7.84	10.0	-21.6*	20.0
1,1,2-Trichloroethane	Ave	1.039	1.026	0.1000	9.88	10.0	-1.2	20.0
Tetrachloroethene	Ave	0.9508	0.8933	0.2000	9.40	10.0	-6.0	20.0
1,3-Dichloropropane	Ave	1.920	1.748	0.0100	9.10	10.0	-9.0	20.0
2-Hexanone	Ave	0.9836	1.071	0.1000	21.8	20.0	8.9	20.0
Dibromochloromethane	Ave	0.8779	0.8193	0.1000	9.33	10.0	-6.7	20.0
1,2-Dibromoethane (EDB)	Ave	1.065	0.9552	0.1000	8.97	10.0	-10.3	20.0
3-Chlorobenzotrifluoride	Ave	1.718	1.827	0.0100	10.6	10.0	6.3	20.0
Chlorobenzene	Ave	3.246	3.068	0.5000	9.45	10.0	-5.5	20.0
4-Chlorobenzotrifluoride	Ave	1.586	1.753	0.0100	11.1	10.0	10.6	20.0
1,1,1,2-Tetrachloroethane	Ave	1.032	1.004	0.0100	9.73	10.0	-2.7	20.0
Ethylbenzene	Ave	1.812	1.687	0.1000	9.31	10.0	-6.9	20.0
m-Xylene & p-Xylene	Ave	2.214	2.119	0.1000	9.57	10.0	-4.3	20.0
o-Xylene	Ave	2.110	1.948	0.3000	9.23	10.0	-7.7	20.0
Styrene	Ave	3.571	3.393	0.3000	9.50	10.0	-5.0	20.0
Bromoform	Ave	0.5456	0.4504	0.1000	8.26	10.0	-17.4	20.0
2-Chlorobenzotrifluoride	Ave	1.644	1.751	0.0100	10.7	10.0	6.5	20.0
Isopropylbenzene	Ave	5.150	4.707	0.1000	9.14	10.0	-8.6	20.0
1,1,2,2-Tetrachloroethane	Ave	1.538	1.343	0.3000	8.74	10.0	-12.6	20.0
Bromobenzene	Ave	0.9704	0.8234	0.0100	8.48	10.0	-15.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2926	0.3069	0.0100	10.5	10.0	4.9	20.0
1,2,3-Trichloropropane	Ave	0.4005	0.3315	0.0100	8.28	10.0	-17.2	20.0
N-Propylbenzene	Ave	1.109	0.9395	0.0100	8.47	10.0	-15.3	20.0
2-Chlorotoluene	Ave	0.9585	0.7985	0.0100	8.33	10.0	-16.7	20.0
3-Chlorotoluene	Ave	1.043	1.019	0.0100	9.77	10.0	-2.3	20.0
1,3,5-Trimethylbenzene	Ave	3.173	2.857	0.0100	9.01	10.0	-9.9	20.0
4-Chlorotoluene	Ave	1.035	0.9094	0.0100	8.79	10.0	-12.1	20.0
tert-Butylbenzene	Ave	2.653	2.134	0.0100	8.04	10.0	-19.6	20.0
1,2,4-Trimethylbenzene	Ave	3.226	2.807	0.0100	8.70	10.0	-13.0	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8081	0.7257	0.0100	8.98	10.0	-10.2	20.0
sec-Butylbenzene	Ave	3.701	3.126	0.0100	8.45	10.0	-15.5	20.0
1,3-Dichlorobenzene	Ave	1.734	1.548	0.6000	8.93	10.0	-10.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227010/2 Calibration Date: 10/25/2017 22:12

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: 51025D02.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	2.728	0.0100	8.85	10.0	-11.5	20.0
1,4-Dichlorobenzene	Ave	1.780	1.628	0.5000	9.14	10.0	-8.6	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7524	0.6947	0.0100	9.23	10.0	-7.7	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8127	0.7485	0.0100	9.21	10.0	-7.9	20.0
n-Butylbenzene	Ave	2.514	2.119	0.0100	8.43	10.0	-15.7	20.0
1,2-Dichlorobenzene	Ave	1.653	1.533	0.4000	9.27	10.0	-7.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1835	0.1401	0.0500	7.63	10.0	-23.7*	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.048	1.113	0.0100	31.9	30.0	6.2	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.084	1.124	0.0100	20.7	20.0	3.7	20.0
1,2,4-Trichlorobenzene	Ave	0.7563	0.6689	0.2000	8.84	10.0	-11.6	20.0
Hexachlorobutadiene	Ave	0.2767	0.2540	0.0100	9.18	10.0	-8.2	20.0
Naphthalene	Ave	2.576	2.175	0.0100	8.44	10.0	-15.6	20.0
1,2,3-Trichlorobenzene	Ave	0.6909	0.5939	0.0100	8.60	10.0	-14.0	20.0
2,4,5-Trichlorotoluene	Ave	0.3284	0.2942	0.0100	8.96	10.0	-10.4	20.0
2,3,6-Trichlorotoluene	Ave	0.3055	0.2984	0.0100	9.77	10.0	-2.3	20.0
Dibromofluoromethane (Surr)	Ave	0.2406	0.2130		8.85	10.0	-11.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2934	0.2715		9.25	10.0	-7.5	20.0
Toluene-d8 (Surr)	Ave	3.979	3.933		9.88	10.0	-1.2	20.0
4-Bromofluorobenzene (Surr)	Ave	1.437	1.342		9.34	10.0	-6.6	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D02.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 25-Oct-2017 22:12:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-002
Misc. Info.: CCVIS
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 25-Oct-2017 22:48:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.384	4.384	0.000	0	183590	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.340	7.340	0.000	97	526834	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.429	10.429	0.000	88	114566	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.770	12.770	0.000	93	166995	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.610	6.610	0.000	92	112223	50.0	44.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.987	6.987	0.000	0	143045	50.0	46.3	
$ 7 Toluene-d8 (Surr)	98	8.982	8.982	0.000	93	450550	50.0	49.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.609	11.609	0.000	86	153779	50.0	46.7	
11 Dichlorodifluoromethane	85	1.684	1.684	0.000	99	163567	50.0	53.4	
12 Chloromethane	50	1.891	1.891	0.000	99	184618	50.0	60.0	
14 Butadiene	39	2.012	2.012	0.000	92	186292	50.0	65.6	
13 Vinyl chloride	62	2.012	2.012	0.000	64	158219	50.0	50.6	
15 Bromomethane	94	2.335	2.335	0.000	91	53328	50.0	36.1	M
16 Chloroethane	64	2.426	2.426	0.000	95	78732	50.0	45.8	
17 Dichlorofluoromethane	67	2.760	2.760	0.000	98	232206	50.0	53.5	
18 Trichlorofluoromethane	101	2.791	2.791	0.000	48	203767	50.0	53.1	M
20 Ethyl ether	59	3.131	3.131	0.000	95	141225	50.0	56.6	
21 Acrolein	56	3.314	3.314	0.000	100	106594	150.0	169.4	
22 1,1-Dichloroethene	96	3.411	3.411	0.000	97	129330	50.0	50.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.496	3.496	0.000	92	135794	50.0	48.0	
24 Acetone	43	3.539	3.539	0.000	99	164548	100.0	119.4	
25 Iodomethane	142	3.612	3.612	0.000	95	195718	50.0	48.3	
26 Carbon disulfide	76	3.703	3.703	0.000	100	248750	50.0	43.9	
28 3-Chloro-1-propene	76	4.001	4.001	0.000	90	72163	50.0	43.3	
30 Methyl acetate	43	4.038	4.038	0.000	99	295408	100.0	108.3	
31 Methylene Chloride	84	4.226	4.226	0.000	98	144603	50.0	44.9	
32 2-Methyl-2-propanol	59	4.506	4.506	0.000	92	123013	500.0	566.6	
33 Acrylonitrile	53	4.609	4.609	0.000	100	675445	500.0	509.2	
34 trans-1,2-Dichloroethene	96	4.640	4.640	0.000	98	131046	50.0	44.6	
35 Methyl tert-butyl ether	73	4.664	4.664	0.000	96	345069	50.0	43.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.053	5.053	0.000	94	194539	50.0	51.6	
37 1,1-Dichloroethane	63	5.266	5.266	0.000	96	244353	50.0	47.8	
38 Vinyl acetate	43	5.321	5.321	0.000	97	284835	50.0	54.8	
44 2,2-Dichloropropane	97	6.008	6.008	0.000	60	32416	50.0	49.8	
45 cis-1,2-Dichloroethene	96	6.008	6.008	0.000	82	146306	50.0	43.5	
46 2-Butanone (MEK)	43	6.026	6.026	0.000	99	214823	100.0	109.5	
49 Chlorobromomethane	128	6.288	6.288	0.000	96	66670	50.0	44.6	
51 Tetrahydrofuran	42	6.306	6.306	0.000	91	107968	100.0	94.5	
52 Chloroform	83	6.434	6.434	0.000	94	224088	50.0	43.9	
53 1,1,1-Trichloroethane	97	6.592	6.592	0.000	98	179160	50.0	46.4	
54 Cyclohexane	56	6.659	6.659	0.000	94	246685	50.0	51.8	
56 Carbon tetrachloride	117	6.762	6.762	0.000	97	148565	50.0	46.2	
55 1,1-Dichloropropene	75	6.780	6.780	0.000	93	176730	50.0	42.4	
57 Isobutyl alcohol	41	6.987	6.987	0.000	85	144501	1250.0	1378.4	
58 Benzene	78	6.993	6.993	0.000	97	561851	50.0	43.9	
59 1,2-Dichloroethane	62	7.072	7.072	0.000	97	186540	50.0	50.0	
62 n-Heptane	43	7.352	7.352	0.000	92	171591	50.0	56.9	
64 Trichloroethene	130	7.723	7.723	0.000	97	133890	50.0	41.5	
66 Methylcyclohexane	83	7.960	7.960	0.000	93	192890	50.0	39.6	
67 1,2-Dichloropropane	63	7.997	7.997	0.000	94	134442	50.0	45.1	
70 1,4-Dioxane	88	8.082	8.082	0.000	48	28599	1000.0	942.9	
68 Dibromomethane	93	8.088	8.088	0.000	97	72953	50.0	41.7	
71 Dichlorobromomethane	83	8.276	8.276	0.000	98	137719	50.0	40.1	
73 2-Chloroethyl vinyl ether	63	8.574	8.574	0.000	92	173063	100.0	80.6	
74 cis-1,3-Dichloropropene	75	8.720	8.720	0.000	93	167318	50.0	40.2	
75 4-Methyl-2-pentanone (MIBK	43	8.872	8.872	0.000	99	331261	100.0	112.7	
76 Toluene	91	9.049	9.049	0.000	98	572317	50.0	50.1	
77 trans-1,3-Dichloropropene	75	9.298	9.298	0.000	96	147724	50.0	47.5	
78 Ethyl methacrylate	69	9.353	9.353	0.000	93	146975	50.0	39.2	
79 1,1,2-Trichloroethane	97	9.486	9.486	0.000	91	117536	50.0	49.4	
80 Tetrachloroethene	164	9.559	9.559	0.000	96	102343	50.0	47.0	
81 1,3-Dichloropropane	76	9.645	9.645	0.000	97	200256	50.0	45.5	
82 2-Hexanone	43	9.705	9.705	0.000	99	245497	100.0	108.9	
84 Chlorodibromomethane	129	9.857	9.857	0.000	89	93868	50.0	46.7	
85 Ethylene Dibromide	107	9.967	9.967	0.000	97	109430	50.0	44.8	
86 3-Chlorobenzotrifluoride	180	10.435	10.435	0.000	88	209316	50.0	53.2	
87 Chlorobenzene	112	10.459	10.459	0.000	94	351440	50.0	47.3	
88 4-Chlorobenzotrifluoride	180	10.520	10.520	0.000	96	200811	50.0	55.3	
89 1,1,1,2-Tetrachloroethane	131	10.551	10.551	0.000	93	115032	50.0	48.6	
90 Ethylbenzene	106	10.557	10.557	0.000	99	193257	50.0	46.6	
91 m-Xylene & p-Xylene	106	10.684	10.684	0.000	0	242762	50.0	47.9	
92 o-Xylene	106	11.068	11.068	0.000	96	223188	50.0	46.2	
93 Styrene	104	11.092	11.092	0.000	95	388706	50.0	47.5	
94 Bromoform	173	11.274	11.274	0.000	96	51605	50.0	41.3	
96 2-Chlorobenzotrifluoride	180	11.341	11.341	0.000	95	200645	50.0	53.3	
97 Isopropylbenzene	105	11.439	11.439	0.000	96	539209	50.0	45.7	
100 Bromobenzene	156	11.749	11.749	0.000	96	137507	50.0	42.4	
99 1,1,2,2-Tetrachloroethane	83	11.749	11.749	0.000	83	153909	50.0	43.7	
102 trans-1,4-Dichloro-2-buten	53	11.785	11.785	0.000	82	51256	50.0	52.4	
101 1,2,3-Trichloropropane	110	11.803	11.803	0.000	85	55364	50.0	41.4	
103 N-Propylbenzene	120	11.852	11.852	0.000	99	156891	50.0	42.4	
104 2-Chlorotoluene	126	11.943	11.943	0.000	97	133346	50.0	41.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	12.004	12.004	0.000	97	170097	50.0	48.8	
106 1,3,5-Trimethylbenzene	105	12.035	12.035	0.000	94	477187	50.0	45.0	
107 4-Chlorotoluene	126	12.065	12.065	0.000	96	151863	50.0	43.9	
108 tert-Butylbenzene	119	12.351	12.351	0.000	94	356298	50.0	40.2	
110 1,2,4-Trimethylbenzene	105	12.412	12.412	0.000	97	468755	50.0	43.5	
111 1,2-dichloro-4-(trifluorom	214	12.454	12.454	0.000	95	121191	50.0	44.9	
112 sec-Butylbenzene	105	12.576	12.576	0.000	94	521990	50.0	42.2	
113 1,3-Dichlorobenzene	146	12.691	12.691	0.000	98	258540	50.0	44.6	
114 4-Isopropyltoluene	119	12.728	12.728	0.000	97	455492	50.0	44.2	
115 1,4-Dichlorobenzene	146	12.795	12.795	0.000	96	271881	50.0	45.7	
116 2,4-Dichloro-1-(triflourom	214	12.819	12.819	0.000	94	116018	50.0	46.2	
118 2,5-Dichlorobenzotrifluori	214	12.862	12.862	0.000	0	124999	50.0	46.1	
120 n-Butylbenzene	91	13.141	13.141	0.000	98	353806	50.0	42.1	
121 1,2-Dichlorobenzene	146	13.147	13.147	0.000	97	255933	50.0	46.4	
122 1,2-Dibromo-3-Chloropropan	75	13.938	13.938	0.000	77	23395	50.0	38.2	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.084	14.084	0.000	0	557793	150.0	159.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.504	14.504	0.000	0	375386	100.0	103.7	
126 1,2,4-Trichlorobenzene	180	14.765	14.765	0.000	94	111696	50.0	44.2	
127 Hexachlorobutadiene	225	14.911	14.911	0.000	94	42422	50.0	45.9	
128 Naphthalene	128	15.033	15.033	0.000	97	363200	50.0	42.2	
129 1,2,3-Trichlorobenzene	180	15.258	15.258	0.000	96	99176	50.0	43.0	
131 2,4,5-Trichlorotoluene	159	16.024	16.024	0.000	0	49132	50.0	44.8	
130 2,3,6-Trichlorotoluene	159	16.121	16.121	0.000	97	49838	50.0	48.8	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	88.1	
S 133 Xylenes, Total	106				0		100.0	94.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	87.7	

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	
voaWKetmix1st_00006	Amount Added:	2.00	Units: uL	
voaWVA1stRest_00021	Amount Added:	2.00	Units: uL	
voaWAcro1stRe_00021	Amount Added:	6.00	Units: uL	
VOA8260VOAPRI_00268	Amount Added:	2.00	Units: uL	
voaW2clev1stR_00023	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

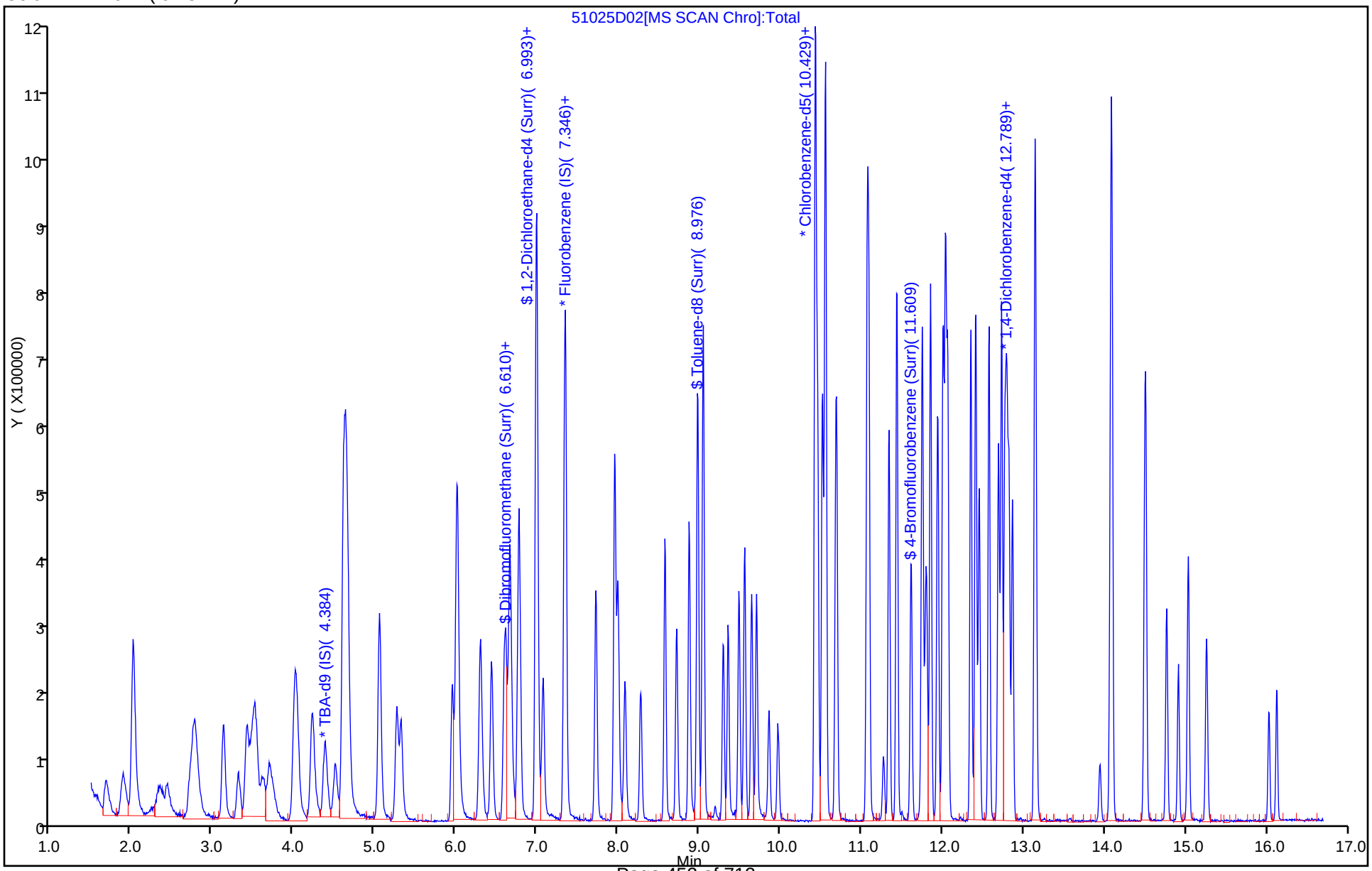
Report Date: 26-Oct-2017 20:41:13 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D02.D

Injection Date:	25-Oct-2017 22:12:30	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

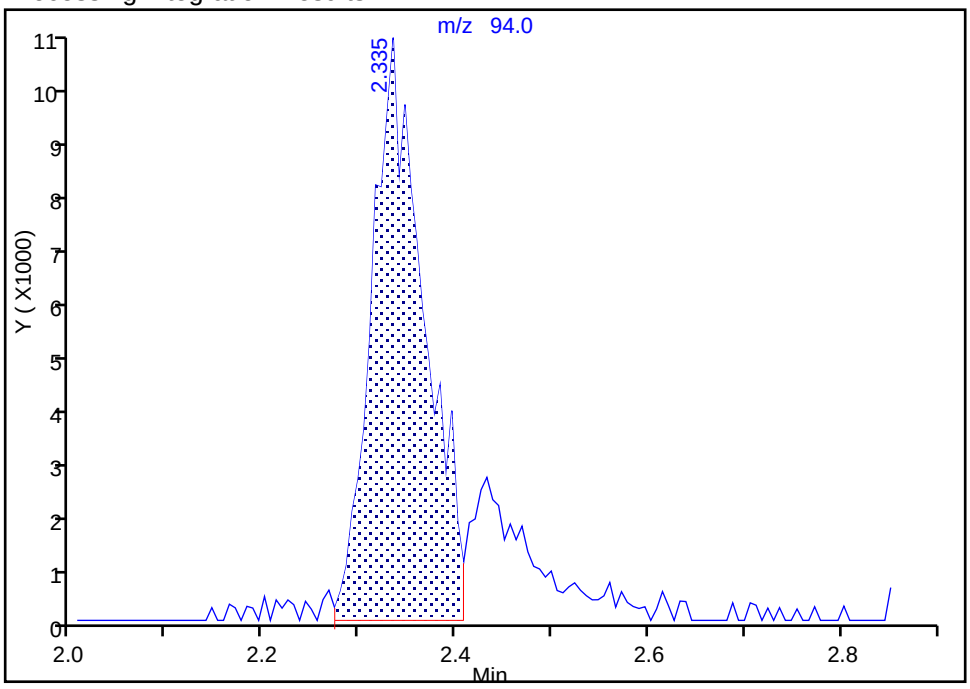
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D02.D				
Injection Date:	25-Oct-2017 22:12:30	Instrument ID:	CHHP5		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

15 Bromomethane, CAS: 74-83-9

Signal: 1

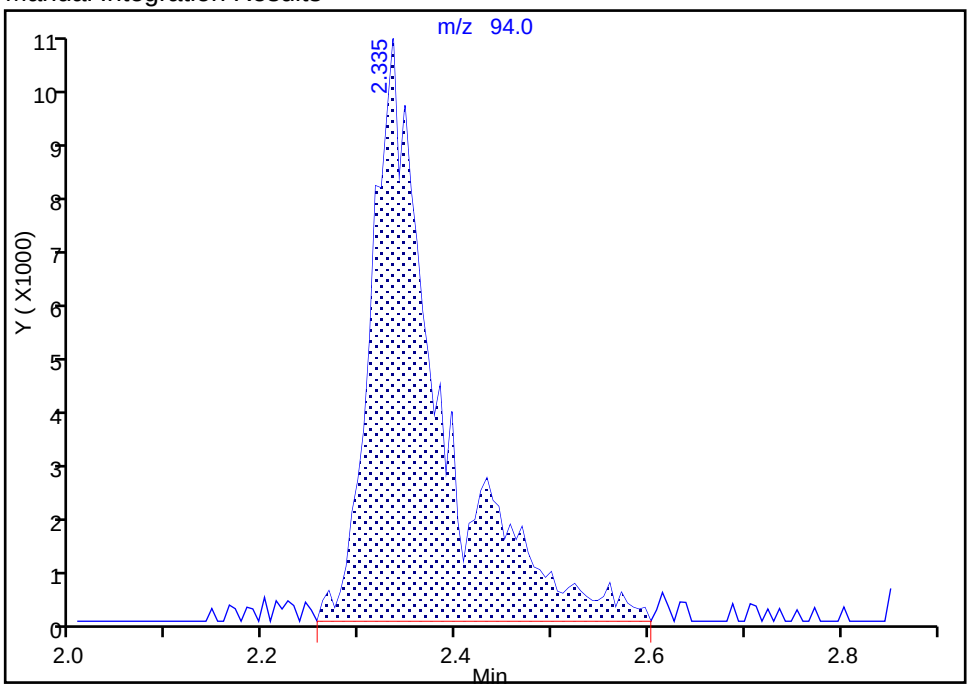
Processing Integration Results

RT: 2.33
Area: 41318
Amount: 27.969422
Amount Units: ng



Manual Integration Results

RT: 2.33
Area: 53328
Amount: 36.099359
Amount Units: ng



Reviewer: bungardf, 25-Oct-2017 22:47:06

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

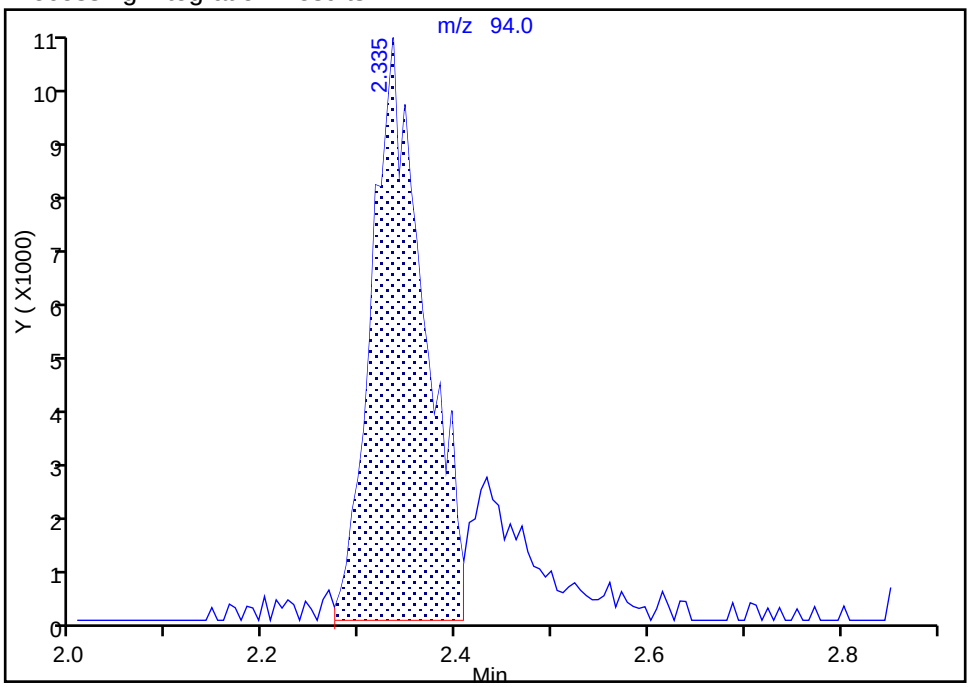
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D02.D
Injection Date: 25-Oct-2017 22:12:30 Instrument ID: CHHP5
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

15 Bromomethane, CAS: 74-83-9

Signal: 1

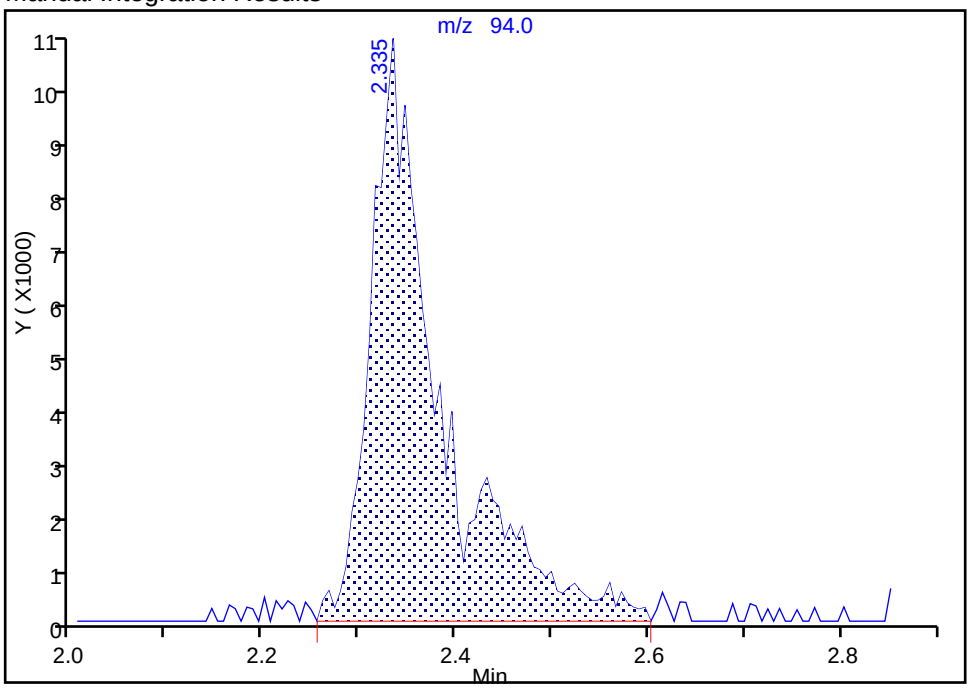
Processing Integration Results

RT: 2.33
Area: 41318
Amount: 27.969422
Amount Units: ng



Manual Integration Results

RT: 2.33
Area: 53328
Amount: 36.099359
Amount Units: ng



Reviewer: bungardf, 25-Oct-2017 22:47:13
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

TestAmerica Pittsburgh

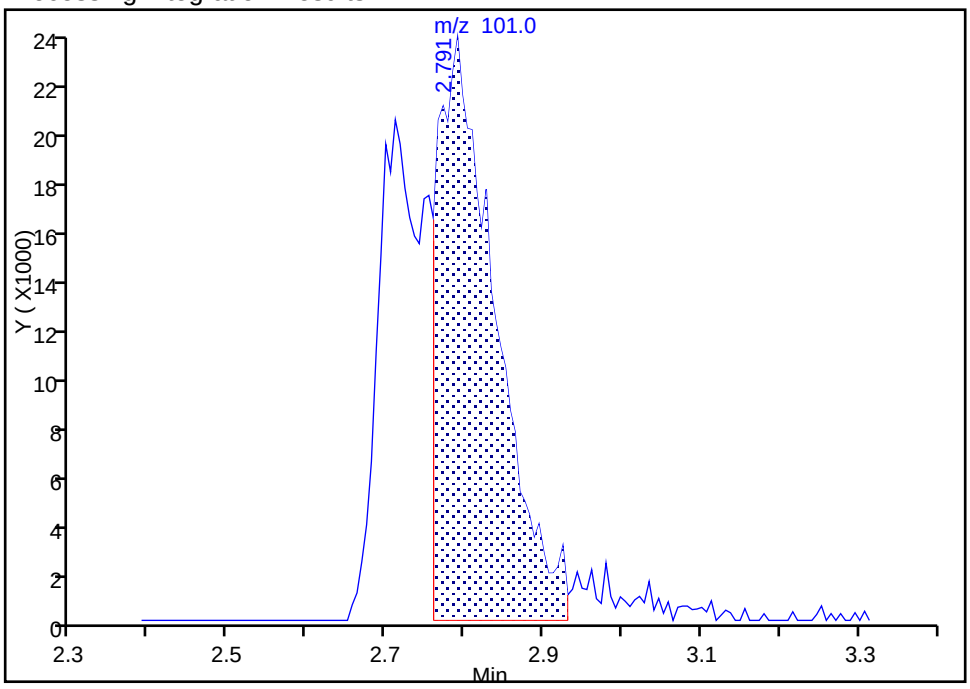
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D02.D
Injection Date: 25-Oct-2017 22:12:30 Instrument ID: CHHP5
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

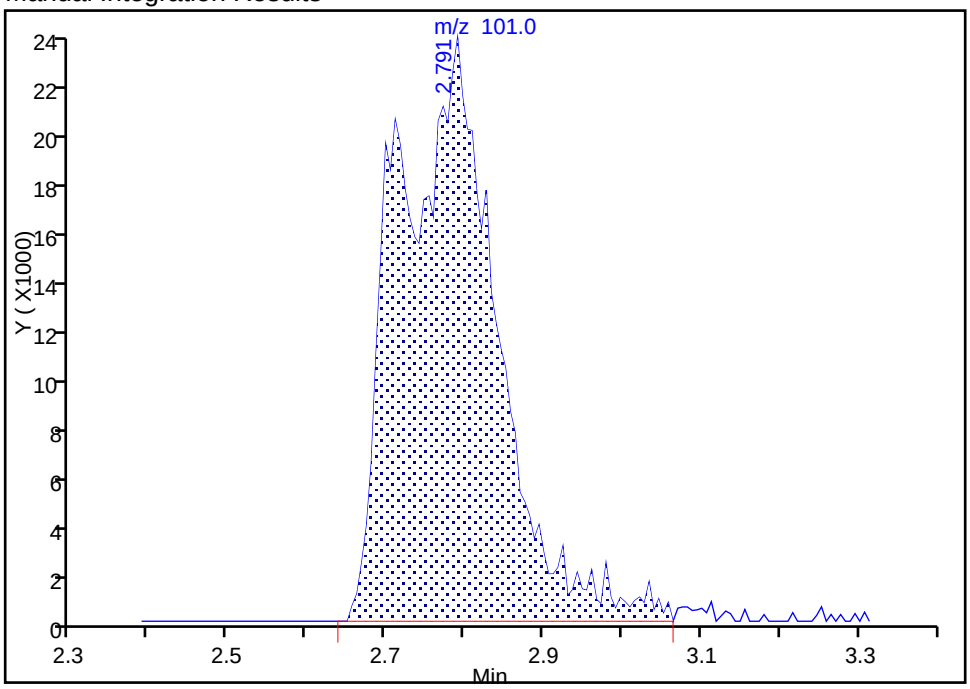
Processing Integration Results

RT: 2.79
Area: 118708
Amount: 30.921621
Amount Units: ng



Manual Integration Results

RT: 2.79
Area: 203767
Amount: 53.078192
Amount Units: ng



Reviewer: bungardf, 25-Oct-2017 22:46:34
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227152/2 Calibration Date: 10/26/2017 21:43

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: 51026D02.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	0.3032	0.1000	10.4	10.0	4.3	20.0
Chloromethane	Ave	0.2922	0.3636	0.1000	12.4	10.0	24.4*	20.0
1,3-Butadiene	Ave	0.2694	0.3756	0.0100	13.9	10.0	39.4*	20.0
Vinyl chloride	Ave	0.2965	0.3093	0.1000	10.4	10.0	4.3	20.0
Bromomethane	Ave	0.1402	0.1110	0.0500	7.91	10.0	-20.9*	20.0
Chloroethane	Ave	0.1630	0.1521	0.0500	9.33	10.0	-6.7	20.0
Trichlorofluoromethane	Ave	0.3643	0.3979	0.1000	10.9	10.0	9.2	20.0
Ethyl ether	Ave	0.2370	0.2709	0.0100	11.4	10.0	14.3	20.0
Acrolein	Ave	0.0597	0.0633	0.0100	31.8	30.0	6.0	20.0
1,1-Dichloroethene	Ave	0.2448	0.2445	0.1000	9.99	10.0	-0.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2686	0.2745	0.1000	10.2	10.0	2.2	20.0
Acetone	Ave	0.1308	0.1796	0.0500	27.5	20.0	37.3*	20.0
Iodomethane	Ave	0.3845	0.3863	0.0100	10.0	10.0	0.5	20.0
Carbon disulfide	Ave	0.5372	0.4817	0.1000	8.97	10.0	-10.3	20.0
Allyl chloride	Ave	0.1582	0.1415	0.0100	8.94	10.0	-10.6	20.0
Methyl acetate	Ave	0.2589	0.2585	0.1000	20.0	20.0	-0.2	20.0
Methylene Chloride	Lin2		0.2837	0.1000	9.31	10.0	-6.9	20.0
tert-Butyl alcohol	Ave	1.183	1.435	0.0100	121	100	21.3*	20.0
Acrylonitrile	Ave	0.1259	0.1313	0.0100	104	100	4.3	20.0
trans-1,2-Dichloroethene	Ave	0.2789	0.2622	0.1000	9.40	10.0	-6.0	20.0
Methyl tert-butyl ether	Ave	0.7479	0.6738	0.1000	9.01	10.0	-9.9	20.0
Hexane	Ave	0.3580	0.3887	0.0100	10.9	10.0	8.6	20.0
1,1-Dichloroethane	Ave	0.4850	0.4765	0.2000	9.83	10.0	-1.7	20.0
2,2-Dichloropropane	Ave	0.0617	0.0685	0.0100	11.1	10.0	10.9	20.0
cis-1,2-Dichloroethene	Ave	0.3190	0.2915	0.1000	9.14	10.0	-8.6	20.0
2-Butanone (MEK)	Ave	0.1861	0.1977	0.0500	21.2	20.0	6.2	20.0
Bromochloromethane	Ave	0.1418	0.1327	0.0100	9.36	10.0	-6.4	20.0
Tetrahydrofuran	Ave	0.1084	0.0928	0.0100	17.1	20.0	-14.4	20.0
Chloroform	Ave	0.4843	0.4363	0.2000	9.01	10.0	-9.9	20.0
1,1,1-Trichloroethane	Ave	0.3666	0.3516	0.1000	9.59	10.0	-4.1	20.0
Cyclohexane	Ave	0.4524	0.4649	0.1000	10.3	10.0	2.8	20.0
Carbon tetrachloride	Ave	0.3051	0.2944	0.1000	9.65	10.0	-3.5	20.0
1,1-Dichloropropene	Ave	0.3961	0.3372	0.0100	8.51	10.0	-14.9	20.0
Isobutyl alcohol	Ave	0.0099	0.0106	0.0100	265	250	6.0	20.0
Benzene	Ave	1.216	1.091	0.5000	8.97	10.0	-10.3	20.0
1,2-Dichloroethane	Ave	0.3544	0.3471	0.1000	9.79	10.0	-2.1	20.0
n-Heptane	Ave	0.2863	0.3255	0.0100	11.4	10.0	13.7	20.0
Trichloroethene	Ave	0.3059	0.2567	0.2000	8.39	10.0	-16.1	20.0
Methylcyclohexane	Ave	0.4626	0.3750	0.1000	8.10	10.0	-19.0	20.0
1,2-Dichloropropane	Ave	0.2831	0.2695	0.1000	9.52	10.0	-4.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227152/2 Calibration Date: 10/26/2017 21:43

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: 51026D02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.0029	0.0025*	0.0100	176	200	-12.0	20.0
Dibromomethane	Ave	0.1659	0.1395	0.0100	8.41	10.0	-15.9	20.0
Bromodichloromethane	Ave	0.3256	0.2641	0.2000	8.11	10.0	-18.9	20.0
2-Chloroethyl vinyl ether	Ave	0.2037	0.1393	0.0100	13.7	20.0	-31.6*	20.0
cis-1,3-Dichloropropene	Ave	0.3955	0.3127	0.2000	7.91	10.0	-20.9*	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.282	1.238	0.1000	19.3	20.0	-3.5	20.0
Toluene	Ave	4.986	4.974	0.4000	9.98	10.0	-0.2	20.0
trans-1,3-Dichloropropene	Ave	1.357	1.224	0.1000	9.02	10.0	-9.8	20.0
Ethyl methacrylate	Ave	1.636	1.175	0.0100	7.18	10.0	-28.2*	20.0
1,1,2-Trichloroethane	Ave	1.039	0.9704	0.1000	9.34	10.0	-6.6	20.0
Tetrachloroethene	Ave	0.9508	0.8688	0.2000	9.14	10.0	-8.6	20.0
1,3-Dichloropropane	Ave	1.920	1.645	0.0100	8.57	10.0	-14.3	20.0
2-Hexanone	Ave	0.9836	0.9946	0.1000	20.2	20.0	1.1	20.0
Dibromochloromethane	Ave	0.8779	0.8013	0.1000	9.13	10.0	-8.7	20.0
1,2-Dibromoethane (EDB)	Ave	1.065	0.9446	0.1000	8.87	10.0	-11.3	20.0
3-Chlorobenzotrifluoride	Ave	1.718	1.722	0.0100	10.0	10.0	0.2	20.0
Chlorobenzene	Ave	3.246	3.021	0.5000	9.31	10.0	-6.9	20.0
4-Chlorobenzotrifluoride	Ave	1.586	1.715	0.0100	10.8	10.0	8.2	20.0
1,1,1,2-Tetrachloroethane	Ave	1.032	0.9899	0.0100	9.59	10.0	-4.1	20.0
Ethylbenzene	Ave	1.812	1.673	0.1000	9.23	10.0	-7.7	20.0
m-Xylene & p-Xylene	Ave	2.214	2.094	0.1000	9.46	10.0	-5.4	20.0
o-Xylene	Ave	2.110	1.908	0.3000	9.04	10.0	-9.6	20.0
Styrene	Ave	3.571	3.397	0.3000	9.51	10.0	-4.9	20.0
Bromoform	Ave	0.5456	0.4431	0.1000	8.12	10.0	-18.8	20.0
2-Chlorobenzotrifluoride	Ave	1.644	1.683	0.0100	10.2	10.0	2.4	20.0
Isopropylbenzene	Ave	5.150	4.741	0.1000	9.21	10.0	-7.9	20.0
1,1,2,2-Tetrachloroethane	Ave	1.538	1.355	0.3000	8.81	10.0	-11.9	20.0
Bromobenzene	Ave	0.9704	0.8197	0.0100	8.45	10.0	-15.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2926	0.3097	0.0100	10.6	10.0	5.8	20.0
1,2,3-Trichloropropane	Ave	0.4005	0.3313	0.0100	8.27	10.0	-17.3	20.0
N-Propylbenzene	Ave	1.109	0.9753	0.0100	8.80	10.0	-12.0	20.0
2-Chlorotoluene	Ave	0.9585	0.8265	0.0100	8.62	10.0	-13.8	20.0
3-Chlorotoluene	Ave	1.043	1.020	0.0100	9.79	10.0	-2.1	20.0
1,3,5-Trimethylbenzene	Ave	3.173	2.881	0.0100	9.08	10.0	-9.2	20.0
4-Chlorotoluene	Ave	1.035	0.9280	0.0100	8.97	10.0	-10.3	20.0
tert-Butylbenzene	Ave	2.653	2.184	0.0100	8.23	10.0	-17.7	20.0
1,2,4-Trimethylbenzene	Ave	3.226	2.904	0.0100	9.00	10.0	-10.0	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8081	0.6993	0.0100	8.65	10.0	-13.5	20.0
sec-Butylbenzene	Ave	3.701	3.167	0.0100	8.56	10.0	-14.4	20.0
1,3-Dichlorobenzene	Ave	1.734	1.587	0.6000	9.15	10.0	-8.5	20.0
4-Isopropyltoluene	Ave	3.083	2.729	0.0100	8.85	10.0	-11.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227152/2 Calibration Date: 10/26/2017 21:43

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: 51026D02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.780	1.660	0.5000	9.32	10.0	-6.8	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7524	0.6727	0.0100	8.94	10.0	-10.6	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8127	0.7177	0.0100	8.83	10.0	-11.7	20.0
n-Butylbenzene	Ave	2.514	2.161	0.0100	8.60	10.0	-14.0	20.0
1,2-Dichlorobenzene	Ave	1.653	1.556	0.4000	9.42	10.0	-5.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1835	0.1505	0.0500	8.20	10.0	-18.0	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.048	1.080	0.0100	30.9	30.0	3.0	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.084	1.118	0.0100	20.6	20.0	3.1	20.0
1,2,4-Trichlorobenzene	Ave	0.7563	0.6727	0.2000	8.89	10.0	-11.1	20.0
Hexachlorobutadiene	Ave	0.2767	0.2477	0.0100	8.95	10.0	-10.5	20.0
Naphthalene	Ave	2.576	2.198	0.0100	8.53	10.0	-14.7	20.0
1,2,3-Trichlorobenzene	Ave	0.6909	0.6038	0.0100	8.74	10.0	-12.6	20.0
2,4,5-Trichlorotoluene	Ave	0.3284	0.2812	0.0100	8.56	10.0	-14.4	20.0
2,3,6-Trichlorotoluene	Ave	0.3055	0.2910	0.0100	9.52	10.0	-4.8	20.0
Vinyl acetate	Ave	0.4932			1.00	10.0		
Dibromofluoromethane (Surr)	Ave	0.2406	0.1936		8.05	10.0	-19.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2934	0.2569		8.76	10.0	-12.4	20.0
Toluene-d8 (Surr)	Ave	3.979	3.477		8.74	10.0	-12.6	20.0
4-Bromofluorobenzene (Surr)	Ave	1.437	1.178		8.20	10.0	-18.0	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D02.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 26-Oct-2017 21:43:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019053-002
Misc. Info.: CCVIS
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Oct-2017 21:14:03 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: XAWRK007

First Level Reviewer: bungardf Date: 26-Oct-2017 22:06:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.379	4.379	0.000	0	199288	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.341	7.341	0.000	97	535925	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.430	10.430	0.000	87	119054	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.771	12.771	0.000	93	171336	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.617	6.617	0.000	94	103778	50.0	40.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.988	6.988	0.000	0	137697	50.0	43.8	
$ 7 Toluene-d8 (Surr)	98	8.982	8.982	0.000	94	413987	50.0	43.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.610	11.610	0.000	86	140295	50.0	41.0	
11 Dichlorodifluoromethane	85	1.685	1.685	0.000	99	162474	50.0	52.1	
12 Chloromethane	50	1.886	1.886	0.000	100	194872	50.0	62.2	
14 Butadiene	39	2.013	2.013	0.000	97	201264	50.0	69.7	
13 Vinyl chloride	62	2.025	2.025	0.000	66	165775	50.0	52.2	
15 Bromomethane	94	2.336	2.336	0.000	91	59461	50.0	39.6	
16 Chloroethane	64	2.439	2.439	0.000	97	81520	50.0	46.7	
17 Dichlorofluoromethane	67	2.743	2.743	0.000	97	240036	50.0	54.3	
18 Trichlorofluoromethane	101	2.792	2.792	0.000	98	213259	50.0	54.6	M
20 Ethyl ether	59	3.126	3.126	0.000	95	145183	50.0	57.2	
21 Acrolein	56	3.315	3.315	0.000	99	101742	150.0	158.9	
22 1,1-Dichloroethene	96	3.412	3.412	0.000	95	131054	50.0	49.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.485	3.485	0.000	93	147097	50.0	51.1	
24 Acetone	43	3.534	3.534	0.000	100	192488	100.0	137.3	
25 Iodomethane	142	3.619	3.619	0.000	96	207025	50.0	50.2	
26 Carbon disulfide	76	3.710	3.710	0.000	100	258140	50.0	44.8	
28 3-Chloro-1-propene	76	4.014	4.014	0.000	90	75804	50.0	44.7	
30 Methyl acetate	43	4.038	4.038	0.000	99	277065	100.0	99.8	
31 Methylene Chloride	84	4.227	4.227	0.000	96	152056	50.0	46.6	
32 2-Methyl-2-propanol	59	4.513	4.513	0.000	93	142965	500.0	606.6	
33 Acrylonitrile	53	4.616	4.616	0.000	99	703605	500.0	521.4	
34 trans-1,2-Dichloroethene	96	4.640	4.640	0.000	99	140509	50.0	47.0	
35 Methyl tert-butyl ether	73	4.665	4.665	0.000	96	361113	50.0	45.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43		5.060				ND	ND	
36 Hexane	57	5.060	5.060	0.000	94	208338	50.0	54.3	
37 1,1-Dichloroethane	63	5.273	5.273	0.000	96	255386	50.0	49.1	
45 cis-1,2-Dichloroethene	96	6.009	6.009	0.000	83	156241	50.0	45.7	
44 2,2-Dichloropropane	97	6.009	6.009	0.000	63	36704	50.0	55.5	
46 2-Butanone (MEK)	43	6.021	6.021	0.000	99	211863	100.0	106.2	
49 Chlorobromomethane	128	6.295	6.295	0.000	95	71109	50.0	46.8	
51 Tetrahydrofuran	42	6.313	6.313	0.000	88	99498	100.0	85.6	
52 Chloroform	83	6.440	6.440	0.000	93	233801	50.0	45.0	
53 1,1,1-Trichloroethane	97	6.593	6.593	0.000	98	188407	50.0	48.0	
54 Cyclohexane	56	6.665	6.665	0.000	95	249163	50.0	51.4	
56 Carbon tetrachloride	117	6.769	6.769	0.000	96	157783	50.0	48.3	
55 1,1-Dichloropropene	75	6.781	6.781	0.000	91	180712	50.0	42.6	
57 Isobutyl alcohol	41	6.988	6.988	0.000	88	141310	1250.0	1325.1	
58 Benzene	78	6.994	6.994	0.000	97	584762	50.0	44.9	
59 1,2-Dichloroethane	62	7.073	7.073	0.000	97	186009	50.0	49.0	
62 n-Heptane	43	7.353	7.353	0.000	90	174423	50.0	56.8	
64 Trichloroethene	130	7.724	7.724	0.000	97	137571	50.0	42.0	
66 Methylcyclohexane	83	7.955	7.955	0.000	95	200946	50.0	40.5	
67 1,2-Dichloropropane	63	7.997	7.997	0.000	95	144418	50.0	47.6	
68 Dibromomethane	93	8.082	8.082	0.000	98	74763	50.0	42.1	
70 1,4-Dioxane	88	8.082	8.082	0.000	46	27149	1000.0	879.9	
71 Dichlorobromomethane	83	8.277	8.277	0.000	96	141538	50.0	40.6	
73 2-Chloroethyl vinyl ether	63	8.575	8.575	0.000	92	149342	100.0	68.4	
74 cis-1,3-Dichloropropene	75	8.721	8.721	0.000	92	167567	50.0	39.5	
75 4-Methyl-2-pentanone (MIBK	43	8.873	8.873	0.000	98	294696	100.0	96.5	
76 Toluene	91	9.049	9.049	0.000	98	592190	50.0	49.9	
77 trans-1,3-Dichloropropene	75	9.293	9.293	0.000	98	145716	50.0	45.1	
78 Ethyl methacrylate	69	9.360	9.360	0.000	92	139886	50.0	35.9	
79 1,1,2-Trichloroethane	97	9.487	9.487	0.000	92	115528	50.0	46.7	
80 Tetrachloroethene	164	9.560	9.560	0.000	95	103429	50.0	45.7	
81 1,3-Dichloropropane	76	9.645	9.645	0.000	98	195818	50.0	42.8	
82 2-Hexanone	43	9.706	9.706	0.000	99	236827	100.0	101.1	
84 Chlorodibromomethane	129	9.858	9.858	0.000	91	95394	50.0	45.6	
85 Ethylene Dibromide	107	9.968	9.968	0.000	98	112455	50.0	44.3	
86 3-Chlorobenzotrifluoride	180	10.430	10.430	0.000	87	204997	50.0	50.1	
87 Chlorobenzene	112	10.460	10.460	0.000	94	359616	50.0	46.5	
88 4-Chlorobenzotrifluoride	180	10.521	10.521	0.000	96	204216	50.0	54.1	
89 1,1,1,2-Tetrachloroethane	131	10.551	10.551	0.000	92	117856	50.0	48.0	
90 Ethylbenzene	106	10.558	10.558	0.000	98	199149	50.0	46.2	
91 m-Xylene & p-Xylene	106	10.691	10.691	0.000	0	249358	50.0	47.3	
92 o-Xylene	106	11.068	11.068	0.000	96	227133	50.0	45.2	
93 Styrene	104	11.093	11.093	0.000	95	404394	50.0	47.6	
94 Bromoform	173	11.269	11.269	0.000	95	52756	50.0	40.6	
96 2-Chlorobenzotrifluoride	180	11.342	11.342	0.000	92	200351	50.0	51.2	
97 Isopropylbenzene	105	11.439	11.439	0.000	96	564442	50.0	46.0	
100 Bromobenzene	156	11.749	11.749	0.000	95	140440	50.0	42.2	
99 1,1,2,2-Tetrachloroethane	83	11.749	11.749	0.000	83	161334	50.0	44.1	
102 trans-1,4-Dichloro-2-buten	53	11.786	11.786	0.000	79	53059	50.0	52.9	
101 1,2,3-Trichloropropane	110	11.810	11.810	0.000	86	56761	50.0	41.4	
103 N-Propylbenzene	120	11.853	11.853	0.000	99	167109	50.0	44.0	
104 2-Chlorotoluene	126	11.944	11.944	0.000	97	141603	50.0	43.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	12.005	12.005	0.000	97	174824	50.0	48.9	
106 1,3,5-Trimethylbenzene	105	12.035	12.035	0.000	96	493645	50.0	45.4	
107 4-Chlorotoluene	126	12.066	12.066	0.000	96	158997	50.0	44.8	
108 tert-Butylbenzene	119	12.352	12.352	0.000	94	374245	50.0	41.2	
110 1,2,4-Trimethylbenzene	105	12.412	12.412	0.000	97	497500	50.0	45.0	
111 1,2-dichloro-4-(trifluorom	214	12.455	12.455	0.000	94	119818	50.0	43.3	
112 sec-Butylbenzene	105	12.577	12.577	0.000	94	542702	50.0	42.8	
113 1,3-Dichlorobenzene	146	12.692	12.692	0.000	98	271958	50.0	45.8	
114 4-Isopropyltoluene	119	12.729	12.729	0.000	97	467640	50.0	44.3	
115 1,4-Dichlorobenzene	146	12.795	12.795	0.000	94	284368	50.0	46.6	
116 2,4-Dichloro-1-(triflourom	214	12.820	12.820	0.000	93	115259	50.0	44.7	
118 2,5-Dichlorobenzotrifluori	214	12.862	12.862	0.000	0	122971	50.0	44.2	
120 n-Butylbenzene	91	13.136	13.136	0.000	98	370333	50.0	43.0	
121 1,2-Dichlorobenzene	146	13.148	13.148	0.000	96	266636	50.0	47.1	
122 1,2-Dibromo-3-Chloropropan	75	13.939	13.939	0.000	75	25787	50.0	41.0	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.085	14.085	0.000	0	555009	150.0	154.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.504	14.504	0.000	0	383138	100.0	103.1	
126 1,2,4-Trichlorobenzene	180	14.766	14.766	0.000	95	115252	50.0	44.5	
127 Hexachlorobutadiene	225	14.906	14.906	0.000	91	42441	50.0	44.8	
128 Naphthalene	128	15.033	15.033	0.000	97	376552	50.0	42.7	
129 1,2,3-Trichlorobenzene	180	15.258	15.258	0.000	95	103457	50.0	43.7	
131 2,4,5-Trichlorotoluene	159	16.031	16.031	0.000	0	48179	50.0	42.8	
130 2,3,6-Trichlorotoluene	159	16.122	16.122	0.000	95	49853	50.0	47.6	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	92.5	
S 134 1,2-Dichloroethene, Total	96				0		100.0	92.7	
S 135 1,3-Dichloropropene, Total	1				0		100.0	84.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

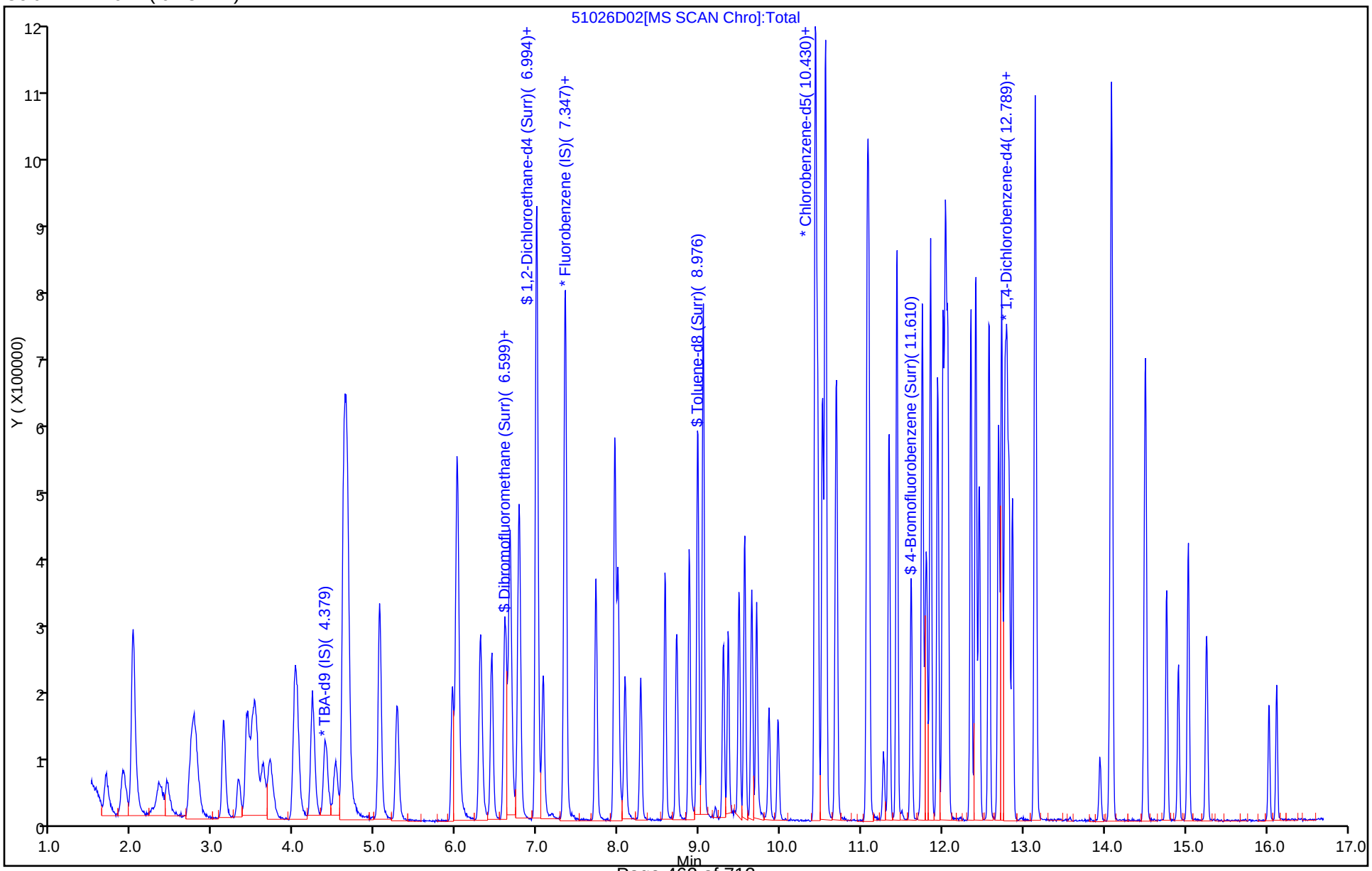
voaWEEmix1stR_00014	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00022	Amount Added:	2.00	Units: uL		
voaWVA1stRest_00021	Amount Added:	2.00	Units: uL		
voaWAcro1stRe_00021	Amount Added:	6.00	Units: uL		
VOA8260VOAPRI_00268	Amount Added:	2.00	Units: uL		
voaW2clev1stR_00023	Amount Added:	2.00	Units: uL		
VOA8260INT_00075	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00074	Amount Added:	2.00	Units: uL	Run Reagent	

Report Date: 29-Oct-2017 21:14:04 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D02.D				
Injection Date:	26-Oct-2017 21:43:30	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

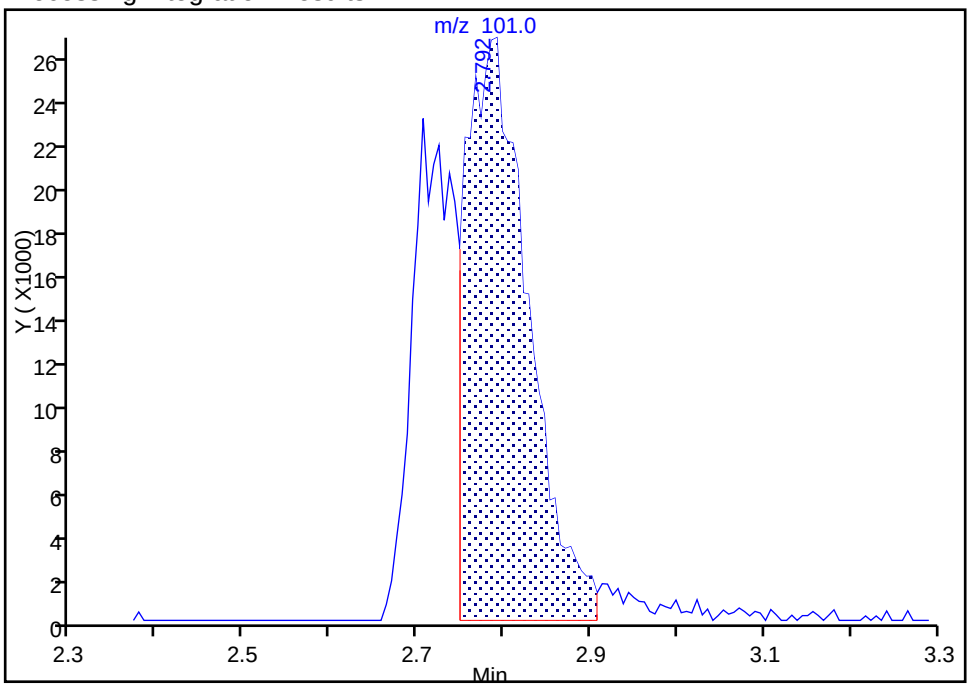
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D02.D				
Injection Date:	26-Oct-2017 21:43:30	Instrument ID:	CHHP5		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

18 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

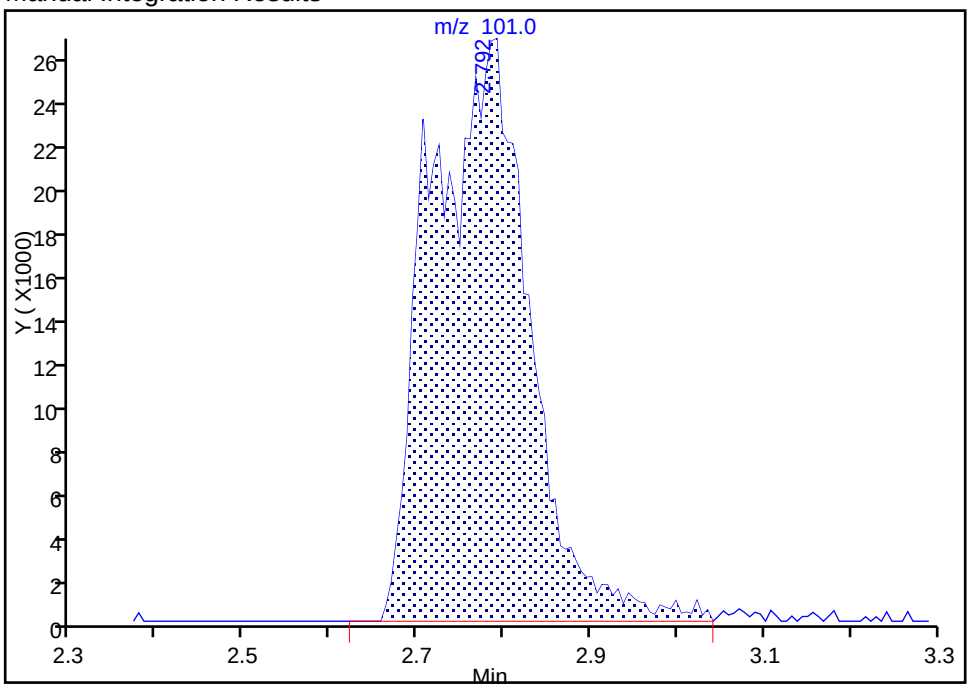
Processing Integration Results

RT: 2.79
Area: 134937
Amount: 34.552788
Amount Units: ng



Manual Integration Results

RT: 2.79
Area: 213259
Amount: 54.608396
Amount Units: ng



Reviewer: bungardf, 26-Oct-2017 22:38:58

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227508/2 Calibration Date: 10/30/2017 22:32

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: 51030D02.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	0.1478	0.1000	5.08	10.0	-49.2*	20.0
Chloromethane	Ave	0.2922	0.3153	0.1000	10.8	10.0	7.9	20.0
1,3-Butadiene	Ave	0.2694	0.3253	0.0100	12.1	10.0	20.8*	20.0
Vinyl chloride	Ave	0.2965	0.2799	0.1000	9.44	10.0	-5.6	20.0
Bromomethane	Ave	0.1402	0.0899	0.0500	6.41	10.0	-35.9*	20.0
Chloroethane	Ave	0.1630	0.1313	0.0500	8.06	10.0	-19.4	20.0
Trichlorofluoromethane	Ave	0.3643	0.3934	0.1000	10.8	10.0	8.0	20.0
Ethyl ether	Ave	0.2370	0.2553	0.0100	10.8	10.0	7.7	20.0
Acrolein	Ave	0.0597	0.0421	0.0100	21.2	30.0	-29.5*	20.0
1,1-Dichloroethene	Ave	0.2448	0.2401	0.1000	9.81	10.0	-1.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2686	0.2697	0.1000	10.0	10.0	0.4	20.0
Acetone	Ave	0.1308	0.1569	0.0500	24.0	20.0	20.0	20.0
Iodomethane	Ave	0.3845	0.3679	0.0100	9.57	10.0	-4.3	20.0
Carbon disulfide	Ave	0.5372	0.4941	0.1000	9.20	10.0	-8.0	20.0
Allyl chloride	Ave	0.1582	0.1430	0.0100	9.04	10.0	-9.6	20.0
Methyl acetate	Ave	0.2589	0.2596	0.1000	20.1	20.0	0.3	20.0
Methylene Chloride	Lin2		0.2788	0.1000	9.14	10.0	-8.6	20.0
tert-Butyl alcohol	Ave	1.183	1.339	0.0100	113	100	13.2	20.0
Acrylonitrile	Ave	0.1259	0.1304	0.0100	104	100	3.6	20.0
trans-1,2-Dichloroethene	Ave	0.2789	0.2613	0.1000	9.37	10.0	-6.3	20.0
Methyl tert-butyl ether	Ave	0.7479	0.6622	0.1000	8.85	10.0	-11.5	20.0
Hexane	Ave	0.3580	0.3704	0.0100	10.3	10.0	3.4	20.0
1,1-Dichloroethane	Ave	0.4850	0.4814	0.2000	9.93	10.0	-0.7	20.0
Vinyl acetate	Ave	0.4932	0.5418	0.0100	11.0	10.0	9.9	20.0
2,2-Dichloropropane	Ave	0.0617	0.0717	0.0100	11.6	10.0	16.1	20.0
cis-1,2-Dichloroethene	Ave	0.3190	0.2883	0.1000	9.04	10.0	-9.6	20.0
2-Butanone (MEK)	Ave	0.1861	0.1870	0.0500	20.1	20.0	0.5	20.0
Bromochloromethane	Ave	0.1418	0.1300	0.0100	9.17	10.0	-8.3	20.0
Tetrahydrofuran	Ave	0.1084	0.0949	0.0100	17.5	20.0	-12.4	20.0
Chloroform	Ave	0.4843	0.4364	0.2000	9.01	10.0	-9.9	20.0
1,1,1-Trichloroethane	Ave	0.3666	0.3670	0.1000	10.0	10.0	0.1	20.0
Cyclohexane	Ave	0.4524	0.4853	0.1000	10.7	10.0	7.3	20.0
Carbon tetrachloride	Ave	0.3051	0.3185	0.1000	10.4	10.0	4.4	20.0
1,1-Dichloropropene	Ave	0.3961	0.3508	0.0100	8.86	10.0	-11.4	20.0
Isobutyl alcohol	Ave	0.0099	0.0098*	0.0100	247	250	-1.2	20.0
Benzene	Ave	1.216	1.081	0.5000	8.89	10.0	-11.1	20.0
1,2-Dichloroethane	Ave	0.3544	0.3457	0.1000	9.75	10.0	-2.5	20.0
n-Heptane	Ave	0.2863	0.3403	0.0100	11.9	10.0	18.9	20.0
Trichloroethene	Ave	0.3059	0.2671	0.2000	8.73	10.0	-12.7	20.0
Methylcyclohexane	Ave	0.4626	0.3874	0.1000	8.37	10.0	-16.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227508/2 Calibration Date: 10/30/2017 22:32

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: 51030D02.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	0.2646	0.1000	9.35	10.0	-6.5	20.0
1,4-Dioxane	Ave	0.0029	0.0023*	0.0100	160	200	-20.0	20.0
Dibromomethane	Ave	0.1659	0.1438	0.0100	8.67	10.0	-13.3	20.0
Bromodichloromethane	Ave	0.3256	0.2771	0.2000	8.51	10.0	-14.9	20.0
2-Chloroethyl vinyl ether	Ave	0.2037	0.1603	0.0100	15.7	20.0	-21.3*	20.0
cis-1,3-Dichloropropene	Ave	0.3955	0.3246	0.2000	8.21	10.0	-17.9	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.282	1.254	0.1000	19.6	20.0	-2.2	20.0
Toluene	Ave	4.986	5.191	0.4000	10.4	10.0	4.1	20.0
trans-1,3-Dichloropropene	Ave	1.357	1.350	0.1000	9.95	10.0	-0.5	20.0
Ethyl methacrylate	Ave	1.636	1.266	0.0100	7.74	10.0	-22.6*	20.0
1,1,2-Trichloroethane	Ave	1.039	0.997	0.1000	9.60	10.0	-4.0	20.0
Tetrachloroethene	Ave	0.9508	0.9229	0.2000	9.71	10.0	-2.9	20.0
1,3-Dichloropropane	Ave	1.920	1.738	0.0100	9.05	10.0	-9.5	20.0
2-Hexanone	Ave	0.9836	0.9876	0.1000	20.1	20.0	0.4	20.0
Dibromochloromethane	Ave	0.8779	0.8329	0.1000	9.49	10.0	-5.1	20.0
1,2-Dibromoethane (EDB)	Ave	1.065	0.9898	0.1000	9.29	10.0	-7.1	20.0
3-Chlorobenzotrifluoride	Ave	1.718	1.736	0.0100	10.1	10.0	1.0	20.0
Chlorobenzene	Ave	3.246	3.176	0.5000	9.79	10.0	-2.1	20.0
4-Chlorobenzotrifluoride	Ave	1.586	1.698	0.0100	10.7	10.0	7.1	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	1.816	0.1000	10.0	10.0	0.2	20.0
m-Xylene & p-Xylene	Ave	2.214	2.231	0.1000	10.1	10.0	0.8	20.0
o-Xylene	Ave	2.110	2.016	0.3000	9.56	10.0	-4.4	20.0
Styrene	Ave	3.571	3.572	0.3000	10.0	10.0	0.0	20.0
Bromoform	Ave	0.5456	0.4777	0.1000	8.76	10.0	-12.4	20.0
2-Chlorobenzotrifluoride	Ave	1.644	1.739	0.0100	10.6	10.0	5.7	20.0
Isopropylbenzene	Ave	5.150	5.147	0.1000	9.99	10.0	-0.0	20.0
1,1,2,2-Tetrachloroethane	Ave	1.538	1.399	0.3000	9.10	10.0	-9.0	20.0
Bromobenzene	Ave	0.9704	0.8124	0.0100	8.37	10.0	-16.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2926	0.3164	0.0100	10.8	10.0	8.1	20.0
1,2,3-Trichloropropane	Ave	0.4005	0.3302	0.0100	8.24	10.0	-17.6	20.0
N-Propylbenzene	Ave	1.109	1.004	0.0100	9.05	10.0	-9.5	20.0
2-Chlorotoluene	Ave	0.9585	0.8479	0.0100	8.85	10.0	-11.5	20.0
3-Chlorotoluene	Ave	1.043	0.9911	0.0100	9.51	10.0	-4.9	20.0
1,3,5-Trimethylbenzene	Ave	3.173	2.921	0.0100	9.21	10.0	-7.9	20.0
4-Chlorotoluene	Ave	1.035	0.8909	0.0100	8.61	10.0	-13.9	20.0
tert-Butylbenzene	Ave	2.653	2.238	0.0100	8.44	10.0	-15.6	20.0
1,2,4-Trimethylbenzene	Ave	3.226	2.924	0.0100	9.07	10.0	-9.3	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8081	0.6741	0.0100	8.34	10.0	-16.6	20.0
sec-Butylbenzene	Ave	3.701	3.288	0.0100	8.88	10.0	-11.2	20.0
1,3-Dichlorobenzene	Ave	1.734	1.550	0.6000	8.94	10.0	-10.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227508/2 Calibration Date: 10/30/2017 22:32

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: 51030D02.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	2.858	0.0100	9.27	10.0	-7.3	20.0
1,4-Dichlorobenzene	Ave	1.780	1.631	0.5000	9.16	10.0	-8.4	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7524	0.6708	0.0100	8.92	10.0	-10.8	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8127	0.6947	0.0100	8.55	10.0	-14.5	20.0
n-Butylbenzene	Ave	2.514	2.213	0.0100	8.80	10.0	-12.0	20.0
1,2-Dichlorobenzene	Ave	1.653	1.539	0.4000	9.31	10.0	-6.9	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1835	0.1516	0.0500	8.26	10.0	-17.4	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.048	1.037	0.0100	29.7	30.0	-1.1	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.084	1.060	0.0100	19.6	20.0	-2.2	20.0
1,2,4-Trichlorobenzene	Ave	0.7563	0.6446	0.2000	8.52	10.0	-14.8	20.0
Hexachlorobutadiene	Ave	0.2767	0.2463	0.0100	8.90	10.0	-11.0	20.0
Naphthalene	Ave	2.576	2.035	0.0100	7.90	10.0	-21.0*	20.0
1,2,3-Trichlorobenzene	Ave	0.6909	0.5964	0.0100	8.63	10.0	-13.7	20.0
2,4,5-Trichlorotoluene	Ave	0.3284	0.2800	0.0100	8.53	10.0	-14.7	20.0
2,3,6-Trichlorotoluene	Ave	0.3055	0.2806	0.0100	9.19	10.0	-8.1	20.0
Dibromofluoromethane (Surr)	Ave	0.2406	0.2079		8.64	10.0	-13.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2934	0.2702		9.21	10.0	-7.9	20.0
Toluene-d8 (Surr)	Ave	3.979	4.160		10.5	10.0	4.5	20.0
4-Bromofluorobenzene (Surr)	Ave	1.437	1.441		10.0	10.0	0.3	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D02.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 30-Oct-2017 22:32:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019107-002
Misc. Info.: CCVIS
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub12

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2017 08:26:11 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: XAWRK010

First Level Reviewer: bungardf Date: 30-Oct-2017 23:11:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.390	4.390	0.000	0	199245	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.340	7.340	0.000	98	544831	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.429	10.429	0.000	86	115360	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.771	12.771	0.000	93	174808	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.616	6.616	0.000	93	113277	50.0	43.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.987	6.987	0.000	0	147203	50.0	46.0	
$ 7 Toluene-d8 (Surr)	98	8.976	8.976	0.000	94	479917	50.0	52.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.615	11.615	0.000	85	166230	50.0	50.1	
11 Dichlorodifluoromethane	85	1.690	1.690	0.000	99	80538	50.0	25.4	
12 Chloromethane	50	1.885	1.885	0.000	99	171763	50.0	53.9	
14 Butadiene	39	2.013	2.013	0.000	97	177254	50.0	60.4	
13 Vinyl chloride	62	2.019	2.019	0.000	68	152495	50.0	47.2	
15 Bromomethane	94	2.341	2.341	0.000	92	48974	50.0	32.1	
16 Chloroethane	64	2.426	2.426	0.000	97	71556	50.0	40.3	
17 Dichlorofluoromethane	67	2.755	2.755	0.000	97	257089	50.0	57.2	
18 Trichlorofluoromethane	101	2.797	2.797	0.000	90	214320	50.0	54.0	
20 Ethyl ether	59	3.126	3.126	0.000	94	139087	50.0	53.9	
21 Acrolein	56	3.314	3.314	0.000	96	68847	150.0	105.8	
22 1,1-Dichloroethene	96	3.411	3.411	0.000	94	130813	50.0	49.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.496	3.496	0.000	95	146934	50.0	50.2	
24 Acetone	43	3.539	3.539	0.000	99	171015	100.0	120.0	
25 Iodomethane	142	3.612	3.612	0.000	97	200438	50.0	47.8	
26 Carbon disulfide	76	3.697	3.697	0.000	99	269209	50.0	46.0	
28 3-Chloro-1-propene	76	4.007	4.007	0.000	90	77906	50.0	45.2	
30 Methyl acetate	43	4.038	4.038	0.000	99	282908	100.0	100.3	
31 Methylene Chloride	84	4.226	4.226	0.000	99	151920	50.0	45.7	
32 2-Methyl-2-propanol	59	4.524	4.524	0.000	93	133368	500.0	566.0	
33 Acrylonitrile	53	4.615	4.615	0.000	99	710358	500.0	517.8	
34 trans-1,2-Dichloroethene	96	4.640	4.640	0.000	97	142382	50.0	46.8	
35 Methyl tert-butyl ether	73	4.664	4.664	0.000	97	360766	50.0	44.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.053	5.053	0.000	95	201787	50.0	51.7	
37 1,1-Dichloroethane	63	5.272	5.272	0.000	97	262299	50.0	49.6	
38 Vinyl acetate	43	5.321	5.321	0.000	97	295171	50.0	54.9	
44 2,2-Dichloropropane	97	6.008	6.008	0.000	66	39068	50.0	58.1	
45 cis-1,2-Dichloroethene	96	6.008	6.008	0.000	82	157045	50.0	45.2	
46 2-Butanone (MEK)	43	6.026	6.026	0.000	99	203811	100.0	100.5	
49 Chlorobromomethane	128	6.294	6.294	0.000	95	70831	50.0	45.8	
51 Tetrahydrofuran	42	6.312	6.312	0.000	93	103435	100.0	87.6	
52 Chloroform	83	6.440	6.440	0.000	93	237782	50.0	45.1	
53 1,1,1-Trichloroethane	97	6.598	6.598	0.000	97	199971	50.0	50.1	
54 Cyclohexane	56	6.665	6.665	0.000	94	264387	50.0	53.6	
56 Carbon tetrachloride	117	6.762	6.762	0.000	97	173551	50.0	52.2	
55 1,1-Dichloropropene	75	6.787	6.787	0.000	94	191146	50.0	44.3	
57 Isobutyl alcohol	41	6.987	6.987	0.000	86	133843	1250.0	1234.6	
58 Benzene	78	6.993	6.993	0.000	97	588887	50.0	44.5	
59 1,2-Dichloroethane	62	7.072	7.072	0.000	97	188349	50.0	48.8	
62 n-Heptane	43	7.352	7.352	0.000	89	185378	50.0	59.4	
64 Trichloroethene	130	7.729	7.729	0.000	97	145506	50.0	43.6	
66 Methylcyclohexane	83	7.954	7.954	0.000	93	211038	50.0	41.9	
67 1,2-Dichloropropane	63	7.997	7.997	0.000	95	144157	50.0	46.7	
70 1,4-Dioxane	88	8.082	8.082	0.000	45	25110	1000.0	800.5	
68 Dibromomethane	93	8.082	8.082	0.000	96	78327	50.0	43.3	
71 Dichlorobromomethane	83	8.276	8.276	0.000	98	150979	50.0	42.6	
73 2-Chloroethyl vinyl ether	63	8.574	8.574	0.000	92	174709	100.0	78.7	
74 cis-1,3-Dichloropropene	75	8.720	8.720	0.000	93	176830	50.0	41.0	
75 4-Methyl-2-pentanone (MIBK	43	8.872	8.872	0.000	99	289290	100.0	97.8	
76 Toluene	91	9.049	9.049	0.000	98	598784	50.0	52.1	
77 trans-1,3-Dichloropropene	75	9.298	9.298	0.000	97	155754	50.0	49.8	
78 Ethyl methacrylate	69	9.353	9.353	0.000	92	145989	50.0	38.7	
79 1,1,2-Trichloroethane	97	9.487	9.487	0.000	92	115041	50.0	48.0	
80 Tetrachloroethene	164	9.560	9.560	0.000	94	106465	50.0	48.5	
81 1,3-Dichloropropane	76	9.645	9.645	0.000	97	200495	50.0	45.3	
82 2-Hexanone	43	9.706	9.706	0.000	99	227866	100.0	100.4	
84 Chlorodibromomethane	129	9.864	9.864	0.000	92	96083	50.0	47.4	
85 Ethylene Dibromide	107	9.973	9.973	0.000	98	114188	50.0	46.5	
86 3-Chlorobenzotrifluoride	180	10.435	10.435	0.000	87	200251	50.0	50.5	
87 Chlorobenzene	112	10.460	10.460	0.000	94	366385	50.0	48.9	
88 4-Chlorobenzotrifluoride	180	10.520	10.520	0.000	96	195852	50.0	53.5	
89 1,1,1,2-Tetrachloroethane	131	10.551	10.551	0.000	94	119770	50.0	50.3	
90 Ethylbenzene	106	10.563	10.563	0.000	98	209438	50.0	50.1	
91 m-Xylene & p-Xylene	106	10.691	10.691	0.000	0	257421	50.0	50.4	
92 o-Xylene	106	11.074	11.074	0.000	97	232594	50.0	47.8	
93 Styrene	104	11.092	11.092	0.000	96	412104	50.0	50.0	
94 Bromoform	173	11.275	11.275	0.000	93	55107	50.0	43.8	
96 2-Chlorobenzotrifluoride	180	11.341	11.341	0.000	95	200558	50.0	52.9	
97 Isopropylbenzene	105	11.439	11.439	0.000	96	593741	50.0	50.0	
99 1,1,2,2-Tetrachloroethane	83	11.749	11.749	0.000	81	161440	50.0	45.5	
100 Bromobenzene	156	11.749	11.749	0.000	96	142021	50.0	41.9	
102 trans-1,4-Dichloro-2-buten	53	11.791	11.791	0.000	73	55301	50.0	54.1	
101 1,2,3-Trichloropropane	110	11.810	11.810	0.000	87	57723	50.0	41.2	
103 N-Propylbenzene	120	11.852	11.852	0.000	98	175443	50.0	45.3	
104 2-Chlorotoluene	126	11.943	11.943	0.000	97	148224	50.0	44.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	12.010	12.010	0.000	97	173252	50.0	47.5	
106 1,3,5-Trimethylbenzene	105	12.035	12.035	0.000	95	510695	50.0	46.0	
107 4-Chlorotoluene	126	12.065	12.065	0.000	98	155732	50.0	43.0	
108 tert-Butylbenzene	119	12.351	12.351	0.000	94	391228	50.0	42.2	
110 1,2,4-Trimethylbenzene	105	12.412	12.412	0.000	97	511212	50.0	45.3	
111 1,2-dichloro-4-(trifluorom	214	12.454	12.454	0.000	94	117829	50.0	41.7	
112 sec-Butylbenzene	105	12.576	12.576	0.000	94	574812	50.0	44.4	
113 1,3-Dichlorobenzene	146	12.691	12.691	0.000	98	270939	50.0	44.7	
114 4-Isopropyltoluene	119	12.728	12.728	0.000	97	499646	50.0	46.4	
115 1,4-Dichlorobenzene	146	12.795	12.795	0.000	95	285109	50.0	45.8	
116 2,4-Dichloro-1-(triflourom	214	12.825	12.825	0.000	93	117265	50.0	44.6	
118 2,5-Dichlorobenzotrifluori	214	12.862	12.862	0.000	0	121431	50.0	42.7	
120 n-Butylbenzene	91	13.141	13.141	0.000	98	386861	50.0	44.0	
121 1,2-Dichlorobenzene	146	13.154	13.154	0.000	97	269021	50.0	46.6	
122 1,2-Dibromo-3-Chloropropan	75	13.944	13.944	0.000	79	26499	50.0	41.3	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.084	14.084	0.000	0	543675	150.0	148.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.504	14.504	0.000	0	370576	100.0	97.8	
126 1,2,4-Trichlorobenzene	180	14.765	14.765	0.000	94	112681	50.0	42.6	
127 Hexachlorobutadiene	225	14.911	14.911	0.000	92	43060	50.0	44.5	
128 Naphthalene	128	15.033	15.033	0.000	97	355786	50.0	39.5	
129 1,2,3-Trichlorobenzene	180	15.258	15.258	0.000	96	104263	50.0	43.2	
131 2,4,5-Trichlorotoluene	159	16.030	16.030	0.000	0	48946	50.0	42.6	
130 2,3,6-Trichlorotoluene	159	16.121	16.121	0.000	95	49058	50.0	45.9	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	98.2	
S 134 1,2-Dichloroethene, Total	96				0		100.0	92.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	90.8	

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	
voaWVA1stRest_00021	Amount Added:	2.00	Units: uL	
voaWAcro1stRe_00021	Amount Added:	6.00	Units: uL	
VOA8260VOAPRI_00268	Amount Added:	2.00	Units: uL	
voaW2clev1stR_00023	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

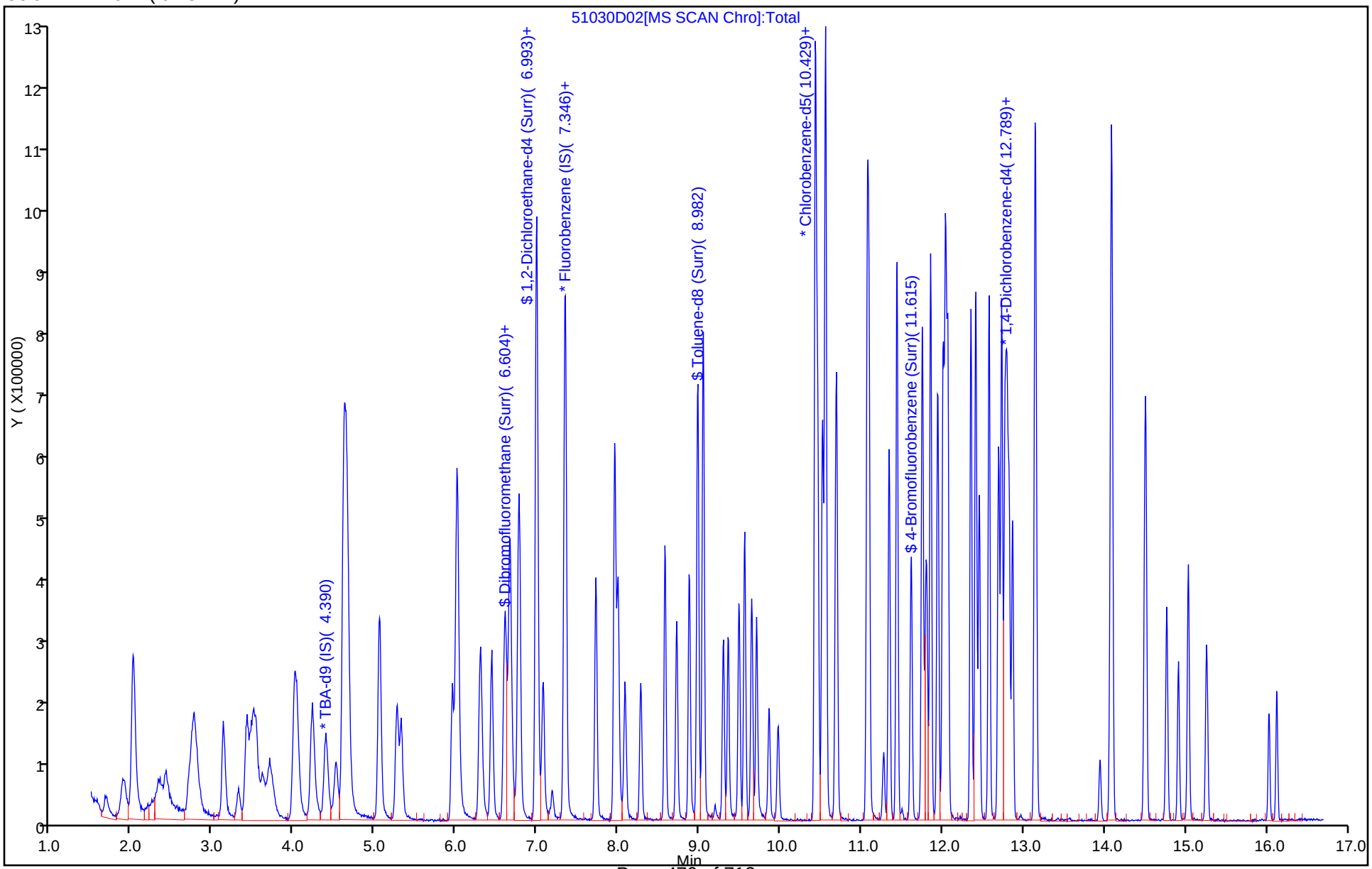
Report Date: 31-Oct-2017 08:26:12 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D02.D

Injection Date:	30-Oct-2017 22:32:30	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.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227613/2 Calibration Date: 11/01/2017 01:29

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: 51031D02.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	0.4058	0.1000	14.0	10.0	39.6*	20.0
Chloromethane	Ave	0.2922	0.4492	0.1000	15.4	10.0	53.7*	20.0
1,3-Butadiene	Ave	0.2694	0.4517	0.0100	16.8	10.0	67.7*	20.0
Vinyl chloride	Ave	0.2965	0.3659	0.1000	12.3	10.0	23.4*	20.0
Bromomethane	Ave	0.1402	0.1248	0.0500	8.90	10.0	-11.0	20.0
Chloroethane	Ave	0.1630	0.1821	0.0500	11.2	10.0	11.7	20.0
Trichlorofluoromethane	Ave	0.3643	0.4494	0.1000	12.3	10.0	23.3*	20.0
Ethyl ether	Ave	0.2370	0.2937	0.0100	12.4	10.0	23.9*	20.0
Acrolein	Ave	0.0597	0.0489	0.0100	24.6	30.0	-18.1	20.0
1,1-Dichloroethene	Ave	0.2448	0.2634	0.1000	10.8	10.0	7.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2686	0.3016	0.1000	11.2	10.0	12.3	20.0
Acetone	Ave	0.1308	0.1951	0.0500	29.8	20.0	49.2*	20.0
Iodomethane	Ave	0.3845	0.4039	0.0100	10.5	10.0	5.1	20.0
Carbon disulfide	Ave	0.5372	0.5645	0.1000	10.5	10.0	5.1	20.0
Allyl chloride	Ave	0.1582	0.1572	0.0100	9.94	10.0	-0.6	20.0
Methyl acetate	Ave	0.2589	0.3165	0.1000	24.4	20.0	22.2*	20.0
Methylene Chloride	Lin2		0.2933	0.1000	9.65	10.0	-3.5	20.0
tert-Butyl alcohol	Ave	1.183	1.274	0.0100	108	100	7.8	20.0
Acrylonitrile	Ave	0.1259	0.1518	0.0100	121	100	20.6*	20.0
trans-1,2-Dichloroethene	Ave	0.2789	0.2731	0.1000	9.79	10.0	-2.1	20.0
Methyl tert-butyl ether	Ave	0.7479	0.7306	0.1000	9.77	10.0	-2.3	20.0
Hexane	Ave	0.3580	0.4221	0.0100	11.8	10.0	17.9	20.0
1,1-Dichloroethane	Ave	0.4850	0.5140	0.2000	10.6	10.0	6.0	20.0
Vinyl acetate	Ave	0.4932	0.6570	0.0100	13.3	10.0	33.2*	20.0
2,2-Dichloropropane	Ave	0.0617	0.0714	0.0100	11.6	10.0	15.6	20.0
cis-1,2-Dichloroethene	Ave	0.3190	0.3087	0.1000	9.68	10.0	-3.2	20.0
2-Butanone (MEK)	Ave	0.1861	0.2374	0.0500	25.5	20.0	27.5*	20.0
Bromochloromethane	Ave	0.1418	0.1370	0.0100	9.66	10.0	-3.4	20.0
Tetrahydrofuran	Ave	0.1084	0.1132	0.0100	20.9	20.0	4.5	20.0
Chloroform	Ave	0.4843	0.4568	0.2000	9.43	10.0	-5.7	20.0
1,1,1-Trichloroethane	Ave	0.3666	0.3743	0.1000	10.2	10.0	2.1	20.0
Cyclohexane	Ave	0.4524	0.5219	0.1000	11.5	10.0	15.4	20.0
Carbon tetrachloride	Ave	0.3051	0.2982	0.1000	9.78	10.0	-2.2	20.0
1,1-Dichloropropene	Ave	0.3961	0.3615	0.0100	9.13	10.0	-8.7	20.0
Isobutyl alcohol	Ave	0.0099	0.0116	0.0100	291	250	16.4	20.0
Benzene	Ave	1.216	1.136	0.5000	9.35	10.0	-6.5	20.0
1,2-Dichloroethane	Ave	0.3544	0.3640	0.1000	10.3	10.0	2.7	20.0
n-Heptane	Ave	0.2863	0.3622	0.0100	12.7	10.0	26.5*	20.0
Trichloroethene	Ave	0.3059	0.2801	0.2000	9.15	10.0	-8.5	20.0
Methylcyclohexane	Ave	0.4626	0.4054	0.1000	8.76	10.0	-12.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227613/2 Calibration Date: 11/01/2017 01:29

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: 51031D02.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	0.2808	0.1000	9.92	10.0	-0.8	20.0
1,4-Dioxane	Ave	0.0029	0.0030*	0.0100	211	200	5.7	20.0
Dibromomethane	Ave	0.1659	0.1506	0.0100	9.08	10.0	-9.2	20.0
Bromodichloromethane	Ave	0.3256	0.2866	0.2000	8.80	10.0	-12.0	20.0
2-Chloroethyl vinyl ether	Ave	0.2037	0.1931	0.0100	19.0	20.0	-5.2	20.0
cis-1,3-Dichloropropene	Ave	0.3955	0.3546	0.2000	8.97	10.0	-10.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.282	1.329	0.1000	20.7	20.0	3.6	20.0
Toluene	Ave	4.986	4.896	0.4000	9.82	10.0	-1.8	20.0
trans-1,3-Dichloropropene	Ave	1.357	1.295	0.1000	9.55	10.0	-4.5	20.0
Ethyl methacrylate	Ave	1.636	1.314	0.0100	8.03	10.0	-19.7	20.0
1,1,2-Trichloroethane	Ave	1.039	1.009	0.1000	9.72	10.0	-2.8	20.0
Tetrachloroethene	Ave	0.9508	0.8679	0.2000	9.13	10.0	-8.7	20.0
1,3-Dichloropropane	Ave	1.920	1.738	0.0100	9.05	10.0	-9.5	20.0
2-Hexanone	Ave	0.9836	1.076	0.1000	21.9	20.0	9.3	20.0
Dibromochloromethane	Ave	0.8779	0.8271	0.1000	9.42	10.0	-5.8	20.0
1,2-Dibromoethane (EDB)	Ave	1.065	0.999	0.1000	9.38	10.0	-6.2	20.0
3-Chlorobenzotrifluoride	Ave	1.718	1.838	0.0100	10.7	10.0	7.0	20.0
Chlorobenzene	Ave	3.246	2.955	0.5000	9.11	10.0	-8.9	20.0
4-Chlorobenzotrifluoride	Ave	1.586	1.759	0.0100	11.1	10.0	10.9	20.0
1,1,1,2-Tetrachloroethane	Ave	1.032	1.023	0.0100	9.92	10.0	-0.8	20.0
Ethylbenzene	Ave	1.812	1.655	0.1000	9.13	10.0	-8.7	20.0
m-Xylene & p-Xylene	Ave	2.214	2.074	0.1000	9.37	10.0	-6.3	20.0
o-Xylene	Ave	2.110	1.907	0.3000	9.04	10.0	-9.6	20.0
Styrene	Ave	3.571	3.357	0.3000	9.40	10.0	-6.0	20.0
Bromoform	Ave	0.5456	0.4533	0.1000	8.31	10.0	-16.9	20.0
2-Chlorobenzotrifluoride	Ave	1.644	1.750	0.0100	10.6	10.0	6.4	20.0
Isopropylbenzene	Ave	5.150	4.838	0.1000	9.39	10.0	-6.1	20.0
1,1,2,2-Tetrachloroethane	Ave	1.538	1.400	0.3000	9.10	10.0	-9.0	20.0
Bromobenzene	Ave	0.9704	0.8996	0.0100	9.27	10.0	-7.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2926	0.3555	0.0100	12.1	10.0	21.5*	20.0
1,2,3-Trichloropropane	Ave	0.4005	0.3693	0.0100	9.22	10.0	-7.8	20.0
N-Propylbenzene	Ave	1.109	1.033	0.0100	9.32	10.0	-6.8	20.0
2-Chlorotoluene	Ave	0.9585	0.8817	0.0100	9.20	10.0	-8.0	20.0
3-Chlorotoluene	Ave	1.043	1.114	0.0100	10.7	10.0	6.8	20.0
1,3,5-Trimethylbenzene	Ave	3.173	3.015	0.0100	9.50	10.0	-5.0	20.0
4-Chlorotoluene	Ave	1.035	0.9924	0.0100	9.59	10.0	-4.1	20.0
tert-Butylbenzene	Ave	2.653	2.338	0.0100	8.81	10.0	-11.9	20.0
1,2,4-Trimethylbenzene	Ave	3.226	2.998	0.0100	9.29	10.0	-7.1	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8081	0.7812	0.0100	9.67	10.0	-3.3	20.0
sec-Butylbenzene	Ave	3.701	3.367	0.0100	9.10	10.0	-9.0	20.0
1,3-Dichlorobenzene	Ave	1.734	1.683	0.6000	9.70	10.0	-3.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227613/2 Calibration Date: 11/01/2017 01:29

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: 51031D02.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	2.902	0.0100	9.41	10.0	-5.9	20.0
1,4-Dichlorobenzene	Ave	1.780	1.729	0.5000	9.71	10.0	-2.9	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7524	0.7536	0.0100	10.0	10.0	0.2	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8127	0.7803	0.0100	9.60	10.0	-4.0	20.0
n-Butylbenzene	Ave	2.514	2.342	0.0100	9.32	10.0	-6.8	20.0
1,2-Dichlorobenzene	Ave	1.653	1.620	0.4000	9.80	10.0	-2.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1835	0.1667	0.0500	9.08	10.0	-9.2	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.048	1.244	0.0100	35.6	30.0	18.6	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.084	1.243	0.0100	22.9	20.0	14.7	20.0
1,2,4-Trichlorobenzene	Ave	0.7563	0.7398	0.2000	9.78	10.0	-2.2	20.0
Hexachlorobutadiene	Ave	0.2767	0.2731	0.0100	9.87	10.0	-1.3	20.0
Naphthalene	Ave	2.576	2.462	0.0100	9.56	10.0	-4.4	20.0
1,2,3-Trichlorobenzene	Ave	0.6909	0.6627	0.0100	9.59	10.0	-4.1	20.0
2,4,5-Trichlorotoluene	Ave	0.3284	0.3466	0.0100	10.6	10.0	5.6	20.0
2,3,6-Trichlorotoluene	Ave	0.3055	0.3549	0.0100	11.6	10.0	16.2	20.0
Dibromofluoromethane (Surr)	Ave	0.2406	0.2405		10.0	10.0	-0.0	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2934	0.3236		11.0	10.0	10.3	20.0
Toluene-d8 (Surr)	Ave	3.979	4.382		11.0	10.0	10.1	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\20171031-19122.b\51031D02.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 01-Nov-2017 01:29:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019122-002
Misc. Info.: CCVIS
Operator ID: 034635 Instrument ID: CHHP5
Sublist: chrom-MSVOA_LL_CHHP5*sub29

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 11:46:34 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: XAWRK031

First Level Reviewer: bungardf Date: 01-Nov-2017 01:56:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.384	4.384	0.000	0	229283	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.340	7.340	0.000	98	502403	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.429	10.429	0.000	86	116077	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.770	12.770	0.000	93	155950	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.616	6.616	0.000	93	120838	50.0	50.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.987	6.987	0.000	0	162586	50.0	55.1	
$ 7 Toluene-d8 (Surr)	98	8.982	8.982	0.000	93	508652	50.0	55.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.609	11.609	0.000	85	179153	50.0	53.7	
11 Dichlorodifluoromethane	85	1.684	1.684	0.000	99	203890	50.0	69.8	
12 Chloromethane	50	1.891	1.891	0.000	99	225677	50.0	76.9	
14 Butadiene	39	2.019	2.019	0.000	95	226958	50.0	83.9	
13 Vinyl chloride	62	2.019	2.019	0.000	62	183846	50.0	61.7	
15 Bromomethane	94	2.341	2.341	0.000	88	62700	50.0	44.5	
16 Chloroethane	64	2.438	2.438	0.000	99	91484	50.0	55.9	
17 Dichlorofluoromethane	67	2.742	2.742	0.000	97	245109	50.0	59.2	
18 Trichlorofluoromethane	101	2.773	2.773	0.000	98	225785	50.0	61.7	
20 Ethyl ether	59	3.131	3.131	0.000	94	147530	50.0	62.0	
21 Acrolein	56	3.314	3.314	0.000	97	73745	150.0	122.9	
22 1,1-Dichloroethene	96	3.417	3.417	0.000	98	132323	50.0	53.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.502	3.502	0.000	94	151520	50.0	56.1	
24 Acetone	43	3.533	3.533	0.000	99	196034	100.0	149.2	
25 Iodomethane	142	3.618	3.618	0.000	98	202912	50.0	52.5	
26 Carbon disulfide	76	3.703	3.703	0.000	99	283579	50.0	52.5	
28 3-Chloro-1-propene	76	4.001	4.001	0.000	91	78974	50.0	49.7	
30 Methyl acetate	43	4.038	4.038	0.000	99	318057	100.0	122.2	
31 Methylene Chloride	84	4.232	4.232	0.000	97	147333	50.0	48.3	
32 2-Methyl-2-propanol	59	4.512	4.512	0.000	92	146104	500.0	538.8	
33 Acrylonitrile	53	4.615	4.615	0.000	100	762832	500.0	603.0	
34 trans-1,2-Dichloroethene	96	4.646	4.646	0.000	97	137200	50.0	49.0	
35 Methyl tert-butyl ether	73	4.658	4.658	0.000	97	367034	50.0	48.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.053	5.053	0.000	94	212068	50.0	59.0	
37 1,1-Dichloroethane	63	5.272	5.272	0.000	96	258214	50.0	53.0	
38 Vinyl acetate	43	5.321	5.321	0.000	97	330063	50.0	66.6	
45 cis-1,2-Dichloroethene	96	6.008	6.008	0.000	83	155103	50.0	48.4	
44 2,2-Dichloropropane	97	6.008	6.008	0.000	64	35856	50.0	57.8	
46 2-Butanone (MEK)	43	6.026	6.026	0.000	99	238490	100.0	127.5	
49 Chlorobromomethane	128	6.294	6.294	0.000	96	68835	50.0	48.3	
51 Tetrahydrofuran	42	6.312	6.312	0.000	92	113781	100.0	104.5	
52 Chloroform	83	6.440	6.440	0.000	94	229507	50.0	47.2	
53 1,1,1-Trichloroethane	97	6.598	6.598	0.000	98	188060	50.0	51.1	
54 Cyclohexane	56	6.665	6.665	0.000	95	262193	50.0	57.7	
56 Carbon tetrachloride	117	6.768	6.768	0.000	96	149832	50.0	48.9	
55 1,1-Dichloropropene	75	6.780	6.780	0.000	93	181610	50.0	45.6	
57 Isobutyl alcohol	41	6.987	6.987	0.000	90	145504	1250.0	1455.5	
58 Benzene	78	6.993	6.993	0.000	97	570856	50.0	46.7	
59 1,2-Dichloroethane	62	7.072	7.072	0.000	96	182893	50.0	51.4	
62 n-Heptane	43	7.352	7.352	0.000	94	181984	50.0	63.3	
64 Trichloroethene	130	7.723	7.723	0.000	96	140696	50.0	45.8	
66 Methylcyclohexane	83	7.954	7.954	0.000	95	203656	50.0	43.8	
67 1,2-Dichloropropane	63	7.996	7.996	0.000	94	141065	50.0	49.6	
68 Dibromomethane	93	8.082	8.082	0.000	96	75666	50.0	45.4	
70 1,4-Dioxane	88	8.082	8.082	0.000	47	30583	1000.0	1057.3	
71 Dichlorobromomethane	83	8.276	8.276	0.000	97	143998	50.0	44.0	
73 2-Chloroethyl vinyl ether	63	8.574	8.574	0.000	93	194049	100.0	94.8	
74 cis-1,3-Dichloropropene	75	8.720	8.720	0.000	92	178157	50.0	44.8	
75 4-Methyl-2-pentanone (MIBK	43	8.872	8.872	0.000	98	308477	100.0	103.6	
76 Toluene	91	9.049	9.049	0.000	98	568255	50.0	49.1	
77 trans-1,3-Dichloropropene	75	9.292	9.292	0.000	97	150362	50.0	47.7	
78 Ethyl methacrylate	69	9.359	9.359	0.000	92	152544	50.0	40.2	M
79 1,1,2-Trichloroethane	97	9.486	9.486	0.000	90	117146	50.0	48.6	
80 Tetrachloroethene	164	9.559	9.559	0.000	96	100745	50.0	45.6	
81 1,3-Dichloropropane	76	9.651	9.651	0.000	97	201737	50.0	45.3	
82 2-Hexanone	43	9.705	9.705	0.000	98	249682	100.0	109.3	
84 Chlorodibromomethane	129	9.857	9.857	0.000	91	96011	50.0	47.1	
85 Ethylene Dibromide	107	9.973	9.973	0.000	98	115927	50.0	46.9	
86 3-Chlorobenzotrifluoride	180	10.435	10.435	0.000	92	213342	50.0	53.5	
87 Chlorobenzene	112	10.459	10.459	0.000	94	343055	50.0	45.5	
88 4-Chlorobenzotrifluoride	180	10.520	10.520	0.000	96	204130	50.0	55.5	
89 1,1,1,2-Tetrachloroethane	131	10.551	10.551	0.000	90	118784	50.0	49.6	
90 Ethylbenzene	106	10.557	10.557	0.000	98	192082	50.0	45.7	
91 m-Xylene & p-Xylene	106	10.690	10.690	0.000	0	240721	50.0	46.8	
92 o-Xylene	106	11.074	11.074	0.000	96	221328	50.0	45.2	
93 Styrene	104	11.092	11.092	0.000	96	389662	50.0	47.0	
94 Bromoform	173	11.274	11.274	0.000	95	52613	50.0	41.5	
96 2-Chlorobenzotrifluoride	180	11.341	11.341	0.000	94	203132	50.0	53.2	
97 Isopropylbenzene	105	11.439	11.439	0.000	96	561608	50.0	47.0	
99 1,1,2,2-Tetrachloroethane	83	11.749	11.749	0.000	85	162490	50.0	45.5	
100 Bromobenzene	156	11.749	11.749	0.000	95	140289	50.0	46.3	
102 trans-1,4-Dichloro-2-buten	53	11.785	11.785	0.000	80	55433	50.0	60.7	
101 1,2,3-Trichloropropane	110	11.803	11.803	0.000	86	57595	50.0	46.1	
103 N-Propylbenzene	120	11.852	11.852	0.000	99	161114	50.0	46.6	
104 2-Chlorotoluene	126	11.943	11.943	0.000	96	137494	50.0	46.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	12.004	12.004	0.000	97	173683	50.0	53.4	
106 1,3,5-Trimethylbenzene	105	12.034	12.034	0.000	94	470227	50.0	47.5	
107 4-Chlorotoluene	126	12.065	12.065	0.000	96	154760	50.0	47.9	
108 tert-Butylbenzene	119	12.351	12.351	0.000	94	364647	50.0	44.1	
110 1,2,4-Trimethylbenzene	105	12.412	12.412	0.000	97	467541	50.0	46.5	
111 1,2-dichloro-4-(trifluorom	214	12.454	12.454	0.000	92	121827	50.0	48.3	
112 sec-Butylbenzene	105	12.570	12.570	0.000	94	525133	50.0	45.5	
113 1,3-Dichlorobenzene	146	12.691	12.691	0.000	98	262395	50.0	48.5	
114 4-Isopropyltoluene	119	12.728	12.728	0.000	97	452625	50.0	47.1	
115 1,4-Dichlorobenzene	146	12.795	12.795	0.000	96	269610	50.0	48.6	
116 2,4-Dichloro-1-(triflourom	214	12.825	12.825	0.000	92	117520	50.0	50.1	
118 2,5-Dichlorobenzotrifluori	214	12.868	12.868	0.000	0	121686	50.0	48.0	
120 n-Butylbenzene	91	13.135	13.135	0.000	98	365277	50.0	46.6	
121 1,2-Dichlorobenzene	146	13.153	13.153	0.000	97	252587	50.0	49.0	
122 1,2-Dibromo-3-Chloropropan	75	13.938	13.938	0.000	78	25991	50.0	45.4	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.084	14.084	0.000	0	581928	150.0	178.0	
125 2,3- & 3,4- Dichlorotoluen	125	14.503	14.503	0.000	0	387801	100.0	114.7	
126 1,2,4-Trichlorobenzene	180	14.765	14.765	0.000	94	115377	50.0	48.9	
127 Hexachlorobutadiene	225	14.917	14.917	0.000	92	42584	50.0	49.3	
128 Naphthalene	128	15.033	15.033	0.000	97	384012	50.0	47.8	
129 1,2,3-Trichlorobenzene	180	15.258	15.258	0.000	96	103347	50.0	48.0	
131 2,4,5-Trichlorotoluene	159	16.030	16.030	0.000	0	54059	50.0	52.8	
130 2,3,6-Trichlorotoluene	159	16.121	16.121	0.000	96	55342	50.0	58.1	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	92.0	
S 134 1,2-Dichloroethene, Total	96				0		100.0	97.3	
S 135 1,3-Dichloropropene, Total	1				0		100.0	92.6	

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		
voaWVA1stRest_00021	Amount Added:	2.00	Units: uL		
voaWAcro1stRe_00021	Amount Added:	6.00	Units: uL		
VOA8260VOA2ND_00270	Amount Added:	2.00	Units: uL		
voaW2clev1stR_00024	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	

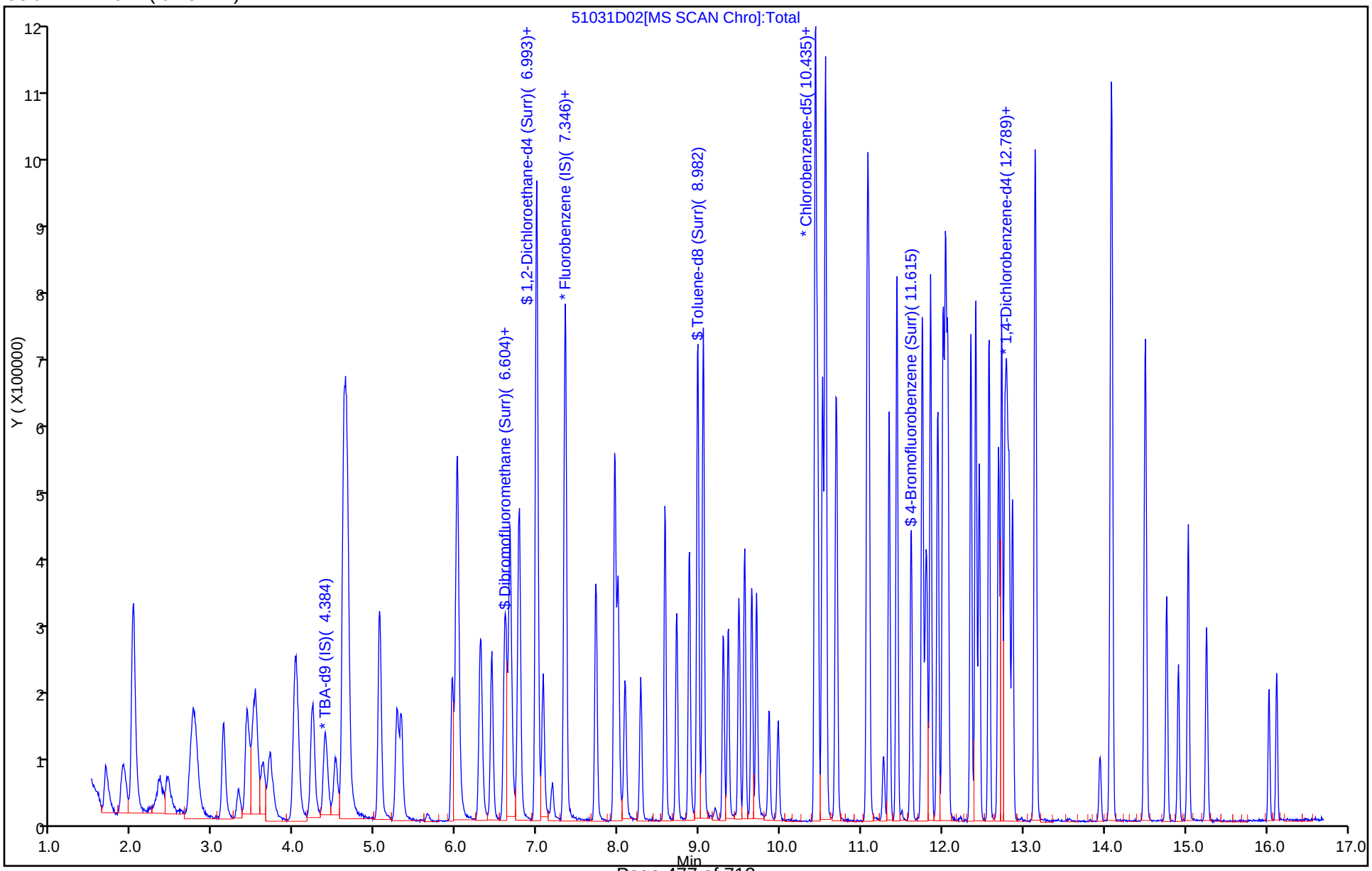
Report Date: 01-Nov-2017 11:46:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D02.D

Injection Date:	01-Nov-2017 01:29:30	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

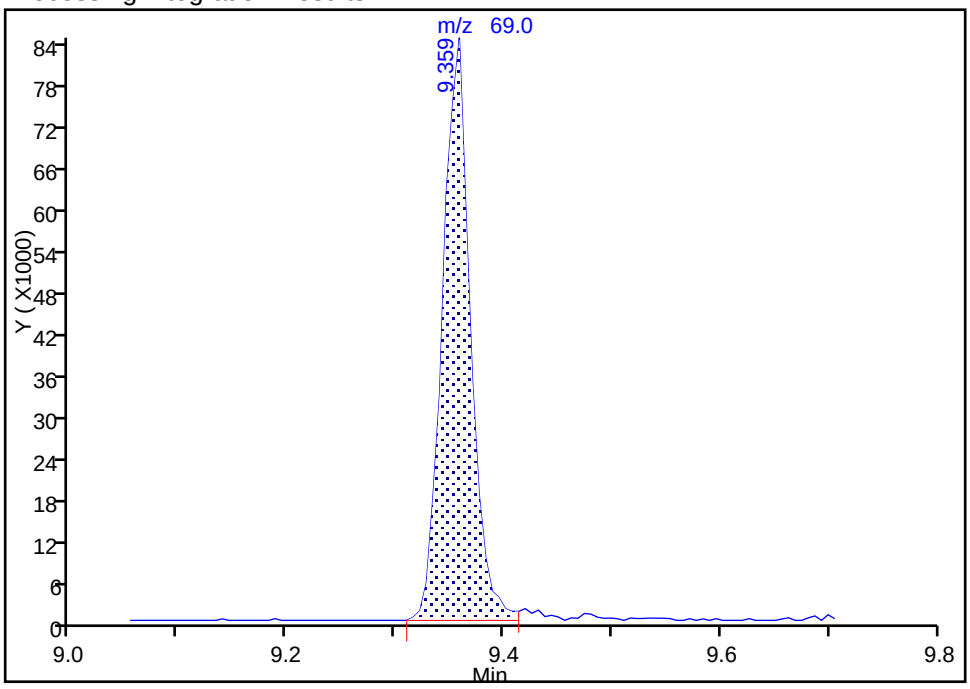
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D02.D				
Injection Date:	01-Nov-2017 01:29:30	Instrument ID:	CHHP5		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

78 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

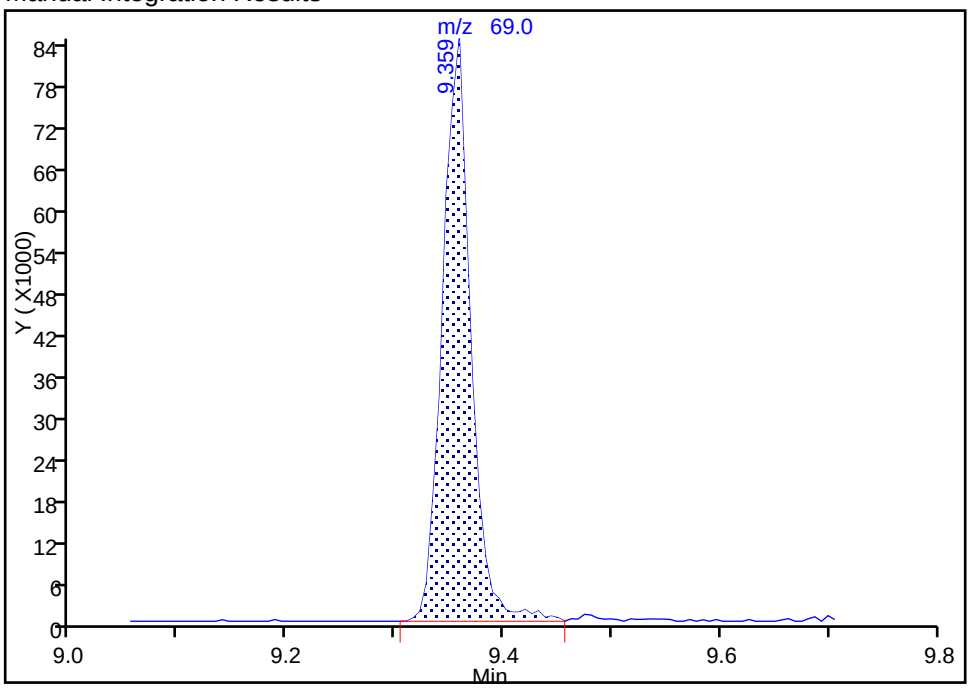
Processing Integration Results

RT: 9.36
Area: 150356
Amount: 39.589724
Amount Units: ng



Manual Integration Results

RT: 9.36
Area: 152544
Amount: 40.165839
Amount Units: ng



Reviewer: bungardf, 01-Nov-2017 02:16:28

Audit Action: Manually Integrated Audit Reason: Poor chromatography

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:

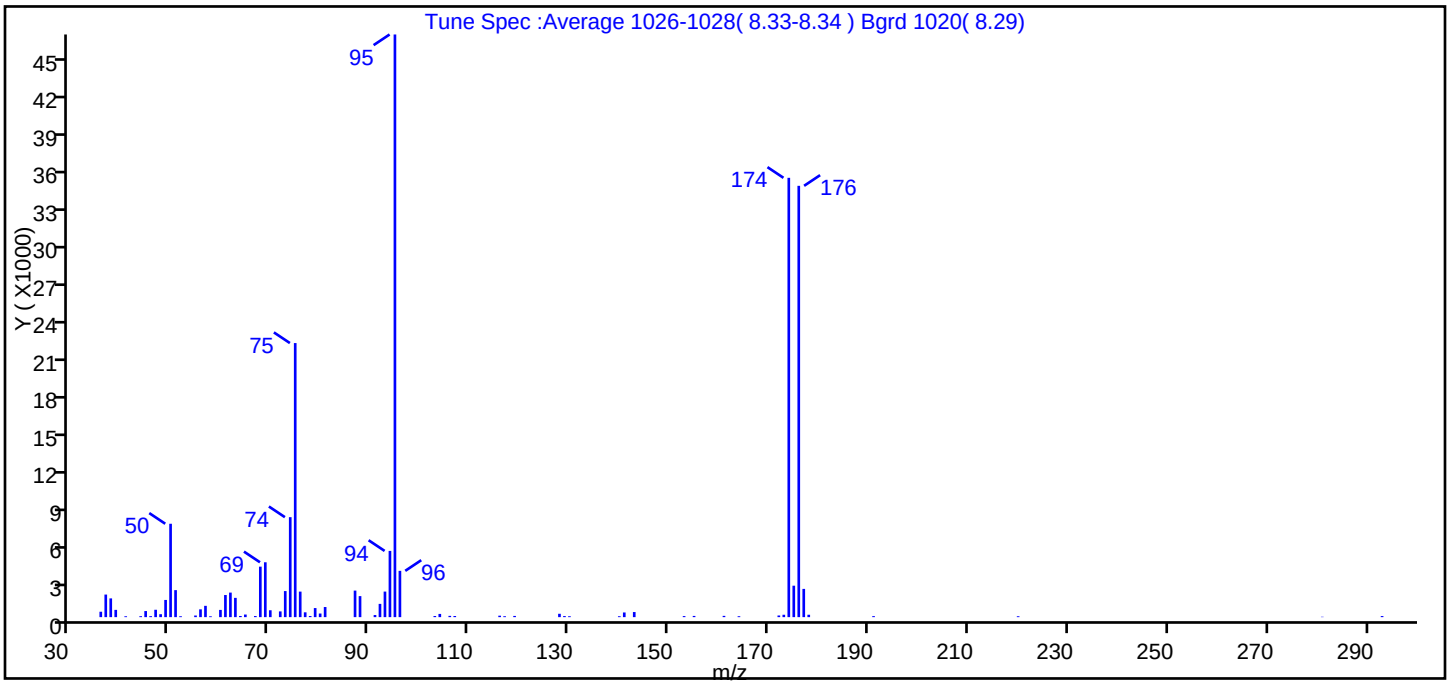
VOABFB25_00090 Amount Added: 1.00 Units: uL

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		

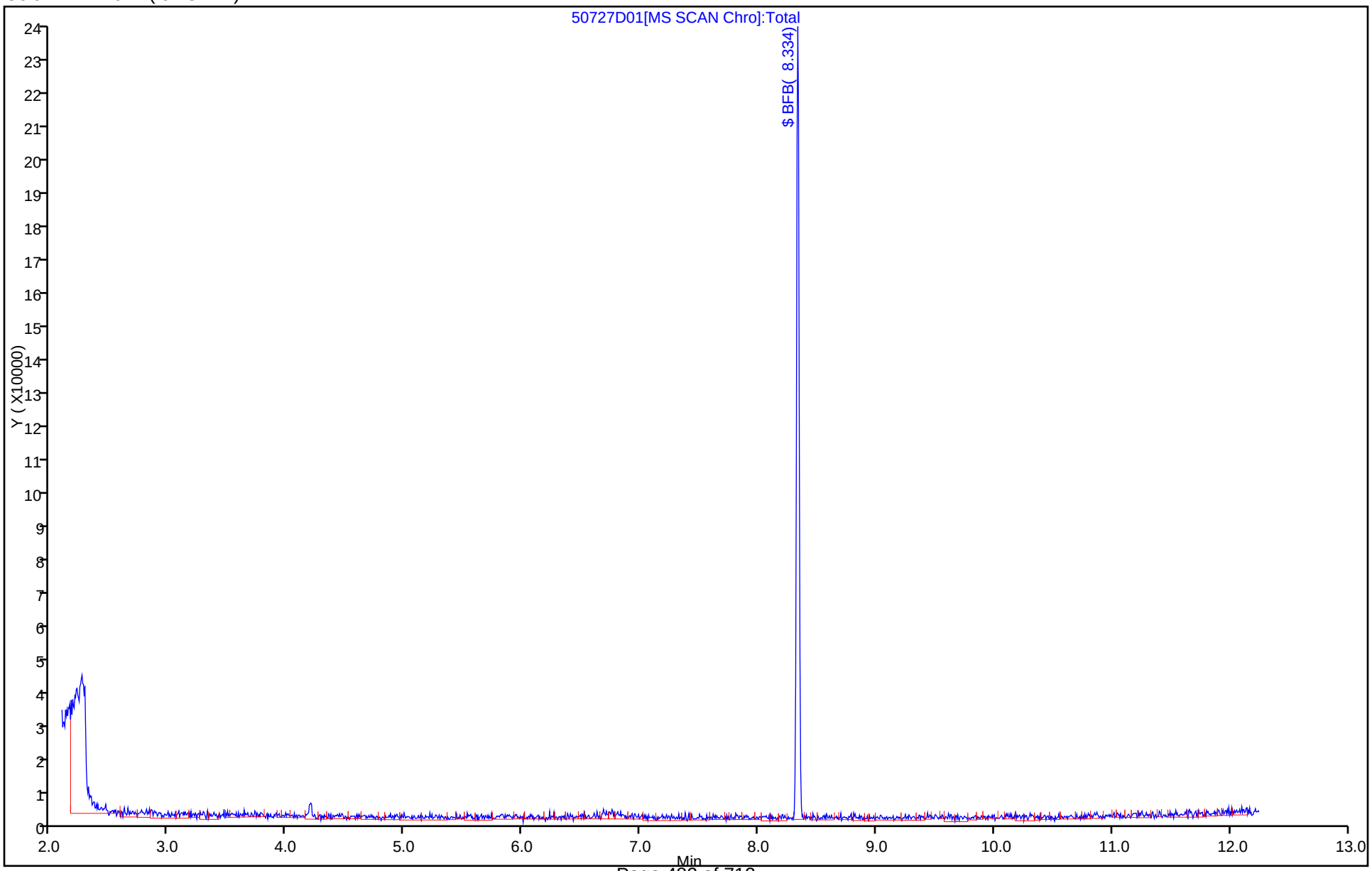
Report Date: 28-Jul-2017 01:04:43 Chrom Revision: 2.2 20-Jun-2017 07:42:38

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\20171025-19038.b\51025D01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	25-Oct-2017 21:39:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0019038-001				
Misc. Info.:	BFB				
Operator ID:	034635	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	26-Oct-2017 20:41:10	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:	XAWRK030				

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	60032	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

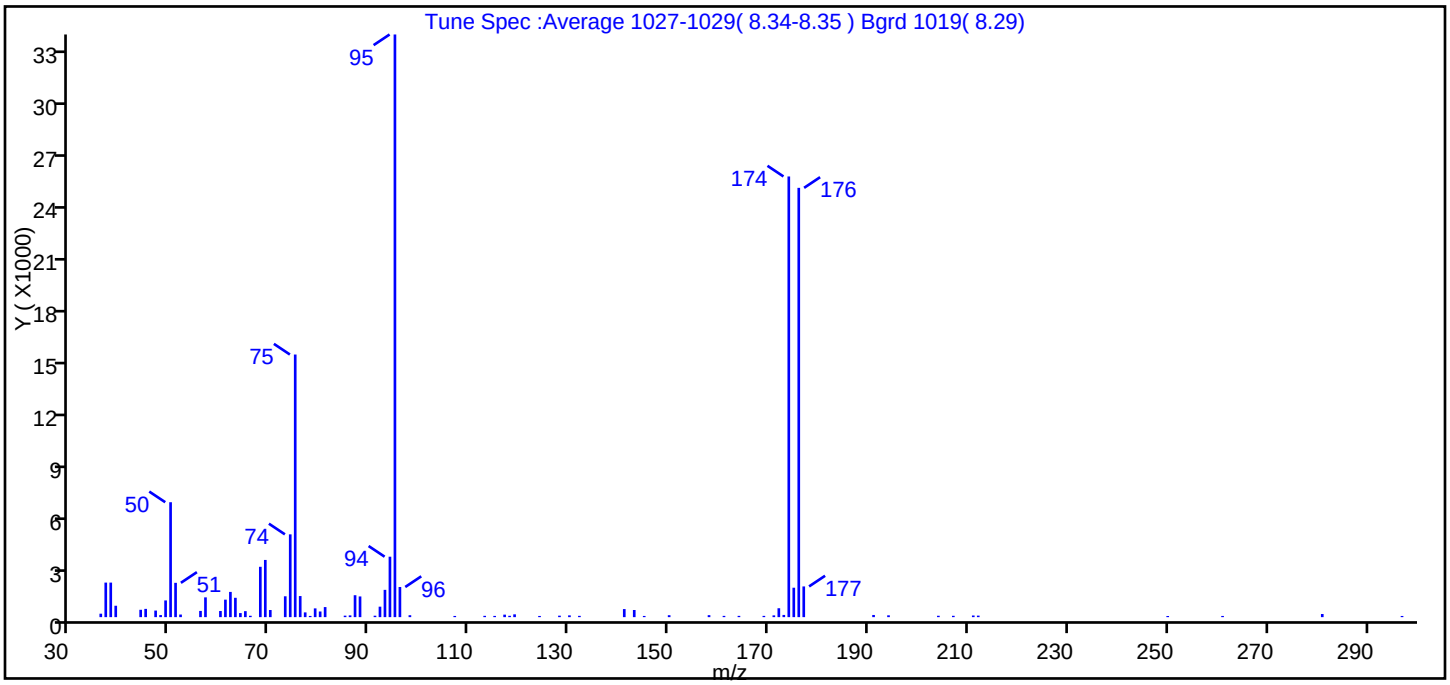
VOABFB25_00094 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D01.D
Injection Date: 25-Oct-2017 21:39:30 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	19.7
75	30 to 60% of m/z 95	45.1
96	5 to 9% of m/z 95	5.2
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	75.6
175	5 to 9% of m/z 174	5.1 (6.7)
176	Greater than 95% but less than 101% of m/z 174	73.7 (97.4)
177	5 to 9% of m/z 176	5.3 (7.2)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D01.D\MSVOA_LL_CHHP5.rslt\spec
Injection Date: 25-Oct-2017 21:39:30
Spectrum: Tune Spec :Average 1027-1029(8.34-8.35) Bgrd 1019(8.29)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 79

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	199	66.00	79	94.00	3484	164.00	74
37.00	1991	68.00	2902	95.00	33584	169.00	73
38.00	1991	69.00	3297	96.00	1738	171.00	102
39.00	657	70.00	411	98.00	111	172.00	513
44.00	424	73.00	1202	107.00	69	173.00	127
45.00	476	74.00	4772	113.00	75	174.00	25400
47.00	379	75.00	15137	115.00	71	175.00	1696
48.00	119	76.00	1216	117.00	144	176.00	24744
49.00	963	77.00	274	118.00	77	177.00	1770
50.00	6624	78.00	70	119.00	162	191.00	125
51.00	1978	79.00	505	124.00	69	194.00	105
52.00	150	80.00	326	128.00	85	204.00	80
56.00	358	81.00	580	130.00	102	207.00	77
57.00	1140	85.00	86	132.00	75	211.00	95
60.00	353	86.00	101	141.00	465	212.00	88
61.00	1008	87.00	1264	143.00	412	250.00	66
62.00	1454	88.00	1193	145.00	69	261.00	69
63.00	1115	91.00	83	150.00	111	281.00	181
64.00	235	92.00	604	158.00	114	297.00	68
65.00	345	93.00	1573	161.00	73		

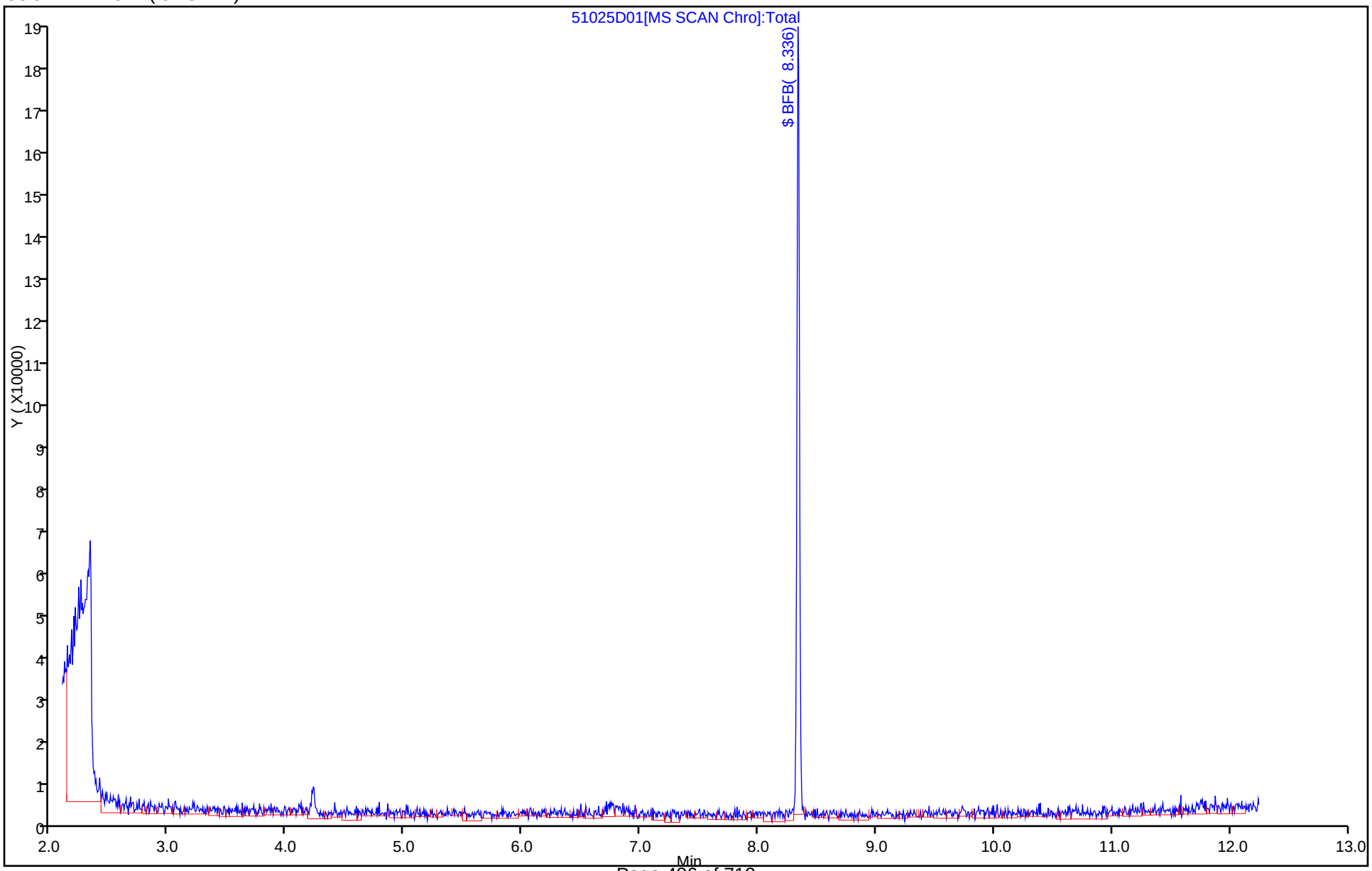
Report Date: 26-Oct-2017 20:41:11 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D01.D

Injection Date:	25-Oct-2017 21:39:30	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\20171026-19053.b\51026D01.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 26-Oct-2017 21:11:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 180-0019053-001
Misc. Info.: BFB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Oct-2017 21:14:00 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: XAWRK007

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	105162	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

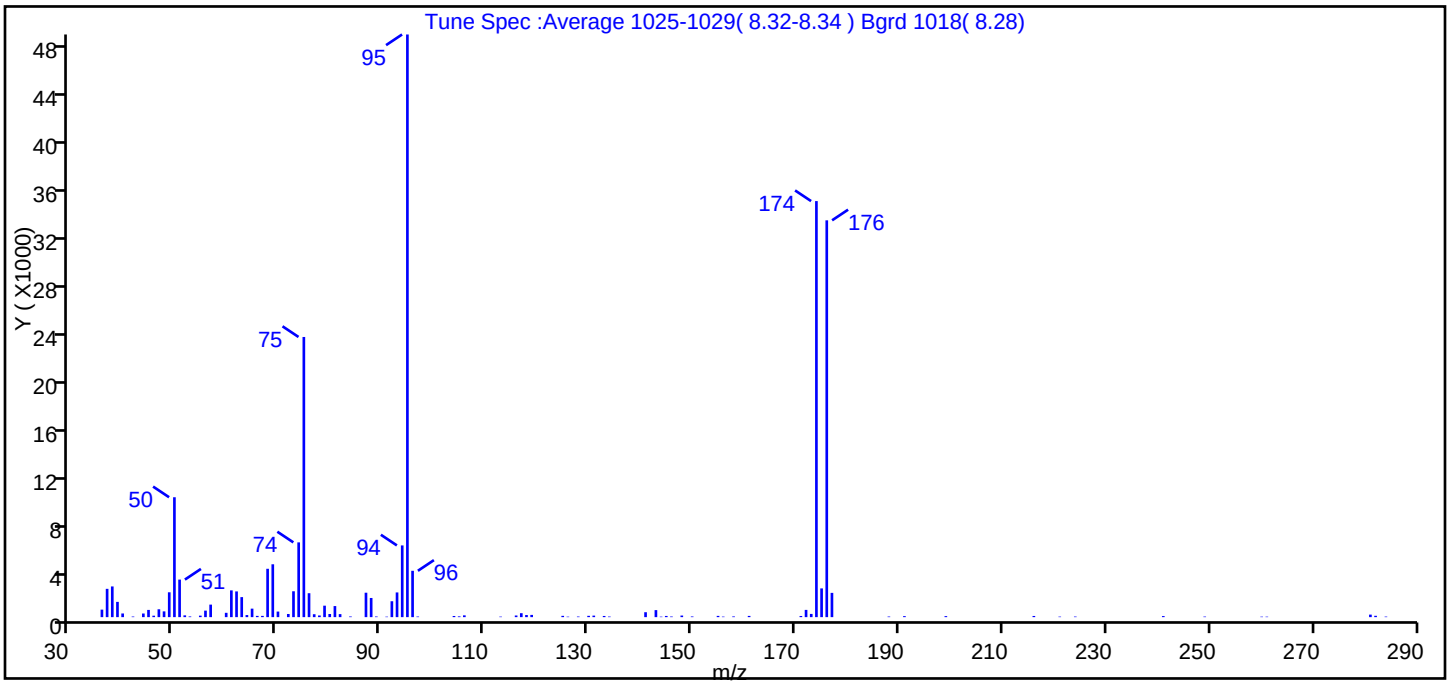
VOABFB25_00094 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D01.D				
Injection Date:	26-Oct-2017 21:11:30	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	20.6
75	30 to 60% of m/z 95	48.1
96	5 to 9% of m/z 95	8.0
173	Less than 2% of m/z 174	0.6 (0.8)
174	50 to 120% of m/z 95	71.4
175	5 to 9% of m/z 174	4.9 (6.9)
176	Greater than 95% but less than 101% of m/z 174	68.1 (95.4)
177	5 to 9% of m/z 176	4.2 (6.1)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D01.D\MSVOA_LL_CHHP5.rslt\spec
Injection Date: 26-Oct-2017 21:11:30
Spectrum: Tune Spec :Average 1025-1029(8.32-8.34) Bgrd 1018(8.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 98

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	622	66.00	104	96.00	3836	156.00	44
37.00	2343	67.00	104	97.00	50	158.00	59
38.00	2541	68.00	4003	104.00	94	161.00	102
39.00	1263	69.00	4376	105.00	64	171.00	96
40.00	304	70.00	462	106.00	148	172.00	600
42.00	50	72.00	261	113.00	43	173.00	267
44.00	301	73.00	2142	116.00	137	174.00	34440
45.00	598	74.00	6189	117.00	327	175.00	2379
46.00	119	75.00	23192	118.00	174	176.00	32848
47.00	651	76.00	1981	119.00	186	177.00	2009
48.00	478	77.00	242	125.00	107	188.00	50
49.00	2057	78.00	138	126.00	40	191.00	83
50.00	9925	79.00	949	128.00	50	199.00	85
51.00	3109	80.00	260	130.00	109	216.00	97
52.00	148	81.00	917	131.00	126	221.00	44
53.00	57	82.00	250	133.00	97	224.00	48
55.00	123	84.00	54	134.00	49	241.00	87
56.00	539	87.00	2022	141.00	408	249.00	47
57.00	1037	88.00	1587	143.00	582	260.00	40
60.00	358	89.00	54	144.00	41	261.00	40
61.00	2216	91.00	40	145.00	99	281.00	209
62.00	2130	92.00	1317	146.00	52	282.00	112
63.00	1658	93.00	2045	148.00	132	284.00	46
64.00	172	94.00	5937	150.00	56		
65.00	704	95.00	48232	155.00	104		

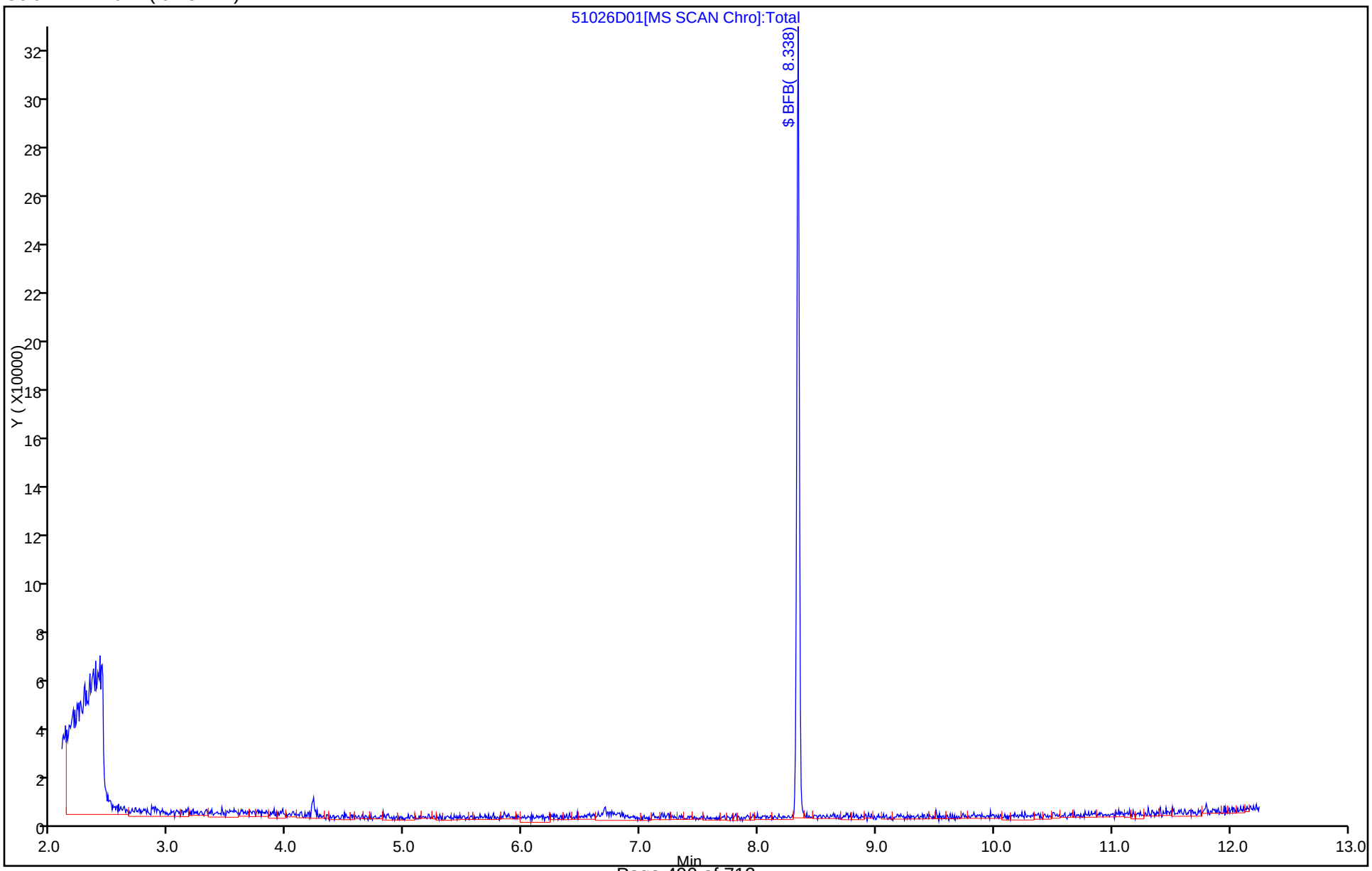
Report Date: 29-Oct-2017 21:14:01 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D01.D

Injection Date:	26-Oct-2017 21:11:30	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\20171030-19107.b\51030D01.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 30-Oct-2017 21:19:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 180-0019107-001
Misc. Info.: BFB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2017 08:26:07 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: XAWRK010

First Level Reviewer: bungardf Date: 30-Oct-2017 21:40:01

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	13713	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

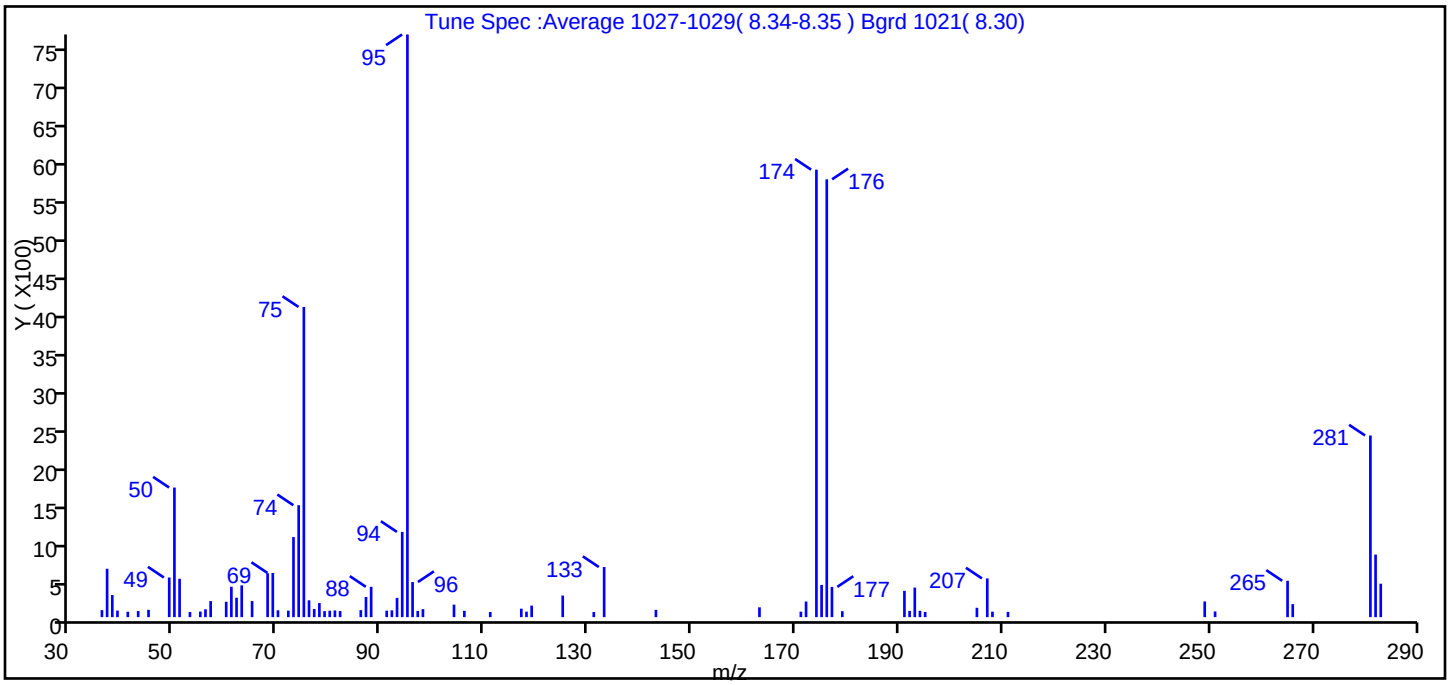
VOABFB25_00094 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D01.D
Injection Date: 30-Oct-2017 21:19:30 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	22.2
75	30 to 60% of m/z 95	53.2
96	5 to 9% of m/z 95	6.0
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	5.5 (7.2)
176	Greater than 95% but less than 101% of m/z 174	75.1 (97.8)
177	5 to 9% of m/z 176	5.2 (6.9)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D01.D\MSVOA_LL_CHHP5.rslt\spec
Injection Date: 30-Oct-2017 21:19:30
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: 78

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	92	69.00	580	95.00	7647	177.00	397
37.00	635	70.00	90	96.00	461	179.00	78
38.00	290	72.00	85	97.00	81	191.00	345
39.00	86	73.00	1051	98.00	105	192.00	82
41.00	71	74.00	1469	104.00	164	193.00	388
43.00	80	75.00	4071	106.00	83	194.00	83
45.00	96	76.00	221	111.00	67	195.00	68
49.00	520	77.00	107	117.00	111	205.00	123
50.00	1701	78.00	185	118.00	72	207.00	508
51.00	503	79.00	79	119.00	151	208.00	72
53.00	68	80.00	84	125.00	283	211.00	69
55.00	73	81.00	88	131.00	67	249.00	206
56.00	103	82.00	80	133.00	658	251.00	75
57.00	211	86.00	92	143.00	96	265.00	477
60.00	202	87.00	265	163.00	129	266.00	171
61.00	399	88.00	398	171.00	72	281.00	2384
62.00	255	91.00	85	172.00	205	282.00	821
63.00	417	92.00	89	174.00	5873	283.00	439
65.00	211	93.00	253	175.00	423		
68.00	576	94.00	1119	176.00	5746		

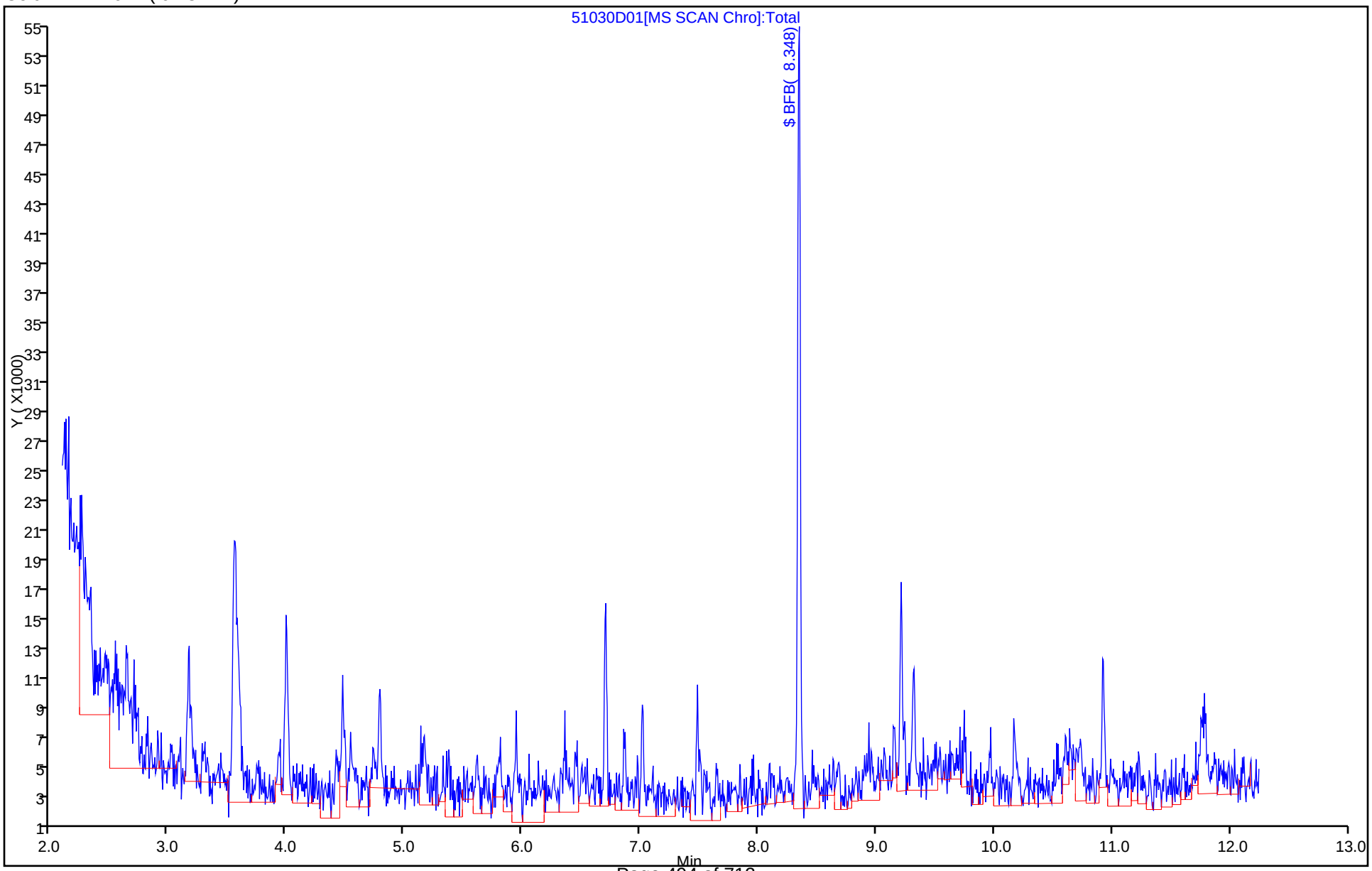
Report Date: 31-Oct-2017 08:26:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D01.D

Injection Date:	30-Oct-2017 21:19:30	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\20171031-19122.b\51031D01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	01-Nov-2017 00:52:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0019122-001				
Misc. Info.:	BFB				
Operator ID:	034635	Instrument ID:	CHHP5		
Method:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\MSVOA_LL_CHHP5.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	01-Nov-2017 11:46:30	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:	XAWRK031				

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	210996	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

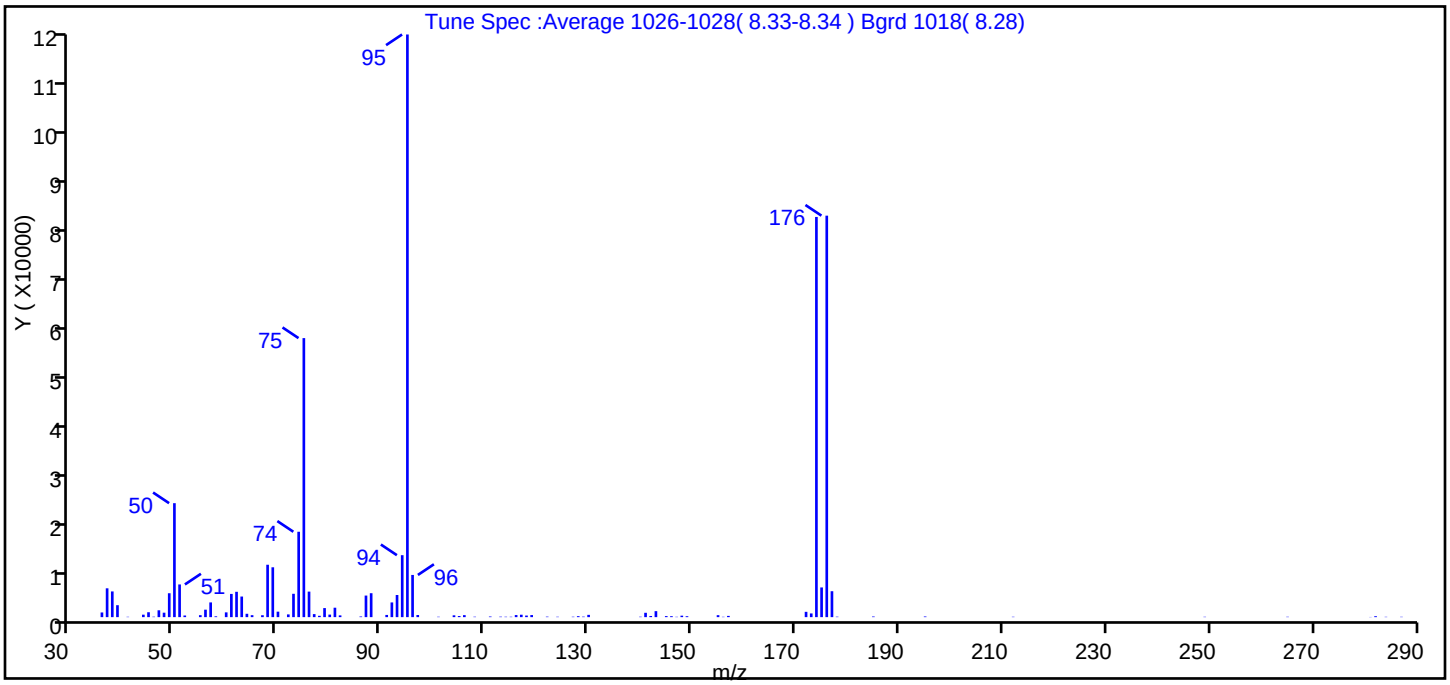
VOABFB25_00094 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D01.D				
Injection Date:	01-Nov-2017 00:52:30	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	19.6
75	30 to 60% of m/z 95	47.9
96	5 to 9% of m/z 95	7.2
173	Less than 2% of m/z 174	0.6 (0.9)
174	50 to 120% of m/z 95	68.7
175	5 to 9% of m/z 174	5.1 (7.4)
176	Greater than 95% but less than 101% of m/z 174	68.9 (100.3)
177	5 to 9% of m/z 176	4.5 (6.5)

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D01.D\MSVOA_LL_CHHP5.rslt\spec
Injection Date: 01-Nov-2017 00:52:30
Spectrum: Tune Spec :Average 1026-1028(8.33-8.34) Bgrd 1018(8.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 96

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	931	67.00	380	97.00	423	145.00	209
37.00	5738	68.00	10427	101.00	77	146.00	186
38.00	5116	69.00	9921	104.00	362	147.00	67
39.00	2377	70.00	1090	105.00	220	148.00	293
41.00	69	72.00	544	106.00	397	149.00	182
44.00	492	73.00	4649	108.00	85	155.00	391
45.00	975	74.00	16992	111.00	125	156.00	67
46.00	87	75.00	55528	113.00	96	157.00	250
47.00	1363	76.00	5083	114.00	82	172.00	1058
48.00	887	77.00	605	115.00	78	173.00	738
49.00	4756	78.00	268	116.00	413	174.00	79640
50.00	22680	79.00	1803	117.00	482	175.00	5911
51.00	6506	80.00	504	118.00	317	176.00	79896
52.00	326	81.00	1876	119.00	413	177.00	5160
55.00	390	82.00	349	122.00	101	178.00	92
56.00	1487	86.00	131	124.00	77	185.00	125
57.00	2931	87.00	4294	127.00	83	195.00	129
58.00	162	88.00	4763	128.00	191	212.00	74
60.00	952	91.00	439	129.00	99	249.00	70
61.00	4622	92.00	2927	130.00	456	265.00	74
62.00	5043	93.00	4406	140.00	84	281.00	35
63.00	4101	94.00	12330	141.00	866	282.00	183
64.00	668	95.00	115952	142.00	230	284.00	66
65.00	392	96.00	8398	143.00	1192	287.00	68

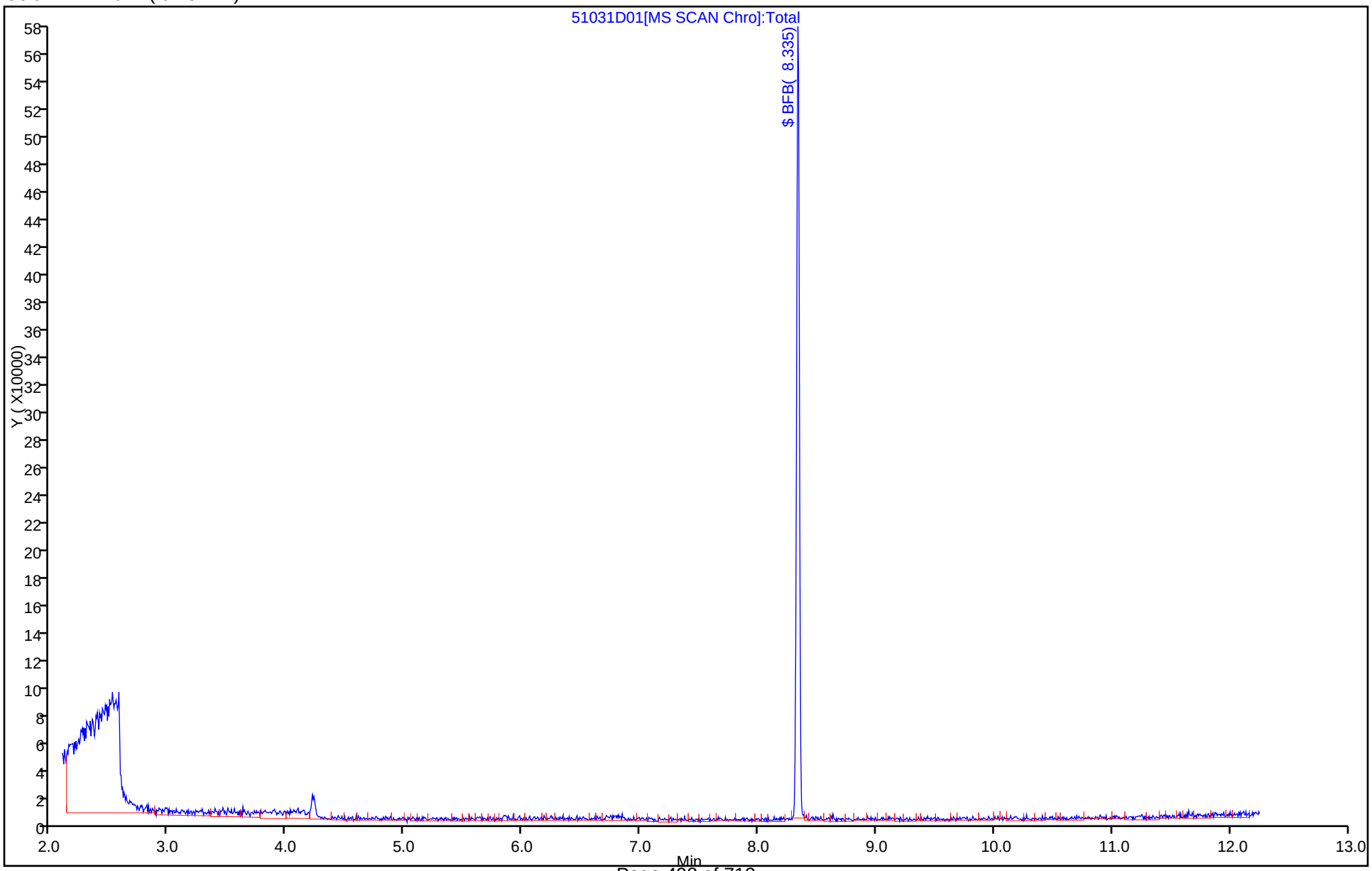
Report Date: 01-Nov-2017 11:46:30 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D01.D

Injection Date:	01-Nov-2017 00:52:30	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)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-227010/5

Matrix: Water | Lab File ID: 51025D05.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/25/2017 23:51

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.: 227010 | 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.: 180-71580-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-227010/5

Matrix: Water Lab File ID: 51025D05.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/25/2017 23:51

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.: 227010 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)	109		65-121
2037-26-5	Toluene-d8 (Surr)	94		73-120
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 25-Oct-2017 23:51:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 00:14:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.367	4.384	-0.018	0	204506	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.340	7.340	0.000	98	490132	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.430	10.429	0.001	86	118973	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.771	12.770	0.001	97	173707	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.617	6.610	0.007	93	123783	50.0	52.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.988	6.987	0.001	0	157312	50.0	54.7	
$ 7 Toluene-d8 (Surr)	98	8.982	8.982	0.000	94	445099	50.0	47.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.609	11.609	0.000	86	157345	50.0	46.0	
11 Dichlorodifluoromethane	85		1.684					ND	
12 Chloromethane	50		1.891					ND	
14 Butadiene	39		2.012					ND	
13 Vinyl chloride	62		2.012					ND	
15 Bromomethane	94		2.335					ND	
16 Chloroethane	64		2.426					ND	
17 Dichlorofluoromethane	67		2.760					ND	
18 Trichlorofluoromethane	101		2.791					ND	
19 Ethanol	45		2.821					ND	
20 Ethyl ether	59		3.131					ND	
21 Acrolein	56		3.314					ND	
22 1,1-Dichloroethene	96		3.411					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.496					ND	
24 Acetone	43		3.539					ND	
25 Iodomethane	142		3.612					ND	
26 Carbon disulfide	76		3.703					ND	
27 Isopropyl alcohol	45		3.816					ND	
29 Acetonitrile	41		3.981					ND	
28 3-Chloro-1-propene	76		4.001					ND	
30 Methyl acetate	43		4.038					ND	
31 Methylene Chloride	84		4.226					ND	
32 2-Methyl-2-propanol	59		4.506					ND	
33 Acrylonitrile	53		4.609					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		4.640					ND	
35 Methyl tert-butyl ether	73		4.664					ND	
36 Hexane	57		5.053					ND	
37 1,1-Dichloroethane	63		5.266					ND	
38 Vinyl acetate	43		5.321					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		6.008					ND	
45 cis-1,2-Dichloroethene	96		6.008					ND	
46 2-Butanone (MEK)	43		6.026					ND	
48 Ethyl acetate	43		6.097					ND	
47 Propionitrile	54		6.103					ND	
50 Methacrylonitrile	41		6.273					ND	
49 Chlorobromomethane	128		6.288					ND	
51 Tetrahydrofuran	42		6.306					ND	
52 Chloroform	83		6.434					ND	
53 1,1,1-Trichloroethane	97		6.592					ND	
54 Cyclohexane	56		6.659					ND	
56 Carbon tetrachloride	117		6.762					ND	
55 1,1-Dichloropropene	75		6.780					ND	
57 Isobutyl alcohol	41		6.987					ND	
58 Benzene	78		6.993					ND	
59 1,2-Dichloroethane	62		7.072					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		7.352					ND	
63 n-Butanol	56		7.684					ND	
64 Trichloroethene	130		7.723					ND	
65 Ethyl acrylate	55		7.848					ND	
66 Methylcyclohexane	83		7.960					ND	
67 1,2-Dichloropropane	63		7.997					ND	
70 1,4-Dioxane	88		8.082					ND	
69 Methyl methacrylate	69		8.086					ND	
68 Dibromomethane	93		8.088					ND	
71 Dichlorobromomethane	83		8.276					ND	
73 2-Chloroethyl vinyl ether	63		8.574					ND	
74 cis-1,3-Dichloropropene	75		8.720					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872					ND	
76 Toluene	91		9.049					ND	
77 trans-1,3-Dichloropropene	75		9.298					ND	
78 Ethyl methacrylate	69		9.353					ND	
79 1,1,2-Trichloroethane	97		9.486					ND	
80 Tetrachloroethene	164		9.559					ND	
81 1,3-Dichloropropane	76		9.645					ND	
82 2-Hexanone	43		9.705					ND	
83 n-Butyl acetate	43		9.825					ND	
84 Chlorodibromomethane	129		9.857					ND	
85 Ethylene Dibromide	107		9.967					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.435					ND	
87 Chlorobenzene	112		10.459					ND	
88 4-Chlorobenzotrifluoride	180		10.520					ND	
89 1,1,1,2-Tetrachloroethane	131		10.551					ND	
90 Ethylbenzene	106		10.557					ND	
91 m-Xylene & p-Xylene	106		10.684					ND	
92 o-Xylene	106		11.068					ND	
93 Styrene	104		11.092					ND	
94 Bromoform	173		11.274					ND	
95 Cyclohexanol	57		11.288					ND	
96 2-Chlorobenzotrifluoride	180		11.341					ND	
97 Isopropylbenzene	105		11.439					ND	
98 Cyclohexanone	55		11.528					ND	
100 Bromobenzene	156		11.749					ND	
99 1,1,2,2-Tetrachloroethane	83		11.749					ND	
102 trans-1,4-Dichloro-2-buten	53		11.785					ND	
101 1,2,3-Trichloropropane	110		11.803					ND	
103 N-Propylbenzene	120		11.852					ND	
104 2-Chlorotoluene	126		11.943					ND	
105 3-Chlorotoluene	126		12.004					ND	
106 1,3,5-Trimethylbenzene	105		12.035					ND	
107 4-Chlorotoluene	126		12.065					ND	
108 tert-Butylbenzene	119		12.351					ND	
110 1,2,4-Trimethylbenzene	105		12.412					ND	
111 1,2-dichloro-4-(trifluorom	214		12.454					ND	
112 sec-Butylbenzene	105		12.576					ND	
113 1,3-Dichlorobenzene	146		12.691					ND	
114 4-Isopropyltoluene	119		12.728					ND	
115 1,4-Dichlorobenzene	146		12.795					ND	
116 2,4-Dichloro-1-(triflourom	214		12.819					ND	
117 1,2,3-Trimethylbenzene	105		12.823					ND	
118 2,5-Dichlorobenzotrifluori	214		12.862					ND	
119 Benzyl chloride	91		12.908					ND	
120 n-Butylbenzene	91		13.141					ND	
121 1,2-Dichlorobenzene	146		13.147					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.938					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.084					ND	
124 1,3,5-Trichlorobenzene	180		14.130					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.504					ND	
126 1,2,4-Trichlorobenzene	180		14.765					ND	
127 Hexachlorobutadiene	225		14.911					ND	
128 Naphthalene	128	15.033	15.033	0.000	89	4523		0.5054	
129 1,2,3-Trichlorobenzene	180		15.258					ND	
131 2,4,5-Trichlorotoluene	159		16.024					ND	
130 2,3,6-Trichlorotoluene	159		16.121					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

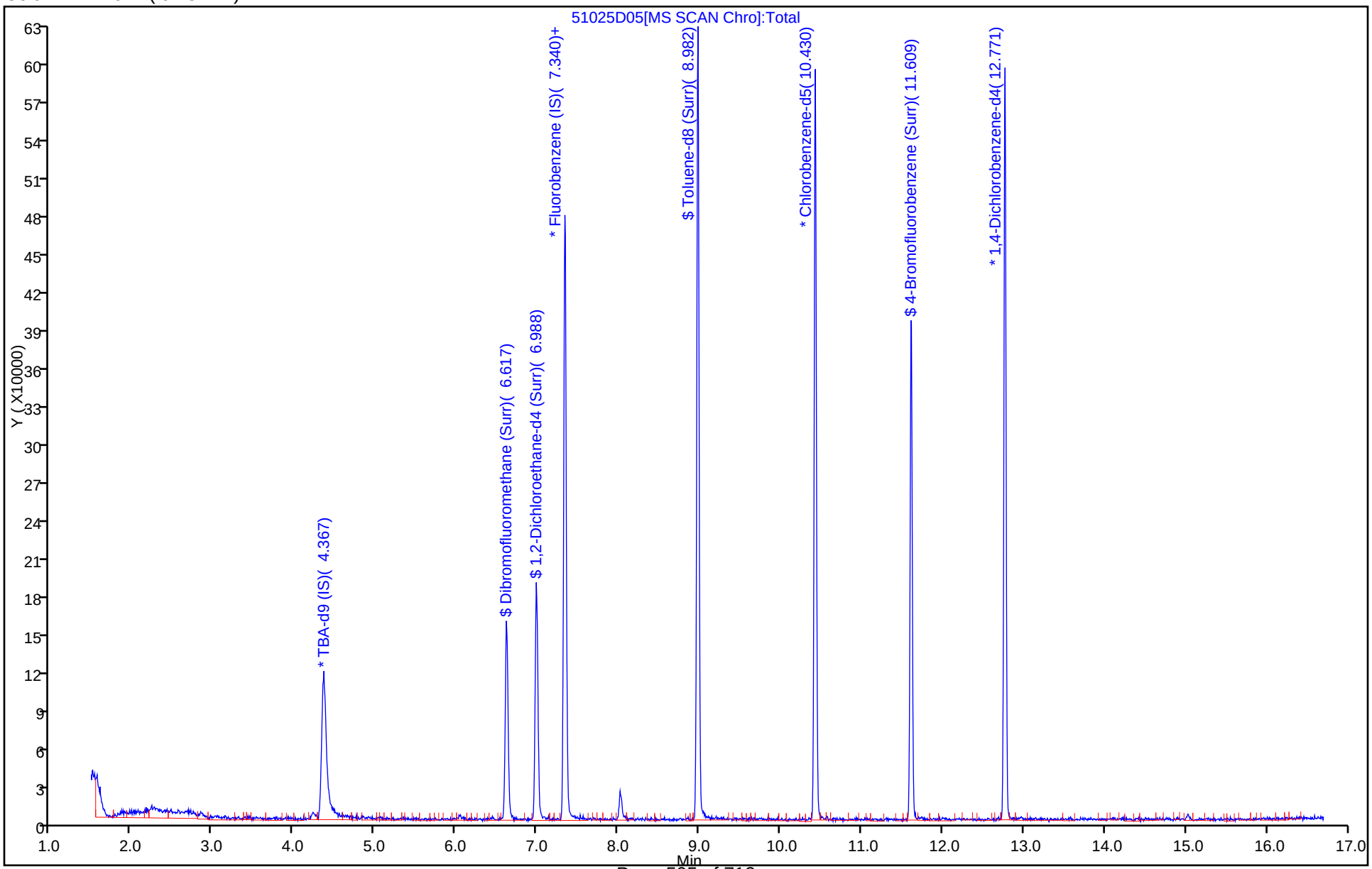
Report Date: 26-Oct-2017 20:41:19 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D05.D

Injection Date:	25-Oct-2017 23:51:30	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\20171025-19038.b\51025D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 25-Oct-2017 23:51:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 26-Oct-2017 00:14:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	52.5	104.98
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	54.7	109.39
$ 7 Toluene-d8 (Surr)	50.0	47.0	94.01
$ 8 4-Bromofluorobenzene (Surr)	50.0	46.0	92.02

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-227152/5

Matrix: Water | Lab File ID: 51026D05.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 23:22

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227152 | 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.: 180-71580-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-227152/5

Matrix: Water Lab File ID: 51026D05.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/26/2017 23:22

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 227152 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)	95		73-120
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 26-Oct-2017 23:22:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019053-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Oct-2017 21:14:03 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: XAWRK007

First Level Reviewer: bungardf Date: 27-Oct-2017 00:00:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.369	4.379	-0.010	0	204654	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.343	7.341	0.003	98	472652	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.432	10.430	0.002	87	111234	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.767	12.771	-0.004	97	160607	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.625	6.617	0.008	92	116949	50.0	51.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.990	6.988	0.002	0	152672	50.0	55.0	
$ 7 Toluene-d8 (Surr)	98	8.985	8.982	0.003	94	419688	50.0	47.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.610	0.002	86	143837	50.0	45.0	
11 Dichlorodifluoromethane	85		1.685					ND	
12 Chloromethane	50		1.886					ND	
14 Butadiene	39		2.013					ND	
13 Vinyl chloride	62		2.025					ND	
15 Bromomethane	94		2.336					ND	
16 Chloroethane	64		2.439					ND	
17 Dichlorofluoromethane	67		2.743					ND	
18 Trichlorofluoromethane	101		2.792					ND	
19 Ethanol	45		2.821					ND	
20 Ethyl ether	59		3.126					ND	
21 Acrolein	56		3.315					ND	
22 1,1-Dichloroethene	96		3.412					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.485					ND	
24 Acetone	43		3.534					ND	
25 Iodomethane	142		3.619					ND	
26 Carbon disulfide	76		3.710					ND	
27 Isopropyl alcohol	45		3.816					ND	
29 Acetonitrile	41		3.981					ND	
28 3-Chloro-1-propene	76		4.014					ND	
30 Methyl acetate	43		4.038					ND	
31 Methylene Chloride	84		4.227					ND	
32 2-Methyl-2-propanol	59		4.513					ND	
33 Acrylonitrile	53		4.616					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		4.640					ND	
35 Methyl tert-butyl ether	73		4.665					ND	
38 Vinyl acetate	43		5.060					ND	
36 Hexane	57		5.060					ND	
37 1,1-Dichloroethane	63		5.273					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	
45 cis-1,2-Dichloroethene	96		6.009					ND	
44 2,2-Dichloropropane	97		6.009					ND	
46 2-Butanone (MEK)	43		6.021					ND	
48 Ethyl acetate	43		6.097					ND	
47 Propionitrile	54		6.103					ND	
50 Methacrylonitrile	41		6.273					ND	
49 Chlorobromomethane	128		6.295					ND	
51 Tetrahydrofuran	42		6.313					ND	
52 Chloroform	83	6.455	6.440	0.015	1	2121		0.4633	M
53 1,1,1-Trichloroethane	97		6.593					ND	
54 Cyclohexane	56		6.665					ND	
56 Carbon tetrachloride	117		6.769					ND	
55 1,1-Dichloropropene	75		6.781					ND	
57 Isobutyl alcohol	41		6.988					ND	
58 Benzene	78		6.994					ND	
59 1,2-Dichloroethane	62		7.073					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		7.353					ND	
63 n-Butanol	56		7.684					ND	
64 Trichloroethene	130		7.724					ND	
65 Ethyl acrylate	55		7.848					ND	
66 Methylcyclohexane	83		7.955					ND	
67 1,2-Dichloropropane	63		7.997					ND	
68 Dibromomethane	93		8.082					ND	
70 1,4-Dioxane	88		8.082					ND	
69 Methyl methacrylate	69		8.086					ND	
71 Dichlorobromomethane	83		8.277					ND	
73 2-Chloroethyl vinyl ether	63		8.575					ND	
74 cis-1,3-Dichloropropene	75		8.721					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.873					ND	
76 Toluene	91		9.049					ND	
77 trans-1,3-Dichloropropene	75		9.293					ND	
78 Ethyl methacrylate	69		9.360					ND	
79 1,1,2-Trichloroethane	97		9.487					ND	
80 Tetrachloroethene	164		9.560					ND	
81 1,3-Dichloropropane	76		9.645					ND	
82 2-Hexanone	43		9.706					ND	
83 n-Butyl acetate	43		9.825					ND	
84 Chlorodibromomethane	129		9.858					ND	
85 Ethylene Dibromide	107		9.968					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.430					ND	
87 Chlorobenzene	112		10.460					ND	
88 4-Chlorobenzotrifluoride	180		10.521					ND	
89 1,1,1,2-Tetrachloroethane	131		10.551					ND	
90 Ethylbenzene	106		10.558					ND	
91 m-Xylene & p-Xylene	106		10.691					ND	
92 o-Xylene	106		11.068					ND	
93 Styrene	104		11.093					ND	
94 Bromoform	173		11.269					ND	
95 Cyclohexanol	57		11.288					ND	
96 2-Chlorobenzotrifluoride	180		11.342					ND	
97 Isopropylbenzene	105		11.439					ND	
98 Cyclohexanone	55		11.528					ND	
100 Bromobenzene	156		11.749					ND	
99 1,1,2,2-Tetrachloroethane	83		11.749					ND	
102 trans-1,4-Dichloro-2-buten	53		11.786					ND	
101 1,2,3-Trichloropropane	110		11.810					ND	
103 N-Propylbenzene	120		11.853					ND	
104 2-Chlorotoluene	126		11.944					ND	
105 3-Chlorotoluene	126		12.005					ND	
106 1,3,5-Trimethylbenzene	105		12.035					ND	
107 4-Chlorotoluene	126		12.066					ND	
108 tert-Butylbenzene	119		12.352					ND	
110 1,2,4-Trimethylbenzene	105		12.412					ND	
111 1,2-dichloro-4-(trifluorom	214		12.455					ND	
112 sec-Butylbenzene	105		12.577					ND	
113 1,3-Dichlorobenzene	146		12.692					ND	
114 4-Isopropyltoluene	119		12.729					ND	
115 1,4-Dichlorobenzene	146		12.795					ND	
116 2,4-Dichloro-1-(triflourom	214		12.820					ND	
117 1,2,3-Trimethylbenzene	105		12.823					ND	
118 2,5-Dichlorobenzotrifluori	214		12.862					ND	
119 Benzyl chloride	91		12.908					ND	
120 n-Butylbenzene	91		13.136					ND	
121 1,2-Dichlorobenzene	146		13.148					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.939					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.085					ND	
124 1,3,5-Trichlorobenzene	180		14.130					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.504					ND	
126 1,2,4-Trichlorobenzene	180		14.766					ND	
127 Hexachlorobutadiene	225		14.906					ND	
128 Naphthalene	128	15.030	15.033	-0.003	95	4852		0.5864	
129 1,2,3-Trichlorobenzene	180		15.258					ND	
131 2,4,5-Trichlorotoluene	159		16.031					ND	
130 2,3,6-Trichlorotoluene	159		16.122					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	

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

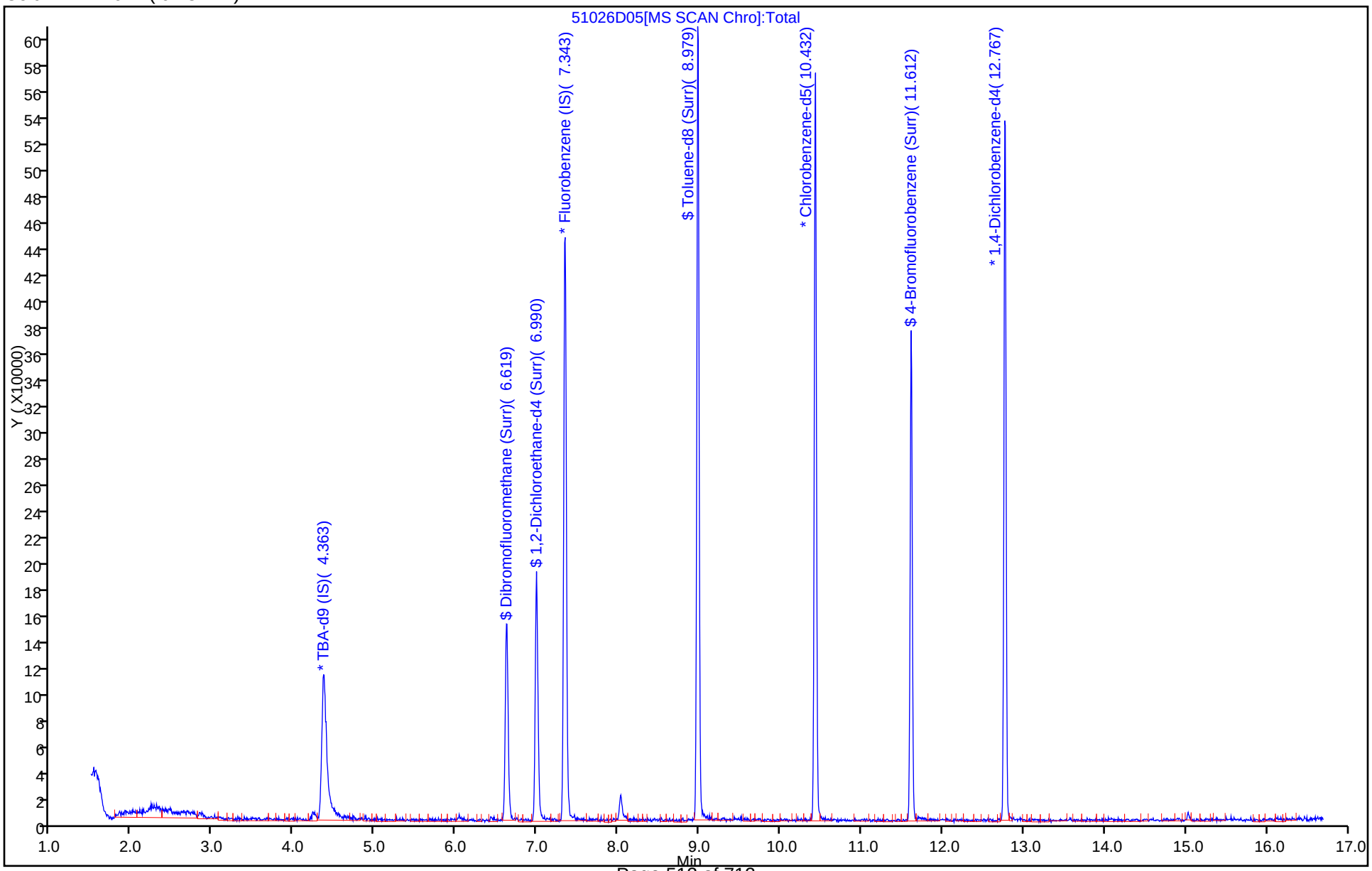
Report Date: 29-Oct-2017 21:14:12 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D05.D

Injection Date:	26-Oct-2017 23:22:30	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\20171026-19053.b\51026D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 26-Oct-2017 23:22:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019053-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Oct-2017 21:14:03 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: XAWRK007

First Level Reviewer: bungardf Date: 27-Oct-2017 00:00:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.4	102.85
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	55.0	110.09
$ 7 Toluene-d8 (Surr)	50.0	47.4	94.81
$ 8 4-Bromofluorobenzene (Surr)	50.0	45.0	89.97

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

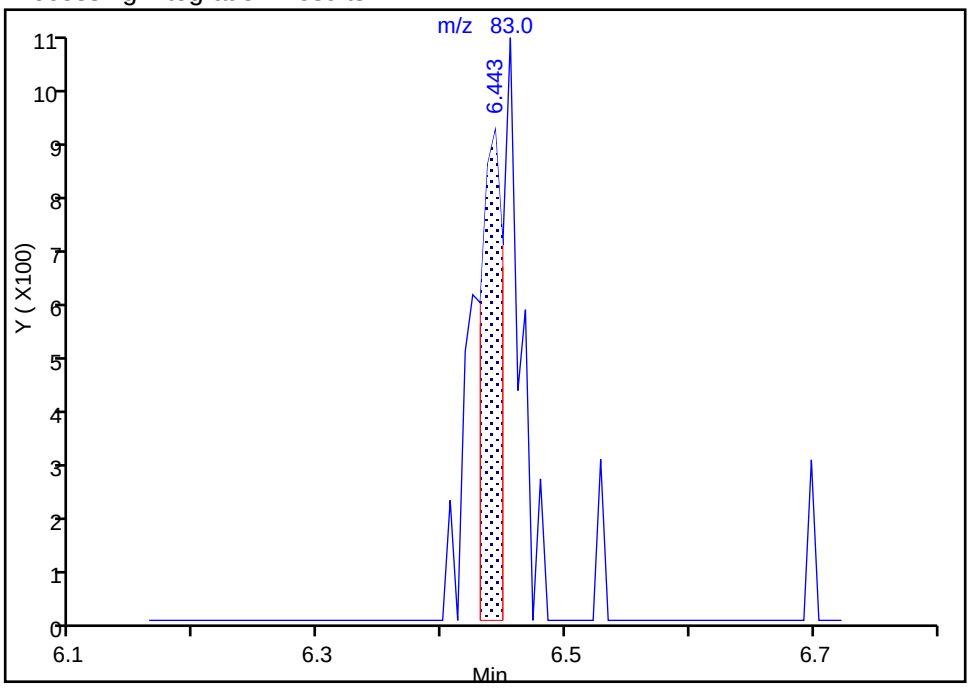
Data File:	\\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D05.D				
Injection Date:	26-Oct-2017 23:22:30	Instrument ID:	CHHP5		
Lims ID:	MB				
Client ID:					
Operator ID:	034635	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

Signal: 1

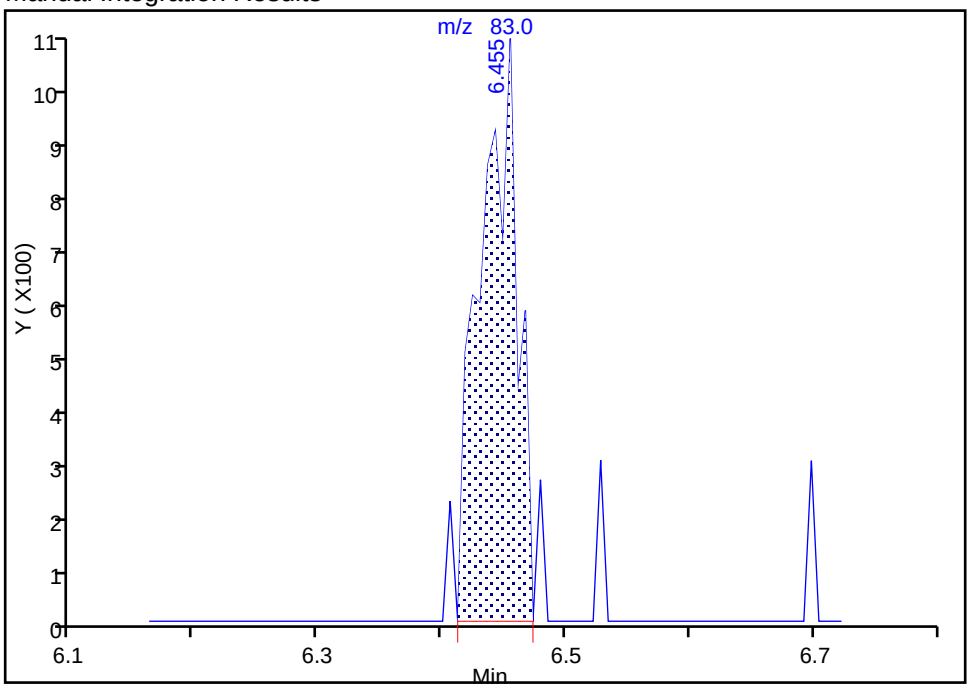
Processing Integration Results

RT: 6.44
Area: 1035
Amount: 0.226083
Amount Units: ng



Manual Integration Results

RT: 6.46
Area: 2121
Amount: 0.463306
Amount Units: ng



Reviewer: bungardf, 26-Oct-2017 23:59:43

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-227508/5

Matrix: Water | Lab File ID: 51030D05.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/31/2017 00:07

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.: 227508 | 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.: 180-71580-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-227508/5

Matrix: Water Lab File ID: 51030D05.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/31/2017 00:07

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.: 227508 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)	112		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)	106		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 31-Oct-2017 00:07:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019107-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2017 08:26:11 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: XAWRK010

First Level Reviewer: bungardf Date: 31-Oct-2017 00:43:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.375	4.390	-0.015	0	217733	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.343	7.340	0.003	99	492120	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.432	10.429	0.003	86	116744	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.773	12.771	0.002	97	167621	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.619	6.616	0.003	93	125526	50.0	53.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.990	6.987	0.003	0	161409	50.0	55.9	
$ 7 Toluene-d8 (Surr)	98	8.985	8.976	0.009	94	438287	50.0	47.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.615	-0.003	85	150148	50.0	44.7	
11 Dichlorodifluoromethane	85		1.690					ND	
12 Chloromethane	50		1.885					ND	
14 Butadiene	39		2.013					ND	
13 Vinyl chloride	62		2.019					ND	
15 Bromomethane	94		2.341					ND	
16 Chloroethane	64		2.426					ND	
17 Dichlorofluoromethane	67		2.755					ND	
18 Trichlorofluoromethane	101		2.797					ND	
19 Ethanol	45		2.821					ND	
20 Ethyl ether	59		3.126					ND	
21 Acrolein	56		3.314					ND	
22 1,1-Dichloroethene	96		3.411					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.496					ND	
24 Acetone	43		3.539					ND	
25 Iodomethane	142		3.612					ND	
26 Carbon disulfide	76		3.697					ND	
27 Isopropyl alcohol	45		3.816					ND	
29 Acetonitrile	41		3.981					ND	
28 3-Chloro-1-propene	76		4.007					ND	
30 Methyl acetate	43		4.038					ND	
31 Methylene Chloride	84		4.226					ND	
32 2-Methyl-2-propanol	59		4.524					ND	
33 Acrylonitrile	53		4.615					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		4.640					ND	
35 Methyl tert-butyl ether	73		4.664					ND	
36 Hexane	57		5.053					ND	
37 1,1-Dichloroethane	63		5.272					ND	
38 Vinyl acetate	43		5.321					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		6.008					ND	
45 cis-1,2-Dichloroethene	96		6.008					ND	
46 2-Butanone (MEK)	43		6.026					ND	
48 Ethyl acetate	43		6.097					ND	
47 Propionitrile	54		6.103					ND	
50 Methacrylonitrile	41		6.273					ND	
49 Chlorobromomethane	128		6.294					ND	
51 Tetrahydrofuran	42		6.312					ND	
52 Chloroform	83	6.437	6.440	-0.003	18	2610		0.5476	
53 1,1,1-Trichloroethane	97		6.598					ND	
54 Cyclohexane	56		6.665					ND	
56 Carbon tetrachloride	117		6.762					ND	
55 1,1-Dichloropropene	75		6.787					ND	
57 Isobutyl alcohol	41		6.987					ND	
58 Benzene	78		6.993					ND	
59 1,2-Dichloroethane	62		7.072					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		7.352					ND	
63 n-Butanol	56		7.684					ND	
64 Trichloroethene	130		7.729					ND	
65 Ethyl acrylate	55		7.848					ND	
66 Methylcyclohexane	83		7.954					ND	
67 1,2-Dichloropropane	63		7.997					ND	
70 1,4-Dioxane	88		8.082					ND	
68 Dibromomethane	93		8.082					ND	
69 Methyl methacrylate	69		8.086					ND	
71 Dichlorobromomethane	83		8.276					ND	
73 2-Chloroethyl vinyl ether	63		8.574					ND	
74 cis-1,3-Dichloropropene	75		8.720					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872					ND	
76 Toluene	91		9.049					ND	
77 trans-1,3-Dichloropropene	75		9.298					ND	
78 Ethyl methacrylate	69		9.353					ND	
79 1,1,2-Trichloroethane	97		9.487					ND	
80 Tetrachloroethene	164		9.560					ND	
81 1,3-Dichloropropane	76		9.645					ND	
82 2-Hexanone	43		9.706					ND	
83 n-Butyl acetate	43		9.825					ND	
84 Chlorodibromomethane	129		9.864					ND	
85 Ethylene Dibromide	107		9.973					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.435					ND	
87 Chlorobenzene	112		10.460					ND	
88 4-Chlorobenzotrifluoride	180		10.520					ND	
89 1,1,1,2-Tetrachloroethane	131		10.551					ND	
90 Ethylbenzene	106		10.563					ND	
91 m-Xylene & p-Xylene	106		10.691					ND	
92 o-Xylene	106		11.074					ND	
93 Styrene	104		11.092					ND	
94 Bromoform	173		11.275					ND	
95 Cyclohexanol	57		11.288					ND	
96 2-Chlorobenzotrifluoride	180		11.341					ND	
97 Isopropylbenzene	105		11.439					ND	
98 Cyclohexanone	55		11.528					ND	
99 1,1,2,2-Tetrachloroethane	83		11.749					ND	
100 Bromobenzene	156		11.749					ND	
102 trans-1,4-Dichloro-2-buten	53		11.791					ND	
101 1,2,3-Trichloropropane	110		11.810					ND	
103 N-Propylbenzene	120		11.852					ND	
104 2-Chlorotoluene	126		11.943					ND	
105 3-Chlorotoluene	126		12.010					ND	
106 1,3,5-Trimethylbenzene	105		12.035					ND	
107 4-Chlorotoluene	126		12.065					ND	
108 tert-Butylbenzene	119		12.351					ND	
110 1,2,4-Trimethylbenzene	105		12.412					ND	
111 1,2-dichloro-4-(trifluorom	214		12.454					ND	
112 sec-Butylbenzene	105		12.576					ND	
113 1,3-Dichlorobenzene	146		12.691					ND	
114 4-Isopropyltoluene	119		12.728					ND	
115 1,4-Dichlorobenzene	146		12.795					ND	
117 1,2,3-Trimethylbenzene	105		12.823					ND	
116 2,4-Dichloro-1-(triflourom	214		12.825					ND	
118 2,5-Dichlorobenzotrifluori	214		12.862					ND	
119 Benzyl chloride	91		12.908					ND	
120 n-Butylbenzene	91		13.141					ND	
121 1,2-Dichlorobenzene	146		13.154					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.944					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.084					ND	
124 1,3,5-Trichlorobenzene	180		14.130					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.504					ND	
126 1,2,4-Trichlorobenzene	180		14.765					ND	
127 Hexachlorobutadiene	225		14.911					ND	
128 Naphthalene	128	15.030	15.033	-0.003	1	2869		0.3322	
129 1,2,3-Trichlorobenzene	180		15.258					ND	
131 2,4,5-Trichlorotoluene	159		16.030					ND	
130 2,3,6-Trichlorotoluene	159		16.121					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

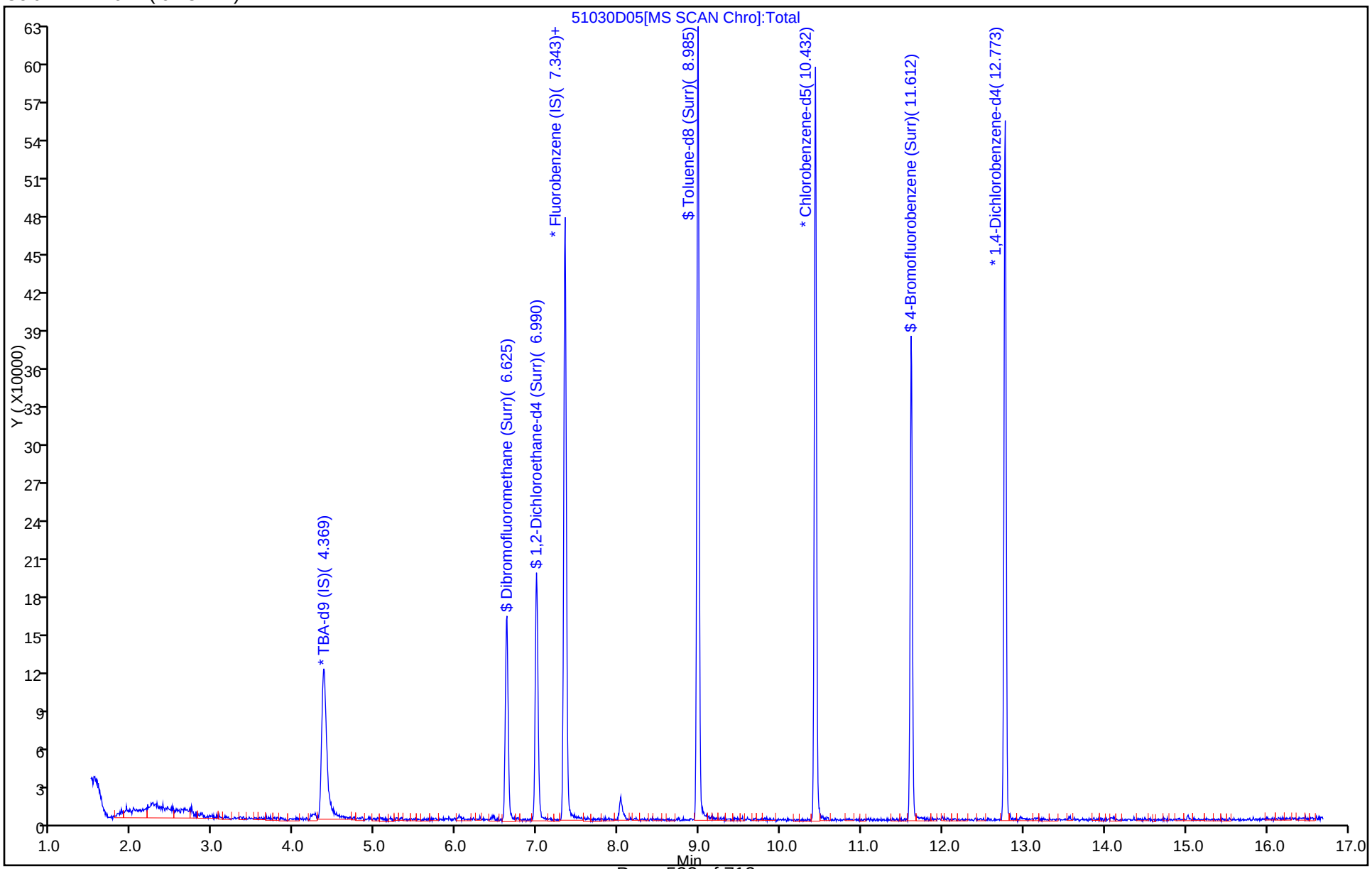
Report Date: 31-Oct-2017 08:26:25 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D05.D

Injection Date:	31-Oct-2017 00:07:30	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\20171030-19107.b\51030D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 31-Oct-2017 00:07:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019107-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2017 08:26:11 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: XAWRK010

First Level Reviewer: bungardf Date: 31-Oct-2017 00:43:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	53.0	106.03
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	55.9	111.78
$ 7 Toluene-d8 (Surr)	50.0	47.2	94.34
$ 8 4-Bromofluorobenzene (Surr)	50.0	44.7	89.49

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-227613/5

Matrix: Water | Lab File ID: 51031D05.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 03:10

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.: 227613 | 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.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-227613/5

Matrix: Water | Lab File ID: 51031D05.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 03:10

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.: 227613 | 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)	93		73-120
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 01-Nov-2017 03:10:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019122-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 11:46:34 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: XAWRK031

First Level Reviewer: bungardf Date: 01-Nov-2017 03:33:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.358	4.384	-0.026	0	240510	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.338	7.340	-0.002	98	527640	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.433	10.429	0.004	86	127019	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.770	-0.001	97	181016	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.626	6.616	0.010	94	127807	50.0	50.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.987	0.004	0	170309	50.0	55.0	
$ 7 Toluene-d8 (Surr)	98	8.980	8.982	-0.002	94	468661	50.0	46.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.609	0.004	86	163855	50.0	44.9	
11 Dichlorodifluoromethane	85		1.684					ND	
12 Chloromethane	50		1.891					ND	
14 Butadiene	39		2.019					ND	
13 Vinyl chloride	62		2.019					ND	
15 Bromomethane	94		2.341					ND	
16 Chloroethane	64		2.438					ND	
17 Dichlorofluoromethane	67		2.742					ND	
18 Trichlorofluoromethane	101		2.773					ND	
19 Ethanol	45		2.821					ND	
20 Ethyl ether	59		3.131					ND	
21 Acrolein	56		3.314					ND	
22 1,1-Dichloroethene	96		3.417					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.502					ND	
24 Acetone	43		3.533					ND	
25 Iodomethane	142		3.618					ND	
26 Carbon disulfide	76		3.703					ND	
27 Isopropyl alcohol	45		3.816					ND	
29 Acetonitrile	41		3.981					ND	
28 3-Chloro-1-propene	76		4.001					ND	
30 Methyl acetate	43		4.038					ND	
31 Methylene Chloride	84		4.232					ND	
32 2-Methyl-2-propanol	59		4.512					ND	
33 Acrylonitrile	53		4.615					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		4.646					ND	
35 Methyl tert-butyl ether	73		4.658					ND	
36 Hexane	57		5.053					ND	
37 1,1-Dichloroethane	63		5.272					ND	
38 Vinyl acetate	43		5.321					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	
45 cis-1,2-Dichloroethene	96		6.008					ND	
44 2,2-Dichloropropane	97		6.008					ND	
46 2-Butanone (MEK)	43		6.026					ND	
48 Ethyl acetate	43		6.097					ND	
47 Propionitrile	54		6.103					ND	
50 Methacrylonitrile	41		6.273					ND	
49 Chlorobromomethane	128		6.294					ND	
51 Tetrahydrofuran	42		6.312					ND	
52 Chloroform	83	6.444	6.440	0.004	33	4659		0.9116	
53 1,1,1-Trichloroethane	97		6.598					ND	
54 Cyclohexane	56		6.665					ND	
56 Carbon tetrachloride	117		6.768					ND	
55 1,1-Dichloropropene	75		6.780					ND	
57 Isobutyl alcohol	41		6.987					ND	
58 Benzene	78		6.993					ND	
59 1,2-Dichloroethane	62		7.072					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		7.352					ND	
63 n-Butanol	56		7.684					ND	
64 Trichloroethene	130		7.723					ND	
65 Ethyl acrylate	55		7.848					ND	
66 Methylcyclohexane	83		7.954					ND	
67 1,2-Dichloropropane	63		7.996					ND	
68 Dibromomethane	93		8.082					ND	
70 1,4-Dioxane	88		8.082					ND	
69 Methyl methacrylate	69		8.086					ND	
71 Dichlorobromomethane	83		8.276					ND	
73 2-Chloroethyl vinyl ether	63		8.574					ND	
74 cis-1,3-Dichloropropene	75		8.720					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.872					ND	
76 Toluene	91		9.049					ND	
77 trans-1,3-Dichloropropene	75		9.292					ND	
78 Ethyl methacrylate	69		9.359					ND	
79 1,1,2-Trichloroethane	97		9.486					ND	
80 Tetrachloroethene	164		9.559					ND	
81 1,3-Dichloropropane	76		9.651					ND	
82 2-Hexanone	43		9.705					ND	
83 n-Butyl acetate	43		9.825					ND	
84 Chlorodibromomethane	129		9.857					ND	
85 Ethylene Dibromide	107		9.973					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.435					ND	
87 Chlorobenzene	112		10.459					ND	
88 4-Chlorobenzotrifluoride	180		10.520					ND	
89 1,1,1,2-Tetrachloroethane	131		10.551					ND	
90 Ethylbenzene	106		10.557					ND	
91 m-Xylene & p-Xylene	106		10.690					ND	
92 o-Xylene	106		11.074					ND	
93 Styrene	104		11.092					ND	
94 Bromoform	173		11.274					ND	
95 Cyclohexanol	57		11.288					ND	
96 2-Chlorobenzotrifluoride	180		11.341					ND	
97 Isopropylbenzene	105		11.439					ND	
98 Cyclohexanone	55		11.528					ND	
99 1,1,2,2-Tetrachloroethane	83		11.749					ND	
100 Bromobenzene	156		11.749					ND	
102 trans-1,4-Dichloro-2-buten	53		11.785					ND	
101 1,2,3-Trichloropropane	110		11.803					ND	
103 N-Propylbenzene	120		11.852					ND	
104 2-Chlorotoluene	126		11.943					ND	
105 3-Chlorotoluene	126		12.004					ND	
106 1,3,5-Trimethylbenzene	105		12.034					ND	
107 4-Chlorotoluene	126		12.065					ND	
108 tert-Butylbenzene	119		12.351					ND	
110 1,2,4-Trimethylbenzene	105		12.412					ND	
111 1,2-dichloro-4-(trifluorom	214		12.454					ND	
112 sec-Butylbenzene	105		12.570					ND	
113 1,3-Dichlorobenzene	146		12.691					ND	
114 4-Isopropyltoluene	119		12.728					ND	
115 1,4-Dichlorobenzene	146		12.795					ND	
117 1,2,3-Trimethylbenzene	105		12.823					ND	
116 2,4-Dichloro-1-(triflourom	214		12.825					ND	
118 2,5-Dichlorobenzotrifluori	214		12.868					ND	
119 Benzyl chloride	91		12.908					ND	
120 n-Butylbenzene	91		13.135					ND	
121 1,2-Dichlorobenzene	146		13.153					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.938					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.084					ND	
124 1,3,5-Trichlorobenzene	180		14.130					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.503					ND	
126 1,2,4-Trichlorobenzene	180		14.765					ND	
127 Hexachlorobutadiene	225		14.917					ND	
128 Naphthalene	128		15.033					ND	
129 1,2,3-Trichlorobenzene	180		15.258					ND	
131 2,4,5-Trichlorotoluene	159		16.030					ND	
130 2,3,6-Trichlorotoluene	159		16.121					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

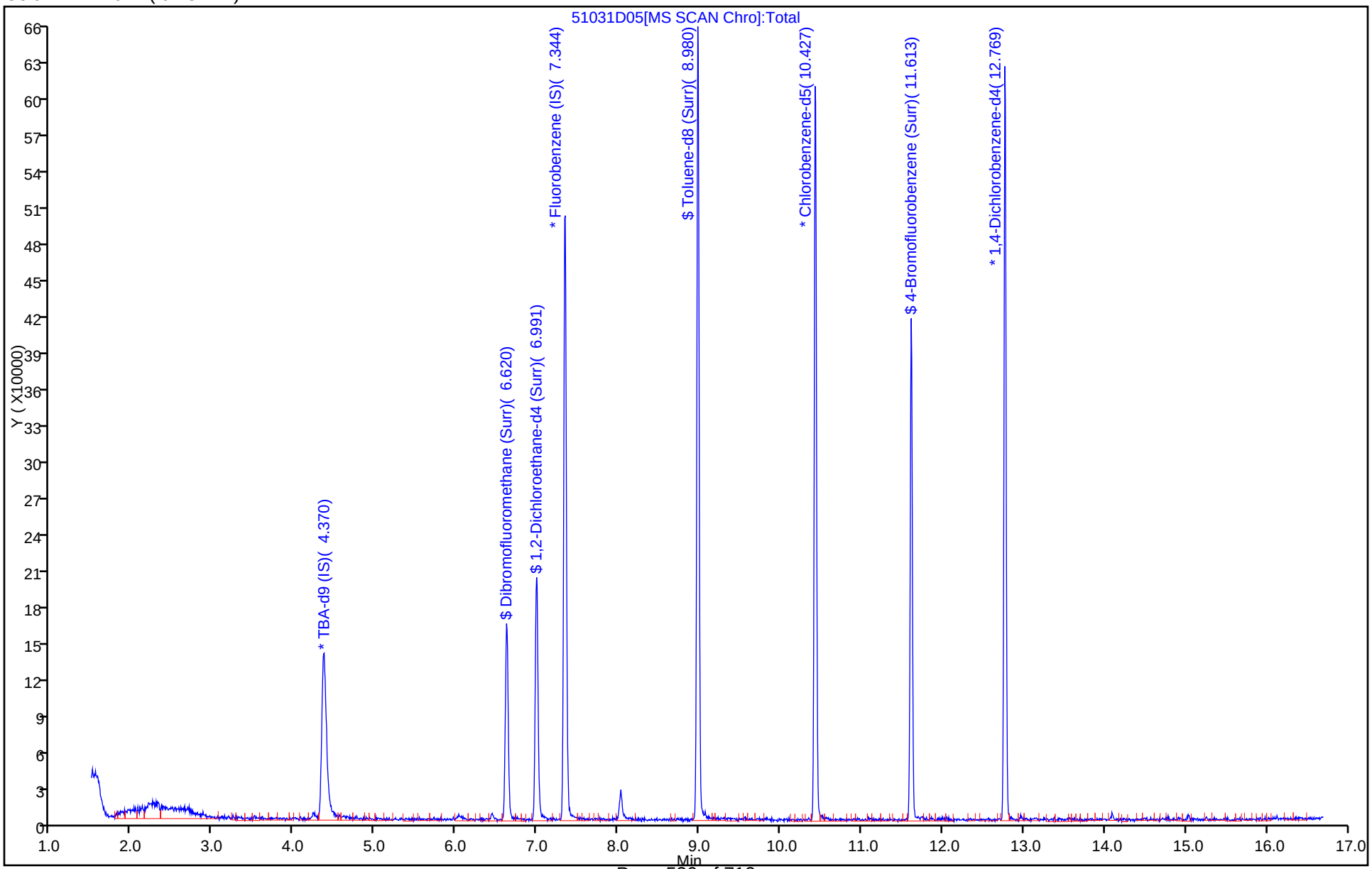
Report Date: 01-Nov-2017 11:46:57 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D05.D

Injection Date:	01-Nov-2017 03:10:30	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\20171031-19122.b\51031D05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 01-Nov-2017 03:10:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019122-005
Misc. Info.: MB
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 11:46:34 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: XAWRK031

First Level Reviewer: bungardf Date: 01-Nov-2017 03:33:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.3	100.69
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	55.0	110.00
$ 7 Toluene-d8 (Surr)	50.0	46.4	92.72
$ 8 4-Bromofluorobenzene (Surr)	50.0	44.9	89.76

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227010/3

Matrix: Water | Lab File ID: 51025D03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/25/2017 22:51

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.: 227010 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	13.7		1.0	0.90
75-01-4	Vinyl chloride	10.6		1.0	0.88
74-83-9	Bromomethane	6.88		1.0	0.89
75-00-3	Chloroethane	9.57		1.0	0.90
75-35-4	1,1-Dichloroethene	10.2		1.0	0.55
67-64-1	Acetone	26.4		5.0	3.4
75-15-0	Carbon disulfide	10.0		1.0	0.88
75-09-2	Methylene Chloride	9.78		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	10.0		1.0	0.67
1634-04-4	Methyl tert-butyl ether	9.29		1.0	0.59
75-34-3	1,1-Dichloroethane	10.2		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	9.49		1.0	0.71
74-97-5	Bromochloromethane	9.54		1.0	0.63
78-93-3	2-Butanone (MEK)	23.5		5.0	2.6
67-66-3	Chloroform	9.19		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.70		1.0	0.60
56-23-5	Carbon tetrachloride	9.92		1.0	0.88
71-43-2	Benzene	9.20		1.0	0.60
107-06-2	1,2-Dichloroethane	10.1		1.0	0.57
79-01-6	Trichloroethene	8.92		1.0	0.69
78-87-5	1,2-Dichloropropane	9.45		1.0	0.66
75-27-4	Bromodichloromethane	8.92		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.58		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	22.0		5.0	3.1
108-88-3	Toluene	9.90		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	9.64		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.41		1.0	0.45
127-18-4	Tetrachloroethene	9.21		1.0	0.47
591-78-6	2-Hexanone	21.8		5.0	3.3
124-48-1	Dibromochloromethane	9.57		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.35		1.0	0.50
108-90-7	Chlorobenzene	9.41		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.79		1.0	0.57
100-41-4	Ethylbenzene	9.66		1.0	0.51
1330-20-7	Xylenes, Total	19.0		2.0	0.89
100-42-5	Styrene	9.79		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227010/3

Matrix: Water | Lab File ID: 51025D03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/25/2017 22:51

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.: 227010 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	8.10		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	8.53		1.0	0.60
107-13-1	Acrylonitrile	106		20	7.8
123-91-1	1,4-Dioxane	190	J	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		65-121
2037-26-5	Toluene-d8 (Surr)	95		73-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	90		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 25-Oct-2017 22:51:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 25-Oct-2017 23:15:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.388	4.384	0.004	0	196941	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.337	7.340	-0.003	97	509802	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.433	10.429	0.004	86	118325	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.768	12.770	-0.002	95	167377	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.620	6.610	0.010	92	109875	50.0	44.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.984	6.987	-0.003	0	139062	50.0	46.5	
$ 7 Toluene-d8 (Surr)	98	8.979	8.982	-0.003	94	448374	50.0	47.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.612	11.609	0.003	85	158536	50.0	46.6	
11 Dichlorodifluoromethane	85	1.682	1.684	-0.002	98	160641	50.0	54.2	
12 Chloromethane	50	1.907	1.891	0.016	99	204449	50.0	68.6	
14 Butadiene	39	2.010	2.012	-0.002	94	194044	50.0	70.6	
13 Vinyl chloride	62	2.022	2.012	0.010	93	159555	50.0	52.8	
15 Bromomethane	94	2.332	2.335	-0.003	90	49191	50.0	34.4	
16 Chloroethane	64	2.430	2.426	0.004	98	79480	50.0	47.8	
17 Dichlorofluoromethane	67	2.752	2.760	-0.008	81	239147	50.0	56.9	
18 Trichlorofluoromethane	101	2.794	2.791	0.003	94	212029	50.0	57.1	
20 Ethyl ether	59	3.135	3.131	0.004	95	146736	50.0	60.7	
21 Acrolein	56	3.311	3.314	-0.003	98	109886	150.0	180.5	
22 1,1-Dichloroethene	96	3.415	3.411	0.004	96	127323	50.0	51.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.494	3.496	-0.002	92	143178	50.0	52.3	
24 Acetone	43	3.536	3.539	-0.003	98	175710	100.0	131.8	
25 Iodomethane	142	3.615	3.612	0.003	97	204988	50.0	52.3	
26 Carbon disulfide	76	3.701	3.703	-0.002	99	274732	50.0	50.2	
28 3-Chloro-1-propene	76	3.999	4.001	-0.002	90	74395	50.0	46.1	
30 Methyl acetate	43	4.041	4.038	0.003	99	298106	100.0	112.9	
31 Methylene Chloride	84	4.224	4.226	-0.002	96	151361	50.0	48.9	
32 2-Methyl-2-propanol	59	4.515	4.506	0.009	93	121679	500.0	522.4	
33 Acrylonitrile	53	4.613	4.609	0.004	100	679600	500.0	529.4	
34 trans-1,2-Dichloroethene	96	4.643	4.640	0.003	97	142906	50.0	50.2	
35 Methyl tert-butyl ether	73	4.655	4.664	-0.009	97	354237	50.0	46.5	
36 Hexane	57	5.057	5.053	0.004	95	208347	50.0	57.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.270	5.266	0.004	97	251171	50.0	50.8	
38 Vinyl acetate	43	5.318	5.321	-0.003	97	275068	50.0	54.7	
44 2,2-Dichloropropane	97	5.999	6.008	-0.009	64	35718	50.0	56.7	
45 cis-1,2-Dichloroethene	96	6.005	6.008	-0.003	82	154405	50.0	47.5	
46 2-Butanone (MEK)	43	6.024	6.026	-0.002	99	222686	100.0	117.3	
49 Chlorobromomethane	128	6.291	6.288	0.003	97	68945	50.0	47.7	
51 Tetrahydrofuran	42	6.303	6.306	-0.003	90	106264	100.0	96.2	
52 Chloroform	83	6.437	6.434	0.003	94	226846	50.0	45.9	
53 1,1,1-Trichloroethane	97	6.595	6.592	0.003	98	181294	50.0	48.5	
54 Cyclohexane	56	6.668	6.659	0.009	94	255401	50.0	55.4	
56 Carbon tetrachloride	117	6.759	6.762	-0.003	96	154314	50.0	49.6	
55 1,1-Dichloropropene	75	6.784	6.780	0.004	94	189029	50.0	46.8	
57 Isobutyl alcohol	41	6.984	6.987	-0.003	89	121345	1250.0	1196.2	
58 Benzene	78	6.997	6.993	0.004	97	570420	50.0	46.0	
59 1,2-Dichloroethane	62	7.070	7.072	-0.002	95	182426	50.0	50.5	
62 n-Heptane	43	7.349	7.352	-0.003	92	177720	50.0	60.9	
64 Trichloroethene	130	7.720	7.723	-0.003	97	139091	50.0	44.6	
66 Methylcyclohexane	83	7.957	7.960	-0.003	96	203923	50.0	43.2	
67 1,2-Dichloropropane	63	7.994	7.997	-0.003	93	136433	50.0	47.3	
70 1,4-Dioxane	88	8.079	8.082	-0.003	49	27930	1000.0	951.6	
68 Dibromomethane	93	8.079	8.088	-0.009	98	75328	50.0	44.5	
71 Dichlorobromomethane	83	8.274	8.276	-0.002	99	147989	50.0	44.6	
73 2-Chloroethyl vinyl ether	63	8.578	8.574	0.004	91	170077	100.0	81.9	
74 cis-1,3-Dichloropropene	75	8.718	8.720	-0.002	93	173010	50.0	42.9	
75 4-Methyl-2-pentanone (MIBK	43	8.876	8.872	0.004	98	334461	100.0	110.2	
76 Toluene	91	9.046	9.049	-0.003	99	583811	50.0	49.5	
77 trans-1,3-Dichloropropene	75	9.295	9.298	-0.003	97	154800	50.0	48.2	
78 Ethyl methacrylate	69	9.356	9.353	0.003	94	148831	50.0	38.4	
79 1,1,2-Trichloroethane	97	9.490	9.486	0.004	92	115585	50.0	47.0	
80 Tetrachloroethene	164	9.557	9.559	-0.002	96	103580	50.0	46.0	
81 1,3-Dichloropropane	76	9.642	9.645	-0.003	99	198434	50.0	43.7	
82 2-Hexanone	43	9.703	9.705	-0.002	98	253628	100.0	109.0	
84 Chlorodibromomethane	129	9.861	9.857	0.004	88	99435	50.0	47.9	
85 Ethylene Dibromide	107	9.970	9.967	0.003	95	117880	50.0	46.8	
86 3-Chlorobenzotrifluoride	180	10.433	10.435	-0.002	87	210238	50.0	51.7	
87 Chlorobenzene	112	10.457	10.459	-0.002	95	361332	50.0	47.0	
88 4-Chlorobenzotrifluoride	180	10.518	10.520	-0.002	95	195652	50.0	52.1	
89 1,1,1,2-Tetrachloroethane	131	10.548	10.551	-0.003	95	119538	50.0	48.9	
90 Ethylbenzene	106	10.554	10.557	-0.003	98	207073	50.0	48.3	
91 m-Xylene & p-Xylene	106	10.688	10.684	0.004	0	251197	50.0	47.9	
92 o-Xylene	106	11.071	11.068	0.003	96	235384	50.0	47.1	
93 Styrene	104	11.089	11.092	-0.003	95	413632	50.0	48.9	
94 Bromoform	173	11.272	11.274	-0.002	95	52279	50.0	40.5	
96 2-Chlorobenzotrifluoride	180	11.339	11.341	-0.002	95	203107	50.0	52.2	
97 Isopropylbenzene	105	11.436	11.439	-0.003	96	589857	50.0	48.4	
100 Bromobenzene	156	11.752	11.749	0.003	95	148605	50.0	45.7	
99 1,1,2,2-Tetrachloroethane	83	11.752	11.749	0.003	83	155198	50.0	42.6	
102 trans-1,4-Dichloro-2-buten	53	11.789	11.785	0.004	80	49462	50.0	50.5	
101 1,2,3-Trichloropropane	110	11.807	11.803	0.004	86	54038	50.0	40.3	
103 N-Propylbenzene	120	11.856	11.852	0.004	98	171459	50.0	46.2	
104 2-Chlorotoluene	126	11.941	11.943	-0.002	96	143767	50.0	44.8	
105 3-Chlorotoluene	126	12.008	12.004	0.004	97	180742	50.0	51.8	

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	12.038	12.035	0.003	93	507038	50.0	47.7	
107 4-Chlorotoluene	126	12.068	12.065	0.003	97	155397	50.0	44.8	
108 tert-Butylbenzene	119	12.348	12.351	-0.003	94	389252	50.0	43.8	
110 1,2,4-Trimethylbenzene	105	12.409	12.412	-0.003	97	500494	50.0	46.4	
111 1,2-dichloro-4-(trifluorom	214	12.458	12.454	0.004	94	121648	50.0	45.0	
112 sec-Butylbenzene	105	12.573	12.576	-0.003	94	553703	50.0	44.7	
113 1,3-Dichlorobenzene	146	12.689	12.691	-0.002	97	270257	50.0	46.6	
114 4-Isopropyltoluene	119	12.731	12.728	0.003	97	476245	50.0	46.1	
115 1,4-Dichlorobenzene	146	12.792	12.795	-0.003	96	278840	50.0	46.8	
116 2,4-Dichloro-1-(triflourom	214	12.823	12.819	0.004	94	110740	50.0	44.0	
118 2,5-Dichlorobenzotrifluori	214	12.865	12.862	0.003	0	125465	50.0	46.1	
120 n-Butylbenzene	91	13.139	13.141	-0.002	98	372017	50.0	44.2	
121 1,2-Dichlorobenzene	146	13.151	13.147	0.004	97	264704	50.0	47.8	
122 1,2-Dibromo-3-Chloropropan	75	13.942	13.938	0.004	80	24228	50.0	39.4	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.081	14.084	-0.003	0	560568	150.0	159.7	
125 2,3- & 3,4- Dichlorotoluen	125	14.507	14.504	0.003	0	391848	100.0	108.0	
126 1,2,4-Trichlorobenzene	180	14.763	14.765	-0.003	95	119866	50.0	47.3	
127 Hexachlorobutadiene	225	14.908	14.911	-0.003	95	43688	50.0	47.2	
128 Naphthalene	128	15.030	15.033	-0.003	97	386467	50.0	44.8	
129 1,2,3-Trichlorobenzene	180	15.255	15.258	-0.003	95	107076	50.0	46.3	
131 2,4,5-Trichlorotoluene	159	16.027	16.024	0.003	0	51565	50.0	46.9	
130 2,3,6-Trichlorotoluene	159	16.125	16.121	0.004	97	54972	50.0	53.8	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	97.7	
S 133 Xylenes, Total	106				0		100.0	95.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	91.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWEEmix1stR_00014	Amount Added:	2.00	Units: uL	
voaWKetmix1st_00006	Amount Added:	2.00	Units: uL	
voaWVA1stRest_00021	Amount Added:	2.00	Units: uL	
voaWAcro1stRe_00021	Amount Added:	6.00	Units: uL	
VOA8260VOAPRI_00268	Amount Added:	2.00	Units: uL	
voaW2clev1stR_00023	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

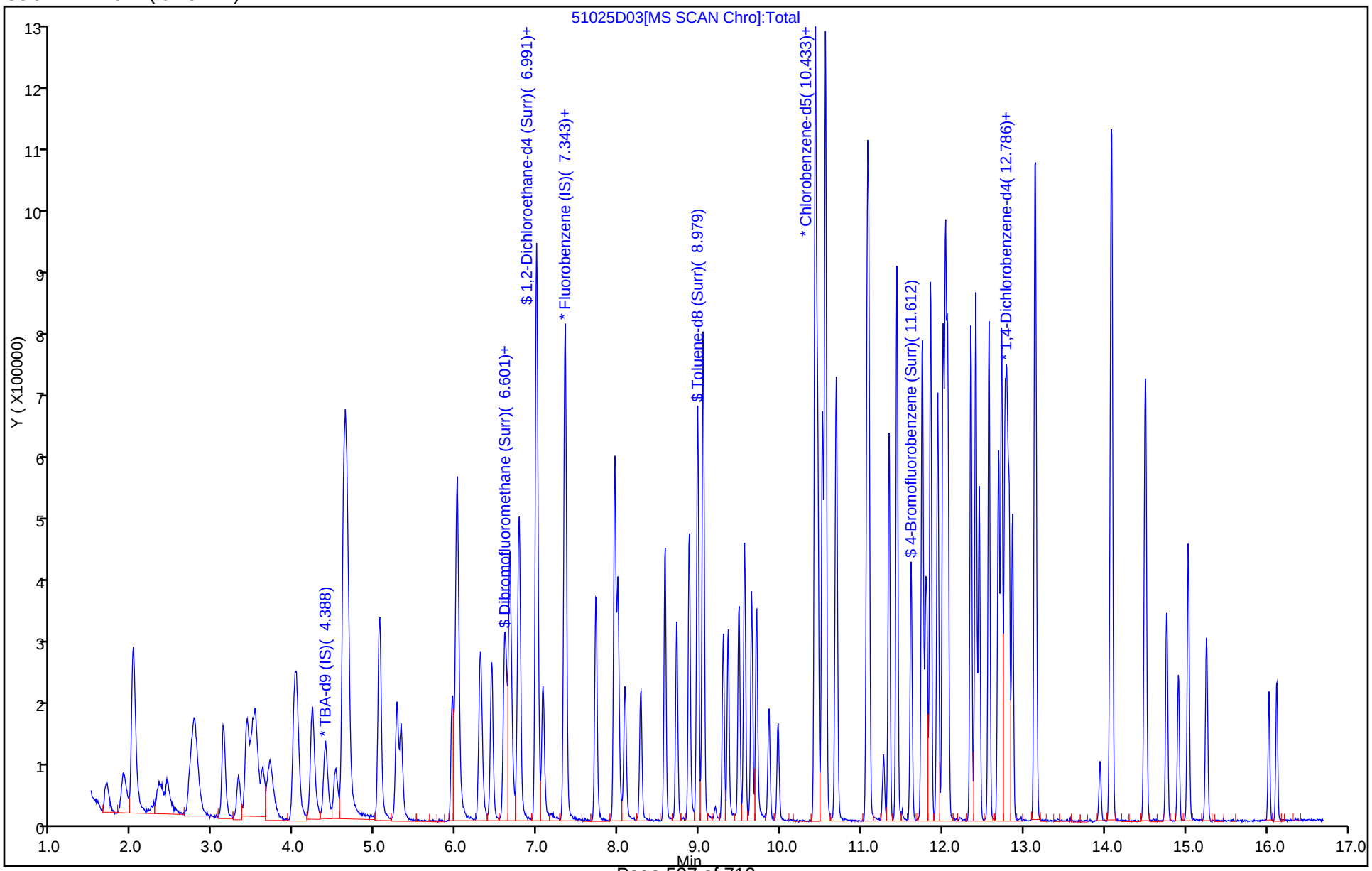
Report Date: 26-Oct-2017 20:41:16 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\51025D03.D

Injection Date:	25-Oct-2017 22:51:30	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\20171025-19038.b\51025D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 25-Oct-2017 22:51:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019038-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171025-19038.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 26-Oct-2017 20:41:12 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: XAWRK030

First Level Reviewer: bungardf Date: 25-Oct-2017 23:15:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	44.8	89.59
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	46.5	92.96
$ 7 Toluene-d8 (Surr)	50.0	47.6	95.22
$ 8 4-Bromofluorobenzene (Surr)	50.0	46.6	93.23

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227152/3

Matrix: Water | Lab File ID: 51026D03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 22:19

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.: 227152 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	12.6		1.0	0.90
75-01-4	Vinyl chloride	9.92		1.0	0.88
74-83-9	Bromomethane	7.44		1.0	0.89
75-00-3	Chloroethane	8.59		1.0	0.90
75-35-4	1,1-Dichloroethene	9.81		1.0	0.55
67-64-1	Acetone	28.4		5.0	3.4
75-15-0	Carbon disulfide	9.00		1.0	0.88
75-09-2	Methylene Chloride	9.21		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	9.18		1.0	0.67
1634-04-4	Methyl tert-butyl ether	9.36		1.0	0.59
75-34-3	1,1-Dichloroethane	9.62		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	9.19		1.0	0.71
74-97-5	Bromochloromethane	8.88		1.0	0.63
78-93-3	2-Butanone (MEK)	24.2		5.0	2.6
67-66-3	Chloroform	8.84		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.27		1.0	0.60
56-23-5	Carbon tetrachloride	9.19		1.0	0.88
71-43-2	Benzene	8.66		1.0	0.60
107-06-2	1,2-Dichloroethane	10.0		1.0	0.57
79-01-6	Trichloroethene	8.22		1.0	0.69
78-87-5	1,2-Dichloropropane	9.25		1.0	0.66
75-27-4	Bromodichloromethane	8.16		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.33		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	22.0		5.0	3.1
108-88-3	Toluene	9.64		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	9.31		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.57		1.0	0.45
127-18-4	Tetrachloroethene	8.87		1.0	0.47
591-78-6	2-Hexanone	23.4		5.0	3.3
124-48-1	Dibromochloromethane	9.00		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.21		1.0	0.50
108-90-7	Chlorobenzene	9.23		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.30		1.0	0.57
100-41-4	Ethylbenzene	9.18		1.0	0.51
1330-20-7	Xylenes, Total	17.9		2.0	0.89
100-42-5	Styrene	9.27		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227152/3

Matrix: Water | Lab File ID: 51026D03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/26/2017 22:19

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.: 227152 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	8.02		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	8.90		1.0	0.60
107-13-1	Acrylonitrile	114		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)	99		65-121
2037-26-5	Toluene-d8 (Surr)	100		73-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	91		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 26-Oct-2017 22:19:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019053-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Oct-2017 21:14:03 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: XAWRK007

First Level Reviewer: bungardf Date: 26-Oct-2017 22:41:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.376	4.379	-0.003	0	220390	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.338	7.341	-0.002	97	524723	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.427	10.430	-0.003	87	118591	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.771	-0.002	94	166817	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.614	6.617	-0.003	93	115329	50.0	45.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.985	6.988	-0.003	0	152410	50.0	49.5	
$ 7 Toluene-d8 (Surr)	98	8.980	8.982	-0.002	93	470733	50.0	49.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.610	0.003	87	159014	50.0	46.6	
11 Dichlorodifluoromethane	85	1.682	1.685	-0.003	98	147802	50.0	48.4	
12 Chloromethane	50	1.889	1.886	0.003	99	193934	50.0	63.2	
14 Butadiene	39	2.011	2.013	-0.002	95	190513	50.0	67.4	
13 Vinyl chloride	62	2.011	2.025	-0.014	62	154292	50.0	49.6	
15 Bromomethane	94	2.345	2.336	0.009	91	54697	50.0	37.2	
16 Chloroethane	64	2.424	2.439	-0.015	96	73468	50.0	43.0	
17 Dichlorofluoromethane	67	2.753	2.743	0.010	97	223311	50.0	51.6	
18 Trichlorofluoromethane	101	2.783	2.792	-0.009	89	190697	50.0	49.9	
20 Ethyl ether	59	3.130	3.126	0.004	95	145192	50.0	58.4	
21 Acrolein	56	3.306	3.315	-0.009	99	109785	150.0	175.2	
22 1,1-Dichloroethene	96	3.416	3.412	0.004	97	126056	50.0	49.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.489	3.485	0.003	94	137286	50.0	48.7	
24 Acetone	43	3.543	3.534	0.009	100	194937	100.0	142.1	
25 Iodomethane	142	3.622	3.619	0.003	97	195939	50.0	48.6	
26 Carbon disulfide	76	3.714	3.710	0.004	100	253610	50.0	45.0	
28 3-Chloro-1-propene	76	4.011	4.014	-0.003	90	74082	50.0	44.6	
30 Methyl acetate	43	4.036	4.038	-0.002	99	296105	100.0	109.0	
31 Methylene Chloride	84	4.218	4.227	-0.009	96	147358	50.0	46.1	
32 2-Methyl-2-propanol	59	4.510	4.513	-0.003	91	143904	500.0	552.1	
33 Acrylonitrile	53	4.614	4.616	-0.002	100	753760	500.0	570.5	
34 trans-1,2-Dichloroethene	96	4.638	4.640	-0.002	98	134359	50.0	45.9	
35 Methyl tert-butyl ether	73	4.662	4.665	-0.003	97	367291	50.0	46.8	
38 Vinyl acetate	43		5.060				ND	ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.057	5.060	-0.003	97	193390	50.0	51.5	
37 1,1-Dichloroethane	63	5.270	5.273	-0.003	96	244800	50.0	48.1	
45 cis-1,2-Dichloroethene	96	6.012	6.009	0.003	82	153841	50.0	46.0	
44 2,2-Dichloropropane	97	6.000	6.009	-0.009	62	34278	50.0	52.9	
46 2-Butanone (MEK)	43	6.030	6.021	0.009	100	236225	100.0	120.9	
49 Chlorobromomethane	128	6.292	6.295	-0.003	96	66078	50.0	44.4	
51 Tetrahydrofuran	42	6.310	6.313	-0.003	93	114814	100.0	100.9	
52 Chloroform	83	6.438	6.440	-0.002	95	224644	50.0	44.2	
53 1,1,1-Trichloroethane	97	6.596	6.593	0.004	99	178349	50.0	46.4	
54 Cyclohexane	56	6.657	6.665	-0.008	95	237944	50.0	50.1	
56 Carbon tetrachloride	117	6.766	6.769	-0.003	97	147111	50.0	46.0	
55 1,1-Dichloropropene	75	6.779	6.781	-0.003	92	173327	50.0	41.7	
57 Isobutyl alcohol	41	6.985	6.988	-0.003	91	142976	1250.0	1369.4	
58 Benzene	78	6.997	6.994	0.003	97	552145	50.0	43.3	
59 1,2-Dichloroethane	62	7.070	7.073	-0.003	97	186088	50.0	50.0	
62 n-Heptane	43	7.350	7.353	-0.003	90	169955	50.0	56.6	
64 Trichloroethene	130	7.721	7.724	-0.003	98	131970	50.0	41.1	
66 Methylcyclohexane	83	7.958	7.955	0.003	95	192527	50.0	39.7	
67 1,2-Dichloropropane	63	8.001	7.997	0.004	94	137428	50.0	46.3	
68 Dibromomethane	93	8.086	8.082	0.004	97	76140	50.0	43.7	
70 1,4-Dioxane	88	8.080	8.082	-0.002	49	30819	1000.0	1020.1	
71 Dichlorobromomethane	83	8.275	8.277	-0.003	99	139419	50.0	40.8	
73 2-Chloroethyl vinyl ether	63	8.579	8.575	0.004	92	184010	100.0	86.1	
74 cis-1,3-Dichloropropene	75	8.718	8.721	-0.003	92	172822	50.0	41.6	
75 4-Methyl-2-pentanone (MIBK	43	8.870	8.873	-0.003	99	334380	100.0	109.9	
76 Toluene	91	9.047	9.049	-0.002	98	569696	50.0	48.2	
77 trans-1,3-Dichloropropene	75	9.296	9.293	0.003	97	149722	50.0	46.5	
78 Ethyl methacrylate	69	9.357	9.360	-0.003	93	151549	50.0	39.1	
79 1,1,2-Trichloroethane	97	9.491	9.487	0.004	92	117818	50.0	47.8	
80 Tetrachloroethene	164	9.558	9.560	-0.002	95	100007	50.0	44.3	
81 1,3-Dichloropropane	76	9.643	9.645	-0.002	97	196990	50.0	43.3	
82 2-Hexanone	43	9.704	9.706	-0.002	98	272377	100.0	116.8	
84 Chlorodibromomethane	129	9.856	9.858	-0.002	91	93754	50.0	45.0	
85 Ethylene Dibromide	107	9.971	9.968	0.003	98	116379	50.0	46.1	
86 3-Chlorobenzotrifluoride	180	10.433	10.430	0.003	95	216026	50.0	53.0	
87 Chlorobenzene	112	10.458	10.460	-0.002	94	355433	50.0	46.2	
88 4-Chlorobenzotrifluoride	180	10.519	10.521	-0.002	96	204355	50.0	54.3	
89 1,1,1,2-Tetrachloroethane	131	10.555	10.551	0.004	93	113782	50.0	46.5	
90 Ethylbenzene	106	10.561	10.558	0.003	98	197252	50.0	45.9	
91 m-Xylene & p-Xylene	106	10.689	10.691	-0.002	0	233736	50.0	44.5	
92 o-Xylene	106	11.072	11.068	0.004	96	225421	50.0	45.0	
93 Styrene	104	11.090	11.093	-0.003	96	392491	50.0	46.3	
94 Bromoform	173	11.273	11.269	0.004	93	51904	50.0	40.1	
96 2-Chlorobenzotrifluoride	180	11.340	11.342	-0.002	94	208465	50.0	53.5	
97 Isopropylbenzene	105	11.437	11.439	-0.002	96	549854	50.0	45.0	
100 Bromobenzene	156	11.753	11.749	0.004	95	137355	50.0	42.4	
99 1,1,2,2-Tetrachloroethane	83	11.747	11.749	-0.002	93	162305	50.0	44.5	
102 trans-1,4-Dichloro-2-buten	53	11.790	11.786	0.004	72	54580	50.0	55.9	
101 1,2,3-Trichloropropane	110	11.808	11.810	-0.002	86	57658	50.0	43.2	
103 N-Propylbenzene	120	11.856	11.853	0.003	99	162579	50.0	43.9	
104 2-Chlorotoluene	126	11.942	11.944	-0.002	96	136286	50.0	42.6	
105 3-Chlorotoluene	126	12.008	12.005	0.003	97	183232	50.0	52.7	

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	12.035	0.004	94	477281	50.0	45.1	
107 4-Chlorotoluene	126	12.063	12.066	-0.003	96	150136	50.0	43.5	
108 tert-Butylbenzene	119	12.349	12.352	-0.003	94	363244	50.0	41.0	
110 1,2,4-Trimethylbenzene	105	12.410	12.412	-0.002	97	477425	50.0	44.4	
111 1,2-dichloro-4-(trifluorom	214	12.452	12.455	-0.003	95	125190	50.0	46.4	
112 sec-Butylbenzene	105	12.574	12.577	-0.003	94	527205	50.0	42.7	
113 1,3-Dichlorobenzene	146	12.690	12.692	-0.002	98	262369	50.0	45.4	
114 4-Isopropyltoluene	119	12.726	12.729	-0.003	97	454041	50.0	44.1	
115 1,4-Dichlorobenzene	146	12.793	12.795	-0.002	95	275275	50.0	46.3	
116 2,4-Dichloro-1-(triflourom	214	12.823	12.820	0.003	94	112597	50.0	44.9	
118 2,5-Dichlorobenzotrifluori	214	12.866	12.862	0.004	0	128676	50.0	47.5	
120 n-Butylbenzene	91	13.140	13.136	0.004	98	349088	50.0	41.6	
121 1,2-Dichlorobenzene	146	13.152	13.148	0.004	97	252359	50.0	45.8	
122 1,2-Dibromo-3-Chloropropan	75	13.936	13.939	-0.003	77	25090	50.0	41.0	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.088	14.085	0.003	0	563363	150.0	161.1	
125 2,3- & 3,4- Dichlorotoluen	125	14.502	14.504	-0.002	0	392525	100.0	108.5	
126 1,2,4-Trichlorobenzene	180	14.763	14.766	-0.003	95	111389	50.0	44.1	
127 Hexachlorobutadiene	225	14.909	14.906	0.003	95	41352	50.0	44.8	
128 Naphthalene	128	15.031	15.033	-0.002	97	368699	50.0	42.9	
129 1,2,3-Trichlorobenzene	180	15.256	15.258	-0.002	96	101885	50.0	44.2	
131 2,4,5-Trichlorotoluene	159	16.028	16.031	-0.003	0	50566	50.0	46.2	
130 2,3,6-Trichlorotoluene	159	16.126	16.122	0.004	97	53874	50.0	52.9	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	89.6	
S 134 1,2-Dichloroethene, Total	96				0		100.0	91.9	
S 135 1,3-Dichloropropene, Total	1				0		100.0	88.2	

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		
voaWVA1stRest_00021	Amount Added:	2.00	Units: uL		
voaWAcro1stRe_00021	Amount Added:	6.00	Units: uL		
VOA8260VOAPRI_00268	Amount Added:	2.00	Units: uL		
voaW2clev1stR_00023	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	

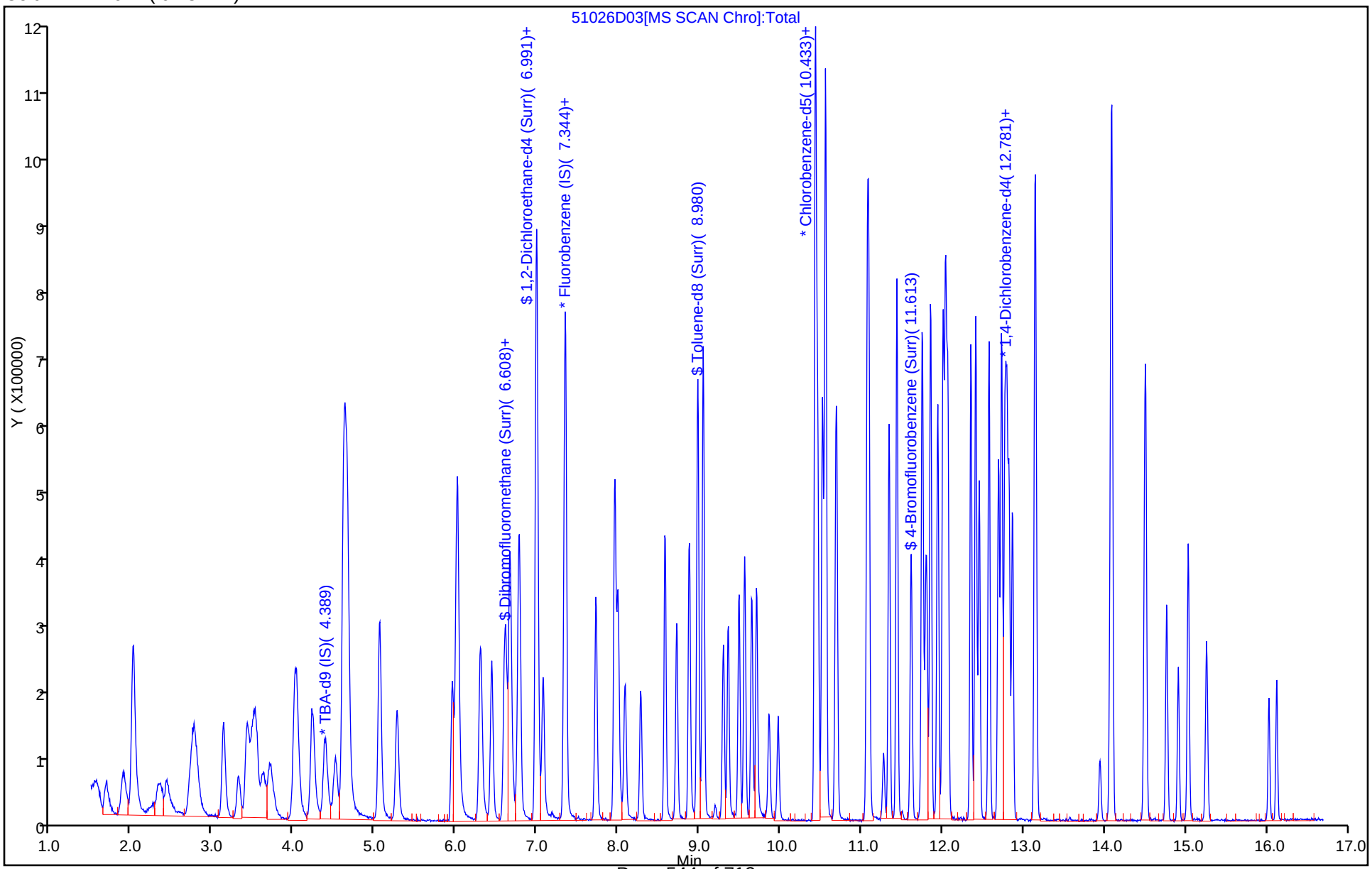
Report Date: 29-Oct-2017 21:14:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\51026D03.D

Injection Date:	26-Oct-2017 22:19:30	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\20171026-19053.b\51026D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 26-Oct-2017 22:19:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019053-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171026-19053.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 29-Oct-2017 21:14:03 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: XAWRK007

First Level Reviewer: bungardf Date: 26-Oct-2017 22:41:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	45.7	91.36
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.5	98.99
$ 7 Toluene-d8 (Surr)	50.0	49.9	99.75
$ 8 4-Bromofluorobenzene (Surr)	50.0	46.6	93.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227508/3

Matrix: Water | Lab File ID: 51030D03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/30/2017 23:08

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.: 227508 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	9.23		1.0	0.90
75-01-4	Vinyl chloride	8.16		1.0	0.88
74-83-9	Bromomethane	6.21		1.0	0.89
75-00-3	Chloroethane	7.84		1.0	0.90
75-35-4	1,1-Dichloroethene	8.72		1.0	0.55
67-64-1	Acetone	24.3		5.0	3.4
75-15-0	Carbon disulfide	8.40		1.0	0.88
75-09-2	Methylene Chloride	8.61		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	8.45		1.0	0.67
1634-04-4	Methyl tert-butyl ether	9.01		1.0	0.59
75-34-3	1,1-Dichloroethane	9.04		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	8.36		1.0	0.71
74-97-5	Bromochloromethane	8.86		1.0	0.63
78-93-3	2-Butanone (MEK)	21.7		5.0	2.6
67-66-3	Chloroform	8.36		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.12		1.0	0.60
56-23-5	Carbon tetrachloride	8.86		1.0	0.88
71-43-2	Benzene	8.15		1.0	0.60
107-06-2	1,2-Dichloroethane	9.51		1.0	0.57
79-01-6	Trichloroethene	7.87		1.0	0.69
78-87-5	1,2-Dichloropropane	8.43		1.0	0.66
75-27-4	Bromodichloromethane	7.92		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	7.94		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	20.0		5.0	3.1
108-88-3	Toluene	9.14		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	9.25		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.39		1.0	0.45
127-18-4	Tetrachloroethene	8.57		1.0	0.47
591-78-6	2-Hexanone	19.5		5.0	3.3
124-48-1	Dibromochloromethane	9.11		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	8.65		1.0	0.50
108-90-7	Chlorobenzene	8.68		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.57		1.0	0.57
100-41-4	Ethylbenzene	8.60		1.0	0.51
1330-20-7	Xylenes, Total	17.1		2.0	0.89
100-42-5	Styrene	8.50		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227508/3

Matrix: Water | Lab File ID: 51030D03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/30/2017 23:08

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.: 227508 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	8.03		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	8.77		1.0	0.60
107-13-1	Acrylonitrile	105		20	7.8
123-91-1	1,4-Dioxane	164	J	200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		65-121
2037-26-5	Toluene-d8 (Surr)	108		73-120
460-00-4	4-Bromofluorobenzene (Surr)	103		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 30-Oct-2017 23:08:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019107-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2017 08:26:11 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: XAWRK010

First Level Reviewer: bungardf Date: 30-Oct-2017 23:30:43

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.389	4.390	-0.001	0	209310	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.339	7.340	-0.001	97	527621	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.428	10.429	-0.001	86	117034	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.769	12.771	-0.002	95	168609	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.621	6.616	0.005	92	124270	50.0	49.0	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.986	6.987	-0.001	0	156548	50.0	50.6	
$	7 Toluene-d8 (Surr)	98	8.981	8.976	0.005	94	504281	50.0	54.1	
$	8 4-Bromofluorobenzene (Surr	95	11.614	11.615	-0.001	86	172851	50.0	51.4	
	11 Dichlorodifluoromethane	85	1.683	1.690	-0.007	98	74649	50.0	24.3	
	12 Chloromethane	50	1.878	1.885	-0.007	99	142264	50.0	46.1	
	14 Butadiene	39	2.011	2.013	-0.002	95	141976	50.0	49.9	
	13 Vinyl chloride	62	2.011	2.019	-0.008	65	127628	50.0	40.8	
	15 Bromomethane	94	2.334	2.341	-0.007	94	45974	50.0	31.1	
	16 Chloroethane	64	2.431	2.426	0.005	99	67412	50.0	39.2	
	17 Dichlorofluoromethane	67	2.753	2.755	-0.002	97	213030	50.0	49.0	
	18 Trichlorofluoromethane	101	2.790	2.797	-0.007	68	181297	50.0	47.2	
	20 Ethyl ether	59	3.136	3.126	0.010	95	138506	50.0	55.4	
	21 Acrolein	56	3.307	3.314	-0.007	97	62335	150.0	98.9	
	22 1,1-Dichloroethene	96	3.422	3.411	0.011	96	112656	50.0	43.6	
	23 1,1,2-Trichloro-1,2,2-trif	101	3.495	3.496	-0.001	93	123853	50.0	43.7	
	24 Acetone	43	3.538	3.539	-0.001	100	167814	100.0	121.6	
	25 Iodomethane	142	3.617	3.612	0.005	97	177444	50.0	43.7	
	26 Carbon disulfide	76	3.708	3.697	0.011	99	237972	50.0	42.0	
	28 3-Chloro-1-propene	76	4.012	4.007	0.005	90	68520	50.0	41.0	
	30 Methyl acetate	43	4.036	4.038	-0.002	99	288016	100.0	105.4	
	31 Methylene Chloride	84	4.225	4.226	-0.001	99	139160	50.0	43.1	
	32 2-Methyl-2-propanol	59	4.517	4.524	-0.007	91	134698	500.0	544.2	
	33 Acrylonitrile	53	4.614	4.615	-0.001	99	697272	500.0	524.8	
	34 trans-1,2-Dichloroethene	96	4.638	4.640	-0.002	99	124284	50.0	42.2	
	35 Methyl tert-butyl ether	73	4.663	4.664	-0.001	97	355394	50.0	45.0	
	36 Hexane	57	5.058	5.053	0.005	96	177728	50.0	47.0	

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	5.272	-0.001	96	231363	50.0	45.2	
38 Vinyl acetate	43	5.320	5.321	-0.001	98	305956	50.0	58.8	
44 2,2-Dichloropropane	97	6.007	6.008	-0.001	62	34703	50.0	53.3	
45 cis-1,2-Dichloroethene	96	6.013	6.008	0.005	84	140777	50.0	41.8	
46 2-Butanone (MEK)	43	6.025	6.026	-0.001	99	212965	100.0	108.4	
49 Chlorobromomethane	128	6.299	6.294	0.005	96	66284	50.0	44.3	
51 Tetrahydrofuran	42	6.311	6.312	-0.001	94	107066	100.0	93.6	
52 Chloroform	83	6.439	6.440	-0.001	94	213532	50.0	41.8	
53 1,1,1-Trichloroethane	97	6.597	6.598	-0.001	99	176327	50.0	45.6	
54 Cyclohexane	56	6.670	6.665	0.005	95	226083	50.0	47.4	
56 Carbon tetrachloride	117	6.767	6.762	0.005	96	142654	50.0	44.3	
55 1,1-Dichloropropene	75	6.779	6.787	-0.007	93	166322	50.0	39.8	
57 Isobutyl alcohol	41	6.992	6.987	0.005	88	133313	1250.0	1269.8	
58 Benzene	78	6.998	6.993	0.005	98	522635	50.0	40.7	
59 1,2-Dichloroethane	62	7.071	7.072	-0.001	97	177864	50.0	47.6	
62 n-Heptane	43	7.357	7.352	0.005	91	161599	50.0	53.5	
64 Trichloroethene	130	7.728	7.729	-0.001	95	127031	50.0	39.3	
66 Methylcyclohexane	83	7.959	7.954	0.005	94	181229	50.0	37.1	
67 1,2-Dichloropropane	63	7.995	7.997	-0.002	96	125852	50.0	42.1	
70 1,4-Dioxane	88	8.081	8.082	-0.001	45	24871	1000.0	818.7	
68 Dibromomethane	93	8.081	8.082	-0.001	96	72686	50.0	41.5	
71 Dichlorobromomethane	83	8.281	8.276	0.005	97	136056	50.0	39.6	
73 2-Chloroethyl vinyl ether	63	8.579	8.574	0.005	93	179161	100.0	83.3	
74 cis-1,3-Dichloropropene	75	8.719	8.720	-0.001	93	165745	50.0	39.7	
75 4-Methyl-2-pentanone (MIBK	43	8.871	8.872	-0.001	99	299433	100.0	99.8	
76 Toluene	91	9.047	9.049	-0.002	98	533129	50.0	45.7	
77 trans-1,3-Dichloropropene	75	9.297	9.298	-0.001	96	146895	50.0	46.3	
78 Ethyl methacrylate	69	9.358	9.353	0.005	92	137895	50.0	36.0	
79 1,1,2-Trichloroethane	97	9.491	9.487	0.004	93	114135	50.0	46.9	
80 Tetrachloroethene	164	9.564	9.560	0.004	97	95405	50.0	42.9	
81 1,3-Dichloropropane	76	9.643	9.645	-0.002	98	185725	50.0	41.3	
82 2-Hexanone	43	9.704	9.706	-0.002	98	223904	100.0	97.3	
84 Chlorodibromomethane	129	9.862	9.864	-0.002	91	93630	50.0	45.6	
85 Ethylene Dibromide	107	9.972	9.973	-0.001	100	107839	50.0	43.3	
86 3-Chlorobenzotrifluoride	180	10.434	10.435	-0.001	86	199503	50.0	49.6	
87 Chlorobenzene	112	10.458	10.460	-0.002	94	329532	50.0	43.4	
88 4-Chlorobenzotrifluoride	180	10.519	10.520	-0.001	96	192581	50.0	51.9	
89 1,1,1,2-Tetrachloroethane	131	10.550	10.551	-0.001	91	115567	50.0	47.8	
90 Ethylbenzene	106	10.562	10.563	-0.001	98	182448	50.0	43.0	
91 m-Xylene & p-Xylene	106	10.689	10.691	-0.002	0	221002	50.0	42.6	
92 o-Xylene	106	11.073	11.074	-0.001	96	210641	50.0	42.7	
93 Styrene	104	11.091	11.092	-0.001	95	355355	50.0	42.5	
94 Bromoform	173	11.273	11.275	-0.002	95	51288	50.0	40.2	
96 2-Chlorobenzotrifluoride	180	11.340	11.341	-0.001	95	196458	50.0	51.0	
97 Isopropylbenzene	105	11.437	11.439	-0.002	96	512761	50.0	42.5	
99 1,1,2,2-Tetrachloroethane	83	11.754	11.749	0.005	83	157841	50.0	43.9	
100 Bromobenzene	156	11.754	11.749	0.005	94	132521	50.0	40.5	
102 trans-1,4-Dichloro-2-buten	53	11.790	11.791	-0.001	70	53292	50.0	54.0	
101 1,2,3-Trichloropropane	110	11.802	11.810	-0.008	86	54590	50.0	40.4	
103 N-Propylbenzene	120	11.851	11.852	-0.001	99	146512	50.0	39.2	
104 2-Chlorotoluene	126	11.942	11.943	-0.001	96	125650	50.0	38.9	
105 3-Chlorotoluene	126	12.003	12.010	-0.007	97	167454	50.0	47.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	12.039	12.035	0.004	95	444458	50.0	41.5	
107 4-Chlorotoluene	126	12.064	12.065	-0.001	98	147233	50.0	42.2	
108 tert-Butylbenzene	119	12.350	12.351	-0.001	94	335718	50.0	37.5	
110 1,2,4-Trimethylbenzene	105	12.410	12.412	-0.002	97	445203	50.0	40.9	
111 1,2-dichloro-4-(trifluorom	214	12.453	12.454	-0.001	95	113446	50.0	41.6	
112 sec-Butylbenzene	105	12.575	12.576	-0.001	94	489857	50.0	39.2	
113 1,3-Dichlorobenzene	146	12.690	12.691	-0.001	98	250011	50.0	42.8	
114 4-Isopropyltoluene	119	12.733	12.728	0.005	97	428207	50.0	41.2	
115 1,4-Dichlorobenzene	146	12.794	12.795	-0.001	96	260073	50.0	43.3	
116 2,4-Dichloro-1-(triflourom	214	12.824	12.825	-0.001	93	109293	50.0	43.1	
118 2,5-Dichlorobenzotrifluori	214	12.867	12.862	0.005	0	119357	50.0	43.6	
120 n-Butylbenzene	91	13.140	13.141	-0.001	98	341197	50.0	40.2	
121 1,2-Dichlorobenzene	146	13.152	13.154	-0.002	97	242735	50.0	43.6	
122 1,2-Dibromo-3-Chloropropan	75	13.943	13.944	-0.001	78	23713	50.0	38.3	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.083	14.084	-0.001	0	541215	150.0	153.1	
125 2,3- & 3,4- Dichlorotoluen	125	14.502	14.504	-0.002	0	372921	100.0	102.0	
126 1,2,4-Trichlorobenzene	180	14.770	14.765	0.005	95	107541	50.0	42.2	
127 Hexachlorobutadiene	225	14.910	14.911	-0.001	93	41504	50.0	44.5	
128 Naphthalene	128	15.032	15.033	-0.001	97	348203	50.0	40.1	
129 1,2,3-Trichlorobenzene	180	15.257	15.258	-0.002	97	97222	50.0	41.7	
131 2,4,5-Trichlorotoluene	159	16.029	16.030	-0.001	0	49353	50.0	44.6	
130 2,3,6-Trichlorotoluene	159	16.126	16.121	0.005	96	49405	50.0	48.0	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	85.3	
S 134 1,2-Dichloroethene, Total	96				0		100.0	84.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	86.0	

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		
voaWVA1stRest_00021	Amount Added:	2.00	Units: uL		
voaWAcro1stRe_00021	Amount Added:	6.00	Units: uL		
VOA8260VOAPRI_00268	Amount Added:	2.00	Units: uL		
voaW2clev1stR_00023	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	

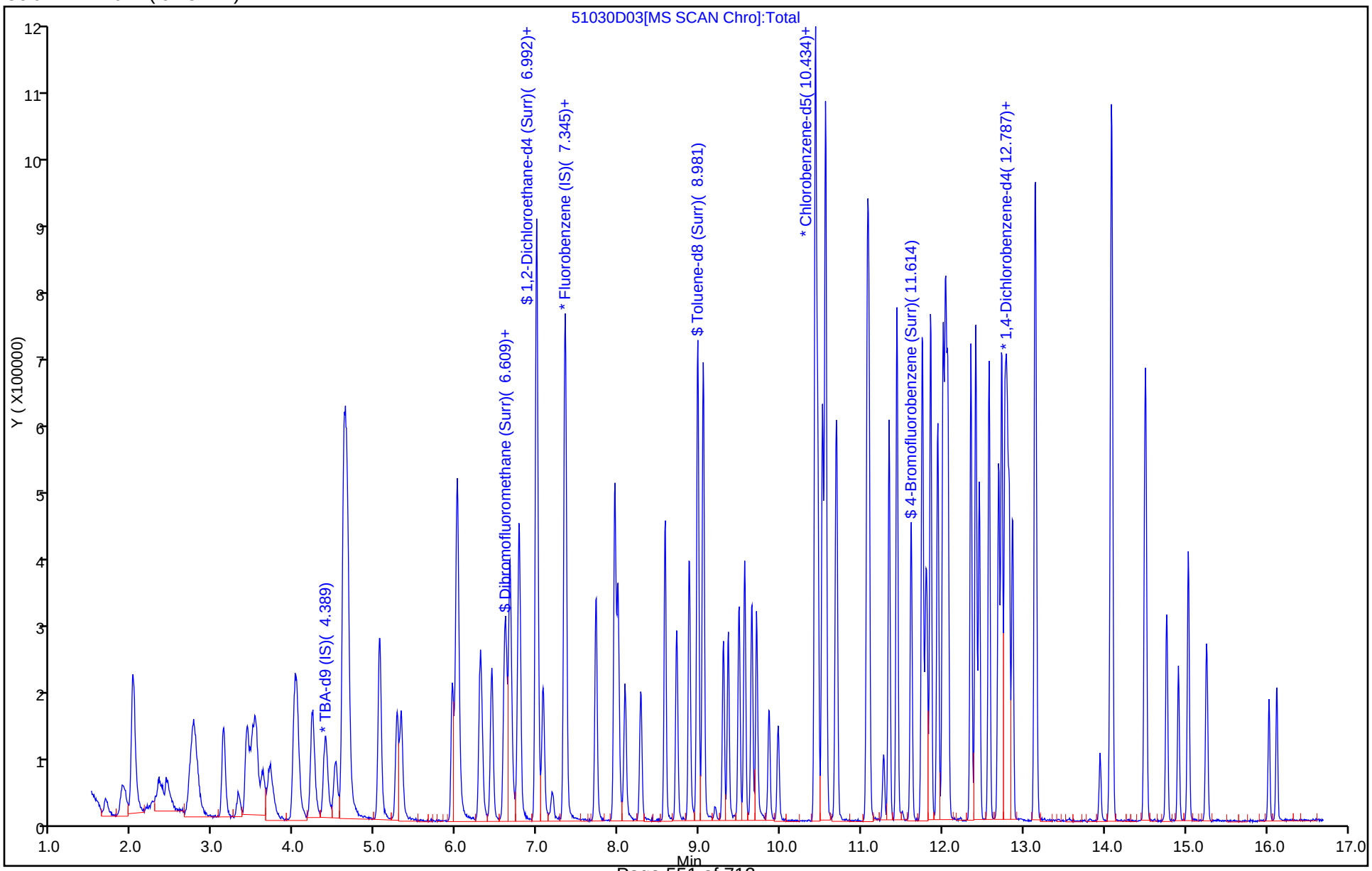
Report Date: 31-Oct-2017 08:26:19 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\51030D03.D

Injection Date:	30-Oct-2017 23:08:30	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\20171030-19107.b\51030D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 30-Oct-2017 23:08:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019107-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171030-19107.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Oct-2017 08:26:11 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: XAWRK010

First Level Reviewer: bungardf Date: 30-Oct-2017 23:30:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.0	97.90
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.6	101.12
$ 7 Toluene-d8 (Surr)	50.0	54.1	108.28
$ 8 4-Bromofluorobenzene (Surr)	50.0	51.4	102.76

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227613/3

Matrix: Water | Lab File ID: 51031D03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 02:09

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227613 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	14.0		1.0	0.90
75-01-4	Vinyl chloride	11.5		1.0	0.88
74-83-9	Bromomethane	8.03		1.0	0.89
75-00-3	Chloroethane	8.85		1.0	0.90
75-35-4	1,1-Dichloroethene	9.70		1.0	0.55
67-64-1	Acetone	24.8		5.0	3.4
75-15-0	Carbon disulfide	10.0		1.0	0.88
75-09-2	Methylene Chloride	9.20		1.0	0.36
156-60-5	trans-1,2-Dichloroethene	9.03		1.0	0.67
1634-04-4	Methyl tert-butyl ether	9.44		1.0	0.59
75-34-3	1,1-Dichloroethane	9.77		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	8.86		1.0	0.71
74-97-5	Bromochloromethane	9.17		1.0	0.63
78-93-3	2-Butanone (MEK)	20.5		5.0	2.6
67-66-3	Chloroform	8.50		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.41		1.0	0.60
56-23-5	Carbon tetrachloride	9.23		1.0	0.88
71-43-2	Benzene	8.71		1.0	0.60
107-06-2	1,2-Dichloroethane	9.94		1.0	0.57
79-01-6	Trichloroethene	8.57		1.0	0.69
78-87-5	1,2-Dichloropropane	9.29		1.0	0.66
75-27-4	Bromodichloromethane	8.37		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.49		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	17.9		5.0	3.1
108-88-3	Toluene	9.63		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	9.98		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.52		1.0	0.45
127-18-4	Tetrachloroethene	9.06		1.0	0.47
591-78-6	2-Hexanone	18.8		5.0	3.3
124-48-1	Dibromochloromethane	9.25		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.50		1.0	0.50
108-90-7	Chlorobenzene	9.30		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.69		1.0	0.57
100-41-4	Ethylbenzene	9.03		1.0	0.51
1330-20-7	Xylenes, Total	18.3		2.0	0.89
100-42-5	Styrene	9.22		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-227613/3

Matrix: Water | Lab File ID: 51031D03.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/01/2017 02:09

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 227613 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	8.51		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	8.85		1.0	0.60
107-13-1	Acrylonitrile	112		20	7.8
123-91-1	1,4-Dioxane	202		200	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		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)	97		73-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Nov-2017 02:09:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019122-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 11:46:34 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: XAWRK031

First Level Reviewer: bungardf Date: 01-Nov-2017 02:31:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.383	4.384	-0.001	0	232581	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.339	7.340	-0.001	97	525062	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.428	10.429	-0.001	86	114165	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.770	-0.001	93	158466	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.615	6.616	-0.001	93	122616	50.0	48.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.986	6.987	-0.001	0	160498	50.0	52.1	
$ 7 Toluene-d8 (Surr)	98	8.980	8.982	-0.002	94	501767	50.0	55.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.614	11.609	0.005	85	172498	50.0	52.6	
11 Dichlorodifluoromethane	85	1.677	1.684	-0.007	99	186635	50.0	61.1	
12 Chloromethane	50	1.884	1.891	-0.007	99	215193	50.0	70.1	
14 Butadiene	39	2.011	2.019	-0.008	96	208660	50.0	73.8	
13 Vinyl chloride	62	2.017	2.019	-0.002	64	179166	50.0	57.5	
15 Bromomethane	94	2.334	2.341	-0.007	89	59076	50.0	40.1	
16 Chloroethane	64	2.425	2.438	-0.013	96	75708	50.0	44.2	
17 Dichlorofluoromethane	67	2.753	2.742	0.011	98	243474	50.0	56.2	
18 Trichlorofluoromethane	101	2.778	2.773	0.005	95	221015	50.0	57.8	
20 Ethyl ether	59	3.124	3.131	-0.007	93	143582	50.0	57.7	
21 Acrolein	56	3.313	3.314	-0.001	99	76780	150.0	122.4	
22 1,1-Dichloroethene	96	3.410	3.417	-0.007	98	124650	50.0	48.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.495	3.502	-0.007	93	141580	50.0	50.2	
24 Acetone	43	3.538	3.533	0.005	99	170525	100.0	124.2	
25 Iodomethane	142	3.611	3.618	-0.007	98	197813	50.0	49.0	
26 Carbon disulfide	76	3.708	3.703	0.005	100	283204	50.0	50.2	
28 3-Chloro-1-propene	76	4.006	4.001	0.005	90	69205	50.0	41.7	
30 Methyl acetate	43	4.030	4.038	-0.008	99	302221	100.0	111.1	
31 Methylene Chloride	84	4.225	4.232	-0.007	96	147286	50.0	46.0	
32 2-Methyl-2-propanol	59	4.511	4.512	-0.001	95	144430	500.0	525.1	
33 Acrylonitrile	53	4.608	4.615	-0.007	99	740352	500.0	560.0	
34 trans-1,2-Dichloroethene	96	4.644	4.646	-0.002	96	132263	50.0	45.2	
35 Methyl tert-butyl ether	73	4.663	4.658	0.005	97	370599	50.0	47.2	
36 Hexane	57	5.052	5.053	-0.001	96	204224	50.0	54.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.265	5.272	-0.007	96	248801	50.0	48.9	
38 Vinyl acetate	43	5.320	5.321	-0.001	97	326553	50.0	63.1	
45 cis-1,2-Dichloroethene	96	6.007	6.008	-0.001	83	148409	50.0	44.3	
44 2,2-Dichloropropane	97	6.007	6.008	-0.001	62	35941	50.0	55.4	
46 2-Butanone (MEK)	43	6.025	6.026	-0.001	99	200056	100.0	102.4	
49 Chlorobromomethane	128	6.293	6.294	-0.001	95	68285	50.0	45.9	
51 Tetrahydrofuran	42	6.317	6.312	0.005	94	114122	100.0	100.3	
52 Chloroform	83	6.438	6.440	-0.002	94	216123	50.0	42.5	
53 1,1,1-Trichloroethane	97	6.591	6.598	-0.008	99	181052	50.0	47.0	
54 Cyclohexane	56	6.657	6.665	-0.008	94	253004	50.0	53.3	
56 Carbon tetrachloride	117	6.767	6.768	-0.001	97	147808	50.0	46.1	
55 1,1-Dichloropropene	75	6.779	6.780	-0.001	93	180187	50.0	43.3	
57 Isobutyl alcohol	41	6.986	6.987	-0.001	87	143503	1250.0	1373.5	
58 Benzene	78	6.998	6.993	0.005	96	555756	50.0	43.5	
59 1,2-Dichloroethane	62	7.071	7.072	-0.001	97	185027	50.0	49.7	
62 n-Heptane	43	7.351	7.352	-0.001	96	178052	50.0	59.2	
64 Trichloroethene	130	7.722	7.723	-0.001	97	137637	50.0	42.8	
66 Methylcyclohexane	83	7.959	7.954	0.005	96	203438	50.0	41.9	
67 1,2-Dichloropropane	63	7.995	7.996	-0.001	94	138143	50.0	46.5	
68 Dibromomethane	93	8.080	8.082	-0.002	97	76663	50.0	44.0	
70 1,4-Dioxane	88	8.080	8.082	-0.002	48	30500	1000.0	1008.9	
71 Dichlorobromomethane	83	8.275	8.276	-0.001	97	143162	50.0	41.9	
73 2-Chloroethyl vinyl ether	63	8.573	8.574	-0.001	91	191934	100.0	89.7	
74 cis-1,3-Dichloropropene	75	8.719	8.720	-0.001	93	176388	50.0	42.5	
75 4-Methyl-2-pentanone (MIBK	43	8.871	8.872	-0.001	98	261697	100.0	89.4	
76 Toluene	91	9.047	9.049	-0.002	99	547907	50.0	48.1	
77 trans-1,3-Dichloropropene	75	9.297	9.292	0.005	96	154549	50.0	49.9	
78 Ethyl methacrylate	69	9.351	9.359	-0.008	92	146971	50.0	39.3	
79 1,1,2-Trichloroethane	97	9.491	9.486	0.005	92	112824	50.0	47.6	
80 Tetrachloroethene	164	9.558	9.559	-0.001	95	98327	50.0	45.3	
81 1,3-Dichloropropane	76	9.643	9.651	-0.008	96	195391	50.0	44.6	
82 2-Hexanone	43	9.704	9.705	-0.001	99	211286	100.0	94.1	
84 Chlorodibromomethane	129	9.856	9.857	-0.001	91	92688	50.0	46.2	
85 Ethylene Dibromide	107	9.972	9.973	-0.001	95	115566	50.0	47.5	
86 3-Chlorobenzotrifluoride	180	10.434	10.435	-0.001	87	199311	50.0	50.8	
87 Chlorobenzene	112	10.458	10.459	-0.001	94	344673	50.0	46.5	
88 4-Chlorobenzotrifluoride	180	10.519	10.520	-0.001	96	195456	50.0	54.0	
89 1,1,1,2-Tetrachloroethane	131	10.549	10.551	-0.002	93	114219	50.0	48.5	
90 Ethylbenzene	106	10.556	10.557	-0.001	98	186839	50.0	45.2	
91 m-Xylene & p-Xylene	106	10.689	10.690	-0.001	0	229241	50.0	45.3	
92 o-Xylene	106	11.072	11.074	-0.002	96	221492	50.0	46.0	
93 Styrene	104	11.091	11.092	-0.001	96	375896	50.0	46.1	
94 Bromoform	173	11.273	11.274	-0.001	93	53019	50.0	42.6	
96 2-Chlorobenzotrifluoride	180	11.340	11.341	-0.001	93	196239	50.0	52.3	
97 Isopropylbenzene	105	11.437	11.439	-0.001	96	534712	50.0	45.5	
99 1,1,2,2-Tetrachloroethane	83	11.747	11.749	-0.002	81	155276	50.0	44.2	
100 Bromobenzene	156	11.754	11.749	0.005	95	131927	50.0	42.9	
102 trans-1,4-Dichloro-2-buten	53	11.784	11.785	-0.001	72	54765	50.0	59.1	
101 1,2,3-Trichloropropane	110	11.802	11.803	-0.001	87	54269	50.0	42.8	
103 N-Propylbenzene	120	11.857	11.852	0.005	99	152742	50.0	43.5	
104 2-Chlorotoluene	126	11.942	11.943	-0.001	96	130559	50.0	43.0	
105 3-Chlorotoluene	126	12.009	12.004	0.005	96	173836	50.0	52.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	12.039	12.034	0.005	94	452323	50.0	45.0	
107 4-Chlorotoluene	126	12.064	12.065	-0.001	98	145142	50.0	44.2	
108 tert-Butylbenzene	119	12.350	12.351	-0.001	94	357801	50.0	42.6	
110 1,2,4-Trimethylbenzene	105	12.410	12.412	-0.002	97	456870	50.0	44.7	
111 1,2-dichloro-4-(trifluorom	214	12.453	12.454	-0.001	95	114112	50.0	44.6	
112 sec-Butylbenzene	105	12.575	12.570	0.005	94	505122	50.0	43.1	
113 1,3-Dichlorobenzene	146	12.690	12.691	-0.001	98	252035	50.0	45.9	
114 4-Isopropyltoluene	119	12.733	12.728	0.005	97	434275	50.0	44.4	
115 1,4-Dichlorobenzene	146	12.800	12.795	0.005	96	263104	50.0	46.6	
116 2,4-Dichloro-1-(triflourom	214	12.824	12.825	-0.001	92	109594	50.0	46.0	
118 2,5-Dichlorobenzotrifluori	214	12.866	12.868	-0.002	0	121677	50.0	47.2	
120 n-Butylbenzene	91	13.140	13.135	0.005	97	340490	50.0	42.7	
121 1,2-Dichlorobenzene	146	13.152	13.153	-0.001	97	248781	50.0	47.5	
122 1,2-Dibromo-3-Chloropropan	75	13.943	13.938	0.005	76	24153	50.0	41.5	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.083	14.084	-0.001	0	536905	150.0	161.6	
125 2,3- & 3,4- Dichlorotoluen	125	14.502	14.503	-0.001	0	367838	100.0	107.1	
126 1,2,4-Trichlorobenzene	180	14.764	14.765	-0.001	94	107393	50.0	44.8	
127 Hexachlorobutadiene	225	14.916	14.917	-0.001	92	37735	50.0	43.0	
128 Naphthalene	128	15.031	15.033	-0.002	97	356240	50.0	43.6	
129 1,2,3-Trichlorobenzene	180	15.256	15.258	-0.002	96	94510	50.0	43.2	
131 2,4,5-Trichlorotoluene	159	16.023	16.030	-0.007	0	45568	50.0	43.8	
130 2,3,6-Trichlorotoluene	159	16.126	16.121	0.005	95	48414	50.0	50.0	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	91.3	
S 134 1,2-Dichloroethene, Total	96				0		100.0	89.5	
S 135 1,3-Dichloropropene, Total	1				0		100.0	92.4	

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	
voaWVA1stRest_00021	Amount Added:	2.00	Units: uL	
voaWAcro1stRe_00021	Amount Added:	6.00	Units: uL	
VOA8260VOA2ND_00270	Amount Added:	2.00	Units: uL	
voaW2clev1stR_00024	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

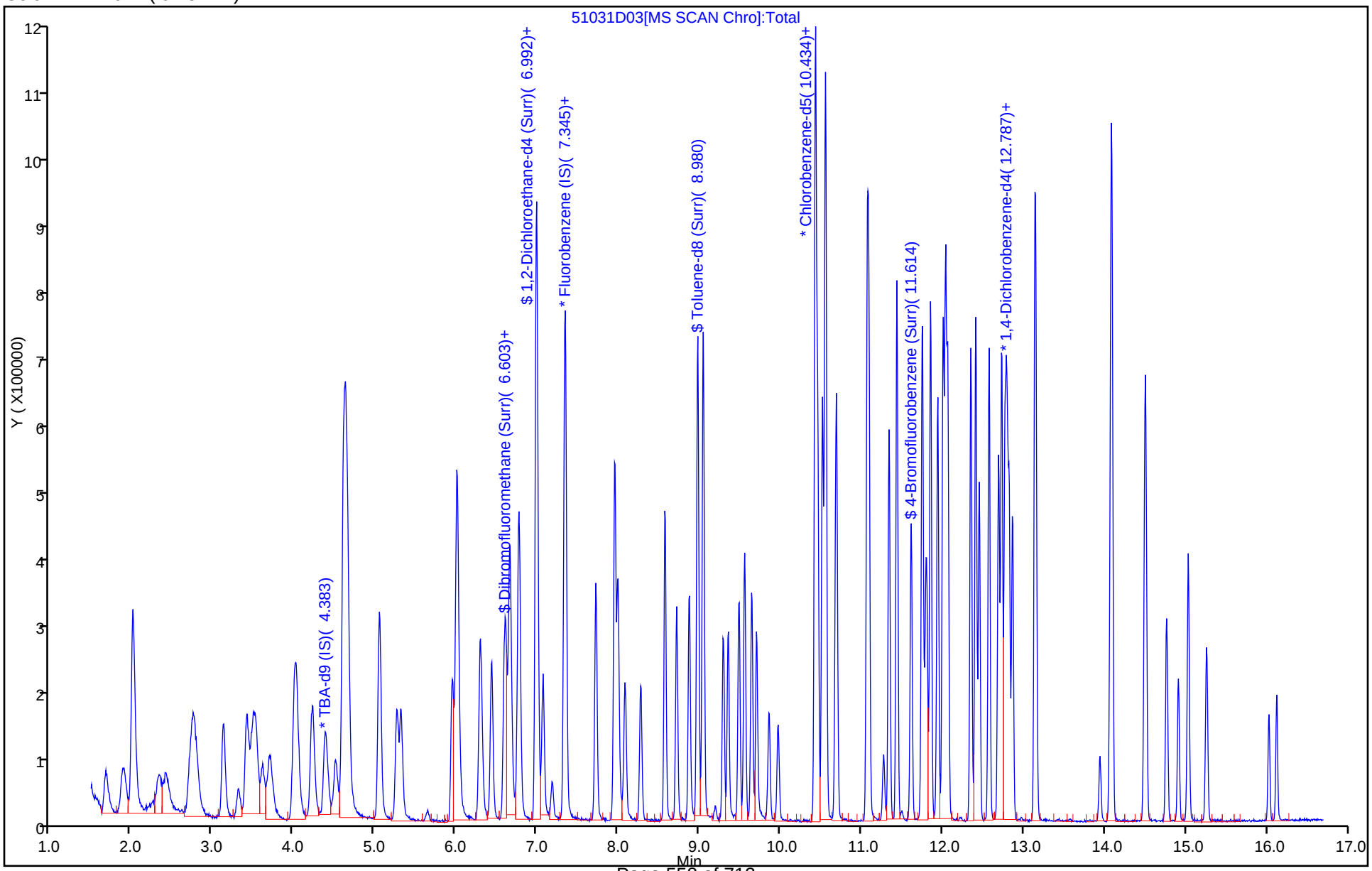
Report Date: 01-Nov-2017 11:46:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\51031D03.D

Injection Date:	01-Nov-2017 02:09:30	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\20171031-19122.b\51031D03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Nov-2017 02:09:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0019122-003
Misc. Info.: LCS
Operator ID: 034635 Instrument ID: CHHP5

Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20171031-19122.b\MSVOA_LL_CHHP5.m
Limit Group: VOA 8260C ICAL
Last Update: 01-Nov-2017 11:46:34 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: XAWRK031

First Level Reviewer: bungardf Date: 01-Nov-2017 02:31:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.5	97.07
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	52.1	104.18
$ 7 Toluene-d8 (Surr)	50.0	55.2	110.45
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.6	105.13

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

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.: 180-71580-1

SDG No.:

Instrument ID: CHHP5 Start Date: 10/25/2017 21:39

Analysis Batch Number: 227010 End Date: 10/26/2017 08:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-227010/1		10/25/2017 21:39	1	51025D01.D	DB-624 0.18(mm)
CCVIS 180-227010/2		10/25/2017 22:12	1	51025D02.D	DB-624 0.18(mm)
ZZZZZ		10/25/2017 22:12	1		DB-624 0.18(mm)
LCS 180-227010/3		10/25/2017 22:51	1	51025D03.D	DB-624 0.18(mm)
ZZZZZ		10/25/2017 23:27	1		DB-624 0.18(mm)
MB 180-227010/5		10/25/2017 23:51	1	51025D05.D	DB-624 0.18(mm)
ZZZZZ		10/26/2017 00:27	1		DB-624 0.18(mm)
ZZZZZ		10/26/2017 00:55	1		DB-624 0.18(mm)
ZZZZZ		10/26/2017 01:20	1		DB-624 0.18(mm)
ZZZZZ		10/26/2017 02:08	1		DB-624 0.18(mm)
ZZZZZ		10/26/2017 02:31	1		DB-624 0.18(mm)
ZZZZZ		10/26/2017 02:55	1		DB-624 0.18(mm)
ZZZZZ		10/26/2017 03:19	1		DB-624 0.18(mm)
ZZZZZ		10/26/2017 03:43	1		DB-624 0.18(mm)
ZZZZZ		10/26/2017 04:07	10		DB-624 0.18(mm)
180-71580-1		10/26/2017 04:56	1	51025D17.D	DB-624 0.18(mm)
180-71580-6		10/26/2017 05:20	1	51025D18.D	DB-624 0.18(mm)
180-71580-7		10/26/2017 05:44	1	51025D19.D	DB-624 0.18(mm)
180-71580-8		10/26/2017 06:08	1	51025D20.D	DB-624 0.18(mm)
180-71580-9		10/26/2017 06:32	1	51025D21.D	DB-624 0.18(mm)
180-71580-10		10/26/2017 06:56	1	51025D22.D	DB-624 0.18(mm)
180-71580-2		10/26/2017 07:43	10	51025D24.D	DB-624 0.18(mm)
180-71580-3		10/26/2017 08:07	10	51025D25.D	DB-624 0.18(mm)
180-71580-4		10/26/2017 08:31	25	51025D26.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Instrument ID: CHHP5 Start Date: 10/26/2017 21:11

Analysis Batch Number: 227152 End Date: 10/27/2017 08:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-227152/1		10/26/2017 21:11	1	51026D01.D	DB-624 0.18(mm)
CCVIS 180-227152/2		10/26/2017 21:43	1	51026D02.D	DB-624 0.18(mm)
ZZZZZ		10/26/2017 21:43	1		DB-624 0.18(mm)
LCS 180-227152/3		10/26/2017 22:19	1	51026D03.D	DB-624 0.18(mm)
ZZZZZ		10/26/2017 22:59	1		DB-624 0.18(mm)
MB 180-227152/5		10/26/2017 23:22	1	51026D05.D	DB-624 0.18(mm)
ZZZZZ		10/26/2017 23:54	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 00:22	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 00:49	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 01:37	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 02:01	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 02:25	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 03:13	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 03:37	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 04:24	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 04:48	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 05:12	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 05:36	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 06:00	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 06:47	1		DB-624 0.18(mm)
ZZZZZ		10/27/2017 07:35	2		DB-624 0.18(mm)
180-71580-5		10/27/2017 07:59	50	51026D26.D	DB-624 0.18(mm)
ZZZZZ		10/27/2017 08:23	250		DB-624 0.18(mm)
ZZZZZ		10/27/2017 08:47	500		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Instrument ID: CHHP5 Start Date: 10/30/2017 21:19

Analysis Batch Number: 227508 End Date: 10/31/2017 08:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-227508/1		10/30/2017 21:19	1	51030D01.D	DB-624 0.18(mm)
CCVIS 180-227508/2		10/30/2017 22:32	1	51030D02.D	DB-624 0.18(mm)
ZZZZZ		10/30/2017 22:32	1		DB-624 0.18(mm)
LCS 180-227508/3		10/30/2017 23:08	1	51030D03.D	DB-624 0.18(mm)
ZZZZZ		10/30/2017 23:43	1		DB-624 0.18(mm)
MB 180-227508/5		10/31/2017 00:07	1	51030D05.D	DB-624 0.18(mm)
ZZZZZ		10/31/2017 07:03	2		DB-624 0.18(mm)
180-71580-4 RA		10/31/2017 07:27	1	51030D23.D	DB-624 0.18(mm)
180-71580-5 RA		10/31/2017 08:14	1	51030D25.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Instrument ID: CHHP5 Start Date: 11/01/2017 00:52

Analysis Batch Number: 227613 End Date: 11/01/2017 11:49

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-227613/1		11/01/2017 00:52	1	51031D01.D	DB-624 0.18(mm)
CCVIS 180-227613/2		11/01/2017 01:29	1	51031D02.D	DB-624 0.18(mm)
ZZZZZ		11/01/2017 01:29	1		DB-624 0.18(mm)
LCS 180-227613/3		11/01/2017 02:09	1	51031D03.D	DB-624 0.18(mm)
ZZZZZ		11/01/2017 02:43	1		DB-624 0.18(mm)
MB 180-227613/5		11/01/2017 03:10	1	51031D05.D	DB-624 0.18(mm)
ZZZZZ		11/01/2017 03:45	1		DB-624 0.18(mm)
ZZZZZ		11/01/2017 04:15	1		DB-624 0.18(mm)
ZZZZZ		11/01/2017 05:03	1		DB-624 0.18(mm)
ZZZZZ		11/01/2017 05:27	1		DB-624 0.18(mm)
ZZZZZ		11/01/2017 05:51	1		DB-624 0.18(mm)
ZZZZZ		11/01/2017 06:15	1		DB-624 0.18(mm)
ZZZZZ		11/01/2017 06:38	1		DB-624 0.18(mm)
ZZZZZ		11/01/2017 07:26	1		DB-624 0.18(mm)
ZZZZZ		11/01/2017 07:50	1		DB-624 0.18(mm)
ZZZZZ		11/01/2017 08:14	1		DB-624 0.18(mm)
ZZZZZ		11/01/2017 08:38	1		DB-624 0.18(mm)
ZZZZZ		11/01/2017 09:01	2		DB-624 0.18(mm)
ZZZZZ		11/01/2017 09:49	10		DB-624 0.18(mm)
ZZZZZ		11/01/2017 10:12	10		DB-624 0.18(mm)
ZZZZZ		11/01/2017 10:36	25		DB-624 0.18(mm)
ZZZZZ		11/01/2017 11:00	250		DB-624 0.18(mm)
180-71580-2 RA		11/01/2017 11:24	1	51031D25.D	DB-624 0.18(mm)
180-71580-3 RA		11/01/2017 11:49	1	51031D26.D	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.: 180-71580-1

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-127-0/1-0	180-71580-2	73	78	77	75	84	85
HD-MW-87-0/1-0	180-71580-3	83	89	94	92	92	105
	MB 180-226906/1-A	76	73	74	70	72	73
	LCS 180-226906/2-A	85	76	78	68	78	76
	LCSD 180-226906/3-A	84	76	71	68	79	74

	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.: 180-71580-1

SDG No.:

Matrix: Water Level: Low Lab File ID: D10280007.D

Lab ID: LCS 180-226906/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	20.0	16.9	85	41-107	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Matrix: Water Level: Low Lab File ID: D10280008.D

Lab ID: LCSD 180-226906/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	20.0	16.8	84	1	16	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.: 180-71580-1

SDG No.:

Lab File ID: D10280004.D Lab Sample ID: MB 180-226906/1-A

Matrix: Water Date Extracted: 10/25/2017 11:21

Instrument ID: CH732 Date Analyzed: 10/28/2017 10:59

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-226906/2-A	D10280007.D	10/28/2017 12:19
	LCSD 180-226906/3-A	D10280008.D	10/28/2017 12:45
HD-MW-127-0/1-0	180-71580-2	D10280011.D	10/28/2017 14:05
HD-MW-87-0/1-0	180-71580-3	D10280012.D	10/28/2017 14:31

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab File ID: D10090002.D DFTPP Injection Date: 10/09/2017

Instrument ID: CH732 DFTPP Injection Time: 04:42

Analysis Batch No.: 225193

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	56.3	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	54.4	
70	Less than 2.0 % of mass 69	0.3	(0.6) 1
127	40.0 - 60.0 % of mass 198	51.6	
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	24.4	
365	Greater than 1.0 % of mass 198	3.3	
441	Present but less than mass 443	7.4	(82.2) 3
442	Greater than 40.0 % of mass 198	45.5	
443	17.0 - 23.0 % of mass 442	9.0	(19.7) 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 180-225193/3	D10090003.D	10/09/2017	04:57
	IC 180-225193/4	D10090004.D	10/09/2017	05:23
	IC 180-225193/5	D10090005.D	10/09/2017	05:50
	ICIS 180-225193/6	D10090006.D	10/09/2017	06:16
	IC 180-225193/7	D10090007.D	10/09/2017	06:43
	IC 180-225193/8	D10090008.D	10/09/2017	07:09
	IC 180-225193/9	D10090009.D	10/09/2017	07:35
	IC 180-225193/10	D10090010.D	10/09/2017	08:02

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab File ID: D10280002.D DFTPP Injection Date: 10/28/2017

Instrument ID: CH732 DFTPP Injection Time: 10:18

Analysis Batch No.: 227303

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	59.0	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	59.0	
70	Less than 2.0 % of mass 69	0.4	(0.6) 1
127	40.0 - 60.0 % of mass 198	53.3	
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	24.0	
365	Greater than 1.0 % of mass 198	3.1	
441	Present but less than mass 443	7.8	(86.2) 3
442	Greater than 40.0 % of mass 198	47.7	
443	17.0 - 23.0 % of mass 442	9.0	(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 180-227303/3	D10280003.D	10/28/2017	10:33
	MB 180-226906/1-A	D10280004.D	10/28/2017	10:59
	LCS 180-226906/2-A	D10280007.D	10/28/2017	12:19
	LCSD 180-226906/3-A	D10280008.D	10/28/2017	12:45
HD-MW-127-0/1-0	180-71580-2	D10280011.D	10/28/2017	14:05
HD-MW-87-0/1-0	180-71580-3	D10280012.D	10/28/2017	14:31

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Sample No.: CCVIS 180-227303/3 Date Analyzed: 10/28/2017 10:33

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): D10280003.D Heated Purge: (Y/N) N

Calibration ID: 35705

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		89980	6.18	342595	7.46	164120	9.16
UPPER LIMIT		179960	6.68	685190	7.96	328240	9.66
LOWER LIMIT		44990	5.68	171298	6.96	82060	8.66
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-226906/1-A		97741	6.18	391874	7.46	193220	9.16
LCS 180-226906/2-A		93747	6.18	348312	7.46	187884	9.17
LCSD 180-226906/3-A		93056	6.18	365008	7.46	185384	9.16
180-71580-2	HD-MW-127-0/1-0	102348	6.18	402801	7.46	195976	9.16
180-71580-3	HD-MW-87-0/1-0	105730	6.18	403700	7.46	196942	9.17

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.: 180-71580-1

SDG No.:

Sample No.: CCVIS 180-227303/3 Date Analyzed: 10/28/2017 10:33

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): D10280003.D Heated Purge: (Y/N) N

Calibration ID: 35705

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		331166	10.61	303109	14.36	298513	17.24
UPPER LIMIT		662332	11.11	606218	14.86	597026	17.74
LOWER LIMIT		165583	10.11	151555	13.86	149257	16.74
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-226906/1-A		367214	10.61	325370	14.36	295196	17.25
LCS 180-226906/2-A		380570	10.61	330417	14.36	341709	17.24
LCSD 180-226906/3-A		366353	10.61	328418	14.36	315037	17.24
180-71580-2	HD-MW-127-0/1-0	383753	10.61	364850	14.36	316679	17.24
180-71580-3	HD-MW-87-0/1-0	386462	10.61	356642	14.36	324197	17.25

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.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-127-0/1-0 | Lab Sample ID: 180-71580-2

Matrix: Water | Lab File ID: D10280011.D

Analysis Method: 8270D LL | Date Collected: 10/18/2017 14:30

Extract. Method: 3520C | Date Extracted: 10/25/2017 11:21

Sample wt/vol: 270(mL) | Date Analyzed: 10/28/2017 14:05

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.: 227303 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	6.9		1.9	0.35

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	75		26-103
367-12-4	2-Fluorophenol (Surr)	73		27-100
118-79-6	2,4,6-Tribromophenol (Surr)	84		28-134
4165-60-0	Nitrobenzene-d5 (Surr)	77		30-101
4165-62-2	Phenol-d5 (Surr)	78		27-101
1718-51-0	Terphenyl-d14 (Surr)	85		20-119

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280011.D
Lims ID: 180-71580-D-2-A
Client ID: HD-MW-127-0/1-0
Sample Type: Client
Inject. Date: 28-Oct-2017 14:05:30 ALS Bottle#: 10 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019077-011
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Oct-2017 04:47:29 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: piccolinov Date: 30-Oct-2017 04:37:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.177	6.182	-0.005	97	102348	8.00	
* 2 Naphthalene-d8	136	7.459	7.464	-0.005	99	402801	8.00	
* 3 Acenaphthene-d10	164	9.163	9.163	0.000	97	195976	8.00	
* 4 Phenanthrene-d10	188	10.606	10.606	0.000	97	383753	8.00	
* 5 Chrysene-d12	240	14.356	14.356	0.000	98	364850	8.00	
* 6 Perylene-d12	264	17.241	17.235	0.006	97	316679	8.00	
$ 7 2-Fluorophenol	112	4.724	4.735	-0.011	93	479551	29.1	
$ 8 Phenol-d5	99	5.798	5.803	-0.005	95	689583	31.2	
$ 9 Nitrobenzene-d5	82	6.738	6.743	-0.005	92	703925	30.9	
$ 10 2-Fluorobiphenyl	172	8.501	8.501	0.000	99	1132069	30.2	
$ 11 2,4,6-Tribromophenol	330	9.922	9.922	0.000	82	119971	33.6	
$ 12 Terphenyl-d14	244	12.529	12.524	0.005	99	1360361	34.0	
13 1,4-Dioxane	88	1.572	1.588	-0.016	88	85673	14.9	

Reagents:

SVTAPITINTRNi_00016 Amount Added: 1.00 Units: uL Run Reagent

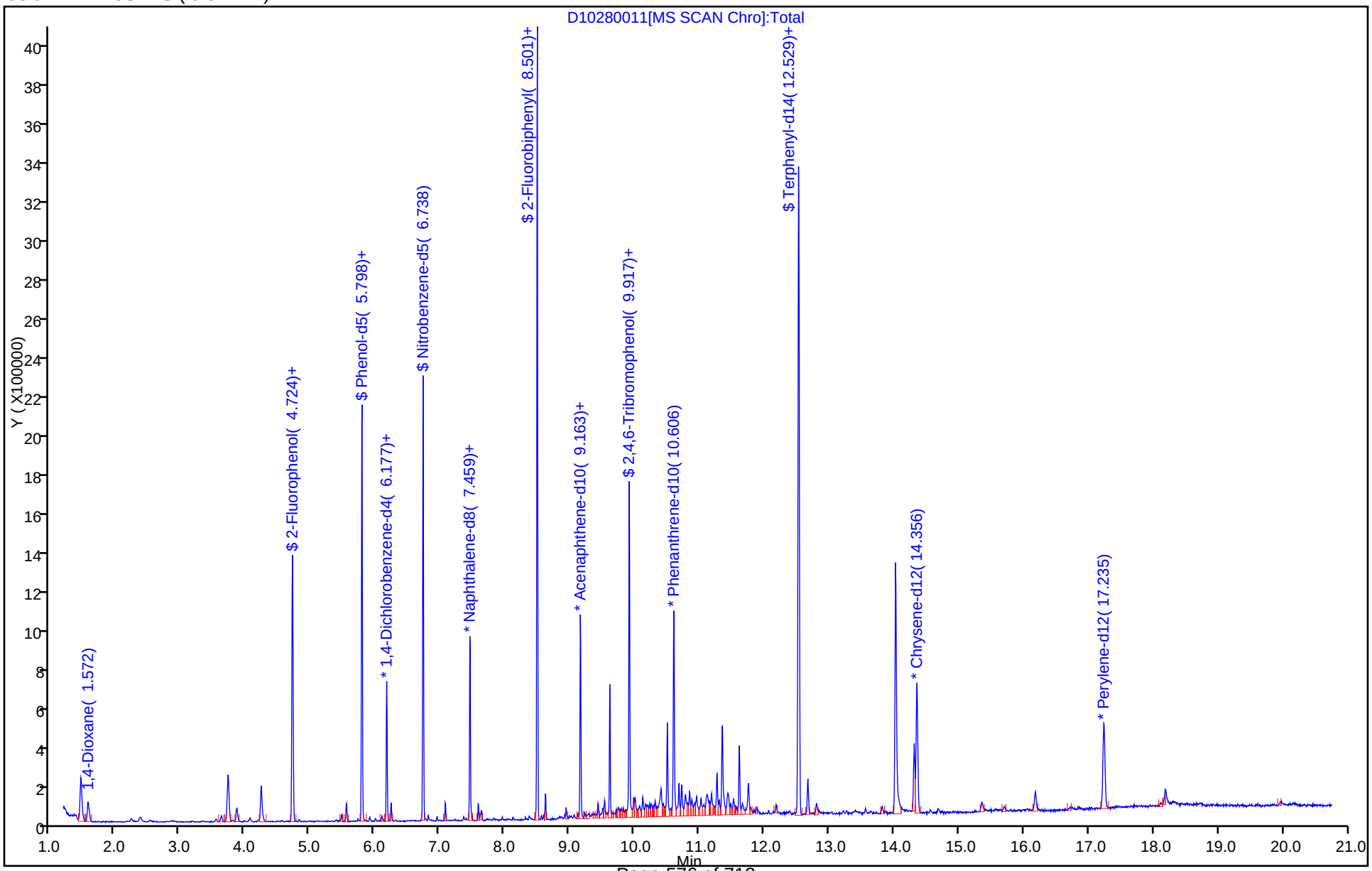
Report Date: 30-Oct-2017 04:47:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280011.D

Injection Date:	28-Oct-2017 14:05:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	180-71580-D-2-A	Lab Sample ID:	180-71580-2	Worklist Smp#:	11
Client ID:	HD-MW-127-0/1-0				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280011.D
Lims ID: 180-71580-D-2-A
Client ID: HD-MW-127-0/1-0
Sample Type: Client
Inject. Date: 28-Oct-2017 14:05:30 ALS Bottle#: 10 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019077-011
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Oct-2017 04:47:29 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: piccolinov Date: 30-Oct-2017 04:37:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	40.0	29.1	72.78
$ 8 Phenol-d5	40.0	31.2	77.92
$ 9 Nitrobenzene-d5	40.0	30.9	77.20
$ 10 2-Fluorobiphenyl	40.0	30.2	75.43
$ 11 2,4,6-Tribromophenol	40.0	33.6	83.91
$ 12 Terphenyl-d14	40.0	34.0	84.99

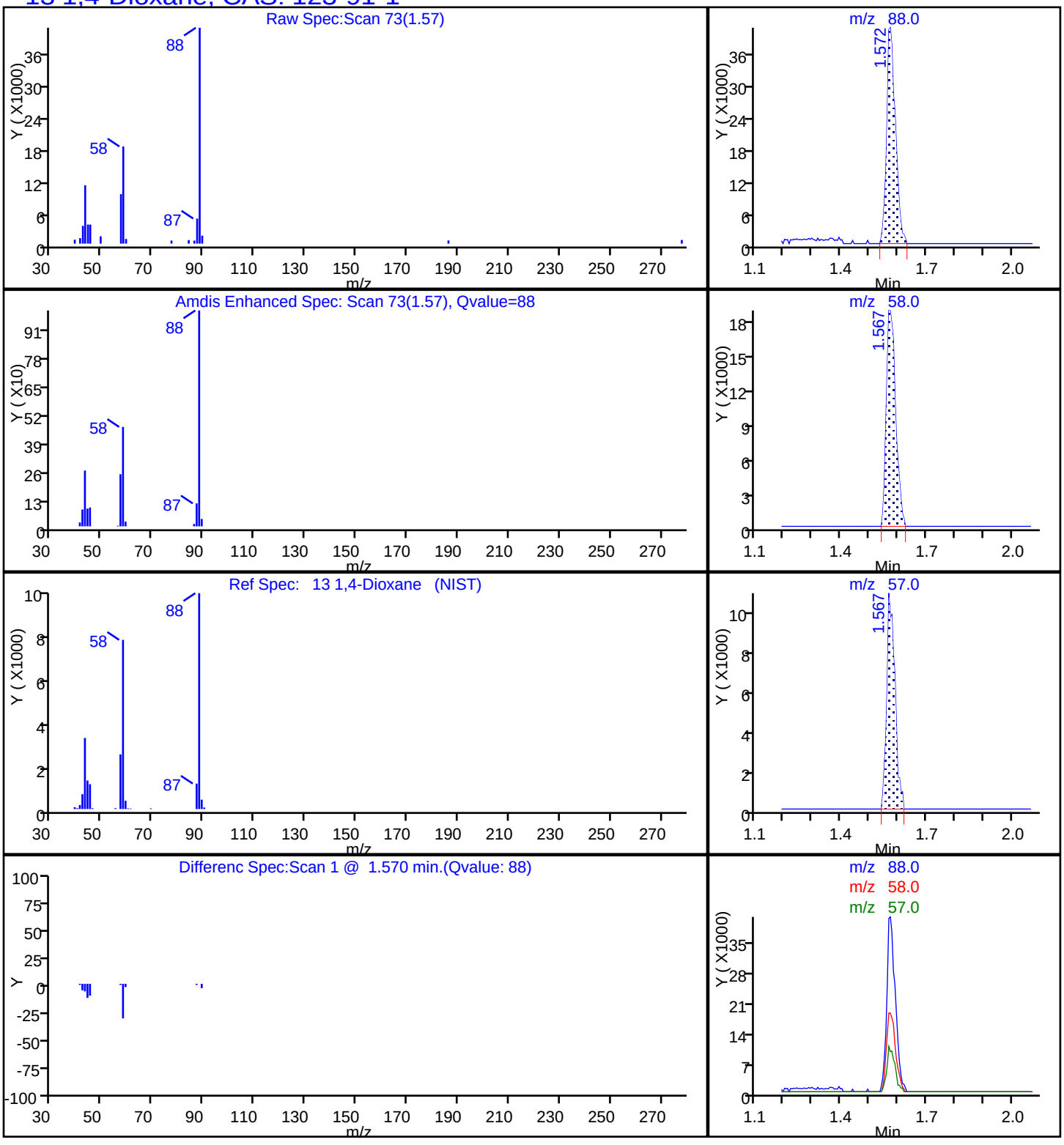
Report Date: 30-Oct-2017 04:47:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280011.D

Injection Date:	28-Oct-2017 14:05:30	Instrument ID:	CH732		
Lims ID:	180-71580-D-2-A	Lab Sample ID:	180-71580-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	003200	ALS Bottle#:	10	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

13 1,4-Dioxane, CAS: 123-91-1



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: HD-MW-87-0/1-0 | Lab Sample ID: 180-71580-3

Matrix: Water | Lab File ID: D10280012.D

Analysis Method: 8270D LL | Date Collected: 10/18/2017 13:30

Extract. Method: 3520C | Date Extracted: 10/25/2017 11:21

Sample wt/vol: 270(mL) | Date Analyzed: 10/28/2017 14:31

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.: 227303 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10		1.9	0.35

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	92		26-103
367-12-4	2-Fluorophenol (Surr)	83		27-100
118-79-6	2,4,6-Tribromophenol (Surr)	92		28-134
4165-60-0	Nitrobenzene-d5 (Surr)	94		30-101
4165-62-2	Phenol-d5 (Surr)	89		27-101
1718-51-0	Terphenyl-d14 (Surr)	105		20-119

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280012.D
Lims ID: 180-71580-D-3-A
Client ID: HD-MW-87-0/1-0
Sample Type: Client
Inject. Date: 28-Oct-2017 14:31:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019077-012
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Oct-2017 04:47:29 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: piccolinov Date: 30-Oct-2017 04:37:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.177	6.182	-0.005	96	105730	8.00	
* 2 Naphthalene-d8	136	7.464	7.464	0.000	99	403700	8.00	
* 3 Acenaphthene-d10	164	9.169	9.163	0.006	97	196942	8.00	
* 4 Phenanthrene-d10	188	10.606	10.606	0.000	97	386462	8.00	
* 5 Chrysene-d12	240	14.361	14.356	0.005	98	356642	8.00	
* 6 Perylene-d12	264	17.251	17.235	0.016	97	324197	8.00	
$ 7 2-Fluorophenol	112	4.719	4.735	-0.016	93	566778	33.3	
$ 8 Phenol-d5	99	5.792	5.803	-0.011	94	811249	35.5	
$ 9 Nitrobenzene-d5	82	6.738	6.743	-0.005	92	855565	37.4	
$ 10 2-Fluorobiphenyl	172	8.501	8.501	0.000	99	1384365	36.7	
$ 11 2,4,6-Tribromophenol	330	9.922	9.922	0.000	79	132371	36.8	
$ 12 Terphenyl-d14	244	12.534	12.524	0.010	99	1649457	42.2	
13 1,4-Dioxane	88	1.556	1.588	-0.032	89	130437	21.9	

Reagents:

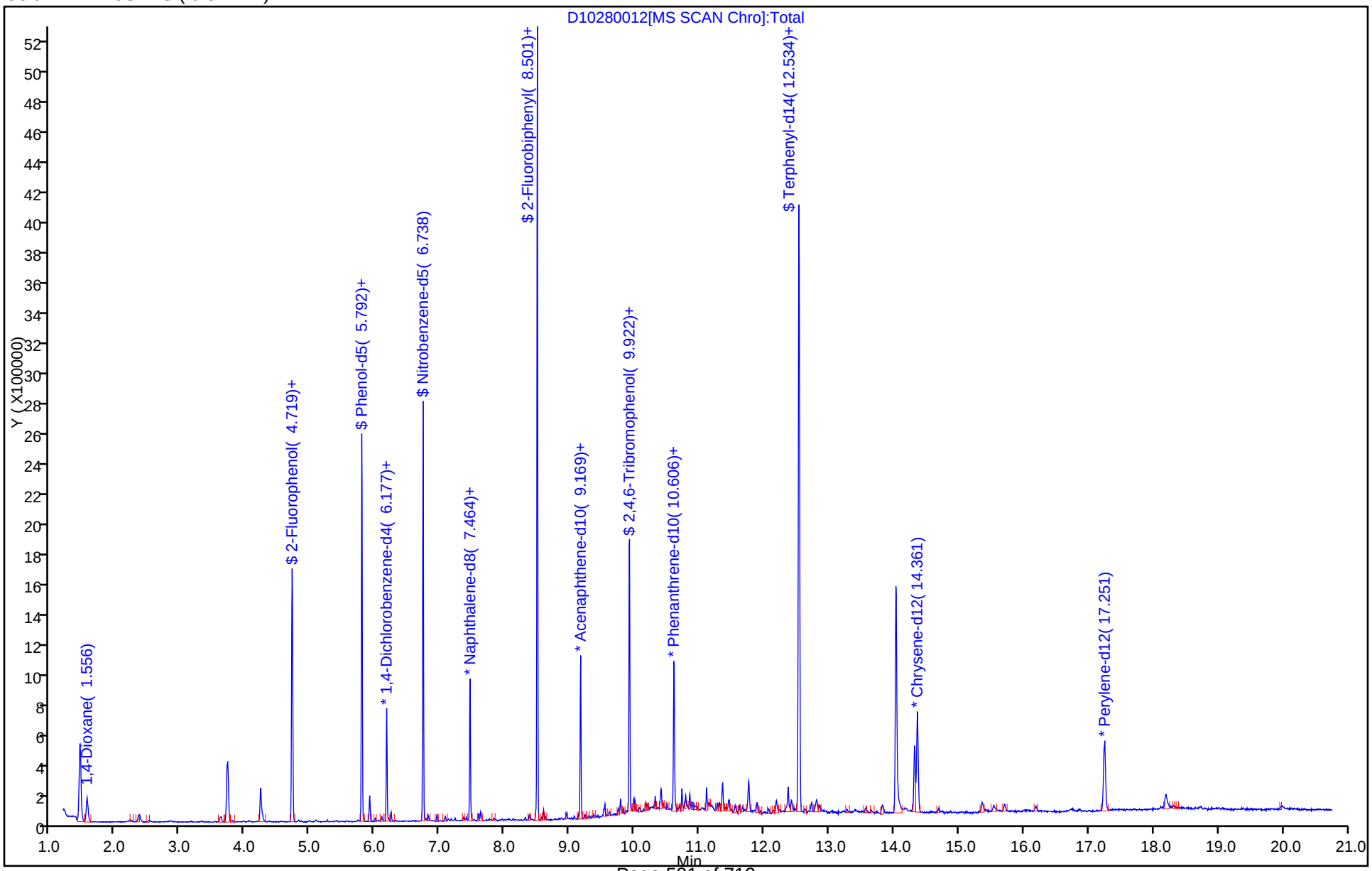
SVTAPITINTRNi_00016 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 30-Oct-2017 04:48:01 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280012.D				
Injection Date:	28-Oct-2017 14:31:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	180-71580-D-3-A	Lab Sample ID:	180-71580-3	Worklist Smp#:	12
Client ID:	HD-MW-87-0/1-0				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280012.D
Lims ID: 180-71580-D-3-A
Client ID: HD-MW-87-0/1-0
Sample Type: Client
Inject. Date: 28-Oct-2017 14:31:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019077-012
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Oct-2017 04:47:29 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: piccolinov Date: 30-Oct-2017 04:37:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	40.0	33.3	83.26
$ 8 Phenol-d5	40.0	35.5	88.73
$ 9 Nitrobenzene-d5	40.0	37.4	93.62
$ 10 2-Fluorobiphenyl	40.0	36.7	91.79
$ 11 2,4,6-Tribromophenol	40.0	36.8	91.93
$ 12 Terphenyl-d14	40.0	42.2	105.42

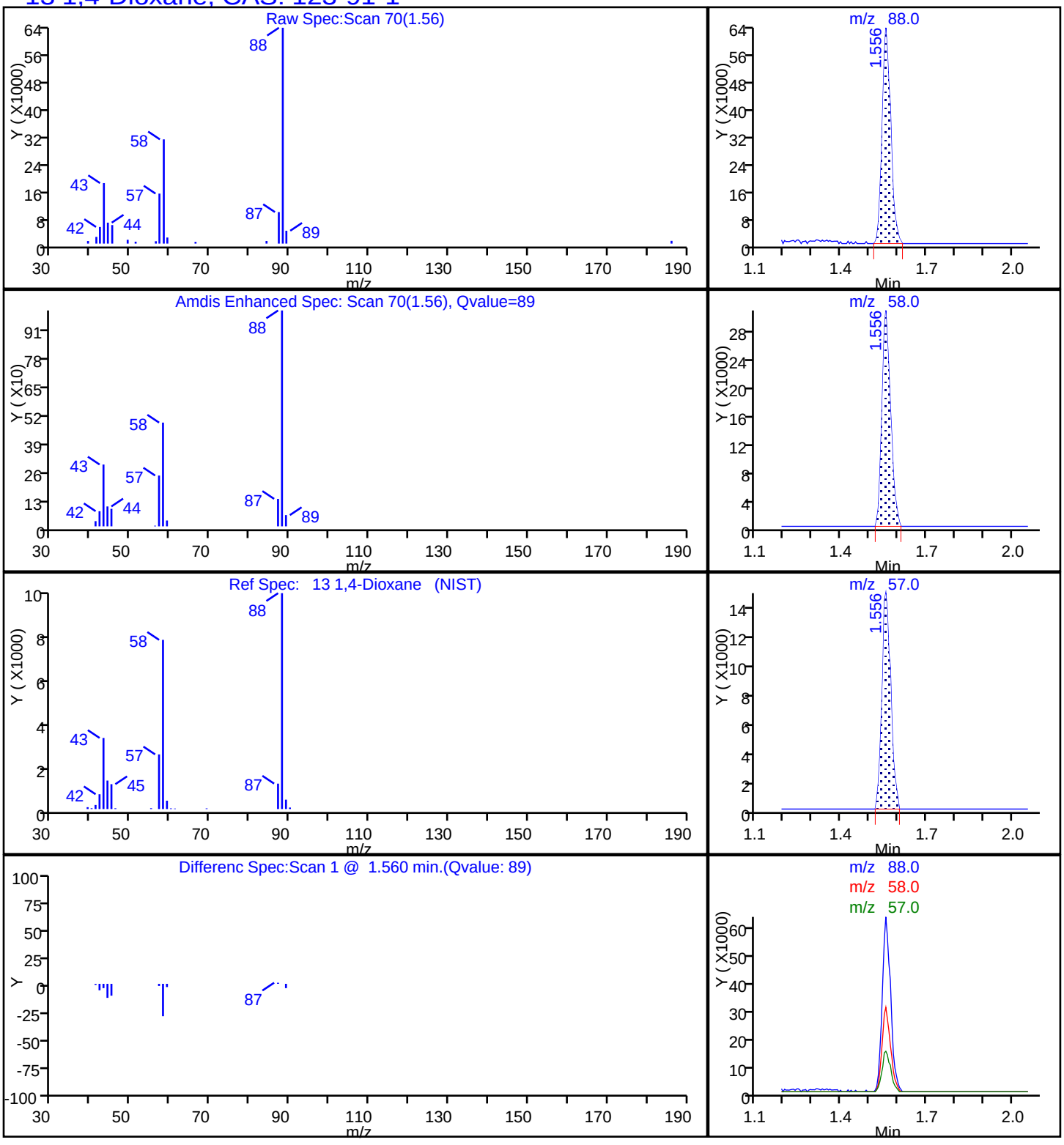
Report Date: 30-Oct-2017 04:48:01 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280012.D

Injection Date:	28-Oct-2017 14:31:30	Instrument ID:	CH732		
Lims ID:	180-71580-D-3-A	Lab Sample ID:	180-71580-3		
Client ID:	HD-MW-87-0/1-0				
Operator ID:	003200	ALS Bottle#:	11	Worklist Smp#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

13 1,4-Dioxane, CAS: 123-91-1



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-225193/3	D10090003.D
Level 2	IC 180-225193/4	D10090004.D
Level 3	IC 180-225193/5	D10090005.D
Level 4	ICIS 180-225193/6	D10090006.D
Level 5	IC 180-225193/7	D10090007.D
Level 6	IC 180-225193/8	D10090008.D
Level 7	IC 180-225193/9	D10090009.D
Level 8	IC 180-225193/10	D10090010.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	0.4454 0.4606	0.4317 0.4665	0.4533 0.4446	0.4422	0.4534	Ave		0.4497			0.0100	2.5		20.0			
N-Nitrosodimethylamine	0.7581 0.6511	0.5928 0.6560	0.6461 0.6314	0.6572	0.6467	Ave		0.6549			0.0100	7.1		20.0			
Pyridine	1.2804 1.1760	1.2619 1.1558	1.2402 1.0905	1.2606	1.2079	Ave		1.2092			0.0100	5.4		20.0			
Methyl methanesulfonate	0.8577 0.8173	0.8053 0.8480	0.8296 0.7794	0.8348	0.8323	Ave		0.8256			0.0100	3.0		20.0			
Benzaldehyde	+++++ 1.0923	1.2008 1.0116	1.2121 0.8797	1.1471	1.2106	Ave		1.1078			0.0100	11.2		20.0			
Phenol	2.4844 1.7484	1.9070 1.6982	1.9772 1.5581	1.9549	1.8026	Ave		1.8913			0.8000	14.7		20.0			
Aniline	2.5631 1.9500	2.2477 1.9421	2.2567 1.7674	2.2041	2.0293	Ave		2.1201			0.0100	11.7		20.0			
Bis(2-chloroethyl)ether	1.5175 1.1854	1.3585 1.2181	1.2899 1.1316	1.2658	1.2500	Ave		1.2771			0.7000	9.3		20.0			
2-Chlorophenol	1.6654 1.3178	1.3577 1.3234	1.3924 1.2471	1.3908	1.3122	Ave		1.3759			0.8000	9.2		20.0			
n-Decane	+++++ 1.1846	1.4337 1.1471	1.4009 1.0515	1.3259	1.2790	Ave		1.2604				11.1		20.0			
1,3-Dichlorobenzene	1.8334 1.5111	1.6228 1.4942	1.5646 1.4261	1.5360	1.4946	Ave		1.5603			0.0100	8.0		20.0			
1,4-Dichlorobenzene	1.7821 1.4930	1.5474 1.4982	1.5333 1.4096	1.4910	1.4947	Ave		1.5312			0.0100	7.1		20.0			
Benzyl alcohol	1.0078 0.8762	0.8469 0.8730	0.8887 0.8263	0.8648	0.8797	Ave		0.8829			0.0100	6.1		20.0			
1,2-Dichlorobenzene	1.5958 1.4072	1.4909 1.4105	1.4788 1.3290	1.4396	1.3982	Ave		1.4437			0.0100	5.5		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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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	1.3033 1.2025	1.2473 1.1896	1.2744 1.1240	1.2693	1.2165	Ave		1.2284			0.7000	4.7		20.0			
Indene	2.7021 2.1853	2.4099 2.2063	2.4061 2.0927	2.2831	2.2170	Ave		2.3128			0.0100	8.3		20.0			
2,2'-oxybis[1-chloropropane]	2.2875 1.4918	1.8555 1.4009	1.7863 +++++	1.7263	1.5591	Lin2	0.2810	1.5862			0.0100				0.9930		0.9900
N-Nitrosopyrrolidine	0.6195 0.6429	0.5827 0.6522	0.5817 0.6126	0.6133	0.6291	Ave		0.6167			0.0100	4.1		20.0			
Methylphenol, 3 & 4	1.4597 1.2763	1.3332 1.2138	1.3336 1.1410	1.3011	1.2395	Ave		1.2873			0.6000	7.4		20.0			
N-Nitrosodi-n-propylamine	1.2452 0.9607	1.1126 0.9080	1.1428 0.8063	1.1011	1.0082	Ave		1.0356			0.5000	13.7		20.0			
Acetophenone	2.2001 1.8278	2.1031 1.7395	2.0550 1.6169	1.9258	1.8693	Ave		1.9172			0.0100	10.2		20.0			
Hexachloroethane	0.7051 0.6580	0.6444 0.6620	0.6552 0.6197	0.6708	0.6601	Ave		0.6594			0.3000	3.6		20.0			
Nitrobenzene	0.6130 0.4358	0.4978 0.4141	0.5008 0.3938	0.4780	0.4568	Ave		0.4738			0.2000	14.4		20.0			
Isophorone	0.8531 0.7818	0.8109 0.7705	0.8440 0.7344	0.8414	0.8110	Ave		0.8059			0.4000	5.1		20.0			
2-Nitrophenol	0.1547 0.1960	0.1719 0.1979	0.1845 0.2021	0.1909	0.1910	Ave		0.1861			0.1000	8.5		20.0			
2,4-Dimethylphenol	0.4375 0.3854	0.3993 0.3748	0.4193 0.3704	0.4184	0.4031	Ave		0.4010			0.2000	5.8		20.0			
Benzoic acid	0.1964 0.1984	0.1817 0.2169	0.2360 0.2180	0.1584	0.1853	Ave		0.1989			0.0100	12.3		20.0			
Bis(2-chloroethoxy)methane	0.5111 0.4348	0.4689 0.4230	0.4925 0.4105	0.4778	0.4582	Ave		0.4596			0.3000	7.6		20.0			
2,4-Dichlorophenol	0.3155 0.3092	0.2853 0.3079	0.3060 0.3124	0.3093	0.2961	Ave		0.3052			0.2000	3.2		20.0			
1,2,4-Trichlorobenzene	0.3947 0.3419	0.3371 0.3441	0.3488 0.3506	0.3416	0.3306	Ave		0.3487			0.0100	5.6		20.0			
Naphthalene	1.1036 1.0390	1.0247 1.0006	1.0501 1.0052	1.0451	1.0007	Ave		1.0336			0.7000	3.3		20.0			
4-Chloroaniline	0.4578 0.4340	0.4384 0.4252	0.4392 0.4400	0.4454	0.4344	Ave		0.4393			0.0100	2.2		20.0			
2,6-Dichlorophenol	0.3176 0.2854	0.2863 0.2808	0.3012 0.2948	0.2915	0.2763	Ave		0.2918			0.0100	4.5		20.0			
Hexachlorobutadiene	0.2252 0.2122	0.2193 0.2255	0.2110 0.2294	0.2117	0.2096	Ave		0.2180			0.0100	3.6		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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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	0.0930 0.1126	0.0915 0.1121	0.1091 0.1143	0.1106	0.1104	Ave		0.1067			0.0100	8.5		20.0			
4-Chloro-3-methylphenol	0.4117 0.3540	0.3426 0.3508	0.3521 0.3523	0.3676	0.3510	Ave		0.3603			0.2000	6.1		20.0			
2-Methylnaphthalene	0.7723 0.7017	0.6996 0.7179	0.7334 0.7366	0.7596	0.7219	Ave		0.7304			0.4000	3.5		20.0			
1-Methylnaphthalene	0.7535 0.6600	0.6708 0.6583	0.7108 0.6723	0.6952	0.6548	Ave		0.6845			0.0100	5.0		20.0			
Hexachlorocyclopentadiene	0.3768 0.5027	0.3809 0.5345	0.4185 0.5490	0.4340	0.4454	Ave		0.4552			0.0500	14.6		20.0			
1,2,4,5-Tetrachlorobenzene	0.7581 0.6757	0.6270 0.7057	0.7002 0.7078	0.6487	0.6244	Ave		0.6809			0.0100	6.8		20.0			
2,4,6-Trichlorophenol	0.4765 0.4239	0.4230 0.4395	0.4384 0.4606	0.4318	0.4375	Ave		0.4414			0.2000	4.2		20.0			
2,4,5-Trichlorophenol	0.4437 0.4493	0.4507 0.4625	0.4717 0.4681	0.4495	0.4376	Ave		0.4541			0.2000	2.6		20.0			
1,1'-Biphenyl	1.7107 1.5878	1.6368 1.6295	1.7167 1.6362	1.6474	1.6225	Ave		1.6485			0.0100	2.7		20.0			
2-Chloronaphthalene	1.3346 1.1981	1.2504 1.2112	1.3479 1.2456	1.2284	1.2300	Ave		1.2558			0.8000	4.4		20.0			
2-Nitroaniline	0.6780 0.5630	0.5533 0.5514	0.5531 0.5402	0.5582	0.5588	Ave		0.5695			0.0100	7.8		20.0			
Dimethyl phthalate	1.6190 1.5002	1.4680 1.4970	1.5977 1.5593	1.5236	1.5207	Ave		1.5357			0.0100	3.4		20.0			
1,3-Dinitrobenzene	0.1459 0.2185	0.1668 0.2191	0.1958 0.2179	0.2034	0.2115	Ave		0.1973			0.0100	13.8		20.0			
2,6-Dinitrotoluene	+++++ 0.3124	0.2749 0.3167	0.3323 0.3153	0.3303	0.3167	Ave		0.3141			0.2000	6.0		20.0			
Acenaphthylene	2.0263 1.8970	1.8835 1.8880	1.9735 1.8910	1.9402	1.9138	Ave		1.9267			0.9000	2.6		20.0			
3-Nitroaniline	0.3277 0.3722	0.3098 0.3717	0.3596 0.3690	0.3672	0.3732	Ave		0.3563			0.0100	6.7		20.0			
Acenaphthene	1.4130 1.2574	1.2678 1.3227	1.3194 1.3083	1.2648	1.2531	Ave		1.3008			0.9000	4.1		20.0			
2,4-Dinitrophenol	+++++ 0.2420	+++++ 0.2750	0.1962 0.2873	0.1861	0.2055	Lin1	-1.229	0.2785			0.0100				0.9900		0.9900
4-Nitrophenol	0.2137 0.2694	0.2396 0.2671	0.2652 0.2666	0.2629	0.2656	Ave		0.2563			0.0100	7.7		20.0			
2,4-Dinitrotoluene	0.3294 0.4586	0.3822 0.4533	0.4299 0.4504	0.4188	0.4442	Ave		0.4208			0.2000	10.6		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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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	1.9548 1.7235	1.8608 1.7248	1.9165 1.7428	1.7965	1.7471	Ave		1.8084			0.8000	5.0		20.0			
2,3,5,6-Tetrachlorophenol	0.3483 0.3922	0.3249 0.4025	0.3631 0.4014	0.3624	0.3734	Ave		0.3710			0.0100	7.3		20.0			
2,3,4,6-Tetrachlorophenol	0.3316 0.3768	0.3377 0.3952	0.3972 0.3917	0.3742	0.3738	Ave		0.3723			0.0100	6.7		20.0			
2-Naphthylamine	1.3363 1.2930	1.3293 1.2983	1.3953 1.2396	1.3419	1.3118	Ave		1.3182			0.0100	3.4		20.0			
Diethyl phthalate	+++++ 1.4946	1.6673 1.5618	1.6840 1.4756	1.5039	1.4538	Ave		1.5487			0.0100	6.0		20.0			
Hexadecane	0.6825 0.5816	0.6350 0.5010	0.6452 0.4706	0.6579	0.6217	Ave		0.5994				12.7		20.0			
4-Chlorophenyl phenyl ether	0.8106 0.7420	0.7265 0.7693	0.7548 0.8036	0.7370	0.7378	Ave		0.7602			0.4000	4.2		20.0			
4-Nitroaniline	0.3216 0.3875	0.3378 0.4029	0.3979 0.4054	0.3877	0.3876	Ave		0.3785			0.0100	8.3		20.0			
Fluorene	1.5241 1.4075	1.4400 1.5002	1.4864 1.5109	1.4119	1.4075	Ave		1.4611			0.9000	3.4		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1199	0.0837 0.1316	0.1019 0.1310	0.1107	0.1159	Ave		0.1135			0.0100	14.9		20.0			
N-Nitrosodiphenylamine	0.6165 0.5063	0.5543 0.5315	0.5558 0.5117	0.5423	0.5279	Ave		0.5433			0.0100	6.4		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	1.1083 0.9594	1.0524 0.9684	1.0749 0.9157	1.0572	0.9969	Ave		1.0166			0.0100	6.5		20.0			
4-Bromophenyl phenyl ether	0.2186 0.2006	0.2180 0.2090	0.2158 0.2024	0.2122	0.1991	Ave		0.2094			0.1000	3.8		20.0			
Hexachlorobenzene	0.2121 0.1751	0.1954 0.1834	0.1942 0.1795	0.1903	0.1821	Ave		0.1890			0.1000	6.2		20.0			
Atrazine	0.2102 0.1979	0.2107 0.1960	0.2194 0.1864	0.2176	0.2045	Ave		0.2053			0.0100	5.5		20.0			
Pentachlorophenol	0.1772 0.1420	0.1321 0.1769	0.1502 0.1824	0.1294	0.1319	Ave		0.1528			0.0500	14.8		20.0			
n-Octadecane	2.4476 2.3836	2.4138 2.1174	2.3961 1.7886	2.5307	2.4377	Ave		2.3144				10.5		20.0			
Phenanthrene	1.1972 1.0138	1.0618 1.0436	1.0888 1.0036	1.0734	1.0282	Ave		1.0638			0.7000	5.8		20.0			
Anthracene	1.0493 1.0279	1.0893 1.0729	1.1231 1.0464	1.1128	1.0486	Ave		1.0713			0.7000	3.2		20.0			
Carbazole	1.1036 0.9664	1.0604 0.9957	1.0584 0.9499	1.0284	1.0067	Ave		1.0212			0.0100	5.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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	1.1432 1.2507	1.2149 1.2884	1.2874 1.2190	1.3466	1.2778	Ave		1.2535			0.0100	4.9		20.0			
Fluoranthene	1.2614 1.1793	1.2296 1.1905	1.2466 1.1400	1.2672	1.2191	Ave		1.2167			0.6000	3.6		20.0			
Benzidine	0.5164 0.7246	0.5469 0.6580	0.5915 0.5898	0.6795	0.7419	Ave		0.6311			0.0100	13.1		20.0			
Pyrene	1.2783 1.3226	1.2841 1.2850	1.3379 1.2669	1.2969	1.3057	Ave		1.2972			0.6000	1.8		20.0			
Butyl benzyl phthalate	0.6167 0.6553	0.5501 0.6449	0.5859 0.6258	0.6126	0.6441	Ave		0.6170			0.0100	5.7		20.0			
3,3'-Dichlorobenzidine	0.4480 0.4753	0.3719 0.4626	0.4135 0.4472	0.4233	0.4475	Ave		0.4362			0.0100	7.5		20.0			
Bis(2-ethylhexyl) phthalate	0.6415 0.8548	0.6957 0.8417	0.7691 0.8346	0.8214	0.8483	Ave		0.7884			0.0100	10.1		20.0			
Benzo[a]anthracene	1.3295 1.2323	1.2294 1.1890	1.2413 1.2020	1.2156	1.2240	Ave		1.2329			0.8000	3.5		20.0			
Chrysene	1.2052 1.1951	1.1424 1.1829	1.1847 1.1487	1.1658	1.1599	Ave		1.1731			0.7000	1.9		20.0			
Di-n-octyl phthalate	+++++ 1.4998	1.0628 1.4774	1.1891 1.4692	1.3740	1.4368	Ave		1.3584			0.0100	12.4		20.0			
7,12-Dimethylbenz(a)anthracene	0.5359 0.5886	0.5747 0.5762	0.5635 0.5689	0.5869	0.5811	Ave		0.5720			0.0100	2.9		20.0			
Benzo[b]fluoranthene	1.1851 1.2031	1.2702 1.2029	1.2722 1.1867	1.2251	1.2203	Ave		1.2207			0.7000	2.8		20.0			
Benzo[k]fluoranthene	1.2178 1.1941	1.1914 1.1186	1.2519 1.1519	1.2704	1.1810	Ave		1.1971			0.7000	4.2		20.0			
Benzo[e]pyrene	1.1412 1.1235	1.1102 1.0882	1.1674 1.0942	1.1403	1.1493	Ave		1.1268			0.0100	2.5		20.0			
Benzo[a]pyrene	1.0961 1.1604	1.1052 1.1388	1.1062 1.1232	1.1701	1.1509	Ave		1.1313			0.7000	2.5		20.0			
Indeno[1,2,3-cd]pyrene	1.0941 1.2762	1.1145 1.2450	1.2491 1.2200	1.2103	1.2421	Ave		1.2064			0.5000	5.5		20.0			
Dibenz(a,h)anthracene	1.4474 1.0363	1.0756 1.0466	1.0986 1.0240	1.0288	1.0068	Ave		1.0955			0.4000	13.3		20.0			
Benzo[g,h,i]perylene	0.9779 1.0960	0.9808 1.0698	1.0449 1.0687	1.0468	1.0742	Ave		1.0449			0.5000	4.2		20.0			
2-Fluorophenol (Surr)	1.3842 1.2626	1.2496 1.2963	1.2793 1.2181	1.3088	1.3022	Ave		1.2876				3.8		20.0			
Phenol-d5 (Surr)	1.9737 1.6600	1.7917 1.6476	1.7935 1.5364	1.7289	1.7033	Ave		1.7294				7.5		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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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)	0.4991 0.4353	0.4612 0.4252	0.4660 0.4088	0.4757	0.4507	Ave		0.4528				6.4		20.0			
2-Fluorobiphenyl	1.6651 1.4496	1.5411 1.4924	1.6605 1.4949	1.4818	1.4680	Ave		1.5317				5.6		20.0			
2,4,6-Tribromophenol (Surr)	0.0599 0.0787	0.0706 0.0820	0.0720 0.0814	0.0752	0.0763	Ave		0.0745			0.0100	9.6		20.0			
Terphenyl-d14 (Surr)	0.9299 0.8675	0.8636 0.8694	0.8788 0.8756	0.8545	0.8800	Ave		0.8774				2.6		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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-225193/3	D10090003.D
Level 2	IC 180-225193/4	D10090004.D
Level 3	IC 180-225193/5	D10090005.D
Level 4	ICIS 180-225193/6	D10090006.D
Level 5	IC 180-225193/7	D10090007.D
Level 6	IC 180-225193/8	D10090008.D
Level 7	IC 180-225193/9	D10090009.D
Level 8	IC 180-225193/10	D10090010.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	2259 218472	11856 321096	24168 423283	54218	113363	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodimethylamine	DCBd 4	Ave	3845 308842	16279 451527	34452 601056	80584	161705	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyridine	DCBd 4	Ave	12987 1115599	69308 1591022	132252 2076236	309133	604035	0.760 80.0	4.00 120	8.00 160	20.0	40.0
Methyl methanesulfonate	DCBd 4	Ave	4350 387644	22115 583674	44233 741982	102354	208115	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzaldehyde	DCBd 4	Ave	+++++ 518108	32976 696217	64630 837500	140643	302704	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol	DCBd 4	Ave	12600 829316	52370 1168789	105423 1483261	239691	450705	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Aniline	DCBd 4	Ave	12999 924935	61726 1336650	120325 1682500	270255	507401	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethyl)ether	DCBd 4	Ave	7696 562242	37306 838393	68775 1077267	155197	312551	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chlorophenol	DCBd 4	Ave	8446 625079	37284 910845	74241 1187250	170535	328093	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
n-Decane	DCBd 4	Ave	+++++ 561896	39372 789521	74694 1001031	162568	319800	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	9298 716751	44565 1028420	83423 1357598	188332	373700	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	9038 708165	42494 1031129	81754 1341910	182821	373734	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzyl alcohol	DCBd 4	Ave	5111 415604	23258 600848	47384 786593	106030	219968	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	8093 667460	40941 970823	78846 1265198	176510	349589	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Methylphenol	DCBd 4	Ave	6610 570371	34253 818782	67951 1070021	155636	304165	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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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	13704 1036529	66179 1518491	128290 1992233	279941	554323	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,2'-oxybis[1-chloropropane]	DCBd 4	Lin2	11601 707606	50955 964193	95243 +++++	211661	389829	0.380 40.0	2.00 60.0	4.00 +++++	10.0	20.0
N-Nitrosopyrrolidine	DCBd 4	Ave	3142 304946	16001 448866	31013 583154	75199	157308	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methylphenol, 3 & 4	DCBd 4	Ave	7403 605384	36613 835401	71106 1086177	159527	309909	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodi-n-propylamine	DCBd 4	Ave	6315 455694	30555 624967	60935 767542	135011	252078	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acetophenone	DCBd 4	Ave	11158 866980	57755 1197260	109571 1539253	236122	467398	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachloroethane	DCBd 4	Ave	3576 312124	17695 455660	34934 589918	82244	165045	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene	NPT	Ave	11609 762261	49763 1087893	94954 1365022	208734	413132	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Isophorone	NPT	Ave	16155 1367439	81062 2023875	160035 2545331	367413	733538	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitrophenol	NPT	Ave	2929 342836	17184 519899	34981 700368	83341	172763	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dimethylphenol	NPT	Ave	8285 674066	39912 984501	79509 1283660	182706	364613	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzoic acid	NPT	Ave	3719 347033	18159 569795	44756 755443	69151	167640	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethoxy)methane	NPT	Ave	9678 760496	46872 1111185	93380 1422812	208624	414415	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dichlorophenol	NPT	Ave	5975 540737	28520 808716	58017 1082605	135072	267784	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4-Trichlorobenzene	NPT	Ave	7474 597997	33699 903986	66138 1215260	149145	298977	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Naphthalene	NPT	Ave	20898 1817287	102431 2628296	199105 3483887	456345	905094	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloroaniline	NPT	Ave	8670 759019	43825 1116998	83277 1525139	194498	392876	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dichlorophenol	NPT	Ave	6015 499244	28622 737650	57110 1021764	127294	249893	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobutadiene	NPT	Ave	4264 371194	21922 592444	40017 795198	92427	189570	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Caprolactam	NPT	Ave	1762 196869	9150 294375	20686 396132	48316	99825	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloro-3-methylphenol	NPT	Ave	7797 619234	34248 921497	66758 1220924	160508	317428	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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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	14626 1227228	69929 1885793	139053 2552895	331687	652898	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1-Methylnaphthalene	NPT	Ave	14269 1154322	67055 1729345	134780 2330279	303576	592243	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorocyclopentadiene	ANT	Ave	3679 456813	19534 723942	39734 1022759	100254	207507	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4,5-Tetrachlorobenzene	ANT	Ave	7401 613931	32155 955858	66478 1318482	149837	290891	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Trichlorophenol	ANT	Ave	4652 385166	21690 595371	41623 858126	99741	203816	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,5-Trichlorophenol	ANT	Ave	4332 408257	23113 626458	44783 872006	103819	203865	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,1'-Biphenyl	ANT	Ave	16702 1442717	83938 2207294	162979 3048156	380526	755928	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chloronaphthalene	ANT	Ave	13030 1088635	64124 1640659	127962 2320436	283750	573048	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitroaniline	ANT	Ave	6619 511524	28374 746894	52505 1006369	128926	260367	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dimethyl phthalate	ANT	Ave	15806 1363162	75282 2027794	151682 2904843	351937	708483	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dinitrobenzene	ANT	Ave	1424 198553	8554 296721	18588 405963	46973	98524	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dinitrotoluene	ANT	Ave	+++++ 283837	14095 429040	31549 587398	76301	147543	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthylene	ANT	Ave	19783 1723697	96588 2557344	187350 3522766	448172	891666	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3-Nitroaniline	ANT	Ave	3199 338184	15889 503542	34142 687499	84823	173890	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthene	ANT	Ave	13795 1142522	65016 1791676	125259 2437223	292150	583826	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dinitrophenol	ANT	Lin1	+++++ 439772	+++++ 745094	37255 1070407	85981	191508	+++++ 80.0	+++++ 120	8.00 160	20.0	40.0
4-Nitrophenol	ANT	Ave	4172 489614	24570 723538	50357 993301	121469	247469	0.760 80.0	4.00 120	8.00 160	20.0	40.0
2,4-Dinitrotoluene	ANT	Ave	3216 416709	19598 613979	40810 839002	96728	206940	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenzofuran	ANT	Ave	19085 1566075	95426 2336397	181943 3246760	414966	813993	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,5,6-Tetrachlorophenol	ANT	Ave	3400 356352	16662 545237	34472 747719	83709	173959	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	3237 342360	17317 535363	37706 729780	86436	174139	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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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	13046 1174909	68167 1758659	132466 2309188	309971	611184	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Diethyl phthalate	ANT	Ave	+++++ 1358019	85499 2115541	159866 2748874	347390	677332	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexadecane	NPT	Ave	12925 1017274	63480 1316078	122327 1631150	287290	562285	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chlorophenyl phenyl ether	ANT	Ave	7914 674170	37258 1042026	71655 1496954	170248	343751	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitroaniline	ANT	Ave	3140 352099	17323 545758	37770 755311	89543	180591	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluorene	ANT	Ave	14880 1278934	73846 2032129	141115 2814750	326141	655763	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4,6-Dinitro-2-methylphenol	PHN	Ave	+++++ 465594	16948 750417	40313 1055410	102878	227886	+++++ 80.0	4.00 120	8.00 160	20.0	40.0
N-Nitrosodiphenylamine	PHN	Ave	11544 982982	56137 1514935	109959 2061513	251910	518875	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	20754 1862680	106585 2760311	212629 3688761	491093	979956	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Bromophenyl phenyl ether	PHN	Ave	4093 389416	22078 595605	42687 815433	98586	195685	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobenzene	PHN	Ave	3971 339906	19792 522674	38421 723193	88403	178984	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Atrazine	PHN	Ave	3937 384242	21338 558612	43411 750881	101090	201002	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pentachlorophenol	PHN	Ave	6636 551212	26762 1008320	59434 1469785	120265	259365	0.760 80.0	4.00 120	8.00 160	20.0	40.0
n-Octadecane	DCBd 4	Ave	12413 1130570	66287 1457355	127760 1702759	310290	609515	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenanthrene	PHN	Ave	22420 1968305	107531 2974567	215392 4042929	498649	1010755	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Anthracene	PHN	Ave	19650 1995795	110322 3058234	222169 4215523	516922	1030787	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Carbazole	PHN	Ave	20666 1876376	107397 2838003	209380 3826800	477720	989573	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-butyl phthalate	PHN	Ave	21408 2428240	123042 3672439	254679 4910568	625543	1256081	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluoranthene	PHN	Ave	23622 2289728	124529 3393368	246604 4592389	588677	1198338	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzidine	CRY	Ave	9361 1265204	52714 1763570	111792 2157260	308210	677859	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyrene	CRY	Ave	23171 2309264	123765 3444231	252841 4633897	588222	1192985	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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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	11179 1144250	53023 1728596	110734 2288949	277861	588474	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3,3'-Dichlorobenzidine	CRY	Ave	8121 829958	35841 1239842	78145 1635492	192002	408824	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	11627 1492519	67055 2255911	145355 3052673	372544	775005	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]anthracene	CRY	Ave	24098 2151591	118490 3186957	234592 4396388	551343	1118285	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Chrysene	CRY	Ave	21845 2086682	110110 3170410	223892 4201601	528762	1059696	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-octyl phthalate	PRY	Ave	+++++ 2616991	94133 4021742	207279 5409474	579311	1287986	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
7,12-Dimethylbenz(a)anthracene	PRY	Ave	8806 1027009	50905 1568586	98233 2094751	247448	520950	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[b]fluoranthene	PRY	Ave	19475 2099238	112508 3274484	221771 4369329	516523	1093946	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[k]fluoranthene	PRY	Ave	20012 2083567	105521 3044979	218232 4241328	535631	1058706	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[e]pyrene	PRY	Ave	18754 1960253	98336 2962294	203512 4028926	480798	1030287	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]pyrene	PRY	Ave	18012 2024705	97891 3099940	192833 4135420	493323	1031683	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Indeno[1,2,3-cd]pyrene	PRY	Ave	17980 2226701	98710 3389090	217740 4491800	510298	1113450	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenz(a,h)anthracene	PRY	Ave	23786 1808110	95264 2849018	191512 3770286	433750	902512	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[g,h,i]perylene	PRY	Ave	16070 1912322	86870 2912118	182145 3934887	441336	962965	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorophenol (Surr)	DCBd 4	Ave	7020 598868	34316 892195	68209 1159662	160480	325608	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol-d5 (Surr)	DCBd 4	Ave	10010 787359	49204 1133986	95627 1462599	211987	425892	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene-d5 (Surr)	NPT	Ave	9451 761426	46105 1117027	88360 1416811	207730	407648	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorobiphenyl	ANT	Ave	16256 1317138	79029 2021588	157636 2784904	342266	683940	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Tribromophenol (Surr)	PHN	Ave	1122 152853	7154 233686	14249 327888	34910	75008	0.380 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Terphenyl-d14 (Surr)	CRY	Ave	16856 1514692	83233 2330273	166076 3202703	387547	804043	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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-225193/3	D10090003.D
Level 2	IC 180-225193/4	D10090004.D
Level 3	IC 180-225193/5	D10090005.D
Level 4	ICIS 180-225193/6	D10090006.D
Level 5	IC 180-225193/7	D10090007.D
Level 6	IC 180-225193/8	D10090008.D
Level 7	IC 180-225193/9	D10090009.D
Level 8	IC 180-225193/10	D10090010.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	-1.0 3.7	-4.0 -1.1	0.8	-1.7	0.8	2.4	50 30	30 30	30	30	30	30
N-Nitrosodimethylamine	15.8 0.2	-9.5 -3.6	-1.3	0.3	-1.3	-0.6	50 30	30 30	30	30	30	30
Pyridine	5.9 -4.4	4.4 -9.8	2.6	4.3	-0.1	-2.7	50 30	30 30	30	30	30	30
Methyl methanesulfonate	3.9 2.7	-2.5 -5.6	0.5	1.1	0.8	-1.0	50 30	30 30	30	30	30	30
Benzaldehyde	+++++ -8.7	8.4 -20.6	9.4	3.5	9.3	-1.4	 30	50 30	30	30	30	30
Phenol	31.4 -10.2	0.8 -17.6	4.5	3.4	-4.7	-7.6	50 30	30 30	30	30	30	30
Aniline	20.9 -8.4	6.0 -16.6	6.4	4.0	-4.3	-8.0	50 30	30 30	30	30	30	30
Bis(2-chloroethyl)ether	18.8 -4.6	6.4 -11.4	1.0	-0.9	-2.1	-7.2	50 30	30 30	30	30	30	30
2-Chlorophenol	21.0 -3.8	-1.3 -9.4	1.2	1.1	-4.6	-4.2	50 30	30 30	30	30	30	30
n-Decane	+++++ -9.0	13.8 -16.6	11.1	5.2	1.5	-6.0	 30	50 30	30	30	30	30
1,3-Dichlorobenzene	17.5 -4.2	4.0 -8.6	0.3	-1.6	-4.2	-3.2	50 30	30 30	30	30	30	30
1,4-Dichlorobenzene	16.4 -2.2	1.1 -7.9	0.1	-2.6	-2.4	-2.5	50 30	30 30	30	30	30	30
Benzyl alcohol	14.1 -1.1	-4.1 -6.4	0.7	-2.1	-0.4	-0.8	50 30	30 30	30	30	30	30
1,2-Dichlorobenzene	10.5 -2.3	3.3 -7.9	2.4	-0.3	-3.2	-2.5	50 30	30 30	30	30	30	30
2-Methylphenol	6.1 -3.2	1.5 -8.5	3.7	3.3	-1.0	-2.1	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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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	16.8 -4.6	4.2 -9.5	4.0	-1.3	-4.1	-5.5	50 30	30 30	30	30	30	30
2,2'-oxybis[1-chloropropane]	-2.4 -12.0	8.1 +++++	8.2	7.1	-2.6	-6.4	50 30	30	30	30	30	30
N-Nitrosopyrrolidine	0.5 5.7	-5.5 -0.7	-5.7	-0.6	2.0	4.2	50 30	30 30	30	30	30	30
Methylphenol, 3 & 4	13.4 -5.7	3.6 -11.4	3.6	1.1	-3.7	-0.9	50 30	30 30	30	30	30	30
N-Nitrosodi-n-propylamine	20.2 -12.3	7.4 -22.1	10.4	6.3	-2.7	-7.2	50 30	30 30	30	30	30	30
Acetophenone	14.8 -9.3	9.7 -15.7	7.2	0.4	-2.5	-4.7	50 30	30 30	30	30	30	30
Hexachloroethane	6.9 0.4	-2.3 -6.0	-0.6	1.7	0.1	-0.2	50 30	30 30	30	30	30	30
Nitrobenzene	29.4 -12.6	5.1 -16.9	5.7	0.9	-3.6	-8.0	50 30	30 30	30	30	30	30
Isophorone	5.9 -4.4	0.6 -8.9	4.7	4.4	0.6	-3.0	50 30	30 30	30	30	30	30
2-Nitrophenol	-16.9 6.3	-7.6 8.6	-0.9	2.5	2.6	5.3	50 30	30 30	30	30	30	30
2,4-Dimethylphenol	9.1 -6.5	-0.4 -7.6	4.6	4.3	0.5	-3.9	50 30	30 30	30	30	30	30
Benzoic acid	-1.3 9.1	-8.7 9.6	18.7	-20.4	-6.8	-0.2	50 30	30 30	30	30	30	30
Bis(2-chloroethoxy)methane	11.2 -8.0	2.0 -10.7	7.2	4.0	-0.3	-5.4	50 30	30 30	30	30	30	30
2,4-Dichlorophenol	3.4 0.9	-6.5 2.3	0.3	1.4	-3.0	1.3	50 30	30 30	30	30	30	30
1,2,4-Trichlorobenzene	13.2 -1.3	-3.3 0.6	0.0	-2.0	-5.2	-1.9	50 30	30 30	30	30	30	30
Naphthalene	6.8 -3.2	-0.9 -2.8	1.6	1.1	-3.2	0.5	50 30	30 30	30	30	30	30
4-Chloroaniline	4.2 -3.2	-0.2 0.2	0.0	1.4	-1.1	-1.2	50 30	30 30	30	30	30	30
2,6-Dichlorophenol	8.9 -3.7	-1.9 1.0	3.2	-0.1	-5.3	-2.2	50 30	30 30	30	30	30	30
Hexachlorobutadiene	3.3 3.5	0.6 5.2	-3.2	-2.9	-3.9	-2.6	50 30	30 30	30	30	30	30
Caprolactam	-12.8 5.0	-14.2 7.1	2.2	3.7	3.4	5.5	50 30	30 30	30	30	30	30
4-Chloro-3-methylphenol	14.3 -2.6	-4.9 -2.2	-2.3	2.0	-2.6	-1.7	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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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	5.7 -1.7	-4.2 0.8	0.4	4.0	-1.2	-3.9	50 30	30 30	30	30	30	30
1-Methylnaphthalene	10.1 -3.8	-2.0 -1.8	3.9	1.6	-4.3	-3.6	50 30	30 30	30	30	30	30
Hexachlorocyclopentadiene	-17.2 17.4	-16.3 20.6	-8.1	-4.7	-2.2	10.4	50 30	30 30	30	30	30	30
1,2,4,5-Tetrachlorobenzene	11.3 3.6	-7.9 3.9	2.8	-4.7	-8.3	-0.8	50 30	30 30	30	30	30	30
2,4,6-Trichlorophenol	7.9 -0.4	-4.2 4.4	-0.7	-2.2	-0.9	-4.0	50 30	30 30	30	30	30	30
2,4,5-Trichlorophenol	-2.3 1.8	-0.8 3.1	3.9	-1.0	-3.6	-1.1	50 30	30 30	30	30	30	30
1,1'-Biphenyl	3.8 -1.1	-0.7 -0.7	4.1	-0.1	-1.6	-3.7	50 30	30 30	30	30	30	30
2-Chloronaphthalene	6.3 -3.5	-0.4 -0.8	7.3	-2.2	-2.1	-4.6	50 30	30 30	30	30	30	30
2-Nitroaniline	19.0 -3.2	-2.8 -5.1	-2.9	-2.0	-1.9	-1.1	50 30	30 30	30	30	30	30
Dimethyl phthalate	5.4 -2.5	-4.4 1.5	4.0	-0.8	-1.0	-2.3	50 30	30 30	30	30	30	30
1,3-Dinitrobenzene	-26.1 11.0	-15.5 10.4	-0.8	3.0	7.2	10.7	50 30	30 30	30	30	30	30
2,6-Dinitrotoluene	+++++ 0.8	-12.5 0.4	5.8	5.2	0.8	-0.5	 30	50 30	30	30	30	30
Acenaphthylene	5.2 -2.0	-2.2 -1.9	2.4	0.7	-0.7	-1.5	50 30	30 30	30	30	30	30
3-Nitroaniline	-8.0 4.3	-13.0 3.6	0.9	3.1	4.7	4.5	50 30	30 30	30	30	30	30
Acenaphthene	8.6 1.7	-2.5 0.6	1.4	-2.8	-3.7	-3.3	50 30	30 30	30	30	30	30
2,4-Dinitrophenol	+++++ 2.4	+++++ 5.9	25.6	-11.1	-15.2	-7.6	 30	 30	50	30	30	30
4-Nitrophenol	-16.6 4.2	-6.5 4.0	3.5	2.6	3.6	5.1	50 30	30 30	30	30	30	30
2,4-Dinitrotoluene	-21.7 7.7	-9.2 7.0	2.1	-0.5	5.5	9.0	50 30	30 30	30	30	30	30
Dibenzofuran	8.1 -4.6	2.9 -3.6	6.0	-0.7	-3.4	-4.7	50 30	30 30	30	30	30	30
2,3,5,6-Tetrachlorophenol	-6.1 8.5	-12.4 8.2	-2.1	-2.3	0.6	5.7	50 30	30 30	30	30	30	30
2,3,4,6-Tetrachlorophenol	-10.9 6.2	-9.3 5.2	6.7	0.5	0.4	1.2	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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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	1.4 -1.5	0.8 -6.0	5.9	1.8	-0.5	-1.9	50 30	30 30	30	30	30	30
Diethyl phthalate	+++++ 0.8	7.7 -4.7	8.7	-2.9	-6.1	-3.5	 30	50 30	30	30	30	30
Hexadecane	13.9 -16.4	5.9 -21.5	7.6	9.8	3.7	-3.0	50 30	30 30	30	30	30	30
4-Chlorophenyl phenyl ether	6.6 1.2	-4.4 5.7	-0.7	-3.0	-2.9	-2.4	50 30	30 30	30	30	30	30
4-Nitroaniline	-15.0 6.4	-10.8 7.1	5.1	2.4	2.4	2.4	50 30	30 30	30	30	30	30
Fluorene	4.3 2.7	-1.4 3.4	1.7	-3.4	-3.7	-3.7	50 30	30 30	30	30	30	30
4,6-Dinitro-2-methylphenol	+++++ 15.9	-26.3 15.4	-10.3	-2.5	2.1	5.6	 30	50 30	30	30	30	30
N-Nitrosodiphenylamine	13.5 -2.2	2.0 -5.8	2.3	-0.2	-2.8	-6.8	50 30	30 30	30	30	30	30
1,2-Diphenylhydrazine(as Azobenzene)	9.0 -4.7	3.5 -9.9	5.7	4.0	-1.9	-5.6	50 30	30 30	30	30	30	30
4-Bromophenyl phenyl ether	4.4 -0.2	4.1 -3.4	3.0	1.3	-5.0	-4.2	50 30	30 30	30	30	30	30
Hexachlorobenzene	12.2 -3.0	3.4 -5.0	2.8	0.7	-3.7	-7.4	50 30	30 30	30	30	30	30
Atrazine	2.4 -4.6	2.6 -9.2	6.9	6.0	-0.4	-3.6	50 30	30 30	30	30	30	30
Pentachlorophenol	16.0 15.8	-13.5 19.4	-1.7	-15.3	-13.6	-7.1	50 30	30 30	30	30	30	30
n-Octadecane	5.8 -8.5	4.3 -22.7	3.5	9.3	5.3	3.0	50 30	30 30	30	30	30	30
Phenanthrene	12.5 -1.9	-0.2 -5.7	2.4	0.9	-3.3	-4.7	50 30	30 30	30	30	30	30
Anthracene	-2.1 0.2	1.7 -2.3	4.8	3.9	-2.1	-4.0	50 30	30 30	30	30	30	30
Carbazole	8.1 -2.5	3.8 -7.0	3.6	0.7	-1.4	-5.4	50 30	30 30	30	30	30	30
Di-n-butyl phthalate	-8.8 2.8	-3.1 -2.8	2.7	7.4	1.9	-0.2	50 30	30 30	30	30	30	30
Fluoranthene	3.7 -2.2	1.1 -6.3	2.5	4.2	0.2	-3.1	50 30	30 30	30	30	30	30
Benzidine	-18.2 4.3	-13.3 -6.5	-6.3	7.7	17.6	14.8	50 30	30 30	30	30	30	30
Pyrene	-1.5 -0.9	-1.0 -2.3	3.1	0.0	0.7	2.0	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.: 180-71580-1 Analy Batch No.: 225193

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2017 04:57 Calibration End Date: 10/09/2017 08:02 Calibration ID: 35705

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	0.0 4.5	-10.8 1.4	-5.0	-0.7	4.4	6.2	50 30	30 30	30	30	30	30
3,3'-Dichlorobenzidine	2.7 6.1	-14.7 2.5	-5.2	-2.9	2.6	9.0	50 30	30 30	30	30	30	30
Bis(2-ethylhexyl) phthalate	-18.6 6.8	-11.8 5.9	-2.4	4.2	7.6	8.4	50 30	30 30	30	30	30	30
Benzo[a]anthracene	7.8 -3.6	-0.3 -2.5	0.7	-1.4	-0.7	0.0	50 30	30 30	30	30	30	30
Chrysene	2.7 0.8	-2.6 -2.1	1.0	-0.6	-1.1	1.9	50 30	30 30	30	30	30	30
Di-n-octyl phthalate	+++++ 8.8	-21.8 8.2	-12.5	1.1	5.8	10.4	 30	50 30	30	30	30	30
7,12-Dimethylbenz(a)anthracene	-6.3 0.7	0.5 -0.5	-1.5	2.6	1.6	2.9	50 30	30 30	30	30	30	30
Benzo[b]fluoranthene	-2.9 -1.5	4.1 -2.8	4.2	0.4	0.0	-1.4	50 30	30 30	30	30	30	30
Benzo[k]fluoranthene	1.7 -6.6	-0.5 -3.8	4.6	6.1	-1.3	-0.3	50 30	30 30	30	30	30	30
Benzo[e]pyrene	1.3 -3.4	-1.5 -2.9	3.6	1.2	2.0	-0.3	50 30	30 30	30	30	30	30
Benzo[a]pyrene	-3.1 0.7	-2.3 -0.7	-2.2	3.4	1.7	2.6	50 30	30 30	30	30	30	30
Indeno[1,2,3-cd]pyrene	-9.3 3.2	-7.6 1.1	3.5	0.3	3.0	5.8	50 30	30 30	30	30	30	30
Dibenz(a,h)anthracene	32.1 -4.5	-1.8 -6.5	0.3	-6.1	-8.1	-5.4	50 30	30 30	30	30	30	30
Benzo[g,h,i]perylene	-6.4 2.4	-6.1 2.3	0.0	0.2	2.8	4.9	50 30	30 30	30	30	30	30
2-Fluorophenol (Surr)	7.5 0.7	-3.0 -5.4	-0.7	1.6	1.1	-1.9	50 30	30 30	30	30	30	30
Phenol-d5 (Surr)	14.1 -4.7	3.6 -11.2	3.7	0.0	-1.5	-4.0	50 30	30 30	30	30	30	30
Nitrobenzene-d5 (Surr)	10.2 -6.1	1.9 -9.7	2.9	5.1	-0.5	-3.8	50 30	30 30	30	30	30	30
2-Fluorobiphenyl	8.7 -2.6	0.6 -2.4	8.4	-3.3	-4.2	-5.4	50 30	30 30	30	30	30	30
2,4,6-Tribromophenol (Surr)	-19.6 10.0	-5.2 9.2	-3.3	0.8	2.4	5.6	50 30	30 30	30	30	30	30
Terphenyl-d14 (Surr)	6.0 -0.9	-1.6 -0.2	0.2	-2.6	0.3	-1.1	50 30	30 30	30	30	30	30

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090003.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 09-Oct-2017 04:57:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018773-003
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Oct-2017 08:46:38 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 09-Oct-2017 06:12:54

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	6.204	6.193	0.011	98	106770	8.00	8.00	
* 2 Naphthalene-d8	136	7.475	7.470	0.005	99	398674	8.00	8.00	
* 3 Acenaphthene-d10	164	9.174	9.163	0.011	98	205538	8.00	8.00	
* 4 Phenanthrene-d10	188	10.606	10.600	0.006	97	394239	8.00	8.00	
* 5 Chrysene-d12	240	14.334	14.329	0.005	98	381595	8.00	8.00	
* 6 Perylene-d12	264	17.209	17.203	0.006	97	345960	8.00	8.00	
$ 7 2-Fluorophenol	112	4.761	4.745	0.016	92	7020	0.3800	0.4085	
$ 8 Phenol-d5	99	5.819	5.808	0.011	93	10010	0.3800	0.4337	
$ 9 Nitrobenzene-d5	82	6.759	6.749	0.010	91	9451	0.3800	0.4189	
$ 10 2-Fluorobiphenyl	172	8.506	8.501	0.005	98	16256	0.3800	0.4131	
$ 11 2,4,6-Tribromophenol	330	9.922	9.917	0.005	73	1122	0.3800	0.3055	
$ 12 Terphenyl-d14	244	12.513	12.513	0.000	97	16856	0.3800	0.4027	
13 1,4-Dioxane	88	1.631	1.609	0.022	0	2259	0.3800	0.3764	M
14 N-Nitrosodimethylamine	74	2.250	2.218	0.032	72	3845	0.3800	0.4399	M
15 Pyridine	79	2.341	2.283	0.059	97	12987	0.7600	0.8048	M
21 Methyl methanesulfonate	80	4.521	4.500	0.021	80	4350	0.3800	0.3948	
25 Benzaldehyde	77	5.733	5.723	0.010	90	8773	0.3800	0.5934	
26 Phenol	94	5.835	5.819	0.016	86	12600	0.3800	0.4992	
27 Aniline	93	5.851	5.840	0.011	96	12999	0.3800	0.4594	
29 Bis(2-chloroethyl)ether	93	5.926	5.910	0.016	93	7696	0.3800	0.4515	
30 2-Chlorophenol	128	5.979	5.969	0.010	92	8446	0.3800	0.4600	
31 n-Decane	43	6.049	6.033	0.016	89	8637	0.3800	0.5134	
32 1,3-Dichlorobenzene	146	6.145	6.134	0.011	95	9298	0.3800	0.4465	
33 1,4-Dichlorobenzene	146	6.220	6.209	0.011	6	9038	0.3800	0.4423	
34 Benzyl alcohol	108	6.337	6.327	0.010	85	5111	0.3800	0.4337	
35 1,2-Dichlorobenzene	146	6.380	6.369	0.011	90	8093	0.3800	0.4200	
36 2-Methylphenol	108	6.449	6.439	0.010	89	6610	0.3800	0.4032	
37 Indene	116	6.465	6.460	0.005	89	13704	0.3800	0.4440	
38 2,2'-oxybis[1-chloropropan	45	6.481	6.471	0.010	88	11601	0.3800	0.3709	
39 N-Nitrosopyrrolidine	100	6.572	6.562	0.010	76	3142	0.3800	0.3817	
41 N-Nitrosodi-n-propylamine	70	6.604	6.594	0.010	85	6315	0.3800	0.4569	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.604	6.594	0.010	78	11158	0.3800	0.4361	
42 4-Methylphenol	108	6.599	6.594	0.005	85	7403	0.3800	0.4309	
45 Hexachloroethane	117	6.727	6.717	0.010	85	3576	0.3800	0.4063	
46 Nitrobenzene	77	6.775	6.765	0.010	87	11609	0.3800	0.4917	
48 Isophorone	82	7.010	7.000	0.010	97	16155	0.3800	0.4023	
49 2-Nitrophenol	139	7.096	7.085	0.011	77	2929	0.3800	0.3158	
50 2,4-Dimethylphenol	107	7.122	7.117	0.005	93	8285	0.3800	0.4146	
52 Benzoic acid	122	7.149	7.160	-0.011	82	3719	0.3800	0.3752	
53 Bis(2-chloroethoxy)methane	93	7.213	7.208	0.005	91	9678	0.3800	0.4226	
54 2,4-Dichlorophenol	162	7.331	7.320	0.011	95	5975	0.3800	0.3929	
56 1,2,4-Trichlorobenzene	180	7.422	7.411	0.011	88	7474	0.3800	0.4301	
58 Naphthalene	128	7.496	7.491	0.005	98	20898	0.3800	0.4057	
59 4-Chloroaniline	127	7.539	7.529	0.010	92	8670	0.3800	0.3960	
60 2,6-Dichlorophenol	162	7.550	7.545	0.005	88	6015	0.3800	0.4137	
62 Hexachlorobutadiene	225	7.619	7.614	0.005	92	4264	0.3800	0.3925	
64 Caprolactam	113	7.833	7.828	0.005	70	1762	0.3800	0.3314	
67 4-Chloro-3-methylphenol	107	7.988	7.983	0.005	93	7797	0.3800	0.4343	
69 2-Methylnaphthalene	142	8.164	8.159	0.005	89	14626	0.3800	0.4018	
71 1-Methylnaphthalene	142	8.260	8.255	0.005	90	14269	0.3800	0.4183	
72 Hexachlorocyclopentadiene	237	8.324	8.319	0.005	90	3679	0.3800	0.3145	
73 1,2,4,5-Tetrachlorobenzene	216	8.330	8.325	0.005	92	7401	0.3800	0.4230	
74 2,4,6-Trichlorophenol	196	8.431	8.421	0.010	91	4652	0.3800	0.4102	
75 2,4,5-Trichlorophenol	196	8.458	8.458	0.000	90	4332	0.3800	0.3713	
76 1,1'-Biphenyl	154	8.602	8.602	0.000	97	16702	0.3800	0.3944	
77 2-Chloronaphthalene	162	8.634	8.629	0.005	98	13030	0.3800	0.4039	
79 2-Nitroaniline	65	8.714	8.709	0.005	73	6619	0.3800	0.4524	
82 Dimethyl phthalate	163	8.875	8.869	0.006	83	15806	0.3800	0.4006	
83 1,3-Dinitrobenzene	168	8.912	8.902	0.010	72	1424	0.3800	0.2809	
84 2,6-Dinitrotoluene	165	8.933	8.934	-0.001	71	1915	0.3800	0.2373	
85 Acenaphthylene	152	9.040	9.030	0.010	98	19783	0.3800	0.3997	
86 3-Nitroaniline	138	9.104	9.099	0.005	61	3199	0.3800	0.3494	
88 Acenaphthene	153	9.201	9.195	0.006	95	13795	0.3800	0.4128	
87 2,4-Dinitrophenol	184	9.201	9.195	0.006	65	3237	0.7600	4.86	
89 4-Nitrophenol	109	9.238	9.233	0.005	93	4172	0.7600	0.6337	
91 2,4-Dinitrotoluene	165	9.323	9.318	0.005	85	3216	0.3800	0.2974	
93 Dibenzofuran	168	9.366	9.361	0.005	95	19085	0.3800	0.4108	
95 2,3,5,6-Tetrachlorophenol	232	9.436	9.430	0.006	82	3400	0.3800	0.3567	
96 2,3,4,6-Tetrachlorophenol	232	9.473	9.473	0.000	76	3237	0.3800	0.3384	
97 2-Naphthylamine	143	9.505	9.500	0.005	95	13046	0.3800	0.3852	
98 Diethyl phthalate	149	9.537	9.532	0.005	96	26889	0.3800	0.6758	
99 Hexadecane	57	9.542	9.537	0.005	95	12925	0.3800	0.4327	
100 4-Chlorophenyl phenyl ethe	204	9.676	9.671	0.005	94	7914	0.3800	0.4052	
101 4-Nitroaniline	138	9.687	9.682	0.005	73	3140	0.3800	0.3229	
103 Fluorene	166	9.692	9.687	0.005	89	14880	0.3800	0.3964	
104 4,6-Dinitro-2-methylphenol	198	9.719	9.708	0.011	60	2008	0.7600	0.3589	
105 N-Nitrosodiphenylamine	169	9.783	9.778	0.005	63	11544	0.3800	0.4312	
90 1,2-Diphenylhydrazine	77	9.826	9.820	0.006	98	20754	0.3800	0.4143	
57 Azobenzene	77	9.826	9.820	0.006	98	20754	0.3800	0.4143	
110 4-Bromophenyl phenyl ether	248	10.141	10.136	0.005	79	4093	0.3800	0.3965	
112 Hexachlorobenzene	284	10.226	10.226	0.000	88	3971	0.3800	0.4263	
113 Atrazine	200	10.258	10.258	0.000	83	3937	0.3800	0.3891	
116 Pentachlorophenol	266	10.403	10.397	0.006	81	6636	0.7600	0.8815	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.408	10.403	0.005	92	12413	0.3800	0.4019	
121 Phenanthrene	178	10.632	10.627	0.005	95	22420	0.3800	0.4277	
122 Anthracene	178	10.686	10.681	0.006	98	19650	0.3800	0.3722	
124 Carbazole	167	10.830	10.830	0.000	97	20666	0.3800	0.4107	
126 Di-n-butyl phthalate	149	11.150	11.151	-0.001	98	21408	0.3800	0.3466	
131 Fluoranthene	202	12.027	12.021	0.006	98	23622	0.3800	0.3940	
132 Benzidine	184	12.160	12.150	0.010	35	9361	0.3800	0.3110	M
133 Pyrene	202	12.347	12.342	0.005	94	23171	0.3800	0.3745	
138 Butyl benzyl phthalate	149	13.250	13.250	0.000	92	11179	0.3800	0.3799	
144 3,3'-Dichlorobenzidine	252	14.238	14.233	0.005	73	8121	0.3800	0.3903	M
145 Bis(2-ethylhexyl) phthalat	149	14.286	14.281	0.005	92	11627	0.3800	0.3092	
146 Benzo[a]anthracene	228	14.313	14.308	0.005	98	24098	0.3800	0.4098	
147 Chrysene	228	14.383	14.377	0.005	96	21845	0.3800	0.3904	
150 Di-n-octyl phthalate	149	15.585	15.585	-0.001	50	16501	0.3800	0.2809	M
151 7,12-Dimethylbenz(a)anthra	256	16.423	16.423	0.000	71	8806	0.3800	0.3560	
152 Benzo[b]fluoranthene	252	16.439	16.439	0.000	95	19475	0.3800	0.3689	
153 Benzo[k]fluoranthene	252	16.487	16.488	-0.001	94	20012	0.3800	0.3866	
219 Benzo[e]pyrene	252	16.995	16.995	0.000	0	18754	0.3800	0.3849	
154 Benzo[a]pyrene	252	17.096	17.091	0.005	80	18012	0.3800	0.3682	
157 Indeno[1,2,3-cd]pyrene	276	19.538	19.549	-0.011	41	17980	0.3800	0.3446	M
158 Dibenz(a,h)anthracene	278	19.586	19.575	0.011	1	23786	0.3800	0.5021	M
159 Benzo[g,h,i]perylene	276	20.222	20.216	0.006	78	16070	0.3800	0.3556	M
S 197 Methyl Phenols,Total	108				0		0.7600	0.8341	
S 199 Total Cresols	108				0		0.7600	0.8341	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD0.38i_00004 Amount Added: 1.00 Units: mL

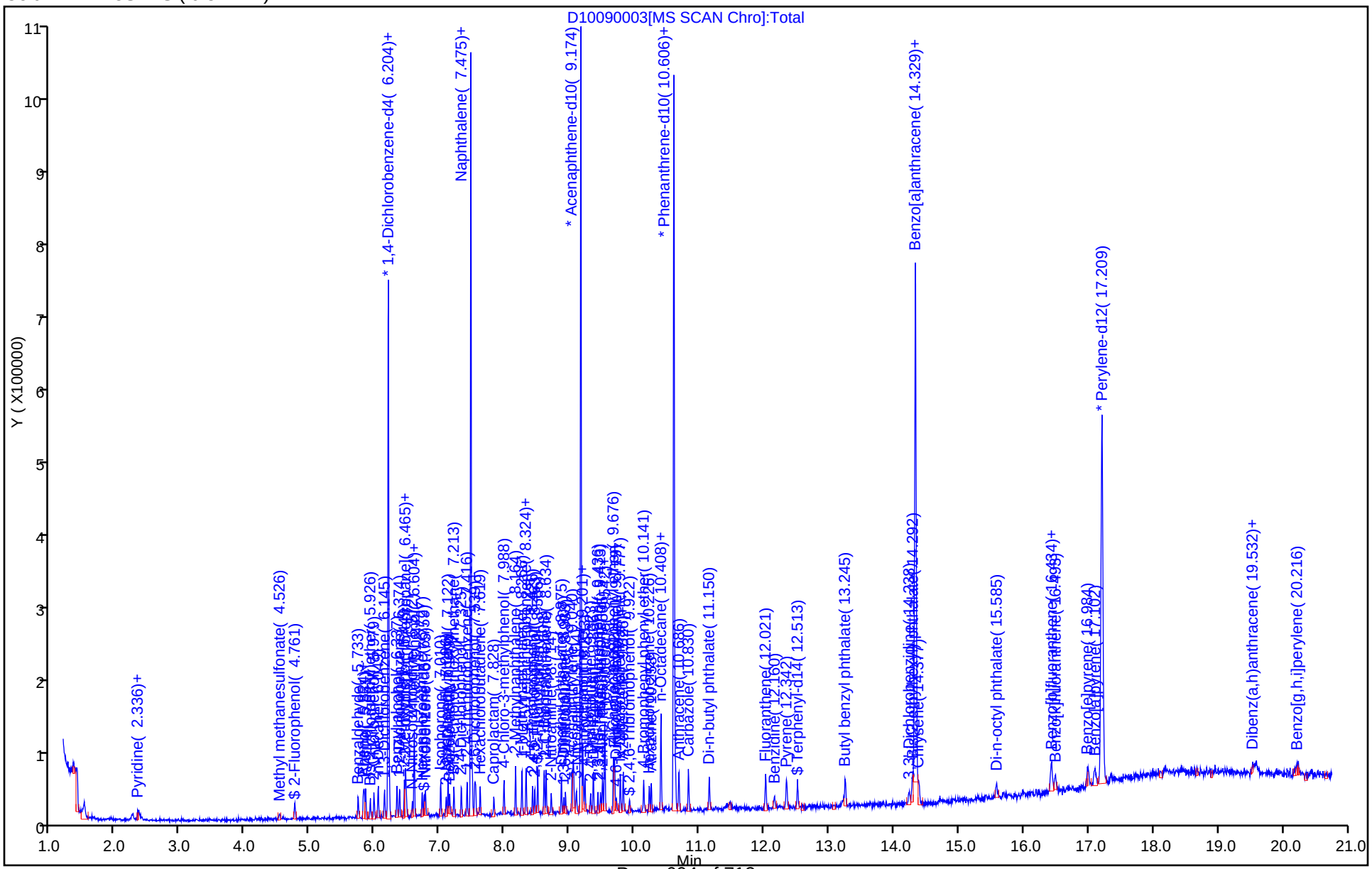
Report Date: 09-Oct-2017 08:46:39 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090003.D

Injection Date:	09-Oct-2017 04:57:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

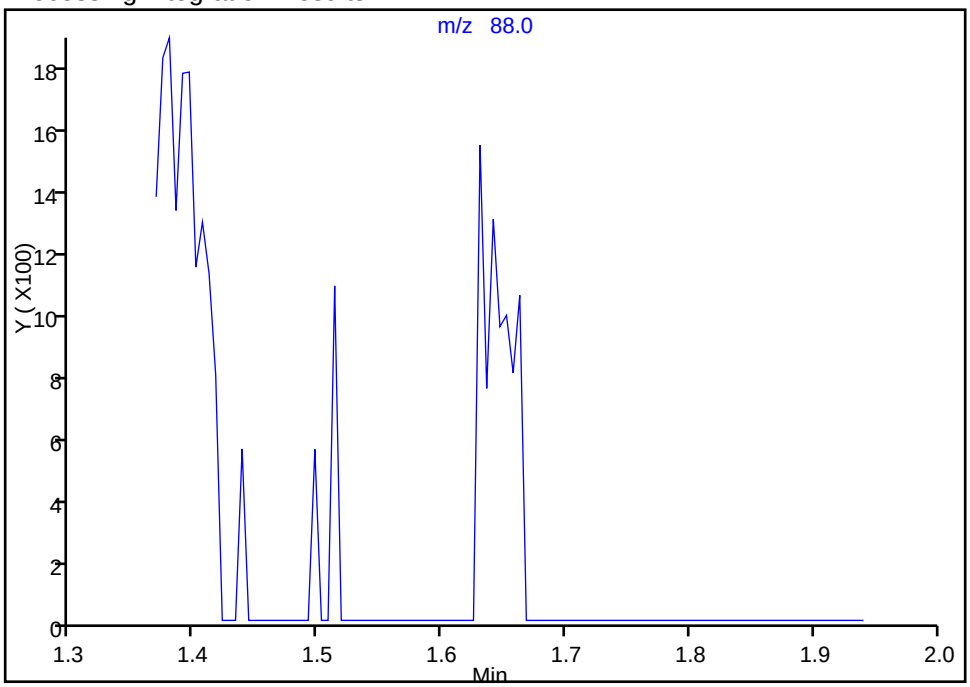
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090003.D				
Injection Date:	09-Oct-2017 04:57:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

13 1,4-Dioxane, CAS: 123-91-1

Signal: 1

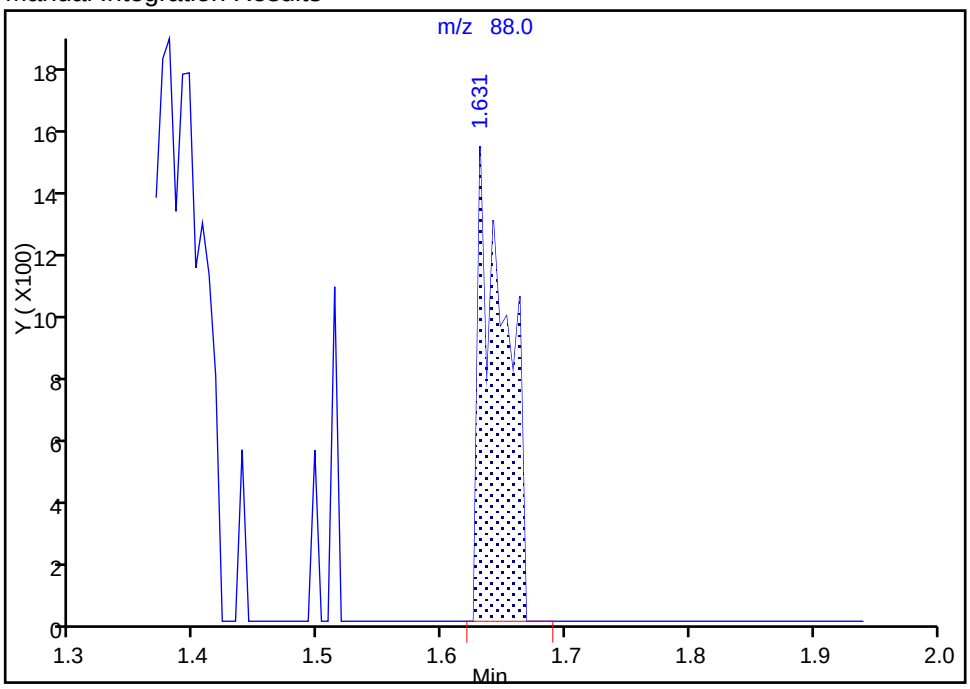
Not Detected
Expected RT: 1.61

Processing Integration Results



Manual Integration Results

RT: 1.63
Area: 2259
Amount: 0.376369
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:54:01
Audit Action: Manually Integrated Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

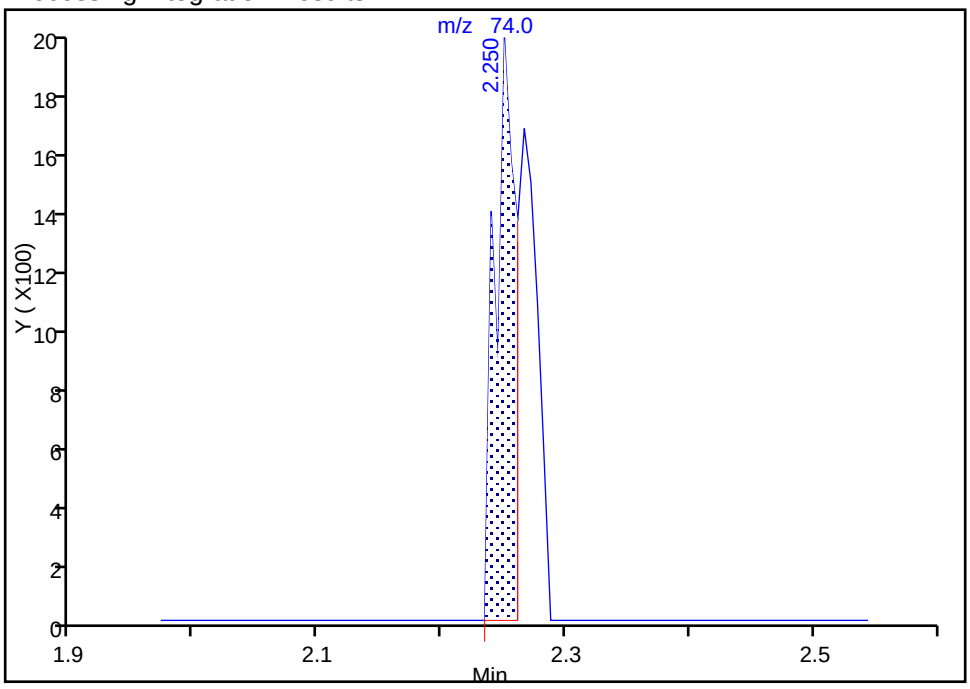
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090003.D
Injection Date: 09-Oct-2017 04:57:30 Instrument ID: CH732
Lims ID: IC
Client ID:
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL
Column: Rxi-5SilMS (0.32 mm) Detector MS SCAN

14 N-Nitrosodimethylamine, CAS: 62-75-9

Signal: 1

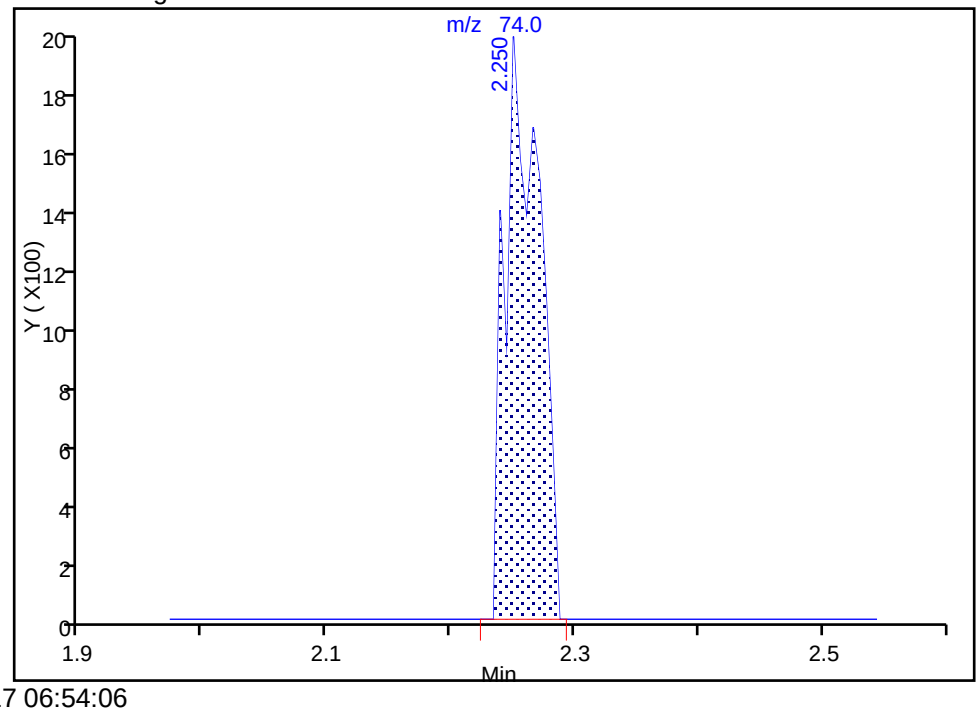
Processing Integration Results

RT: 2.25
Area: 2305
Amount: 0.293888
Amount Units: ng



Manual Integration Results

RT: 2.25
Area: 3845
Amount: 0.439876
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:54:06
Audit Action: Manually Integrated Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

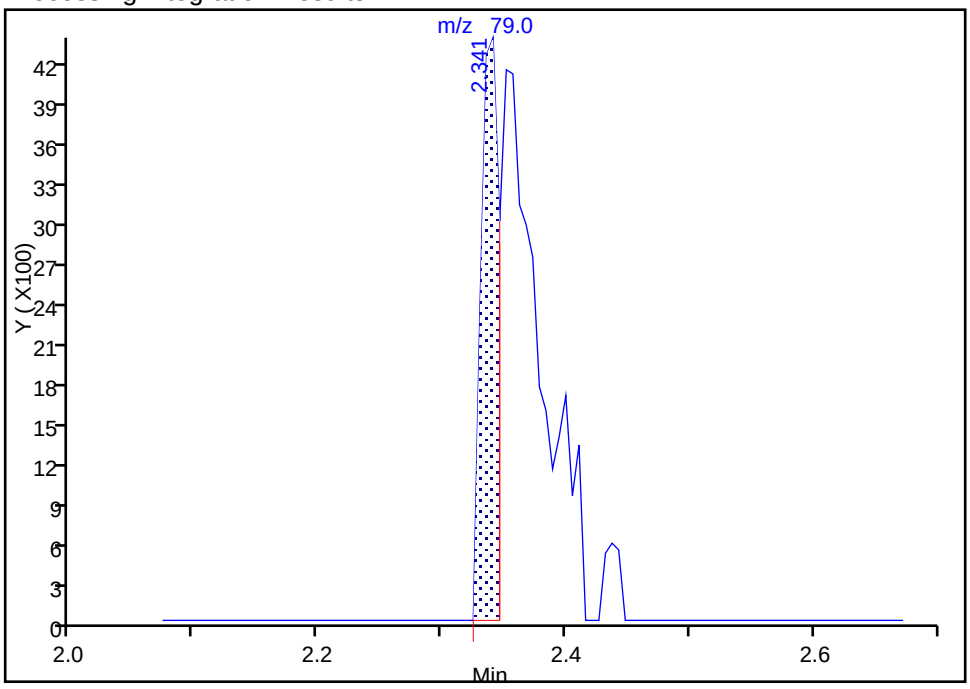
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090003.D				
Injection Date:	09-Oct-2017 04:57:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

Signal: 1

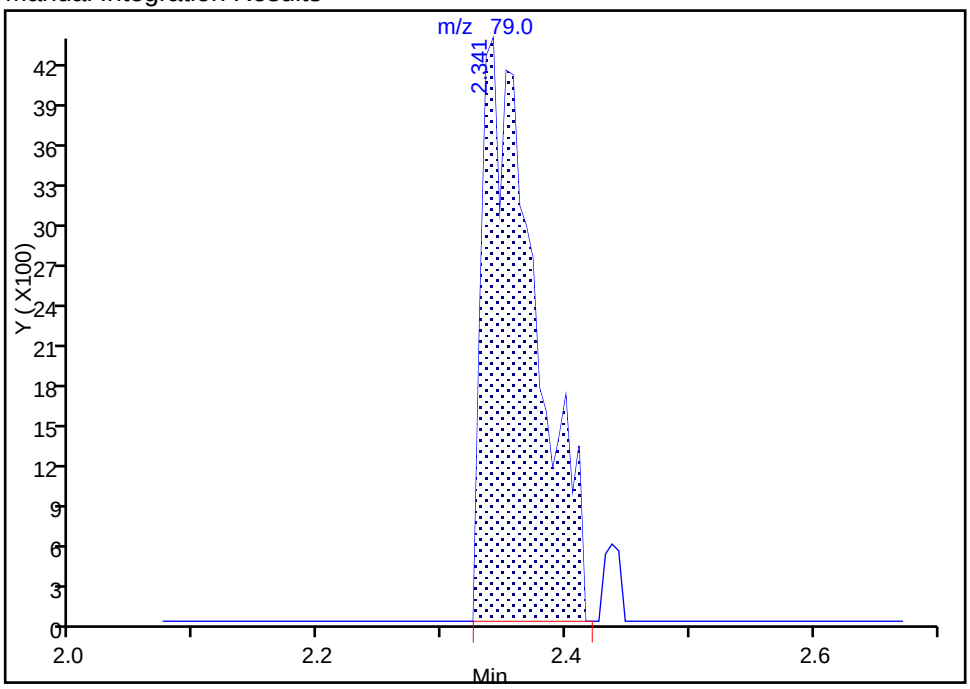
Processing Integration Results

RT: 2.34
Area: 4441
Amount: 0.316866
Amount Units: ng



Manual Integration Results

RT: 2.34
Area: 12987
Amount: 0.804758
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:54:09

Audit Action: Manually Integrated Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

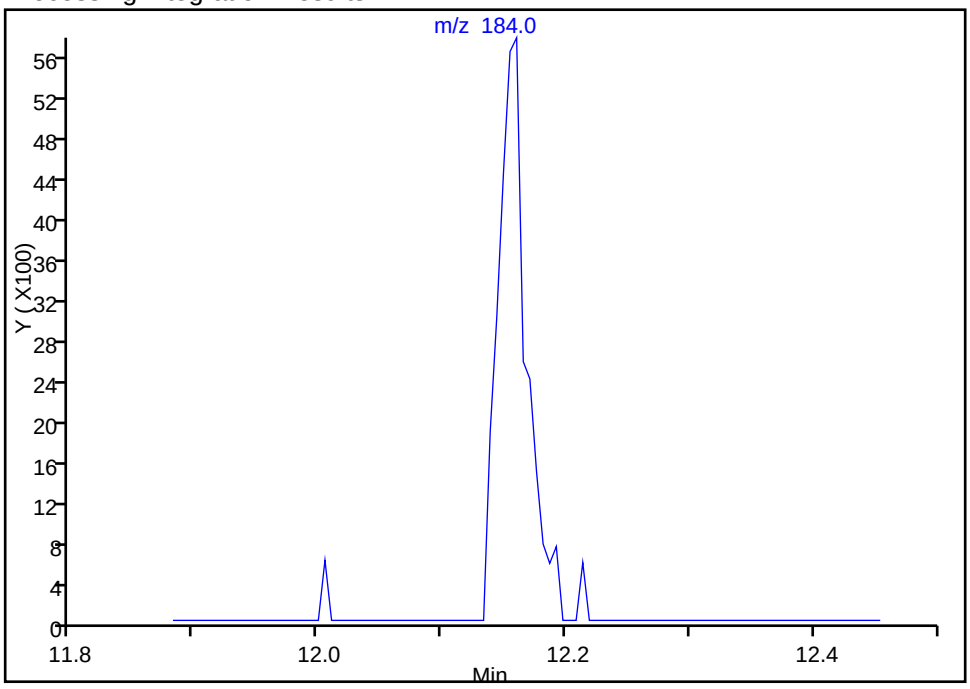
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090003.D				
Injection Date:	09-Oct-2017 04:57:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

132 Benzidine, CAS: 92-87-5

Signal: 1

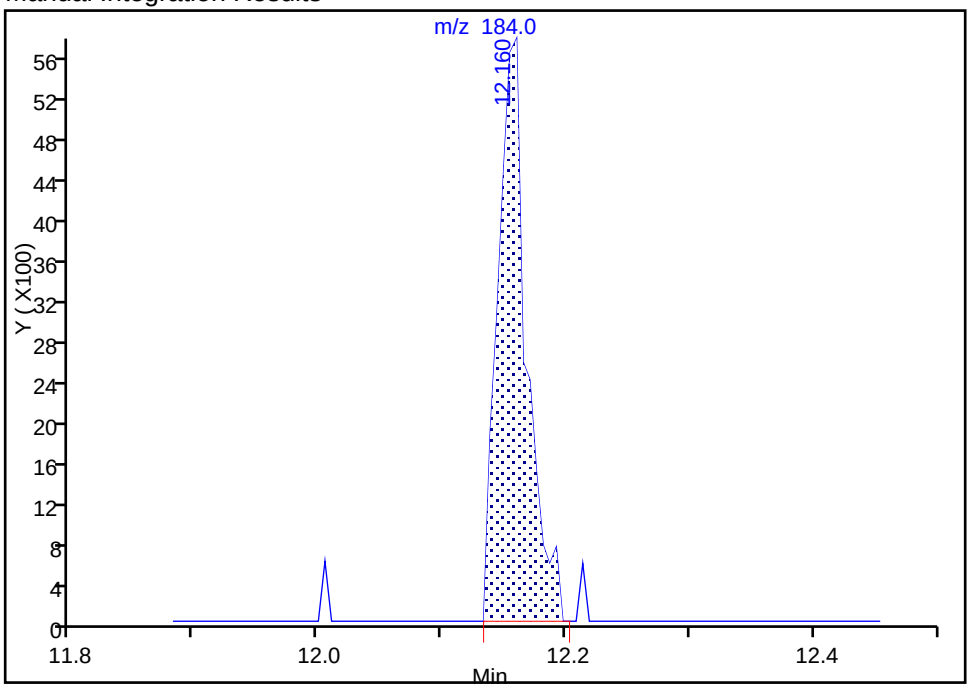
Not Detected
Expected RT: 12.15

Processing Integration Results



Manual Integration Results

RT: 12.16
Area: 9361
Amount: 0.310966
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:55:08
Audit Action: Assigned Compound ID Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

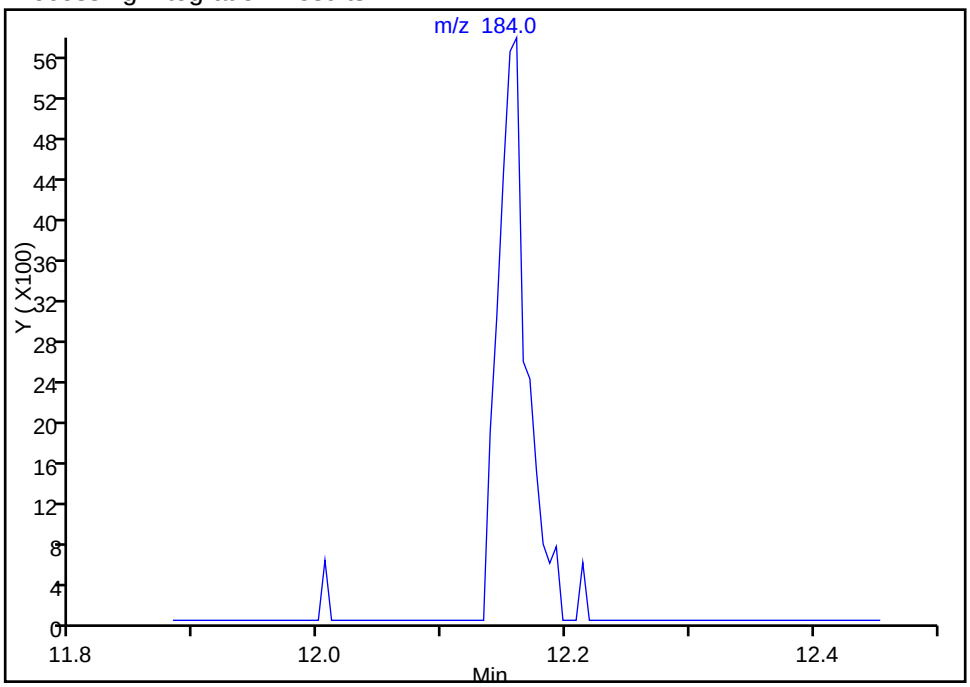
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090003.D				
Injection Date:	09-Oct-2017 04:57:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

132 Benzidine, CAS: 92-87-5

Signal: 1

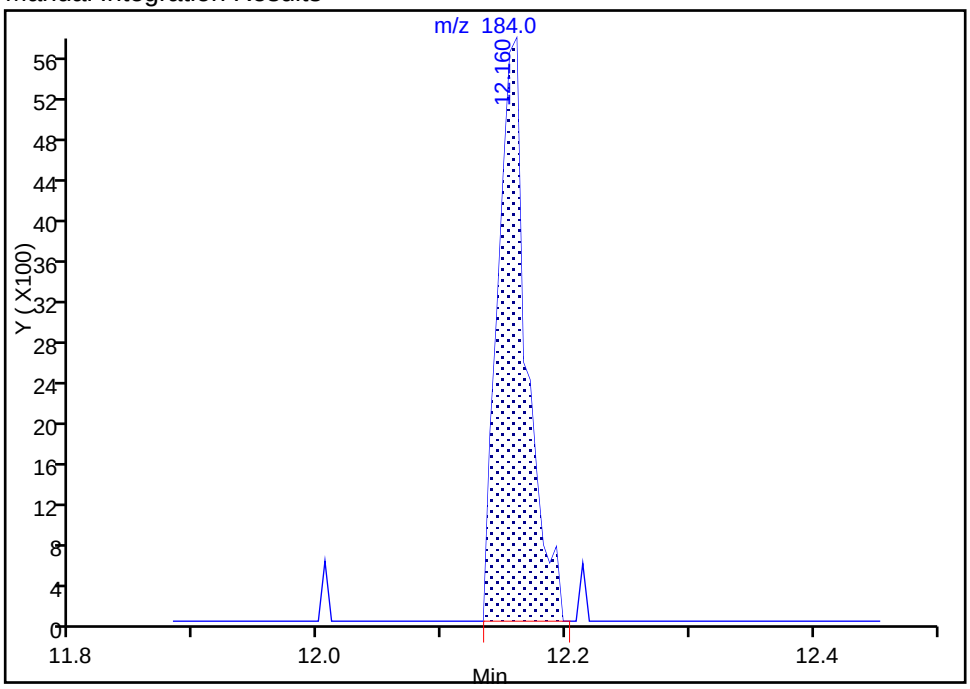
Not Detected
Expected RT: 12.15

Processing Integration Results



Manual Integration Results

RT: 12.16
Area: 9361
Amount: 0.310966
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:55:22
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

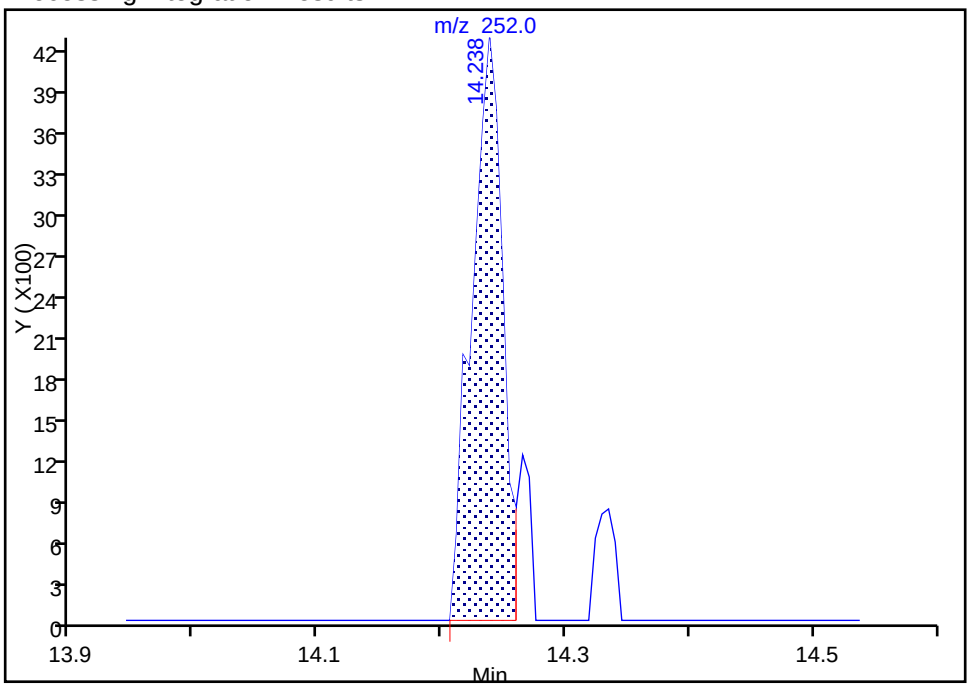
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090003.D				
Injection Date:	09-Oct-2017 04:57:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

144 3,3'-Dichlorobenzidine, CAS: 91-94-1

Signal: 1

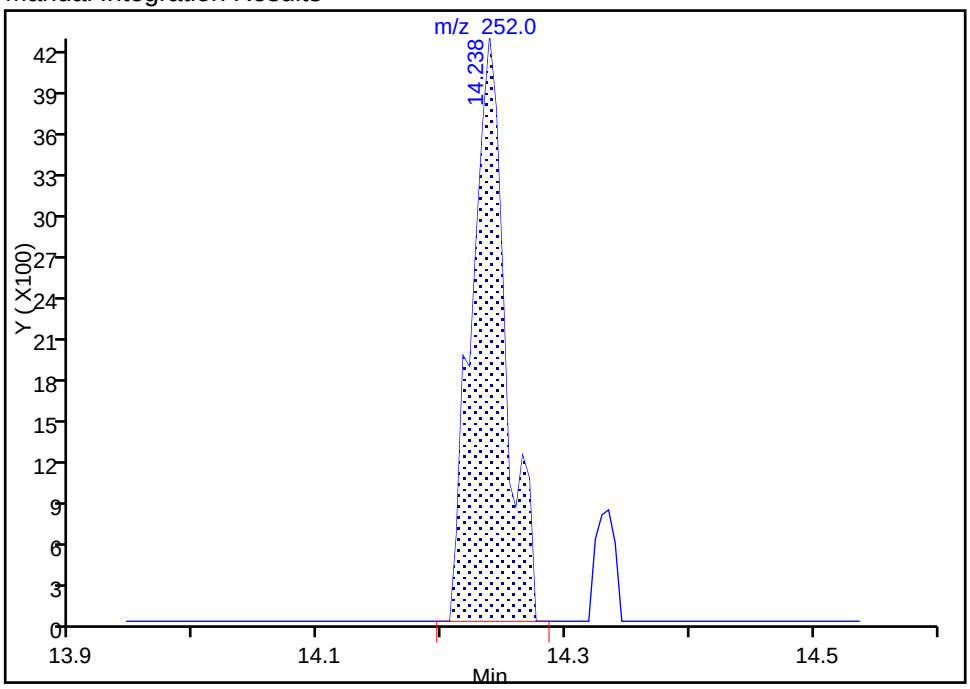
Processing Integration Results

RT: 14.24
Area: 7400
Amount: 0.385059
Amount Units: ng



Manual Integration Results

RT: 14.24
Area: 8121
Amount: 0.390350
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:55:29

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

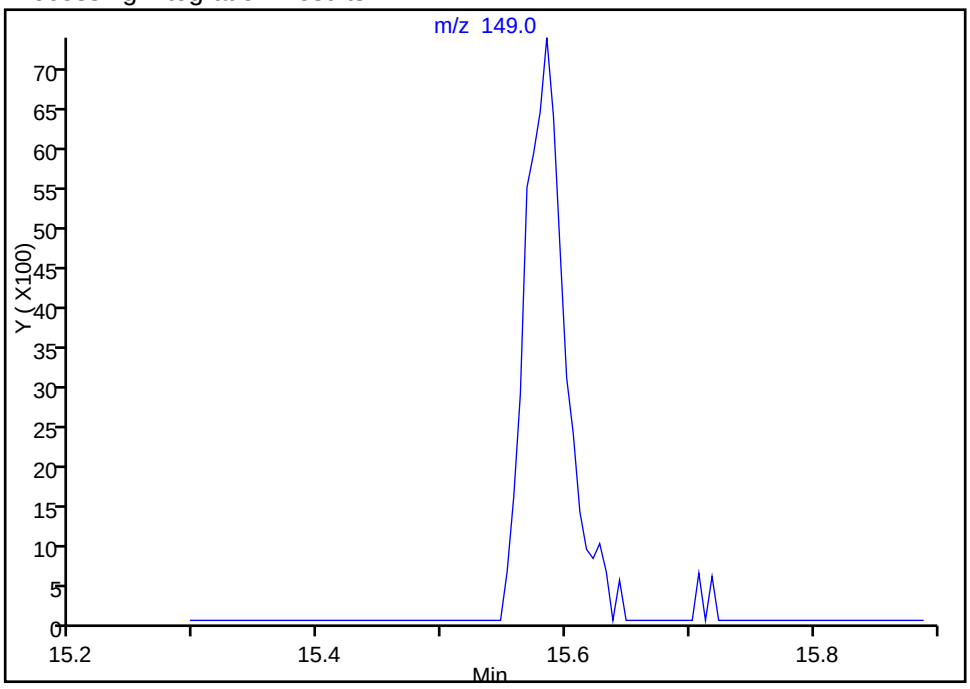
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090003.D				
Injection Date:	09-Oct-2017 04:57:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

150 Di-n-octyl phthalate, CAS: 117-84-0

Signal: 1

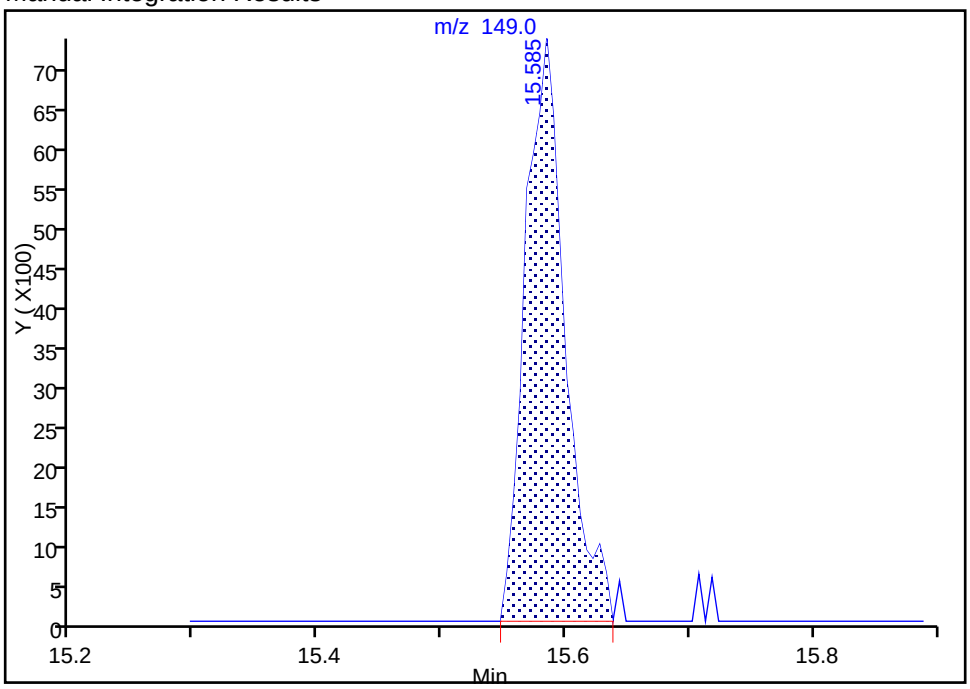
Not Detected
Expected RT: 15.58

Processing Integration Results



Manual Integration Results

RT: 15.58
Area: 16501
Amount: 0.280889
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:55:34
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

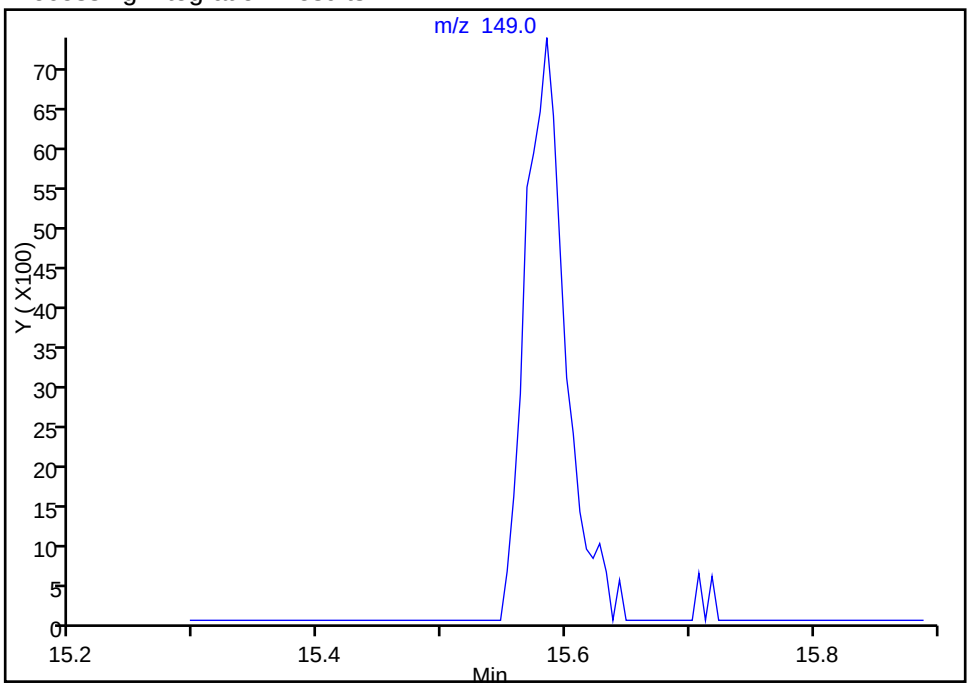
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090003.D				
Injection Date:	09-Oct-2017 04:57:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

150 Di-n-octyl phthalate, CAS: 117-84-0

Signal: 1

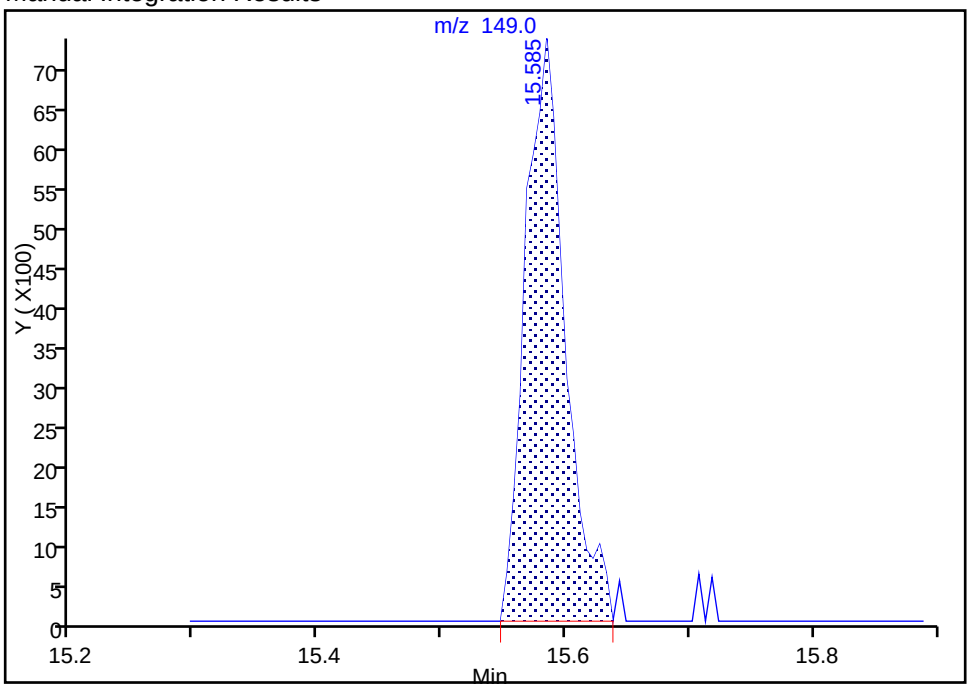
Not Detected
Expected RT: 15.58

Processing Integration Results



Manual Integration Results

RT: 15.58
Area: 16501
Amount: 0.280889
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:55:41
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

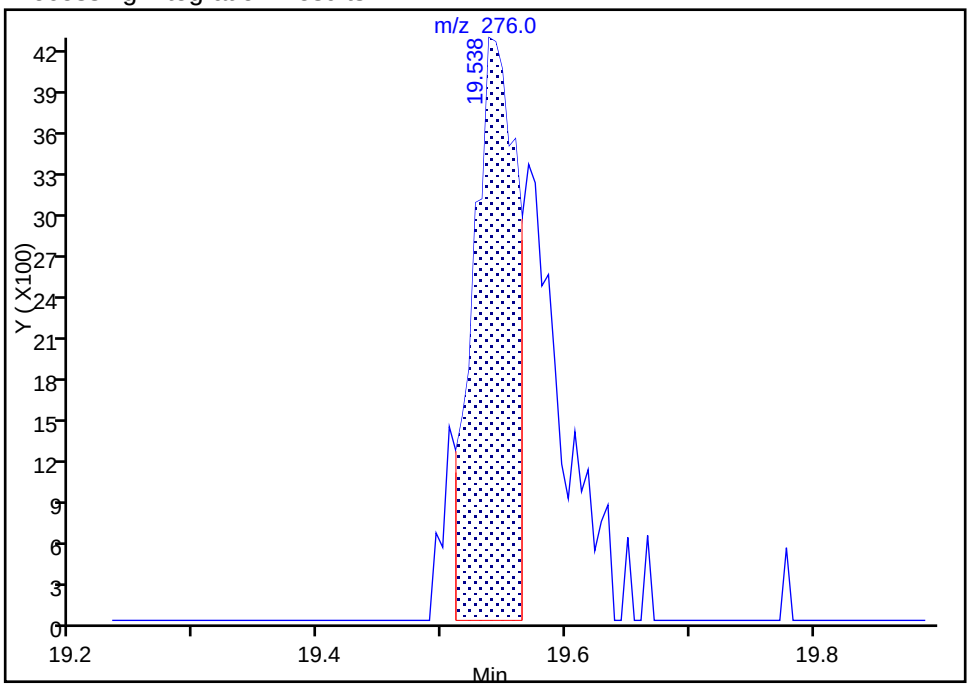
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090003.D				
Injection Date:	09-Oct-2017 04:57:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

157 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

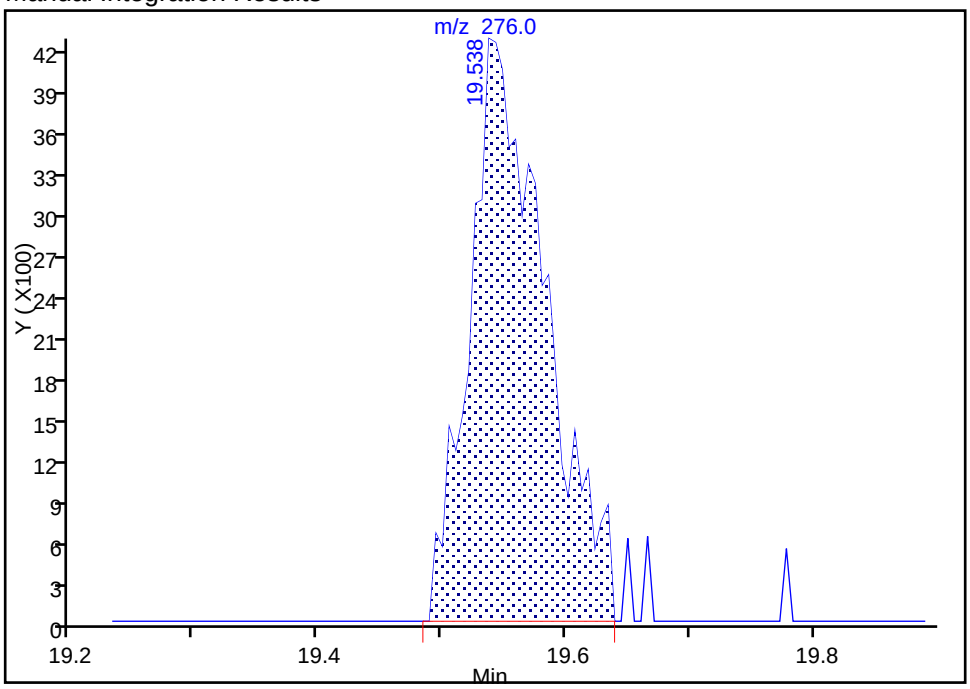
Processing Integration Results

RT: 19.54
Area: 10521
Amount: 0.230929
Amount Units: ng



Manual Integration Results

RT: 19.54
Area: 17980
Amount: 0.344638
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:55:52

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

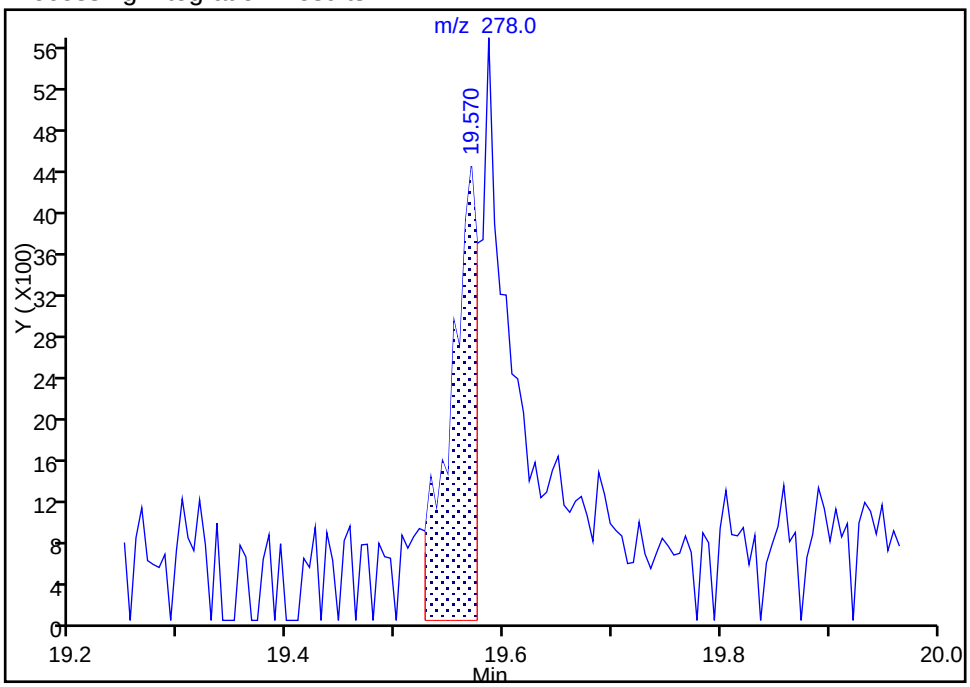
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090003.D				
Injection Date:	09-Oct-2017 04:57:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

158 Dibenz(a,h)anthracene, CAS: 53-70-3

Signal: 1

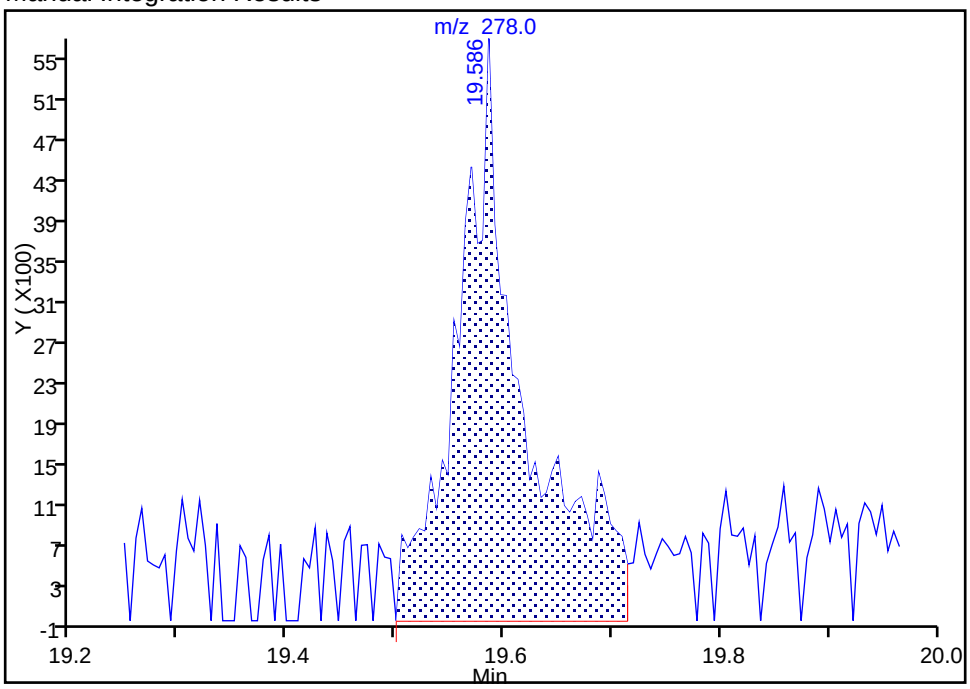
Processing Integration Results

RT: 19.57
Area: 7637
Amount: 0.192601
Amount Units: ng



Manual Integration Results

RT: 19.59
Area: 23786
Amount: 0.502080
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 08:40:14

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

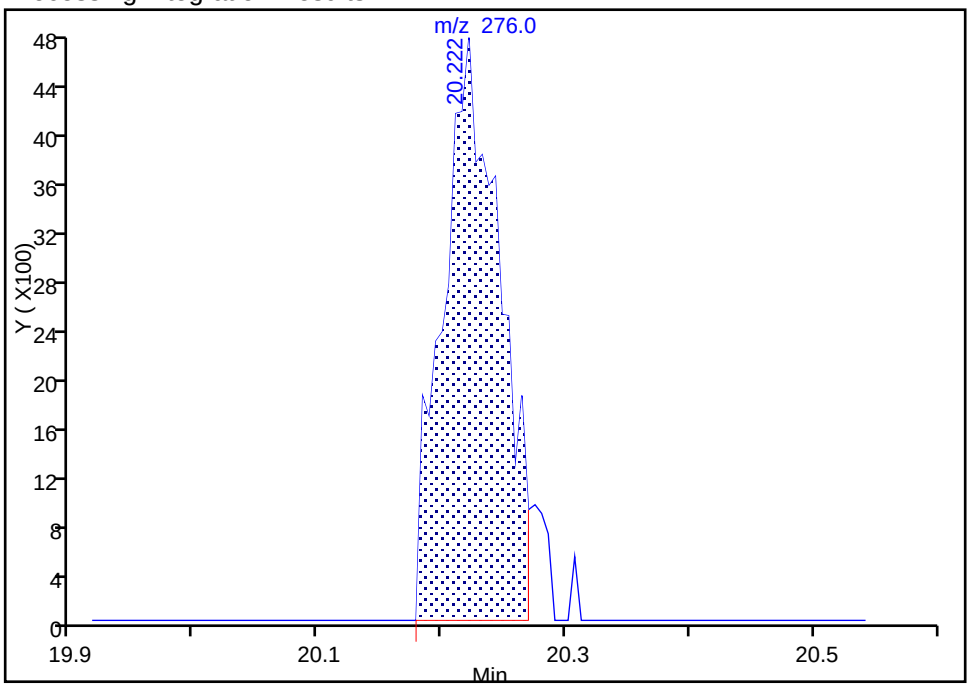
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090003.D				
Injection Date:	09-Oct-2017 04:57:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

159 Benzo[g,h,i]perylene, CAS: 191-24-2

Signal: 1

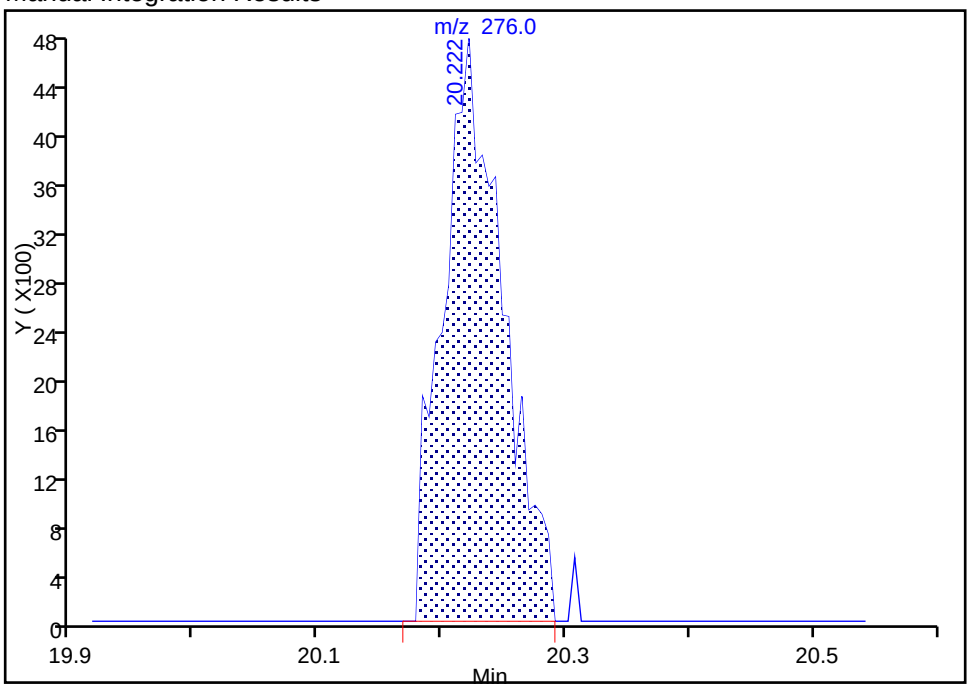
Processing Integration Results

RT: 20.22
Area: 15259
Amount: 0.352765
Amount Units: ng



Manual Integration Results

RT: 20.22
Area: 16070
Amount: 0.355644
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:56:22

Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090004.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 09-Oct-2017 05:23:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018773-004
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Oct-2017 08:46:42 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 09-Oct-2017 06:15:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.198	6.193	0.005	98	109846	8.00	8.00	
* 2 Naphthalene-d8	136	7.470	7.470	0.000	99	399847	8.00	8.00	
* 3 Acenaphthene-d10	164	9.169	9.163	0.005	97	205125	8.00	8.00	
* 4 Phenanthrene-d10	188	10.606	10.600	0.006	98	405101	8.00	8.00	
* 5 Chrysene-d12	240	14.334	14.329	0.005	98	385528	8.00	8.00	
* 6 Perylene-d12	264	17.209	17.203	0.006	98	354288	8.00	8.00	
$ 7 2-Fluorophenol	112	4.750	4.745	0.005	92	34316	2.00	1.94	
$ 8 Phenol-d5	99	5.814	5.808	0.006	95	49204	2.00	2.07	
$ 9 Nitrobenzene-d5	82	6.748	6.749	-0.001	90	46105	2.00	2.04	
$ 10 2-Fluorobiphenyl	172	8.501	8.501	0.000	99	79029	2.00	2.01	
$ 11 2,4,6-Tribromophenol	330	9.922	9.917	0.005	76	7154	2.00	1.90	
$ 12 Terphenyl-d14	244	12.513	12.513	0.000	98	83233	2.00	1.97	
13 1,4-Dioxane	88	1.631	1.609	0.022	91	11856	2.00	1.92	
14 N-Nitrosodimethylamine	74	2.240	2.218	0.022	88	16279	2.00	1.81	
15 Pyridine	79	2.309	2.283	0.027	97	69308	4.00	4.17	M
21 Methyl methanesulfonate	80	4.510	4.500	0.010	89	22115	2.00	1.95	
25 Benzaldehyde	77	5.728	5.723	0.005	94	32976	2.00	2.17	
26 Phenol	94	5.824	5.819	0.005	98	52370	2.00	2.02	
27 Aniline	93	5.846	5.840	0.006	97	61726	2.00	2.12	
29 Bis(2-chloroethyl)ether	93	5.920	5.910	0.010	94	37306	2.00	2.13	
30 2-Chlorophenol	128	5.974	5.969	0.005	95	37284	2.00	1.97	
31 n-Decane	43	6.038	6.033	0.005	89	39372	2.00	2.28	
32 1,3-Dichlorobenzene	146	6.139	6.134	0.005	95	44565	2.00	2.08	
33 1,4-Dichlorobenzene	146	6.214	6.209	0.005	94	42494	2.00	2.02	
34 Benzyl alcohol	108	6.332	6.327	0.005	88	23258	2.00	1.92	
35 1,2-Dichlorobenzene	146	6.369	6.369	0.000	93	40941	2.00	2.07	
36 2-Methylphenol	108	6.444	6.439	0.005	95	34253	2.00	2.03	
37 Indene	116	6.460	6.460	0.000	89	66179	2.00	2.08	
38 2,2'-oxybis[1-chloropropan	45	6.471	6.471	0.000	90	50955	2.00	2.16	
39 N-Nitrosopyrrolidine	100	6.561	6.562	-0.001	85	16001	2.00	1.89	
42 4-Methylphenol	108	6.594	6.594	0.000	89	36613	2.00	2.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.599	6.594	0.005	88	57755	2.00	2.19	
41 N-Nitrosodi-n-propylamine	70	6.594	6.594	0.000	73	30555	2.00	2.15	
45 Hexachloroethane	117	6.716	6.717	-0.001	91	17695	2.00	1.95	
46 Nitrobenzene	77	6.770	6.765	0.005	89	49763	2.00	2.10	
48 Isophorone	82	7.005	7.000	0.005	98	81062	2.00	2.01	
49 2-Nitrophenol	139	7.090	7.085	0.005	87	17184	2.00	1.85	
50 2,4-Dimethylphenol	107	7.117	7.117	0.000	99	39912	2.00	1.99	
52 Benzoic acid	122	7.149	7.160	-0.011	87	18159	2.00	1.83	M
53 Bis(2-chloroethoxy)methane	93	7.208	7.208	0.000	93	46872	2.00	2.04	
54 2,4-Dichlorophenol	162	7.325	7.320	0.005	95	28520	2.00	1.87	
56 1,2,4-Trichlorobenzene	180	7.411	7.411	0.000	91	33699	2.00	1.93	
58 Naphthalene	128	7.491	7.491	0.000	98	102431	2.00	1.98	
59 4-Chloroaniline	127	7.528	7.529	-0.001	93	43825	2.00	2.00	
60 2,6-Dichlorophenol	162	7.544	7.545	-0.001	91	28622	2.00	1.96	
62 Hexachlorobutadiene	225	7.614	7.614	0.000	95	21922	2.00	2.01	
64 Caprolactam	113	7.828	7.828	0.000	72	9150	2.00	1.72	
67 4-Chloro-3-methylphenol	107	7.983	7.983	0.000	93	34248	2.00	1.90	
69 2-Methylnaphthalene	142	8.159	8.159	0.000	91	69929	2.00	1.92	
71 1-Methylnaphthalene	142	8.260	8.255	0.005	91	67055	2.00	1.96	
72 Hexachlorocyclopentadiene	237	8.319	8.319	0.000	96	19534	2.00	1.67	
73 1,2,4,5-Tetrachlorobenzene	216	8.324	8.325	-0.001	95	32155	2.00	1.84	
74 2,4,6-Trichlorophenol	196	8.426	8.421	0.005	95	21690	2.00	1.92	
75 2,4,5-Trichlorophenol	196	8.458	8.458	0.000	90	23113	2.00	1.98	
76 1,1'-Biphenyl	154	8.602	8.602	0.000	98	83938	2.00	1.99	
77 2-Chloronaphthalene	162	8.629	8.629	0.000	97	64124	2.00	1.99	
79 2-Nitroaniline	65	8.714	8.709	0.005	73	28374	2.00	1.94	
82 Dimethyl phthalate	163	8.869	8.869	0.000	95	75282	2.00	1.91	
83 1,3-Dinitrobenzene	168	8.907	8.902	0.005	79	8554	2.00	1.69	
84 2,6-Dinitrotoluene	165	8.933	8.934	-0.001	79	14095	2.00	1.75	
85 Acenaphthylene	152	9.035	9.030	0.005	99	96588	2.00	1.96	
86 3-Nitroaniline	138	9.099	9.099	0.000	85	15889	2.00	1.74	
87 2,4-Dinitrophenol	184	9.201	9.195	0.006	67	15234	4.00	6.55	
88 Acenaphthene	153	9.201	9.195	0.006	92	65016	2.00	1.95	
89 4-Nitrophenol	109	9.233	9.233	0.000	91	24570	4.00	3.74	
91 2,4-Dinitrotoluene	165	9.318	9.318	0.000	80	19598	2.00	1.82	
93 Dibenzofuran	168	9.361	9.361	0.000	95	95426	2.00	2.06	
95 2,3,5,6-Tetrachlorophenol	232	9.430	9.430	0.000	92	16662	2.00	1.75	
96 2,3,4,6-Tetrachlorophenol	232	9.473	9.473	0.000	79	17317	2.00	1.81	
97 2-Naphthylamine	143	9.500	9.500	0.000	95	68167	2.00	2.02	
98 Diethyl phthalate	149	9.532	9.532	0.000	96	85499	2.00	2.15	
99 Hexadecane	57	9.542	9.537	0.005	93	63480	2.00	2.12	
100 4-Chlorophenyl phenyl ethe	204	9.671	9.671	0.000	95	37258	2.00	1.91	
101 4-Nitroaniline	138	9.681	9.682	-0.001	78	17323	2.00	1.78	
103 Fluorene	166	9.687	9.687	0.000	93	73846	2.00	1.97	
104 4,6-Dinitro-2-methylphenol	198	9.713	9.708	0.005	74	16948	4.00	2.95	
105 N-Nitrosodiphenylamine	169	9.778	9.778	0.000	65	56137	2.00	2.04	
57 Azobenzene	77	9.820	9.820	0.000	97	106585	2.00	2.07	
90 1,2-Diphenylhydrazine	77	9.820	9.820	0.000	97	106585	2.00	2.07	
110 4-Bromophenyl phenyl ether	248	10.141	10.136	0.005	78	22078	2.00	2.08	
112 Hexachlorobenzene	284	10.226	10.226	0.000	88	19792	2.00	2.07	
113 Atrazine	200	10.253	10.258	-0.005	86	21338	2.00	2.05	
116 Pentachlorophenol	266	10.403	10.397	0.006	86	26762	4.00	3.46	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.408	10.403	0.005	93	66287	2.00	2.09	
121 Phenanthrene	178	10.627	10.627	0.000	98	107531	2.00	2.00	
122 Anthracene	178	10.680	10.681	0.000	98	110322	2.00	2.03	
124 Carbazole	167	10.830	10.830	0.000	96	107397	2.00	2.08	
126 Di-n-butyl phthalate	149	11.150	11.151	-0.001	99	123042	2.00	1.94	
131 Fluoranthene	202	12.021	12.021	0.000	99	124529	2.00	2.02	
132 Benzidine	184	12.155	12.150	0.005	99	52714	2.00	1.73	
133 Pyrene	202	12.347	12.342	0.005	96	123765	2.00	1.98	
138 Butyl benzyl phthalate	149	13.250	13.250	0.000	92	53023	2.00	1.78	
144 3,3'-Dichlorobenzidine	252	14.233	14.233	0.000	77	35841	2.00	1.71	
145 Bis(2-ethylhexyl) phthalat	149	14.281	14.281	0.000	93	67055	2.00	1.76	
146 Benzo[a]anthracene	228	14.308	14.308	0.000	99	118490	2.00	1.99	
147 Chrysene	228	14.383	14.377	0.006	97	110110	2.00	1.95	
150 Di-n-octyl phthalate	149	15.579	15.585	-0.006	97	94133	2.00	1.56	
151 7,12-Dimethylbenz(a)anthra	256	16.418	16.423	-0.005	80	50905	2.00	2.01	
152 Benzo[b]fluoranthene	252	16.434	16.439	-0.005	97	112508	2.00	2.08	
153 Benzo[k]fluoranthene	252	16.487	16.488	-0.001	98	105521	2.00	1.99	M
219 Benzo[e]pyrene	252	16.990	16.995	-0.005	0	98336	2.00	1.97	
154 Benzo[a]pyrene	252	17.096	17.091	0.005	78	97891	2.00	1.95	
157 Indeno[1,2,3-cd]pyrene	276	19.554	19.549	0.005	85	98710	2.00	1.85	M
158 Dibenz(a,h)anthracene	278	19.581	19.575	0.006	90	95264	2.00	1.96	M
159 Benzo[g,h,i]perylene	276	20.222	20.216	0.006	95	86870	2.00	1.88	M
S 199 Total Cresols	108				0		4.00	4.10	
S 197 Methyl Phenols,Total	108				0		4.00	4.10	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD2.0i_00015 Amount Added: 1.00 Units: mL

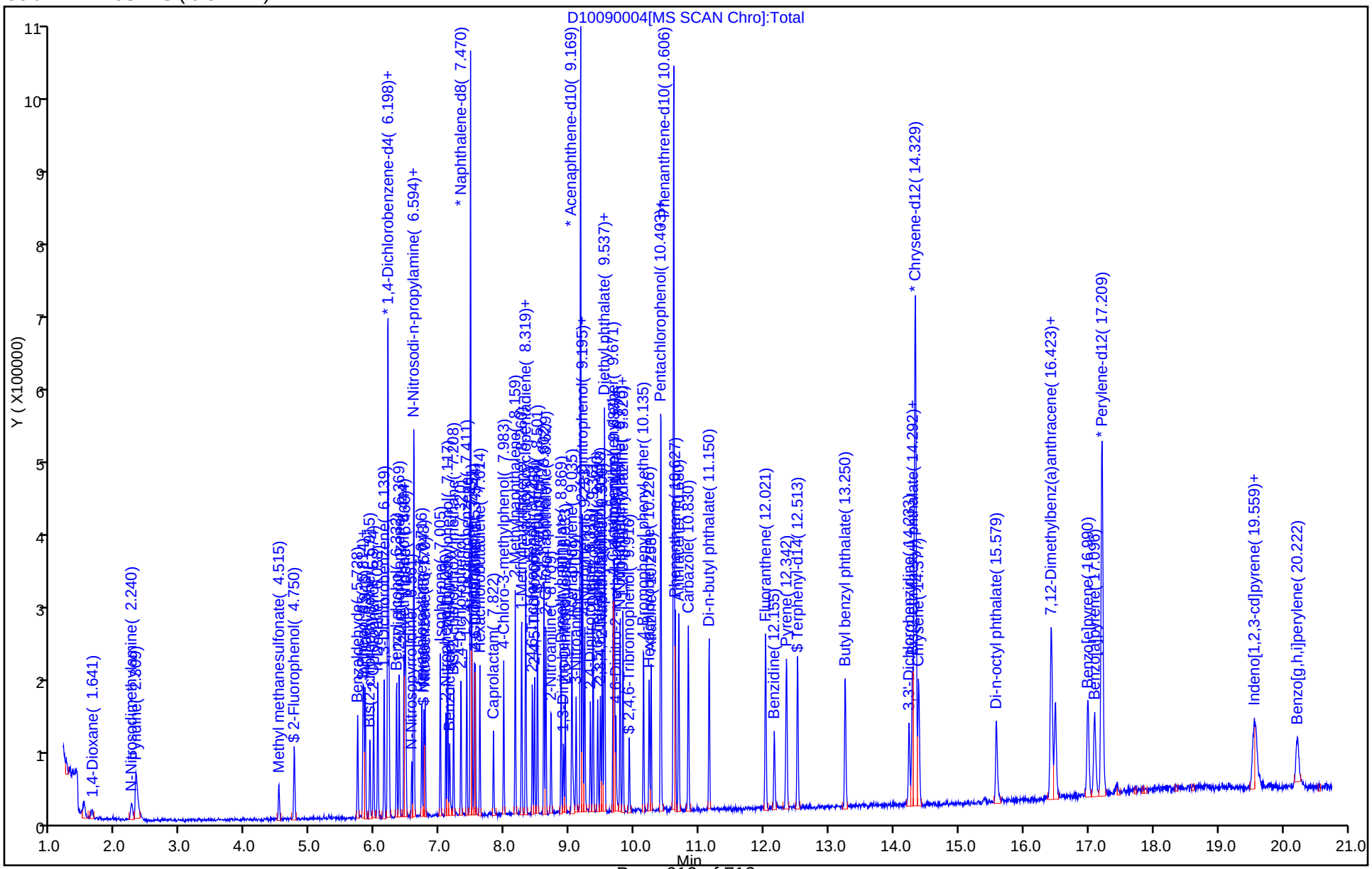
Report Date: 09-Oct-2017 08:46:43 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090004.D

Injection Date:	09-Oct-2017 05:23:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

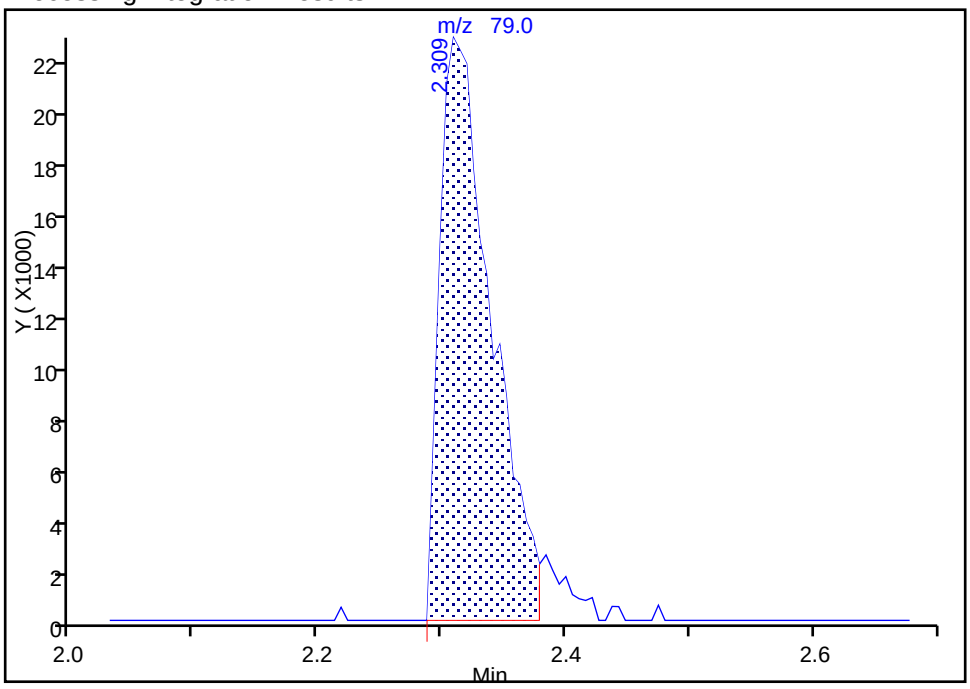
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090004.D				
Injection Date:	09-Oct-2017 05:23:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

Signal: 1

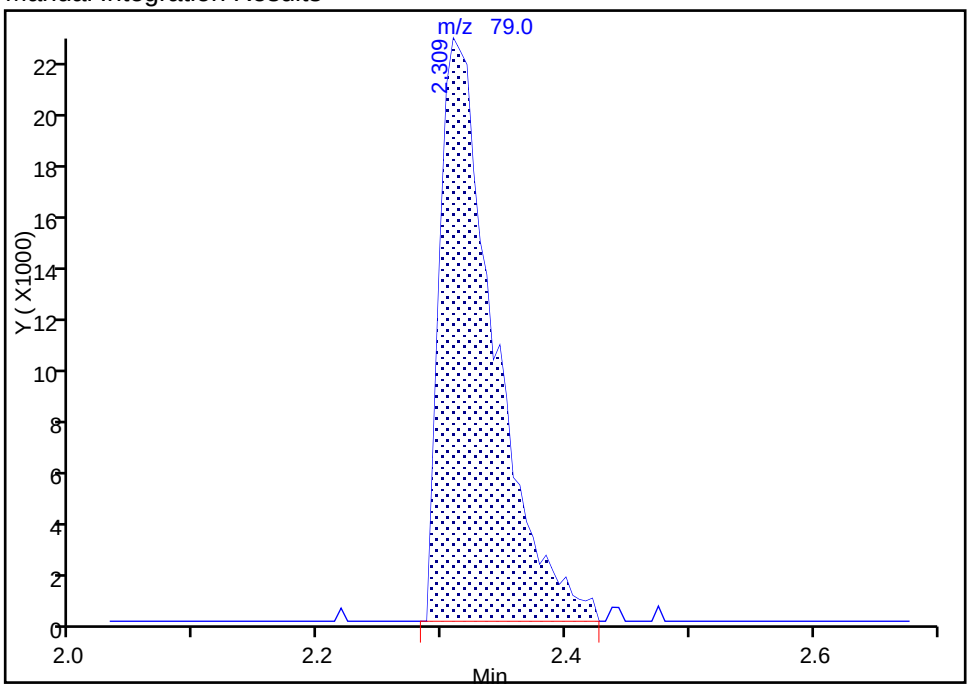
Processing Integration Results

RT: 2.31
Area: 65733
Amount: 3.864935
Amount Units: ng



Manual Integration Results

RT: 2.31
Area: 69308
Amount: 4.174504
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:13:10

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

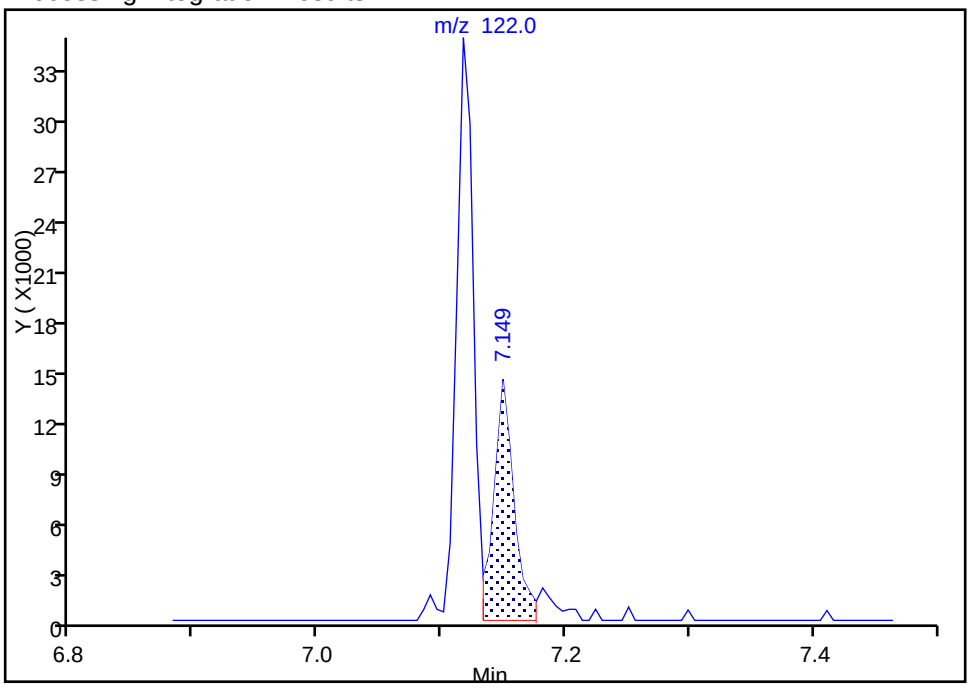
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090004.D
Injection Date: 09-Oct-2017 05:23:30 Instrument ID: CH732
Lims ID: IC
Client ID:
Operator ID: 003200 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL
Column: Rxi-5SilMS (0.32 mm) Detector MS SCAN

52 Benzoic acid, CAS: 65-85-0

Signal: 1

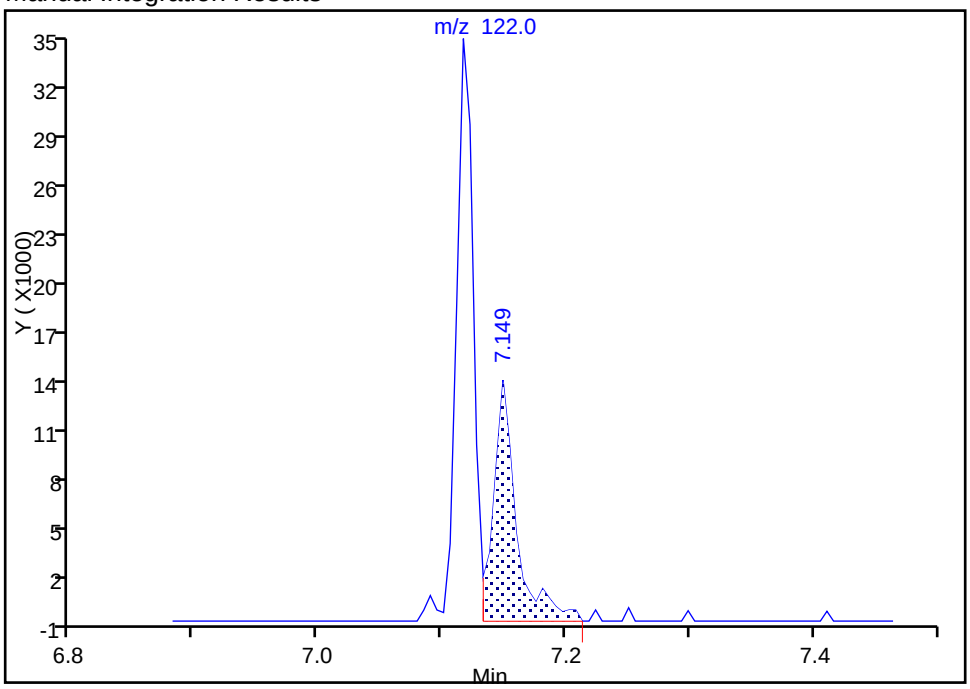
Processing Integration Results

RT: 7.15
Area: 16215
Amount: 2.000000
Amount Units: ng



Manual Integration Results

RT: 7.15
Area: 18159
Amount: 1.826774
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:13:30
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

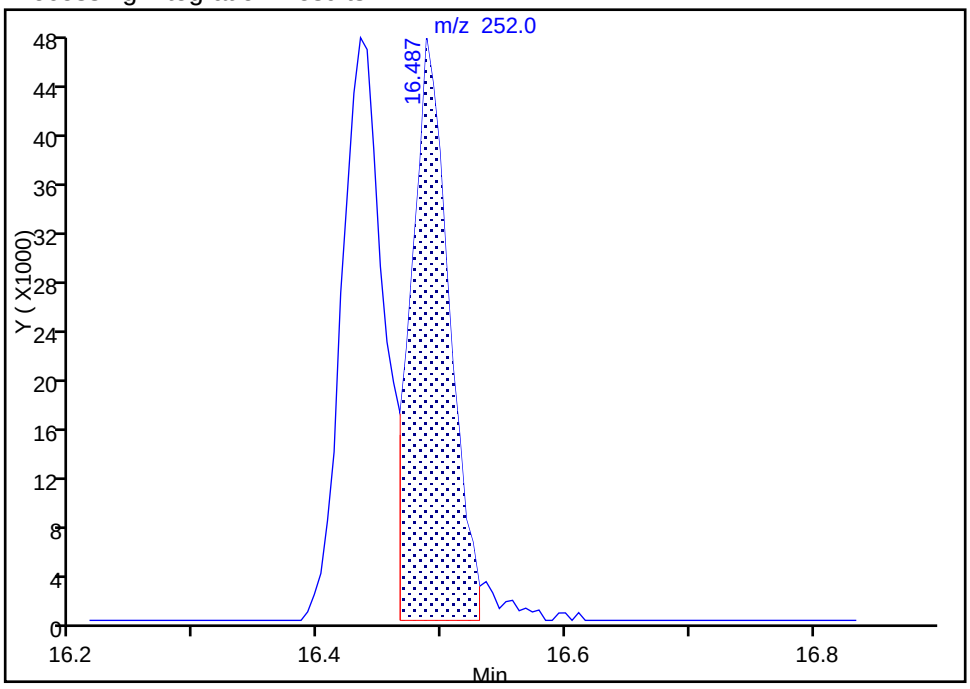
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090004.D				
Injection Date:	09-Oct-2017 05:23:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

153 Benzo[k]fluoranthene, CAS: 207-08-9

Signal: 1

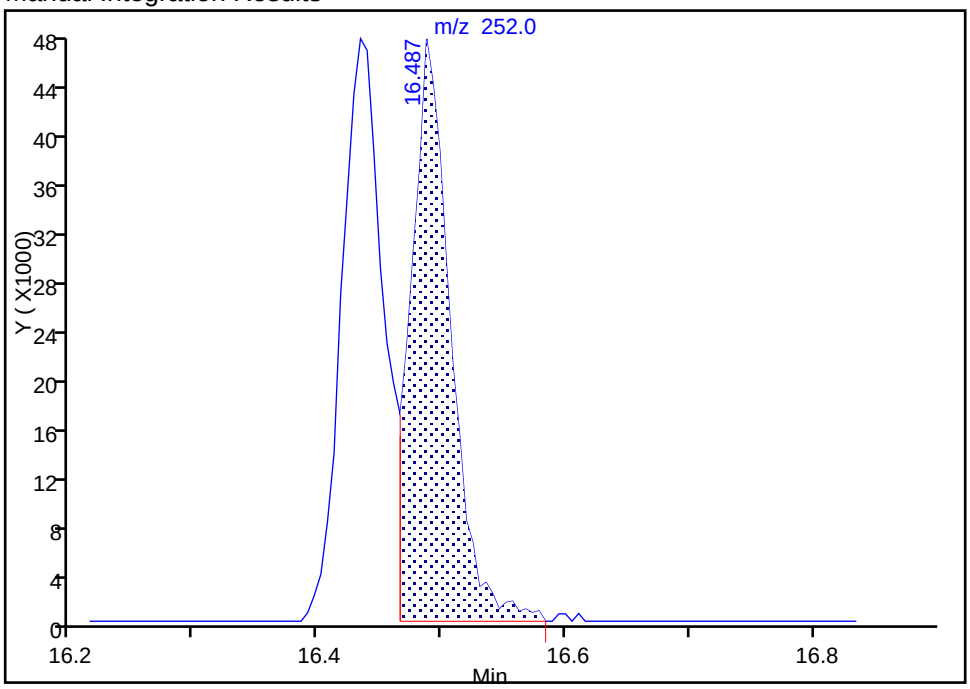
Processing Integration Results

RT: 16.49
Area: 101442
Amount: 1.938656
Amount Units: ng



Manual Integration Results

RT: 16.49
Area: 105521
Amount: 1.990346
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:14:02

Audit Action: Split an Integrated Peak Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

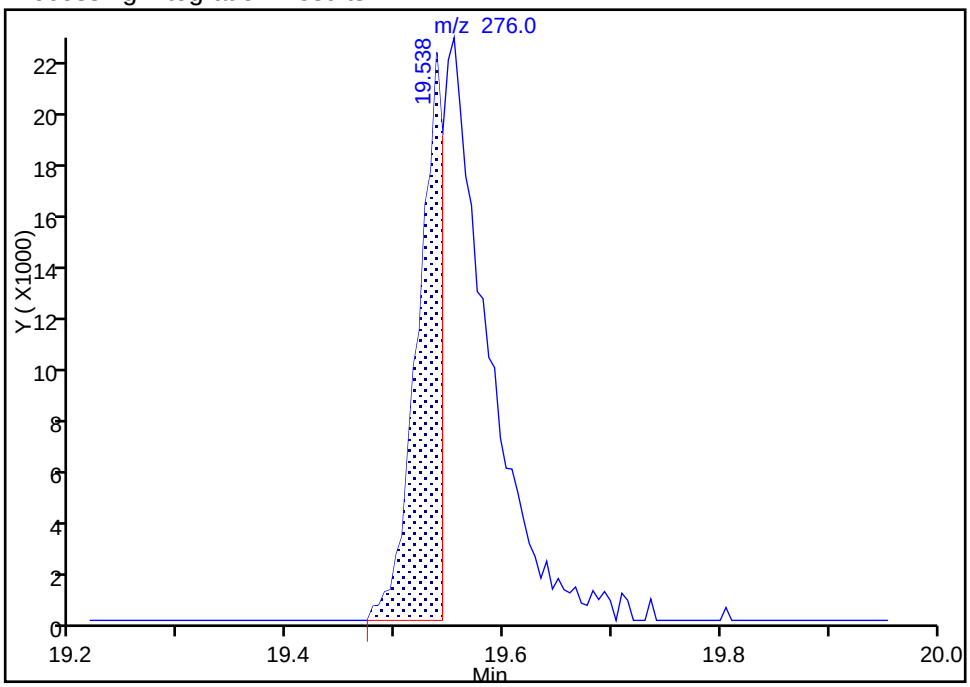
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090004.D				
Injection Date:	09-Oct-2017 05:23:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

157 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

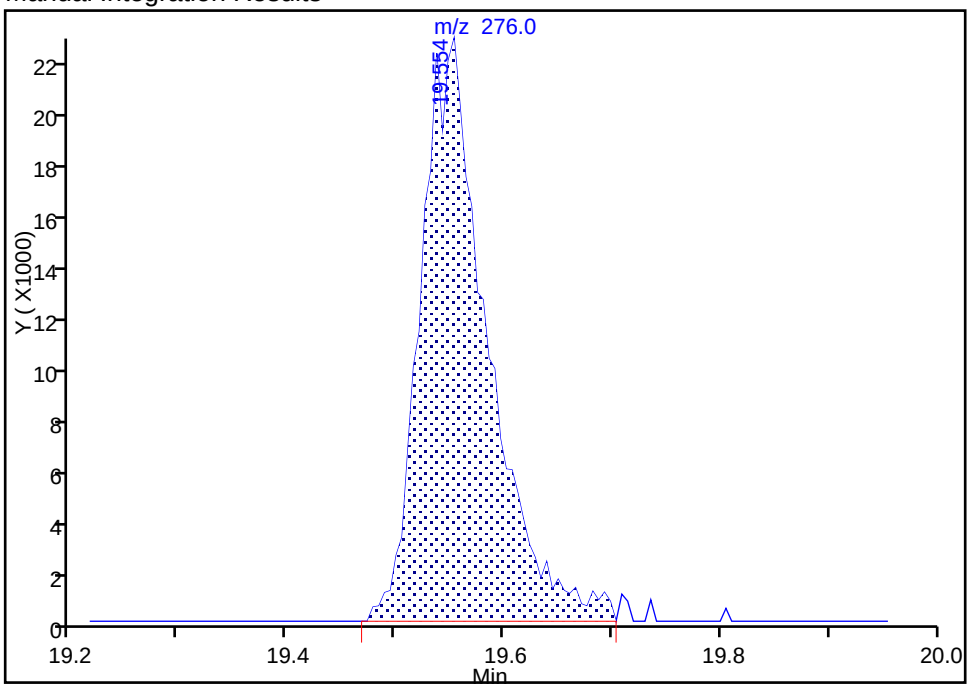
Processing Integration Results

RT: 19.54
Area: 36309
Amount: 1.090253
Amount Units: ng



Manual Integration Results

RT: 19.55
Area: 98710
Amount: 1.847584
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:14:12

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

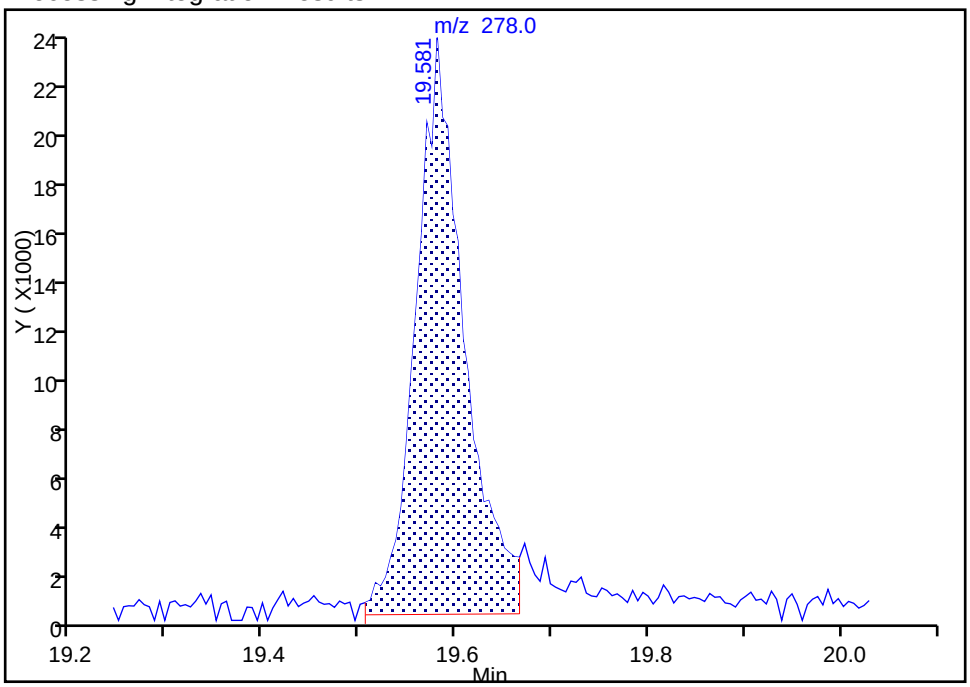
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090004.D				
Injection Date:	09-Oct-2017 05:23:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

158 Dibenz(a,h)anthracene, CAS: 53-70-3

Signal: 1

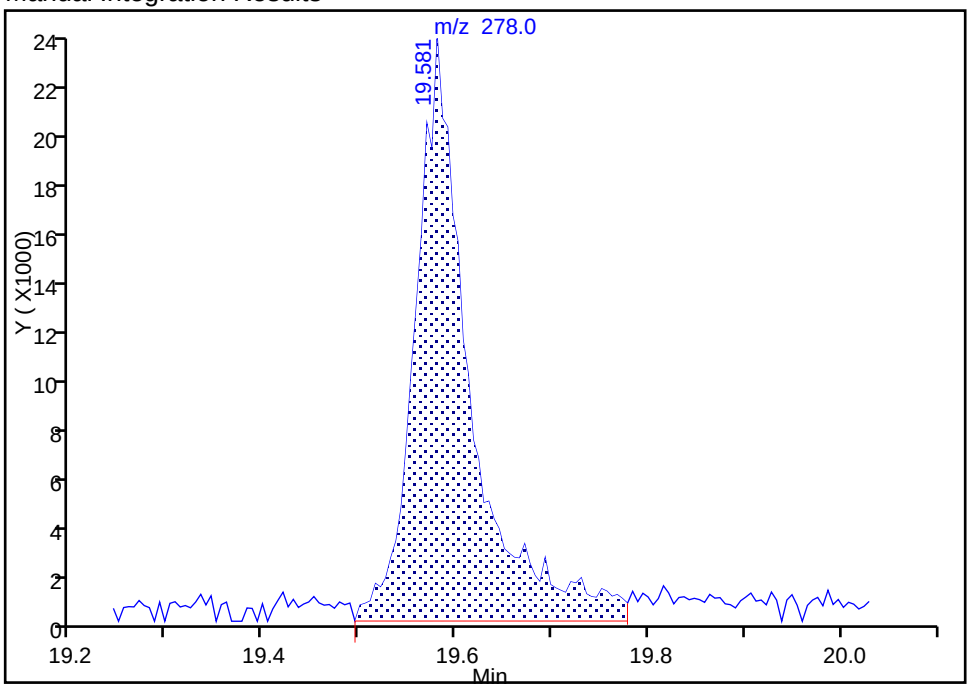
Processing Integration Results

RT: 19.58
Area: 82675
Amount: 1.649710
Amount Units: ng



Manual Integration Results

RT: 19.58
Area: 95264
Amount: 1.963585
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:14:46

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

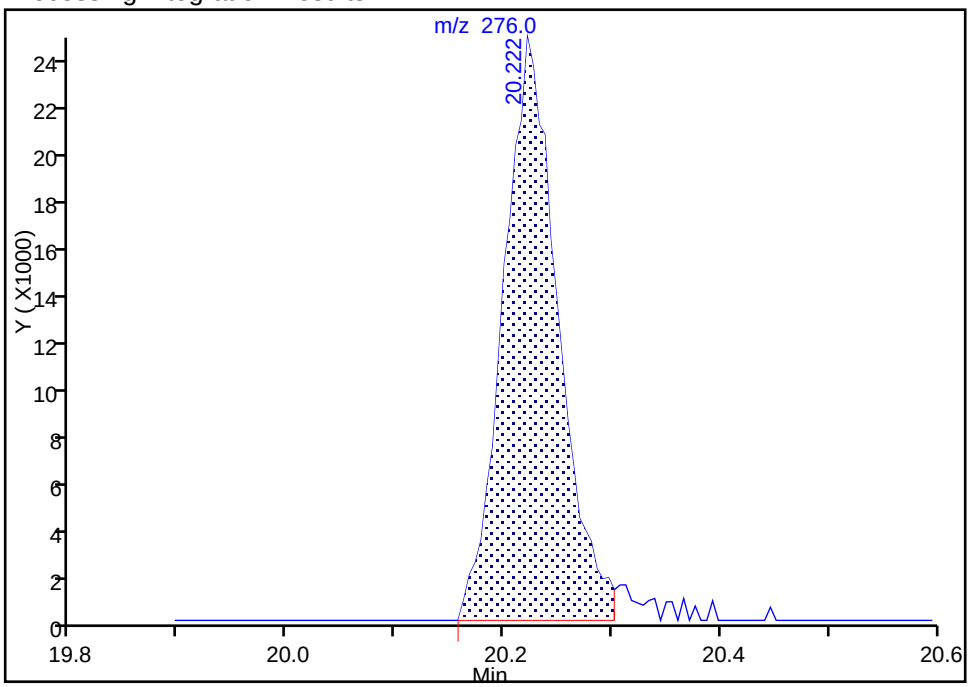
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090004.D				
Injection Date:	09-Oct-2017 05:23:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

159 Benzo[g,h,i]perylene, CAS: 191-24-2

Signal: 1

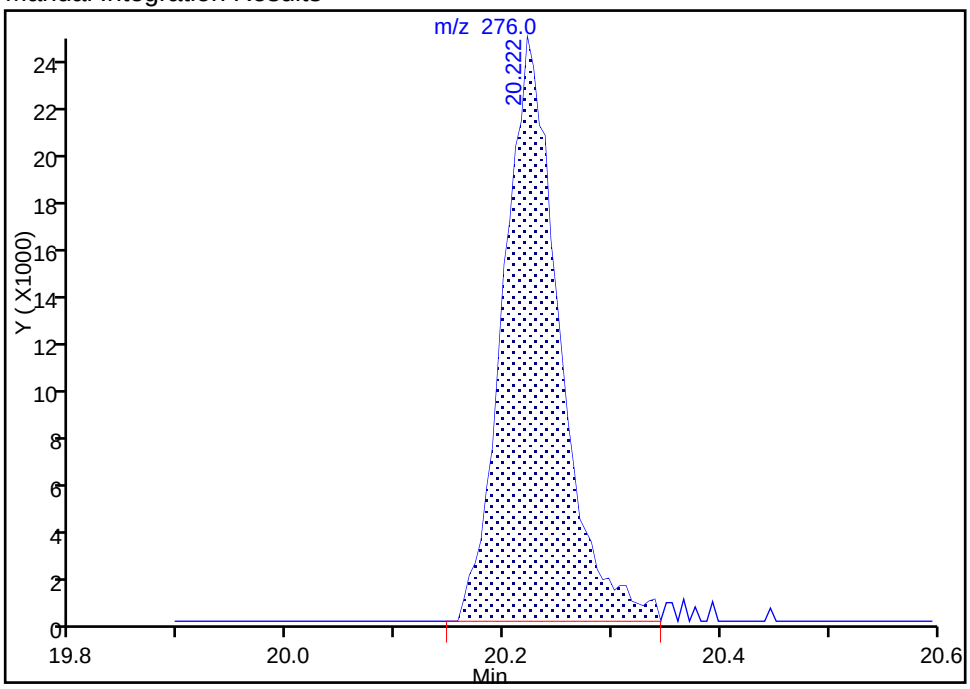
Processing Integration Results

RT: 20.22
Area: 84681
Amount: 1.977544
Amount Units: ng



Manual Integration Results

RT: 20.22
Area: 86870
Amount: 1.877323
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:14:57

Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090005.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 09-Oct-2017 05:50:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018773-005
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Oct-2017 08:46:47 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 09-Oct-2017 06:17:30

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	6.193	6.193	0.000	97	106638	8.00	8.00	
* 2 Naphthalene-d8	136	7.470	7.470	0.000	99	379220	8.00	8.00	
* 3 Acenaphthene-d10	164	9.163	9.163	0.000	97	189870	8.00	8.00	
* 4 Phenanthrene-d10	188	10.600	10.600	0.000	98	395644	8.00	8.00	
* 5 Chrysene-d12	240	14.329	14.329	0.000	98	377969	8.00	8.00	
* 6 Perylene-d12	264	17.203	17.203	0.000	97	348645	8.00	8.00	
$ 7 2-Fluorophenol	112	4.745	4.745	0.000	93	68209	4.00	3.97	
$ 8 Phenol-d5	99	5.808	5.808	0.000	95	95627	4.00	4.15	
$ 9 Nitrobenzene-d5	82	6.749	6.749	-0.001	92	88360	4.00	4.12	
$ 10 2-Fluorobiphenyl	172	8.501	8.501	0.000	99	157636	4.00	4.34	
$ 11 2,4,6-Tribromophenol	330	9.916	9.917	-0.001	79	14249	4.00	3.87	
$ 12 Terphenyl-d14	244	12.507	12.513	-0.006	99	166076	4.00	4.01	
13 1,4-Dioxane	88	1.615	1.609	0.006	89	24168	4.00	4.03	
14 N-Nitrosodimethylamine	74	2.224	2.218	0.006	92	34452	4.00	3.95	M
15 Pyridine	79	2.288	2.283	0.006	96	132252	8.00	8.21	M
21 Methyl methanesulfonate	80	4.505	4.500	0.005	88	44233	4.00	4.02	
25 Benzaldehyde	77	5.723	5.723	0.000	92	64630	4.00	4.38	
26 Phenol	94	5.819	5.819	0.000	97	105423	4.00	4.18	
27 Aniline	93	5.840	5.840	0.000	97	120325	4.00	4.26	
29 Bis(2-chloroethyl)ether	93	5.915	5.910	0.005	92	68775	4.00	4.04	
30 2-Chlorophenol	128	5.974	5.969	0.005	96	74241	4.00	4.05	
31 n-Decane	43	6.038	6.033	0.005	87	74694	4.00	4.45	
32 1,3-Dichlorobenzene	146	6.134	6.134	0.000	94	83423	4.00	4.01	
33 1,4-Dichlorobenzene	146	6.209	6.209	0.000	90	81754	4.00	4.01	
34 Benzyl alcohol	108	6.326	6.327	-0.001	88	47384	4.00	4.03	
35 1,2-Dichlorobenzene	146	6.369	6.369	0.000	92	78846	4.00	4.10	
36 2-Methylphenol	108	6.439	6.439	0.000	97	67951	4.00	4.15	
37 Indene	116	6.455	6.460	-0.005	90	128290	4.00	4.16	
38 2,2'-oxybis[1-chloropropan	45	6.465	6.471	-0.006	89	95243	4.00	4.33	
39 N-Nitrosopyrrolidine	100	6.562	6.562	0.000	79	31013	4.00	3.77	
41 N-Nitrosodi-n-propylamine	70	6.594	6.594	0.000	69	60935	4.00	4.41	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.594	6.594	0.000	76	109571	4.00	4.29	
42 4-Methylphenol	108	6.594	6.594	0.000	58	71106	4.00	4.14	
45 Hexachloroethane	117	6.716	6.717	-0.001	93	34934	4.00	3.97	
46 Nitrobenzene	77	6.765	6.765	0.000	89	94954	4.00	4.23	
48 Isophorone	82	7.000	7.000	0.000	98	160035	4.00	4.19	
49 2-Nitrophenol	139	7.085	7.085	0.000	88	34981	4.00	3.97	
50 2,4-Dimethylphenol	107	7.117	7.117	0.000	98	79509	4.00	4.18	
52 Benzoic acid	122	7.155	7.160	-0.005	89	44756	4.00	4.75	M
53 Bis(2-chloroethoxy)methane	93	7.208	7.208	0.000	95	93380	4.00	4.29	
54 2,4-Dichlorophenol	162	7.320	7.320	0.000	96	58017	4.00	4.01	
56 1,2,4-Trichlorobenzene	180	7.411	7.411	0.000	92	66138	4.00	4.00	
58 Naphthalene	128	7.491	7.491	0.000	98	199105	4.00	4.06	
59 4-Chloroaniline	127	7.528	7.529	-0.001	92	83277	4.00	4.00	
60 2,6-Dichlorophenol	162	7.545	7.545	-0.001	90	57110	4.00	4.13	
62 Hexachlorobutadiene	225	7.614	7.614	0.000	95	40017	4.00	3.87	
64 Caprolactam	113	7.822	7.828	-0.006	74	20686	4.00	4.09	
67 4-Chloro-3-methylphenol	107	7.977	7.983	-0.006	93	66758	4.00	3.91	
69 2-Methylnaphthalene	142	8.159	8.159	0.000	90	139053	4.00	4.02	
71 1-Methylnaphthalene	142	8.255	8.255	0.000	92	134780	4.00	4.15	
72 Hexachlorocyclopentadiene	237	8.314	8.319	-0.005	95	39734	4.00	3.68	
73 1,2,4,5-Tetrachlorobenzene	216	8.319	8.325	-0.006	97	66478	4.00	4.11	
74 2,4,6-Trichlorophenol	196	8.421	8.421	0.000	96	41623	4.00	3.97	
75 2,4,5-Trichlorophenol	196	8.453	8.458	-0.005	90	44783	4.00	4.15	
76 1,1'-Biphenyl	154	8.597	8.602	-0.005	98	162979	4.00	4.17	
77 2-Chloronaphthalene	162	8.629	8.629	0.000	98	127962	4.00	4.29	
79 2-Nitroaniline	65	8.709	8.709	0.000	74	52505	4.00	3.88	
82 Dimethyl phthalate	163	8.864	8.869	-0.005	95	151682	4.00	4.16	
83 1,3-Dinitrobenzene	168	8.901	8.902	-0.001	80	18588	4.00	3.97	
84 2,6-Dinitrotoluene	165	8.928	8.934	-0.006	83	31549	4.00	4.23	
85 Acenaphthylene	152	9.030	9.030	0.000	99	187350	4.00	4.10	
86 3-Nitroaniline	138	9.099	9.099	0.000	84	34142	4.00	4.04	
88 Acenaphthene	153	9.195	9.195	0.000	89	125259	4.00	4.06	
87 2,4-Dinitrophenol	184	9.195	9.195	0.000	70	37255	8.00	10.0	
89 4-Nitrophenol	109	9.227	9.233	-0.006	93	50357	8.00	8.28	
91 2,4-Dinitrotoluene	165	9.318	9.318	0.000	81	40810	4.00	4.09	
93 Dibenzofuran	168	9.356	9.361	-0.005	95	181943	4.00	4.24	
95 2,3,5,6-Tetrachlorophenol	232	9.430	9.430	0.000	92	34472	4.00	3.91	
96 2,3,4,6-Tetrachlorophenol	232	9.468	9.473	-0.005	77	37706	4.00	4.27	
97 2-Naphthylamine	143	9.500	9.500	0.000	94	132466	4.00	4.23	
98 Diethyl phthalate	149	9.532	9.532	0.000	96	159866	4.00	4.35	
99 Hexadecane	57	9.537	9.537	0.000	94	122327	4.00	4.30	
100 4-Chlorophenyl phenyl ethe	204	9.665	9.671	-0.006	94	71655	4.00	3.97	
101 4-Nitroaniline	138	9.676	9.682	-0.006	81	37770	4.00	4.20	
103 Fluorene	166	9.687	9.687	0.000	94	141115	4.00	4.07	
104 4,6-Dinitro-2-methylphenol	198	9.708	9.708	0.000	73	40313	8.00	7.18	
105 N-Nitrosodiphenylamine	169	9.772	9.778	-0.006	65	109959	4.00	4.09	
90 1,2-Diphenylhydrazine	77	9.820	9.820	0.000	98	212629	4.00	4.23	
57 Azobenzene	77	9.820	9.820	0.000	98	212629	4.00	4.23	
110 4-Bromophenyl phenyl ether	248	10.135	10.136	-0.001	79	42687	4.00	4.12	
112 Hexachlorobenzene	284	10.221	10.226	-0.005	90	38421	4.00	4.11	
113 Atrazine	200	10.253	10.258	-0.005	85	43411	4.00	4.27	
116 Pentachlorophenol	266	10.397	10.397	0.000	86	59434	8.00	7.87	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.403	10.403	0.000	93	127760	4.00	4.14	
121 Phenanthrene	178	10.627	10.627	0.000	99	215392	4.00	4.09	
122 Anthracene	178	10.680	10.681	0.000	99	222169	4.00	4.19	
124 Carbazole	167	10.825	10.830	-0.005	96	209380	4.00	4.15	
126 Di-n-butyl phthalate	149	11.151	11.151	0.000	99	254679	4.00	4.11	
131 Fluoranthene	202	12.016	12.021	-0.005	99	246604	4.00	4.10	
132 Benzidine	184	12.155	12.150	0.005	99	111792	4.00	3.75	
133 Pyrene	202	12.342	12.342	0.000	97	252841	4.00	4.13	
138 Butyl benzyl phthalate	149	13.245	13.250	-0.005	95	110734	4.00	3.80	
144 3,3'-Dichlorobenzidine	252	14.233	14.233	0.000	77	78145	4.00	3.79	
145 Bis(2-ethylhexyl) phthalat	149	14.281	14.281	0.000	93	145355	4.00	3.90	
146 Benzo[a]anthracene	228	14.308	14.308	0.000	99	234592	4.00	4.03	
147 Chrysene	228	14.383	14.377	0.006	98	223892	4.00	4.04	
150 Di-n-octyl phthalate	149	15.579	15.585	-0.006	98	207279	4.00	3.50	
151 7,12-Dimethylbenz(a)anthra	256	16.413	16.423	-0.010	89	98233	4.00	3.94	
152 Benzo[b]fluoranthene	252	16.434	16.439	-0.005	98	221771	4.00	4.17	
153 Benzo[k]fluoranthene	252	16.487	16.488	-0.001	99	218232	4.00	4.18	
219 Benzo[e]pyrene	252	16.984	16.995	-0.011	0	203512	4.00	4.14	
154 Benzo[a]pyrene	252	17.091	17.091	0.000	79	192833	4.00	3.91	
157 Indeno[1,2,3-cd]pyrene	276	19.549	19.549	0.000	91	217740	4.00	4.14	M
158 Dibenz(a,h)anthracene	278	19.575	19.575	0.000	89	191512	4.00	4.01	M
159 Benzo[g,h,i]perylene	276	20.211	20.216	-0.005	96	182145	4.00	4.00	M
S 197 Methyl Phenols,Total	108				0		8.00	8.29	
S 199 Total Cresols	108				0		8.00	8.29	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD4.0i_00014 Amount Added: 1.00 Units: mL

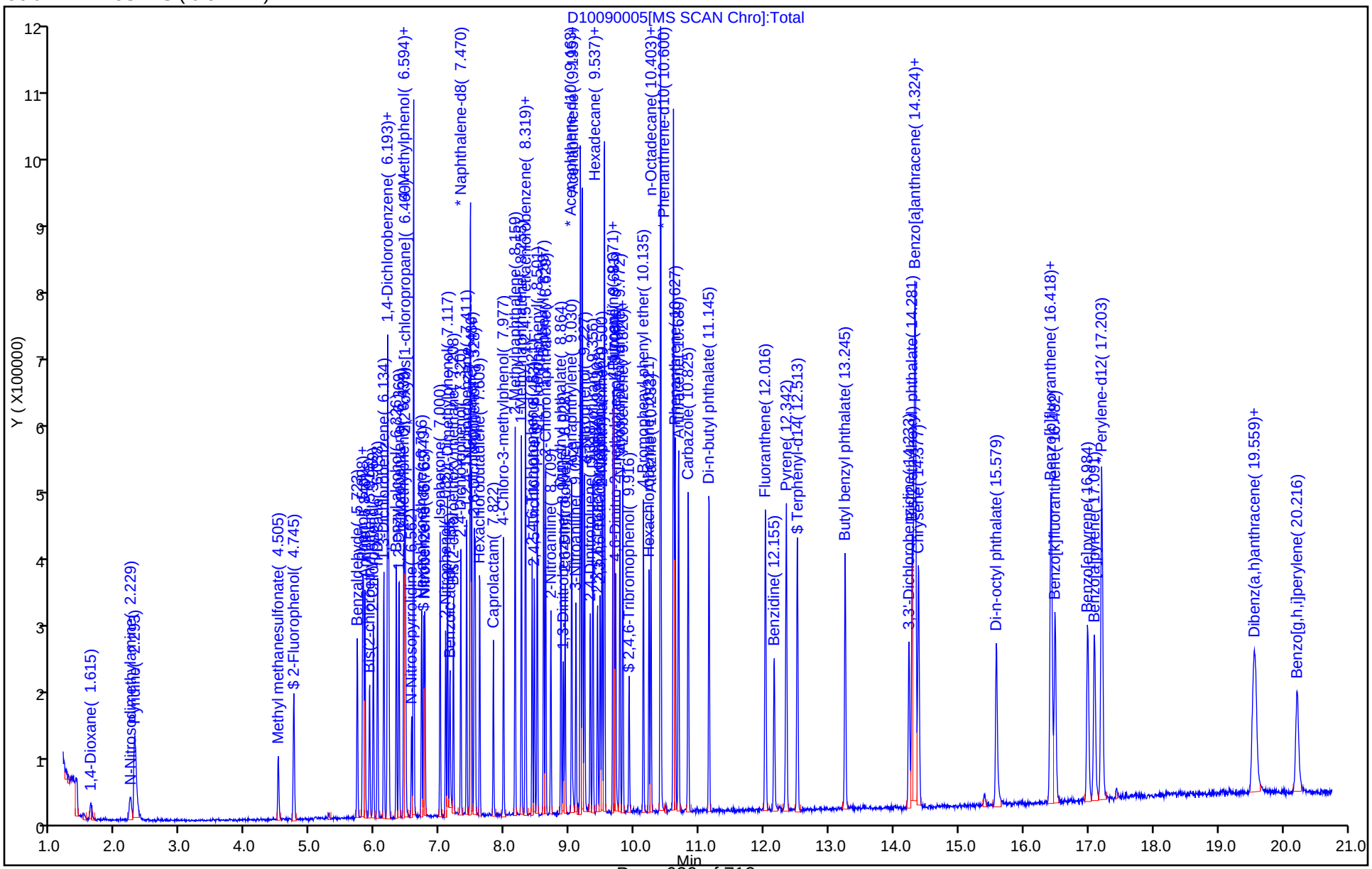
Report Date: 09-Oct-2017 08:46:48 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090005.D

Injection Date:	09-Oct-2017 05:50:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

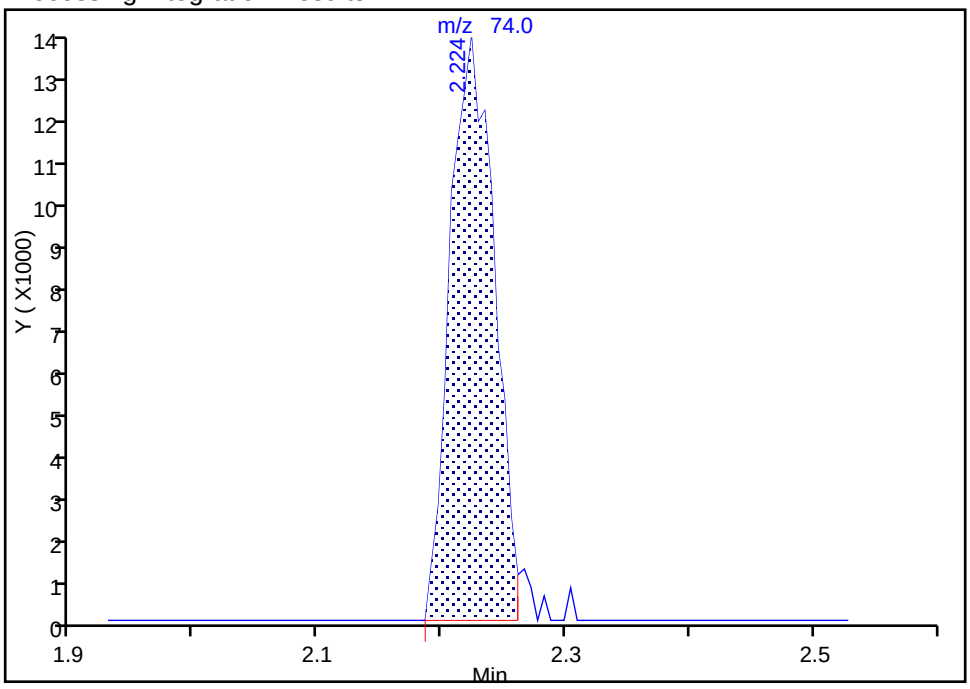
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090005.D				
Injection Date:	09-Oct-2017 05:50:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

14 N-Nitrosodimethylamine, CAS: 62-75-9

Signal: 1

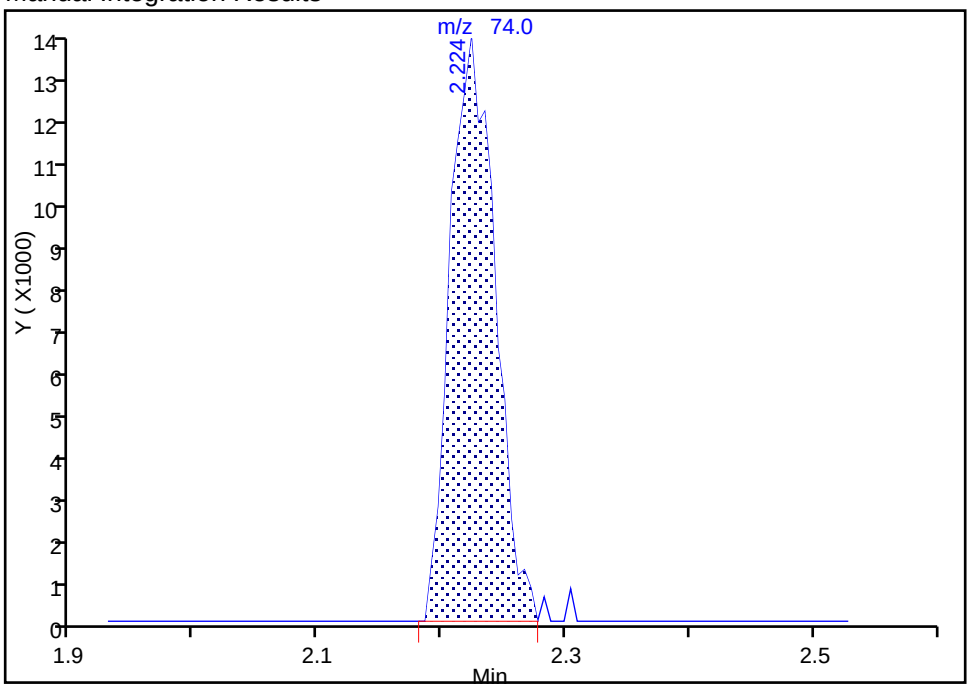
Processing Integration Results

RT: 2.22
Area: 33826
Amount: 3.834539
Amount Units: ng



Manual Integration Results

RT: 2.22
Area: 34452
Amount: 3.946263
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:15:34

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

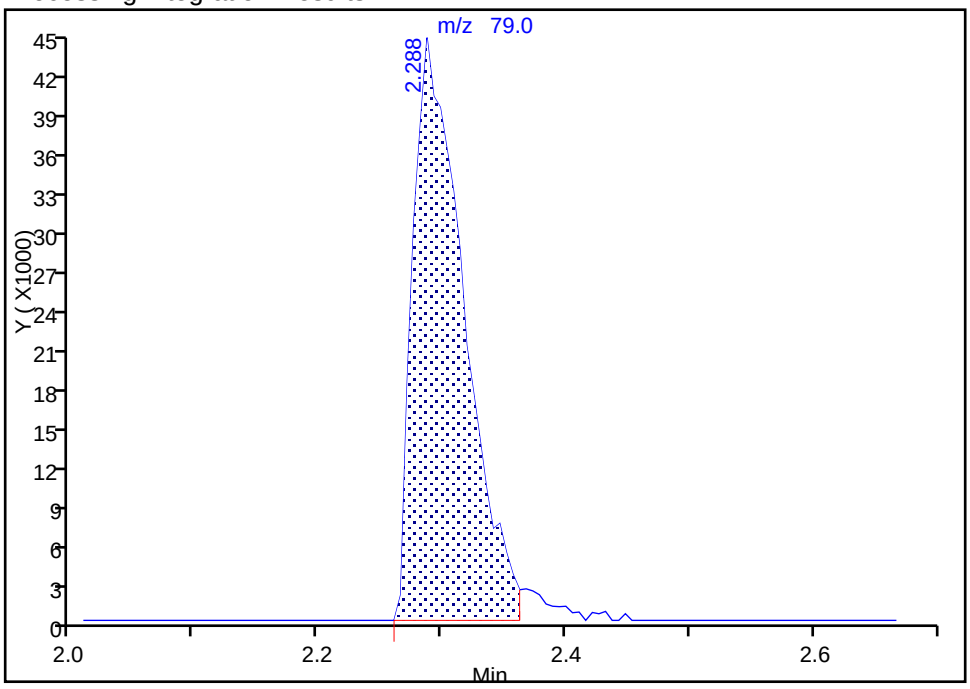
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090005.D				
Injection Date:	09-Oct-2017 05:50:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

Signal: 1

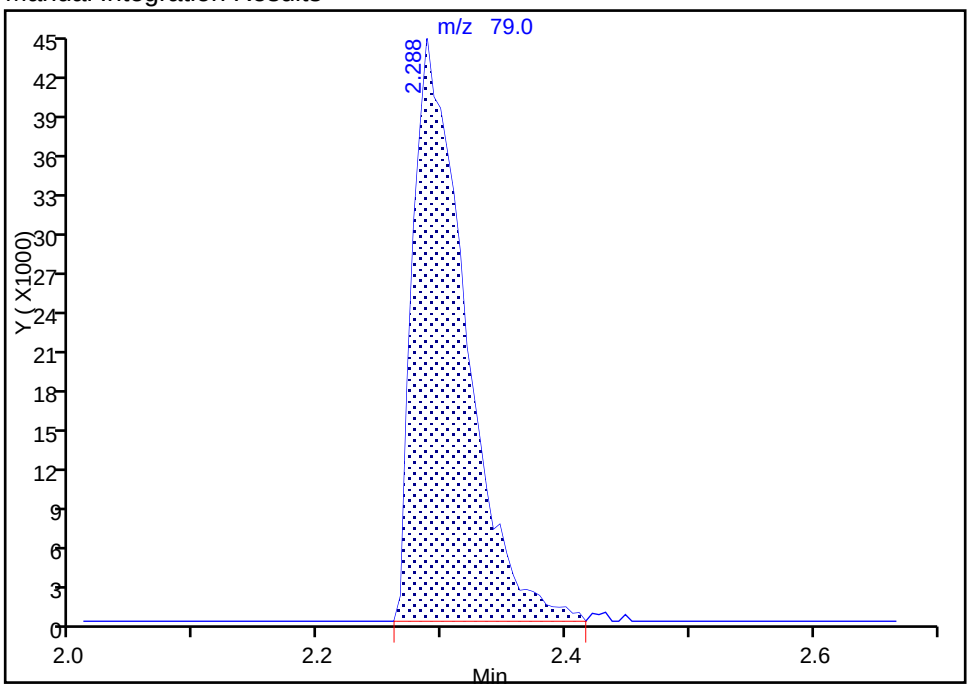
Processing Integration Results

RT: 2.29
Area: 128287
Amount: 7.708753
Amount Units: ng



Manual Integration Results

RT: 2.29
Area: 132252
Amount: 8.205330
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:15:38

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

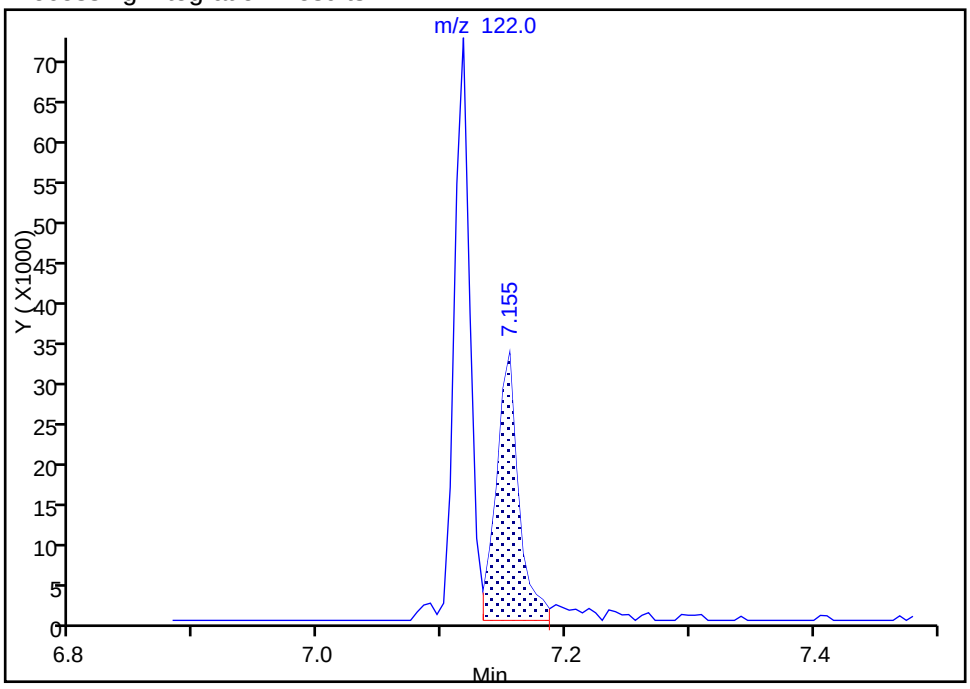
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090005.D				
Injection Date:	09-Oct-2017 05:50:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

52 Benzoic acid, CAS: 65-85-0

Signal: 1

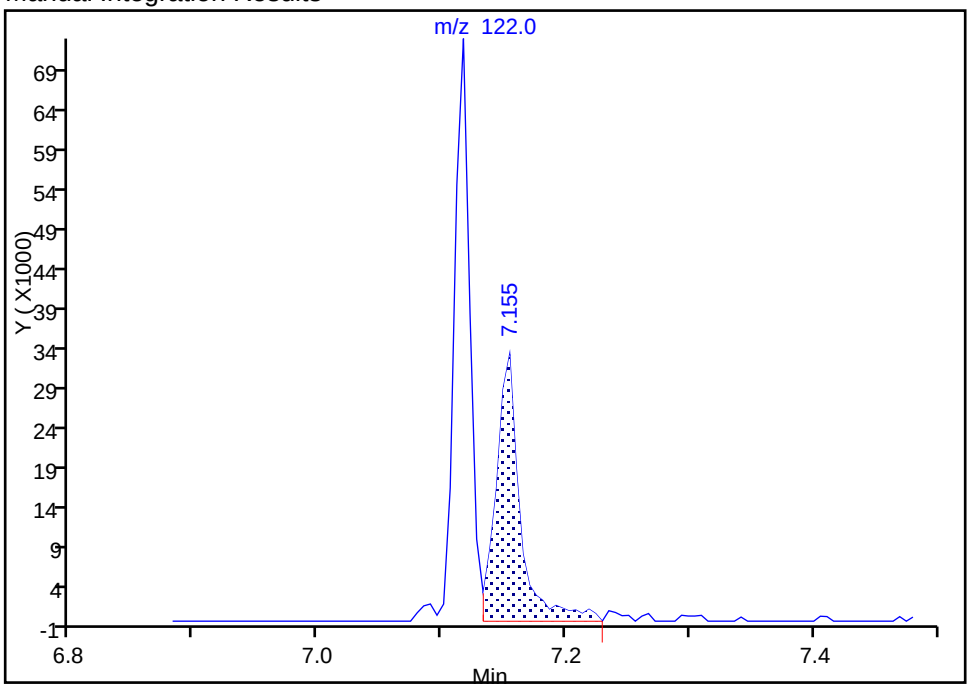
Processing Integration Results

RT: 7.15
Area: 41636
Amount: 4.378102
Amount Units: ng



Manual Integration Results

RT: 7.15
Area: 44756
Amount: 4.747301
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:16:10

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

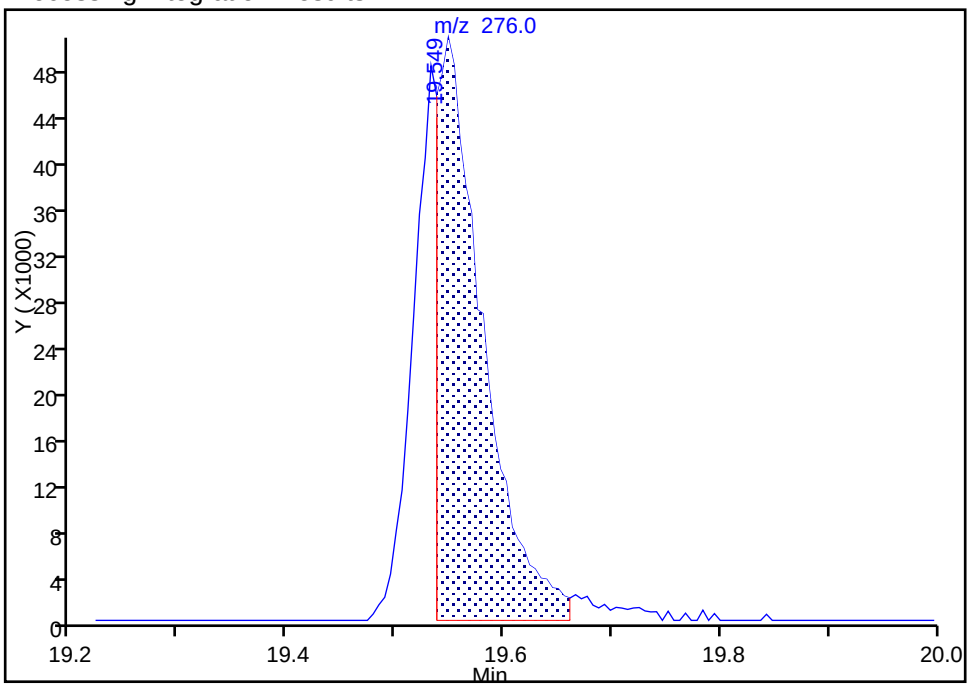
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090005.D				
Injection Date:	09-Oct-2017 05:50:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

157 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

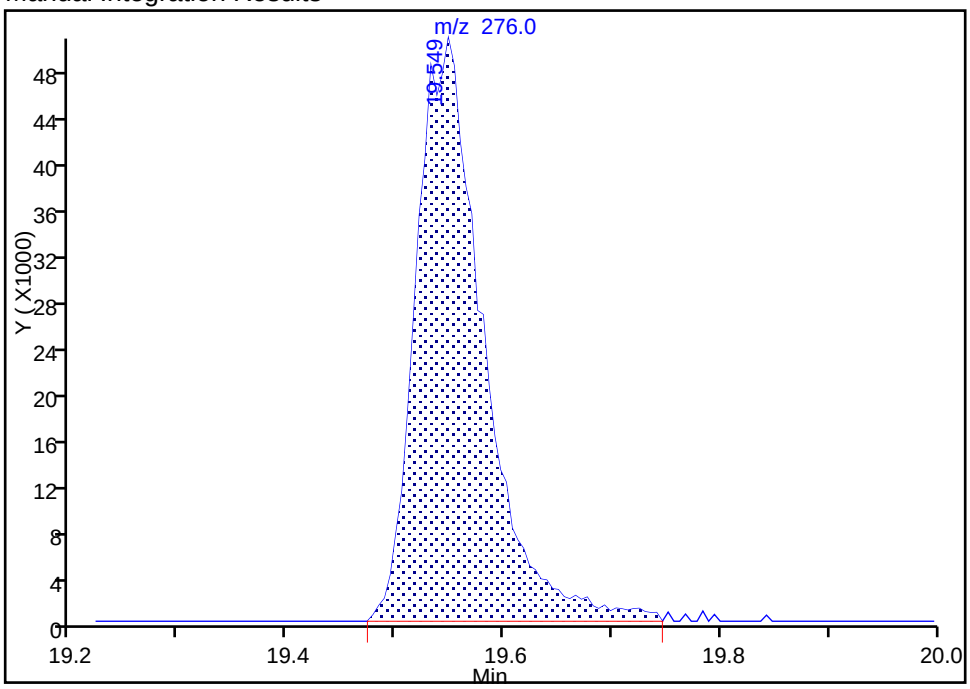
Processing Integration Results

RT: 19.55
Area: 149580
Amount: 3.357720
Amount Units: ng



Manual Integration Results

RT: 19.55
Area: 217740
Amount: 4.141468
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:16:39

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

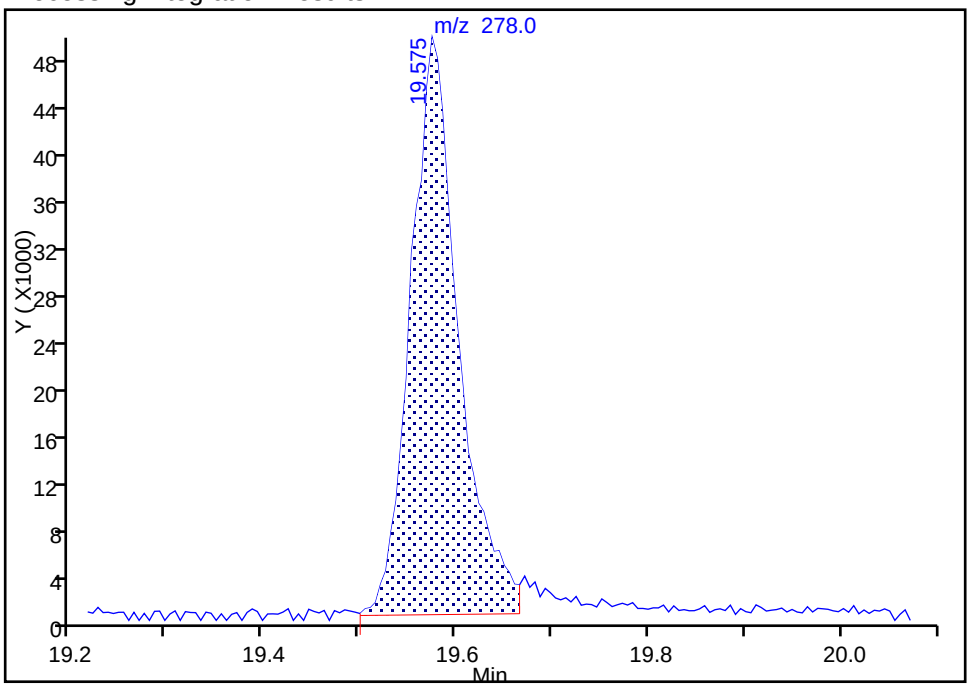
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090005.D				
Injection Date:	09-Oct-2017 05:50:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

158 Dibenz(a,h)anthracene, CAS: 53-70-3

Signal: 1

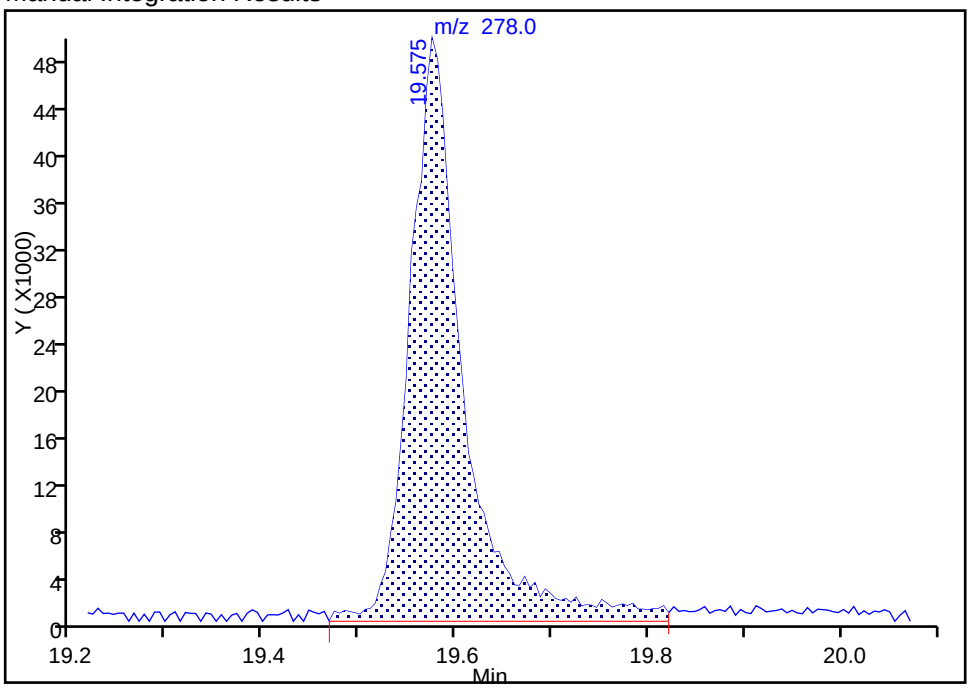
Processing Integration Results

RT: 19.58
Area: 169698
Amount: 3.457297
Amount Units: ng



Manual Integration Results

RT: 19.58
Area: 191512
Amount: 4.011344
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:17:00

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

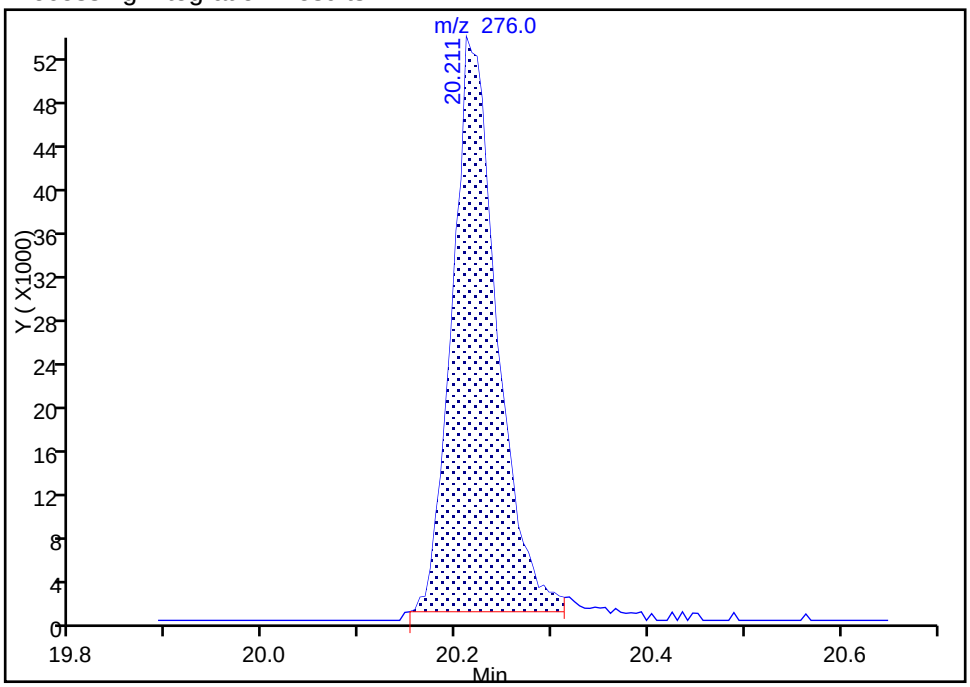
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090005.D				
Injection Date:	09-Oct-2017 05:50:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

159 Benzo[g,h,i]perylene, CAS: 191-24-2

Signal: 1

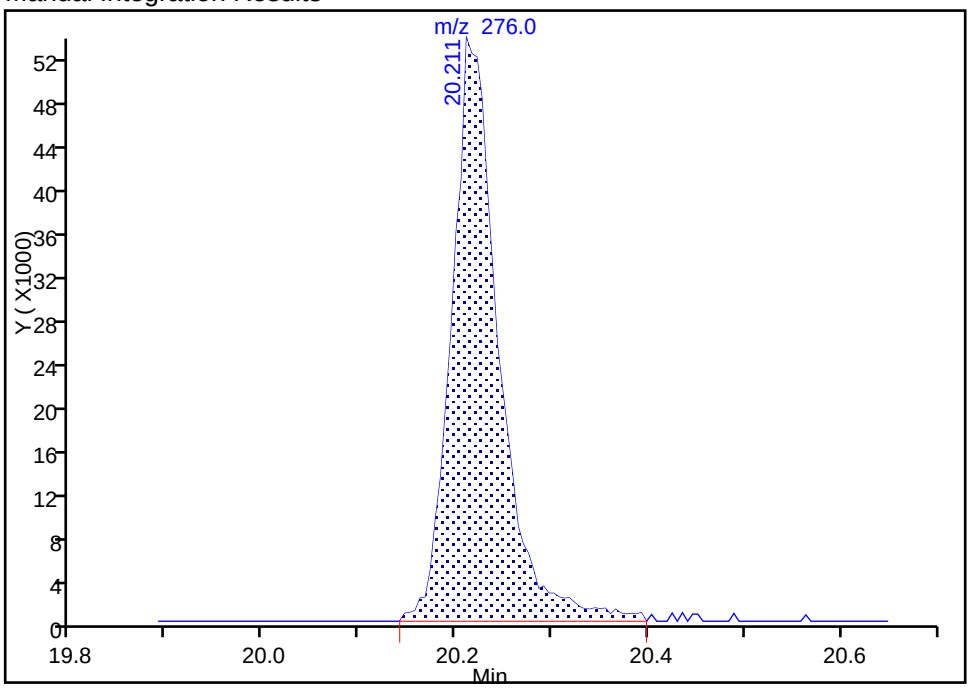
Processing Integration Results

RT: 20.21
Area: 168902
Amount: 3.971640
Amount Units: ng



Manual Integration Results

RT: 20.21
Area: 182145
Amount: 3.999994
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 06:17:08

Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090006.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 09-Oct-2017 06:16:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018773-006
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Oct-2017 08:46:51 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 09-Oct-2017 06:53:01

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	6.193	6.193	0.000	97	98090	8.00	8.00	
* 2 Naphthalene-d8	136	7.470	7.470	0.000	99	349328	8.00	8.00	
* 3 Acenaphthene-d10	164	9.163	9.163	0.000	97	184790	8.00	8.00	
* 4 Phenanthrene-d10	188	10.600	10.600	0.000	97	371629	8.00	8.00	
* 5 Chrysene-d12	240	14.329	14.329	0.000	98	362848	8.00	8.00	
* 6 Perylene-d12	264	17.203	17.203	0.000	97	337299	8.00	8.00	
$ 7 2-Fluorophenol	112	4.745	4.745	0.000	93	160480	10.0	10.2	
$ 8 Phenol-d5	99	5.808	5.808	0.000	94	211987	10.0	10.0	
$ 9 Nitrobenzene-d5	82	6.749	6.749	0.000	91	207730	10.0	10.5	
$ 10 2-Fluorobiphenyl	172	8.501	8.501	0.000	99	342266	10.0	9.67	
$ 11 2,4,6-Tribromophenol	330	9.917	9.917	0.000	78	34910	10.0	10.1	
$ 12 Terphenyl-d14	244	12.513	12.513	0.000	99	387547	10.0	9.74	
13 1,4-Dioxane	88	1.609	1.609	0.000	89	54218	10.0	9.83	
14 N-Nitrosodimethylamine	74	2.218	2.218	0.000	91	80584	10.0	10.0	
15 Pyridine	79	2.283	2.283	0.000	96	309133	20.0	20.9	
21 Methyl methanesulfonate	80	4.500	4.500	0.000	89	102354	10.0	10.1	
25 Benzaldehyde	77	5.723	5.723	0.000	94	140643	10.0	10.4	
26 Phenol	94	5.819	5.819	0.000	97	239691	10.0	10.3	
27 Aniline	93	5.840	5.840	0.000	97	270255	10.0	10.4	
29 Bis(2-chloroethyl)ether	93	5.910	5.910	0.000	93	155197	10.0	9.91	
30 2-Chlorophenol	128	5.969	5.969	0.000	97	170535	10.0	10.1	
31 n-Decane	43	6.033	6.033	0.000	88	162568	10.0	10.5	
32 1,3-Dichlorobenzene	146	6.134	6.134	0.000	94	188332	10.0	9.84	
33 1,4-Dichlorobenzene	146	6.209	6.209	0.000	91	182821	10.0	9.74	
34 Benzyl alcohol	108	6.327	6.327	0.000	87	106030	10.0	9.79	
35 1,2-Dichlorobenzene	146	6.369	6.369	0.000	93	176510	10.0	9.97	
36 2-Methylphenol	108	6.439	6.439	0.000	97	155636	10.0	10.3	
37 Indene	116	6.460	6.460	0.000	89	279941	10.0	9.87	
38 2,2'-oxybis[1-chloropropan	45	6.471	6.471	0.000	90	211661	10.0	10.7	
39 N-Nitrosopyrrolidine	100	6.562	6.562	0.000	82	75199	10.0	9.94	
42 4-Methylphenol	108	6.594	6.594	0.000	61	159527	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.594	6.594	0.000	79	236122	10.0	10.0	
41 N-Nitrosodi-n-propylamine	70	6.594	6.594	0.000	69	135011	10.0	10.6	
45 Hexachloroethane	117	6.717	6.717	0.000	94	82244	10.0	10.2	
46 Nitrobenzene	77	6.765	6.765	0.000	88	208734	10.0	10.1	
48 Isophorone	82	7.000	7.000	0.000	98	367413	10.0	10.4	
49 2-Nitrophenol	139	7.085	7.085	0.000	90	83341	10.0	10.3	
50 2,4-Dimethylphenol	107	7.117	7.117	0.000	99	182706	10.0	10.4	
52 Benzoic acid	122	7.160	7.160	0.000	90	69151	10.0	7.96	
53 Bis(2-chloroethoxy)methane	93	7.208	7.208	0.000	95	208624	10.0	10.4	
54 2,4-Dichlorophenol	162	7.320	7.320	0.000	96	135072	10.0	10.1	
56 1,2,4-Trichlorobenzene	180	7.411	7.411	0.000	93	149145	10.0	9.80	
58 Naphthalene	128	7.491	7.491	0.000	98	456345	10.0	10.1	
59 4-Chloroaniline	127	7.529	7.529	0.000	92	194498	10.0	10.1	
60 2,6-Dichlorophenol	162	7.545	7.545	0.000	93	127294	10.0	10.0	
62 Hexachlorobutadiene	225	7.614	7.614	0.000	95	92427	10.0	9.71	
64 Caprolactam	113	7.828	7.828	0.000	74	48316	10.0	10.4	
67 4-Chloro-3-methylphenol	107	7.983	7.983	0.000	93	160508	10.0	10.2	
69 2-Methylnaphthalene	142	8.159	8.159	0.000	91	331687	10.0	10.4	
71 1-Methylnaphthalene	142	8.255	8.255	0.000	92	303576	10.0	10.2	
72 Hexachlorocyclopentadiene	237	8.319	8.319	0.000	96	100254	10.0	9.53	
73 1,2,4,5-Tetrachlorobenzene	216	8.325	8.325	0.000	97	149837	10.0	9.53	
74 2,4,6-Trichlorophenol	196	8.421	8.421	0.000	96	99741	10.0	9.78	
75 2,4,5-Trichlorophenol	196	8.458	8.458	0.000	90	103819	10.0	9.90	
76 1,1'-Biphenyl	154	8.602	8.602	0.000	97	380526	10.0	10.0	
77 2-Chloronaphthalene	162	8.629	8.629	0.000	98	283750	10.0	9.78	
79 2-Nitroaniline	65	8.709	8.709	0.000	74	128926	10.0	9.80	
82 Dimethyl phthalate	163	8.869	8.869	0.000	96	351937	10.0	9.92	
83 1,3-Dinitrobenzene	168	8.902	8.902	0.000	78	46973	10.0	10.3	
84 2,6-Dinitrotoluene	165	8.934	8.934	0.000	84	76301	10.0	10.5	
85 Acenaphthylene	152	9.030	9.030	0.000	99	448172	10.0	10.1	
86 3-Nitroaniline	138	9.099	9.099	0.000	87	84823	10.0	10.3	
87 2,4-Dinitrophenol	184	9.195	9.195	0.000	72	85981	20.0	17.8	
88 Acenaphthene	153	9.195	9.195	0.000	90	292150	10.0	9.72	
89 4-Nitrophenol	109	9.233	9.233	0.000	92	121469	20.0	20.5	
91 2,4-Dinitrotoluene	165	9.318	9.318	0.000	81	96728	10.0	9.95	
93 Dibenzofuran	168	9.361	9.361	0.000	95	414966	10.0	9.93	
95 2,3,5,6-Tetrachlorophenol	232	9.430	9.430	0.000	93	83709	10.0	9.77	
96 2,3,4,6-Tetrachlorophenol	232	9.473	9.473	0.000	79	86436	10.0	10.1	
97 2-Naphthylamine	143	9.500	9.500	0.000	94	309971	10.0	10.2	
98 Diethyl phthalate	149	9.532	9.532	0.000	96	347390	10.0	9.71	
99 Hexadecane	57	9.537	9.537	0.000	94	287290	10.0	11.0	
100 4-Chlorophenyl phenyl ethe	204	9.671	9.671	0.000	94	170248	10.0	9.70	
101 4-Nitroaniline	138	9.682	9.682	0.000	81	89543	10.0	10.2	
103 Fluorene	166	9.687	9.687	0.000	93	326141	10.0	9.66	
104 4,6-Dinitro-2-methylphenol	198	9.708	9.708	0.000	80	102878	20.0	19.5	
105 N-Nitrosodiphenylamine	169	9.778	9.778	0.000	65	251910	10.0	9.98	
57 Azobenzene	77	9.820	9.820	0.000	97	491093	10.0	10.4	
90 1,2-Diphenylhydrazine	77	9.820	9.820	0.000	97	491093	10.0	10.4	
110 4-Bromophenyl phenyl ether	248	10.136	10.136	0.000	79	98586	10.0	10.1	
112 Hexachlorobenzene	284	10.226	10.226	0.000	89	88403	10.0	10.1	
113 Atrazine	200	10.258	10.258	0.000	86	101090	10.0	10.6	
116 Pentachlorophenol	266	10.397	10.397	0.000	86	120265	20.0	16.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.403	10.403	0.000	94	310290	10.0	10.9	
121 Phenanthrene	178	10.627	10.627	0.000	99	498649	10.0	10.1	
122 Anthracene	178	10.681	10.681	0.000	99	516922	10.0	10.4	
124 Carbazole	167	10.830	10.830	0.000	97	477720	10.0	10.1	
126 Di-n-butyl phthalate	149	11.151	11.151	0.000	99	625543	10.0	10.7	
131 Fluoranthene	202	12.021	12.021	0.000	99	588677	10.0	10.4	
132 Benzidine	184	12.150	12.150	0.000	99	308210	10.0	10.8	
133 Pyrene	202	12.342	12.342	0.000	96	588222	10.0	10.0	
138 Butyl benzyl phthalate	149	13.250	13.250	0.000	95	277861	10.0	9.93	
144 3,3'-Dichlorobenzidine	252	14.233	14.233	0.000	77	192002	10.0	9.71	
145 Bis(2-ethylhexyl) phthalat	149	14.281	14.281	0.000	94	372544	10.0	10.4	
146 Benzo[a]anthracene	228	14.308	14.308	0.000	99	551343	10.0	9.86	
147 Chrysene	228	14.377	14.377	0.000	97	528762	10.0	9.94	
150 Di-n-octyl phthalate	149	15.585	15.585	0.000	98	579311	10.0	10.1	
151 7,12-Dimethylbenz(a)anthra	256	16.423	16.423	0.000	89	247448	10.0	10.3	
152 Benzo[b]fluoranthene	252	16.439	16.439	0.000	98	516523	10.0	10.0	
153 Benzo[k]fluoranthene	252	16.488	16.488	0.000	99	535631	10.0	10.6	
219 Benzo[e]pyrene	252	16.995	16.995	0.000	0	480798	10.0	10.1	
154 Benzo[a]pyrene	252	17.091	17.091	0.000	79	493323	10.0	10.3	
157 Indeno[1,2,3-cd]pyrene	276	19.549	19.549	0.000	98	510298	10.0	10.0	
158 Dibenz(a,h)anthracene	278	19.575	19.575	0.000	90	433750	10.0	9.39	
159 Benzo[g,h,i]perylene	276	20.216	20.216	0.000	96	441336	10.0	10.0	
S 199 Total Cresols	108				0		20.0	20.4	
S 197 Methyl Phenols,Total	108				0		20.0	20.4	

Reagents:

SVTAPSTD10i_00240 Amount Added: 1.00 Units: mL

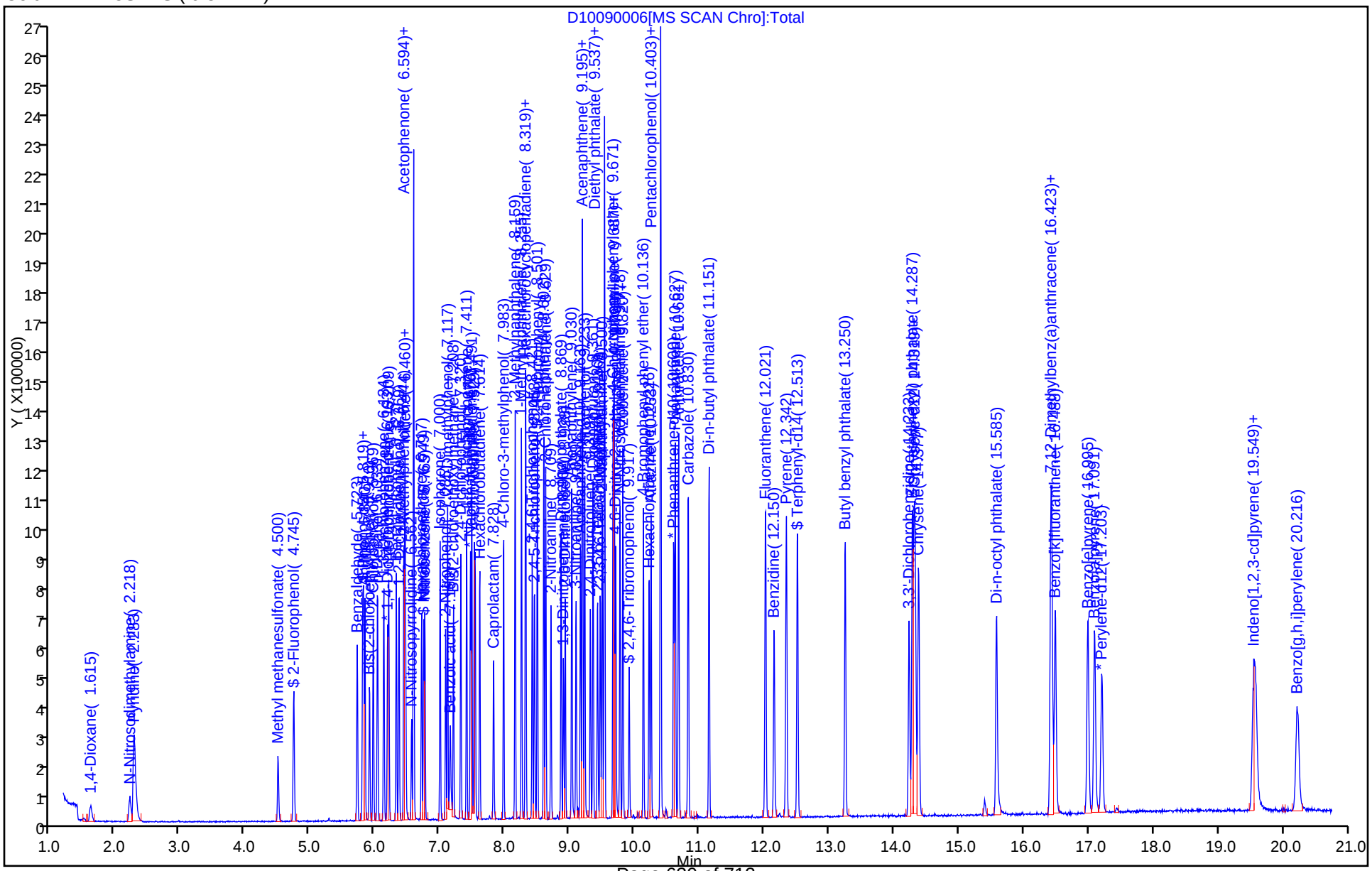
Report Date: 09-Oct-2017 08:46:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090006.D

Injection Date:	09-Oct-2017 06:16:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	ICIS			Worklist Smp#:	6
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090007.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 09-Oct-2017 06:43:30 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018773-007
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Oct-2017 08:46:54 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 09-Oct-2017 07:36:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.198	6.193	0.005	96	100014	8.00	8.00	
* 2 Naphthalene-d8	136	7.475	7.470	0.005	99	361787	8.00	8.00	
* 3 Acenaphthene-d10	164	9.174	9.163	0.011	97	186363	8.00	8.00	
* 4 Phenanthrene-d10	188	10.611	10.600	0.011	98	393196	8.00	8.00	
* 5 Chrysene-d12	240	14.345	14.329	0.016	98	365456	8.00	8.00	
* 6 Perylene-d12	264	17.219	17.203	0.016	97	358578	8.00	8.00	
$ 7 2-Fluorophenol	112	4.751	4.745	0.006	92	325608	20.0	20.2	
$ 8 Phenol-d5	99	5.814	5.808	0.006	95	425892	20.0	19.7	
$ 9 Nitrobenzene-d5	82	6.754	6.749	0.005	92	407648	20.0	19.9	
$ 10 2-Fluorobiphenyl	172	8.506	8.501	0.005	99	683940	20.0	19.2	
$ 11 2,4,6-Tribromophenol	330	9.927	9.917	0.010	80	75008	20.0	20.5	
$ 12 Terphenyl-d14	244	12.524	12.513	0.011	99	804043	20.0	20.1	
13 1,4-Dioxane	88	1.615	1.609	0.006	88	113363	20.0	20.2	
14 N-Nitrosodimethylamine	74	2.229	2.218	0.011	93	161705	20.0	19.7	
15 Pyridine	79	2.293	2.283	0.011	97	604035	40.0	40.0	
21 Methyl methanesulfonate	80	4.510	4.500	0.010	88	208115	20.0	20.2	
25 Benzaldehyde	77	5.734	5.723	0.011	93	302704	20.0	21.9	
26 Phenol	94	5.830	5.819	0.011	99	450705	20.0	19.1	
27 Aniline	93	5.851	5.840	0.011	96	507401	20.0	19.1	
29 Bis(2-chloroethyl)ether	93	5.921	5.910	0.011	94	312551	20.0	19.6	
30 2-Chlorophenol	128	5.979	5.969	0.010	97	328093	20.0	19.1	
31 n-Decane	43	6.043	6.033	0.010	87	319800	20.0	20.3	
32 1,3-Dichlorobenzene	146	6.140	6.134	0.006	95	373700	20.0	19.2	
33 1,4-Dichlorobenzene	146	6.214	6.209	0.005	90	373734	20.0	19.5	
34 Benzyl alcohol	108	6.332	6.327	0.005	87	219968	20.0	19.9	
35 1,2-Dichlorobenzene	146	6.375	6.369	0.006	93	349589	20.0	19.4	
36 2-Methylphenol	108	6.449	6.439	0.010	98	304165	20.0	19.8	
37 Indene	116	6.465	6.460	0.005	89	554323	20.0	19.2	
38 2,2'-oxybis[1-chloropropan	45	6.476	6.471	0.005	90	389829	20.0	19.5	
39 N-Nitrosopyrrolidine	100	6.567	6.562	0.005	84	157308	20.0	20.4	
41 N-Nitrosodi-n-propylamine	70	6.599	6.594	0.005	73	252078	20.0	19.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.599	6.594	0.005	90	467398	20.0	19.5	
42 4-Methylphenol	108	6.599	6.594	0.005	96	309909	20.0	19.3	
45 Hexachloroethane	117	6.722	6.717	0.005	95	165045	20.0	20.0	
46 Nitrobenzene	77	6.775	6.765	0.010	89	413132	20.0	19.3	
48 Isophorone	82	7.005	7.000	0.005	99	733538	20.0	20.1	
49 2-Nitrophenol	139	7.096	7.085	0.011	93	172763	20.0	20.5	
50 2,4-Dimethylphenol	107	7.123	7.117	0.006	99	364613	20.0	20.1	
52 Benzoic acid	122	7.181	7.160	0.021	90	167640	20.0	18.6	
53 Bis(2-chloroethoxy)methane	93	7.213	7.208	0.005	94	414415	20.0	19.9	
54 2,4-Dichlorophenol	162	7.326	7.320	0.006	97	267784	20.0	19.4	
56 1,2,4-Trichlorobenzene	180	7.416	7.411	0.005	93	298977	20.0	19.0	
58 Naphthalene	128	7.497	7.491	0.006	99	905094	20.0	19.4	
59 4-Chloroaniline	127	7.534	7.529	0.005	93	392876	20.0	19.8	
60 2,6-Dichlorophenol	162	7.550	7.545	0.005	92	249893	20.0	18.9	
62 Hexachlorobutadiene	225	7.619	7.614	0.005	95	189570	20.0	19.2	
64 Caprolactam	113	7.838	7.828	0.010	75	99825	20.0	20.7	
67 4-Chloro-3-methylphenol	107	7.988	7.983	0.005	94	317428	20.0	19.5	
69 2-Methylnaphthalene	142	8.164	8.159	0.005	92	652898	20.0	19.8	
71 1-Methylnaphthalene	142	8.260	8.255	0.005	92	592243	20.0	19.1	
72 Hexachlorocyclopentadiene	237	8.325	8.319	0.006	96	207507	20.0	19.6	
73 1,2,4,5-Tetrachlorobenzene	216	8.330	8.325	0.005	98	290891	20.0	18.3	
74 2,4,6-Trichlorophenol	196	8.431	8.421	0.010	97	203816	20.0	19.8	
75 2,4,5-Trichlorophenol	196	8.463	8.458	0.005	90	203865	20.0	19.3	
76 1,1'-Biphenyl	154	8.608	8.602	0.006	97	755928	20.0	19.7	
77 2-Chloronaphthalene	162	8.640	8.629	0.011	98	573048	20.0	19.6	
79 2-Nitroaniline	65	8.720	8.709	0.011	75	260367	20.0	19.6	
82 Dimethyl phthalate	163	8.875	8.869	0.006	96	708483	20.0	19.8	
83 1,3-Dinitrobenzene	168	8.912	8.902	0.010	80	98524	20.0	21.4	
84 2,6-Dinitrotoluene	165	8.939	8.934	0.005	83	147543	20.0	20.2	
85 Acenaphthylene	152	9.040	9.030	0.010	99	891666	20.0	19.9	
86 3-Nitroaniline	138	9.105	9.099	0.006	86	173890	20.0	20.9	
88 Acenaphthene	153	9.206	9.195	0.011	89	583826	20.0	19.3	
87 2,4-Dinitrophenol	184	9.206	9.195	0.011	73	191508	40.0	33.9	
89 4-Nitrophenol	109	9.238	9.233	0.005	93	247469	40.0	41.5	
91 2,4-Dinitrotoluene	165	9.329	9.318	0.011	81	206940	20.0	21.1	
93 Dibenzofuran	168	9.366	9.361	0.005	95	813993	20.0	19.3	
95 2,3,5,6-Tetrachlorophenol	232	9.436	9.430	0.006	93	173959	20.0	20.1	
96 2,3,4,6-Tetrachlorophenol	232	9.478	9.473	0.005	78	174139	20.0	20.1	
97 2-Naphthylamine	143	9.511	9.500	0.011	94	611184	20.0	19.9	
98 Diethyl phthalate	149	9.543	9.532	0.011	96	677332	20.0	18.8	
99 Hexadecane	57	9.548	9.537	0.011	94	562285	20.0	20.7	
100 4-Chlorophenyl phenyl ethe	204	9.676	9.671	0.005	96	343751	20.0	19.4	
101 4-Nitroaniline	138	9.692	9.682	0.010	79	180591	20.0	20.5	
103 Fluorene	166	9.698	9.687	0.011	94	655763	20.0	19.3	
104 4,6-Dinitro-2-methylphenol	198	9.719	9.708	0.011	75	227886	40.0	40.8	
105 N-Nitrosodiphenylamine	169	9.783	9.778	0.005	64	518875	20.0	19.4	
90 1,2-Diphenylhydrazine	77	9.826	9.820	0.006	98	979956	20.0	19.6	
57 Azobenzene	77	9.826	9.820	0.006	98	979956	20.0	19.6	
110 4-Bromophenyl phenyl ether	248	10.146	10.136	0.010	80	195685	20.0	19.0	
112 Hexachlorobenzene	284	10.232	10.226	0.006	90	178984	20.0	19.3	
113 Atrazine	200	10.264	10.258	0.006	86	201002	20.0	19.9	
116 Pentachlorophenol	266	10.408	10.397	0.011	87	259365	40.0	34.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.413	10.403	0.010	94	609515	20.0	21.1	
121 Phenanthrene	178	10.638	10.627	0.011	99	1010755	20.0	19.3	
122 Anthracene	178	10.691	10.681	0.011	99	1030787	20.0	19.6	
124 Carbazole	167	10.835	10.830	0.005	96	989573	20.0	19.7	
126 Di-n-butyl phthalate	149	11.161	11.151	0.010	99	1256081	20.0	20.4	
131 Fluoranthene	202	12.032	12.021	0.011	99	1198338	20.0	20.0	
132 Benzidine	184	12.166	12.150	0.016	99	677859	20.0	23.5	
133 Pyrene	202	12.353	12.342	0.011	96	1192985	20.0	20.1	
138 Butyl benzyl phthalate	149	13.261	13.250	0.011	95	588474	20.0	20.9	
144 3,3'-Dichlorobenzidine	252	14.249	14.233	0.016	79	408824	20.0	20.5	
145 Bis(2-ethylhexyl) phthalat	149	14.297	14.281	0.016	94	775005	20.0	21.5	
146 Benzo[a]anthracene	228	14.324	14.308	0.016	99	1118285	20.0	19.9	
147 Chrysene	228	14.393	14.377	0.016	98	1059696	20.0	19.8	
150 Di-n-octyl phthalate	149	15.595	15.585	0.010	98	1287986	20.0	21.2	
151 7,12-Dimethylbenz(a)anthra	256	16.434	16.423	0.011	90	520950	20.0	20.3	
152 Benzo[b]fluoranthene	252	16.450	16.439	0.011	98	1093946	20.0	20.0	
153 Benzo[k]fluoranthene	252	16.509	16.488	0.021	99	1058706	20.0	19.7	
219 Benzo[e]pyrene	252	17.006	16.995	0.011	0	1030287	20.0	20.4	
154 Benzo[a]pyrene	252	17.113	17.091	0.022	79	1031683	20.0	20.3	
157 Indeno[1,2,3-cd]pyrene	276	19.570	19.549	0.021	97	1113450	20.0	20.6	
158 Dibenz(a,h)anthracene	278	19.602	19.575	0.027	91	902512	20.0	18.4	
159 Benzo[g,h,i]perylene	276	20.259	20.216	0.043	98	962965	20.0	20.6	M
S 197 Methyl Phenols,Total	108				0		40.0	39.1	
S 199 Total Cresols	108				0		40.0	39.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD20i_00013 Amount Added: 1.00 Units: mL

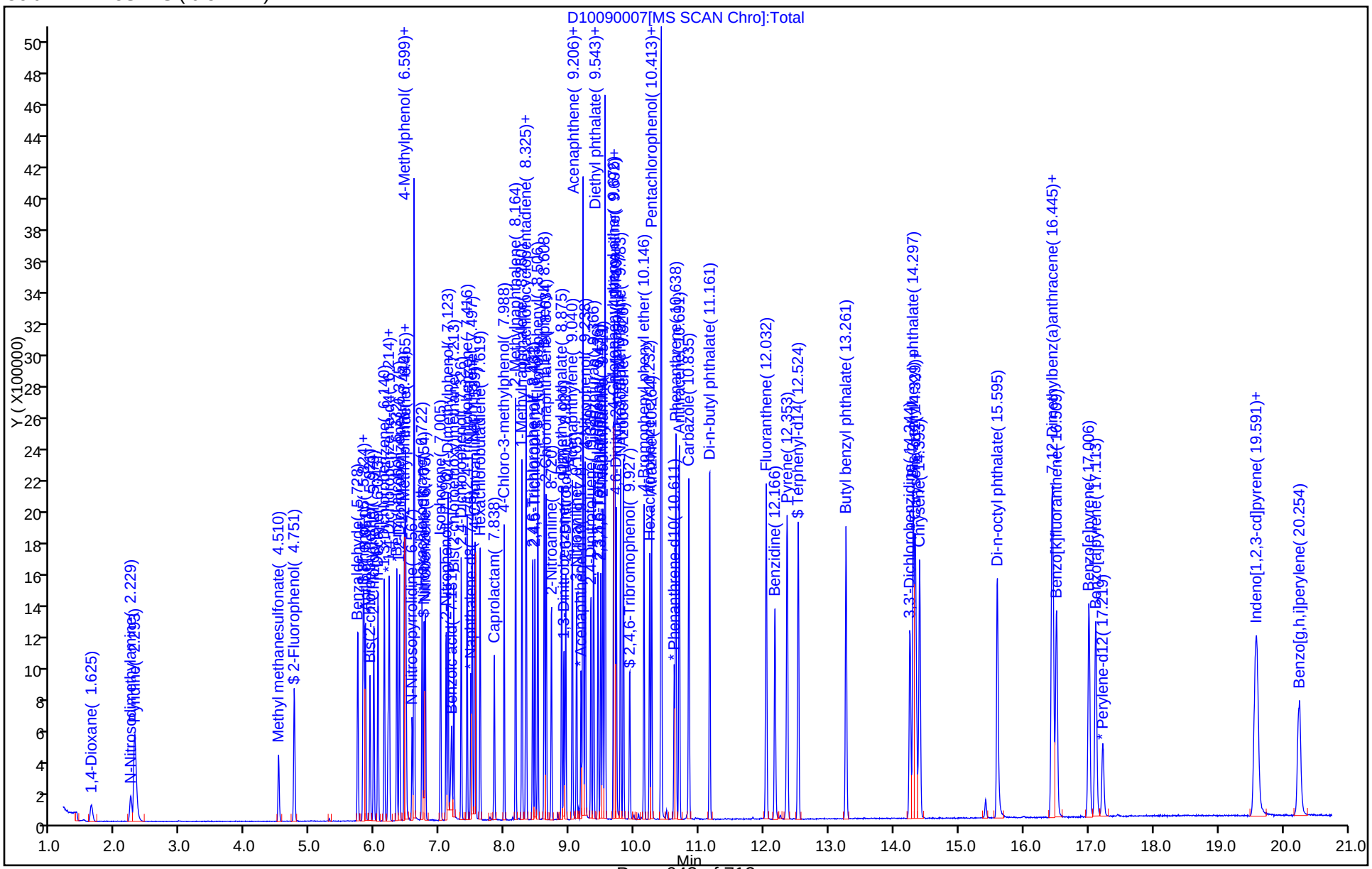
Report Date: 09-Oct-2017 08:46:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090007.D

Injection Date:	09-Oct-2017 06:43:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	7
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

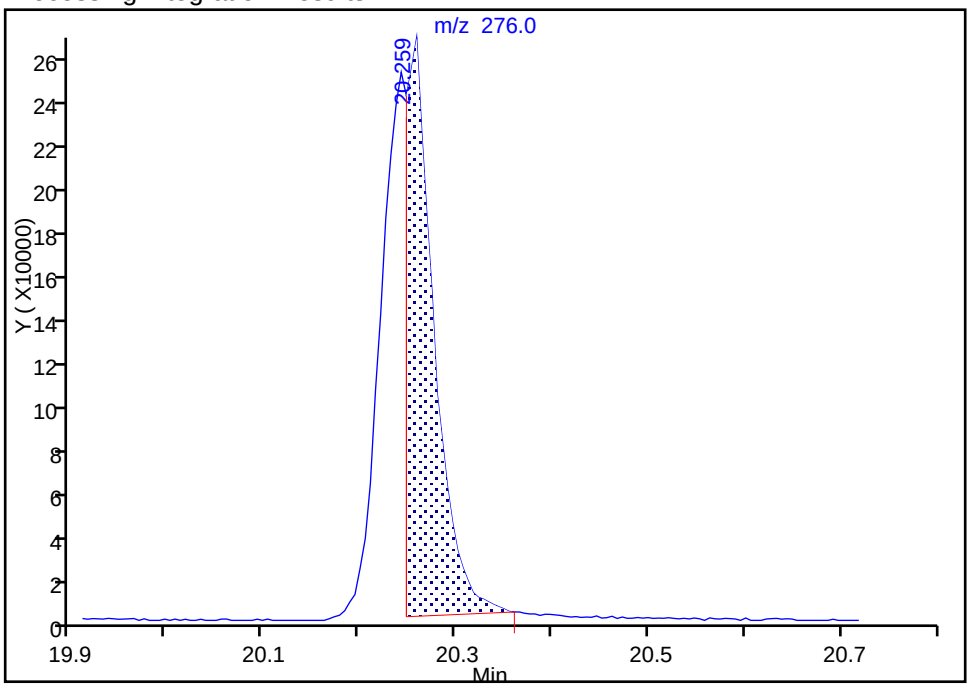
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090007.D				
Injection Date:	09-Oct-2017 06:43:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	6	Worklist Smp#:	7
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

159 Benzo[g,h,i]perylene, CAS: 191-24-2

Signal: 1

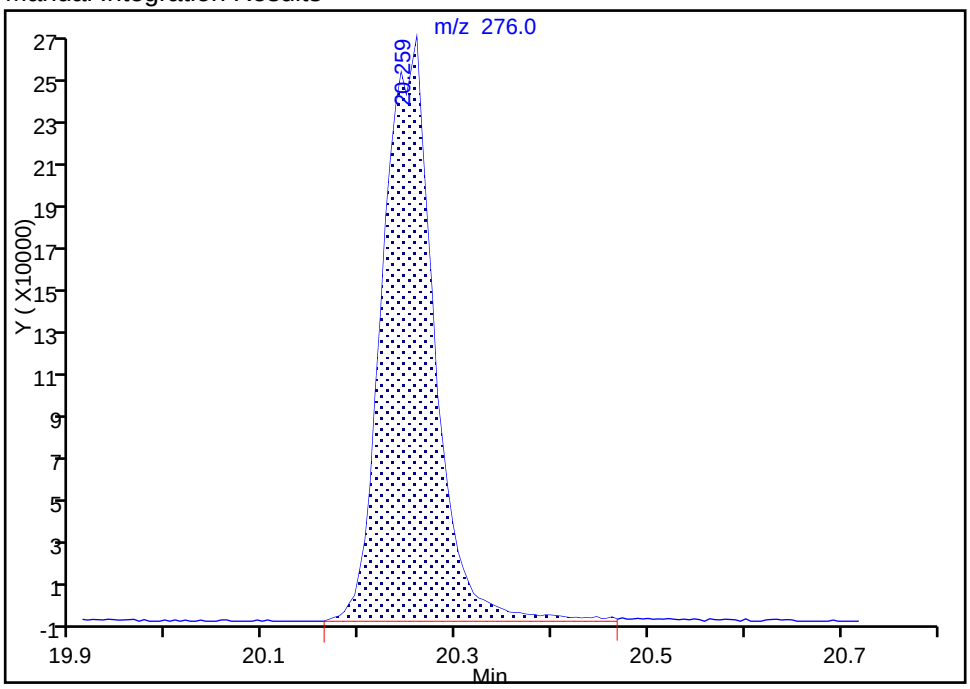
Processing Integration Results

RT: 20.26
Area: 529052
Amount: 12.717789
Amount Units: ng



Manual Integration Results

RT: 20.26
Area: 962965
Amount: 20.561388
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 07:17:59

Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090008.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 09-Oct-2017 07:09:30 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018773-008
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Oct-2017 08:46:57 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 09-Oct-2017 07:37:35

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	6.198	6.193	0.005	97	94864	8.00	8.00	
* 2 Naphthalene-d8	136	7.475	7.470	0.005	99	349812	8.00	8.00	
* 3 Acenaphthene-d10	164	9.174	9.163	0.011	98	181727	8.00	8.00	
* 4 Phenanthrene-d10	188	10.611	10.600	0.011	98	388309	8.00	8.00	
* 5 Chrysene-d12	240	14.350	14.329	0.021	98	349203	8.00	8.00	
* 6 Perylene-d12	264	17.230	17.203	0.027	97	348969	8.00	8.00	
$ 7 2-Fluorophenol	112	4.745	4.745	0.000	93	598868	40.0	39.2	
$ 8 Phenol-d5	99	5.814	5.808	0.006	96	787359	40.0	38.4	
$ 9 Nitrobenzene-d5	82	6.754	6.749	0.005	90	761426	40.0	38.5	
$ 10 2-Fluorobiphenyl	172	8.506	8.501	0.005	99	1317138	40.0	37.9	
$ 11 2,4,6-Tribromophenol	330	9.927	9.917	0.010	80	152853	40.0	42.3	
$ 12 Terphenyl-d14	244	12.523	12.513	0.010	99	1514692	40.0	39.5	
13 1,4-Dioxane	88	1.609	1.609	0.000	90	218472	40.0	41.0	
14 N-Nitrosodimethylamine	74	2.213	2.218	-0.005	93	308842	40.0	39.8	
15 Pyridine	79	2.277	2.283	-0.005	98	1115599	80.0	77.8	
21 Methyl methanesulfonate	80	4.505	4.500	0.005	88	387644	40.0	39.6	
25 Benzaldehyde	77	5.728	5.723	0.005	95	518108	40.0	39.4	
26 Phenol	94	5.830	5.819	0.011	98	829316	40.0	37.0	
27 Aniline	93	5.846	5.840	0.006	97	924935	40.0	36.8	
29 Bis(2-chloroethyl)ether	93	5.915	5.910	0.005	95	562242	40.0	37.1	
30 2-Chlorophenol	128	5.974	5.969	0.005	96	625079	40.0	38.3	
31 n-Decane	43	6.038	6.033	0.005	87	561896	40.0	37.6	
32 1,3-Dichlorobenzene	146	6.139	6.134	0.005	96	716751	40.0	38.7	
33 1,4-Dichlorobenzene	146	6.214	6.209	0.005	91	708165	40.0	39.0	
34 Benzyl alcohol	108	6.332	6.327	0.005	88	415604	40.0	39.7	
35 1,2-Dichlorobenzene	146	6.374	6.369	0.005	94	667460	40.0	39.0	
36 2-Methylphenol	108	6.449	6.439	0.010	97	570371	40.0	39.2	
37 Indene	116	6.465	6.460	0.005	90	1036529	40.0	37.8	
38 2,2'-oxybis[1-chloropropan	45	6.476	6.471	0.005	89	707606	40.0	37.4	
39 N-Nitrosopyrrolidine	100	6.572	6.562	0.010	85	304946	40.0	41.7	
42 4-Methylphenol	108	6.599	6.594	0.005	68	605384	40.0	39.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.599	6.594	0.005	80	866980	40.0	38.1	
41 N-Nitrosodi-n-propylamine	70	6.599	6.594	0.005	68	455694	40.0	37.1	
45 Hexachloroethane	117	6.722	6.717	0.005	93	312124	40.0	39.9	
46 Nitrobenzene	77	6.775	6.765	0.010	88	762261	40.0	36.8	
48 Isophorone	82	7.005	7.000	0.005	99	1367439	40.0	38.8	
49 2-Nitrophenol	139	7.096	7.085	0.011	98	342836	40.0	42.1	
50 2,4-Dimethylphenol	107	7.122	7.117	0.005	99	674066	40.0	38.4	
52 Benzoic acid	122	7.197	7.160	0.037	91	347033	40.0	39.9	
53 Bis(2-chloroethoxy)methane	93	7.213	7.208	0.005	96	760496	40.0	37.8	
54 2,4-Dichlorophenol	162	7.325	7.320	0.005	98	540737	40.0	40.5	
56 1,2,4-Trichlorobenzene	180	7.416	7.411	0.005	94	597997	40.0	39.2	
58 Naphthalene	128	7.496	7.491	0.005	99	1817287	40.0	40.2	
59 4-Chloroaniline	127	7.534	7.529	0.005	93	759019	40.0	39.5	
60 2,6-Dichlorophenol	162	7.550	7.545	0.005	94	499244	40.0	39.1	
62 Hexachlorobutadiene	225	7.619	7.614	0.005	96	371194	40.0	38.9	
64 Caprolactam	113	7.844	7.828	0.016	75	196869	40.0	42.2	
67 4-Chloro-3-methylphenol	107	7.993	7.983	0.010	94	619234	40.0	39.3	
69 2-Methylnaphthalene	142	8.164	8.159	0.005	92	1227228	40.0	38.4	
71 1-Methylnaphthalene	142	8.266	8.255	0.011	92	1154322	40.0	38.6	
72 Hexachlorocyclopentadiene	237	8.324	8.319	0.005	97	456813	40.0	44.2	
73 1,2,4,5-Tetrachlorobenzene	216	8.330	8.325	0.005	98	613931	40.0	39.7	
74 2,4,6-Trichlorophenol	196	8.431	8.421	0.010	96	385166	40.0	38.4	
75 2,4,5-Trichlorophenol	196	8.463	8.458	0.005	92	408257	40.0	39.6	
76 1,1'-Biphenyl	154	8.608	8.602	0.006	97	1442717	40.0	38.5	
77 2-Chloronaphthalene	162	8.640	8.629	0.011	98	1088635	40.0	38.2	
79 2-Nitroaniline	65	8.720	8.709	0.011	75	511524	40.0	39.5	
82 Dimethyl phthalate	163	8.875	8.869	0.006	96	1363162	40.0	39.1	
83 1,3-Dinitrobenzene	168	8.912	8.902	0.010	79	198553	40.0	44.3	
84 2,6-Dinitrotoluene	165	8.939	8.934	0.005	82	283837	40.0	39.8	
85 Acenaphthylene	152	9.040	9.030	0.010	99	1723697	40.0	39.4	
86 3-Nitroaniline	138	9.110	9.099	0.011	87	338184	40.0	41.8	
87 2,4-Dinitrophenol	184	9.206	9.195	0.011	73	439772	80.0	73.9	
88 Acenaphthene	153	9.206	9.195	0.011	87	1142522	40.0	38.7	
89 4-Nitrophenol	109	9.243	9.233	0.010	93	489614	80.0	84.1	
91 2,4-Dinitrotoluene	165	9.329	9.318	0.011	85	416709	40.0	43.6	
93 Dibenzofuran	168	9.366	9.361	0.005	95	1566075	40.0	38.1	
95 2,3,5,6-Tetrachlorophenol	232	9.436	9.430	0.006	93	356352	40.0	42.3	
96 2,3,4,6-Tetrachlorophenol	232	9.478	9.473	0.005	78	342360	40.0	40.5	
97 2-Naphthylamine	143	9.510	9.500	0.010	94	1174909	40.0	39.2	
98 Diethyl phthalate	149	9.548	9.532	0.016	97	1358019	40.0	38.6	
99 Hexadecane	57	9.548	9.537	0.011	96	1017274	40.0	38.8	
100 4-Chlorophenyl phenyl ethe	204	9.676	9.671	0.005	96	674170	40.0	39.0	
101 4-Nitroaniline	138	9.692	9.682	0.010	80	352099	40.0	40.9	
103 Fluorene	166	9.697	9.687	0.010	94	1278934	40.0	38.5	
104 4,6-Dinitro-2-methylphenol	198	9.724	9.708	0.016	75	465594	80.0	84.5	
105 N-Nitrosodiphenylamine	169	9.783	9.778	0.005	64	982982	40.0	37.3	
57 Azobenzene	77	9.831	9.820	0.011	99	1862680	40.0	37.7	
90 1,2-Diphenylhydrazine	77	9.831	9.820	0.011	99	1862680	40.0	37.7	
110 4-Bromophenyl phenyl ether	248	10.146	10.136	0.010	77	389416	40.0	38.3	
112 Hexachlorobenzene	284	10.232	10.226	0.006	88	339906	40.0	37.1	
113 Atrazine	200	10.264	10.258	0.006	88	384242	40.0	38.6	
116 Pentachlorophenol	266	10.408	10.397	0.011	87	551212	80.0	74.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.413	10.403	0.010	97	1130570	40.0	41.2	
121 Phenanthrene	178	10.638	10.627	0.011	99	1968305	40.0	38.1	
122 Anthracene	178	10.691	10.681	0.011	99	1995795	40.0	38.4	
124 Carbazole	167	10.841	10.830	0.011	96	1876376	40.0	37.9	
126 Di-n-butyl phthalate	149	11.161	11.151	0.010	99	2428240	40.0	39.9	
131 Fluoranthene	202	12.032	12.021	0.011	99	2289728	40.0	38.8	
132 Benzidine	184	12.165	12.150	0.015	99	1265204	40.0	45.9	
133 Pyrene	202	12.352	12.342	0.010	97	2309264	40.0	40.8	
138 Butyl benzyl phthalate	149	13.261	13.250	0.011	96	1144250	40.0	42.5	
144 3,3'-Dichlorobenzidine	252	14.249	14.233	0.016	76	829958	40.0	43.6	
145 Bis(2-ethylhexyl) phthalat	149	14.297	14.281	0.016	94	1492519	40.0	43.4	
146 Benzo[a]anthracene	228	14.329	14.308	0.021	99	2151591	40.0	40.0	
147 Chrysene	228	14.399	14.377	0.022	98	2086682	40.0	40.8	
150 Di-n-octyl phthalate	149	15.595	15.585	0.010	99	2616991	40.0	44.2	
151 7,12-Dimethylbenz(a)anthra	256	16.445	16.423	0.022	91	1027009	40.0	41.2	
152 Benzo[b]fluoranthene	252	16.466	16.439	0.027	98	2099238	40.0	39.4	
153 Benzo[k]fluoranthene	252	16.514	16.488	0.026	99	2083567	40.0	39.9	
219 Benzo[e]pyrene	252	17.016	16.995	0.021	0	1960253	40.0	39.9	
154 Benzo[a]pyrene	252	17.123	17.091	0.032	79	2024705	40.0	41.0	
157 Indeno[1,2,3-cd]pyrene	276	19.581	19.549	0.031	98	2226701	40.0	42.3	
158 Dibenz(a,h)anthracene	278	19.613	19.575	0.038	94	1808110	40.0	37.8	
159 Benzo[g,h,i]perylene	276	20.264	20.216	0.048	94	1912322	40.0	42.0	M
S 199 Total Cresols	108				0		80.0	78.8	
S 197 Methyl Phenols,Total	108				0		80.0	78.8	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD40i_00013 Amount Added: 1.00 Units: mL

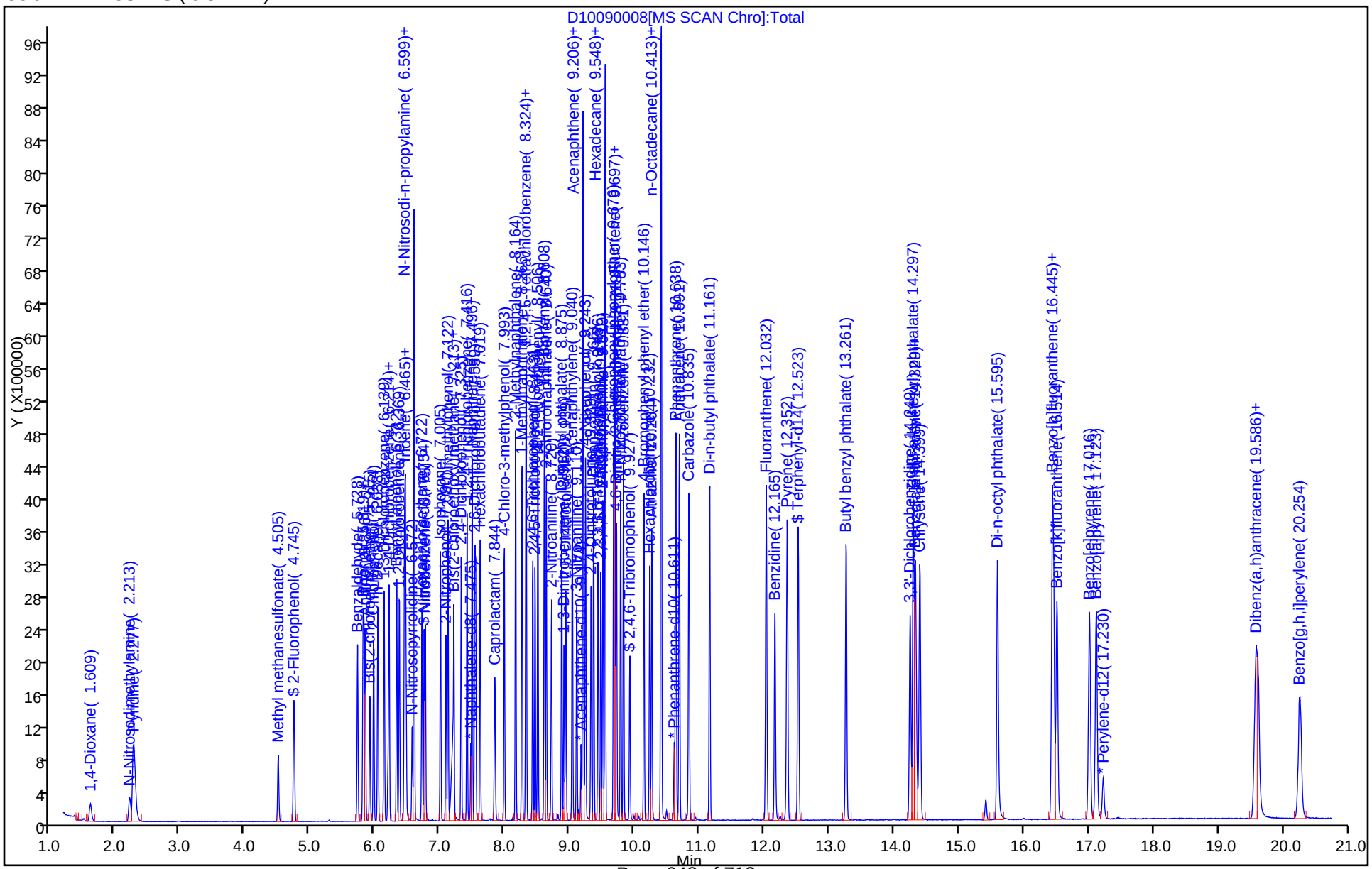
Report Date: 09-Oct-2017 08:46:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090008.D

Injection Date:	09-Oct-2017 07:09:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

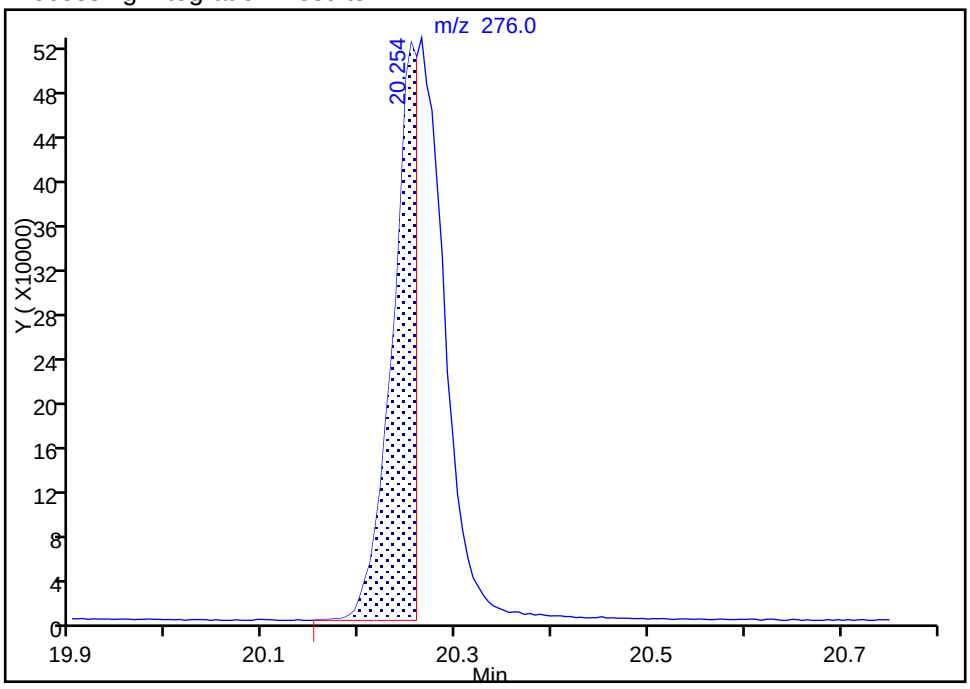
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090008.D				
Injection Date:	09-Oct-2017 07:09:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

159 Benzo[g,h,i]perylene, CAS: 191-24-2

Signal: 1

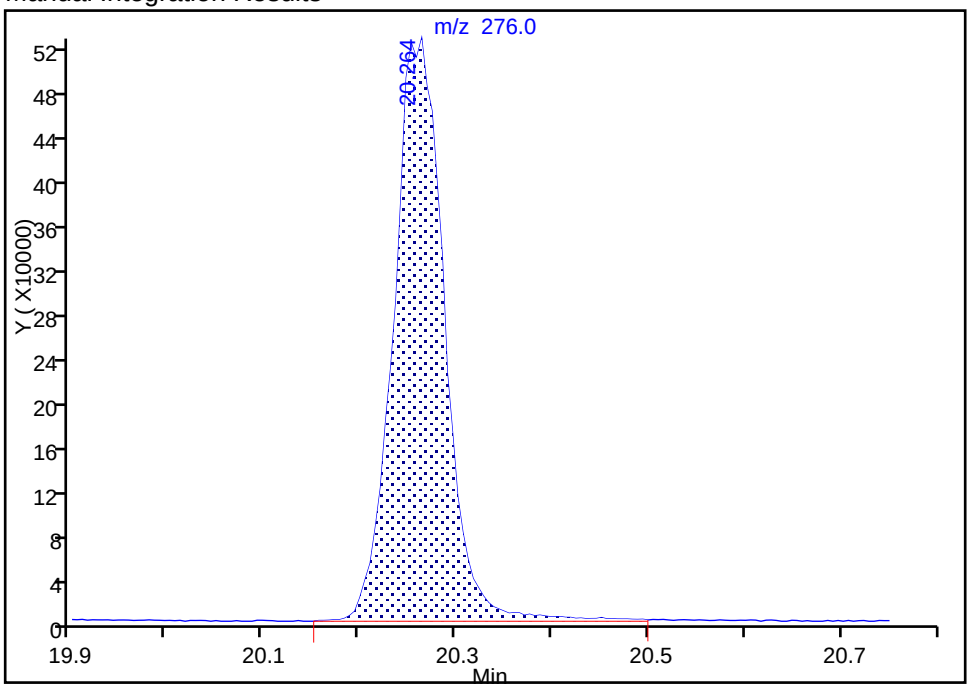
Processing Integration Results

RT: 20.25
Area: 934221
Amount: 22.703478
Amount Units: ng



Manual Integration Results

RT: 20.26
Area: 1912322
Amount: 41.956547
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 07:37:29

Audit Action: Split an Integrated Peak Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090009.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 09-Oct-2017 07:35:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018773-009
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Oct-2017 08:47:00 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 09-Oct-2017 08:11:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.198	6.193	0.005	98	91768	8.00	8.00	
* 2 Naphthalene-d8	136	7.475	7.470	0.005	99	350242	8.00	8.00	
* 3 Acenaphthene-d10	164	9.174	9.163	0.011	96	180607	8.00	8.00	
* 4 Phenanthrene-d10	188	10.616	10.600	0.016	97	380051	8.00	8.00	
* 5 Chrysene-d12	240	14.351	14.329	0.022	98	357375	8.00	8.00	
* 6 Perylene-d12	264	17.230	17.203	0.027	97	362949	8.00	8.00	
$ 7 2-Fluorophenol	112	4.751	4.745	0.006	92	892195	60.0	60.4	
$ 8 Phenol-d5	99	5.814	5.808	0.006	96	1133986	60.0	57.2	
$ 9 Nitrobenzene-d5	82	6.754	6.749	0.005	90	1117027	60.0	56.4	
$ 10 2-Fluorobiphenyl	172	8.511	8.501	0.010	100	2021588	60.0	58.5	
$ 11 2,4,6-Tribromophenol	330	9.927	9.917	0.010	80	233686	60.0	66.0	
$ 12 Terphenyl-d14	244	12.529	12.513	0.016	99	2330273	60.0	59.5	
13 1,4-Dioxane	88	1.609	1.609	0.000	88	321096	60.0	62.2	
14 N-Nitrosodimethylamine	74	2.218	2.218	0.000	93	451527	60.0	60.1	
15 Pyridine	79	2.282	2.283	0.000	97	1591022	120.0	114.7	
21 Methyl methanesulfonate	80	4.505	4.500	0.005	88	583674	60.0	61.6	
25 Benzaldehyde	77	5.728	5.723	0.005	95	696217	60.0	54.8	
26 Phenol	94	5.830	5.819	0.011	98	1168789	60.0	53.9	
27 Aniline	93	5.851	5.840	0.011	96	1336650	60.0	55.0	
29 Bis(2-chloroethyl)ether	93	5.921	5.910	0.010	95	838393	60.0	57.2	
30 2-Chlorophenol	128	5.979	5.969	0.010	96	910845	60.0	57.7	
31 n-Decane	43	6.038	6.033	0.005	87	789521	60.0	54.6	
32 1,3-Dichlorobenzene	146	6.140	6.134	0.006	96	1028420	60.0	57.5	
33 1,4-Dichlorobenzene	146	6.214	6.209	0.005	92	1031129	60.0	58.7	
34 Benzyl alcohol	108	6.332	6.327	0.005	89	600848	60.0	59.3	
35 1,2-Dichlorobenzene	146	6.375	6.369	0.006	95	970823	60.0	58.6	
36 2-Methylphenol	108	6.455	6.439	0.016	97	818782	60.0	58.1	
37 Indene	116	6.465	6.460	0.005	92	1518491	60.0	57.2	
38 2,2'-oxybis[1-chloropropan	45	6.476	6.471	0.005	89	964193	60.0	52.8	
39 N-Nitrosopyrrolidine	100	6.572	6.562	0.010	88	448866	60.0	63.4	
41 N-Nitrosodi-n-propylamine	70	6.604	6.594	0.010	65	624967	60.0	52.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.604	6.594	0.010	82	1197260	60.0	54.4	
42 4-Methylphenol	108	6.599	6.594	0.005	70	835401	60.0	56.6	
45 Hexachloroethane	117	6.722	6.717	0.005	93	455660	60.0	60.2	
46 Nitrobenzene	77	6.775	6.765	0.010	89	1087893	60.0	52.4	
48 Isophorone	82	7.010	7.000	0.010	99	2023875	60.0	57.4	
49 2-Nitrophenol	139	7.096	7.085	0.011	98	519899	60.0	63.8	
50 2,4-Dimethylphenol	107	7.123	7.117	0.006	98	984501	60.0	56.1	
52 Benzoic acid	122	7.213	7.160	0.053	90	569795	60.0	65.4	
53 Bis(2-chloroethoxy)methane	93	7.213	7.208	0.005	98	1111185	60.0	55.2	
54 2,4-Dichlorophenol	162	7.326	7.320	0.006	97	808716	60.0	60.5	
56 1,2,4-Trichlorobenzene	180	7.416	7.411	0.005	94	903986	60.0	59.2	
58 Naphthalene	128	7.496	7.491	0.005	99	2628296	60.0	58.1	
59 4-Chloroaniline	127	7.539	7.529	0.010	95	1116998	60.0	58.1	
60 2,6-Dichlorophenol	162	7.550	7.545	0.005	95	737650	60.0	57.8	
62 Hexachlorobutadiene	225	7.619	7.614	0.005	95	592444	60.0	62.1	
64 Caprolactam	113	7.854	7.828	0.026	75	294375	60.0	63.0	
67 4-Chloro-3-methylphenol	107	7.993	7.983	0.010	94	921497	60.0	58.4	
69 2-Methylnaphthalene	142	8.164	8.159	0.005	92	1885793	60.0	59.0	
71 1-Methylnaphthalene	142	8.266	8.255	0.011	92	1729345	60.0	57.7	
72 Hexachlorocyclopentadiene	237	8.325	8.319	0.006	96	723942	60.0	70.4	
73 1,2,4,5-Tetrachlorobenzene	216	8.330	8.325	0.005	97	955858	60.0	62.2	
74 2,4,6-Trichlorophenol	196	8.431	8.421	0.010	96	595371	60.0	59.7	
75 2,4,5-Trichlorophenol	196	8.469	8.458	0.011	92	626458	60.0	61.1	
76 1,1'-Biphenyl	154	8.608	8.602	0.006	96	2207294	60.0	59.3	
77 2-Chloronaphthalene	162	8.640	8.629	0.011	98	1640659	60.0	57.9	
79 2-Nitroaniline	65	8.720	8.709	0.011	75	746894	60.0	58.1	
82 Dimethyl phthalate	163	8.880	8.869	0.011	96	2027794	60.0	58.5	
83 1,3-Dinitrobenzene	168	8.912	8.902	0.010	80	296721	60.0	66.6	
84 2,6-Dinitrotoluene	165	8.939	8.934	0.005	85	429040	60.0	60.5	
85 Acenaphthylene	152	9.040	9.030	0.010	99	2557344	60.0	58.8	
86 3-Nitroaniline	138	9.110	9.099	0.011	87	503542	60.0	62.6	
88 Acenaphthene	153	9.206	9.195	0.011	88	1791676	60.0	61.0	
87 2,4-Dinitrophenol	184	9.206	9.195	0.011	73	745094	120.0	122.9	
89 4-Nitrophenol	109	9.249	9.233	0.016	93	723538	120.0	125.1	
91 2,4-Dinitrotoluene	165	9.334	9.318	0.016	85	613979	60.0	64.6	
93 Dibenzofuran	168	9.372	9.361	0.011	95	2336397	60.0	57.2	
95 2,3,5,6-Tetrachlorophenol	232	9.441	9.430	0.011	93	545237	60.0	65.1	
96 2,3,4,6-Tetrachlorophenol	232	9.484	9.473	0.011	76	535363	60.0	63.7	
97 2-Naphthylamine	143	9.516	9.500	0.016	94	1758659	60.0	59.1	
98 Diethyl phthalate	149	9.548	9.532	0.016	98	2115541	60.0	60.5	
99 Hexadecane	57	9.548	9.537	0.011	96	1316078	60.0	50.1	
100 4-Chlorophenyl phenyl ethe	204	9.676	9.671	0.005	97	1042026	60.0	60.7	
101 4-Nitroaniline	138	9.697	9.682	0.015	61	545758	60.0	63.9	
103 Fluorene	166	9.697	9.687	0.010	94	2032129	60.0	61.6	
104 4,6-Dinitro-2-methylphenol	198	9.724	9.708	0.016	79	750417	120.0	139.1	
105 N-Nitrosodiphenylamine	169	9.788	9.778	0.010	64	1514935	60.0	58.7	
90 1,2-Diphenylhydrazine	77	9.831	9.820	0.011	98	2760311	60.0	57.2	
57 Azobenzene	77	9.831	9.820	0.011	98	2760311	60.0	57.2	
110 4-Bromophenyl phenyl ether	248	10.146	10.136	0.010	76	595605	60.0	59.9	
112 Hexachlorobenzene	284	10.237	10.226	0.011	90	522674	60.0	58.2	
113 Atrazine	200	10.269	10.258	0.011	88	558612	60.0	57.3	
116 Pentachlorophenol	266	10.408	10.397	0.011	92	1008320	120.0	138.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.413	10.403	0.010	97	1457355	60.0	54.9	
121 Phenanthrene	178	10.638	10.627	0.011	99	2974567	60.0	58.9	
122 Anthracene	178	10.691	10.681	0.011	99	3058234	60.0	60.1	
124 Carbazole	167	10.841	10.830	0.011	96	2838003	60.0	58.5	
126 Di-n-butyl phthalate	149	11.161	11.151	0.010	99	3672439	60.0	61.7	
131 Fluoranthene	202	12.032	12.021	0.011	99	3393368	60.0	58.7	
132 Benzidine	184	12.171	12.150	0.021	99	1763570	60.0	62.6	
133 Pyrene	202	12.358	12.342	0.016	96	3444231	60.0	59.4	
138 Butyl benzyl phthalate	149	13.266	13.250	0.016	94	1728596	60.0	62.7	
144 3,3'-Dichlorobenzidine	252	14.260	14.233	0.027	70	1239842	60.0	63.6	
145 Bis(2-ethylhexyl) phthalat	149	14.297	14.281	0.016	95	2255911	60.0	64.1	
146 Benzo[a]anthracene	228	14.335	14.308	0.027	98	3186957	60.0	57.9	
147 Chrysene	228	14.404	14.377	0.027	94	3170410	60.0	60.5	
150 Di-n-octyl phthalate	149	15.601	15.585	0.016	98	4021742	60.0	65.3	
151 7,12-Dimethylbenz(a)anthra	256	16.455	16.423	0.032	68	1568586	60.0	60.4	
152 Benzo[b]fluoranthene	252	16.466	16.439	0.027	94	3274484	60.0	59.1	
153 Benzo[k]fluoranthene	252	16.525	16.488	0.037	94	3044979	60.0	56.1	
219 Benzo[e]pyrene	252	17.016	16.995	0.021	0	2962294	60.0	57.9	
154 Benzo[a]pyrene	252	17.123	17.091	0.032	73	3099940	60.0	60.4	
157 Indeno[1,2,3-cd]pyrene	276	19.586	19.549	0.037	93	3389090	60.0	61.9	
158 Dibenz(a,h)anthracene	278	19.623	19.575	0.048	63	2849018	60.0	57.3	
159 Benzo[g,h,i]perylene	276	20.280	20.216	0.064	88	2912118	60.0	61.4	
S 197 Methyl Phenols,Total	108				0		120.0	114.7	
S 199 Total Cresols	108				0		120.0	114.7	

Reagents:

SVTAPSTD60i_00013 Amount Added: 1.00 Units: mL

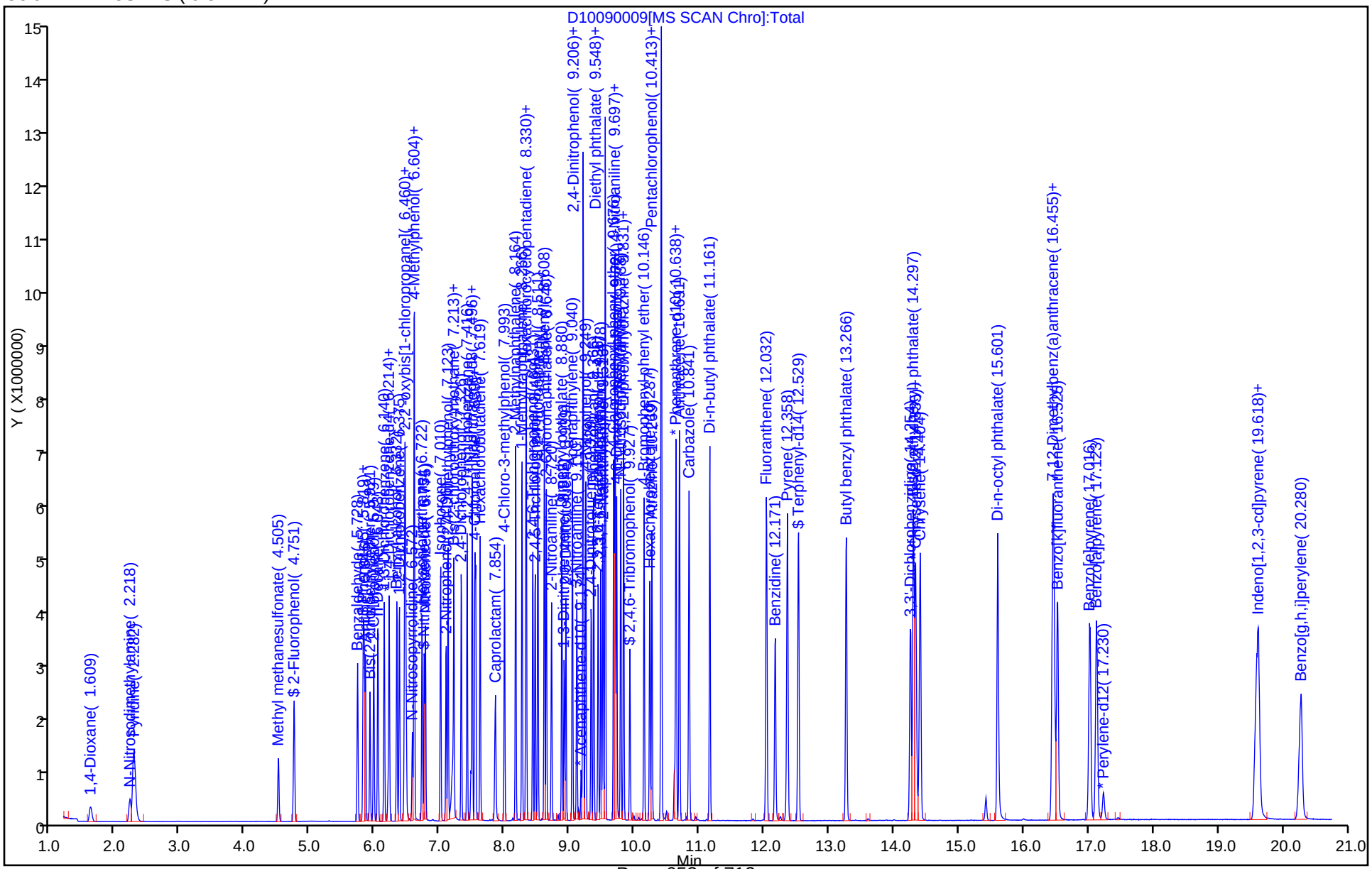
Report Date: 09-Oct-2017 08:47:01 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090009.D

Injection Date:	09-Oct-2017 07:35:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 09-Oct-2017 08:02:30 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018773-010
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Oct-2017 08:48:48 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 09-Oct-2017 08:26:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.198	6.193	0.005	97	95199	8.00	8.00	
* 2 Naphthalene-d8	136	7.475	7.470	0.005	99	346599	8.00	8.00	
* 3 Acenaphthene-d10	164	9.174	9.163	0.011	96	186291	8.00	8.00	
* 4 Phenanthrene-d10	188	10.611	10.600	0.011	97	402845	8.00	8.00	
* 5 Chrysene-d12	240	14.350	14.329	0.021	98	365759	8.00	8.00	
* 6 Perylene-d12	264	17.230	17.203	0.027	97	368194	8.00	8.00	
$ 7 2-Fluorophenol	112	4.750	4.745	0.005	92	1159662	80.0	75.7	
$ 8 Phenol-d5	99	5.819	5.808	0.011	96	1462599	80.0	71.1	
$ 9 Nitrobenzene-d5	82	6.754	6.749	0.005	89	1416811	80.0	72.2	
$ 10 2-Fluorobiphenyl	172	8.506	8.501	0.005	100	2784904	80.0	78.1	
$ 11 2,4,6-Tribromophenol	330	9.927	9.917	0.010	82	327888	80.0	87.4	
$ 12 Terphenyl-d14	244	12.523	12.513	0.010	99	3202703	80.0	79.8	
13 1,4-Dioxane	88	1.625	1.609	0.016	89	423283	80.0	79.1	M
14 N-Nitrosodimethylamine	74	2.229	2.218	0.011	93	601056	80.0	77.1	
15 Pyridine	79	2.282	2.283	0.000	97	2076236	160.0	144.3	
21 Methyl methanesulfonate	80	4.510	4.500	0.010	88	741982	80.0	75.5	
25 Benzaldehyde	77	5.728	5.723	0.005	95	837500	80.0	63.5	
26 Phenol	94	5.830	5.819	0.011	98	1483261	80.0	65.9	
27 Aniline	93	5.851	5.840	0.011	96	1682500	80.0	66.7	
29 Bis(2-chloroethyl)ether	93	5.920	5.910	0.010	96	1077267	80.0	70.9	
30 2-Chlorophenol	128	5.979	5.969	0.010	96	1187250	80.0	72.5	
31 n-Decane	43	6.038	6.033	0.005	86	1001031	80.0	66.7	
32 1,3-Dichlorobenzene	146	6.139	6.134	0.005	97	1357598	80.0	73.1	
33 1,4-Dichlorobenzene	146	6.214	6.209	0.005	91	1341910	80.0	73.6	
34 Benzyl alcohol	108	6.332	6.327	0.005	90	786593	80.0	74.9	
35 1,2-Dichlorobenzene	146	6.375	6.369	0.006	95	1265198	80.0	73.6	
36 2-Methylphenol	108	6.455	6.439	0.016	97	1070021	80.0	73.2	
37 Indene	116	6.465	6.460	0.005	90	1992233	80.0	72.4	
38 2,2'-oxybis[1-chloropropan	45	6.476	6.471	0.005	90	1202388	80.0	63.5	
39 N-Nitrosopyrrolidine	100	6.578	6.562	0.016	86	583154	80.0	79.5	
41 N-Nitrosodi-n-propylamine	70	6.604	6.594	0.010	65	767542	80.0	62.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.604	6.594	0.010	84	1539253	80.0	67.5	
42 4-Methylphenol	108	6.604	6.594	0.010	74	1086177	80.0	70.9	
45 Hexachloroethane	117	6.722	6.717	0.005	93	589918	80.0	75.2	
46 Nitrobenzene	77	6.775	6.765	0.010	88	1365022	80.0	66.5	
48 Isophorone	82	7.010	7.000	0.010	99	2545331	80.0	72.9	
49 2-Nitrophenol	139	7.090	7.085	0.005	98	700368	80.0	86.9	
50 2,4-Dimethylphenol	107	7.122	7.117	0.005	98	1283660	80.0	73.9	
52 Benzoic acid	122	7.219	7.160	0.059	89	755443	80.0	87.7	
53 Bis(2-chloroethoxy)methane	93	7.213	7.208	0.005	99	1422812	80.0	71.5	
54 2,4-Dichlorophenol	162	7.325	7.320	0.005	96	1082605	80.0	81.9	
56 1,2,4-Trichlorobenzene	180	7.416	7.411	0.005	93	1215260	80.0	80.4	
58 Naphthalene	128	7.496	7.491	0.005	98	3483887	80.0	77.8	
59 4-Chloroaniline	127	7.534	7.529	0.005	95	1525139	80.0	80.1	
60 2,6-Dichlorophenol	162	7.550	7.545	0.005	97	1021764	80.0	80.8	
62 Hexachlorobutadiene	225	7.619	7.614	0.005	94	795198	80.0	84.2	
64 Caprolactam	113	7.860	7.828	0.032	76	396132	80.0	85.7	
67 4-Chloro-3-methylphenol	107	7.993	7.983	0.010	95	1220924	80.0	78.2	
69 2-Methylnaphthalene	142	8.164	8.159	0.005	92	2552895	80.0	80.7	
71 1-Methylnaphthalene	142	8.260	8.255	0.005	93	2330279	80.0	78.6	
72 Hexachlorocyclopentadiene	237	8.324	8.319	0.005	95	1022759	80.0	96.5	
73 1,2,4,5-Tetrachlorobenzene	216	8.330	8.325	0.005	97	1318482	80.0	83.2	
74 2,4,6-Trichlorophenol	196	8.431	8.421	0.010	94	858126	80.0	83.5	
75 2,4,5-Trichlorophenol	196	8.469	8.458	0.011	94	872006	80.0	82.5	
76 1,1'-Biphenyl	154	8.608	8.602	0.006	96	3048156	80.0	79.4	
77 2-Chloronaphthalene	162	8.640	8.629	0.011	97	2320436	80.0	79.4	
79 2-Nitroaniline	65	8.720	8.709	0.011	76	1006369	80.0	75.9	
82 Dimethyl phthalate	163	8.880	8.869	0.011	97	2904843	80.0	81.2	
83 1,3-Dinitrobenzene	168	8.912	8.902	0.010	80	405963	80.0	88.3	
84 2,6-Dinitrotoluene	165	8.944	8.934	0.010	86	587398	80.0	80.3	
85 Acenaphthylene	152	9.040	9.030	0.010	99	3522766	80.0	78.5	
86 3-Nitroaniline	138	9.110	9.099	0.011	88	687499	80.0	82.9	
88 Acenaphthene	153	9.206	9.195	0.011	87	2437223	80.0	80.5	
87 2,4-Dinitrophenol	184	9.206	9.195	0.011	72	1070407	160.0	169.4	
89 4-Nitrophenol	109	9.249	9.233	0.016	94	993301	160.0	166.5	
91 2,4-Dinitrotoluene	165	9.329	9.318	0.011	85	839002	80.0	85.6	
93 Dibenzofuran	168	9.372	9.361	0.011	95	3246760	80.0	77.1	
95 2,3,5,6-Tetrachlorophenol	232	9.436	9.430	0.006	93	747719	80.0	86.5	
96 2,3,4,6-Tetrachlorophenol	232	9.478	9.473	0.005	78	729780	80.0	84.2	
97 2-Naphthylamine	143	9.510	9.500	0.010	94	2309188	80.0	75.2	
98 Diethyl phthalate	149	9.548	9.532	0.016	98	2748874	80.0	76.2	
99 Hexadecane	57	9.548	9.537	0.011	78	1631150	80.0	62.8	
100 4-Chlorophenyl phenyl ethe	204	9.676	9.671	0.005	93	1496954	80.0	84.6	
101 4-Nitroaniline	138	9.697	9.682	0.015	76	755311	80.0	85.7	
103 Fluorene	166	9.697	9.687	0.010	94	2814750	80.0	82.7	
104 4,6-Dinitro-2-methylphenol	198	9.724	9.708	0.016	82	1055410	160.0	184.6	
105 N-Nitrosodiphenylamine	169	9.788	9.778	0.010	64	2061513	80.0	75.4	
90 1,2-Diphenylhydrazine	77	9.831	9.820	0.011	99	3688761	80.0	72.1	
57 Azobenzene	77	9.831	9.820	0.011	99	3688761	80.0	72.1	
110 4-Bromophenyl phenyl ether	248	10.146	10.136	0.010	74	815433	80.0	77.3	
112 Hexachlorobenzene	284	10.232	10.226	0.006	90	723193	80.0	76.0	
113 Atrazine	200	10.269	10.258	0.011	89	750881	80.0	72.6	
116 Pentachlorophenol	266	10.408	10.397	0.011	94	1469785	160.0	191.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.413	10.403	0.010	98	1702759	80.0	61.8	
121 Phenanthrene	178	10.638	10.627	0.011	99	4042929	80.0	75.5	
122 Anthracene	178	10.691	10.681	0.011	99	4215523	80.0	78.1	
124 Carbazole	167	10.841	10.830	0.011	96	3826800	80.0	74.4	
126 Di-n-butyl phthalate	149	11.161	11.151	0.010	99	4910568	80.0	77.8	
131 Fluoranthene	202	12.032	12.021	0.011	99	4592389	80.0	75.0	
132 Benzidine	184	12.166	12.150	0.016	97	2157260	80.0	74.8	
133 Pyrene	202	12.352	12.342	0.010	96	4633897	80.0	78.1	
138 Butyl benzyl phthalate	149	13.266	13.250	0.016	95	2288949	80.0	81.1	
144 3,3'-Dichlorobenzidine	252	14.260	14.233	0.027	72	1635492	80.0	82.0	
145 Bis(2-ethylhexyl) phthalat	149	14.302	14.281	0.021	96	3052673	80.0	84.7	
146 Benzo[a]anthracene	228	14.334	14.308	0.026	97	4396388	80.0	78.0	
147 Chrysene	228	14.404	14.377	0.027	95	4201601	80.0	78.3	
150 Di-n-octyl phthalate	149	15.601	15.585	0.016	99	5409474	80.0	86.5	
151 7,12-Dimethylbenz(a)anthra	256	16.461	16.423	0.038	65	2094751	80.0	79.6	
152 Benzo[b]fluoranthene	252	16.471	16.439	0.032	92	4369329	80.0	77.8	
153 Benzo[k]fluoranthene	252	16.519	16.488	0.031	94	4241328	80.0	77.0	
219 Benzo[e]pyrene	252	17.022	16.995	0.027	0	4028926	80.0	77.7	
154 Benzo[a]pyrene	252	17.128	17.091	0.037	76	4135420	80.0	79.4	
157 Indeno[1,2,3-cd]pyrene	276	19.602	19.549	0.053	90	4491800	80.0	80.9	
158 Dibenz(a,h)anthracene	278	19.629	19.575	0.054	66	3770286	80.0	74.8	
159 Benzo[g,h,i]perylene	276	20.275	20.216	0.059	89	3934887	80.0	81.8	
S 197 Methyl Phenols,Total	108				0		160.0	144.1	
S 199 Total Cresols	108				0		160.0	144.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD80i_00013 Amount Added: 1.00 Units: mL

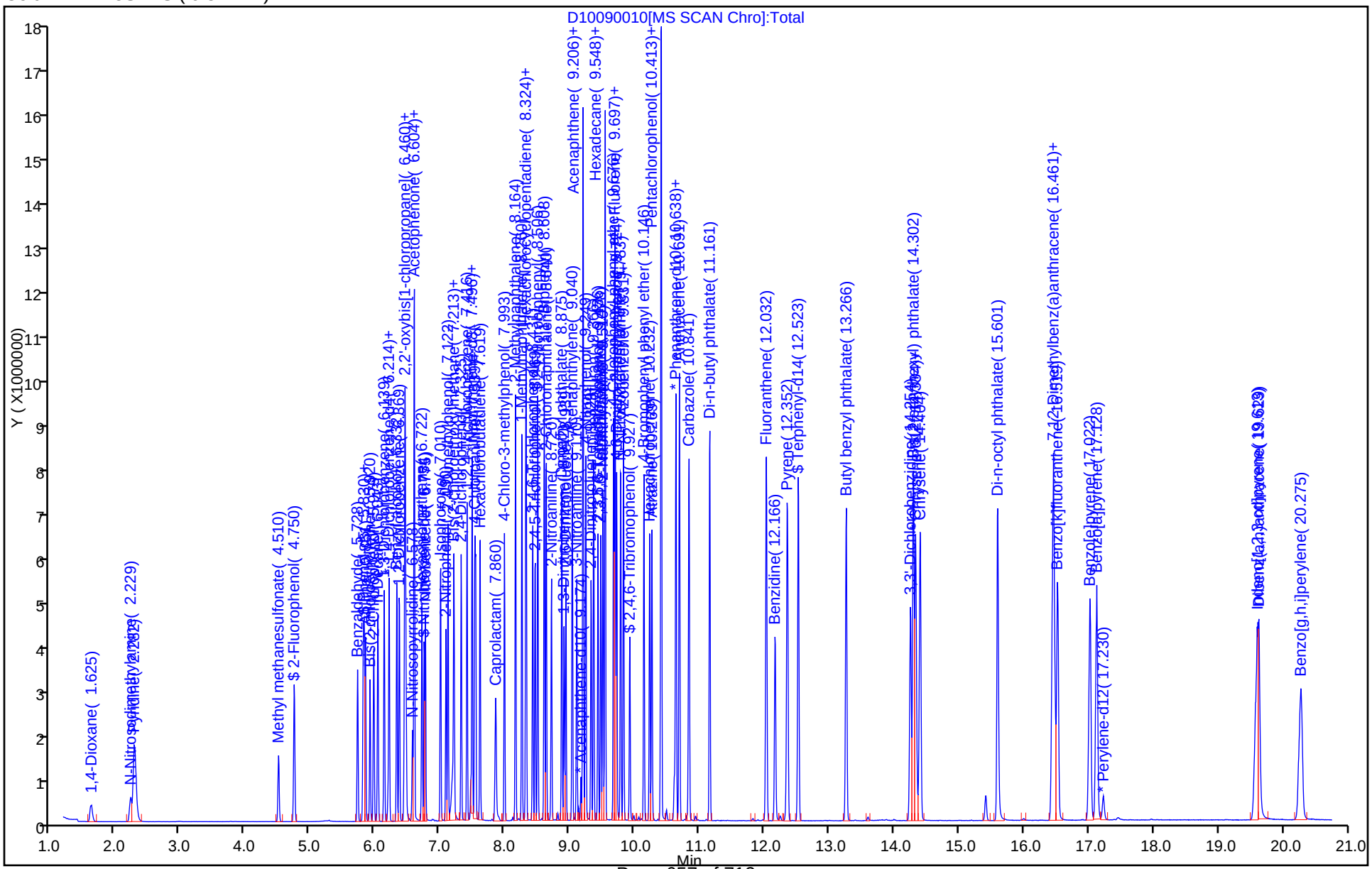
Report Date: 09-Oct-2017 08:48:50 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Injection Date:	09-Oct-2017 08:02:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

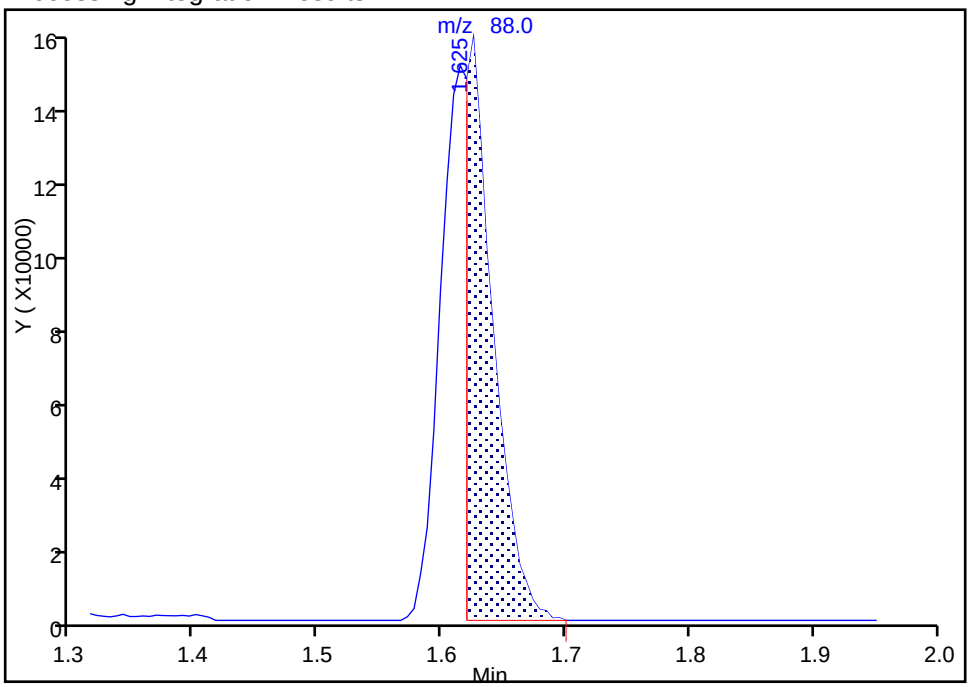
Data File:	\\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D				
Injection Date:	09-Oct-2017 08:02:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

13 1,4-Dioxane, CAS: 123-91-1

Signal: 1

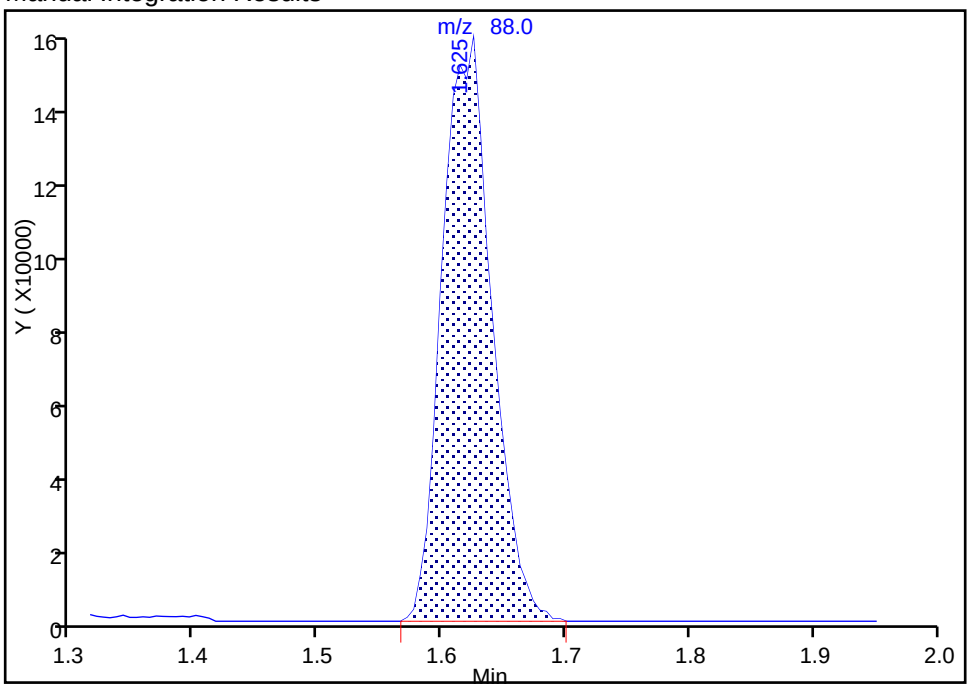
Processing Integration Results

RT: 1.63
Area: 239935
Amount: 47.686356
Amount Units: ng



Manual Integration Results

RT: 1.63
Area: 423283
Amount: 79.094297
Amount Units: ng



Reviewer: piccolinov, 09-Oct-2017 08:25:54

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227303/3 Calibration Date: 10/28/2017 10:33

Instrument ID: CH732 Calib Start Date: 10/09/2017 04:57

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2017 08:02

Lab File ID: D10280003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4497	0.4875	0.0100	5.42	5.00	8.4	20.0
N-Nitrosodimethylamine	Ave	0.6549	0.7217	0.0100	5.51	5.00	10.2	20.0
Pyridine	Ave	1.209	1.384	0.0100	11.4	10.0	14.4	20.0
Methyl methanesulfonate	Ave	0.8256	0.9042	0.0100	5.48	5.00	9.5	20.0
Benzaldehyde	Ave	1.108	1.192	0.0100	5.38	5.00	7.6	20.0
Phenol	Ave	1.891	1.879	0.8000	4.97	5.00	-0.6	20.0
Aniline	Ave	2.120	2.153	0.0100	5.08	5.00	1.5	20.0
Bis(2-chloroethyl)ether	Ave	1.277	1.219	0.7000	4.77	5.00	-4.6	20.0
2-Chlorophenol	Ave	1.376	1.337	0.8000	4.86	5.00	-2.8	20.0
n-Decane	Ave	1.260	1.480		5.87	5.00	17.4	20.0
1,3-Dichlorobenzene	Ave	1.560	1.454	0.0100	4.66	5.00	-6.8	20.0
1,4-Dichlorobenzene	Ave	1.531	1.421	0.0100	4.64	5.00	-7.2	20.0
Benzyl alcohol	Ave	0.8829	0.8117	0.0100	4.60	5.00	-8.1	20.0
1,2-Dichlorobenzene	Ave	1.444	1.352	0.0100	4.68	5.00	-6.4	20.0
2-Methylphenol	Ave	1.228	1.171	0.7000	4.77	5.00	-4.6	20.0
Indene	Ave	2.313	2.188	0.0100	4.73	5.00	-5.4	20.0
2,2'-oxybis[1-chloropropane]	Lin2		1.808	0.0100	5.61	5.00	12.2	20.0
N-Nitrosopyrrolidine	Ave	0.6167	0.5593	0.0100	4.53	5.00	-9.3	20.0
Acetophenone	Ave	1.917	1.872	0.0100	4.88	5.00	-2.4	20.0
Methylphenol, 3 & 4	Ave	1.287	1.196	0.6000	4.65	5.00	-7.1	20.0
N-Nitrosodi-n-propylamine	Ave	1.036	1.099	0.5000	5.31	5.00	6.1	20.0
Hexachloroethane	Ave	0.6594	0.6565	0.3000	4.98	5.00	-0.4	20.0
Nitrobenzene	Ave	0.4738	0.4342	0.2000	4.58	5.00	-8.4	20.0
Isophorone	Ave	0.8059	0.7304	0.4000	4.53	5.00	-9.4	20.0
2-Nitrophenol	Ave	0.1861	0.1829	0.1000	4.91	5.00	-1.7	20.0
2,4-Dimethylphenol	Ave	0.4010	0.3824	0.2000	4.77	5.00	-4.6	20.0
Benzoic acid	Ave	0.1989	0.2150	0.0100	5.40	5.00	8.1	20.0
Bis(2-chloroethoxy)methane	Ave	0.4596	0.4305	0.3000	4.68	5.00	-6.3	20.0
2,4-Dichlorophenol	Ave	0.3052	0.2777	0.2000	4.55	5.00	-9.0	20.0
1,2,4-Trichlorobenzene	Ave	0.3487	0.3058	0.0100	4.39	5.00	-12.3	20.0
Naphthalene	Ave	1.034	0.9392	0.7000	4.54	5.00	-9.1	20.0
4-Chloroaniline	Ave	0.4393	0.4052	0.0100	4.61	5.00	-7.8	20.0
2,6-Dichlorophenol	Ave	0.2918	0.2553	0.0100	4.38	5.00	-12.5	20.0
Hexachlorobutadiene	Ave	0.2180	0.1963	0.0100	4.50	5.00	-9.9	20.0
Caprolactam	Ave	0.1067	0.0872	0.0100	4.08	5.00	-18.3	20.0
4-Chloro-3-methylphenol	Ave	0.3603	0.3366	0.2000	4.67	5.00	-6.6	20.0
2-Methylnaphthalene	Ave	0.7304	0.6554	0.4000	4.49	5.00	-10.3	20.0
1-Methylnaphthalene	Ave	0.6845	0.6210	0.0100	4.54	5.00	-9.3	20.0
Hexachlorocyclopentadiene	Ave	0.4552	0.4026	0.0500	4.42	5.00	-11.6	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6809	0.6276	0.0100	4.61	5.00	-7.8	20.0
2,4,6-Trichlorophenol	Ave	0.4414	0.4066	0.2000	4.61	5.00	-7.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227303/3 Calibration Date: 10/28/2017 10:33

Instrument ID: CH732 Calib Start Date: 10/09/2017 04:57

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2017 08:02

Lab File ID: D10280003.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	0.4541	0.4251	0.2000	4.68	5.00	-6.4	20.0
1,1'-Biphenyl	Ave	1.648	1.563	0.0100	4.74	5.00	-5.2	20.0
2-Chloronaphthalene	Ave	1.256	1.223	0.8000	4.87	5.00	-2.6	20.0
2-Nitroaniline	Ave	0.5695	0.5718	0.0100	5.02	5.00	0.4	20.0
Dimethyl phthalate	Ave	1.536	1.455	0.0100	4.74	5.00	-5.3	20.0
1,3-Dinitrobenzene	Ave	0.1973	0.2014	0.0100	5.10	5.00	2.1	20.0
2,6-Dinitrotoluene	Ave	0.3141	0.3024	0.2000	4.81	5.00	-3.7	20.0
Acenaphthylene	Ave	1.927	1.869	0.9000	4.85	5.00	-3.0	20.0
3-Nitroaniline	Ave	0.3563	0.3280	0.0100	4.60	5.00	-7.9	20.0
2,4-Dinitrophenol	Lin1		0.2507	0.0100	11.2	10.0	12.1	20.0
Acenaphthene	Ave	1.301	1.226	0.9000	4.71	5.00	-5.8	20.0
4-Nitrophenol	Ave	0.2563	0.2374	0.0100	9.27	10.0	-7.3	20.0
2,4-Dinitrotoluene	Ave	0.4208	0.4065	0.2000	4.83	5.00	-3.4	20.0
Dibenzofuran	Ave	1.808	1.738	0.8000	4.80	5.00	-3.9	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3710	0.3967	0.0100	5.35	5.00	6.9	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3723	0.3173	0.0100	4.26	5.00	-14.8	20.0
2-Naphthylamine	Ave	1.318	1.238	0.0100	4.70	5.00	-6.1	20.0
Diethyl phthalate	Ave	1.549	1.394	0.0100	4.50	5.00	-10.0	20.0
Hexadecane	Ave	0.5994	0.5834		4.87	5.00	-2.7	20.0
4-Chlorophenyl phenyl ether	Ave	0.7602	0.6799	0.4000	4.47	5.00	-10.6	20.0
4-Nitroaniline	Ave	0.3785	0.3478	0.0100	4.59	5.00	-8.1	20.0
Fluorene	Ave	1.461	1.366	0.9000	4.67	5.00	-6.5	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1135	0.1003	0.0100	8.84	10.0	-11.6	20.0
N-Nitrosodiphenylamine	Ave	0.5433	0.5083	0.0100	4.68	5.00	-6.4	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.017	1.005	0.0100	4.94	5.00	-1.2	20.0
4-Bromophenyl phenyl ether	Ave	0.2094	0.1938	0.1000	4.63	5.00	-7.5	20.0
Hexachlorobenzene	Ave	0.1890	0.1808	0.1000	4.78	5.00	-4.3	20.0
Atrazine	Ave	0.2053	0.1993	0.0100	4.85	5.00	-3.0	20.0
Pentachlorophenol	Ave	0.1528	0.1588	0.0500	10.4	10.0	3.9	20.0
n-Octadecane	Ave	2.314	2.400		5.18	5.00	3.7	20.0
Phenanthrene	Ave	1.064	0.9909	0.7000	4.66	5.00	-6.9	20.0
Anthracene	Ave	1.071	1.049	0.7000	4.89	5.00	-2.1	20.0
Carbazole	Ave	1.021	0.9648	0.0100	4.72	5.00	-5.5	20.0
Di-n-butyl phthalate	Ave	1.254	1.239	0.0100	4.94	5.00	-1.1	20.0
Fluoranthene	Ave	1.217	1.144	0.6000	4.70	5.00	-6.0	20.0
Benzidine	Ave	0.6311	0.6084	0.0100	20.0	5.00	-3.6	20.0
Pyrene	Ave	1.297	1.263	0.6000	4.87	5.00	-2.6	20.0
Butyl benzyl phthalate	Ave	0.6170	0.6341	0.0100	5.14	5.00	2.8	20.0
3,3'-Dichlorobenzidine	Ave	0.4362	0.4059	0.0100	4.65	5.00	-6.9	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.7884	0.8519	0.0100	5.40	5.00	8.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Lab Sample ID: CCVIS 180-227303/3 Calibration Date: 10/28/2017 10:33

Instrument ID: CH732 Calib Start Date: 10/09/2017 04:57

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2017 08:02

Lab File ID: D10280003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]anthracene	Ave	1.233	1.132	0.8000	4.59	5.00	-8.2	20.0
Chrysene	Ave	1.173	1.118	0.7000	4.76	5.00	-4.7	20.0
Di-n-octyl phthalate	Ave	1.358	1.400	0.0100	5.15	5.00	3.0	20.0
7,12-Dimethylbenz(a)anthrace ne	Ave	0.5720	0.5202	0.0100	4.55	5.00	-9.1	20.0
Benzo[b]fluoranthene	Ave	1.221	1.133	0.7000	4.64	5.00	-7.2	20.0
Benzo[k]fluoranthene	Ave	1.197	1.162	0.7000	4.85	5.00	-2.9	20.0
Benzo[e]pyrene	Ave	1.127	1.043	0.0100	4.63	5.00	-7.4	20.0
Benzo[a]pyrene	Ave	1.131	1.102	0.7000	4.87	5.00	-2.6	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.206	1.298	0.5000	5.38	5.00	7.6	20.0
Dibenz(a,h)anthracene	Ave	1.096	1.088	0.4000	4.96	5.00	-0.7	20.0
Benzo[g,h,i]perylene	Ave	1.045	1.077	0.5000	5.15	5.00	3.1	20.0
2-Fluorophenol (Surr)	Ave	1.288	1.358		5.27	5.00	5.5	20.0
Phenol-d5 (Surr)	Ave	1.729	1.712		4.95	5.00	-1.0	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4528	0.4366		4.82	5.00	-3.6	20.0
2-Fluorobiphenyl	Ave	1.532	1.445		4.72	5.00	-5.7	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.0745	0.0628	0.0100	4.21	5.00	-15.8	20.0
Terphenyl-d14 (Surr)	Ave	0.8774	0.8460		4.82	5.00	-3.6	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280003.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 28-Oct-2017 10:33:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019077-003
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Oct-2017 04:47:29 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: piccolinov Date: 28-Oct-2017 11:18:06

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	6.182	6.182	0.000	95	89980	8.00	8.00	
* 2 Naphthalene-d8	136	7.464	7.464	0.000	99	342595	8.00	8.00	
* 3 Acenaphthene-d10	164	9.163	9.163	0.000	96	164120	8.00	8.00	
* 4 Phenanthrene-d10	188	10.606	10.606	0.000	97	331166	8.00	8.00	
* 5 Chrysene-d12	240	14.356	14.356	0.000	98	303109	8.00	8.00	
* 6 Perylene-d12	264	17.235	17.235	0.000	97	298513	8.00	8.00	M
$ 7 2-Fluorophenol	112	4.735	4.735	0.000	94	152748	10.0	10.5	
$ 8 Phenol-d5	99	5.803	5.803	0.000	93	192554	10.0	9.90	
$ 9 Nitrobenzene-d5	82	6.743	6.743	0.000	93	186957	10.0	9.64	
$ 10 2-Fluorobiphenyl	172	8.501	8.501	0.000	99	296449	10.0	9.43	
$ 11 2,4,6-Tribromophenol	330	9.922	9.922	0.000	80	25983	10.0	8.42	
$ 12 Terphenyl-d14	244	12.524	12.524	0.000	99	320549	10.0	9.64	
13 1,4-Dioxane	88	1.588	1.588	0.000	89	54834	10.0	10.8	
14 N-Nitrosodimethylamine	74	2.186	2.186	0.000	92	81172	10.0	11.0	
15 Pyridine	79	2.256	2.256	0.000	97	311263	20.0	22.9	
21 Methyl methanesulfonate	80	4.494	4.494	0.000	90	101703	10.0	11.0	
25 Benzaldehyde	77	5.712	5.712	0.000	89	134115	10.0	10.8	
26 Phenol	94	5.814	5.814	0.000	96	211380	10.0	9.94	
27 Aniline	93	5.830	5.830	0.000	95	242142	10.0	10.2	
29 Bis(2-chloroethyl)ether	93	5.904	5.904	0.000	89	137099	10.0	9.54	
30 2-Chlorophenol	128	5.963	5.963	0.000	95	150396	10.0	9.72	
31 n-Decane	43	6.027	6.027	0.000	87	166429	10.0	11.7	
32 1,3-Dichlorobenzene	146	6.124	6.124	0.000	92	163519	10.0	9.32	
33 1,4-Dichlorobenzene	146	6.198	6.198	0.000	88	159830	10.0	9.28	
34 Benzyl alcohol	108	6.321	6.321	0.000	85	91291	10.0	9.19	
35 1,2-Dichlorobenzene	146	6.359	6.359	0.000	92	152040	10.0	9.36	
36 2-Methylphenol	108	6.439	6.439	0.000	96	131758	10.0	9.54	
37 Indene	116	6.449	6.449	0.000	90	246064	10.0	9.46	
38 2,2'-oxybis[1-chloropropan	45	6.460	6.460	0.000	89	203361	10.0	11.2	
39 N-Nitrosopyrrolidine	100	6.556	6.556	0.000	79	62906	10.0	9.07	
42 4-Methylphenol	108	6.588	6.588	0.000	58	134565	10.0	9.29	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.588	6.588	0.000	74	210566	10.0	9.76	
41 N-Nitrosodi-n-propylamine	70	6.588	6.588	0.000	70	123600	10.0	10.6	
45 Hexachloroethane	117	6.706	6.706	0.000	94	73841	10.0	9.96	
46 Nitrobenzene	77	6.759	6.759	0.000	89	185935	10.0	9.16	
48 Isophorone	82	6.994	6.994	0.000	98	312801	10.0	9.06	
49 2-Nitrophenol	139	7.080	7.080	0.000	88	78327	10.0	9.83	
50 2,4-Dimethylphenol	107	7.112	7.112	0.000	98	163770	10.0	9.54	
52 Benzoic acid	122	7.171	7.171	0.000	91	92070	10.0	10.8	
53 Bis(2-chloroethoxy)methane	93	7.203	7.203	0.000	93	184372	10.0	9.37	
54 2,4-Dichlorophenol	162	7.315	7.315	0.000	96	118923	10.0	9.10	
56 1,2,4-Trichlorobenzene	180	7.406	7.406	0.000	91	130961	10.0	8.77	
58 Naphthalene	128	7.486	7.486	0.000	99	402190	10.0	9.09	
59 4-Chloroaniline	127	7.523	7.523	0.000	92	173511	10.0	9.22	
60 2,6-Dichlorophenol	162	7.539	7.539	0.000	92	109327	10.0	8.75	
62 Hexachlorobutadiene	225	7.609	7.609	0.000	95	84075	10.0	9.01	
64 Caprolactam	113	7.828	7.828	0.000	72	37329	10.0	8.17	
67 4-Chloro-3-methylphenol	107	7.983	7.983	0.000	93	144138	10.0	9.34	
69 2-Methylnaphthalene	142	8.154	8.154	0.000	91	280685	10.0	8.97	
71 1-Methylnaphthalene	142	8.255	8.255	0.000	91	265942	10.0	9.07	
72 Hexachlorocyclopentadiene	237	8.314	8.314	0.000	95	82587	10.0	8.84	
73 1,2,4,5-Tetrachlorobenzene	216	8.319	8.319	0.000	97	128749	10.0	9.22	
74 2,4,6-Trichlorophenol	196	8.421	8.421	0.000	96	83421	10.0	9.21	
75 2,4,5-Trichlorophenol	196	8.453	8.453	0.000	90	87208	10.0	9.36	
76 1,1'-Biphenyl	154	8.597	8.597	0.000	98	320672	10.0	9.48	
77 2-Chloronaphthalene	162	8.629	8.629	0.000	98	250991	10.0	9.74	
79 2-Nitroaniline	65	8.709	8.709	0.000	74	117297	10.0	10.0	
82 Dimethyl phthalate	163	8.869	8.869	0.000	95	298411	10.0	9.47	
83 1,3-Dinitrobenzene	168	8.901	8.901	0.000	79	41322	10.0	10.2	
84 2,6-Dinitrotoluene	165	8.934	8.934	0.000	79	62045	10.0	9.63	
85 Acenaphthylene	152	9.030	9.030	0.000	99	383513	10.0	9.70	
86 3-Nitroaniline	138	9.099	9.099	0.000	85	67296	10.0	9.21	
88 Acenaphthene	153	9.195	9.195	0.000	86	251418	10.0	9.42	
87 2,4-Dinitrophenol	184	9.195	9.195	0.000	76	102859	20.0	22.4	
89 4-Nitrophenol	109	9.233	9.233	0.000	93	97421	20.0	18.5	
91 2,4-Dinitrotoluene	165	9.318	9.318	0.000	78	83390	10.0	9.66	
93 Dibenzofuran	168	9.361	9.361	0.000	95	356496	10.0	9.61	
95 2,3,5,6-Tetrachlorophenol	232	9.430	9.430	0.000	91	81392	10.0	10.7	
96 2,3,4,6-Tetrachlorophenol	232	9.473	9.473	0.000	80	65100	10.0	8.52	
97 2-Naphthylamine	143	9.500	9.500	0.000	93	254033	10.0	9.39	
98 Diethyl phthalate	149	9.532	9.532	0.000	96	285966	10.0	9.00	
99 Hexadecane	57	9.537	9.537	0.000	93	249843	10.0	9.73	
100 4-Chlorophenyl phenyl ethe	204	9.671	9.671	0.000	94	139480	10.0	8.94	
101 4-Nitroaniline	138	9.681	9.681	0.000	82	71356	10.0	9.19	
103 Fluorene	166	9.687	9.687	0.000	94	280145	10.0	9.35	
104 4,6-Dinitro-2-methylphenol	198	9.713	9.713	0.000	67	83068	20.0	17.7	
105 N-Nitrosodiphenylamine	169	9.778	9.778	0.000	66	210421	10.0	9.36	
57 Azobenzene	77	9.820	9.820	0.000	97	415932	10.0	9.88	
90 1,2-Diphenylhydrazine	77	9.820	9.820	0.000	97	415932	10.0	9.88	
110 4-Bromophenyl phenyl ether	248	10.141	10.141	0.000	81	80232	10.0	9.25	
112 Hexachlorobenzene	284	10.226	10.226	0.000	89	74851	10.0	9.57	
113 Atrazine	200	10.258	10.258	0.000	85	82483	10.0	9.70	
116 Pentachlorophenol	266	10.403	10.403	0.000	85	131432	20.0	20.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.408	10.408	0.000	93	269948	10.0	10.4	
121 Phenanthrene	178	10.627	10.627	0.000	99	410198	10.0	9.31	
122 Anthracene	178	10.680	10.680	0.000	99	434101	10.0	9.79	
124 Carbazole	167	10.830	10.830	0.000	97	399386	10.0	9.45	
126 Di-n-butyl phthalate	149	11.156	11.156	0.000	99	512941	10.0	9.89	
131 Fluoranthene	202	12.027	12.027	0.000	99	473452	10.0	9.40	
132 Benzidine	184	12.160	12.160	0.000	99	230520	10.0	9.64	
133 Pyrene	202	12.353	12.353	0.000	96	478479	10.0	9.74	
138 Butyl benzyl phthalate	149	13.266	13.266	0.000	94	240238	10.0	10.3	
144 3,3'-Dichlorobenzidine	252	14.254	14.254	0.000	78	153787	10.0	9.31	
145 Bis(2-ethylhexyl) phthalat	149	14.308	14.308	0.000	94	322781	10.0	10.8	
146 Benzo[a]anthracene	228	14.329	14.329	0.000	100	429041	10.0	9.18	
147 Chrysene	228	14.399	14.399	0.000	98	423454	10.0	9.53	
150 Di-n-octyl phthalate	149	15.606	15.606	0.000	98	522235	10.0	10.3	
151 7,12-Dimethylbenz(a)anthra	256	16.445	16.445	0.000	94	194102	10.0	9.09	
152 Benzo[b]fluoranthene	252	16.455	16.455	0.000	97	422884	10.0	9.28	
153 Benzo[k]fluoranthene	252	16.514	16.514	0.000	99	433650	10.0	9.71	
219 Benzo[e]pyrene	252	17.016	17.016	0.000	0	389261	10.0	9.26	
154 Benzo[a]pyrene	252	17.118	17.118	0.000	79	411172	10.0	9.74	
157 Indeno[1,2,3-cd]pyrene	276	19.581	19.581	0.000	98	484163	10.0	10.8	
158 Dibenz(a,h)anthracene	278	19.618	19.618	0.000	92	405861	10.0	9.93	
159 Benzo[g,h,i]perylene	276	20.264	20.264	0.000	97	401843	10.0	10.3	
S 199 Total Cresols	108				0		20.0	18.8	
S 197 Methyl Phenols,Total	108				0		20.0	18.8	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD10i_00243 Amount Added: 1.00 Units: mL

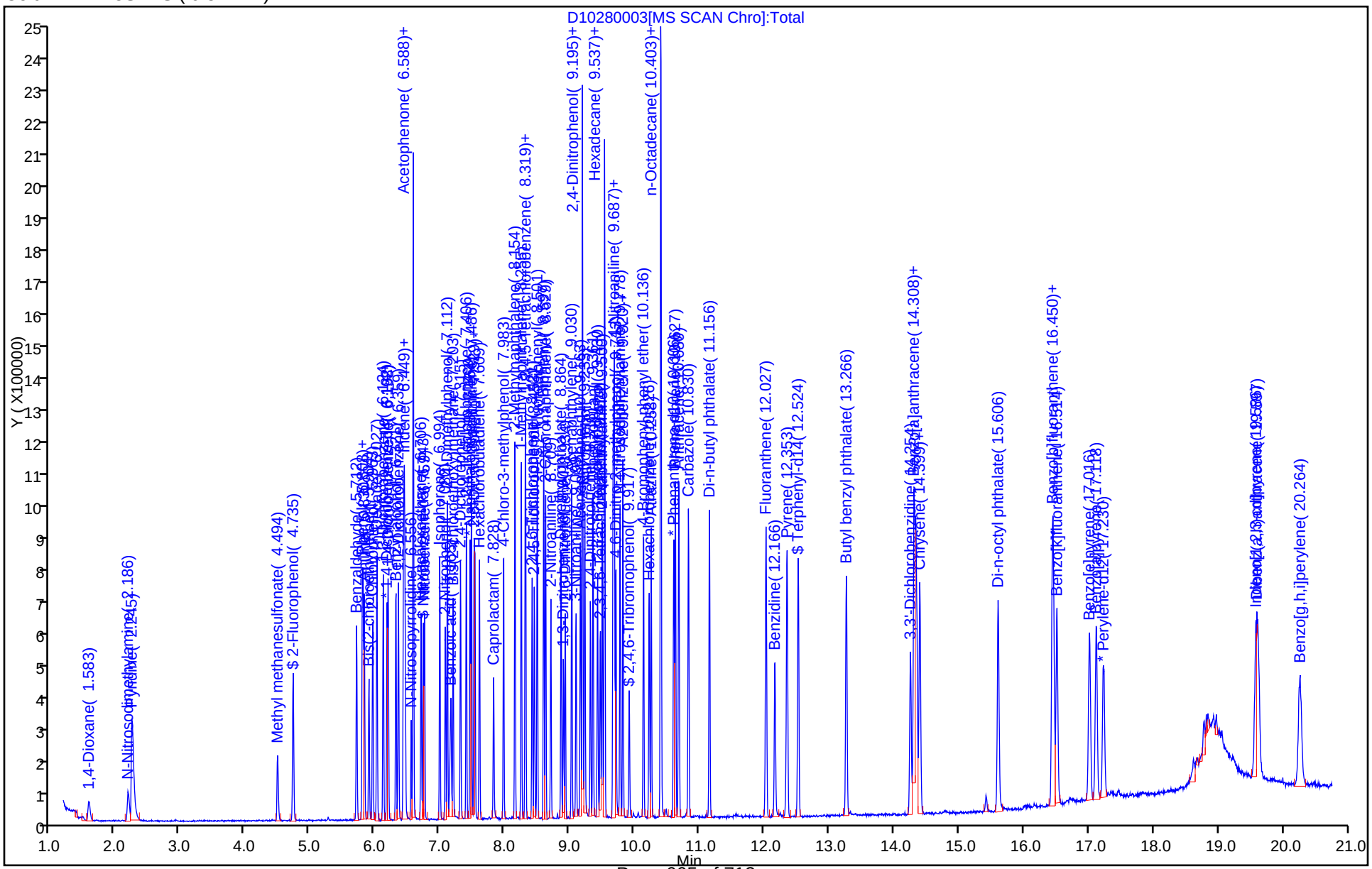
Report Date: 30-Oct-2017 04:47:30 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280003.D

Injection Date:	28-Oct-2017 10:33:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

TestAmerica Pittsburgh

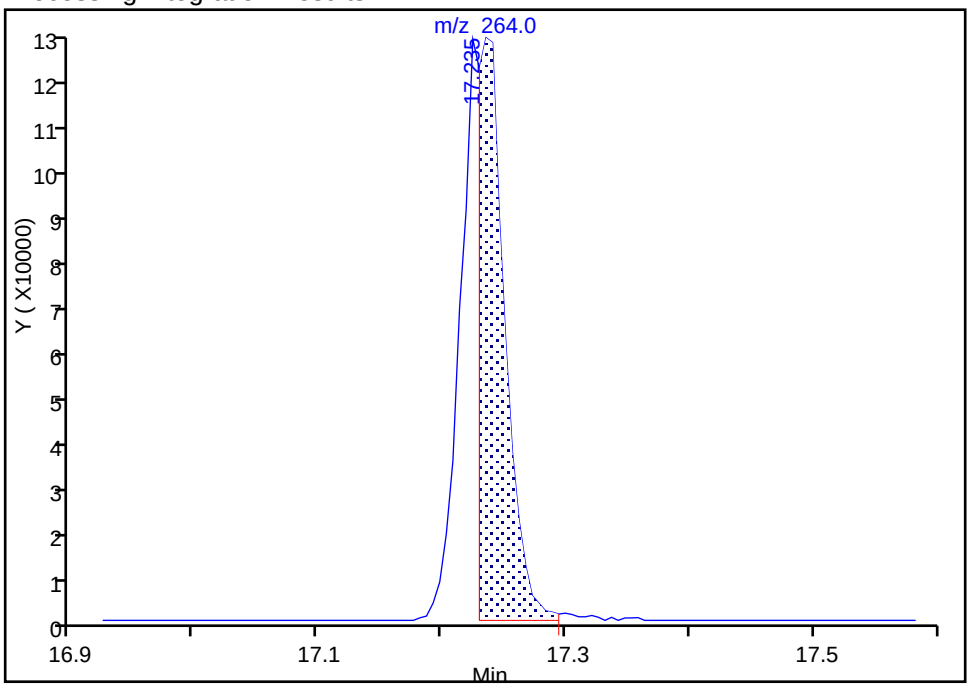
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280003.D
Injection Date: 28-Oct-2017 10:33:30 Instrument ID: CH732
Lims ID: CCVIS
Client ID:
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL
Column: Rxi-5SilMS (0.32 mm) Detector MS SCAN

* 6 Perylene-d12, CAS: 1520-96-3

Signal: 1

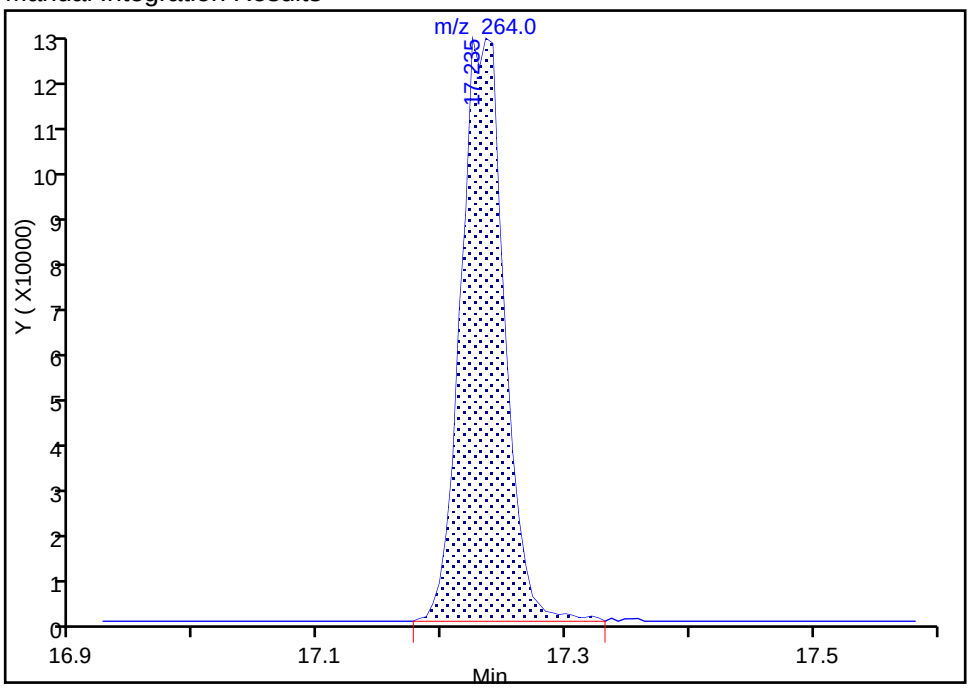
Processing Integration Results

RT: 17.24
Area: 187823
Amount: 8.000000
Amount Units: ng



Manual Integration Results

RT: 17.24
Area: 298513
Amount: 8.000000
Amount Units: ng



Reviewer: piccolinov, 28-Oct-2017 10:56:34
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 09-Oct-2017 04:42:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0018773-002
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Oct-2017 08:56:55 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 09-Oct-2017 08:56:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.554	5.554	0.000	88	647980	NR	NR	
190 DFTPP									
191 Benzidine_T	184	8.204	8.204	0.000	99	4289683	NR	NR	
193 4,4'-DDD	235		8.871					ND	
192 4,4'-DDE	246		9.014					ND	
194 4,4'-DDT	235	9.860	9.860	0.000	96	1905442	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

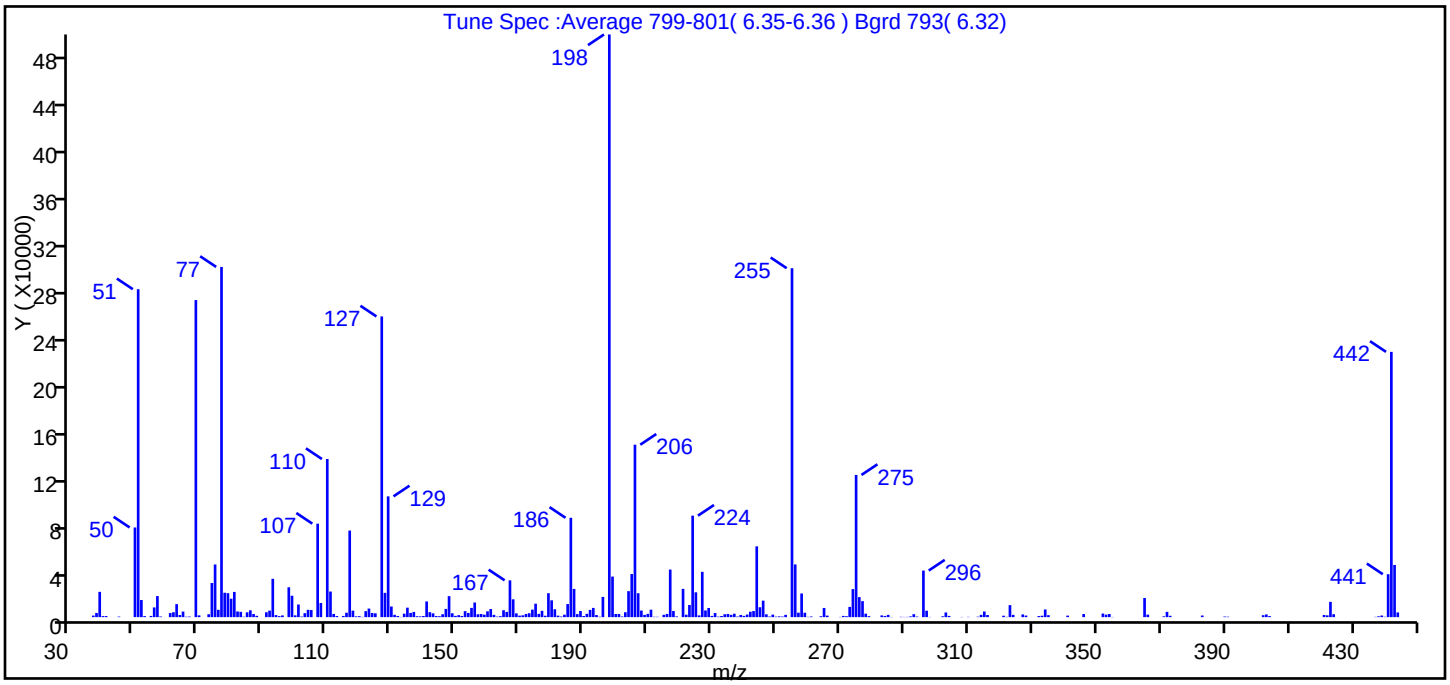
SVDFTPP50i_00029 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090002.D
Injection Date: 09-Oct-2017 04:42:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL
Tune Method: DFTPP Method 8270

190 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	56.3
68	<2% of mass 69	0.0 (0.0)
69	Present	54.4
70	<2% of mass 69	0.3 (0.6)
127	40-60% of mass 198	51.6
197	<1% of mass 198	0.0
199	5-9% of mass 198	7.0
275	10-30% of mass 198	24.4
365	>1% of mass 198	3.3
441	Present but less than mass 443	7.4 (82.2)
442	>40% of mass 198	45.5
443	17-23% of mass 442	9.0 (19.7)

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090002.D\BNA_CH732.rslt\spectra.d
Injection Date: 09-Oct-2017 04:42:30
Spectrum: Tune Spec :Average 799-801(6.35-6.36) Bgrd 793(6.32)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 275

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	1334	125.00	3241	195.00	345	273.00	8642
38.00	3526	127.00	253760	196.00	17080	274.00	23664
39.00	21352	128.00	20488	198.00	491712	275.00	119984
40.00	903	129.00	101928	199.00	34240	276.00	16904
41.00	921	130.00	8982	200.00	2644	277.00	13512
45.00	487	131.00	1962	201.00	2677	278.00	2933
50.00	75672	132.00	1002	202.00	544	279.00	863
51.00	276736	133.00	171	203.00	4154	283.00	1462
52.00	14442	134.00	2924	204.00	21936	284.00	1024
53.00	873	135.00	8001	205.00	36376	285.00	1924
55.00	1017	136.00	3583	206.00	145536	286.00	179
56.00	8205	137.00	4411	207.00	20184	289.00	273
57.00	17792	138.00	757	208.00	5568	290.00	178
58.00	552	139.00	638	209.00	1910	291.00	220
61.00	3446	140.00	926	210.00	2788	292.00	629
62.00	4136	141.00	13254	211.00	6291	293.00	2488
63.00	10973	142.00	4194	212.00	311	294.00	474
64.00	1789	143.00	3203	213.00	301	296.00	39320
65.00	4690	144.00	913	215.00	1960	297.00	5434
66.00	350	145.00	806	216.00	2712	298.00	177
67.00	487	146.00	2456	217.00	40160	302.00	701
69.00	267584	147.00	6959	218.00	5161	303.00	3947
70.00	1504	148.00	17712	219.00	606	304.00	1040
73.00	2422	149.00	3276	221.00	23848	308.00	175
74.00	28816	150.00	1086	222.00	2055	310.00	219
75.00	44432	151.00	1687	223.00	10259	313.00	377
76.00	6186	152.00	991	224.00	85640	314.00	1920
77.00	295552	153.00	5058	225.00	20968	315.00	4754
78.00	20584	154.00	3554	226.00	1480	316.00	1824
79.00	20216	155.00	7798	227.00	38240	321.00	1205
80.00	15566	156.00	12335	228.00	5631	322.00	257
81.00	21288	157.00	2425	229.00	7698	323.00	10148
82.00	4785	158.00	2640	230.00	1046	324.00	1936

Report Date: 09-Oct-2017 08:56:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090002.D\BNA_CH732.rslt\spectra.d
Injection Date: 09-Oct-2017 04:42:30
Spectrum: Tune Spec :Average 799-801(6.35-6.36) Bgrd 793(6.32)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 275

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	4471	159.00	2063	231.00	3458	327.00	2296
84.00	355	160.00	4913	232.00	429	328.00	1329
85.00	4048	161.00	6877	233.00	965	332.00	919
86.00	5747	162.00	1931	234.00	2414	333.00	1191
87.00	2640	163.00	455	235.00	2688	334.00	6482
88.00	1130	164.00	803	236.00	1920	335.00	1668
91.00	4125	165.00	5849	237.00	2889	341.00	1308
92.00	5488	166.00	4418	238.00	478	346.00	2613
93.00	32360	167.00	31064	239.00	1847	352.00	3026
94.00	1717	168.00	15064	240.00	1075	353.00	2141
95.00	868	169.00	3197	241.00	2205	354.00	2649
96.00	1449	170.00	1279	242.00	4556	355.00	177
98.00	25200	171.00	1559	243.00	5144	365.00	16170
99.00	18080	172.00	2702	244.00	59752	366.00	2129
100.00	1523	173.00	3302	245.00	8359	371.00	669
101.00	10645	174.00	6342	246.00	13926	372.00	4444
102.00	481	175.00	11347	247.00	2397	373.00	1129
103.00	3366	176.00	2757	248.00	524	383.00	1376
104.00	6163	177.00	5338	249.00	2124	390.00	499
105.00	6001	178.00	1195	250.00	410	391.00	392
107.00	78888	179.00	20192	251.00	640	402.00	1643
108.00	11919	180.00	14187	252.00	490	403.00	2302
110.00	133440	181.00	6650	253.00	1920	404.00	900
111.00	21608	182.00	1277	255.00	294464	421.00	1810
112.00	2719	183.00	514	256.00	44496	422.00	1521
113.00	913	184.00	2053	257.00	3769	423.00	12913
115.00	1011	185.00	11024	258.00	19960	424.00	2469
116.00	3730	186.00	83840	259.00	3740	437.00	229
117.00	73072	187.00	23816	260.00	264	438.00	697
118.00	5480	188.00	2552	261.00	549	439.00	1365
119.00	655	189.00	5172	264.00	751	440.00	300
120.00	816	190.00	963	265.00	7751	441.00	36232
121.00	216	191.00	2803	266.00	1300	442.00	223872
122.00	5059	192.00	6123	270.00	184	443.00	44064

Report Date: 09-Oct-2017 08:56:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090002.D\BNA_CH732.rslt\spectra.d
Injection Date: 09-Oct-2017 04:42:30
Spectrum: Tune Spec :Average 799-801(6.35-6.36) Bgrd 793(6.32)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 275

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	7237	193.00	7792	271.00	1044	444.00	3963
124.00	3507	194.00	1790	272.00	793		

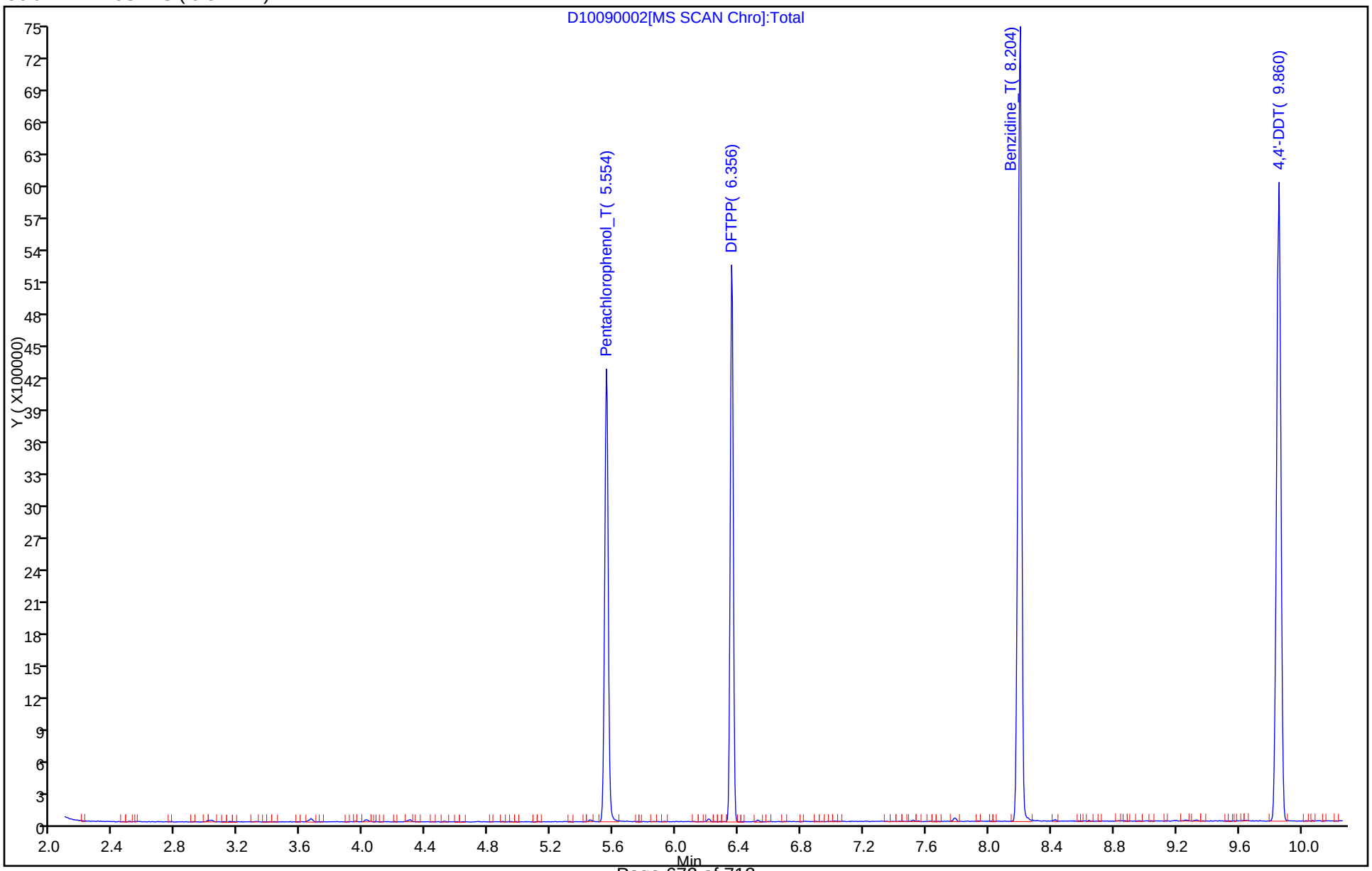
Report Date: 09-Oct-2017 08:56:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090002.D

Injection Date:	09-Oct-2017 04:42:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	DFTPP			Worklist Smp#:	2
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

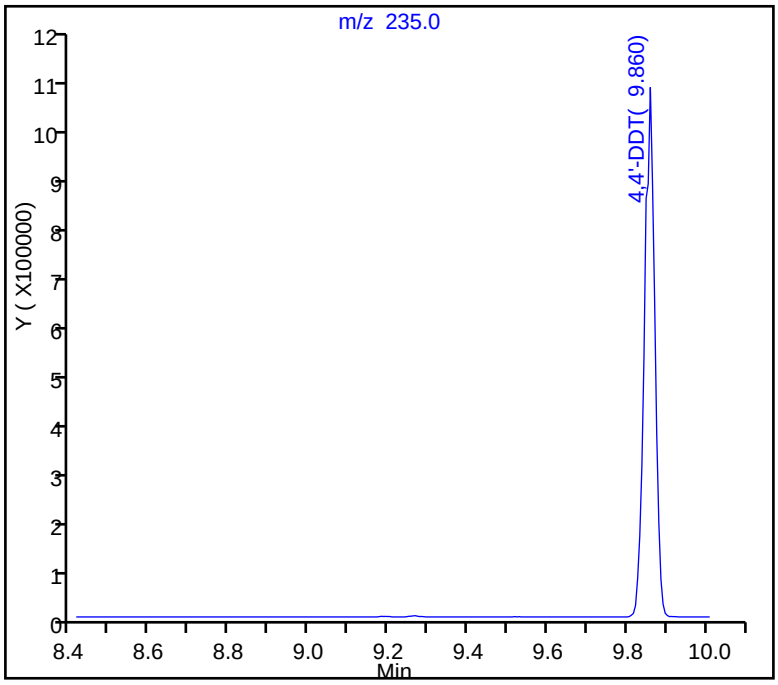


Breakdown Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090002.D
Injection Date: 09-Oct-2017 04:42:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

194 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

194 4,4'-DDT, Area = 1905442
192 4,4'-DDE, Area = 0
193 4,4'-DDD, Area = 0

%Breakdown: 0.00%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

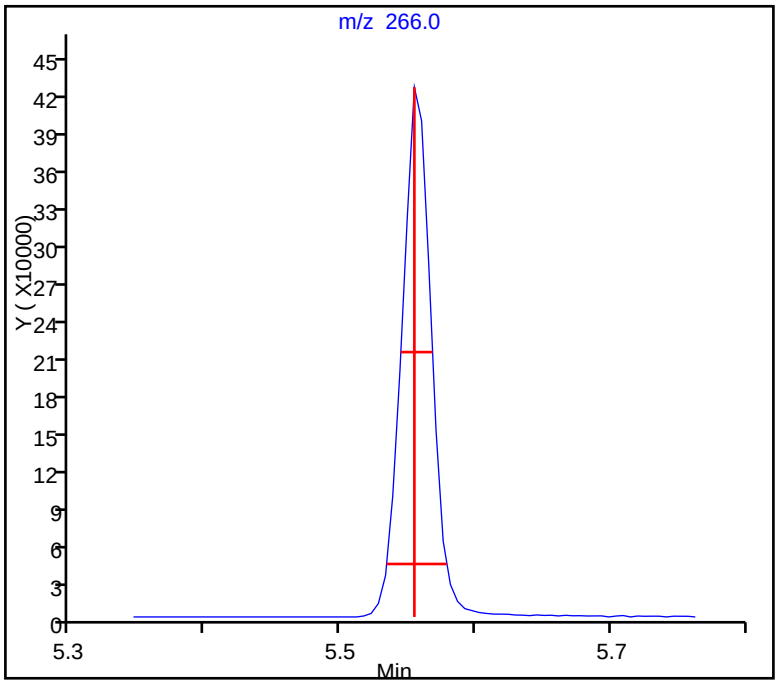
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090002.D
Injection Date: 09-Oct-2017 04:42:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

189 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.024 (min.)
Front Width = 0.021 (min.)

Tailing Factor = 1.2, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

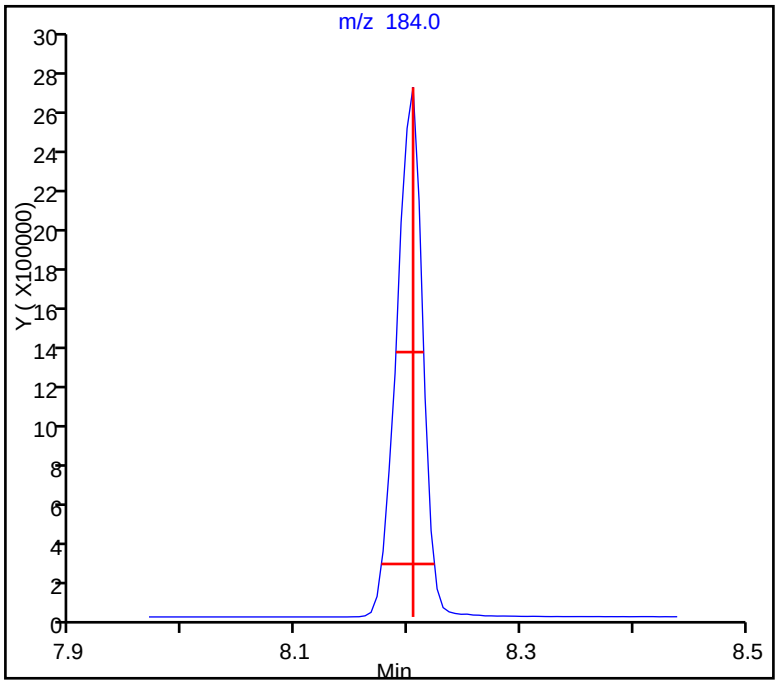
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090002.D
Injection Date: 09-Oct-2017 04:42:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

191 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.019 (min.)
Front Width = 0.028 (min.)

Tailing Factor = 0.7, Max. Tailing < 2.00
Passed



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 28-Oct-2017 10:18:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019077-002
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Oct-2017 04:47:25 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: piccolinov Date: 30-Oct-2017 04:32:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.597	5.597	0.000	89	324361	NR	NR	
190 DFTPP									
191 Benzidine_T	184	8.247	8.247	0.000	99	3500968	NR	NR	
193 4,4'-DDD	235		8.871					ND	
192 4,4'-DDE	246		9.014					ND	
194 4,4'-DDT	235	9.924	9.924	0.000	96	1589931	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

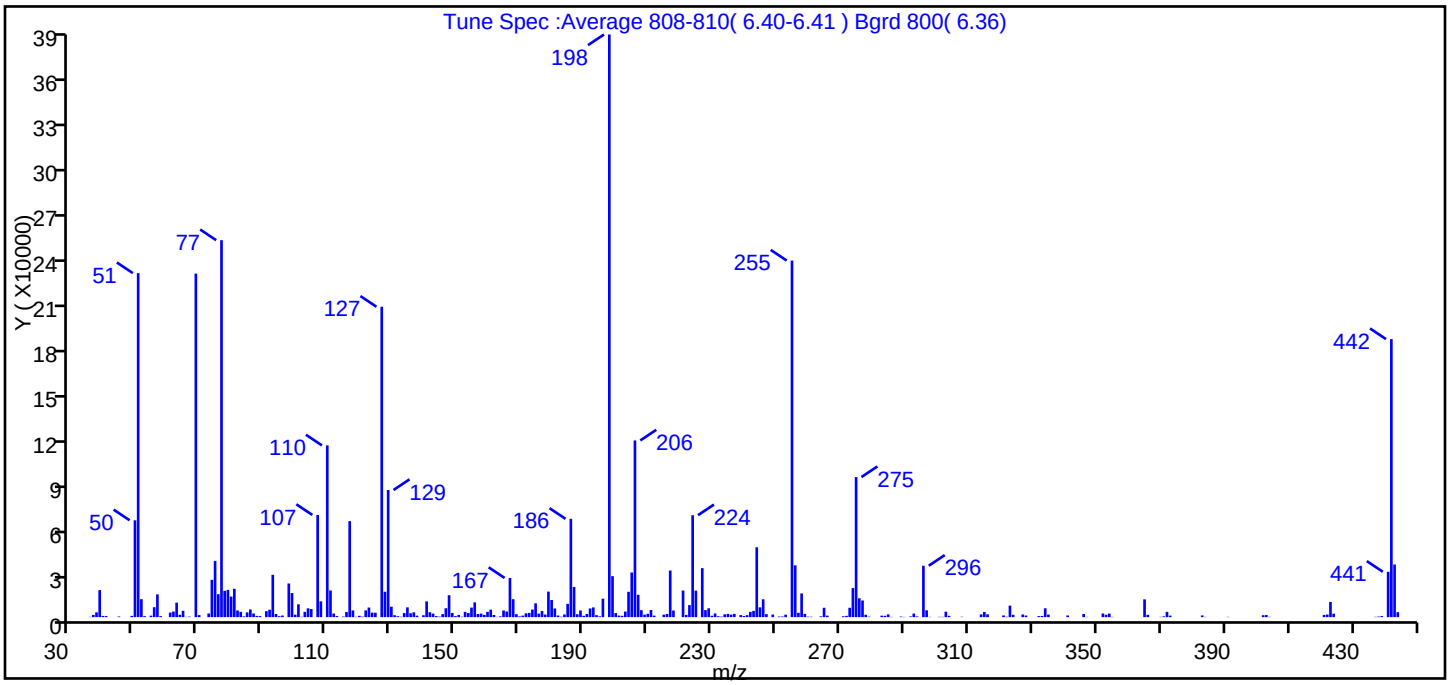
SVDFTPP50i_00029 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280002.D
Injection Date: 28-Oct-2017 10:18:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL
Tune Method: DFTPP Method 8270

190 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	59.0
68	<2% of mass 69	0.0 (0.0)
69	Present	59.0
70	<2% of mass 69	0.4 (0.6)
127	40-60% of mass 198	53.3
197	<1% of mass 198	0.0
199	5-9% of mass 198	7.0
275	10-30% of mass 198	24.0
365	>1% of mass 198	3.1
441	Present but less than mass 443	7.8 (86.2)
442	>40% of mass 198	47.7
443	17-23% of mass 442	9.0 (18.9)

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280002.D\BNA_CH732.rslt\spectra.d
Injection Date: 28-Oct-2017 10:18:30
Spectrum: Tune Spec :Average 808-810(6.40-6.41) Bgrd 800(6.36)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 269

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	196	121.00	352	191.00	2101	275.00	93344
37.00	1472	122.00	4508	192.00	5802	276.00	12560
38.00	3209	123.00	6392	193.00	6486	277.00	11082
39.00	18032	124.00	3037	194.00	1320	278.00	1579
40.00	827	125.00	2953	195.00	554	279.00	298
41.00	792	127.00	206848	196.00	12297	283.00	973
45.00	432	128.00	16920	198.00	388288	284.00	887
49.00	844	129.00	84720	199.00	27312	285.00	1819
50.00	64544	130.00	6928	200.00	2708	286.00	177
51.00	229248	131.00	1298	201.00	1037	289.00	389
52.00	11976	132.00	609	202.00	885	290.00	168
53.00	668	133.00	245	203.00	3732	292.00	473
55.00	983	134.00	2722	204.00	16880	293.00	2395
56.00	6626	135.00	6517	205.00	29760	294.00	478
57.00	15180	136.00	2605	206.00	117744	296.00	34248
58.00	707	137.00	3216	207.00	14889	297.00	4539
61.00	3033	138.00	982	208.00	4642	298.00	167
62.00	3719	140.00	1286	209.00	1622	301.00	222
63.00	9637	141.00	10496	210.00	2236	302.00	210
64.00	1578	142.00	3274	211.00	4777	303.00	3629
65.00	4216	143.00	2363	212.00	1005	304.00	894
66.00	166	144.00	707	215.00	1638	308.00	240
67.00	340	145.00	366	216.00	2130	314.00	1852
69.00	228928	146.00	2025	217.00	31064	315.00	3439
70.00	1374	147.00	5941	218.00	4421	316.00	1896
73.00	2444	148.00	14608	221.00	17720	321.00	1144
74.00	24872	149.00	2773	222.00	1498	322.00	256
75.00	37496	150.00	708	223.00	8045	323.00	7699
76.00	15299	151.00	1473	224.00	67936	324.00	1552
77.00	251200	152.00	279	225.00	17680	327.00	1782
78.00	17544	153.00	3538	227.00	32656	328.00	1069
79.00	18168	154.00	2758	228.00	4674	332.00	686
80.00	13680	155.00	6374	229.00	5917	333.00	777

Report Date: 30-Oct-2017 04:47:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280002.D\BNA_CH732.rslt\spectra.d
Injection Date: 28-Oct-2017 10:18:30
Spectrum: Tune Spec :Average 808-810(6.40-6.41) Bgrd 800(6.36)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 269

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	18888	156.00	9839	230.00	927	334.00	5922
82.00	4438	157.00	2076	231.00	2448	335.00	1701
83.00	3508	158.00	2368	232.00	614	341.00	1113
84.00	516	159.00	1493	233.00	365	346.00	2104
85.00	3202	160.00	3533	234.00	1886	347.00	184
86.00	5119	161.00	4983	235.00	2146	352.00	2435
87.00	2447	162.00	1422	236.00	1665	353.00	1621
88.00	833	163.00	182	237.00	2165	354.00	2384
89.00	711	164.00	515	239.00	1367	355.00	168
91.00	3988	165.00	4446	240.00	770	365.00	11853
92.00	4961	166.00	3760	241.00	1331	366.00	1560
93.00	28208	167.00	26112	242.00	3487	370.00	187
94.00	2086	168.00	11968	243.00	4164	371.00	536
95.00	638	169.00	1975	244.00	46552	372.00	3549
96.00	1079	170.00	515	245.00	6527	373.00	995
98.00	22416	171.00	1046	246.00	11922	383.00	1140
99.00	16068	172.00	2535	247.00	2030	384.00	171
100.00	1618	173.00	2846	249.00	1727	391.00	188
101.00	8556	174.00	5059	251.00	417	402.00	1294
102.00	225	175.00	9214	252.00	416	403.00	1384
103.00	3519	176.00	2337	253.00	1620	404.00	193
104.00	5894	177.00	4136	255.00	237632	421.00	1494
105.00	5432	178.00	1724	256.00	34528	422.00	1744
107.00	68104	179.00	17016	257.00	2872	423.00	10124
108.00	10537	180.00	11414	258.00	15814	424.00	2297
110.00	114440	181.00	5793	259.00	2157	437.00	205
111.00	17776	182.00	1077	260.00	339	438.00	390
112.00	2394	183.00	268	261.00	259	439.00	701
113.00	728	184.00	1783	264.00	529	441.00	30240
115.00	379	185.00	8865	265.00	6237	442.00	185280
116.00	3406	186.00	65504	266.00	1009	443.00	35080
117.00	64000	187.00	20104	271.00	597	444.00	3308
118.00	4474	188.00	1925	272.00	858		
119.00	221	189.00	4439	273.00	6234		

Report Date: 30-Oct-2017 04:47:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280002.D\BNA_CH732.rslt\spectra.d
Injection Date: 28-Oct-2017 10:18:30
Spectrum: Tune Spec :Average 808-810(6.40-6.41) Bgrd 800(6.36)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 269

m/z	Y	m/z	Y	m/z	Y	m/z	Y
120.00	883	190.00	897	274.00	19384		

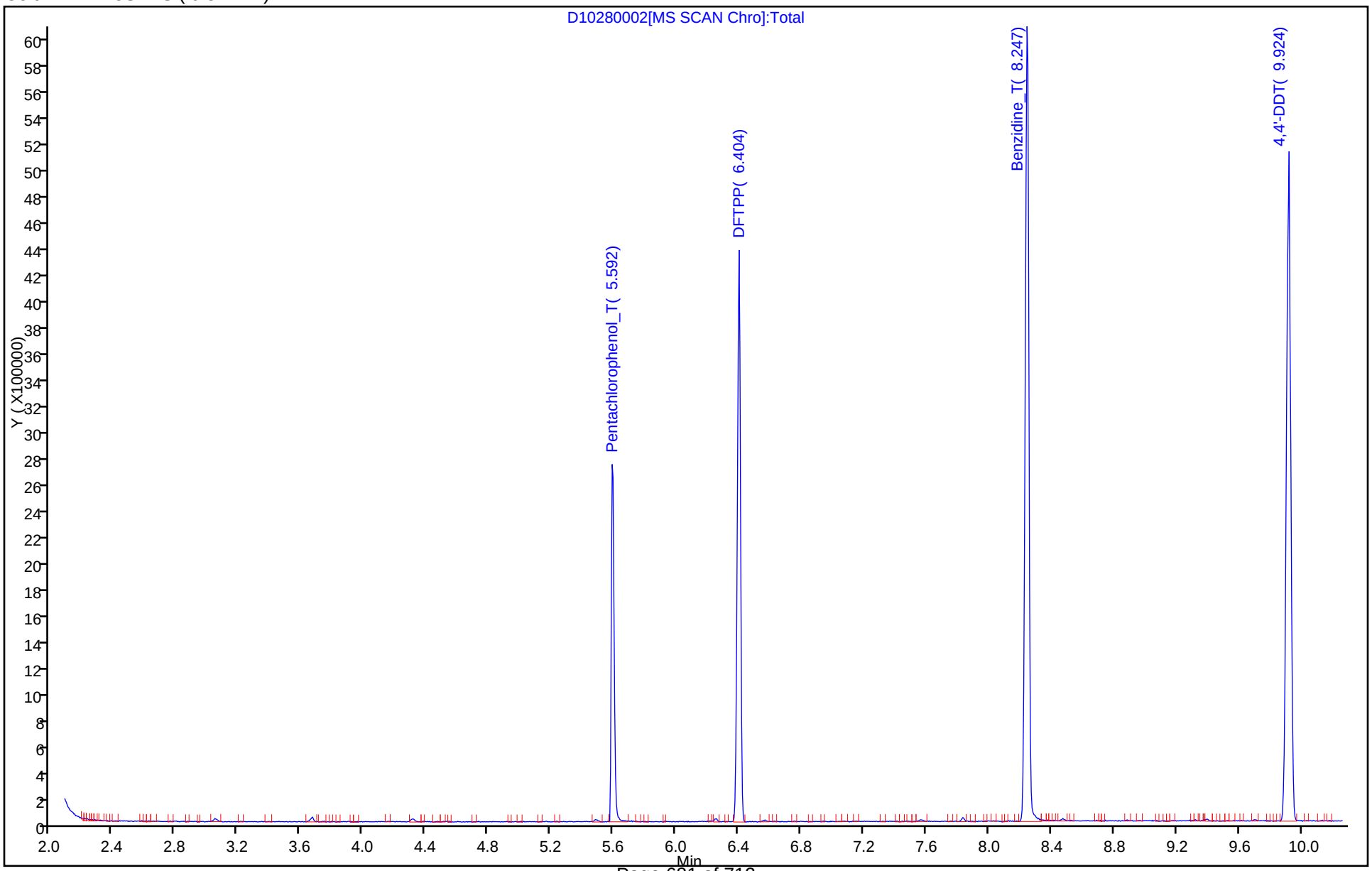
Report Date: 30-Oct-2017 04:47:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280002.D

Injection Date:	28-Oct-2017 10:18:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	DFTPP			Worklist Smp#:	2
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

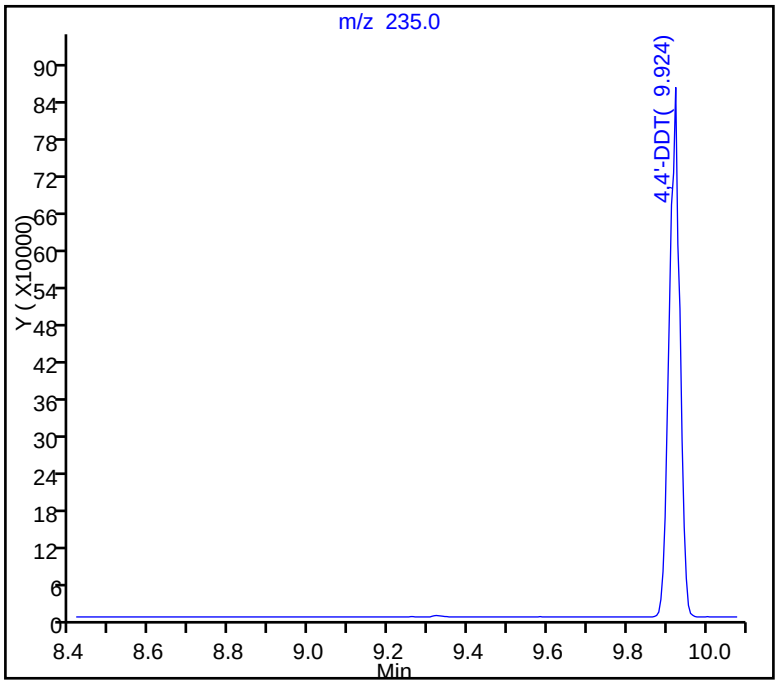


Breakdown Report

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280002.D
Injection Date: 28-Oct-2017 10:18:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

194 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

194 4,4'-DDT, Area = 1589931
192 4,4'-DDE, Area = 0
193 4,4'-DDD, Area = 0

%Breakdown: 0.00%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

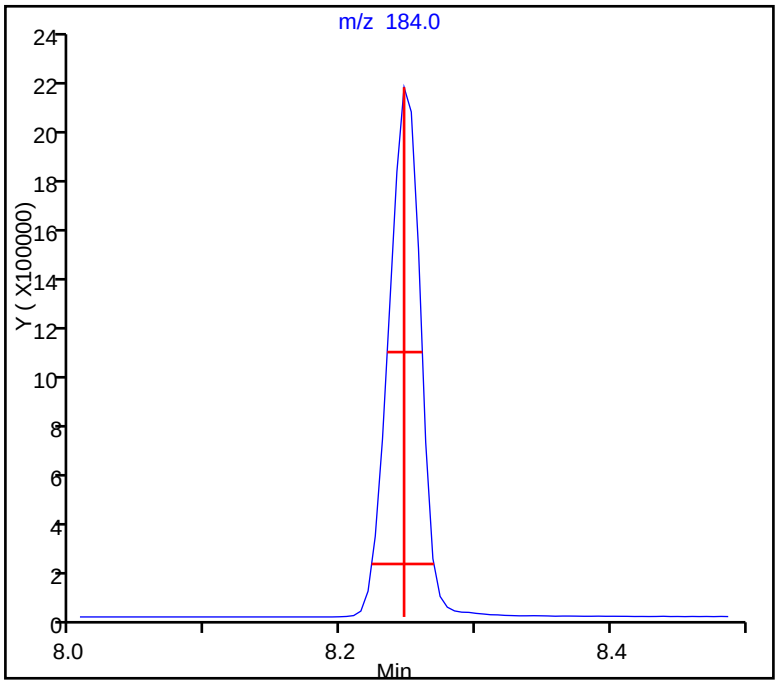
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280002.D
Injection Date: 28-Oct-2017 10:18:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

191 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.022 (min.)
Front Width = 0.024 (min.)

Tailing Factor = 0.9, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

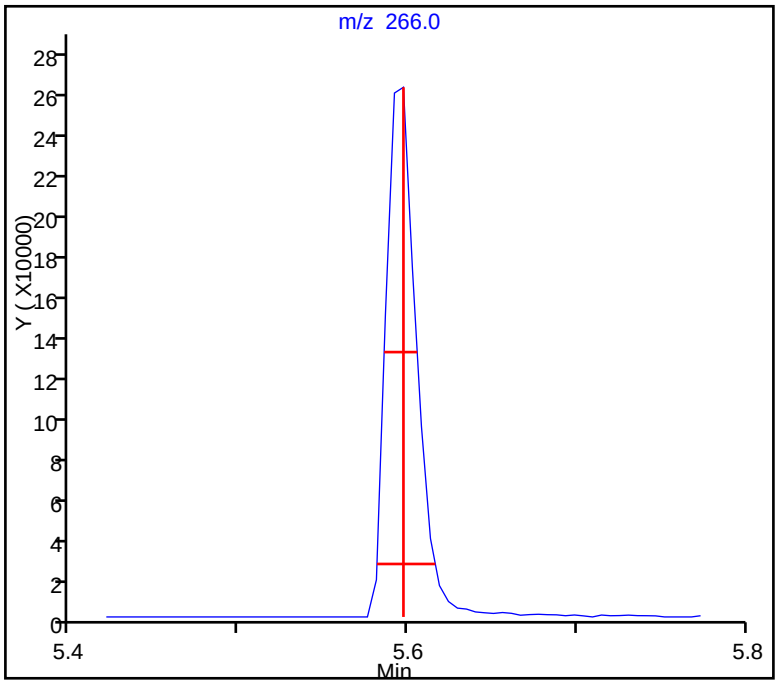
Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280002.D
Injection Date: 28-Oct-2017 10:18:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

189 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.019 (min.)
Front Width = 0.016 (min.)

Tailing Factor = 1.2, Max. Tailing < 2.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-226906/1-A

Matrix: Water | Lab File ID: D10280004.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/25/2017 11:21

Sample wt/vol: 250(mL) | Date Analyzed: 10/28/2017 10:59

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.: 227303 | 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	70		26-103
367-12-4	2-Fluorophenol (Surr)	76		27-100
118-79-6	2,4,6-Tribromophenol (Surr)	72		28-134
4165-60-0	Nitrobenzene-d5 (Surr)	74		30-101
4165-62-2	Phenol-d5 (Surr)	73		27-101
1718-51-0	Terphenyl-d14 (Surr)	73		20-119

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280004.D
Lims ID: MB 180-226906/1-A
Client ID:
Sample Type: MB
Inject. Date: 28-Oct-2017 10:59:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019077-004
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Oct-2017 04:47:29 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: piccolinov Date: 30-Oct-2017 04:33:16

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	6.177	6.182	-0.005	97	97741	8.00	8.00	
* 2 Naphthalene-d8	136	7.464	7.464	0.000	99	391874	8.00	8.00	
* 3 Acenaphthene-d10	164	9.163	9.163	0.000	97	193220	8.00	8.00	
* 4 Phenanthrene-d10	188	10.606	10.606	0.000	97	367214	8.00	8.00	
* 5 Chrysene-d12	240	14.356	14.356	0.000	97	325370	8.00	8.00	
* 6 Perylene-d12	264	17.246	17.235	0.011	97	295196	8.00	8.00	
$ 7 2-Fluorophenol	112	4.724	4.735	-0.011	93	475888	40.0	30.2	
$ 8 Phenol-d5	99	5.792	5.803	-0.011	94	619179	40.0	29.3	
$ 9 Nitrobenzene-d5	82	6.738	6.743	-0.005	92	653467	40.0	29.5	
$ 10 2-Fluorobiphenyl	172	8.501	8.501	0.000	99	1036470	40.0	28.0	
$ 11 2,4,6-Tribromophenol	330	9.922	9.922	0.000	83	98379	40.0	28.8	
$ 12 Terphenyl-d14	244	12.529	12.524	0.005	99	1044701	40.0	29.3	
13 1,4-Dioxane	88		1.588					ND	
14 N-Nitrosodimethylamine	74		2.186					ND	
15 Pyridine	79		2.256					ND	
176 Dimethylformamide	73		3.052					ND	
18 2-Picoline	93		4.030					ND	
19 N-Nitrosomethylethylamine	88		4.233					ND	
21 Methyl methanesulfonate	80		4.494					ND	
20 Acrylamide	71		4.689					ND	
23 N-Nitrosodiethylamine	102		5.115					ND	
24 Ethyl methanesulfonate	79		5.256					ND	
25 Benzaldehyde	77		5.712					ND	
28 Pentachloroethane	167		5.806					ND	
26 Phenol	94		5.814					ND	
27 Aniline	93		5.830					ND	
29 Bis(2-chloroethyl)ether	93		5.904					ND	
30 2-Chlorophenol	128		5.963					ND	
31 n-Decane	43		6.027					ND	
32 1,3-Dichlorobenzene	146		6.124					ND	
175 1,2,3-Trimethylbenzene	105		6.188					ND	
33 1,4-Dichlorobenzene	146		6.198					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 Benzyl alcohol	108		6.321					ND	
35 1,2-Dichlorobenzene	146		6.359					ND	
36 2-Methylphenol	108		6.439					ND	
37 Indene	116		6.449					ND	
38 2,2'-oxybis[1-chloropropan	45		6.460					ND	
39 N-Nitrosopyrrolidine	100		6.556					ND	
42 4-Methylphenol	108		6.588					ND	
40 Acetophenone	105		6.588					ND	
41 N-Nitrosodi-n-propylamine	70		6.588					ND	
43 N-Nitrosomorpholine	116		6.632					ND	
44 2-Toluidine	106		6.664					ND	
45 Hexachloroethane	117		6.706					ND	
46 Nitrobenzene	77		6.759					ND	
47 N-Nitrosopiperidine	114		6.926					ND	
48 Isophorone	82		6.994					ND	
49 2-Nitrophenol	139		7.080					ND	
50 2,4-Dimethylphenol	107		7.112					ND	
166 4-Chloro-3-nitro-alpha,alp	179		7.112					ND	
52 Benzoic acid	122		7.171					ND	
51 o,o',o''-Triethylphosphoro	198		7.182					ND	
53 Bis(2-chloroethoxy)methane	93		7.203					ND	
54 2,4-Dichlorophenol	162		7.315					ND	
56 1,2,4-Trichlorobenzene	180		7.406					ND	
55 alpha,alpha-Dimethyl phene	58		7.435					ND	
66 p-Phenylene diamine	108		7.435					ND	
58 Naphthalene	128		7.486					ND	
59 4-Chloroaniline	127		7.523					ND	
61 Hexachloropropene	213		7.526					ND	
60 2,6-Dichlorophenol	162		7.539					ND	
62 Hexachlorobutadiene	225		7.609					ND	
63 Quinoline	129		7.786					ND	
65 N-Nitrosodi-n-butylamine	84		7.818					ND	
64 Caprolactam	113		7.828					ND	
67 4-Chloro-3-methylphenol	107		7.983					ND	
68 Safrole, Total	162		8.026					ND	
167 Phthalic anhydride	104		8.132					ND	
69 2-Methylnaphthalene	142		8.154					ND	
71 1-Methylnaphthalene	142		8.255					ND	
72 Hexachlorocyclopentadiene	237		8.314					ND	
73 1,2,4,5-Tetrachlorobenzene	216		8.319					ND	
74 2,4,6-Trichlorophenol	196		8.421					ND	
75 2,4,5-Trichlorophenol	196		8.453					ND	
80 1,4-Naphthoquinone	158		8.477					ND	
81 1,4-Dinitrobenzene	168		8.477					ND	
180 Isosafrole	162		8.514					ND	
76 1,1'-Biphenyl	154		8.597					ND	
78 1-Chloronaphthalene	162		8.616					ND	
77 2-Chloronaphthalene	162		8.629					ND	
79 2-Nitroaniline	65		8.709					ND	
82 Dimethyl phthalate	163		8.869					ND	
83 1,3-Dinitrobenzene	168		8.901					ND	
84 2,6-Dinitrotoluene	165		8.934					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 Acenaphthylene	152		9.030					ND	
86 3-Nitroaniline	138		9.099					ND	
88 Acenaphthene	153		9.195					ND	
87 2,4-Dinitrophenol	184		9.195					ND	
89 4-Nitrophenol	109		9.233					ND	
92 Pentachlorobenzene	250		9.294					ND	
91 2,4-Dinitrotoluene	165		9.318					ND	
94 1-Naphthylamine	143		9.340					ND	
93 Dibenzofuran	168		9.361					ND	
95 2,3,5,6-Tetrachlorophenol	232		9.430					ND	
96 2,3,4,6-Tetrachlorophenol	232		9.473					ND	
97 2-Naphthylamine	143		9.500					ND	
98 Diethyl phthalate	149		9.532					ND	
99 Hexadecane	57		9.537					ND	
170 4-tert-Octylphenol	135		9.580					ND	
100 4-Chlorophenyl phenyl ethe	204		9.671					ND	
101 4-Nitroaniline	138		9.681					ND	
103 Fluorene	166		9.687					ND	
104 4,6-Dinitro-2-methylphenol	198		9.713					ND	
105 N-Nitrosodiphenylamine	169		9.778					ND	
57 Azobenzene	77		9.820					ND	
90 1,2-Diphenylhydrazine	77		9.820					ND	
107 1,3,5-Trinitrobenzene	213		9.896					ND	
102 N-Nitro-o-toluidine	152		9.898					ND	
117 Pronamide	173		9.898					ND	
114 4-Aminobiphenyl	169		9.898					ND	
108 Phenacetin	108		9.939					ND	
109 Phorate	121		9.944					ND	
111 Dimethoate	87		10.099					ND	
110 4-Bromophenyl phenyl ether	248		10.141					ND	
112 Hexachlorobenzene	284		10.226					ND	
113 Atrazine	200		10.258					ND	
118 Pentachloronitrobenzene	237		10.302					ND	
225 PCB-14	222		10.333					ND	
116 Pentachlorophenol	266		10.403					ND	
115 n-Octadecane	57		10.408					ND	
119 Disulfoton	88		10.419					ND	
120 Dinoseb	211		10.545					ND	
123 Hexachlorophene TIC	198		10.600					ND	
121 Phenanthrene	178		10.627					ND	
122 Anthracene	178		10.680					ND	
125 Methyl parathion	109		10.793					ND	
124 Carbazole	167		10.830					ND	
126 Di-n-butyl phthalate	149		11.156					ND	
127 Ethyl Parathion	109		11.189					ND	
233 PCB-36	256		11.220					ND	
128 4-Nitroquinoline-1-oxide	190		11.263					ND	
129 Methapyrilene	58		11.317					ND	
224 PCB-104	326		11.482					ND	
70 Diphenamid	167		11.610					ND	
106 Diphenylamine	167		11.620					ND	
130 Isodrin	193		11.821					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
227 PCB-121	326		11.952					ND	
131 Fluoranthene	202		12.027					ND	
234 PCB-155	360		12.096					ND	
132 Benzidine	184		12.160					ND	
133 Pyrene	202		12.353					ND	
228 PCB-78	290		12.438					ND	
134 1,2,3,4 -Tetrachlorobenzen	216		12.511					ND	
139 3,3'-Dimethylbenzidine	212		12.511					ND	
135 p-Dimethylamino azobenzene	225		12.516					ND	
136 Chlorobenzilate	139		12.783					ND	
137 Famphur	218		12.850					ND	
140 Kepone	272		13.030					ND	
232 PCB-142	360		13.138					ND	
138 Butyl benzyl phthalate	149		13.266					ND	
141 2-Acetylaminofluorene	181		13.363					ND	
142 Thionazin	97		13.789					ND	
143 4,4'-Methylene bis(2-chlor	231		13.881					ND	
144 3,3'-Dichlorobenzidine	252		14.254					ND	
145 Bis(2-ethylhexyl) phthalat	149		14.308					ND	
146 Benzo[a]anthracene	228		14.329					ND	
229 PCB-204	428		14.388					ND	
147 Chrysene	228		14.399					ND	
230 PCB-192	394		14.420					ND	
148 Sulfotepp	97		14.530					ND	
149 6-Methylchrysene	242		14.907					ND	
150 Di-n-octyl phthalate	149		15.606					ND	
151 7,12-Dimethylbenz(a)anthra	256		16.445					ND	
152 Benzo[b]fluoranthene	252		16.455					ND	
153 Benzo[k]fluoranthene	252		16.514					ND	
219 Benzo[e]pyrene	252		17.016					ND	
154 Benzo[a]pyrene	252		17.118					ND	
155 3-Methylcholanthrene	268		17.524					ND	
156 Dibenz[a,h]acridine	279		18.636					ND	
220 Dibenz[a,j]acridine	279		19.247					ND	
157 Indeno[1,2,3-cd]pyrene	276		19.581					ND	
158 Dibenz(a,h)anthracene	278		19.618					ND	
159 Benzo[g,h,i]perylene	276		20.264					ND	
182 4-Chlorophenol	128		0.000					ND	
168 Aramite Peak 1	185		0.000					ND	
231 DCB Decachlorobiphenyl	1		0.000					ND	
181 4-Chlorobenzoic Acid	139		0.000					ND	
161 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
186 o-Phenylphenol	1		0.000					ND	
218 Benzotrichloride TIC	1		0.000					ND	
185 4-Nitrobiphenyl	199		0.000					ND	
173 Octachlorocyclopentene	307		0.000					ND	
162 3-Chlorobenzoic Acid	139		0.000					ND	
178 Trifluralin	306		0.000					ND	
226 PCB-184	1		0.000					ND	
213 3-Methylphenol	1		0.000					ND	
177 1,2,3,4-Tetrahydronaphthal	104		0.000					ND	
164 Aramite Peak 2	185		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
174 2-Chlorobenzoic Acid	139		0.000					ND	
187 1,2-Dibromo-3-Chloropropan	157		0.000					ND	
179 2,5-Dichlorophenol	162		0.000					ND	
184 Diallate Peak 1	86		0.000					ND	
163 Diallate Peak 2	86		0.000					ND	
214 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
215 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
171 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
212 2,3,7,8-TCDD TIC	1		0.000					ND	
169 Octachlorostyrene	308		0.000					ND	
160 n,n'-Dimethylaniline	120		0.000					ND	
223 2,6-Dichlorotoluene	1		0.000					ND	
222 2-Butoxyethanol	1		0.000					ND	
183 2,3-Dichlorophenol	162		0.000					ND	
189 Pentachlorophenol_T	266		5.597					ND	
191 Benzidine_T	184		8.247					ND	
193 4,4'-DDD	235		8.871					ND	
192 4,4'-DDE	246		9.014					ND	
194 4,4'-DDT	235		9.924					ND	
S 195 Aramite, Total	185		1.000					ND	
S 198 Diallate	86		0.000					ND	
S 199 Total Cresols	108		0.000					ND	
S 197 Methyl Phenols,Total	108		0.000					ND	
S 196 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
T 216 1-Phenyl-1-(2,4-dimethylph	195		9.600					ND	
T 217 1-Phenyl-1-(4-methylphenyl	181		9.700					ND	
T 235 4-nonylphenol TIC	107		10.830					ND	
T 221 Phenyl ether TIC	170		11.500					ND	
T 200 Quinoline TIC	129		0.000					ND	

Reagents:

SVTAPITINTRNi_00016 Amount Added: 1.00 Units: uL Run Reagent

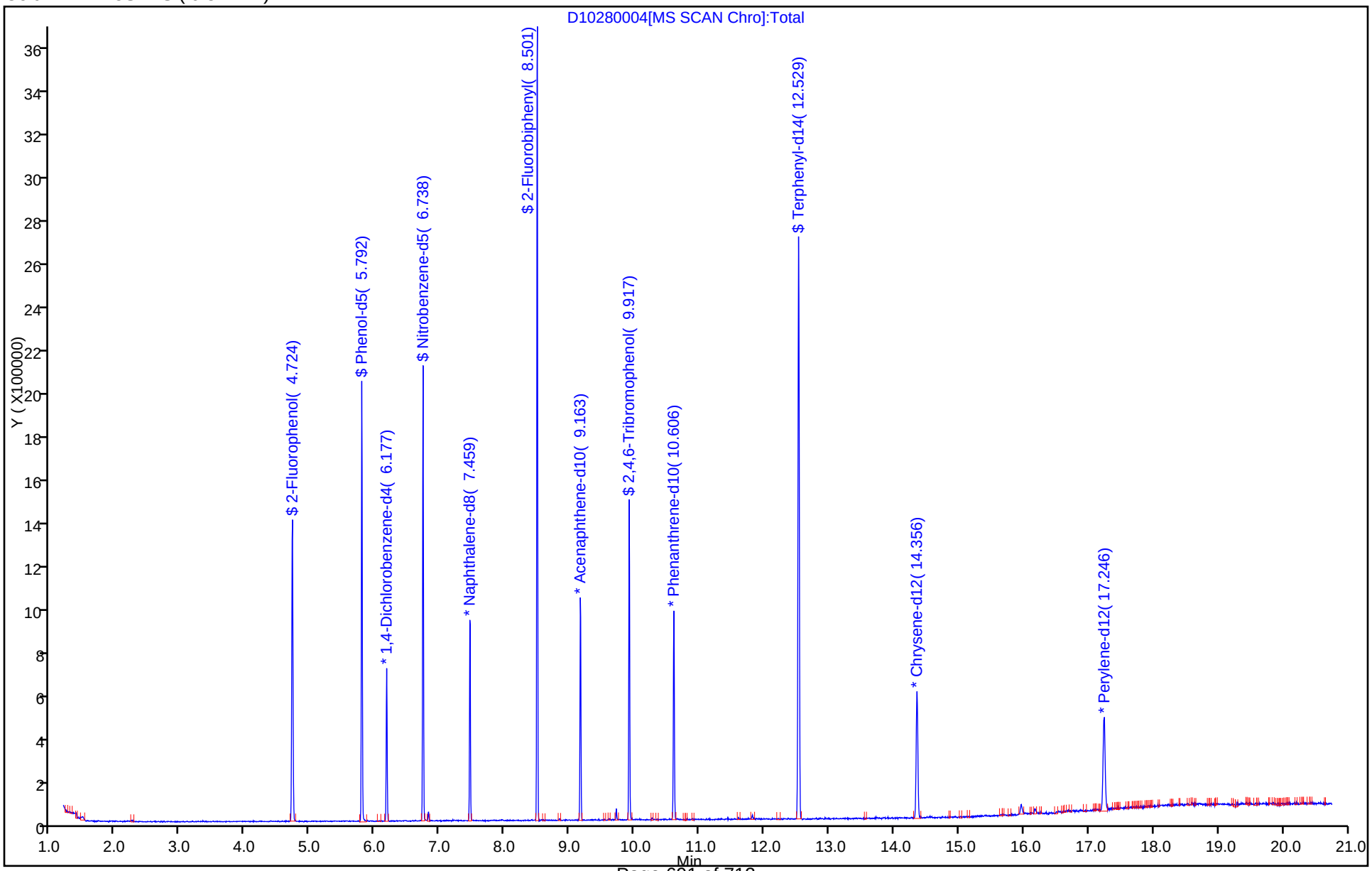
Report Date: 30-Oct-2017 04:47:36 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280004.D

Injection Date:	28-Oct-2017 10:59:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	MB 180-226906/1-A			Worklist Smp#:	4
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280004.D
Lims ID: MB 180-226906/1-A
Client ID:
Sample Type: MB
Inject. Date: 28-Oct-2017 10:59:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019077-004
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Oct-2017 04:47:29 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: piccolinov Date: 30-Oct-2017 04:33:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	40.0	30.2	75.62
$ 8 Phenol-d5	40.0	29.3	73.26
$ 9 Nitrobenzene-d5	40.0	29.5	73.66
$ 10 2-Fluorobiphenyl	40.0	28.0	70.04
$ 11 2,4,6-Tribromophenol	40.0	28.8	71.90
$ 12 Terphenyl-d14	40.0	29.3	73.19

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-226906/2-A

Matrix: Water | Lab File ID: D10280007.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/25/2017 11:21

Sample wt/vol: 250(mL) | Date Analyzed: 10/28/2017 12:19

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.: 227303 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	16.9		2.0	0.37

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	68		26-103
367-12-4	2-Fluorophenol (Surr)	85		27-100
118-79-6	2,4,6-Tribromophenol (Surr)	78		28-134
4165-60-0	Nitrobenzene-d5 (Surr)	78		30-101
4165-62-2	Phenol-d5 (Surr)	76		27-101
1718-51-0	Terphenyl-d14 (Surr)	76		20-119

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280007.D
Lims ID: LCS 180-226906/2-A
Client ID:
Sample Type: LCS
Inject. Date: 28-Oct-2017 12:19:30 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019077-007
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Oct-2017 04:47:29 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: piccolinov Date: 30-Oct-2017 04:34:58

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	6.177	6.182	-0.005	97	93747	8.00	8.00	
* 2 Naphthalene-d8	136	7.464	7.464	0.000	99	348312	8.00	8.00	
* 3 Acenaphthene-d10	164	9.169	9.163	0.006	98	187884	8.00	8.00	
* 4 Phenanthrene-d10	188	10.611	10.606	0.005	98	380570	8.00	8.00	
* 5 Chrysene-d12	240	14.361	14.356	0.005	98	330417	8.00	8.00	
* 6 Perylene-d12	264	17.241	17.235	0.006	96	341709	8.00	8.00	
$ 7 2-Fluorophenol	112	4.719	4.735	-0.017	93	515018	40.0	34.1	
$ 8 Phenol-d5	99	5.798	5.803	-0.005	93	616056	40.0	30.4	
$ 9 Nitrobenzene-d5	82	6.738	6.743	-0.005	92	613474	40.0	31.1	
$ 10 2-Fluorobiphenyl	172	8.501	8.501	0.000	99	983753	40.0	27.3	
$ 11 2,4,6-Tribromophenol	330	9.922	9.922	0.000	79	109921	40.0	31.0	
$ 12 Terphenyl-d14	244	12.529	12.524	0.005	99	1105456	40.0	30.5	
13 1,4-Dioxane	88	1.556	1.588	-0.032	89	178469	40.0	33.9	
14 N-Nitrosodimethylamine	74	2.160	2.186	-0.026	92	266406	40.0	34.7	
15 Pyridine	79	2.218	2.256	-0.038	97	962561	80.0	67.9	
25 Benzaldehyde	77	5.707	5.712	-0.005	90	412576	40.0	31.8	
26 Phenol	94	5.808	5.814	-0.006	97	640150	40.0	28.9	
27 Aniline	93	5.824	5.830	-0.006	35	683378	40.0	27.5	
29 Bis(2-chloroethyl)ether	93	5.899	5.904	-0.005	92	444354	40.0	29.7	
30 2-Chlorophenol	128	5.958	5.963	-0.005	96	467444	40.0	29.0	
31 n-Decane	43	6.022	6.027	-0.005	87	485598	40.0	32.9	
32 1,3-Dichlorobenzene	146	6.118	6.124	-0.006	94	523313	40.0	28.6	
33 1,4-Dichlorobenzene	146	6.193	6.198	-0.005	89	514931	40.0	28.7	
34 Benzyl alcohol	108	6.316	6.321	-0.005	86	307576	40.0	29.7	
35 1,2-Dichlorobenzene	146	6.353	6.359	-0.006	92	488371	40.0	28.9	
36 2-Methylphenol	108	6.433	6.439	-0.006	97	430817	40.0	29.9	
37 Indene	116	6.444	6.449	-0.005	89	814001	40.0	30.0	
38 2,2'-oxybis[1-chloropropan	45	6.460	6.460	0.000	87	619310	40.0	33.1	
42 4-Methylphenol	108	6.583	6.588	-0.005	62	460754	40.0	30.5	
40 Acetophenone	105	6.583	6.588	-0.005	76	665253	40.0	29.6	
41 N-Nitrosodi-n-propylamine	70	6.583	6.588	-0.005	68	398551	40.0	32.8	
45 Hexachloroethane	117	6.706	6.706	0.000	94	238428	40.0	30.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
46 Nitrobenzene	77	6.759	6.759	0.000	89	596759	40.0	28.9	
48 Isophorone	82	6.994	6.994	0.000	98	1008632	40.0	28.7	
49 2-Nitrophenol	139	7.080	7.080	0.000	90	253527	40.0	31.3	
50 2,4-Dimethylphenol	107	7.112	7.112	0.000	98	505167	40.0	28.9	
52 Benzoic acid	122	7.181	7.171	0.010	90	250132	40.0	28.9	
53 Bis(2-chloroethoxy)methane	93	7.203	7.203	0.000	93	573075	40.0	28.6	
54 2,4-Dichlorophenol	162	7.315	7.315	0.000	96	389151	40.0	29.3	
56 1,2,4-Trichlorobenzene	180	7.406	7.406	0.000	92	439513	40.0	29.0	
58 Naphthalene	128	7.486	7.486	0.000	99	1313942	40.0	29.2	
59 4-Chloroaniline	127	7.523	7.523	0.000	92	546497	40.0	28.6	
60 2,6-Dichlorophenol	162	7.539	7.539	0.000	91	360738	40.0	28.4	
62 Hexachlorobutadiene	225	7.609	7.609	0.000	95	292541	40.0	30.8	
64 Caprolactam	113	7.833	7.828	0.005	74	138985	40.0	29.9	
67 4-Chloro-3-methylphenol	107	7.983	7.983	0.000	93	464149	40.0	29.6	
69 2-Methylnaphthalene	142	8.159	8.154	0.005	90	916847	40.0	28.8	
71 1-Methylnaphthalene	142	8.255	8.255	0.000	95	827272	40.0	27.8	
72 Hexachlorocyclopentadiene	237	8.314	8.314	0.000	97	311091	40.0	29.1	
73 1,2,4,5-Tetrachlorobenzene	216	8.319	8.319	0.000	97	431275	40.0	27.0	
74 2,4,6-Trichlorophenol	196	8.421	8.421	0.000	96	300270	40.0	29.0	
75 2,4,5-Trichlorophenol	196	8.458	8.453	0.005	90	287427	40.0	26.9	
76 1,1'-Biphenyl	154	8.602	8.597	0.005	97	1089691	40.0	28.1	
77 2-Chloronaphthalene	162	8.629	8.629	0.000	99	810473	40.0	27.5	
79 2-Nitroaniline	65	8.709	8.709	0.000	74	380583	40.0	28.5	
82 Dimethyl phthalate	163	8.869	8.869	0.000	95	1001225	40.0	27.8	
83 1,3-Dinitrobenzene	168	8.907	8.901	0.006	78	141942	40.0	30.6	
84 2,6-Dinitrotoluene	165	8.934	8.934	0.000	80	212672	40.0	28.8	
85 Acenaphthylene	152	9.035	9.030	0.005	99	1341558	40.0	29.6	
86 3-Nitroaniline	138	9.104	9.099	0.005	87	249627	40.0	29.8	
88 Acenaphthene	153	9.201	9.195	0.006	87	840676	40.0	27.5	
87 2,4-Dinitrophenol	184	9.201	9.195	0.006	74	270471	80.0	45.8	
89 4-Nitrophenol	109	9.238	9.233	0.005	93	367191	80.0	61.0	
91 2,4-Dinitrotoluene	165	9.324	9.318	0.006	82	301849	40.0	30.5	
93 Dibenzofuran	168	9.361	9.361	0.000	95	1189738	40.0	28.0	
96 2,3,4,6-Tetrachlorophenol	232	9.473	9.473	0.000	79	245282	40.0	28.1	
98 Diethyl phthalate	149	9.537	9.532	0.005	96	1042202	40.0	28.7	
99 Hexadecane	57	9.543	9.537	0.006	95	843802	40.0	32.3	
100 4-Chlorophenyl phenyl ethe	204	9.671	9.671	0.000	95	497613	40.0	27.9	
101 4-Nitroaniline	138	9.687	9.681	0.006	81	259717	40.0	29.2	
103 Fluorene	166	9.692	9.687	0.005	92	924224	40.0	26.9	
104 4,6-Dinitro-2-methylphenol	198	9.719	9.713	0.006	74	355761	80.0	65.9	
105 N-Nitrosodiphenylamine	169	9.783	9.778	0.005	65	740288	40.0	28.6	
57 Azobenzene	77	9.826	9.820	0.006	98	1441993	40.0	29.8	
90 1,2-Diphenylhydrazine	77	9.826	9.820	0.006	98	1441993	40.0	29.8	
110 4-Bromophenyl phenyl ether	248	10.141	10.141	0.000	80	282288	40.0	28.3	
112 Hexachlorobenzene	284	10.226	10.226	0.000	89	254077	40.0	28.3	
113 Atrazine	200	10.264	10.258	0.006	87	206110	40.0	21.1	
116 Pentachlorophenol	266	10.403	10.403	0.000	86	359145	80.0	49.4	
115 n-Octadecane	57	10.413	10.408	0.005	95	915137	40.0	33.7	
121 Phenanthrene	178	10.632	10.627	0.005	99	1477529	40.0	29.2	
122 Anthracene	178	10.686	10.680	0.006	99	1500173	40.0	29.4	
124 Carbazole	167	10.835	10.830	0.005	97	1388399	40.0	28.6	
126 Di-n-butyl phthalate	149	11.161	11.156	0.005	99	1867920	40.0	31.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Fluoranthene	202	12.032	12.027	0.005	99	1629866	40.0	28.2	
132 Benzidine	184	12.171	12.160	0.011	99	733427	40.0	28.1	
133 Pyrene	202	12.358	12.353	0.005	97	1623045	40.0	30.3	
138 Butyl benzyl phthalate	149	13.271	13.266	0.005	94	825052	40.0	32.4	
144 3,3'-Dichlorobenzidine	252	14.260	14.254	0.006	77	556093	40.0	30.9	
145 Bis(2-ethylhexyl) phthalat	149	14.313	14.308	0.005	94	1113294	40.0	34.2	
146 Benzo[a]anthracene	228	14.340	14.329	0.011	100	1496549	40.0	29.4	
147 Chrysene	228	14.409	14.399	0.010	97	1428834	40.0	29.5	
150 Di-n-octyl phthalate	149	15.617	15.606	0.011	98	1941377	40.0	33.5	
152 Benzo[b]fluoranthene	252	16.477	16.455	0.022	98	1386400	40.0	26.6	
153 Benzo[k]fluoranthene	252	16.525	16.514	0.011	99	1421879	40.0	27.8	
154 Benzo[a]pyrene	252	17.134	17.118	0.016	80	1415814	40.0	29.3	
157 Indeno[1,2,3-cd]pyrene	276	19.597	19.581	0.016	98	1576728	40.0	30.6	
158 Dibenz(a,h)anthracene	278	19.634	19.618	0.016	95	1308474	40.0	28.0	
159 Benzo[g,h,i]perylene	276	20.286	20.264	0.022	97	1345335	40.0	30.1	
S 199 Total Cresols	108				0		80.0	60.5	
S 197 Methyl Phenols,Total	108				0		80.0	60.5	

Reagents:

SVTAPITINTRNi_00016 Amount Added: 1.00 Units: uL Run Reagent

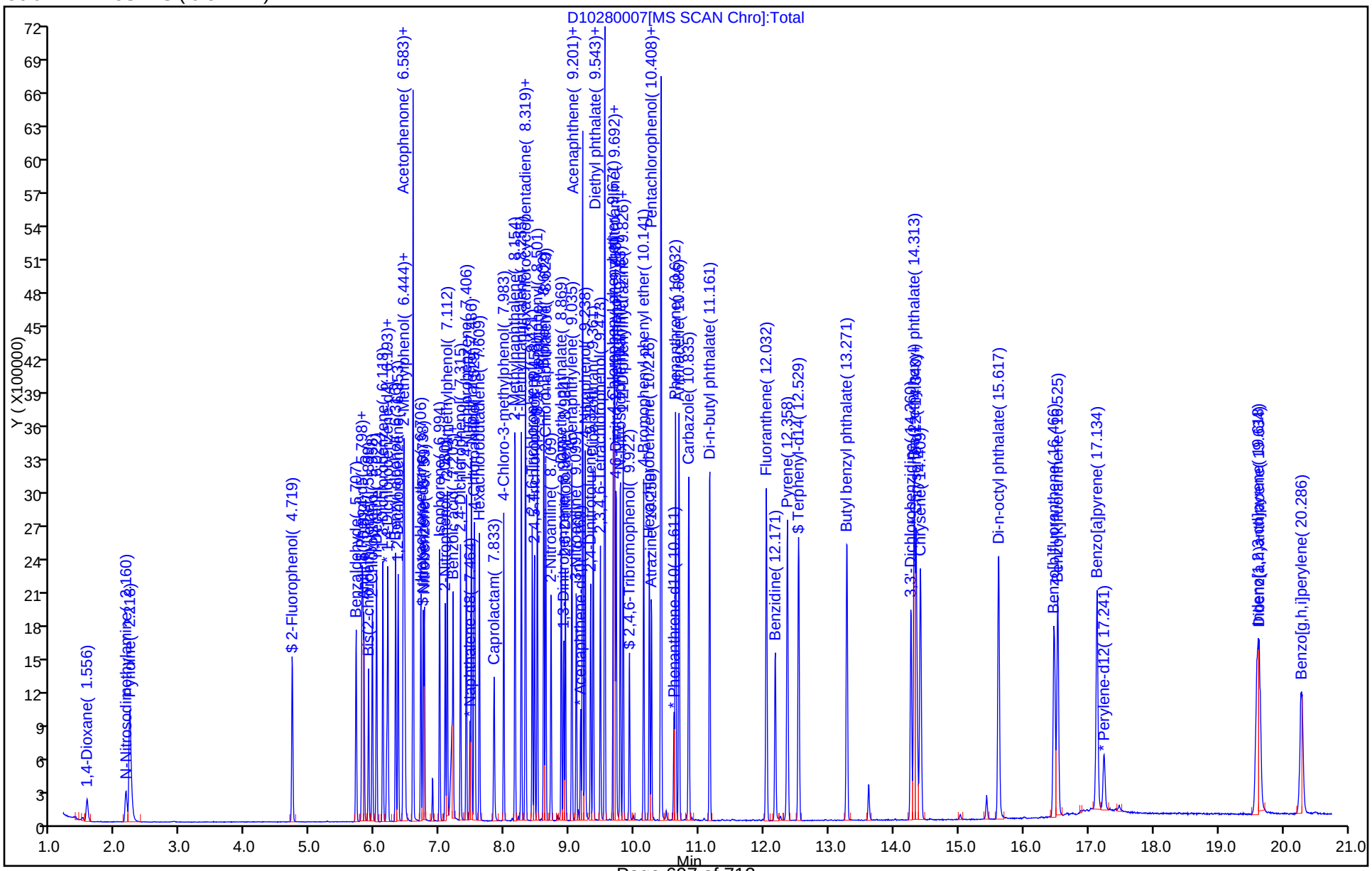
Report Date: 30-Oct-2017 04:47:46 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280007.D

Injection Date:	28-Oct-2017 12:19:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	LCS 180-226906/2-A			Worklist Smp#:	7
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280007.D
Lims ID: LCS 180-226906/2-A
Client ID:
Sample Type: LCS
Inject. Date: 28-Oct-2017 12:19:30 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019077-007
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Oct-2017 04:47:29 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: piccolinov Date: 30-Oct-2017 04:34:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	40.0	34.1	85.33
$ 8 Phenol-d5	40.0	30.4	76.00
$ 9 Nitrobenzene-d5	40.0	31.1	77.80
$ 10 2-Fluorobiphenyl	40.0	27.3	68.37
$ 11 2,4,6-Tribromophenol	40.0	31.0	77.52
$ 12 Terphenyl-d14	40.0	30.5	76.26

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-71580-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-226906/3-A

Matrix: Water | Lab File ID: D10280008.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/25/2017 11:21

Sample wt/vol: 250(mL) | Date Analyzed: 10/28/2017 12:45

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.: 227303 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	16.8		2.0	0.37

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	68		26-103
367-12-4	2-Fluorophenol (Surr)	84		27-100
118-79-6	2,4,6-Tribromophenol (Surr)	79		28-134
4165-60-0	Nitrobenzene-d5 (Surr)	71		30-101
4165-62-2	Phenol-d5 (Surr)	76		27-101
1718-51-0	Terphenyl-d14 (Surr)	74		20-119

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280008.D
Lims ID: LCSD 180-226906/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 28-Oct-2017 12:45:30 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019077-008
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Oct-2017 04:47:29 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: piccolinov Date: 30-Oct-2017 04:35:26

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	6.177	6.182	-0.005	97	93056	8.00	8.00	
* 2 Naphthalene-d8	136	7.459	7.464	-0.005	99	365008	8.00	8.00	
* 3 Acenaphthene-d10	164	9.163	9.163	0.000	98	185384	8.00	8.00	
* 4 Phenanthrene-d10	188	10.606	10.606	0.000	97	366353	8.00	8.00	
* 5 Chrysene-d12	240	14.361	14.356	0.005	98	328418	8.00	8.00	
* 6 Perylene-d12	264	17.235	17.235	0.000	96	315037	8.00	8.00	
$ 7 2-Fluorophenol	112	4.724	4.735	-0.011	93	503661	40.0	33.6	
$ 8 Phenol-d5	99	5.798	5.803	-0.005	93	608881	40.0	30.3	
$ 9 Nitrobenzene-d5	82	6.738	6.743	-0.005	92	584697	40.0	28.3	
$ 10 2-Fluorobiphenyl	172	8.501	8.501	0.000	99	963851	40.0	27.2	
$ 11 2,4,6-Tribromophenol	330	9.922	9.922	0.000	80	107526	40.0	31.5	
$ 12 Terphenyl-d14	244	12.529	12.524	0.005	99	1066598	40.0	29.6	
13 1,4-Dioxane	88	1.561	1.588	-0.027	88	175919	40.0	33.6	
14 N-Nitrosodimethylamine	74	2.165	2.186	-0.021	92	261440	40.0	34.3	
15 Pyridine	79	2.224	2.256	-0.032	97	941546	80.0	66.9	
25 Benzaldehyde	77	5.707	5.712	-0.005	90	400969	40.0	31.1	
26 Phenol	94	5.808	5.814	-0.006	96	638136	40.0	29.0	
27 Aniline	93	5.824	5.830	-0.006	27	676457	40.0	27.4	
29 Bis(2-chloroethyl)ether	93	5.899	5.904	-0.005	92	438573	40.0	29.5	
30 2-Chlorophenol	128	5.958	5.963	-0.005	96	456336	40.0	28.5	
31 n-Decane	43	6.022	6.027	-0.005	87	481698	40.0	32.9	
32 1,3-Dichlorobenzene	146	6.118	6.124	-0.006	94	515103	40.0	28.4	
33 1,4-Dichlorobenzene	146	6.193	6.198	-0.005	89	503161	40.0	28.3	
34 Benzyl alcohol	108	6.316	6.321	-0.005	86	293634	40.0	28.6	
35 1,2-Dichlorobenzene	146	6.353	6.359	-0.006	92	480357	40.0	28.6	
36 2-Methylphenol	108	6.433	6.439	-0.006	97	418273	40.0	29.3	
37 Indene	116	6.444	6.449	-0.005	89	782547	40.0	29.1	
38 2,2'-oxybis[1-chloropropan	45	6.455	6.460	-0.005	89	598435	40.0	32.3	
42 4-Methylphenol	108	6.583	6.588	-0.005	63	445411	40.0	29.7	
40 Acetophenone	105	6.583	6.588	-0.005	75	630055	40.0	28.3	
41 N-Nitrosodi-n-propylamine	70	6.583	6.588	-0.005	69	385378	40.0	32.0	
45 Hexachloroethane	117	6.700	6.706	-0.006	95	234892	40.0	30.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
46 Nitrobenzene	77	6.759	6.759	0.000	89	586094	40.0	27.1	
48 Isophorone	82	6.994	6.994	0.000	98	1032919	40.0	28.1	
49 2-Nitrophenol	139	7.080	7.080	0.000	88	253560	40.0	29.9	
50 2,4-Dimethylphenol	107	7.112	7.112	0.000	98	505389	40.0	27.6	
52 Benzoic acid	122	7.181	7.171	0.010	90	250281	40.0	27.6	
53 Bis(2-chloroethoxy)methane	93	7.203	7.203	0.000	94	572278	40.0	27.3	
54 2,4-Dichlorophenol	162	7.315	7.315	0.000	96	377858	40.0	27.1	
56 1,2,4-Trichlorobenzene	180	7.400	7.406	-0.006	92	437459	40.0	27.5	
58 Naphthalene	128	7.480	7.486	-0.006	99	1273180	40.0	27.0	
59 4-Chloroaniline	127	7.523	7.523	0.000	92	542842	40.0	27.1	
60 2,6-Dichlorophenol	162	7.539	7.539	0.000	91	351372	40.0	26.4	
62 Hexachlorobutadiene	225	7.603	7.609	-0.006	95	290959	40.0	29.3	
64 Caprolactam	113	7.833	7.828	0.005	74	141509	40.0	29.1	
67 4-Chloro-3-methylphenol	107	7.983	7.983	-0.001	93	458777	40.0	27.9	
69 2-Methylnaphthalene	142	8.153	8.154	-0.001	91	922402	40.0	27.7	
71 1-Methylnaphthalene	142	8.250	8.255	-0.005	92	815474	40.0	26.1	
72 Hexachlorocyclopentadiene	237	8.314	8.314	0.000	97	309607	40.0	29.3	
73 1,2,4,5-Tetrachlorobenzene	216	8.319	8.319	0.000	98	426447	40.0	27.0	
74 2,4,6-Trichlorophenol	196	8.421	8.421	0.000	96	287296	40.0	28.1	
75 2,4,5-Trichlorophenol	196	8.453	8.453	0.000	90	288274	40.0	27.4	
76 1,1'-Biphenyl	154	8.597	8.597	0.000	97	1080391	40.0	28.3	
77 2-Chloronaphthalene	162	8.629	8.629	0.000	98	802489	40.0	27.6	
79 2-Nitroaniline	65	8.709	8.709	0.000	74	381774	40.0	28.9	
82 Dimethyl phthalate	163	8.869	8.869	0.000	96	1003230	40.0	28.2	
83 1,3-Dinitrobenzene	168	8.901	8.901	0.000	79	143455	40.0	31.4	
84 2,6-Dinitrotoluene	165	8.933	8.934	-0.001	84	215608	40.0	29.6	
85 Acenaphthylene	152	9.030	9.030	0.000	99	1336437	40.0	29.9	
86 3-Nitroaniline	138	9.099	9.099	0.000	86	241943	40.0	29.3	
88 Acenaphthene	153	9.195	9.195	0.000	88	842835	40.0	28.0	
87 2,4-Dinitrophenol	184	9.195	9.195	0.000	73	271786	80.0	46.5	
89 4-Nitrophenol	109	9.238	9.233	0.005	92	360044	80.0	60.6	
91 2,4-Dinitrotoluene	165	9.318	9.318	0.000	82	294474	40.0	30.2	
93 Dibenzofuran	168	9.361	9.361	0.000	95	1142057	40.0	27.3	
96 2,3,4,6-Tetrachlorophenol	232	9.468	9.473	-0.005	79	247258	40.0	28.7	
98 Diethyl phthalate	149	9.537	9.532	0.005	96	1015324	40.0	28.3	
99 Hexadecane	57	9.537	9.537	0.000	95	823713	40.0	30.1	
100 4-Chlorophenyl phenyl ethe	204	9.671	9.671	0.000	96	485125	40.0	27.5	
101 4-Nitroaniline	138	9.687	9.681	0.006	78	250328	40.0	28.5	
103 Fluorene	166	9.687	9.687	0.000	93	918865	40.0	27.1	
104 4,6-Dinitro-2-methylphenol	198	9.713	9.713	0.000	73	344340	80.0	66.2	
105 N-Nitrosodiphenylamine	169	9.777	9.778	-0.001	78	717090	40.0	28.8	
57 Azobenzene	77	9.820	9.820	0.000	98	1404570	40.0	30.2	
90 1,2-Diphenylhydrazine	77	9.820	9.820	0.000	98	1404570	40.0	30.2	
110 4-Bromophenyl phenyl ether	248	10.141	10.141	0.000	79	279526	40.0	29.1	
112 Hexachlorobenzene	284	10.226	10.226	0.000	89	253159	40.0	29.2	
113 Atrazine	200	10.258	10.258	0.000	86	200570	40.0	21.3	
116 Pentachlorophenol	266	10.403	10.403	0.000	86	346639	80.0	49.5	
115 n-Octadecane	57	10.408	10.408	0.000	94	871583	40.0	32.4	
121 Phenanthrene	178	10.627	10.627	0.000	99	1409044	40.0	28.9	
122 Anthracene	178	10.686	10.680	0.006	99	1463559	40.0	29.8	
124 Carbazole	167	10.830	10.830	0.000	97	1350611	40.0	28.9	
126 Di-n-butyl phthalate	149	11.156	11.156	0.000	99	1779609	40.0	31.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Fluoranthene	202	12.032	12.027	0.005	99	1631896	40.0	29.3	
132 Benzidine	184	12.165	12.160	0.005	99	703972	40.0	27.2	
133 Pyrene	202	12.352	12.353	-0.001	96	1605072	40.0	30.1	
138 Butyl benzyl phthalate	149	13.271	13.266	0.005	95	836041	40.0	33.0	
144 3,3'-Dichlorobenzidine	252	14.260	14.254	0.006	77	530107	40.0	29.6	
145 Bis(2-ethylhexyl) phthalat	149	14.308	14.308	0.000	93	1063657	40.0	32.9	
146 Benzo[a]anthracene	228	14.334	14.329	0.005	99	1459602	40.0	28.8	
147 Chrysene	228	14.404	14.399	0.005	97	1408442	40.0	29.2	
150 Di-n-octyl phthalate	149	15.611	15.606	0.005	98	1903320	40.0	35.6	
152 Benzo[b]fluoranthene	252	16.466	16.455	0.011	98	1327489	40.0	27.6	
153 Benzo[k]fluoranthene	252	16.519	16.514	0.005	99	1407725	40.0	29.9	
154 Benzo[a]pyrene	252	17.128	17.118	0.010	86	1345899	40.0	30.2	
157 Indeno[1,2,3-cd]pyrene	276	19.591	19.581	0.010	99	1472493	40.0	31.0	
158 Dibenz(a,h)anthracene	278	19.629	19.618	0.011	92	1236448	40.0	28.7	
159 Benzo[g,h,i]perylene	276	20.280	20.264	0.016	96	1280904	40.0	31.1	
S 199 Total Cresols	108				0		80.0	59.0	
S 197 Methyl Phenols,Total	108				0		80.0	59.0	

Reagents:

SVTAPITINTRNi_00016 Amount Added: 1.00 Units: uL Run Reagent

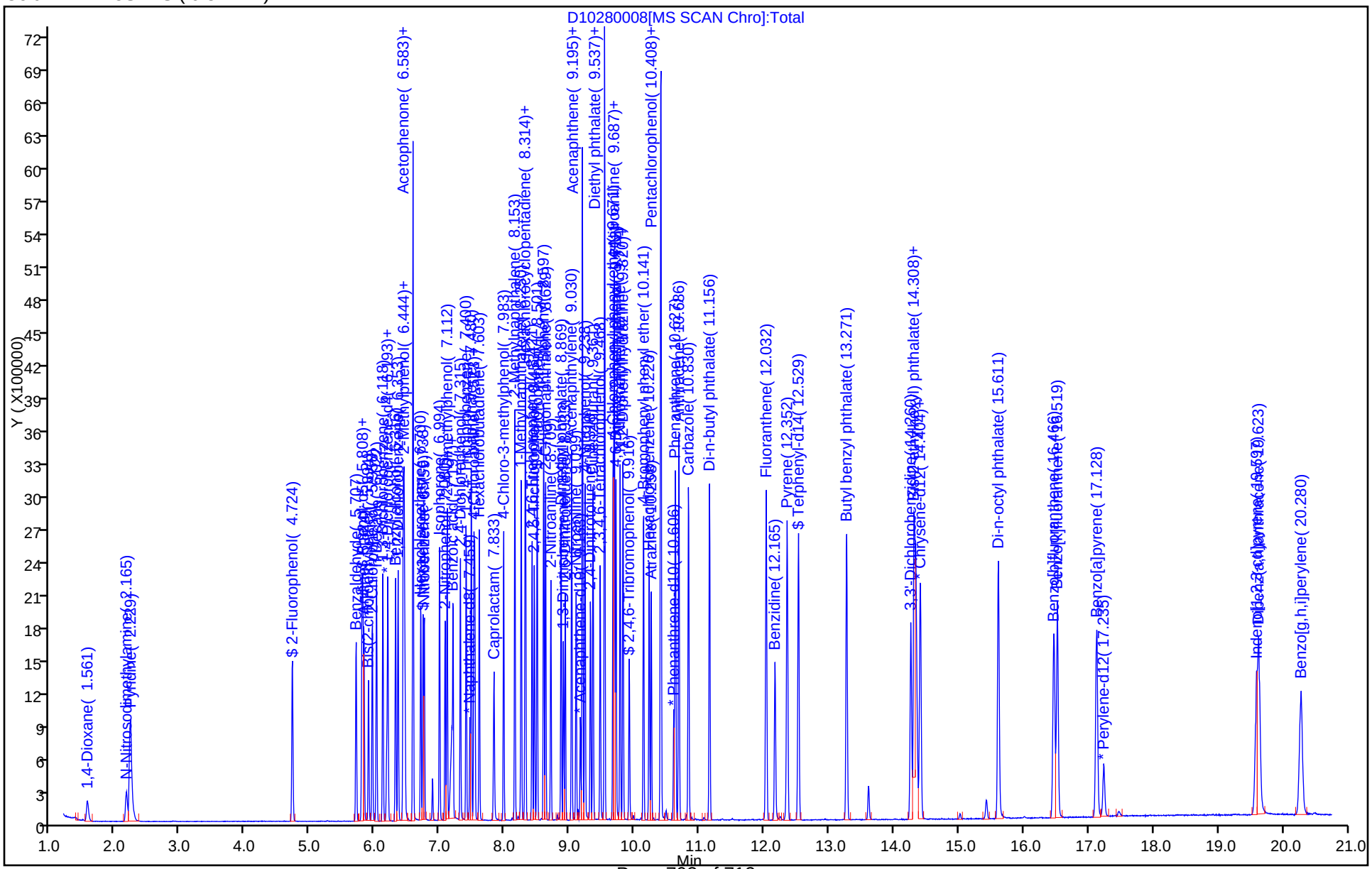
Report Date: 30-Oct-2017 04:47:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280008.D

Injection Date:	28-Oct-2017 12:45:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	LCSD 180-226906/3-A			Worklist Smp#:	8
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Recovery Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\D10280008.D
Lims ID: LCSD 180-226906/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 28-Oct-2017 12:45:30 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0019077-008
Operator ID: 003200 Instrument ID: CH732

Method: \\ChromNA\Pittsburgh\ChromData\CH732\20171028-19077.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 30-Oct-2017 04:47:29 Calib Date: 09-Oct-2017 08:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH732\20171009-18773.b\D10090010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: piccolinov Date: 30-Oct-2017 04:35:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	40.0	33.6	84.07
$ 8 Phenol-d5	40.0	30.3	75.67
$ 9 Nitrobenzene-d5	40.0	28.3	70.76
$ 10 2-Fluorobiphenyl	40.0	27.2	67.89
$ 11 2,4,6-Tribromophenol	40.0	31.5	78.77
$ 12 Terphenyl-d14	40.0	29.6	74.03

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Instrument ID: CH732 Start Date: 10/09/2017 04:42

Analysis Batch Number: 225193 End Date: 10/09/2017 08:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-225193/2		10/09/2017 04:42	1	D10090002.D	Rxi-5SilMS 0.32(mm)
IC 180-225193/3		10/09/2017 04:57	1	D10090003.D	Rxi-5SilMS 0.32(mm)
IC 180-225193/4		10/09/2017 05:23	1	D10090004.D	Rxi-5SilMS 0.32(mm)
IC 180-225193/5		10/09/2017 05:50	1	D10090005.D	Rxi-5SilMS 0.32(mm)
ICIS 180-225193/6		10/09/2017 06:16	1	D10090006.D	Rxi-5SilMS 0.32(mm)
IC 180-225193/7		10/09/2017 06:43	1	D10090007.D	Rxi-5SilMS 0.32(mm)
IC 180-225193/8		10/09/2017 07:09	1	D10090008.D	Rxi-5SilMS 0.32(mm)
IC 180-225193/9		10/09/2017 07:35	1	D10090009.D	Rxi-5SilMS 0.32(mm)
IC 180-225193/10		10/09/2017 08:02	1	D10090010.D	Rxi-5SilMS 0.32(mm)
ICV 180-225193/11		10/09/2017 08:28	1		Rxi-5SilMS 0.32(mm)
ICV 180-225193/12		10/09/2017 08:55	1		Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Instrument ID: CH732 Start Date: 10/28/2017 10:18

Analysis Batch Number: 227303 End Date: 10/28/2017 14:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-227303/2		10/28/2017 10:18	1	D10280002.D	Rxi-5SilMS 0.32(mm)
CCVIS 180-227303/3		10/28/2017 10:33	1	D10280003.D	Rxi-5SilMS 0.32(mm)
MB 180-226906/1-A		10/28/2017 10:59	1	D10280004.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		10/28/2017 11:26	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/28/2017 11:52	1		Rxi-5SilMS 0.32(mm)
LCS 180-226906/2-A		10/28/2017 12:19	1	D10280007.D	Rxi-5SilMS 0.32(mm)
LCSD 180-226906/3-A		10/28/2017 12:45	1	D10280008.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		10/28/2017 13:12	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/28/2017 13:38	1		Rxi-5SilMS 0.32(mm)
180-71580-2		10/28/2017 14:05	1	D10280011.D	Rxi-5SilMS 0.32(mm)
180-71580-3		10/28/2017 14:31	1	D10280012.D	Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Batch Number: 226906 Batch Start Date: 10/25/17 14:45 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 10/26/17 09:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	OPLVISPKMIX1i 00057	OPQL8270SURi 00059
MB 180-226906/1		3520C, 8270D LL		5 SU	250 mL	250 uL	2 SU		25 uL
LCS 180-226906/2		3520C, 8270D LL		5 SU	250 mL	250 uL	2 SU	25 uL	25 uL
LCSD 180-226906/3		3520C, 8270D LL		5 SU	250 mL	250 uL	2 SU	25 uL	25 uL
180-71580-D-2	HD-MW-127-0/1-0	3520C, 8270D LL	T	7 SU	270 mL	250 uL	2		25 uL
180-71580-D-3	HD-MW-87-0/1-0	3520C, 8270D LL	T	7 SU	270 mL	250 uL	2		25 uL

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid Used for pH Adjustment ID	2421644
Analyst ID - Concentration	cdm
Filter Paper ID	9792820
Extraction 1 End Time	0920
Extraction 1 Start Time	1445
N-evap ID	1
N-evap Temperature	25 Degrees C
Na2SO4 ID	2168777
pH Paper ID	Ph paper HC697954
Prep Solvent ID	2532635
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	100 mL
Person's name who did the prep	BT
Uncorrected N-evap Temperature	26 Degrees C
Uncorrected Temperature	65 Degrees C
Water Bath ID	1
Water Bath Temperature	65 Degrees C

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.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-71580-1

SDG No.:

Batch Number: 226906 Batch Start Date: 10/25/17 14:45 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 10/26/17 09:20

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Christopher D. O'neil	Site Contact: Kaitlin B. Franssen	DateSubmitted: 10/19/17	COC No: TAP2017/09/01
Groundwater Sciences Corporation	Tel/Fax: 717-901-8176 / (717) 657-1611	Lab Contact: Carrie Gamber	Carrier: FEDEX	of 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-GC2-0/1-2	10/18/17	1200	TripBlk	W	2	2						
HD-MW-127-D/1-D	10/18/17	1430	GW	W	5	3			2			
HD-MW-87-D/1-D	10/18/17	1330	GW	W	5	3			2			
HD-MW-77-D/1-D	10/18/17	1205	GW	W	3	3						
HD-MW-129-D/1-D	10/18/17	0935	GW	W	3	3						
HD-MW-142S-D/1-D	10/18/17	1442	GW	W	3	3						
HD-MW-142D-D/1-D	10/18/17	1342	GW	W	3	3						
HD-MW-143S-D/1-D	10/18/17	1105	GW	W	3	3						
HD-MW-143D-D/1-D	10/18/17	0917	GW	W	3	3						
HD-MW-205-D/1-D	10/19/17	1350	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	

180-71580 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: 10/19/17 1515	Received by:	Company:	Date/Time: 10/19/17 1515
Relinquished by:	Company: TA	Date/Time: 10/19/17 1650	Received by:	Company:	Date/Time: 10-30-17 0835
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: 190CT17
ACTWGT: 33.00 LB
CAD: 8490299/INET3920

BILL RECIPIENT

TO SAMPLE RECEIPT
TEST AMERICA - PITTSBURGH
301 ALPHA DR

PIT [illegible] 15238

(412)
INV:
PO:

549J4/94FC/104C

FedEx
Express

J172117091381uv

FRI - 20 OCT 3:00P
STANDARD OVERNIGHT

TRK# 0201 7705 4377 9211

15238
PIT

Uncorrected temp 1.2 °C
Thermometer ID 13

CF 0 Initials TB

PT-WI-SR-001 effective 7/26/13

Part #

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-71580-1

Login Number: 71580
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	