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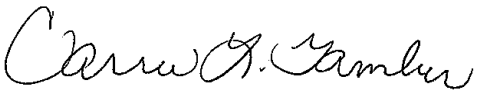
ANALYTICAL REPORT

Job Number: 180-104021-1

Job Description: fYNOP

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

Attention: Christopher O'Neil



Approved for release.
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4/8/2020 1:23 PM

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04/08/2020

Table of Contents

Table of Contents

Definitions/Glossary

Client: Groundwater Sciences Corporation
Job ID: 180-104021-1
Project/Site: fYNOP

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
^c	CCV Recovery is outside acceptance limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
X	Surrogate recovery exceeds control limits

Glossary

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

Report Number: 180-104021-1

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 03/26/2020; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.2 C.

VOLATILES

Internal standard (ISTD) response for TBA-d9 for the following sample was outside acceptance criteria: (180-104021-C-7 MSD). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

Surrogate recovery for the following samples were outside the upper control limit: HD-COD-SW-13-0/1-0 (180-104021-5), HD-COD-SW-28-0/1-0 (180-104021-11) and HD-COD-SW-29-0/1-0 (180-104021-12). These samples did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

The following analyte recovered outside control limits for the LCS: Trichloroethene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Several analytes failed the recovery criteria low for the MS/MSD of sample HD-COD-SW-15-0/1-0 (180-104021-6) in batch 180-311669.

Several analytes failed the recovery criteria low for the MS/MSD of sample HD-COD-SW-16-0/1-0 (180-104021-7) in batch 180-311793. 2-Butanone (MEK) and 2-Hexanone exceeded the RPD limit.

Trichloroethene failed the recovery criteria low for the MS of sample HD-COD-SW-17-0/1-0 (180-104021-8) in batch 180-311900.

The continuing calibration verification (CCV) analyzed in batch 180-311669 was outside the method criteria for the following surrogate 1,2-Dichloroethane-d4, low. All samples recovered within the QC window.

The continuing calibration verification (CCV) analyzed in batch 180-311900 was outside the method criteria for the following analytes: Chlorobromomethane and 4-Methyl-2-pentanone, low. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-311900 was outside the method criteria for the following analytes: Carbon disulfide, Dichlorodifluoro-methane and Chloromethane, high. 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 180-311669 was outside the method criteria for the following analytes: 2-Butanone, Acetone and Methyl acetate, low minimum RRF. A low-level LCS (LLCS), spiked at the reporting limit (RL), was prepared with this batch. The affected target analytes recovered within acceptance limits; therefore, the LLCS demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. 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 180-311793 was outside the method criteria for the following analytes: Carbon disulfide, 1,2,3-Trichloropropane, 2-Hexanone, Acetone, 1,1,2,2-Tetrachloroethane, Dichloro-difluoromethane, 1,1,2-Trichloroethane, 1,2-Dibromoethane and 2-Butanone, high. 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 180-311793 was outside the method criteria for the following analytes: Bromomethane and 4-Methyl-2-pentanone, low. A CCV standard at or below the reporting limit (RL) was analyzed with the affected

samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-311669 was outside the method criteria for the following analyte: Dichloro-difluoromethane, high. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-311669 was outside the method criteria for the following analytes: 2-Hexanone, 2-Butanone, 4-Methyl-2-pentanone and Bromomethane, low. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: fYNOP

Job ID: 180-104021-1

Client Sample ID: HD-COD-SW-6-0/1-0 — Lab Sample ID: 180-104021-1

No Detections.

Client Sample ID: HD-COD-SW-7-0/1-0 — Lab Sample ID: 180-104021-2

No Detections.

Client Sample ID: HD-COD-SW-8-0/1-0 — Lab Sample ID: 180-104021-3

No Detections.

Client Sample ID: HD-COD-SW-9-0/1-0 — Lab Sample ID: 180-104021-4

No Detections.

Client Sample ID: HD-COD-SW-13-0/1-0 — Lab Sample ID: 180-104021-5

No Detections.

Client Sample ID: HD-COD-SW-15-0/1-0 — Lab Sample ID: 180-104021-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	2.2		1.0	0.47	ug/L	1		EPA 8260C	Total/NA

Client Sample ID: HD-COD-SW-16-0/1-0 — Lab Sample ID: 180-104021-7

No Detections.

Client Sample ID: HD-COD-SW-17-0/1-0 — Lab Sample ID: 180-104021-8

No Detections.

Client Sample ID: HD-COD-SW-26-0/1-0 — Lab Sample ID: 180-104021-9

No Detections.

Client Sample ID: HD-COD-SW-27-0/1-0 — Lab Sample ID: 180-104021-10

No Detections.

Client Sample ID: HD-COD-SW-28-0/1-0 — Lab Sample ID: 180-104021-11

No Detections.

Client Sample ID: HD-COD-SW-29-0/1-0 — Lab Sample ID: 180-104021-12

No Detections.

Client Sample ID: HD-QC1-0/1-1 — Lab Sample ID: 180-104021-13

No Detections.

Client Sample ID: HD-QC1-0/1-2 — Lab Sample ID: 180-104021-14

No Detections.

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: HD-COD-SW-6-0/1-0
Date Collected: 03/25/20 11:45
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			04/01/20 00:49	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/01/20 00:49	1
Bromomethane	ND	^c	1.0	0.89	ug/L			04/01/20 00:49	1
Chloroethane	ND		1.0	0.90	ug/L			04/01/20 00:49	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/01/20 00:49	1
Acetone	ND		5.0	3.4	ug/L			04/01/20 00:49	1
Carbon disulfide	ND		1.0	0.88	ug/L			04/01/20 00:49	1
Methylene Chloride	ND		1.0	0.89	ug/L			04/01/20 00:49	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			04/01/20 00:49	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/01/20 00:49	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/01/20 00:49	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			04/01/20 00:49	1
Bromochloromethane	ND		1.0	0.63	ug/L			04/01/20 00:49	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			04/01/20 00:49	1
Chloroform	ND		1.0	0.60	ug/L			04/01/20 00:49	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/01/20 00:49	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/01/20 00:49	1
Benzene	ND		1.0	0.60	ug/L			04/01/20 00:49	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/01/20 00:49	1
Trichloroethene	ND		1.0	0.69	ug/L			04/01/20 00:49	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/01/20 00:49	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/01/20 00:49	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			04/01/20 00:49	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			04/01/20 00:49	1
Toluene	ND		1.0	0.46	ug/L			04/01/20 00:49	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/01/20 00:49	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			04/01/20 00:49	1
Tetrachloroethene	ND		1.0	0.47	ug/L			04/01/20 00:49	1
2-Hexanone	ND	^c	5.0	3.3	ug/L			04/01/20 00:49	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/01/20 00:49	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			04/01/20 00:49	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/01/20 00:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/01/20 00:49	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/01/20 00:49	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/01/20 00:49	1
Styrene	ND		1.0	0.47	ug/L			04/01/20 00:49	1
Bromoform	ND		1.0	0.98	ug/L			04/01/20 00:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			04/01/20 00:49	1
Acrylonitrile	ND		20	7.8	ug/L			04/01/20 00:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*69*	*^c*	*62 - 146*		*04/01/20 00:49*	*1*
Toluene-d8 (Surr)	*118*		*75 - 120*		*04/01/20 00:49*	*1*
4-Bromofluorobenzene (Surr)	*87*		*64 - 120*		*04/01/20 00:49*	*1*
Dibromofluoromethane (Surr)	*82*		*71 - 132*		*04/01/20 00:49*	*1*

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

Client Sample ID: HD-COD-SW-7-0/1-0
Date Collected: 03/25/20 12:30
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			04/01/20 01:17	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/01/20 01:17	1
Bromomethane	ND	^c	1.0	0.89	ug/L			04/01/20 01:17	1
Chloroethane	ND		1.0	0.90	ug/L			04/01/20 01:17	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/01/20 01:17	1
Acetone	ND		5.0	3.4	ug/L			04/01/20 01:17	1
Carbon disulfide	ND		1.0	0.88	ug/L			04/01/20 01:17	1
Methylene Chloride	ND		1.0	0.89	ug/L			04/01/20 01:17	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			04/01/20 01:17	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/01/20 01:17	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/01/20 01:17	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			04/01/20 01:17	1
Bromochloromethane	ND		1.0	0.63	ug/L			04/01/20 01:17	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			04/01/20 01:17	1
Chloroform	ND		1.0	0.60	ug/L			04/01/20 01:17	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/01/20 01:17	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/01/20 01:17	1
Benzene	ND		1.0	0.60	ug/L			04/01/20 01:17	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/01/20 01:17	1
Trichloroethene	ND		1.0	0.69	ug/L			04/01/20 01:17	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/01/20 01:17	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/01/20 01:17	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			04/01/20 01:17	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			04/01/20 01:17	1
Toluene	ND		1.0	0.46	ug/L			04/01/20 01:17	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/01/20 01:17	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			04/01/20 01:17	1
Tetrachloroethene	ND		1.0	0.47	ug/L			04/01/20 01:17	1
2-Hexanone	ND	^c	5.0	3.3	ug/L			04/01/20 01:17	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/01/20 01:17	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			04/01/20 01:17	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/01/20 01:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/01/20 01:17	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/01/20 01:17	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/01/20 01:17	1
Styrene	ND		1.0	0.47	ug/L			04/01/20 01:17	1
Bromoform	ND		1.0	0.98	ug/L			04/01/20 01:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			04/01/20 01:17	1
Acrylonitrile	ND		20	7.8	ug/L			04/01/20 01:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*	*^c*	*62 - 146*		*04/01/20 01:17*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*04/01/20 01:17*	*1*
4-Bromofluorobenzene (Surr)	*86*		*64 - 120*		*04/01/20 01:17*	*1*
Dibromofluoromethane (Surr)	*84*		*71 - 132*		*04/01/20 01:17*	*1*

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

Client Sample ID: HD-COD-SW-8-0/1-0
Date Collected: 03/25/20 10:35
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			04/01/20 01:45	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/01/20 01:45	1
Bromomethane	ND	^c	1.0	0.89	ug/L			04/01/20 01:45	1
Chloroethane	ND		1.0	0.90	ug/L			04/01/20 01:45	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/01/20 01:45	1
Acetone	ND		5.0	3.4	ug/L			04/01/20 01:45	1
Carbon disulfide	ND		1.0	0.88	ug/L			04/01/20 01:45	1
Methylene Chloride	ND		1.0	0.89	ug/L			04/01/20 01:45	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			04/01/20 01:45	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/01/20 01:45	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/01/20 01:45	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			04/01/20 01:45	1
Bromochloromethane	ND		1.0	0.63	ug/L			04/01/20 01:45	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			04/01/20 01:45	1
Chloroform	ND		1.0	0.60	ug/L			04/01/20 01:45	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/01/20 01:45	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/01/20 01:45	1
Benzene	ND		1.0	0.60	ug/L			04/01/20 01:45	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/01/20 01:45	1
Trichloroethene	ND		1.0	0.69	ug/L			04/01/20 01:45	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/01/20 01:45	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/01/20 01:45	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			04/01/20 01:45	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			04/01/20 01:45	1
Toluene	ND		1.0	0.46	ug/L			04/01/20 01:45	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/01/20 01:45	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			04/01/20 01:45	1
Tetrachloroethene	ND		1.0	0.47	ug/L			04/01/20 01:45	1
2-Hexanone	ND	^c	5.0	3.3	ug/L			04/01/20 01:45	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/01/20 01:45	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			04/01/20 01:45	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/01/20 01:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/01/20 01:45	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/01/20 01:45	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/01/20 01:45	1
Styrene	ND		1.0	0.47	ug/L			04/01/20 01:45	1
Bromoform	ND		1.0	0.98	ug/L			04/01/20 01:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			04/01/20 01:45	1
Acrylonitrile	ND		20	7.8	ug/L			04/01/20 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*	*^c*	*62 - 146*		*04/01/20 01:45*	*1*
Toluene-d8 (Surr)	*118*		*75 - 120*		*04/01/20 01:45*	*1*
4-Bromofluorobenzene (Surr)	*87*		*64 - 120*		*04/01/20 01:45*	*1*
Dibromofluoromethane (Surr)	*84*		*71 - 132*		*04/01/20 01:45*	*1*

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

Client Sample ID: HD-COD-SW-9-0/1-0
Date Collected: 03/25/20 13:25
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			04/01/20 02:12	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/01/20 02:12	1
Bromomethane	ND	^c	1.0	0.89	ug/L			04/01/20 02:12	1
Chloroethane	ND		1.0	0.90	ug/L			04/01/20 02:12	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/01/20 02:12	1
Acetone	ND		5.0	3.4	ug/L			04/01/20 02:12	1
Carbon disulfide	ND		1.0	0.88	ug/L			04/01/20 02:12	1
Methylene Chloride	ND		1.0	0.89	ug/L			04/01/20 02:12	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			04/01/20 02:12	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/01/20 02:12	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/01/20 02:12	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			04/01/20 02:12	1
Bromochloromethane	ND		1.0	0.63	ug/L			04/01/20 02:12	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			04/01/20 02:12	1
Chloroform	ND		1.0	0.60	ug/L			04/01/20 02:12	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/01/20 02:12	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/01/20 02:12	1
Benzene	ND		1.0	0.60	ug/L			04/01/20 02:12	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/01/20 02:12	1
Trichloroethene	ND		1.0	0.69	ug/L			04/01/20 02:12	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/01/20 02:12	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/01/20 02:12	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			04/01/20 02:12	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			04/01/20 02:12	1
Toluene	ND		1.0	0.46	ug/L			04/01/20 02:12	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/01/20 02:12	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			04/01/20 02:12	1
Tetrachloroethene	ND		1.0	0.47	ug/L			04/01/20 02:12	1
2-Hexanone	ND	^c	5.0	3.3	ug/L			04/01/20 02:12	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/01/20 02:12	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			04/01/20 02:12	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/01/20 02:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/01/20 02:12	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/01/20 02:12	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/01/20 02:12	1
Styrene	ND		1.0	0.47	ug/L			04/01/20 02:12	1
Bromoform	ND		1.0	0.98	ug/L			04/01/20 02:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			04/01/20 02:12	1
Acrylonitrile	ND		20	7.8	ug/L			04/01/20 02:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*71*	*^c*	*62 - 146*		*04/01/20 02:12*	*1*
Toluene-d8 (Surr)	*106*		*75 - 120*		*04/01/20 02:12*	*1*
4-Bromofluorobenzene (Surr)	*80*		*64 - 120*		*04/01/20 02:12*	*1*
Dibromofluoromethane (Surr)	*78*		*71 - 132*		*04/01/20 02:12*	*1*

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

Client Sample ID: HD-COD-SW-13-0/1-0
Date Collected: 03/25/20 10:55
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			04/01/20 02:40	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/01/20 02:40	1
Bromomethane	ND	^c	1.0	0.89	ug/L			04/01/20 02:40	1
Chloroethane	ND		1.0	0.90	ug/L			04/01/20 02:40	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/01/20 02:40	1
Acetone	ND		5.0	3.4	ug/L			04/01/20 02:40	1
Carbon disulfide	ND		1.0	0.88	ug/L			04/01/20 02:40	1
Methylene Chloride	ND		1.0	0.89	ug/L			04/01/20 02:40	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			04/01/20 02:40	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/01/20 02:40	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/01/20 02:40	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			04/01/20 02:40	1
Bromochloromethane	ND		1.0	0.63	ug/L			04/01/20 02:40	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			04/01/20 02:40	1
Chloroform	ND		1.0	0.60	ug/L			04/01/20 02:40	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/01/20 02:40	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/01/20 02:40	1
Benzene	ND		1.0	0.60	ug/L			04/01/20 02:40	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/01/20 02:40	1
Trichloroethene	ND		1.0	0.69	ug/L			04/01/20 02:40	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/01/20 02:40	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/01/20 02:40	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			04/01/20 02:40	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			04/01/20 02:40	1
Toluene	ND		1.0	0.46	ug/L			04/01/20 02:40	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/01/20 02:40	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			04/01/20 02:40	1
Tetrachloroethene	ND		1.0	0.47	ug/L			04/01/20 02:40	1
2-Hexanone	ND	^c	5.0	3.3	ug/L			04/01/20 02:40	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/01/20 02:40	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			04/01/20 02:40	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/01/20 02:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/01/20 02:40	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/01/20 02:40	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/01/20 02:40	1
Styrene	ND		1.0	0.47	ug/L			04/01/20 02:40	1
Bromoform	ND		1.0	0.98	ug/L			04/01/20 02:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			04/01/20 02:40	1
Acrylonitrile	ND		20	7.8	ug/L			04/01/20 02:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*	*^c*	*62 - 146*		*04/01/20 02:40*	*1*
Toluene-d8 (Surr)	*121*	*X*	*75 - 120*		*04/01/20 02:40*	*1*
4-Bromofluorobenzene (Surr)	*85*		*64 - 120*		*04/01/20 02:40*	*1*
Dibromofluoromethane (Surr)	*93*		*71 - 132*		*04/01/20 02:40*	*1*

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

Client Sample ID: HD-COD-SW-15-0/1-0
Date Collected: 03/25/20 12:55
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			03/31/20 21:36	1
Vinyl chloride	ND		1.0	0.40	ug/L			03/31/20 21:36	1
Bromomethane	ND	^c	1.0	0.89	ug/L			03/31/20 21:36	1
Chloroethane	ND		1.0	0.90	ug/L			03/31/20 21:36	1
1,1-Dichloroethene	ND	F1	1.0	0.55	ug/L			03/31/20 21:36	1
Acetone	ND	F1	5.0	3.4	ug/L			03/31/20 21:36	1
Carbon disulfide	ND		1.0	0.88	ug/L			03/31/20 21:36	1
Methylene Chloride	ND	F1	1.0	0.89	ug/L			03/31/20 21:36	1
trans-1,2-Dichloroethene	ND	F1	1.0	0.67	ug/L			03/31/20 21:36	1
Methyl tert-butyl ether	ND	F1	1.0	0.59	ug/L			03/31/20 21:36	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			03/31/20 21:36	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			03/31/20 21:36	1
Bromochloromethane	ND	F1	1.0	0.63	ug/L			03/31/20 21:36	1
2-Butanone (MEK)	ND	^c F1	5.0	2.6	ug/L			03/31/20 21:36	1
Chloroform	ND		1.0	0.60	ug/L			03/31/20 21:36	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			03/31/20 21:36	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			03/31/20 21:36	1
Benzene	ND		1.0	0.60	ug/L			03/31/20 21:36	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			03/31/20 21:36	1
Trichloroethene	ND	F1	1.0	0.69	ug/L			03/31/20 21:36	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			03/31/20 21:36	1
Bromodichloromethane	ND		1.0	0.64	ug/L			03/31/20 21:36	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			03/31/20 21:36	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			03/31/20 21:36	1
Toluene	ND		1.0	0.46	ug/L			03/31/20 21:36	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			03/31/20 21:36	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			03/31/20 21:36	1
Tetrachloroethene	**2.2**		1.0	0.47	ug/L			03/31/20 21:36	1
2-Hexanone	ND	^c	5.0	3.3	ug/L			03/31/20 21:36	1
Dibromochloromethane	ND		1.0	0.84	ug/L			03/31/20 21:36	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			03/31/20 21:36	1
Chlorobenzene	ND		1.0	0.50	ug/L			03/31/20 21:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			03/31/20 21:36	1
Ethylbenzene	ND		1.0	0.51	ug/L			03/31/20 21:36	1
Xylenes, Total	ND		2.0	0.89	ug/L			03/31/20 21:36	1
Styrene	ND		1.0	0.47	ug/L			03/31/20 21:36	1
Bromoform	ND		1.0	0.98	ug/L			03/31/20 21:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			03/31/20 21:36	1
Acrylonitrile	ND		20	7.8	ug/L			03/31/20 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*	*^c*	*62 - 146*		*03/31/20 21:36*	*1*
Toluene-d8 (Surr)	*110*		*75 - 120*		*03/31/20 21:36*	*1*
4-Bromofluorobenzene (Surr)	*87*		*64 - 120*		*03/31/20 21:36*	*1*
Dibromofluoromethane (Surr)	*81*		*71 - 132*		*03/31/20 21:36*	*1*

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

Client Sample ID: HD-COD-SW-16-0/1-0
Date Collected: 03/25/20 11:20
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			04/02/20 01:56	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/02/20 01:56	1
Bromomethane	ND	^c	1.0	0.89	ug/L			04/02/20 01:56	1
Chloroethane	ND		1.0	0.90	ug/L			04/02/20 01:56	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/02/20 01:56	1
Acetone	ND	^c F1	5.0	3.4	ug/L			04/02/20 01:56	1
Carbon disulfide	ND	^c	1.0	0.88	ug/L			04/02/20 01:56	1
Methylene Chloride	ND	F1	1.0	0.89	ug/L			04/02/20 01:56	1
trans-1,2-Dichloroethene	ND	F1	1.0	0.67	ug/L			04/02/20 01:56	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/02/20 01:56	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/02/20 01:56	1
cis-1,2-Dichloroethene	ND	F1	1.0	0.71	ug/L			04/02/20 01:56	1
Bromochloromethane	ND	F1	1.0	0.63	ug/L			04/02/20 01:56	1
2-Butanone (MEK)	ND	^c F1 F2	5.0	2.6	ug/L			04/02/20 01:56	1
Chloroform	ND	F1	1.0	0.60	ug/L			04/02/20 01:56	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/02/20 01:56	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/02/20 01:56	1
Benzene	ND		1.0	0.60	ug/L			04/02/20 01:56	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/02/20 01:56	1
Trichloroethene	ND	F1	1.0	0.69	ug/L			04/02/20 01:56	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/02/20 01:56	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/02/20 01:56	1
cis-1,3-Dichloropropene	ND	F1	1.0	0.59	ug/L			04/02/20 01:56	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			04/02/20 01:56	1
Toluene	ND		1.0	0.46	ug/L			04/02/20 01:56	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/02/20 01:56	1
1,1,2-Trichloroethane	ND	^c	1.0	0.45	ug/L			04/02/20 01:56	1
Tetrachloroethene	ND	F1	1.0	0.47	ug/L			04/02/20 01:56	1
2-Hexanone	ND	^c F2	5.0	3.3	ug/L			04/02/20 01:56	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/02/20 01:56	1
1,2-Dibromoethane (EDB)	ND	^c	1.0	0.50	ug/L			04/02/20 01:56	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/02/20 01:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/02/20 01:56	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/02/20 01:56	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/02/20 01:56	1
Styrene	ND		1.0	0.47	ug/L			04/02/20 01:56	1
Bromoform	ND		1.0	0.98	ug/L			04/02/20 01:56	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			04/02/20 01:56	1
Acrylonitrile	ND		20	7.8	ug/L			04/02/20 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*62 - 146*		*04/02/20 01:56*	*1*
Toluene-d8 (Surr)	*110*		*75 - 120*		*04/02/20 01:56*	*1*
4-Bromofluorobenzene (Surr)	*80*		*64 - 120*		*04/02/20 01:56*	*1*
Dibromofluoromethane (Surr)	*83*		*71 - 132*		*04/02/20 01:56*	*1*

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

Client Sample ID: HD-COD-SW-17-0/1-0
Date Collected: 03/25/20 11:35
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			04/02/20 17:52	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/02/20 17:52	1
Bromomethane	ND		1.0	0.89	ug/L			04/02/20 17:52	1
Chloroethane	ND		1.0	0.90	ug/L			04/02/20 17:52	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/02/20 17:52	1
Acetone	ND		5.0	3.4	ug/L			04/02/20 17:52	1
Carbon disulfide	ND	^c	1.0	0.88	ug/L			04/02/20 17:52	1
Methylene Chloride	ND		1.0	0.89	ug/L			04/02/20 17:52	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			04/02/20 17:52	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/02/20 17:52	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/02/20 17:52	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			04/02/20 17:52	1
Bromochloromethane	ND	^c	1.0	0.63	ug/L			04/02/20 17:52	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			04/02/20 17:52	1
Chloroform	ND		1.0	0.60	ug/L			04/02/20 17:52	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/02/20 17:52	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/02/20 17:52	1
Benzene	ND		1.0	0.60	ug/L			04/02/20 17:52	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/02/20 17:52	1
Trichloroethene	ND	F1 *	1.0	0.69	ug/L			04/02/20 17:52	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/02/20 17:52	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/02/20 17:52	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			04/02/20 17:52	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			04/02/20 17:52	1
Toluene	ND		1.0	0.46	ug/L			04/02/20 17:52	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/02/20 17:52	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			04/02/20 17:52	1
Tetrachloroethene	ND		1.0	0.47	ug/L			04/02/20 17:52	1
2-Hexanone	ND		5.0	3.3	ug/L			04/02/20 17:52	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/02/20 17:52	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			04/02/20 17:52	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/02/20 17:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/02/20 17:52	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/02/20 17:52	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/02/20 17:52	1
Styrene	ND		1.0	0.47	ug/L			04/02/20 17:52	1
Bromoform	ND		1.0	0.98	ug/L			04/02/20 17:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			04/02/20 17:52	1
Acrylonitrile	ND		20	7.8	ug/L			04/02/20 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*73*		*62 - 146*		*04/02/20 17:52*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*04/02/20 17:52*	*1*
4-Bromofluorobenzene (Surr)	*76*		*64 - 120*		*04/02/20 17:52*	*1*
Dibromofluoromethane (Surr)	*77*		*71 - 132*		*04/02/20 17:52*	*1*

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

Client Sample ID: HD-COD-SW-26-0/1-0
Date Collected: 03/25/20 12:05
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			04/02/20 02:24	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/02/20 02:24	1
Bromomethane	ND	^c	1.0	0.89	ug/L			04/02/20 02:24	1
Chloroethane	ND		1.0	0.90	ug/L			04/02/20 02:24	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/02/20 02:24	1
Acetone	ND	^c	5.0	3.4	ug/L			04/02/20 02:24	1
Carbon disulfide	ND	^c	1.0	0.88	ug/L			04/02/20 02:24	1
Methylene Chloride	ND		1.0	0.89	ug/L			04/02/20 02:24	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			04/02/20 02:24	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/02/20 02:24	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/02/20 02:24	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			04/02/20 02:24	1
Bromochloromethane	ND		1.0	0.63	ug/L			04/02/20 02:24	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			04/02/20 02:24	1
Chloroform	ND		1.0	0.60	ug/L			04/02/20 02:24	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/02/20 02:24	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/02/20 02:24	1
Benzene	ND		1.0	0.60	ug/L			04/02/20 02:24	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/02/20 02:24	1
Trichloroethene	ND		1.0	0.69	ug/L			04/02/20 02:24	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/02/20 02:24	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/02/20 02:24	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			04/02/20 02:24	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			04/02/20 02:24	1
Toluene	ND		1.0	0.46	ug/L			04/02/20 02:24	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/02/20 02:24	1
1,1,2-Trichloroethane	ND	^c	1.0	0.45	ug/L			04/02/20 02:24	1
Tetrachloroethene	ND		1.0	0.47	ug/L			04/02/20 02:24	1
2-Hexanone	ND	^c	5.0	3.3	ug/L			04/02/20 02:24	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/02/20 02:24	1
1,2-Dibromoethane (EDB)	ND	^c	1.0	0.50	ug/L			04/02/20 02:24	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/02/20 02:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/02/20 02:24	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/02/20 02:24	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/02/20 02:24	1
Styrene	ND		1.0	0.47	ug/L			04/02/20 02:24	1
Bromoform	ND		1.0	0.98	ug/L			04/02/20 02:24	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			04/02/20 02:24	1
Acrylonitrile	ND		20	7.8	ug/L			04/02/20 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*62 - 146*		*04/02/20 02:24*	*1*
Toluene-d8 (Surr)	*110*		*75 - 120*		*04/02/20 02:24*	*1*
4-Bromofluorobenzene (Surr)	*86*		*64 - 120*		*04/02/20 02:24*	*1*
Dibromofluoromethane (Surr)	*83*		*71 - 132*		*04/02/20 02:24*	*1*

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

Client Sample ID: HD-COD-SW-27-0/1-0
Date Collected: 03/25/20 12:45
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			04/02/20 02:52	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/02/20 02:52	1
Bromomethane	ND	^c	1.0	0.89	ug/L			04/02/20 02:52	1
Chloroethane	ND		1.0	0.90	ug/L			04/02/20 02:52	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/02/20 02:52	1
Acetone	ND	^c	5.0	3.4	ug/L			04/02/20 02:52	1
Carbon disulfide	ND	^c	1.0	0.88	ug/L			04/02/20 02:52	1
Methylene Chloride	ND		1.0	0.89	ug/L			04/02/20 02:52	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			04/02/20 02:52	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/02/20 02:52	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/02/20 02:52	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			04/02/20 02:52	1
Bromochloromethane	ND		1.0	0.63	ug/L			04/02/20 02:52	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			04/02/20 02:52	1
Chloroform	ND		1.0	0.60	ug/L			04/02/20 02:52	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/02/20 02:52	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/02/20 02:52	1
Benzene	ND		1.0	0.60	ug/L			04/02/20 02:52	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/02/20 02:52	1
Trichloroethene	ND		1.0	0.69	ug/L			04/02/20 02:52	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/02/20 02:52	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/02/20 02:52	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			04/02/20 02:52	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			04/02/20 02:52	1
Toluene	ND		1.0	0.46	ug/L			04/02/20 02:52	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/02/20 02:52	1
1,1,2-Trichloroethane	ND	^c	1.0	0.45	ug/L			04/02/20 02:52	1
Tetrachloroethene	ND		1.0	0.47	ug/L			04/02/20 02:52	1
2-Hexanone	ND	^c	5.0	3.3	ug/L			04/02/20 02:52	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/02/20 02:52	1
1,2-Dibromoethane (EDB)	ND	^c	1.0	0.50	ug/L			04/02/20 02:52	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/02/20 02:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/02/20 02:52	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/02/20 02:52	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/02/20 02:52	1
Styrene	ND		1.0	0.47	ug/L			04/02/20 02:52	1
Bromoform	ND		1.0	0.98	ug/L			04/02/20 02:52	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			04/02/20 02:52	1
Acrylonitrile	ND		20	7.8	ug/L			04/02/20 02:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*62 - 146*		*04/02/20 02:52*	*1*
Toluene-d8 (Surr)	*109*		*75 - 120*		*04/02/20 02:52*	*1*
4-Bromofluorobenzene (Surr)	*84*		*64 - 120*		*04/02/20 02:52*	*1*
Dibromofluoromethane (Surr)	*87*		*71 - 132*		*04/02/20 02:52*	*1*

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

Client Sample ID: HD-COD-SW-28-0/1-0
Date Collected: 03/25/20 13:35
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			04/02/20 03:19	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/02/20 03:19	1
Bromomethane	ND	^c	1.0	0.89	ug/L			04/02/20 03:19	1
Chloroethane	ND		1.0	0.90	ug/L			04/02/20 03:19	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/02/20 03:19	1
Acetone	ND	^c	5.0	3.4	ug/L			04/02/20 03:19	1
Carbon disulfide	ND	^c	1.0	0.88	ug/L			04/02/20 03:19	1
Methylene Chloride	ND		1.0	0.89	ug/L			04/02/20 03:19	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			04/02/20 03:19	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/02/20 03:19	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/02/20 03:19	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			04/02/20 03:19	1
Bromochloromethane	ND		1.0	0.63	ug/L			04/02/20 03:19	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			04/02/20 03:19	1
Chloroform	ND		1.0	0.60	ug/L			04/02/20 03:19	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/02/20 03:19	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/02/20 03:19	1
Benzene	ND		1.0	0.60	ug/L			04/02/20 03:19	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/02/20 03:19	1
Trichloroethene	ND		1.0	0.69	ug/L			04/02/20 03:19	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/02/20 03:19	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/02/20 03:19	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			04/02/20 03:19	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			04/02/20 03:19	1
Toluene	ND		1.0	0.46	ug/L			04/02/20 03:19	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/02/20 03:19	1
1,1,2-Trichloroethane	ND	^c	1.0	0.45	ug/L			04/02/20 03:19	1
Tetrachloroethene	ND		1.0	0.47	ug/L			04/02/20 03:19	1
2-Hexanone	ND	^c	5.0	3.3	ug/L			04/02/20 03:19	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/02/20 03:19	1
1,2-Dibromoethane (EDB)	ND	^c	1.0	0.50	ug/L			04/02/20 03:19	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/02/20 03:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/02/20 03:19	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/02/20 03:19	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/02/20 03:19	1
Styrene	ND		1.0	0.47	ug/L			04/02/20 03:19	1
Bromoform	ND		1.0	0.98	ug/L			04/02/20 03:19	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			04/02/20 03:19	1
Acrylonitrile	ND		20	7.8	ug/L			04/02/20 03:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*62 - 146*		*04/02/20 03:19*	*1*
Toluene-d8 (Surr)	*123*	*X*	*75 - 120*		*04/02/20 03:19*	*1*
4-Bromofluorobenzene (Surr)	*89*		*64 - 120*		*04/02/20 03:19*	*1*
Dibromofluoromethane (Surr)	*92*		*71 - 132*		*04/02/20 03:19*	*1*

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

Client Sample ID: HD-COD-SW-29-0/1-0
Date Collected: 03/25/20 14:25
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			04/02/20 03:47	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/02/20 03:47	1
Bromomethane	ND	^c	1.0	0.89	ug/L			04/02/20 03:47	1
Chloroethane	ND		1.0	0.90	ug/L			04/02/20 03:47	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/02/20 03:47	1
Acetone	ND	^c	5.0	3.4	ug/L			04/02/20 03:47	1
Carbon disulfide	ND	^c	1.0	0.88	ug/L			04/02/20 03:47	1
Methylene Chloride	ND		1.0	0.89	ug/L			04/02/20 03:47	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			04/02/20 03:47	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/02/20 03:47	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/02/20 03:47	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			04/02/20 03:47	1
Bromochloromethane	ND		1.0	0.63	ug/L			04/02/20 03:47	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			04/02/20 03:47	1
Chloroform	ND		1.0	0.60	ug/L			04/02/20 03:47	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/02/20 03:47	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/02/20 03:47	1
Benzene	ND		1.0	0.60	ug/L			04/02/20 03:47	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/02/20 03:47	1
Trichloroethene	ND		1.0	0.69	ug/L			04/02/20 03:47	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/02/20 03:47	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/02/20 03:47	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			04/02/20 03:47	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			04/02/20 03:47	1
Toluene	ND		1.0	0.46	ug/L			04/02/20 03:47	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/02/20 03:47	1
1,1,2-Trichloroethane	ND	^c	1.0	0.45	ug/L			04/02/20 03:47	1
Tetrachloroethene	ND		1.0	0.47	ug/L			04/02/20 03:47	1
2-Hexanone	ND	^c	5.0	3.3	ug/L			04/02/20 03:47	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/02/20 03:47	1
1,2-Dibromoethane (EDB)	ND	^c	1.0	0.50	ug/L			04/02/20 03:47	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/02/20 03:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/02/20 03:47	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/02/20 03:47	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/02/20 03:47	1
Styrene	ND		1.0	0.47	ug/L			04/02/20 03:47	1
Bromoform	ND		1.0	0.98	ug/L			04/02/20 03:47	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			04/02/20 03:47	1
Acrylonitrile	ND		20	7.8	ug/L			04/02/20 03:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*62 - 146*		*04/02/20 03:47*	*1*
Toluene-d8 (Surr)	*125*	*X*	*75 - 120*		*04/02/20 03:47*	*1*
4-Bromofluorobenzene (Surr)	*96*		*64 - 120*		*04/02/20 03:47*	*1*
Dibromofluoromethane (Surr)	*88*		*71 - 132*		*04/02/20 03:47*	*1*

Client: Groundwater Sciences Corporation
Project/Site: fYNOP

Job ID: 180-104021-1

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

Client Sample ID: HD-QC1-0/1-1
Date Collected: 03/25/20 12:00
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			04/02/20 04:15	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/02/20 04:15	1
Bromomethane	ND	^c	1.0	0.89	ug/L			04/02/20 04:15	1
Chloroethane	ND		1.0	0.90	ug/L			04/02/20 04:15	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/02/20 04:15	1
Acetone	ND	^c	5.0	3.4	ug/L			04/02/20 04:15	1
Carbon disulfide	ND	^c	1.0	0.88	ug/L			04/02/20 04:15	1
Methylene Chloride	ND		1.0	0.89	ug/L			04/02/20 04:15	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			04/02/20 04:15	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/02/20 04:15	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/02/20 04:15	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			04/02/20 04:15	1
Bromochloromethane	ND		1.0	0.63	ug/L			04/02/20 04:15	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			04/02/20 04:15	1
Chloroform	ND		1.0	0.60	ug/L			04/02/20 04:15	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/02/20 04:15	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/02/20 04:15	1
Benzene	ND		1.0	0.60	ug/L			04/02/20 04:15	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/02/20 04:15	1
Trichloroethene	ND		1.0	0.69	ug/L			04/02/20 04:15	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/02/20 04:15	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/02/20 04:15	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			04/02/20 04:15	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			04/02/20 04:15	1
Toluene	ND		1.0	0.46	ug/L			04/02/20 04:15	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/02/20 04:15	1
1,1,2-Trichloroethane	ND	^c	1.0	0.45	ug/L			04/02/20 04:15	1
Tetrachloroethene	ND		1.0	0.47	ug/L			04/02/20 04:15	1
2-Hexanone	ND	^c	5.0	3.3	ug/L			04/02/20 04:15	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/02/20 04:15	1
1,2-Dibromoethane (EDB)	ND	^c	1.0	0.50	ug/L			04/02/20 04:15	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/02/20 04:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/02/20 04:15	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/02/20 04:15	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/02/20 04:15	1
Styrene	ND		1.0	0.47	ug/L			04/02/20 04:15	1
Bromoform	ND		1.0	0.98	ug/L			04/02/20 04:15	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			04/02/20 04:15	1
Acrylonitrile	ND		20	7.8	ug/L			04/02/20 04:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*62 - 146*		*04/02/20 04:15*	*1*
Toluene-d8 (Surr)	*114*		*75 - 120*		*04/02/20 04:15*	*1*
4-Bromofluorobenzene (Surr)	*79*		*64 - 120*		*04/02/20 04:15*	*1*
Dibromofluoromethane (Surr)	*85*		*71 - 132*		*04/02/20 04:15*	*1*

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

Client Sample ID: HD-QC1-0/1-2
Date Collected: 03/25/20 00:00
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			03/31/20 22:04	1
Vinyl chloride	ND		1.0	0.40	ug/L			03/31/20 22:04	1
Bromomethane	ND	^c	1.0	0.89	ug/L			03/31/20 22:04	1
Chloroethane	ND		1.0	0.90	ug/L			03/31/20 22:04	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			03/31/20 22:04	1
Acetone	ND		5.0	3.4	ug/L			03/31/20 22:04	1
Carbon disulfide	ND		1.0	0.88	ug/L			03/31/20 22:04	1
Methylene Chloride	ND		1.0	0.89	ug/L			03/31/20 22:04	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			03/31/20 22:04	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			03/31/20 22:04	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			03/31/20 22:04	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			03/31/20 22:04	1
Bromochloromethane	ND		1.0	0.63	ug/L			03/31/20 22:04	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			03/31/20 22:04	1
Chloroform	ND		1.0	0.60	ug/L			03/31/20 22:04	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			03/31/20 22:04	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			03/31/20 22:04	1
Benzene	ND		1.0	0.60	ug/L			03/31/20 22:04	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			03/31/20 22:04	1
Trichloroethene	ND		1.0	0.69	ug/L			03/31/20 22:04	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			03/31/20 22:04	1
Bromodichloromethane	ND		1.0	0.64	ug/L			03/31/20 22:04	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			03/31/20 22:04	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1	ug/L			03/31/20 22:04	1
Toluene	ND		1.0	0.46	ug/L			03/31/20 22:04	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			03/31/20 22:04	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			03/31/20 22:04	1
Tetrachloroethene	ND		1.0	0.47	ug/L			03/31/20 22:04	1
2-Hexanone	ND	^c	5.0	3.3	ug/L			03/31/20 22:04	1
Dibromochloromethane	ND		1.0	0.84	ug/L			03/31/20 22:04	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			03/31/20 22:04	1
Chlorobenzene	ND		1.0	0.50	ug/L			03/31/20 22:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			03/31/20 22:04	1
Ethylbenzene	ND		1.0	0.51	ug/L			03/31/20 22:04	1
Xylenes, Total	ND		2.0	0.89	ug/L			03/31/20 22:04	1
Styrene	ND		1.0	0.47	ug/L			03/31/20 22:04	1
Bromoform	ND		1.0	0.98	ug/L			03/31/20 22:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			03/31/20 22:04	1
Acrylonitrile	ND		20	7.8	ug/L			03/31/20 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*74*	*^c*	*62 - 146*		*03/31/20 22:04*	*1*
Toluene-d8 (Surr)	*110*		*75 - 120*		*03/31/20 22:04*	*1*
4-Bromofluorobenzene (Surr)	*82*		*64 - 120*		*03/31/20 22:04*	*1*
Dibromofluoromethane (Surr)	*80*		*71 - 132*		*03/31/20 22:04*	*1*

Default Detection Limits

Client: Groundwater Sciences Corporation
Job ID: 180-104021-1
Project/Site: fYNOP

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

Analyte	RL	MDL	Units
1,1,1,2-Tetrachloroethane	1.0	0.57	ug/L
1,1,1-Trichloroethane	1.0	0.60	ug/L
1,1,2,2-Tetrachloroethane	1.0	0.60	ug/L
1,1,2-Trichloroethane	1.0	0.45	ug/L
1,1-Dichloroethane	1.0	0.31	ug/L
1,1-Dichloroethene	1.0	0.55	ug/L
1,2-Dibromoethane (EDB)	1.0	0.50	ug/L
1,2-Dichloroethane	1.0	0.57	ug/L
1,2-Dichloropropane	1.0	0.66	ug/L
2-Butanone (MEK)	5.0	2.6	ug/L
2-Hexanone	5.0	3.3	ug/L
4-Methyl-2-pentanone (MIBK)	5.0	3.1	ug/L
Acetone	5.0	3.4	ug/L
Acrylonitrile	20	7.8	ug/L
Benzene	1.0	0.60	ug/L
Bromochloromethane	1.0	0.63	ug/L
Bromodichloromethane	1.0	0.64	ug/L
Bromoform	1.0	0.98	ug/L
Bromomethane	1.0	0.89	ug/L
Carbon disulfide	1.0	0.88	ug/L
Carbon tetrachloride	1.0	0.88	ug/L
Chlorobenzene	1.0	0.50	ug/L
Chloroethane	1.0	0.90	ug/L
Chloroform	1.0	0.60	ug/L
Chloromethane	1.0	0.90	ug/L
cis-1,2-Dichloroethene	1.0	0.71	ug/L
cis-1,3-Dichloropropene	1.0	0.59	ug/L
Dibromochloromethane	1.0	0.84	ug/L
Ethylbenzene	1.0	0.51	ug/L
Methyl tert-butyl ether	1.0	0.59	ug/L
Methylene Chloride	1.0	0.89	ug/L
Styrene	1.0	0.47	ug/L
Tetrachloroethene	1.0	0.47	ug/L
Toluene	1.0	0.46	ug/L
trans-1,2-Dichloroethene	1.0	0.67	ug/L
trans-1,3-Dichloropropene	1.0	0.58	ug/L
Trichloroethene	1.0	0.69	ug/L
Vinyl chloride	1.0	0.40	ug/L
Xylenes, Total	2.0	0.89	ug/L

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: fYNOP

Job ID: 180-104021-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(62-146)	(75-120)	(64-120)	(71-132)
180-104021-1	HD-COD-SW-6-0/1-0	69 ^c	118	87	82
180-104021-2	HD-COD-SW-7-0/1-0	76 ^c	105	86	84
180-104021-3	HD-COD-SW-8-0/1-0	79 ^c	118	87	84
180-104021-4	HD-COD-SW-9-0/1-0	71 ^c	106	80	78
180-104021-5	HD-COD-SW-13-0/1-0	82 ^c	121 X	85	93
180-104021-6	HD-COD-SW-15-0/1-0	76 ^c	110	87	81
180-104021-6 MS	HD-COD-SW-15-0/1-0	68	102	92	78
180-104021-6 MSD	HD-COD-SW-15-0/1-0	74	102	90	80
180-104021-7	HD-COD-SW-16-0/1-0	79	110	80	83
180-104021-7 MS	HD-COD-SW-16-0/1-0	69	88	103	74
180-104021-7 MSD	HD-COD-SW-16-0/1-0	73	91	112	76
180-104021-8	HD-COD-SW-17-0/1-0	73	102	76	77
180-104021-8 MS	HD-COD-SW-17-0/1-0	95	106	110	94
180-104021-9	HD-COD-SW-26-0/1-0	78	110	86	83
180-104021-10	HD-COD-SW-27-0/1-0	82	109	84	87
180-104021-11	HD-COD-SW-28-0/1-0	86	123 X	89	92
180-104021-12	HD-COD-SW-29-0/1-0	78	125 X	96	88
180-104021-13	HD-QC1-0/1-1	84	114	79	85
180-104021-14	HD-QC1-0/1-2	74 ^c	110	82	80
LCS 180-311669/5	Lab Control Sample	74	98	96	84
LCS 180-311793/3	Lab Control Sample	75	102	117	83
LCS 180-311900/11	Lab Control Sample	92	115	118	92
MB 180-311669/7	Method Blank	77	108	89	79
MB 180-311793/5	Method Blank	74	102	99	77
MB 180-311900/6	Method Blank	74	106	82	81

Surrogate Legend

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

Client: Groundwater Sciences Corporation
Project/Site: fYNOP

Job ID: 180-104021-1

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

Lab Sample ID: MB 180-311669/7
Matrix: Water
Analysis Batch: 311669

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			03/31/20 20:13	1
Vinyl chloride	ND		1.0	0.40	ug/L			03/31/20 20:13	1
Bromomethane	ND		1.0	0.89	ug/L			03/31/20 20:13	1
Chloroethane	ND		1.0	0.90	ug/L			03/31/20 20:13	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			03/31/20 20:13	1
Acetone	ND		5.0	3.4	ug/L			03/31/20 20:13	1
Carbon disulfide	ND		1.0	0.88	ug/L			03/31/20 20:13	1
Methylene Chloride	ND		1.0	0.89	ug/L			03/31/20 20:13	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			03/31/20 20:13	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			03/31/20 20:13	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			03/31/20 20:13	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			03/31/20 20:13	1
Bromochloromethane	ND		1.0	0.63	ug/L			03/31/20 20:13	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			03/31/20 20:13	1
Chloroform	ND		1.0	0.60	ug/L			03/31/20 20:13	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			03/31/20 20:13	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			03/31/20 20:13	1
Benzene	ND		1.0	0.60	ug/L			03/31/20 20:13	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			03/31/20 20:13	1
Trichloroethene	ND		1.0	0.69	ug/L			03/31/20 20:13	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			03/31/20 20:13	1
Bromodichloromethane	ND		1.0	0.64	ug/L			03/31/20 20:13	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			03/31/20 20:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			03/31/20 20:13	1
Toluene	ND		1.0	0.46	ug/L			03/31/20 20:13	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			03/31/20 20:13	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			03/31/20 20:13	1
Tetrachloroethene	ND		1.0	0.47	ug/L			03/31/20 20:13	1
2-Hexanone	ND		5.0	3.3	ug/L			03/31/20 20:13	1
Dibromochloromethane	ND		1.0	0.84	ug/L			03/31/20 20:13	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			03/31/20 20:13	1
Chlorobenzene	ND		1.0	0.50	ug/L			03/31/20 20:13	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			03/31/20 20:13	1
Ethylbenzene	ND		1.0	0.51	ug/L			03/31/20 20:13	1
Xylenes, Total	ND		2.0	0.89	ug/L			03/31/20 20:13	1
Styrene	ND		1.0	0.47	ug/L			03/31/20 20:13	1
Bromoform	ND		1.0	0.98	ug/L			03/31/20 20:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			03/31/20 20:13	1
Acrylonitrile	ND		20	7.8	ug/L			03/31/20 20:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*77*		*62 - 146*		*03/31/20 20:13*	*1*
Toluene-d8 (Surr)	*108*		*75 - 120*		*03/31/20 20:13*	*1*
4-Bromofluorobenzene (Surr)	*89*		*64 - 120*		*03/31/20 20:13*	*1*
Dibromofluoromethane (Surr)	*79*		*71 - 132*		*03/31/20 20:13*	*1*

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

Lab Sample ID: LCS 180-311669/5
Matrix: Water
Analysis Batch: 311669

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	13.2		ug/L		132	37 - 150
Vinyl chloride	10.0	11.9		ug/L		119	50 - 150
Bromomethane	10.0	8.35		ug/L		83	35 - 150
Chloroethane	10.0	9.65		ug/L		97	52 - 150
1,1-Dichloroethene	10.0	10.8		ug/L		108	79 - 132
Acetone	20.0	15.1		ug/L		76	37 - 150
Carbon disulfide	10.0	11.6		ug/L		116	66 - 134
Methylene Chloride	10.0	10.1		ug/L		101	72 - 131
trans-1,2-Dichloroethene	10.0	9.56		ug/L		96	81 - 126
Methyl tert-butyl ether	10.0	8.38		ug/L		84	65 - 125
1,1-Dichloroethane	10.0	10.4		ug/L		104	70 - 127
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	79 - 119
Bromochloromethane	10.0	8.05		ug/L		80	74 - 124
2-Butanone (MEK)	20.0	13.2		ug/L		66	35 - 150
Chloroform	10.0	10.2		ug/L		102	75 - 126
1,1,1-Trichloroethane	10.0	9.54		ug/L		95	63 - 142
Carbon tetrachloride	10.0	9.03		ug/L		90	55 - 150
Benzene	10.0	10.5		ug/L		105	72 - 127
1,2-Dichloroethane	10.0	8.46		ug/L		85	60 - 138
Trichloroethene	10.0	8.77		ug/L		88	81 - 121
1,2-Dichloropropane	10.0	11.1		ug/L		111	67 - 124
Bromodichloromethane	10.0	9.67		ug/L		97	67 - 131
cis-1,3-Dichloropropene	10.0	9.55		ug/L		96	69 - 122
4-Methyl-2-pentanone (MIBK)	20.0	9.27		ug/L		46	19 - 150
Toluene	10.0	11.1		ug/L		111	73 - 123
trans-1,3-Dichloropropene	10.0	8.98		ug/L		90	61 - 122
1,1,2-Trichloroethane	10.0	10.6		ug/L		106	72 - 120
Tetrachloroethene	10.0	9.55		ug/L		95	69 - 134
2-Hexanone	20.0	13.0		ug/L		65	24 - 150
Dibromochloromethane	10.0	10.2		ug/L		102	59 - 134
1,2-Dibromoethane (EDB)	10.0	10.1		ug/L		101	65 - 129
Chlorobenzene	10.0	10.6		ug/L		106	76 - 119
1,1,1,2-Tetrachloroethane	10.0	10.2		ug/L		102	65 - 132
Ethylbenzene	10.0	11.2		ug/L		112	76 - 118
Xylenes, Total	20.0	21.6		ug/L		108	76 - 116
Styrene	10.0	10.6		ug/L		106	74 - 118
Bromoform	10.0	8.96		ug/L		90	50 - 146
1,1,2,2-Tetrachloroethane	10.0	11.1		ug/L		111	57 - 135
Acrylonitrile	100	80.5		ug/L		81	43 - 149

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*74*		*62 - 146*
Toluene-d8 (Surr)	*98*		*75 - 120*
4-Bromofluorobenzene (Surr)	*96*		*64 - 120*
Dibromofluoromethane (Surr)	*84*		*71 - 132*

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

Lab Sample ID: 180-104021-6 MS
Matrix: Water
Analysis Batch: 311669

Client Sample ID: HD-COD-SW-15-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	ND		10.0	6.37		ug/L		64	37 - 150
Vinyl chloride	ND		10.0	6.62		ug/L		66	50 - 150
Bromomethane	ND	^c	10.0	5.07		ug/L		51	35 - 150
Chloroethane	ND		10.0	5.94		ug/L		59	52 - 150
1,1-Dichloroethene	ND	F1	10.0	7.58	F1	ug/L		76	79 - 132
Acetone	ND	F1	20.0	5.77	F1	ug/L		29	37 - 150
Carbon disulfide	ND		10.0	7.94		ug/L		79	66 - 134
Methylene Chloride	ND	F1	10.0	6.47	F1	ug/L		65	72 - 131
trans-1,2-Dichloroethene	ND	F1	10.0	7.34	F1	ug/L		73	81 - 126
Methyl tert-butyl ether	ND	F1	10.0	6.05	F1	ug/L		60	65 - 125
1,1-Dichloroethane	ND		10.0	8.17		ug/L		82	70 - 127
cis-1,2-Dichloroethene	ND		10.0	8.16		ug/L		82	79 - 119
Bromochloromethane	ND	F1	10.0	6.01	F1	ug/L		60	74 - 124
2-Butanone (MEK)	ND	^c F1	20.0	5.98	F1	ug/L		30	35 - 150
Chloroform	ND		10.0	7.80		ug/L		78	75 - 126
1,1,1-Trichloroethane	ND		10.0	7.35		ug/L		73	63 - 142
Carbon tetrachloride	ND		10.0	7.17		ug/L		72	55 - 150
Benzene	ND		10.0	7.81		ug/L		78	72 - 127
1,2-Dichloroethane	ND		10.0	6.28		ug/L		63	60 - 138
Trichloroethene	ND	F1	10.0	7.56	F1	ug/L		76	81 - 121
1,2-Dichloropropane	ND		10.0	8.57		ug/L		86	67 - 124
Bromodichloromethane	ND		10.0	7.73		ug/L		77	67 - 131
cis-1,3-Dichloropropene	ND		10.0	7.75		ug/L		77	69 - 122
4-Methyl-2-pentanone (MIBK)	ND	^c	20.0	7.83		ug/L		39	19 - 150
Toluene	ND		10.0	9.29		ug/L		93	73 - 123
trans-1,3-Dichloropropene	ND		10.0	7.89		ug/L		79	61 - 122
1,1,2-Trichloroethane	ND		10.0	8.74		ug/L		87	72 - 120
Tetrachloroethene	2.2		10.0	10.3		ug/L		81	69 - 134
2-Hexanone	ND	^c	20.0	7.01		ug/L		35	24 - 150
Dibromochloromethane	ND		10.0	8.37		ug/L		84	59 - 134
1,2-Dibromoethane (EDB)	ND		10.0	8.56		ug/L		86	65 - 129
Chlorobenzene	ND		10.0	9.20		ug/L		92	76 - 119
1,1,1,2-Tetrachloroethane	ND		10.0	8.83		ug/L		88	65 - 132
Ethylbenzene	ND		10.0	9.49		ug/L		95	76 - 118
Xylenes, Total	ND		20.0	19.6		ug/L		98	76 - 116
Styrene	ND		10.0	10.1		ug/L		101	74 - 118
Bromoform	ND		10.0	7.75		ug/L		77	50 - 146
1,1,2,2-Tetrachloroethane	ND		10.0	10.2		ug/L		102	57 - 135
Acrylonitrile	ND		100	56.6		ug/L		57	43 - 149

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*68*		*62 - 146*
Toluene-d8 (Surr)	*102*		*75 - 120*
4-Bromofluorobenzene (Surr)	*92*		*64 - 120*
Dibromofluoromethane (Surr)	*78*		*71 - 132*

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

Lab Sample ID: 180-104021-6 MSD
Matrix: Water
Analysis Batch: 311669

Client Sample ID: HD-COD-SW-15-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane	ND		10.0	6.41		ug/L		64	37 - 150	1	35
Vinyl chloride	ND		10.0	6.60		ug/L		66	50 - 150	0	31
Bromomethane	ND	^c	10.0	5.13		ug/L		51	35 - 150	1	35
Chloroethane	ND		10.0	6.32		ug/L		63	52 - 150	6	31
1,1-Dichloroethene	ND	F1	10.0	7.98		ug/L		80	79 - 132	5	29
Acetone	ND	F1	20.0	5.10	F1	ug/L		25	37 - 150	12	35
Carbon disulfide	ND		10.0	7.77		ug/L		78	66 - 134	2	31
Methylene Chloride	ND	F1	10.0	6.71	F1	ug/L		67	72 - 131	4	29
trans-1,2-Dichloroethene	ND	F1	10.0	7.19	F1	ug/L		72	81 - 126	2	27
Methyl tert-butyl ether	ND	F1	10.0	6.16	F1	ug/L		62	65 - 125	2	28
1,1-Dichloroethane	ND		10.0	8.16		ug/L		82	70 - 127	0	27
cis-1,2-Dichloroethene	ND		10.0	8.15		ug/L		81	79 - 119	0	28
Bromochloromethane	ND	F1	10.0	6.15	F1	ug/L		62	74 - 124	2	27
2-Butanone (MEK)	ND	^c F1	20.0	6.08	F1	ug/L		30	35 - 150	2	34
Chloroform	ND		10.0	7.46		ug/L		75	75 - 126	4	26
1,1,1-Trichloroethane	ND		10.0	7.67		ug/L		77	63 - 142	4	28
Carbon tetrachloride	ND		10.0	7.24		ug/L		72	55 - 150	1	29
Benzene	ND		10.0	8.10		ug/L		81	72 - 127	4	27
1,2-Dichloroethane	ND		10.0	6.30		ug/L		63	60 - 138	0	26
Trichloroethene	ND	F1	10.0	7.73	F1	ug/L		77	81 - 121	2	28
1,2-Dichloropropane	ND		10.0	8.84		ug/L		88	67 - 124	3	27
Bromodichloromethane	ND		10.0	7.92		ug/L		79	67 - 131	2	28
cis-1,3-Dichloropropene	ND		10.0	7.98		ug/L		80	69 - 122	3	29
4-Methyl-2-pentanone (MIBK)	ND	^c	20.0	7.87		ug/L		39	19 - 150	0	33
Toluene	ND		10.0	9.95		ug/L		100	73 - 123	7	31
trans-1,3-Dichloropropene	ND		10.0	7.93		ug/L		79	61 - 122	0	30
1,1,2-Trichloroethane	ND		10.0	8.96		ug/L		90	72 - 120	3	27
Tetrachloroethene	2.2		10.0	10.9		ug/L		88	69 - 134	6	27
2-Hexanone	ND	^c	20.0	8.29		ug/L		41	24 - 150	17	32
Dibromochloromethane	ND		10.0	8.59		ug/L		86	59 - 134	3	28
1,2-Dibromoethane (EDB)	ND		10.0	8.56		ug/L		86	65 - 129	0	27
Chlorobenzene	ND		10.0	9.29		ug/L		93	76 - 119	1	25
1,1,1,2-Tetrachloroethane	ND		10.0	9.02		ug/L		90	65 - 132	2	28
Ethylbenzene	ND		10.0	10.2		ug/L		102	76 - 118	7	27
Xylenes, Total	ND		20.0	19.8		ug/L		99	76 - 116	1	27
Styrene	ND		10.0	9.78		ug/L		98	74 - 118	3	27
Bromoform	ND		10.0	7.73		ug/L		77	50 - 146	0	30
1,1,2,2-Tetrachloroethane	ND		10.0	9.70		ug/L		97	57 - 135	5	29
Acrylonitrile	ND		100	53.4		ug/L		53	43 - 149	6	34

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*74*		*62 - 146*
Toluene-d8 (Surr)	*102*		*75 - 120*
4-Bromofluorobenzene (Surr)	*90*		*64 - 120*
Dibromofluoromethane (Surr)	*80*		*71 - 132*

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

Lab Sample ID: MB 180-311793/5
Matrix: Water
Analysis Batch: 311793

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			04/01/20 20:31	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/01/20 20:31	1
Bromomethane	ND		1.0	0.89	ug/L			04/01/20 20:31	1
Chloroethane	ND		1.0	0.90	ug/L			04/01/20 20:31	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/01/20 20:31	1
Acetone	ND		5.0	3.4	ug/L			04/01/20 20:31	1
Carbon disulfide	ND		1.0	0.88	ug/L			04/01/20 20:31	1
Methylene Chloride	ND		1.0	0.89	ug/L			04/01/20 20:31	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			04/01/20 20:31	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/01/20 20:31	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/01/20 20:31	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			04/01/20 20:31	1
Bromochloromethane	ND		1.0	0.63	ug/L			04/01/20 20:31	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			04/01/20 20:31	1
Chloroform	ND		1.0	0.60	ug/L			04/01/20 20:31	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/01/20 20:31	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/01/20 20:31	1
Benzene	ND		1.0	0.60	ug/L			04/01/20 20:31	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/01/20 20:31	1
Trichloroethene	ND		1.0	0.69	ug/L			04/01/20 20:31	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/01/20 20:31	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/01/20 20:31	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			04/01/20 20:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			04/01/20 20:31	1
Toluene	ND		1.0	0.46	ug/L			04/01/20 20:31	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/01/20 20:31	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			04/01/20 20:31	1
Tetrachloroethene	ND		1.0	0.47	ug/L			04/01/20 20:31	1
2-Hexanone	ND		5.0	3.3	ug/L			04/01/20 20:31	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/01/20 20:31	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			04/01/20 20:31	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/01/20 20:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/01/20 20:31	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/01/20 20:31	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/01/20 20:31	1
Styrene	ND		1.0	0.47	ug/L			04/01/20 20:31	1
Bromoform	ND		1.0	0.98	ug/L			04/01/20 20:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			04/01/20 20:31	1
Acrylonitrile	ND		20	7.8	ug/L			04/01/20 20:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*74*		*62 - 146*		*04/01/20 20:31*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*04/01/20 20:31*	*1*
4-Bromofluorobenzene (Surr)	*99*		*64 - 120*		*04/01/20 20:31*	*1*
Dibromofluoromethane (Surr)	*77*		*71 - 132*		*04/01/20 20:31*	*1*

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

Lab Sample ID: LCS 180-311793/3
Matrix: Water
Analysis Batch: 311793

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	10.5		ug/L		105	37 - 150
Vinyl chloride	10.0	11.4		ug/L		114	50 - 150
Bromomethane	10.0	8.37		ug/L		84	35 - 150
Chloroethane	10.0	9.69		ug/L		97	52 - 150
1,1-Dichloroethene	10.0	11.7		ug/L		117	79 - 132
Acetone	20.0	22.9		ug/L		115	37 - 150
Carbon disulfide	10.0	13.2		ug/L		132	66 - 134
Methylene Chloride	10.0	10.8		ug/L		108	72 - 131
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	81 - 126
Methyl tert-butyl ether	10.0	9.65		ug/L		96	65 - 125
1,1-Dichloroethane	10.0	11.2		ug/L		112	70 - 127
cis-1,2-Dichloroethene	10.0	9.96		ug/L		100	79 - 119
Bromochloromethane	10.0	8.81		ug/L		88	74 - 124
2-Butanone (MEK)	20.0	22.5		ug/L		112	35 - 150
Chloroform	10.0	10.1		ug/L		101	75 - 126
1,1,1-Trichloroethane	10.0	9.65		ug/L		96	63 - 142
Carbon tetrachloride	10.0	9.51		ug/L		95	55 - 150
Benzene	10.0	10.6		ug/L		106	72 - 127
1,2-Dichloroethane	10.0	9.47		ug/L		95	60 - 138
Trichloroethene	10.0	9.01		ug/L		90	81 - 121
1,2-Dichloropropane	10.0	11.1		ug/L		111	67 - 124
Bromodichloromethane	10.0	9.46		ug/L		95	67 - 131
cis-1,3-Dichloropropene	10.0	9.02		ug/L		90	69 - 122
4-Methyl-2-pentanone (MIBK)	20.0	12.0		ug/L		60	19 - 150
Toluene	10.0	11.9		ug/L		119	73 - 123
trans-1,3-Dichloropropene	10.0	10.1		ug/L		101	61 - 122
1,1,2-Trichloroethane	10.0	11.8		ug/L		118	72 - 120
Tetrachloroethene	10.0	9.70		ug/L		97	69 - 134
2-Hexanone	20.0	20.3		ug/L		102	24 - 150
Dibromochloromethane	10.0	10.9		ug/L		109	59 - 134
1,2-Dibromoethane (EDB)	10.0	11.3		ug/L		113	65 - 129
Chlorobenzene	10.0	10.9		ug/L		109	76 - 119
1,1,1,2-Tetrachloroethane	10.0	10.4		ug/L		104	65 - 132
Ethylbenzene	10.0	11.6		ug/L		116	76 - 118
Xylenes, Total	20.0	22.0		ug/L		110	76 - 116
Styrene	10.0	10.9		ug/L		109	74 - 118
Bromoform	10.0	9.57		ug/L		96	50 - 146
1,1,2,2-Tetrachloroethane	10.0	12.3		ug/L		123	57 - 135
Acrylonitrile	100	95.3		ug/L		95	43 - 149

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*75*		*62 - 146*
Toluene-d8 (Surr)	*102*		*75 - 120*
4-Bromofluorobenzene (Surr)	*117*		*64 - 120*
Dibromofluoromethane (Surr)	*83*		*71 - 132*

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

Lab Sample ID: 180-104021-7 MS
Matrix: Water
Analysis Batch: 311793

Client Sample ID: HD-COD-SW-16-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	ND		10.0	6.80		ug/L		68	37 - 150
Vinyl chloride	ND		10.0	6.83		ug/L		68	50 - 150
Bromomethane	ND	^c	10.0	5.50		ug/L		55	35 - 150
Chloroethane	ND		10.0	6.32		ug/L		63	52 - 150
1,1-Dichloroethene	ND		10.0	7.85		ug/L		79	79 - 132
Acetone	ND	^c F1	20.0	5.76	F1	ug/L		29	37 - 150
Carbon disulfide	ND	^c	10.0	9.04		ug/L		90	66 - 134
Methylene Chloride	ND	F1	10.0	6.90	F1	ug/L		69	72 - 131
trans-1,2-Dichloroethene	ND	F1	10.0	7.03	F1	ug/L		70	81 - 126
Methyl tert-butyl ether	ND		10.0	6.58		ug/L		66	65 - 125
1,1-Dichloroethane	ND		10.0	7.62		ug/L		76	70 - 127
cis-1,2-Dichloroethene	ND	F1	10.0	7.20	F1	ug/L		72	79 - 119
Bromochloromethane	ND	F1	10.0	6.33	F1	ug/L		63	74 - 124
2-Butanone (MEK)	ND	^c F1 F2	20.0	5.09	F1	ug/L		25	35 - 150
Chloroform	ND	F1	10.0	6.87	F1	ug/L		69	75 - 126
1,1,1-Trichloroethane	ND		10.0	6.84		ug/L		68	63 - 142
Carbon tetrachloride	ND		10.0	6.76		ug/L		68	55 - 150
Benzene	ND		10.0	7.68		ug/L		77	72 - 127
1,2-Dichloroethane	ND		10.0	6.51		ug/L		65	60 - 138
Trichloroethene	ND	F1	10.0	6.32	F1	ug/L		63	81 - 121
1,2-Dichloropropane	ND		10.0	7.81		ug/L		78	67 - 124
Bromodichloromethane	ND		10.0	6.90		ug/L		69	67 - 131
cis-1,3-Dichloropropene	ND	F1	10.0	6.82	F1	ug/L		68	69 - 122
4-Methyl-2-pentanone (MIBK)	ND	^c	20.0	8.31		ug/L		42	19 - 150
Toluene	ND		10.0	8.36		ug/L		84	73 - 123
trans-1,3-Dichloropropene	ND		10.0	7.57		ug/L		76	61 - 122
1,1,2-Trichloroethane	ND	^c	10.0	7.91		ug/L		79	72 - 120
Tetrachloroethene	ND	F1	10.0	6.62	F1	ug/L		66	69 - 134
2-Hexanone	ND	^c F2	20.0	7.29		ug/L		36	24 - 150
Dibromochloromethane	ND		10.0	7.43		ug/L		74	59 - 134
1,2-Dibromoethane (EDB)	ND	^c	10.0	8.06		ug/L		81	65 - 129
Chlorobenzene	ND		10.0	7.80		ug/L		78	76 - 119
1,1,1,2-Tetrachloroethane	ND		10.0	7.25		ug/L		72	65 - 132
Ethylbenzene	ND		10.0	8.16		ug/L		82	76 - 118
Xylenes, Total	ND		20.0	16.2		ug/L		81	76 - 116
Styrene	ND		10.0	7.93		ug/L		79	74 - 118
Bromoform	ND		10.0	6.87		ug/L		69	50 - 146
1,1,2,2-Tetrachloroethane	ND	^c	10.0	8.91		ug/L		89	57 - 135
Acrylonitrile	ND		100	64.8		ug/L		65	43 - 149

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*69*		*62 - 146*
Toluene-d8 (Surr)	*88*		*75 - 120*
4-Bromofluorobenzene (Surr)	*103*		*64 - 120*
Dibromofluoromethane (Surr)	*74*		*71 - 132*

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

Lab Sample ID: 180-104021-7 MSD
Matrix: Water
Analysis Batch: 311793

Client Sample ID: HD-COD-SW-16-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane	ND		10.0	8.35		ug/L		84	37 - 150	20	35
Vinyl chloride	ND		10.0	8.07		ug/L		81	50 - 150	17	31
Bromomethane	ND	^c	10.0	5.87		ug/L		59	35 - 150	7	35
Chloroethane	ND		10.0	6.49		ug/L		65	52 - 150	3	31
1,1-Dichloroethene	ND		10.0	8.81		ug/L		88	79 - 132	11	29
Acetone	ND	^c F1	20.0	6.59	F1	ug/L		33	37 - 150	13	35
Carbon disulfide	ND	^c	10.0	10.0		ug/L		100	66 - 134	10	31
Methylene Chloride	ND	F1	10.0	8.02		ug/L		80	72 - 131	15	29
trans-1,2-Dichloroethene	ND	F1	10.0	7.54	F1	ug/L		75	81 - 126	7	27
Methyl tert-butyl ether	ND		10.0	8.16		ug/L		82	65 - 125	21	28
1,1-Dichloroethane	ND		10.0	8.47		ug/L		85	70 - 127	11	27
cis-1,2-Dichloroethene	ND	F1	10.0	7.83	F1	ug/L		78	79 - 119	8	28
Bromochloromethane	ND	F1	10.0	7.09	F1	ug/L		71	74 - 124	11	27
2-Butanone (MEK)	ND	^c F1 F2	20.0	8.62	F2	ug/L		43	35 - 150	51	34
Chloroform	ND	F1	10.0	7.15	F1	ug/L		72	75 - 126	4	26
1,1,1-Trichloroethane	ND		10.0	7.24		ug/L		72	63 - 142	6	28
Carbon tetrachloride	ND		10.0	7.02		ug/L		70	55 - 150	4	29
Benzene	ND		10.0	8.27		ug/L		83	72 - 127	7	27
1,2-Dichloroethane	ND		10.0	7.86		ug/L		79	60 - 138	19	26
Trichloroethene	ND	F1	10.0	6.50	F1	ug/L		65	81 - 121	3	28
1,2-Dichloropropane	ND		10.0	9.21		ug/L		92	67 - 124	16	27
Bromodichloromethane	ND		10.0	7.72		ug/L		77	67 - 131	11	28
cis-1,3-Dichloropropene	ND	F1	10.0	8.29		ug/L		83	69 - 122	19	29
4-Methyl-2-pentanone (MIBK)	ND	^c	20.0	11.0		ug/L		55	19 - 150	28	33
Toluene	ND		10.0	9.14		ug/L		91	73 - 123	9	31
trans-1,3-Dichloropropene	ND		10.0	9.22		ug/L		92	61 - 122	20	30
1,1,2-Trichloroethane	ND	^c	10.0	9.62		ug/L		96	72 - 120	19	27
Tetrachloroethene	ND	F1	10.0	7.62		ug/L		76	69 - 134	14	27
2-Hexanone	ND	^c F2	20.0	12.2	F2	ug/L		61	24 - 150	50	32
Dibromochloromethane	ND		10.0	8.77		ug/L		88	59 - 134	17	28
1,2-Dibromoethane (EDB)	ND	^c	10.0	9.94		ug/L		99	65 - 129	21	27
Chlorobenzene	ND		10.0	8.60		ug/L		86	76 - 119	10	25
1,1,1,2-Tetrachloroethane	ND		10.0	8.21		ug/L		82	65 - 132	12	28
Ethylbenzene	ND		10.0	8.86		ug/L		89	76 - 118	8	27
Xylenes, Total	ND		20.0	17.3		ug/L		86	76 - 116	6	27
Styrene	ND		10.0	8.71		ug/L		87	74 - 118	9	27
Bromoform	ND		10.0	8.94		ug/L		89	50 - 146	26	30
1,1,2,2-Tetrachloroethane	ND	^c	10.0	11.3		ug/L		113	57 - 135	24	29
Acrylonitrile	ND		100	88.4		ug/L		88	43 - 149	31	34

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*73*		*62 - 146*
Toluene-d8 (Surr)	*91*		*75 - 120*
4-Bromofluorobenzene (Surr)	*112*		*64 - 120*
Dibromofluoromethane (Surr)	*76*		*71 - 132*

Client: Groundwater Sciences Corporation
Project/Site: fYNOP

Job ID: 180-104021-1

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

Lab Sample ID: MB 180-311900/6
Matrix: Water
Analysis Batch: 311900

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			04/02/20 17:25	1
Vinyl chloride	ND		1.0	0.40	ug/L			04/02/20 17:25	1
Bromomethane	ND		1.0	0.89	ug/L			04/02/20 17:25	1
Chloroethane	ND		1.0	0.90	ug/L			04/02/20 17:25	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			04/02/20 17:25	1
Acetone	ND		5.0	3.4	ug/L			04/02/20 17:25	1
Carbon disulfide	ND		1.0	0.88	ug/L			04/02/20 17:25	1
Methylene Chloride	ND		1.0	0.89	ug/L			04/02/20 17:25	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			04/02/20 17:25	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			04/02/20 17:25	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			04/02/20 17:25	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			04/02/20 17:25	1
Bromochloromethane	ND		1.0	0.63	ug/L			04/02/20 17:25	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			04/02/20 17:25	1
Chloroform	ND		1.0	0.60	ug/L			04/02/20 17:25	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			04/02/20 17:25	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			04/02/20 17:25	1
Benzene	ND		1.0	0.60	ug/L			04/02/20 17:25	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			04/02/20 17:25	1
Trichloroethene	ND		1.0	0.69	ug/L			04/02/20 17:25	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			04/02/20 17:25	1
Bromodichloromethane	ND		1.0	0.64	ug/L			04/02/20 17:25	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			04/02/20 17:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			04/02/20 17:25	1
Toluene	ND		1.0	0.46	ug/L			04/02/20 17:25	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			04/02/20 17:25	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			04/02/20 17:25	1
Tetrachloroethene	ND		1.0	0.47	ug/L			04/02/20 17:25	1
2-Hexanone	ND		5.0	3.3	ug/L			04/02/20 17:25	1
Dibromochloromethane	ND		1.0	0.84	ug/L			04/02/20 17:25	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			04/02/20 17:25	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/02/20 17:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			04/02/20 17:25	1
Ethylbenzene	ND		1.0	0.51	ug/L			04/02/20 17:25	1
Xylenes, Total	ND		2.0	0.89	ug/L			04/02/20 17:25	1
Styrene	ND		1.0	0.47	ug/L			04/02/20 17:25	1
Bromoform	ND		1.0	0.98	ug/L			04/02/20 17:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			04/02/20 17:25	1
Acrylonitrile	ND		20	7.8	ug/L			04/02/20 17:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*74*		*62 - 146*		*04/02/20 17:25*	*1*
Toluene-d8 (Surr)	*106*		*75 - 120*		*04/02/20 17:25*	*1*
4-Bromofluorobenzene (Surr)	*82*		*64 - 120*		*04/02/20 17:25*	*1*
Dibromofluoromethane (Surr)	*81*		*71 - 132*		*04/02/20 17:25*	*1*

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

Lab Sample ID: LCS 180-311900/11
Matrix: Water
Analysis Batch: 311900

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	8.48		ug/L		85	37 - 150
Vinyl chloride	10.0	8.19		ug/L		82	50 - 150
Bromomethane	10.0	6.52		ug/L		65	35 - 150
Chloroethane	10.0	6.92		ug/L		69	52 - 150
1,1-Dichloroethene	10.0	9.04		ug/L		90	79 - 132
Acetone	20.0	21.7		ug/L		109	37 - 150
Carbon disulfide	10.0	10.9		ug/L		109	66 - 134
Methylene Chloride	10.0	9.67		ug/L		97	72 - 131
trans-1,2-Dichloroethene	10.0	8.70		ug/L		87	81 - 126
Methyl tert-butyl ether	10.0	9.17		ug/L		92	65 - 125
1,1-Dichloroethane	10.0	9.94		ug/L		99	70 - 127
cis-1,2-Dichloroethene	10.0	9.09		ug/L		91	79 - 119
Bromochloromethane	10.0	7.95		ug/L		80	74 - 124
2-Butanone (MEK)	20.0	19.8		ug/L		99	35 - 150
Chloroform	10.0	9.51		ug/L		95	75 - 126
1,1,1-Trichloroethane	10.0	8.29		ug/L		83	63 - 142
Carbon tetrachloride	10.0	8.00		ug/L		80	55 - 150
Benzene	10.0	10.1		ug/L		101	72 - 127
1,2-Dichloroethane	10.0	8.67		ug/L		87	60 - 138
Trichloroethene	10.0	7.59	*	ug/L		76	81 - 121
1,2-Dichloropropane	10.0	10.1		ug/L		101	67 - 124
Bromodichloromethane	10.0	8.86		ug/L		89	67 - 131
cis-1,3-Dichloropropene	10.0	8.90		ug/L		89	69 - 122
4-Methyl-2-pentanone (MIBK)	20.0	11.2		ug/L		56	19 - 150
Toluene	10.0	11.3		ug/L		113	73 - 123
trans-1,3-Dichloropropene	10.0	9.95		ug/L		100	61 - 122
1,1,2-Trichloroethane	10.0	11.7		ug/L		117	72 - 120
Tetrachloroethene	10.0	8.97		ug/L		90	69 - 134
2-Hexanone	20.0	16.5		ug/L		82	24 - 150
Dibromochloromethane	10.0	10.6		ug/L		106	59 - 134
1,2-Dibromoethane (EDB)	10.0	10.8		ug/L		108	65 - 129
Chlorobenzene	10.0	10.1		ug/L		101	76 - 119
1,1,1,2-Tetrachloroethane	10.0	9.98		ug/L		100	65 - 132
Ethylbenzene	10.0	10.6		ug/L		106	76 - 118
Xylenes, Total	20.0	20.7		ug/L		104	76 - 116
Styrene	10.0	10.3		ug/L		103	74 - 118
Bromoform	10.0	9.65		ug/L		97	50 - 146
1,1,2,2-Tetrachloroethane	10.0	12.9		ug/L		129	57 - 135
Acrylonitrile	100	85.0		ug/L		85	43 - 149

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 146*
Toluene-d8 (Surr)	*115*		*75 - 120*
4-Bromofluorobenzene (Surr)	*118*		*64 - 120*
Dibromofluoromethane (Surr)	*92*		*71 - 132*

Client: Groundwater Sciences Corporation
Project/Site: fYNOP

Job ID: 180-104021-1

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

Lab Sample ID: 180-104021-8 MS
Matrix: Water
Analysis Batch: 311900

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	ND	^c	10.0	9.76		ug/L		98	37 - 150
Vinyl chloride	ND		10.0	8.62		ug/L		86	50 - 150
Bromomethane	ND		10.0	7.05		ug/L		71	35 - 150
Chloroethane	ND		10.0	7.67		ug/L		77	52 - 150
1,1-Dichloroethene	ND		10.0	10.0		ug/L		100	79 - 132
Acetone	ND		20.0	24.0		ug/L		120	37 - 150
Carbon disulfide	ND	^c	10.0	11.2		ug/L		112	66 - 134
Methylene Chloride	ND		10.0	10.8		ug/L		108	72 - 131
trans-1,2-Dichloroethene	ND		10.0	8.86		ug/L		89	81 - 126
Methyl tert-butyl ether	ND		10.0	10.1		ug/L		101	65 - 125
1,1-Dichloroethane	ND		10.0	10.1		ug/L		101	70 - 127
cis-1,2-Dichloroethene	ND		10.0	9.49		ug/L		95	79 - 119
Bromochloromethane	ND	^c	10.0	8.87		ug/L		89	74 - 124
2-Butanone (MEK)	ND		20.0	21.7		ug/L		109	35 - 150
Chloroform	ND		10.0	9.68		ug/L		97	75 - 126
1,1,1-Trichloroethane	ND		10.0	8.76		ug/L		88	63 - 142
Carbon tetrachloride	ND		10.0	8.13		ug/L		81	55 - 150
Benzene	ND		10.0	10.5		ug/L		105	72 - 127
1,2-Dichloroethane	ND		10.0	9.94		ug/L		99	60 - 138
Trichloroethene	ND	F1 *	10.0	7.87	F1	ug/L		79	81 - 121
1,2-Dichloropropane	ND		10.0	11.1		ug/L		111	67 - 124
Bromodichloromethane	ND		10.0	9.43		ug/L		94	67 - 131
cis-1,3-Dichloropropene	ND		10.0	9.55		ug/L		96	69 - 122
4-Methyl-2-pentanone (MIBK)	ND	^c	20.0	11.6		ug/L		58	19 - 150
Toluene	ND		10.0	10.6		ug/L		106	73 - 123
trans-1,3-Dichloropropene	ND		10.0	10.4		ug/L		104	61 - 122
1,1,2-Trichloroethane	ND		10.0	11.3		ug/L		113	72 - 120
Tetrachloroethene	ND		10.0	8.62		ug/L		86	69 - 134
2-Hexanone	ND		20.0	20.3		ug/L		102	24 - 150
Dibromochloromethane	ND		10.0	10.4		ug/L		104	59 - 134
1,2-Dibromoethane (EDB)	ND		10.0	10.7		ug/L		107	65 - 129
Chlorobenzene	ND		10.0	9.94		ug/L		99	76 - 119
1,1,1,2-Tetrachloroethane	ND		10.0	9.96		ug/L		100	65 - 132
Ethylbenzene	ND		10.0	10.4		ug/L		104	76 - 118
Xylenes, Total	ND		20.0	21.0		ug/L		105	76 - 116
Styrene	ND		10.0	10.7		ug/L		107	74 - 118
Bromoform	ND		10.0	10.2		ug/L		102	50 - 146
1,1,2,2-Tetrachloroethane	ND		10.0	12.8		ug/L		128	57 - 135
Acrylonitrile	ND		100	103		ug/L		103	43 - 149

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 146*
Toluene-d8 (Surr)	*106*		*75 - 120*
4-Bromofluorobenzene (Surr)	*110*		*64 - 120*
Dibromofluoromethane (Surr)	*94*		*71 - 132*

QC Association Summary

Client: Groundwater Sciences Corporation
Job ID: 180-104021-1
Project/Site: fYNOP

GC/MS VOA

Analysis Batch: 311669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104021-1	HD-COD-SW-6-0/1-0	Total/NA	Water	EPA 8260C	
180-104021-2	HD-COD-SW-7-0/1-0	Total/NA	Water	EPA 8260C	
180-104021-3	HD-COD-SW-8-0/1-0	Total/NA	Water	EPA 8260C	
180-104021-4	HD-COD-SW-9-0/1-0	Total/NA	Water	EPA 8260C	
180-104021-5	HD-COD-SW-13-0/1-0	Total/NA	Water	EPA 8260C	
180-104021-6	HD-COD-SW-15-0/1-0	Total/NA	Water	EPA 8260C	
180-104021-14	HD-QC1-0/1-2	Total/NA	Water	EPA 8260C	
MB 180-311669/7	Method Blank	Total/NA	Water	EPA 8260C	
LCS 180-311669/5	Lab Control Sample	Total/NA	Water	EPA 8260C	
180-104021-6 MS	HD-COD-SW-15-0/1-0	Total/NA	Water	EPA 8260C	
180-104021-6 MSD	HD-COD-SW-15-0/1-0	Total/NA	Water	EPA 8260C	

Analysis Batch: 311793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104021-7	HD-COD-SW-16-0/1-0	Total/NA	Water	EPA 8260C	
180-104021-9	HD-COD-SW-26-0/1-0	Total/NA	Water	EPA 8260C	
180-104021-10	HD-COD-SW-27-0/1-0	Total/NA	Water	EPA 8260C	
180-104021-11	HD-COD-SW-28-0/1-0	Total/NA	Water	EPA 8260C	
180-104021-12	HD-COD-SW-29-0/1-0	Total/NA	Water	EPA 8260C	
180-104021-13	HD-QC1-0/1-1	Total/NA	Water	EPA 8260C	
MB 180-311793/5	Method Blank	Total/NA	Water	EPA 8260C	
LCS 180-311793/3	Lab Control Sample	Total/NA	Water	EPA 8260C	
180-104021-7 MS	HD-COD-SW-16-0/1-0	Total/NA	Water	EPA 8260C	
180-104021-7 MSD	HD-COD-SW-16-0/1-0	Total/NA	Water	EPA 8260C	

Analysis Batch: 311900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-104021-8	HD-COD-SW-17-0/1-0	Total/NA	Water	EPA 8260C	
MB 180-311900/6	Method Blank	Total/NA	Water	EPA 8260C	
LCS 180-311900/11	Lab Control Sample	Total/NA	Water	EPA 8260C	
180-104021-8 MS	HD-COD-SW-17-0/1-0	Total/NA	Water	EPA 8260C	

Client Sample ID: HD-COD-SW-6-0/1-0

Lab Sample ID: 180-104021-1

Date Collected: 03/25/20 11:45

Matrix: Water

Date Received: 03/26/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	311669	04/01/20 00:49	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-7-0/1-0

Lab Sample ID: 180-104021-2

Date Collected: 03/25/20 12:30

Matrix: Water

Date Received: 03/26/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	311669	04/01/20 01:17	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-8-0/1-0

Lab Sample ID: 180-104021-3

Date Collected: 03/25/20 10:35

Matrix: Water

Date Received: 03/26/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	311669	04/01/20 01:45	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-9-0/1-0

Lab Sample ID: 180-104021-4

Date Collected: 03/25/20 13:25

Matrix: Water

Date Received: 03/26/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	311669	04/01/20 02:12	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-13-0/1-0

Lab Sample ID: 180-104021-5

Date Collected: 03/25/20 10:55

Matrix: Water

Date Received: 03/26/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	311669	04/01/20 02:40	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-15-0/1-0

Lab Sample ID: 180-104021-6

Date Collected: 03/25/20 12:55

Matrix: Water

Date Received: 03/26/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	311669	03/31/20 21:36	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-16-0/1-0
Date Collected: 03/25/20 11:20
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	311793	04/02/20 01:56	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-17-0/1-0
Date Collected: 03/25/20 11:35
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	311900	04/02/20 17:52	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-26-0/1-0
Date Collected: 03/25/20 12:05
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	311793	04/02/20 02:24	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-27-0/1-0
Date Collected: 03/25/20 12:45
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-10
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	EPA 8260C		1	5 mL	5 mL	311793	04/02/20 02:52	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-28-0/1-0
Date Collected: 03/25/20 13:35
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-11
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	EPA 8260C		1	5 mL	5 mL	311793	04/02/20 03:19	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-29-0/1-0
Date Collected: 03/25/20 14:25
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-12
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	EPA 8260C		1	5 mL	5 mL	311793	04/02/20 03:47	PJJ	TAL PIT
	Instrument ID: CHHP10									

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

Date Collected: 03/25/20 12:00
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-13

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	EPA 8260C		1	5 mL	5 mL	311793	04/02/20 04:15	PJJ	TAL PIT
	Instrument ID: CHHP10									

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

Date Collected: 03/25/20 00:00
Date Received: 03/26/20 09:00

Lab Sample ID: 180-104021-14

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	EPA 8260C		1	5 mL	5 mL	311669	03/31/20 22:04	PJJ	TAL PIT
	Instrument ID: CHHP10									

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

PJJ = Patrick Journet

Accreditation/Certification Summary

Client: Groundwater Sciences Corporation
Job ID: 180-104021-1
Project/Site: fYNOP

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-20

Method Summary

Client: Groundwater Sciences Corporation
Job ID: 180-104021-1
Project/Site: fYNOP

Method	Method Description	Protocol	Laboratory
EPA 8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
5030C	Purge and Trap	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 = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Groundwater Sciences Corporation
Project/Site: fYNOP

Job ID: 180-104021-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-104021-1	HD-COD-SW-6-0/1-0	Water	03/25/20 11:45	03/26/20 09:00	
180-104021-2	HD-COD-SW-7-0/1-0	Water	03/25/20 12:30	03/26/20 09:00	
180-104021-3	HD-COD-SW-8-0/1-0	Water	03/25/20 10:35	03/26/20 09:00	
180-104021-4	HD-COD-SW-9-0/1-0	Water	03/25/20 13:25	03/26/20 09:00	
180-104021-5	HD-COD-SW-13-0/1-0	Water	03/25/20 10:55	03/26/20 09:00	
180-104021-6	HD-COD-SW-15-0/1-0	Water	03/25/20 12:55	03/26/20 09:00	
180-104021-7	HD-COD-SW-16-0/1-0	Water	03/25/20 11:20	03/26/20 09:00	
180-104021-8	HD-COD-SW-17-0/1-0	Water	03/25/20 11:35	03/26/20 09:00	
180-104021-9	HD-COD-SW-26-0/1-0	Water	03/25/20 12:05	03/26/20 09:00	
180-104021-10	HD-COD-SW-27-0/1-0	Water	03/25/20 12:45	03/26/20 09:00	
180-104021-11	HD-COD-SW-28-0/1-0	Water	03/25/20 13:35	03/26/20 09:00	
180-104021-12	HD-COD-SW-29-0/1-0	Water	03/25/20 14:25	03/26/20 09:00	
180-104021-13	HD-QC1-0/1-1	Water	03/25/20 12:00	03/26/20 09:00	
180-104021-14	HD-QC1-0/1-2	Water	03/25/20 00:00	03/26/20 09:00	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 308976

Lab Sample ID: IC 180-308976/2 Client Sample ID:

Date Analyzed: 03/05/20 07:55 Lab File ID: 10030502.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	1.79	Poor chromatography	journetp	03/05/20 08:27
Vinyl chloride	1.80	Poor chromatography	journetp	03/05/20 08:27
Chloroethane	2.16	Poor chromatography	journetp	03/05/20 08:27
Dichlorofluoromethane	2.43	Poor chromatography	journetp	03/05/20 08:27
Trichlorofluoromethane	2.43	Poor chromatography	journetp	03/05/20 08:27
1,1-Dichloroethene	3.05	Poor chromatography	journetp	03/05/20 08:27
1,1,2-Trichloro-1,2,2-trifluoroethane	3.10	Poor chromatography	journetp	03/05/20 08:27
Iodomethane	3.24	Poor chromatography	journetp	03/05/20 08:27
Allyl chloride	3.58	Poor chromatography	journetp	03/05/20 08:28
Methyl acetate	3.63	Poor chromatography	journetp	03/05/20 08:28
Methylene Chloride	3.78	Poor chromatography	journetp	03/05/20 08:28
trans-1,2-Dichloroethene	4.20	Poor chromatography	journetp	03/05/20 08:28
Acrylonitrile	4.21	Poor chromatography	journetp	03/05/20 08:28
Methyl tert-butyl ether	4.25	Poor chromatography	journetp	03/05/20 08:28
Hexane	4.65	Poor chromatography	journetp	03/05/20 08:28
1,1-Dichloroethane	4.86	Poor chromatography	journetp	03/05/20 09:48
2,2-Dichloropropane	5.63	Poor chromatography	journetp	03/05/20 08:28
cis-1,2-Dichloroethene	5.64	Poor chromatography	journetp	03/05/20 08:28
Bromochloromethane	5.93	Peak assignment corrected	journetp	03/05/20 09:48
1,1,1-Trichloroethane	6.23	Poor chromatography	journetp	03/05/20 08:28
Cyclohexane	6.31	Poor chromatography	journetp	03/05/20 08:28
1,1-Dichloropropene	6.44	Poor chromatography	journetp	03/05/20 08:28
Benzene	6.65	Poor chromatography	journetp	03/05/20 08:28
1,2-Dichloroethane-d4 (Surr)	6.66	Poor chromatography	journetp	03/05/20 08:26
Trichloroethene	7.41	Poor chromatography	journetp	03/05/20 08:29
1,2-Dichloropropane	7.67	Poor chromatography	journetp	03/05/20 08:29
Dibromomethane	7.77	Poor chromatography	journetp	03/05/20 08:29
Bromodichloromethane	7.97	Poor chromatography	journetp	03/05/20 08:29
cis-1,3-Dichloropropene	8.42	Poor chromatography	journetp	03/05/20 08:29

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 308976

Lab Sample ID: IC 180-308976/2 Client Sample ID:

Date Analyzed: 03/05/20 07:55 Lab File ID: 10030502.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toluene-d8 (Surr)	8.68	Poor chromatography	journetp	03/05/20 08:27
Toluene	8.74	Poor chromatography	journetp	03/05/20 08:29
trans-1,3-Dichloropropene	9.04	Poor chromatography	journetp	03/05/20 08:29
Ethyl methacrylate	9.10	Poor chromatography	journetp	03/05/20 08:29
Tetrachloroethene	9.26	Poor chromatography	journetp	03/05/20 08:29
1,3-Dichloropropane	9.36	Poor chromatography	journetp	03/05/20 08:29
2-Hexanone	9.50	Poor chromatography	journetp	03/05/20 08:30
1,2-Dibromoethane (EDB)	9.69	Poor chromatography	journetp	03/05/20 08:30
Styrene	10.81	Poor chromatography	journetp	03/05/20 08:30
4-Bromofluorobenzene (Surr)	11.33	Poor chromatography	journetp	03/05/20 08:27
Bromobenzene	11.46	Poor chromatography	journetp	03/05/20 08:30
trans-1,4-Dichloro-2-butene	11.53	Poor chromatography	journetp	03/05/20 10:13
1,3-Dichlorobenzene	12.40	Poor chromatography	journetp	03/05/20 08:31
1,4-Dichlorobenzene-d4	12.48	Poor chromatography	journetp	03/05/20 08:26
1,4-Dichlorobenzene	12.50	Poor chromatography	journetp	03/05/20 08:31
1,2,4-Trichlorobenzene	14.46	Poor chromatography	journetp	03/05/20 08:31
Hexachlorobutadiene	14.60	Poor chromatography	journetp	03/05/20 11:08
Naphthalene	14.75	Poor chromatography	journetp	03/05/20 08:31
1,2,3-Trichlorobenzene	14.94	Poor chromatography	journetp	03/05/20 08:31

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 308976

Lab Sample ID: IC 180-308976/3 Client Sample ID:

Date Analyzed: 03/05/20 08:22 Lab File ID: 10030503.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethyl ether	2.80	Poor chromatography	journetp	03/05/20 08:52
1,1-Dichloroethene	3.06	Poor chromatography	journetp	03/05/20 08:52
1,1,2-Trichloro-1,2,2-trifluoroethane	3.13	Poor chromatography	journetp	03/05/20 08:52
Acetone	3.18	Poor chromatography	journetp	03/05/20 08:53
Methyl acetate	3.62	Poor chromatography	journetp	03/05/20 08:53
Methylene Chloride	3.79	Poor chromatography	journetp	03/05/20 08:53
TBA-d9 (IS)	3.99	Poor chromatography	journetp	03/05/20 08:52
tert-Butyl alcohol	4.13	Poor chromatography	journetp	03/05/20 08:53
Acrylonitrile	4.21	Poor chromatography	journetp	03/05/20 08:53
trans-1,2-Dichloroethene	4.21	Poor chromatography	journetp	03/05/20 08:53
Methyl tert-butyl ether	4.25	Poor chromatography	journetp	03/05/20 08:53
2,2-Dichloropropane	5.64	Poor chromatography	journetp	03/05/20 08:53
2-Butanone (MEK)	5.69	Poor chromatography	journetp	03/05/20 08:54
Chloroform	6.09	Poor chromatography	journetp	03/05/20 08:54
1,1-Dichloropropene	6.44	Poor chromatography	journetp	03/05/20 08:54
Isobutyl alcohol	6.70	Poor chromatography	journetp	03/05/20 11:05
2-Hexanone	9.44	Poor chromatography	journetp	03/05/20 11:03
1,1,2,2-Tetrachloroethane	11.46	Poor chromatography	journetp	03/05/20 08:54
trans-1,4-Dichloro-2-butene	11.55	Poor chromatography	journetp	03/05/20 11:01

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 308976

Lab Sample ID: ICIS 180-308976/4 Client Sample ID:

Date Analyzed: 03/05/20 08:50 Lab File ID: 10030504.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.48	Peak assignment corrected	journetp	03/05/20 09:45
Ethyl ether	2.81	Poor chromatography	journetp	03/05/20 11:44
Allyl chloride	3.58	Poor chromatography	journetp	03/05/20 09:46
Methylene Chloride	3.78	Poor chromatography	journetp	03/05/20 10:58
Isobutyl alcohol	6.69	Poor chromatography	journetp	03/05/20 09:47
Hexachlorobutadiene	14.60	Poor chromatography	journetp	03/05/20 11:09

Lab Sample ID: IC 180-308976/5 Client Sample ID:

Date Analyzed: 03/05/20 09:18 Lab File ID: 10030505.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.32	Poor chromatography	journetp	03/05/20 09:49
Methylene Chloride	3.80	Poor chromatography	journetp	03/05/20 10:58
TBA-d9 (IS)	3.99	Poor chromatography	journetp	03/05/20 09:49
1,2-Dichloropropane	7.68	Poor chromatography	journetp	03/05/20 09:50

Lab Sample ID: IC 180-308976/6 Client Sample ID:

Date Analyzed: 03/05/20 09:46 Lab File ID: 10030506.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.70	Poor chromatography	journetp	03/05/20 10:11
Vinyl chloride	1.81	Poor chromatography	journetp	03/05/20 10:11
Carbon disulfide	3.32	Poor chromatography	journetp	03/05/20 10:11
TBA-d9 (IS)	3.99	Poor chromatography	journetp	03/05/20 10:11

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 308976

Lab Sample ID: IC 180-308976/8 Client Sample ID:

Date Analyzed: 03/05/20 10:44 Lab File ID: 10030508.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorofluoromethane	2.46	Poor chromatography	journetp	03/09/20 06:28
Ethyl ether	2.80	Poor chromatography	journetp	03/05/20 11:43

Lab Sample ID: IC 180-308976/9 Client Sample ID:

Date Analyzed: 03/05/20 11:12 Lab File ID: 10030509.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.06	Peak assignment corrected	journetp	03/05/20 11:45
Carbon disulfide	3.32	Poor chromatography	journetp	03/05/20 11:40

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 311669

Lab Sample ID: CCVIS 180-311669/4 Client Sample ID:

Date Analyzed: 03/31/20 18:40 Lab File ID: 10033104.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.74	Poor chromatography	journetp	03/31/20 19:12
1,2-Dichloroethane-d4 (Surr)	6.66	Poor chromatography	journetp	03/31/20 19:13

Lab Sample ID: LCS 180-311669/5 Client Sample ID:

Date Analyzed: 03/31/20 19:08 Lab File ID: 10033105.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.33	Peak assignment corrected	journetp	03/31/20 21:51
1,2-Dichloropropane	7.68	Peak assignment corrected	journetp	04/01/20 00:06

Lab Sample ID: 180-104021-6 Client Sample ID: HD-COD-SW-15-0/1-0

Date Analyzed: 03/31/20 21:36 Lab File ID: 10033110.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	03/31/20 23:09

Lab Sample ID: 180-104021-14 Client Sample ID: HD-QC1-0/1-2

Date Analyzed: 03/31/20 22:04 Lab File ID: 10033111.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	03/31/20 23:09

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 311669

Lab Sample ID: 180-104021-6 MSD Client Sample ID: HD-COD-SW-15-0/1-0 MSD

Date Analyzed: 03/31/20 23:53 Lab File ID: 10033113.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.73	Poor chromatography	journetp	04/01/20 00:18
Vinyl chloride	1.84	Peak assignment corrected	journetp	04/01/20 00:17
Chloroethane	2.25	Peak assignment corrected	journetp	04/01/20 00:17
Carbon disulfide	3.36	Poor chromatography	journetp	04/01/20 00:18

Lab Sample ID: 180-104021-1 Client Sample ID: HD-COD-SW-6-0/1-0

Date Analyzed: 04/01/20 00:49 Lab File ID: 10033114.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	04/01/20 16:53

Lab Sample ID: 180-104021-2 Client Sample ID: HD-COD-SW-7-0/1-0

Date Analyzed: 04/01/20 01:17 Lab File ID: 10033115.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	04/01/20 16:53

Lab Sample ID: 180-104021-3 Client Sample ID: HD-COD-SW-8-0/1-0

Date Analyzed: 04/01/20 01:45 Lab File ID: 10033116.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	04/01/20 16:54

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 311669

Lab Sample ID: 180-104021-4 Client Sample ID: HD-COD-SW-9-0/1-0

Date Analyzed: 04/01/20 02:12 Lab File ID: 10033117.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	04/01/20 16:54
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	04/01/20 16:54

Lab Sample ID: 180-104021-5 Client Sample ID: HD-COD-SW-13-0/1-0

Date Analyzed: 04/01/20 02:40 Lab File ID: 10033118.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	04/01/20 16:54
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	04/01/20 16:54

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 311793

Lab Sample ID: CCVIS 180-311793/2 Client Sample ID:

Date Analyzed: 04/01/20 19:08 Lab File ID: 10040102.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.52	Peak assignment corrected	journetp	04/01/20 19:28
Chloromethane	1.72	Poor chromatography	journetp	04/01/20 19:28
Bromomethane	2.10	Poor chromatography	journetp	04/01/20 19:28
Carbon disulfide	3.36	Poor chromatography	journetp	04/01/20 19:28
Methylene Chloride	3.79	Poor chromatography	journetp	04/01/20 19:28
Hexane	4.66	Poor chromatography	journetp	04/02/20 21:55
1,2-Dichloroethane-d4 (Surr)	6.65	Poor chromatography	journetp	04/02/20 21:54
4-Methyl-2-pentanone (MIBK)	8.58	Poor chromatography	journetp	04/01/20 19:29
Hexachlorobutadiene	14.60	Poor chromatography	journetp	04/01/20 19:29

Lab Sample ID: LCS 180-311793/3 Client Sample ID:

Date Analyzed: 04/01/20 19:36 Lab File ID: 10040103.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.73	Poor chromatography	journetp	04/02/20 00:28

Lab Sample ID: 180-104021-7 MS Client Sample ID: HD-COD-SW-16-0/1-0 MS

Date Analyzed: 04/02/20 01:01 Lab File ID: 10040114.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl chloride	1.84	Peak assignment corrected	journetp	04/02/20 16:13

Lab Sample ID: 180-104021-7 MSD Client Sample ID: HD-COD-SW-16-0/1-0 MSD

Date Analyzed: 04/02/20 01:28 Lab File ID: 10040115.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.06	Peak assignment corrected	journetp	04/02/20 16:14

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 311793

Lab Sample ID: 180-104021-7 Client Sample ID: HD-COD-SW-16-0/1-0

Date Analyzed: 04/02/20 01:56 Lab File ID: 10040116.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	04/02/20 16:19

Lab Sample ID: 180-104021-10 Client Sample ID: HD-COD-SW-27-0/1-0

Date Analyzed: 04/02/20 02:52 Lab File ID: 10040118.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	04/02/20 17:30

Lab Sample ID: 180-104021-11 Client Sample ID: HD-COD-SW-28-0/1-0

Date Analyzed: 04/02/20 03:19 Lab File ID: 10040119.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	04/02/20 17:30

Lab Sample ID: 180-104021-12 Client Sample ID: HD-COD-SW-29-0/1-0

Date Analyzed: 04/02/20 03:47 Lab File ID: 10040120.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	04/02/20 17:30

Lab Sample ID: 180-104021-13 Client Sample ID: HD-QC1-0/1-1

Date Analyzed: 04/02/20 04:15 Lab File ID: 10040121.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	04/02/20 17:31

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 311900

Lab Sample ID: CCVIS 180-311900/3 Client Sample ID:

Date Analyzed: 04/02/20 16:04 Lab File ID: 10040203.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.11	Poor chromatography	journetp	04/02/20 16:41
Acrylonitrile	4.20	Poor chromatography	journetp	04/02/20 16:42
2-Butanone (MEK)	5.69	Poor chromatography	journetp	04/02/20 16:41
Cyclohexane	6.30	Poor chromatography	journetp	04/02/20 16:41

Lab Sample ID: MB 180-311900/6 Client Sample ID:

Date Analyzed: 04/02/20 17:25 Lab File ID: 10040206.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	04/02/20 21:22
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	04/02/20 21:22

Lab Sample ID: LCS 180-311900/11 Client Sample ID:

Date Analyzed: 04/02/20 19:41 Lab File ID: 10040211.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.70	Poor chromatography	journetp	04/02/20 20:01
Vinyl chloride	1.84	Peak assignment corrected	journetp	04/02/20 20:01

Lab Sample ID: 180-104021-8 MS Client Sample ID: HD-COD-SW-17-0/1-0 MS

Date Analyzed: 04/02/20 20:08 Lab File ID: 10040212.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.35	Peak assignment corrected	journetp	04/02/20 20:48

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOA BFB25_00007							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Xylenes, Total	
					VOABFB50_00124	5 mL	BFB	25 ug/mL
.VOABFB50_00124	03/17/20	02/17/20	Methanol, Lot 3167189	50 mL	VOABFBRES_00090	1 mL	BFB	50 ug/mL
..VOABFBRES_00090	04/30/24		Restek, Lot A0147670		(Purchased Reagent)		BFB	2500 ug/mL
VOA8260INT_00104	03/07/20	02/07/20	Methanol, Lot 3167194	10 mL	VOA8260INTRES_00162	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_00162	01/31/24		Restek, Lot A0145169		(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_00105							1,2-Dichloroethane-d4 (Surr)	
							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							4-Bromofluorobenzene (Surr)	
							BFB	
							Dibromofluoromethane (Surr)	
							Tentatively Identified Compound	
							Toluene-d8 (Surr)	
							Total BTEX	
							Xylenes, Total	
					VOA8260INTRES_00159	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_00159	01/31/24		Restek, Lot A0145169		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260SURR_00104	03/07/20	02/07/20	Methanol, Lot 3167194	100 mL	VOA8260SURRES_00152	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_00152	11/30/23		Restek, Lot A0143613		(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_00105	03/06/21	03/06/20	Methanol, Lot 3167189	100 mL	VOA8260SURRES_00154	1 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL
.VOA8260SURRES_00154	11/30/23		Restek, Lot A0143613		(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_00397	04/03/20	03/30/20	Methanol, Lot 3167189	10 mL	VOA8260GAS2ND_00299	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00394	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
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylene Chloride	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	50 ug/mL
.VOA8260GAS2ND_00299	04/30/22		Restek, Lot A0148330		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOA2ND_00394	04/03/20	03/03/20	Methanol, Lot 3167192	10 mL	VOA8260MEGA2_00099	1 mL	1,1,1,2-Tetrachloroethane	250 ug/mL
							1,1,1-Trichloroethane	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-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
							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_00099	06/30/21		Restek, Lot A0144202		(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
							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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00394	03/11/20	03/04/20	Methanol, Lot 3167189	10 mL	VOA8260GAS1ST_00293	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00393	1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VOA8260GAS1ST_00293	11/30/22		Restek, Lot A0154679		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00393	04/04/20	03/04/20	Methanol, Lot 3167189	10 mL	VOA8260KET1ST_00136	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_00096	1 mL	1,1,1,2-Tetrachloroethane	250 ug/mL
							1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,1-Dichloropropene	250 ug/mL
							1,2,3-Trichlorobenzene	250 ug/mL
							1,2,3-Trichloropropane	250 ug/mL
							1,2,4-Trichlorobenzene	250 ug/mL
							1,2,4-Trimethylbenzene	250 ug/mL
							1,2-Dibromo-3-Chloropropane	250 ug/mL
							1,2-Dibromoethane (EDB)	250 ug/mL
							1,2-Dichlorobenzene	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							1,3,5-Trimethylbenzene	250 ug/mL
							1,3-Dichlorobenzene	250 ug/mL
							1,3-Dichloropropane	250 ug/mL
							1,4-Dichlorobenzene	250 ug/mL
							1,4-Dioxane	5000 ug/mL
							2,2-Dichloropropane	250 ug/mL
							2-Chlorotoluene	250 ug/mL
							2-Methyl-2-propanol	2500 ug/mL
							3-Chloro-1-propene	250 ug/mL
							4-Chlorotoluene	250 ug/mL
							4-Isopropyltoluene	250 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzene	250 ug/mL
							Bromobenzene	250 ug/mL
							Bromochloromethane	250 ug/mL
							Bromodichloromethane	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
..VOA8260KET1ST_00136	12/31/21		Restek, Lot A0143988		(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_00096	06/30/21		Restek, Lot A0143774		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	2500 ug/mL
							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
VOABFB25_00121							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Xylenes, Total	
					VOABFB50_00125	5 mL	BFB	25 ug/mL
.VOABFB50_00125	04/18/20	03/18/20	Methanol, Lot 3167189	50 mL	VOABFBRES_00093	1 mL	BFB	50 ug/mL
..VOABFBRES_00093	04/30/24		Restek, Lot A0147670		(Purchased Reagent)		BFB	2500 ug/mL
voaWKetmix1st_00024	04/04/20	03/04/20	Methanol, Lot 3167192	50 mL	VOA8260KET1ST_00142	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_00142	12/31/21		Restek, Lot A0143988		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL

Reagent

VOA8260GAS1ST_00293

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569722 **Lot No.:** A0154679

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

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

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

Expiration Date : November 30, 2022 **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 00012554) **Purity** 99%	2,502.7 µg/mL	+/- 18.2705 µg/mL +/- 140.7566 µg/mL +/- 144.0300 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.3 µg/mL	+/- 18.7547 µg/mL +/- 140.6865 µg/mL +/- 143.9553 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,501.1 µg/mL	+/- 18.5858 µg/mL +/- 140.7083 µg/mL +/- 143.9787 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,497.1 µg/mL	+/- 17.5808 µg/mL +/- 140.3628 µg/mL +/- 143.6309 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.8 µg/mL	+/- 23.3138 µg/mL +/- 141.3956 µg/mL +/- 144.6498 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,499.0 µg/mL	+/- 21.4252 µg/mL +/- 140.9973 µg/mL +/- 144.2558 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,499.6 µg/mL	+/-	21.2368	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot 25931)		+/-	141.0019	µg/mL	Unstressed
	Purity 99%			+/-	144.2618	µg/mL	Stressed

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

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

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

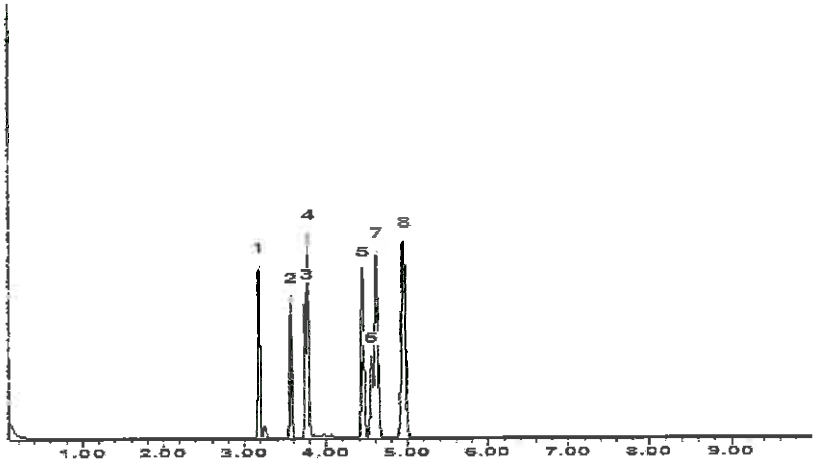
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 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.

Tom Suckar - Mix Technician

Date Mixed: 04-Nov-2019 **Balance:** B707717271

Date Passed: 10-Nov-2019

Manufactured under Restek's ISO 9001:2015
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 17034 and Guide 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VOA8260GAS2ND_00299

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CERTIFIED REFERENCE MATERIAL

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ACCREDITED ISO 17034 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. : 569722.SEC **Lot No.:** A0148330

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

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

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

Expiration Date : April 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 25587) **Purity** 99%	2,513.2 µg/mL	+/- 19.3767 µg/mL +/- 141.4861 µg/mL +/- 144.7702 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,505.2 µg/mL	+/- 20.4180 µg/mL +/- 141.1888 µg/mL +/- 144.4589 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,524.8 µg/mL	+/- 17.9317 µg/mL +/- 141.9344 µg/mL +/- 145.2382 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 24033) **Purity** 99%	2,521.5 µg/mL	+/- 17.6825 µg/mL +/- 141.7249 µg/mL +/- 145.0252 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	2,505.9 µg/mL	+/- 24.7917 µg/mL +/- 141.9274 µg/mL +/- 145.1827 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,507.1 µg/mL	+/- 24.1112 µg/mL +/- 141.8739 µg/mL +/- 145.1334 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 * (Lot 7978700) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,507.2 µg/mL	+/-	21.4957	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)		+/-	141.4611	µg/mL	Unstressed
	Purity 99%			+/-	144.7303	µg/mL	Stressed

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

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

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

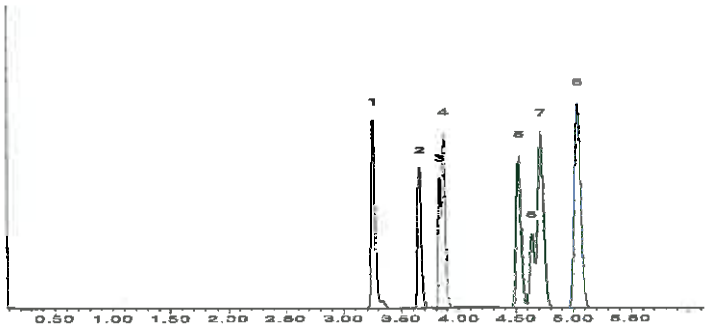
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Lane Kibe - Mix Technician

Date Mixed: 18-Apr-2019 **Balance:** 1128342314

Date Passed: 30-Apr-2019

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VOA8260INTRES_00159

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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.:** A0145169

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

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

Expiration Date : January 31, 2024 **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 (Lot CD-107) **Purity** 98%	5,044.0 µg/mL	+/- 29.3246 µg/mL +/- 107.9918 µg/mL +/- 111.1314 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 (Lot M-276) **Purity** 99%	1,254.2 µg/mL	+/- 7.2922 µg/mL +/- 26.8533 µg/mL +/- 27.6340 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 (Lot BCBK8171V) **Purity** 99%	252.1 µg/mL	+/- 1.4689 µg/mL +/- 5.3977 µg/mL +/- 5.5545 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 (Lot I-19942) **Purity** 99%	5,027.8 µg/mL	+/- 29.2304 µg/mL +/- 107.6448 µg/mL +/- 110.7743 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-23926) **Purity** 99%	250.6 µg/mL	+/- 1.4603 µg/mL +/- 5.3661 µg/mL +/- 5.5220 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	251.6 µg/mL	+/- 1.4660 µg/mL +/- 5.3871 µg/mL +/- 5.5436 µg/mL	Gravimetric Unstressed Stressed

Reagent

VOA8260INTRES_00162

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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. : 568718 **Lot No.:** A0145169

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

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

Expiration Date : January 31, 2024 **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 (Lot CD-107) **Purity** 98%	5,044.0 µg/mL	+/- 29.3246 µg/mL +/- 107.9918 µg/mL +/- 111.1314 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 (Lot M-276) **Purity** 99%	1,254.2 µg/mL	+/- 7.2922 µg/mL +/- 26.8533 µg/mL +/- 27.6340 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 (Lot BCBK8171V) **Purity** 99%	252.1 µg/mL	+/- 1.4689 µg/mL +/- 5.3977 µg/mL +/- 5.5545 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 (Lot I-19942) **Purity** 99%	5,027.8 µg/mL	+/- 29.2304 µg/mL +/- 107.6448 µg/mL +/- 110.7743 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-23926) **Purity** 99%	250.6 µg/mL	+/- 1.4603 µg/mL +/- 5.3661 µg/mL +/- 5.5220 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	251.6 µg/mL	+/- 1.4660 µg/mL +/- 5.3871 µg/mL +/- 5.5436 µg/mL	Gravimetric Unstressed Stressed

Reagent

VOA8260KET1ST_00136

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Certificate 43222.01

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Certificate 43222.02

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. : 569721 **Lot No.:** A0143988

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

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

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

Expiration Date : December 31, 2021 **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 SHBJ7699)	12,500.5 µg/mL	+/- 72.6790 µg/mL +/- 754.2106 µg/mL +/- 756.0012 µg/mL		Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 **Purity** 99%	(Lot SHBF2461V)	12,501.0 µg/mL	+/- 72.6819 µg/mL +/- 754.2407 µg/mL +/- 756.0314 µg/mL		Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 **Purity** 99%	(Lot SHBH8930)	12,501.5 µg/mL	+/- 72.6848 µg/mL +/- 754.2709 µg/mL +/- 756.0617 µg/mL		Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 **Purity** 99%	(Lot MKCD9048)	12,501.8 µg/mL	+/- 72.6863 µg/mL +/- 754.2860 µg/mL +/- 756.0768 µg/mL		Gravimetric Unstressed Stressed

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

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

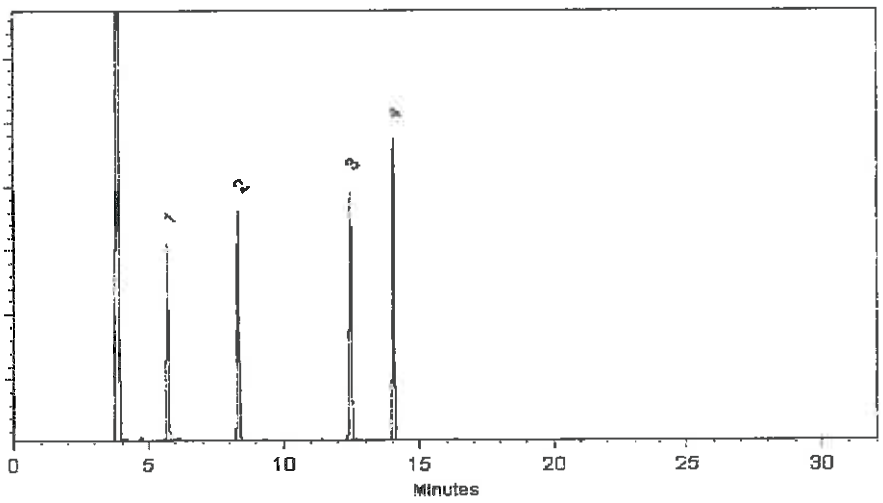
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°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.

F. Joseph Fallon - Mix Technician

Date Mixed: 11-Dec-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 14-Dec-2018

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VOA8260KET1ST_00142

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 17034 Accredited
Reference Material Producer
Certificate 43222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate 43222.02

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. : 569721 **Lot No.:** A0143988

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

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

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

Expiration Date : December 31, 2021 **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 SHBJ7699)	12,500.5 µg/mL	+/- 72.6790 µg/mL +/- 754.2106 µg/mL +/- 756.0012 µg/mL		Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 **Purity** 99%	(Lot SHBF2461V)	12,501.0 µg/mL	+/- 72.6819 µg/mL +/- 754.2407 µg/mL +/- 756.0314 µg/mL		Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 **Purity** 99%	(Lot SHBH8930)	12,501.5 µg/mL	+/- 72.6848 µg/mL +/- 754.2709 µg/mL +/- 756.0617 µg/mL		Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 **Purity** 99%	(Lot MKCD9048)	12,501.8 µg/mL	+/- 72.6863 µg/mL +/- 754.2860 µg/mL +/- 756.0768 µg/mL		Gravimetric Unstressed Stressed

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

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

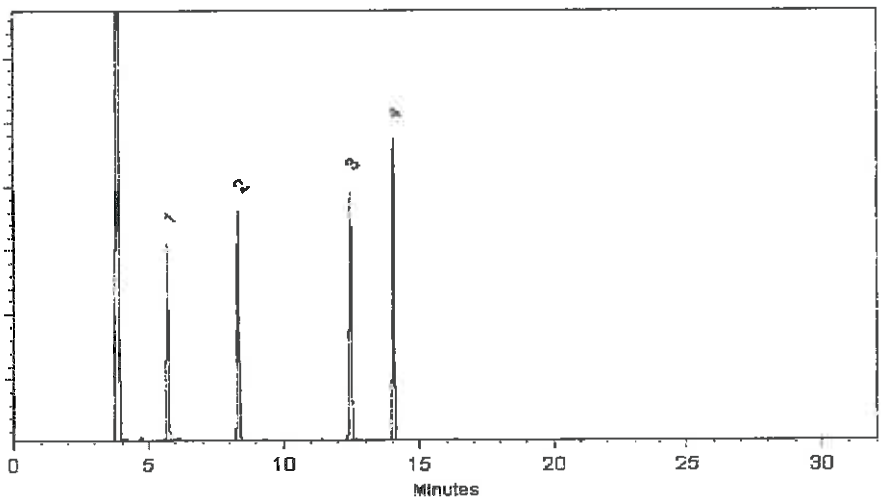
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°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.

F. Joseph Fallon - Mix Technician

Date Mixed: 11-Dec-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 14-Dec-2018

Manufactured under Restek's ISO 9001:2015 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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- 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.

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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:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VOA8260MEGA1_00096

RESTEK
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Bellefonte, PA 16823-8812
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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
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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.:** A0143774

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

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : June 30, 2021 **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 SHBJ5713) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,501.6 µg/mL	+/- 14.5447 µg/mL +/- 150.9341 µg/mL +/- 151.2925 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,501.9 µg/mL	+/- 14.5461 µg/mL +/- 150.9492 µg/mL +/- 151.3076 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBJ9404) **Purity** 99%	25,008.1 µg/mL	+/- 145.3918 µg/mL +/- 1,508.8503 µg/mL +/- 1,512.4325 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.8 µg/mL	+/- 29.0748 µg/mL +/- 301.7174 µg/mL +/- 302.4337 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBH4362V) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot WXBB7852V) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 µg/mL +/- 150.9567 µg/mL +/- 151.3151 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot R15D047)			+/-	1,508.9860	µg/mL	Unstressed
	Purity 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	Purity 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	Purity 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBJ2110)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBJ2424)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBJ0707)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBJ5344)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot SHBJ0457)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot BCBR0882V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBJ7415)	50,001.1	µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 99%	(Lot 10201030)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 25076)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBJ5659)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot 69796APV)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 98%	(Lot C797620)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBH9691)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	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	(Lot WXBC5147V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBS7648V)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
58	2-Chlorotoluene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
59	4-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,499.9	µg/mL	+/-	14.5348	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBH5027V)			+/-	150.8320	µg/mL	Unstressed
	Purity 97%				+/-	151.1901	µg/mL	Stressed
62	sec-Butylbenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKBV3556V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
66	n-Butylbenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBG3111V)			+/-	151.0095	µg/mL	Unstressed
	Purity 99%				+/-	151.3681	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.1	µg/mL	+/-	14.5476	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	150.9643	µg/mL	Unstressed
	Purity 99%				+/-	151.3227	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
71	Naphthalene		2,502.8	µg/mL	+/-	14.5512	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	151.0020	µg/mL	Unstressed
	Purity 99%				+/-	151.3605	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	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)

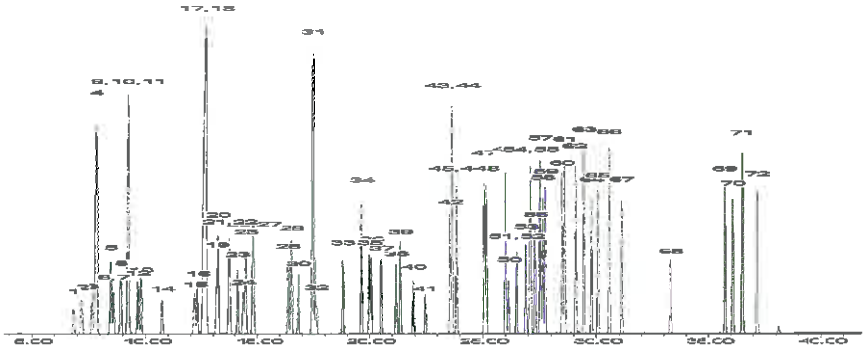
Carrier Gas:
helium-constant pressure 30 psi

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 Tation - Mix Technician

Date Mixed: 05-Dec-2018 **Balance:** B251644995

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
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 17034 and Guide 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VOA8260MEGA2_00099

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 17034 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.SEC **Lot No.:** A0144202

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

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : June 30, 2021 **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%	2,517.0 µg/mL	+/- 14.6339 µg/mL +/- 151.8598 µg/mL +/- 152.2203 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 µg/mL +/- 151.2383 µg/mL +/- 151.5974 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,503.3 µg/mL	+/- 14.5546 µg/mL +/- 151.0372 µg/mL +/- 151.3958 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.8 µg/mL	+/- 145.3491 µg/mL +/- 1,508.4071 µg/mL +/- 1,511.9883 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,002.3 µg/mL	+/- 29.0840 µg/mL +/- 301.8129 µg/mL +/- 302.5295 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,503.5 µg/mL	+/- 14.5556 µg/mL +/- 151.0472 µg/mL +/- 151.4059 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,511.7 µg/mL	+/- 14.6030 µg/mL +/- 151.5400 µg/mL +/- 151.8998 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
9	Carbon disulfide		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
10	Acrylonitrile		25,001.2	µg/mL	+/-	145.3513	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL)			+/-	1,508.4304	µg/mL	Unstressed
	Purity 99%				+/-	1,512.0117	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
13	n-Hexane (C6)		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot K24W001)			+/-	151.0320	µg/mL	Unstressed
	Purity 97%				+/-	151.3905	µg/mL	Stressed
14	1,1-Dichloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5379000)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
15	2,2-Dichloropropane		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	151.0320	µg/mL	Unstressed
	Purity 98%				+/-	151.3905	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,501.0	µg/mL	+/-	14.5409	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TS5UB)			+/-	150.8954	µg/mL	Unstressed
	Purity 97%				+/-	151.2537	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,508.3	µg/mL	+/-	363.4098	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot PH2XK)			+/-	3,771.4029	µg/mL	Unstressed
	Purity 99%				+/-	3,780.3569	µg/mL	Stressed
18	Chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 5670200)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
20	Tetrahydrofuran		5,006.7	µg/mL	+/-	29.1092	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 8DAOJ)			+/-	302.0744	µg/mL	Unstressed
	Purity 99%				+/-	302.7916	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,507.7	µg/mL	+/-	14.5798	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 7998000)			+/-	151.2986	µg/mL	Unstressed
	Purity 99%				+/-	151.6579	µg/mL	Stressed
22	Cyclohexane		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	151.3188	µg/mL	Unstressed
	Purity 99%				+/-	151.6780	µg/mL	Stressed
23	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5492	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 5221100)			+/-	150.9809	µg/mL	Unstressed
	Purity 96%				+/-	151.3393	µg/mL	Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,510.3	µg/mL	+/- 14.5953 +/- 151.4595 +/- 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot TFHUC)	2,511.8	µg/mL	+/- 14.6040 +/- 151.5500 +/- 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,501.3	µg/mL	+/- 14.5430 +/- 150.9165 +/- 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,504.8	µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,508.7	µg/mL	+/- 14.5856 +/- 151.3590 +/- 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot Q02QG)	2,504.5	µg/mL	+/- 14.5614 +/- 151.1076 +/- 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot ERRBI-RH)	2,504.0	µg/mL	+/- 14.5585 +/- 151.0774 +/- 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot YVP2C)	50,008.0	µg/mL	+/- 290.7356 +/- 3,017.2028 +/- 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,509.5	µg/mL	+/- 14.5904 +/- 151.4093 +/- 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,508.8	µg/mL	+/- 14.5866 +/- 151.3690 +/- 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 96%	(Lot ZDMSL)	2,502.9	µg/mL	+/- 14.5520 +/- 151.0098 +/- 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	(Lot 7871500)	2,502.5	µg/mL	+/- 14.5498 +/- 150.9869 +/- 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,502.7	µg/mL	+/- 14.5507 +/- 150.9970 +/- 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,505.0	µg/mL	+/- 14.5643 +/- 151.1378 +/- 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane		2,502.4	µg/mL	+/-	14.5494	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10206360)			+/-	150.9832	µg/mL	Unstressed
	Purity 97%				+/-	151.3417	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
42	Chlorobenzene		2,504.8	µg/mL	+/-	14.5633	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	151.1277	µg/mL	Unstressed
	Purity 99%				+/-	151.4865	µg/mL	Stressed
43	m-Xylene		1,251.7	µg/mL	+/-	7.2941	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	75.5202	µg/mL	Unstressed
	Purity 99%				+/-	75.6995	µg/mL	Stressed
44	p-Xylene		1,253.7	µg/mL	+/-	7.3058	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/-	75.6409	µg/mL	Unstressed
	Purity 99%				+/-	75.8205	µg/mL	Stressed
45	Ethylbenzene		2,503.5	µg/mL	+/-	14.5556	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	151.0472	µg/mL	Unstressed
	Purity 99%				+/-	151.4059	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
47	o-Xylene		2,504.2	µg/mL	+/-	14.5594	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01)			+/-	151.0875	µg/mL	Unstressed
	Purity 99%				+/-	151.4462	µg/mL	Stressed
48	Styrene		2,507.2	µg/mL	+/-	14.5769	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/-	151.2685	µg/mL	Unstressed
	Purity 99%				+/-	151.6276	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,505.2	µg/mL	+/-	14.5653	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)			+/-	151.1478	µg/mL	Unstressed
	Purity 99%				+/-	151.5067	µg/mL	Stressed
50	Bromoform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5461400)			+/-	150.8661	µg/mL	Unstressed
	Purity 97%				+/-	151.2243	µg/mL	Stressed
51	Bromodichloromethane		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,505.7	µg/mL	+/-	14.5682	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot GUHZN)			+/-	151.1780	µg/mL	Unstressed
	Purity 99%				+/-	151.5369	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,514.2	µg/mL	+/-	14.6177	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)			+/-	151.6922	µg/mL	Unstressed
	Purity 98%				+/-	152.0524	µg/mL	Stressed
55	n-Propylbenzene		2,503.7	µg/mL	+/-	14.5565	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC)			+/-	151.0573	µg/mL	Unstressed
	Purity 99%				+/-	151.4159	µg/mL	Stressed

56	Bromobenzene		2,506.2	µg/mL	+/-	14.5711	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	151.2081	µg/mL	Unstressed
	Purity 99%				+/-	151.5671	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%				+/-	151.7990	µg/mL	Stressed
58	2-Chlorotoluene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
59	4-Chlorotoluene		2,509.2	µg/mL	+/-	14.5885	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	151.3891	µg/mL	Unstressed
	Purity 99%				+/-	151.7486	µg/mL	Stressed
60	tert-Butylbenzene		2,505.8	µg/mL	+/-	14.5691	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	151.1880	µg/mL	Unstressed
	Purity 99%				+/-	151.5470	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,508.7	µg/mL	+/-	14.5856	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/-	151.3590	µg/mL	Unstressed
	Purity 99%				+/-	151.7183	µg/mL	Stressed
62	sec-Butylbenzene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 6628200)			+/-	150.8562	µg/mL	Unstressed
	Purity 99%				+/-	151.2143	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,506.3	µg/mL	+/-	14.5720	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	151.2182	µg/mL	Unstressed
	Purity 99%				+/-	151.5772	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.8	µg/mL	+/-	14.5924	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	151.4294	µg/mL	Unstressed
	Purity 99%				+/-	151.7889	µg/mL	Stressed
66	n-Butylbenzene		2,513.7	µg/mL	+/-	14.6147	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	151.6607	µg/mL	Unstressed
	Purity 99%				+/-	152.0207	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.9467	µg/mL	Unstressed
	Purity 99%				+/-	151.3051	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.5	µg/mL	+/-	14.5845	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	151.3473	µg/mL	Unstressed
	Purity 98%				+/-	151.7066	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
70	Hexachlorobutadiene		2,504.4	µg/mL	+/-	14.5607	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	151.1002	µg/mL	Unstressed
	Purity 97%				+/-	151.4590	µg/mL	Stressed
71	Naphthalene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/-	14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	151.5740	µg/mL	Unstressed
	Purity 98%			+/-	151.9338	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)

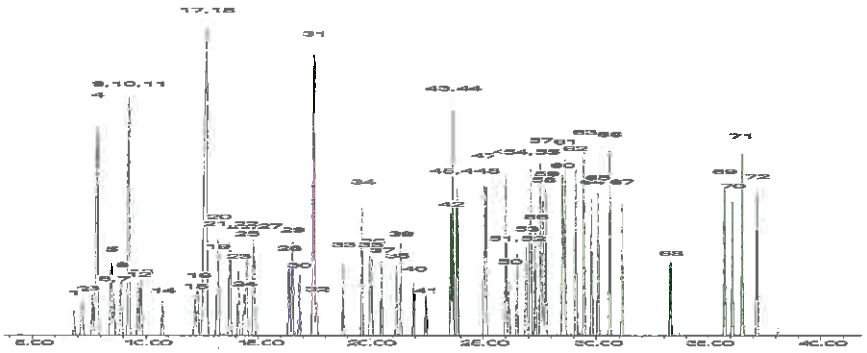
Carrier Gas:
helium-constant pressure 30 psi

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.

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2018 **Balance:** 1127510105

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
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 17034 and Guide 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VOA8260SURRES_00152

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 17034 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. : 567650 **Lot No.:** A0143613

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

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

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 **Purity** 99%	(Lot 0012017)	2,506.4 µg/mL	+/- 14.5724 µg/mL +/- 140.5314 µg/mL +/- 143.8196 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 **Purity** 99%	(Lot PR-29377)	2,503.8 µg/mL	+/- 14.5570 µg/mL +/- 140.3828 µg/mL +/- 143.6676 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 **Purity** 99%	(Lot PR-27311)	2,512.2 µg/mL	+/- 14.6059 µg/mL +/- 140.8538 µg/mL +/- 144.1496 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 **Purity** 99%	(Lot 20401KO)	2,501.8 µg/mL	+/- 14.5457 µg/mL +/- 140.2734 µg/mL +/- 143.5557 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260SURRES_00154

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 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. : 567650 **Lot No.:** A0143613

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

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

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 **Purity** 99%	(Lot 0012017)	2,506.4 µg/mL	+/- 14.5724 µg/mL +/- 140.5314 µg/mL +/- 143.8196 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 **Purity** 99%	(Lot PR-29377)	2,503.8 µg/mL	+/- 14.5570 µg/mL +/- 140.3828 µg/mL +/- 143.6676 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 **Purity** 99%	(Lot PR-27311)	2,512.2 µg/mL	+/- 14.6059 µg/mL +/- 140.8538 µg/mL +/- 144.1496 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 **Purity** 99%	(Lot 20401KO)	2,501.8 µg/mL	+/- 14.5457 µg/mL +/- 140.2734 µg/mL +/- 143.5557 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOABFBRES_00090

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate 43222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate 43222.02

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. : 30067 **Lot No.:** A0147670

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 : April 30, 2024 **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)	2,511.0 µg/mL	+/- 14.7360	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 140.8035	µg/mL	Unstressed
	Purity 99%		+/- 144.0975	µg/mL	Stressed

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

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

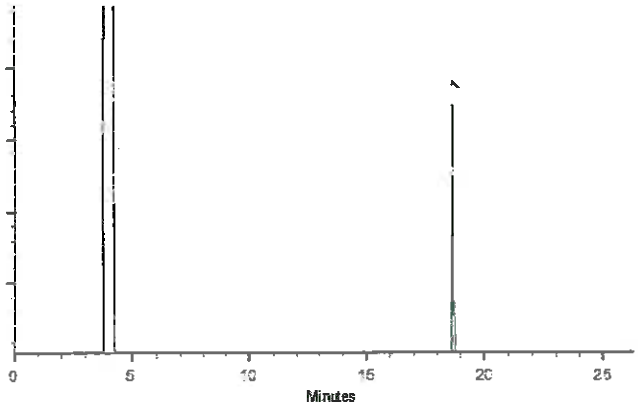
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°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.

Dustin J. Lidgett

Dustin Lidgett - Mix Technician

Date Mixed: 01-Apr-2019 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Apr-2019

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VOABFBRES_00093

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate 43222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate 43222.02

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. : 30067 **Lot No.:** A0147670

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 : April 30, 2024 **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)	2,511.0 µg/mL	+/- 14.7360	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 140.8035	µg/mL	Unstressed
	Purity 99%		+/- 144.0975	µg/mL	Stressed

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

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

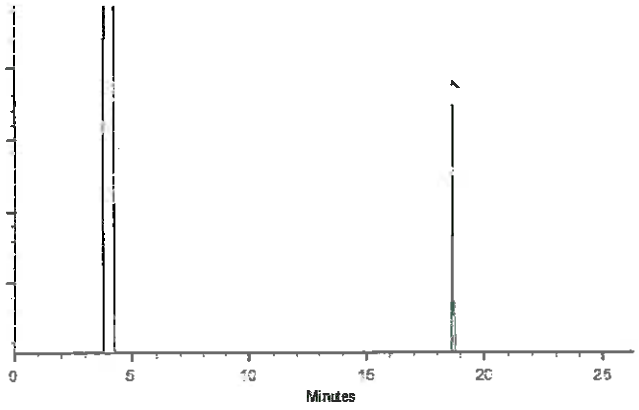
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°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.

Dustin J. Lidgett

Dustin Lidgett - Mix Technician

Date Mixed: 01-Apr-2019 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Apr-2019

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Method 8260C Low Level

Volatile Organic Compounds (GC/MS) by Method 8260C Low Level

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

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-COD-SW-6-0/1-0	180-104021-1	82	69 ^c	118	87
HD-COD-SW-7-0/1-0	180-104021-2	84	76 ^c	105	86
HD-COD-SW-8-0/1-0	180-104021-3	84	79 ^c	118	87
HD-COD-SW-9-0/1-0	180-104021-4	78	71 ^c	106	80
HD-COD-SW-13-0/1-0	180-104021-5	93	82 ^c	121 X	85
HD-COD-SW-15-0/1-0	180-104021-6	81	76 ^c	110	87
HD-COD-SW-16-0/1-0	180-104021-7	83	79	110	80
HD-COD-SW-17-0/1-0	180-104021-8	77	73	102	76
HD-COD-SW-26-0/1-0	180-104021-9	83	78	110	86
HD-COD-SW-27-0/1-0	180-104021-10	87	82	109	84
HD-COD-SW-28-0/1-0	180-104021-11	92	86	123 X	89
HD-COD-SW-29-0/1-0	180-104021-12	88	78	125 X	96
HD-QC1-0/1-1	180-104021-13	85	84	114	79
HD-QC1-0/1-2	180-104021-14	80	74 ^c	110	82
	MB 180-311669/7	79	77	108	89
	MB 180-311793/5	77	74	102	99
	MB 180-311900/6	81	74	106	82
	LCS 180-311669/5	84	74	98	96
	LCS 180-311793/3	83	75	102	117
	LCS 180-311900/11	92	92	115	118
HD-COD-SW-15-0/1-0 MS	180-104021-6 MS	78	68	102	92
HD-COD-SW-16-0/1-0 MS	180-104021-7 MS	74	69	88	103
HD-COD-SW-17-0/1-0 MS	180-104021-8 MS	94	95	106	110
HD-COD-SW-15-0/1-0 MSD	180-104021-6 MSD	80	74	102	90
HD-COD-SW-16-0/1-0 MSD	180-104021-7 MSD	76	73	91	112

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	71-132
DCA = 1,2-Dichloroethane-d4 (Surr)	62-146
TOL = Toluene-d8 (Surr)	75-120
BFB = 4-Bromofluorobenzene (Surr)	64-120

Column to be used to flag recovery values

FORM II EPA 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10033105.d

Lab ID: LCS 180-311669/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	13.2	132	37-150	
Vinyl chloride	10.0	11.9	119	50-150	
Bromomethane	10.0	8.35	83	35-150	
Chloroethane	10.0	9.65	97	52-150	
1,1-Dichloroethene	10.0	10.8	108	79-132	
Acetone	20.0	15.1	76	37-150	
Carbon disulfide	10.0	11.6	116	66-134	
Methylene Chloride	10.0	10.1	101	72-131	
trans-1,2-Dichloroethene	10.0	9.56	96	81-126	
Methyl tert-butyl ether	10.0	8.38	84	65-125	
1,1-Dichloroethane	10.0	10.4	104	70-127	
cis-1,2-Dichloroethene	10.0	10.5	105	79-119	
Bromochloromethane	10.0	8.05	80	74-124	
2-Butanone (MEK)	20.0	13.2	66	35-150	
Chloroform	10.0	10.2	102	75-126	
1,1,1-Trichloroethane	10.0	9.54	95	63-142	
Carbon tetrachloride	10.0	9.03	90	55-150	
Benzene	10.0	10.5	105	72-127	
1,2-Dichloroethane	10.0	8.46	85	60-138	
Trichloroethene	10.0	8.77	88	81-121	
1,2-Dichloropropane	10.0	11.1	111	67-124	
Bromodichloromethane	10.0	9.67	97	67-131	
cis-1,3-Dichloropropene	10.0	9.55	96	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	9.27	46	19-150	
Toluene	10.0	11.1	111	73-123	
trans-1,3-Dichloropropene	10.0	8.98	90	61-122	
1,1,2-Trichloroethane	10.0	10.6	106	72-120	
Tetrachloroethene	10.0	9.55	95	69-134	
2-Hexanone	20.0	13.0	65	24-150	
Dibromochloromethane	10.0	10.2	102	59-134	
1,2-Dibromoethane (EDB)	10.0	10.1	101	65-129	
Chlorobenzene	10.0	10.6	106	76-119	
1,1,1,2-Tetrachloroethane	10.0	10.2	102	65-132	
Ethylbenzene	10.0	11.2	112	76-118	
Xylenes, Total	20.0	21.6	108	76-116	
Styrene	10.0	10.6	106	74-118	
Bromoform	10.0	8.96	90	50-146	
1,1,2,2-Tetrachloroethane	10.0	11.1	111	57-135	
Acrylonitrile	100	80.5	81	43-149	

Column to be used to flag recovery and RPD values

FORM III EPA 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10040103.d

Lab ID: LCS 180-311793/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	10.5	105	37-150	
Vinyl chloride	10.0	11.4	114	50-150	
Bromomethane	10.0	8.37	84	35-150	
Chloroethane	10.0	9.69	97	52-150	
1,1-Dichloroethene	10.0	11.7	117	79-132	
Acetone	20.0	22.9	115	37-150	
Carbon disulfide	10.0	13.2	132	66-134	
Methylene Chloride	10.0	10.8	108	72-131	
trans-1,2-Dichloroethene	10.0	10.2	102	81-126	
Methyl tert-butyl ether	10.0	9.65	96	65-125	
1,1-Dichloroethane	10.0	11.2	112	70-127	
cis-1,2-Dichloroethene	10.0	9.96	100	79-119	
Bromochloromethane	10.0	8.81	88	74-124	
2-Butanone (MEK)	20.0	22.5	112	35-150	
Chloroform	10.0	10.1	101	75-126	
1,1,1-Trichloroethane	10.0	9.65	96	63-142	
Carbon tetrachloride	10.0	9.51	95	55-150	
Benzene	10.0	10.6	106	72-127	
1,2-Dichloroethane	10.0	9.47	95	60-138	
Trichloroethene	10.0	9.01	90	81-121	
1,2-Dichloropropane	10.0	11.1	111	67-124	
Bromodichloromethane	10.0	9.46	95	67-131	
cis-1,3-Dichloropropene	10.0	9.02	90	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	12.0	60	19-150	
Toluene	10.0	11.9	119	73-123	
trans-1,3-Dichloropropene	10.0	10.1	101	61-122	
1,1,2-Trichloroethane	10.0	11.8	118	72-120	
Tetrachloroethene	10.0	9.70	97	69-134	
2-Hexanone	20.0	20.3	102	24-150	
Dibromochloromethane	10.0	10.9	109	59-134	
1,2-Dibromoethane (EDB)	10.0	11.3	113	65-129	
Chlorobenzene	10.0	10.9	109	76-119	
1,1,1,2-Tetrachloroethane	10.0	10.4	104	65-132	
Ethylbenzene	10.0	11.6	116	76-118	
Xylenes, Total	20.0	22.0	110	76-116	
Styrene	10.0	10.9	109	74-118	
Bromoform	10.0	9.57	96	50-146	
1,1,2,2-Tetrachloroethane	10.0	12.3	123	57-135	
Acrylonitrile	100	95.3	95	43-149	

Column to be used to flag recovery and RPD values

FORM III EPA 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10040211.d

Lab ID: LCS 180-311900/11 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	8.48	85	37-150	
Vinyl chloride	10.0	8.19	82	50-150	
Bromomethane	10.0	6.52	65	35-150	
Chloroethane	10.0	6.92	69	52-150	
1,1-Dichloroethene	10.0	9.04	90	79-132	
Acetone	20.0	21.7	109	37-150	
Carbon disulfide	10.0	10.9	109	66-134	
Methylene Chloride	10.0	9.67	97	72-131	
trans-1,2-Dichloroethene	10.0	8.70	87	81-126	
Methyl tert-butyl ether	10.0	9.17	92	65-125	
1,1-Dichloroethane	10.0	9.94	99	70-127	
cis-1,2-Dichloroethene	10.0	9.09	91	79-119	
Bromochloromethane	10.0	7.95	80	74-124	
2-Butanone (MEK)	20.0	19.8	99	35-150	
Chloroform	10.0	9.51	95	75-126	
1,1,1-Trichloroethane	10.0	8.29	83	63-142	
Carbon tetrachloride	10.0	8.00	80	55-150	
Benzene	10.0	10.1	101	72-127	
1,2-Dichloroethane	10.0	8.67	87	60-138	
Trichloroethene	10.0	7.59	76	81-121	*
1,2-Dichloropropane	10.0	10.1	101	67-124	
Bromodichloromethane	10.0	8.86	89	67-131	
cis-1,3-Dichloropropene	10.0	8.90	89	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	11.2	56	19-150	
Toluene	10.0	11.3	113	73-123	
trans-1,3-Dichloropropene	10.0	9.95	100	61-122	
1,1,2-Trichloroethane	10.0	11.7	117	72-120	
Tetrachloroethene	10.0	8.97	90	69-134	
2-Hexanone	20.0	16.5	82	24-150	
Dibromochloromethane	10.0	10.6	106	59-134	
1,2-Dibromoethane (EDB)	10.0	10.8	108	65-129	
Chlorobenzene	10.0	10.1	101	76-119	
1,1,1,2-Tetrachloroethane	10.0	9.98	100	65-132	
Ethylbenzene	10.0	10.6	106	76-118	
Xylenes, Total	20.0	20.7	104	76-116	
Styrene	10.0	10.3	103	74-118	
Bromoform	10.0	9.65	97	50-146	
1,1,2,2-Tetrachloroethane	10.0	12.9	129	57-135	
Acrylonitrile	100	85.0	85	43-149	

Column to be used to flag recovery and RPD values

FORM III EPA 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10033112.d

Lab ID: 180-104021-6 MS Client ID: HD-COD-SW-15-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloromethane	10.0	ND	6.37	64	37-150	
Vinyl chloride	10.0	ND	6.62	66	50-150	
Bromomethane	10.0	ND	5.07	51	35-150	
Chloroethane	10.0	ND	5.94	59	52-150	
1,1-Dichloroethene	10.0	ND	7.58	76	79-132	F1
Acetone	20.0	ND	5.77	29	37-150	F1
Carbon disulfide	10.0	ND	7.94	79	66-134	
Methylene Chloride	10.0	ND	6.47	65	72-131	F1
trans-1,2-Dichloroethene	10.0	ND	7.34	73	81-126	F1
Methyl tert-butyl ether	10.0	ND	6.05	60	65-125	F1
1,1-Dichloroethane	10.0	ND	8.17	82	70-127	
cis-1,2-Dichloroethene	10.0	ND	8.16	82	79-119	
Bromochloromethane	10.0	ND	6.01	60	74-124	F1
2-Butanone (MEK)	20.0	ND	5.98	30	35-150	F1
Chloroform	10.0	ND	7.80	78	75-126	
1,1,1-Trichloroethane	10.0	ND	7.35	73	63-142	
Carbon tetrachloride	10.0	ND	7.17	72	55-150	
Benzene	10.0	ND	7.81	78	72-127	
1,2-Dichloroethane	10.0	ND	6.28	63	60-138	
Trichloroethene	10.0	ND	7.56	76	81-121	F1
1,2-Dichloropropane	10.0	ND	8.57	86	67-124	
Bromodichloromethane	10.0	ND	7.73	77	67-131	
cis-1,3-Dichloropropene	10.0	ND	7.75	77	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	ND	7.83	39	19-150	
Toluene	10.0	ND	9.29	93	73-123	
trans-1,3-Dichloropropene	10.0	ND	7.89	79	61-122	
1,1,2-Trichloroethane	10.0	ND	8.74	87	72-120	
Tetrachloroethene	10.0	2.2	10.3	81	69-134	
2-Hexanone	20.0	ND	7.01	35	24-150	
Dibromochloromethane	10.0	ND	8.37	84	59-134	
1,2-Dibromoethane (EDB)	10.0	ND	8.56	86	65-129	
Chlorobenzene	10.0	ND	9.20	92	76-119	
1,1,1,2-Tetrachloroethane	10.0	ND	8.83	88	65-132	
Ethylbenzene	10.0	ND	9.49	95	76-118	
Xylenes, Total	20.0	ND	19.6	98	76-116	
Styrene	10.0	ND	10.1	101	74-118	
Bromoform	10.0	ND	7.75	77	50-146	
1,1,2,2-Tetrachloroethane	10.0	ND	10.2	102	57-135	
Acrylonitrile	100	ND	56.6	57	43-149	

Column to be used to flag recovery and RPD values

FORM III EPA 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10040114.d

Lab ID: 180-104021-7 MS Client ID: HD-COD-SW-16-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloromethane	10.0	ND	6.80	68	37-150	
Vinyl chloride	10.0	ND	6.83	68	50-150	
Bromomethane	10.0	ND	5.50	55	35-150	
Chloroethane	10.0	ND	6.32	63	52-150	
1,1-Dichloroethene	10.0	ND	7.85	79	79-132	
Acetone	20.0	ND	5.76	29	37-150	F1
Carbon disulfide	10.0	ND	9.04	90	66-134	
Methylene Chloride	10.0	ND	6.90	69	72-131	F1
trans-1,2-Dichloroethene	10.0	ND	7.03	70	81-126	F1
Methyl tert-butyl ether	10.0	ND	6.58	66	65-125	
1,1-Dichloroethane	10.0	ND	7.62	76	70-127	
cis-1,2-Dichloroethene	10.0	ND	7.20	72	79-119	F1
Bromochloromethane	10.0	ND	6.33	63	74-124	F1
2-Butanone (MEK)	20.0	ND	5.09	25	35-150	F1
Chloroform	10.0	ND	6.87	69	75-126	F1
1,1,1-Trichloroethane	10.0	ND	6.84	68	63-142	
Carbon tetrachloride	10.0	ND	6.76	68	55-150	
Benzene	10.0	ND	7.68	77	72-127	
1,2-Dichloroethane	10.0	ND	6.51	65	60-138	
Trichloroethene	10.0	ND	6.32	63	81-121	F1
1,2-Dichloropropane	10.0	ND	7.81	78	67-124	
Bromodichloromethane	10.0	ND	6.90	69	67-131	
cis-1,3-Dichloropropene	10.0	ND	6.82	68	69-122	F1
4-Methyl-2-pentanone (MIBK)	20.0	ND	8.31	42	19-150	
Toluene	10.0	ND	8.36	84	73-123	
trans-1,3-Dichloropropene	10.0	ND	7.57	76	61-122	
1,1,2-Trichloroethane	10.0	ND	7.91	79	72-120	
Tetrachloroethene	10.0	ND	6.62	66	69-134	F1
2-Hexanone	20.0	ND	7.29	36	24-150	
Dibromochloromethane	10.0	ND	7.43	74	59-134	
1,2-Dibromoethane (EDB)	10.0	ND	8.06	81	65-129	
Chlorobenzene	10.0	ND	7.80	78	76-119	
1,1,1,2-Tetrachloroethane	10.0	ND	7.25	72	65-132	
Ethylbenzene	10.0	ND	8.16	82	76-118	
Xylenes, Total	20.0	ND	16.2	81	76-116	
Styrene	10.0	ND	7.93	79	74-118	
Bromoform	10.0	ND	6.87	69	50-146	
1,1,2,2-Tetrachloroethane	10.0	ND	8.91	89	57-135	
Acrylonitrile	100	ND	64.8	65	43-149	

Column to be used to flag recovery and RPD values

FORM III EPA 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10040212.d

Lab ID: 180-104021-8 MS Client ID: HD-COD-SW-17-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloromethane	10.0	ND	9.76	98	37-150	
Vinyl chloride	10.0	ND	8.62	86	50-150	
Bromomethane	10.0	ND	7.05	71	35-150	
Chloroethane	10.0	ND	7.67	77	52-150	
1,1-Dichloroethene	10.0	ND	10.0	100	79-132	
Acetone	20.0	ND	24.0	120	37-150	
Carbon disulfide	10.0	ND	11.2	112	66-134	
Methylene Chloride	10.0	ND	10.8	108	72-131	
trans-1,2-Dichloroethene	10.0	ND	8.86	89	81-126	
Methyl tert-butyl ether	10.0	ND	10.1	101	65-125	
1,1-Dichloroethane	10.0	ND	10.1	101	70-127	
cis-1,2-Dichloroethene	10.0	ND	9.49	95	79-119	
Bromochloromethane	10.0	ND	8.87	89	74-124	
2-Butanone (MEK)	20.0	ND	21.7	109	35-150	
Chloroform	10.0	ND	9.68	97	75-126	
1,1,1-Trichloroethane	10.0	ND	8.76	88	63-142	
Carbon tetrachloride	10.0	ND	8.13	81	55-150	
Benzene	10.0	ND	10.5	105	72-127	
1,2-Dichloroethane	10.0	ND	9.94	99	60-138	
Trichloroethene	10.0	ND	7.87	79	81-121	F1
1,2-Dichloropropane	10.0	ND	11.1	111	67-124	
Bromodichloromethane	10.0	ND	9.43	94	67-131	
cis-1,3-Dichloropropene	10.0	ND	9.55	96	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	ND	11.6	58	19-150	
Toluene	10.0	ND	10.6	106	73-123	
trans-1,3-Dichloropropene	10.0	ND	10.4	104	61-122	
1,1,2-Trichloroethane	10.0	ND	11.3	113	72-120	
Tetrachloroethene	10.0	ND	8.62	86	69-134	
2-Hexanone	20.0	ND	20.3	102	24-150	
Dibromochloromethane	10.0	ND	10.4	104	59-134	
1,2-Dibromoethane (EDB)	10.0	ND	10.7	107	65-129	
Chlorobenzene	10.0	ND	9.94	99	76-119	
1,1,1,2-Tetrachloroethane	10.0	ND	9.96	100	65-132	
Ethylbenzene	10.0	ND	10.4	104	76-118	
Xylenes, Total	20.0	ND	21.0	105	76-116	
Styrene	10.0	ND	10.7	107	74-118	
Bromoform	10.0	ND	10.2	102	50-146	
1,1,2,2-Tetrachloroethane	10.0	ND	12.8	128	57-135	
Acrylonitrile	100	ND	103	103	43-149	

Column to be used to flag recovery and RPD values

FORM III EPA 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10033113.d

Lab ID: 180-104021-6 MSD Client ID: HD-COD-SW-15-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloromethane	10.0	6.41	64	1	35	37-150	
Vinyl chloride	10.0	6.60	66	0	31	50-150	
Bromomethane	10.0	5.13	51	1	35	35-150	
Chloroethane	10.0	6.32	63	6	31	52-150	
1,1-Dichloroethene	10.0	7.98	80	5	29	79-132	
Acetone	20.0	5.10	25	12	35	37-150	F1
Carbon disulfide	10.0	7.77	78	2	31	66-134	
Methylene Chloride	10.0	6.71	67	4	29	72-131	F1
trans-1,2-Dichloroethene	10.0	7.19	72	2	27	81-126	F1
Methyl tert-butyl ether	10.0	6.16	62	2	28	65-125	F1
1,1-Dichloroethane	10.0	8.16	82	0	27	70-127	
cis-1,2-Dichloroethene	10.0	8.15	81	0	28	79-119	
Bromochloromethane	10.0	6.15	62	2	27	74-124	F1
2-Butanone (MEK)	20.0	6.08	30	2	34	35-150	F1
Chloroform	10.0	7.46	75	4	26	75-126	
1,1,1-Trichloroethane	10.0	7.67	77	4	28	63-142	
Carbon tetrachloride	10.0	7.24	72	1	29	55-150	
Benzene	10.0	8.10	81	4	27	72-127	
1,2-Dichloroethane	10.0	6.30	63	0	26	60-138	
Trichloroethene	10.0	7.73	77	2	28	81-121	F1
1,2-Dichloropropane	10.0	8.84	88	3	27	67-124	
Bromodichloromethane	10.0	7.92	79	2	28	67-131	
cis-1,3-Dichloropropene	10.0	7.98	80	3	29	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	7.87	39	0	33	19-150	
Toluene	10.0	9.95	100	7	31	73-123	
trans-1,3-Dichloropropene	10.0	7.93	79	0	30	61-122	
1,1,2-Trichloroethane	10.0	8.96	90	3	27	72-120	
Tetrachloroethene	10.0	10.9	88	6	27	69-134	
2-Hexanone	20.0	8.29	41	17	32	24-150	
Dibromochloromethane	10.0	8.59	86	3	28	59-134	
1,2-Dibromoethane (EDB)	10.0	8.56	86	0	27	65-129	
Chlorobenzene	10.0	9.29	93	1	25	76-119	
1,1,1,2-Tetrachloroethane	10.0	9.02	90	2	28	65-132	
Ethylbenzene	10.0	10.2	102	7	27	76-118	
Xylenes, Total	20.0	19.8	99	1	27	76-116	
Styrene	10.0	9.78	98	3	27	74-118	
Bromoform	10.0	7.73	77	0	30	50-146	
1,1,2,2-Tetrachloroethane	10.0	9.70	97	5	29	57-135	
Acrylonitrile	100	53.4	53	6	34	43-149	

Column to be used to flag recovery and RPD values

FORM III EPA 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10040115.d

Lab ID: 180-104021-7 MSD Client ID: HD-COD-SW-16-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloromethane	10.0	8.35	84	20	35	37-150	
Vinyl chloride	10.0	8.07	81	17	31	50-150	
Bromomethane	10.0	5.87	59	7	35	35-150	
Chloroethane	10.0	6.49	65	3	31	52-150	
1,1-Dichloroethene	10.0	8.81	88	11	29	79-132	
Acetone	20.0	6.59	33	13	35	37-150	F1
Carbon disulfide	10.0	10.0	100	10	31	66-134	
Methylene Chloride	10.0	8.02	80	15	29	72-131	
trans-1,2-Dichloroethene	10.0	7.54	75	7	27	81-126	F1
Methyl tert-butyl ether	10.0	8.16	82	21	28	65-125	
1,1-Dichloroethane	10.0	8.47	85	11	27	70-127	
cis-1,2-Dichloroethene	10.0	7.83	78	8	28	79-119	F1
Bromochloromethane	10.0	7.09	71	11	27	74-124	F1
2-Butanone (MEK)	20.0	8.62	43	51	34	35-150	F2
Chloroform	10.0	7.15	72	4	26	75-126	F1
1,1,1-Trichloroethane	10.0	7.24	72	6	28	63-142	
Carbon tetrachloride	10.0	7.02	70	4	29	55-150	
Benzene	10.0	8.27	83	7	27	72-127	
1,2-Dichloroethane	10.0	7.86	79	19	26	60-138	
Trichloroethene	10.0	6.50	65	3	28	81-121	F1
1,2-Dichloropropane	10.0	9.21	92	16	27	67-124	
Bromodichloromethane	10.0	7.72	77	11	28	67-131	
cis-1,3-Dichloropropene	10.0	8.29	83	19	29	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	11.0	55	28	33	19-150	
Toluene	10.0	9.14	91	9	31	73-123	
trans-1,3-Dichloropropene	10.0	9.22	92	20	30	61-122	
1,1,2-Trichloroethane	10.0	9.62	96	19	27	72-120	
Tetrachloroethene	10.0	7.62	76	14	27	69-134	
2-Hexanone	20.0	12.2	61	50	32	24-150	F2
Dibromochloromethane	10.0	8.77	88	17	28	59-134	
1,2-Dibromoethane (EDB)	10.0	9.94	99	21	27	65-129	
Chlorobenzene	10.0	8.60	86	10	25	76-119	
1,1,1,2-Tetrachloroethane	10.0	8.21	82	12	28	65-132	
Ethylbenzene	10.0	8.86	89	8	27	76-118	
Xylenes, Total	20.0	17.3	86	6	27	76-116	
Styrene	10.0	8.71	87	9	27	74-118	
Bromoform	10.0	8.94	89	26	30	50-146	
1,1,2,2-Tetrachloroethane	10.0	11.3	113	24	29	57-135	
Acrylonitrile	100	88.4	88	31	34	43-149	

Column to be used to flag recovery and RPD values

FORM III EPA 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab File ID: 10033107.d Lab Sample ID: MB 180-311669/7

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

Instrument ID: CHHP10 Date Analyzed: 03/31/2020 20:13

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 180-311669/5	10033105.d	03/31/2020 19:08
HD-COD-SW-15-0/1-0	180-104021-6	10033110.d	03/31/2020 21:36
HD-QC1-0/1-2	180-104021-14	10033111.d	03/31/2020 22:04
HD-COD-SW-15-0/1-0 MS	180-104021-6 MS	10033112.d	03/31/2020 23:00
HD-COD-SW-15-0/1-0 MSD	180-104021-6 MSD	10033113.d	03/31/2020 23:53
HD-COD-SW-6-0/1-0	180-104021-1	10033114.d	04/01/2020 00:49
HD-COD-SW-7-0/1-0	180-104021-2	10033115.d	04/01/2020 01:17
HD-COD-SW-8-0/1-0	180-104021-3	10033116.d	04/01/2020 01:45
HD-COD-SW-9-0/1-0	180-104021-4	10033117.d	04/01/2020 02:12
HD-COD-SW-13-0/1-0	180-104021-5	10033118.d	04/01/2020 02:40

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab File ID: 10040105.d Lab Sample ID: MB 180-311793/5

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

Instrument ID: CHHP10 Date Analyzed: 04/01/2020 20:31

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 180-311793/3	10040103.d	04/01/2020 19:36
HD-COD-SW-16-0/1-0 MS	180-104021-7 MS	10040114.d	04/02/2020 01:01
HD-COD-SW-16-0/1-0 MSD	180-104021-7 MSD	10040115.d	04/02/2020 01:28
HD-COD-SW-16-0/1-0	180-104021-7	10040116.d	04/02/2020 01:56
HD-COD-SW-26-0/1-0	180-104021-9	10040117.d	04/02/2020 02:24
HD-COD-SW-27-0/1-0	180-104021-10	10040118.d	04/02/2020 02:52
HD-COD-SW-28-0/1-0	180-104021-11	10040119.d	04/02/2020 03:19
HD-COD-SW-29-0/1-0	180-104021-12	10040120.d	04/02/2020 03:47
HD-QC1-0/1-1	180-104021-13	10040121.d	04/02/2020 04:15

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab File ID: 10040206.d Lab Sample ID: MB 180-311900/6

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

Instrument ID: CHHP10 Date Analyzed: 04/02/2020 17:25

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
HD-COD-SW-17-0/1-0	180-104021-8	10040207.d	04/02/2020 17:52
	LCS 180-311900/11	10040211.d	04/02/2020 19:41
HD-COD-SW-17-0/1-0 MS	180-104021-8 MS	10040212.d	04/02/2020 20:08

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab File ID: 10030501A.d BFB Injection Date: 03/05/2020

Instrument ID: CHHP10 BFB Injection Time: 07:14

Analysis Batch No.: 308976

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.5	
75	30.0 - 60.0 % of mass 95	59.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.9	(1.1) 1
174	50.0 - 120.00 % of mass 95	82.6	
175	5.0 - 9.0 % of mass 174	6.3	(7.6) 1
176	95.0 - 101.0 % of mass 174	80.7	(97.7) 1
177	5.0 - 9.0 % of mass 176	4.9	(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
	IC 180-308976/2	10030502.d	03/05/2020	07:55
	IC 180-308976/3	10030503.d	03/05/2020	08:22
	ICIS 180-308976/4	10030504.d	03/05/2020	08:50
	IC 180-308976/5	10030505.d	03/05/2020	09:18
	IC 180-308976/6	10030506.d	03/05/2020	09:46
	IC 180-308976/7	10030507.d	03/05/2020	10:16
	IC 180-308976/8	10030508.d	03/05/2020	10:44
	IC 180-308976/9	10030509.d	03/05/2020	11:12

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab File ID: 10033103.d BFB Injection Date: 03/31/2020

Instrument ID: CHHP10 BFB Injection Time: 18:00

Analysis Batch No.: 311669

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.4	
75	30.0 - 60.0 % of mass 95	49.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.8	
173	Less than 2.0 % of mass 174	0.5	(0.7) 1
174	50.0 - 120.00 % of mass 95	71.3	
175	5.0 - 9.0 % of mass 174	5.6	(7.9) 1
176	95.0 - 101.0 % of mass 174	70.1	(98.3) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.6) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-311669/4	10033104.d	03/31/2020	18:40
	LCS 180-311669/5	10033105.d	03/31/2020	19:08
	MB 180-311669/7	10033107.d	03/31/2020	20:13
HD-COD-SW-15-0/1-0	180-104021-6	10033110.d	03/31/2020	21:36
HD-QC1-0/1-2	180-104021-14	10033111.d	03/31/2020	22:04
HD-COD-SW-15-0/1-0 MS	180-104021-6 MS	10033112.d	03/31/2020	23:00
HD-COD-SW-15-0/1-0 MSD	180-104021-6 MSD	10033113.d	03/31/2020	23:53
HD-COD-SW-6-0/1-0	180-104021-1	10033114.d	04/01/2020	00:49
HD-COD-SW-7-0/1-0	180-104021-2	10033115.d	04/01/2020	01:17
HD-COD-SW-8-0/1-0	180-104021-3	10033116.d	04/01/2020	01:45
HD-COD-SW-9-0/1-0	180-104021-4	10033117.d	04/01/2020	02:12
HD-COD-SW-13-0/1-0	180-104021-5	10033118.d	04/01/2020	02:40

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab File ID: 10040101A.d BFB Injection Date: 04/01/2020

Instrument ID: CHHP10 BFB Injection Time: 18:24

Analysis Batch No.: 311793

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.7	
75	30.0 - 60.0 % of mass 95	50.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.1	
173	Less than 2.0 % of mass 174	1.2	(1.8) 1
174	50.0 - 120.00 % of mass 95	70.0	
175	5.0 - 9.0 % of mass 174	5.0	(7.1) 1
176	95.0 - 101.0 % of mass 174	69.0	(98.5) 1
177	5.0 - 9.0 % of mass 176	5.1	(7.5) 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 180-311793/2	10040102.d	04/01/2020	19:08
	LCS 180-311793/3	10040103.d	04/01/2020	19:36
	MB 180-311793/5	10040105.d	04/01/2020	20:31
HD-COD-SW-16-0/1-0 MS	180-104021-7 MS	10040114.d	04/02/2020	01:01
HD-COD-SW-16-0/1-0 MSD	180-104021-7 MSD	10040115.d	04/02/2020	01:28
HD-COD-SW-16-0/1-0	180-104021-7	10040116.d	04/02/2020	01:56
HD-COD-SW-26-0/1-0	180-104021-9	10040117.d	04/02/2020	02:24
HD-COD-SW-27-0/1-0	180-104021-10	10040118.d	04/02/2020	02:52
HD-COD-SW-28-0/1-0	180-104021-11	10040119.d	04/02/2020	03:19
HD-COD-SW-29-0/1-0	180-104021-12	10040120.d	04/02/2020	03:47
HD-QC1-0/1-1	180-104021-13	10040121.d	04/02/2020	04:15

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab File ID: 10040202.d BFB Injection Date: 04/02/2020

Instrument ID: CHHP10 BFB Injection Time: 15:36

Analysis Batch No.: 311900

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.6	
75	30.0 - 60.0 % of mass 95	52.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	74.9	
175	5.0 - 9.0 % of mass 174	5.2	(7.0) 1
176	95.0 - 101.0 % of mass 174	72.0	(96.1) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.3) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-311900/3	10040203.d	04/02/2020	16:04
	MB 180-311900/6	10040206.d	04/02/2020	17:25
HD-COD-SW-17-0/1-0	180-104021-8	10040207.d	04/02/2020	17:52
	LCS 180-311900/11	10040211.d	04/02/2020	19:41
HD-COD-SW-17-0/1-0 MS	180-104021-8 MS	10040212.d	04/02/2020	20:08

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Sample No.: CCVIS 180-311669/4 Date Analyzed: 03/31/2020 18:40

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 10033104.d Heated Purge: (Y/N) N

Calibration ID: 42998

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		74225	3.94	440323	7.01	84506	10.13
UPPER LIMIT		148450	4.44	880646	7.51	169012	10.63
LOWER LIMIT		37113	3.44	220162	6.51	42253	9.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-311669/5		59246	3.96	403780	7.01	79699	10.13
MB 180-311669/7		117816	3.96	576312	7.02	93522	10.13
180-104021-6	HD-COD-SW-15-0/1-0	100857	3.96	518164	7.02	87964	10.14
180-104021-14	HD-QC1-0/1-2	72539	3.96	531188	7.01	85321	10.14
180-104021-6 MS	HD-COD-SW-15-0/1-0 MS	83251	3.96	538297	7.00	104022	10.13
180-104021-6 MSD	HD-COD-SW-15-0/1-0 MSD	72599	3.95	564759	7.01	108894	10.13
180-104021-1	HD-COD-SW-6-0/1-0	70614	3.95	499874	7.01	81792	10.13
180-104021-2	HD-COD-SW-7-0/1-0	114050	3.96	551267	7.01	96480	10.13
180-104021-3	HD-COD-SW-8-0/1-0	98512	3.96	517704	7.00	83679	10.13
180-104021-4	HD-COD-SW-9-0/1-0	86998	3.96	523751	7.02	88158	10.13
180-104021-5	HD-COD-SW-13-0/1-0	94891	3.96	437025	7.00	74355	10.14

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 EPA 8260C

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Sample No.: CCVIS 180-311669/4 Date Analyzed: 03/31/2020 18:40

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 10033104.d Heated Purge: (Y/N) N

Calibration ID: 42998

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		116933	12.47				
UPPER LIMIT		233866	12.97				
LOWER LIMIT		58467	11.97				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-311669/5		119726	12.47				
MB 180-311669/7		109132	12.48				
180-104021-6	HD-COD-SW-15-0/1-0	94138	12.49				
180-104021-14	HD-QC1-0/1-2	83929	12.48				
180-104021-6 MS	HD-COD-SW-15-0/1-0 MS	156224	12.47				
180-104021-6 MSD	HD-COD-SW-15-0/1-0 MSD	157101	12.47				
180-104021-1	HD-COD-SW-6-0/1-0	84318	12.48				
180-104021-2	HD-COD-SW-7-0/1-0	99805	12.48				
180-104021-3	HD-COD-SW-8-0/1-0	93327	12.48				
180-104021-4	HD-COD-SW-9-0/1-0	88379	12.49				
180-104021-5	HD-COD-SW-13-0/1-0	74254	12.49				

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 EPA 8260C

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Sample No.: CCVIS 180-311793/2 Date Analyzed: 04/01/2020 19:08

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 10040102.d Heated Purge: (Y/N) N

Calibration ID: 42998

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		76427	3.95	378523	7.00	74684	10.13
UPPER LIMIT		152854	4.45	757046	7.50	149368	10.63
LOWER LIMIT		38214	3.45	189262	6.50	37342	9.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-311793/3		67953	3.95	377586	7.01	71791	10.13
MB 180-311793/5		147986	3.96	596686	7.01	94367	10.13
180-104021-7 MS	HD-COD-SW-16-0/1-0 MS	102568	3.95	572410	7.00	109343	10.13
180-104021-7 MSD	HD-COD-SW-16-0/1-0 MSD	164646*3	3.96	608271	7.00	113958	10.13
180-104021-7	HD-COD-SW-16-0/1-0	122864	3.96	526399	7.01	88318	10.14
180-104021-9	HD-COD-SW-26-0/1-0	101096	3.96	492184	7.01	81247	10.13
180-104021-10	HD-COD-SW-27-0/1-0	102941	3.95	452910	7.00	75579	10.13
180-104021-11	HD-COD-SW-28-0/1-0	84865	3.96	448601	7.01	76080	10.13
180-104021-12	HD-COD-SW-29-0/1-0	77578	3.96	454545	7.02	69509	10.13
180-104021-13	HD-QC1-0/1-1	114493	3.95	489288	7.01	83803	10.14

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 EPA 8260C

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Sample No.: CCVIS 180-311793/2 Date Analyzed: 04/01/2020 19:08

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 10040102.d Heated Purge: (Y/N) N

Calibration ID: 42998

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		123596	12.47				
UPPER LIMIT		247192	12.97				
LOWER LIMIT		61798	11.97				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-311793/3		107291	12.47				
MB 180-311793/5		112174	12.48				
180-104021-7 MS	HD-COD-SW-16-0/1-0 MS	170167	12.47				
180-104021-7 MSD	HD-COD-SW-16-0/1-0 MSD	178919	12.47				
180-104021-7	HD-COD-SW-16-0/1-0	93481	12.48				
180-104021-9	HD-COD-SW-26-0/1-0	77639	12.48				
180-104021-10	HD-COD-SW-27-0/1-0	74545	12.48				
180-104021-11	HD-COD-SW-28-0/1-0	68239	12.48				
180-104021-12	HD-COD-SW-29-0/1-0	72371	12.48				
180-104021-13	HD-QC1-0/1-1	79675	12.49				

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 EPA 8260C

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Sample No.: CCVIS 180-311900/3 Date Analyzed: 04/02/2020 16:04

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 10040203.d Heated Purge: (Y/N) N

Calibration ID: 42998

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		61879	3.96	400665	7.01	77084	10.13
UPPER LIMIT		123758	4.46	801330	7.51	154168	10.63
LOWER LIMIT		30940	3.46	200333	6.51	38542	9.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-311900/6		105300	3.96	569942	7.01	89639	10.14
180-104021-8	HD-COD-SW-17-0/1-0	119593	3.96	558241	7.00	94042	10.13
LCS 180-311900/11		58390	3.96	366466	7.00	65194	10.13

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 EPA 8260C

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Sample No.: CCVIS 180-311900/3 Date Analyzed: 04/02/2020 16:04

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 10040203.d Heated Purge: (Y/N) N

Calibration ID: 42998

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		111758	12.47				
UPPER LIMIT		223516	12.97				
LOWER LIMIT		55879	11.97				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-311900/6		101945	12.48				
180-104021-8	HD-COD-SW-17-0/1-0	106114	12.48				
LCS 180-311900/11		109347	12.47				

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 EPA 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 180-104021-1

Matrix: Water Lab File ID: 10033114.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 11:45

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 00:49

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND	^c	5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 180-104021-1

Matrix: Water Lab File ID: 10033114.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 11:45

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 00:49

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	69	^c	62-146
2037-26-5	Toluene-d8 (Surr)	118		75-120
460-00-4	4-Bromofluorobenzene (Surr)	87		64-120
1868-53-7	Dibromofluoromethane (Surr)	82		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033114.d
Lims ID: 180-104021-A-1
Client ID: HD-COD-SW-6-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2020 00:49:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-014
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 16:56:07 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: journetp Date: 01-Apr-2020 16:53:48

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.951	3.957	-0.006	0	70614	1000.0	
*	2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	499874	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	88	81792	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	97	84318	50.0	
$	5 Dibromofluoromethane (Surr	113	6.275	6.281	-0.006	92	132661	41.0	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	128164	34.4	
$	7 Toluene-d8 (Surr)	98	8.674	8.675	-0.001	93	630812	58.9	
$	8 4-Bromofluorobenzene (Surr	95	11.321	11.316	0.005	82	161340	43.6	
$	9 BFB	95	11.321	11.316	0.005	0	161340	NR	
	37 Isopropyl alcohol	45	3.963	3.987	-0.024	26	2162	NC	
	45 Ethyl acetate	43	5.669	5.598	0.071	1	80	NC	
	58 Tert-amyl methyl ether	73	7.004	7.075	-0.071	37	6927	NC	
	57 Isooctane	57	7.010	7.145	-0.135	39	13736	NC	
	116 Naphthalene	128	14.733	14.727	0.006	91	4298	1.97	
	117 1,2,3-Trichlorobenzene	180	14.951	14.939	0.012	88	4945	4.11	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

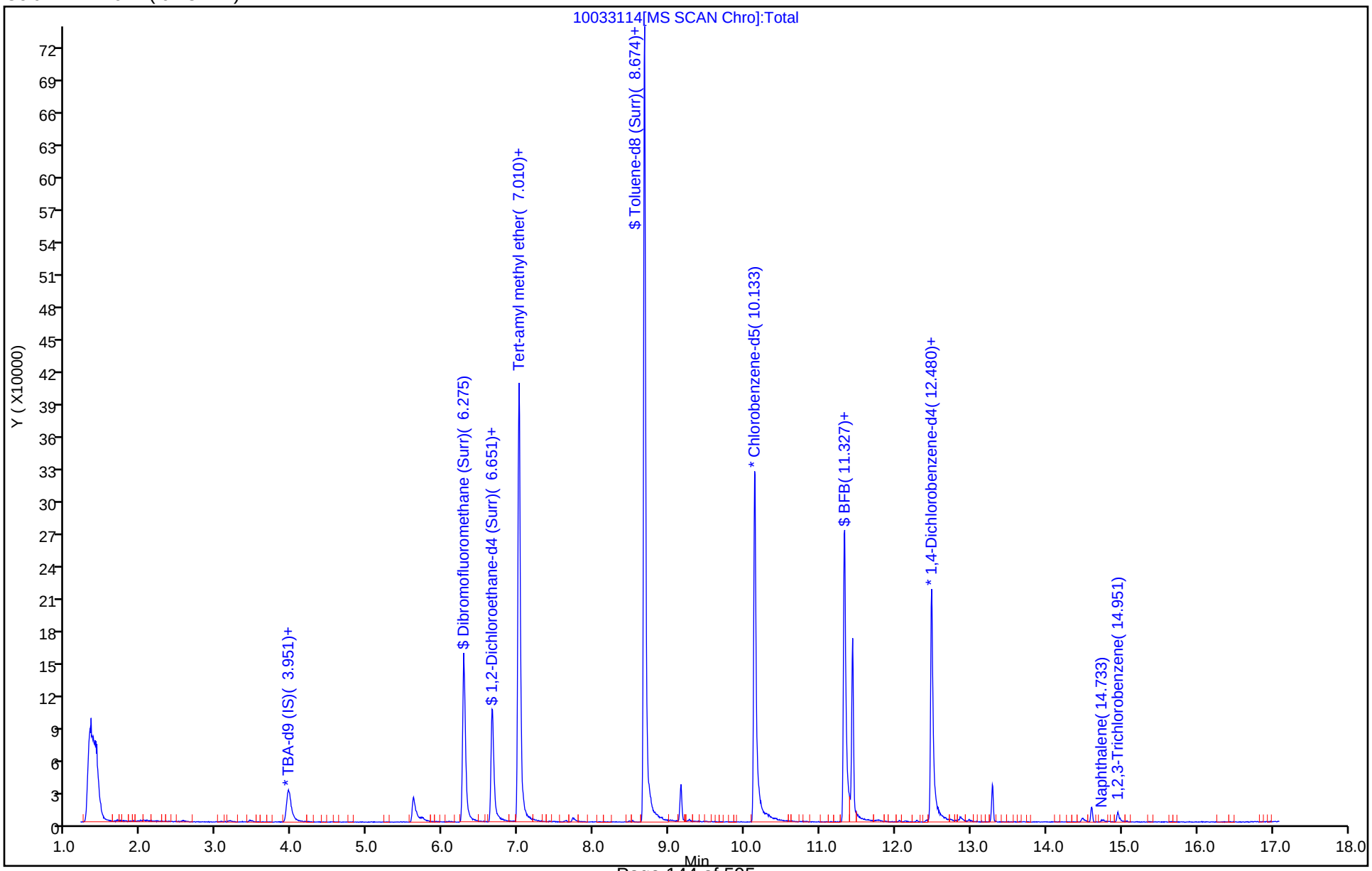
Report Date: 01-Apr-2020 18:09:15 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033114.d

Injection Date:	01-Apr-2020 00:49:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-A-1	Lab Sample ID:	180-104021-1	Worklist Smp#:	14
Client ID:	HD-COD-SW-6-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033114.d
Lims ID: 180-104021-A-1
Client ID: HD-COD-SW-6-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2020 00:49:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-014
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 16:56:07 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: journetp Date: 01-Apr-2020 16:53:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	41.0	81.91
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	34.4	68.90
$ 7 Toluene-d8 (Surr)	50.0	58.9	117.87
$ 8 4-Bromofluorobenzene (Surr)	50.0	43.6	87.25

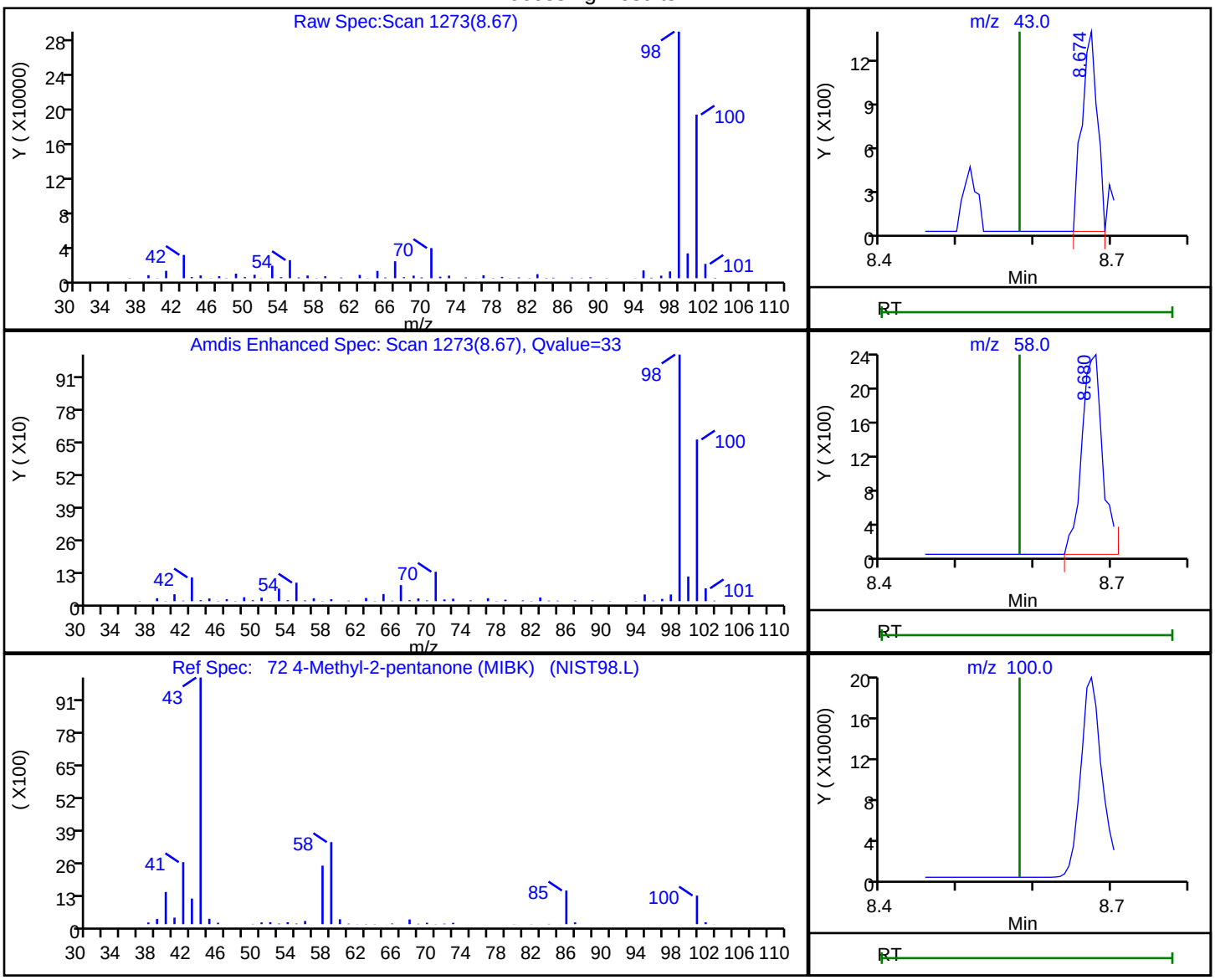
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033114.d				
Injection Date:	01-Apr-2020 00:49:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-A-1	Lab Sample ID:	180-104021-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	034635	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.67	43.00	1847	9.647502
8.68	58.00	4284	
8.67	100.00	406714	

Reviewer: journetp, 01-Apr-2020 16:53:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 180-104021-2

Matrix: Water Lab File ID: 10033115.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:30

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 01:17

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND	^c	5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 180-104021-2

Matrix: Water Lab File ID: 10033115.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:30

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 01:17

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	76	^c	62-146
2037-26-5	Toluene-d8 (Surr)	105		75-120
460-00-4	4-Bromofluorobenzene (Surr)	86		64-120
1868-53-7	Dibromofluoromethane (Surr)	84		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033115.d
Lims ID: 180-104021-C-2
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2020 01:17:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-015
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 16:56:07 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: journetp Date: 01-Apr-2020 16:53:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.957	3.957	0.000	0	114050	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	551267	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	89	96480	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	97	99805	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.281	-0.006	92	150087	42.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	155814	38.0	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	92	664423	52.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.321	11.316	0.005	84	186758	42.8	
$ 9 BFB	95	11.321	11.316	0.005	0	186758	NR	
37 Isopropyl alcohol	45	3.975	3.987	-0.012	26	3341	NC	
45 Ethyl acetate	43	5.622	5.598	0.024	1	321	NC	
58 Tert-amyl methyl ether	73	7.010	7.075	-0.065	37	7959	NC	
57 Isooctane	57	7.057	7.145	-0.088	1	771	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

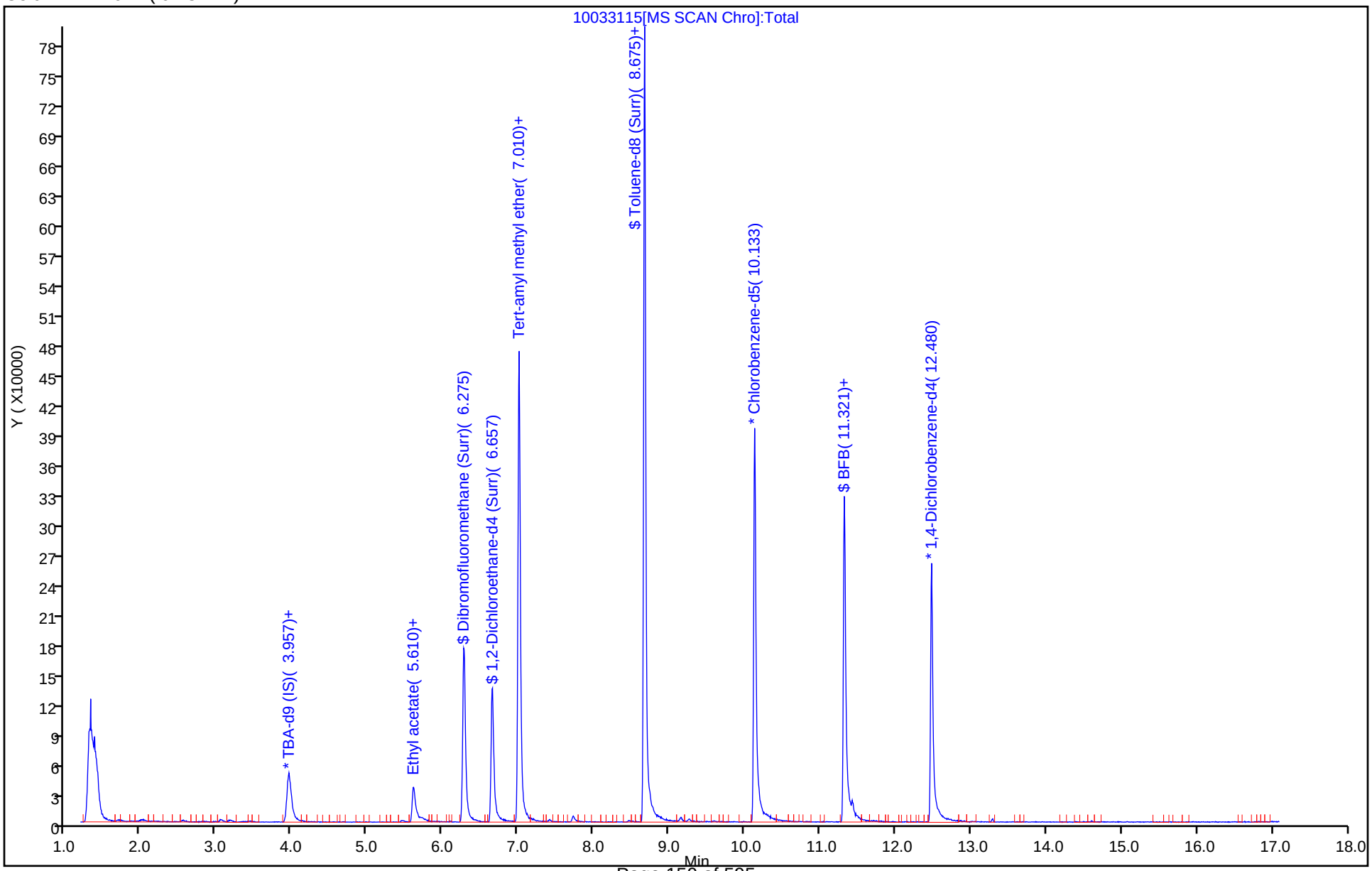
Report Date: 01-Apr-2020 18:09:17 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033115.d

Injection Date:	01-Apr-2020 01:17:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-C-2	Lab Sample ID:	180-104021-2	Worklist Smp#:	15
Client ID:	HD-COD-SW-7-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033115.d
Lims ID: 180-104021-C-2
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2020 01:17:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-015
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 16:56:07 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: journetp Date: 01-Apr-2020 16:53:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	42.0	84.03
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	38.0	75.95
$ 7 Toluene-d8 (Surr)	50.0	52.6	105.25
$ 8 4-Bromofluorobenzene (Surr)	50.0	42.8	85.62

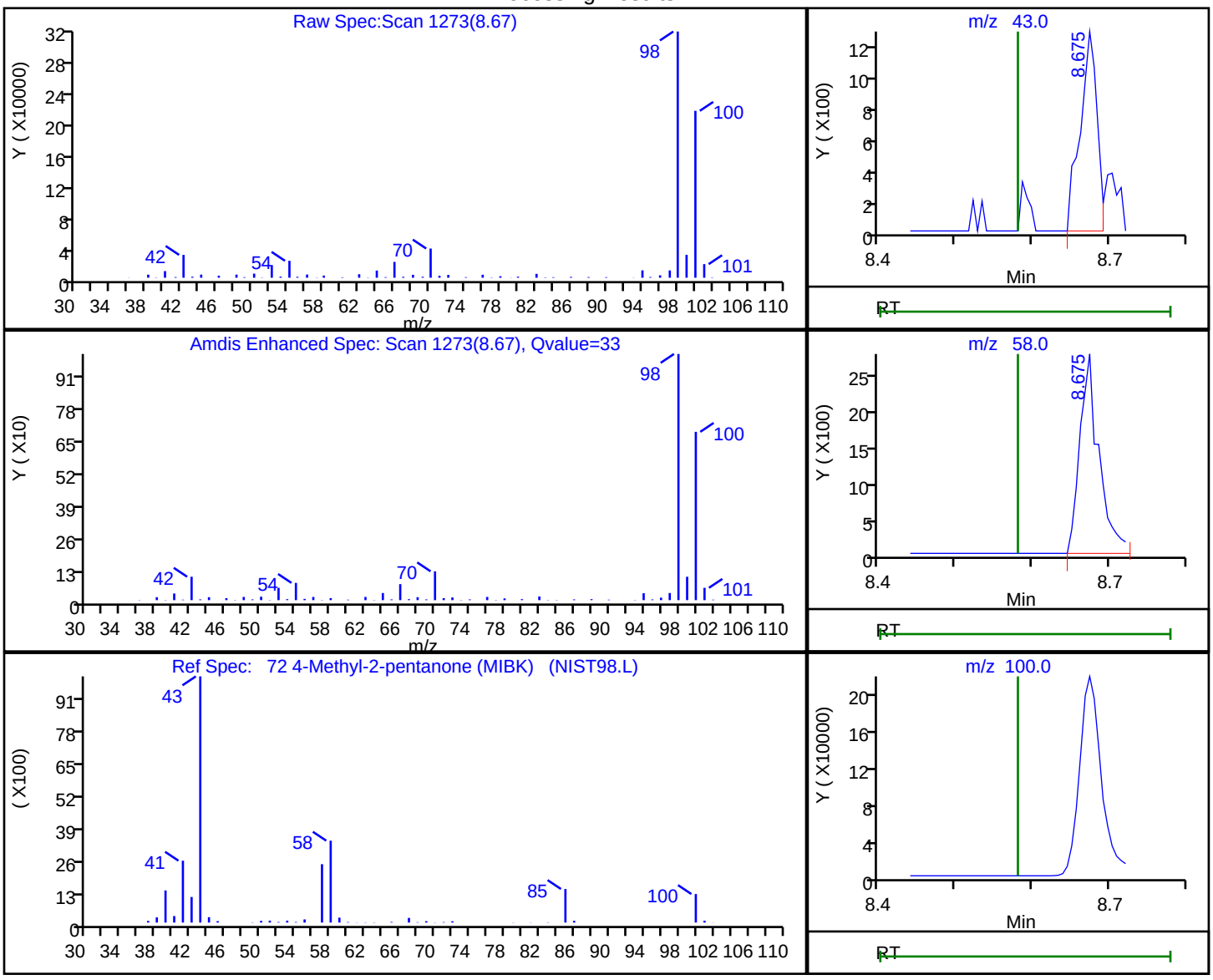
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033115.d				
Injection Date:	01-Apr-2020 01:17:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-C-2	Lab Sample ID:	180-104021-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	034635	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.67	43.00	1968	9.474878
8.67	58.00	4669	
8.67	100.00	447290	

Reviewer: journetp, 01-Apr-2020 16:53:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 180-104021-3

Matrix: Water Lab File ID: 10033116.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 10:35

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 01:45

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND	^c	5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 180-104021-3

Matrix: Water Lab File ID: 10033116.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 10:35

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 01:45

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79	^c	62-146
2037-26-5	Toluene-d8 (Surr)	118		75-120
460-00-4	4-Bromofluorobenzene (Surr)	87		64-120
1868-53-7	Dibromofluoromethane (Surr)	84		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033116.d
Lims ID: 180-104021-C-3
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2020 01:45:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-016
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 16:56:07 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: journetp Date: 01-Apr-2020 16:54:09

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.963	3.957	0.006	0	98512	1000.0	
*	2 Fluorobenzene (IS)	96	7.004	7.004	0.000	98	517704	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	89	83679	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	97	93327	50.0	
$	5 Dibromofluoromethane (Surr	113	6.286	6.281	0.005	93	140293	41.8	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	152978	39.7	
$	7 Toluene-d8 (Surr)	98	8.674	8.675	-0.001	93	646006	59.0	
$	8 4-Bromofluorobenzene (Surr	95	11.321	11.316	0.005	84	164187	43.4	
$	9 BFB	95	11.321	11.316	0.005	0	164187	NR	
	37 Isopropyl alcohol	45	3.957	3.987	-0.030	27	4568	NC	
	45 Ethyl acetate	43	5.592	5.598	-0.006	1	70	NC	
	58 Tert-amyl methyl ether	73	7.016	7.075	-0.059	37	8031	NC	
	57 Isooctane	57	7.010	7.145	-0.135	32	14892	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

VOA8260INT_00105	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added: 2.00	Units: uL	Run Reagent

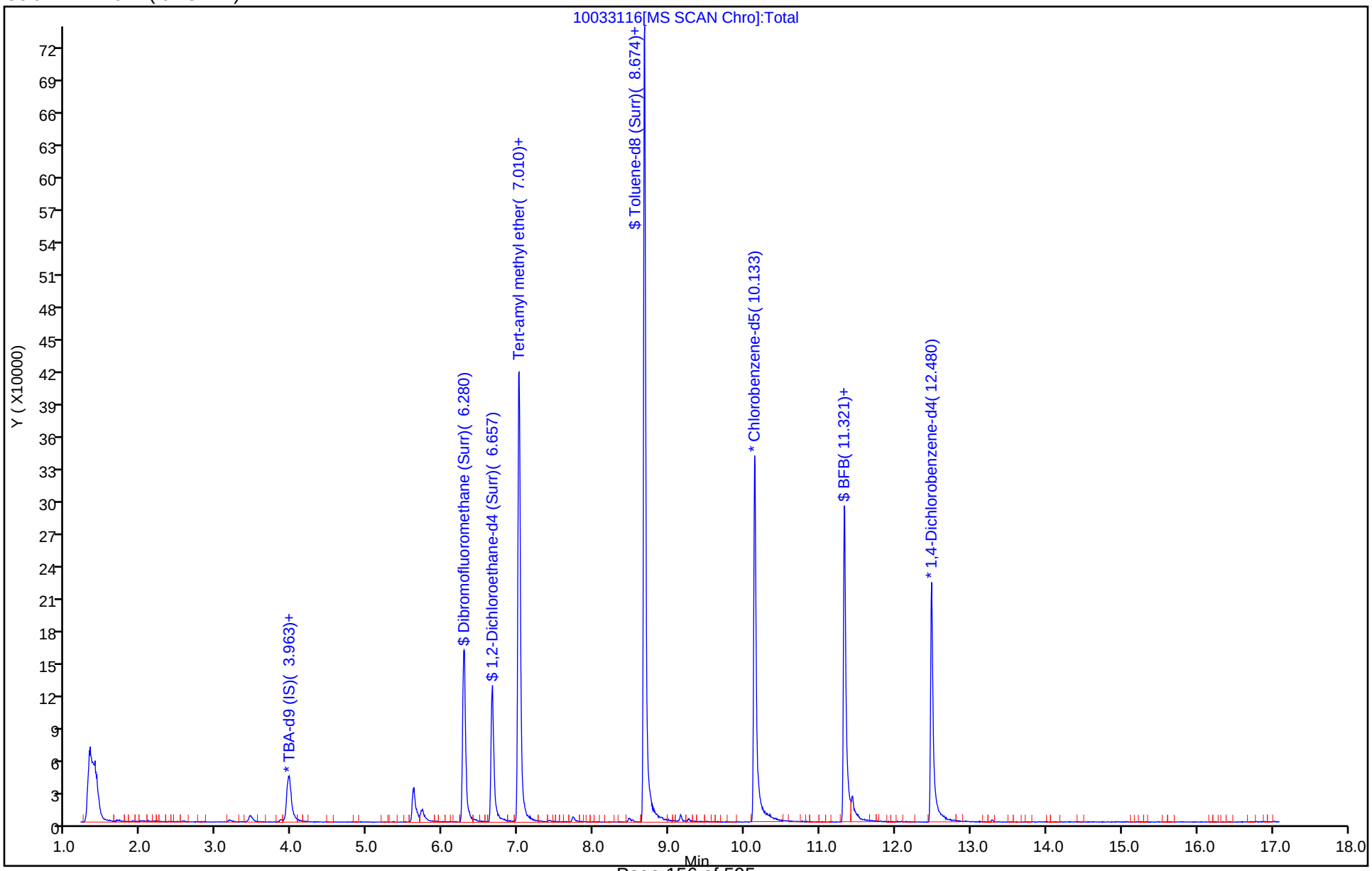
Report Date: 01-Apr-2020 18:09:19 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033116.d

Injection Date:	01-Apr-2020 01:45:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-C-3	Lab Sample ID:	180-104021-3	Worklist Smp#:	16
Client ID:	HD-COD-SW-8-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033116.d
Lims ID: 180-104021-C-3
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2020 01:45:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-016
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 16:56:07 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: journetp Date: 01-Apr-2020 16:54:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	41.8	83.64
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	39.7	79.41
$ 7 Toluene-d8 (Surr)	50.0	59.0	117.99
$ 8 4-Bromofluorobenzene (Surr)	50.0	43.4	86.78

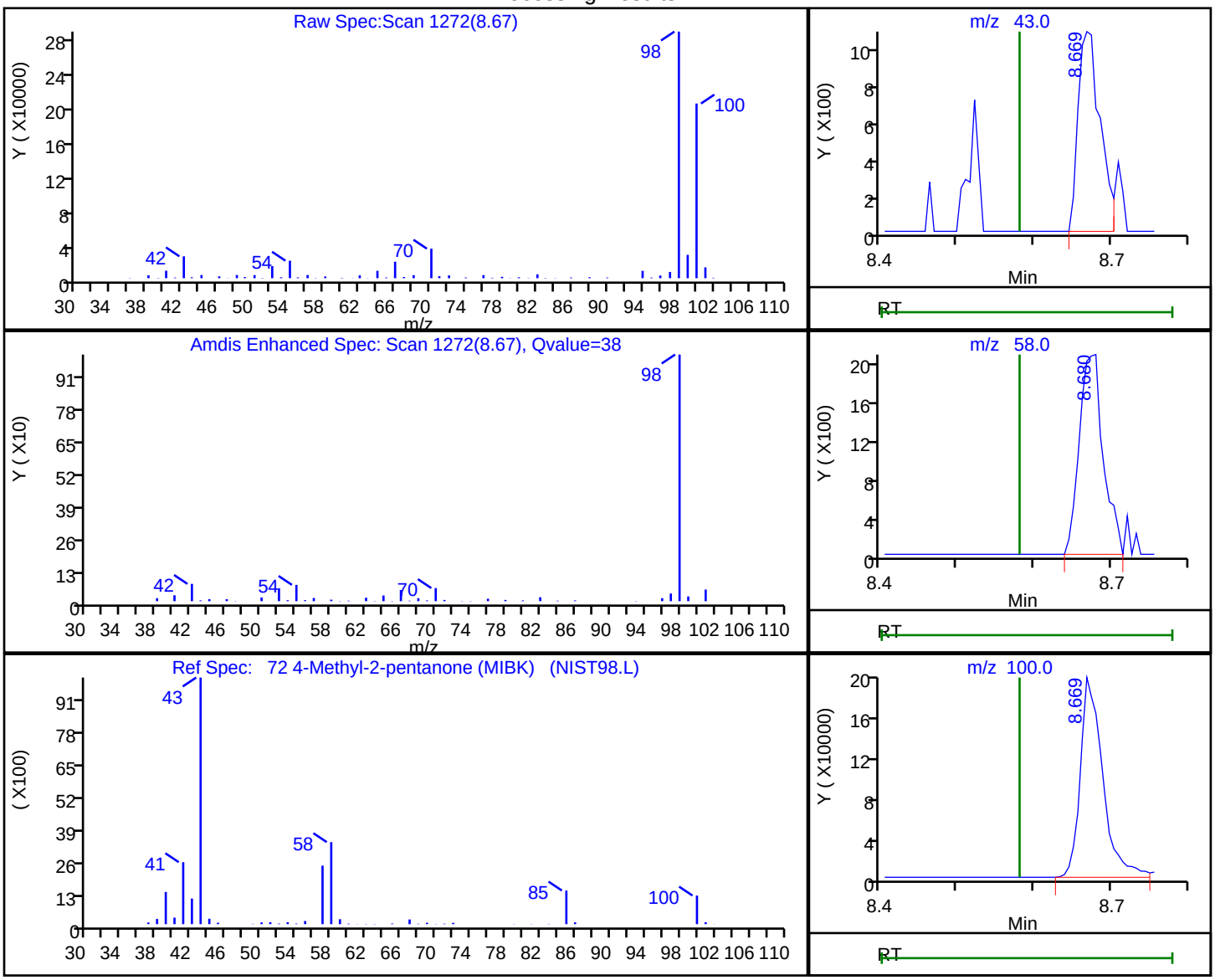
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033116.d				
Injection Date:	01-Apr-2020 01:45:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-C-3	Lab Sample ID:	180-104021-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	034635	ALS Bottle#:	16	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.67	43.00	2048	9.797133
8.68	58.00	4380	
8.67	100.00	407455	

Reviewer: journetp, 01-Apr-2020 16:54:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 180-104021-4

Matrix: Water Lab File ID: 10033117.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 13:25

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 02:12

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND	^c	5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 180-104021-4

Matrix: Water Lab File ID: 10033117.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 13:25

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 02:12

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	71	^c	62-146
2037-26-5	Toluene-d8 (Surr)	106		75-120
460-00-4	4-Bromofluorobenzene (Surr)	80		64-120
1868-53-7	Dibromofluoromethane (Surr)	78		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033117.d
Lims ID: 180-104021-A-4
Client ID: HD-COD-SW-9-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2020 02:12:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-017
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 16:56:07 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: journetp Date: 01-Apr-2020 16:54:20

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.963	3.957	0.006	0	86998	1000.0	
*	2 Fluorobenzene (IS)	96	7.016	7.004	0.012	99	523751	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	88	88158	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.486	12.474	0.012	97	88379	50.0	
$	5 Dibromofluoromethane (Surr	113	6.275	6.281	-0.006	92	132132	38.9	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	139206	35.7	
$	7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	94	614223	53.2	
$	8 4-Bromofluorobenzene (Surr	95	11.327	11.316	0.011	83	160103	40.2	
$	9 BFB	95	11.327	11.316	0.011	0	160103	NR	
	37 Isopropyl alcohol	45	3.999	3.987	0.012	1	1340	NC	
	45 Ethyl acetate	43	5.622	5.598	0.024	31	298	NC	
	58 Tert-amyl methyl ether	73	7.004	7.075	-0.071	37	7592	NC	
	57 Isooctane	57	7.004	7.145	-0.141	35	14695	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

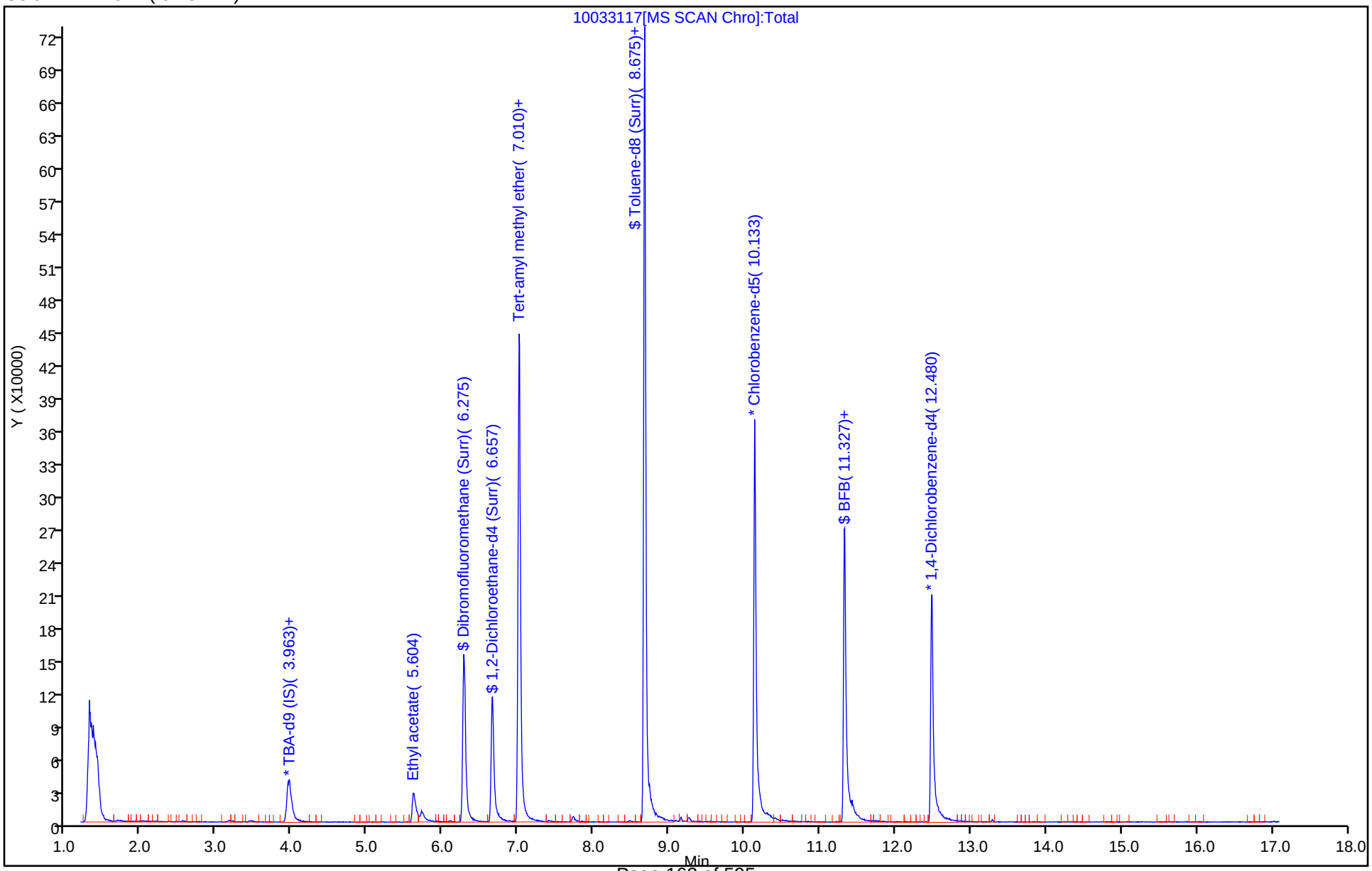
VOA8260INT_00105	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added: 2.00	Units: uL	Run Reagent

Report Date: 01-Apr-2020 18:09:21 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033117.d				
Injection Date:	01-Apr-2020 02:12:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-A-4	Lab Sample ID:	180-104021-4	Worklist Smp#:	17
Client ID:	HD-COD-SW-9-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033117.d
Lims ID: 180-104021-A-4
Client ID: HD-COD-SW-9-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2020 02:12:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-017
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 16:56:07 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: journetp Date: 01-Apr-2020 16:54:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	38.9	77.87
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	35.7	71.42
$ 7 Toluene-d8 (Surr)	50.0	53.2	106.48
$ 8 4-Bromofluorobenzene (Surr)	50.0	40.2	80.33

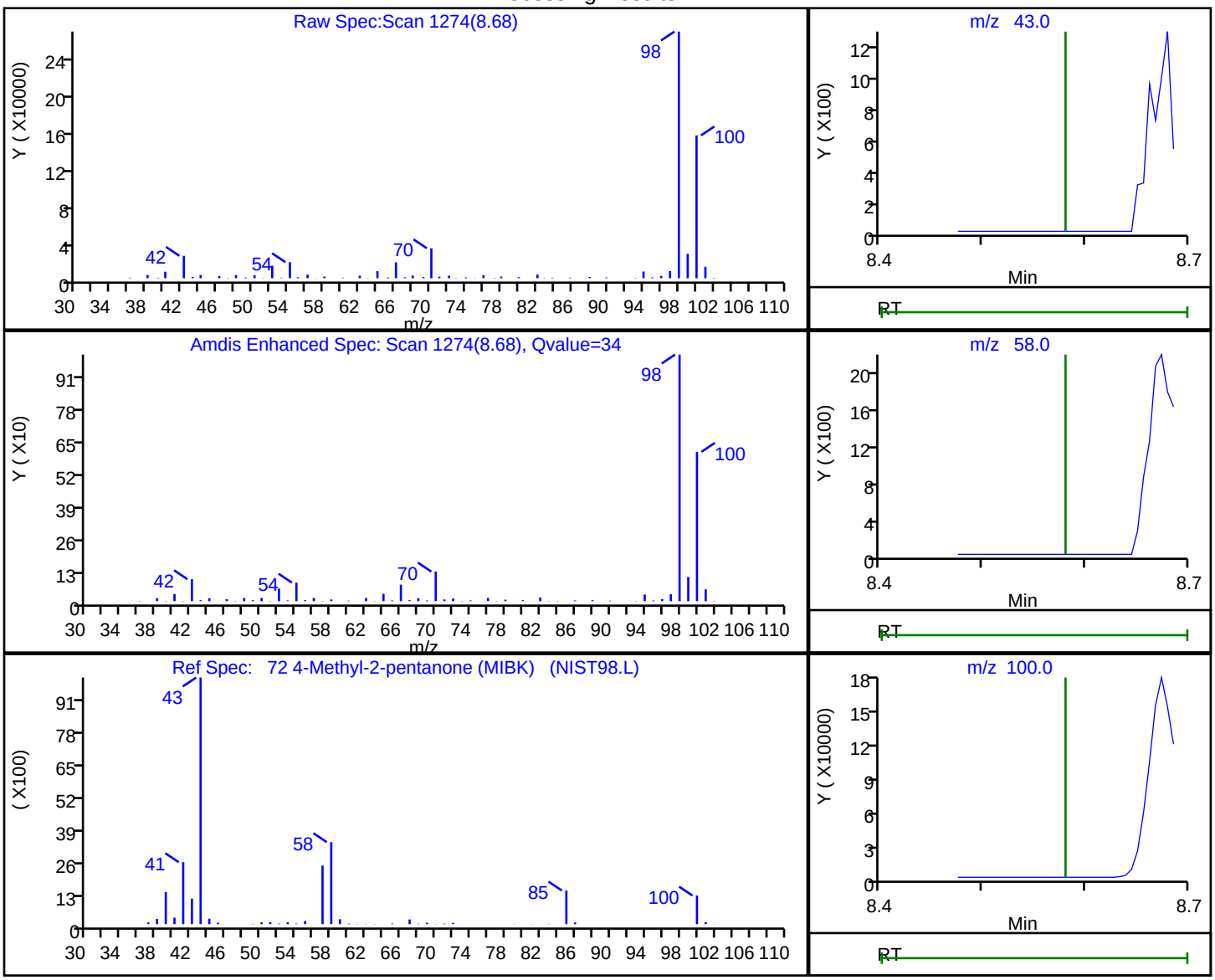
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033117.d				
Injection Date:	01-Apr-2020 02:12:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-A-4	Lab Sample ID:	180-104021-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	034635	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.68	43.00	1422	9.137493
8.67	58.00	4397	
8.67	100.00	371256	

Reviewer: journetp, 01-Apr-2020 16:54:15

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

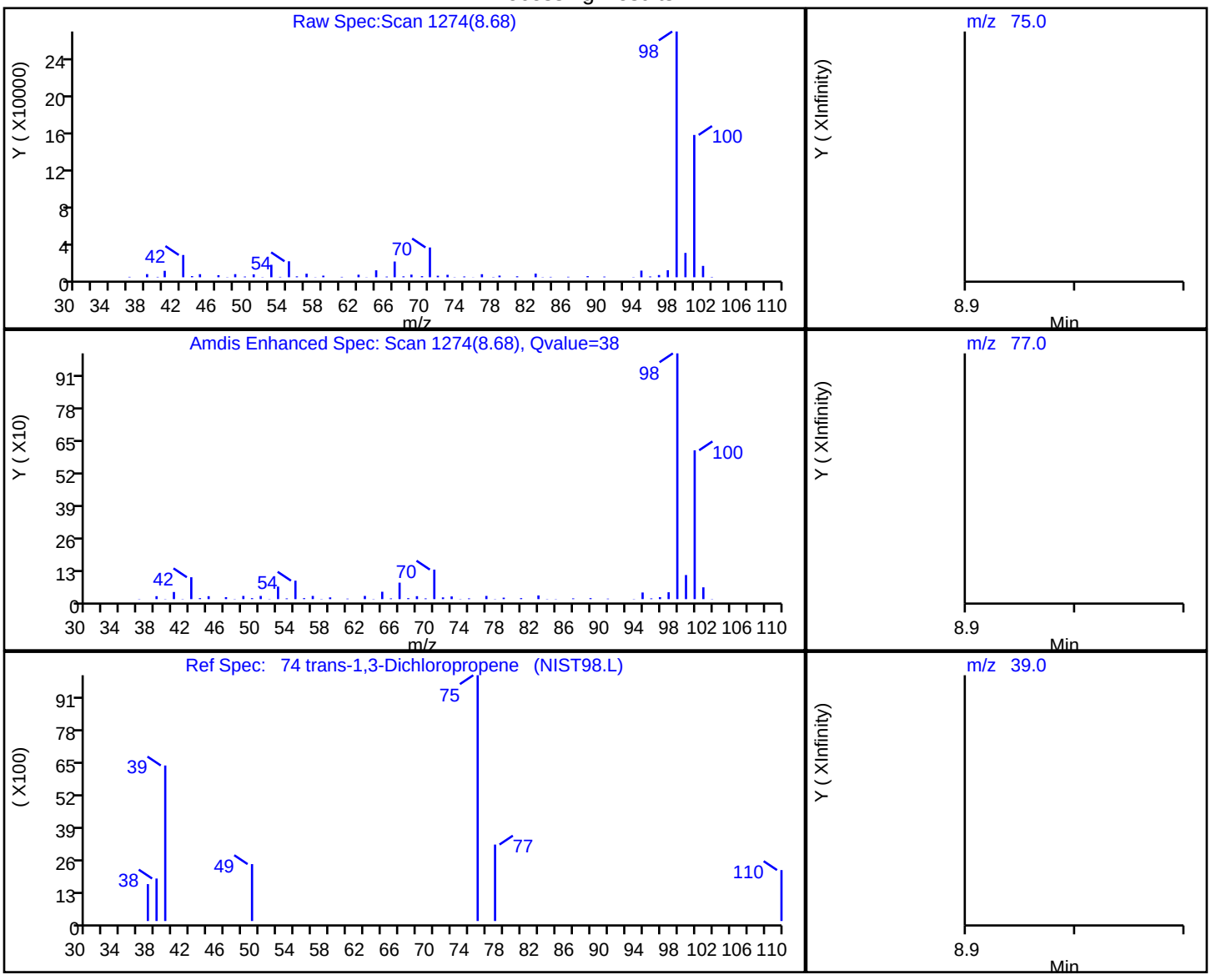
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033117.d				
Injection Date:	01-Apr-2020 02:12:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-A-4	Lab Sample ID:	180-104021-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	034635	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

74 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
8.68	75.00	56	3.626947
8.68	77.00	338	
8.68	39.00	508	

Reviewer: journetp, 01-Apr-2020 16:54:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 180-104021-5

Matrix: Water Lab File ID: 10033118.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 10:55

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 02:40

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND	^c	5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 180-104021-5

Matrix: Water Lab File ID: 10033118.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 10:55

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 02:40

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82	^c	62-146
2037-26-5	Toluene-d8 (Surr)	121	X	75-120
460-00-4	4-Bromofluorobenzene (Surr)	85		64-120
1868-53-7	Dibromofluoromethane (Surr)	93		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033118.d
Lims ID: 180-104021-B-5
Client ID: HD-COD-SW-13-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2020 02:40:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-018
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 16:56:07 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: journetp Date: 01-Apr-2020 16:56:07

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.957	3.957	0.000	0	94891	1000.0	
*	2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	437025	50.0	
*	3 Chlorobenzene-d5	119	10.139	10.133	0.006	89	74355	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.486	12.474	0.012	97	74254	50.0	
$	5 Dibromofluoromethane (Surr	113	6.275	6.281	-0.006	92	132026	46.6	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	132673	40.8	
$	7 Toluene-d8 (Surr)	98	8.681	8.675	0.006	93	587610	60.4	
$	8 4-Bromofluorobenzene (Surr	95	11.322	11.316	0.006	86	142958	42.5	
$	9 BFB	95	11.322	11.316	0.006	0	142958	NR	
	37 Isopropyl alcohol	45	3.951	3.987	-0.036	27	4065	NC	
	45 Ethyl acetate	43	5.616	5.598	0.018	1	136	NC	
	58 Tert-amyl methyl ether	73	7.010	7.075	-0.065	37	6470	NC	
	57 Isooctane	57	7.016	7.145	-0.129	32	12538	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

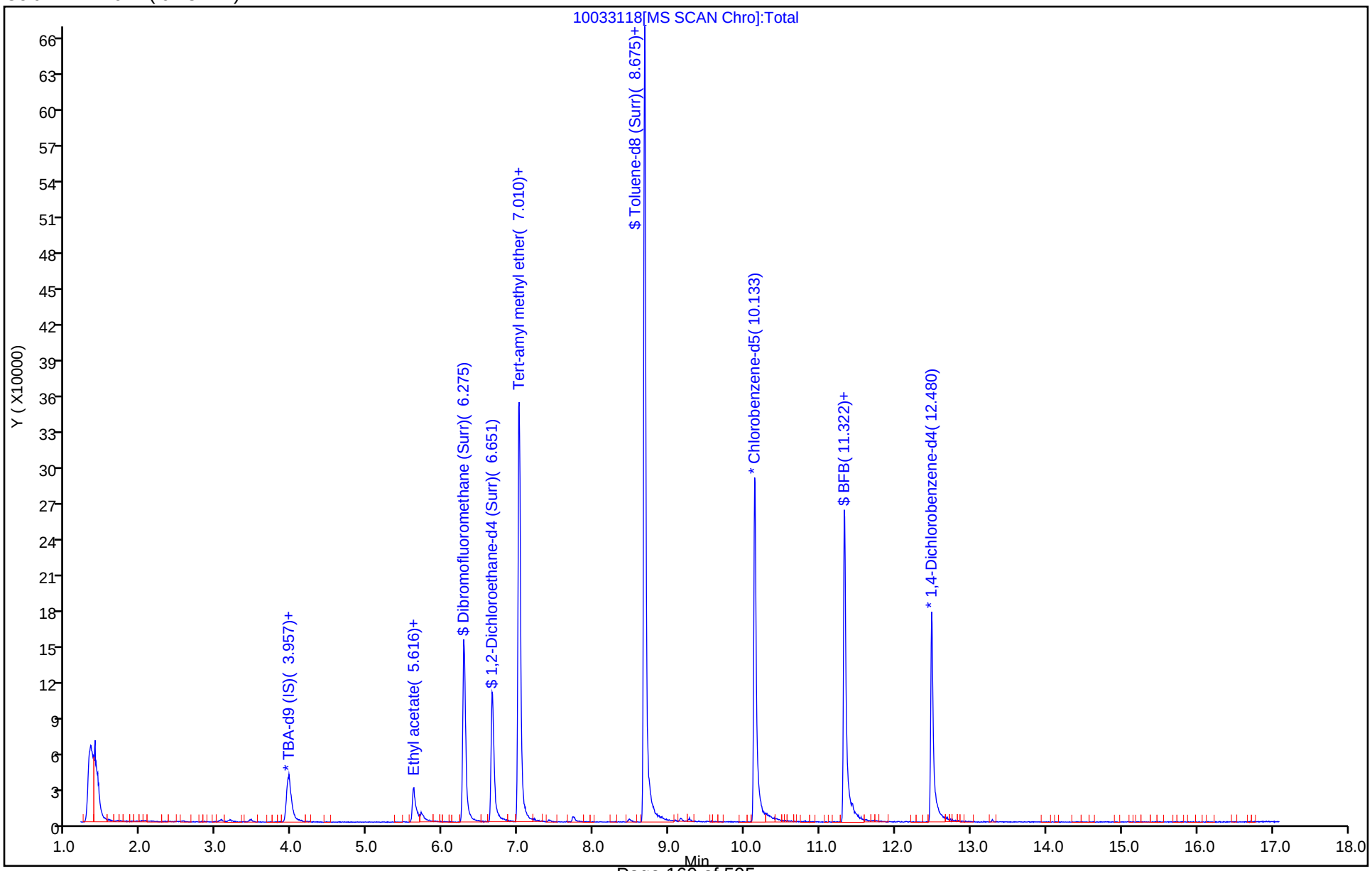
VOA8260INT_00105	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added: 2.00	Units: uL	Run Reagent

Report Date: 01-Apr-2020 18:09:22 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033118.d				
Injection Date:	01-Apr-2020 02:40:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-B-5	Lab Sample ID:	180-104021-5	Worklist Smp#:	18
Client ID:	HD-COD-SW-13-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033118.d
Lims ID: 180-104021-B-5
Client ID: HD-COD-SW-13-0/1-0
Sample Type: Client
Inject. Date: 01-Apr-2020 02:40:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-018
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 16:56:07 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: journetp Date: 01-Apr-2020 16:56:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	46.6	93.24
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	40.8	81.58
$ 7 Toluene-d8 (Surr)	50.0	60.4	120.78
$ 8 4-Bromofluorobenzene (Surr)	50.0	42.5	85.04

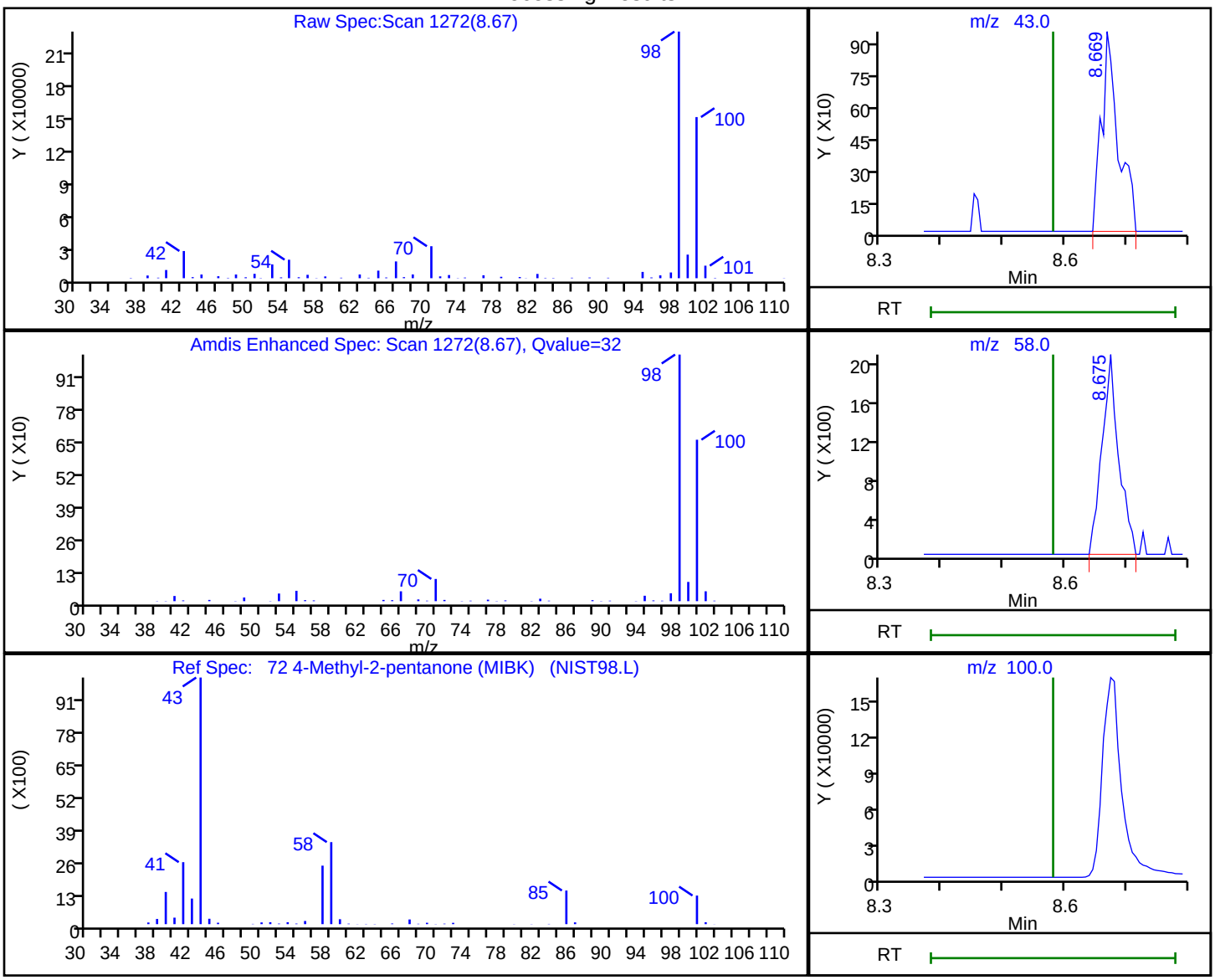
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033118.d				
Injection Date:	01-Apr-2020 02:40:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-B-5	Lab Sample ID:	180-104021-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	034635	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.67	43.00	1815	9.792030
8.67	58.00	3845	
8.67	100.00	387690	

Reviewer: journetp, 01-Apr-2020 16:54:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 180-104021-6

Matrix: Water Lab File ID: 10033110.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:55

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2020 21:36

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND	F1	1.0	0.55
67-64-1	Acetone	ND	F1	5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND	F1	1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND	F1	1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND	F1	1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND	F1	1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c F1	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND	F1	1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	2.2		1.0	0.47
591-78-6	2-Hexanone	ND	^c	5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 180-104021-6

Matrix: Water Lab File ID: 10033110.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:55

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2020 21:36

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	76	^c	62-146
2037-26-5	Toluene-d8 (Surr)	110		75-120
460-00-4	4-Bromofluorobenzene (Surr)	87		64-120
1868-53-7	Dibromofluoromethane (Surr)	81		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033110.d
Lims ID: 180-104021-C-6
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 31-Mar-2020 21:36:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-010
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 31-Mar-2020 23:21:14 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: journetp Date: 31-Mar-2020 22:04:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.957	3.940	0.017	0	100857	1000.0	
* 2 Fluorobenzene (IS)	96	7.016	7.010	0.006	99	518164	50.0	
* 3 Chlorobenzene-d5	119	10.139	10.133	0.006	87	87964	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.486	12.474	0.012	97	94138	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	92	136546	40.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.657	0.000	0	147446	38.2	
$ 7 Toluene-d8 (Surr)	98	8.674	8.675	-0.001	94	631954	54.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.327	11.321	0.006	83	173405	43.6	
37 Isopropyl alcohol	45	3.945	3.987	-0.042	26	4350	NC	
45 Ethyl acetate	43	5.616	5.598	0.018	1	204	NC	
41 cis-1,2-Dichloroethene	96	5.657	5.657	0.000	77	12333	3.06	
58 Tert-amyl methyl ether	73	7.010	7.075	-0.065	41	7883	NC	
57 Isooctane	57	7.057	7.145	-0.088	1	1047	NC	
60 Trichloroethene	130	7.404	7.410	-0.006	91	12785	2.78	
77 Tetrachloroethene	164	9.257	9.257	0.000	96	34899	10.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

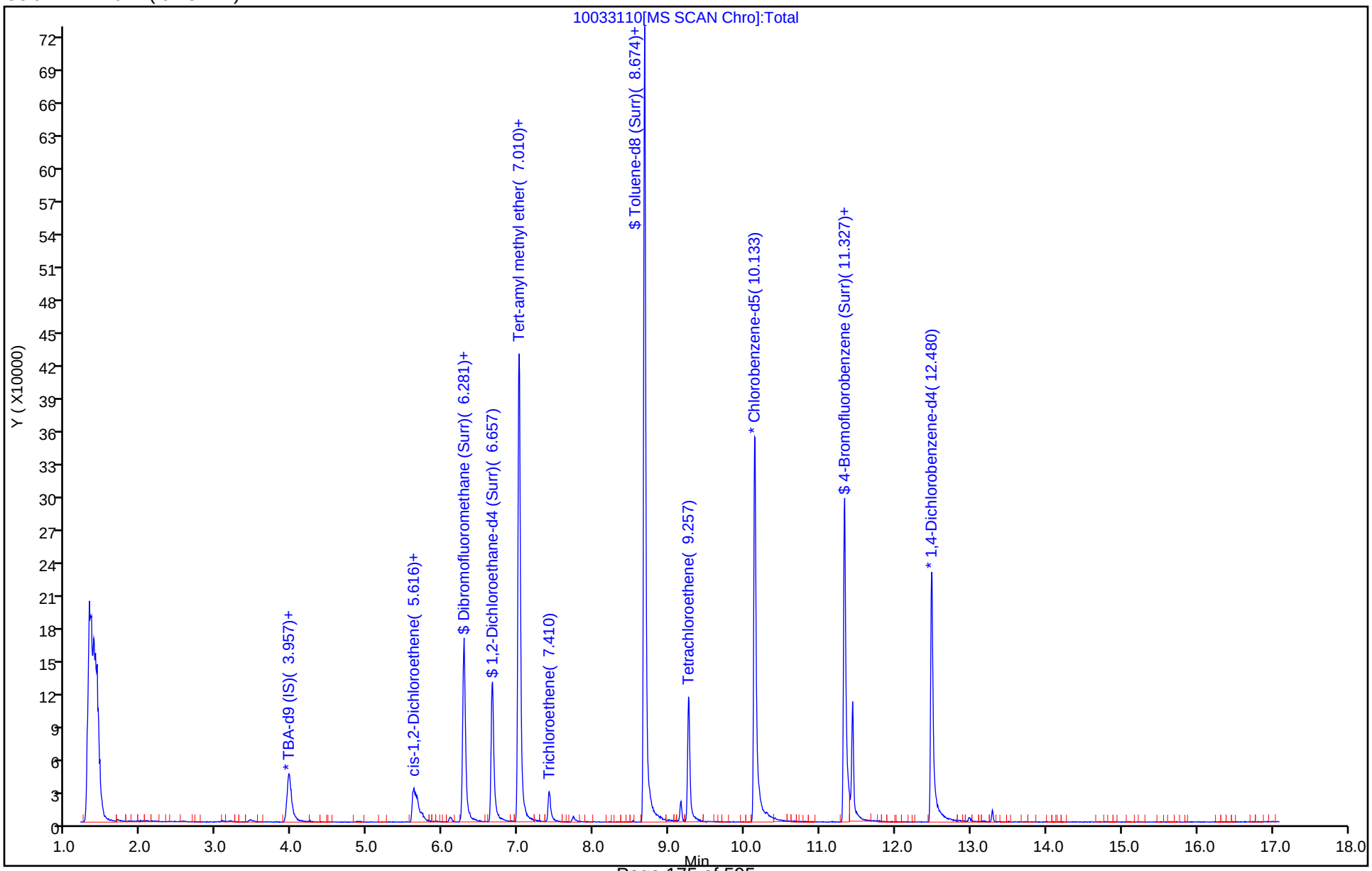
Report Date: 31-Mar-2020 23:54:20 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033110.d

Injection Date:	31-Mar-2020 21:36:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-C-6	Lab Sample ID:	180-104021-6	Worklist Smp#:	10
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033110.d
Lims ID: 180-104021-C-6
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 31-Mar-2020 21:36:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-010
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 31-Mar-2020 23:21:14 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: journetp Date: 31-Mar-2020 22:04:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	40.7	81.33
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	38.2	76.47
$ 7 Toluene-d8 (Surr)	50.0	54.9	109.80
$ 8 4-Bromofluorobenzene (Surr)	50.0	43.6	87.19

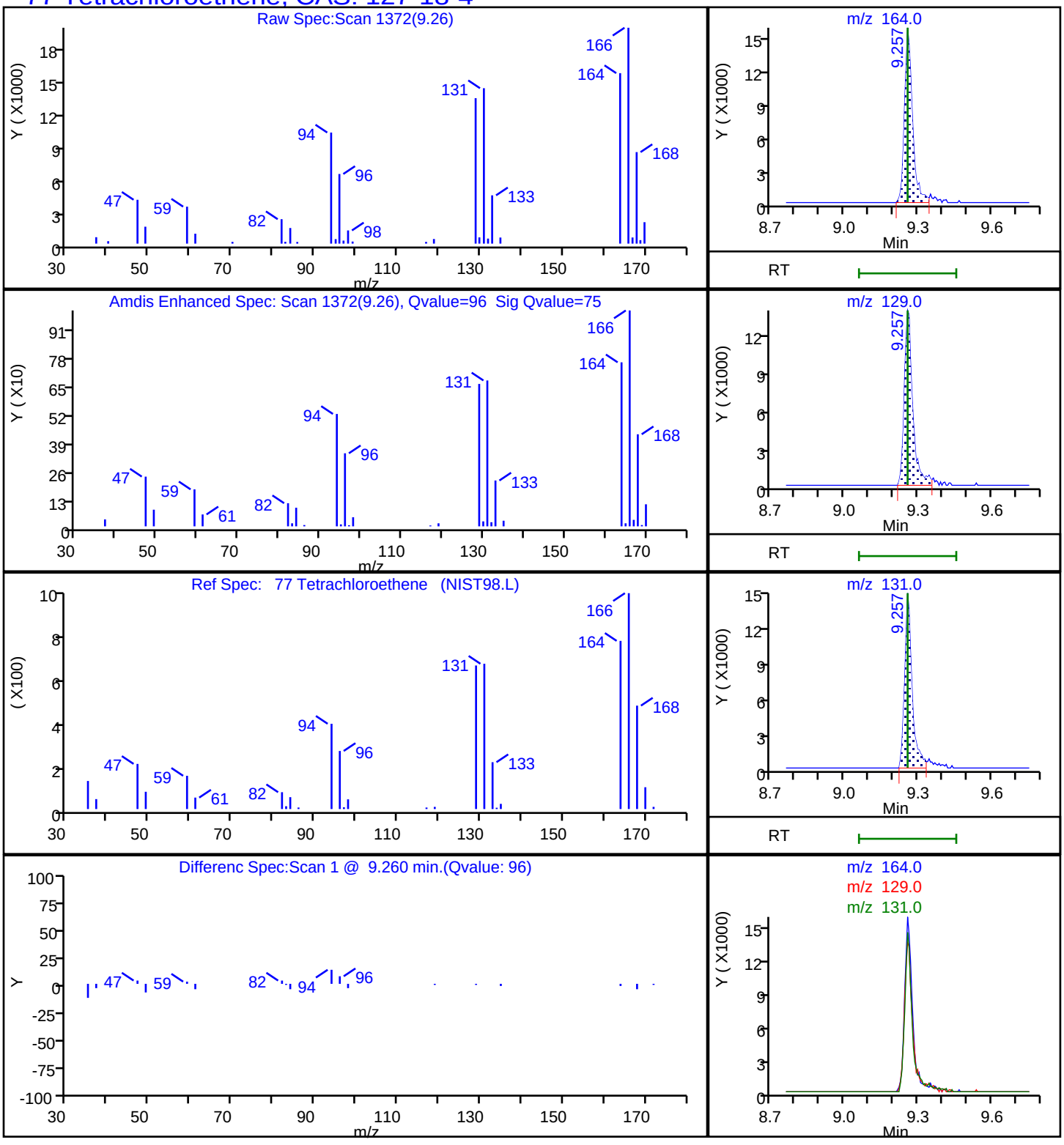
Report Date: 31-Mar-2020 23:54:21 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033110.d

Injection Date:	31-Mar-2020 21:36:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-C-6	Lab Sample ID:	180-104021-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

77 Tetrachloroethene, CAS: 127-18-4



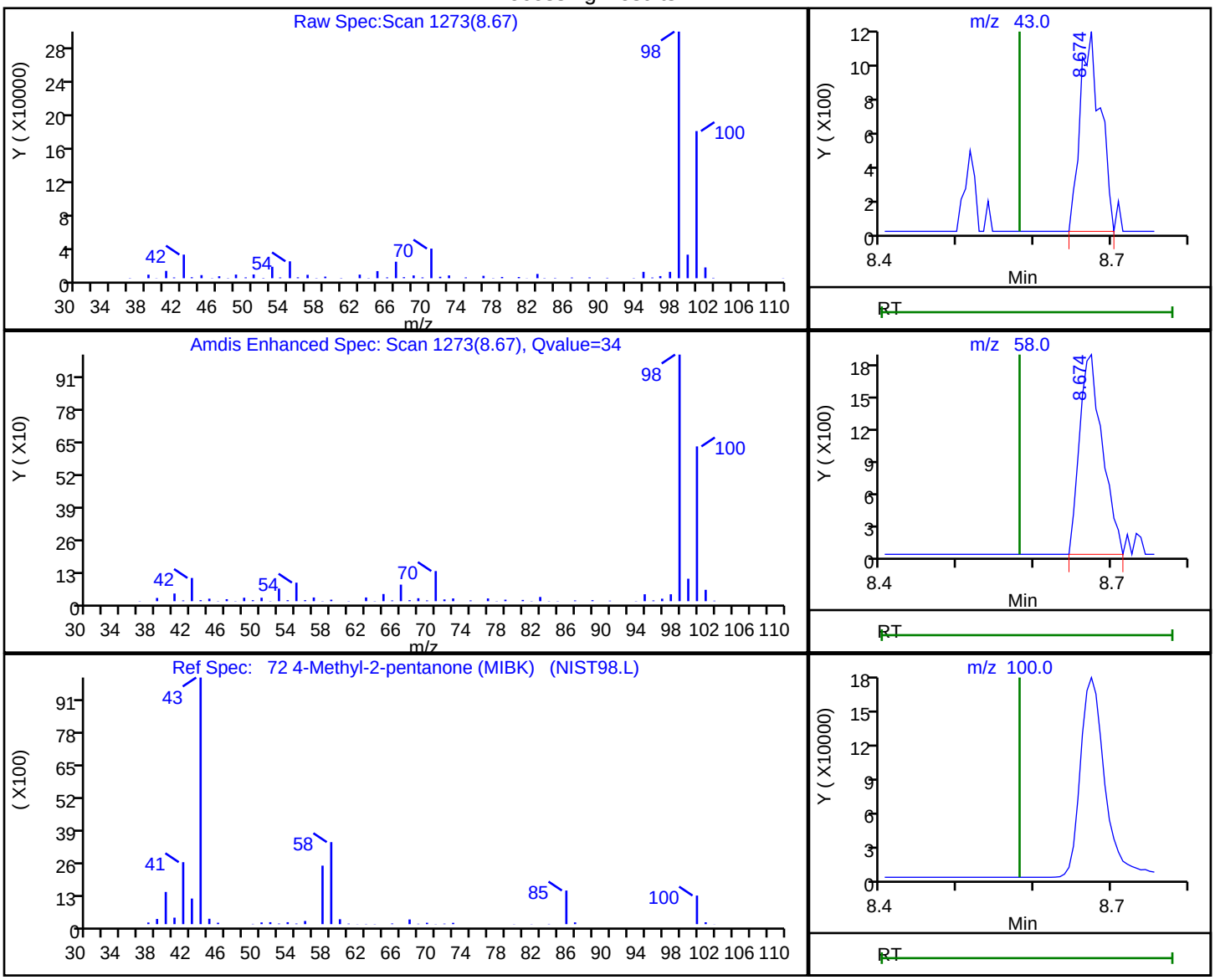
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033110.d				
Injection Date:	31-Mar-2020 21:36:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-C-6	Lab Sample ID:	180-104021-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.67	43.00	2091	9.741528
8.67	58.00	3852	
8.67	100.00	403780	

Reviewer: journetp, 31-Mar-2020 23:09:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 180-104021-7

Matrix: Water Lab File ID: 10040116.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 11:20

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 01:56

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND	^c F1	5.0	3.4
75-15-0	Carbon disulfide	ND	^c	1.0	0.88
75-09-2	Methylene Chloride	ND	F1	1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND	F1	1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND	F1	1.0	0.71
74-97-5	Bromochloromethane	ND	F1	1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c F1 F2	5.0	2.6
67-66-3	Chloroform	ND	F1	1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND	F1	1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND	F1	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND	^c	1.0	0.45
127-18-4	Tetrachloroethene	ND	F1	1.0	0.47
591-78-6	2-Hexanone	ND	^c F2	5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND	^c	1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 180-104021-7

Matrix: Water Lab File ID: 10040116.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 11:20

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 01:56

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-42-5	Styrene	ND		1.0	0.47
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		62-146
2037-26-5	Toluene-d8 (Surr)	110		75-120
460-00-4	4-Bromofluorobenzene (Surr)	80		64-120
1868-53-7	Dibromofluoromethane (Surr)	83		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040116.d
Lims ID: 180-104021-B-7
Client ID: HD-COD-SW-16-0/1-0
Sample Type: Client
Inject. Date: 02-Apr-2020 01:56:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-016
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:05 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.963	3.951	0.012	0	122864	1000.0	
*	2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	526399	50.0	
*	3 Chlorobenzene-d5	119	10.139	10.133	0.006	88	88318	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	97	93481	50.0	
$	5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	92	141025	41.3	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	154914	39.5	
$	7 Toluene-d8 (Surr)	98	8.669	8.675	-0.005	93	633325	54.8	
$	8 4-Bromofluorobenzene (Surr	95	11.322	11.321	0.001	85	160038	40.1	
	37 Isopropyl alcohol	45	3.957	3.987	-0.030	26	5323	NC	
	45 Ethyl acetate	43	5.616	5.598	0.018	1	140	NC	
	58 Tert-amyl methyl ether	73	7.010	7.075	-0.065	37	7609	NC	
	57 Isooctane	57	7.010	7.145	-0.135	32	14520	NC	
	77 Tetrachloroethene	164	9.263	9.251	0.012	81	4863	1.49	
	116 Naphthalene	128	14.745	14.727	0.018	94	4409	1.82	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

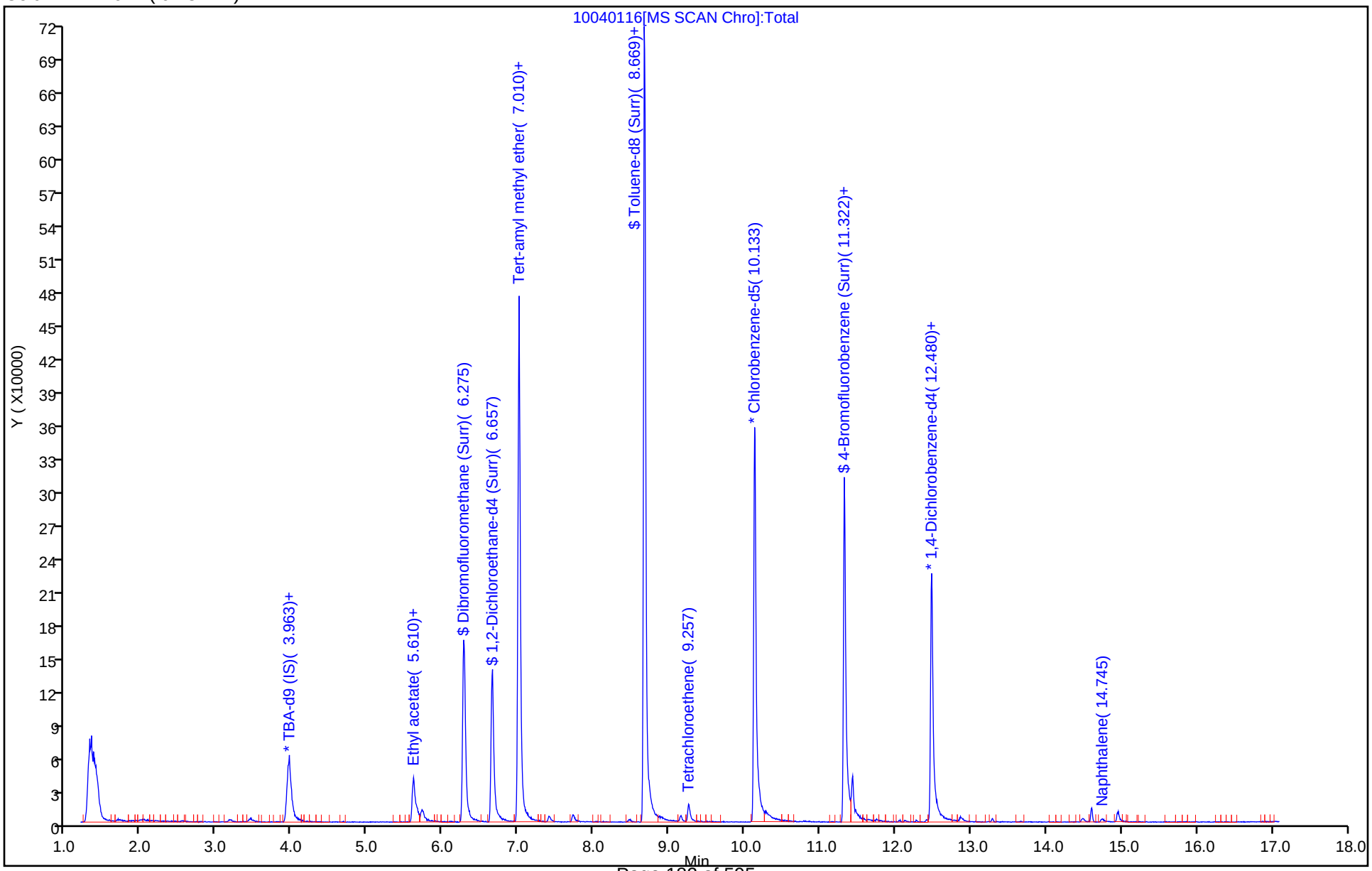
VOA8260INT_00105 Amount Added: 2.00 Units: uL Run Reagent
VOA8260SURR_00105 Amount Added: 2.00 Units: uL Run Reagent

Report Date: 02-Apr-2020 22:02:06 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040116.d				
Injection Date:	02-Apr-2020 01:56:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-B-7	Lab Sample ID:	180-104021-7	Worklist Smp#:	16
Client ID:	HD-COD-SW-16-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040116.d
Lims ID: 180-104021-B-7
Client ID: HD-COD-SW-16-0/1-0
Sample Type: Client
Inject. Date: 02-Apr-2020 01:56:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-016
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:05 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	41.3	82.69
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	39.5	79.08
$ 7 Toluene-d8 (Surr)	50.0	54.8	109.59
$ 8 4-Bromofluorobenzene (Surr)	50.0	40.1	80.15

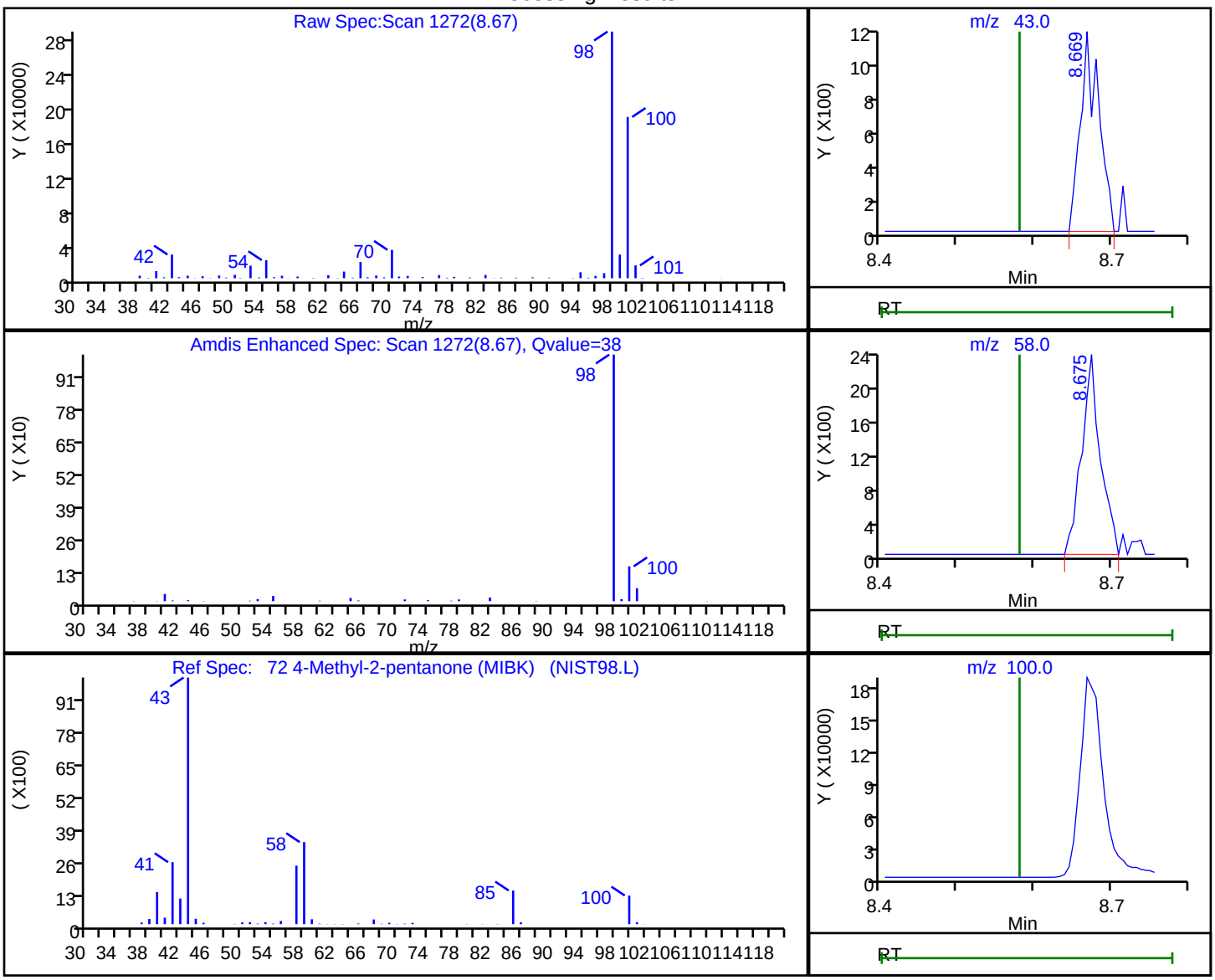
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040116.d				
Injection Date:	02-Apr-2020 01:56:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-B-7	Lab Sample ID:	180-104021-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	034635	ALS Bottle#:	16	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.67	43.00	1854	9.521860
8.67	58.00	4035	
8.67	100.00	415554	

Reviewer: journetp, 02-Apr-2020 16:19:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 180-104021-8

Matrix: Water Lab File ID: 10040207.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 11:35

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 17:52

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.: 311900 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND		5.0	3.4
75-15-0	Carbon disulfide	ND	^c	1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND	^c	1.0	0.63
78-93-3	2-Butanone (MEK)	ND		5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND	F1 *	1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 180-104021-8

Matrix: Water Lab File ID: 10040207.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 11:35

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 17:52

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.: 311900 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	73		62-146
2037-26-5	Toluene-d8 (Surr)	102		75-120
460-00-4	4-Bromofluorobenzene (Surr)	76		64-120
1868-53-7	Dibromofluoromethane (Surr)	77		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040207.d
Lims ID: 180-104021-C-8
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 02-Apr-2020 17:52:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031431-007
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 03-Apr-2020 00:50:30 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.957	3.963	-0.006	0	119593	1000.0	
*	2 Fluorobenzene (IS)	96	7.004	7.010	-0.006	99	558241	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	89	94042	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.468	0.012	97	106114	50.0	
$	5 Dibromofluoromethane (Surr	113	6.269	6.281	-0.012	92	139038	38.4	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.657	0.000	0	152402	36.7	
$	7 Toluene-d8 (Surr)	98	8.669	8.669	0.000	93	626387	50.9	
$	8 4-Bromofluorobenzene (Surr	95	11.322	11.316	0.006	84	161173	37.9	
	37 Isopropyl alcohol	45	3.999	3.987	0.012	1	1286	NC	
	45 Ethyl acetate	43	5.593	5.598	-0.005	6	188	NC	
	48 Tetrahydrofuran	42	5.622	5.975	-0.353	33	906	2.68	
	58 Tert-amyl methyl ether	73	7.004	7.075	-0.071	37	8172	NC	
	57 Isooctane	57	7.010	7.145	-0.135	32	16059	NC	
	72 4-Methyl-2-pentanone (MIBK	43	8.669	8.580	0.089	33	2299	9.79	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

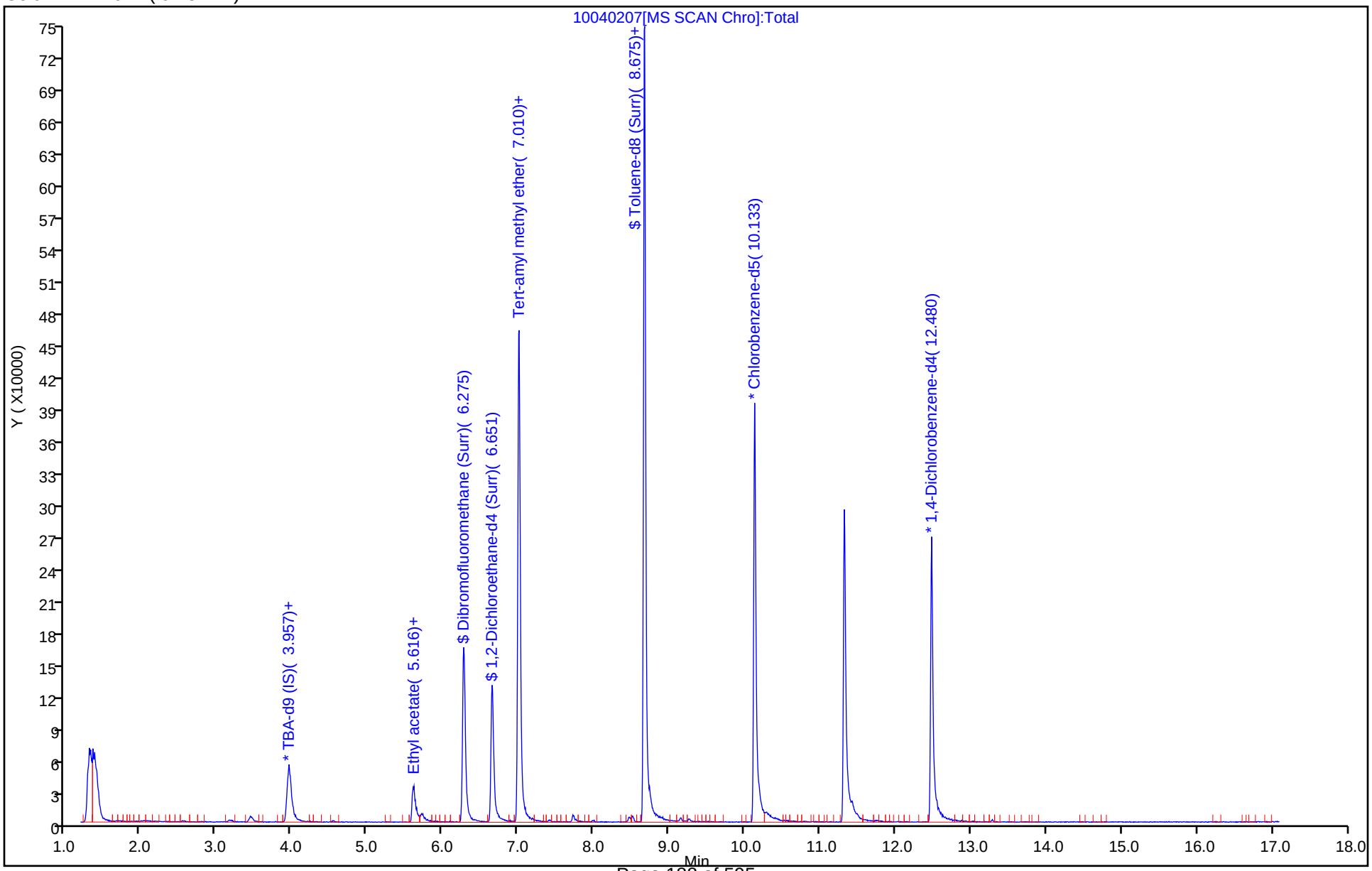
VOA8260INT_00105	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added: 2.00	Units: uL	Run Reagent

Report Date: 03-Apr-2020 00:59:58 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040207.d				
Injection Date:	02-Apr-2020 17:52:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-C-8	Lab Sample ID:	180-104021-8	Worklist Smp#:	7
Client ID:	HD-COD-SW-17-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040207.d
Lims ID: 180-104021-C-8
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 02-Apr-2020 17:52:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031431-007
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 03-Apr-2020 00:50:30 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	38.4	76.87
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.7	73.36
$ 7 Toluene-d8 (Surr)	50.0	50.9	101.80
$ 8 4-Bromofluorobenzene (Surr)	50.0	37.9	75.80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 180-104021-9

Matrix: Water Lab File ID: 10040117.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:05

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 02:24

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND	^c	5.0	3.4
75-15-0	Carbon disulfide	ND	^c	1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND	^c	1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND	^c	5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND	^c	1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 180-104021-9

Matrix: Water Lab File ID: 10040117.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:05

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 02:24

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		62-146
2037-26-5	Toluene-d8 (Surr)	110		75-120
460-00-4	4-Bromofluorobenzene (Surr)	86		64-120
1868-53-7	Dibromofluoromethane (Surr)	83		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040117.d
Lims ID: 180-104021-A-9
Client ID: HD-COD-SW-26-0/1-0
Sample Type: Client
Inject. Date: 02-Apr-2020 02:24:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-017
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:09 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.957	3.951	0.006	0	101096	1000.0	
*	2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	492184	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	88	81247	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	97	77639	50.0	
$	5 Dibromofluoromethane (Surr	113	6.281	6.275	0.006	92	132278	41.5	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	142020	38.8	
$	7 Toluene-d8 (Surr)	98	8.669	8.675	-0.005	93	586016	55.1	
$	8 4-Bromofluorobenzene (Surr	95	11.327	11.321	0.006	84	158264	43.1	
$	9 BFB	95	11.327	11.339	-0.012	0	158264	NR	
	37 Isopropyl alcohol	45	3.951	3.987	-0.036	26	4739	NC	
	45 Ethyl acetate	43	5.610	5.598	0.012	31	367	NC	
	58 Tert-amyl methyl ether	73	7.010	7.075	-0.065	38	7508	NC	
	57 Isooctane	57	7.004	7.145	-0.141	33	13042	NC	
	72 4-Methyl-2-pentanone (MIBK	43	8.674	8.580	0.094	34	2140	9.94	
	77 Tetrachloroethene	164	9.257	9.251	0.006	91	4487	1.50	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

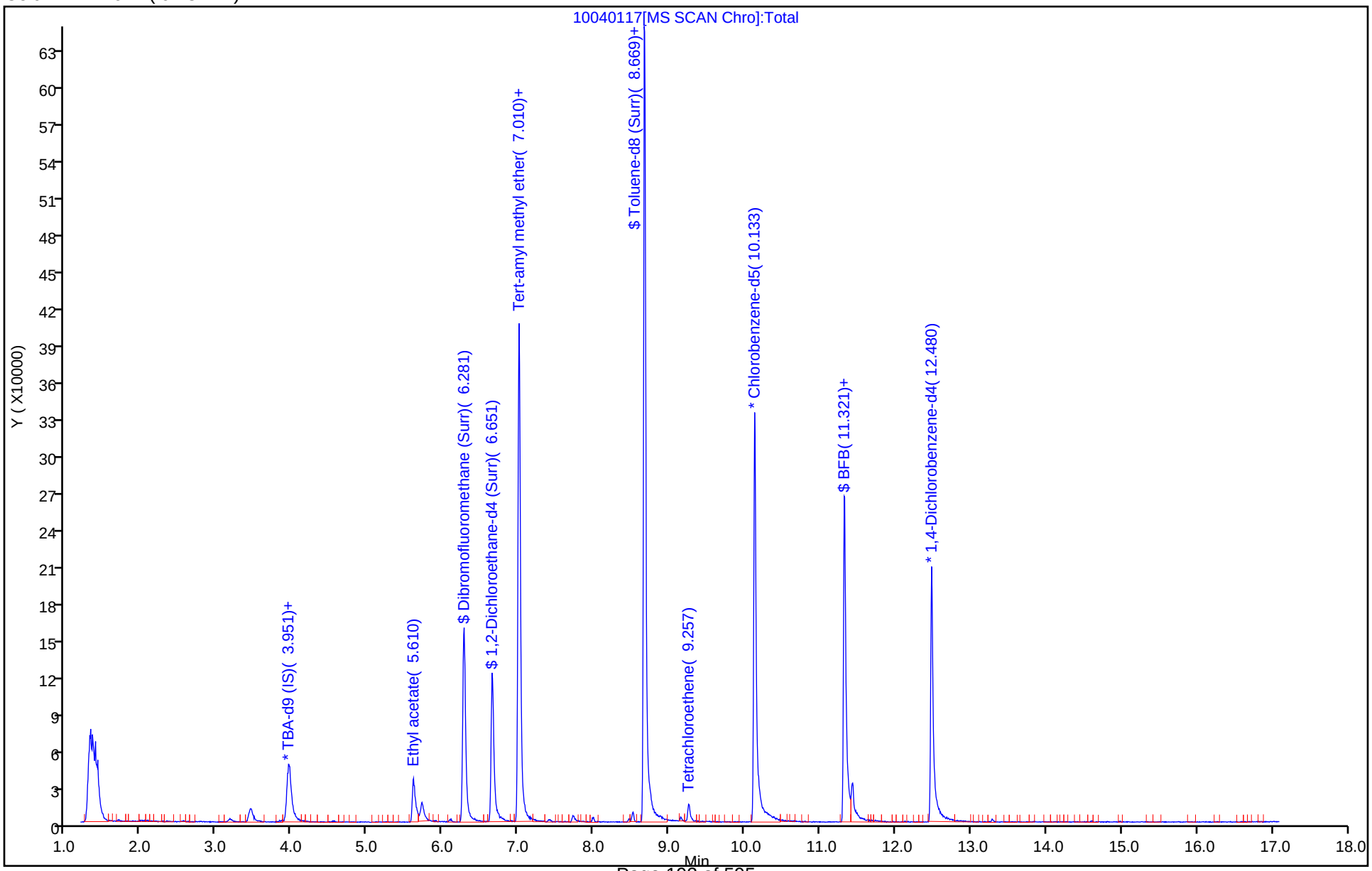
Report Date: 02-Apr-2020 22:02:10 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040117.d

Injection Date:	02-Apr-2020 02:24:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-A-9	Lab Sample ID:	180-104021-9	Worklist Smp#:	17
Client ID:	HD-COD-SW-26-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040117.d
Lims ID: 180-104021-A-9
Client ID: HD-COD-SW-26-0/1-0
Sample Type: Client
Inject. Date: 02-Apr-2020 02:24:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-017
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:09 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	41.5	82.95
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	38.8	77.54
$ 7 Toluene-d8 (Surr)	50.0	55.1	110.23
$ 8 4-Bromofluorobenzene (Surr)	50.0	43.1	86.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 180-104021-10

Matrix: Water Lab File ID: 10040118.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:45

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 02:52

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND	^c	5.0	3.4
75-15-0	Carbon disulfide	ND	^c	1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND	^c	1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND	^c	5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND	^c	1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 180-104021-10

Matrix: Water Lab File ID: 10040118.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:45

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 02:52

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		62-146
2037-26-5	Toluene-d8 (Surr)	109		75-120
460-00-4	4-Bromofluorobenzene (Surr)	84		64-120
1868-53-7	Dibromofluoromethane (Surr)	87		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040118.d
Lims ID: 180-104021-A-10
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 02-Apr-2020 02:52:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-018
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:13 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.946	3.951	-0.005	0	102941	1000.0	
*	2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	452910	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	88	75579	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	97	74545	50.0	
$	5 Dibromofluoromethane (Surr	113	6.281	6.275	0.006	91	127095	43.3	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	138003	40.9	
$	7 Toluene-d8 (Surr)	98	8.675	8.675	0.001	93	536623	54.3	
$	8 4-Bromofluorobenzene (Surr	95	11.321	11.321	0.000	86	142784	41.8	
$	9 BFB	95	11.321	11.339	-0.018	0	142784	NR	
	37 Isopropyl alcohol	45	3.957	3.987	-0.030	26	4243	NC	
	45 Ethyl acetate	43	5.610	5.598	0.012	1	114	NC	
	58 Tert-amyl methyl ether	73	7.010	7.075	-0.065	37	6840	NC	
	57 Isooctane	57	7.010	7.145	-0.135	39	12851	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

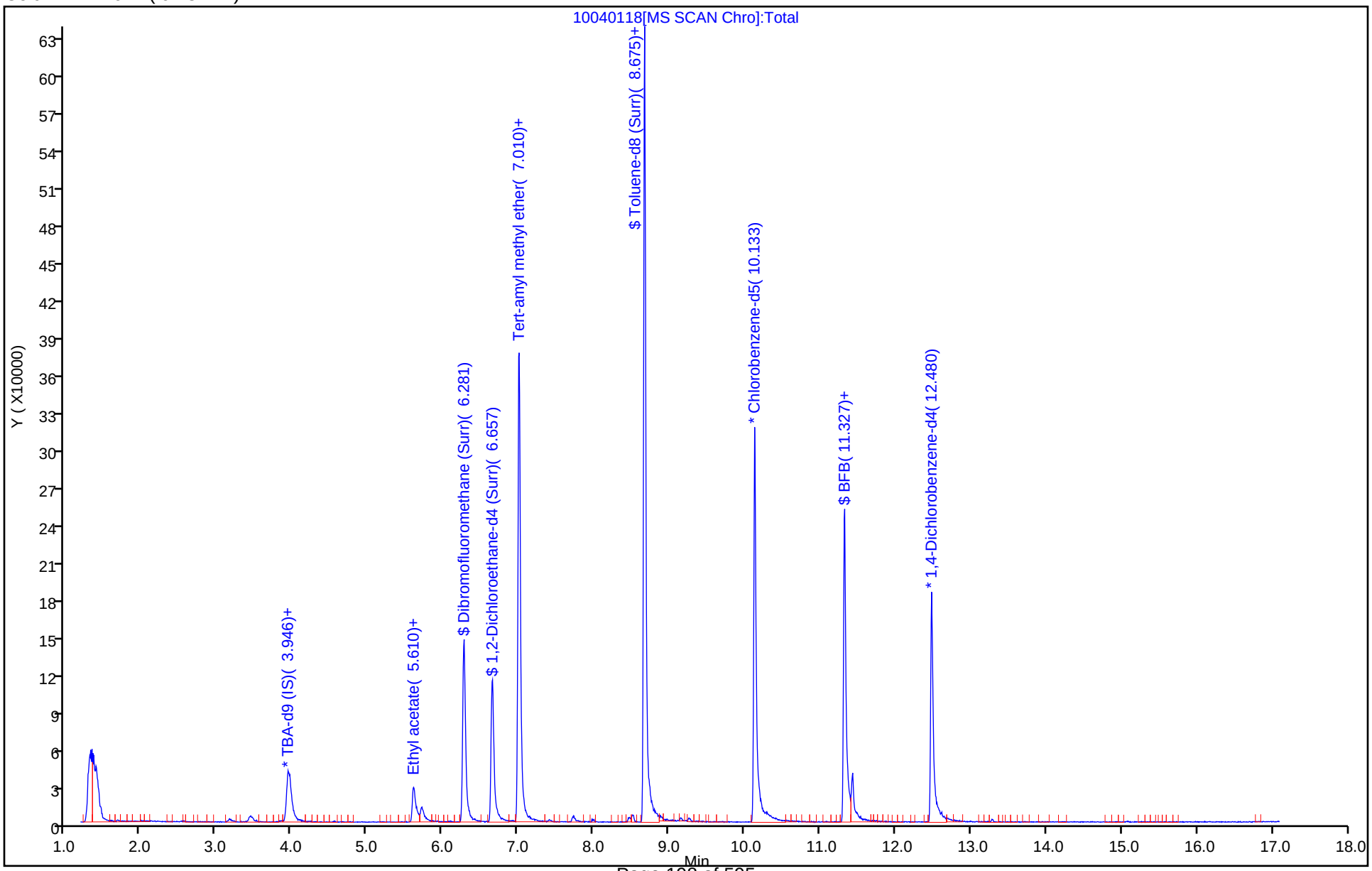
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 02-Apr-2020 22:02:15 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040118.d				
Injection Date:	02-Apr-2020 02:52:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-A-10	Lab Sample ID:	180-104021-10	Worklist Smp#:	18
Client ID:	HD-COD-SW-27-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040118.d
Lims ID: 180-104021-A-10
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 02-Apr-2020 02:52:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-018
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:13 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	43.3	86.61
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	40.9	81.88
$ 7 Toluene-d8 (Surr)	50.0	54.3	108.51
$ 8 4-Bromofluorobenzene (Surr)	50.0	41.8	83.56

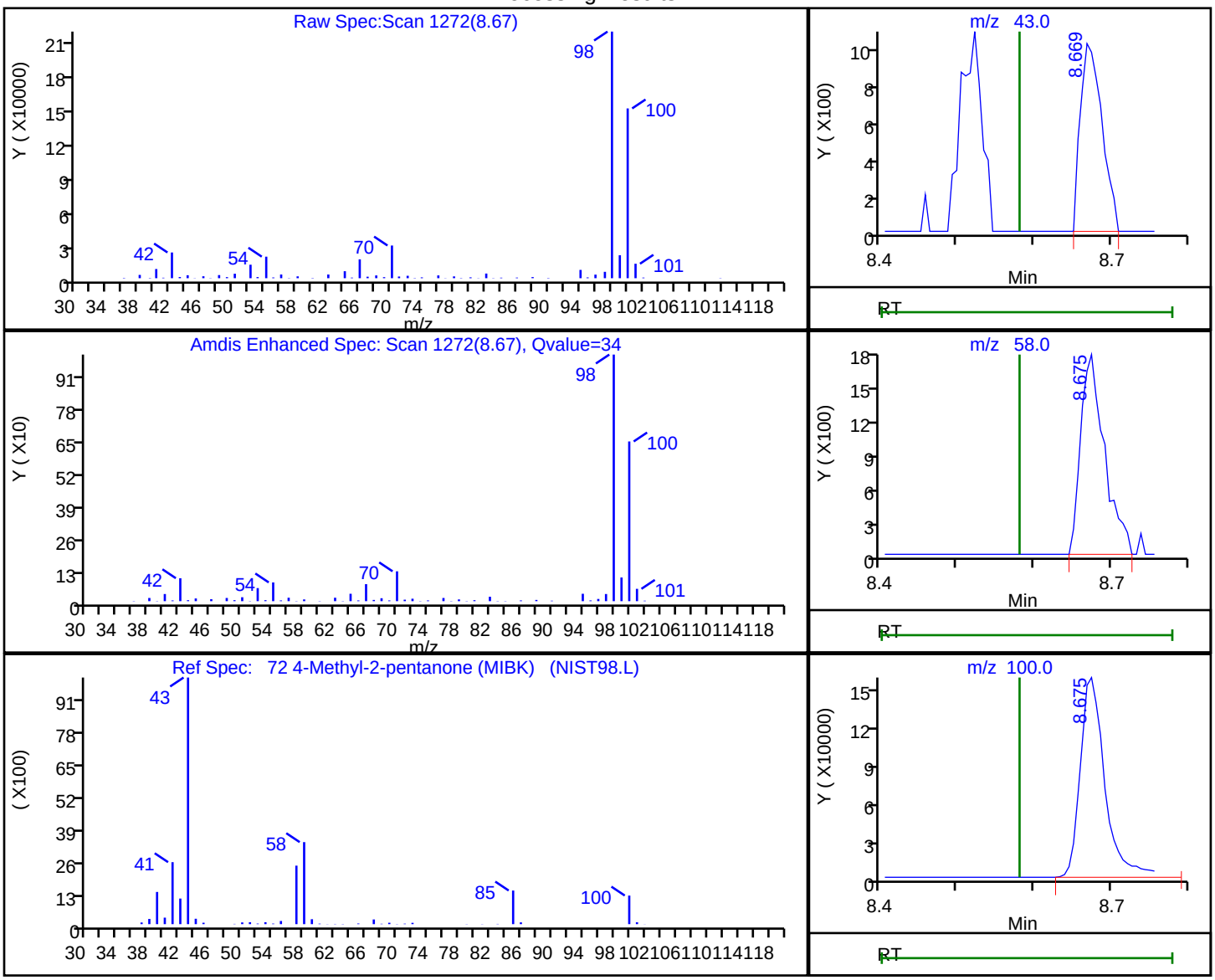
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040118.d				
Injection Date:	02-Apr-2020 02:52:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-A-10	Lab Sample ID:	180-104021-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	034635	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.67	43.00	2036	9.991935
8.67	58.00	3846	
8.67	100.00	357300	

Reviewer: journetp, 02-Apr-2020 17:30:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 180-104021-11

Matrix: Water Lab File ID: 10040119.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 13:35

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 03:19

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND	^c	5.0	3.4
75-15-0	Carbon disulfide	ND	^c	1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND	^c	1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND	^c	5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND	^c	1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 180-104021-11

Matrix: Water Lab File ID: 10040119.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 13:35

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 03:19

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		62-146
2037-26-5	Toluene-d8 (Surr)	123	X	75-120
460-00-4	4-Bromofluorobenzene (Surr)	89		64-120
1868-53-7	Dibromofluoromethane (Surr)	92		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040119.d
Lims ID: 180-104021-A-11
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 02-Apr-2020 03:19:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-019
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:20 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.963	3.951	0.012	0	84865	1000.0	
*	2 Fluorobenzene (IS)	96	7.010	7.004	0.006	98	448601	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	88	76080	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	98	68239	50.0	
$	5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	92	133872	46.1	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	143101	42.9	
$	7 Toluene-d8 (Surr)	98	8.675	8.675	0.001	94	614164	61.7	
$	8 4-Bromofluorobenzene (Surr	95	11.321	11.321	0.000	85	152286	44.3	
$	9 BFB	95	11.321	11.339	-0.018	0	152286	NR	
	37 Isopropyl alcohol	45	3.992	3.987	0.005	1	1037	NC	
	45 Ethyl acetate	43	5.698	5.598	0.100	20	257	NC	
	58 Tert-amyl methyl ether	73	7.004	7.075	-0.071	37	7270	NC	
	57 Isooctane	57	7.010	7.145	-0.135	32	12929	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

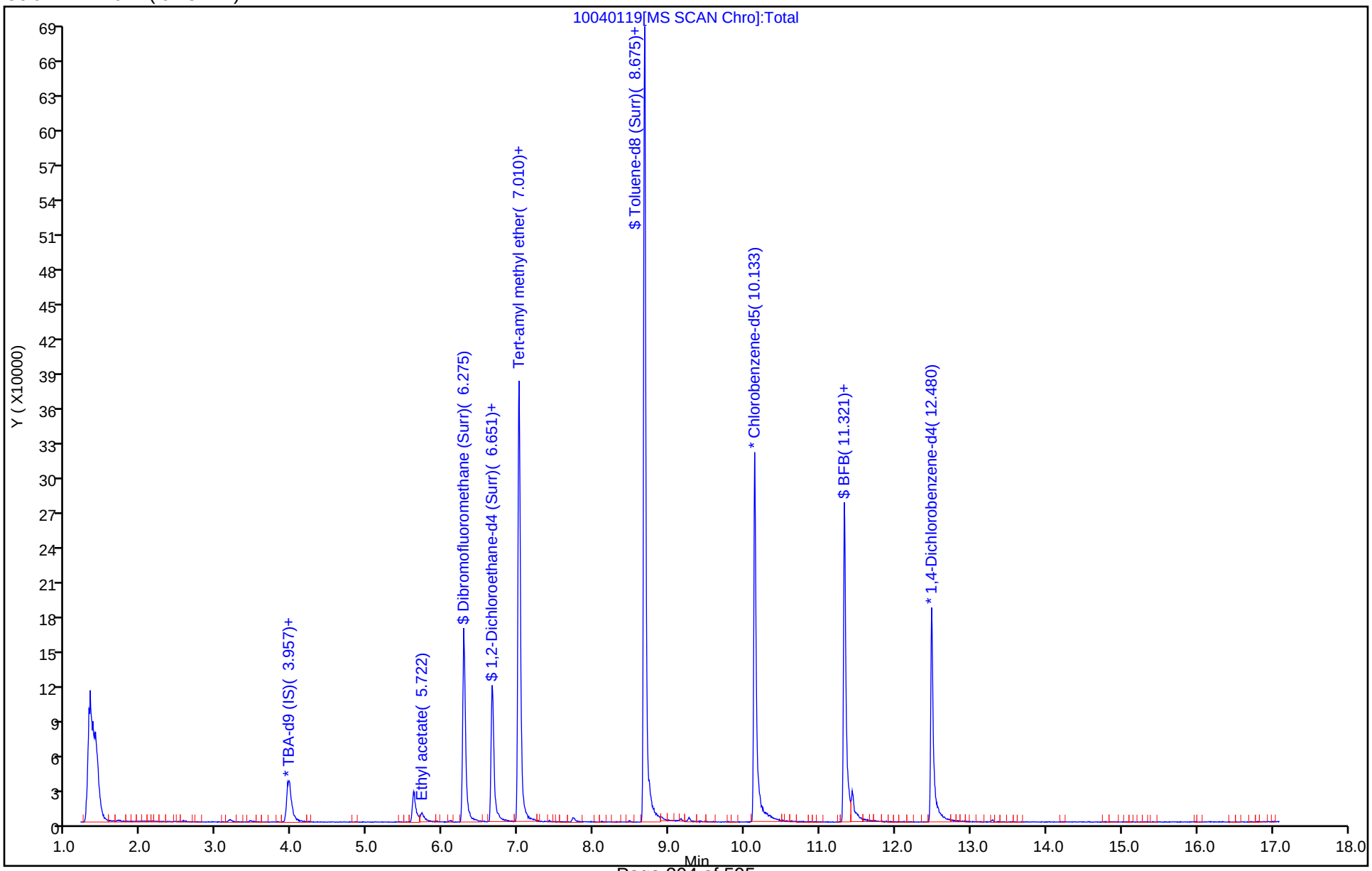
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 02-Apr-2020 22:02:21 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040119.d				
Injection Date:	02-Apr-2020 03:19:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-A-11	Lab Sample ID:	180-104021-11	Worklist Smp#:	19
Client ID:	HD-COD-SW-28-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040119.d
Lims ID: 180-104021-A-11
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 02-Apr-2020 03:19:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-019
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:20 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	46.1	92.11
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	42.9	85.72
$ 7 Toluene-d8 (Surr)	50.0	61.7	123.37
$ 8 4-Bromofluorobenzene (Surr)	50.0	44.3	88.53

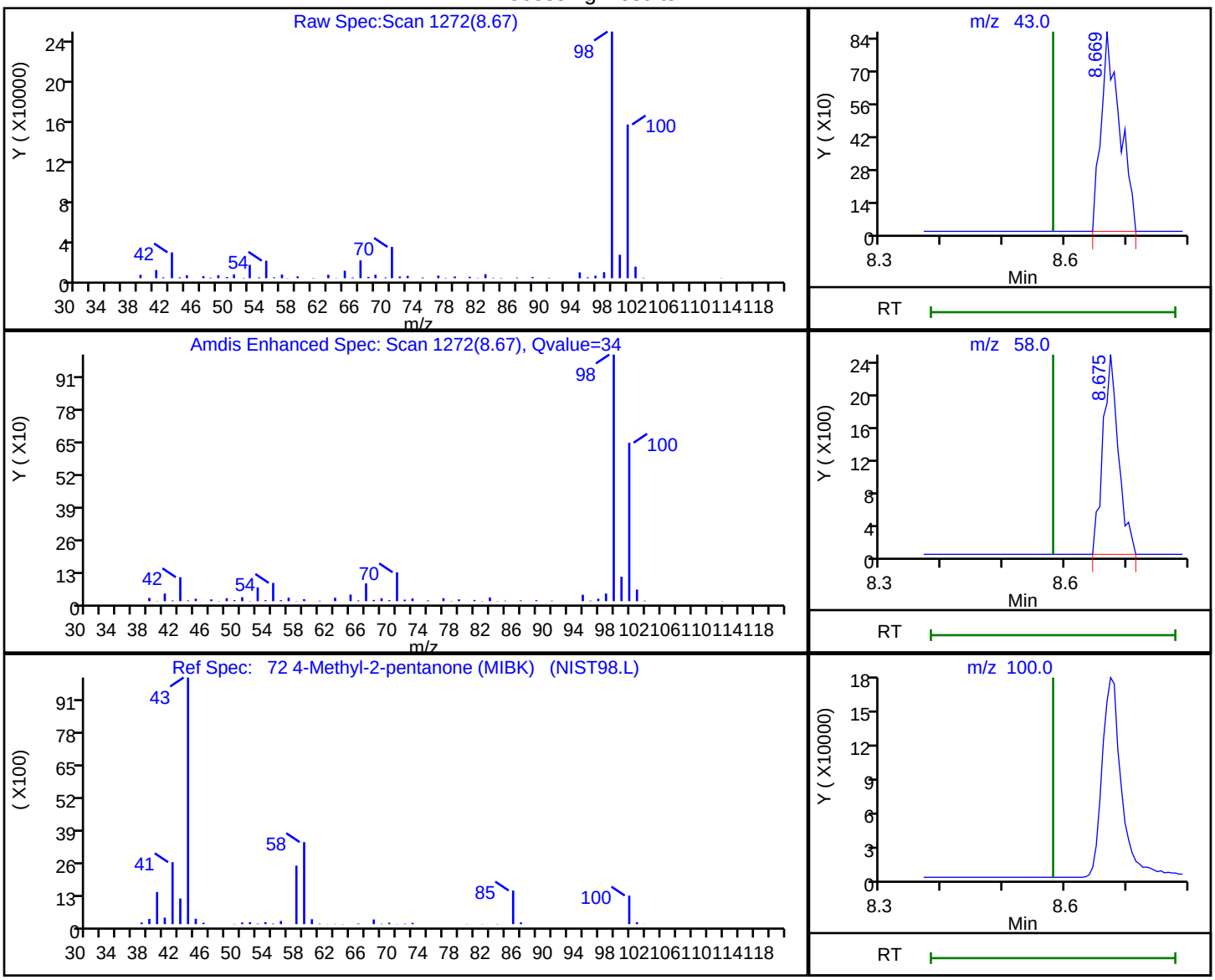
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040119.d				
Injection Date:	02-Apr-2020 03:19:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-A-11	Lab Sample ID:	180-104021-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	034635	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.67	43.00	1831	9.764903
8.67	58.00	4202	
8.67	100.00	393230	

Reviewer: journetp, 02-Apr-2020 17:30:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 180-104021-12

Matrix: Water Lab File ID: 10040120.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 14:25

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 03:47

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND	^c	5.0	3.4
75-15-0	Carbon disulfide	ND	^c	1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND	^c	1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND	^c	5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND	^c	1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 180-104021-12

Matrix: Water Lab File ID: 10040120.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 14:25

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 03:47

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		62-146
2037-26-5	Toluene-d8 (Surr)	125	X	75-120
460-00-4	4-Bromofluorobenzene (Surr)	96		64-120
1868-53-7	Dibromofluoromethane (Surr)	88		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040120.d
Lims ID: 180-104021-C-12
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 02-Apr-2020 03:47:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-020
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:23 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.957	3.951	0.006	0	77578	1000.0	
*	2 Fluorobenzene (IS)	96	7.016	7.004	0.012	99	454545	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	87	69509	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	97	72371	50.0	
$	5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	92	129739	44.0	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	132173	39.1	
$	7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	567673	62.4	
$	8 4-Bromofluorobenzene (Surr	95	11.327	11.321	0.006	82	151437	48.2	
$	9 BFB	95	11.327	11.339	-0.012	0	151437	NR	
	37 Isopropyl alcohol	45	3.975	3.987	-0.012	26	3616	NC	
	45 Ethyl acetate	43	5.616	5.598	0.018	30	125	NC	
	58 Tert-amyl methyl ether	73	7.010	7.075	-0.065	39	6897	NC	
	57 Isooctane	57	7.004	7.145	-0.141	38	12925	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

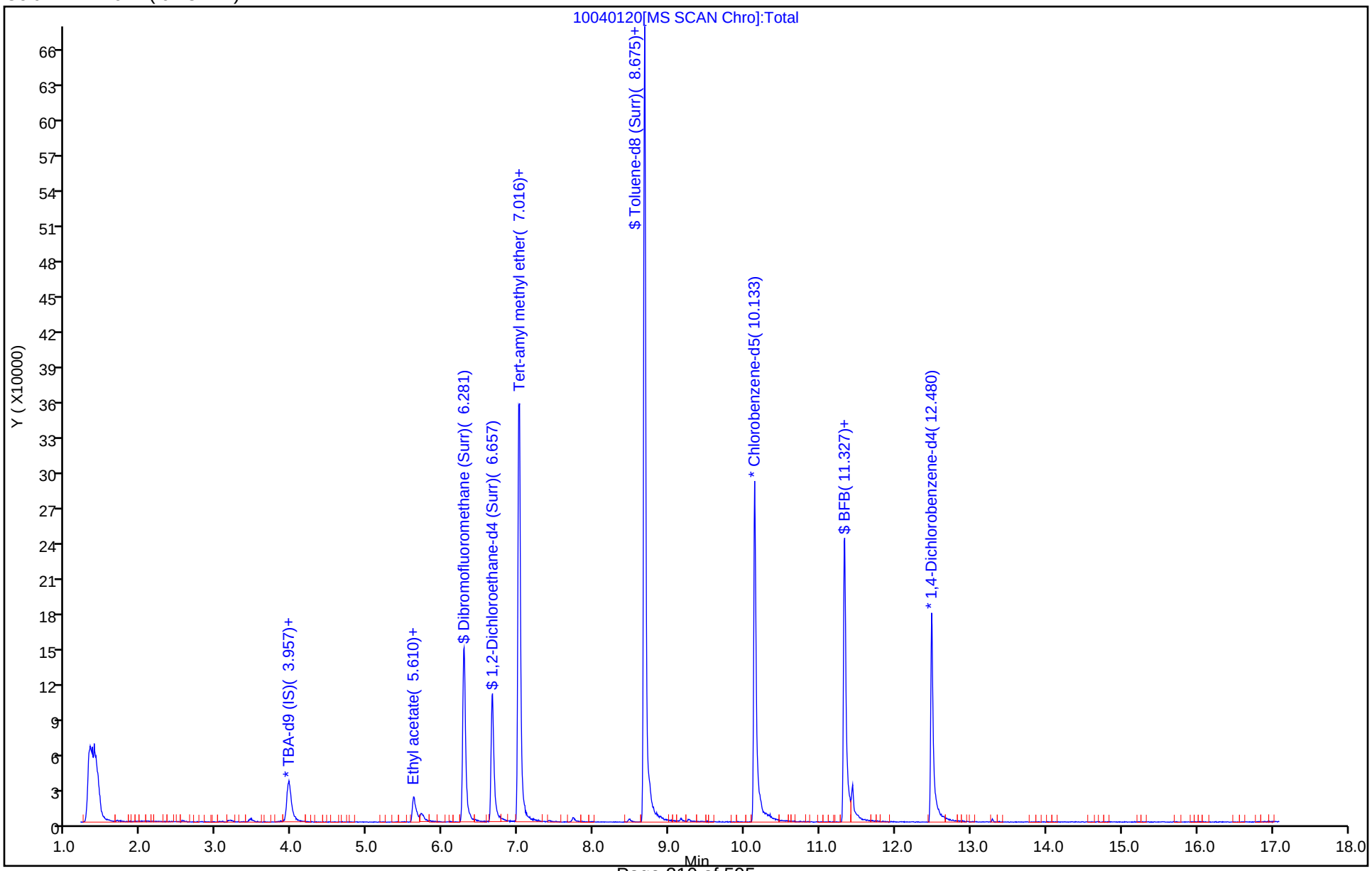
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 02-Apr-2020 22:02:25 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040120.d				
Injection Date:	02-Apr-2020 03:47:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-C-12	Lab Sample ID:	180-104021-12	Worklist Smp#:	20
Client ID:	HD-COD-SW-29-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh

Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040120.d
Lims ID: 180-104021-C-12
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 02-Apr-2020 03:47:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-020
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:23 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	44.0	88.10
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	39.1	78.14
$ 7 Toluene-d8 (Surr)	50.0	62.4	124.82
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.2	96.36

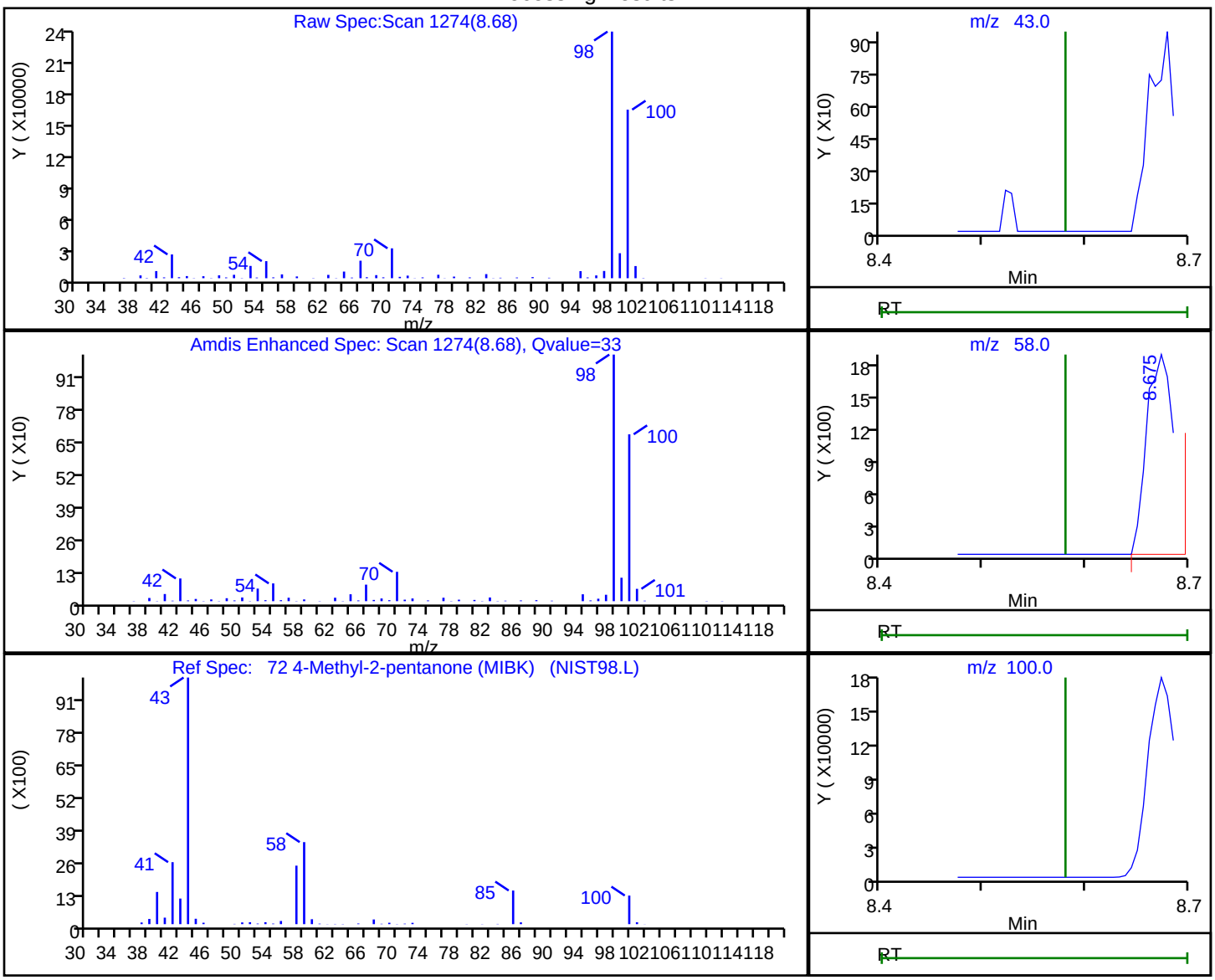
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040120.d				
Injection Date:	02-Apr-2020 03:47:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-C-12	Lab Sample ID:	180-104021-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	034635	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.68	43.00	1219	9.248732
8.67	58.00	3566	
8.67	100.00	386657	

Reviewer: journetp, 02-Apr-2020 17:30:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 180-104021-13

Matrix: Water Lab File ID: 10040121.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:00

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 04:15

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND	^c	5.0	3.4
75-15-0	Carbon disulfide	ND	^c	1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND	^c	1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND	^c	5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND	^c	1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 180-104021-13

Matrix: Water Lab File ID: 10040121.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:00

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 04:15

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		62-146
2037-26-5	Toluene-d8 (Surr)	114		75-120
460-00-4	4-Bromofluorobenzene (Surr)	79		64-120
1868-53-7	Dibromofluoromethane (Surr)	85		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040121.d
Lims ID: 180-104021-A-13
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 02-Apr-2020 04:15:30 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-021
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:28 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.951	3.951	0.000	0	114493	1000.0	
*	2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	489288	50.0	
*	3 Chlorobenzene-d5	119	10.139	10.133	0.006	89	83803	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.486	12.474	0.012	97	79675	50.0	
$	5 Dibromofluoromethane (Surr	113	6.281	6.275	0.006	93	134472	42.4	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	153441	42.1	
$	7 Toluene-d8 (Surr)	98	8.675	8.675	0.001	92	625336	57.0	
$	8 4-Bromofluorobenzene (Surr	95	11.327	11.321	0.006	85	148960	39.3	
$	9 BFB	95	11.327	11.339	-0.012	0	148960	NR	
	37 Isopropyl alcohol	45	3.946	3.987	-0.041	26	4485	NC	
	45 Ethyl acetate	43	5.598	5.598	0.000	1	170	NC	
	58 Tert-amyl methyl ether	73	7.010	7.075	-0.065	37	6912	NC	
	57 Isooctane	57	7.004	7.145	-0.141	32	14013	NC	
	77 Tetrachloroethene	164	9.263	9.251	0.012	91	5146	1.67	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

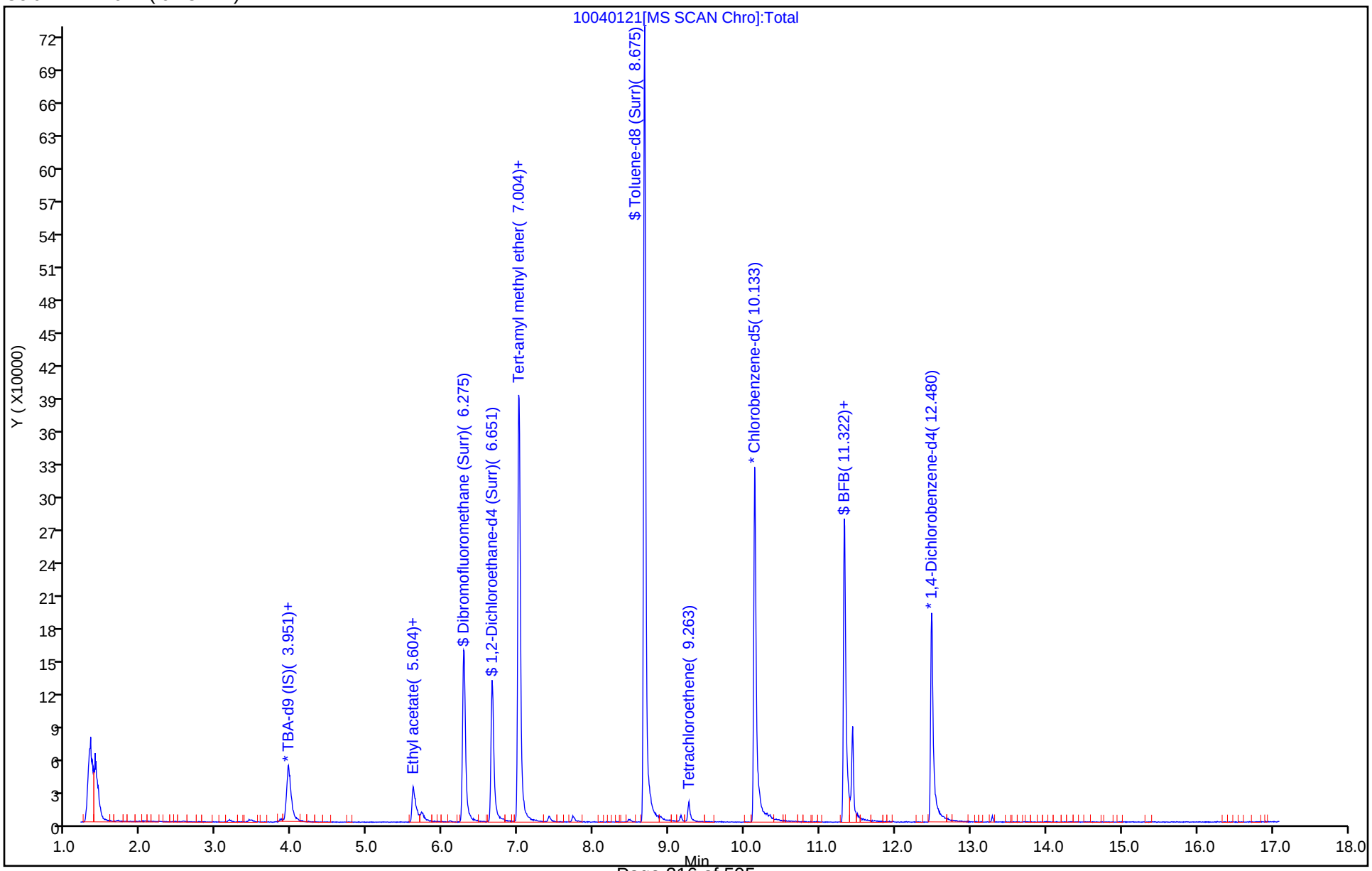
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 02-Apr-2020 22:02:29 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040121.d				
Injection Date:	02-Apr-2020 04:15:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-A-13	Lab Sample ID:	180-104021-13	Worklist Smp#:	21
Client ID:	HD-QC1-0/1-1				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040121.d
Lims ID: 180-104021-A-13
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 02-Apr-2020 04:15:30 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-021
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:28 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	42.4	84.83
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	42.1	84.27
$ 7 Toluene-d8 (Surr)	50.0	57.0	114.04
$ 8 4-Bromofluorobenzene (Surr)	50.0	39.3	78.62

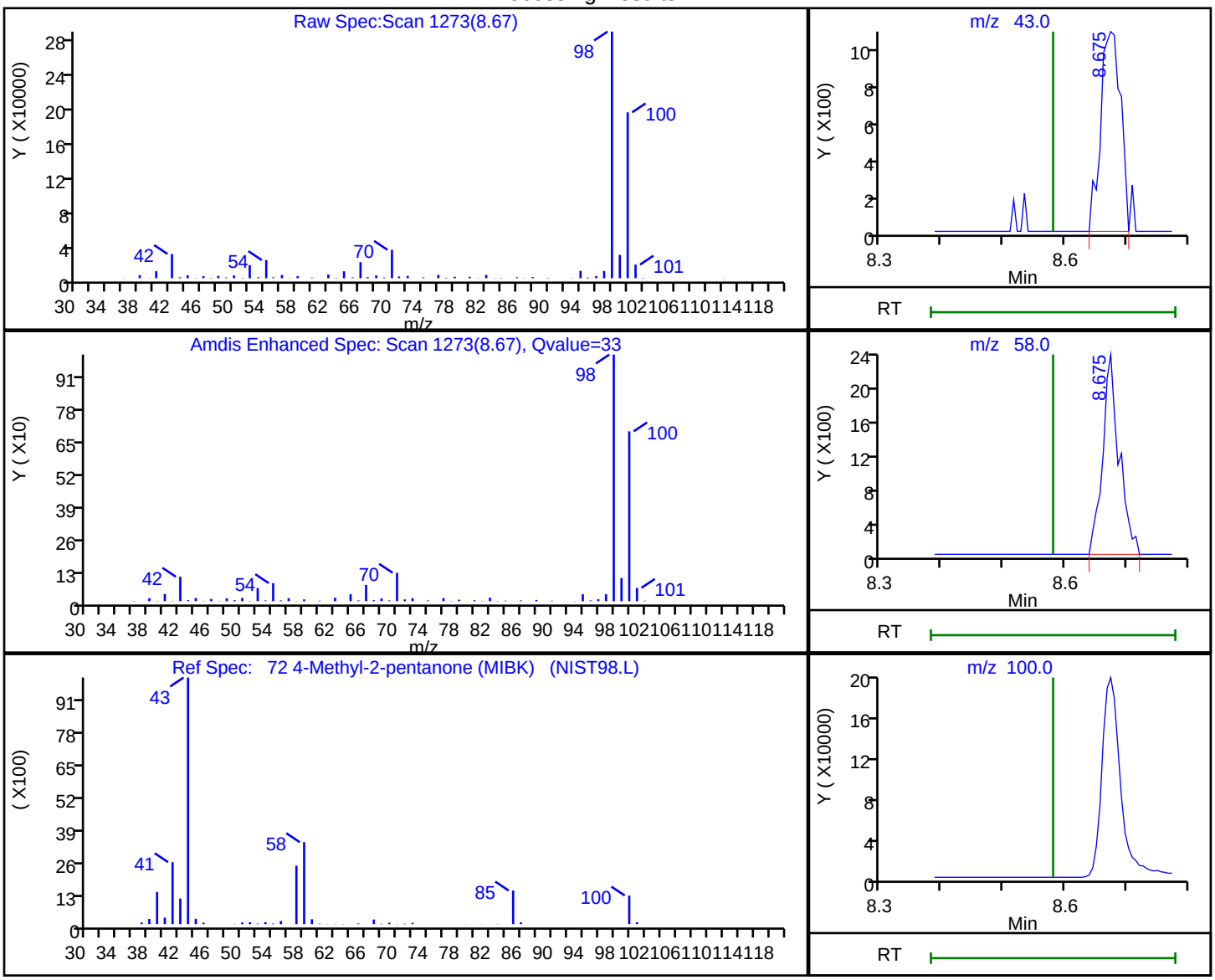
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040121.d				
Injection Date:	02-Apr-2020 04:15:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-A-13	Lab Sample ID:	180-104021-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	034635	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.67	43.00	2295	10.027268
8.67	58.00	4457	
8.67	100.00	416784	

Reviewer: journetp, 02-Apr-2020 17:31:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 180-104021-14

Matrix: Water Lab File ID: 10033111.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2020 22:04

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND	^c	5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 180-104021-14

Matrix: Water Lab File ID: 10033111.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2020 22:04

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	74	^c	62-146
2037-26-5	Toluene-d8 (Surr)	110		75-120
460-00-4	4-Bromofluorobenzene (Surr)	82		64-120
1868-53-7	Dibromofluoromethane (Surr)	80		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033111.d
Lims ID: 180-104021-A-14
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 31-Mar-2020 22:04:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-011
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 31-Mar-2020 23:21:14 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: journetp Date: 31-Mar-2020 23:09:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.963	3.940	0.023	0	72539	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	98	531188	50.0	
* 3 Chlorobenzene-d5	119	10.139	10.133	0.006	87	85321	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	98	83929	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.281	-0.006	93	137903	40.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.657	-0.006	0	145359	36.8	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	613926	55.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.327	11.321	0.006	84	158711	41.1	
$ 9 BFB	95	11.327	11.316	0.011	0	158711	NR	
37 Isopropyl alcohol	45	3.969	3.987	-0.018	26	3078	NC	
45 Ethyl acetate	43	5.640	5.598	0.042	1	70	NC	
58 Tert-amyl methyl ether	73	7.010	7.075	-0.065	37	8426	NC	
57 Isooctane	57	7.010	7.145	-0.135	32	14464	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

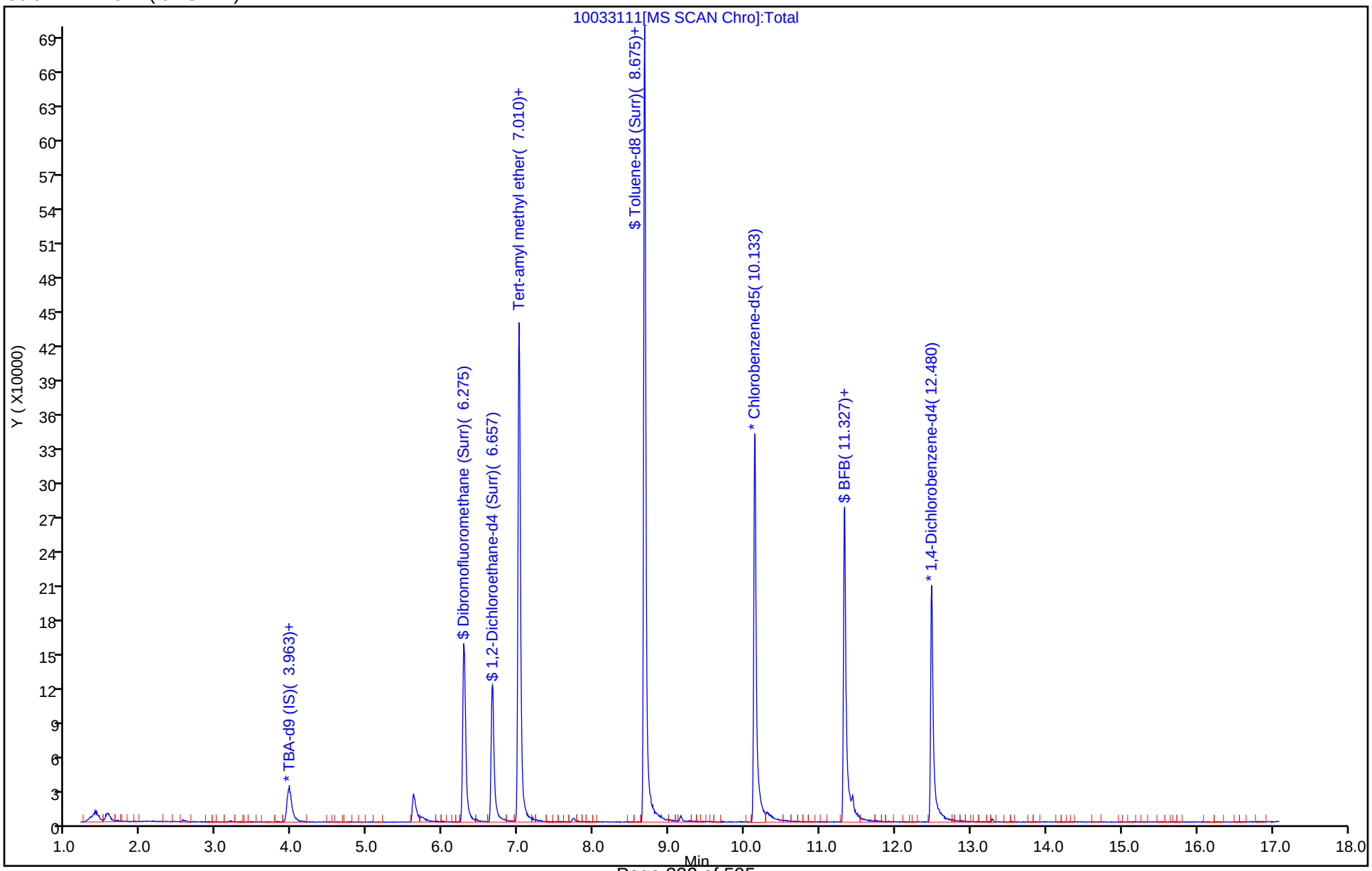
Report Date: 31-Mar-2020 23:54:12 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033111.d

Injection Date:	31-Mar-2020 22:04:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-A-14	Lab Sample ID:	180-104021-14	Worklist Smp#:	11
Client ID:	HD-QC1-0/1-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033111.d
Lims ID: 180-104021-A-14
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 31-Mar-2020 22:04:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-011
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 31-Mar-2020 23:21:14 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: journetp Date: 31-Mar-2020 23:09:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	40.1	80.13
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.8	73.54
$ 7 Toluene-d8 (Surr)	50.0	55.0	109.97
$ 8 4-Bromofluorobenzene (Surr)	50.0	41.1	82.28

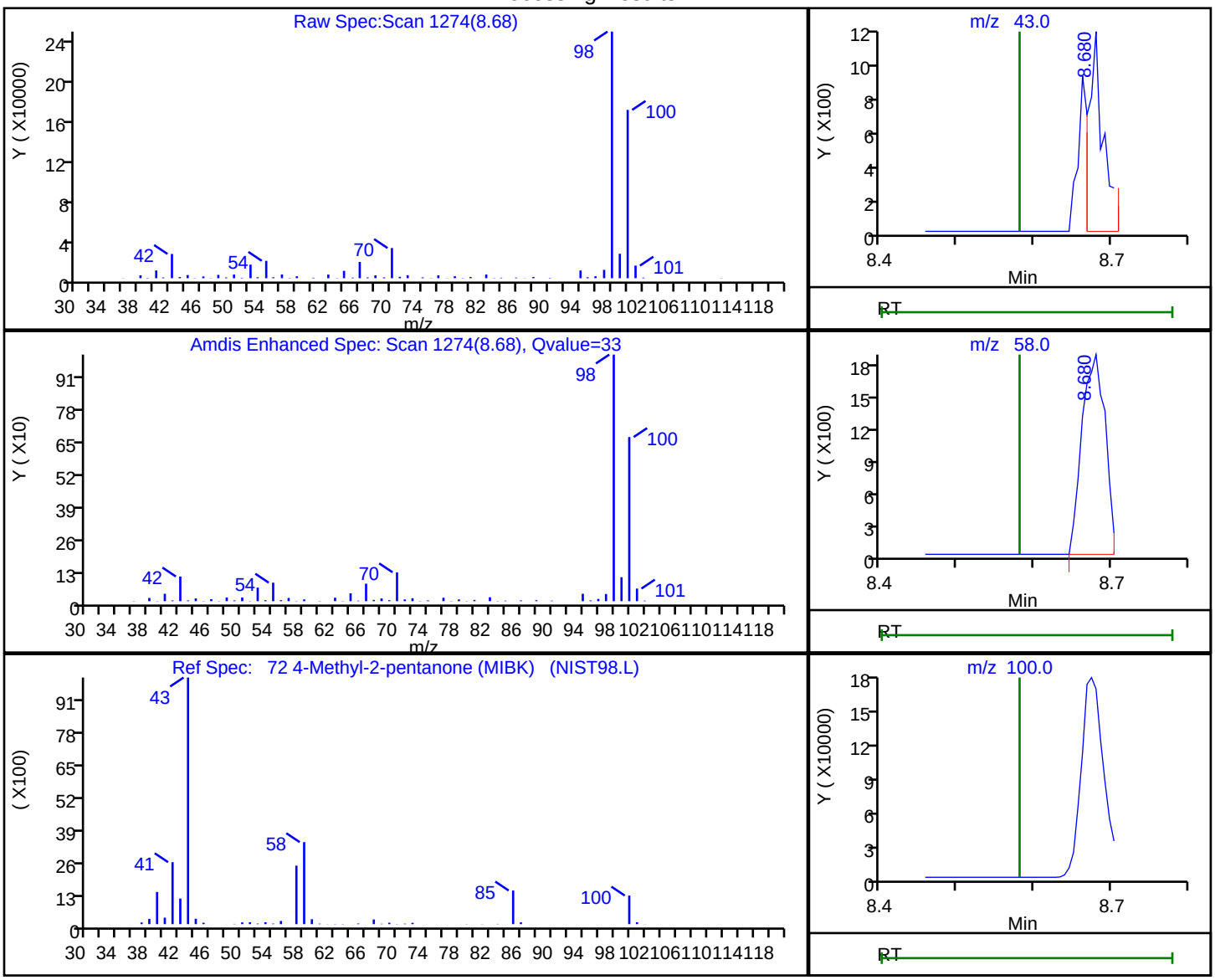
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033111.d				
Injection Date:	31-Mar-2020 22:04:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-A-14	Lab Sample ID:	180-104021-14		
Client ID:	HD-QC1-0/1-2				
Operator ID:	034635	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.68	43.00	1458	9.213247
8.68	58.00	3986	
8.67	100.00	399618	

Reviewer: journetp, 31-Mar-2020 23:09:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-308976/2	10030502.d
Level 2	IC 180-308976/3	10030503.d
Level 3	ICIS 180-308976/4	10030504.d
Level 4	IC 180-308976/5	10030505.d
Level 5	IC 180-308976/6	10030506.d
Level 6	IC 180-308976/7	10030507.d
Level 7	IC 180-308976/8	10030508.d
Level 8	IC 180-308976/9	10030509.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	0.3539 0.2907	0.3215 0.3283	0.3267 0.3190	0.3117	0.3117	Ave		0.3204			0.1000	5.6		20.0			
Chloromethane	0.2310 0.2012	0.2450 0.2222	0.2207 0.2112	0.2065	0.2071	Ave		0.2181			0.1000	6.7		20.0			
1,3-Butadiene	0.2902 0.2919	0.3163 0.3109	0.2973 0.2894	0.2918	0.3090	Ave		0.2996			0.0100	3.6		20.0			
Vinyl chloride	0.3806 0.3363	0.3752 0.3396	0.3244 0.3313	0.3105	0.3677	Ave		0.3457			0.1000	7.4		20.0			
Bromomethane	0.4302 0.3681	0.4012 0.3620	0.4116 0.3582	0.3746	0.3981	Ave		0.3880			0.0500	6.7		20.0			
Chloroethane	0.3279 0.2472	0.2897 0.2935	0.2938 0.2875	0.2444	0.2973	Ave		0.2851			0.0500	9.6		20.0			
Dichlorofluoromethane	0.9803 0.7177	0.8235 +++++	0.8778 +++++	0.9162	0.8768	Ave		0.8654			0.0100	10.3		20.0			
Trichlorofluoromethane	1.1389 0.8408	0.9865 0.8744	1.0353 +++++	1.0675	1.0343	Ave		0.9968			0.1000	10.6		20.0			
Ethyl ether	0.2095 0.1794	0.1430 0.1677	0.1628 0.1783	0.2314	0.2157	Ave		0.1860			0.0100	16.2		20.0			
1,1-Dichloroethene	0.3374 0.3147	0.3478 0.3445	0.2961 0.3308	0.2563	0.3239	Ave		0.3189			0.1000	9.5		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.4097 0.3774	0.3999 0.3971	0.3685 0.3906	0.3717	0.3725	Ave		0.3859			0.1000	4.0		20.0			
Acetone	0.0716 0.0624	0.0512 0.0599	0.0513 0.0601	0.0491	0.0514	Ave		0.0571			0.0500	13.5		20.0			
Iodomethane	0.5396 0.5290	0.5428 0.5507	0.5020 +++++	0.5159	0.5324	Ave		0.5304			0.0100	3.1		20.0			
Carbon disulfide	0.8712 0.9280	0.9391 0.9954	0.8456 +++++	0.8874	0.9565	Ave		0.9176			0.1000	5.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

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	0.2011 0.1987	0.1877 0.2261	0.1863 0.2137	0.2082	0.1997	Ave		0.2027			0.0100	6.5		20.0			
Methyl acetate	0.0791 0.0856	0.0656 +++++	0.0696 +++++	0.0653	0.0706	Ave		0.0726		*	0.1000	11.2		20.0			
Methylene Chloride	0.6041 0.3051	0.3678 0.3272	0.3282 +++++	0.2996	0.3045	Lin2	1.5332	0.2980			0.1000				0.9980		0.9900
tert-Butyl alcohol	1.5492 1.7773	1.8982 1.8146	1.5720 1.7644	1.5212	1.6960	Ave		1.6991			0.0100	8.1		20.0			
Acrylonitrile	0.0344 0.0450	0.0305 0.0445	0.0358 +++++	0.0342	0.0372	Ave		0.0374			0.0100	14.6		20.0			
trans-1,2-Dichloroethene	0.4316 0.3821	0.3984 0.4004	0.3451 0.4098	0.3904	0.3916	Ave		0.3937			0.1000	6.3		20.0			
Methyl tert-butyl ether	0.7286 0.8099	0.6945 0.8378	0.7176 0.8418	0.7331	0.7775	Ave		0.7676			0.1000	7.4		20.0			
Hexane	0.4572 0.4596	0.4417 0.4636	0.4249 0.4331	0.4308	0.4341	Ave		0.4431			0.0100	3.4		20.0			
1,1-Dichloroethane	0.6051 0.6086	0.5529 0.6215	0.5583 0.6316	0.6002	0.5870	Ave		0.5956			0.2000	4.7		20.0			
2,2-Dichloropropane	0.0826 0.0974	0.1008 0.0962	0.0956 0.0923	0.1004	0.0989	Ave		0.0955			0.0100	6.2		20.0			
cis-1,2-Dichloroethene	0.3815 0.4035	0.3763 0.4115	0.3704 0.4016	0.3964	0.3741	Ave		0.3894			0.1000	4.0		20.0			
2-Butanone (MEK)	0.0488 0.0638	0.0470 +++++	0.0583 +++++	0.0526	0.0586	Ave		0.0548			0.0500	11.8		20.0			
Bromochloromethane	0.1342 0.1460	0.1349 0.1554	0.1421 0.1628	0.1369	0.1359	Ave		0.1435			0.0100	7.4		20.0			
Tetrahydrofuran	0.0252 0.0348	0.0257 0.0356	0.0327 +++++	0.0280	0.0298	Ave		0.0302			0.0100	14.0		20.0			
Chloroform	1.0987 0.6830	0.7584 0.7627	0.7179 0.7303	0.7183	0.7075	Lin2	1.9713	0.6986			0.2000				0.9980		0.9900
1,1,1-Trichloroethane	0.7556 0.7369	0.7005 0.7742	0.7305 0.7573	0.7402	0.7320	Ave		0.7409			0.1000	3.0		20.0			
Cyclohexane	0.5150 0.5118	0.5393 0.5394	0.5063 0.5247	0.5437	0.5230	Ave		0.5254			0.1000	2.7		20.0			
Carbon tetrachloride	0.7209 0.7423	0.7126 0.7551	0.6988 0.7493	0.7223	0.7209	Ave		0.7278			0.1000	2.7		20.0			
1,1-Dichloropropene	0.5115 0.6200	0.5669 0.6355	0.5901 0.6243	0.6157	0.6042	Ave		0.5960			0.0100	6.8		20.0			
Benzene	1.2668 1.5642	1.3420 1.5489	1.4240 1.5528	1.5658	1.4880	Ave		1.4691			0.5000	7.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

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	0.0033 +++++	0.0029 +++++	0.0044 +++++	0.0039	0.0044	Ave		0.0038		*	0.0100	17.6		20.0			
1,2-Dichloroethane	0.3799 0.4708	0.3774 0.4839	0.4458 0.4879	0.4474	0.4375	Ave		0.4413			0.1000	9.7		20.0			
n-Heptane	0.4062 0.4481	0.4308 0.4331	0.4177 0.4375	0.4487	0.4218	Ave		0.4305			0.0100	3.4		20.0			
Trichloroethene	0.4229 0.4515	0.4198 0.4815	0.4162 0.4865	0.4311	0.4430	Ave		0.4441			0.2000	6.2		20.0			
Methylcyclohexane	0.7668 0.8072	0.8247 0.8271	0.7729 0.8063	0.8230	0.7886	Ave		0.8021			0.1000	2.9		20.0			
1,2-Dichloropropane	0.2838 0.2996	0.2604 0.3097	0.2751 0.3015	0.2870	0.2793	Ave		0.2870			0.1000	5.6		20.0			
Dibromomethane	0.1400 0.1682	0.1217 0.1778	0.1340 0.1688	0.1488	0.1505	Ave		0.1512			0.0100	12.7		20.0			
1,4-Dioxane	0.0019 0.0018	0.0012 0.0018	0.0015 0.0019	0.0015	0.0016	Lin1	-0.070	0.0018		*	0.0100				0.9900		0.9900
Bromodichloromethane	0.4582 0.5368	0.4515 0.5609	0.4691 0.5511	0.4903	0.4948	Ave		0.5016			0.2000	8.5		20.0			
cis-1,3-Dichloropropene	0.3454 0.5681	0.3894 0.5808	0.4789 0.5820	0.4856	0.4680	Lin1	-2.054	0.5638			0.2000				0.9920		0.9900
4-Methyl-2-pentanone (MIBK)	0.3265 0.6466	0.4585 0.6467	0.5820 0.6876	0.5192	0.6174	Lin2	-4.973	0.6325			0.1000				0.9910		0.9900
Toluene	7.6218 7.6741	8.1588 +++++	8.2168 +++++	8.6351	8.2257	Ave		8.0887			0.4000	4.7		20.0			
trans-1,3-Dichloropropene	1.2320 2.1031	1.2820 2.1646	1.7829 +++++	1.9514	2.0299	Lin1	-7.631	2.1128			0.1000				0.9940		0.9900
Ethyl methacrylate	0.8000 1.4295	0.8864 +++++	1.2178 +++++	1.3293	1.3248	Lin1	-4.662	1.3892			0.0100				0.9930		0.9900
1,1,2-Trichloroethane	0.8958 1.0723	0.9595 1.0864	1.0207 1.0694	1.0271	0.9962	Ave		1.0159			0.1000	6.4		20.0			
Tetrachloroethene	1.7766 1.7550	1.9168 1.9291	1.7810 1.7924	1.9059	1.8825	Ave		1.8424			0.2000	3.9		20.0			
1,3-Dichloropropane	1.4119 1.7608	1.6078 1.8495	1.6346 1.8108	1.7533	1.7141	Ave		1.6928			0.0100	8.3		20.0			
2-Hexanone	0.0893 +++++	0.2766 +++++	0.3616 +++++	0.3544	0.3910	Lin2	-4.686	0.3961			0.1000				0.9970		0.9900
Dibromochloromethane	1.0837 1.4196	1.2388 1.4847	1.2718 1.4991	1.3829	1.3474	Ave		1.3410			0.1000	10.4		20.0			
1,2-Dibromoethane (EDB)	0.7161 0.9744	0.7129 +++++	0.8864 +++++	0.8739	0.8610	Ave		0.8375			0.1000	12.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

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								
Chlorobenzene	4.4887 4.6908	5.0519 4.9082	4.9062 4.9988	5.1649	4.9754	Ave		4.8981			0.5000	4.4		20.0			
1,1,1,2-Tetrachloroethane	1.5348 1.7762	1.9301 1.8965	1.8412 1.8448	1.9575	1.8931	Ave		1.8343			0.0100	7.3		20.0			
Ethylbenzene	2.4798 2.8308	2.8624 2.8192	3.0371 2.8278	3.1797	3.0030	Ave		2.8800			0.1000	7.2		20.0			
m-Xylene & p-Xylene	3.3600 3.4228	3.7947 3.5765	3.9059 3.4142	3.7603	3.8393	Ave		3.6342			0.1000	6.0		20.0			
o-Xylene	2.9751 3.2865	3.6215 3.4187	3.5599 3.3058	3.6888	3.5659	Ave		3.4278			0.3000	6.8		20.0			
Styrene	4.3407 5.2615	5.3950 5.4771	5.5422 5.2772	5.7676	5.6927	Ave		5.3443			0.3000	8.3		20.0			
Bromoform	0.4703 0.8504	0.6146 0.8945	0.7704 0.8779	0.8123	0.8183	Ave		0.7636			0.1000	19.3		20.0			
Isopropylbenzene	9.2679 9.3479	10.914 9.6648	10.502 9.5735	11.160	10.663	Ave		10.137			0.1000	7.4		20.0			
Bromobenzene	0.9234 1.2586	1.0723 1.2826	1.1425 1.2487	1.1883	1.1456	Ave		1.1578			0.0100	10.2		20.0			
1,1,2,2-Tetrachloroethane	0.9813 1.0853	1.0119 +++++	1.1731 +++++	1.0968	1.1203	Ave		1.0781			0.3000	6.6		20.0			
trans-1,4-Dichloro-2-butene	0.0041 0.1918	0.0936 +++++	0.1236 +++++	0.1306	0.1555	Qua	-0.588	0.1071	0.0005049		0.0100				0.9990		0.9900
1,2,3-Trichloropropane	0.1986 0.2585	0.2175 0.2389	0.2281 0.2373	0.2234	0.2219	Ave		0.2280			0.0100	7.7		20.0			
N-Propylbenzene	1.2235 1.5877	1.7984 1.6296	1.5963 1.5283	1.6575	1.6316	Ave		1.5816			0.0100	10.4		20.0			
2-Chlorotoluene	1.0474 1.2876	1.3272 1.2968	1.2803 1.2061	1.2992	1.2747	Ave		1.2524			0.0100	7.2		20.0			
1,3,5-Trimethylbenzene	4.0545 4.9128	5.4081 5.0328	5.5147 4.7152	5.3428	5.1604	Ave		5.0177			0.0100	9.4		20.0			
4-Chlorotoluene	0.7775 1.2993	1.2043 1.3275	1.2434 1.2504	1.3109	1.3202	Ave		1.2167			0.0100	15.0		20.0			
tert-Butylbenzene	3.6143 4.1772	4.9598 4.3845	4.7375 4.0764	4.6380	4.6402	Ave		4.4035			0.0100	9.8		20.0			
1,2,4-Trimethylbenzene	4.2023 4.7529	5.2373 4.9394	5.2025 4.6276	5.0403	5.0172	Ave		4.8774			0.0100	7.0		20.0			
sec-Butylbenzene	5.6324 5.9540	7.4613 6.3956	7.0893 5.8596	6.8861	6.7727	Ave		6.5064			0.0100	10.0		20.0			
1,3-Dichlorobenzene	1.7434 2.3120	2.0924 2.4932	2.3591 2.3009	2.3729	2.3821	Ave		2.2570			0.6000	10.5		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: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

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								
4-Isopropyltoluene	4.8067 5.1121	6.2904 5.3633	6.0221 5.0418	5.9256	5.8490	Ave		5.5514			0.0100	9.7		20.0			
1,4-Dichlorobenzene	2.6533 2.3242	2.3241 2.4622	2.2952 2.3070	2.3641	2.4118	Ave		2.3927			0.5000	5.0		20.0			
n-Butylbenzene	4.4017 4.1424	4.7324 4.5412	5.2269 4.1925	5.0810	4.8991	Ave		4.6522			0.0100	8.6		20.0			
1,2-Dichlorobenzene	1.8631 1.9833	1.8413 2.1376	2.0391 1.9726	2.0946	2.0604	Ave		1.9990			0.4000	5.3		20.0			
1,2-Dibromo-3-Chloropropane	0.0367 0.1130	0.0684 0.1213	0.1027 0.1235	0.0907	0.1023	Lin1	-0.626	0.1182			0.0500				0.9910		0.9900
1,2,4-Trichlorobenzene	0.7819 0.8237	1.2122 0.9561	0.9706 0.9183	1.0670	1.0658	Ave		0.9745			0.2000	14.3		20.0			
Hexachlorobutadiene	0.8896 0.6806	1.4767 +++++	1.0409 +++++	0.9846	0.9815	Qua	0.5594	1.2812	-0.003437		0.0100				0.9900		0.9900
Naphthalene	0.9185 1.2395	1.2957 1.4930	1.2870 1.3745	1.3353	1.4185	Ave		1.2953			0.0100	13.3		20.0			
1,2,3-Trichlorobenzene	0.5672 0.5768	0.8626 0.7022	0.7760 0.6785	0.7798	0.7663	Ave		0.7137			0.0100	14.5		20.0			
Dibromofluoromethane (Surr)	0.2430 0.3327	0.3219 0.3548	0.3151 0.3638	0.3368	0.3238	Ave		0.3240				11.3		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3172 0.3995	0.3561 0.4092	0.3691 +++++	0.3648	0.3890	Ave		0.3721				8.3		20.0			
Toluene-d8 (Surr)	4.8254 6.3359	7.2200 6.8255	6.5115 6.6941	7.0239	6.9089	Ave		6.5432				11.4		20.0			
4-Bromofluorobenzene (Surr)	1.7796 2.1387	2.3647 2.3351	2.2540 2.3797	2.4570	2.3783	Ave		2.2609				9.6		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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-308976/2	10030502.d
Level 2	IC 180-308976/3	10030503.d
Level 3	ICIS 180-308976/4	10030504.d
Level 4	IC 180-308976/5	10030505.d
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Level 6	IC 180-308976/7	10030507.d
Level 7	IC 180-308976/8	10030508.d
Level 8	IC 180-308976/9	10030509.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	11621 390020	55515 467367	119714 556035	174013	229231	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	7585 270038	42316 316310	80873 368155	115289	152329	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	9527 391650	54630 442636	108948 504447	162870	227259	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	12498 451214	64798 483459	118869 577361	173301	270387	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Ave	14125 493925	69287 515459	150845 624365	209086	292760	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	10765 331751	50023 417861	107644 501085	136407	218668	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	32188 963051	142211 +++++	321673 +++++	511449	644807	5.00 175	25.0 +++++	50.0 +++++	75.0	100
Trichlorofluoromethane	FB	Ave	37395 1128189	170371 1245030	379388 +++++	595856	760679	5.00 175	25.0 200	50.0 +++++	75.0	100
Ethyl ether	FB	Ave	6878 240711	24688 238721	59670 310826	129174	158660	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethene	FB	Ave	11077 422291	60067 490514	108514 576597	143061	238212	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	13452 506345	69061 565349	135034 680833	207487	273976	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	7050 167342	17683 170473	37605 209352	54838	75667	15.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	17718 709876	93733 784084	183961 +++++	287987	391560	5.00 175	25.0 200	50.0 +++++	75.0	100
Carbon disulfide	FB	Ave	28605 1245249	162180 1417265	309876 +++++	495326	703406	5.00 175	25.0 200	50.0 +++++	75.0	100
Allyl chloride	FB	Ave	6602 266587	32412 321965	68269 372450	116198	146874	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: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

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	5193 229853	22651 +++++	51013 +++++	72851	103902	10.0 350	50.0 +++++	100 +++++	150	200
Methylene Chloride	FB	Lin2	19837 409427	63521 465888	120273 +++++	167213	223955	5.00 175	25.0 200	50.0 +++++	75.0	100
tert-Butyl alcohol	TBAd9	Ave	5922 304017	27648 323956	63278 432663	84380	149997	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	11292 603974	52606 634167	131214 +++++	191118	273711	50.0 1750	250 2000	500 +++++	750	1000
trans-1,2-Dichloroethene	FB	Ave	14173 512694	68811 570100	126450 714265	217896	287971	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	23922 1086750	119943 1192840	262941 1467225	409206	571806	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	15011 616655	76285 660097	155704 754849	240468	319227	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	19868 816574	95482 884818	204576 1100882	335032	431714	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	2711 130655	17416 136975	35043 160832	56023	72742	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	12526 541371	64979 585925	135733 699927	221248	275147	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	4803 171159	16247 +++++	42742 +++++	58717	86132	15.0 350	50.0 +++++	100 +++++	150	200
Bromochloromethane	FB	Ave	4408 195923	23300 221239	52088 283672	76422	99923	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	1654 93461	8861 101489	23930 +++++	31262	43778	10.0 350	50.0 400	100 +++++	150	200
Chloroform	FB	Lin2	36074 916474	130970 1085861	263072 1272781	400958	520307	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	24809 988723	120978 1102356	267673 1319964	413180	538308	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	16910 686703	93140 767937	185530 914496	303510	384660	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	23671 996008	123068 1075112	256051 1305955	403212	530160	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	16795 831979	97894 904777	216227 1088062	343676	444373	5.00 175	25.0 200	50.0 250	75.0	100
Benzene	FB	Ave	41595 2098843	231764 2205328	521811 2706455	874048	1094311	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Ave	2671 +++++	12570 +++++	40120 +++++	54398	80437	125 +++++	625 +++++	1250 +++++	1875	2500
1,2-Dichloroethane	FB	Ave	12474 631737	65172 688930	163353 850439	249739	321728	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: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

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
n-Heptane	FB	Ave	13338 601327	74403 616657	153048 762445	250460	310188	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	13886 605770	72492 685578	152519 847888	240663	325760	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	25177 1083149	142429 1177656	283237 1405398	459421	579938	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	9317 402035	44969 440965	100803 525480	160211	205381	5.00 175	25.0 200	50.0 250	75.0	100
Dibromomethane	FB	Ave	4598 225676	21014 253155	49120 294139	83081	110691	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Lin1	1256 48730	4011 50515	10677 66270	17177	23792	100 3500	500 4000	1000 5000	1500	2000
Bromodichloromethane	FB	Ave	15046 720328	77978 798581	171901 960614	273693	363855	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Lin1	11340 762281	67248 826994	175499 1014438	271074	344203	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Lin2	7116 411914	31900 421782	91060 551740	120410	194839	15.0 350	50.0 400	100 500	150	200
Toluene	CBNZ d5	Ave	55365 2444430	283794 +++++	642792 +++++	1001260	1297941	5.00 175	25.0 +++++	50.0 +++++	75.0	100
trans-1,3-Dichloropropene	CBNZ d5	Lin1	8949 669882	44592 705905	139471 +++++	226270	320301	5.00 175	25.0 200	50.0 +++++	75.0	100
Ethyl methacrylate	CBNZ d5	Lin1	5811 455340	30831 +++++	95269 +++++	154139	209044	5.00 175	25.0 +++++	50.0 +++++	75.0	100
1,1,2-Trichloroethane	CBNZ d5	Ave	6507 341571	33375 354284	79846 429033	119097	157192	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBNZ d5	Ave	12905 559015	66673 629089	139326 719078	220997	297039	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBNZ d5	Ave	10256 560857	55924 603123	127873 726494	203297	270471	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBNZ d5	Lin2	1946 +++++	19245 +++++	56583 +++++	82196	123403	15.0 +++++	50.0 +++++	100 +++++	150	200
Dibromochloromethane	CBNZ d5	Ave	7872 452167	43090 484168	99491 601429	160347	212604	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBNZ d5	Ave	5202 310363	24796 +++++	69345 +++++	101333	135865	5.00 175	25.0 +++++	50.0 +++++	75.0	100
Chlorobenzene	CBNZ d5	Ave	32606 1494167	175725 1600612	383811 2005478	598880	785070	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	11149 565760	67135 618477	144039 740112	226982	298710	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBNZ d5	Ave	18013 901684	99564 919353	237586 1134493	368698	473836	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: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

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
m-Xylene & p-Xylene	CBNZ d5	Ave	24407 1090260	131994 1166335	305556 1369725	436020	605797	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBNZ d5	Ave	21611 1046831	125969 1114876	278489 1326242	427728	562662	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBNZ d5	Ave	31531 1675931	187661 1786127	433564 2117156	668767	898251	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBNZ d5	Ave	3416 270875	21377 291699	60270 352219	94192	129123	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBNZ d5	Ave	67322 2977570	379633 3151783	821595 3840802	1294032	1682492	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCBd 4	Ave	12263 602051	61581 658803	151863 834527	248053	314753	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	7128 345684	35199 +++++	91769 +++++	127178	176774	5.00 175	25.0 +++++	50.0 +++++	75.0	100
trans-1,4-Dichloro-2-butene	DCBd 4	Qua	54 91749	5374 +++++	16429 +++++	27270	42720	5.00 175	25.0 +++++	50.0 +++++	75.0	100
1,2,3-Trichloropropane	DCBd 4	Ave	2637 123645	12489 122702	30317 158572	46641	60953	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCBd 4	Ave	16249 759496	103285 837040	212193 1021342	345980	448250	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCBd 4	Ave	13910 615951	76219 666107	170177 806049	271200	350215	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCBd 4	Ave	53847 2350080	310591 2585135	733030 3151109	1115258	1417761	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCBd 4	Ave	10326 621550	69163 681871	165277 835651	273630	362707	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCBd 4	Ave	48000 1998235	284843 2252126	629733 2724210	968122	1274829	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCBd 4	Ave	55810 2273618	300783 2537177	691531 3092554	1052100	1378422	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCBd 4	Ave	74802 2848148	428504 3285127	942342 3915913	1437385	1860720	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCBd 4	Ave	23153 1105975	120168 1280655	313587 1537640	495311	654446	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCBd 4	Ave	63836 2445444	361262 2754893	800486 3369391	1236900	1606949	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCBd 4	Ave	35238 1111796	133473 1264708	305090 1541742	493479	662601	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCBd 4	Ave	58458 1981570	271786 2332611	694785 2801819	1060605	1345966	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCBd 4	Ave	24743 948720	105744 1097984	271039 1318288	437218	566072	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: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

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-Dibromo-3-Chloropropane	DCBd 4	Lin1	487 54062	3929 62306	13645 82521	18938	28094	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trichlorobenzene	DCBd 4	Ave	10384 394038	69617 491109	129018 613721	222734	292813	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCBd 4	Qua	11814 325588	84810 +++++	138361 +++++	205525	269650	5.00 175	25.0 +++++	50.0 +++++	75.0	100
Naphthalene	DCBd 4	Ave	12198 592950	74410 766897	171077 918581	278737	389718	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCBd 4	Ave	7533 275900	49539 360664	103148 453410	162776	210522	5.00 175	25.0 200	50.0 250	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	7980 446484	55586 505146	115463 634100	188005	238132	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	10416 536102	61490 582622	135253 +++++	203645	286057	5.00 175	25.0 200	50.0 +++++	75.0	100
Toluene-d8 (Surr)	CBNZ d5	Ave	35052 2018165	251140 2225866	509390 2685618	814437	1090155	5.00 175	25.0 200	50.0 250	75.0	100
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	12927 681247	82254 761497	176330 954726	284892	375276	5.00 175	25.0 200	50.0 250	75.0	100

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-308976/2	10030502.d
Level 2	IC 180-308976/3	10030503.d
Level 3	ICIS 180-308976/4	10030504.d
Level 4	IC 180-308976/5	10030505.d
Level 5	IC 180-308976/6	10030506.d
Level 6	IC 180-308976/7	10030507.d
Level 7	IC 180-308976/8	10030508.d
Level 8	IC 180-308976/9	10030509.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	10.5 2.4	0.3 -0.4	2.0	-2.7	-2.7	-9.3	50 30	30 30	30	30	30	30
Chloromethane	5.9 1.8	12.3 -3.2	1.2	-5.3	-5.0	-7.7	50 30	30 30	30	30	30	30
1,3-Butadiene	-3.2 3.8	5.6 -3.4	-0.8	-2.6	3.1	-2.6	50 30	30 30	30	30	30	30
Vinyl chloride	10.1 -1.8	8.5 -4.2	-6.2	-10.2	6.4	-2.7	50 30	30 30	30	30	30	30
Bromomethane	10.9 -6.7	3.4 -7.7	6.1	-3.5	2.6	-5.1	50 30	30 30	30	30	30	30
Chloroethane	15.0 2.9	1.6 0.8	3.0	-14.3	4.3	-13.3	50 30	30 30	30	30	30	30
Dichlorofluoromethane	13.3 +++++	-4.8 +++++	1.4	5.9	1.3	-17.1	50	30	30	30	30	30
Trichlorofluoromethane	14.3 -12.3	-1.0 +++++	3.9	7.1	3.8	-15.7	50 30	30	30	30	30	30
Ethyl ether	12.6 -9.8	-23.1 -4.1	-12.4	24.4	16.0	-3.5	50 30	30 30	30	30	30	30
1,1-Dichloroethene	5.8 8.0	9.1 3.7	-7.2	-19.6	1.6	-1.3	50 30	30 30	30	30	30	30
1,1,2-Trichloro-1,2,2-trifluoroethane	6.2 2.9	3.6 1.2	-4.5	-3.7	-3.5	-2.2	50 30	30 30	30	30	30	30
Acetone	25.3 4.8	-10.4 5.2	-10.2	-14.0	-9.9	9.2	50 30	30 30	30	30	30	30
Iodomethane	1.7 3.8	2.3 +++++	-5.3	-2.7	0.4	-0.2	50 30	30	30	30	30	30
Carbon disulfide	-5.1 8.5	2.3 +++++	-7.8	-3.3	4.2	1.1	50 30	30	30	30	30	30
Allyl chloride	-0.8 11.6	-7.4 5.4	-8.1	2.7	-1.5	-2.0	50 30	30 30	30	30	30	30

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

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	8.9 +++++	-9.7 +++++	-4.2	-10.2	-2.7	17.9	50	30	30	30	30	30
Methylene Chloride	-0.2 7.2	2.9 +++++	-0.1	-6.3	-2.9	-0.5	50 30	30	30	30	30	30
tert-Butyl alcohol	-8.8 6.8	11.7 3.8	-7.5	-10.5	-0.2	4.6	50 30	30 30	30	30	30	30
Acrylonitrile	-8.0 19.2	-18.5 +++++	-4.2	-8.4	-0.4	20.4	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	9.6 1.7	1.2 4.1	-12.3	-0.8	-0.5	-2.9	50 30	30 30	30	30	30	30
Methyl tert-butyl ether	-5.1 9.1	-9.5 9.7	-6.5	-4.5	1.3	5.5	50 30	30 30	30	30	30	30
Hexane	3.2 4.6	-0.3 -2.3	-4.1	-2.8	-2.0	3.7	50 30	30 30	30	30	30	30
1,1-Dichloroethane	1.6 4.3	-7.2 6.0	-6.3	0.8	-1.4	2.2	50 30	30 30	30	30	30	30
2,2-Dichloropropane	-13.6 0.7	5.6 -3.4	0.1	5.1	3.5	1.9	50 30	30 30	30	30	30	30
cis-1,2-Dichloroethene	-2.0 5.7	-3.4 3.1	-4.9	1.8	-3.9	3.6	50 30	30 30	30	30	30	30
2-Butanone (MEK)	-11.1 +++++	-14.2 +++++	6.3	-4.1	6.8	16.3	50	30	30	30	30	30
Bromochloromethane	-6.5 8.3	-6.0 13.4	-1.0	-4.6	-5.3	1.7	50 30	30 30	30	30	30	30
Tetrahydrofuran	-16.7 17.8	-15.2 +++++	8.0	-7.4	-1.6	15.1	50 30	30	30	30	30	30
Chloroform	0.8 7.8	-2.7 3.4	-2.9	-0.9	-1.6	-3.8	50 30	30 30	30	30	30	30
1,1,1-Trichloroethane	2.0 4.5	-5.4 2.2	-1.4	-0.1	-1.2	-0.5	50 30	30 30	30	30	30	30
Cyclohexane	-2.0 2.7	2.6 -0.1	-3.6	3.5	-0.4	-2.6	50 30	30 30	30	30	30	30
Carbon tetrachloride	-0.9 3.8	-2.1 3.0	-4.0	-0.7	-0.9	2.0	50 30	30 30	30	30	30	30
1,1-Dichloropropene	-14.2 6.6	-4.9 4.7	-1.0	3.3	1.4	4.0	50 30	30 30	30	30	30	30
Benzene	-13.8 5.4	-8.6 5.7	-3.1	6.6	1.3	6.5	50 30	30 30	30	30	30	30
Isobutyl alcohol	-13.5 +++++	-22.6 +++++	16.4	3.6	16.2	+++++	50	30	30	30	30	
1,2-Dichloroethane	-13.9 9.6	-14.5 10.6	1.0	1.4	-0.9	6.7	50 30	30 30	30	30	30	30

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
n-Heptane	-5.6 0.6	0.1 1.6	-3.0	4.2	-2.0	4.1	50 30	30 30	30	30	30	30
Trichloroethene	-4.8 8.4	-5.5 9.6	-6.3	-2.9	-0.2	1.7	50 30	30 30	30	30	30	30
Methylcyclohexane	-4.4 3.1	2.8 0.5	-3.6	2.6	-1.7	0.6	50 30	30 30	30	30	30	30
1,2-Dichloropropane	-1.1 7.9	-9.3 5.0	-4.2	0.0	-2.7	4.4	50 30	30 30	30	30	30	30
Dibromomethane	-7.4 17.6	-19.5 11.6	-11.4	-1.6	-0.5	11.2	50 30	30 30	30	30	30	30
1,4-Dioxane	47.0 0.8	-26.8 7.7	-14.1	-10.8	-7.0	3.3	50 30	30 30	30	30	30	30
Bromodichloromethane	-8.6 11.8	-10.0 9.9	-6.5	-2.3	-1.4	7.0	50 30	30 30	30	30	30	30
cis-1,3-Dichloropropene	34.1 4.8	-16.4 4.7	-7.8	-9.0	-13.3	2.8	50 30	30 30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	4.0 4.2	-11.8 10.3	-0.1	-12.7	1.5	4.5	50 30	30 30	30	30	30	30
Toluene	-5.8 +++++	0.9 +++++	1.6	6.8	1.7	-5.1	50	30	30	30	30	30
trans-1,3-Dichloropropene	30.5 4.3	-24.9 +++++	-8.4	-2.8	-0.3	1.6	50 30	30	30	30	30	30
Ethyl methacrylate	24.7 +++++	-22.8 +++++	-5.6	0.2	-1.3	4.8	50	30	30	30	30	30
1,1,2-Trichloroethane	-11.8 6.9	-5.6 5.3	0.5	1.1	-1.9	5.6	50 30	30 30	30	30	30	30
Tetrachloroethene	-3.6 4.7	4.0 -2.7	-3.3	3.4	2.2	-4.7	50 30	30 30	30	30	30	30
1,3-Dichloropropane	-16.6 9.3	-5.0 7.0	-3.4	3.6	1.3	4.0	50 30	30 30	30	30	30	30
2-Hexanone	1.4 +++++	-6.5 +++++	3.1	-2.6	4.6	+++++	50	30	30	30	30	
Dibromochloromethane	-19.2 10.7	-7.6 11.8	-5.2	3.1	0.5	5.9	50 30	30 30	30	30	30	30
1,2-Dibromoethane (EDB)	-14.5 +++++	-14.9 +++++	5.8	4.4	2.8	16.3	50	30	30	30	30	30
Chlorobenzene	-8.4 0.2	3.1 2.1	0.2	5.4	1.6	-4.2	50 30	30 30	30	30	30	30
1,1,1,2-Tetrachloroethane	-16.3 3.4	5.2 0.6	0.4	6.7	3.2	-3.2	50 30	30 30	30	30	30	30
Ethylbenzene	-13.9 -2.1	-0.6 -1.8	5.5	10.4	4.3	-1.7	50 30	30 30	30	30	30	30

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

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
m-Xylene & p-Xylene	-7.5 -1.6	4.4 -6.1	7.5	3.5	5.6	-5.8	50 30	30 30	30	30	30	30
o-Xylene	-13.2 -0.3	5.7 -3.6	3.9	7.6	4.0	-4.1	50 30	30 30	30	30	30	30
Styrene	-18.8 2.5	1.0 -1.3	3.7	7.9	6.5	-1.5	50 30	30 30	30	30	30	30
Bromoform	-38.4 17.1	-19.5 15.0	0.9	6.4	7.2	11.4	50 30	30 30	30	30	30	30
Isopropylbenzene	-8.6 -4.7	7.7 -5.6	3.6	10.1	5.2	-7.8	50 30	30 30	30	30	30	30
Bromobenzene	-20.2 10.8	-7.4 7.9	-1.3	2.6	-1.0	8.7	50 30	30 30	30	30	30	30
1,1,2,2-Tetrachloroethane	-9.0 +++++	-6.1 +++++	8.8	1.7	3.9	0.7	50	30	30	30	30	30
trans-1,4-Dichloro-2-butene	10.8 +++++	-2.0 +++++	1.9	-3.6	1.8	-0.1	50	30	30	30	30	30
1,2,3-Trichloropropane	-12.9 4.8	-4.6 4.1	0.0	-2.0	-2.7	13.4	50 30	30 30	30	30	30	30
N-Propylbenzene	-22.6 3.0	13.7 -3.4	0.9	4.8	3.2	0.4	50 30	30 30	30	30	30	30
2-Chlorotoluene	-16.4 3.5	6.0 -3.7	2.2	3.7	1.8	2.8	50 30	30 30	30	30	30	30
1,3,5-Trimethylbenzene	-19.2 0.3	7.8 -6.0	9.9	6.5	2.8	-2.1	50 30	30 30	30	30	30	30
4-Chlorotoluene	-36.1 9.1	-1.0 2.8	2.2	7.7	8.5	6.8	50 30	30 30	30	30	30	30
tert-Butylbenzene	-17.9 -0.4	12.6 -7.4	7.6	5.3	5.4	-5.1	50 30	30 30	30	30	30	30
1,2,4-Trimethylbenzene	-13.8 1.3	7.4 -5.1	6.7	3.3	2.9	-2.6	50 30	30 30	30	30	30	30
sec-Butylbenzene	-13.4 -1.7	14.7 -9.9	9.0	5.8	4.1	-8.5	50 30	30 30	30	30	30	30
1,3-Dichlorobenzene	-22.8 10.5	-7.3 1.9	4.5	5.1	5.5	2.4	50 30	30 30	30	30	30	30
4-Isopropyltoluene	-13.4 -3.4	13.3 -9.2	8.5	6.7	5.4	-7.9	50 30	30 30	30	30	30	30
1,4-Dichlorobenzene	10.9 2.9	-2.9 -3.6	-4.1	-1.2	0.8	-2.9	50 30	30 30	30	30	30	30
n-Butylbenzene	-5.4 -2.4	1.7 -9.9	12.4	9.2	5.3	-11.0	50 30	30 30	30	30	30	30
1,2-Dichlorobenzene	-6.8 6.9	-7.9 -1.3	2.0	4.8	3.1	-0.8	50 30	30 30	30	30	30	30

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1 Analy Batch No.: 308976

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/05/2020 07:55 Calibration End Date: 03/05/2020 11:12 Calibration ID: 42998

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-Dibromo-3-Chloropropane	37.1 5.3	-20.9 6.6	-2.5	-16.1	-8.2	-1.3	50 30	30 30	30	30	30	30
1,2,4-Trichlorobenzene	-19.8 -1.9	24.4 -5.8	-0.4	9.5	9.4	-15.5	50 30	30 30	30	30	30	30
Hexachlorobutadiene	-38.8 +++++	23.8 +++++	-8.4	-5.9	6.7	-2.5	50	30	30	30	30	30
Naphthalene	-29.1 15.3	0.0 6.1	-0.6	3.1	9.5	-4.3	50 30	30 30	30	30	30	30
1,2,3-Trichlorobenzene	-20.5 -1.6	20.9 -4.9	8.7	9.3	7.4	-19.2	50 30	30 30	30	30	30	30
Dibromofluoromethane (Surr)	-25.0 9.5	-0.7 12.3	-2.7	4.0	-0.1	2.7	50 30	30 30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	-14.8 10.0	-4.3 +++++	-0.8	-2.0	4.5	7.4	50 30	30	30	30	30	30
Toluene-d8 (Surr)	-26.3 4.3	10.3 2.3	-0.5	7.3	5.6	-3.2	50 30	30 30	30	30	30	30
4-Bromofluorobenzene (Surr)	-21.3 3.3	4.6 5.3	-0.3	8.7	5.2	-5.4	50 30	30 30	30	30	30	30

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Lims ID: IC 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 05-Mar-2020 07:55:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031047-002
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub20

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 05-Mar-2020 14:08:21 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0339

First Level Reviewer: journetp Date: 05-Mar-2020 08:31:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.998	3.993	0.005	0	76452	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	328347	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	87	72640	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	97	132807	50.0	50.0	M
$ 5 Dibromofluoromethane (Surr	113	6.269	6.275	-0.006	91	7980	5.00	3.75	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	10416	5.00	4.26	M
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	35052	5.00	3.69	M
$ 8 4-Bromofluorobenzene (Surr	95	11.333	11.322	0.011	86	12927	5.00	3.94	M
10 Dichlorodifluoromethane	85	1.516	1.516	0.000	95	11621	5.00	5.52	
11 Chloromethane	50	1.687	1.716	-0.029	69	7585	5.00	5.30	
13 Butadiene	39	1.793	1.799	-0.006	91	9527	5.00	4.84	M
12 Vinyl chloride	62	1.799	1.822	-0.023	69	12498	5.00	5.51	M
14 Bromomethane	94	2.069	2.075	-0.006	92	14125	5.00	5.54	
15 Chloroethane	64	2.157	2.175	-0.018	82	10765	5.00	5.75	M
17 Dichlorofluoromethane	67	2.434	2.457	-0.023	94	32188	5.00	5.66	M
16 Trichlorofluoromethane	101	2.428	2.457	-0.029	90	37395	5.00	5.71	M
18 Ethyl ether	59	2.793	2.804	-0.011	78	6878	5.00	5.63	
20 1,1-Dichloroethene	96	3.046	3.051	-0.005	70	11077	5.00	5.29	M
21 1,1,2-Trichloro-1,2,2-trif	101	3.104	3.116	-0.012	65	13452	5.00	5.31	M
22 Acetone	43	3.187	3.175	0.012	61	7050	15.0	18.8	
23 Iodomethane	142	3.240	3.234	0.006	22	17718	5.00	5.09	M
24 Carbon disulfide	76	3.310	3.322	-0.012	95	28605	5.00	4.75	
26 3-Chloro-1-propene	76	3.581	3.575	0.006	72	6602	5.00	4.96	M
28 Methyl acetate	43	3.628	3.622	0.006	20	5193	10.0	10.9	M
29 Methylene Chloride	84	3.775	3.798	-0.023	90	19837	5.00	4.99	M
32 2-Methyl-2-propanol	59	4.145	4.122	0.023	61	5922	50.0	45.6	
31 Acrylonitrile	53	4.210	4.193	0.017	67	11292	50.0	46.0	M
30 trans-1,2-Dichloroethene	96	4.204	4.216	-0.012	88	14173	5.00	5.48	M
33 Methyl tert-butyl ether	73	4.245	4.257	-0.012	93	23922	5.00	4.75	M
34 Hexane	57	4.645	4.645	0.000	91	15011	5.00	5.16	M
36 1,1-Dichloroethane	63	4.863	4.869	-0.006	91	19868	5.00	5.08	Ma

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.628	5.634	-0.006	1	2711	5.00	4.32	M
41 cis-1,2-Dichloroethene	96	5.639	5.651	-0.012	79	12526	5.00	4.90	M
43 2-Butanone (MEK)	43	5.692	5.681	0.011	58	4803	15.0	13.3	
46 Chlorobromomethane	128	5.934	5.945	-0.011	76	4408	5.00	4.68	a
48 Tetrahydrofuran	42	5.969	5.975	-0.006	31	1654	10.0	8.33	
49 Chloroform	83	6.098	6.092	0.006	90	36074	5.00	5.04	
50 1,1,1-Trichloroethane	97	6.234	6.239	-0.005	96	24809	5.00	5.10	M
52 Cyclohexane	56	6.310	6.304	0.006	81	16910	5.00	4.90	M
53 Carbon tetrachloride	117	6.416	6.416	0.000	95	23671	5.00	4.95	
54 1,1-Dichloropropene	75	6.439	6.434	0.005	79	16795	5.00	4.29	M
55 Benzene	78	6.651	6.651	0.000	97	41595	5.00	4.31	M
51 Isobutyl alcohol	41	6.722	6.698	0.024	31	2671	125.0	108.1	
56 1,2-Dichloroethane	62	6.739	6.734	0.005	94	12474	5.00	4.30	
59 n-Heptane	43	7.022	7.028	-0.006	76	13338	5.00	4.72	
60 Trichloroethene	130	7.410	7.404	0.006	89	13886	5.00	4.76	M
63 Methylcyclohexane	83	7.633	7.628	0.005	85	25177	5.00	4.78	
64 1,2-Dichloropropane	63	7.669	7.675	-0.006	86	9317	5.00	4.94	M
65 Dibromomethane	93	7.769	7.769	0.000	86	4598	5.00	4.63	M
67 1,4-Dioxane	88	7.798	7.775	0.023	40	1256	100.0	147.0	
68 Dichlorobromomethane	83	7.969	7.963	0.006	97	15046	5.00	4.57	M
71 cis-1,3-Dichloropropene	75	8.422	8.416	0.006	90	11340	5.00	6.71	M
72 4-Methyl-2-pentanone (MIBK	43	8.586	8.575	0.011	87	7116	15.0	15.6	
73 Toluene	91	8.739	8.739	0.000	97	55365	5.00	4.71	M
74 trans-1,3-Dichloropropene	75	9.039	9.004	0.035	1	8949	5.00	6.53	M
75 Ethyl methacrylate	69	9.098	9.069	0.029	28	5811	5.00	6.24	M
76 1,1,2-Trichloroethane	97	9.192	9.186	0.006	84	6507	5.00	4.41	
77 Tetrachloroethene	164	9.257	9.257	0.000	94	12905	5.00	4.82	M
78 1,3-Dichloropropane	76	9.357	9.351	0.006	87	10256	5.00	4.17	M
79 2-Hexanone	43	9.498	9.428	0.070	34	1946	15.0	15.2	M
81 Chlorodibromomethane	129	9.569	9.563	0.006	86	7872	5.00	4.04	
82 Ethylene Dibromide	107	9.686	9.669	0.017	40	5202	5.00	4.28	M
83 Chlorobenzene	112	10.163	10.163	0.000	56	32606	5.00	4.58	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.251	0.000	84	11149	5.00	4.18	
85 Ethylbenzene	106	10.263	10.263	0.000	98	18013	5.00	4.31	
86 m-Xylene & p-Xylene	106	10.404	10.398	0.006	0	24407	5.00	4.62	
88 o-Xylene	106	10.774	10.774	0.000	97	21611	5.00	4.34	
89 Styrene	104	10.810	10.798	0.012	48	31531	5.00	4.06	M
90 Bromoform	173	10.986	10.980	0.006	79	3416	5.00	3.08	
91 Isopropylbenzene	105	11.139	11.145	-0.006	97	67322	5.00	4.57	
94 Bromobenzene	156	11.463	11.451	0.012	95	12263	5.00	3.99	M
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	87	7128	5.00	4.55	
96 trans-1,4-Dichloro-2-buten	53	11.527	11.504	0.023	1	54	5.00	5.54	Ma
95 1,2,3-Trichloropropane	110	11.521	11.510	0.011	3	2637	5.00	4.35	
97 N-Propylbenzene	120	11.557	11.563	-0.006	99	16249	5.00	3.87	
98 2-Chlorotoluene	126	11.651	11.639	0.012	94	13910	5.00	4.18	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	95	53847	5.00	4.04	
100 4-Chlorotoluene	126	11.774	11.769	0.005	92	10326	5.00	3.20	
101 tert-Butylbenzene	119	12.051	12.051	0.000	91	48000	5.00	4.10	
103 1,2,4-Trimethylbenzene	105	12.121	12.116	0.005	97	55810	5.00	4.31	
104 sec-Butylbenzene	105	12.280	12.274	0.006	95	74802	5.00	4.33	
105 1,3-Dichlorobenzene	146	12.404	12.398	0.006	42	23153	5.00	3.86	a
106 4-Isopropyltoluene	119	12.439	12.433	0.006	95	63836	5.00	4.33	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	94	35238	5.00	5.54	a
110 n-Butylbenzene	91	12.845	12.845	0.000	98	58458	5.00	4.73	
111 1,2-Dichlorobenzene	146	12.868	12.851	0.017	92	24743	5.00	4.66	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	1	487	5.00	6.85	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	88	10384	5.00	4.01	M
115 Hexachlorobutadiene	225	14.598	14.604	-0.006	93	11814	5.00	3.06	M
116 Naphthalene	128	14.745	14.721	0.024	95	12198	5.00	3.55	M
117 1,2,3-Trichlorobenzene	180	14.939	14.945	-0.006	92	7533	5.00	3.97	M
S 130 1,2-Dichloroethene, Total	96				0		10.0	10.4	
S 129 Xylenes, Total	106				0		10.0	8.96	
S 131 1,3-Dichloropropene, Total	1				0		10.0	13.2	
S 145 Total BTEX	1				0		25.0	22.3	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

voaWKetmix1st_00024	Amount Added:	0.40	Units: uL
VOA8260SURR_00104	Amount Added:	0.20	Units: uL
VOA8260INT_00104	Amount Added:	2.00	Units: uL
VOA8260VOAPRI_00394	Amount Added:	0.20	Units: uL

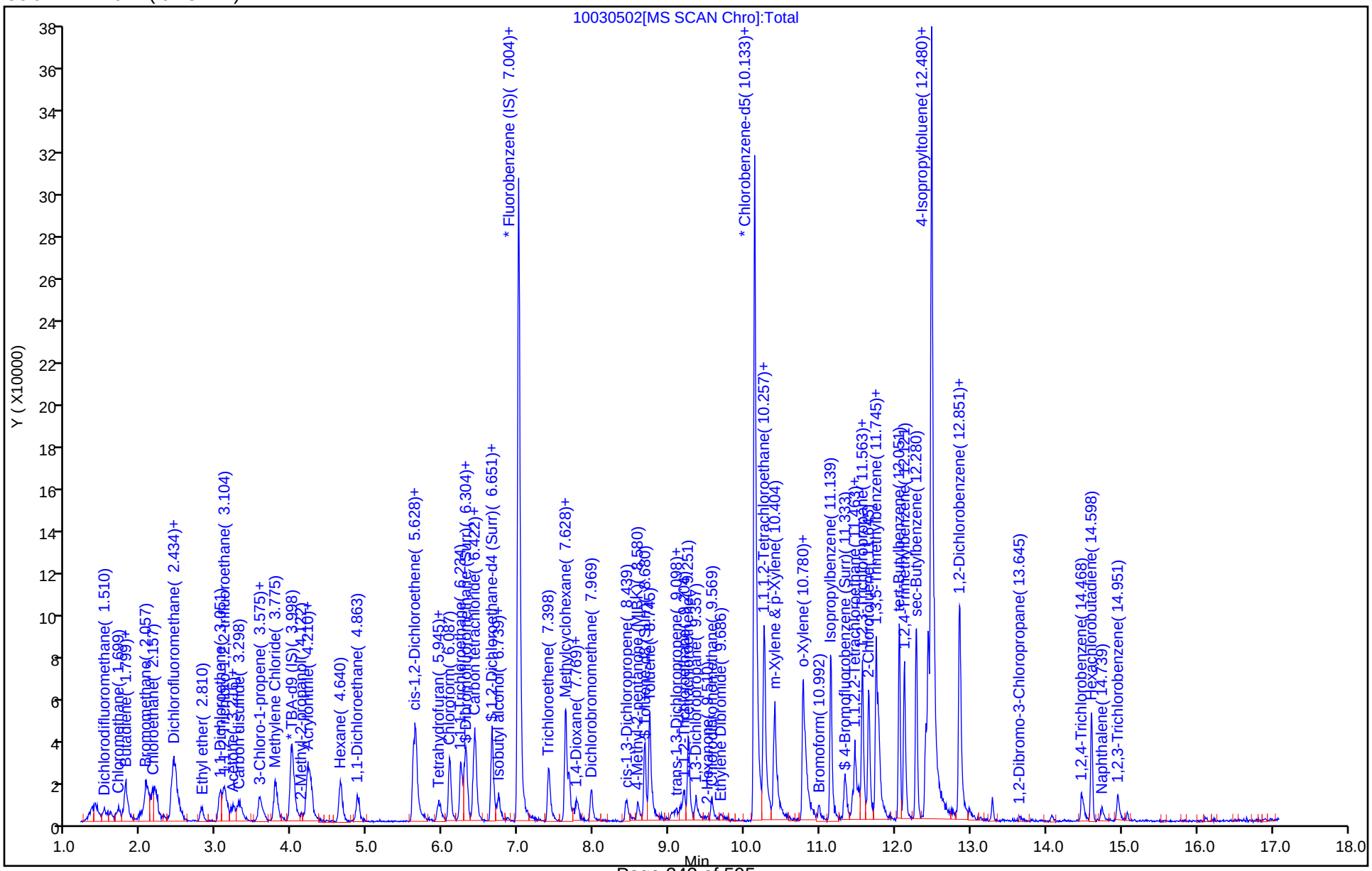
Report Date: 05-Mar-2020 14:08:23 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d

Injection Date:	05-Mar-2020 07:55:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	IC 1			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

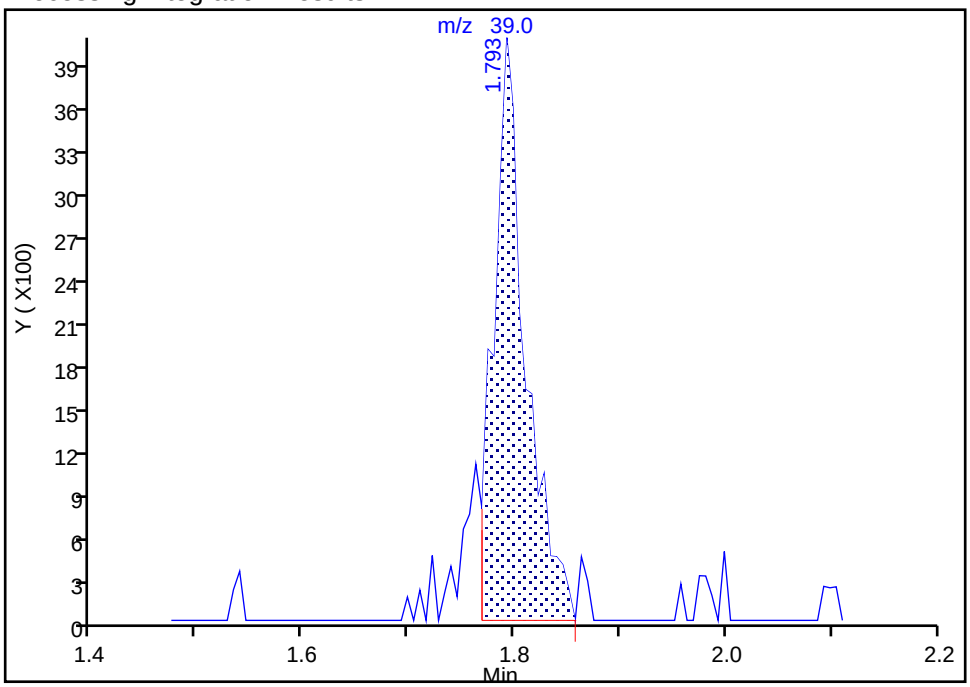
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

13 Butadiene, CAS: 106-99-0

Signal: 1

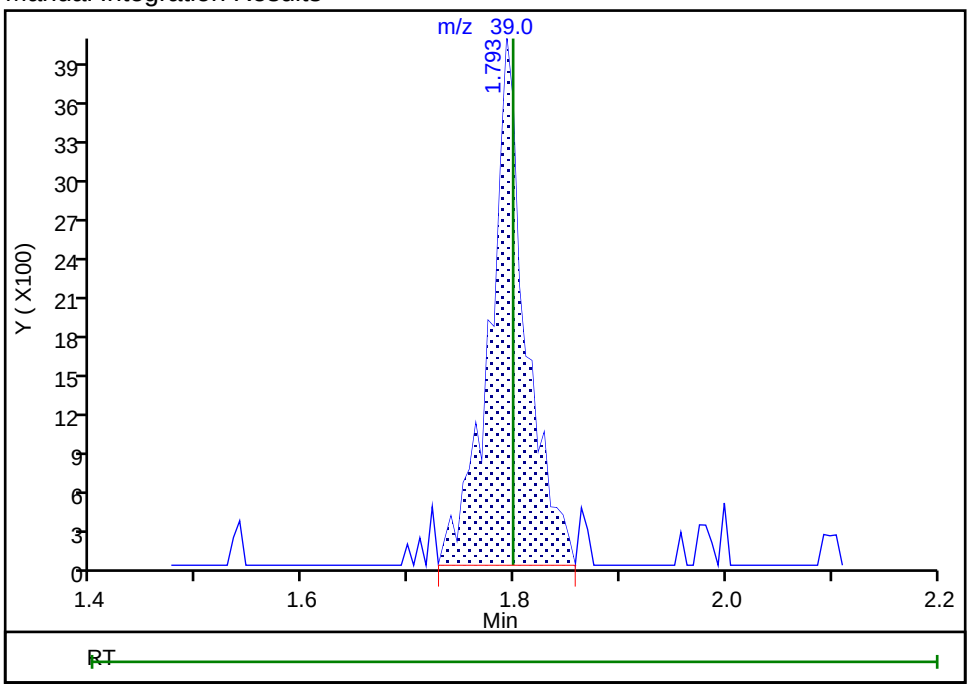
Processing Integration Results

RT: 1.79
Area: 8401
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 1.79
Area: 9527
Amount: 4.842336
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:27:25
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

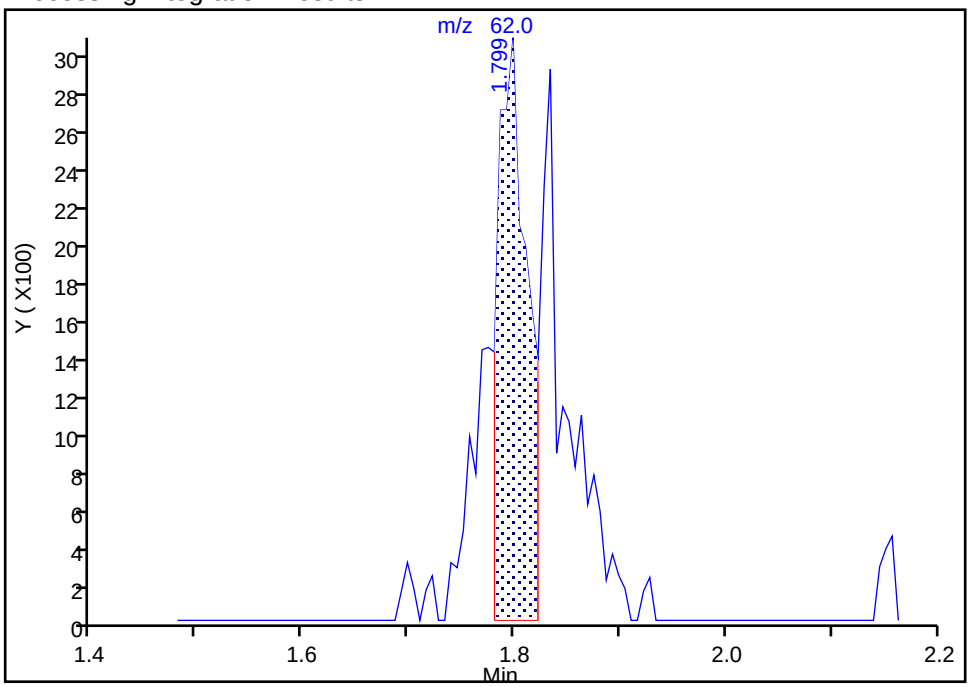
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

12 Vinyl chloride, CAS: 75-01-4

Signal: 1

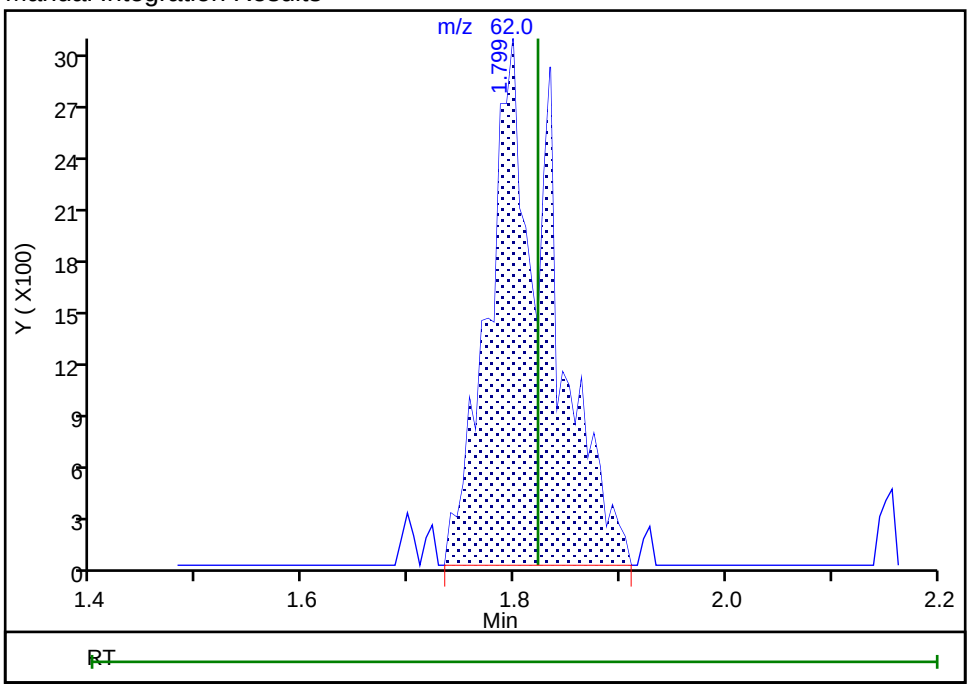
Processing Integration Results

RT: 1.80
Area: 5937
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 1.80
Area: 12498
Amount: 5.505578
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:27:29
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

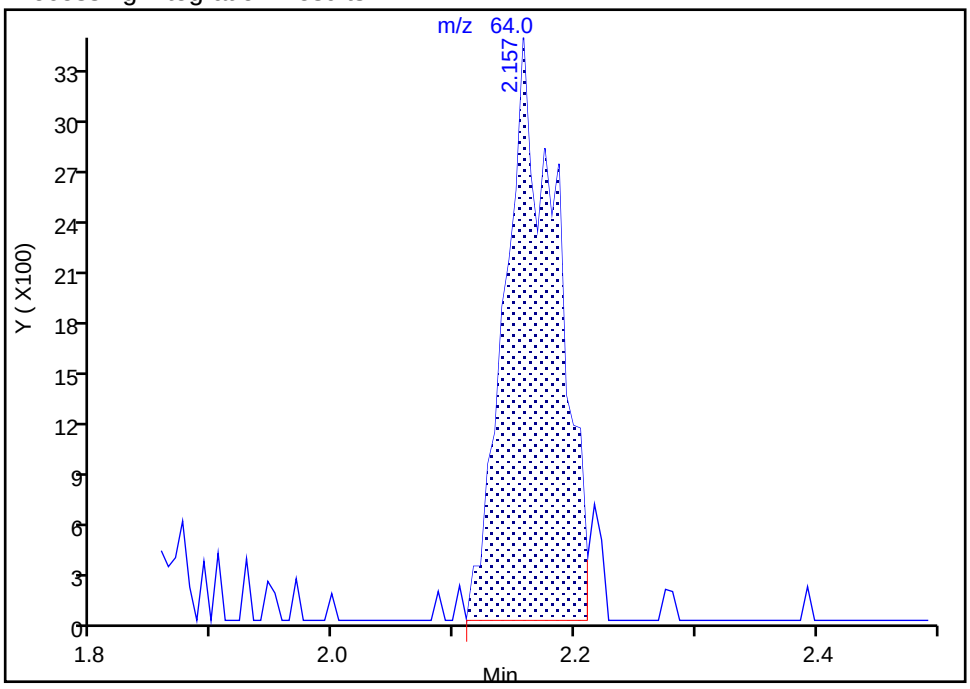
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

15 Chloroethane, CAS: 75-00-3

Signal: 1

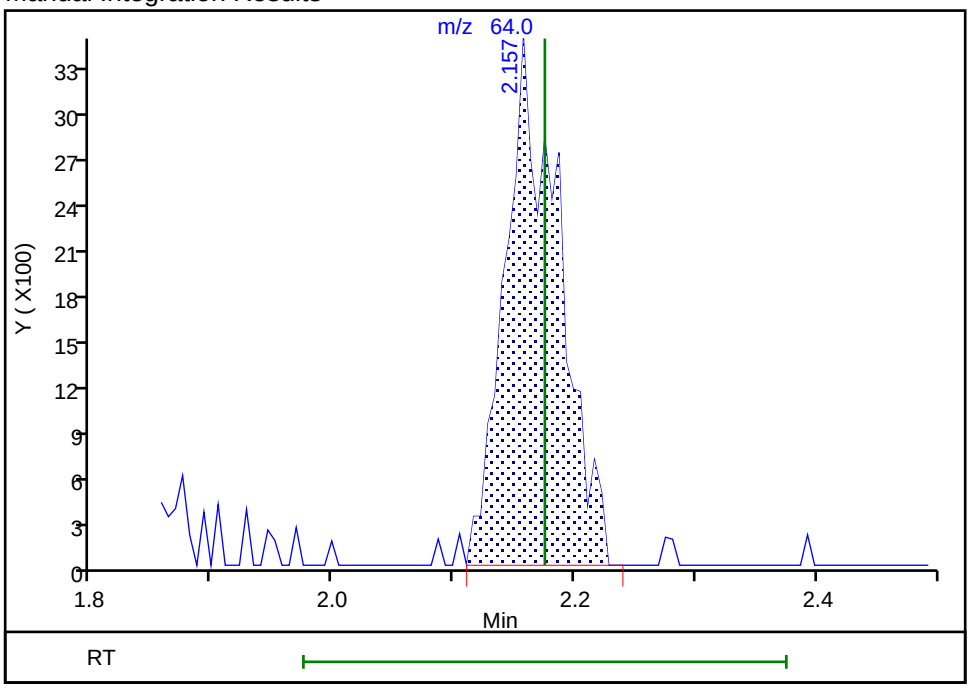
Processing Integration Results

RT: 2.16
Area: 10355
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 2.16
Area: 10765
Amount: 5.748831
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:27:34
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

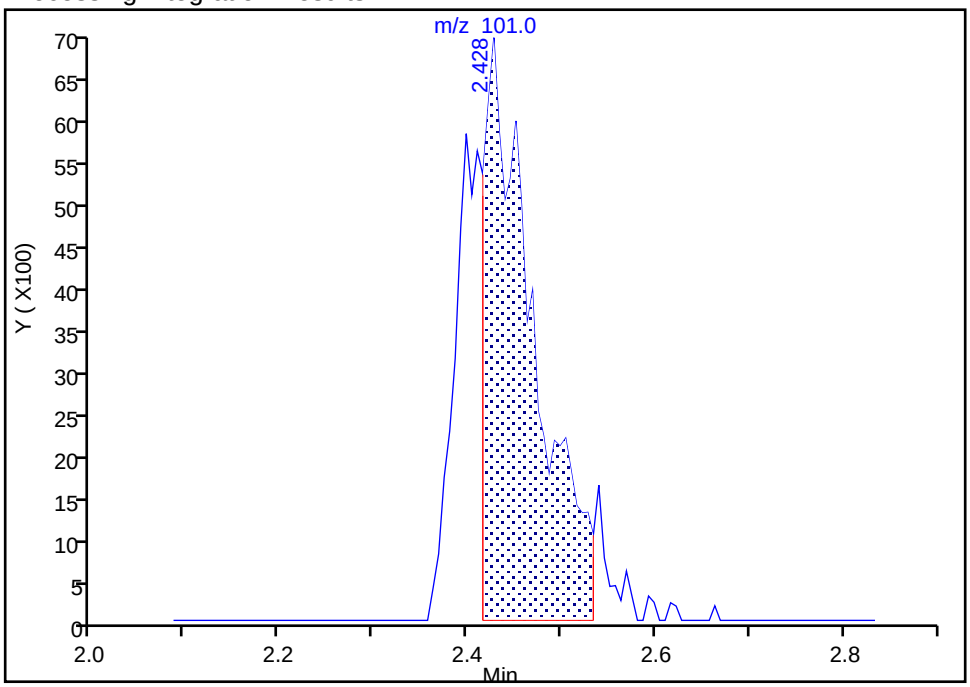
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

16 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

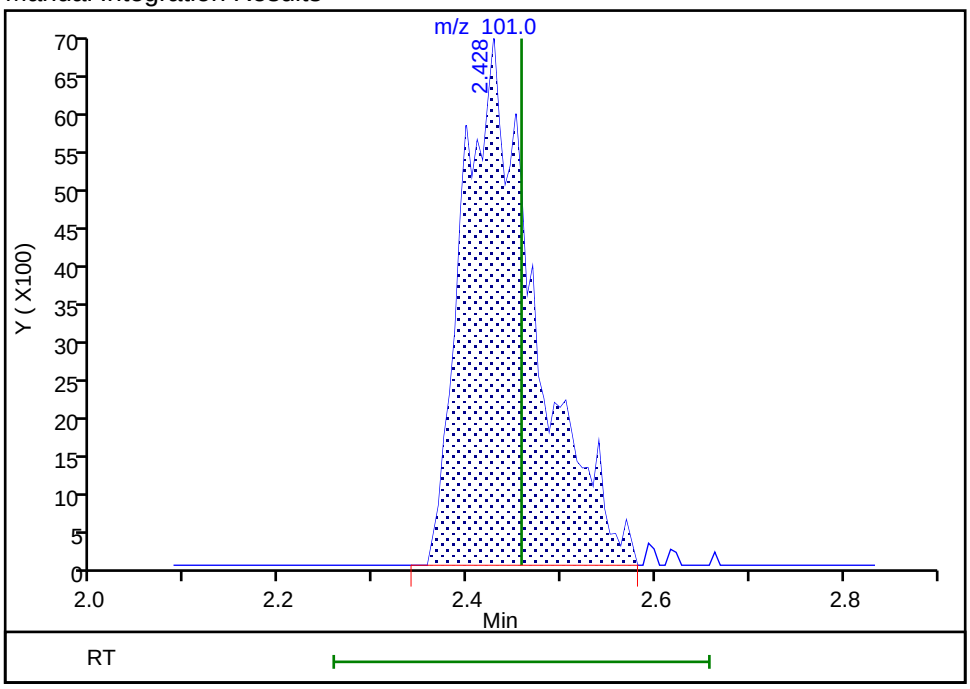
Processing Integration Results

RT: 2.43
Area: 25511
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 2.43
Area: 37395
Amount: 5.712569
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:27:43
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

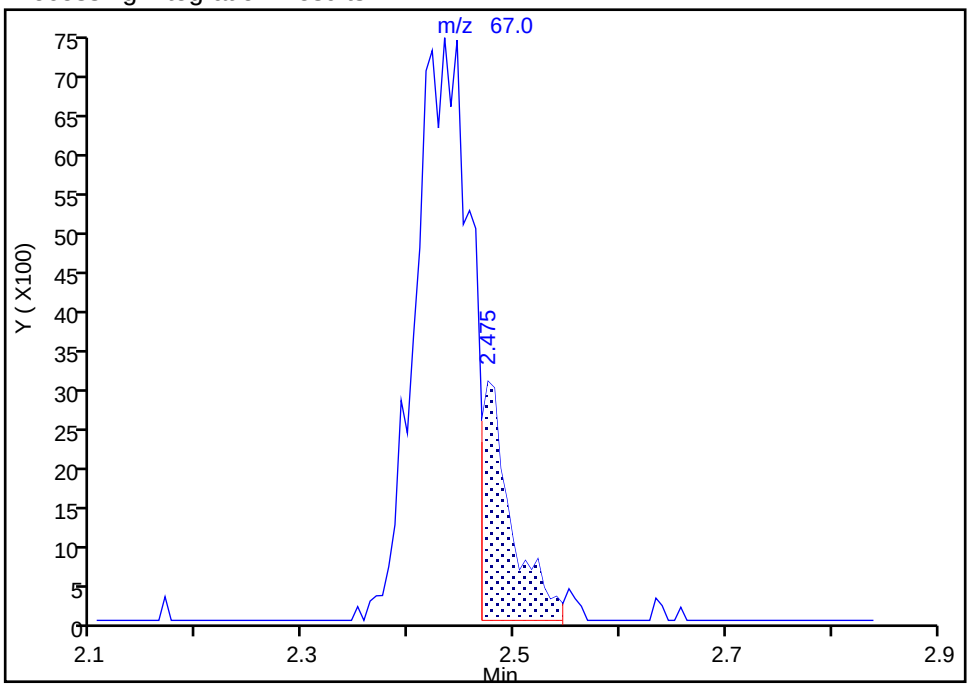
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

17 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

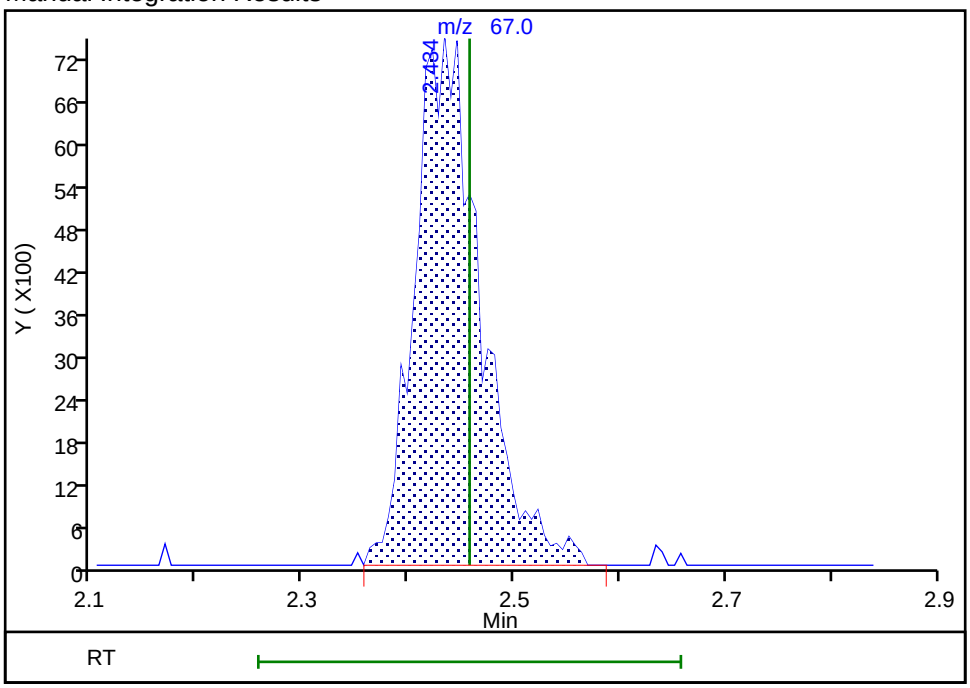
Processing Integration Results

RT: 2.47
Area: 6011
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 2.43
Area: 32188
Amount: 5.663941
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:27:39
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

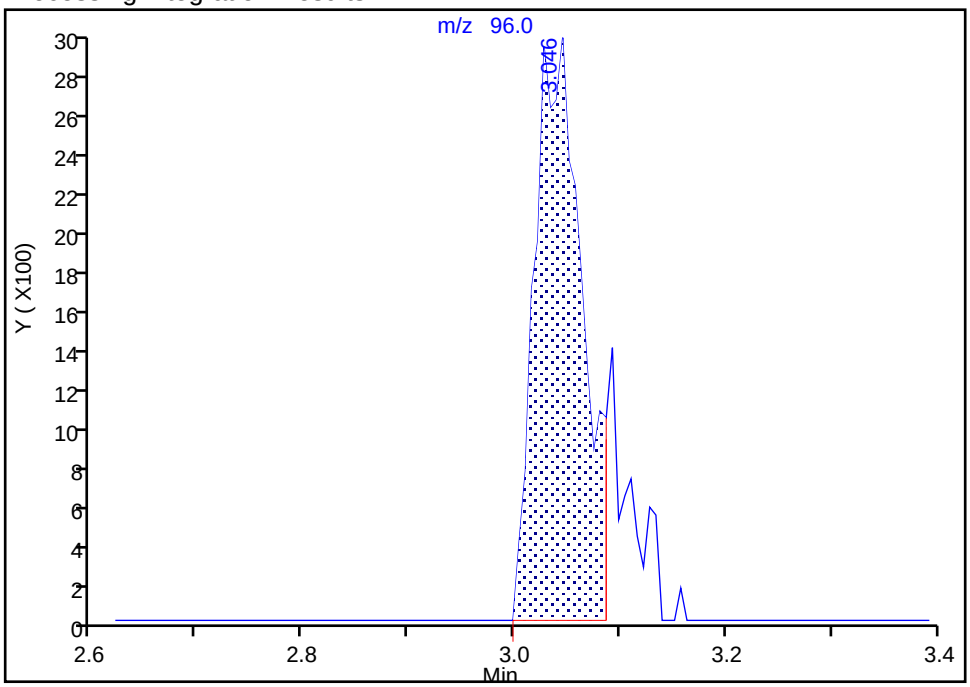
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

20 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

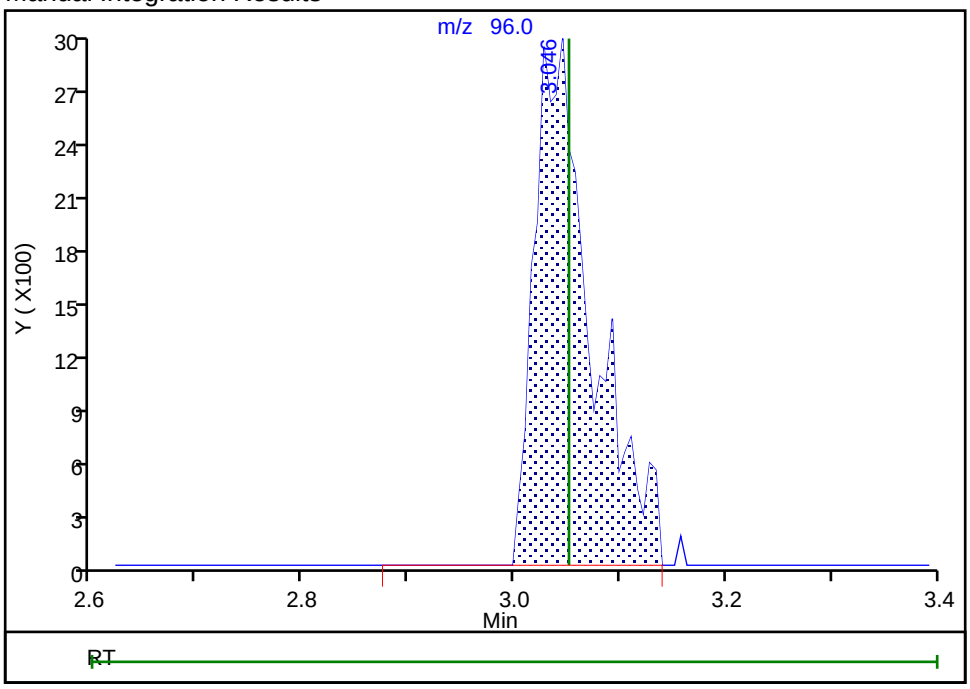
Processing Integration Results

RT: 3.05
Area: 9296
Amount: 4.706354
Amount Units: ng



Manual Integration Results

RT: 3.05
Area: 11077
Amount: 5.288654
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:27:47
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

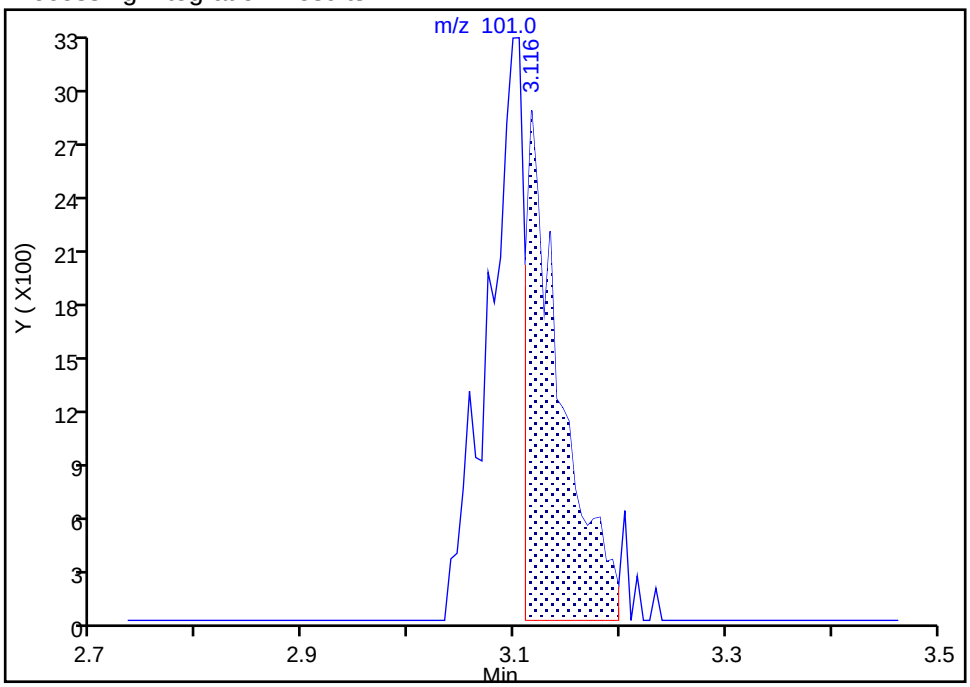
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

21 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

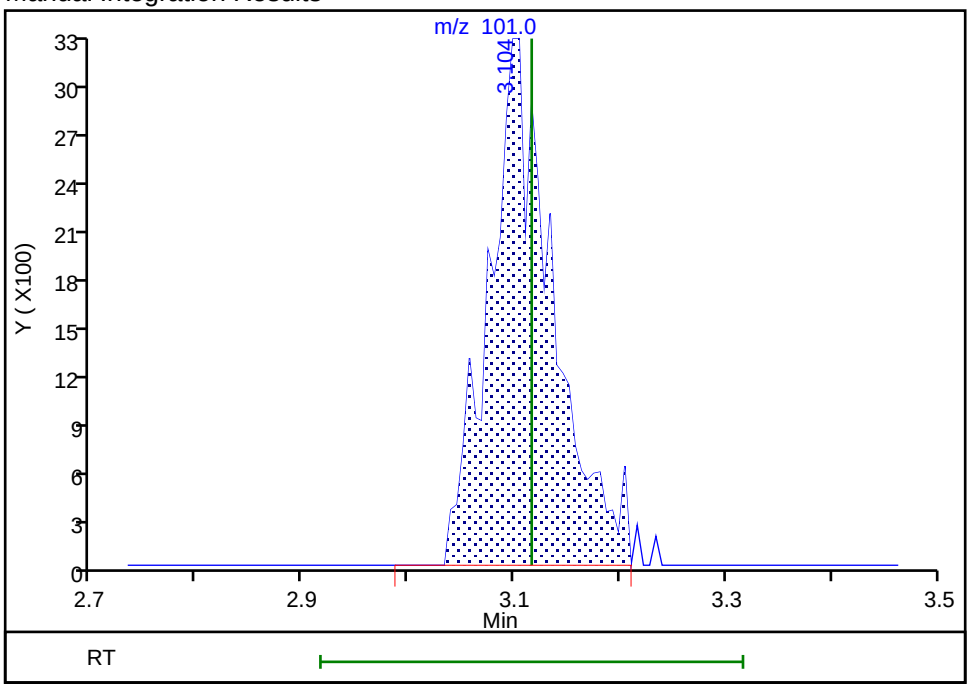
Processing Integration Results

RT: 3.12
Area: 6424
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 3.10
Area: 13452
Amount: 5.307900
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:27:55
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

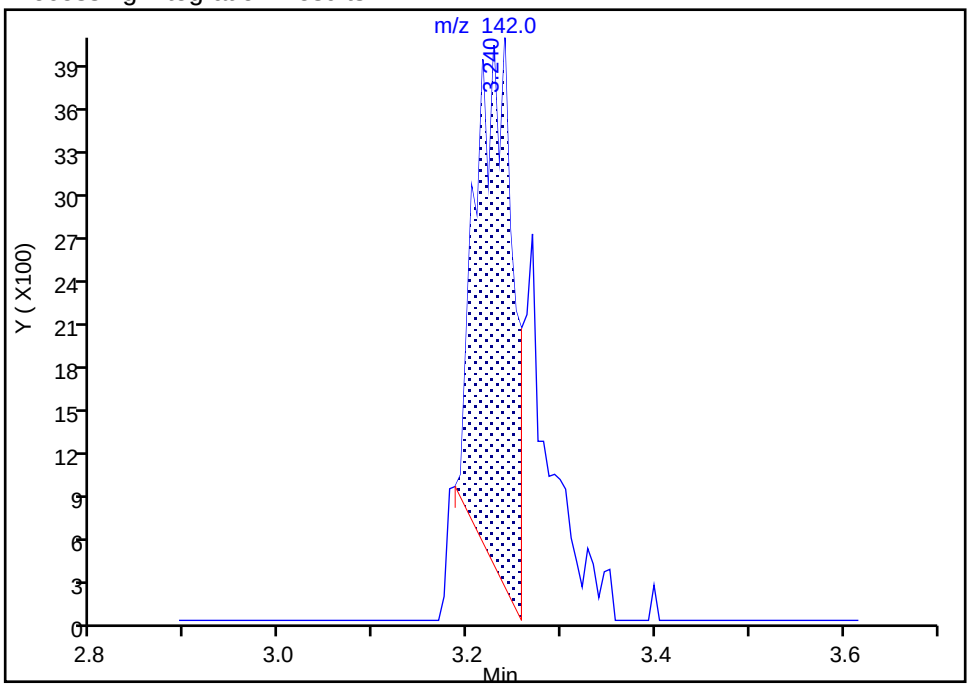
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

23 Iodomethane, CAS: 74-88-4

Signal: 1

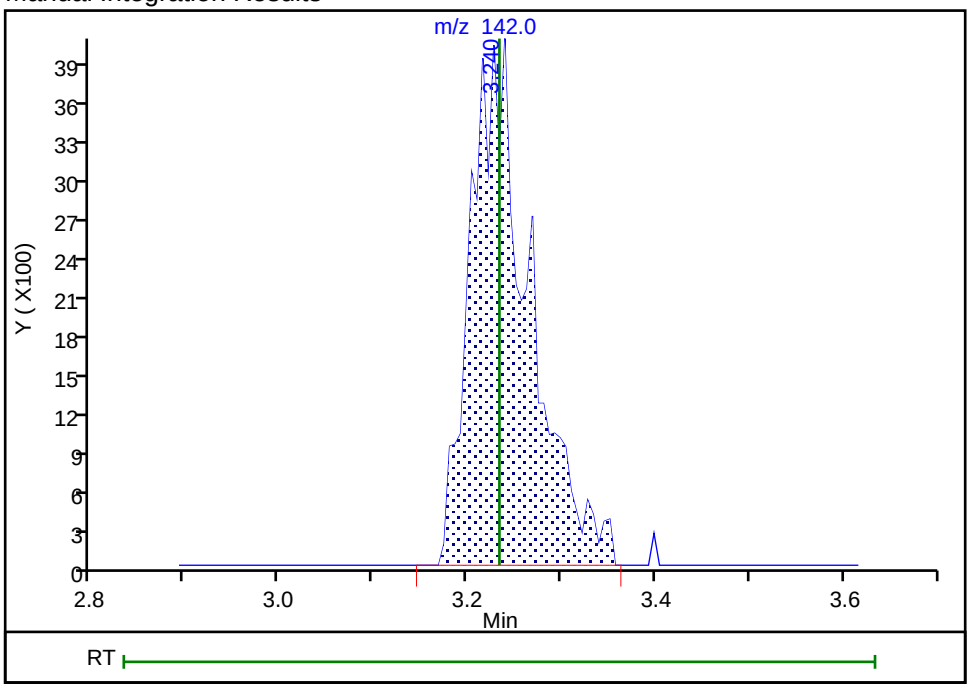
Processing Integration Results

RT: 3.24
Area: 10151
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 3.24
Area: 17718
Amount: 5.087283
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:27:59
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

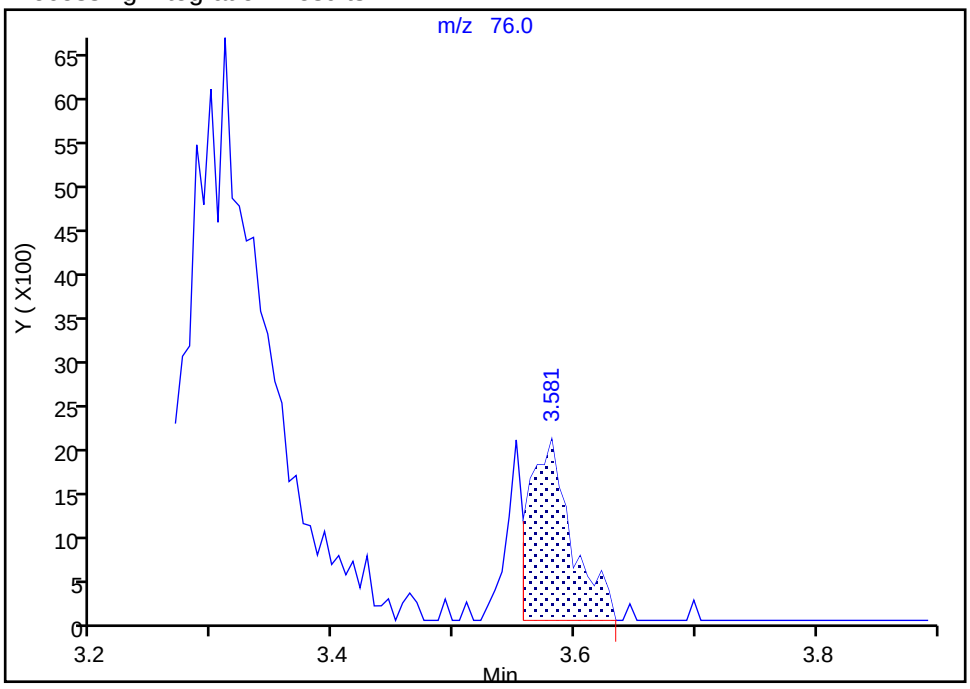
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

26 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

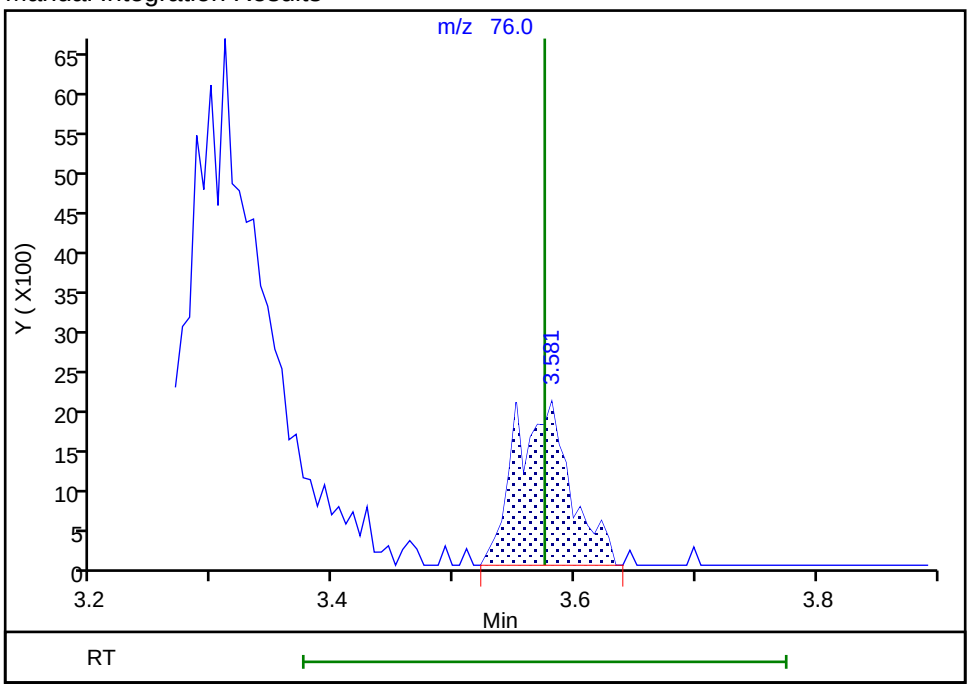
Processing Integration Results

RT: 3.58
Area: 5072
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 3.58
Area: 6602
Amount: 4.960262
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:28:04
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

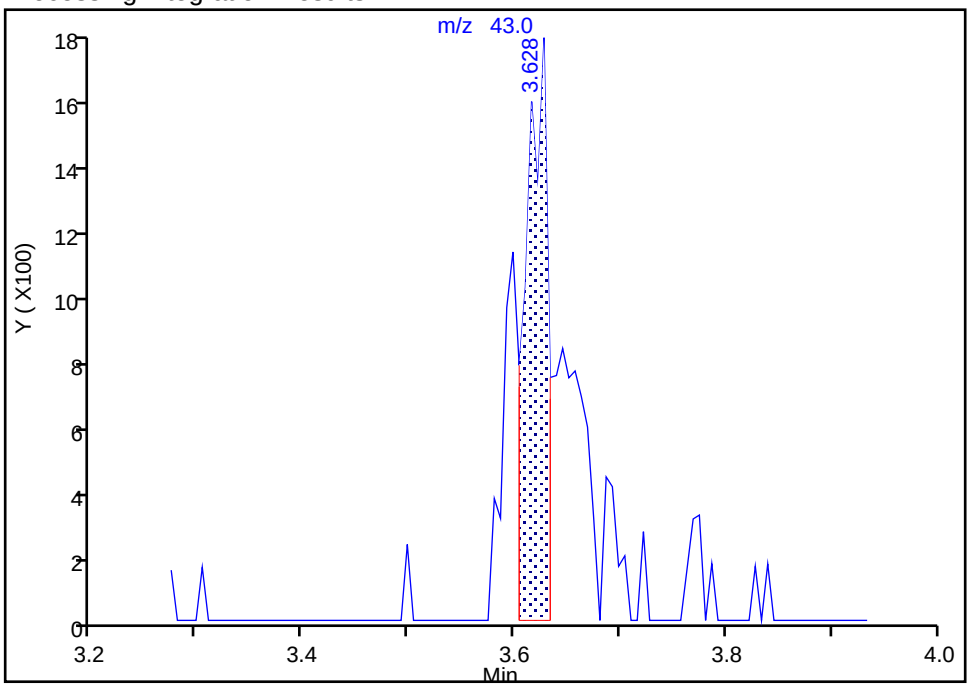
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

28 Methyl acetate, CAS: 79-20-9

Signal: 1

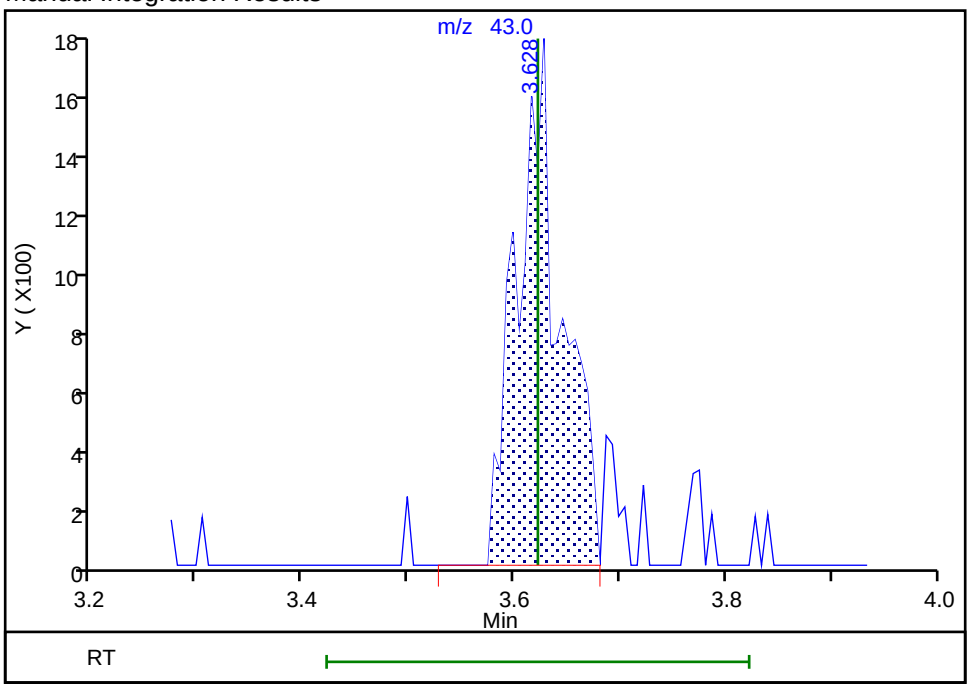
Processing Integration Results

RT: 3.63
Area: 2560
Amount: 10.000000
Amount Units: ng



Manual Integration Results

RT: 3.63
Area: 5193
Amount: 10.887049
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:28:08
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

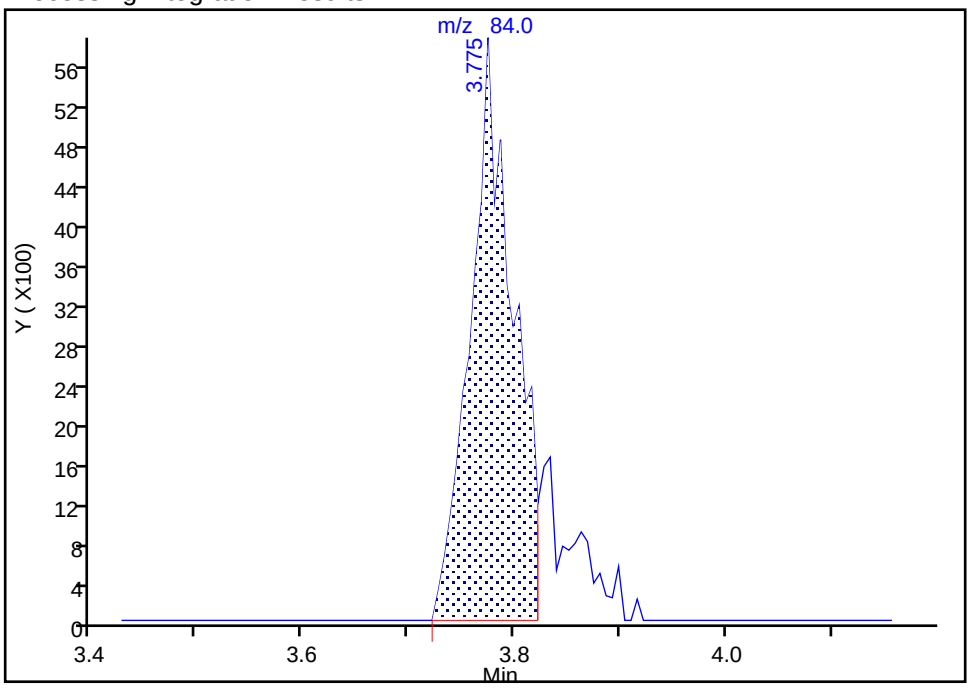
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d				
Injection Date:	05-Mar-2020 07:55:30	Instrument ID:	CHHP10		
Lims ID:	IC 1				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

29 Methylene Chloride, CAS: 75-09-2

Signal: 1

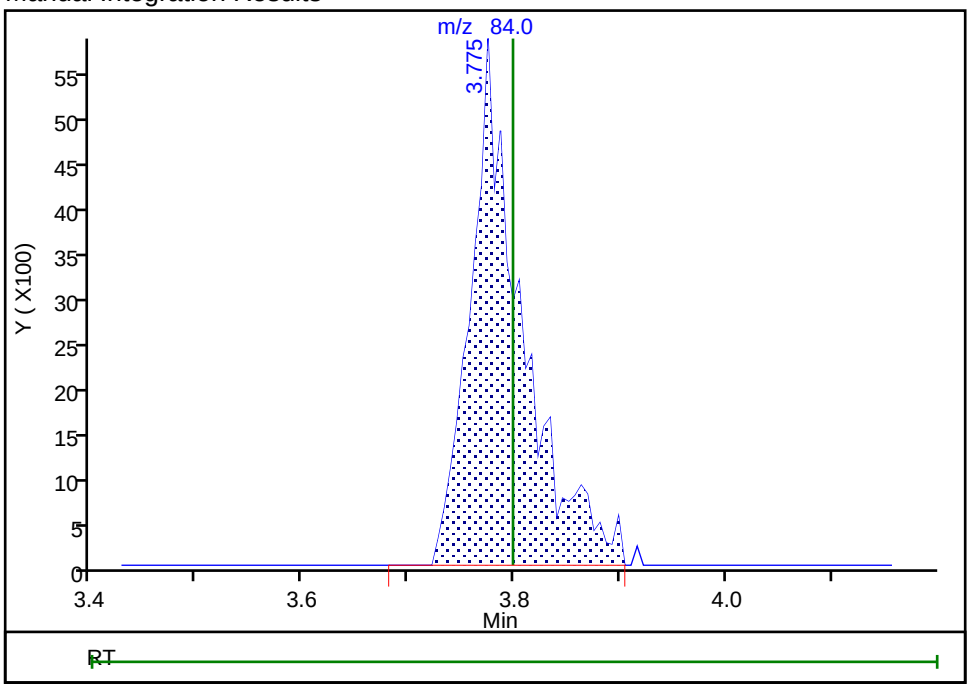
Processing Integration Results

RT: 3.77
Area: 16478
Amount: 19.120799
Amount Units: ng



Manual Integration Results

RT: 3.77
Area: 19837
Amount: 4.992263
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:28:12

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

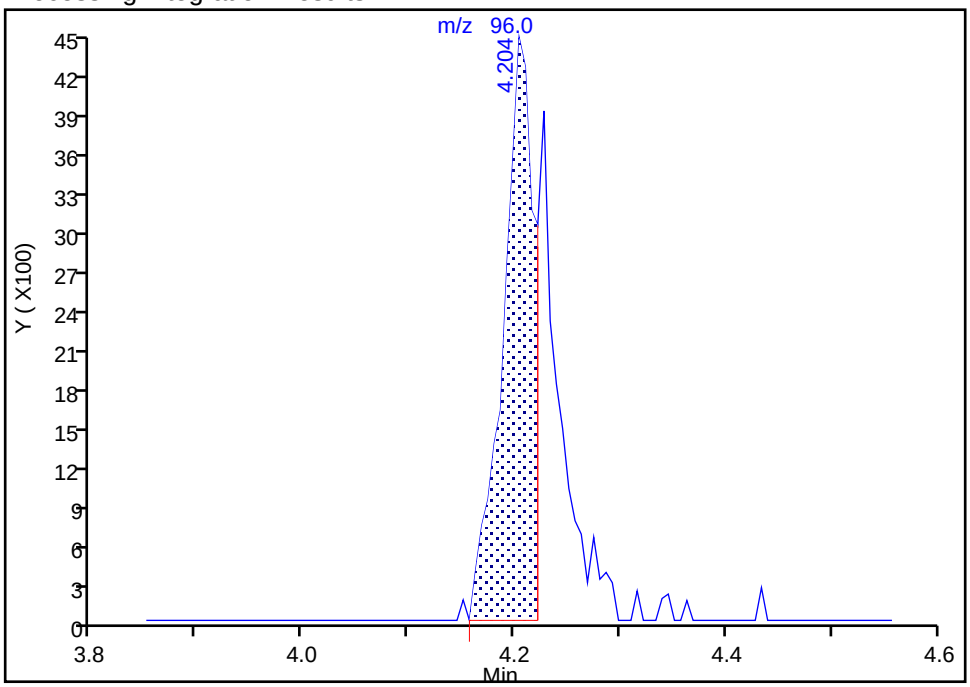
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

Signal: 1

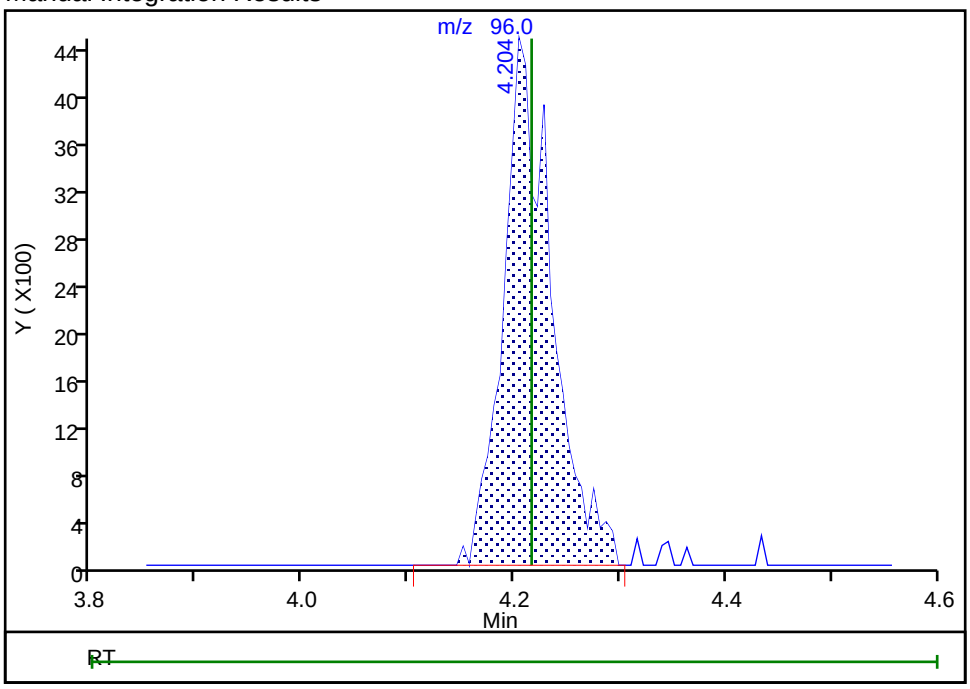
Processing Integration Results

RT: 4.20
Area: 9233
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 4.20
Area: 14173
Amount: 5.482276
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:28:20
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

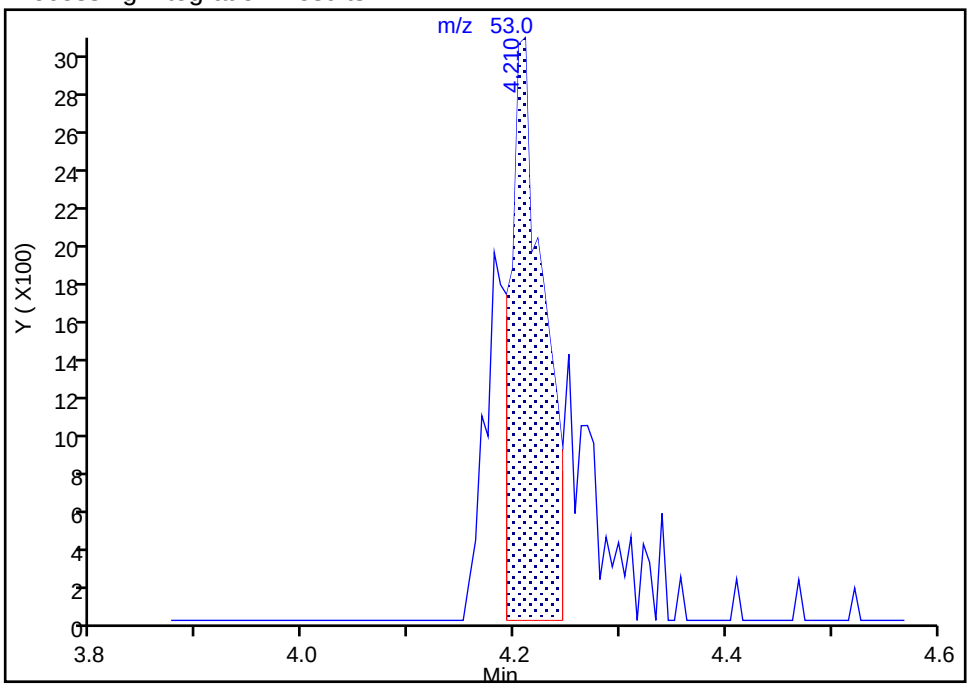
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

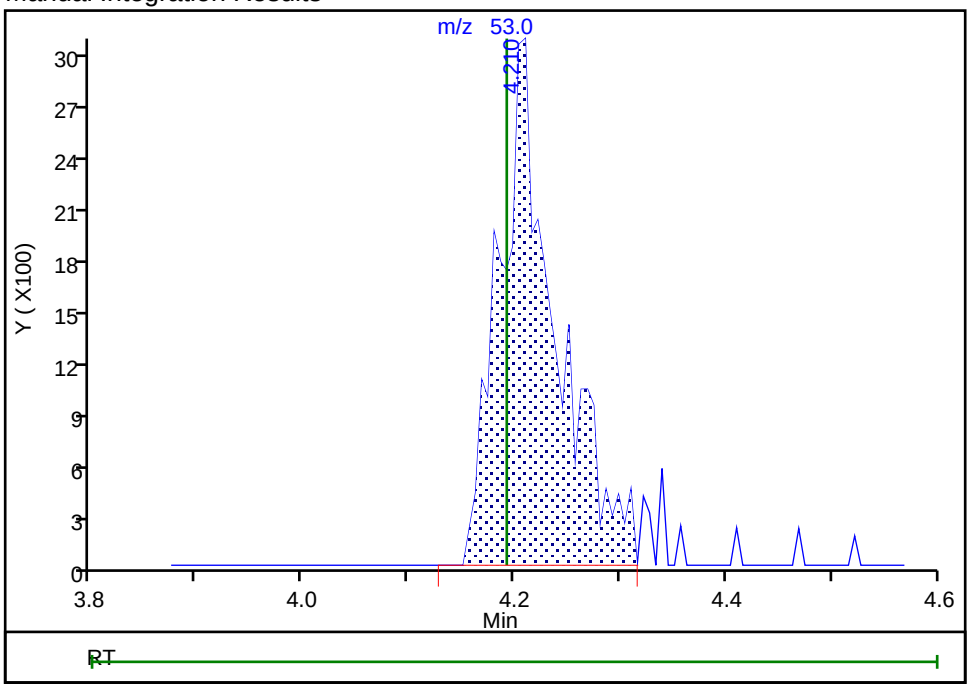
Processing Integration Results

RT: 4.21
Area: 6624
Amount: 50.000000
Amount Units: ng



Manual Integration Results

RT: 4.21
Area: 11292
Amount: 45.999746
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:28:17
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

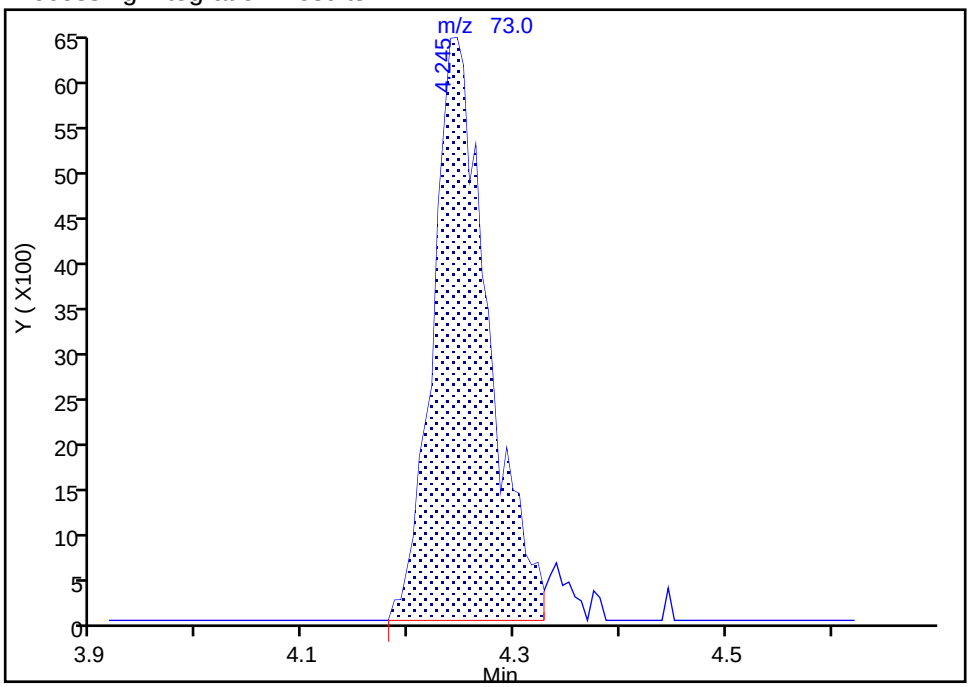
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

Signal: 1

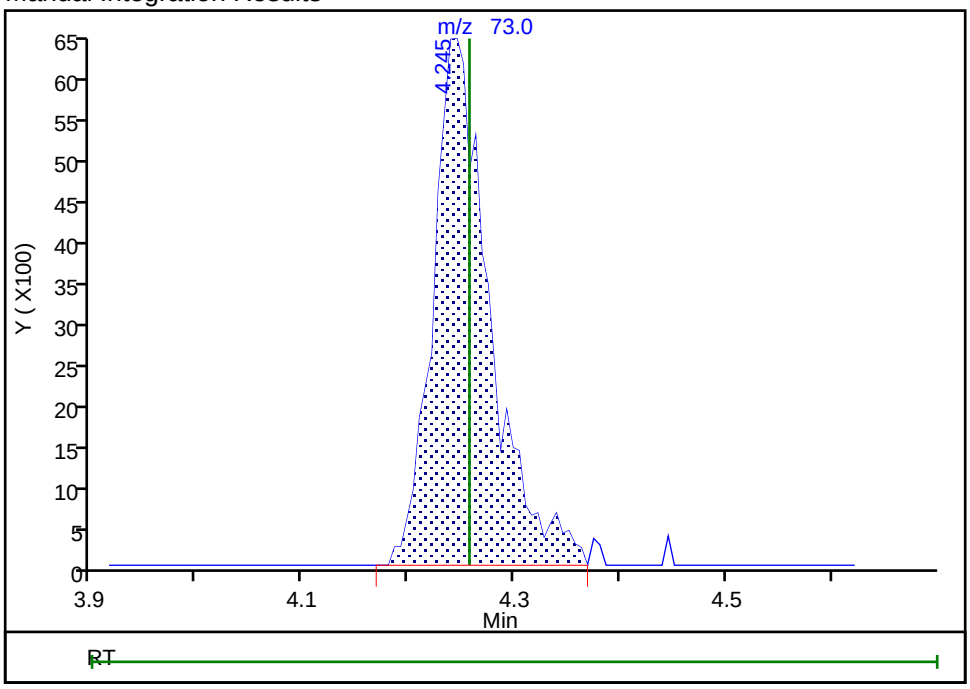
Processing Integration Results

RT: 4.25
Area: 23075
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 4.25
Area: 23922
Amount: 4.745732
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:28:24
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

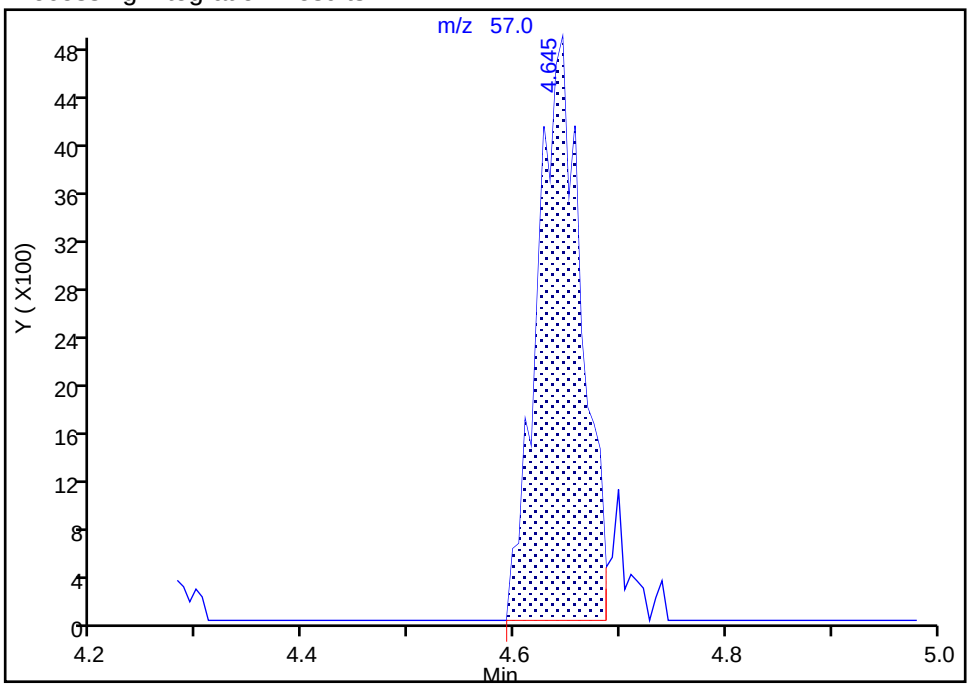
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

34 Hexane, CAS: 110-54-3

Signal: 1

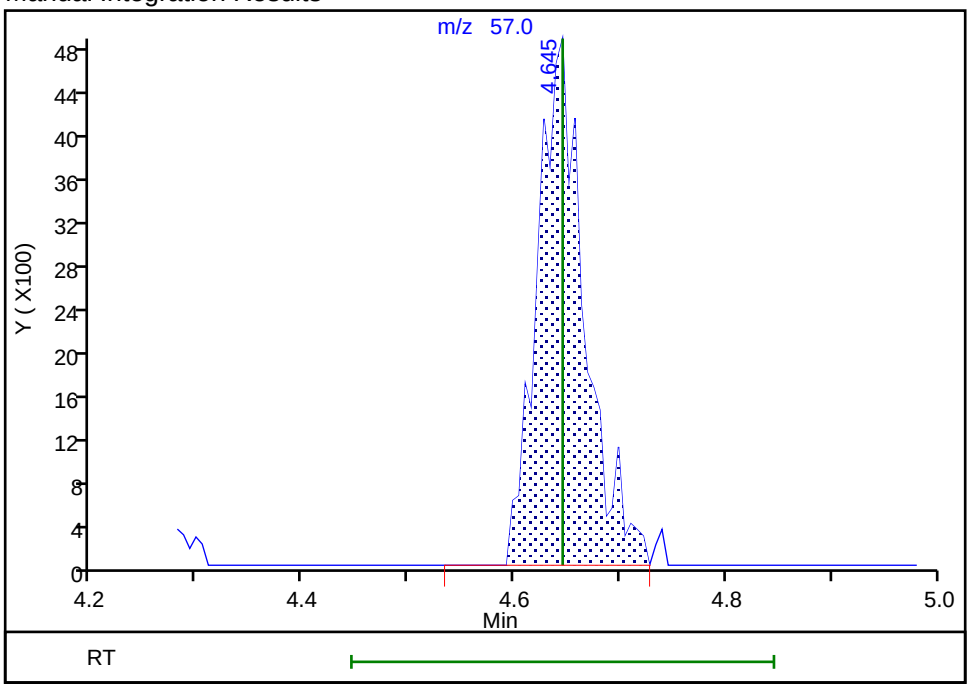
Processing Integration Results

RT: 4.65
Area: 14004
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 4.65
Area: 15011
Amount: 5.158548
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:28:27
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

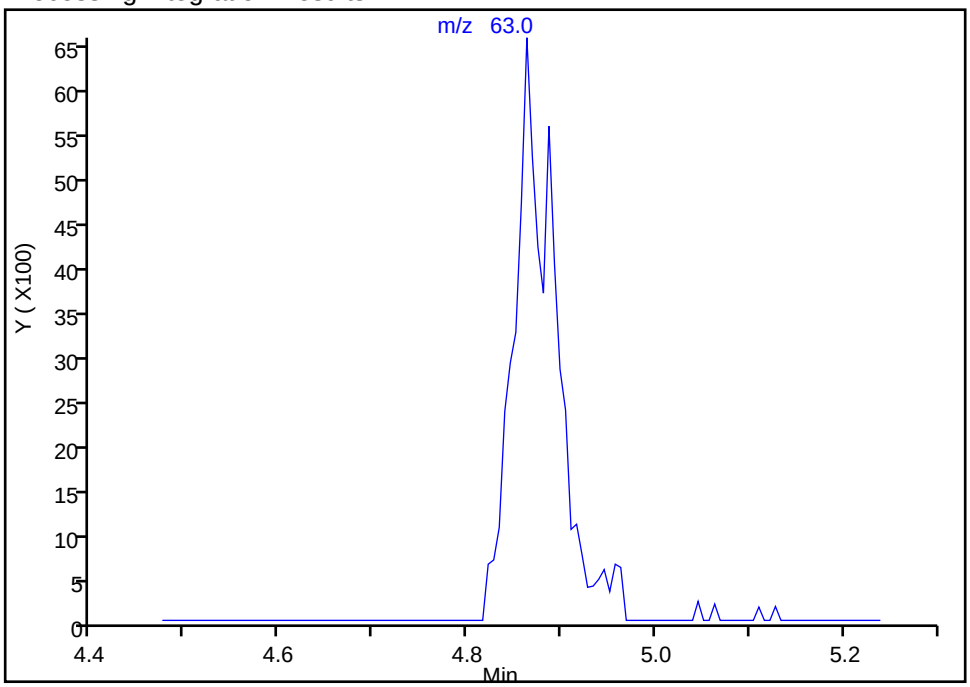
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3

Signal: 1

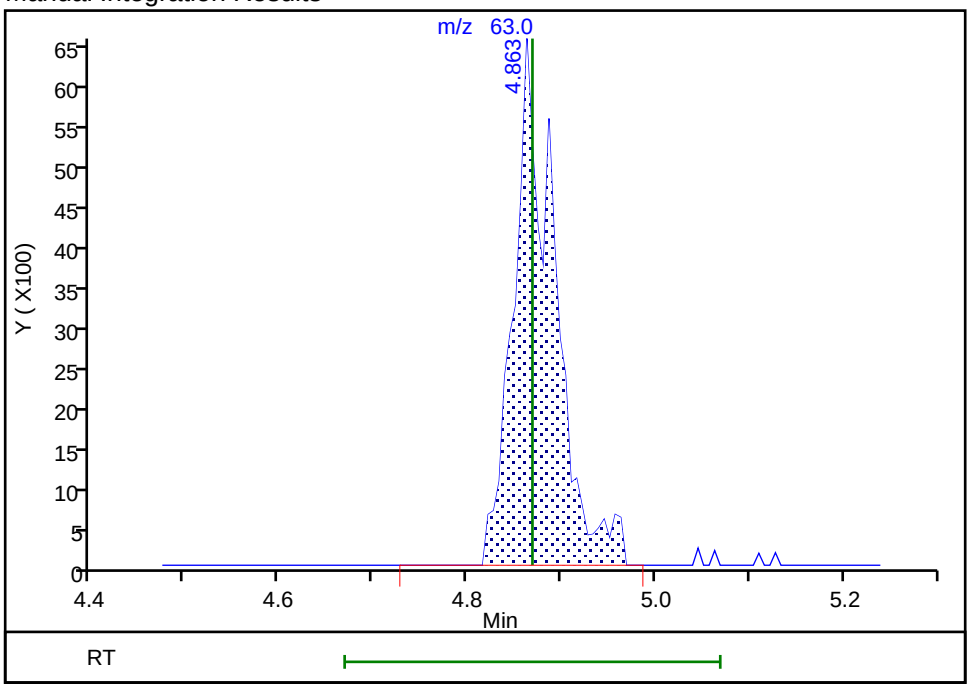
Not Detected
Expected RT: 4.87

Processing Integration Results



Manual Integration Results

RT: 4.86
Area: 19868
Amount: 5.079344
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 09:48:36
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

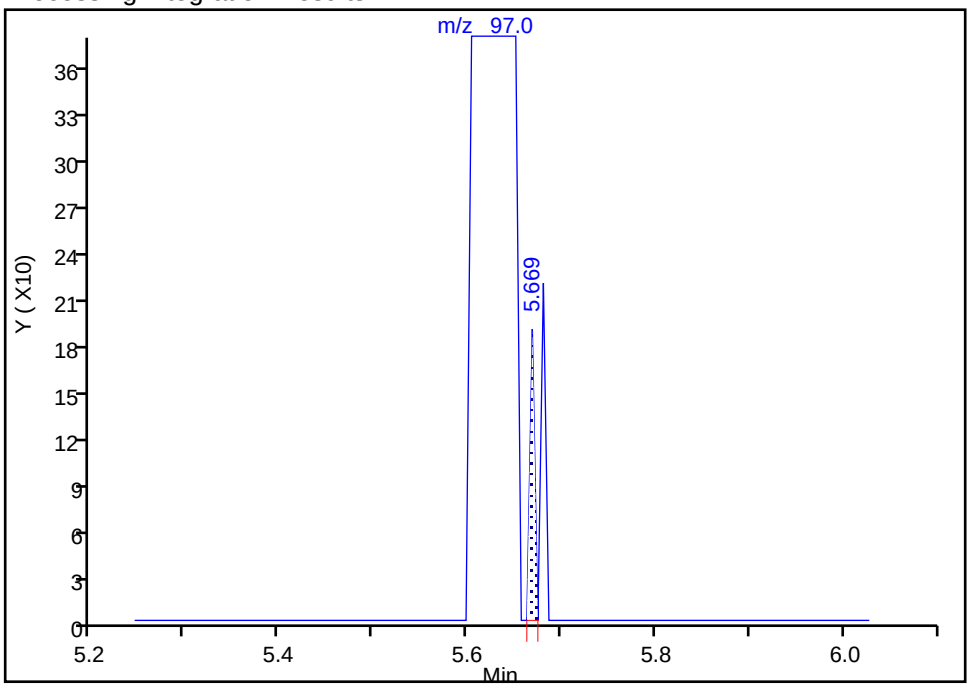
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

42 2,2-Dichloropropane, CAS: 594-20-7

Signal: 2

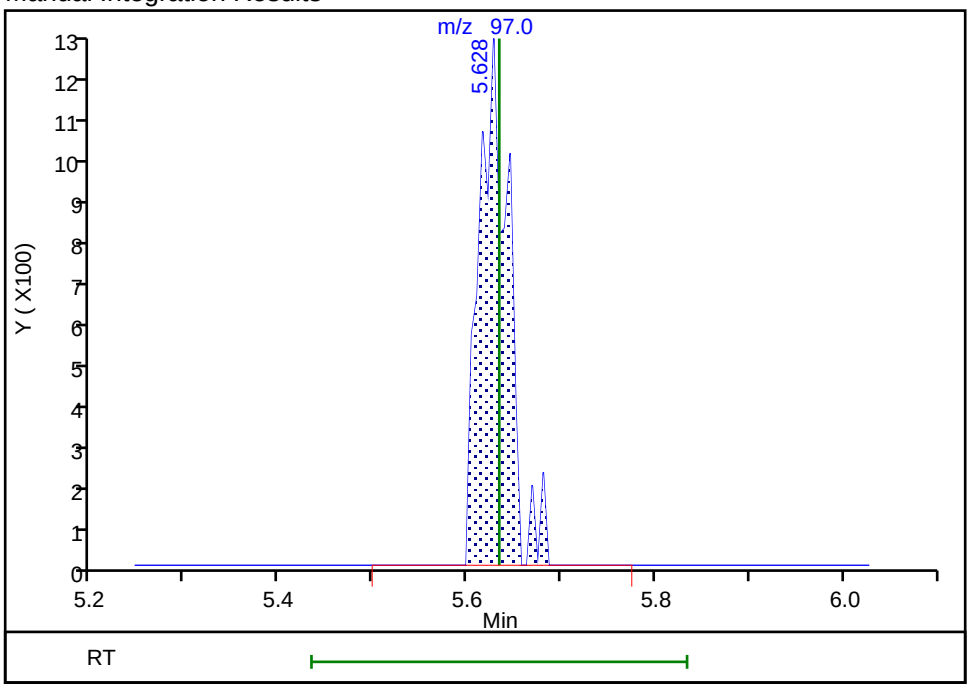
Processing Integration Results

RT: 5.67
Area: 67
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 5.63
Area: 2711
Amount: 4.321819
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:28:31
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

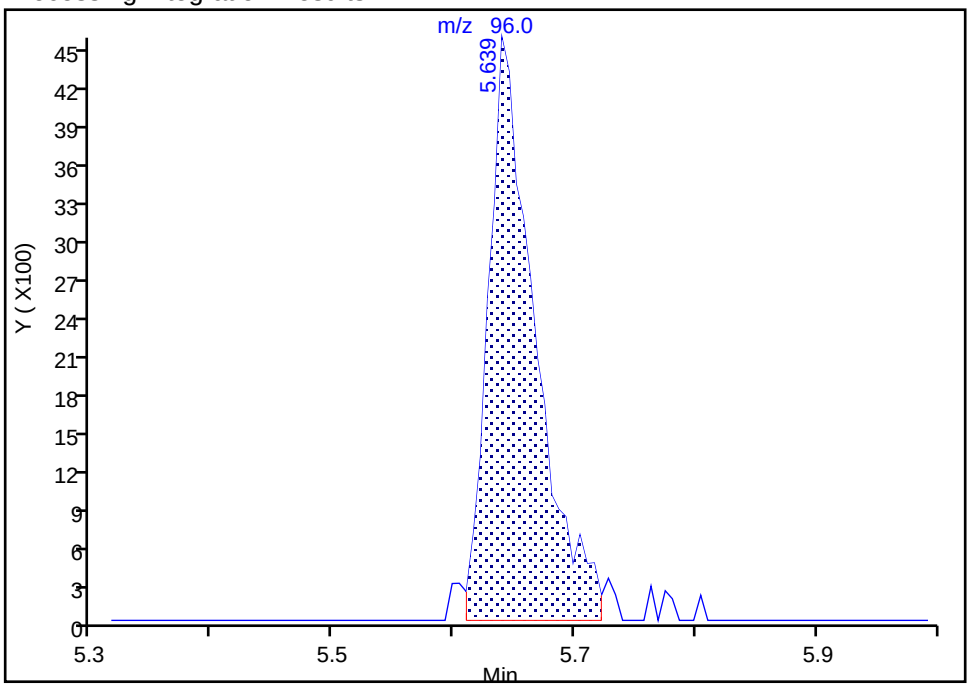
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d				
Injection Date:	05-Mar-2020 07:55:30	Instrument ID:	CHHP10		
Lims ID:	IC 1				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Signal: 1

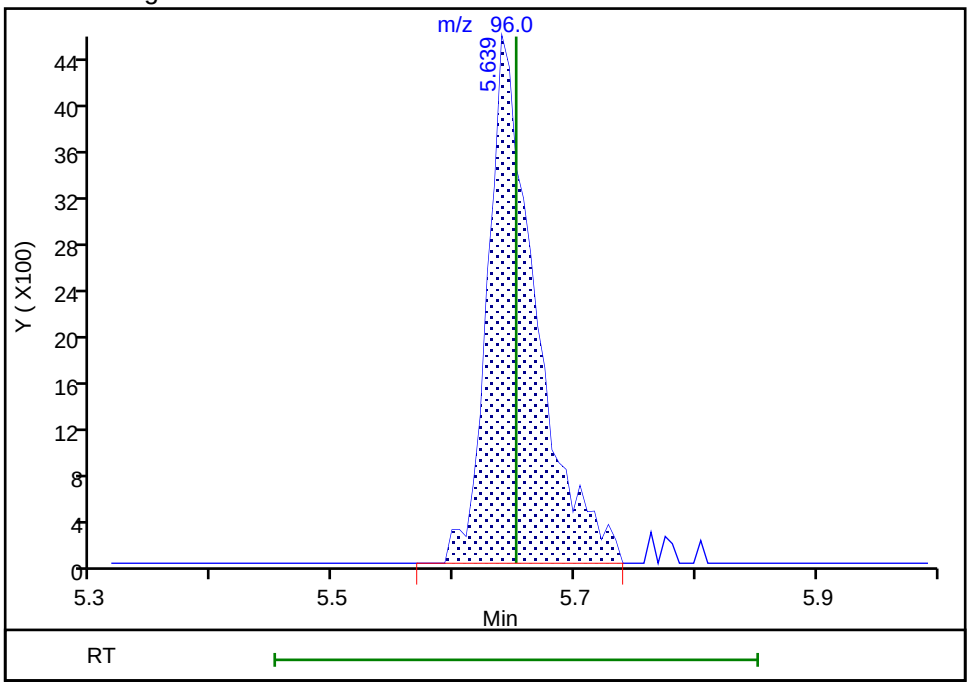
Processing Integration Results

RT: 5.64
Area: 12140
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 5.64
Area: 12526
Amount: 4.898373
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:28:34

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

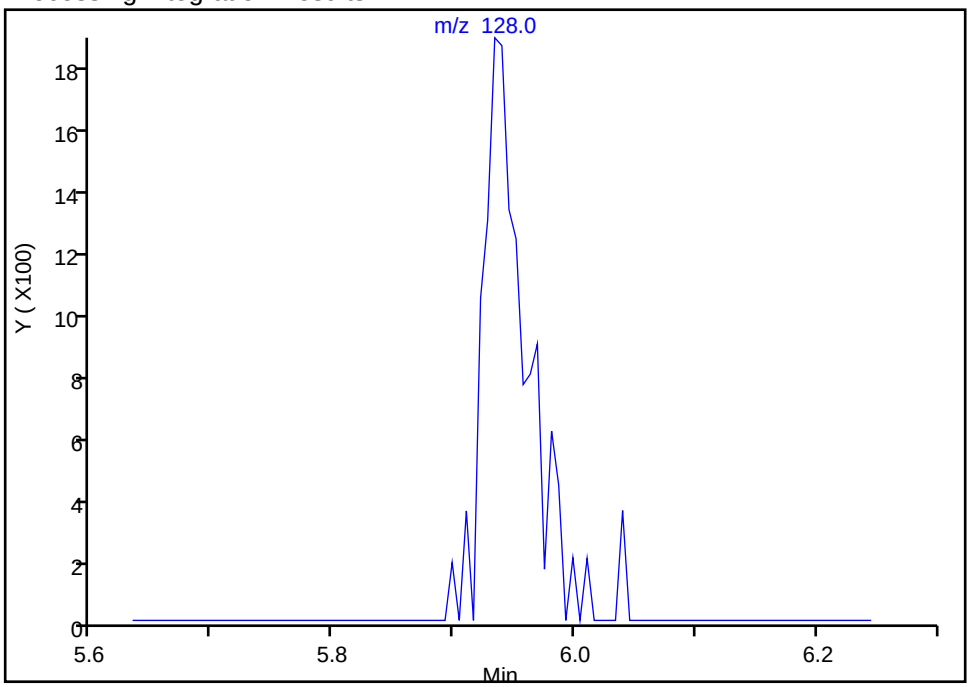
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d				
Injection Date:	05-Mar-2020 07:55:30	Instrument ID:	CHHP10		
Lims ID:	IC 1				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

46 Chlorobromomethane, CAS: 74-97-5

Signal: 1

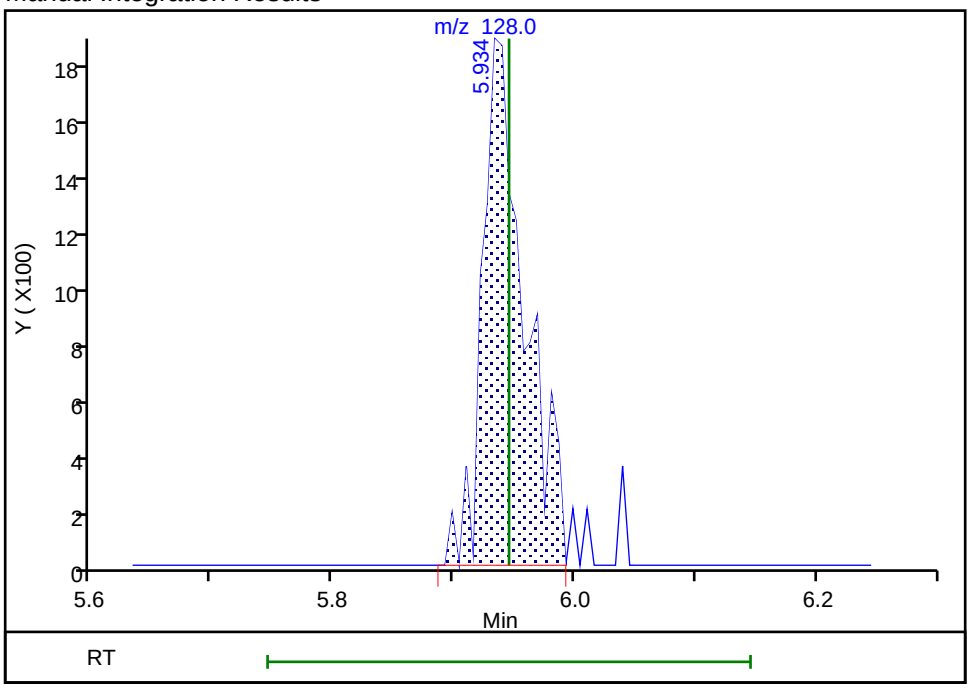
Not Detected
Expected RT: 5.95

Processing Integration Results



Manual Integration Results

RT: 5.93
Area: 4408
Amount: 4.676636
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 09:48:21
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

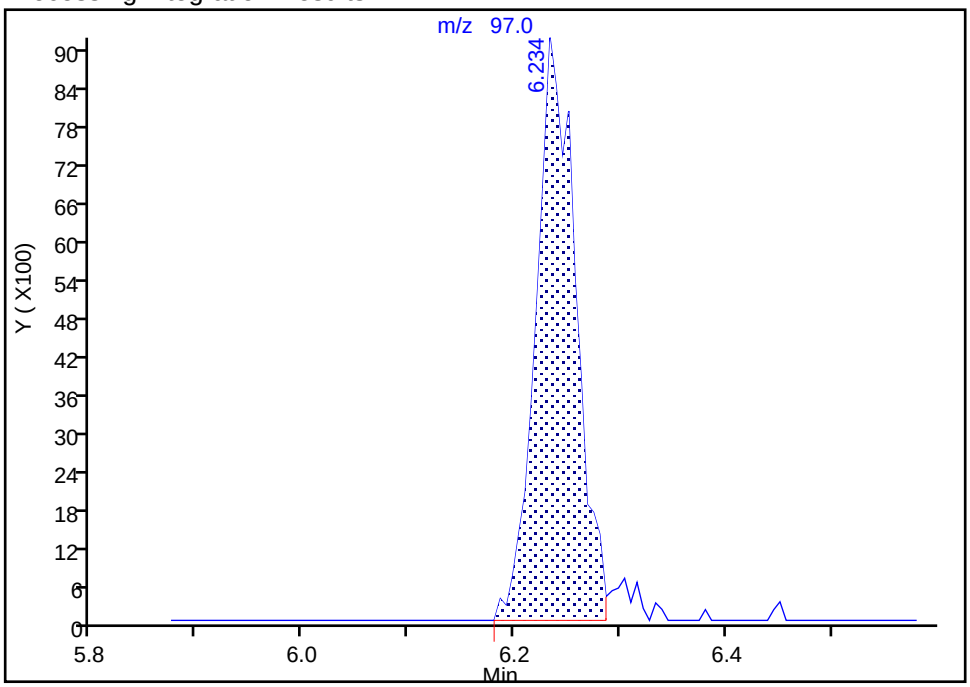
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

50 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 1

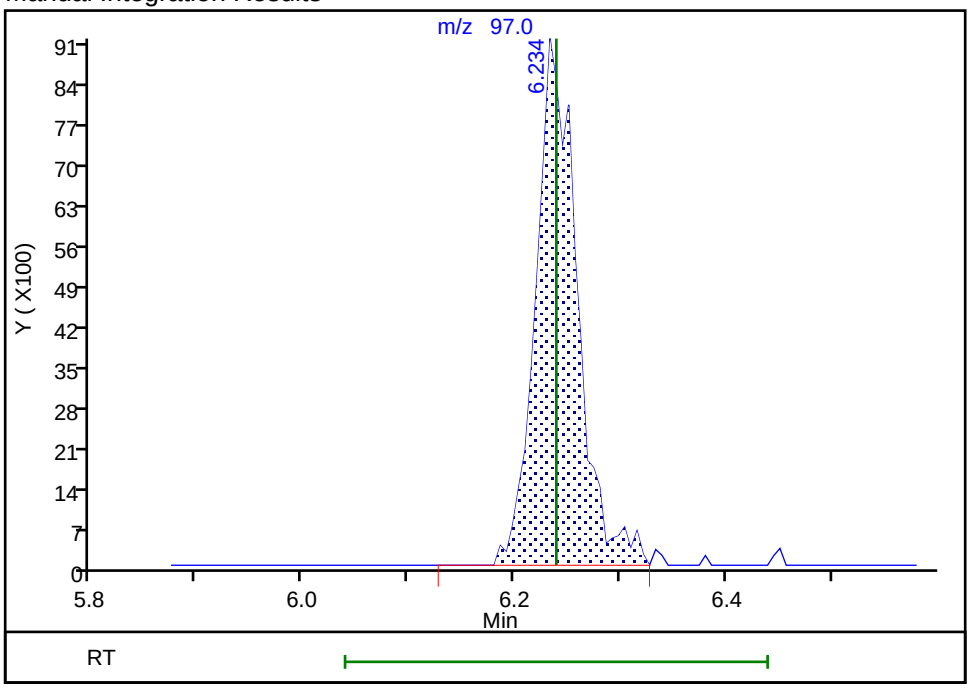
Processing Integration Results

RT: 6.23
Area: 23858
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 6.23
Area: 24809
Amount: 5.099070
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:28:46
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

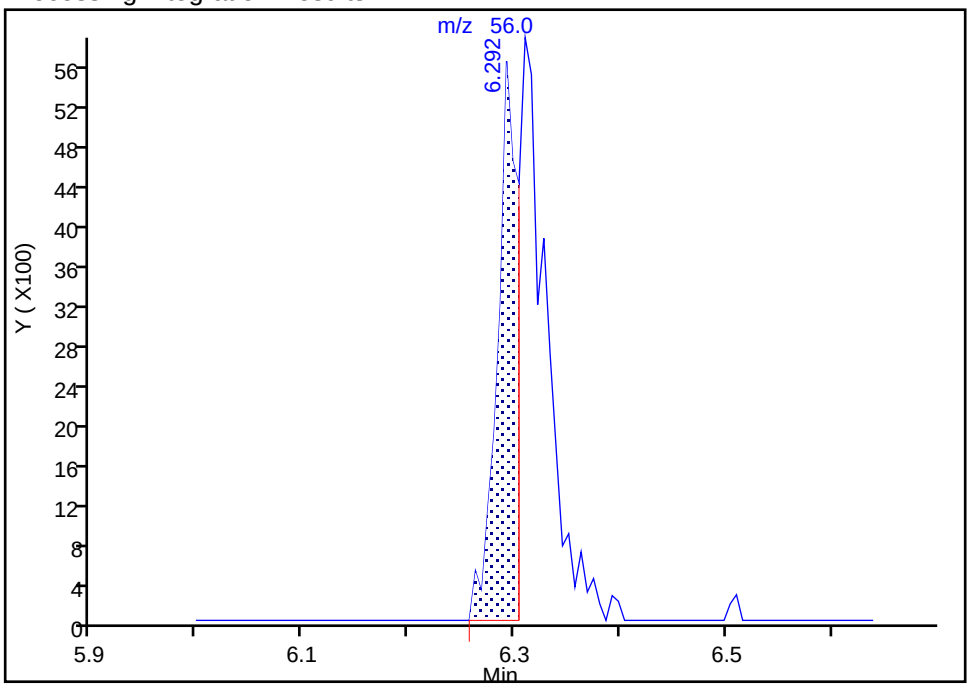
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

52 Cyclohexane, CAS: 110-82-7

Signal: 1

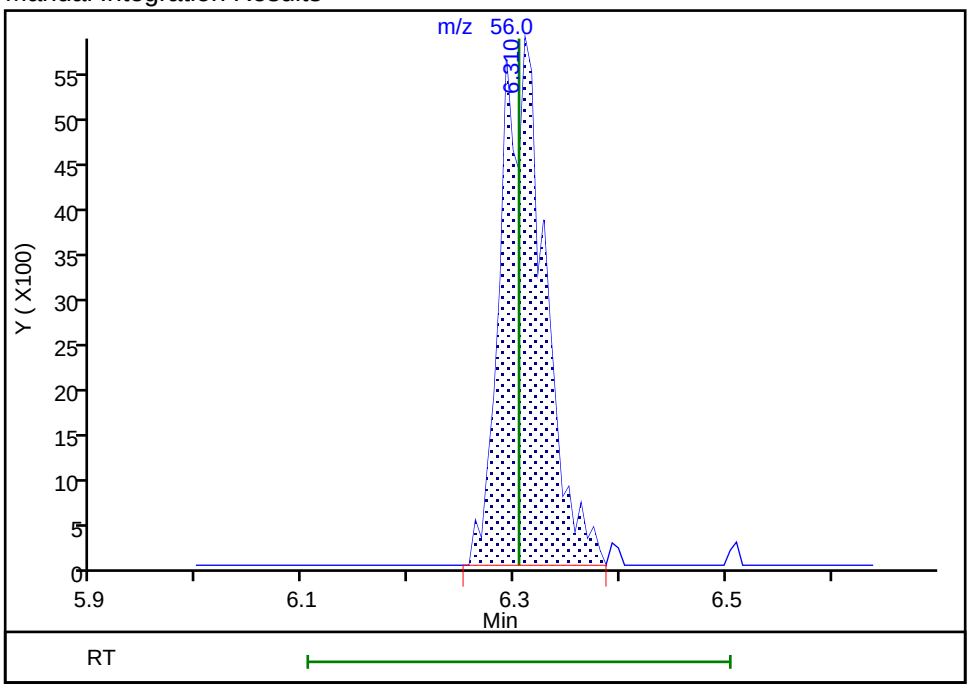
Processing Integration Results

RT: 6.29
Area: 7628
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 6.31
Area: 16910
Amount: 4.901040
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:28:49
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

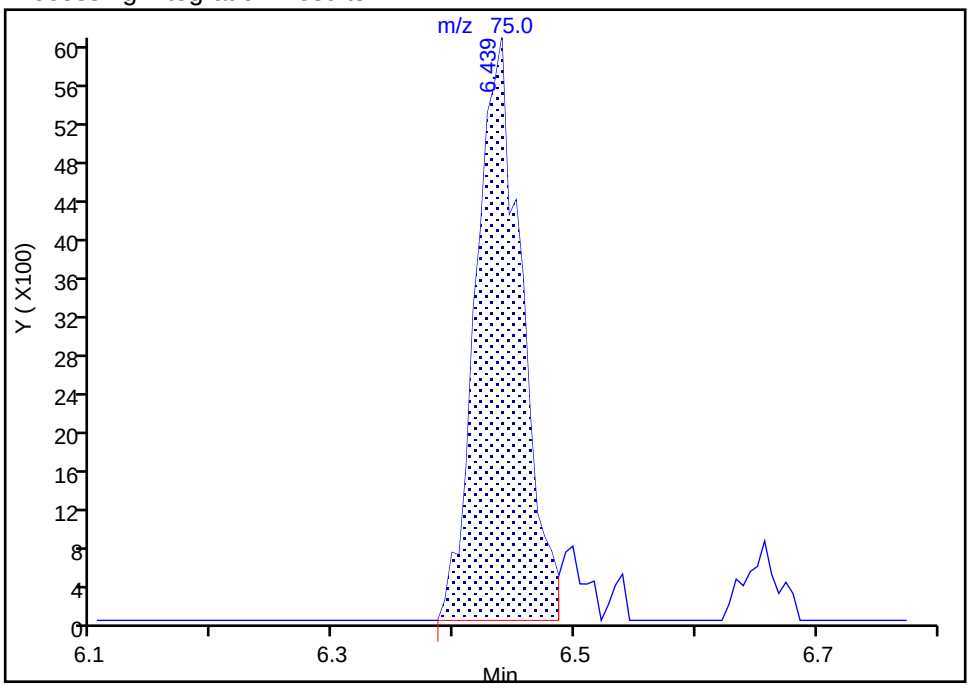
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d				
Injection Date:	05-Mar-2020 07:55:30	Instrument ID:	CHHP10		
Lims ID:	IC 1				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

54 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

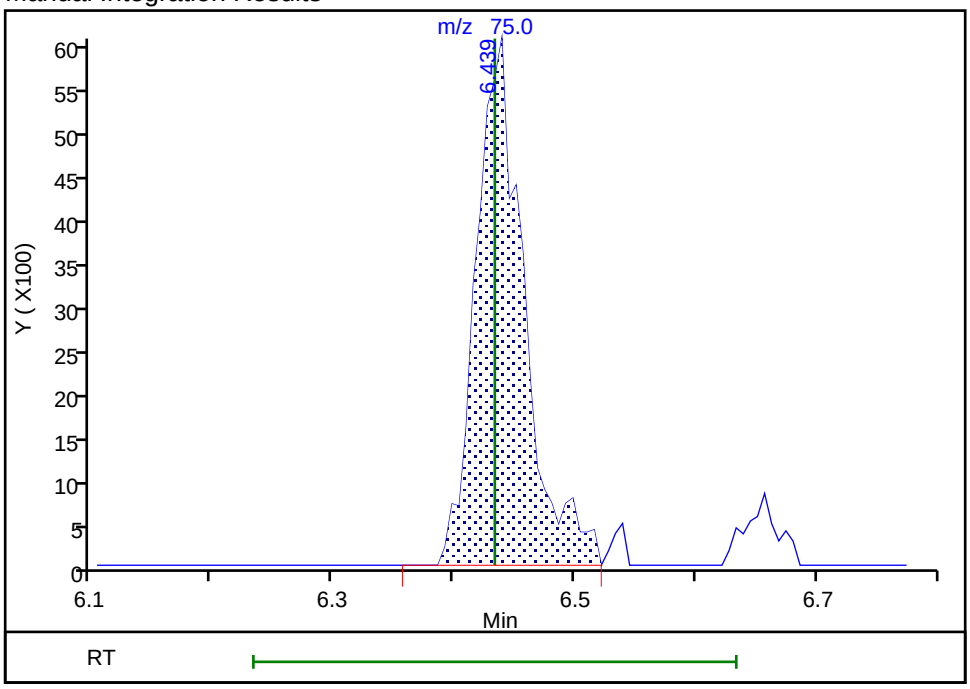
Processing Integration Results

RT: 6.44
Area: 15861
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 6.44
Area: 16795
Amount: 4.291004
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:28:53

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

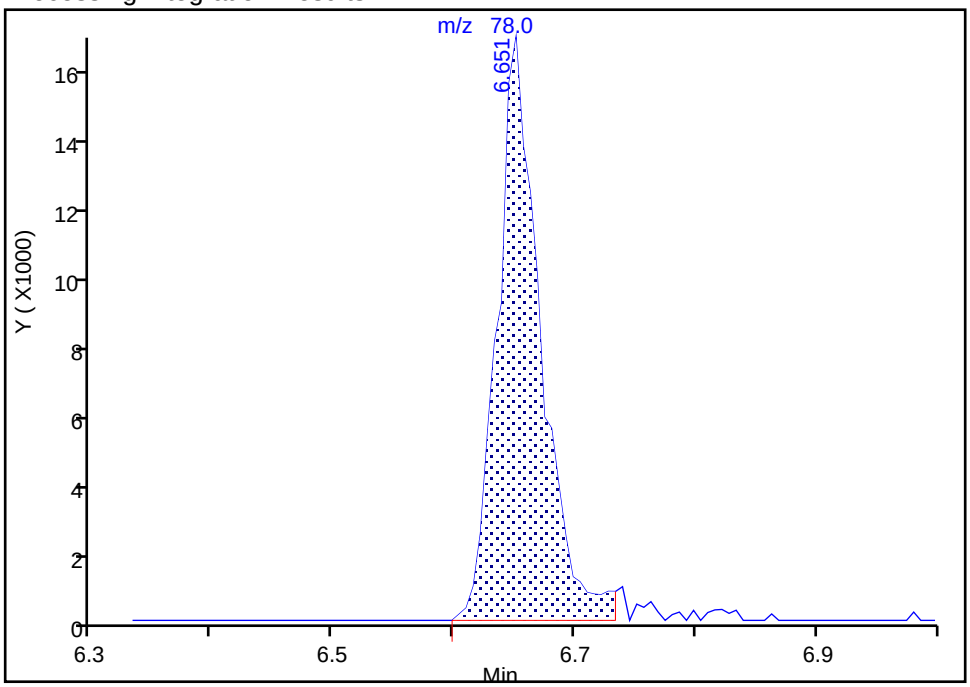
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

55 Benzene, CAS: 71-43-2

Signal: 1

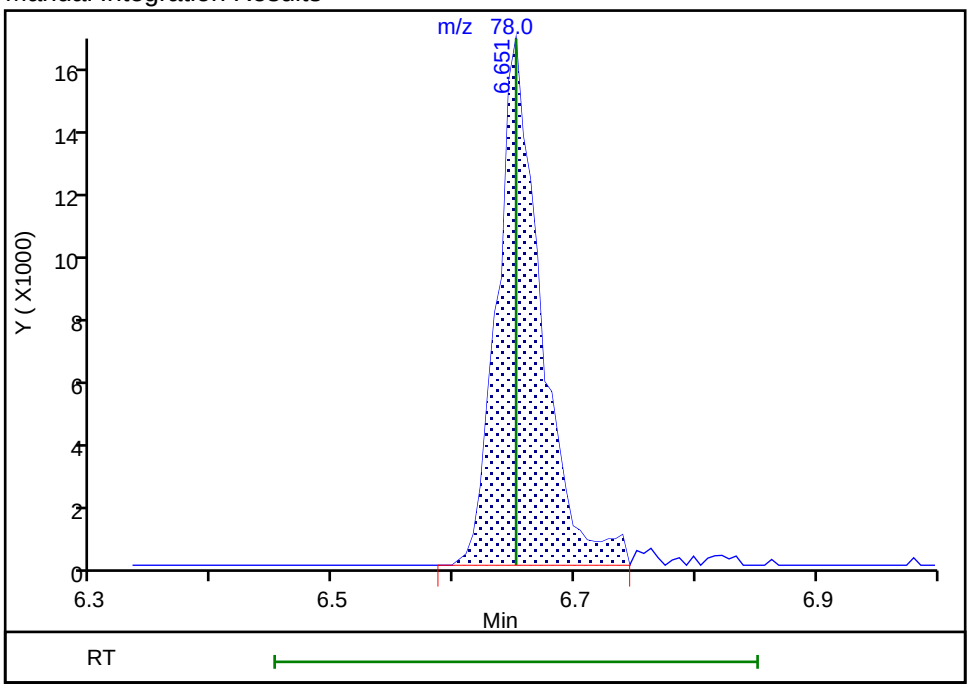
Processing Integration Results

RT: 6.65
Area: 41266
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 6.65
Area: 41595
Amount: 4.311575
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:28:58
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

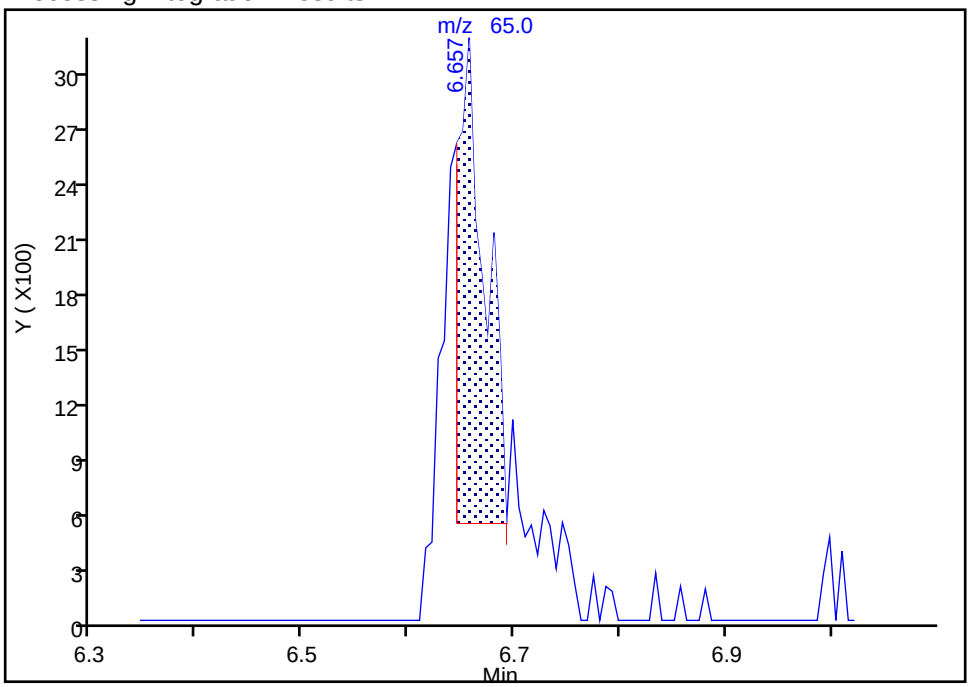
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

$ 6 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

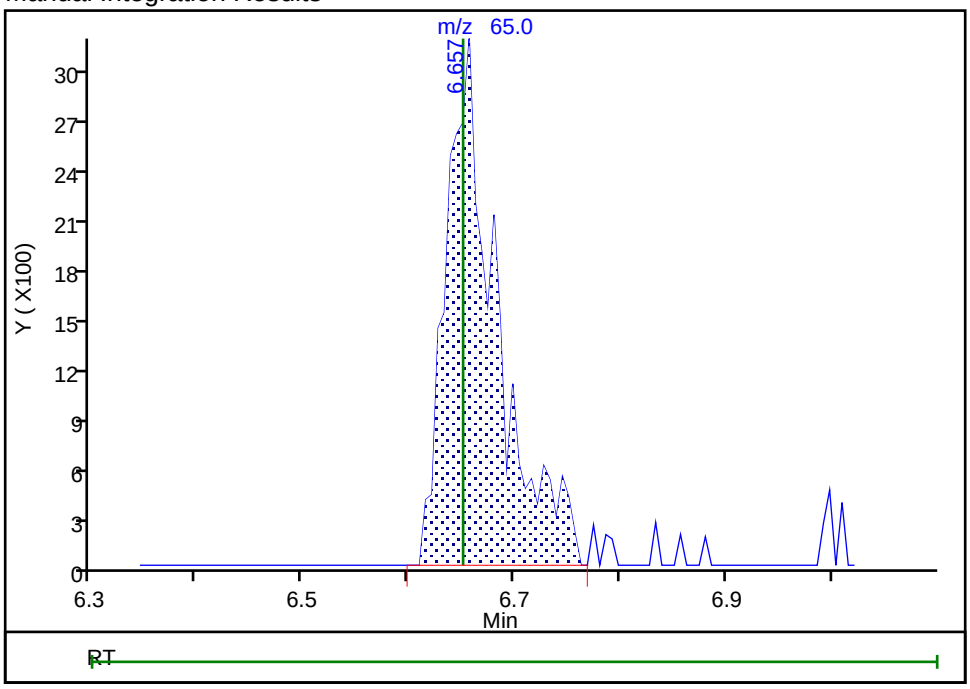
Processing Integration Results

RT: 6.66
Area: 4656
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 6.66
Area: 10416
Amount: 4.262294
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:26:57
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

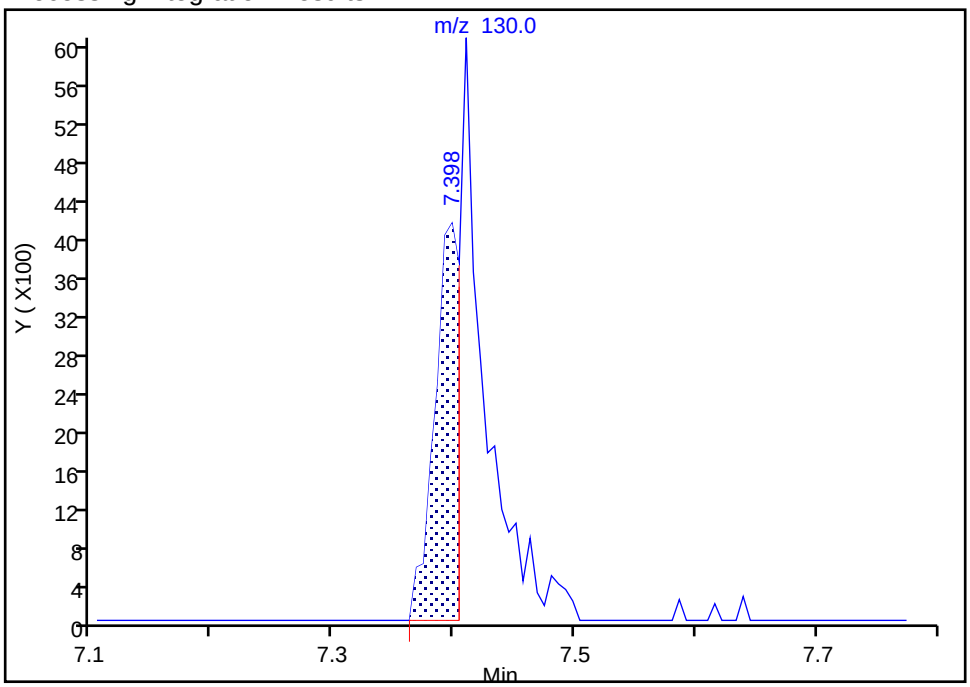
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

60 Trichloroethene, CAS: 79-01-6

Signal: 1

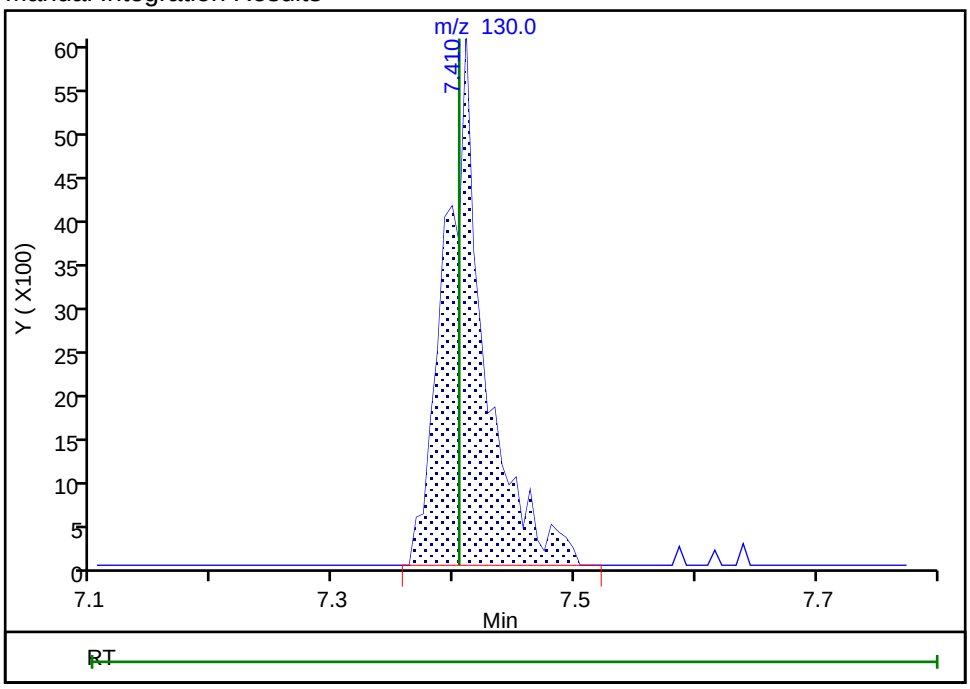
Processing Integration Results

RT: 7.40
Area: 6059
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 7.41
Area: 13886
Amount: 4.761892
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:29:05
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

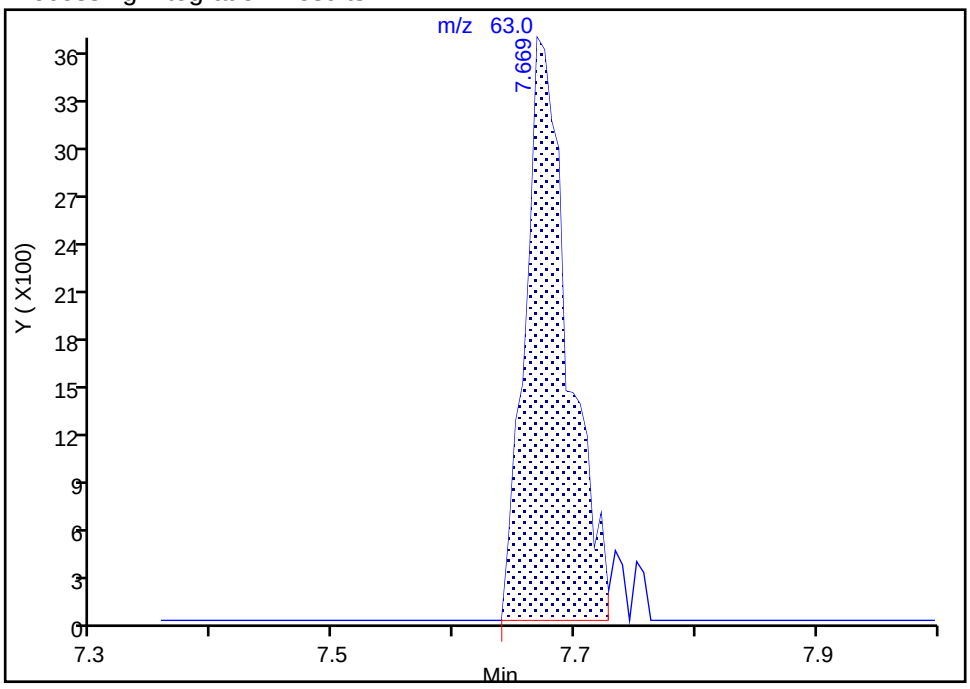
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

64 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

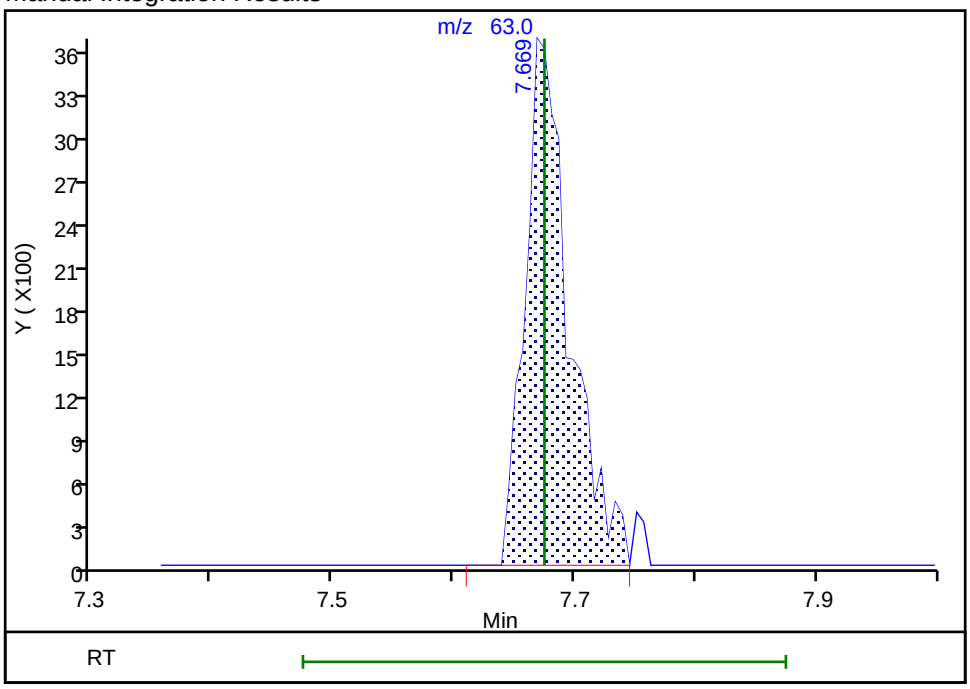
Processing Integration Results

RT: 7.67
Area: 9039
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 7.67
Area: 9317
Amount: 4.942736
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:29:10
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

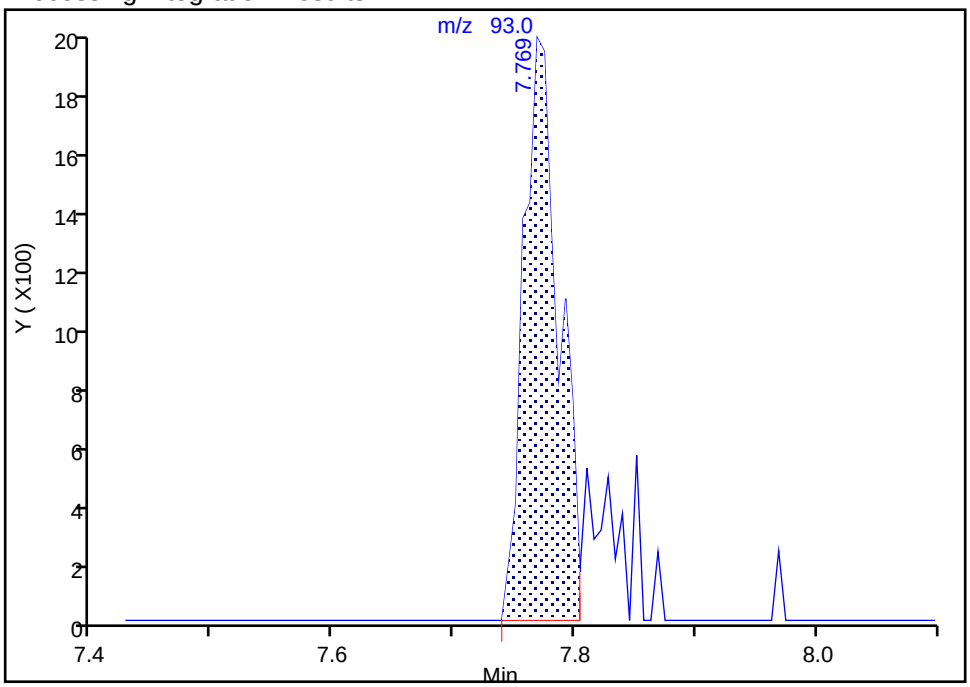
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

65 Dibromomethane, CAS: 74-95-3

Signal: 1

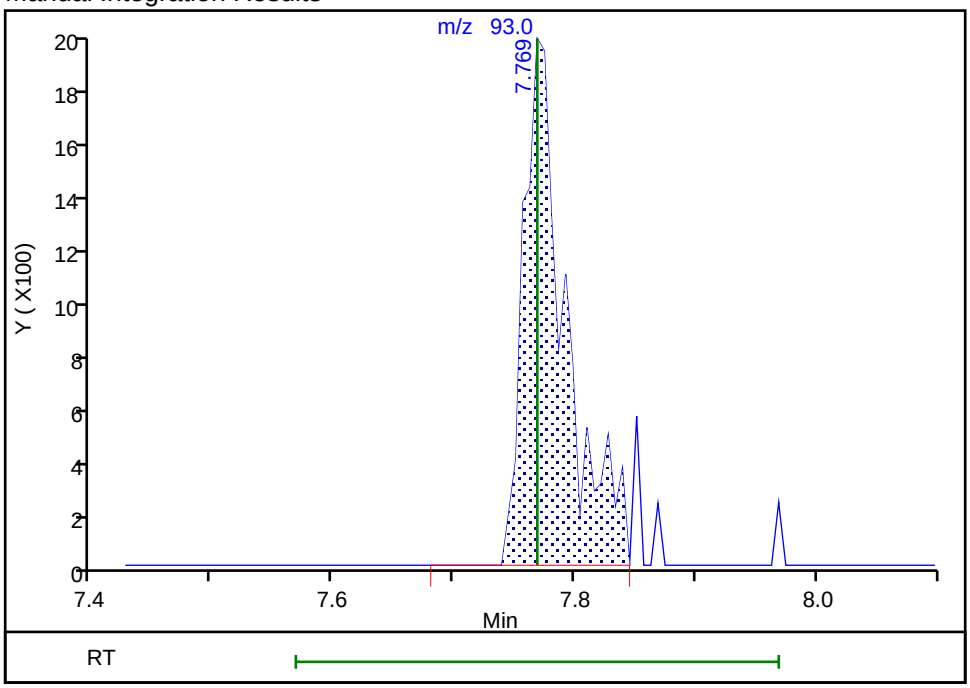
Processing Integration Results

RT: 7.77
Area: 3866
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 7.77
Area: 4598
Amount: 4.629775
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:29:13
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

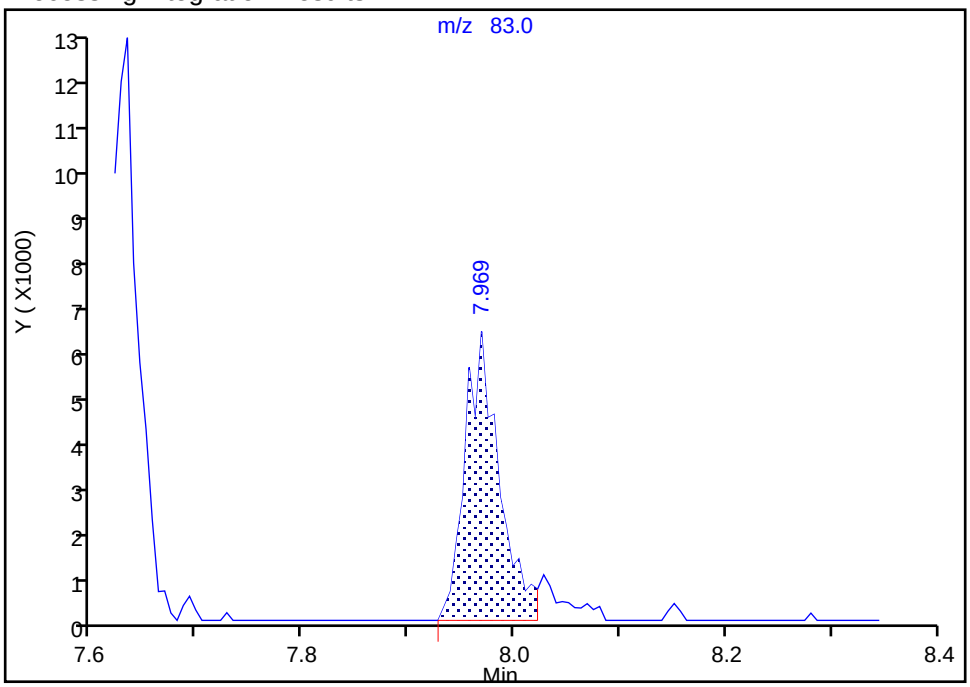
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

68 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

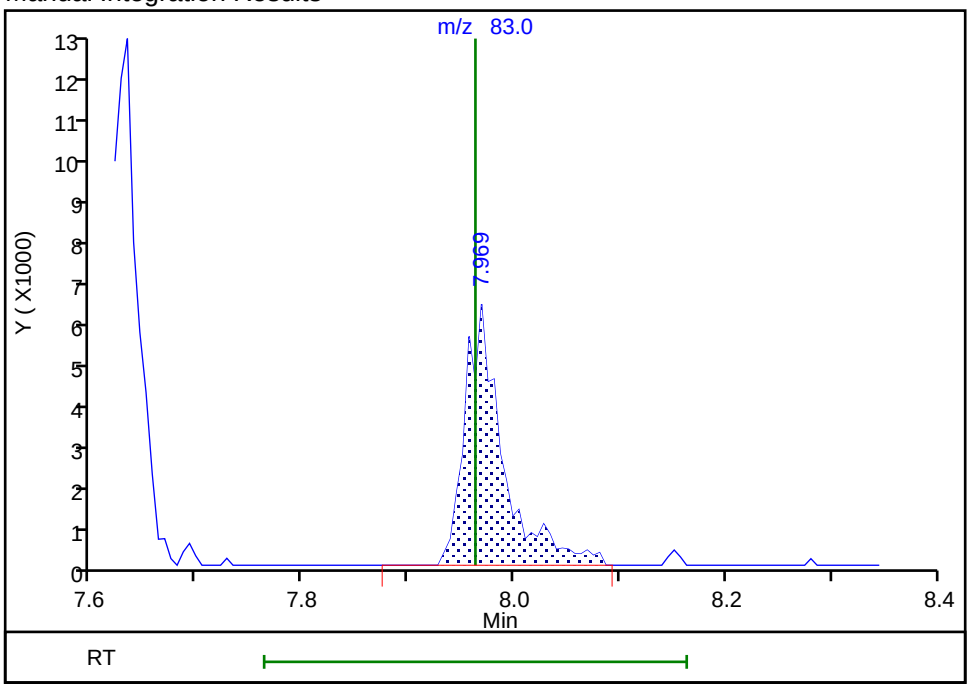
Processing Integration Results

RT: 7.97
Area: 13556
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 7.97
Area: 15046
Amount: 4.567730
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:29:19
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

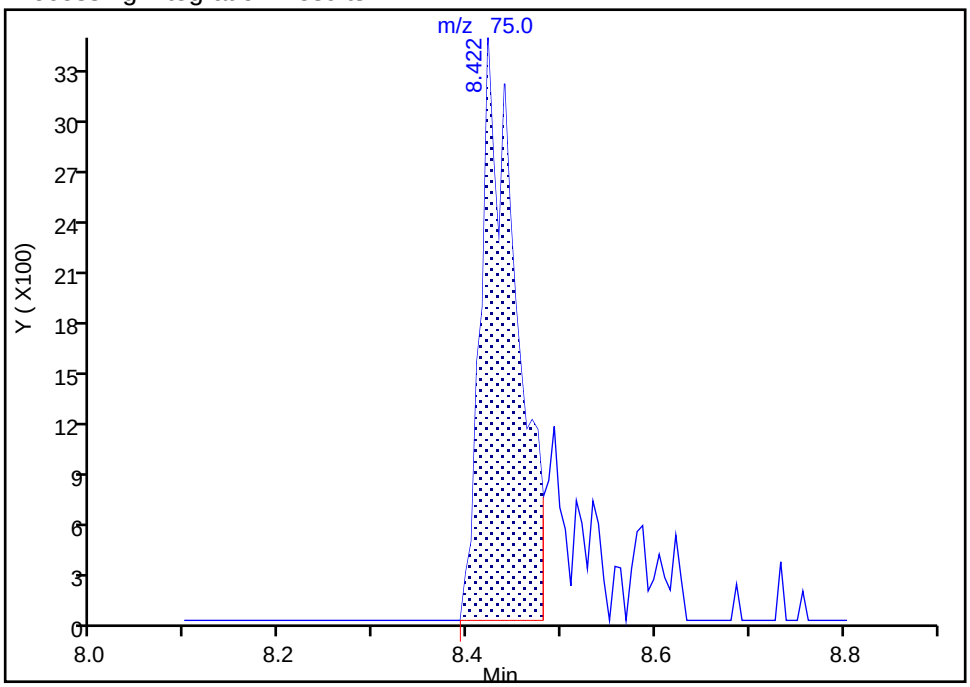
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d				
Injection Date:	05-Mar-2020 07:55:30	Instrument ID:	CHHP10		
Lims ID:	IC 1				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

71 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 1

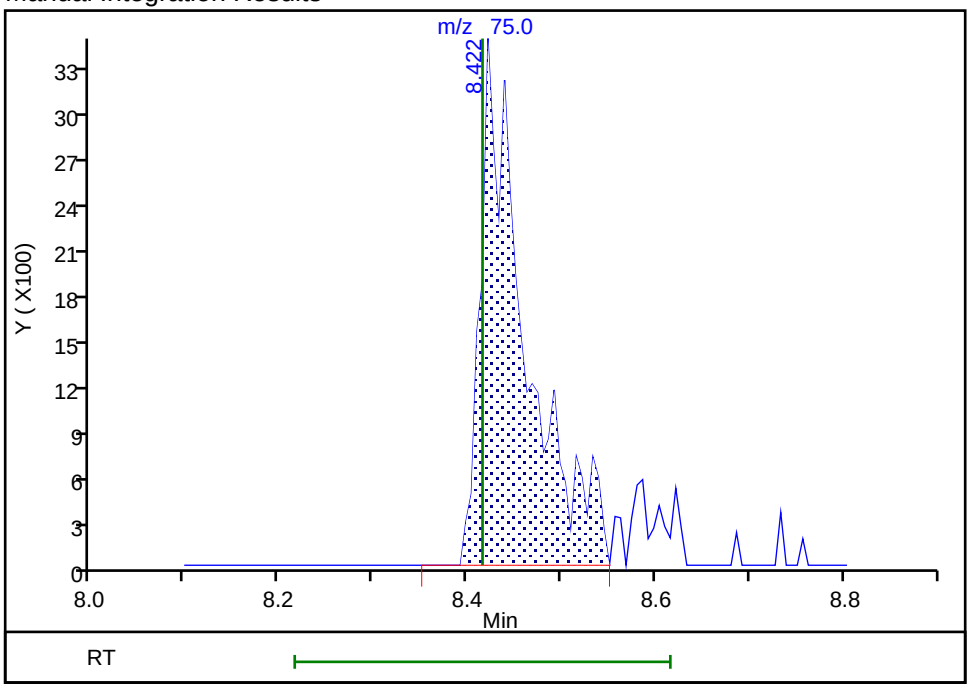
Processing Integration Results

RT: 8.42
Area: 9053
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 8.42
Area: 11340
Amount: 6.705950
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:29:23

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

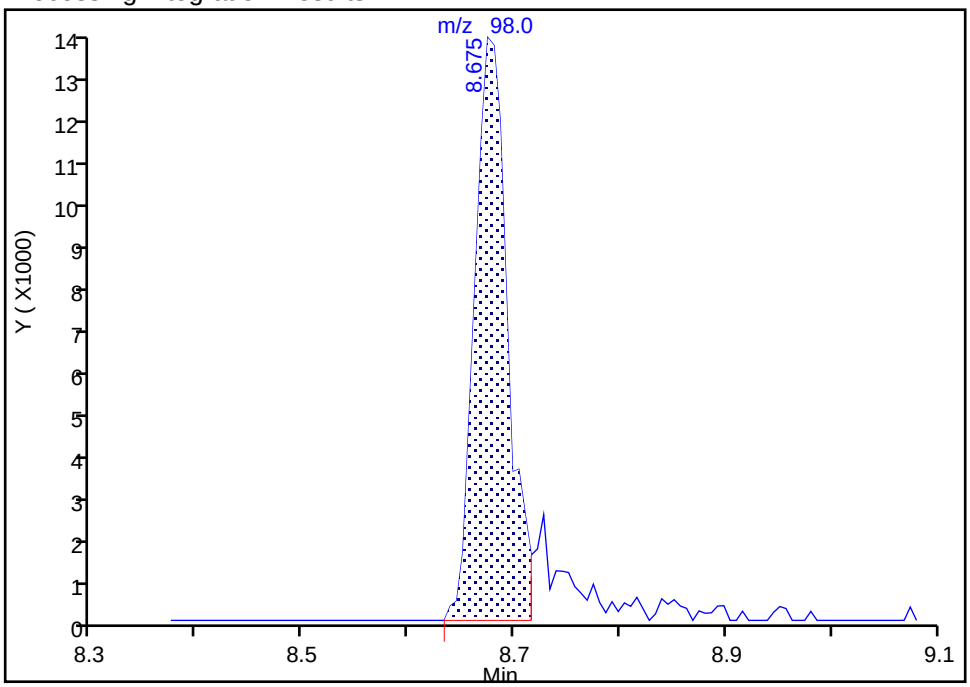
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

$ 7 Toluene-d8 (Surr), CAS: 2037-26-5

Signal: 1

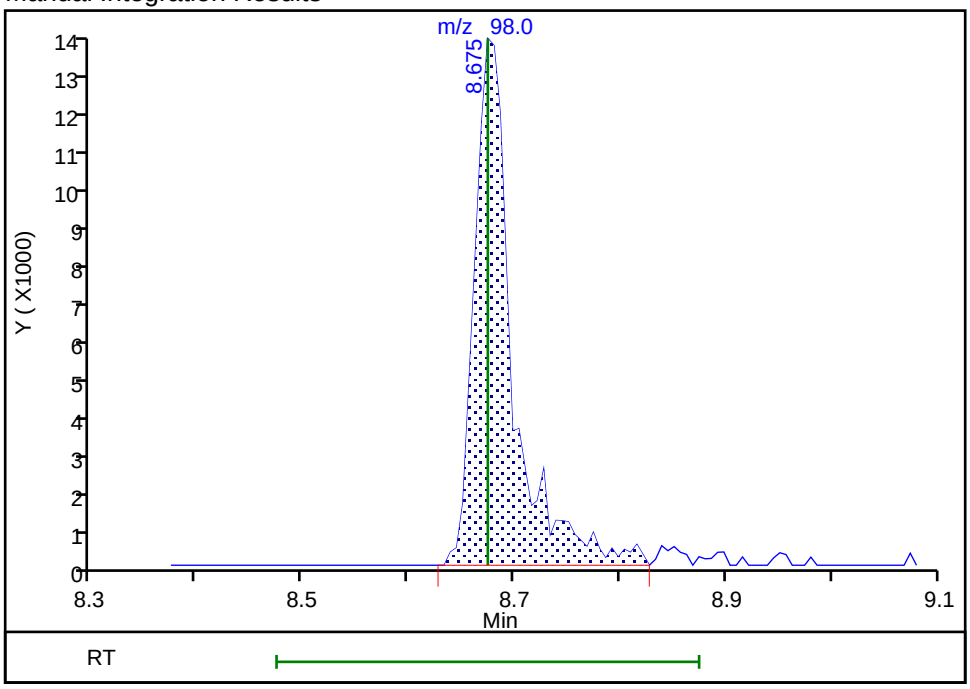
Processing Integration Results

RT: 8.67
Area: 30097
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 8.67
Area: 35052
Amount: 3.687392
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:27:01
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

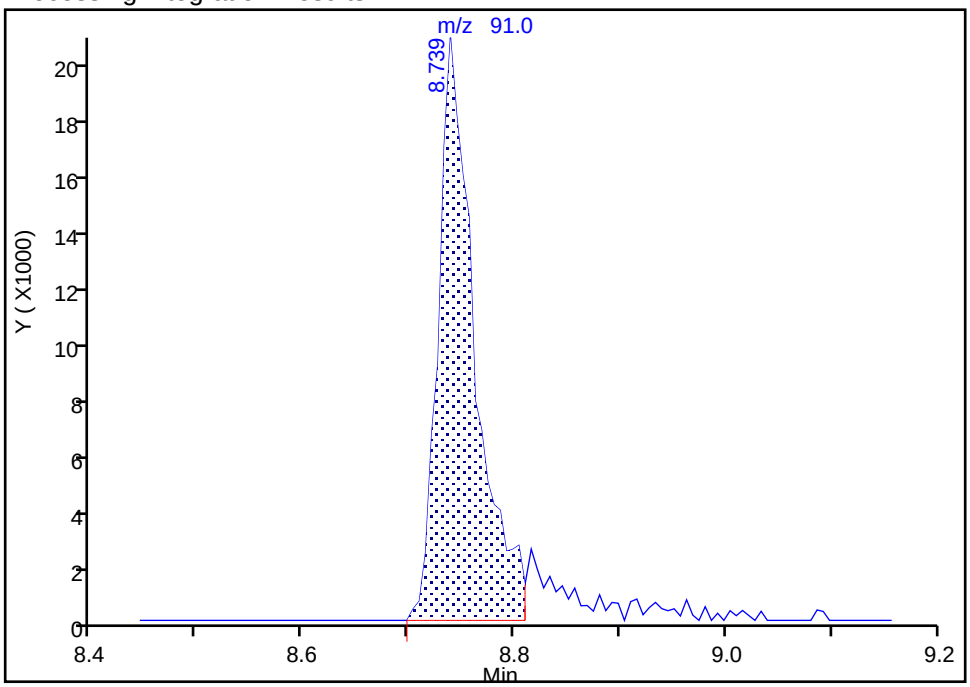
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

73 Toluene, CAS: 108-88-3

Signal: 1

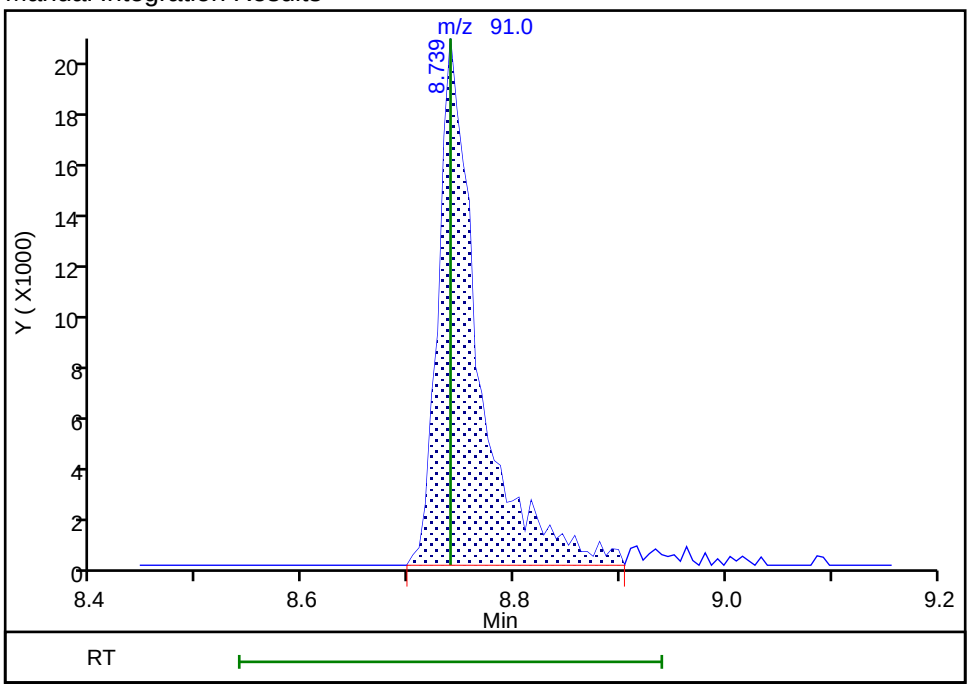
Processing Integration Results

RT: 8.74
Area: 50038
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 8.74
Area: 55365
Amount: 4.711396
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:29:30
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

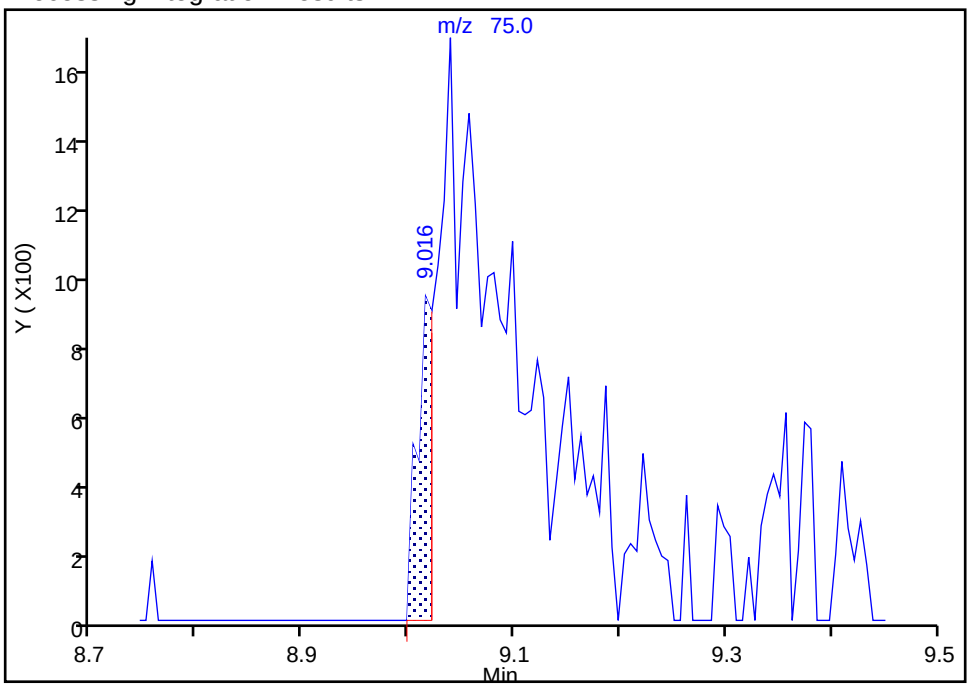
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d				
Injection Date:	05-Mar-2020 07:55:30	Instrument ID:	CHHP10		
Lims ID:	IC 1				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

74 trans-1,3-Dichloropropene, CAS: 10061-02-6

Signal: 1

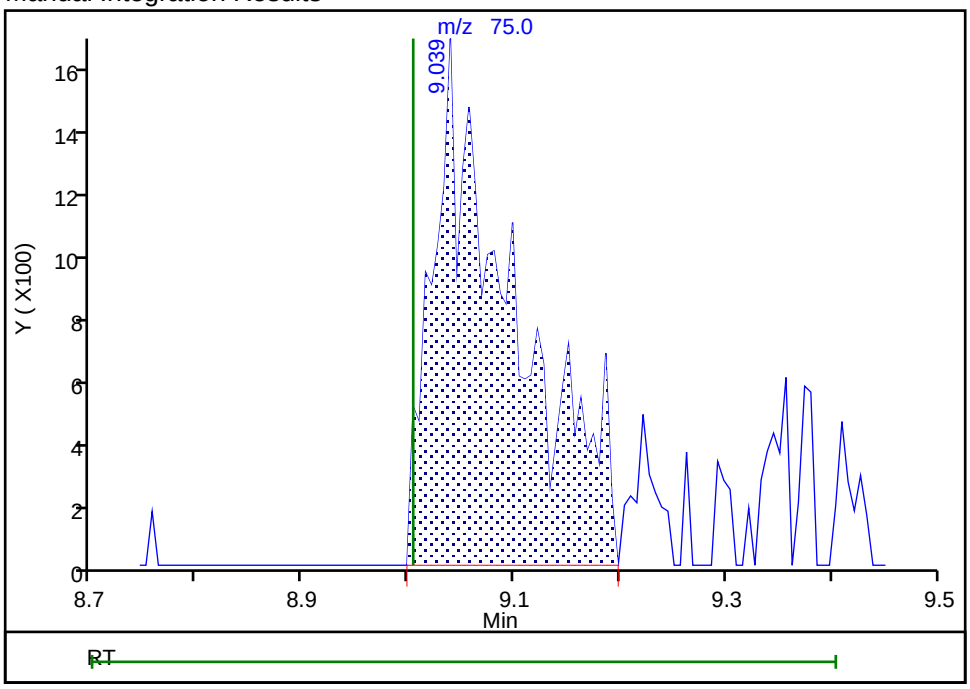
Processing Integration Results

RT: 9.02
Area: 992
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 9.04
Area: 8949
Amount: 6.527362
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:29:35

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

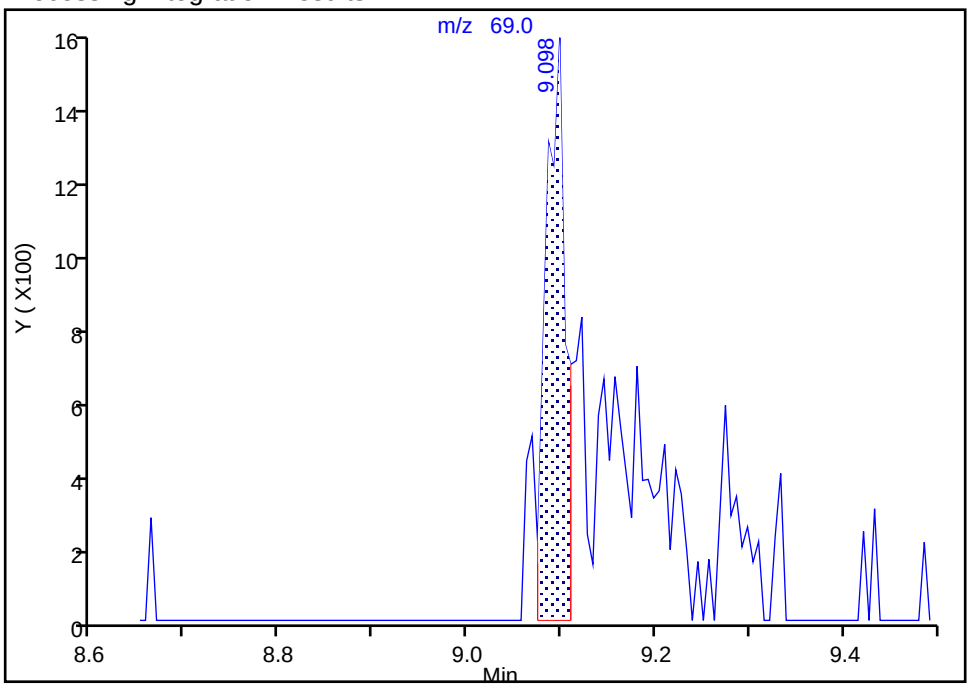
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

75 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

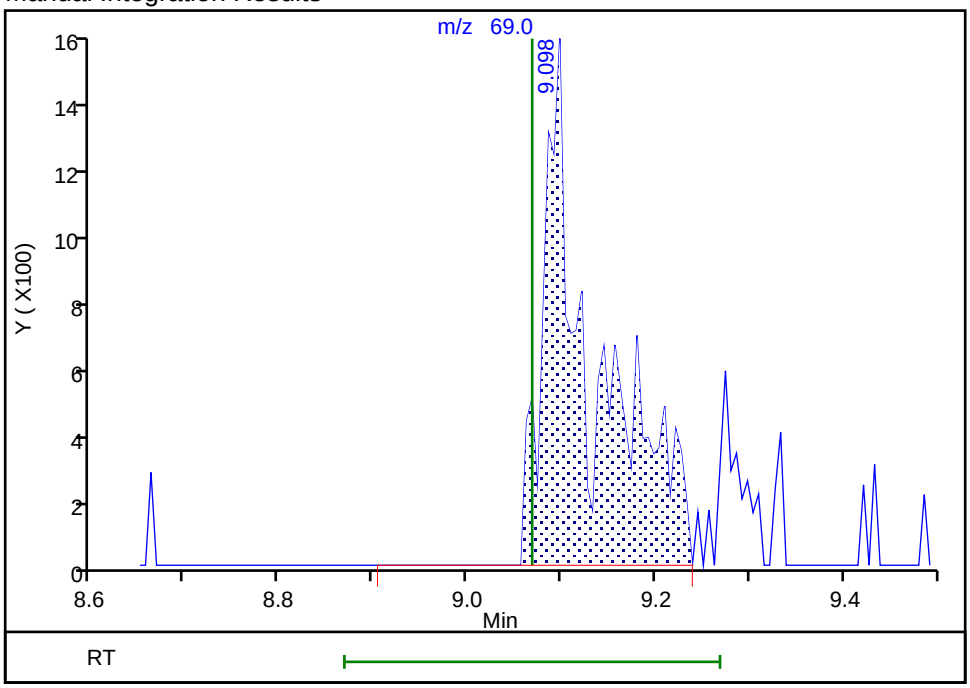
Processing Integration Results

RT: 9.10
Area: 2278
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 9.10
Area: 5811
Amount: 6.235083
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:29:45
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

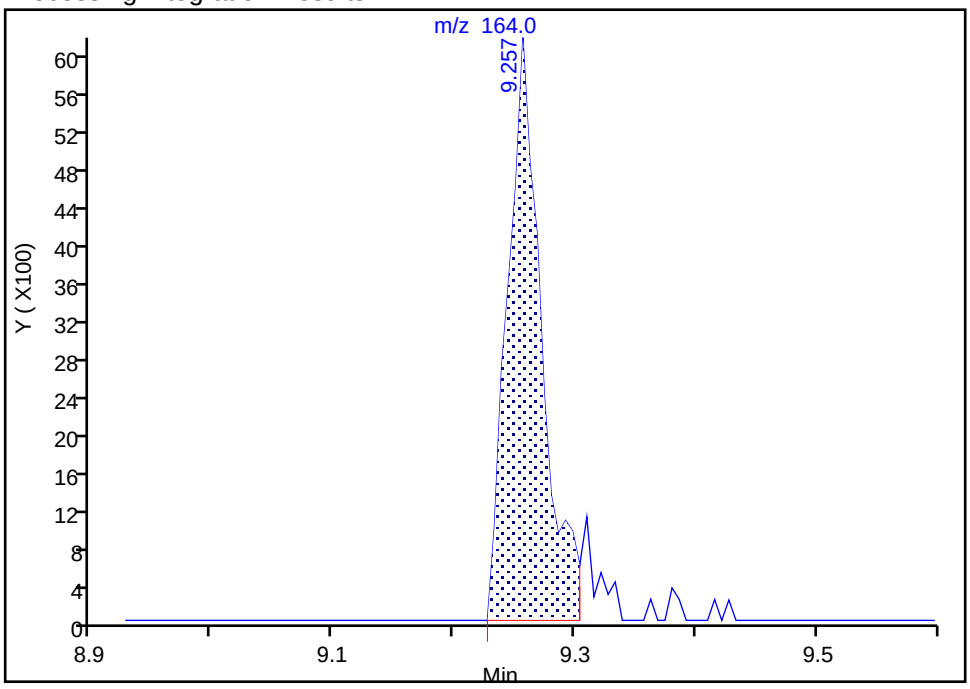
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

77 Tetrachloroethene, CAS: 127-18-4

Signal: 1

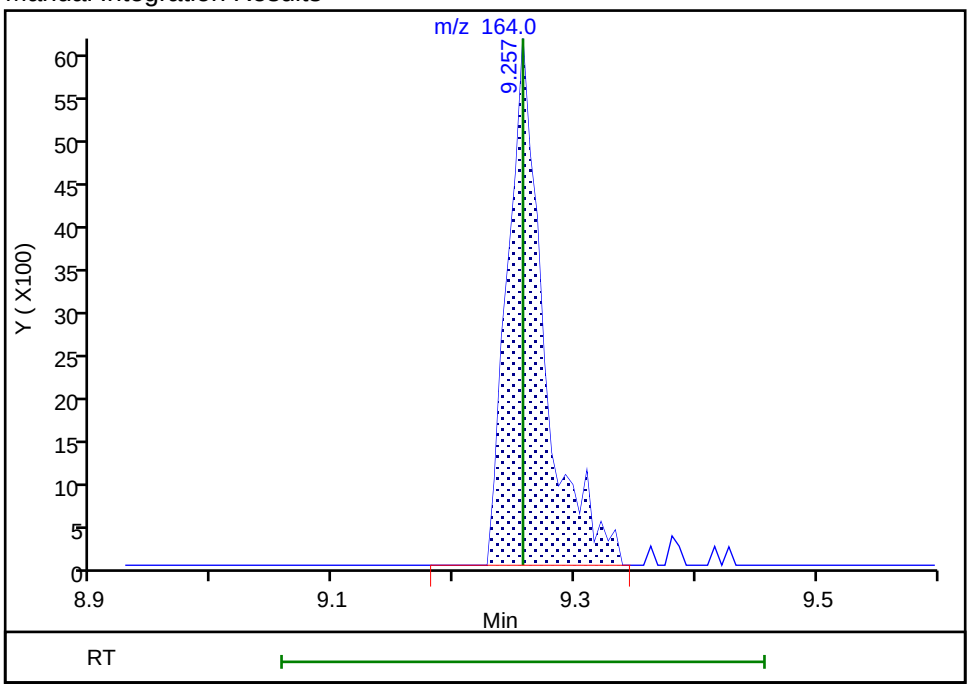
Processing Integration Results

RT: 9.26
Area: 12015
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 9.26
Area: 12905
Amount: 4.821346
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:29:51
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

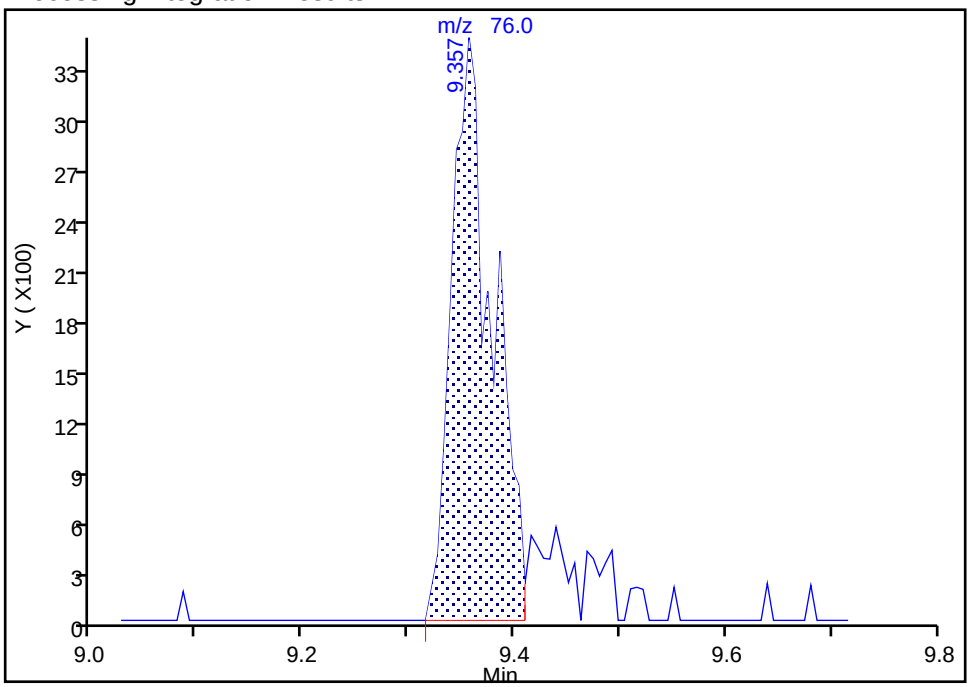
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

78 1,3-Dichloropropane, CAS: 142-28-9

Signal: 1

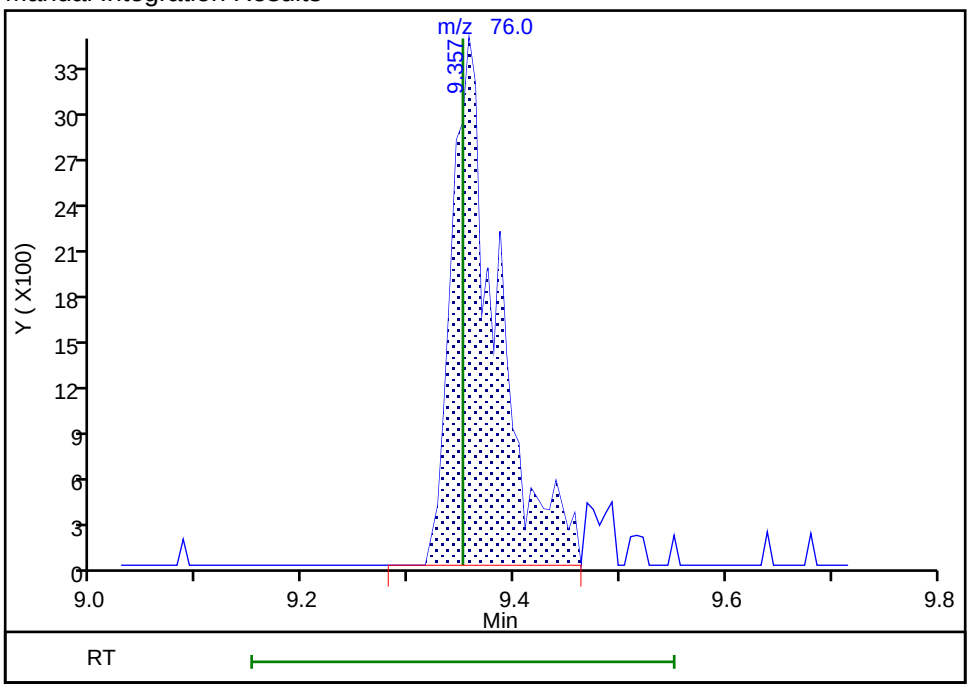
Processing Integration Results

RT: 9.36
Area: 9145
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 9.36
Area: 10256
Amount: 4.170195
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:29:56
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

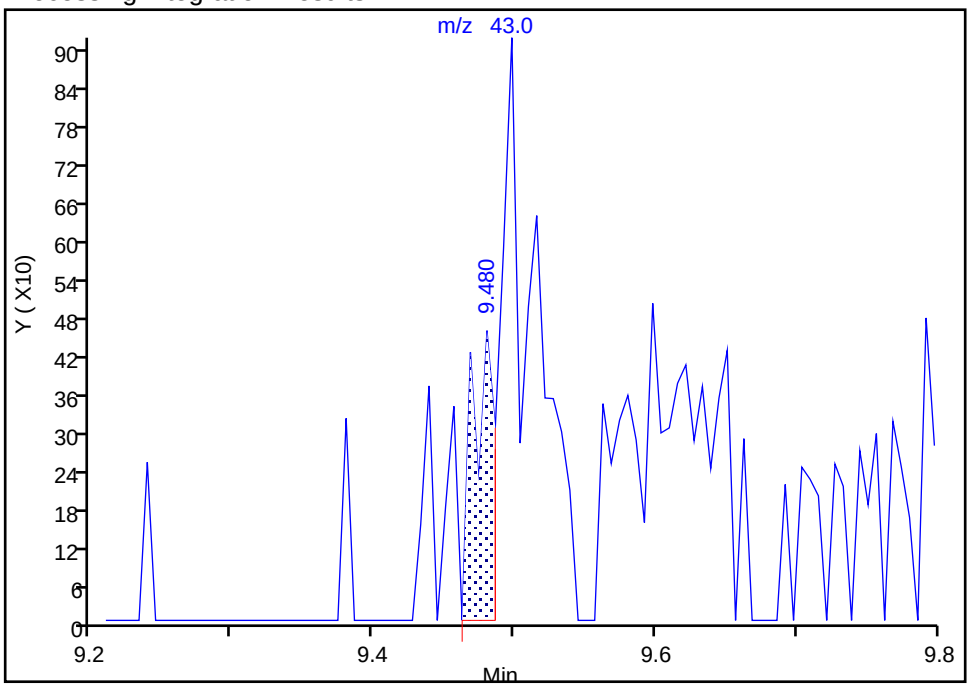
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

79 2-Hexanone, CAS: 591-78-6

Signal: 1

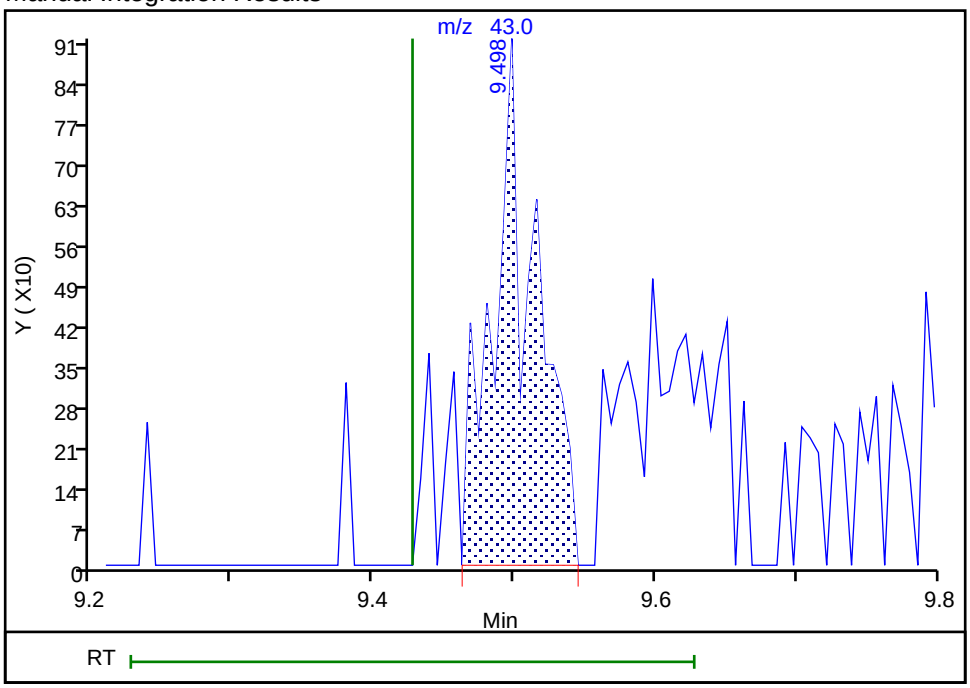
Processing Integration Results

RT: 9.48
Area: 494
Amount: 15.000000
Amount Units: ng



Manual Integration Results

RT: 9.50
Area: 1946
Amount: 15.210226
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:30:07
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

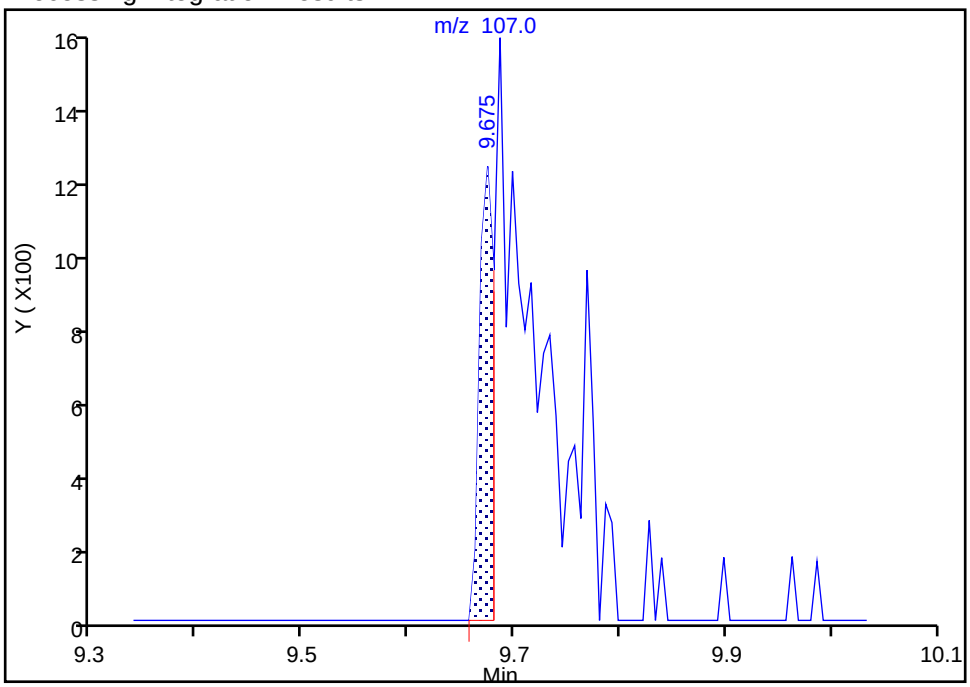
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

82 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

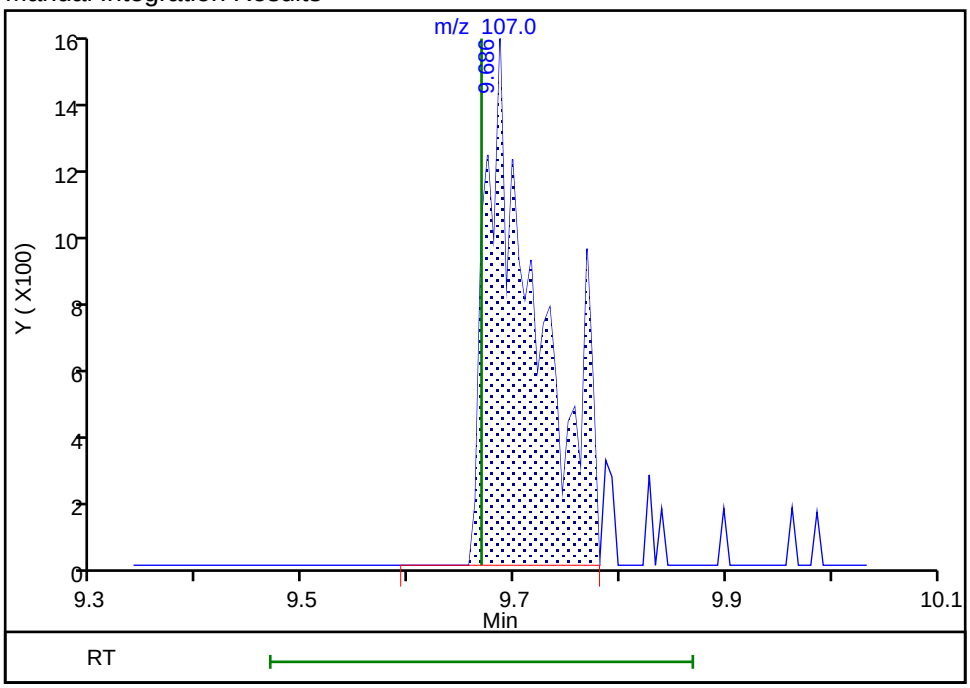
Processing Integration Results

RT: 9.67
Area: 1171
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 9.69
Area: 5202
Amount: 4.275636
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:30:17
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

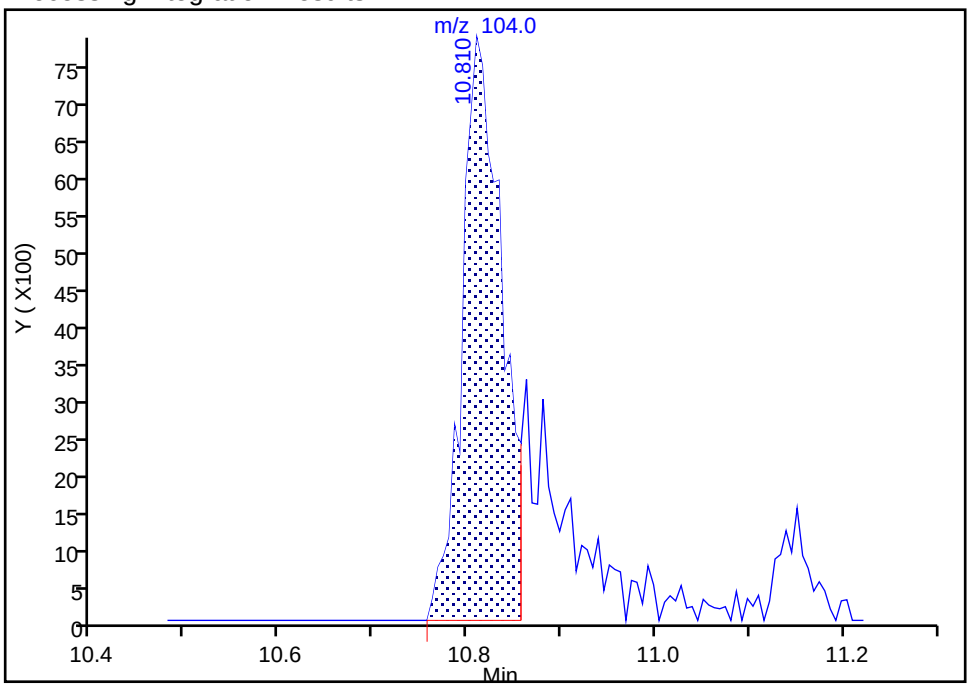
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

89 Styrene, CAS: 100-42-5

Signal: 1

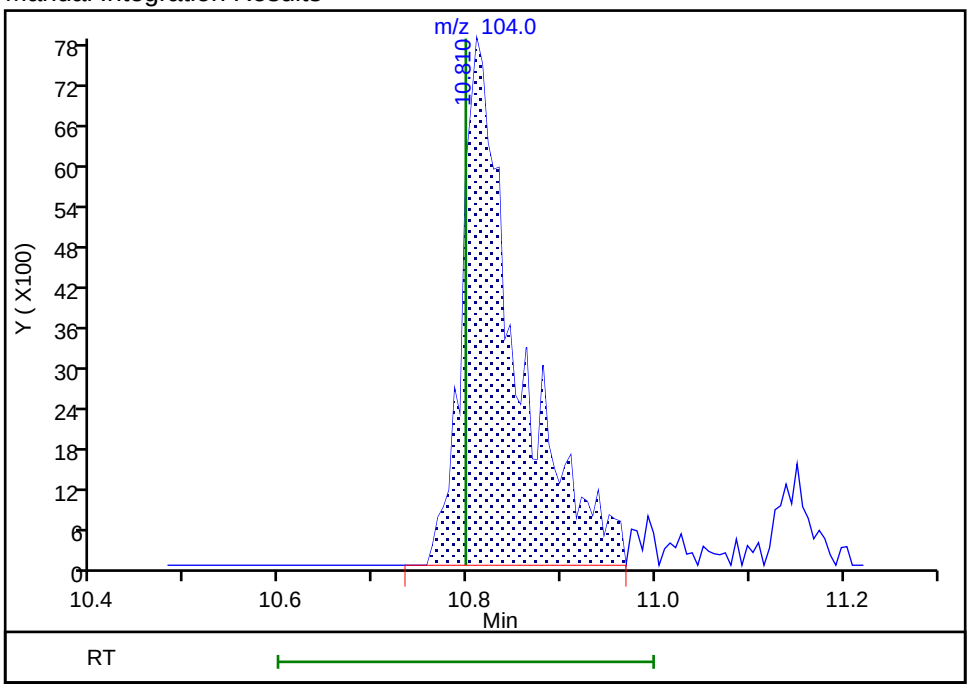
Processing Integration Results

RT: 10.81
Area: 23133
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 10.81
Area: 31531
Amount: 4.061109
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:30:27
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

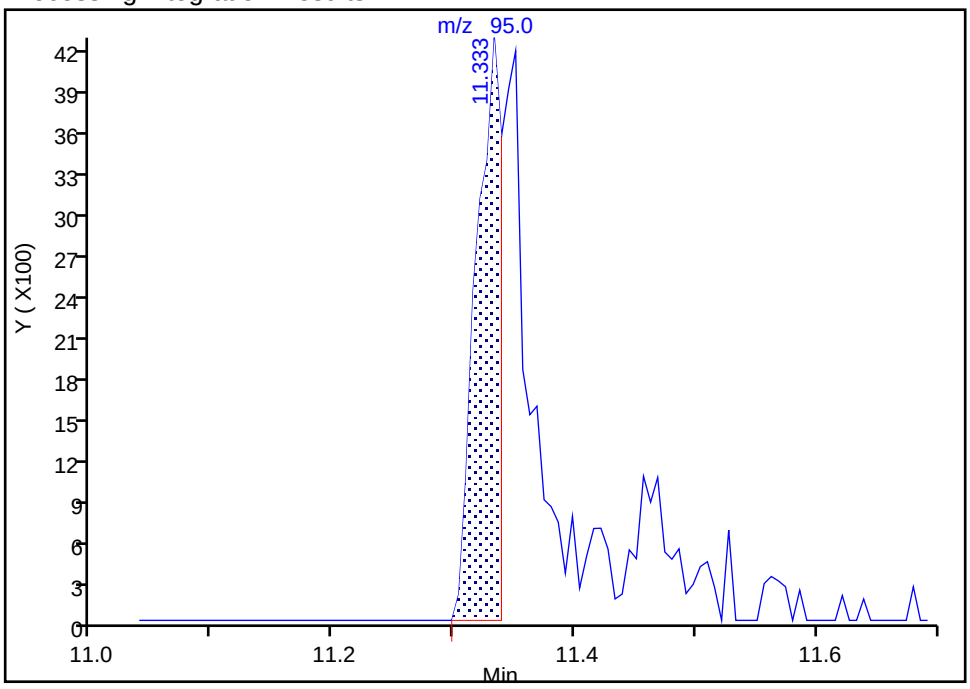
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

$ 8 4-Bromofluorobenzene (Surr), CAS: 460-00-4

Signal: 1

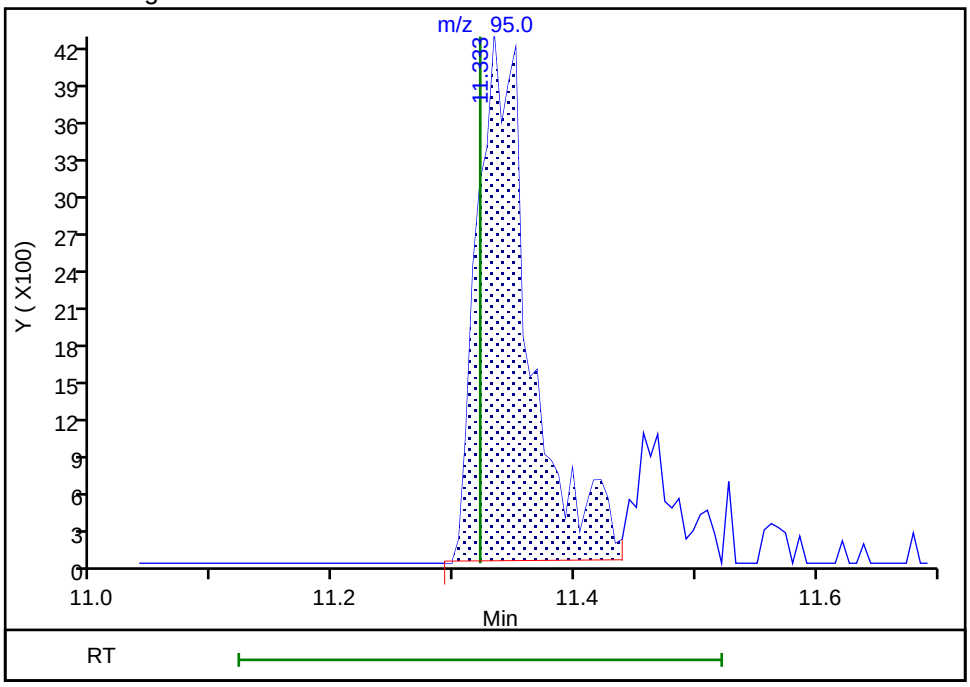
Processing Integration Results

RT: 11.33
Area: 6299
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 11.33
Area: 12927
Amount: 3.935598
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:27:13
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

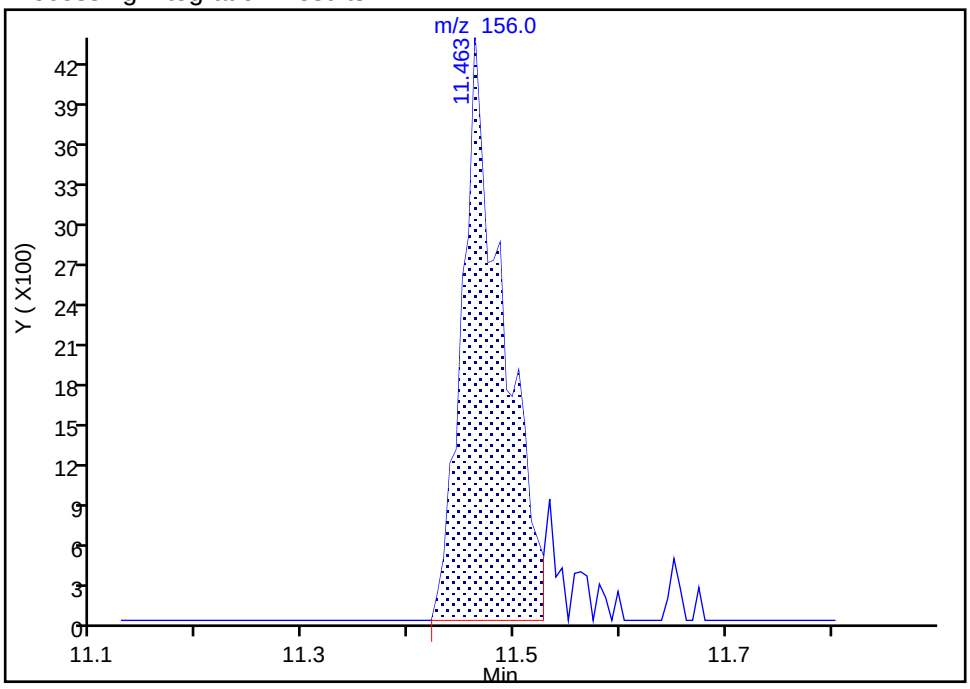
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

94 Bromobenzene, CAS: 108-86-1

Signal: 1

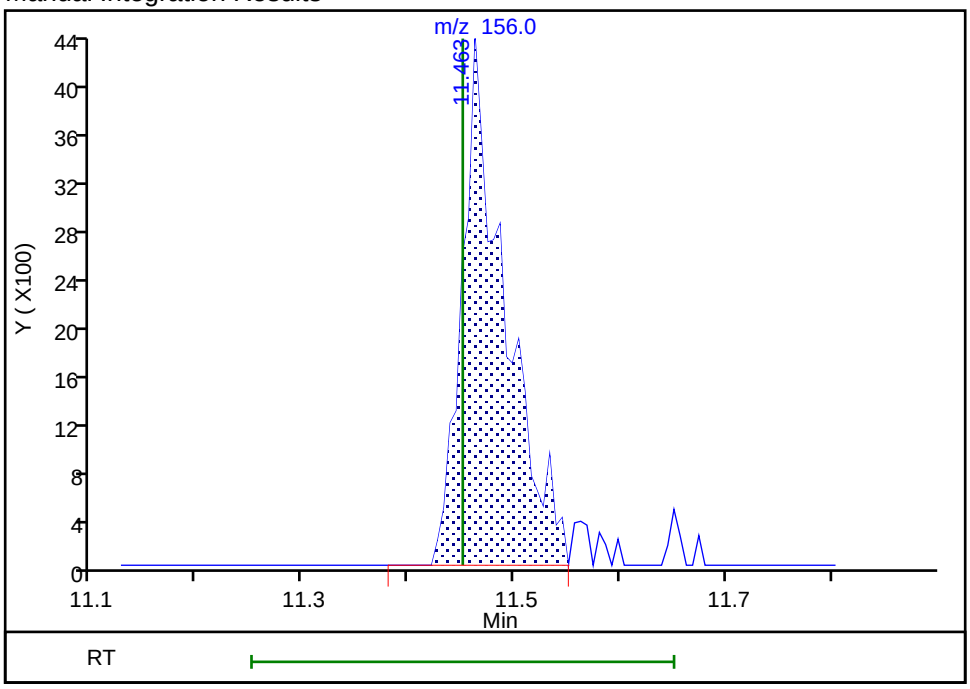
Processing Integration Results

RT: 11.46
Area: 11691
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 11.46
Area: 12263
Amount: 3.987776
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:30:36
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

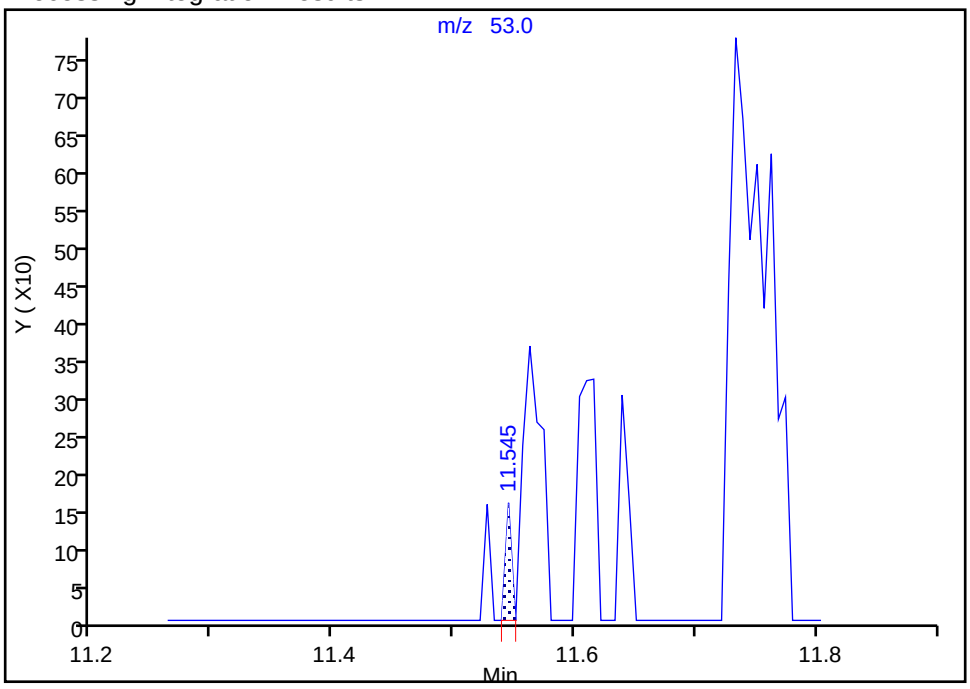
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

Signal: 1

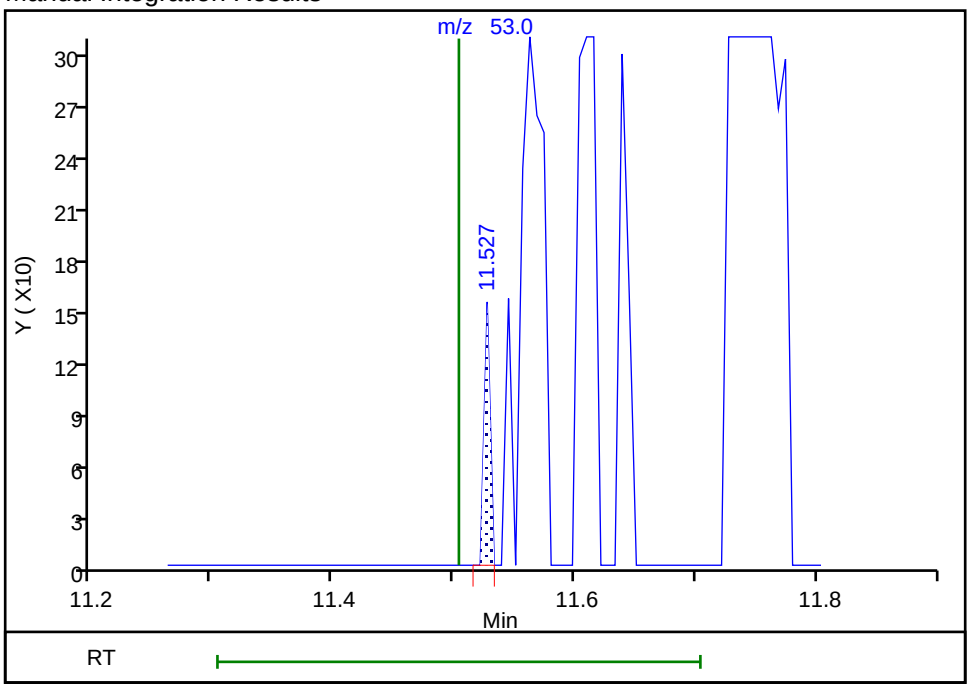
Processing Integration Results

RT: 11.54
Area: 55
Amount: 0.187790
Amount Units: ng



Manual Integration Results

RT: 11.53
Area: 54
Amount: 5.540476
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 10:13:47
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

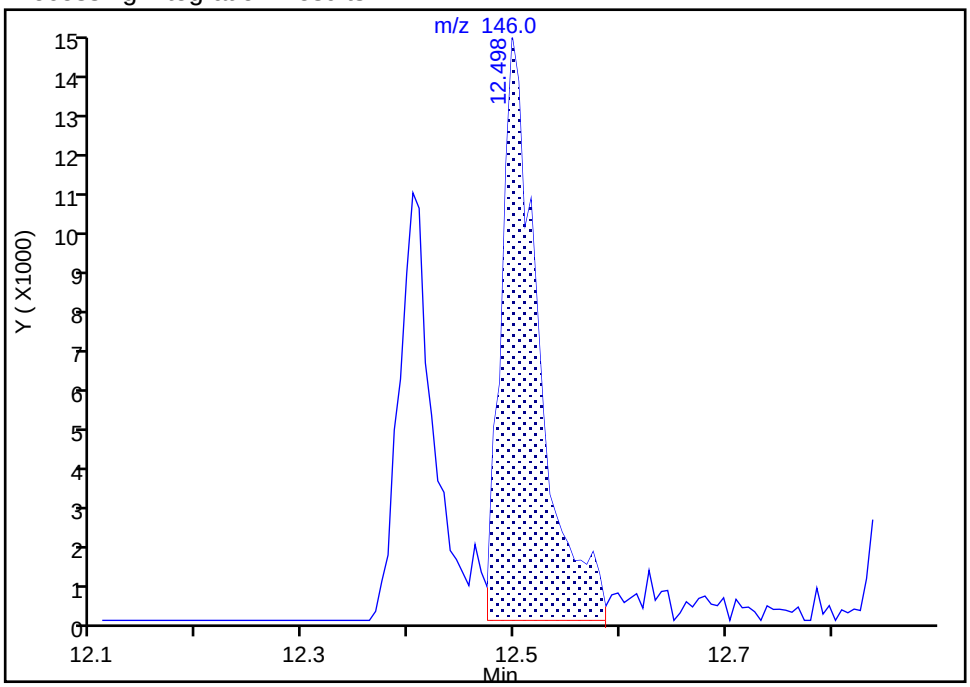
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

105 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 1

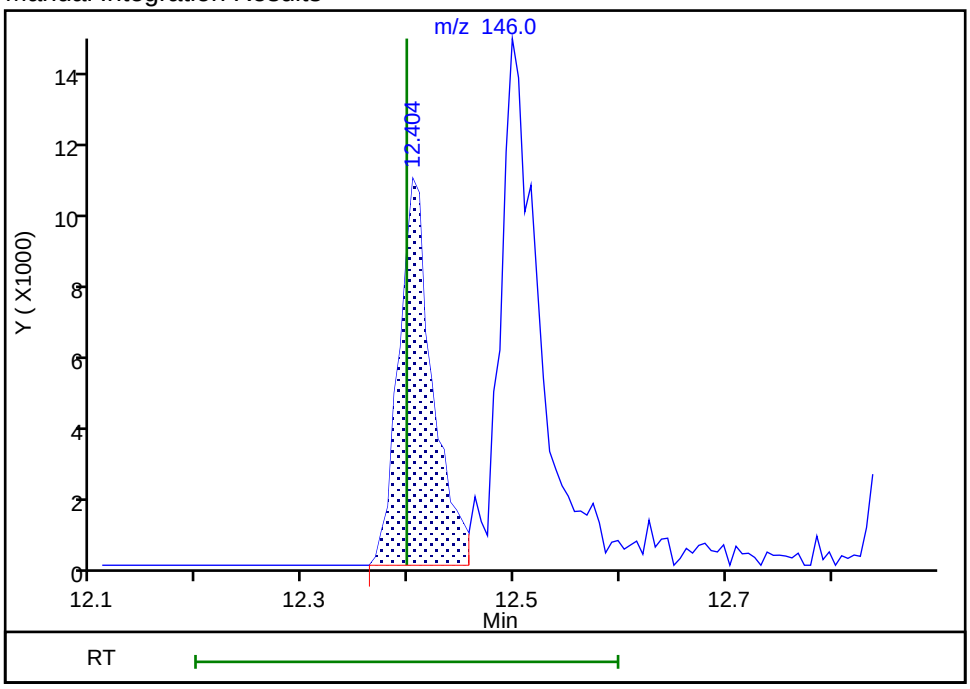
Processing Integration Results

RT: 12.50
Area: 35238
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 12.40
Area: 23153
Amount: 3.862125
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:31:01
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

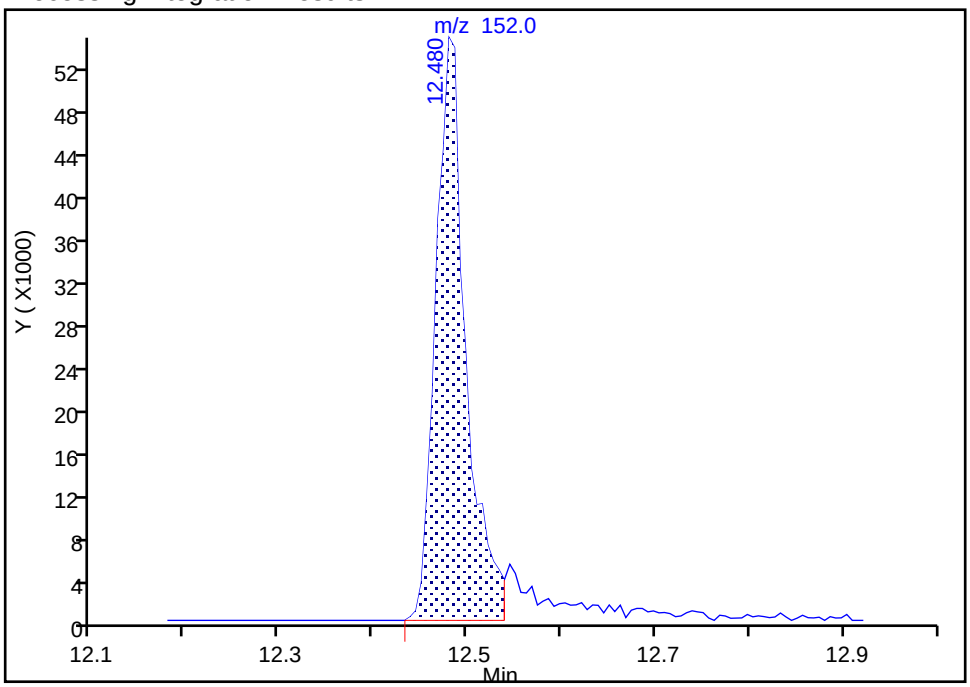
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

* 4 1,4-Dichlorobenzene-d4, CAS: 3855-82-1

Signal: 1

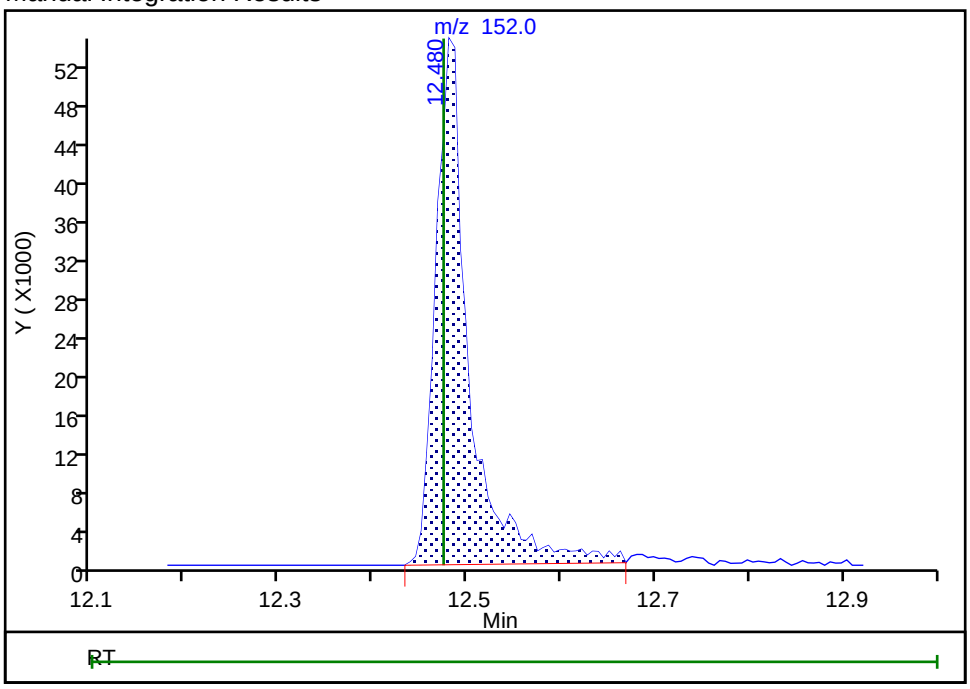
Processing Integration Results

RT: 12.48
Area: 120376
Amount: 50.000000
Amount Units: ng



Manual Integration Results

RT: 12.48
Area: 132807
Amount: 50.000000
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:26:52
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

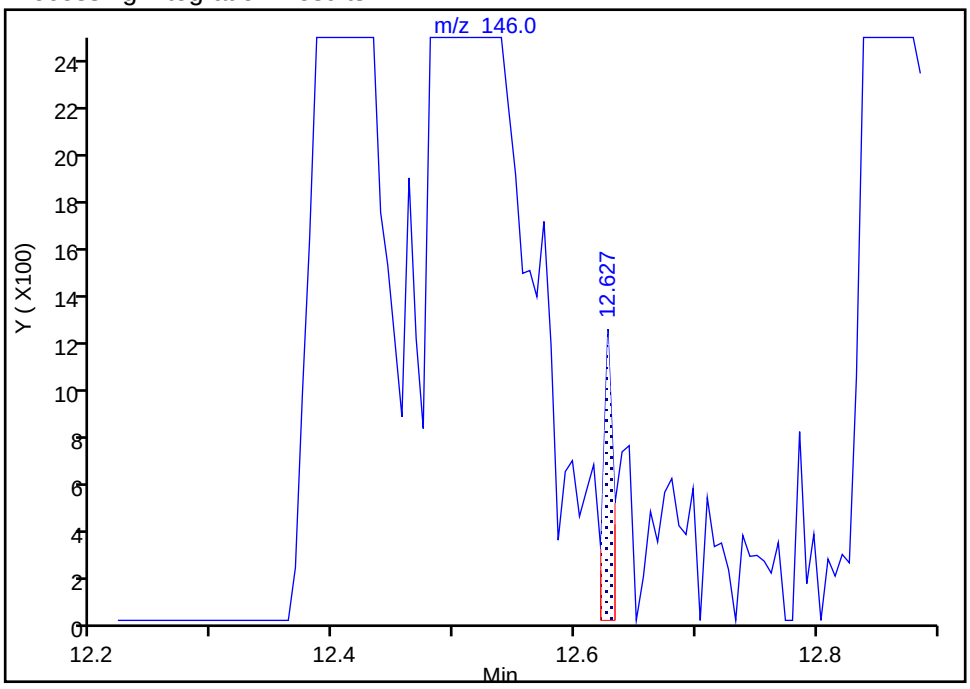
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

107 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 1

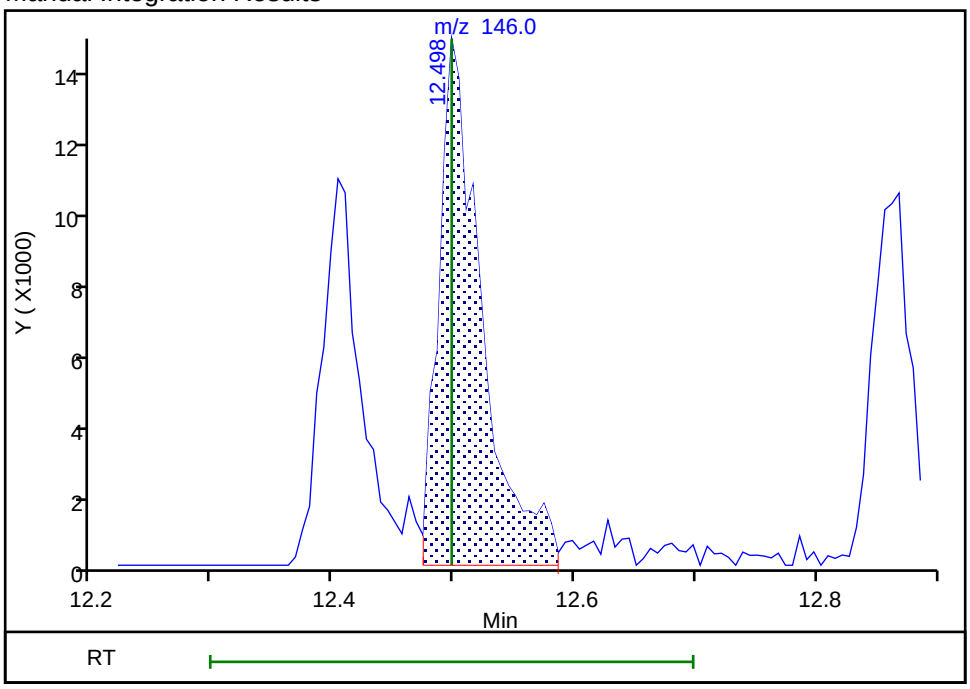
Processing Integration Results

RT: 12.63
Area: 712
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 12.50
Area: 35238
Amount: 5.544560
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:31:09
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

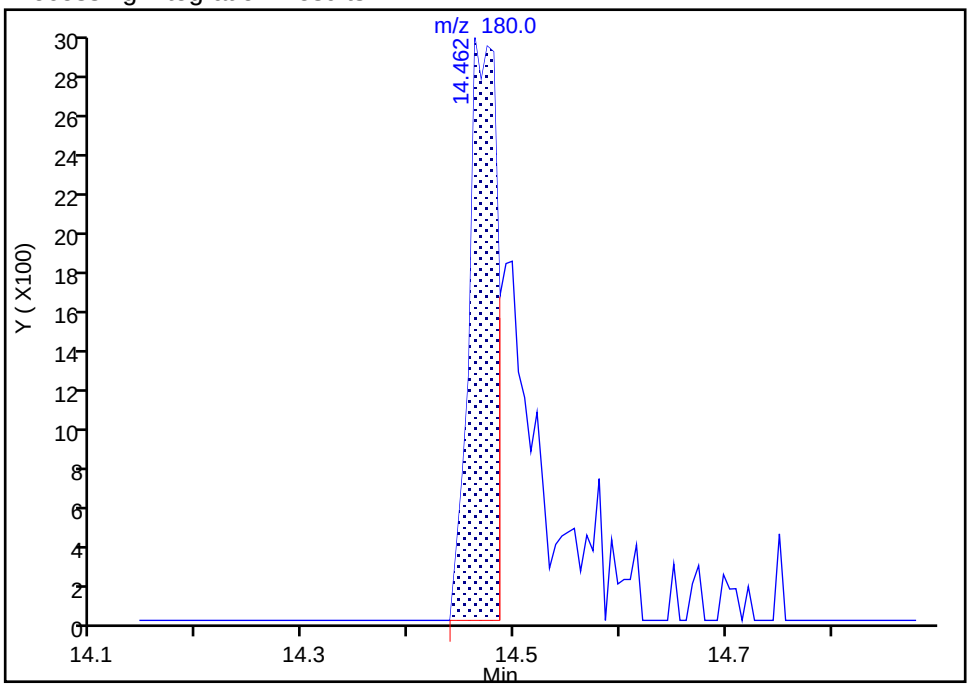
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d
Injection Date: 05-Mar-2020 07:55:30 Instrument ID: CHHP10
Lims ID: IC 1
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

114 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 1

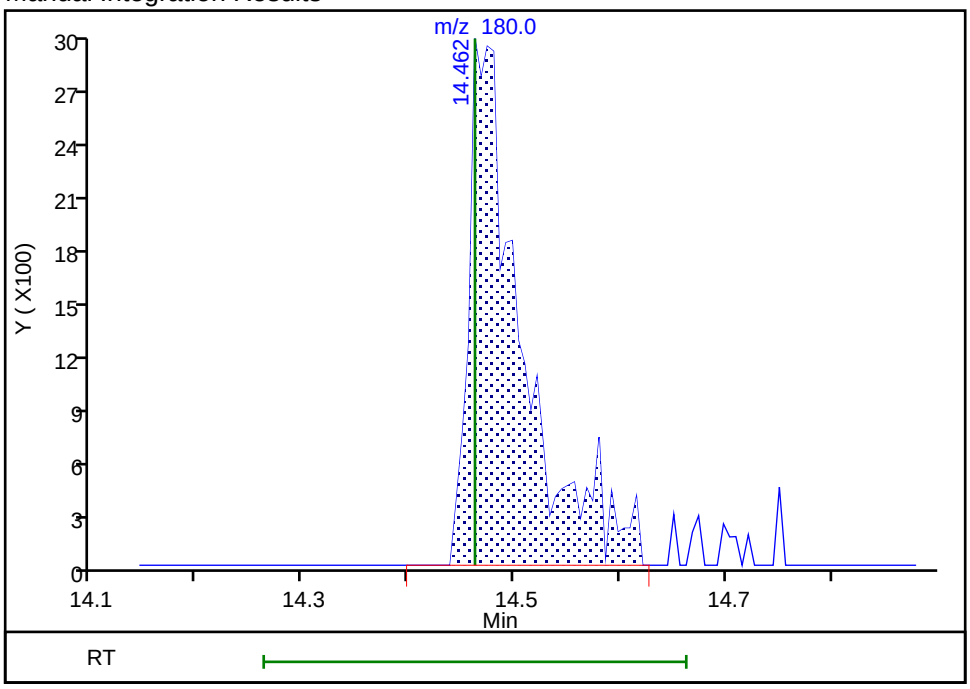
Processing Integration Results

RT: 14.46
Area: 5500
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 14.46
Area: 10384
Amount: 4.011882
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:31:20
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

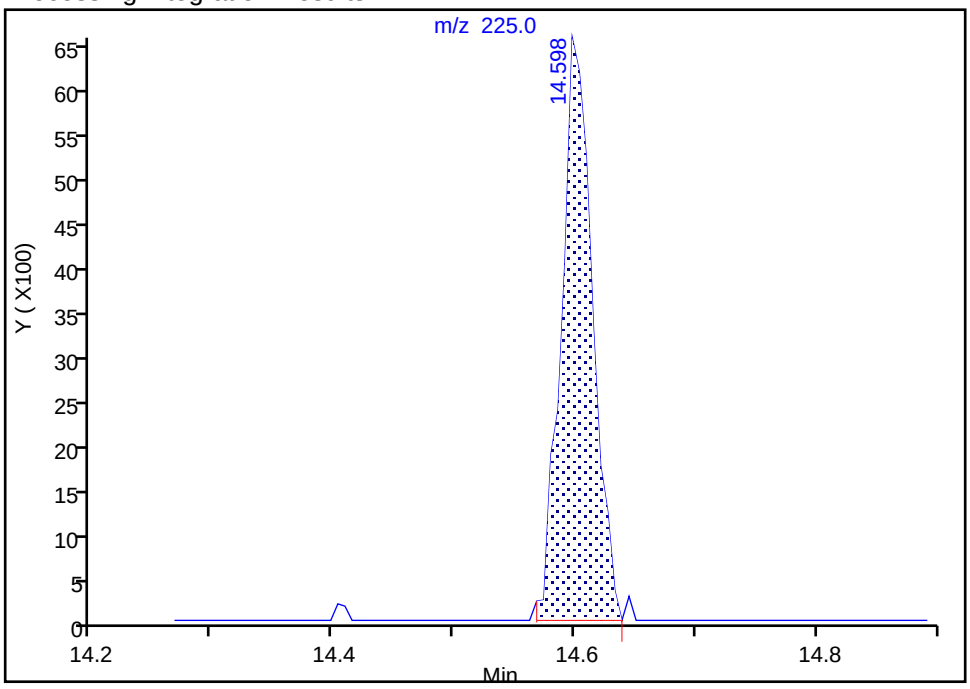
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d				
Injection Date:	05-Mar-2020 07:55:30	Instrument ID:	CHHP10		
Lims ID:	IC 1				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

115 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

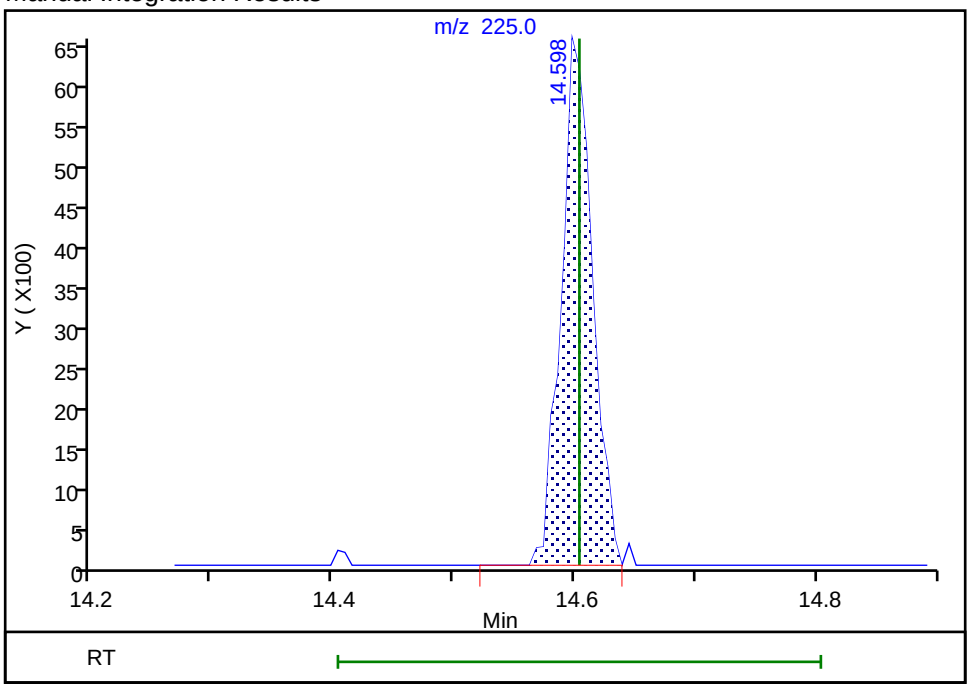
Processing Integration Results

RT: 14.60
Area: 11813
Amount: 4.413868
Amount Units: ng



Manual Integration Results

RT: 14.60
Area: 11814
Amount: 3.060025
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 11:08:09

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

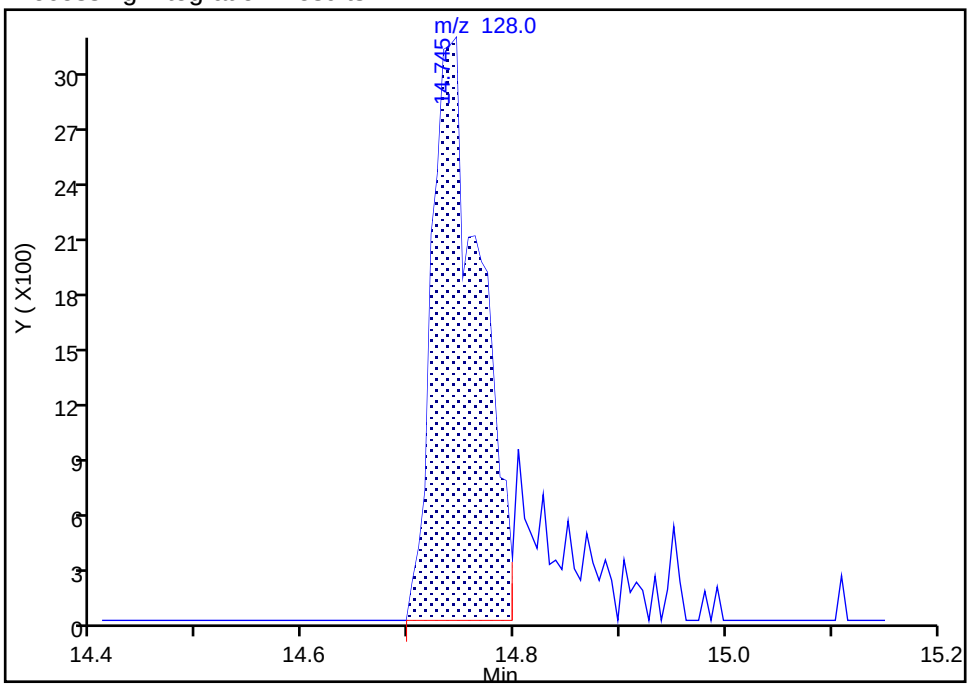
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d				
Injection Date:	05-Mar-2020 07:55:30	Instrument ID:	CHHP10		
Lims ID:	IC 1				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

116 Naphthalene, CAS: 91-20-3

Signal: 1

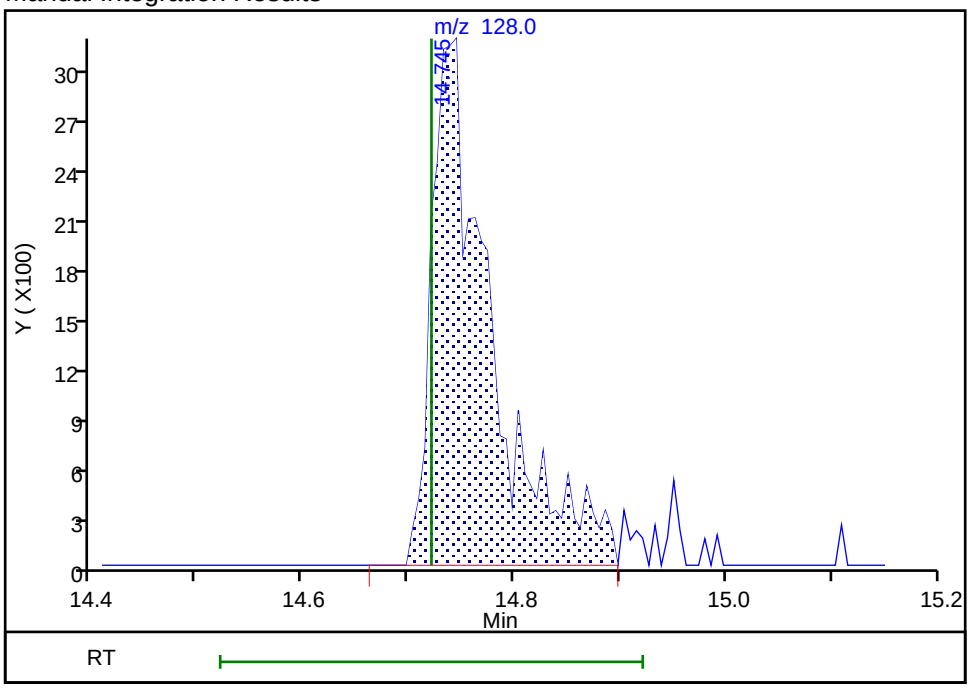
Processing Integration Results

RT: 14.74
Area: 9908
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 14.74
Area: 12198
Amount: 3.545524
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:31:24

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

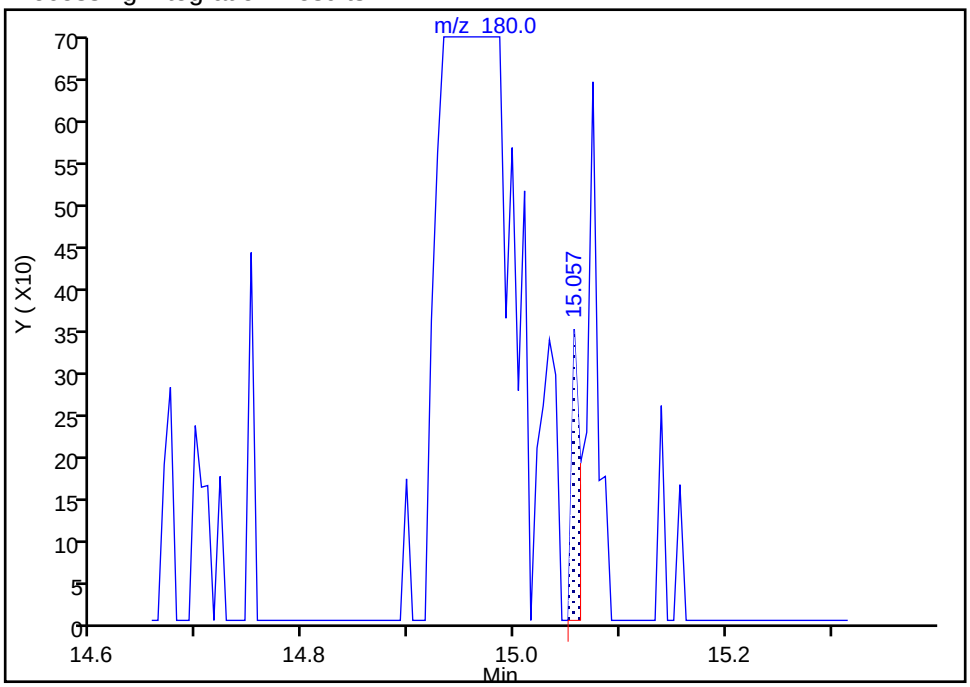
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030502.d				
Injection Date:	05-Mar-2020 07:55:30	Instrument ID:	CHHP10		
Lims ID:	IC 1				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

117 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 1

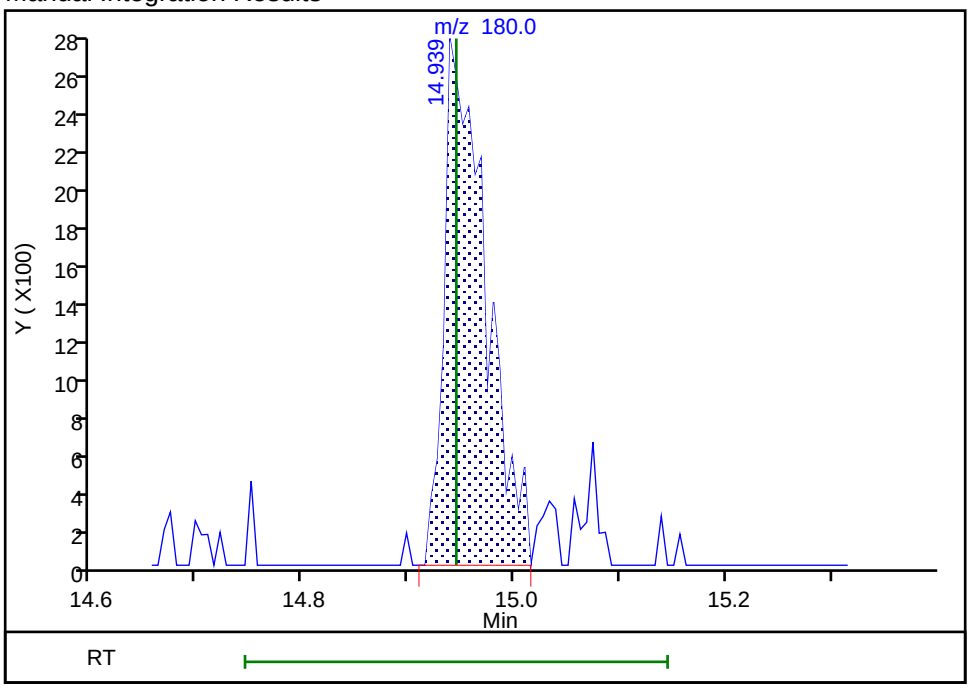
Processing Integration Results

RT: 15.06
Area: 190
Amount: 5.000000
Amount Units: ng



Manual Integration Results

RT: 14.94
Area: 7533
Amount: 3.974006
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:31:28

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Lims ID: IC 5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 05-Mar-2020 08:22:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031047-003
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub20

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 05-Mar-2020 14:08:29 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0339

First Level Reviewer: journetp Date: 05-Mar-2020 08:59:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.987	3.993	-0.006	0	58262	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.010	7.004	0.006	98	345395	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	87	69568	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	95	114861	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.275	0.006	80	55586	25.0	24.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.645	6.651	-0.006	0	61490	25.0	23.9	
$ 7 Toluene-d8 (Surr)	98	8.669	8.675	-0.006	93	251140	25.0	27.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.321	11.322	-0.001	86	82254	25.0	26.1	
10 Dichlorodifluoromethane	85	1.504	1.516	-0.012	99	55515	25.0	25.1	
11 Chloromethane	50	1.699	1.716	-0.017	94	42316	25.0	28.1	
13 Butadiene	39	1.799	1.799	0.000	96	54630	25.0	26.4	
12 Vinyl chloride	62	1.816	1.822	-0.006	96	64798	25.0	27.1	
14 Bromomethane	94	2.075	2.075	0.000	92	69287	25.0	25.9	
15 Chloroethane	64	2.181	2.175	0.006	97	50023	25.0	25.4	
17 Dichlorofluoromethane	67	2.446	2.457	-0.011	95	142211	25.0	23.8	
16 Trichlorofluoromethane	101	2.457	2.457	0.000	70	170371	25.0	24.7	
18 Ethyl ether	59	2.804	2.804	0.000	85	24688	25.0	19.2	M
20 1,1-Dichloroethene	96	3.057	3.051	0.006	85	60067	25.0	27.3	M
21 1,1,2-Trichloro-1,2,2-trif	101	3.128	3.116	0.012	89	69061	25.0	25.9	M
22 Acetone	43	3.181	3.175	0.006	23	17683	50.0	44.8	M
23 Iodomethane	142	3.234	3.234	0.000	95	93733	25.0	25.6	
24 Carbon disulfide	76	3.316	3.322	-0.006	99	162180	25.0	25.6	
26 3-Chloro-1-propene	76	3.575	3.575	0.000	77	32412	25.0	23.2	
28 Methyl acetate	43	3.616	3.622	-0.006	19	22651	50.0	45.1	M
29 Methylene Chloride	84	3.787	3.798	-0.011	85	63521	25.0	25.7	M
32 2-Methyl-2-propanol	59	4.128	4.122	0.006	96	27648	250.0	279.3	M
31 Acrylonitrile	53	4.210	4.193	0.017	96	52606	250.0	203.7	M
30 trans-1,2-Dichloroethene	96	4.210	4.216	-0.006	97	68811	25.0	25.3	M
33 Methyl tert-butyl ether	73	4.245	4.257	-0.012	95	119943	25.0	22.6	M
34 Hexane	57	4.651	4.645	0.006	90	76285	25.0	24.9	
36 1,1-Dichloroethane	63	4.881	4.869	0.012	96	95482	25.0	23.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.639	5.634	0.005	80	17416	25.0	26.4	M
41 cis-1,2-Dichloroethene	96	5.639	5.651	-0.012	78	64979	25.0	24.2	
43 2-Butanone (MEK)	43	5.687	5.681	0.005	19	16247	50.0	42.9	M
46 Chlorobromomethane	128	5.939	5.945	-0.006	80	23300	25.0	23.5	
48 Tetrahydrofuran	42	5.975	5.975	0.000	71	8861	50.0	42.4	
49 Chloroform	83	6.086	6.092	-0.006	92	130970	25.0	24.3	M
50 1,1,1-Trichloroethane	97	6.239	6.239	0.000	97	120978	25.0	23.6	
52 Cyclohexane	56	6.304	6.304	0.000	83	93140	25.0	25.7	
53 Carbon tetrachloride	117	6.410	6.416	-0.006	97	123068	25.0	24.5	
54 1,1-Dichloropropene	75	6.439	6.434	0.005	95	97894	25.0	23.8	M
55 Benzene	78	6.657	6.651	0.006	98	231764	25.0	22.8	
51 Isobutyl alcohol	41	6.698	6.698	0.000	87	12570	625.0	483.5	M
56 1,2-Dichloroethane	62	6.739	6.734	0.005	98	65172	25.0	21.4	
59 n-Heptane	43	7.033	7.028	0.005	84	74403	25.0	25.0	
60 Trichloroethene	130	7.398	7.404	-0.006	97	72492	25.0	23.6	
63 Methylcyclohexane	83	7.628	7.628	0.000	82	142429	25.0	25.7	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	90	44969	25.0	22.7	
65 Dibromomethane	93	7.769	7.769	0.000	92	21014	25.0	20.1	
67 1,4-Dioxane	88	7.780	7.775	0.005	34	4011	500.0	366.0	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	77978	25.0	22.5	
71 cis-1,3-Dichloropropene	75	8.422	8.416	0.006	93	67248	25.0	20.9	
72 4-Methyl-2-pentanone (MIBK	43	8.586	8.575	0.011	92	31900	50.0	44.1	
73 Toluene	91	8.745	8.739	0.006	98	283794	25.0	25.2	
74 trans-1,3-Dichloropropene	75	9.010	9.004	0.006	91	44592	25.0	18.8	
75 Ethyl methacrylate	69	9.075	9.069	0.006	88	30831	25.0	19.3	
76 1,1,2-Trichloroethane	97	9.198	9.186	0.012	94	33375	25.0	23.6	
77 Tetrachloroethene	164	9.251	9.257	-0.006	97	66673	25.0	26.0	
78 1,3-Dichloropropane	76	9.351	9.351	0.000	90	55924	25.0	23.7	
79 2-Hexanone	43	9.439	9.428	0.011	32	19245	50.0	46.7	M
81 Chlorodibromomethane	129	9.563	9.563	0.000	87	43090	25.0	23.1	
82 Ethylene Dibromide	107	9.680	9.669	0.011	99	24796	25.0	21.3	
83 Chlorobenzene	112	10.163	10.163	0.000	95	175725	25.0	25.8	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.251	0.000	89	67135	25.0	26.3	
85 Ethylbenzene	106	10.263	10.263	0.000	99	99564	25.0	24.8	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	131994	25.0	26.1	
88 o-Xylene	106	10.774	10.774	0.000	97	125969	25.0	26.4	
89 Styrene	104	10.798	10.798	0.000	93	187661	25.0	25.2	
90 Bromoform	173	10.980	10.980	0.000	93	21377	25.0	20.1	
91 Isopropylbenzene	105	11.139	11.145	-0.006	95	379633	25.0	26.9	
94 Bromobenzene	156	11.457	11.451	0.006	92	61581	25.0	23.2	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	66	35199	25.0	23.5	M
96 trans-1,4-Dichloro-2-buten	53	11.551	11.504	0.047	59	5374	25.0	24.5	M
95 1,2,3-Trichloropropane	110	11.516	11.510	0.006	79	12489	25.0	23.8	
97 N-Propylbenzene	120	11.563	11.563	0.000	99	103285	25.0	28.4	
98 2-Chlorotoluene	126	11.645	11.639	0.006	95	76219	25.0	26.5	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	93	310591	25.0	26.9	
100 4-Chlorotoluene	126	11.774	11.769	0.005	99	69163	25.0	24.7	
101 tert-Butylbenzene	119	12.051	12.051	0.000	92	284843	25.0	28.2	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	98	300783	25.0	26.8	
104 sec-Butylbenzene	105	12.274	12.274	0.000	95	428504	25.0	28.7	
105 1,3-Dichlorobenzene	146	12.398	12.398	0.000	94	120168	25.0	23.2	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	361262	25.0	28.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	95	133473	25.0	24.3	
110 n-Butylbenzene	91	12.845	12.845	0.000	98	271786	25.0	25.4	
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	72	105744	25.0	23.0	
112 1,2-Dibromo-3-Chloropropan	157	13.657	13.645	0.012	79	3929	25.0	19.8	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	94	69617	25.0	31.1	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	96	84810	25.0	30.9	
116 Naphthalene	128	14.727	14.721	0.006	97	74410	25.0	25.0	
117 1,2,3-Trichlorobenzene	180	14.951	14.945	0.006	93	49539	25.0	30.2	
S 130 1,2-Dichloroethene, Total	96				0		50.0	49.5	
S 129 Xylenes, Total	106				0		50.0	52.5	
S 131 1,3-Dichloropropene, Total	1				0		50.0	39.7	
S 145 Total BTEX	1				0		125.0	125.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

voaWKetmix1st_00024	Amount Added:	1.00	Units: uL
VOA8260SURR_00104	Amount Added:	1.00	Units: uL
VOA8260INT_00104	Amount Added:	2.00	Units: uL
VOA8260VOAPRI_00394	Amount Added:	1.00	Units: uL

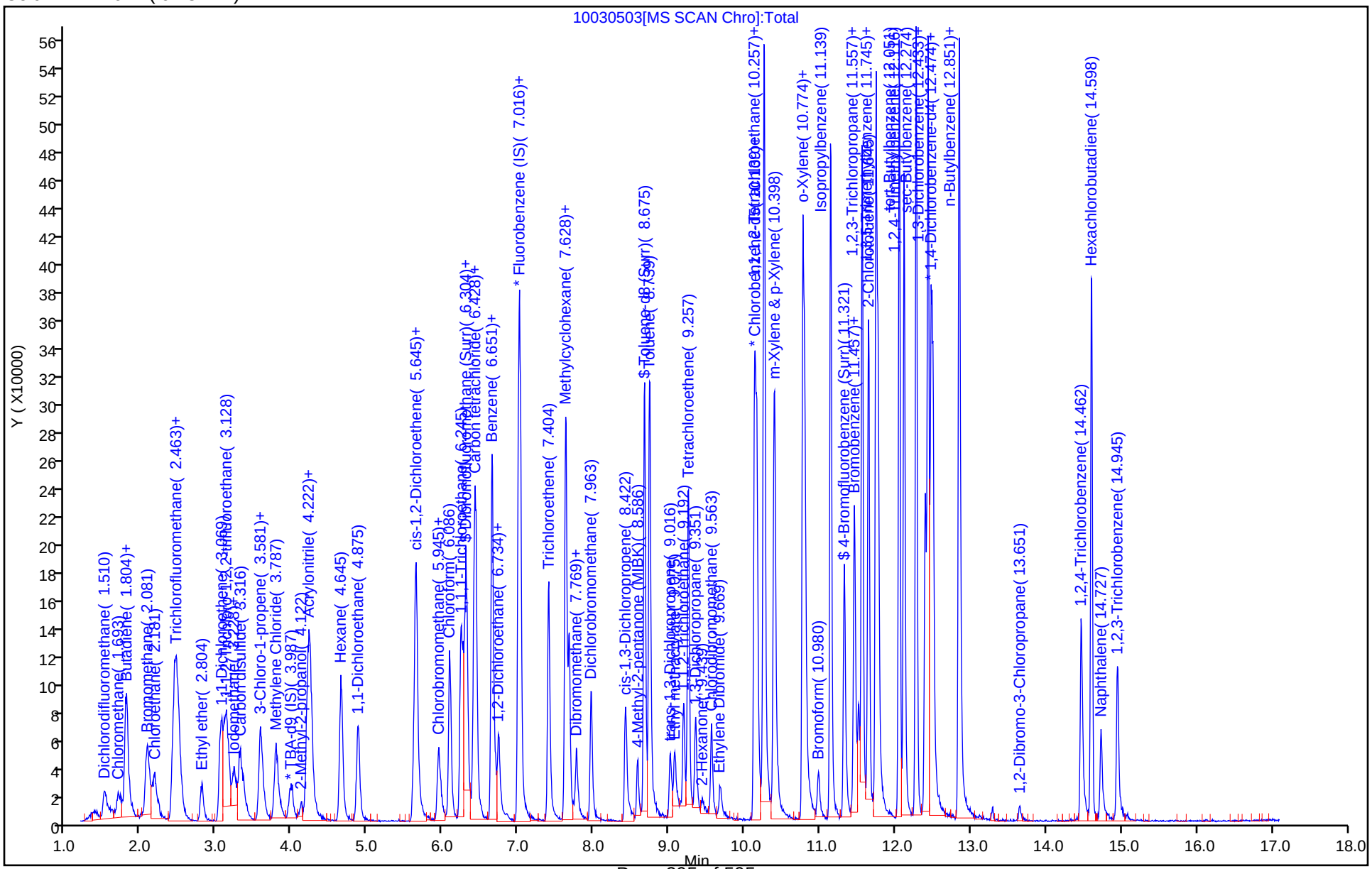
Report Date: 05-Mar-2020 14:08:31 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d

Injection Date:	05-Mar-2020 08:22:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	IC 5			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

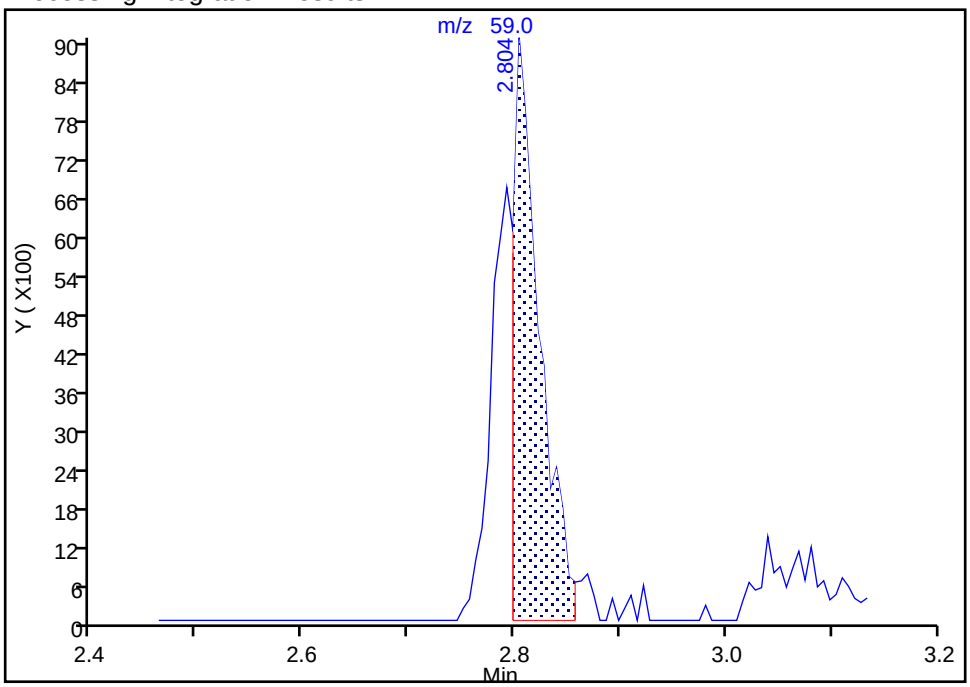
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

18 Ethyl ether, CAS: 60-29-7

Signal: 1

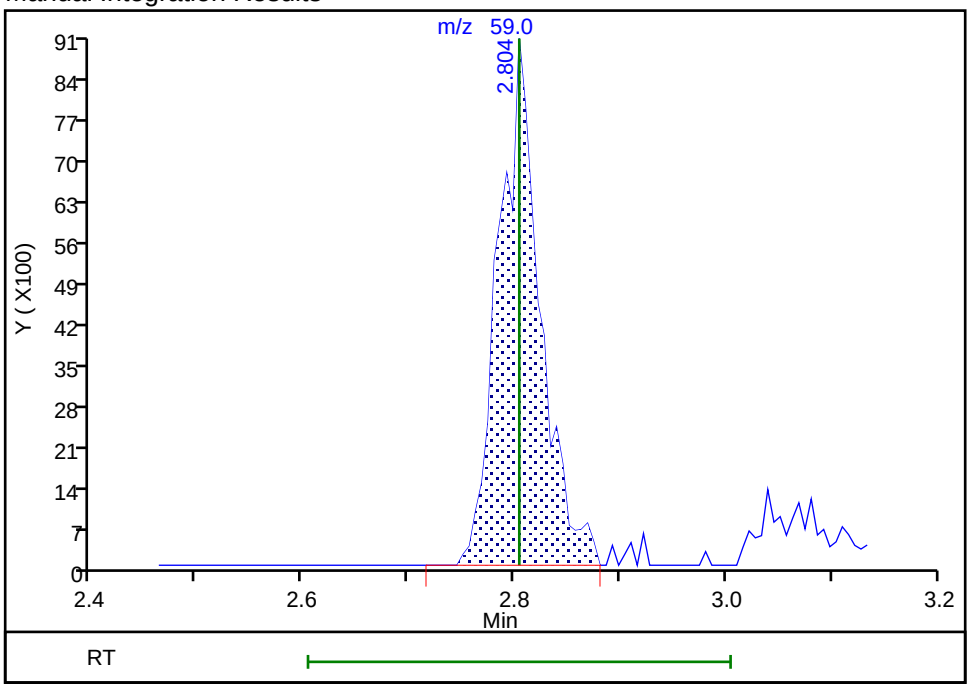
Processing Integration Results

RT: 2.80
Area: 15872
Amount: 15.247595
Amount Units: ng



Manual Integration Results

RT: 2.80
Area: 24688
Amount: 19.216894
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:52:51
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

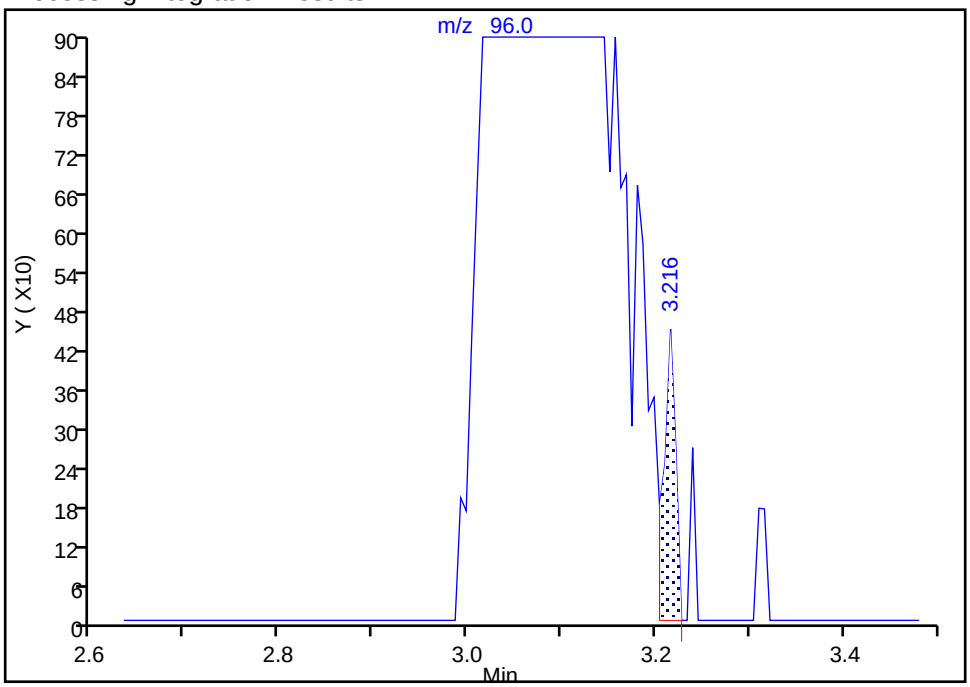
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

20 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

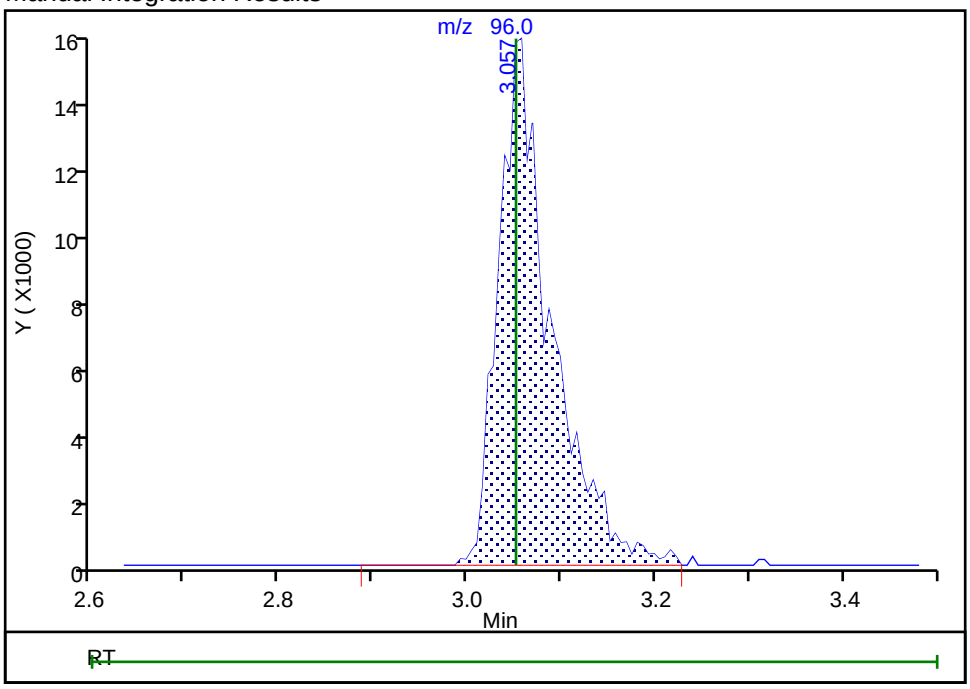
Processing Integration Results

RT: 3.22
Area: 396
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 3.06
Area: 60067
Amount: 27.263146
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:52:55
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

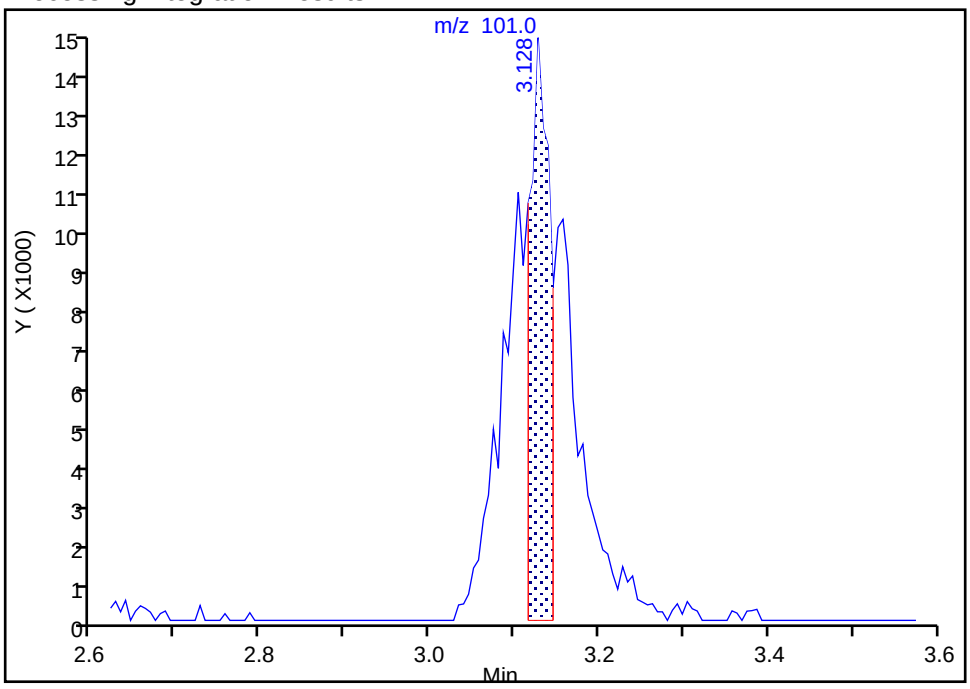
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

21 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

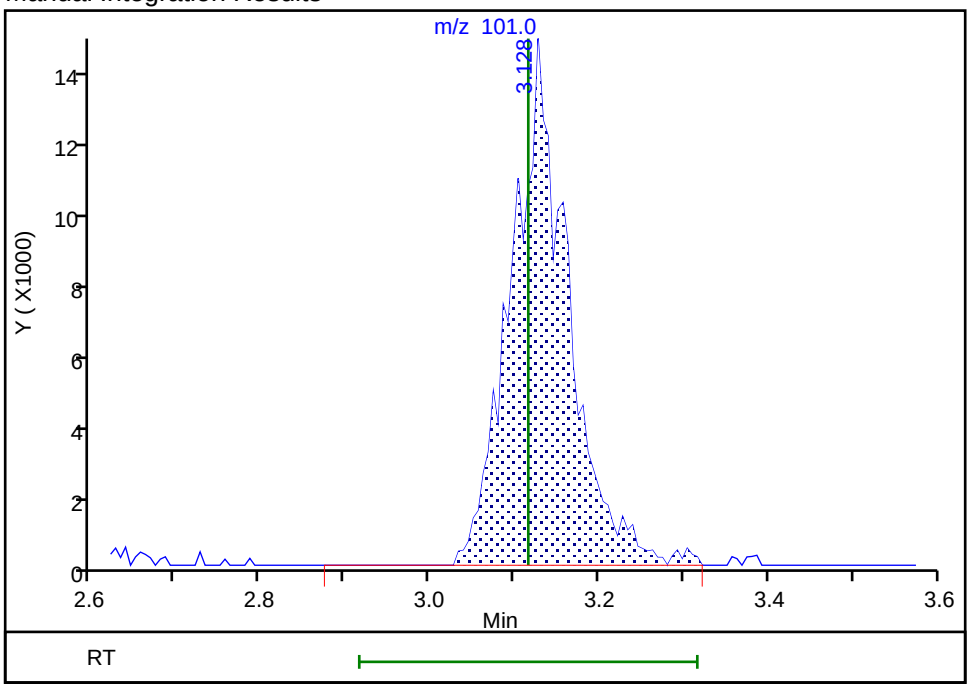
Processing Integration Results

RT: 3.13
Area: 24516
Amount: 12.866835
Amount Units: ng



Manual Integration Results

RT: 3.13
Area: 69061
Amount: 25.905126
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:52:58
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

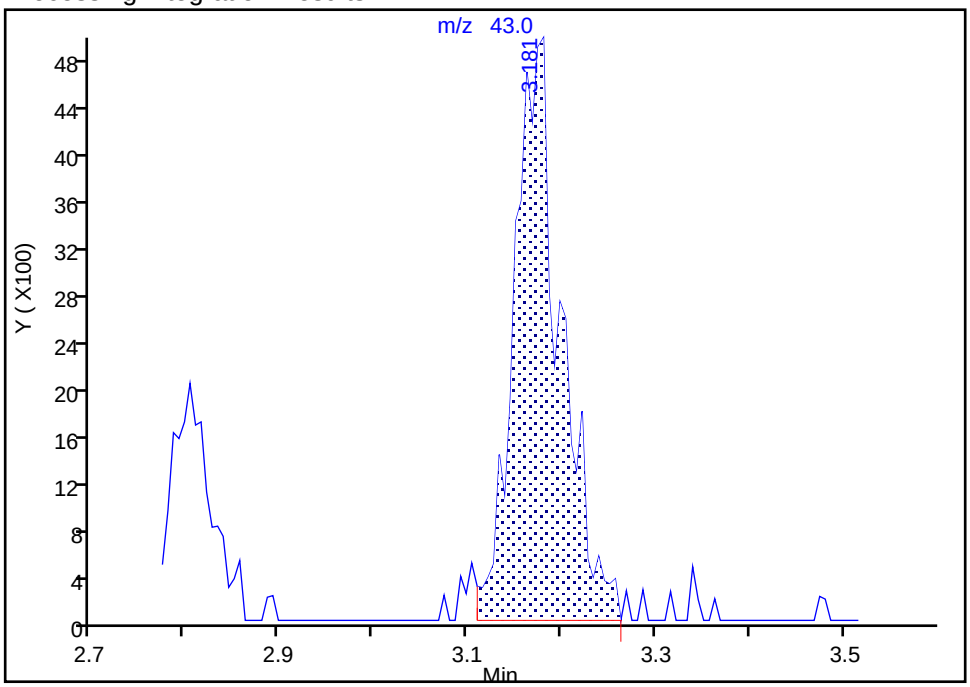
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

22 Acetone, CAS: 67-64-1

Signal: 1

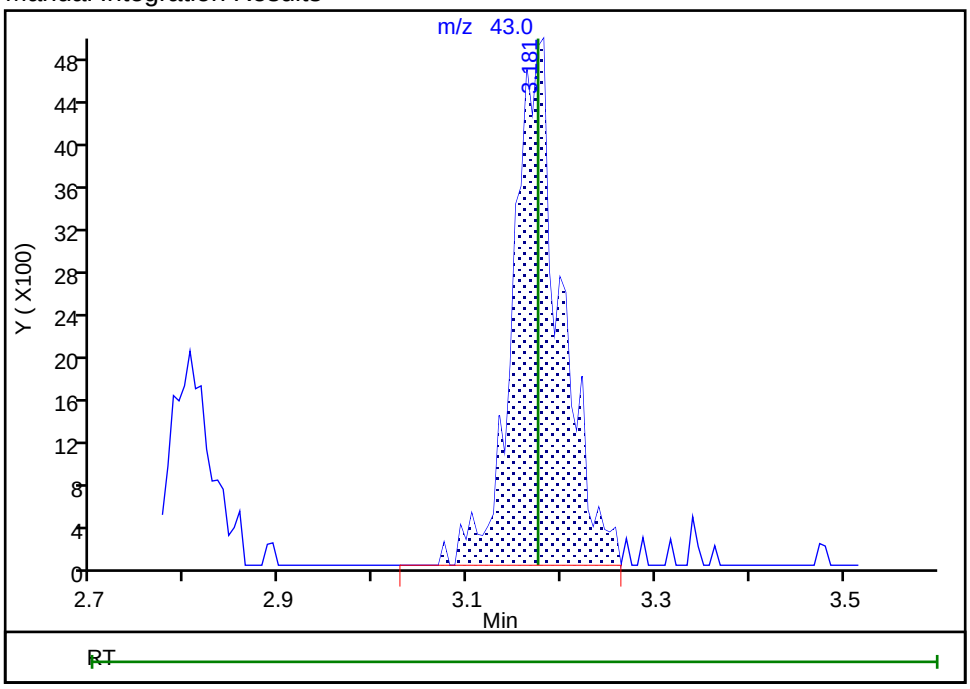
Processing Integration Results

RT: 3.18
Area: 17219
Amount: 41.057117
Amount Units: ng



Manual Integration Results

RT: 3.18
Area: 17683
Amount: 44.818511
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:53:03
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

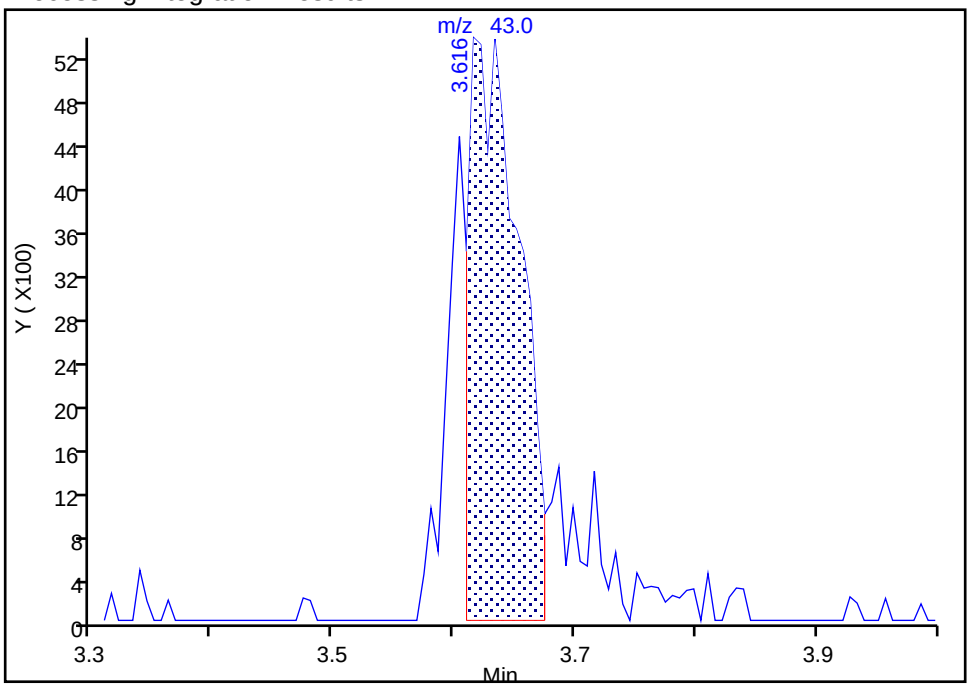
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

28 Methyl acetate, CAS: 79-20-9

Signal: 1

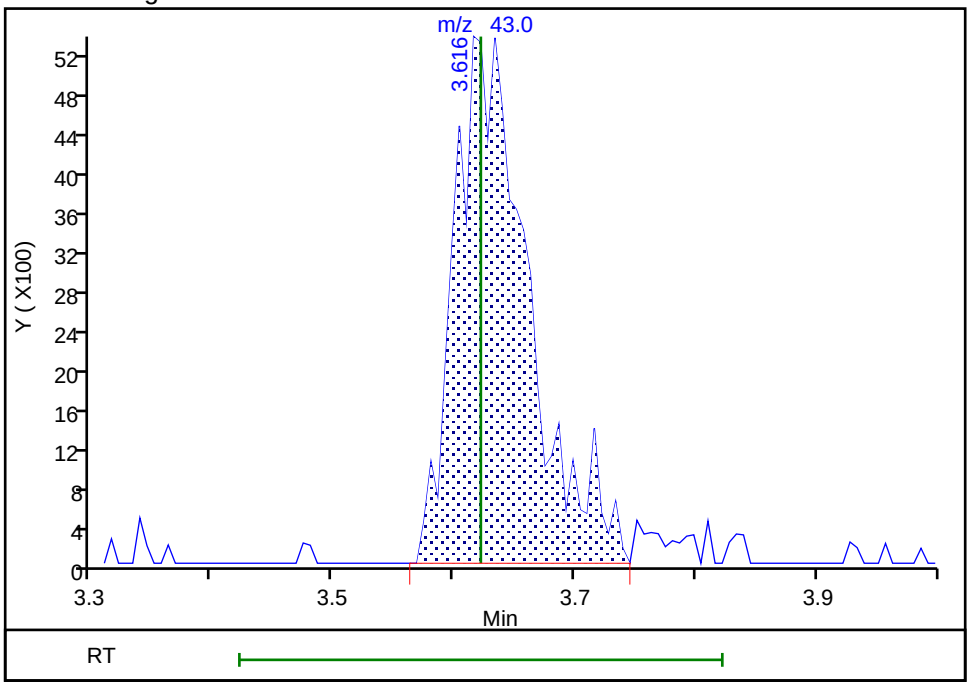
Processing Integration Results

RT: 3.62
Area: 15685
Amount: 36.478339
Amount Units: ng



Manual Integration Results

RT: 3.62
Area: 22651
Amount: 45.143607
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:53:12
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

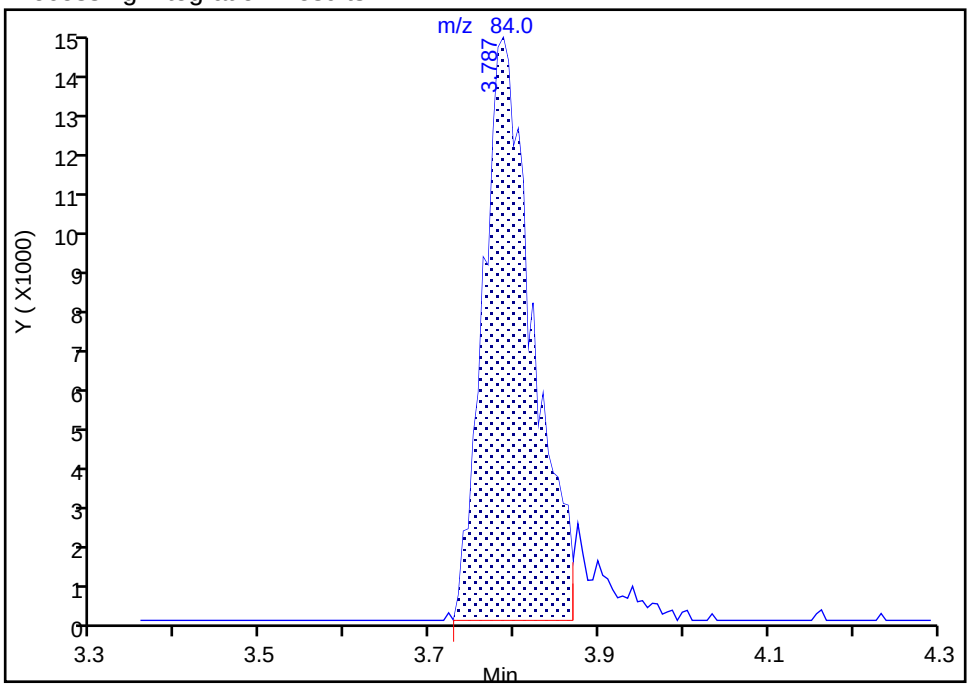
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

29 Methylene Chloride, CAS: 75-09-2

Signal: 1

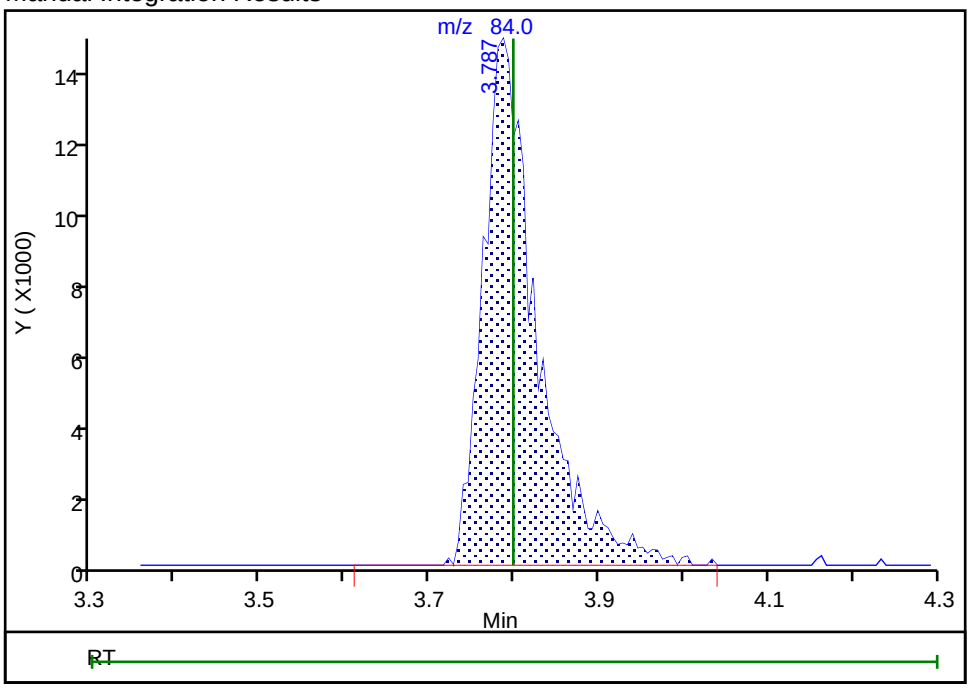
Processing Integration Results

RT: 3.79
Area: 57770
Amount: 25.000000
Amount Units: ng



Manual Integration Results

RT: 3.79
Area: 63521
Amount: 25.714909
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:53:18
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

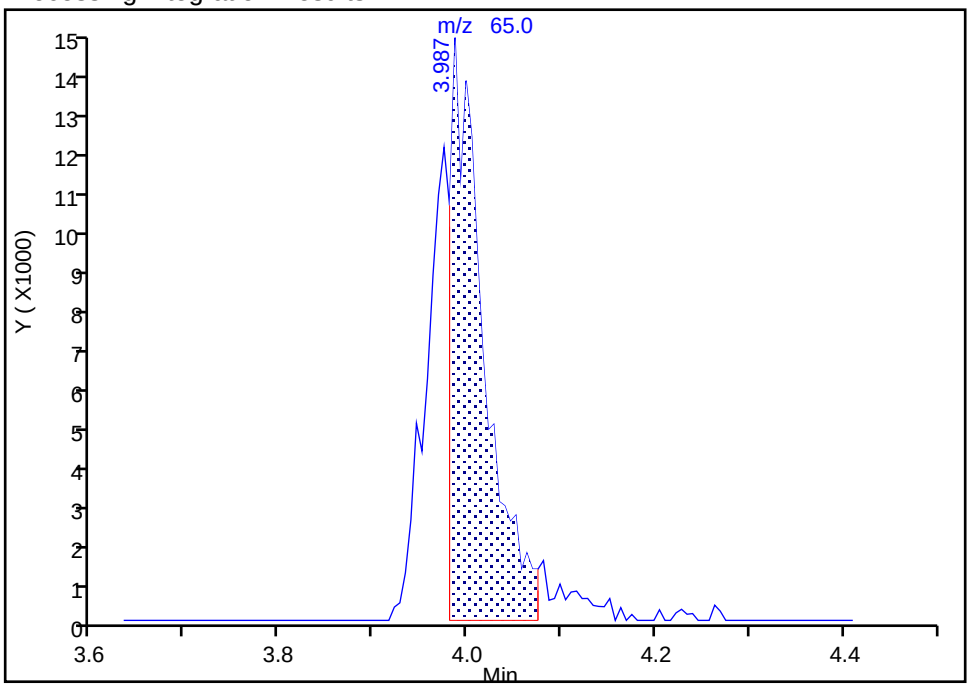
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

* 1 TBA-d9 (IS), CAS: 25725-11-5

Signal: 1

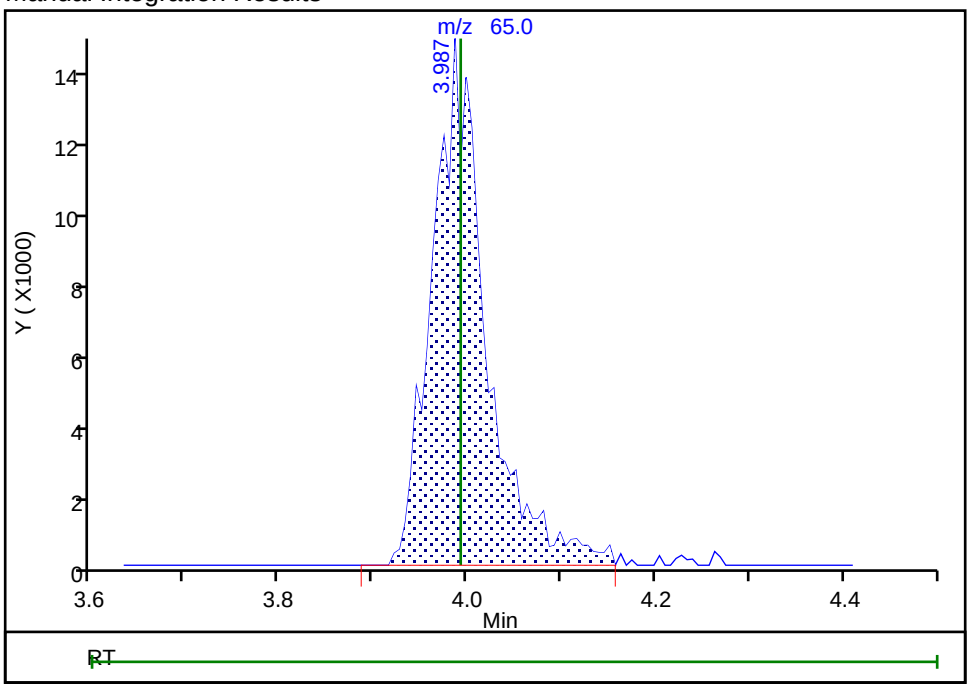
Processing Integration Results

RT: 3.99
Area: 37119
Amount: 1000.0000
Amount Units: ng



Manual Integration Results

RT: 3.99
Area: 58262
Amount: 1000.0000
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:52:40
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

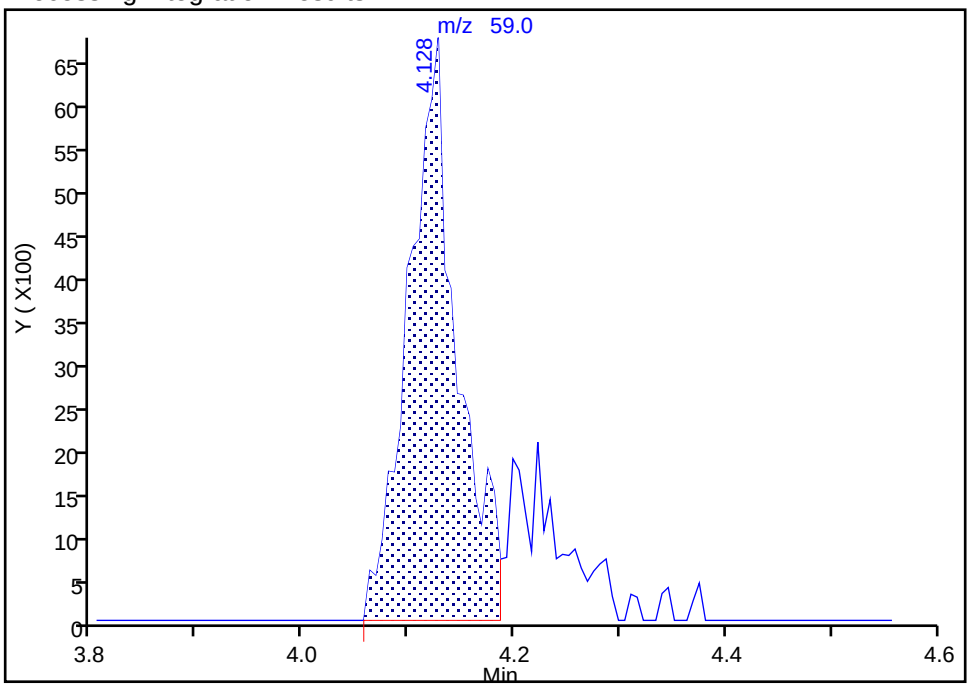
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

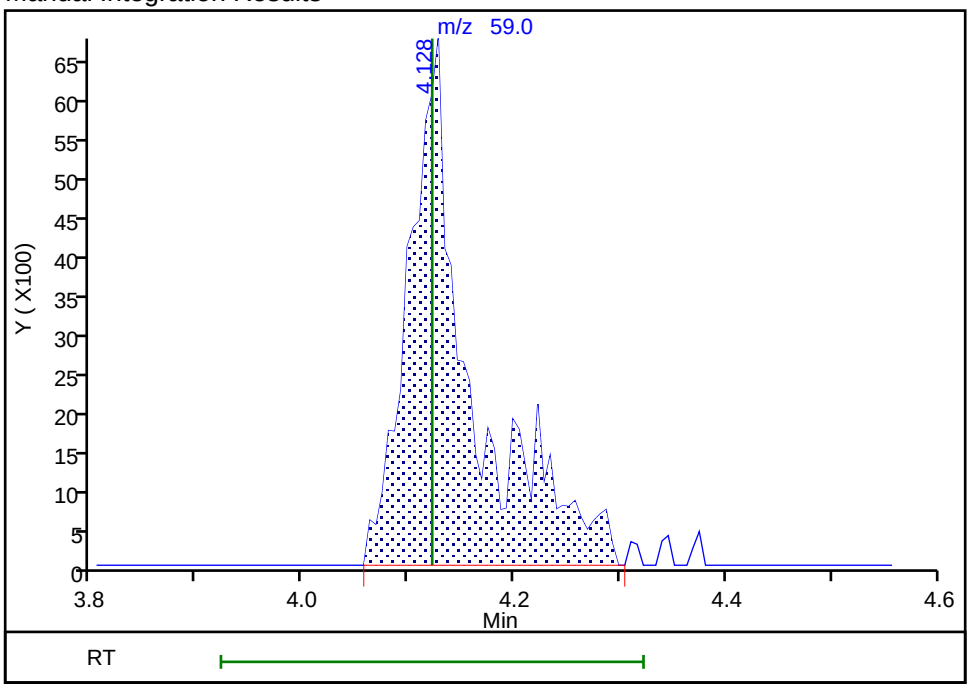
Processing Integration Results

RT: 4.13
Area: 21556
Amount: 244.2829
Amount Units: ng



Manual Integration Results

RT: 4.13
Area: 27648
Amount: 279.2909
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:53:23
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

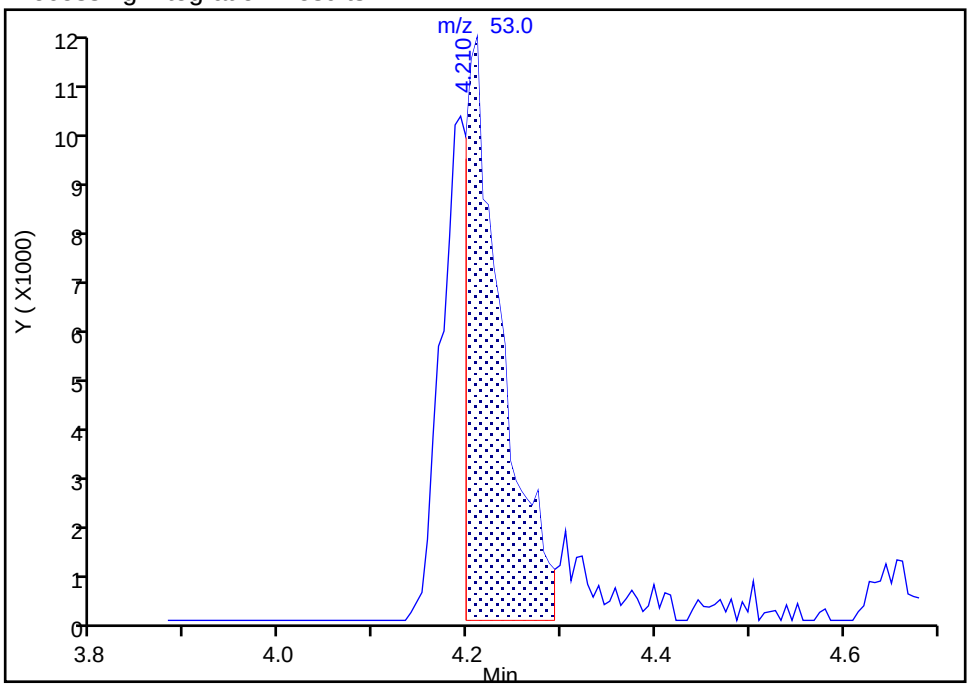
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

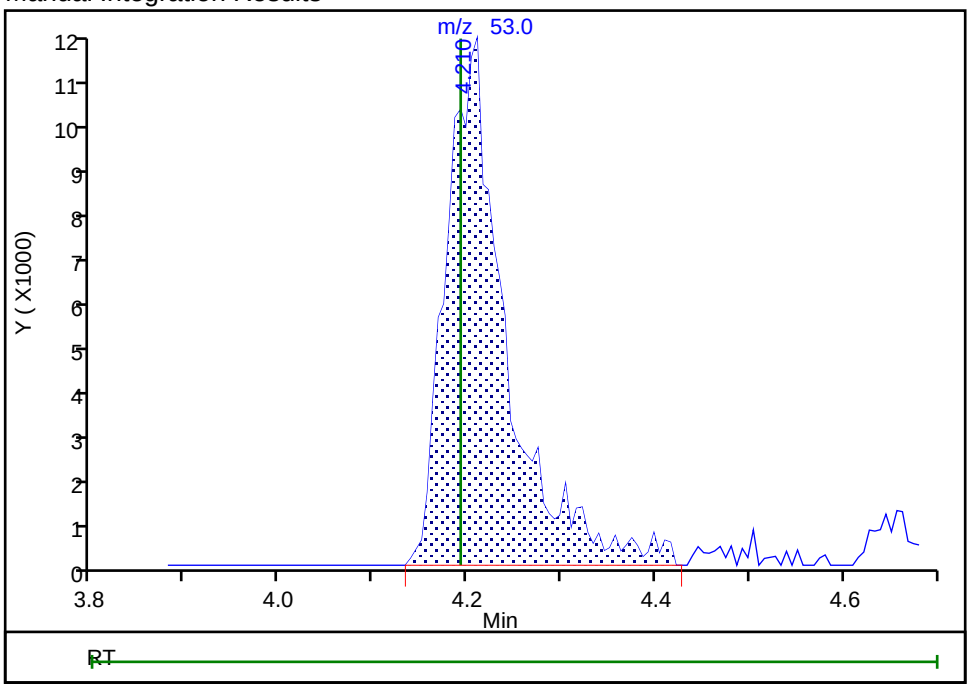
Processing Integration Results

RT: 4.21
Area: 31438
Amount: 173.0606
Amount Units: ng



Manual Integration Results

RT: 4.21
Area: 52606
Amount: 203.7215
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:53:27
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

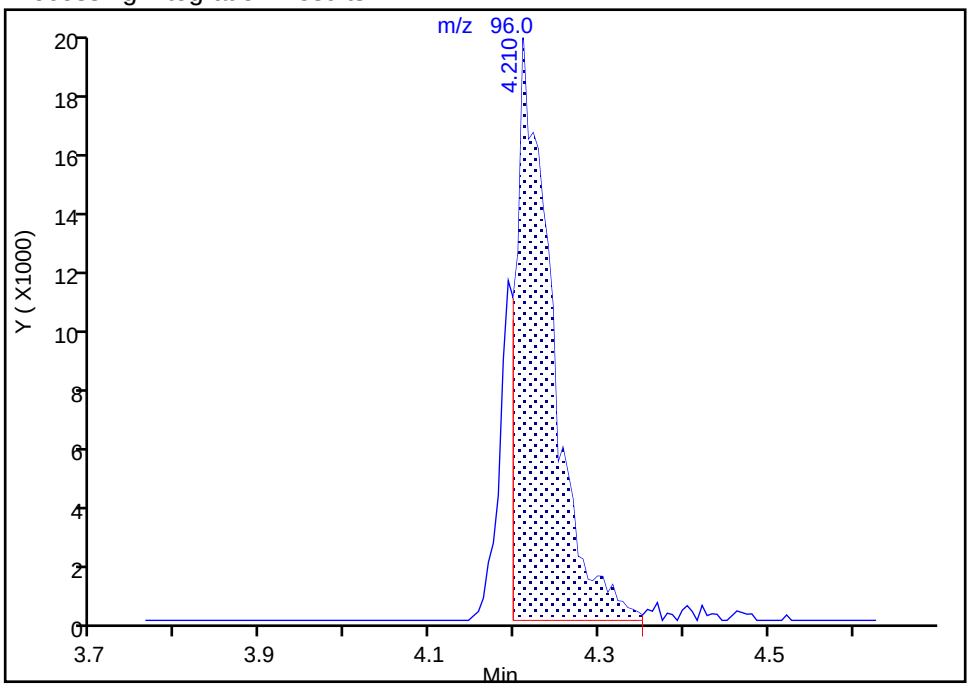
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

Signal: 1

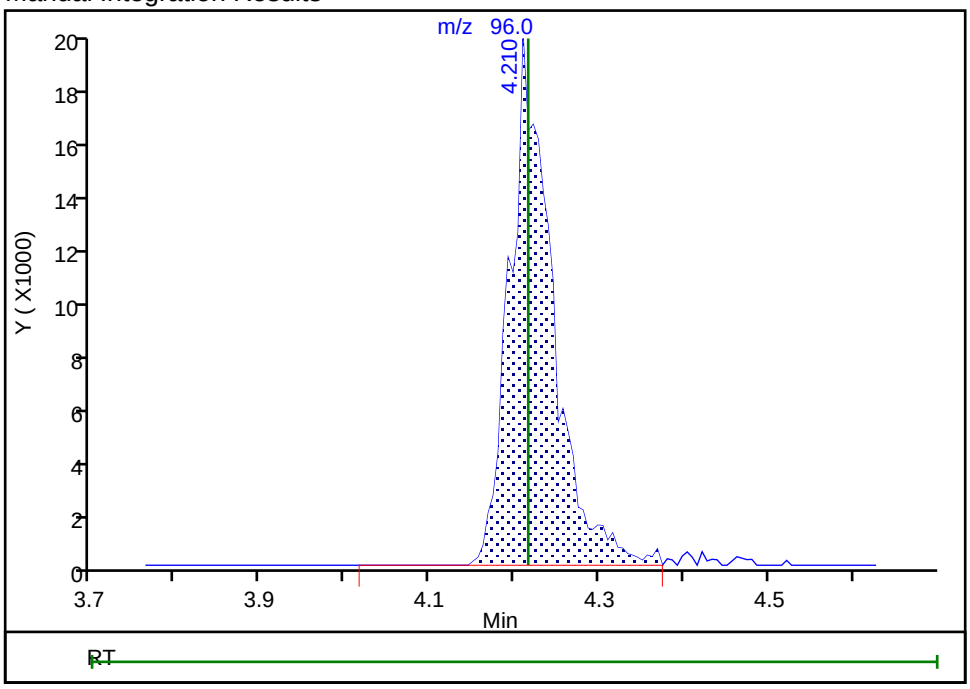
Processing Integration Results

RT: 4.21
Area: 57683
Amount: 21.812052
Amount Units: ng



Manual Integration Results

RT: 4.21
Area: 68811
Amount: 25.303117
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:53:31
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

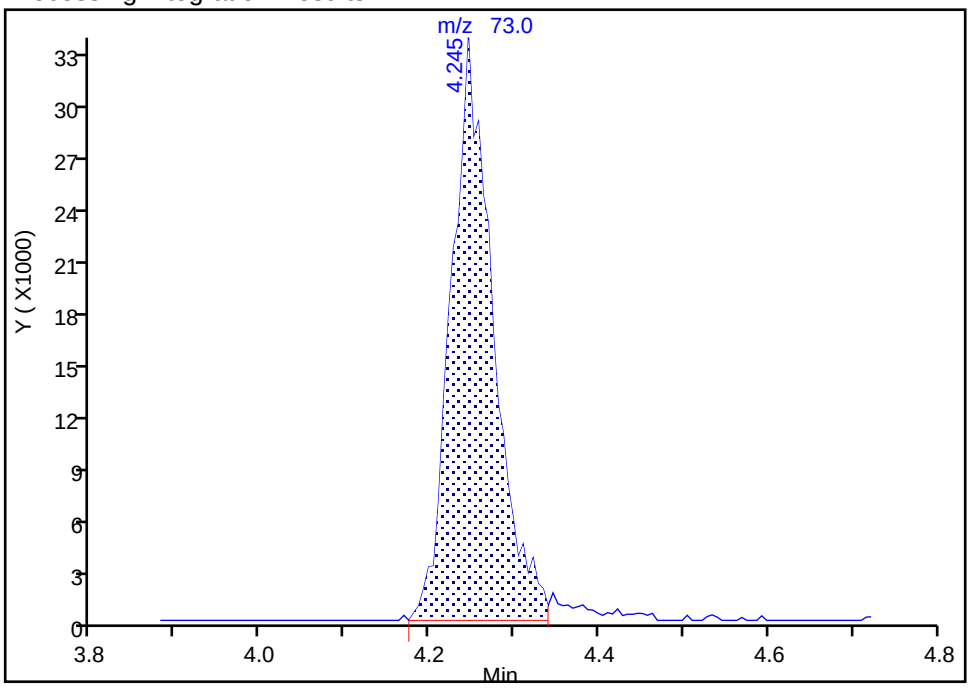
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

Signal: 1

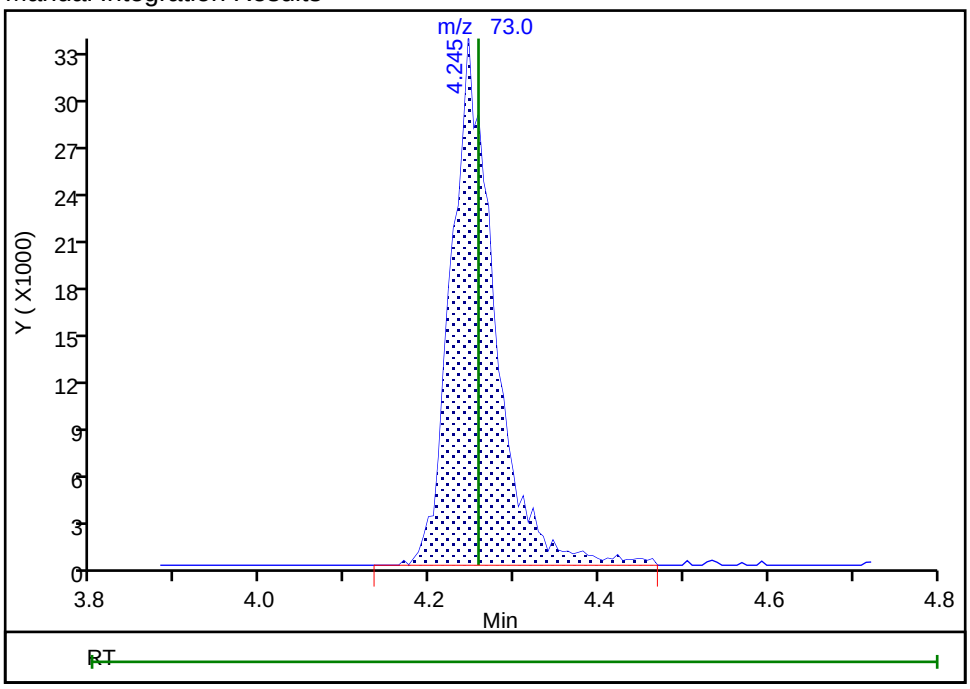
Processing Integration Results

RT: 4.25
Area: 115436
Amount: 23.923942
Amount Units: ng



Manual Integration Results

RT: 4.25
Area: 119943
Amount: 22.620263
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:53:35
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

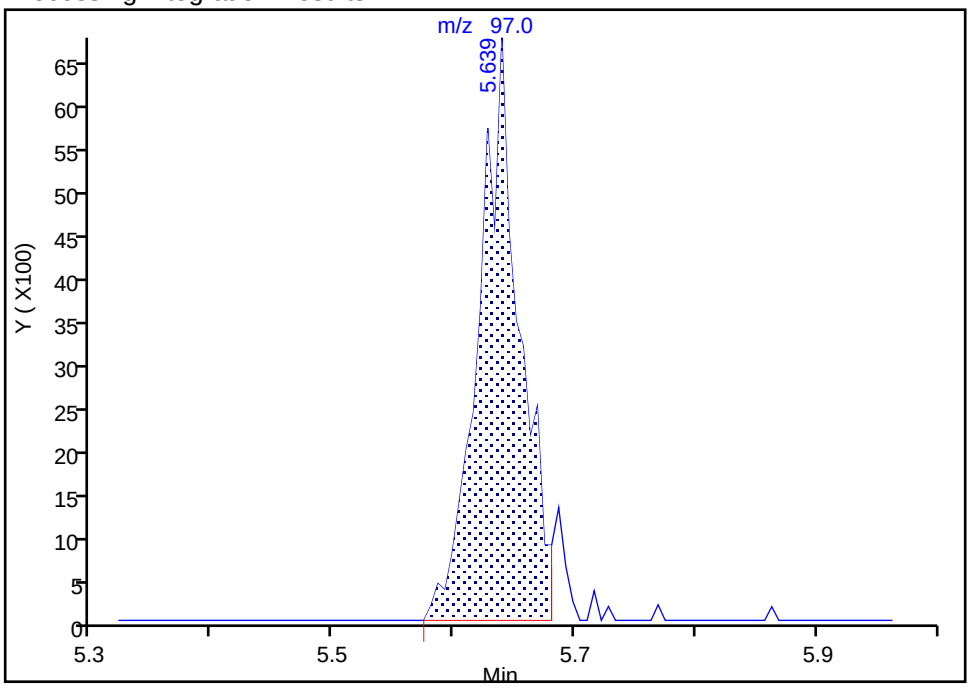
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d				
Injection Date:	05-Mar-2020 08:22:30	Instrument ID:	CHHP10		
Lims ID:	IC 5				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

42 2,2-Dichloropropane, CAS: 594-20-7

Signal: 2

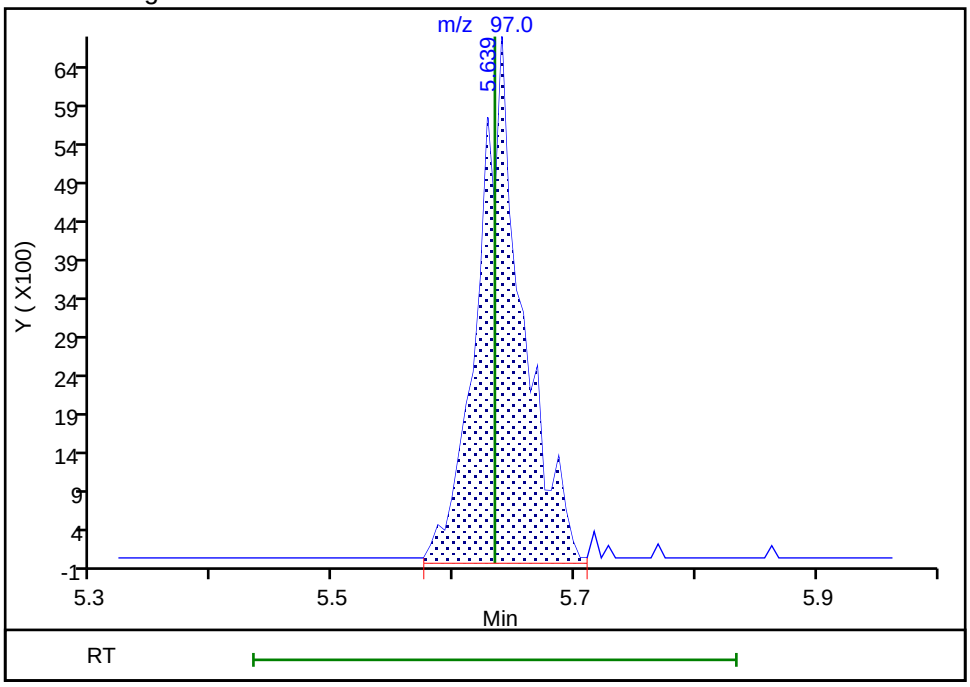
Processing Integration Results

RT: 5.64
Area: 16069
Amount: 26.492209
Amount Units: ng



Manual Integration Results

RT: 5.64
Area: 17416
Amount: 26.393831
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:53:54

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

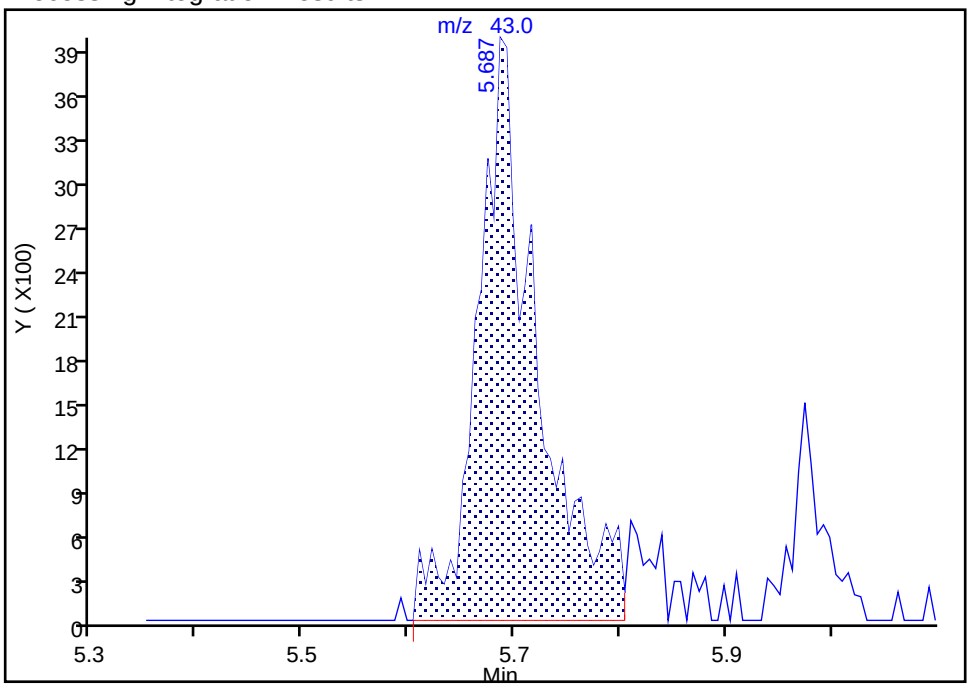
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

43 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

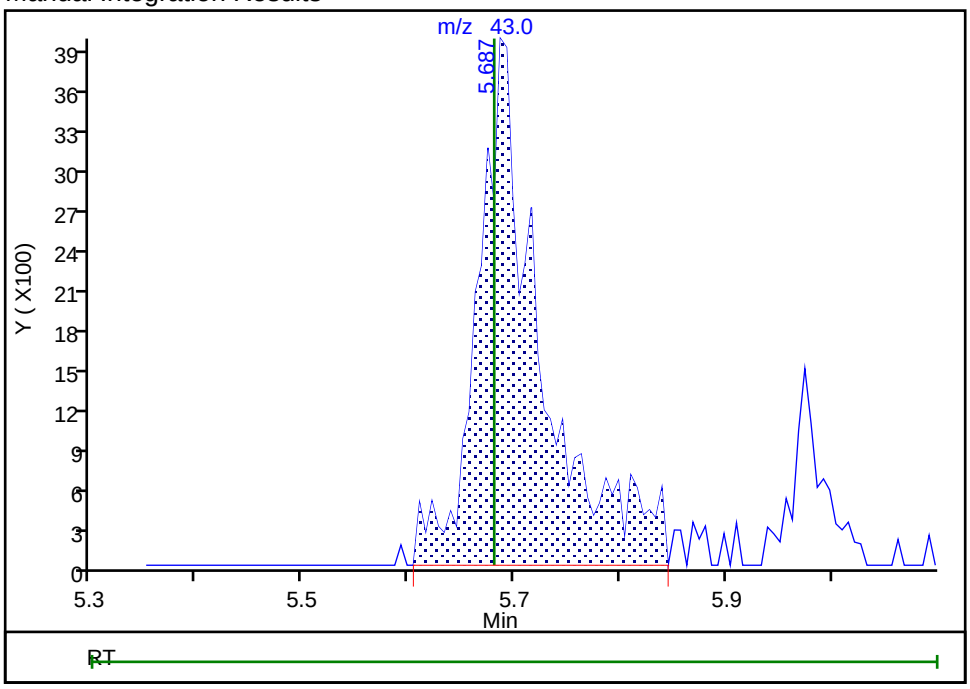
Processing Integration Results

RT: 5.69
Area: 15206
Amount: 47.448689
Amount Units: ng



Manual Integration Results

RT: 5.69
Area: 16247
Amount: 42.885938
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:54:02
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

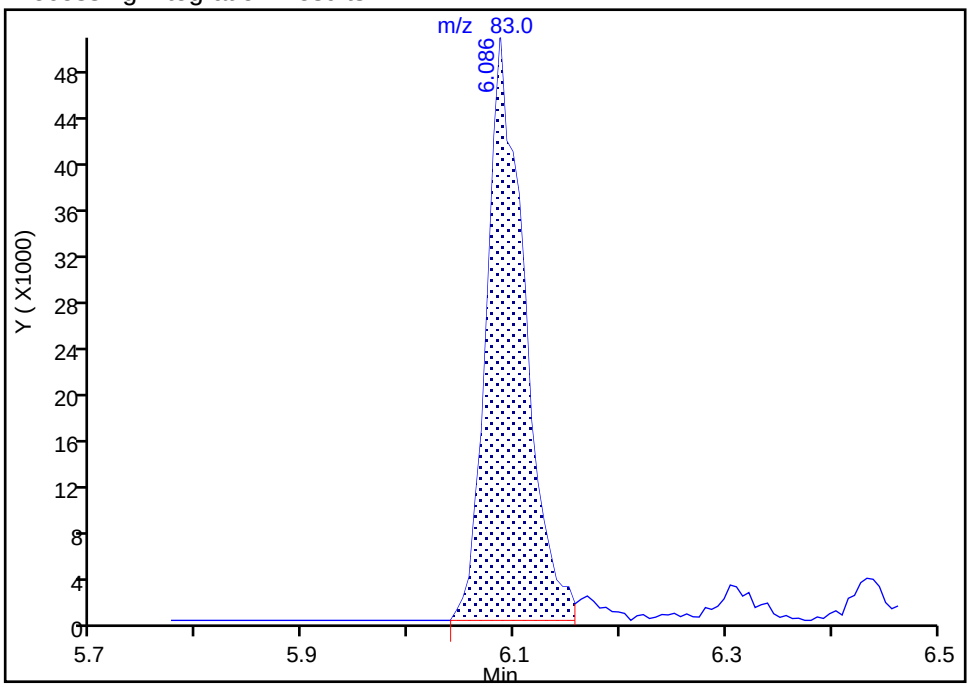
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

49 Chloroform, CAS: 67-66-3

Signal: 1

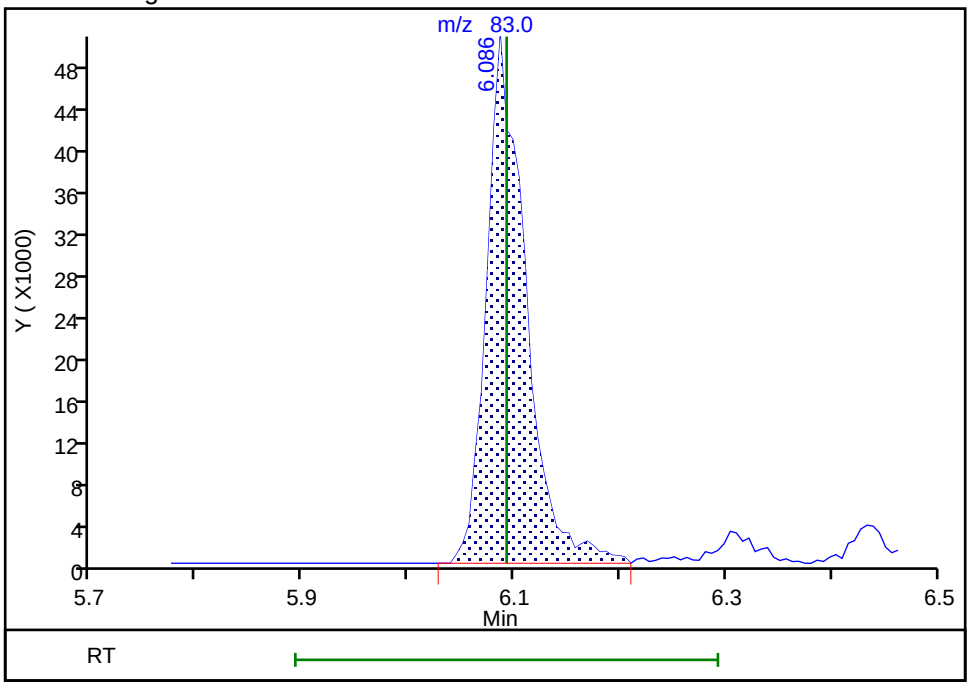
Processing Integration Results

RT: 6.09
Area: 127445
Amount: 20.090331
Amount Units: ng



Manual Integration Results

RT: 6.09
Area: 130970
Amount: 24.316073
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:54:12
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

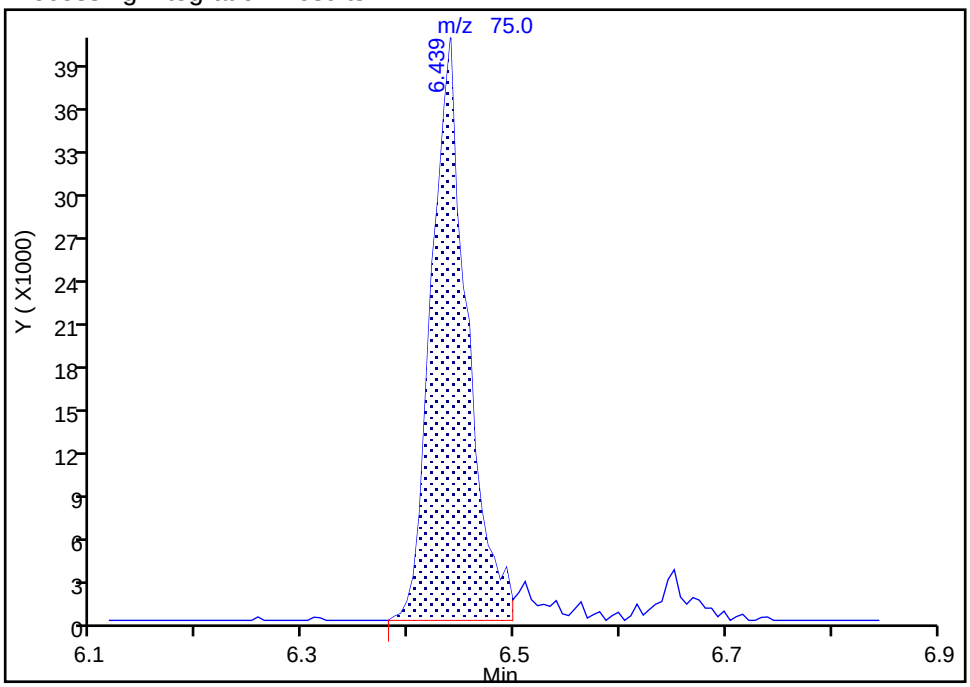
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

54 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

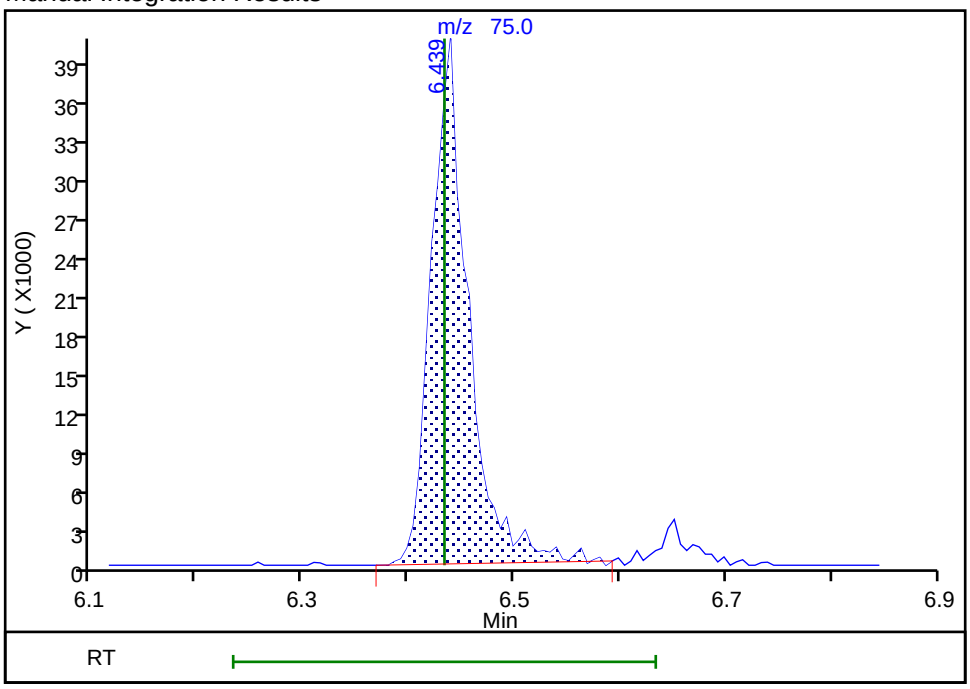
Processing Integration Results

RT: 6.44
Area: 94885
Amount: 25.893729
Amount Units: ng



Manual Integration Results

RT: 6.44
Area: 97894
Amount: 23.776723
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:54:20
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

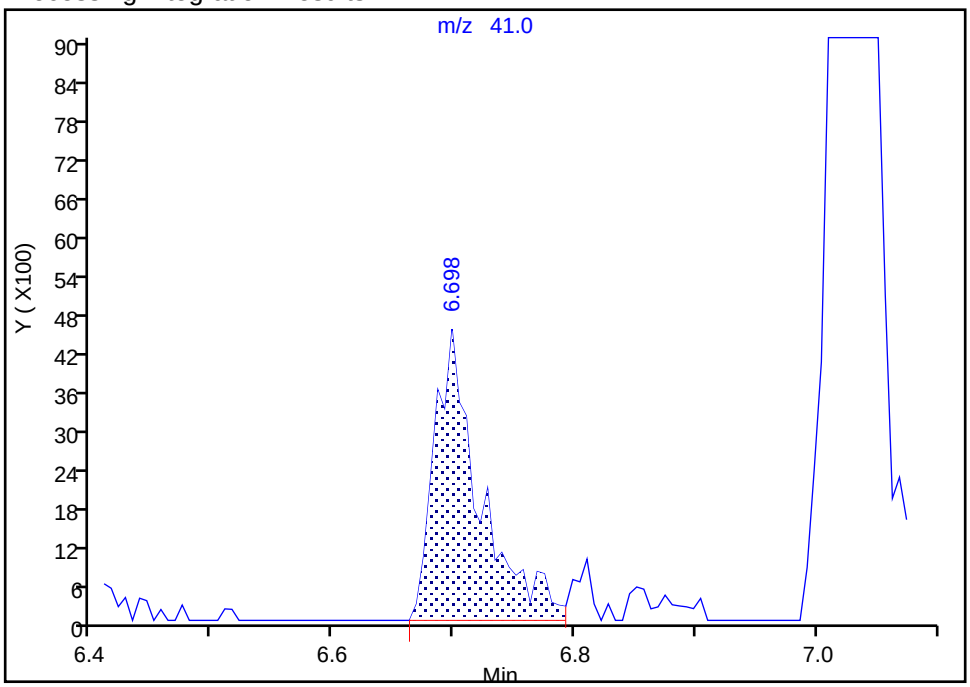
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

51 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

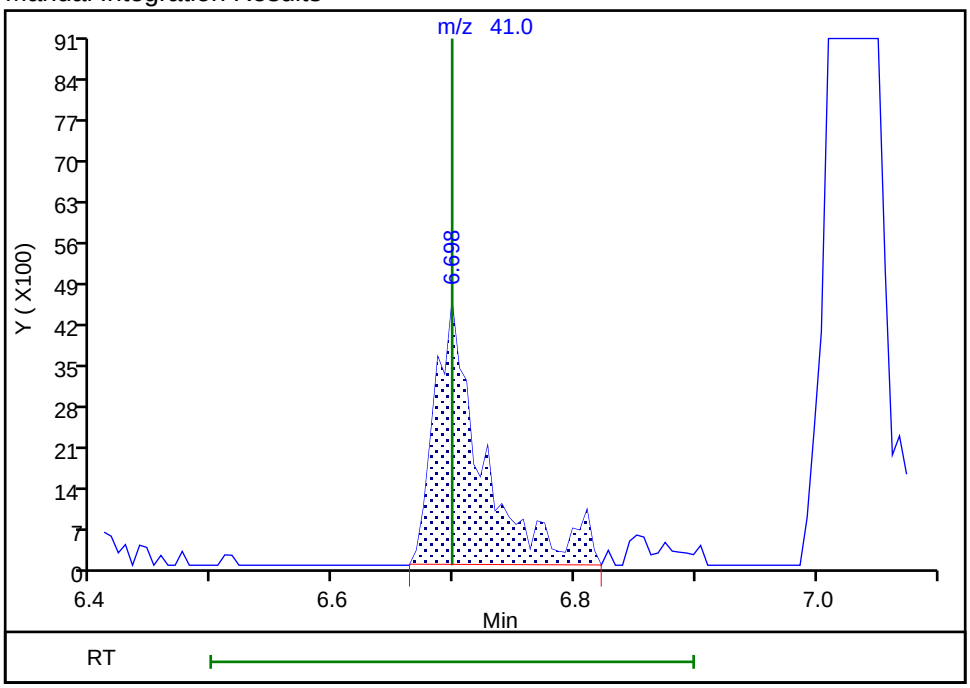
Processing Integration Results

RT: 6.70
Area: 11821
Amount: 429.7824
Amount Units: ng



Manual Integration Results

RT: 6.70
Area: 12570
Amount: 483.4931
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 11:05:20
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

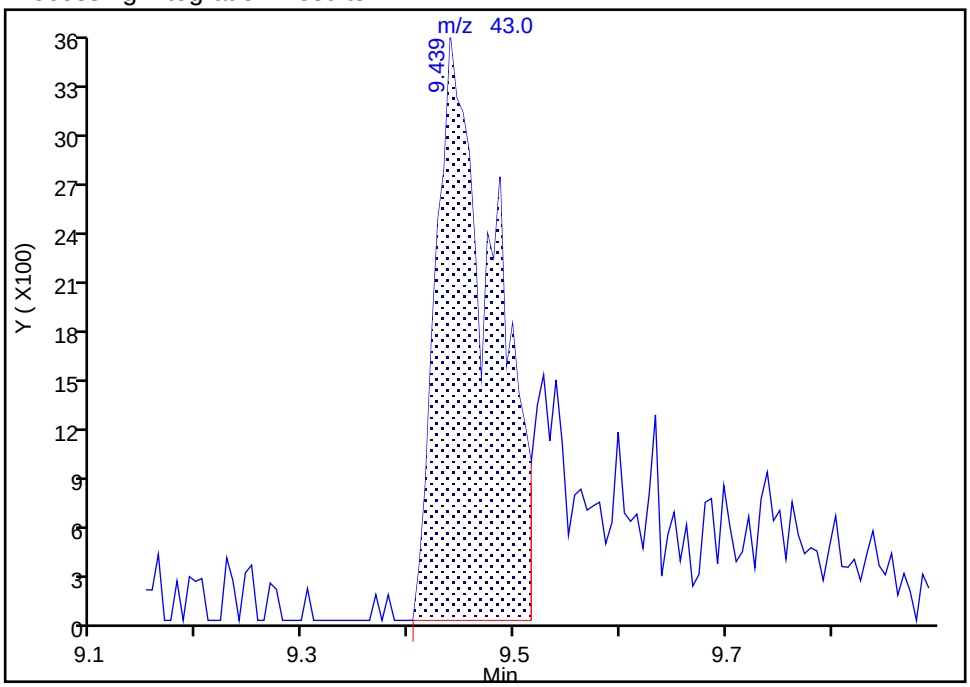
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d				
Injection Date:	05-Mar-2020 08:22:30	Instrument ID:	CHHP10		
Lims ID:	IC 5				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

79 2-Hexanone, CAS: 591-78-6

Signal: 1

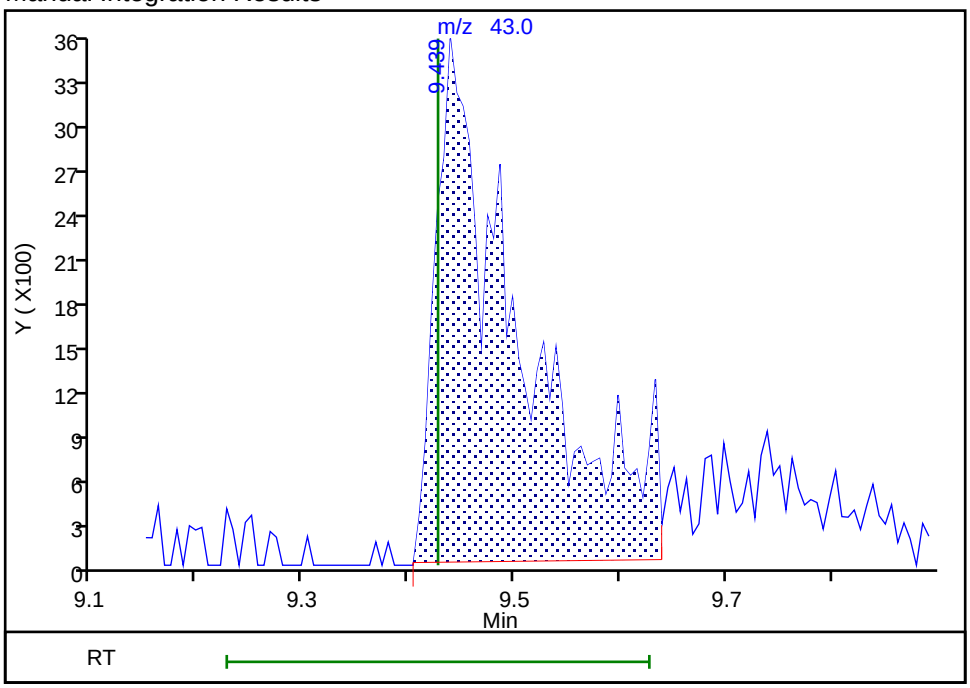
Processing Integration Results

RT: 9.44
Area: 13520
Amount: 31.235627
Amount Units: ng



Manual Integration Results

RT: 9.44
Area: 19245
Amount: 46.745418
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 11:03:45

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

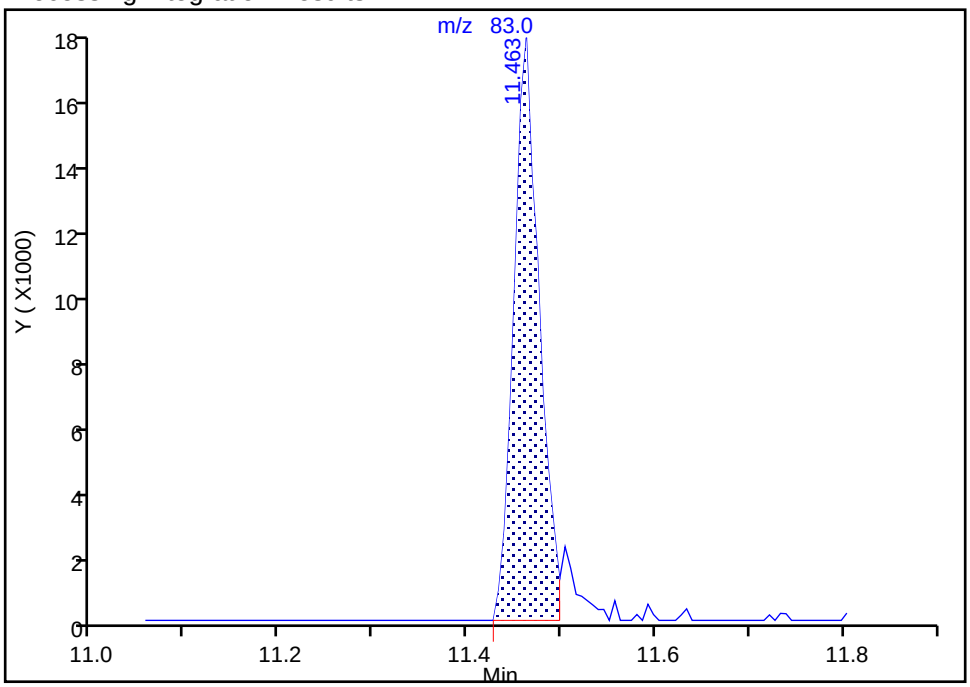
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

93 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Signal: 1

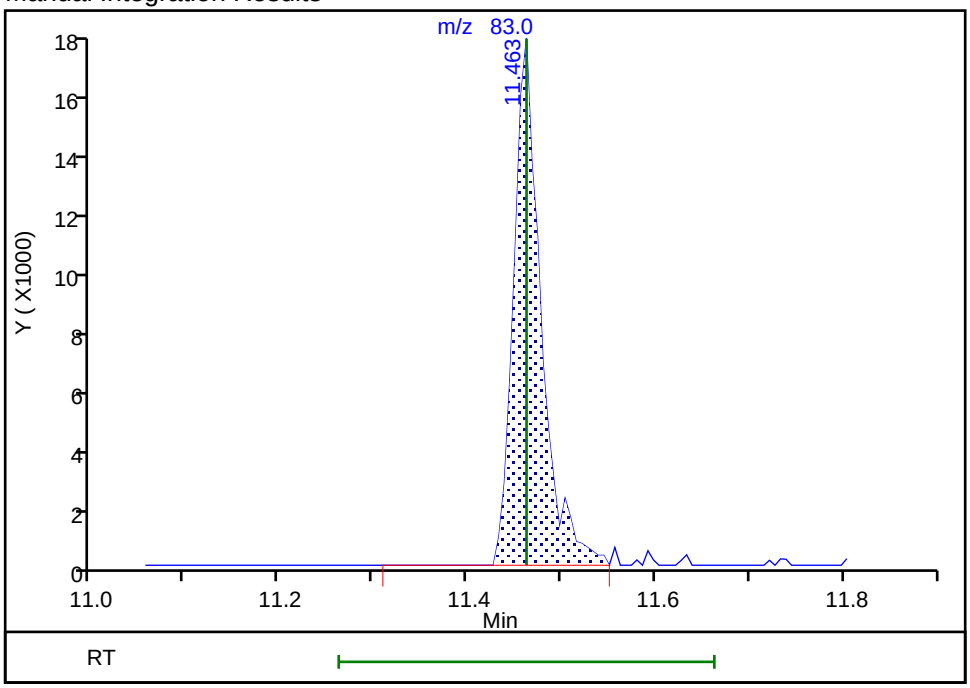
Processing Integration Results

RT: 11.46
Area: 32735
Amount: 24.477417
Amount Units: ng



Manual Integration Results

RT: 11.46
Area: 35199
Amount: 23.465378
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 08:54:34
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

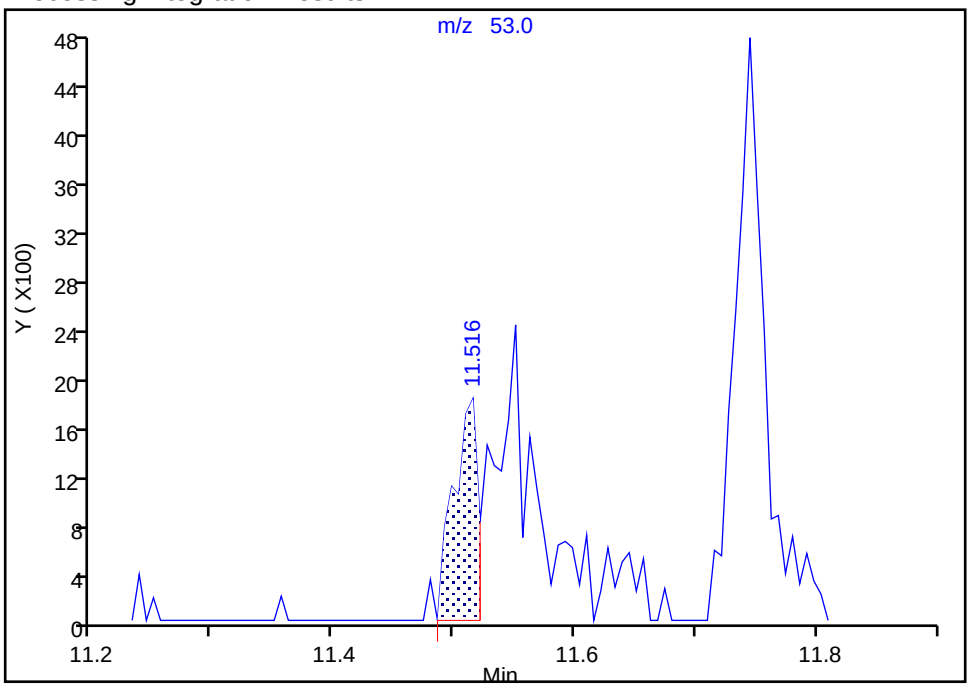
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030503.d
Injection Date: 05-Mar-2020 08:22:30 Instrument ID: CHHP10
Lims ID: IC 5
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

Signal: 1

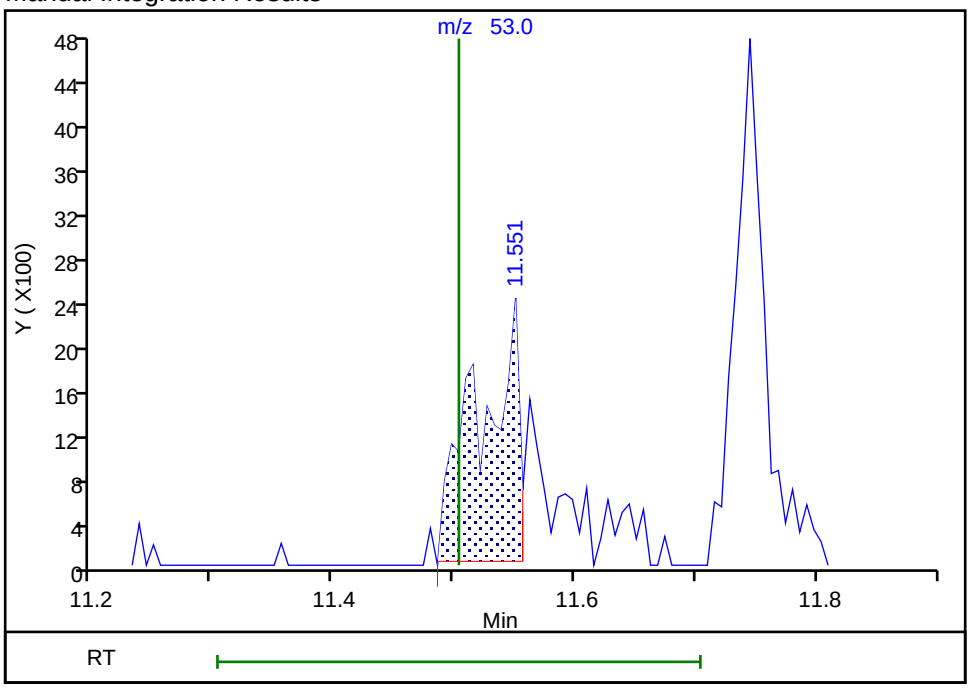
Processing Integration Results

RT: 11.52
Area: 2511
Amount: 45.673817
Amount Units: ng



Manual Integration Results

RT: 11.55
Area: 5374
Amount: 24.511572
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 11:01:52
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030504.d
Lims ID: ICIS 10
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 05-Mar-2020 08:50:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031047-004
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub20

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 05-Mar-2020 14:08:36 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0339

First Level Reviewer: journetp Date: 05-Mar-2020 09:48:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.999	3.999	0.000	0	80507	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	366441	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	86	78229	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	91	132924	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.269	6.269	0.000	93	115463	50.0	48.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.645	6.645	0.000	0	135253	50.0	49.6	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	509390	50.0	49.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.322	0.000	91	176330	50.0	49.8	
10 Dichlorodifluoromethane	85	1.510	1.510	0.000	99	119714	50.0	51.0	
11 Chloromethane	50	1.705	1.705	0.000	100	80873	50.0	50.6	
13 Butadiene	39	1.805	1.805	0.000	97	108948	50.0	49.6	
12 Vinyl chloride	62	1.816	1.816	0.000	71	118869	50.0	46.9	
14 Bromomethane	94	2.081	2.081	0.000	91	150845	50.0	53.0	
15 Chloroethane	64	2.175	2.175	0.000	98	107644	50.0	51.5	
17 Dichlorofluoromethane	67	2.457	2.457	0.000	96	321673	50.0	50.7	
16 Trichlorofluoromethane	101	2.475	2.475	0.000	97	379388	50.0	51.9	a
18 Ethyl ether	59	2.805	2.805	0.000	85	59670	50.0	43.8	M
20 1,1-Dichloroethene	96	3.046	3.046	0.000	97	108514	50.0	46.4	
21 1,1,2-Trichloro-1,2,2-trif	101	3.134	3.134	0.000	93	135034	50.0	47.7	
22 Acetone	43	3.175	3.175	0.000	87	37605	100.0	89.8	
23 Iodomethane	142	3.228	3.228	0.000	98	183961	50.0	47.3	
24 Carbon disulfide	76	3.316	3.316	0.000	99	309876	50.0	46.1	
26 3-Chloro-1-propene	76	3.581	3.581	0.000	79	68269	50.0	46.0	M
28 Methyl acetate	43	3.622	3.622	0.000	93	51013	100.0	95.8	
29 Methylene Chloride	84	3.781	3.781	0.000	85	120273	50.0	49.9	M
32 2-Methyl-2-propanol	59	4.122	4.122	0.000	99	63278	500.0	462.6	
31 Acrylonitrile	53	4.199	4.199	0.000	92	131214	500.0	479.0	
30 trans-1,2-Dichloroethene	96	4.210	4.210	0.000	98	126450	50.0	43.8	
33 Methyl tert-butyl ether	73	4.246	4.246	0.000	93	262941	50.0	46.7	
34 Hexane	57	4.640	4.640	0.000	92	155704	50.0	47.9	
36 1,1-Dichloroethane	63	4.869	4.869	0.000	96	204576	50.0	46.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.640	5.634	0.006	87	35043	50.0	50.1	
41 cis-1,2-Dichloroethene	96	5.646	5.646	0.000	83	135733	50.0	47.6	
43 2-Butanone (MEK)	43	5.681	5.681	0.000	90	42742	100.0	106.3	
46 Chlorobromomethane	128	5.940	5.940	0.000	84	52088	50.0	49.5	
48 Tetrahydrofuran	42	5.969	5.969	0.000	75	23930	100.0	108.0	
49 Chloroform	83	6.087	6.087	0.000	92	263072	50.0	48.6	
50 1,1,1-Trichloroethane	97	6.240	6.240	0.000	96	267673	50.0	49.3	
52 Cyclohexane	56	6.310	6.310	0.000	85	185530	50.0	48.2	
53 Carbon tetrachloride	117	6.410	6.410	0.000	96	256051	50.0	48.0	
54 1,1-Dichloropropene	75	6.440	6.440	0.000	94	216227	50.0	49.5	
55 Benzene	78	6.651	6.651	0.000	97	521811	50.0	48.5	
51 Isobutyl alcohol	41	6.693	6.693	0.000	88	40120	1250.0	1454.5	Ma
56 1,2-Dichloroethane	62	6.734	6.734	0.000	98	163353	50.0	50.5	
59 n-Heptane	43	7.028	7.028	0.000	82	153048	50.0	48.5	
60 Trichloroethene	130	7.398	7.398	0.000	97	152519	50.0	46.9	
63 Methylcyclohexane	83	7.628	7.628	0.000	85	283237	50.0	48.2	
64 1,2-Dichloropropane	63	7.669	7.669	0.000	83	100803	50.0	47.9	
65 Dibromomethane	93	7.763	7.763	0.000	93	49120	50.0	44.3	
67 1,4-Dioxane	88	7.781	7.781	0.000	36	10677	1000.0	858.9	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	171901	50.0	46.8	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	93	175499	50.0	46.1	
72 4-Methyl-2-pentanone (MIBK	43	8.581	8.581	0.000	91	91060	100.0	99.9	
73 Toluene	91	8.739	8.739	0.000	98	642792	50.0	50.8	
74 trans-1,3-Dichloropropene	75	9.004	9.004	0.000	93	139471	50.0	45.8	
75 Ethyl methacrylate	69	9.069	9.069	0.000	85	95269	50.0	47.2	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	92	79846	50.0	50.2	
77 Tetrachloroethene	164	9.257	9.257	0.000	97	139326	50.0	48.3	
78 1,3-Dichloropropane	76	9.351	9.351	0.000	90	127873	50.0	48.3	
79 2-Hexanone	43	9.428	9.428	0.000	97	56583	100.0	103.1	
81 Chlorodibromomethane	129	9.563	9.563	0.000	91	99491	50.0	47.4	
82 Ethylene Dibromide	107	9.675	9.675	0.000	97	69345	50.0	52.9	
83 Chlorobenzene	112	10.157	10.157	0.000	94	383811	50.0	50.1	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.251	0.000	92	144039	50.0	50.2	
85 Ethylbenzene	106	10.263	10.263	0.000	98	237586	50.0	52.7	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	305556	50.0	53.7	
88 o-Xylene	106	10.769	10.769	0.000	97	278489	50.0	51.9	
89 Styrene	104	10.798	10.798	0.000	93	433564	50.0	51.9	
90 Bromoform	173	10.975	10.975	0.000	95	60270	50.0	50.4	
91 Isopropylbenzene	105	11.145	11.145	0.000	96	821595	50.0	51.8	
94 Bromobenzene	156	11.457	11.457	0.000	92	151863	50.0	49.3	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	92	91769	50.0	54.4	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	67	16429	50.0	51.0	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	84	30317	50.0	50.0	
97 N-Propylbenzene	120	11.557	11.557	0.000	99	212193	50.0	50.5	
98 2-Chlorotoluene	126	11.639	11.639	0.000	94	170177	50.0	51.1	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	93	733030	50.0	55.0	
100 4-Chlorotoluene	126	11.769	11.769	0.000	98	165277	50.0	51.1	
101 tert-Butylbenzene	119	12.051	12.051	0.000	92	629733	50.0	53.8	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	97	691531	50.0	53.3	
104 sec-Butylbenzene	105	12.274	12.274	0.000	95	942342	50.0	54.5	
105 1,3-Dichlorobenzene	146	12.398	12.398	0.000	97	313587	50.0	52.3	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	96	800486	50.0	54.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	93	305090	50.0	48.0	
110 n-Butylbenzene	91	12.839	12.839	0.000	98	694785	50.0	56.2	
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	95	271039	50.0	51.0	
112 1,2-Dibromo-3-Chloropropan	157	13.651	13.651	0.000	85	13645	50.0	48.7	
114 1,2,4-Trichlorobenzene	180	14.468	14.468	0.000	94	129018	50.0	49.8	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	95	138361	50.0	45.8	M
116 Naphthalene	128	14.727	14.727	0.000	97	171077	50.0	49.7	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	93	103148	50.0	54.4	
S 130 1,2-Dichloroethene, Total	96				0		100.0	91.4	
S 129 Xylenes, Total	106				0		100.0	105.7	
S 131 1,3-Dichloropropene, Total	1				0		100.0	91.9	
S 145 Total BTEX	1				0		250.0	257.7	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

voaWKetmix1st_00024	Amount Added:	2.00	Units: uL
VOA8260INT_00104	Amount Added:	2.00	Units: uL
VOA8260SURR_00104	Amount Added:	2.00	Units: uL
VOA8260VOAPRI_00394	Amount Added:	2.00	Units: uL

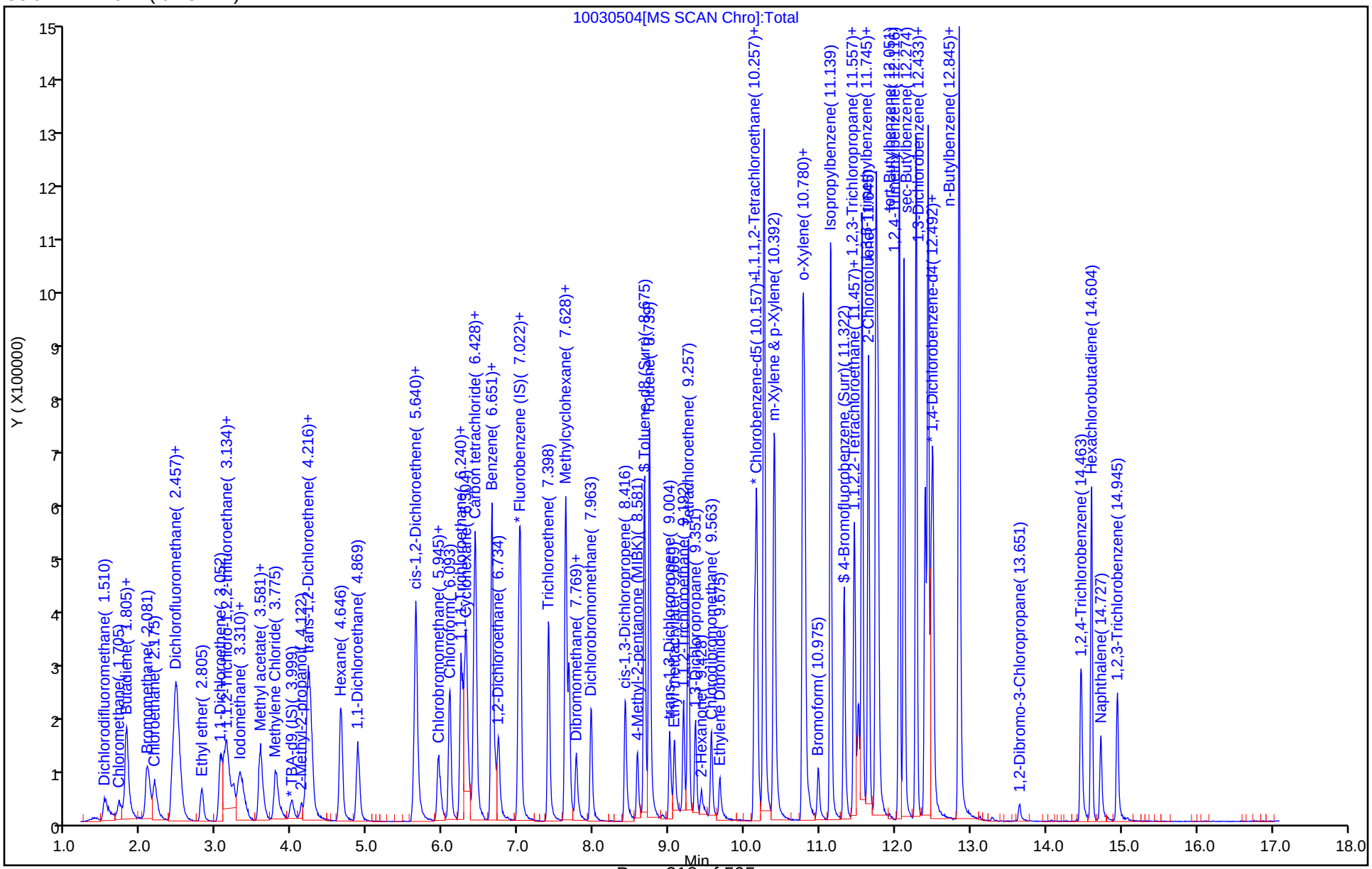
Report Date: 05-Mar-2020 14:08:37 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030504.d

Injection Date:	05-Mar-2020 08:50:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	ICIS 10			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

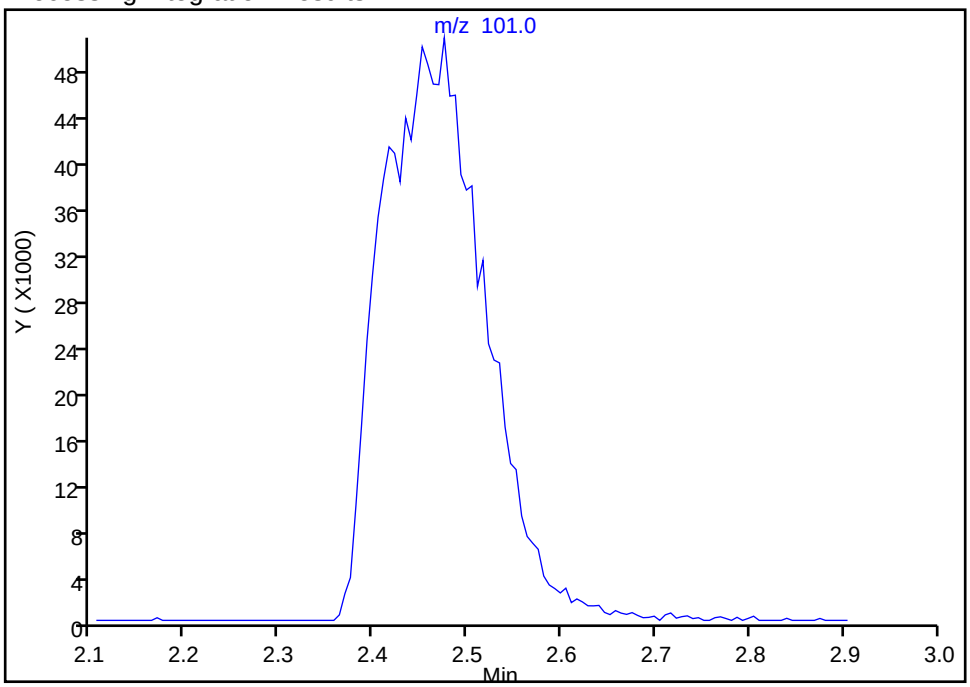
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030504.d
Injection Date: 05-Mar-2020 08:50:30 Instrument ID: CHHP10
Lims ID: ICIS 10
Client ID:
Operator ID: 034635 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

16 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

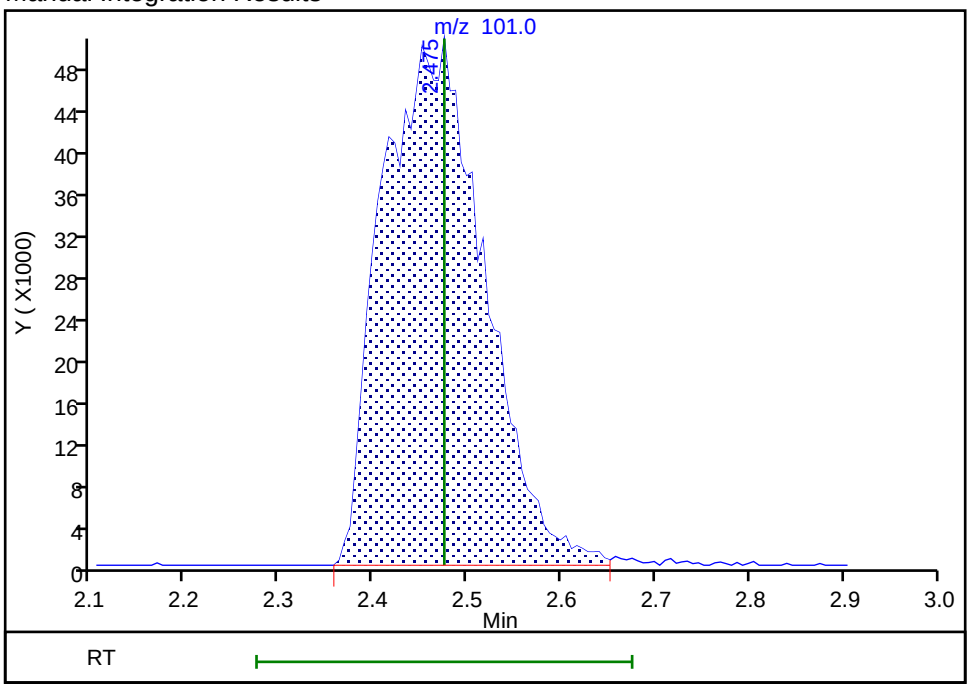
Not Detected
Expected RT: 2.48

Processing Integration Results



Manual Integration Results

RT: 2.48
Area: 379388
Amount: 51.931459
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 09:45:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

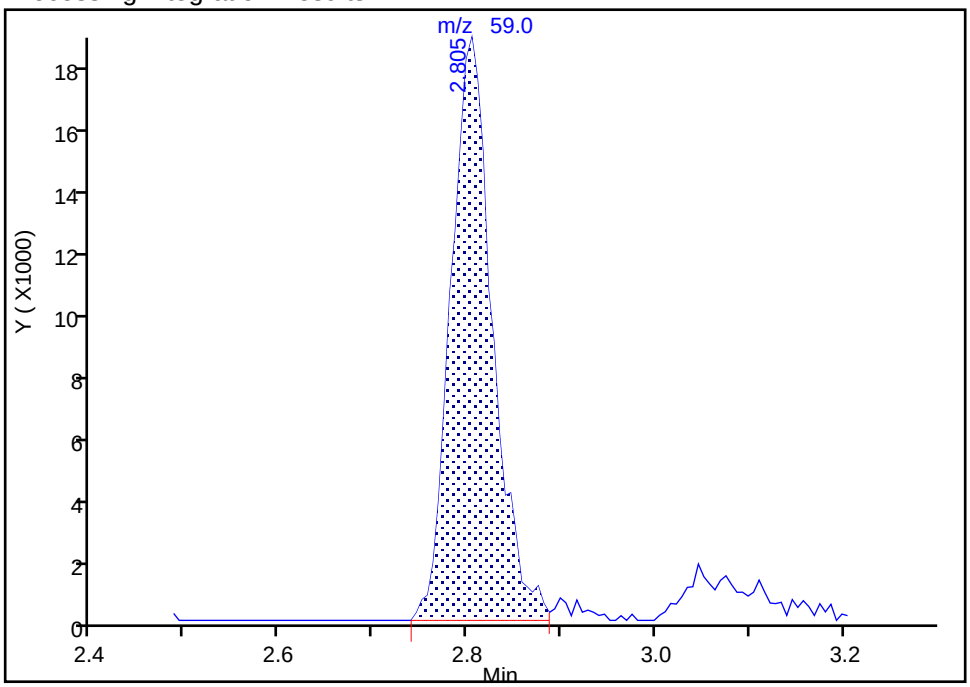
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030504.d				
Injection Date:	05-Mar-2020 08:50:30	Instrument ID:	CHHP10		
Lims ID:	ICIS 10				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

18 Ethyl ether, CAS: 60-29-7

Signal: 1

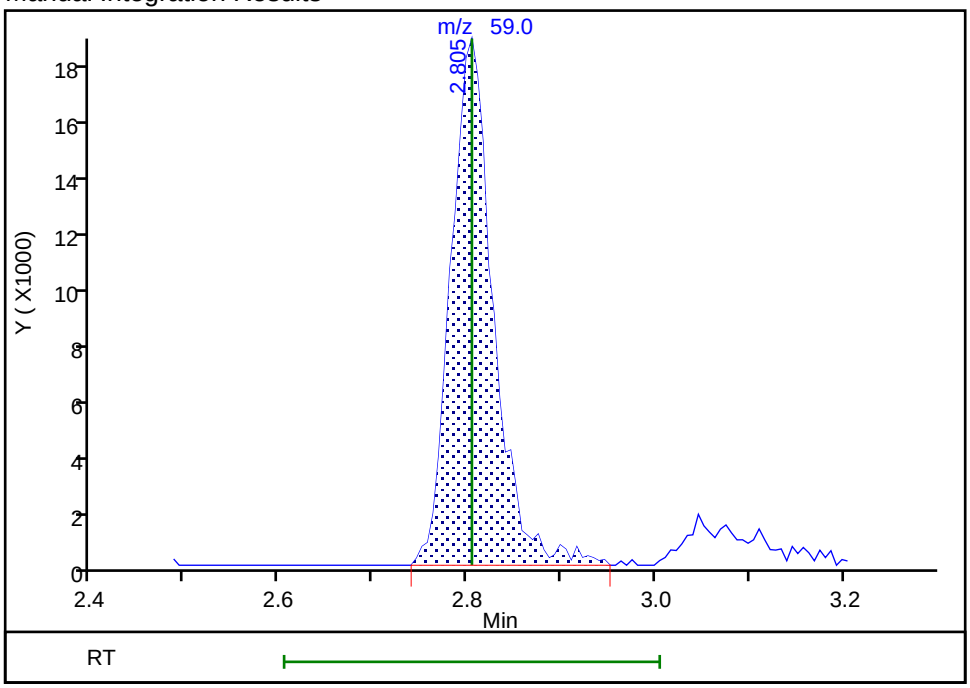
Processing Integration Results

RT: 2.80
Area: 58360
Amount: 42.920951
Amount Units: ng



Manual Integration Results

RT: 2.80
Area: 59670
Amount: 43.778946
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 11:44:32

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

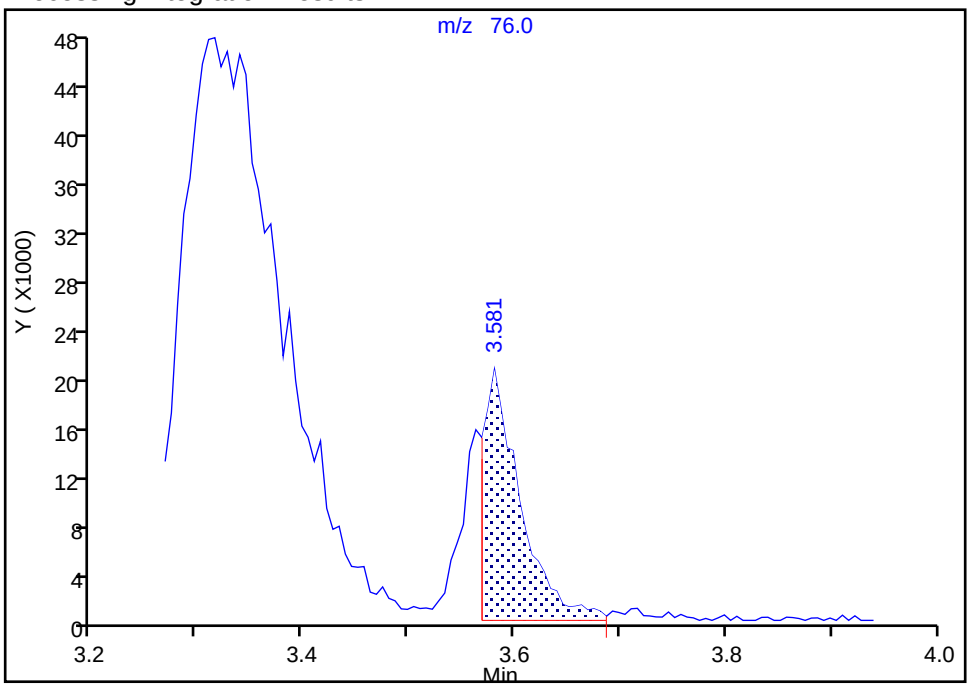
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030504.d
Injection Date: 05-Mar-2020 08:50:30 Instrument ID: CHHP10
Lims ID: ICIS 10
Client ID:
Operator ID: 034635 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

26 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

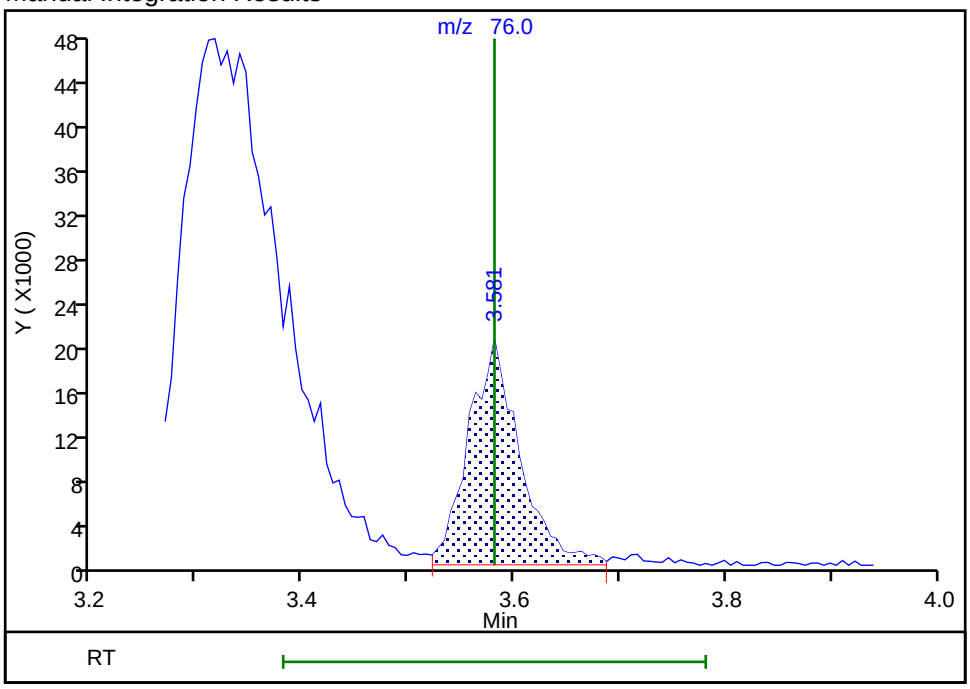
Processing Integration Results

RT: 3.58
Area: 49932
Amount: 38.931228
Amount Units: ng



Manual Integration Results

RT: 3.58
Area: 68269
Amount: 45.960171
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 09:46:02
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

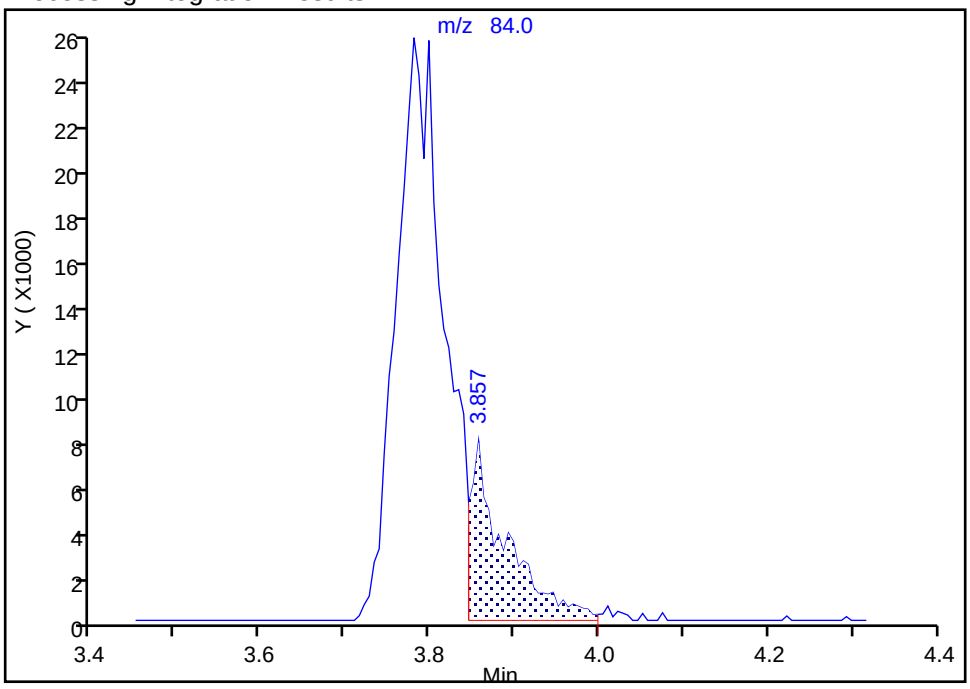
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030504.d
Injection Date: 05-Mar-2020 08:50:30 Instrument ID: CHHP10
Lims ID: ICIS 10
Client ID:
Operator ID: 034635 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

29 Methylene Chloride, CAS: 75-09-2

Signal: 1

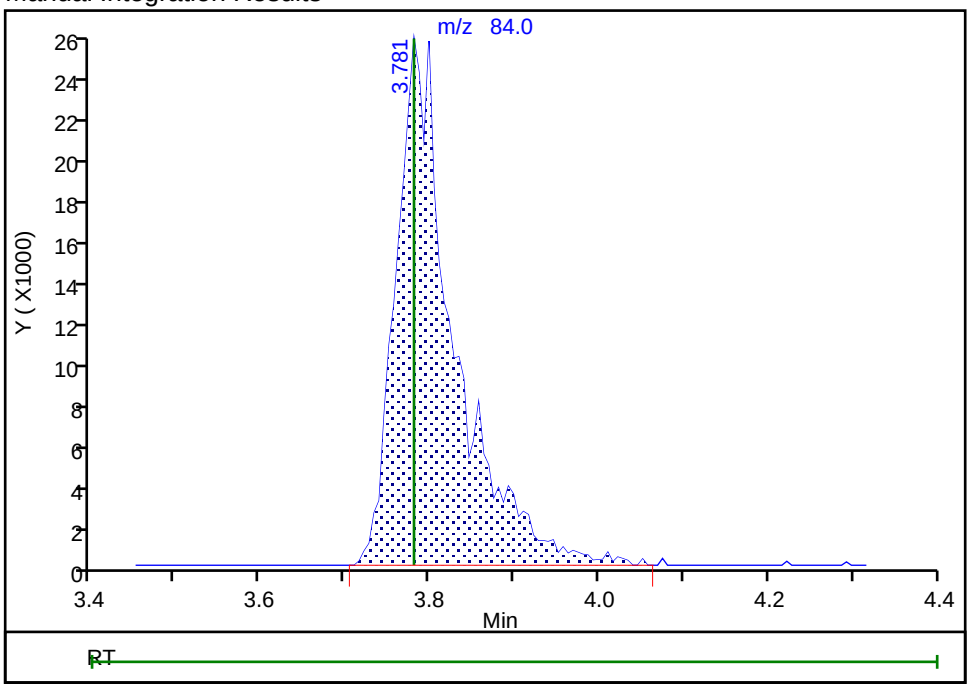
Processing Integration Results

RT: 3.86
Area: 22646
Amount: 10.103610
Amount Units: ng



Manual Integration Results

RT: 3.78
Area: 120273
Amount: 49.930798
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 10:58:03
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

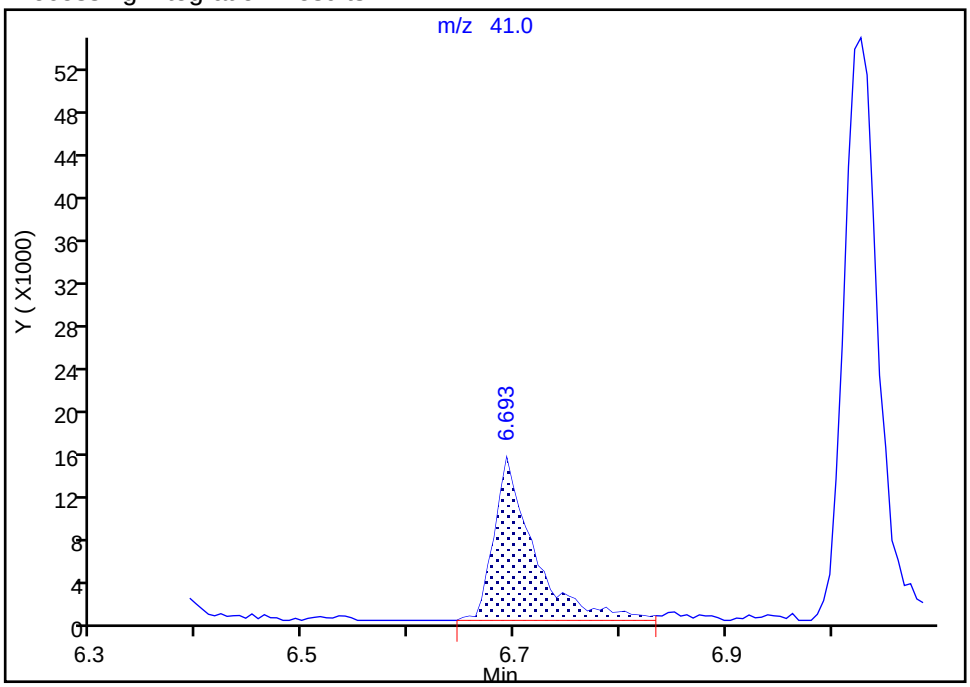
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030504.d				
Injection Date:	05-Mar-2020 08:50:30	Instrument ID:	CHHP10		
Lims ID:	ICIS 10				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

51 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

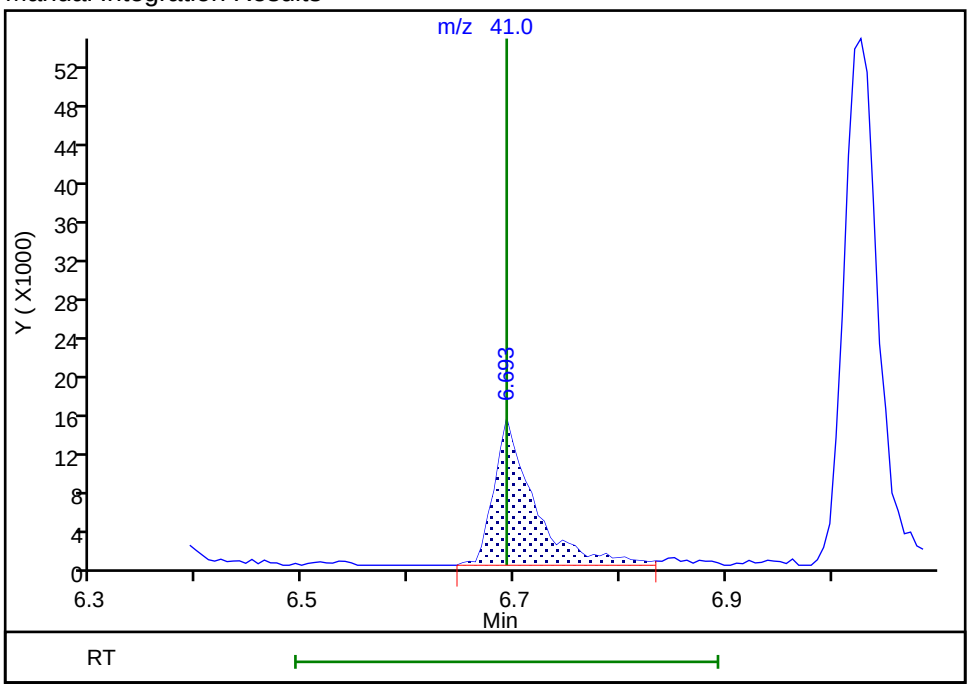
Processing Integration Results

RT: 6.69
Area: 40120
Amount: 1583.4940
Amount Units: ng



Manual Integration Results

RT: 6.69
Area: 40120
Amount: 1454.5476
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 09:47:51

Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

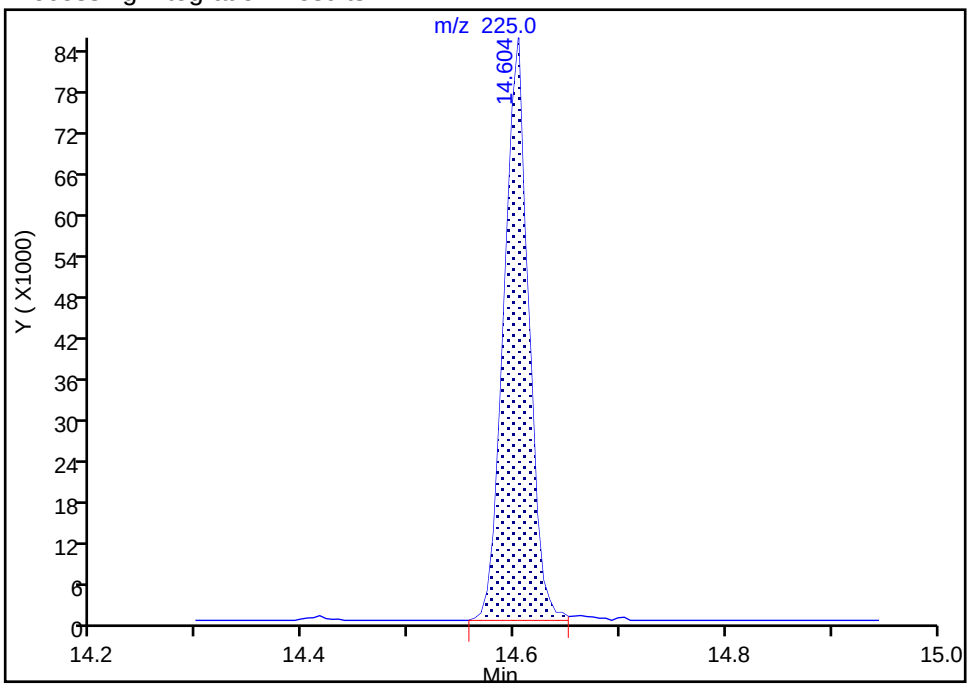
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030504.d
Injection Date: 05-Mar-2020 08:50:30 Instrument ID: CHHP10
Lims ID: ICIS 10
Client ID:
Operator ID: 034635 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

115 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

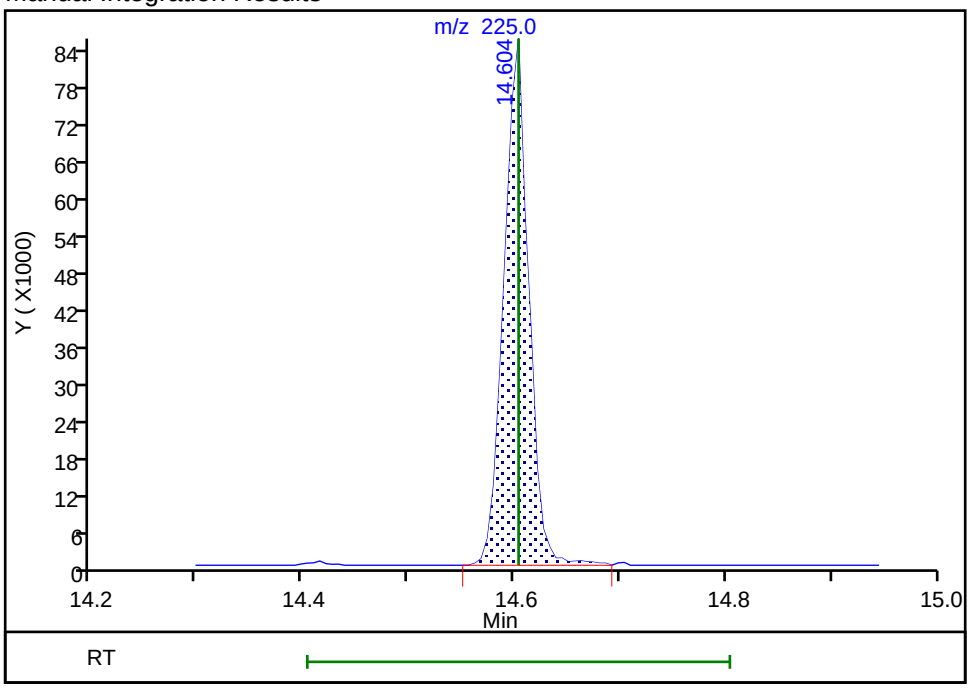
Processing Integration Results

RT: 14.60
Area: 137268
Amount: 51.243716
Amount Units: ng



Manual Integration Results

RT: 14.60
Area: 138361
Amount: 45.815011
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 11:09:12
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030505.d
Lims ID: IC 15
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 05-Mar-2020 09:18:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031047-005
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub20

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 05-Mar-2020 14:08:41 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0339

First Level Reviewer: journetp Date: 05-Mar-2020 09:50:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.993	3.993	0.000	0	73959	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.004	7.004	0.000	98	372133	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	87	77302	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	94	139159	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	88	188005	75.0	78.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	203645	75.0	73.5	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	814437	75.0	80.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.322	0.000	89	284892	75.0	81.5	
10 Dichlorodifluoromethane	85	1.516	1.516	0.000	99	174013	75.0	73.0	
11 Chloromethane	50	1.716	1.716	0.000	95	115289	75.0	71.0	
13 Butadiene	39	1.799	1.799	0.000	94	162870	75.0	73.0	
12 Vinyl chloride	62	1.822	1.822	0.000	82	173301	75.0	67.4	
14 Bromomethane	94	2.075	2.075	0.000	91	209086	75.0	72.4	
15 Chloroethane	64	2.175	2.175	0.000	98	136407	75.0	64.3	
17 Dichlorofluoromethane	67	2.457	2.457	0.000	96	511449	75.0	79.4	
16 Trichlorofluoromethane	101	2.457	2.457	0.000	93	595856	75.0	80.3	
18 Ethyl ether	59	2.804	2.804	0.000	83	129174	75.0	93.3	
20 1,1-Dichloroethene	96	3.051	3.051	0.000	96	143061	75.0	60.3	
21 1,1,2-Trichloro-1,2,2-trif	101	3.116	3.116	0.000	90	207487	75.0	72.2	
22 Acetone	43	3.175	3.175	0.000	88	54838	150.0	129.0	
23 Iodomethane	142	3.234	3.234	0.000	98	287987	75.0	73.0	
24 Carbon disulfide	76	3.322	3.322	0.000	99	495326	75.0	72.5	M
26 3-Chloro-1-propene	76	3.575	3.575	0.000	74	116198	75.0	77.0	
28 Methyl acetate	43	3.622	3.622	0.000	94	72851	150.0	134.8	
29 Methylene Chloride	84	3.798	3.798	0.000	93	167213	75.0	70.3	M
32 2-Methyl-2-propanol	59	4.122	4.122	0.000	97	84380	750.0	671.5	
31 Acrylonitrile	53	4.193	4.193	0.000	97	191118	750.0	686.9	
30 trans-1,2-Dichloroethene	96	4.216	4.216	0.000	97	217896	75.0	74.4	
33 Methyl tert-butyl ether	73	4.257	4.257	0.000	93	409206	75.0	71.6	
34 Hexane	57	4.645	4.645	0.000	90	240468	75.0	72.9	
36 1,1-Dichloroethane	63	4.869	4.869	0.000	96	335032	75.0	75.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.634	5.634	0.000	87	56023	75.0	78.8	
41 cis-1,2-Dichloroethene	96	5.651	5.651	0.000	81	221248	75.0	76.3	
43 2-Butanone (MEK)	43	5.681	5.681	0.000	97	58717	150.0	143.9	
46 Chlorobromomethane	128	5.945	5.945	0.000	82	76422	75.0	71.5	
48 Tetrahydrofuran	42	5.975	5.975	0.000	79	31262	150.0	138.9	
49 Chloroform	83	6.092	6.092	0.000	93	400958	75.0	74.3	
50 1,1,1-Trichloroethane	97	6.239	6.239	0.000	98	413180	75.0	74.9	
52 Cyclohexane	56	6.304	6.304	0.000	87	303510	75.0	77.6	
53 Carbon tetrachloride	117	6.416	6.416	0.000	97	403212	75.0	74.4	
54 1,1-Dichloropropene	75	6.434	6.434	0.000	96	343676	75.0	77.5	
55 Benzene	78	6.651	6.651	0.000	95	874048	75.0	79.9	
51 Isobutyl alcohol	41	6.698	6.698	0.000	50	54398	1875.0	1942.0	
56 1,2-Dichloroethane	62	6.734	6.734	0.000	99	249739	75.0	76.0	
59 n-Heptane	43	7.028	7.028	0.000	80	250460	75.0	78.2	
60 Trichloroethene	130	7.404	7.404	0.000	96	240663	75.0	72.8	
63 Methylcyclohexane	83	7.628	7.628	0.000	84	459421	75.0	77.0	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	87	160211	75.0	75.0	a
65 Dibromomethane	93	7.769	7.769	0.000	90	83081	75.0	73.8	
67 1,4-Dioxane	88	7.775	7.775	0.000	38	17177	1500.0	1337.6	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	273693	75.0	73.3	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	93	271074	75.0	68.2	
72 4-Methyl-2-pentanone (MIBK	43	8.575	8.575	0.000	89	120410	150.0	131.0	
73 Toluene	91	8.739	8.739	0.000	98	1001260	75.0	80.1	
74 trans-1,3-Dichloropropene	75	9.004	9.004	0.000	93	226270	75.0	72.9	
75 Ethyl methacrylate	69	9.069	9.069	0.000	85	154139	75.0	75.1	
76 1,1,2-Trichloroethane	97	9.186	9.186	0.000	94	119097	75.0	75.8	
77 Tetrachloroethene	164	9.257	9.257	0.000	96	220997	75.0	77.6	
78 1,3-Dichloropropane	76	9.351	9.351	0.000	89	203297	75.0	77.7	
79 2-Hexanone	43	9.428	9.428	0.000	90	82196	150.0	146.0	
81 Chlorodibromomethane	129	9.563	9.563	0.000	88	160347	75.0	77.3	
82 Ethylene Dibromide	107	9.669	9.669	0.000	98	101333	75.0	78.3	
83 Chlorobenzene	112	10.163	10.163	0.000	96	598880	75.0	79.1	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.251	0.000	91	226982	75.0	80.0	
85 Ethylbenzene	106	10.263	10.263	0.000	99	368698	75.0	82.8	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	436020	75.0	77.6	
88 o-Xylene	106	10.774	10.774	0.000	97	427728	75.0	80.7	
89 Styrene	104	10.798	10.798	0.000	93	668767	75.0	80.9	
90 Bromoform	173	10.980	10.980	0.000	96	94192	75.0	79.8	
91 Isopropylbenzene	105	11.145	11.145	0.000	96	1294032	75.0	82.6	
94 Bromobenzene	156	11.451	11.451	0.000	93	248053	75.0	77.0	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	95	127178	75.0	76.3	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	74	27270	75.0	72.3	
95 1,2,3-Trichloropropane	110	11.510	11.510	0.000	86	46641	75.0	73.5	
97 N-Propylbenzene	120	11.563	11.563	0.000	99	345980	75.0	78.6	
98 2-Chlorotoluene	126	11.639	11.639	0.000	95	271200	75.0	77.8	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	93	1115258	75.0	79.9	
100 4-Chlorotoluene	126	11.769	11.769	0.000	98	273630	75.0	80.8	
101 tert-Butylbenzene	119	12.051	12.051	0.000	92	968122	75.0	79.0	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	97	1052100	75.0	77.5	
104 sec-Butylbenzene	105	12.274	12.274	0.000	95	1437385	75.0	79.4	
105 1,3-Dichlorobenzene	146	12.398	12.398	0.000	97	495311	75.0	78.9	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	1236900	75.0	80.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	94	493479	75.0	74.1	
110 n-Butylbenzene	91	12.845	12.845	0.000	97	1060605	75.0	81.9	
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	96	437218	75.0	78.6	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	82	18938	75.0	62.9	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	93	222734	75.0	82.1	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	96	205525	75.0	70.6	
116 Naphthalene	128	14.721	14.721	0.000	97	278737	75.0	77.3	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	94	162776	75.0	82.0	
S 130 1,2-Dichloroethene, Total	96				0		150.0	150.7	
S 129 Xylenes, Total	106				0		150.0	158.3	
S 131 1,3-Dichloropropene, Total	1				0		150.0	141.1	
S 145 Total BTEX	1				0		375.0	401.1	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

VOA8260INT_00104	Amount Added:	2.00	Units: uL
VOA8260SURR_00104	Amount Added:	3.00	Units: uL
voaWKetmix1st_00024	Amount Added:	3.00	Units: uL
VOA8260VOAPRI_00394	Amount Added:	3.00	Units: uL

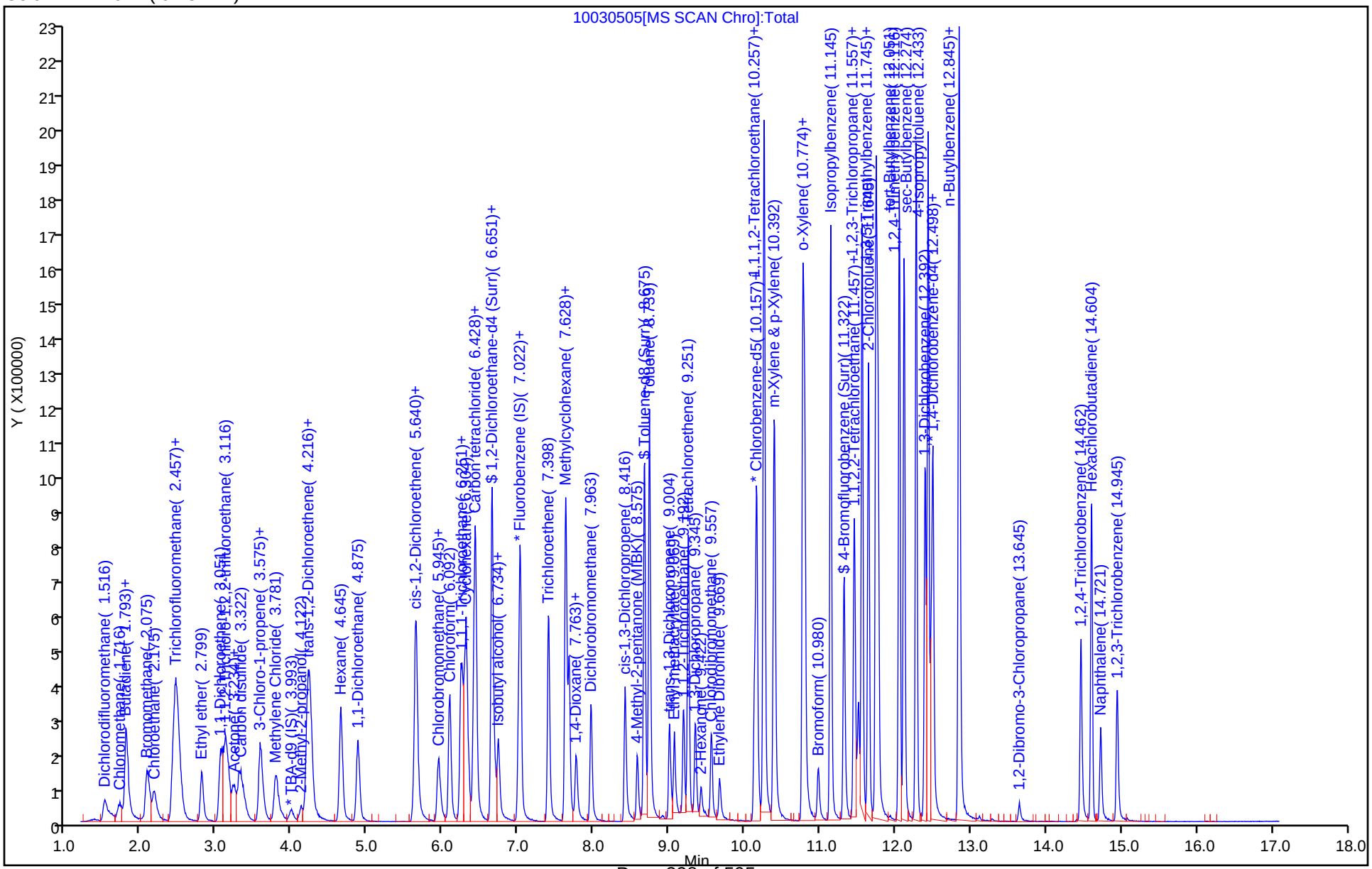
Report Date: 05-Mar-2020 14:08:43 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030505.d

Injection Date:	05-Mar-2020 09:18:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	IC 15			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

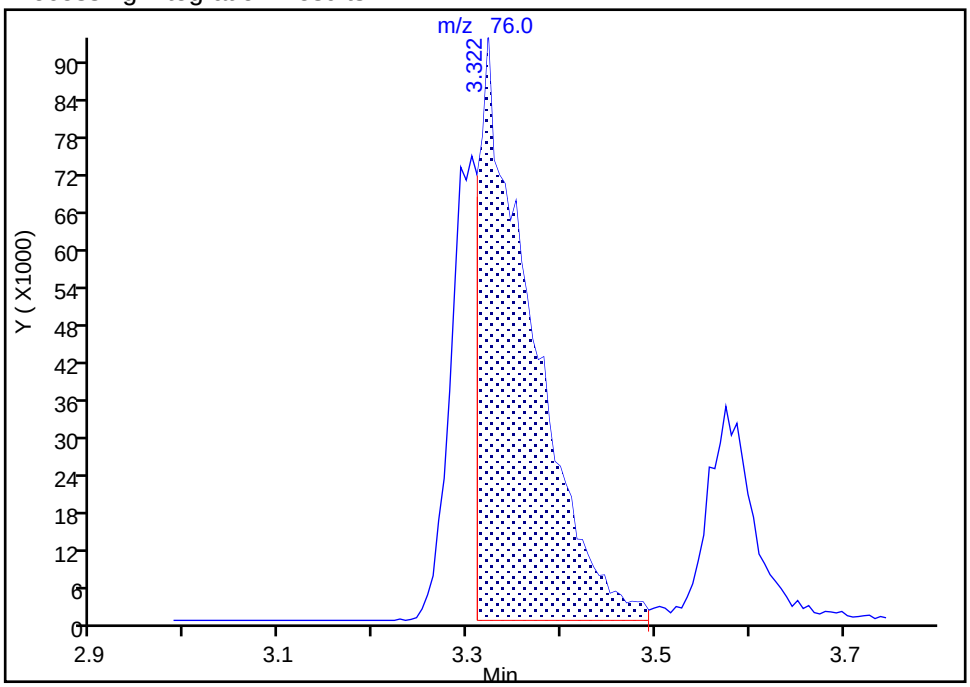
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030505.d
Injection Date: 05-Mar-2020 09:18:30 Instrument ID: CHHP10
Lims ID: IC 15
Client ID:
Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

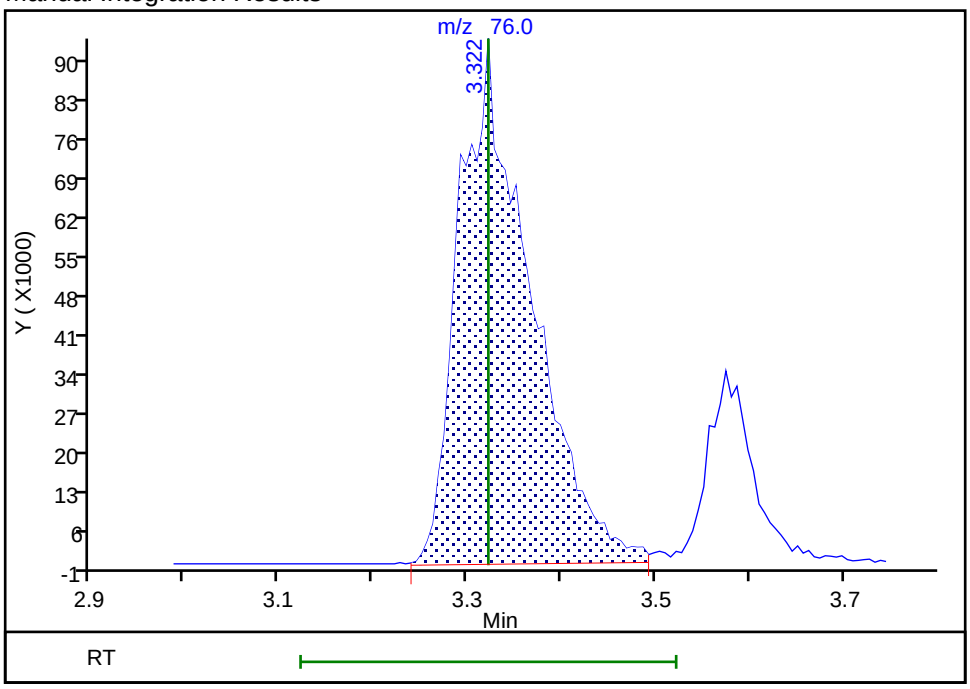
Processing Integration Results

RT: 3.32
Area: 367193
Amount: 59.553668
Amount Units: ng



Manual Integration Results

RT: 3.32
Area: 495326
Amount: 72.528835
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 09:49:54
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

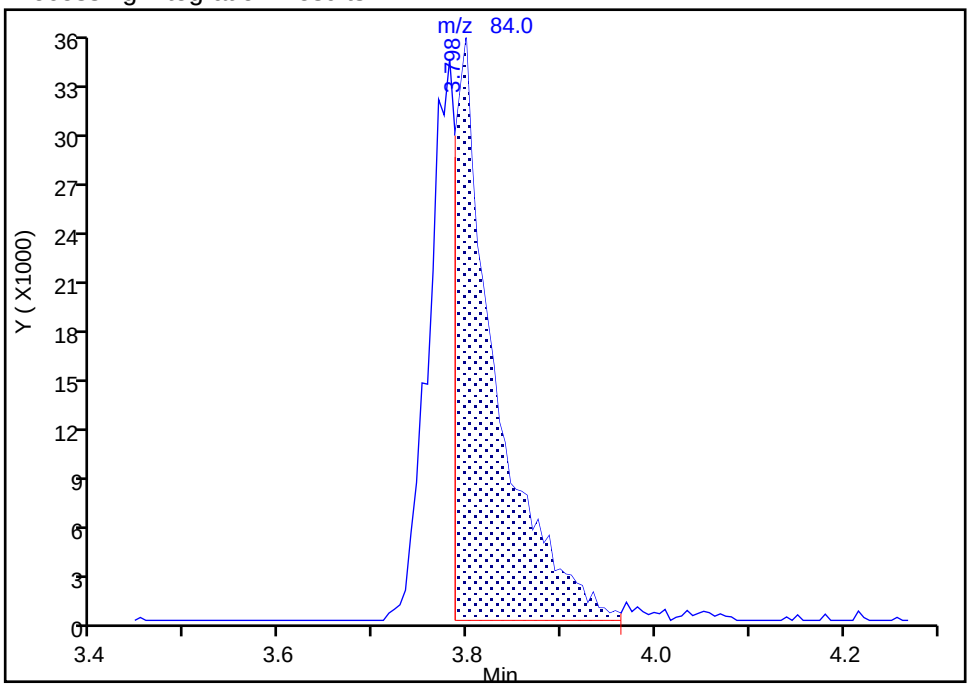
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030505.d				
Injection Date:	05-Mar-2020 09:18:30	Instrument ID:	CHHP10		
Lims ID:	IC 15				
Client ID:					
Operator ID:	034635	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

29 Methylene Chloride, CAS: 75-09-2

Signal: 1

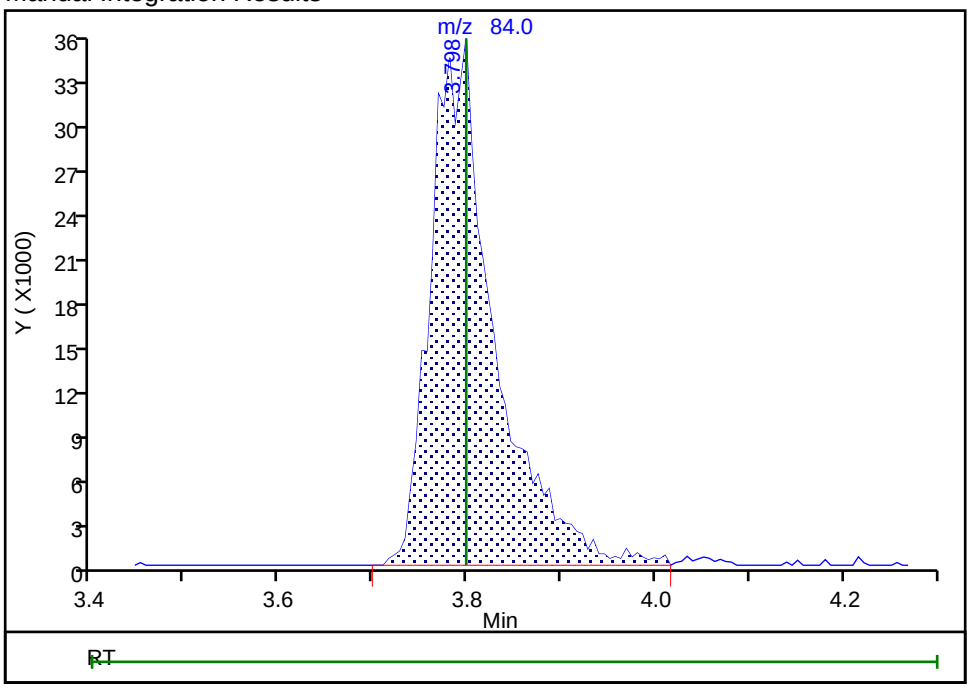
Processing Integration Results

RT: 3.80
Area: 106934
Amount: 41.023206
Amount Units: ng



Manual Integration Results

RT: 3.80
Area: 167213
Amount: 70.254718
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 10:58:22

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

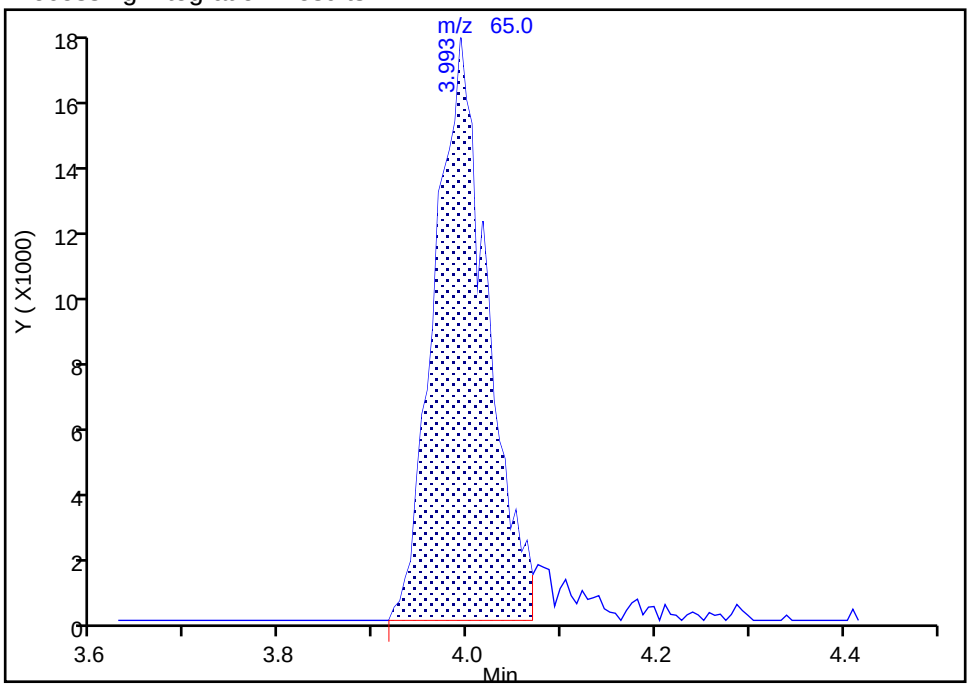
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030505.d
Injection Date: 05-Mar-2020 09:18:30 Instrument ID: CHHP10
Lims ID: IC 15
Client ID:
Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

* 1 TBA-d9 (IS), CAS: 25725-11-5

Signal: 1

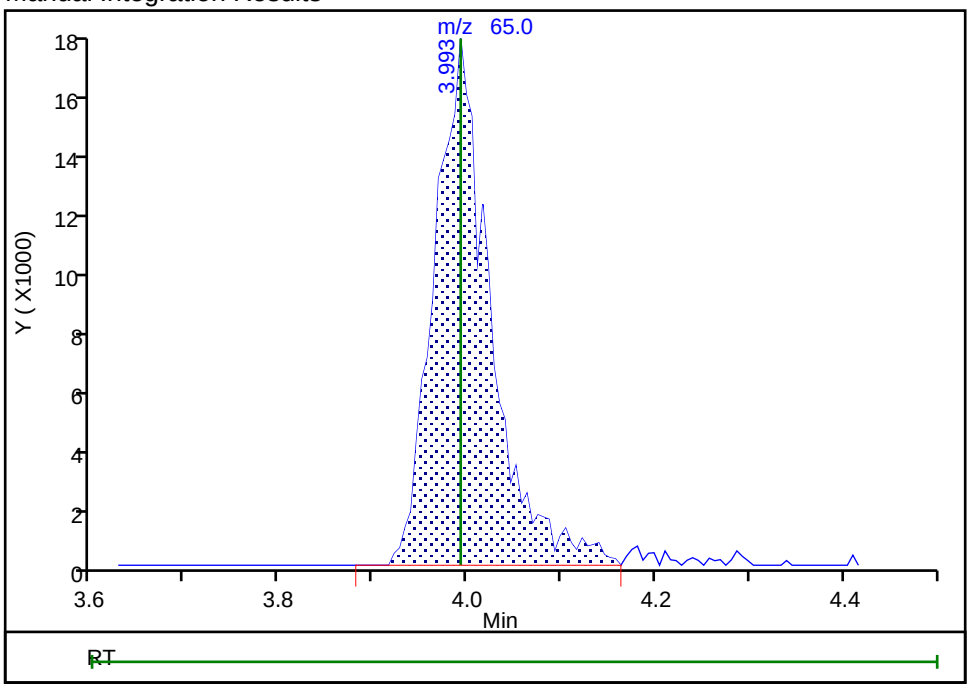
Processing Integration Results

RT: 3.99
Area: 69514
Amount: 1000.0000
Amount Units: ng



Manual Integration Results

RT: 3.99
Area: 73959
Amount: 1000.0000
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 09:49:41
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

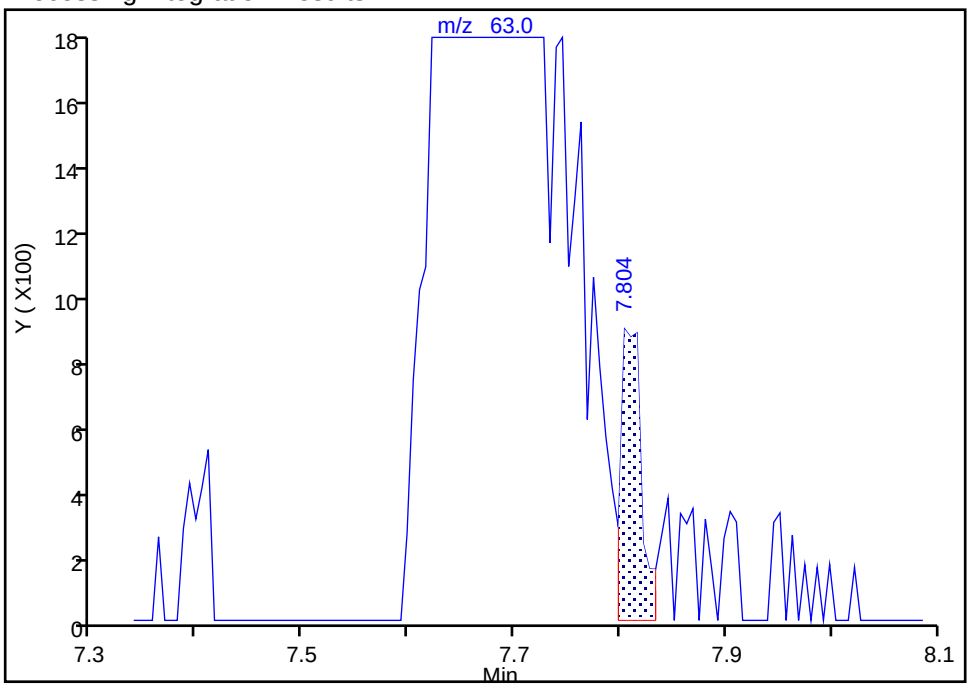
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030505.d
Injection Date: 05-Mar-2020 09:18:30 Instrument ID: CHHP10
Lims ID: IC 15
Client ID:
Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

64 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

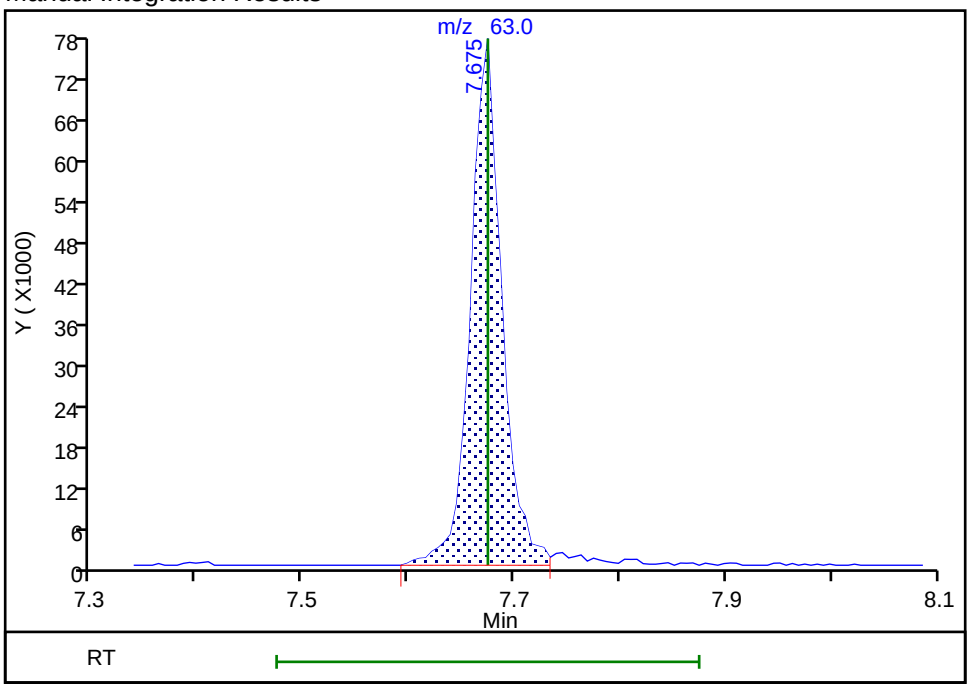
Processing Integration Results

RT: 7.80
Area: 1222
Amount: 0.799533
Amount Units: ng



Manual Integration Results

RT: 7.67
Area: 160211
Amount: 74.992625
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 09:50:07
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030506.d
Lims ID: IC 20
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 05-Mar-2020 09:46:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031047-006
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub20

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 05-Mar-2020 14:08:47 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0339

First Level Reviewer: journetp Date: 05-Mar-2020 10:12:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.993	3.993	0.000	0	88442	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	367716	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	86	78895	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	94	137369	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	94	238132	100.0	99.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	286057	100.0	104.5	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	1090155	100.0	105.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.316	11.322	-0.006	89	375276	100.0	105.2	
10 Dichlorodifluoromethane	85	1.510	1.516	-0.006	99	229231	100.0	97.3	
11 Chloromethane	50	1.699	1.716	-0.017	98	152329	100.0	95.0	a
13 Butadiene	39	1.793	1.799	-0.006	94	227259	100.0	103.1	
12 Vinyl chloride	62	1.810	1.822	-0.012	97	270387	100.0	106.4	a
14 Bromomethane	94	2.081	2.075	0.006	92	292760	100.0	102.6	
15 Chloroethane	64	2.175	2.175	0.000	99	218668	100.0	104.3	
17 Dichlorofluoromethane	67	2.457	2.457	0.000	96	644807	100.0	101.3	
16 Trichlorofluoromethane	101	2.451	2.457	-0.006	96	760679	100.0	103.8	
18 Ethyl ether	59	2.804	2.804	0.000	84	158660	100.0	116.0	
20 1,1-Dichloroethene	96	3.057	3.051	0.006	97	238212	100.0	101.6	
21 1,1,2-Trichloro-1,2,2-trif	101	3.122	3.116	0.006	92	273976	100.0	96.5	
22 Acetone	43	3.181	3.175	0.006	91	75667	200.0	180.1	
23 Iodomethane	142	3.234	3.234	0.000	98	391560	100.0	100.4	
24 Carbon disulfide	76	3.322	3.322	0.000	99	703406	100.0	104.2	a
26 3-Chloro-1-propene	76	3.587	3.575	0.012	78	146874	100.0	98.5	
28 Methyl acetate	43	3.634	3.622	0.012	96	103902	200.0	194.5	
29 Methylene Chloride	84	3.787	3.798	-0.011	82	223955	100.0	97.1	
32 2-Methyl-2-propanol	59	4.128	4.122	0.006	98	149997	1000.0	998.2	
31 Acrylonitrile	53	4.193	4.193	0.000	100	273711	1000.0	995.6	
30 trans-1,2-Dichloroethene	96	4.216	4.216	0.000	96	287971	100.0	99.5	
33 Methyl tert-butyl ether	73	4.251	4.257	-0.006	93	571806	100.0	101.3	
34 Hexane	57	4.651	4.645	0.006	91	319227	100.0	98.0	
36 1,1-Dichloroethane	63	4.875	4.869	0.006	96	431714	100.0	98.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.634	5.634	0.000	85	72742	100.0	103.5	
41 cis-1,2-Dichloroethene	96	5.651	5.651	0.000	81	275147	100.0	96.1	
43 2-Butanone (MEK)	43	5.687	5.681	0.006	97	86132	200.0	213.6	
46 Chlorobromomethane	128	5.940	5.945	-0.005	81	99923	100.0	94.7	
48 Tetrahydrofuran	42	5.975	5.975	0.000	86	43778	200.0	196.8	
49 Chloroform	83	6.087	6.092	-0.005	93	520307	100.0	98.4	
50 1,1,1-Trichloroethane	97	6.245	6.239	0.006	97	538308	100.0	98.8	
52 Cyclohexane	56	6.316	6.304	0.012	84	384660	100.0	99.6	
53 Carbon tetrachloride	117	6.416	6.416	0.000	96	530160	100.0	99.1	
54 1,1-Dichloropropene	75	6.434	6.434	0.000	96	444373	100.0	101.4	
55 Benzene	78	6.651	6.651	0.000	95	1094311	100.0	101.3	
51 Isobutyl alcohol	41	6.687	6.698	-0.011	87	80437	2500.0	2906.1	
56 1,2-Dichloroethane	62	6.734	6.734	0.000	98	321728	100.0	99.1	
59 n-Heptane	43	7.028	7.028	0.000	77	310188	100.0	98.0	
60 Trichloroethene	130	7.404	7.404	0.000	97	325760	100.0	99.8	
63 Methylcyclohexane	83	7.628	7.628	0.000	84	579938	100.0	98.3	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	89	205381	100.0	97.3	
65 Dibromomethane	93	7.769	7.769	0.000	93	110691	100.0	99.5	
67 1,4-Dioxane	88	7.775	7.775	0.000	36	23792	2000.0	1859.2	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	363855	100.0	98.6	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	94	344203	100.0	86.7	
72 4-Methyl-2-pentanone (MIBK	43	8.575	8.575	0.000	92	194839	200.0	203.1	
73 Toluene	91	8.739	8.739	0.000	98	1297941	100.0	101.7	
74 trans-1,3-Dichloropropene	75	9.004	9.004	0.000	92	320301	100.0	99.7	
75 Ethyl methacrylate	69	9.069	9.069	0.000	85	209044	100.0	98.7	
76 1,1,2-Trichloroethane	97	9.192	9.186	0.006	94	157192	100.0	98.1	
77 Tetrachloroethene	164	9.251	9.257	-0.006	97	297039	100.0	102.2	
78 1,3-Dichloropropane	76	9.345	9.351	-0.006	89	270471	100.0	101.3	
79 2-Hexanone	43	9.416	9.428	-0.012	94	123403	200.0	209.3	
81 Chlorodibromomethane	129	9.563	9.563	0.000	89	212604	100.0	100.5	
82 Ethylene Dibromide	107	9.675	9.669	0.006	99	135865	100.0	102.8	
83 Chlorobenzene	112	10.163	10.163	0.000	93	785070	100.0	101.6	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.251	0.006	92	298710	100.0	103.2	
85 Ethylbenzene	106	10.263	10.263	0.000	99	473836	100.0	104.3	
86 m-Xylene & p-Xylene	106	10.392	10.398	-0.006	0	605797	100.0	105.6	
88 o-Xylene	106	10.769	10.774	-0.005	98	562662	100.0	104.0	
89 Styrene	104	10.792	10.798	-0.006	92	898251	100.0	106.5	
90 Bromoform	173	10.980	10.980	0.000	96	129123	100.0	107.2	
91 Isopropylbenzene	105	11.139	11.145	-0.006	96	1682492	100.0	105.2	
94 Bromobenzene	156	11.451	11.451	0.000	93	314753	100.0	99.0	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	97	176774	100.0	103.9	
96 trans-1,4-Dichloro-2-buten	53	11.498	11.504	-0.006	70	42720	100.0	101.8	
95 1,2,3-Trichloropropane	110	11.516	11.510	0.006	85	60953	100.0	97.3	
97 N-Propylbenzene	120	11.563	11.563	0.000	99	448250	100.0	103.2	
98 2-Chlorotoluene	126	11.645	11.639	0.006	95	350215	100.0	101.8	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	93	1417761	100.0	102.8	
100 4-Chlorotoluene	126	11.769	11.769	0.000	98	362707	100.0	108.5	
101 tert-Butylbenzene	119	12.051	12.051	0.000	92	1274829	100.0	105.4	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	98	1378422	100.0	102.9	
104 sec-Butylbenzene	105	12.274	12.274	0.000	95	1860720	100.0	104.1	
105 1,3-Dichlorobenzene	146	12.392	12.398	-0.006	96	654446	100.0	105.5	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	1606949	100.0	105.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	94	662601	100.0	100.8	
110 n-Butylbenzene	91	12.845	12.845	0.000	98	1345966	100.0	105.3	
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	96	566072	100.0	103.1	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	85	28094	100.0	91.8	
114 1,2,4-Trichlorobenzene	180	14.457	14.462	-0.005	92	292813	100.0	109.4	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	95	269650	100.0	106.7	
116 Naphthalene	128	14.721	14.721	0.000	97	389718	100.0	109.5	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	95	210522	100.0	107.4	
S 130 1,2-Dichloroethene, Total	96				0		200.0	195.5	
S 129 Xylenes, Total	106				0		200.0	209.7	
S 131 1,3-Dichloropropene, Total	1				0		200.0	186.3	
S 145 Total BTEX	1				0		500.0	516.9	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

voaWKetmix1st_00024	Amount Added:	4.00	Units: uL
VOA8260SURR_00104	Amount Added:	4.00	Units: uL
VOA8260INT_00104	Amount Added:	2.00	Units: uL
VOA8260VOAPRI_00394	Amount Added:	4.00	Units: uL

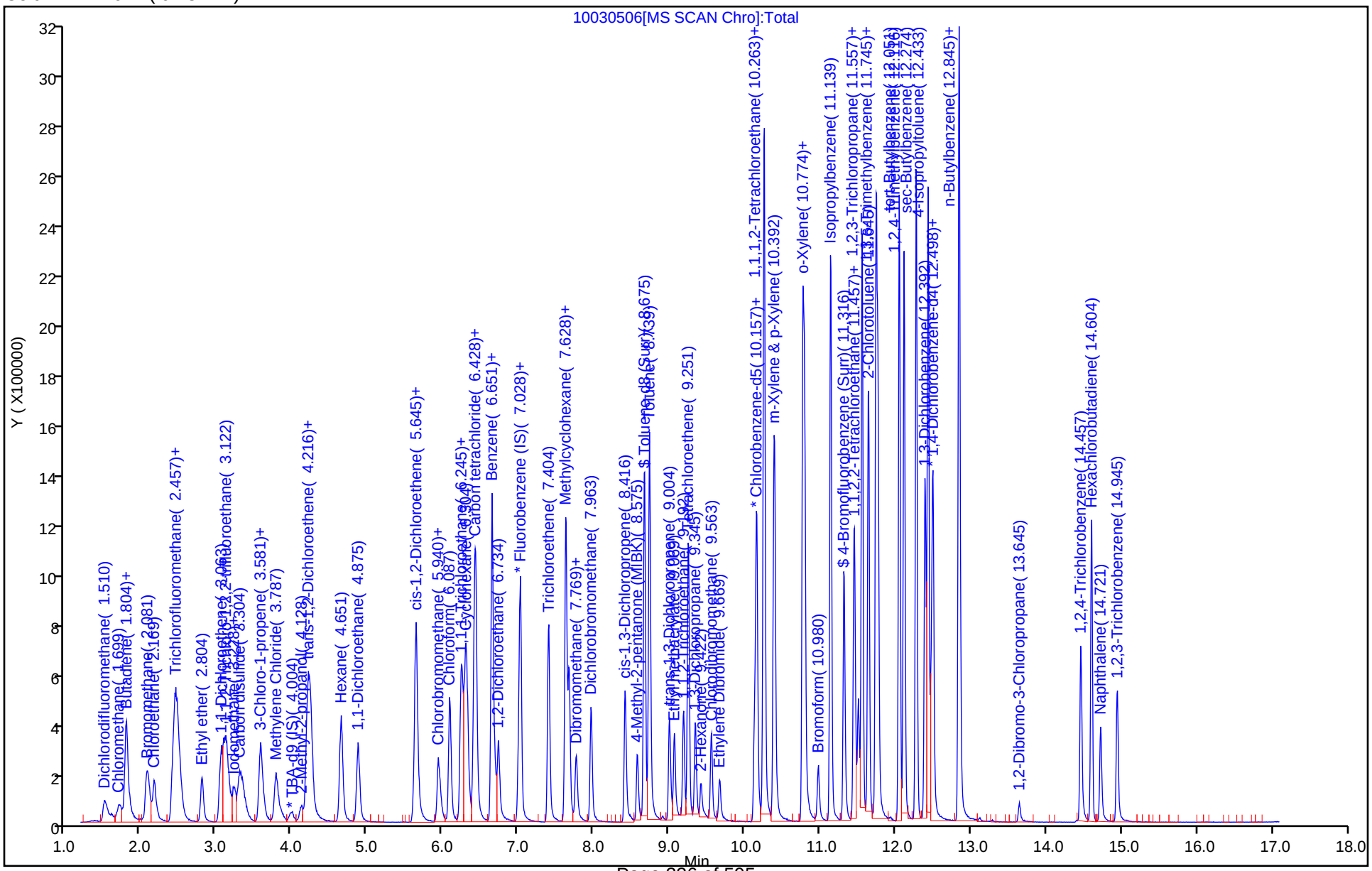
Report Date: 05-Mar-2020 14:08:48 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030506.d

Injection Date:	05-Mar-2020 09:46:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	IC 20			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

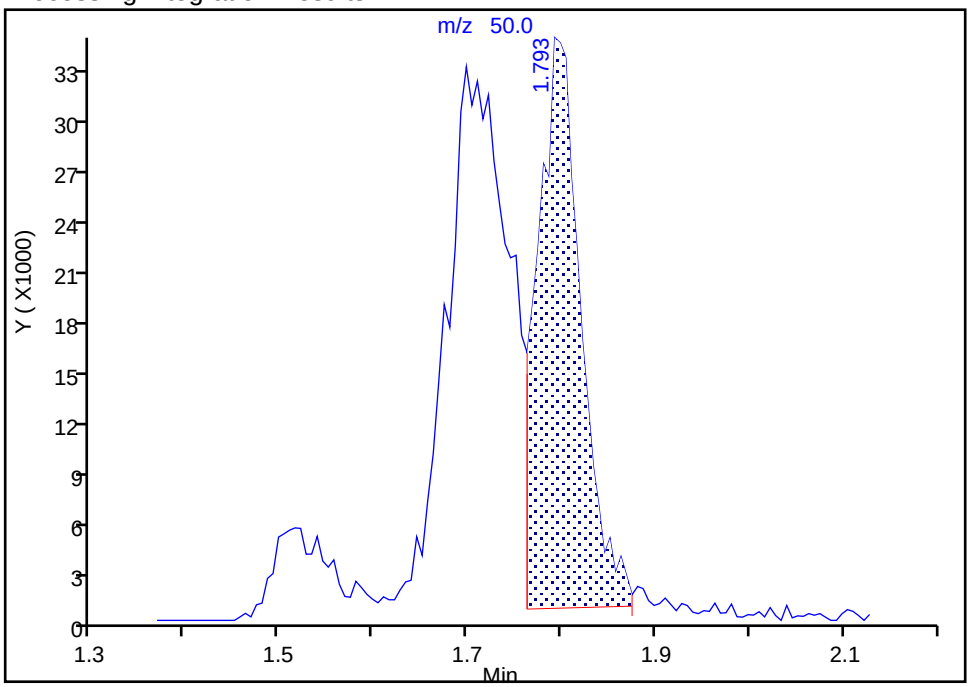
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030506.d
Injection Date: 05-Mar-2020 09:46:30 Instrument ID: CHHP10
Lims ID: IC 20
Client ID:
Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 1

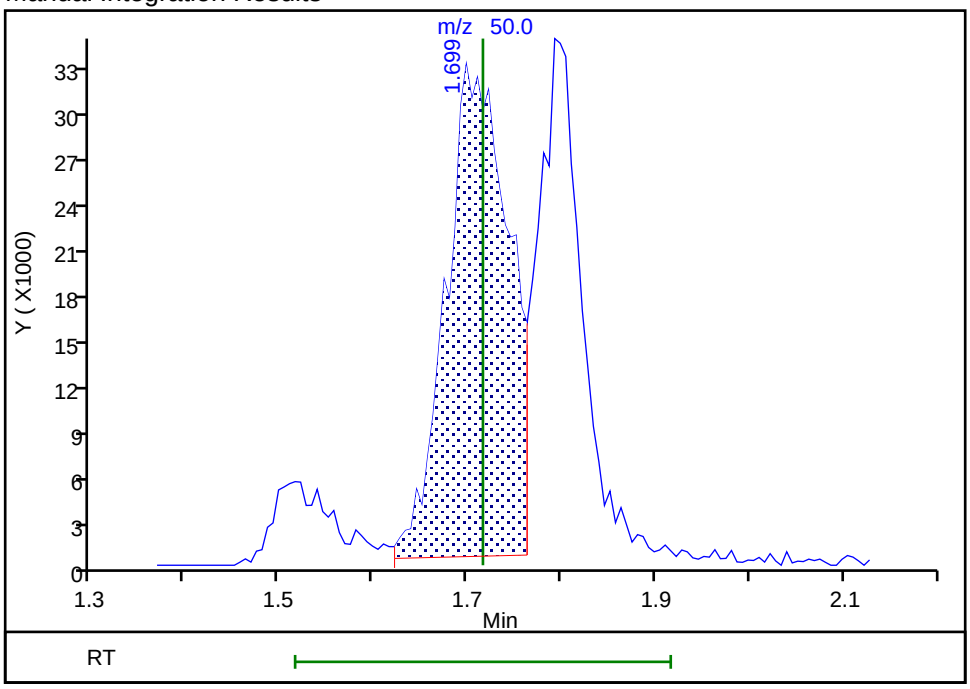
Processing Integration Results

RT: 1.79
Area: 110417
Amount: 71.263309
Amount Units: ng



Manual Integration Results

RT: 1.70
Area: 152329
Amount: 94.956722
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 10:11:32
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

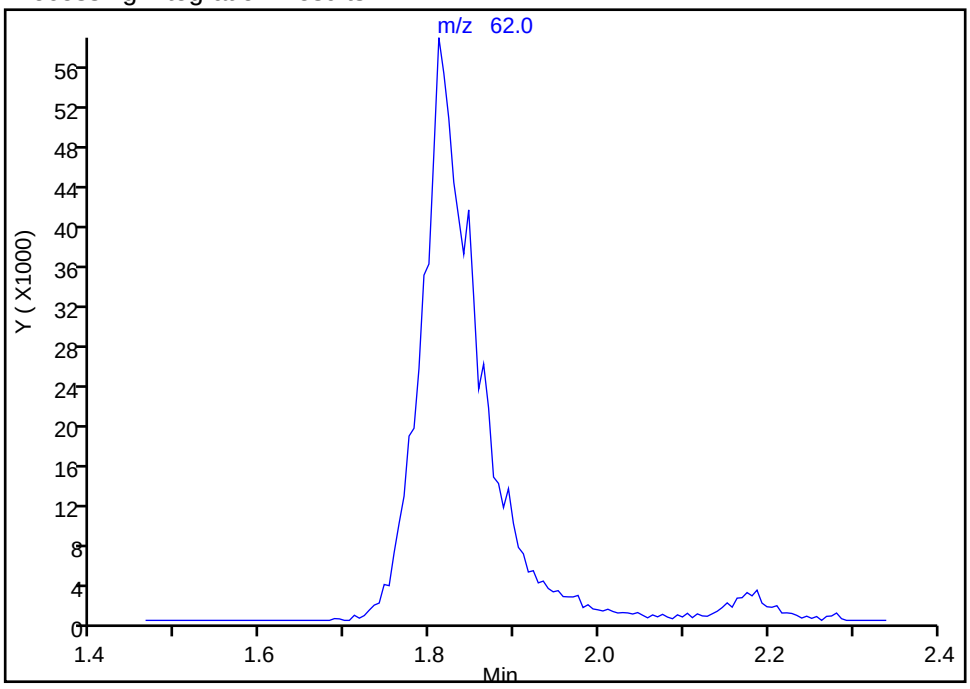
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030506.d
Injection Date: 05-Mar-2020 09:46:30 Instrument ID: CHHP10
Lims ID: IC 20
Client ID:
Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

12 Vinyl chloride, CAS: 75-01-4

Signal: 1

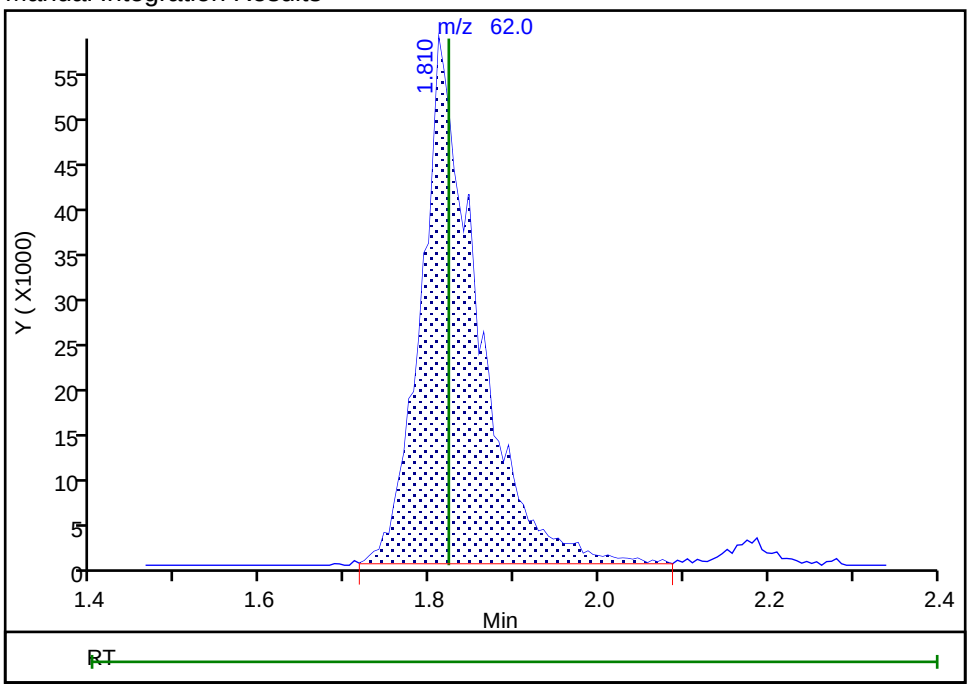
Not Detected
Expected RT: 1.82

Processing Integration Results



Manual Integration Results

RT: 1.81
Area: 270387
Amount: 106.3577
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 10:11:40
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

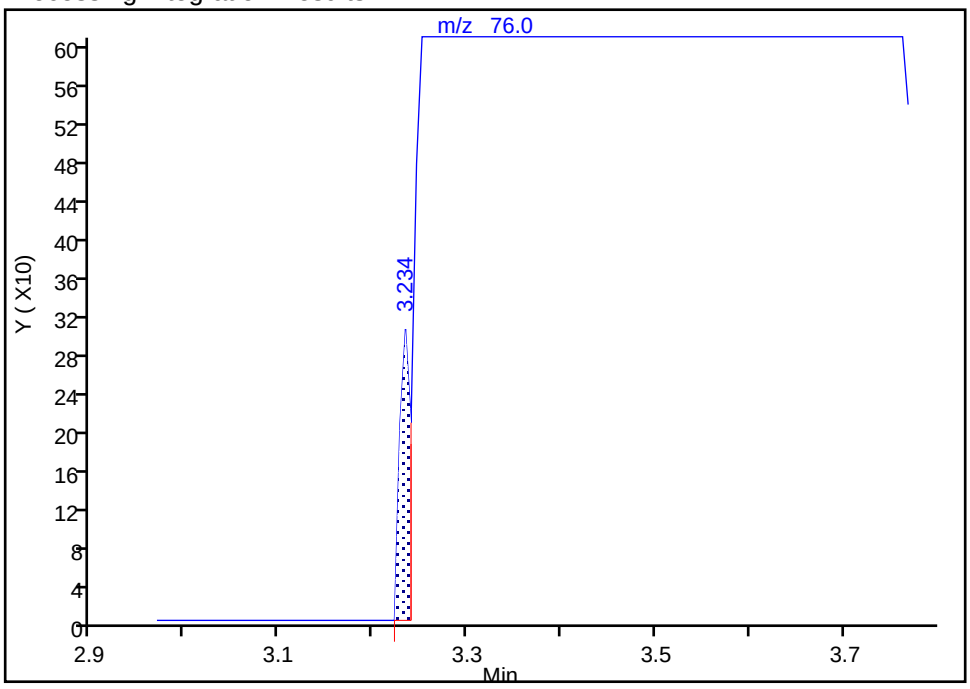
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030506.d
Injection Date: 05-Mar-2020 09:46:30 Instrument ID: CHHP10
Lims ID: IC 20
Client ID:
Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

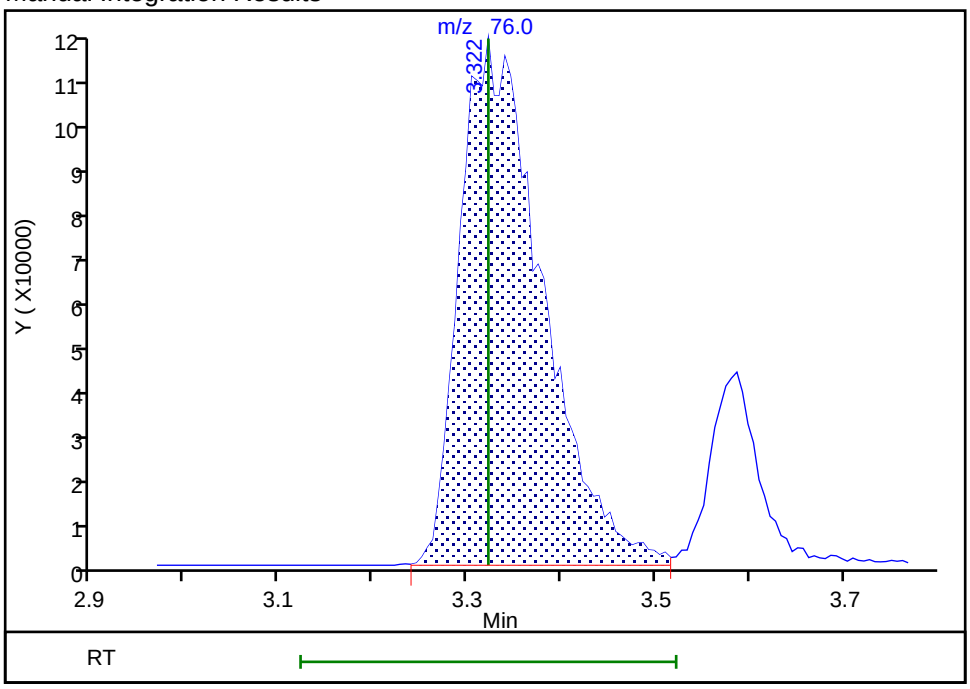
Processing Integration Results

RT: 3.23
Area: 253
Amount: 0.048540
Amount Units: ng



Manual Integration Results

RT: 3.32
Area: 703406
Amount: 104.2345
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 10:11:50
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

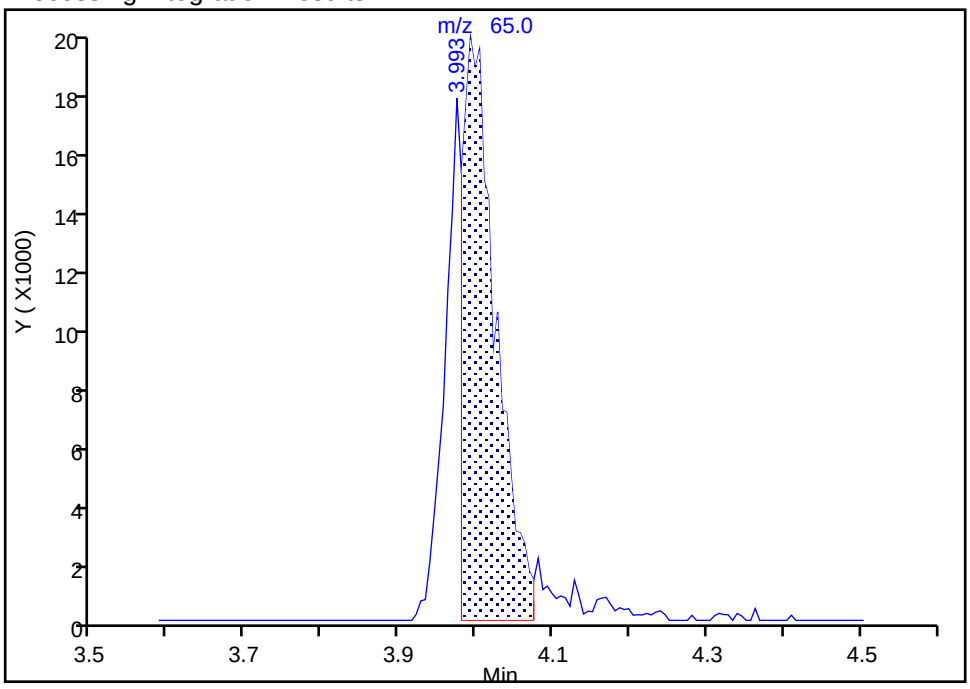
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030506.d
Injection Date: 05-Mar-2020 09:46:30 Instrument ID: CHHP10
Lims ID: IC 20
Client ID:
Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

* 1 TBA-d9 (IS), CAS: 25725-11-5

Signal: 1

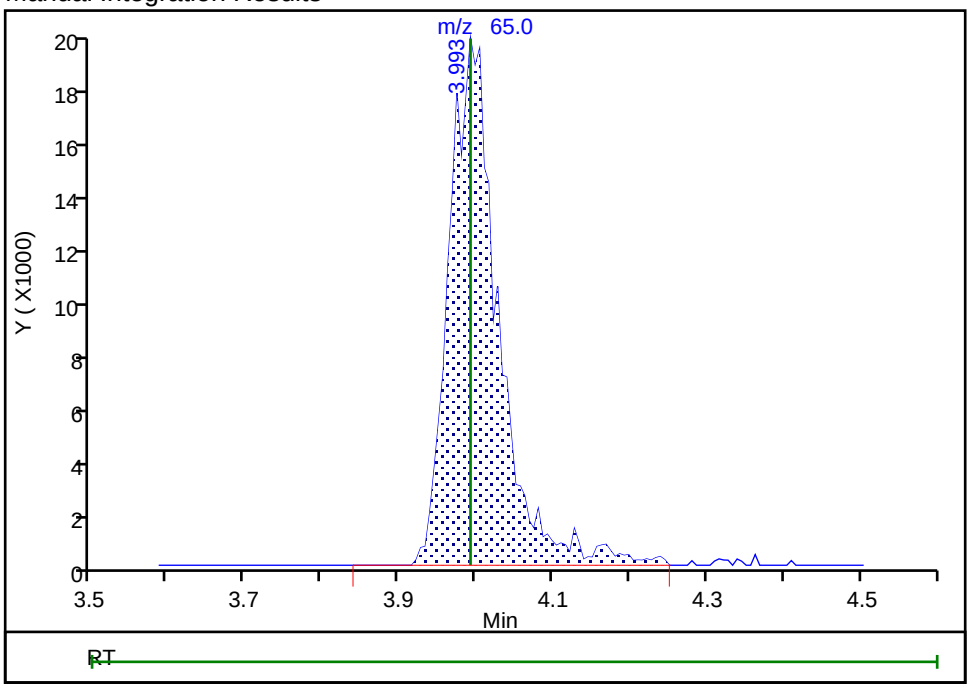
Processing Integration Results

RT: 3.99
Area: 60136
Amount: 1000.0000
Amount Units: ng



Manual Integration Results

RT: 3.99
Area: 88442
Amount: 1000.0000
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 10:11:22
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030507.d
Lims ID: IC 35
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 05-Mar-2020 10:16:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031047-007
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub20

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 05-Mar-2020 14:08:52 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0339

First Level Reviewer: journetp Date: 05-Mar-2020 10:57:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.975	3.993	-0.018	0	97746	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	383377	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	85	91008	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	95	136675	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.275	0.006	93	446484	175.0	179.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.645	6.651	-0.006	0	536102	175.0	187.9	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	-0.001	93	2018165	175.0	169.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.316	11.322	-0.006	89	681247	175.0	165.5	
10 Dichlorodifluoromethane	85	1.516	1.516	0.000	99	390020	175.0	158.7	
11 Chloromethane	50	1.710	1.716	-0.006	98	270038	175.0	161.5	
13 Butadiene	39	1.804	1.799	0.005	93	391650	175.0	170.5	
12 Vinyl chloride	62	1.828	1.822	0.006	98	451214	175.0	170.2	
14 Bromomethane	94	2.075	2.075	0.000	91	493925	175.0	166.0	
15 Chloroethane	64	2.187	2.175	0.012	100	331751	175.0	151.7	
17 Dichlorofluoromethane	67	2.445	2.457	-0.012	97	963051	175.0	145.1	
16 Trichlorofluoromethane	101	2.475	2.457	0.018	97	1128189	175.0	147.6	
18 Ethyl ether	59	2.804	2.804	0.000	86	240711	175.0	168.8	
20 1,1-Dichloroethene	96	3.057	3.051	0.006	96	422291	175.0	172.7	
21 1,1,2-Trichloro-1,2,2-trif	101	3.128	3.116	0.012	91	506345	175.0	171.1	
22 Acetone	43	3.169	3.175	-0.006	97	167342	350.0	382.1	
23 Iodomethane	142	3.234	3.234	0.000	99	709876	175.0	174.6	
24 Carbon disulfide	76	3.322	3.322	0.000	99	1245249	175.0	177.0	
26 3-Chloro-1-propene	76	3.569	3.575	-0.006	82	266587	175.0	171.5	
28 Methyl acetate	43	3.616	3.622	-0.006	95	229853	350.0	412.7	
29 Methylene Chloride	84	3.787	3.798	-0.011	82	409427	175.0	174.1	
32 2-Methyl-2-propanol	59	4.110	4.122	-0.012	98	304017	1750.0	1830.5	
31 Acrylonitrile	53	4.187	4.193	-0.006	100	603974	1750.0	2107.2	
30 trans-1,2-Dichloroethene	96	4.216	4.216	0.000	95	512694	175.0	169.8	
33 Methyl tert-butyl ether	73	4.251	4.257	-0.006	94	1086750	175.0	184.6	
34 Hexane	57	4.645	4.645	0.000	91	616655	175.0	181.5	
36 1,1-Dichloroethane	63	4.875	4.869	0.006	96	816574	175.0	178.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.645	5.634	0.011	87	130655	175.0	178.4	
41 cis-1,2-Dichloroethene	96	5.645	5.651	-0.006	81	541371	175.0	181.3	
43 2-Butanone (MEK)	43	5.675	5.681	-0.006	97	171159	350.0	407.0	
46 Chlorobromomethane	128	5.934	5.945	-0.011	82	195923	175.0	178.0	
48 Tetrahydrofuran	42	5.969	5.975	-0.006	74	93461	350.0	403.0	
49 Chloroform	83	6.092	6.092	0.000	93	916474	175.0	168.3	
50 1,1,1-Trichloroethane	97	6.239	6.239	0.000	97	988723	175.0	174.0	
52 Cyclohexane	56	6.304	6.304	0.000	83	686703	175.0	170.5	
53 Carbon tetrachloride	117	6.416	6.416	0.000	96	996008	175.0	178.5	
54 1,1-Dichloropropene	75	6.433	6.434	-0.001	96	831979	175.0	182.1	
55 Benzene	78	6.657	6.651	0.006	96	2098843	175.0	186.3	
51 Isobutyl alcohol	41	6.692	6.698	-0.006	89	175959	4375.0	6097.6	
56 1,2-Dichloroethane	62	6.733	6.734	-0.001	98	631737	175.0	186.7	
59 n-Heptane	43	7.033	7.028	0.005	81	601327	175.0	182.2	
60 Trichloroethene	130	7.398	7.404	-0.006	97	605770	175.0	177.9	
63 Methylcyclohexane	83	7.628	7.628	0.000	85	1083149	175.0	176.1	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	85	402035	175.0	182.7	
65 Dibromomethane	93	7.763	7.769	-0.006	93	225676	175.0	194.6	
67 1,4-Dioxane	88	7.775	7.775	0.000	39	48730	3500.0	3614.3	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	720328	175.0	187.3	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	94	762281	175.0	180.0	
72 4-Methyl-2-pentanone (MIBK	43	8.575	8.575	-0.001	92	411914	350.0	365.7	
73 Toluene	91	8.739	8.739	0.000	98	2444430	175.0	166.0	
74 trans-1,3-Dichloropropene	75	9.004	9.004	0.000	93	669882	175.0	177.8	
75 Ethyl methacrylate	69	9.069	9.069	0.000	84	455340	175.0	183.4	
76 1,1,2-Trichloroethane	97	9.192	9.186	0.006	92	341571	175.0	184.7	
77 Tetrachloroethene	164	9.251	9.257	-0.006	97	559015	175.0	166.7	
78 1,3-Dichloropropane	76	9.345	9.351	-0.006	90	560857	175.0	182.0	
79 2-Hexanone	43	9.416	9.428	-0.012	94	303099	350.0	432.2	
81 Chlorodibromomethane	129	9.563	9.563	0.000	89	452167	175.0	185.3	
82 Ethylene Dibromide	107	9.669	9.669	0.000	97	310363	175.0	203.6	
83 Chlorobenzene	112	10.163	10.163	0.000	94	1494167	175.0	167.6	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.251	0.006	90	565760	175.0	169.5	
85 Ethylbenzene	106	10.263	10.263	0.000	98	901684	175.0	172.0	
86 m-Xylene & p-Xylene	106	10.392	10.398	-0.006	0	1090260	175.0	164.8	
88 o-Xylene	106	10.774	10.774	0.000	97	1046831	175.0	167.8	
89 Styrene	104	10.798	10.798	0.000	93	1675931	175.0	172.3	
90 Bromoform	173	10.974	10.980	-0.006	96	270875	175.0	194.9	
91 Isopropylbenzene	105	11.139	11.145	-0.006	96	2977570	175.0	161.4	
94 Bromobenzene	156	11.451	11.451	0.000	91	602051	175.0	190.2	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	97	345684	175.0	176.2	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	82	91749	175.0	174.8	
95 1,2,3-Trichloropropane	110	11.515	11.510	0.005	85	123645	175.0	198.4	
97 N-Propylbenzene	120	11.563	11.563	0.000	99	759496	175.0	175.7	
98 2-Chlorotoluene	126	11.645	11.639	0.006	95	615951	175.0	179.9	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	93	2350080	175.0	171.3	
100 4-Chlorotoluene	126	11.768	11.769	-0.001	98	621550	175.0	186.9	
101 tert-Butylbenzene	119	12.057	12.051	0.006	92	1998235	175.0	166.0	
103 1,2,4-Trimethylbenzene	105	12.115	12.116	-0.001	98	2273618	175.0	170.5	
104 sec-Butylbenzene	105	12.274	12.274	0.000	95	2848148	175.0	160.1	
105 1,3-Dichlorobenzene	146	12.392	12.398	-0.006	96	1105975	175.0	179.3	
106 4-Isopropyltoluene	119	12.439	12.433	0.006	97	2445444	175.0	161.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	94	1111796	175.0	170.0	
110 n-Butylbenzene	91	12.845	12.845	0.000	97	1981570	175.0	155.8	
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	96	948720	175.0	173.6	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	86	54062	175.0	172.7	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	92	394038	175.0	147.9	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	95	325588	175.0	170.5	
116 Naphthalene	128	14.721	14.721	0.000	97	592950	175.0	167.5	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	94	275900	175.0	141.4	
S 130 1,2-Dichloroethene, Total	96				0		350.0	351.2	
S 129 Xylenes, Total	106				0		350.0	332.6	
S 131 1,3-Dichloropropene, Total	1				0		350.0	357.8	
S 145 Total BTEX	1				0		875.0	857.0	

Reagents:

VOA8260INT_00104	Amount Added:	2.00	Units: uL
VOA8260SURR_00104	Amount Added:	7.00	Units: uL
voaWKetmix1st_00024	Amount Added:	7.00	Units: uL
VOA8260VOAPRI_00394	Amount Added:	7.00	Units: uL

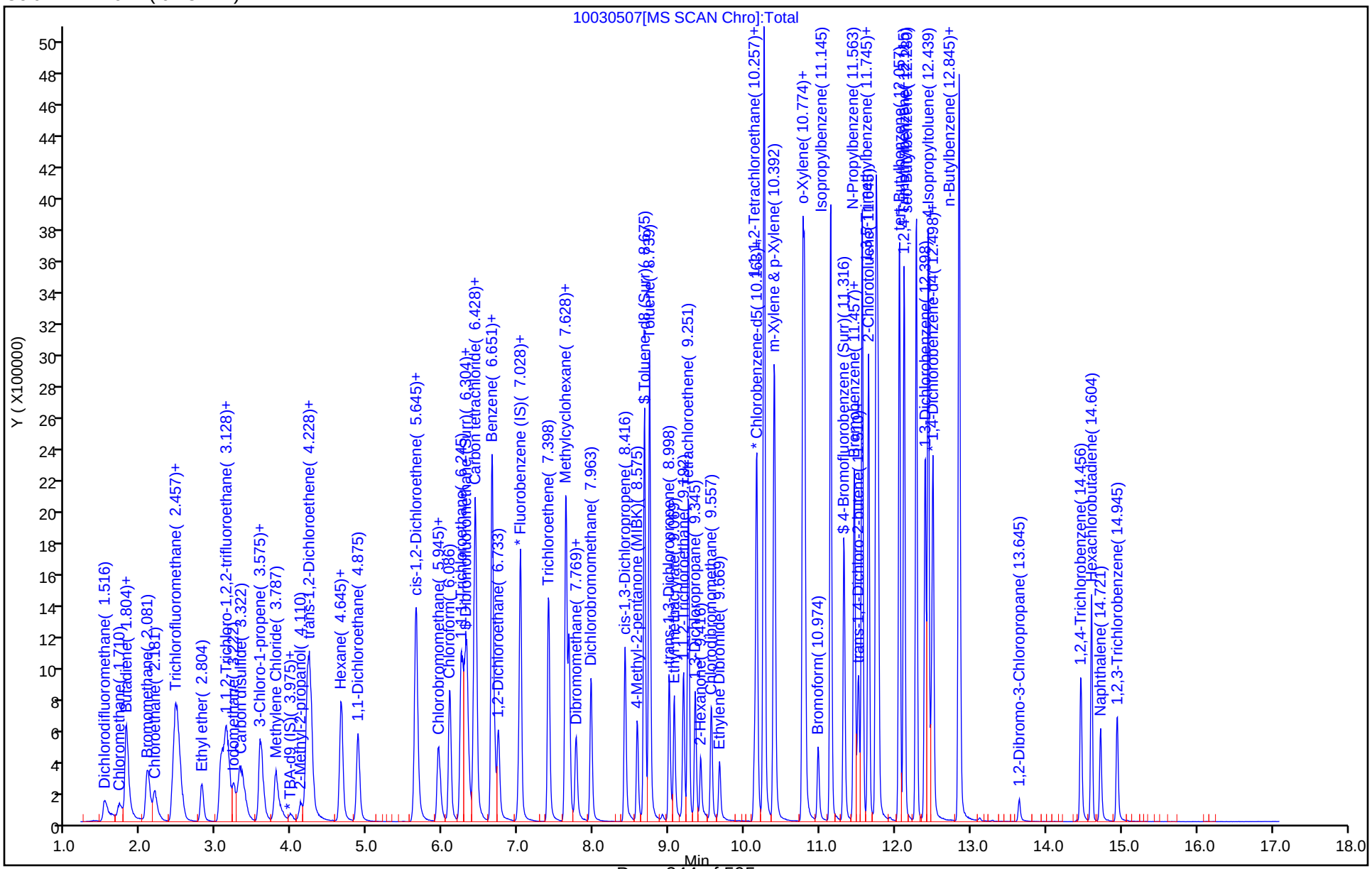
Report Date: 05-Mar-2020 14:08:53 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030507.d

Injection Date:	05-Mar-2020 10:16:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	IC 35			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030508.d
Lims ID: IC 40
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 05-Mar-2020 10:44:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031047-008
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub20

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 09-Mar-2020 06:38:45 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0318

First Level Reviewer: journetp Date: 09-Mar-2020 06:38:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.998	3.999	-0.001	0	89262	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	355947	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.127	10.133	-0.006	86	81527	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	95	128414	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.269	6.269	0.000	90	505146	200.0	219.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.645	6.645	0.000	0	582622	200.0	219.9	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	94	2225866	200.0	208.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.321	11.322	-0.001	90	761497	200.0	206.6	
10 Dichlorodifluoromethane	85	1.510	1.510	0.000	98	467367	200.0	204.9	
11 Chloromethane	50	1.704	1.705	-0.001	97	316310	200.0	203.7	
13 Butadiene	39	1.799	1.805	-0.006	95	442636	200.0	207.5	
12 Vinyl chloride	62	1.822	1.816	0.006	98	483459	200.0	196.5	
14 Bromomethane	94	2.075	2.081	-0.006	92	515459	200.0	186.6	
15 Chloroethane	64	2.169	2.175	-0.006	99	417861	200.0	205.8	
17 Dichlorofluoromethane	67	2.457	2.457	0.000	95	1048789	200.0	170.2	M
16 Trichlorofluoromethane	101	2.469	2.475	-0.006	97	1245030	200.0	175.4	
18 Ethyl ether	59	2.799	2.805	-0.007	84	238721	200.0	180.3	M
20 1,1-Dichloroethene	96	3.063	3.046	0.017	98	490514	200.0	216.0	
21 1,1,2-Trichloro-1,2,2-trif	101	3.122	3.134	-0.012	92	565349	200.0	205.8	
22 Acetone	43	3.175	3.175	0.000	90	170473	400.0	419.3	
23 Iodomethane	142	3.228	3.228	0.000	98	784084	200.0	207.7	
24 Carbon disulfide	76	3.310	3.316	-0.006	99	1417265	200.0	217.0	
26 3-Chloro-1-propene	76	3.587	3.581	0.006	79	321965	200.0	223.1	
28 Methyl acetate	43	3.622	3.622	0.000	95	249142	400.0	481.8	
29 Methylene Chloride	84	3.787	3.781	0.006	81	465888	200.0	214.5	
32 2-Methyl-2-propanol	59	4.134	4.122	0.012	99	323956	2000.0	2136.0	
31 Acrylonitrile	53	4.204	4.199	0.005	100	634167	2000.0	2383.1	
30 trans-1,2-Dichloroethene	96	4.216	4.210	0.006	99	570100	200.0	203.4	
33 Methyl tert-butyl ether	73	4.257	4.246	0.011	94	1192840	200.0	218.3	
34 Hexane	57	4.645	4.640	0.005	91	660097	200.0	209.3	
36 1,1-Dichloroethane	63	4.869	4.869	0.000	96	884818	200.0	208.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.634	5.634	0.000	86	136975	200.0	201.4	
41 cis-1,2-Dichloroethene	96	5.645	5.646	-0.001	83	585925	200.0	211.4	
43 2-Butanone (MEK)	43	5.681	5.681	0.000	100	185279	400.0	474.6	
46 Chlorobromomethane	128	5.939	5.940	-0.001	82	221239	200.0	216.5	
48 Tetrahydrofuran	42	5.963	5.969	-0.006	93	101489	400.0	471.3	
49 Chloroform	83	6.087	6.087	0.000	93	1085861	200.0	215.5	
50 1,1,1-Trichloroethane	97	6.239	6.240	-0.001	97	1102356	200.0	209.0	
52 Cyclohexane	56	6.310	6.310	0.000	84	767937	200.0	205.3	
53 Carbon tetrachloride	117	6.416	6.410	0.006	96	1075112	200.0	207.5	
54 1,1-Dichloropropene	75	6.434	6.440	-0.006	96	904777	200.0	213.2	
55 Benzene	78	6.651	6.651	0.000	96	2205328	200.0	210.9	
51 Isobutyl alcohol	41	6.692	6.693	0.000	88	183232	5000.0	6838.9	
56 1,2-Dichloroethane	62	6.739	6.734	0.005	98	688930	200.0	219.3	
59 n-Heptane	43	7.028	7.028	0.000	77	616657	200.0	201.2	
60 Trichloroethene	130	7.398	7.398	0.000	97	685578	200.0	216.9	
63 Methylcyclohexane	83	7.628	7.628	0.000	85	1177656	200.0	206.2	
64 1,2-Dichloropropane	63	7.675	7.669	0.006	89	440965	200.0	215.8	
65 Dibromomethane	93	7.763	7.763	0.000	93	253155	200.0	235.1	
67 1,4-Dioxane	88	7.775	7.781	-0.006	38	50515	4000.0	4030.8	
68 Dichlorobromomethane	83	7.963	7.963	0.000	98	798581	200.0	223.6	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	94	826994	200.0	209.7	
72 4-Methyl-2-pentanone (MIBK	43	8.575	8.581	-0.006	93	421782	400.0	416.8	
73 Toluene	91	8.739	8.739	0.000	98	2667341	200.0	202.2	
74 trans-1,3-Dichloropropene	75	8.998	9.004	-0.006	94	705905	200.0	208.5	
75 Ethyl methacrylate	69	9.069	9.069	0.000	85	447180	200.0	200.8	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	92	354284	200.0	213.9	
77 Tetrachloroethene	164	9.257	9.257	0.000	97	629089	200.0	209.4	
78 1,3-Dichloropropane	76	9.345	9.351	-0.006	90	603123	200.0	218.5	
79 2-Hexanone	43	9.422	9.428	-0.006	93	312857	400.0	496.2	
81 Chlorodibromomethane	129	9.557	9.563	-0.006	90	484168	200.0	221.4	
82 Ethylene Dibromide	107	9.669	9.675	-0.006	98	328937	200.0	240.9	
83 Chlorobenzene	112	10.157	10.157	0.000	93	1600612	200.0	200.4	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.251	0.006	92	618477	200.0	206.8	
85 Ethylbenzene	106	10.257	10.263	-0.006	99	919353	200.0	195.8	
86 m-Xylene & p-Xylene	106	10.392	10.398	-0.006	0	1166335	200.0	196.8	
88 o-Xylene	106	10.769	10.769	0.000	97	1114876	200.0	199.5	
89 Styrene	104	10.798	10.798	0.000	94	1786127	200.0	205.0	
90 Bromoform	173	10.974	10.975	-0.001	97	291699	200.0	234.3	
91 Isopropylbenzene	105	11.145	11.145	0.000	96	3151783	200.0	190.7	
94 Bromobenzene	156	11.451	11.457	-0.006	92	658803	200.0	221.6	
93 1,1,2,2-Tetrachloroethane	83	11.457	11.463	-0.006	97	370313	200.0	210.7	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	86	95030	200.0	186.7	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	85	122702	200.0	209.5	
97 N-Propylbenzene	120	11.563	11.557	0.006	99	837040	200.0	206.1	
98 2-Chlorotoluene	126	11.645	11.639	0.006	94	666107	200.0	207.1	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	93	2585135	200.0	200.6	
100 4-Chlorotoluene	126	11.769	11.769	-0.001	99	681871	200.0	218.2	
101 tert-Butylbenzene	119	12.051	12.051	0.000	92	2252126	200.0	199.1	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	97	2537177	200.0	202.5	
104 sec-Butylbenzene	105	12.280	12.274	0.006	95	3285127	200.0	196.6	
105 1,3-Dichlorobenzene	146	12.398	12.398	0.000	97	1280655	200.0	220.9	
106 4-Isopropyltoluene	119	12.439	12.433	0.006	96	2754893	200.0	193.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	94	1264708	200.0	205.8	
110 n-Butylbenzene	91	12.845	12.839	0.006	97	2332611	200.0	195.2	
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	97	1097984	200.0	213.9	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.651	-0.006	88	62306	200.0	210.6	
114 1,2,4-Trichlorobenzene	180	14.462	14.468	-0.006	94	491109	200.0	196.2	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	95	389614	200.0	NQ	
116 Naphthalene	128	14.721	14.727	-0.006	97	766897	200.0	230.5	
117 1,2,3-Trichlorobenzene	180	14.939	14.945	-0.006	94	360664	200.0	196.8	
S 130 1,2-Dichloroethene, Total	96				0		400.0	414.8	
S 129 Xylenes, Total	106				0		400.0	396.3	
S 131 1,3-Dichloropropene, Total	1				0		400.0	418.2	
S 145 Total BTEX	1				0		1000.0	1005.2	

QC Flag Legend

Processing Flags
NQ - Not Quantifiable
Review Flags
M - Manually Integrated

Reagents:

VOA8260INT_00104	Amount Added:	2.00	Units: uL
VOA8260SURR_00104	Amount Added:	8.00	Units: uL
voaWKetmix1st_00024	Amount Added:	8.00	Units: uL
VOA8260VOAPRI_00394	Amount Added:	8.00	Units: uL

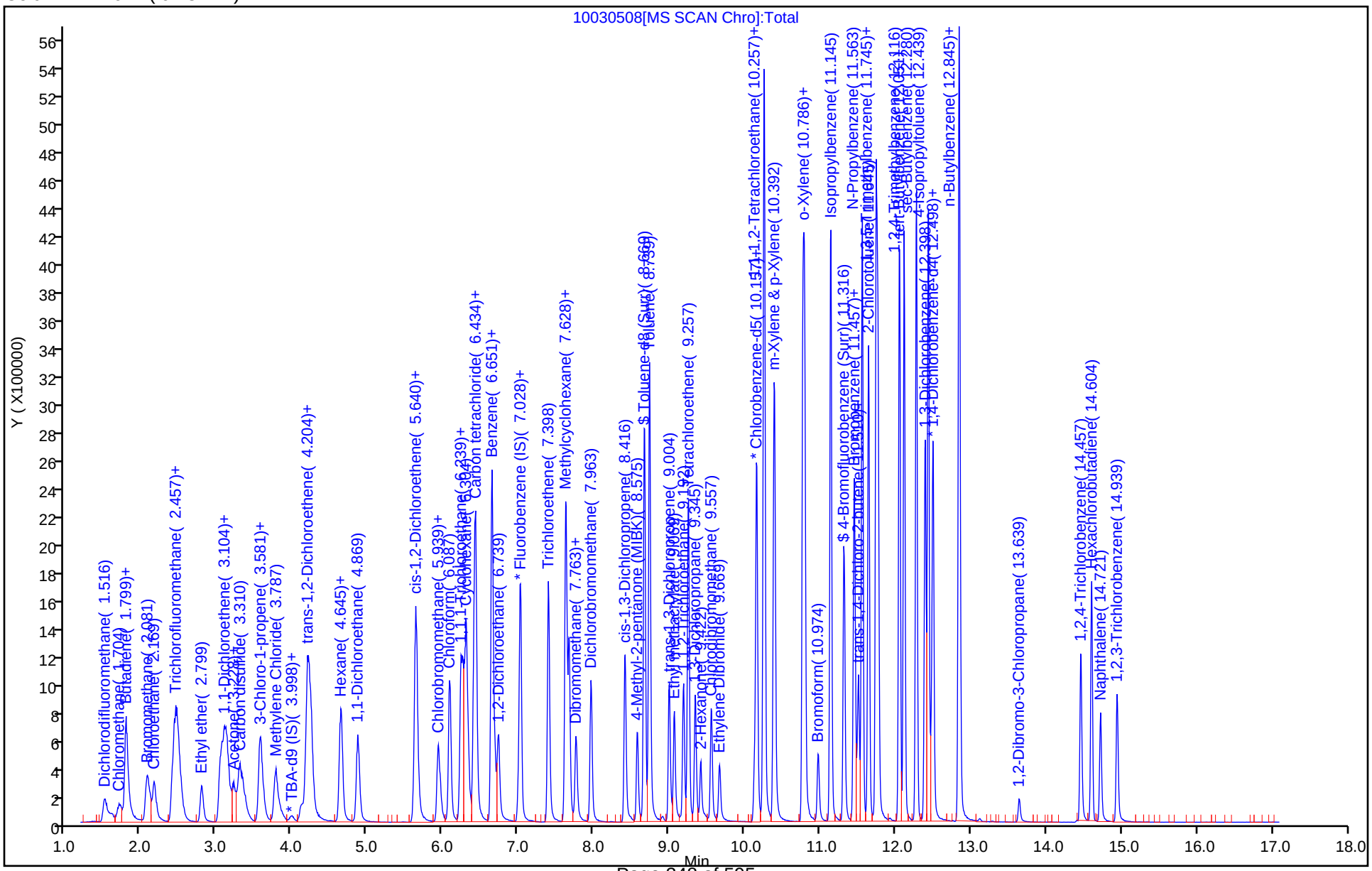
Report Date: 09-Mar-2020 06:38:46 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030508.d

Injection Date:	05-Mar-2020 10:44:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	IC 40			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

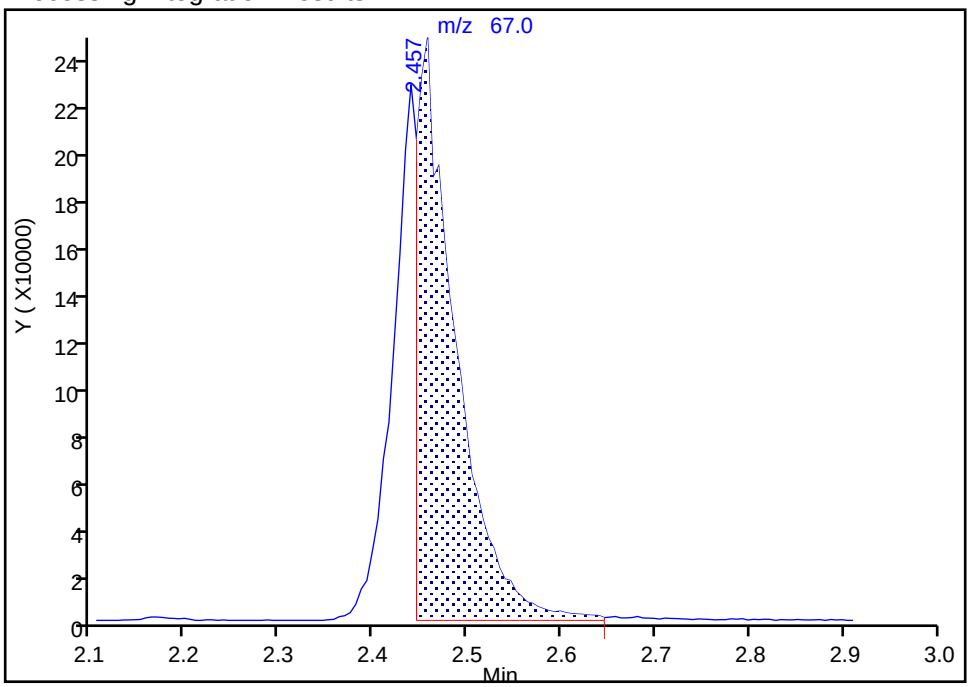
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030508.d
Injection Date: 05-Mar-2020 10:44:30 Instrument ID: CHHP10
Lims ID: IC 40
Client ID:
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

17 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

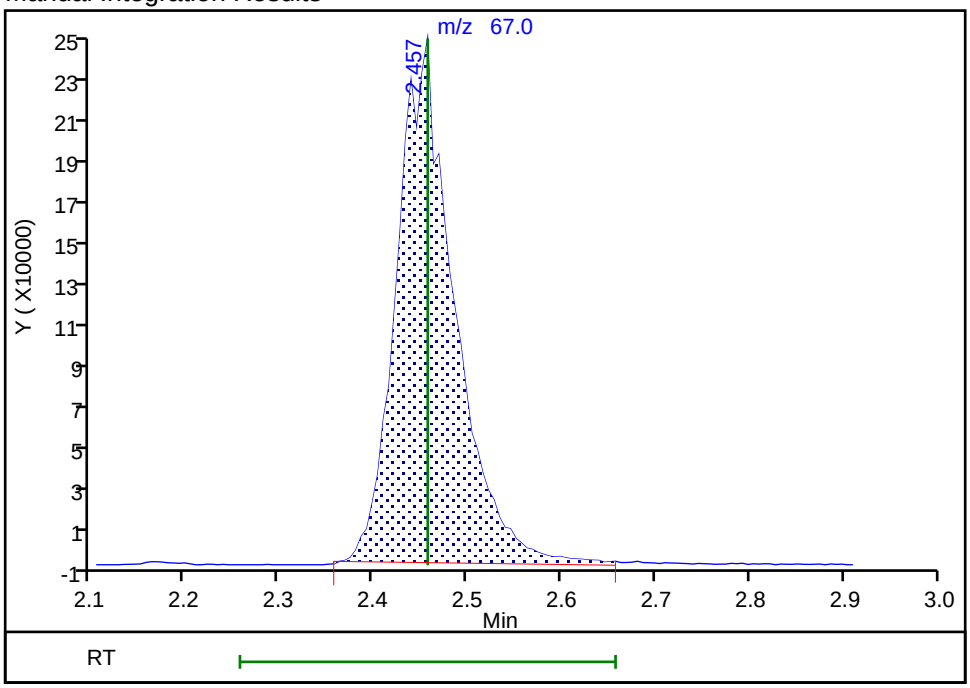
Processing Integration Results

RT: 2.46
Area: 716597
Amount: 116.3181
Amount Units: ng



Manual Integration Results

RT: 2.46
Area: 1048789
Amount: 170.2396
Amount Units: ng



Reviewer: journetp, 09-Mar-2020 06:28:40
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

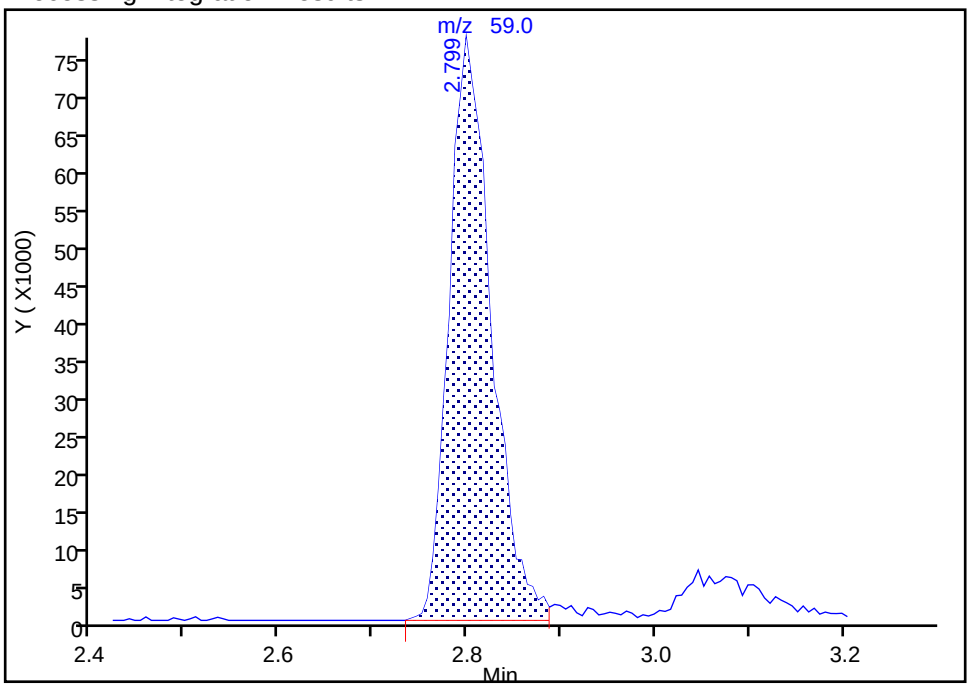
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030508.d
Injection Date: 05-Mar-2020 10:44:30 Instrument ID: CHHP10
Lims ID: IC 40
Client ID:
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

18 Ethyl ether, CAS: 60-29-7

Signal: 1

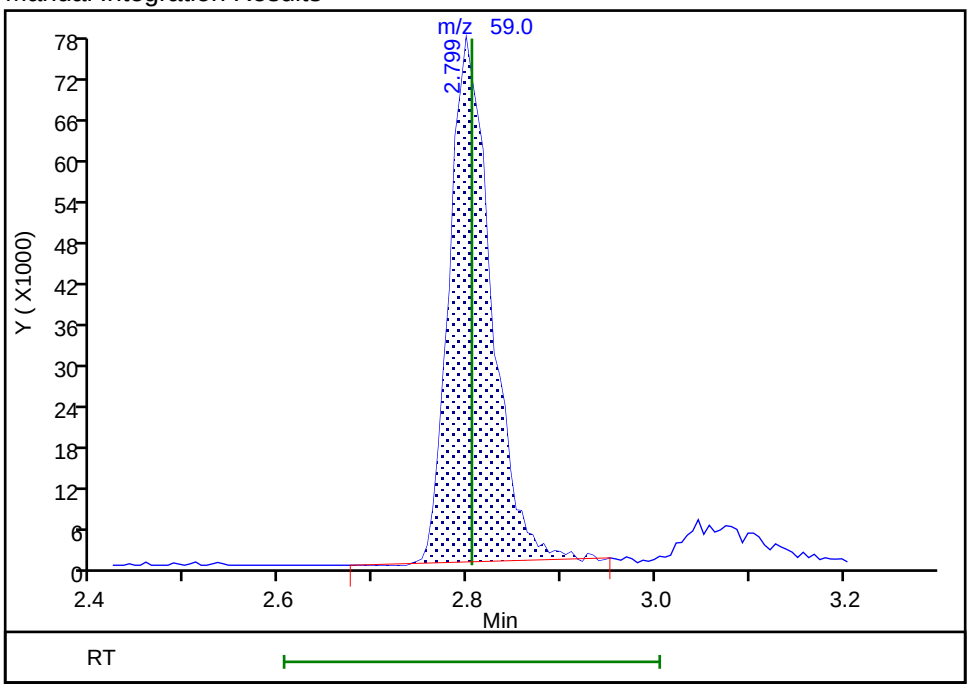
Processing Integration Results

RT: 2.80
Area: 242616
Amount: 183.3549
Amount Units: ng



Manual Integration Results

RT: 2.80
Area: 238721
Amount: 180.3095
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 11:43:25
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d
Lims ID: IC 50
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 05-Mar-2020 11:12:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031047-009
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub20

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 05-Mar-2020 14:09:05 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0339

First Level Reviewer: journetp Date: 05-Mar-2020 11:42:58

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.022	3.993	0.029	0	98089	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	348586	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	85	80238	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	93	133658	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	93	634100	250.0	280.7	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.645	6.651	-0.006	0	728494	250.0	280.8	
$	7 Toluene-d8 (Surr)	98	8.669	8.675	-0.006	93	2685618	250.0	255.8	
$	8 4-Bromofluorobenzene (Surr	95	11.316	11.322	-0.006	90	954726	250.0	263.1	
	10 Dichlorodifluoromethane	85	1.516	1.516	0.000	99	556035	250.0	248.9	
	11 Chloromethane	50	1.728	1.716	0.012	98	368155	250.0	242.1	
	13 Butadiene	39	1.787	1.799	-0.012	93	504447	250.0	241.5	
	12 Vinyl chloride	62	1.822	1.822	0.000	82	577361	250.0	239.6	
	14 Bromomethane	94	2.069	2.075	-0.006	93	624365	250.0	230.8	
	15 Chloroethane	64	2.169	2.175	-0.006	100	501085	250.0	252.1	
	17 Dichlorofluoromethane	67	2.440	2.457	-0.017	96	1293535	250.0	214.4	
	16 Trichlorofluoromethane	101	2.446	2.457	-0.011	95	1498386	250.0	215.6	
	18 Ethyl ether	59	2.805	2.804	0.001	85	310826	250.0	239.7	
	20 1,1-Dichloroethene	96	3.057	3.051	0.006	97	576597	250.0	259.3	a
	21 1,1,2-Trichloro-1,2,2-trif	101	3.116	3.116	0.000	91	680833	250.0	253.0	
	22 Acetone	43	3.181	3.175	0.006	99	209352	500.0	525.8	
	23 Iodomethane	142	3.228	3.234	-0.006	99	985673	250.0	266.6	
	24 Carbon disulfide	76	3.322	3.322	0.000	96	1689236	250.0	264.1	a
	26 3-Chloro-1-propene	76	3.569	3.575	-0.006	81	372450	250.0	263.6	
	28 Methyl acetate	43	3.622	3.622	0.000	95	312124	500.0	616.4	
	29 Methylene Chloride	84	3.781	3.798	-0.017	86	570986	250.0	269.7	
	32 2-Methyl-2-propanol	59	4.140	4.122	0.018	94	432663	2500.0	2596.0	
	31 Acrylonitrile	53	4.193	4.193	0.000	98	802256	2500.0	3078.4	
	30 trans-1,2-Dichloroethene	96	4.210	4.216	-0.006	97	714265	250.0	260.2	
	33 Methyl tert-butyl ether	73	4.251	4.257	-0.006	96	1467225	250.0	274.2	
	34 Hexane	57	4.640	4.645	-0.005	91	754849	250.0	244.3	
	36 1,1-Dichloroethane	63	4.869	4.869	0.000	97	1100882	250.0	265.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.640	5.634	0.006	86	160832	250.0	241.5	
41 cis-1,2-Dichloroethene	96	5.646	5.651	-0.005	81	699927	250.0	257.8	
43 2-Butanone (MEK)	43	5.675	5.681	-0.006	90	249017	500.0	651.3	
46 Chlorobromomethane	128	5.940	5.945	-0.005	80	283672	250.0	283.5	
48 Tetrahydrofuran	42	5.975	5.975	0.000	79	135826	500.0	644.1	
49 Chloroform	83	6.093	6.092	0.001	93	1272781	250.0	258.5	
50 1,1,1-Trichloroethane	97	6.240	6.239	0.001	97	1319964	250.0	255.5	
52 Cyclohexane	56	6.310	6.304	0.006	81	914496	250.0	249.7	
53 Carbon tetrachloride	117	6.416	6.416	0.000	96	1305955	250.0	257.4	
54 1,1-Dichloropropene	75	6.434	6.434	0.000	96	1088062	250.0	261.9	
55 Benzene	78	6.651	6.651	0.000	96	2706455	250.0	264.3	
51 Isobutyl alcohol	41	6.693	6.698	-0.006	90	229234	6250.0	8736.6	
56 1,2-Dichloroethane	62	6.734	6.734	0.000	98	850439	250.0	276.4	
59 n-Heptane	43	7.028	7.028	0.000	79	762445	250.0	254.0	
60 Trichloroethene	130	7.398	7.404	-0.006	98	847888	250.0	273.9	
63 Methylcyclohexane	83	7.628	7.628	0.000	85	1405398	250.0	251.3	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	91	525480	250.0	262.6	
65 Dibromomethane	93	7.763	7.769	-0.006	92	294139	250.0	279.0	
67 1,4-Dioxane	88	7.775	7.775	0.000	86	66270	5000.0	5386.2	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	960614	250.0	274.7	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	95	1014438	250.0	261.7	
72 4-Methyl-2-pentanone (MIBK	43	8.581	8.575	0.006	92	551740	500.0	551.4	
73 Toluene	91	8.739	8.739	0.000	97	3209541	250.0	247.3	
74 trans-1,3-Dichloropropene	75	8.998	9.004	-0.006	93	877292	250.0	262.4	
75 Ethyl methacrylate	69	9.069	9.069	0.000	85	568992	250.0	258.6	
76 1,1,2-Trichloroethane	97	9.192	9.186	0.006	93	429033	250.0	263.2	
77 Tetrachloroethene	164	9.257	9.257	0.000	97	719078	250.0	243.2	
78 1,3-Dichloropropane	76	9.345	9.351	-0.006	90	726494	250.0	267.4	
79 2-Hexanone	43	9.416	9.428	-0.012	95	396727	500.0	635.9	
81 Chlorodibromomethane	129	9.557	9.563	-0.006	90	601429	250.0	279.5	
82 Ethylene Dibromide	107	9.669	9.669	0.000	100	411318	250.0	306.1	
83 Chlorobenzene	112	10.163	10.163	0.000	95	2005478	250.0	255.1	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.251	0.006	94	740112	250.0	251.4	
85 Ethylbenzene	106	10.263	10.263	0.000	99	1134493	250.0	245.5	
86 m-Xylene & p-Xylene	106	10.392	10.398	-0.006	0	1369725	250.0	234.9	
88 o-Xylene	106	10.775	10.774	0.001	97	1326242	250.0	241.1	
89 Styrene	104	10.798	10.798	0.000	93	2117156	250.0	246.9	
90 Bromoform	173	10.975	10.980	-0.005	96	352219	250.0	287.4	
91 Isopropylbenzene	105	11.139	11.145	-0.006	95	3840802	250.0	236.1	
94 Bromobenzene	156	11.451	11.451	0.000	92	834527	250.0	269.7	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	97	451494	250.0	261.0	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	87	131251	250.0	225.1	
95 1,2,3-Trichloropropane	110	11.516	11.510	0.006	85	158572	250.0	260.2	
97 N-Propylbenzene	120	11.563	11.563	0.000	99	1021342	250.0	241.6	
98 2-Chlorotoluene	126	11.645	11.639	0.006	94	806049	250.0	240.8	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	94	3151109	250.0	234.9	
100 4-Chlorotoluene	126	11.769	11.769	0.000	100	835651	250.0	256.9	
101 tert-Butylbenzene	119	12.057	12.051	0.006	92	2724210	250.0	231.4	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	97	3092554	250.0	237.2	
104 sec-Butylbenzene	105	12.280	12.274	0.006	95	3915913	250.0	225.1	
105 1,3-Dichlorobenzene	146	12.398	12.398	0.000	97	1537640	250.0	254.9	
106 4-Isopropyltoluene	119	12.439	12.433	0.006	97	3369391	250.0	227.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	94	1541742	250.0	241.0	
110 n-Butylbenzene	91	12.839	12.845	-0.006	98	2801819	250.0	225.3	
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	96	1318288	250.0	246.7	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	80	82521	250.0	266.6	
114 1,2,4-Trichlorobenzene	180	14.457	14.462	-0.005	94	613721	250.0	235.6	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	95	468982	250.0	NQ	
116 Naphthalene	128	14.721	14.721	0.000	97	918581	250.0	265.3	
117 1,2,3-Trichlorobenzene	180	14.939	14.945	-0.006	94	453410	250.0	237.7	
S 130 1,2-Dichloroethene, Total	96				0		500.0	518.1	
S 129 Xylenes, Total	106				0		500.0	476.0	
S 131 1,3-Dichloropropene, Total	1				0		500.0	524.1	
S 145 Total BTEX	1				0		1250.0	1233.0	

QC Flag Legend

Processing Flags
NQ - Not Quantifiable
Review Flags
a - User Assigned ID

Reagents:

VOA8260SURR_00104	Amount Added:	10.00	Units: uL
VOA8260INT_00104	Amount Added:	2.00	Units: uL
VOA8260VOAPRI_00394	Amount Added:	10.00	Units: uL
voaWKetmix1st_00024	Amount Added:	10.00	Units: uL

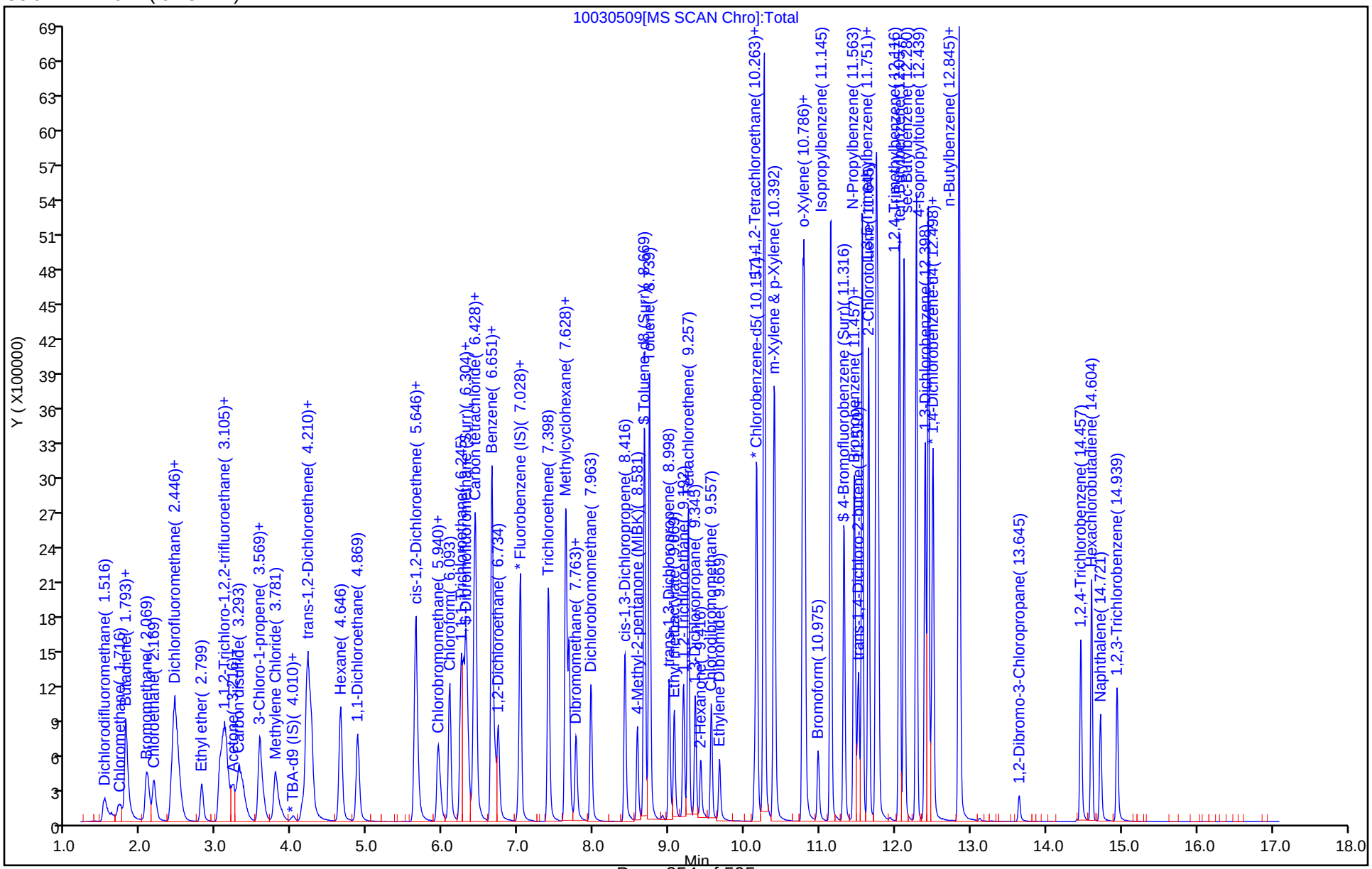
Report Date: 05-Mar-2020 14:09:06 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Injection Date:	05-Mar-2020 11:12:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	IC 50			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

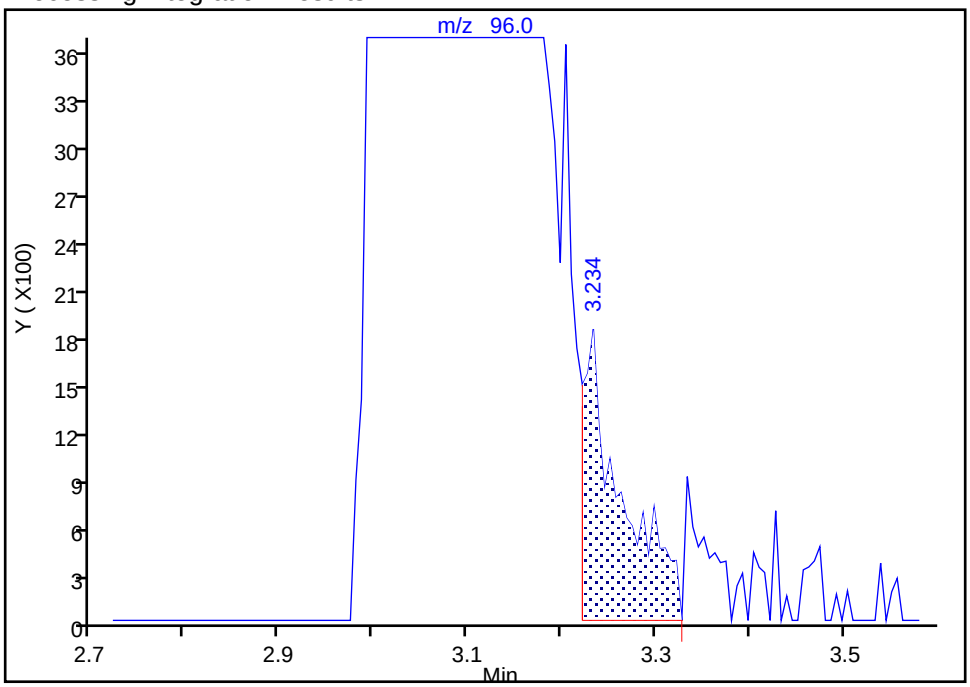
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d
Injection Date: 05-Mar-2020 11:12:30 Instrument ID: CHHP10
Lims ID: IC 50
Client ID:
Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

20 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

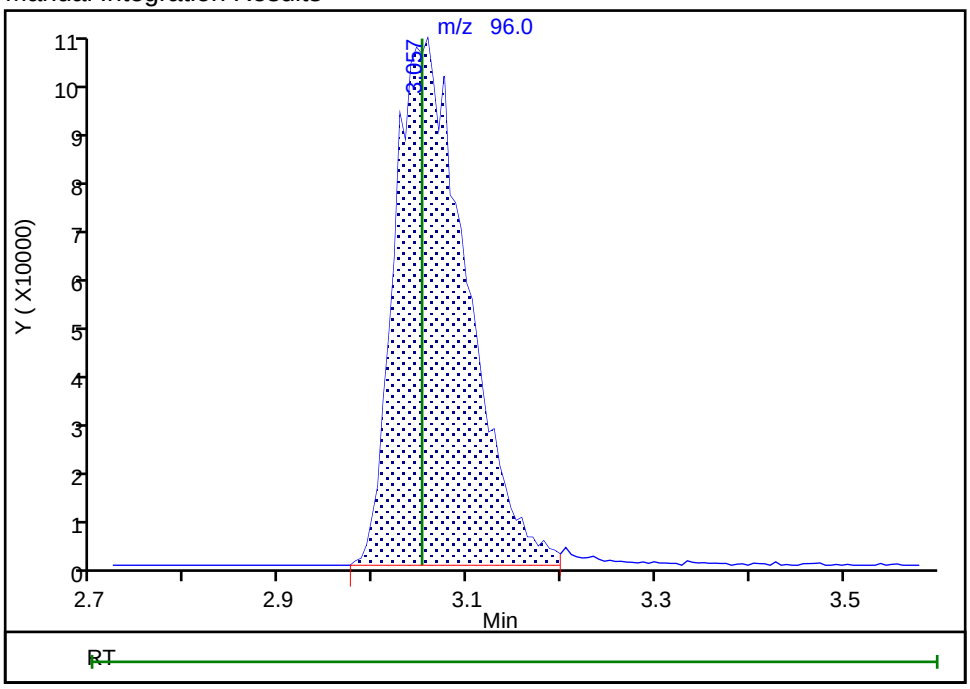
Processing Integration Results

RT: 3.23
Area: 5210
Amount: 2.688488
Amount Units: ng



Manual Integration Results

RT: 3.06
Area: 576597
Amount: 259.3095
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 11:45:36
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

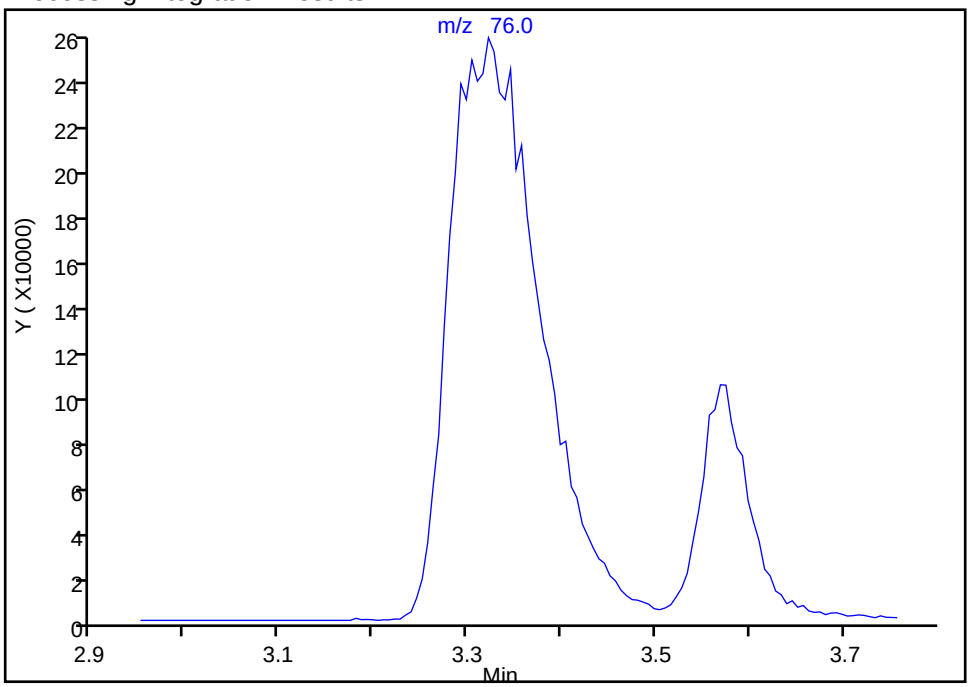
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d				
Injection Date:	05-Mar-2020 11:12:30	Instrument ID:	CHHP10		
Lims ID:	IC 50				
Client ID:					
Operator ID:	034635	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

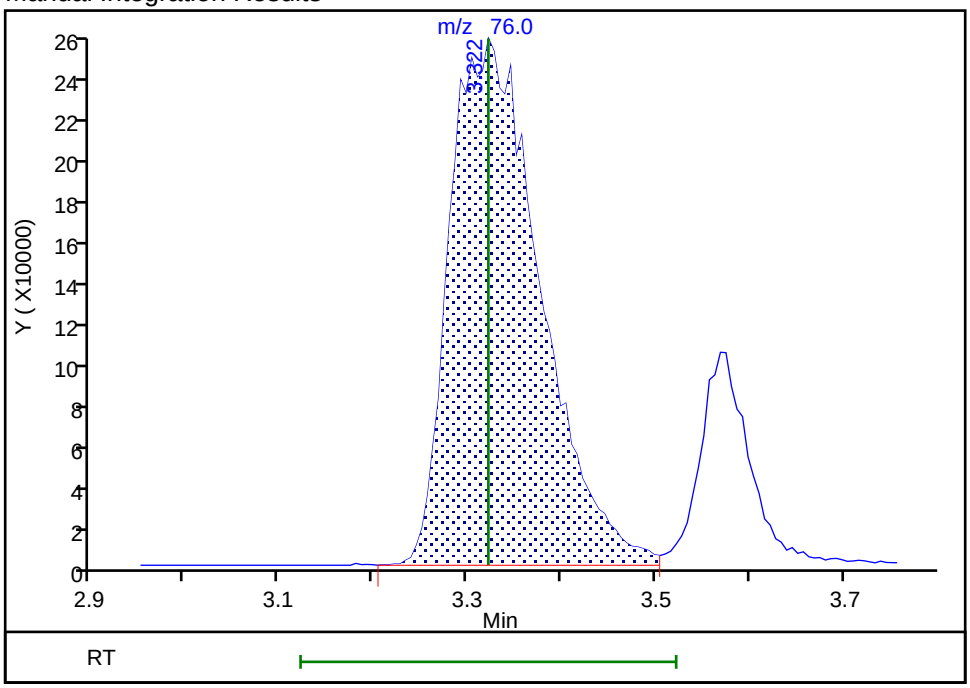
Not Detected
Expected RT: 3.32

Processing Integration Results



Manual Integration Results

RT: 3.32
Area: 1689236
Amount: 264.0573
Amount Units: ng



Reviewer: journetp, 05-Mar-2020 11:40:03
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

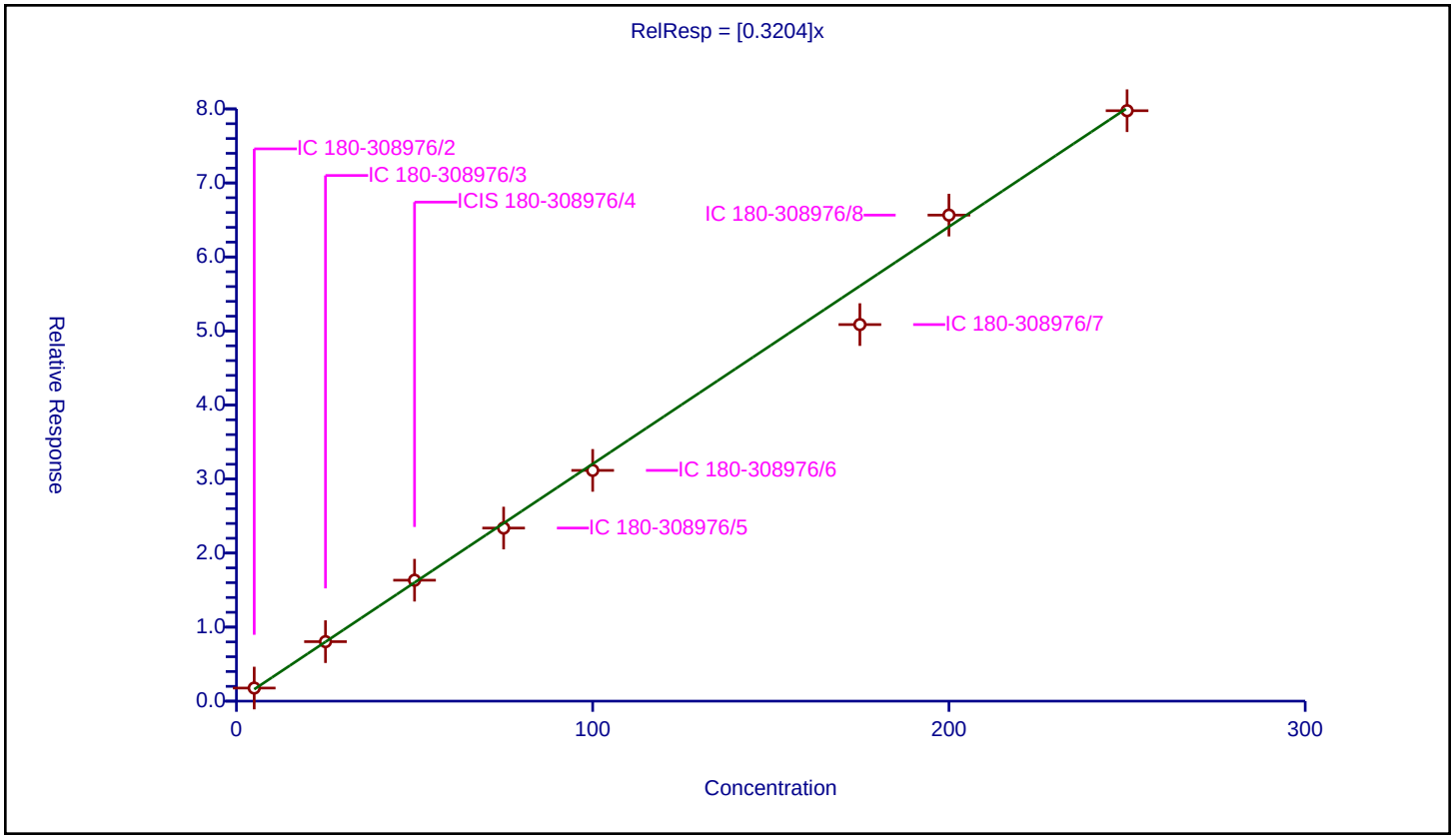
Curve Coefficients

Intercept:	0
Slope:	0.3204

Error Coefficients

Standard Error:	334000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.769622	50.0	328347.0	0.353924	Y
2	IC 180-308976/3	25.0	8.036451	50.0	345395.0	0.321458	Y
3	ICIS 180-308976/4	50.0	16.33469	50.0	366441.0	0.326694	Y
4	IC 180-308976/5	75.0	23.380485	50.0	372133.0	0.31174	Y
5	IC 180-308976/6	100.0	31.169571	50.0	367716.0	0.311696	Y
6	IC 180-308976/7	175.0	50.86638	50.0	383377.0	0.290665	Y
7	IC 180-308976/8	200.0	65.651206	50.0	355947.0	0.328256	Y
8	IC 180-308976/9	250.0	79.755785	50.0	348586.0	0.319023	Y



Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

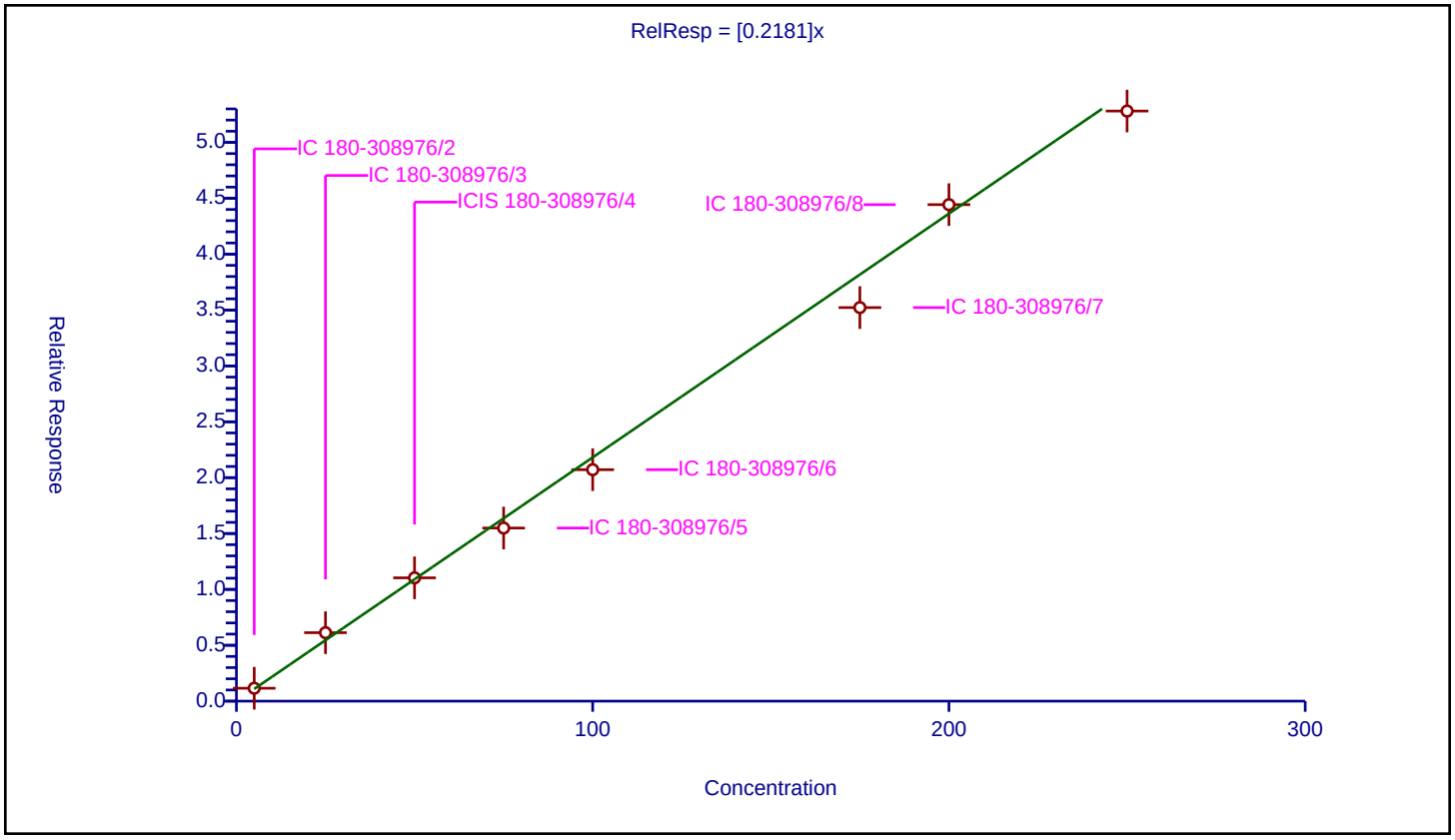
Curve Coefficients

Intercept:	0
Slope:	0.2181

Error Coefficients

Standard Error:	225000
Relative Standard Error:	6.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.155028	50.0	328347.0	0.231006	Y
2	IC 180-308976/3	25.0	6.12574	50.0	345395.0	0.24503	Y
3	ICIS 180-308976/4	50.0	11.034928	50.0	366441.0	0.220699	Y
4	IC 180-308976/5	75.0	15.490295	50.0	372133.0	0.206537	Y
5	IC 180-308976/6	100.0	20.71286	50.0	367716.0	0.207129	Y
6	IC 180-308976/7	175.0	35.218336	50.0	383377.0	0.201248	Y
7	IC 180-308976/8	200.0	44.432177	50.0	355947.0	0.222161	Y
8	IC 180-308976/9	250.0	52.806911	50.0	348586.0	0.211228	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

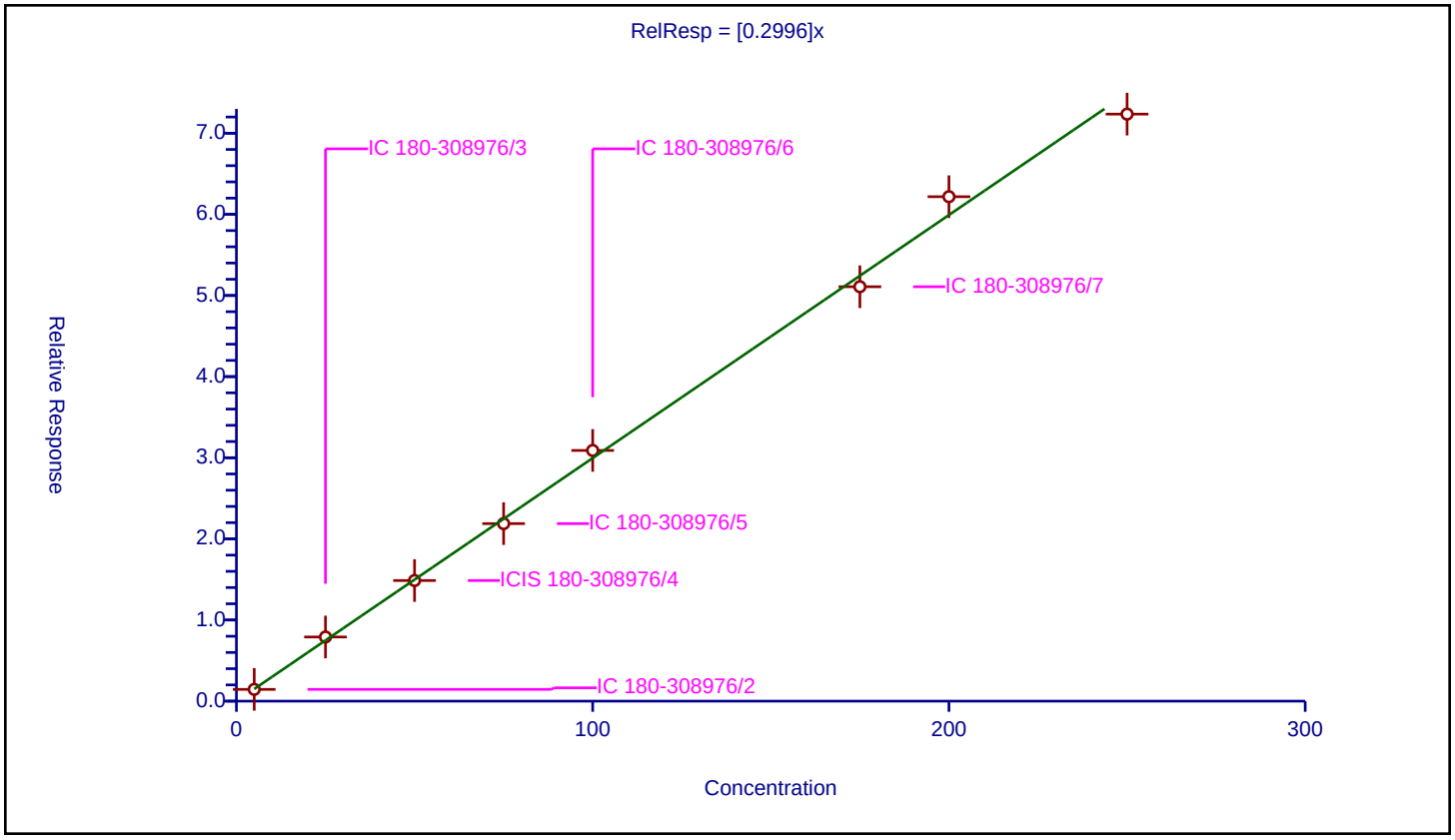
Curve Coefficients

Intercept:	0
Slope:	0.2996

Error Coefficients

Standard Error:	315000
Relative Standard Error:	3.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.450752	50.0	328347.0	0.29015	Y
2	IC 180-308976/3	25.0	7.908337	50.0	345395.0	0.316333	Y
3	ICIS 180-308976/4	50.0	14.865695	50.0	366441.0	0.297314	Y
4	IC 180-308976/5	75.0	21.883305	50.0	372133.0	0.291777	Y
5	IC 180-308976/6	100.0	30.901429	50.0	367716.0	0.309014	Y
6	IC 180-308976/7	175.0	51.078964	50.0	383377.0	0.29188	Y
7	IC 180-308976/8	200.0	62.177234	50.0	355947.0	0.310886	Y
8	IC 180-308976/9	250.0	72.356176	50.0	348586.0	0.289425	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

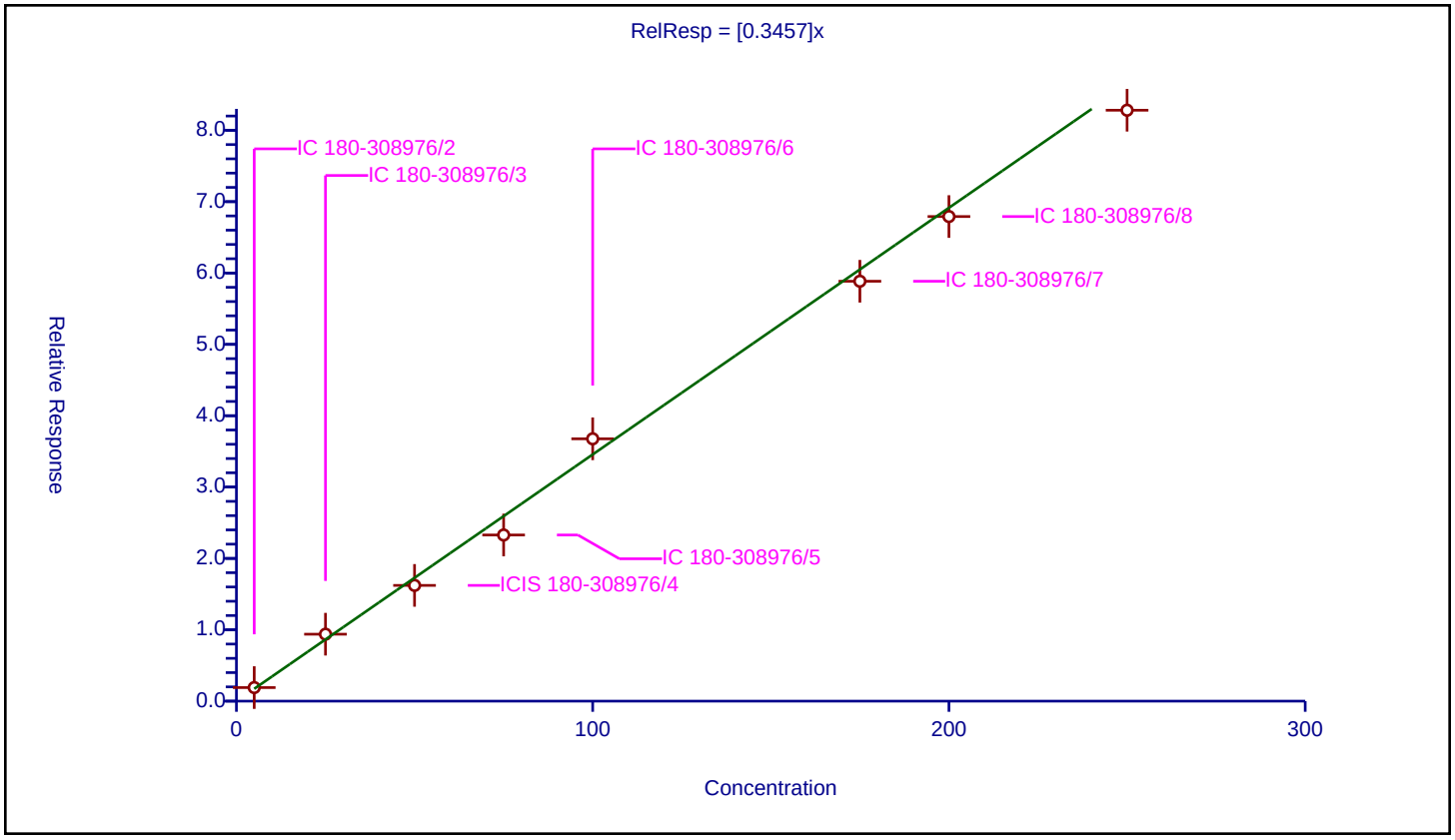
Curve Coefficients

Intercept:	0
Slope:	0.3457

Error Coefficients

Standard Error:	357000
Relative Standard Error:	7.4
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.90317	50.0	328347.0	0.380634	Y
2	IC 180-308976/3	25.0	9.380275	50.0	345395.0	0.375211	Y
3	ICIS 180-308976/4	50.0	16.219391	50.0	366441.0	0.324388	Y
4	IC 180-308976/5	75.0	23.28482	50.0	372133.0	0.310464	Y
5	IC 180-308976/6	100.0	36.765738	50.0	367716.0	0.367657	Y
6	IC 180-308976/7	175.0	58.847297	50.0	383377.0	0.33627	Y
7	IC 180-308976/8	200.0	67.911655	50.0	355947.0	0.339558	Y
8	IC 180-308976/9	250.0	82.814714	50.0	348586.0	0.331259	Y



Calibration / Bromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

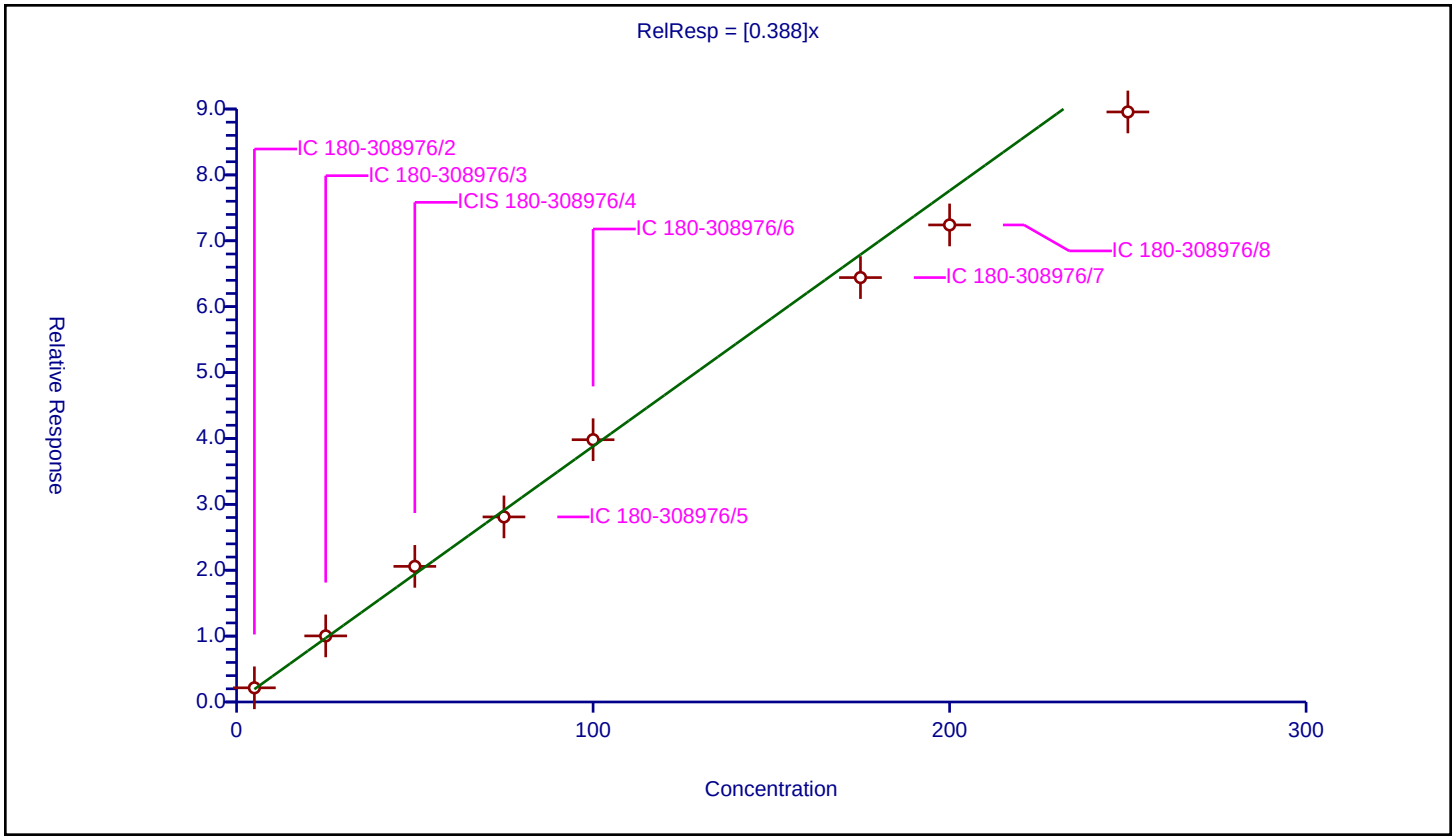
Curve Coefficients

Intercept:	0
Slope:	0.388

Error Coefficients

Standard Error:	388000
Relative Standard Error:	6.7
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	2.150926	50.0	328347.0	0.430185	Y
2	IC 180-308976/3	25.0	10.03011	50.0	345395.0	0.401204	Y
3	ICIS 180-308976/4	50.0	20.58244	50.0	366441.0	0.411649	Y
4	IC 180-308976/5	75.0	28.092913	50.0	372133.0	0.374572	Y
5	IC 180-308976/6	100.0	39.807895	50.0	367716.0	0.398079	Y
6	IC 180-308976/7	175.0	64.417662	50.0	383377.0	0.368101	Y
7	IC 180-308976/8	200.0	72.406707	50.0	355947.0	0.362034	Y
8	IC 180-308976/9	250.0	89.55681	50.0	348586.0	0.358227	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

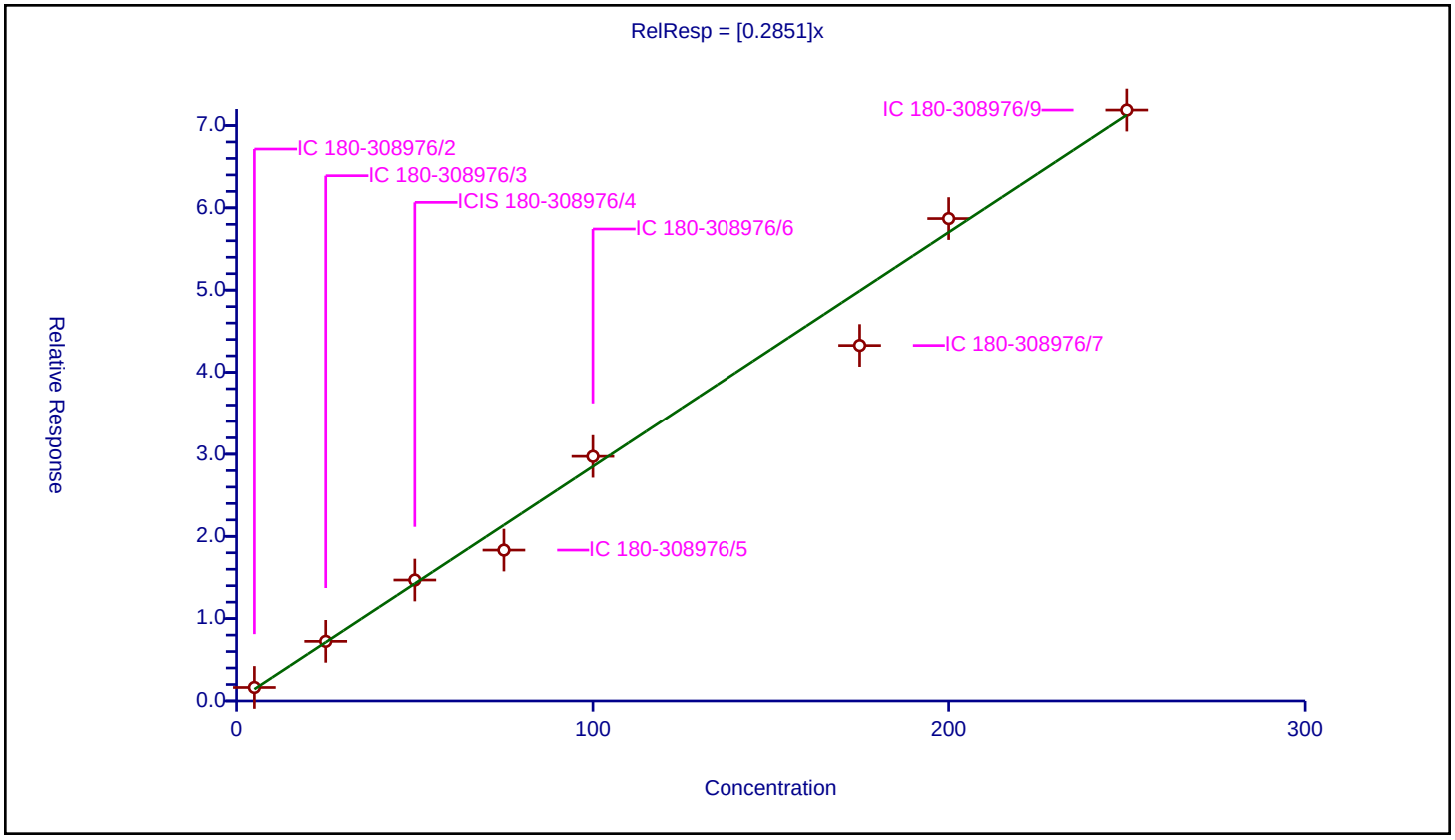
Curve Coefficients

Intercept:	0
Slope:	0.2851

Error Coefficients

Standard Error:	297000
Relative Standard Error:	9.6
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.639272	50.0	328347.0	0.327854	Y
2	IC 180-308976/3	25.0	7.241419	50.0	345395.0	0.289657	Y
3	ICIS 180-308976/4	50.0	14.687767	50.0	366441.0	0.293755	Y
4	IC 180-308976/5	75.0	18.327722	50.0	372133.0	0.24437	Y
5	IC 180-308976/6	100.0	29.733272	50.0	367716.0	0.297333	Y
6	IC 180-308976/7	175.0	43.266941	50.0	383377.0	0.24724	Y
7	IC 180-308976/8	200.0	58.697081	50.0	355947.0	0.293485	Y
8	IC 180-308976/9	250.0	71.873942	50.0	348586.0	0.287496	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

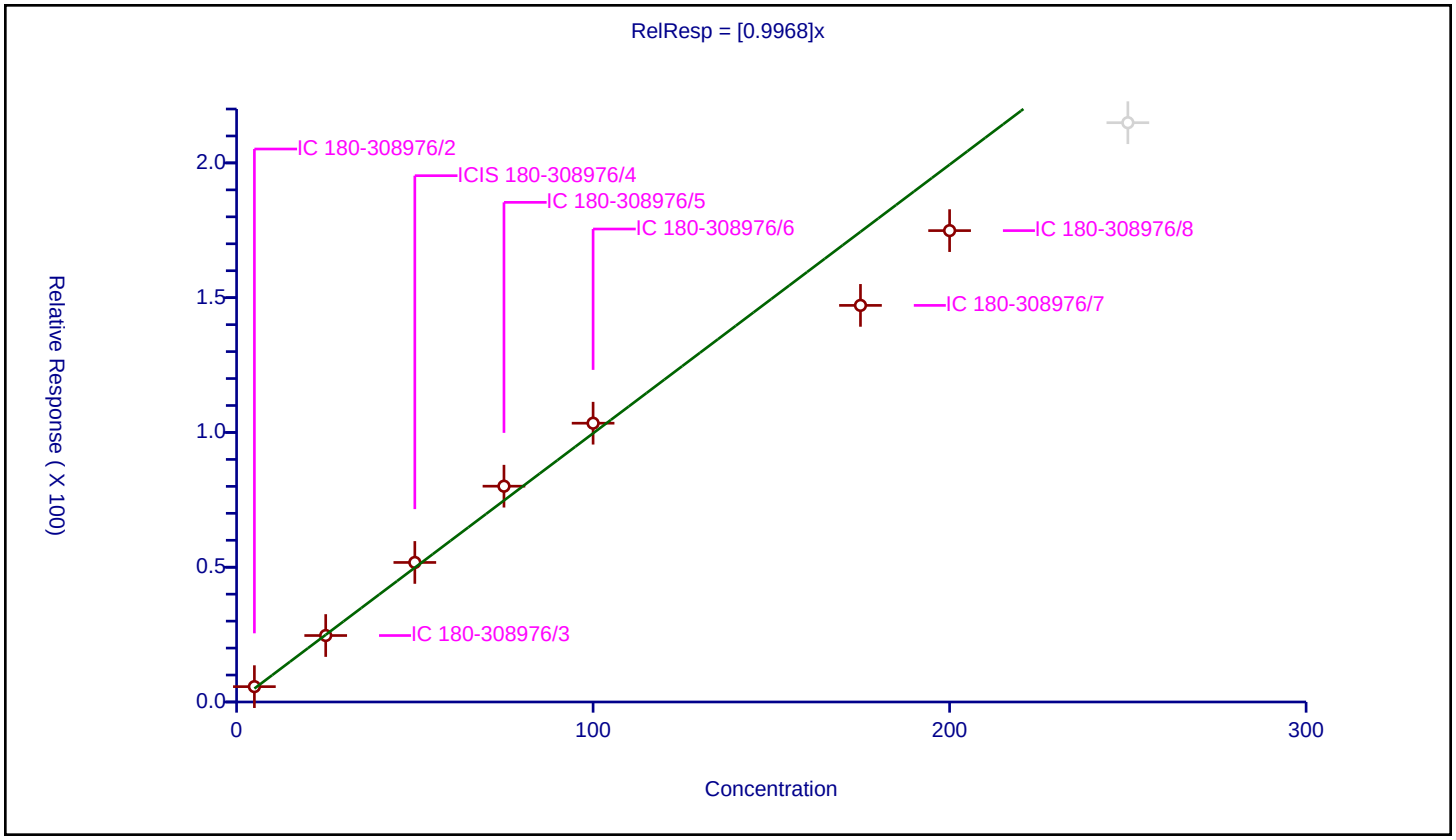
Curve Coefficients

Intercept:	0
Slope:	0.9968

Error Coefficients

Standard Error:	809000
Relative Standard Error:	10.6
Correlation Coefficient:	0.984
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	5.694433	50.0	328347.0	1.138887	Y
2	IC 180-308976/3	25.0	24.663212	50.0	345395.0	0.986528	Y
3	ICIS 180-308976/4	50.0	51.766587	50.0	366441.0	1.035332	Y
4	IC 180-308976/5	75.0	80.059549	50.0	372133.0	1.067461	Y
5	IC 180-308976/6	100.0	103.432948	50.0	367716.0	1.034329	Y
6	IC 180-308976/7	175.0	147.138326	50.0	383377.0	0.84079	Y
7	IC 180-308976/8	200.0	174.889801	50.0	355947.0	0.874449	Y
8	IC 180-308976/9	250.0	214.923434	50.0	348586.0	0.859694	N



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

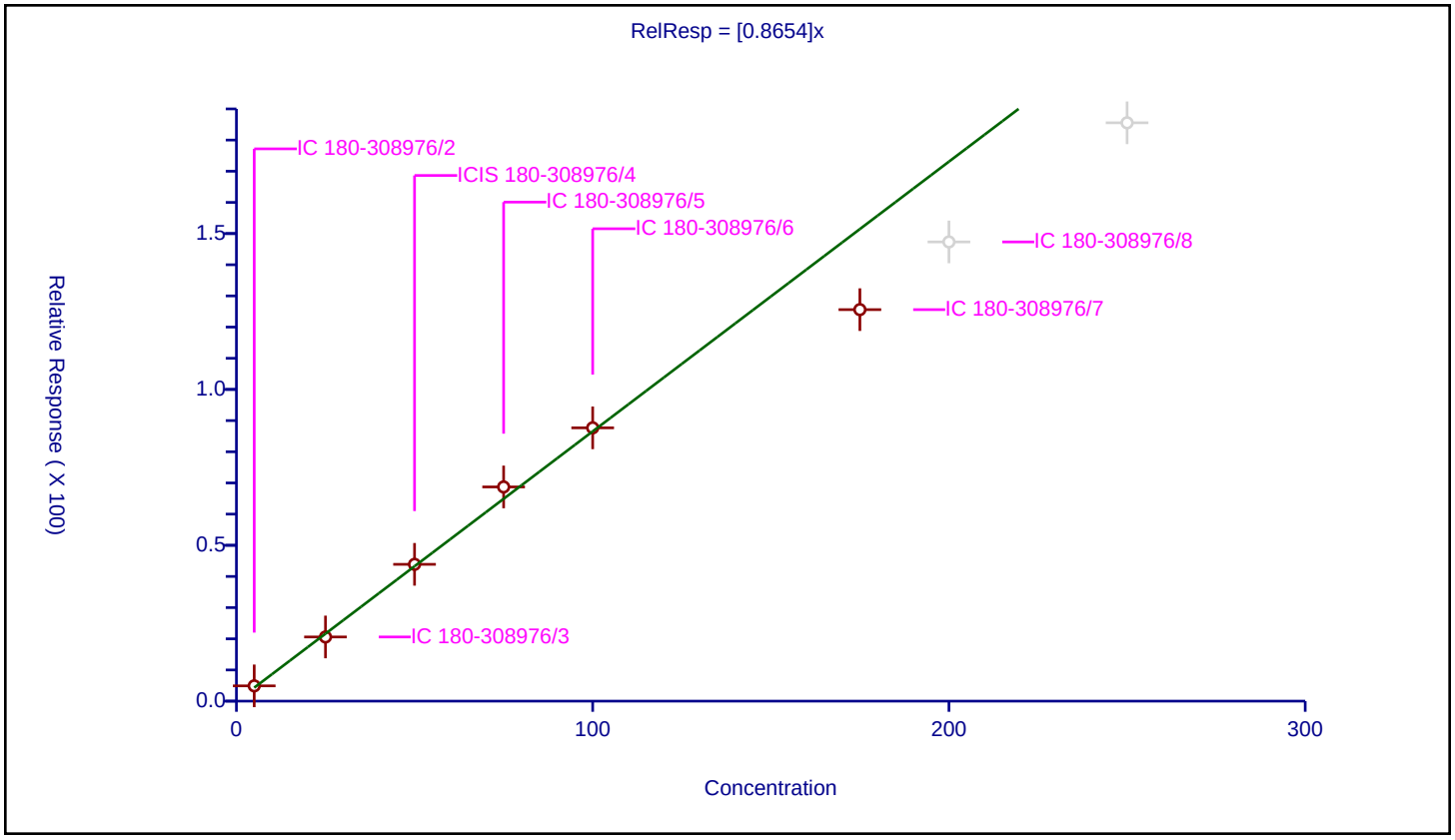
Curve Coefficients

Intercept:	0
Slope:	0.8654

Error Coefficients

Standard Error:	588000
Relative Standard Error:	10.3
Correlation Coefficient:	0.982
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	4.901522	50.0	328347.0	0.980304	Y
2	IC 180-308976/3	25.0	20.58672	50.0	345395.0	0.823469	Y
3	ICIS 180-308976/4	50.0	43.891513	50.0	366441.0	0.87783	Y
4	IC 180-308976/5	75.0	68.718576	50.0	372133.0	0.916248	Y
5	IC 180-308976/6	100.0	87.677311	50.0	367716.0	0.876773	Y
6	IC 180-308976/7	175.0	125.60104	50.0	383377.0	0.71772	Y
7	IC 180-308976/8	200.0	147.323759	50.0	355947.0	0.736619	N
8	IC 180-308976/9	250.0	185.540297	50.0	348586.0	0.742161	N



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

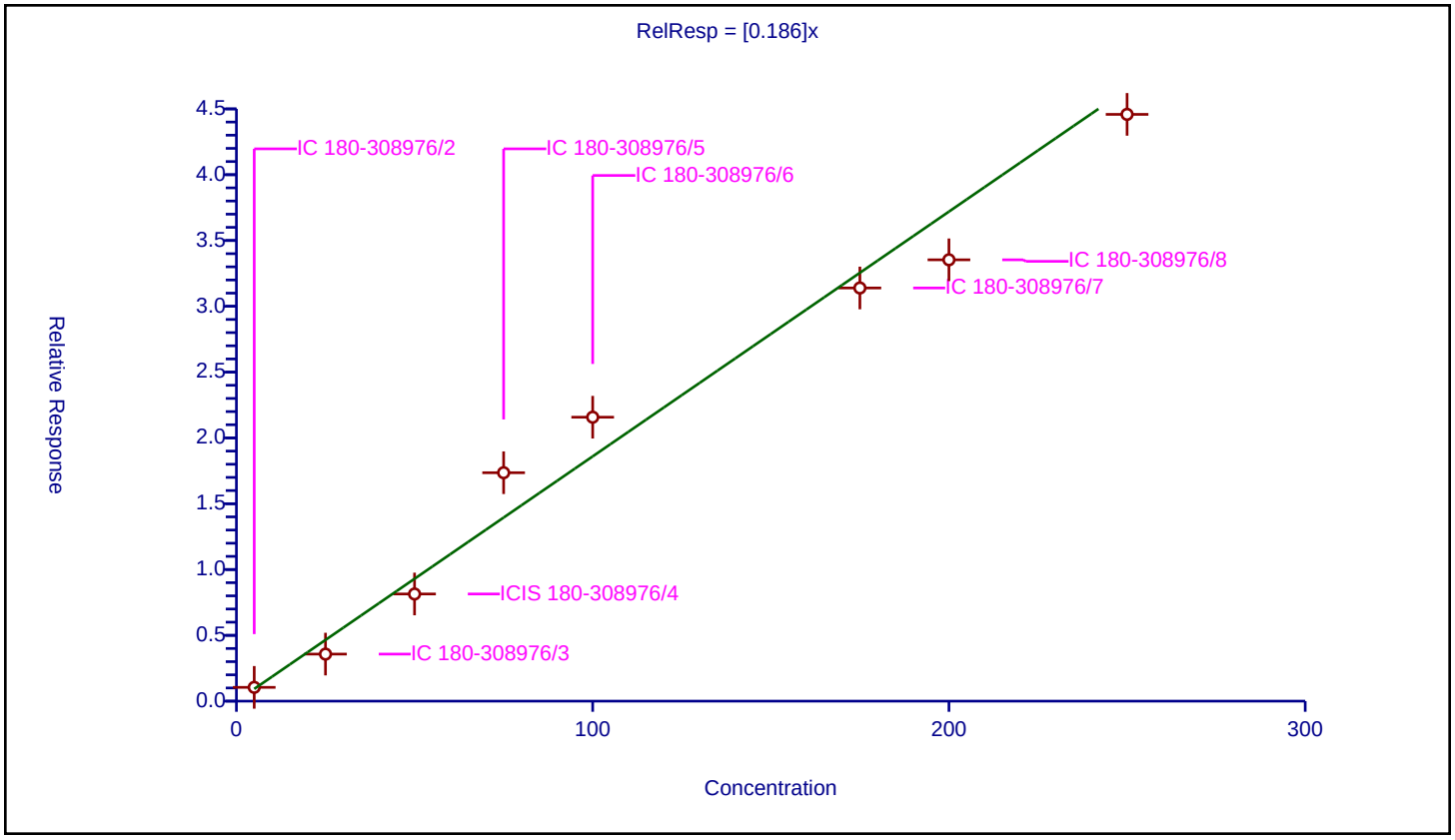
Curve Coefficients

Intercept:	0
Slope:	0.186

Error Coefficients

Standard Error:	192000
Relative Standard Error:	16.2
Correlation Coefficient:	0.972
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.047368	50.0	328347.0	0.209474	Y
2	IC 180-308976/3	25.0	3.573879	50.0	345395.0	0.142955	Y
3	ICIS 180-308976/4	50.0	8.141829	50.0	366441.0	0.162837	Y
4	IC 180-308976/5	75.0	17.355892	50.0	372133.0	0.231412	Y
5	IC 180-308976/6	100.0	21.573714	50.0	367716.0	0.215737	Y
6	IC 180-308976/7	175.0	31.393511	50.0	383377.0	0.179391	Y
7	IC 180-308976/8	200.0	33.533223	50.0	355947.0	0.167666	Y
8	IC 180-308976/9	250.0	44.583833	50.0	348586.0	0.178335	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

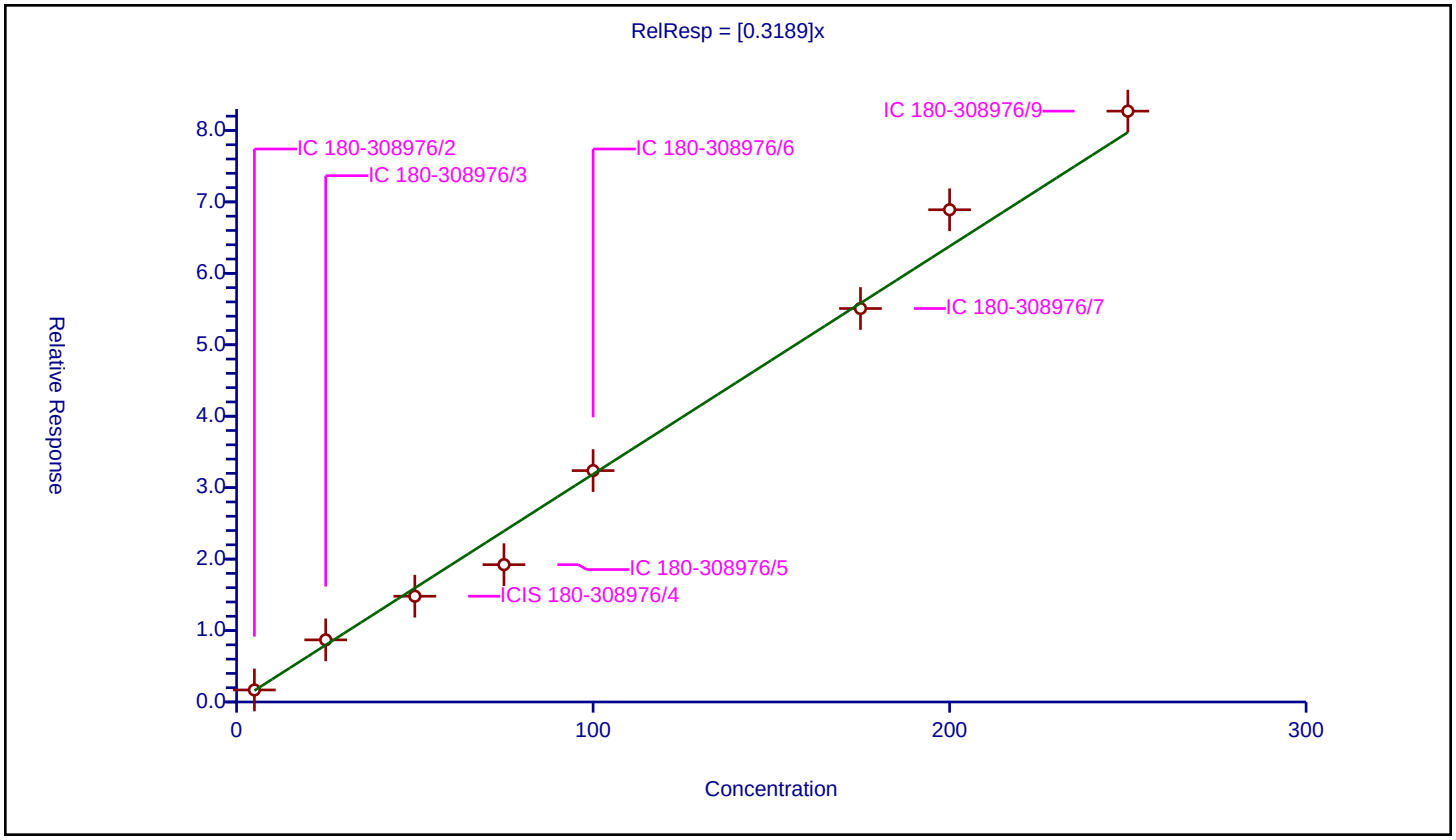
Curve Coefficients

Intercept:	0
Slope:	0.3189

Error Coefficients

Standard Error:	347000
Relative Standard Error:	9.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.686783	50.0	328347.0	0.337357	Y
2	IC 180-308976/3	25.0	8.695407	50.0	345395.0	0.347816	Y
3	ICIS 180-308976/4	50.0	14.806476	50.0	366441.0	0.29613	Y
4	IC 180-308976/5	75.0	19.221757	50.0	372133.0	0.25629	Y
5	IC 180-308976/6	100.0	32.390758	50.0	367716.0	0.323908	Y
6	IC 180-308976/7	175.0	55.075161	50.0	383377.0	0.314715	Y
7	IC 180-308976/8	200.0	68.902674	50.0	355947.0	0.344513	Y
8	IC 180-308976/9	250.0	82.705129	50.0	348586.0	0.330821	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

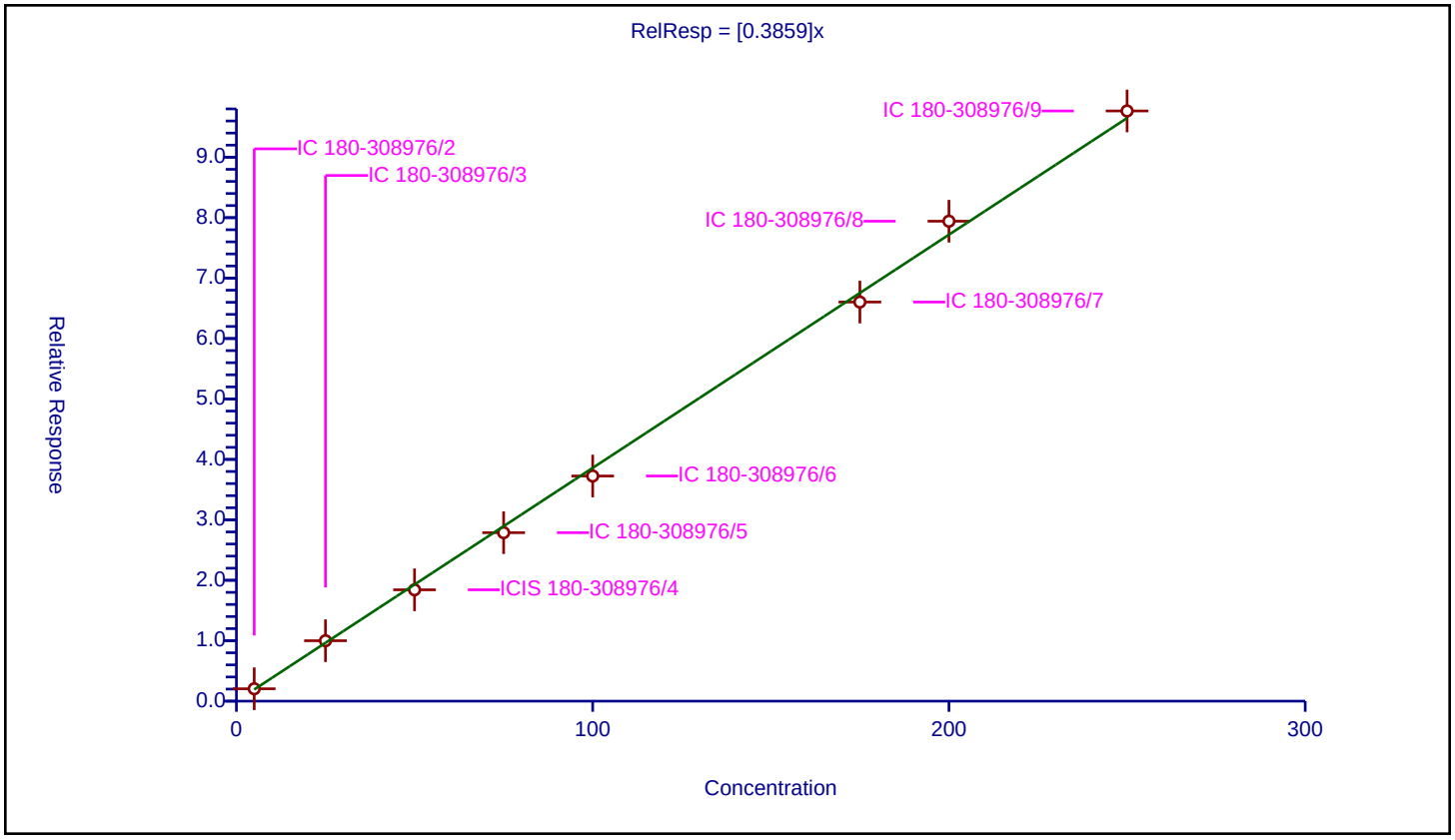
Curve Coefficients

Intercept:	0
Slope:	0.3859

Error Coefficients

Standard Error:	411000
Relative Standard Error:	4.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	2.048443	50.0	328347.0	0.409689	Y
2	IC 180-308976/3	25.0	9.997394	50.0	345395.0	0.399896	Y
3	ICIS 180-308976/4	50.0	18.425067	50.0	366441.0	0.368501	Y
4	IC 180-308976/5	75.0	27.87807	50.0	372133.0	0.371708	Y
5	IC 180-308976/6	100.0	37.25375	50.0	367716.0	0.372538	Y
6	IC 180-308976/7	175.0	66.037477	50.0	383377.0	0.377357	Y
7	IC 180-308976/8	200.0	79.414772	50.0	355947.0	0.397074	Y
8	IC 180-308976/9	250.0	97.656389	50.0	348586.0	0.390626	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

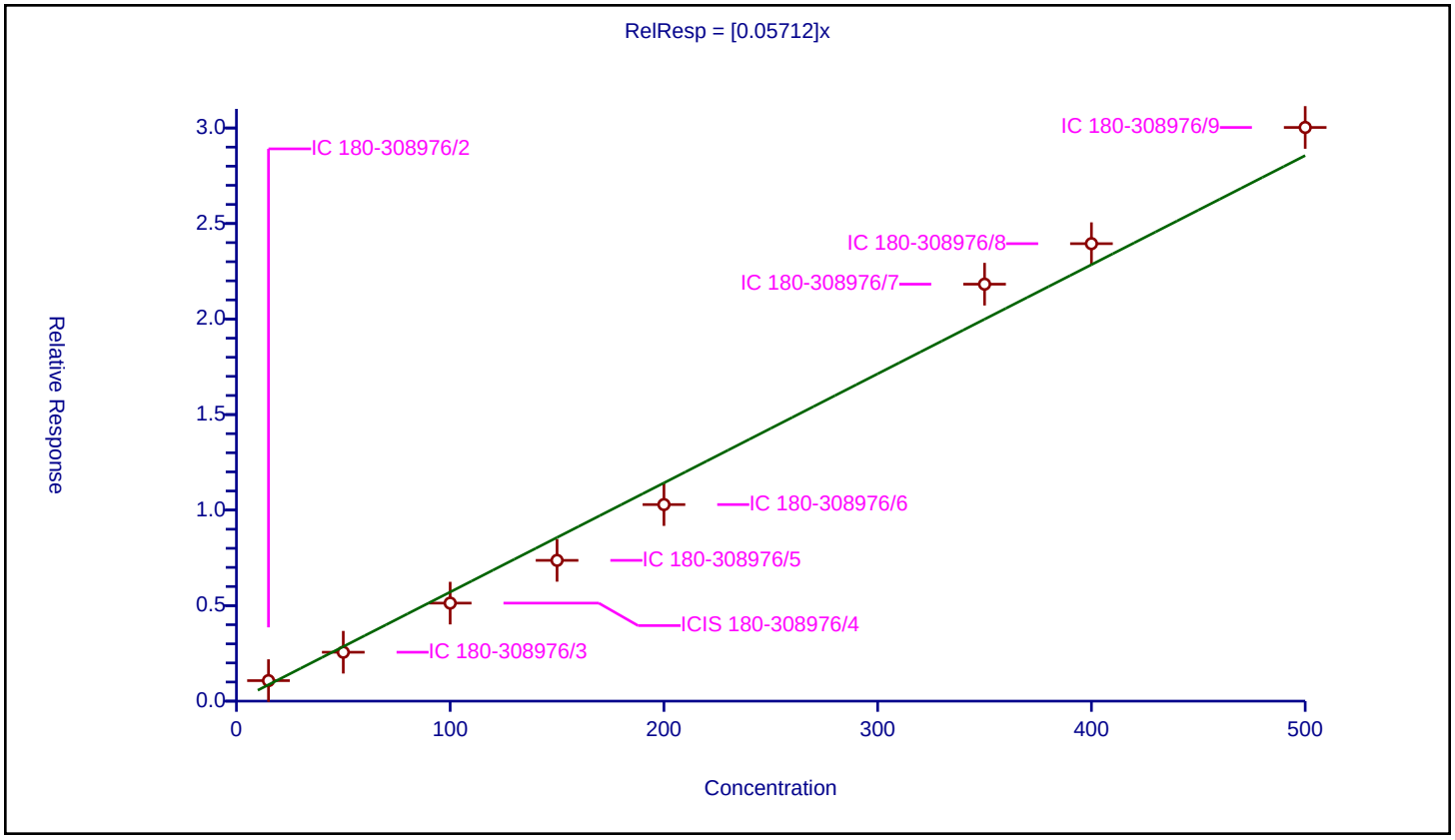
Curve Coefficients

Intercept:	0
Slope:	0.05712

Error Coefficients

Standard Error:	126000
Relative Standard Error:	13.5
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	15.0	1.073559	50.0	328347.0	0.071571	Y
2	IC 180-308976/3	50.0	2.559823	50.0	345395.0	0.051196	Y
3	ICIS 180-308976/4	100.0	5.131113	50.0	366441.0	0.051311	Y
4	IC 180-308976/5	150.0	7.368065	50.0	372133.0	0.04912	Y
5	IC 180-308976/6	200.0	10.288783	50.0	367716.0	0.051444	Y
6	IC 180-308976/7	350.0	21.824731	50.0	383377.0	0.062356	Y
7	IC 180-308976/8	400.0	23.946402	50.0	355947.0	0.059866	Y
8	IC 180-308976/9	500.0	30.028745	50.0	348586.0	0.060057	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

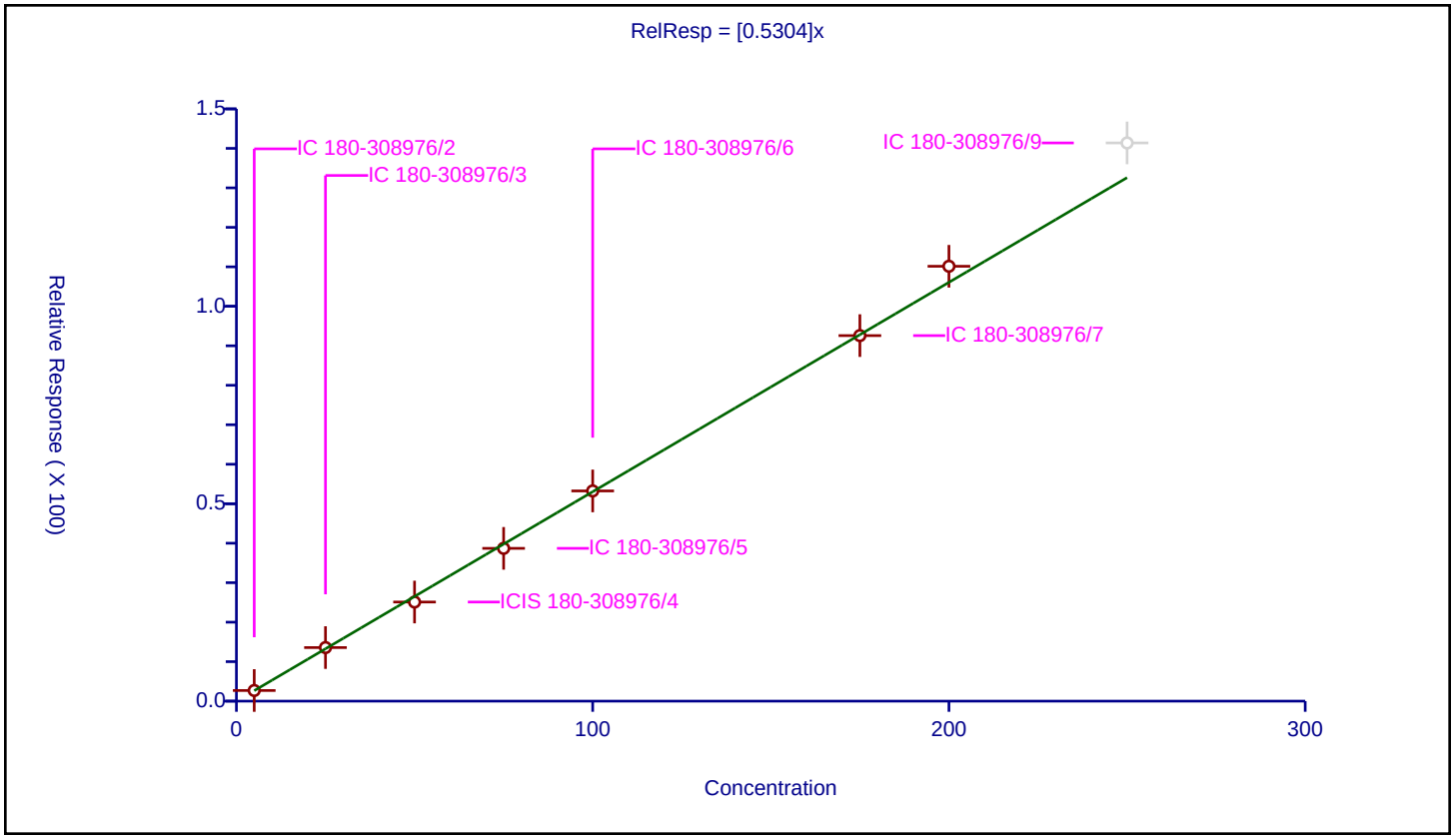
Curve Coefficients

Intercept:	0
Slope:	0.5304

Error Coefficients

Standard Error:	483000
Relative Standard Error:	3.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	2.69806	50.0	328347.0	0.539612	Y
2	IC 180-308976/3	25.0	13.568957	50.0	345395.0	0.542758	Y
3	ICIS 180-308976/4	50.0	25.101039	50.0	366441.0	0.502021	Y
4	IC 180-308976/5	75.0	38.694096	50.0	372133.0	0.515921	Y
5	IC 180-308976/6	100.0	53.242176	50.0	367716.0	0.532422	Y
6	IC 180-308976/7	175.0	92.581975	50.0	383377.0	0.52904	Y
7	IC 180-308976/8	200.0	110.140555	50.0	355947.0	0.550703	Y
8	IC 180-308976/9	250.0	141.38161	50.0	348586.0	0.565526	N



Calibration / Carbon disulfide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

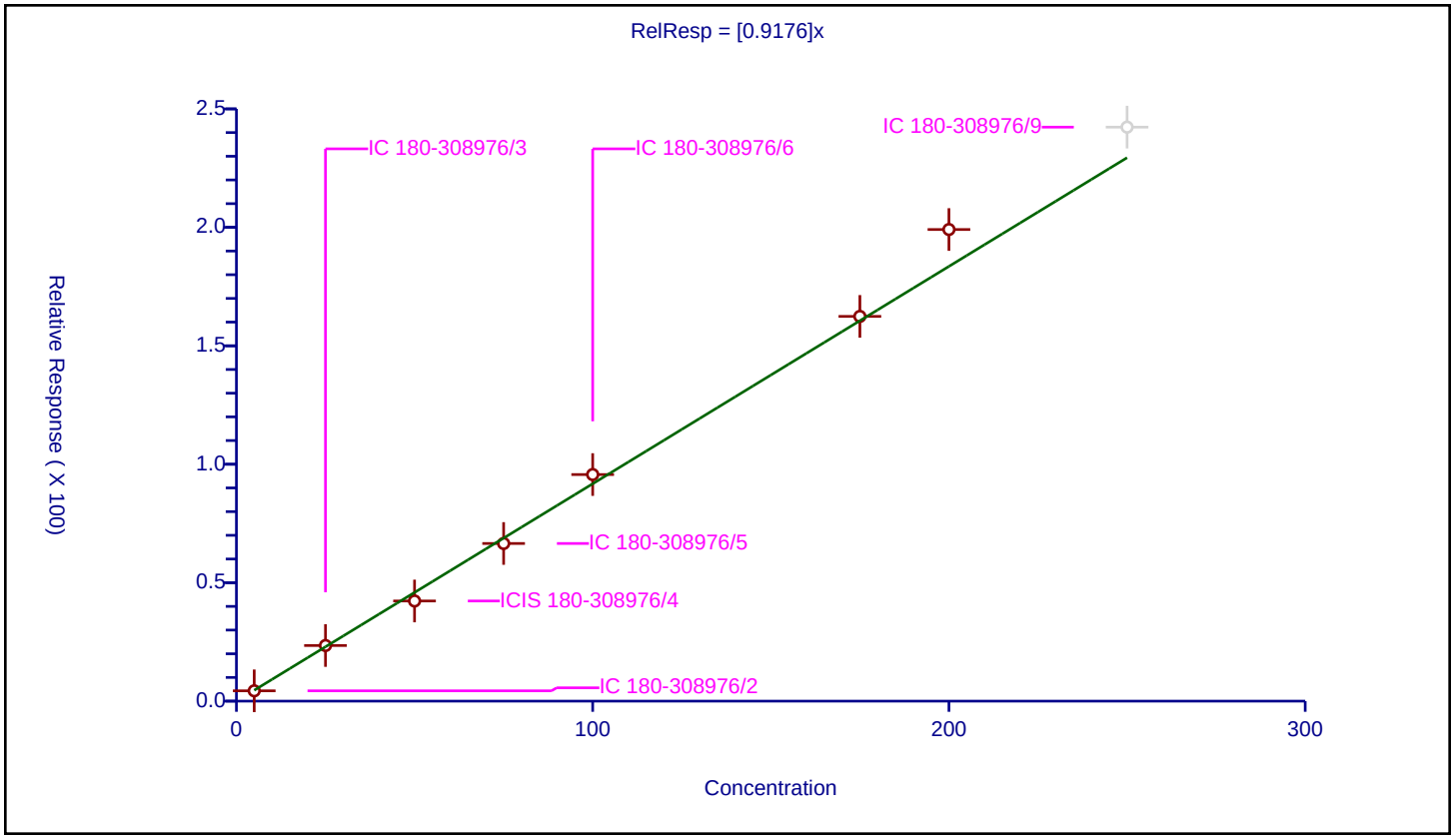
Curve Coefficients

Intercept:	0
Slope:	0.9176

Error Coefficients

Standard Error:	858000
Relative Standard Error:	5.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	4.35591	50.0	328347.0	0.871182	Y
2	IC 180-308976/3	25.0	23.477468	50.0	345395.0	0.939099	Y
3	ICIS 180-308976/4	50.0	42.281841	50.0	366441.0	0.845637	Y
4	IC 180-308976/5	75.0	66.552281	50.0	372133.0	0.887364	Y
5	IC 180-308976/6	100.0	95.645281	50.0	367716.0	0.956453	Y
6	IC 180-308976/7	175.0	162.405283	50.0	383377.0	0.92803	Y
7	IC 180-308976/8	200.0	199.083712	50.0	355947.0	0.995419	Y
8	IC 180-308976/9	250.0	242.298314	50.0	348586.0	0.969193	N



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

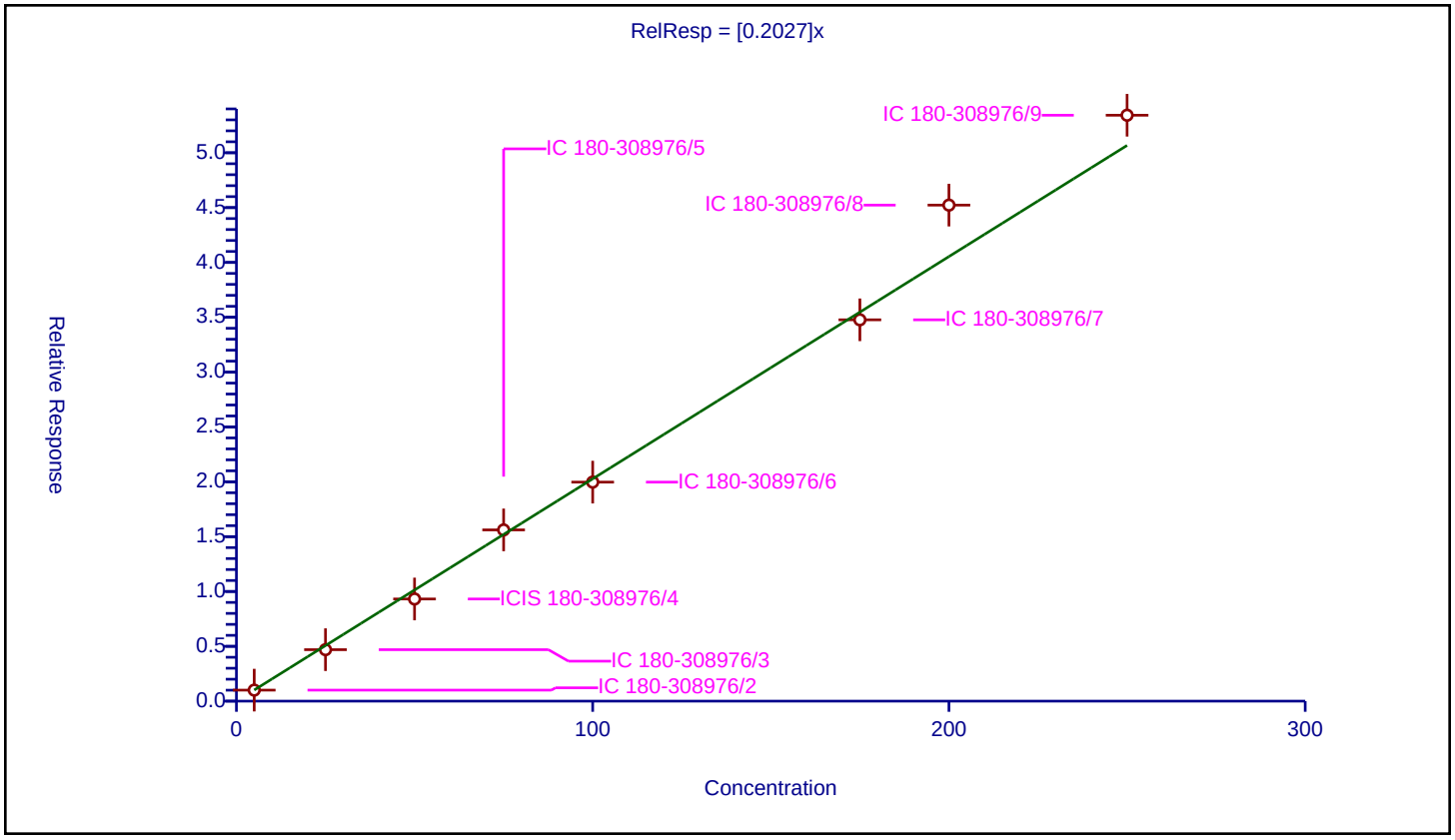
Curve Coefficients

Intercept:	0
Slope:	0.2027

Error Coefficients

Standard Error:	225000
Relative Standard Error:	6.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.005339	50.0	328347.0	0.201068	Y
2	IC 180-308976/3	25.0	4.692019	50.0	345395.0	0.187681	Y
3	ICIS 180-308976/4	50.0	9.315142	50.0	366441.0	0.186303	Y
4	IC 180-308976/5	75.0	15.612429	50.0	372133.0	0.208166	Y
5	IC 180-308976/6	100.0	19.971119	50.0	367716.0	0.199711	Y
6	IC 180-308976/7	175.0	34.768257	50.0	383377.0	0.198676	Y
7	IC 180-308976/8	200.0	45.226537	50.0	355947.0	0.226133	Y
8	IC 180-308976/9	250.0	53.422972	50.0	348586.0	0.213692	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

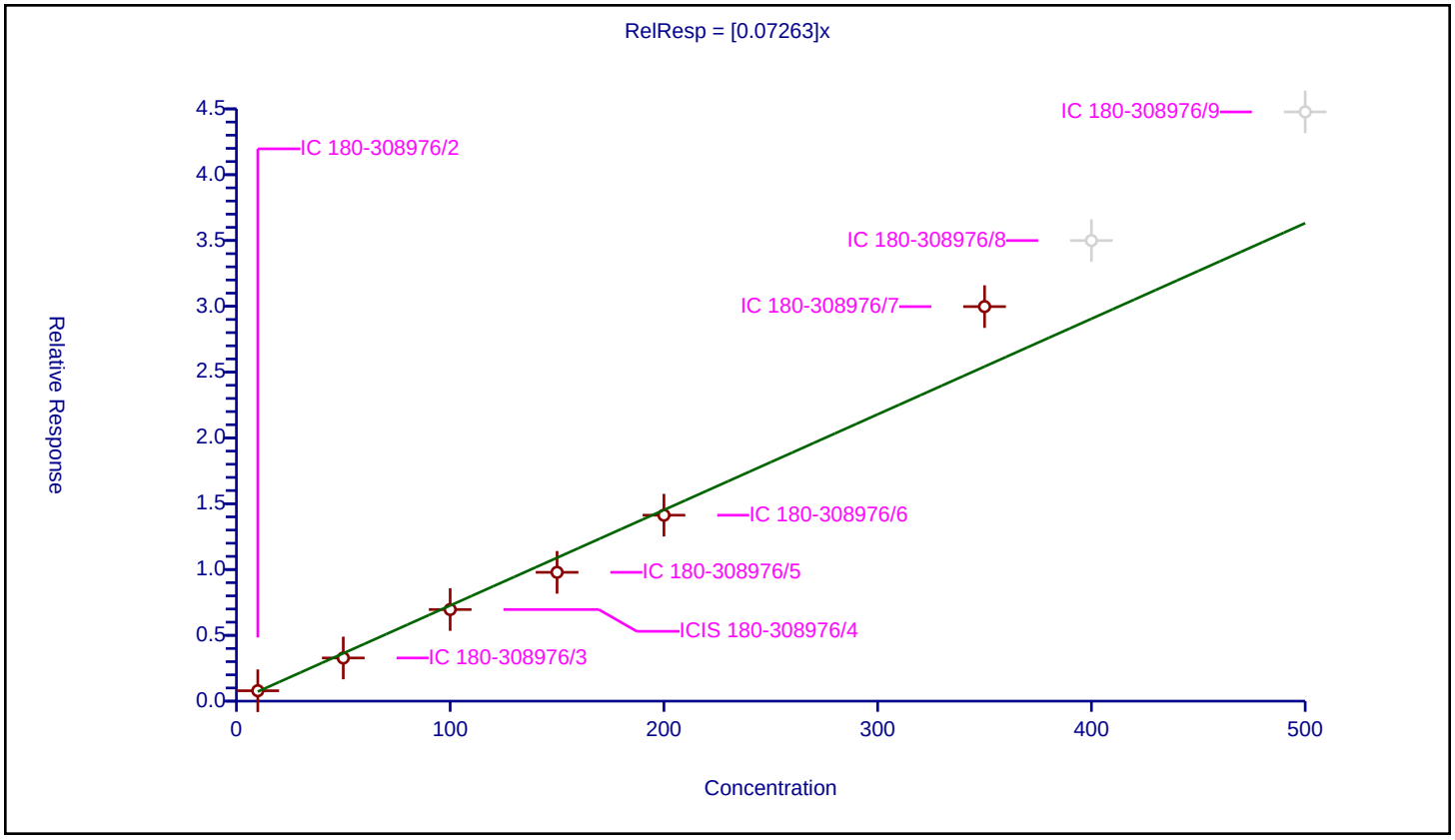
Curve Coefficients

Intercept:	0
Slope:	0.07263

Error Coefficients

Standard Error:	120000
Relative Standard Error:	11.2
Correlation Coefficient:	0.979
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	10.0	0.790779	50.0	328347.0	0.079078	Y
2	IC 180-308976/3	50.0	3.278999	50.0	345395.0	0.06558	Y
3	ICIS 180-308976/4	100.0	6.960602	50.0	366441.0	0.069606	Y
4	IC 180-308976/5	150.0	9.788301	50.0	372133.0	0.065255	Y
5	IC 180-308976/6	200.0	14.128023	50.0	367716.0	0.07064	Y
6	IC 180-308976/7	350.0	29.977411	50.0	383377.0	0.08565	Y
7	IC 180-308976/8	400.0	34.997064	50.0	355947.0	0.087493	N
8	IC 180-308976/9	500.0	44.770014	50.0	348586.0	0.08954	N



Calibration / Methylene Chloride

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

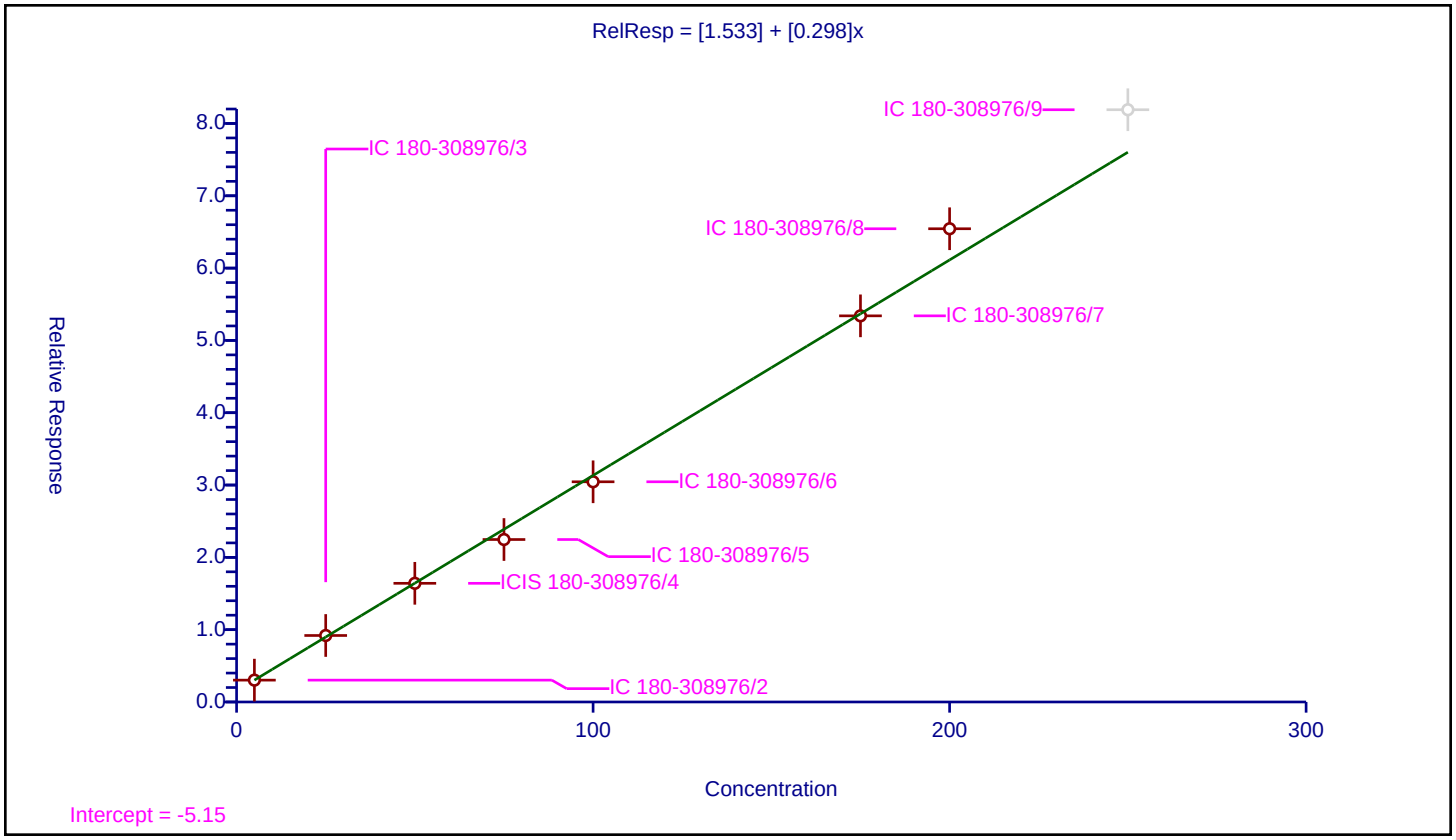
Curve Coefficients

Intercept:	1.533
Slope:	0.298

Error Coefficients

Standard Error:	310000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	3.020737	50.0	328347.0	0.604147	Y
2	IC 180-308976/3	25.0	9.195414	50.0	345395.0	0.367817	Y
3	ICIS 180-308976/4	50.0	16.410964	50.0	366441.0	0.328219	Y
4	IC 180-308976/5	75.0	22.466833	50.0	372133.0	0.299558	Y
5	IC 180-308976/6	100.0	30.45217	50.0	367716.0	0.304522	Y
6	IC 180-308976/7	175.0	53.397439	50.0	383377.0	0.305128	Y
7	IC 180-308976/8	200.0	65.443451	50.0	355947.0	0.327217	Y
8	IC 180-308976/9	250.0	81.900306	50.0	348586.0	0.327601	N



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

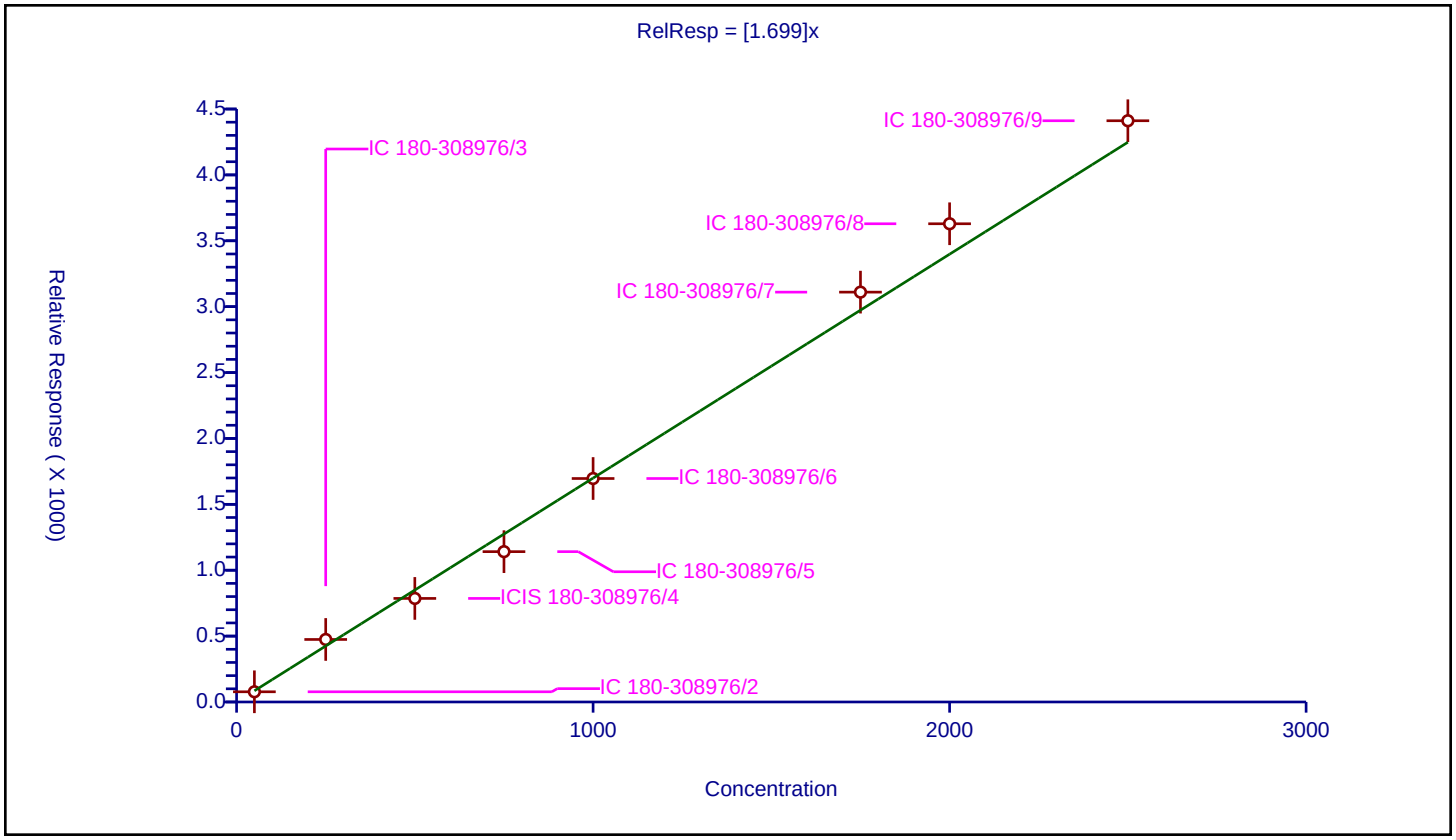
Curve Coefficients

Intercept:	0
Slope:	1.699

Error Coefficients

Standard Error:	242000
Relative Standard Error:	8.1
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	50.0	77.460367	1000.0	76452.0	1.549207	Y
2	IC 180-308976/3	250.0	474.546016	1000.0	58262.0	1.898184	Y
3	ICIS 180-308976/4	500.0	785.993765	1000.0	80507.0	1.571988	Y
4	IC 180-308976/5	750.0	1140.902392	1000.0	73959.0	1.521203	Y
5	IC 180-308976/6	1000.0	1695.992854	1000.0	88442.0	1.695993	Y
6	IC 180-308976/7	1750.0	3110.275612	1000.0	97746.0	1.7773	Y
7	IC 180-308976/8	2000.0	3629.271134	1000.0	89262.0	1.814636	Y
8	IC 180-308976/9	2500.0	4410.922733	1000.0	98089.0	1.764369	Y



Calibration / Acrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

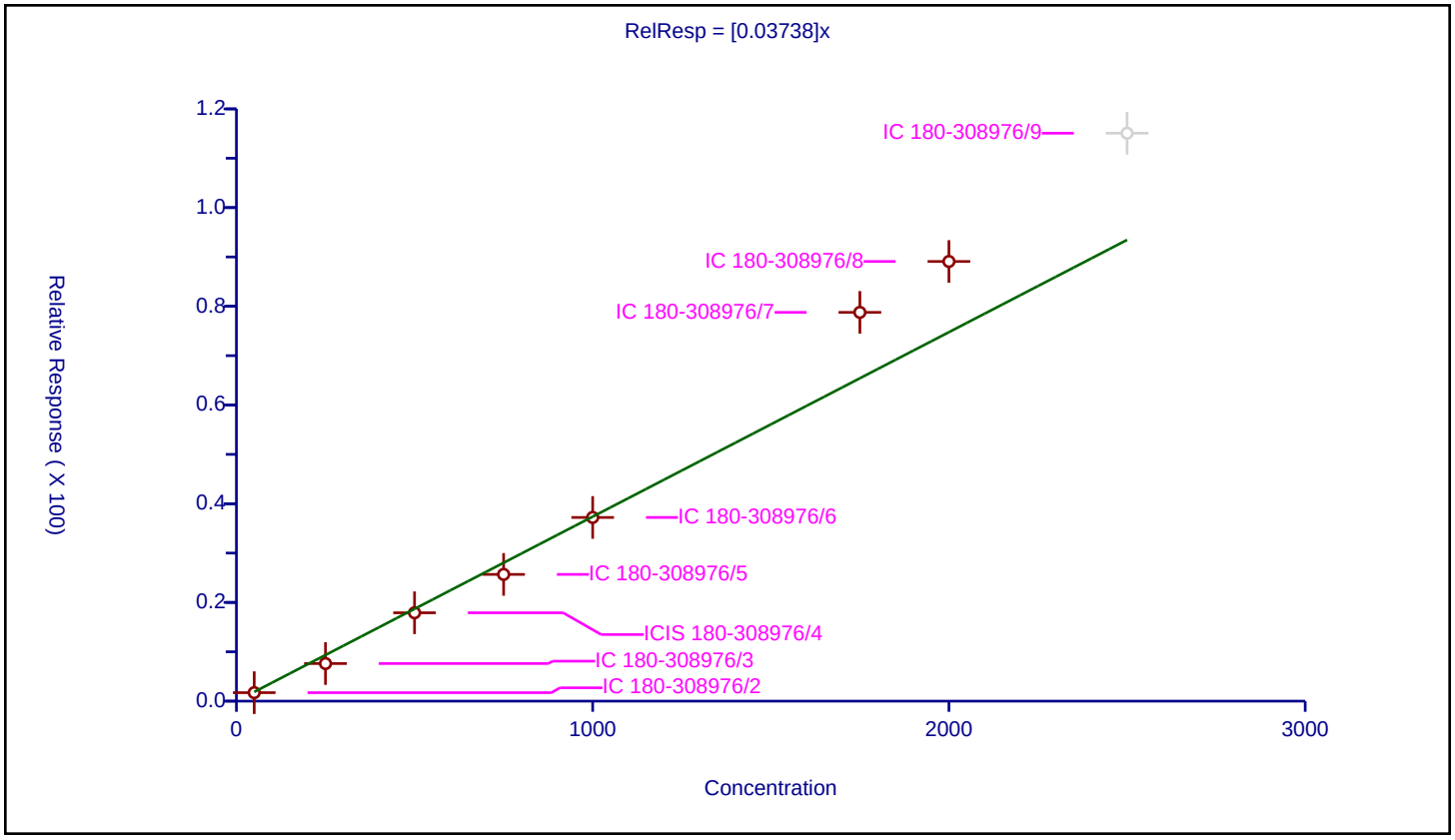
Curve Coefficients

Intercept:	0
Slope:	0.03738

Error Coefficients

Standard Error:	387000
Relative Standard Error:	14.6
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	50.0	1.719522	50.0	328347.0	0.03439	Y
2	IC 180-308976/3	250.0	7.615339	50.0	345395.0	0.030461	Y
3	ICIS 180-308976/4	500.0	17.903837	50.0	366441.0	0.035808	Y
4	IC 180-308976/5	750.0	25.678722	50.0	372133.0	0.034238	Y
5	IC 180-308976/6	1000.0	37.217717	50.0	367716.0	0.037218	Y
6	IC 180-308976/7	1750.0	78.770244	50.0	383377.0	0.045012	Y
7	IC 180-308976/8	2000.0	89.081661	50.0	355947.0	0.044541	Y
8	IC 180-308976/9	2500.0	115.072894	50.0	348586.0	0.046029	N



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

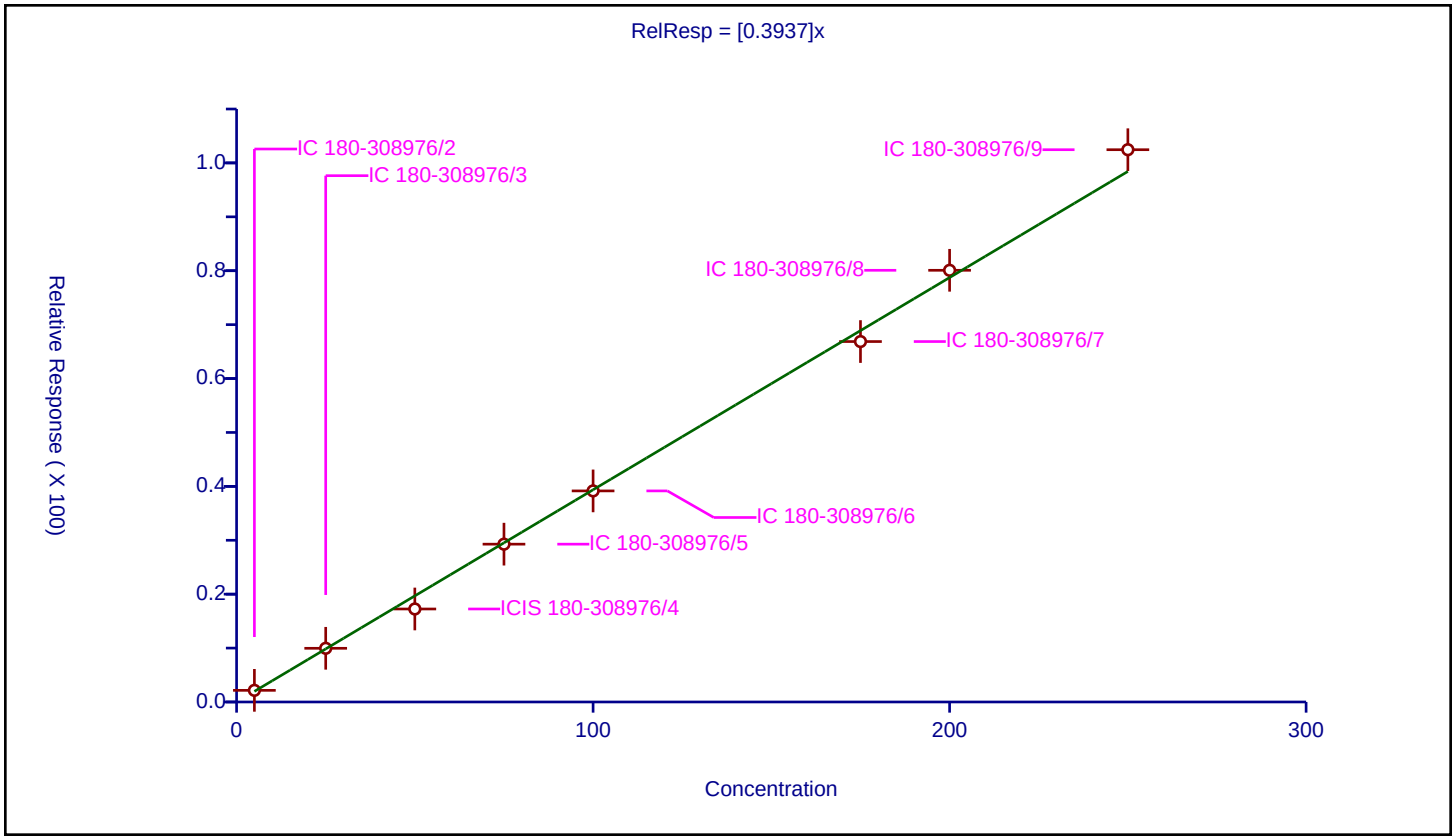
Curve Coefficients

Intercept:	0
Slope:	0.3937

Error Coefficients

Standard Error:	422000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	2.158235	50.0	328347.0	0.431647	Y
2	IC 180-308976/3	25.0	9.961204	50.0	345395.0	0.398448	Y
3	ICIS 180-308976/4	50.0	17.253801	50.0	366441.0	0.345076	Y
4	IC 180-308976/5	75.0	29.27663	50.0	372133.0	0.390355	Y
5	IC 180-308976/6	100.0	39.156713	50.0	367716.0	0.391567	Y
6	IC 180-308976/7	175.0	66.865514	50.0	383377.0	0.382089	Y
7	IC 180-308976/8	200.0	80.082147	50.0	355947.0	0.400411	Y
8	IC 180-308976/9	250.0	102.451762	50.0	348586.0	0.409807	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

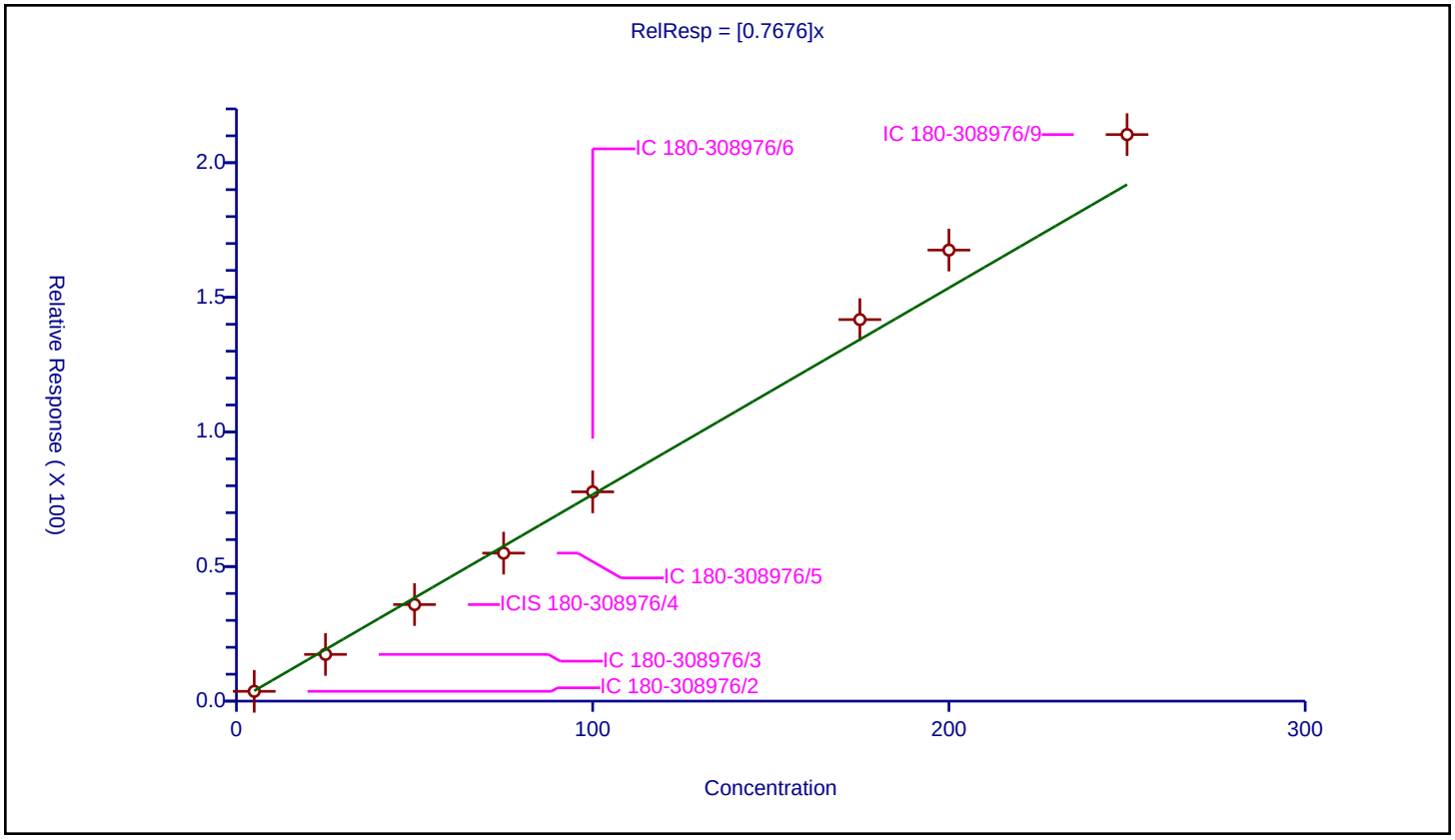
Curve Coefficients

Intercept:	0
Slope:	0.7676

Error Coefficients

Standard Error:	873000
Relative Standard Error:	7.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	3.642793	50.0	328347.0	0.728559	Y
2	IC 180-308976/3	25.0	17.363164	50.0	345395.0	0.694527	Y
3	ICIS 180-308976/4	50.0	35.877672	50.0	366441.0	0.717553	Y
4	IC 180-308976/5	75.0	54.981149	50.0	372133.0	0.733082	Y
5	IC 180-308976/6	100.0	77.751036	50.0	367716.0	0.77751	Y
6	IC 180-308976/7	175.0	141.733855	50.0	383377.0	0.809908	Y
7	IC 180-308976/8	200.0	167.558653	50.0	355947.0	0.837793	Y
8	IC 180-308976/9	250.0	210.453805	50.0	348586.0	0.841815	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

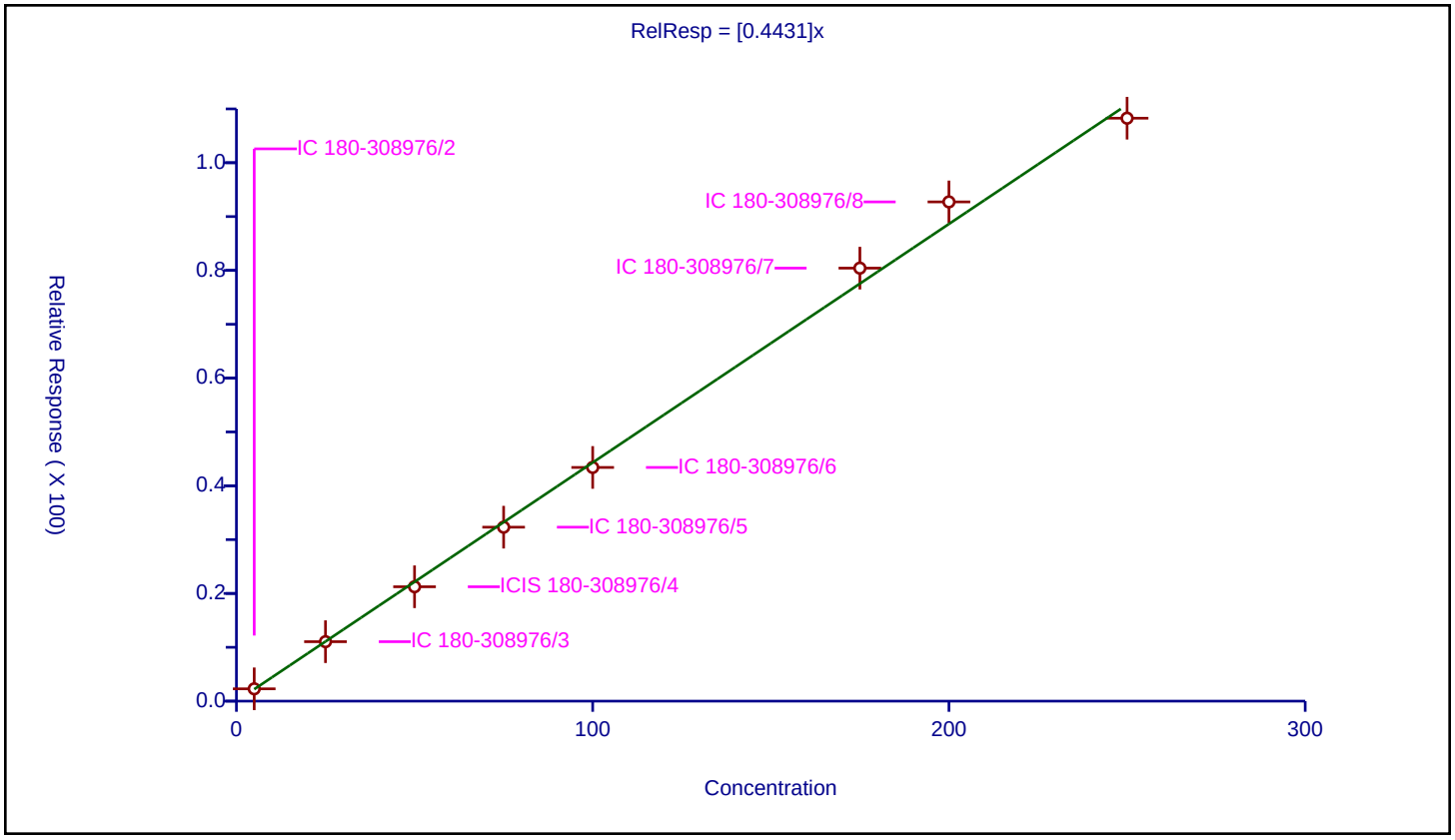
Curve Coefficients

Intercept:	0
Slope:	0.4431

Error Coefficients

Standard Error:	474000
Relative Standard Error:	3.4
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	2.285844	50.0	328347.0	0.457169	Y
2	IC 180-308976/3	25.0	11.043153	50.0	345395.0	0.441726	Y
3	ICIS 180-308976/4	50.0	21.245439	50.0	366441.0	0.424909	Y
4	IC 180-308976/5	75.0	32.309416	50.0	372133.0	0.430792	Y
5	IC 180-308976/6	100.0	43.406732	50.0	367716.0	0.434067	Y
6	IC 180-308976/7	175.0	80.4241	50.0	383377.0	0.459566	Y
7	IC 180-308976/8	200.0	92.724057	50.0	355947.0	0.46362	Y
8	IC 180-308976/9	250.0	108.272994	50.0	348586.0	0.433092	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

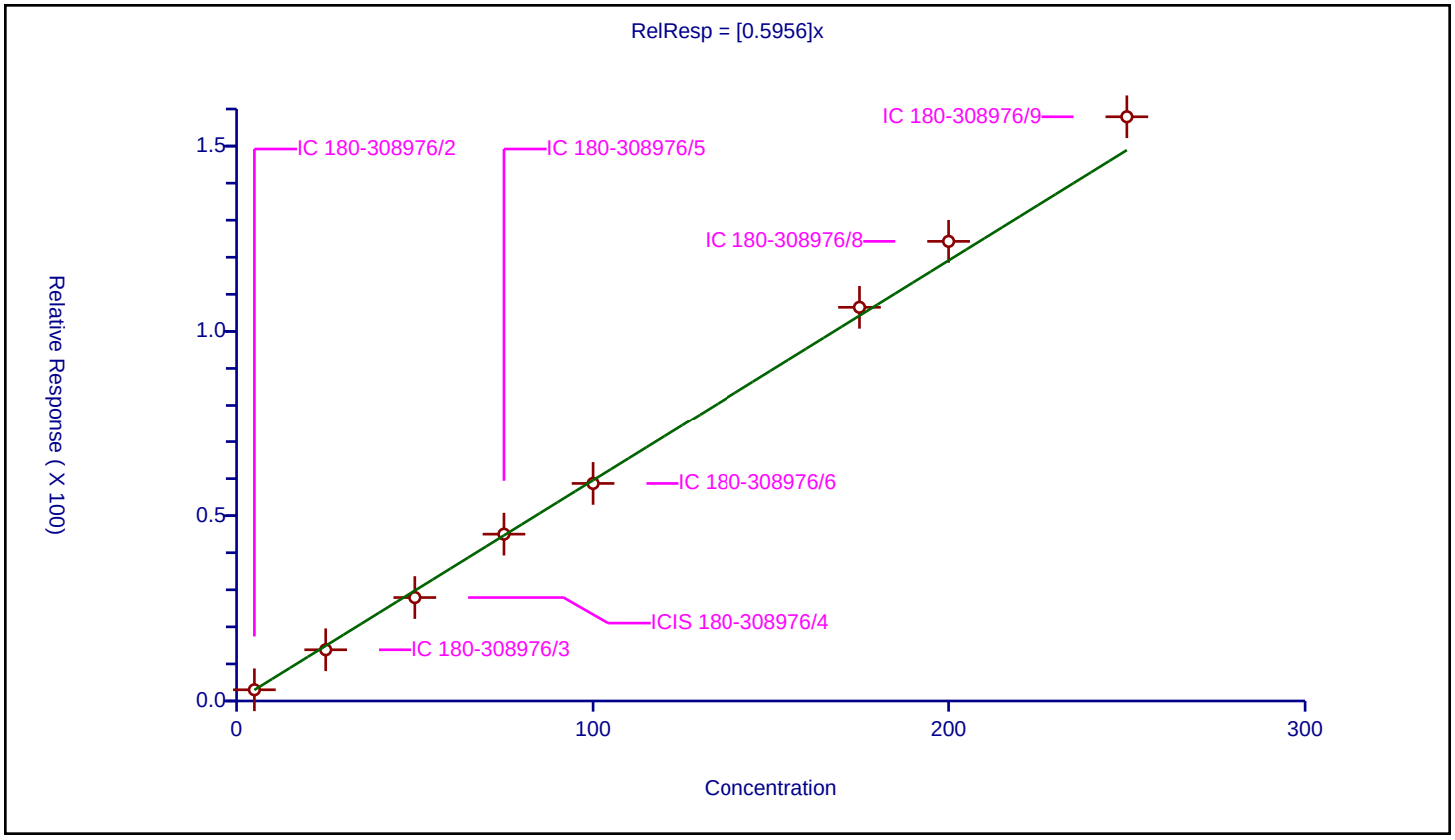
Curve Coefficients

Intercept:	0
Slope:	0.5956

Error Coefficients

Standard Error:	656000
Relative Standard Error:	4.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	3.025458	50.0	328347.0	0.605092	Y
2	IC 180-308976/3	25.0	13.822146	50.0	345395.0	0.552886	Y
3	ICIS 180-308976/4	50.0	27.913907	50.0	366441.0	0.558278	Y
4	IC 180-308976/5	75.0	45.015089	50.0	372133.0	0.600201	Y
5	IC 180-308976/6	100.0	58.702096	50.0	367716.0	0.587021	Y
6	IC 180-308976/7	175.0	106.497521	50.0	383377.0	0.608557	Y
7	IC 180-308976/8	200.0	124.290695	50.0	355947.0	0.621453	Y
8	IC 180-308976/9	250.0	157.906801	50.0	348586.0	0.631627	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

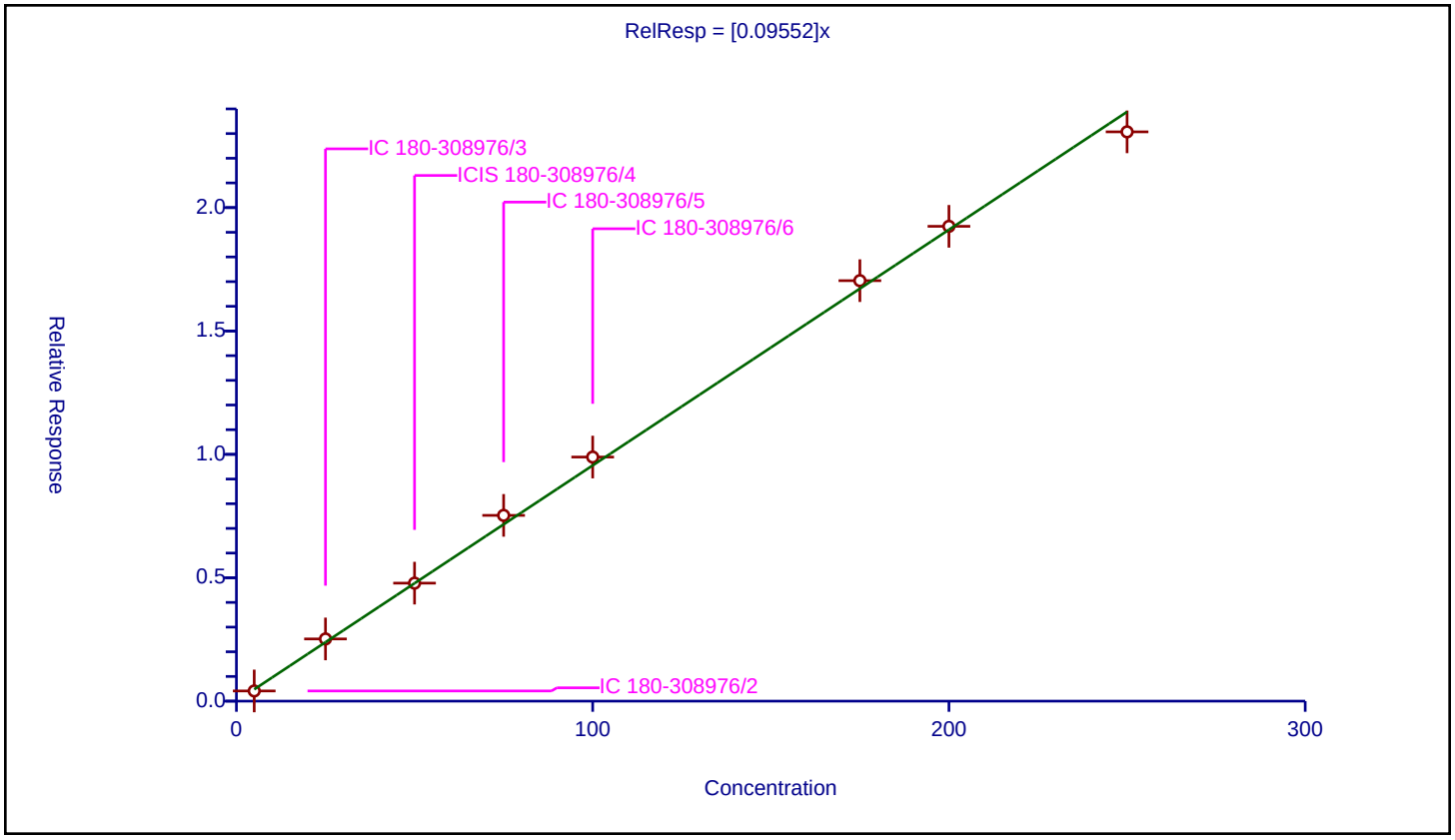
Curve Coefficients

Intercept:	0
Slope:	0.09552

Error Coefficients

Standard Error:	101000
Relative Standard Error:	6.2
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	0.412825	50.0	328347.0	0.082565	Y
2	IC 180-308976/3	25.0	2.521171	50.0	345395.0	0.100847	Y
3	ICIS 180-308976/4	50.0	4.781534	50.0	366441.0	0.095631	Y
4	IC 180-308976/5	75.0	7.527282	50.0	372133.0	0.100364	Y
5	IC 180-308976/6	100.0	9.891057	50.0	367716.0	0.098911	Y
6	IC 180-308976/7	175.0	17.040015	50.0	383377.0	0.097372	Y
7	IC 180-308976/8	200.0	19.240926	50.0	355947.0	0.096205	Y
8	IC 180-308976/9	250.0	23.0692	50.0	348586.0	0.092277	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

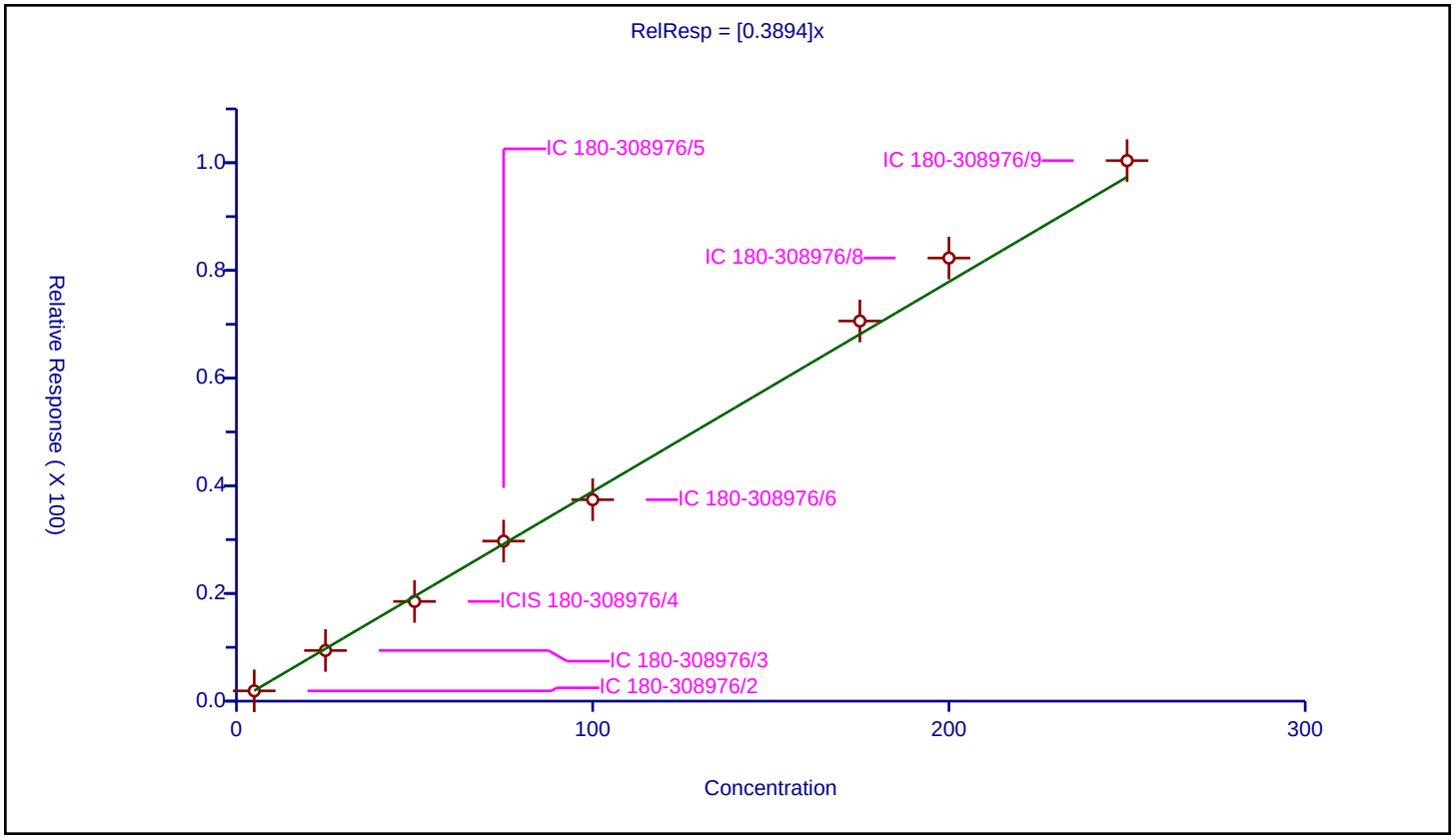
Curve Coefficients

Intercept:	0
Slope:	0.3894

Error Coefficients

Standard Error:	427000
Relative Standard Error:	4.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.907433	50.0	328347.0	0.381487	Y
2	IC 180-308976/3	25.0	9.406477	50.0	345395.0	0.376259	Y
3	ICIS 180-308976/4	50.0	18.520444	50.0	366441.0	0.370409	Y
4	IC 180-308976/5	75.0	29.727006	50.0	372133.0	0.39636	Y
5	IC 180-308976/6	100.0	37.412976	50.0	367716.0	0.37413	Y
6	IC 180-308976/7	175.0	70.605566	50.0	383377.0	0.40346	Y
7	IC 180-308976/8	200.0	82.30509	50.0	355947.0	0.411525	Y
8	IC 180-308976/9	250.0	100.395168	50.0	348586.0	0.401581	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

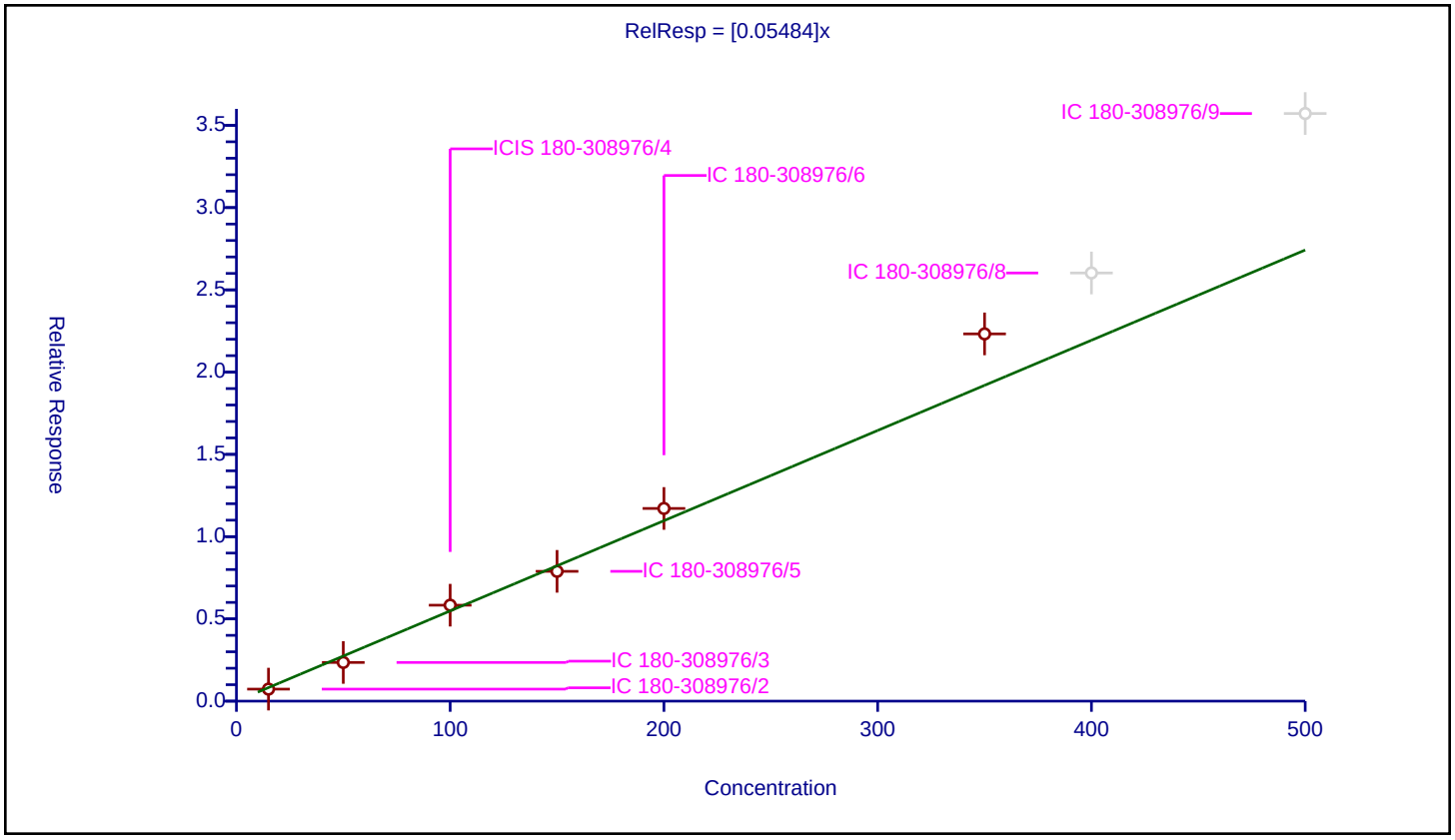
Curve Coefficients

Intercept:	0
Slope:	0.05484

Error Coefficients

Standard Error:	91900
Relative Standard Error:	11.8
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	15.0	0.731391	50.0	328347.0	0.048759	Y
2	IC 180-308976/3	50.0	2.351945	50.0	345395.0	0.047039	Y
3	ICIS 180-308976/4	100.0	5.832044	50.0	366441.0	0.05832	Y
4	IC 180-308976/5	150.0	7.889249	50.0	372133.0	0.052595	Y
5	IC 180-308976/6	200.0	11.711756	50.0	367716.0	0.058559	Y
6	IC 180-308976/7	350.0	22.322544	50.0	383377.0	0.063779	Y
7	IC 180-308976/8	400.0	26.026206	50.0	355947.0	0.065066	N
8	IC 180-308976/9	500.0	35.718159	50.0	348586.0	0.071436	N



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

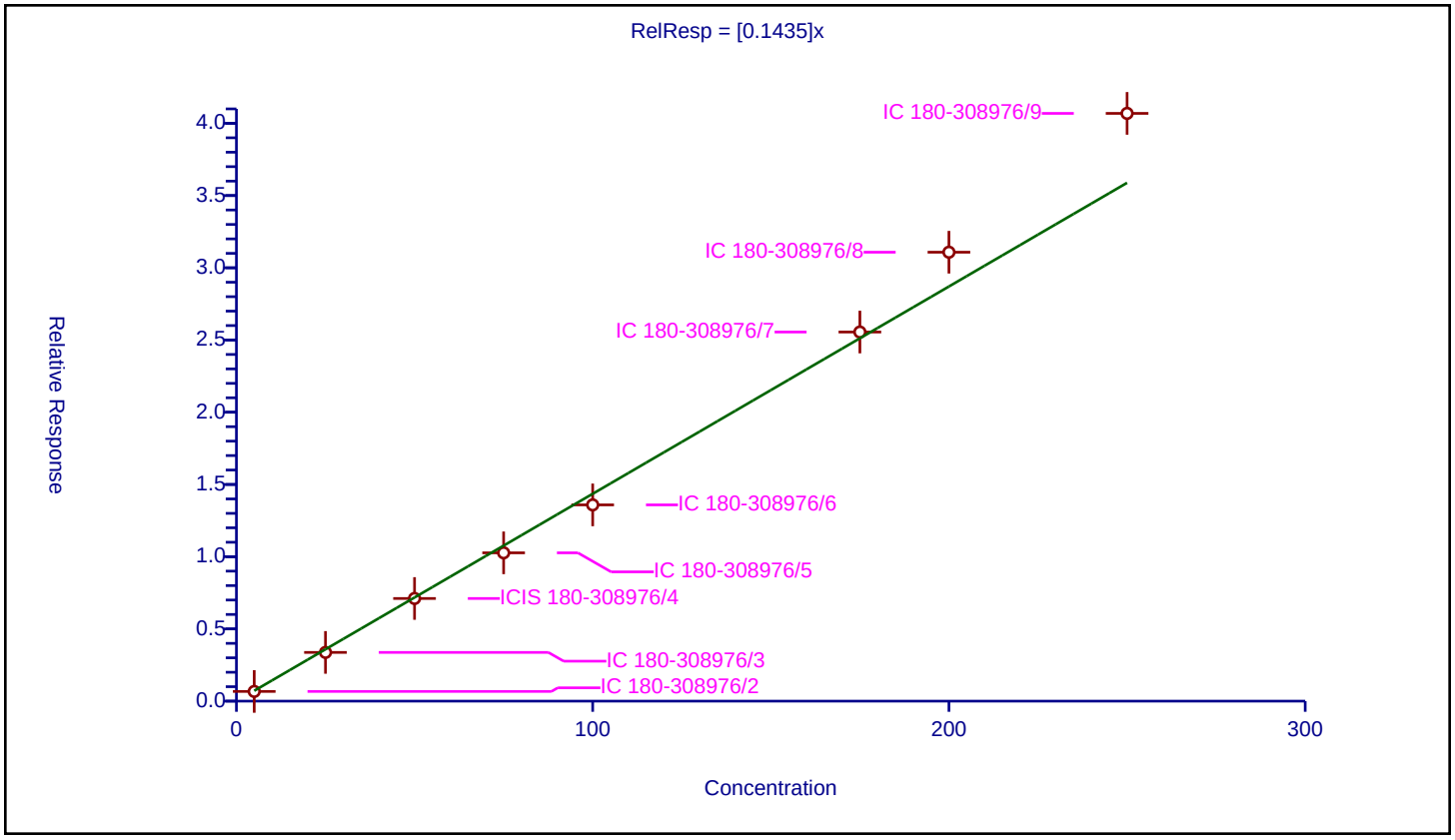
Curve Coefficients

Intercept:	0
Slope:	0.1435

Error Coefficients

Standard Error:	163000
Relative Standard Error:	7.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	0.671241	50.0	328347.0	0.134248	Y
2	IC 180-308976/3	25.0	3.37295	50.0	345395.0	0.134918	Y
3	ICIS 180-308976/4	50.0	7.107283	50.0	366441.0	0.142146	Y
4	IC 180-308976/5	75.0	10.268103	50.0	372133.0	0.136908	Y
5	IC 180-308976/6	100.0	13.58698	50.0	367716.0	0.13587	Y
6	IC 180-308976/7	175.0	25.552263	50.0	383377.0	0.146013	Y
7	IC 180-308976/8	200.0	31.07752	50.0	355947.0	0.155388	Y
8	IC 180-308976/9	250.0	40.688955	50.0	348586.0	0.162756	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

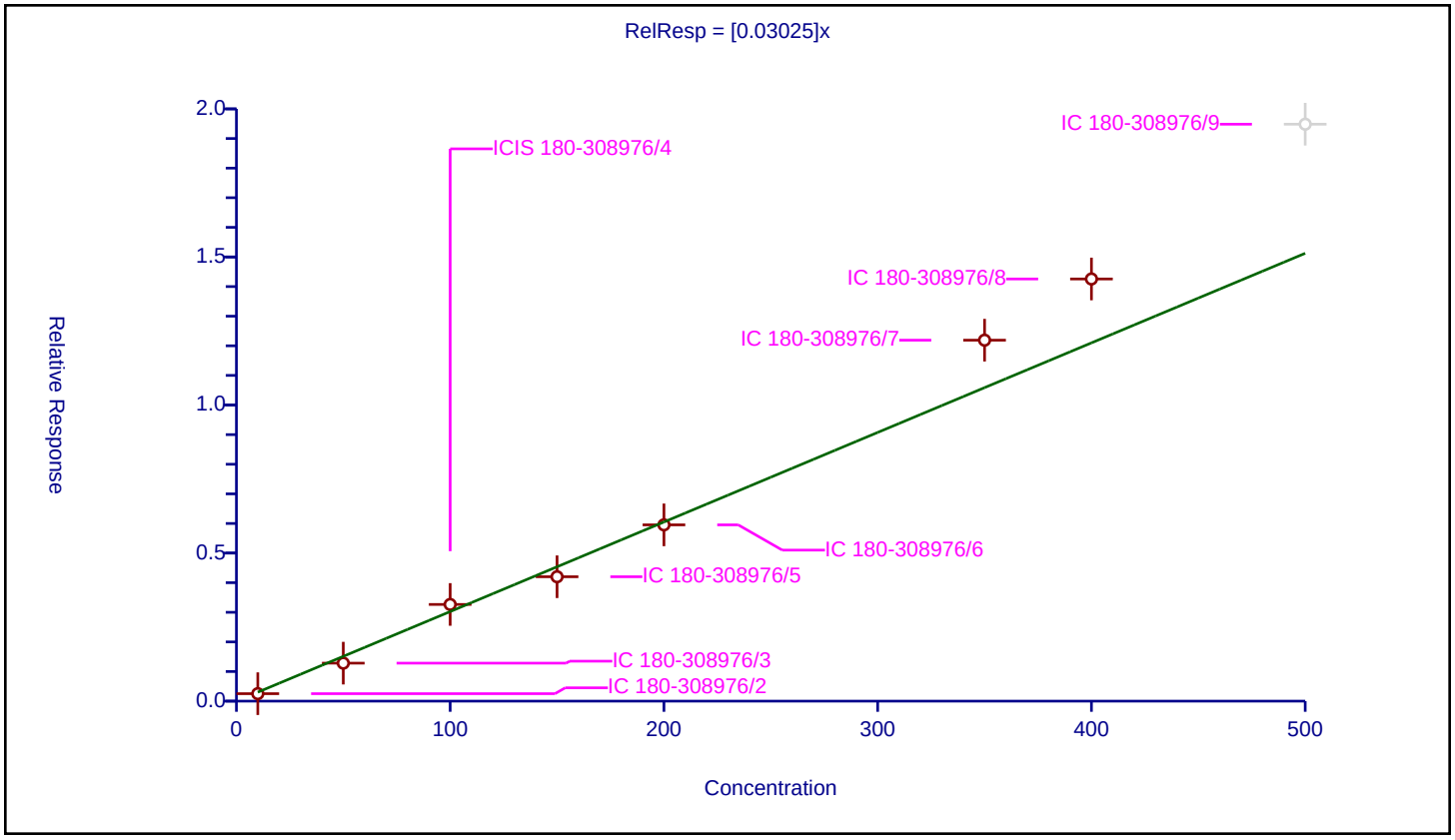
Curve Coefficients

Intercept:	0
Slope:	0.03025

Error Coefficients

Standard Error:	61300
Relative Standard Error:	14.0
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	10.0	0.251868	50.0	328347.0	0.025187	Y
2	IC 180-308976/3	50.0	1.282734	50.0	345395.0	0.025655	Y
3	ICIS 180-308976/4	100.0	3.265191	50.0	366441.0	0.032652	Y
4	IC 180-308976/5	150.0	4.20038	50.0	372133.0	0.028003	Y
5	IC 180-308976/6	200.0	5.952692	50.0	367716.0	0.029763	Y
6	IC 180-308976/7	350.0	12.189177	50.0	383377.0	0.034826	Y
7	IC 180-308976/8	400.0	14.256195	50.0	355947.0	0.03564	Y
8	IC 180-308976/9	500.0	19.482423	50.0	348586.0	0.038965	N



Calibration / Chloroform

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

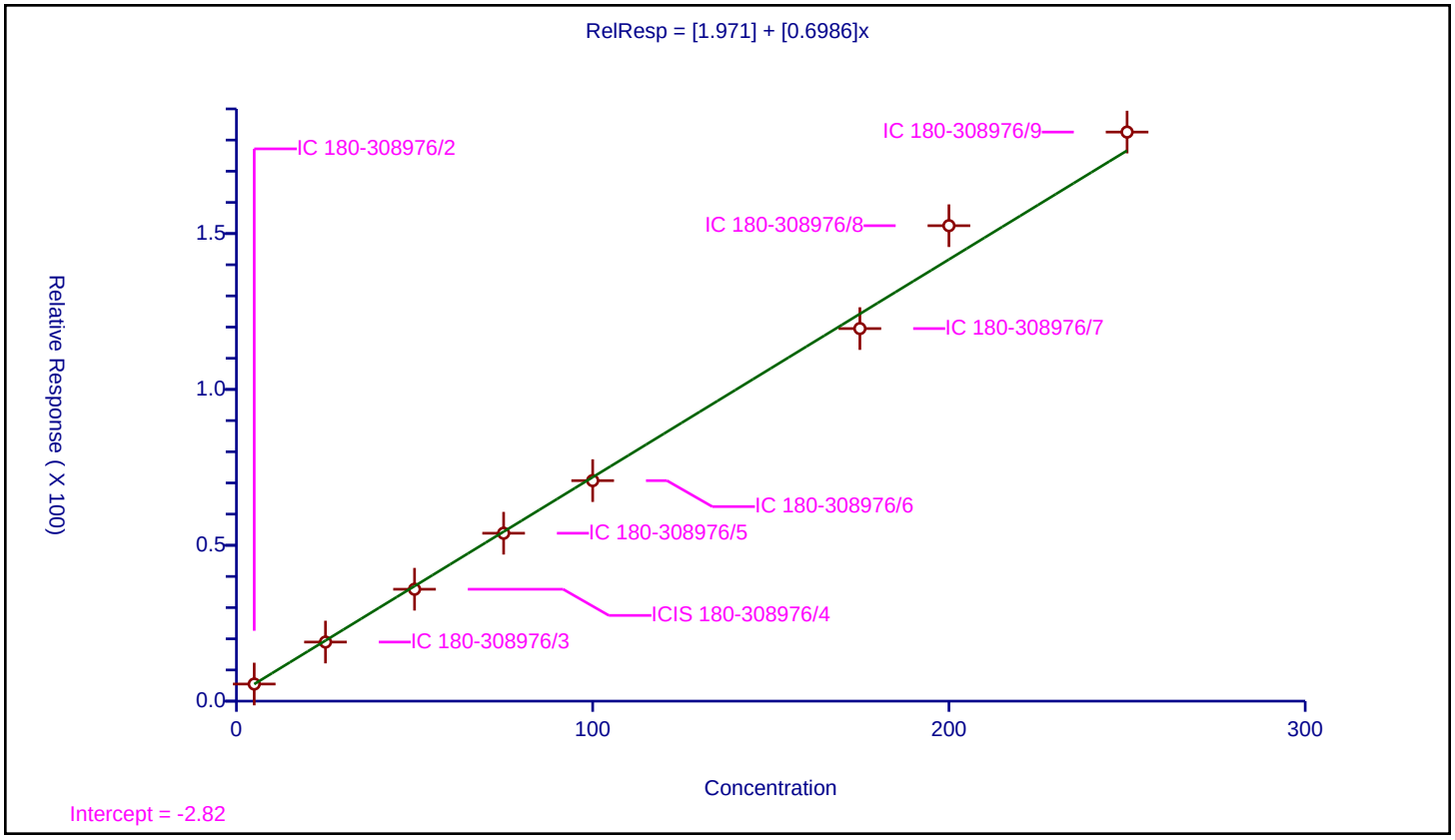
Curve Coefficients

Intercept:	1.971
Slope:	0.6986

Error Coefficients

Standard Error:	832000
Relative Standard Error:	4.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	5.493274	50.0	328347.0	1.098655	Y
2	IC 180-308976/3	25.0	18.959452	50.0	345395.0	0.758378	Y
3	ICIS 180-308976/4	50.0	35.895547	50.0	366441.0	0.717911	Y
4	IC 180-308976/5	75.0	53.872943	50.0	372133.0	0.718306	Y
5	IC 180-308976/6	100.0	70.748485	50.0	367716.0	0.707485	Y
6	IC 180-308976/7	175.0	119.526471	50.0	383377.0	0.683008	Y
7	IC 180-308976/8	200.0	152.531276	50.0	355947.0	0.762656	Y
8	IC 180-308976/9	250.0	182.563413	50.0	348586.0	0.730254	Y



Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

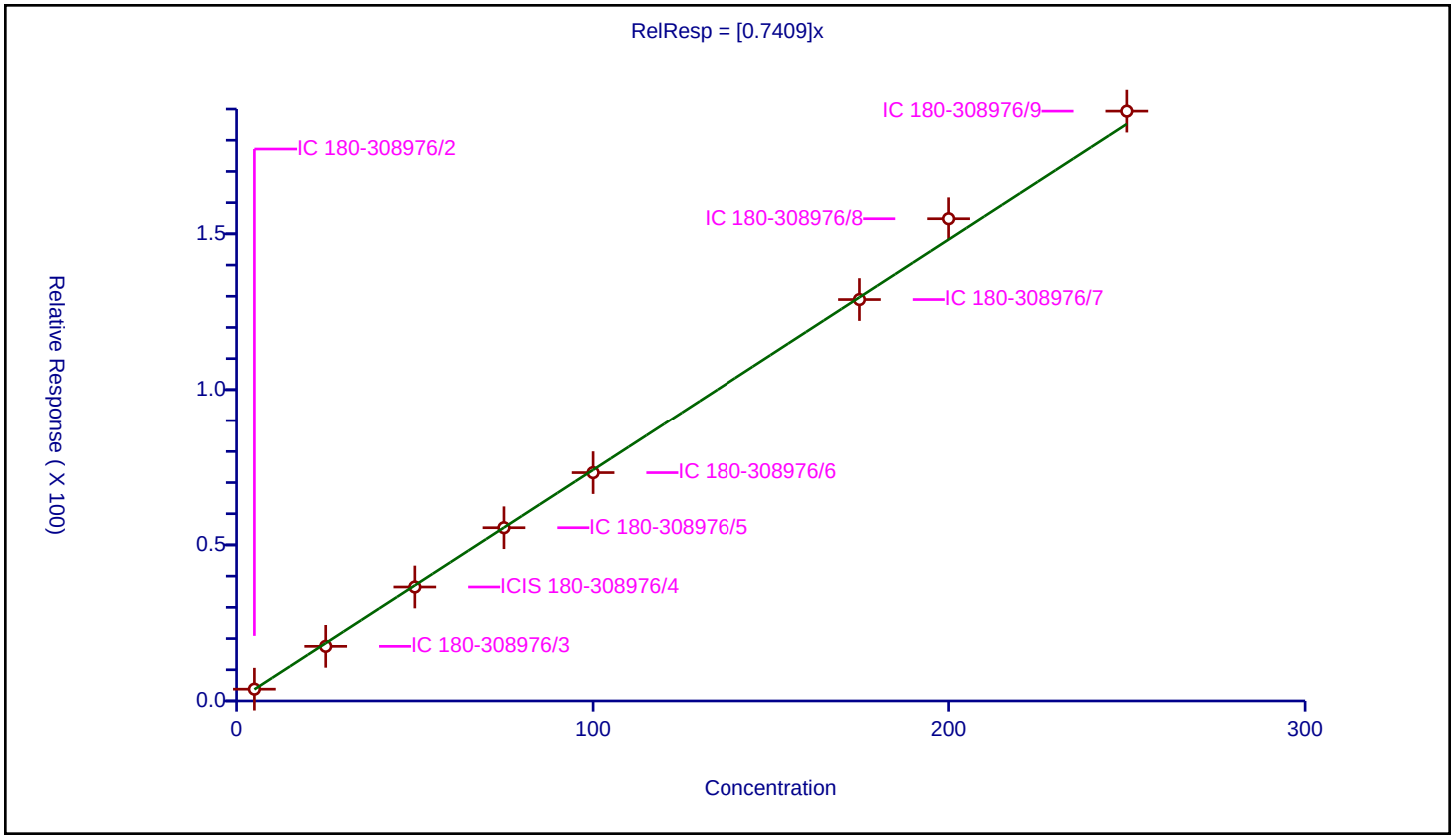
Curve Coefficients

Intercept:	0
Slope:	0.7409

Error Coefficients

Standard Error:	800000
Relative Standard Error:	3.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	3.777863	50.0	328347.0	0.755573	Y
2	IC 180-308976/3	25.0	17.512992	50.0	345395.0	0.70052	Y
3	ICIS 180-308976/4	50.0	36.523342	50.0	366441.0	0.730467	Y
4	IC 180-308976/5	75.0	55.515098	50.0	372133.0	0.740201	Y
5	IC 180-308976/6	100.0	73.196162	50.0	367716.0	0.731962	Y
6	IC 180-308976/7	175.0	128.949181	50.0	383377.0	0.736852	Y
7	IC 180-308976/8	200.0	154.848334	50.0	355947.0	0.774242	Y
8	IC 180-308976/9	250.0	189.331184	50.0	348586.0	0.757325	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

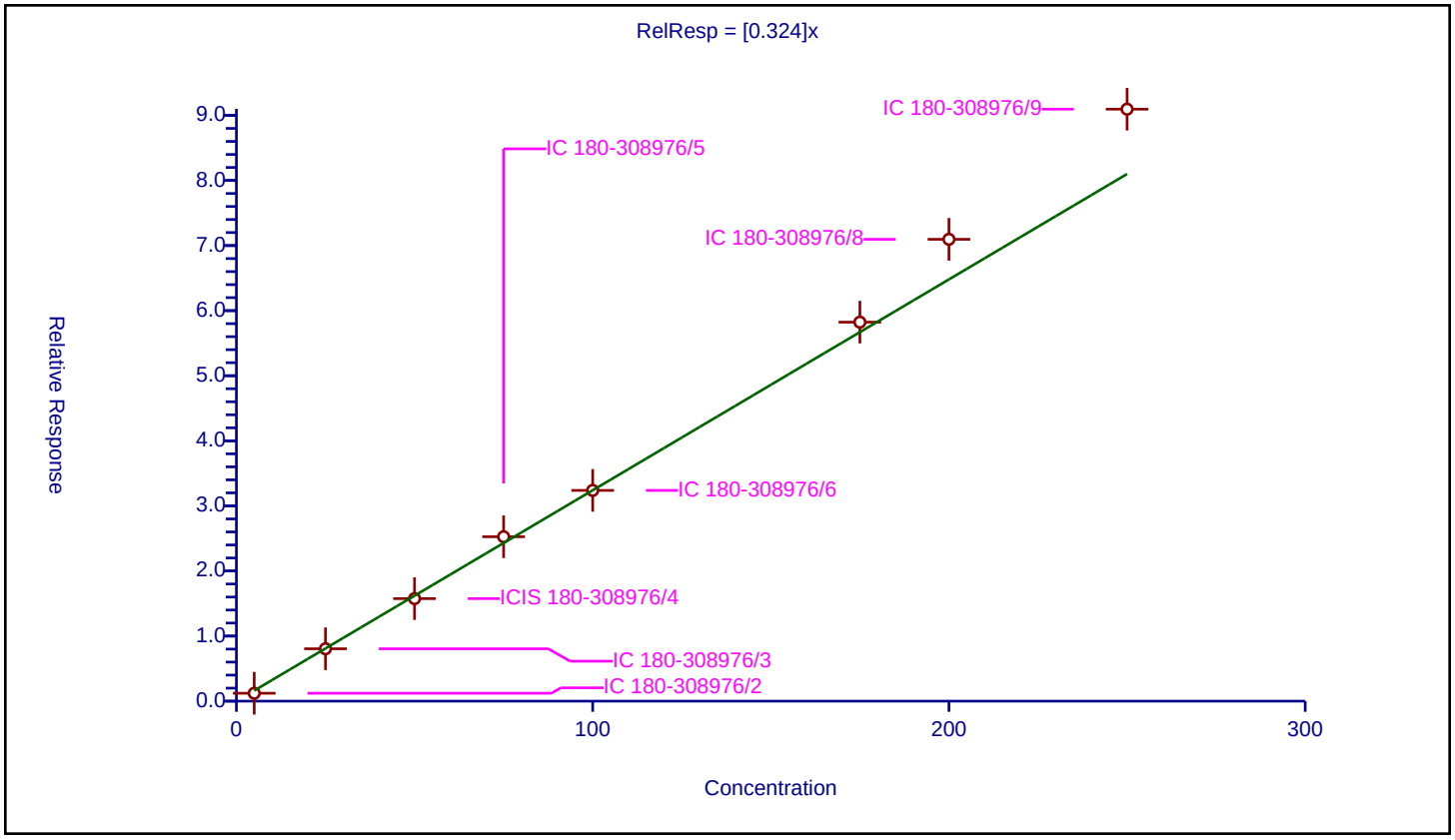
Curve Coefficients

Intercept:	0
Slope:	0.324

Error Coefficients

Standard Error:	371000
Relative Standard Error:	11.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.215178	50.0	328347.0	0.243036	Y
2	IC 180-308976/3	25.0	8.046729	50.0	345395.0	0.321869	Y
3	ICIS 180-308976/4	50.0	15.754651	50.0	366441.0	0.315093	Y
4	IC 180-308976/5	75.0	25.260458	50.0	372133.0	0.336806	Y
5	IC 180-308976/6	100.0	32.37988	50.0	367716.0	0.323799	Y
6	IC 180-308976/7	175.0	58.23041	50.0	383377.0	0.332745	Y
7	IC 180-308976/8	200.0	70.958036	50.0	355947.0	0.35479	Y
8	IC 180-308976/9	250.0	90.953165	50.0	348586.0	0.363813	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

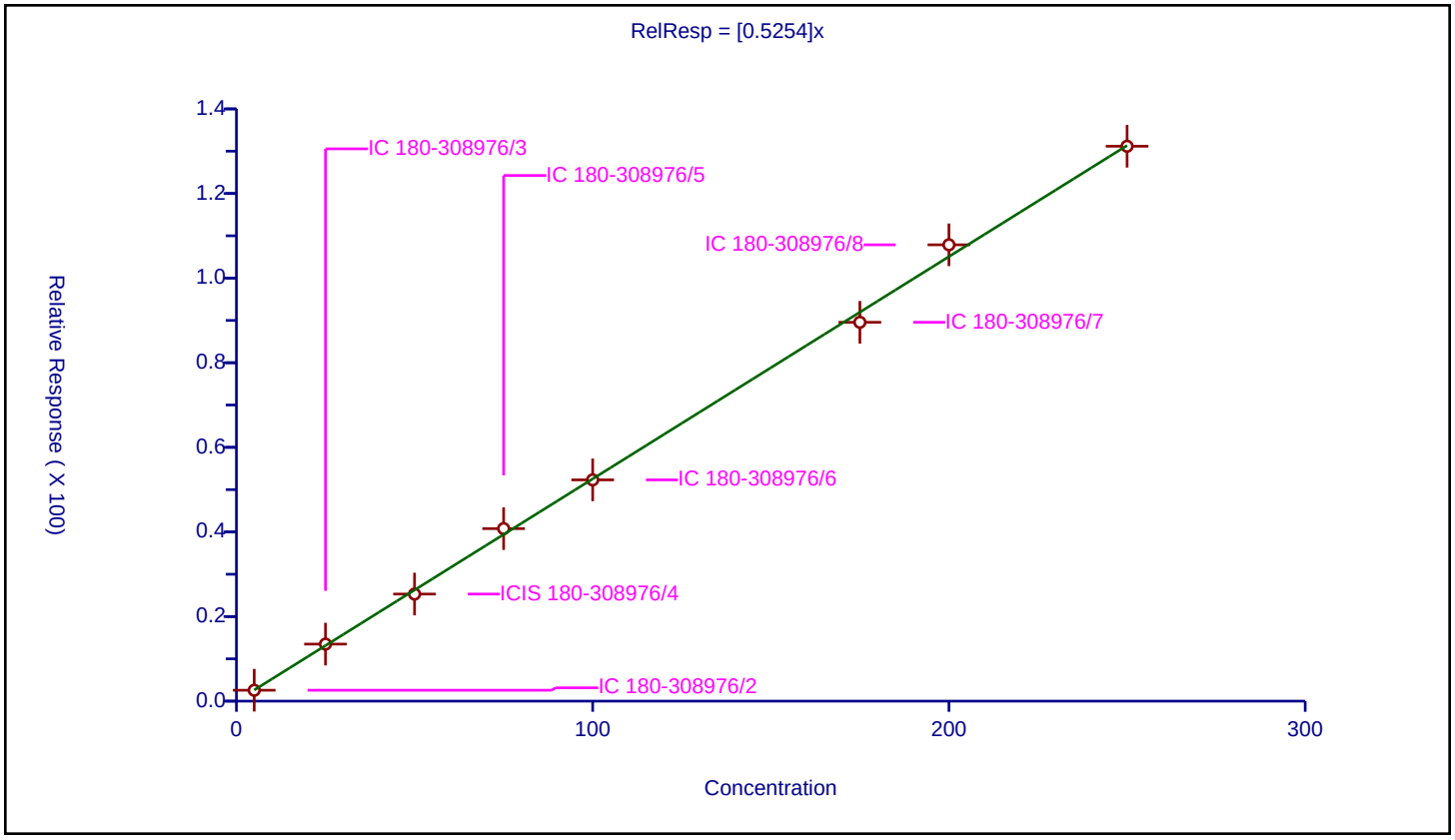
Curve Coefficients

Intercept:	0
Slope:	0.5254

Error Coefficients

Standard Error:	558000
Relative Standard Error:	2.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	2.57502	50.0	328347.0	0.515004	Y
2	IC 180-308976/3	25.0	13.483114	50.0	345395.0	0.539325	Y
3	ICIS 180-308976/4	50.0	25.315126	50.0	366441.0	0.506303	Y
4	IC 180-308976/5	75.0	40.779775	50.0	372133.0	0.54373	Y
5	IC 180-308976/6	100.0	52.303952	50.0	367716.0	0.52304	Y
6	IC 180-308976/7	175.0	89.559754	50.0	383377.0	0.51177	Y
7	IC 180-308976/8	200.0	107.87238	50.0	355947.0	0.539362	Y
8	IC 180-308976/9	250.0	131.172221	50.0	348586.0	0.524689	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

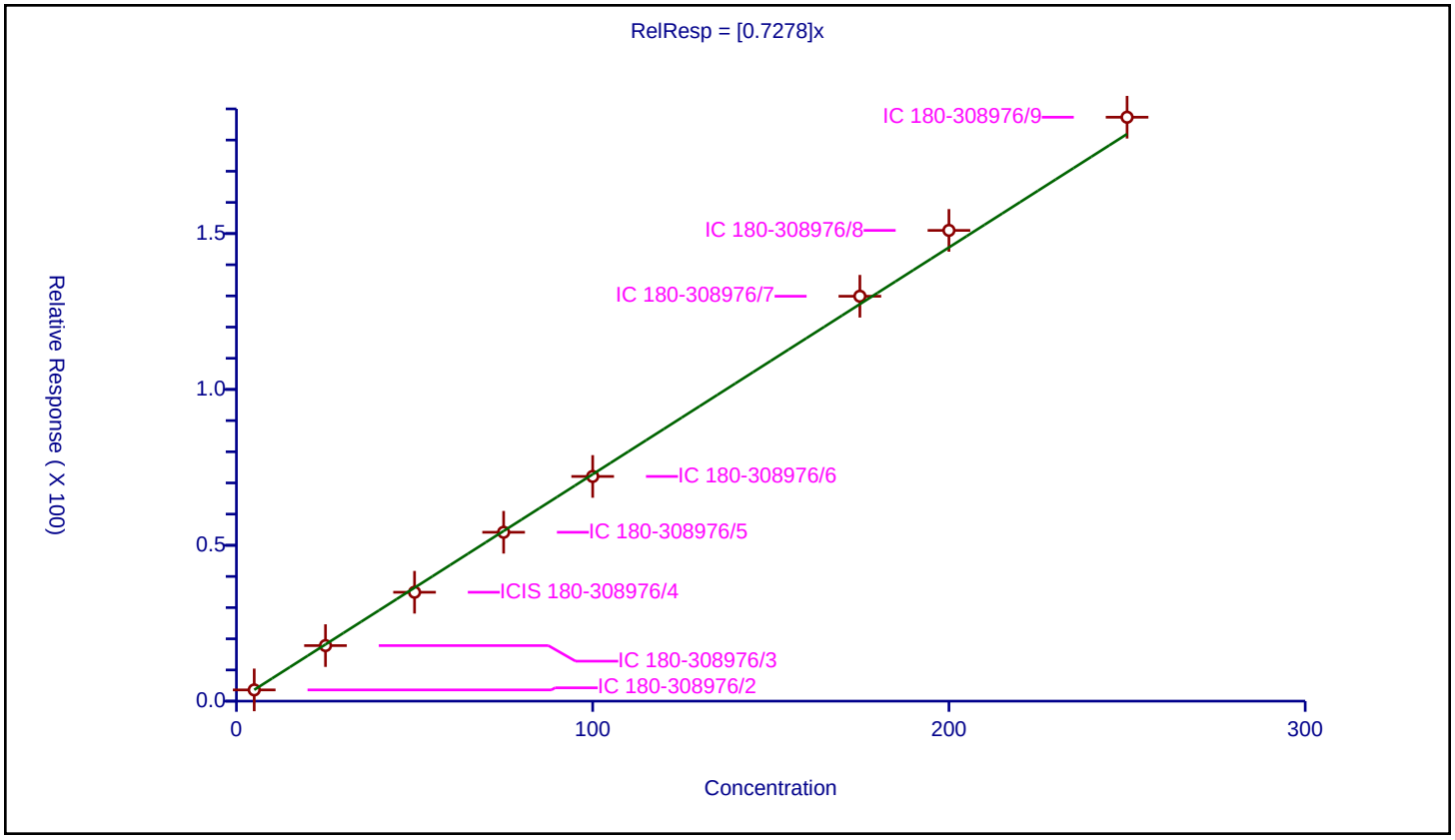
Curve Coefficients

Intercept:	0
Slope:	0.7278

Error Coefficients

Standard Error:	791000
Relative Standard Error:	2.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	3.604571	50.0	328347.0	0.720914	Y
2	IC 180-308976/3	25.0	17.815545	50.0	345395.0	0.712622	Y
3	ICIS 180-308976/4	50.0	34.937548	50.0	366441.0	0.698751	Y
4	IC 180-308976/5	75.0	54.175792	50.0	372133.0	0.722344	Y
5	IC 180-308976/6	100.0	72.088242	50.0	367716.0	0.720882	Y
6	IC 180-308976/7	175.0	129.89929	50.0	383377.0	0.742282	Y
7	IC 180-308976/8	200.0	151.02136	50.0	355947.0	0.755107	Y
8	IC 180-308976/9	250.0	187.32178	50.0	348586.0	0.749287	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

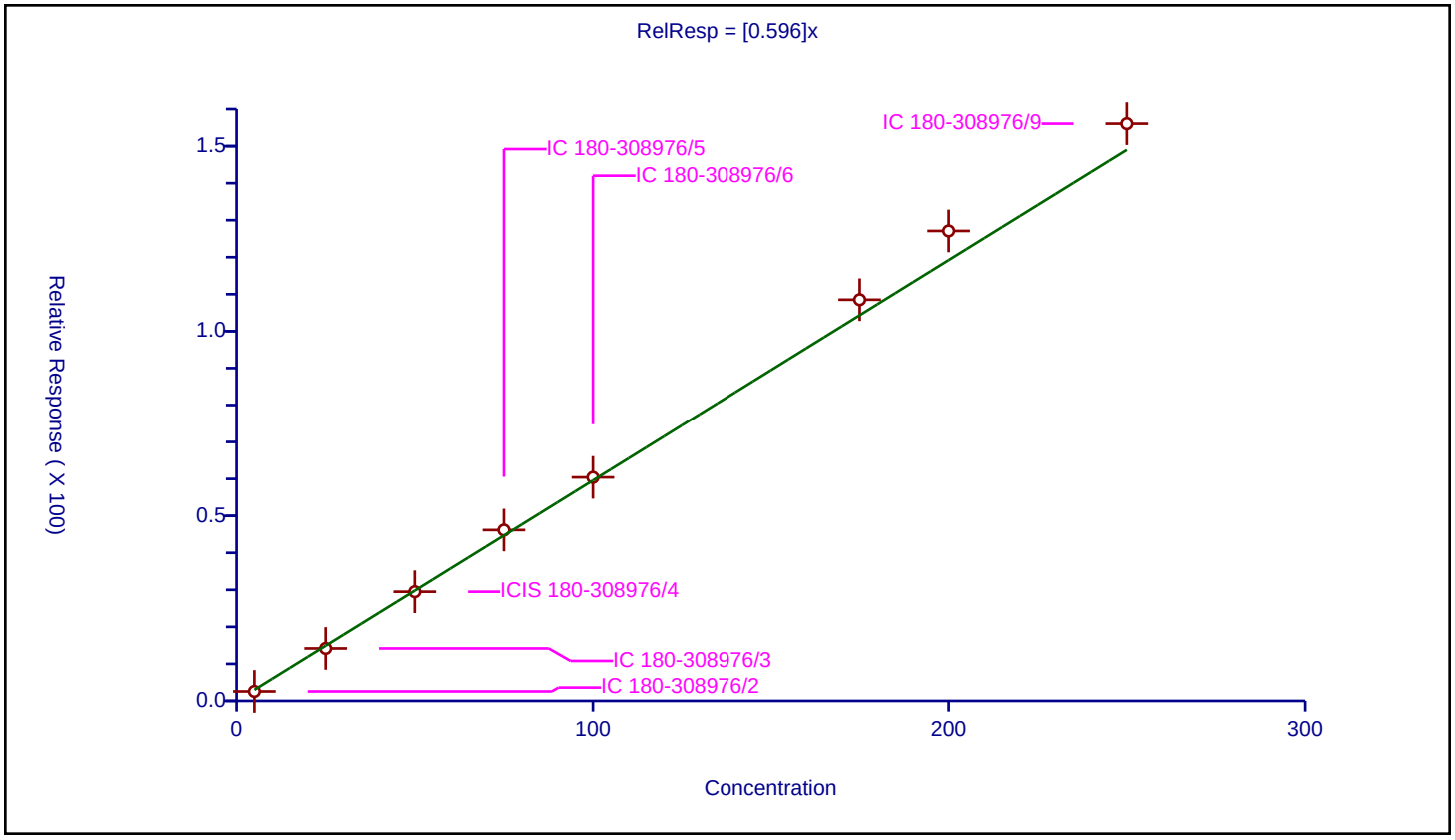
Curve Coefficients

Intercept:	0
Slope:	0.596

Error Coefficients

Standard Error:	662000
Relative Standard Error:	6.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	2.557508	50.0	328347.0	0.511502	Y
2	IC 180-308976/3	25.0	14.171311	50.0	345395.0	0.566852	Y
3	ICIS 180-308976/4	50.0	29.503658	50.0	366441.0	0.590073	Y
4	IC 180-308976/5	75.0	46.176501	50.0	372133.0	0.615687	Y
5	IC 180-308976/6	100.0	60.423397	50.0	367716.0	0.604234	Y
6	IC 180-308976/7	175.0	108.50664	50.0	383377.0	0.620038	Y
7	IC 180-308976/8	200.0	127.094343	50.0	355947.0	0.635472	Y
8	IC 180-308976/9	250.0	156.067943	50.0	348586.0	0.624272	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

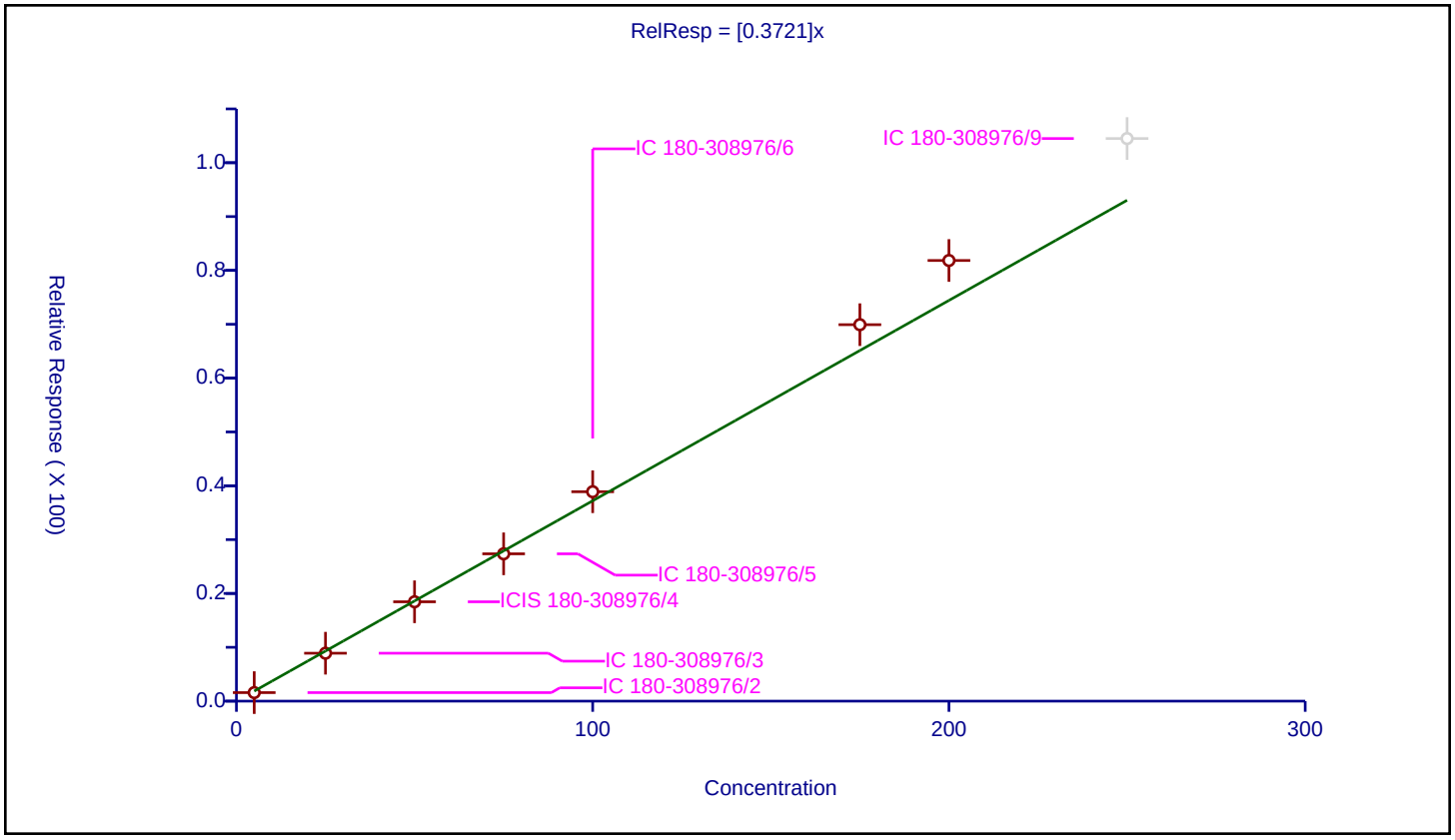
Curve Coefficients

Intercept:	0
Slope:	0.3721

Error Coefficients

Standard Error:	359000
Relative Standard Error:	8.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.586127	50.0	328347.0	0.317225	Y
2	IC 180-308976/3	25.0	8.901403	50.0	345395.0	0.356056	Y
3	ICIS 180-308976/4	50.0	18.454949	50.0	366441.0	0.369099	Y
4	IC 180-308976/5	75.0	27.361857	50.0	372133.0	0.364825	Y
5	IC 180-308976/6	100.0	38.896458	50.0	367716.0	0.388965	Y
6	IC 180-308976/7	175.0	69.918383	50.0	383377.0	0.399534	Y
7	IC 180-308976/8	200.0	81.841117	50.0	355947.0	0.409206	Y
8	IC 180-308976/9	250.0	104.492722	50.0	348586.0	0.417971	N



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

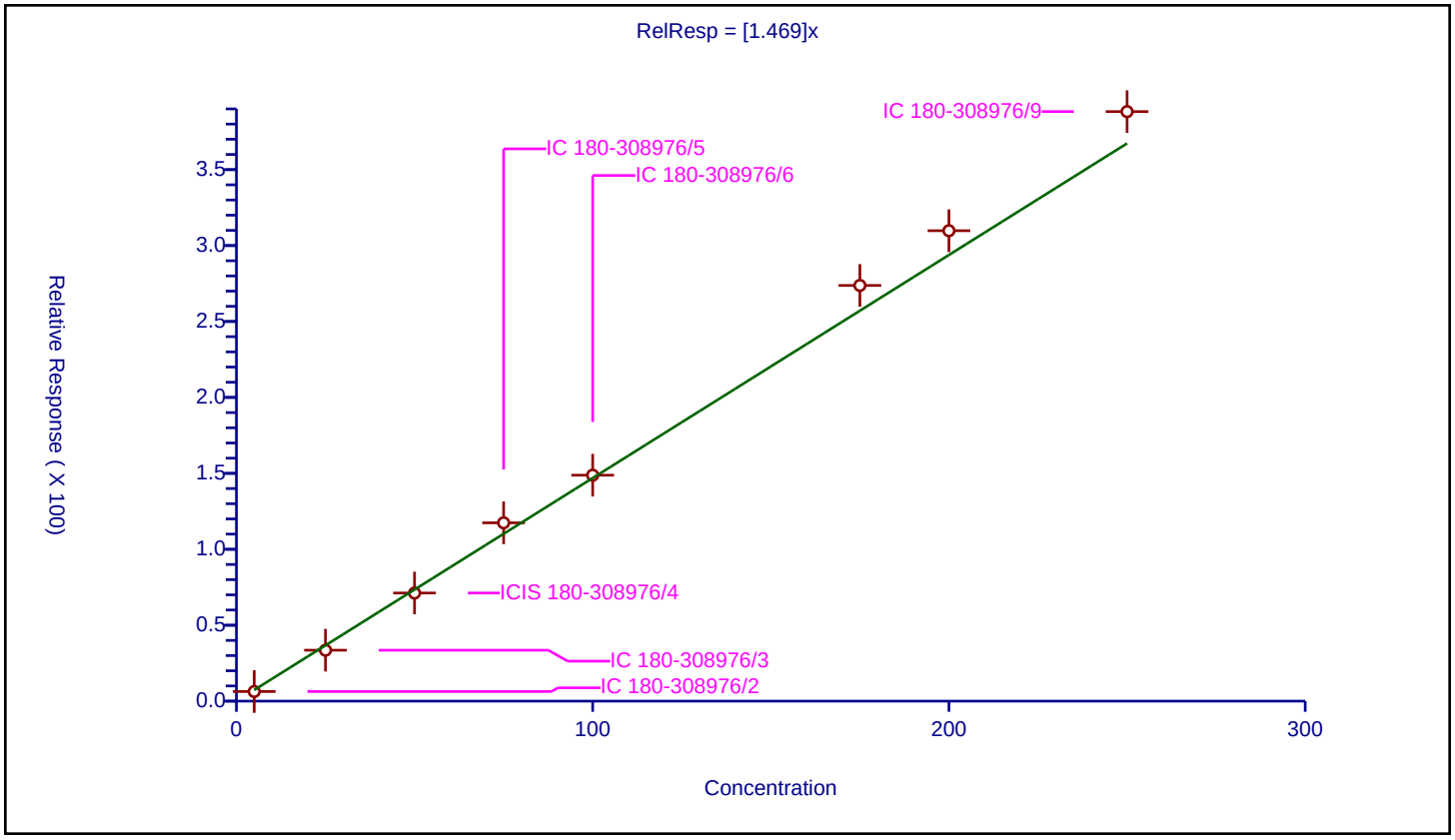
Curve Coefficients

Intercept:	0
Slope:	1.469

Error Coefficients

Standard Error:	1640000
Relative Standard Error:	7.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	6.334	50.0	328347.0	1.2668	Y
2	IC 180-308976/3	25.0	33.550573	50.0	345395.0	1.342023	Y
3	ICIS 180-308976/4	50.0	71.199866	50.0	366441.0	1.423997	Y
4	IC 180-308976/5	75.0	117.437583	50.0	372133.0	1.565834	Y
5	IC 180-308976/6	100.0	148.798393	50.0	367716.0	1.487984	Y
6	IC 180-308976/7	175.0	273.730949	50.0	383377.0	1.564177	Y
7	IC 180-308976/8	200.0	309.783198	50.0	355947.0	1.548916	Y
8	IC 180-308976/9	250.0	388.204776	50.0	348586.0	1.552819	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

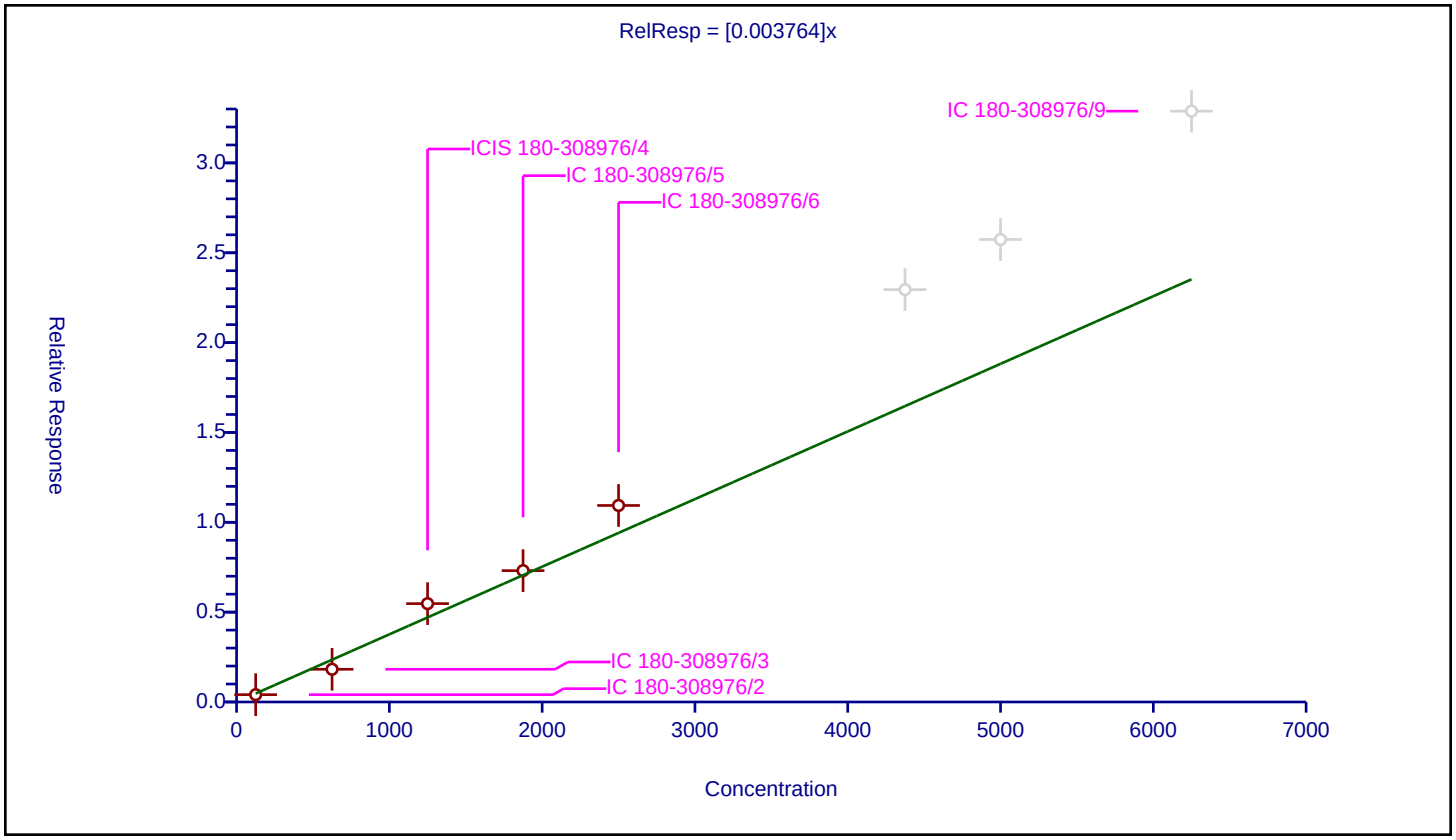
Curve Coefficients

Intercept:	0
Slope:	0.003764

Error Coefficients

Standard Error:	52900
Relative Standard Error:	17.6
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	125.0	0.406734	50.0	328347.0	0.003254	Y
2	IC 180-308976/3	625.0	1.819656	50.0	345395.0	0.002911	Y
3	ICIS 180-308976/4	1250.0	5.474278	50.0	366441.0	0.004379	Y
4	IC 180-308976/5	1875.0	7.308946	50.0	372133.0	0.003898	Y
5	IC 180-308976/6	2500.0	10.937381	50.0	367716.0	0.004375	Y
6	IC 180-308976/7	4375.0	22.94856	50.0	383377.0	0.005245	N
7	IC 180-308976/8	5000.0	25.738663	50.0	355947.0	0.005148	N
8	IC 180-308976/9	6250.0	32.880552	50.0	348586.0	0.005261	N



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

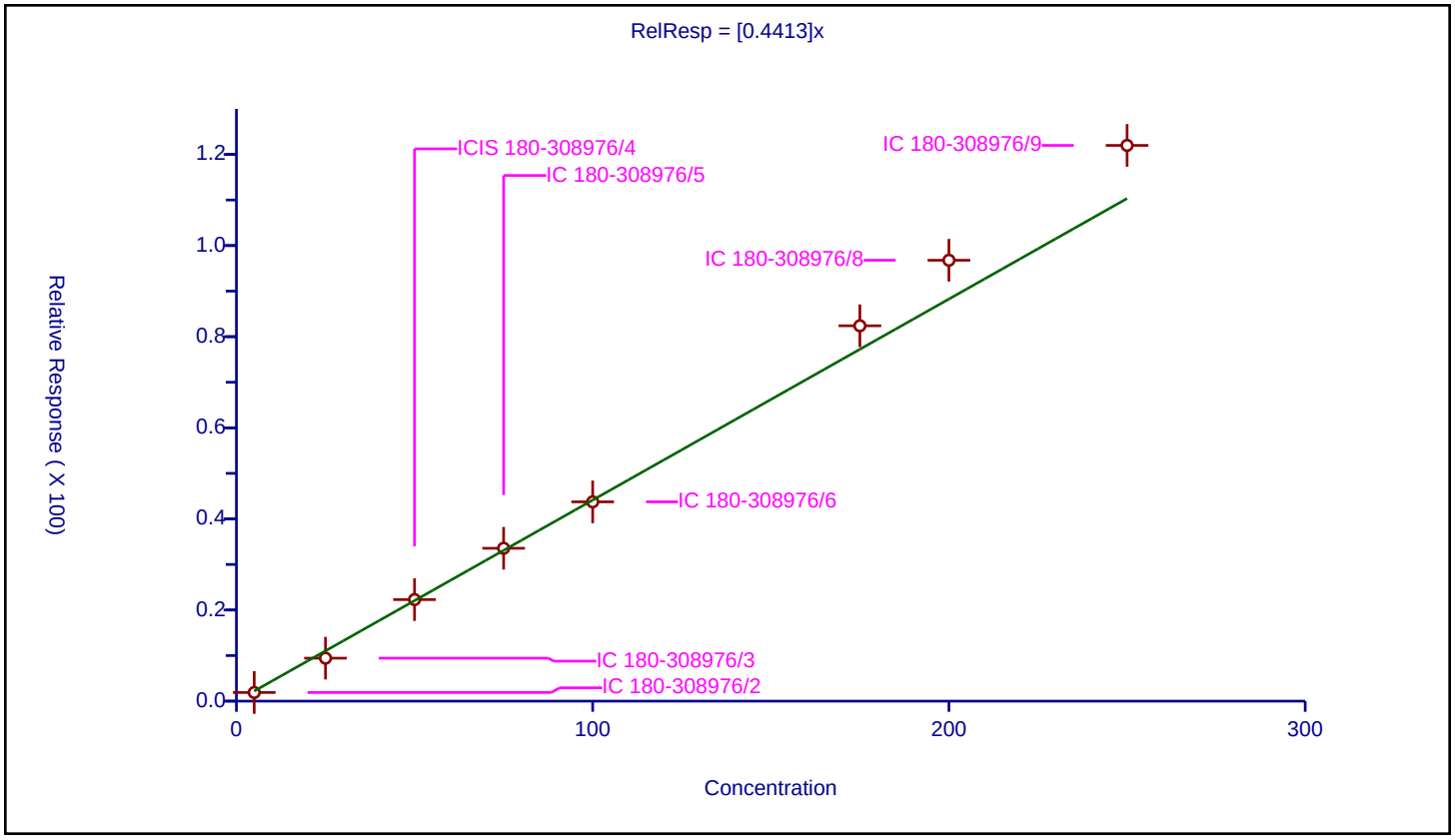
Curve Coefficients

Intercept:	0
Slope:	0.4413

Error Coefficients

Standard Error:	506000
Relative Standard Error:	9.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.899515	50.0	328347.0	0.379903	Y
2	IC 180-308976/3	25.0	9.434416	50.0	345395.0	0.377377	Y
3	ICIS 180-308976/4	50.0	22.289127	50.0	366441.0	0.445783	Y
4	IC 180-308976/5	75.0	33.555073	50.0	372133.0	0.447401	Y
5	IC 180-308976/6	100.0	43.746805	50.0	367716.0	0.437468	Y
6	IC 180-308976/7	175.0	82.391093	50.0	383377.0	0.470806	Y
7	IC 180-308976/8	200.0	96.774239	50.0	355947.0	0.483871	Y
8	IC 180-308976/9	250.0	121.984101	50.0	348586.0	0.487936	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

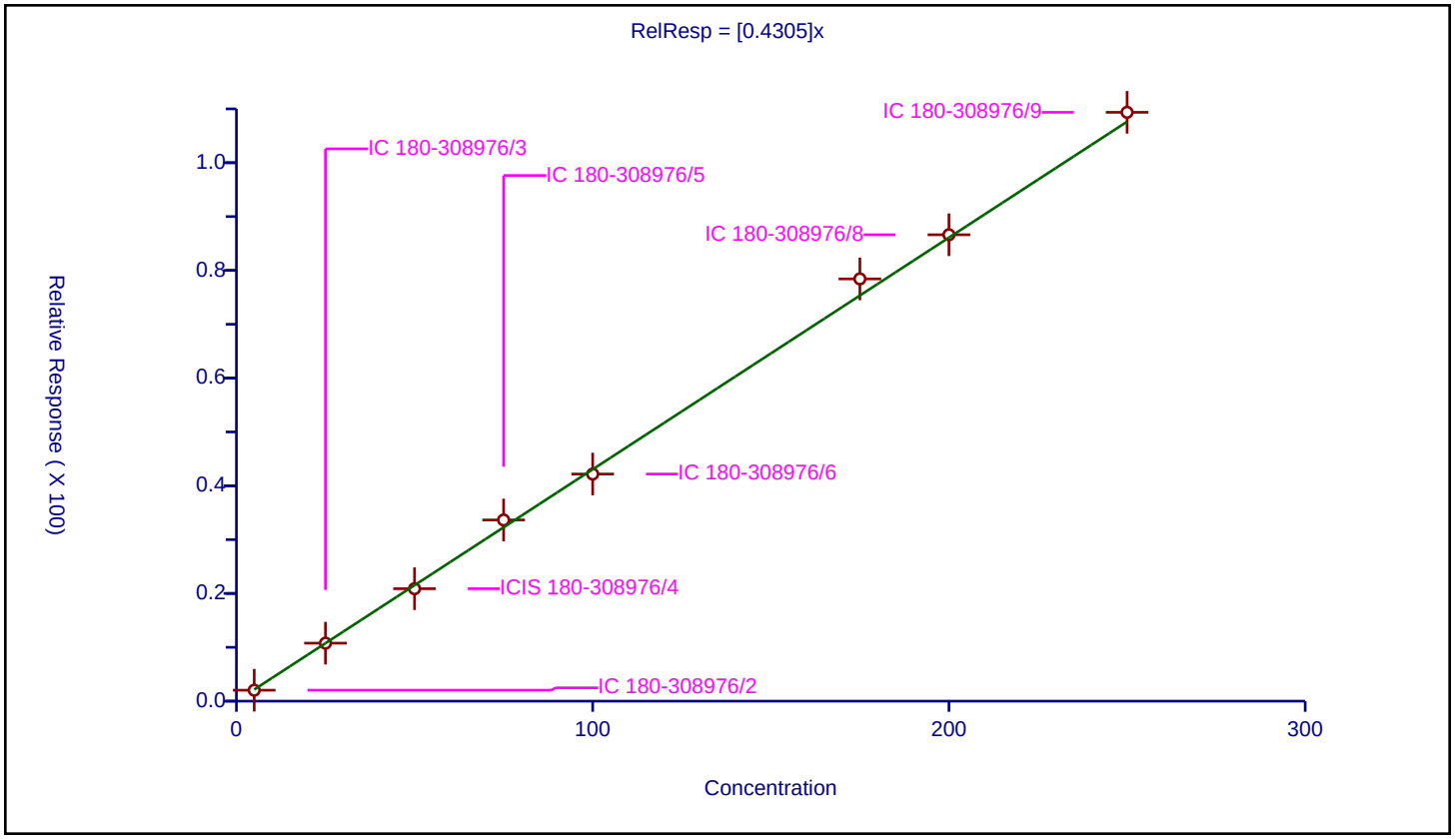
Curve Coefficients

Intercept:	0
Slope:	0.4305

Error Coefficients

Standard Error:	465000
Relative Standard Error:	3.4
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	2.031083	50.0	328347.0	0.406217	Y
2	IC 180-308976/3	25.0	10.770712	50.0	345395.0	0.430828	Y
3	ICIS 180-308976/4	50.0	20.883034	50.0	366441.0	0.417661	Y
4	IC 180-308976/5	75.0	33.651947	50.0	372133.0	0.448693	Y
5	IC 180-308976/6	100.0	42.177659	50.0	367716.0	0.421777	Y
6	IC 180-308976/7	175.0	78.425023	50.0	383377.0	0.448143	Y
7	IC 180-308976/8	200.0	86.622025	50.0	355947.0	0.43311	Y
8	IC 180-308976/9	250.0	109.362539	50.0	348586.0	0.43745	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

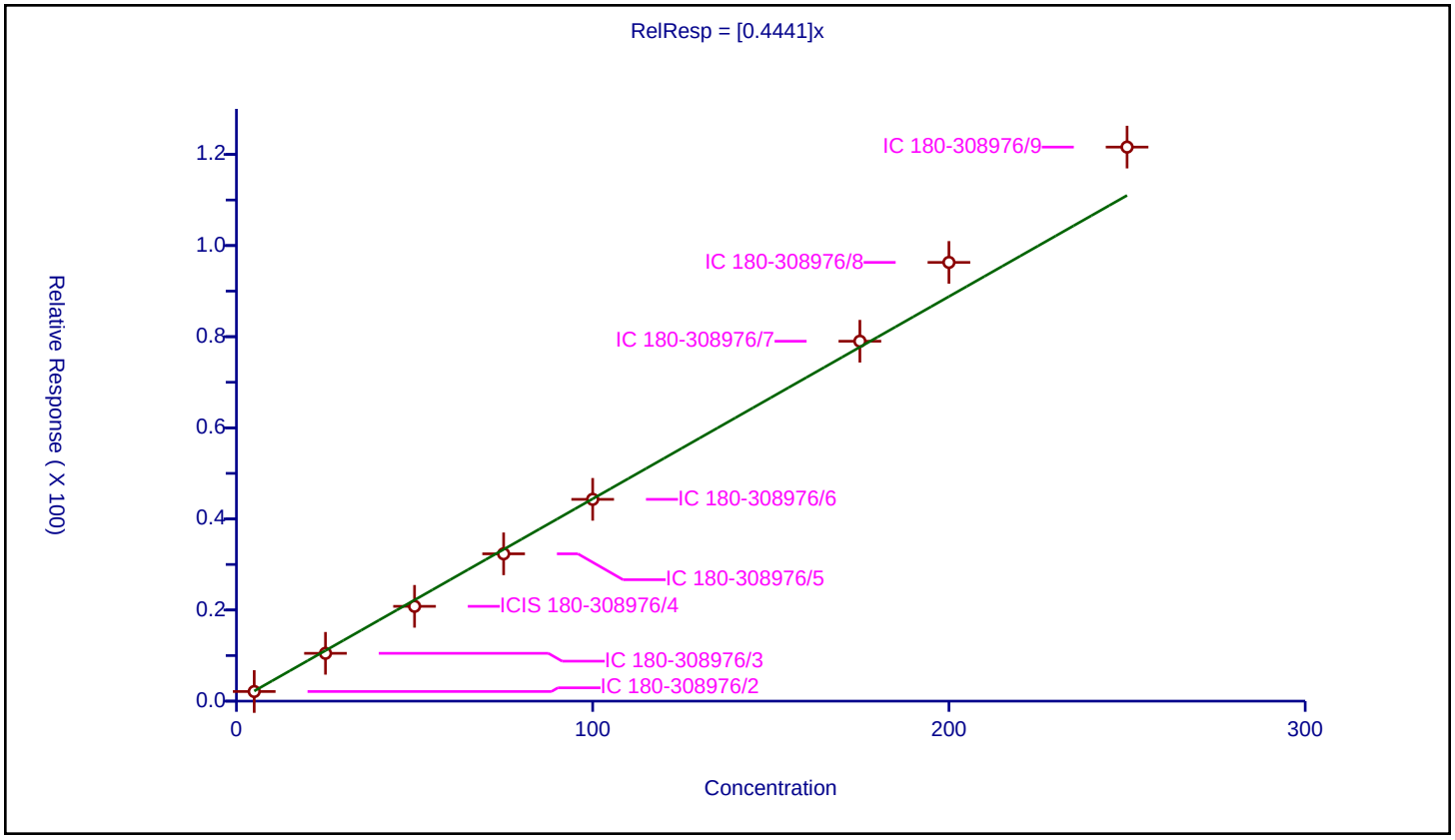
Curve Coefficients

Intercept:	0
Slope:	0.4441

Error Coefficients

Standard Error:	500000
Relative Standard Error:	6.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	2.114531	50.0	328347.0	0.422906	Y
2	IC 180-308976/3	25.0	10.494072	50.0	345395.0	0.419763	Y
3	ICIS 180-308976/4	50.0	20.810854	50.0	366441.0	0.416217	Y
4	IC 180-308976/5	75.0	32.335617	50.0	372133.0	0.431142	Y
5	IC 180-308976/6	100.0	44.295054	50.0	367716.0	0.442951	Y
6	IC 180-308976/7	175.0	79.004479	50.0	383377.0	0.451454	Y
7	IC 180-308976/8	200.0	96.303382	50.0	355947.0	0.481517	Y
8	IC 180-308976/9	250.0	121.618195	50.0	348586.0	0.486473	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

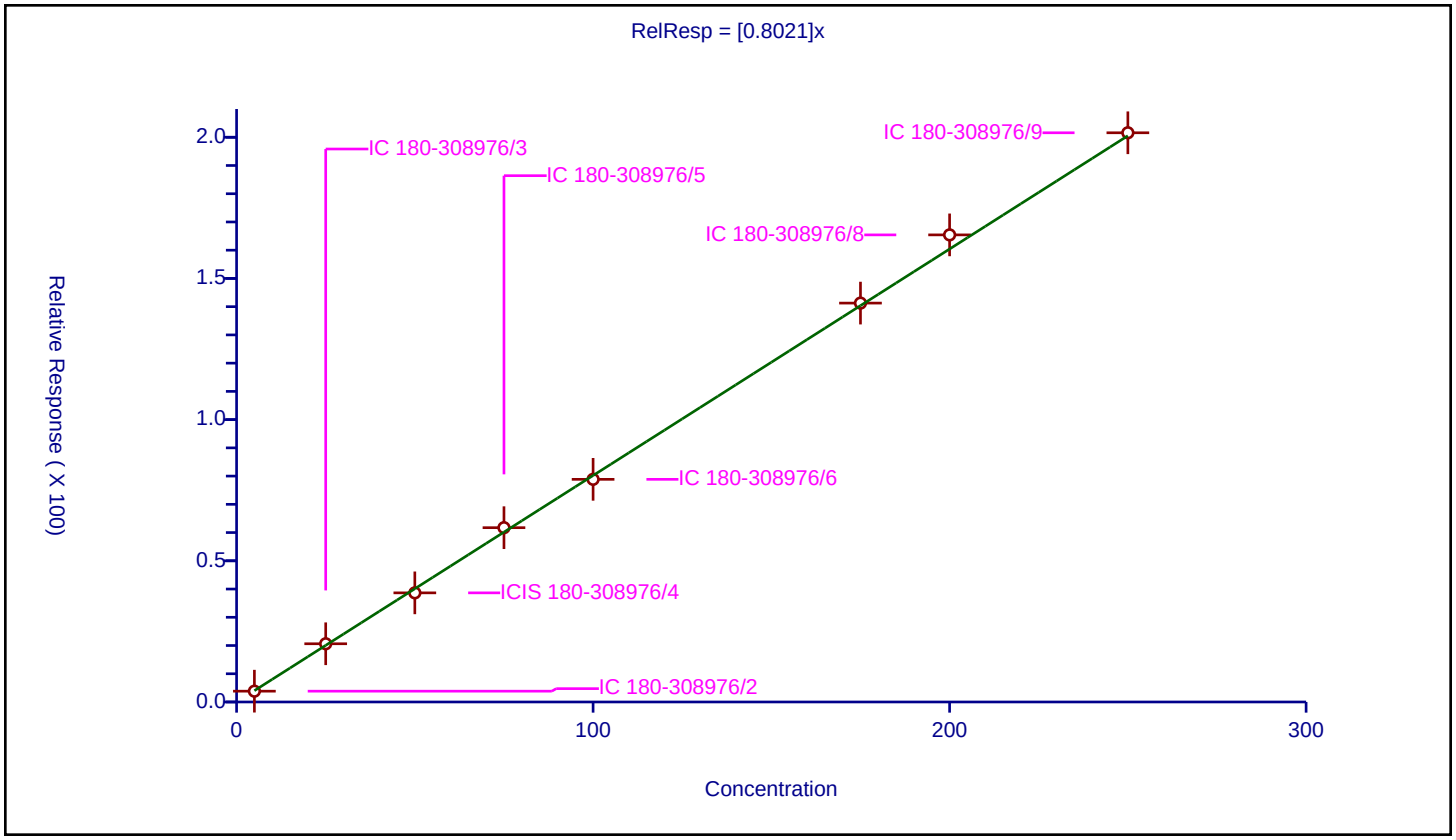
Curve Coefficients

Intercept:	0
Slope:	0.8021

Error Coefficients

Standard Error:	860000
Relative Standard Error:	2.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	3.833901	50.0	328347.0	0.76678	Y
2	IC 180-308976/3	25.0	20.618278	50.0	345395.0	0.824731	Y
3	ICIS 180-308976/4	50.0	38.647013	50.0	366441.0	0.77294	Y
4	IC 180-308976/5	75.0	61.728065	50.0	372133.0	0.823041	Y
5	IC 180-308976/6	100.0	78.856781	50.0	367716.0	0.788568	Y
6	IC 180-308976/7	175.0	141.264213	50.0	383377.0	0.807224	Y
7	IC 180-308976/8	200.0	165.425752	50.0	355947.0	0.827129	Y
8	IC 180-308976/9	250.0	201.585548	50.0	348586.0	0.806342	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

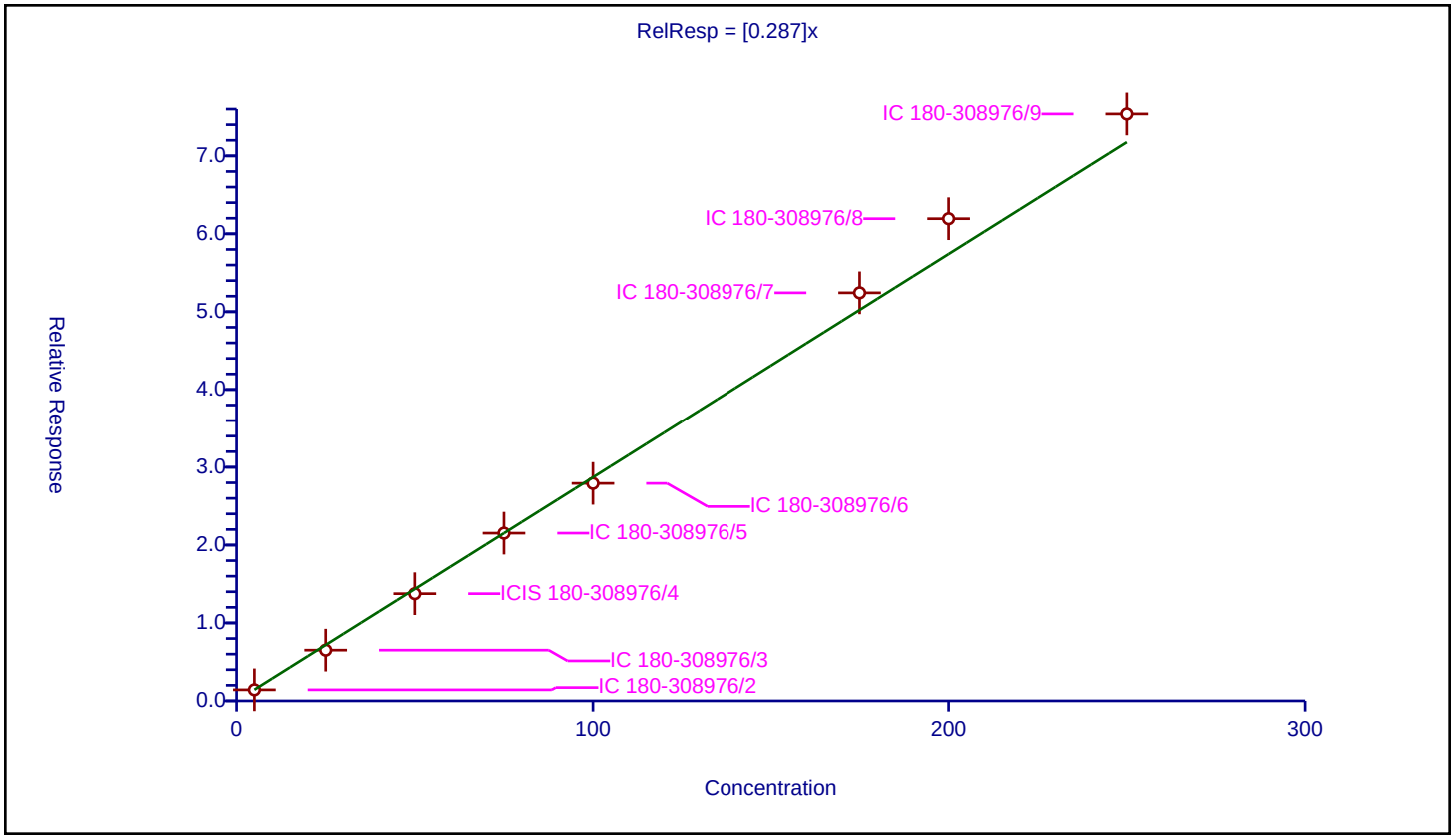
Curve Coefficients

Intercept:	0
Slope:	0.287

Error Coefficients

Standard Error:	319000
Relative Standard Error:	5.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.418773	50.0	328347.0	0.283755	Y
2	IC 180-308976/3	25.0	6.509793	50.0	345395.0	0.260392	Y
3	ICIS 180-308976/4	50.0	13.754329	50.0	366441.0	0.275087	Y
4	IC 180-308976/5	75.0	21.52604	50.0	372133.0	0.287014	Y
5	IC 180-308976/6	100.0	27.926579	50.0	367716.0	0.279266	Y
6	IC 180-308976/7	175.0	52.433375	50.0	383377.0	0.299619	Y
7	IC 180-308976/8	200.0	61.942508	50.0	355947.0	0.309713	Y
8	IC 180-308976/9	250.0	75.373079	50.0	348586.0	0.301492	Y



Calibration / Dibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

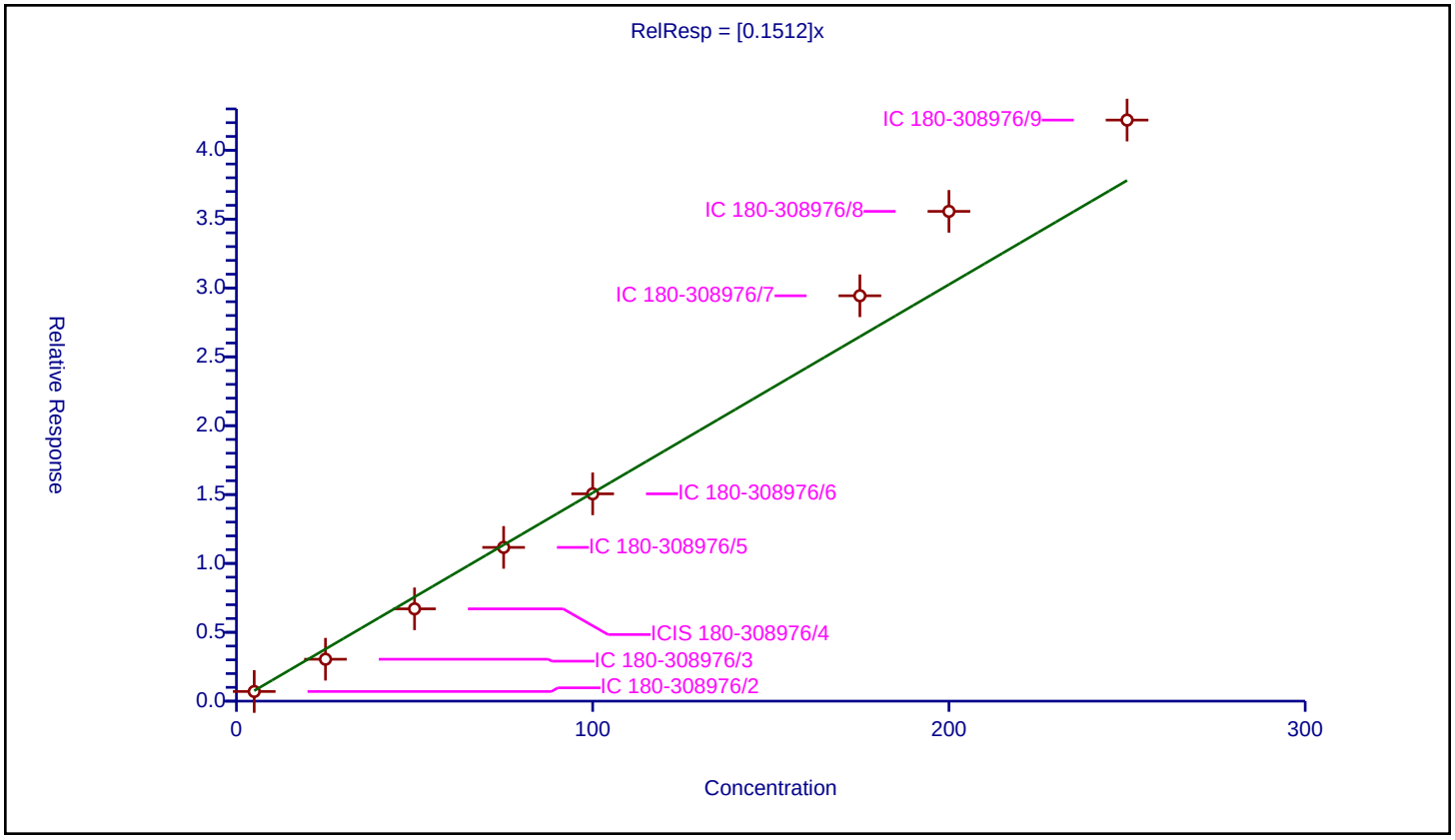
Curve Coefficients

Intercept:	0
Slope:	0.1512

Error Coefficients

Standard Error:	179000
Relative Standard Error:	12.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	0.700174	50.0	328347.0	0.140035	Y
2	IC 180-308976/3	25.0	3.042024	50.0	345395.0	0.121681	Y
3	ICIS 180-308976/4	50.0	6.702307	50.0	366441.0	0.134046	Y
4	IC 180-308976/5	75.0	11.16281	50.0	372133.0	0.148837	Y
5	IC 180-308976/6	100.0	15.051154	50.0	367716.0	0.150512	Y
6	IC 180-308976/7	175.0	29.432647	50.0	383377.0	0.168187	Y
7	IC 180-308976/8	200.0	35.560772	50.0	355947.0	0.177804	Y
8	IC 180-308976/9	250.0	42.190306	50.0	348586.0	0.168761	Y



Calibration / 1,4-Dioxane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

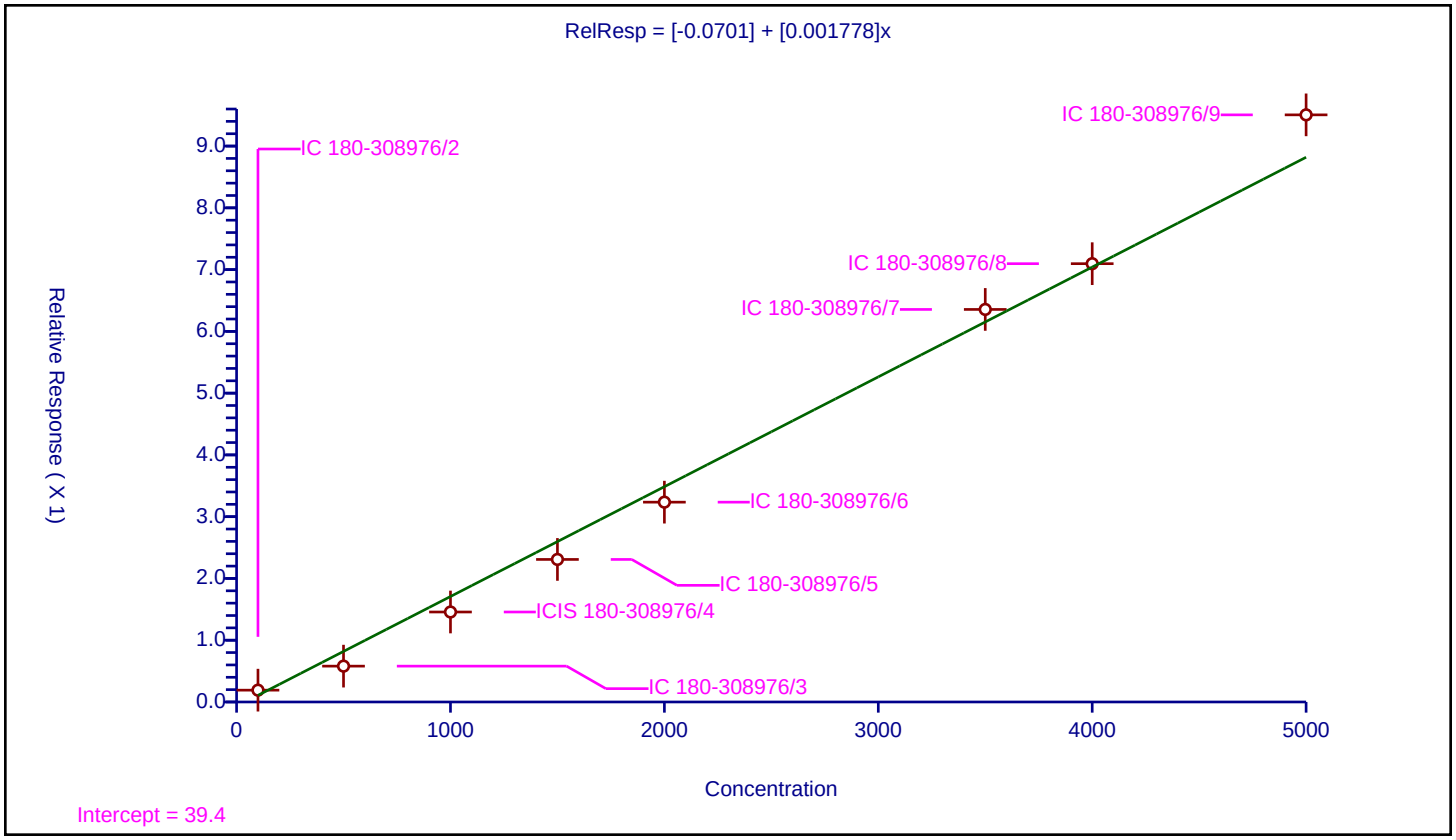
Curve Coefficients

Intercept:	-0.0701
Slope:	0.001778

Error Coefficients

Standard Error:	41400
Relative Standard Error:	23.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	100.0	0.191261	50.0	328347.0	0.001913	Y
2	IC 180-308976/3	500.0	0.58064	50.0	345395.0	0.001161	Y
3	ICIS 180-308976/4	1000.0	1.456851	50.0	366441.0	0.001457	Y
4	IC 180-308976/5	1500.0	2.307911	50.0	372133.0	0.001539	Y
5	IC 180-308976/6	2000.0	3.235105	50.0	367716.0	0.001618	Y
6	IC 180-308976/7	3500.0	6.355363	50.0	383377.0	0.001816	Y
7	IC 180-308976/8	4000.0	7.09586	50.0	355947.0	0.001774	Y
8	IC 180-308976/9	5000.0	9.505545	50.0	348586.0	0.001901	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

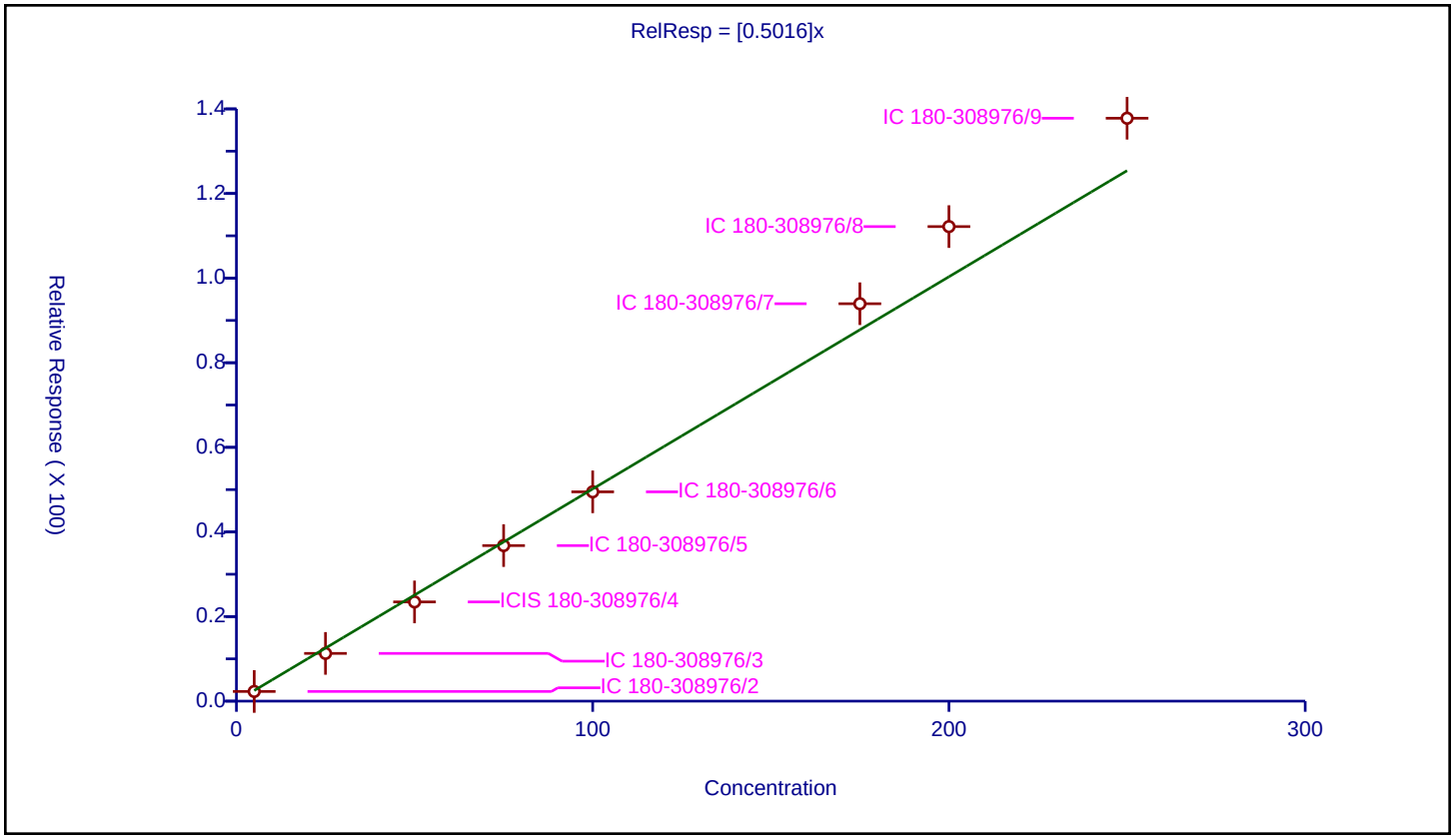
Curve Coefficients

Intercept:	0
Slope:	0.5016

Error Coefficients

Standard Error:	576000
Relative Standard Error:	8.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	2.291174	50.0	328347.0	0.458235	Y
2	IC 180-308976/3	25.0	11.288235	50.0	345395.0	0.451529	Y
3	ICIS 180-308976/4	50.0	23.455481	50.0	366441.0	0.46911	Y
4	IC 180-308976/5	75.0	36.773546	50.0	372133.0	0.490314	Y
5	IC 180-308976/6	100.0	49.475002	50.0	367716.0	0.49475	Y
6	IC 180-308976/7	175.0	93.945125	50.0	383377.0	0.536829	Y
7	IC 180-308976/8	200.0	112.176953	50.0	355947.0	0.560885	Y
8	IC 180-308976/9	250.0	137.787232	50.0	348586.0	0.551149	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

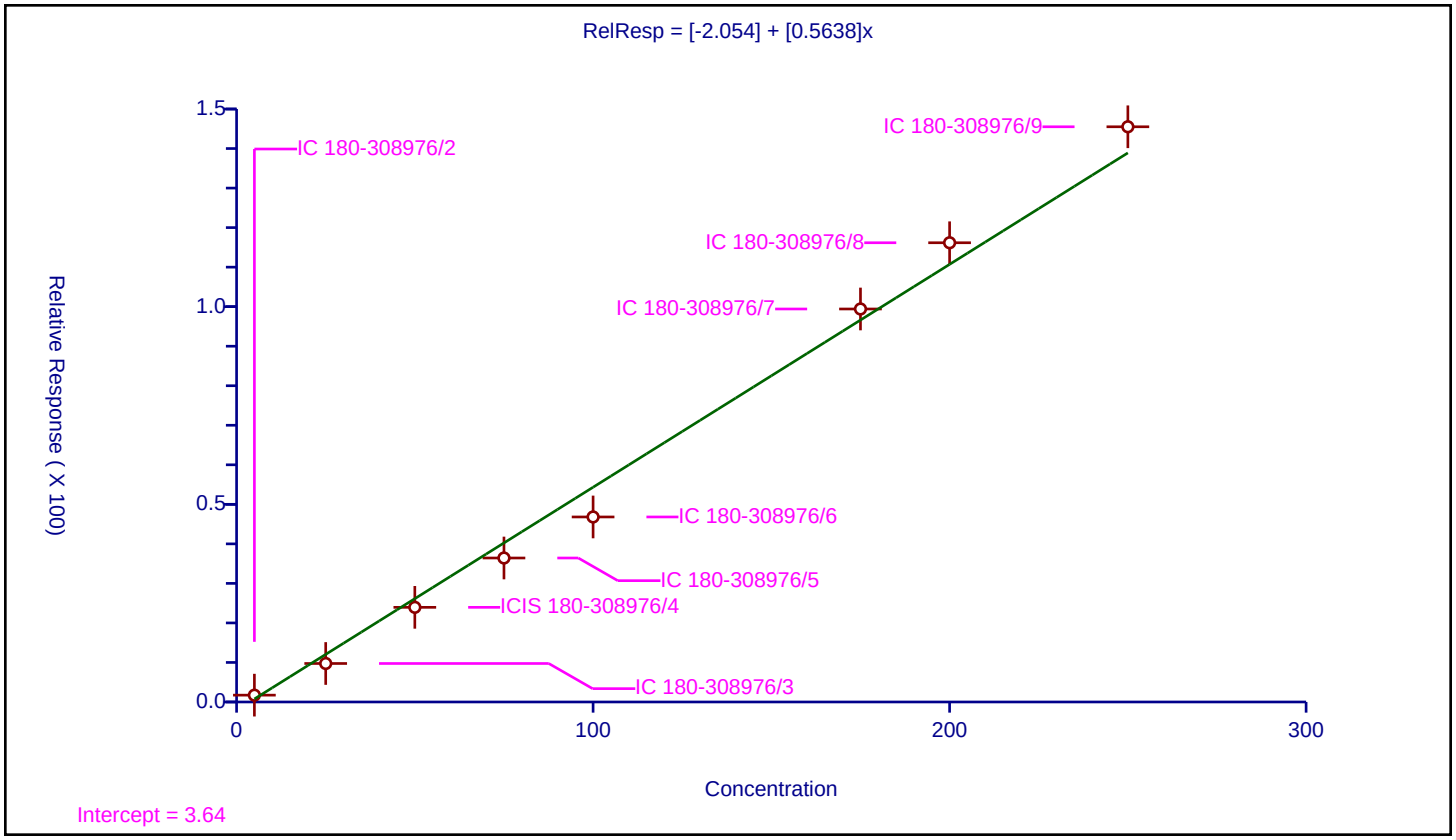
Curve Coefficients

Intercept:	-2.054
Slope:	0.5638

Error Coefficients

Standard Error:	648000
Relative Standard Error:	17.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	1.726832	50.0	328347.0	0.345366	Y
2	IC 180-308976/3	25.0	9.734941	50.0	345395.0	0.389398	Y
3	ICIS 180-308976/4	50.0	23.94642	50.0	366441.0	0.478928	Y
4	IC 180-308976/5	75.0	36.421656	50.0	372133.0	0.485622	Y
5	IC 180-308976/6	100.0	46.802832	50.0	367716.0	0.468028	Y
6	IC 180-308976/7	175.0	99.416632	50.0	383377.0	0.568095	Y
7	IC 180-308976/8	200.0	116.168137	50.0	355947.0	0.580841	Y
8	IC 180-308976/9	250.0	145.507565	50.0	348586.0	0.58203	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

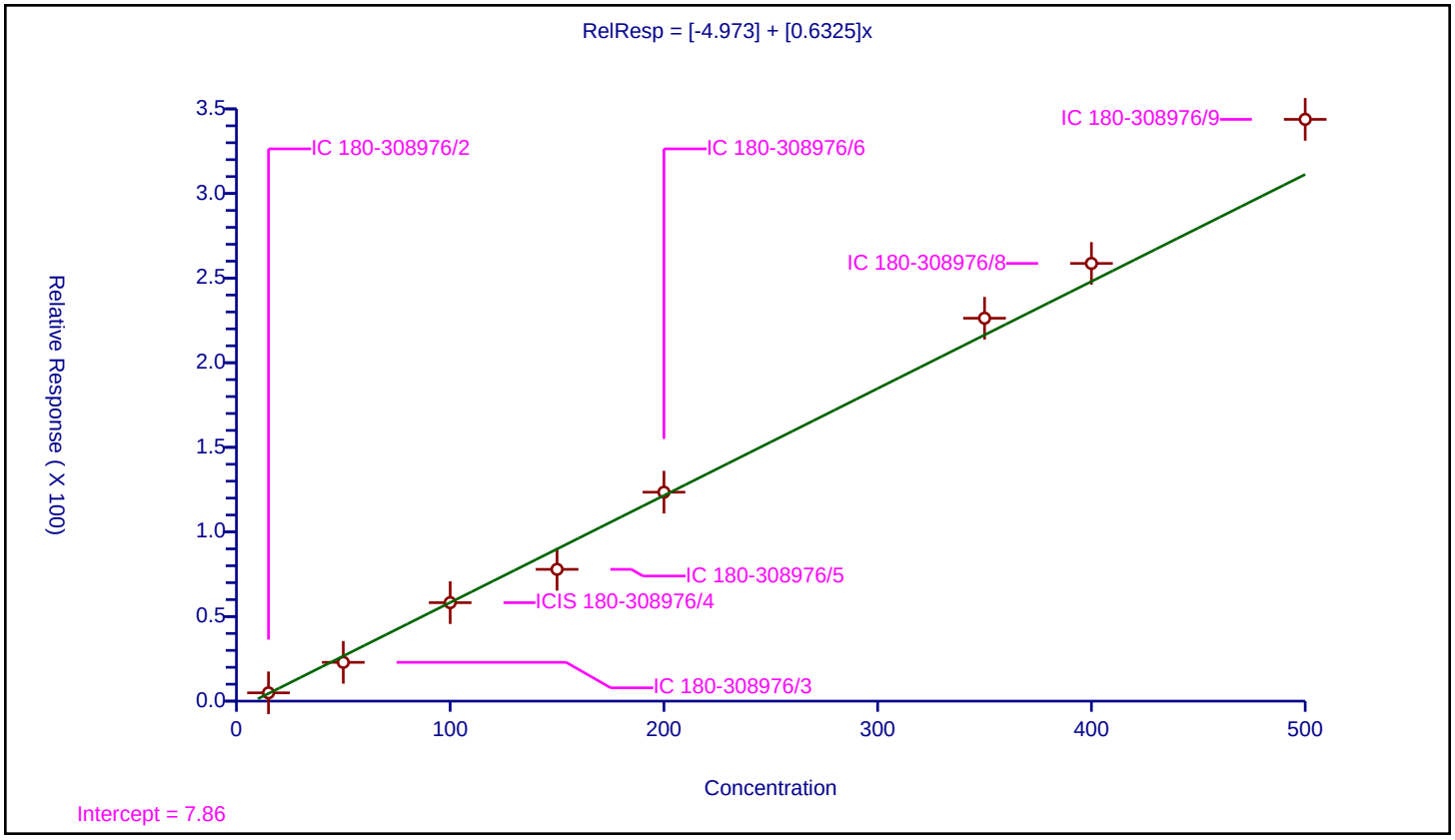
Curve Coefficients

Intercept:	-4.973
Slope:	0.6325

Error Coefficients

Standard Error:	345000
Relative Standard Error:	8.8
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	15.0	4.898128	50.0	72640.0	0.326542	Y
2	IC 180-308976/3	50.0	22.927208	50.0	69568.0	0.458544	Y
3	ICIS 180-308976/4	100.0	58.200923	50.0	78229.0	0.582009	Y
4	IC 180-308976/5	150.0	77.882849	50.0	77302.0	0.519219	Y
5	IC 180-308976/6	200.0	123.479942	50.0	78895.0	0.6174	Y
6	IC 180-308976/7	350.0	226.306479	50.0	91008.0	0.64659	Y
7	IC 180-308976/8	400.0	258.676267	50.0	81527.0	0.646691	Y
8	IC 180-308976/9	500.0	343.814651	50.0	80238.0	0.687629	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

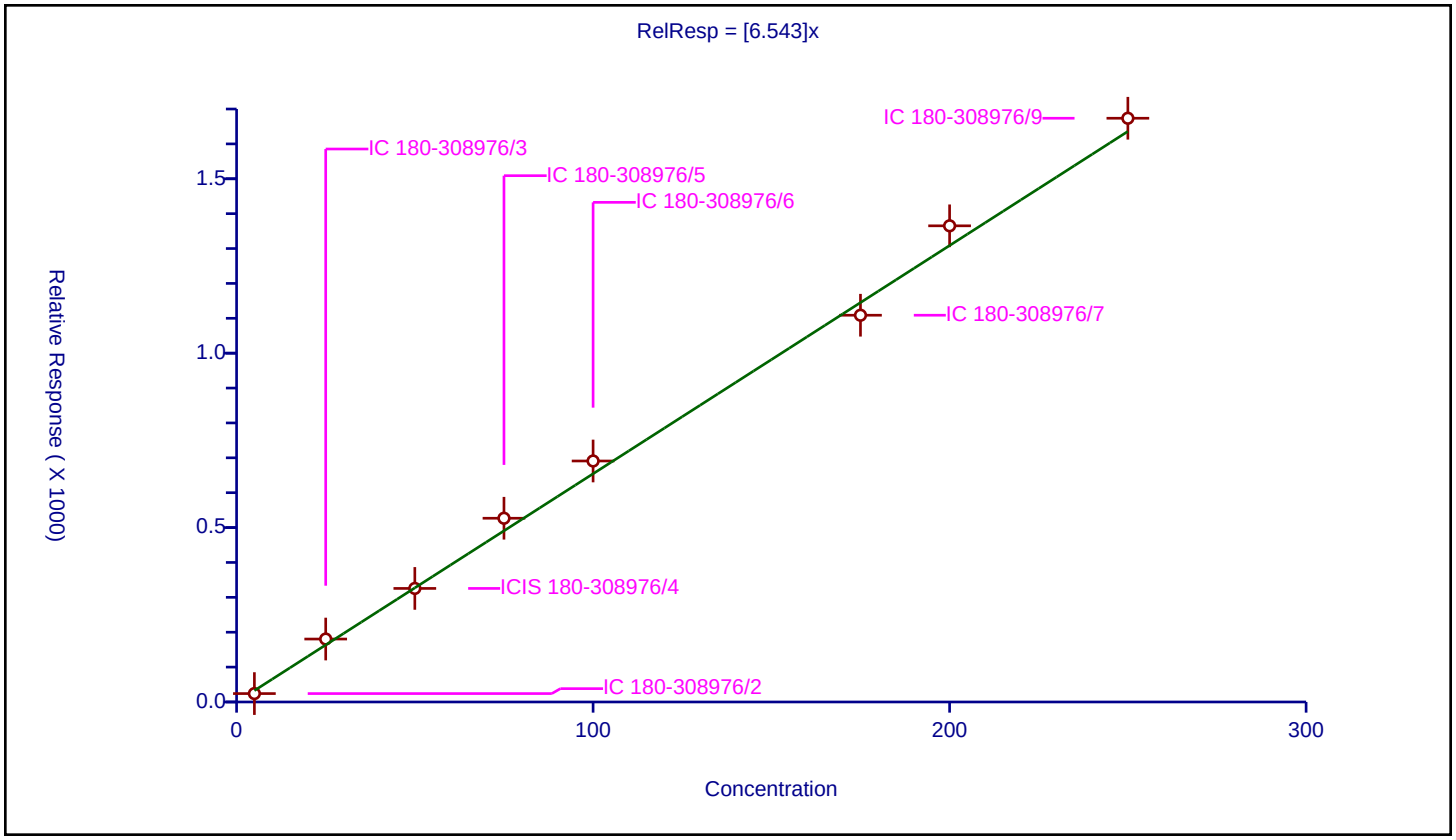
Curve Coefficients

Intercept:	0
Slope:	6.543

Error Coefficients

Standard Error:	1620000
Relative Standard Error:	11.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	24.127203	50.0	72640.0	4.825441	Y
2	IC 180-308976/3	25.0	180.499655	50.0	69568.0	7.219986	Y
3	ICIS 180-308976/4	50.0	325.576193	50.0	78229.0	6.511524	Y
4	IC 180-308976/5	75.0	526.789087	50.0	77302.0	7.023854	Y
5	IC 180-308976/6	100.0	690.88979	50.0	78895.0	6.908898	Y
6	IC 180-308976/7	175.0	1108.784393	50.0	91008.0	6.335911	Y
7	IC 180-308976/8	200.0	1365.109718	50.0	81527.0	6.825549	Y
8	IC 180-308976/9	250.0	1673.532491	50.0	80238.0	6.69413	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

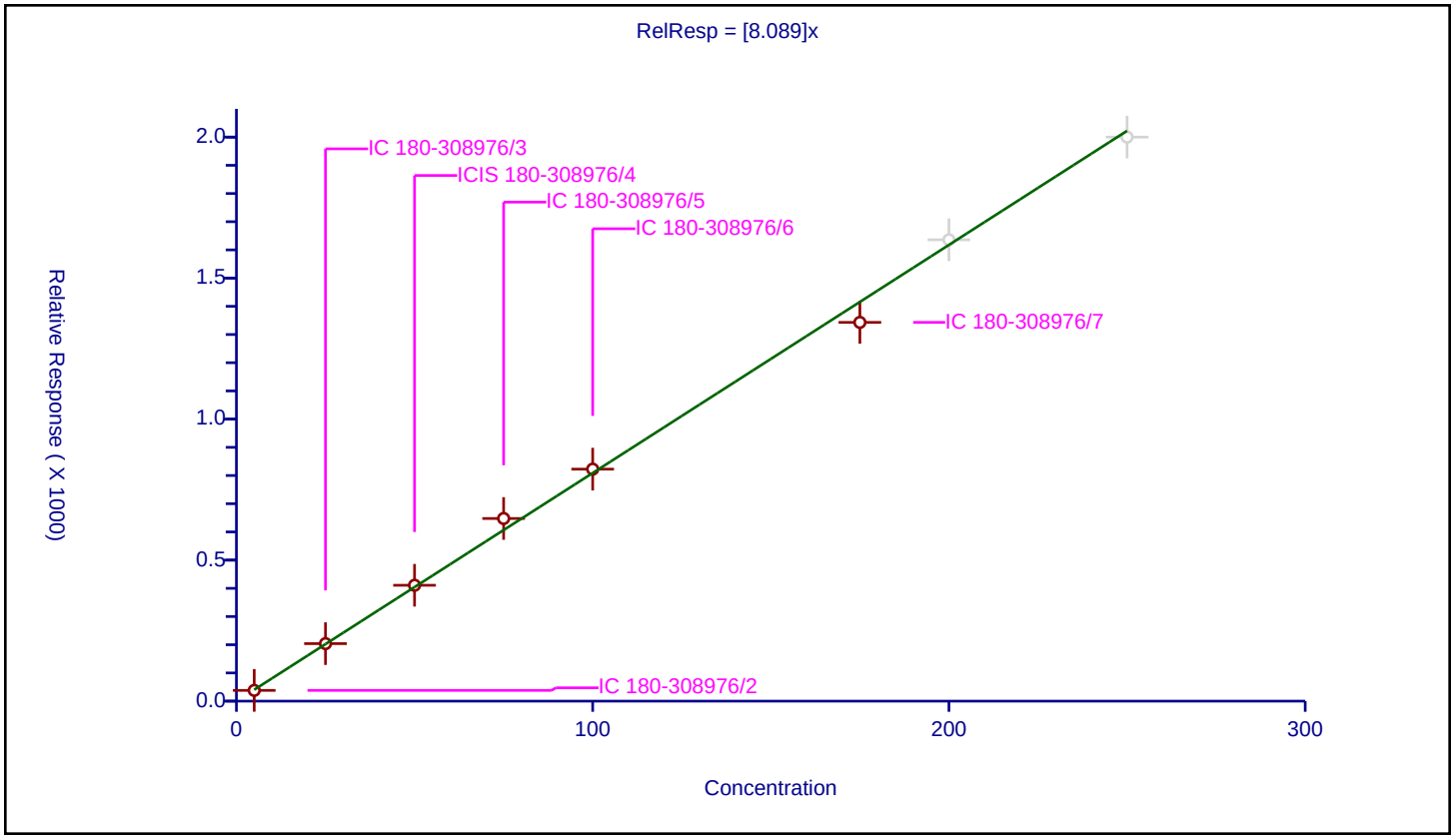
Curve Coefficients

Intercept:	0
Slope:	8.089

Error Coefficients

Standard Error:	1350000
Relative Standard Error:	4.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	38.109169	50.0	72640.0	7.621834	Y
2	IC 180-308976/3	25.0	203.968779	50.0	69568.0	8.158751	Y
3	ICIS 180-308976/4	50.0	410.83997	50.0	78229.0	8.216799	Y
4	IC 180-308976/5	75.0	647.628781	50.0	77302.0	8.63505	Y
5	IC 180-308976/6	100.0	822.574941	50.0	78895.0	8.225749	Y
6	IC 180-308976/7	175.0	1342.975343	50.0	91008.0	7.674145	Y
7	IC 180-308976/8	200.0	1635.863579	50.0	81527.0	8.179318	N
8	IC 180-308976/9	250.0	2000.013086	50.0	80238.0	8.000052	N



Calibration / trans-1,3-Dichloropropene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

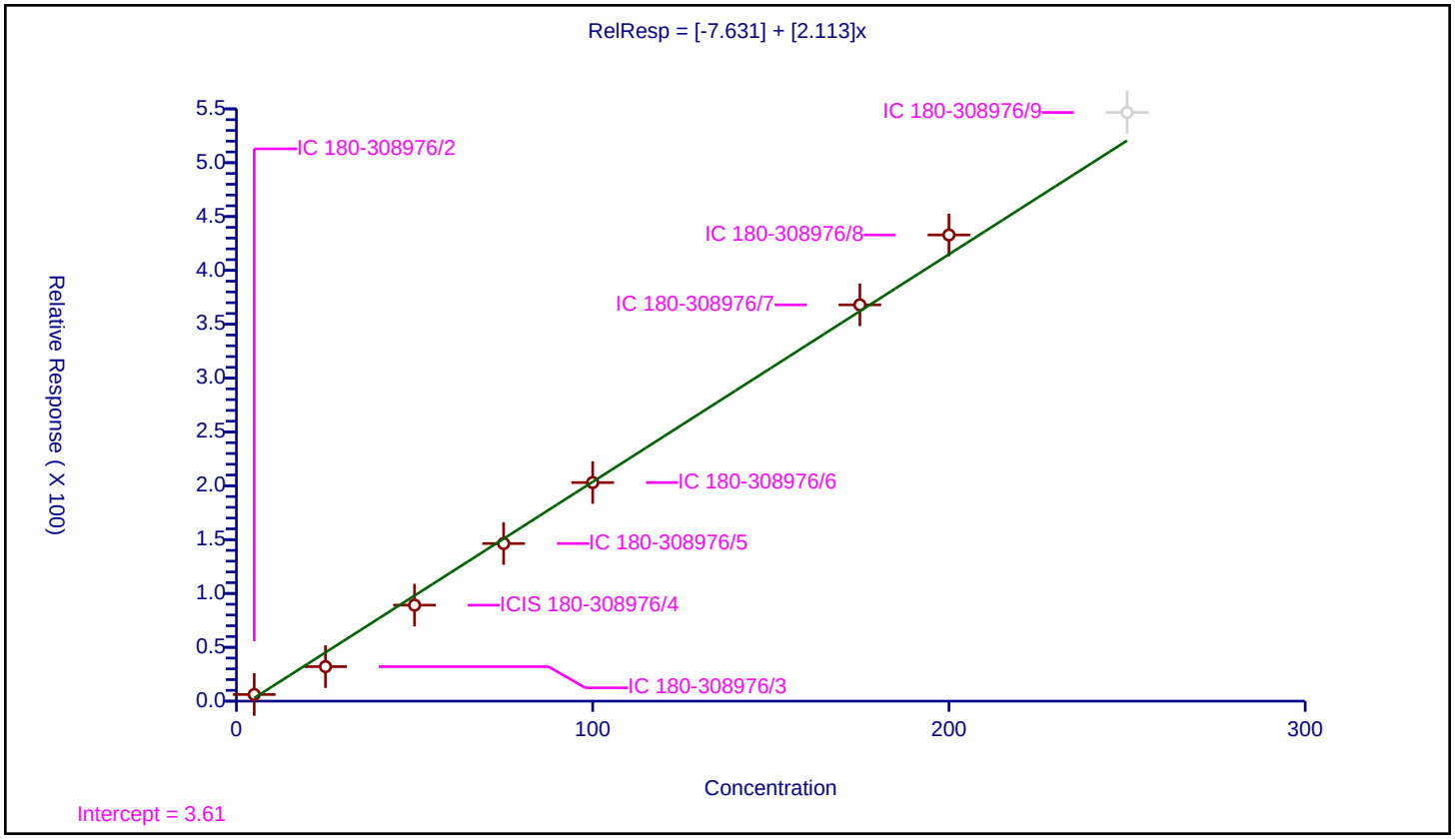
Curve Coefficients

Intercept:	-7.631
Slope:	2.113

Error Coefficients

Standard Error:	474000
Relative Standard Error:	18.2
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	6.159829	50.0	72640.0	1.231966	Y
2	IC 180-308976/3	25.0	32.049218	50.0	69568.0	1.281969	Y
3	ICIS 180-308976/4	50.0	89.142773	50.0	78229.0	1.782855	Y
4	IC 180-308976/5	75.0	146.354557	50.0	77302.0	1.951394	Y
5	IC 180-308976/6	100.0	202.991951	50.0	78895.0	2.02992	Y
6	IC 180-308976/7	175.0	368.034678	50.0	91008.0	2.103055	Y
7	IC 180-308976/8	200.0	432.927128	50.0	81527.0	2.164636	Y
8	IC 180-308976/9	250.0	546.681124	50.0	80238.0	2.186724	N



Calibration / Ethyl methacrylate

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

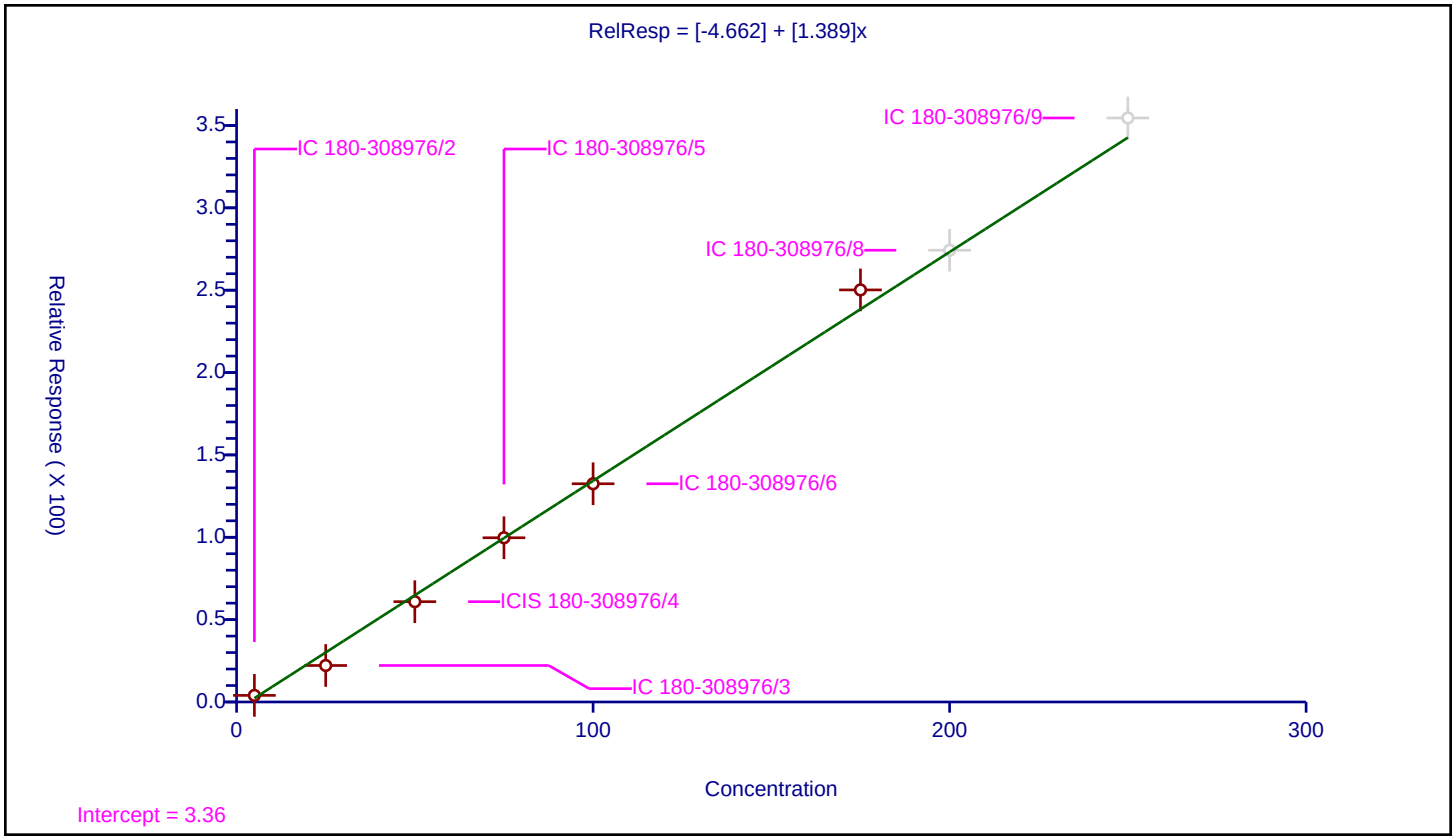
Curve Coefficients

Intercept:	-4.662
Slope:	1.389

Error Coefficients

Standard Error:	267000
Relative Standard Error:	17.2
Correlation Coefficient:	0.986
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	3.999862	50.0	72640.0	0.799972	Y
2	IC 180-308976/3	25.0	22.158895	50.0	69568.0	0.886356	Y
3	ICIS 180-308976/4	50.0	60.891102	50.0	78229.0	1.217822	Y
4	IC 180-308976/5	75.0	99.699232	50.0	77302.0	1.329323	Y
5	IC 180-308976/6	100.0	132.482413	50.0	78895.0	1.324824	Y
6	IC 180-308976/7	175.0	250.164821	50.0	91008.0	1.429513	Y
7	IC 180-308976/8	200.0	274.252702	50.0	81527.0	1.371264	N
8	IC 180-308976/9	250.0	354.565169	50.0	80238.0	1.418261	N



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

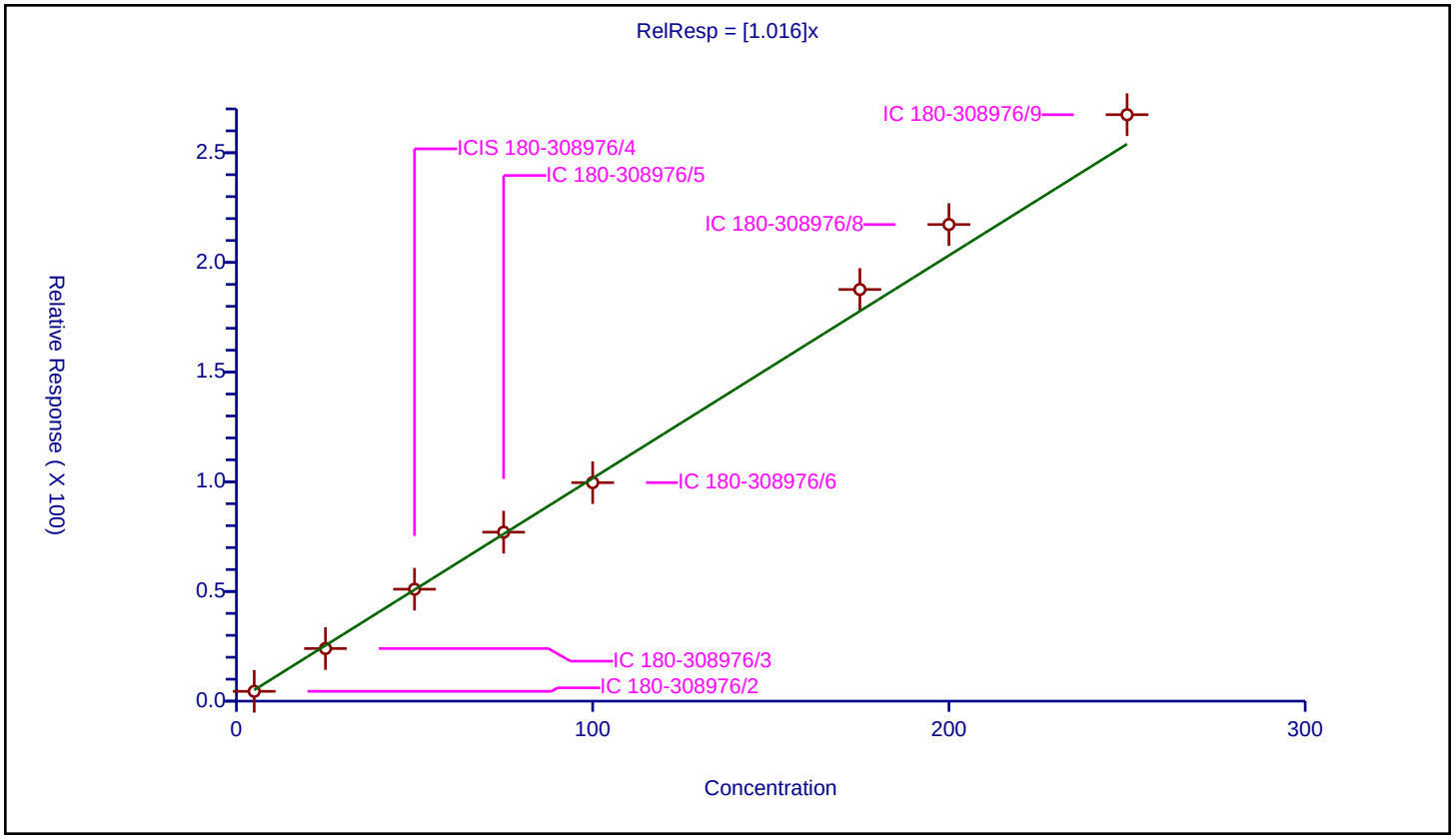
Curve Coefficients

Intercept:	0
Slope:	1.016

Error Coefficients

Standard Error:	260000
Relative Standard Error:	6.4
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	4.478937	50.0	72640.0	0.895787	Y
2	IC 180-308976/3	25.0	23.987322	50.0	69568.0	0.959493	Y
3	ICIS 180-308976/4	50.0	51.033504	50.0	78229.0	1.02067	Y
4	IC 180-308976/5	75.0	77.033583	50.0	77302.0	1.027114	Y
5	IC 180-308976/6	100.0	99.621015	50.0	78895.0	0.99621	Y
6	IC 180-308976/7	175.0	187.659876	50.0	91008.0	1.072342	Y
7	IC 180-308976/8	200.0	217.280165	50.0	81527.0	1.086401	Y
8	IC 180-308976/9	250.0	267.350258	50.0	80238.0	1.069401	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

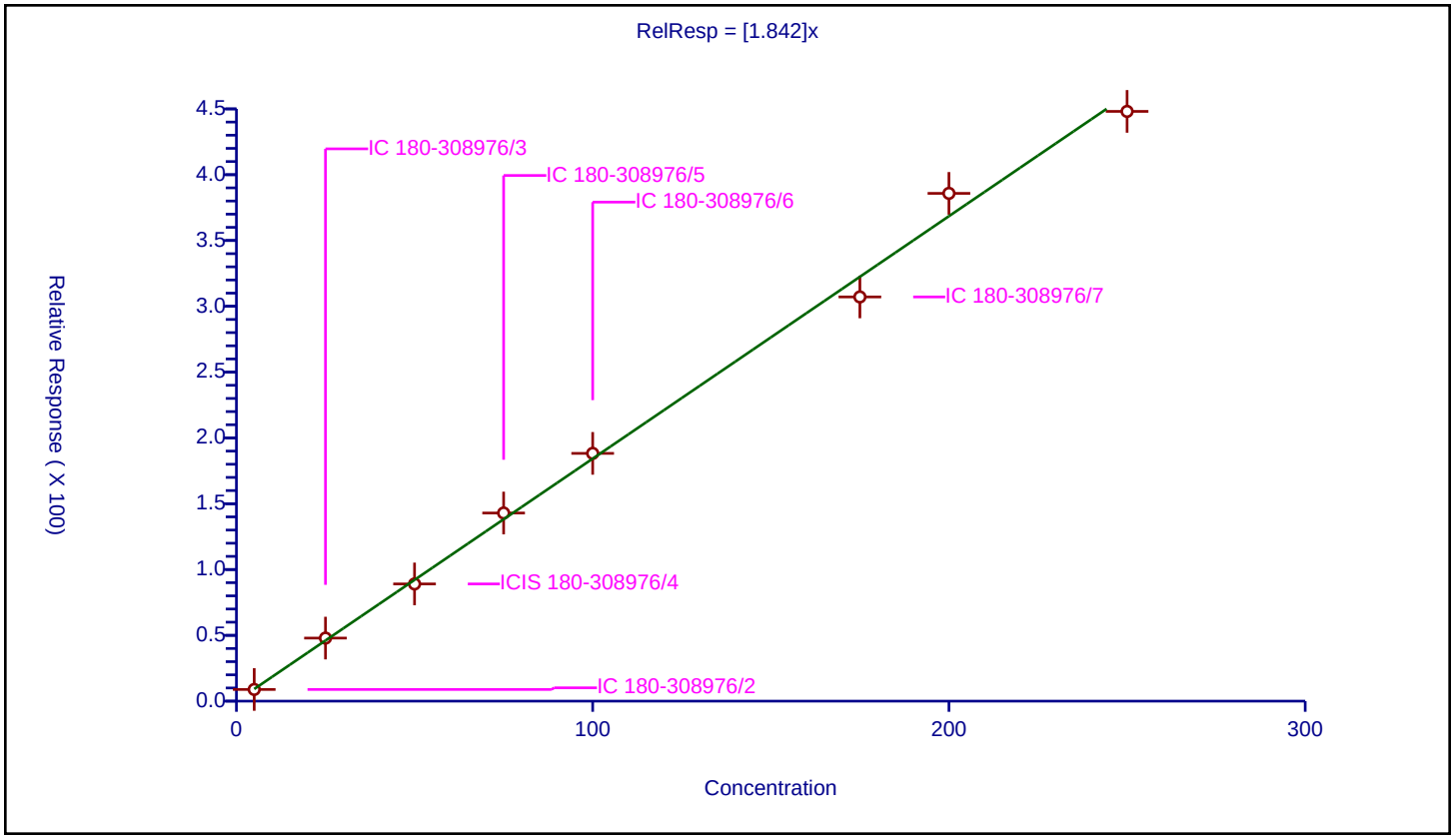
Curve Coefficients

Intercept:	0
Slope:	1.842

Error Coefficients

Standard Error:	445000
Relative Standard Error:	3.9
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	8.882847	50.0	72640.0	1.776569	Y
2	IC 180-308976/3	25.0	47.919302	50.0	69568.0	1.916772	Y
3	ICIS 180-308976/4	50.0	89.050097	50.0	78229.0	1.781002	Y
4	IC 180-308976/5	75.0	142.943908	50.0	77302.0	1.905919	Y
5	IC 180-308976/6	100.0	188.249572	50.0	78895.0	1.882496	Y
6	IC 180-308976/7	175.0	307.124099	50.0	91008.0	1.754995	Y
7	IC 180-308976/8	200.0	385.816355	50.0	81527.0	1.929082	Y
8	IC 180-308976/9	250.0	448.09068	50.0	80238.0	1.792363	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

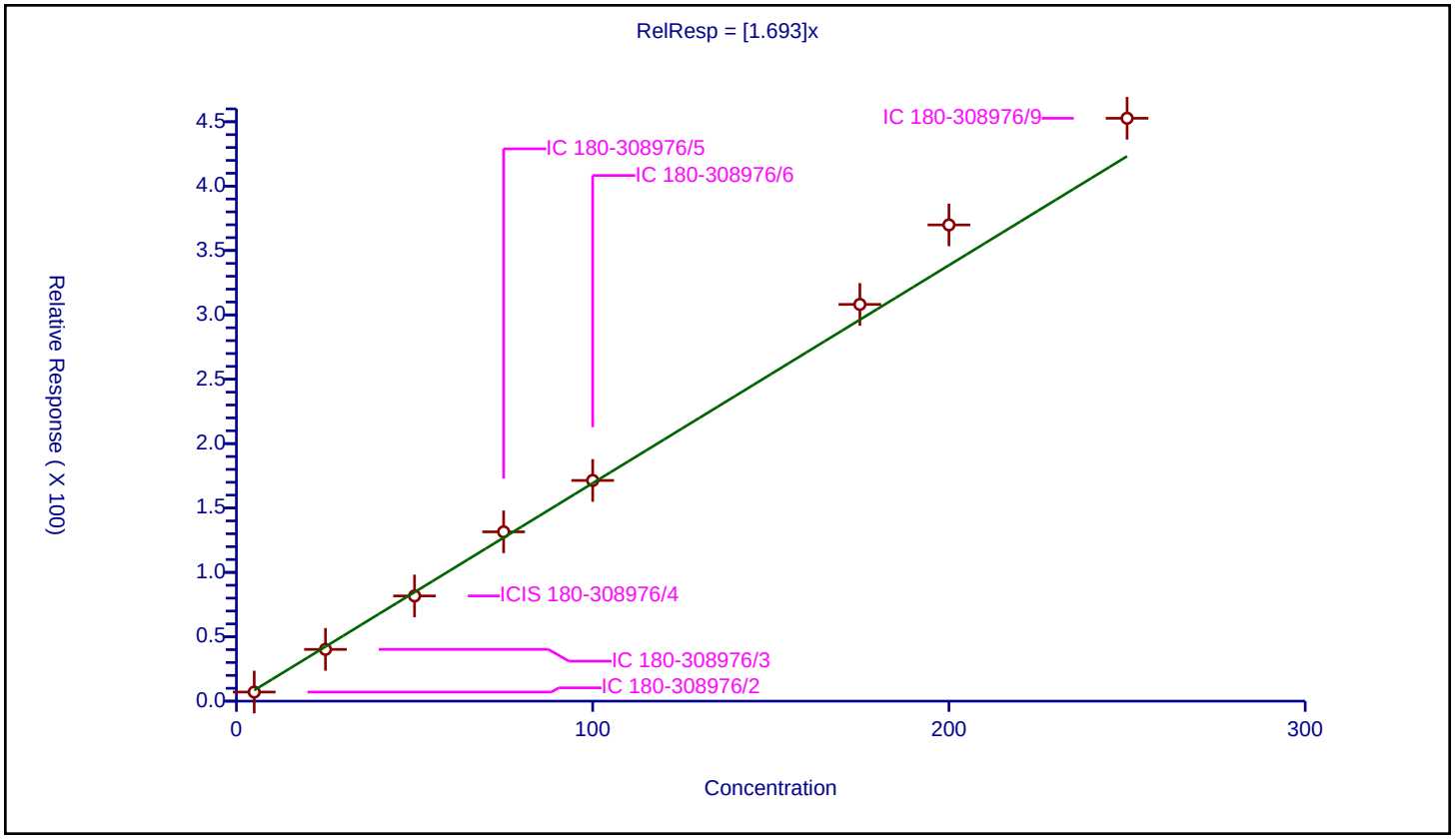
Curve Coefficients

Intercept:	0
Slope:	1.693

Error Coefficients

Standard Error:	437000
Relative Standard Error:	8.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	7.059471	50.0	72640.0	1.411894	Y
2	IC 180-308976/3	25.0	40.193767	50.0	69568.0	1.607751	Y
3	ICIS 180-308976/4	50.0	81.729921	50.0	78229.0	1.634598	Y
4	IC 180-308976/5	75.0	131.495304	50.0	77302.0	1.753271	Y
5	IC 180-308976/6	100.0	171.412003	50.0	78895.0	1.71412	Y
6	IC 180-308976/7	175.0	308.136098	50.0	91008.0	1.760778	Y
7	IC 180-308976/8	200.0	369.89157	50.0	81527.0	1.849458	Y
8	IC 180-308976/9	250.0	452.711932	50.0	80238.0	1.810848	Y



Calibration / 2-Hexanone

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

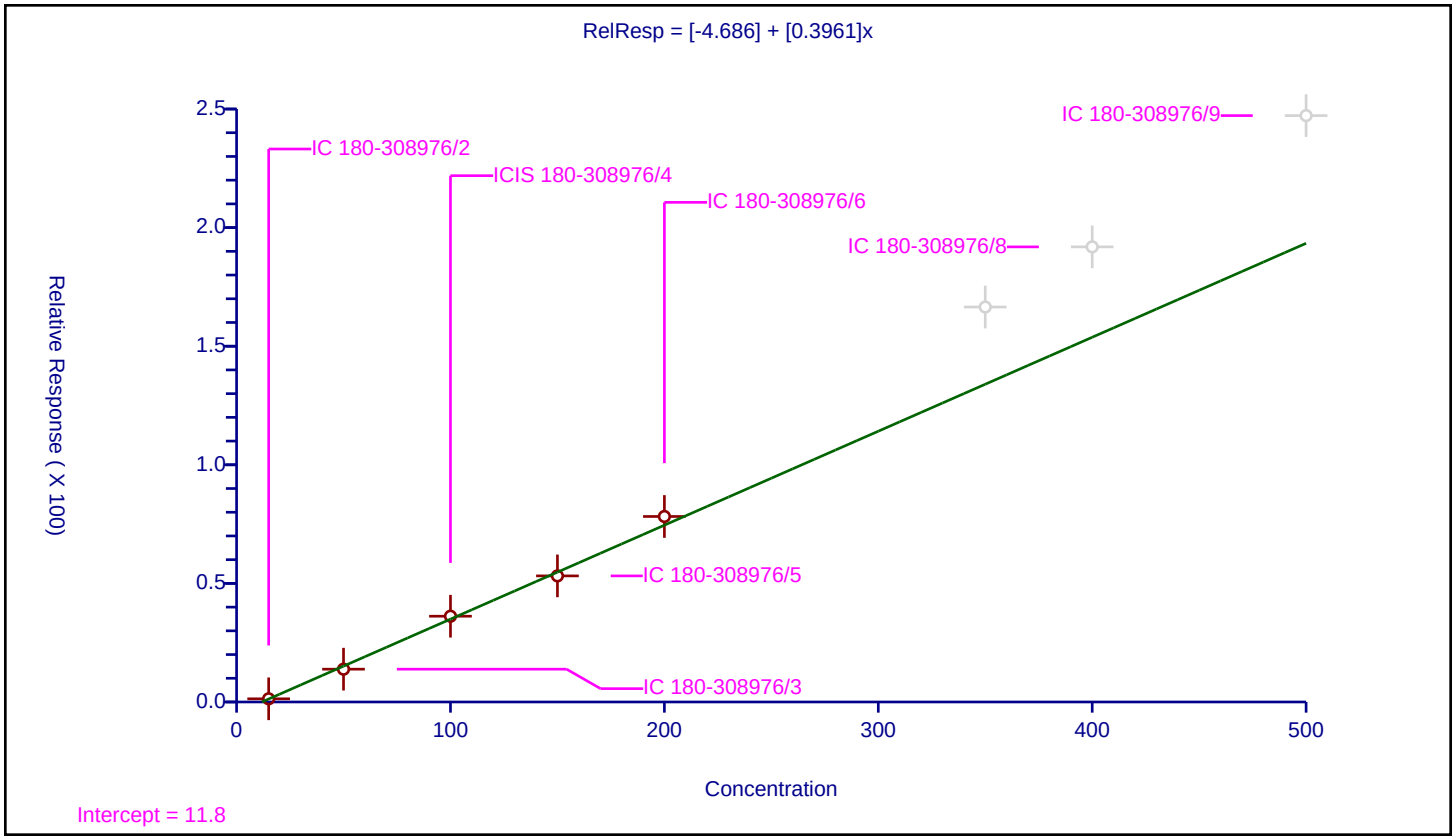
Curve Coefficients

Intercept:	-4.686
Slope:	0.3961

Error Coefficients

Standard Error:	92200
Relative Standard Error:	5.2
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	15.0	1.339482	50.0	72640.0	0.089299	Y
2	IC 180-308976/3	50.0	13.83179	50.0	69568.0	0.276636	Y
3	ICIS 180-308976/4	100.0	36.164977	50.0	78229.0	0.36165	Y
4	IC 180-308976/5	150.0	53.165507	50.0	77302.0	0.354437	Y
5	IC 180-308976/6	200.0	78.207111	50.0	78895.0	0.391036	Y
6	IC 180-308976/7	350.0	166.523273	50.0	91008.0	0.475781	N
7	IC 180-308976/8	400.0	191.873244	50.0	81527.0	0.479683	N
8	IC 180-308976/9	500.0	247.218899	50.0	80238.0	0.494438	N



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

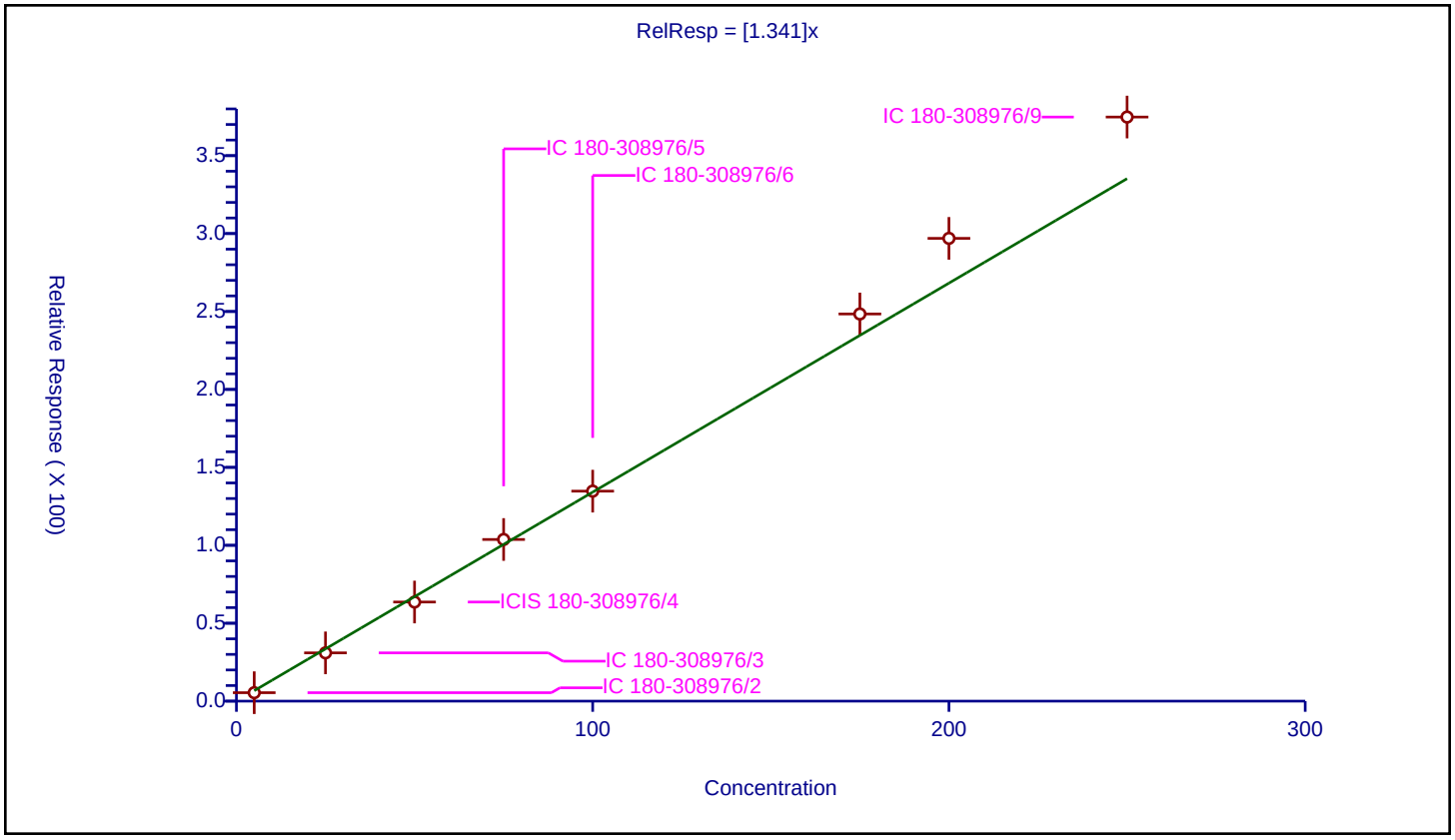
Curve Coefficients

Intercept:	0
Slope:	1.341

Error Coefficients

Standard Error:	355000
Relative Standard Error:	10.4
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	5.418502	50.0	72640.0	1.0837	Y
2	IC 180-308976/3	25.0	30.969699	50.0	69568.0	1.238788	Y
3	ICIS 180-308976/4	50.0	63.58959	50.0	78229.0	1.271792	Y
4	IC 180-308976/5	75.0	103.714652	50.0	77302.0	1.382862	Y
5	IC 180-308976/6	100.0	134.738577	50.0	78895.0	1.347386	Y
6	IC 180-308976/7	175.0	248.421567	50.0	91008.0	1.419552	Y
7	IC 180-308976/8	200.0	296.937211	50.0	81527.0	1.484686	Y
8	IC 180-308976/9	250.0	374.77816	50.0	80238.0	1.499113	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

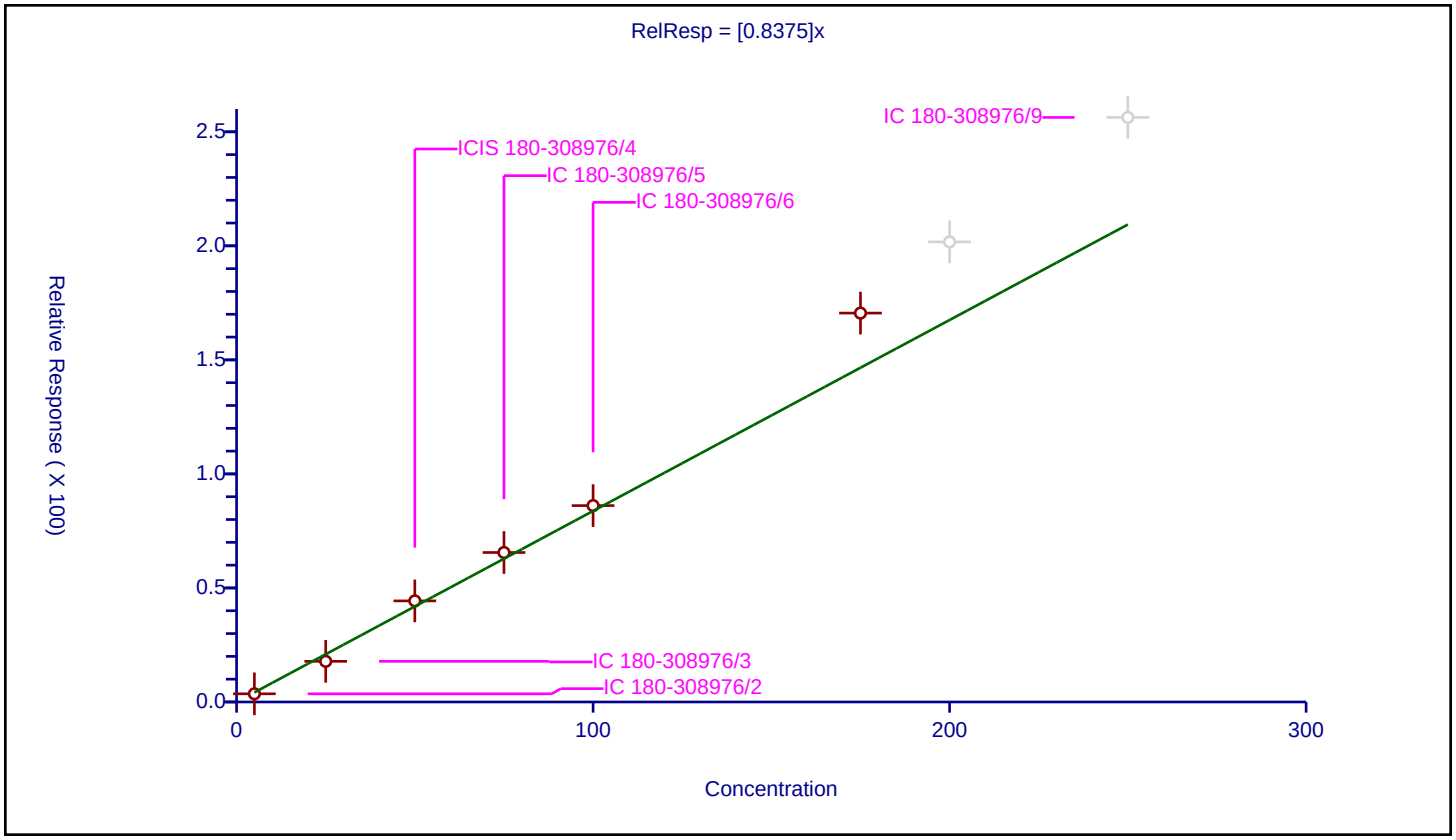
Curve Coefficients

Intercept:	0
Slope:	0.8375

Error Coefficients

Standard Error:	161000
Relative Standard Error:	12.3
Correlation Coefficient:	0.979
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	3.580672	50.0	72640.0	0.716134	Y
2	IC 180-308976/3	25.0	17.821412	50.0	69568.0	0.712856	Y
3	ICIS 180-308976/4	50.0	44.321799	50.0	78229.0	0.886436	Y
4	IC 180-308976/5	75.0	65.543582	50.0	77302.0	0.873914	Y
5	IC 180-308976/6	100.0	86.10495	50.0	78895.0	0.861049	Y
6	IC 180-308976/7	175.0	170.514131	50.0	91008.0	0.974366	Y
7	IC 180-308976/8	200.0	201.735008	50.0	81527.0	1.008675	N
8	IC 180-308976/9	250.0	256.311224	50.0	80238.0	1.025245	N



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

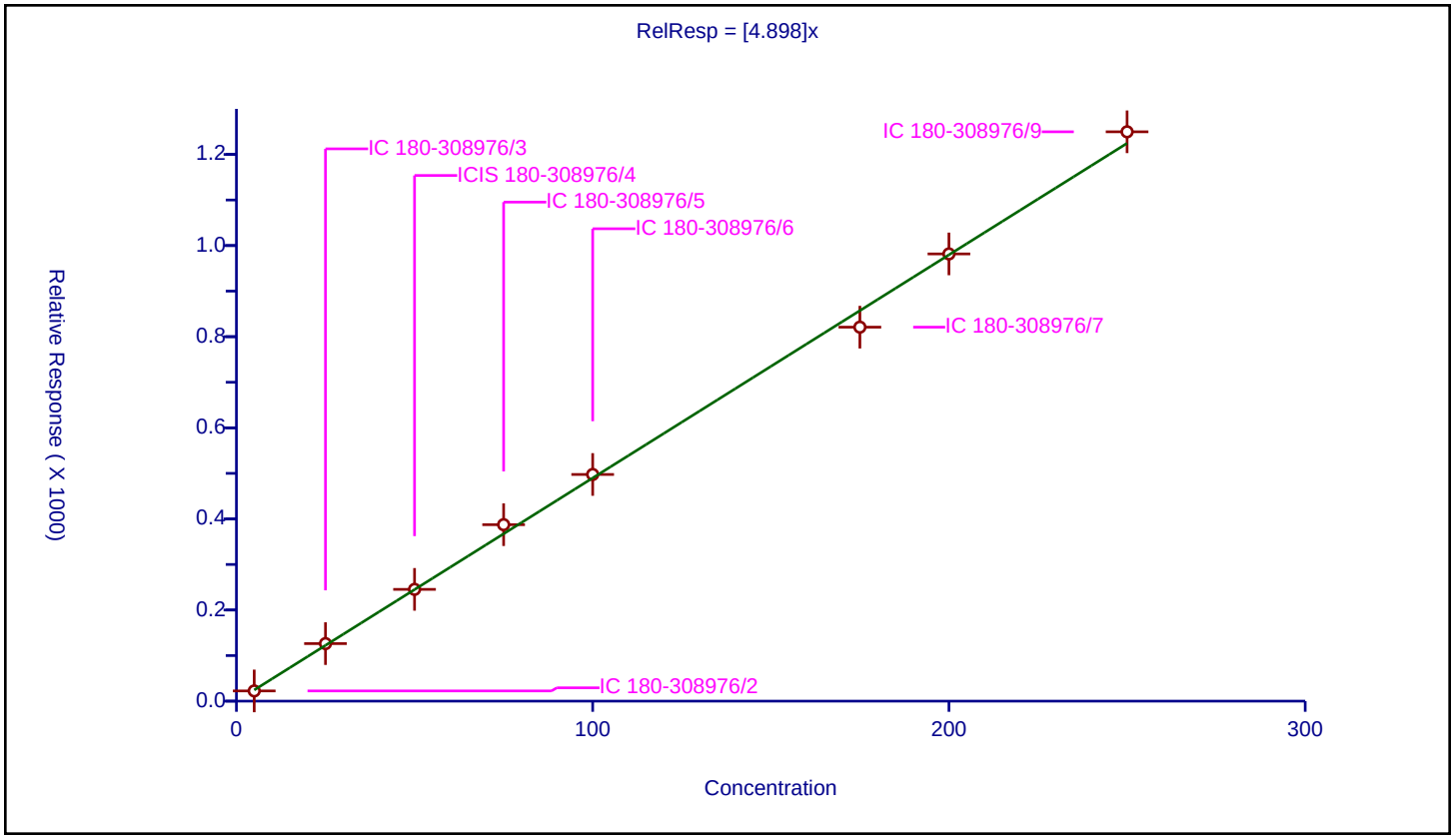
Curve Coefficients

Intercept:	0
Slope:	4.898

Error Coefficients

Standard Error:	1190000
Relative Standard Error:	4.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	22.443557	50.0	72640.0	4.488711	Y
2	IC 180-308976/3	25.0	126.297292	50.0	69568.0	5.051892	Y
3	ICIS 180-308976/4	50.0	245.31248	50.0	78229.0	4.90625	Y
4	IC 180-308976/5	75.0	387.363846	50.0	77302.0	5.164851	Y
5	IC 180-308976/6	100.0	497.541036	50.0	78895.0	4.97541	Y
6	IC 180-308976/7	175.0	820.898712	50.0	91008.0	4.69085	Y
7	IC 180-308976/8	200.0	981.645344	50.0	81527.0	4.908227	Y
8	IC 180-308976/9	250.0	1249.705875	50.0	80238.0	4.998824	Y



Calibration / 1,1,1,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

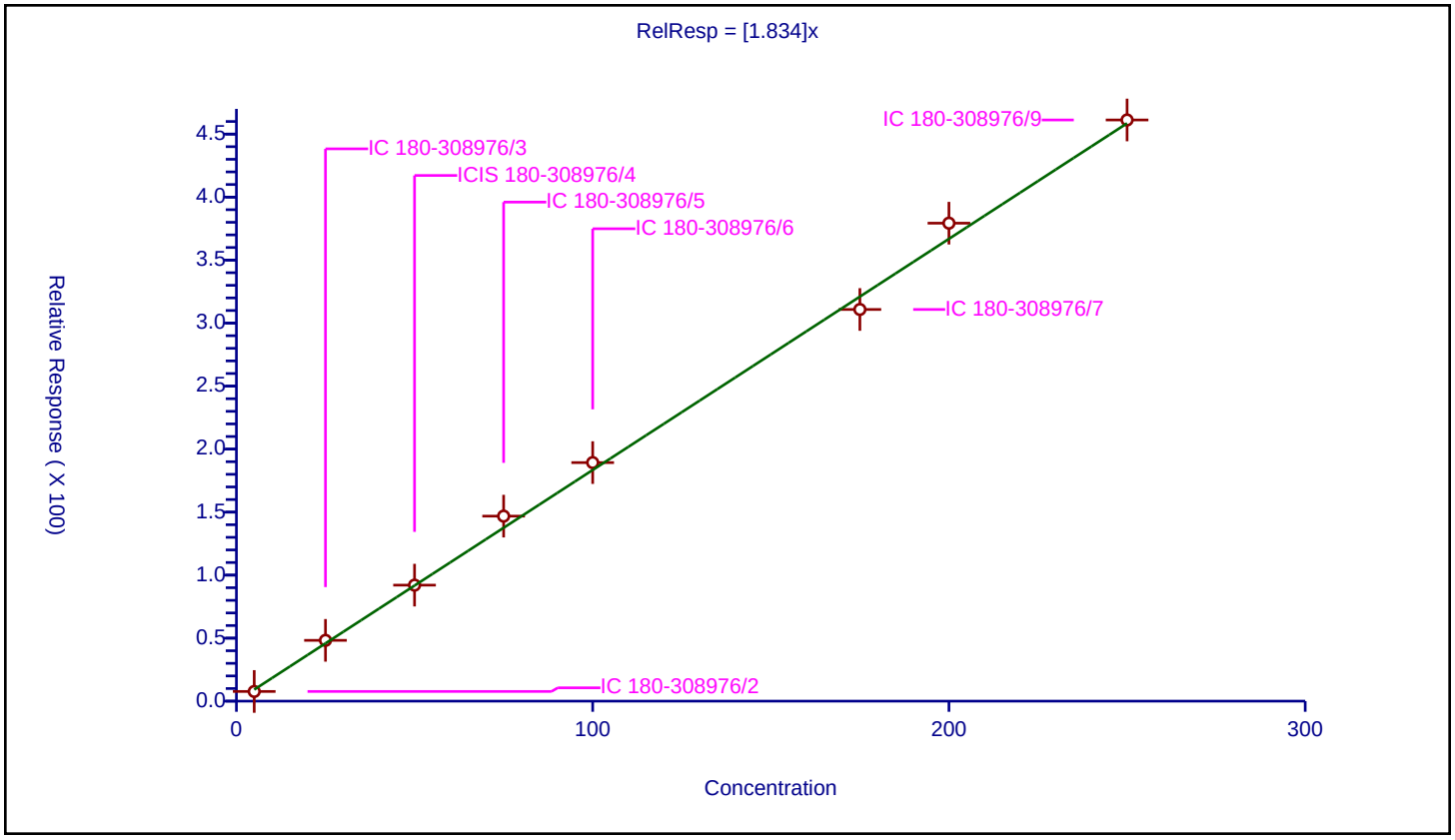
Curve Coefficients

Intercept:	0
Slope:	1.834

Error Coefficients

Standard Error:	450000
Relative Standard Error:	7.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	7.674146	50.0	72640.0	1.534829	Y
2	IC 180-308976/3	25.0	48.251351	50.0	69568.0	1.930054	Y
3	ICIS 180-308976/4	50.0	92.062407	50.0	78229.0	1.841248	Y
4	IC 180-308976/5	75.0	146.815089	50.0	77302.0	1.957535	Y
5	IC 180-308976/6	100.0	189.308575	50.0	78895.0	1.893086	Y
6	IC 180-308976/7	175.0	310.829817	50.0	91008.0	1.77617	Y
7	IC 180-308976/8	200.0	379.308082	50.0	81527.0	1.89654	Y
8	IC 180-308976/9	250.0	461.197936	50.0	80238.0	1.844792	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

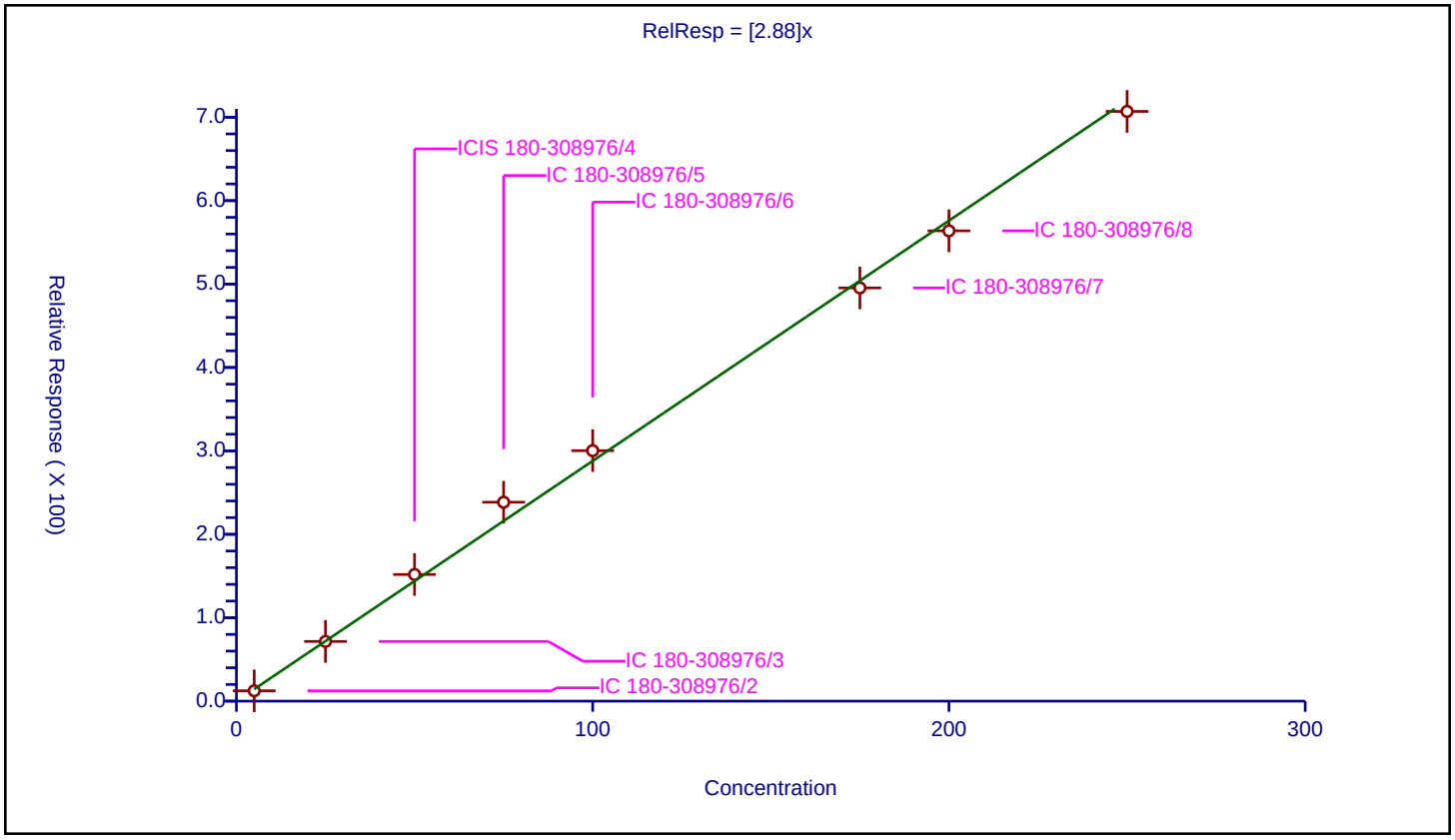
Curve Coefficients

Intercept:	0
Slope:	2.88

Error Coefficients

Standard Error:	694000
Relative Standard Error:	7.2
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	12.398816	50.0	72640.0	2.479763	Y
2	IC 180-308976/3	25.0	71.558763	50.0	69568.0	2.862351	Y
3	ICIS 180-308976/4	50.0	151.852893	50.0	78229.0	3.037058	Y
4	IC 180-308976/5	75.0	238.478953	50.0	77302.0	3.179719	Y
5	IC 180-308976/6	100.0	300.295329	50.0	78895.0	3.002953	Y
6	IC 180-308976/7	175.0	495.387219	50.0	91008.0	2.830784	Y
7	IC 180-308976/8	200.0	563.833454	50.0	81527.0	2.819167	Y
8	IC 180-308976/9	250.0	706.954934	50.0	80238.0	2.82782	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

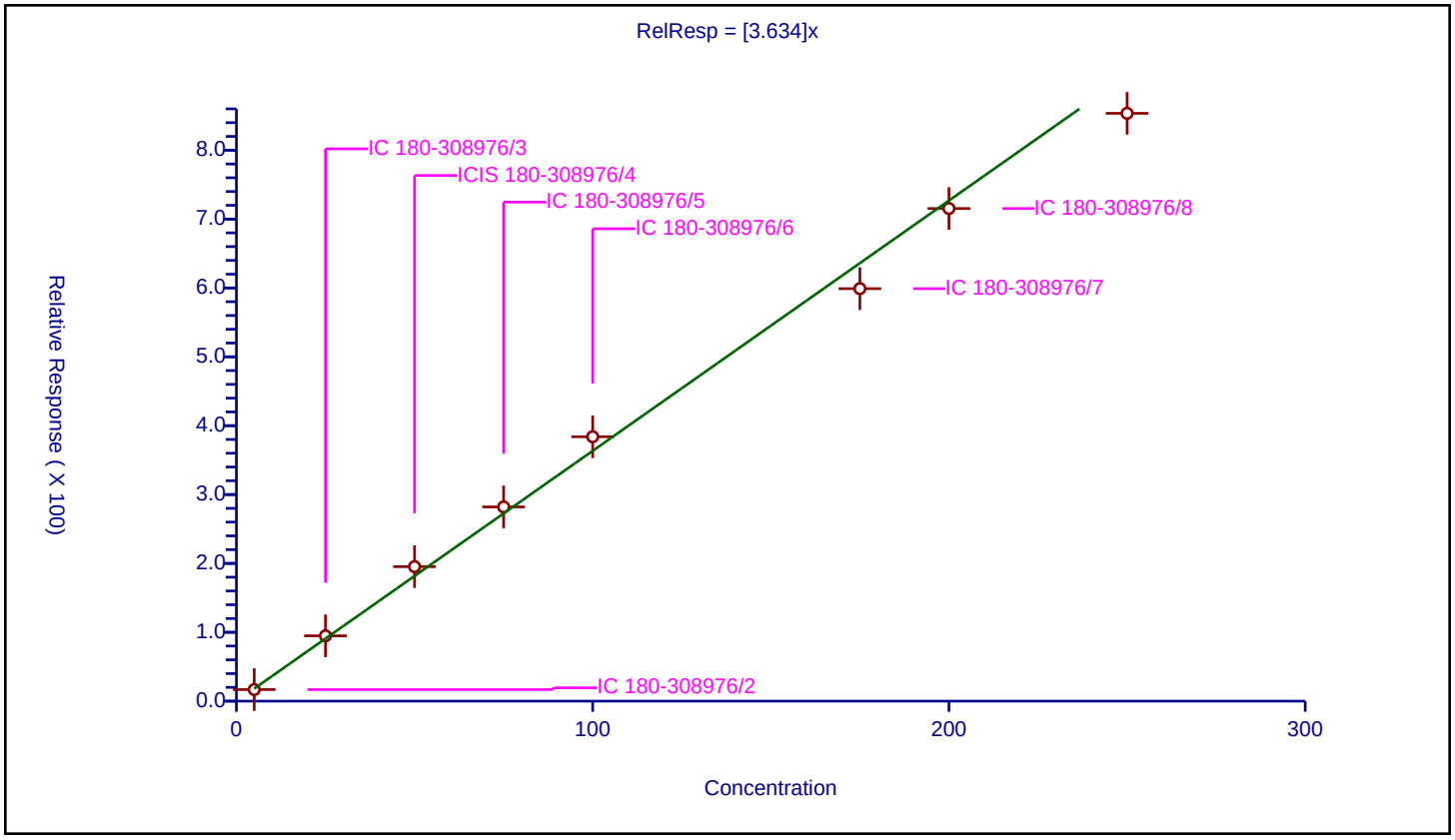
Curve Coefficients

Intercept:	0
Slope:	3.634

Error Coefficients

Standard Error:	852000
Relative Standard Error:	6.0
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	16.799972	50.0	72640.0	3.359994	Y
2	IC 180-308976/3	25.0	94.866893	50.0	69568.0	3.794676	Y
3	ICIS 180-308976/4	50.0	195.295862	50.0	78229.0	3.905917	Y
4	IC 180-308976/5	75.0	282.023751	50.0	77302.0	3.760317	Y
5	IC 180-308976/6	100.0	383.926104	50.0	78895.0	3.839261	Y
6	IC 180-308976/7	175.0	598.991297	50.0	91008.0	3.422807	Y
7	IC 180-308976/8	200.0	715.305972	50.0	81527.0	3.57653	Y
8	IC 180-308976/9	250.0	853.538847	50.0	80238.0	3.414155	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

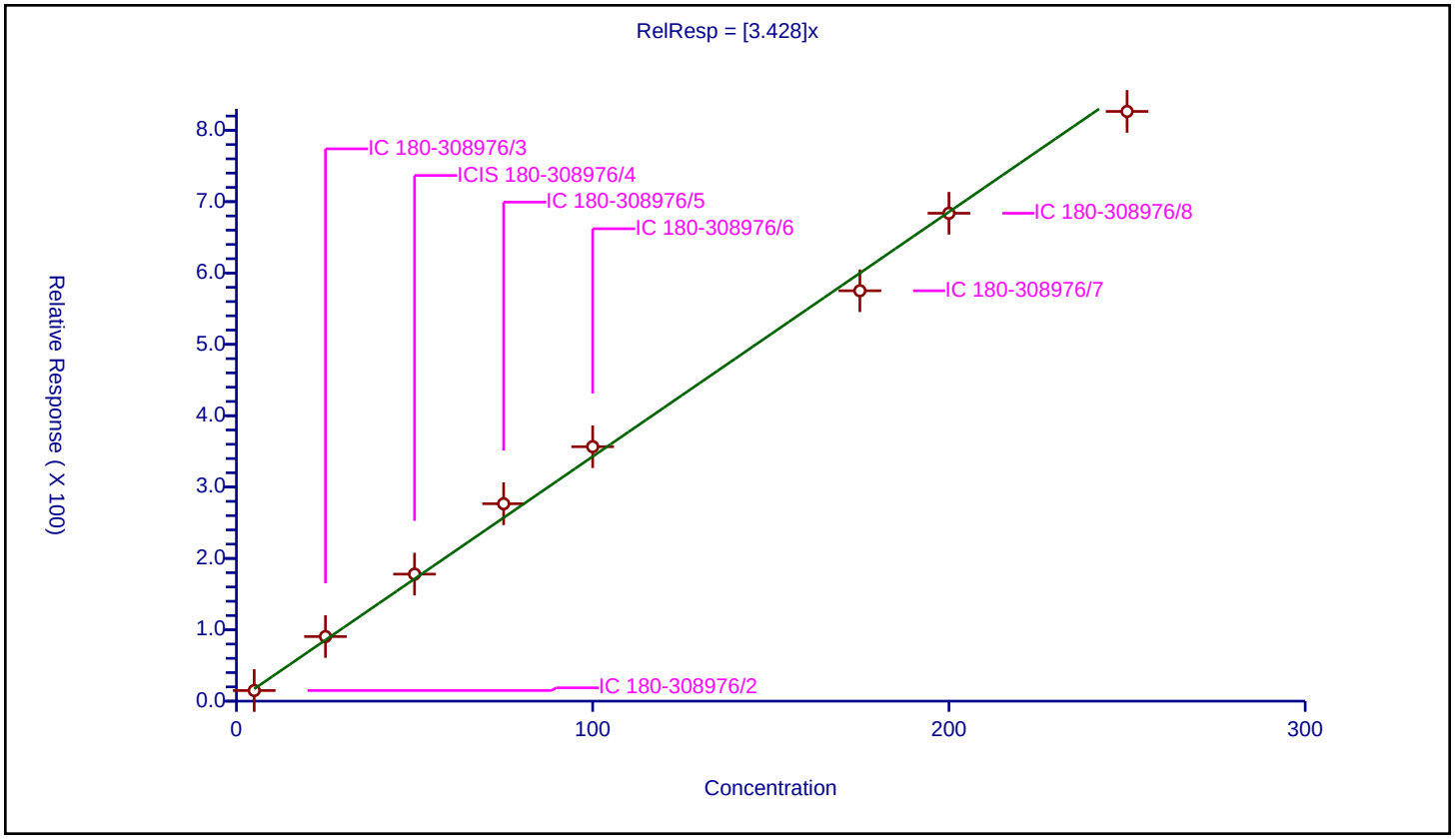
Curve Coefficients

Intercept:	0
Slope:	3.428

Error Coefficients

Standard Error:	818000
Relative Standard Error:	6.8
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	14.875413	50.0	72640.0	2.975083	Y
2	IC 180-308976/3	25.0	90.536597	50.0	69568.0	3.621464	Y
3	ICIS 180-308976/4	50.0	177.996012	50.0	78229.0	3.55992	Y
4	IC 180-308976/5	75.0	276.660371	50.0	77302.0	3.688805	Y
5	IC 180-308976/6	100.0	356.589137	50.0	78895.0	3.565891	Y
6	IC 180-308976/7	175.0	575.131307	50.0	91008.0	3.286465	Y
7	IC 180-308976/8	200.0	683.746489	50.0	81527.0	3.418732	Y
8	IC 180-308976/9	250.0	826.442583	50.0	80238.0	3.30577	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

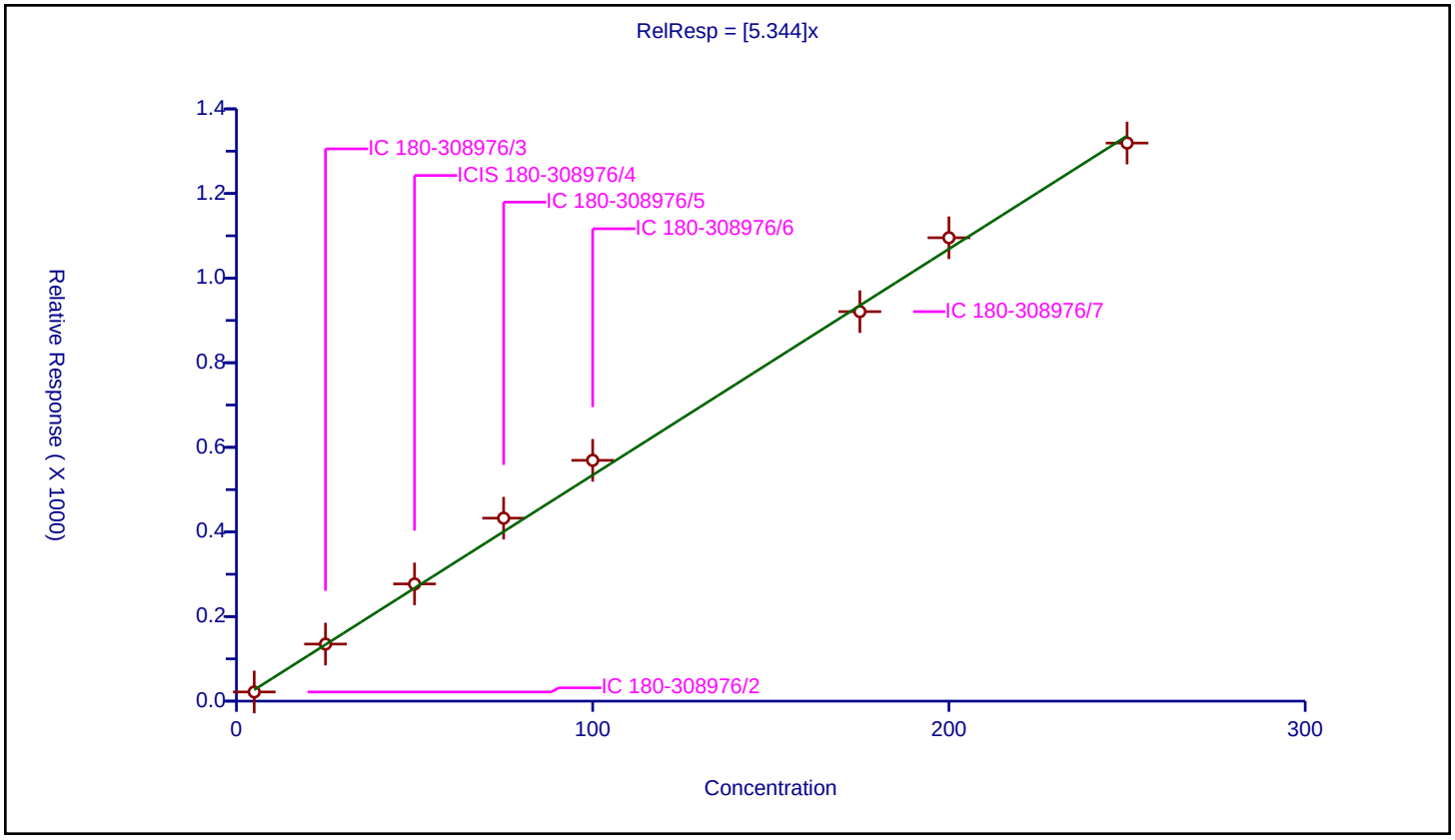
Curve Coefficients

Intercept:	0
Slope:	5.344

Error Coefficients

Standard Error:	1310000
Relative Standard Error:	8.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	21.703607	50.0	72640.0	4.340721	Y
2	IC 180-308976/3	25.0	134.875949	50.0	69568.0	5.395038	Y
3	ICIS 180-308976/4	50.0	277.112068	50.0	78229.0	5.542241	Y
4	IC 180-308976/5	75.0	432.567721	50.0	77302.0	5.76757	Y
5	IC 180-308976/6	100.0	569.269916	50.0	78895.0	5.692699	Y
6	IC 180-308976/7	175.0	920.760263	50.0	91008.0	5.261487	Y
7	IC 180-308976/8	200.0	1095.420536	50.0	81527.0	5.477103	Y
8	IC 180-308976/9	250.0	1319.29759	50.0	80238.0	5.27719	Y



Calibration / Bromoform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

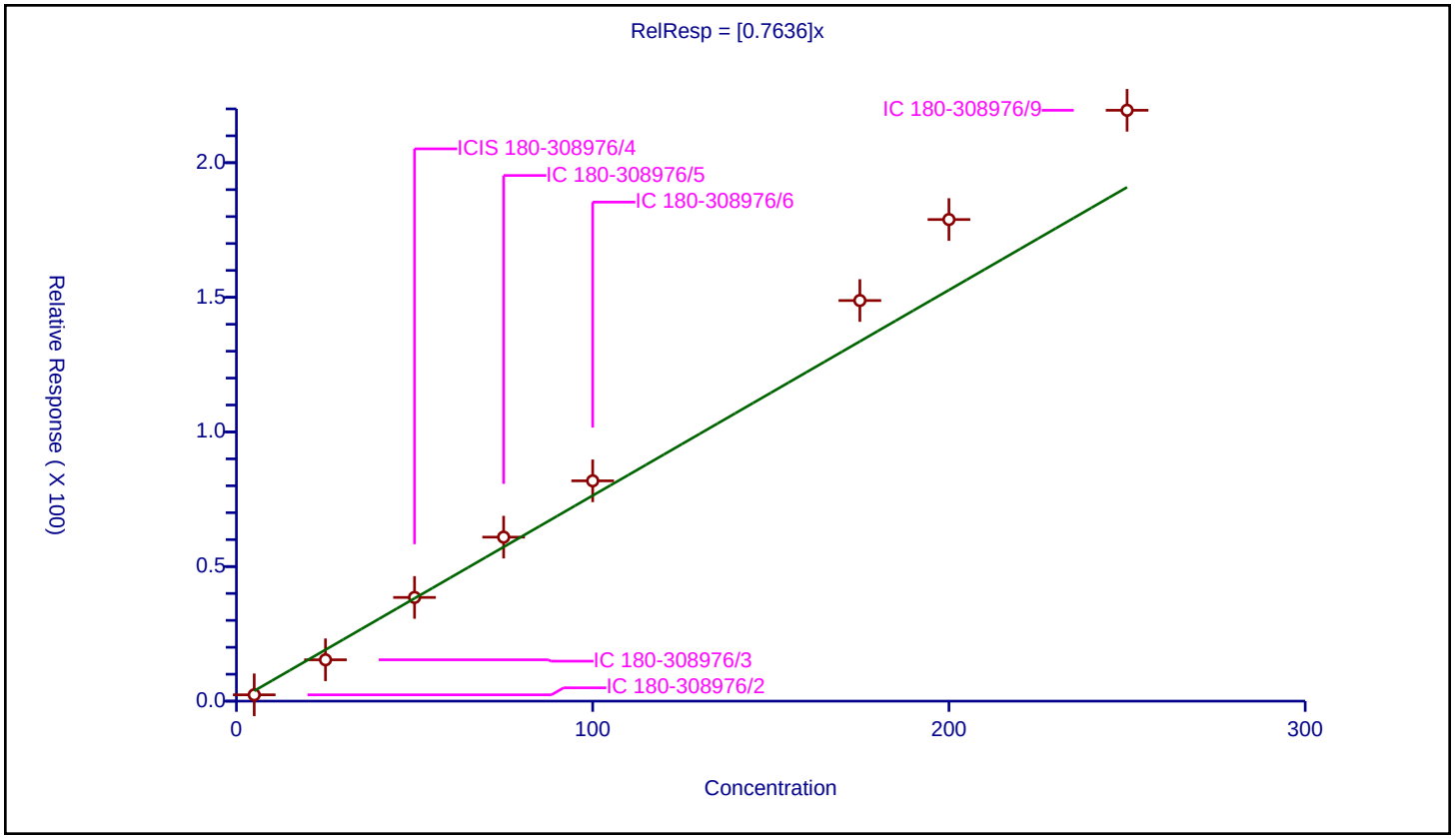
Curve Coefficients

Intercept:	0
Slope:	0.7636

Error Coefficients

Standard Error:	211000
Relative Standard Error:	19.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.964

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	2.351322	50.0	72640.0	0.470264	Y
2	IC 180-308976/3	25.0	15.364104	50.0	69568.0	0.614564	Y
3	ICIS 180-308976/4	50.0	38.52152	50.0	78229.0	0.77043	Y
4	IC 180-308976/5	75.0	60.924685	50.0	77302.0	0.812329	Y
5	IC 180-308976/6	100.0	81.832182	50.0	78895.0	0.818322	Y
6	IC 180-308976/7	175.0	148.819335	50.0	91008.0	0.850396	Y
7	IC 180-308976/8	200.0	178.897175	50.0	81527.0	0.894486	Y
8	IC 180-308976/9	250.0	219.48391	50.0	80238.0	0.877936	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

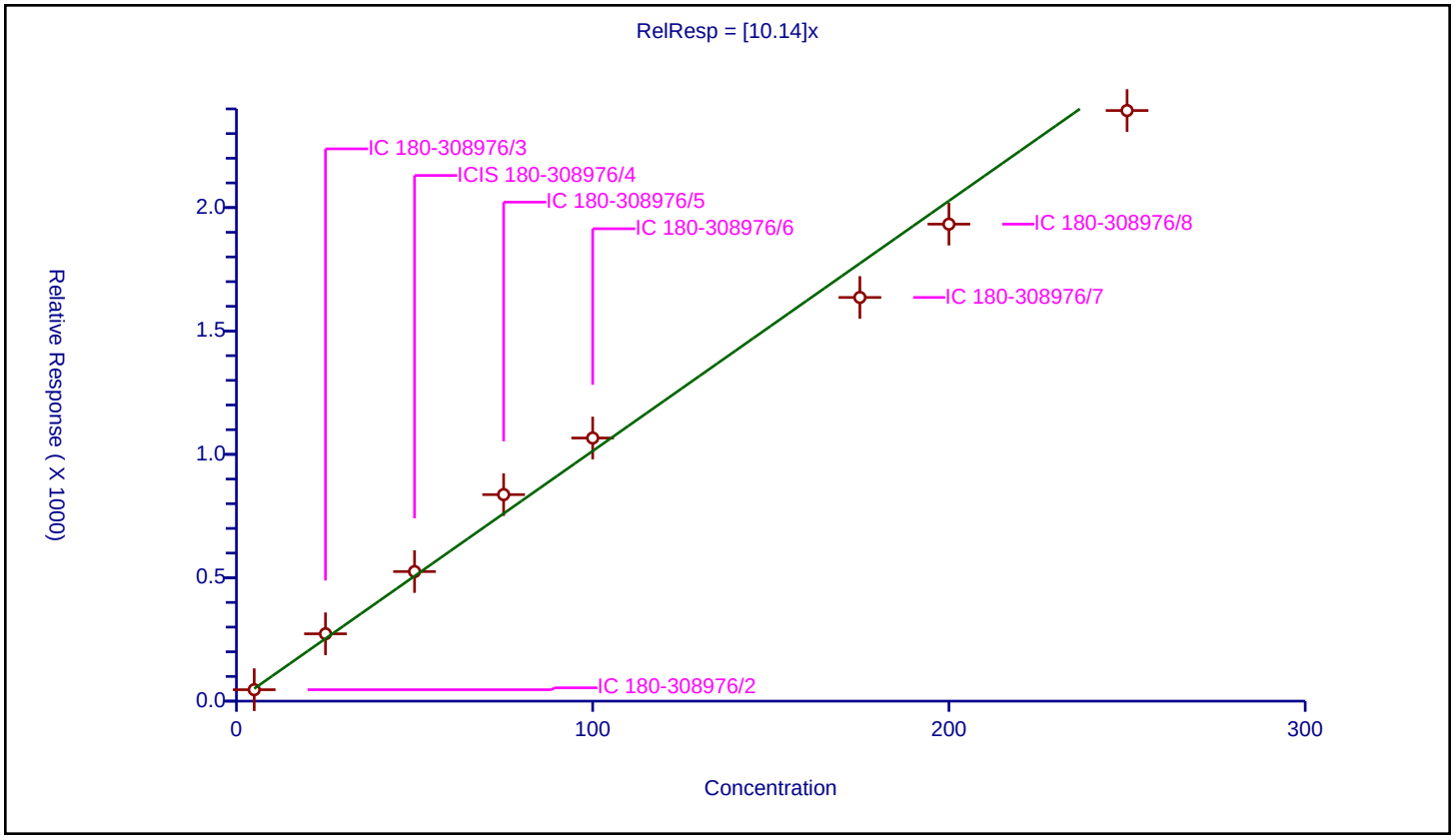
Curve Coefficients

Intercept:	0
Slope:	10.14

Error Coefficients

Standard Error:	2360000
Relative Standard Error:	7.4
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	46.339482	50.0	72640.0	9.267896	Y
2	IC 180-308976/3	25.0	272.850305	50.0	69568.0	10.914012	Y
3	ICIS 180-308976/4	50.0	525.121758	50.0	78229.0	10.502435	Y
4	IC 180-308976/5	75.0	836.997749	50.0	77302.0	11.15997	Y
5	IC 180-308976/6	100.0	1066.285569	50.0	78895.0	10.662856	Y
6	IC 180-308976/7	175.0	1635.883659	50.0	91008.0	9.347907	Y
7	IC 180-308976/8	200.0	1932.968832	50.0	81527.0	9.664844	Y
8	IC 180-308976/9	250.0	2393.380942	50.0	80238.0	9.573524	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

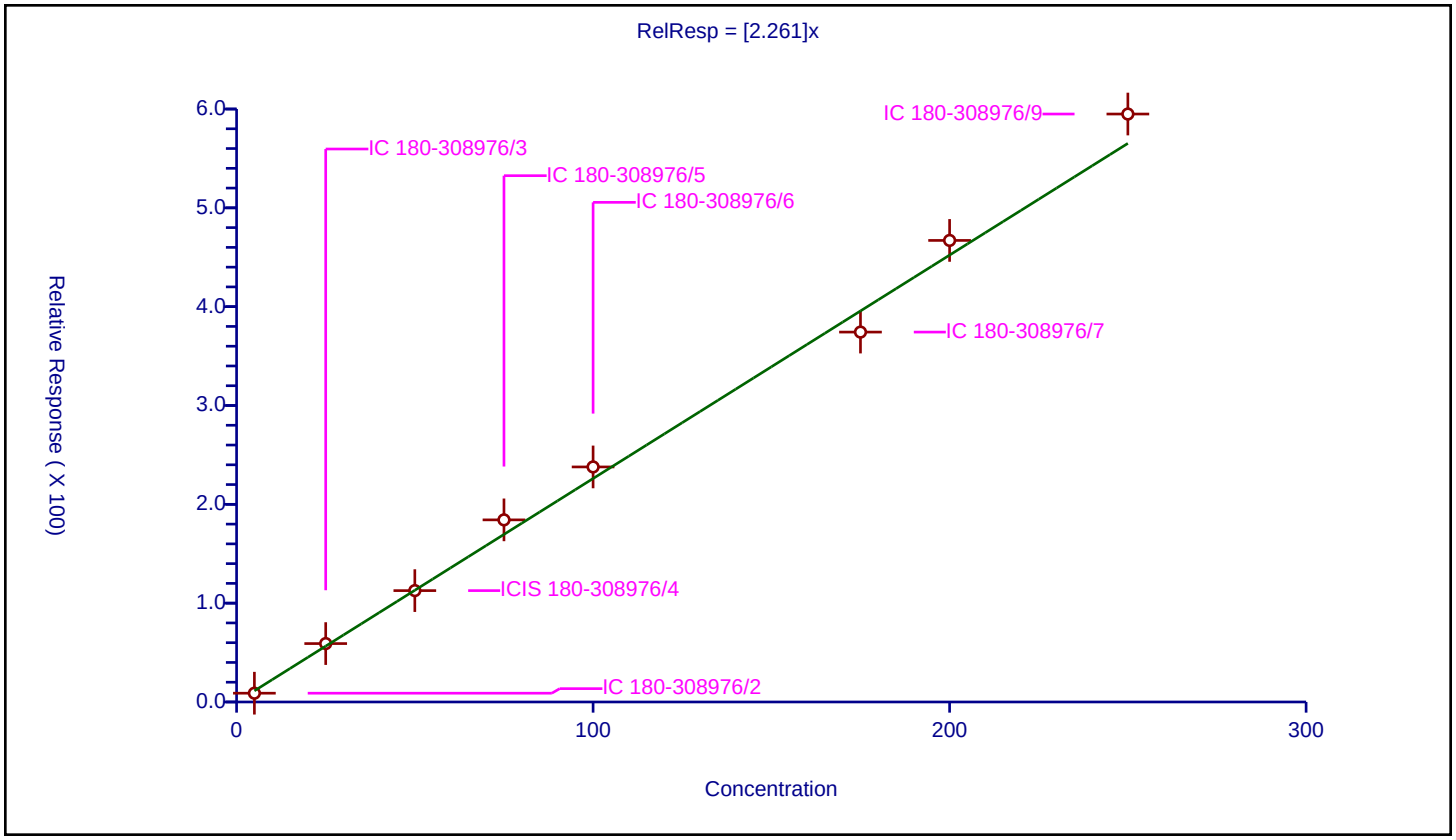
Curve Coefficients

Intercept:	0
Slope:	2.261

Error Coefficients

Standard Error:	562000
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	8.89799	50.0	72640.0	1.779598	Y
2	IC 180-308976/3	25.0	59.117698	50.0	69568.0	2.364708	Y
3	ICIS 180-308976/4	50.0	112.701172	50.0	78229.0	2.254023	Y
4	IC 180-308976/5	75.0	184.272076	50.0	77302.0	2.456961	Y
5	IC 180-308976/6	100.0	237.832562	50.0	78895.0	2.378326	Y
6	IC 180-308976/7	175.0	374.278635	50.0	91008.0	2.138735	Y
7	IC 180-308976/8	200.0	467.021355	50.0	81527.0	2.335107	Y
8	IC 180-308976/9	250.0	594.933822	50.0	80238.0	2.379735	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

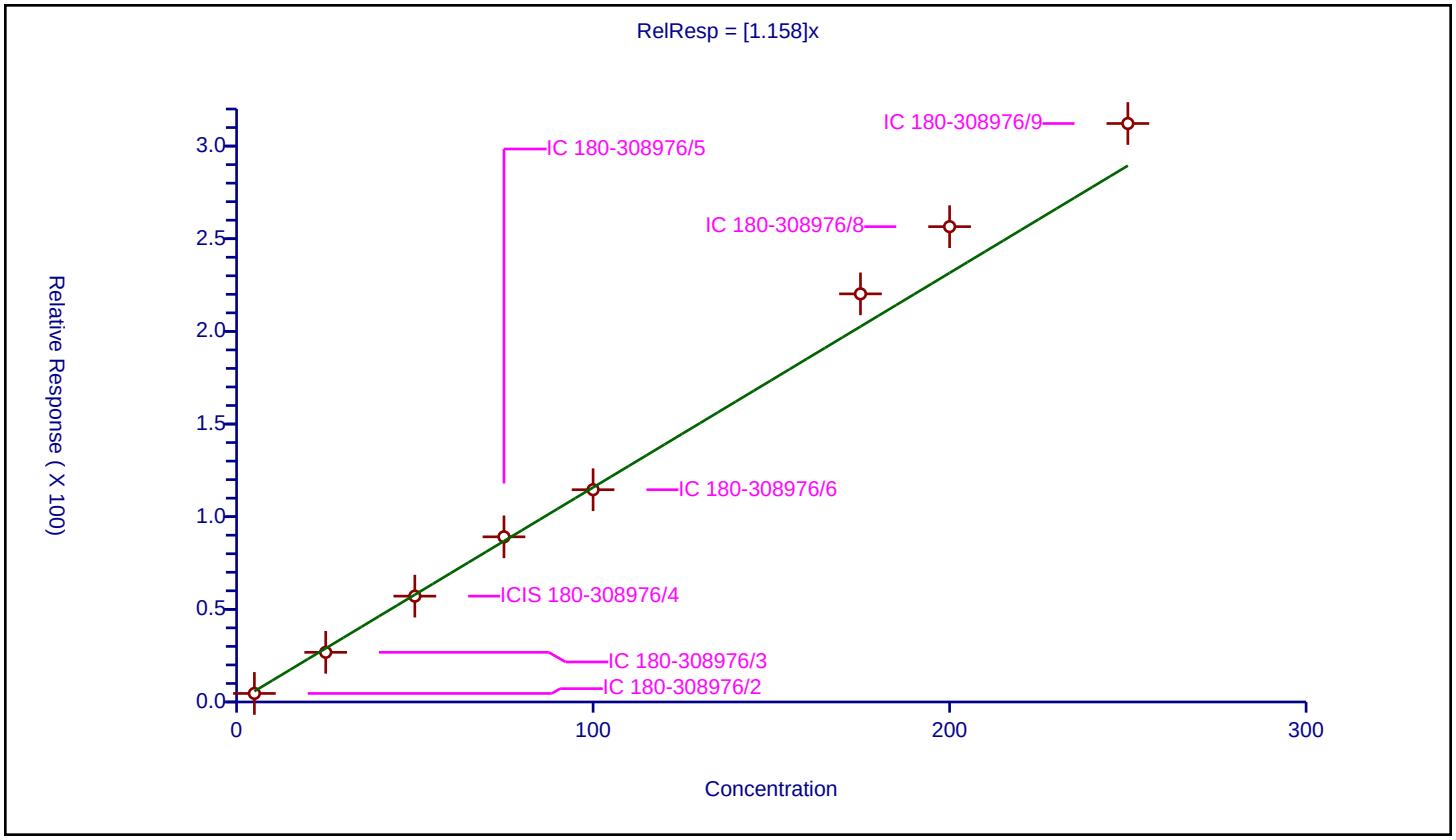
Curve Coefficients

Intercept:	0
Slope:	1.158

Error Coefficients

Standard Error:	490000
Relative Standard Error:	10.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	4.61685	50.0	132807.0	0.92337	Y
2	IC 180-308976/3	25.0	26.806749	50.0	114861.0	1.07227	Y
3	ICIS 180-308976/4	50.0	57.123996	50.0	132924.0	1.14248	Y
4	IC 180-308976/5	75.0	89.125748	50.0	139159.0	1.188343	Y
5	IC 180-308976/6	100.0	114.564785	50.0	137369.0	1.145648	Y
6	IC 180-308976/7	175.0	220.249131	50.0	136675.0	1.258566	Y
7	IC 180-308976/8	200.0	256.515255	50.0	128414.0	1.282576	Y
8	IC 180-308976/9	250.0	312.187449	50.0	133658.0	1.24875	Y



Calibration / 1,1,2,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

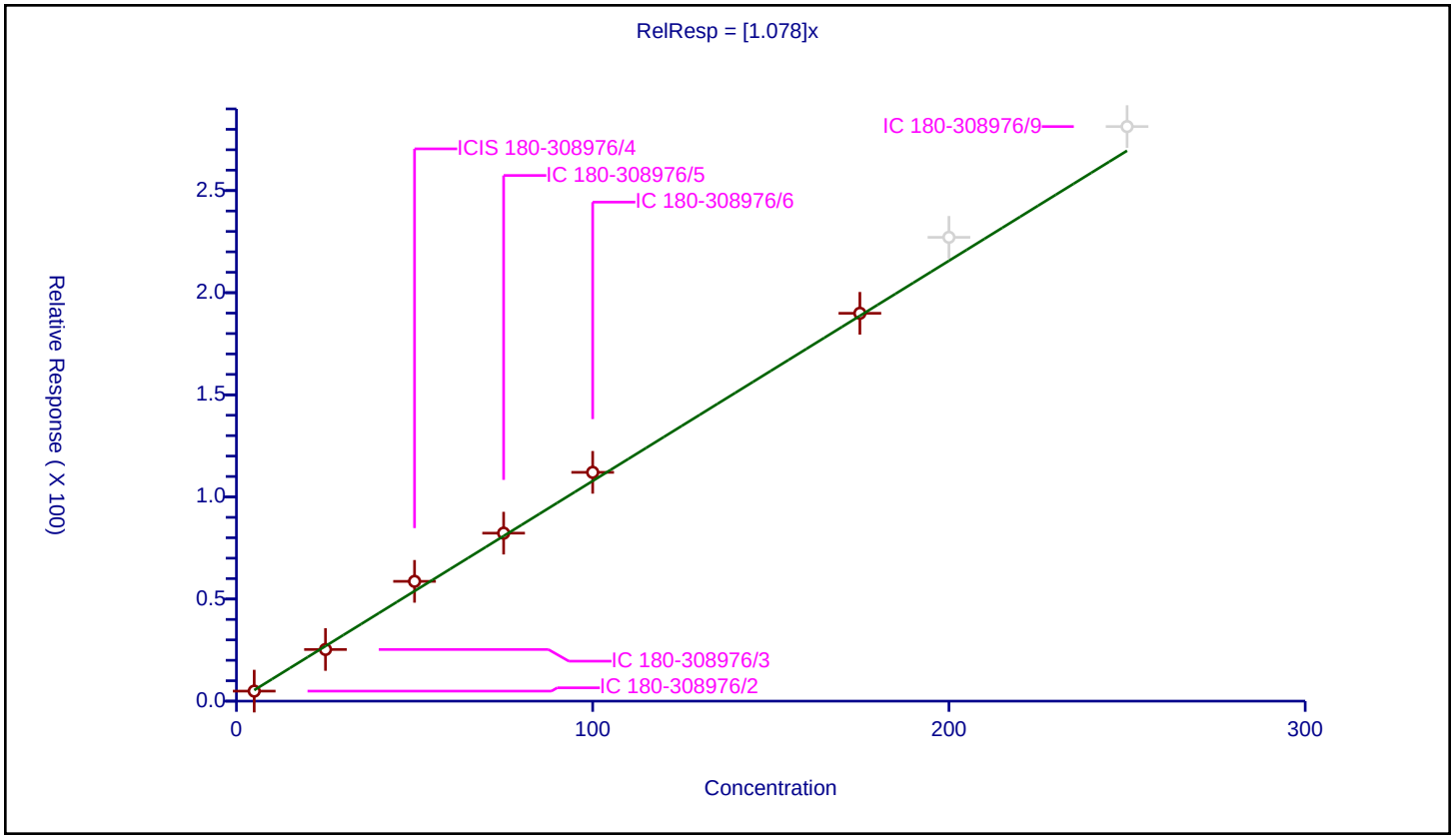
Curve Coefficients

Intercept:	0
Slope:	1.078

Error Coefficients

Standard Error:	188000
Relative Standard Error:	6.6
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	4.906388	50.0	72640.0	0.981278	Y
2	IC 180-308976/3	25.0	25.298269	50.0	69568.0	1.011931	Y
3	ICIS 180-308976/4	50.0	58.65408	50.0	78229.0	1.173082	Y
4	IC 180-308976/5	75.0	82.260485	50.0	77302.0	1.096806	Y
5	IC 180-308976/6	100.0	112.031181	50.0	78895.0	1.120312	Y
6	IC 180-308976/7	175.0	189.919568	50.0	91008.0	1.085255	Y
7	IC 180-308976/8	200.0	227.11065	50.0	81527.0	1.135553	N
8	IC 180-308976/9	250.0	281.346743	50.0	80238.0	1.125387	N



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

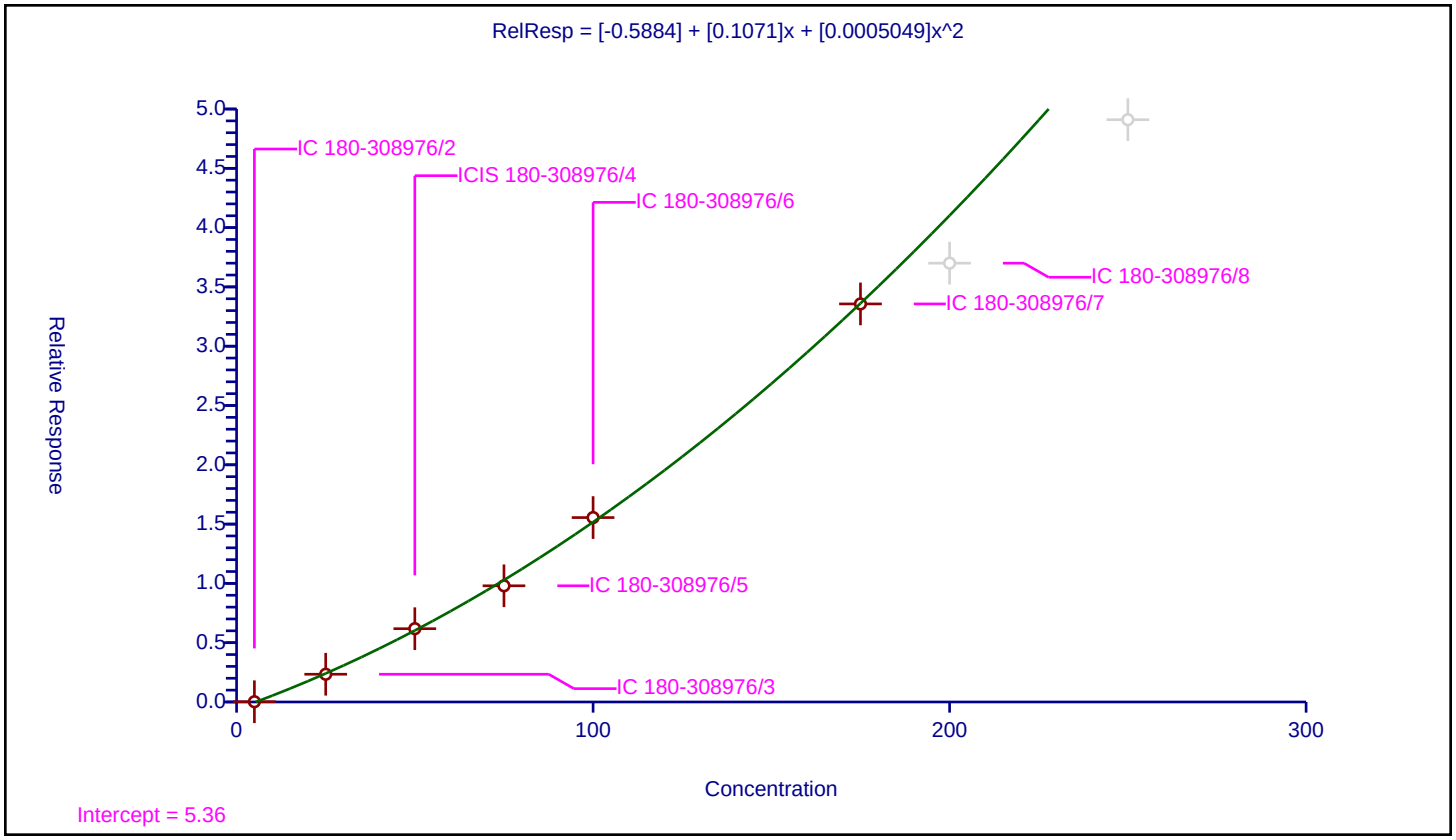
Curve Coefficients

Intercept:	-0.5884
Slope:	0.1071
Second Order:	0.0005049

Error Coefficients

Standard Error:	61300
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	0.02033	50.0	132807.0	0.004066	Y
2	IC 180-308976/3	25.0	2.339349	50.0	114861.0	0.093574	Y
3	ICIS 180-308976/4	50.0	6.179847	50.0	132924.0	0.123597	Y
4	IC 180-308976/5	75.0	9.798145	50.0	139159.0	0.130642	Y
5	IC 180-308976/6	100.0	15.54936	50.0	137369.0	0.155494	Y
6	IC 180-308976/7	175.0	33.564661	50.0	136675.0	0.191798	Y
7	IC 180-308976/8	200.0	37.001417	50.0	128414.0	0.185007	N
8	IC 180-308976/9	250.0	49.099568	50.0	133658.0	0.196398	N



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

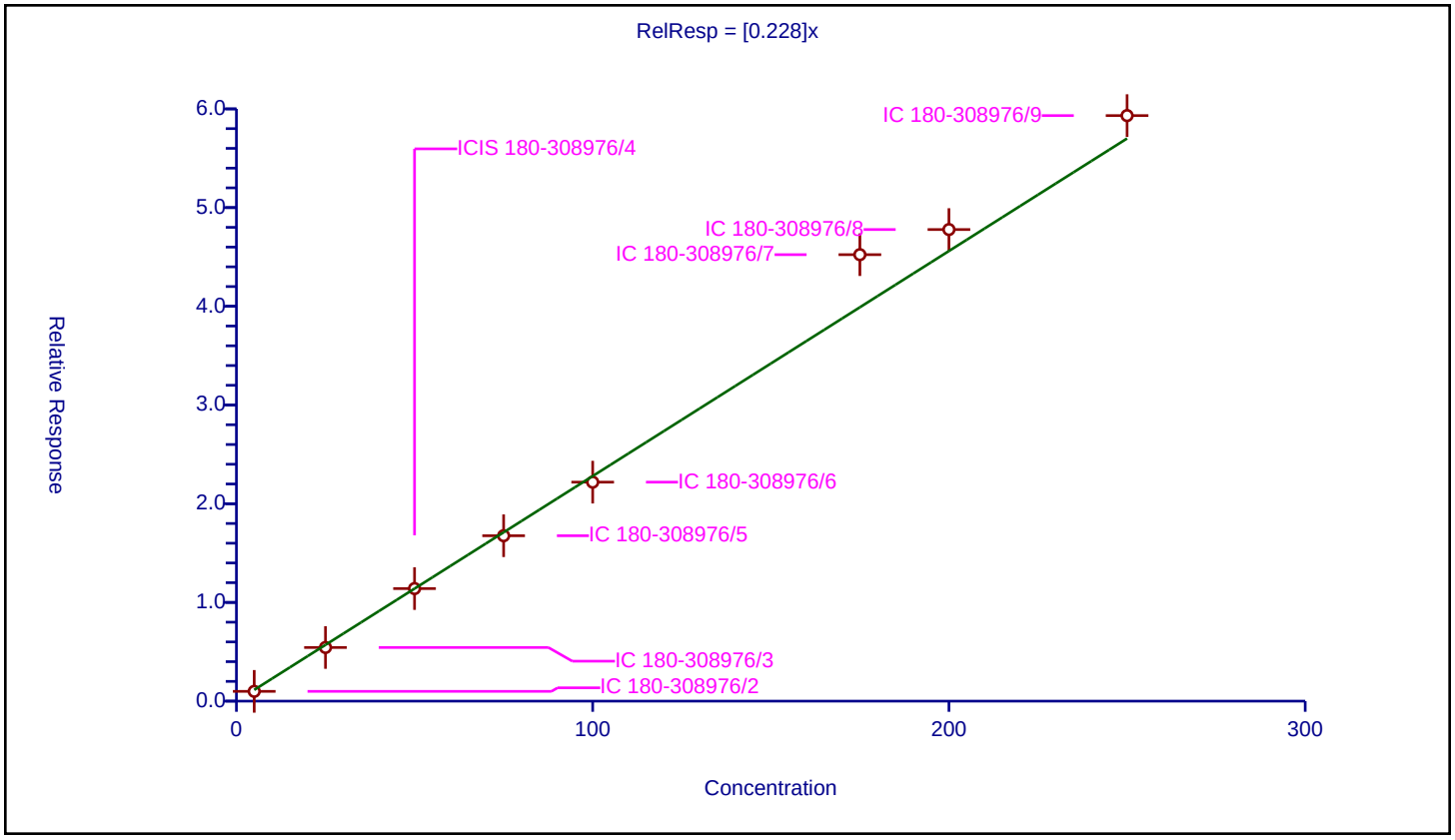
Curve Coefficients

Intercept:	0
Slope:	0.228

Error Coefficients

Standard Error:	94400
Relative Standard Error:	7.7
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	0.992794	50.0	132807.0	0.198559	Y
2	IC 180-308976/3	25.0	5.436571	50.0	114861.0	0.217463	Y
3	ICIS 180-308976/4	50.0	11.403885	50.0	132924.0	0.228078	Y
4	IC 180-308976/5	75.0	16.758169	50.0	139159.0	0.223442	Y
5	IC 180-308976/6	100.0	22.185864	50.0	137369.0	0.221859	Y
6	IC 180-308976/7	175.0	45.233217	50.0	136675.0	0.258476	Y
7	IC 180-308976/8	200.0	47.775943	50.0	128414.0	0.23888	Y
8	IC 180-308976/9	250.0	59.320056	50.0	133658.0	0.23728	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

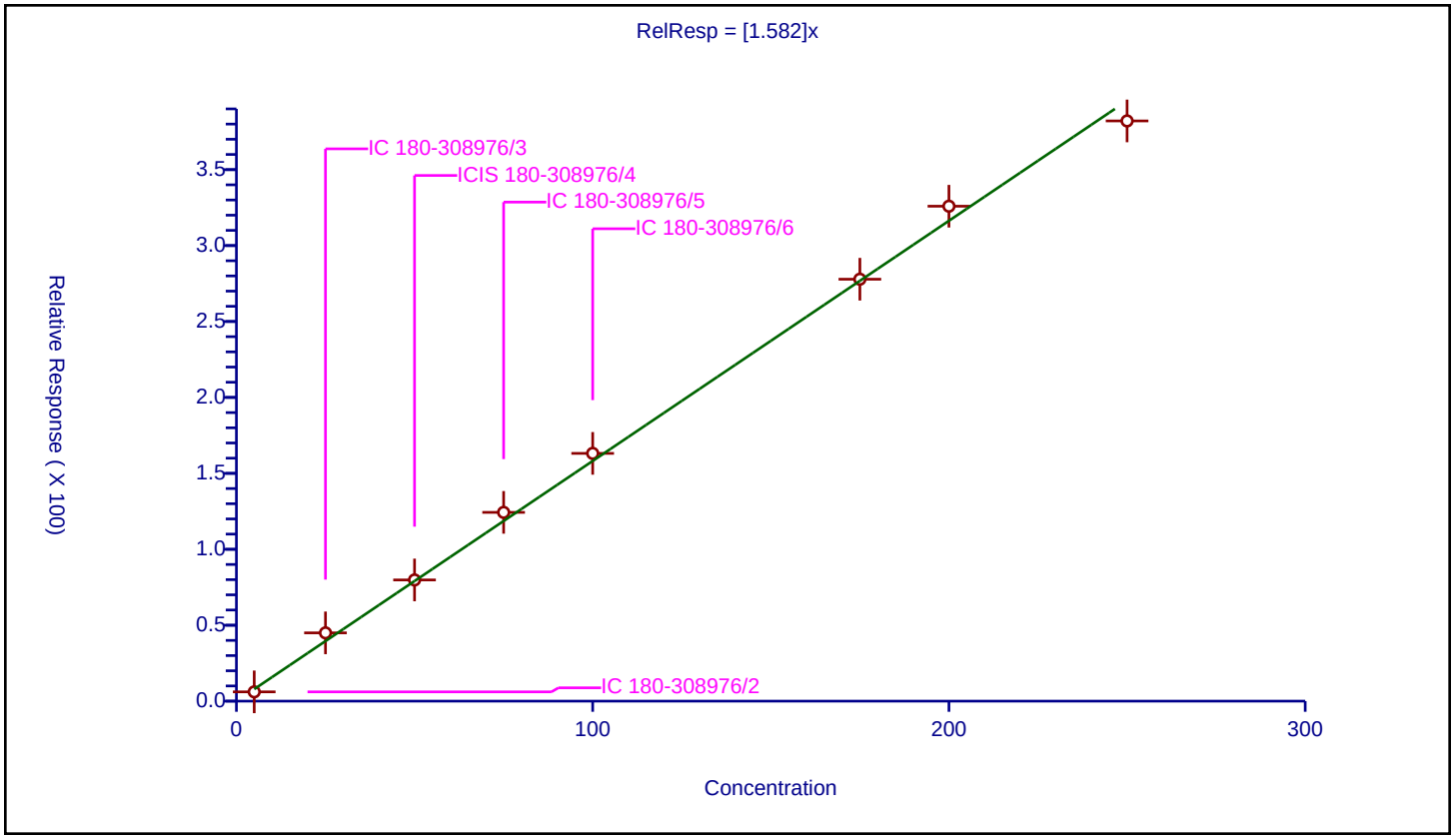
Curve Coefficients

Intercept:	0
Slope:	1.582

Error Coefficients

Standard Error:	621000
Relative Standard Error:	10.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	6.117524	50.0	132807.0	1.223505	Y
2	IC 180-308976/3	25.0	44.960866	50.0	114861.0	1.798435	Y
3	ICIS 180-308976/4	50.0	79.817414	50.0	132924.0	1.596348	Y
4	IC 180-308976/5	75.0	124.31104	50.0	139159.0	1.657481	Y
5	IC 180-308976/6	100.0	163.155443	50.0	137369.0	1.631554	Y
6	IC 180-308976/7	175.0	277.847448	50.0	136675.0	1.5877	Y
7	IC 180-308976/8	200.0	325.91462	50.0	128414.0	1.629573	Y
8	IC 180-308976/9	250.0	382.072902	50.0	133658.0	1.528292	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

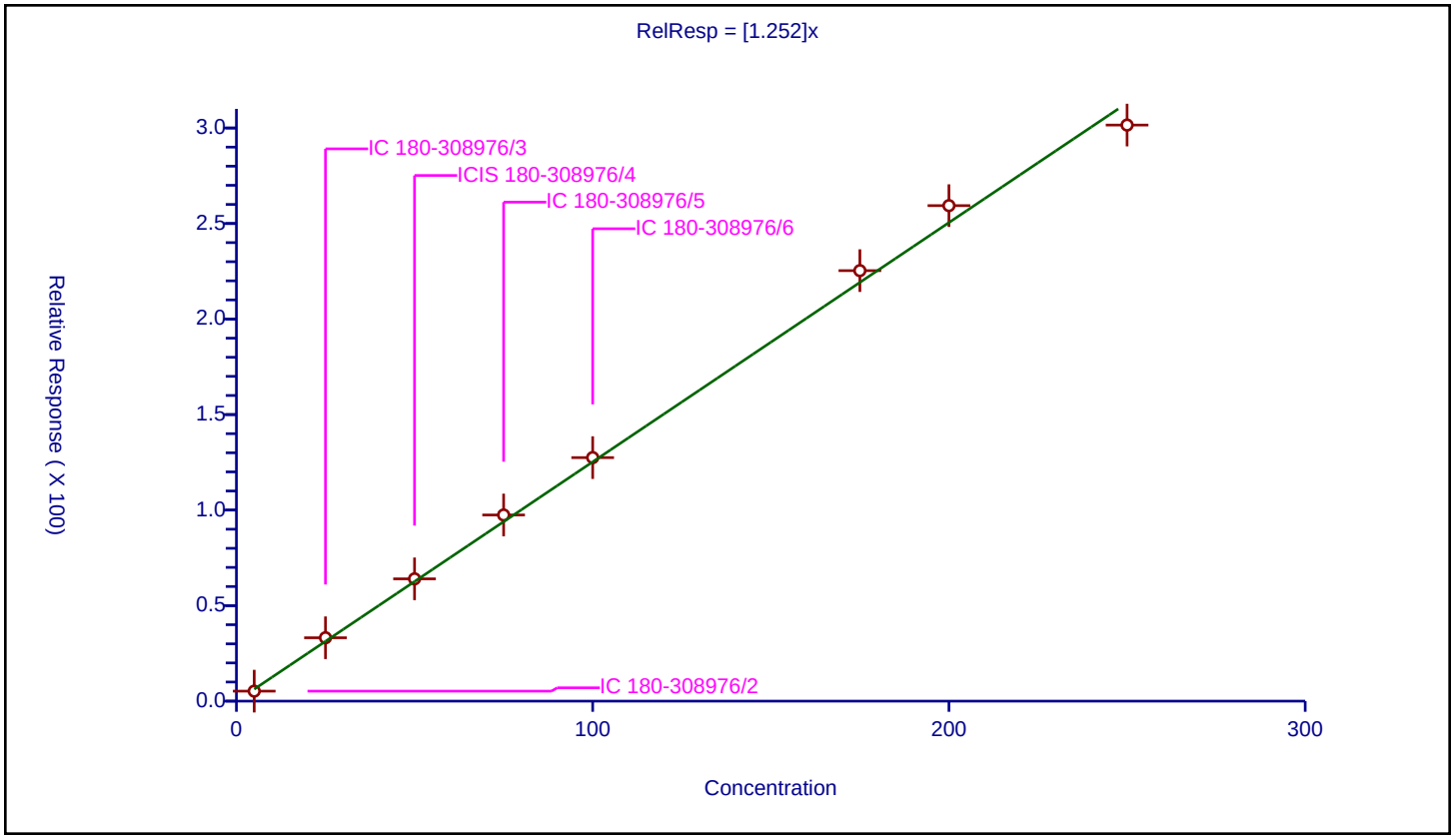
Curve Coefficients

Intercept:	0
Slope:	1.252

Error Coefficients

Standard Error:	493000
Relative Standard Error:	7.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	5.236923	50.0	132807.0	1.047385	Y
2	IC 180-308976/3	25.0	33.178799	50.0	114861.0	1.327152	Y
3	ICIS 180-308976/4	50.0	64.012895	50.0	132924.0	1.280258	Y
4	IC 180-308976/5	75.0	97.442494	50.0	139159.0	1.299233	Y
5	IC 180-308976/6	100.0	127.472355	50.0	137369.0	1.274724	Y
6	IC 180-308976/7	175.0	225.334187	50.0	136675.0	1.287624	Y
7	IC 180-308976/8	200.0	259.359182	50.0	128414.0	1.296796	Y
8	IC 180-308976/9	250.0	301.534139	50.0	133658.0	1.206137	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

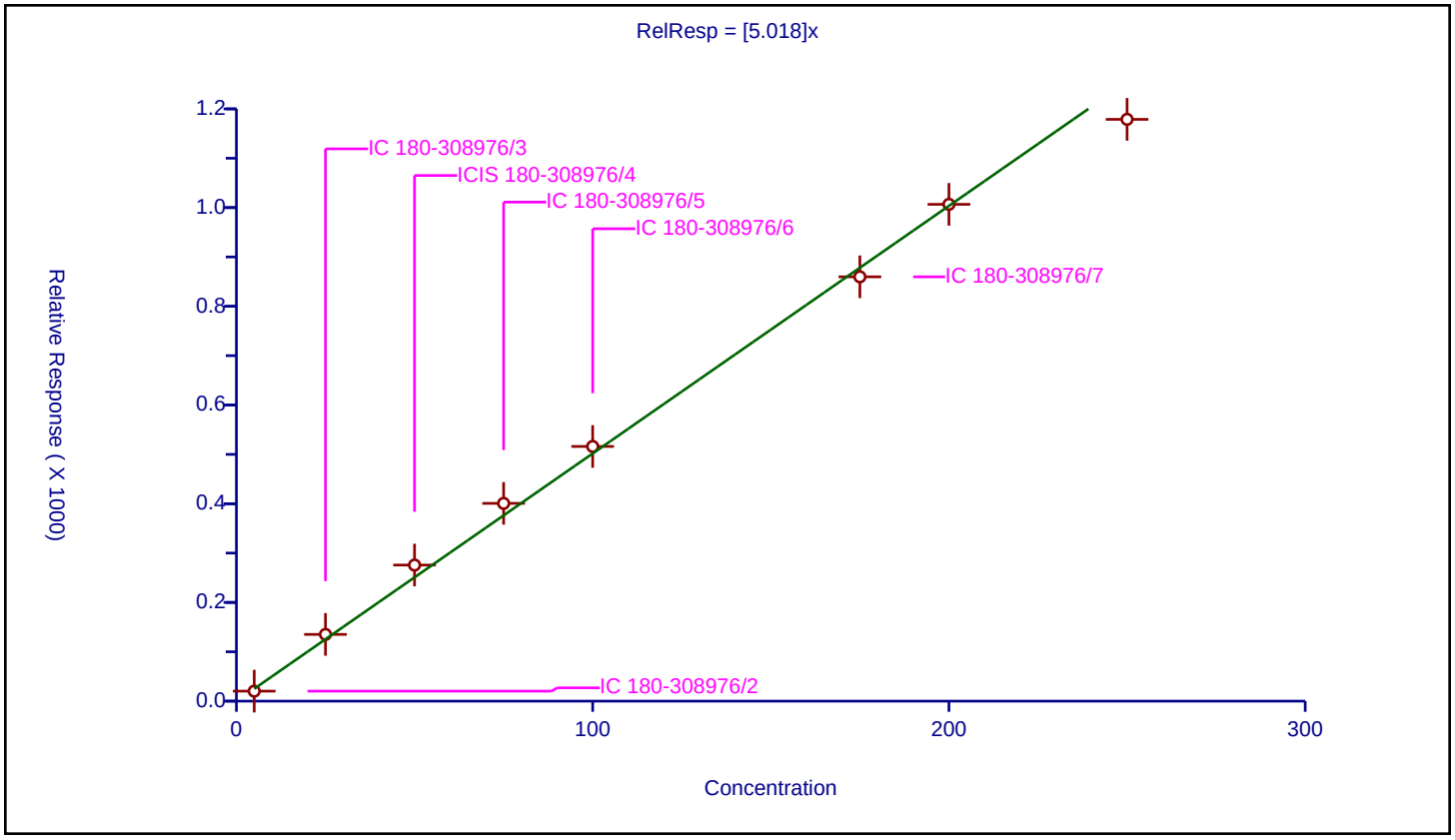
Curve Coefficients

Intercept:	0
Slope:	5.018

Error Coefficients

Standard Error:	1930000
Relative Standard Error:	9.4
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	20.272651	50.0	132807.0	4.05453	Y
2	IC 180-308976/3	25.0	135.202984	50.0	114861.0	5.408119	Y
3	ICIS 180-308976/4	50.0	275.73275	50.0	132924.0	5.514655	Y
4	IC 180-308976/5	75.0	400.713572	50.0	139159.0	5.342848	Y
5	IC 180-308976/6	100.0	516.041101	50.0	137369.0	5.160411	Y
6	IC 180-308976/7	175.0	859.732943	50.0	136675.0	4.91276	Y
7	IC 180-308976/8	200.0	1006.562758	50.0	128414.0	5.032814	Y
8	IC 180-308976/9	250.0	1178.795508	50.0	133658.0	4.715182	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

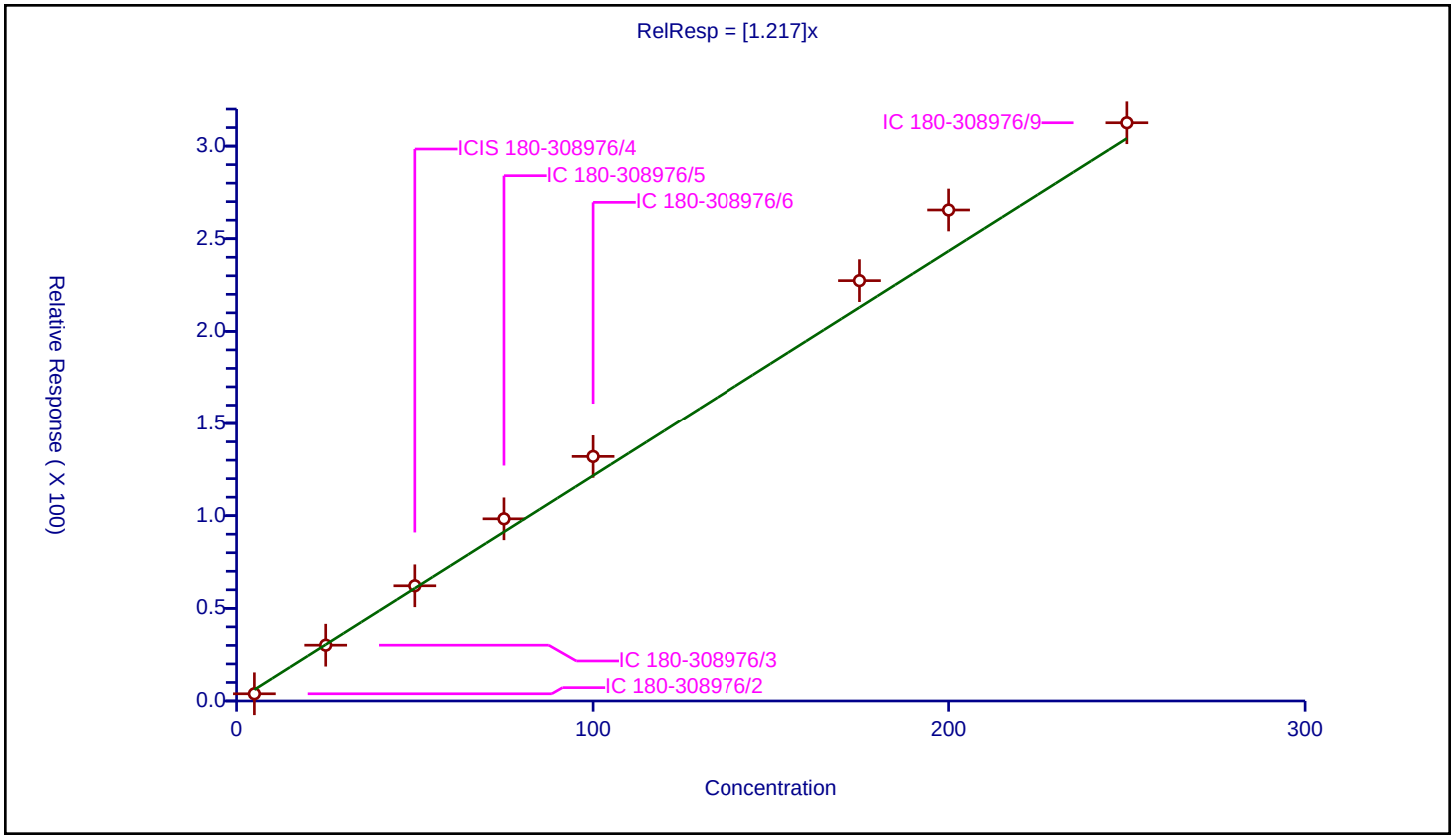
Curve Coefficients

Intercept:	0
Slope:	1.217

Error Coefficients

Standard Error:	505000
Relative Standard Error:	15.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	3.887596	50.0	132807.0	0.777519	Y
2	IC 180-308976/3	25.0	30.10726	50.0	114861.0	1.20429	Y
3	ICIS 180-308976/4	50.0	62.169736	50.0	132924.0	1.243395	Y
4	IC 180-308976/5	75.0	98.315596	50.0	139159.0	1.310875	Y
5	IC 180-308976/6	100.0	132.019233	50.0	137369.0	1.320192	Y
6	IC 180-308976/7	175.0	227.382477	50.0	136675.0	1.299328	Y
7	IC 180-308976/8	200.0	265.497142	50.0	128414.0	1.327486	Y
8	IC 180-308976/9	250.0	312.607925	50.0	133658.0	1.250432	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

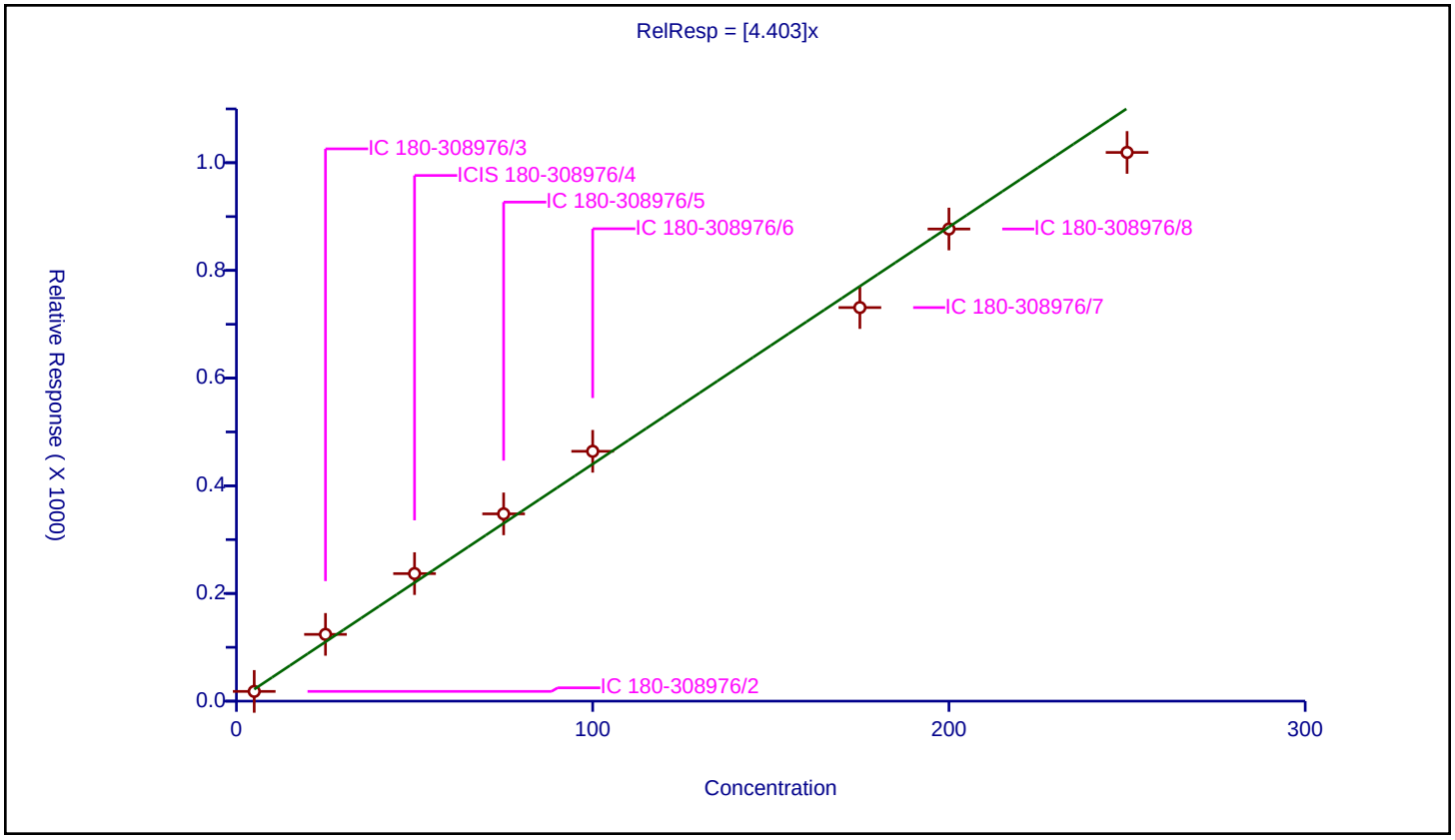
Curve Coefficients

Intercept:	0
Slope:	4.403

Error Coefficients

Standard Error:	1670000
Relative Standard Error:	9.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	18.071337	50.0	132807.0	3.614267	Y
2	IC 180-308976/3	25.0	123.994654	50.0	114861.0	4.959786	Y
3	ICIS 180-308976/4	50.0	236.877088	50.0	132924.0	4.737542	Y
4	IC 180-308976/5	75.0	347.847426	50.0	139159.0	4.637966	Y
5	IC 180-308976/6	100.0	464.016263	50.0	137369.0	4.640163	Y
6	IC 180-308976/7	175.0	731.017011	50.0	136675.0	4.17724	Y
7	IC 180-308976/8	200.0	876.900494	50.0	128414.0	4.384502	Y
8	IC 180-308976/9	250.0	1019.097248	50.0	133658.0	4.076389	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

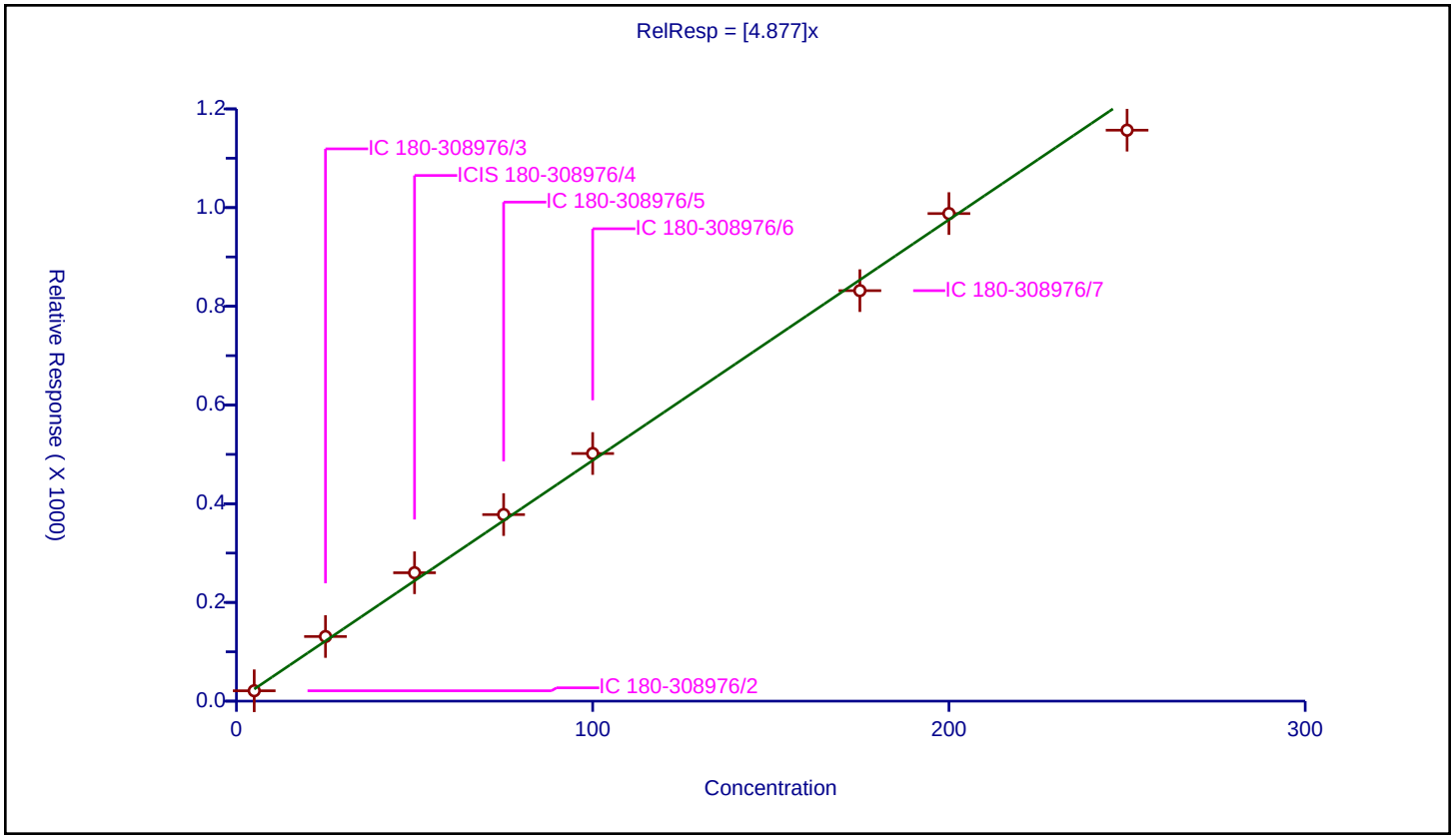
Curve Coefficients

Intercept:	0
Slope:	4.877

Error Coefficients

Standard Error:	1880000
Relative Standard Error:	7.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	21.011694	50.0	132807.0	4.202339	Y
2	IC 180-308976/3	25.0	130.933476	50.0	114861.0	5.237339	Y
3	ICIS 180-308976/4	50.0	260.122702	50.0	132924.0	5.202454	Y
4	IC 180-308976/5	75.0	378.020825	50.0	139159.0	5.040278	Y
5	IC 180-308976/6	100.0	501.722368	50.0	137369.0	5.017224	Y
6	IC 180-308976/7	175.0	831.760746	50.0	136675.0	4.752919	Y
7	IC 180-308976/8	200.0	987.88956	50.0	128414.0	4.939448	Y
8	IC 180-308976/9	250.0	1156.890721	50.0	133658.0	4.627563	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

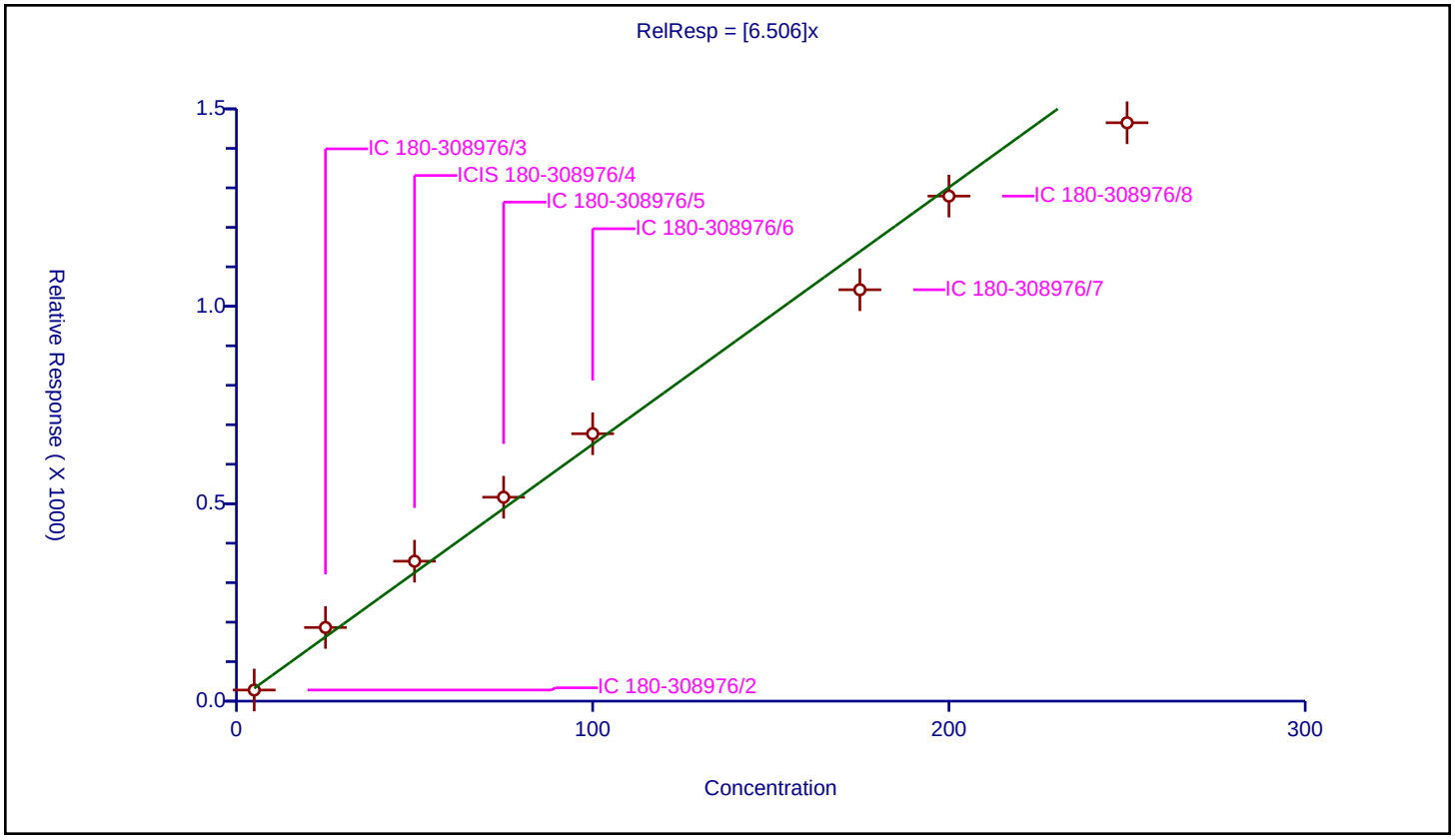
Curve Coefficients

Intercept:	0
Slope:	6.506

Error Coefficients

Standard Error:	2410000
Relative Standard Error:	10.0
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	28.161919	50.0	132807.0	5.632384	Y
2	IC 180-308976/3	25.0	186.531547	50.0	114861.0	7.461262	Y
3	ICIS 180-308976/4	50.0	354.466462	50.0	132924.0	7.089329	Y
4	IC 180-308976/5	75.0	516.4542	50.0	139159.0	6.886056	Y
5	IC 180-308976/6	100.0	677.270709	50.0	137369.0	6.772707	Y
6	IC 180-308976/7	175.0	1041.941833	50.0	136675.0	5.953953	Y
7	IC 180-308976/8	200.0	1279.115595	50.0	128414.0	6.395578	Y
8	IC 180-308976/9	250.0	1464.900343	50.0	133658.0	5.859601	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

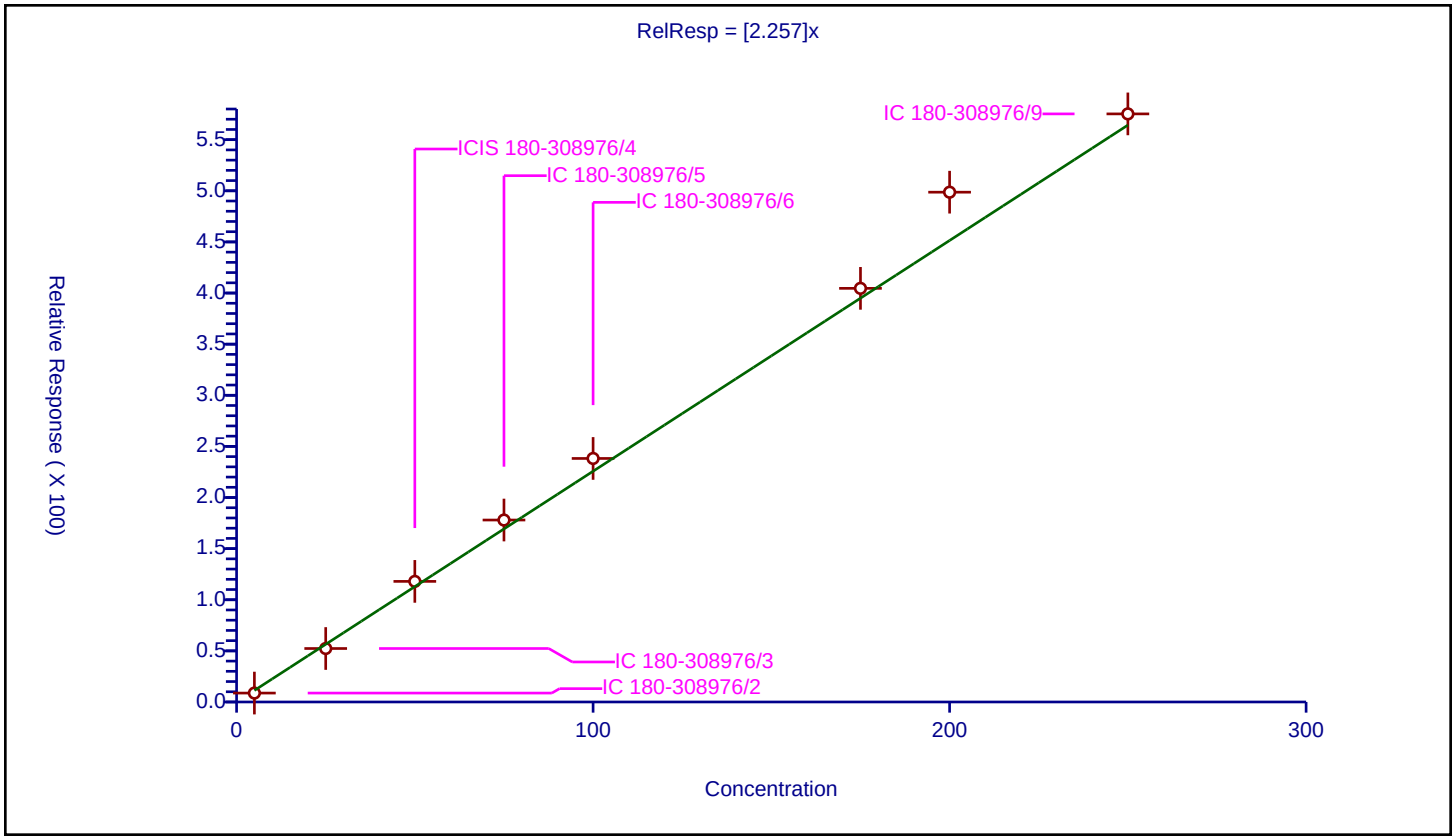
Curve Coefficients

Intercept:	0
Slope:	2.257

Error Coefficients

Standard Error:	927000
Relative Standard Error:	10.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	8.716785	50.0	132807.0	1.743357	Y
2	IC 180-308976/3	25.0	52.310184	50.0	114861.0	2.092407	Y
3	ICIS 180-308976/4	50.0	117.957254	50.0	132924.0	2.359145	Y
4	IC 180-308976/5	75.0	177.965852	50.0	139159.0	2.372878	Y
5	IC 180-308976/6	100.0	238.20731	50.0	137369.0	2.382073	Y
6	IC 180-308976/7	175.0	404.600329	50.0	136675.0	2.312002	Y
7	IC 180-308976/8	200.0	498.643061	50.0	128414.0	2.493215	Y
8	IC 180-308976/9	250.0	575.214353	50.0	133658.0	2.300857	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

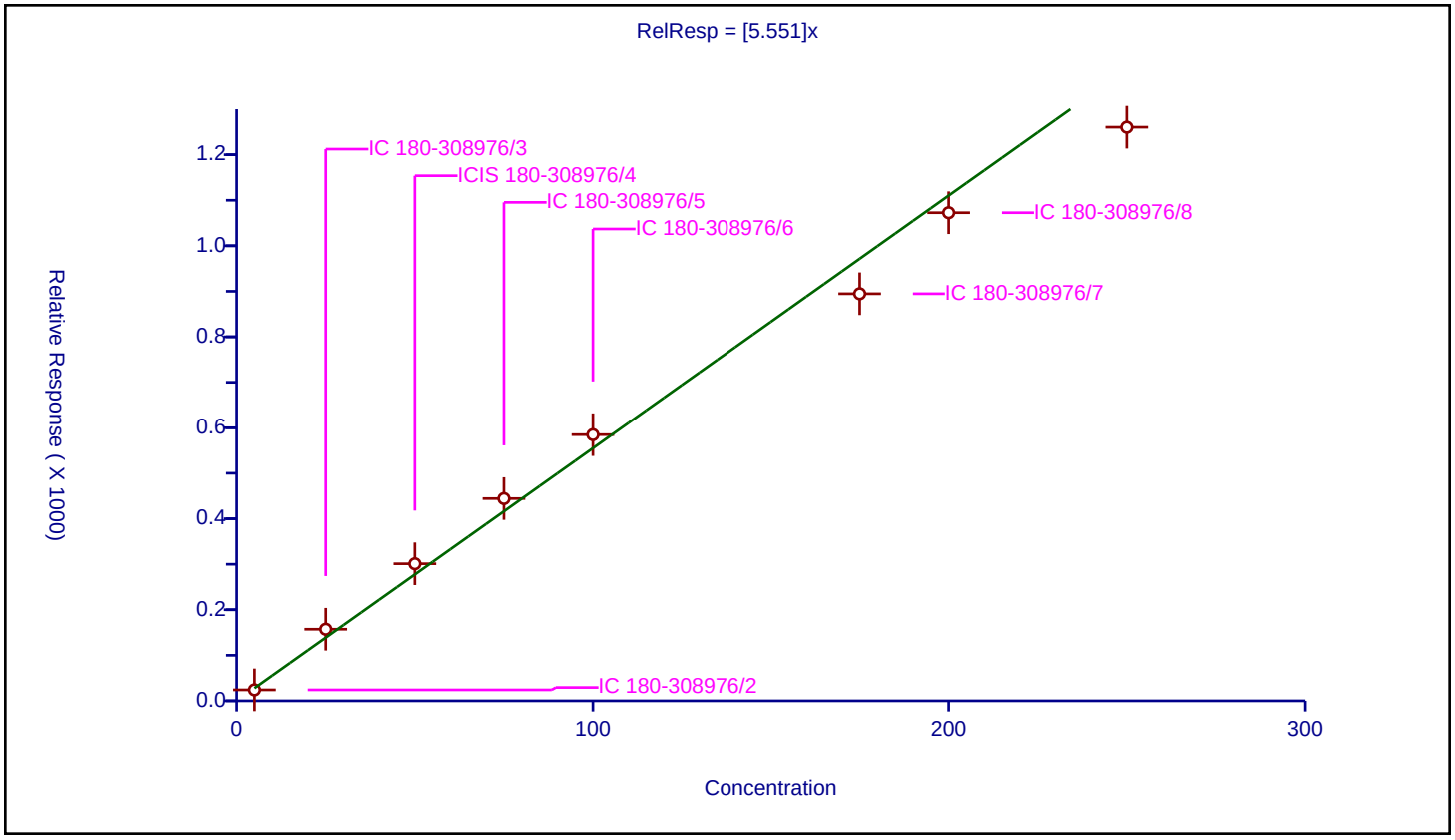
Curve Coefficients

Intercept:	0
Slope:	5.551

Error Coefficients

Standard Error:	2060000
Relative Standard Error:	9.7
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	24.033372	50.0	132807.0	4.806674	Y
2	IC 180-308976/3	25.0	157.260515	50.0	114861.0	6.290421	Y
3	ICIS 180-308976/4	50.0	301.106647	50.0	132924.0	6.022133	Y
4	IC 180-308976/5	75.0	444.419693	50.0	139159.0	5.925596	Y
5	IC 180-308976/6	100.0	584.902343	50.0	137369.0	5.849023	Y
6	IC 180-308976/7	175.0	894.620084	50.0	136675.0	5.112115	Y
7	IC 180-308976/8	200.0	1072.660691	50.0	128414.0	5.363303	Y
8	IC 180-308976/9	250.0	1260.452423	50.0	133658.0	5.04181	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

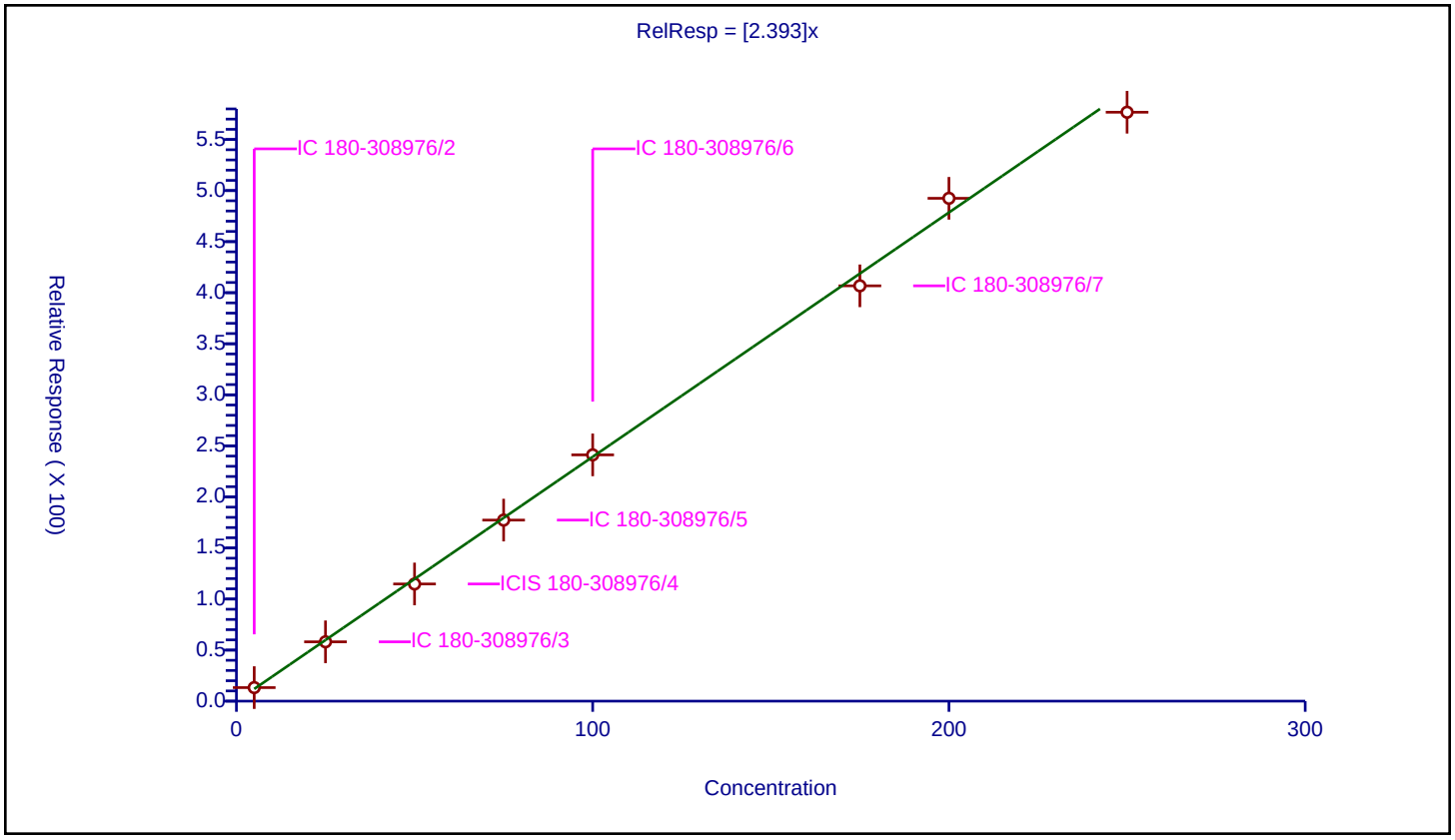
Curve Coefficients

Intercept:	0
Slope:	2.393

Error Coefficients

Standard Error:	926000
Relative Standard Error:	5.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	13.26662	50.0	132807.0	2.653324	Y
2	IC 180-308976/3	25.0	58.101967	50.0	114861.0	2.324079	Y
3	ICIS 180-308976/4	50.0	114.761066	50.0	132924.0	2.295221	Y
4	IC 180-308976/5	75.0	177.307612	50.0	139159.0	2.364101	Y
5	IC 180-308976/6	100.0	241.175593	50.0	137369.0	2.411756	Y
6	IC 180-308976/7	175.0	406.729834	50.0	136675.0	2.32417	Y
7	IC 180-308976/8	200.0	492.433847	50.0	128414.0	2.462169	Y
8	IC 180-308976/9	250.0	576.748867	50.0	133658.0	2.306995	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

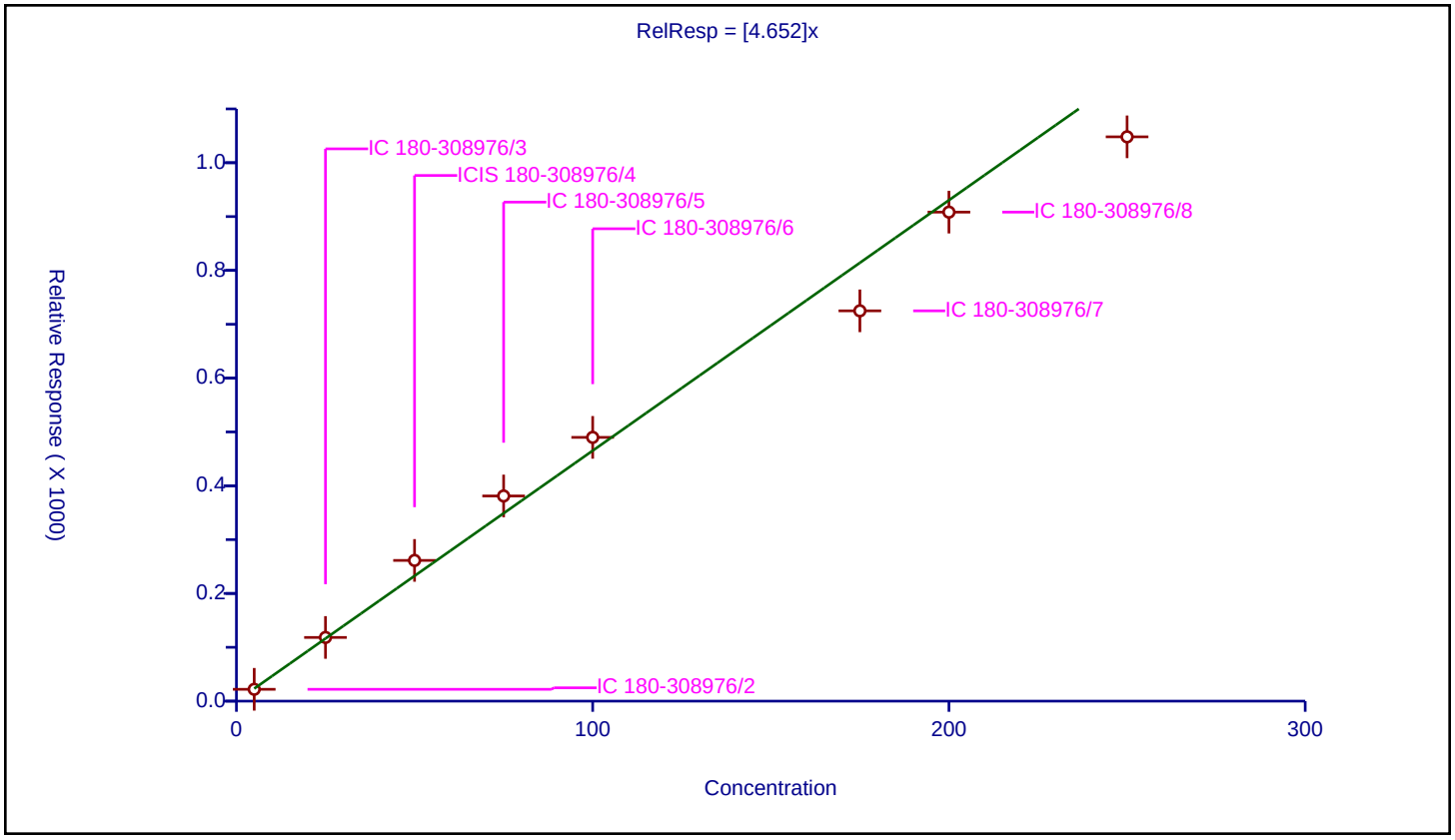
Curve Coefficients

Intercept:	0
Slope:	4.652

Error Coefficients

Standard Error:	1720000
Relative Standard Error:	8.6
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	22.008629	50.0	132807.0	4.401726	Y
2	IC 180-308976/3	25.0	118.310828	50.0	114861.0	4.732433	Y
3	ICIS 180-308976/4	50.0	261.346709	50.0	132924.0	5.226934	Y
4	IC 180-308976/5	75.0	381.076682	50.0	139159.0	5.081022	Y
5	IC 180-308976/6	100.0	489.908931	50.0	137369.0	4.899089	Y
6	IC 180-308976/7	175.0	724.920432	50.0	136675.0	4.142402	Y
7	IC 180-308976/8	200.0	908.238588	50.0	128414.0	4.541193	Y
8	IC 180-308976/9	250.0	1048.129929	50.0	133658.0	4.19252	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

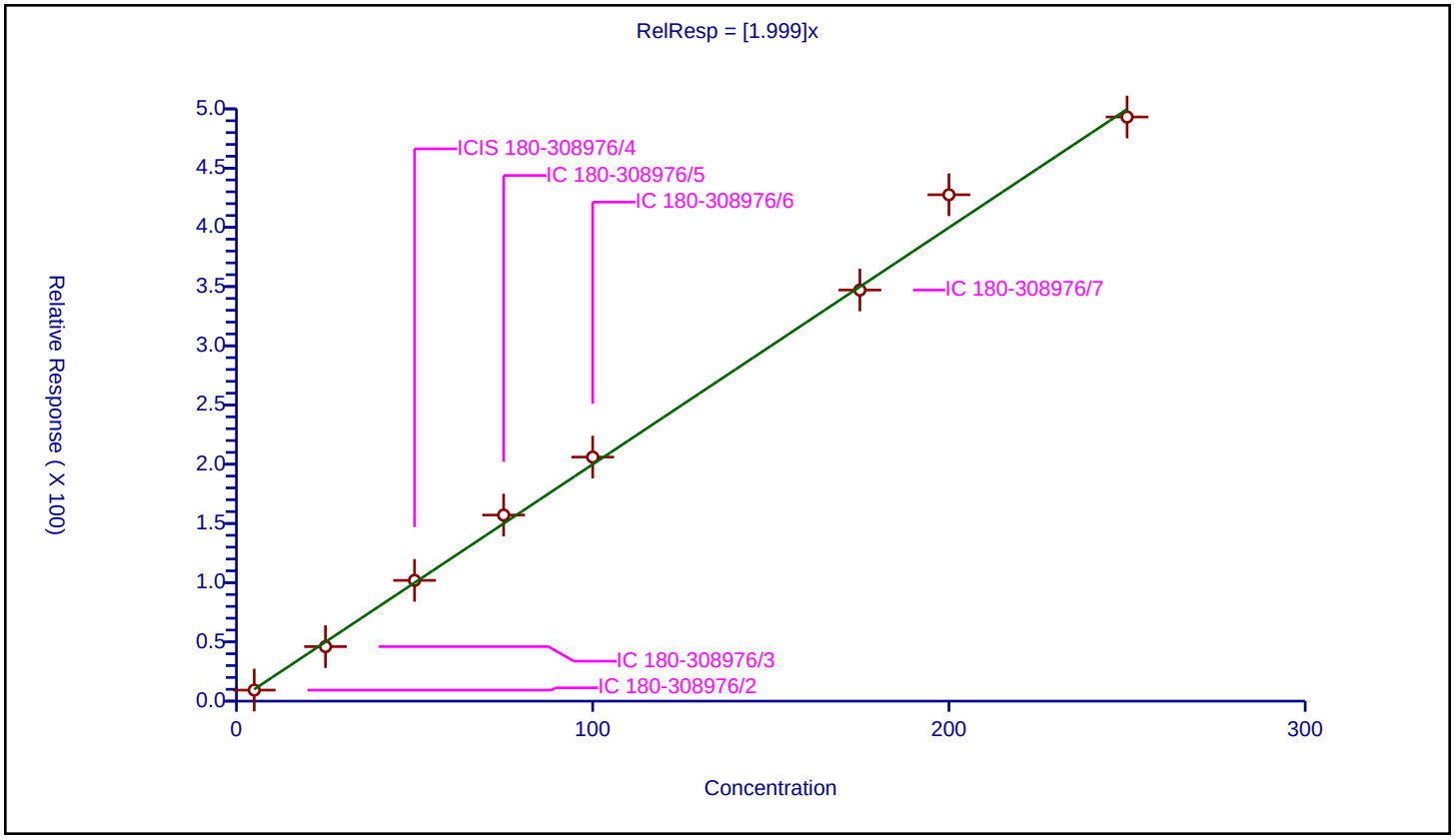
Curve Coefficients

Intercept:	0
Slope:	1.999

Error Coefficients

Standard Error:	796000
Relative Standard Error:	5.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	9.315398	50.0	132807.0	1.86308	Y
2	IC 180-308976/3	25.0	46.03129	50.0	114861.0	1.841252	Y
3	ICIS 180-308976/4	50.0	101.95262	50.0	132924.0	2.039052	Y
4	IC 180-308976/5	75.0	157.092966	50.0	139159.0	2.094573	Y
5	IC 180-308976/6	100.0	206.040664	50.0	137369.0	2.060407	Y
6	IC 180-308976/7	175.0	347.07152	50.0	136675.0	1.983266	Y
7	IC 180-308976/8	200.0	427.517249	50.0	128414.0	2.137586	Y
8	IC 180-308976/9	250.0	493.157162	50.0	133658.0	1.972629	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

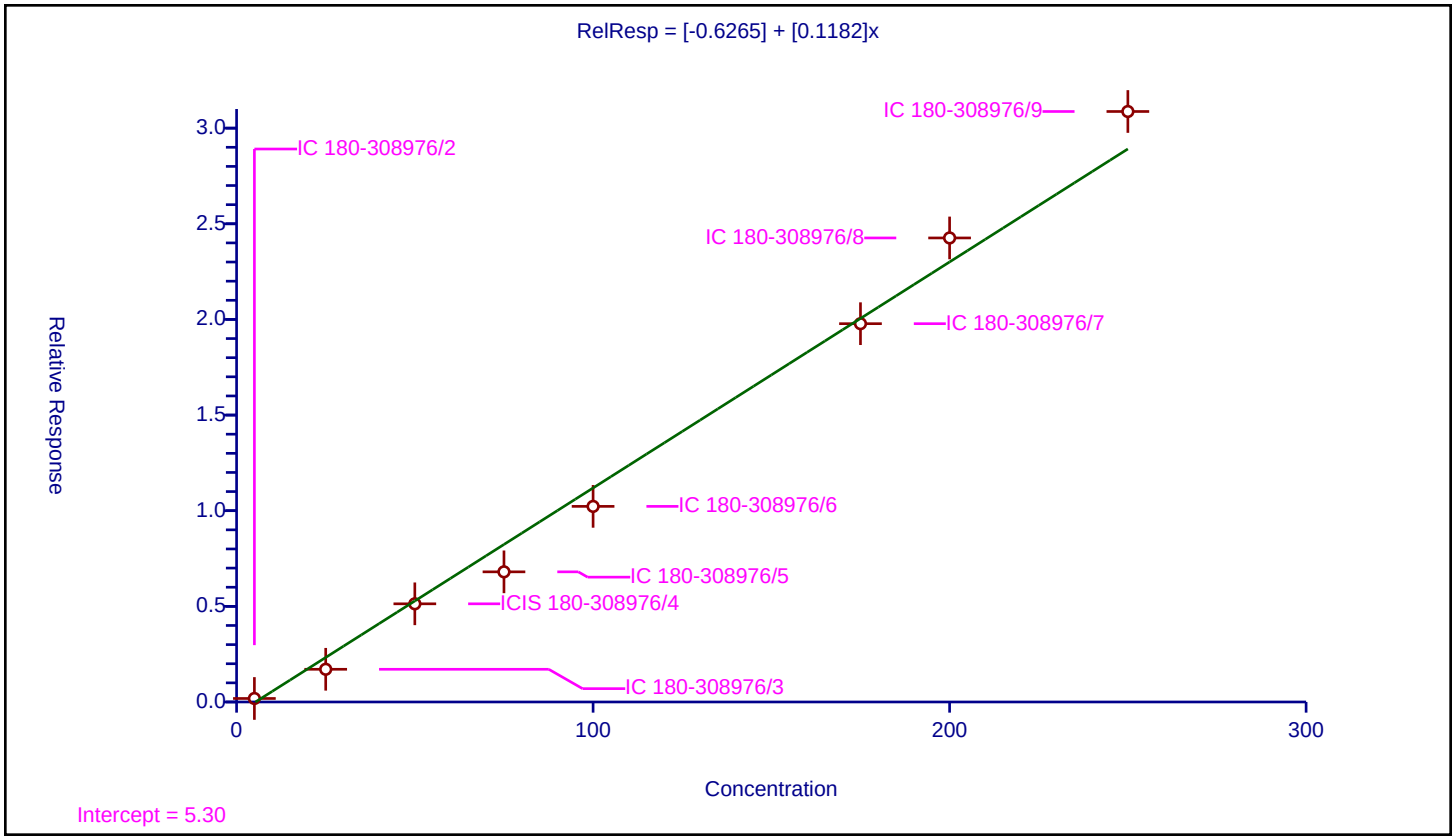
Curve Coefficients

Intercept:	-0.6265
Slope:	0.1182

Error Coefficients

Standard Error:	49900
Relative Standard Error:	19.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	0.183349	50.0	132807.0	0.03667	Y
2	IC 180-308976/3	25.0	1.710328	50.0	114861.0	0.068413	Y
3	ICIS 180-308976/4	50.0	5.132632	50.0	132924.0	0.102653	Y
4	IC 180-308976/5	75.0	6.804447	50.0	139159.0	0.090726	Y
5	IC 180-308976/6	100.0	10.225742	50.0	137369.0	0.102257	Y
6	IC 180-308976/7	175.0	19.777575	50.0	136675.0	0.113015	Y
7	IC 180-308976/8	200.0	24.259816	50.0	128414.0	0.121299	Y
8	IC 180-308976/9	250.0	30.870206	50.0	133658.0	0.123481	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

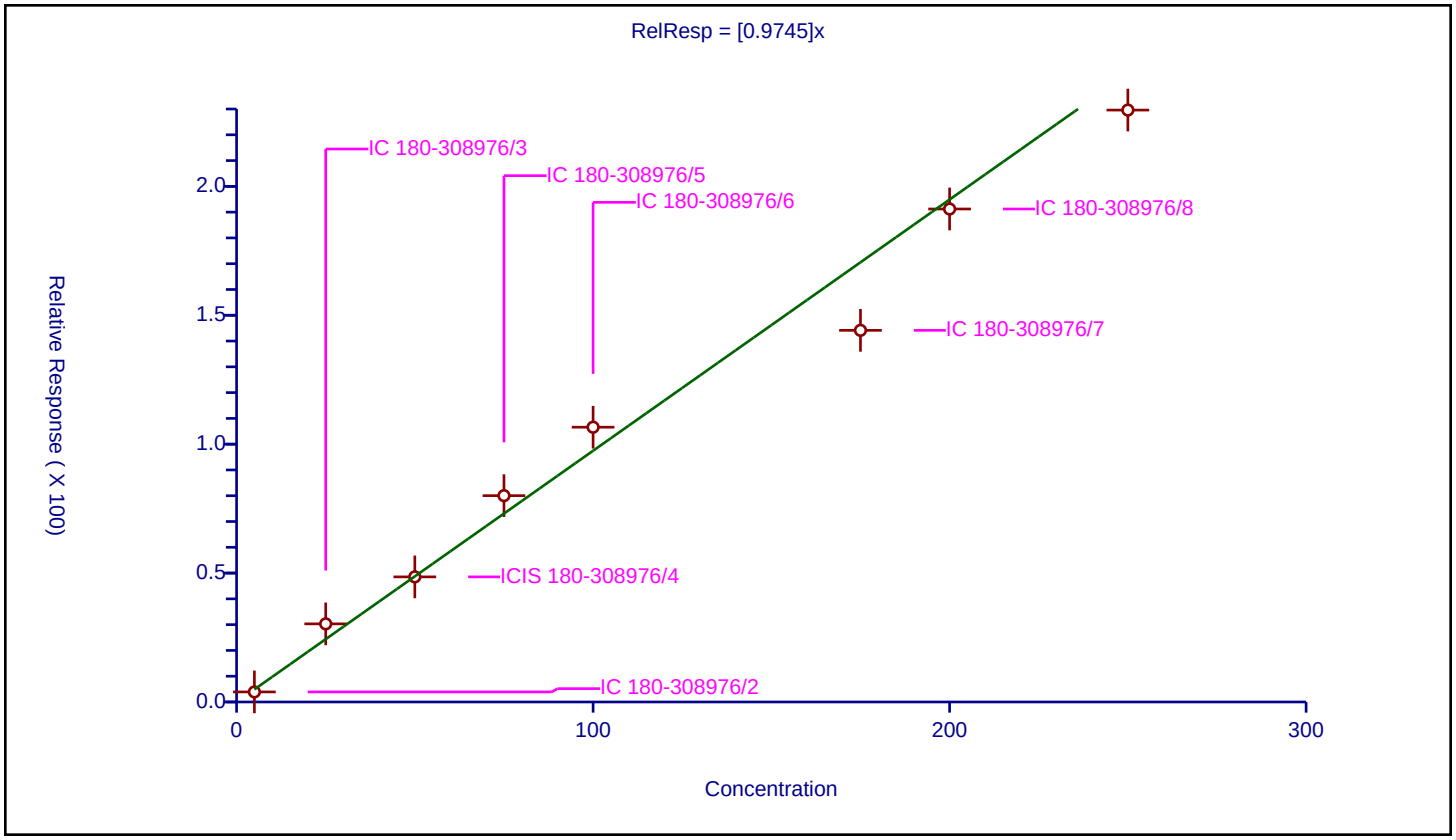
Curve Coefficients

Intercept:	0
Slope:	0.9745

Error Coefficients

Standard Error:	364000
Relative Standard Error:	14.3
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	3.909432	50.0	132807.0	0.781886	Y
2	IC 180-308976/3	25.0	30.30489	50.0	114861.0	1.212196	Y
3	ICIS 180-308976/4	50.0	48.530739	50.0	132924.0	0.970615	Y
4	IC 180-308976/5	75.0	80.0286	50.0	139159.0	1.067048	Y
5	IC 180-308976/6	100.0	106.578995	50.0	137369.0	1.06579	Y
6	IC 180-308976/7	175.0	144.151454	50.0	136675.0	0.823723	Y
7	IC 180-308976/8	200.0	191.220973	50.0	128414.0	0.956105	Y
8	IC 180-308976/9	250.0	229.586332	50.0	133658.0	0.918345	Y



Calibration / Hexachlorobutadiene

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

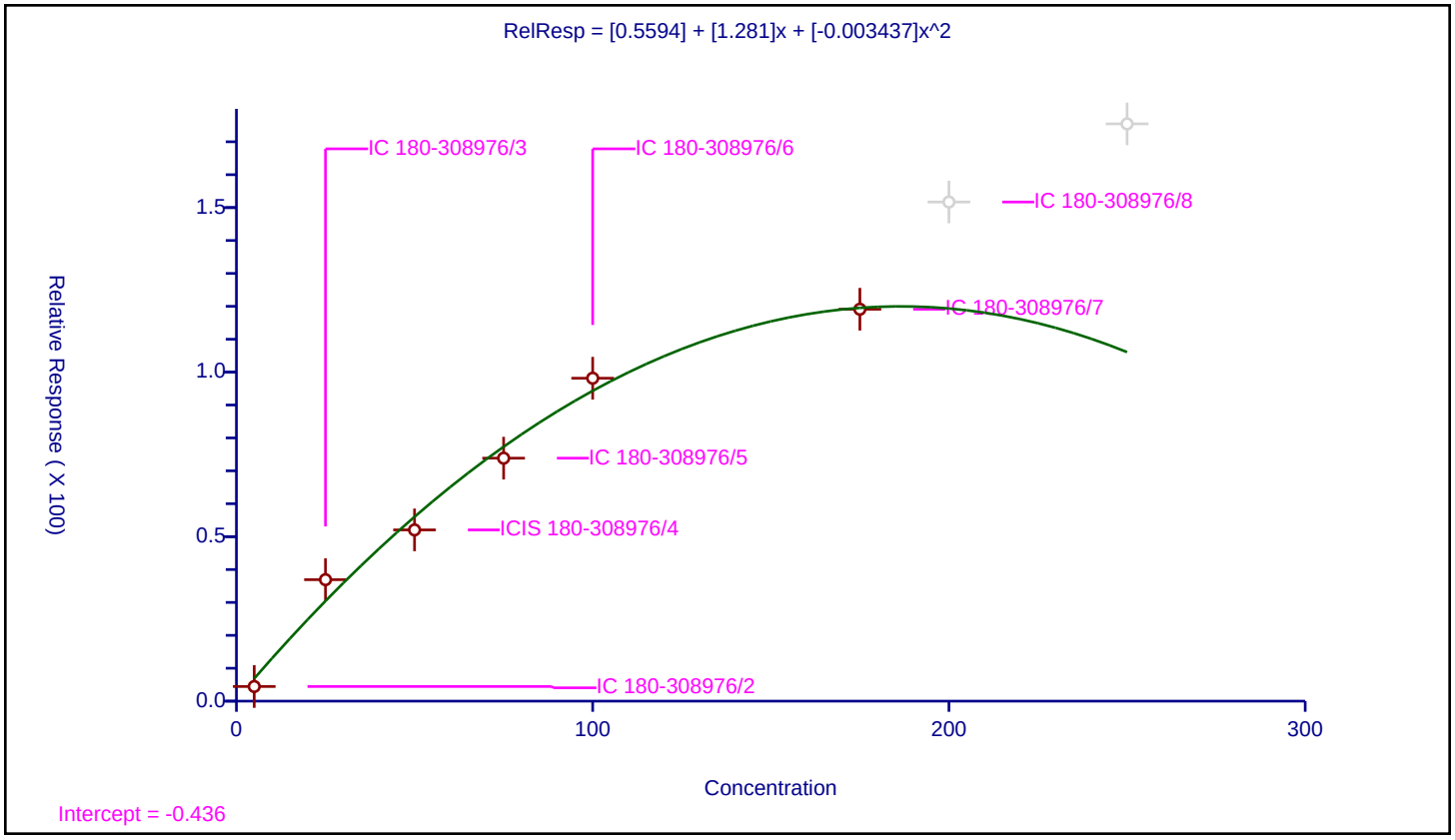
Curve Coefficients

Intercept:	0.5594
Slope:	1.281
Second Order:	-0.003437

Error Coefficients

Standard Error:	287000
Relative Standard Error:	27.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	4.447808	50.0	132807.0	0.889562	Y
2	IC 180-308976/3	25.0	36.918536	50.0	114861.0	1.476741	Y
3	ICIS 180-308976/4	50.0	52.045154	50.0	132924.0	1.040903	Y
4	IC 180-308976/5	75.0	73.845385	50.0	139159.0	0.984605	Y
5	IC 180-308976/6	100.0	98.148054	50.0	137369.0	0.981481	Y
6	IC 180-308976/7	175.0	119.110298	50.0	136675.0	0.68063	Y
7	IC 180-308976/8	200.0	151.702307	50.0	128414.0	0.758512	N
8	IC 180-308976/9	250.0	175.441051	50.0	133658.0	0.701764	N



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

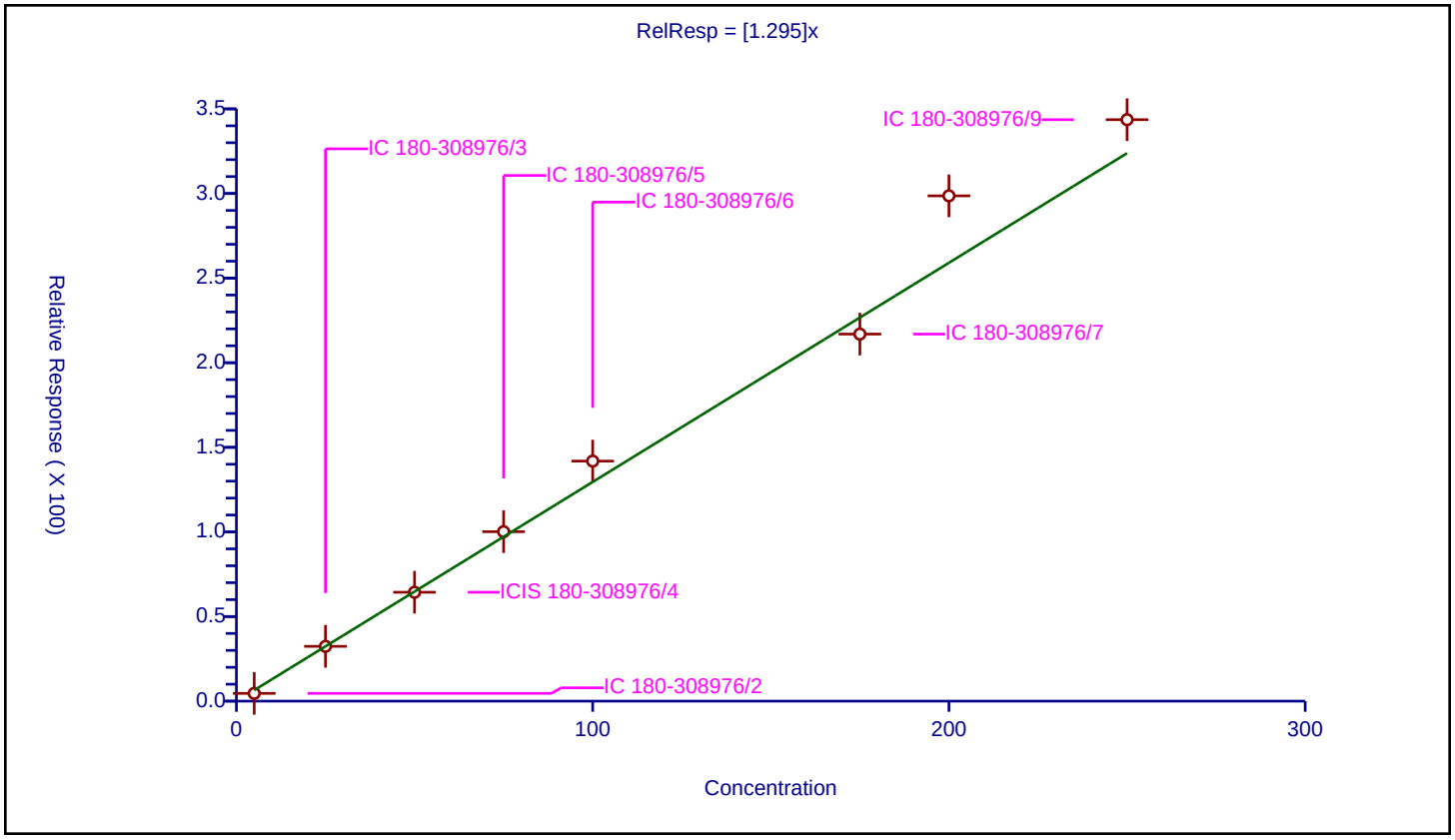
Curve Coefficients

Intercept:	0
Slope:	1.295

Error Coefficients

Standard Error:	541000
Relative Standard Error:	13.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	4.592378	50.0	132807.0	0.918476	Y
2	IC 180-308976/3	25.0	32.391325	50.0	114861.0	1.295653	Y
3	ICIS 180-308976/4	50.0	64.351434	50.0	132924.0	1.287029	Y
4	IC 180-308976/5	75.0	100.150547	50.0	139159.0	1.335341	Y
5	IC 180-308976/6	100.0	141.850781	50.0	137369.0	1.418508	Y
6	IC 180-308976/7	175.0	216.9197	50.0	136675.0	1.239541	Y
7	IC 180-308976/8	200.0	298.603345	50.0	128414.0	1.493017	Y
8	IC 180-308976/9	250.0	343.631133	50.0	133658.0	1.374525	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

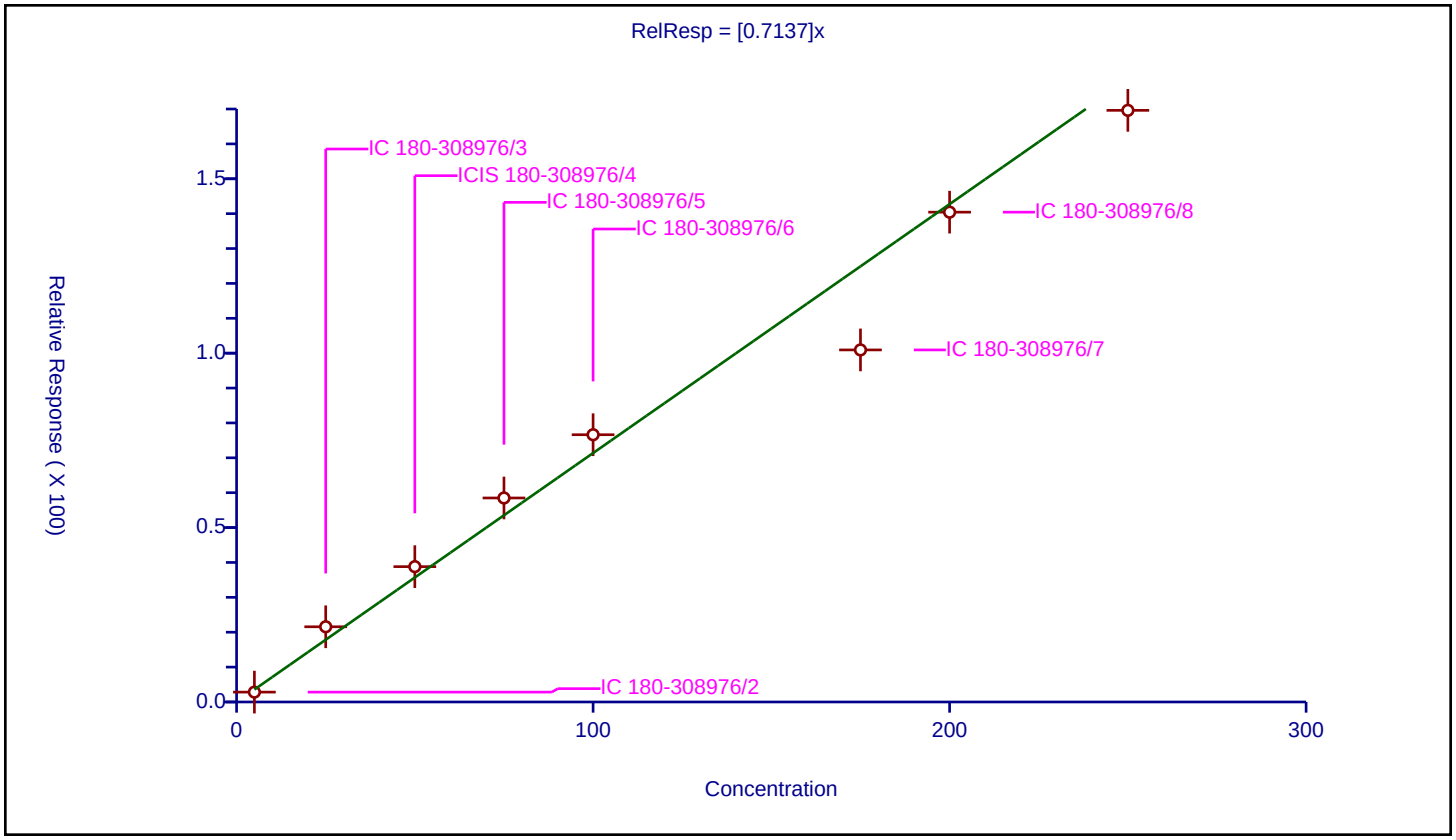
Curve Coefficients

Intercept:	0
Slope:	0.7137

Error Coefficients

Standard Error:	266000
Relative Standard Error:	14.5
Correlation Coefficient:	0.983
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-308976/2	5.0	2.83607	50.0	132807.0	0.567214	Y
2	IC 180-308976/3	25.0	21.564761	50.0	114861.0	0.86259	Y
3	ICIS 180-308976/4	50.0	38.799615	50.0	132924.0	0.775992	Y
4	IC 180-308976/5	75.0	58.485617	50.0	139159.0	0.779808	Y
5	IC 180-308976/6	100.0	76.626459	50.0	137369.0	0.766265	Y
6	IC 180-308976/7	175.0	100.93287	50.0	136675.0	0.576759	Y
7	IC 180-308976/8	200.0	140.430171	50.0	128414.0	0.702151	Y
8	IC 180-308976/9	250.0	169.615736	50.0	133658.0	0.678463	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab Sample ID: CCVIS 180-311669/4 Calibration Date: 03/31/2020 18:40

Instrument ID: CHHP10 Calib Start Date: 03/05/2020 07:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/05/2020 11:12

Lab File ID: 10033104.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	0.3204	0.5407	0.1000	16.9	10.0	68.7*	20.0
Chloromethane	Ave	0.2181	0.2323	0.1000	10.7	10.0	6.5	20.0
1,3-Butadiene	Ave	0.2996	0.3213	0.0100	10.7	10.0	7.2	20.0
Vinyl chloride	Ave	0.3457	0.3810	0.1000	11.0	10.0	10.2	20.0
Bromomethane	Ave	0.3880	0.2989	0.0500	7.70	10.0	-23.0*	20.0
Chloroethane	Ave	0.2851	0.2494	0.0500	8.75	10.0	-12.5	20.0
Dichlorofluoromethane	Ave	0.8654	0.7369	0.0100	8.52	10.0	-14.8	20.0
Trichlorofluoromethane	Ave	0.997	0.8115	0.1000	8.14	10.0	-18.6	20.0
Ethyl ether	Ave	0.1860	0.1671	0.0100	8.99	10.0	-10.1	20.0
1,1-Dichloroethene	Ave	0.3189	0.3165	0.1000	9.92	10.0	-0.8	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3859	0.3451	0.1000	8.94	10.0	-10.6	20.0
Acetone	Ave	0.0571	0.0472*	0.0500	16.5	20.0	-17.3	20.0
Iodomethane	Ave	0.5304	0.4363	0.0100	8.23	10.0	-17.7	20.0
Carbon disulfide	Ave	0.9176	0.9750	0.1000	10.6	10.0	6.2	20.0
Allyl chloride	Ave	0.2027	0.2155	0.0100	10.6	10.0	6.3	20.0
Methyl acetate	Ave	0.0726	0.0638*	0.1000	17.6	20.0	-12.2	20.0
Methylene Chloride	Lin2		0.3050	0.1000	9.21	10.0	-7.9	20.0
tert-Butyl alcohol	Ave	1.699	1.637	0.0100	96.3	100	-3.7	20.0
Acrylonitrile	Ave	0.0374	0.0307	0.0100	82.2	100	-17.8	20.0
trans-1,2-Dichloroethene	Ave	0.3937	0.3369	0.1000	8.56	10.0	-14.4	20.0
Methyl tert-butyl ether	Ave	0.7676	0.6420	0.1000	8.36	10.0	-16.4	20.0
Hexane	Ave	0.4431	0.4379	0.0100	9.88	10.0	-1.2	20.0
1,1-Dichloroethane	Ave	0.5956	0.5937	0.2000	9.97	10.0	-0.3	20.0
2,2-Dichloropropane	Ave	0.0955	0.0904	0.0100	9.46	10.0	-5.4	20.0
cis-1,2-Dichloroethene	Ave	0.3894	0.3667	0.1000	9.42	10.0	-5.8	20.0
2-Butanone (MEK)	Ave	0.0548	0.0396*	0.0500	14.5	20.0	-27.7*	20.0
Bromochloromethane	Ave	0.1435	0.1167	0.0100	8.13	10.0	-18.7	20.0
Tetrahydrofuran	Ave	0.0302	0.0259	0.0100	17.1	20.0	-14.5	20.0
Chloroform	Lin2		0.6962	0.2000	9.40	10.0	-6.0	20.0
1,1,1-Trichloroethane	Ave	0.7409	0.6488	0.1000	8.76	10.0	-12.4	20.0
Cyclohexane	Ave	0.5254	0.4853	0.1000	9.24	10.0	-7.6	20.0
Carbon tetrachloride	Ave	0.7278	0.6271	0.1000	8.62	10.0	-13.8	20.0
1,1-Dichloropropene	Ave	0.5960	0.5681	0.0100	9.53	10.0	-4.7	20.0
Benzene	Ave	1.469	1.425	0.5000	9.70	10.0	-3.0	20.0
Isobutyl alcohol	Ave	0.0038	0.0037*	0.0100	243	250	-2.7	20.0
1,2-Dichloroethane	Ave	0.4413	0.3571	0.1000	8.09	10.0	-19.1	20.0
n-Heptane	Ave	0.4305	0.4174	0.0100	9.70	10.0	-3.0	20.0
Trichloroethene	Ave	0.4441	0.3699	0.2000	8.33	10.0	-16.7	20.0
Methylcyclohexane	Ave	0.8021	0.7700	0.1000	9.60	10.0	-4.0	20.0
1,2-Dichloropropane	Ave	0.2870	0.3201	0.1000	11.2	10.0	11.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab Sample ID: CCVIS 180-311669/4 Calibration Date: 03/31/2020 18:40

Instrument ID: CHHP10 Calib Start Date: 03/05/2020 07:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/05/2020 11:12

Lab File ID: 10033104.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromomethane	Ave	0.1512	0.1282	0.0100	8.48	10.0	-15.2	20.0
1,4-Dioxane	Lin1		0.0014*	0.0100	162	200	-19.2	20.0
Bromodichloromethane	Ave	0.5016	0.4785	0.2000	9.54	10.0	-4.6	20.0
cis-1,3-Dichloropropene	Lin1		0.4975	0.2000	9.55	10.0	-4.5	25.0
4-Methyl-2-pentanone (MIBK)	Lin2		0.2875	0.1000	10.7	20.0	-46.7*	20.0
Toluene	Ave	8.089	9.393	0.4000	11.6	10.0	16.1	20.0
trans-1,3-Dichloropropene	Lin1		1.836	0.1000	9.41	10.0	-5.9	20.0
Ethyl methacrylate	Lin1		1.527	0.0100	11.7	10.0	16.7	20.0
1,1,2-Trichloroethane	Ave	1.016	1.190	0.1000	11.7	10.0	17.1	20.0
Tetrachloroethene	Ave	1.842	1.779	0.2000	9.66	10.0	-3.4	20.0
1,3-Dichloropropane	Ave	1.693	2.084	0.0100	12.3	10.0	23.1*	20.0
2-Hexanone	Lin2		0.2285	0.1000	13.9	20.0	-30.5*	20.0
Dibromochloromethane	Ave	1.341	1.402	0.1000	10.5	10.0	4.5	20.0
1,2-Dibromoethane (EDB)	Ave	0.8375	0.9312	0.1000	11.1	10.0	11.2	20.0
Chlorobenzene	Ave	4.898	5.433	0.5000	11.1	10.0	10.9	20.0
1,1,1,2-Tetrachloroethane	Ave	1.834	1.865	0.0100	10.2	10.0	1.7	20.0
Ethylbenzene	Ave	2.880	3.259	0.1000	11.3	10.0	13.2	20.0
m-Xylene & p-Xylene	Ave	3.634	3.953	0.1000	10.9	10.0	8.8	20.0
o-Xylene	Ave	3.428	3.793	0.3000	11.1	10.0	10.7	20.0
Styrene	Ave	5.344	5.836	0.3000	10.9	10.0	9.2	20.0
Bromoform	Ave	0.7636	0.7213	0.1000	9.45	10.0	-5.5	20.0
Isopropylbenzene	Ave	10.14	11.37	0.1000	11.2	10.0	12.2	20.0
Bromobenzene	Ave	1.158	1.292	0.0100	11.2	10.0	11.6	20.0
1,1,2,2-Tetrachloroethane	Ave	1.078	1.291	0.3000	12.0	10.0	19.8	20.0
trans-1,4-Dichloro-2-butene	Qua		0.1128	0.0100	9.50	10.0	-5.0	20.0
1,2,3-Trichloropropane	Ave	0.2280	0.2778	0.0100	12.2	10.0	21.8*	20.0
N-Propylbenzene	Ave	1.582	2.007	0.0100	12.7	10.0	26.9*	20.0
2-Chlorotoluene	Ave	1.252	1.592	0.0100	12.7	10.0	27.1*	20.0
1,3,5-Trimethylbenzene	Ave	5.018	6.661	0.0100	13.3	10.0	32.7*	20.0
4-Chlorotoluene	Ave	1.217	1.499	0.0100	12.3	10.0	23.2*	20.0
tert-Butylbenzene	Ave	4.403	5.759	0.0100	13.1	10.0	30.8*	20.0
1,2,4-Trimethylbenzene	Ave	4.877	6.348	0.0100	13.0	10.0	30.2*	20.0
sec-Butylbenzene	Ave	6.506	8.929	0.0100	13.7	10.0	37.2*	20.0
1,3-Dichlorobenzene	Ave	2.257	2.645	0.6000	11.7	10.0	17.2	20.0
4-Isopropyltoluene	Ave	5.551	7.096	0.0100	12.8	10.0	27.8*	20.0
1,4-Dichlorobenzene	Ave	2.393	2.545	0.5000	10.6	10.0	6.4	20.0
n-Butylbenzene	Ave	4.652	6.686	0.0100	14.4	10.0	43.7*	20.0
1,2-Dichlorobenzene	Ave	1.999	2.282	0.4000	11.4	10.0	14.2	20.0
1,2-Dibromo-3-Chloropropane	Lin1		0.0965	0.0500	9.23	10.0	-7.7	20.0
1,2,4-Trichlorobenzene	Ave	0.9745	0.9839	0.2000	10.1	10.0	1.0	20.0
Hexachlorobutadiene	Qua		1.082	0.0100	9.60	10.0	-4.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab Sample ID: CCVIS 180-311669/4 Calibration Date: 03/31/2020 18:40

Instrument ID: CHHP10 Calib Start Date: 03/05/2020 07:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/05/2020 11:12

Lab File ID: 10033104.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
Naphthalene	Ave	1.295	1.376	0.0100	10.6	10.0	6.2	20.0
1,2,3-Trichlorobenzene	Ave	0.7137	0.7767	0.0100	10.9	10.0	8.8	20.0
Dibromofluoromethane (Surr)	Ave	0.3240	0.2618		8.08	10.0	-19.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3721	0.2941		7.90	10.0	-21.0*	20.0
Toluene-d8 (Surr)	Ave	6.543	6.714		10.3	10.0	2.6	20.0
4-Bromofluorobenzene (Surr)	Ave	2.261	2.095		9.27	10.0	-7.3	20.0

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033104.d
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 31-Mar-2020 18:40:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-004
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub19

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 31-Mar-2020 23:55:20 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: journetp Date: 31-Mar-2020 19:18:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.940	3.940	0.000	0	74225	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	440323	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	88	84506	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	96	116933	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	93	115260	50.0	40.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.657	0.000	0	129508	50.0	39.5	M
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	567344	50.0	51.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.321	11.321	0.000	84	177065	50.0	46.3	
10 Dichlorodifluoromethane	85	1.534	1.534	0.000	99	238064	50.0	84.4	
11 Chloromethane	50	1.740	1.740	0.000	98	102296	50.0	53.3	M
13 Butadiene	39	1.828	1.828	0.000	92	141479	50.0	53.6	
12 Vinyl chloride	62	1.840	1.840	0.000	98	167773	50.0	55.1	
14 Bromomethane	94	2.134	2.134	0.000	91	131601	50.0	38.5	
15 Chloroethane	64	2.251	2.251	0.000	99	109808	50.0	43.7	
17 Dichlorofluoromethane	67	2.493	2.493	0.000	97	324477	50.0	42.6	
16 Trichlorofluoromethane	101	2.504	2.504	0.000	98	357318	50.0	40.7	
18 Ethyl ether	59	2.822	2.822	0.000	83	73593	50.0	44.9	
20 1,1-Dichloroethene	96	3.081	3.081	0.000	97	139359	50.0	49.6	
21 1,1,2-Trichloro-1,2,2-trif	101	3.169	3.169	0.000	95	151940	50.0	44.7	
22 Acetone	43	3.175	3.175	0.000	77	41586	100.0	82.7	
23 Iodomethane	142	3.257	3.257	0.000	100	192089	50.0	41.1	
24 Carbon disulfide	76	3.363	3.363	0.000	99	429291	50.0	53.1	
26 3-Chloro-1-propene	76	3.604	3.604	0.000	79	94868	50.0	53.2	
28 Methyl acetate	43	3.628	3.628	0.000	94	56174	100.0	87.8	
29 Methylene Chloride	84	3.816	3.816	0.000	93	134284	50.0	46.0	
32 2-Methyl-2-propanol	59	4.081	4.081	0.000	97	60750	500.0	481.7	
31 Acrylonitrile	53	4.204	4.204	0.000	98	135362	500.0	411.2	
30 trans-1,2-Dichloroethene	96	4.234	4.234	0.000	96	148331	50.0	42.8	
33 Methyl tert-butyl ether	73	4.251	4.251	0.000	93	282704	50.0	41.8	
34 Hexane	57	4.675	4.675	0.000	89	192794	50.0	49.4	
36 1,1-Dichloroethane	63	4.887	4.887	0.000	96	261415	50.0	49.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.645	5.645	0.000	85	39801	50.0	47.3	
41 cis-1,2-Dichloroethene	96	5.657	5.657	0.000	82	161453	50.0	47.1	
43 2-Butanone (MEK)	43	5.681	5.681	0.000	95	34896	100.0	72.3	
46 Chlorobromomethane	128	5.951	5.951	0.000	83	51386	50.0	40.7	
48 Tetrahydrofuran	42	5.969	5.969	0.000	78	22778	100.0	85.5	
49 Chloroform	83	6.098	6.098	0.000	92	306533	50.0	47.0	
50 1,1,1-Trichloroethane	97	6.251	6.251	0.000	97	285685	50.0	43.8	
52 Cyclohexane	56	6.316	6.316	0.000	80	213697	50.0	46.2	
53 Carbon tetrachloride	117	6.428	6.428	0.000	96	276146	50.0	43.1	
54 1,1-Dichloropropene	75	6.445	6.445	0.000	97	250148	50.0	47.7	
55 Benzene	78	6.657	6.657	0.000	95	627622	50.0	48.5	
51 Isobutyl alcohol	41	6.681	6.681	0.000	87	40309	1250.0	1216.2	
56 1,2-Dichloroethane	62	6.739	6.739	0.000	98	157227	50.0	40.5	
59 n-Heptane	43	7.033	7.033	0.000	77	183806	50.0	48.5	
60 Trichloroethene	130	7.410	7.410	0.000	96	162864	50.0	41.6	
63 Methylcyclohexane	83	7.633	7.633	0.000	84	339041	50.0	48.0	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	93	140934	50.0	55.8	
65 Dibromomethane	93	7.775	7.775	0.000	95	56462	50.0	42.4	
67 1,4-Dioxane	88	7.780	7.780	0.000	37	12040	1000.0	808.5	
68 Dichlorobromomethane	83	7.969	7.969	0.000	99	210687	50.0	47.7	
71 cis-1,3-Dichloropropene	75	8.422	8.422	0.000	96	219054	50.0	47.8	
72 4-Methyl-2-pentanone (MIBK	43	8.580	8.580	0.000	92	48582	100.0	53.3	
73 Toluene	91	8.739	8.739	0.000	98	793786	50.0	58.1	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	91	155119	50.0	47.1	
75 Ethyl methacrylate	69	9.075	9.075	0.000	84	129080	50.0	58.3	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	91	100555	50.0	58.6	
77 Tetrachloroethene	164	9.257	9.257	0.000	96	150339	50.0	48.3	
78 1,3-Dichloropropane	76	9.351	9.351	0.000	87	176087	50.0	61.5	
79 2-Hexanone	43	9.427	9.427	0.000	96	38617	100.0	69.5	
81 Chlorodibromomethane	129	9.563	9.563	0.000	90	118472	50.0	52.3	
82 Ethylene Dibromide	107	9.674	9.674	0.000	99	78695	50.0	55.6	
83 Chlorobenzene	112	10.163	10.163	0.000	94	459087	50.0	55.5	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.257	0.000	93	157622	50.0	50.8	
85 Ethylbenzene	106	10.263	10.263	0.000	98	275433	50.0	56.6	
86 m-Xylene & p-Xylene	106	10.392	10.392	0.000	0	334045	50.0	54.4	
88 o-Xylene	106	10.774	10.774	0.000	96	320545	50.0	55.3	
89 Styrene	104	10.798	10.798	0.000	92	493200	50.0	54.6	
90 Bromoform	173	10.980	10.980	0.000	96	60957	50.0	47.2	
91 Isopropylbenzene	105	11.145	11.145	0.000	96	960871	50.0	56.1	
94 Bromobenzene	156	11.451	11.451	0.000	95	151130	50.0	55.8	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	93	109102	50.0	59.9	
96 trans-1,4-Dichloro-2-buten	53	11.510	11.510	0.000	64	13190	50.0	47.5	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	81	32478	50.0	60.9	
97 N-Propylbenzene	120	11.563	11.563	0.000	99	234654	50.0	63.4	
98 2-Chlorotoluene	126	11.645	11.645	0.000	95	186130	50.0	63.5	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	94	778862	50.0	66.4	
100 4-Chlorotoluene	126	11.768	11.768	0.000	99	175278	50.0	61.6	
101 tert-Butylbenzene	119	12.051	12.051	0.000	91	673392	50.0	65.4	
103 1,2,4-Trimethylbenzene	105	12.115	12.115	0.000	97	742330	50.0	65.1	
104 sec-Butylbenzene	105	12.280	12.280	0.000	95	1044132	50.0	68.6	
105 1,3-Dichlorobenzene	146	12.398	12.398	0.000	95	309275	50.0	58.6	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	829764	50.0	63.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	90	297637	50.0	53.2	
110 n-Butylbenzene	91	12.845	12.845	0.000	98	781810	50.0	71.9	
111 1,2-Dichlorobenzene	146	12.857	12.857	0.000	94	266848	50.0	57.1	
112 1,2-Dibromo-3-Chloropropan	157	13.639	13.639	0.000	79	11284	50.0	46.1	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	94	115053	50.0	50.5	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	94	126574	50.0	48.0	
116 Naphthalene	128	14.727	14.727	0.000	98	160874	50.0	53.1	
117 1,2,3-Trichlorobenzene	180	14.939	14.939	0.000	94	90824	50.0	54.4	
S 130 1,2-Dichloroethene, Total	96				0		100.0	89.9	
S 129 Xylenes, Total	106				0		100.0	109.7	
S 131 1,3-Dichloropropene, Total	1				0		100.0	94.8	
S 145 Total BTEX	1				0		250.0	272.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00397	Amount Added:	2.00	Units: uL
voaWKetmix1st_00024	Amount Added:	2.00	Units: uL
VOA8260SURR_00105	Amount Added:	2.00	Units: uL
VOA8260INT_00105	Amount Added:	2.00	Units: uL

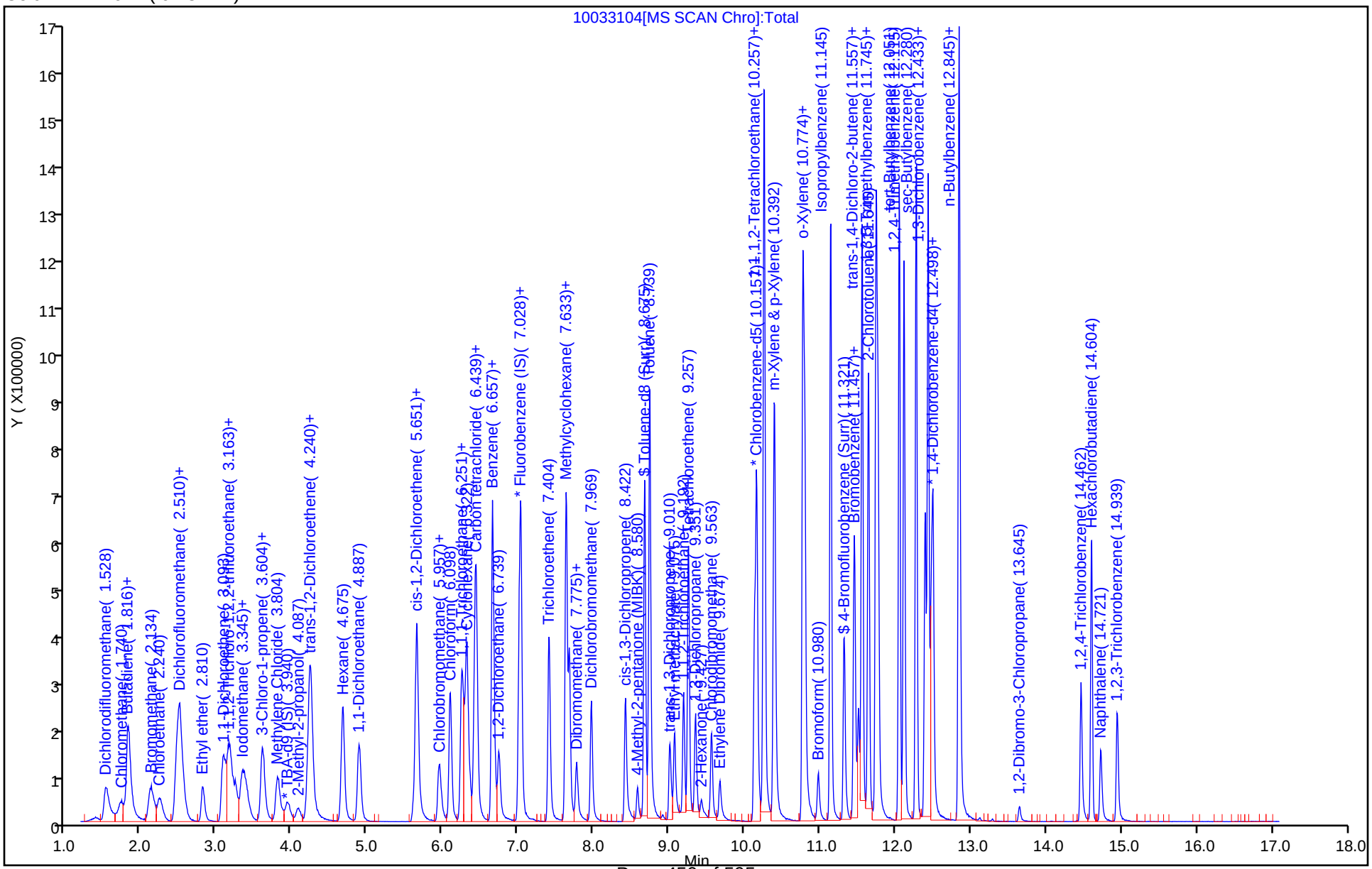
Report Date: 31-Mar-2020 23:55:22 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033104.d

Injection Date:	31-Mar-2020 18:40:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

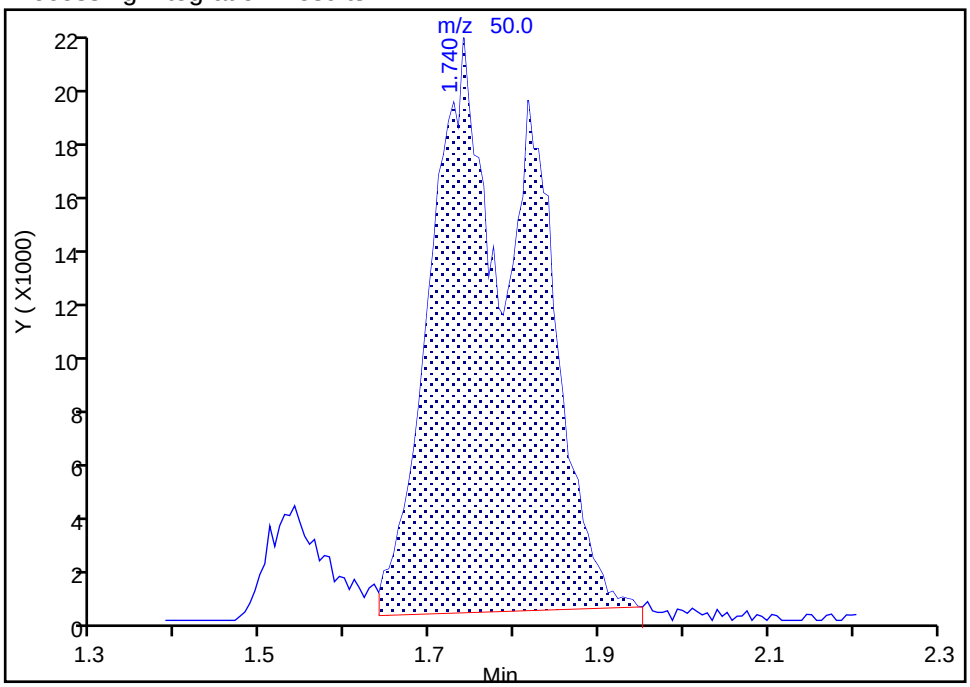
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033104.d
Injection Date: 31-Mar-2020 18:40:30 Instrument ID: CHHP10
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 1

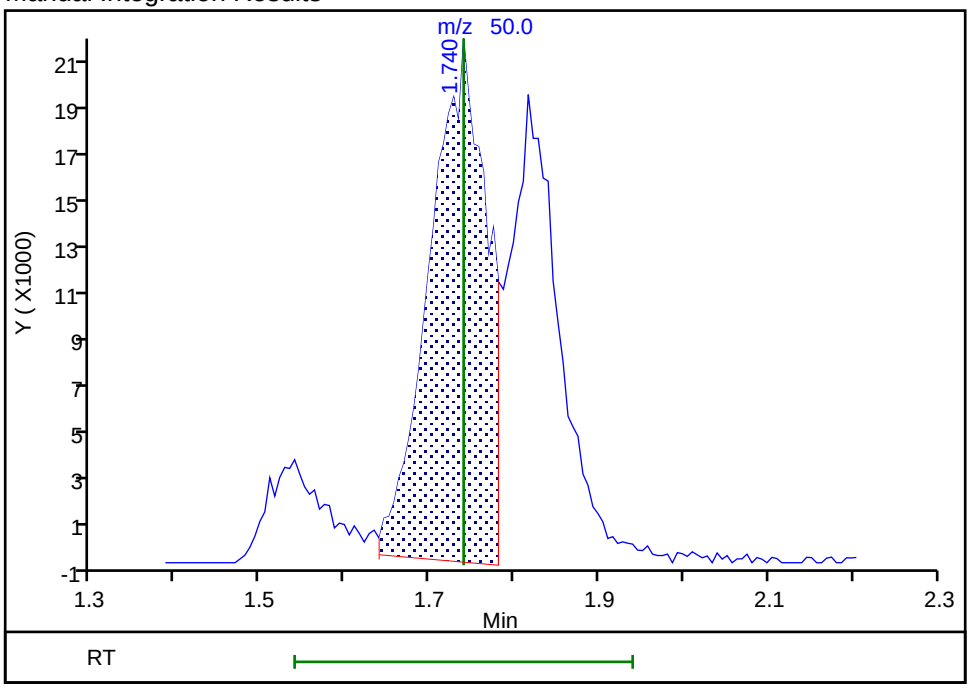
Processing Integration Results

RT: 1.74
Area: 174939
Amount: 91.069073
Amount Units: ng



Manual Integration Results

RT: 1.74
Area: 102296
Amount: 53.252859
Amount Units: ng



Reviewer: journetp, 31-Mar-2020 19:12:26
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

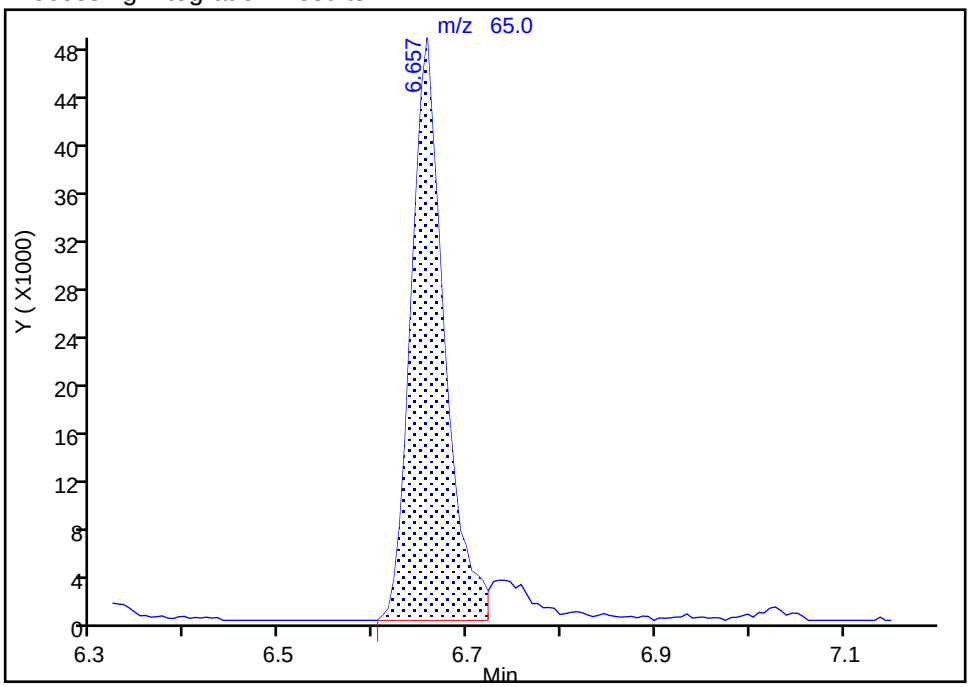
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033104.d				
Injection Date:	31-Mar-2020 18:40:30	Instrument ID:	CHHP10		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

$ 6 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

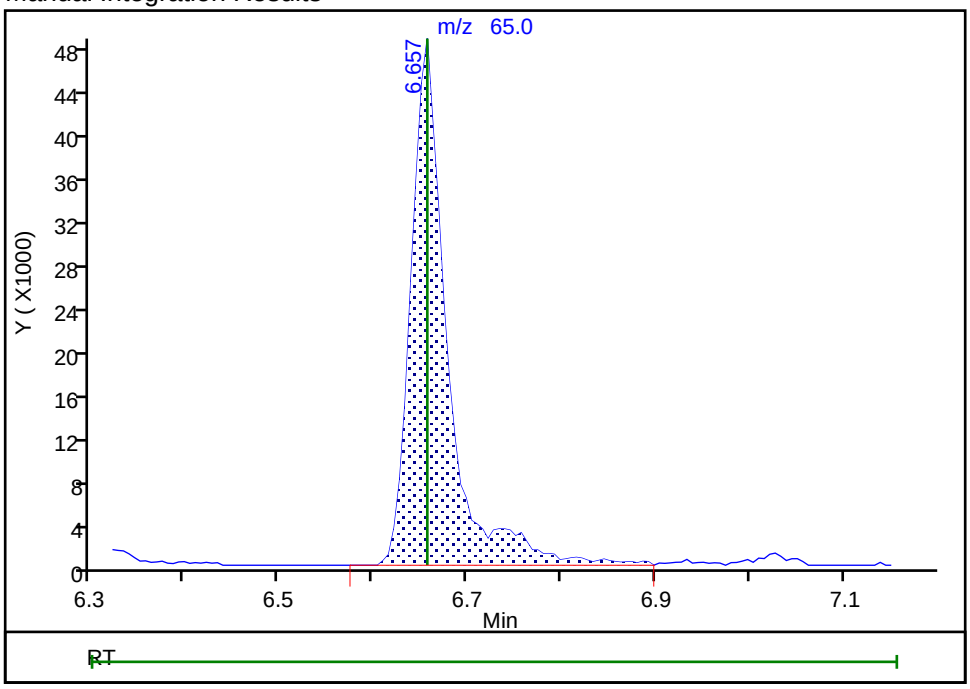
Processing Integration Results

RT: 6.66
Area: 117531
Amount: 35.863820
Amount Units: ng



Manual Integration Results

RT: 6.66
Area: 129508
Amount: 39.518524
Amount Units: ng



Reviewer: journetp, 31-Mar-2020 19:13:21

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab Sample ID: CCVIS 180-311793/2 Calibration Date: 04/01/2020 19:08

Instrument ID: CHHP10 Calib Start Date: 03/05/2020 07:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/05/2020 11:12

Lab File ID: 10040102.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	0.3204	0.4356	0.1000	13.6	10.0	35.9*	20.0
Chloromethane	Ave	0.2181	0.2258	0.1000	10.3	10.0	3.5	20.0
1,3-Butadiene	Ave	0.2996	0.2721	0.0100	9.08	10.0	-9.2	20.0
Vinyl chloride	Ave	0.3457	0.3455	0.1000	9.99	10.0	-0.0	20.0
Bromomethane	Ave	0.3880	0.2954	0.0500	7.61	10.0	-23.9*	20.0
Chloroethane	Ave	0.2851	0.2431	0.0500	8.53	10.0	-14.7	20.0
Dichlorofluoromethane	Ave	0.8654	0.7157	0.0100	8.27	10.0	-17.3	20.0
Trichlorofluoromethane	Ave	0.997	0.8118	0.1000	8.14	10.0	-18.6	20.0
Ethyl ether	Ave	0.1860	0.2125	0.0100	11.4	10.0	14.3	20.0
1,1-Dichloroethene	Ave	0.3189	0.3423	0.1000	10.7	10.0	7.3	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3859	0.3804	0.1000	9.86	10.0	-1.4	20.0
Acetone	Ave	0.0571	0.0748	0.0500	26.2	20.0	30.9*	20.0
Iodomethane	Ave	0.5304	0.4782	0.0100	9.02	10.0	-9.8	20.0
Carbon disulfide	Ave	0.9176	1.121	0.1000	12.2	10.0	22.2*	20.0
Allyl chloride	Ave	0.2027	0.2254	0.0100	11.1	10.0	11.2	20.0
Methyl acetate	Ave	0.0726	0.0896*	0.1000	24.7	20.0	23.3*	20.0
Methylene Chloride	Lin2		0.3536	0.1000	10.8	10.0	8.4	20.0
tert-Butyl alcohol	Ave	1.699	1.436	0.0100	84.5	100	-15.5	20.0
Acrylonitrile	Ave	0.0374	0.0396	0.0100	106	100	6.0	20.0
trans-1,2-Dichloroethene	Ave	0.3937	0.3785	0.1000	9.62	10.0	-3.8	20.0
Methyl tert-butyl ether	Ave	0.7676	0.8061	0.1000	10.5	10.0	5.0	20.0
Hexane	Ave	0.4431	0.4602	0.0100	10.4	10.0	3.9	20.0
1,1-Dichloroethane	Ave	0.5956	0.6517	0.2000	10.9	10.0	9.4	20.0
2,2-Dichloropropane	Ave	0.0955	0.0903	0.0100	9.46	10.0	-5.4	20.0
cis-1,2-Dichloroethene	Ave	0.3894	0.3954	0.1000	10.2	10.0	1.5	20.0
2-Butanone (MEK)	Ave	0.0548	0.0710	0.0500	25.9	20.0	29.4*	20.0
Bromochloromethane	Ave	0.1435	0.1356	0.0100	9.44	10.0	-5.6	20.0
Tetrahydrofuran	Ave	0.0302	0.0362	0.0100	23.9	20.0	19.5	20.0
Chloroform	Lin2		0.7506	0.2000	10.2	10.0	1.8	20.0
1,1,1-Trichloroethane	Ave	0.7409	0.6651	0.1000	8.98	10.0	-10.2	20.0
Cyclohexane	Ave	0.5254	0.4939	0.1000	9.40	10.0	-6.0	20.0
Carbon tetrachloride	Ave	0.7278	0.6469	0.1000	8.89	10.0	-11.1	20.0
1,1-Dichloropropene	Ave	0.5960	0.5913	0.0100	9.92	10.0	-0.8	20.0
Benzene	Ave	1.469	1.451	0.5000	9.88	10.0	-1.2	20.0
Isobutyl alcohol	Ave	0.0038	0.0040*	0.0100	268	250	7.2	20.0
1,2-Dichloroethane	Ave	0.4413	0.4328	0.1000	9.81	10.0	-1.9	20.0
n-Heptane	Ave	0.4305	0.3846	0.0100	8.93	10.0	-10.7	20.0
Trichloroethene	Ave	0.4441	0.3755	0.2000	8.46	10.0	-15.4	20.0
Methylcyclohexane	Ave	0.8021	0.7876	0.1000	9.82	10.0	-1.8	20.0
1,2-Dichloropropane	Ave	0.2870	0.3120	0.1000	10.9	10.0	8.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab Sample ID: CCVIS 180-311793/2 Calibration Date: 04/01/2020 19:08

Instrument ID: CHHP10 Calib Start Date: 03/05/2020 07:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/05/2020 11:12

Lab File ID: 10040102.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromomethane	Ave	0.1512	0.1487	0.0100	9.84	10.0	-1.6	20.0
1,4-Dioxane	Lin1		0.0013*	0.0100	158	200	-21.1*	20.0
Bromodichloromethane	Ave	0.5016	0.5045	0.2000	10.1	10.0	0.6	20.0
cis-1,3-Dichloropropene	Lin1		0.5149	0.2000	9.86	10.0	-1.4	25.0
4-Methyl-2-pentanone (MIBK)	Lin2		0.4007	0.1000	14.2	20.0	-28.8*	20.0
Toluene	Ave	8.089	8.598	0.4000	10.6	10.0	6.3	20.0
trans-1,3-Dichloropropene	Lin1		2.008	0.1000	10.2	10.0	2.3	20.0
Ethyl methacrylate	Lin1		1.749	0.0100	13.3	10.0	32.6*	20.0
1,1,2-Trichloroethane	Ave	1.016	1.231	0.1000	12.1	10.0	21.2*	20.0
Tetrachloroethene	Ave	1.842	1.651	0.2000	8.96	10.0	-10.4	20.0
1,3-Dichloropropane	Ave	1.693	2.291	0.0100	13.5	10.0	35.3*	20.0
2-Hexanone	Lin2		0.4600	0.1000	25.6	20.0	28.0*	20.0
Dibromochloromethane	Ave	1.341	1.552	0.1000	11.6	10.0	15.7	20.0
1,2-Dibromoethane (EDB)	Ave	0.8375	1.117	0.1000	13.3	10.0	33.4*	20.0
Chlorobenzene	Ave	4.898	5.233	0.5000	10.7	10.0	6.8	20.0
1,1,1,2-Tetrachloroethane	Ave	1.834	1.970	0.0100	10.7	10.0	7.4	20.0
Ethylbenzene	Ave	2.880	3.009	0.1000	10.4	10.0	4.5	20.0
m-Xylene & p-Xylene	Ave	3.634	3.844	0.1000	10.6	10.0	5.8	20.0
o-Xylene	Ave	3.428	3.770	0.3000	11.0	10.0	10.0	20.0
Styrene	Ave	5.344	5.808	0.3000	10.9	10.0	8.7	20.0
Bromoform	Ave	0.7636	0.9088	0.1000	11.9	10.0	19.0	20.0
Isopropylbenzene	Ave	10.14	10.62	0.1000	10.5	10.0	4.8	20.0
Bromobenzene	Ave	1.158	1.189	0.0100	10.3	10.0	2.7	20.0
1,1,2,2-Tetrachloroethane	Ave	1.078	1.585	0.3000	14.7	10.0	47.0*	20.0
trans-1,4-Dichloro-2-butene	Qua		0.1300	0.0100	10.6	10.0	6.0	20.0
1,2,3-Trichloropropane	Ave	0.2280	0.3047	0.0100	13.4	10.0	33.6*	20.0
N-Propylbenzene	Ave	1.582	1.629	0.0100	10.3	10.0	3.0	20.0
2-Chlorotoluene	Ave	1.252	1.262	0.0100	10.1	10.0	0.7	20.0
1,3,5-Trimethylbenzene	Ave	5.018	5.408	0.0100	10.8	10.0	7.8	20.0
4-Chlorotoluene	Ave	1.217	1.327	0.0100	10.9	10.0	9.1	20.0
tert-Butylbenzene	Ave	4.403	4.544	0.0100	10.3	10.0	3.2	20.0
1,2,4-Trimethylbenzene	Ave	4.877	5.354	0.0100	11.0	10.0	9.8	20.0
sec-Butylbenzene	Ave	6.506	7.073	0.0100	10.9	10.0	8.7	20.0
1,3-Dichlorobenzene	Ave	2.257	2.201	0.6000	9.75	10.0	-2.5	20.0
4-Isopropyltoluene	Ave	5.551	5.945	0.0100	10.7	10.0	7.1	20.0
1,4-Dichlorobenzene	Ave	2.393	2.259	0.5000	9.44	10.0	-5.6	20.0
n-Butylbenzene	Ave	4.652	5.209	0.0100	11.2	10.0	12.0	20.0
1,2-Dichlorobenzene	Ave	1.999	2.142	0.4000	10.7	10.0	7.2	20.0
1,2-Dibromo-3-Chloropropane	Lin1		0.0995	0.0500	9.48	10.0	-5.2	20.0
1,2,4-Trichlorobenzene	Ave	0.9745	0.8967	0.2000	9.20	10.0	-8.0	20.0
Hexachlorobutadiene	Qua		0.9115	0.0100	7.85	10.0	-21.5*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab Sample ID: CCVIS 180-311793/2 Calibration Date: 04/01/2020 19:08

Instrument ID: CHHP10 Calib Start Date: 03/05/2020 07:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/05/2020 11:12

Lab File ID: 10040102.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
Naphthalene	Ave	1.295	1.359	0.0100	10.5	10.0	4.9	20.0
1,2,3-Trichlorobenzene	Ave	0.7137	0.7393	0.0100	10.4	10.0	3.6	20.0
Dibromofluoromethane (Surr)	Ave	0.3240	0.2659		8.21	10.0	-17.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3721	0.3172		8.52	10.0	-14.8	20.0
Toluene-d8 (Surr)	Ave	6.543	5.868		8.97	10.0	-10.3	20.0
4-Bromofluorobenzene (Surr)	Ave	2.261	2.527		11.2	10.0	11.8	20.0

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040102.d
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 01-Apr-2020 19:08:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-002
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub19

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 21:57:00 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: journetp Date: 02-Apr-2020 21:57:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.951	3.951	0.000	0	76427	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.004	7.004	0.000	98	378523	50.0	50.0	M
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	86	74684	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	95	123596	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	92	100643	50.0	41.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	120072	50.0	42.6	M
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	438235	50.0	44.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.321	11.321	0.000	84	188740	50.0	55.9	
10 Dichlorodifluoromethane	85	1.516	1.516	0.000	98	164869	50.0	68.0	a
11 Chloromethane	50	1.722	1.722	0.000	98	85455	50.0	51.7	Ma
13 Butadiene	39	1.804	1.804	0.000	97	103007	50.0	45.4	
12 Vinyl chloride	62	1.834	1.834	0.000	82	130766	50.0	50.0	
14 Bromomethane	94	2.098	2.098	0.000	93	111829	50.0	38.1	a
15 Chloroethane	64	2.216	2.216	0.000	97	92024	50.0	42.6	
17 Dichlorofluoromethane	67	2.469	2.469	0.000	97	270896	50.0	41.3	
16 Trichlorofluoromethane	101	2.493	2.493	0.000	97	307267	50.0	40.7	
18 Ethyl ether	59	2.804	2.804	0.000	83	80431	50.0	57.1	
20 1,1-Dichloroethene	96	3.069	3.069	0.000	96	129561	50.0	53.7	
21 1,1,2-Trichloro-1,2,2-trif	101	3.140	3.140	0.000	94	143972	50.0	49.3	
22 Acetone	43	3.169	3.169	0.000	68	56596	100.0	130.9	
23 Iodomethane	142	3.245	3.245	0.000	99	180993	50.0	45.1	
24 Carbon disulfide	76	3.363	3.363	0.000	98	424295	50.0	61.1	a
26 3-Chloro-1-propene	76	3.598	3.598	0.000	81	85314	50.0	55.6	
28 Methyl acetate	43	3.616	3.616	0.000	75	67812	100.0	123.3	
29 Methylene Chloride	84	3.792	3.792	0.000	80	133847	50.0	54.2	a
32 2-Methyl-2-propanol	59	4.081	4.081	0.000	97	54888	500.0	422.7	
31 Acrylonitrile	53	4.198	4.198	0.000	98	150033	500.0	530.2	
30 trans-1,2-Dichloroethene	96	4.234	4.234	0.000	98	143285	50.0	48.1	
33 Methyl tert-butyl ether	73	4.239	4.239	0.000	92	305127	50.0	52.5	
34 Hexane	57	4.663	4.663	0.000	90	174213	50.0	51.9	M
36 1,1-Dichloroethane	63	4.875	4.875	0.000	96	246692	50.0	54.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.639	5.634	0.005	85	34197	50.0	47.3	
41 cis-1,2-Dichloroethene	96	5.651	5.651	0.000	80	149654	50.0	50.8	
43 2-Butanone (MEK)	43	5.675	5.675	0.000	52	53735	100.0	129.4	
46 Chlorobromomethane	128	5.939	5.939	0.000	83	51312	50.0	47.2	
48 Tetrahydrofuran	42	5.969	5.969	0.000	74	27365	100.0	119.5	
49 Chloroform	83	6.092	6.092	0.000	92	284135	50.0	50.9	
50 1,1,1-Trichloroethane	97	6.245	6.245	0.000	97	251735	50.0	44.9	
52 Cyclohexane	56	6.316	6.316	0.000	85	186959	50.0	47.0	
53 Carbon tetrachloride	117	6.416	6.416	0.000	97	244883	50.0	44.4	
54 1,1-Dichloropropene	75	6.439	6.439	0.000	98	223837	50.0	49.6	
55 Benzene	78	6.651	6.651	0.000	95	549239	50.0	49.4	
51 Isobutyl alcohol	41	6.686	6.686	0.000	89	38167	1250.0	1339.6	
56 1,2-Dichloroethane	62	6.739	6.739	0.000	98	163839	50.0	49.0	
59 n-Heptane	43	7.028	7.028	0.000	80	145560	50.0	44.7	
60 Trichloroethene	130	7.398	7.398	0.000	94	142133	50.0	42.3	
63 Methylcyclohexane	83	7.633	7.633	0.000	83	298119	50.0	49.1	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	90	118091	50.0	54.3	
65 Dibromomethane	93	7.769	7.769	0.000	95	56302	50.0	49.2	
67 1,4-Dioxane	88	7.775	7.775	0.000	34	10092	1000.0	789.3	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	190950	50.0	50.3	
71 cis-1,3-Dichloropropene	75	8.422	8.422	0.000	96	194890	50.0	49.3	
72 4-Methyl-2-pentanone (MIBK	43	8.580	8.580	0.000	92	59858	100.0	71.2	M
73 Toluene	91	8.739	8.739	0.000	98	642109	50.0	53.1	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	90	149991	50.0	51.1	
75 Ethyl methacrylate	69	9.069	9.069	0.000	85	130618	50.0	66.3	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	93	91939	50.0	60.6	
77 Tetrachloroethene	164	9.251	9.251	0.000	95	123274	50.0	44.8	
78 1,3-Dichloropropane	76	9.345	9.345	0.000	88	171075	50.0	67.7	
79 2-Hexanone	43	9.427	9.427	0.000	91	68710	100.0	128.0	
81 Chlorodibromomethane	129	9.557	9.557	0.000	90	115877	50.0	57.9	
82 Ethylene Dibromide	107	9.669	9.669	0.000	99	83436	50.0	66.7	
83 Chlorobenzene	112	10.157	10.157	0.000	93	390848	50.0	53.4	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.251	0.000	90	147098	50.0	53.7	
85 Ethylbenzene	106	10.263	10.263	0.000	98	224734	50.0	52.2	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	287093	50.0	52.9	
88 o-Xylene	106	10.774	10.774	0.000	97	281564	50.0	55.0	
89 Styrene	104	10.798	10.798	0.000	92	433765	50.0	54.3	
90 Bromoform	173	10.980	10.980	0.000	96	67875	50.0	59.5	
91 Isopropylbenzene	105	11.139	11.139	0.000	95	793256	50.0	52.4	
94 Bromobenzene	156	11.451	11.451	0.000	95	146912	50.0	51.3	
93 1,1,2,2-Tetrachloroethane	83	11.457	11.457	0.000	97	118385	50.0	73.5	
96 trans-1,4-Dichloro-2-buten	53	11.510	11.510	0.000	72	16073	50.0	53.0	
95 1,2,3-Trichloropropane	110	11.515	11.515	0.000	84	37661	50.0	66.8	
97 N-Propylbenzene	120	11.557	11.557	0.000	99	201316	50.0	51.5	
98 2-Chlorotoluene	126	11.645	11.645	0.000	94	155931	50.0	50.4	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	93	668378	50.0	53.9	
100 4-Chlorotoluene	126	11.768	11.768	0.000	99	164042	50.0	54.5	
101 tert-Butylbenzene	119	12.051	12.051	0.000	91	561655	50.0	51.6	
103 1,2,4-Trimethylbenzene	105	12.115	12.115	0.000	97	661786	50.0	54.9	
104 sec-Butylbenzene	105	12.274	12.274	0.000	95	874231	50.0	54.4	
105 1,3-Dichlorobenzene	146	12.398	12.398	0.000	95	272036	50.0	48.8	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	734798	50.0	53.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.504	12.504	0.000	92	279172	50.0	47.2	
110 n-Butylbenzene	91	12.845	12.845	0.000	98	643861	50.0	56.0	
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	95	264777	50.0	53.6	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	81	12293	50.0	47.4	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	93	110834	50.0	46.0	
115 Hexachlorobutadiene	225	14.598	14.598	0.000	96	112657	50.0	39.3	M
116 Naphthalene	128	14.727	14.727	0.000	97	167910	50.0	52.4	
117 1,2,3-Trichlorobenzene	180	14.939	14.939	0.000	93	91374	50.0	51.8	
S 129 Xylenes, Total	106				0		100.0	107.9	
S 130 1,2-Dichloroethene, Total	96				0		100.0	98.8	
S 145 Total BTEX	1				0		250.0	262.7	
S 131 1,3-Dichloropropene, Total	1				0		100.0	100.4	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

VOA8260VOA2ND_00397	Amount Added:	2.00	Units: uL		
voaWKetmix1st_00024	Amount Added:	2.00	Units: uL		
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent	

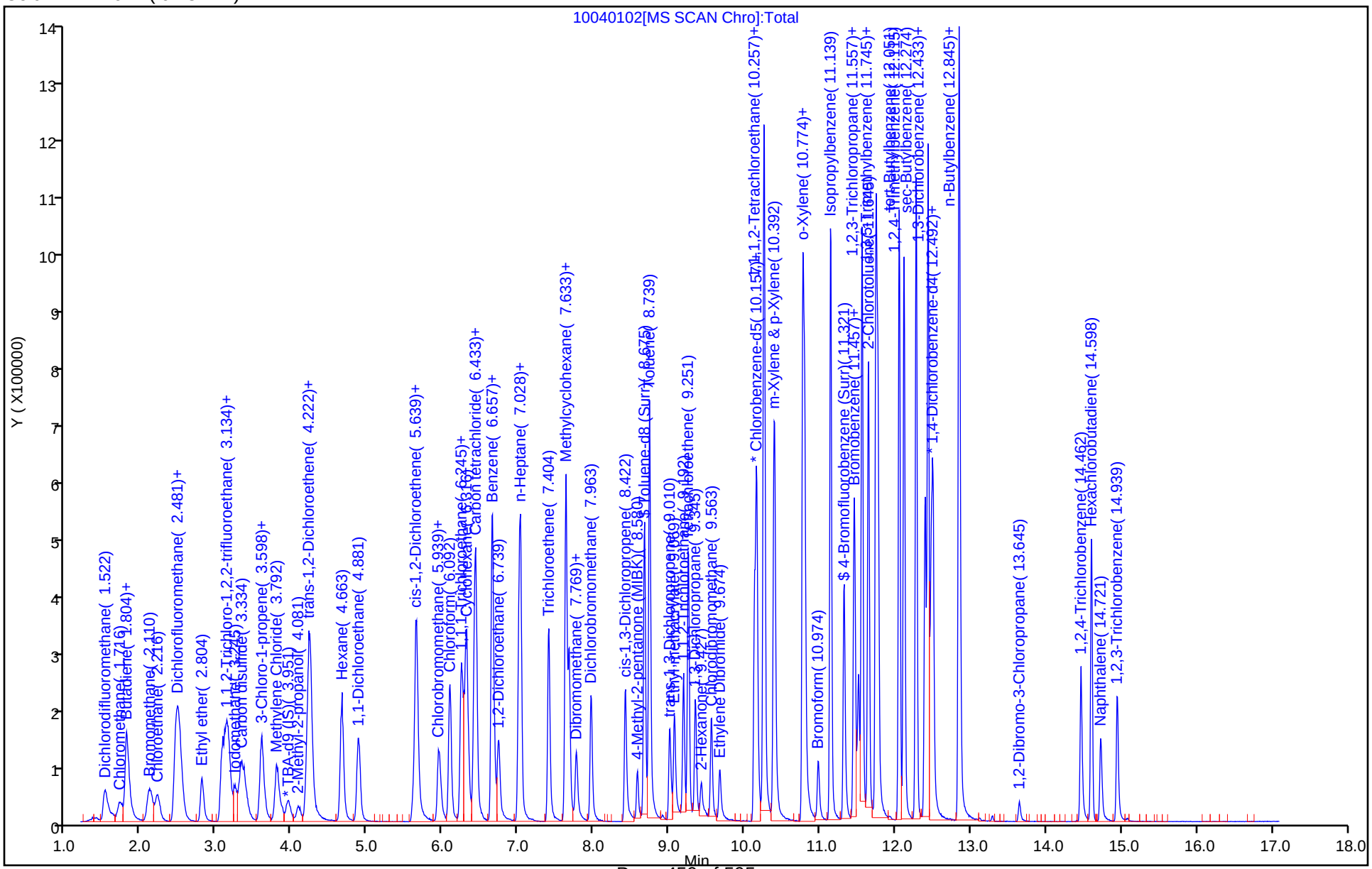
Report Date: 02-Apr-2020 21:57:03 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040102.d

Injection Date:	01-Apr-2020 19:08:30	Instrument ID:	CHHP10	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_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

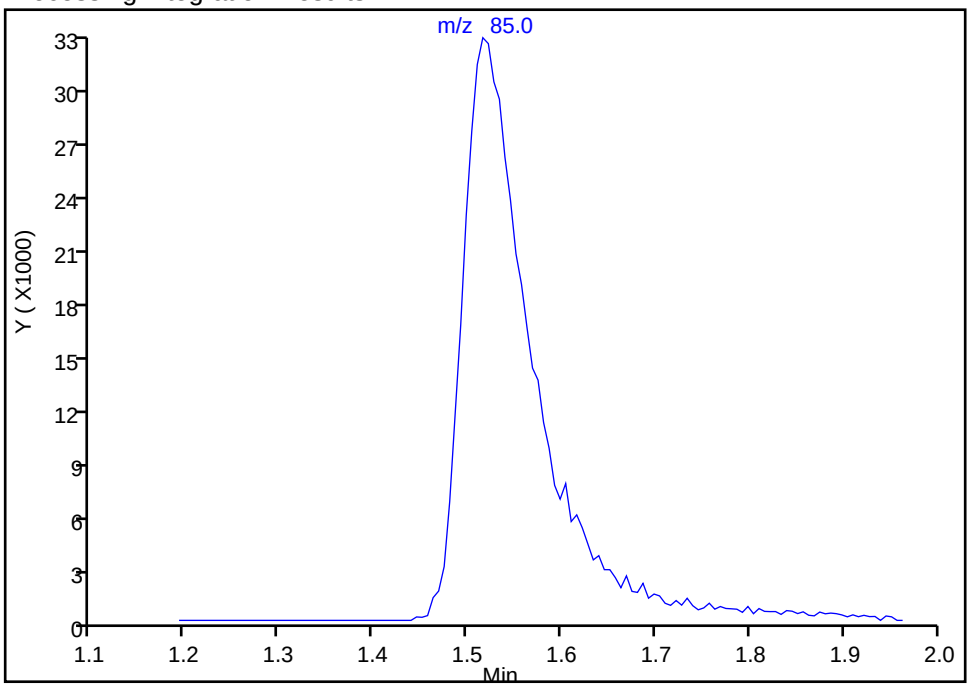
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040102.d
Injection Date: 01-Apr-2020 19:08:30 Instrument ID: CHHP10
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

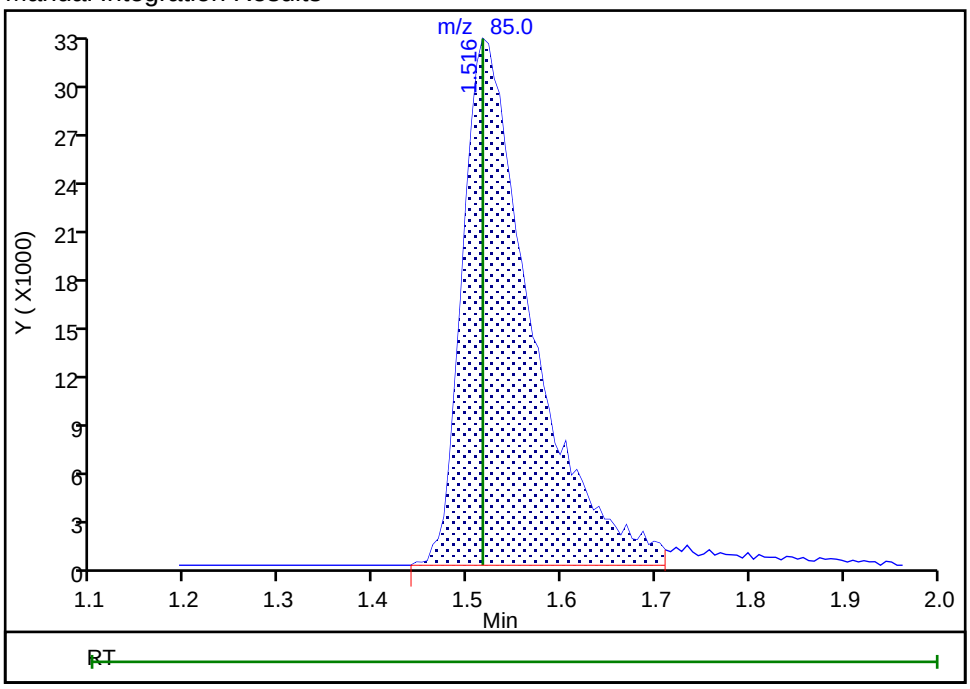
Not Detected
Expected RT: 1.52

Processing Integration Results



Manual Integration Results

RT: 1.52
Area: 164869
Amount: 67.964304
Amount Units: ng



Reviewer: journetp, 01-Apr-2020 19:28:23
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

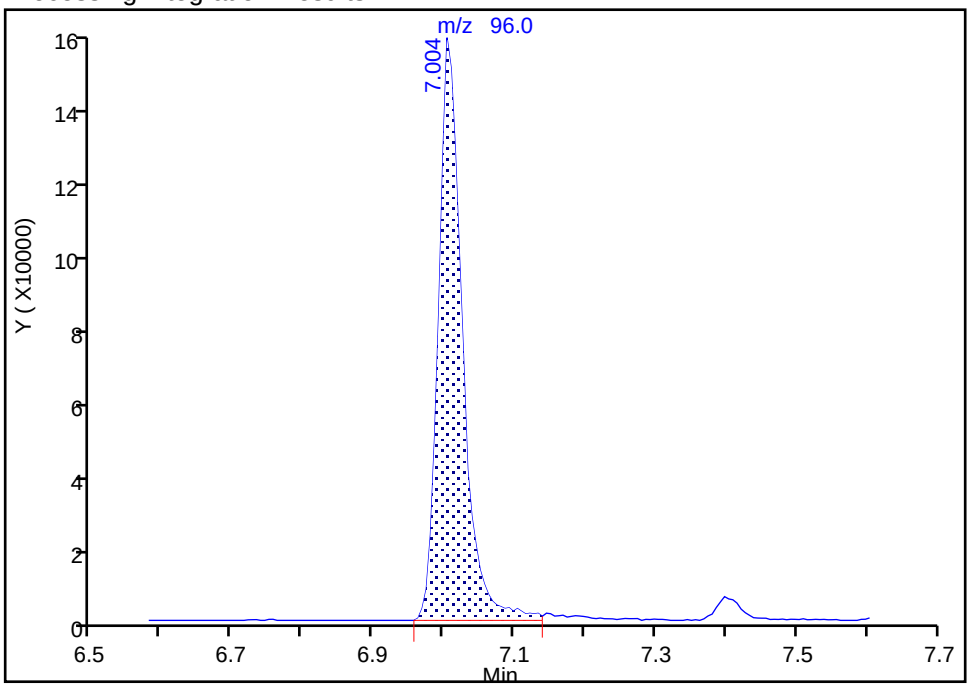
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040102.d				
Injection Date:	01-Apr-2020 19:08:30	Instrument ID:	CHHP10		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

* 2 Fluorobenzene (IS), CAS: 462-06-6

Signal: 1

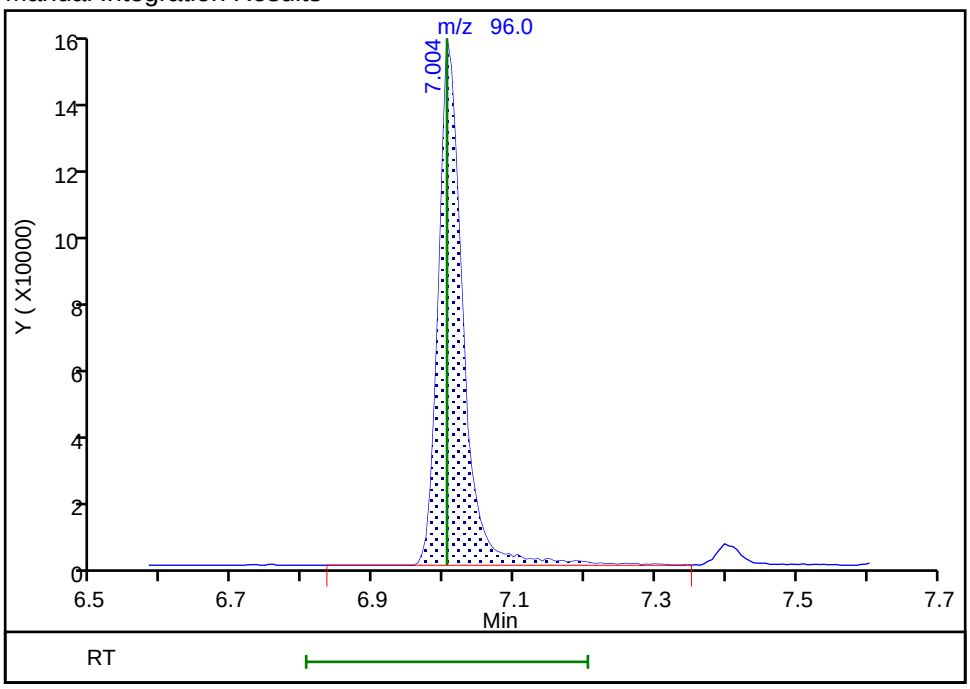
Processing Integration Results

RT: 7.00
Area: 371009
Amount: 50.000000
Amount Units: ng



Manual Integration Results

RT: 7.00
Area: 378523
Amount: 50.000000
Amount Units: ng



Reviewer: journetp, 02-Apr-2020 21:56:26

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

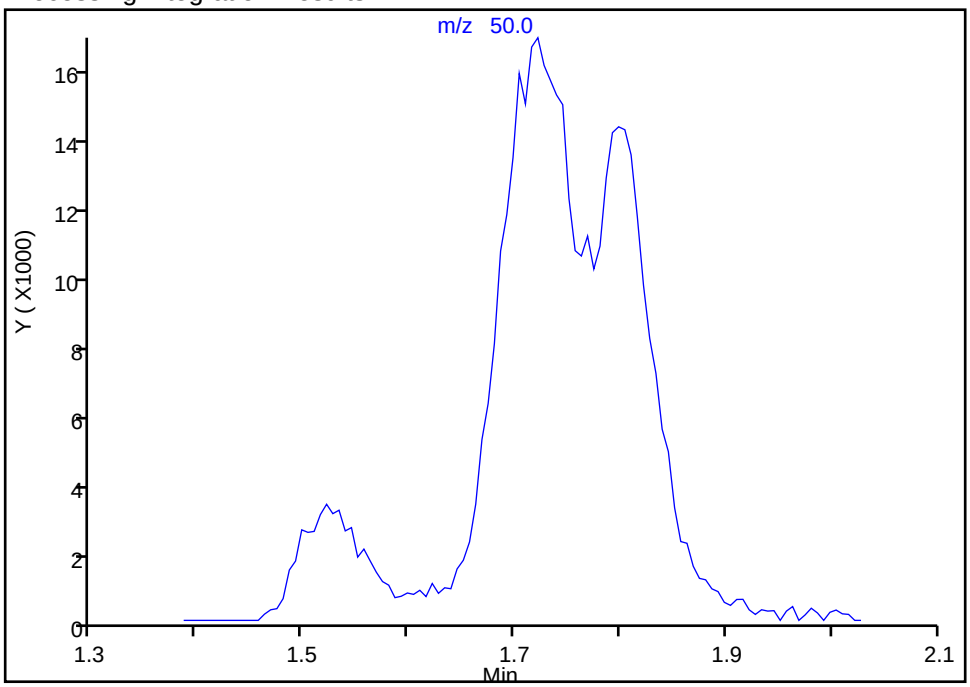
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040102.d
Injection Date: 01-Apr-2020 19:08:30 Instrument ID: CHHP10
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 1

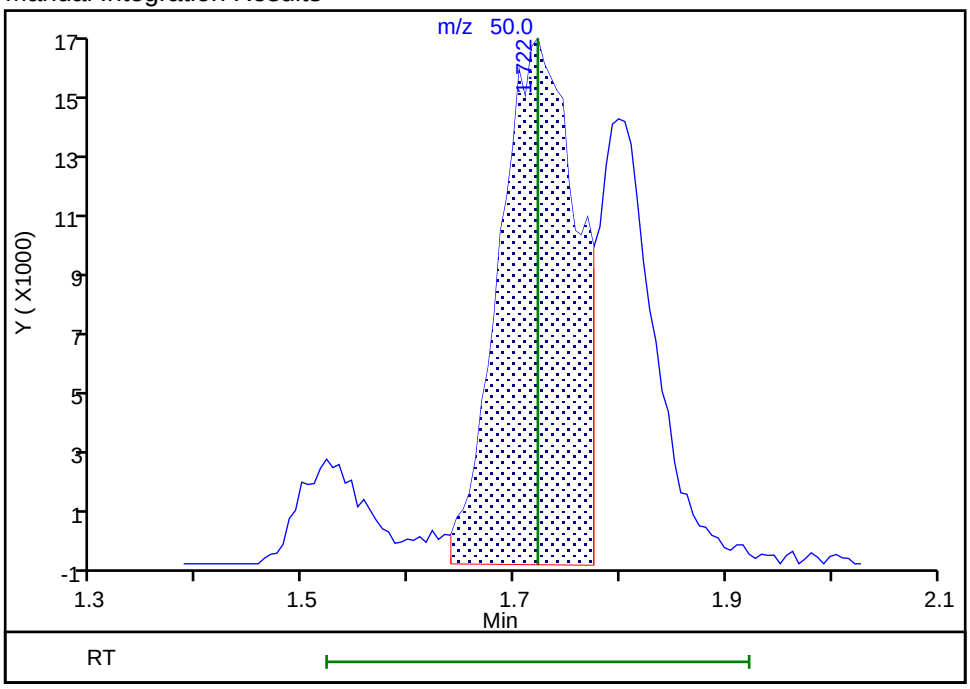
Not Detected
Expected RT: 1.72

Processing Integration Results



Manual Integration Results

RT: 1.72
Area: 85455
Amount: 51.748868
Amount Units: ng



Reviewer: journetp, 01-Apr-2020 19:28:41
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

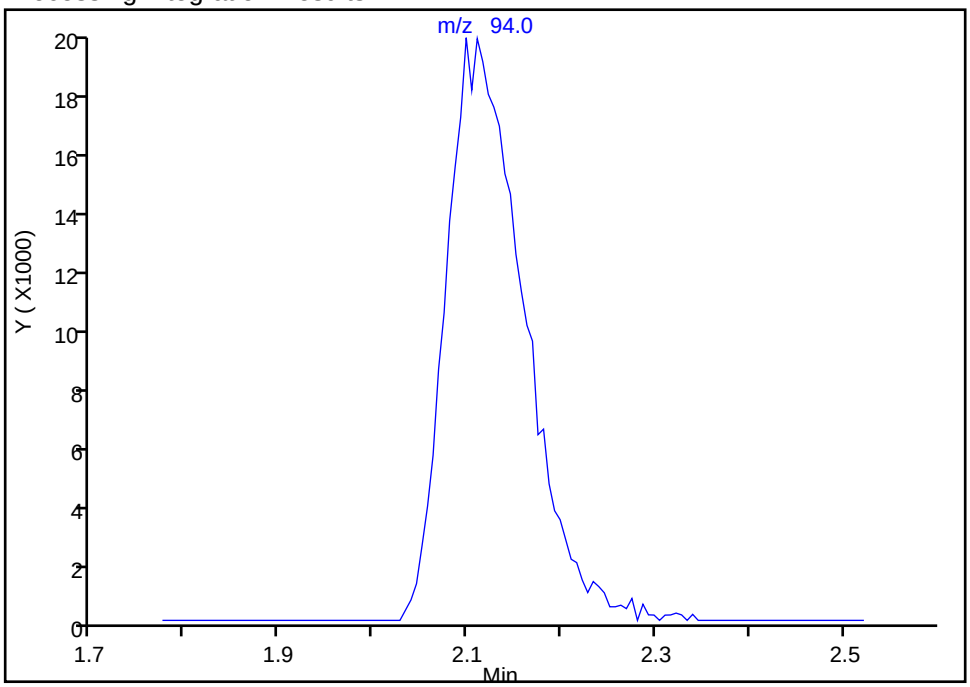
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040102.d
Injection Date: 01-Apr-2020 19:08:30 Instrument ID: CHHP10
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 1

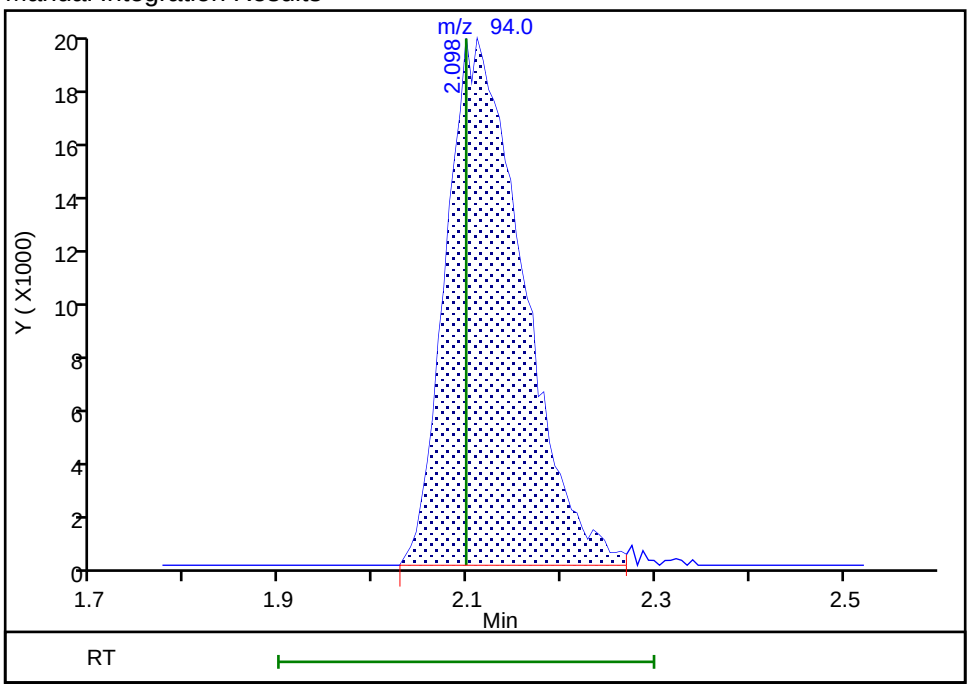
Not Detected
Expected RT: 2.10

Processing Integration Results



Manual Integration Results

RT: 2.10
Area: 111829
Amount: 38.070912
Amount Units: ng



Reviewer: journetp, 01-Apr-2020 19:28:48
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

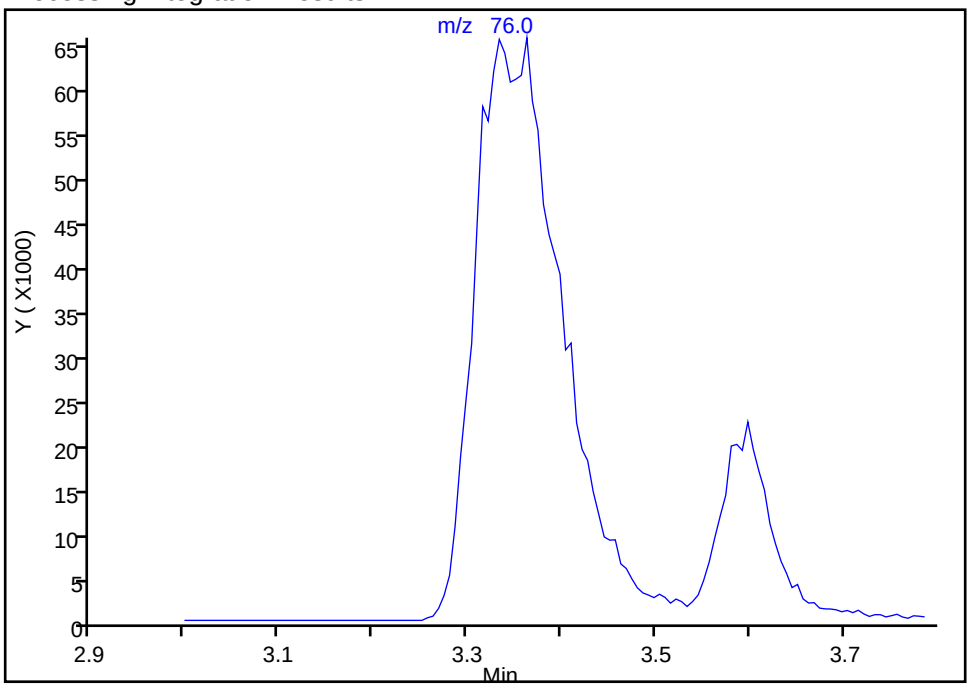
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040102.d
Injection Date: 01-Apr-2020 19:08:30 Instrument ID: CHHP10
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

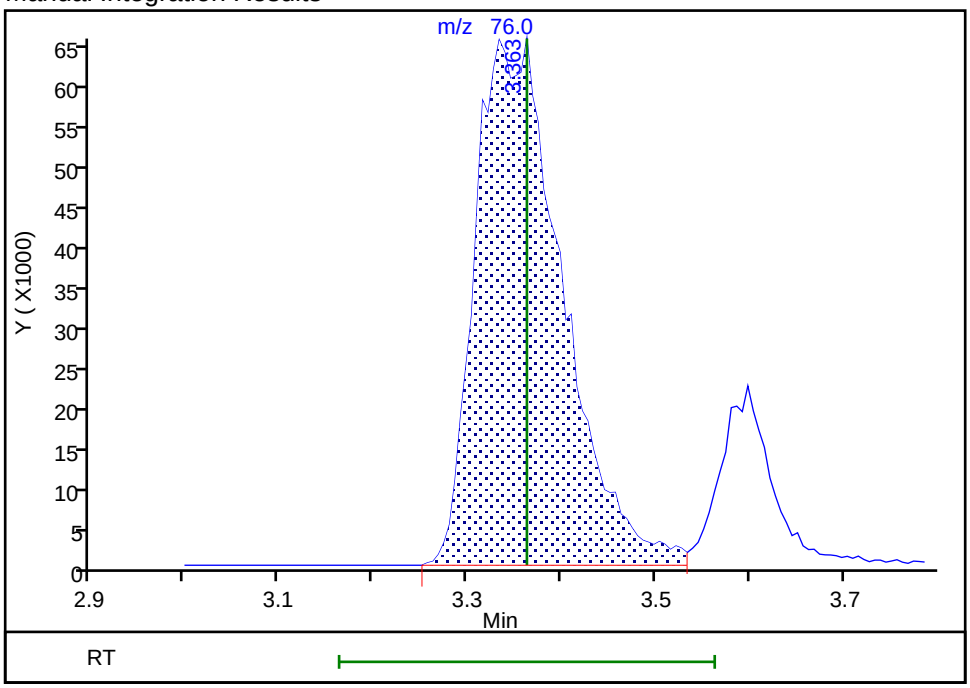
Not Detected
Expected RT: 3.36

Processing Integration Results



Manual Integration Results

RT: 3.36
Area: 424295
Amount: 61.079208
Amount Units: ng



Reviewer: journetp, 01-Apr-2020 19:28:53
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

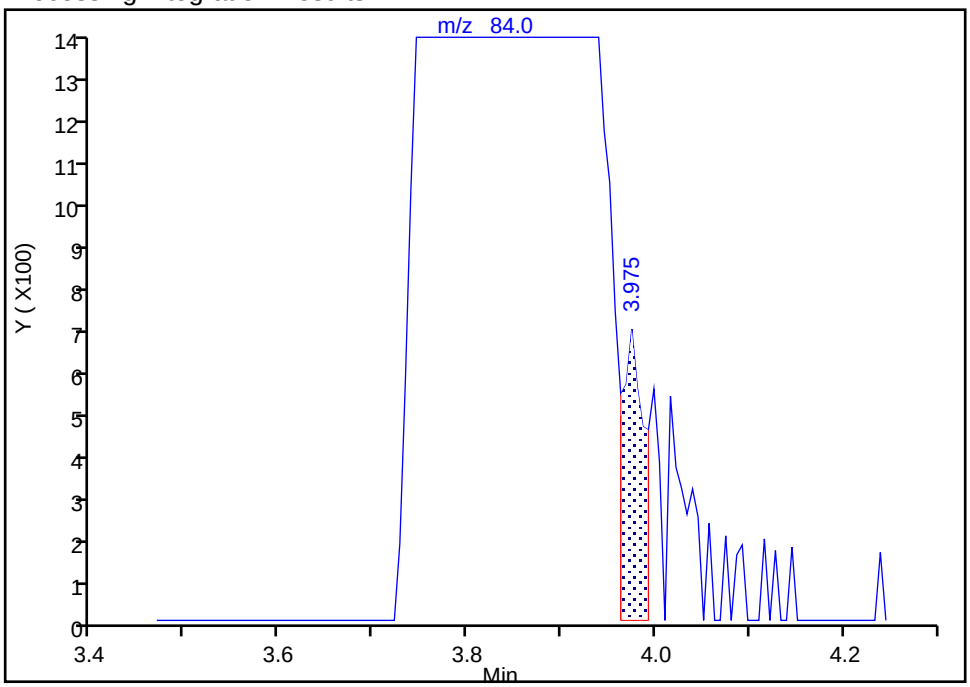
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040102.d				
Injection Date:	01-Apr-2020 19:08:30	Instrument ID:	CHHP10		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

29 Methylene Chloride, CAS: 75-09-2

Signal: 1

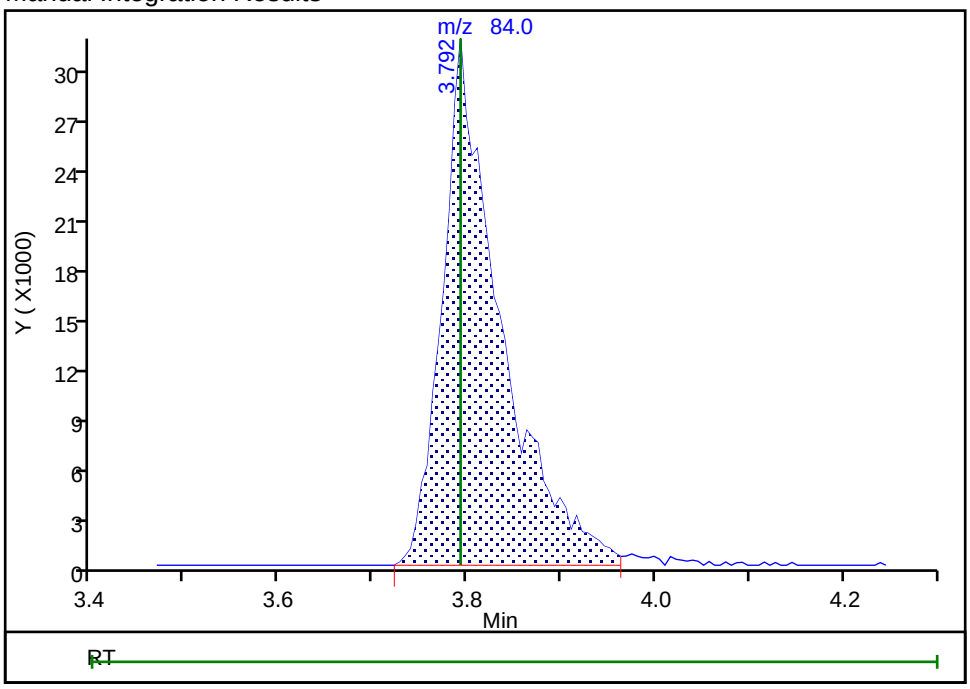
Processing Integration Results

RT: 3.97
Area: 1116
Amount: -4.640786
Amount Units: ng



Manual Integration Results

RT: 3.79
Area: 133847
Amount: 54.190334
Amount Units: ng



Reviewer: journetp, 01-Apr-2020 19:28:58

Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

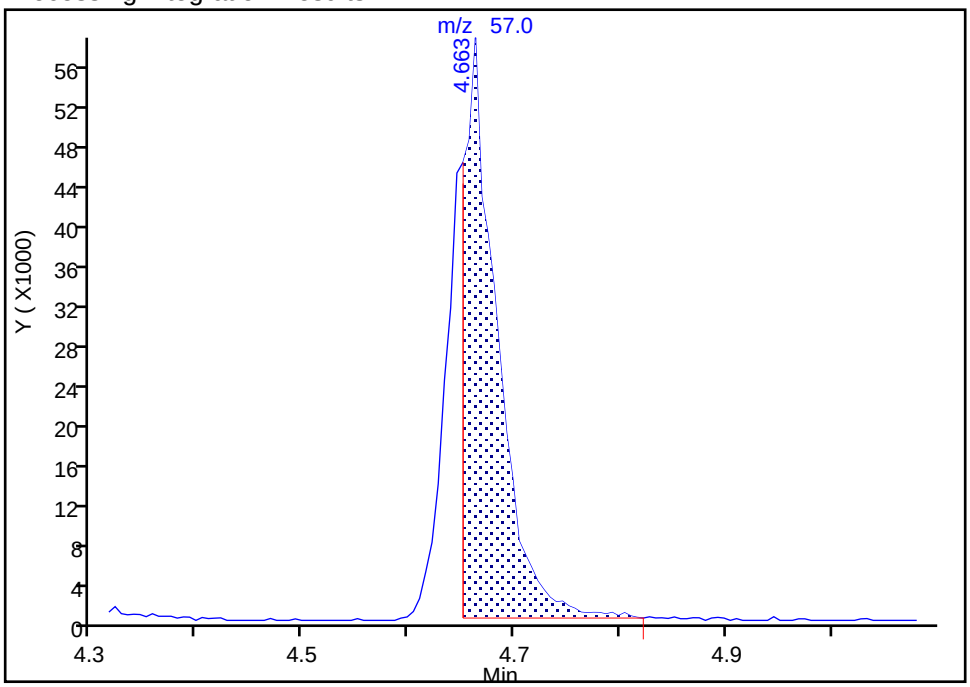
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040102.d				
Injection Date:	01-Apr-2020 19:08:30	Instrument ID:	CHHP10		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

34 Hexane, CAS: 110-54-3

Signal: 1

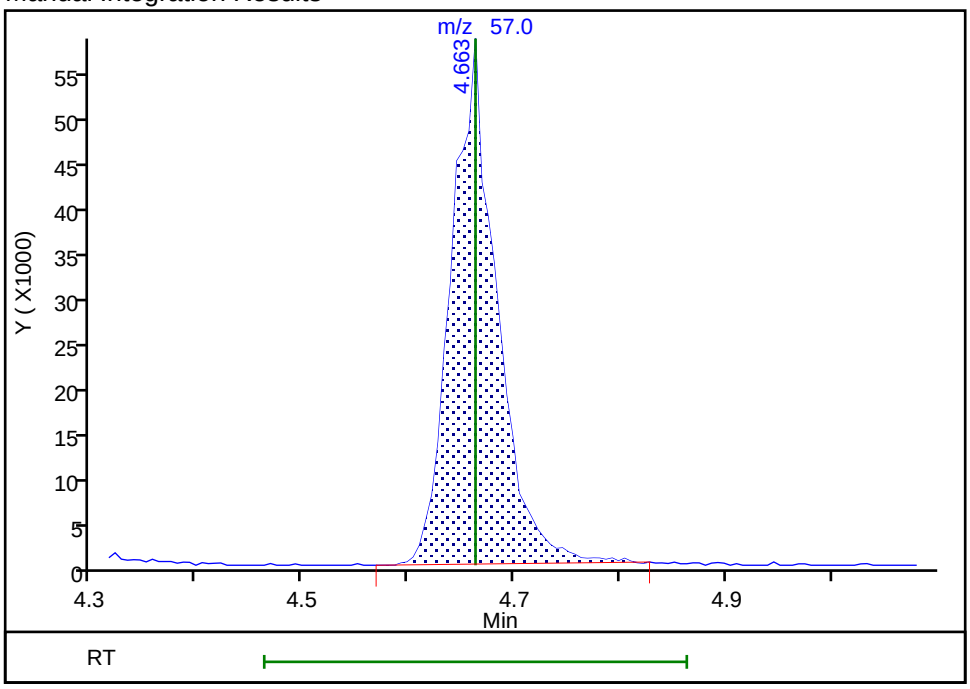
Processing Integration Results

RT: 4.66
Area: 128220
Amount: 38.996193
Amount Units: ng



Manual Integration Results

RT: 4.66
Area: 174213
Amount: 51.932493
Amount Units: ng



Reviewer: journetp, 02-Apr-2020 21:55:21

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

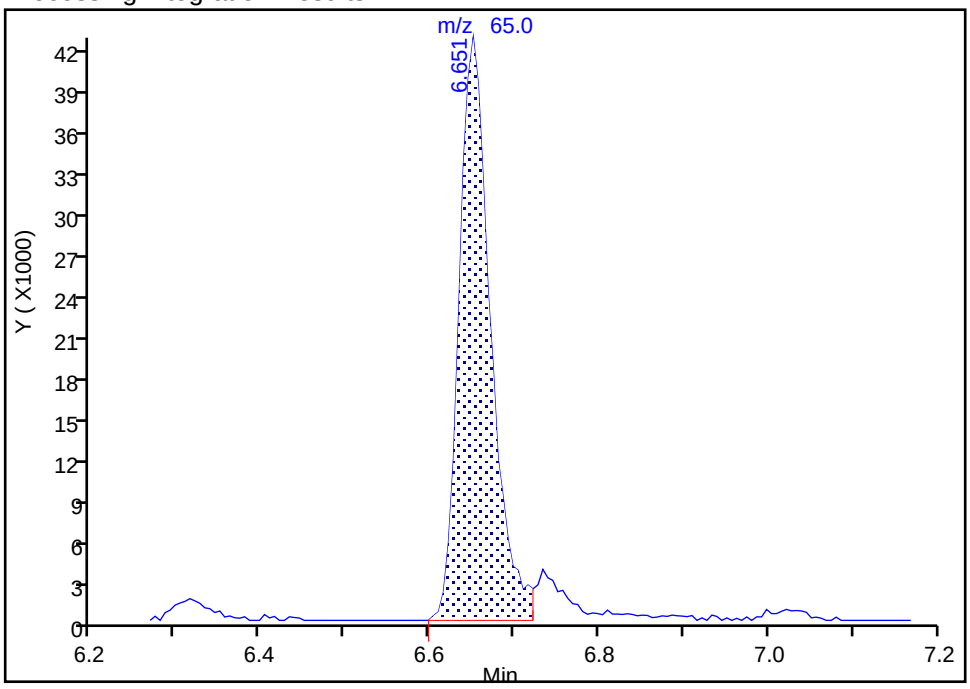
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040102.d
Injection Date: 01-Apr-2020 19:08:30 Instrument ID: CHHP10
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

$ 6 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

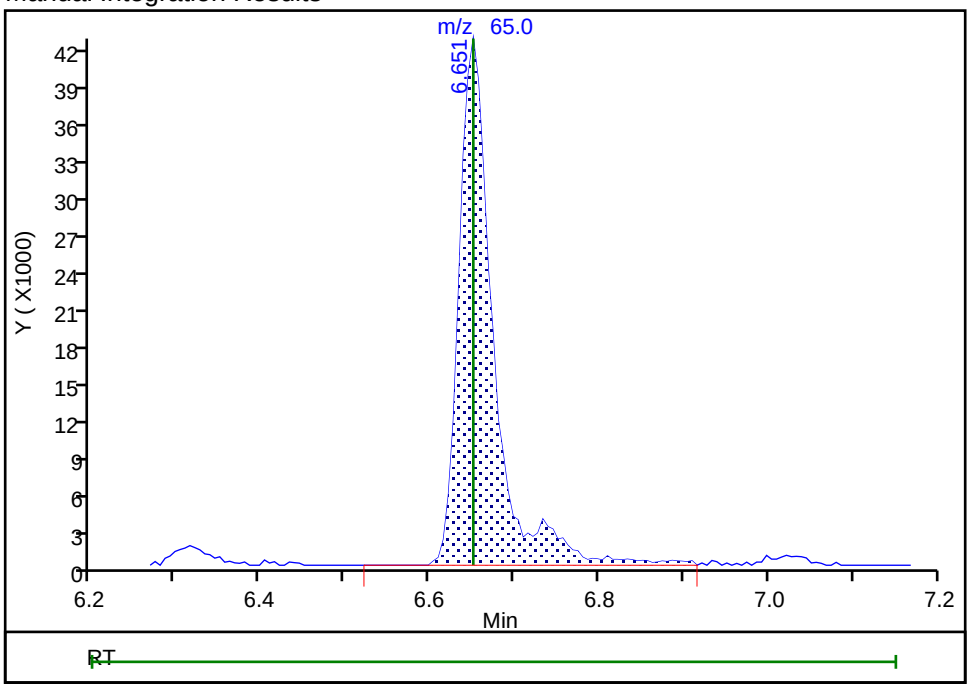
Processing Integration Results

RT: 6.65
Area: 109564
Amount: 39.678836
Amount Units: ng



Manual Integration Results

RT: 6.65
Area: 120072
Amount: 42.621130
Amount Units: ng



Reviewer: journetp, 02-Apr-2020 21:54:42
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Pittsburgh

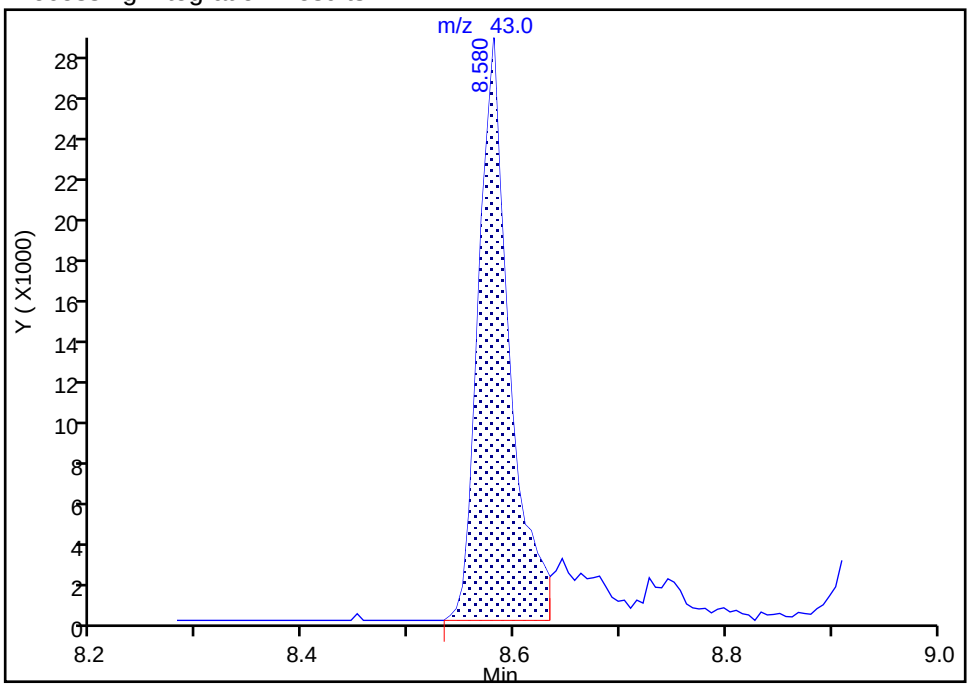
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040102.d
Injection Date: 01-Apr-2020 19:08:30 Instrument ID: CHHP10
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

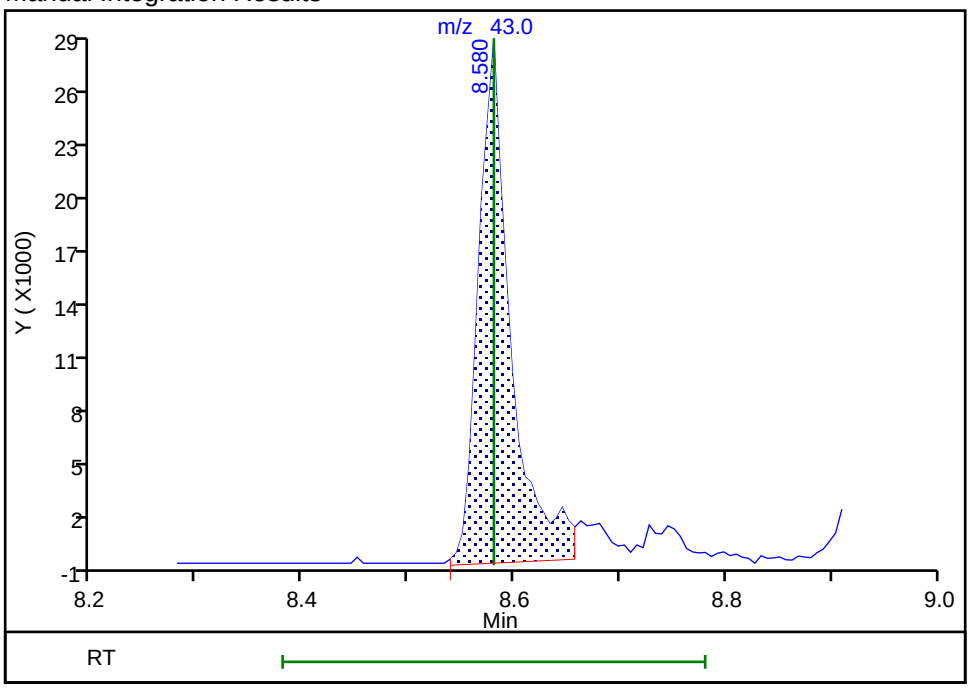
Processing Integration Results

RT: 8.58
Area: 56868
Amount: 68.056622
Amount Units: ng



Manual Integration Results

RT: 8.58
Area: 59858
Amount: 71.221509
Amount Units: ng



Reviewer: journetp, 01-Apr-2020 19:29:25
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

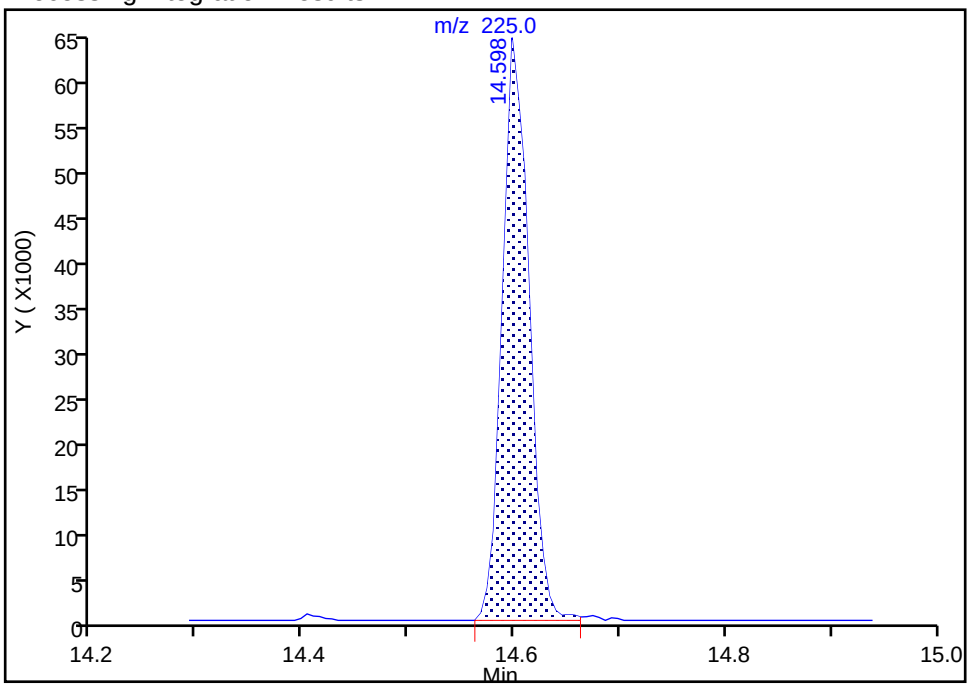
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040102.d
Injection Date: 01-Apr-2020 19:08:30 Instrument ID: CHHP10
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

115 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

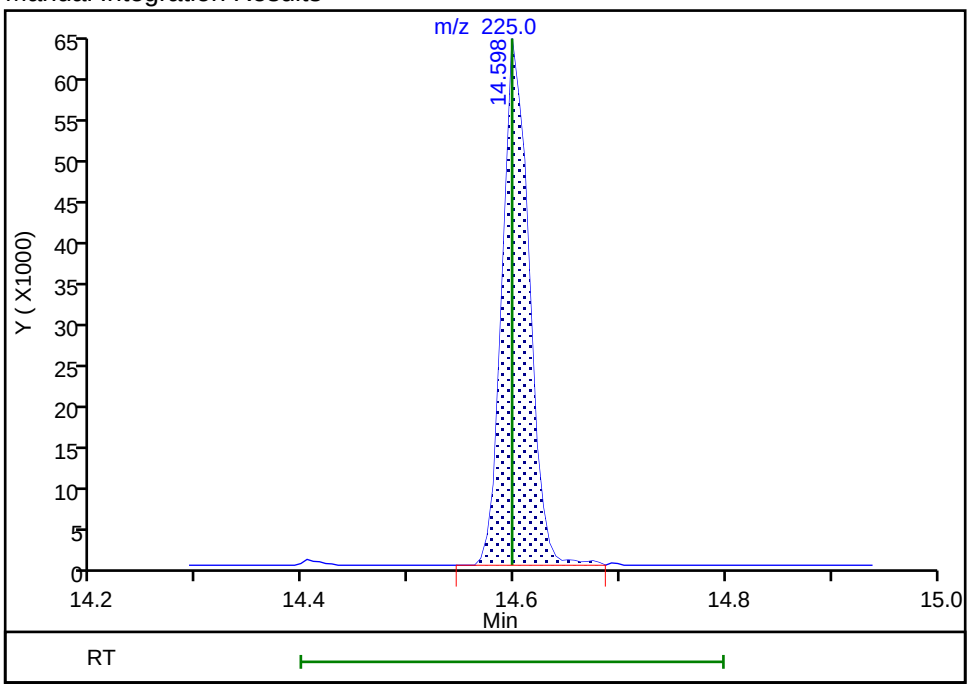
Processing Integration Results

RT: 14.60
Area: 112200
Amount: 39.088671
Amount Units: ng



Manual Integration Results

RT: 14.60
Area: 112657
Amount: 39.271368
Amount Units: ng



Reviewer: journetp, 01-Apr-2020 19:29:48
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab Sample ID: CCVIS 180-311900/3 Calibration Date: 04/02/2020 16:04

Instrument ID: CHHP10 Calib Start Date: 03/05/2020 07:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/05/2020 11:12

Lab File ID: 10040203.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	0.3204	0.5570	0.1000	17.4	10.0	73.8*	20.0
Chloromethane	Ave	0.2181	0.2778	0.1000	12.7	10.0	27.3*	20.0
1,3-Butadiene	Ave	0.2996	0.3044	0.0100	10.2	10.0	1.6	20.0
Vinyl chloride	Ave	0.3457	0.3910	0.1000	11.3	10.0	13.1	20.0
Bromomethane	Ave	0.3880	0.3134	0.0500	8.08	10.0	-19.2	20.0
Chloroethane	Ave	0.2851	0.2516	0.0500	8.82	10.0	-11.8	20.0
Dichlorofluoromethane	Ave	0.8654	0.7008	0.0100	8.10	10.0	-19.0	20.0
Trichlorofluoromethane	Ave	0.997	0.8174	0.1000	8.20	10.0	-18.0	20.0
Ethyl ether	Ave	0.1860	0.1730	0.0100	9.30	10.0	-7.0	20.0
1,1-Dichloroethene	Ave	0.3189	0.3567	0.1000	11.2	10.0	11.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3859	0.4013	0.1000	10.4	10.0	4.0	20.0
Acetone	Ave	0.0571	0.0587	0.0500	20.6	20.0	2.8	20.0
Iodomethane	Ave	0.5304	0.4973	0.0100	9.38	10.0	-6.2	20.0
Carbon disulfide	Ave	0.9176	1.194	0.1000	13.0	10.0	30.1*	20.0
Allyl chloride	Ave	0.2027	0.2209	0.0100	10.9	10.0	9.0	20.0
Methyl acetate	Ave	0.0726	0.0603*	0.1000	16.6	20.0	-17.0	20.0
Methylene Chloride	Lin2		0.3382	0.1000	10.3	10.0	3.2	20.0
tert-Butyl alcohol	Ave	1.699	1.388	0.0100	81.7	100	-18.3	20.0
Acrylonitrile	Ave	0.0374	0.0327	0.0100	87.5	100	-12.5	20.0
trans-1,2-Dichloroethene	Ave	0.3937	0.3869	0.1000	9.83	10.0	-1.7	20.0
Methyl tert-butyl ether	Ave	0.7676	0.6534	0.1000	8.51	10.0	-14.9	20.0
Hexane	Ave	0.4431	0.4921	0.0100	11.1	10.0	11.0	20.0
1,1-Dichloroethane	Ave	0.5956	0.6236	0.2000	10.5	10.0	4.7	20.0
2,2-Dichloropropane	Ave	0.0955	0.0871	0.0100	9.12	10.0	-8.8	20.0
cis-1,2-Dichloroethene	Ave	0.3894	0.3700	0.1000	9.50	10.0	-5.0	20.0
2-Butanone (MEK)	Ave	0.0548	0.0515	0.0500	18.8	20.0	-6.0	20.0
Bromochloromethane	Ave	0.1435	0.1116	0.0100	7.78	10.0	-22.2*	20.0
Tetrahydrofuran	Ave	0.0302	0.0231	0.0100	15.3	20.0	-23.6*	20.0
Chloroform	Lin2		0.6962	0.2000	9.40	10.0	-6.0	20.0
1,1,1-Trichloroethane	Ave	0.7409	0.6763	0.1000	9.13	10.0	-8.7	20.0
Cyclohexane	Ave	0.5254	0.5427	0.1000	10.3	10.0	3.3	20.0
Carbon tetrachloride	Ave	0.7278	0.6463	0.1000	8.88	10.0	-11.2	20.0
1,1-Dichloropropene	Ave	0.5960	0.6085	0.0100	10.2	10.0	2.1	20.0
Benzene	Ave	1.469	1.582	0.5000	10.8	10.0	7.7	20.0
Isobutyl alcohol	Ave	0.0038	0.0029*	0.0100	193	250	-22.9*	20.0
1,2-Dichloroethane	Ave	0.4413	0.3850	0.1000	8.72	10.0	-12.8	20.0
n-Heptane	Ave	0.4305	0.4249	0.0100	9.87	10.0	-1.3	20.0
Trichloroethene	Ave	0.4441	0.3748	0.2000	8.44	10.0	-15.6	20.0
Methylcyclohexane	Ave	0.8021	0.8314	0.1000	10.4	10.0	3.7	20.0
1,2-Dichloropropane	Ave	0.2870	0.2975	0.1000	10.4	10.0	3.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab Sample ID: CCVIS 180-311900/3 Calibration Date: 04/02/2020 16:04

Instrument ID: CHHP10 Calib Start Date: 03/05/2020 07:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/05/2020 11:12

Lab File ID: 10040203.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromomethane	Ave	0.1512	0.1286	0.0100	8.50	10.0	-15.0	20.0
1,4-Dioxane	Lin1		0.0011*	0.0100	136	200	-31.8*	20.0
Bromodichloromethane	Ave	0.5016	0.4383	0.2000	8.74	10.0	-12.6	20.0
cis-1,3-Dichloropropene	Lin1		0.4600	0.2000	8.89	10.0	-11.1	25.0
4-Methyl-2-pentanone (MIBK)	Lin2		0.3511	0.1000	12.7	20.0	-36.6*	20.0
Toluene	Ave	8.089	8.674	0.4000	10.7	10.0	7.2	20.0
trans-1,3-Dichloropropene	Lin1		1.770	0.1000	9.10	10.0	-9.0	20.0
Ethyl methacrylate	Lin1		1.286	0.0100	9.93	10.0	-0.7	20.0
1,1,2-Trichloroethane	Ave	1.016	1.013	0.1000	9.97	10.0	-0.3	20.0
Tetrachloroethene	Ave	1.842	1.692	0.2000	9.18	10.0	-8.2	20.0
1,3-Dichloropropane	Ave	1.693	1.861	0.0100	11.0	10.0	9.9	20.0
2-Hexanone	Lin2		0.3115	0.1000	18.1	20.0	-9.5	20.0
Dibromochloromethane	Ave	1.341	1.238	0.1000	9.23	10.0	-7.7	20.0
1,2-Dibromoethane (EDB)	Ave	0.8375	0.7922	0.1000	9.46	10.0	-5.4	20.0
Chlorobenzene	Ave	4.898	4.728	0.5000	9.65	10.0	-3.5	20.0
1,1,1,2-Tetrachloroethane	Ave	1.834	1.696	0.0100	9.24	10.0	-7.6	20.0
Ethylbenzene	Ave	2.880	2.962	0.1000	10.3	10.0	2.9	20.0
m-Xylene & p-Xylene	Ave	3.634	3.621	0.1000	9.96	10.0	-0.4	20.0
o-Xylene	Ave	3.428	3.494	0.3000	10.2	10.0	1.9	20.0
Styrene	Ave	5.344	5.289	0.3000	9.90	10.0	-1.0	20.0
Bromoform	Ave	0.7636	0.6494	0.1000	8.50	10.0	-15.0	20.0
Isopropylbenzene	Ave	10.14	10.82	0.1000	10.7	10.0	6.7	20.0
Bromobenzene	Ave	1.158	1.179	0.0100	10.2	10.0	1.8	20.0
1,1,2,2-Tetrachloroethane	Ave	1.078	1.119	0.3000	10.4	10.0	3.8	20.0
trans-1,4-Dichloro-2-butene	Qua		0.0904	0.0100	8.02	10.0	-19.8	20.0
1,2,3-Trichloropropane	Ave	0.2280	0.2392	0.0100	10.5	10.0	4.9	20.0
N-Propylbenzene	Ave	1.582	1.830	0.0100	11.6	10.0	15.7	20.0
2-Chlorotoluene	Ave	1.252	1.379	0.0100	11.0	10.0	10.1	20.0
1,3,5-Trimethylbenzene	Ave	5.018	6.089	0.0100	12.1	10.0	21.4*	20.0
4-Chlorotoluene	Ave	1.217	1.348	0.0100	11.1	10.0	10.8	20.0
tert-Butylbenzene	Ave	4.403	5.343	0.0100	12.1	10.0	21.3*	20.0
1,2,4-Trimethylbenzene	Ave	4.877	5.853	0.0100	12.0	10.0	20.0	20.0
sec-Butylbenzene	Ave	6.506	8.368	0.0100	12.9	10.0	28.6*	20.0
1,3-Dichlorobenzene	Ave	2.257	2.343	0.6000	10.4	10.0	3.8	20.0
4-Isopropyltoluene	Ave	5.551	6.466	0.0100	11.6	10.0	16.5	20.0
1,4-Dichlorobenzene	Ave	2.393	2.324	0.5000	9.71	10.0	-2.9	20.0
n-Butylbenzene	Ave	4.652	6.064	0.0100	13.0	10.0	30.3*	20.0
1,2-Dichlorobenzene	Ave	1.999	2.007	0.4000	10.0	10.0	0.4	20.0
1,2-Dibromo-3-Chloropropane	Lin1		0.0856	0.0500	8.30	10.0	-17.0	20.0
1,2,4-Trichlorobenzene	Ave	0.9745	0.9542	0.2000	9.79	10.0	-2.1	20.0
Hexachlorobutadiene	Qua		1.069	0.0100	9.45	10.0	-5.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Lab Sample ID: CCVIS 180-311900/3 Calibration Date: 04/02/2020 16:04

Instrument ID: CHHP10 Calib Start Date: 03/05/2020 07:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/05/2020 11:12

Lab File ID: 10040203.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
Naphthalene	Ave	1.295	1.261	0.0100	9.73	10.0	-2.7	20.0
1,2,3-Trichlorobenzene	Ave	0.7137	0.7945	0.0100	11.1	10.0	11.3	20.0
Dibromofluoromethane (Surr)	Ave	0.3240	0.2919		9.01	10.0	-9.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3721	0.3067		8.24	10.0	-17.6	20.0
Toluene-d8 (Surr)	Ave	6.543	7.237		11.1	10.0	10.6	20.0
4-Bromofluorobenzene (Surr)	Ave	2.261	2.307		10.2	10.0	2.1	20.0

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040203.d
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 02-Apr-2020 16:04:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031431-003
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub19

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 03-Apr-2020 01:00:44 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: journetp Date: 02-Apr-2020 16:50:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.963	3.963	0.000	0	61879	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	400665	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	88	77084	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.468	12.468	0.000	95	111758	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	91	116956	50.0	45.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.657	0.000	0	122882	50.0	41.2	
$ 7 Toluene-d8 (Surr)	98	8.669	8.669	0.000	94	557844	50.0	55.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.316	11.316	0.000	86	177864	50.0	51.0	
10 Dichlorodifluoromethane	85	1.522	1.522	0.000	99	223173	50.0	86.9	
11 Chloromethane	50	1.722	1.722	0.000	99	111286	50.0	63.7	
13 Butadiene	39	1.804	1.804	0.000	93	121969	50.0	50.8	
12 Vinyl chloride	62	1.828	1.828	0.000	97	156676	50.0	56.6	
14 Bromomethane	94	2.110	2.110	0.000	90	125556	50.0	40.4	M
15 Chloroethane	64	2.222	2.222	0.000	99	100796	50.0	44.1	
17 Dichlorofluoromethane	67	2.475	2.475	0.000	97	280772	50.0	40.5	
16 Trichlorofluoromethane	101	2.493	2.493	0.000	98	327493	50.0	41.0	
18 Ethyl ether	59	2.810	2.810	0.000	82	69310	50.0	46.5	
20 1,1-Dichloroethene	96	3.069	3.069	0.000	97	142933	50.0	55.9	
21 1,1,2-Trichloro-1,2,2-trif	101	3.140	3.140	0.000	96	160765	50.0	52.0	
22 Acetone	43	3.175	3.175	0.000	53	47034	100.0	102.8	
23 Iodomethane	142	3.263	3.263	0.000	100	199265	50.0	46.9	
24 Carbon disulfide	76	3.351	3.351	0.000	99	478401	50.0	65.1	
26 3-Chloro-1-propene	76	3.593	3.593	0.000	81	88506	50.0	54.5	
28 Methyl acetate	43	3.634	3.634	0.000	94	48294	100.0	83.0	
29 Methylene Chloride	84	3.798	3.798	0.000	81	135522	50.0	51.6	
32 2-Methyl-2-propanol	59	4.092	4.092	0.000	98	42952	500.0	408.5	
31 Acrylonitrile	53	4.204	4.204	0.000	97	131002	500.0	437.3	M
30 trans-1,2-Dichloroethene	96	4.228	4.228	0.000	98	155010	50.0	49.1	
33 Methyl tert-butyl ether	73	4.245	4.245	0.000	92	261784	50.0	42.6	
34 Hexane	57	4.663	4.663	0.000	87	197147	50.0	55.5	
36 1,1-Dichloroethane	63	4.875	4.875	0.000	96	249835	50.0	52.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.639	5.639	0.000	85	34889	50.0	45.6	
41 cis-1,2-Dichloroethene	96	5.651	5.651	0.000	83	148236	50.0	47.5	
43 2-Butanone (MEK)	43	5.687	5.687	0.000	98	41294	100.0	94.0	a
46 Chlorobromomethane	128	5.945	5.945	0.000	87	44721	50.0	38.9	
48 Tetrahydrofuran	42	5.975	5.975	0.000	71	18529	100.0	76.4	
49 Chloroform	83	6.092	6.092	0.000	92	278961	50.0	47.0	
50 1,1,1-Trichloroethane	97	6.239	6.239	0.000	96	270950	50.0	45.6	
52 Cyclohexane	56	6.304	6.304	0.000	81	217433	50.0	51.6	M
53 Carbon tetrachloride	117	6.422	6.422	0.000	96	258961	50.0	44.4	
54 1,1-Dichloropropene	75	6.439	6.439	0.000	97	243794	50.0	51.0	
55 Benzene	78	6.657	6.657	0.000	95	633937	50.0	53.9	
51 Isobutyl alcohol	41	6.681	6.681	0.000	89	29082	1250.0	964.3	
56 1,2-Dichloroethane	62	6.739	6.739	0.000	98	154243	50.0	43.6	
59 n-Heptane	43	7.028	7.028	0.000	78	170232	50.0	49.3	
60 Trichloroethene	130	7.404	7.404	0.000	94	150154	50.0	42.2	
63 Methylcyclohexane	83	7.628	7.628	0.000	82	333109	50.0	51.8	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	96	119199	50.0	51.8	
65 Dibromomethane	93	7.775	7.775	0.000	94	51504	50.0	42.5	
67 1,4-Dioxane	88	7.780	7.780	0.000	38	9149	1000.0	681.6	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	175617	50.0	43.7	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	96	184320	50.0	44.4	
72 4-Methyl-2-pentanone (MIBK	43	8.580	8.580	0.000	92	54124	100.0	63.4	
73 Toluene	91	8.745	8.745	0.000	98	668615	50.0	53.6	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	90	136439	50.0	45.5	
75 Ethyl methacrylate	69	9.075	9.075	0.000	85	99103	50.0	49.6	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	93	78056	50.0	49.8	
77 Tetrachloroethene	164	9.257	9.257	0.000	97	130421	50.0	45.9	
78 1,3-Dichloropropane	76	9.345	9.345	0.000	86	143424	50.0	55.0	
79 2-Hexanone	43	9.427	9.427	0.000	91	48022	100.0	90.5	
81 Chlorodibromomethane	129	9.557	9.557	0.000	90	95406	50.0	46.1	
82 Ethylene Dibromide	107	9.674	9.674	0.000	100	61066	50.0	47.3	
83 Chlorobenzene	112	10.157	10.157	0.000	94	364484	50.0	48.3	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.257	0.000	92	130712	50.0	46.2	
85 Ethylbenzene	106	10.263	10.263	0.000	99	228340	50.0	51.4	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	279145	50.0	49.8	
88 o-Xylene	106	10.774	10.774	0.000	96	269318	50.0	51.0	
89 Styrene	104	10.798	10.798	0.000	92	407713	50.0	49.5	
90 Bromoform	173	10.980	10.980	0.000	95	50059	50.0	42.5	
91 Isopropylbenzene	105	11.145	11.145	0.000	96	833773	50.0	53.4	
94 Bromobenzene	156	11.451	11.451	0.000	95	131763	50.0	50.9	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	94	86280	50.0	51.9	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	64	10101	50.0	40.1	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	82	26727	50.0	52.4	
97 N-Propylbenzene	120	11.557	11.557	0.000	99	204463	50.0	57.8	
98 2-Chlorotoluene	126	11.645	11.645	0.000	94	154125	50.0	55.1	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	93	680522	50.0	60.7	
100 4-Chlorotoluene	126	11.768	11.768	0.000	97	150649	50.0	55.4	
101 tert-Butylbenzene	119	12.051	12.051	0.000	91	597121	50.0	60.7	
103 1,2,4-Trimethylbenzene	105	12.115	12.115	0.000	97	654126	50.0	60.0	
104 sec-Butylbenzene	105	12.274	12.274	0.000	95	935178	50.0	64.3	
105 1,3-Dichlorobenzene	146	12.392	12.392	0.000	95	261904	50.0	51.9	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	722607	50.0	58.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	92	259722	50.0	48.6	
110 n-Butylbenzene	91	12.845	12.845	0.000	98	677666	50.0	65.2	
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	93	224258	50.0	50.2	
112 1,2-Dibromo-3-Chloropropan	157	13.657	13.657	0.000	78	9565	50.0	41.5	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	93	106640	50.0	49.0	
115 Hexachlorobutadiene	225	14.598	14.598	0.000	97	119464	50.0	47.3	
116 Naphthalene	128	14.727	14.727	0.000	98	140913	50.0	48.7	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	94	88794	50.0	55.7	
S 130 1,2-Dichloroethene, Total	96				0		100.0	96.6	
S 129 Xylenes, Total	106				0		100.0	100.8	
S 131 1,3-Dichloropropene, Total	1				0		100.0	89.9	
S 145 Total BTEX	1				0		250.0	259.7	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

VOA8260VOA2ND_00397	Amount Added:	2.00	Units: uL	
voaWKetmix1st_00024	Amount Added:	2.00	Units: uL	
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

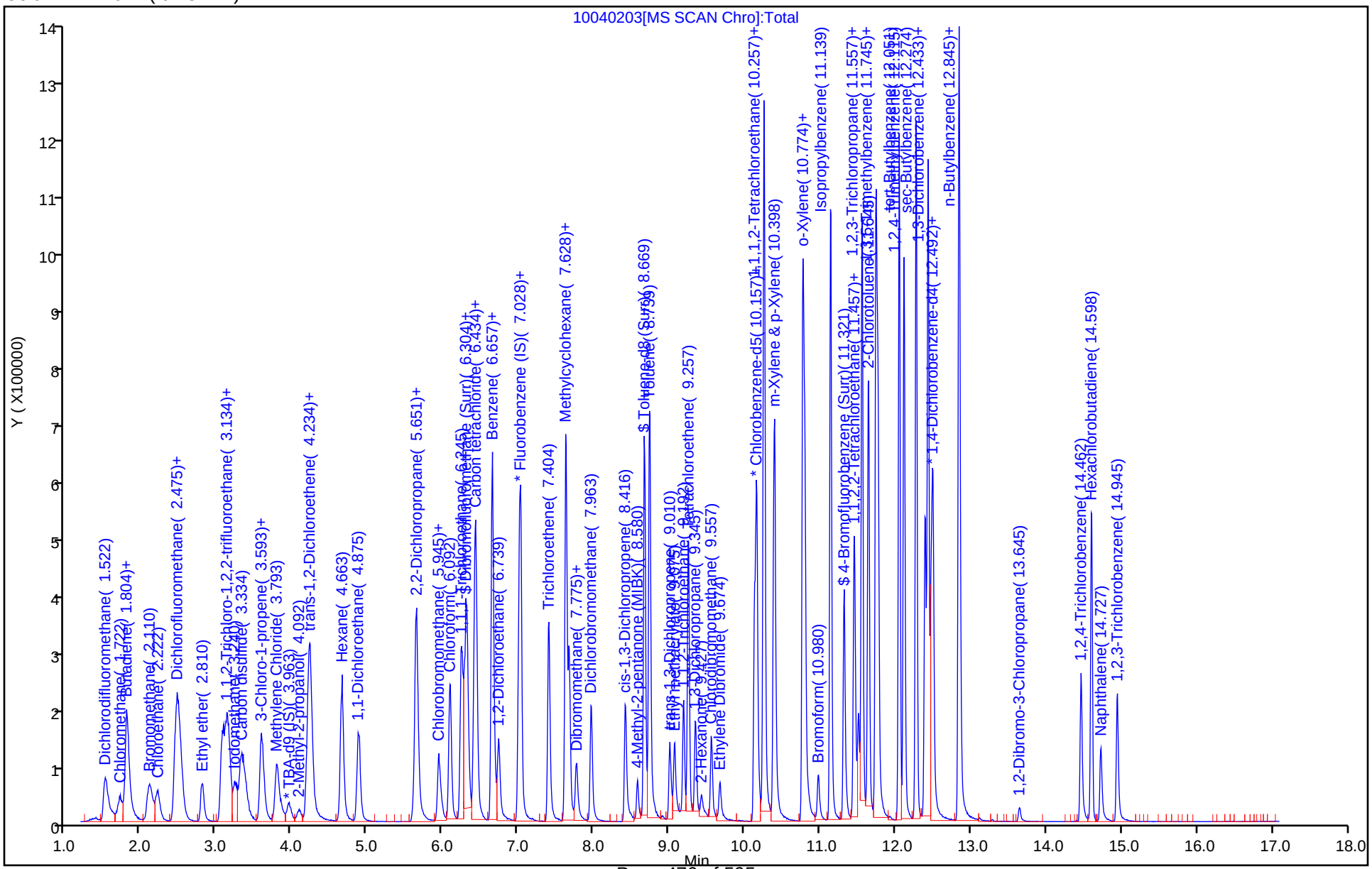
Report Date: 03-Apr-2020 01:00:46 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040203.d

Injection Date:	02-Apr-2020 16:04:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

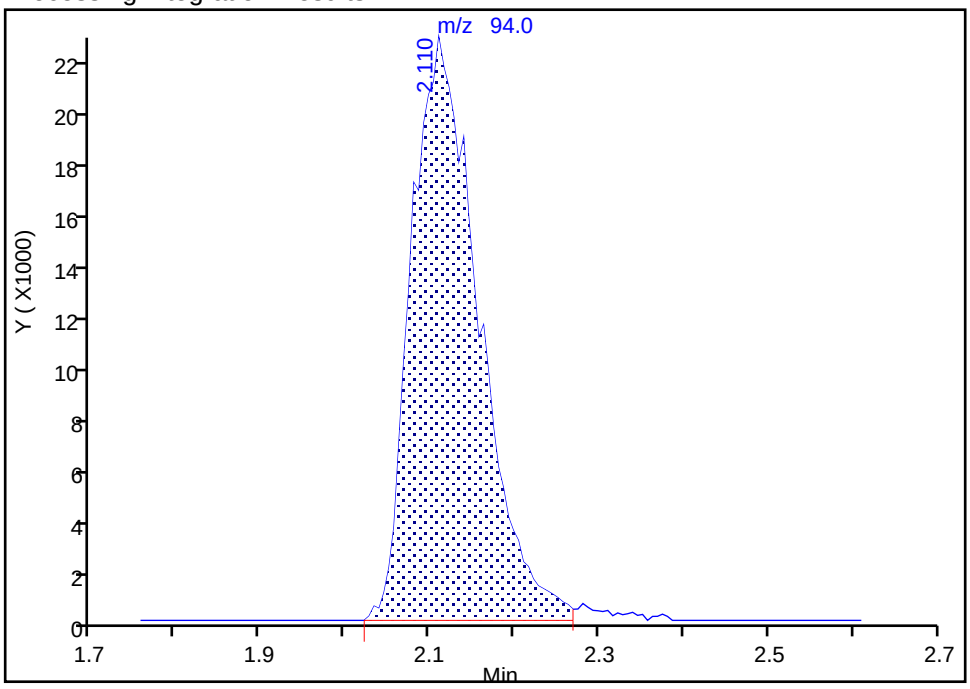
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040203.d				
Injection Date:	02-Apr-2020 16:04:30	Instrument ID:	CHHP10		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

14 Bromomethane, CAS: 74-83-9

Signal: 1

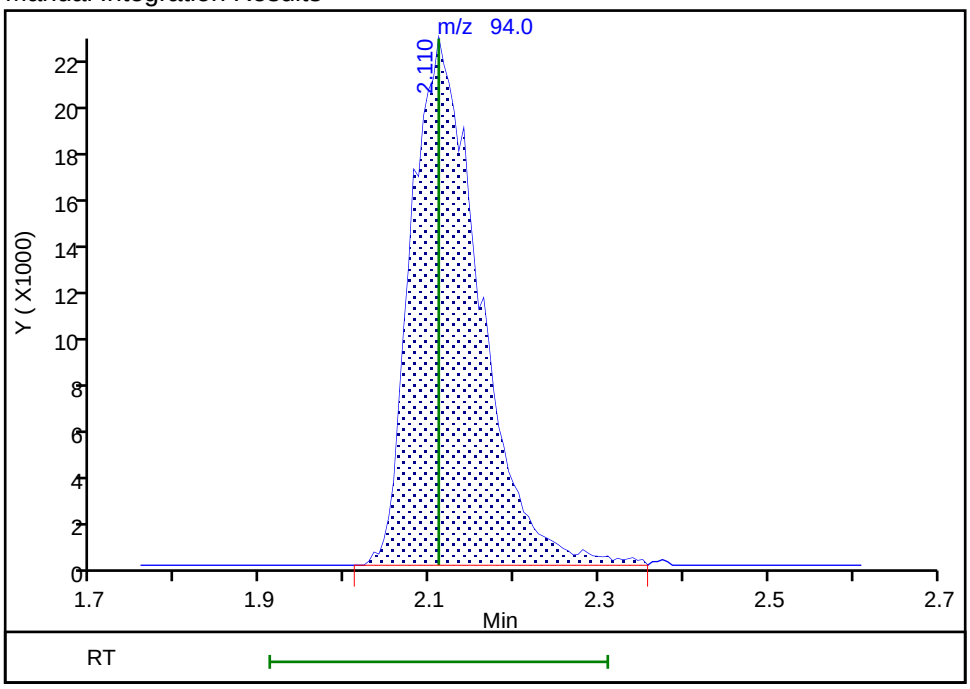
Processing Integration Results

RT: 2.11
Area: 123889
Amount: 39.845792
Amount Units: ng



Manual Integration Results

RT: 2.11
Area: 125556
Amount: 40.381940
Amount Units: ng



Reviewer: journetp, 02-Apr-2020 16:41:23

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

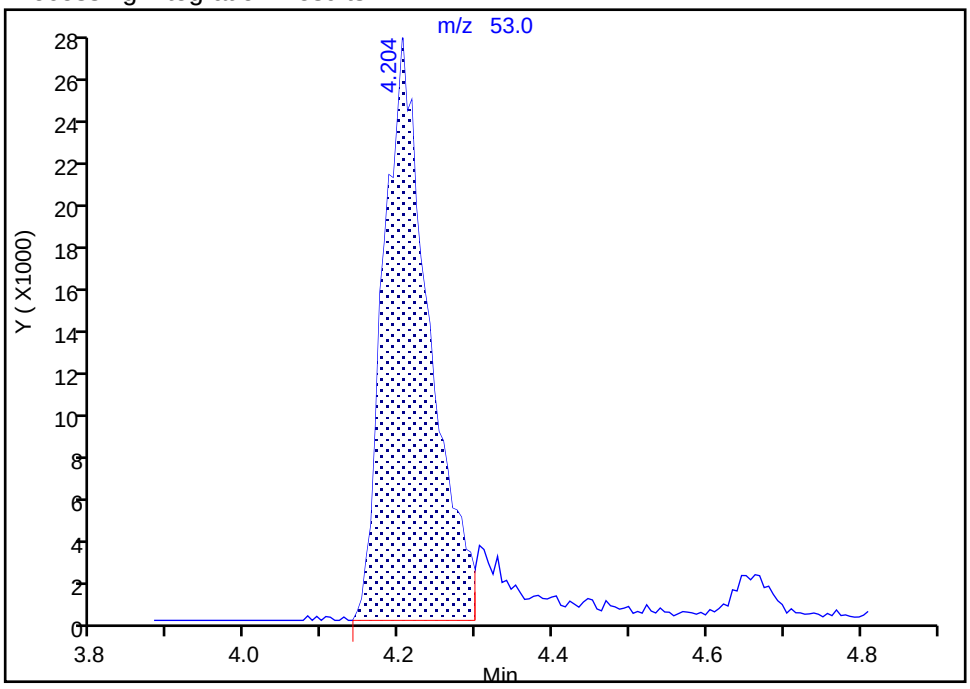
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040203.d				
Injection Date:	02-Apr-2020 16:04:30	Instrument ID:	CHHP10		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

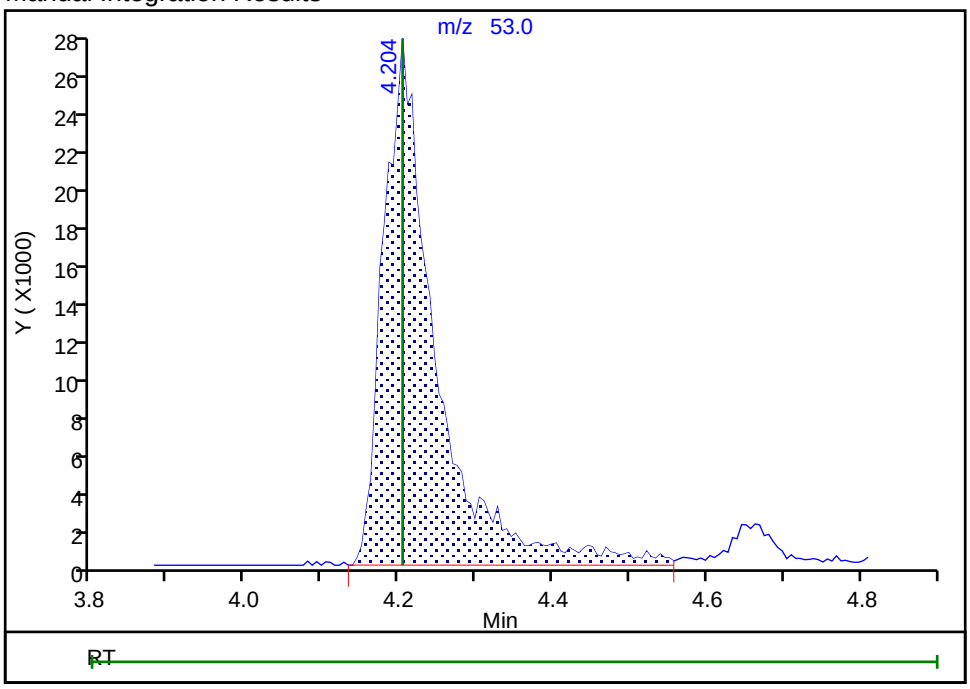
Processing Integration Results

RT: 4.20
Area: 114229
Amount: 381.3402
Amount Units: ng



Manual Integration Results

RT: 4.20
Area: 131002
Amount: 437.3349
Amount Units: ng



Reviewer: journetp, 02-Apr-2020 16:42:19

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

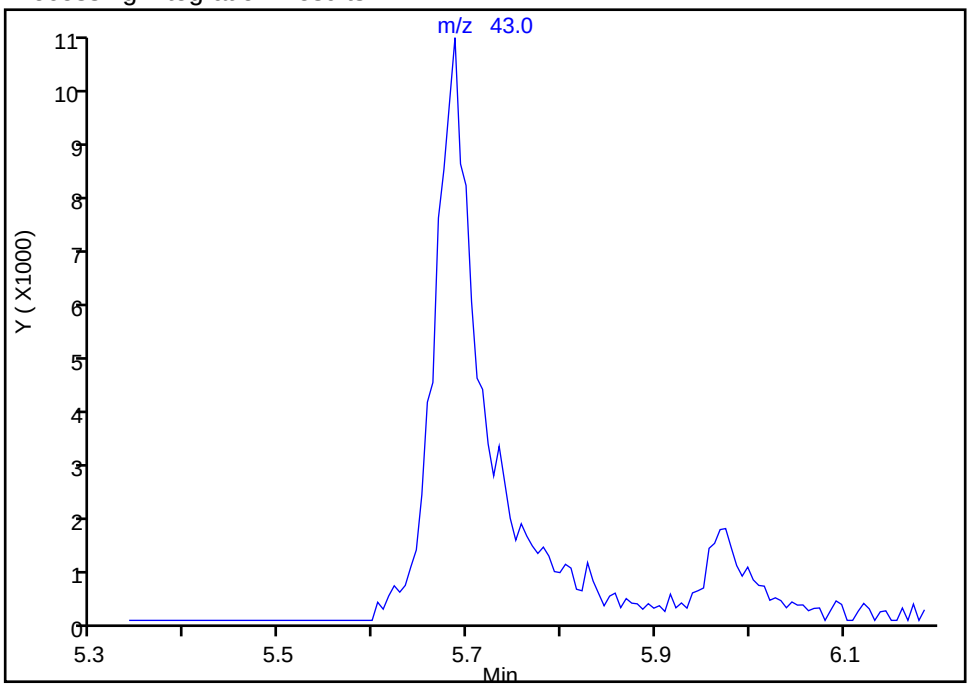
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040203.d				
Injection Date:	02-Apr-2020 16:04:30	Instrument ID:	CHHP10		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

43 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

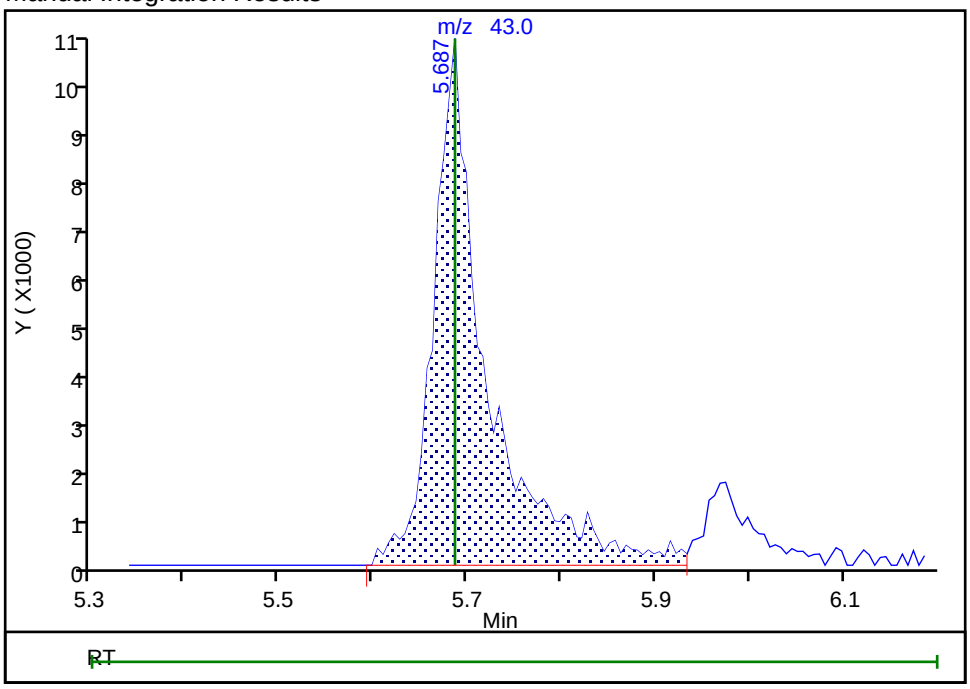
Not Detected
Expected RT: 5.69

Processing Integration Results



Manual Integration Results

RT: 5.69
Area: 41294
Amount: 93.964395
Amount Units: ng



Reviewer: journetp, 02-Apr-2020 16:41:32
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

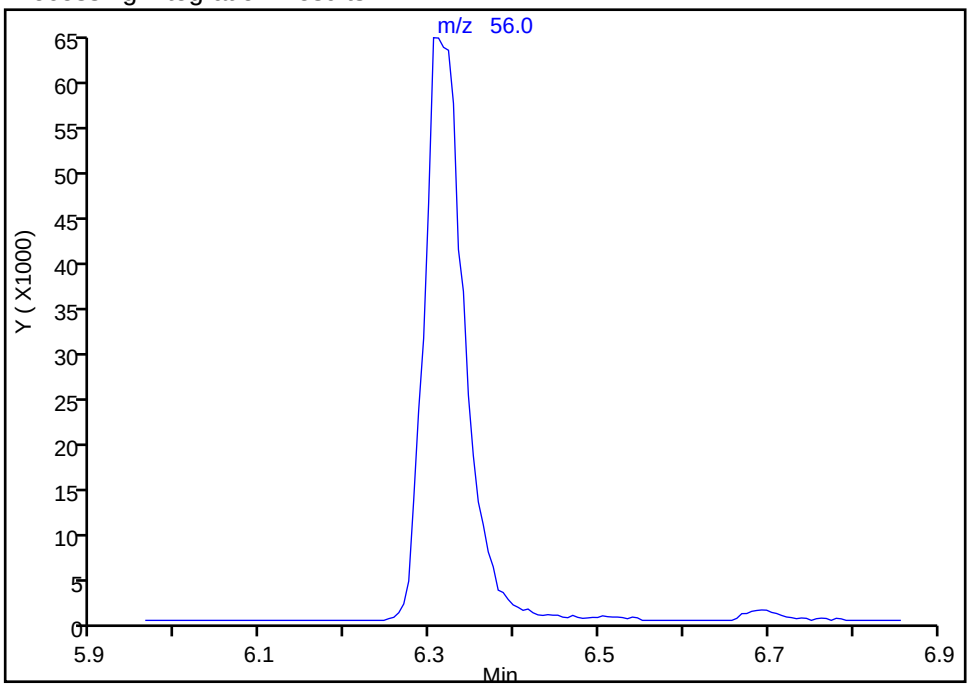
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040203.d				
Injection Date:	02-Apr-2020 16:04:30	Instrument ID:	CHHP10		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Cyclohexane, CAS: 110-82-7

Signal: 1

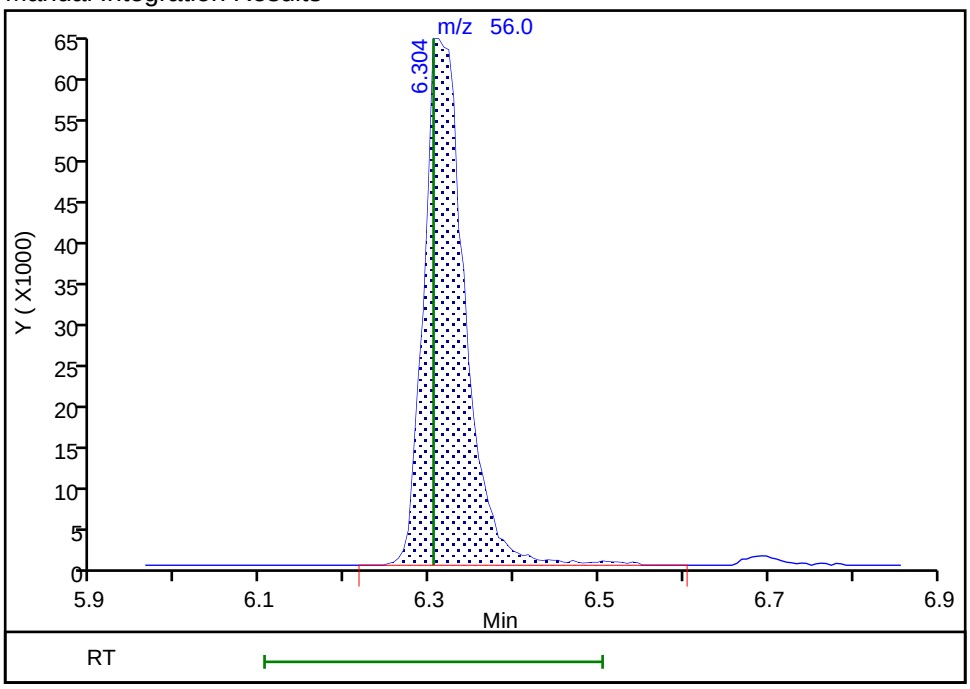
Not Detected
Expected RT: 6.30

Processing Integration Results



Manual Integration Results

RT: 6.30
Area: 217433
Amount: 51.644223
Amount Units: ng



Reviewer: journetp, 02-Apr-2020 16:41:42
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030501A.d
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 05-Mar-2020 07:14:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 180-0031047-001
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 05-Mar-2020 15:20:22 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0339

First Level Reviewer: journetp Date: 05-Mar-2020 11:07:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	11.327	11.327	0.000	0	163482	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

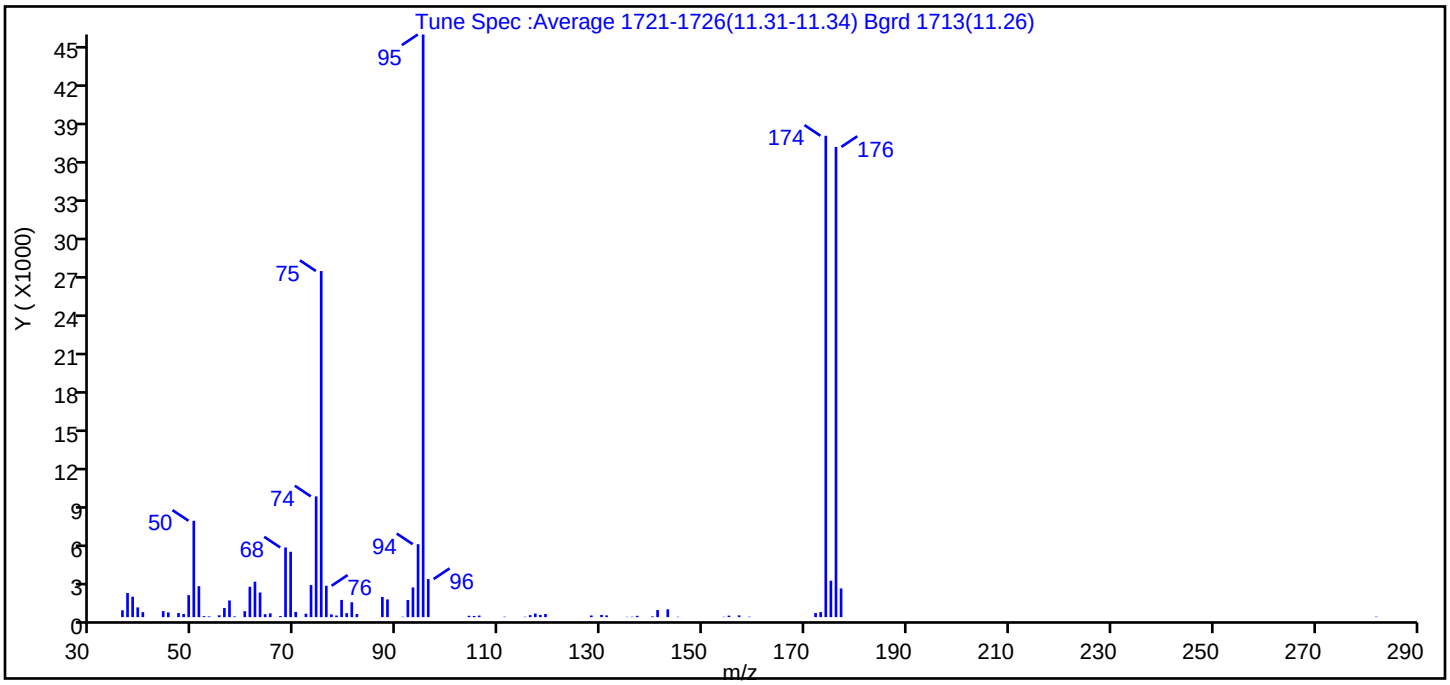
VOA BFB25_00007 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030501A.d
Injection Date: 05-Mar-2020 07:14:30 Instrument ID: CHHP10
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_CHHP10 Limit Group: VOA 8260C_D ICAL
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.5
75	30 to 60% of m/z 95	59.4
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.9 (1.1)
174	50 to 120% of m/z 95	82.6
175	5 to 9% of m/z 174	6.3 (7.6)
176	Greater than 95% but less than 101% of m/z 174	80.7 (97.7)
177	5 to 9% of m/z 176	4.9 (6.1)

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030501A.d\MSVOA_CHHP10.rslt\spectra
Injection Date: 05-Mar-2020 07:14:30
Spectrum: Tune Spec :Average 1721-1726(11.31-11.34) Bgrd 1713(11.26)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 77

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	536	62.00	2770	88.00	1385	136.00	31
37.00	1887	63.00	1924	91.00	32	137.00	104
38.00	1600	64.00	229	92.00	1343	140.00	58
39.00	761	65.00	295	93.00	2321	141.00	554
40.00	393	67.00	85	94.00	5699	143.00	612
44.00	471	68.00	5443	95.00	45520	145.00	29
45.00	369	69.00	5109	96.00	2975	154.00	26
47.00	322	70.00	410	104.00	108	155.00	119
48.00	244	72.00	270	105.00	94	157.00	138
49.00	1719	73.00	2506	106.00	123	159.00	34
50.00	7529	74.00	9435	111.00	33	172.00	321
51.00	2422	75.00	27040	115.00	31	173.00	396
52.00	77	76.00	2453	116.00	158	174.00	37608
53.00	56	77.00	214	117.00	281	175.00	2849
55.00	143	78.00	126	118.00	173	176.00	36736
56.00	711	79.00	1346	119.00	244	177.00	2243
57.00	1302	80.00	314	128.00	130	282.00	36
58.00	56	81.00	1164	130.00	175		
60.00	464	82.00	244	131.00	134		
61.00	2374	87.00	1578	135.00	25		

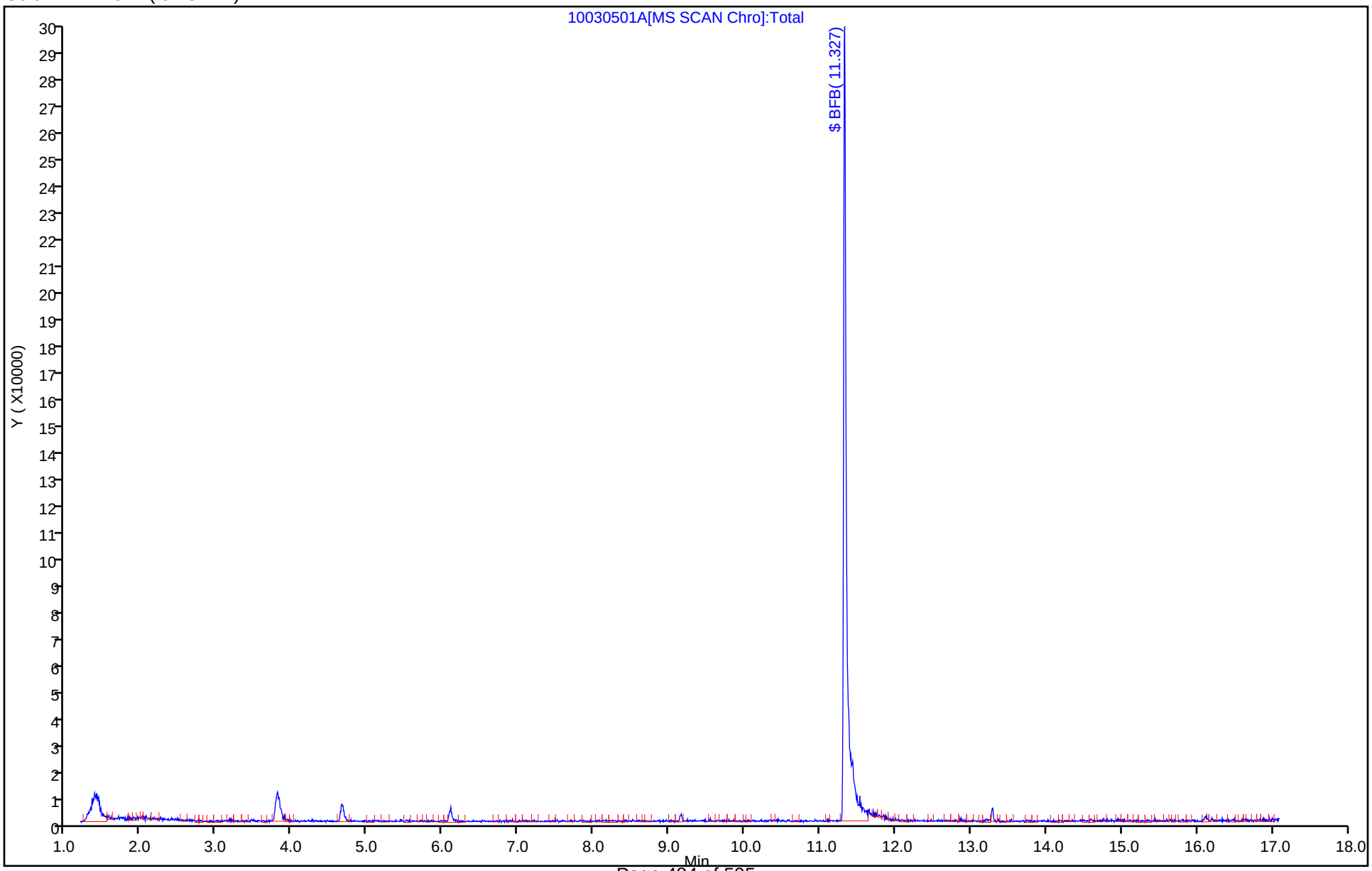
Report Date: 05-Mar-2020 15:20:23 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030501A.d

Injection Date:	05-Mar-2020 07:14:30	Instrument ID:	CHHP10	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_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033103.d
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 31-Mar-2020 18:00:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-003
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 18:30:49 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: journetp Date: 31-Mar-2020 21:52:50

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.957	3.957	0.000	0	122434	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	403016	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	87	79749	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	93	128988	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	93	113241	50.0	43.4	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	129977	50.0	43.3	
$	7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	496273	50.0	47.6	
$	8 4-Bromofluorobenzene (Surr	95	11.316	11.316	0.000	84	179847	50.0	49.9	
$	9 BFB	95	11.316	11.316	0.000	0	179847	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

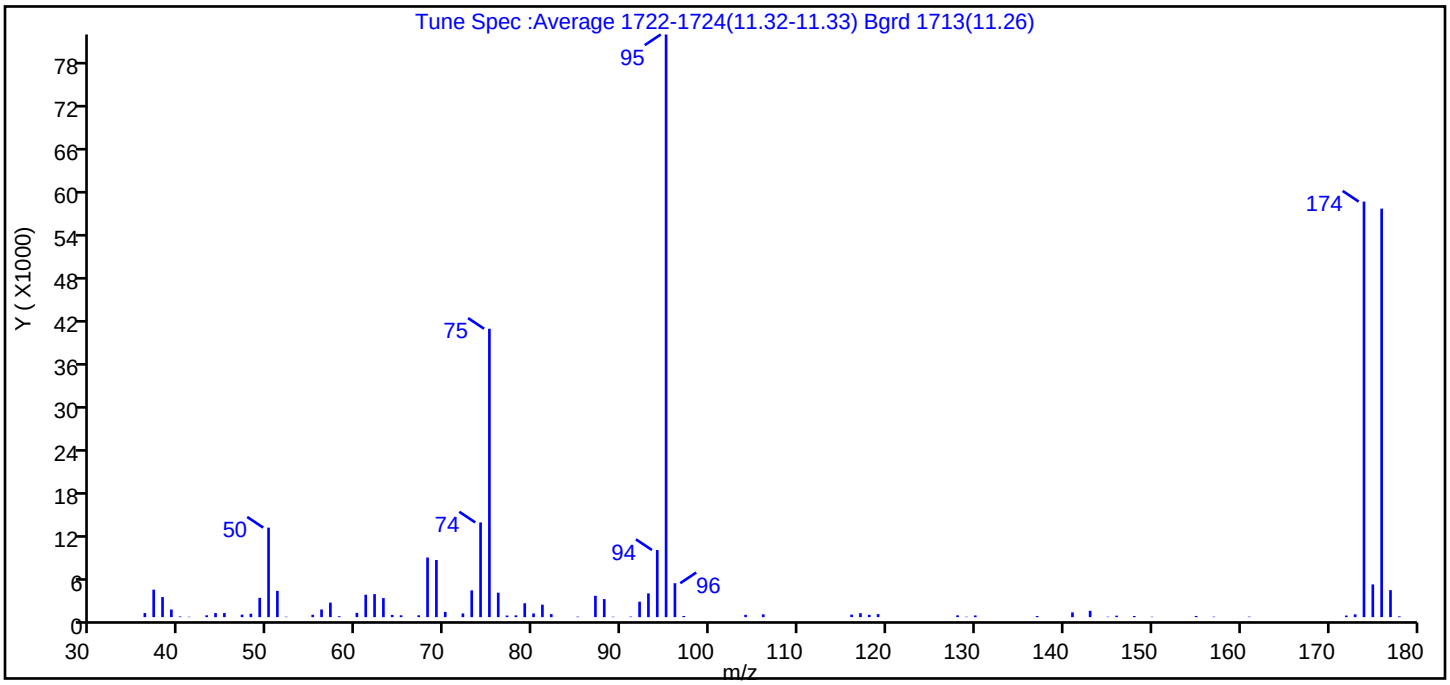
VOABFB25_00121	Amount Added:	1.00	Units: uL	
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

MS Tune Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033103.d				
Injection Date:	31-Mar-2020 18:00:30	Instrument ID:	CHHP10		
Lims ID:	BFB				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Tune Method:	BFB Method 8260				

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.4
75	30 to 60% of m/z 95	49.5
96	5 to 9% of m/z 95	5.8
173	Less than 2% of m/z 174	0.5 (0.7)
174	50 to 120% of m/z 95	71.3
175	5 to 9% of m/z 174	5.6 (7.9)
176	Greater than 95% but less than 101% of m/z 174	70.1 (98.3)
177	5 to 9% of m/z 176	4.6 (6.6)

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033103.d\MSVOA_CHHP10.rslt\spectra.
Injection Date: 31-Mar-2020 18:00:30
Spectrum: Tune Spec :Average 1722-1724(11.32-11.33) Bgrd 1713(11.26)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 77

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	568	61.00	3119	85.00	69	137.00	161
37.00	3828	62.00	3205	87.00	2973	141.00	662
38.00	2798	63.00	2656	88.00	2513	143.00	880
39.00	1066	64.00	304	89.00	59	145.00	59
40.00	92	65.00	258	91.00	75	146.00	206
41.00	57	67.00	259	92.00	2150	148.00	161
43.00	258	68.00	8302	93.00	3309	150.00	55
44.00	566	69.00	7958	94.00	9348	155.00	166
45.00	570	70.00	730	95.00	81120	157.00	65
47.00	344	72.00	513	96.00	4725	161.00	69
48.00	476	73.00	3724	97.00	162	172.00	224
49.00	2688	74.00	13189	104.00	322	173.00	389
50.00	12462	75.00	40152	106.00	388	174.00	57856
51.00	3661	76.00	3401	116.00	355	175.00	4557
52.00	60	77.00	229	117.00	549	176.00	56872
55.00	327	78.00	251	118.00	321	177.00	3759
56.00	1065	79.00	1932	119.00	421	178.00	109
57.00	2024	80.00	511	128.00	252		
58.00	125	81.00	1735	129.00	59		
60.00	596	82.00	421	130.00	236		

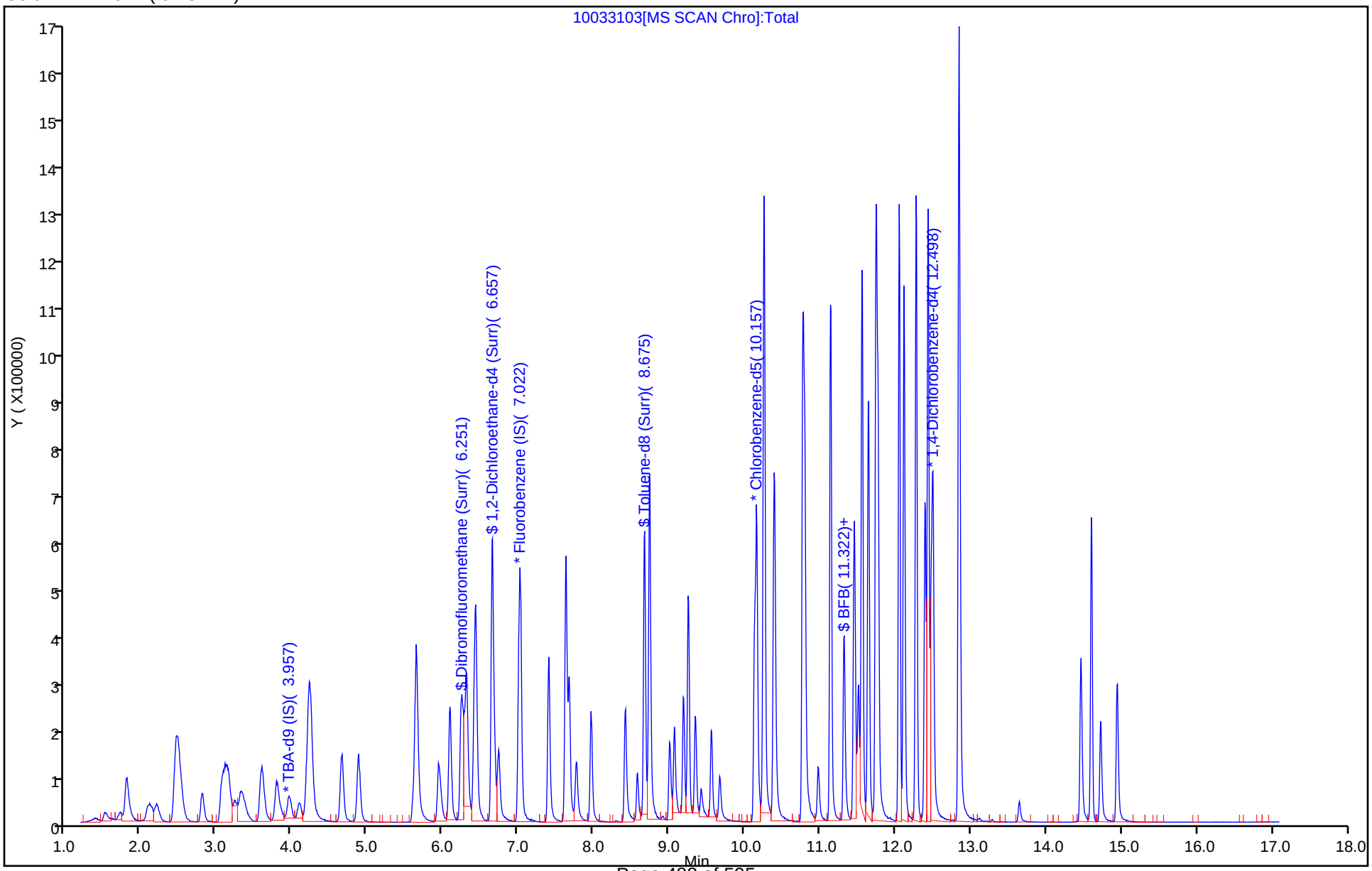
Report Date: 01-Apr-2020 18:30:51 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033103.d

Injection Date:	31-Mar-2020 18:00:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040101A.d
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 01-Apr-2020 18:24:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-001
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 19:55:28 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: journetp Date: 01-Apr-2020 18:46:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	11.339	11.339	0.000	0	67119	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

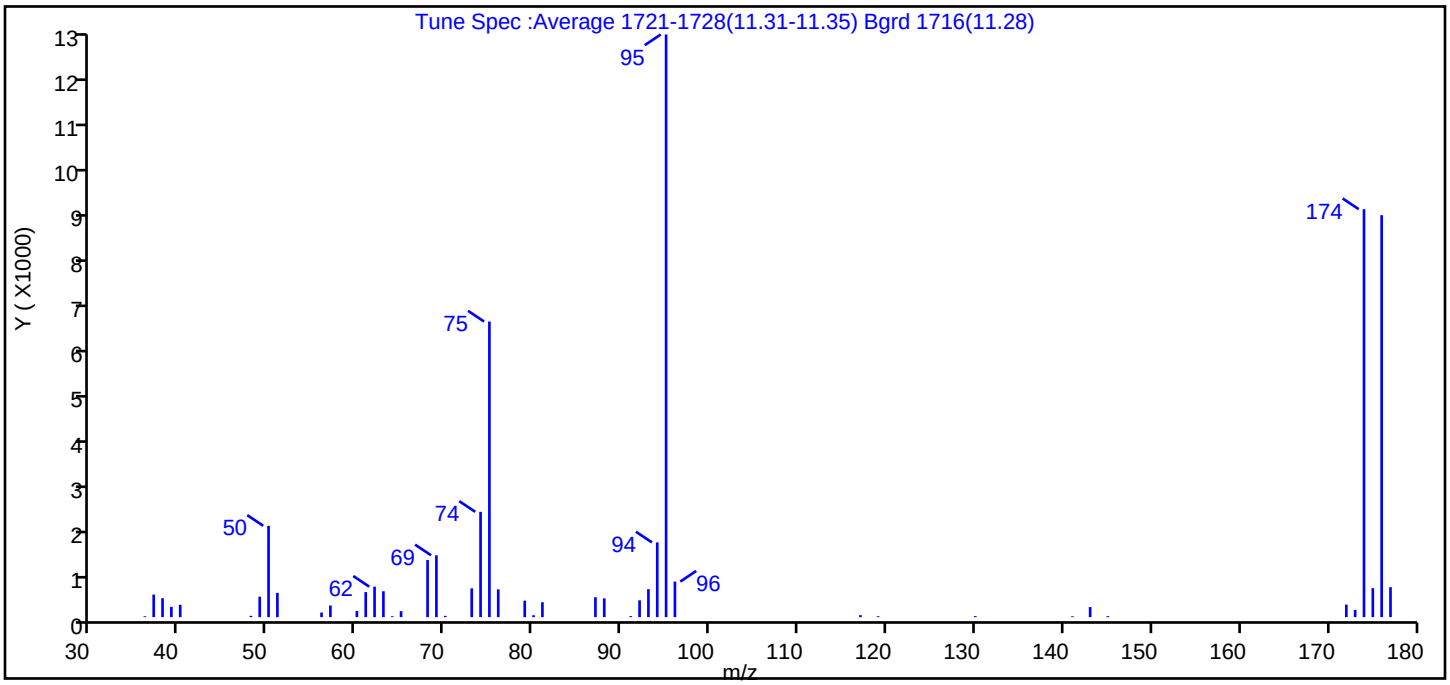
VOABFB25_00121 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040101A.d				
Injection Date:	01-Apr-2020 18:24:30	Instrument ID:	CHHP10		
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_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Tune Method:	BFB Method 8260				

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.7
75	30 to 60% of m/z 95	50.7
96	5 to 9% of m/z 95	6.1
173	Less than 2% of m/z 174	1.2 (1.8)
174	50 to 120% of m/z 95	70.0
175	5 to 9% of m/z 174	5.0 (7.1)
176	Greater than 95% but less than 101% of m/z 174	69.0 (98.5)
177	5 to 9% of m/z 176	5.1 (7.5)

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040101A.d\MSVOA_CHHP10.rslt\spectra
Injection Date: 01-Apr-2020 18:24:30
Spectrum: Tune Spec :Average 1721-1728(11.31-11.35) Bgrd 1716(11.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 47

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	19	61.00	535	79.00	352	119.00	19
37.00	482	62.00	650	80.00	40	130.00	22
38.00	404	63.00	552	81.00	318	141.00	18
39.00	219	64.00	19	87.00	425	143.00	215
40.00	263	65.00	128	88.00	400	145.00	21
48.00	28	68.00	1218	91.00	22	172.00	267
49.00	437	69.00	1319	92.00	359	173.00	155
50.00	1948	70.00	28	93.00	596	174.00	8701
51.00	517	73.00	614	94.00	1594	175.00	618
56.00	98	74.00	2246	95.00	12426	176.00	8573
57.00	248	75.00	6304	96.00	758	177.00	639
60.00	131	76.00	593	117.00	43		

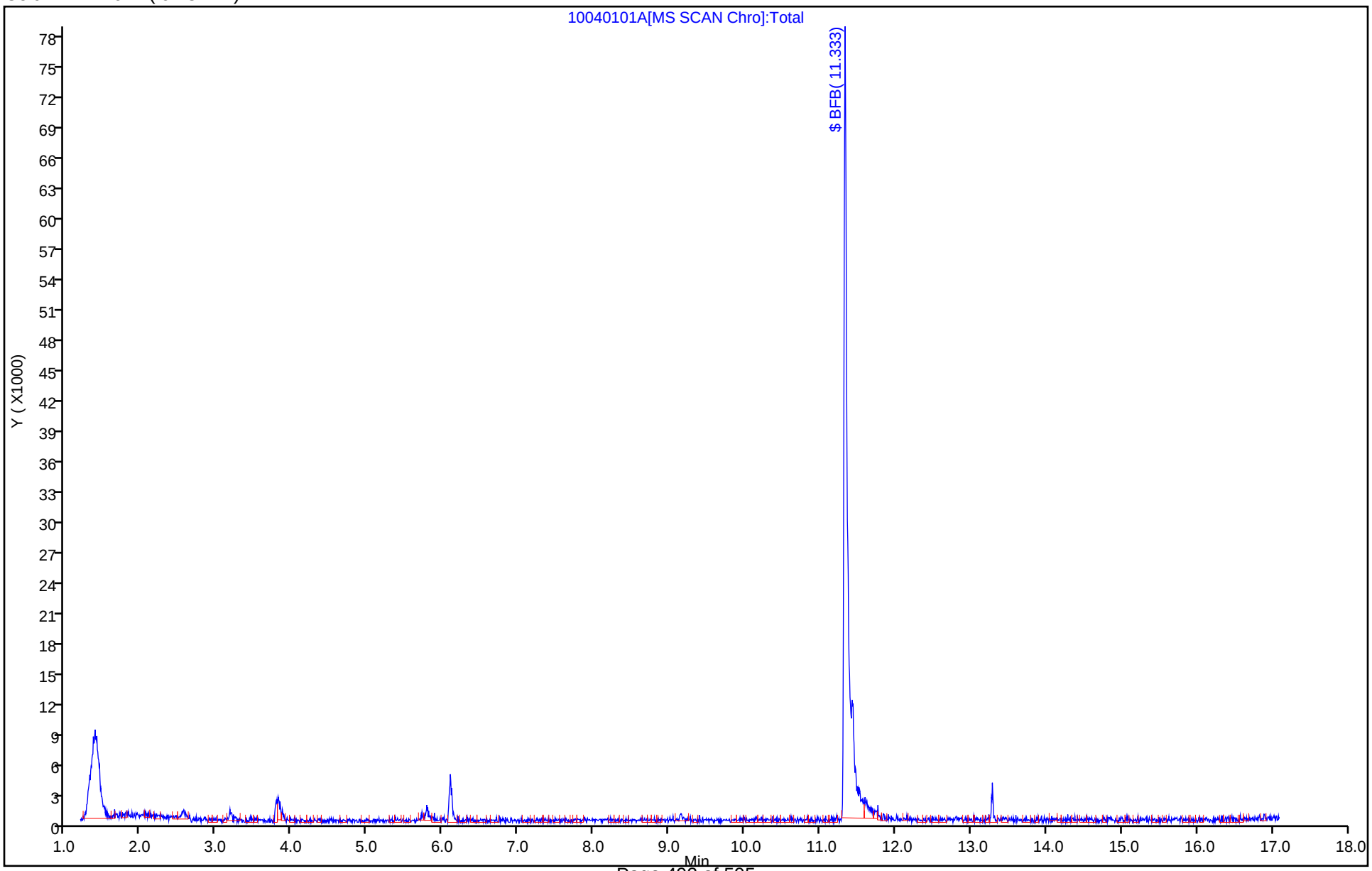
Report Date: 02-Apr-2020 19:55:28 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040101A.d

Injection Date:	01-Apr-2020 18:24:30	Instrument ID:	CHHP10	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_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040202.d
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 02-Apr-2020 15:36:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 180-0031431-002
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 06-Apr-2020 12:19:10 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: krisornc Date: 06-Apr-2020 12:19:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	11.322	11.322	0.000	0	193591	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

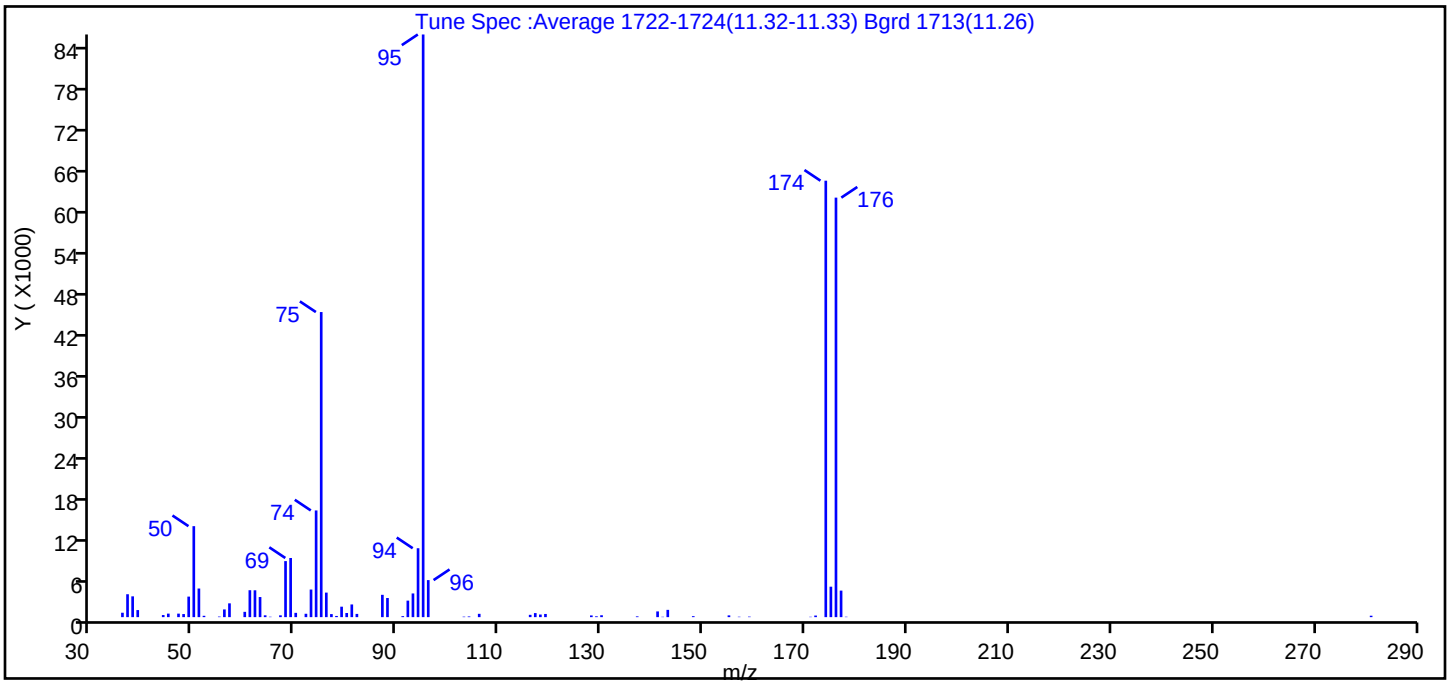
VOABFB25_00121 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040202.d
Injection Date: 02-Apr-2020 15:36:30 Instrument ID: CHHP10
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.6
75	30 to 60% of m/z 95	52.4
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	74.9
175	5 to 9% of m/z 174	5.2 (7.0)
176	Greater than 95% but less than 101% of m/z 174	72.0 (96.1)
177	5 to 9% of m/z 176	4.6 (6.3)

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040202.d\MSVOA_CHHP10.rslt\spectra.
Injection Date: 02-Apr-2020 15:36:30
Spectrum: Tune Spec :Average 1722-1724(11.32-11.33) Bgrd 1713(11.26)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 70

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	651	63.00	2964	87.00	3291	137.00	114
37.00	3378	64.00	271	88.00	2822	141.00	844
38.00	3067	65.00	59	91.00	147	142.00	54
39.00	1043	67.00	266	92.00	2435	143.00	1073
44.00	310	68.00	8262	93.00	3494	148.00	143
45.00	519	69.00	8722	94.00	10161	155.00	260
47.00	518	70.00	633	95.00	85912	157.00	62
48.00	456	72.00	497	96.00	5461	159.00	78
49.00	3028	73.00	4071	103.00	71	171.00	52
50.00	13415	74.00	15733	104.00	100	172.00	235
51.00	4220	75.00	44984	106.00	490	174.00	64352
52.00	198	76.00	3618	116.00	341	175.00	4489
55.00	85	77.00	449	117.00	598	176.00	61856
56.00	1138	78.00	175	118.00	385	177.00	3913
57.00	2035	79.00	1542	119.00	469	178.00	59
60.00	782	80.00	609	128.00	251	281.00	210
61.00	3970	81.00	1872	129.00	123		
62.00	3960	82.00	477	130.00	279		

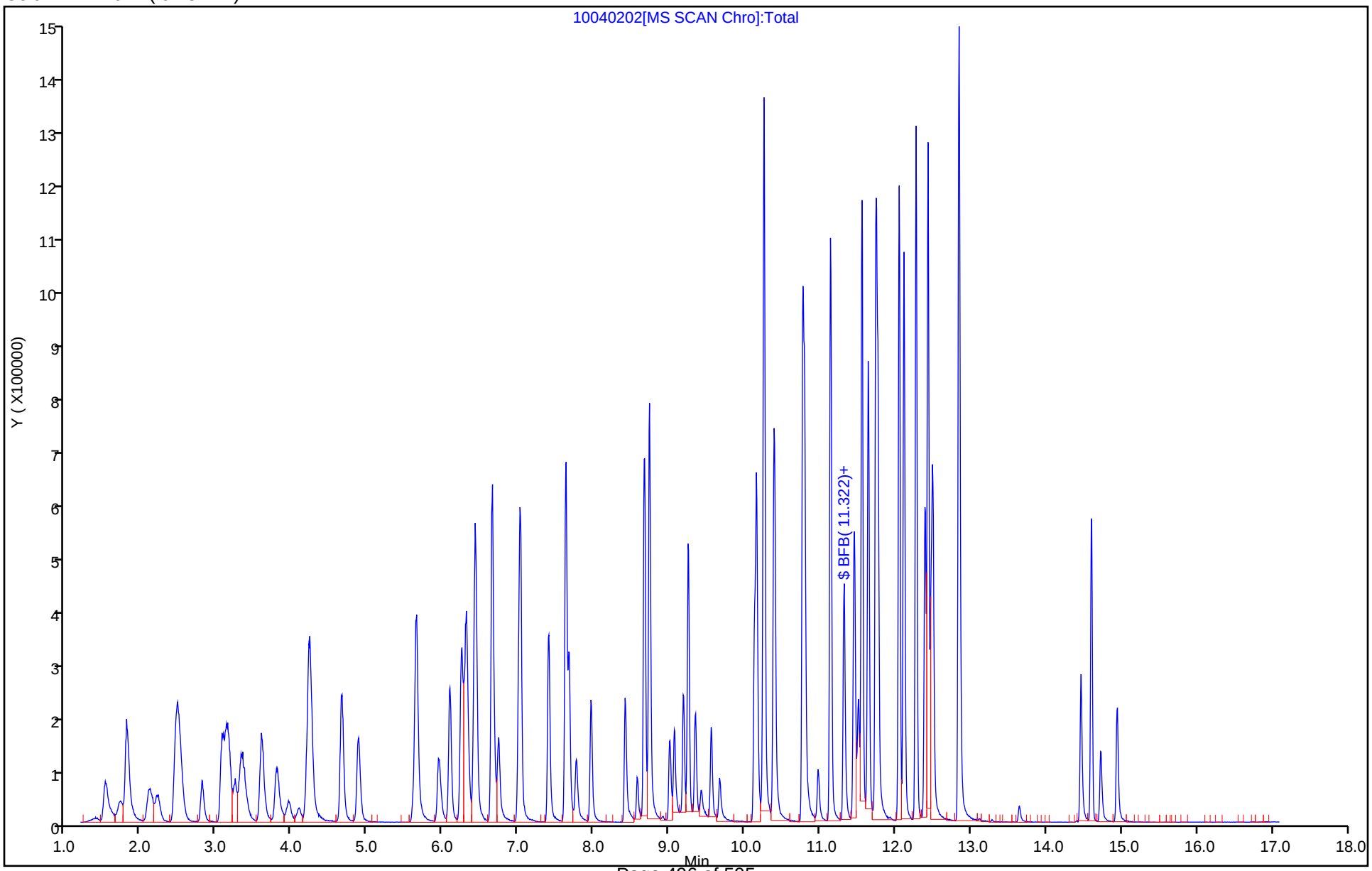
Report Date: 06-Apr-2020 12:19:14 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040202.d

Injection Date:	02-Apr-2020 15:36:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-311669/7

Matrix: Water Lab File ID: 10033107.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2020 20:13

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND		5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-311669/7

Matrix: Water Lab File ID: 10033107.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2020 20:13

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	77		62-146
2037-26-5	Toluene-d8 (Surr)	108		75-120
460-00-4	4-Bromofluorobenzene (Surr)	89		64-120
1868-53-7	Dibromofluoromethane (Surr)	79		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033107.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 31-Mar-2020 20:13:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-007
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 31-Mar-2020 23:21:14 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.963	3.940	0.023	0	117816	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.016	7.010	0.006	99	576312	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	90	93522	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	97	109132	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	92	147089	50.0	39.4	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.657	0.000	0	166146	50.0	38.7	
$	7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	661364	50.0	54.0	
$	8 4-Bromofluorobenzene (Surr	95	11.322	11.321	0.001	84	189047	50.0	44.7	
	37 Isopropyl alcohol	45	3.963	3.987	-0.024	26	4570		NC	
	45 Ethyl acetate	43	5.710	5.598	0.112	1	152		NC	
	48 Tetrahydrofuran	42	5.604	5.969	-0.365	40	1763		5.06	
	58 Tert-amyl methyl ether	73	7.004	7.075	-0.071	37	8142		NC	
	57 Isooctane	57	7.004	7.145	-0.141	32	16153		NC	
	72 4-Methyl-2-pentanone (MIBK	43	8.669	8.580	0.089	33	2280		9.79	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

VOA8260INT_00105 Amount Added: 2.00 Units: uL Run Reagent
VOA8260SURR_00105 Amount Added: 2.00 Units: uL Run Reagent

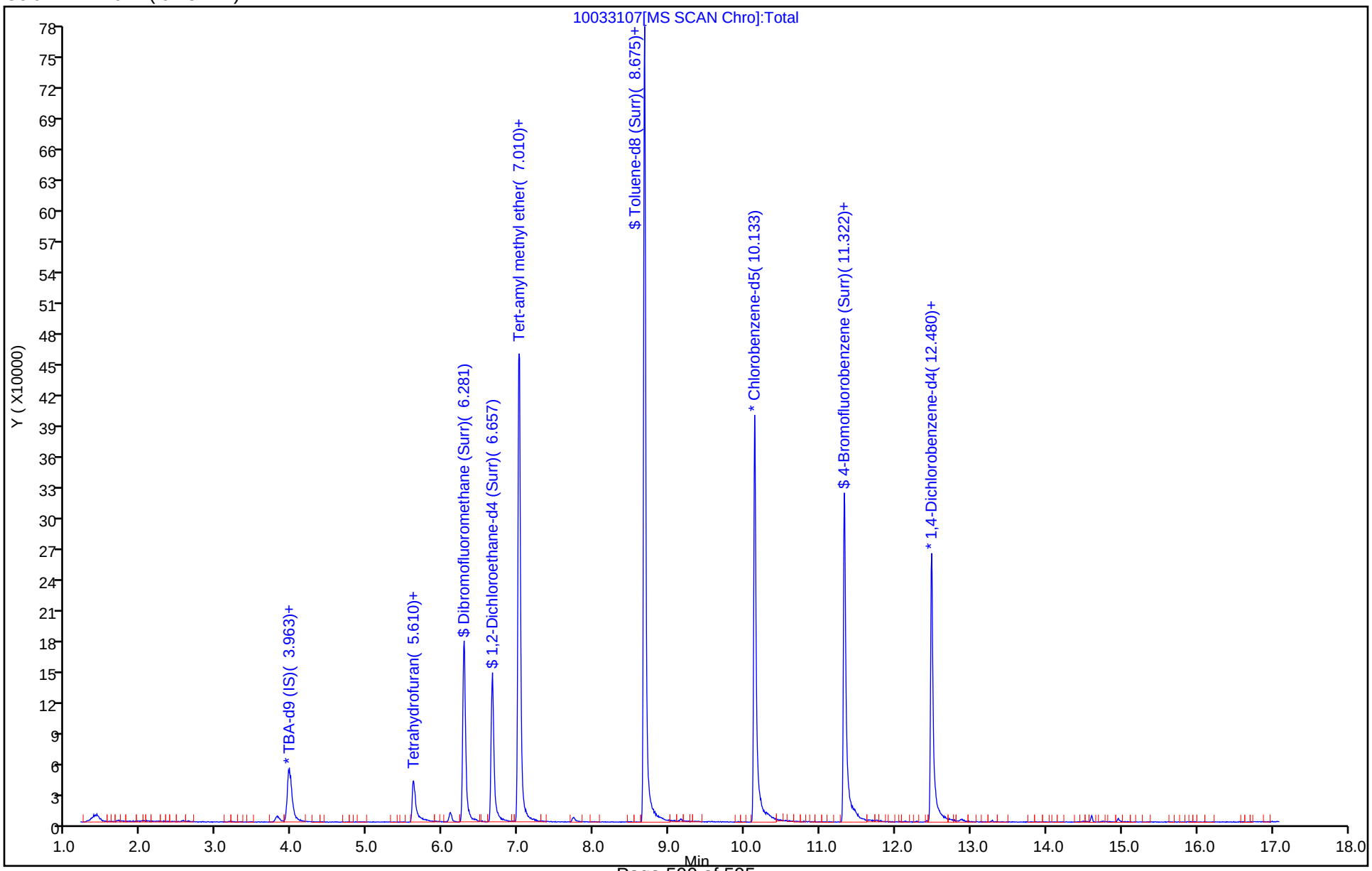
Report Date: 31-Mar-2020 23:54:50 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033107.d

Injection Date:	31-Mar-2020 20:13:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	mb			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh

Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033107.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 31-Mar-2020 20:13:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-007
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 31-Mar-2020 23:21:14 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	39.4	78.77
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	38.7	77.47
$ 7 Toluene-d8 (Surr)	50.0	54.0	108.08
$ 8 4-Bromofluorobenzene (Surr)	50.0	44.7	89.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-311793/5

Matrix: Water Lab File ID: 10040105.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 20:31

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND		5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-311793/5

Matrix: Water Lab File ID: 10040105.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 20:31

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	74		62-146
2037-26-5	Toluene-d8 (Surr)	102		75-120
460-00-4	4-Bromofluorobenzene (Surr)	99		64-120
1868-53-7	Dibromofluoromethane (Surr)	77		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040105.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 01-Apr-2020 20:31:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-005
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:01:16 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.957	3.951	0.006	0	147986	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	596686	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	89	94367	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	97	112174	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.281	6.275	0.006	93	149229	50.0	38.6	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	163723	50.0	36.9	
$	7 Toluene-d8 (Surr)	98	8.669	8.675	-0.005	93	630107	50.0	51.0	
$	8 4-Bromofluorobenzene (Surr	95	11.322	11.321	0.001	84	211471	50.0	49.6	
	37 Isopropyl alcohol	45	3.963	3.987	-0.024	27	5294		NC	
	19 Acrolein	56	5.598	4.646	0.952	24	1057		NC	
	45 Ethyl acetate	43	5.628	5.598	0.030	32	473		NC	
	48 Tetrahydrofuran	42	5.616	5.969	-0.353	34	2323		6.44	
	58 Tert-amyl methyl ether	73	7.010	7.075	-0.065	37	7900		NC	
	57 Isooctane	57	7.010	7.145	-0.135	35	15553		NC	
	72 4-Methyl-2-pentanone (MIBK	43	8.669	8.580	0.089	33	2027		9.56	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

VOA8260INT_00105	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added: 2.00	Units: uL	Run Reagent

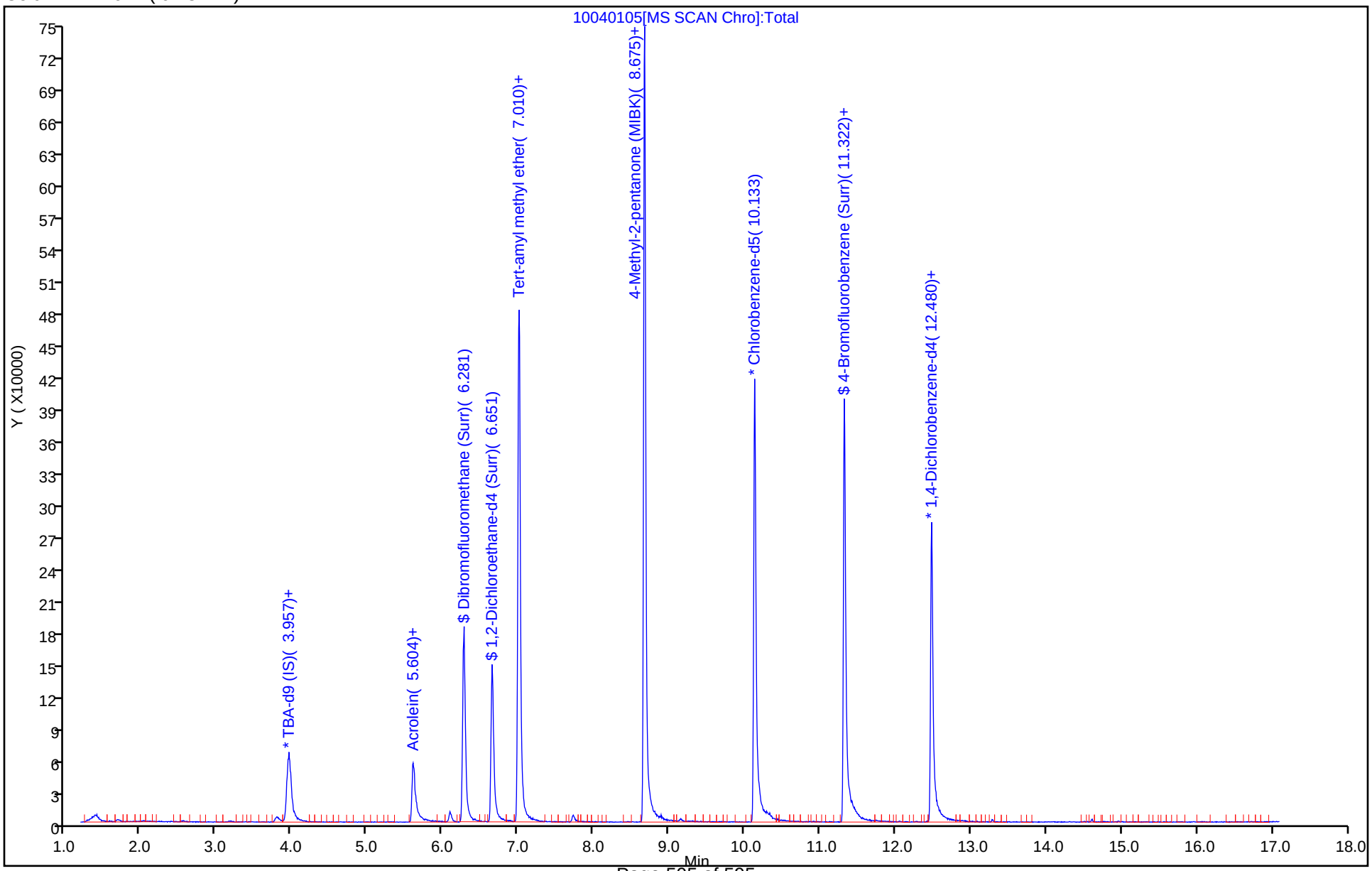
Report Date: 02-Apr-2020 22:01:17 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040105.d

Injection Date:	01-Apr-2020 20:31:30	Instrument ID:	CHHP10	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_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040105.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 01-Apr-2020 20:31:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-005
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:01:16 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	38.6	77.19
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.9	73.73
$ 7 Toluene-d8 (Surr)	50.0	51.0	102.05
$ 8 4-Bromofluorobenzene (Surr)	50.0	49.6	99.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-311900/6

Matrix: Water Lab File ID: 10040206.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 17:25

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311900 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND		5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-311900/6

Matrix: Water Lab File ID: 10040206.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 17:25

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311900 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	74		62-146
2037-26-5	Toluene-d8 (Surr)	106		75-120
460-00-4	4-Bromofluorobenzene (Surr)	82		64-120
1868-53-7	Dibromofluoromethane (Surr)	81		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040206.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 02-Apr-2020 17:25:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031431-006
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 03-Apr-2020 00:50:30 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: journetp Date: 02-Apr-2020 21:22:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.963	3.963	0.000	0	105300	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	569942	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.139	10.133	0.006	89	89639	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.468	0.012	97	101945	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.281	-0.006	92	149013	50.0	40.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.657	-0.006	0	156443	50.0	36.9	
$ 7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	93	621970	50.0	53.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.327	11.316	0.011	83	166016	50.0	41.0	
37 Isopropyl alcohol	45	3.975	3.987	-0.012	26	4105		NC	
45 Ethyl acetate	43	5.610	5.598	0.012	31	494		NC	
48 Tetrahydrofuran	42	5.604	5.975	-0.371	33	1196		3.47	
58 Tert-amyl methyl ether	73	7.010	7.075	-0.065	37	7917		NC	
57 Isooctane	57	7.010	7.145	-0.135	32	15252		NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

VOA8260INT_00105 Amount Added: 2.00 Units: uL Run Reagent
VOA8260SURR_00105 Amount Added: 2.00 Units: uL Run Reagent

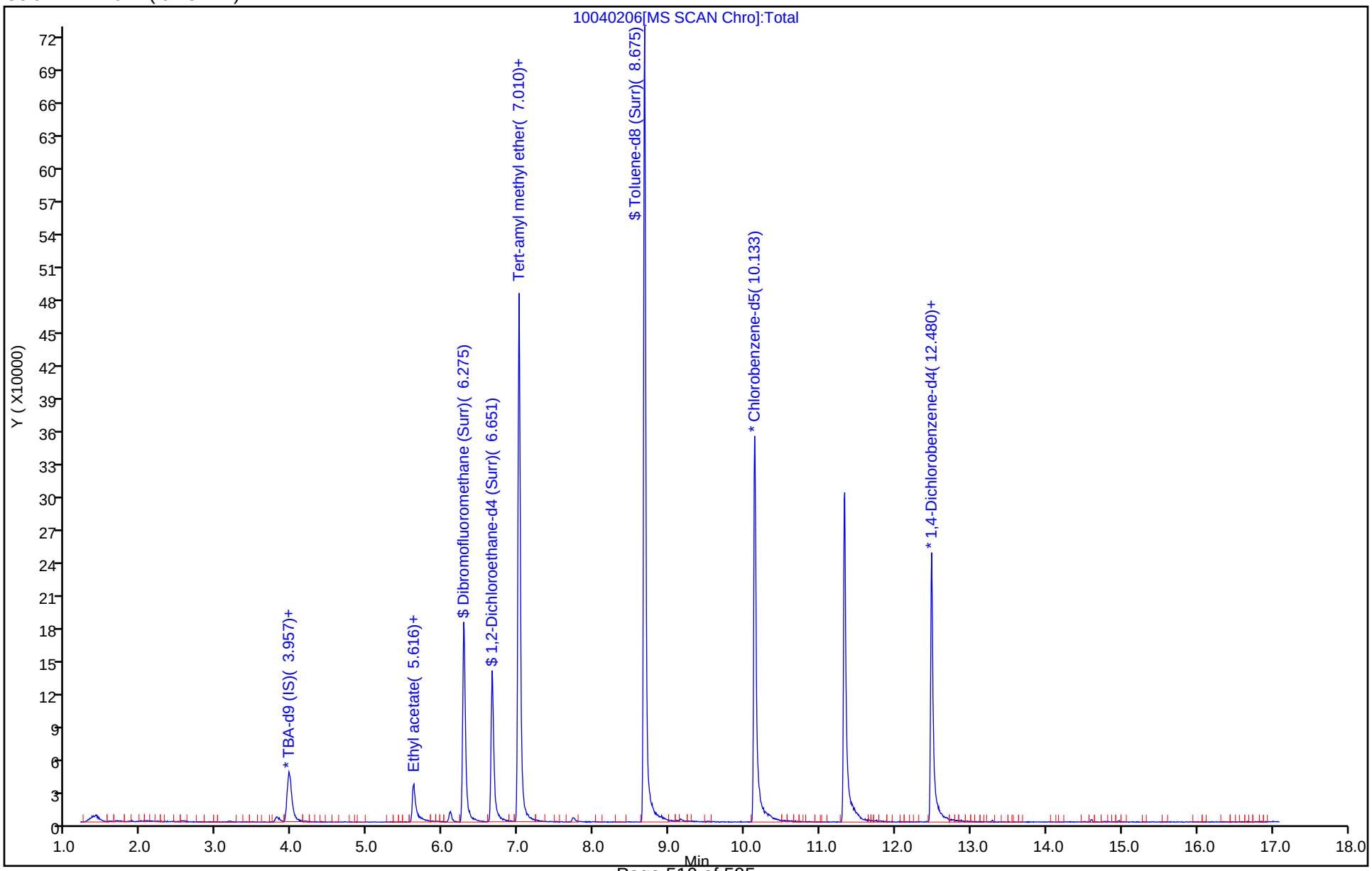
Report Date: 03-Apr-2020 01:00:01 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040206.d

Injection Date:	02-Apr-2020 17:25:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040206.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 02-Apr-2020 17:25:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031431-006
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 03-Apr-2020 00:50:30 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: journetp Date: 02-Apr-2020 21:22:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	40.3	80.70
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.9	73.76
$ 7 Toluene-d8 (Surr)	50.0	53.0	106.04
$ 8 4-Bromofluorobenzene (Surr)	50.0	41.0	81.92

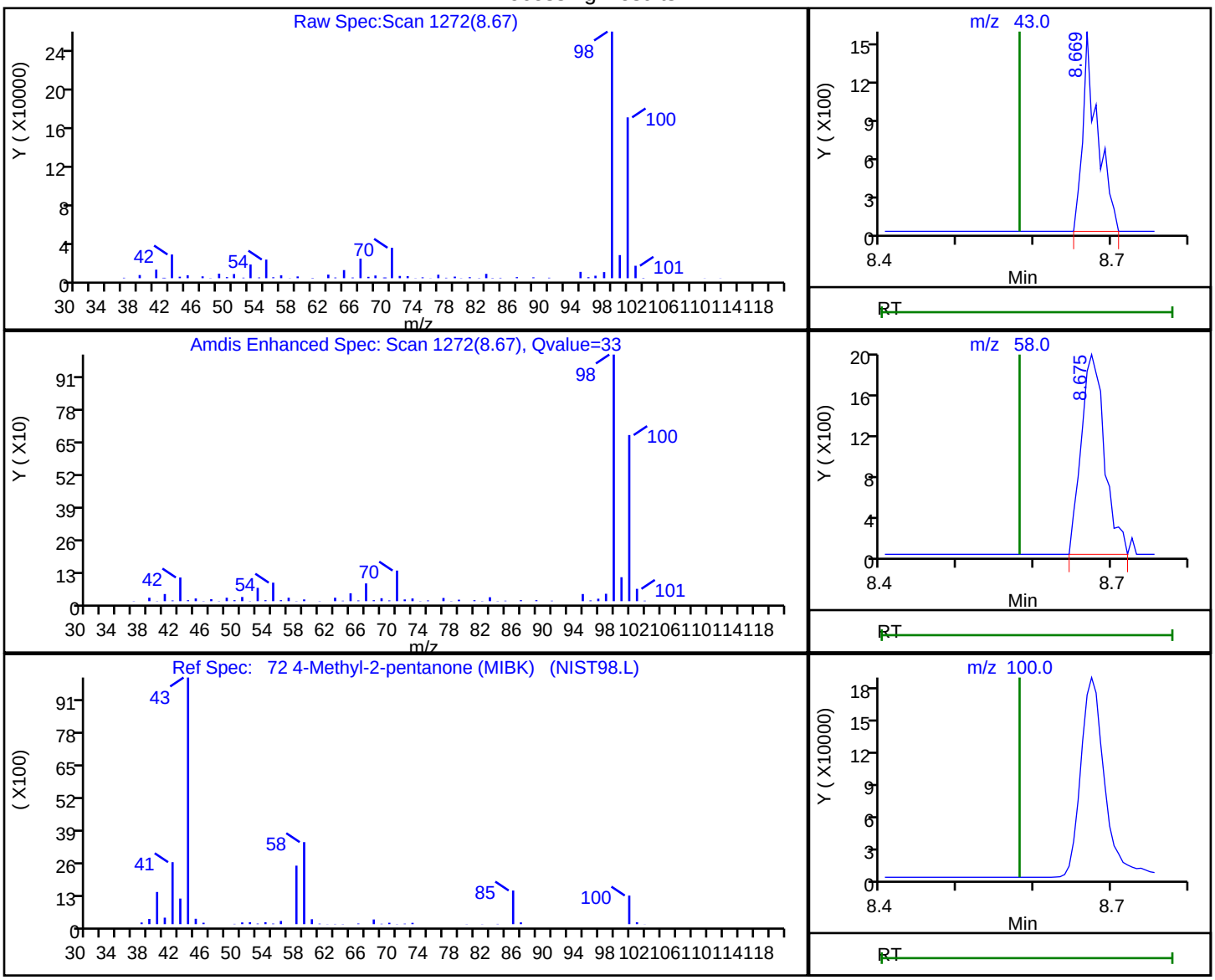
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040206.d				
Injection Date:	02-Apr-2020 17:25:30	Instrument ID:	CHHP10		
Lims ID:	mb				
Client ID:					
Operator ID:	034635	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.67	43.00	2138	9.747863
8.67	58.00	4222	
8.67	100.00	417710	

Reviewer: journetp, 02-Apr-2020 21:22:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

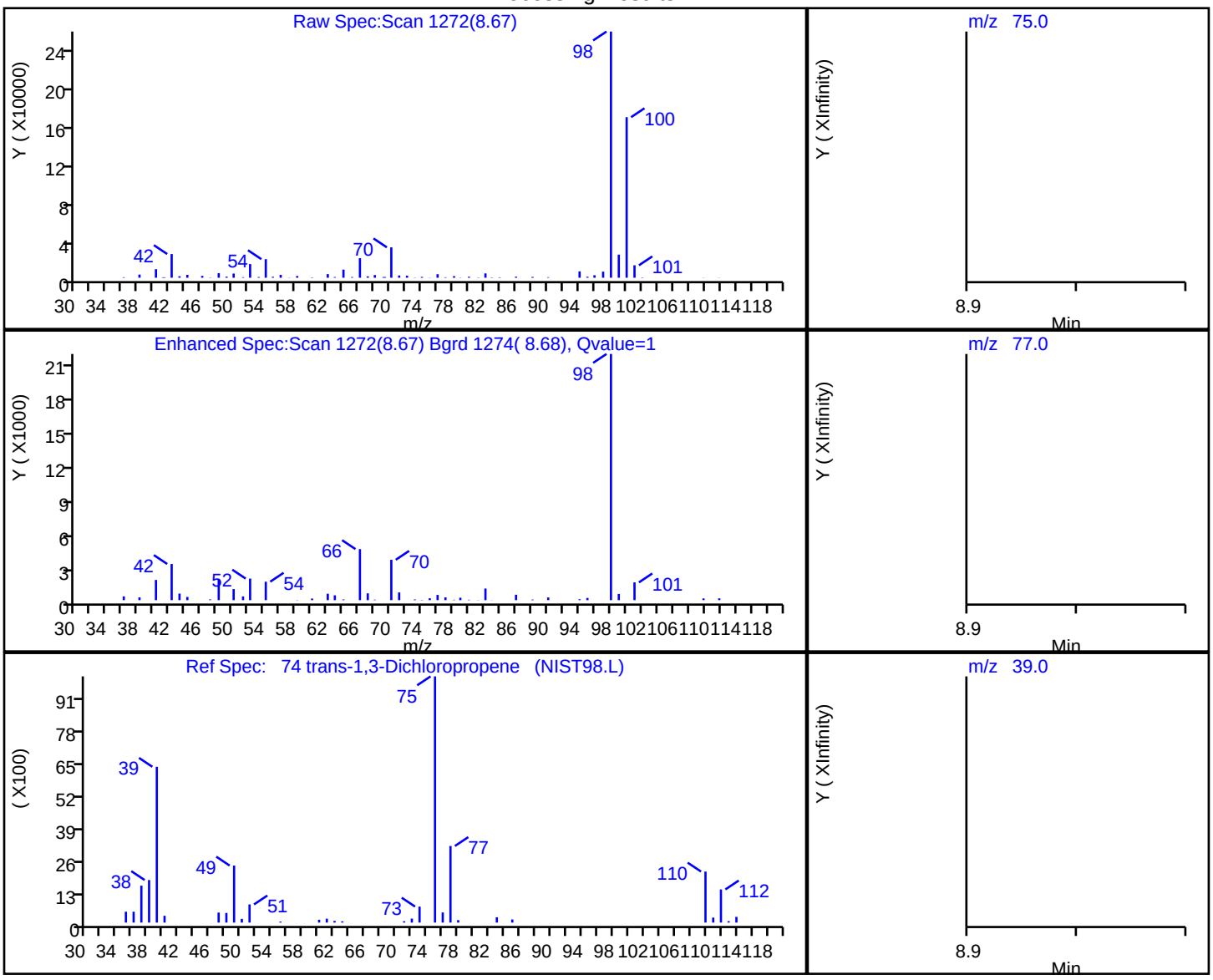
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040206.d				
Injection Date:	02-Apr-2020 17:25:30	Instrument ID:	CHHP10		
Lims ID:	mb				
Client ID:					
Operator ID:	034635	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

74 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
8.67	75.00	113	3.641747
8.67	77.00	262	
8.67	39.00	208	

Reviewer: journetp, 02-Apr-2020 21:22:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-311669/5

Matrix: Water Lab File ID: 10033105.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2020 19:08

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	13.2		1.0	0.90
75-01-4	Vinyl chloride	11.9		1.0	0.40
74-83-9	Bromomethane	8.35		1.0	0.89
75-00-3	Chloroethane	9.65		1.0	0.90
75-35-4	1,1-Dichloroethene	10.8		1.0	0.55
67-64-1	Acetone	15.1		5.0	3.4
75-15-0	Carbon disulfide	11.6		1.0	0.88
75-09-2	Methylene Chloride	10.1		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	9.56		1.0	0.67
1634-04-4	Methyl tert-butyl ether	8.38		1.0	0.59
75-34-3	1,1-Dichloroethane	10.4		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	10.5		1.0	0.71
74-97-5	Bromochloromethane	8.05		1.0	0.63
78-93-3	2-Butanone (MEK)	13.2		5.0	2.6
67-66-3	Chloroform	10.2		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.54		1.0	0.60
56-23-5	Carbon tetrachloride	9.03		1.0	0.88
71-43-2	Benzene	10.5		1.0	0.60
107-06-2	1,2-Dichloroethane	8.46		1.0	0.57
79-01-6	Trichloroethene	8.77		1.0	0.69
78-87-5	1,2-Dichloropropane	11.1		1.0	0.66
75-27-4	Bromodichloromethane	9.67		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	9.55		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	9.27		5.0	3.1
108-88-3	Toluene	11.1		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	8.98		1.0	0.58
79-00-5	1,1,2-Trichloroethane	10.6		1.0	0.45
127-18-4	Tetrachloroethene	9.55		1.0	0.47
591-78-6	2-Hexanone	13.0		5.0	3.3
124-48-1	Dibromochloromethane	10.2		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	10.1		1.0	0.50
108-90-7	Chlorobenzene	10.6		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	10.2		1.0	0.57
100-41-4	Ethylbenzene	11.2		1.0	0.51
1330-20-7	Xylenes, Total	21.6		2.0	0.89
100-42-5	Styrene	10.6		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-311669/5

Matrix: Water Lab File ID: 10033105.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2020 19:08

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	8.96		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	11.1		1.0	0.60
107-13-1	Acrylonitrile	80.5		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	74		62-146
2037-26-5	Toluene-d8 (Surr)	98		75-120
460-00-4	4-Bromofluorobenzene (Surr)	96		64-120
1868-53-7	Dibromofluoromethane (Surr)	84		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033105.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 31-Mar-2020 19:08:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-005
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 00:18:14 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: journetp Date: 01-Apr-2020 00:07:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.957	3.957	0.000	0	59246	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.004	0.006	98	403780	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	87	79699	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	95	119726	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.269	6.281	-0.012	93	109257	50.0	41.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	110823	50.0	36.9	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	511170	50.0	49.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.316	0.006	83	173467	50.0	48.1	
10 Dichlorodifluoromethane	85	1.528	1.534	-0.006	99	224783	50.0	86.9	
11 Chloromethane	50	1.722	1.740	-0.018	98	116028	50.0	65.9	
13 Butadiene	39	1.799	1.828	-0.029	90	140214	50.0	58.0	
12 Vinyl chloride	62	1.828	1.840	-0.012	96	166364	50.0	59.6	
14 Bromomethane	94	2.099	2.134	-0.035	91	130777	50.0	41.7	
15 Chloroethane	64	2.210	2.251	-0.041	98	111155	50.0	48.3	
17 Dichlorofluoromethane	67	2.463	2.493	-0.030	96	313529	50.0	44.9	
16 Trichlorofluoromethane	101	2.475	2.504	-0.029	96	345946	50.0	43.0	
18 Ethyl ether	59	2.804	2.822	-0.018	84	68067	50.0	45.3	
20 1,1-Dichloroethene	96	3.075	3.081	-0.006	98	139549	50.0	54.2	
21 1,1,2-Trichloro-1,2,2-trif	101	3.128	3.169	-0.041	95	150873	50.0	48.4	
22 Acetone	43	3.175	3.175	0.000	62	34869	100.0	75.6	
23 Iodomethane	142	3.251	3.257	-0.006	98	183455	50.0	42.8	
24 Carbon disulfide	76	3.334	3.363	-0.029	98	428288	50.0	57.8	a
26 3-Chloro-1-propene	76	3.593	3.604	-0.011	79	86628	50.0	52.9	
28 Methyl acetate	43	3.634	3.628	0.006	86	47721	100.0	81.4	
29 Methylene Chloride	84	3.804	3.816	-0.012	80	133788	50.0	50.5	
32 2-Methyl-2-propanol	59	4.087	4.081	0.006	98	45742	500.0	454.4	
31 Acrylonitrile	53	4.204	4.204	0.000	99	121573	500.0	402.7	
30 trans-1,2-Dichloroethene	96	4.234	4.234	0.000	97	151897	50.0	47.8	
33 Methyl tert-butyl ether	73	4.246	4.251	-0.005	92	259867	50.0	41.9	
34 Hexane	57	4.663	4.675	-0.012	88	179008	50.0	50.0	
36 1,1-Dichloroethane	63	4.881	4.887	-0.006	96	249637	50.0	51.9	
42 2,2-Dichloropropane	97	5.640	5.645	-0.005	87	42507	50.0	55.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
41 cis-1,2-Dichloroethene	96	5.657	5.657	0.000	80	164875	50.0	52.4	
43 2-Butanone (MEK)	43	5.687	5.681	0.006	94	29245	100.0	66.0	
46 Chlorobromomethane	128	5.940	5.951	-0.011	83	46635	50.0	40.2	
48 Tetrahydrofuran	42	5.969	5.969	0.000	73	19996	100.0	81.9	
49 Chloroform	83	6.087	6.098	-0.011	92	302565	50.0	50.8	
50 1,1,1-Trichloroethane	97	6.245	6.251	-0.006	96	285353	50.0	47.7	
52 Cyclohexane	56	6.310	6.316	-0.006	82	212766	50.0	50.1	
53 Carbon tetrachloride	117	6.416	6.428	-0.012	96	265435	50.0	45.2	
54 1,1-Dichloropropene	75	6.440	6.445	-0.005	98	251275	50.0	52.2	
55 Benzene	78	6.657	6.657	0.000	95	620464	50.0	52.3	
51 Isobutyl alcohol	41	6.681	6.681	0.000	84	31415	1250.0	1033.6	
56 1,2-Dichloroethane	62	6.740	6.739	0.001	99	150788	50.0	42.3	
59 n-Heptane	43	7.028	7.033	-0.005	76	171475	50.0	49.3	
60 Trichloroethene	130	7.398	7.410	-0.012	94	157326	50.0	43.9	
63 Methylcyclohexane	83	7.634	7.633	0.001	82	351603	50.0	54.3	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	90	128313	50.0	55.4	a
65 Dibromomethane	93	7.769	7.775	-0.006	94	55165	50.0	45.2	
67 1,4-Dioxane	88	7.775	7.780	-0.005	34	9429	1000.0	696.2	
68 Dichlorobromomethane	83	7.963	7.969	-0.006	99	195865	50.0	48.4	
71 cis-1,3-Dichloropropene	75	8.422	8.422	0.000	96	200864	50.0	47.8	
72 4-Methyl-2-pentanone (MIBK	43	8.581	8.580	0.001	90	38778	100.0	46.3	
73 Toluene	91	8.739	8.739	0.000	99	715422	50.0	55.5	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	91	139026	50.0	44.9	
75 Ethyl methacrylate	69	9.069	9.075	-0.005	84	108849	50.0	52.5	
76 1,1,2-Trichloroethane	97	9.186	9.192	-0.006	92	85504	50.0	52.8	
77 Tetrachloroethene	164	9.257	9.257	0.000	97	140185	50.0	47.7	
78 1,3-Dichloropropane	76	9.351	9.351	0.000	85	158422	50.0	58.7	
79 2-Hexanone	43	9.428	9.427	0.001	89	33706	100.0	65.2	
81 Chlorodibromomethane	129	9.557	9.563	-0.006	89	108794	50.0	50.9	
82 Ethylene Dibromide	107	9.675	9.674	0.001	99	67372	50.0	50.5	
83 Chlorobenzene	112	10.157	10.163	-0.006	94	413069	50.0	52.9	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.257	-0.006	92	149604	50.0	51.2	
85 Ethylbenzene	106	10.263	10.263	0.000	98	256398	50.0	55.9	
86 m-Xylene & p-Xylene	106	10.392	10.392	0.000	0	304202	50.0	52.5	
88 o-Xylene	106	10.775	10.774	0.001	97	303040	50.0	55.5	
89 Styrene	104	10.798	10.798	0.000	92	452330	50.0	53.1	
90 Bromoform	173	10.980	10.980	0.000	96	54551	50.0	44.8	
91 Isopropylbenzene	105	11.139	11.145	-0.006	96	916350	50.0	56.7	
94 Bromobenzene	156	11.451	11.451	0.000	96	145331	50.0	52.4	
93 1,1,2,2-Tetrachloroethane	83	11.457	11.463	-0.006	95	95465	50.0	55.6	
96 trans-1,4-Dichloro-2-buten	53	11.510	11.510	0.000	65	11120	50.0	41.0	
95 1,2,3-Trichloropropane	110	11.510	11.516	-0.006	83	29447	50.0	53.9	
97 N-Propylbenzene	120	11.557	11.563	-0.006	99	229328	50.0	60.6	
98 2-Chlorotoluene	126	11.645	11.645	0.000	94	172053	50.0	57.4	
99 1,3,5-Trimethylbenzene	105	11.739	11.745	-0.006	93	781026	50.0	65.0	
100 4-Chlorotoluene	126	11.769	11.768	0.001	97	176202	50.0	60.5	
101 tert-Butylbenzene	119	12.051	12.051	0.000	91	680168	50.0	64.5	
103 1,2,4-Trimethylbenzene	105	12.116	12.115	0.001	97	726608	50.0	62.2	
104 sec-Butylbenzene	105	12.274	12.280	-0.006	95	1019766	50.0	65.5	
105 1,3-Dichlorobenzene	146	12.398	12.398	0.000	96	302289	50.0	55.9	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	842187	50.0	63.4	
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	92	289710	50.0	50.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
110 n-Butylbenzene	91	12.845	12.845	0.000	98	753190	50.0	67.6	
111 1,2-Dichlorobenzene	146	12.851	12.857	-0.006	93	256117	50.0	53.5	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.639	0.006	83	10742	50.0	43.3	
114 1,2,4-Trichlorobenzene	180	14.463	14.462	0.001	93	126007	50.0	54.0	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	95	142801	50.0	53.9	
116 Naphthalene	128	14.727	14.727	0.000	98	156687	50.0	50.5	
117 1,2,3-Trichlorobenzene	180	14.939	14.939	0.000	93	95713	50.0	56.0	
S 130 1,2-Dichloroethene, Total	96				0		100.0	100.2	
S 129 Xylenes, Total	106				0		100.0	108.0	
S 131 1,3-Dichloropropene, Total	1				0		100.0	92.7	
S 145 Total BTEX	1				0		250.0	271.6	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VOA8260VOA2ND_00397	Amount Added:	2.00	Units: uL		
voaWKetmix1st_00024	Amount Added:	2.00	Units: uL		
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent	

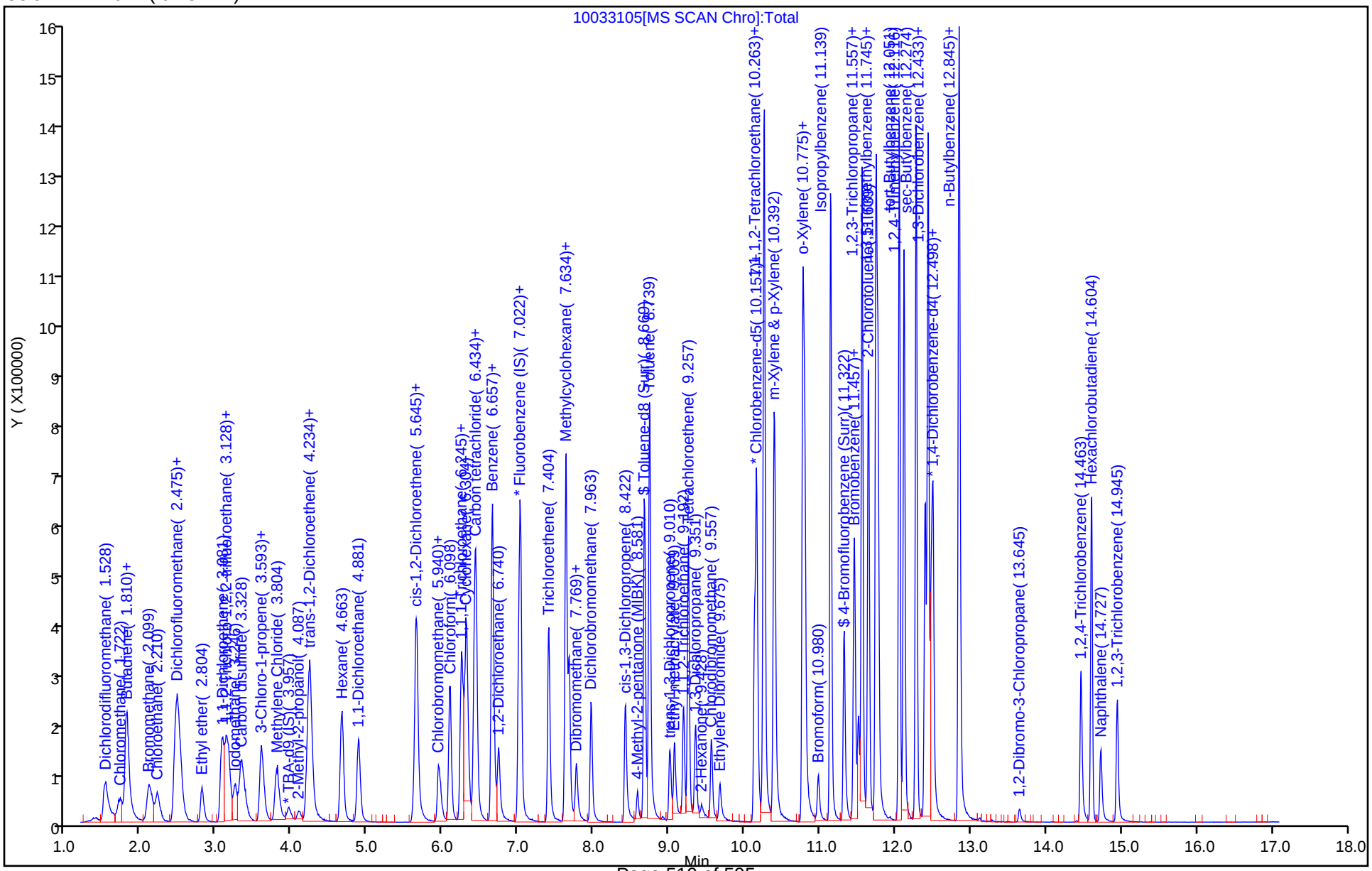
Report Date: 01-Apr-2020 00:18:42 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033105.d

Injection Date:	31-Mar-2020 19:08:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033105.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 31-Mar-2020 19:08:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-005
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 00:18:14 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: journetp Date: 01-Apr-2020 00:07:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	41.8	83.52
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.9	73.75
$ 7 Toluene-d8 (Surr)	50.0	49.0	98.02
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.1	96.27

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

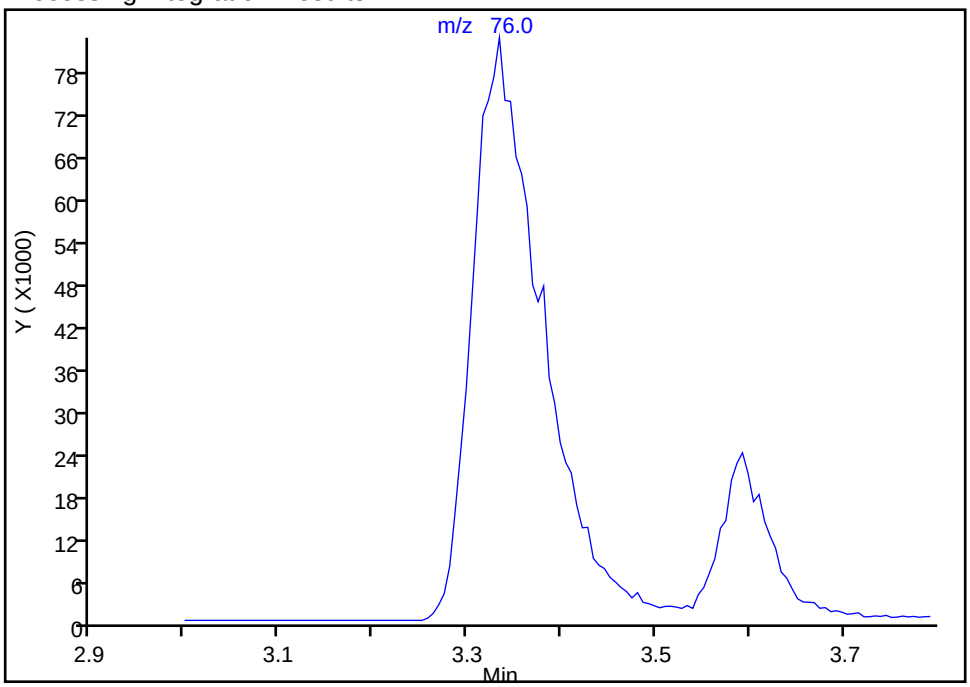
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033105.d				
Injection Date:	31-Mar-2020 19:08:30	Instrument ID:	CHHP10		
Lims ID:	LCS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

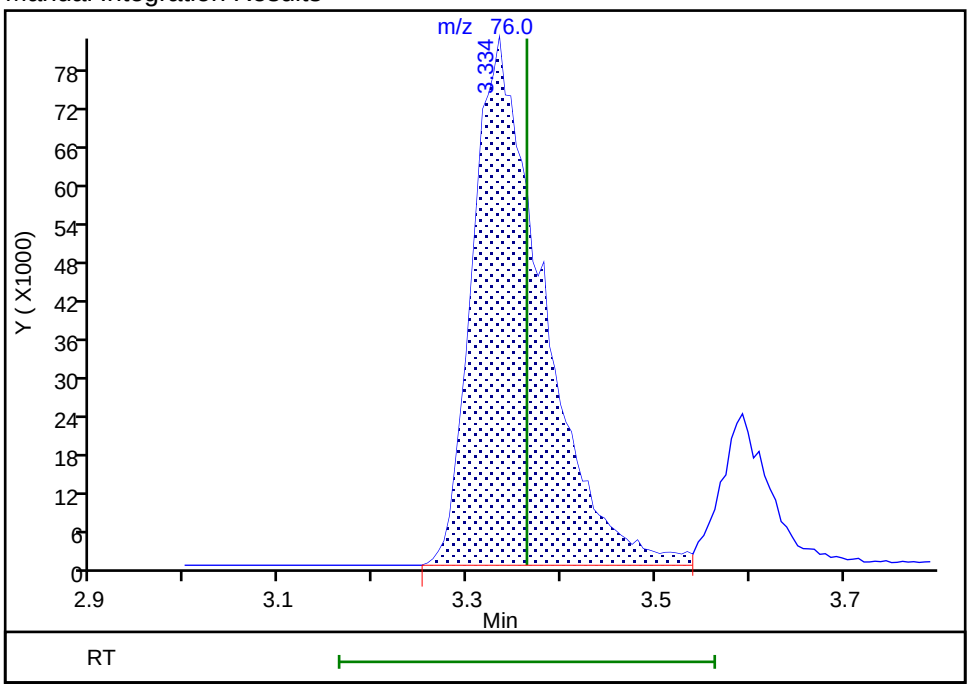
Not Detected
Expected RT: 3.36

Processing Integration Results



Manual Integration Results

RT: 3.33
Area: 428288
Amount: 57.797475
Amount Units: ng



Reviewer: journetp, 31-Mar-2020 21:51:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

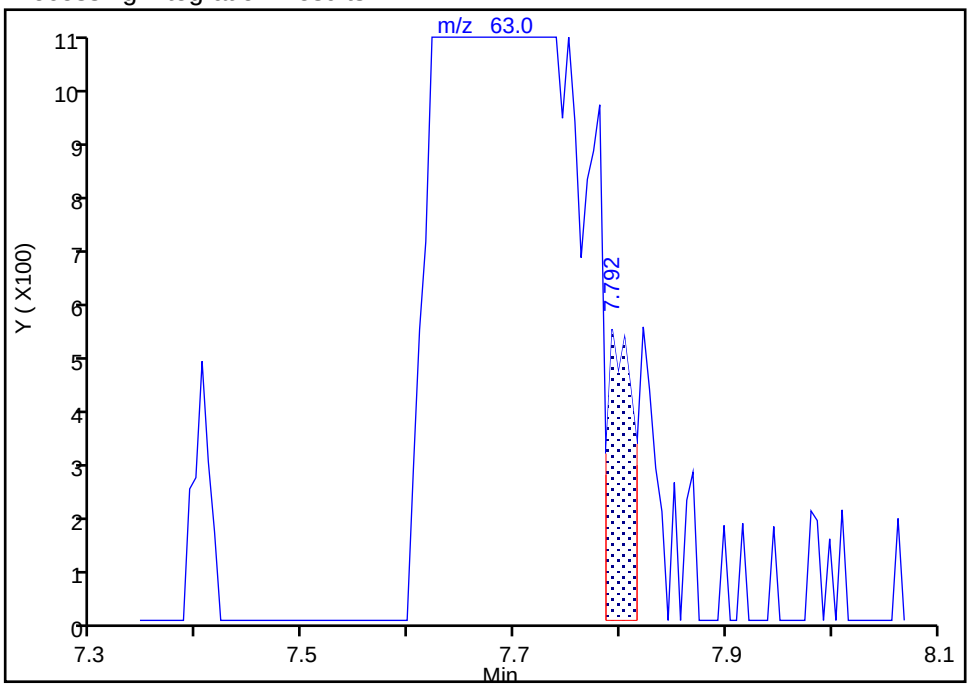
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033105.d
Injection Date: 31-Mar-2020 19:08:30 Instrument ID: CHHP10
Lims ID: LCS
Client ID:
Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

64 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

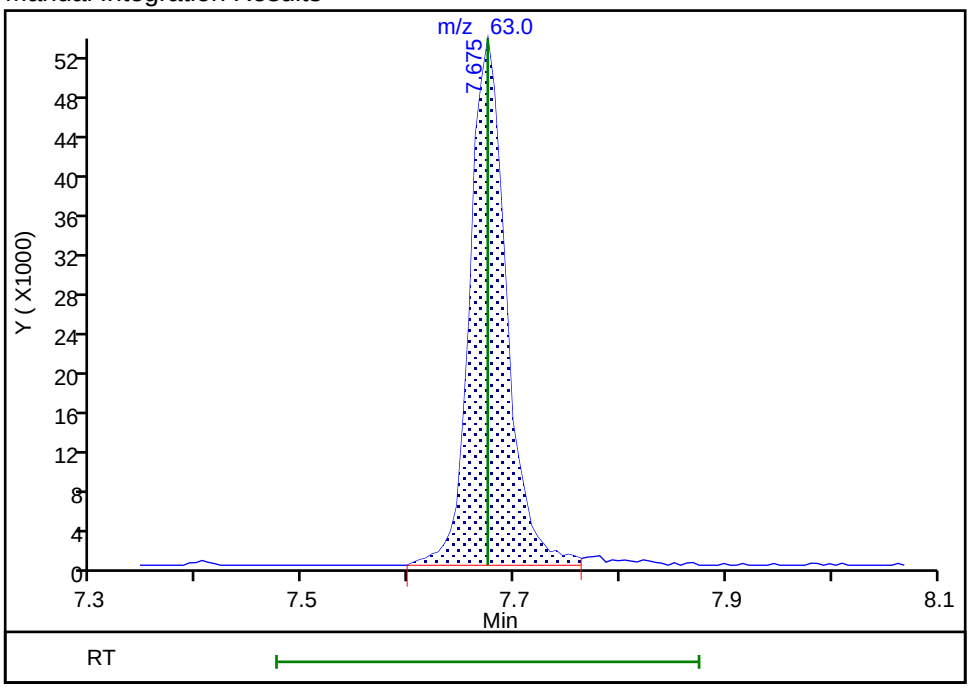
Processing Integration Results

RT: 7.79
Area: 918
Amount: 0.396025
Amount Units: ng



Manual Integration Results

RT: 7.67
Area: 128313
Amount: 55.354160
Amount Units: ng



Reviewer: journetp, 01-Apr-2020 00:06:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-311793/3

Matrix: Water Lab File ID: 10040103.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 19:36

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10.5		1.0	0.90
75-01-4	Vinyl chloride	11.4		1.0	0.40
74-83-9	Bromomethane	8.37		1.0	0.89
75-00-3	Chloroethane	9.69		1.0	0.90
75-35-4	1,1-Dichloroethene	11.7		1.0	0.55
67-64-1	Acetone	22.9		5.0	3.4
75-15-0	Carbon disulfide	13.2		1.0	0.88
75-09-2	Methylene Chloride	10.8		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	10.2		1.0	0.67
1634-04-4	Methyl tert-butyl ether	9.65		1.0	0.59
75-34-3	1,1-Dichloroethane	11.2		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	9.96		1.0	0.71
74-97-5	Bromochloromethane	8.81		1.0	0.63
78-93-3	2-Butanone (MEK)	22.5		5.0	2.6
67-66-3	Chloroform	10.1		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.65		1.0	0.60
56-23-5	Carbon tetrachloride	9.51		1.0	0.88
71-43-2	Benzene	10.6		1.0	0.60
107-06-2	1,2-Dichloroethane	9.47		1.0	0.57
79-01-6	Trichloroethene	9.01		1.0	0.69
78-87-5	1,2-Dichloropropane	11.1		1.0	0.66
75-27-4	Bromodichloromethane	9.46		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	9.02		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	12.0		5.0	3.1
108-88-3	Toluene	11.9		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	10.1		1.0	0.58
79-00-5	1,1,2-Trichloroethane	11.8		1.0	0.45
127-18-4	Tetrachloroethene	9.70		1.0	0.47
591-78-6	2-Hexanone	20.3		5.0	3.3
124-48-1	Dibromochloromethane	10.9		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	11.3		1.0	0.50
108-90-7	Chlorobenzene	10.9		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	10.4		1.0	0.57
100-41-4	Ethylbenzene	11.6		1.0	0.51
1330-20-7	Xylenes, Total	22.0		2.0	0.89
100-42-5	Styrene	10.9		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-311793/3

Matrix: Water Lab File ID: 10040103.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/01/2020 19:36

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.57		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	12.3		1.0	0.60
107-13-1	Acrylonitrile	95.3		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	75		62-146
2037-26-5	Toluene-d8 (Surr)	102		75-120
460-00-4	4-Bromofluorobenzene (Surr)	117		64-120
1868-53-7	Dibromofluoromethane (Surr)	83		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040103.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Apr-2020 19:36:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-003
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:01:08 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.951	3.951	0.000	0	67953	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	377586	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	87	71791	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	96	107291	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.275	0.006	92	101256	50.0	41.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	104768	50.0	37.3	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.001	92	480705	50.0	51.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.321	11.321	0.000	85	190332	50.0	58.6	
10 Dichlorodifluoromethane	85	1.522	1.516	0.006	99	192010	50.0	79.3	
11 Chloromethane	50	1.728	1.722	0.006	99	86265	50.0	52.4	M
13 Butadiene	39	1.804	1.804	0.000	89	115940	50.0	51.2	
12 Vinyl chloride	62	1.828	1.834	-0.006	82	149313	50.0	57.2	
14 Bromomethane	94	2.122	2.098	0.024	90	122553	50.0	41.8	
15 Chloroethane	64	2.228	2.216	0.012	97	104283	50.0	48.4	
17 Dichlorofluoromethane	67	2.481	2.469	0.012	97	302637	50.0	46.3	
16 Trichlorofluoromethane	101	2.493	2.493	0.000	86	336373	50.0	44.7	a
18 Ethyl ether	59	2.798	2.804	-0.006	83	74067	50.0	52.7	
20 1,1-Dichloroethene	96	3.069	3.069	0.000	98	140634	50.0	58.4	
21 1,1,2-Trichloro-1,2,2-trif	101	3.157	3.140	0.017	95	156557	50.0	53.7	
22 Acetone	43	3.175	3.169	0.006	95	49482	100.0	114.7	
23 Iodomethane	142	3.246	3.245	0.001	99	196567	50.0	49.1	
24 Carbon disulfide	76	3.340	3.363	-0.023	98	457843	50.0	66.1	
26 3-Chloro-1-propene	76	3.598	3.598	0.000	79	91743	50.0	59.9	
28 Methyl acetate	43	3.628	3.616	0.012	94	55912	100.0	101.9	
29 Methylene Chloride	84	3.793	3.792	0.001	78	132907	50.0	53.9	
32 2-Methyl-2-propanol	59	4.093	4.081	0.012	97	48662	500.0	421.5	
31 Acrylonitrile	53	4.198	4.198	0.000	99	134540	500.0	476.6	
30 trans-1,2-Dichloroethene	96	4.222	4.234	-0.012	98	151008	50.0	50.8	
33 Methyl tert-butyl ether	73	4.245	4.239	0.006	92	279564	50.0	48.2	
34 Hexane	57	4.657	4.663	-0.006	89	187617	50.0	56.1	
36 1,1-Dichloroethane	63	4.881	4.875	0.006	97	252952	50.0	56.2	
42 2,2-Dichloropropane	97	5.639	5.634	0.005	87	37535	50.0	52.0	
41 cis-1,2-Dichloroethene	96	5.651	5.651	0.000	81	146375	50.0	49.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
43 2-Butanone (MEK)	43	5.687	5.675	0.012	94	46588	100.0	112.5	
46 Chlorobromomethane	128	5.945	5.939	0.006	86	47757	50.0	44.1	
48 Tetrahydrofuran	42	5.969	5.969	0.000	74	21293	100.0	93.2	
49 Chloroform	83	6.092	6.092	0.000	92	280773	50.0	50.4	
50 1,1,1-Trichloroethane	97	6.245	6.245	0.000	97	269949	50.0	48.2	
52 Cyclohexane	56	6.316	6.316	0.000	82	208794	50.0	52.6	
53 Carbon tetrachloride	117	6.422	6.416	0.006	95	261434	50.0	47.6	
54 1,1-Dichloropropene	75	6.439	6.439	0.000	98	246706	50.0	54.8	
55 Benzene	78	6.657	6.651	0.006	95	586976	50.0	52.9	
51 Isobutyl alcohol	41	6.686	6.686	0.000	90	33233	1250.0	1169.3	
56 1,2-Dichloroethane	62	6.745	6.739	0.006	98	157810	50.0	47.4	
59 n-Heptane	43	7.028	7.028	0.000	76	164021	50.0	50.5	
60 Trichloroethene	130	7.404	7.398	0.006	97	151006	50.0	45.0	
63 Methylcyclohexane	83	7.628	7.633	-0.005	83	327069	50.0	54.0	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	90	120243	50.0	55.5	
65 Dibromomethane	93	7.769	7.769	0.000	96	50952	50.0	44.6	
67 1,4-Dioxane	88	7.781	7.775	0.005	35	9935	1000.0	779.4	
68 Dichlorobromomethane	83	7.969	7.963	0.006	99	179098	50.0	47.3	
71 cis-1,3-Dichloropropene	75	8.416	8.422	-0.006	96	176561	50.0	45.1	
72 4-Methyl-2-pentanone (MIBK	43	8.580	8.580	0.000	92	47518	100.0	60.2	
73 Toluene	91	8.745	8.739	0.006	98	691797	50.0	59.6	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	91	142982	50.0	50.7	
75 Ethyl methacrylate	69	9.075	9.069	0.006	85	113818	50.0	60.4	
76 1,1,2-Trichloroethane	97	9.198	9.192	0.006	92	85862	50.0	58.9	
77 Tetrachloroethene	164	9.257	9.251	0.006	95	128358	50.0	48.5	
78 1,3-Dichloropropane	76	9.345	9.345	0.000	86	159630	50.0	65.7	
79 2-Hexanone	43	9.433	9.427	0.006	92	51119	100.0	101.7	
81 Chlorodibromomethane	129	9.563	9.557	0.006	89	104623	50.0	54.3	
82 Ethylene Dibromide	107	9.675	9.669	0.005	99	68018	50.0	56.6	
83 Chlorobenzene	112	10.163	10.157	0.006	94	382289	50.0	54.4	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.251	0.000	92	137205	50.0	52.1	
85 Ethylbenzene	106	10.263	10.263	0.000	98	238965	50.0	57.8	
86 m-Xylene & p-Xylene	106	10.392	10.398	-0.006	0	286334	50.0	54.9	
88 o-Xylene	106	10.774	10.774	0.000	97	270686	50.0	55.0	
89 Styrene	104	10.798	10.798	0.000	92	417787	50.0	54.4	
90 Bromoform	173	10.980	10.980	0.000	94	52438	50.0	47.8	
91 Isopropylbenzene	105	11.139	11.139	0.000	96	817966	50.0	56.2	
94 Bromobenzene	156	11.451	11.451	0.000	96	136623	50.0	55.0	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.457	0.006	94	95324	50.0	61.6	
96 trans-1,4-Dichloro-2-buten	53	11.510	11.510	0.000	66	11904	50.0	46.9	
95 1,2,3-Trichloropropane	110	11.516	11.515	0.001	83	30430	50.0	62.2	
97 N-Propylbenzene	120	11.557	11.557	0.000	99	208169	50.0	61.3	
98 2-Chlorotoluene	126	11.645	11.645	0.000	95	160389	50.0	59.7	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	93	695786	50.0	64.6	
100 4-Chlorotoluene	126	11.768	11.768	0.000	98	153630	50.0	58.8	
101 tert-Butylbenzene	119	12.051	12.051	0.000	91	602272	50.0	63.7	
103 1,2,4-Trimethylbenzene	105	12.116	12.115	0.001	97	670395	50.0	64.1	
104 sec-Butylbenzene	105	12.280	12.274	0.006	95	928022	50.0	66.5	
105 1,3-Dichlorobenzene	146	12.392	12.398	-0.006	95	267578	50.0	55.2	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	747303	50.0	62.7	
107 1,4-Dichlorobenzene	146	12.498	12.504	-0.006	92	270123	50.0	52.6	
110 n-Butylbenzene	91	12.845	12.845	0.000	98	654475	50.0	65.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	95	241047	50.0	56.2	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	82	11387	50.0	50.2	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	92	100247	50.0	47.9	
115 Hexachlorobutadiene	225	14.604	14.598	0.006	96	112623	50.0	46.3	
116 Naphthalene	128	14.721	14.727	-0.006	98	150078	50.0	54.0	
117 1,2,3-Trichlorobenzene	180	14.939	14.939	0.000	94	87088	50.0	56.9	
S 129 Xylenes, Total	106				0		100.0	109.9	
S 130 1,2-Dichloroethene, Total	96				0		100.0	100.6	
S 145 Total BTEX	1				0		250.0	280.1	
S 131 1,3-Dichloropropene, Total	1				0		100.0	95.9	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

VOA8260VOA2ND_00397	Amount Added:	2.00	Units: uL		
voaWKetmix1st_00024	Amount Added:	2.00	Units: uL		
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent	

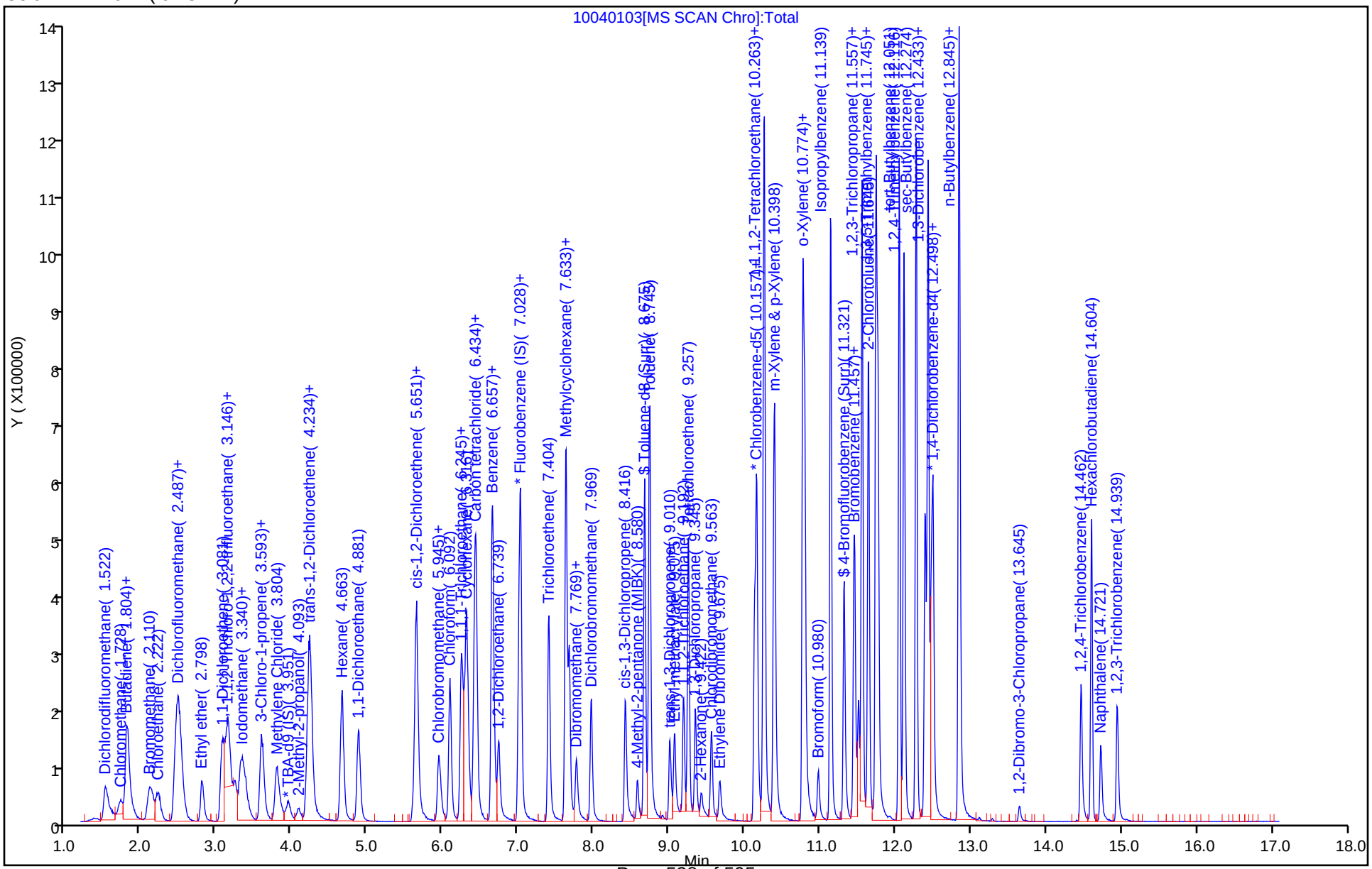
Report Date: 02-Apr-2020 22:01:09 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040103.d

Injection Date:	01-Apr-2020 19:36:30	Instrument ID:	CHHP10	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_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040103.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Apr-2020 19:36:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-003
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:01:08 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	41.4	82.77
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	37.3	74.56
$ 7 Toluene-d8 (Surr)	50.0	51.2	102.33
$ 8 4-Bromofluorobenzene (Surr)	50.0	58.6	117.26

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

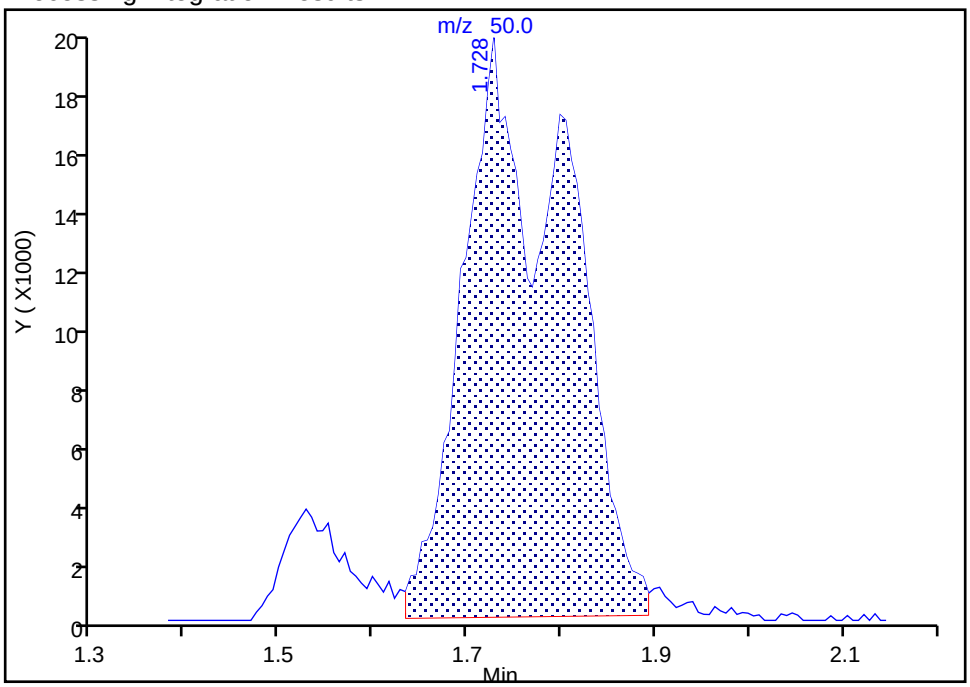
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040103.d
Injection Date: 01-Apr-2020 19:36:30 Instrument ID: CHHP10
Lims ID: LCS
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 1

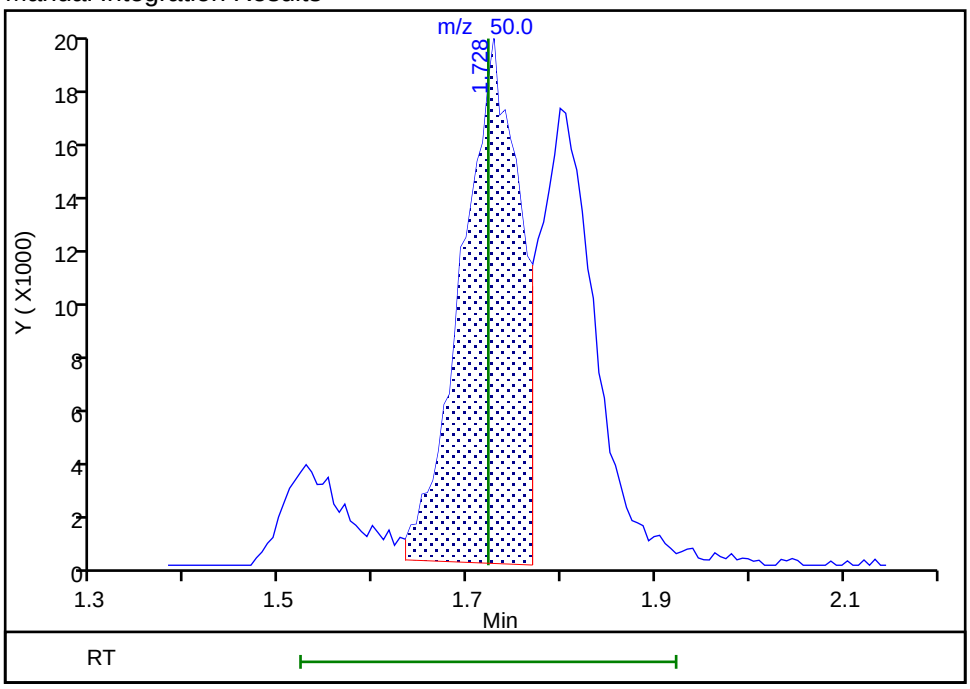
Processing Integration Results

RT: 1.73
Area: 150998
Amount: 91.666566
Amount Units: ng



Manual Integration Results

RT: 1.73
Area: 86265
Amount: 52.369013
Amount Units: ng



Reviewer: journetp, 02-Apr-2020 00:28:51
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-311900/11

Matrix: Water Lab File ID: 10040211.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 19:41

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.: 311900 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	8.48		1.0	0.90
75-01-4	Vinyl chloride	8.19		1.0	0.40
74-83-9	Bromomethane	6.52		1.0	0.89
75-00-3	Chloroethane	6.92		1.0	0.90
75-35-4	1,1-Dichloroethene	9.04		1.0	0.55
67-64-1	Acetone	21.7		5.0	3.4
75-15-0	Carbon disulfide	10.9		1.0	0.88
75-09-2	Methylene Chloride	9.67		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	8.70		1.0	0.67
1634-04-4	Methyl tert-butyl ether	9.17		1.0	0.59
75-34-3	1,1-Dichloroethane	9.94		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	9.09		1.0	0.71
74-97-5	Bromochloromethane	7.95		1.0	0.63
78-93-3	2-Butanone (MEK)	19.8		5.0	2.6
67-66-3	Chloroform	9.51		1.0	0.60
71-55-6	1,1,1-Trichloroethane	8.29		1.0	0.60
56-23-5	Carbon tetrachloride	8.00		1.0	0.88
71-43-2	Benzene	10.1		1.0	0.60
107-06-2	1,2-Dichloroethane	8.67		1.0	0.57
79-01-6	Trichloroethene	7.59		1.0	0.69
78-87-5	1,2-Dichloropropane	10.1		1.0	0.66
75-27-4	Bromodichloromethane	8.86		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.90		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	11.2		5.0	3.1
108-88-3	Toluene	11.3		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	9.95		1.0	0.58
79-00-5	1,1,2-Trichloroethane	11.7		1.0	0.45
127-18-4	Tetrachloroethene	8.97		1.0	0.47
591-78-6	2-Hexanone	16.5		5.0	3.3
124-48-1	Dibromochloromethane	10.6		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	10.8		1.0	0.50
108-90-7	Chlorobenzene	10.1		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.98		1.0	0.57
100-41-4	Ethylbenzene	10.6		1.0	0.51
1330-20-7	Xylenes, Total	20.7		2.0	0.89
100-42-5	Styrene	10.3		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-311900/11

Matrix: Water Lab File ID: 10040211.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 19:41

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.: 311900 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.65		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	12.9		1.0	0.60
107-13-1	Acrylonitrile	85.0		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		62-146
2037-26-5	Toluene-d8 (Surr)	115		75-120
460-00-4	4-Bromofluorobenzene (Surr)	118		64-120
1868-53-7	Dibromofluoromethane (Surr)	92		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040211.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-Apr-2020 19:41:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031431-011
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 03-Apr-2020 18:48:10 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0305

First Level Reviewer: journetp Date: 02-Apr-2020 20:04:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.957	3.963	-0.006	0	58390	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.004	7.010	-0.006	99	366466	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	86	65194	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.468	0.006	95	109347	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.281	-0.006	92	108688	50.0	45.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.657	-0.006	0	125106	50.0	45.9	
$ 7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	93	491202	50.0	57.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.316	0.006	85	174596	50.0	59.2	
10 Dichlorodifluoromethane	85	1.522	1.522	0.000	99	113200	50000000	48.2	
11 Chloromethane	50	1.704	1.722	-0.018	99	67816	50000000	42.4	M
13 Butadiene	39	1.804	1.804	0.000	89	76286	50000000	34.7	
12 Vinyl chloride	62	1.840	1.828	0.012	89	103730	50000000	40.9	a
14 Bromomethane	94	2.099	2.110	-0.011	92	92678	50000000	32.6	
15 Chloroethane	64	2.199	2.222	-0.023	99	72264	50000000	34.6	
17 Dichlorofluoromethane	67	2.457	2.475	-0.018	96	234474	50000000	37.0	
16 Trichlorofluoromethane	101	2.475	2.493	-0.018	98	235663	50000000	32.3	
18 Ethyl ether	59	2.804	2.810	-0.006	81	65008	50000000	47.7	
20 1,1-Dichloroethene	96	3.069	3.069	0.000	95	105640	50000000	45.2	
21 1,1,2-Trichloro-1,2,2-trif	101	3.140	3.140	0.000	96	125921	50000000	44.5	
22 Acetone	43	3.169	3.175	-0.006	98	45462	50000050	108.6	
23 Iodomethane	142	3.228	3.263	-0.035	99	162401	50000000	41.8	
24 Carbon disulfide	76	3.322	3.351	-0.029	98	365295	50000000	54.3	
26 3-Chloro-1-propene	76	3.587	3.593	-0.006	81	73259	50000000	49.3	
28 Methyl acetate	43	3.622	3.634	-0.012	95	52344	100000000	98.3	
29 Methylene Chloride	84	3.787	3.798	-0.011	81	116836	50000000	48.4	
32 2-Methyl-2-propanol	59	4.104	4.092	0.012	97	42388	500000000	427.3	
31 Acrylonitrile	53	4.198	4.204	-0.006	95	116439	500000000	425.0	
30 trans-1,2-Dichloroethene	96	4.222	4.228	-0.006	99	125498	50000000	43.5	
33 Methyl tert-butyl ether	73	4.246	4.245	0.001	91	258063	50000000	45.9	
34 Hexane	57	4.657	4.663	-0.006	89	145787	50000000	44.9	
36 1,1-Dichloroethane	63	4.875	4.875	0.000	95	216928	50000000	49.7	
42 2,2-Dichloropropane	97	5.640	5.639	0.001	87	30670	50000000	43.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
41 cis-1,2-Dichloroethene	96	5.651	5.651	0.000	82	129760	50000000	45.5	
43 2-Butanone (MEK)	43	5.687	5.687	0.001	95	39869	50000050	99.2	
46 Chlorobromomethane	128	5.940	5.945	-0.005	85	41830	50000000	39.8	
48 Tetrahydrofuran	42	5.975	5.975	0.000	69	18791	100000000	84.8	
49 Chloroform	83	6.092	6.092	0.000	92	257965	50000000	47.6	
50 1,1,1-Trichloroethane	97	6.239	6.239	0.000	97	225170	50000000	41.5	
52 Cyclohexane	56	6.316	6.304	0.012	79	175473	50000000	45.6	
53 Carbon tetrachloride	117	6.416	6.422	-0.006	96	213260	50000000	40.0	
54 1,1-Dichloropropene	75	6.439	6.439	0.000	98	211532	50000000	48.4	
55 Benzene	78	6.651	6.657	-0.006	95	545934	50000000	50.7	
51 Isobutyl alcohol	41	6.692	6.681	0.011	91	29397	1250000000	1065.7	
56 1,2-Dichloroethane	62	6.739	6.739	0.000	99	140181	50000000	43.3	
59 n-Heptane	43	7.028	7.028	0.000	77	140451	50000000	44.5	
60 Trichloroethene	130	7.404	7.404	0.000	94	123593	50000000	38.0	
63 Methylcyclohexane	83	7.634	7.628	0.006	84	265435	50000000	45.2	
64 1,2-Dichloropropane	63	7.669	7.675	-0.006	92	106093	50000000	50.4	
65 Dibromomethane	93	7.775	7.775	0.000	94	50997	50000000	46.0	
67 1,4-Dioxane	88	7.775	7.780	-0.005	35	8296	1000000000	676.1	
68 Dichlorobromomethane	83	7.969	7.963	0.006	99	162885	50000000	44.3	
71 cis-1,3-Dichloropropene	75	8.422	8.416	0.006	96	168752	50000000	44.5	
72 4-Methyl-2-pentanone (MIBK	43	8.581	8.580	0.001	95	39493	50000050	55.8	
73 Toluene	91	8.739	8.745	-0.006	99	594625	50000000	56.4	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	90	127145	50000000	49.8	
75 Ethyl methacrylate	69	9.069	9.075	-0.006	84	102733	50000000	60.1	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	92	77635	50000000	58.6	
77 Tetrachloroethene	164	9.257	9.257	0.000	97	107699	50000000	44.8	
78 1,3-Dichloropropane	76	9.345	9.345	0.000	86	144162	50000000	65.3	
79 2-Hexanone	43	9.428	9.427	0.001	94	36397	50000050	82.3	
81 Chlorodibromomethane	129	9.557	9.557	0.000	88	93060	50000000	53.2	
82 Ethylene Dibromide	107	9.669	9.674	-0.005	99	58845	50000000	53.9	
83 Chlorobenzene	112	10.157	10.157	0.000	92	323841	50000000	50.7	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.257	0.000	93	119328	50000000	49.9	
85 Ethylbenzene	106	10.257	10.263	-0.006	99	198270	50000000	52.8	
86 m-Xylene & p-Xylene	106	10.392	10.398	-0.006	0	230214	50000000	48.6	
88 o-Xylene	106	10.769	10.774	-0.005	97	245084	50000000	54.8	
89 Styrene	104	10.798	10.798	0.000	93	360055	50000000	51.7	
90 Bromoform	173	10.980	10.980	0.000	95	48055	50000000	48.3	
91 Isopropylbenzene	105	11.139	11.145	-0.006	95	709868	50000000	53.7	
94 Bromobenzene	156	11.457	11.451	0.006	95	121684	50000000	48.1	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	95	90396	50000000	64.3	
96 trans-1,4-Dichloro-2-buten	53	11.510	11.504	0.006	62	10022	50000000	40.5	
95 1,2,3-Trichloropropane	110	11.510	11.516	-0.006	80	28227	50000000	56.6	
97 N-Propylbenzene	120	11.563	11.557	0.006	99	170546	50000000	49.3	
98 2-Chlorotoluene	126	11.645	11.645	0.000	95	135989	50000000	49.6	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	93	607285	50000000	55.3	
100 4-Chlorotoluene	126	11.769	11.768	0.001	99	133443	50000000	50.2	
101 tert-Butylbenzene	119	12.051	12.051	0.000	91	506976	50000000	52.6	
103 1,2,4-Trimethylbenzene	105	12.116	12.115	0.001	97	585770	50000000	54.9	
104 sec-Butylbenzene	105	12.280	12.274	0.006	95	772329	50000000	54.3	
105 1,3-Dichlorobenzene	146	12.392	12.392	0.000	95	239556	50000000	48.5	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	654222	50000000	53.9	
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	91	234212	50000000	44.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
110 n-Butylbenzene	91	12.845	12.845	0.000	99	568274	50000000	55.9	
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	93	214964	50000000	49.2	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.657	-0.012	79	9196	50000000	40.9	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	93	87031	50000000	40.8	
115 Hexachlorobutadiene	225	14.598	14.598	0.000	96	97818	50000000	38.4	
116 Naphthalene	128	14.721	14.727	-0.006	98	121205	50000000	42.8	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	95	70983	50000000	45.5	
S 130 1,2-Dichloroethene, Total	96				0		100000000	89.0	
S 129 Xylenes, Total	106				0		100000000	103.4	
S 131 1,3-Dichloropropene, Total	1				0		100000000	94.2	
S 145 Total BTEX	1				0		250000000	263.3	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

voaWKetmix1st_00024	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00397	Amount Added:	2.00	Units: L	
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

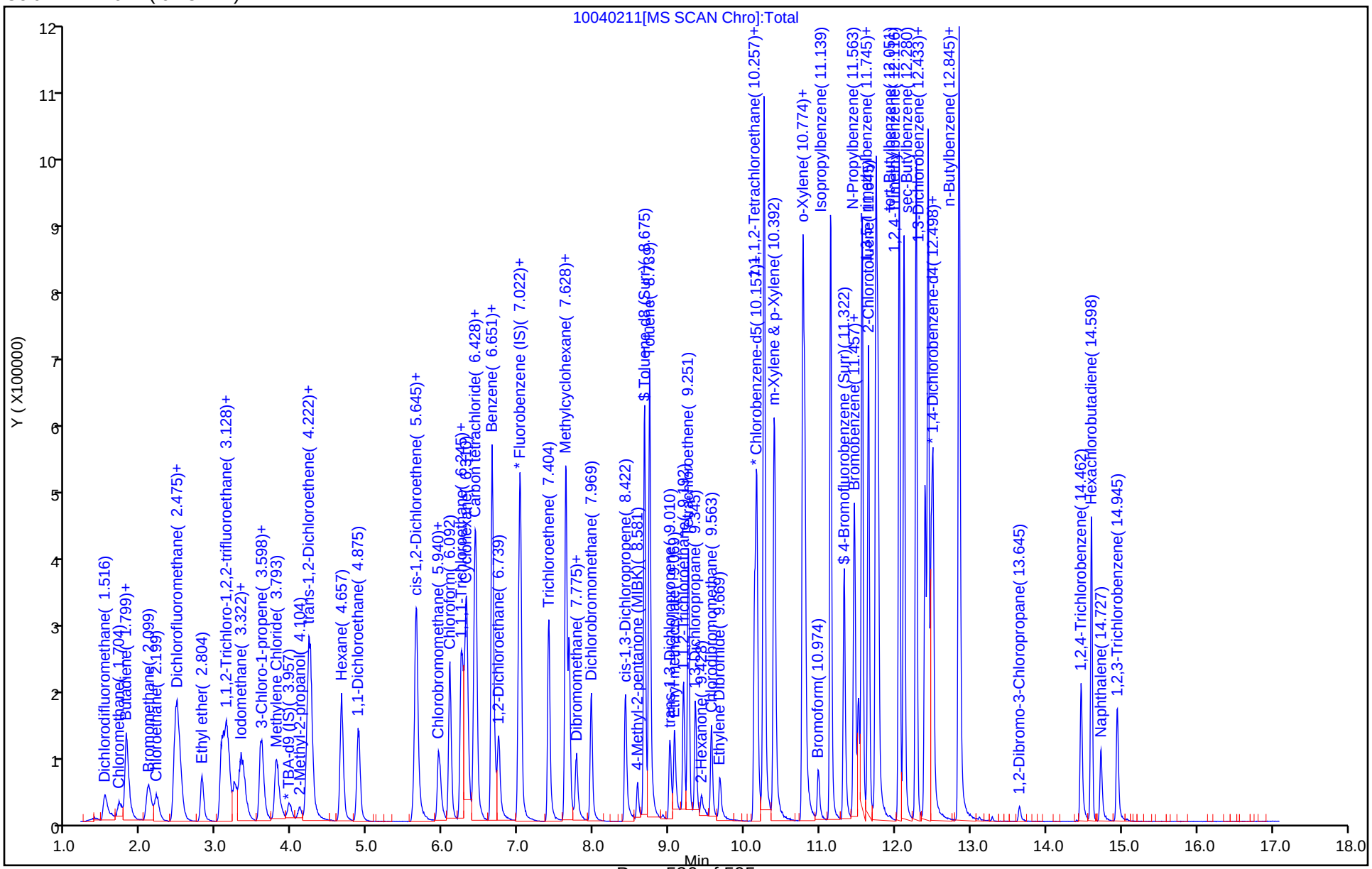
Report Date: 03-Apr-2020 19:13:12 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040211.d

Injection Date:	02-Apr-2020 19:41:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	LCS			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040211.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-Apr-2020 19:41:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031431-011
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 03-Apr-2020 18:48:10 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0305

First Level Reviewer: journetp Date: 02-Apr-2020 20:04:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	45.8	91.54
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	45.9	91.74
$ 7 Toluene-d8 (Surr)	50.0	57.6	115.15
$ 8 4-Bromofluorobenzene (Surr)	50.0	59.2	118.45

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

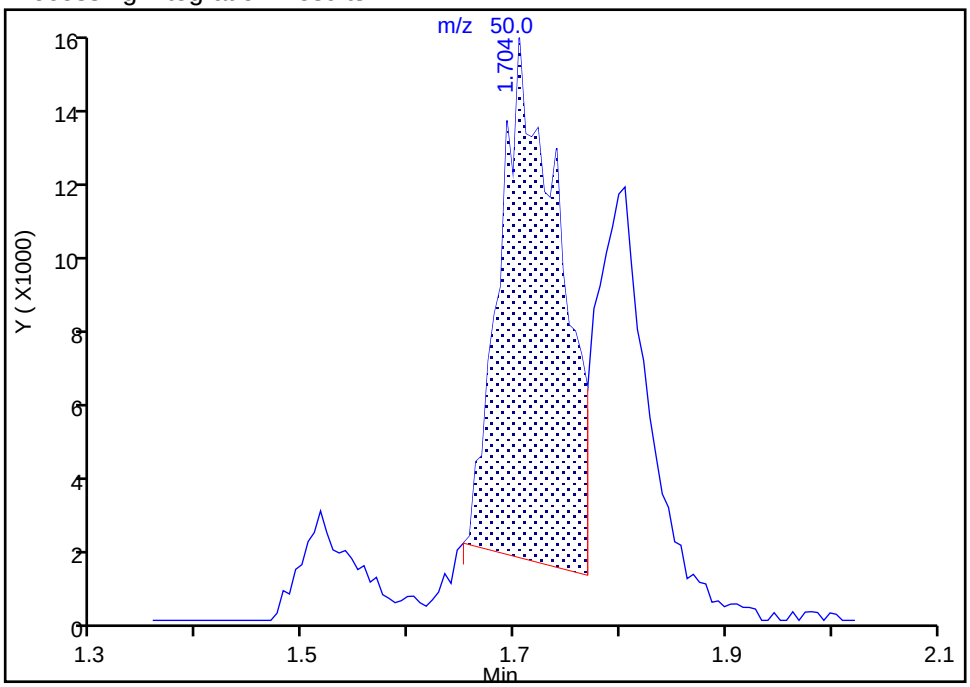
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040211.d				
Injection Date:	02-Apr-2020 19:41:30	Instrument ID:	CHHP10		
Lims ID:	LCS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Chloromethane, CAS: 74-87-3

Signal: 1

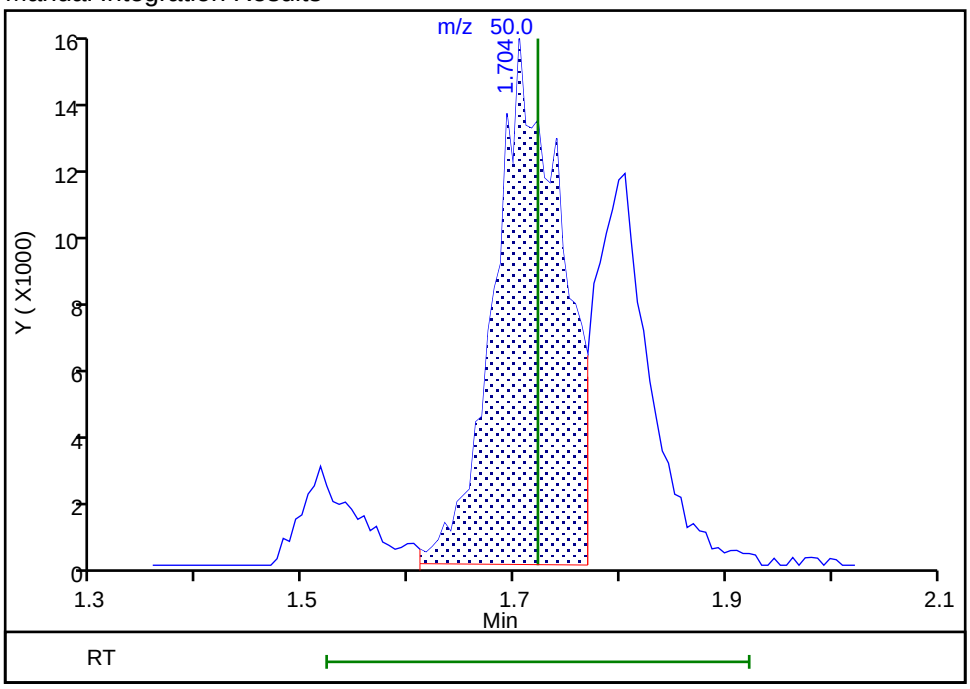
Processing Integration Results

RT: 1.70
Area: 54032
Amount: 33.796599
Amount Units: ng



Manual Integration Results

RT: 1.70
Area: 67816
Amount: 42.418385
Amount Units: ng



Reviewer: journetp, 02-Apr-2020 20:01:34

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

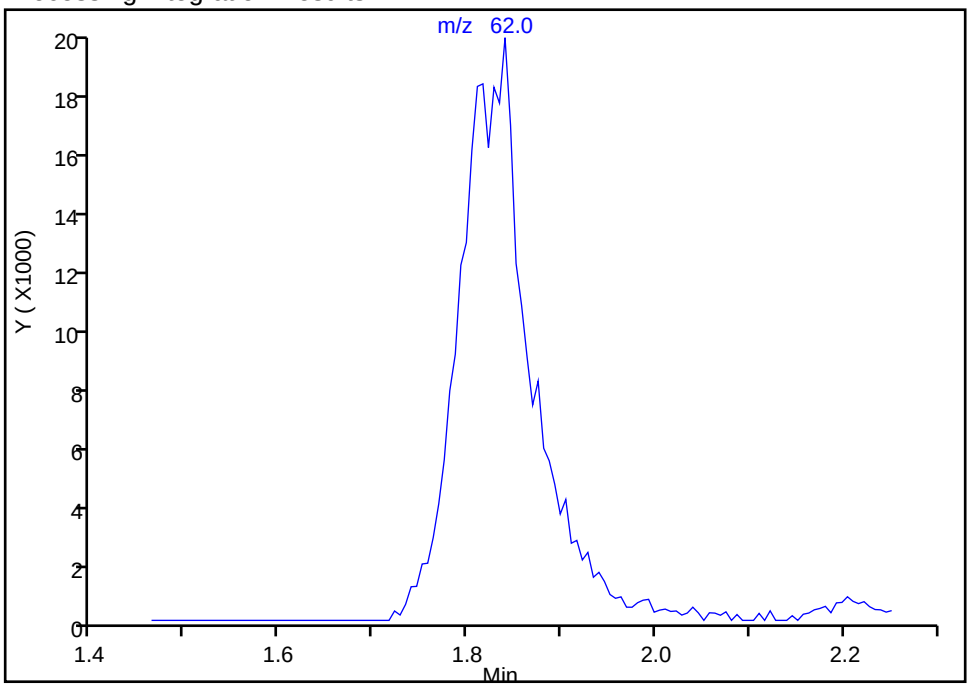
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040211.d				
Injection Date:	02-Apr-2020 19:41:30	Instrument ID:	CHHP10		
Lims ID:	LCS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Vinyl chloride, CAS: 75-01-4

Signal: 1

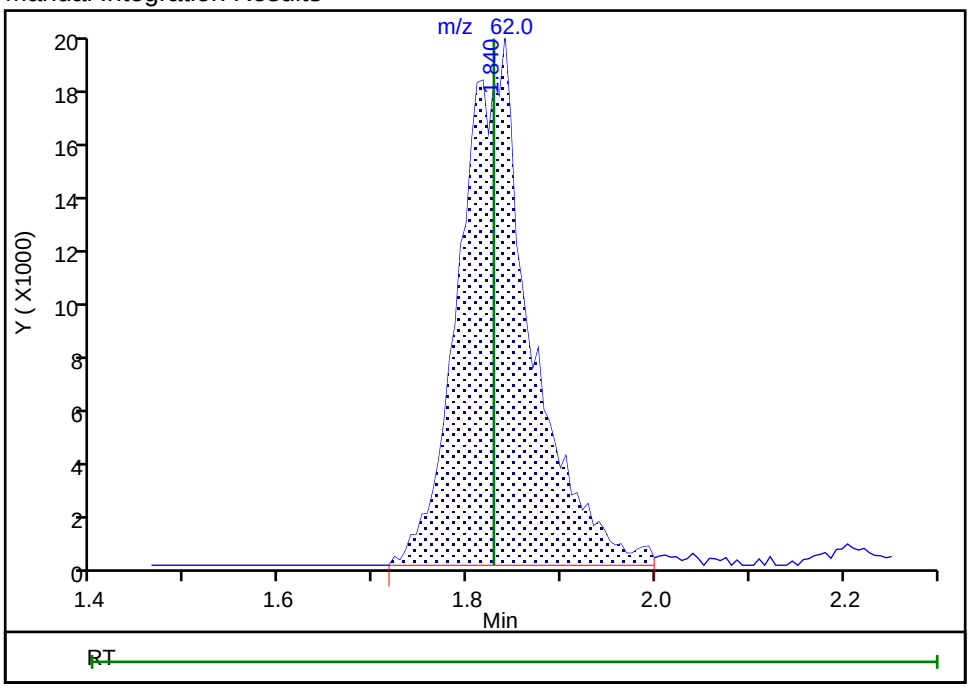
Not Detected
Expected RT: 1.83

Processing Integration Results



Manual Integration Results

RT: 1.84
Area: 103730
Amount: 40.941728
Amount Units: ng



Reviewer: journetp, 02-Apr-2020 20:01:11
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS Lab Sample ID: 180-104021-6 MS

Matrix: Water Lab File ID: 10033112.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:55

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2020 23:00

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	6.37		1.0	0.90
75-01-4	Vinyl chloride	6.62		1.0	0.40
74-83-9	Bromomethane	5.07		1.0	0.89
75-00-3	Chloroethane	5.94		1.0	0.90
75-35-4	1,1-Dichloroethene	7.58		1.0	0.55
67-64-1	Acetone	5.77		5.0	3.4
75-15-0	Carbon disulfide	7.94		1.0	0.88
75-09-2	Methylene Chloride	6.47		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	7.34		1.0	0.67
1634-04-4	Methyl tert-butyl ether	6.05		1.0	0.59
75-34-3	1,1-Dichloroethane	8.17		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	8.16		1.0	0.71
74-97-5	Bromochloromethane	6.01		1.0	0.63
78-93-3	2-Butanone (MEK)	5.98		5.0	2.6
67-66-3	Chloroform	7.80		1.0	0.60
71-55-6	1,1,1-Trichloroethane	7.35		1.0	0.60
56-23-5	Carbon tetrachloride	7.17		1.0	0.88
71-43-2	Benzene	7.81		1.0	0.60
107-06-2	1,2-Dichloroethane	6.28		1.0	0.57
79-01-6	Trichloroethene	7.56		1.0	0.69
78-87-5	1,2-Dichloropropane	8.57		1.0	0.66
75-27-4	Bromodichloromethane	7.73		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	7.75		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	7.83		5.0	3.1
108-88-3	Toluene	9.29		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	7.89		1.0	0.58
79-00-5	1,1,2-Trichloroethane	8.74		1.0	0.45
127-18-4	Tetrachloroethene	10.3		1.0	0.47
591-78-6	2-Hexanone	7.01		5.0	3.3
124-48-1	Dibromochloromethane	8.37		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	8.56		1.0	0.50
108-90-7	Chlorobenzene	9.20		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	8.83		1.0	0.57
100-41-4	Ethylbenzene	9.49		1.0	0.51
1330-20-7	Xylenes, Total	19.6		2.0	0.89
100-42-5	Styrene	10.1		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS Lab Sample ID: 180-104021-6 MS

Matrix: Water Lab File ID: 10033112.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:55

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2020 23:00

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	7.75		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	10.2		1.0	0.60
107-13-1	Acrylonitrile	56.6		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	68		62-146
2037-26-5	Toluene-d8 (Surr)	102		75-120
460-00-4	4-Bromofluorobenzene (Surr)	92		64-120
1868-53-7	Dibromofluoromethane (Surr)	78		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033112.d
Lims ID: 180-104021-A-6 MS
Client ID: HD-COD-SW-15-0/1-0
Sample Type: MS
Inject. Date: 31-Mar-2020 23:00:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-012
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 31-Mar-2020 23:21:14 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.957	3.940	0.017	0	83251	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.004	7.010	-0.006	99	538297	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.127	10.133	-0.006	88	104022	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	96	156224	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.281	-0.006	92	136018	50.0	39.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.657	-0.006	0	136493	50.0	34.1	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	691647	50.0	50.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.321	11.321	0.000	86	215216	50.0	45.8	
10 Dichlorodifluoromethane	85	1.522	1.534	-0.012	98	115098	50.0	33.4	
11 Chloromethane	50	1.704	1.740	-0.036	99	74764	50.0	31.8	
13 Butadiene	39	1.804	1.828	-0.024	92	99712	50.0	30.9	
12 Vinyl chloride	62	1.816	1.840	-0.024	97	123207	50.0	33.1	
14 Bromomethane	94	2.104	2.134	-0.030	92	105822	50.0	25.3	
15 Chloroethane	64	2.210	2.251	-0.041	99	91193	50.0	29.7	
17 Dichlorofluoromethane	67	2.469	2.493	-0.024	96	276887	50.0	29.7	
16 Trichlorofluoromethane	101	2.475	2.504	-0.029	93	294419	50.0	27.4	
18 Ethyl ether	59	2.810	2.822	-0.012	82	61095	50.0	30.5	
20 1,1-Dichloroethene	96	3.075	3.081	-0.006	96	130099	50.0	37.9	
21 1,1,2-Trichloro-1,2,2-trif	101	3.134	3.169	-0.035	95	146387	50.0	35.2	
22 Acetone	43	3.181	3.175	0.006	98	17733	100.0	28.8	
23 Iodomethane	142	3.246	3.257	-0.011	98	168898	50.0	29.6	
24 Carbon disulfide	76	3.334	3.363	-0.029	99	392137	50.0	39.7	
26 3-Chloro-1-propene	76	3.598	3.604	-0.006	81	84218	50.0	38.6	
28 Methyl acetate	43	3.616	3.628	-0.012	96	45588	100.0	58.3	
29 Methylene Chloride	84	3.787	3.816	-0.029	80	120281	50.0	32.3	
32 2-Methyl-2-propanol	59	4.081	4.081	0.000	97	55189	500.0	390.2	
31 Acrylonitrile	53	4.198	4.204	-0.006	99	113802	500.0	282.8	
30 trans-1,2-Dichloroethene	96	4.228	4.234	-0.006	95	155452	50.0	36.7	
33 Methyl tert-butyl ether	73	4.245	4.251	-0.006	93	249820	50.0	30.2	
34 Hexane	57	4.657	4.675	-0.018	89	177562	50.0	37.2	
36 1,1-Dichloroethane	63	4.881	4.887	-0.006	96	261997	50.0	40.9	
42 2,2-Dichloropropane	97	5.640	5.645	-0.005	86	39887	50.0	38.8	
41 cis-1,2-Dichloroethene	96	5.645	5.657	-0.012	82	171071	50.0	40.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
43 2-Butanone (MEK)	43	5.675	5.681	-0.006	27	17653	100.0	29.9	
46 Chlorobromomethane	128	5.945	5.951	-0.006	87	46430	50.0	30.0	
48 Tetrahydrofuran	42	5.963	5.969	-0.006	78	19444	100.0	59.7	
49 Chloroform	83	6.087	6.098	-0.011	92	314466	50.0	39.0	
50 1,1,1-Trichloroethane	97	6.245	6.251	-0.006	97	293102	50.0	36.7	
52 Cyclohexane	56	6.316	6.316	0.000	81	206719	50.0	36.5	
53 Carbon tetrachloride	117	6.416	6.428	-0.012	96	281079	50.0	35.9	
54 1,1-Dichloropropene	75	6.445	6.445	0.000	98	259054	50.0	40.4	
55 Benzene	78	6.651	6.657	-0.006	95	617569	50.0	39.0	
51 Isobutyl alcohol	41	6.687	6.681	0.005	87	37560	1250.0	927.0	
56 1,2-Dichloroethane	62	6.745	6.739	0.006	98	149258	50.0	31.4	
59 n-Heptane	43	7.034	7.033	0.001	76	171784	50.0	37.1	
60 Trichloroethene	130	7.404	7.410	-0.006	93	180642	50.0	37.8	
63 Methylcyclohexane	83	7.634	7.633	0.001	84	345131	50.0	40.0	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	90	132396	50.0	42.8	
65 Dibromomethane	93	7.769	7.775	-0.006	95	54284	50.0	33.3	
67 1,4-Dioxane	88	7.769	7.780	-0.011	39	11637	1000.0	647.4	
68 Dichlorobromomethane	83	7.969	7.969	0.000	99	208761	50.0	38.7	
71 cis-1,3-Dichloropropene	75	8.416	8.422	-0.006	96	213076	50.0	38.7	
72 4-Methyl-2-pentanone (MIBK	43	8.580	8.580	0.000	89	41187	100.0	39.2	
73 Toluene	91	8.745	8.739	0.006	98	781443	50.0	46.4	
74 trans-1,3-Dichloropropene	75	9.004	9.010	-0.006	91	157583	50.0	39.5	
75 Ethyl methacrylate	69	9.069	9.075	-0.005	84	119694	50.0	44.8	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	90	92320	50.0	43.7	
77 Tetrachloroethene	164	9.257	9.257	0.000	94	196909	50.0	51.4	
78 1,3-Dichloropropane	76	9.345	9.351	-0.006	85	167025	50.0	47.4	
79 2-Hexanone	43	9.439	9.427	0.012	88	19137	100.0	35.0	
81 Chlorodibromomethane	129	9.563	9.563	0.000	90	116764	50.0	41.9	
82 Ethylene Dibromide	107	9.669	9.674	-0.005	99	74588	50.0	42.8	
83 Chlorobenzene	112	10.163	10.163	0.000	93	468728	50.0	46.0	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.257	-0.006	92	168402	50.0	44.1	
85 Ethylbenzene	106	10.263	10.263	0.000	99	284368	50.0	47.5	
86 m-Xylene & p-Xylene	106	10.398	10.392	0.006	0	362689	50.0	48.0	
88 o-Xylene	106	10.774	10.774	0.000	97	356916	50.0	50.0	
89 Styrene	104	10.798	10.798	0.000	93	561576	50.0	50.5	
90 Bromoform	173	10.980	10.980	0.000	95	61549	50.0	38.7	
91 Isopropylbenzene	105	11.139	11.145	-0.006	96	1079311	50.0	51.2	
94 Bromobenzene	156	11.451	11.451	0.000	95	173929	50.0	48.1	
93 1,1,2,2-Tetrachloroethane	83	11.457	11.463	-0.006	95	114454	50.0	51.0	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.510	-0.006	67	16759	50.0	45.7	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	85	34431	50.0	48.3	
97 N-Propylbenzene	120	11.557	11.563	-0.006	99	284965	50.0	57.7	
98 2-Chlorotoluene	126	11.639	11.645	-0.006	94	207859	50.0	53.1	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	93	937554	50.0	59.8	
100 4-Chlorotoluene	126	11.769	11.768	0.001	99	210915	50.0	55.5	
101 tert-Butylbenzene	119	12.051	12.051	0.000	91	815704	50.0	59.3	
103 1,2,4-Trimethylbenzene	105	12.116	12.115	0.001	98	916782	50.0	60.2	
104 sec-Butylbenzene	105	12.274	12.280	-0.006	95	1246286	50.0	61.3	
105 1,3-Dichlorobenzene	146	12.392	12.398	-0.006	94	366234	50.0	51.9	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	1095477	50.0	63.2	
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	94	377094	50.0	50.4	
110 n-Butylbenzene	91	12.839	12.845	-0.006	98	992622	50.0	68.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
111 1,2-Dichlorobenzene	146	12.851	12.857	-0.006	93	317104	50.0	50.8	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.639	0.006	83	12149	50.0	38.2	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	93	149744	50.0	49.2	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	96	168888	50.0	47.9	
116 Naphthalene	128	14.727	14.727	0.000	98	162048	50.0	40.0	
117 1,2,3-Trichlorobenzene	180	14.945	14.939	0.006	93	104325	50.0	46.8	
S 130 1,2-Dichloroethene, Total	96				0		100.0	77.5	
S 129 Xylenes, Total	106				0		100.0	98.0	
S 131 1,3-Dichloropropene, Total	1				0		100.0	78.2	
S 145 Total BTEX	1				0		250.0	231.0	

Reagents:

voaWKetmix1st_00024	Amount Added:	2.00	Units: uL		
VOA8260VOA2ND_00397	Amount Added:	2.00	Units: uL		
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent	

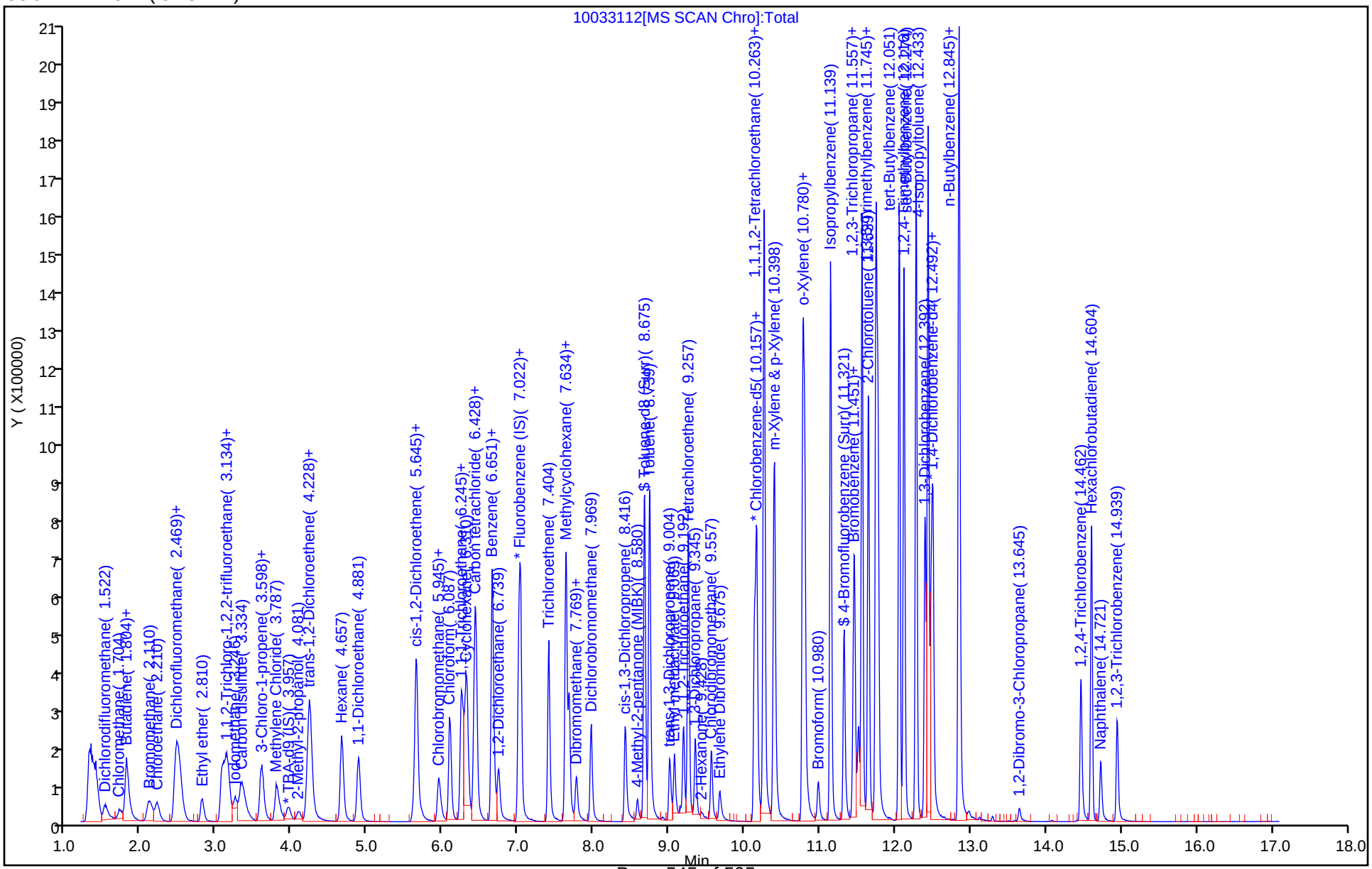
Report Date: 31-Mar-2020 23:54:02 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033112.d

Injection Date:	31-Mar-2020 23:00:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-A-6 MS			Worklist Smp#:	12
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033112.d
Lims ID: 180-104021-A-6 MS
Client ID: HD-COD-SW-15-0/1-0
Sample Type: MS
Inject. Date: 31-Mar-2020 23:00:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-012
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 31-Mar-2020 23:21:14 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	39.0	77.99
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	34.1	68.14
$ 7 Toluene-d8 (Surr)	50.0	50.8	101.62
$ 8 4-Bromofluorobenzene (Surr)	50.0	45.8	91.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 MS Lab Sample ID: 180-104021-7 MS

Matrix: Water Lab File ID: 10040114.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 11:20

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 01:01

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	6.80		1.0	0.90
75-01-4	Vinyl chloride	6.83		1.0	0.40
74-83-9	Bromomethane	5.50		1.0	0.89
75-00-3	Chloroethane	6.32		1.0	0.90
75-35-4	1,1-Dichloroethene	7.85		1.0	0.55
67-64-1	Acetone	5.76		5.0	3.4
75-15-0	Carbon disulfide	9.04		1.0	0.88
75-09-2	Methylene Chloride	6.90		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	7.03		1.0	0.67
1634-04-4	Methyl tert-butyl ether	6.58		1.0	0.59
75-34-3	1,1-Dichloroethane	7.62		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	7.20		1.0	0.71
74-97-5	Bromochloromethane	6.33		1.0	0.63
78-93-3	2-Butanone (MEK)	5.09		5.0	2.6
67-66-3	Chloroform	6.87		1.0	0.60
71-55-6	1,1,1-Trichloroethane	6.84		1.0	0.60
56-23-5	Carbon tetrachloride	6.76		1.0	0.88
71-43-2	Benzene	7.68		1.0	0.60
107-06-2	1,2-Dichloroethane	6.51		1.0	0.57
79-01-6	Trichloroethene	6.32		1.0	0.69
78-87-5	1,2-Dichloropropane	7.81		1.0	0.66
75-27-4	Bromodichloromethane	6.90		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	6.82		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	8.31		5.0	3.1
108-88-3	Toluene	8.36		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	7.57		1.0	0.58
79-00-5	1,1,2-Trichloroethane	7.91		1.0	0.45
127-18-4	Tetrachloroethene	6.62		1.0	0.47
591-78-6	2-Hexanone	7.29		5.0	3.3
124-48-1	Dibromochloromethane	7.43		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	8.06		1.0	0.50
108-90-7	Chlorobenzene	7.80		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	7.25		1.0	0.57
100-41-4	Ethylbenzene	8.16		1.0	0.51
1330-20-7	Xylenes, Total	16.2		2.0	0.89
100-42-5	Styrene	7.93		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 MS Lab Sample ID: 180-104021-7 MS

Matrix: Water Lab File ID: 10040114.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 11:20

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 01:01

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.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	6.87		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	8.91		1.0	0.60
107-13-1	Acrylonitrile	64.8		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	69		62-146
2037-26-5	Toluene-d8 (Surr)	88		75-120
460-00-4	4-Bromofluorobenzene (Surr)	103		64-120
1868-53-7	Dibromofluoromethane (Surr)	74		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040114.d
Lims ID: 180-104021-C-7 MS
Client ID:
Sample Type: MS
Inject. Date: 02-Apr-2020 01:01:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-014
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:01:56 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.951	3.951	0.000	0	102568	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	572410	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.127	10.133	-0.006	86	109343	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	95	170167	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	92	136968	50.0	36.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	147829	50.0	34.7	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.001	93	632703	50.0	44.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.321	0.001	84	255840	50.0	51.7	
10 Dichlorodifluoromethane	85	1.540	1.516	0.024	99	157911	50.0	43.0	
11 Chloromethane	50	1.728	1.722	0.006	99	84887	50.0	34.0	
13 Butadiene	39	1.810	1.804	0.006	90	105300	50.0	30.7	
12 Vinyl chloride	62	1.840	1.834	0.006	53	135100	50.0	34.1	a
14 Bromomethane	94	2.116	2.098	0.018	92	122046	50.0	27.5	
15 Chloroethane	64	2.210	2.216	-0.006	99	103235	50.0	31.6	
17 Dichlorofluoromethane	67	2.475	2.469	0.006	97	301825	50.0	30.5	
16 Trichlorofluoromethane	101	2.499	2.493	0.006	97	330266	50.0	28.9	
18 Ethyl ether	59	2.810	2.804	0.006	81	75655	50.0	35.5	
20 1,1-Dichloroethene	96	3.081	3.069	0.012	96	143357	50.0	39.3	
21 1,1,2-Trichloro-1,2,2-trif	101	3.146	3.140	0.006	95	168299	50.0	38.1	
22 Acetone	43	3.163	3.169	-0.006	29	18830	100.0	28.8	
23 Iodomethane	142	3.246	3.245	0.001	97	194787	50.0	32.1	
24 Carbon disulfide	76	3.334	3.363	-0.029	98	474711	50.0	45.2	
26 3-Chloro-1-propene	76	3.593	3.598	-0.005	79	97063	50.0	41.8	
28 Methyl acetate	43	3.634	3.616	0.018	94	55028	100.0	66.2	
29 Methylene Chloride	84	3.798	3.792	0.006	81	135213	50.0	34.5	
32 2-Methyl-2-propanol	59	4.093	4.081	0.012	98	56743	500.0	325.6	
31 Acrylonitrile	53	4.198	4.198	0.000	98	138660	500.0	324.0	
30 trans-1,2-Dichloroethene	96	4.228	4.234	-0.006	96	158470	50.0	35.2	
33 Methyl tert-butyl ether	73	4.251	4.239	0.012	92	289164	50.0	32.9	
34 Hexane	57	4.663	4.663	0.000	89	188437	50.0	37.1	
36 1,1-Dichloroethane	63	4.881	4.875	0.006	96	259719	50.0	38.1	
42 2,2-Dichloropropane	97	5.651	5.634	0.017	85	39290	50.0	35.9	
41 cis-1,2-Dichloroethene	96	5.651	5.651	0.000	81	160375	50.0	36.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
43 2-Butanone (MEK)	43	5.692	5.675	0.017	43	15985	100.0	25.5	
46 Chlorobromomethane	128	5.945	5.939	0.006	83	51981	50.0	31.6	
48 Tetrahydrofuran	42	5.963	5.969	-0.006	72	21744	100.0	62.8	
49 Chloroform	83	6.092	6.092	0.000	91	297286	50.0	34.3	
50 1,1,1-Trichloroethane	97	6.251	6.245	0.006	97	289916	50.0	34.2	
52 Cyclohexane	56	6.316	6.316	0.000	79	226323	50.0	37.6	
53 Carbon tetrachloride	117	6.422	6.416	0.006	95	281635	50.0	33.8	
54 1,1-Dichloropropene	75	6.439	6.439	0.000	97	263272	50.0	38.6	
55 Benzene	78	6.645	6.651	-0.006	95	645697	50.0	38.4	
51 Isobutyl alcohol	41	6.687	6.686	0.001	87	37456	1250.0	869.3	
56 1,2-Dichloroethane	62	6.739	6.739	0.000	98	164403	50.0	32.5	
59 n-Heptane	43	7.034	7.028	0.006	80	172433	50.0	35.0	
60 Trichloroethene	130	7.398	7.398	0.000	94	160655	50.0	31.6	
63 Methylcyclohexane	83	7.639	7.633	0.006	83	353035	50.0	38.4	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	90	128399	50.0	39.1	
65 Dibromomethane	93	7.763	7.769	-0.006	91	58955	50.0	34.1	
67 1,4-Dioxane	88	7.775	7.775	0.000	39	13392	1000.0	697.4	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	198136	50.0	34.5	
71 cis-1,3-Dichloropropene	75	8.422	8.422	0.000	96	196508	50.0	34.1	
72 4-Methyl-2-pentanone (MIBK	43	8.581	8.580	0.000	93	46625	100.0	41.6	
73 Toluene	91	8.739	8.739	0.000	98	739075	50.0	41.8	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	91	158117	50.0	37.8	
75 Ethyl methacrylate	69	9.069	9.069	0.000	85	109270	50.0	39.3	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	91	87915	50.0	39.6	
77 Tetrachloroethene	164	9.257	9.251	0.006	96	133319	50.0	33.1	
78 1,3-Dichloropropane	76	9.351	9.345	0.006	85	167104	50.0	45.1	
79 2-Hexanone	43	9.433	9.427	0.006	90	21322	100.0	36.4	
81 Chlorodibromomethane	129	9.563	9.557	0.006	89	108946	50.0	37.2	
82 Ethylene Dibromide	107	9.675	9.669	0.006	99	73810	50.0	40.3	
83 Chlorobenzene	112	10.157	10.157	0.000	93	417605	50.0	39.0	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.251	0.000	93	145390	50.0	36.2	
85 Ethylbenzene	106	10.263	10.263	0.000	99	257093	50.0	40.8	
86 m-Xylene & p-Xylene	106	10.392	10.398	-0.006	0	316598	50.0	39.8	
88 o-Xylene	106	10.769	10.774	-0.005	97	308639	50.0	41.2	
89 Styrene	104	10.798	10.798	0.000	92	463621	50.0	39.7	
90 Bromoform	173	10.974	10.980	-0.006	95	57334	50.0	34.3	
91 Isopropylbenzene	105	11.145	11.139	0.006	95	926367	50.0	41.8	
94 Bromobenzene	156	11.451	11.451	0.000	96	146924	50.0	37.3	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.457	0.006	96	105073	50.0	44.6	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.510	-0.006	64	14079	50.0	37.5	
95 1,2,3-Trichloropropane	110	11.516	11.515	0.001	82	33409	50.0	43.1	
97 N-Propylbenzene	120	11.557	11.557	0.000	99	231078	50.0	42.9	
98 2-Chlorotoluene	126	11.645	11.645	0.000	94	175583	50.0	41.2	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	93	772525	50.0	45.2	
100 4-Chlorotoluene	126	11.769	11.768	0.001	98	178403	50.0	43.1	
101 tert-Butylbenzene	119	12.051	12.051	0.000	91	658809	50.0	44.0	
103 1,2,4-Trimethylbenzene	105	12.116	12.115	0.001	97	761125	50.0	45.9	
104 sec-Butylbenzene	105	12.274	12.274	0.000	95	1045776	50.0	47.2	
105 1,3-Dichlorobenzene	146	12.398	12.398	0.000	96	302416	50.0	39.4	
106 4-Isopropyltoluene	119	12.439	12.433	0.006	96	847166	50.0	44.8	
107 1,4-Dichlorobenzene	146	12.492	12.504	-0.012	91	299946	50.0	36.8	
110 n-Butylbenzene	91	12.839	12.845	-0.006	98	764162	50.0	48.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	93	264738	50.0	38.9	
112 1,2-Dibromo-3-Chloropropan	157	13.651	13.645	0.006	78	10485	50.0	31.4	
114 1,2,4-Trichlorobenzene	180	14.457	14.462	-0.005	93	108609	50.0	32.7	
115 Hexachlorobutadiene	225	14.604	14.598	0.006	96	133722	50.0	33.2	
116 Naphthalene	128	14.721	14.727	-0.006	97	146659	50.0	33.3	
117 1,2,3-Trichlorobenzene	180	14.945	14.939	0.006	94	88338	50.0	36.4	
S 129 Xylenes, Total	106				0		100.0	81.0	
S 130 1,2-Dichloroethene, Total	96				0		100.0	71.1	
S 145 Total BTEX	1				0		250.0	202.0	
S 131 1,3-Dichloropropene, Total	1				0		100.0	71.9	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

voaWKetmix1st_00024	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00397	Amount Added:	2.00	Units: uL	
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

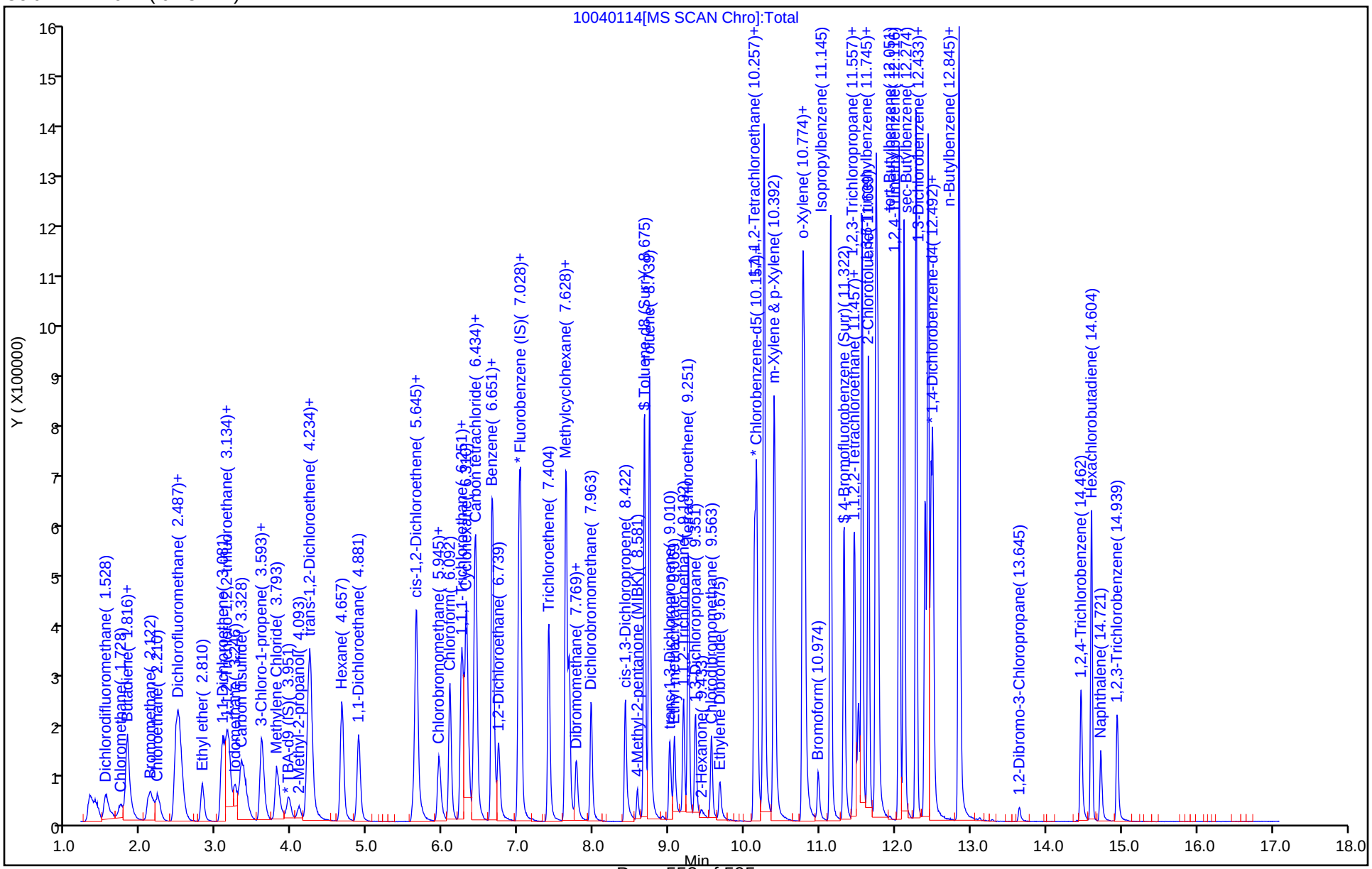
Report Date: 02-Apr-2020 22:01:57 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040114.d

Injection Date:	02-Apr-2020 01:01:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-C-7 MS			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040114.d
Lims ID: 180-104021-C-7 MS
Client ID:
Sample Type: MS
Inject. Date: 02-Apr-2020 01:01:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-014
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:01:56 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	36.9	73.85
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	34.7	69.40
$ 7 Toluene-d8 (Surr)	50.0	44.2	88.43
$ 8 4-Bromofluorobenzene (Surr)	50.0	51.7	103.49

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

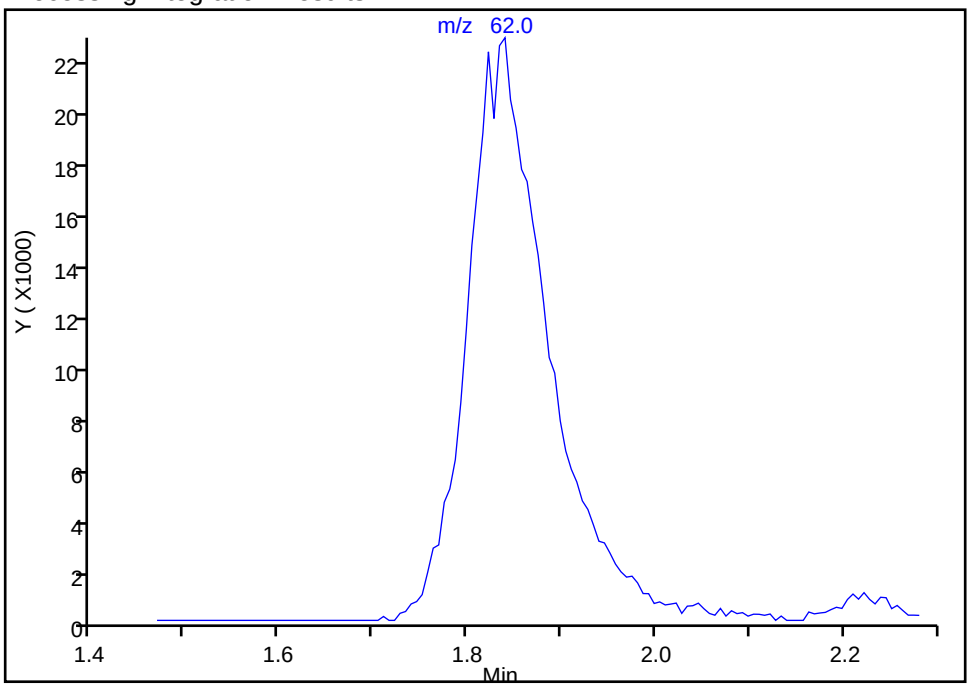
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040114.d		
Injection Date:	02-Apr-2020 01:01:30	Instrument ID:	CHHP10
Lims ID:	180-104021-C-7 MS		
Client ID:			
Operator ID:	034635	ALS Bottle#:	14 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

12 Vinyl chloride, CAS: 75-01-4

Signal: 1

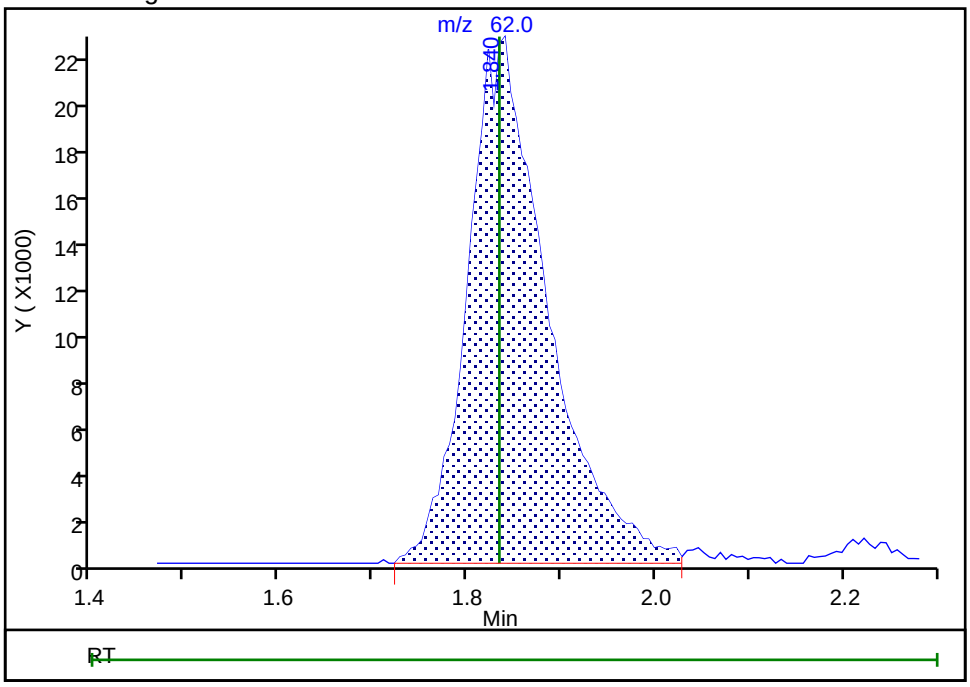
Not Detected
Expected RT: 1.83

Processing Integration Results



Manual Integration Results

RT: 1.84
Area: 135100
Amount: 34.138435
Amount Units: ng



Reviewer: journetp, 02-Apr-2020 16:13:30
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 MS Lab Sample ID: 180-104021-8 MS

Matrix: Water Lab File ID: 10040212.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 11:35

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 20:08

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.: 311900 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	9.76		1.0	0.90
75-01-4	Vinyl chloride	8.62		1.0	0.40
74-83-9	Bromomethane	7.05		1.0	0.89
75-00-3	Chloroethane	7.67		1.0	0.90
75-35-4	1,1-Dichloroethene	10.0		1.0	0.55
67-64-1	Acetone	24.0		5.0	3.4
75-15-0	Carbon disulfide	11.2		1.0	0.88
75-09-2	Methylene Chloride	10.8		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	8.86		1.0	0.67
1634-04-4	Methyl tert-butyl ether	10.1		1.0	0.59
75-34-3	1,1-Dichloroethane	10.1		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	9.49		1.0	0.71
74-97-5	Bromochloromethane	8.87		1.0	0.63
78-93-3	2-Butanone (MEK)	21.7		5.0	2.6
67-66-3	Chloroform	9.68		1.0	0.60
71-55-6	1,1,1-Trichloroethane	8.76		1.0	0.60
56-23-5	Carbon tetrachloride	8.13		1.0	0.88
71-43-2	Benzene	10.5		1.0	0.60
107-06-2	1,2-Dichloroethane	9.94		1.0	0.57
79-01-6	Trichloroethene	7.87		1.0	0.69
78-87-5	1,2-Dichloropropane	11.1		1.0	0.66
75-27-4	Bromodichloromethane	9.43		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	9.55		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	11.6		5.0	3.1
108-88-3	Toluene	10.6		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	10.4		1.0	0.58
79-00-5	1,1,2-Trichloroethane	11.3		1.0	0.45
127-18-4	Tetrachloroethene	8.62		1.0	0.47
591-78-6	2-Hexanone	20.3		5.0	3.3
124-48-1	Dibromochloromethane	10.4		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	10.7		1.0	0.50
108-90-7	Chlorobenzene	9.94		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.96		1.0	0.57
100-41-4	Ethylbenzene	10.4		1.0	0.51
1330-20-7	Xylenes, Total	21.0		2.0	0.89
100-42-5	Styrene	10.7		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 MS Lab Sample ID: 180-104021-8 MS

Matrix: Water Lab File ID: 10040212.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 11:35

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 20:08

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.: 311900 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.2		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	12.8		1.0	0.60
107-13-1	Acrylonitrile	103		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		62-146
2037-26-5	Toluene-d8 (Surr)	106		75-120
460-00-4	4-Bromofluorobenzene (Surr)	110		64-120
1868-53-7	Dibromofluoromethane (Surr)	94		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040212.d
Lims ID: 180-104021-B-8 MS
Client ID:
Sample Type: MS
Inject. Date: 02-Apr-2020 20:08:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031431-012
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 06-Apr-2020 15:04:59 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0338

First Level Reviewer: journetp Date: 06-Apr-2020 15:04:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.969	3.963	0.006	0	69087	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.004	7.010	-0.006	99	347583	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	88	65900	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.468	0.006	97	100408	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.281	-0.006	92	105897	50.0	47.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.657	-0.006	0	123273	50.0	47.7	
$ 7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	93	456940	50.0	53.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.316	0.006	86	164469	50.0	55.2	
10 Dichlorodifluoromethane	85	1.510	1.522	-0.012	99	108200	50.0	48.6	
11 Chloromethane	50	1.710	1.722	-0.012	98	74024	50.0	48.8	
13 Butadiene	39	1.799	1.804	-0.005	92	78317	50.0	37.6	
12 Vinyl chloride	62	1.816	1.828	-0.012	82	103550	50.0	43.1	
14 Bromomethane	94	2.087	2.110	-0.023	90	95100	50.0	35.3	
15 Chloroethane	64	2.193	2.222	-0.029	100	75984	50.0	38.3	
17 Dichlorofluoromethane	67	2.463	2.475	-0.012	96	229451	50.0	38.1	
16 Trichlorofluoromethane	101	2.469	2.493	-0.024	98	238707	50.0	34.4	
18 Ethyl ether	59	2.810	2.810	0.000	82	68719	50.0	53.2	
20 1,1-Dichloroethene	96	3.069	3.069	0.000	98	111132	50.0	50.1	
21 1,1,2-Trichloro-1,2,2-trif	101	3.122	3.140	-0.018	95	119348	50.0	44.5	
22 Acetone	43	3.169	3.175	-0.006	100	47741	100.0	120.2	
23 Iodomethane	142	3.234	3.263	-0.029	99	158507	50.0	43.0	
24 Carbon disulfide	76	3.352	3.351	0.001	98	357862	50.0	56.1	a
26 3-Chloro-1-propene	76	3.593	3.593	0.000	81	72258	50.0	51.3	
28 Methyl acetate	43	3.628	3.634	-0.006	95	59186	100.0	117.2	M
29 Methylene Chloride	84	3.793	3.798	-0.005	79	122881	50.0	54.2	
32 2-Methyl-2-propanol	59	4.116	4.092	0.024	98	52510	500.0	447.3	
31 Acrylonitrile	53	4.193	4.204	-0.011	99	134099	500.0	516.0	
30 trans-1,2-Dichloroethene	96	4.222	4.228	-0.006	98	121189	50.0	44.3	
33 Methyl tert-butyl ether	73	4.246	4.245	0.001	92	270321	50.0	50.7	
34 Hexane	57	4.663	4.663	0.000	87	147831	50.0	48.0	
36 1,1-Dichloroethane	63	4.875	4.875	0.000	96	209681	50.0	50.6	
42 2,2-Dichloropropane	97	5.640	5.639	0.001	86	29794	50.0	44.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
41 cis-1,2-Dichloroethene	96	5.651	5.651	0.000	83	128434	50.0	47.4	
43 2-Butanone (MEK)	43	5.681	5.687	-0.005	94	41381	100.0	108.5	
46 Chlorobromomethane	128	5.940	5.945	-0.005	81	44259	50.0	44.4	
48 Tetrahydrofuran	42	5.969	5.975	-0.006	70	21481	100.0	102.2	
49 Chloroform	83	6.087	6.092	-0.005	92	248715	50.0	48.4	
50 1,1,1-Trichloroethane	97	6.245	6.239	0.006	97	225491	50.0	43.8	
52 Cyclohexane	56	6.304	6.304	0.000	80	175482	50.0	48.0	
53 Carbon tetrachloride	117	6.422	6.422	0.000	96	205542	50.0	40.6	
54 1,1-Dichloropropene	75	6.440	6.439	0.001	98	210995	50.0	50.9	
55 Benzene	78	6.657	6.657	0.000	95	537690	50.0	52.7	
51 Isobutyl alcohol	41	6.687	6.681	0.006	89	36193	1250.0	1383.4	
56 1,2-Dichloroethane	62	6.740	6.739	0.001	99	152437	50.0	49.7	
59 n-Heptane	43	7.028	7.028	0.000	78	136944	50.0	45.8	
60 Trichloroethene	130	7.398	7.404	-0.006	93	121418	50.0	39.3	
63 Methylcyclohexane	83	7.628	7.628	0.000	81	270612	50.0	48.5	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	93	110369	50.0	55.3	
65 Dibromomethane	93	7.775	7.775	0.000	95	48719	50.0	46.3	
67 1,4-Dioxane	88	7.775	7.780	-0.005	43	10195	1000.0	864.4	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	164447	50.0	47.2	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	96	172904	50.0	47.8	
72 4-Methyl-2-pentanone (MIBK	43	8.581	8.580	0.001	92	41903	100.0	58.1	
73 Toluene	91	8.745	8.745	0.000	98	566723	50.0	53.2	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	90	134533	50.0	51.9	
75 Ethyl methacrylate	69	9.069	9.075	-0.006	86	95700	50.0	55.6	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	93	75810	50.0	56.6	
77 Tetrachloroethene	164	9.251	9.257	-0.006	93	104640	50.0	43.1	
78 1,3-Dichloropropane	76	9.351	9.345	0.006	85	144991	50.0	65.0	
79 2-Hexanone	43	9.434	9.427	0.007	93	46929	100.0	101.7	
81 Chlorodibromomethane	129	9.563	9.557	0.006	88	92050	50.0	52.1	
82 Ethylene Dibromide	107	9.675	9.674	0.001	99	59264	50.0	53.7	
83 Chlorobenzene	112	10.163	10.157	0.006	92	320703	50.0	49.7	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.257	-0.006	93	120403	50.0	49.8	
85 Ethylbenzene	106	10.263	10.263	0.000	98	196440	50.0	51.8	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	246562	50.0	51.5	
88 o-Xylene	106	10.775	10.774	0.001	97	242741	50.0	53.7	
89 Styrene	104	10.798	10.798	0.000	93	377867	50.0	53.6	
90 Bromoform	173	10.980	10.980	0.000	95	51134	50.0	50.8	
91 Isopropylbenzene	105	11.145	11.145	0.000	96	689550	50.0	51.6	
94 Bromobenzene	156	11.451	11.451	0.000	95	121986	50.0	52.5	
93 1,1,2,2-Tetrachloroethane	83	11.457	11.463	-0.006	93	91249	50.0	64.2	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	65	10459	50.0	44.7	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	83	28719	50.0	62.7	
97 N-Propylbenzene	120	11.563	11.557	0.006	99	169833	50.0	53.5	
98 2-Chlorotoluene	126	11.645	11.645	0.000	94	140584	50.0	55.9	
99 1,3,5-Trimethylbenzene	105	11.739	11.745	-0.006	93	585604	50.0	58.1	
100 4-Chlorotoluene	126	11.769	11.768	0.001	99	137101	50.0	56.1	
101 tert-Butylbenzene	119	12.051	12.051	0.000	91	489683	50.0	55.4	
103 1,2,4-Trimethylbenzene	105	12.116	12.115	0.001	97	571622	50.0	58.4	
104 sec-Butylbenzene	105	12.274	12.274	0.000	95	773167	50.0	59.2	
105 1,3-Dichlorobenzene	146	12.398	12.392	0.006	94	230122	50.0	50.8	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	640342	50.0	57.4	
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	92	246805	50.0	51.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
110 n-Butylbenzene	91	12.845	12.845	0.000	98	584744	50.0	62.6	
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	96	226351	50.0	56.4	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.657	-0.012	77	9761	50.0	46.4	
114 1,2,4-Trichlorobenzene	180	14.463	14.462	0.001	93	98540	50.0	50.4	
115 Hexachlorobutadiene	225	14.598	14.598	0.000	96	101775	50.0	44.4	
116 Naphthalene	128	14.721	14.727	-0.006	98	143872	50.0	55.3	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	94	84660	50.0	59.1	
S 130 1,2-Dichloroethene, Total	96				0		100.0	91.7	
S 129 Xylenes, Total	106				0		100.0	105.2	
S 131 1,3-Dichloropropene, Total	1				0		100.0	99.7	
S 145 Total BTEX	1				0		250.0	262.8	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

voaWKetmix1st_00024	Amount Added:	2.00	Units: uL		
VOA8260VOA2ND_00397	Amount Added:	2.00	Units: uL		
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent	

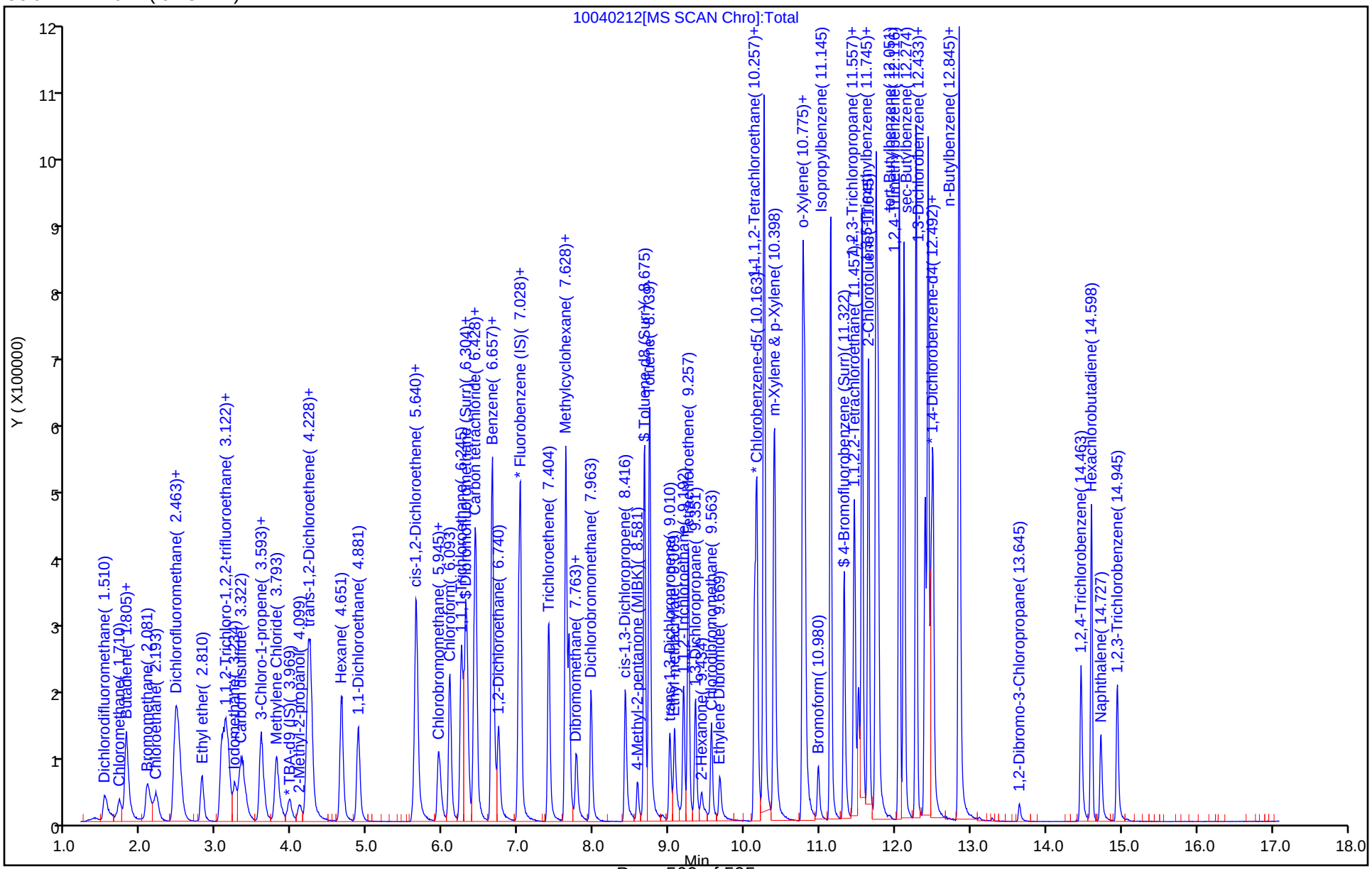
Report Date: 06-Apr-2020 15:05:00 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040212.d

Injection Date:	02-Apr-2020 20:08:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-B-8 MS			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040212.d
Lims ID: 180-104021-B-8 MS
Client ID:
Sample Type: MS
Inject. Date: 02-Apr-2020 20:08:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031431-012
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 06-Apr-2020 15:04:59 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0338

First Level Reviewer: journetp Date: 06-Apr-2020 15:04:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	47.0	94.03
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.7	95.30
$ 7 Toluene-d8 (Surr)	50.0	53.0	105.97
$ 8 4-Bromofluorobenzene (Surr)	50.0	55.2	110.39

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

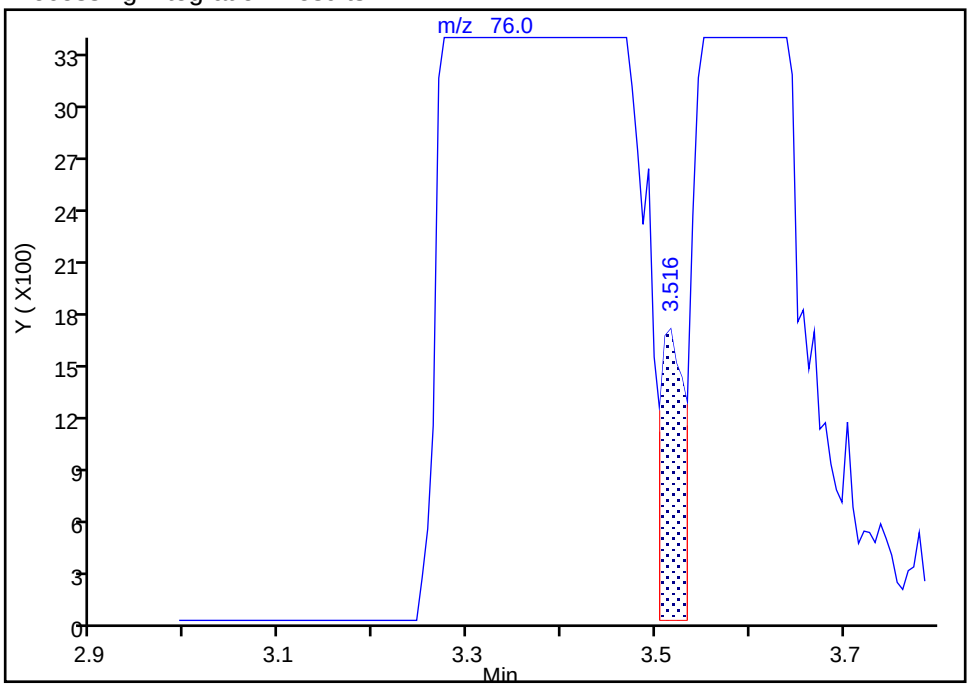
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200402-31431.b\10040212.d
Injection Date: 02-Apr-2020 20:08:30 Instrument ID: CHHP10
Lims ID: 180-104021-B-8 MS
Client ID:
Operator ID: 034635 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

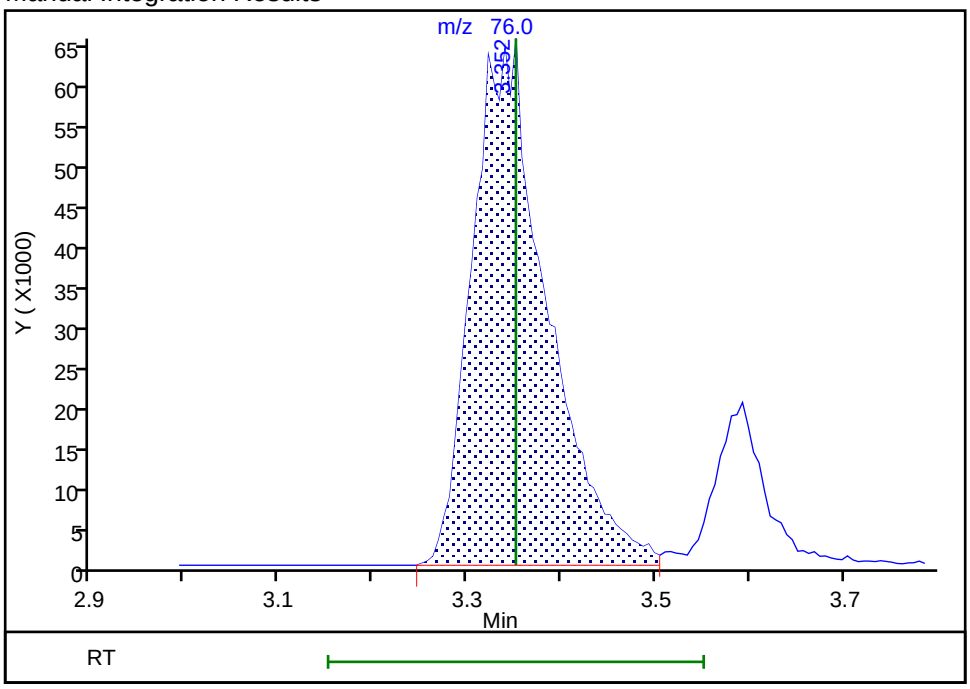
Processing Integration Results

RT: 3.52
Area: 3085
Amount: 0.483631
Amount Units: ng



Manual Integration Results

RT: 3.35
Area: 357862
Amount: 56.101544
Amount Units: ng



Reviewer: journetp, 02-Apr-2020 20:48:12
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD Lab Sample ID: 180-104021-6 MSD

Matrix: Water Lab File ID: 10033113.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:55

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2020 23:53

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	6.41		1.0	0.90
75-01-4	Vinyl chloride	6.60		1.0	0.40
74-83-9	Bromomethane	5.13		1.0	0.89
75-00-3	Chloroethane	6.32		1.0	0.90
75-35-4	1,1-Dichloroethene	7.98		1.0	0.55
67-64-1	Acetone	5.10		5.0	3.4
75-15-0	Carbon disulfide	7.77		1.0	0.88
75-09-2	Methylene Chloride	6.71		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	7.19		1.0	0.67
1634-04-4	Methyl tert-butyl ether	6.16		1.0	0.59
75-34-3	1,1-Dichloroethane	8.16		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	8.15		1.0	0.71
74-97-5	Bromochloromethane	6.15		1.0	0.63
78-93-3	2-Butanone (MEK)	6.08		5.0	2.6
67-66-3	Chloroform	7.46		1.0	0.60
71-55-6	1,1,1-Trichloroethane	7.67		1.0	0.60
56-23-5	Carbon tetrachloride	7.24		1.0	0.88
71-43-2	Benzene	8.10		1.0	0.60
107-06-2	1,2-Dichloroethane	6.30		1.0	0.57
79-01-6	Trichloroethene	7.73		1.0	0.69
78-87-5	1,2-Dichloropropane	8.84		1.0	0.66
75-27-4	Bromodichloromethane	7.92		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	7.98		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	7.87		5.0	3.1
108-88-3	Toluene	9.95		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	7.93		1.0	0.58
79-00-5	1,1,2-Trichloroethane	8.96		1.0	0.45
127-18-4	Tetrachloroethene	10.9		1.0	0.47
591-78-6	2-Hexanone	8.29		5.0	3.3
124-48-1	Dibromochloromethane	8.59		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	8.56		1.0	0.50
108-90-7	Chlorobenzene	9.29		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.02		1.0	0.57
100-41-4	Ethylbenzene	10.2		1.0	0.51
1330-20-7	Xylenes, Total	19.8		2.0	0.89
100-42-5	Styrene	9.78		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD Lab Sample ID: 180-104021-6 MSD

Matrix: Water Lab File ID: 10033113.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 12:55

Sample wt/vol: 5(mL) Date Analyzed: 03/31/2020 23:53

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.: 311669 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	7.73		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	9.70		1.0	0.60
107-13-1	Acrylonitrile	53.4		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	74		62-146
2037-26-5	Toluene-d8 (Surr)	102		75-120
460-00-4	4-Bromofluorobenzene (Surr)	90		64-120
1868-53-7	Dibromofluoromethane (Surr)	80		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033113.d
Lims ID: 180-104021-A-6 MSD
Client ID: HD-COD-SW-15-0/1-0
Sample Type: MSD
Inject. Date: 31-Mar-2020 23:53:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-013
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 00:18:14 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: journetp Date: 01-Apr-2020 00:18:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.951	3.957	-0.006	0	72599	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	564759	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	87	108894	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	96	157101	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	92	146091	50.0	39.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	154798	50.0	36.8	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	725454	50.0	50.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.316	0.006	84	221016	50.0	44.9	
10 Dichlorodifluoromethane	85	1.540	1.534	0.006	99	119396	50.0	33.0	
11 Chloromethane	50	1.734	1.740	-0.006	98	78992	50.0	32.1	M
13 Butadiene	39	1.840	1.828	0.012	93	110691	50.0	32.7	
12 Vinyl chloride	62	1.840	1.840	0.000	60	128857	50.0	33.0	a
14 Bromomethane	94	2.134	2.134	0.000	91	112430	50.0	25.7	
15 Chloroethane	64	2.252	2.251	0.001	98	101793	50.0	31.6	a
17 Dichlorofluoromethane	67	2.504	2.493	0.011	96	299554	50.0	30.6	
16 Trichlorofluoromethane	101	2.510	2.504	0.006	98	319575	50.0	28.4	
18 Ethyl ether	59	2.816	2.822	-0.006	82	66042	50.0	31.4	
20 1,1-Dichloroethene	96	3.081	3.081	0.000	97	143725	50.0	39.9	
21 1,1,2-Trichloro-1,2,2-trif	101	3.199	3.169	0.030	92	156027	50.0	35.8	
22 Acetone	43	3.181	3.175	0.006	42	16441	100.0	25.5	
23 Iodomethane	142	3.257	3.257	0.000	99	180850	50.0	30.2	
24 Carbon disulfide	76	3.363	3.363	0.000	98	402907	50.0	38.9	a
26 3-Chloro-1-propene	76	3.610	3.604	0.006	80	98852	50.0	43.2	
28 Methyl acetate	43	3.628	3.628	0.000	94	50048	100.0	61.0	
29 Methylene Chloride	84	3.798	3.816	-0.018	78	130231	50.0	33.5	
32 2-Methyl-2-propanol	59	4.093	4.081	0.012	96	52848	500.0	428.4	
31 Acrylonitrile	53	4.204	4.204	0.000	99	112765	500.0	267.1	
30 trans-1,2-Dichloroethene	96	4.234	4.234	0.000	98	159963	50.0	36.0	
33 Methyl tert-butyl ether	73	4.246	4.251	-0.005	92	267092	50.0	30.8	
34 Hexane	57	4.675	4.675	0.000	89	192159	50.0	38.4	
36 1,1-Dichloroethane	63	4.893	4.887	0.006	96	274366	50.0	40.8	
42 2,2-Dichloropropane	97	5.651	5.645	0.006	86	43458	50.0	40.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
41 cis-1,2-Dichloroethene	96	5.651	5.657	-0.006	81	179216	50.0	40.7	
43 2-Butanone (MEK)	43	5.681	5.681	0.000	98	18834	100.0	30.4	
46 Chlorobromomethane	128	5.951	5.951	0.000	87	49869	50.0	30.8	
48 Tetrahydrofuran	42	5.969	5.969	0.000	72	20494	100.0	60.0	
49 Chloroform	83	6.098	6.098	0.000	92	316481	50.0	37.3	
50 1,1,1-Trichloroethane	97	6.251	6.251	0.000	97	321009	50.0	38.4	
52 Cyclohexane	56	6.316	6.316	0.000	88	225287	50.0	38.0	
53 Carbon tetrachloride	117	6.422	6.428	-0.006	96	297512	50.0	36.2	
54 1,1-Dichloropropene	75	6.445	6.445	0.000	98	273525	50.0	40.6	
55 Benzene	78	6.663	6.657	0.006	95	672351	50.0	40.5	
51 Isobutyl alcohol	41	6.687	6.681	0.006	88	35038	1250.0	824.2	
56 1,2-Dichloroethane	62	6.739	6.739	0.000	99	156990	50.0	31.5	
59 n-Heptane	43	7.034	7.033	0.001	77	198556	50.0	40.8	
60 Trichloroethene	130	7.404	7.410	-0.006	95	193896	50.0	38.7	
63 Methylcyclohexane	83	7.634	7.633	0.001	82	373973	50.0	41.3	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	91	143269	50.0	44.2	
65 Dibromomethane	93	7.769	7.775	-0.006	95	53319	50.0	31.2	
67 1,4-Dioxane	88	7.786	7.780	0.006	37	11034	1000.0	588.9	
68 Dichlorobromomethane	83	7.963	7.969	-0.006	99	224442	50.0	39.6	
71 cis-1,3-Dichloropropene	75	8.422	8.422	0.000	96	230992	50.0	39.9	
72 4-Methyl-2-pentanone (MIBK	43	8.581	8.580	0.001	91	43379	100.0	39.4	
73 Toluene	91	8.739	8.739	0.000	97	876783	50.0	49.8	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	91	165735	50.0	39.6	
75 Ethyl methacrylate	69	9.075	9.075	0.001	86	131022	50.0	46.7	
76 1,1,2-Trichloroethane	97	9.198	9.192	0.006	92	99153	50.0	44.8	
77 Tetrachloroethene	164	9.257	9.257	0.000	97	219519	50.0	54.7	
78 1,3-Dichloropropane	76	9.351	9.351	0.000	86	181609	50.0	49.3	
79 2-Hexanone	43	9.433	9.427	0.006	88	25534	100.0	41.4	
81 Chlorodibromomethane	129	9.563	9.563	0.000	88	125472	50.0	43.0	
82 Ethylene Dibromide	107	9.675	9.674	0.001	98	78036	50.0	42.8	
83 Chlorobenzene	112	10.163	10.163	0.000	95	495712	50.0	46.5	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.257	-0.006	93	180135	50.0	45.1	
85 Ethylbenzene	106	10.263	10.263	0.000	98	320508	50.0	51.1	
86 m-Xylene & p-Xylene	106	10.392	10.392	0.000	0	401124	50.0	50.7	
88 o-Xylene	106	10.775	10.774	0.000	97	363648	50.0	48.7	
89 Styrene	104	10.798	10.798	0.000	92	569168	50.0	48.9	
90 Bromoform	173	10.980	10.980	0.000	96	64235	50.0	38.6	
91 Isopropylbenzene	105	11.145	11.145	0.000	95	1128812	50.0	51.1	
94 Bromobenzene	156	11.451	11.451	0.000	95	175937	50.0	48.4	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	95	113831	50.0	48.5	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.510	-0.006	66	16742	50.0	45.5	
95 1,2,3-Trichloropropane	110	11.510	11.516	-0.006	83	34260	50.0	47.8	
97 N-Propylbenzene	120	11.557	11.563	-0.006	99	282456	50.0	56.8	
98 2-Chlorotoluene	126	11.645	11.645	0.000	94	215853	50.0	54.9	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	94	941780	50.0	59.7	
100 4-Chlorotoluene	126	11.769	11.768	0.001	97	214161	50.0	56.0	
101 tert-Butylbenzene	119	12.051	12.051	0.000	91	798448	50.0	57.7	
103 1,2,4-Trimethylbenzene	105	12.116	12.115	0.001	98	930159	50.0	60.7	
104 sec-Butylbenzene	105	12.280	12.280	0.000	95	1252107	50.0	61.2	
105 1,3-Dichlorobenzene	146	12.392	12.398	-0.006	95	381195	50.0	53.8	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	1051503	50.0	60.3	
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	92	368993	50.0	49.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
110 n-Butylbenzene	91	12.845	12.845	0.000	99	984696	50.0	67.4	
111 1,2-Dichlorobenzene	146	12.857	12.857	0.000	96	321907	50.0	51.3	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.639	0.006	80	12520	50.0	39.0	
114 1,2,4-Trichlorobenzene	180	14.463	14.462	0.000	94	137122	50.0	44.8	
115 Hexachlorobutadiene	225	14.598	14.604	-0.006	96	155555	50.0	43.2	
116 Naphthalene	128	14.727	14.727	0.000	97	166614	50.0	40.9	
117 1,2,3-Trichlorobenzene	180	14.939	14.939	0.000	94	95039	50.0	42.4	
S 130 1,2-Dichloroethene, Total	96				0		100.0	76.7	
S 129 Xylenes, Total	106				0		100.0	99.4	
S 131 1,3-Dichloropropene, Total	1				0		100.0	79.5	
S 145 Total BTEX	1				0		250.0	240.8	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

VOA8260VOA2ND_00397	Amount Added:	2.00	Units: uL	
voaWKetmix1st_00024	Amount Added:	2.00	Units: uL	
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

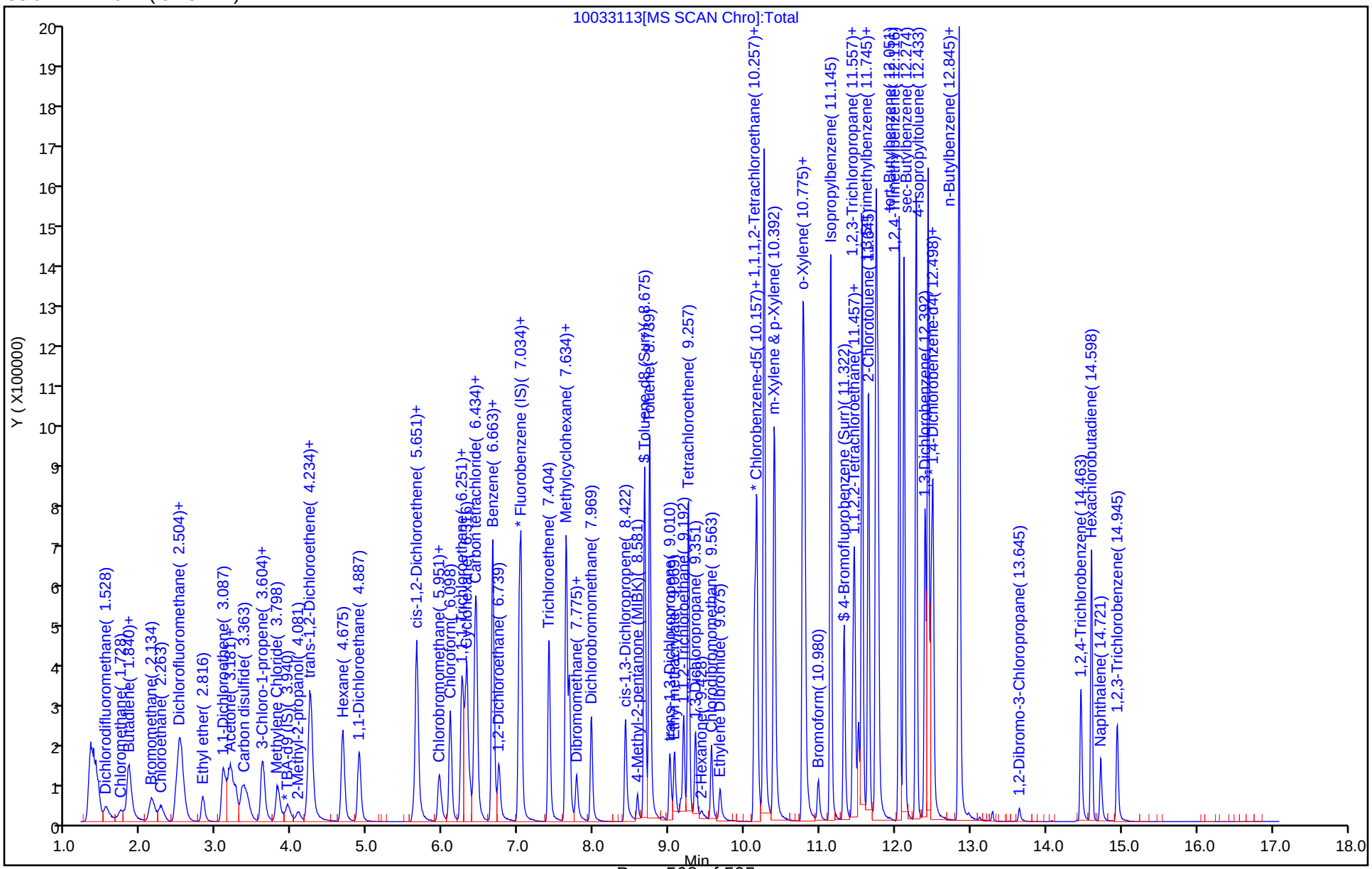
Report Date: 01-Apr-2020 00:18:48 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033113.d

Injection Date:	31-Mar-2020 23:53:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-A-6 MSD			Worklist Smp#:	13
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033113.d
Lims ID: 180-104021-A-6 MSD
Client ID: HD-COD-SW-15-0/1-0
Sample Type: MSD
Inject. Date: 31-Mar-2020 23:53:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031398-013
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 01-Apr-2020 00:18:14 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: journetp Date: 01-Apr-2020 00:18:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	39.9	79.84
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.8	73.66
$ 7 Toluene-d8 (Surr)	50.0	50.9	101.82
$ 8 4-Bromofluorobenzene (Surr)	50.0	44.9	89.77

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

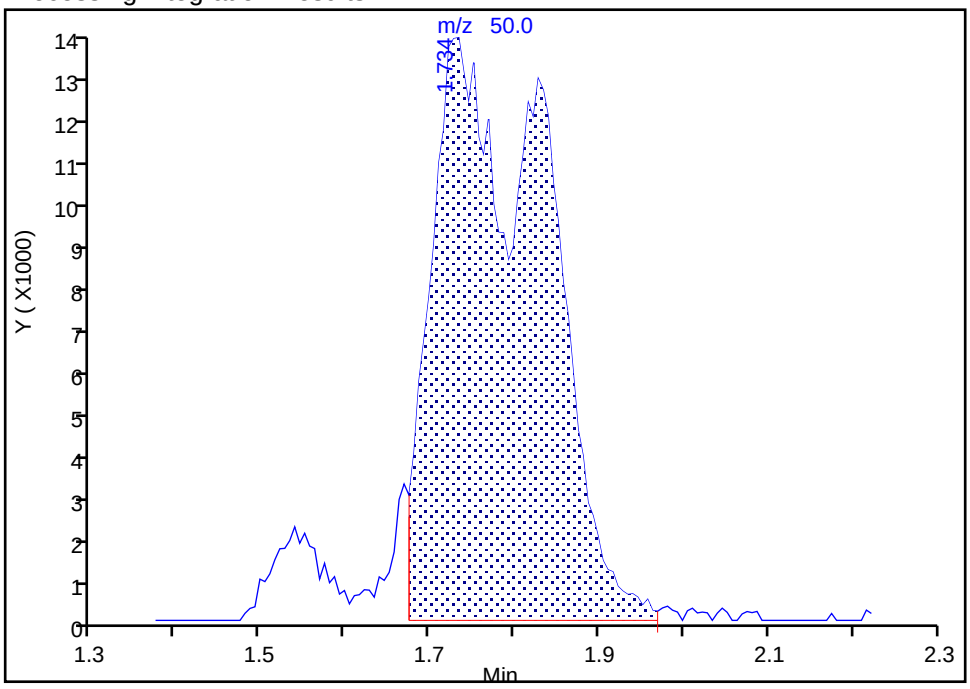
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033113.d				
Injection Date:	31-Mar-2020 23:53:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-A-6 MSD				
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Chloromethane, CAS: 74-87-3

Signal: 1

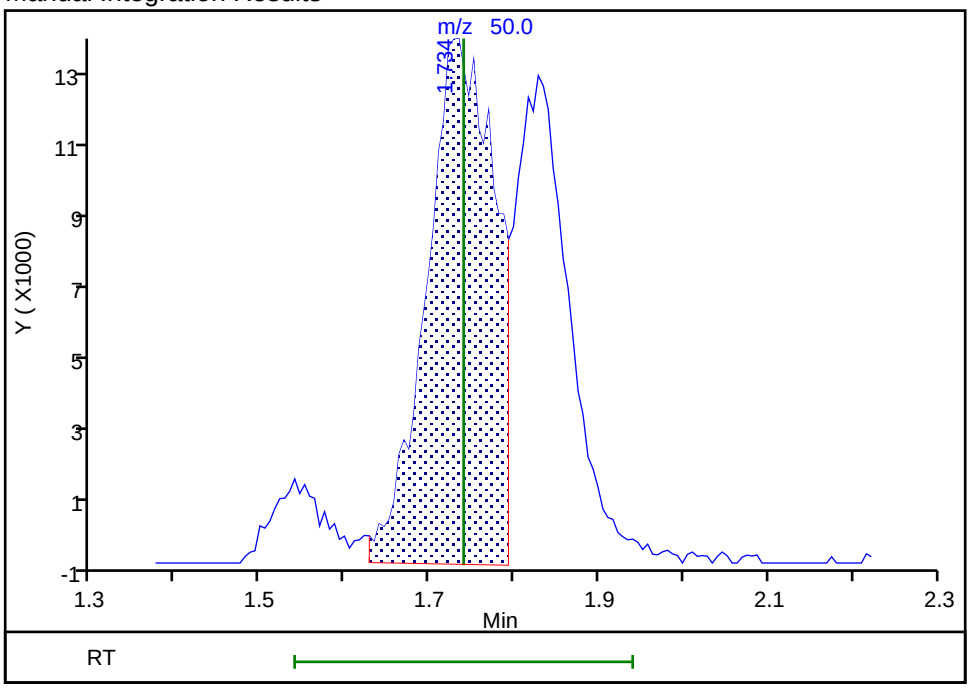
Processing Integration Results

RT: 1.73
Area: 130202
Amount: 52.845759
Amount Units: ng



Manual Integration Results

RT: 1.73
Area: 78992
Amount: 32.060892
Amount Units: ng



Reviewer: journetp, 01-Apr-2020 00:18:02

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

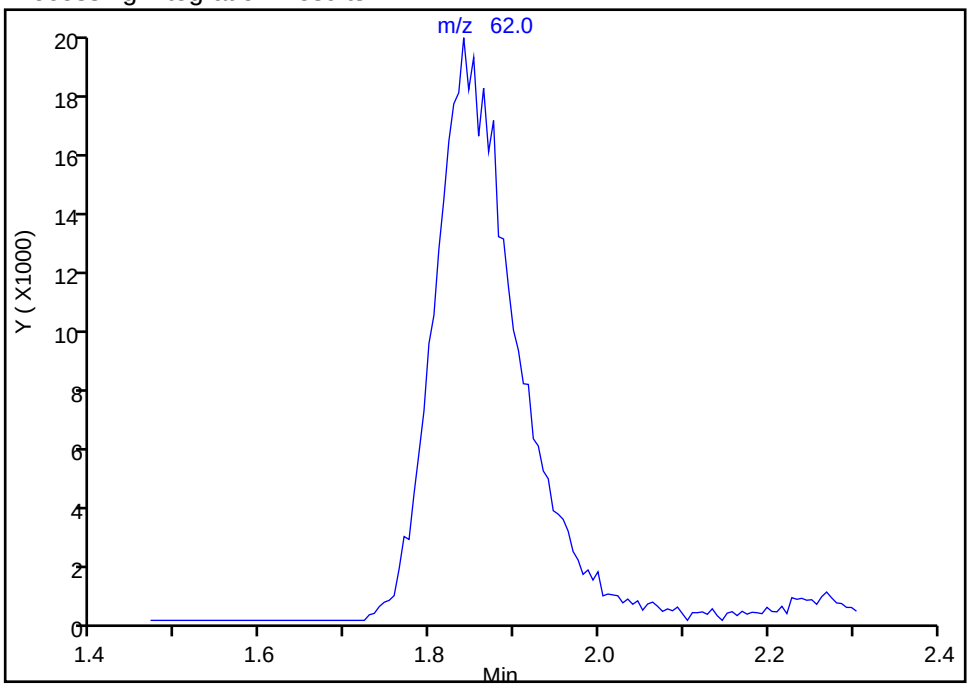
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033113.d				
Injection Date:	31-Mar-2020 23:53:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-A-6 MSD				
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Vinyl chloride, CAS: 75-01-4

Signal: 1

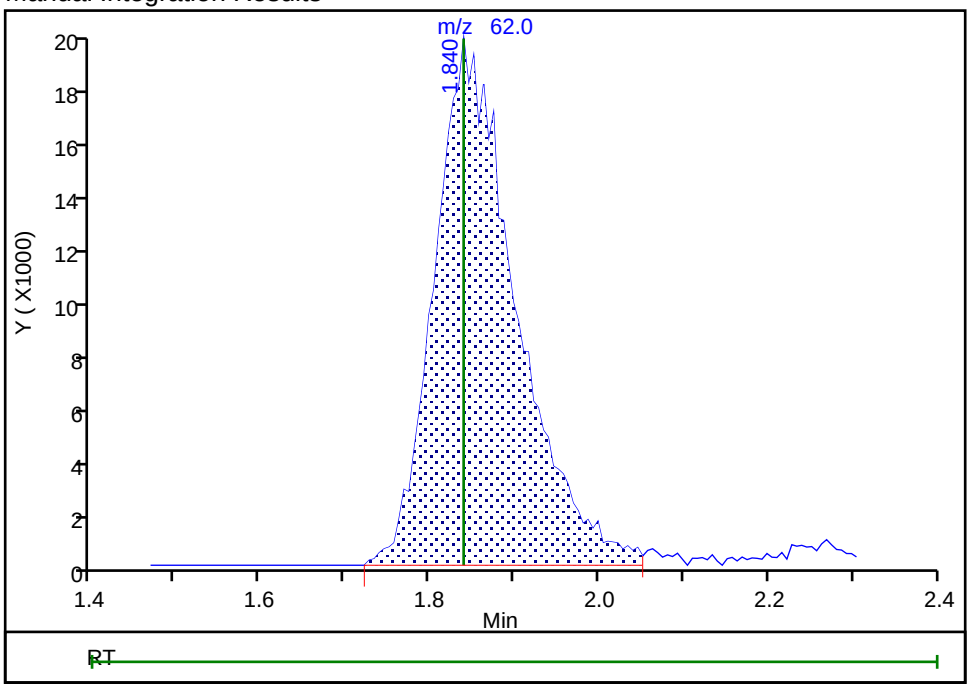
Not Detected
Expected RT: 1.84

Processing Integration Results



Manual Integration Results

RT: 1.84
Area: 128857
Amount: 33.002005
Amount Units: ng



Reviewer: journetp, 01-Apr-2020 00:17:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

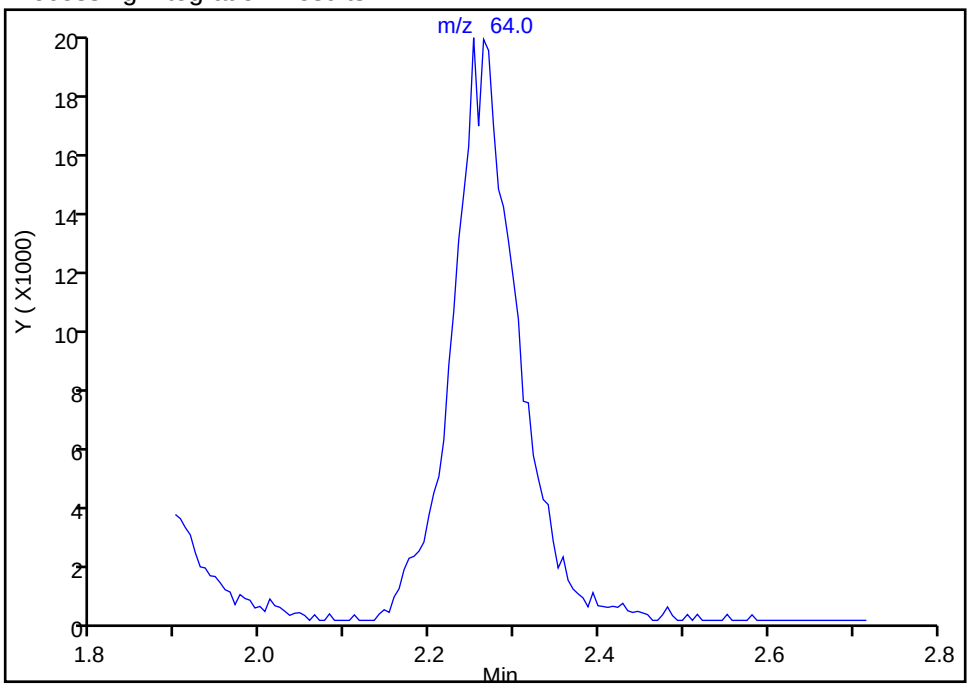
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033113.d				
Injection Date:	31-Mar-2020 23:53:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-A-6 MSD				
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

15 Chloroethane, CAS: 75-00-3

Signal: 1

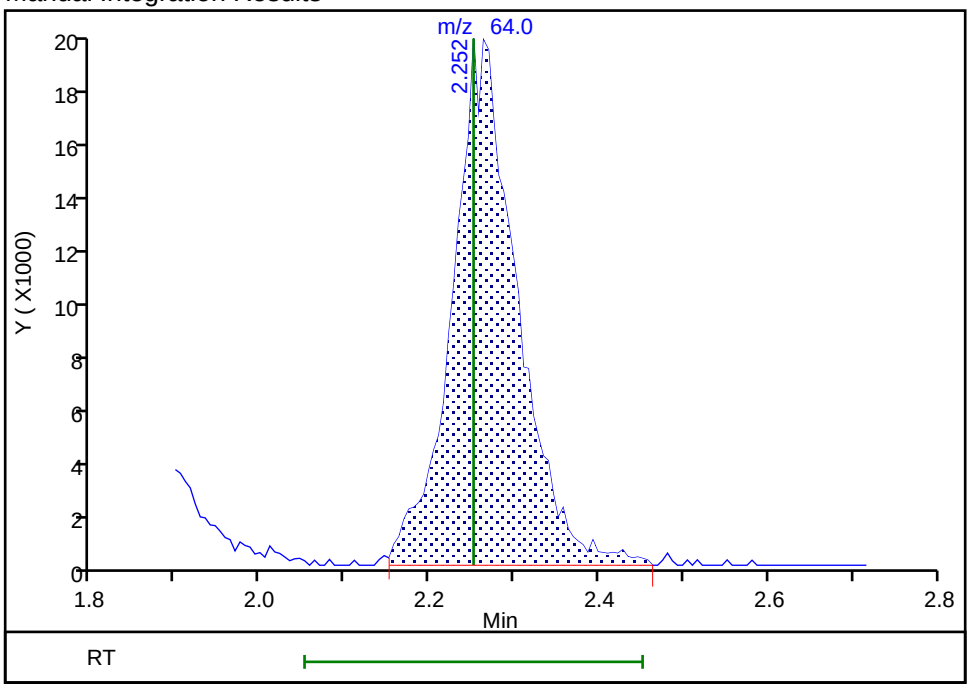
Not Detected
Expected RT: 2.25

Processing Integration Results



Manual Integration Results

RT: 2.25
Area: 101793
Amount: 31.604822
Amount Units: ng



Reviewer: journetp, 01-Apr-2020 00:17:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

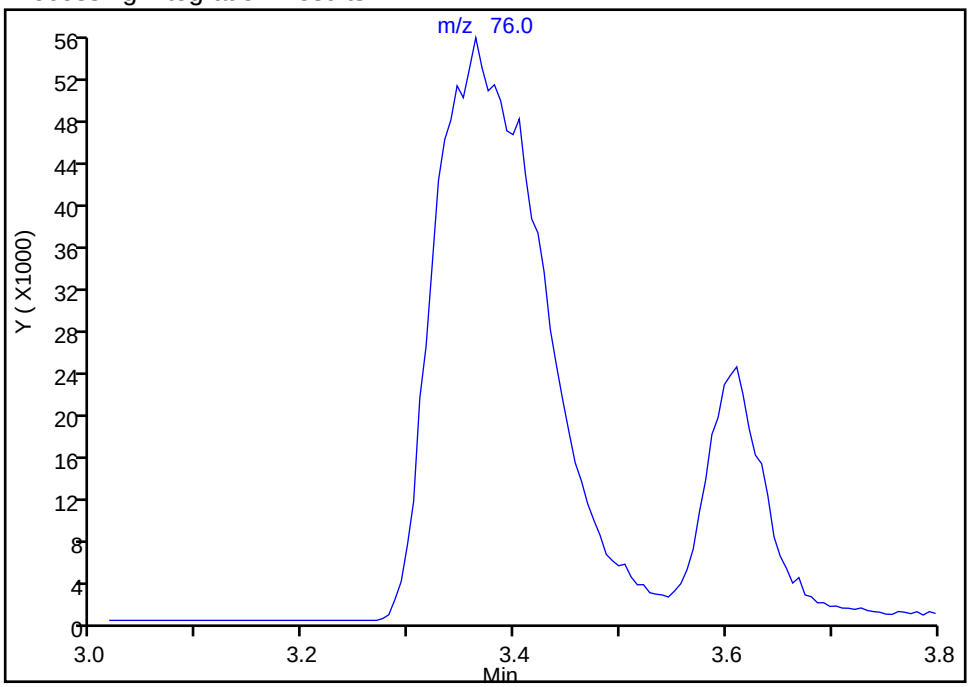
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20200331-31398.b\10033113.d				
Injection Date:	31-Mar-2020 23:53:30	Instrument ID:	CHHP10		
Lims ID:	180-104021-A-6 MSD				
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

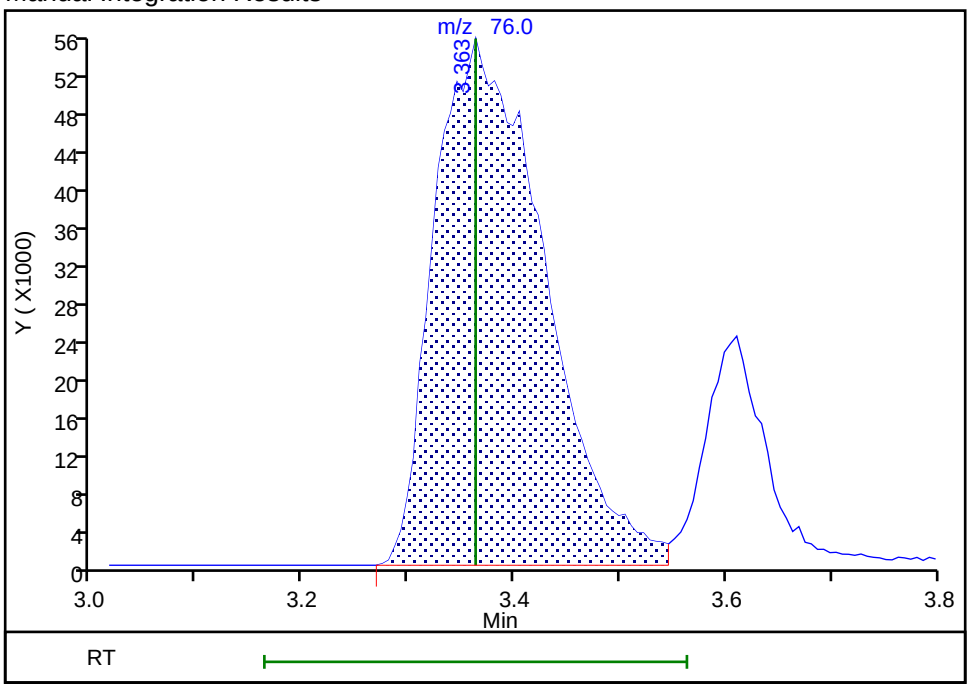
Not Detected
Expected RT: 3.36

Processing Integration Results



Manual Integration Results

RT: 3.36
Area: 402907
Amount: 38.874016
Amount Units: ng



Reviewer: journetp, 01-Apr-2020 00:18:06
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 MSD Lab Sample ID: 180-104021-7 MSD

Matrix: Water Lab File ID: 10040115.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 11:20

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 01:28

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	8.35		1.0	0.90
75-01-4	Vinyl chloride	8.07		1.0	0.40
74-83-9	Bromomethane	5.87		1.0	0.89
75-00-3	Chloroethane	6.49		1.0	0.90
75-35-4	1,1-Dichloroethene	8.81		1.0	0.55
67-64-1	Acetone	6.59		5.0	3.4
75-15-0	Carbon disulfide	10.0		1.0	0.88
75-09-2	Methylene Chloride	8.02		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	7.54		1.0	0.67
1634-04-4	Methyl tert-butyl ether	8.16		1.0	0.59
75-34-3	1,1-Dichloroethane	8.47		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	7.83		1.0	0.71
74-97-5	Bromochloromethane	7.09		1.0	0.63
78-93-3	2-Butanone (MEK)	8.62		5.0	2.6
67-66-3	Chloroform	7.15		1.0	0.60
71-55-6	1,1,1-Trichloroethane	7.24		1.0	0.60
56-23-5	Carbon tetrachloride	7.02		1.0	0.88
71-43-2	Benzene	8.27		1.0	0.60
107-06-2	1,2-Dichloroethane	7.86		1.0	0.57
79-01-6	Trichloroethene	6.50		1.0	0.69
78-87-5	1,2-Dichloropropane	9.21		1.0	0.66
75-27-4	Bromodichloromethane	7.72		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	8.29		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	11.0		5.0	3.1
108-88-3	Toluene	9.14		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	9.22		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.62		1.0	0.45
127-18-4	Tetrachloroethene	7.62		1.0	0.47
591-78-6	2-Hexanone	12.2		5.0	3.3
124-48-1	Dibromochloromethane	8.77		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.94		1.0	0.50
108-90-7	Chlorobenzene	8.60		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	8.21		1.0	0.57
100-41-4	Ethylbenzene	8.86		1.0	0.51
1330-20-7	Xylenes, Total	17.3		2.0	0.89
100-42-5	Styrene	8.71		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 MSD Lab Sample ID: 180-104021-7 MSD

Matrix: Water Lab File ID: 10040115.d

Analysis Method: EPA 8260C Date Collected: 03/25/2020 11:20

Sample wt/vol: 5(mL) Date Analyzed: 04/02/2020 01:28

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 311793 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	8.94		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	11.3		1.0	0.60
107-13-1	Acrylonitrile	88.4		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	73		62-146
2037-26-5	Toluene-d8 (Surr)	91		75-120
460-00-4	4-Bromofluorobenzene (Surr)	112		64-120
1868-53-7	Dibromofluoromethane (Surr)	76		71-132

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040115.d
Lims ID: 180-104021-C-7 MSD
Client ID:
Sample Type: MSD
Inject. Date: 02-Apr-2020 01:28:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-015
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:00 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.957	3.951	0.006	0	164646	1000.0	1000.0	s
* 2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	608271	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	89	113958	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	96	178919	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	93	148852	50.0	37.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	164372	50.0	36.3	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.001	93	679855	50.0	45.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.316	11.321	-0.005	83	288493	50.0	56.0	
10 Dichlorodifluoromethane	85	1.522	1.516	0.006	99	186869	50.0	47.9	
11 Chloromethane	50	1.722	1.722	0.000	97	110798	50.0	41.8	
13 Butadiene	39	1.804	1.804	0.000	92	126129	50.0	34.6	
12 Vinyl chloride	62	1.828	1.834	-0.006	98	169661	50.0	40.3	
14 Bromomethane	94	2.110	2.098	0.012	92	138506	50.0	29.3	
15 Chloroethane	64	2.210	2.216	-0.006	99	112618	50.0	32.5	
17 Dichlorofluoromethane	67	2.463	2.469	-0.006	96	336088	50.0	31.9	
16 Trichlorofluoromethane	101	2.493	2.493	0.000	96	371603	50.0	30.6	
18 Ethyl ether	59	2.804	2.804	0.000	83	99734	50.0	44.1	
20 1,1-Dichloroethene	96	3.063	3.069	-0.006	93	170881	50.0	44.0	a
21 1,1,2-Trichloro-1,2,2-trif	101	3.146	3.140	0.006	94	187125	50.0	39.9	
22 Acetone	43	3.163	3.169	-0.006	100	22896	100.0	33.0	
23 Iodomethane	142	3.251	3.245	0.006	98	234984	50.0	36.4	
24 Carbon disulfide	76	3.328	3.363	-0.035	99	558993	50.0	50.1	
26 3-Chloro-1-propene	76	3.587	3.598	-0.011	83	112236	50.0	45.5	
28 Methyl acetate	43	3.622	3.616	0.006	95	85418	100.0	96.7	
29 Methylene Chloride	84	3.798	3.792	0.006	85	163953	50.0	40.1	
32 2-Methyl-2-propanol	59	4.098	4.081	0.017	98	96463	500.0	344.8	
31 Acrylonitrile	53	4.187	4.198	-0.011	99	200982	500.0	442.0	
30 trans-1,2-Dichloroethene	96	4.228	4.234	-0.006	98	180586	50.0	37.7	
33 Methyl tert-butyl ether	73	4.245	4.239	0.006	92	381096	50.0	40.8	
34 Hexane	57	4.657	4.663	-0.006	89	223351	50.0	41.4	
36 1,1-Dichloroethane	63	4.875	4.875	0.000	96	306739	50.0	42.3	
42 2,2-Dichloropropane	97	5.639	5.634	0.005	86	43700	50.0	37.6	
41 cis-1,2-Dichloroethene	96	5.651	5.651	0.000	81	185377	50.0	39.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
43 2-Butanone (MEK)	43	5.692	5.675	0.017	91	28756	100.0	43.1	
46 Chlorobromomethane	128	5.939	5.939	0.000	85	61923	50.0	35.5	
48 Tetrahydrofuran	42	5.969	5.969	0.000	70	34115	100.0	92.7	
49 Chloroform	83	6.092	6.092	0.000	92	328020	50.0	35.8	
50 1,1,1-Trichloroethane	97	6.239	6.245	-0.006	97	326286	50.0	36.2	
52 Cyclohexane	56	6.316	6.316	0.000	84	259483	50.0	40.6	
53 Carbon tetrachloride	117	6.416	6.416	0.000	96	310723	50.0	35.1	
54 1,1-Dichloropropene	75	6.434	6.439	-0.005	98	304525	50.0	42.0	
55 Benzene	78	6.651	6.651	0.000	95	738734	50.0	41.3	
51 Isobutyl alcohol	41	6.681	6.686	-0.005	85	62819	1250.0	1372.0	
56 1,2-Dichloroethane	62	6.739	6.739	0.000	98	211075	50.0	39.3	
59 n-Heptane	43	7.028	7.028	0.000	77	195471	50.0	37.3	
60 Trichloroethene	130	7.404	7.398	0.006	92	175551	50.0	32.5	
63 Methylcyclohexane	83	7.633	7.633	0.000	83	399538	50.0	40.9	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	93	160795	50.0	46.0	
65 Dibromomethane	93	7.763	7.769	-0.006	93	73173	50.0	39.8	
67 1,4-Dioxane	88	7.786	7.775	0.011	46	18853	1000.0	911.1	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	235489	50.0	38.6	
71 cis-1,3-Dichloropropene	75	8.422	8.422	0.000	96	259271	50.0	41.4	
72 4-Methyl-2-pentanone (MIBK	43	8.580	8.580	0.000	90	68222	100.0	55.2	
73 Toluene	91	8.739	8.739	0.000	99	842374	50.0	45.7	
74 trans-1,3-Dichloropropene	75	9.004	9.010	-0.006	90	204701	50.0	46.1	
75 Ethyl methacrylate	69	9.069	9.069	0.000	85	162305	50.0	54.6	
76 1,1,2-Trichloroethane	97	9.186	9.192	-0.006	92	111418	50.0	48.1	
77 Tetrachloroethene	164	9.257	9.251	0.006	95	159981	50.0	38.1	
78 1,3-Dichloropropane	76	9.345	9.345	0.000	86	209279	50.0	54.2	
79 2-Hexanone	43	9.427	9.427	0.000	89	44252	100.0	60.8	
81 Chlorodibromomethane	129	9.563	9.557	0.006	90	134007	50.0	43.8	
82 Ethylene Dibromide	107	9.674	9.669	0.005	98	94828	50.0	49.7	
83 Chlorobenzene	112	10.163	10.157	0.006	93	479803	50.0	43.0	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.251	0.000	94	171626	50.0	41.1	
85 Ethylbenzene	106	10.263	10.263	0.000	99	290916	50.0	44.3	
86 m-Xylene & p-Xylene	106	10.392	10.398	-0.006	0	350833	50.0	42.4	
88 o-Xylene	106	10.774	10.774	0.000	97	343406	50.0	44.0	
89 Styrene	104	10.792	10.798	-0.006	92	530652	50.0	43.6	
90 Bromoform	173	10.974	10.980	-0.006	96	77768	50.0	44.7	
91 Isopropylbenzene	105	11.139	11.139	0.000	96	1017427	50.0	44.0	
94 Bromobenzene	156	11.457	11.451	0.006	95	171776	50.0	41.5	
93 1,1,2,2-Tetrachloroethane	83	11.457	11.457	0.000	96	138743	50.0	56.5	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.510	-0.006	65	22539	50.0	51.7	
95 1,2,3-Trichloropropane	110	11.516	11.515	0.001	82	43429	50.0	53.2	
97 N-Propylbenzene	120	11.557	11.557	0.000	99	248414	50.0	43.9	
98 2-Chlorotoluene	126	11.645	11.645	0.000	94	194851	50.0	43.5	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	93	873412	50.0	48.6	
100 4-Chlorotoluene	126	11.768	11.768	0.000	99	197965	50.0	45.5	
101 tert-Butylbenzene	119	12.051	12.051	0.000	91	721048	50.0	45.8	
103 1,2,4-Trimethylbenzene	105	12.116	12.115	0.001	97	839329	50.0	48.1	
104 sec-Butylbenzene	105	12.274	12.274	0.000	95	1154161	50.0	49.6	
105 1,3-Dichlorobenzene	146	12.392	12.398	-0.006	95	346112	50.0	42.9	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	96	920385	50.0	46.3	
107 1,4-Dichlorobenzene	146	12.498	12.504	-0.006	91	346927	50.0	40.5	
110 n-Butylbenzene	91	12.839	12.845	-0.006	98	853112	50.0	51.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
111 1,2-Dichlorobenzene	146	12.851	12.851	0.000	94	324624	50.0	45.4	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	79	17058	50.0	45.6	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	93	153392	50.0	44.0	
115 Hexachlorobutadiene	225	14.598	14.598	0.000	96	148092	50.0	35.2	
116 Naphthalene	128	14.727	14.727	0.000	97	230087	50.0	49.6	
117 1,2,3-Trichlorobenzene	180	14.945	14.939	0.006	95	134571	50.0	52.7	
S 129 Xylenes, Total	106				0		100.0	86.3	
S 130 1,2-Dichloroethene, Total	96				0		100.0	76.8	
S 145 Total BTEX	1				0		250.0	217.7	
S 131 1,3-Dichloropropene, Total	1				0		100.0	87.6	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Review Flags

a - User Assigned ID

Reagents:

voaWKetmix1st_00024	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00397	Amount Added:	2.00	Units: uL	
VOA8260INT_00105	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00105	Amount Added:	2.00	Units: uL	Run Reagent

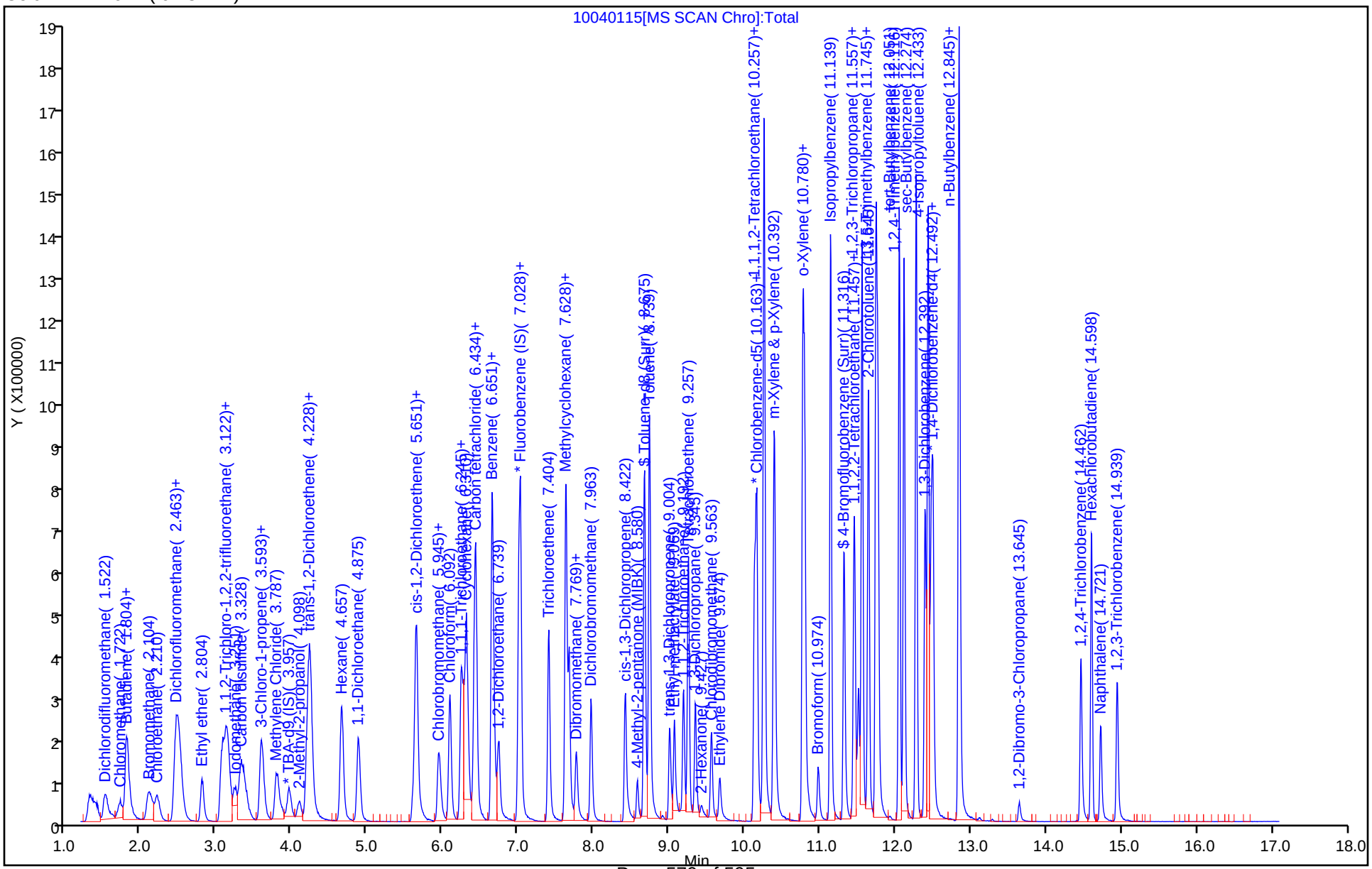
Report Date: 02-Apr-2020 22:02:02 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040115.d

Injection Date:	02-Apr-2020 01:28:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-104021-C-7 MSD			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040115.d
Lims ID: 180-104021-C-7 MSD
Client ID:
Sample Type: MSD
Inject. Date: 02-Apr-2020 01:28:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0031414-015
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 02-Apr-2020 22:02:00 Calib Date: 05-Mar-2020 11:12:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20200305-31047.b\10030509.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	37.8	75.53
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.3	72.62
$ 7 Toluene-d8 (Surr)	50.0	45.6	91.18
$ 8 4-Bromofluorobenzene (Surr)	50.0	56.0	111.97

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

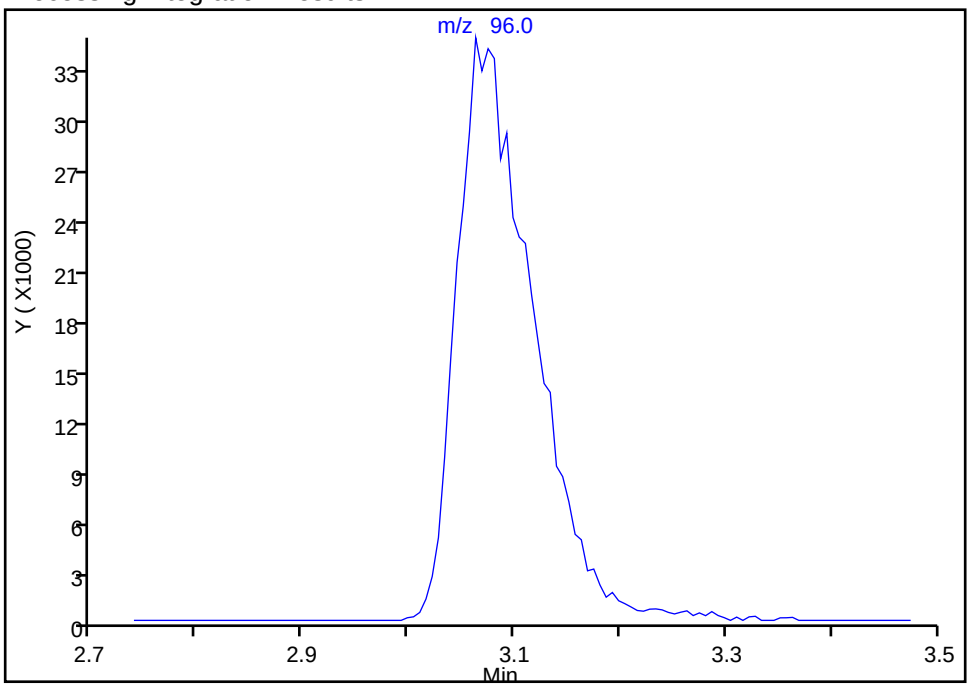
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20200401-31414.b\10040115.d
Injection Date: 02-Apr-2020 01:28:30 Instrument ID: CHHP10
Lims ID: 180-104021-C-7 MSD
Client ID:
Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

20 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

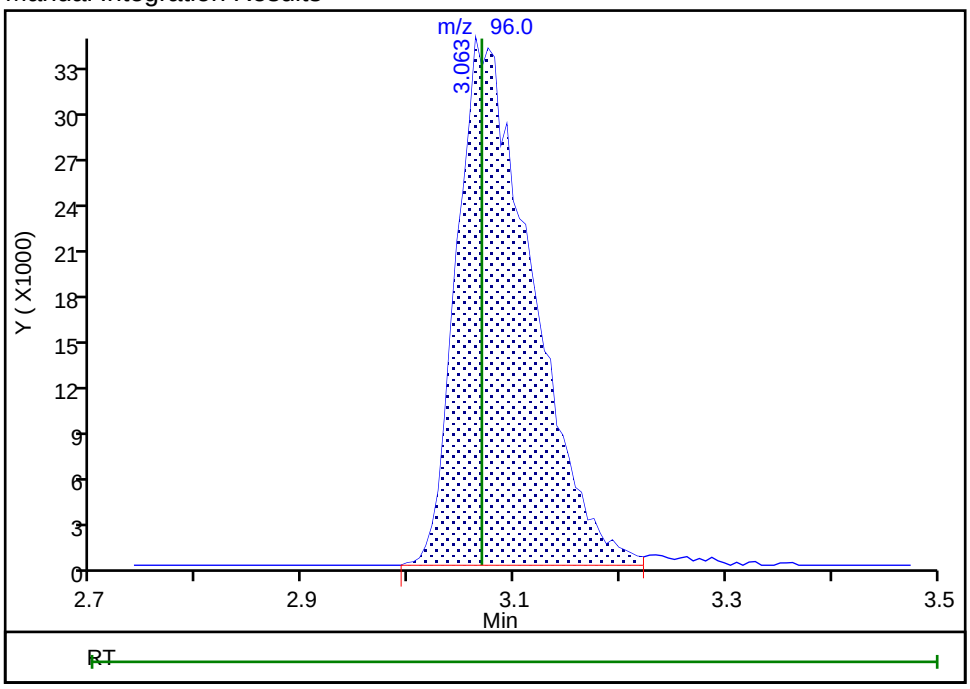
Not Detected
Expected RT: 3.07

Processing Integration Results



Manual Integration Results

RT: 3.06
Area: 170881
Amount: 44.040550
Amount Units: ng



Reviewer: journetp, 02-Apr-2020 16:14:10
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Start Date: 03/05/2020 07:14

Analysis Batch Number: 308976 End Date: 03/05/2020 19:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-308976/1		03/05/2020 07:14	1	10030501A.d	DB-624 0.18(mm)
IC 180-308976/2		03/05/2020 07:55	1	10030502.d	DB-624 0.18(mm)
IC 180-308976/3		03/05/2020 08:22	1	10030503.d	DB-624 0.18(mm)
ICIS 180-308976/4		03/05/2020 08:50	1	10030504.d	DB-624 0.18(mm)
CCVIS 180-308976/27		03/05/2020 08:50	1		DB-624 0.18(mm)
IC 180-308976/5		03/05/2020 09:18	1	10030505.d	DB-624 0.18(mm)
IC 180-308976/6		03/05/2020 09:46	1	10030506.d	DB-624 0.18(mm)
IC 180-308976/7		03/05/2020 10:16	1	10030507.d	DB-624 0.18(mm)
IC 180-308976/8		03/05/2020 10:44	1	10030508.d	DB-624 0.18(mm)
IC 180-308976/9		03/05/2020 11:12	1	10030509.d	DB-624 0.18(mm)
ZZZZZ		03/05/2020 12:24	1		DB-624 0.18(mm)
ZZZZZ		03/05/2020 13:58	1		DB-624 0.18(mm)
ICV 180-308976/15		03/05/2020 14:26	1		DB-624 0.18(mm)
ZZZZZ		03/05/2020 14:26	1		DB-624 0.18(mm)
ZZZZZ		03/05/2020 14:53	1		DB-624 0.18(mm)
ZZZZZ		03/05/2020 15:21	1		DB-624 0.18(mm)
ZZZZZ		03/05/2020 15:48	1		DB-624 0.18(mm)
ZZZZZ		03/05/2020 16:15	1		DB-624 0.18(mm)
ZZZZZ		03/05/2020 16:43	5		DB-624 0.18(mm)
ZZZZZ		03/05/2020 17:10	5		DB-624 0.18(mm)
ZZZZZ		03/05/2020 17:38	1		DB-624 0.18(mm)
ZZZZZ		03/05/2020 18:06	1		DB-624 0.18(mm)
ZZZZZ		03/05/2020 18:34	1		DB-624 0.18(mm)
ZZZZZ		03/05/2020 19:01	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Start Date: 03/31/2020 18:00

Analysis Batch Number: 311669 End Date: 04/01/2020 02:40

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-311669/3		03/31/2020 18:00	1	10033103.d	DB-624 0.18(mm)
CCVIS 180-311669/4		03/31/2020 18:40	1	10033104.d	DB-624 0.18(mm)
LCS 180-311669/5		03/31/2020 19:08	1	10033105.d	DB-624 0.18(mm)
ZZZZZ		03/31/2020 19:46	1		DB-624 0.18(mm)
MB 180-311669/7		03/31/2020 20:13	1	10033107.d	DB-624 0.18(mm)
ZZZZZ		03/31/2020 20:41	1		DB-624 0.18(mm)
ZZZZZ		03/31/2020 21:09	1		DB-624 0.18(mm)
180-104021-6		03/31/2020 21:36	1	10033110.d	DB-624 0.18(mm)
180-104021-14		03/31/2020 22:04	1	10033111.d	DB-624 0.18(mm)
180-104021-6 MS		03/31/2020 23:00	1	10033112.d	DB-624 0.18(mm)
180-104021-6 MSD		03/31/2020 23:53	1	10033113.d	DB-624 0.18(mm)
180-104021-1		04/01/2020 00:49	1	10033114.d	DB-624 0.18(mm)
180-104021-2		04/01/2020 01:17	1	10033115.d	DB-624 0.18(mm)
180-104021-3		04/01/2020 01:45	1	10033116.d	DB-624 0.18(mm)
180-104021-4		04/01/2020 02:12	1	10033117.d	DB-624 0.18(mm)
180-104021-5		04/01/2020 02:40	1	10033118.d	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Start Date: 04/01/2020 18:24

Analysis Batch Number: 311793 End Date: 04/02/2020 06:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-311793/1		04/01/2020 18:24	1	10040101A.d	DB-624 0.18(mm)
CCVIS 180-311793/2		04/01/2020 19:08	1	10040102.d	DB-624 0.18(mm)
LCS 180-311793/3		04/01/2020 19:36	1	10040103.d	DB-624 0.18(mm)
ZZZZZ		04/01/2020 20:03	1		DB-624 0.18(mm)
MB 180-311793/5		04/01/2020 20:31	1	10040105.d	DB-624 0.18(mm)
ZZZZZ		04/01/2020 20:58	1		DB-624 0.18(mm)
ZZZZZ		04/01/2020 21:26	1		DB-624 0.18(mm)
ZZZZZ		04/01/2020 21:54	1		DB-624 0.18(mm)
ZZZZZ		04/01/2020 22:22	1		DB-624 0.18(mm)
ZZZZZ		04/01/2020 22:49	1		DB-624 0.18(mm)
ZZZZZ		04/01/2020 23:17	1		DB-624 0.18(mm)
ZZZZZ		04/01/2020 23:44	1		DB-624 0.18(mm)
180-104021-7 MS		04/02/2020 01:01	1	10040114.d	DB-624 0.18(mm)
180-104021-7 MSD		04/02/2020 01:28	1	10040115.d	DB-624 0.18(mm)
180-104021-7		04/02/2020 01:56	1	10040116.d	DB-624 0.18(mm)
180-104021-9		04/02/2020 02:24	1	10040117.d	DB-624 0.18(mm)
180-104021-10		04/02/2020 02:52	1	10040118.d	DB-624 0.18(mm)
180-104021-11		04/02/2020 03:19	1	10040119.d	DB-624 0.18(mm)
180-104021-12		04/02/2020 03:47	1	10040120.d	DB-624 0.18(mm)
180-104021-13		04/02/2020 04:15	1	10040121.d	DB-624 0.18(mm)
ZZZZZ		04/02/2020 04:43	1		DB-624 0.18(mm)
ZZZZZ		04/02/2020 05:10	1		DB-624 0.18(mm)
ZZZZZ		04/02/2020 05:37	1		DB-624 0.18(mm)
ZZZZZ		04/02/2020 06:05	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-104021-1

SDG No.:

Instrument ID: CHHP10 Start Date: 04/02/2020 15:36

Analysis Batch Number: 311900 End Date: 04/03/2020 03:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-311900/2		04/02/2020 15:36	1	10040202.d	DB-624 0.18(mm)
CCVIS 180-311900/3		04/02/2020 16:04	1	10040203.d	DB-624 0.18(mm)
ZZZZZ		04/02/2020 16:31	1		DB-624 0.18(mm)
ZZZZZ		04/02/2020 16:58	1		DB-624 0.18(mm)
MB 180-311900/6		04/02/2020 17:25	1	10040206.d	DB-624 0.18(mm)
180-104021-8		04/02/2020 17:52	1	10040207.d	DB-624 0.18(mm)
ZZZZZ		04/02/2020 18:19	5		DB-624 0.18(mm)
ZZZZZ		04/02/2020 18:47	400		DB-624 0.18(mm)
ZZZZZ		04/02/2020 19:14	50		DB-624 0.18(mm)
LCS 180-311900/11		04/02/2020 19:41	1	10040211.d	DB-624 0.18(mm)
180-104021-8 MS		04/02/2020 20:08	1	10040212.d	DB-624 0.18(mm)
ZZZZZ		04/02/2020 20:35	25		DB-624 0.18(mm)
ZZZZZ		04/02/2020 21:03	25		DB-624 0.18(mm)
ZZZZZ		04/02/2020 21:30	100		DB-624 0.18(mm)
ZZZZZ		04/02/2020 21:57	5		DB-624 0.18(mm)
ZZZZZ		04/02/2020 22:25	100		DB-624 0.18(mm)
ZZZZZ		04/02/2020 22:52	20		DB-624 0.18(mm)
ZZZZZ		04/02/2020 23:19	25		DB-624 0.18(mm)
ZZZZZ		04/03/2020 00:23	1		DB-624 0.18(mm)
ZZZZZ		04/03/2020 00:50	1		DB-624 0.18(mm)
ZZZZZ		04/03/2020 01:18	1		DB-624 0.18(mm)
ZZZZZ		04/03/2020 01:46	1		DB-624 0.18(mm)
ZZZZZ		04/03/2020 02:13	1		DB-624 0.18(mm)
ZZZZZ		04/03/2020 02:40	1		DB-624 0.18(mm)
ZZZZZ		04/03/2020 03:07	1		DB-624 0.18(mm)
ZZZZZ		04/03/2020 03:35	5		DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-104021-1

SDG No.:

Batch Number: 311669 Batch Start Date: 03/31/20 18:00 Batch Analyst: Journet, Patrick

Batch Method: EPA 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VOA8260INT 00105	VOA8260SURR 00105	VOA8260VOA2ND 00397
BFB 180-311669/3		EPA 8260C		5 mL	5 mL		2 uL	2 uL	
CCVIS 180-311669/4		EPA 8260C		5 mL	5 mL		2 uL	2 uL	2 uL
LCS 180-311669/5		EPA 8260C		5 mL	5 mL		2 uL	2 uL	2 uL
MB 180-311669/7		EPA 8260C		5 mL	5 mL		2 uL	2 uL	
180-104021-C-6	HD-COD-SW-15-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
180-104021-A-14	HD-QC1-0/1-2	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
180-104021-A-6 MS	HD-COD-SW-15-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	2 uL
180-104021-A-6 MSD	HD-COD-SW-15-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	2 uL
180-104021-A-1	HD-COD-SW-6-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
180-104021-C-2	HD-COD-SW-7-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
180-104021-C-3	HD-COD-SW-8-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
180-104021-A-4	HD-COD-SW-9-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
180-104021-B-5	HD-COD-SW-13-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOABFB25 00121	voaWKetmix1st 00024				
BFB 180-311669/3		EPA 8260C		1 uL					
CCVIS 180-311669/4		EPA 8260C			2 uL				
LCS 180-311669/5		EPA 8260C			2 uL				
MB 180-311669/7		EPA 8260C							
180-104021-C-6	HD-COD-SW-15-0/1-0	EPA 8260C	T						
180-104021-A-14	HD-QC1-0/1-2	EPA 8260C	T						
180-104021-A-6 MS	HD-COD-SW-15-0/1-0	EPA 8260C	T		2 uL				

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 VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-104021-1

SDG No.:

Batch Number: 311669 Batch Start Date: 03/31/20 18:00 Batch Analyst: Journet, Patrick

Batch Method: EPA 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOABFB25 00121	voaWKetmix1st 00024				
180-104021-A-6 MSD	HD-COD-SW-15-0/1-0	EPA 8260C	T		2 uL				
180-104021-A-1	HD-COD-SW-6-0/1-0	EPA 8260C	T						
180-104021-C-2	HD-COD-SW-7-0/1-0	EPA 8260C	T						
180-104021-C-3	HD-COD-SW-8-0/1-0	EPA 8260C	T						
180-104021-A-4	HD-COD-SW-9-0/1-0	EPA 8260C	T						
180-104021-B-5	HD-COD-SW-13-0/1-0	EPA 8260C	T						

Batch Notes	
Batch Comment	3167192-MEOhj
pH Indicator ID	HC987808
Vial Lot Number	0217701E

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-104021-1

SDG No.:

Batch Number: 311793 Batch Start Date: 04/01/20 18:24 Batch Analyst: Journet, Patrick

Batch Method: EPA 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VOA8260INT 00105	VOA8260SURR 00105	VOA8260VOA2ND 00397
BFB 180-311793/1		EPA 8260C		5 mL	5 mL				
CCVIS 180-311793/2		EPA 8260C		5 mL	5 mL		2 uL	2 uL	2 uL
LCS 180-311793/3		EPA 8260C		5 mL	5 mL		2 uL	2 uL	2 uL
MB 180-311793/5		EPA 8260C		5 mL	5 mL		2 uL	2 uL	
180-104021-C-7 MS	HD-COD-SW-16-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	2 uL
180-104021-C-7 MSD	HD-COD-SW-16-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	2 uL
180-104021-B-7	HD-COD-SW-16-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
180-104021-A-9	HD-COD-SW-26-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
180-104021-A-10	HD-COD-SW-27-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
180-104021-A-11	HD-COD-SW-28-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
180-104021-C-12	HD-COD-SW-29-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
180-104021-A-13	HD-QC1-0/1-1	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOABFB25 00121	voaWKetmix1st 00024				
BFB 180-311793/1		EPA 8260C		1 uL					
CCVIS 180-311793/2		EPA 8260C			2 uL				
LCS 180-311793/3		EPA 8260C			2 uL				
MB 180-311793/5		EPA 8260C							
180-104021-C-7 MS	HD-COD-SW-16-0/1-0	EPA 8260C	T		2 uL				
180-104021-C-7 MSD	HD-COD-SW-16-0/1-0	EPA 8260C	T		2 uL				
180-104021-B-7	HD-COD-SW-16-0/1-0	EPA 8260C	T						
180-104021-A-9	HD-COD-SW-26-0/1-0	EPA 8260C	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-104021-1

SDG No.:

Batch Number: 311793 Batch Start Date: 04/01/20 18:24 Batch Analyst: Journet, Patrick

Batch Method: EPA 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOABFB25 00121	voaWKetmix1st 00024				
180-104021-A-10	HD-COD-SW-27-0/1-0	EPA 8260C	T						
180-104021-A-11	HD-COD-SW-28-0/1-0	EPA 8260C	T						
180-104021-C-12	HD-COD-SW-29-0/1-0	EPA 8260C	T						
180-104021-A-13	HD-QC1-0/1-1	EPA 8260C	T						

Batch Notes	
Batch Comment	3167192-MEOh
pH Indicator ID	HC987808
Vial Lot Number	0217701E

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-104021-1

SDG No.:

Batch Number: 311900 Batch Start Date: 04/02/20 15:36 Batch Analyst: Journet, Patrick

Batch Method: EPA 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VOA8260INT 00105	VOA8260SURR 00105	VOA8260VOA2ND 00397
BFB 180-311900/2		EPA 8260C		5 mL	5 mL				
CCVIS 180-311900/3		EPA 8260C		5 mL	5 mL		2 uL	2 uL	2 uL
MB 180-311900/6		EPA 8260C		5 mL	5 mL		2 uL	2 uL	
180-104021-C-8	HD-COD-SW-17-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
LCS 180-311900/11		EPA 8260C		5 mL	5 mL		2 uL	2 uL	2 uL
180-104021-B-8 MS	HD-COD-SW-17-0/1-0	EPA 8260C		5 mL	5 mL	<2 SU	2 uL	2 uL	2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOABFB25 00121	voaWKetmix1st 00024				
BFB 180-311900/2		EPA 8260C		1 uL					
CCVIS 180-311900/3		EPA 8260C			2 uL				
MB 180-311900/6		EPA 8260C							
180-104021-C-8	HD-COD-SW-17-0/1-0	EPA 8260C	T						
LCS 180-311900/11		EPA 8260C			2 uL				
180-104021-B-8 MS	HD-COD-SW-17-0/1-0	EPA 8260C			2 uL				

Batch Notes	
Batch Comment	3167192-MEOH
pH Indicator ID	Hc987808
Vial Lot Number	0217701E

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

TAP20200325

3/25/20 **TestAmerica Laboratories, Inc.**

Client Contact	Project Manager: Chris O'Neil	Site Contact: Casey Littlefield	Date Submitted: ~~2/24~~/2020	COC No: ~~TAP20200224~~
Groundwater Sciences Corporation	Tel/Fax: 717-901-8176 / (717) 756-1246	Lab Contact: Carrie Gamber	Carrier: FEDEX	1 of 2 COCs
2601 Market Place St. Suite 310	**Analysis Turnaround Time**	Harrisburg #267		Job No. 10012.42
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: Surface Water Monthly	1 week			
Site: fYNOP, York PA	2 days			
Quote # 18000557	1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	SW-846 Method VOCs via (8260C) Modified QAPP List	Sample Specific Notes:
HD-COD-SW-6-0/1-0	3/25/20	~~1025~~ 1145	Surface Water	Water	3	X	
HD-COD-SW-7-0/1-0		1230	Surface Water	Water	3	X	
HD-COD-SW-8-0/1-0		1035	Surface Water	Water	3	X	
HD-COD-SW-9-0/1-0		1325	Surface Water	Water	3	X	
HD-COD-SW-13-0/1-0		1055	Surface Water	Water	3	X	
HD-COD-SW-15-0/1-0		1255	Surface Water	Water	3	X	
HD-COD-SW-16-0/1-0		1120	Surface Water	Water	3	X	
HD-COD-SW-17-0/1-0		1135	Surface Water	Water	3	X	
HD-COD-SW-26-0/1-0		1205	Surface Water	Water	3	X	
HD-COD-SW-27-0/1-0		1245	Surface Water	Water	3	X	
HD-COD-SW-28-0/1-0		1335	Surface Water	Water	3	X	
HD-COD-SW-29-0/1-0		1025	Surface Water	Water	3	X	
HD-QC1-0/1-1		1200	Surface Water	Water	3	X	
HD-QC1-0/1-2		—	Trip Blank	Water	2	X	
				Number of Containers		41	
				Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Unpreserved 7=Na2S2O3		2	
				Field Filter		N	

180-104021 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, Project Specific Analyte Lists**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Casey Littlefield	GSC	3/25/20		ETA.	3/25/20 1430
	ETA	3/25/20	FED EX.		
				BOA/TK	3/26/20 900

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Harrisburg #267

Client Information	Sampler: Casey Littlefield	Lab PM: Gamber, Carrie L	Carrier Tracking No(s):	COC No: ~~180-59356-11672.2~~
Client Contact: Casey Littlefield	Phone:	E-Mail: carrie.gamber@testamericainc.com		Page: Page 2 of 2
Company: Groundwater Sciences Corporation				Job #: 10012.42
Address: 2601 Market Place Street, Suite 310	Due Date Requested:			
City: Harrisburg	TAT Requested (days): STANDARD			
State, Zip: PA, 17110-9307				
Phone:	PO #: Purchase Order not required			
Email: clittlefield@groundwatersciences.com	WO #:			
Project Name: ~~FYNOP~~ SURFACE WATER MONTHLY	Project #: ~~48010144~~			
Site: FYNOP	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C_LL - QAPP List LL, updated 08292019 (minus 14	SW-846 Method 8260C Modified QAPP List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A			
HD-COD-SW-15-01-01MS	3/25/20	1255	G	SW				3		
HD-COD-SW-15-01-01MSD	↓	1255	G	SW				3		

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		3/25/20	GSC		3/25/20 1430	EJA
2		3/25/20	EJA	FED EX		
3					3/26/20 900	GSC

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

97 . 1
10:30 A

FZ

6430 61-6245
03.26 SC

5020 RITTER RD
SUITES 205/206
MECHANICSBURG, PA 170554837
UNITED STATES US

SHIP DATE: 25MAR20
ACTWGT: 45.00 LB MAN
CAD: 0129689/CAFE3211

BILL RECIPIENT

TO SAMPLE RECEIVING
TESTAMERICA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 152382907

(412) 963-7058 REF:
INV:
PO: DEPT:

551C2/64E0/104C

FedEx Express

THU - 26 MAR 10:30A
PRIORITY OVERNIGHT

TRK# 0201 4690 5823 6430

NA AGCA

15238
PIT
PA-US

Uncorrected temp 1.2 °C
Thermometer ID 17
CF 0 Initials JB

PT-WI-SR-001 effective 11/8/18

180-104021 Waybill

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-104021-1

Login Number: 104021
List Number: 1
Creator: Say, Thomas C

List Source: Eurofins 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	