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ANALYTICAL REPORT

Job Number: 180-100176-1

Job Description: fYNOP

For:
Groundwater Sciences Corporation
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Harrisburg, PA 17110-9307

Attention: Christopher O'Neil

Approved for release.
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12/30/2019 3:20 PM

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: 180-100176-1

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 12/19/2019; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.1 C.

VOLATILES

The continuing calibration verification (CCV) analyzed in batch 180-302285 was outside the method criteria for the following analyte: Chloroethane, 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 analyte is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-302393 was outside the method criteria for the following analyte: Chloroethane, 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 180-302393 was outside the method criteria for the following analytes: 1,4-Dioxane & 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. 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: 180-100176-1

Client Sample ID: HD-COD-SW-6-0/1-0 — Lab Sample ID: 180-100176-1

No Detections.

Client Sample ID: HD-COD-SW-7-0/1-0 — Lab Sample ID: 180-100176-2

No Detections.

Client Sample ID: HD-COD-SW-8-0/1-0 — Lab Sample ID: 180-100176-3

No Detections.

Client Sample ID: HD-COD-SW-9-0/1-0 — Lab Sample ID: 180-100176-4

No Detections.

Client Sample ID: HD-COD-SW-13-0/1-0 — Lab Sample ID: 180-100176-5

No Detections.

Client Sample ID: HD-COD-SW-15-0/1-0 — Lab Sample ID: 180-100176-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.83	J	1.0	0.71	ug/L	1		EPA 8260C	Total/NA
Trichloroethene	0.86	J	1.0	0.69	ug/L	1		EPA 8260C	Total/NA
Tetrachloroethene	3.0		1.0	0.47	ug/L	1		EPA 8260C	Total/NA

Client Sample ID: HD-COD-SW-16-0/1-0 — Lab Sample ID: 180-100176-7

No Detections.

Client Sample ID: HD-COD-SW-17-0/1-0 — Lab Sample ID: 180-100176-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	2.0		1.0	0.47	ug/L	1		EPA 8260C	Total/NA

Client Sample ID: HD-COD-SW-26-0/1-0 — Lab Sample ID: 180-100176-9

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

Client Sample ID: HD-COD-SW-27-0/1-0 — Lab Sample ID: 180-100176-10

No Detections.

Client Sample ID: HD-COD-SW-28-0/1-0 — Lab Sample ID: 180-100176-11

No Detections.

Client Sample ID: HD-COD-SW-29-0/1-0 — Lab Sample ID: 180-100176-12

No Detections.

Client Sample ID: HD-QC1-0/1-2 — Lab Sample ID: 180-100176-13

No Detections.

Client Sample ID: HD-QC1-0/1-1 — Lab Sample ID: 180-100176-14

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: 12/18/19 12:35
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/23/19 14:29	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/23/19 14:29	1
Bromomethane	ND		1.0	0.89	ug/L			12/23/19 14:29	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/23/19 14:29	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/23/19 14:29	1
Acetone	ND		5.0	3.4	ug/L			12/23/19 14:29	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/23/19 14:29	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/23/19 14:29	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/23/19 14:29	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/23/19 14:29	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/23/19 14:29	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/23/19 14:29	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/23/19 14:29	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/23/19 14:29	1
Chloroform	ND		1.0	0.60	ug/L			12/23/19 14:29	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/23/19 14:29	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/23/19 14:29	1
Benzene	ND		1.0	0.60	ug/L			12/23/19 14:29	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/23/19 14:29	1
Trichloroethene	ND		1.0	0.69	ug/L			12/23/19 14:29	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/23/19 14:29	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/23/19 14:29	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/23/19 14:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/23/19 14:29	1
Toluene	ND		1.0	0.46	ug/L			12/23/19 14:29	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/23/19 14:29	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/23/19 14:29	1
Tetrachloroethene	ND		1.0	0.47	ug/L			12/23/19 14:29	1
2-Hexanone	ND		5.0	3.3	ug/L			12/23/19 14:29	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/23/19 14:29	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/23/19 14:29	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/23/19 14:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/23/19 14:29	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/23/19 14:29	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/23/19 14:29	1
Styrene	ND		1.0	0.47	ug/L			12/23/19 14:29	1
Bromoform	ND		1.0	0.98	ug/L			12/23/19 14:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/23/19 14:29	1
Acrylonitrile	ND		20	7.8	ug/L			12/23/19 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 150*		*12/23/19 14:29*	*1*
Toluene-d8 (Surr)	*93*		*78 - 128*		*12/23/19 14:29*	*1*
4-Bromofluorobenzene (Surr)	*74*		*64 - 123*		*12/23/19 14:29*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 147*		*12/23/19 14:29*	*1*

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

Client Sample ID: HD-COD-SW-7-0/1-0
Date Collected: 12/18/19 13:37
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/24/19 09:03	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/24/19 09:03	1
Bromomethane	ND		1.0	0.89	ug/L			12/24/19 09:03	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/24/19 09:03	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/24/19 09:03	1
Acetone	ND		5.0	3.4	ug/L			12/24/19 09:03	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/24/19 09:03	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/24/19 09:03	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/24/19 09:03	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/24/19 09:03	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/24/19 09:03	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/24/19 09:03	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/24/19 09:03	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/24/19 09:03	1
Chloroform	ND		1.0	0.60	ug/L			12/24/19 09:03	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/24/19 09:03	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/24/19 09:03	1
Benzene	ND		1.0	0.60	ug/L			12/24/19 09:03	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/24/19 09:03	1
Trichloroethene	ND		1.0	0.69	ug/L			12/24/19 09:03	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/24/19 09:03	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/24/19 09:03	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/24/19 09:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/24/19 09:03	1
Toluene	ND		1.0	0.46	ug/L			12/24/19 09:03	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/24/19 09:03	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/24/19 09:03	1
Tetrachloroethene	ND		1.0	0.47	ug/L			12/24/19 09:03	1
2-Hexanone	ND		5.0	3.3	ug/L			12/24/19 09:03	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/24/19 09:03	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/24/19 09:03	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/24/19 09:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/24/19 09:03	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/24/19 09:03	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/24/19 09:03	1
Styrene	ND		1.0	0.47	ug/L			12/24/19 09:03	1
Bromoform	ND		1.0	0.98	ug/L			12/24/19 09:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/24/19 09:03	1
Acrylonitrile	ND		20	7.8	ug/L			12/24/19 09:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 150*		*12/24/19 09:03*	*1*
Toluene-d8 (Surr)	*99*		*78 - 128*		*12/24/19 09:03*	*1*
4-Bromofluorobenzene (Surr)	*91*		*64 - 123*		*12/24/19 09:03*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 147*		*12/24/19 09:03*	*1*

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

Client Sample ID: HD-COD-SW-8-0/1-0
Date Collected: 12/18/19 09:38
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/24/19 09:30	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/24/19 09:30	1
Bromomethane	ND		1.0	0.89	ug/L			12/24/19 09:30	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/24/19 09:30	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/24/19 09:30	1
Acetone	ND		5.0	3.4	ug/L			12/24/19 09:30	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/24/19 09:30	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/24/19 09:30	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/24/19 09:30	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/24/19 09:30	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/24/19 09:30	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/24/19 09:30	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/24/19 09:30	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/24/19 09:30	1
Chloroform	ND		1.0	0.60	ug/L			12/24/19 09:30	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/24/19 09:30	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/24/19 09:30	1
Benzene	ND		1.0	0.60	ug/L			12/24/19 09:30	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/24/19 09:30	1
Trichloroethene	ND		1.0	0.69	ug/L			12/24/19 09:30	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/24/19 09:30	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/24/19 09:30	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/24/19 09:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/24/19 09:30	1
Toluene	ND		1.0	0.46	ug/L			12/24/19 09:30	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/24/19 09:30	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/24/19 09:30	1
Tetrachloroethene	ND		1.0	0.47	ug/L			12/24/19 09:30	1
2-Hexanone	ND		5.0	3.3	ug/L			12/24/19 09:30	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/24/19 09:30	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/24/19 09:30	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/24/19 09:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/24/19 09:30	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/24/19 09:30	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/24/19 09:30	1
Styrene	ND		1.0	0.47	ug/L			12/24/19 09:30	1
Bromoform	ND		1.0	0.98	ug/L			12/24/19 09:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/24/19 09:30	1
Acrylonitrile	ND		20	7.8	ug/L			12/24/19 09:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 150*		*12/24/19 09:30*	*1*
Toluene-d8 (Surr)	*94*		*78 - 128*		*12/24/19 09:30*	*1*
4-Bromofluorobenzene (Surr)	*80*		*64 - 123*		*12/24/19 09:30*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 147*		*12/24/19 09:30*	*1*

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

Client Sample ID: HD-COD-SW-9-0/1-0
Date Collected: 12/18/19 14:24
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/24/19 09:57	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/24/19 09:57	1
Bromomethane	ND		1.0	0.89	ug/L			12/24/19 09:57	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/24/19 09:57	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/24/19 09:57	1
Acetone	ND		5.0	3.4	ug/L			12/24/19 09:57	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/24/19 09:57	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/24/19 09:57	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/24/19 09:57	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/24/19 09:57	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/24/19 09:57	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/24/19 09:57	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/24/19 09:57	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/24/19 09:57	1
Chloroform	ND		1.0	0.60	ug/L			12/24/19 09:57	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/24/19 09:57	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/24/19 09:57	1
Benzene	ND		1.0	0.60	ug/L			12/24/19 09:57	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/24/19 09:57	1
Trichloroethene	ND		1.0	0.69	ug/L			12/24/19 09:57	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/24/19 09:57	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/24/19 09:57	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/24/19 09:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/24/19 09:57	1
Toluene	ND		1.0	0.46	ug/L			12/24/19 09:57	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/24/19 09:57	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/24/19 09:57	1
Tetrachloroethene	ND		1.0	0.47	ug/L			12/24/19 09:57	1
2-Hexanone	ND		5.0	3.3	ug/L			12/24/19 09:57	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/24/19 09:57	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/24/19 09:57	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/24/19 09:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/24/19 09:57	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/24/19 09:57	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/24/19 09:57	1
Styrene	ND		1.0	0.47	ug/L			12/24/19 09:57	1
Bromoform	ND		1.0	0.98	ug/L			12/24/19 09:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/24/19 09:57	1
Acrylonitrile	ND		20	7.8	ug/L			12/24/19 09:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 150*		*12/24/19 09:57*	*1*
Toluene-d8 (Surr)	*106*		*78 - 128*		*12/24/19 09:57*	*1*
4-Bromofluorobenzene (Surr)	*75*		*64 - 123*		*12/24/19 09:57*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 147*		*12/24/19 09:57*	*1*

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

Client Sample ID: HD-COD-SW-13-0/1-0
Date Collected: 12/18/19 09:58
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/24/19 10:25	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/24/19 10:25	1
Bromomethane	ND		1.0	0.89	ug/L			12/24/19 10:25	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/24/19 10:25	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/24/19 10:25	1
Acetone	ND		5.0	3.4	ug/L			12/24/19 10:25	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/24/19 10:25	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/24/19 10:25	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/24/19 10:25	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/24/19 10:25	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/24/19 10:25	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/24/19 10:25	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/24/19 10:25	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/24/19 10:25	1
Chloroform	ND		1.0	0.60	ug/L			12/24/19 10:25	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/24/19 10:25	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/24/19 10:25	1
Benzene	ND		1.0	0.60	ug/L			12/24/19 10:25	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/24/19 10:25	1
Trichloroethene	ND		1.0	0.69	ug/L			12/24/19 10:25	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/24/19 10:25	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/24/19 10:25	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/24/19 10:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/24/19 10:25	1
Toluene	ND		1.0	0.46	ug/L			12/24/19 10:25	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/24/19 10:25	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/24/19 10:25	1
Tetrachloroethene	ND		1.0	0.47	ug/L			12/24/19 10:25	1
2-Hexanone	ND		5.0	3.3	ug/L			12/24/19 10:25	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/24/19 10:25	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/24/19 10:25	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/24/19 10:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/24/19 10:25	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/24/19 10:25	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/24/19 10:25	1
Styrene	ND		1.0	0.47	ug/L			12/24/19 10:25	1
Bromoform	ND		1.0	0.98	ug/L			12/24/19 10:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/24/19 10:25	1
Acrylonitrile	ND		20	7.8	ug/L			12/24/19 10:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 150*		*12/24/19 10:25*	*1*
Toluene-d8 (Surr)	*96*		*78 - 128*		*12/24/19 10:25*	*1*
4-Bromofluorobenzene (Surr)	*72*		*64 - 123*		*12/24/19 10:25*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 147*		*12/24/19 10:25*	*1*

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

Client Sample ID: HD-COD-SW-15-0/1-0
Date Collected: 12/18/19 13:57
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/24/19 12:14	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/24/19 12:14	1
Bromomethane	ND		1.0	0.89	ug/L			12/24/19 12:14	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/24/19 12:14	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/24/19 12:14	1
Acetone	ND		5.0	3.4	ug/L			12/24/19 12:14	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/24/19 12:14	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/24/19 12:14	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/24/19 12:14	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/24/19 12:14	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/24/19 12:14	1
cis-1,2-Dichloroethene	**0.83**	**J**	1.0	0.71	ug/L			12/24/19 12:14	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/24/19 12:14	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/24/19 12:14	1
Chloroform	ND		1.0	0.60	ug/L			12/24/19 12:14	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/24/19 12:14	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/24/19 12:14	1
Benzene	ND		1.0	0.60	ug/L			12/24/19 12:14	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/24/19 12:14	1
Trichloroethene	**0.86**	**J**	1.0	0.69	ug/L			12/24/19 12:14	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/24/19 12:14	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/24/19 12:14	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/24/19 12:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/24/19 12:14	1
Toluene	ND		1.0	0.46	ug/L			12/24/19 12:14	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/24/19 12:14	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/24/19 12:14	1
Tetrachloroethene	**3.0**		1.0	0.47	ug/L			12/24/19 12:14	1
2-Hexanone	ND		5.0	3.3	ug/L			12/24/19 12:14	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/24/19 12:14	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/24/19 12:14	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/24/19 12:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/24/19 12:14	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/24/19 12:14	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/24/19 12:14	1
Styrene	ND		1.0	0.47	ug/L			12/24/19 12:14	1
Bromoform	ND		1.0	0.98	ug/L			12/24/19 12:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/24/19 12:14	1
Acrylonitrile	ND		20	7.8	ug/L			12/24/19 12:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 150*		*12/24/19 12:14*	*1*
Toluene-d8 (Surr)	*112*		*78 - 128*		*12/24/19 12:14*	*1*
4-Bromofluorobenzene (Surr)	*85*		*64 - 123*		*12/24/19 12:14*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 147*		*12/24/19 12:14*	*1*

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

Client Sample ID: HD-COD-SW-16-0/1-0
Date Collected: 12/18/19 10:15
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/24/19 12:41	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/24/19 12:41	1
Bromomethane	ND		1.0	0.89	ug/L			12/24/19 12:41	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/24/19 12:41	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/24/19 12:41	1
Acetone	ND		5.0	3.4	ug/L			12/24/19 12:41	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/24/19 12:41	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/24/19 12:41	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/24/19 12:41	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/24/19 12:41	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/24/19 12:41	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/24/19 12:41	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/24/19 12:41	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/24/19 12:41	1
Chloroform	ND		1.0	0.60	ug/L			12/24/19 12:41	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/24/19 12:41	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/24/19 12:41	1
Benzene	ND		1.0	0.60	ug/L			12/24/19 12:41	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/24/19 12:41	1
Trichloroethene	ND		1.0	0.69	ug/L			12/24/19 12:41	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/24/19 12:41	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/24/19 12:41	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/24/19 12:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/24/19 12:41	1
Toluene	ND		1.0	0.46	ug/L			12/24/19 12:41	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/24/19 12:41	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/24/19 12:41	1
Tetrachloroethene	ND		1.0	0.47	ug/L			12/24/19 12:41	1
2-Hexanone	ND		5.0	3.3	ug/L			12/24/19 12:41	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/24/19 12:41	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/24/19 12:41	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/24/19 12:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/24/19 12:41	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/24/19 12:41	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/24/19 12:41	1
Styrene	ND		1.0	0.47	ug/L			12/24/19 12:41	1
Bromoform	ND		1.0	0.98	ug/L			12/24/19 12:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/24/19 12:41	1
Acrylonitrile	ND		20	7.8	ug/L			12/24/19 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 150*		*12/24/19 12:41*	*1*
Toluene-d8 (Surr)	*108*		*78 - 128*		*12/24/19 12:41*	*1*
4-Bromofluorobenzene (Surr)	*81*		*64 - 123*		*12/24/19 12:41*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 147*		*12/24/19 12:41*	*1*

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

Client Sample ID: HD-COD-SW-17-0/1-0
Date Collected: 12/18/19 10:30
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/24/19 13:08	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/24/19 13:08	1
Bromomethane	ND		1.0	0.89	ug/L			12/24/19 13:08	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/24/19 13:08	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/24/19 13:08	1
Acetone	ND		5.0	3.4	ug/L			12/24/19 13:08	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/24/19 13:08	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/24/19 13:08	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/24/19 13:08	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/24/19 13:08	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/24/19 13:08	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/24/19 13:08	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/24/19 13:08	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/24/19 13:08	1
Chloroform	ND		1.0	0.60	ug/L			12/24/19 13:08	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/24/19 13:08	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/24/19 13:08	1
Benzene	ND		1.0	0.60	ug/L			12/24/19 13:08	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/24/19 13:08	1
Trichloroethene	ND		1.0	0.69	ug/L			12/24/19 13:08	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/24/19 13:08	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/24/19 13:08	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/24/19 13:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/24/19 13:08	1
Toluene	ND		1.0	0.46	ug/L			12/24/19 13:08	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/24/19 13:08	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/24/19 13:08	1
Tetrachloroethene	**2.0**		1.0	0.47	ug/L			12/24/19 13:08	1
2-Hexanone	ND		5.0	3.3	ug/L			12/24/19 13:08	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/24/19 13:08	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/24/19 13:08	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/24/19 13:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/24/19 13:08	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/24/19 13:08	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/24/19 13:08	1
Styrene	ND		1.0	0.47	ug/L			12/24/19 13:08	1
Bromoform	ND		1.0	0.98	ug/L			12/24/19 13:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/24/19 13:08	1
Acrylonitrile	ND		20	7.8	ug/L			12/24/19 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 150*		*12/24/19 13:08*	*1*
Toluene-d8 (Surr)	*112*		*78 - 128*		*12/24/19 13:08*	*1*
4-Bromofluorobenzene (Surr)	*79*		*64 - 123*		*12/24/19 13:08*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 147*		*12/24/19 13:08*	*1*

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

Client Sample ID: HD-COD-SW-26-0/1-0
Date Collected: 12/18/19 13:15
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/24/19 13:35	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/24/19 13:35	1
Bromomethane	ND		1.0	0.89	ug/L			12/24/19 13:35	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/24/19 13:35	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/24/19 13:35	1
Acetone	ND		5.0	3.4	ug/L			12/24/19 13:35	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/24/19 13:35	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/24/19 13:35	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/24/19 13:35	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/24/19 13:35	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/24/19 13:35	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/24/19 13:35	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/24/19 13:35	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/24/19 13:35	1
Chloroform	ND		1.0	0.60	ug/L			12/24/19 13:35	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/24/19 13:35	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/24/19 13:35	1
Benzene	ND		1.0	0.60	ug/L			12/24/19 13:35	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/24/19 13:35	1
Trichloroethene	ND		1.0	0.69	ug/L			12/24/19 13:35	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/24/19 13:35	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/24/19 13:35	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/24/19 13:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/24/19 13:35	1
Toluene	ND		1.0	0.46	ug/L			12/24/19 13:35	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/24/19 13:35	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/24/19 13:35	1
Tetrachloroethene	**1.0**		1.0	0.47	ug/L			12/24/19 13:35	1
2-Hexanone	ND		5.0	3.3	ug/L			12/24/19 13:35	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/24/19 13:35	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/24/19 13:35	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/24/19 13:35	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/24/19 13:35	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/24/19 13:35	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/24/19 13:35	1
Styrene	ND		1.0	0.47	ug/L			12/24/19 13:35	1
Bromoform	ND		1.0	0.98	ug/L			12/24/19 13:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/24/19 13:35	1
Acrylonitrile	ND		20	7.8	ug/L			12/24/19 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 150*		*12/24/19 13:35*	*1*
Toluene-d8 (Surr)	*106*		*78 - 128*		*12/24/19 13:35*	*1*
4-Bromofluorobenzene (Surr)	*78*		*64 - 123*		*12/24/19 13:35*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 147*		*12/24/19 13:35*	*1*

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

Client Sample ID: HD-COD-SW-27-0/1-0
Date Collected: 12/18/19 13:50
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/24/19 14:03	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/24/19 14:03	1
Bromomethane	ND		1.0	0.89	ug/L			12/24/19 14:03	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/24/19 14:03	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/24/19 14:03	1
Acetone	ND		5.0	3.4	ug/L			12/24/19 14:03	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/24/19 14:03	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/24/19 14:03	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/24/19 14:03	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/24/19 14:03	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/24/19 14:03	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/24/19 14:03	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/24/19 14:03	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/24/19 14:03	1
Chloroform	ND		1.0	0.60	ug/L			12/24/19 14:03	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/24/19 14:03	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/24/19 14:03	1
Benzene	ND		1.0	0.60	ug/L			12/24/19 14:03	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/24/19 14:03	1
Trichloroethene	ND		1.0	0.69	ug/L			12/24/19 14:03	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/24/19 14:03	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/24/19 14:03	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/24/19 14:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/24/19 14:03	1
Toluene	ND		1.0	0.46	ug/L			12/24/19 14:03	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/24/19 14:03	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/24/19 14:03	1
Tetrachloroethene	ND		1.0	0.47	ug/L			12/24/19 14:03	1
2-Hexanone	ND		5.0	3.3	ug/L			12/24/19 14:03	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/24/19 14:03	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/24/19 14:03	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/24/19 14:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/24/19 14:03	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/24/19 14:03	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/24/19 14:03	1
Styrene	ND		1.0	0.47	ug/L			12/24/19 14:03	1
Bromoform	ND		1.0	0.98	ug/L			12/24/19 14:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/24/19 14:03	1
Acrylonitrile	ND		20	7.8	ug/L			12/24/19 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 150*		*12/24/19 14:03*	*1*
Toluene-d8 (Surr)	*108*		*78 - 128*		*12/24/19 14:03*	*1*
4-Bromofluorobenzene (Surr)	*79*		*64 - 123*		*12/24/19 14:03*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 147*		*12/24/19 14:03*	*1*

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

Client Sample ID: HD-COD-SW-28-0/1-0
Date Collected: 12/18/19 14:40
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/24/19 14:30	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/24/19 14:30	1
Bromomethane	ND		1.0	0.89	ug/L			12/24/19 14:30	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/24/19 14:30	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/24/19 14:30	1
Acetone	ND		5.0	3.4	ug/L			12/24/19 14:30	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/24/19 14:30	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/24/19 14:30	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/24/19 14:30	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/24/19 14:30	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/24/19 14:30	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/24/19 14:30	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/24/19 14:30	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/24/19 14:30	1
Chloroform	ND		1.0	0.60	ug/L			12/24/19 14:30	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/24/19 14:30	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/24/19 14:30	1
Benzene	ND		1.0	0.60	ug/L			12/24/19 14:30	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/24/19 14:30	1
Trichloroethene	ND		1.0	0.69	ug/L			12/24/19 14:30	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/24/19 14:30	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/24/19 14:30	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/24/19 14:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/24/19 14:30	1
Toluene	ND		1.0	0.46	ug/L			12/24/19 14:30	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/24/19 14:30	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/24/19 14:30	1
Tetrachloroethene	ND		1.0	0.47	ug/L			12/24/19 14:30	1
2-Hexanone	ND		5.0	3.3	ug/L			12/24/19 14:30	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/24/19 14:30	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/24/19 14:30	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/24/19 14:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/24/19 14:30	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/24/19 14:30	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/24/19 14:30	1
Styrene	ND		1.0	0.47	ug/L			12/24/19 14:30	1
Bromoform	ND		1.0	0.98	ug/L			12/24/19 14:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/24/19 14:30	1
Acrylonitrile	ND		20	7.8	ug/L			12/24/19 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 150*		*12/24/19 14:30*	*1*
Toluene-d8 (Surr)	*109*		*78 - 128*		*12/24/19 14:30*	*1*
4-Bromofluorobenzene (Surr)	*84*		*64 - 123*		*12/24/19 14:30*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 147*		*12/24/19 14:30*	*1*

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

Client Sample ID: HD-COD-SW-29-0/1-0
Date Collected: 12/18/19 09:18
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/24/19 14:58	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/24/19 14:58	1
Bromomethane	ND		1.0	0.89	ug/L			12/24/19 14:58	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/24/19 14:58	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/24/19 14:58	1
Acetone	ND		5.0	3.4	ug/L			12/24/19 14:58	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/24/19 14:58	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/24/19 14:58	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/24/19 14:58	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/24/19 14:58	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/24/19 14:58	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/24/19 14:58	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/24/19 14:58	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/24/19 14:58	1
Chloroform	ND		1.0	0.60	ug/L			12/24/19 14:58	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/24/19 14:58	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/24/19 14:58	1
Benzene	ND		1.0	0.60	ug/L			12/24/19 14:58	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/24/19 14:58	1
Trichloroethene	ND		1.0	0.69	ug/L			12/24/19 14:58	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/24/19 14:58	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/24/19 14:58	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/24/19 14:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/24/19 14:58	1
Toluene	ND		1.0	0.46	ug/L			12/24/19 14:58	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/24/19 14:58	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/24/19 14:58	1
Tetrachloroethene	ND		1.0	0.47	ug/L			12/24/19 14:58	1
2-Hexanone	ND		5.0	3.3	ug/L			12/24/19 14:58	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/24/19 14:58	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/24/19 14:58	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/24/19 14:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/24/19 14:58	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/24/19 14:58	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/24/19 14:58	1
Styrene	ND		1.0	0.47	ug/L			12/24/19 14:58	1
Bromoform	ND		1.0	0.98	ug/L			12/24/19 14:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/24/19 14:58	1
Acrylonitrile	ND		20	7.8	ug/L			12/24/19 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 150*		*12/24/19 14:58*	*1*
Toluene-d8 (Surr)	*106*		*78 - 128*		*12/24/19 14:58*	*1*
4-Bromofluorobenzene (Surr)	*82*		*64 - 123*		*12/24/19 14:58*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 147*		*12/24/19 14:58*	*1*

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

Client Sample ID: HD-QC1-0/1-2
Date Collected: 12/18/19 00:00
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/23/19 13:07	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/23/19 13:07	1
Bromomethane	ND		1.0	0.89	ug/L			12/23/19 13:07	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/23/19 13:07	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/23/19 13:07	1
Acetone	ND		5.0	3.4	ug/L			12/23/19 13:07	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/23/19 13:07	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/23/19 13:07	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/23/19 13:07	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/23/19 13:07	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/23/19 13:07	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/23/19 13:07	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/23/19 13:07	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/23/19 13:07	1
Chloroform	ND		1.0	0.60	ug/L			12/23/19 13:07	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/23/19 13:07	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/23/19 13:07	1
Benzene	ND		1.0	0.60	ug/L			12/23/19 13:07	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/23/19 13:07	1
Trichloroethene	ND		1.0	0.69	ug/L			12/23/19 13:07	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/23/19 13:07	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/23/19 13:07	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/23/19 13:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/23/19 13:07	1
Toluene	ND		1.0	0.46	ug/L			12/23/19 13:07	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/23/19 13:07	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/23/19 13:07	1
Tetrachloroethene	ND		1.0	0.47	ug/L			12/23/19 13:07	1
2-Hexanone	ND		5.0	3.3	ug/L			12/23/19 13:07	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/23/19 13:07	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/23/19 13:07	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/23/19 13:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/23/19 13:07	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/23/19 13:07	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/23/19 13:07	1
Styrene	ND		1.0	0.47	ug/L			12/23/19 13:07	1
Bromoform	ND		1.0	0.98	ug/L			12/23/19 13:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/23/19 13:07	1
Acrylonitrile	ND		20	7.8	ug/L			12/23/19 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 150*		*12/23/19 13:07*	*1*
Toluene-d8 (Surr)	*89*		*78 - 128*		*12/23/19 13:07*	*1*
4-Bromofluorobenzene (Surr)	*82*		*64 - 123*		*12/23/19 13:07*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 147*		*12/23/19 13:07*	*1*

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

Client Sample ID: HD-QC1-0/1-1
Date Collected: 12/18/19 12:00
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			12/24/19 15:25	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/24/19 15:25	1
Bromomethane	ND		1.0	0.89	ug/L			12/24/19 15:25	1
Chloroethane	ND	^c	1.0	0.90	ug/L			12/24/19 15:25	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/24/19 15:25	1
Acetone	ND		5.0	3.4	ug/L			12/24/19 15:25	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/24/19 15:25	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/24/19 15:25	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/24/19 15:25	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/24/19 15:25	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/24/19 15:25	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/24/19 15:25	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/24/19 15:25	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/24/19 15:25	1
Chloroform	ND		1.0	0.60	ug/L			12/24/19 15:25	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/24/19 15:25	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/24/19 15:25	1
Benzene	ND		1.0	0.60	ug/L			12/24/19 15:25	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/24/19 15:25	1
Trichloroethene	ND		1.0	0.69	ug/L			12/24/19 15:25	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/24/19 15:25	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/24/19 15:25	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/24/19 15:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/24/19 15:25	1
Toluene	ND		1.0	0.46	ug/L			12/24/19 15:25	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/24/19 15:25	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/24/19 15:25	1
Tetrachloroethene	ND		1.0	0.47	ug/L			12/24/19 15:25	1
2-Hexanone	ND		5.0	3.3	ug/L			12/24/19 15:25	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/24/19 15:25	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/24/19 15:25	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/24/19 15:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/24/19 15:25	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/24/19 15:25	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/24/19 15:25	1
Styrene	ND		1.0	0.47	ug/L			12/24/19 15:25	1
Bromoform	ND		1.0	0.98	ug/L			12/24/19 15:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/24/19 15:25	1
Acrylonitrile	ND		20	7.8	ug/L			12/24/19 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 150*		*12/24/19 15:25*	*1*
Toluene-d8 (Surr)	*111*		*78 - 128*		*12/24/19 15:25*	*1*
4-Bromofluorobenzene (Surr)	*79*		*64 - 123*		*12/24/19 15:25*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 147*		*12/24/19 15:25*	*1*

Default Detection Limits

Client: Groundwater Sciences Corporation
Project/Site: fYNOP

Job ID: 180-100176-1

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	0.63	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	0.88	ug/L
Xylenes, Total	2.0	0.89	ug/L

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: fYNOP

Job ID: 180-100176-1

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	(70-150)	(78-128)	(64-123)	(75-147)
180-100176-1	HD-COD-SW-6-0/1-0	86	93	74	90
180-100176-2	HD-COD-SW-7-0/1-0	105	99	91	102
180-100176-2 MS	HD-COD-SW-7-0/1-0	117	92	94	106
180-100176-2 MSD	HD-COD-SW-7-0/1-0	111	94	96	98
180-100176-3	HD-COD-SW-8-0/1-0	100	94	80	95
180-100176-4	HD-COD-SW-9-0/1-0	99	106	75	98
180-100176-5	HD-COD-SW-13-0/1-0	104	96	72	101
180-100176-6	HD-COD-SW-15-0/1-0	95	112	85	104
180-100176-7	HD-COD-SW-16-0/1-0	91	108	81	98
180-100176-8	HD-COD-SW-17-0/1-0	90	112	79	99
180-100176-9	HD-COD-SW-26-0/1-0	101	106	78	101
180-100176-10	HD-COD-SW-27-0/1-0	90	108	79	96
180-100176-11	HD-COD-SW-28-0/1-0	88	109	84	98
180-100176-12	HD-COD-SW-29-0/1-0	99	106	82	101
180-100176-13	HD-QC1-0/1-2	92	89	82	97
180-100176-14	HD-QC1-0/1-1	85	111	79	97
LCS 180-302285/3	Lab Control Sample	100	99	104	98
LCS 180-302393/12	Lab Control Sample	101	93	88	102
MB 180-302285/5	Method Blank	91	97	87	91
MB 180-302393/5	Method Blank	102	99	77	101

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: 180-100176-1

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

Lab Sample ID: MB 180-302285/5
Matrix: Water
Analysis Batch: 302285

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			12/23/19 10:22	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/23/19 10:22	1
Bromomethane	ND		1.0	0.89	ug/L			12/23/19 10:22	1
Chloroethane	ND		1.0	0.90	ug/L			12/23/19 10:22	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/23/19 10:22	1
Acetone	ND		5.0	3.4	ug/L			12/23/19 10:22	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/23/19 10:22	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/23/19 10:22	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/23/19 10:22	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/23/19 10:22	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/23/19 10:22	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/23/19 10:22	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/23/19 10:22	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/23/19 10:22	1
Chloroform	ND		1.0	0.60	ug/L			12/23/19 10:22	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/23/19 10:22	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/23/19 10:22	1
Benzene	ND		1.0	0.60	ug/L			12/23/19 10:22	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/23/19 10:22	1
Trichloroethene	ND		1.0	0.69	ug/L			12/23/19 10:22	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/23/19 10:22	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/23/19 10:22	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/23/19 10:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/23/19 10:22	1
Toluene	ND		1.0	0.46	ug/L			12/23/19 10:22	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/23/19 10:22	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/23/19 10:22	1
Tetrachloroethene	ND		1.0	0.47	ug/L			12/23/19 10:22	1
2-Hexanone	ND		5.0	3.3	ug/L			12/23/19 10:22	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/23/19 10:22	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/23/19 10:22	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/23/19 10:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/23/19 10:22	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/23/19 10:22	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/23/19 10:22	1
Styrene	ND		1.0	0.47	ug/L			12/23/19 10:22	1
Bromoform	ND		1.0	0.98	ug/L			12/23/19 10:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/23/19 10:22	1
Acrylonitrile	ND		20	7.8	ug/L			12/23/19 10:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 150*		*12/23/19 10:22*	*1*
Toluene-d8 (Surr)	*97*		*78 - 128*		*12/23/19 10:22*	*1*
4-Bromofluorobenzene (Surr)	*87*		*64 - 123*		*12/23/19 10:22*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 147*		*12/23/19 10:22*	*1*

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

Lab Sample ID: LCS 180-302285/3
Matrix: Water
Analysis Batch: 302285

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	9.40		ug/L		94	37 - 150
Vinyl chloride	10.0	9.88		ug/L		99	50 - 150
Bromomethane	10.0	8.52		ug/L		85	35 - 150
Chloroethane	10.0	7.31		ug/L		73	52 - 150
1,1-Dichloroethene	10.0	9.99		ug/L		100	79 - 132
Acetone	20.0	20.0		ug/L		100	37 - 150
Carbon disulfide	10.0	9.78		ug/L		98	66 - 134
Methylene Chloride	10.0	10.2		ug/L		102	72 - 131
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	81 - 126
Methyl tert-butyl ether	10.0	11.0		ug/L		110	65 - 125
1,1-Dichloroethane	10.0	10.1		ug/L		101	70 - 127
cis-1,2-Dichloroethene	10.0	10.0		ug/L		100	79 - 119
Bromochloromethane	10.0	10.2		ug/L		102	74 - 124
2-Butanone (MEK)	20.0	21.8		ug/L		109	35 - 150
Chloroform	10.0	9.65		ug/L		97	75 - 126
1,1,1-Trichloroethane	10.0	9.32		ug/L		93	63 - 142
Carbon tetrachloride	10.0	9.11		ug/L		91	55 - 150
Benzene	10.0	9.87		ug/L		99	72 - 127
1,2-Dichloroethane	10.0	10.3		ug/L		103	60 - 138
Trichloroethene	10.0	9.79		ug/L		98	81 - 121
1,2-Dichloropropane	10.0	9.86		ug/L		99	67 - 124
Bromodichloromethane	10.0	10.0		ug/L		100	67 - 131
cis-1,3-Dichloropropene	10.0	11.2		ug/L		112	69 - 122
4-Methyl-2-pentanone (MIBK)	20.0	22.7		ug/L		113	19 - 150
Toluene	10.0	9.83		ug/L		98	73 - 123
trans-1,3-Dichloropropene	10.0	11.8		ug/L		118	61 - 122
1,1,2-Trichloroethane	10.0	11.0		ug/L		110	72 - 120
Tetrachloroethene	10.0	9.86		ug/L		99	69 - 134
2-Hexanone	20.0	22.1		ug/L		110	24 - 150
Dibromochloromethane	10.0	10.5		ug/L		105	59 - 134
1,2-Dibromoethane (EDB)	10.0	11.8		ug/L		118	65 - 129
Chlorobenzene	10.0	10.0		ug/L		100	76 - 119
1,1,1,2-Tetrachloroethane	10.0	9.94		ug/L		99	65 - 132
Ethylbenzene	10.0	10.5		ug/L		105	76 - 118
Xylenes, Total	20.0	20.3		ug/L		101	76 - 116
Styrene	10.0	10.5		ug/L		105	74 - 118
Bromoform	10.0	11.1		ug/L		111	50 - 146
1,1,2,2-Tetrachloroethane	10.0	11.5		ug/L		115	57 - 135
Acrylonitrile	100	124		ug/L		124	43 - 149

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 150*
Toluene-d8 (Surr)	*99*		*78 - 128*
4-Bromofluorobenzene (Surr)	*104*		*64 - 123*
Dibromofluoromethane (Surr)	*98*		*75 - 147*

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

Lab Sample ID: MB 180-302393/5
Matrix: Water
Analysis Batch: 302393

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			12/24/19 08:35	1
Vinyl chloride	ND		1.0	0.88	ug/L			12/24/19 08:35	1
Bromomethane	ND		1.0	0.89	ug/L			12/24/19 08:35	1
Chloroethane	ND		1.0	0.90	ug/L			12/24/19 08:35	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			12/24/19 08:35	1
Acetone	ND		5.0	3.4	ug/L			12/24/19 08:35	1
Carbon disulfide	ND		1.0	0.88	ug/L			12/24/19 08:35	1
Methylene Chloride	ND		1.0	0.89	ug/L			12/24/19 08:35	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			12/24/19 08:35	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			12/24/19 08:35	1
1,1-Dichloroethane	ND		1.0	0.63	ug/L			12/24/19 08:35	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			12/24/19 08:35	1
Bromochloromethane	ND		1.0	0.63	ug/L			12/24/19 08:35	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			12/24/19 08:35	1
Chloroform	ND		1.0	0.60	ug/L			12/24/19 08:35	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			12/24/19 08:35	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			12/24/19 08:35	1
Benzene	ND		1.0	0.60	ug/L			12/24/19 08:35	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			12/24/19 08:35	1
Trichloroethene	ND		1.0	0.69	ug/L			12/24/19 08:35	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			12/24/19 08:35	1
Bromodichloromethane	ND		1.0	0.64	ug/L			12/24/19 08:35	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			12/24/19 08:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			12/24/19 08:35	1
Toluene	ND		1.0	0.46	ug/L			12/24/19 08:35	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			12/24/19 08:35	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			12/24/19 08:35	1
Tetrachloroethene	ND		1.0	0.47	ug/L			12/24/19 08:35	1
2-Hexanone	ND		5.0	3.3	ug/L			12/24/19 08:35	1
Dibromochloromethane	ND		1.0	0.84	ug/L			12/24/19 08:35	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			12/24/19 08:35	1
Chlorobenzene	ND		1.0	0.50	ug/L			12/24/19 08:35	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			12/24/19 08:35	1
Ethylbenzene	ND		1.0	0.51	ug/L			12/24/19 08:35	1
Xylenes, Total	ND		2.0	0.89	ug/L			12/24/19 08:35	1
Styrene	ND		1.0	0.47	ug/L			12/24/19 08:35	1
Bromoform	ND		1.0	0.98	ug/L			12/24/19 08:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			12/24/19 08:35	1
Acrylonitrile	ND		20	7.8	ug/L			12/24/19 08:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 150*		*12/24/19 08:35*	*1*
Toluene-d8 (Surr)	*99*		*78 - 128*		*12/24/19 08:35*	*1*
4-Bromofluorobenzene (Surr)	*77*		*64 - 123*		*12/24/19 08:35*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 147*		*12/24/19 08:35*	*1*

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

Lab Sample ID: LCS 180-302393/12
Matrix: Water
Analysis Batch: 302393

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	8.02		ug/L		80	37 - 150
Vinyl chloride	10.0	8.73		ug/L		87	50 - 150
Bromomethane	10.0	10.3		ug/L		103	35 - 150
Chloroethane	10.0	10.7		ug/L		107	52 - 150
1,1-Dichloroethene	10.0	9.04		ug/L		90	79 - 132
Acetone	20.0	12.7		ug/L		64	37 - 150
Carbon disulfide	10.0	8.63		ug/L		86	66 - 134
Methylene Chloride	10.0	8.79		ug/L		88	72 - 131
trans-1,2-Dichloroethene	10.0	8.70		ug/L		87	81 - 126
Methyl tert-butyl ether	10.0	10.0		ug/L		100	65 - 125
1,1-Dichloroethane	10.0	9.02		ug/L		90	70 - 127
cis-1,2-Dichloroethene	10.0	8.93		ug/L		89	79 - 119
Bromochloromethane	10.0	9.59		ug/L		96	74 - 124
2-Butanone (MEK)	20.0	16.3		ug/L		81	35 - 150
Chloroform	10.0	9.34		ug/L		93	75 - 126
1,1,1-Trichloroethane	10.0	9.13		ug/L		91	63 - 142
Carbon tetrachloride	10.0	9.18		ug/L		92	55 - 150
Benzene	10.0	8.54		ug/L		85	72 - 127
1,2-Dichloroethane	10.0	10.0		ug/L		100	60 - 138
Trichloroethene	10.0	8.42		ug/L		84	81 - 121
1,2-Dichloropropane	10.0	8.49		ug/L		85	67 - 124
Bromodichloromethane	10.0	9.14		ug/L		91	67 - 131
cis-1,3-Dichloropropene	10.0	9.22		ug/L		92	69 - 122
4-Methyl-2-pentanone (MIBK)	20.0	19.3		ug/L		97	19 - 150
Toluene	10.0	8.32		ug/L		83	73 - 123
trans-1,3-Dichloropropene	10.0	9.87		ug/L		99	61 - 122
1,1,2-Trichloroethane	10.0	9.11		ug/L		91	72 - 120
Tetrachloroethene	10.0	8.16		ug/L		82	69 - 134
2-Hexanone	20.0	16.1		ug/L		80	24 - 150
Dibromochloromethane	10.0	9.11		ug/L		91	59 - 134
1,2-Dibromoethane (EDB)	10.0	9.45		ug/L		94	65 - 129
Chlorobenzene	10.0	8.33		ug/L		83	76 - 119
1,1,1,2-Tetrachloroethane	10.0	9.22		ug/L		92	65 - 132
Ethylbenzene	10.0	8.69		ug/L		87	76 - 118
Xylenes, Total	20.0	16.7		ug/L		84	76 - 116
Styrene	10.0	8.26		ug/L		83	74 - 118
Bromoform	10.0	9.68		ug/L		97	50 - 146
1,1,2,2-Tetrachloroethane	10.0	9.68		ug/L		97	57 - 135
Acrylonitrile	100	102		ug/L		102	43 - 149

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 150*
Toluene-d8 (Surr)	*93*		*78 - 128*
4-Bromofluorobenzene (Surr)	*88*		*64 - 123*
Dibromofluoromethane (Surr)	*102*		*75 - 147*

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

Lab Sample ID: 180-100176-2 MS
Matrix: Water
Analysis Batch: 302393

Client Sample ID: HD-COD-SW-7-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	ND		10.0	7.22		ug/L		72	37 - 150
Vinyl chloride	ND		10.0	8.02		ug/L		80	50 - 150
Bromomethane	ND		10.0	10.0		ug/L		100	35 - 150
Chloroethane	ND	^c	10.0	9.83		ug/L		98	52 - 150
1,1-Dichloroethene	ND		10.0	8.60		ug/L		86	79 - 132
Acetone	ND		20.0	15.8		ug/L		79	37 - 150
Carbon disulfide	ND		10.0	8.39		ug/L		84	66 - 134
Methylene Chloride	ND		10.0	8.67		ug/L		87	72 - 131
trans-1,2-Dichloroethene	ND		10.0	8.64		ug/L		86	81 - 126
Methyl tert-butyl ether	ND		10.0	10.0		ug/L		100	65 - 125
1,1-Dichloroethane	ND		10.0	8.41		ug/L		84	70 - 127
cis-1,2-Dichloroethene	ND		10.0	8.65		ug/L		86	79 - 119
Bromochloromethane	ND		10.0	9.59		ug/L		96	74 - 124
2-Butanone (MEK)	ND		20.0	18.4		ug/L		92	35 - 150
Chloroform	ND		10.0	9.57		ug/L		96	75 - 126
1,1,1-Trichloroethane	ND		10.0	8.95		ug/L		89	63 - 142
Carbon tetrachloride	ND		10.0	9.10		ug/L		91	55 - 150
Benzene	ND		10.0	8.08		ug/L		81	72 - 127
1,2-Dichloroethane	ND		10.0	10.3		ug/L		103	60 - 138
Trichloroethene	ND		10.0	8.82		ug/L		88	81 - 121
1,2-Dichloropropane	ND		10.0	7.94		ug/L		79	67 - 124
Bromodichloromethane	ND		10.0	9.46		ug/L		95	67 - 131
cis-1,3-Dichloropropene	ND		10.0	9.55		ug/L		96	69 - 122
4-Methyl-2-pentanone (MIBK)	ND		20.0	20.8		ug/L		104	19 - 150
Toluene	ND		10.0	8.14		ug/L		81	73 - 123
trans-1,3-Dichloropropene	ND		10.0	9.51		ug/L		95	61 - 122
1,1,2-Trichloroethane	ND		10.0	9.19		ug/L		92	72 - 120
Tetrachloroethene	ND		10.0	8.08		ug/L		81	69 - 134
2-Hexanone	ND		20.0	16.8		ug/L		84	24 - 150
Dibromochloromethane	ND		10.0	9.78		ug/L		98	59 - 134
1,2-Dibromoethane (EDB)	ND		10.0	9.49		ug/L		95	65 - 129
Chlorobenzene	ND		10.0	8.33		ug/L		83	76 - 119
1,1,1,2-Tetrachloroethane	ND		10.0	8.91		ug/L		89	65 - 132
Ethylbenzene	ND		10.0	8.10		ug/L		81	76 - 118
Xylenes, Total	ND		20.0	16.4		ug/L		82	76 - 116
Styrene	ND		10.0	8.64		ug/L		86	74 - 118
Bromoform	ND		10.0	10.5		ug/L		105	50 - 146
1,1,2,2-Tetrachloroethane	ND		10.0	9.96		ug/L		100	57 - 135
Acrylonitrile	ND		100	106		ug/L		106	43 - 149

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 150*
Toluene-d8 (Surr)	*92*		*78 - 128*
4-Bromofluorobenzene (Surr)	*94*		*64 - 123*
Dibromofluoromethane (Surr)	*106*		*75 - 147*

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

Lab Sample ID: 180-100176-2 MSD
Matrix: Water
Analysis Batch: 302393

Client Sample ID: HD-COD-SW-7-0/1-0
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	7.82		ug/L		78	37 - 150	8	35
Vinyl chloride	ND		10.0	8.34		ug/L		83	50 - 150	4	31
Bromomethane	ND		10.0	10.4		ug/L		104	35 - 150	4	35
Chloroethane	ND	^c	10.0	10.8		ug/L		108	52 - 150	9	31
1,1-Dichloroethene	ND		10.0	9.09		ug/L		91	79 - 132	6	29
Acetone	ND		20.0	13.6		ug/L		68	37 - 150	15	35
Carbon disulfide	ND		10.0	8.54		ug/L		85	66 - 134	2	31
Methylene Chloride	ND		10.0	8.66		ug/L		87	72 - 131	0	29
trans-1,2-Dichloroethene	ND		10.0	8.57		ug/L		86	81 - 126	1	27
Methyl tert-butyl ether	ND		10.0	10.1		ug/L		101	65 - 125	0	28
1,1-Dichloroethane	ND		10.0	8.90		ug/L		89	70 - 127	6	27
cis-1,2-Dichloroethene	ND		10.0	8.84		ug/L		88	79 - 119	2	28
Bromochloromethane	ND		10.0	9.77		ug/L		98	74 - 124	2	27
2-Butanone (MEK)	ND		20.0	18.0		ug/L		90	35 - 150	2	34
Chloroform	ND		10.0	9.33		ug/L		93	75 - 126	3	26
1,1,1-Trichloroethane	ND		10.0	9.26		ug/L		93	63 - 142	3	28
Carbon tetrachloride	ND		10.0	9.28		ug/L		93	55 - 150	2	29
Benzene	ND		10.0	8.58		ug/L		86	72 - 127	6	27
1,2-Dichloroethane	ND		10.0	10.3		ug/L		103	60 - 138	0	26
Trichloroethene	ND		10.0	8.61		ug/L		86	81 - 121	2	28
1,2-Dichloropropane	ND		10.0	8.46		ug/L		85	67 - 124	6	27
Bromodichloromethane	ND		10.0	9.37		ug/L		94	67 - 131	1	28
cis-1,3-Dichloropropene	ND		10.0	9.27		ug/L		93	69 - 122	3	29
4-Methyl-2-pentanone (MIBK)	ND		20.0	22.5		ug/L		113	19 - 150	8	33
Toluene	ND		10.0	8.98		ug/L		90	73 - 123	10	31
trans-1,3-Dichloropropene	ND		10.0	10.6		ug/L		106	61 - 122	11	30
1,1,2-Trichloroethane	ND		10.0	9.92		ug/L		99	72 - 120	8	27
Tetrachloroethene	ND		10.0	8.76		ug/L		88	69 - 134	8	27
2-Hexanone	ND		20.0	16.5		ug/L		83	24 - 150	2	32
Dibromochloromethane	ND		10.0	9.92		ug/L		99	59 - 134	1	28
1,2-Dibromoethane (EDB)	ND		10.0	10.8		ug/L		108	65 - 129	13	27
Chlorobenzene	ND		10.0	8.91		ug/L		89	76 - 119	7	25
1,1,1,2-Tetrachloroethane	ND		10.0	9.43		ug/L		94	65 - 132	6	28
Ethylbenzene	ND		10.0	8.90		ug/L		89	76 - 118	9	27
Xylenes, Total	ND		20.0	17.7		ug/L		88	76 - 116	7	27
Styrene	ND		10.0	8.96		ug/L		90	74 - 118	4	27
Bromoform	ND		10.0	10.9		ug/L		109	50 - 146	4	30
1,1,2,2-Tetrachloroethane	ND		10.0	10.5		ug/L		105	57 - 135	6	29
Acrylonitrile	ND		100	108		ug/L		108	43 - 149	2	34

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 150*
Toluene-d8 (Surr)	*94*		*78 - 128*
4-Bromofluorobenzene (Surr)	*96*		*64 - 123*
Dibromofluoromethane (Surr)	*98*		*75 - 147*

QC Association Summary

Client: Groundwater Sciences Corporation
Job ID: 180-100176-1
Project/Site: fYNOP

GC/MS VOA

Analysis Batch: 302285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-100176-1	HD-COD-SW-6-0/1-0	Total/NA	Water	EPA 8260C	
180-100176-13	HD-QC1-0/1-2	Total/NA	Water	EPA 8260C	
MB 180-302285/5	Method Blank	Total/NA	Water	EPA 8260C	
LCS 180-302285/3	Lab Control Sample	Total/NA	Water	EPA 8260C	

Analysis Batch: 302393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-100176-2	HD-COD-SW-7-0/1-0	Total/NA	Water	EPA 8260C	
180-100176-3	HD-COD-SW-8-0/1-0	Total/NA	Water	EPA 8260C	
180-100176-4	HD-COD-SW-9-0/1-0	Total/NA	Water	EPA 8260C	
180-100176-5	HD-COD-SW-13-0/1-0	Total/NA	Water	EPA 8260C	
180-100176-6	HD-COD-SW-15-0/1-0	Total/NA	Water	EPA 8260C	
180-100176-7	HD-COD-SW-16-0/1-0	Total/NA	Water	EPA 8260C	
180-100176-8	HD-COD-SW-17-0/1-0	Total/NA	Water	EPA 8260C	
180-100176-9	HD-COD-SW-26-0/1-0	Total/NA	Water	EPA 8260C	
180-100176-10	HD-COD-SW-27-0/1-0	Total/NA	Water	EPA 8260C	
180-100176-11	HD-COD-SW-28-0/1-0	Total/NA	Water	EPA 8260C	
180-100176-12	HD-COD-SW-29-0/1-0	Total/NA	Water	EPA 8260C	
180-100176-14	HD-QC1-0/1-1	Total/NA	Water	EPA 8260C	
MB 180-302393/5	Method Blank	Total/NA	Water	EPA 8260C	
LCS 180-302393/12	Lab Control Sample	Total/NA	Water	EPA 8260C	
180-100176-2 MS	HD-COD-SW-7-0/1-0	Total/NA	Water	EPA 8260C	
180-100176-2 MSD	HD-COD-SW-7-0/1-0	Total/NA	Water	EPA 8260C	

Client Sample ID: HD-COD-SW-6-0/1-0
Date Collected: 12/18/19 12:35
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	302285	12/23/19 14:29	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-7-0/1-0
Date Collected: 12/18/19 13:37
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	302393	12/24/19 09:03	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-8-0/1-0
Date Collected: 12/18/19 09:38
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	302393	12/24/19 09:30	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-9-0/1-0
Date Collected: 12/18/19 14:24
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	302393	12/24/19 09:57	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-13-0/1-0
Date Collected: 12/18/19 09:58
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	302393	12/24/19 10:25	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-15-0/1-0
Date Collected: 12/18/19 13:57
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	302393	12/24/19 12:14	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-16-0/1-0
Date Collected: 12/18/19 10:15
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-7
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	302393	12/24/19 12:41	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-17-0/1-0
Date Collected: 12/18/19 10:30
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-8
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	302393	12/24/19 13:08	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-26-0/1-0
Date Collected: 12/18/19 13:15
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-9
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	302393	12/24/19 13:35	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-27-0/1-0
Date Collected: 12/18/19 13:50
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-10
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	302393	12/24/19 14:03	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-28-0/1-0
Date Collected: 12/18/19 14:40
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-11
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	302393	12/24/19 14:30	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-COD-SW-29-0/1-0
Date Collected: 12/18/19 09:18
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-12
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	302393	12/24/19 14:58	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-QC1-0/1-2
Date Collected: 12/18/19 00:00
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-13
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	302285	12/23/19 13:07	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: HD-QC1-0/1-1
Date Collected: 12/18/19 12:00
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100176-14
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	302393	12/24/19 15:25	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: 180-100176-1
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: 180-100176-1
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: 180-100176-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-100176-1	HD-COD-SW-6-0/1-0	Water	12/18/19 12:35	12/19/19 10:00	
180-100176-2	HD-COD-SW-7-0/1-0	Water	12/18/19 13:37	12/19/19 10:00	
180-100176-3	HD-COD-SW-8-0/1-0	Water	12/18/19 09:38	12/19/19 10:00	
180-100176-4	HD-COD-SW-9-0/1-0	Water	12/18/19 14:24	12/19/19 10:00	
180-100176-5	HD-COD-SW-13-0/1-0	Water	12/18/19 09:58	12/19/19 10:00	
180-100176-6	HD-COD-SW-15-0/1-0	Water	12/18/19 13:57	12/19/19 10:00	
180-100176-7	HD-COD-SW-16-0/1-0	Water	12/18/19 10:15	12/19/19 10:00	
180-100176-8	HD-COD-SW-17-0/1-0	Water	12/18/19 10:30	12/19/19 10:00	
180-100176-9	HD-COD-SW-26-0/1-0	Water	12/18/19 13:15	12/19/19 10:00	
180-100176-10	HD-COD-SW-27-0/1-0	Water	12/18/19 13:50	12/19/19 10:00	
180-100176-11	HD-COD-SW-28-0/1-0	Water	12/18/19 14:40	12/19/19 10:00	
180-100176-12	HD-COD-SW-29-0/1-0	Water	12/18/19 09:18	12/19/19 10:00	
180-100176-13	HD-QC1-0/1-2	Water	12/18/19 00:00	12/19/19 10:00	
180-100176-14	HD-QC1-0/1-1	Water	12/18/19 12:00	12/19/19 10:00	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-100176-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 302077

Lab Sample ID: IC 180-302077/14 Client Sample ID:

Date Analyzed: 12/20/19 12:55 Lab File ID: 10122014.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,4-Dichloro-2-butene	11.56	Poor chromatography	journetp	12/21/19 16:25
Naphthalene	14.73	Poor chromatography	journetp	12/21/19 16:26

Lab Sample ID: IC 180-302077/16 Client Sample ID:

Date Analyzed: 12/20/19 13:49 Lab File ID: 10122016.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.70	Poor chromatography	journetp	12/20/19 14:40

Lab Sample ID: IC 180-302077/17 Client Sample ID:

Date Analyzed: 12/20/19 14:16 Lab File ID: 10122017.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloropropane	7.68	Poor chromatography	journetp	12/23/19 07:21

Lab Sample ID: IC 180-302077/18 Client Sample ID:

Date Analyzed: 12/20/19 14:44 Lab File ID: 10122018.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.70	Peak assignment corrected	journetp	12/21/19 16:23
Acrylonitrile	4.19	Peak assignment corrected	journetp	12/21/19 16:22
1,2-Dichloropropane	7.68	Peak assignment corrected	journetp	12/21/19 16:22

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-100176-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 302077

Lab Sample ID: IC 180-302077/19 Client Sample ID:

Date Analyzed: 12/20/19 15:11 Lab File ID: 10122019.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.63	Poor chromatography	journetp	12/23/19 07:22

Lab Sample ID: IC 180-302077/24 Client Sample ID:

Date Analyzed: 12/20/19 17:27 Lab File ID: 10122024.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.47	Peak assignment corrected	journetp	12/21/19 16:17
Methyl acetate	3.65	Poor chromatography	journetp	12/23/19 07:24
Tetrahydrofuran	5.99	Peak assignment corrected	journetp	12/21/19 16:18
1,4-Dioxane	7.78	Peak assignment corrected	journetp	12/21/19 16:18
trans-1,3-Dichloropropene	9.02	Peak assignment corrected	journetp	12/21/19 16:18
Ethyl methacrylate	9.09	Peak assignment corrected	journetp	12/21/19 16:18
trans-1,4-Dichloro-2-butene	11.57	Poor chromatography	journetp	12/21/19 16:19
1,2-Dibromo-3-Chloropropane	13.66	Peak assignment corrected	journetp	12/21/19 16:14
Naphthalene	14.74	Poor chromatography	journetp	12/21/19 16:28

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-100176-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 302285

Lab Sample ID: CCVIS 180-302285/2 Client Sample ID:

Date Analyzed: 12/23/19 08:52 Lab File ID: 10122302.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.69	Peak assignment corrected	journetp	12/23/19 09:35

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-100176-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 302393

Lab Sample ID: CCVIS 180-302393/3 Client Sample ID:

Date Analyzed: 12/24/19 07:40 Lab File ID: 10122403.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.72	Peak assignment corrected	journetp	12/24/19 09:29
Trichlorofluoromethane	2.49	Peak assignment corrected	journetp	12/24/19 09:29

Lab Sample ID: 180-100176-5 Client Sample ID: HD-COD-SW-13-0/1-0

Date Analyzed: 12/24/19 10:25 Lab File ID: 10122409.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform		Invalid Compound ID	journetp	12/26/19 10:06

Lab Sample ID: 180-100176-2 MS Client Sample ID: HD-COD-SW-7-0/1-0 MS

Date Analyzed: 12/24/19 10:52 Lab File ID: 10122410.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	12/26/19 10:06
2-Butanone (MEK)	5.69	Peak assignment corrected	journetp	12/26/19 10:06

Lab Sample ID: 180-100176-2 MSD Client Sample ID: HD-COD-SW-7-0/1-0 MSD

Date Analyzed: 12/24/19 11:19 Lab File ID: 10122411.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.71	Poor chromatography	journetp	12/26/19 10:07
Acetone	3.17	Peak assignment corrected	journetp	12/26/19 10:06
Carbon disulfide	3.33	Peak assignment corrected	journetp	12/26/19 10:06

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-100176-1

SDG No.:

Instrument ID: CHHP10 Analysis Batch Number: 302393

Lab Sample ID: LCS 180-302393/12 Client Sample ID:

Date Analyzed: 12/24/19 11:46 Lab File ID: 10122412.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.17	Peak assignment corrected	journetp	12/24/19 13:02
1,2-Dichloropropane	7.68	Peak assignment corrected	journetp	12/24/19 13:03

Lab Sample ID: 180-100176-14 Client Sample ID: HD-QC1-0/1-1

Date Analyzed: 12/24/19 15:25 Lab File ID: 10122420.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrachloroethene		Invalid Compound ID	journetp	12/26/19 10:13

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOA BFB25_00005							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Xylenes, Total	
					VOABFB50_00122	5 mL	BFB	25 ug/mL
.VOABFB50_00122	01/16/20	12/16/19	Methanol, Lot 3167189	50 mL	VOABFBRES_00086	1 mL	BFB	50 ug/mL
..VOABFBRES_00086	04/30/24		Restek, Lot A0147670		(Purchased Reagent)		BFB	2500 ug/mL
VOA8260INT_00102	01/06/20	12/06/19	Methanol, Lot 3167189	10 mL	VOA8260INTRES_00168	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_00168	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_00102	01/06/20	12/06/19	Methanol, Lot 3167189	100 mL	VOA8260SURRES_00141	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_00141	11/30/22		Restek, Lot A0132615		(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_00383	12/23/19	12/16/19	Methanol, Lot 3167189	10 mL	VOA8260GAS2ND_00291	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00381	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00291	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_00381	01/06/20	12/06/19	Methanol, Lot 3167189	10 mL	VOA8260MEGA2_00093	1 mL	1,1,1,2-Tetrachloroethane	250 ug/mL
							1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,2-Dibromoethane (EDB)	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VOA8260MEGA2_00093	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
							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_00384	12/27/19	12/20/19	Methanol, Lot 3167192	10 mL	VOA8260GAS1ST_00289	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
					VOA8260VOA_00003	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl acetate	50 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00289	03/31/22		Restek, Lot A0146651		(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
.VOA8260VOA_00003	01/06/20	12/06/19	Methanol, Lot 3167189	10 mL	VOA8260KET1ST_00135	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_00095	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00135	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_00095	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VOA8260VOAPRI_00384	12/27/19	12/20/19	Methanol, Lot 3167192	10 mL	VOA8260VOA_00003	1 mL	Xylenes, Total	50 ug/mL
.VOA8260VOA_00003	01/06/20	12/06/19	Methanol, Lot 3167189	10 mL	VOA8260MEGA1_00095	1 mL	Xylenes, Total	500 ug/mL
..VOA8260MEGA1_00095	06/30/21		Restek, Lot A0143774		(Purchased Reagent)		Xylenes, Total	5000 ug/mL
voaWKet2ndRes_00046	01/06/20	12/06/19	Methanol, Lot 3167194	50 mL	VOA8260KET2ND_00118	0.1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET2ND_00118	12/31/20		Restek, Lot A0133078		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
voaWKetmix1st_00021	01/06/20	12/06/19	Methanol, Lot 3167194	50 mL	VOA8260KET1ST_00135	0.1 mL	2-Butanone (MEK)	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET1ST_00135	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_00289

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Fax: (814)353-1309

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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. : 569722 **Lot No.:** A0146651

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 : March 31, 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%	2,500.2 µg/mL	+/- 19.5056 µg/mL +/- 140.7858 µg/mL +/- 144.0522 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBJ6334) **Purity** 99%	2,501.5 µg/mL	+/- 20.4136 µg/mL +/- 140.9867 µg/mL +/- 144.2520 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00012557) **Purity** 99%	2,502.6 µg/mL	+/- 19.3699 µg/mL +/- 140.9018 µg/mL +/- 144.1719 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,502.4 µg/mL	+/- 21.0409 µg/mL +/- 141.1253 µg/mL +/- 144.3895 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,501.9 µg/mL	+/- 18.1039 µg/mL +/- 140.6930 µg/mL +/- 143.9660 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,498.4 µg/mL	+/- 18.1959 µg/mL +/- 140.5102 µg/mL +/- 143.7782 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)		2,505.7	µg/mL	+/-	19.3191	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBH4155V)			+/-	141.0656	µg/mL	Unstressed
	Purity 99%				+/-	144.3399	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)

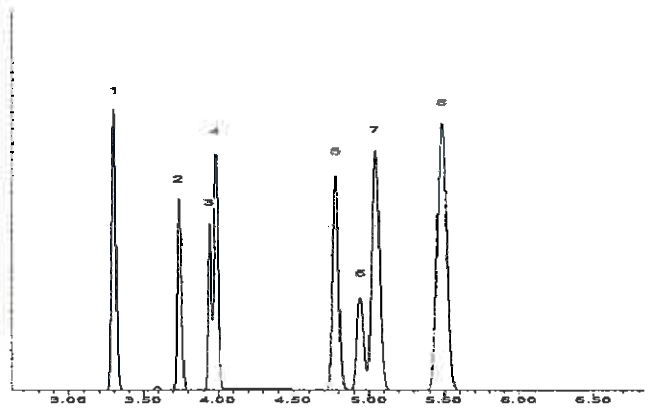
Carrier Gas:
helium-constant pressure 30 psi

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: 05-Mar-2019 **Balance:** B707717271

John Lidgett - AD Chemist

Date Passed: 12-Mar-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_00291

RESTEK
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Bellefonte, PA 16823-8812
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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. : 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)

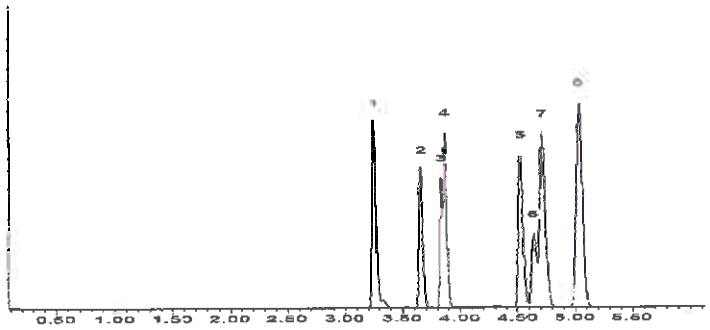
Carrier Gas:
helium-constant pressure 30 psi

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

Fang-Yun Lo - QC Analyst

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_00168

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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_00135

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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. : 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)

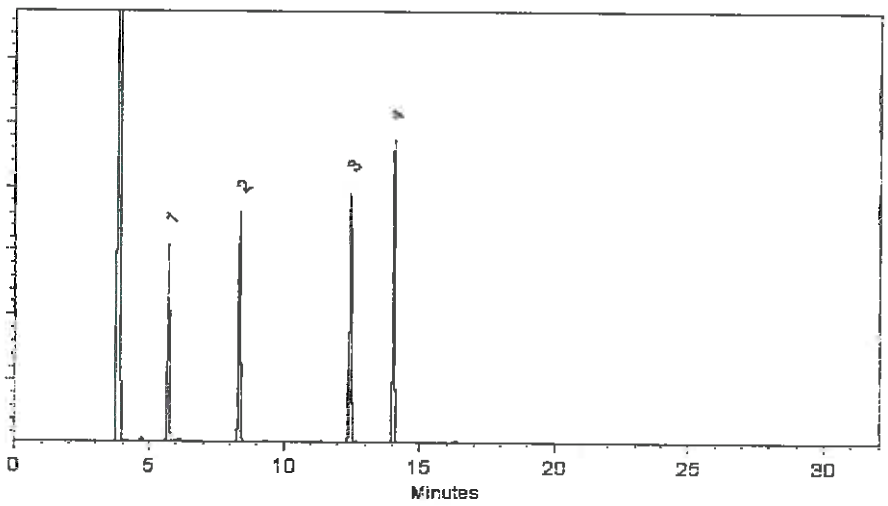
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

P. Joseph Talion - 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

VOA8260KET2ND_00118

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
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ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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Catalog No. : 569721.SEC **Lot No.:** A0133078

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, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone		0.0 µg/mL	+/- < 0.0001	
	CAS # 67-64-1.SEC	(Lot P14A572)		+/- < 0.0001	Unstressed
	Purity 99%			+/- < 0.0001	Stressed
2	2-Butanone (MEK)		0.0 µg/mL	+/- < 0.0001	
	CAS # 78-93-3.SEC	(Lot RA58J)		+/- < 0.0001	Unstressed
	Purity 99%			+/- < 0.0001	Stressed
3	4-Methyl-2-pentanone (MIBK)		0.0 µg/mL	+/- < 0.0001	
	CAS # 108-10-1.SEC	(Lot E29T040)		+/- < 0.0001	Unstressed
	Purity 99%			+/- < 0.0001	Stressed
4	2-Hexanone		0.0 µg/mL	+/- < 0.0001	
	CAS # 591-78-6.SEC	(Lot V3NRA)		+/- < 0.0001	Unstressed
	Purity 99%			+/- < 0.0001	Stressed

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

Reagent

VOA8260MEGA1_00095

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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

Catalog No. : 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)		2,500.6	µg/mL	+/- 14.5388	µg/mL	Gravimetric
	CAS # 60-29-7	(Lot SHBJ5713)			+/- 150.8738	µg/mL	Unstressed
	Purity 99%				+/- 151.2320	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)		2,501.6	µg/mL	+/- 14.5447	µg/mL	Gravimetric
	CAS # 76-13-1	(Lot 00009482)			+/- 150.9341	µg/mL	Unstressed
	Purity 99%				+/- 151.2925	µg/mL	Stressed
3	1,1-dichloroethene		2,501.9	µg/mL	+/- 14.5461	µg/mL	Gravimetric
	CAS # 75-35-4	(Lot SHBG8609V)			+/- 150.9492	µg/mL	Unstressed
	Purity 99%				+/- 151.3076	µg/mL	Stressed
4	tert-Butanol (TBA)		25,008.1	µg/mL	+/- 145.3918	µg/mL	Gravimetric
	CAS # 75-65-0	(Lot SHBJ9404)			+/- 1,508.8503	µg/mL	Unstressed
	Purity 99%				+/- 1,512.4325	µg/mL	Stressed
5	Methyl acetate		5,000.8	µg/mL	+/- 29.0748	µg/mL	Gravimetric
	CAS # 79-20-9	(Lot SHBG4345V)			+/- 301.7174	µg/mL	Unstressed
	Purity 99%				+/- 302.4337	µg/mL	Stressed
6	Iodomethane (methyl iodide)		2,500.6	µg/mL	+/- 14.5388	µg/mL	Gravimetric
	CAS # 74-88-4	(Lot SHBH4362V)			+/- 150.8738	µg/mL	Unstressed
	Purity 99%				+/- 151.2320	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)		2,502.0	µg/mL	+/- 14.5468	µg/mL	Gravimetric
	CAS # 107-05-1	(Lot WXBB7852V)			+/- 150.9567	µg/mL	Unstressed
	Purity 99%				+/- 151.3151	µg/mL	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)

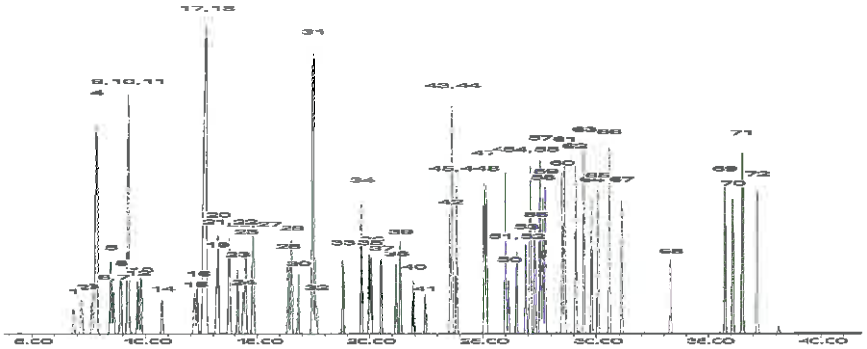
Carrier Gas:
helium-constant pressure 30 psi

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_00093

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		2,510.3	µg/mL	+/-	14.5953	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	151.4595	µg/mL	Unstressed
	Purity 99%				+/-	151.8191	µg/mL	Stressed
25	n-Heptane (C7)		2,511.8	µg/mL	+/-	14.6040	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot TFHUC)			+/-	151.5500	µg/mL	Unstressed
	Purity 99%				+/-	151.9098	µg/mL	Stressed
26	1,2-Dichloroethane		2,501.3	µg/mL	+/-	14.5430	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)			+/-	150.9165	µg/mL	Unstressed
	Purity 99%				+/-	151.2748	µg/mL	Stressed
27	Benzene		2,504.8	µg/mL	+/-	14.5633	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	151.1277	µg/mL	Unstressed
	Purity 99%				+/-	151.4865	µg/mL	Stressed
28	Trichloroethene		2,508.7	µg/mL	+/-	14.5856	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	151.3590	µg/mL	Unstressed
	Purity 99%				+/-	151.7183	µg/mL	Stressed
29	Methylcyclohexane		2,504.5	µg/mL	+/-	14.5614	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot Q02QG)			+/-	151.1076	µg/mL	Unstressed
	Purity 99%				+/-	151.4663	µg/mL	Stressed
30	1,2-Dichloropropane		2,504.0	µg/mL	+/-	14.5585	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot ERRBI-RH)			+/-	151.0774	µg/mL	Unstressed
	Purity 99%				+/-	151.4361	µg/mL	Stressed
31	1,4-Dioxane		50,008.0	µg/mL	+/-	290.7356	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot YVP2C)			+/-	3,017.2028	µg/mL	Unstressed
	Purity 99%				+/-	3,024.3661	µg/mL	Stressed
32	Dibromomethane		2,509.5	µg/mL	+/-	14.5904	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)			+/-	151.4093	µg/mL	Unstressed
	Purity 99%				+/-	151.7687	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
34	Toluene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
35	Ethyl methacrylate		2,508.8	µg/mL	+/-	14.5866	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot MLWYK-LS)			+/-	151.3690	µg/mL	Unstressed
	Purity 99%				+/-	151.7284	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,502.9	µg/mL	+/-	14.5520	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	151.0098	µg/mL	Unstressed
	Purity 96%				+/-	151.3684	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 7871500)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed
38	1,3-Dichloropropane		2,502.7	µg/mL	+/-	14.5507	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	150.9970	µg/mL	Unstressed
	Purity 99%				+/-	151.3555	µg/mL	Stressed
39	Tetrachloroethene		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	151.1378	µg/mL	Unstressed
	Purity 99%				+/-	151.4966	µg/mL	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 **CAS #** 108-86-1.SEC **Purity** 99%	(Lot 2FUHG-EM)	2,506.2	µg/mL	+/- 14.5711 +/- 151.2081 +/- 151.5671	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8.SEC **Purity** 99%	(Lot FGH02-CMLN)	2,510.0	µg/mL	+/- 14.5934 +/- 151.4394 +/- 151.7990	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8.SEC **Purity** 99%	(Lot SW8QG-AO)	2,504.7	µg/mL	+/- 14.5623 +/- 151.1176 +/- 151.4764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4.SEC **Purity** 99%	(Lot P4XHJ-AO)	2,509.2	µg/mL	+/- 14.5885 +/- 151.3891 +/- 151.7486	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6.SEC **Purity** 99%	(Lot D6OHC)	2,505.8	µg/mL	+/- 14.5691 +/- 151.1880 +/- 151.5470	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6.SEC **Purity** 99%	(Lot JMIYD)	2,508.7	µg/mL	+/- 14.5856 +/- 151.3590 +/- 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8.SEC **Purity** 99%	(Lot OGN01-IMA)	2,504.7	µg/mL	+/- 14.5623 +/- 151.1176 +/- 151.4764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) **CAS #** 99-87-6.SEC **Purity** 99%	(Lot 6628200)	2,500.3	µg/mL	+/- 14.5372 +/- 150.8562 +/- 151.2143	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1.SEC **Purity** 99%	(Lot FMDFD)	2,506.3	µg/mL	+/- 14.5720 +/- 151.2182 +/- 151.5772	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7.SEC **Purity** 99%	(Lot 4Y5DC)	2,509.8	µg/mL	+/- 14.5924 +/- 151.4294 +/- 151.7889	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8.SEC **Purity** 99%	(Lot MMPGA)	2,513.7	µg/mL	+/- 14.6147 +/- 151.6607 +/- 152.0207	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1.SEC **Purity** 99%	(Lot R6QDM)	2,501.8	µg/mL	+/- 14.5459 +/- 150.9467 +/- 151.3051	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8.SEC **Purity** 98%	(Lot LC00408V)	2,508.5	µg/mL	+/- 14.5845 +/- 151.3473 +/- 151.7066	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1.SEC **Purity** 99%	(Lot 3LYYC)	2,503.3	µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3.SEC **Purity** 97%	(Lot 5526800)	2,504.4	µg/mL	+/- 14.5607 +/- 151.1002 +/- 151.4590	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3.SEC **Purity** 99%	(Lot 4KW3H-OO)	2,503.3	µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed 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)

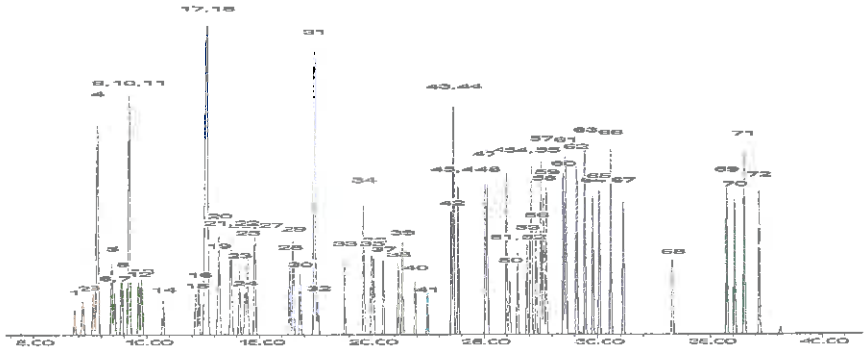
Carrier Gas:
helium-constant pressure 30 psi

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_00141

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567650 **Lot No.:** A0132615

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, 2022 **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** 99.8%	(Lot 0012017)	2,500.2 µg/mL	+/- 14.5364 µg/mL +/- 140.1837 µg/mL +/- 143.4639 µg/mL		Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 **Purity** 99%	(Lot PR-26748)	2,500.2 µg/mL	+/- 14.5361 µg/mL +/- 140.1809 µg/mL +/- 143.4610 µg/mL		Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 **Purity** 99%	(Lot PR-26623)	2,500.2 µg/mL	+/- 14.5364 µg/mL +/- 140.1837 µg/mL +/- 143.4639 µg/mL		Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 **Purity** 99%	(Lot 20401KOV)	2,500.3 µg/mL	+/- 14.5370 µg/mL +/- 140.1893 µg/mL +/- 143.4696 µg/mL		Gravimetric Unstressed Stressed

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

Reagent

VOABFBRES_00086

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. : 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)

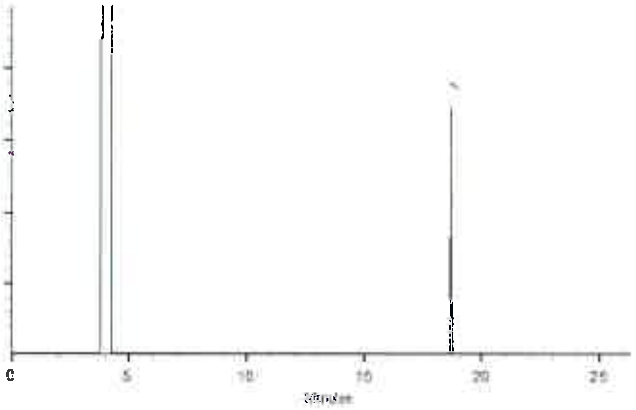
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.
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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:

- 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.: 180-100176-1

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	180-100176-1	90	86	93	74
HD-COD-SW-7-0/1-0	180-100176-2	102	105	99	91
HD-COD-SW-8-0/1-0	180-100176-3	95	100	94	80
HD-COD-SW-9-0/1-0	180-100176-4	98	99	106	75
HD-COD-SW-13-0/1-0	180-100176-5	101	104	96	72
HD-COD-SW-15-0/1-0	180-100176-6	104	95	112	85
HD-COD-SW-16-0/1-0	180-100176-7	98	91	108	81
HD-COD-SW-17-0/1-0	180-100176-8	99	90	112	79
HD-COD-SW-26-0/1-0	180-100176-9	101	101	106	78
HD-COD-SW-27-0/1-0	180-100176-10	96	90	108	79
HD-COD-SW-28-0/1-0	180-100176-11	98	88	109	84
HD-COD-SW-29-0/1-0	180-100176-12	101	99	106	82
HD-QC1-0/1-2	180-100176-13	97	92	89	82
HD-QC1-0/1-1	180-100176-14	97	85	111	79
	MB 180-302285/5	91	91	97	87
	MB 180-302393/5	101	102	99	77
	LCS 180-302285/3	98	100	99	104
	LCS 180-302393/12	102	101	93	88
HD-COD-SW-7-0/1-0 MS	180-100176-2 MS	106	117	92	94
HD-COD-SW-7-0/1-0 MSD	180-100176-2 MSD	98	111	94	96

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-147
DCA = 1,2-Dichloroethane-d4 (Surr)	70-150
TOL = Toluene-d8 (Surr)	78-128
BFB = 4-Bromofluorobenzene (Surr)	64-123

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.: 180-100176-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10122303.d

Lab ID: LCS 180-302285/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	9.40	94	37-150	
Vinyl chloride	10.0	9.88	99	50-150	
Bromomethane	10.0	8.52	85	35-150	
Chloroethane	10.0	7.31	73	52-150	
1,1-Dichloroethene	10.0	9.99	100	79-132	
Acetone	20.0	20.0	100	37-150	
Carbon disulfide	10.0	9.78	98	66-134	
Methylene Chloride	10.0	10.2	102	72-131	
trans-1,2-Dichloroethene	10.0	10.4	104	81-126	
Methyl tert-butyl ether	10.0	11.0	110	65-125	
1,1-Dichloroethane	10.0	10.1	101	70-127	
cis-1,2-Dichloroethene	10.0	10.0	100	79-119	
Bromochloromethane	10.0	10.2	102	74-124	
2-Butanone (MEK)	20.0	21.8	109	35-150	
Chloroform	10.0	9.65	97	75-126	
1,1,1-Trichloroethane	10.0	9.32	93	63-142	
Carbon tetrachloride	10.0	9.11	91	55-150	
Benzene	10.0	9.87	99	72-127	
1,2-Dichloroethane	10.0	10.3	103	60-138	
Trichloroethene	10.0	9.79	98	81-121	
1,2-Dichloropropane	10.0	9.86	99	67-124	
Bromodichloromethane	10.0	10.0	100	67-131	
cis-1,3-Dichloropropene	10.0	11.2	112	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	22.7	113	19-150	
Toluene	10.0	9.83	98	73-123	
trans-1,3-Dichloropropene	10.0	11.8	118	61-122	
1,1,2-Trichloroethane	10.0	11.0	110	72-120	
Tetrachloroethene	10.0	9.86	99	69-134	
2-Hexanone	20.0	22.1	110	24-150	
Dibromochloromethane	10.0	10.5	105	59-134	
1,2-Dibromoethane (EDB)	10.0	11.8	118	65-129	
Chlorobenzene	10.0	10.0	100	76-119	
1,1,1,2-Tetrachloroethane	10.0	9.94	99	65-132	
Ethylbenzene	10.0	10.5	105	76-118	
Xylenes, Total	20.0	20.3	101	76-116	
Styrene	10.0	10.5	105	74-118	
Bromoform	10.0	11.1	111	50-146	
1,1,2,2-Tetrachloroethane	10.0	11.5	115	57-135	
Acrylonitrile	100	124	124	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.: 180-100176-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10122412.d

Lab ID: LCS 180-302393/12 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	8.02	80	37-150	
Vinyl chloride	10.0	8.73	87	50-150	
Bromomethane	10.0	10.3	103	35-150	
Chloroethane	10.0	10.7	107	52-150	
1,1-Dichloroethene	10.0	9.04	90	79-132	
Acetone	20.0	12.7	64	37-150	
Carbon disulfide	10.0	8.63	86	66-134	
Methylene Chloride	10.0	8.79	88	72-131	
trans-1,2-Dichloroethene	10.0	8.70	87	81-126	
Methyl tert-butyl ether	10.0	10.0	100	65-125	
1,1-Dichloroethane	10.0	9.02	90	70-127	
cis-1,2-Dichloroethene	10.0	8.93	89	79-119	
Bromochloromethane	10.0	9.59	96	74-124	
2-Butanone (MEK)	20.0	16.3	81	35-150	
Chloroform	10.0	9.34	93	75-126	
1,1,1-Trichloroethane	10.0	9.13	91	63-142	
Carbon tetrachloride	10.0	9.18	92	55-150	
Benzene	10.0	8.54	85	72-127	
1,2-Dichloroethane	10.0	10.0	100	60-138	
Trichloroethene	10.0	8.42	84	81-121	
1,2-Dichloropropane	10.0	8.49	85	67-124	
Bromodichloromethane	10.0	9.14	91	67-131	
cis-1,3-Dichloropropene	10.0	9.22	92	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	19.3	97	19-150	
Toluene	10.0	8.32	83	73-123	
trans-1,3-Dichloropropene	10.0	9.87	99	61-122	
1,1,2-Trichloroethane	10.0	9.11	91	72-120	
Tetrachloroethene	10.0	8.16	82	69-134	
2-Hexanone	20.0	16.1	80	24-150	
Dibromochloromethane	10.0	9.11	91	59-134	
1,2-Dibromoethane (EDB)	10.0	9.45	94	65-129	
Chlorobenzene	10.0	8.33	83	76-119	
1,1,1,2-Tetrachloroethane	10.0	9.22	92	65-132	
Ethylbenzene	10.0	8.69	87	76-118	
Xylenes, Total	20.0	16.7	84	76-116	
Styrene	10.0	8.26	83	74-118	
Bromoform	10.0	9.68	97	50-146	
1,1,2,2-Tetrachloroethane	10.0	9.68	97	57-135	
Acrylonitrile	100	102	102	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.: 180-100176-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10122410.d

Lab ID: 180-100176-2 MS Client ID: HD-COD-SW-7-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloromethane	10.0	ND	7.22	72	37-150	
Vinyl chloride	10.0	ND	8.02	80	50-150	
Bromomethane	10.0	ND	10.0	100	35-150	
Chloroethane	10.0	ND	9.83	98	52-150	
1,1-Dichloroethene	10.0	ND	8.60	86	79-132	
Acetone	20.0	ND	15.8	79	37-150	
Carbon disulfide	10.0	ND	8.39	84	66-134	
Methylene Chloride	10.0	ND	8.67	87	72-131	
trans-1,2-Dichloroethene	10.0	ND	8.64	86	81-126	
Methyl tert-butyl ether	10.0	ND	10.0	100	65-125	
1,1-Dichloroethane	10.0	ND	8.41	84	70-127	
cis-1,2-Dichloroethene	10.0	ND	8.65	86	79-119	
Bromochloromethane	10.0	ND	9.59	96	74-124	
2-Butanone (MEK)	20.0	ND	18.4	92	35-150	
Chloroform	10.0	ND	9.57	96	75-126	
1,1,1-Trichloroethane	10.0	ND	8.95	89	63-142	
Carbon tetrachloride	10.0	ND	9.10	91	55-150	
Benzene	10.0	ND	8.08	81	72-127	
1,2-Dichloroethane	10.0	ND	10.3	103	60-138	
Trichloroethene	10.0	ND	8.82	88	81-121	
1,2-Dichloropropane	10.0	ND	7.94	79	67-124	
Bromodichloromethane	10.0	ND	9.46	95	67-131	
cis-1,3-Dichloropropene	10.0	ND	9.55	96	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	ND	20.8	104	19-150	
Toluene	10.0	ND	8.14	81	73-123	
trans-1,3-Dichloropropene	10.0	ND	9.51	95	61-122	
1,1,2-Trichloroethane	10.0	ND	9.19	92	72-120	
Tetrachloroethene	10.0	ND	8.08	81	69-134	
2-Hexanone	20.0	ND	16.8	84	24-150	
Dibromochloromethane	10.0	ND	9.78	98	59-134	
1,2-Dibromoethane (EDB)	10.0	ND	9.49	95	65-129	
Chlorobenzene	10.0	ND	8.33	83	76-119	
1,1,1,2-Tetrachloroethane	10.0	ND	8.91	89	65-132	
Ethylbenzene	10.0	ND	8.10	81	76-118	
Xylenes, Total	20.0	ND	16.4	82	76-116	
Styrene	10.0	ND	8.64	86	74-118	
Bromoform	10.0	ND	10.5	105	50-146	
1,1,2,2-Tetrachloroethane	10.0	ND	9.96	100	57-135	
Acrylonitrile	100	ND	106	106	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.: 180-100176-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10122411.d

Lab ID: 180-100176-2 MSD Client ID: HD-COD-SW-7-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloromethane	10.0	7.82	78	8	35	37-150	
Vinyl chloride	10.0	8.34	83	4	31	50-150	
Bromomethane	10.0	10.4	104	4	35	35-150	
Chloroethane	10.0	10.8	108	9	31	52-150	
1,1-Dichloroethene	10.0	9.09	91	6	29	79-132	
Acetone	20.0	13.6	68	15	35	37-150	
Carbon disulfide	10.0	8.54	85	2	31	66-134	
Methylene Chloride	10.0	8.66	87	0	29	72-131	
trans-1,2-Dichloroethene	10.0	8.57	86	1	27	81-126	
Methyl tert-butyl ether	10.0	10.1	101	0	28	65-125	
1,1-Dichloroethane	10.0	8.90	89	6	27	70-127	
cis-1,2-Dichloroethene	10.0	8.84	88	2	28	79-119	
Bromochloromethane	10.0	9.77	98	2	27	74-124	
2-Butanone (MEK)	20.0	18.0	90	2	34	35-150	
Chloroform	10.0	9.33	93	3	26	75-126	
1,1,1-Trichloroethane	10.0	9.26	93	3	28	63-142	
Carbon tetrachloride	10.0	9.28	93	2	29	55-150	
Benzene	10.0	8.58	86	6	27	72-127	
1,2-Dichloroethane	10.0	10.3	103	0	26	60-138	
Trichloroethene	10.0	8.61	86	2	28	81-121	
1,2-Dichloropropane	10.0	8.46	85	6	27	67-124	
Bromodichloromethane	10.0	9.37	94	1	28	67-131	
cis-1,3-Dichloropropene	10.0	9.27	93	3	29	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	22.5	113	8	33	19-150	
Toluene	10.0	8.98	90	10	31	73-123	
trans-1,3-Dichloropropene	10.0	10.6	106	11	30	61-122	
1,1,2-Trichloroethane	10.0	9.92	99	8	27	72-120	
Tetrachloroethene	10.0	8.76	88	8	27	69-134	
2-Hexanone	20.0	16.5	83	2	32	24-150	
Dibromochloromethane	10.0	9.92	99	1	28	59-134	
1,2-Dibromoethane (EDB)	10.0	10.8	108	13	27	65-129	
Chlorobenzene	10.0	8.91	89	7	25	76-119	
1,1,1,2-Tetrachloroethane	10.0	9.43	94	6	28	65-132	
Ethylbenzene	10.0	8.90	89	9	27	76-118	
Xylenes, Total	20.0	17.7	88	7	27	76-116	
Styrene	10.0	8.96	90	4	27	74-118	
Bromoform	10.0	10.9	109	4	30	50-146	
1,1,2,2-Tetrachloroethane	10.0	10.5	105	6	29	57-135	
Acrylonitrile	100	108	108	2	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.: 180-100176-1

SDG No.:

Lab File ID: 10122305.d Lab Sample ID: MB 180-302285/5

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

Instrument ID: CHHP10 Date Analyzed: 12/23/2019 10:22

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-302285/3	10122303.d	12/23/2019 09:20
HD-QC1-0/1-2	180-100176-13	10122311.d	12/23/2019 13:07
HD-COD-SW-6-0/1-0	180-100176-1	10122314.d	12/23/2019 14:29

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Lab File ID: 10122405.d Lab Sample ID: MB 180-302393/5

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

Instrument ID: CHHP10 Date Analyzed: 12/24/2019 08:35

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
HD-COD-SW-7-0/1-0	180-100176-2	10122406.d	12/24/2019 09:03
HD-COD-SW-8-0/1-0	180-100176-3	10122407.d	12/24/2019 09:30
HD-COD-SW-9-0/1-0	180-100176-4	10122408.d	12/24/2019 09:57
HD-COD-SW-13-0/1-0	180-100176-5	10122409.d	12/24/2019 10:25
HD-COD-SW-7-0/1-0 MS	180-100176-2 MS	10122410.d	12/24/2019 10:52
HD-COD-SW-7-0/1-0 MSD	180-100176-2 MSD	10122411.d	12/24/2019 11:19
	LCS 180-302393/12	10122412.d	12/24/2019 11:46
HD-COD-SW-15-0/1-0	180-100176-6	10122413.d	12/24/2019 12:14
HD-COD-SW-16-0/1-0	180-100176-7	10122414.d	12/24/2019 12:41
HD-COD-SW-17-0/1-0	180-100176-8	10122415.d	12/24/2019 13:08
HD-COD-SW-26-0/1-0	180-100176-9	10122416.d	12/24/2019 13:35
HD-COD-SW-27-0/1-0	180-100176-10	10122417.d	12/24/2019 14:03
HD-COD-SW-28-0/1-0	180-100176-11	10122418.d	12/24/2019 14:30
HD-COD-SW-29-0/1-0	180-100176-12	10122419.d	12/24/2019 14:58
HD-QC1-0/1-1	180-100176-14	10122420.d	12/24/2019 15:25

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Lab File ID: 10122001.d BFB Injection Date: 12/20/2019

Instrument ID: CHHP10 BFB Injection Time: 06:27

Analysis Batch No.: 302077

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.6	
75	30.0 - 60.0 % of mass 95	50.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	92.3	
175	5.0 - 9.0 % of mass 174	6.7	(7.3) 1
176	95.0 - 101.0 % of mass 174	88.5	(95.9) 1
177	5.0 - 9.0 % of mass 176	5.0	(5.6) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-302077/14	10122014.d	12/20/2019	12:55
	ICIS 180-302077/15	10122015.d	12/20/2019	13:22
	IC 180-302077/16	10122016.d	12/20/2019	13:49
	IC 180-302077/17	10122017.d	12/20/2019	14:16
	IC 180-302077/18	10122018.d	12/20/2019	14:44
	IC 180-302077/19	10122019.d	12/20/2019	15:11
	IC 180-302077/20	10122020.d	12/20/2019	15:38
	IC 180-302077/24	10122024.d	12/20/2019	17:27

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Lab File ID: 10122301.d BFB Injection Date: 12/23/2019

Instrument ID: CHHP10 BFB Injection Time: 08:11

Analysis Batch No.: 302285

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.1	
75	30.0 - 60.0 % of mass 95	44.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.3	(0.3) 1
174	50.0 - 120.00 % of mass 95	89.2	
175	5.0 - 9.0 % of mass 174	6.4	(7.2) 1
176	95.0 - 101.0 % of mass 174	89.7	(100.6) 1
177	5.0 - 9.0 % of mass 176	5.9	(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 180-302285/2	10122302.d	12/23/2019	08:52
	LCS 180-302285/3	10122303.d	12/23/2019	09:20
	MB 180-302285/5	10122305.d	12/23/2019	10:22
HD-QC1-0/1-2	180-100176-13	10122311.d	12/23/2019	13:07
HD-COD-SW-6-0/1-0	180-100176-1	10122314.d	12/23/2019	14:29

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Lab File ID: 10122402.d BFB Injection Date: 12/24/2019

Instrument ID: CHHP10 BFB Injection Time: 07:12

Analysis Batch No.: 302393

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.4	
75	30.0 - 60.0 % of mass 95	49.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	88.0	
175	5.0 - 9.0 % of mass 174	7.1	(8.0) 1
176	95.0 - 101.0 % of mass 174	87.5	(99.4) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.5) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-302393/3	10122403.d	12/24/2019	07:40
	MB 180-302393/5	10122405.d	12/24/2019	08:35
HD-COD-SW-7-0/1-0	180-100176-2	10122406.d	12/24/2019	09:03
HD-COD-SW-8-0/1-0	180-100176-3	10122407.d	12/24/2019	09:30
HD-COD-SW-9-0/1-0	180-100176-4	10122408.d	12/24/2019	09:57
HD-COD-SW-13-0/1-0	180-100176-5	10122409.d	12/24/2019	10:25
HD-COD-SW-7-0/1-0 MS	180-100176-2 MS	10122410.d	12/24/2019	10:52
HD-COD-SW-7-0/1-0 MSD	180-100176-2 MSD	10122411.d	12/24/2019	11:19
	LCS 180-302393/12	10122412.d	12/24/2019	11:46
HD-COD-SW-15-0/1-0	180-100176-6	10122413.d	12/24/2019	12:14
HD-COD-SW-16-0/1-0	180-100176-7	10122414.d	12/24/2019	12:41
HD-COD-SW-17-0/1-0	180-100176-8	10122415.d	12/24/2019	13:08
HD-COD-SW-26-0/1-0	180-100176-9	10122416.d	12/24/2019	13:35
HD-COD-SW-27-0/1-0	180-100176-10	10122417.d	12/24/2019	14:03
HD-COD-SW-28-0/1-0	180-100176-11	10122418.d	12/24/2019	14:30
HD-COD-SW-29-0/1-0	180-100176-12	10122419.d	12/24/2019	14:58
HD-QC1-0/1-1	180-100176-14	10122420.d	12/24/2019	15:25

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Sample No.: CCVIS 180-302285/2 Date Analyzed: 12/23/2019 08:52

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

Lab File ID (Standard): 10122302.d Heated Purge: (Y/N) N

Calibration ID: 42321

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		67111	3.99	260047	7.00	71331	10.13
UPPER LIMIT		134222	4.49	520094	7.50	142662	10.63
LOWER LIMIT		33556	3.49	130024	6.50	35666	9.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-302285/3		79054	4.00	272249	7.00	67229	10.13
MB 180-302285/5		105368	3.96	356446	7.01	79397	10.14
180-100176-13	HD-QC1-0/1-2	54302	3.96	291561	7.02	67906	10.13
180-100176-1	HD-COD-SW-6-0/1-0	42461	3.97	243571	7.01	56001	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.: 180-100176-1

SDG No.:

Sample No.: CCVIS 180-302285/2 Date Analyzed: 12/23/2019 08:52

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

Lab File ID (Standard): 10122302.d Heated Purge: (Y/N) N

Calibration ID: 42321

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		111871	12.47				
UPPER LIMIT		223742	12.97				
LOWER LIMIT		55936	11.97				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-302285/3		109867	12.47				
MB 180-302285/5		106558	12.48				
180-100176-13	HD-QC1-0/1-2	81540	12.48				
180-100176-1	HD-COD-SW-6-0/1-0	67337	12.48				

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.: 180-100176-1

SDG No.:

Sample No.: CCVIS 180-302393/3 Date Analyzed: 12/24/2019 07:40

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

Lab File ID (Standard): 10122403.d Heated Purge: (Y/N) N

Calibration ID: 42321

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		46742	3.96	220297	7.01	56106	10.13
UPPER LIMIT		93484	4.46	440594	7.51	112212	10.63
LOWER LIMIT		23371	3.46	110149	6.51	28053	9.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-302393/5		58937	3.96	266170	7.02	61351	10.13
180-100176-2	HD-COD-SW-7-0/1-0	53489	3.96	245476	7.01	62507	10.13
180-100176-3	HD-COD-SW-8-0/1-0	51351	3.97	259369	7.01	61792	10.14
180-100176-4	HD-COD-SW-9-0/1-0	46687	3.96	245385	7.01	55977	10.13
180-100176-5	HD-COD-SW-13-0/1-0	43431	3.96	241393	7.01	58396	10.13
180-100176-2 MS	HD-COD-SW-7-0/1-0 MS	56766	3.96	207539	7.01	54165	10.13
180-100176-2 MSD	HD-COD-SW-7-0/1-0 MSD	57353	3.98	230865	7.01	56160	10.13
LCS 180-302393/12		52480	3.96	225651	7.01	58420	10.13
180-100176-6	HD-COD-SW-15-0/1-0	55533	3.97	254889	7.01	55140	10.14
180-100176-7	HD-COD-SW-16-0/1-0	41795	3.96	256594	7.01	55414	10.13
180-100176-8	HD-COD-SW-17-0/1-0	40562	3.96	254706	7.01	55663	10.14
180-100176-9	HD-COD-SW-26-0/1-0	50908	3.96	241363	7.02	55733	10.13
180-100176-10	HD-COD-SW-27-0/1-0	35485	3.96	237273	7.02	50943	10.14
180-100176-11	HD-COD-SW-28-0/1-0	39455	3.97	247889	7.01	50809	10.14
180-100176-12	HD-COD-SW-29-0/1-0	42542	3.96	231983	7.01	52069	10.13
180-100176-14	HD-QC1-0/1-1	29514	3.97	231901	7.02	49144	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.: 180-100176-1

SDG No.:

Sample No.: CCVIS 180-302393/3 Date Analyzed: 12/24/2019 07:40

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

Lab File ID (Standard): 10122403.d Heated Purge: (Y/N) N

Calibration ID: 42321

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		94785	12.47				
UPPER LIMIT		189570	12.97				
LOWER LIMIT		47393	11.97				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-302393/5		73984	12.48				
180-100176-2	HD-COD-SW-7-0/1-0	78271	12.48				
180-100176-3	HD-COD-SW-8-0/1-0	78090	12.48				
180-100176-4	HD-COD-SW-9-0/1-0	66504	12.48				
180-100176-5	HD-COD-SW-13-0/1-0	66681	12.48				
180-100176-2 MS	HD-COD-SW-7-0/1-0 MS	90440	12.47				
180-100176-2 MSD	HD-COD-SW-7-0/1-0 MSD	95332	12.47				
LCS 180-302393/12		89884	12.48				
180-100176-6	HD-COD-SW-15-0/1-0	67202	12.48				
180-100176-7	HD-COD-SW-16-0/1-0	64221	12.48				
180-100176-8	HD-COD-SW-17-0/1-0	63039	12.49				
180-100176-9	HD-COD-SW-26-0/1-0	59801	12.48				
180-100176-10	HD-COD-SW-27-0/1-0	57422	12.49				
180-100176-11	HD-COD-SW-28-0/1-0	58655	12.48				
180-100176-12	HD-COD-SW-29-0/1-0	63609	12.48				
180-100176-14	HD-QC1-0/1-1	53557	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 I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 180-100176-1

Matrix: Water Lab File ID: 10122314.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 12:35

Sample wt/vol: 5(mL) Date Analyzed: 12/23/2019 14:29

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302285 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 180-100176-1

Matrix: Water Lab File ID: 10122314.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 12:35

Sample wt/vol: 5(mL) Date Analyzed: 12/23/2019 14:29

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302285 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)	86		70-150
2037-26-5	Toluene-d8 (Surr)	93		78-128
460-00-4	4-Bromofluorobenzene (Surr)	74		64-123
1868-53-7	Dibromofluoromethane (Surr)	90		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122314.d
Lims ID: 180-100176-C-1
Client ID: HD-COD-SW-6-0/1-0
Sample Type: Client
Inject. Date: 23-Dec-2019 14:29:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030123-014
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 24-Dec-2019 07:11:12 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0309

First Level Reviewer: journetp Date: 24-Dec-2019 07:07:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.969	3.993	-0.024	0	42461	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	243571	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	85	56001	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	93	67337	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.275	0.006	93	54936	45.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.645	0.012	0	45328	42.9	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	92	210289	46.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.327	11.322	0.005	93	54859	37.1	
$ 9 BFB	95	11.327	11.322	0.005	0	54859	NR	
37 Isopropyl alcohol	45	3.963	3.987	-0.024	27	1944	NC	
57 Isooctane	57	7.010	7.033	-0.023	37	7705	NC	
116 Naphthalene	128	14.751	14.727	0.024	88	2731	7.38	
117 1,2,3-Trichlorobenzene	180	14.957	14.939	0.018	94	2004	3.29	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

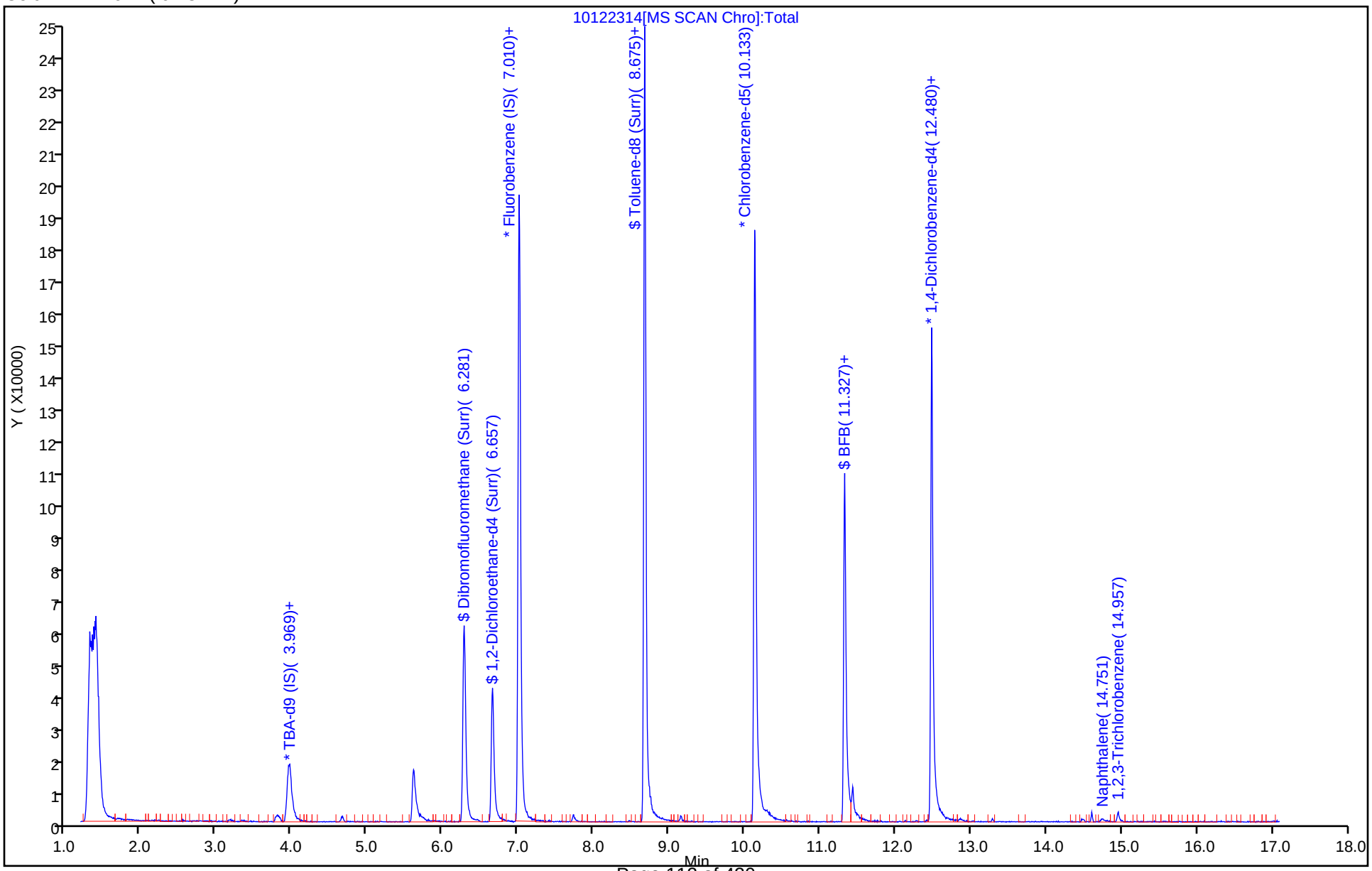
VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 24-Dec-2019 07:17:11 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122314.d				
Injection Date:	23-Dec-2019 14:29:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-C-1	Lab Sample ID:	180-100176-1	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\20191223-30123.b\10122314.d
Lims ID: 180-100176-C-1
Client ID: HD-COD-SW-6-0/1-0
Sample Type: Client
Inject. Date: 23-Dec-2019 14:29:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030123-014
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 24-Dec-2019 07:11:12 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0309

First Level Reviewer: journetp Date: 24-Dec-2019 07:07:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	45.1	90.16
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	42.9	85.71
$ 7 Toluene-d8 (Surr)	50.0	46.6	93.28
$ 8 4-Bromofluorobenzene (Surr)	50.0	37.1	74.11

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 180-100176-2

Matrix: Water Lab File ID: 10122406.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 13:37

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 09:03

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 180-100176-2

Matrix: Water Lab File ID: 10122406.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 13:37

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 09:03

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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)	105		70-150
2037-26-5	Toluene-d8 (Surr)	99		78-128
460-00-4	4-Bromofluorobenzene (Surr)	91		64-123
1868-53-7	Dibromofluoromethane (Surr)	102		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122406.d
Lims ID: 180-100176-B-2
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 09:03:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-006
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:05:39

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	53489	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	245476	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	85	62507	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	94	78271	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.280	6.281	-0.001	93	62455	50.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	55847	52.4	
$ 7 Toluene-d8 (Surr)	98	8.680	8.669	0.011	94	248117	49.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.327	11.322	0.005	94	74806	45.3	
37 Isopropyl alcohol	45	3.957	3.987	-0.030	26	2451	NC	
19 Acrolein	56	4.675	4.657	0.018	66	1228	NC	
57 Isooctane	57	7.010	7.033	-0.023	44	7916	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

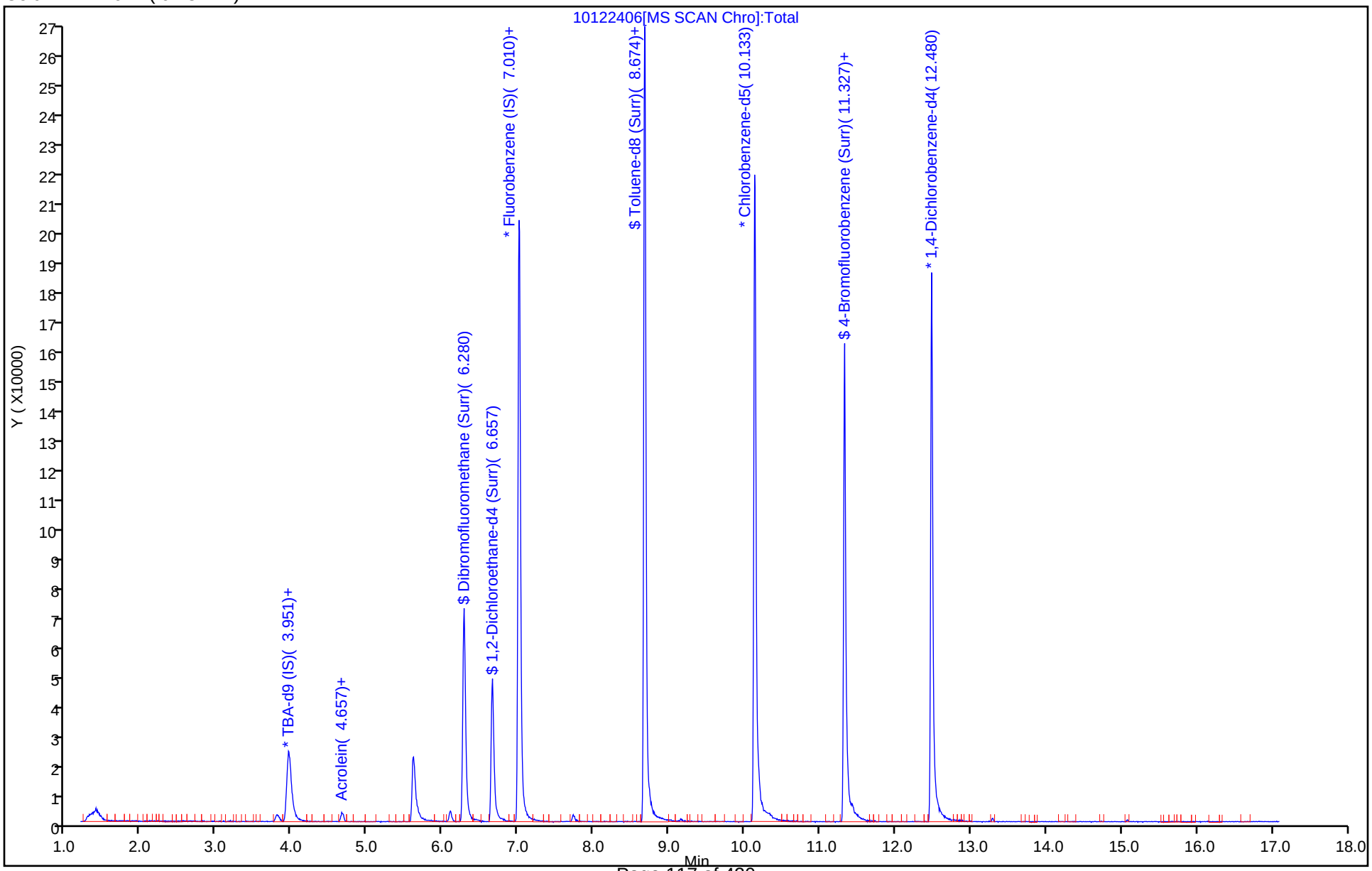
VOA8260INT_00102 Amount Added: 2.00 Units: uL Run Reagent
VOA8260SURR_00102 Amount Added: 2.00 Units: uL Run Reagent

Report Date: 26-Dec-2019 10:28:12 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122406.d				
Injection Date:	24-Dec-2019 09:03:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-B-2	Lab Sample ID:	180-100176-2	Worklist Smp#:	6
Client ID:	HD-COD-SW-7-0/1-0				
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\20191224-30134.b\10122406.d
Lims ID: 180-100176-B-2
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 09:03:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-006
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:05:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.8	101.70
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	52.4	104.79
$ 7 Toluene-d8 (Surr)	50.0	49.3	98.61
$ 8 4-Bromofluorobenzene (Surr)	50.0	45.3	90.54

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 180-100176-3

Matrix: Water Lab File ID: 10122407.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 09:38

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 09:30

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.: 302393 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 180-100176-3

Matrix: Water Lab File ID: 10122407.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 09:38

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 09:30

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.: 302393 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)	100		70-150
2037-26-5	Toluene-d8 (Surr)	94		78-128
460-00-4	4-Bromofluorobenzene (Surr)	80		64-123
1868-53-7	Dibromofluoromethane (Surr)	95		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122407.d
Lims ID: 180-100176-A-3
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 09:30:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-007
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:05:53

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.969	3.957	0.012	0	51351	1000.0	
*	2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	259369	50.0	
*	3 Chlorobenzene-d5	119	10.139	10.133	0.006	83	61792	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	93	78090	50.0	
$	5 Dibromofluoromethane (Surr	113	6.275	6.281	-0.006	93	61819	47.6	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	56584	50.2	
$	7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	93	234737	47.2	
$	8 4-Bromofluorobenzene (Surr	95	11.327	11.322	0.005	96	65106	39.9	
$	9 BFB	95	11.327	11.316	0.011	0	65106	NR	
	37 Isopropyl alcohol	45	3.963	3.987	-0.024	95	2236	NC	
	19 Acrolein	56	4.663	4.657	0.006	38	1265	NC	
	57 Isooctane	57	7.016	7.033	-0.017	33	8479	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

VOA8260INT_00102	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added: 2.00	Units: uL	Run Reagent

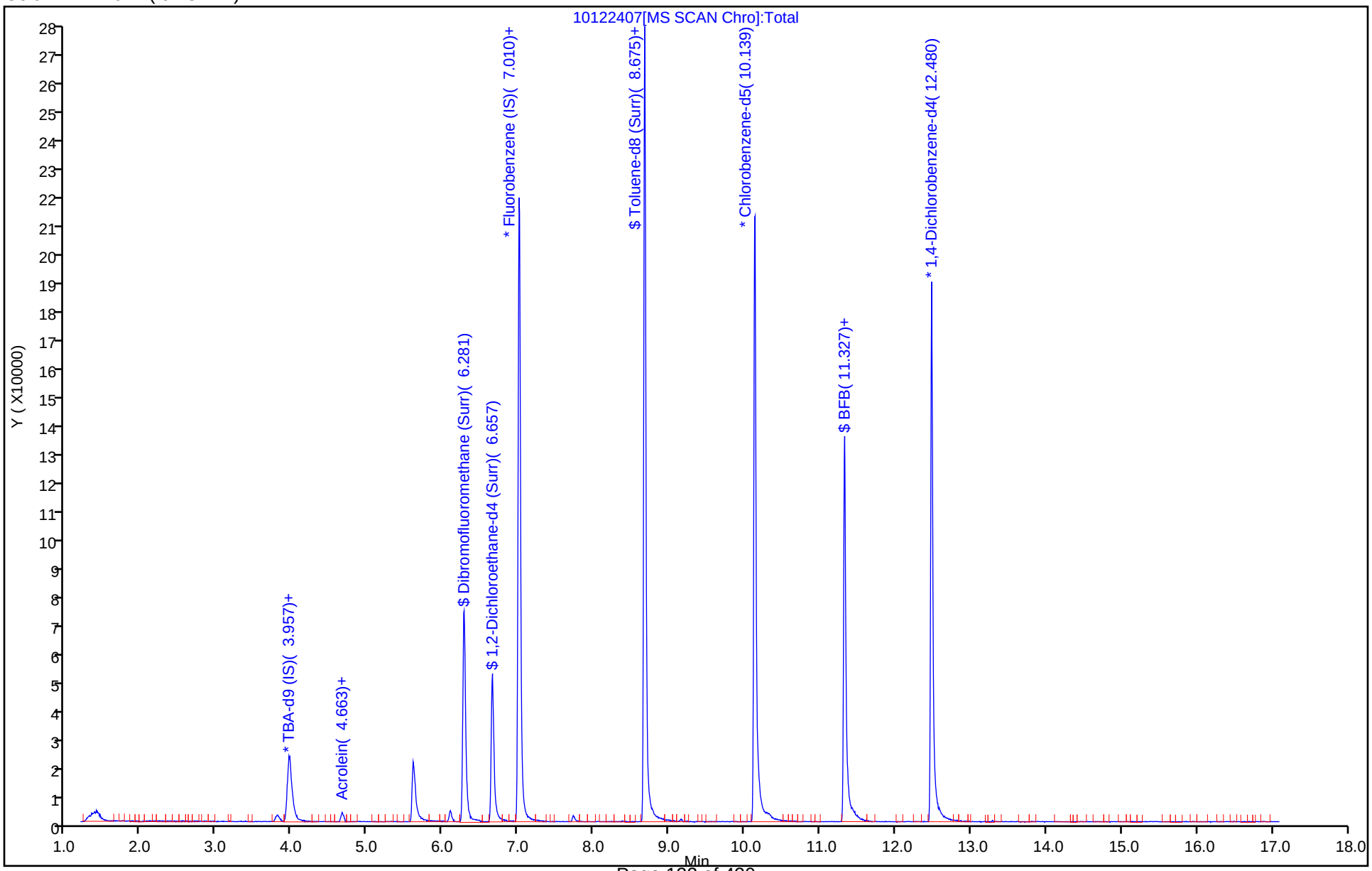
Report Date: 26-Dec-2019 10:28:11 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122407.d

Injection Date:	24-Dec-2019 09:30:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-A-3	Lab Sample ID:	180-100176-3	Worklist Smp#:	7
Client ID:	HD-COD-SW-8-0/1-0				
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\20191224-30134.b\10122407.d
Lims ID: 180-100176-A-3
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 09:30:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-007
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:05:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	47.6	95.27
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.2	100.48
$ 7 Toluene-d8 (Surr)	50.0	47.2	94.37
$ 8 4-Bromofluorobenzene (Surr)	50.0	39.9	79.71

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 180-100176-4

Matrix: Water Lab File ID: 10122408.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 14:24

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 09:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 180-100176-4

Matrix: Water Lab File ID: 10122408.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 14:24

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 09:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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)	99		70-150
2037-26-5	Toluene-d8 (Surr)	106		78-128
460-00-4	4-Bromofluorobenzene (Surr)	75		64-123
1868-53-7	Dibromofluoromethane (Surr)	98		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122408.d
Lims ID: 180-100176-A-4
Client ID: HD-COD-SW-9-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 09:57:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-008
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:06:01

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	46687	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	245385	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	85	55977	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	93	66504	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	93	59928	48.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	52722	49.5	
$ 7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	93	239019	53.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.322	0.000	96	55846	37.7	
$ 9 BFB	95	11.322	11.316	0.006	0	55846	NR	
37 Isopropyl alcohol	45	3.957	3.987	-0.030	26	1986	NC	
57 Isooctane	57	7.010	7.033	-0.023	48	7828	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

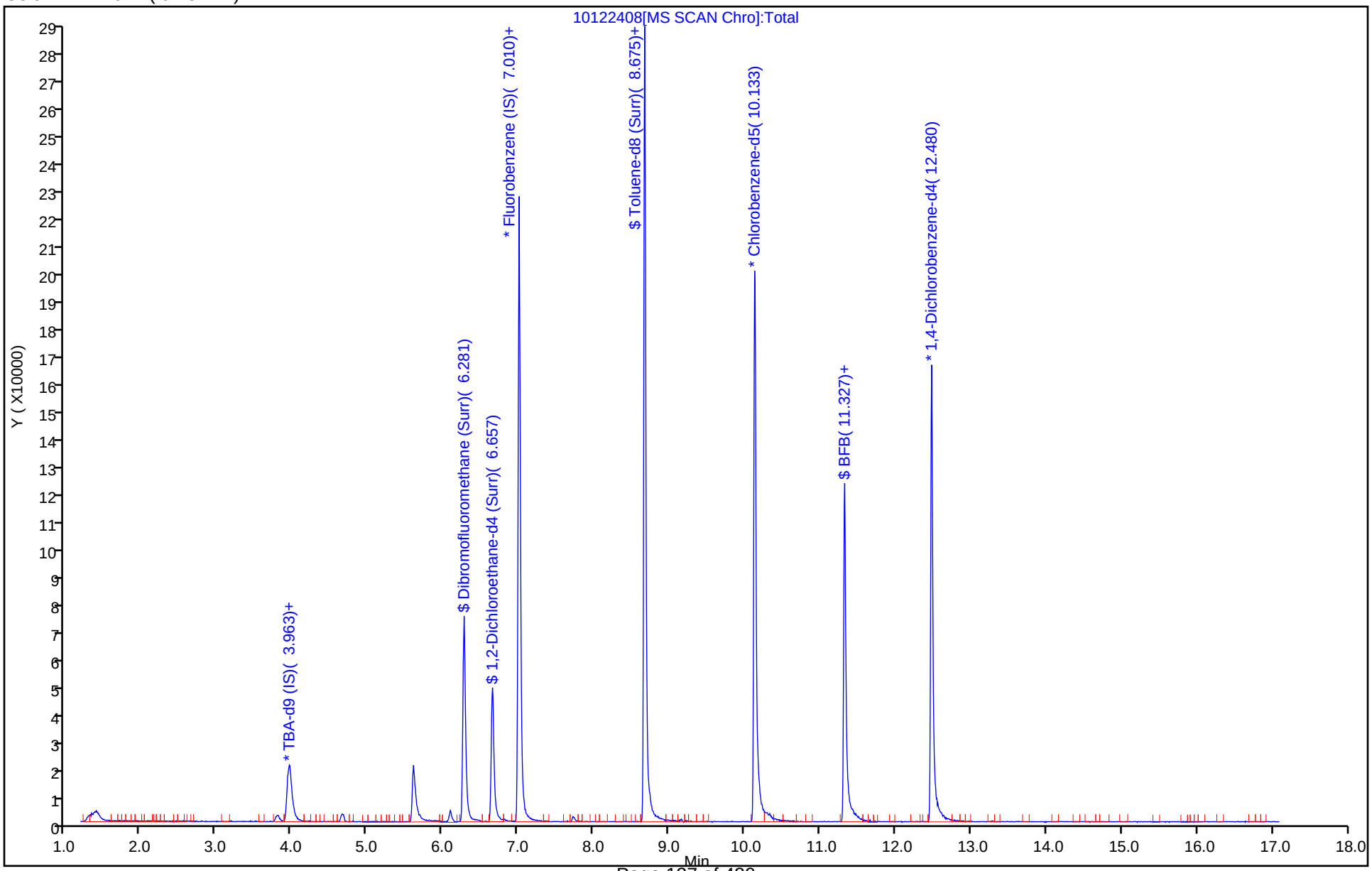
VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 26-Dec-2019 10:28:09 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122408.d				
Injection Date:	24-Dec-2019 09:57:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-A-4	Lab Sample ID:	180-100176-4	Worklist Smp#:	8
Client ID:	HD-COD-SW-9-0/1-0				
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)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122408.d
Lims ID: 180-100176-A-4
Client ID: HD-COD-SW-9-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 09:57:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-008
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:06:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.8	97.62
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.5	98.96
$ 7 Toluene-d8 (Surr)	50.0	53.0	106.07
$ 8 4-Bromofluorobenzene (Surr)	50.0	37.7	75.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 180-100176-5

Matrix: Water Lab File ID: 10122409.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 09:58

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 10:25

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.: 302393 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 180-100176-5

Matrix: Water Lab File ID: 10122409.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 09:58

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 10:25

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.: 302393 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)	104		70-150
2037-26-5	Toluene-d8 (Surr)	96		78-128
460-00-4	4-Bromofluorobenzene (Surr)	72		64-123
1868-53-7	Dibromofluoromethane (Surr)	101		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122409.d
Lims ID: 180-100176-A-5
Client ID: HD-COD-SW-13-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 10:25:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-009
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:06:12

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	43431	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	241393	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	85	58396	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	94	66681	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	93	60985	50.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	54436	51.9	
$ 7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	92	225570	48.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.327	11.322	0.005	93	55516	36.0	
$ 9 BFB	95	11.327	11.316	0.011	0	55516	NR	
37 Isopropyl alcohol	45	3.957	3.987	-0.030	29	1700	NC	
57 Isooctane	57	7.016	7.033	-0.017	33	7573	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

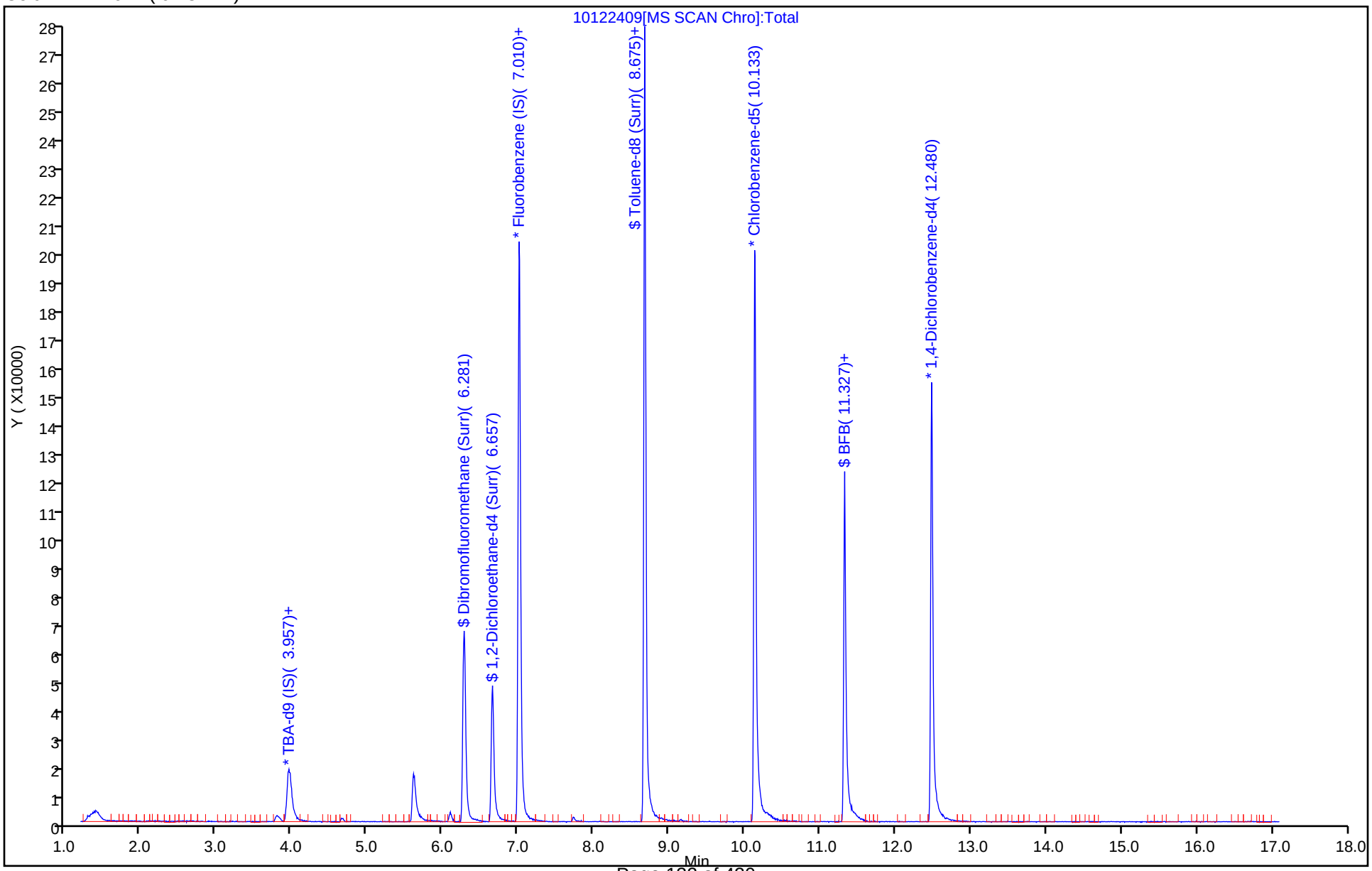
VOA8260INT_00102 Amount Added: 2.00 Units: uL Run Reagent
VOA8260SURR_00102 Amount Added: 2.00 Units: uL Run Reagent

Report Date: 26-Dec-2019 10:28:08 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122409.d				
Injection Date:	24-Dec-2019 10:25:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-A-5	Lab Sample ID:	180-100176-5	Worklist Smp#:	9
Client ID:	HD-COD-SW-13-0/1-0				
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)



Eurofins TestAmerica, Pittsburgh
Recovery Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122409.d
Lims ID: 180-100176-A-5
Client ID: HD-COD-SW-13-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 10:25:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-009
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:06:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.5	100.99
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	51.9	103.87
$ 7 Toluene-d8 (Surr)	50.0	48.0	95.96
$ 8 4-Bromofluorobenzene (Surr)	50.0	36.0	71.92

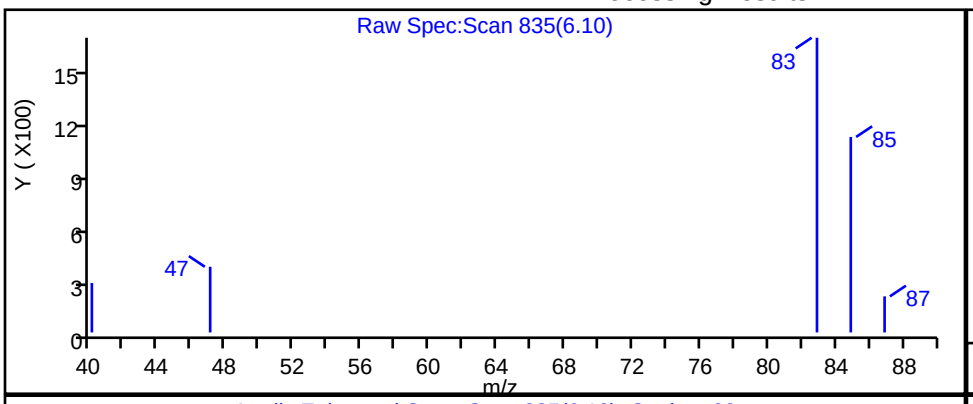
User Disabled Compound Report

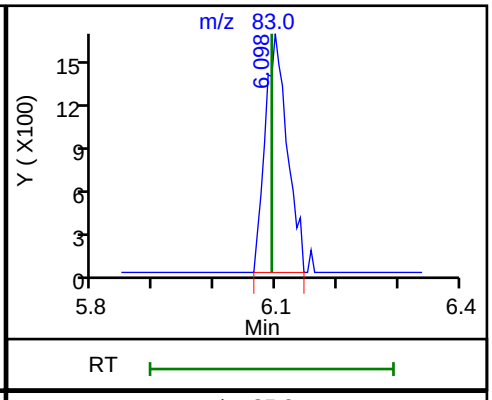
Eurofins TestAmerica, Pittsburgh

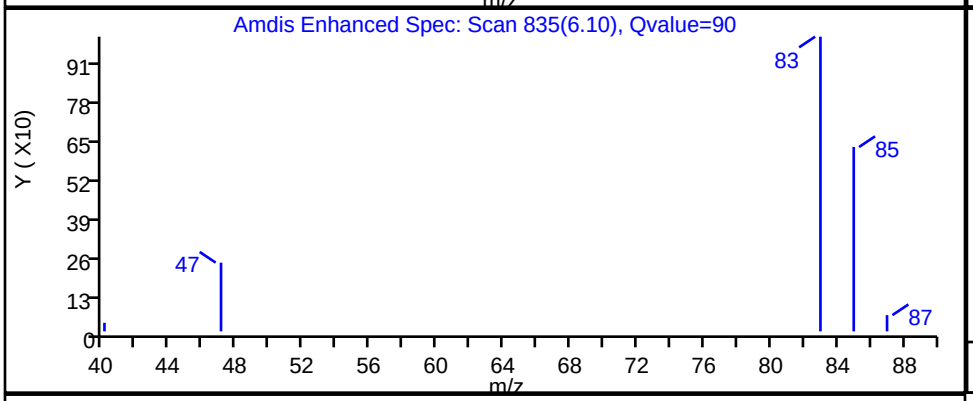
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122409.d				
Injection Date:	24-Dec-2019 10:25:30	Instrument ID:	CHHP10		
Lims ID:	180-100176-A-5	Lab Sample ID:	180-100176-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	034635	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

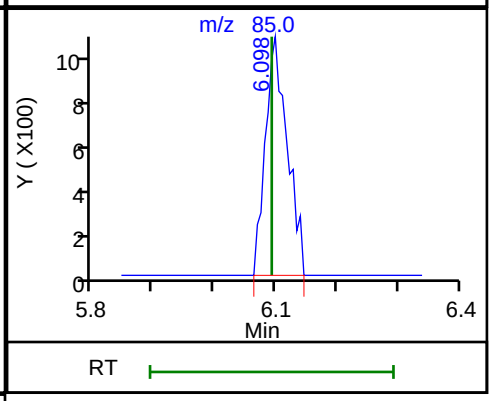
49 Chloroform, CAS: 67-66-3

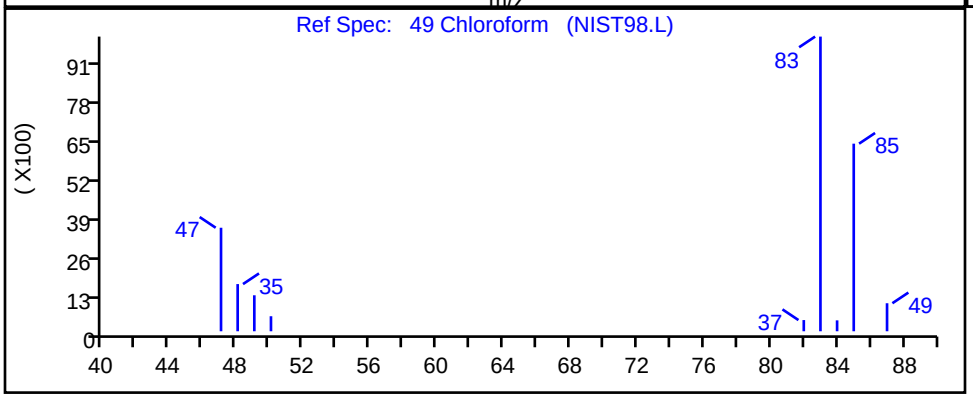
Processing Results











RT	Mass	Response	Amount
6.10	83.00	4081	-1.826181
6.10	85.00	2692	

Reviewer: journetp, 26-Dec-2019 10:06:07

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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 180-100176-6

Matrix: Water Lab File ID: 10122413.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 13:57

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 12:14

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
156-59-2	cis-1,2-Dichloroethene	0.83	J	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	0.86	J	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	3.0		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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 180-100176-6

Matrix: Water Lab File ID: 10122413.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 13:57

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 12:14

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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)	95		70-150
2037-26-5	Toluene-d8 (Surr)	112		78-128
460-00-4	4-Bromofluorobenzene (Surr)	85		64-123
1868-53-7	Dibromofluoromethane (Surr)	104		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122413.d
Lims ID: 180-100176-B-6
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 12:14:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-013
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 24-Dec-2019 12:43:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.969	3.957	0.012	0	55533	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	254889	50.0	
* 3 Chlorobenzene-d5	119	10.139	10.133	0.006	84	55140	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	93	67202	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	93	66158	51.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	52692	47.6	
$ 7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	94	247890	55.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.327	11.322	0.005	95	62299	42.7	
$ 9 BFB	95	11.327	11.316	0.011	0	62299	NR	
37 Isopropyl alcohol	45	3.963	3.987	-0.024	26	2318	NC	
41 cis-1,2-Dichloroethene	96	5.657	5.645	0.012	78	6091	4.15	
57 Isooctane	57	7.010	7.033	-0.023	39	8079	NC	
60 Trichloroethene	130	7.410	7.398	0.012	93	7912	4.31	
77 Tetrachloroethene	164	9.257	9.257	0.000	95	20481	15.1	
116 Naphthalene	128	14.739	14.727	0.012	88	2220	6.95	
117 1,2,3-Trichlorobenzene	180	14.951	14.945	0.006	91	1597	2.63	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

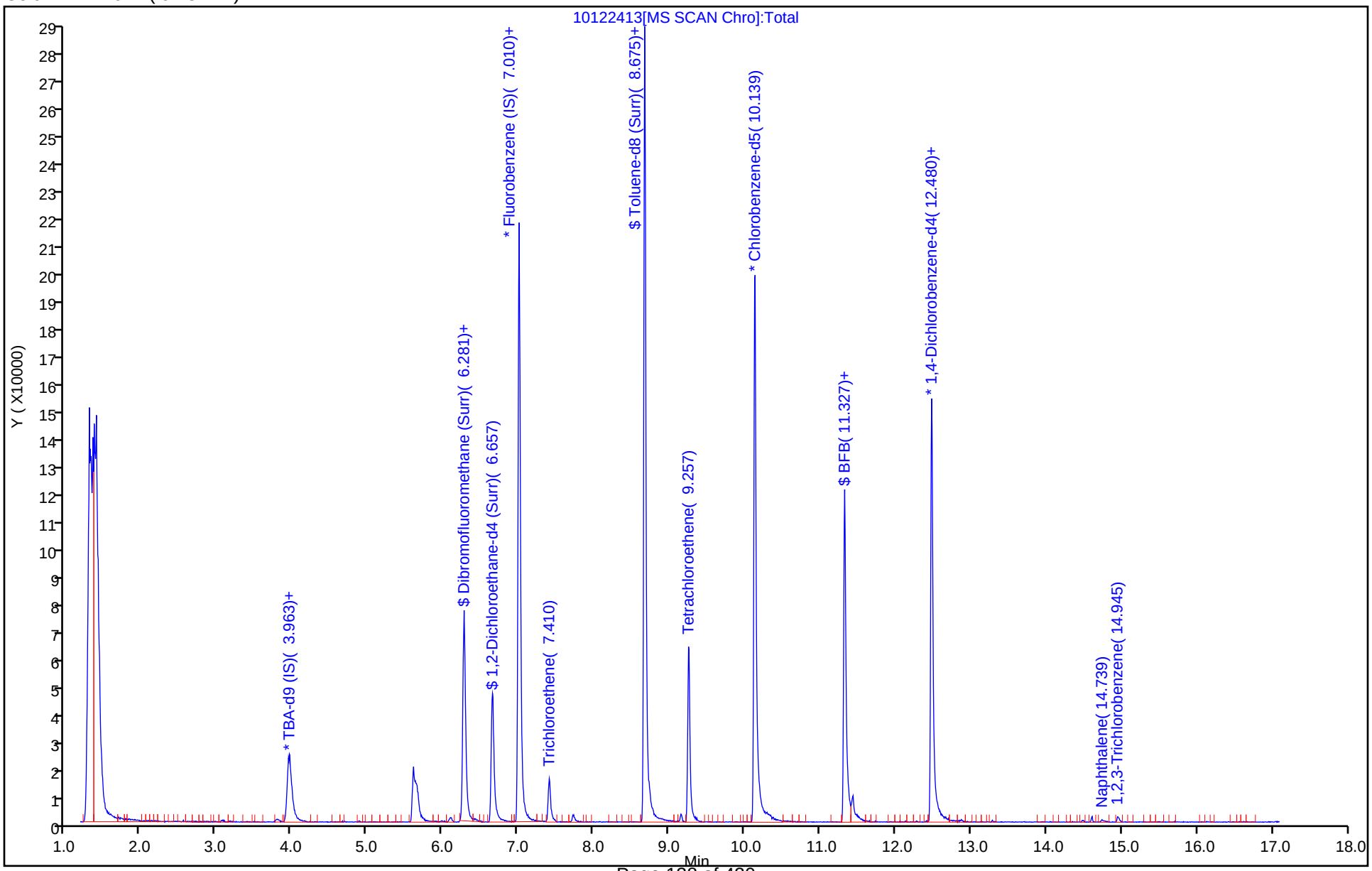
VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 26-Dec-2019 10:27:54 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122413.d				
Injection Date:	24-Dec-2019 12:14:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-B-6	Lab Sample ID:	180-100176-6	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\20191224-30134.b\10122413.d
Lims ID: 180-100176-B-6
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 12:14:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-013
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 24-Dec-2019 12:43:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.9	103.75
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	47.6	95.21
$ 7 Toluene-d8 (Surr)	50.0	55.8	111.68
$ 8 4-Bromofluorobenzene (Surr)	50.0	42.7	85.48

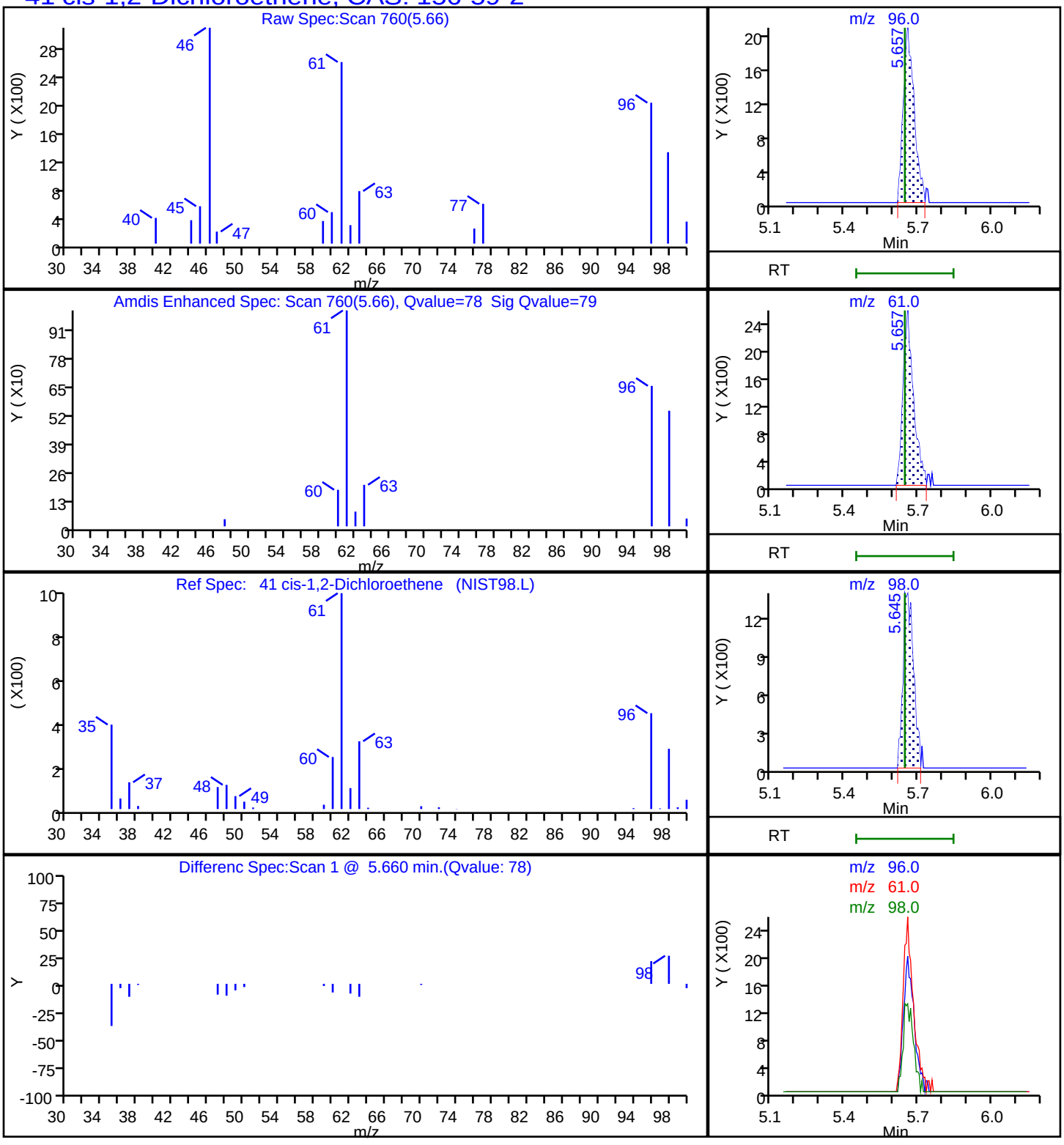
Report Date: 26-Dec-2019 10:27:54 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122413.d

Injection Date:	24-Dec-2019 12:14:30	Instrument ID:	CHHP10		
Lims ID:	180-100176-B-6	Lab Sample ID:	180-100176-6		
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		

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

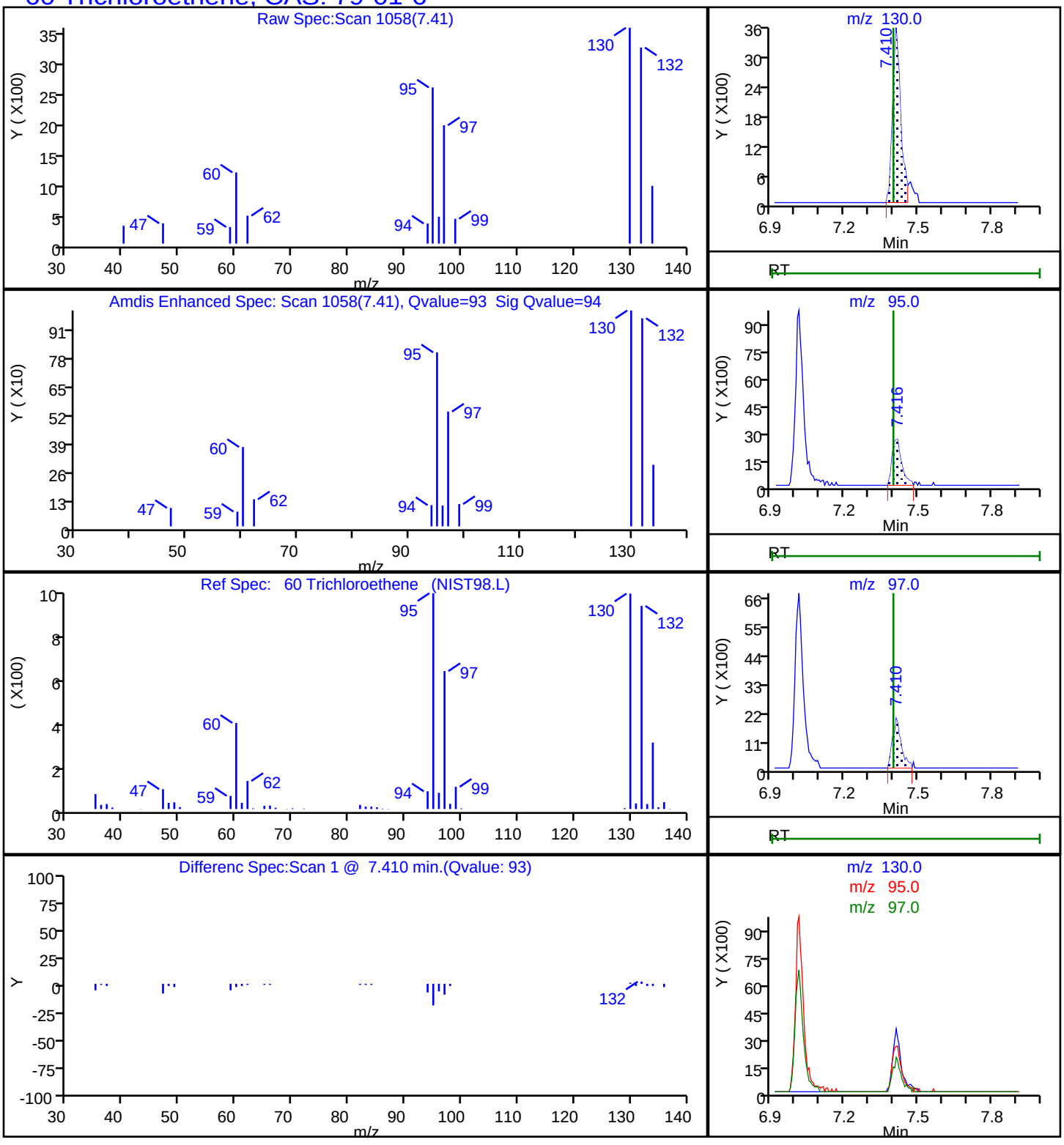


Report Date: 26-Dec-2019 10:27:54 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122413.d		
Injection Date:	24-Dec-2019 12:14:30	Instrument ID:	CHHP10
Lims ID:	180-100176-B-6	Lab Sample ID:	180-100176-6
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

60 Trichloroethene, CAS: 79-01-6

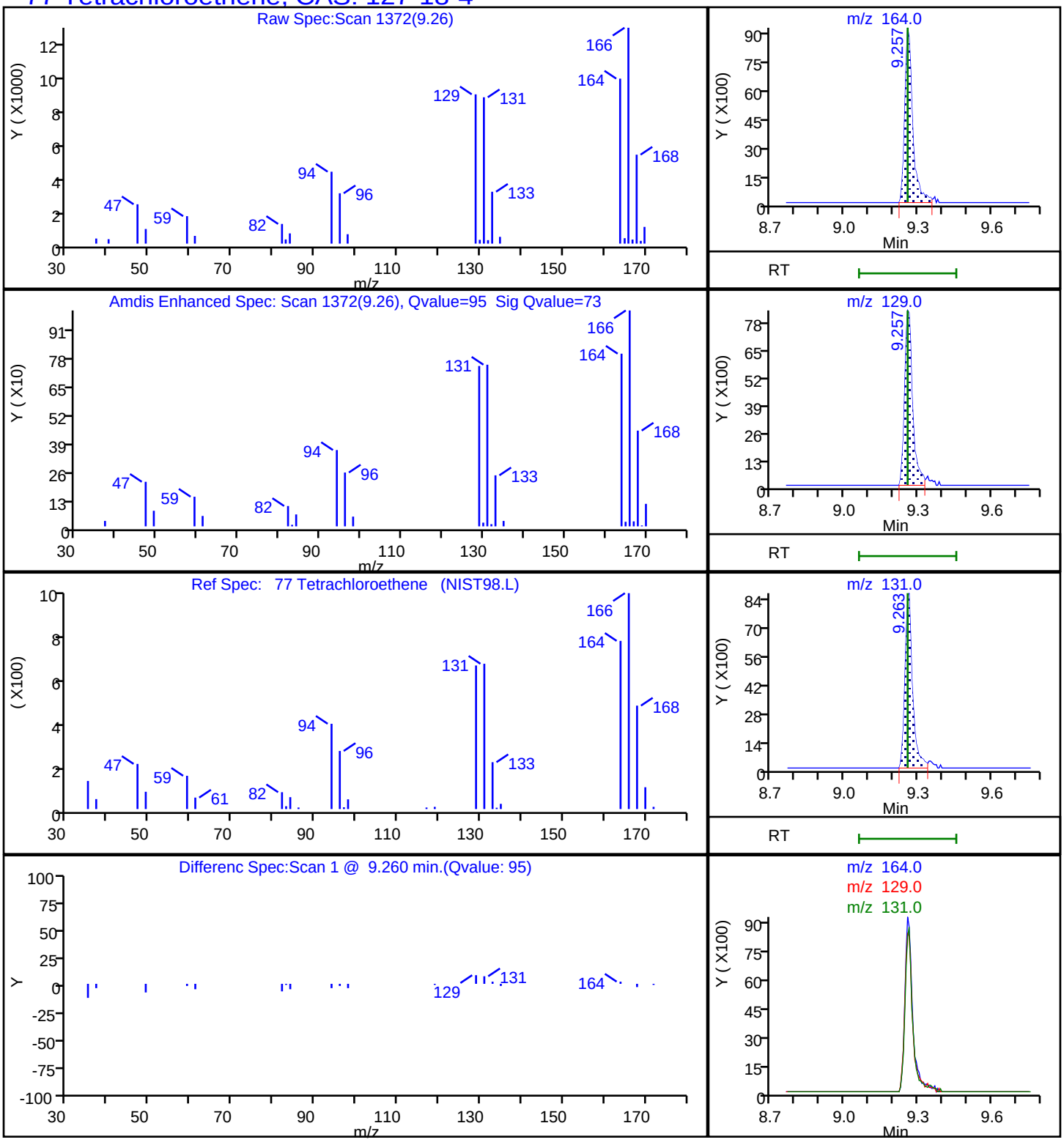


Report Date: 26-Dec-2019 10:27:55 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122413.d		
Injection Date:	24-Dec-2019 12:14:30	Instrument ID:	CHHP10
Lims ID:	180-100176-B-6	Lab Sample ID:	180-100176-6
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

77 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 180-100176-7

Matrix: Water Lab File ID: 10122414.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 10:15

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 12:41

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.: 302393 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 180-100176-7

Matrix: Water Lab File ID: 10122414.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 10:15

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 12:41

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.: 302393 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)	91		70-150
2037-26-5	Toluene-d8 (Surr)	108		78-128
460-00-4	4-Bromofluorobenzene (Surr)	81		64-123
1868-53-7	Dibromofluoromethane (Surr)	98		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122414.d
Lims ID: 180-100176-B-7
Client ID: HD-COD-SW-16-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 12:41:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-014
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

	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	41795	1000.0	
*	2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	256594	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	84	55414	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	94	64221	50.0	
$	5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	93	62777	48.9	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	50706	45.5	
$	7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	93	241285	54.1	
$	8 4-Bromofluorobenzene (Surr	95	11.327	11.322	0.005	93	59216	40.4	
$	9 BFB	95	11.327	11.316	0.011	0	59216	NR	
	37 Isopropyl alcohol	45	3.969	3.987	-0.018	48	1901	NC	
	57 Isooctane	57	7.010	7.033	-0.023	42	7957	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent

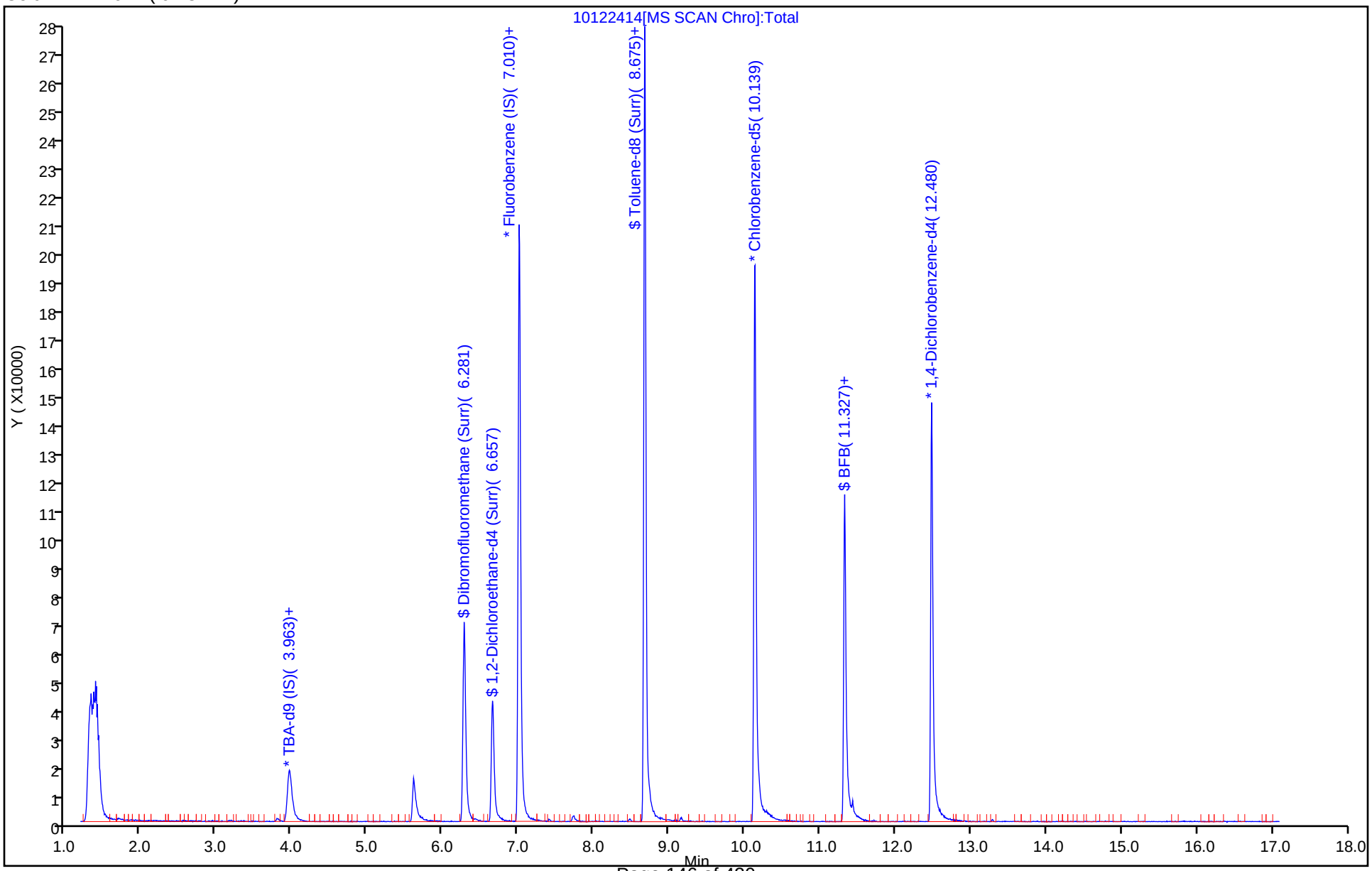
Report Date: 26-Dec-2019 10:27:53 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122414.d

Injection Date:	24-Dec-2019 12:41:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-B-7	Lab Sample ID:	180-100176-7	Worklist Smp#:	14
Client ID:	HD-COD-SW-16-0/1-0				
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\20191224-30134.b\10122414.d
Lims ID: 180-100176-B-7
Client ID: HD-COD-SW-16-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 12:41:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-014
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.9	97.79
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	45.5	91.02
$ 7 Toluene-d8 (Surr)	50.0	54.1	108.16
$ 8 4-Bromofluorobenzene (Surr)	50.0	40.4	80.85

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 180-100176-8

Matrix: Water Lab File ID: 10122415.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 10:30

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 13:08

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.: 302393 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
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	2.0		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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 180-100176-8

Matrix: Water Lab File ID: 10122415.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 10:30

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 13:08

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.: 302393 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)	90		70-150
2037-26-5	Toluene-d8 (Surr)	112		78-128
460-00-4	4-Bromofluorobenzene (Surr)	79		64-123
1868-53-7	Dibromofluoromethane (Surr)	99		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122415.d
Lims ID: 180-100176-B-8
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 13:08:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-015
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:10:03

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	40562	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	254706	50.0	
* 3 Chlorobenzene-d5	119	10.139	10.133	0.006	85	55663	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.486	12.474	0.012	94	63039	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	93	63054	49.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	50044	45.2	
$ 7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	93	251166	56.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.327	11.322	0.005	91	57989	39.4	
$ 9 BFB	95	11.327	11.316	0.011	0	57989	NR	
37 Isopropyl alcohol	45	3.957	3.987	-0.030	46	1388	NC	
57 Isooctane	57	7.010	7.033	-0.023	34	7963	NC	
60 Trichloroethene	130	7.410	7.398	0.012	94	4476	2.44	
77 Tetrachloroethene	164	9.257	9.257	0.000	96	13573	9.94	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent

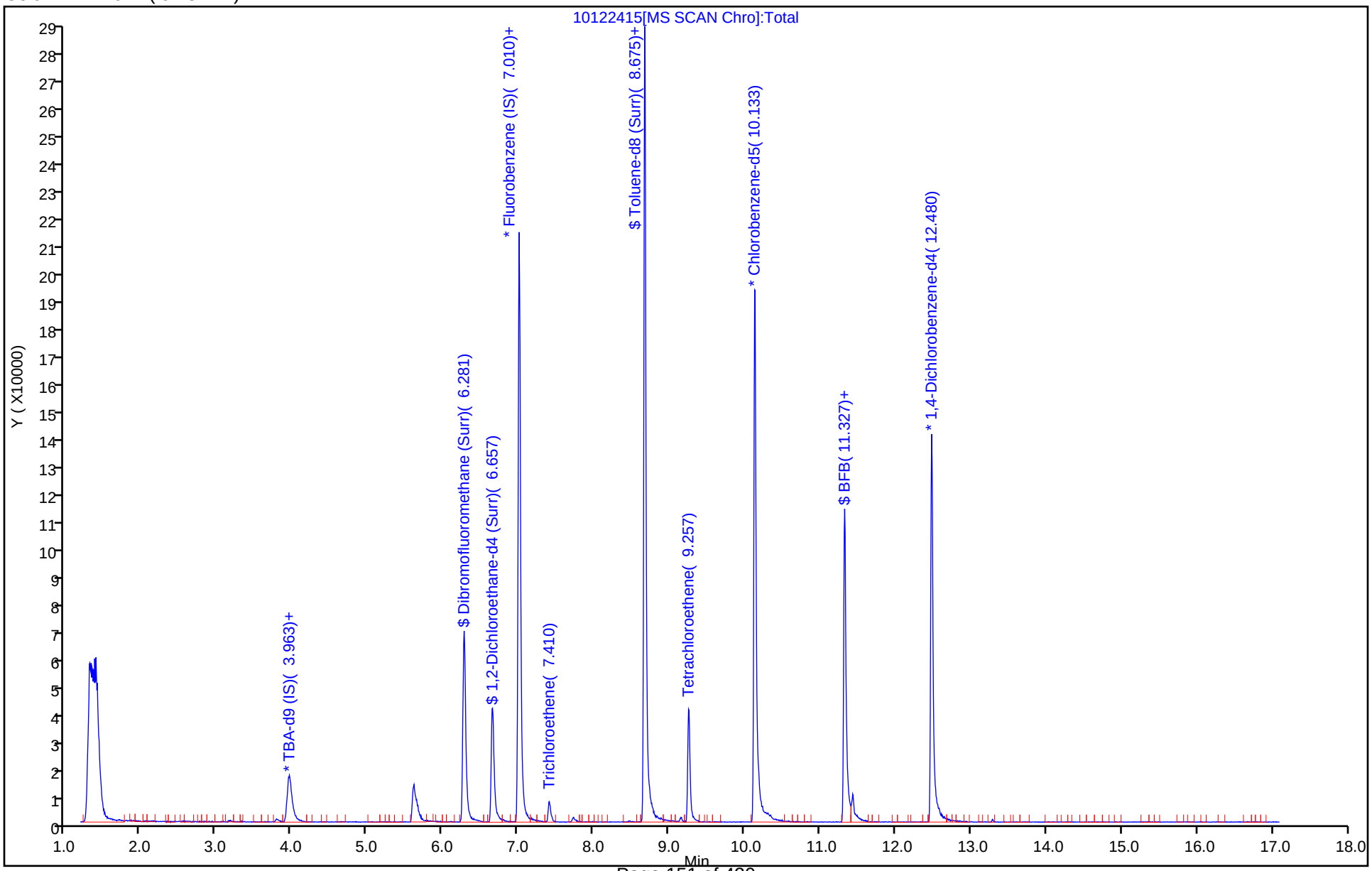
Report Date: 26-Dec-2019 10:27:51 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122415.d

Injection Date:	24-Dec-2019 13:08:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-B-8	Lab Sample ID:	180-100176-8	Worklist Smp#:	15
Client ID:	HD-COD-SW-17-0/1-0				
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\20191224-30134.b\10122415.d
Lims ID: 180-100176-B-8
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 13:08:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-015
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:10:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.5	98.95
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	45.2	90.49
$ 7 Toluene-d8 (Surr)	50.0	56.0	112.09
$ 8 4-Bromofluorobenzene (Surr)	50.0	39.4	78.82

Report Date: 26-Dec-2019 10:27:52 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122415.d

Injection Date: 24-Dec-2019 13:08:30 Instrument ID: CHHP10

Lims ID: 180-100176-B-8 Lab Sample ID: 180-100176-8

Client ID: HD-COD-SW-17-0/1-0

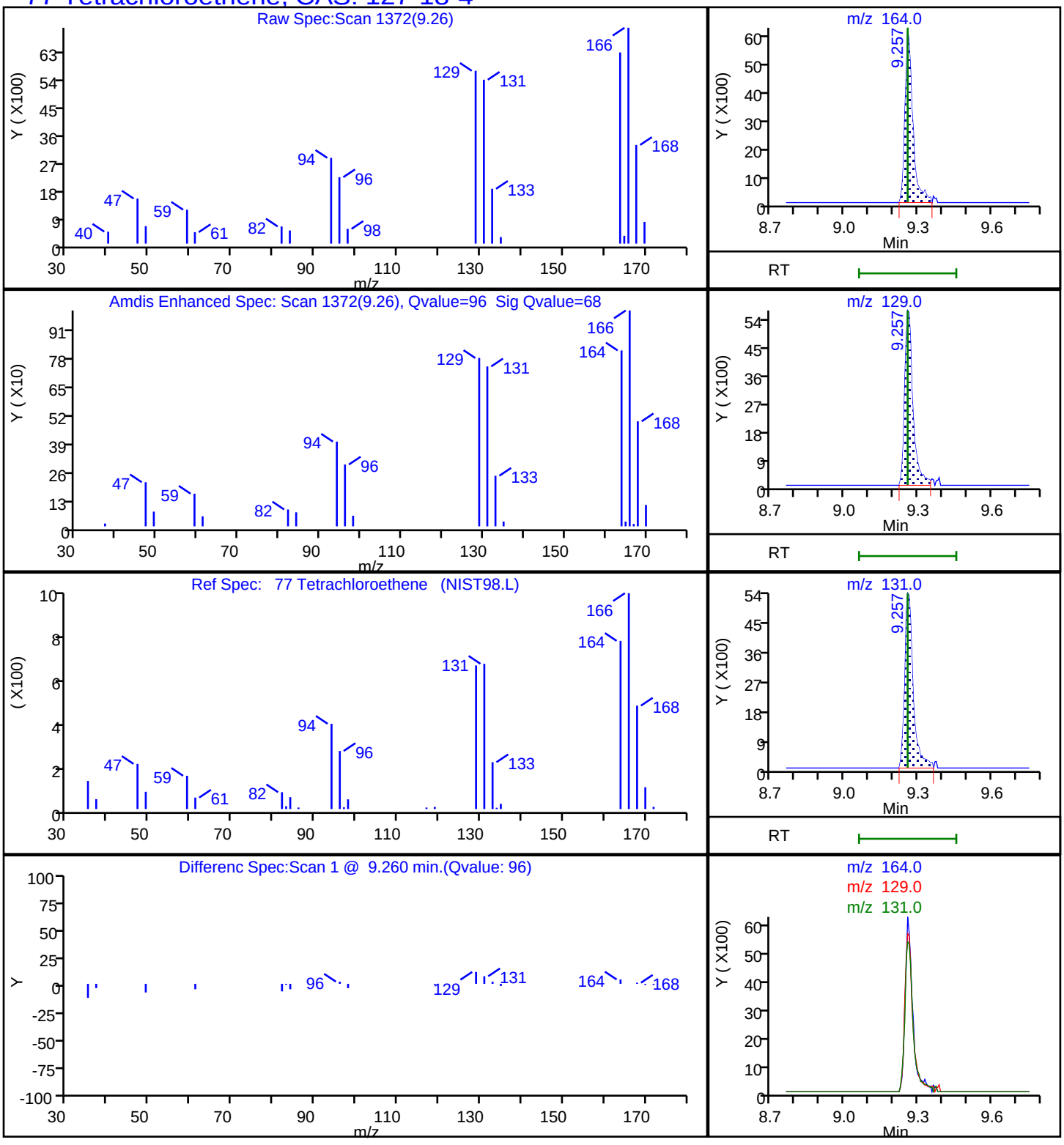
Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15

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

77 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 180-100176-9

Matrix: Water Lab File ID: 10122416.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 13:15

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 13:35

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
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	1.0		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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 180-100176-9

Matrix: Water Lab File ID: 10122416.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 13:15

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 13:35

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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)	101		70-150
2037-26-5	Toluene-d8 (Surr)	106		78-128
460-00-4	4-Bromofluorobenzene (Surr)	78		64-123
1868-53-7	Dibromofluoromethane (Surr)	101		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122416.d
Lims ID: 180-100176-B-9
Client ID: HD-COD-SW-26-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 13:35:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-016
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:10:37

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	50908	1000.0	
* 2 Fluorobenzene (IS)	96	7.016	7.010	0.006	98	241363	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	85	55733	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	94	59801	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	91	61190	50.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	53075	50.6	
$ 7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	94	236714	52.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.322	0.000	93	57288	38.9	
$ 9 BFB	95	11.322	11.316	0.006	0	57288	NR	
37 Isopropyl alcohol	45	3.957	3.987	-0.030	28	2100	NC	
57 Isooctane	57	7.016	7.033	-0.017	32	8170	NC	
77 Tetrachloroethene	164	9.263	9.257	0.006	96	7072	5.17	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent

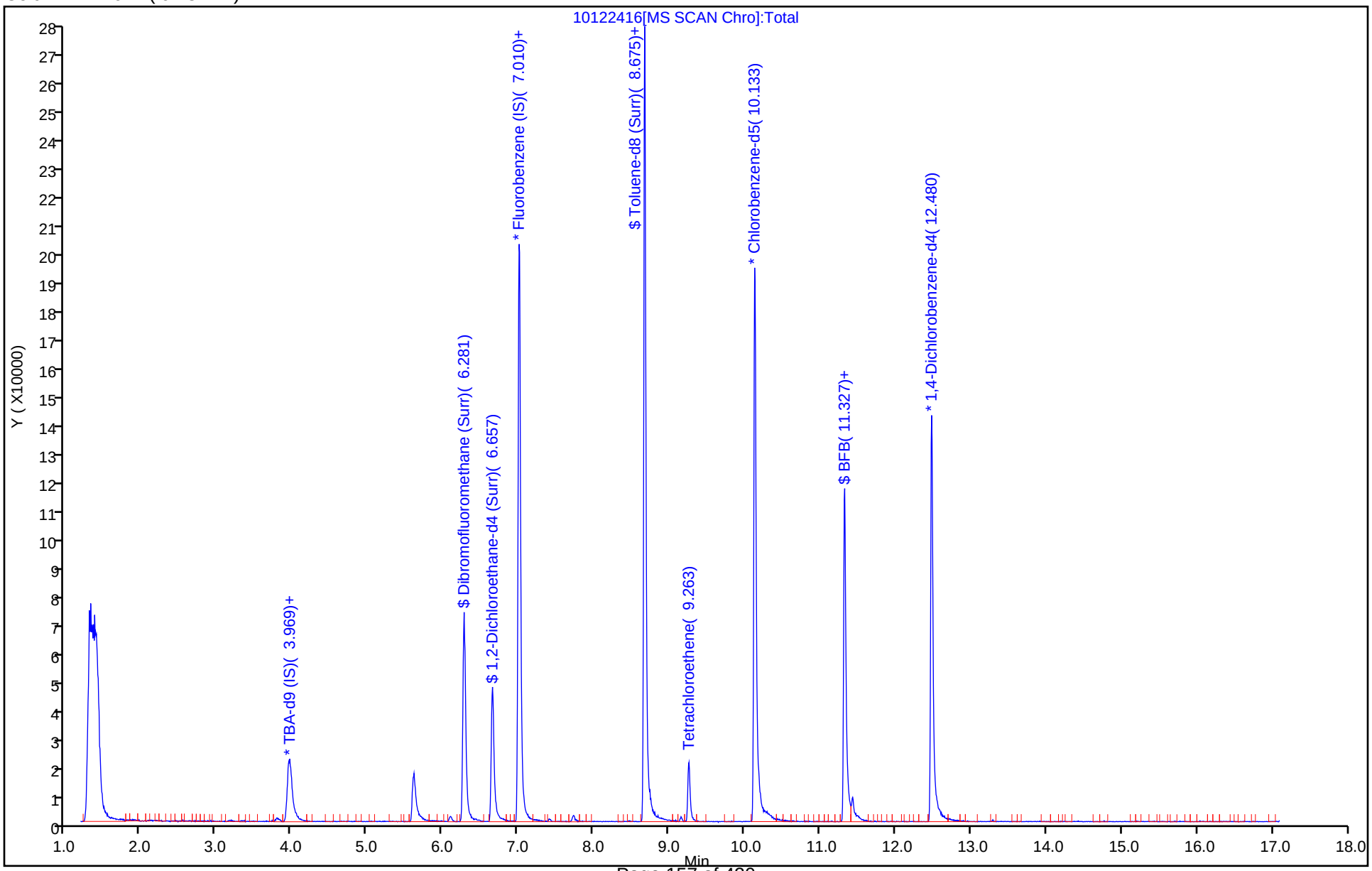
Report Date: 26-Dec-2019 10:27:50 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122416.d

Injection Date:	24-Dec-2019 13:35:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-B-9	Lab Sample ID:	180-100176-9	Worklist Smp#:	16
Client ID:	HD-COD-SW-26-0/1-0				
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\20191224-30134.b\10122416.d				
Lims ID:	180-100176-B-9				
Client ID:	HD-COD-SW-26-0/1-0				
Sample Type:	Client				
Inject. Date:	24-Dec-2019 13:35:30	ALS Bottle#:	16	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	180-0030134-016				
Operator ID:	034635	Instrument ID:	CHHP10		
Method:	\\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m				
Limit Group:	VOA 8260C_D ICAL				
Last Update:	26-Dec-2019 10:25:25	Calib Date:	20-Dec-2019 17:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0301				

First Level Reviewer: journetp Date: 26-Dec-2019 10:10:37

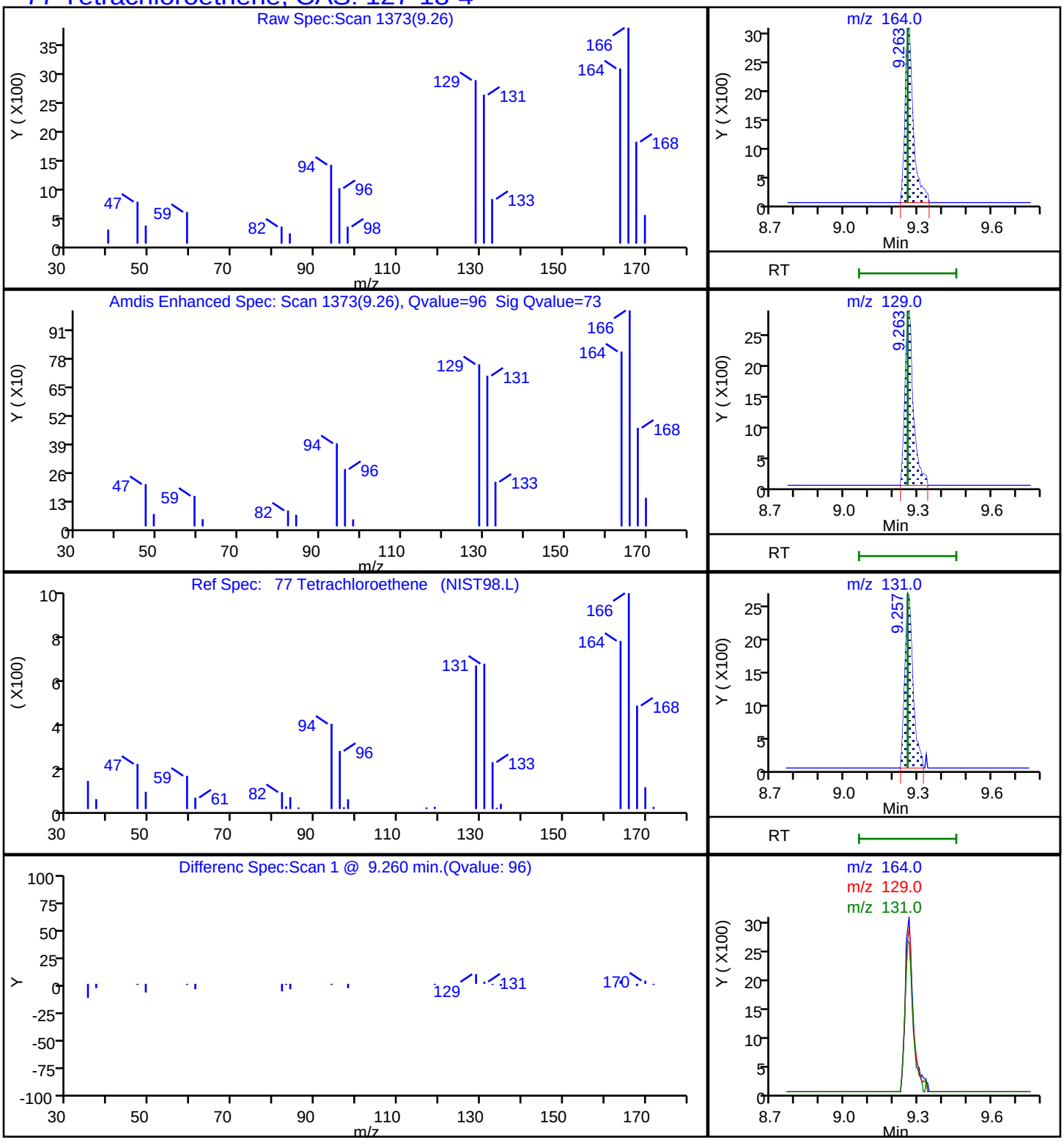
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.7	101.34
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.6	101.28
$ 7 Toluene-d8 (Surr)	50.0	52.8	105.51
$ 8 4-Bromofluorobenzene (Surr)	50.0	38.9	77.77

Report Date: 26-Dec-2019 10:27:50 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122416.d		
Injection Date:	24-Dec-2019 13:35:30	Instrument ID:	CHHP10
Lims ID:	180-100176-B-9	Lab Sample ID:	180-100176-9
Client ID:	HD-COD-SW-26-0/1-0		
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

77 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 180-100176-10

Matrix: Water Lab File ID: 10122417.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 13:50

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 14:03

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 180-100176-10

Matrix: Water Lab File ID: 10122417.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 13:50

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 14:03

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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)	90		70-150
2037-26-5	Toluene-d8 (Surr)	108		78-128
460-00-4	4-Bromofluorobenzene (Surr)	79		64-123
1868-53-7	Dibromofluoromethane (Surr)	96		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122417.d
Lims ID: 180-100176-B-10
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 14:03:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-017
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

	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	35485	1000.0	
*	2 Fluorobenzene (IS)	96	7.016	7.010	0.006	99	237273	50.0	
*	3 Chlorobenzene-d5	119	10.139	10.133	0.006	89	50943	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.486	12.474	0.012	94	57422	50.0	
$	5 Dibromofluoromethane (Surr	113	6.275	6.281	-0.006	93	56946	48.0	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	46423	45.1	
$	7 Toluene-d8 (Surr)	98	8.680	8.669	0.011	93	221981	54.1	
$	8 4-Bromofluorobenzene (Surr	95	11.327	11.322	0.005	93	53213	39.5	
$	9 BFB	95	11.327	11.316	0.011	0	53213	NR	
	37 Isopropyl alcohol	45	3.951	3.987	-0.036	26	1451	NC	
	57 Isooctane	57	7.010	7.033	-0.023	35	7423	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent

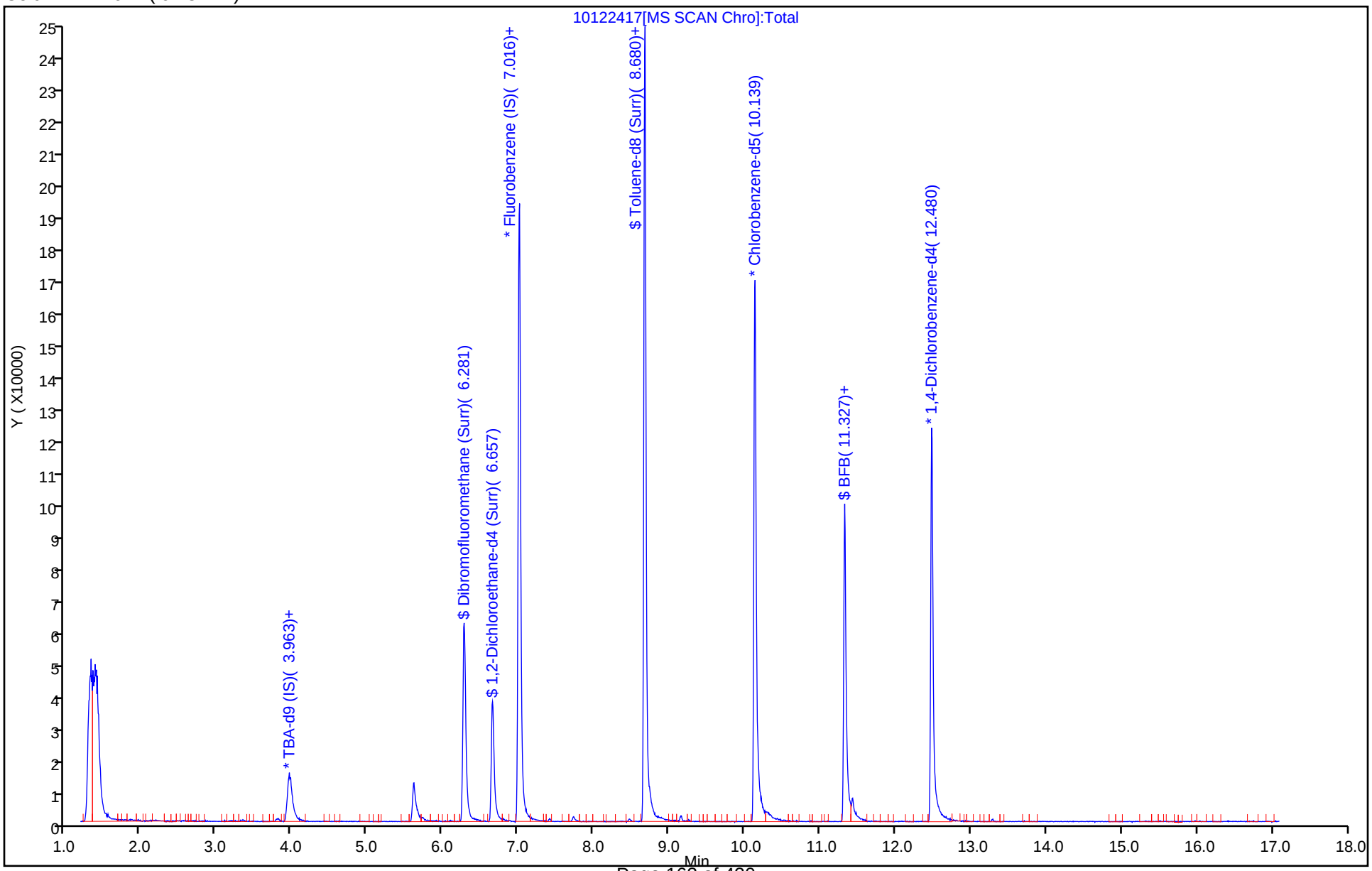
Report Date: 26-Dec-2019 10:27:49 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122417.d

Injection Date:	24-Dec-2019 14:03:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-B-10	Lab Sample ID:	180-100176-10	Worklist Smp#:	17
Client ID:	HD-COD-SW-27-0/1-0				
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\20191224-30134.b\10122417.d
Lims ID: 180-100176-B-10
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 14:03:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-017
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.0	95.93
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	45.1	90.11
$ 7 Toluene-d8 (Surr)	50.0	54.1	108.24
$ 8 4-Bromofluorobenzene (Surr)	50.0	39.5	79.03

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 180-100176-11

Matrix: Water Lab File ID: 10122418.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 14:40

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 14:30

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.: 302393 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 180-100176-11

Matrix: Water Lab File ID: 10122418.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 14:40

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 14:30

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.: 302393 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)	88		70-150
2037-26-5	Toluene-d8 (Surr)	109		78-128
460-00-4	4-Bromofluorobenzene (Surr)	84		64-123
1868-53-7	Dibromofluoromethane (Surr)	98		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122418.d
Lims ID: 180-100176-B-11
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 14:30:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-018
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.969	3.957	0.012	0	39455	1000.0	
*	2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	247889	50.0	
*	3 Chlorobenzene-d5	119	10.139	10.133	0.006	84	50809	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	94	58655	50.0	
$	5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	92	60803	49.0	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	47377	44.0	
$	7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	93	222860	54.5	
$	8 4-Bromofluorobenzene (Surr	95	11.327	11.322	0.005	92	56361	42.0	
$	9 BFB	95	11.327	11.316	0.011	0	56361	NR	
	37 Isopropyl alcohol	45	3.957	3.987	-0.030	26	1490	NC	
	57 Isooctane	57	7.010	7.033	-0.023	41	7551	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent

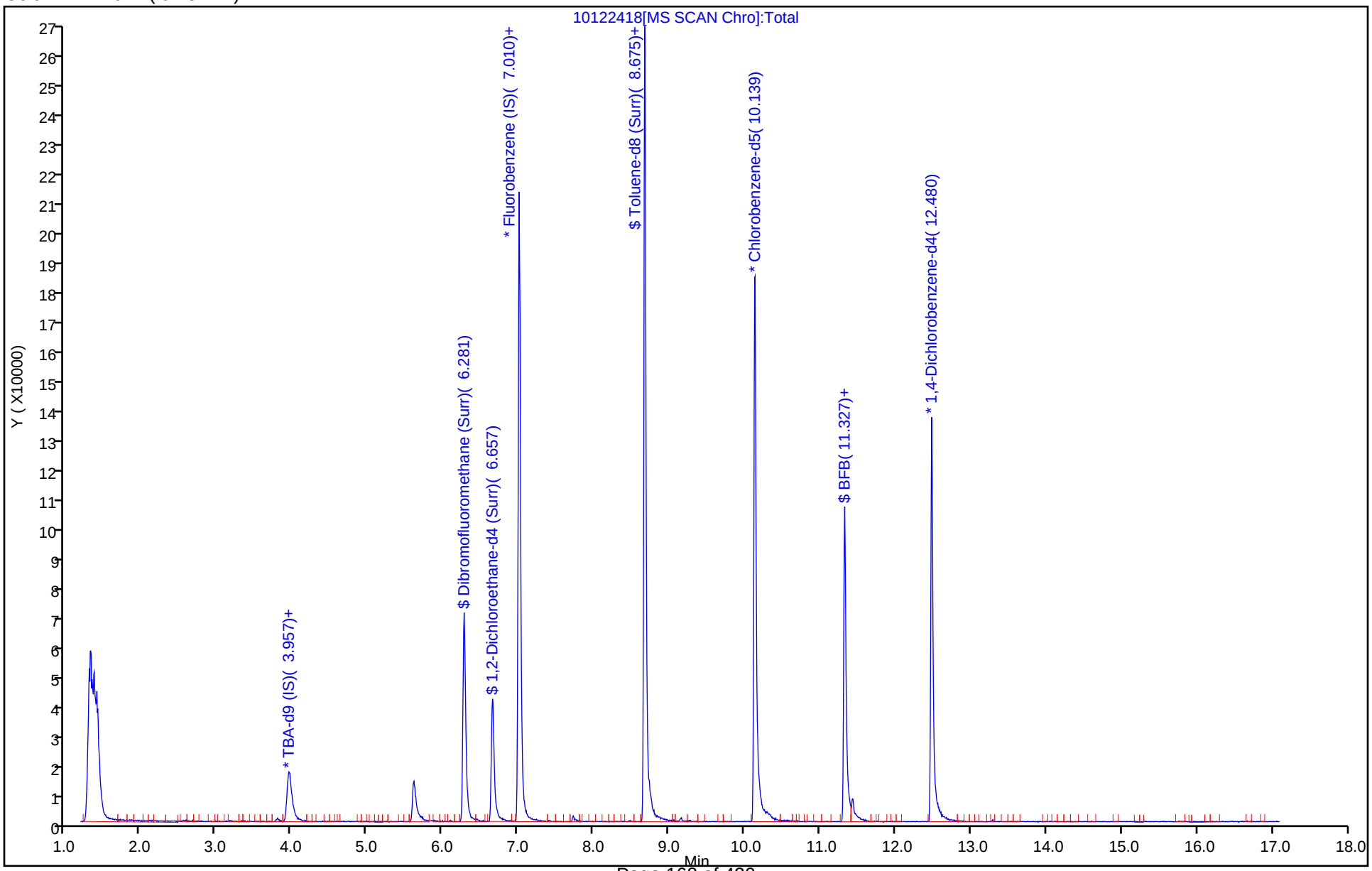
Report Date: 26-Dec-2019 10:27:47 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122418.d

Injection Date:	24-Dec-2019 14:30:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-B-11	Lab Sample ID:	180-100176-11	Worklist Smp#:	18
Client ID:	HD-COD-SW-28-0/1-0				
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\20191224-30134.b\10122418.d
Lims ID: 180-100176-B-11
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 14:30:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-018
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.0	98.05
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	44.0	88.03
$ 7 Toluene-d8 (Surr)	50.0	54.5	108.96
$ 8 4-Bromofluorobenzene (Surr)	50.0	42.0	83.92

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 180-100176-12

Matrix: Water Lab File ID: 10122419.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 09:18

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 14:58

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 180-100176-12

Matrix: Water Lab File ID: 10122419.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 09:18

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 14:58

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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)	99		70-150
2037-26-5	Toluene-d8 (Surr)	106		78-128
460-00-4	4-Bromofluorobenzene (Surr)	82		64-123
1868-53-7	Dibromofluoromethane (Surr)	101		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122419.d
Lims ID: 180-100176-B-12
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 14:58:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-019
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

	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	42542	1000.0	
*	2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	231983	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	84	52069	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	94	63609	50.0	
$	5 Dibromofluoromethane (Surr	113	6.286	6.281	0.005	93	58404	50.3	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	49898	49.5	
$	7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	93	222538	53.1	
$	8 4-Bromofluorobenzene (Surr	95	11.327	11.322	0.005	94	56747	41.2	
$	9 BFB	95	11.327	11.316	0.011	0	56747	NR	
	37 Isopropyl alcohol	45	3.975	3.987	-0.012	26	2112	NC	
	57 Isooctane	57	7.010	7.033	-0.023	33	7731	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent

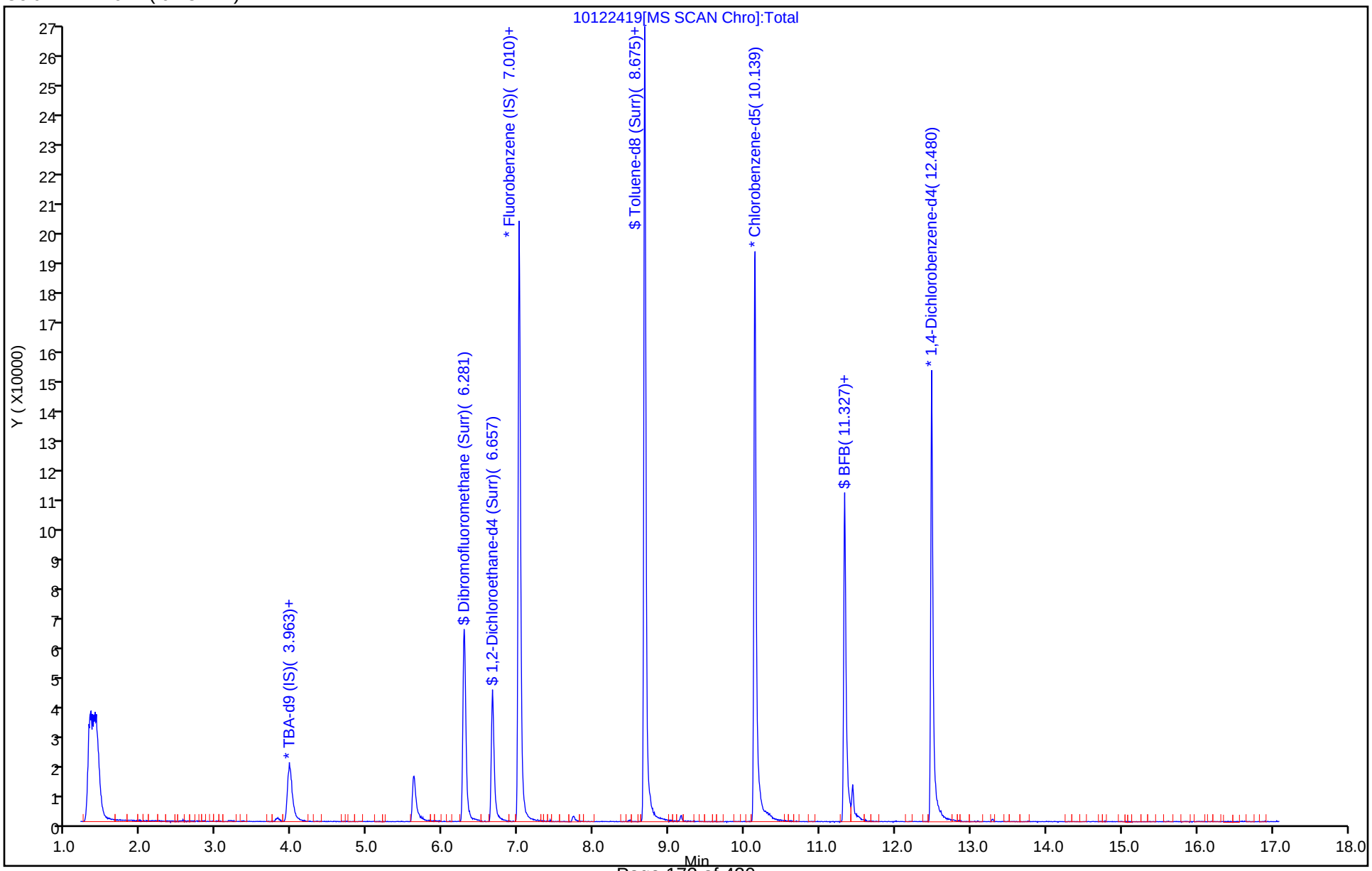
Report Date: 26-Dec-2019 10:27:46 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122419.d

Injection Date:	24-Dec-2019 14:58:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-B-12	Lab Sample ID:	180-100176-12	Worklist Smp#:	19
Client ID:	HD-COD-SW-29-0/1-0				
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\20191224-30134.b\10122419.d
Lims ID: 180-100176-B-12
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 24-Dec-2019 14:58:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-019
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.3	100.63
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.5	99.07
$ 7 Toluene-d8 (Surr)	50.0	53.1	106.17
$ 8 4-Bromofluorobenzene (Surr)	50.0	41.2	82.45

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 180-100176-13

Matrix: Water Lab File ID: 10122311.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 00:00

Sample wt/vol: 5(mL) Date Analyzed: 12/23/2019 13:07

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302285 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
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.: 180-100176-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 180-100176-13

Matrix: Water Lab File ID: 10122311.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 00:00

Sample wt/vol: 5(mL) Date Analyzed: 12/23/2019 13:07

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302285 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)	92		70-150
2037-26-5	Toluene-d8 (Surr)	89		78-128
460-00-4	4-Bromofluorobenzene (Surr)	82		64-123
1868-53-7	Dibromofluoromethane (Surr)	97		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122311.d
Lims ID: 180-100176-B-13
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 23-Dec-2019 13:07:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030123-011
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 24-Dec-2019 07:11:12 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0309

First Level Reviewer: journetp Date: 24-Dec-2019 07:05:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.963	3.993	-0.030	0	54302	1000.0	
* 2 Fluorobenzene (IS)	96	7.016	7.004	0.012	99	291561	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	83	67906	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	93	81540	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.275	0.006	94	70971	48.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.645	0.012	0	58137	45.9	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	242937	44.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.321	11.322	-0.001	96	74016	41.2	
$ 9 BFB	95	11.321	11.322	-0.001	0	74016	NR	
37 Isopropyl alcohol	45	3.963	3.987	-0.024	26	2286	NC	
57 Isooctane	57	7.010	7.033	-0.023	35	8826	NC	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

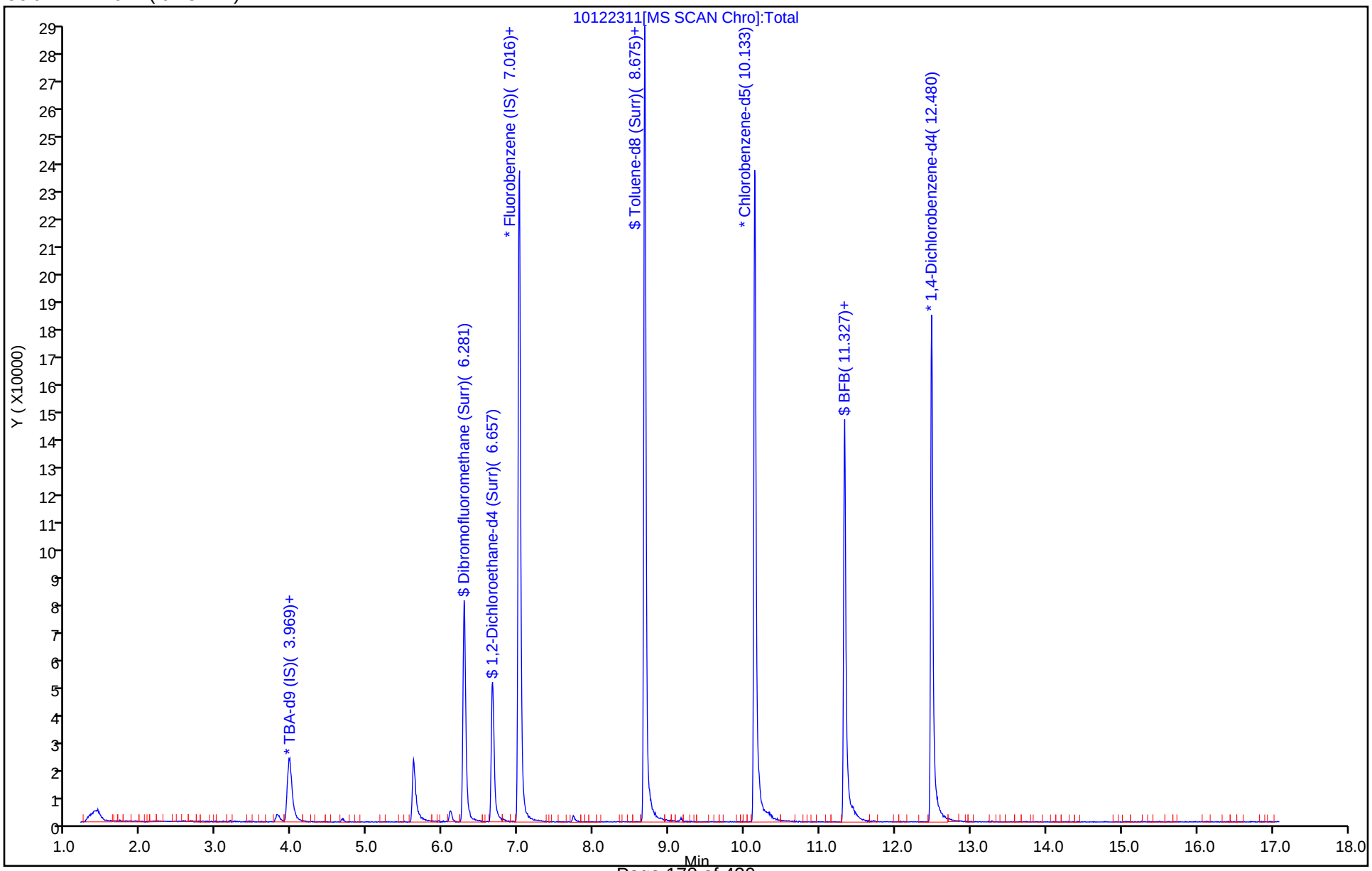
VOA8260INT_00102 Amount Added: 2.00 Units: uL Run Reagent
VOA8260SURR_00102 Amount Added: 2.00 Units: uL Run Reagent

Report Date: 24-Dec-2019 07:17:24 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122311.d				
Injection Date:	23-Dec-2019 13:07:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-B-13	Lab Sample ID:	180-100176-13	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\20191223-30123.b\10122311.d
Lims ID: 180-100176-B-13
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 23-Dec-2019 13:07:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030123-011
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 24-Dec-2019 07:11:12 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0309

First Level Reviewer: journetp Date: 24-Dec-2019 07:05:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.6	97.30
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	45.9	91.84
$ 7 Toluene-d8 (Surr)	50.0	44.4	88.87
$ 8 4-Bromofluorobenzene (Surr)	50.0	41.2	82.46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 180-100176-14

Matrix: Water Lab File ID: 10122420.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 12:00

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 15:25

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.: 302393 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	0.88
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND	^c	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	0.63
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.: 180-100176-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 180-100176-14

Matrix: Water Lab File ID: 10122420.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 12:00

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 15:25

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.: 302393 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)	85		70-150
2037-26-5	Toluene-d8 (Surr)	111		78-128
460-00-4	4-Bromofluorobenzene (Surr)	79		64-123
1868-53-7	Dibromofluoromethane (Surr)	97		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122420.d
Lims ID: 180-100176-B-14
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 24-Dec-2019 15:25:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-020
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:13:06

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.969	3.957	0.012	0	29514	1000.0	
*	2 Fluorobenzene (IS)	96	7.016	7.010	0.006	99	231901	50.0	
*	3 Chlorobenzene-d5	119	10.139	10.133	0.006	84	49144	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.486	12.474	0.012	94	53557	50.0	
$	5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	93	56482	48.7	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	42984	42.7	
$	7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	93	220017	55.6	
$	8 4-Bromofluorobenzene (Surr	95	11.327	11.322	0.005	91	51058	39.3	
$	9 BFB	95	11.327	11.316	0.011	0	51058	NR	
	37 Isopropyl alcohol	45	3.963	3.987	-0.024	26	1422	NC	
	57 Isooctane	57	7.010	7.033	-0.023	41	7330	NC	
	60 Trichloroethene	130	7.416	7.398	0.018	94	3956	2.37	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

VOA8260INT_00102	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added: 2.00	Units: uL	Run Reagent

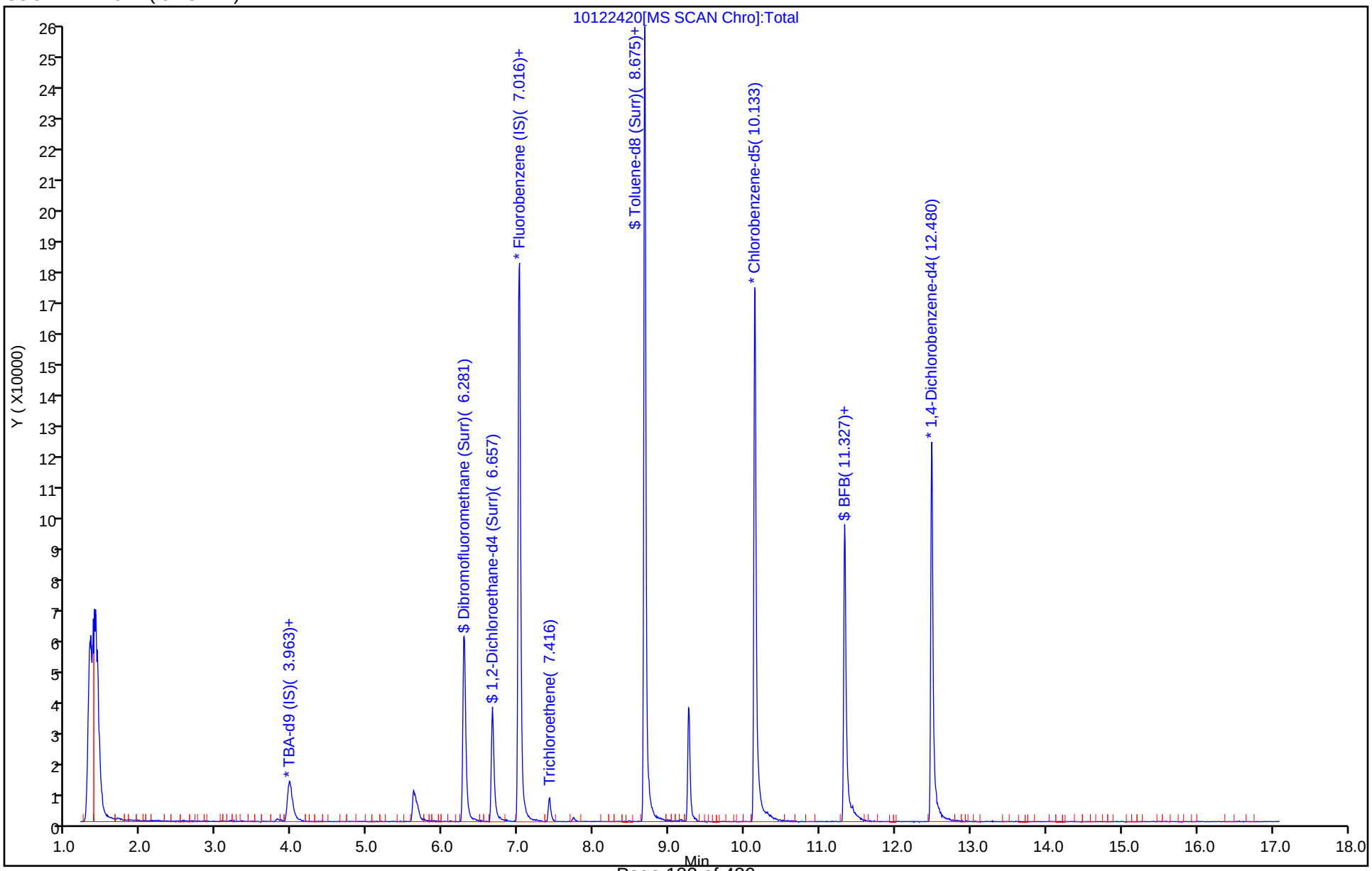
Report Date: 26-Dec-2019 10:27:45 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122420.d

Injection Date:	24-Dec-2019 15:25:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-B-14	Lab Sample ID:	180-100176-14	Worklist Smp#:	20
Client ID:	HD-QC1-0/1-1				
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\20191224-30134.b\10122420.d
Lims ID: 180-100176-B-14
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 24-Dec-2019 15:25:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-020
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:13:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.7	97.36
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	42.7	85.37
$ 7 Toluene-d8 (Surr)	50.0	55.6	111.21
$ 8 4-Bromofluorobenzene (Surr)	50.0	39.3	78.60

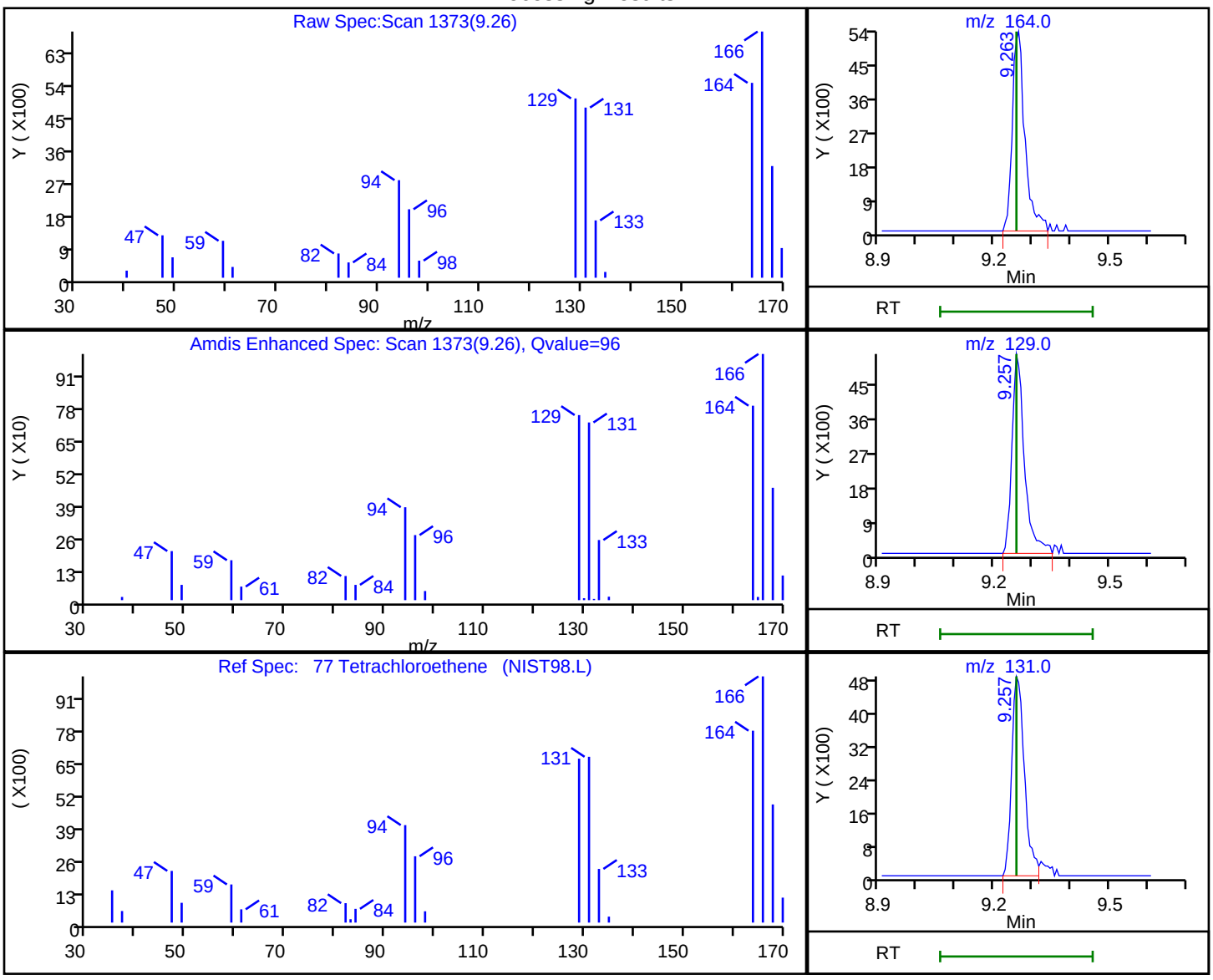
User Disabled Compound Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122420.d				
Injection Date:	24-Dec-2019 15:25:30	Instrument ID:	CHHP10		
Lims ID:	180-100176-B-14	Lab Sample ID:	180-100176-14		
Client ID:	HD-QC1-0/1-1				
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		

77 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
9.26	164.00	12429	10.313909
9.26	129.00	11992	
9.26	131.00	11288	

Reviewer: journetp, 26-Dec-2019 10:13:01

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.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-302077/24	10122024.d
Level 2	IC 180-302077/14	10122014.d
Level 3	ICIS 180-302077/15	10122015.d
Level 4	IC 180-302077/16	10122016.d
Level 5	IC 180-302077/17	10122017.d
Level 6	IC 180-302077/18	10122018.d
Level 7	IC 180-302077/19	10122019.d
Level 8	IC 180-302077/20	10122020.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	0.3841 0.4440	0.5374 0.4094	0.4724 0.4133	0.4411	0.4602	Ave		0.4452			0.1000	10.6		20.0			
Chloromethane	0.3139 0.3080	0.3601 0.4069	0.3137 +++++	0.2963	0.3022	Ave		0.3287			0.1000	12.3		20.0			
1,3-Butadiene	0.3063 0.2648	0.2985 0.2434	0.2788 0.2500	0.2593	0.2729	Ave		0.2718			0.0100	8.2		20.0			
Vinyl chloride	0.3589 0.3221	0.3605 0.2898	0.3252 0.3060	0.3126	0.3303	Ave		0.3257			0.1000	7.5		20.0			
Bromomethane	0.2217 0.1773	0.2143 0.1624	0.1880 0.1623	0.1777	0.1828	Ave		0.1858			0.0500	11.8		20.0			
Chloroethane	0.1943 0.1448	0.1827 0.1198	0.1637 0.1099	0.1389	0.1372	Ave		0.1489			0.0500	19.7		20.0			
Dichlorofluoromethane	0.5088 0.4451	0.5259 0.3976	0.4853 +++++	0.4471	0.4546	Ave		0.4663			0.0100	9.3		20.0			
Trichlorofluoromethane	0.6412 0.5534	0.6643 0.4833	0.6061 +++++	0.5470	0.5721	Ave		0.5811			0.1000	10.6		20.0			
Ethyl ether	0.1674 0.1515	0.1570 0.1532	0.1680 0.1469	0.1625	0.1492	Ave		0.1570			0.0100	5.2		20.0			
1,1-Dichloroethene	0.3213 0.2737	0.3048 0.2391	0.2734 0.2573	0.2578	0.2696	Ave		0.2747			0.1000	9.7		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3588 0.2970	0.3610 0.2656	0.3192 0.2784	0.2927	0.3086	Ave		0.3102			0.1000	11.2		20.0			
Acetone	0.0495 0.0531	0.0434 0.0664	0.0558 0.0609	0.0630	0.0546	Ave		0.0558			0.0500	13.5		20.0			
Iodomethane	0.5830 0.4981	0.5483 0.4517	0.5243 0.4594	0.4904	0.4982	Ave		0.5067			0.0100	8.7		20.0			
Carbon disulfide	0.8960 0.8106	0.8483 0.7383	0.8036 0.7546	0.7404	0.7926	Ave		0.7981			0.1000	6.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

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	0.1485 0.1475	0.1499 0.1417	0.1427 0.1453	0.1387	0.1453	Ave		0.1449			0.0100	2.6		20.0			
Methyl acetate	0.0554 0.0694	0.0643 +++++	0.0835 +++++	0.0861	0.0739	Ave		0.0721		*	0.1000	16.1		20.0			
Methylene Chloride	0.4477 0.2305	0.3260 0.2407	0.2897 0.2324	0.2484	0.2424	Lin2	1.0703	0.2424			0.1000				0.9910		0.9900
tert-Butyl alcohol	1.1251 1.1854	1.0719 1.1983	1.3087 1.2603	1.1947	1.0960	Ave		1.1801			0.0100	6.8		20.0			
Acrylonitrile	0.0306 0.0368	0.0321 +++++	0.0433 +++++	0.0435	0.0385	Ave		0.0375			0.0100	14.6		20.0			
trans-1,2-Dichloroethene	0.3183 0.2785	0.2999 0.2552	0.2968 0.2674	0.2746	0.2811	Ave		0.2840			0.1000	7.1		20.0			
Methyl tert-butyl ether	0.4553 0.4619	0.4391 0.5394	0.5332 0.5038	0.5157	0.4741	Ave		0.4903			0.1000	7.7		20.0			
Hexane	0.4928 0.4327	0.4978 0.4074	0.4578 0.4135	0.4139	0.4486	Ave		0.4456			0.0100	7.9		20.0			
1,1-Dichloroethane	0.5409 0.4541	0.4835 0.4240	0.4780 0.4311	0.4496	0.4640	Ave		0.4656			0.2000	7.9		20.0			
2,2-Dichloropropane	0.0758 0.0703	0.0724 0.0616	0.0694 0.0615	0.0652	0.0696	Ave		0.0682			0.0100	7.5		20.0			
cis-1,2-Dichloroethene	0.3077 0.2885	0.2961 0.2726	0.2971 0.2727	0.2853	0.2847	Ave		0.2881			0.1000	4.2		20.0			
2-Butanone (MEK)	0.0473 0.0579	0.0418 +++++	0.0605 +++++	0.0657	0.0568	Ave		0.0550			0.0500	16.0		20.0			
Bromochloromethane	0.1199 0.1264	0.1191 0.1395	0.1385 0.1272	0.1302	0.1275	Ave		0.1285			0.0100	5.8		20.0			
Tetrahydrofuran	0.0178 0.0304	0.0226 +++++	0.0338 +++++	0.0362	0.0315	Qua	-0.399	0.0395	-0.000023		0.0100				0.9940		0.9900
Chloroform	0.8102 0.4827	0.5319 0.4651	0.5222 0.4666	0.4977	0.4920	Lin2	1.7037	0.4701			0.2000				0.9990		0.9900
1,1,1-Trichloroethane	0.5694 0.4960	0.5166 0.4338	0.5154 0.4368	0.4804	0.4888	Ave		0.4921			0.1000	9.0		20.0			
Cyclohexane	0.6108 0.5527	0.6070 0.5065	0.5910 0.5165	0.5311	0.5530	Ave		0.5586			0.1000	7.2		20.0			
Carbon tetrachloride	0.5452 0.4959	0.5476 0.4424	0.5161 0.4477	0.4756	0.4959	Ave		0.4958			0.1000	8.0		20.0			
1,1-Dichloropropene	0.4264 0.4023	0.4193 0.3756	0.4154 0.3837	0.3796	0.3974	Ave		0.4000			0.0100	4.8		20.0			
Benzene	1.1529 1.0053	1.0452 0.9741	1.0190 0.9900	0.9722	1.0096	Ave		1.0210			0.5000	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.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

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	0.0020 0.0037	0.0027 +++++	0.0043 +++++	0.0042	0.0038	Qua	-0.542	0.0046	0	*	0.0100				0.9950		0.9900
1,2-Dichloroethane	0.2598 0.2625	0.2726 0.2931	0.3016 0.2723	0.2925	0.2743	Ave		0.2786			0.1000	5.5		20.0			
n-Heptane	0.4822 0.4088	0.4431 0.3758	0.4050 0.3865	0.3892	0.4005	Ave		0.4114			0.0100	8.5		20.0			
Trichloroethene	0.3849 0.3661	0.3612 0.3459	0.3526 0.3546	0.3551	0.3626	Ave		0.3604			0.2000	3.3		20.0			
Methylcyclohexane	0.6210 0.5929	0.6294 0.5362	0.6022 0.5519	0.5373	0.5764	Ave		0.5809			0.1000	6.3		20.0			
1,2-Dichloropropane	0.2508 0.2165	0.2168 0.2250	0.2334 0.2294	0.2205	0.2258	Ave		0.2273			0.1000	4.9		20.0			
Dibromomethane	0.0717 0.0928	0.0870 0.1134	0.1047 0.1048	0.1066	0.0952	Ave		0.0970			0.0100	13.7		20.0			
1,4-Dioxane	0.0007 0.0010	0.0007 +++++	0.0010 +++++	0.0010	0.0011	Lin	-0.056	0.0010		*	0.0100				0.9960		0.9900
Bromodichloromethane	0.3132 0.3120	0.2922 0.3210	0.3184 0.3119	0.3139	0.3099	Ave		0.3116			0.2000	2.8		20.0			
cis-1,3-Dichloropropene	0.2172 0.3110	0.2469 +++++	0.3159 +++++	0.3134	0.3098	Ave		0.2857			0.2000	14.9		20.0			
4-Methyl-2-pentanone (MIBK)	0.4024 0.4236	0.3215 +++++	0.4607 +++++	0.4705	0.4546	Ave		0.4222			0.1000	13.1		20.0			
Toluene	5.7785 4.7262	4.9845 4.3007	4.6068 4.6486	4.0988	4.6647	Ave		4.7261			0.4000	10.6		20.0			
trans-1,3-Dichloropropene	0.6468 0.9881	0.7101 +++++	0.9391 +++++	0.9337	1.0152	Ave		0.8722			0.1000	17.7		20.0			
Ethyl methacrylate	0.4019 0.6904	0.4713 +++++	0.7325 +++++	0.6889	0.7202	Lin1	-1.997	0.7137			0.0100				0.9940		0.9900
1,1,2-Trichloroethane	0.6591 0.6102	0.6009 0.6779	0.6627 0.6806	0.6142	0.6294	Ave		0.6419			0.1000	5.0		20.0			
Tetrachloroethene	1.5291 1.2323	1.3513 1.0417	1.1924 1.1978	1.0545	1.2094	Ave		1.2261			0.2000	12.8		20.0			
1,3-Dichloropropane	0.8167 0.9380	0.9149 1.0339	1.0026 1.0444	0.9798	0.9886	Ave		0.9649			0.0100	7.7		20.0			
2-Hexanone	0.2094 0.3734	0.1758 +++++	0.3472 +++++	0.3938	0.3641	Lin	-5.617	0.3943			0.1000				0.9940		0.9900
Dibromochloromethane	0.9132 0.9379	0.8253 0.9732	0.9308 1.0133	0.8816	0.8939	Ave		0.9211			0.1000	6.2		20.0			
1,2-Dibromoethane (EDB)	0.4659 0.5865	0.4670 +++++	0.6046 +++++	0.5585	0.5775	Ave		0.5433			0.1000	11.3		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.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

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	3.9695 3.1786	3.3396 3.0720	3.2955 3.2013	2.9363	3.2088	Ave		3.2752			0.5000	9.4		20.0			
1,1,1,2-Tetrachloroethane	1.4724 1.2123	1.3091 1.1970	1.2793 1.2728	1.1626	1.2700	Ave		1.2719			0.0100	7.4		20.0			
Ethylbenzene	2.1133 1.8907	1.9401 1.6874	1.8121 1.8278	1.6143	1.8196	Ave		1.8382			0.1000	8.3		20.0			
m-Xylene & p-Xylene	2.8569 2.3888	2.3822 2.1720	2.2599 2.2839	2.0782	2.2521	Ave		2.3342			0.1000	10.0		20.0			
o-Xylene	2.4723 2.3060	2.3695 2.0468	2.2120 2.2250	2.0702	2.3257	Ave		2.2534			0.3000	6.5		20.0			
Styrene	3.4324 3.3642	3.3061 3.2943	3.3761 3.4698	3.0615	3.3967	Ave		3.3376			0.3000	3.8		20.0			
Bromoform	0.3346 0.4737	0.3665 0.5763	0.4810 0.5514	0.4645	0.4620	Ave		0.4637			0.1000	17.6		20.0			
Isopropylbenzene	7.0037 6.5575	6.8098 5.8772	6.4580 6.2162	5.8261	6.2845	Ave		6.3791			0.1000	6.5		20.0			
Bromobenzene	0.9480 0.7652	0.7815 0.7734	0.8478 0.8487	0.7626	0.8201	Ave		0.8184			0.0100	7.7		20.0			
1,1,2,2-Tetrachloroethane	0.6915 0.6316	0.6033 +++++	0.7154 +++++	0.7267	0.7120	Ave		0.6801			0.3000	7.4		20.0			
1,2,3-Trichloropropane	0.1296 0.1331	0.1315 0.1660	0.1609 0.1624	0.1510	0.1465	Ave		0.1476			0.0100	10.0		20.0			
trans-1,4-Dichloro-2-butene	0.0300 0.0941	0.0869 +++++	0.0860 +++++	0.0904	0.0916	Lin	-0.357	0.0958			0.0100				1.0000		0.9900
N-Propylbenzene	1.4545 1.1259	1.2808 1.0639	1.1729 1.1611	1.0666	1.1504	Ave		1.1845			0.0100	10.9		20.0			
2-Chlorotoluene	1.3292 0.9057	1.0248 0.8497	0.9301 0.9027	0.8971	0.9296	Ave		0.9711			0.0100	15.7		20.0			
1,3,5-Trimethylbenzene	4.4155 3.1765	3.7213 2.9343	3.3445 3.1638	3.0629	3.3170	Ave		3.3920			0.0100	14.0		20.0			
4-Chlorotoluene	1.2981 0.8943	1.0077 0.8932	0.9304 0.9458	0.8810	0.9489	Ave		0.9749			0.0100	14.0		20.0			
tert-Butylbenzene	4.4031 3.0561	3.6270 2.8267	3.2039 3.1323	2.8812	3.1880	Ave		3.2898			0.0100	15.5		20.0			
1,2,4-Trimethylbenzene	4.1956 3.0493	3.5079 2.8593	3.2608 3.0136	2.9663	3.2508	Ave		3.2629			0.0100	13.2		20.0			
sec-Butylbenzene	6.0890 4.0827	5.0526 3.7206	4.4047 4.0644	3.9897	4.4180	Ave		4.4777			0.0100	17.0		20.0			
1,3-Dichlorobenzene	2.0346 1.6703	1.7553 1.6366	1.6747 1.7603	1.6291	1.7015	Ave		1.7328			0.6000	7.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

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	5.3659 3.9954	4.5400 3.6225	4.0468 3.9374	3.7343	4.2173	Ave		4.1825			0.0100	13.3		20.0			
1,4-Dichlorobenzene	2.3329 1.7223	1.7682 1.6680	1.7146 1.7633	1.6506	1.7498	Ave		1.7962			0.5000	12.3		20.0			
n-Butylbenzene	3.2874 2.9493	3.0856 2.5959	2.8538 2.8259	2.6614	3.0404	Ave		2.9125			0.0100	7.8		20.0			
1,2-Dichlorobenzene	1.8543 1.4167	1.5886 1.4291	1.5597 1.5385	1.4410	1.5397	Ave		1.5460			0.4000	9.1		20.0			
1,2-Dibromo-3-Chloropropane	0.0153 0.0664	0.0379 +++++	0.0646 +++++	0.0689	0.0690	Lin	-0.335	0.0696			0.0500				0.9950		0.9900
1,2,4-Trichlorobenzene	0.4207 0.6369	0.4592 0.6366	0.5499 0.6675	0.5769	0.6607	Ave		0.5760			0.2000	16.3		20.0			
Hexachlorobutadiene	0.7713 0.5040	0.5652 0.4580	0.5048 0.5056	0.4972	0.5343	Ave		0.5426			0.0100	17.9		20.0			
Naphthalene	0.4248 1.0358	0.5115 1.2044	0.8196 +++++	1.0042	1.0232	Qua	-4.464	0.8687	0.0015623		0.0100				0.9920		0.9900
1,2,3-Trichlorobenzene	0.4153 0.4583	0.3698 0.4922	0.4185 0.5022	0.4637	0.4977	Ave		0.4522			0.0100	10.4		20.0			
Dibromofluoromethane (Surr)	0.2472 0.2483	0.2521 0.2547	0.2587 0.2322	0.2603	0.2479	Ave		0.2502				3.5		20.0			
1,2-Dichloroethane-d4 (Surr)	0.1764 0.2047	0.2102 0.2281	0.2454 +++++	0.2436	0.2114	Ave		0.2171				11.1		20.0			
Toluene-d8 (Surr)	4.4300 4.1817	4.0826 3.8474	3.8260 +++++	3.6931	4.1180	Ave		4.0256				6.3		20.0			
4-Bromofluorobenzene (Surr)	1.2101 1.3962	1.2190 1.4135	1.2859 1.3930	1.3192	1.3375	Ave		1.3218				6.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-302077/24	10122024.d
Level 2	IC 180-302077/14	10122014.d
Level 3	ICIS 180-302077/15	10122015.d
Level 4	IC 180-302077/16	10122016.d
Level 5	IC 180-302077/17	10122017.d
Level 6	IC 180-302077/18	10122018.d
Level 7	IC 180-302077/19	10122019.d
Level 8	IC 180-302077/20	10122020.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	10981 428448	56059 494007	104761 652212	168235	244321	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	8972 297157	37565 491007	69561 +++++	113011	160418	5.00 175	25.0 200	50.0 +++++	75.0	100
1,3-Butadiene	FB	Ave	8757 255527	31134 293699	61830 394559	98921	144868	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	10258 310764	37601 349705	72113 482855	119252	175344	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Ave	6337 171082	22350 196025	41692 256055	67768	97067	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	5554 139765	19055 144619	36295 173471	52994	72840	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	14543 429527	54862 479763	107611 +++++	170526	241349	5.00 175	25.0 200	50.0 +++++	75.0	100
Trichlorofluoromethane	FB	Ave	18328 534026	69293 583268	134408 +++++	208649	303727	5.00 175	25.0 200	50.0 +++++	75.0	100
Ethyl ether	FB	Ave	4784 146189	16379 184909	37252 231735	61970	79223	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethene	FB	Ave	9185 264108	31800 288571	60626 406088	98349	143141	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	10257 286558	37663 320456	70776 439343	111648	163826	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	7068 102425	9046 160356	24757 192295	48043	57931	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	16664 480590	57194 545068	116265 724959	187048	264463	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	25613 782121	88493 891005	178208 1190788	282399	420776	5.00 175	25.0 200	50.0 250	75.0	100
Allyl chloride	FB	Ave	4246 142294	15634 171042	31637 229263	52892	77122	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.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

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	3167 133979	13409 +++++	37030 +++++	65682	78479	10.0 350	50.0 +++++	100 +++++	150	200
Methylene Chloride	FB	Lin2	12798 222453	34012 290490	64247 366764	94755	128660	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBAd9	Ave	2359 132922	9405 239660	36157 282524	59527	64654	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	8738 355418	33478 +++++	96130 +++++	165887	204547	50.0 1750	250 +++++	500 +++++	750	1000
trans-1,2-Dichloroethene	FB	Ave	9098 268741	31285 307930	65817 421891	104745	149208	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	13016 445705	45800 650917	118251 794914	196717	251672	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	14088 417553	51932 491634	101522 652559	157856	238166	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	15461 438195	50435 511625	105999 680343	171503	246312	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	2167 67840	7555 74360	15399 96987	24882	36961	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	8795 278345	30885 328971	65890 430274	108827	151146	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	6761 111699	8731 +++++	26849 +++++	50098	60273	25.0 350	50.0 +++++	100 +++++	150	200
Bromochloromethane	FB	Ave	3426 121995	12419 168332	30724 200658	49655	67692	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Qua	1018 58676	4724 +++++	14979 +++++	27584	33433	10.0 350	50.0 +++++	100 +++++	150	200
Chloroform	FB	Lin2	23159 465801	55485 561240	115794 736249	189843	261209	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	16276 478610	53887 523448	114288 689304	183252	259474	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	17459 533315	63324 611162	131066 815047	202570	293562	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	15585 478524	57124 533837	114443 706442	181397	263242	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	12189 388148	43740 453283	92115 605496	144806	210971	5.00 175	25.0 200	50.0 250	75.0	100
Benzene	FB	Ave	32957 970068	109029 1175509	225976 1562145	370840	535958	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Qua	1403 88595	6947 +++++	23664 +++++	39575	50014	125 4375	625 +++++	1250 +++++	1875	2500
1,2-Dichloroethane	FB	Ave	7426 253307	28436 353697	66891 429755	111579	145637	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.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

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	13784 394437	46226 453530	89816 609853	148470	212638	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	11003 353266	37682 417461	78184 559614	135448	192481	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	17751 572136	65656 647012	133536 870861	204951	305972	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	7170 208867	22614 271509	51750 362005	84110	119850	5.00 175	25.0 200	50.0 250	75.0	100
Dibromomethane	FB	Ave	2050 89525	9076 136863	23214 165354	40664	50519	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Lin	427 19480	1394 +++++	4651 +++++	7664	11247	100 3500	500 +++++	1000 +++++	1500	2000
Bromodichloromethane	FB	Ave	8954 301078	30478 387389	70602 492229	119724	164527	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Ave	6209 300100	25751 +++++	70052 +++++	119553	164471	5.00 175	25.0 +++++	50.0 +++++	75.0	100
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	12369 201429	15952 +++++	53440 +++++	95936	120699	25.0 350	50.0 +++++	100 +++++	150	200
Toluene	CBNZ d5	Ave	35524 1123613	123665 1365263	267167 1790519	417860	619291	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBNZ d5	Ave	3976 234916	17617 +++++	54465 +++++	95191	134777	5.00 175	25.0 +++++	50.0 +++++	75.0	100
Ethyl methacrylate	CBNZ d5	Lin1	2471 164137	11692 +++++	42481 +++++	70234	95611	5.00 175	25.0 +++++	50.0 +++++	75.0	100
1,1,2-Trichloroethane	CBNZ d5	Ave	4052 145063	14909 215202	38430 262156	62612	83560	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBNZ d5	Ave	9400 292980	33525 330686	69154 461353	107504	160561	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBNZ d5	Ave	5021 223010	22698 328203	58146 402283	99887	131244	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBNZ d5	Lin	6438 177549	8723 +++++	40272 +++++	80288	96667	25.0 350	50.0 +++++	100 +++++	150	200
Dibromochloromethane	CBNZ d5	Ave	5614 222977	20476 308931	53981 390284	89878	118673	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBNZ d5	Ave	2864 139432	11586 +++++	35066 +++++	56934	76675	5.00 175	25.0 +++++	50.0 +++++	75.0	100
Chlorobenzene	CBNZ d5	Ave	24403 755683	82856 975199	191118 1233061	299348	426001	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	9052 288213	32479 379999	74189 490252	118526	168599	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBNZ d5	Ave	12992 449501	48134 535653	105091 703998	164575	241573	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.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

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	17563 567915	59103 689500	131062 879683	211870	298983	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBNZ d5	Ave	15199 548222	58787 649763	128283 856994	211051	308760	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBNZ d5	Ave	21101 799802	82024 1045779	195796 1336451	312117	450944	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBNZ d5	Ave	2057 112619	9093 182954	27893 212398	47354	61331	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBNZ d5	Ave	43056 1558988	168952 1865730	374526 2394300	593954	834331	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCBd 4	Ave	7768 314609	29507 411781	78447 545097	127969	181302	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	4251 150156	14969 +++++	41489 +++++	74089	94521	5.00 175	25.0 +++++	50.0 +++++	75.0	100
1,2,3-Trichloropropane	DCBd 4	Ave	1062 54730	4964 88401	14884 104299	25341	32387	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCBd 4	Lin	246 38698	3281 +++++	7959 +++++	15176	20241	5.00 175	25.0 +++++	50.0 +++++	75.0	100
N-Propylbenzene	DCBd 4	Ave	11918 462865	48356 566483	108527 745708	178988	254322	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCBd 4	Ave	10891 372343	38691 452417	86059 579777	150537	205513	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCBd 4	Ave	36180 1305915	140501 1562402	309453 2031996	513988	733278	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCBd 4	Ave	10636 367660	38048 475567	86083 607491	147839	209761	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCBd 4	Ave	36078 1256445	136941 1505100	296444 2011752	483498	704768	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCBd 4	Ave	34378 1253646	132444 1522442	301709 1935531	497778	718645	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCBd 4	Ave	49892 1678499	190764 1981043	407551 2610434	669515	976684	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCBd 4	Ave	16671 686705	66271 871433	154955 1130561	273389	376139	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCBd 4	Ave	43967 1642612	171411 1928836	374434 2528885	626670	932308	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCBd 4	Ave	19115 708073	66761 888153	158649 1132516	276988	386826	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCBd 4	Ave	26936 1212534	116497 1382184	264050 1815020	446611	672144	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCBd 4	Ave	15194 582432	59979 760939	144315 988163	241820	340374	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.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

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	Lin	125 27293	1431 +++++	5973 +++++	11556	15244	5.00 175	25.0 +++++	50.0 +++++	75.0	100
1,2,4-Trichlorobenzene	DCBd 4	Ave	3447 261832	17338 338951	50876 428707	96808	146050	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCBd 4	Ave	6320 207217	21339 243891	46712 324710	83438	118109	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCBd 4	Qua	3481 425843	19311 641312	75836 +++++	168519	226188	5.00 175	25.0 200	50.0 +++++	75.0	100
1,2,3-Trichlorobenzene	DCBd 4	Ave	3403 188413	13961 262054	38722 322526	77815	110026	5.00 175	25.0 200	50.0 250	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	7067 239563	26293 307412	57370 366400	99281	131607	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	5043 197484	21932 275277	54417 +++++	92909	112222	5.00 175	25.0 200	50.0 +++++	75.0	100
Toluene-d8 (Surr)	CBNZ d5	Ave	27234 994169	101290 1221363	221884 +++++	376503	546710	5.00 175	25.0 200	50.0 +++++	75.0	100
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	7439 331939	30243 448711	74575 536530	134485	177571	5.00 175	25.0 200	50.0 250	75.0	100

Curve Type Legend:

Ave = Average ISTD
Lin = Linear 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.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-302077/24	10122024.d
Level 2	IC 180-302077/14	10122014.d
Level 3	ICIS 180-302077/15	10122015.d
Level 4	IC 180-302077/16	10122016.d
Level 5	IC 180-302077/17	10122017.d
Level 6	IC 180-302077/18	10122018.d
Level 7	IC 180-302077/19	10122019.d
Level 8	IC 180-302077/20	10122020.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	-13.7 -8.1	20.7 -7.2	6.1	-0.9	3.4	-0.3	50 30	30 30	30	30	30	30
Chloromethane	-4.5 23.8	9.6 +++++	-4.6	-9.9	-8.1	-6.3	50 30	30	30	30	30	30
1,3-Butadiene	12.7 -10.4	9.8 -8.0	2.6	-4.6	0.4	-2.6	50 30	30 30	30	30	30	30
Vinyl chloride	10.2 -11.0	10.7 -6.0	-0.1	-4.0	1.4	-1.1	50 30	30 30	30	30	30	30
Bromomethane	19.3 -12.6	15.3 -12.7	1.2	-4.4	-1.6	-4.6	50 30	30 30	30	30	30	30
Chloroethane	30.5 -19.5	22.7 -26.2	9.9	-6.7	-7.9	-2.7	50 30	30 30	30	30	30	30
Dichlorofluoromethane	9.1 -14.7	12.8 +++++	4.1	-4.1	-2.5	-4.5	50 30	30	30	30	30	30
Trichlorofluoromethane	10.3 -16.8	14.3 +++++	4.3	-5.9	-1.5	-4.8	50 30	30	30	30	30	30
Ethyl ether	6.6 -2.4	0.0 -6.4	7.0	3.5	-4.9	-3.5	50 30	30 30	30	30	30	30
1,1-Dichloroethene	17.0 -12.9	11.0 -6.3	-0.5	-6.1	-1.8	-0.3	50 30	30 30	30	30	30	30
1,1,2-Trichloro-1,2,2-trifluoroethane	15.7 -14.4	16.4 -10.2	2.9	-5.6	-0.5	-4.2	50 30	30 30	30	30	30	30
Acetone	-11.4 19.0	-22.3 9.1	0.0	12.8	-2.3	-4.9	50 30	30 30	30	30	30	30
Iodomethane	15.1 -10.9	8.2 -9.3	3.5	-3.2	-1.7	-1.7	50 30	30 30	30	30	30	30
Carbon disulfide	12.3 -7.5	6.3 -5.4	0.7	-7.2	-0.7	1.6	50 30	30 30	30	30	30	30
Allyl chloride	2.5 -2.2	3.4 0.2	-1.6	-4.3	0.2	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.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

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	-23.2 +++++	-10.9 +++++	15.8	19.4	2.5	-3.7	50	30	30	30	30	30
Methylene Chloride	-3.6 -2.9	16.9 -5.9	10.7	-3.4	-4.4	-7.4	50 30	30 30	30	30	30	30
tert-Butyl alcohol	-4.7 1.5	-9.2 6.8	10.9	1.2	-7.1	0.5	50 30	30 30	30	30	30	30
Acrylonitrile	-18.4 +++++	-14.4 +++++	15.7	16.0	2.8	-1.7	50	30	30	30	30	30
trans-1,2-Dichloroethene	12.1 -10.1	5.6 -5.8	4.5	-3.3	-1.0	-1.9	50 30	30 30	30	30	30	30
Methyl tert-butyl ether	-7.1 10.0	-10.5 2.7	8.8	5.2	-3.3	-5.8	50 30	30 30	30	30	30	30
Hexane	10.6 -8.6	11.7 -7.2	2.7	-7.1	0.7	-2.9	50 30	30 30	30	30	30	30
1,1-Dichloroethane	16.2 -9.0	3.8 -7.4	2.6	-3.4	-0.4	-2.5	50 30	30 30	30	30	30	30
2,2-Dichloropropane	11.1 -9.7	6.1 -9.9	1.8	-4.4	2.0	3.0	50 30	30 30	30	30	30	30
cis-1,2-Dichloroethene	6.8 -5.4	2.8 -5.3	3.1	-1.0	-1.2	0.1	50 30	30 30	30	30	30	30
2-Butanone (MEK)	-14.0 +++++	-23.9 +++++	10.1	19.4	3.2	5.2	50	30	30	30	30	30
Bromochloromethane	-6.8 8.5	-7.4 -1.1	7.8	1.3	-0.8	-1.6	50 30	30 30	30	30	30	30
Tetrahydrofuran	47.3 +++++	-20.7 +++++	1.6	8.5	-4.7	0.3	50	30	30	30	30	30
Chloroform	-0.1 -2.9	-1.3 -2.2	3.8	1.0	1.0	0.6	50 30	30 30	30	30	30	30
1,1,1-Trichloroethane	15.7 -11.9	5.0 -11.2	4.7	-2.4	-0.7	0.8	50 30	30 30	30	30	30	30
Cyclohexane	9.3 -9.3	8.7 -7.5	5.8	-4.9	-1.0	-1.0	50 30	30 30	30	30	30	30
Carbon tetrachloride	10.0 -10.8	10.5 -9.7	4.1	-4.1	0.0	0.0	50 30	30 30	30	30	30	30
1,1-Dichloropropene	6.6 -6.1	4.8 -4.1	3.9	-5.1	-0.6	0.6	50 30	30 30	30	30	30	30
Benzene	12.9 -4.6	2.4 -3.0	-0.2	-4.8	-1.1	-1.5	50 30	30 30	30	30	30	30
Isobutyl alcohol	37.4 +++++	-22.0 +++++	7.8	4.6	-4.3	0.4	50	30	30	30	30	30
1,2-Dichloroethane	-6.8 5.2	-2.2 -2.2	8.3	5.0	-1.5	-5.8	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.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

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	17.2 -8.6	7.7 -6.1	-1.6	-5.4	-2.6	-0.6	50 30	30 30	30	30	30	30
Trichloroethene	6.8 -4.0	0.2 -1.6	-2.2	-1.5	0.6	1.6	50 30	30 30	30	30	30	30
Methylcyclohexane	6.9 -7.7	8.3 -5.0	3.7	-7.5	-0.8	2.1	50 30	30 30	30	30	30	30
1,2-Dichloropropane	10.4 -1.0	-4.6 0.9	2.7	-3.0	-0.7	-4.8	50 30	30 30	30	30	30	30
Dibromomethane	-26.1 16.9	-10.3 8.0	7.9	9.9	-1.9	-4.4	50 30	30 30	30	30	30	30
1,4-Dioxane	25.4 +++++	-25.1 +++++	6.1	0.1	4.5	-1.5	50	30	30	30	30	30
Bromodichloromethane	0.5 3.0	-6.2 0.1	2.2	0.7	-0.5	0.1	50 30	30 30	30	30	30	30
cis-1,3-Dichloropropene	-24.0 +++++	-13.6 +++++	10.6	9.7	8.4	8.9	50	30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	-4.7 +++++	-23.9 +++++	9.1	11.4	7.7	0.3	50	30	30	30	30	30
Toluene	22.3 -9.0	5.5 -1.6	-2.5	-13.3	-1.3	0.0	50 30	30 30	30	30	30	30
trans-1,3-Dichloropropene	-25.8 +++++	-18.6 +++++	7.7	7.1	16.4	13.3	50	30	30	30	30	30
Ethyl methacrylate	12.3 +++++	-22.8 +++++	8.2	0.3	3.7	-1.7	50	30	30	30	30	30
1,1,2-Trichloroethane	2.7 5.6	-6.4 6.0	3.2	-4.3	-1.9	-4.9	50 30	30 30	30	30	30	30
Tetrachloroethene	24.7 -15.0	10.2 -2.3	-2.7	-14.0	-1.4	0.5	50 30	30 30	30	30	30	30
1,3-Dichloropropane	-15.4 7.2	-5.2 8.2	3.9	1.5	2.5	-2.8	50 30	30 30	30	30	30	30
2-Hexanone	10.1 +++++	-26.9 +++++	2.3	9.4	-0.5	-1.2	50	30	30	30	30	30
Dibromochloromethane	-0.9 5.6	-10.4 10.0	1.0	-4.3	-3.0	1.8	50 30	30 30	30	30	30	30
1,2-Dibromoethane (EDB)	-14.3 +++++	-14.1 +++++	11.3	2.8	6.3	7.9	50	30	30	30	30	30
Chlorobenzene	21.2 -6.2	2.0 -2.3	0.6	-10.3	-2.0	-2.9	50 30	30 30	30	30	30	30
1,1,1,2-Tetrachloroethane	15.8 -5.9	2.9 0.1	0.6	-8.6	-0.2	-4.7	50 30	30 30	30	30	30	30
Ethylbenzene	15.0 -8.2	5.5 -0.6	-1.4	-12.2	-1.0	2.9	50 30	30 30	30	30	30	30

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

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	22.4 -7.0	2.1 -2.2	-3.2	-11.0	-3.5	2.3	50 30	30 30	30	30	30	30
o-Xylene	9.7 -9.2	5.2 -1.3	-1.8	-8.1	3.2	2.3	50 30	30 30	30	30	30	30
Styrene	2.8 -1.3	-0.9 4.0	1.2	-8.3	1.8	0.8	50 30	30 30	30	30	30	30
Bromoform	-27.8 24.3	-21.0 18.9	3.7	0.2	-0.4	2.1	50 30	30 30	30	30	30	30
Isopropylbenzene	9.8 -7.9	6.8 -2.6	1.2	-8.7	-1.5	2.8	50 30	30 30	30	30	30	30
Bromobenzene	15.8 -5.5	-4.5 3.7	3.6	-6.8	0.2	-6.5	50 30	30 30	30	30	30	30
1,1,2,2-Tetrachloroethane	1.7 +++++	-11.3 +++++	5.2	6.9	4.7	-7.1	50	30	30	30	30	30
1,2,3-Trichloropropane	-12.2 12.5	-10.9 10.0	9.0	2.3	-0.8	-9.8	50 30	30 30	30	30	30	30
trans-1,4-Dichloro-2-butene	6.0 +++++	5.7 +++++	-2.7	-0.6	-0.7	0.4	50	30	30	30	30	30
N-Propylbenzene	22.8 -10.2	8.1 -2.0	-1.0	-10.0	-2.9	-5.0	50 30	30 30	30	30	30	30
2-Chlorotoluene	36.9 -12.5	5.5 -7.0	-4.2	-7.6	-4.3	-6.7	50 30	30 30	30	30	30	30
1,3,5-Trimethylbenzene	30.2 -13.5	9.7 -6.7	-1.4	-9.7	-2.2	-6.4	50 30	30 30	30	30	30	30
4-Chlorotoluene	33.1 -8.4	3.4 -3.0	-4.6	-9.6	-2.7	-8.3	50 30	30 30	30	30	30	30
tert-Butylbenzene	33.8 -14.1	10.3 -4.8	-2.6	-12.4	-3.1	-7.1	50 30	30 30	30	30	30	30
1,2,4-Trimethylbenzene	28.6 -12.4	7.5 -7.6	-0.1	-9.1	-0.4	-6.5	50 30	30 30	30	30	30	30
sec-Butylbenzene	36.0 -16.9	12.8 -9.2	-1.6	-10.9	-1.3	-8.8	50 30	30 30	30	30	30	30
1,3-Dichlorobenzene	17.4 -5.5	1.3 1.6	-3.4	-6.0	-1.8	-3.6	50 30	30 30	30	30	30	30
4-Isopropyltoluene	28.3 -13.4	8.5 -5.9	-3.2	-10.7	0.8	-4.5	50 30	30 30	30	30	30	30
1,4-Dichlorobenzene	29.9 -7.1	-1.6 -1.8	-4.5	-8.1	-2.6	-4.1	50 30	30 30	30	30	30	30
n-Butylbenzene	12.9 -10.9	5.9 -3.0	-2.0	-8.6	4.4	1.3	50 30	30 30	30	30	30	30
1,2-Dichlorobenzene	19.9 -7.6	2.8 -0.5	0.9	-6.8	-0.4	-8.4	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.: 180-100176-1 Analy Batch No.: 302077

SDG No.:

Instrument ID: CHHP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/20/2019 12:55 Calibration End Date: 12/20/2019 17:27 Calibration ID: 42321

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	18.1 +++++	-26.3 +++++	2.3	5.3	3.8	-1.9	50	30	30	30	30	30
1,2,4-Trichlorobenzene	-27.0 10.5	-20.3 15.9	-4.5	0.1	14.7	10.6	50 30	30 30	30	30	30	30
Hexachlorobutadiene	42.2 -15.6	4.2 -6.8	-7.0	-8.4	-1.5	-7.1	50 30	30 30	30	30	30	30
Naphthalene	49.7 3.0	-23.2 +++++	-3.7	7.0	3.6	-5.8	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	-8.2 8.8	-18.2 11.0	-7.5	2.5	10.1	1.3	50 30	30 30	30	30	30	30
Dibromofluoromethane (Surr)	-1.2 1.8	0.8 -7.2	3.4	4.0	-0.9	-0.8	50 30	30 30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	-18.7 5.1	-3.2 +++++	13.0	12.2	-2.6	-5.7	50 30	30	30	30	30	30
Toluene-d8 (Surr)	10.0 -4.4	1.4 +++++	-5.0	-8.3	2.3	3.9	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	-8.5 6.9	-7.8 5.4	-2.7	-0.2	1.2	5.6	50 30	30 30	30	30	30	30

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122014.d
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 20-Dec-2019 12:55:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030094-014
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub3

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 23-Dec-2019 07:47:42 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: journetp Date: 20-Dec-2019 14:23:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.981	3.981	0.000	0	35096	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	208631	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	84	49620	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	93	75511	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	93	26293	25.0	25.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.645	0.006	0	21932	25.0	24.2	
$ 7 Toluene-d8 (Surr)	98	8.675	8.674	0.001	93	101290	25.0	25.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.328	11.321	0.007	96	30243	25.0	23.1	
10 Dichlorodifluoromethane	85	1.516	1.516	0.000	99	56059	25.0	30.2	
11 Chloromethane	50	1.710	1.693	0.017	98	37565	25.0	27.4	
13 Butadiene	39	1.799	1.793	0.006	91	31134	25.0	27.5	
12 Vinyl chloride	62	1.805	1.798	0.007	92	37601	25.0	27.7	
14 Bromomethane	94	2.069	2.063	0.006	92	22350	25.0	28.8	
15 Chloroethane	64	2.187	2.169	0.018	99	19055	25.0	30.7	
17 Dichlorofluoromethane	67	2.452	2.445	0.007	97	54862	25.0	28.2	
16 Trichlorofluoromethane	101	2.469	2.451	0.018	98	69293	25.0	28.6	
18 Ethyl ether	59	2.799	2.804	-0.005	92	16379	25.0	25.0	
20 1,1-Dichloroethene	96	3.057	3.051	0.006	97	31800	25.0	27.7	
21 1,1,2-Trichloro-1,2,2-trif	101	3.134	3.116	0.018	92	37663	25.0	29.1	
22 Acetone	43	3.169	3.169	0.000	100	9046	50.0	38.8	
23 Iodomethane	142	3.234	3.228	0.006	99	57194	25.0	27.1	
24 Carbon disulfide	76	3.334	3.322	0.012	99	88493	25.0	26.6	
26 3-Chloro-1-propene	76	3.581	3.581	0.000	90	15634	25.0	25.9	
28 Methyl acetate	43	3.628	3.616	0.012	98	13409	50.0	44.6	
29 Methylene Chloride	84	3.781	3.781	0.000	94	34012	25.0	29.2	
32 2-Methyl-2-propanol	59	4.110	4.116	-0.006	95	9405	250.0	227.1	
31 Acrylonitrile	53	4.199	4.192	0.007	97	33478	250.0	214.1	
30 trans-1,2-Dichloroethene	96	4.216	4.216	0.000	97	31285	25.0	26.4	
33 Methyl tert-butyl ether	73	4.251	4.251	0.000	97	45800	25.0	22.4	
34 Hexane	57	4.651	4.645	0.006	89	51932	25.0	27.9	
36 1,1-Dichloroethane	63	4.875	4.875	0.000	97	50435	25.0	26.0	

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	5.639	0.001	87	7555	25.0	26.5	
41 cis-1,2-Dichloroethene	96	5.651	5.645	0.006	82	30885	25.0	25.7	
43 2-Butanone (MEK)	43	5.693	5.686	0.007	98	8731	50.0	38.0	
46 Chlorobromomethane	128	5.945	5.939	0.006	89	12419	25.0	23.2	
48 Tetrahydrofuran	42	5.975	5.969	0.006	82	4724	50.0	39.7	
49 Chloroform	83	6.093	6.092	0.001	93	55485	25.0	24.7	
50 1,1,1-Trichloroethane	97	6.240	6.239	0.001	99	53887	25.0	26.2	
52 Cyclohexane	56	6.310	6.310	0.000	90	63324	25.0	27.2	
53 Carbon tetrachloride	117	6.416	6.416	0.000	96	57124	25.0	27.6	
54 1,1-Dichloropropene	75	6.440	6.439	0.001	95	43740	25.0	26.2	
55 Benzene	78	6.651	6.651	0.000	97	109029	25.0	25.6	
51 Isobutyl alcohol	41	6.693	6.692	0.000	92	6947	625.0	487.8	
56 1,2-Dichloroethane	62	6.740	6.739	0.001	98	28436	25.0	24.5	
59 n-Heptane	43	7.028	7.028	0.000	88	46226	25.0	26.9	
60 Trichloroethene	130	7.404	7.404	0.000	94	37682	25.0	25.1	
63 Methylcyclohexane	83	7.634	7.627	0.007	88	65656	25.0	27.1	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	91	22614	25.0	23.8	
65 Dibromomethane	93	7.769	7.763	0.006	92	9076	25.0	22.4	
67 1,4-Dioxane	88	7.781	7.775	0.006	44	1394	500.0	374.6	
68 Dichlorobromomethane	83	7.969	7.969	0.000	99	30478	25.0	23.4	
71 cis-1,3-Dichloropropene	75	8.422	8.422	0.000	95	25751	25.0	21.6	
72 4-Methyl-2-pentanone (MIBK	43	8.587	8.580	0.006	93	15952	50.0	38.1	
73 Toluene	91	8.745	8.745	0.000	98	123665	25.0	26.4	
74 trans-1,3-Dichloropropene	75	9.016	9.010	0.006	90	17617	25.0	20.4	
75 Ethyl methacrylate	69	9.075	9.074	0.001	93	11692	25.0	19.3	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	91	14909	25.0	23.4	
77 Tetrachloroethene	164	9.257	9.257	0.000	96	33525	25.0	27.6	
78 1,3-Dichloropropane	76	9.351	9.351	0.000	93	22698	25.0	23.7	
79 2-Hexanone	43	9.439	9.427	0.012	96	8723	50.0	36.5	
81 Chlorodibromomethane	129	9.563	9.563	0.000	89	20476	25.0	22.4	
82 Ethylene Dibromide	107	9.675	9.674	0.001	99	11586	25.0	21.5	
83 Chlorobenzene	112	10.163	10.163	0.000	96	82856	25.0	25.5	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.257	-0.006	92	32479	25.0	25.7	
85 Ethylbenzene	106	10.269	10.263	0.006	99	48134	25.0	26.4	
86 m-Xylene & p-Xylene	106	10.398	10.392	0.006	0	59103	25.0	25.5	
88 o-Xylene	106	10.780	10.774	0.006	96	58787	25.0	26.3	
89 Styrene	104	10.804	10.798	0.006	94	82024	25.0	24.8	
90 Bromoform	173	10.980	10.980	0.000	96	9093	25.0	19.8	
91 Isopropylbenzene	105	11.139	11.145	-0.006	95	168952	25.0	26.7	
94 Bromobenzene	156	11.451	11.457	-0.006	89	29507	25.0	23.9	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	95	14969	25.0	22.2	
96 trans-1,4-Dichloro-2-buten	53	11.563	11.510	0.053	63	3281	25.0	26.4	M
95 1,2,3-Trichloropropane	110	11.516	11.515	0.001	84	4964	25.0	22.3	
97 N-Propylbenzene	120	11.563	11.563	0.000	98	48356	25.0	27.0	
98 2-Chlorotoluene	126	11.645	11.645	0.000	97	38691	25.0	26.4	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	97	140501	25.0	27.4	
100 4-Chlorotoluene	126	11.775	11.774	0.001	97	38048	25.0	25.8	
101 tert-Butylbenzene	119	12.051	12.057	-0.006	90	136941	25.0	27.6	
103 1,2,4-Trimethylbenzene	105	12.122	12.115	0.007	96	132444	25.0	26.9	
104 sec-Butylbenzene	105	12.280	12.280	0.000	94	190764	25.0	28.2	
105 1,3-Dichlorobenzene	146	12.398	12.398	0.000	97	66271	25.0	25.3	
106 4-Isopropyltoluene	119	12.439	12.439	0.000	97	171411	25.0	27.1	

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	96	66761	25.0	24.6	
110 n-Butylbenzene	91	12.845	12.845	0.000	96	116497	25.0	26.5	
111 1,2-Dichlorobenzene	146	12.857	12.857	0.000	98	59979	25.0	25.7	
112 1,2-Dibromo-3-Chloropropan	157	13.651	13.645	0.006	77	1431	25.0	18.4	
114 1,2,4-Trichlorobenzene	180	14.468	14.462	0.006	93	17338	25.0	19.9	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	96	21339	25.0	26.0	
116 Naphthalene	128	14.733	14.727	0.006	96	19311	25.0	19.2	M
117 1,2,3-Trichlorobenzene	180	14.951	14.945	0.006	95	13961	25.0	20.4	
S 130 1,2-Dichloroethene, Total	96				0		50.0	52.1	
S 129 Xylenes, Total	106				0		50.0	51.8	
S 145 Total BTEX	1				0			130.1	
S 131 1,3-Dichloropropene, Total	1				0		50.0	42.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00102	Amount Added:	2.00	Units: uL
VOA8260SURR_00102	Amount Added:	1.00	Units: uL
VOA8260VOAPRI_00384	Amount Added:	1.00	Units: uL
voaWKetmix1st_00021	Amount Added:	1.00	Units: uL

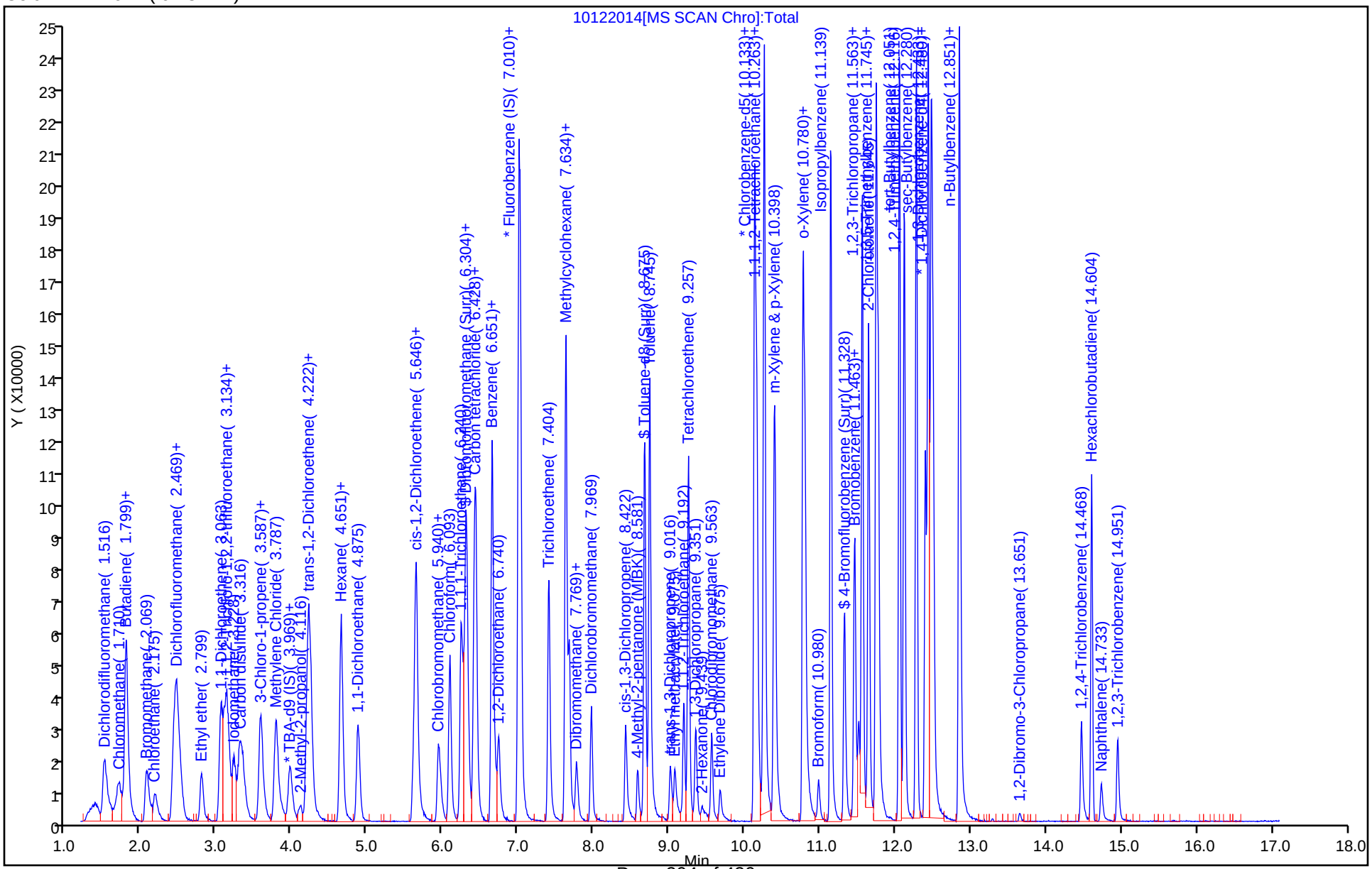
Report Date: 23-Dec-2019 07:47:43 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122014.d

Injection Date:	20-Dec-2019 12:55:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	IC			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)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

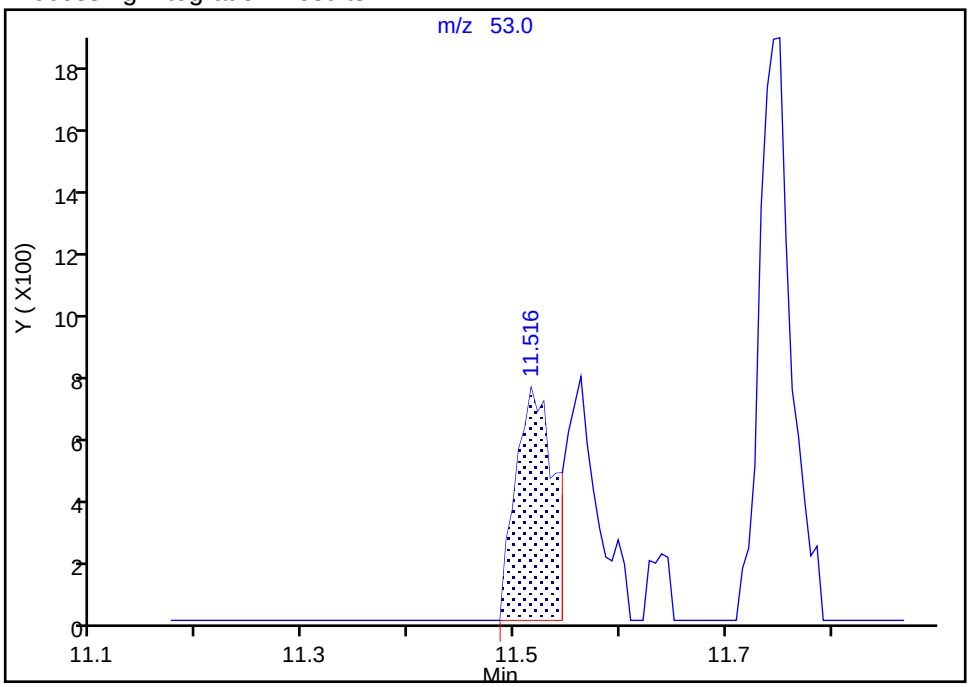
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122014.d				
Injection Date:	20-Dec-2019 12:55:30	Instrument ID:	CHHP10		
Lims ID:	IC				
Client ID:					
Operator ID:	034635	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

96 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

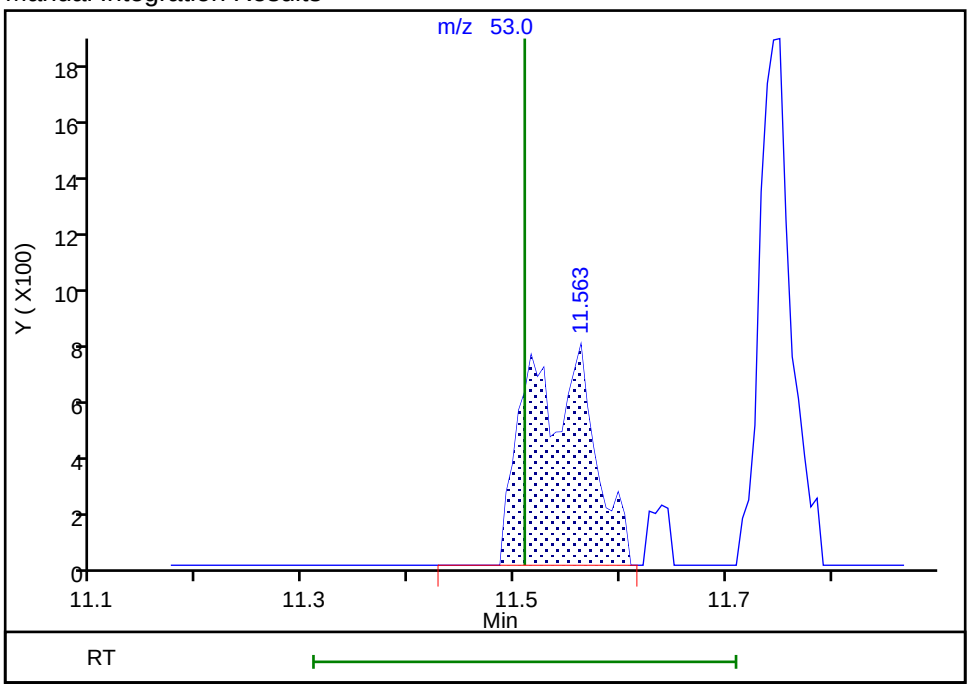
Processing Integration Results

RT: 11.52
Area: 1831
Amount: 13.951329
Amount Units: ng



Manual Integration Results

RT: 11.56
Area: 3281
Amount: 26.417166
Amount Units: ng



Reviewer: journetp, 21-Dec-2019 16:25:27

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

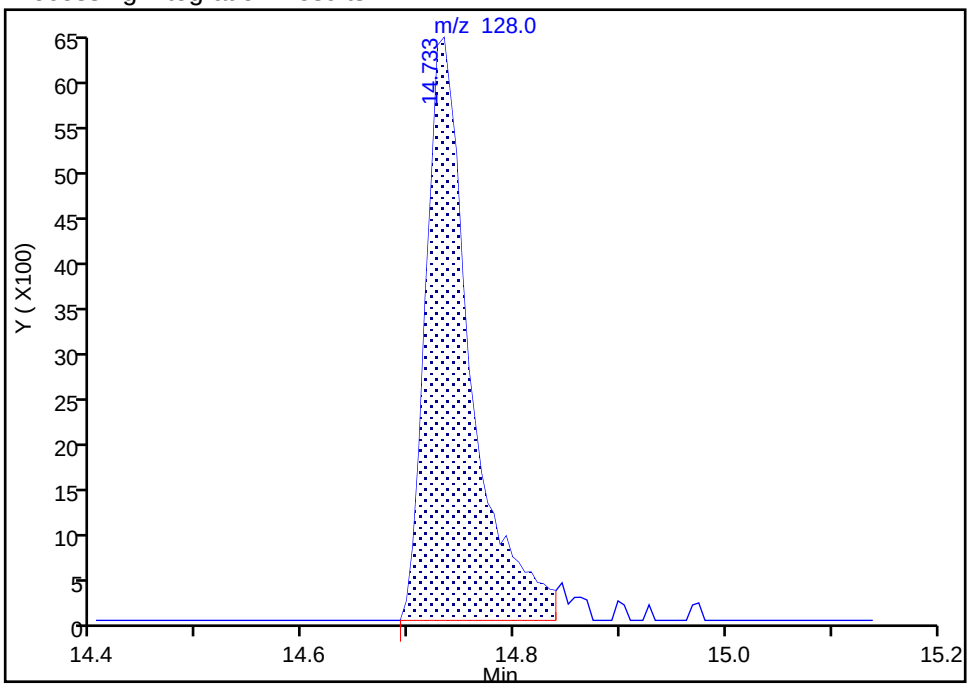
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122014.d
Injection Date: 20-Dec-2019 12:55:30 Instrument ID: CHHP10
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

116 Naphthalene, CAS: 91-20-3

Signal: 1

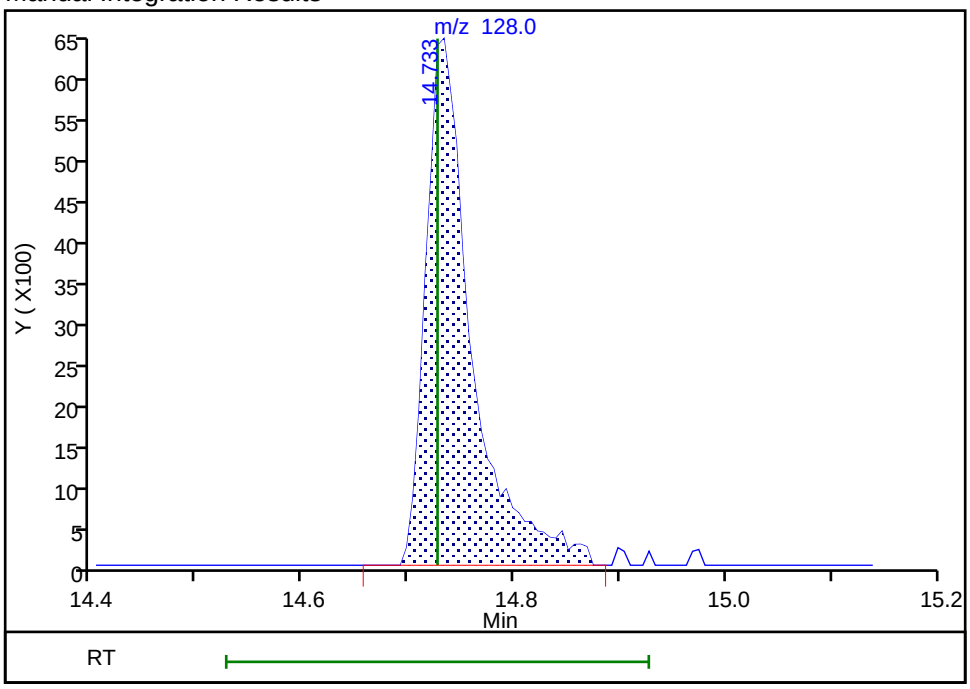
Processing Integration Results

RT: 14.73
Area: 18844
Amount: 16.455106
Amount Units: ng



Manual Integration Results

RT: 14.73
Area: 19311
Amount: 19.196864
Amount Units: ng



Reviewer: journetp, 21-Dec-2019 16:26:58
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122015.d
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 20-Dec-2019 13:22:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030094-015
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub3

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 23-Dec-2019 07:47:49 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: journetp Date: 23-Dec-2019 07:19:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.981	3.981	0.000	0	55255	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	221763	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	84	57994	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	93	92527	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	93	57370	50.0	51.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.645	6.645	0.000	0	54417	50.0	56.5	
$ 7 Toluene-d8 (Surr)	98	8.674	8.674	0.000	94	221884	50.0	47.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.321	11.321	0.000	94	74575	50.0	48.6	
10 Dichlorodifluoromethane	85	1.516	1.516	0.000	99	104761	50.0	53.0	
11 Chloromethane	50	1.693	1.693	0.000	99	69561	50.0	47.7	
13 Butadiene	39	1.793	1.793	0.000	86	61830	50.0	51.3	
12 Vinyl chloride	62	1.798	1.798	0.000	94	72113	50.0	49.9	
14 Bromomethane	94	2.063	2.063	0.000	90	41692	50.0	50.6	
15 Chloroethane	64	2.169	2.169	0.000	100	36295	50.0	54.9	
17 Dichlorofluoromethane	67	2.445	2.445	0.000	97	107611	50.0	52.0	
16 Trichlorofluoromethane	101	2.451	2.451	0.000	98	134408	50.0	52.2	
18 Ethyl ether	59	2.804	2.804	0.000	90	37252	50.0	53.5	
20 1,1-Dichloroethene	96	3.051	3.051	0.000	95	60626	50.0	49.8	
21 1,1,2-Trichloro-1,2,2-trif	101	3.116	3.116	0.000	89	70776	50.0	51.4	
22 Acetone	43	3.169	3.169	0.000	100	24757	100.0	100.0	
23 Iodomethane	142	3.228	3.228	0.000	100	116265	50.0	51.7	
24 Carbon disulfide	76	3.322	3.322	0.000	99	178208	50.0	50.3	
26 3-Chloro-1-propene	76	3.581	3.581	0.000	90	31637	50.0	49.2	
28 Methyl acetate	43	3.616	3.616	0.000	97	37030	100.0	115.8	
29 Methylene Chloride	84	3.781	3.781	0.000	94	64247	50.0	55.4	
32 2-Methyl-2-propanol	59	4.116	4.116	0.000	96	36157	500.0	554.5	
31 Acrylonitrile	53	4.192	4.192	0.000	99	96130	500.0	578.3	
30 trans-1,2-Dichloroethene	96	4.216	4.216	0.000	98	65817	50.0	52.3	
33 Methyl tert-butyl ether	73	4.251	4.251	0.000	97	118251	50.0	54.4	
34 Hexane	57	4.645	4.645	0.000	93	101522	50.0	51.4	
36 1,1-Dichloroethane	63	4.875	4.875	0.000	97	105999	50.0	51.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.634	5.639	-0.005	87	15399	50.0	50.9	
41 cis-1,2-Dichloroethene	96	5.645	5.645	0.000	83	65890	50.0	51.6	
43 2-Butanone (MEK)	43	5.686	5.686	0.000	100	26849	100.0	110.1	
46 Chlorobromomethane	128	5.939	5.939	0.000	87	30724	50.0	53.9	
48 Tetrahydrofuran	42	5.969	5.969	0.000	82	14979	100.0	101.6	
49 Chloroform	83	6.092	6.092	0.000	94	115794	50.0	51.9	
50 1,1,1-Trichloroethane	97	6.239	6.239	0.000	97	114288	50.0	52.4	
52 Cyclohexane	56	6.310	6.310	0.000	89	131066	50.0	52.9	
53 Carbon tetrachloride	117	6.416	6.416	0.000	97	114443	50.0	52.0	
54 1,1-Dichloropropene	75	6.439	6.439	0.000	95	92115	50.0	51.9	
55 Benzene	78	6.651	6.651	0.000	97	225976	50.0	49.9	
51 Isobutyl alcohol	41	6.692	6.692	0.000	95	23664	1250.0	1347.7	
56 1,2-Dichloroethane	62	6.739	6.739	0.000	98	66891	50.0	54.1	
59 n-Heptane	43	7.028	7.028	0.000	88	89816	50.0	49.2	
60 Trichloroethene	130	7.404	7.404	0.000	96	78184	50.0	48.9	
63 Methylcyclohexane	83	7.627	7.627	0.000	87	133536	50.0	51.8	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	93	51750	50.0	51.3	
65 Dibromomethane	93	7.763	7.763	0.000	90	23214	50.0	53.9	
67 1,4-Dioxane	88	7.775	7.775	0.000	36	4651	1000.0	1061.2	
68 Dichlorobromomethane	83	7.969	7.969	0.000	99	70602	50.0	51.1	
71 cis-1,3-Dichloropropene	75	8.422	8.422	0.000	96	70052	50.0	55.3	
72 4-Methyl-2-pentanone (MIBK	43	8.580	8.580	0.000	95	53440	100.0	109.1	
73 Toluene	91	8.745	8.745	0.000	98	267167	50.0	48.7	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	93	54465	50.0	53.8	
75 Ethyl methacrylate	69	9.074	9.074	0.000	89	42481	50.0	54.1	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	92	38430	50.0	51.6	
77 Tetrachloroethene	164	9.257	9.257	0.000	97	69154	50.0	48.6	
78 1,3-Dichloropropane	76	9.351	9.351	0.000	92	58146	50.0	52.0	
79 2-Hexanone	43	9.427	9.427	0.000	94	40272	100.0	102.3	
81 Chlorodibromomethane	129	9.563	9.563	0.000	90	53981	50.0	50.5	
82 Ethylene Dibromide	107	9.674	9.674	0.000	95	35066	50.0	55.6	
83 Chlorobenzene	112	10.163	10.163	0.000	98	191118	50.0	50.3	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.257	0.000	93	74189	50.0	50.3	
85 Ethylbenzene	106	10.263	10.263	0.000	98	105091	50.0	49.3	
86 m-Xylene & p-Xylene	106	10.392	10.392	0.000	0	131062	50.0	48.4	
88 o-Xylene	106	10.774	10.774	0.000	95	128283	50.0	49.1	
89 Styrene	104	10.798	10.798	0.000	94	195796	50.0	50.6	
90 Bromoform	173	10.980	10.980	0.000	97	27893	50.0	51.9	
91 Isopropylbenzene	105	11.145	11.145	0.000	94	374526	50.0	50.6	
94 Bromobenzene	156	11.457	11.457	0.000	85	78447	50.0	51.8	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	96	41489	50.0	52.6	
96 trans-1,4-Dichloro-2-buten	53	11.510	11.510	0.000	68	7959	50.0	48.6	
95 1,2,3-Trichloropropane	110	11.515	11.515	0.000	84	14884	50.0	54.5	
97 N-Propylbenzene	120	11.563	11.563	0.000	98	108527	50.0	49.5	
98 2-Chlorotoluene	126	11.645	11.645	0.000	97	86059	50.0	47.9	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	96	309453	50.0	49.3	
100 4-Chlorotoluene	126	11.774	11.774	0.000	98	86083	50.0	47.7	
101 tert-Butylbenzene	119	12.057	12.057	0.000	90	296444	50.0	48.7	
103 1,2,4-Trimethylbenzene	105	12.115	12.115	0.000	97	301709	50.0	50.0	
104 sec-Butylbenzene	105	12.280	12.280	0.000	93	407551	50.0	49.2	
105 1,3-Dichlorobenzene	146	12.398	12.398	0.000	97	154955	50.0	48.3	
106 4-Isopropyltoluene	119	12.439	12.439	0.000	97	374434	50.0	48.4	

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	96	158649	50.0	47.7	
110 n-Butylbenzene	91	12.845	12.845	0.000	97	264050	50.0	49.0	
111 1,2-Dichlorobenzene	146	12.857	12.857	0.000	98	144315	50.0	50.4	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	91	5973	50.0	51.2	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	94	50876	50.0	47.7	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	97	46712	50.0	46.5	
116 Naphthalene	128	14.727	14.727	0.000	96	75836	50.0	48.1	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	95	38722	50.0	46.3	
S 130 1,2-Dichloroethene, Total	96				0		100.0	103.8	
S 129 Xylenes, Total	106				0		100.0	97.5	
S 131 1,3-Dichloropropene, Total	1				0		100.0	109.1	

Reagents:

VOA8260INT_00102	Amount Added:	2.00	Units: uL
VOA8260VOAPRI_00384	Amount Added:	2.00	Units: uL
voaWKetmix1st_00021	Amount Added:	2.00	Units: uL
VOA8260SURR_00102	Amount Added:	2.00	Units: uL

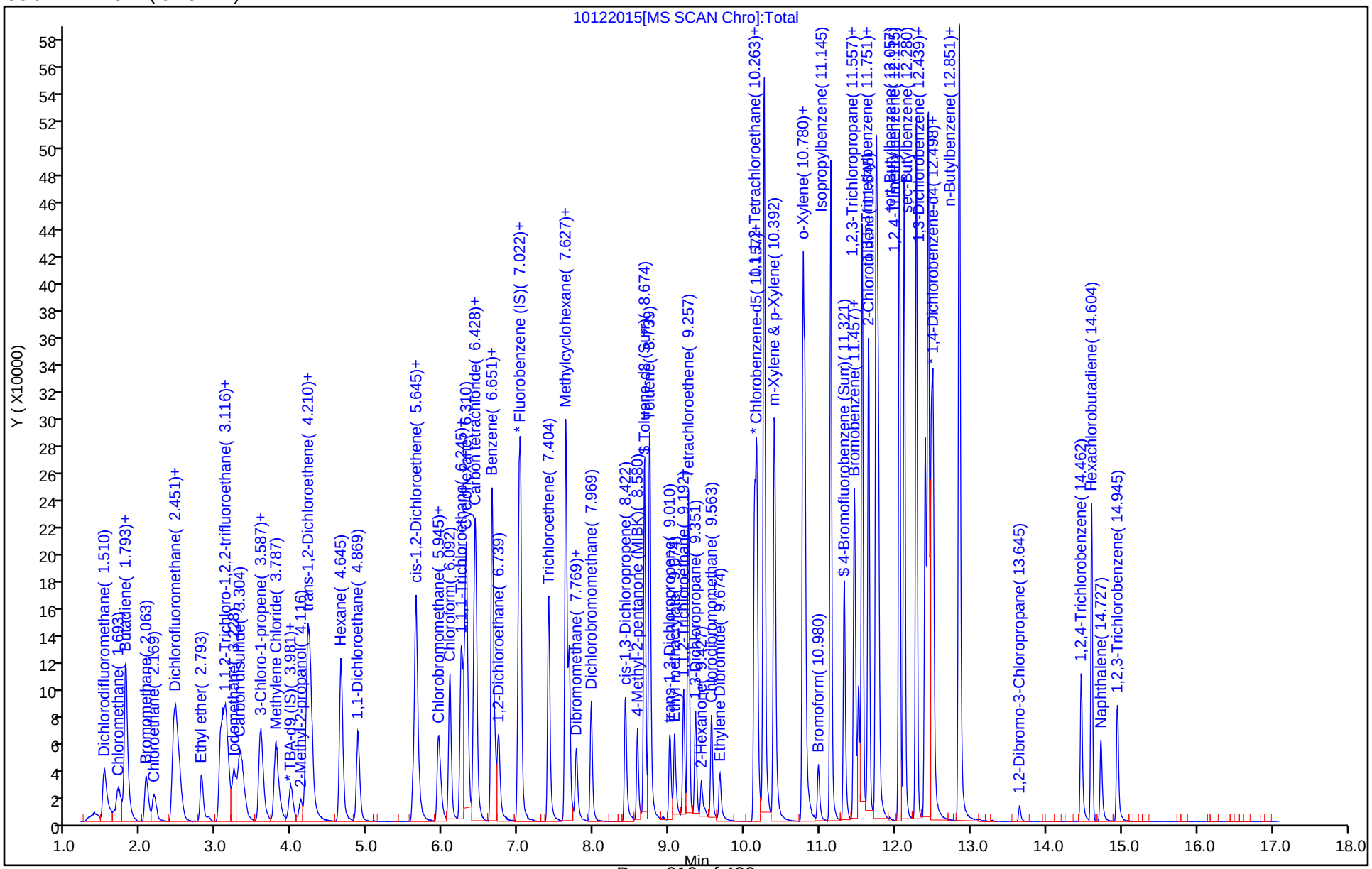
Report Date: 23-Dec-2019 07:47:51 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122015.d

Injection Date:	20-Dec-2019 13:22:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	icis			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
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122016.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 20-Dec-2019 13:49:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030094-016
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub3

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 23-Dec-2019 07:47:55 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: journetp Date: 20-Dec-2019 14:40:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.987	3.987	0.000	0	66435	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	254286	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	82	67965	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	94	111875	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.269	6.269	0.000	94	99281	75.0	78.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	92909	75.0	84.1	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	94	376503	75.0	68.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.321	11.321	0.000	95	134485	75.0	74.9	
10 Dichlorodifluoromethane	85	1.516	1.516	0.000	99	168235	75.0	74.3	
11 Chloromethane	50	1.699	1.699	0.000	98	113011	75.0	67.6	M
13 Butadiene	39	1.793	1.793	0.000	88	98921	75.0	71.6	
12 Vinyl chloride	62	1.816	1.816	0.000	98	119252	75.0	72.0	
14 Bromomethane	94	2.063	2.063	0.000	91	67768	75.0	71.7	
15 Chloroethane	64	2.169	2.169	0.000	99	52994	75.0	70.0	
17 Dichlorofluoromethane	67	2.440	2.440	0.000	96	170526	75.0	71.9	
16 Trichlorofluoromethane	101	2.451	2.451	0.000	97	208649	75.0	70.6	
18 Ethyl ether	59	2.799	2.799	0.000	91	61970	75.0	77.6	
20 1,1-Dichloroethene	96	3.051	3.051	0.000	96	98349	75.0	70.4	
21 1,1,2-Trichloro-1,2,2-trif	101	3.128	3.128	0.000	90	111648	75.0	70.8	
22 Acetone	43	3.175	3.175	0.000	100	48043	150.0	169.2	
23 Iodomethane	142	3.228	3.228	0.000	98	187048	75.0	72.6	
24 Carbon disulfide	76	3.316	3.316	0.000	99	282399	75.0	69.6	
26 3-Chloro-1-propene	76	3.587	3.587	0.000	89	52892	75.0	71.8	
28 Methyl acetate	43	3.616	3.616	0.000	98	65682	150.0	179.1	
29 Methylene Chloride	84	3.787	3.787	0.000	95	94755	75.0	72.5	
32 2-Methyl-2-propanol	59	4.116	4.116	0.000	97	59527	750.0	759.3	
31 Acrylonitrile	53	4.181	4.181	0.000	100	165887	750.0	870.3	
30 trans-1,2-Dichloroethene	96	4.204	4.204	0.000	99	104745	75.0	72.5	
33 Methyl tert-butyl ether	73	4.245	4.245	0.000	96	196717	75.0	78.9	
34 Hexane	57	4.645	4.645	0.000	90	157856	75.0	69.7	
36 1,1-Dichloroethane	63	4.881	4.881	0.000	97	171503	75.0	72.4	

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	90	24882	75.0	71.7	
41 cis-1,2-Dichloroethene	96	5.645	5.645	0.000	82	108827	75.0	74.3	
43 2-Butanone (MEK)	43	5.675	5.675	0.000	99	50098	150.0	179.1	
46 Chlorobromomethane	128	5.934	5.934	0.000	93	49655	75.0	76.0	
48 Tetrahydrofuran	42	5.969	5.969	0.000	91	27584	150.0	162.8	
49 Chloroform	83	6.087	6.087	0.000	93	189843	75.0	75.8	
50 1,1,1-Trichloroethane	97	6.239	6.239	0.000	97	183252	75.0	73.2	
52 Cyclohexane	56	6.310	6.310	0.000	90	202570	75.0	71.3	
53 Carbon tetrachloride	117	6.416	6.416	0.000	97	181397	75.0	71.9	
54 1,1-Dichloropropene	75	6.434	6.434	0.000	93	144806	75.0	71.2	
55 Benzene	78	6.651	6.651	0.000	97	370840	75.0	71.4	
51 Isobutyl alcohol	41	6.686	6.686	0.000	95	39575	1875.0	1961.0	
56 1,2-Dichloroethane	62	6.739	6.739	0.000	98	111579	75.0	78.7	
59 n-Heptane	43	7.028	7.028	0.000	90	148470	75.0	71.0	
60 Trichloroethene	130	7.398	7.398	0.000	95	135448	75.0	73.9	
63 Methylcyclohexane	83	7.628	7.628	0.000	90	204951	75.0	69.4	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	94	84110	75.0	72.8	
65 Dibromomethane	93	7.769	7.769	0.000	92	40664	75.0	82.4	
67 1,4-Dioxane	88	7.775	7.775	0.000	35	7664	1500.0	1501.5	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	119724	75.0	75.6	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	95	119553	75.0	82.3	
72 4-Methyl-2-pentanone (MIBK	43	8.580	8.580	0.000	94	95936	150.0	167.2	
73 Toluene	91	8.745	8.745	0.000	98	417860	75.0	65.0	
74 trans-1,3-Dichloropropene	75	9.004	9.004	0.000	93	95191	75.0	80.3	
75 Ethyl methacrylate	69	9.075	9.075	0.000	90	70234	75.0	75.2	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	90	62612	75.0	71.8	
77 Tetrachloroethene	164	9.257	9.257	0.000	96	107504	75.0	64.5	
78 1,3-Dichloropropane	76	9.351	9.351	0.000	90	99887	75.0	76.2	
79 2-Hexanone	43	9.422	9.422	0.000	93	80288	150.0	164.0	
81 Chlorodibromomethane	129	9.563	9.563	0.000	89	89878	75.0	71.8	
82 Ethylene Dibromide	107	9.669	9.669	0.000	99	56934	75.0	77.1	
83 Chlorobenzene	112	10.163	10.163	0.000	97	299348	75.0	67.2	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.257	0.000	93	118526	75.0	68.6	
85 Ethylbenzene	106	10.263	10.263	0.000	98	164575	75.0	65.9	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	211870	75.0	66.8	
88 o-Xylene	106	10.774	10.774	0.000	96	211051	75.0	68.9	
89 Styrene	104	10.798	10.798	0.000	95	312117	75.0	68.8	
90 Bromoform	173	10.980	10.980	0.000	97	47354	75.0	75.1	
91 Isopropylbenzene	105	11.139	11.139	0.000	95	593954	75.0	68.5	
94 Bromobenzene	156	11.457	11.457	0.000	88	127969	75.0	69.9	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	95	74089	75.0	80.1	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	67	15176	75.0	74.6	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	85	25341	75.0	76.7	
97 N-Propylbenzene	120	11.563	11.563	0.000	98	178988	75.0	67.5	
98 2-Chlorotoluene	126	11.645	11.645	0.000	98	150537	75.0	69.3	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	96	513988	75.0	67.7	
100 4-Chlorotoluene	126	11.769	11.769	0.000	96	147839	75.0	67.8	
101 tert-Butylbenzene	119	12.057	12.057	0.000	92	483498	75.0	65.7	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	97	497778	75.0	68.2	
104 sec-Butylbenzene	105	12.280	12.280	0.000	93	669515	75.0	66.8	
105 1,3-Dichlorobenzene	146	12.392	12.392	0.000	97	273389	75.0	70.5	
106 4-Isopropyltoluene	119	12.439	12.439	0.000	97	626670	75.0	67.0	

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	96	276988	75.0	68.9	
110 n-Butylbenzene	91	12.845	12.845	0.000	97	446611	75.0	68.5	
111 1,2-Dichlorobenzene	146	12.857	12.857	0.000	98	241820	75.0	69.9	
112 1,2-Dibromo-3-Chloropropan	157	13.651	13.651	0.000	89	11556	75.0	79.0	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	95	96808	75.0	75.1	
115 Hexachlorobutadiene	225	14.610	14.610	0.000	97	83438	75.0	68.7	
116 Naphthalene	128	14.721	14.721	0.000	96	168519	75.0	80.3	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	97	77815	75.0	76.9	
S 130 1,2-Dichloroethene, Total	96				0		150.0	146.8	
S 129 Xylenes, Total	106				0		150.0	135.7	
S 145 Total BTEX	1				0			338.0	
S 131 1,3-Dichloropropene, Total	1				0		150.0	162.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00102	Amount Added:	2.00	Units: uL
voaWKetmix1st_00021	Amount Added:	3.00	Units: uL
VOA8260VOAPRI_00384	Amount Added:	3.00	Units: uL
VOA8260SURR_00102	Amount Added:	3.00	Units: uL

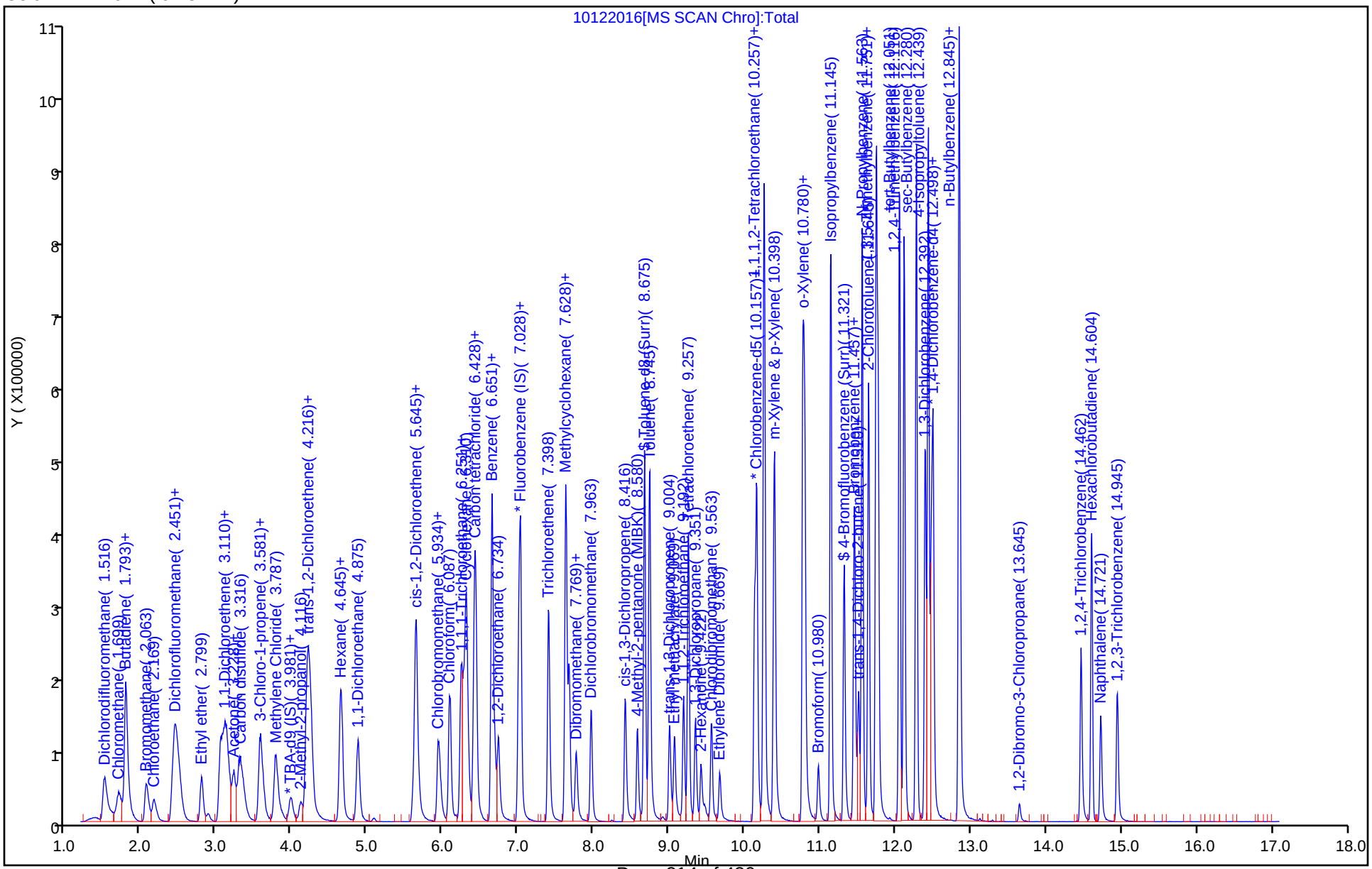
Report Date: 23-Dec-2019 07:47:57 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122016.d

Injection Date:	20-Dec-2019 13:49:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	16
Client ID:					
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)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

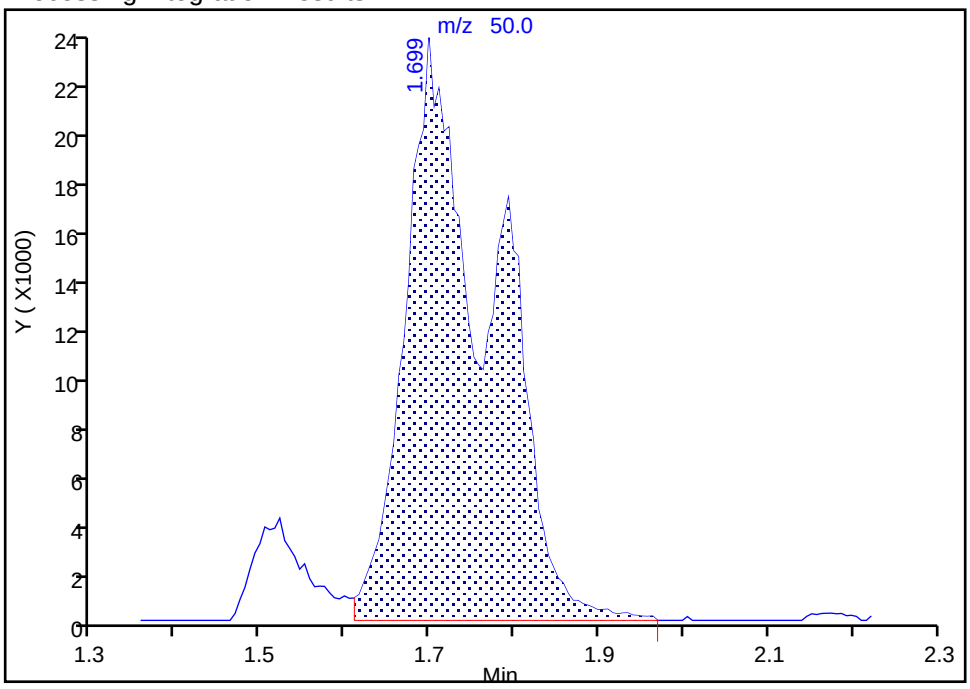
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122016.d				
Injection Date:	20-Dec-2019 13:49:30	Instrument ID:	CHHP10		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	16	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Chloromethane, CAS: 74-87-3

Signal: 1

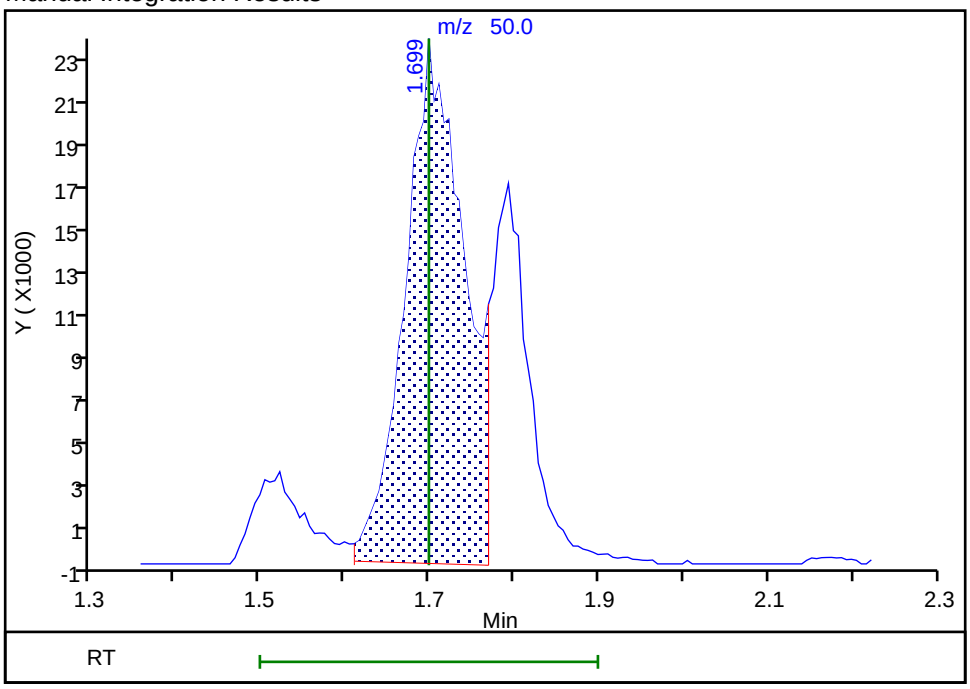
Processing Integration Results

RT: 1.70
Area: 161759
Amount: 93.042042
Amount Units: ng



Manual Integration Results

RT: 1.70
Area: 113011
Amount: 67.601791
Amount Units: ng



Reviewer: journetp, 20-Dec-2019 14:40:23
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122017.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 20-Dec-2019 14:16:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030094-017
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub3

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 23-Dec-2019 07:48:04 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: journetp Date: 23-Dec-2019 07:21:17

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.987	3.987	0.000	0	58989	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	265436	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	84	66380	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	91	110534	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.275	6.269	0.006	93	131607	100.0	99.1	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	112222	100.0	97.4	
$	7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	546710	100.0	102.3	
$	8 4-Bromofluorobenzene (Surr	95	11.322	11.321	0.001	95	177571	100.0	101.2	
	10 Dichlorodifluoromethane	85	1.510	1.516	-0.006	99	244321	100.0	103.4	
	11 Chloromethane	50	1.710	1.699	0.011	99	160418	100.0	91.9	
	13 Butadiene	39	1.799	1.793	0.006	89	144868	100.0	100.4	
	12 Vinyl chloride	62	1.816	1.816	0.000	98	175344	100.0	101.4	
	14 Bromomethane	94	2.069	2.063	0.006	91	97067	100.0	98.4	
	15 Chloroethane	64	2.175	2.169	0.006	99	72840	100.0	92.1	
	17 Dichlorofluoromethane	67	2.446	2.440	0.006	97	241349	100.0	97.5	
	16 Trichlorofluoromethane	101	2.457	2.451	0.006	95	303727	100.0	98.5	
	18 Ethyl ether	59	2.799	2.799	0.001	90	79223	100.0	95.1	
	20 1,1-Dichloroethene	96	3.057	3.051	0.006	97	143141	100.0	98.2	
	21 1,1,2-Trichloro-1,2,2-trif	101	3.122	3.128	-0.006	92	163826	100.0	99.5	
	22 Acetone	43	3.163	3.175	-0.012	100	57931	200.0	195.5	
	23 Iodomethane	142	3.240	3.228	0.012	99	264463	100.0	98.3	
	24 Carbon disulfide	76	3.322	3.316	0.006	99	420776	100.0	99.3	
	26 3-Chloro-1-propene	76	3.581	3.587	-0.006	90	77122	100.0	100.2	
	28 Methyl acetate	43	3.622	3.616	0.006	97	78479	200.0	205.0	
	29 Methylene Chloride	84	3.787	3.787	0.000	95	128660	100.0	95.6	
	32 2-Methyl-2-propanol	59	4.116	4.116	0.000	97	64654	1000.0	928.8	
	31 Acrylonitrile	53	4.193	4.181	0.012	100	204547	1000.0	1028.1	
	30 trans-1,2-Dichloroethene	96	4.204	4.204	0.000	99	149208	100.0	99.0	
	33 Methyl tert-butyl ether	73	4.251	4.245	0.006	96	251672	100.0	96.7	
	34 Hexane	57	4.657	4.645	0.012	91	238166	100.0	100.7	
	36 1,1-Dichloroethane	63	4.875	4.881	-0.006	96	246312	100.0	99.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.640	5.634	0.006	89	36961	100.0	102.0	
41 cis-1,2-Dichloroethene	96	5.645	5.645	0.000	85	151146	100.0	98.8	
43 2-Butanone (MEK)	43	5.681	5.675	0.006	100	60273	200.0	206.4	
46 Chlorobromomethane	128	5.945	5.934	0.011	91	67692	100.0	99.2	
48 Tetrahydrofuran	42	5.969	5.969	0.000	89	33433	200.0	190.6	
49 Chloroform	83	6.087	6.087	0.000	93	261209	100.0	101.0	
50 1,1,1-Trichloroethane	97	6.240	6.239	0.001	98	259474	100.0	99.3	
52 Cyclohexane	56	6.310	6.310	0.000	89	293562	100.0	99.0	
53 Carbon tetrachloride	117	6.416	6.416	0.000	96	263242	100.0	100.0	
54 1,1-Dichloropropene	75	6.434	6.434	0.000	95	210971	100.0	99.4	
55 Benzene	78	6.651	6.651	0.000	97	535958	100.0	98.9	
51 Isobutyl alcohol	41	6.692	6.686	0.006	90	50014	2500.0	2393.6	
56 1,2-Dichloroethane	62	6.739	6.739	0.000	99	145637	100.0	98.5	
59 n-Heptane	43	7.028	7.028	0.000	90	212638	100.0	97.4	
60 Trichloroethene	130	7.404	7.398	0.006	96	192481	100.0	100.6	
63 Methylcyclohexane	83	7.628	7.628	0.000	86	305972	100.0	99.2	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	93	119850	100.0	99.3	a
65 Dibromomethane	93	7.769	7.769	0.000	92	50519	100.0	98.1	
67 1,4-Dioxane	88	7.781	7.775	0.006	93	11247	2000.0	2089.2	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	164527	100.0	99.5	
71 cis-1,3-Dichloropropene	75	8.422	8.416	0.006	94	164471	100.0	108.4	
72 4-Methyl-2-pentanone (MIBK	43	8.581	8.580	0.001	95	120699	200.0	215.3	
73 Toluene	91	8.745	8.745	0.000	98	619291	100.0	98.7	
74 trans-1,3-Dichloropropene	75	9.010	9.004	0.006	92	134777	100.0	116.4	
75 Ethyl methacrylate	69	9.075	9.075	0.000	90	95611	100.0	103.7	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	89	83560	100.0	98.1	
77 Tetrachloroethene	164	9.257	9.257	0.000	97	160561	100.0	98.6	
78 1,3-Dichloropropane	76	9.351	9.351	0.000	90	131244	100.0	102.5	
79 2-Hexanone	43	9.422	9.422	0.000	93	96667	200.0	198.9	
81 Chlorodibromomethane	129	9.563	9.563	0.000	91	118673	100.0	97.0	
82 Ethylene Dibromide	107	9.675	9.669	0.006	98	76675	100.0	106.3	
83 Chlorobenzene	112	10.163	10.163	0.000	98	426001	100.0	98.0	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.257	0.000	94	168599	100.0	99.8	
85 Ethylbenzene	106	10.263	10.263	0.000	98	241573	100.0	99.0	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	298983	100.0	96.5	
88 o-Xylene	106	10.775	10.774	0.001	95	308760	100.0	103.2	
89 Styrene	104	10.798	10.798	0.000	95	450944	100.0	101.8	
90 Bromoform	173	10.980	10.980	0.000	97	61331	100.0	99.6	
91 Isopropylbenzene	105	11.145	11.139	0.006	95	834331	100.0	98.5	
94 Bromobenzene	156	11.457	11.457	0.000	85	181302	100.0	100.2	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	95	94521	100.0	104.7	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	84	20241	100.0	99.3	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	84	32387	100.0	99.2	
97 N-Propylbenzene	120	11.563	11.563	0.000	98	254322	100.0	97.1	
98 2-Chlorotoluene	126	11.645	11.645	0.000	98	205513	100.0	95.7	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	96	733278	100.0	97.8	
100 4-Chlorotoluene	126	11.769	11.769	0.001	96	209761	100.0	97.3	
101 tert-Butylbenzene	119	12.051	12.057	-0.006	91	704768	100.0	96.9	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	96	718645	100.0	99.6	
104 sec-Butylbenzene	105	12.280	12.280	0.000	93	976684	100.0	98.7	
105 1,3-Dichlorobenzene	146	12.398	12.392	0.006	97	376139	100.0	98.2	
106 4-Isopropyltoluene	119	12.439	12.439	0.000	97	932308	100.0	100.8	

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	386826	100.0	97.4	
110 n-Butylbenzene	91	12.845	12.845	0.000	97	672144	100.0	104.4	
111 1,2-Dichlorobenzene	146	12.851	12.857	-0.006	98	340374	100.0	99.6	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.651	-0.006	88	15244	100.0	103.8	
114 1,2,4-Trichlorobenzene	180	14.463	14.462	0.001	94	146050	100.0	114.7	
115 Hexachlorobutadiene	225	14.604	14.610	-0.006	97	118109	100.0	98.5	
116 Naphthalene	128	14.727	14.721	0.006	96	226188	100.0	103.6	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	97	110026	100.0	110.1	
S 130 1,2-Dichloroethene, Total	96				0		200.0	197.8	
S 129 Xylenes, Total	106				0		200.0	199.7	
S 145 Total BTEX	1				0			496.3	
S 131 1,3-Dichloropropene, Total	1				0		200.0	224.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VOA8260INT_00102	Amount Added:	2.00	Units: uL
voaWKetmix1st_00021	Amount Added:	4.00	Units: uL
VOA8260VOAPRI_00384	Amount Added:	4.00	Units: uL
VOA8260SURR_00102	Amount Added:	4.00	Units: uL

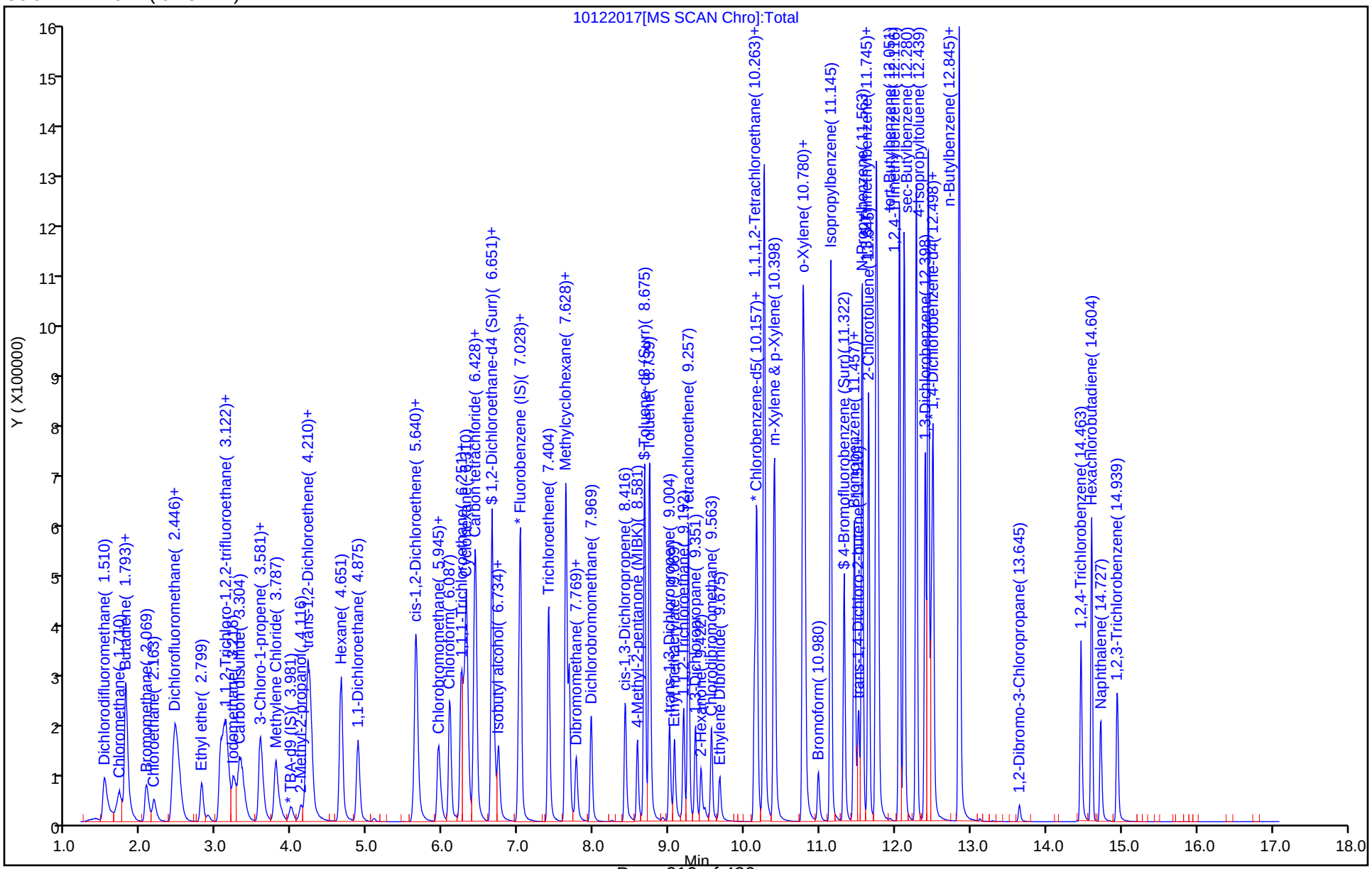
Report Date: 23-Dec-2019 07:48:05 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122017.d

Injection Date:	20-Dec-2019 14:16:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	17
Client ID:					
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)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

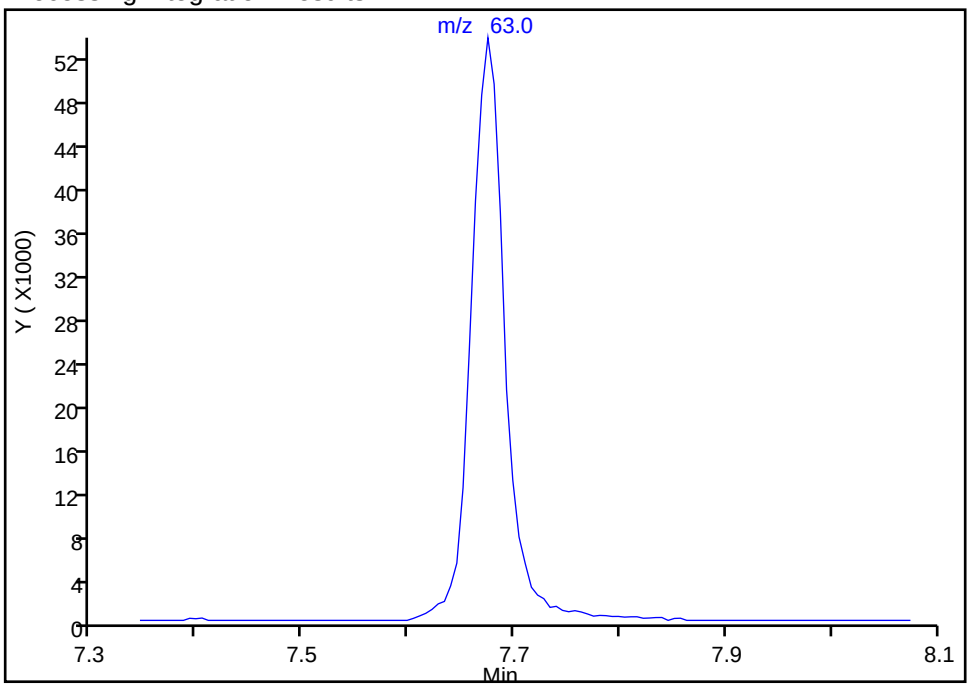
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122017.d
Injection Date: 20-Dec-2019 14:16:30 Instrument ID: CHHP10
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

64 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

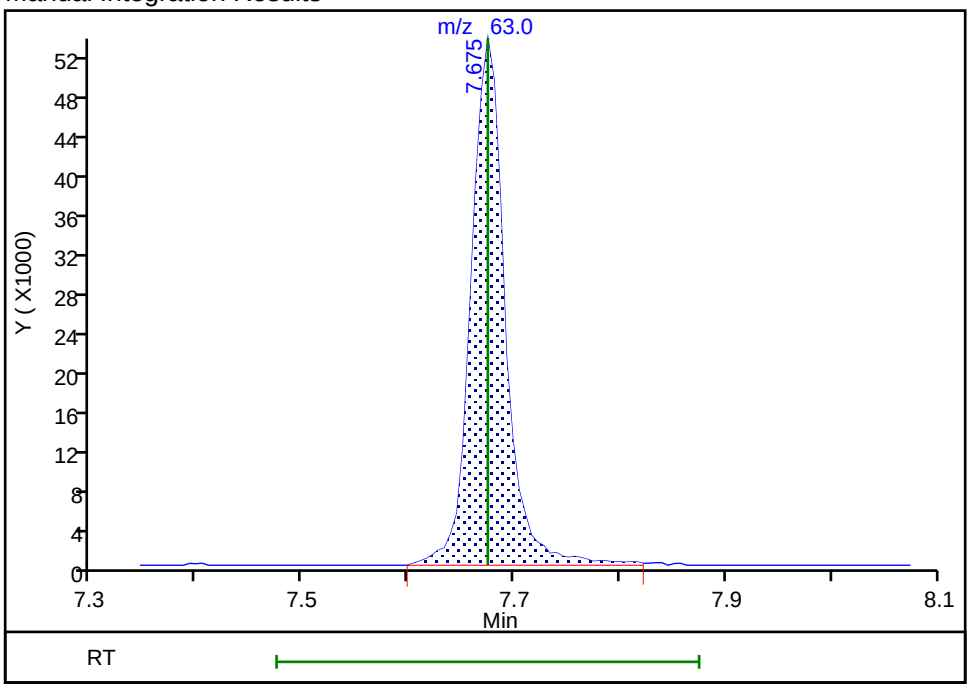
Not Detected
Expected RT: 7.67

Processing Integration Results



Manual Integration Results

RT: 7.67
Area: 119850
Amount: 99.338808
Amount Units: ng



Reviewer: journetp, 23-Dec-2019 07:21:13
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122018.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 20-Dec-2019 14:44:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030094-018
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub3

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 23-Dec-2019 07:48:17 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: journetp Date: 21-Dec-2019 16:24:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.981	3.987	-0.006	0	64077	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	275689	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	82	67926	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	93	117464	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.269	0.006	93	239563	175.0	173.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	197484	175.0	165.0	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	994169	175.0	181.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.321	11.321	0.000	94	331939	175.0	184.9	
10 Dichlorodifluoromethane	85	1.516	1.516	0.000	99	428448	175.0	174.5	
11 Chloromethane	50	1.699	1.699	0.000	96	297157	175.0	164.0	a
13 Butadiene	39	1.793	1.793	0.000	87	255527	175.0	170.5	
12 Vinyl chloride	62	1.822	1.816	0.006	98	310764	175.0	173.1	
14 Bromomethane	94	2.069	2.063	0.006	90	171082	175.0	167.0	
15 Chloroethane	64	2.169	2.169	0.000	99	139765	175.0	170.2	
17 Dichlorofluoromethane	67	2.457	2.440	0.017	97	429527	175.0	167.0	
16 Trichlorofluoromethane	101	2.469	2.451	0.018	97	534026	175.0	166.7	
18 Ethyl ether	59	2.804	2.799	0.006	92	146189	175.0	168.9	
20 1,1-Dichloroethene	96	3.057	3.051	0.006	97	264108	175.0	174.4	
21 1,1,2-Trichloro-1,2,2-trif	101	3.122	3.128	-0.006	90	286558	175.0	167.6	
22 Acetone	43	3.175	3.175	0.000	100	102425	350.0	332.7	
23 Iodomethane	142	3.240	3.228	0.012	98	480590	175.0	172.0	
24 Carbon disulfide	76	3.316	3.316	0.000	99	782121	175.0	177.7	
26 3-Chloro-1-propene	76	3.593	3.587	0.006	90	142294	175.0	178.1	
28 Methyl acetate	43	3.622	3.616	0.006	97	133979	350.0	337.0	
29 Methylene Chloride	84	3.787	3.787	0.000	92	222453	175.0	162.0	
32 2-Methyl-2-propanol	59	4.116	4.116	0.000	98	132922	1750.0	1757.9	
31 Acrylonitrile	53	4.187	4.181	0.006	93	355418	1750.0	1720.0	a
30 trans-1,2-Dichloroethene	96	4.216	4.204	0.012	98	268741	175.0	171.6	
33 Methyl tert-butyl ether	73	4.251	4.245	0.006	98	445705	175.0	164.9	
34 Hexane	57	4.651	4.645	0.006	89	417553	175.0	170.0	
36 1,1-Dichloroethane	63	4.875	4.881	-0.006	96	438195	175.0	170.7	

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	91	67840	175.0	180.3	
41 cis-1,2-Dichloroethene	96	5.651	5.645	0.006	81	278345	175.0	175.2	
43 2-Butanone (MEK)	43	5.681	5.675	0.006	100	111699	350.0	368.3	
46 Chlorobromomethane	128	5.939	5.934	0.005	88	121995	175.0	172.1	
48 Tetrahydrofuran	42	5.969	5.969	0.000	85	58676	350.0	350.9	
49 Chloroform	83	6.092	6.087	0.005	93	465801	175.0	176.1	
50 1,1,1-Trichloroethane	97	6.245	6.239	0.006	97	478610	175.0	176.4	
52 Cyclohexane	56	6.316	6.310	0.006	89	533315	175.0	173.2	
53 Carbon tetrachloride	117	6.422	6.416	0.006	96	478524	175.0	175.0	
54 1,1-Dichloropropene	75	6.434	6.434	0.000	95	388148	175.0	176.0	
55 Benzene	78	6.657	6.651	0.006	97	970068	175.0	172.3	
51 Isobutyl alcohol	41	6.692	6.686	0.006	94	88595	4375.0	4390.6	
56 1,2-Dichloroethane	62	6.739	6.739	0.000	98	253307	175.0	164.9	
59 n-Heptane	43	7.028	7.028	0.000	90	394437	175.0	173.9	
60 Trichloroethene	130	7.404	7.398	0.006	94	353266	175.0	177.8	
63 Methylcyclohexane	83	7.633	7.628	0.005	87	572136	175.0	178.6	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	94	208867	175.0	166.7	a
65 Dibromomethane	93	7.763	7.769	-0.006	90	89525	175.0	167.4	
67 1,4-Dioxane	88	7.769	7.775	-0.006	46	19480	3500.0	3448.1	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	301078	175.0	175.3	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	94	300100	175.0	190.5	
72 4-Methyl-2-pentanone (MIBK	43	8.580	8.580	0.000	95	201429	350.0	351.2	
73 Toluene	91	8.739	8.745	-0.006	98	1123613	175.0	175.0	
74 trans-1,3-Dichloropropene	75	9.004	9.004	0.000	92	234916	175.0	198.3	
75 Ethyl methacrylate	69	9.069	9.075	-0.006	89	164137	175.0	172.1	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	90	145063	175.0	166.4	
77 Tetrachloroethene	164	9.257	9.257	0.000	96	292980	175.0	175.9	
78 1,3-Dichloropropane	76	9.345	9.351	-0.006	92	223010	175.0	170.1	
79 2-Hexanone	43	9.422	9.422	0.000	92	177549	350.0	345.7	
81 Chlorodibromomethane	129	9.563	9.563	0.000	88	222977	175.0	178.2	
82 Ethylene Dibromide	107	9.669	9.669	0.000	100	139432	175.0	188.9	
83 Chlorobenzene	112	10.163	10.163	0.000	98	755683	175.0	169.8	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.257	0.000	94	288213	175.0	166.8	
85 Ethylbenzene	106	10.263	10.263	0.000	97	449501	175.0	180.0	
86 m-Xylene & p-Xylene	106	10.392	10.398	-0.006	0	567915	175.0	179.1	
88 o-Xylene	106	10.774	10.774	0.000	96	548222	175.0	179.1	
89 Styrene	104	10.798	10.798	0.000	94	799802	175.0	176.4	
90 Bromoform	173	10.974	10.980	-0.006	97	112619	175.0	178.8	
91 Isopropylbenzene	105	11.139	11.139	0.000	95	1558988	175.0	179.9	
94 Bromobenzene	156	11.457	11.457	0.000	87	314609	175.0	163.6	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	97	150156	175.0	162.5	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	86	38698	175.0	175.7	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	84	54730	175.0	157.8	
97 N-Propylbenzene	120	11.563	11.563	0.000	98	462865	175.0	166.3	
98 2-Chlorotoluene	126	11.651	11.645	0.006	98	372343	175.0	163.2	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	96	1305915	175.0	163.9	
100 4-Chlorotoluene	126	11.774	11.769	0.006	96	367660	175.0	160.5	
101 tert-Butylbenzene	119	12.057	12.057	0.000	90	1256445	175.0	162.6	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	96	1253646	175.0	163.5	
104 sec-Butylbenzene	105	12.280	12.280	0.000	93	1678499	175.0	159.6	
105 1,3-Dichlorobenzene	146	12.398	12.392	0.006	97	686705	175.0	168.7	
106 4-Isopropyltoluene	119	12.439	12.439	0.000	97	1642612	175.0	167.2	

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	96	708073	175.0	167.8	
110 n-Butylbenzene	91	12.845	12.845	0.000	97	1212534	175.0	177.2	
111 1,2-Dichlorobenzene	146	12.851	12.857	-0.006	99	582432	175.0	160.4	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.651	-0.006	91	27293	175.0	171.7	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	95	261832	175.0	193.5	
115 Hexachlorobutadiene	225	14.604	14.610	-0.006	97	207217	175.0	162.6	
116 Naphthalene	128	14.721	14.721	0.000	96	425843	175.0	164.9	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	97	188413	175.0	177.4	
S 130 1,2-Dichloroethene, Total	96				0		350.0	346.9	
S 129 Xylenes, Total	106				0		350.0	358.2	
S 145 Total BTEX	1				0			885.5	
S 131 1,3-Dichloropropene, Total	1				0		350.0	388.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VOA8260INT_00102	Amount Added:	2.00	Units: uL
voaWKetmix1st_00021	Amount Added:	7.00	Units: uL
VOA8260VOAPRI_00384	Amount Added:	7.00	Units: uL
VOA8260SURR_00102	Amount Added:	7.00	Units: uL

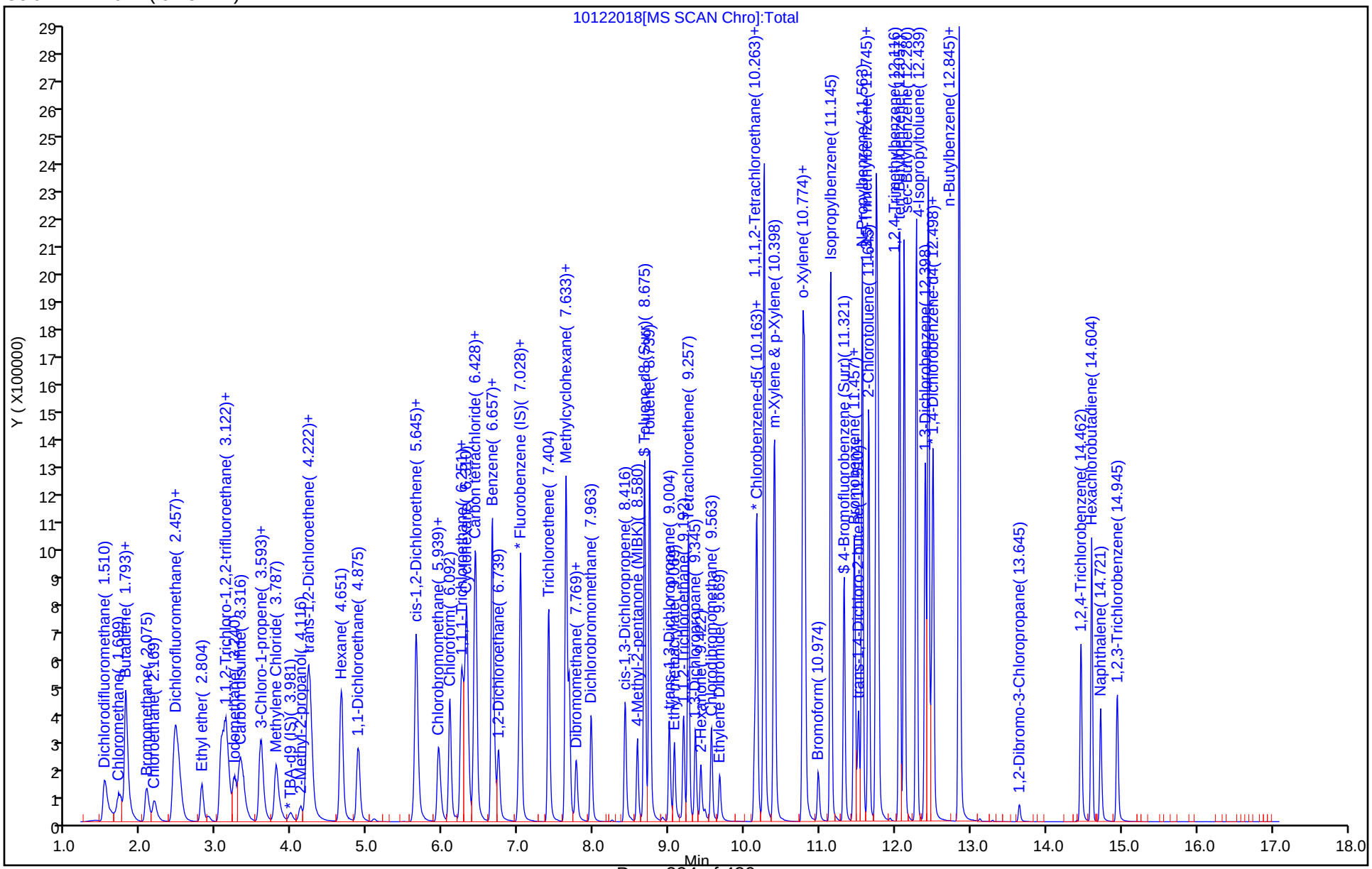
Report Date: 23-Dec-2019 07:48:20 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122018.d

Injection Date:	20-Dec-2019 14:44:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	18
Client ID:					
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)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

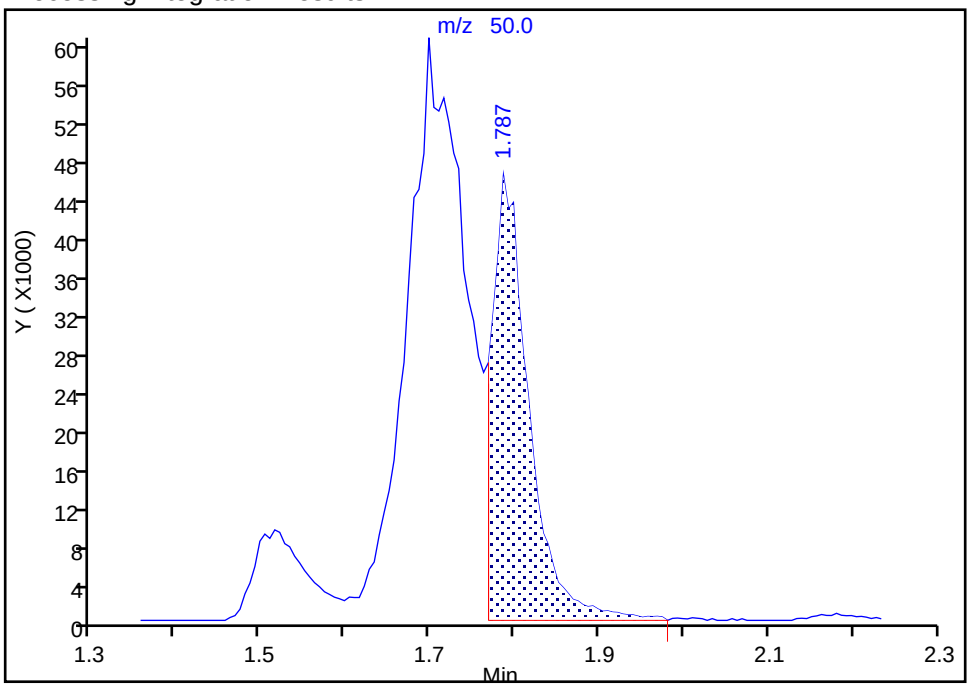
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122018.d
Injection Date: 20-Dec-2019 14:44:30 Instrument ID: CHHP10
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 1

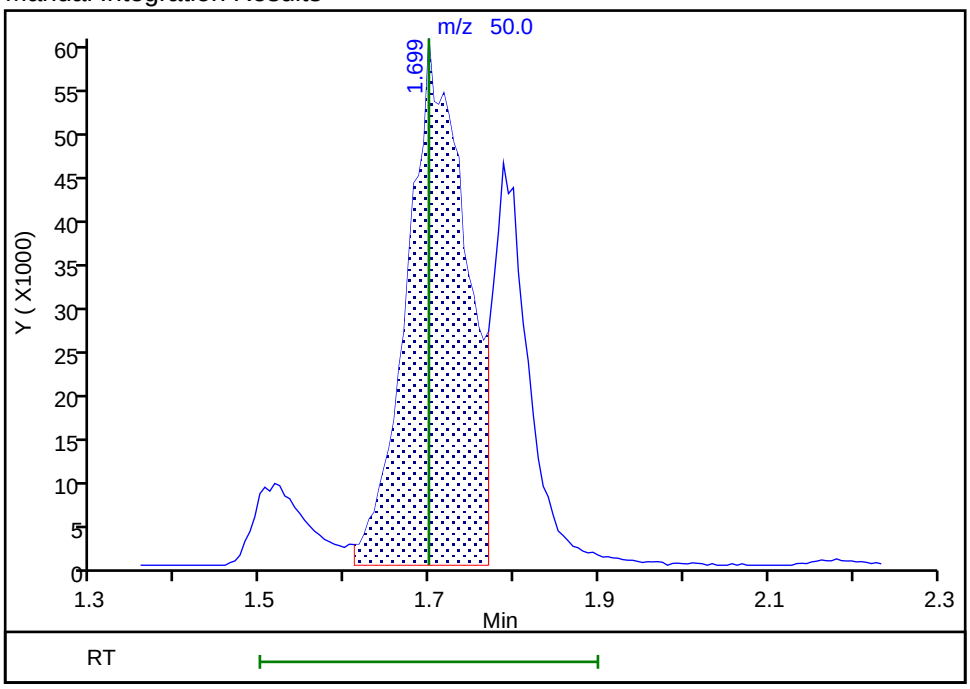
Processing Integration Results

RT: 1.79
Area: 139373
Amount: 78.586093
Amount Units: ng



Manual Integration Results

RT: 1.70
Area: 297157
Amount: 163.9557
Amount Units: ng



Reviewer: journetp, 21-Dec-2019 16:23:01
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

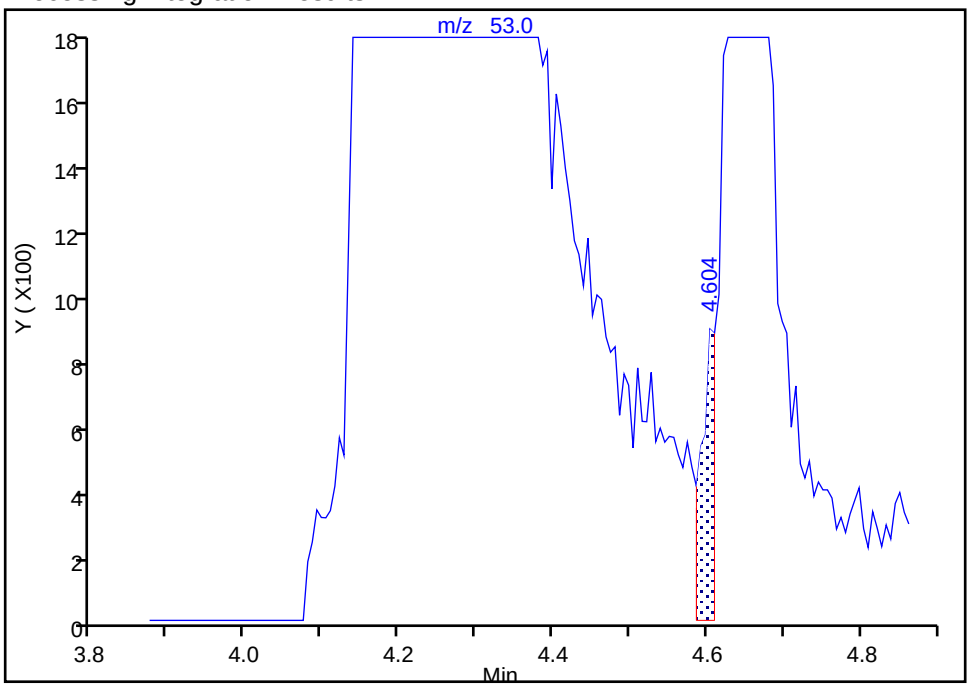
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122018.d				
Injection Date:	20-Dec-2019 14:44:30	Instrument ID:	CHHP10		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

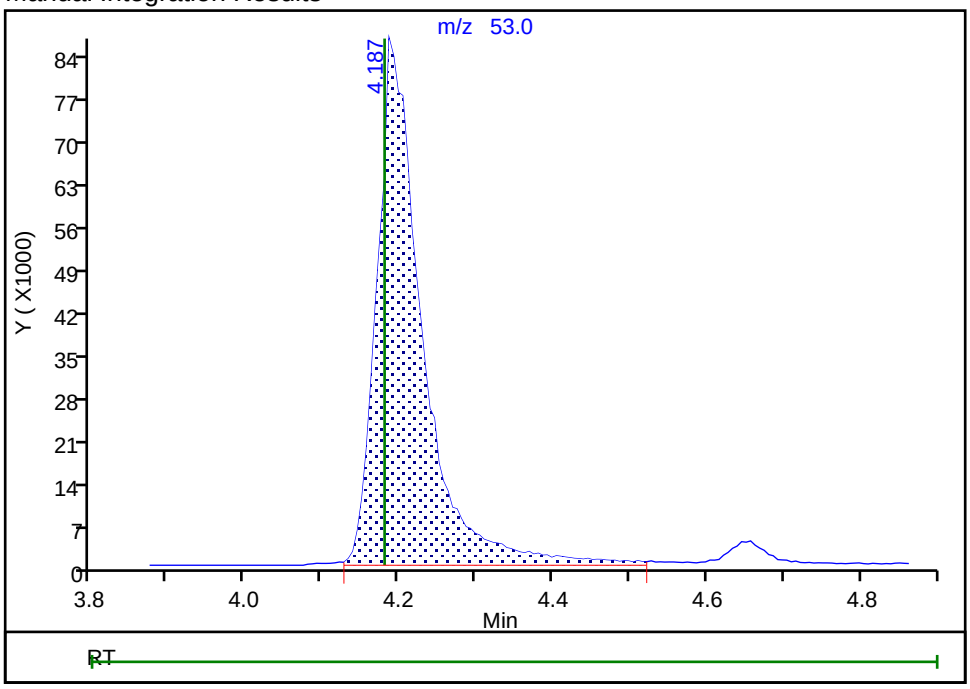
Processing Integration Results

RT: 4.60
Area: 1110
Amount: 6.419940
Amount Units: ng



Manual Integration Results

RT: 4.19
Area: 355418
Amount: 1719.9662
Amount Units: ng



Reviewer: journetp, 21-Dec-2019 16:22:24

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

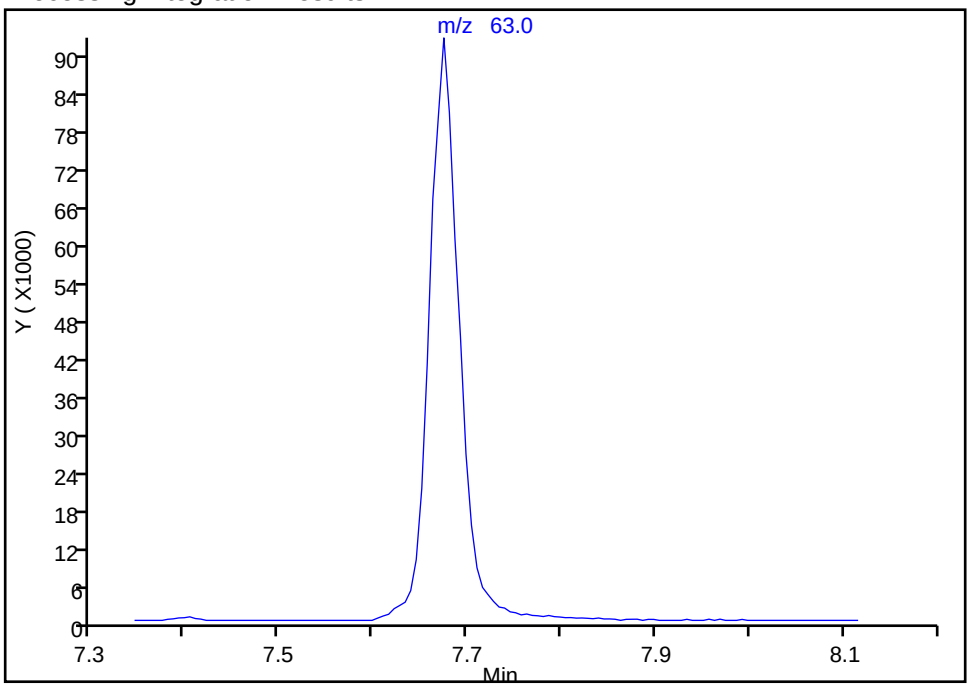
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122018.d
Injection Date: 20-Dec-2019 14:44:30 Instrument ID: CHHP10
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

64 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

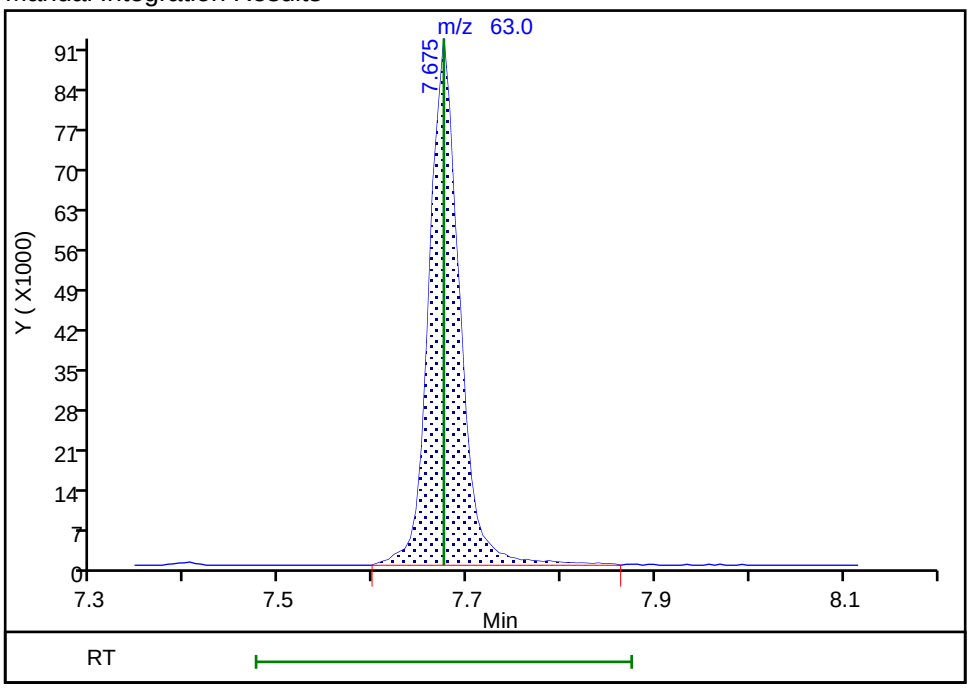
Not Detected
Expected RT: 7.67

Processing Integration Results



Manual Integration Results

RT: 7.67
Area: 208867
Amount: 166.6829
Amount Units: ng



Reviewer: journetp, 21-Dec-2019 16:22:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122019.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 20-Dec-2019 15:11:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030094-019
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub3

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 23-Dec-2019 07:48:32 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: journetp Date: 23-Dec-2019 07:22:34

	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	3.987	0.011	0	99996	1000.0	1000.0	
*	2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	301689	50.0	50.0	
*	3 Chlorobenzene-d5	119	10.133	10.133	0.000	82	79363	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	91	133114	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	6.269	6.269	0.000	94	307412	200.0	203.7	
$	6 1,2-Dichloroethane-d4 (Sur	65	6.645	6.651	-0.006	0	275277	200.0	210.1	
$	7 Toluene-d8 (Surr)	98	8.674	8.675	-0.001	93	1221363	200.0	191.1	
$	8 4-Bromofluorobenzene (Surr	95	11.321	11.321	0.000	95	448711	200.0	213.9	
	10 Dichlorodifluoromethane	85	1.510	1.516	-0.006	99	494007	200.0	183.9	
	11 Chloromethane	50	1.693	1.699	-0.007	99	491007	200.0	247.6	
	13 Butadiene	39	1.787	1.793	-0.006	91	293699	200.0	179.1	
	12 Vinyl chloride	62	1.810	1.816	-0.006	97	349705	200.0	178.0	
	14 Bromomethane	94	2.063	2.063	0.000	91	196025	200.0	174.8	
	15 Chloroethane	64	2.163	2.169	-0.006	99	144619	200.0	160.9	
	17 Dichlorofluoromethane	67	2.451	2.440	0.011	96	479763	200.0	170.5	
	16 Trichlorofluoromethane	101	2.451	2.451	0.000	97	583268	200.0	166.4	
	18 Ethyl ether	59	2.798	2.799	0.000	90	184909	200.0	195.3	
	20 1,1-Dichloroethene	96	3.051	3.051	0.000	96	288571	200.0	174.1	
	21 1,1,2-Trichloro-1,2,2-trif	101	3.122	3.128	-0.006	91	320456	200.0	171.2	
	22 Acetone	43	3.169	3.175	-0.006	100	160356	400.0	476.0	
	23 Iodomethane	142	3.228	3.228	0.000	98	545068	200.0	178.3	
	24 Carbon disulfide	76	3.322	3.316	0.006	99	891005	200.0	185.0	
	26 3-Chloro-1-propene	76	3.569	3.587	-0.018	90	171042	200.0	195.6	
	28 Methyl acetate	43	3.628	3.616	0.012	100	241361	400.0	554.8	a
	29 Methylene Chloride	84	3.781	3.787	-0.006	98	290490	200.0	194.2	
	32 2-Methyl-2-propanol	59	4.122	4.116	0.006	99	239660	2000.0	2031.0	
	31 Acrylonitrile	53	4.192	4.181	0.011	97	596217	2000.0	2636.6	
	30 trans-1,2-Dichloroethene	96	4.204	4.204	0.000	99	307930	200.0	179.7	
	33 Methyl tert-butyl ether	73	4.251	4.245	0.006	95	650917	200.0	220.0	
	34 Hexane	57	4.639	4.645	-0.006	90	491634	200.0	182.9	
	36 1,1-Dichloroethane	63	4.869	4.881	-0.012	96	511625	200.0	182.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.633	5.634	-0.001	88	74360	200.0	180.6	
41 cis-1,2-Dichloroethene	96	5.645	5.645	0.000	81	328971	200.0	189.3	
43 2-Butanone (MEK)	43	5.680	5.675	0.005	100	178394	400.0	537.5	
46 Chlorobromomethane	128	5.933	5.934	-0.001	90	168332	200.0	217.1	
48 Tetrahydrofuran	42	5.969	5.969	0.000	88	104299	400.0	NQ	
49 Chloroform	83	6.086	6.087	-0.001	93	561240	200.0	194.3	
50 1,1,1-Trichloroethane	97	6.239	6.239	0.000	97	523448	200.0	176.3	
52 Cyclohexane	56	6.316	6.310	0.006	90	611162	200.0	181.3	
53 Carbon tetrachloride	117	6.416	6.416	0.000	97	533837	200.0	178.5	
54 1,1-Dichloropropene	75	6.433	6.434	-0.001	96	453283	200.0	187.8	
55 Benzene	78	6.651	6.651	0.000	97	1175509	200.0	190.8	
51 Isobutyl alcohol	41	6.692	6.686	0.006	96	167735	5000.0	NQ	
56 1,2-Dichloroethane	62	6.739	6.739	0.000	98	353697	200.0	210.4	
59 n-Heptane	43	7.022	7.028	-0.006	91	453530	200.0	182.7	
60 Trichloroethene	130	7.404	7.398	0.006	93	417461	200.0	192.0	
63 Methylcyclohexane	83	7.627	7.628	-0.001	88	647012	200.0	184.6	
64 1,2-Dichloropropane	63	7.674	7.675	-0.001	93	271509	200.0	198.0	
65 Dibromomethane	93	7.763	7.769	-0.006	93	136863	200.0	233.8	
67 1,4-Dioxane	88	7.774	7.775	-0.001	93	33575	4000.0	5400.0	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	387389	200.0	206.1	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	96	415914	200.0	241.3	
72 4-Methyl-2-pentanone (MIBK	43	8.574	8.580	-0.006	95	370535	400.0	552.9	
73 Toluene	91	8.739	8.745	-0.006	98	1365263	200.0	182.0	
74 trans-1,3-Dichloropropene	75	8.998	9.004	-0.006	92	357920	200.0	258.5	
75 Ethyl methacrylate	69	9.069	9.075	-0.007	89	270187	200.0	241.3	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	90	215202	200.0	211.2	
77 Tetrachloroethene	164	9.257	9.257	0.000	96	330686	200.0	169.9	
78 1,3-Dichloropropane	76	9.351	9.351	0.000	91	328203	200.0	214.3	
79 2-Hexanone	43	9.421	9.422	-0.001	92	290557	400.0	478.5	
81 Chlorodibromomethane	129	9.563	9.563	0.000	89	308931	200.0	211.3	
82 Ethylene Dibromide	107	9.668	9.669	-0.001	98	208452	200.0	241.7	
83 Chlorobenzene	112	10.163	10.163	0.000	98	975199	200.0	187.6	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.257	0.000	95	379999	200.0	188.2	
85 Ethylbenzene	106	10.263	10.263	0.000	97	535653	200.0	183.6	
86 m-Xylene & p-Xylene	106	10.392	10.398	-0.006	0	689500	200.0	186.1	
88 o-Xylene	106	10.774	10.774	0.000	97	649763	200.0	181.7	
89 Styrene	104	10.798	10.798	0.000	95	1045779	200.0	197.4	
90 Bromoform	173	10.980	10.980	0.000	98	182954	200.0	248.5	
91 Isopropylbenzene	105	11.145	11.139	0.006	94	1865730	200.0	184.3	
94 Bromobenzene	156	11.451	11.457	-0.006	89	411781	200.0	189.0	
93 1,1,2,2-Tetrachloroethane	83	11.462	11.463	-0.001	96	255916	200.0	237.1	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	87	69954	200.0	278.1	
95 1,2,3-Trichloropropane	110	11.515	11.516	-0.001	86	88401	200.0	224.9	
97 N-Propylbenzene	120	11.562	11.563	-0.001	98	566483	200.0	179.6	
98 2-Chlorotoluene	126	11.645	11.645	0.000	98	452417	200.0	175.0	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	95	1562402	200.0	173.0	
100 4-Chlorotoluene	126	11.774	11.769	0.006	98	475567	200.0	183.2	
101 tert-Butylbenzene	119	12.057	12.057	0.000	90	1505100	200.0	171.8	
103 1,2,4-Trimethylbenzene	105	12.121	12.116	0.005	96	1522442	200.0	175.3	
104 sec-Butylbenzene	105	12.280	12.280	0.000	93	1981043	200.0	166.2	
105 1,3-Dichlorobenzene	146	12.392	12.392	0.000	97	871433	200.0	188.9	
106 4-Isopropyltoluene	119	12.439	12.439	0.000	97	1928836	200.0	173.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.504	12.498	0.006	96	888153	200.0	185.7	
110 n-Butylbenzene	91	12.845	12.845	0.000	97	1382184	200.0	178.3	
111 1,2-Dichlorobenzene	146	12.851	12.857	-0.006	99	760939	200.0	184.9	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.651	-0.006	93	49157	200.0	270.0	
114 1,2,4-Trichlorobenzene	180	14.462	14.462	0.000	95	338951	200.0	221.0	
115 Hexachlorobutadiene	225	14.603	14.610	-0.007	97	243891	200.0	168.8	
116 Naphthalene	128	14.721	14.721	0.000	96	641312	200.0	206.1	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	97	262054	200.0	217.7	
S 130 1,2-Dichloroethene, Total	96				0		400.0	369.0	
S 129 Xylenes, Total	106				0		400.0	367.8	
S 145 Total BTEX	1				0			924.2	
S 131 1,3-Dichloropropene, Total	1				0		400.0	499.8	

QC Flag Legend

Processing Flags
NQ - Not Quantifiable
Review Flags
a - User Assigned ID

Reagents:

VOA8260INT_00102	Amount Added:	2.00	Units: uL
voaWKetmix1st_00021	Amount Added:	8.00	Units: uL
VOA8260VOAPRI_00384	Amount Added:	8.00	Units: uL
VOA8260SURR_00102	Amount Added:	8.00	Units: uL

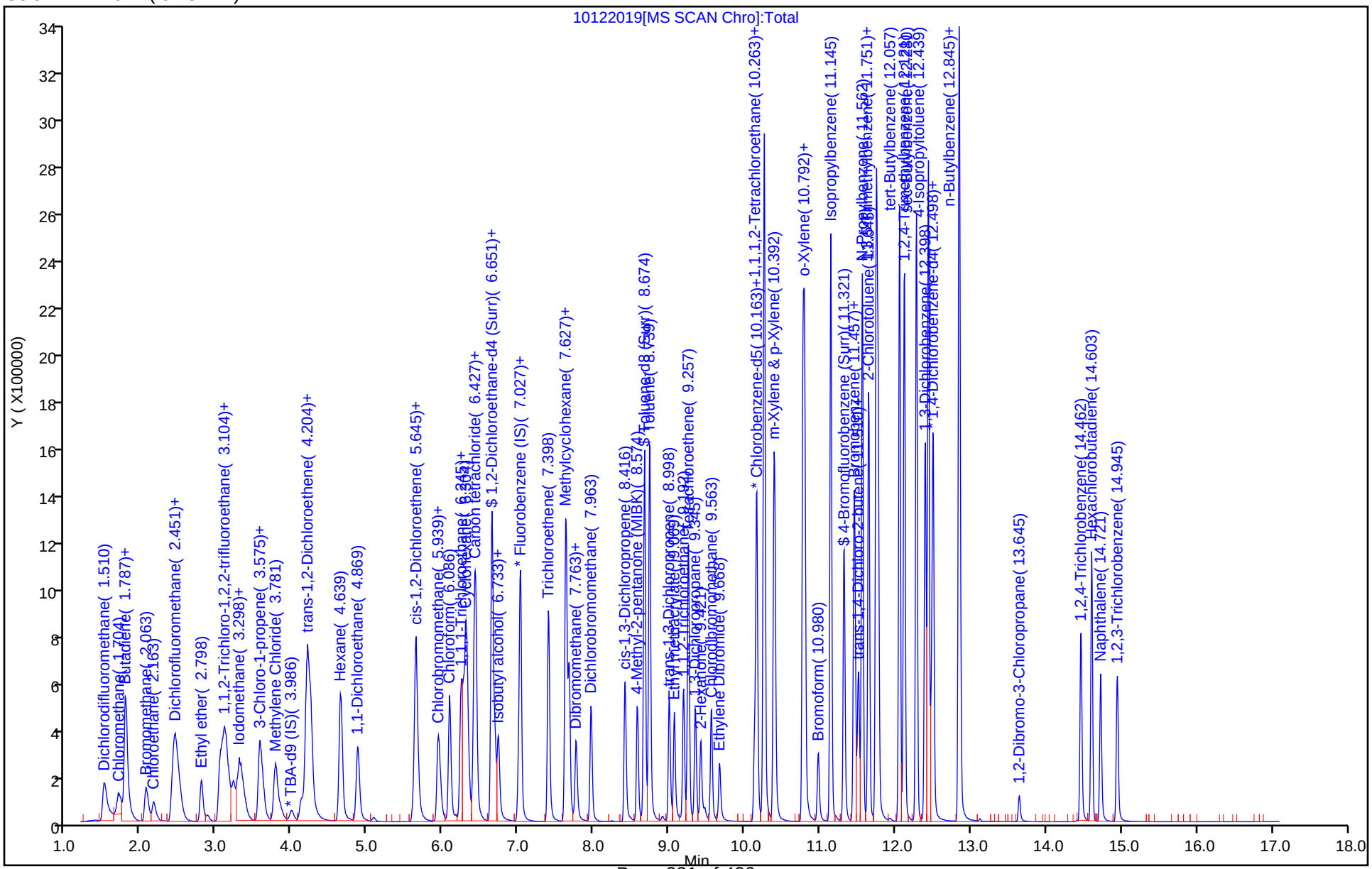
Report Date: 23-Dec-2019 07:48:34 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122019.d

Injection Date:	20-Dec-2019 15:11:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	19
Client ID:					
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

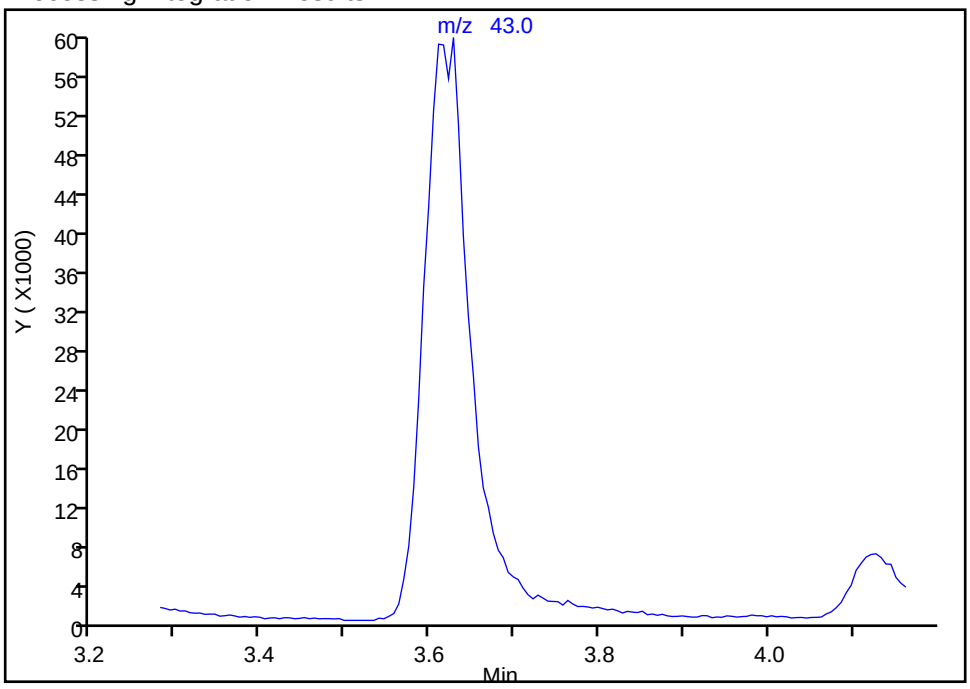
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122019.d
Injection Date: 20-Dec-2019 15:11:30 Instrument ID: CHHP10
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

28 Methyl acetate, CAS: 79-20-9

Signal: 1

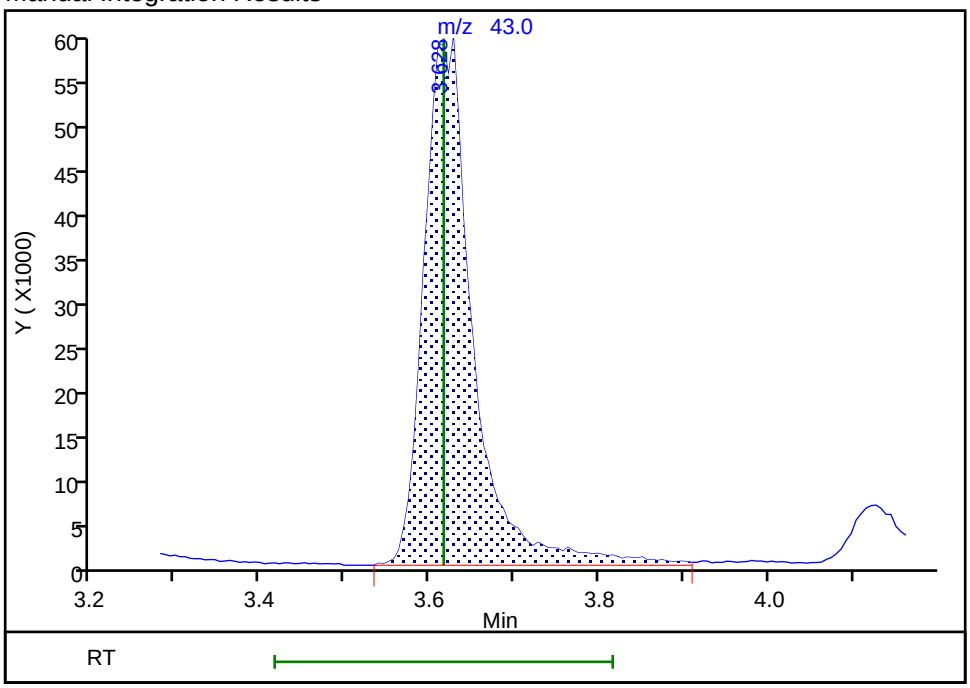
Not Detected
Expected RT: 3.62

Processing Integration Results



Manual Integration Results

RT: 3.63
Area: 241361
Amount: 554.8108
Amount Units: ng



Reviewer: journetp, 23-Dec-2019 07:22:18
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122020.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 20-Dec-2019 15:38:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030094-020
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub3

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 23-Dec-2019 07:48:43 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: journetp Date: 23-Dec-2019 07:23:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.004	3.987	0.017	0	89671	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	315596	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	84	77034	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	93	128454	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.269	0.006	94	366400	250.0	232.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	321928	250.0	234.9	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	92	1455391	250.0	234.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.321	0.001	94	536530	250.0	263.5	
10 Dichlorodifluoromethane	85	1.505	1.516	-0.011	99	652212	250.0	232.1	
11 Chloromethane	50	1.699	1.699	0.000	99	687631	250.0	331.4	
13 Butadiene	39	1.793	1.793	0.000	87	394559	250.0	230.0	
12 Vinyl chloride	62	1.810	1.816	-0.006	98	482855	250.0	234.9	
14 Bromomethane	94	2.063	2.063	0.000	90	256055	250.0	218.3	
15 Chloroethane	64	2.169	2.169	0.000	99	173471	250.0	184.5	
17 Dichlorofluoromethane	67	2.446	2.440	0.006	97	621099	250.0	211.0	
16 Trichlorofluoromethane	101	2.446	2.451	-0.005	97	768627	250.0	209.6	
18 Ethyl ether	59	2.799	2.799	0.001	93	231735	250.0	233.9	
20 1,1-Dichloroethene	96	3.046	3.051	-0.005	98	406088	250.0	234.2	
21 1,1,2-Trichloro-1,2,2-trif	101	3.122	3.128	-0.006	93	439343	250.0	224.4	
22 Acetone	43	3.175	3.175	0.000	100	192295	500.0	545.7	
23 Iodomethane	142	3.234	3.228	0.006	99	724959	250.0	226.7	
24 Carbon disulfide	76	3.322	3.316	0.006	99	1190788	250.0	236.4	
26 3-Chloro-1-propene	76	3.575	3.587	-0.012	90	229263	250.0	250.6	
28 Methyl acetate	43	3.622	3.616	0.006	99	274015	500.0	602.1	
29 Methylene Chloride	84	3.787	3.787	0.000	94	366764	250.0	235.3	
32 2-Methyl-2-propanol	59	4.128	4.116	0.012	99	282524	2500.0	2669.9	
31 Acrylonitrile	53	4.187	4.181	0.006	100	710636	2500.0	3004.1	
30 trans-1,2-Dichloroethene	96	4.204	4.204	0.000	98	421891	250.0	235.4	
33 Methyl tert-butyl ether	73	4.257	4.245	0.012	95	794914	250.0	256.9	
34 Hexane	57	4.651	4.645	0.006	89	652559	250.0	232.0	
36 1,1-Dichloroethane	63	4.875	4.881	-0.006	96	680343	250.0	231.5	

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	89	96987	250.0	225.2	
41 cis-1,2-Dichloroethene	96	5.646	5.645	0.001	82	430274	250.0	236.6	
43 2-Butanone (MEK)	43	5.681	5.675	0.006	100	209692	500.0	604.0	
46 Chlorobromomethane	128	5.934	5.934	0.000	91	200658	250.0	247.3	
48 Tetrahydrofuran	42	5.969	5.969	0.000	86	120975	500.0	NQ	
49 Chloroform	83	6.087	6.087	0.000	93	736249	250.0	244.5	
50 1,1,1-Trichloroethane	97	6.245	6.239	0.006	97	689304	250.0	221.9	
52 Cyclohexane	56	6.310	6.310	0.000	90	815047	250.0	231.2	
53 Carbon tetrachloride	117	6.416	6.416	0.000	96	706442	250.0	225.7	
54 1,1-Dichloropropene	75	6.434	6.434	0.000	96	605496	250.0	239.8	
55 Benzene	78	6.651	6.651	0.000	97	1562145	250.0	242.4	
51 Isobutyl alcohol	41	6.693	6.686	0.006	96	191701	6250.0	NQ	
56 1,2-Dichloroethane	62	6.734	6.739	-0.005	98	429755	250.0	244.4	
59 n-Heptane	43	7.028	7.028	0.000	89	609853	250.0	234.9	
60 Trichloroethene	130	7.398	7.398	0.000	95	559614	250.0	246.0	
63 Methylcyclohexane	83	7.634	7.628	0.006	89	870861	250.0	237.5	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	94	362005	250.0	252.4	
65 Dibromomethane	93	7.763	7.769	-0.006	94	165354	250.0	270.0	
67 1,4-Dioxane	88	7.775	7.775	0.000	92	40563	5000.0	6228.1	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	492229	250.0	250.3	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	96	526148	250.0	291.8	
72 4-Methyl-2-pentanone (MIBK	43	8.581	8.580	0.001	95	423678	500.0	651.3	
73 Toluene	91	8.745	8.745	0.000	99	1790519	250.0	245.9	
74 trans-1,3-Dichloropropene	75	9.004	9.004	0.000	91	442735	250.0	329.5	
75 Ethyl methacrylate	69	9.069	9.075	-0.006	89	322733	250.0	296.3	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	90	262156	250.0	265.1	
77 Tetrachloroethene	164	9.257	9.257	0.000	96	461353	250.0	244.2	
78 1,3-Dichloropropane	76	9.345	9.351	-0.006	92	402283	250.0	270.6	
79 2-Hexanone	43	9.422	9.422	0.000	93	345297	500.0	582.6	
81 Chlorodibromomethane	129	9.563	9.563	0.000	89	390284	250.0	275.0	
82 Ethylene Dibromide	107	9.669	9.669	0.000	99	257441	250.0	307.5	
83 Chlorobenzene	112	10.163	10.163	0.000	97	1233061	250.0	244.4	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.257	0.000	94	490252	250.0	250.2	
85 Ethylbenzene	106	10.263	10.263	0.000	98	703998	250.0	248.6	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	879683	250.0	244.6	
88 o-Xylene	106	10.775	10.774	0.001	95	856994	250.0	246.8	
89 Styrene	104	10.804	10.798	0.006	95	1336451	250.0	259.9	
90 Bromoform	173	10.980	10.980	0.000	98	212398	250.0	297.3	
91 Isopropylbenzene	105	11.145	11.139	0.006	95	2394300	250.0	243.6	
94 Bromobenzene	156	11.451	11.457	-0.006	84	545097	250.0	259.2	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	96	297930	250.0	284.3	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	85	79116	250.0	325.3	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	85	104299	250.0	275.0	
97 N-Propylbenzene	120	11.563	11.563	0.000	98	745708	250.0	245.0	
98 2-Chlorotoluene	126	11.651	11.645	0.006	97	579777	250.0	232.4	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	96	2031996	250.0	233.2	
100 4-Chlorotoluene	126	11.769	11.769	0.001	97	607491	250.0	242.5	
101 tert-Butylbenzene	119	12.057	12.057	0.000	89	2011752	250.0	238.0	
103 1,2,4-Trimethylbenzene	105	12.122	12.116	0.006	96	1935531	250.0	230.9	
104 sec-Butylbenzene	105	12.280	12.280	0.000	93	2610434	250.0	226.9	
105 1,3-Dichlorobenzene	146	12.398	12.392	0.006	97	1130561	250.0	254.0	
106 4-Isopropyltoluene	119	12.439	12.439	0.000	97	2528885	250.0	235.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
107 1,4-Dichlorobenzene	146	12.504	12.498	0.006	97	1132516	250.0	245.4	
110 n-Butylbenzene	91	12.845	12.845	0.000	97	1815020	250.0	242.6	
111 1,2-Dichlorobenzene	146	12.851	12.857	-0.006	98	988163	250.0	248.8	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.651	-0.006	93	57232	250.0	324.8	
114 1,2,4-Trichlorobenzene	180	14.463	14.462	0.001	95	428707	250.0	289.7	
115 Hexachlorobutadiene	225	14.604	14.610	-0.006	96	324710	250.0	233.0	
116 Naphthalene	128	14.721	14.721	0.000	96	756830	250.0	240.4	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	96	322526	250.0	277.6	
S 130 1,2-Dichloroethene, Total	96				0		500.0	472.0	
S 129 Xylenes, Total	106				0		500.0	491.4	
S 145 Total BTEX	1				0			1228.3	
S 131 1,3-Dichloropropene, Total	1				0		500.0	621.2	

QC Flag Legend

Processing Flags

NQ - Not Quantifiable

Reagents:

VOA8260INT_00102	Amount Added:	2.00	Units: uL
voaWKetmix1st_00021	Amount Added:	10.00	Units: uL
VOA8260VOAPRI_00384	Amount Added:	10.00	Units: uL
VOA8260SURR_00102	Amount Added:	10.00	Units: uL

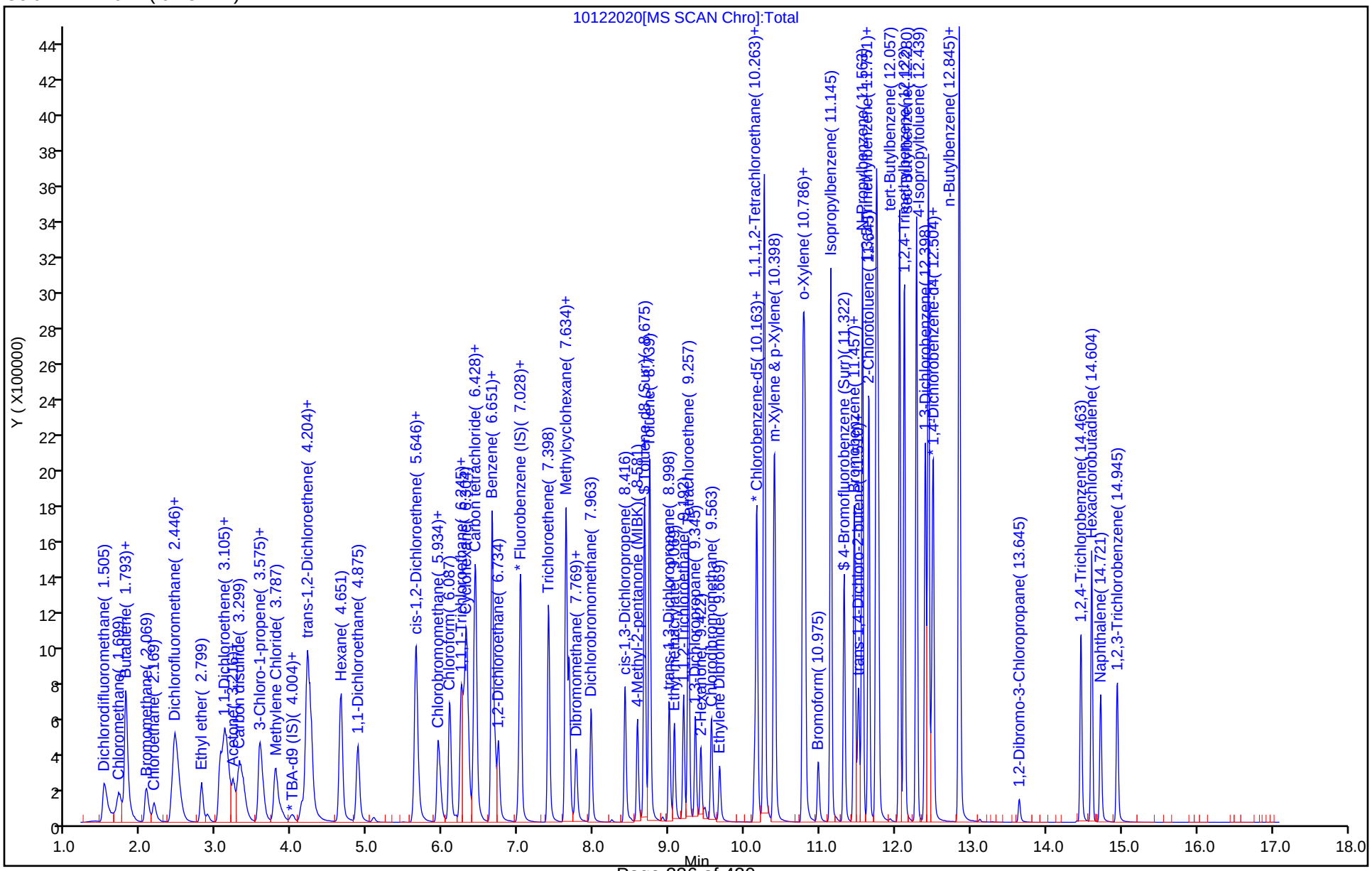
Report Date: 23-Dec-2019 07:48:45 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122020.d

Injection Date:	20-Dec-2019 15:38:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	20
Client ID:					
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
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 20-Dec-2019 17:27:30 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030094-024
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub3

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 23-Dec-2019 07:48:55 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: journetp Date: 21-Dec-2019 16:14:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.963	3.987	-0.024	0	41934	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	285854	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	85	61476	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	92	81938	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.287	6.269	0.018	93	7067	5.00	4.94	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	5043	5.00	4.06	
$ 7 Toluene-d8 (Surr)	98	8.681	8.675	0.005	93	27234	5.00	5.50	
$ 8 4-Bromofluorobenzene (Surr	95	11.333	11.321	0.012	92	7439	5.00	4.58	
10 Dichlorodifluoromethane	85	1.528	1.516	0.012	97	10981	5.00	4.31	
11 Chloromethane	50	1.704	1.699	0.005	98	8972	5.00	4.77	
13 Butadiene	39	1.799	1.793	0.006	89	8757	5.00	5.64	
12 Vinyl chloride	62	1.834	1.816	0.018	91	10258	5.00	5.51	
14 Bromomethane	94	2.081	2.063	0.018	91	6337	5.00	5.97	
15 Chloroethane	64	2.216	2.169	0.047	95	5554	5.00	6.52	
17 Dichlorofluoromethane	67	2.463	2.440	0.023	96	14543	5.00	5.45	
16 Trichlorofluoromethane	101	2.469	2.451	0.018	96	18328	5.00	5.52	a
18 Ethyl ether	59	2.804	2.799	0.006	91	4784	5.00	5.33	
20 1,1-Dichloroethene	96	3.063	3.051	0.012	97	9185	5.00	5.85	
21 1,1,2-Trichloro-1,2,2-trif	101	3.128	3.128	0.000	90	10257	5.00	5.78	
22 Acetone	43	3.169	3.175	-0.006	86	7068	25.0	22.1	
23 Iodomethane	142	3.251	3.228	0.023	99	16664	5.00	5.75	
24 Carbon disulfide	76	3.340	3.316	0.024	99	25613	5.00	5.61	
26 3-Chloro-1-propene	76	3.598	3.587	0.011	91	4246	5.00	5.12	
28 Methyl acetate	43	3.646	3.616	0.030	97	3167	10.0	7.68	M
29 Methylene Chloride	84	3.793	3.787	0.006	95	12798	5.00	4.82	
32 2-Methyl-2-propanol	59	4.093	4.116	-0.023	89	2359	50.0	47.7	
31 Acrylonitrile	53	4.210	4.181	0.029	65	8738	50.0	40.8	
30 trans-1,2-Dichloroethene	96	4.222	4.204	0.018	98	9098	5.00	5.60	
33 Methyl tert-butyl ether	73	4.245	4.245	0.000	95	13016	5.00	4.64	
34 Hexane	57	4.657	4.645	0.012	90	14088	5.00	5.53	
36 1,1-Dichloroethane	63	4.881	4.881	0.000	96	15461	5.00	5.81	

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	85	2167	5.00	5.55	
41 cis-1,2-Dichloroethene	96	5.657	5.645	0.012	83	8795	5.00	5.34	
43 2-Butanone (MEK)	43	5.687	5.675	0.012	99	6761	25.0	21.5	
46 Chlorobromomethane	128	5.940	5.934	0.006	86	3426	5.00	4.66	
48 Tetrahydrofuran	42	5.987	5.969	0.018	33	1018	10.0	14.7	a
49 Chloroform	83	6.092	6.087	0.005	92	23159	5.00	4.99	
50 1,1,1-Trichloroethane	97	6.239	6.239	0.000	98	16276	5.00	5.78	
52 Cyclohexane	56	6.316	6.310	0.006	90	17459	5.00	5.47	
53 Carbon tetrachloride	117	6.416	6.416	0.000	95	15585	5.00	5.50	
54 1,1-Dichloropropene	75	6.445	6.434	0.011	96	12189	5.00	5.33	
55 Benzene	78	6.663	6.651	0.012	97	32957	5.00	5.65	
51 Isobutyl alcohol	41	6.710	6.686	0.024	90	1403	125.0	171.8	
56 1,2-Dichloroethane	62	6.745	6.739	0.006	97	7426	5.00	4.66	
59 n-Heptane	43	7.034	7.028	0.006	89	13784	5.00	5.86	
60 Trichloroethene	130	7.404	7.398	0.006	95	11003	5.00	5.34	
63 Methylcyclohexane	83	7.634	7.628	0.006	87	17751	5.00	5.34	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	93	7170	5.00	5.52	
65 Dibromomethane	93	7.775	7.769	0.006	92	2050	5.00	3.70	
67 1,4-Dioxane	88	7.781	7.775	0.006	34	427	100.0	125.4	a
68 Dichlorobromomethane	83	7.969	7.963	0.006	98	8954	5.00	5.03	
71 cis-1,3-Dichloropropene	75	8.433	8.416	0.017	93	6209	5.00	3.80	
72 4-Methyl-2-pentanone (MIBK	43	8.592	8.580	0.012	94	12369	25.0	23.8	
73 Toluene	91	8.745	8.745	0.000	99	35524	5.00	6.11	
74 trans-1,3-Dichloropropene	75	9.022	9.004	0.018	85	3976	5.00	3.71	a
75 Ethyl methacrylate	69	9.092	9.075	0.017	83	2471	5.00	5.61	a
76 1,1,2-Trichloroethane	97	9.198	9.192	0.006	87	4052	5.00	5.13	
77 Tetrachloroethene	164	9.257	9.257	0.000	95	9400	5.00	6.24	
78 1,3-Dichloropropane	76	9.357	9.351	0.006	89	5021	5.00	4.23	
79 2-Hexanone	43	9.451	9.422	0.029	95	6438	25.0	27.5	
81 Chlorodibromomethane	129	9.563	9.563	0.000	87	5614	5.00	4.96	
82 Ethylene Dibromide	107	9.692	9.669	0.023	96	2864	5.00	4.29	
83 Chlorobenzene	112	10.163	10.163	0.000	98	24403	5.00	6.06	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.257	0.000	90	9052	5.00	5.79	
85 Ethylbenzene	106	10.269	10.263	0.006	98	12992	5.00	5.75	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	17563	5.00	6.12	
88 o-Xylene	106	10.780	10.774	0.006	95	15199	5.00	5.49	
89 Styrene	104	10.810	10.798	0.012	95	21101	5.00	5.14	
90 Bromoform	173	10.980	10.980	0.000	93	2057	5.00	3.61	
91 Isopropylbenzene	105	11.151	11.139	0.012	95	43056	5.00	5.49	
94 Bromobenzene	156	11.469	11.457	0.012	86	7768	5.00	5.79	
93 1,1,2,2-Tetrachloroethane	83	11.469	11.463	0.006	73	4251	5.00	5.08	
96 trans-1,4-Dichloro-2-buten	53	11.574	11.504	0.070	53	246	5.00	5.30	Ma
95 1,2,3-Trichloropropane	110	11.521	11.516	0.005	75	1062	5.00	4.39	
97 N-Propylbenzene	120	11.563	11.563	0.000	98	11918	5.00	6.14	
98 2-Chlorotoluene	126	11.651	11.645	0.006	98	10891	5.00	6.84	
99 1,3,5-Trimethylbenzene	105	11.751	11.745	0.006	96	36180	5.00	6.51	
100 4-Chlorotoluene	126	11.780	11.769	0.012	94	10636	5.00	6.66	
101 tert-Butylbenzene	119	12.057	12.057	0.000	90	36078	5.00	6.69	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	97	34378	5.00	6.43	
104 sec-Butylbenzene	105	12.280	12.280	0.000	94	49892	5.00	6.80	
105 1,3-Dichlorobenzene	146	12.404	12.392	0.012	96	16671	5.00	5.87	
106 4-Isopropyltoluene	119	12.439	12.439	0.000	98	43967	5.00	6.41	

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	96	19115	5.00	6.49	
110 n-Butylbenzene	91	12.851	12.845	0.006	97	26936	5.00	5.64	
111 1,2-Dichlorobenzene	146	12.863	12.857	0.006	96	15194	5.00	6.00	
112 1,2-Dibromo-3-Chloropropan	157	13.657	13.651	0.006	1	125	5.00	5.90	a
114 1,2,4-Trichlorobenzene	180	14.468	14.462	0.006	92	3447	5.00	3.65	
115 Hexachlorobutadiene	225	14.604	14.610	-0.006	96	6320	5.00	7.11	
116 Naphthalene	128	14.739	14.721	0.018	88	3481	5.00	7.48	M
117 1,2,3-Trichlorobenzene	180	14.951	14.945	0.006	94	3403	5.00	4.59	
S 130 1,2-Dichloroethene, Total	96				0		10.0	10.9	
S 129 Xylenes, Total	106				0		10.0	11.6	
S 145 Total BTEX	1				0			29.1	
S 131 1,3-Dichloropropene, Total	1				0		10.0	7.51	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

VOA8260SURR_00102	Amount Added:	0.20	Units: uL
VOA8260INT_00102	Amount Added:	2.00	Units: uL
VOA8260VOAPRI_00384	Amount Added:	0.20	Units: uL
voaWKetmix1st_00021	Amount Added:	0.80	Units: uL

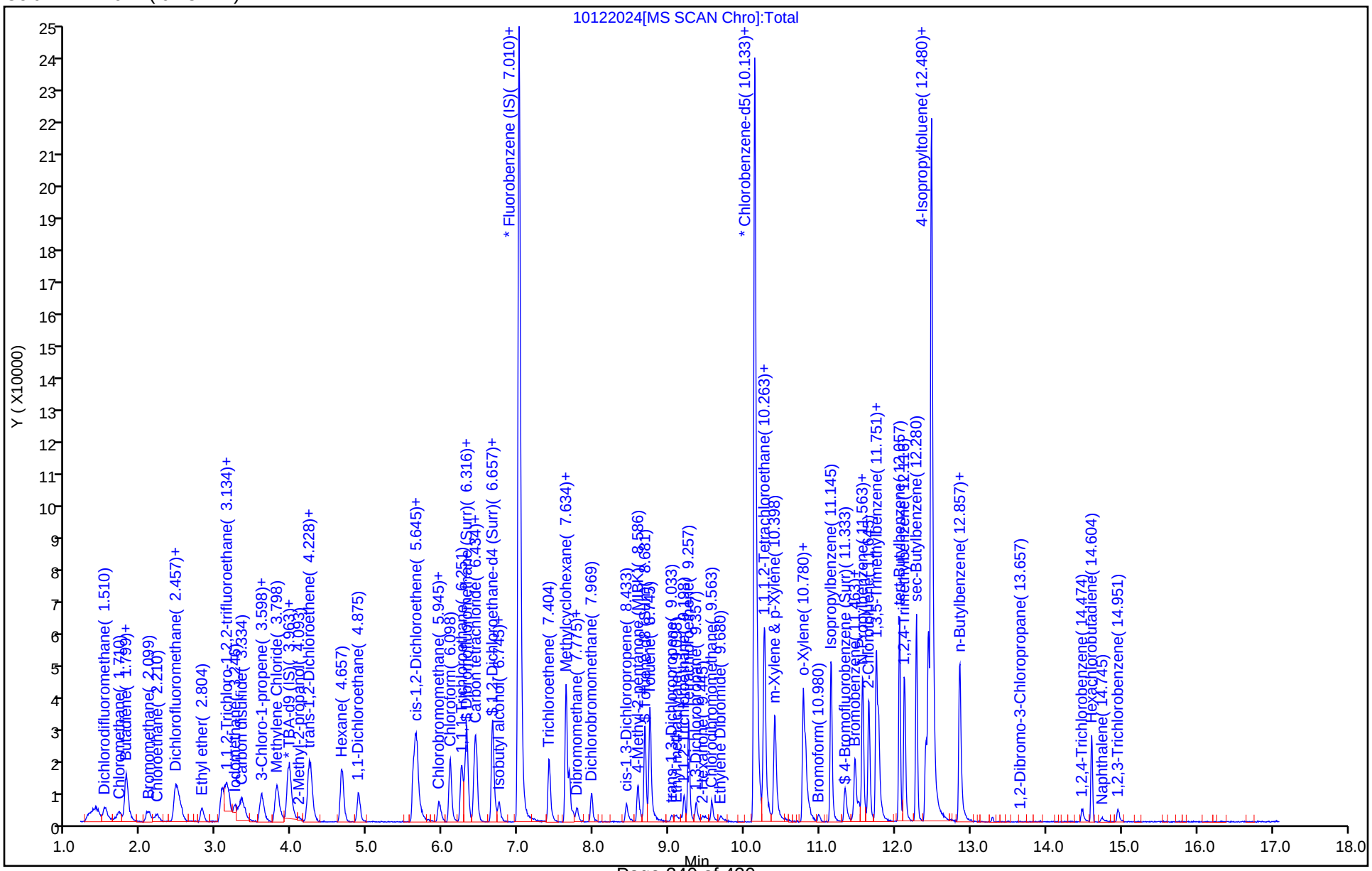
Report Date: 23-Dec-2019 07:48:56 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Injection Date:	20-Dec-2019 17:27:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	24
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

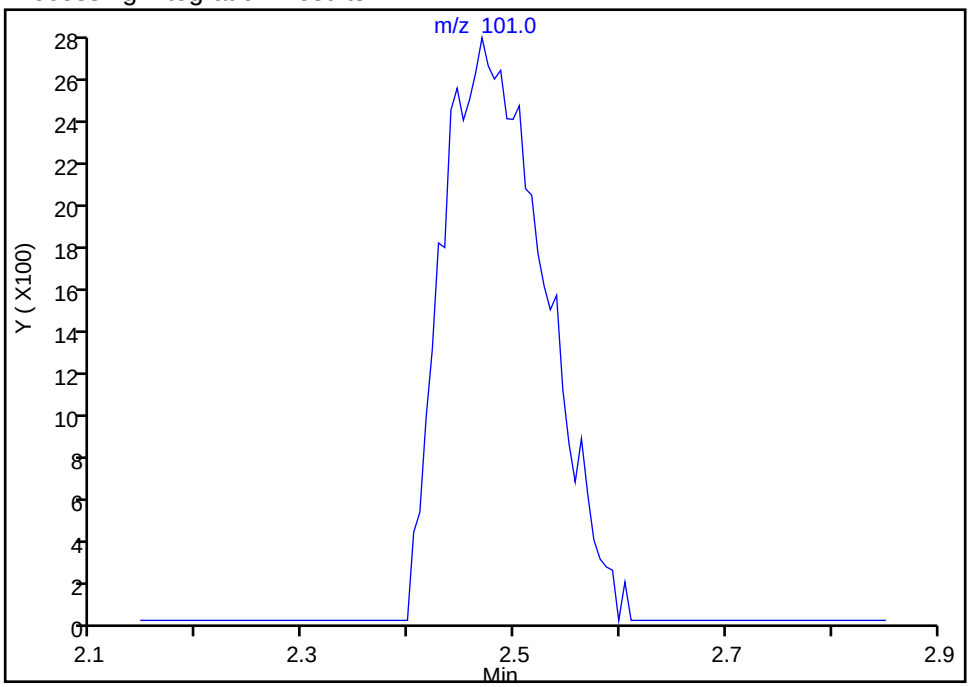
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d
Injection Date: 20-Dec-2019 17:27:30 Instrument ID: CHHP10
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

16 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

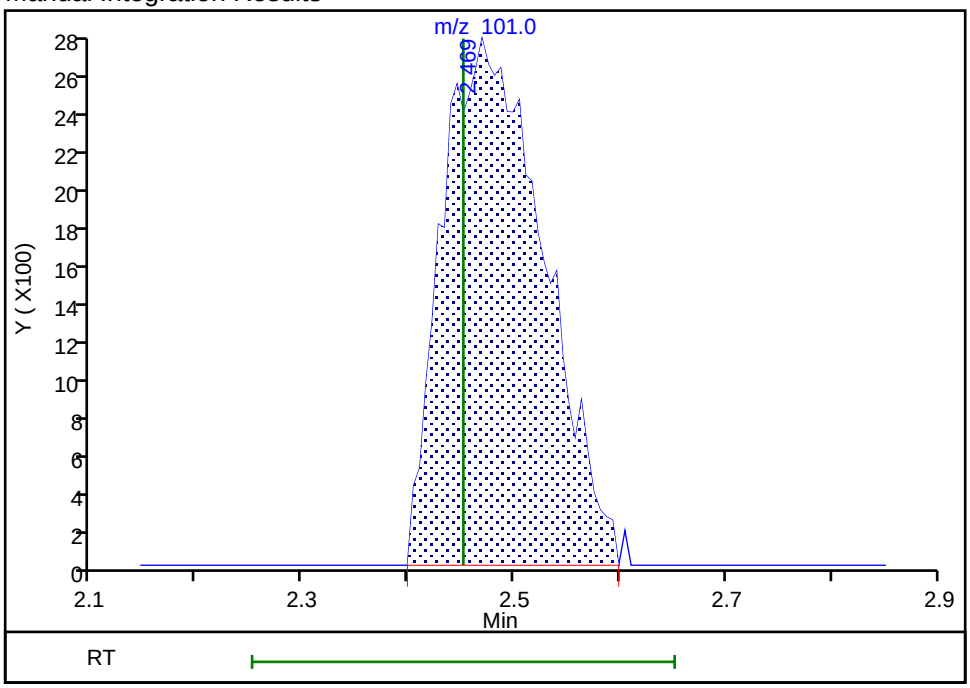
Not Detected
Expected RT: 2.45

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 18328
Amount: 5.517177
Amount Units: ng



Reviewer: journetp, 21-Dec-2019 16:17:59
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Pittsburgh

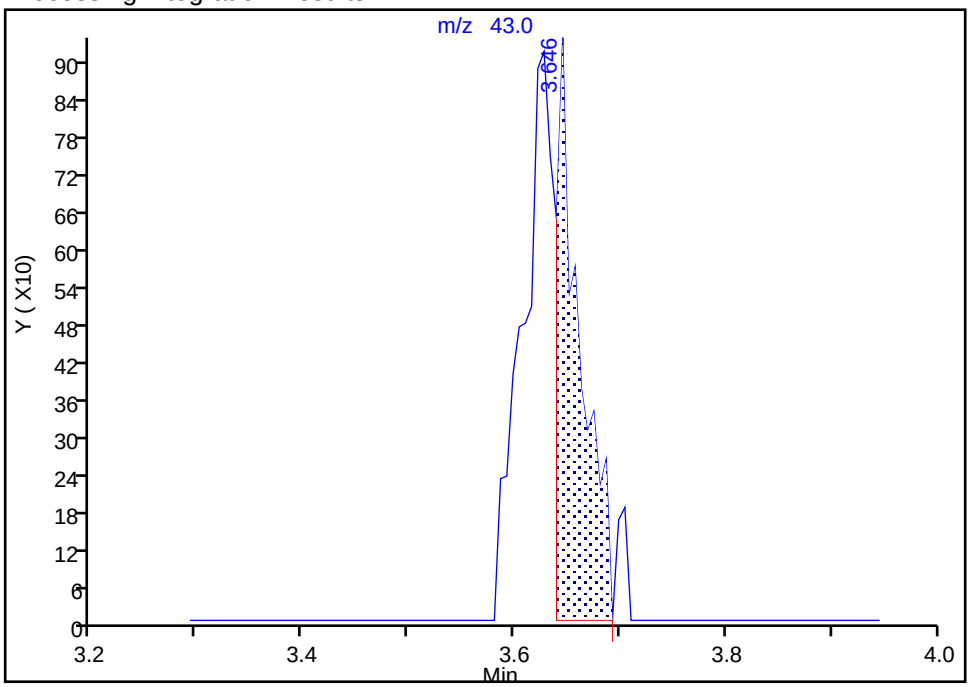
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d
Injection Date: 20-Dec-2019 17:27:30 Instrument ID: CHHP10
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

28 Methyl acetate, CAS: 79-20-9

Signal: 1

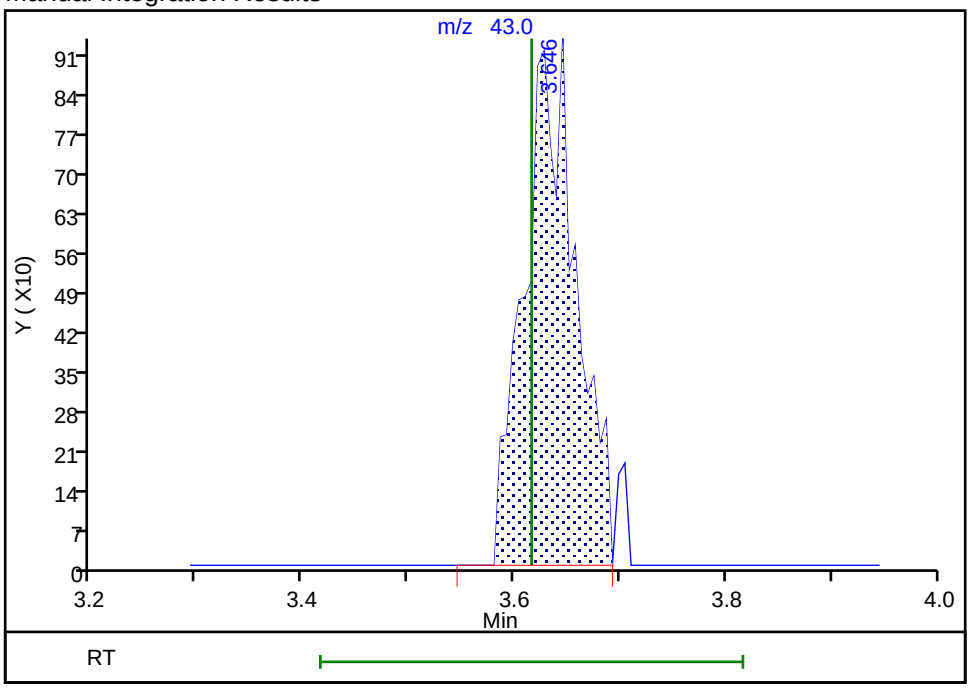
Processing Integration Results

RT: 3.65
Area: 1460
Amount: 11.728676
Amount Units: ng



Manual Integration Results

RT: 3.65
Area: 3167
Amount: 7.683182
Amount Units: ng



Reviewer: journetp, 23-Dec-2019 07:24:09
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

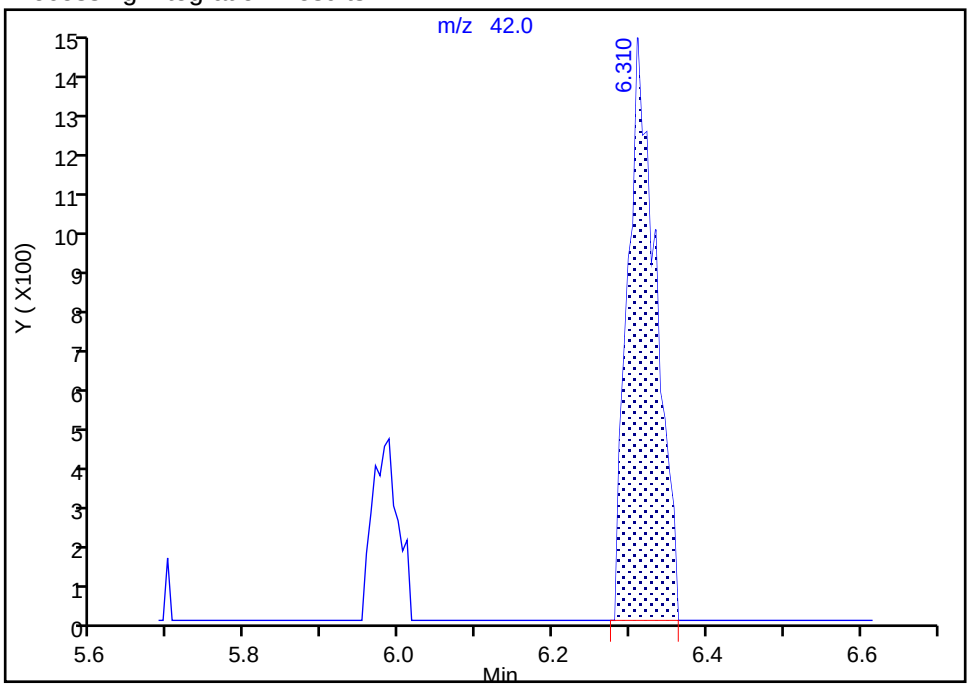
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d
Injection Date: 20-Dec-2019 17:27:30 Instrument ID: CHHP10
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

48 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

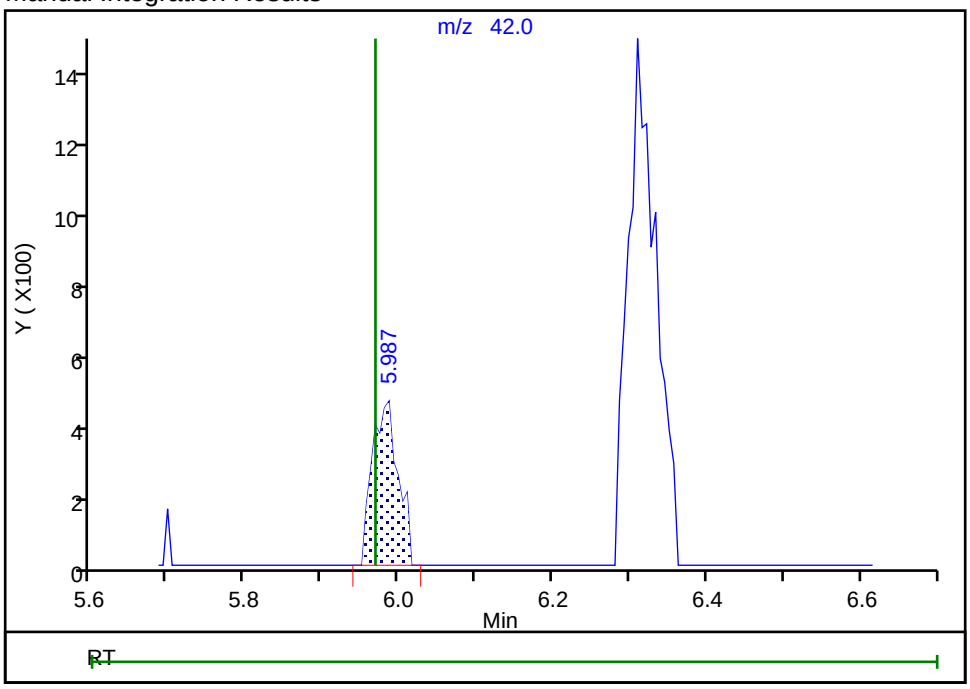
Processing Integration Results

RT: 6.31
Area: 3583
Amount: 17.317481
Amount Units: ng



Manual Integration Results

RT: 5.99
Area: 1018
Amount: 14.726550
Amount Units: ng



Reviewer: journetp, 21-Dec-2019 16:18:13
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Pittsburgh

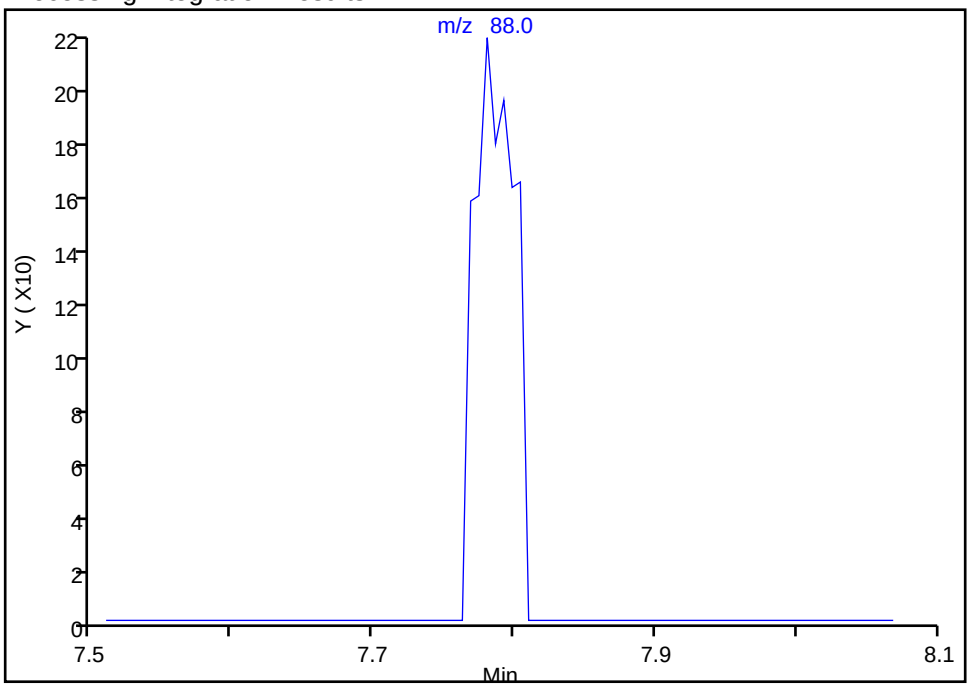
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d
Injection Date: 20-Dec-2019 17:27:30 Instrument ID: CHHP10
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

67 1,4-Dioxane, CAS: 123-91-1

Signal: 1

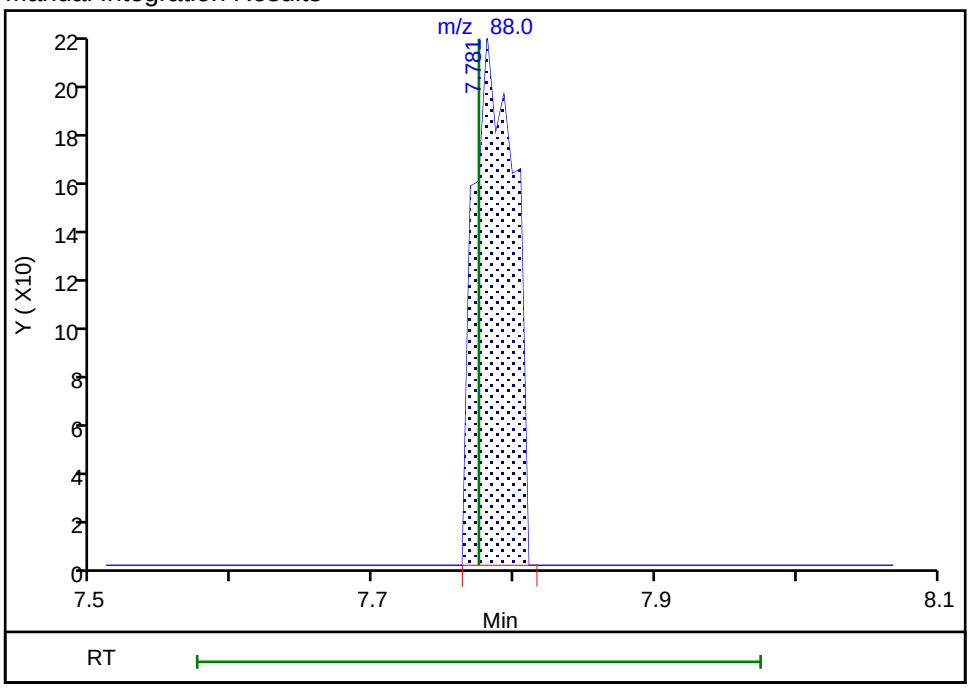
Not Detected
Expected RT: 7.77

Processing Integration Results



Manual Integration Results

RT: 7.78
Area: 427
Amount: 125.4038
Amount Units: ng



Reviewer: journetp, 21-Dec-2019 16:18:36
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Pittsburgh

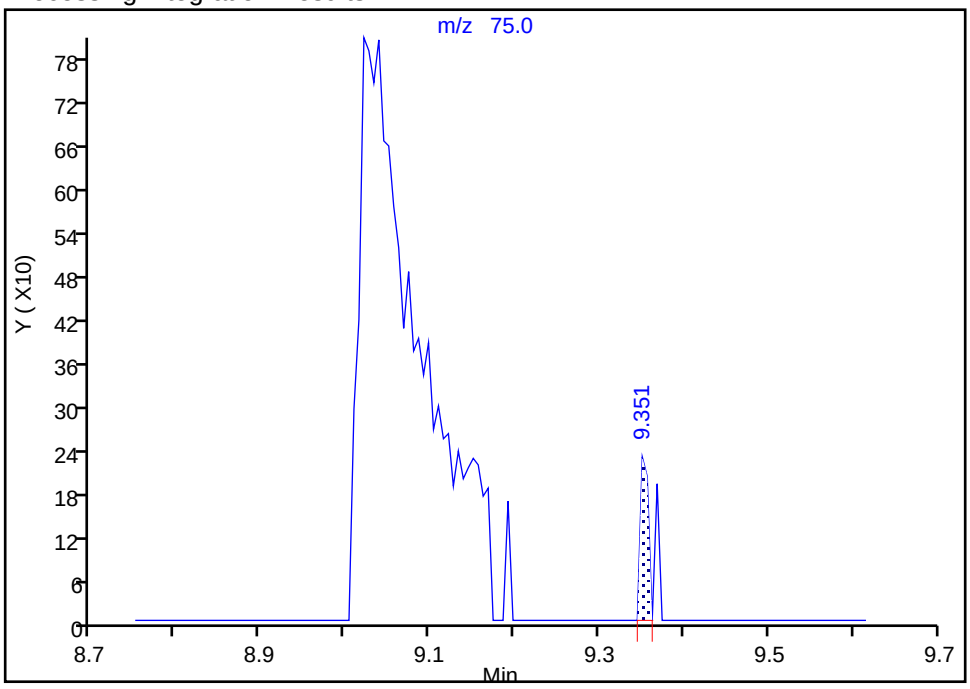
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d
Injection Date: 20-Dec-2019 17:27:30 Instrument ID: CHHP10
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

Signal: 1

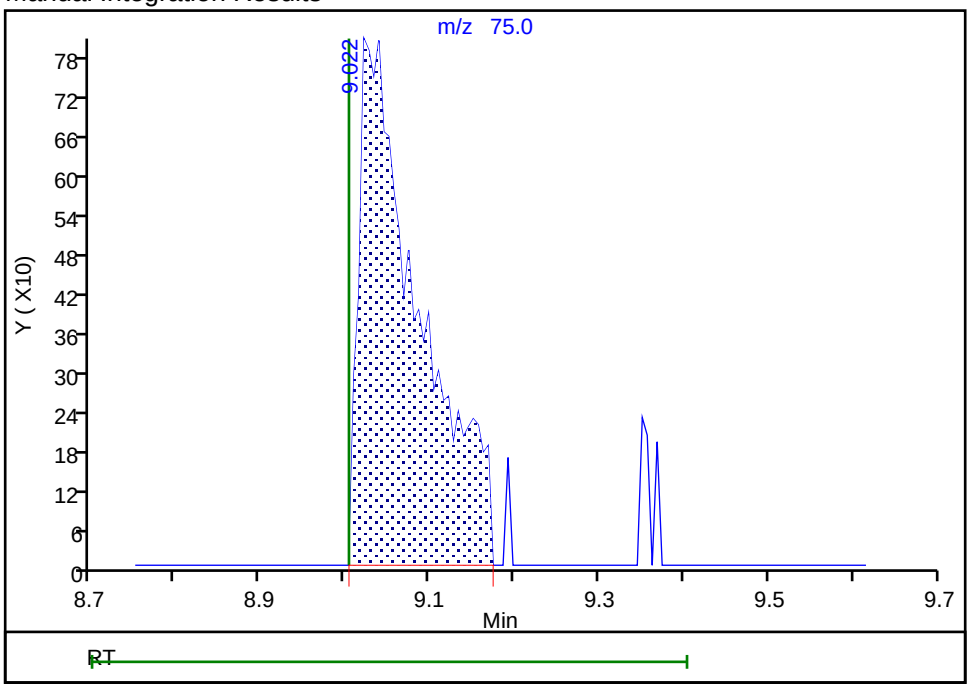
Processing Integration Results

RT: 9.35
Area: 149
Amount: 0.157708
Amount Units: ng



Manual Integration Results

RT: 9.02
Area: 3976
Amount: 3.707745
Amount Units: ng



Reviewer: journetp, 21-Dec-2019 16:18:52
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

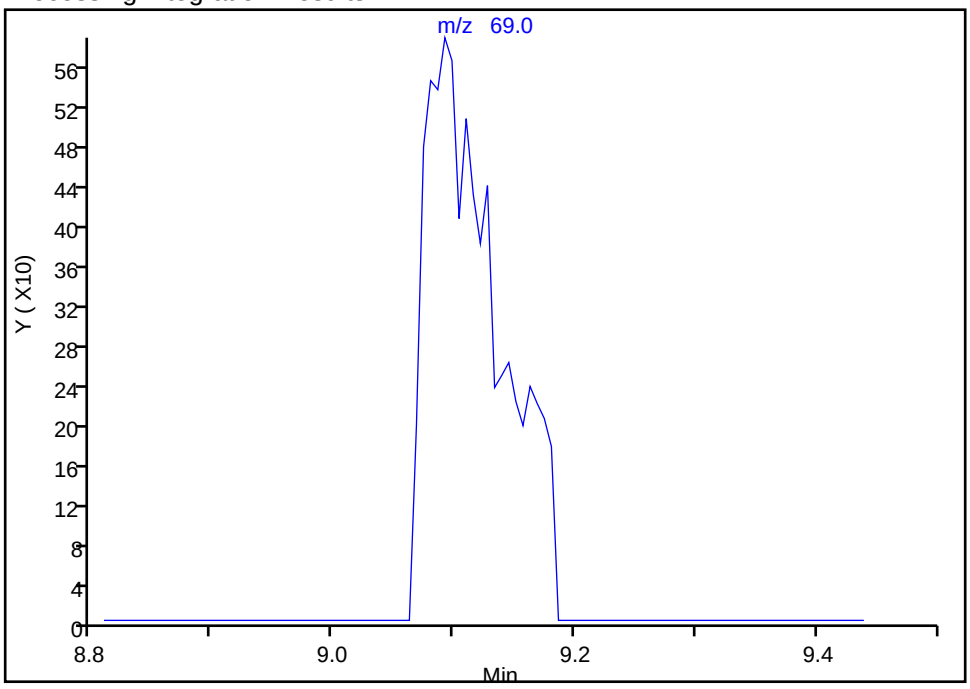
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d
Injection Date: 20-Dec-2019 17:27:30 Instrument ID: CHHP10
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

75 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

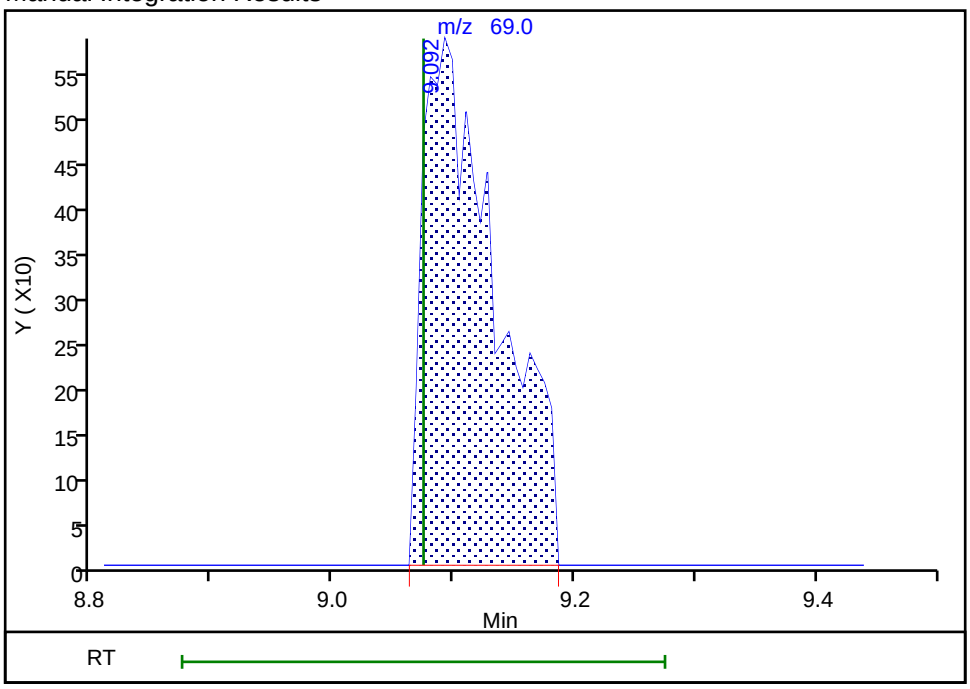
Not Detected
Expected RT: 9.07

Processing Integration Results



Manual Integration Results

RT: 9.09
Area: 2471
Amount: 5.613526
Amount Units: ng



Reviewer: journetp, 21-Dec-2019 16:18:45
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

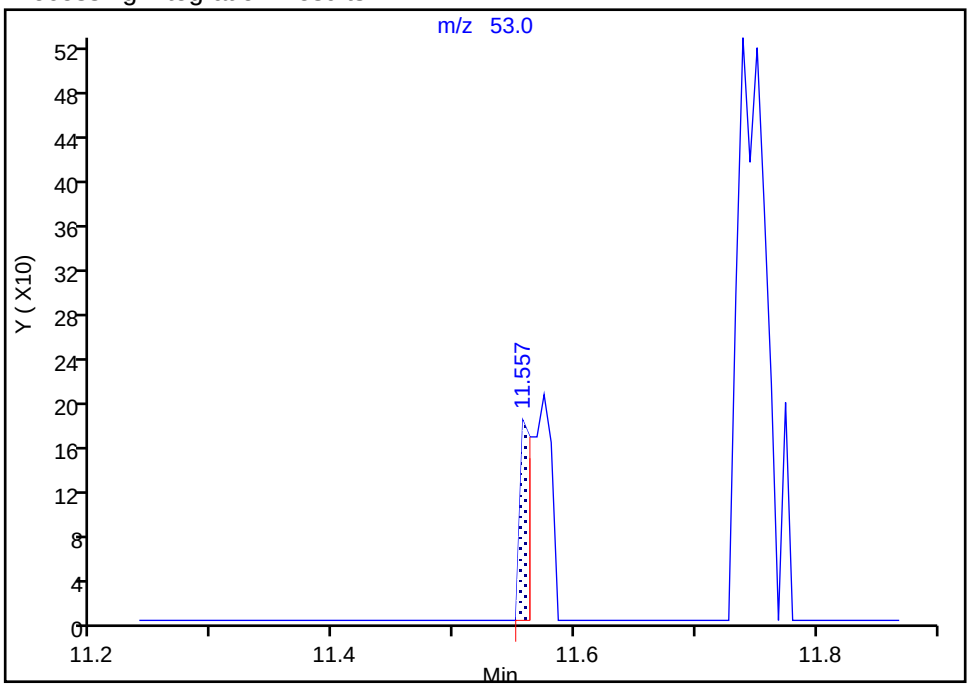
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d
Injection Date: 20-Dec-2019 17:27:30 Instrument ID: CHHP10
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

96 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

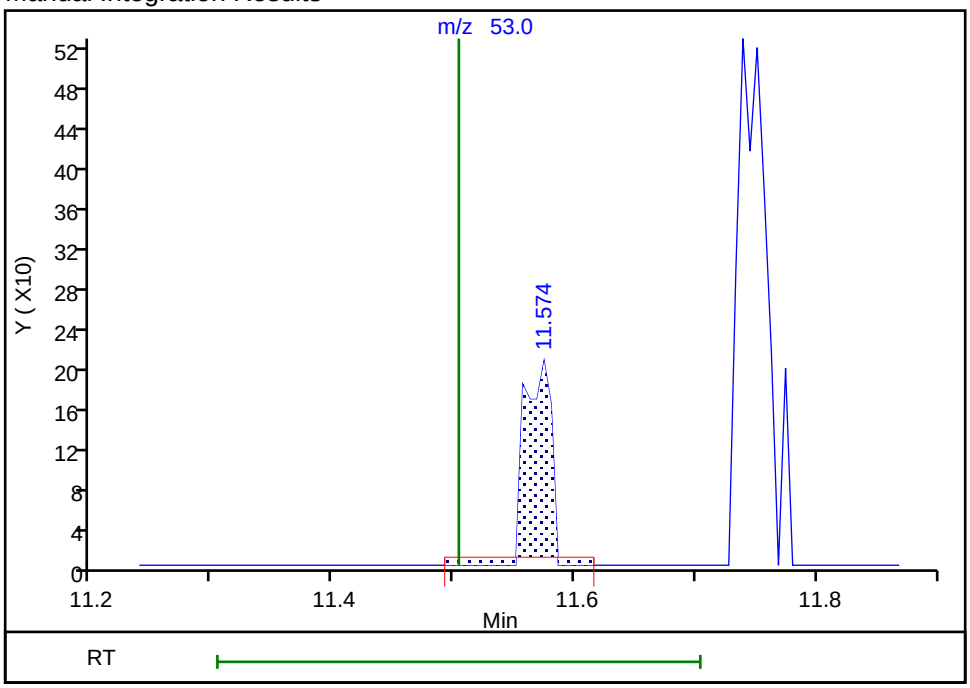
Processing Integration Results

RT: 11.56
Area: 122
Amount: 0.783415
Amount Units: ng



Manual Integration Results

RT: 11.57
Area: 246
Amount: 5.298060
Amount Units: ng



Reviewer: journetp, 21-Dec-2019 16:19:17
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Pittsburgh

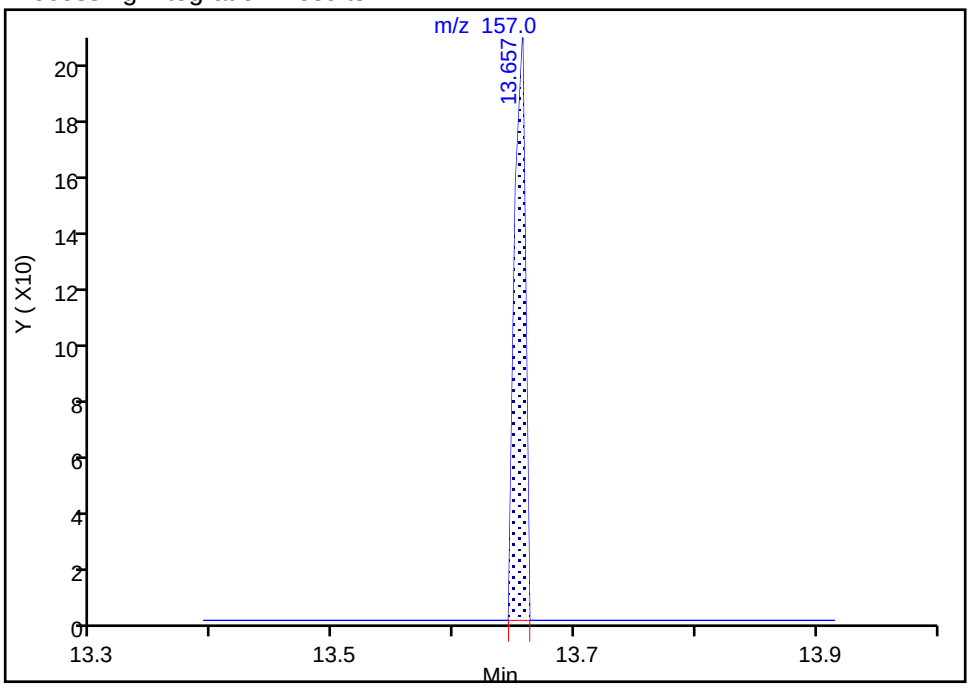
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d
Injection Date: 20-Dec-2019 17:27:30 Instrument ID: CHHP10
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

112 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

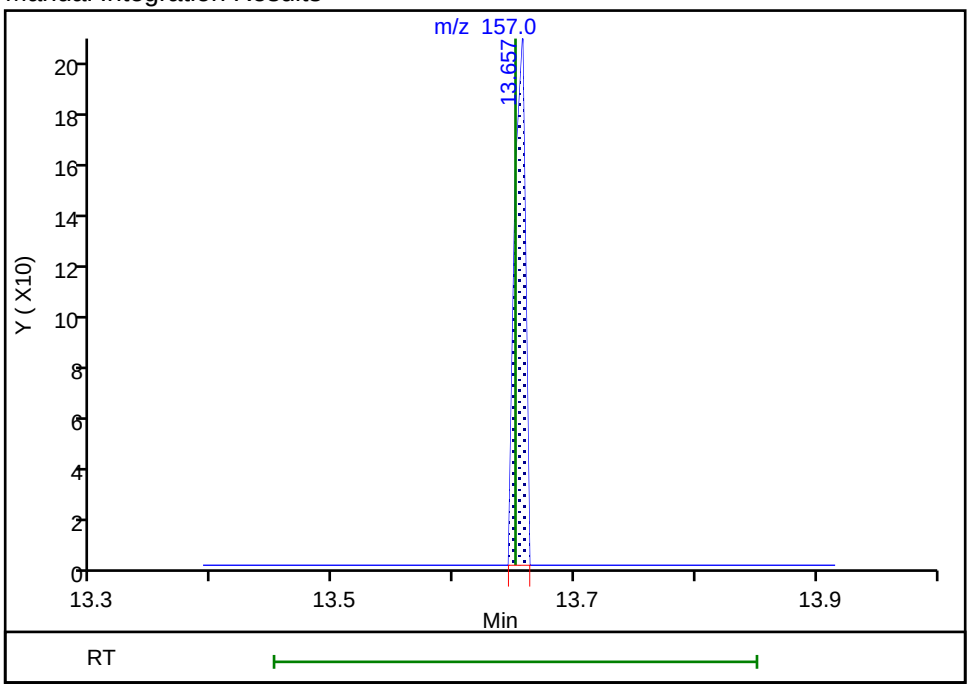
Processing Integration Results

RT: 13.66
Area: 125
Amount: 1.243673
Amount Units: ng



Manual Integration Results

RT: 13.66
Area: 125
Amount: 5.904108
Amount Units: ng



Reviewer: journetp, 21-Dec-2019 16:14:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

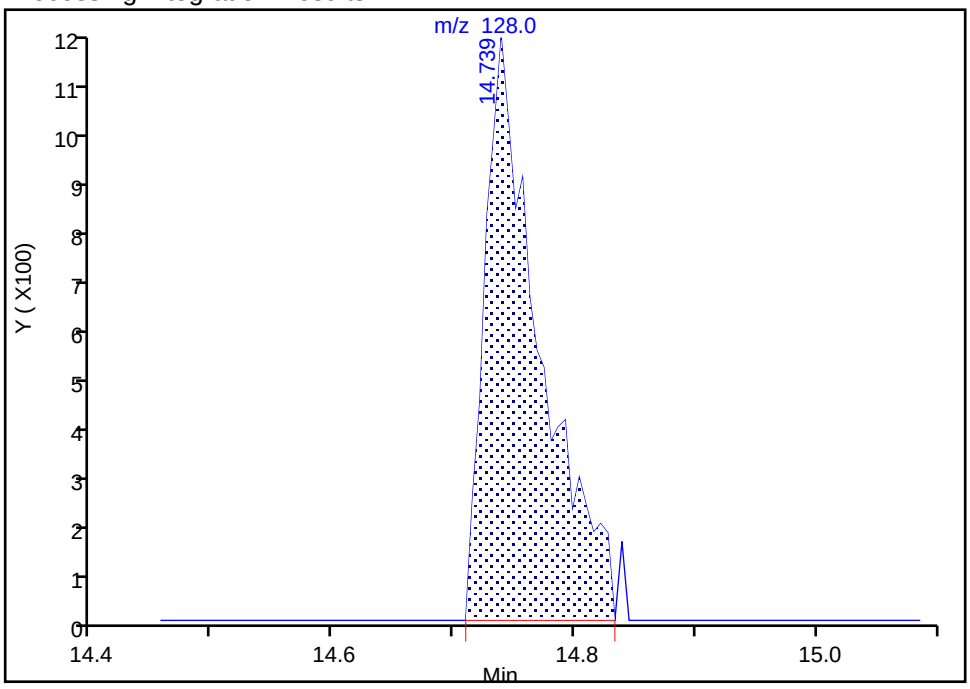
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d				
Injection Date:	20-Dec-2019 17:27:30	Instrument ID:	CHHP10		
Lims ID:	IC				
Client ID:					
Operator ID:	034635	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

116 Naphthalene, CAS: 91-20-3

Signal: 1

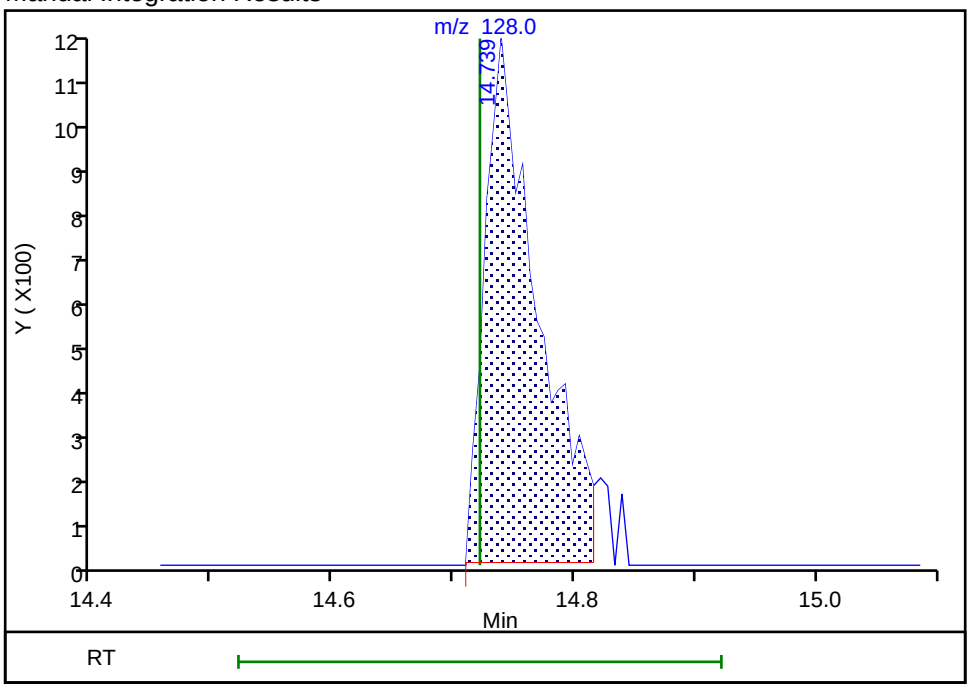
Processing Integration Results

RT: 14.74
Area: 3649
Amount: 2.926926
Amount Units: ng



Manual Integration Results

RT: 14.74
Area: 3481
Amount: 7.483986
Amount Units: ng



Reviewer: journetp, 21-Dec-2019 16:28:31

Audit Action: Manually Integrated 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

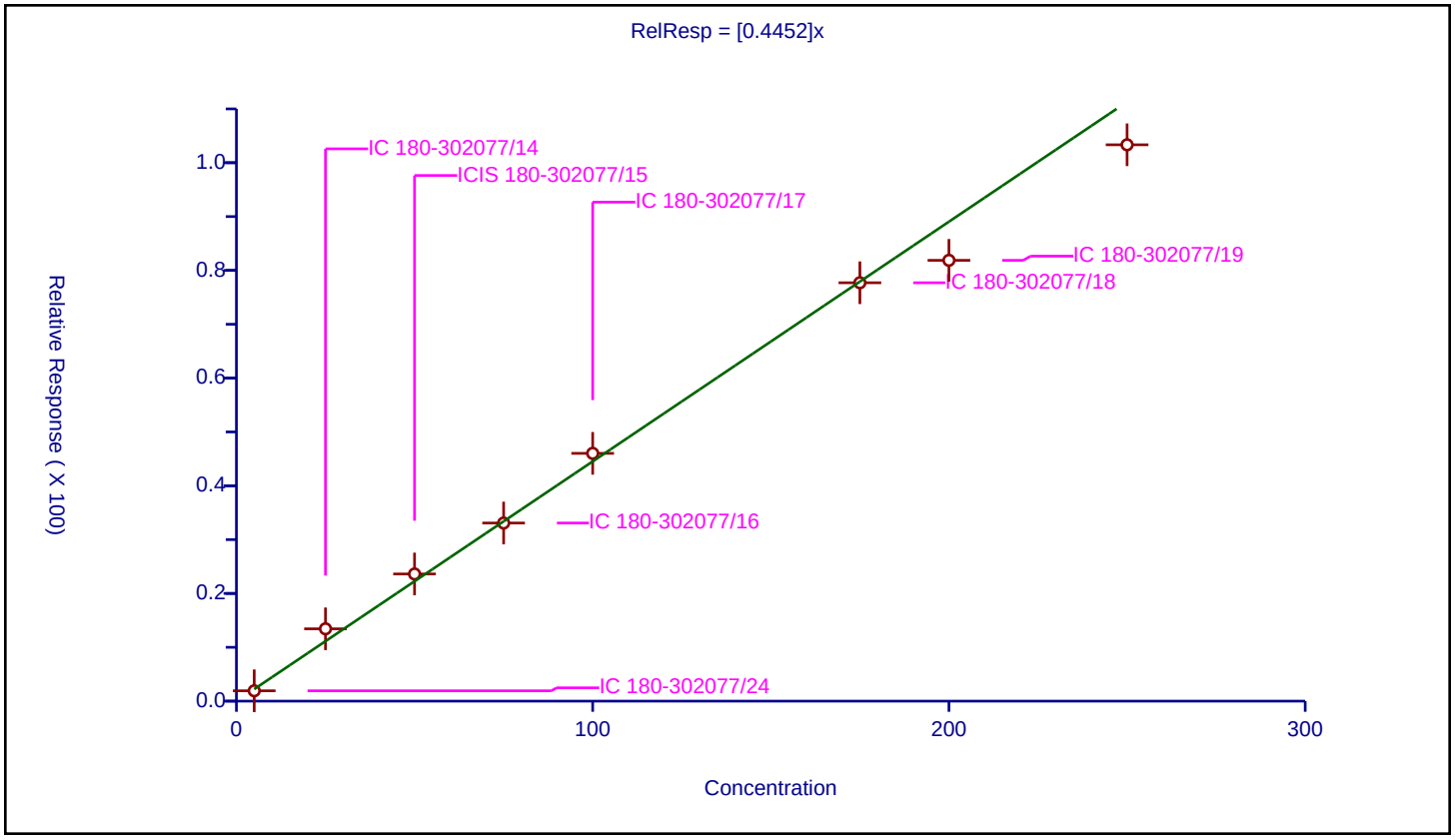
Curve Coefficients

Intercept:	0
Slope:	0.4452

Error Coefficients

Standard Error:	369000
Relative Standard Error:	10.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.920736	50.0	285854.0	0.384147	Y
2	IC 180-302077/14	25.0	13.434964	50.0	208631.0	0.537399	Y
3	ICIS 180-302077/15	50.0	23.620036	50.0	221763.0	0.472401	Y
4	IC 180-302077/16	75.0	33.079879	50.0	254286.0	0.441065	Y
5	IC 180-302077/17	100.0	46.022582	50.0	265436.0	0.460226	Y
6	IC 180-302077/18	175.0	77.70495	50.0	275689.0	0.444028	Y
7	IC 180-302077/19	200.0	81.873552	50.0	301689.0	0.409368	Y
8	IC 180-302077/20	250.0	103.330207	50.0	315596.0	0.413321	Y



Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

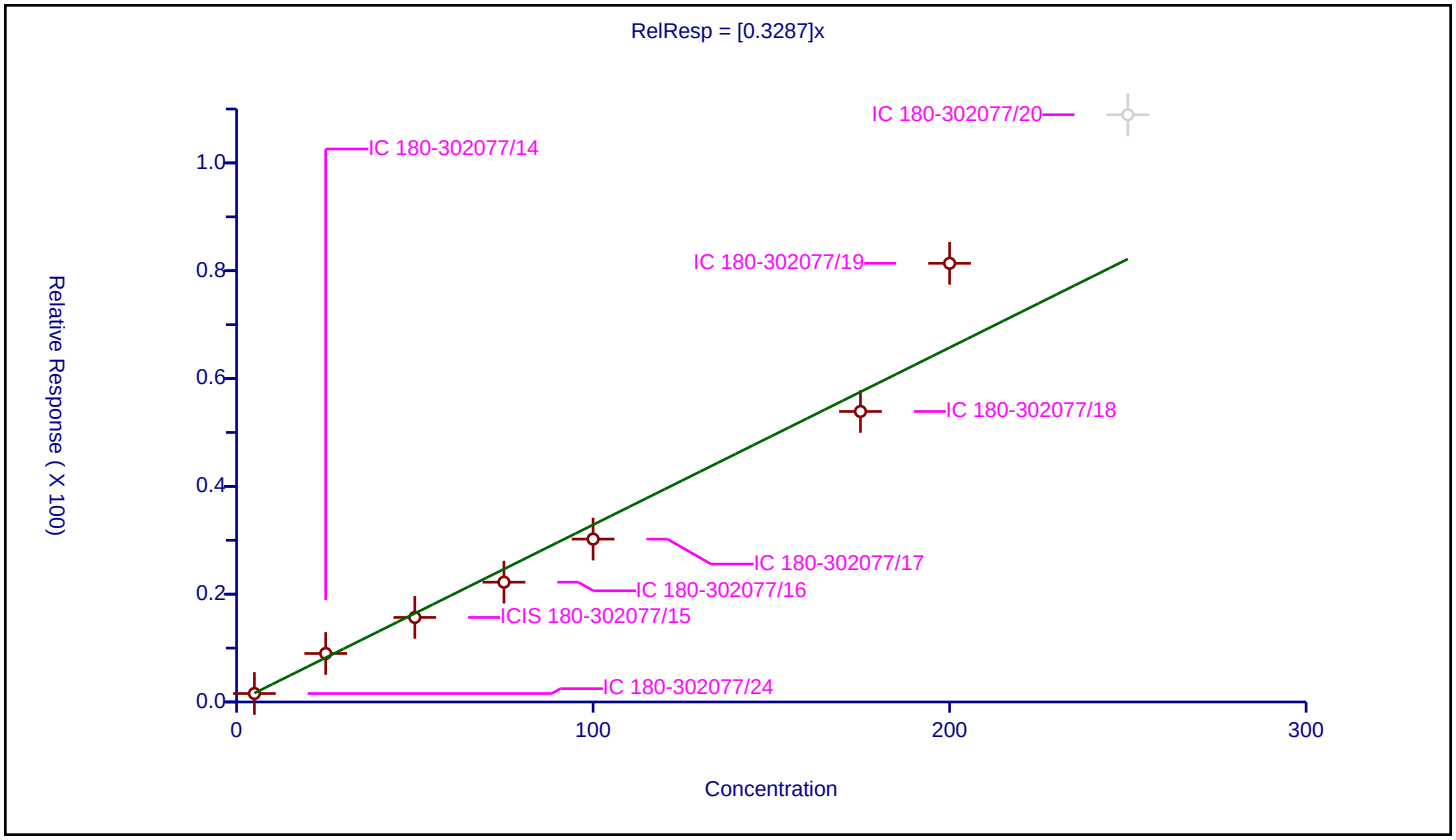
Curve Coefficients

Intercept:	0
Slope:	0.3287

Error Coefficients

Standard Error:	250000
Relative Standard Error:	12.3
Correlation Coefficient:	0.930
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.569333	50.0	285854.0	0.313867	Y
2	IC 180-302077/14	25.0	9.002737	50.0	208631.0	0.360109	Y
3	ICIS 180-302077/15	50.0	15.683635	50.0	221763.0	0.313673	Y
4	IC 180-302077/16	75.0	22.221239	50.0	254286.0	0.296283	Y
5	IC 180-302077/17	100.0	30.21783	50.0	265436.0	0.302178	Y
6	IC 180-302077/18	175.0	53.893518	50.0	275689.0	0.307963	Y
7	IC 180-302077/19	200.0	81.376351	50.0	301689.0	0.406882	Y
8	IC 180-302077/20	250.0	108.941653	50.0	315596.0	0.435767	N



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

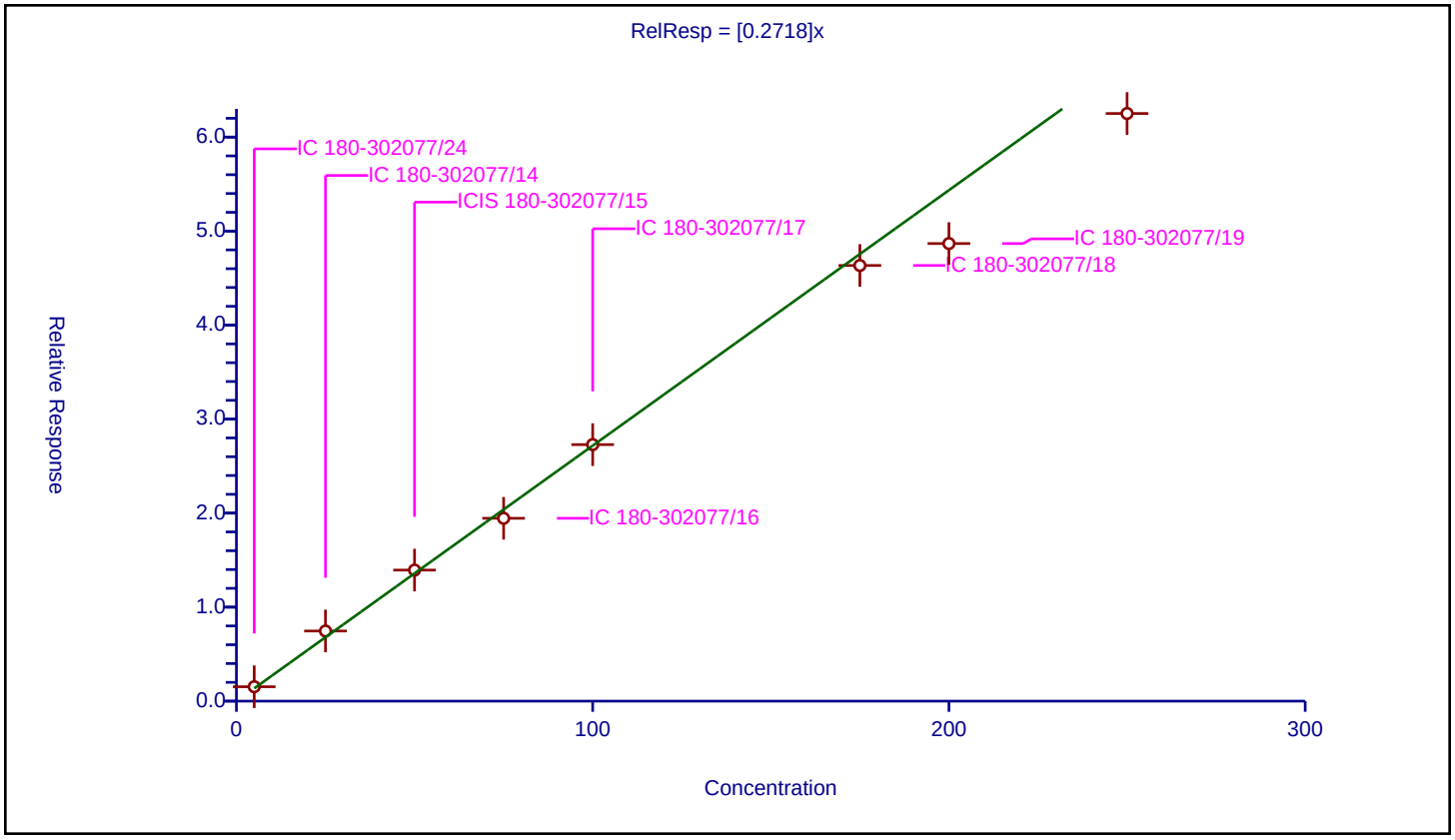
Curve Coefficients

Intercept:	0
Slope:	0.2718

Error Coefficients

Standard Error:	221000
Relative Standard Error:	8.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.531726	50.0	285854.0	0.306345	Y
2	IC 180-302077/14	25.0	7.461499	50.0	208631.0	0.29846	Y
3	ICIS 180-302077/15	50.0	13.940558	50.0	221763.0	0.278811	Y
4	IC 180-302077/16	75.0	19.450737	50.0	254286.0	0.259343	Y
5	IC 180-302077/17	100.0	27.288687	50.0	265436.0	0.272887	Y
6	IC 180-302077/18	175.0	46.343343	50.0	275689.0	0.264819	Y
7	IC 180-302077/19	200.0	48.675789	50.0	301689.0	0.243379	Y
8	IC 180-302077/20	250.0	62.51014	50.0	315596.0	0.250041	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

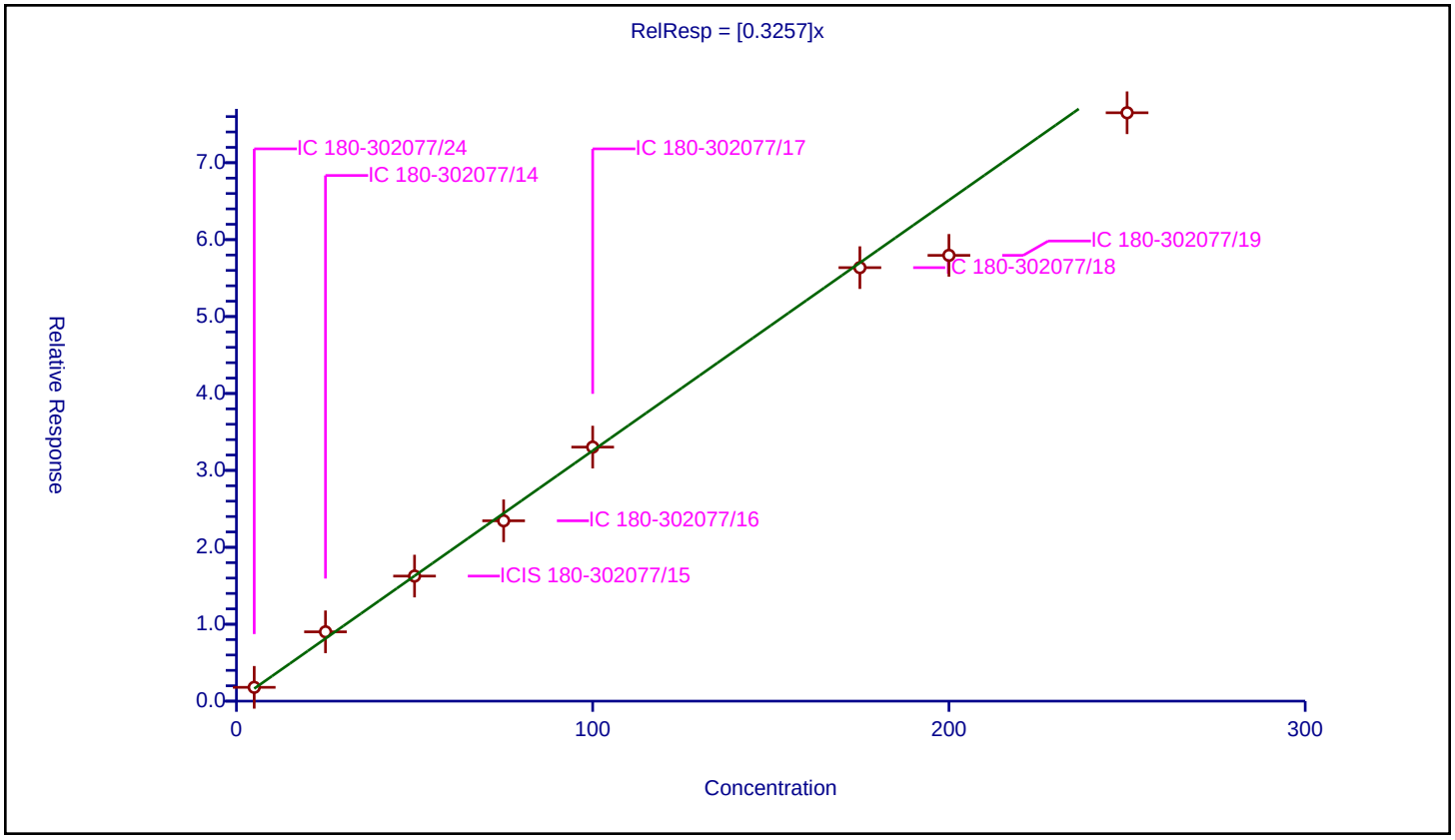
Curve Coefficients

Intercept:	0
Slope:	0.3257

Error Coefficients

Standard Error:	268000
Relative Standard Error:	7.5
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.794273	50.0	285854.0	0.358855	Y
2	IC 180-302077/14	25.0	9.011365	50.0	208631.0	0.360455	Y
3	ICIS 180-302077/15	50.0	16.259024	50.0	221763.0	0.32518	Y
4	IC 180-302077/16	75.0	23.448401	50.0	254286.0	0.312645	Y
5	IC 180-302077/17	100.0	33.029431	50.0	265436.0	0.330294	Y
6	IC 180-302077/18	175.0	56.361335	50.0	275689.0	0.322065	Y
7	IC 180-302077/19	200.0	57.957864	50.0	301689.0	0.289789	Y
8	IC 180-302077/20	250.0	76.49891	50.0	315596.0	0.305996	Y



Calibration / Bromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

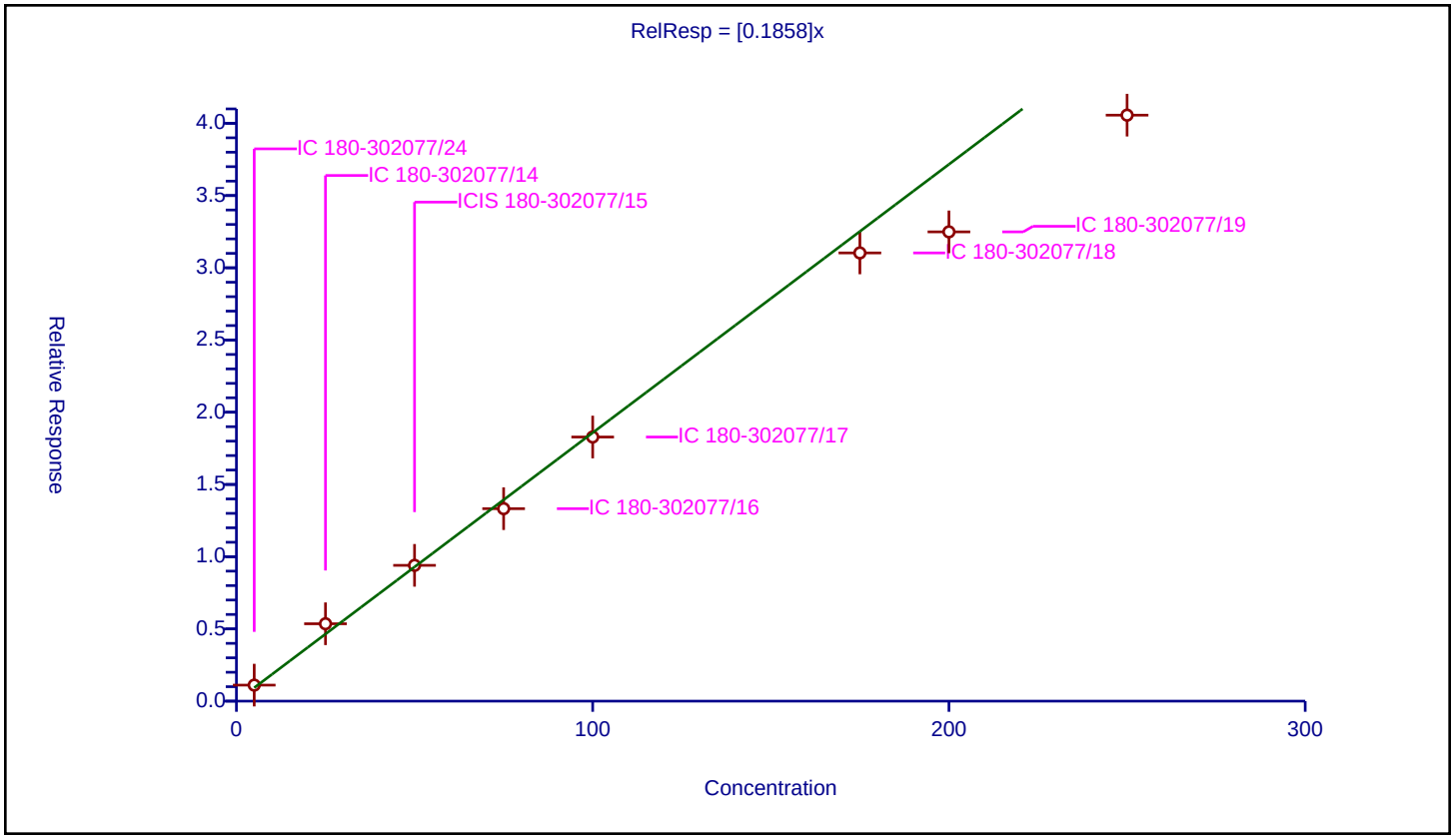
Curve Coefficients

Intercept:	0
Slope:	0.1858

Error Coefficients

Standard Error:	146000
Relative Standard Error:	11.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.108433	50.0	285854.0	0.221687	Y
2	IC 180-302077/14	25.0	5.356347	50.0	208631.0	0.214254	Y
3	ICIS 180-302077/15	50.0	9.400125	50.0	221763.0	0.188003	Y
4	IC 180-302077/16	75.0	13.325154	50.0	254286.0	0.177669	Y
5	IC 180-302077/17	100.0	18.284445	50.0	265436.0	0.182844	Y
6	IC 180-302077/18	175.0	31.028079	50.0	275689.0	0.177303	Y
7	IC 180-302077/19	200.0	32.487926	50.0	301689.0	0.16244	Y
8	IC 180-302077/20	250.0	40.566896	50.0	315596.0	0.162268	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

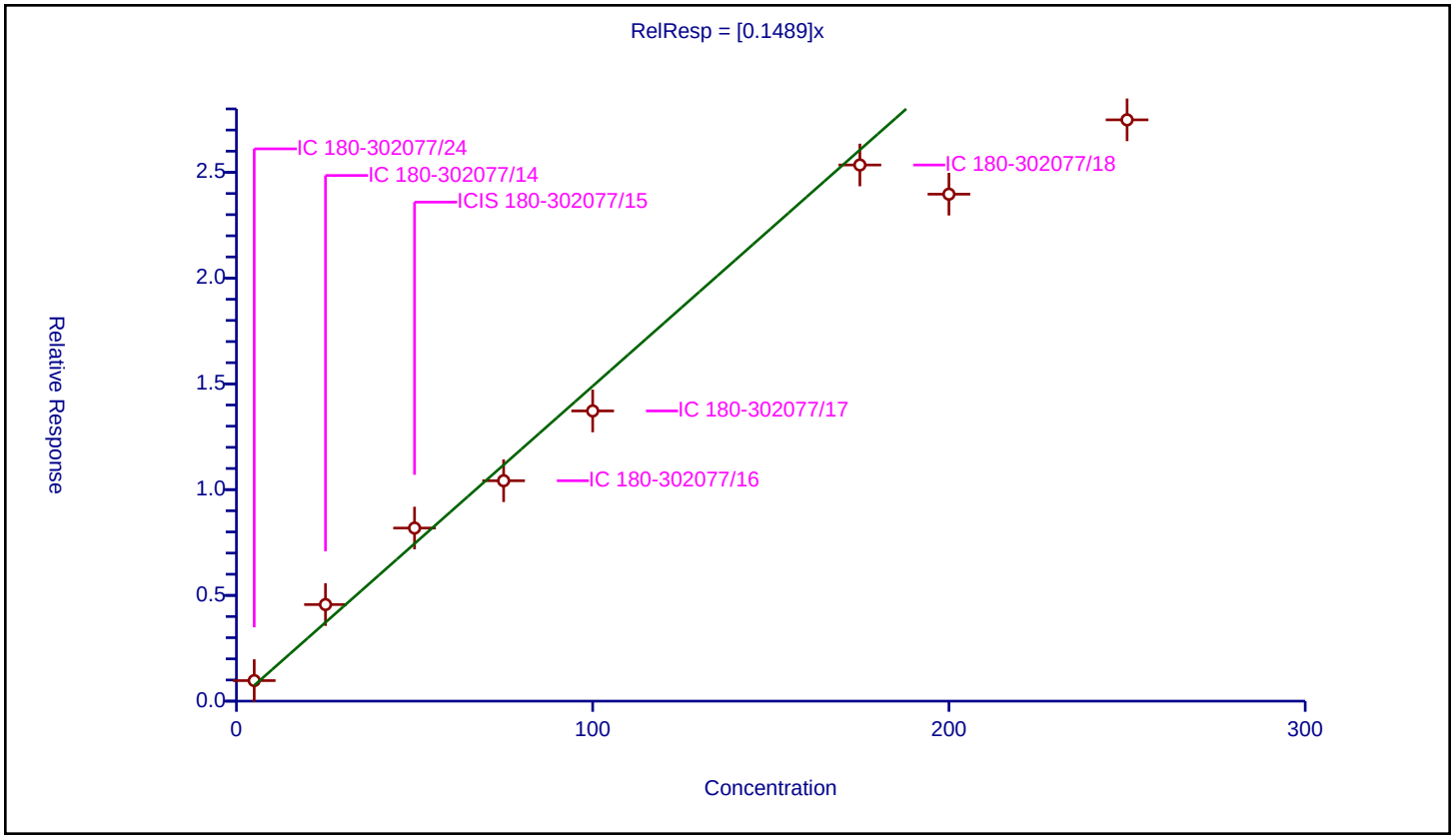
Curve Coefficients

Intercept:	0
Slope:	0.1489

Error Coefficients

Standard Error:	107000
Relative Standard Error:	19.7
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.947

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	0.971475	50.0	285854.0	0.194295	Y
2	IC 180-302077/14	25.0	4.566675	50.0	208631.0	0.182667	Y
3	ICIS 180-302077/15	50.0	8.183286	50.0	221763.0	0.163666	Y
4	IC 180-302077/16	75.0	10.420157	50.0	254286.0	0.138935	Y
5	IC 180-302077/17	100.0	13.720822	50.0	265436.0	0.137208	Y
6	IC 180-302077/18	175.0	25.348309	50.0	275689.0	0.144847	Y
7	IC 180-302077/19	200.0	23.968226	50.0	301689.0	0.119841	Y
8	IC 180-302077/20	250.0	27.48308	50.0	315596.0	0.109932	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

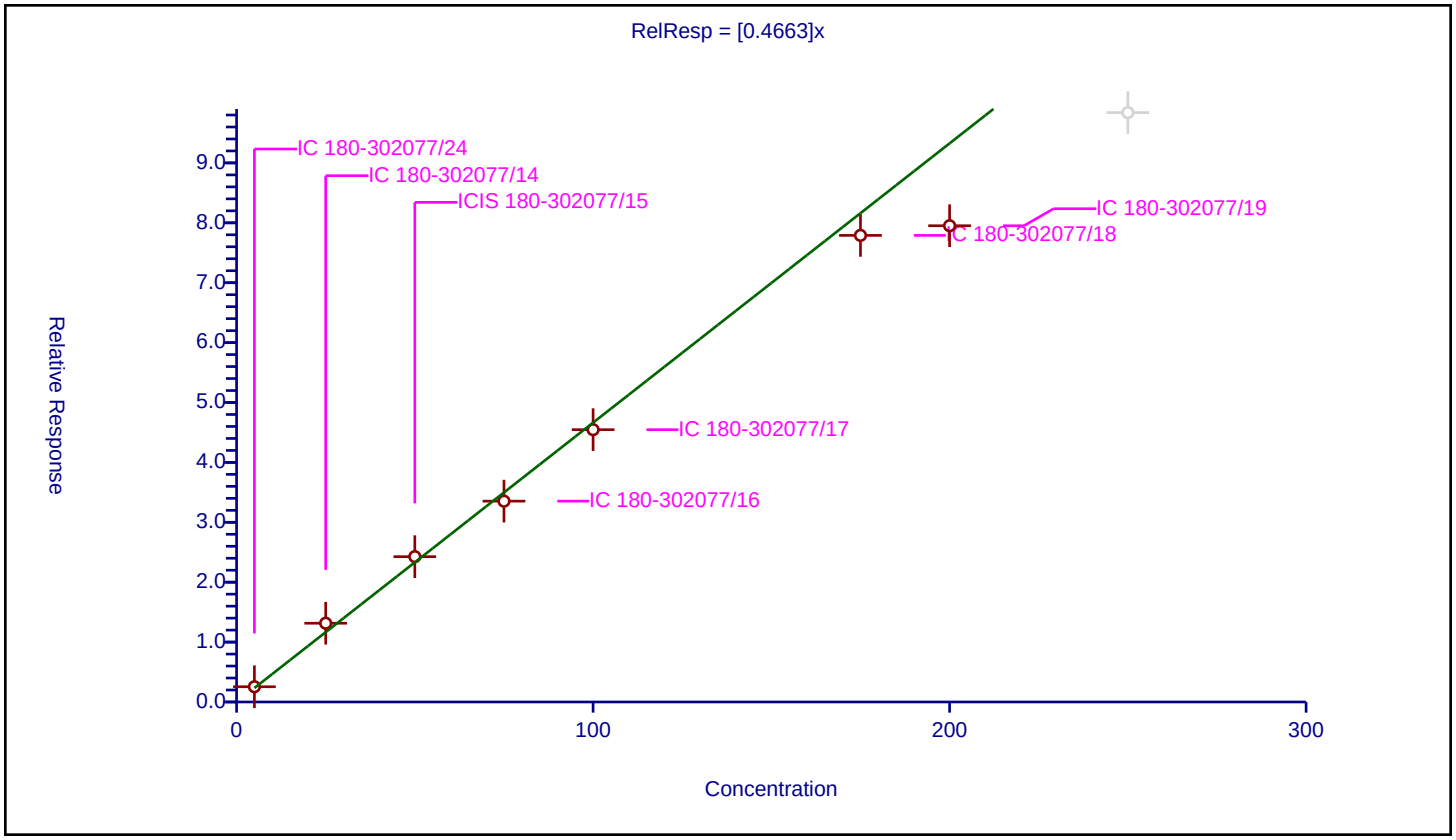
Curve Coefficients

Intercept:	0
Slope:	0.4663

Error Coefficients

Standard Error:	293000
Relative Standard Error:	9.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.543781	50.0	285854.0	0.508756	Y
2	IC 180-302077/14	25.0	13.148094	50.0	208631.0	0.525924	Y
3	ICIS 180-302077/15	50.0	24.262614	50.0	221763.0	0.485252	Y
4	IC 180-302077/16	75.0	33.530356	50.0	254286.0	0.447071	Y
5	IC 180-302077/17	100.0	45.462748	50.0	265436.0	0.454627	Y
6	IC 180-302077/18	175.0	77.900642	50.0	275689.0	0.445147	Y
7	IC 180-302077/19	200.0	79.512843	50.0	301689.0	0.397564	Y
8	IC 180-302077/20	250.0	98.400962	50.0	315596.0	0.393604	N



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

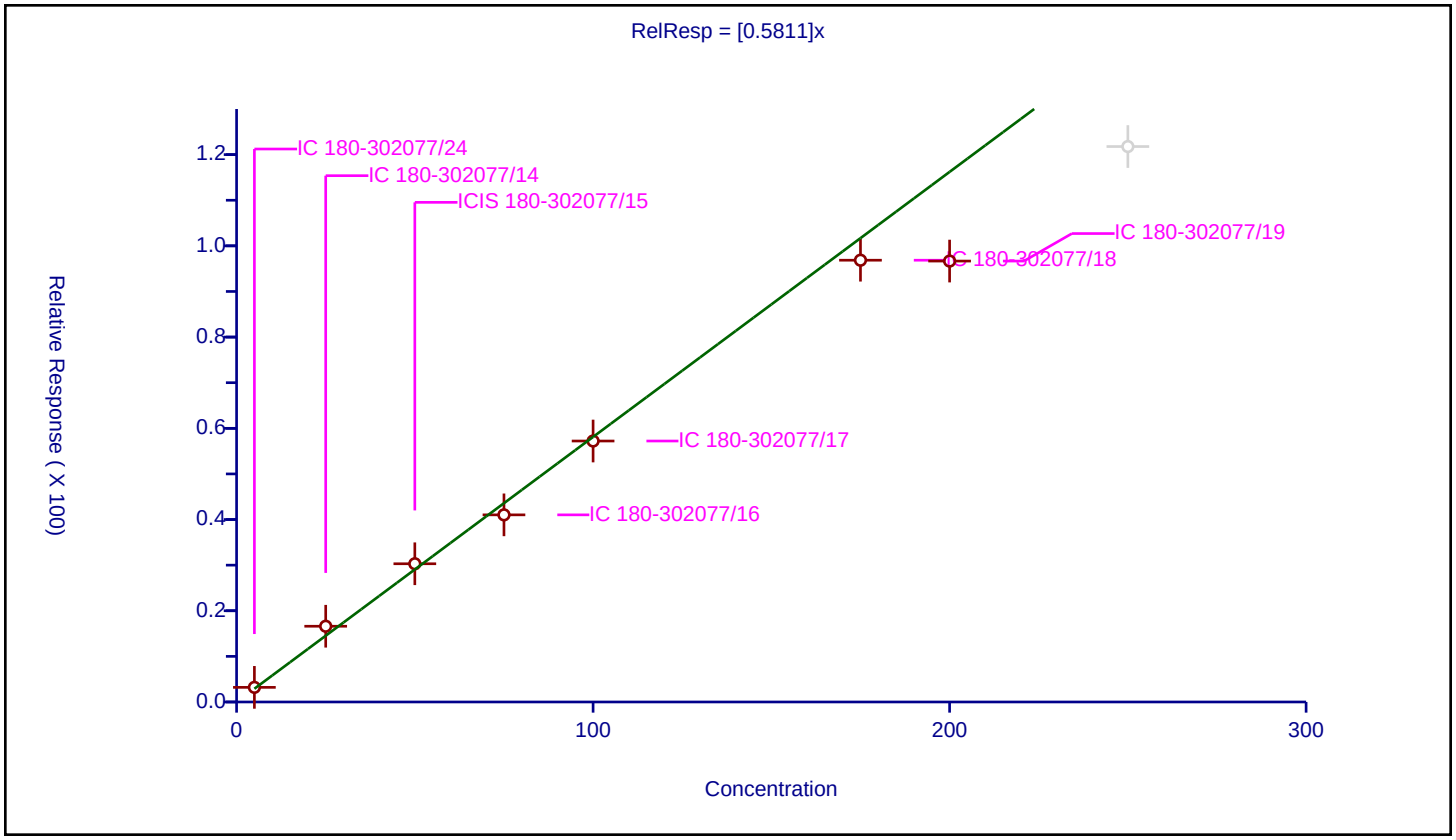
Curve Coefficients

Intercept:	0
Slope:	0.5811

Error Coefficients

Standard Error:	361000
Relative Standard Error:	10.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	3.205832	50.0	285854.0	0.641166	Y
2	IC 180-302077/14	25.0	16.606593	50.0	208631.0	0.664264	Y
3	ICIS 180-302077/15	50.0	30.304424	50.0	221763.0	0.606088	Y
4	IC 180-302077/16	75.0	41.026443	50.0	254286.0	0.547019	Y
5	IC 180-302077/17	100.0	57.21285	50.0	265436.0	0.572128	Y
6	IC 180-302077/18	175.0	96.852976	50.0	275689.0	0.553446	Y
7	IC 180-302077/19	200.0	96.667098	50.0	301689.0	0.483335	Y
8	IC 180-302077/20	250.0	121.773882	50.0	315596.0	0.487096	N



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

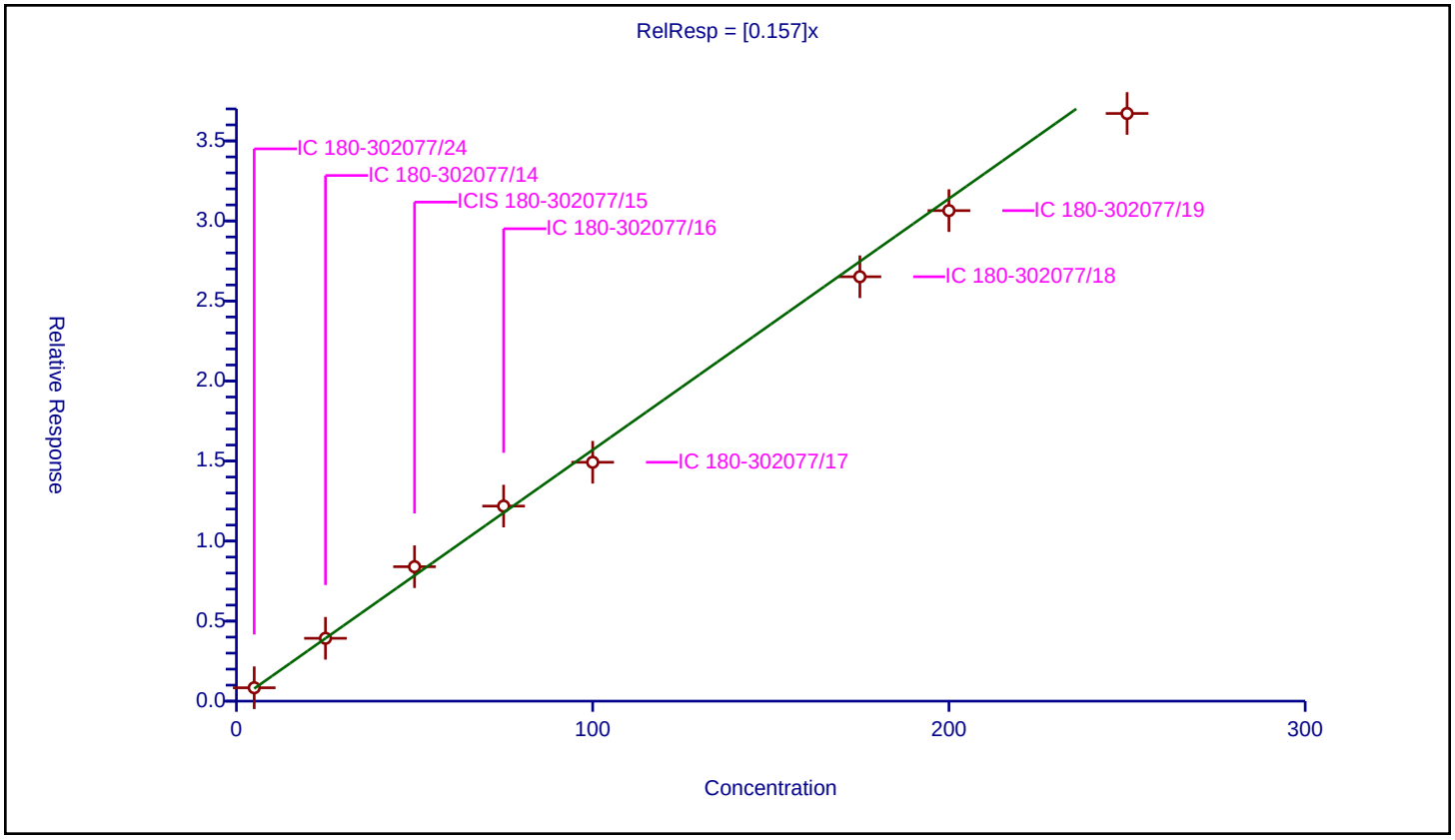
Curve Coefficients

Intercept:	0
Slope:	0.157

Error Coefficients

Standard Error:	131000
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 180-302077/24	5.0	0.836791	50.0	285854.0	0.167358	Y
2	IC 180-302077/14	25.0	3.925351	50.0	208631.0	0.157014	Y
3	ICIS 180-302077/15	50.0	8.399057	50.0	221763.0	0.167981	Y
4	IC 180-302077/16	75.0	12.185099	50.0	254286.0	0.162468	Y
5	IC 180-302077/17	100.0	14.923183	50.0	265436.0	0.149232	Y
6	IC 180-302077/18	175.0	26.51339	50.0	275689.0	0.151505	Y
7	IC 180-302077/19	200.0	30.645632	50.0	301689.0	0.153228	Y
8	IC 180-302077/20	250.0	36.713868	50.0	315596.0	0.146855	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

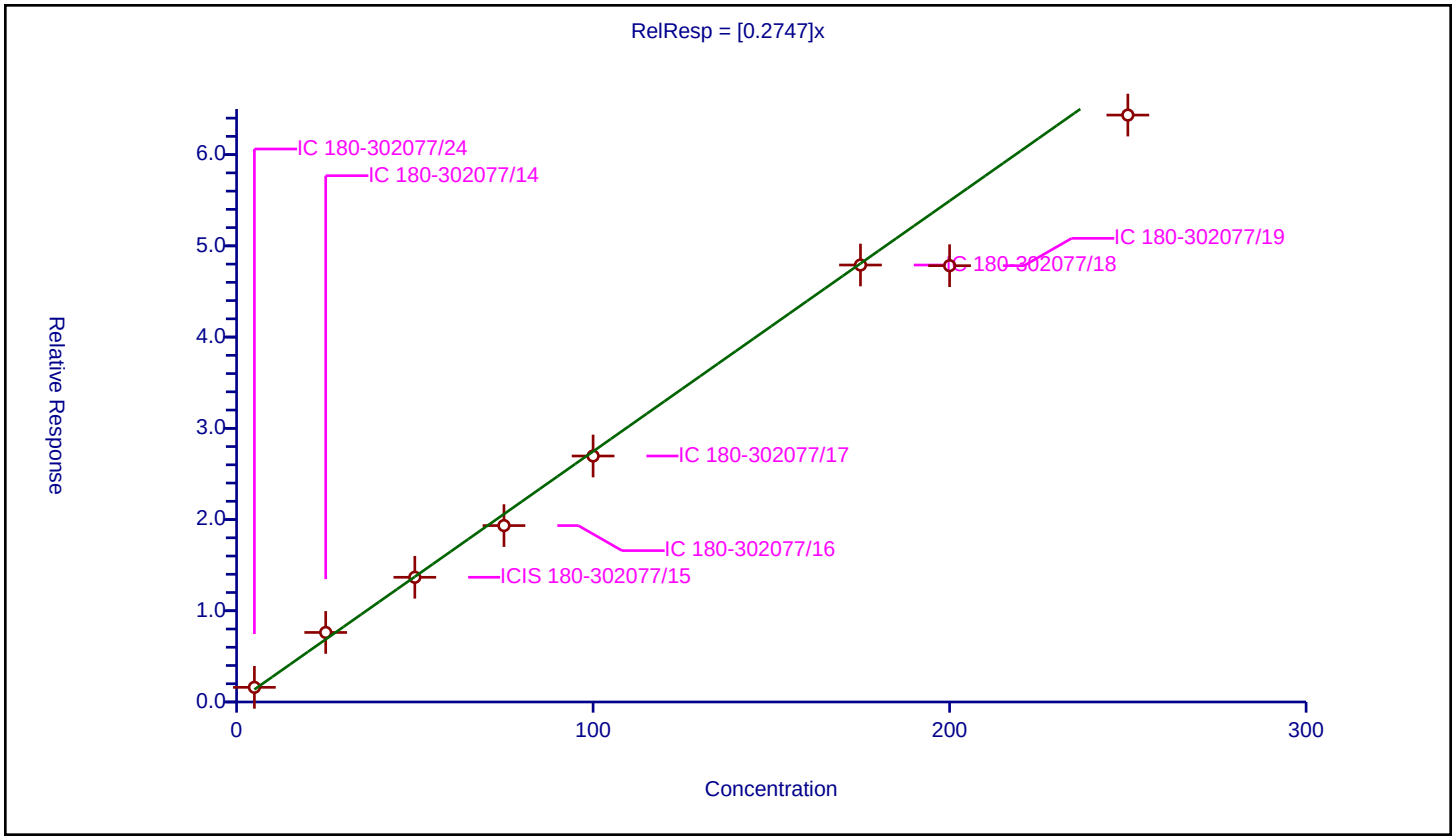
Curve Coefficients

Intercept:	0
Slope:	0.2747

Error Coefficients

Standard Error:	224000
Relative Standard Error:	9.7
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.606589	50.0	285854.0	0.321318	Y
2	IC 180-302077/14	25.0	7.621111	50.0	208631.0	0.304844	Y
3	ICIS 180-302077/15	50.0	13.669097	50.0	221763.0	0.273382	Y
4	IC 180-302077/16	75.0	19.338265	50.0	254286.0	0.257844	Y
5	IC 180-302077/17	100.0	26.963373	50.0	265436.0	0.269634	Y
6	IC 180-302077/18	175.0	47.899626	50.0	275689.0	0.273712	Y
7	IC 180-302077/19	200.0	47.825907	50.0	301689.0	0.23913	Y
8	IC 180-302077/20	250.0	64.336684	50.0	315596.0	0.257347	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

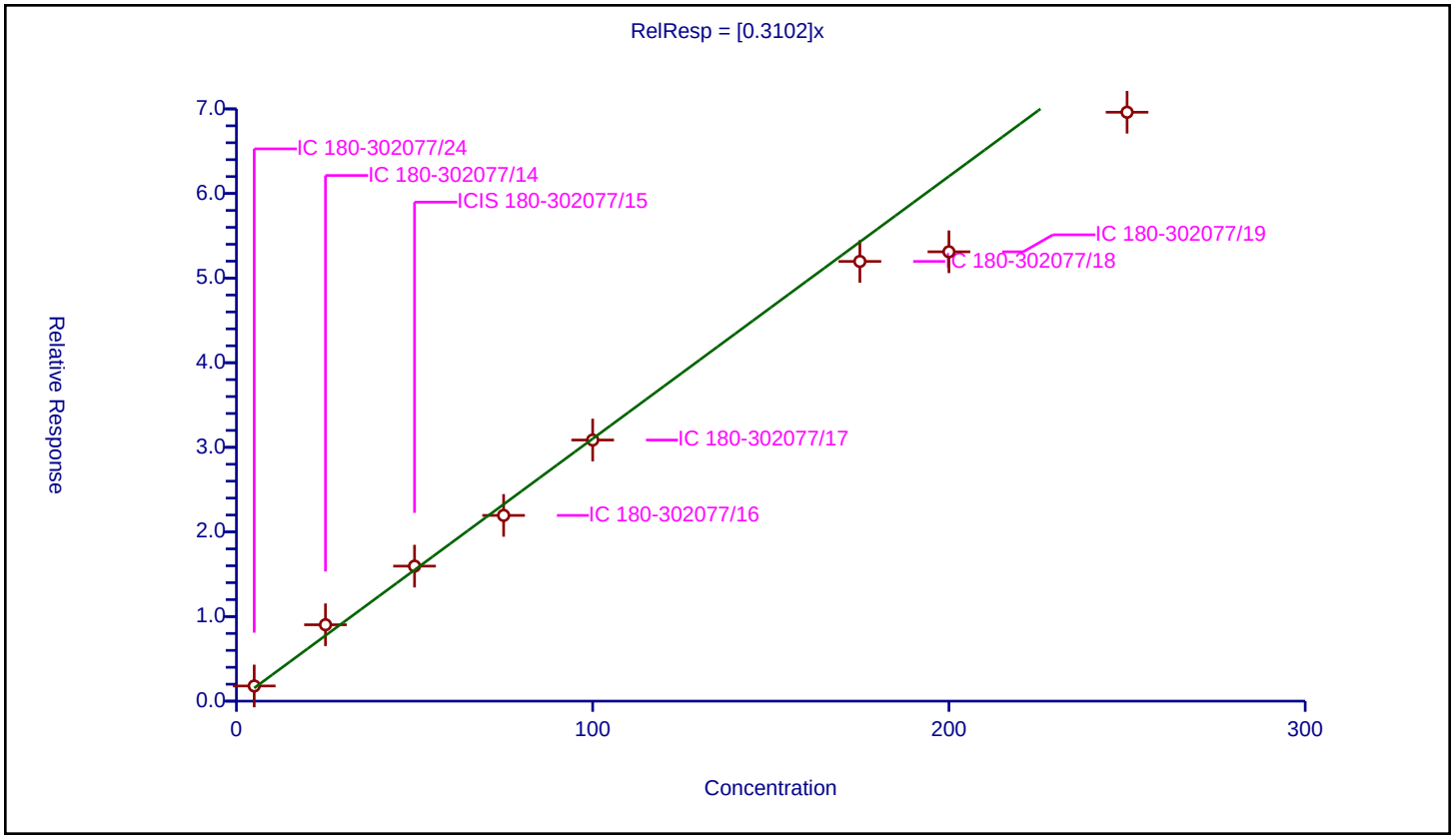
Curve Coefficients

Intercept:	0
Slope:	0.3102

Error Coefficients

Standard Error:	246000
Relative Standard Error:	11.2
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.794098	50.0	285854.0	0.35882	Y
2	IC 180-302077/14	25.0	9.026223	50.0	208631.0	0.361049	Y
3	ICIS 180-302077/15	50.0	15.957576	50.0	221763.0	0.319152	Y
4	IC 180-302077/16	75.0	21.953234	50.0	254286.0	0.29271	Y
5	IC 180-302077/17	100.0	30.859793	50.0	265436.0	0.308598	Y
6	IC 180-302077/18	175.0	51.971243	50.0	275689.0	0.296979	Y
7	IC 180-302077/19	200.0	53.110322	50.0	301689.0	0.265552	Y
8	IC 180-302077/20	250.0	69.605287	50.0	315596.0	0.278421	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

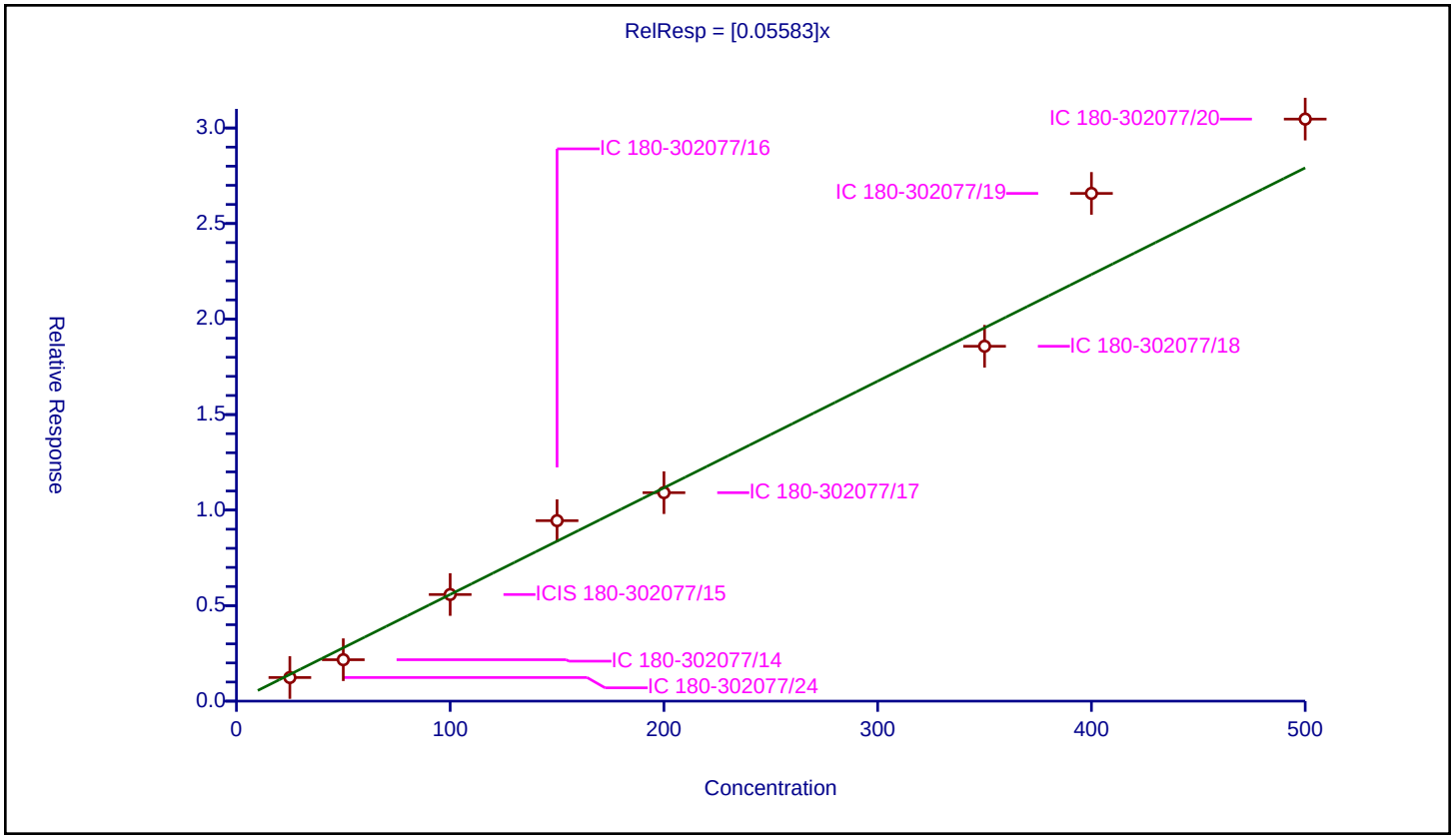
Curve Coefficients

Intercept:	0
Slope:	0.05583

Error Coefficients

Standard Error:	107000
Relative Standard Error:	13.5
Correlation Coefficient:	0.971
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	25.0	1.236295	50.0	285854.0	0.049452	Y
2	IC 180-302077/14	50.0	2.167942	50.0	208631.0	0.043359	Y
3	ICIS 180-302077/15	100.0	5.58186	50.0	221763.0	0.055819	Y
4	IC 180-302077/16	150.0	9.446647	50.0	254286.0	0.062978	Y
5	IC 180-302077/17	200.0	10.912423	50.0	265436.0	0.054562	Y
6	IC 180-302077/18	350.0	18.576185	50.0	275689.0	0.053075	Y
7	IC 180-302077/19	400.0	26.576375	50.0	301689.0	0.066441	Y
8	IC 180-302077/20	500.0	30.465373	50.0	315596.0	0.060931	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

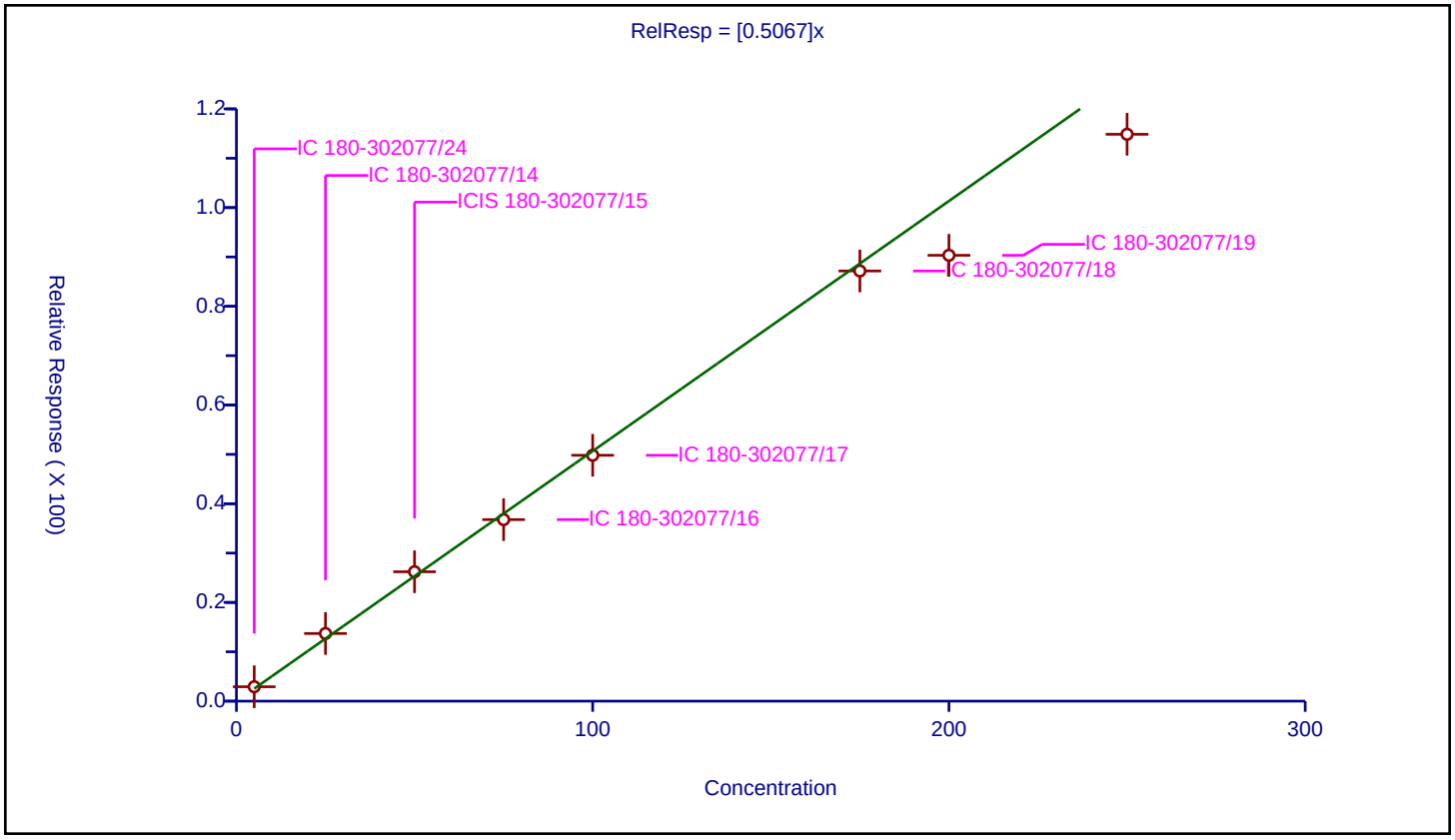
Curve Coefficients

Intercept:	0
Slope:	0.5067

Error Coefficients

Standard Error:	410000
Relative Standard Error:	8.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.914775	50.0	285854.0	0.582955	Y
2	IC 180-302077/14	25.0	13.706975	50.0	208631.0	0.548279	Y
3	ICIS 180-302077/15	50.0	26.213796	50.0	221763.0	0.524276	Y
4	IC 180-302077/16	75.0	36.77906	50.0	254286.0	0.490387	Y
5	IC 180-302077/17	100.0	49.816717	50.0	265436.0	0.498167	Y
6	IC 180-302077/18	175.0	87.161621	50.0	275689.0	0.498066	Y
7	IC 180-302077/19	200.0	90.336075	50.0	301689.0	0.45168	Y
8	IC 180-302077/20	250.0	114.855543	50.0	315596.0	0.459422	Y



Calibration / Carbon disulfide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

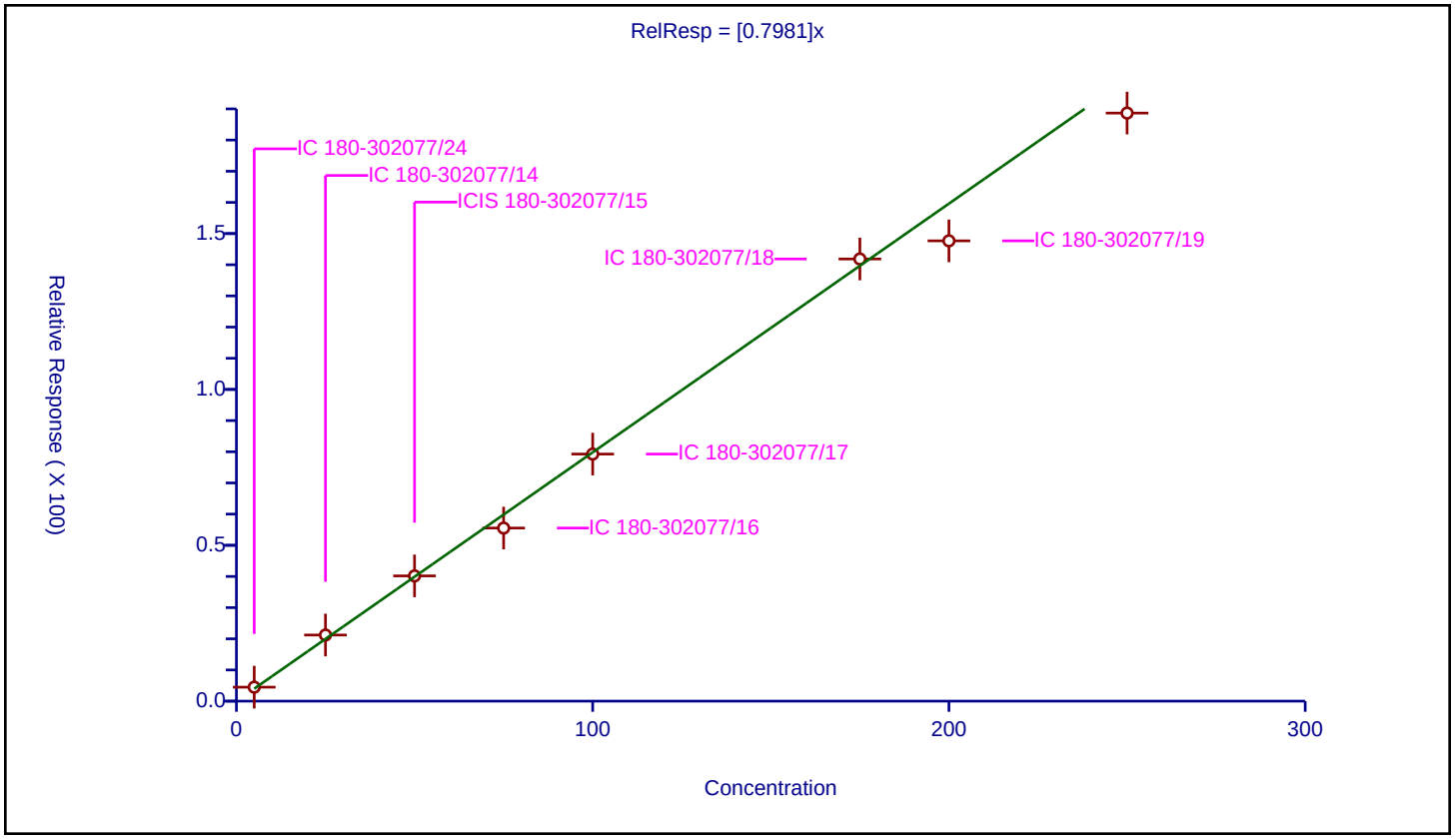
Curve Coefficients

Intercept:	0
Slope:	0.7981

Error Coefficients

Standard Error:	668000
Relative Standard Error:	6.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	4.480084	50.0	285854.0	0.896017	Y
2	IC 180-302077/14	25.0	21.208018	50.0	208631.0	0.848321	Y
3	ICIS 180-302077/15	50.0	40.179832	50.0	221763.0	0.803597	Y
4	IC 180-302077/16	75.0	55.527831	50.0	254286.0	0.740371	Y
5	IC 180-302077/17	100.0	79.261291	50.0	265436.0	0.792613	Y
6	IC 180-302077/18	175.0	141.848423	50.0	275689.0	0.810562	Y
7	IC 180-302077/19	200.0	147.669454	50.0	301689.0	0.738347	Y
8	IC 180-302077/20	250.0	188.657017	50.0	315596.0	0.754628	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

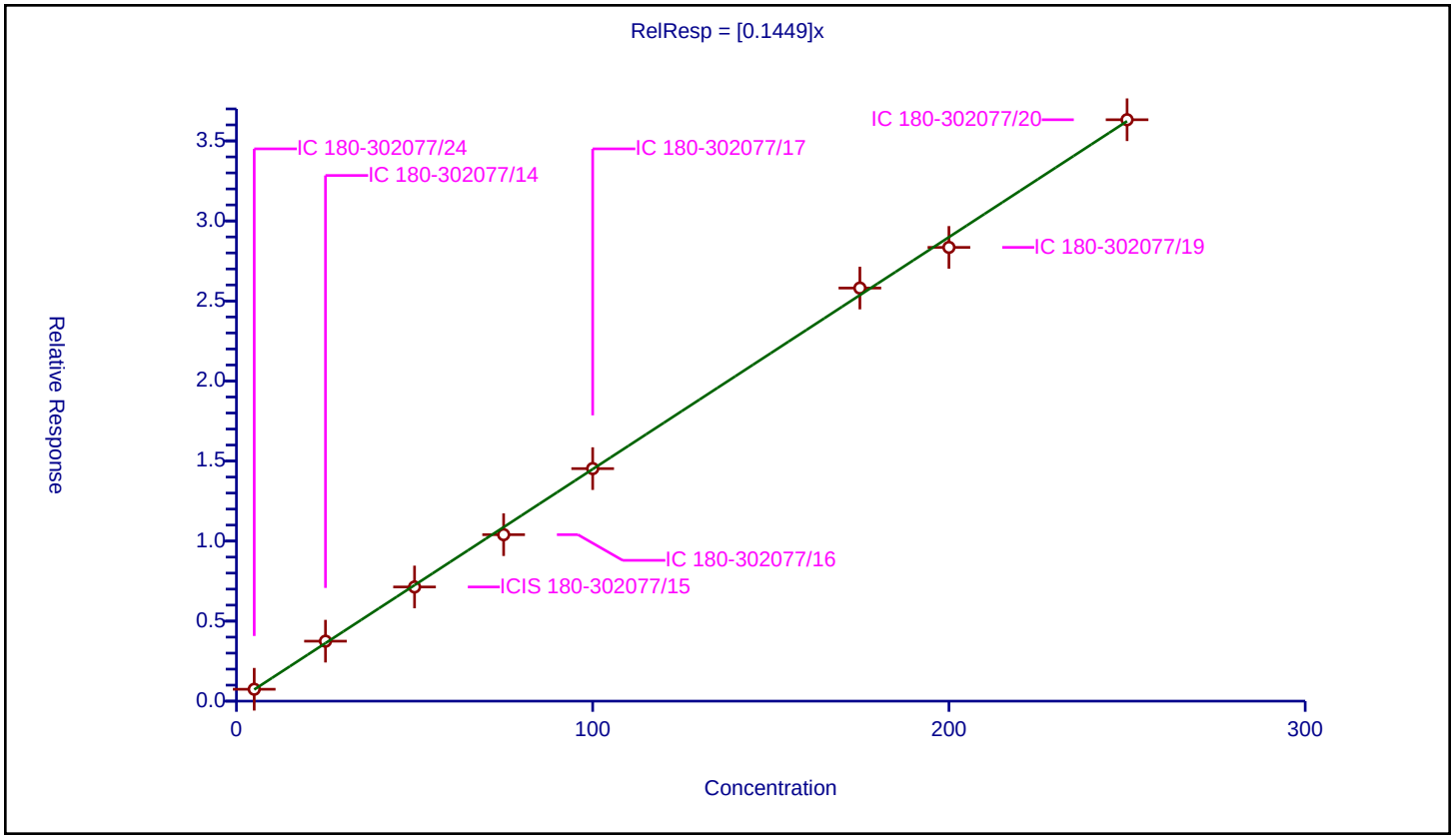
Curve Coefficients

Intercept:	0
Slope:	0.1449

Error Coefficients

Standard Error:	127000
Relative Standard Error:	2.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	0.742687	50.0	285854.0	0.148537	Y
2	IC 180-302077/14	25.0	3.746807	50.0	208631.0	0.149872	Y
3	ICIS 180-302077/15	50.0	7.133065	50.0	221763.0	0.142661	Y
4	IC 180-302077/16	75.0	10.400101	50.0	254286.0	0.138668	Y
5	IC 180-302077/17	100.0	14.527419	50.0	265436.0	0.145274	Y
6	IC 180-302077/18	175.0	25.806978	50.0	275689.0	0.147468	Y
7	IC 180-302077/19	200.0	28.347404	50.0	301689.0	0.141737	Y
8	IC 180-302077/20	250.0	36.322228	50.0	315596.0	0.145289	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

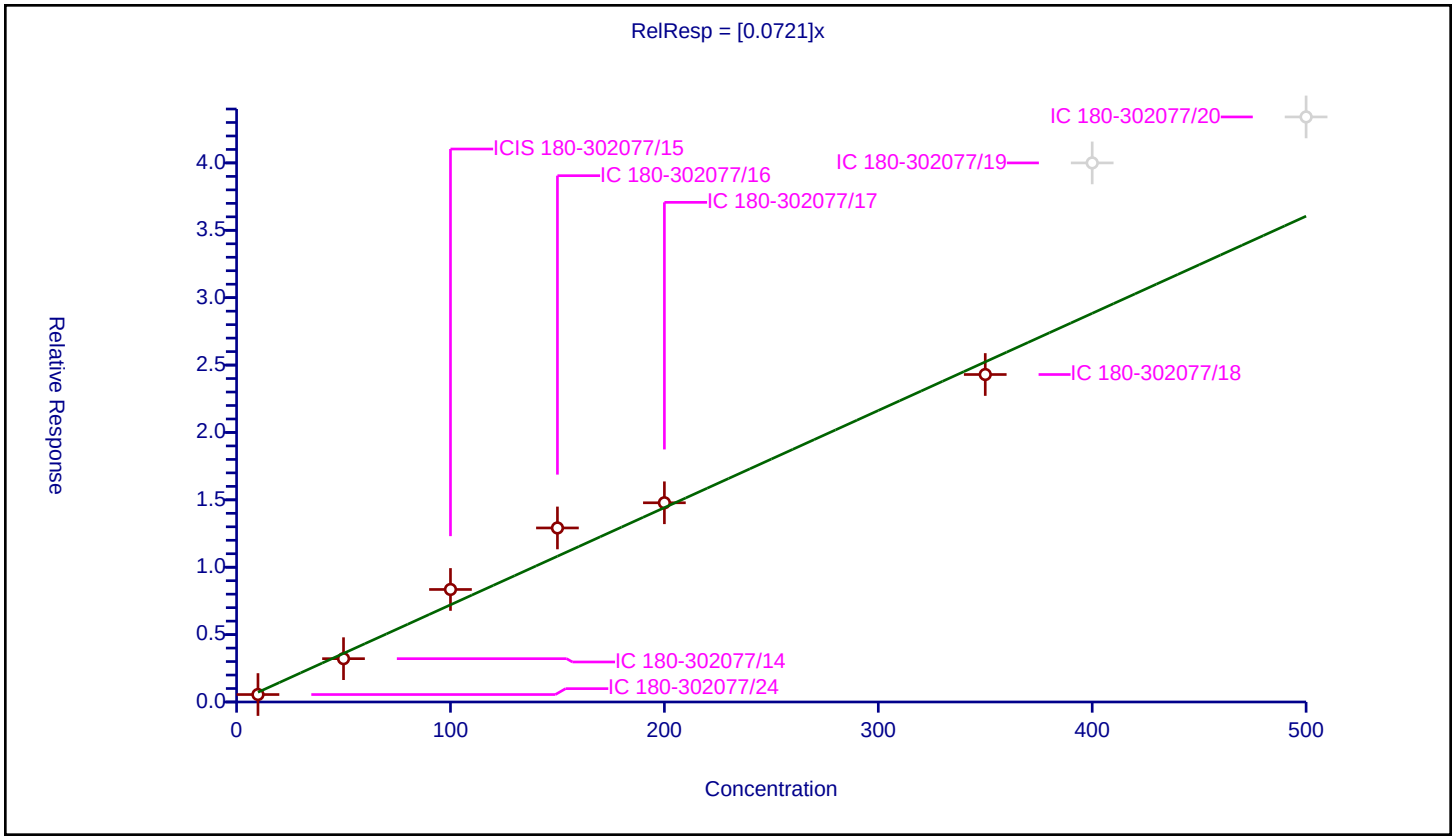
Curve Coefficients

Intercept:	0
Slope:	0.0721

Error Coefficients

Standard Error:	77400
Relative Standard Error:	16.1
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	10.0	0.553954	50.0	285854.0	0.055395	Y
2	IC 180-302077/14	50.0	3.213568	50.0	208631.0	0.064271	Y
3	ICIS 180-302077/15	100.0	8.349003	50.0	221763.0	0.08349	Y
4	IC 180-302077/16	150.0	12.914985	50.0	254286.0	0.0861	Y
5	IC 180-302077/17	200.0	14.783036	50.0	265436.0	0.073915	Y
6	IC 180-302077/18	350.0	24.298938	50.0	275689.0	0.069426	Y
7	IC 180-302077/19	400.0	40.001624	50.0	301689.0	0.100004	N
8	IC 180-302077/20	500.0	43.412306	50.0	315596.0	0.086825	N



Calibration / Methylene Chloride

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

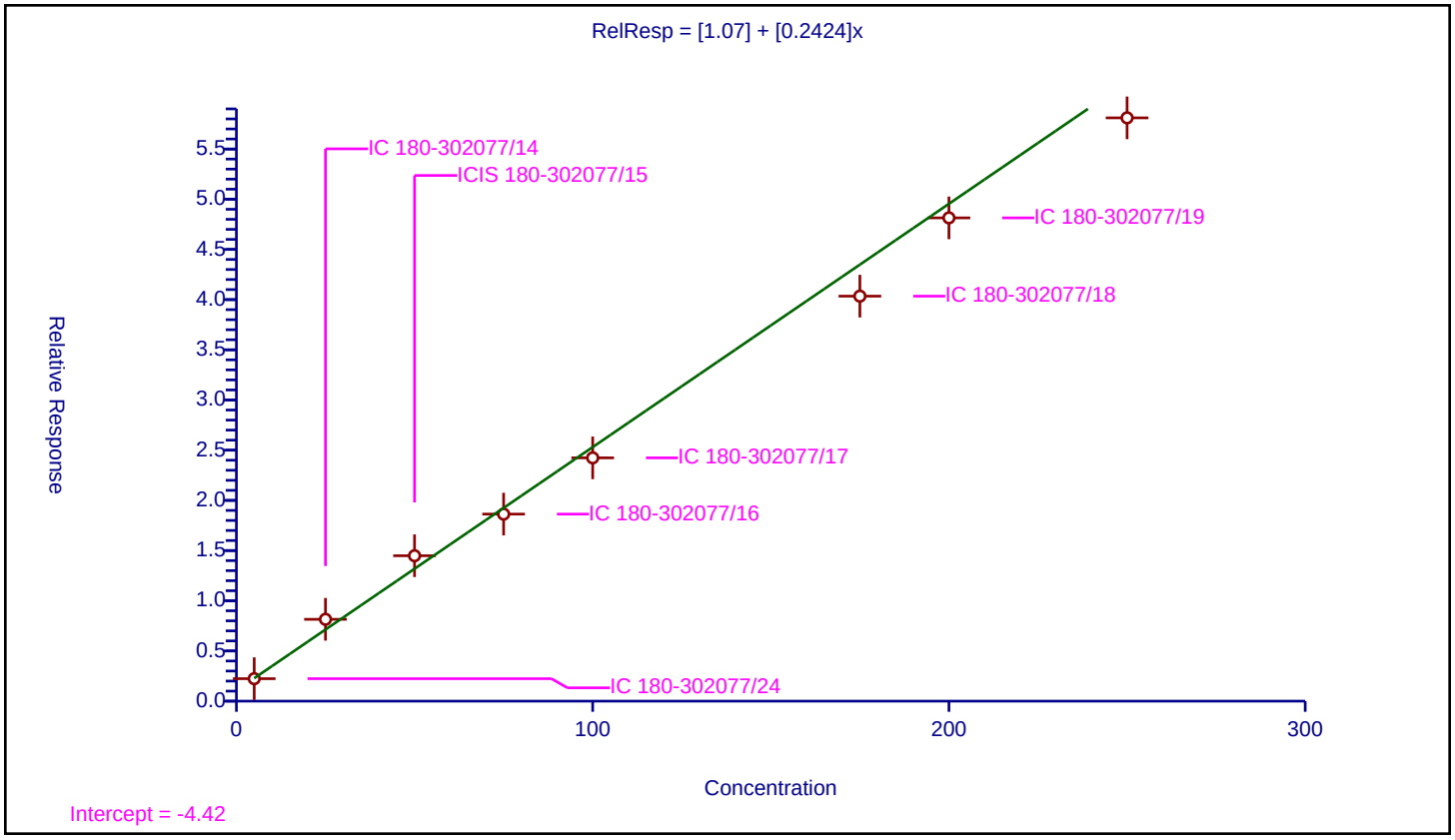
Curve Coefficients

Intercept:	1.07
Slope:	0.2424

Error Coefficients

Standard Error:	223000
Relative Standard Error:	9.5
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.238555	50.0	285854.0	0.447711	Y
2	IC 180-302077/14	25.0	8.151234	50.0	208631.0	0.326049	Y
3	ICIS 180-302077/15	50.0	14.485509	50.0	221763.0	0.28971	Y
4	IC 180-302077/16	75.0	18.63158	50.0	254286.0	0.248421	Y
5	IC 180-302077/17	100.0	24.235597	50.0	265436.0	0.242356	Y
6	IC 180-302077/18	175.0	40.344918	50.0	275689.0	0.230542	Y
7	IC 180-302077/19	200.0	48.14395	50.0	301689.0	0.24072	Y
8	IC 180-302077/20	250.0	58.106567	50.0	315596.0	0.232426	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

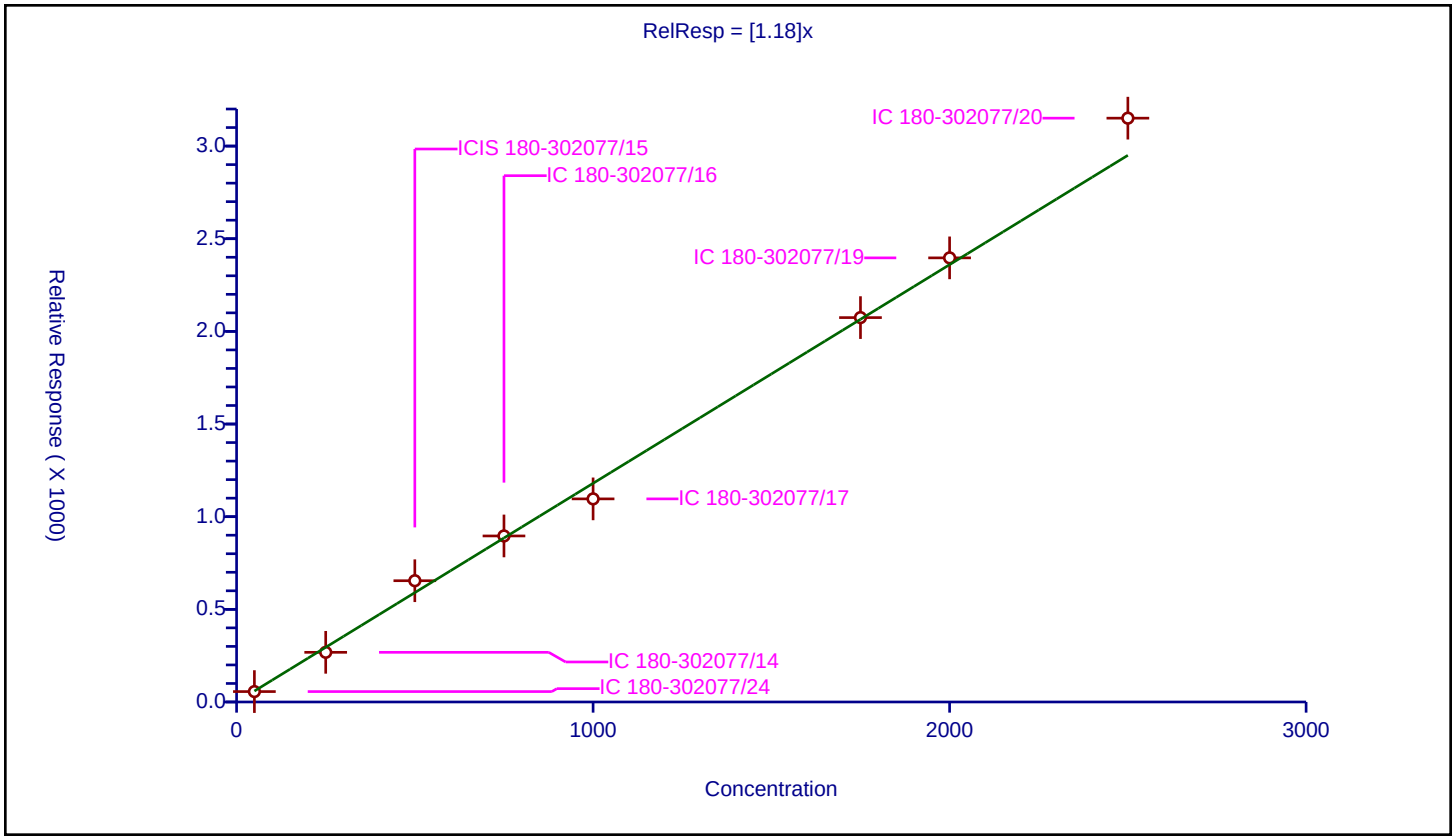
Curve Coefficients

Intercept:	0
Slope:	1.18

Error Coefficients

Standard Error:	151000
Relative Standard Error:	6.8
Correlation Coefficient:	0.941
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	50.0	56.255067	1000.0	41934.0	1.125101	Y
2	IC 180-302077/14	250.0	267.979257	1000.0	35096.0	1.071917	Y
3	ICIS 180-302077/15	500.0	654.366121	1000.0	55255.0	1.308732	Y
4	IC 180-302077/16	750.0	896.018665	1000.0	66435.0	1.194692	Y
5	IC 180-302077/17	1000.0	1096.034854	1000.0	58989.0	1.096035	Y
6	IC 180-302077/18	1750.0	2074.410475	1000.0	64077.0	1.185377	Y
7	IC 180-302077/19	2000.0	2396.695868	1000.0	99996.0	1.198348	Y
8	IC 180-302077/20	2500.0	3150.673016	1000.0	89671.0	1.260269	Y



Calibration / Acrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

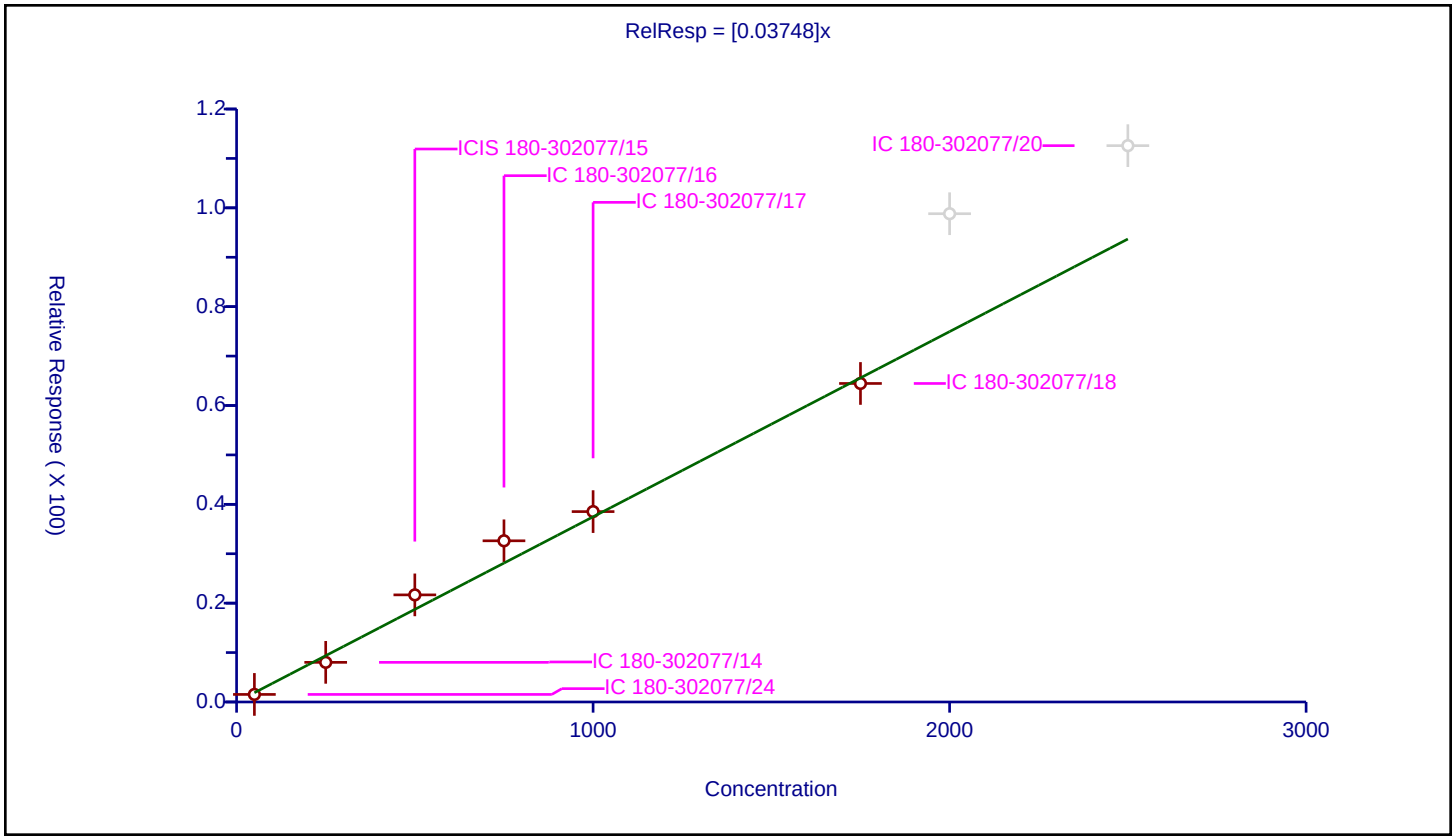
Curve Coefficients

Intercept:	0
Slope:	0.03748

Error Coefficients

Standard Error:	203000
Relative Standard Error:	14.6
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	50.0	1.528403	50.0	285854.0	0.030568	Y
2	IC 180-302077/14	250.0	8.023256	50.0	208631.0	0.032093	Y
3	ICIS 180-302077/15	500.0	21.674039	50.0	221763.0	0.043348	Y
4	IC 180-302077/16	750.0	32.618194	50.0	254286.0	0.043491	Y
5	IC 180-302077/17	1000.0	38.53038	50.0	265436.0	0.03853	Y
6	IC 180-302077/18	1750.0	64.459953	50.0	275689.0	0.036834	Y
7	IC 180-302077/19	2000.0	98.813182	50.0	301689.0	0.049407	N
8	IC 180-302077/20	2500.0	112.586345	50.0	315596.0	0.045035	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

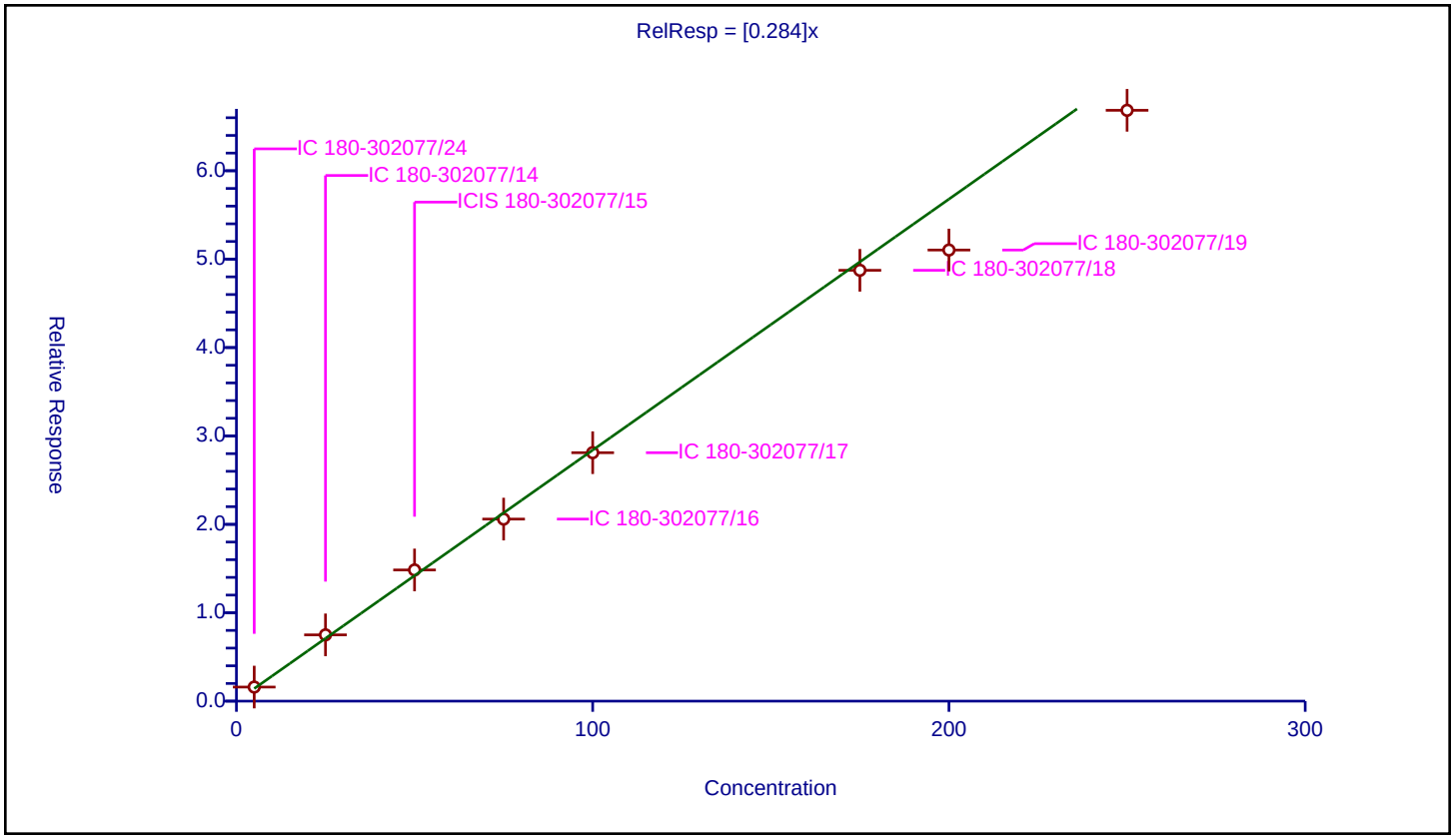
Curve Coefficients

Intercept:	0
Slope:	0.284

Error Coefficients

Standard Error:	234000
Relative Standard Error:	7.1
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.591372	50.0	285854.0	0.318274	Y
2	IC 180-302077/14	25.0	7.497687	50.0	208631.0	0.299907	Y
3	ICIS 180-302077/15	50.0	14.839491	50.0	221763.0	0.29679	Y
4	IC 180-302077/16	75.0	20.595904	50.0	254286.0	0.274612	Y
5	IC 180-302077/17	100.0	28.10621	50.0	265436.0	0.281062	Y
6	IC 180-302077/18	175.0	48.739884	50.0	275689.0	0.278514	Y
7	IC 180-302077/19	200.0	51.034343	50.0	301689.0	0.255172	Y
8	IC 180-302077/20	250.0	66.840359	50.0	315596.0	0.267361	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

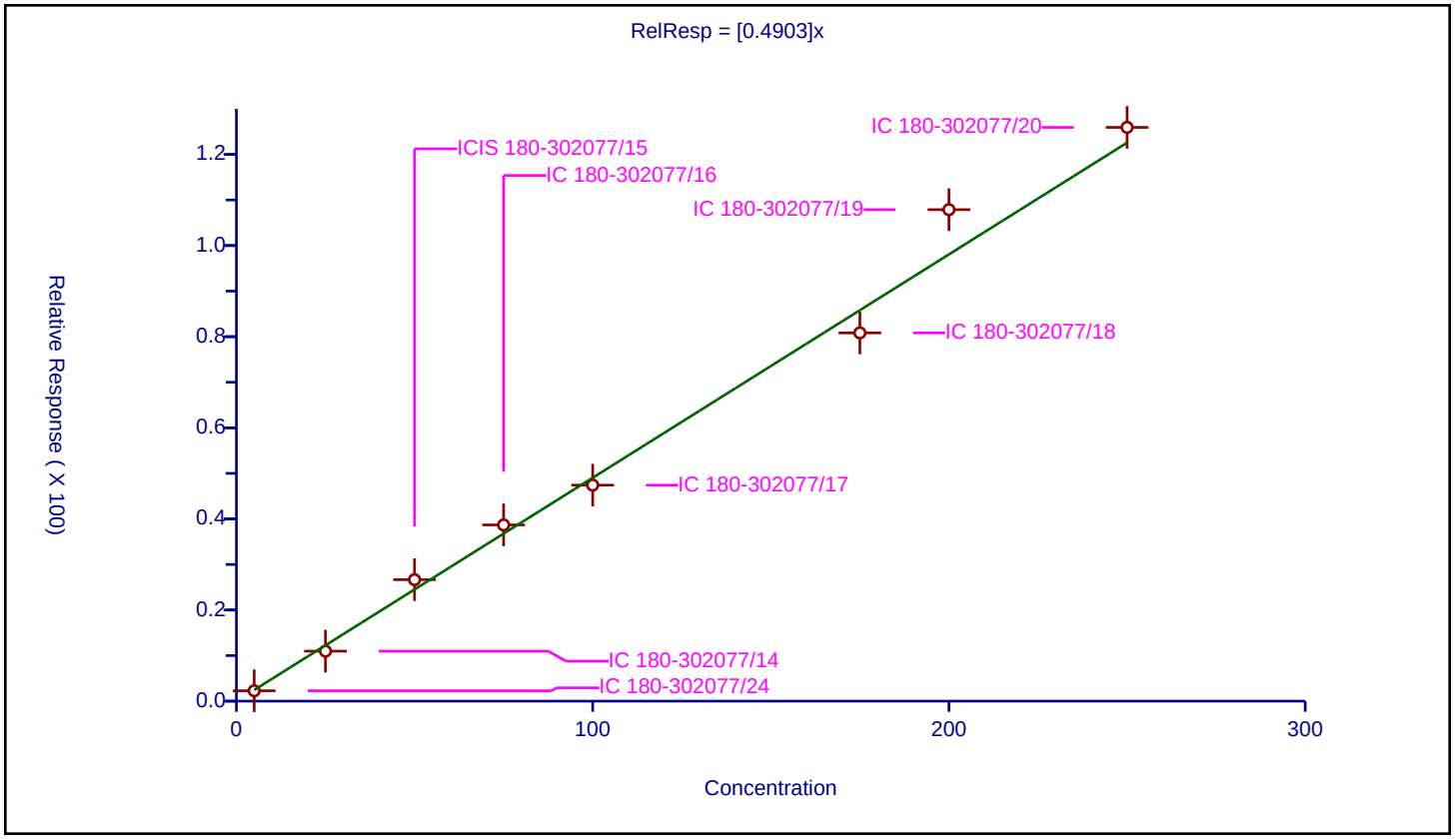
Curve Coefficients

Intercept:	0
Slope:	0.4903

Error Coefficients

Standard Error:	443000
Relative Standard Error:	7.7
Correlation Coefficient:	0.980
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.276687	50.0	285854.0	0.455337	Y
2	IC 180-302077/14	25.0	10.976317	50.0	208631.0	0.439053	Y
3	ICIS 180-302077/15	50.0	26.661571	50.0	221763.0	0.533231	Y
4	IC 180-302077/16	75.0	38.680266	50.0	254286.0	0.515737	Y
5	IC 180-302077/17	100.0	47.407285	50.0	265436.0	0.474073	Y
6	IC 180-302077/18	175.0	80.834745	50.0	275689.0	0.461913	Y
7	IC 180-302077/19	200.0	107.878809	50.0	301689.0	0.539394	Y
8	IC 180-302077/20	250.0	125.938542	50.0	315596.0	0.503754	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

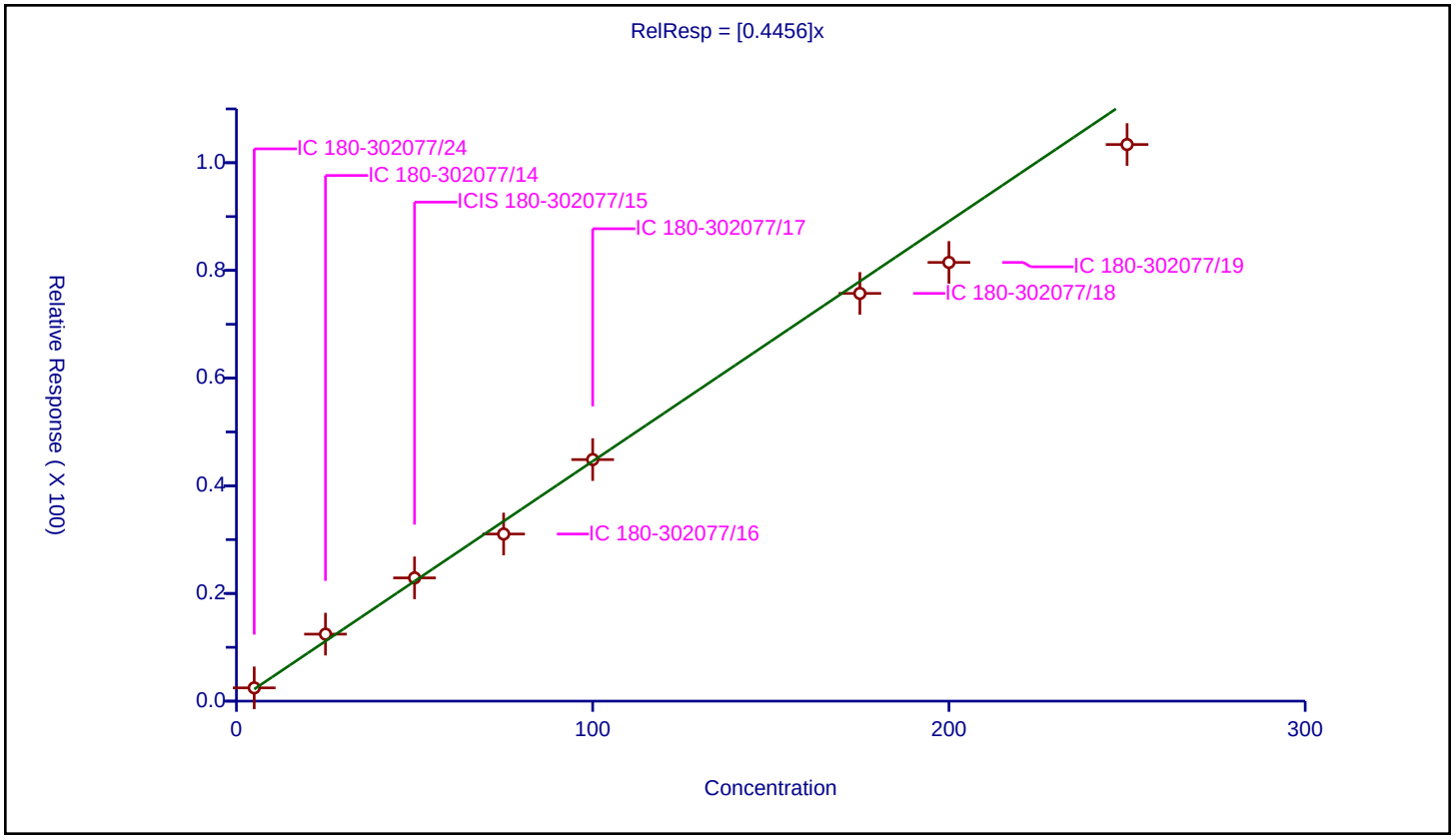
Curve Coefficients

Intercept:	0
Slope:	0.4456

Error Coefficients

Standard Error:	366000
Relative Standard Error:	7.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.464195	50.0	285854.0	0.492839	Y
2	IC 180-302077/14	25.0	12.445897	50.0	208631.0	0.497836	Y
3	ICIS 180-302077/15	50.0	22.889752	50.0	221763.0	0.457795	Y
4	IC 180-302077/16	75.0	31.039066	50.0	254286.0	0.413854	Y
5	IC 180-302077/17	100.0	44.863169	50.0	265436.0	0.448632	Y
6	IC 180-302077/18	175.0	75.728992	50.0	275689.0	0.432737	Y
7	IC 180-302077/19	200.0	81.480266	50.0	301689.0	0.407401	Y
8	IC 180-302077/20	250.0	103.385182	50.0	315596.0	0.413541	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

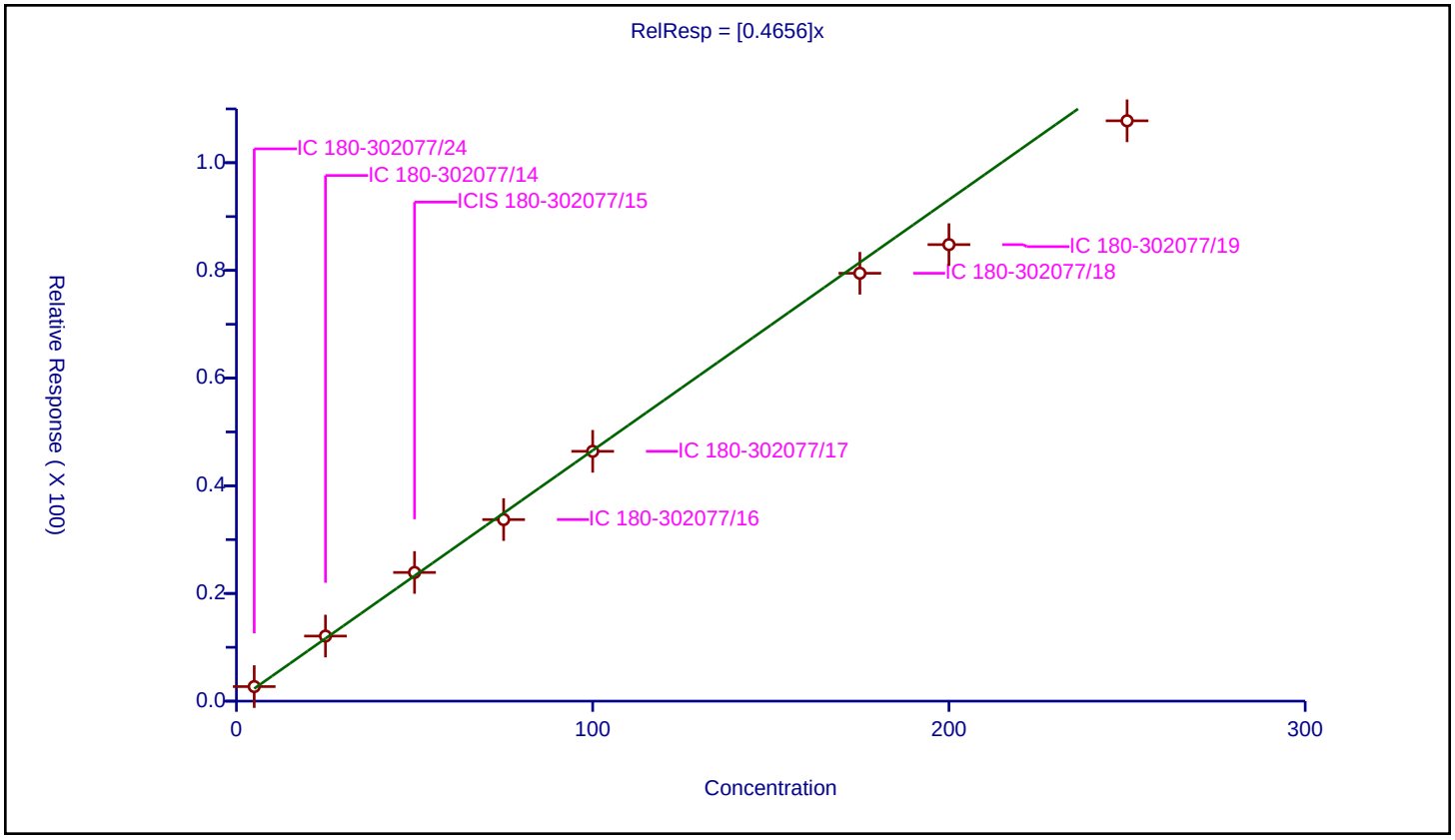
Curve Coefficients

Intercept:	0
Slope:	0.4656

Error Coefficients

Standard Error:	382000
Relative Standard Error:	7.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.704353	50.0	285854.0	0.540871	Y
2	IC 180-302077/14	25.0	12.08713	50.0	208631.0	0.483485	Y
3	ICIS 180-302077/15	50.0	23.899163	50.0	221763.0	0.477983	Y
4	IC 180-302077/16	75.0	33.722462	50.0	254286.0	0.449633	Y
5	IC 180-302077/17	100.0	46.397625	50.0	265436.0	0.463976	Y
6	IC 180-302077/18	175.0	79.472703	50.0	275689.0	0.45413	Y
7	IC 180-302077/19	200.0	84.793446	50.0	301689.0	0.423967	Y
8	IC 180-302077/20	250.0	107.787013	50.0	315596.0	0.431148	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

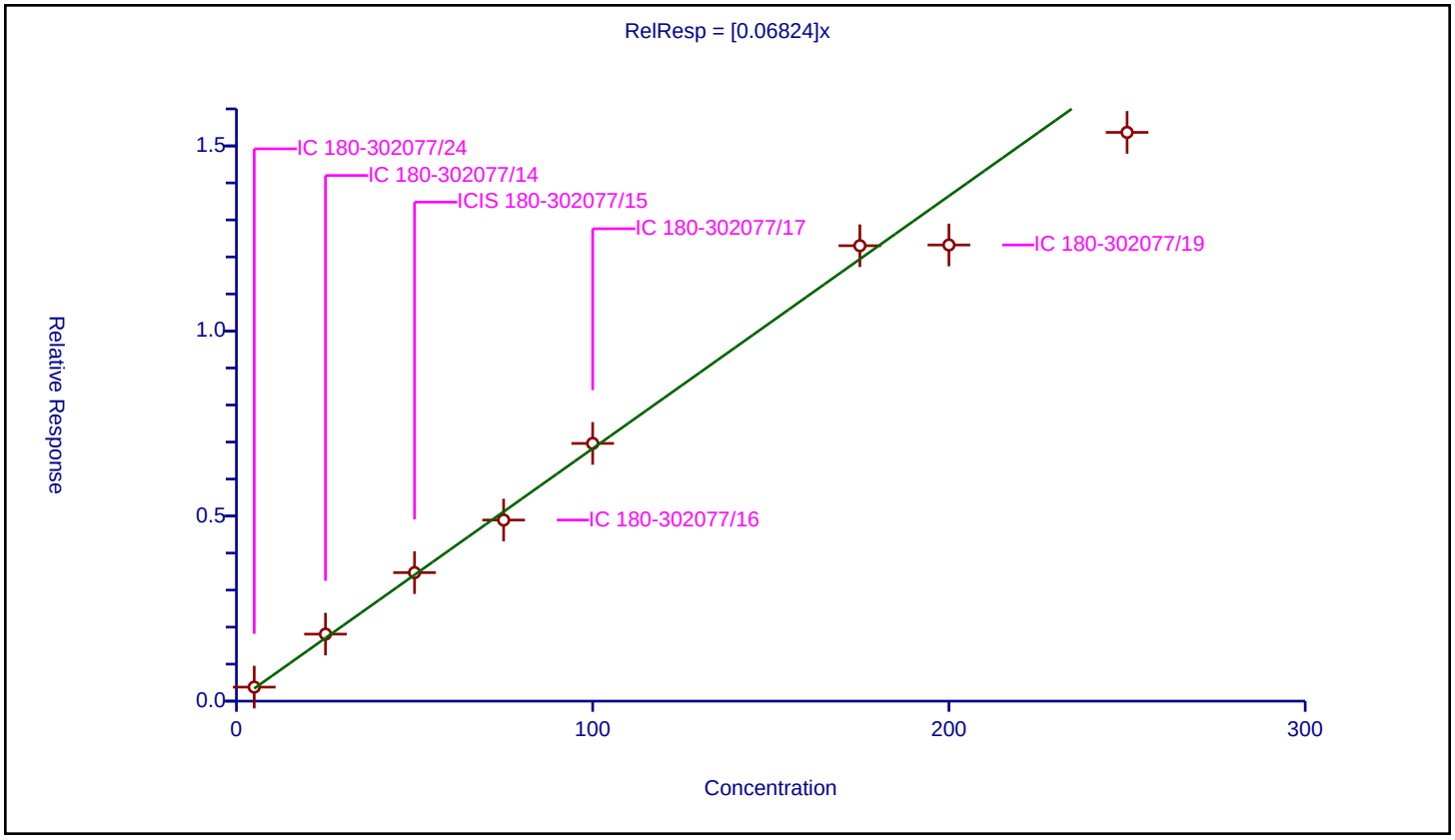
Curve Coefficients

Intercept:	0
Slope:	0.06824

Error Coefficients

Standard Error:	55800
Relative Standard Error:	7.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	0.37904	50.0	285854.0	0.075808	Y
2	IC 180-302077/14	25.0	1.810613	50.0	208631.0	0.072425	Y
3	ICIS 180-302077/15	50.0	3.47195	50.0	221763.0	0.069439	Y
4	IC 180-302077/16	75.0	4.892523	50.0	254286.0	0.065234	Y
5	IC 180-302077/17	100.0	6.962319	50.0	265436.0	0.069623	Y
6	IC 180-302077/18	175.0	12.303719	50.0	275689.0	0.070307	Y
7	IC 180-302077/19	200.0	12.323949	50.0	301689.0	0.06162	Y
8	IC 180-302077/20	250.0	15.365689	50.0	315596.0	0.061463	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

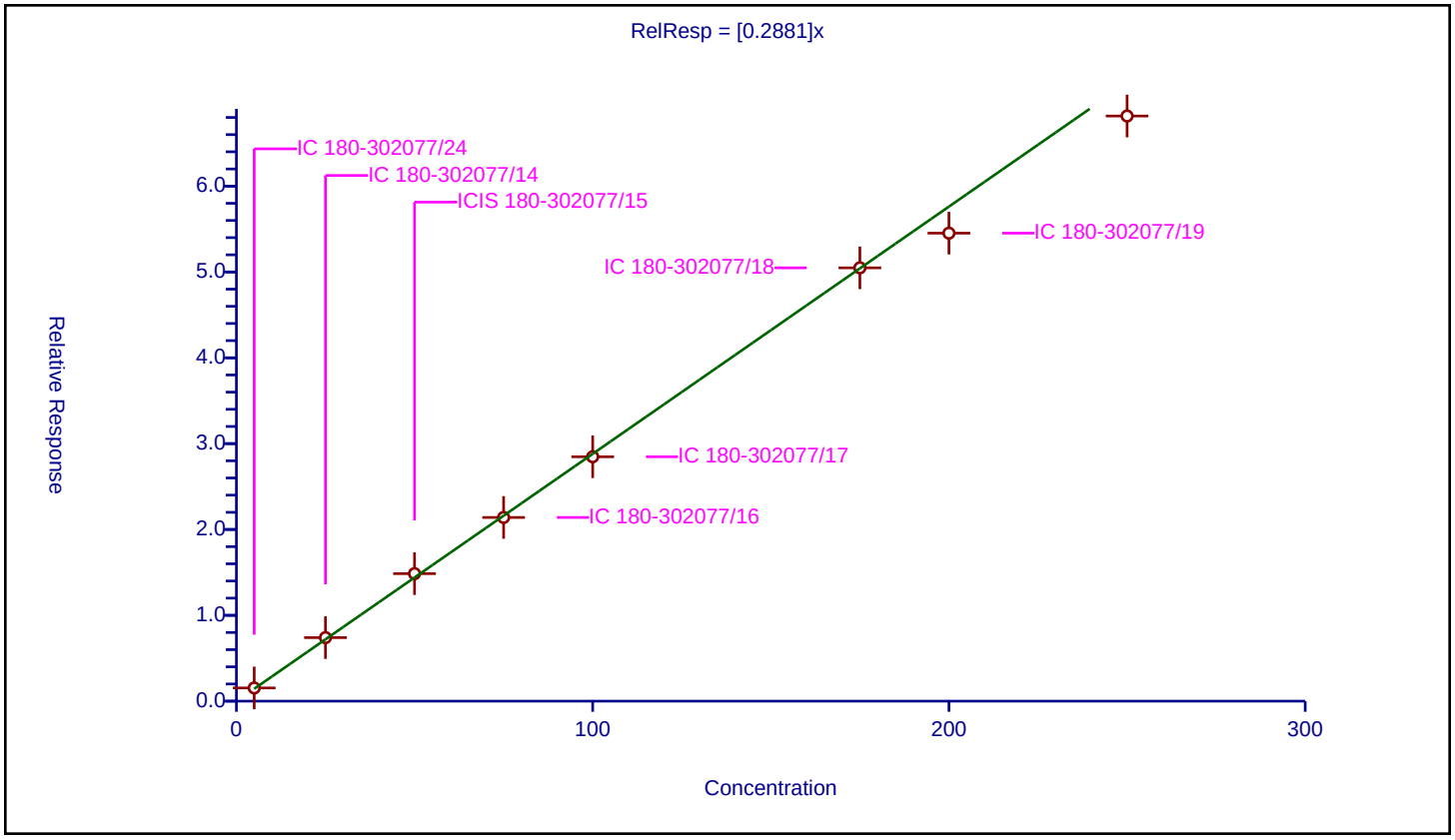
Curve Coefficients

Intercept:	0
Slope:	0.2881

Error Coefficients

Standard Error:	242000
Relative Standard Error:	4.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.538373	50.0	285854.0	0.307675	Y
2	IC 180-302077/14	25.0	7.401824	50.0	208631.0	0.296073	Y
3	ICIS 180-302077/15	50.0	14.85595	50.0	221763.0	0.297119	Y
4	IC 180-302077/16	75.0	21.398543	50.0	254286.0	0.285314	Y
5	IC 180-302077/17	100.0	28.47127	50.0	265436.0	0.284713	Y
6	IC 180-302077/18	175.0	50.481702	50.0	275689.0	0.288467	Y
7	IC 180-302077/19	200.0	54.521544	50.0	301689.0	0.272608	Y
8	IC 180-302077/20	250.0	68.168481	50.0	315596.0	0.272674	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

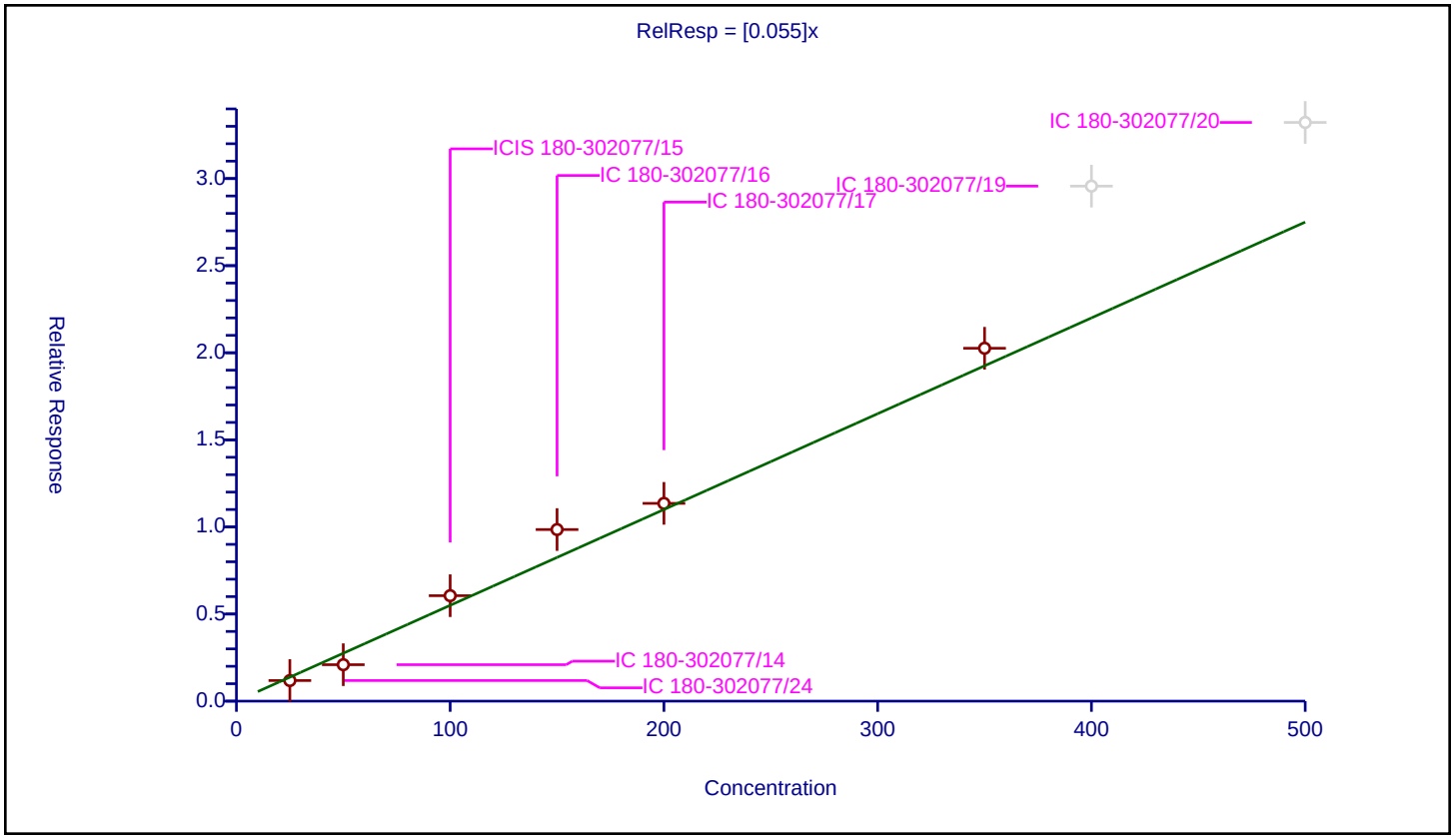
Curve Coefficients

Intercept:	0
Slope:	0.055

Error Coefficients

Standard Error:	62400
Relative Standard Error:	16.0
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.963

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	25.0	1.182597	50.0	285854.0	0.047304	Y
2	IC 180-302077/14	50.0	2.09245	50.0	208631.0	0.041849	Y
3	ICIS 180-302077/15	100.0	6.053535	50.0	221763.0	0.060535	Y
4	IC 180-302077/16	150.0	9.850719	50.0	254286.0	0.065671	Y
5	IC 180-302077/17	200.0	11.353584	50.0	265436.0	0.056768	Y
6	IC 180-302077/18	350.0	20.258153	50.0	275689.0	0.05788	Y
7	IC 180-302077/19	400.0	29.565877	50.0	301689.0	0.073915	N
8	IC 180-302077/20	500.0	33.221587	50.0	315596.0	0.066443	N



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

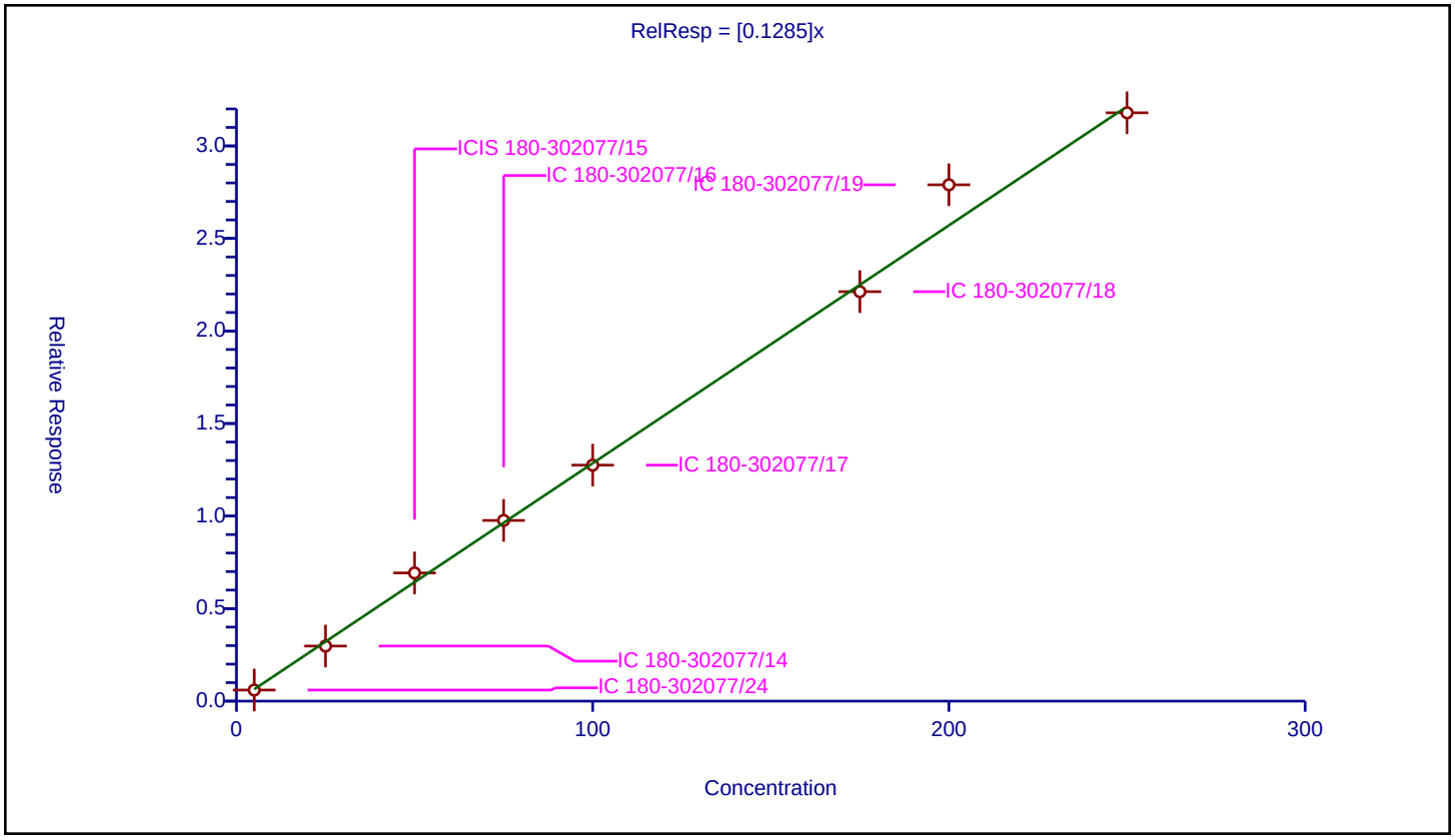
Curve Coefficients

Intercept:	0
Slope:	0.1285

Error Coefficients

Standard Error:	114000
Relative Standard Error:	5.8
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	0.599257	50.0	285854.0	0.119851	Y
2	IC 180-302077/14	25.0	2.976307	50.0	208631.0	0.119052	Y
3	ICIS 180-302077/15	50.0	6.927215	50.0	221763.0	0.138544	Y
4	IC 180-302077/16	75.0	9.763613	50.0	254286.0	0.130182	Y
5	IC 180-302077/17	100.0	12.751096	50.0	265436.0	0.127511	Y
6	IC 180-302077/18	175.0	22.125475	50.0	275689.0	0.126431	Y
7	IC 180-302077/19	200.0	27.898266	50.0	301689.0	0.139491	Y
8	IC 180-302077/20	250.0	31.790327	50.0	315596.0	0.127161	Y



Calibration / Tetrahydrofuran

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

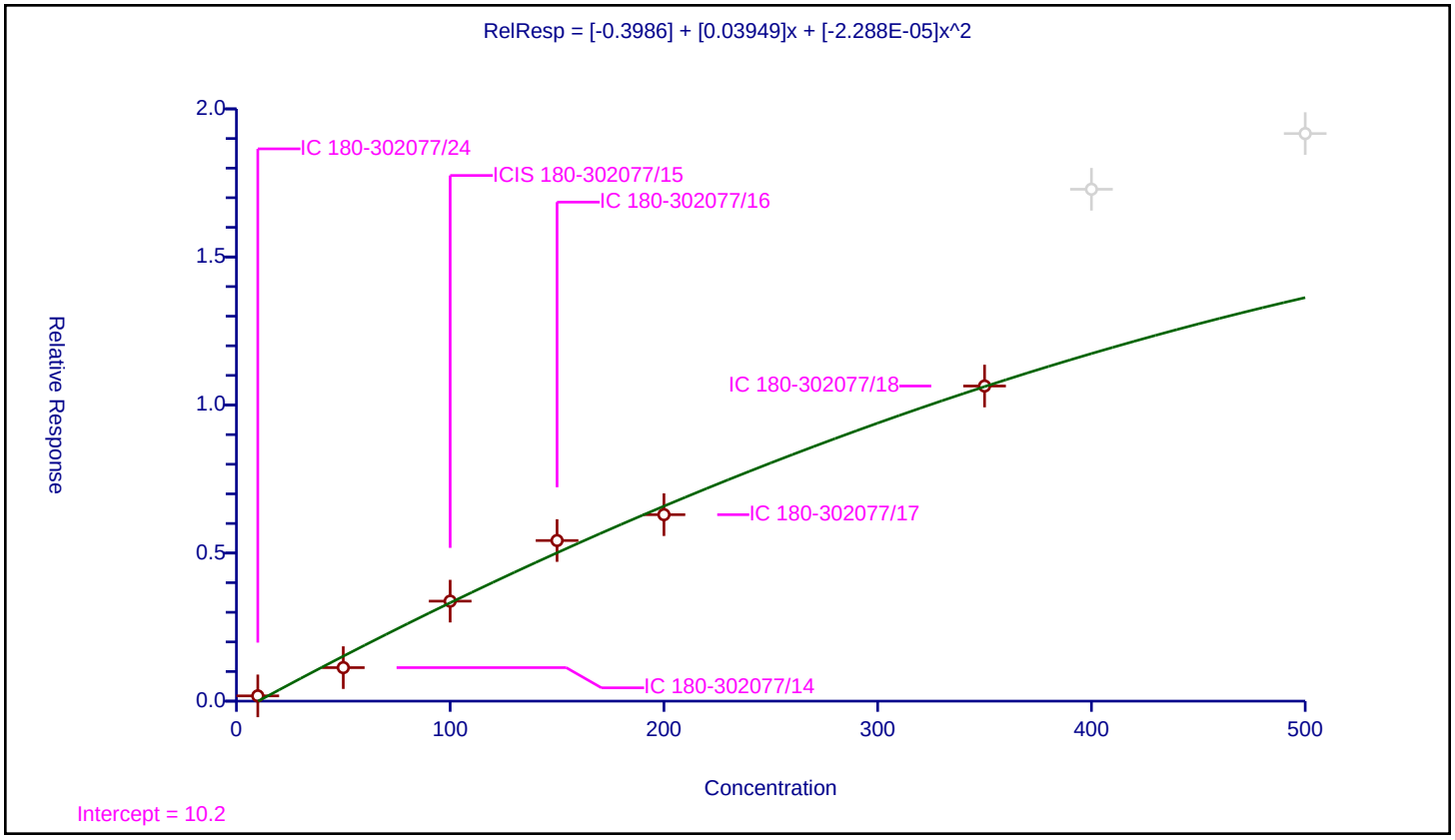
Curve Coefficients

Intercept:	-0.3986
Slope:	0.03949
Second Order:	-2.288E-05

Error Coefficients

Standard Error:	43100
Relative Standard Error:	30.3
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	10.0	0.178063	50.0	285854.0	0.017806	Y
2	IC 180-302077/14	50.0	1.132142	50.0	208631.0	0.022643	Y
3	ICIS 180-302077/15	100.0	3.377254	50.0	221763.0	0.033773	Y
4	IC 180-302077/16	150.0	5.423814	50.0	254286.0	0.036159	Y
5	IC 180-302077/17	200.0	6.297752	50.0	265436.0	0.031489	Y
6	IC 180-302077/18	350.0	10.641701	50.0	275689.0	0.030405	Y
7	IC 180-302077/19	400.0	17.285847	50.0	301689.0	0.043215	N
8	IC 180-302077/20	500.0	19.166117	50.0	315596.0	0.038332	N



Calibration / Chloroform

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

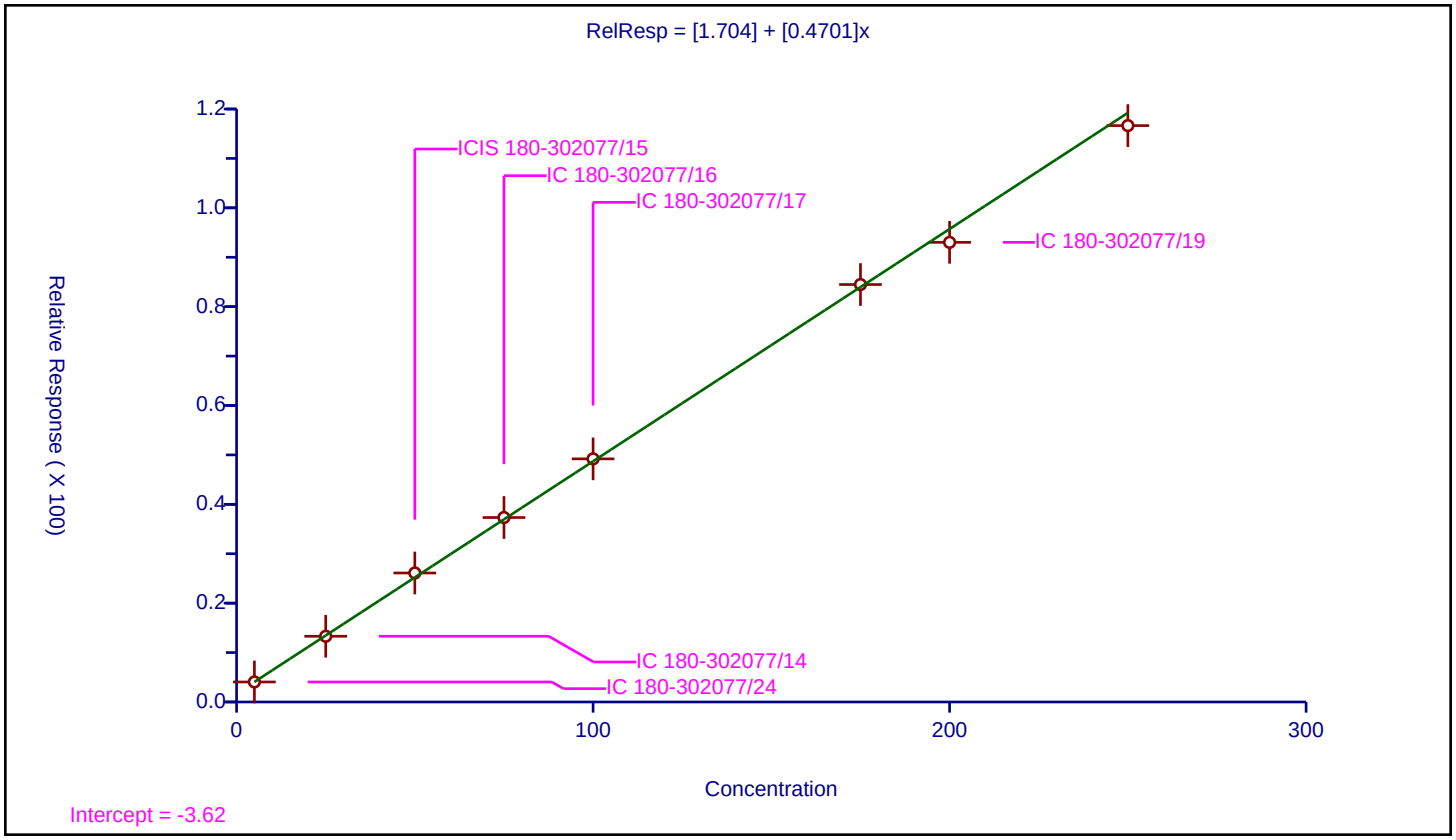
Curve Coefficients

Intercept:	1.704
Slope:	0.4701

Error Coefficients

Standard Error:	446000
Relative Standard Error:	2.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	4.050844	50.0	285854.0	0.810169	Y
2	IC 180-302077/14	25.0	13.297401	50.0	208631.0	0.531896	Y
3	ICIS 180-302077/15	50.0	26.107601	50.0	221763.0	0.522152	Y
4	IC 180-302077/16	75.0	37.328638	50.0	254286.0	0.497715	Y
5	IC 180-302077/17	100.0	49.203763	50.0	265436.0	0.492038	Y
6	IC 180-302077/18	175.0	84.479432	50.0	275689.0	0.48274	Y
7	IC 180-302077/19	200.0	93.016318	50.0	301689.0	0.465082	Y
8	IC 180-302077/20	250.0	116.644222	50.0	315596.0	0.466577	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

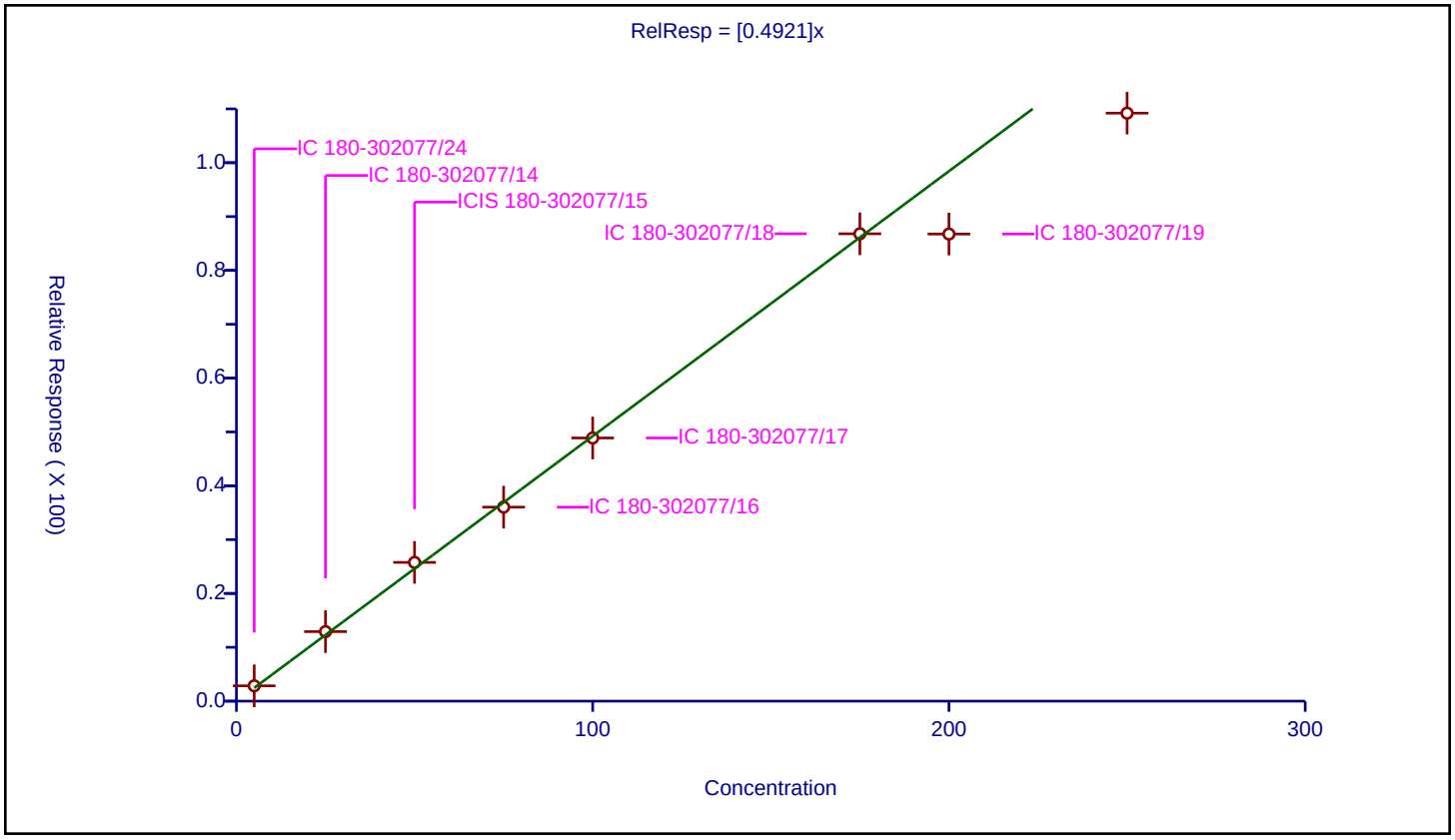
Curve Coefficients

Intercept:	0
Slope:	0.4921

Error Coefficients

Standard Error:	396000
Relative Standard Error:	9.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.846908	50.0	285854.0	0.569382	Y
2	IC 180-302077/14	25.0	12.914428	50.0	208631.0	0.516577	Y
3	ICIS 180-302077/15	50.0	25.76805	50.0	221763.0	0.515361	Y
4	IC 180-302077/16	75.0	36.032656	50.0	254286.0	0.480435	Y
5	IC 180-302077/17	100.0	48.876942	50.0	265436.0	0.488769	Y
6	IC 180-302077/18	175.0	86.80252	50.0	275689.0	0.496014	Y
7	IC 180-302077/19	200.0	86.752914	50.0	301689.0	0.433765	Y
8	IC 180-302077/20	250.0	109.206707	50.0	315596.0	0.436827	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

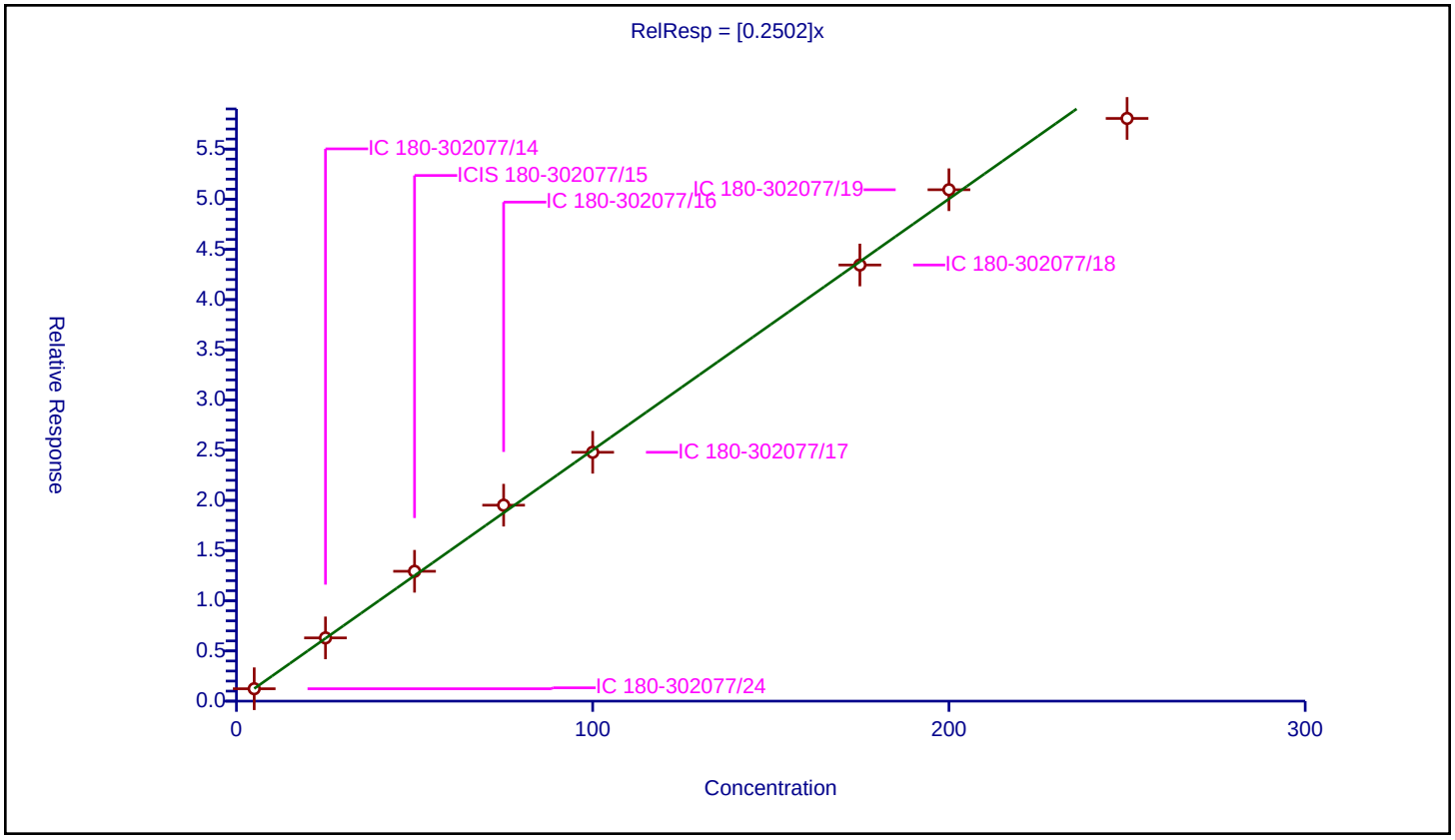
Curve Coefficients

Intercept:	0
Slope:	0.2502

Error Coefficients

Standard Error:	213000
Relative Standard Error:	3.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.236121	50.0	285854.0	0.247224	Y
2	IC 180-302077/14	25.0	6.301317	50.0	208631.0	0.252053	Y
3	ICIS 180-302077/15	50.0	12.93498	50.0	221763.0	0.2587	Y
4	IC 180-302077/16	75.0	19.521523	50.0	254286.0	0.260287	Y
5	IC 180-302077/17	100.0	24.790722	50.0	265436.0	0.247907	Y
6	IC 180-302077/18	175.0	43.448052	50.0	275689.0	0.248275	Y
7	IC 180-302077/19	200.0	50.948493	50.0	301689.0	0.254742	Y
8	IC 180-302077/20	250.0	58.048898	50.0	315596.0	0.232196	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

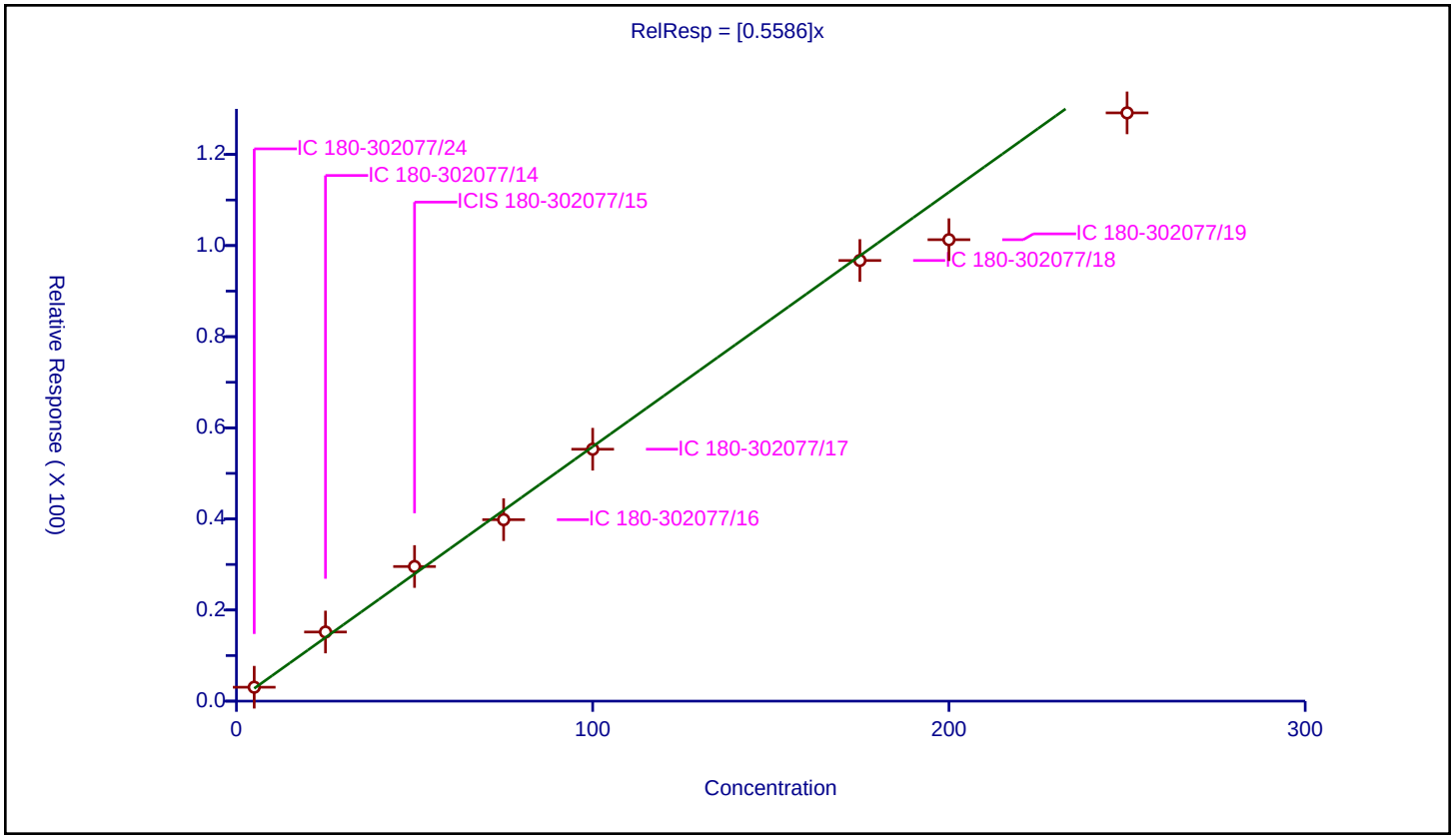
Curve Coefficients

Intercept:	0
Slope:	0.5586

Error Coefficients

Standard Error:	458000
Relative Standard Error:	7.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	3.053832	50.0	285854.0	0.610766	Y
2	IC 180-302077/14	25.0	15.176076	50.0	208631.0	0.607043	Y
3	ICIS 180-302077/15	50.0	29.550917	50.0	221763.0	0.591018	Y
4	IC 180-302077/16	75.0	39.831135	50.0	254286.0	0.531082	Y
5	IC 180-302077/17	100.0	55.298076	50.0	265436.0	0.552981	Y
6	IC 180-302077/18	175.0	96.724026	50.0	275689.0	0.552709	Y
7	IC 180-302077/19	200.0	101.29007	50.0	301689.0	0.50645	Y
8	IC 180-302077/20	250.0	129.128221	50.0	315596.0	0.516513	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

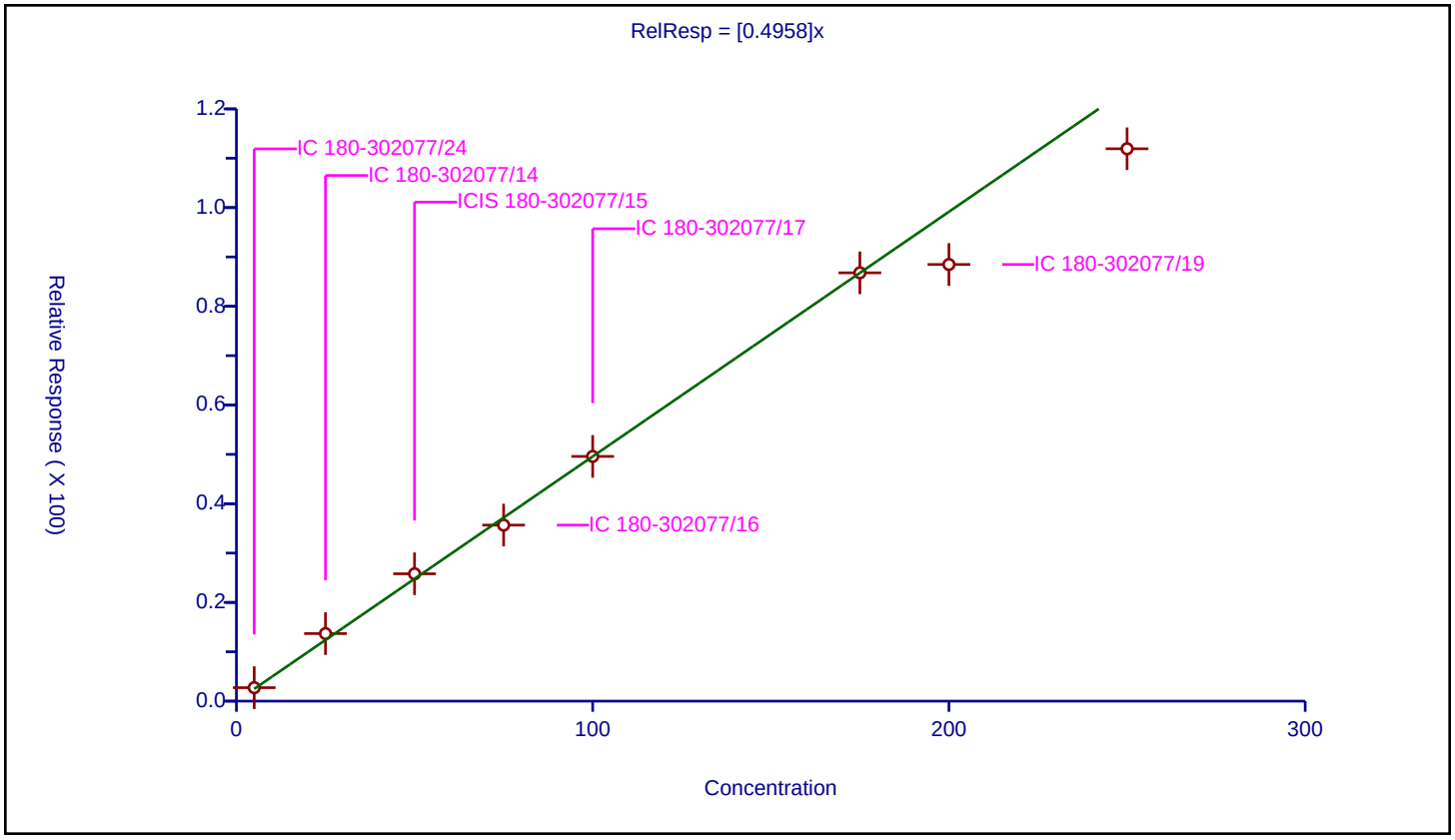
Curve Coefficients

Intercept:	0
Slope:	0.4958

Error Coefficients

Standard Error:	402000
Relative Standard Error:	8.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.726042	50.0	285854.0	0.545208	Y
2	IC 180-302077/14	25.0	13.690199	50.0	208631.0	0.547608	Y
3	ICIS 180-302077/15	50.0	25.802997	50.0	221763.0	0.51606	Y
4	IC 180-302077/16	75.0	35.667909	50.0	254286.0	0.475572	Y
5	IC 180-302077/17	100.0	49.586718	50.0	265436.0	0.495867	Y
6	IC 180-302077/18	175.0	86.786923	50.0	275689.0	0.495925	Y
7	IC 180-302077/19	200.0	88.474721	50.0	301689.0	0.442374	Y
8	IC 180-302077/20	250.0	111.921887	50.0	315596.0	0.447688	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

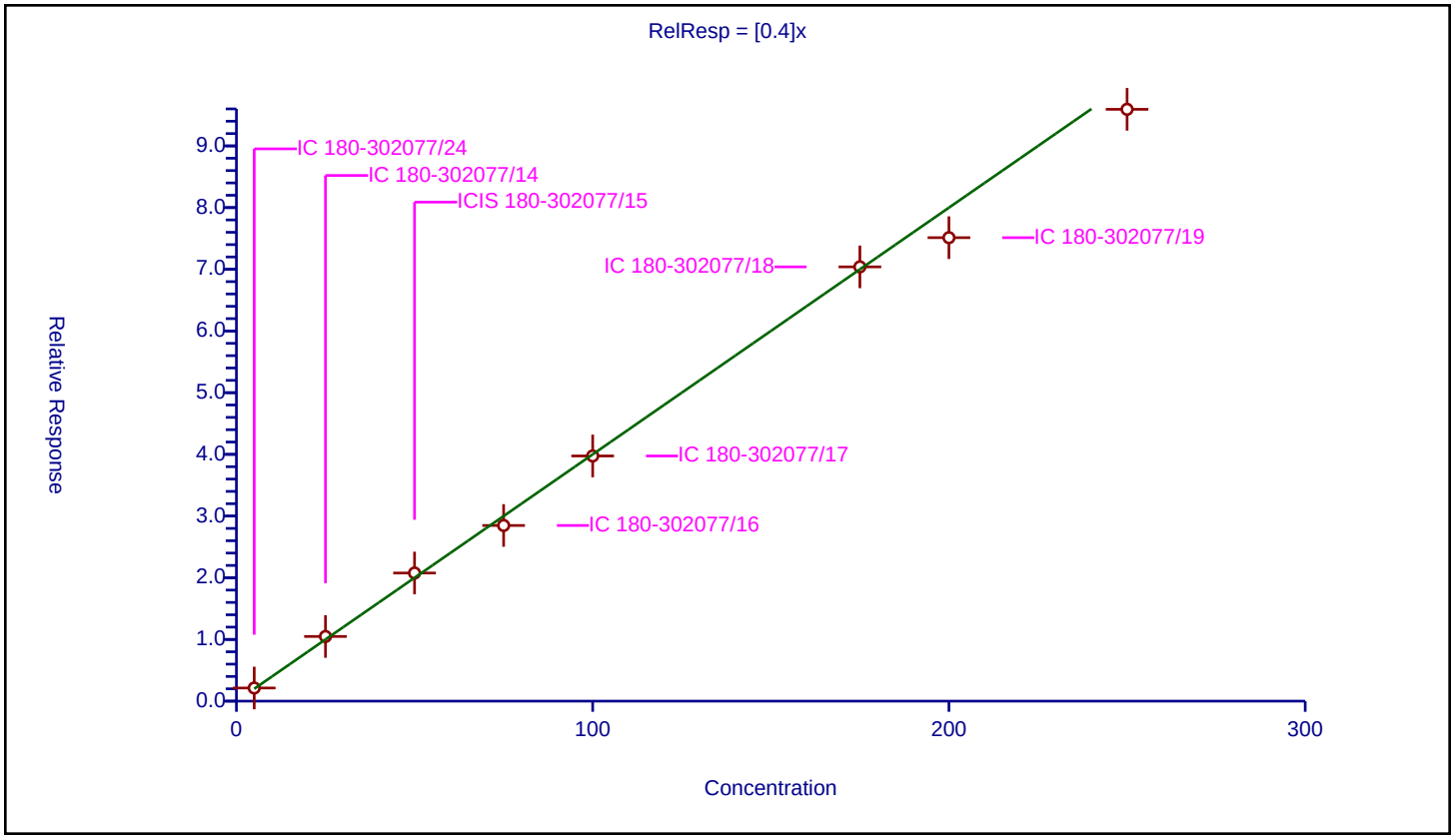
Curve Coefficients

Intercept:	0
Slope:	0.4

Error Coefficients

Standard Error:	338000
Relative Standard Error:	4.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.132032	50.0	285854.0	0.426406	Y
2	IC 180-302077/14	25.0	10.482622	50.0	208631.0	0.419305	Y
3	ICIS 180-302077/15	50.0	20.768794	50.0	221763.0	0.415376	Y
4	IC 180-302077/16	75.0	28.473058	50.0	254286.0	0.379641	Y
5	IC 180-302077/17	100.0	39.740465	50.0	265436.0	0.397405	Y
6	IC 180-302077/18	175.0	70.39599	50.0	275689.0	0.402263	Y
7	IC 180-302077/19	200.0	75.124217	50.0	301689.0	0.375621	Y
8	IC 180-302077/20	250.0	95.928972	50.0	315596.0	0.383716	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

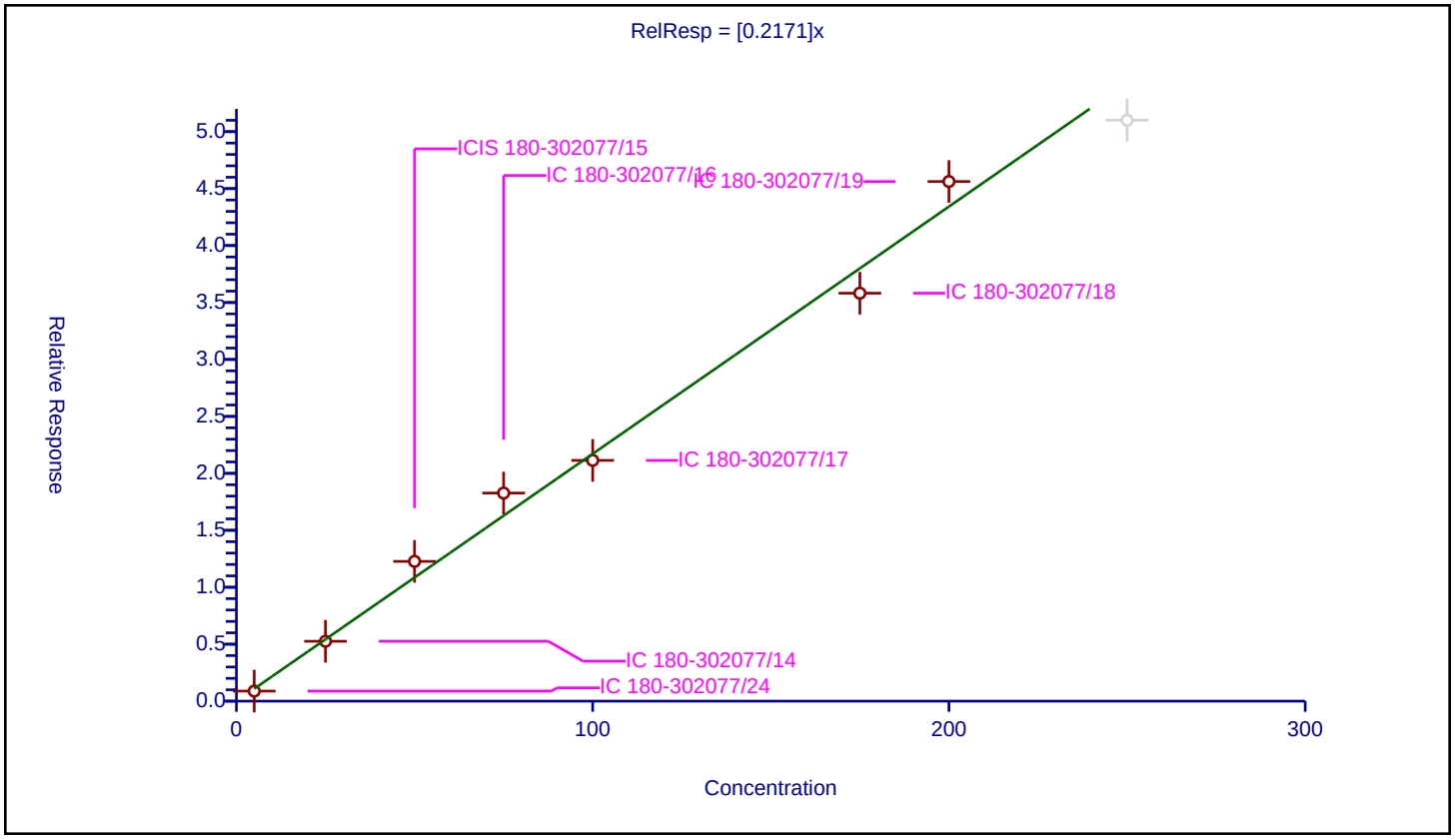
Curve Coefficients

Intercept:	0
Slope:	0.2171

Error Coefficients

Standard Error:	152000
Relative Standard Error:	11.1
Correlation Coefficient:	0.979
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	0.882094	50.0	285854.0	0.176419	Y
2	IC 180-302077/14	25.0	5.25617	50.0	208631.0	0.210247	Y
3	ICIS 180-302077/15	50.0	12.269179	50.0	221763.0	0.245384	Y
4	IC 180-302077/16	75.0	18.268603	50.0	254286.0	0.243581	Y
5	IC 180-302077/17	100.0	21.139182	50.0	265436.0	0.211392	Y
6	IC 180-302077/18	175.0	35.816445	50.0	275689.0	0.204665	Y
7	IC 180-302077/19	200.0	45.622645	50.0	301689.0	0.228113	Y
8	IC 180-302077/20	250.0	51.003181	50.0	315596.0	0.204013	N



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

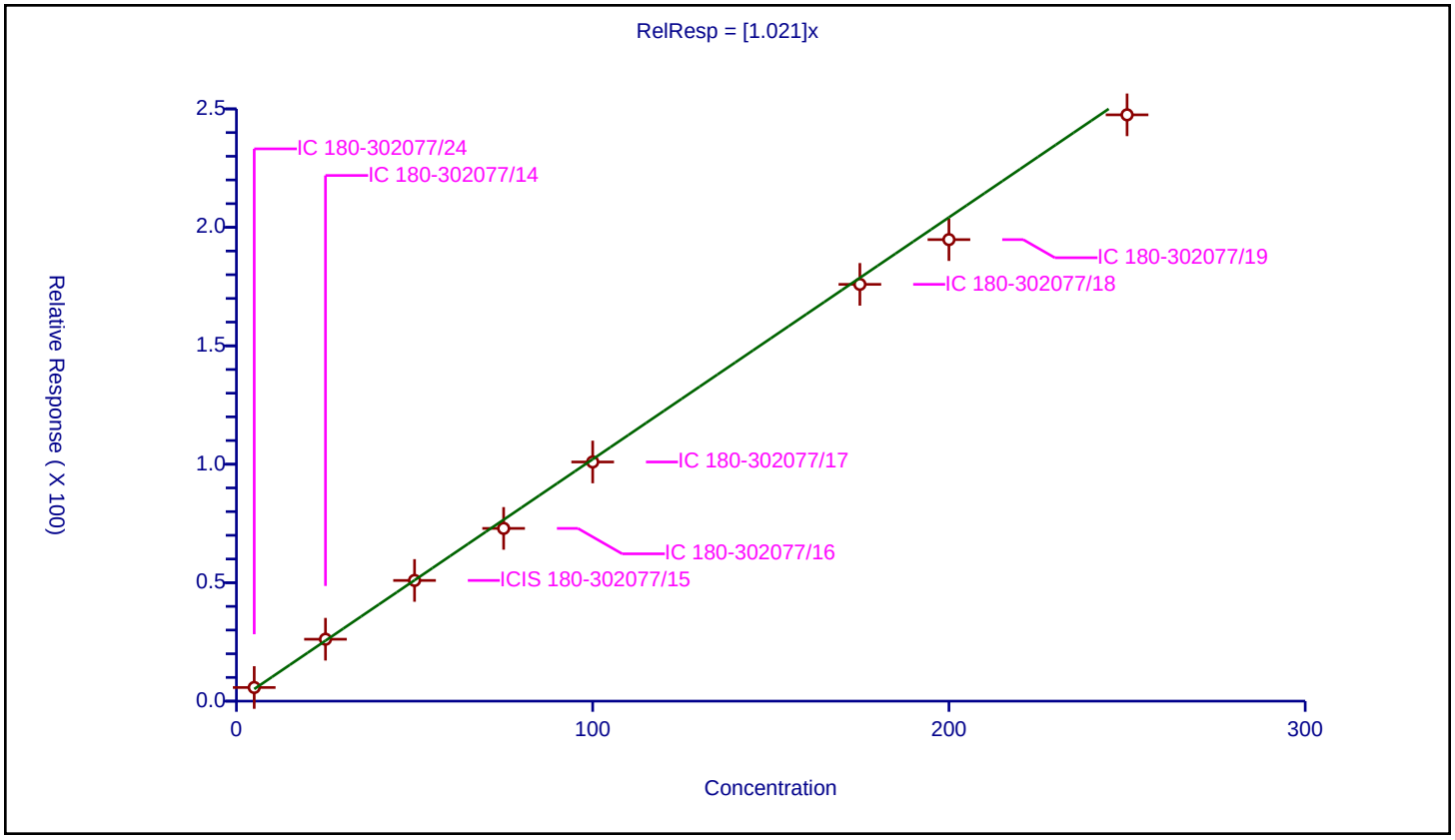
Curve Coefficients

Intercept:	0
Slope:	1.021

Error Coefficients

Standard Error:	866000
Relative Standard Error:	5.7
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	5.764656	50.0	285854.0	1.152931	Y
2	IC 180-302077/14	25.0	26.129626	50.0	208631.0	1.045185	Y
3	ICIS 180-302077/15	50.0	50.949888	50.0	221763.0	1.018998	Y
4	IC 180-302077/16	75.0	72.917896	50.0	254286.0	0.972239	Y
5	IC 180-302077/17	100.0	100.958046	50.0	265436.0	1.00958	Y
6	IC 180-302077/18	175.0	175.935202	50.0	275689.0	1.005344	Y
7	IC 180-302077/19	200.0	194.821323	50.0	301689.0	0.974107	Y
8	IC 180-302077/20	250.0	247.491255	50.0	315596.0	0.989965	Y



Calibration / Isobutyl alcohol

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

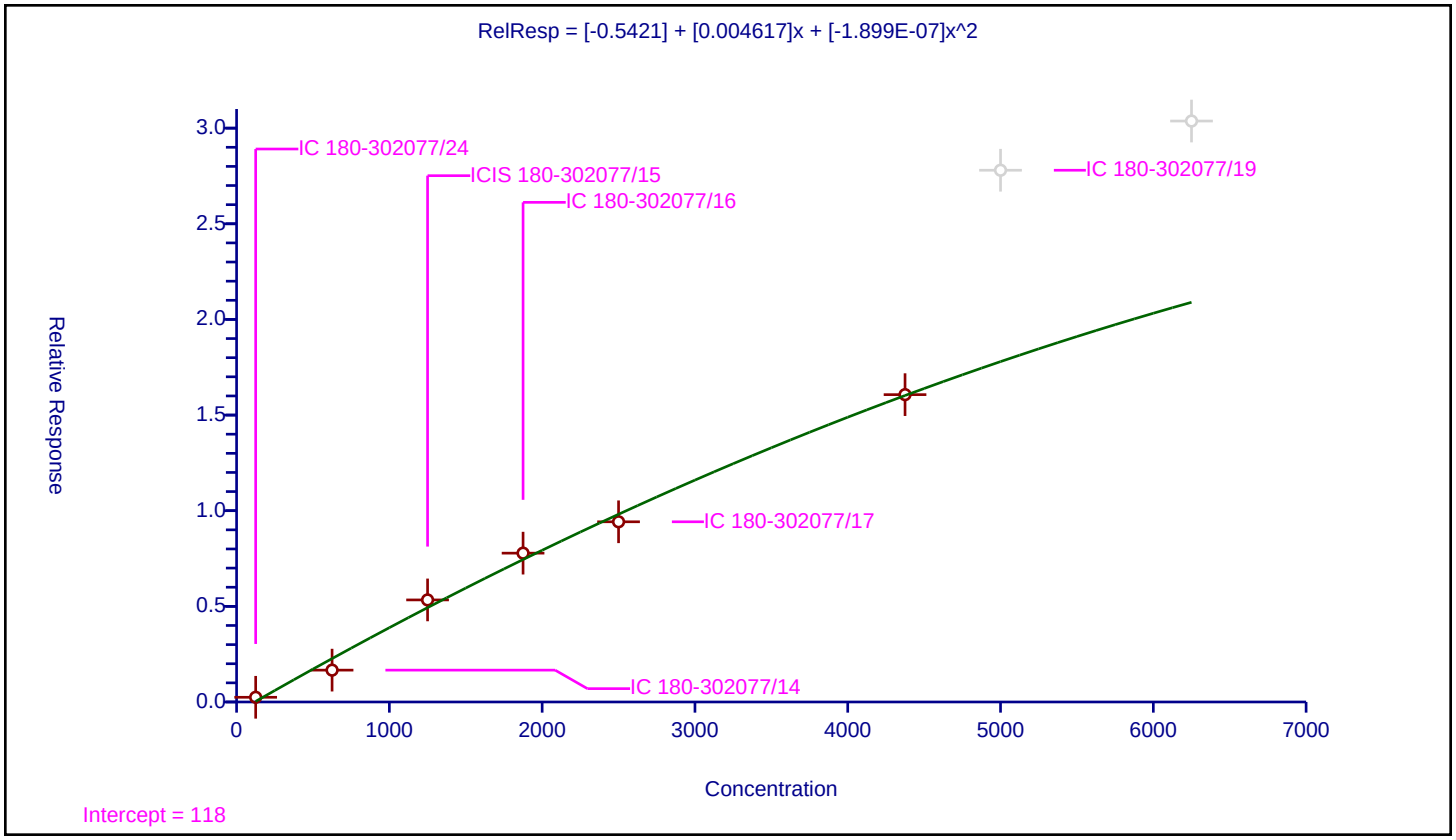
Curve Coefficients

Intercept:	-0.5421
Slope:	0.004617
Second Order:	-1.899E-07

Error Coefficients

Standard Error:	64600
Relative Standard Error:	25.7
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	125.0	0.245405	50.0	285854.0	0.001963	Y
2	IC 180-302077/14	625.0	1.664901	50.0	208631.0	0.002664	Y
3	ICIS 180-302077/15	1250.0	5.335426	50.0	221763.0	0.004268	Y
4	IC 180-302077/16	1875.0	7.781592	50.0	254286.0	0.00415	Y
5	IC 180-302077/17	2500.0	9.421103	50.0	265436.0	0.003768	Y
6	IC 180-302077/18	4375.0	16.067924	50.0	275689.0	0.003673	Y
7	IC 180-302077/19	5000.0	27.799323	50.0	301689.0	0.00556	N
8	IC 180-302077/20	6250.0	30.371266	50.0	315596.0	0.004859	N



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

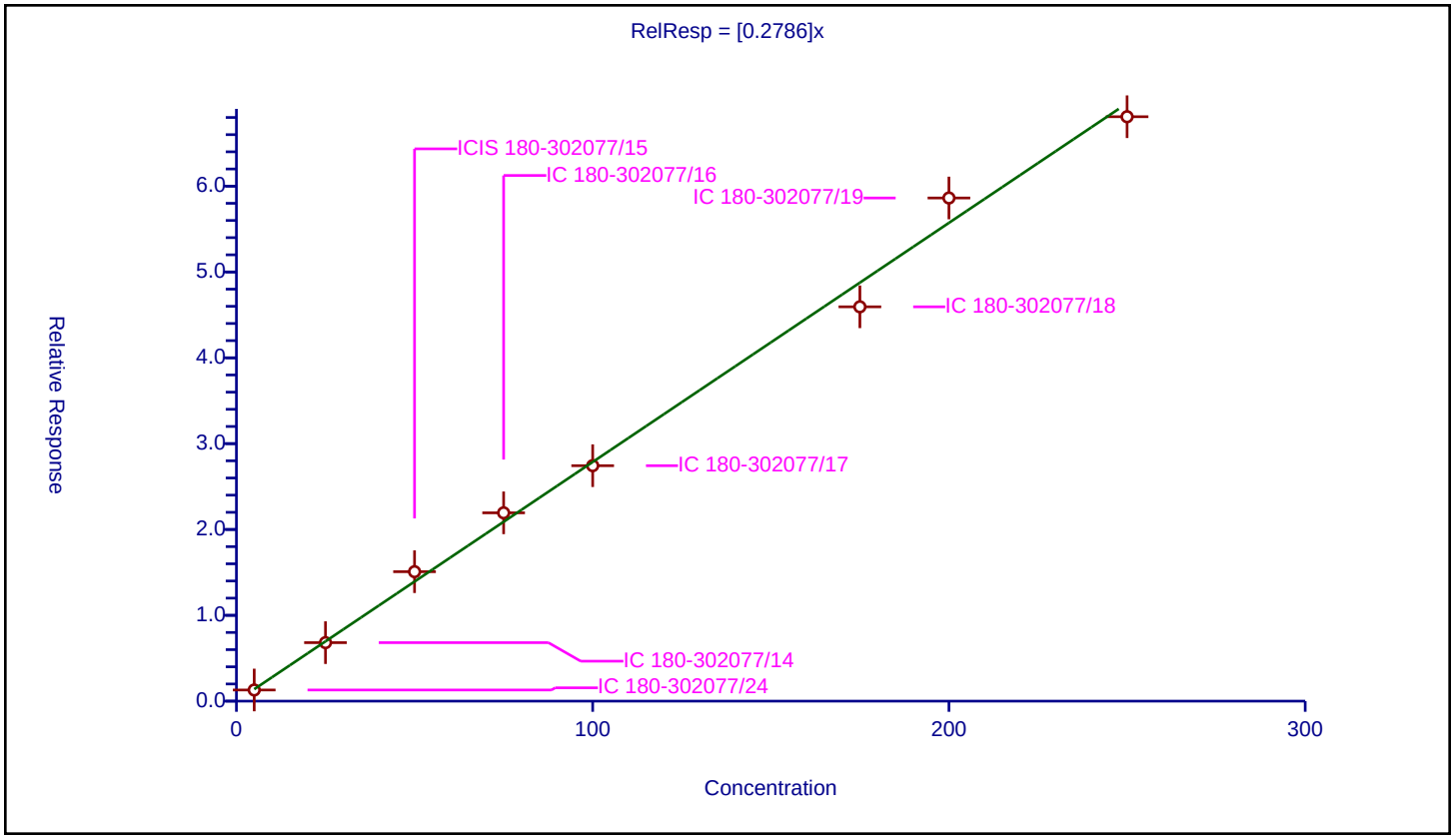
Curve Coefficients

Intercept:	0
Slope:	0.2786

Error Coefficients

Standard Error:	243000
Relative Standard Error:	5.5
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.298915	50.0	285854.0	0.259783	Y
2	IC 180-302077/14	25.0	6.814903	50.0	208631.0	0.272596	Y
3	ICIS 180-302077/15	50.0	15.081641	50.0	221763.0	0.301633	Y
4	IC 180-302077/16	75.0	21.939666	50.0	254286.0	0.292529	Y
5	IC 180-302077/17	100.0	27.433543	50.0	265436.0	0.274335	Y
6	IC 180-302077/18	175.0	45.940716	50.0	275689.0	0.262518	Y
7	IC 180-302077/19	200.0	58.619472	50.0	301689.0	0.293097	Y
8	IC 180-302077/20	250.0	68.086256	50.0	315596.0	0.272345	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

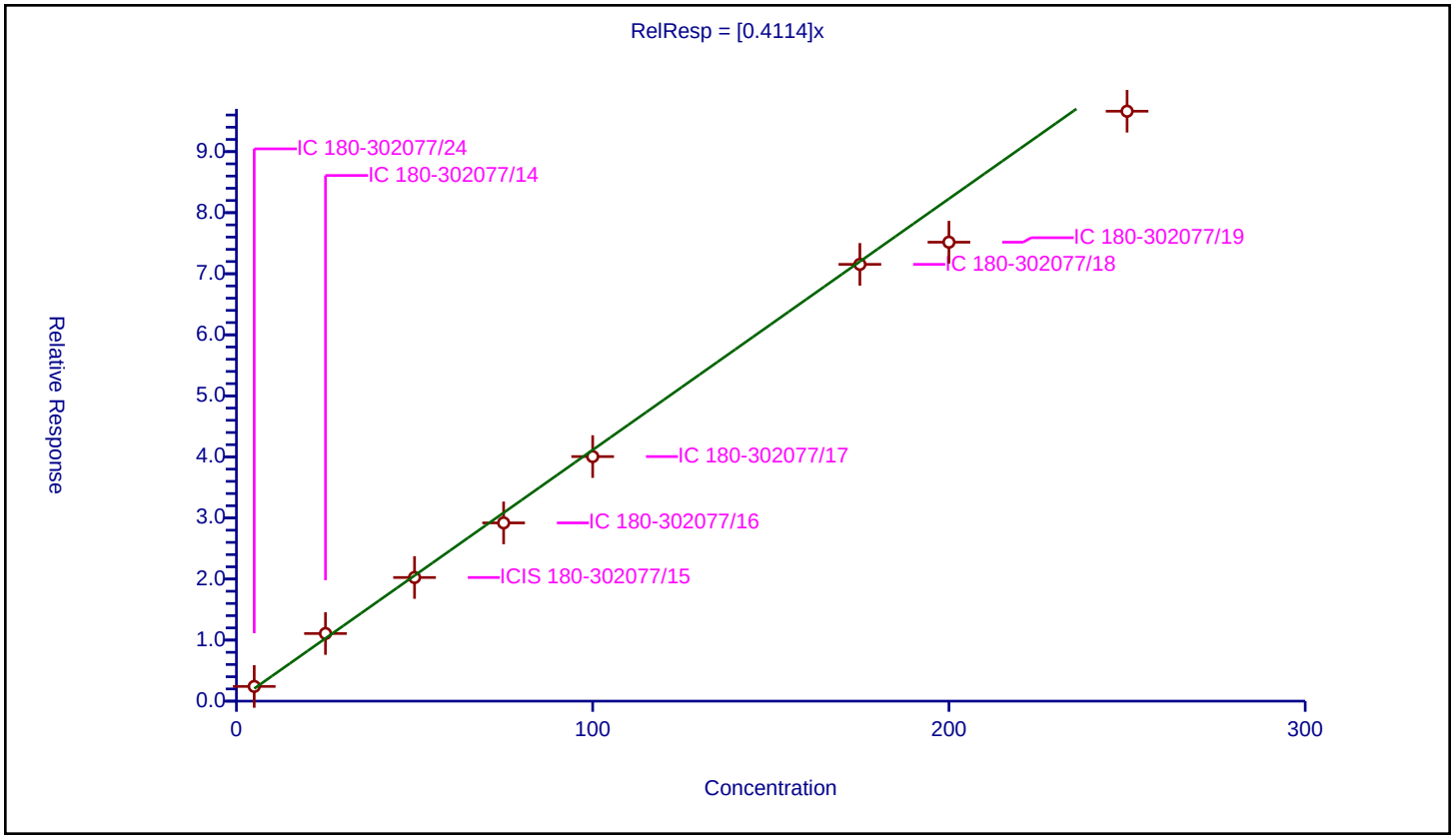
Curve Coefficients

Intercept:	0
Slope:	0.4114

Error Coefficients

Standard Error:	340000
Relative Standard Error:	8.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.411021	50.0	285854.0	0.482204	Y
2	IC 180-302077/14	25.0	11.078411	50.0	208631.0	0.443136	Y
3	ICIS 180-302077/15	50.0	20.250448	50.0	221763.0	0.405009	Y
4	IC 180-302077/16	75.0	29.193507	50.0	254286.0	0.389247	Y
5	IC 180-302077/17	100.0	40.054476	50.0	265436.0	0.400545	Y
6	IC 180-302077/18	175.0	71.536587	50.0	275689.0	0.40878	Y
7	IC 180-302077/19	200.0	75.165154	50.0	301689.0	0.375826	Y
8	IC 180-302077/20	250.0	96.619254	50.0	315596.0	0.386477	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

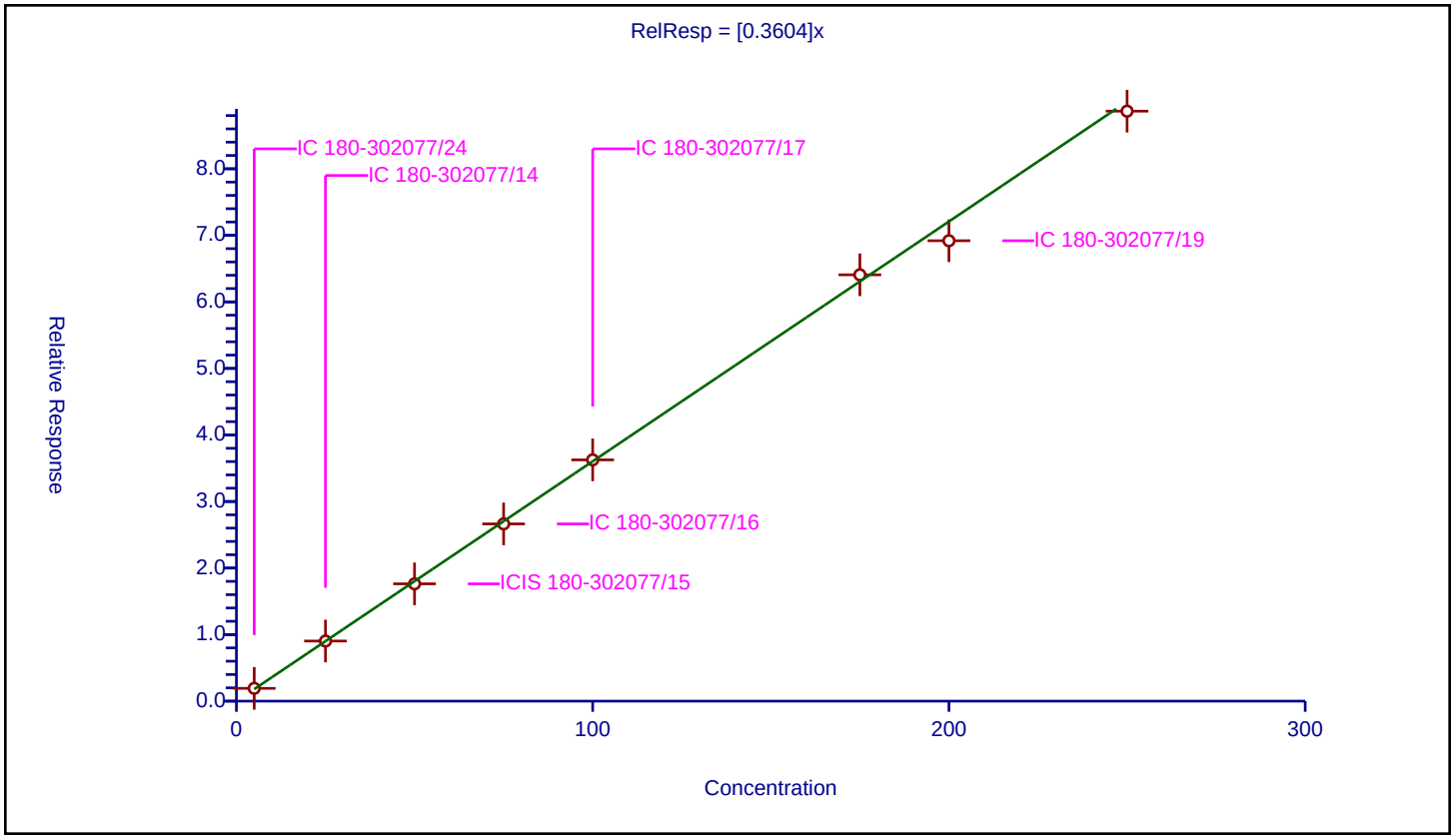
Curve Coefficients

Intercept:	0
Slope:	0.3604

Error Coefficients

Standard Error:	311000
Relative Standard Error:	3.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.924584	50.0	285854.0	0.384917	Y
2	IC 180-302077/14	25.0	9.030777	50.0	208631.0	0.361231	Y
3	ICIS 180-302077/15	50.0	17.627828	50.0	221763.0	0.352557	Y
4	IC 180-302077/16	75.0	26.633004	50.0	254286.0	0.355107	Y
5	IC 180-302077/17	100.0	36.257516	50.0	265436.0	0.362575	Y
6	IC 180-302077/18	175.0	64.069658	50.0	275689.0	0.366112	Y
7	IC 180-302077/19	200.0	69.187309	50.0	301689.0	0.345937	Y
8	IC 180-302077/20	250.0	88.659869	50.0	315596.0	0.354639	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

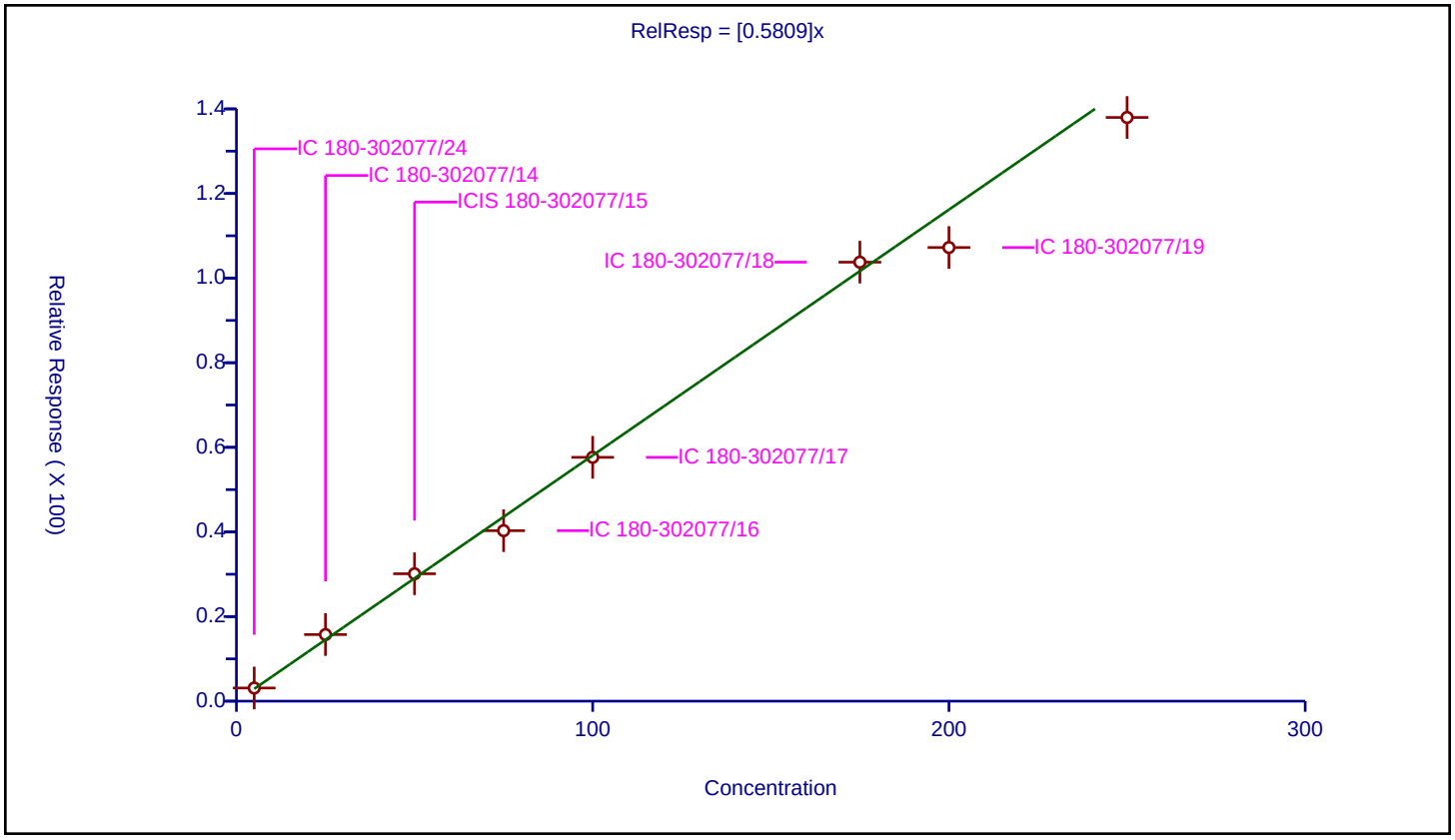
Curve Coefficients

Intercept:	0
Slope:	0.5809

Error Coefficients

Standard Error:	487000
Relative Standard Error:	6.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	3.104907	50.0	285854.0	0.620981	Y
2	IC 180-302077/14	25.0	15.734958	50.0	208631.0	0.629398	Y
3	ICIS 180-302077/15	50.0	30.107818	50.0	221763.0	0.602156	Y
4	IC 180-302077/16	75.0	40.299309	50.0	254286.0	0.537324	Y
5	IC 180-302077/17	100.0	57.635739	50.0	265436.0	0.576357	Y
6	IC 180-302077/18	175.0	103.764749	50.0	275689.0	0.592941	Y
7	IC 180-302077/19	200.0	107.231619	50.0	301689.0	0.536158	Y
8	IC 180-302077/20	250.0	137.970855	50.0	315596.0	0.551883	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

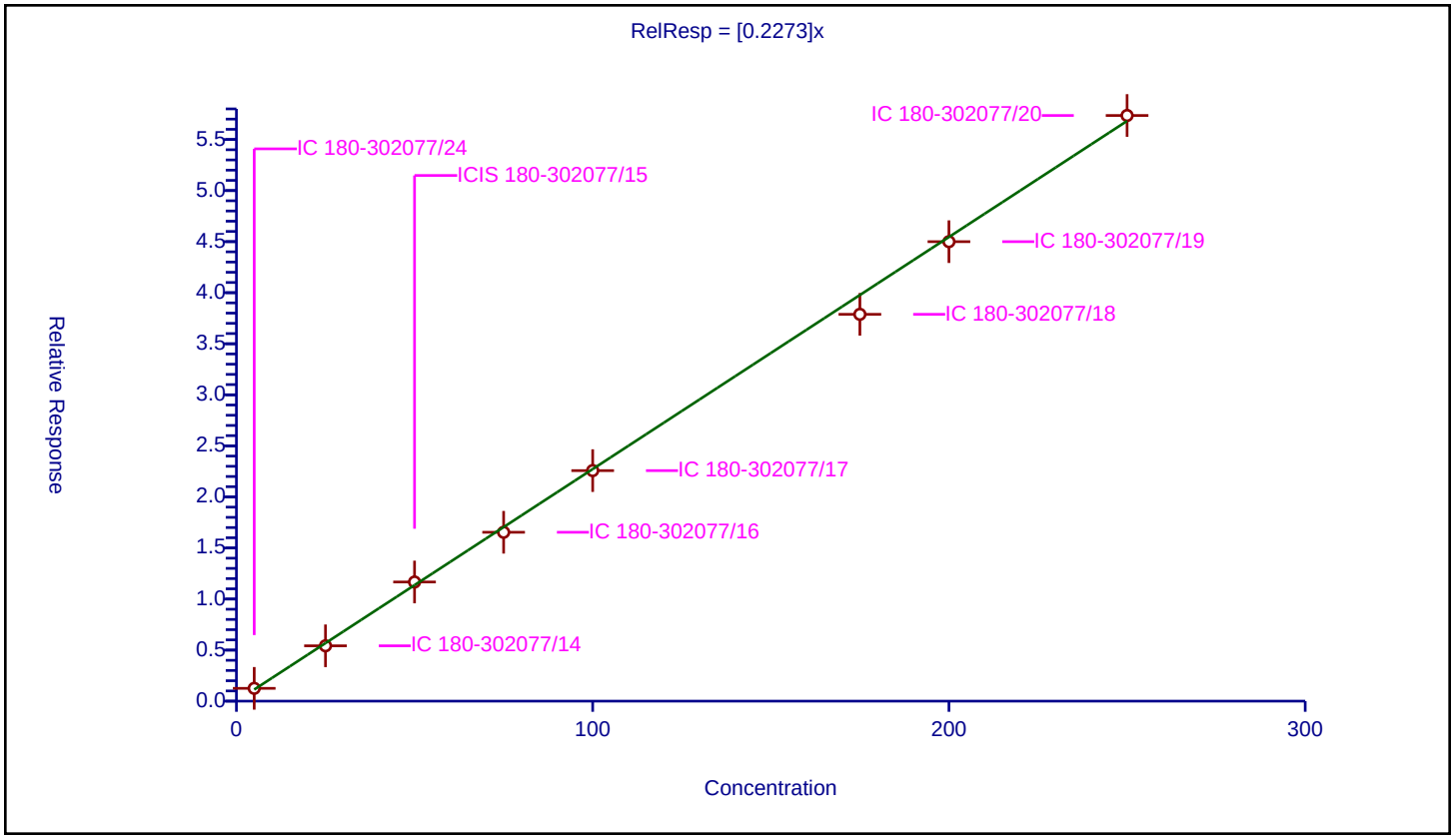
Curve Coefficients

Intercept:	0
Slope:	0.2273

Error Coefficients

Standard Error:	197000
Relative Standard Error:	4.9
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.254137	50.0	285854.0	0.250827	Y
2	IC 180-302077/14	25.0	5.419616	50.0	208631.0	0.216785	Y
3	ICIS 180-302077/15	50.0	11.667862	50.0	221763.0	0.233357	Y
4	IC 180-302077/16	75.0	16.538465	50.0	254286.0	0.220513	Y
5	IC 180-302077/17	100.0	22.576064	50.0	265436.0	0.225761	Y
6	IC 180-302077/18	175.0	37.880909	50.0	275689.0	0.216462	Y
7	IC 180-302077/19	200.0	44.99816	50.0	301689.0	0.224991	Y
8	IC 180-302077/20	250.0	57.352596	50.0	315596.0	0.22941	Y



Calibration / Dibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

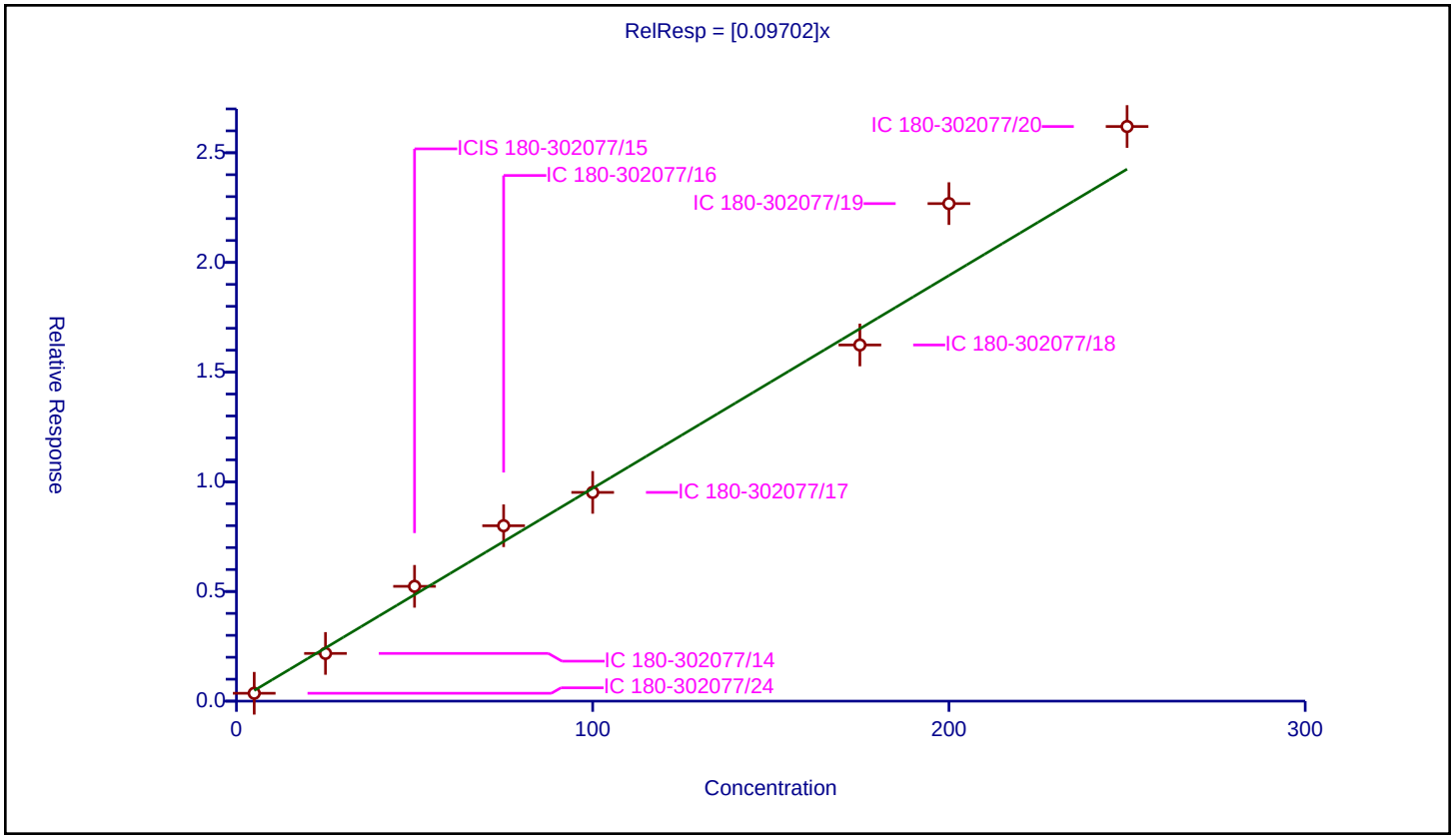
Curve Coefficients

Intercept:	0
Slope:	0.09702

Error Coefficients

Standard Error:	91700
Relative Standard Error:	13.7
Correlation Coefficient:	0.974
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	0.358575	50.0	285854.0	0.071715	Y
2	IC 180-302077/14	25.0	2.175132	50.0	208631.0	0.087005	Y
3	ICIS 180-302077/15	50.0	5.233966	50.0	221763.0	0.104679	Y
4	IC 180-302077/16	75.0	7.995721	50.0	254286.0	0.10661	Y
5	IC 180-302077/17	100.0	9.51623	50.0	265436.0	0.095162	Y
6	IC 180-302077/18	175.0	16.236593	50.0	275689.0	0.092781	Y
7	IC 180-302077/19	200.0	22.682796	50.0	301689.0	0.113414	Y
8	IC 180-302077/20	250.0	26.1971	50.0	315596.0	0.104788	Y



Calibration / 1,4-Dioxane

Curve Type:	Linear
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

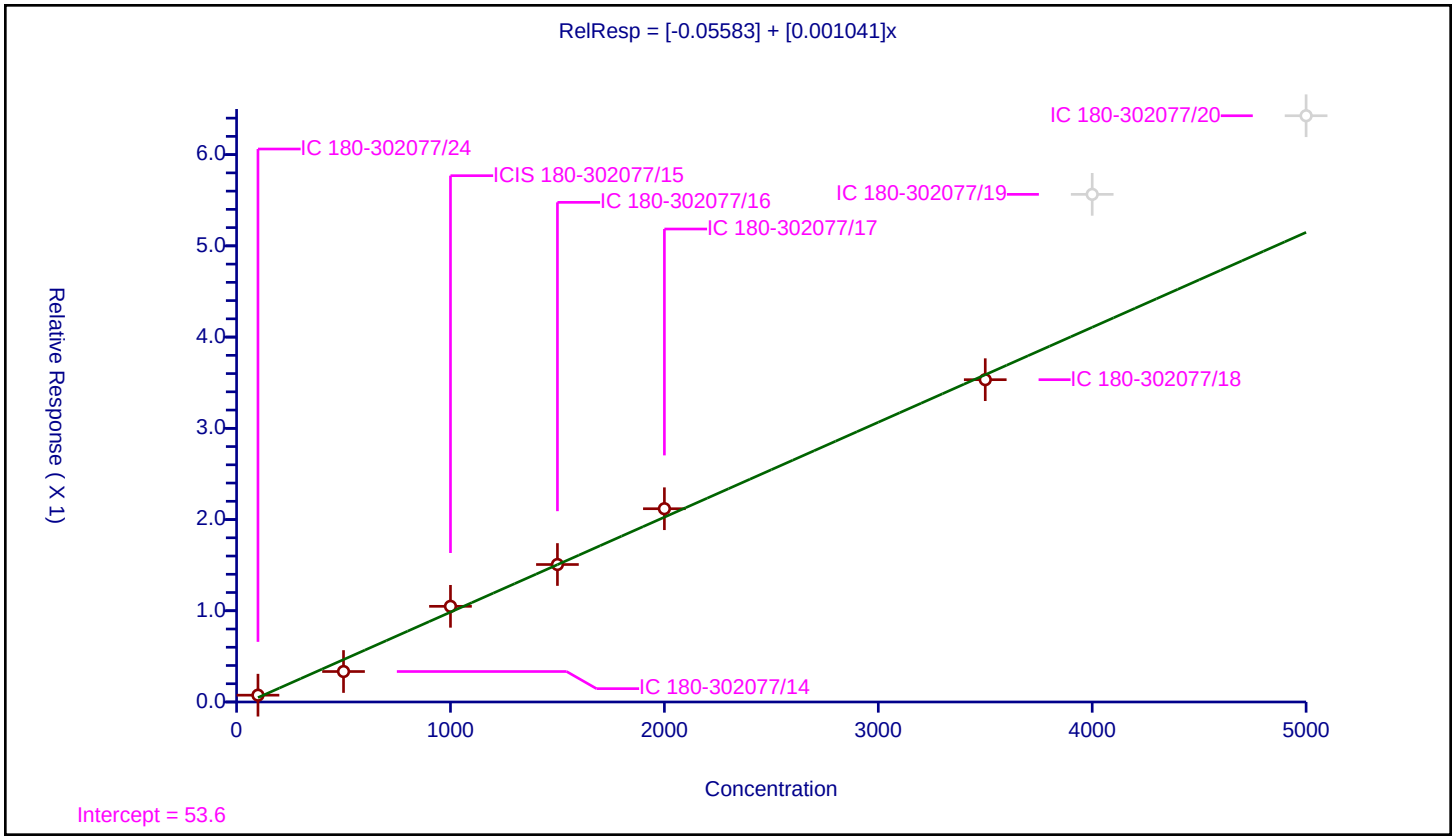
Curve Coefficients

Intercept:	-0.05583
Slope:	0.001041

Error Coefficients

Standard Error:	12100
Relative Standard Error:	18.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	100.0	0.074688	50.0	285854.0	0.000747	Y
2	IC 180-302077/14	500.0	0.334083	50.0	208631.0	0.000668	Y
3	ICIS 180-302077/15	1000.0	1.048642	50.0	221763.0	0.001049	Y
4	IC 180-302077/16	1500.0	1.506965	50.0	254286.0	0.001005	Y
5	IC 180-302077/17	2000.0	2.11859	50.0	265436.0	0.001059	Y
6	IC 180-302077/18	3500.0	3.532966	50.0	275689.0	0.001009	Y
7	IC 180-302077/19	4000.0	5.564505	50.0	301689.0	0.001391	N
8	IC 180-302077/20	5000.0	6.426412	50.0	315596.0	0.001285	N



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

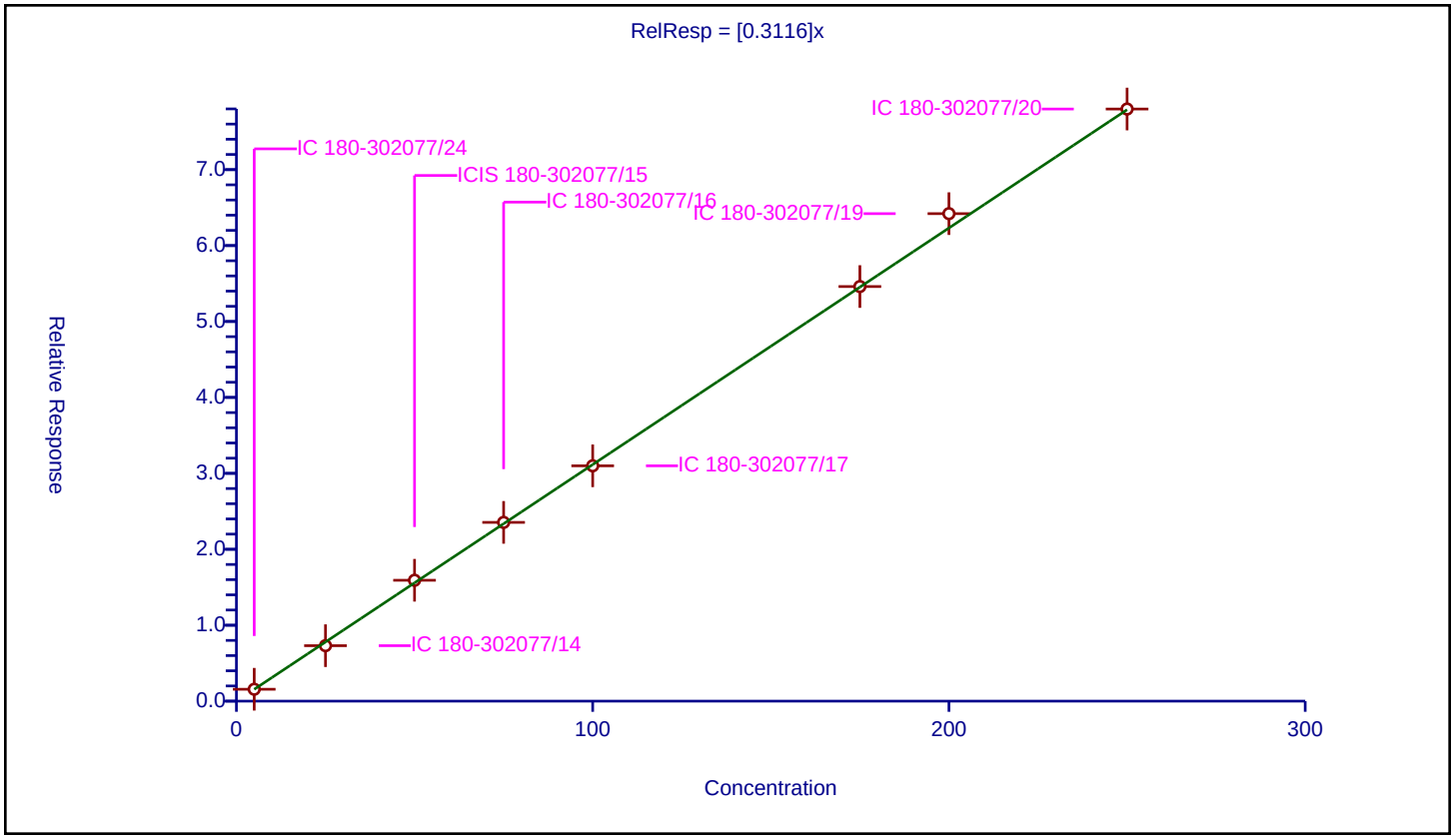
Curve Coefficients

Intercept:	0
Slope:	0.3116

Error Coefficients

Standard Error:	275000
Relative Standard Error:	2.8
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.566184	50.0	285854.0	0.313237	Y
2	IC 180-302077/14	25.0	7.304284	50.0	208631.0	0.292171	Y
3	ICIS 180-302077/15	50.0	15.918345	50.0	221763.0	0.318367	Y
4	IC 180-302077/16	75.0	23.54121	50.0	254286.0	0.313883	Y
5	IC 180-302077/17	100.0	30.99184	50.0	265436.0	0.309918	Y
6	IC 180-302077/18	175.0	54.604645	50.0	275689.0	0.312027	Y
7	IC 180-302077/19	200.0	64.203368	50.0	301689.0	0.321017	Y
8	IC 180-302077/20	250.0	77.984037	50.0	315596.0	0.311936	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

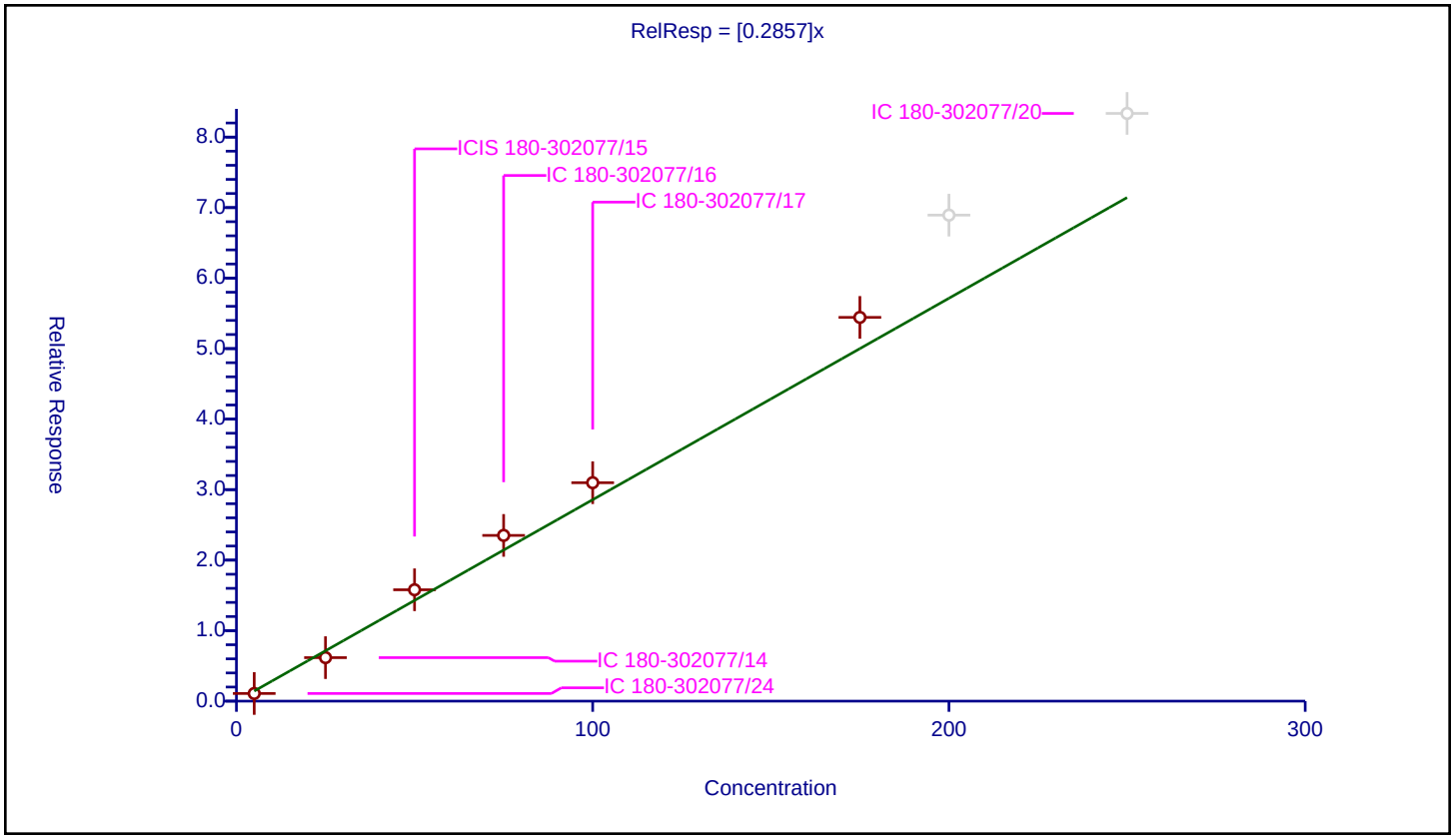
Curve Coefficients

Intercept:	0
Slope:	0.2857

Error Coefficients

Standard Error:	166000
Relative Standard Error:	14.9
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.086044	50.0	285854.0	0.217209	Y
2	IC 180-302077/14	25.0	6.171422	50.0	208631.0	0.246857	Y
3	ICIS 180-302077/15	50.0	15.794339	50.0	221763.0	0.315887	Y
4	IC 180-302077/16	75.0	23.507586	50.0	254286.0	0.313434	Y
5	IC 180-302077/17	100.0	30.981291	50.0	265436.0	0.309813	Y
6	IC 180-302077/18	175.0	54.427271	50.0	275689.0	0.311013	Y
7	IC 180-302077/19	200.0	68.930919	50.0	301689.0	0.344655	N
8	IC 180-302077/20	250.0	83.357837	50.0	315596.0	0.333431	N



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

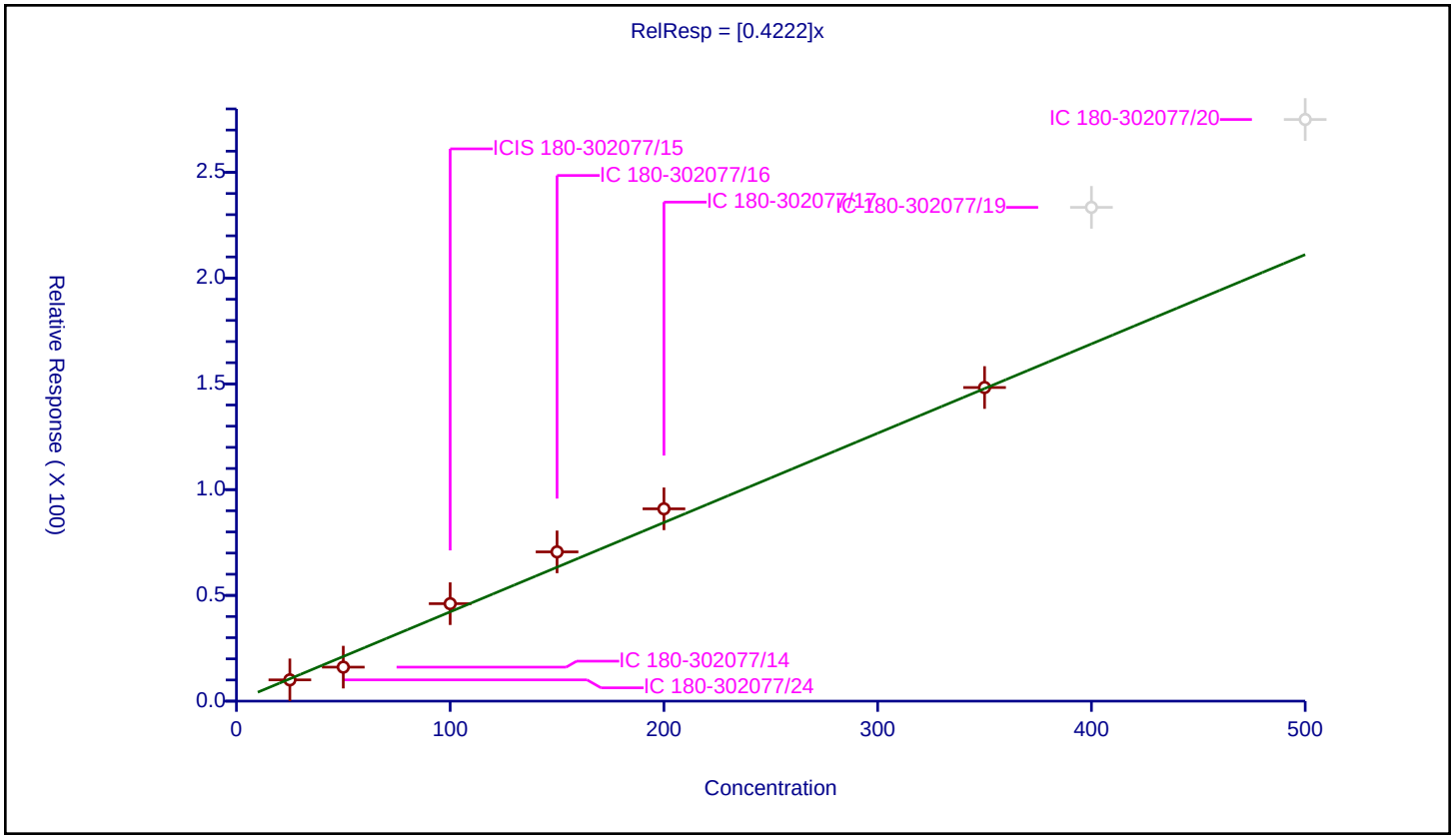
Curve Coefficients

Intercept:	0
Slope:	0.4222

Error Coefficients

Standard Error:	116000
Relative Standard Error:	13.1
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	25.0	10.060023	50.0	61476.0	0.402401	Y
2	IC 180-302077/14	50.0	16.074164	50.0	49620.0	0.321483	Y
3	ICIS 180-302077/15	100.0	46.073732	50.0	57994.0	0.460737	Y
4	IC 180-302077/16	150.0	70.577503	50.0	67965.0	0.470517	Y
5	IC 180-302077/17	200.0	90.915185	50.0	66380.0	0.454576	Y
6	IC 180-302077/18	350.0	148.270912	50.0	67926.0	0.423631	Y
7	IC 180-302077/19	400.0	233.443166	50.0	79363.0	0.583608	N
8	IC 180-302077/20	500.0	274.994158	50.0	77034.0	0.549988	N



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

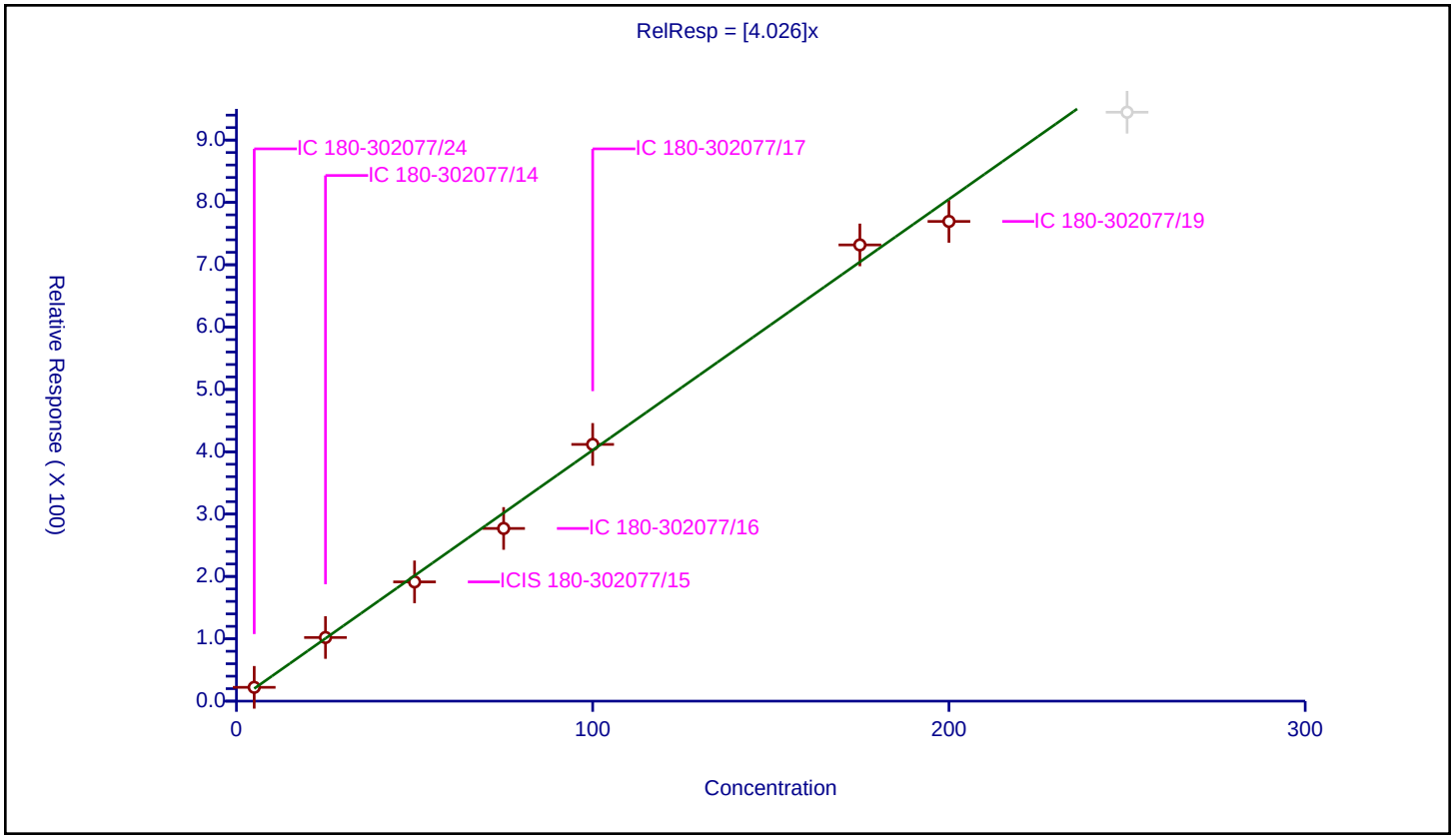
Curve Coefficients

Intercept:	0
Slope:	4.026

Error Coefficients

Standard Error:	704000
Relative Standard Error:	6.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	22.150107	50.0	61476.0	4.430021	Y
2	IC 180-302077/14	25.0	102.065699	50.0	49620.0	4.082628	Y
3	ICIS 180-302077/15	50.0	191.2991	50.0	57994.0	3.825982	Y
4	IC 180-302077/16	75.0	276.983006	50.0	67965.0	3.693107	Y
5	IC 180-302077/17	100.0	411.803254	50.0	66380.0	4.118033	Y
6	IC 180-302077/18	175.0	731.802991	50.0	67926.0	4.181731	Y
7	IC 180-302077/19	200.0	769.47885	50.0	79363.0	3.847394	Y
8	IC 180-302077/20	250.0	944.641976	50.0	77034.0	3.778568	N



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

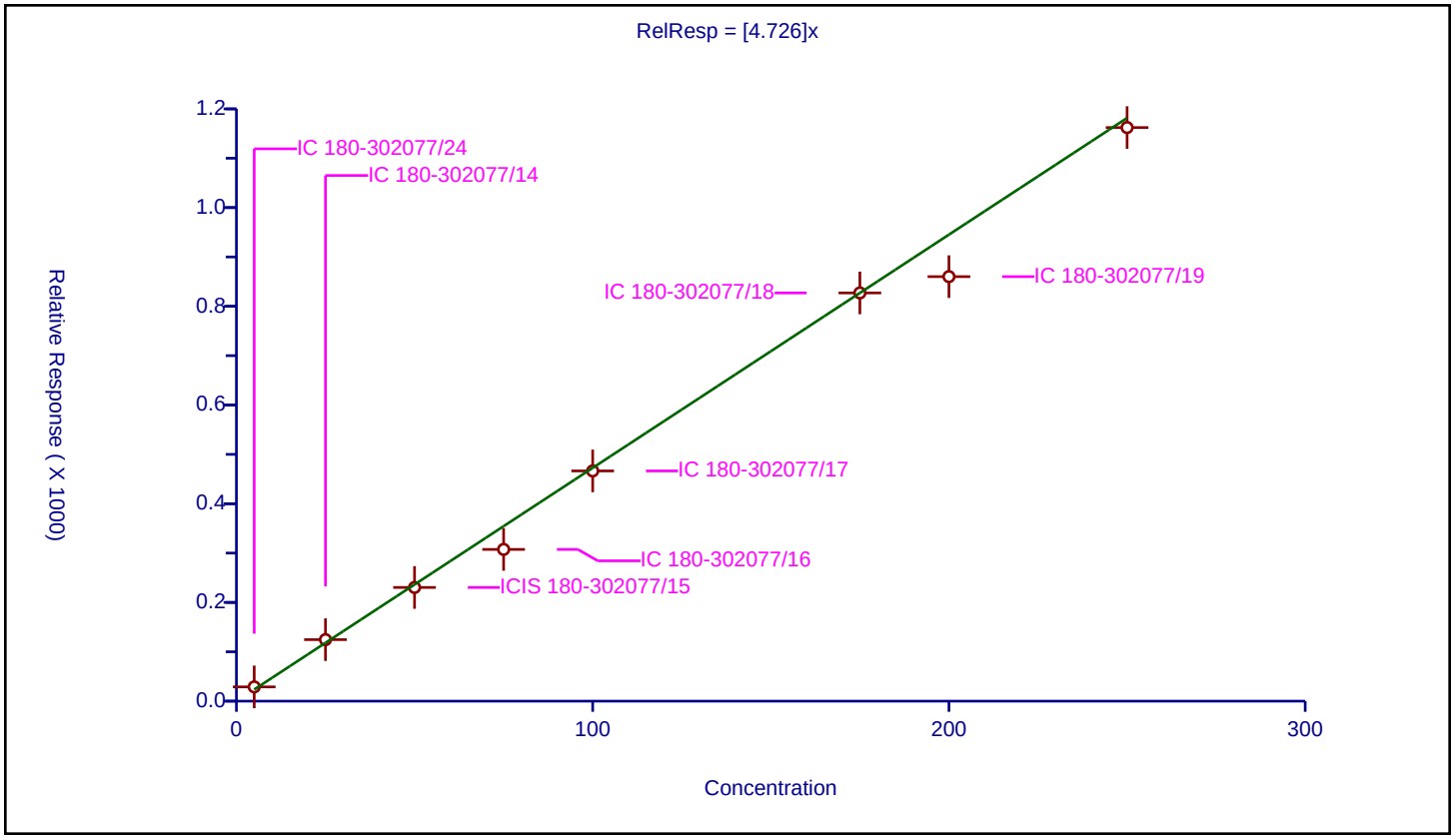
Curve Coefficients

Intercept:	0
Slope:	4.726

Error Coefficients

Standard Error:	998000
Relative Standard Error:	10.6
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	28.892576	50.0	61476.0	5.778515	Y
2	IC 180-302077/14	25.0	124.612052	50.0	49620.0	4.984482	Y
3	ICIS 180-302077/15	50.0	230.340208	50.0	57994.0	4.606804	Y
4	IC 180-302077/16	75.0	307.408225	50.0	67965.0	4.098776	Y
5	IC 180-302077/17	100.0	466.474089	50.0	66380.0	4.664741	Y
6	IC 180-302077/18	175.0	827.086094	50.0	67926.0	4.726206	Y
7	IC 180-302077/19	200.0	860.138226	50.0	79363.0	4.300691	Y
8	IC 180-302077/20	250.0	1162.161513	50.0	77034.0	4.648646	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

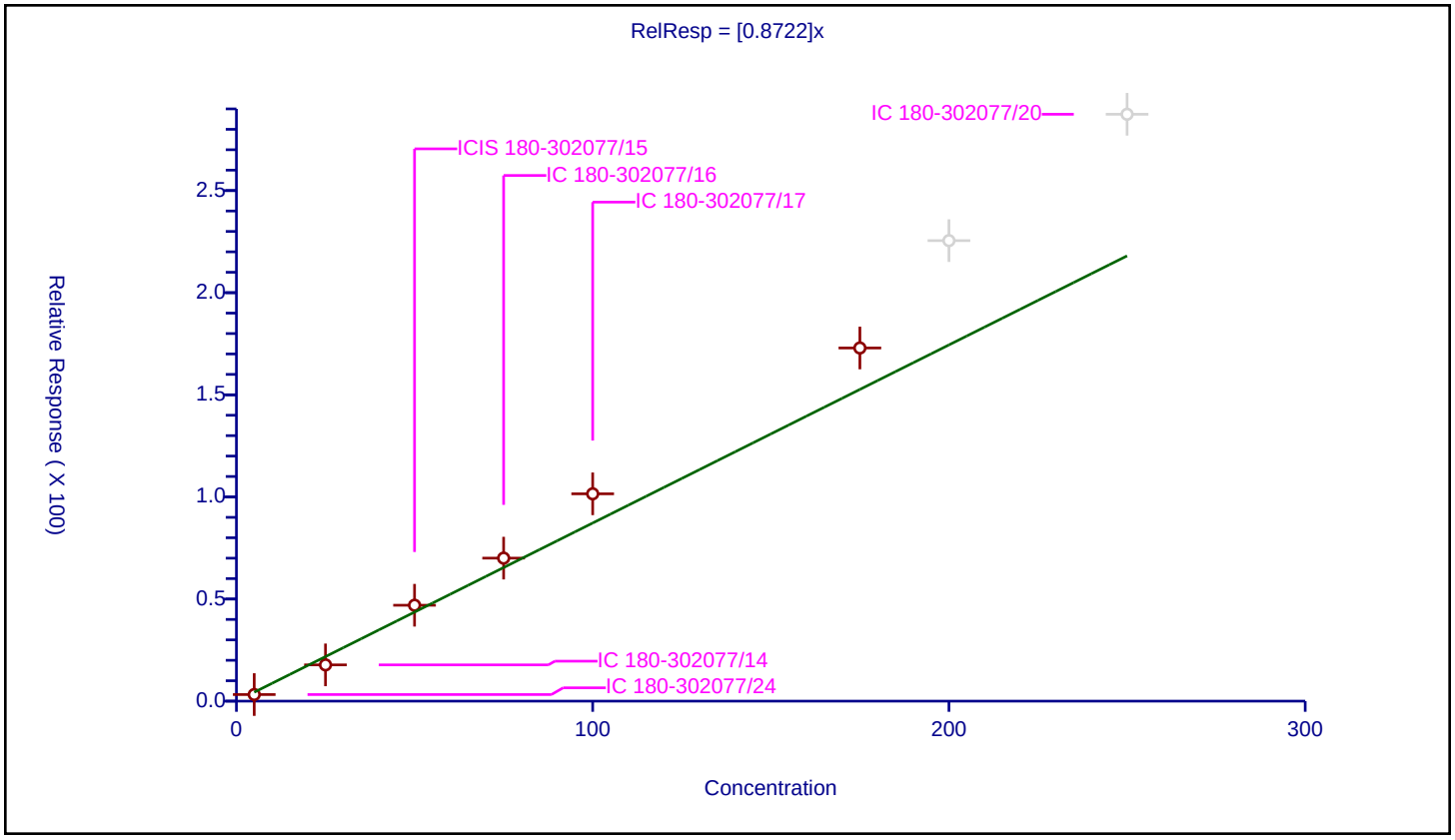
Curve Coefficients

Intercept:	0
Slope:	0.8722

Error Coefficients

Standard Error:	131000
Relative Standard Error:	17.7
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.968

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	3.233782	50.0	61476.0	0.646756	Y
2	IC 180-302077/14	25.0	17.751915	50.0	49620.0	0.710077	Y
3	ICIS 180-302077/15	50.0	46.957444	50.0	57994.0	0.939149	Y
4	IC 180-302077/16	75.0	70.029427	50.0	67965.0	0.933726	Y
5	IC 180-302077/17	100.0	101.519283	50.0	66380.0	1.015193	Y
6	IC 180-302077/18	175.0	172.920531	50.0	67926.0	0.988117	Y
7	IC 180-302077/19	200.0	225.495508	50.0	79363.0	1.127478	N
8	IC 180-302077/20	250.0	287.363372	50.0	77034.0	1.149453	N



Calibration / Ethyl methacrylate

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

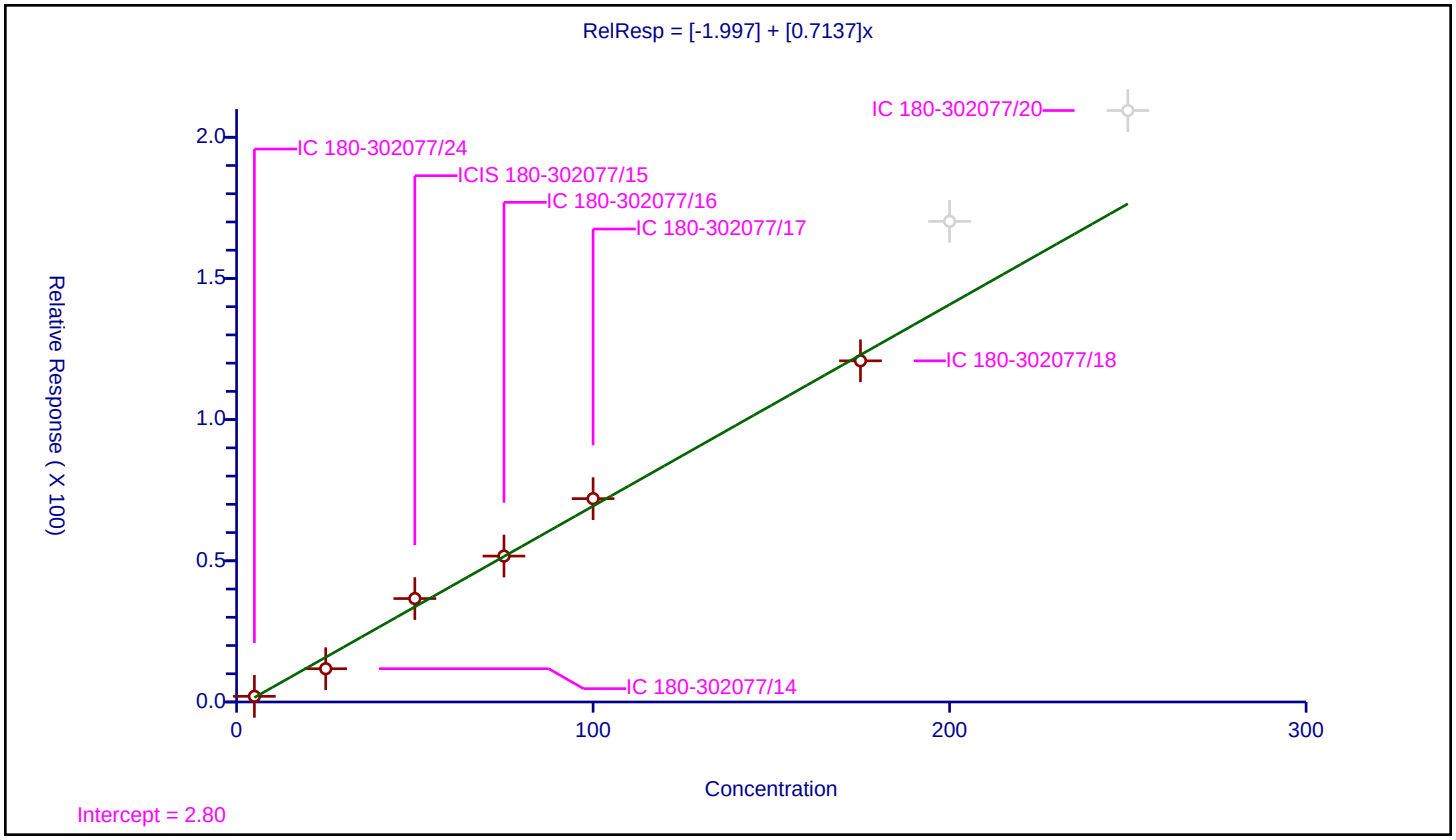
Curve Coefficients

Intercept:	-1.997
Slope:	0.7137

Error Coefficients

Standard Error:	104000
Relative Standard Error:	13.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.009727	50.0	61476.0	0.401945	Y
2	IC 180-302077/14	25.0	11.78154	50.0	49620.0	0.471262	Y
3	ICIS 180-302077/15	50.0	36.625341	50.0	57994.0	0.732507	Y
4	IC 180-302077/16	75.0	51.669242	50.0	67965.0	0.688923	Y
5	IC 180-302077/17	100.0	72.017927	50.0	66380.0	0.720179	Y
6	IC 180-302077/18	175.0	120.820452	50.0	67926.0	0.690403	Y
7	IC 180-302077/19	200.0	170.22227	50.0	79363.0	0.851111	N
8	IC 180-302077/20	250.0	209.474388	50.0	77034.0	0.837898	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

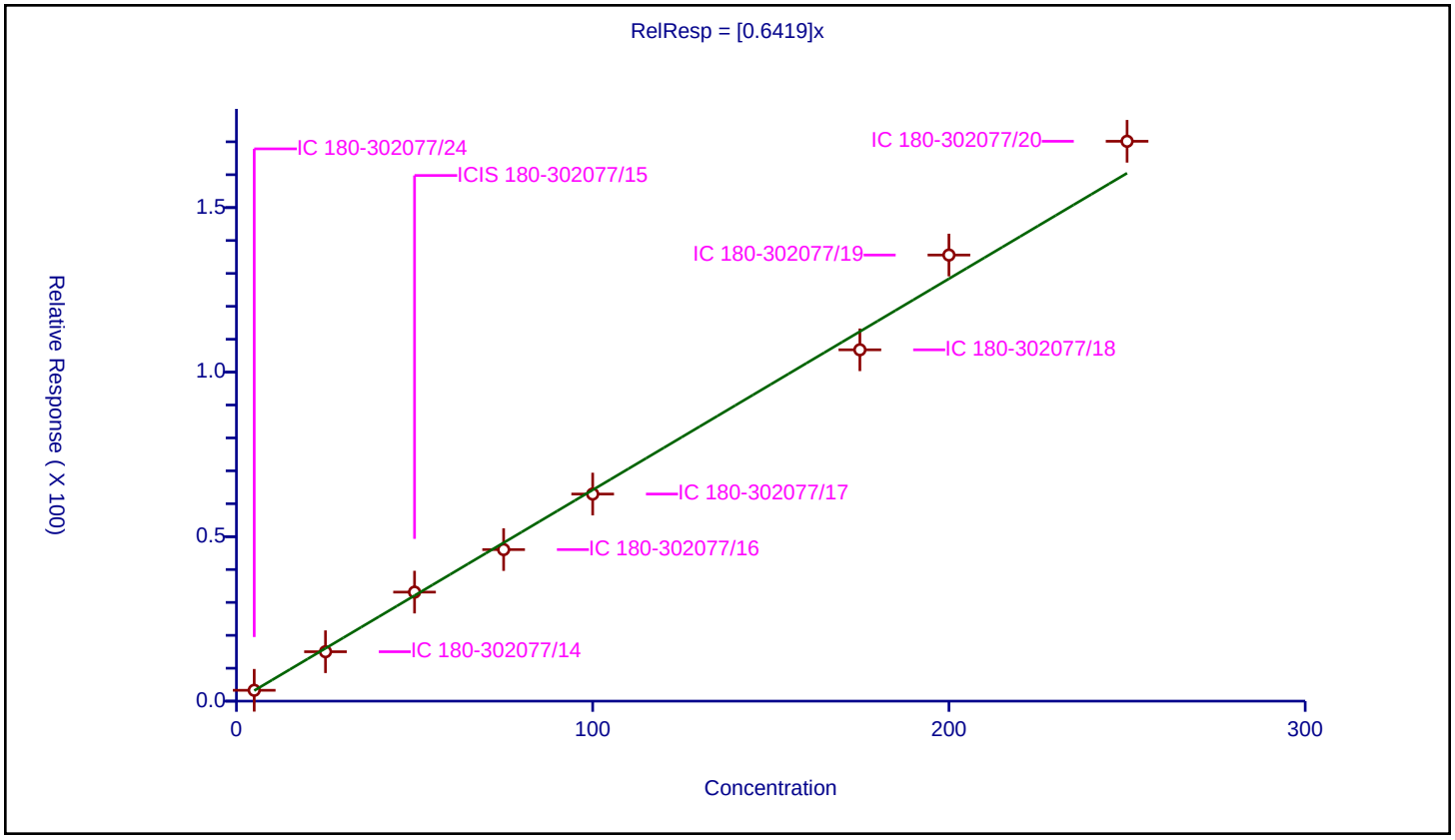
Curve Coefficients

Intercept:	0
Slope:	0.6419

Error Coefficients

Standard Error:	146000
Relative Standard Error:	5.0
Correlation Coefficient:	0.978
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	3.295595	50.0	61476.0	0.659119	Y
2	IC 180-302077/14	25.0	15.023176	50.0	49620.0	0.600927	Y
3	ICIS 180-302077/15	50.0	33.132738	50.0	57994.0	0.662655	Y
4	IC 180-302077/16	75.0	46.061944	50.0	67965.0	0.614159	Y
5	IC 180-302077/17	100.0	62.940645	50.0	66380.0	0.629406	Y
6	IC 180-302077/18	175.0	106.780173	50.0	67926.0	0.610172	Y
7	IC 180-302077/19	200.0	135.580812	50.0	79363.0	0.677904	Y
8	IC 180-302077/20	250.0	170.156035	50.0	77034.0	0.680624	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

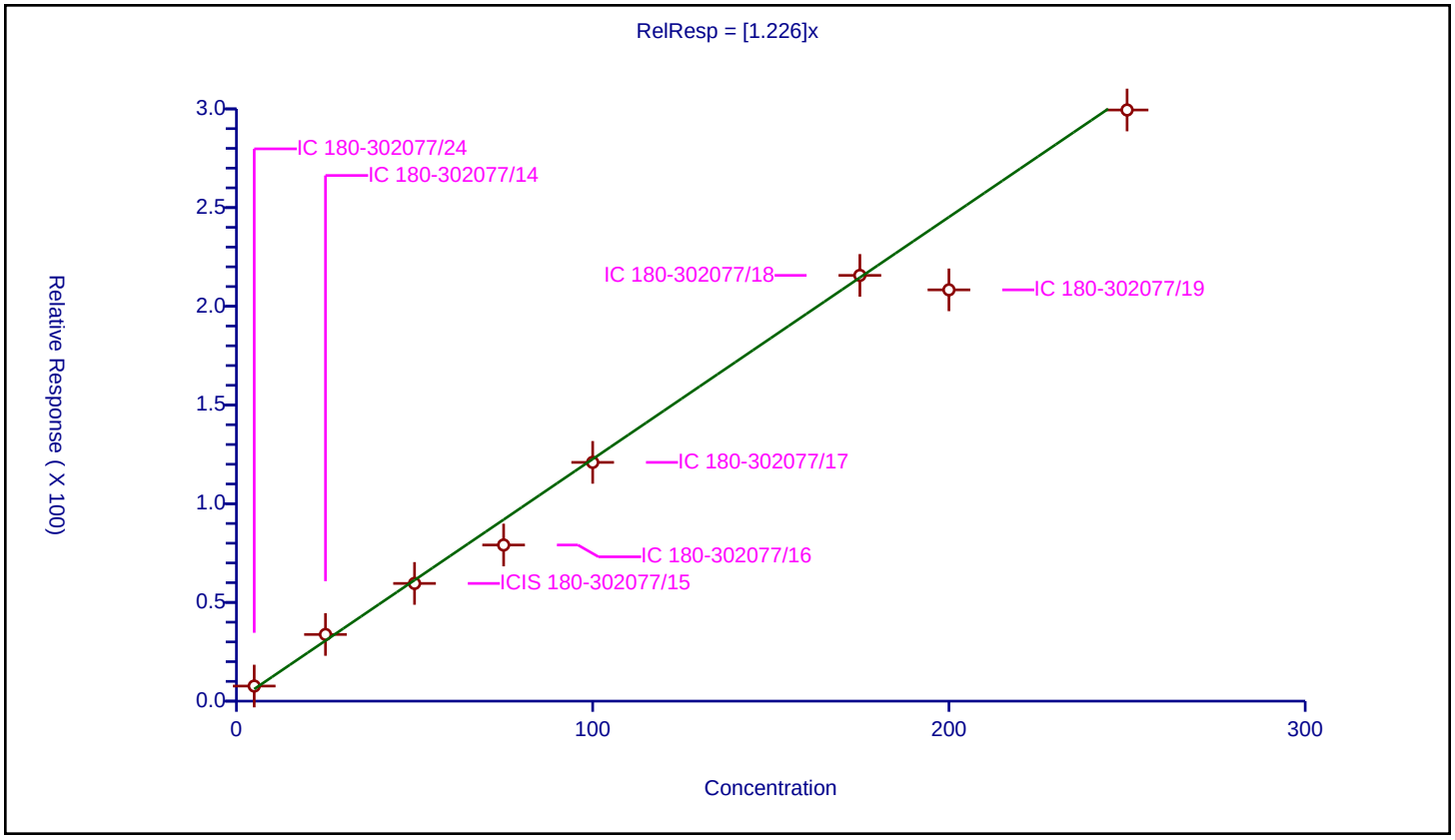
Curve Coefficients

Intercept:	0
Slope:	1.226

Error Coefficients

Standard Error:	254000
Relative Standard Error:	12.8
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	7.64526	50.0	61476.0	1.529052	Y
2	IC 180-302077/14	25.0	33.781741	50.0	49620.0	1.35127	Y
3	ICIS 180-302077/15	50.0	59.621685	50.0	57994.0	1.192434	Y
4	IC 180-302077/16	75.0	79.087766	50.0	67965.0	1.054504	Y
5	IC 180-302077/17	100.0	120.940795	50.0	66380.0	1.209408	Y
6	IC 180-302077/18	175.0	215.661161	50.0	67926.0	1.232349	Y
7	IC 180-302077/19	200.0	208.337638	50.0	79363.0	1.041688	Y
8	IC 180-302077/20	250.0	299.447646	50.0	77034.0	1.197791	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

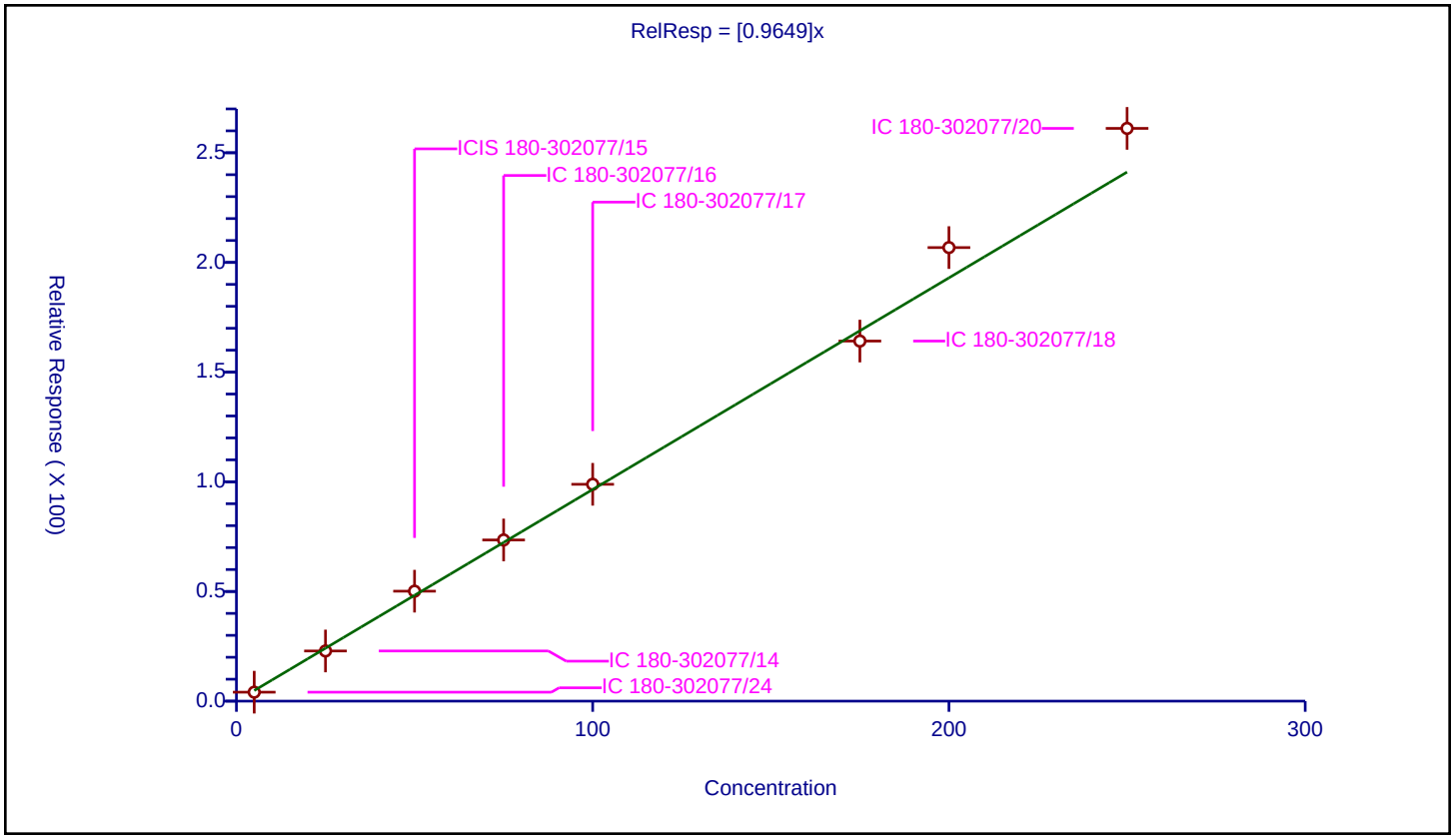
Curve Coefficients

Intercept:	0
Slope:	0.9649

Error Coefficients

Standard Error:	224000
Relative Standard Error:	7.7
Correlation Coefficient:	0.980
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	4.083707	50.0	61476.0	0.816741	Y
2	IC 180-302077/14	25.0	22.871826	50.0	49620.0	0.914873	Y
3	ICIS 180-302077/15	50.0	50.131048	50.0	57994.0	1.002621	Y
4	IC 180-302077/16	75.0	73.484146	50.0	67965.0	0.979789	Y
5	IC 180-302077/17	100.0	98.85809	50.0	66380.0	0.988581	Y
6	IC 180-302077/18	175.0	164.156582	50.0	67926.0	0.938038	Y
7	IC 180-302077/19	200.0	206.773307	50.0	79363.0	1.033867	Y
8	IC 180-302077/20	250.0	261.107433	50.0	77034.0	1.04443	Y



Calibration / 2-Hexanone

Curve Type:	Linear
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

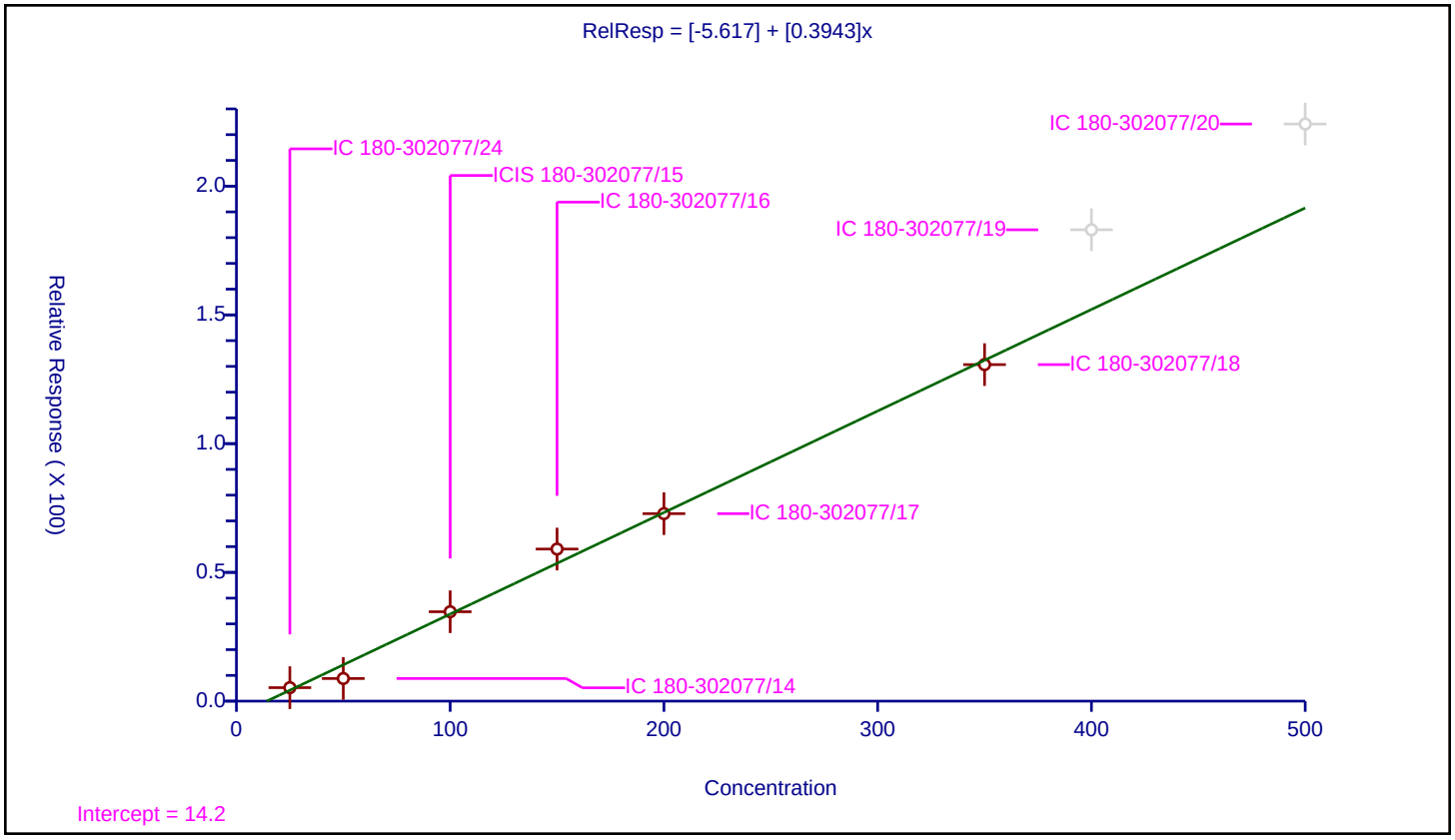
Curve Coefficients

Intercept:	-5.617
Slope:	0.3943

Error Coefficients

Standard Error:	111000
Relative Standard Error:	15.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	25.0	5.23619	50.0	61476.0	0.209448	Y
2	IC 180-302077/14	50.0	8.789802	50.0	49620.0	0.175796	Y
3	ICIS 180-302077/15	100.0	34.720833	50.0	57994.0	0.347208	Y
4	IC 180-302077/16	150.0	59.065696	50.0	67965.0	0.393771	Y
5	IC 180-302077/17	200.0	72.813347	50.0	66380.0	0.364067	Y
6	IC 180-302077/18	350.0	130.69296	50.0	67926.0	0.373408	Y
7	IC 180-302077/19	400.0	183.055706	50.0	79363.0	0.457639	N
8	IC 180-302077/20	500.0	224.119869	50.0	77034.0	0.44824	N



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

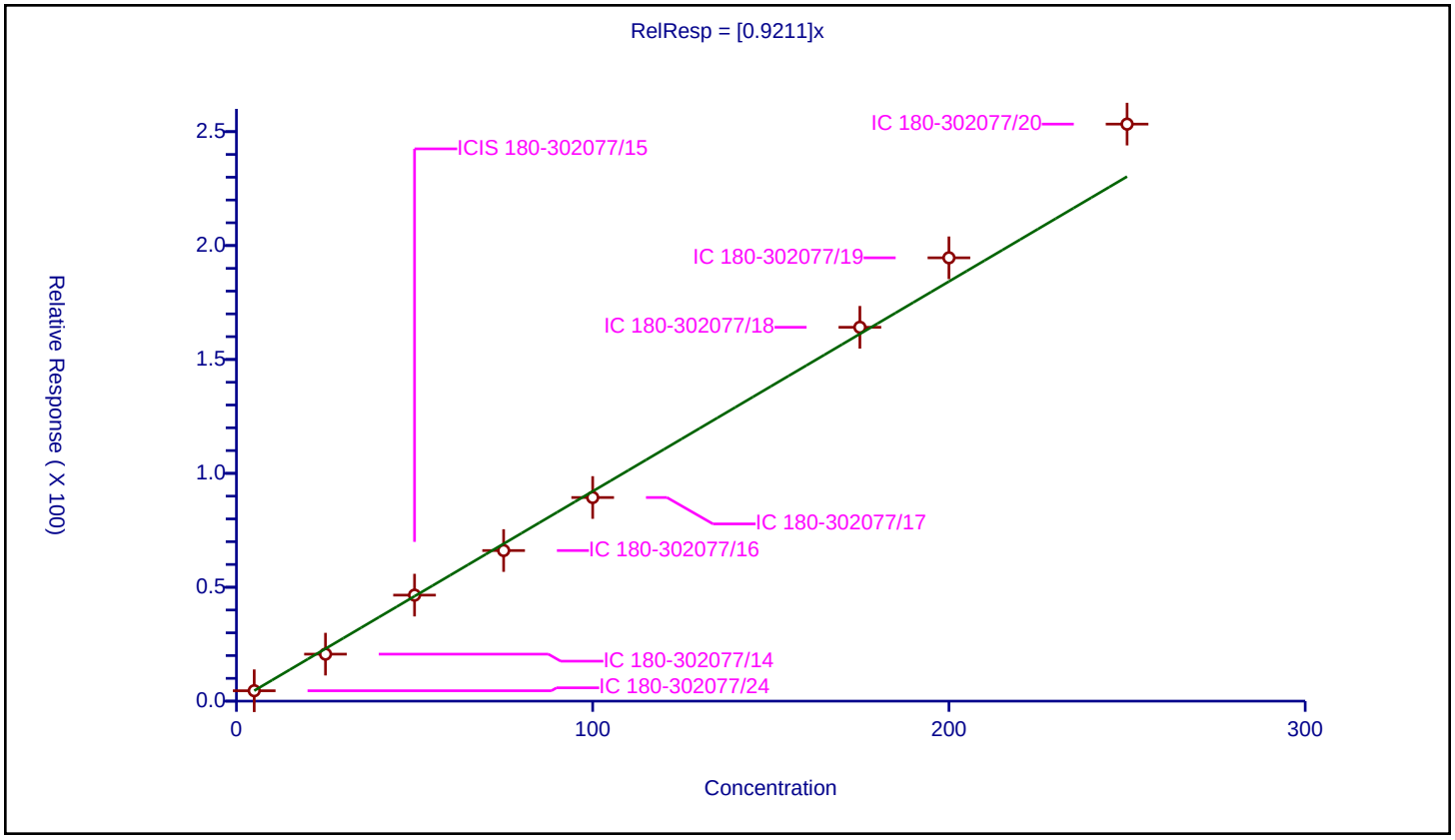
Curve Coefficients

Intercept:	0
Slope:	0.9211

Error Coefficients

Standard Error:	215000
Relative Standard Error:	6.2
Correlation Coefficient:	0.984
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	4.566009	50.0	61476.0	0.913202	Y
2	IC 180-302077/14	25.0	20.632809	50.0	49620.0	0.825312	Y
3	ICIS 180-302077/15	50.0	46.540159	50.0	57994.0	0.930803	Y
4	IC 180-302077/16	75.0	66.120797	50.0	67965.0	0.881611	Y
5	IC 180-302077/17	100.0	89.389123	50.0	66380.0	0.893891	Y
6	IC 180-302077/18	175.0	164.132291	50.0	67926.0	0.937899	Y
7	IC 180-302077/19	200.0	194.631629	50.0	79363.0	0.973158	Y
8	IC 180-302077/20	250.0	253.319314	50.0	77034.0	1.013277	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

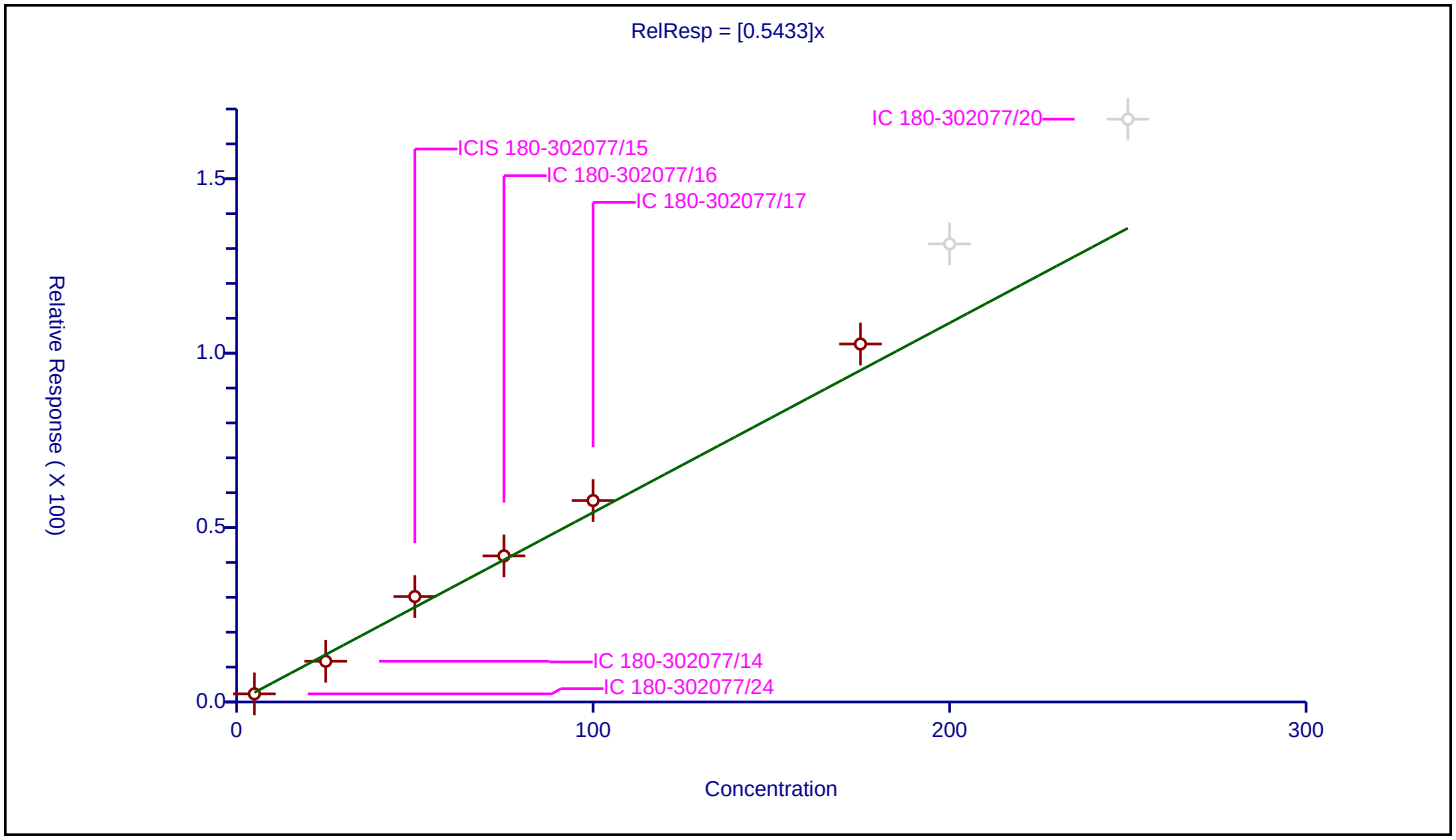
Curve Coefficients

Intercept:	0
Slope:	0.5433

Error Coefficients

Standard Error:	77300
Relative Standard Error:	11.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.329364	50.0	61476.0	0.465873	Y
2	IC 180-302077/14	25.0	11.674728	50.0	49620.0	0.466989	Y
3	ICIS 180-302077/15	50.0	30.232438	50.0	57994.0	0.604649	Y
4	IC 180-302077/16	75.0	41.884794	50.0	67965.0	0.558464	Y
5	IC 180-302077/17	100.0	57.754595	50.0	66380.0	0.577546	Y
6	IC 180-302077/18	175.0	102.635221	50.0	67926.0	0.586487	Y
7	IC 180-302077/19	200.0	131.328201	50.0	79363.0	0.656641	N
8	IC 180-302077/20	250.0	167.095698	50.0	77034.0	0.668383	N



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

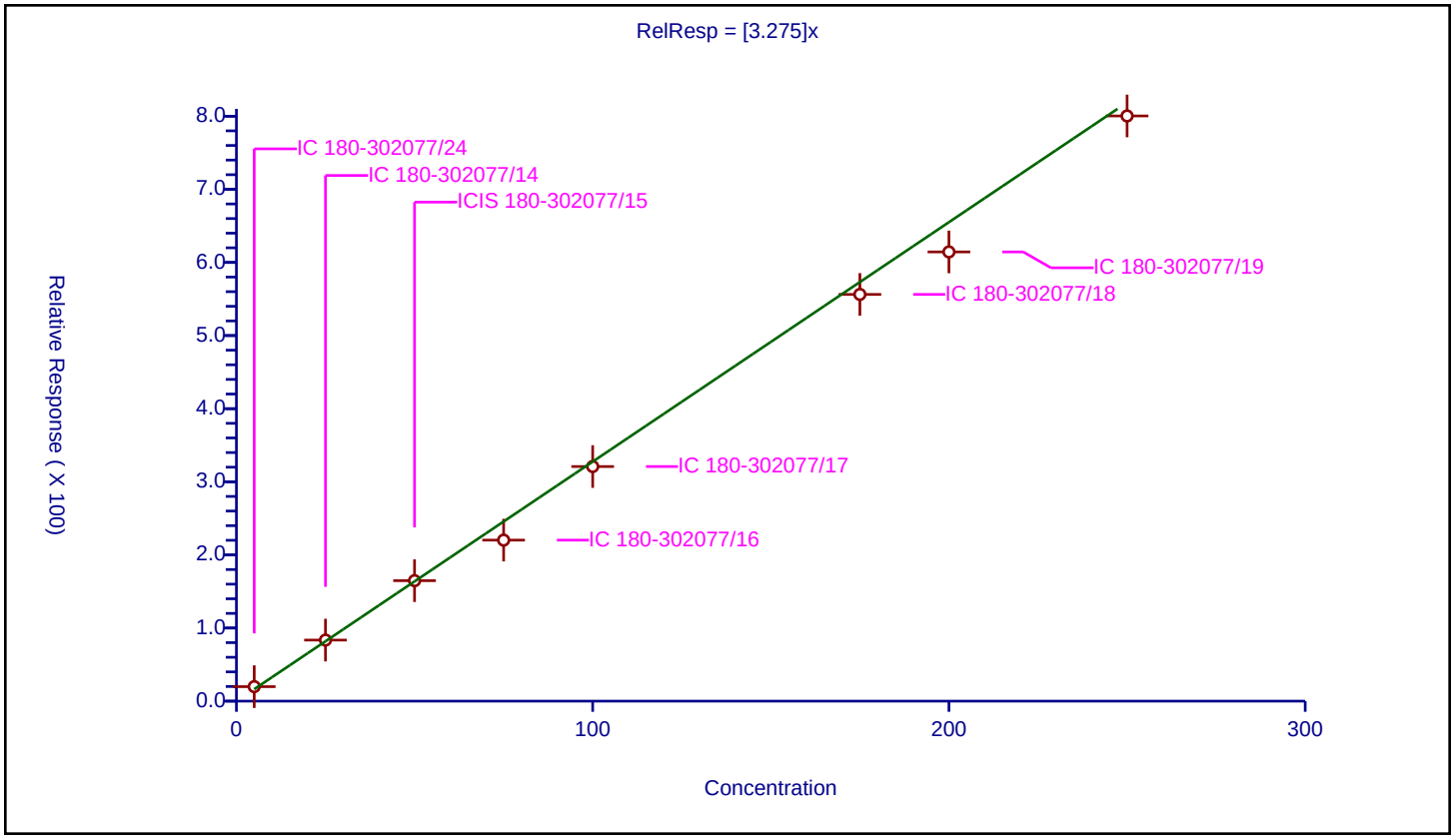
Curve Coefficients

Intercept:	0
Slope:	3.275

Error Coefficients

Standard Error:	692000
Relative Standard Error:	9.4
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	19.847583	50.0	61476.0	3.969517	Y
2	IC 180-302077/14	25.0	83.490528	50.0	49620.0	3.339621	Y
3	ICIS 180-302077/15	50.0	164.773942	50.0	57994.0	3.295479	Y
4	IC 180-302077/16	75.0	220.222173	50.0	67965.0	2.936296	Y
5	IC 180-302077/17	100.0	320.880536	50.0	66380.0	3.208805	Y
6	IC 180-302077/18	175.0	556.254601	50.0	67926.0	3.178598	Y
7	IC 180-302077/19	200.0	614.391467	50.0	79363.0	3.071957	Y
8	IC 180-302077/20	250.0	800.335566	50.0	77034.0	3.201342	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

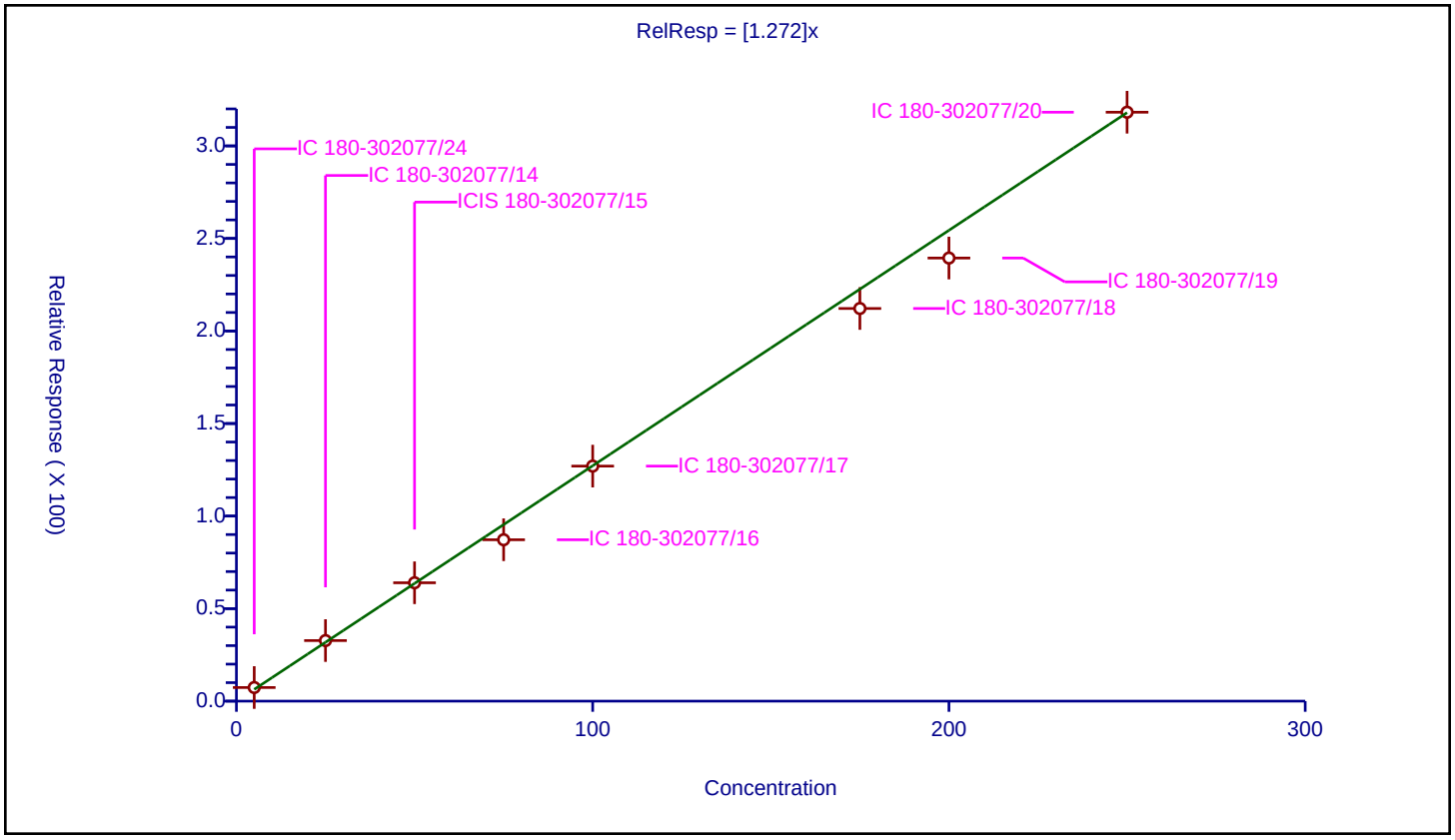
Curve Coefficients

Intercept:	0
Slope:	1.272

Error Coefficients

Standard Error:	272000
Relative Standard Error:	7.4
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	7.362223	50.0	61476.0	1.472445	Y
2	IC 180-302077/14	25.0	32.727731	50.0	49620.0	1.309109	Y
3	ICIS 180-302077/15	50.0	63.962651	50.0	57994.0	1.279253	Y
4	IC 180-302077/16	75.0	87.196351	50.0	67965.0	1.162618	Y
5	IC 180-302077/17	100.0	126.99533	50.0	66380.0	1.269953	Y
6	IC 180-302077/18	175.0	212.152195	50.0	67926.0	1.212298	Y
7	IC 180-302077/19	200.0	239.405642	50.0	79363.0	1.197028	Y
8	IC 180-302077/20	250.0	318.204948	50.0	77034.0	1.27282	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

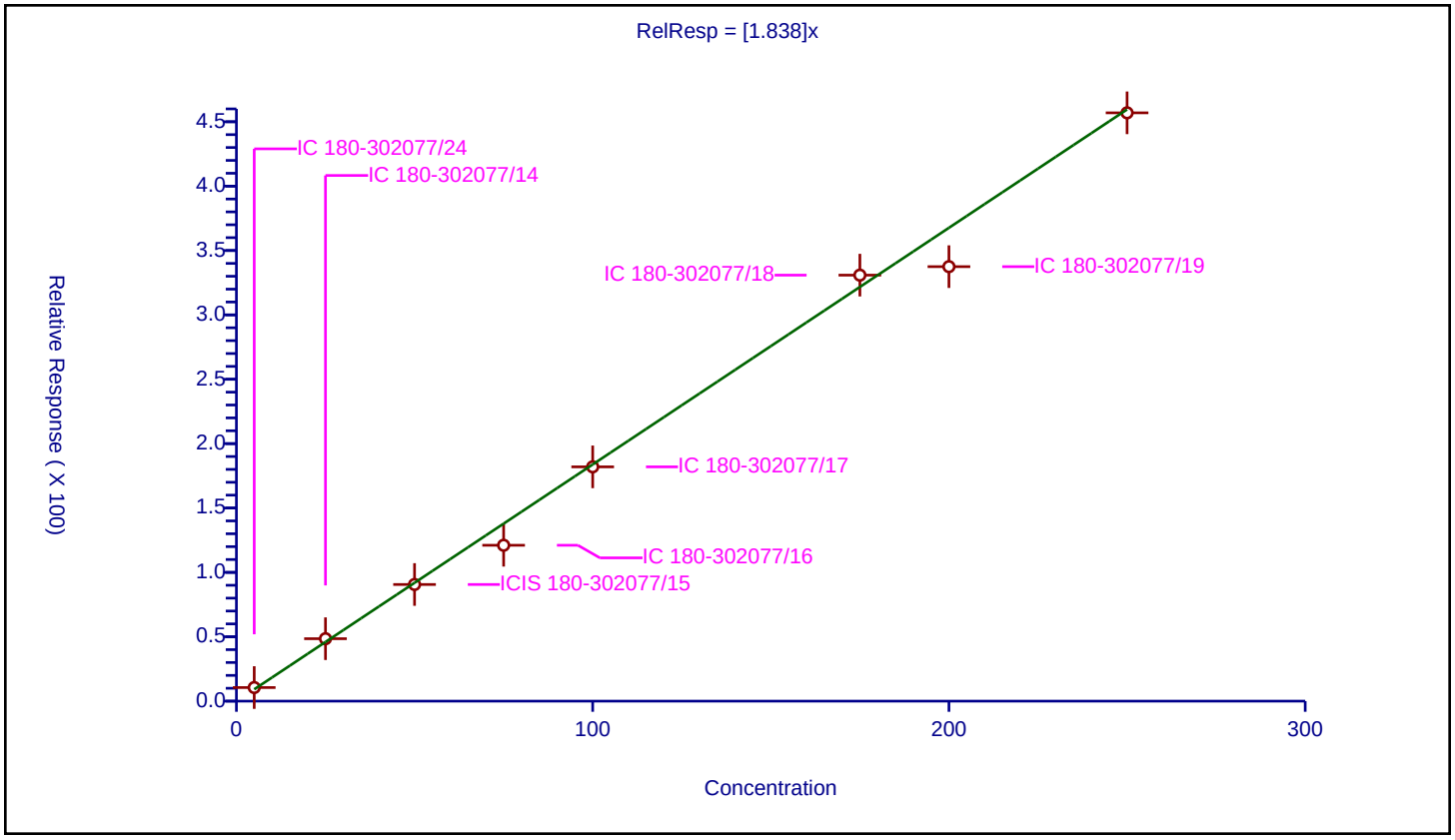
Curve Coefficients

Intercept:	0
Slope:	1.838

Error Coefficients

Standard Error:	393000
Relative Standard Error:	8.3
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	10.566725	50.0	61476.0	2.113345	Y
2	IC 180-302077/14	25.0	48.50262	50.0	49620.0	1.940105	Y
3	ICIS 180-302077/15	50.0	90.605063	50.0	57994.0	1.812101	Y
4	IC 180-302077/16	75.0	121.073347	50.0	67965.0	1.614311	Y
5	IC 180-302077/17	100.0	181.962187	50.0	66380.0	1.819622	Y
6	IC 180-302077/18	175.0	330.875512	50.0	67926.0	1.890717	Y
7	IC 180-302077/19	200.0	337.470232	50.0	79363.0	1.687351	Y
8	IC 180-302077/20	250.0	456.939793	50.0	77034.0	1.827759	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

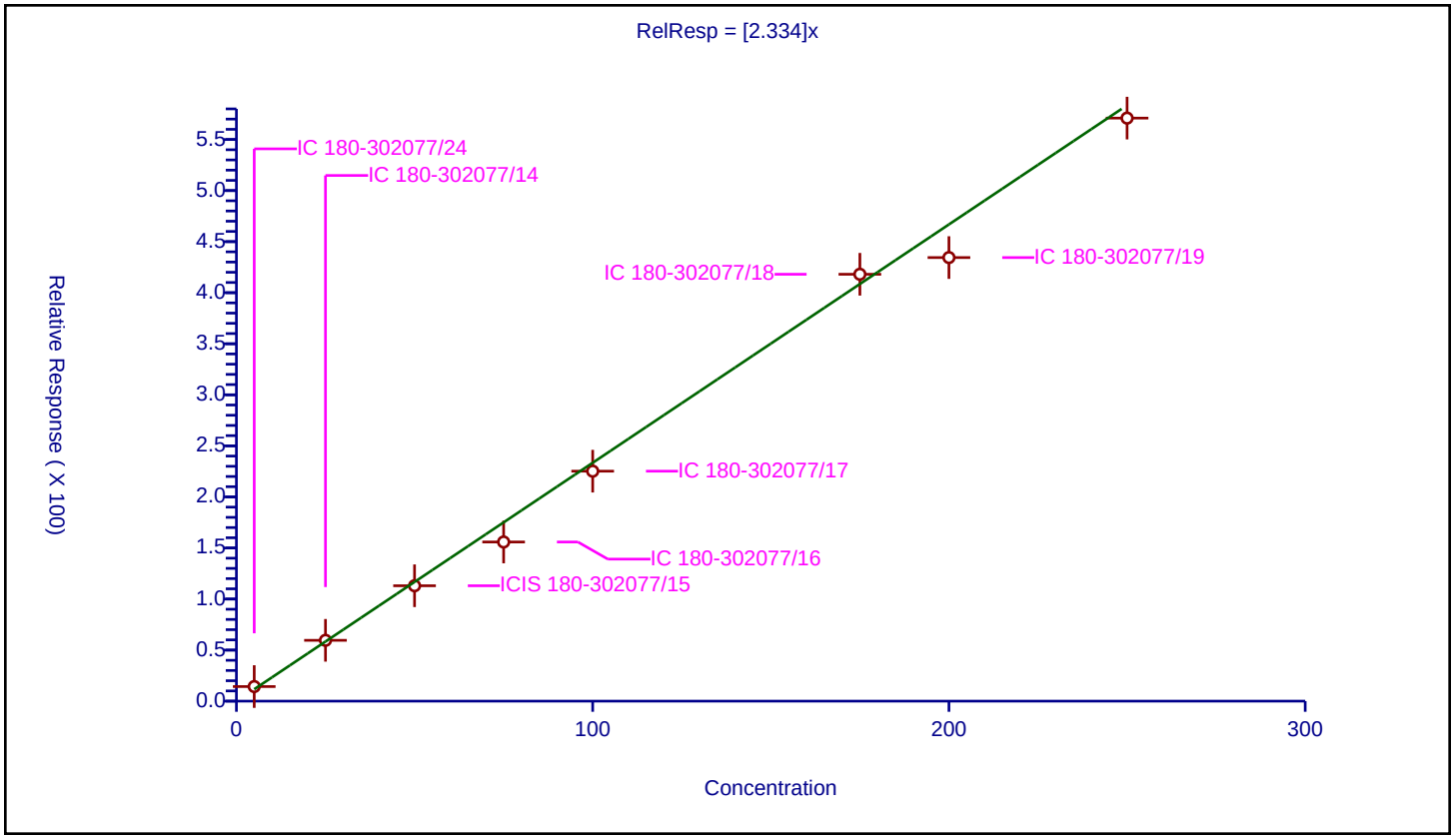
Curve Coefficients

Intercept:	0
Slope:	2.334

Error Coefficients

Standard Error:	496000
Relative Standard Error:	10.0
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	14.284436	50.0	61476.0	2.856887	Y
2	IC 180-302077/14	25.0	59.555623	50.0	49620.0	2.382225	Y
3	ICIS 180-302077/15	50.0	112.996172	50.0	57994.0	2.259923	Y
4	IC 180-302077/16	75.0	155.86699	50.0	67965.0	2.078227	Y
5	IC 180-302077/17	100.0	225.205634	50.0	66380.0	2.252056	Y
6	IC 180-302077/18	175.0	418.039484	50.0	67926.0	2.388797	Y
7	IC 180-302077/19	200.0	434.396381	50.0	79363.0	2.171982	Y
8	IC 180-302077/20	250.0	570.97061	50.0	77034.0	2.283882	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

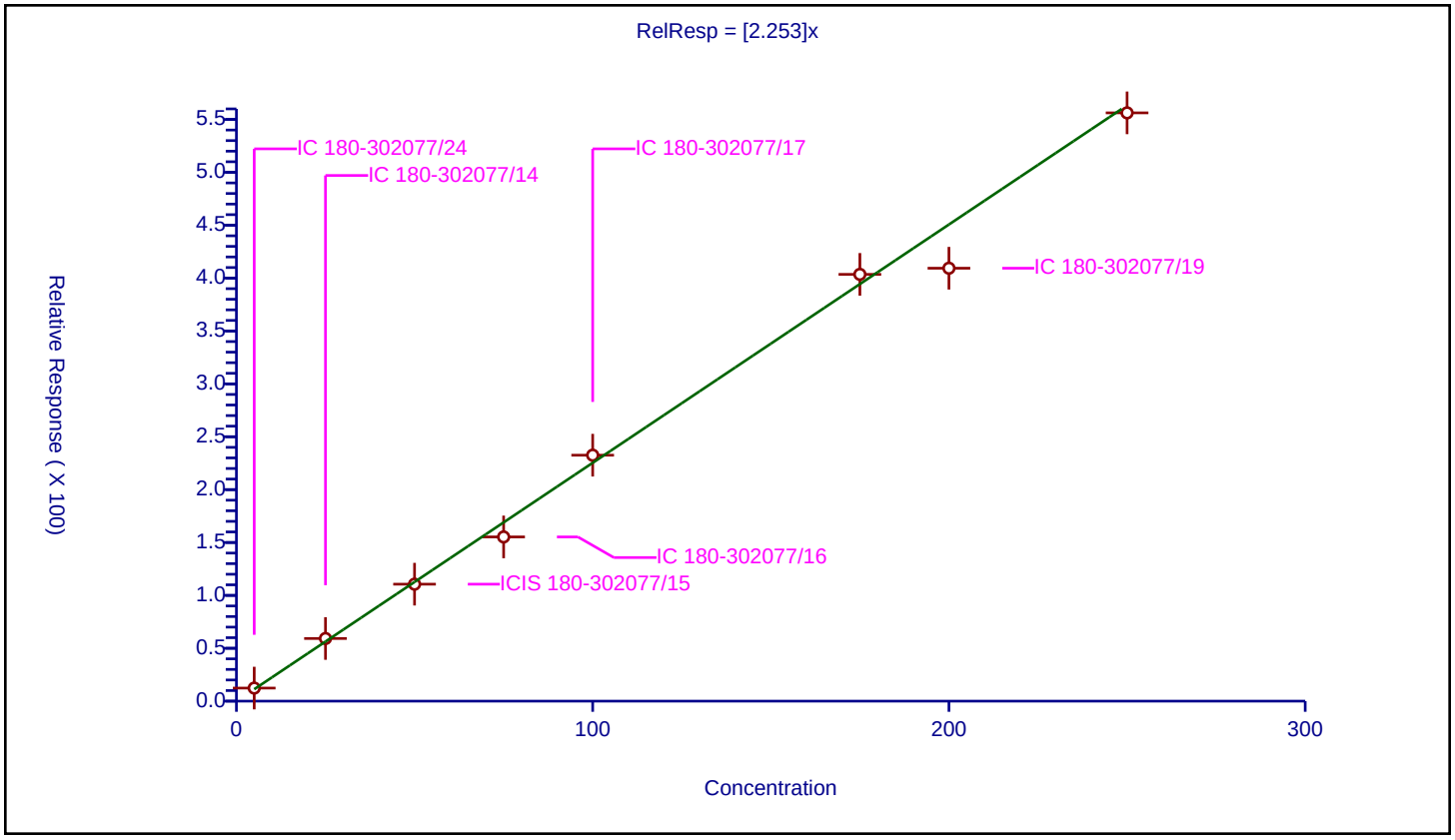
Curve Coefficients

Intercept:	0
Slope:	2.253

Error Coefficients

Standard Error:	480000
Relative Standard Error:	6.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	12.361735	50.0	61476.0	2.472347	Y
2	IC 180-302077/14	25.0	59.237203	50.0	49620.0	2.369488	Y
3	ICIS 180-302077/15	50.0	110.600235	50.0	57994.0	2.212005	Y
4	IC 180-302077/16	75.0	155.264474	50.0	67965.0	2.070193	Y
5	IC 180-302077/17	100.0	232.570051	50.0	66380.0	2.325701	Y
6	IC 180-302077/18	175.0	403.543562	50.0	67926.0	2.305963	Y
7	IC 180-302077/19	200.0	409.361415	50.0	79363.0	2.046807	Y
8	IC 180-302077/20	250.0	556.243996	50.0	77034.0	2.224976	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

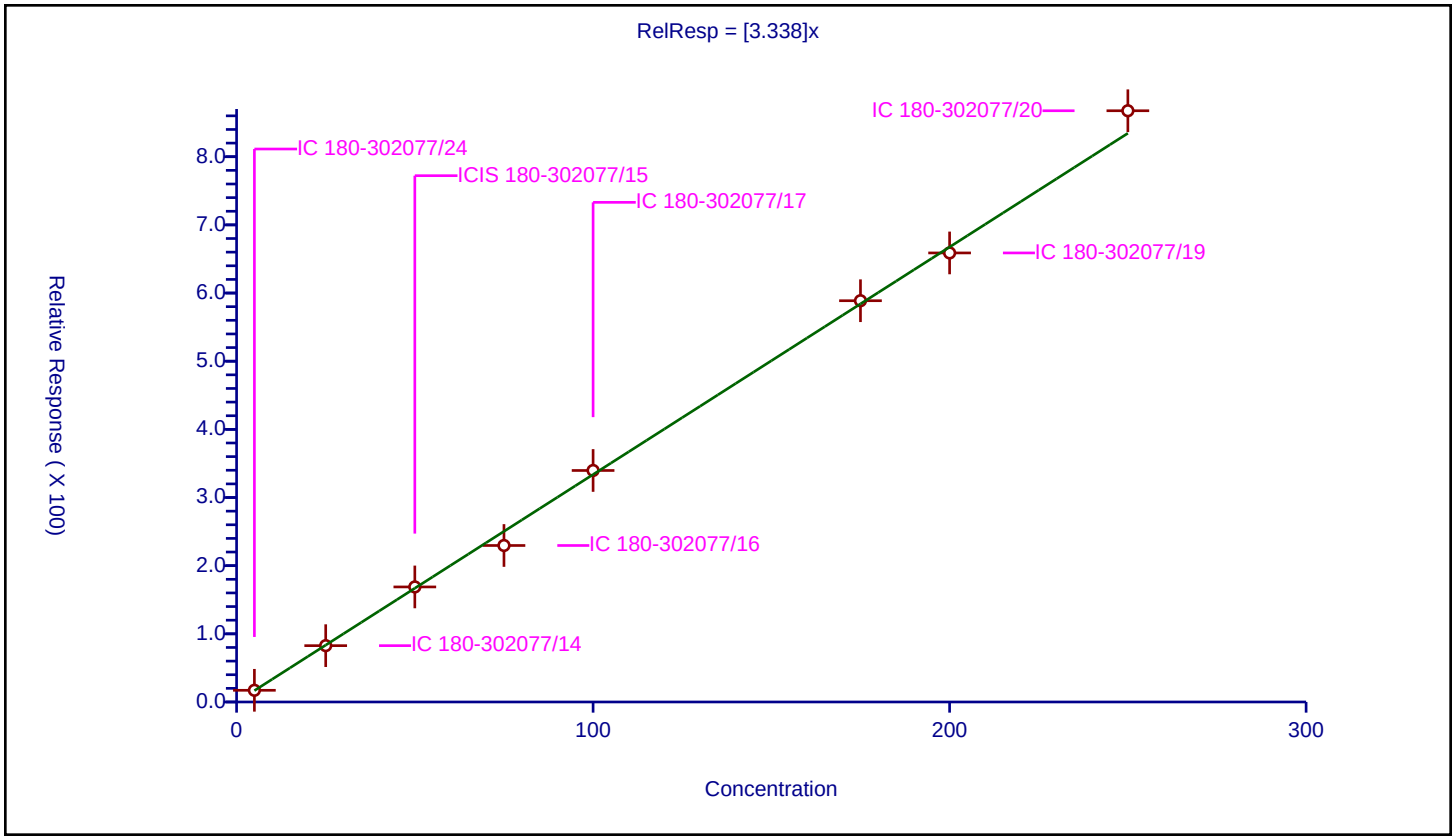
Curve Coefficients

Intercept:	0
Slope:	3.338

Error Coefficients

Standard Error:	743000
Relative Standard Error:	3.8
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	17.161982	50.0	61476.0	3.432396	Y
2	IC 180-302077/14	25.0	82.652156	50.0	49620.0	3.306086	Y
3	ICIS 180-302077/15	50.0	168.807118	50.0	57994.0	3.376142	Y
4	IC 180-302077/16	75.0	229.615979	50.0	67965.0	3.061546	Y
5	IC 180-302077/17	100.0	339.668575	50.0	66380.0	3.396686	Y
6	IC 180-302077/18	175.0	588.730383	50.0	67926.0	3.364174	Y
7	IC 180-302077/19	200.0	658.858032	50.0	79363.0	3.29429	Y
8	IC 180-302077/20	250.0	867.442298	50.0	77034.0	3.469769	Y



Calibration / Bromoform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

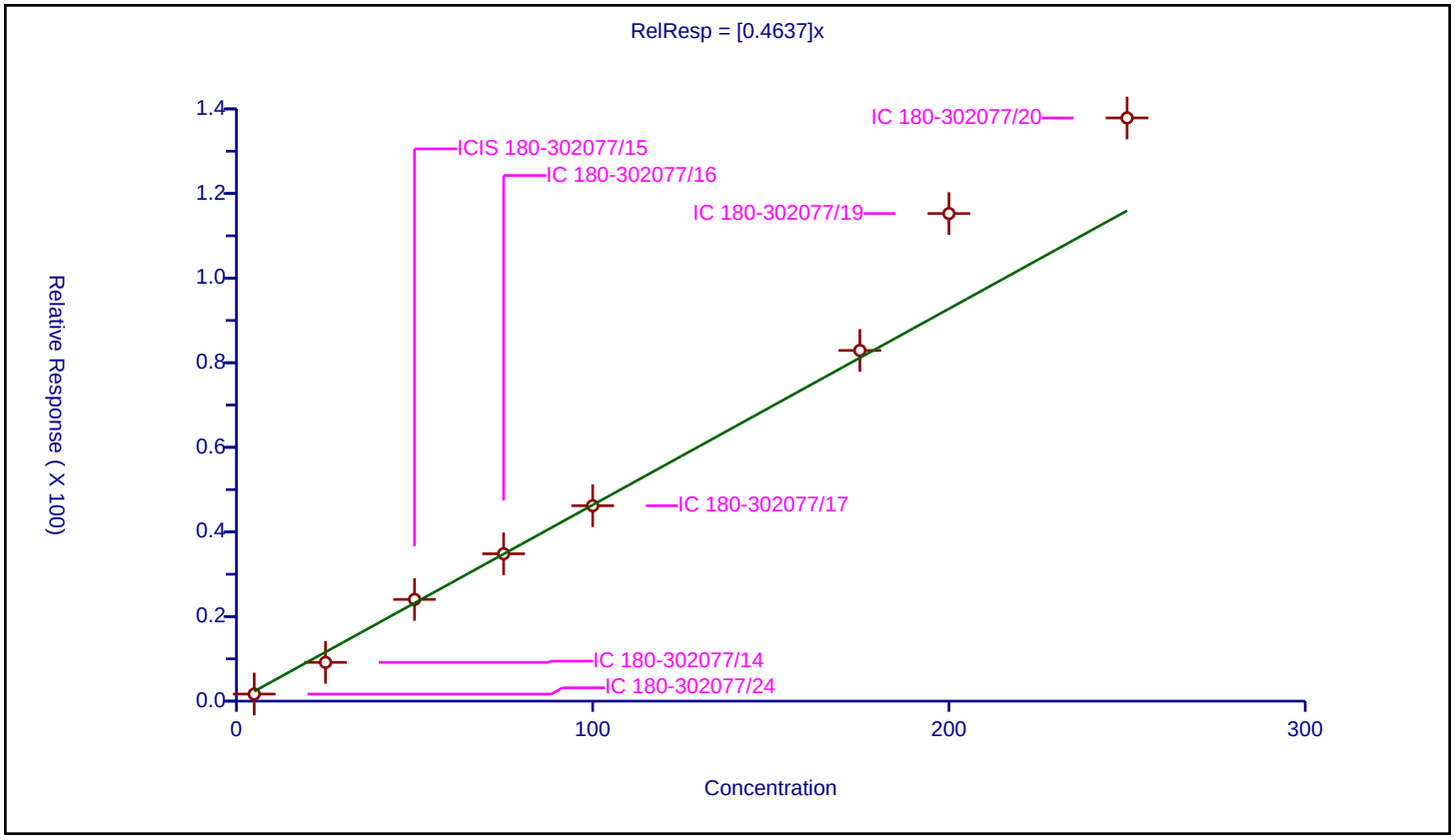
Curve Coefficients

Intercept:	0
Slope:	0.4637

Error Coefficients

Standard Error:	118000
Relative Standard Error:	17.6
Correlation Coefficient:	0.965
Coefficient of Determination (Adjusted):	0.968

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	1.673011	50.0	61476.0	0.334602	Y
2	IC 180-302077/14	25.0	9.162636	50.0	49620.0	0.366505	Y
3	ICIS 180-302077/15	50.0	24.048177	50.0	57994.0	0.480964	Y
4	IC 180-302077/16	75.0	34.837048	50.0	67965.0	0.464494	Y
5	IC 180-302077/17	100.0	46.196897	50.0	66380.0	0.461969	Y
6	IC 180-302077/18	175.0	82.898301	50.0	67926.0	0.473705	Y
7	IC 180-302077/19	200.0	115.26404	50.0	79363.0	0.57632	Y
8	IC 180-302077/20	250.0	137.859906	50.0	77034.0	0.55144	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

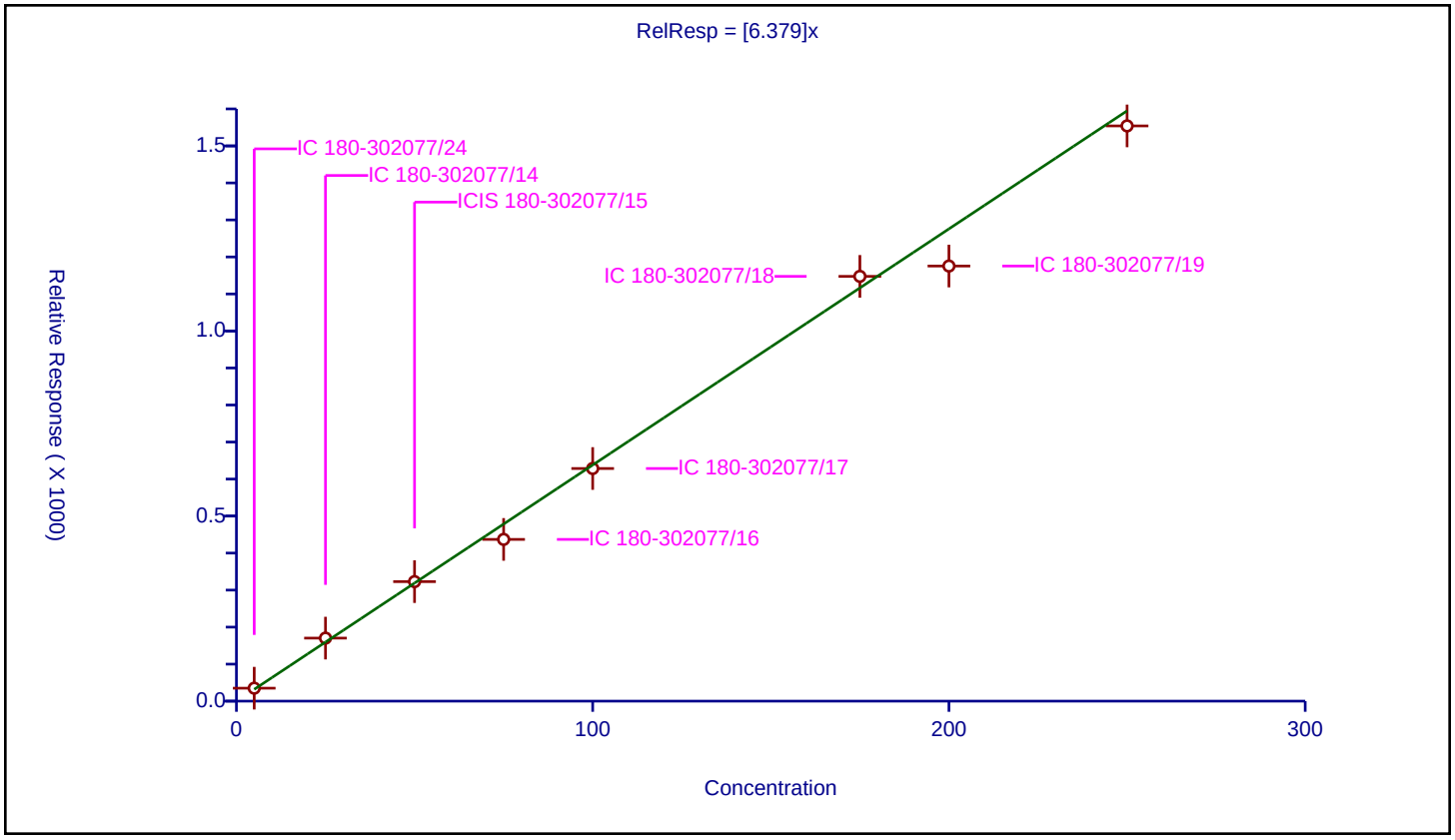
Curve Coefficients

Intercept:	0
Slope:	6.379

Error Coefficients

Standard Error:	1350000
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 180-302077/24	5.0	35.018544	50.0	61476.0	7.003709	Y
2	IC 180-302077/14	25.0	170.245869	50.0	49620.0	6.809835	Y
3	ICIS 180-302077/15	50.0	322.900645	50.0	57994.0	6.458013	Y
4	IC 180-302077/16	75.0	436.955786	50.0	67965.0	5.826077	Y
5	IC 180-302077/17	100.0	628.450588	50.0	66380.0	6.284506	Y
6	IC 180-302077/18	175.0	1147.563525	50.0	67926.0	6.557506	Y
7	IC 180-302077/19	200.0	1175.440697	50.0	79363.0	5.877203	Y
8	IC 180-302077/20	250.0	1554.054054	50.0	77034.0	6.216216	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

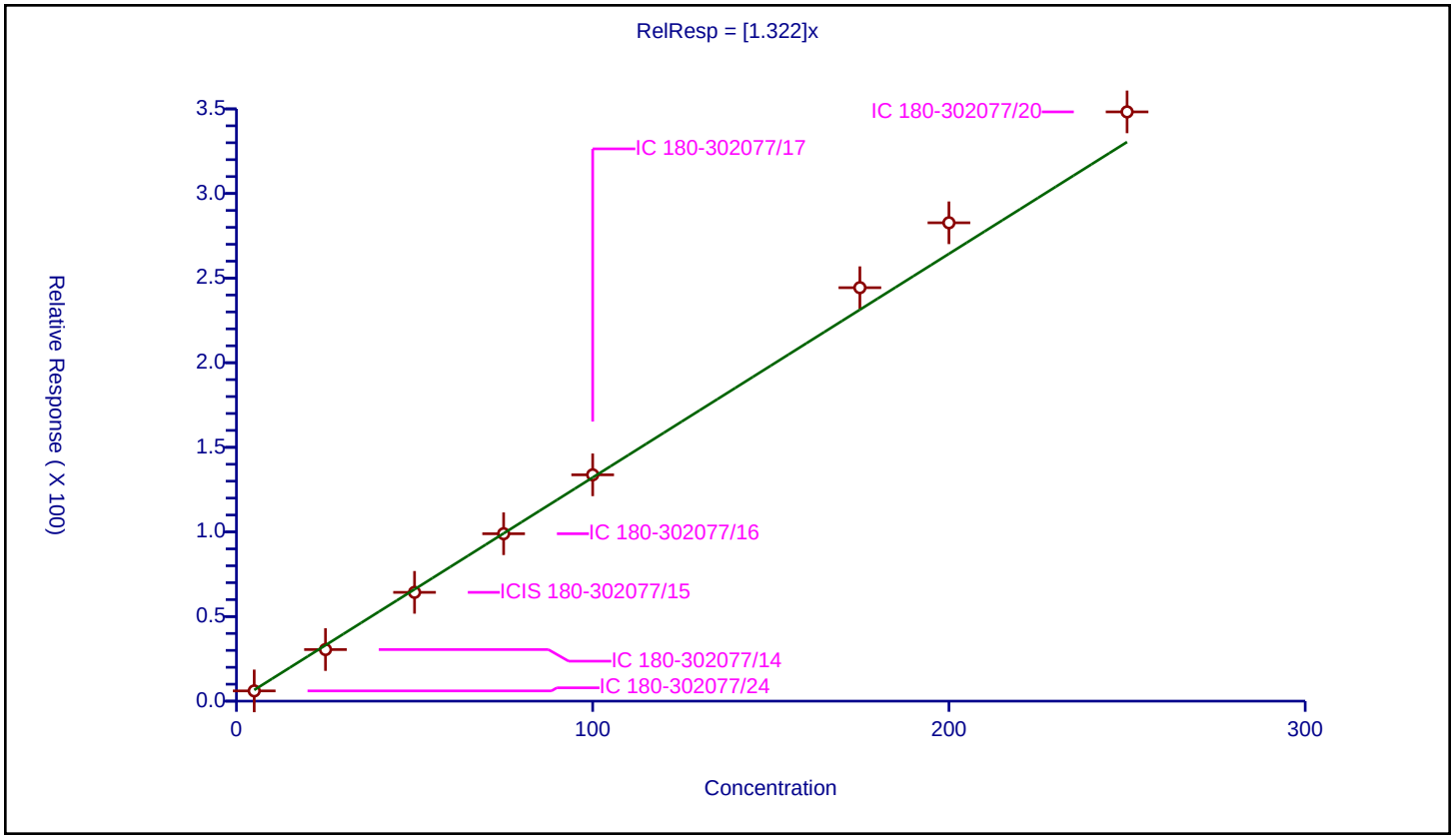
Curve Coefficients

Intercept:	0
Slope:	1.322

Error Coefficients

Standard Error:	306000
Relative Standard Error:	6.0
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	6.050329	50.0	61476.0	1.210066	Y
2	IC 180-302077/14	25.0	30.474607	50.0	49620.0	1.218984	Y
3	ICIS 180-302077/15	50.0	64.295444	50.0	57994.0	1.285909	Y
4	IC 180-302077/16	75.0	98.936953	50.0	67965.0	1.319159	Y
5	IC 180-302077/17	100.0	133.75339	50.0	66380.0	1.337534	Y
6	IC 180-302077/18	175.0	244.338692	50.0	67926.0	1.396221	Y
7	IC 180-302077/19	200.0	282.695337	50.0	79363.0	1.413477	Y
8	IC 180-302077/20	250.0	348.242335	50.0	77034.0	1.392969	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

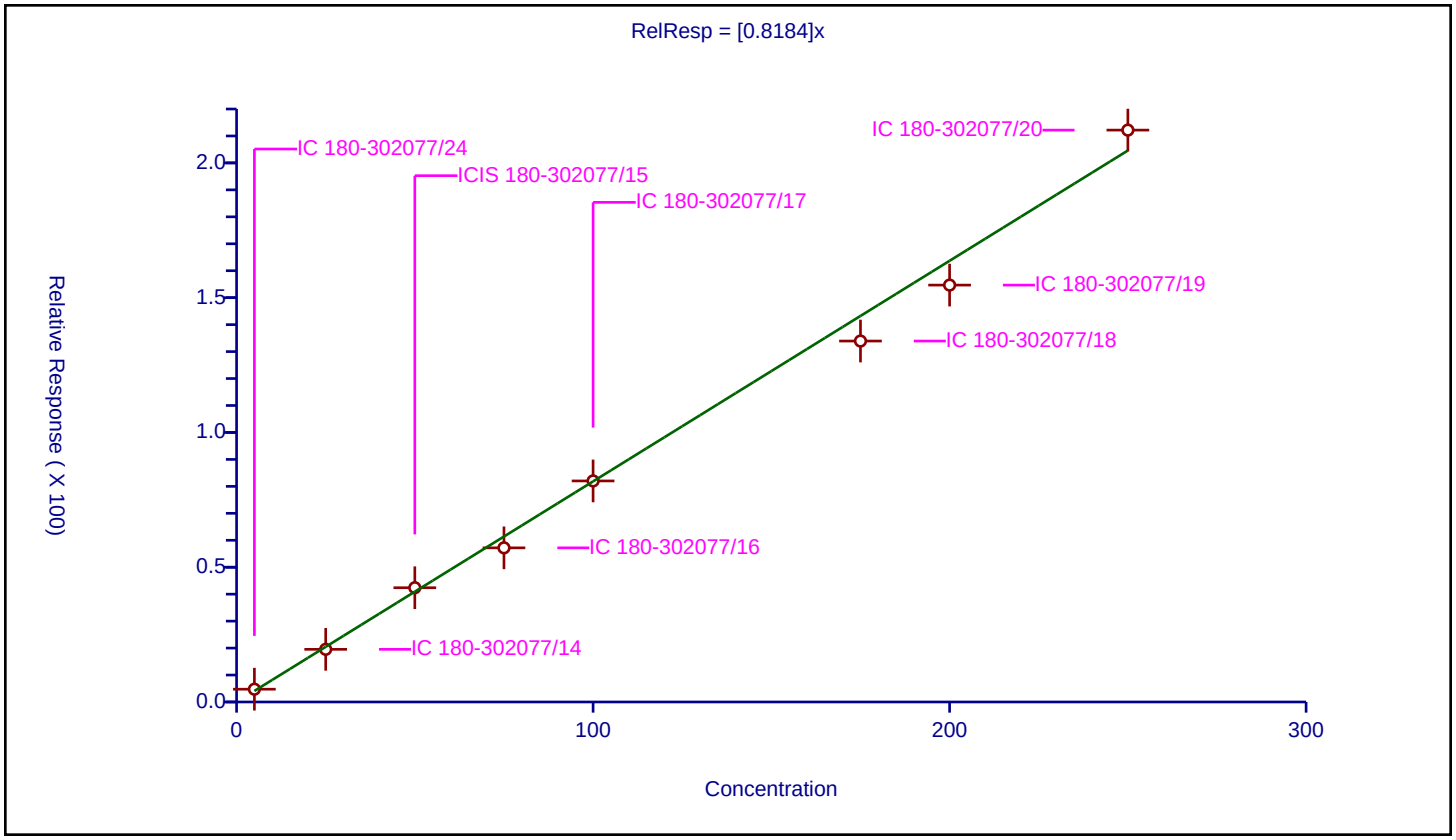
Curve Coefficients

Intercept:	0
Slope:	0.8184

Error Coefficients

Standard Error:	298000
Relative Standard Error:	7.7
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	4.740169	50.0	81938.0	0.948034	Y
2	IC 180-302077/14	25.0	19.538213	50.0	75511.0	0.781529	Y
3	ICIS 180-302077/15	50.0	42.39141	50.0	92527.0	0.847828	Y
4	IC 180-302077/16	75.0	57.192849	50.0	111875.0	0.762571	Y
5	IC 180-302077/17	100.0	82.01187	50.0	110534.0	0.820119	Y
6	IC 180-302077/18	175.0	133.9172	50.0	117464.0	0.765241	Y
7	IC 180-302077/19	200.0	154.672311	50.0	133114.0	0.773362	Y
8	IC 180-302077/20	250.0	212.175954	50.0	128454.0	0.848704	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

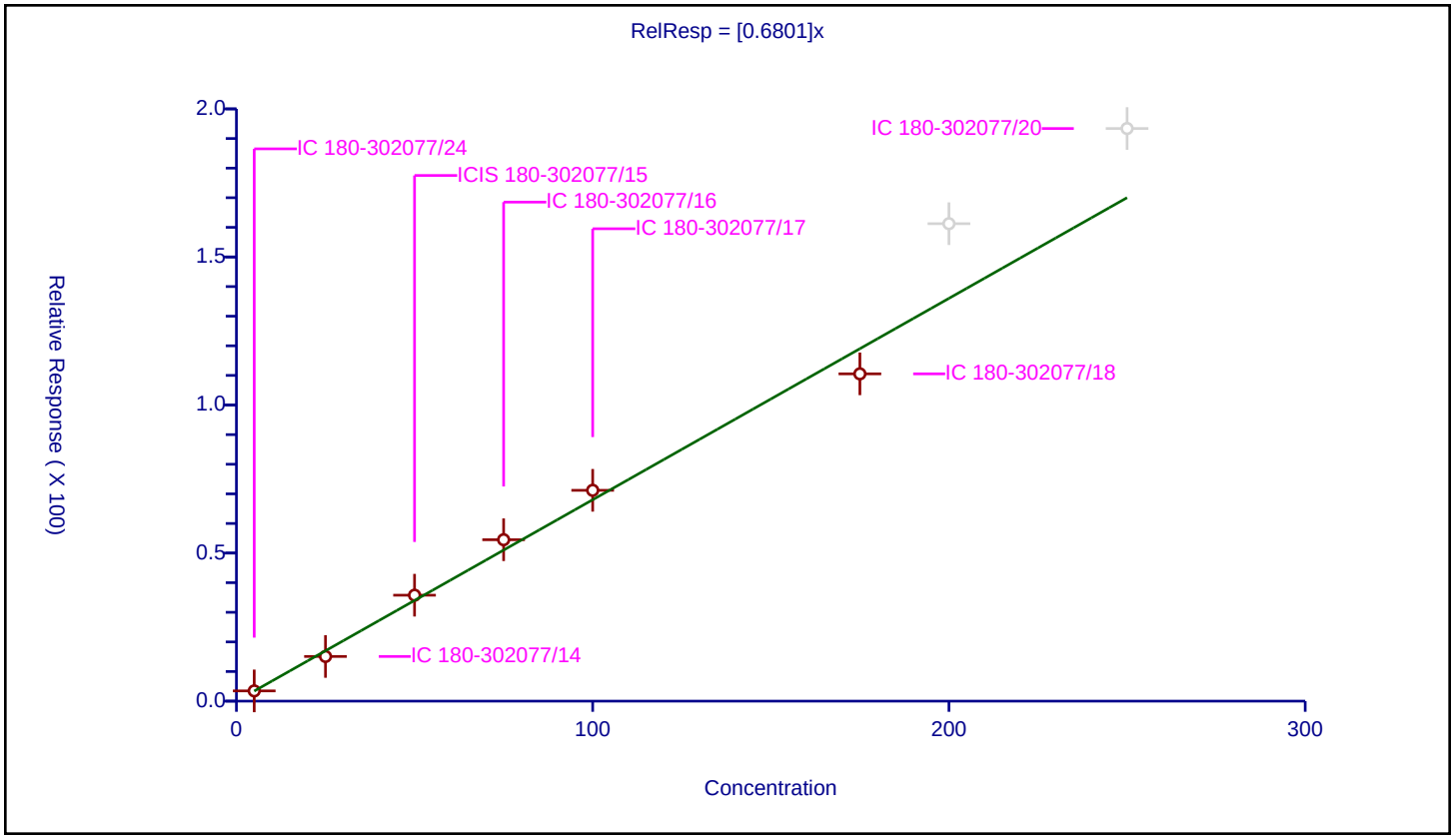
Curve Coefficients

Intercept:	0
Slope:	0.6801

Error Coefficients

Standard Error:	88200
Relative Standard Error:	7.4
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	3.457447	50.0	61476.0	0.691489	Y
2	IC 180-302077/14	25.0	15.083636	50.0	49620.0	0.603345	Y
3	ICIS 180-302077/15	50.0	35.77008	50.0	57994.0	0.715402	Y
4	IC 180-302077/16	75.0	54.50526	50.0	67965.0	0.726737	Y
5	IC 180-302077/17	100.0	71.196897	50.0	66380.0	0.711969	Y
6	IC 180-302077/18	175.0	110.529105	50.0	67926.0	0.631595	Y
7	IC 180-302077/19	200.0	161.231304	50.0	79363.0	0.806157	N
8	IC 180-302077/20	250.0	193.375652	50.0	77034.0	0.773503	N



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Linear
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

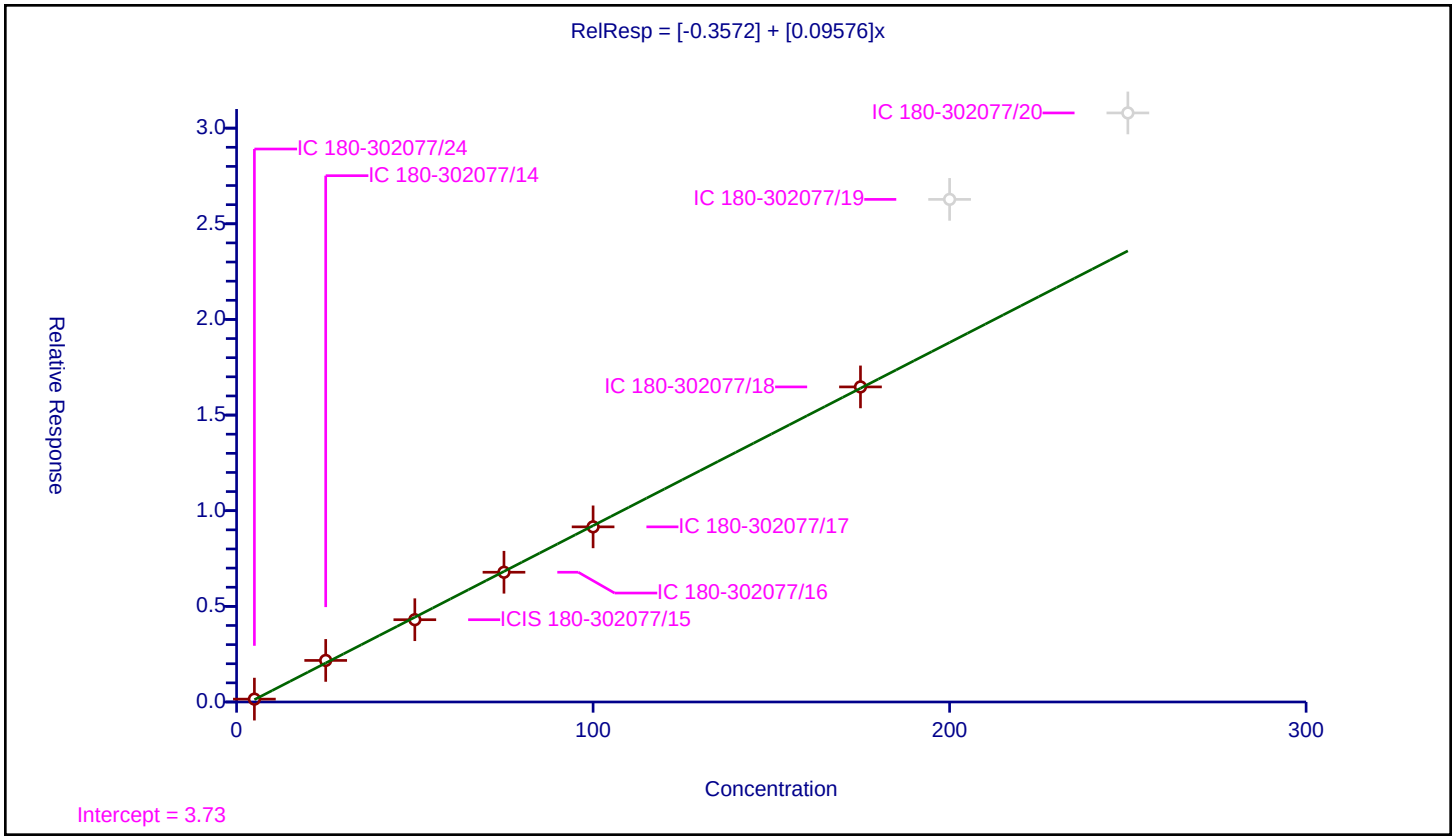
Curve Coefficients

Intercept:	-0.3572
Slope:	0.09576

Error Coefficients

Standard Error:	23500
Relative Standard Error:	4.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	0.150114	50.0	81938.0	0.030023	Y
2	IC 180-302077/14	25.0	2.172531	50.0	75511.0	0.086901	Y
3	ICIS 180-302077/15	50.0	4.300907	50.0	92527.0	0.086018	Y
4	IC 180-302077/16	75.0	6.78257	50.0	111875.0	0.090434	Y
5	IC 180-302077/17	100.0	9.156006	50.0	110534.0	0.09156	Y
6	IC 180-302077/18	175.0	16.472281	50.0	117464.0	0.094127	Y
7	IC 180-302077/19	200.0	26.275974	50.0	133114.0	0.13138	N
8	IC 180-302077/20	250.0	30.79546	50.0	128454.0	0.123182	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

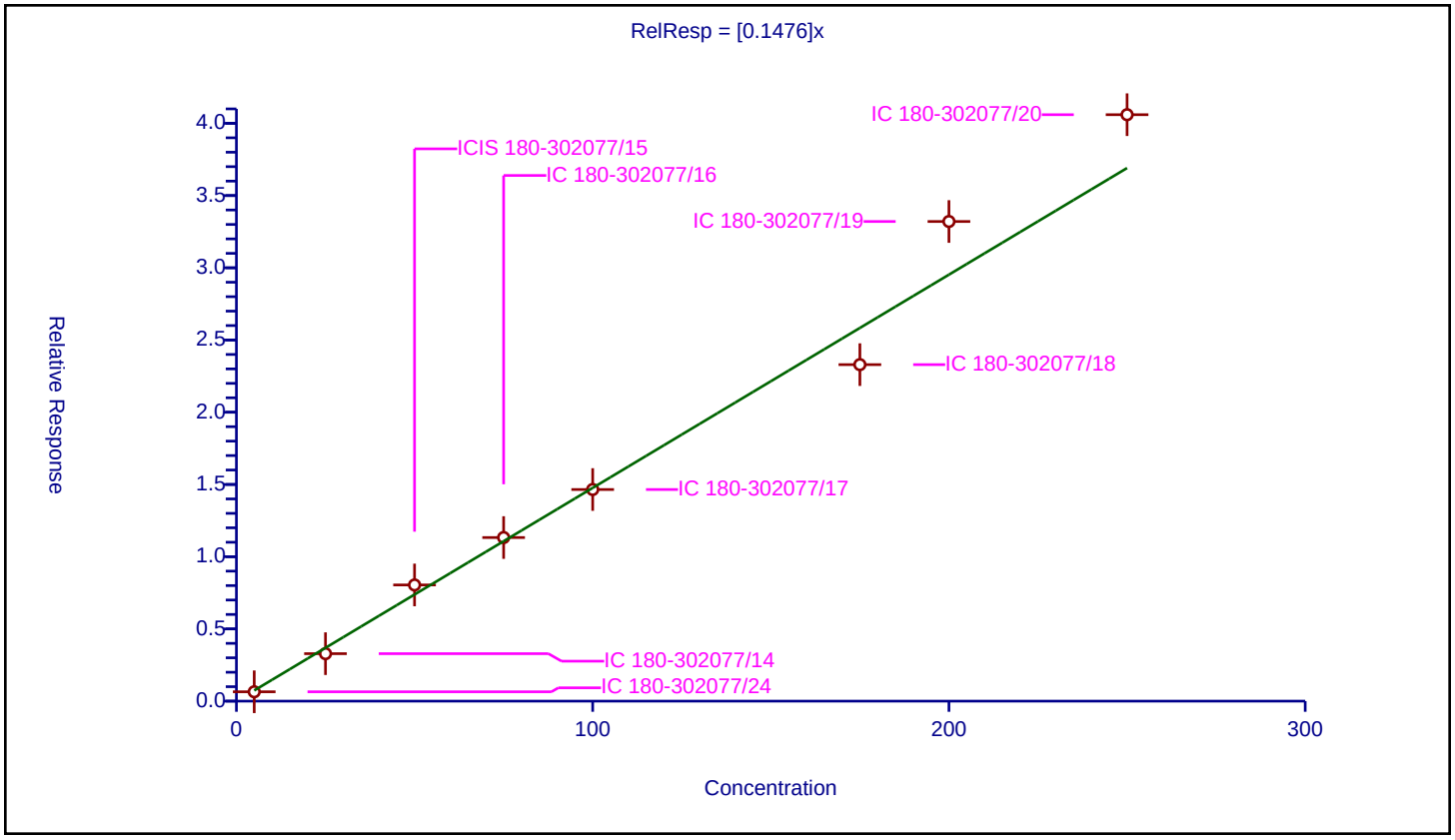
Curve Coefficients

Intercept:	0
Slope:	0.1476

Error Coefficients

Standard Error:	58100
Relative Standard Error:	10.0
Correlation Coefficient:	0.968
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	0.648051	50.0	81938.0	0.12961	Y
2	IC 180-302077/14	25.0	3.286938	50.0	75511.0	0.131478	Y
3	ICIS 180-302077/15	50.0	8.043058	50.0	92527.0	0.160861	Y
4	IC 180-302077/16	75.0	11.325587	50.0	111875.0	0.151008	Y
5	IC 180-302077/17	100.0	14.650243	50.0	110534.0	0.146502	Y
6	IC 180-302077/18	175.0	23.296499	50.0	117464.0	0.133123	Y
7	IC 180-302077/19	200.0	33.204997	50.0	133114.0	0.166025	Y
8	IC 180-302077/20	250.0	40.597802	50.0	128454.0	0.162391	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

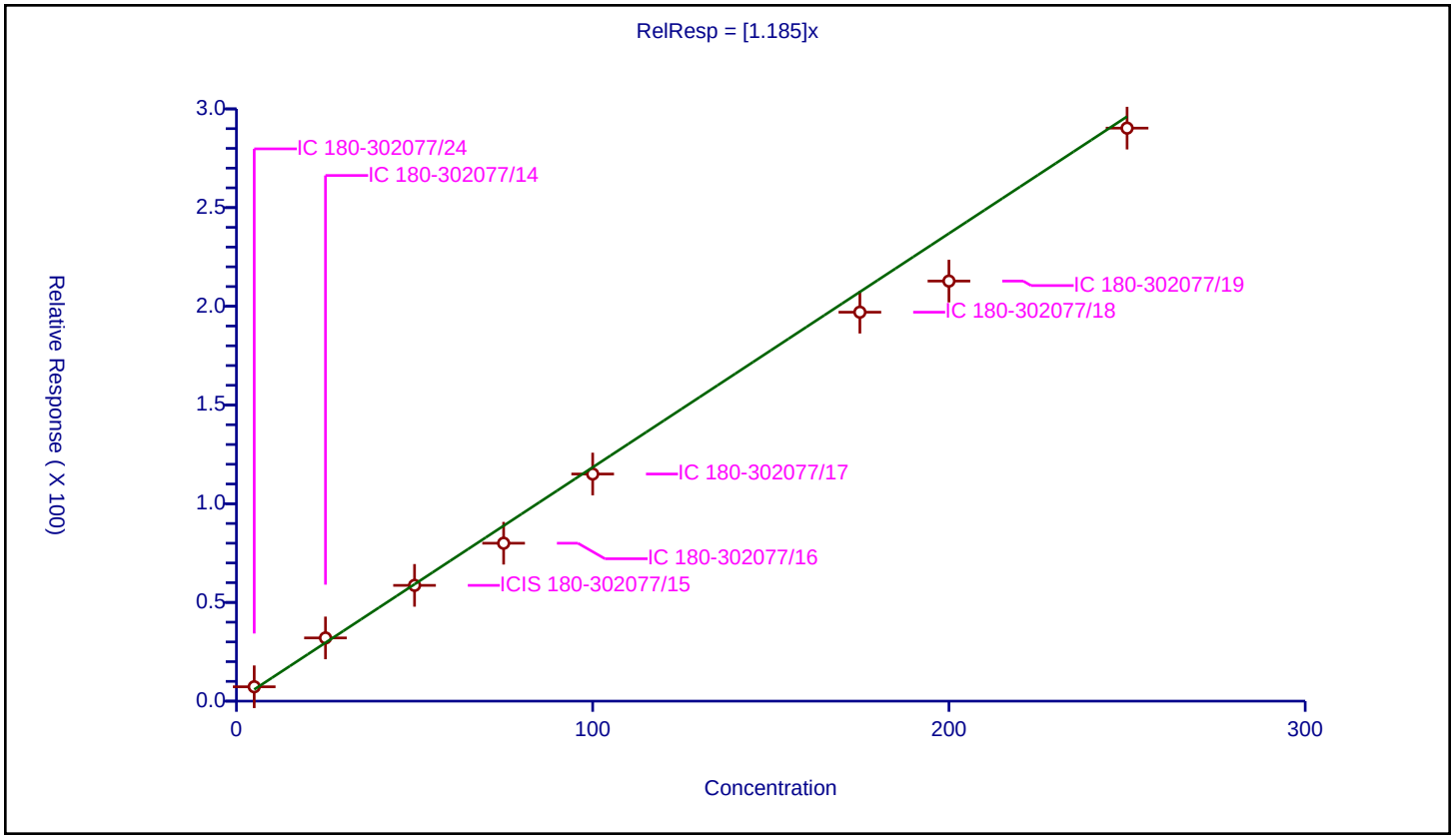
Curve Coefficients

Intercept:	0
Slope:	1.185

Error Coefficients

Standard Error:	414000
Relative Standard Error:	10.9
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	7.272572	50.0	81938.0	1.454514	Y
2	IC 180-302077/14	25.0	32.019176	50.0	75511.0	1.280767	Y
3	ICIS 180-302077/15	50.0	58.646125	50.0	92527.0	1.172922	Y
4	IC 180-302077/16	75.0	79.994637	50.0	111875.0	1.066595	Y
5	IC 180-302077/17	100.0	115.04243	50.0	110534.0	1.150424	Y
6	IC 180-302077/18	175.0	197.024195	50.0	117464.0	1.125853	Y
7	IC 180-302077/19	200.0	212.78115	50.0	133114.0	1.063906	Y
8	IC 180-302077/20	250.0	290.262662	50.0	128454.0	1.161051	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

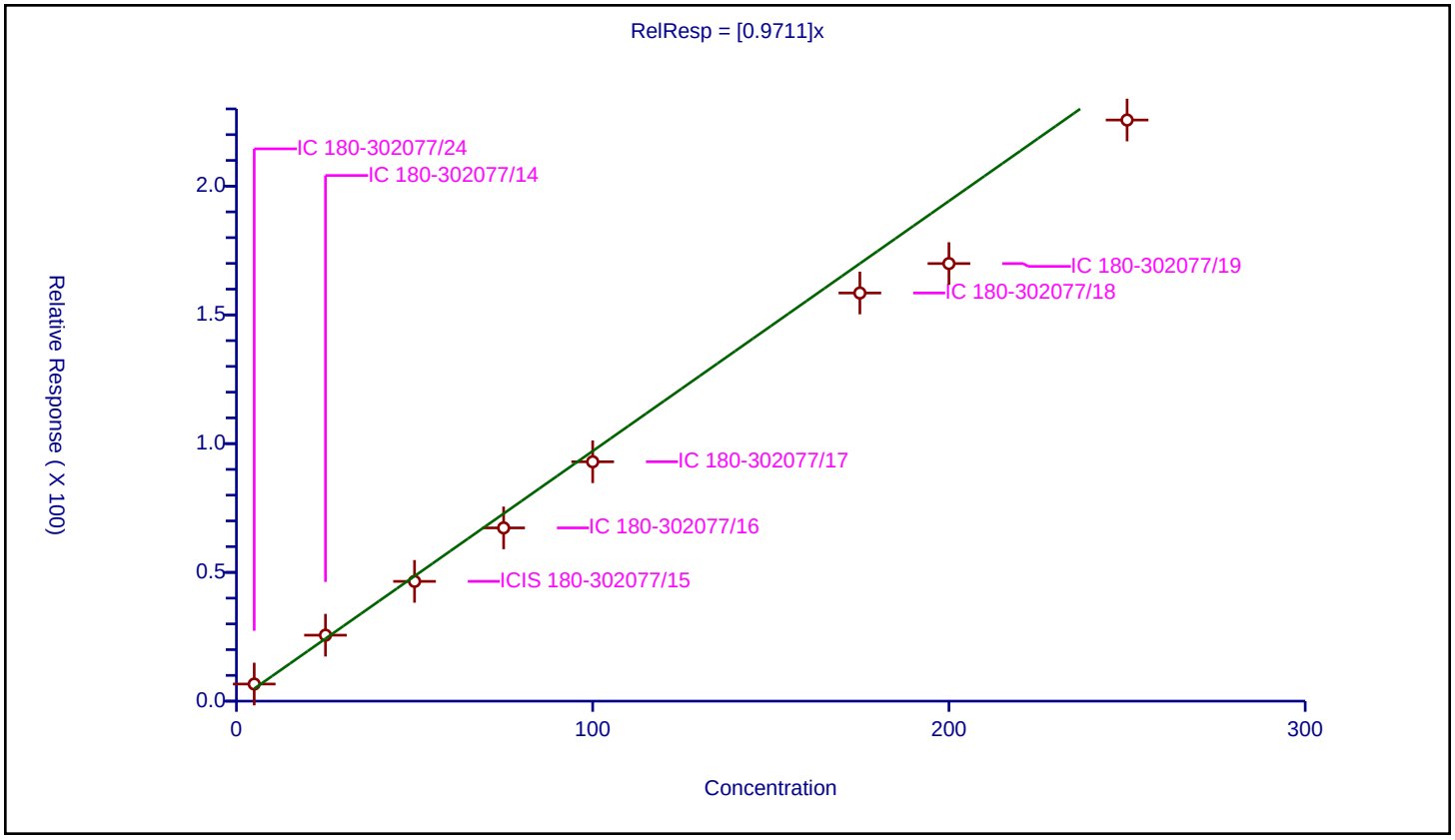
Curve Coefficients

Intercept:	0
Slope:	0.9711

Error Coefficients

Standard Error:	328000
Relative Standard Error:	15.7
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	6.645879	50.0	81938.0	1.329176	Y
2	IC 180-302077/14	25.0	25.619446	50.0	75511.0	1.024778	Y
3	ICIS 180-302077/15	50.0	46.504804	50.0	92527.0	0.930096	Y
4	IC 180-302077/16	75.0	67.279106	50.0	111875.0	0.897055	Y
5	IC 180-302077/17	100.0	92.963703	50.0	110534.0	0.929637	Y
6	IC 180-302077/18	175.0	158.492389	50.0	117464.0	0.905671	Y
7	IC 180-302077/19	200.0	169.93592	50.0	133114.0	0.84968	Y
8	IC 180-302077/20	250.0	225.67495	50.0	128454.0	0.9027	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

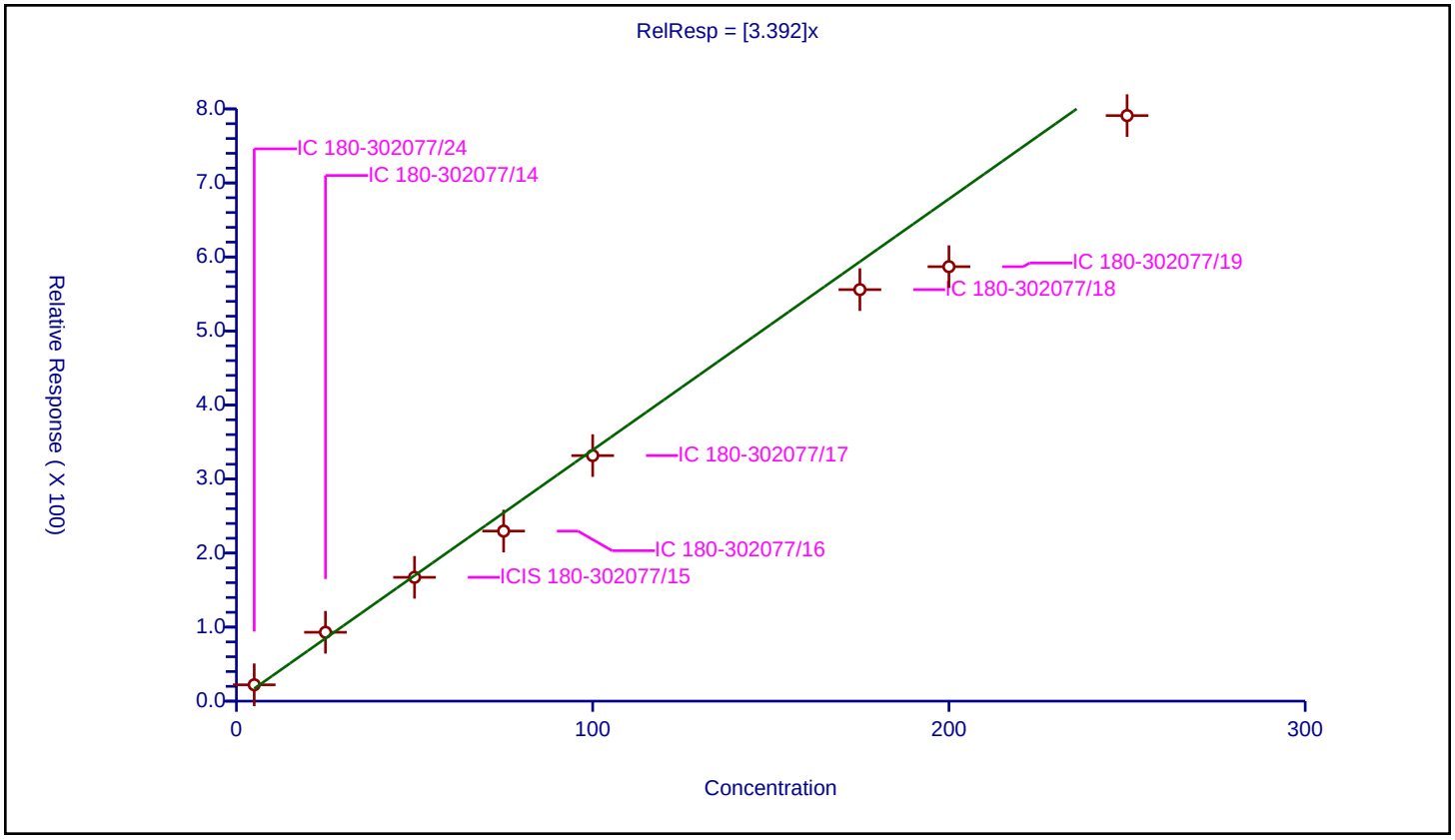
Curve Coefficients

Intercept:	0
Slope:	3.392

Error Coefficients

Standard Error:	1150000
Relative Standard Error:	14.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	22.077668	50.0	81938.0	4.415534	Y
2	IC 180-302077/14	25.0	93.033465	50.0	75511.0	3.721339	Y
3	ICIS 180-302077/15	50.0	167.223081	50.0	92527.0	3.344462	Y
4	IC 180-302077/16	75.0	229.715307	50.0	111875.0	3.062871	Y
5	IC 180-302077/17	100.0	331.697939	50.0	110534.0	3.316979	Y
6	IC 180-302077/18	175.0	555.878822	50.0	117464.0	3.17645	Y
7	IC 180-302077/19	200.0	586.866145	50.0	133114.0	2.934331	Y
8	IC 180-302077/20	250.0	790.943061	50.0	128454.0	3.163772	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

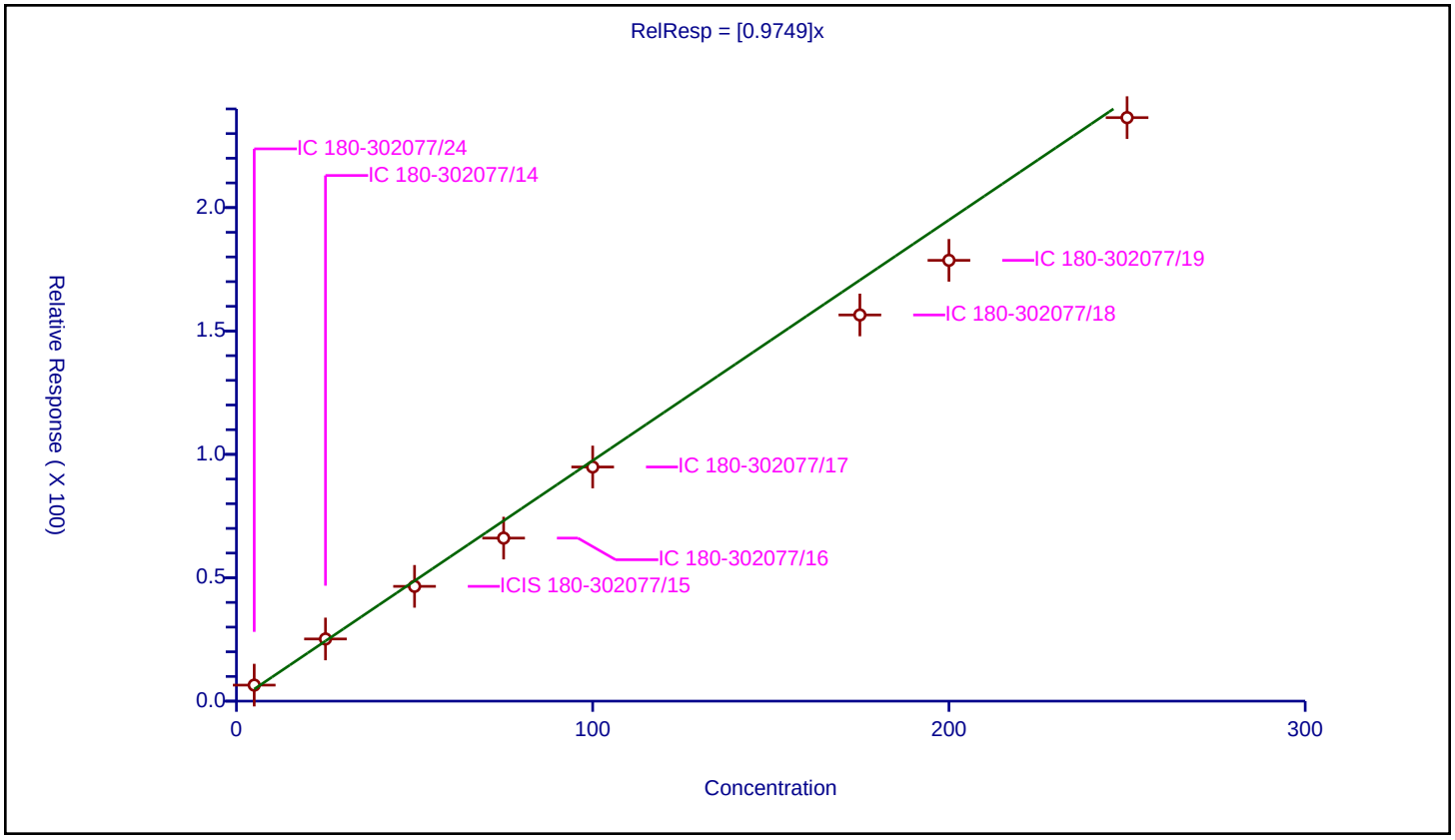
Curve Coefficients

Intercept:	0
Slope:	0.9749

Error Coefficients

Standard Error:	339000
Relative Standard Error:	14.0
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	6.490273	50.0	81938.0	1.298055	Y
2	IC 180-302077/14	25.0	25.19368	50.0	75511.0	1.007747	Y
3	ICIS 180-302077/15	50.0	46.517773	50.0	92527.0	0.930355	Y
4	IC 180-302077/16	75.0	66.073296	50.0	111875.0	0.880977	Y
5	IC 180-302077/17	100.0	94.885284	50.0	110534.0	0.948853	Y
6	IC 180-302077/18	175.0	156.499012	50.0	117464.0	0.89428	Y
7	IC 180-302077/19	200.0	178.631474	50.0	133114.0	0.893157	Y
8	IC 180-302077/20	250.0	236.462469	50.0	128454.0	0.94585	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

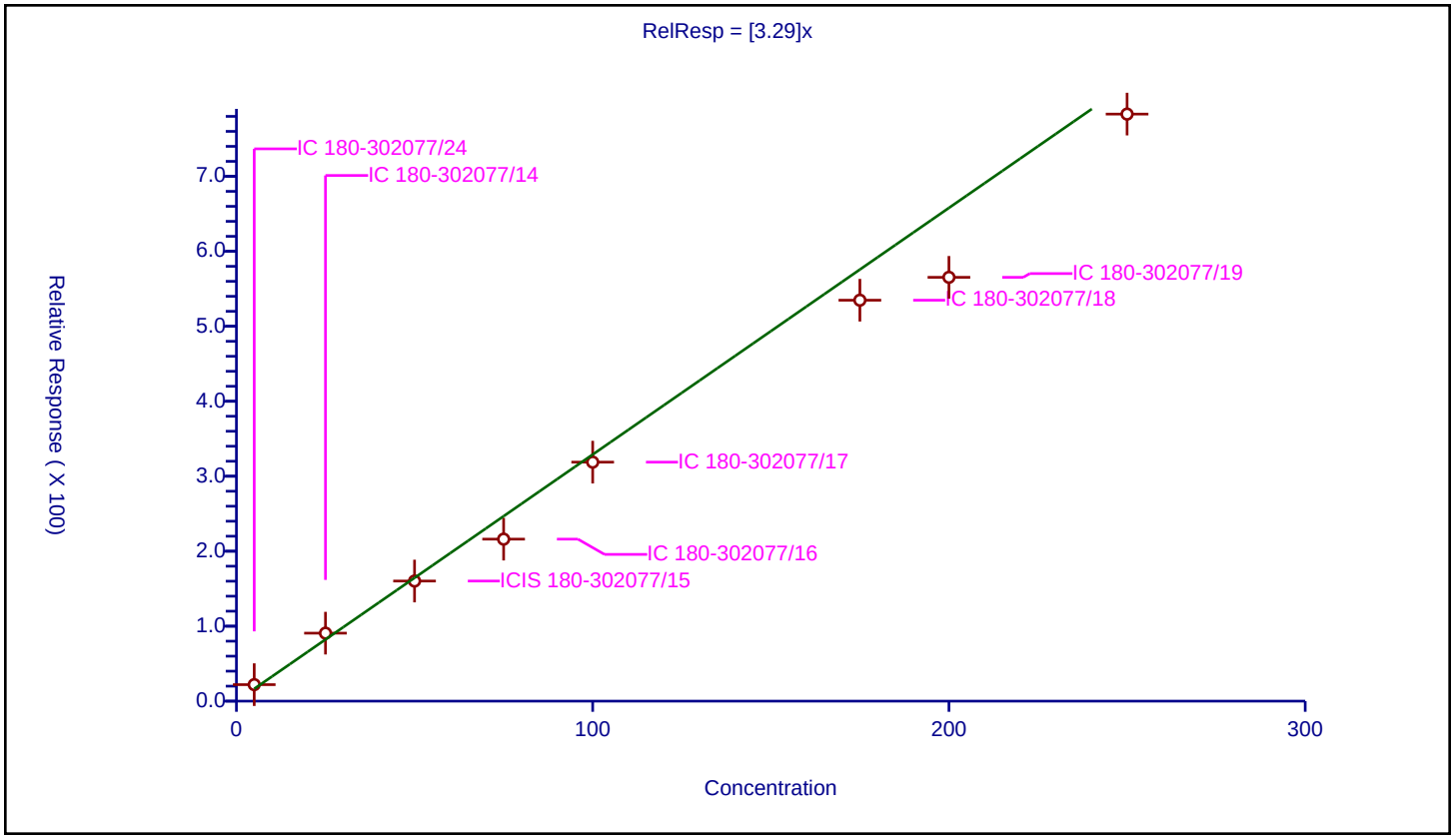
Curve Coefficients

Intercept:	0
Slope:	3.29

Error Coefficients

Standard Error:	1120000
Relative Standard Error:	15.5
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	22.015426	50.0	81938.0	4.403085	Y
2	IC 180-302077/14	25.0	90.676193	50.0	75511.0	3.627048	Y
3	ICIS 180-302077/15	50.0	160.193241	50.0	92527.0	3.203865	Y
4	IC 180-302077/16	75.0	216.088492	50.0	111875.0	2.88118	Y
5	IC 180-302077/17	100.0	318.801455	50.0	110534.0	3.188015	Y
6	IC 180-302077/18	175.0	534.821307	50.0	117464.0	3.056122	Y
7	IC 180-302077/19	200.0	565.342488	50.0	133114.0	2.826712	Y
8	IC 180-302077/20	250.0	783.063198	50.0	128454.0	3.132253	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

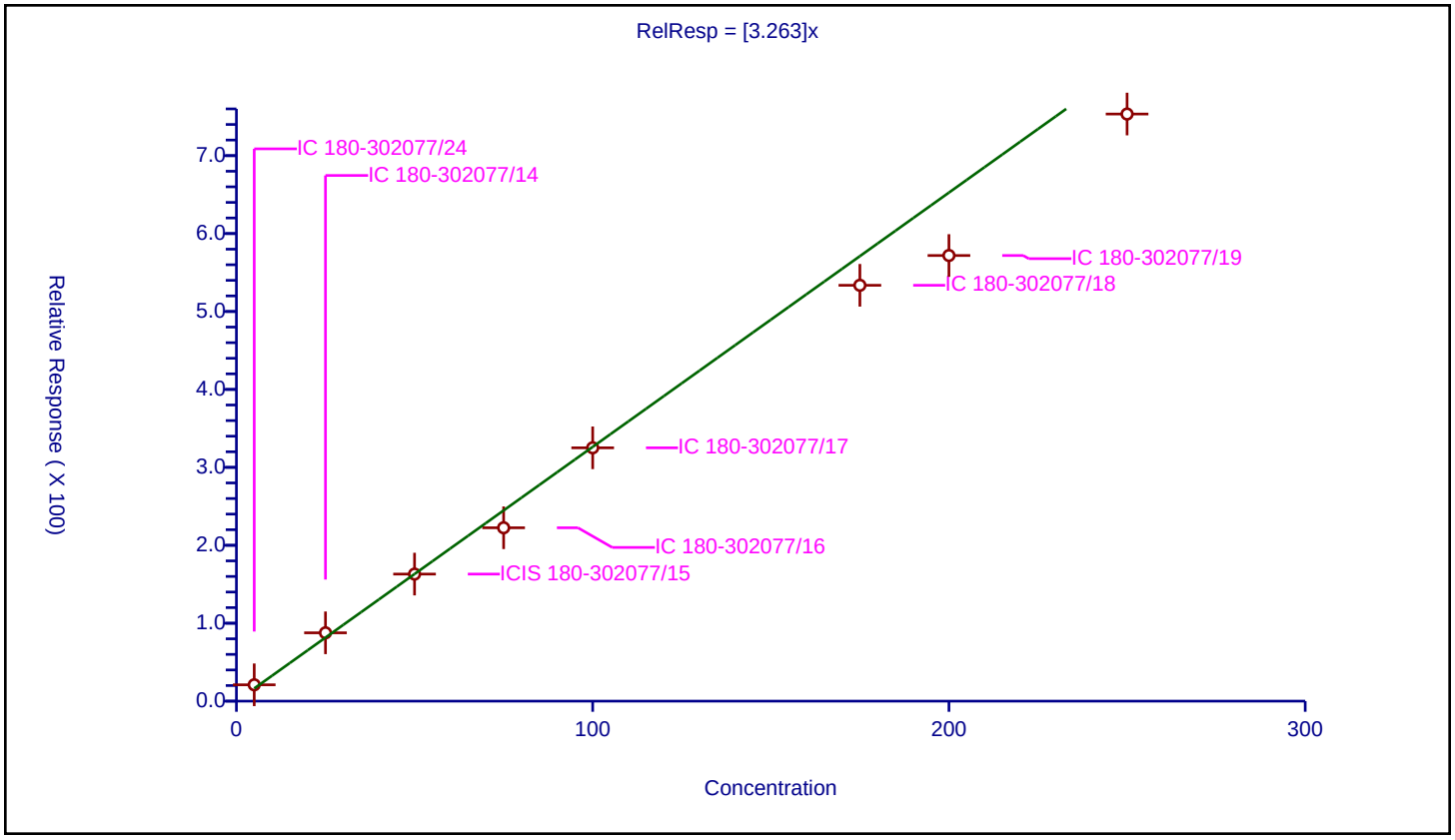
Curve Coefficients

Intercept:	0
Slope:	3.263

Error Coefficients

Standard Error:	1100000
Relative Standard Error:	13.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	20.978057	50.0	81938.0	4.195611	Y
2	IC 180-302077/14	25.0	87.698481	50.0	75511.0	3.507939	Y
3	ICIS 180-302077/15	50.0	163.038356	50.0	92527.0	3.260767	Y
4	IC 180-302077/16	75.0	222.470615	50.0	111875.0	2.966275	Y
5	IC 180-302077/17	100.0	325.078709	50.0	110534.0	3.250787	Y
6	IC 180-302077/18	175.0	533.629878	50.0	117464.0	3.049314	Y
7	IC 180-302077/19	200.0	571.856454	50.0	133114.0	2.859282	Y
8	IC 180-302077/20	250.0	753.3946	50.0	128454.0	3.013578	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

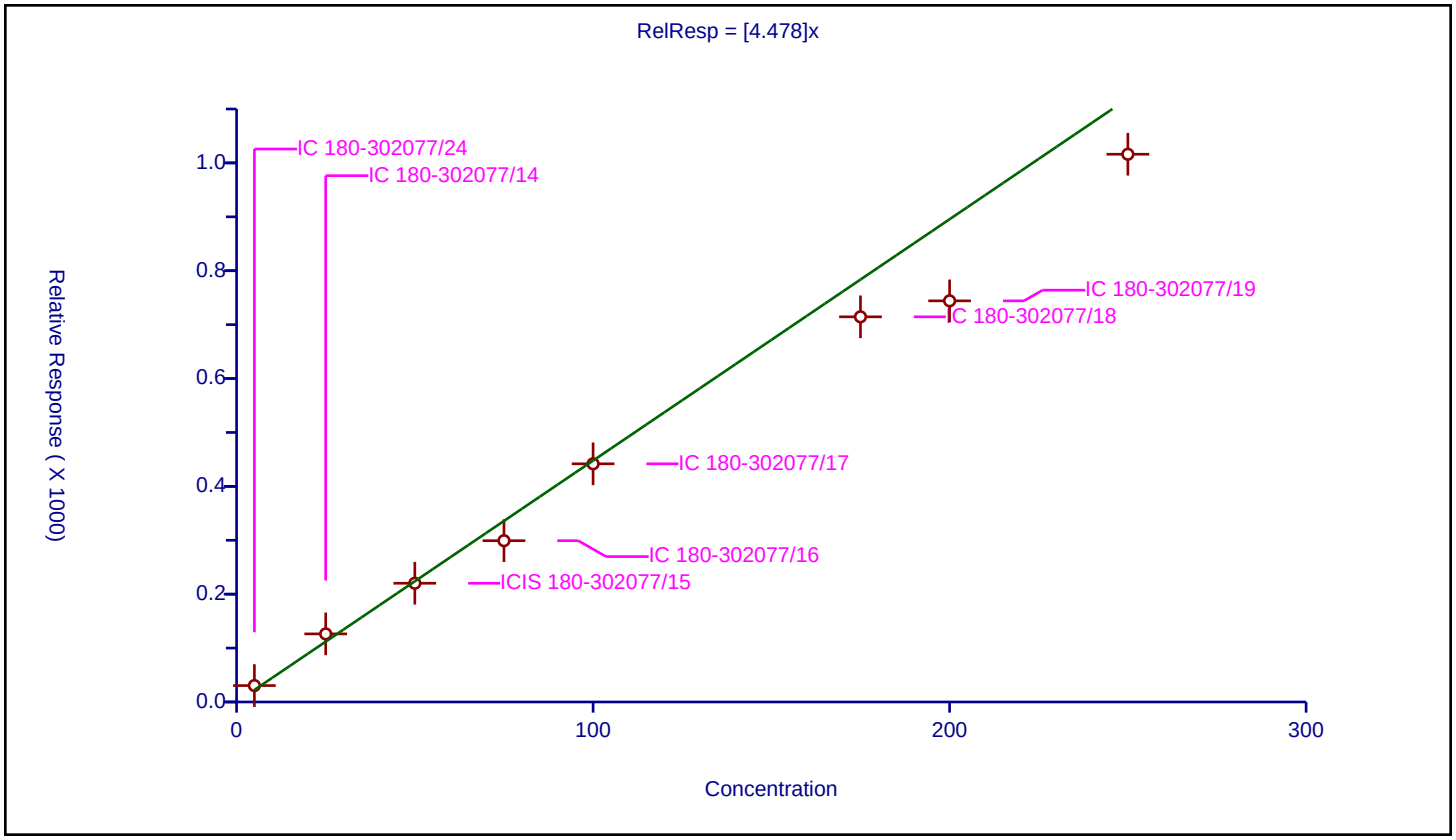
Curve Coefficients

Intercept:	0
Slope:	4.478

Error Coefficients

Standard Error:	1470000
Relative Standard Error:	17.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.959

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	30.444971	50.0	81938.0	6.088994	Y
2	IC 180-302077/14	25.0	126.315371	50.0	75511.0	5.052615	Y
3	ICIS 180-302077/15	50.0	220.233553	50.0	92527.0	4.404671	Y
4	IC 180-302077/16	75.0	299.224581	50.0	111875.0	3.989661	Y
5	IC 180-302077/17	100.0	441.802522	50.0	110534.0	4.418025	Y
6	IC 180-302077/18	175.0	714.473796	50.0	117464.0	4.082707	Y
7	IC 180-302077/19	200.0	744.115194	50.0	133114.0	3.720576	Y
8	IC 180-302077/20	250.0	1016.096813	50.0	128454.0	4.064387	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

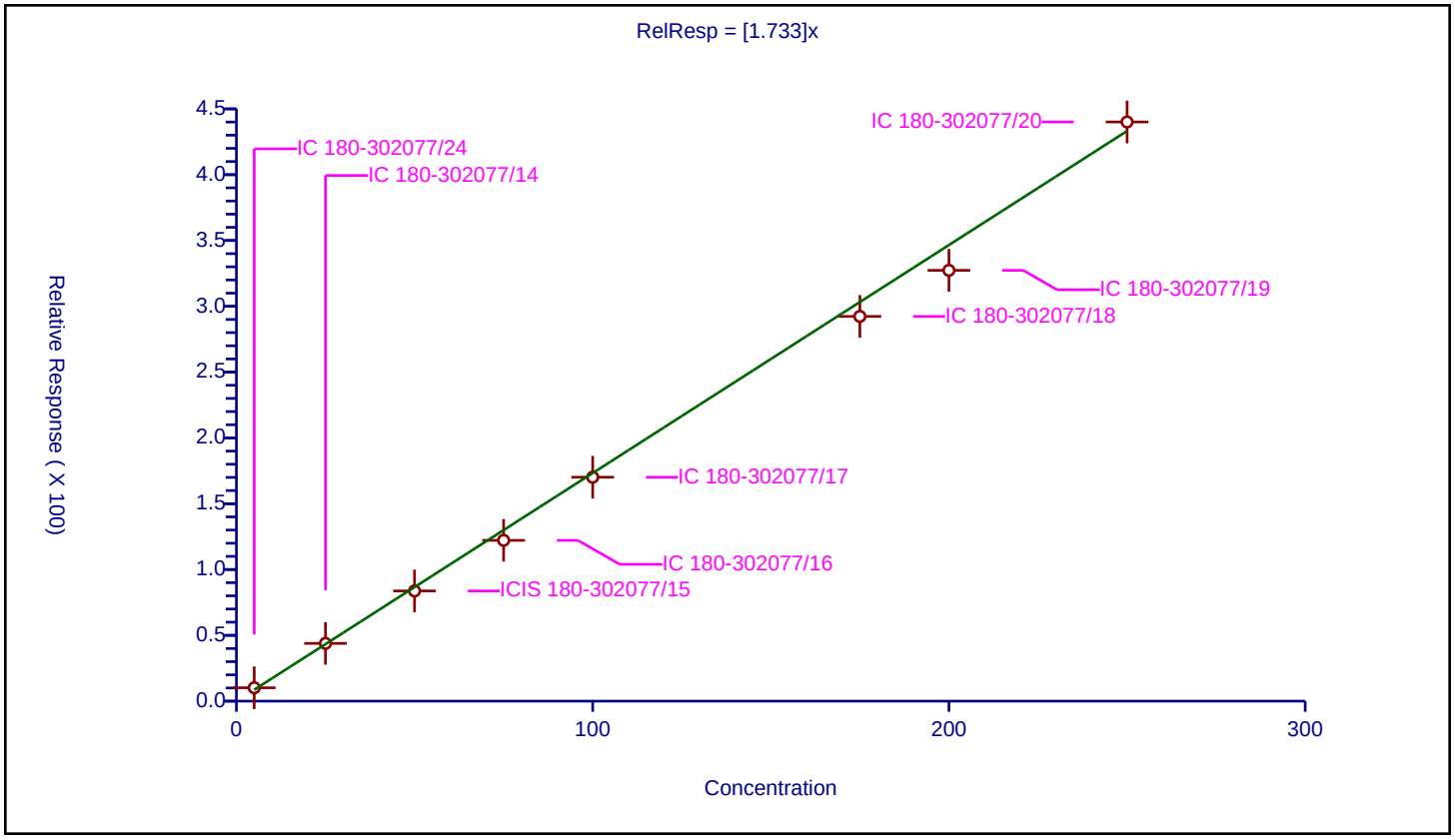
Curve Coefficients

Intercept:	0
Slope:	1.733

Error Coefficients

Standard Error:	627000
Relative Standard Error:	7.6
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	10.172936	50.0	81938.0	2.034587	Y
2	IC 180-302077/14	25.0	43.881686	50.0	75511.0	1.755267	Y
3	ICIS 180-302077/15	50.0	83.735018	50.0	92527.0	1.6747	Y
4	IC 180-302077/16	75.0	122.185028	50.0	111875.0	1.629134	Y
5	IC 180-302077/17	100.0	170.14629	50.0	110534.0	1.701463	Y
6	IC 180-302077/18	175.0	292.304451	50.0	117464.0	1.670311	Y
7	IC 180-302077/19	200.0	327.325826	50.0	133114.0	1.636629	Y
8	IC 180-302077/20	250.0	440.064537	50.0	128454.0	1.760258	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

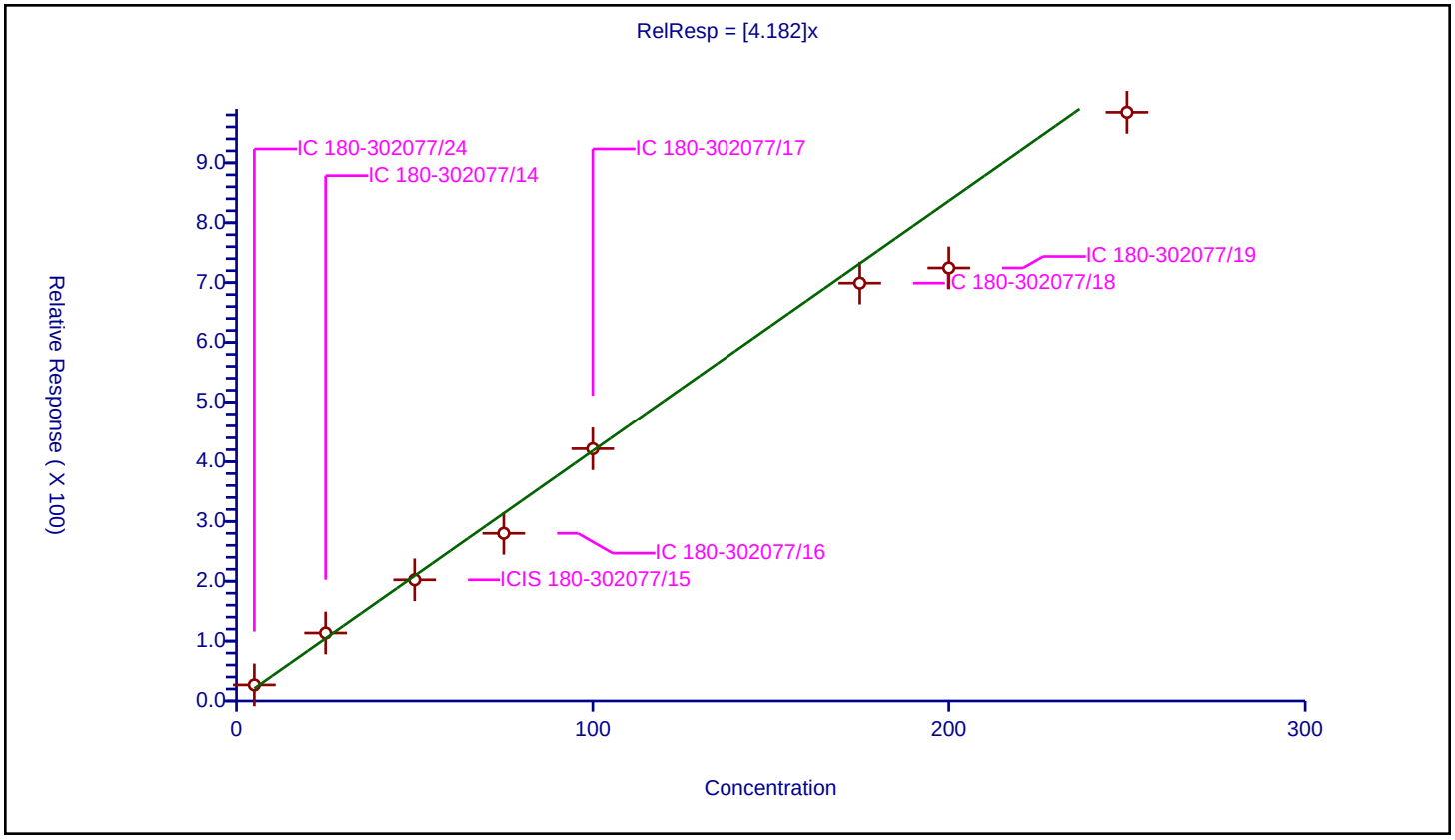
Curve Coefficients

Intercept:	0
Slope:	4.182

Error Coefficients

Standard Error:	1430000
Relative Standard Error:	13.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	26.829432	50.0	81938.0	5.365886	Y
2	IC 180-302077/14	25.0	113.500682	50.0	75511.0	4.540027	Y
3	ICIS 180-302077/15	50.0	202.337696	50.0	92527.0	4.046754	Y
4	IC 180-302077/16	75.0	280.075978	50.0	111875.0	3.734346	Y
5	IC 180-302077/17	100.0	421.729061	50.0	110534.0	4.217291	Y
6	IC 180-302077/18	175.0	699.198052	50.0	117464.0	3.995417	Y
7	IC 180-302077/19	200.0	724.505311	50.0	133114.0	3.622527	Y
8	IC 180-302077/20	250.0	984.354321	50.0	128454.0	3.937417	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

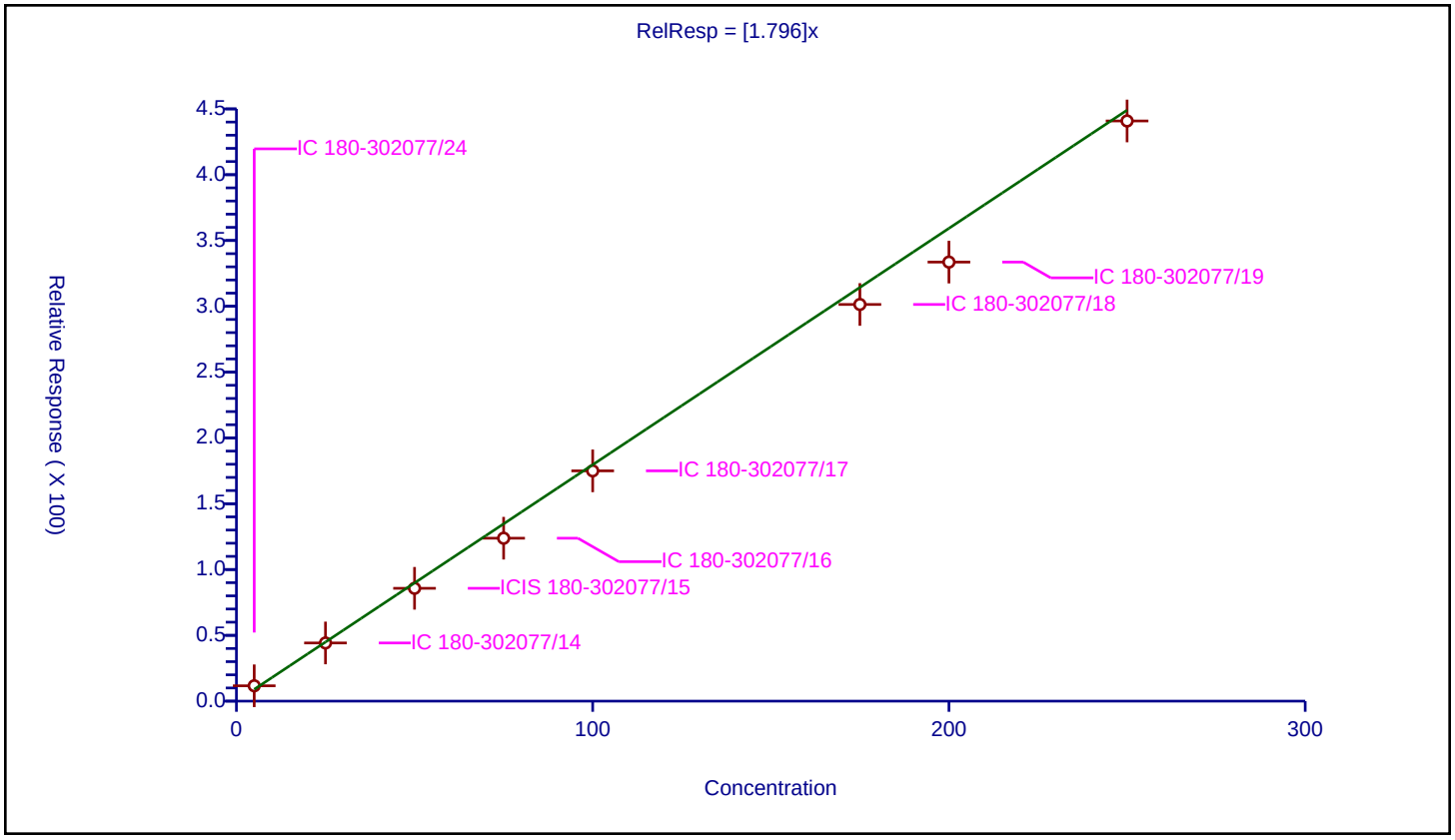
Curve Coefficients

Intercept:	0
Slope:	1.796

Error Coefficients

Standard Error:	635000
Relative Standard Error:	12.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	11.664307	50.0	81938.0	2.332861	Y
2	IC 180-302077/14	25.0	44.206142	50.0	75511.0	1.768246	Y
3	ICIS 180-302077/15	50.0	85.731192	50.0	92527.0	1.714624	Y
4	IC 180-302077/16	75.0	123.79352	50.0	111875.0	1.65058	Y
5	IC 180-302077/17	100.0	174.980549	50.0	110534.0	1.749805	Y
6	IC 180-302077/18	175.0	301.400003	50.0	117464.0	1.722286	Y
7	IC 180-302077/19	200.0	333.606157	50.0	133114.0	1.668031	Y
8	IC 180-302077/20	250.0	440.82551	50.0	128454.0	1.763302	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

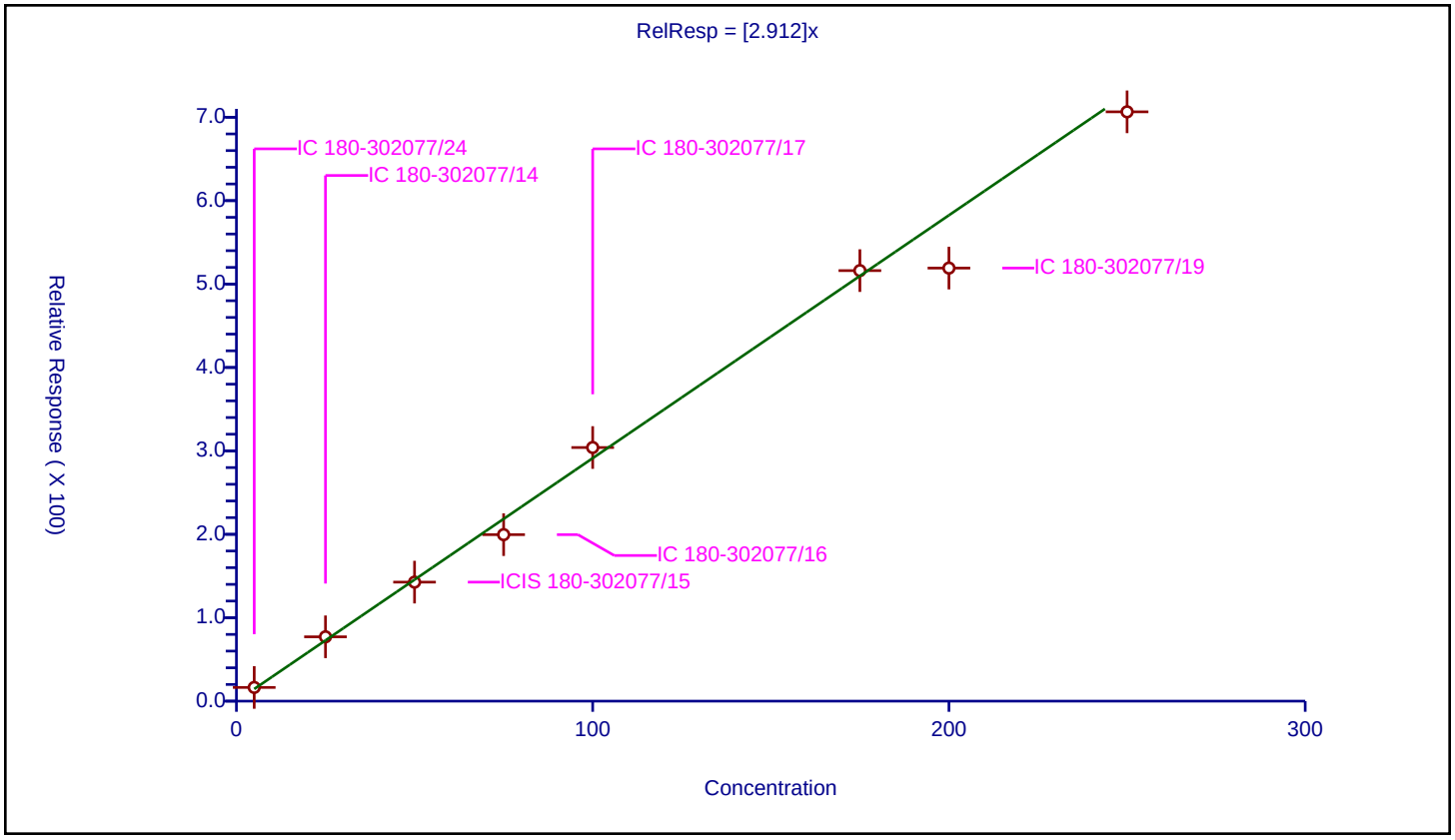
Curve Coefficients

Intercept:	0
Slope:	2.912

Error Coefficients

Standard Error:	1030000
Relative Standard Error:	7.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	16.436818	50.0	81938.0	3.287364	Y
2	IC 180-302077/14	25.0	77.139092	50.0	75511.0	3.085564	Y
3	ICIS 180-302077/15	50.0	142.68808	50.0	92527.0	2.853762	Y
4	IC 180-302077/16	75.0	199.602682	50.0	111875.0	2.661369	Y
5	IC 180-302077/17	100.0	304.044005	50.0	110534.0	3.04044	Y
6	IC 180-302077/18	175.0	516.130048	50.0	117464.0	2.949315	Y
7	IC 180-302077/19	200.0	519.17304	50.0	133114.0	2.595865	Y
8	IC 180-302077/20	250.0	706.486369	50.0	128454.0	2.825945	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

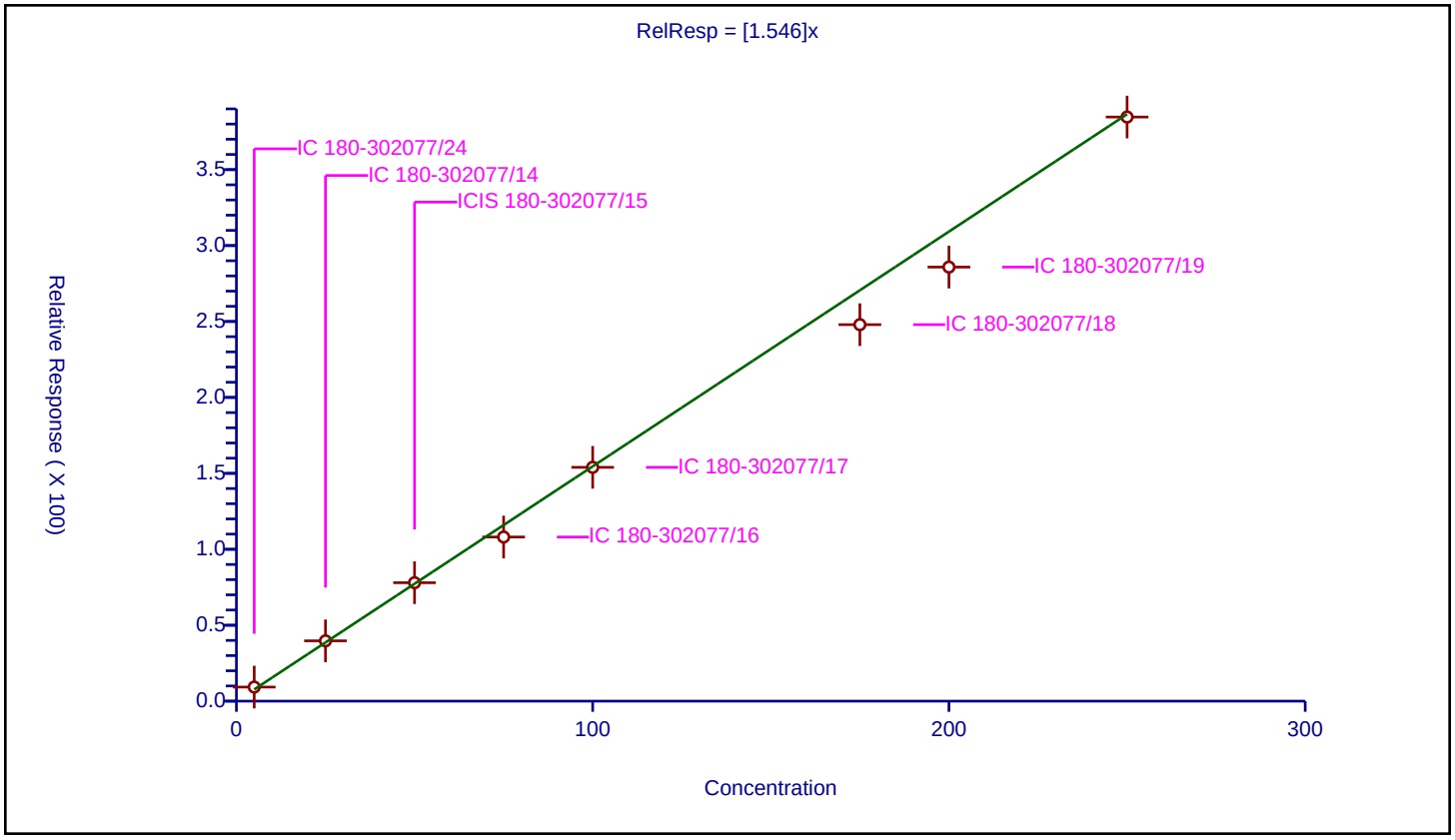
Curve Coefficients

Intercept:	0
Slope:	1.546

Error Coefficients

Standard Error:	547000
Relative Standard Error:	9.1
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	9.271644	50.0	81938.0	1.854329	Y
2	IC 180-302077/14	25.0	39.715406	50.0	75511.0	1.588616	Y
3	ICIS 180-302077/15	50.0	77.985345	50.0	92527.0	1.559707	Y
4	IC 180-302077/16	75.0	108.075978	50.0	111875.0	1.441013	Y
5	IC 180-302077/17	100.0	153.96801	50.0	110534.0	1.53968	Y
6	IC 180-302077/18	175.0	247.919363	50.0	117464.0	1.416682	Y
7	IC 180-302077/19	200.0	285.822303	50.0	133114.0	1.429112	Y
8	IC 180-302077/20	250.0	384.636913	50.0	128454.0	1.538548	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Linear
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

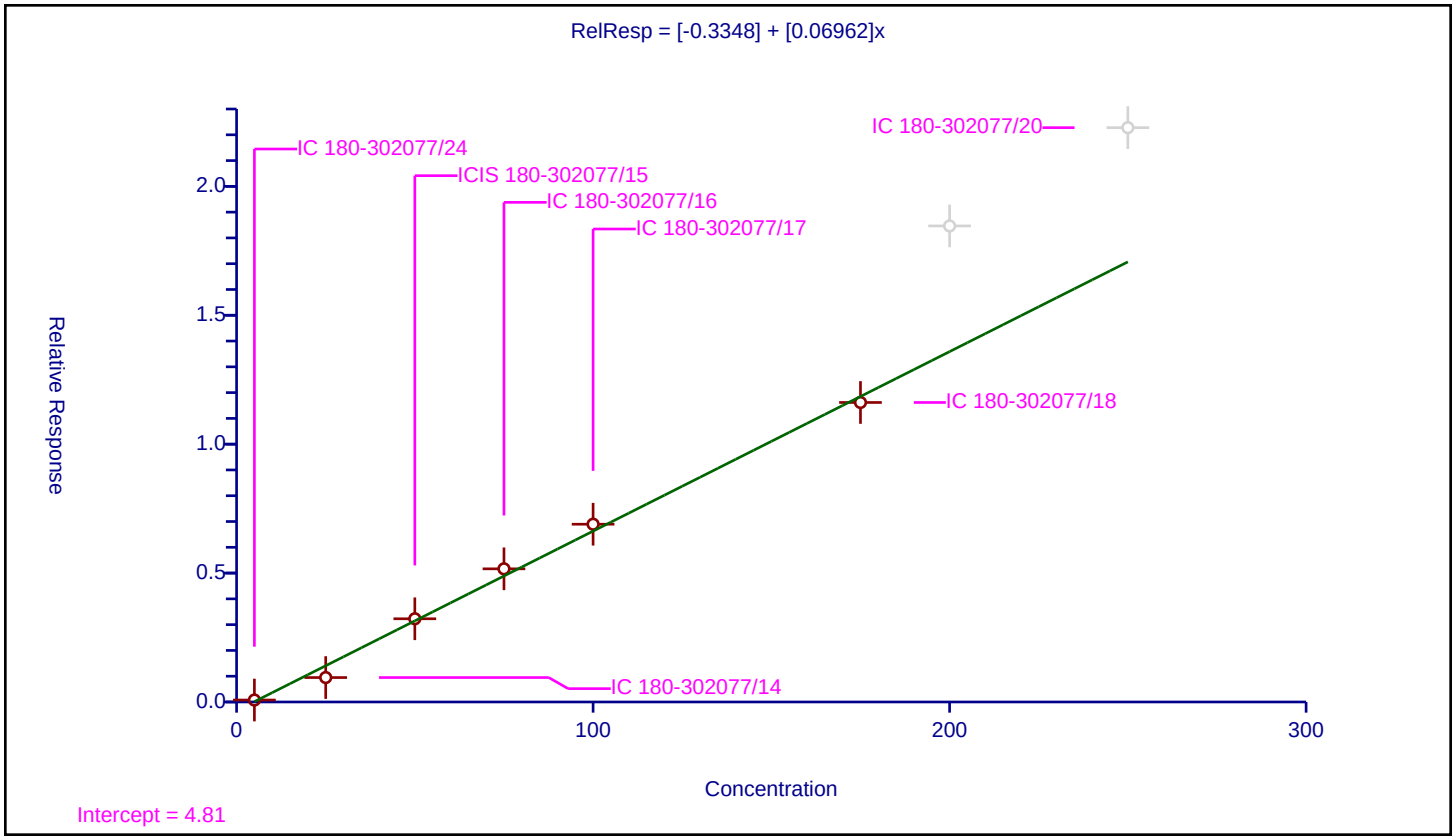
Curve Coefficients

Intercept:	-0.3348
Slope:	0.06962

Error Coefficients

Standard Error:	16900
Relative Standard Error:	16.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	0.076277	50.0	81938.0	0.015255	Y
2	IC 180-302077/14	25.0	0.947544	50.0	75511.0	0.037902	Y
3	ICIS 180-302077/15	50.0	3.227707	50.0	92527.0	0.064554	Y
4	IC 180-302077/16	75.0	5.164693	50.0	111875.0	0.068863	Y
5	IC 180-302077/17	100.0	6.895616	50.0	110534.0	0.068956	Y
6	IC 180-302077/18	175.0	11.617602	50.0	117464.0	0.066386	Y
7	IC 180-302077/19	200.0	18.464249	50.0	133114.0	0.092321	N
8	IC 180-302077/20	250.0	22.277235	50.0	128454.0	0.089109	N



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

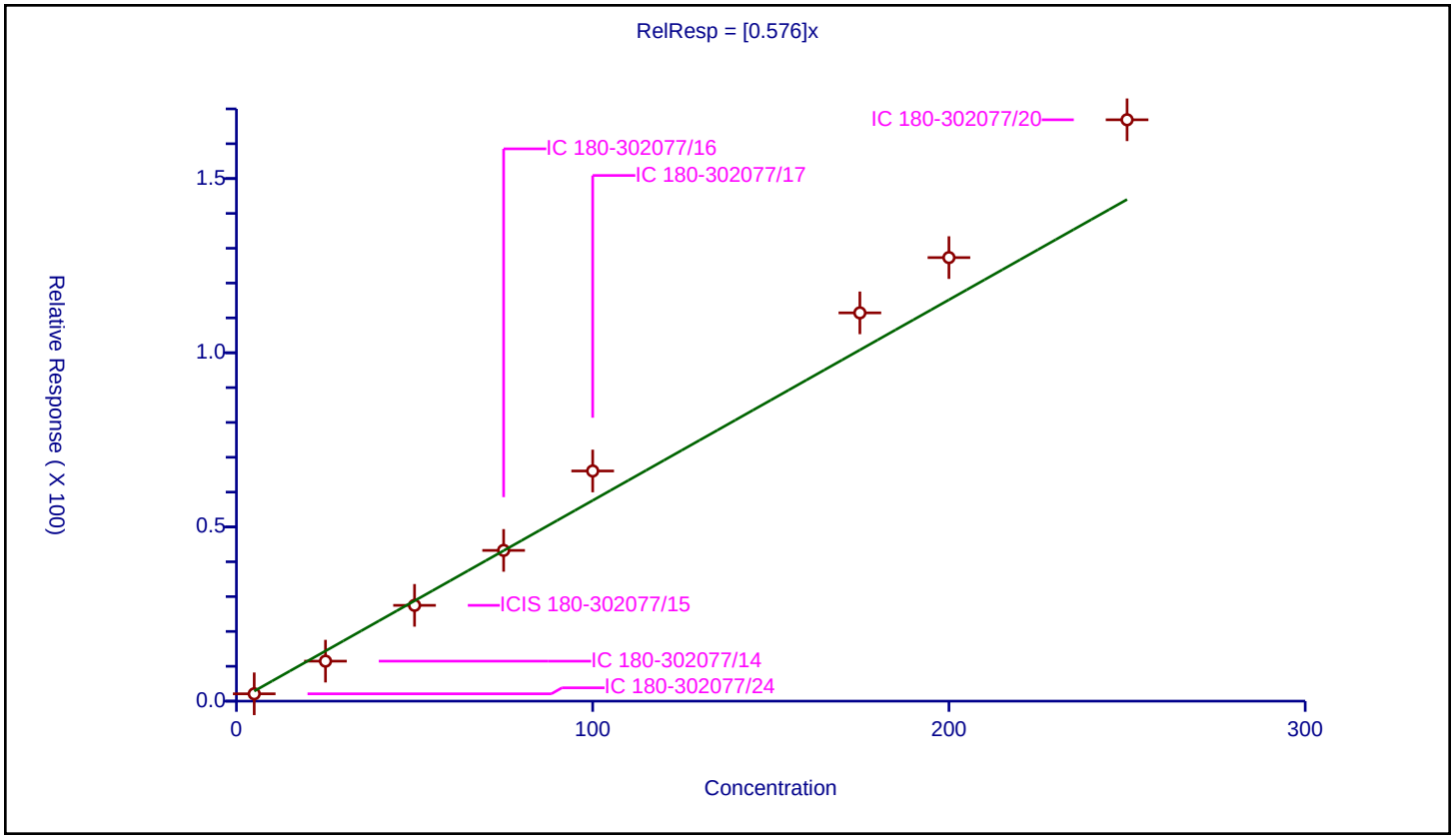
Curve Coefficients

Intercept:	0
Slope:	0.576

Error Coefficients

Standard Error:	239000
Relative Standard Error:	16.3
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.10342	50.0	81938.0	0.420684	Y
2	IC 180-302077/14	25.0	11.480447	50.0	75511.0	0.459218	Y
3	ICIS 180-302077/15	50.0	27.492516	50.0	92527.0	0.54985	Y
4	IC 180-302077/16	75.0	43.266145	50.0	111875.0	0.576882	Y
5	IC 180-302077/17	100.0	66.065645	50.0	110534.0	0.660656	Y
6	IC 180-302077/18	175.0	111.452019	50.0	117464.0	0.636869	Y
7	IC 180-302077/19	200.0	127.31606	50.0	133114.0	0.63658	Y
8	IC 180-302077/20	250.0	166.871798	50.0	128454.0	0.667487	Y



Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

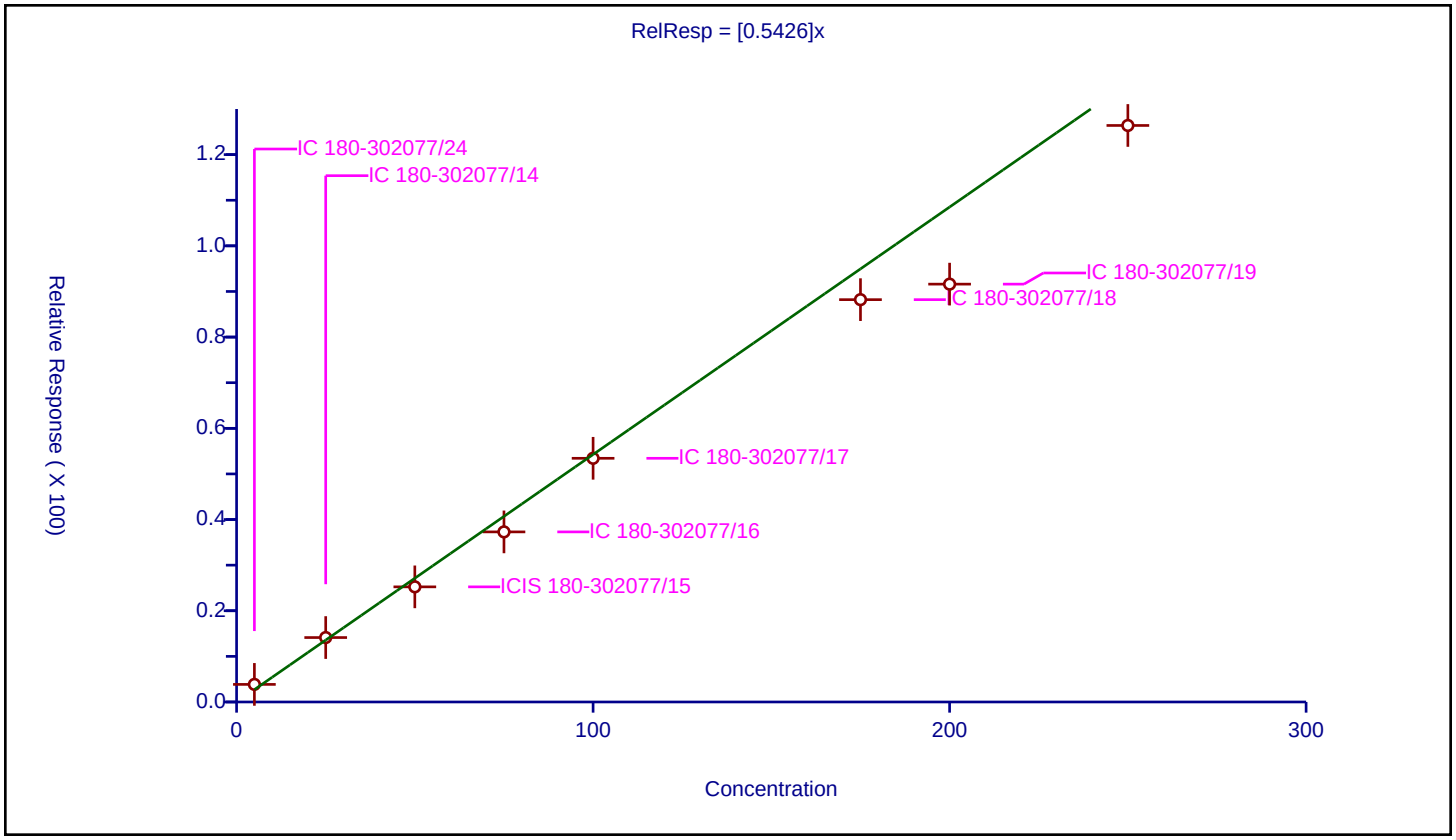
Curve Coefficients

Intercept:	0
Slope:	0.5426

Error Coefficients

Standard Error:	182000
Relative Standard Error:	17.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.953

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	3.856574	50.0	81938.0	0.771315	Y
2	IC 180-302077/14	25.0	14.129729	50.0	75511.0	0.565189	Y
3	ICIS 180-302077/15	50.0	25.242362	50.0	92527.0	0.504847	Y
4	IC 180-302077/16	75.0	37.290726	50.0	111875.0	0.49721	Y
5	IC 180-302077/17	100.0	53.426547	50.0	110534.0	0.534265	Y
6	IC 180-302077/18	175.0	88.204471	50.0	117464.0	0.504026	Y
7	IC 180-302077/19	200.0	91.609823	50.0	133114.0	0.458049	Y
8	IC 180-302077/20	250.0	126.391549	50.0	128454.0	0.505566	Y



Calibration / Naphthalene

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

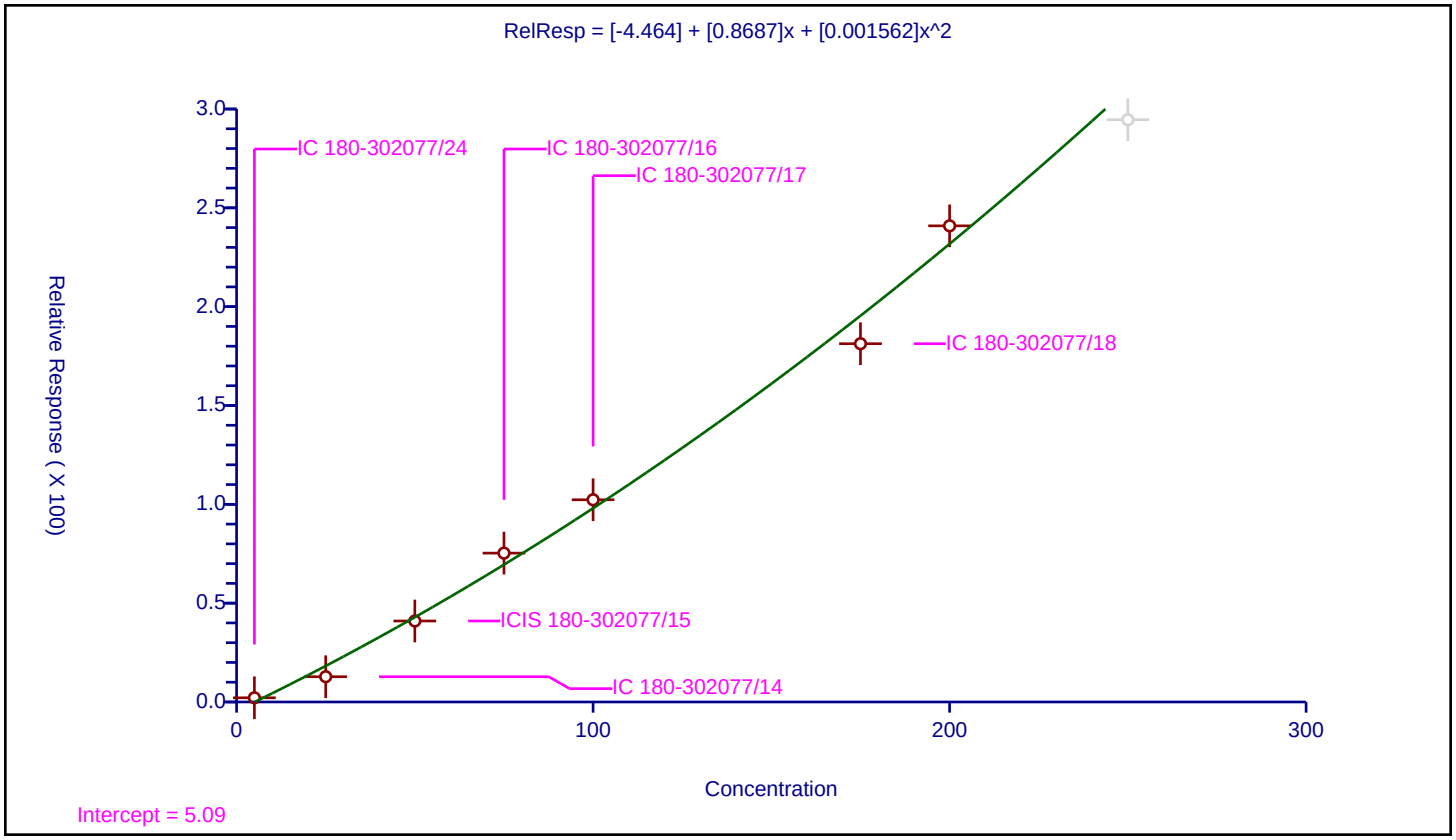
Curve Coefficients

Intercept:	-4.464
Slope:	0.8687
Second Order:	0.001562

Error Coefficients

Standard Error:	412000
Relative Standard Error:	28.0
Correlation Coefficient:	0.975
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.124167	50.0	81938.0	0.424833	Y
2	IC 180-302077/14	25.0	12.786879	50.0	75511.0	0.511475	Y
3	ICIS 180-302077/15	50.0	40.980471	50.0	92527.0	0.819609	Y
4	IC 180-302077/16	75.0	75.315754	50.0	111875.0	1.00421	Y
5	IC 180-302077/17	100.0	102.316029	50.0	110534.0	1.02316	Y
6	IC 180-302077/18	175.0	181.265324	50.0	117464.0	1.035802	Y
7	IC 180-302077/19	200.0	240.888261	50.0	133114.0	1.204441	Y
8	IC 180-302077/20	250.0	294.591838	50.0	128454.0	1.178367	N



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

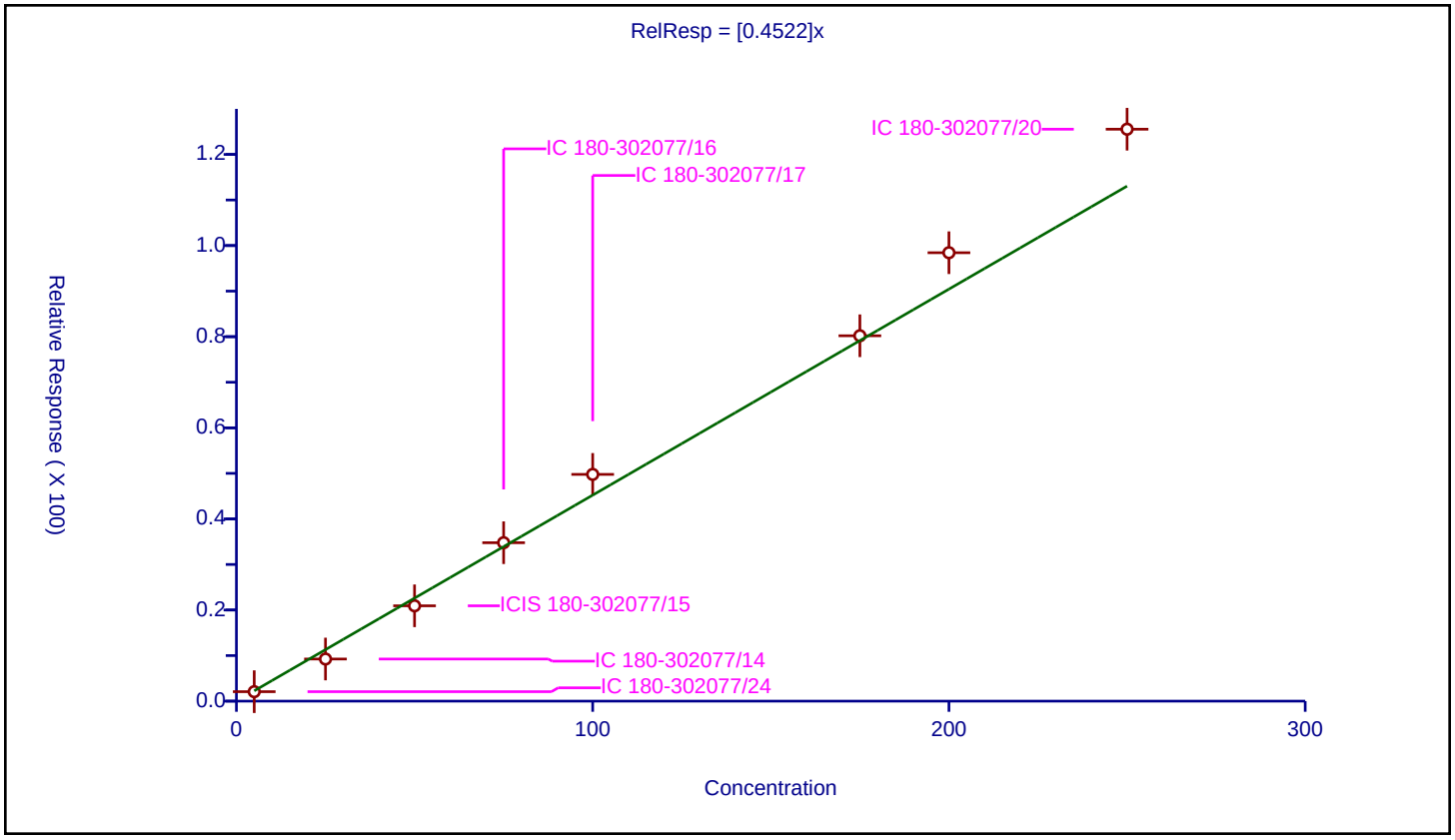
Curve Coefficients

Intercept:	0
Slope:	0.4522

Error Coefficients

Standard Error:	180000
Relative Standard Error:	10.4
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 180-302077/24	5.0	2.07657	50.0	81938.0	0.415314	Y
2	IC 180-302077/14	25.0	9.244349	50.0	75511.0	0.369774	Y
3	ICIS 180-302077/15	50.0	20.924703	50.0	92527.0	0.418494	Y
4	IC 180-302077/16	75.0	34.777654	50.0	111875.0	0.463702	Y
5	IC 180-302077/17	100.0	49.770206	50.0	110534.0	0.497702	Y
6	IC 180-302077/18	175.0	80.200317	50.0	117464.0	0.458288	Y
7	IC 180-302077/19	200.0	98.432171	50.0	133114.0	0.492161	Y
8	IC 180-302077/20	250.0	125.541439	50.0	128454.0	0.502166	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Lab Sample ID: CCVIS 180-302285/2 Calibration Date: 12/23/2019 08:52

Instrument ID: CHHP10 Calib Start Date: 12/20/2019 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/20/2019 17:27

Lab File ID: 10122302.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	0.4452	0.4559	0.1000	10.2	10.0	2.4	20.0
Chloromethane	Ave	0.3287	0.3026	0.1000	9.21	10.0	-7.9	20.0
1,3-Butadiene	Ave	0.2718	0.2625	0.0100	9.66	10.0	-3.4	20.0
Vinyl chloride	Ave	0.3257	0.3240	0.1000	9.95	10.0	-0.5	20.0
Bromomethane	Ave	0.1858	0.1586	0.0500	8.54	10.0	-14.6	20.0
Chloroethane	Ave	0.1489	0.1125	0.0500	7.56	10.0	-24.4*	20.0
Trichlorofluoromethane	Ave	0.5811	0.5477	0.1000	9.43	10.0	-5.7	20.0
Dichlorofluoromethane	Ave	0.4663	0.4423	0.0100	9.48	10.0	-5.2	20.0
Ethyl ether	Ave	0.1570	0.1606	0.0100	10.2	10.0	2.3	20.0
1,1-Dichloroethene	Ave	0.2747	0.2951	0.1000	10.7	10.0	7.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3102	0.3263	0.1000	10.5	10.0	5.2	20.0
Acetone	Ave	0.0558	0.0531	0.0500	19.0	20.0	-4.9	20.0
Iodomethane	Ave	0.5067	0.5534	0.0100	10.9	10.0	9.2	20.0
Carbon disulfide	Ave	0.7981	0.8467	0.1000	10.6	10.0	6.1	20.0
Allyl chloride	Ave	0.1449	0.1617	0.0100	11.2	10.0	11.6	20.0
Methyl acetate	Ave	0.0721	0.0819*	0.1000	22.7	20.0	13.5	20.0
Methylene Chloride	Lin2		0.2724	0.1000	10.4	10.0	3.5	20.0
tert-Butyl alcohol	Ave	1.180	1.205	0.0100	102	100	2.2	20.0
Acrylonitrile	Ave	0.0375	0.0431	0.0100	115	100	14.9	20.0
trans-1,2-Dichloroethene	Ave	0.2840	0.2957	0.1000	10.4	10.0	4.1	20.0
Methyl tert-butyl ether	Ave	0.4903	0.5265	0.1000	10.7	10.0	7.4	20.0
Hexane	Ave	0.4456	0.4443	0.0100	9.97	10.0	-0.3	20.0
1,1-Dichloroethane	Ave	0.4656	0.4767	0.2000	10.2	10.0	2.4	20.0
2,2-Dichloropropane	Ave	0.0682	0.0727	0.0100	10.7	10.0	6.5	20.0
cis-1,2-Dichloroethene	Ave	0.2881	0.3078	0.1000	10.7	10.0	6.8	20.0
2-Butanone (MEK)	Ave	0.0550	0.0544	0.0500	19.8	20.0	-1.2	20.0
Bromochloromethane	Ave	0.1285	0.1337	0.0100	10.4	10.0	4.0	20.0
Tetrahydrofuran	Qua		0.0311	0.0100	18.8	20.0	-6.0	20.0
Chloroform	Lin2		0.5048	0.2000	10.0	10.0	0.1	20.0
1,1,1-Trichloroethane	Ave	0.4921	0.4958	0.1000	10.1	10.0	0.7	20.0
Cyclohexane	Ave	0.5586	0.5331	0.1000	9.54	10.0	-4.6	20.0
Carbon tetrachloride	Ave	0.4958	0.4823	0.1000	9.73	10.0	-2.7	20.0
1,1-Dichloropropene	Ave	0.4000	0.3796	0.0100	9.49	10.0	-5.1	20.0
Benzene	Ave	1.021	0.9651	0.5000	9.45	10.0	-5.5	20.0
Isobutyl alcohol	Qua		0.0040*	0.0100	255	250	1.9	20.0
1,2-Dichloroethane	Ave	0.2786	0.2747	0.1000	9.86	10.0	-1.4	20.0
n-Heptane	Ave	0.4114	0.3767	0.0100	9.16	10.0	-8.4	20.0
Trichloroethene	Ave	0.3604	0.3491	0.2000	9.69	10.0	-3.1	20.0
Methylcyclohexane	Ave	0.5809	0.5937	0.1000	10.2	10.0	2.2	20.0
1,2-Dichloropropane	Ave	0.2273	0.2235	0.1000	9.83	10.0	-1.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Lab Sample ID: CCVIS 180-302285/2 Calibration Date: 12/23/2019 08:52

Instrument ID: CHHP10 Calib Start Date: 12/20/2019 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/20/2019 17:27

Lab File ID: 10122302.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	0.0970	0.1036	0.0100	10.7	10.0	6.8	20.0
1,4-Dioxane	Lin		0.0011*	0.0100	223	200	11.7	20.0
Bromodichloromethane	Ave	0.3116	0.3096	0.2000	9.94	10.0	-0.6	20.0
cis-1,3-Dichloropropene	Ave	0.2857	0.3080	0.2000	10.8	10.0	7.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4222	0.3579	0.1000	17.0	20.0	-15.2	20.0
Toluene	Ave	4.726	4.233	0.4000	8.96	10.0	-10.4	20.0
trans-1,3-Dichloropropene	Ave	0.8722	0.8161	0.1000	9.36	10.0	-6.4	20.0
Ethyl methacrylate	Lin1		0.6492	0.0100	9.65	10.0	-3.5	20.0
1,1,2-Trichloroethane	Ave	0.6419	0.6237	0.1000	9.72	10.0	-2.8	20.0
Tetrachloroethene	Ave	1.226	1.143	0.2000	9.32	10.0	-6.8	20.0
1,3-Dichloropropane	Ave	0.9649	0.9483	0.0100	9.83	10.0	-1.7	20.0
2-Hexanone	Lin		0.2963	0.1000	17.9	20.0	-10.6	20.0
Dibromochloromethane	Ave	0.9211	0.8713	0.1000	9.46	10.0	-5.4	20.0
1,2-Dibromoethane (EDB)	Ave	0.5433	0.5640	0.1000	10.4	10.0	3.8	20.0
Chlorobenzene	Ave	3.275	3.024	0.5000	9.23	10.0	-7.7	20.0
1,1,1,2-Tetrachloroethane	Ave	1.272	1.186	0.0100	9.32	10.0	-6.8	20.0
Ethylbenzene	Ave	1.838	1.738	0.1000	9.46	10.0	-5.4	20.0
m-Xylene & p-Xylene	Ave	2.334	2.118	0.1000	9.07	10.0	-9.3	20.0
o-Xylene	Ave	2.253	2.077	0.3000	9.22	10.0	-7.8	20.0
Styrene	Ave	3.338	3.173	0.3000	9.51	10.0	-4.9	20.0
Bromoform	Ave	0.4637	0.4516	0.1000	9.74	10.0	-2.6	20.0
Isopropylbenzene	Ave	6.379	5.976	0.1000	9.37	10.0	-6.3	20.0
Bromobenzene	Ave	0.8184	0.8276	0.0100	10.1	10.0	1.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6801	0.6933	0.3000	10.2	10.0	1.9	20.0
1,2,3-Trichloropropane	Ave	0.1476	0.1516	0.0100	10.3	10.0	2.7	20.0
trans-1,4-Dichloro-2-butene	Lin		0.1134	0.0100	12.6	10.0	25.9*	20.0
N-Propylbenzene	Ave	1.185	1.122	0.0100	9.47	10.0	-5.3	20.0
2-Chlorotoluene	Ave	0.9711	0.9278	0.0100	9.55	10.0	-4.5	20.0
1,3,5-Trimethylbenzene	Ave	3.392	3.224	0.0100	9.50	10.0	-5.0	20.0
4-Chlorotoluene	Ave	0.9749	0.9058	0.0100	9.29	10.0	-7.1	20.0
tert-Butylbenzene	Ave	3.290	3.122	0.0100	9.49	10.0	-5.1	20.0
1,2,4-Trimethylbenzene	Ave	3.263	3.078	0.0100	9.43	10.0	-5.7	20.0
sec-Butylbenzene	Ave	4.478	4.344	0.0100	9.70	10.0	-3.0	20.0
1,3-Dichlorobenzene	Ave	1.733	1.639	0.6000	9.46	10.0	-5.4	20.0
4-Isopropyltoluene	Ave	4.182	4.002	0.0100	9.57	10.0	-4.3	20.0
1,4-Dichlorobenzene	Ave	1.796	1.750	0.5000	9.74	10.0	-2.6	20.0
n-Butylbenzene	Ave	2.912	2.916	0.0100	10.0	10.0	0.1	20.0
1,2-Dichlorobenzene	Ave	1.546	1.540	0.4000	9.96	10.0	-0.4	20.0
1,2-Dibromo-3-Chloropropane	Lin		0.0703	0.0500	11.1	10.0	10.6	20.0
1,2,4-Trichlorobenzene	Ave	0.5760	0.6336	0.2000	11.0	10.0	10.0	20.0
Hexachlorobutadiene	Ave	0.5426	0.5619	0.0100	10.4	10.0	3.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Lab Sample ID: CCVIS 180-302285/2 Calibration Date: 12/23/2019 08:52

Instrument ID: CHHP10 Calib Start Date: 12/20/2019 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/20/2019 17:27

Lab File ID: 10122302.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	Qua		0.9336	0.0100	10.7	10.0	7.4	20.0
1,2,3-Trichlorobenzene	Ave	0.4522	0.4989	0.0100	11.0	10.0	10.3	20.0
Dibromofluoromethane (Surr)	Ave	0.2502	0.2543		10.2	10.0	1.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2171	0.2293		10.6	10.0	5.6	20.0
Toluene-d8 (Surr)	Ave	4.026	3.780		9.39	10.0	-6.1	20.0
4-Bromofluorobenzene (Surr)	Ave	1.322	1.249		9.45	10.0	-5.5	20.0

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122302.d
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 23-Dec-2019 08:52:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030123-002
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub19

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 24-Dec-2019 07:17:53 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0309

First Level Reviewer: journetp Date: 23-Dec-2019 09:30:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.993	3.993	0.000	0	67111	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	260047	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	82	71331	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	93	111871	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	93	66129	50.0	50.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.645	6.645	0.000	0	59623	50.0	52.8	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	93	269636	50.0	47.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.322	0.000	97	89085	50.0	47.2	
10 Dichlorodifluoromethane	85	1.510	1.510	0.000	99	118545	50.0	51.2	
11 Chloromethane	50	1.687	1.687	0.000	99	78687	50.0	46.0	a
13 Butadiene	39	1.793	1.793	0.000	88	68261	50.0	48.3	
12 Vinyl chloride	62	1.805	1.805	0.000	98	84247	50.0	49.7	
14 Bromomethane	94	2.063	2.063	0.000	91	41244	50.0	42.7	
15 Chloroethane	64	2.169	2.169	0.000	99	29261	50.0	37.8	
16 Trichlorofluoromethane	101	2.428	2.428	0.000	94	142430	50.0	47.1	
17 Dichlorofluoromethane	67	2.440	2.440	0.000	96	115006	50.0	47.4	
18 Ethyl ether	59	2.799	2.799	0.000	92	41753	50.0	51.1	
20 1,1-Dichloroethene	96	3.046	3.046	0.000	98	76739	50.0	53.7	
21 1,1,2-Trichloro-1,2,2-trif	101	3.110	3.110	0.000	92	84840	50.0	52.6	
22 Acetone	43	3.169	3.169	0.000	100	27626	100.0	95.1	
23 Iodomethane	142	3.222	3.222	0.000	98	143910	50.0	54.6	
24 Carbon disulfide	76	3.316	3.316	0.000	99	220183	50.0	53.0	
26 3-Chloro-1-propene	76	3.581	3.581	0.000	92	42057	50.0	55.8	
28 Methyl acetate	43	3.616	3.616	0.000	97	42570	100.0	113.5	
29 Methylene Chloride	84	3.787	3.787	0.000	96	70826	50.0	51.8	
32 2-Methyl-2-propanol	59	4.128	4.128	0.000	98	40450	500.0	510.8	
31 Acrylonitrile	53	4.199	4.199	0.000	99	111985	500.0	574.5	
30 trans-1,2-Dichloroethene	96	4.204	4.204	0.000	99	76898	50.0	52.1	
33 Methyl tert-butyl ether	73	4.251	4.251	0.000	98	136919	50.0	53.7	
34 Hexane	57	4.646	4.646	0.000	90	115543	50.0	49.9	
36 1,1-Dichloroethane	63	4.875	4.875	0.000	96	123976	50.0	51.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 2,2-Dichloropropane	97	5.640	5.634	0.006	88	18903	50.0	53.3	
41 cis-1,2-Dichloroethene	96	5.645	5.645	0.000	81	80045	50.0	53.4	
43 2-Butanone (MEK)	43	5.681	5.681	0.000	99	28268	100.0	98.8	
46 Chlorobromomethane	128	5.945	5.945	0.000	87	34764	50.0	52.0	
48 Tetrahydrofuran	42	5.975	5.975	0.000	82	16182	100.0	94.0	
49 Chloroform	83	6.087	6.087	0.000	93	131274	50.0	50.1	
50 1,1,1-Trichloroethane	97	6.240	6.240	0.000	97	128918	50.0	50.4	
52 Cyclohexane	56	6.304	6.304	0.000	89	138625	50.0	47.7	
53 Carbon tetrachloride	117	6.416	6.416	0.000	97	125432	50.0	48.6	
54 1,1-Dichloropropene	75	6.440	6.440	0.000	95	98720	50.0	47.5	
55 Benzene	78	6.651	6.651	0.000	97	250964	50.0	47.3	
51 Isobutyl alcohol	41	6.692	6.692	0.000	94	26160	1250.0	1273.6	
56 1,2-Dichloroethane	62	6.734	6.734	0.000	98	71422	50.0	49.3	
59 n-Heptane	43	7.028	7.028	0.000	90	97959	50.0	45.8	
60 Trichloroethene	130	7.398	7.398	0.000	94	90776	50.0	48.4	
63 Methylcyclohexane	83	7.634	7.634	0.000	85	154379	50.0	51.1	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	91	58114	50.0	49.2	
65 Dibromomethane	93	7.769	7.769	0.000	89	26943	50.0	53.4	
67 1,4-Dioxane	88	7.775	7.775	0.000	35	5758	1000.0	1117.3	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	80510	50.0	49.7	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	95	80105	50.0	53.9	
72 4-Methyl-2-pentanone (MIBK	43	8.575	8.575	0.000	94	51052	100.0	84.8	
73 Toluene	91	8.739	8.739	0.000	99	301918	50.0	44.8	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	92	58211	50.0	46.8	
75 Ethyl methacrylate	69	9.075	9.075	0.000	88	46306	50.0	48.3	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	88	44488	50.0	48.6	
77 Tetrachloroethene	164	9.257	9.257	0.000	97	81542	50.0	46.6	
78 1,3-Dichloropropane	76	9.345	9.345	0.000	92	67645	50.0	49.1	
79 2-Hexanone	43	9.428	9.428	0.000	94	42271	100.0	89.4	
81 Chlorodibromomethane	129	9.563	9.563	0.000	89	62149	50.0	47.3	
82 Ethylene Dibromide	107	9.675	9.675	0.000	95	40231	50.0	51.9	
83 Chlorobenzene	112	10.163	10.163	0.000	97	215719	50.0	46.2	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.257	0.000	94	84564	50.0	46.6	
85 Ethylbenzene	106	10.263	10.263	0.000	97	123988	50.0	47.3	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	151080	50.0	45.4	
88 o-Xylene	106	10.775	10.775	0.000	95	148154	50.0	46.1	
89 Styrene	104	10.798	10.798	0.000	95	226298	50.0	47.5	
90 Bromoform	173	10.980	10.980	0.000	97	32215	50.0	48.7	
91 Isopropylbenzene	105	11.145	11.145	0.000	95	426257	50.0	46.8	
94 Bromobenzene	156	11.457	11.457	0.000	86	92586	50.0	50.6	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	96	49451	50.0	51.0	
95 1,2,3-Trichloropropane	110	11.510	11.510	0.000	84	16955	50.0	51.3	
96 trans-1,4-Dichloro-2-buten	53	11.510	11.510	0.000	72	12689	50.0	63.0	
97 N-Propylbenzene	120	11.557	11.557	0.000	98	125548	50.0	47.4	
98 2-Chlorotoluene	126	11.639	11.639	0.000	92	103796	50.0	47.8	
99 1,3,5-Trimethylbenzene	105	11.739	11.739	0.000	95	360640	50.0	47.5	
100 4-Chlorotoluene	126	11.769	11.769	0.000	97	101337	50.0	46.5	
101 tert-Butylbenzene	119	12.051	12.051	0.000	90	349209	50.0	47.4	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	97	344372	50.0	47.2	
104 sec-Butylbenzene	105	12.280	12.280	0.000	93	485912	50.0	48.5	
105 1,3-Dichlorobenzene	146	12.398	12.398	0.000	97	183320	50.0	47.3	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	447705	50.0	47.8	

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	97	195793	50.0	48.7	
110 n-Butylbenzene	91	12.845	12.845	0.000	97	326237	50.0	50.1	
111 1,2-Dichlorobenzene	146	12.857	12.857	0.000	98	172232	50.0	49.8	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	91	7867	50.0	55.3	
114 1,2,4-Trichlorobenzene	180	14.463	14.463	0.000	95	70882	50.0	55.0	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	97	62865	50.0	51.8	
116 Naphthalene	128	14.727	14.727	0.000	96	104446	50.0	53.7	
117 1,2,3-Trichlorobenzene	180	14.939	14.939	0.000	97	55814	50.0	55.2	
S 129 Xylenes, Total	106				0		100.0	91.5	
S 130 1,2-Dichloroethene, Total	96				0		100.0	105.5	
S 131 1,3-Dichloropropene, Total	1				0		100.0	100.7	
S 145 Total BTEX	1				0		250.0	230.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

voaWKet2ndRes_00046	Amount Added:	2.00	Units: uL	
VOA8260VOA2ND_00383	Amount Added:	2.00	Units: uL	
VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent

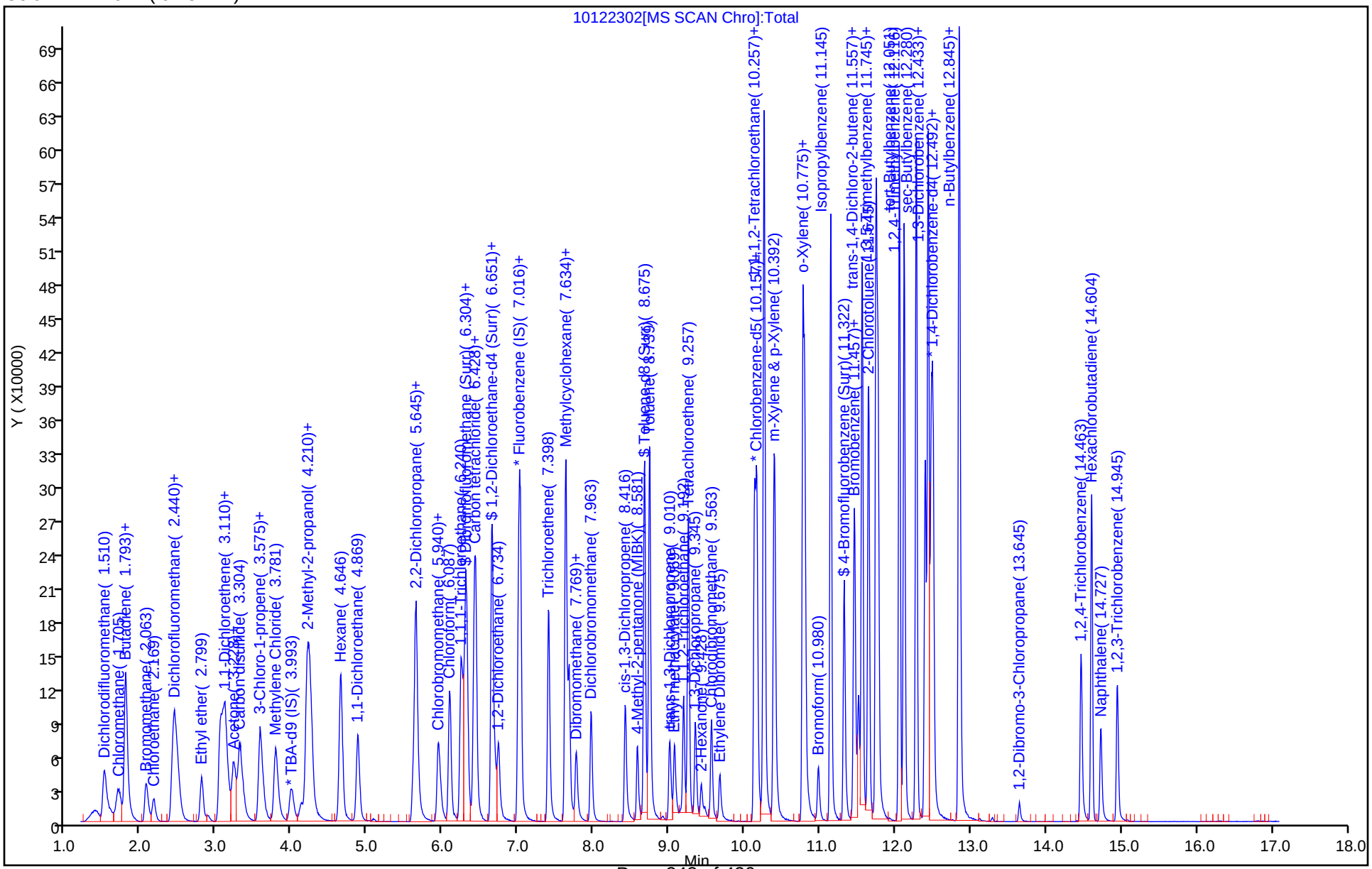
Report Date: 24-Dec-2019 07:17:55 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122302.d

Injection Date:	23-Dec-2019 08:52:30	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

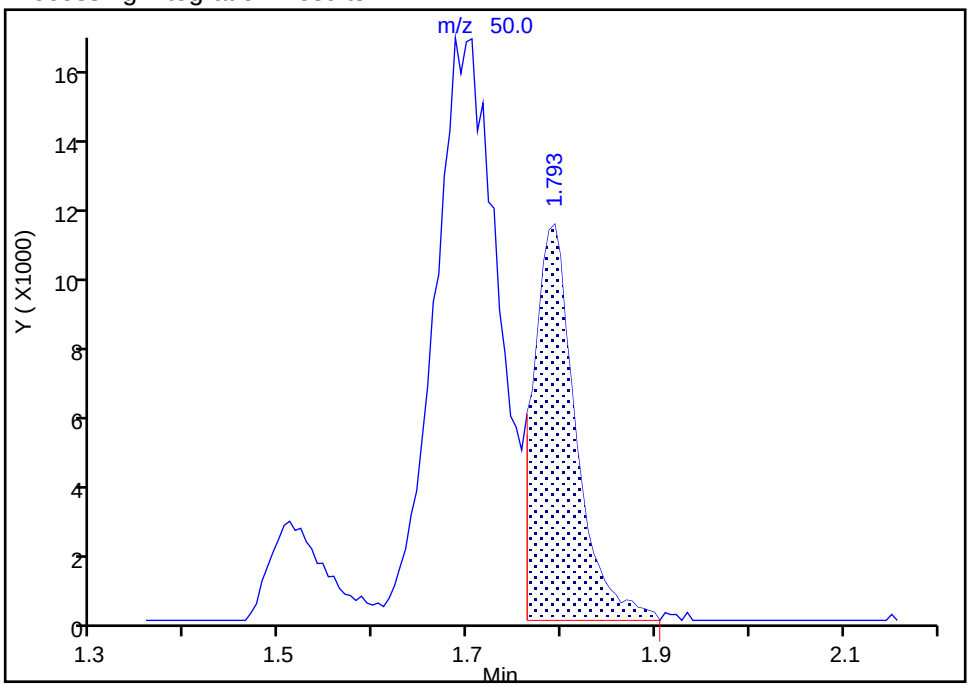
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122302.d
Injection Date: 23-Dec-2019 08:52:30 Instrument ID: CHHP10
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 1

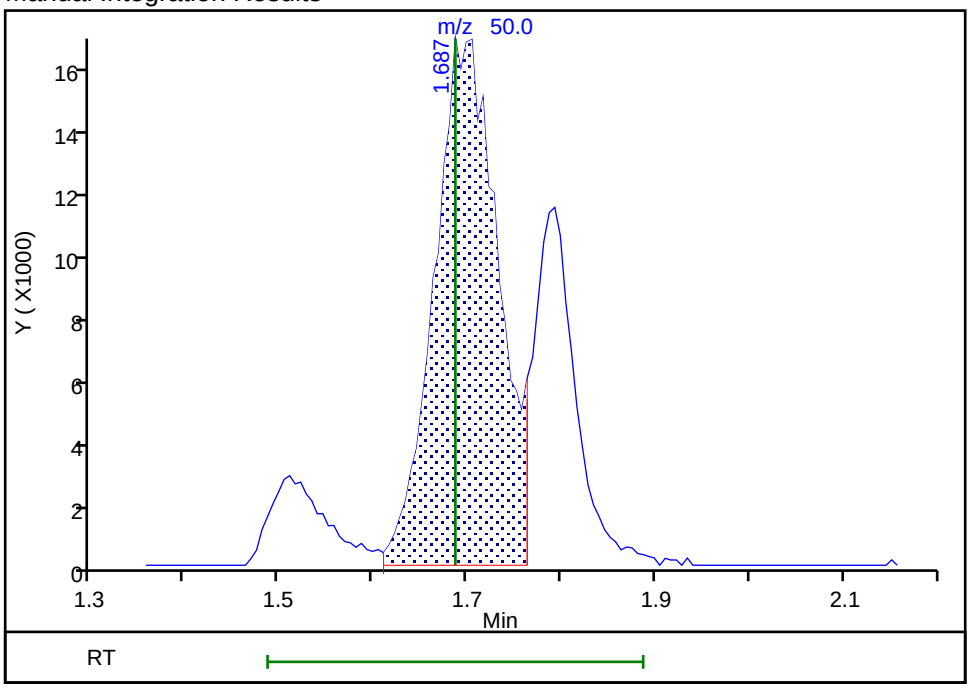
Processing Integration Results

RT: 1.79
Area: 34562
Amount: 20.216546
Amount Units: ng



Manual Integration Results

RT: 1.69
Area: 78687
Amount: 46.026831
Amount Units: ng



Reviewer: journetp, 23-Dec-2019 09:35:25
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Lab Sample ID: CCVIS 180-302393/3 Calibration Date: 12/24/2019 07:40

Instrument ID: CHHP10 Calib Start Date: 12/20/2019 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/20/2019 17:27

Lab File ID: 10122403.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	0.4452	0.5168	0.1000	11.6	10.0	16.1	20.0
Chloromethane	Ave	0.3287	0.3003	0.1000	9.14	10.0	-8.6	20.0
1,3-Butadiene	Ave	0.2718	0.2819	0.0100	10.4	10.0	3.7	20.0
Vinyl chloride	Ave	0.3257	0.3294	0.1000	10.1	10.0	1.1	20.0
Bromomethane	Ave	0.1858	0.2095	0.0500	11.3	10.0	12.8	20.0
Chloroethane	Ave	0.1489	0.1822	0.0500	12.2	10.0	22.3*	20.0
Dichlorofluoromethane	Ave	0.4663	0.4941	0.0100	10.6	10.0	6.0	20.0
Trichlorofluoromethane	Ave	0.5811	0.6429	0.1000	11.1	10.0	10.6	20.0
Ethyl ether	Ave	0.1570	0.1777	0.0100	11.3	10.0	13.2	20.0
1,1-Dichloroethene	Ave	0.2747	0.2945	0.1000	10.7	10.0	7.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3102	0.3373	0.1000	10.9	10.0	8.8	20.0
Acetone	Ave	0.0558	0.0615	0.0500	22.0	20.0	10.2	20.0
Iodomethane	Ave	0.5067	0.5660	0.0100	11.2	10.0	11.7	20.0
Carbon disulfide	Ave	0.7981	0.8036	0.1000	10.1	10.0	0.7	20.0
Allyl chloride	Ave	0.1449	0.1582	0.0100	10.9	10.0	9.2	20.0
Methyl acetate	Ave	0.0721	0.0839*	0.1000	23.3	20.0	16.3	20.0
Methylene Chloride	Lin2		0.2603	0.1000	9.86	10.0	-1.4	20.0
tert-Butyl alcohol	Ave	1.180	1.147	0.0100	97.2	100	-2.8	20.0
Acrylonitrile	Ave	0.0375	0.0421	0.0100	112	100	12.2	20.0
trans-1,2-Dichloroethene	Ave	0.2840	0.2954	0.1000	10.4	10.0	4.0	20.0
Methyl tert-butyl ether	Ave	0.4903	0.5429	0.1000	11.1	10.0	10.7	20.0
Hexane	Ave	0.4456	0.4200	0.0100	9.43	10.0	-5.7	20.0
1,1-Dichloroethane	Ave	0.4656	0.4697	0.2000	10.1	10.0	0.9	20.0
2,2-Dichloropropane	Ave	0.0682	0.0707	0.0100	10.4	10.0	3.5	20.0
cis-1,2-Dichloroethene	Ave	0.2881	0.2885	0.1000	10.0	10.0	0.1	20.0
2-Butanone (MEK)	Ave	0.0550	0.0560	0.0500	20.4	20.0	1.9	20.0
Bromochloromethane	Ave	0.1285	0.1370	0.0100	10.7	10.0	6.6	20.0
Tetrahydrofuran	Qua		0.0304	0.0100	18.4	20.0	-8.0	20.0
Chloroform	Lin2		0.5075	0.2000	10.1	10.0	0.7	20.0
1,1,1-Trichloroethane	Ave	0.4921	0.5066	0.1000	10.3	10.0	2.9	20.0
Cyclohexane	Ave	0.5586	0.4962	0.1000	8.88	10.0	-11.2	20.0
Carbon tetrachloride	Ave	0.4958	0.5350	0.1000	10.8	10.0	7.9	20.0
1,1-Dichloropropene	Ave	0.4000	0.3850	0.0100	9.62	10.0	-3.8	20.0
Benzene	Ave	1.021	0.9369	0.5000	9.18	10.0	-8.2	20.0
Isobutyl alcohol	Qua		0.0038*	0.0100	238	250	-4.8	20.0
1,2-Dichloroethane	Ave	0.2786	0.3087	0.1000	11.1	10.0	10.8	20.0
n-Heptane	Ave	0.4114	0.3737	0.0100	9.08	10.0	-9.2	20.0
Trichloroethene	Ave	0.3604	0.3659	0.2000	10.2	10.0	1.5	20.0
Methylcyclohexane	Ave	0.5809	0.5665	0.1000	9.75	10.0	-2.5	20.0
1,2-Dichloropropane	Ave	0.2273	0.2190	0.1000	9.64	10.0	-3.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Lab Sample ID: CCVIS 180-302393/3 Calibration Date: 12/24/2019 07:40

Instrument ID: CHHP10 Calib Start Date: 12/20/2019 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/20/2019 17:27

Lab File ID: 10122403.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin		0.0009*	0.0100	188	200	-5.9	20.0
Dibromomethane	Ave	0.0970	0.0999	0.0100	10.3	10.0	2.9	20.0
Bromodichloromethane	Ave	0.3116	0.3394	0.2000	10.9	10.0	8.9	20.0
cis-1,3-Dichloropropene	Ave	0.2857	0.3004	0.2000	10.5	10.0	5.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4222	0.4328	0.1000	20.5	20.0	2.5	20.0
Toluene	Ave	4.726	4.414	0.4000	9.34	10.0	-6.6	20.0
trans-1,3-Dichloropropene	Ave	0.8722	1.003	0.1000	11.5	10.0	15.1	20.0
Ethyl methacrylate	Lin1		0.7250	0.0100	10.7	10.0	7.2	20.0
1,1,2-Trichloroethane	Ave	0.6419	0.6734	0.1000	10.5	10.0	4.9	20.0
Tetrachloroethene	Ave	1.226	1.209	0.2000	9.86	10.0	-1.4	20.0
1,3-Dichloropropane	Ave	0.9649	1.069	0.0100	11.1	10.0	10.8	20.0
2-Hexanone	Lin		0.3727	0.1000	21.8	20.0	8.8	20.0
Dibromochloromethane	Ave	0.9211	1.025	0.1000	11.1	10.0	11.2	20.0
1,2-Dibromoethane (EDB)	Ave	0.5433	0.6440	0.1000	11.9	10.0	18.5	20.0
Chlorobenzene	Ave	3.275	3.234	0.5000	9.87	10.0	-1.3	20.0
1,1,1,2-Tetrachloroethane	Ave	1.272	1.353	0.0100	10.6	10.0	6.3	20.0
Ethylbenzene	Ave	1.838	1.851	0.1000	10.1	10.0	0.7	20.0
m-Xylene & p-Xylene	Ave	2.334	2.253	0.1000	9.65	10.0	-3.5	20.0
o-Xylene	Ave	2.253	2.236	0.3000	9.92	10.0	-0.8	20.0
Styrene	Ave	3.338	3.312	0.3000	9.92	10.0	-0.8	20.0
Bromoform	Ave	0.4637	0.5241	0.1000	11.3	10.0	13.0	20.0
Isopropylbenzene	Ave	6.379	6.348	0.1000	9.95	10.0	-0.5	20.0
Bromobenzene	Ave	0.8184	0.8056	0.0100	9.84	10.0	-1.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6801	0.7320	0.3000	10.8	10.0	7.6	20.0
trans-1,4-Dichloro-2-butene	Lin		0.0883	0.0100	9.97	10.0	-0.3	20.0
1,2,3-Trichloropropane	Ave	0.1476	0.1650	0.0100	11.2	10.0	11.8	20.0
N-Propylbenzene	Ave	1.185	1.110	0.0100	9.37	10.0	-6.3	20.0
2-Chlorotoluene	Ave	0.9711	0.8922	0.0100	9.19	10.0	-8.1	20.0
1,3,5-Trimethylbenzene	Ave	3.392	3.133	0.0100	9.24	10.0	-7.6	20.0
4-Chlorotoluene	Ave	0.9749	0.8958	0.0100	9.19	10.0	-8.1	20.0
tert-Butylbenzene	Ave	3.290	3.174	0.0100	9.65	10.0	-3.5	20.0
1,2,4-Trimethylbenzene	Ave	3.263	3.052	0.0100	9.35	10.0	-6.5	20.0
sec-Butylbenzene	Ave	4.478	4.236	0.0100	9.46	10.0	-5.4	20.0
1,3-Dichlorobenzene	Ave	1.733	1.680	0.6000	9.69	10.0	-3.1	20.0
4-Isopropyltoluene	Ave	4.182	3.937	0.0100	9.41	10.0	-5.9	20.0
1,4-Dichlorobenzene	Ave	1.796	1.720	0.5000	9.57	10.0	-4.3	20.0
n-Butylbenzene	Ave	2.912	2.721	0.0100	9.34	10.0	-6.6	20.0
1,2-Dichlorobenzene	Ave	1.546	1.502	0.4000	9.71	10.0	-2.9	20.0
1,2-Dibromo-3-Chloropropane	Lin		0.0661	0.0500	10.5	10.0	4.6	20.0
1,2,4-Trichlorobenzene	Ave	0.5760	0.5582	0.2000	9.69	10.0	-3.1	20.0
Hexachlorobutadiene	Ave	0.5426	0.4977	0.0100	9.17	10.0	-8.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Lab Sample ID: CCVIS 180-302393/3 Calibration Date: 12/24/2019 07:40

Instrument ID: CHHP10 Calib Start Date: 12/20/2019 12:55

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 12/20/2019 17:27

Lab File ID: 10122403.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	Qua		0.8723	0.0100	10.1	10.0	1.4	20.0
1,2,3-Trichlorobenzene	Ave	0.4522	0.4573	0.0100	10.1	10.0	1.1	20.0
Dibromofluoromethane (Surr)	Ave	0.2502	0.2738		10.9	10.0	9.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2171	0.2380		11.0	10.0	9.6	20.0
Toluene-d8 (Surr)	Ave	4.026	4.099		10.2	10.0	1.8	20.0
4-Bromofluorobenzene (Surr)	Ave	1.322	1.410		10.7	10.0	6.7	20.0

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122403.d
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 24-Dec-2019 07:40:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-003
Operator ID: 034635 Instrument ID: CHHP10
Sublist: chrom-MSVOA_CHHP10*sub3

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:28:19 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 24-Dec-2019 09:42:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.957	3.957	0.000	0	46742	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	220297	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	83	56106	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	92	94785	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	93	60320	50.0	54.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	52435	50.0	54.8	
$ 7 Toluene-d8 (Surr)	98	8.669	8.669	0.000	93	229959	50.0	50.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.322	0.000	92	79130	50.0	53.4	
10 Dichlorodifluoromethane	85	1.522	1.522	0.000	99	113853	50.0	58.0	
11 Chloromethane	50	1.716	1.716	0.000	98	66151	50.0	45.7	a
13 Butadiene	39	1.799	1.799	0.000	90	62094	50.0	51.9	
12 Vinyl chloride	62	1.816	1.816	0.000	98	72557	50.0	50.6	
14 Bromomethane	94	2.075	2.075	0.000	91	46157	50.0	56.4	
15 Chloroethane	64	2.199	2.199	0.000	99	40126	50.0	61.2	
17 Dichlorofluoromethane	67	2.457	2.457	0.000	96	108854	50.0	53.0	
16 Trichlorofluoromethane	101	2.487	2.487	0.000	98	141622	50.0	55.3	a
18 Ethyl ether	59	2.804	2.804	0.000	89	39150	50.0	56.6	
20 1,1-Dichloroethene	96	3.063	3.063	0.000	98	64871	50.0	53.6	
21 1,1,2-Trichloro-1,2,2-trif	101	3.146	3.146	0.000	90	74312	50.0	54.4	
22 Acetone	43	3.175	3.175	0.000	87	27100	100.0	110.2	
23 Iodomethane	142	3.234	3.234	0.000	98	124695	50.0	55.9	
24 Carbon disulfide	76	3.328	3.328	0.000	99	177020	50.0	50.3	
26 3-Chloro-1-propene	76	3.599	3.599	0.000	90	34857	50.0	54.6	
28 Methyl acetate	43	3.622	3.622	0.000	97	36955	100.0	116.3	
29 Methylene Chloride	84	3.793	3.793	0.000	95	57349	50.0	49.3	
32 2-Methyl-2-propanol	59	4.093	4.093	0.000	97	26814	500.0	486.1	
31 Acrylonitrile	53	4.193	4.193	0.000	98	92658	500.0	561.1	
30 trans-1,2-Dichloroethene	96	4.228	4.228	0.000	98	65083	50.0	52.0	
33 Methyl tert-butyl ether	73	4.246	4.246	0.000	97	119589	50.0	55.4	
34 Hexane	57	4.651	4.651	0.000	90	92517	50.0	47.1	
36 1,1-Dichloroethane	63	4.881	4.881	0.000	97	103474	50.0	50.4	

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	5.640	0.005	90	15565	50.0	51.8	
41 cis-1,2-Dichloroethene	96	5.645	5.645	0.000	84	63556	50.0	50.1	
43 2-Butanone (MEK)	43	5.681	5.681	0.000	99	24689	100.0	101.9	
46 Chlorobromomethane	128	5.940	5.940	0.000	86	30183	50.0	53.3	
48 Tetrahydrofuran	42	5.975	5.975	0.000	86	13404	100.0	92.0	
49 Chloroform	83	6.092	6.092	0.000	93	111795	50.0	50.4	
50 1,1,1-Trichloroethane	97	6.245	6.245	0.000	98	111593	50.0	51.5	
52 Cyclohexane	56	6.322	6.322	0.000	90	109308	50.0	44.4	
53 Carbon tetrachloride	117	6.422	6.422	0.000	97	117856	50.0	54.0	
54 1,1-Dichloropropene	75	6.440	6.440	0.000	94	84807	50.0	48.1	
55 Benzene	78	6.657	6.657	0.000	97	206391	50.0	45.9	
51 Isobutyl alcohol	41	6.692	6.692	0.000	95	20633	1250.0	1190.0	
56 1,2-Dichloroethane	62	6.739	6.739	0.000	98	68008	50.0	55.4	
59 n-Heptane	43	7.034	7.034	0.000	89	82332	50.0	45.4	
60 Trichloroethene	130	7.398	7.398	0.000	94	80606	50.0	50.8	
63 Methylcyclohexane	83	7.634	7.634	0.000	88	124790	50.0	48.8	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	90	48249	50.0	48.2	
65 Dibromomethane	93	7.775	7.775	0.000	90	22001	50.0	51.5	
67 1,4-Dioxane	88	7.775	7.775	0.000	34	4068	1000.0	940.7	
68 Dichlorobromomethane	83	7.969	7.969	0.000	98	74777	50.0	54.5	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	95	66173	50.0	52.6	
72 4-Methyl-2-pentanone (MIBK	43	8.581	8.581	0.000	94	48560	100.0	102.5	
73 Toluene	91	8.739	8.739	0.000	99	247670	50.0	46.7	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	91	56300	50.0	57.5	
75 Ethyl methacrylate	69	9.069	9.069	0.000	90	40677	50.0	53.6	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	92	37782	50.0	52.5	
77 Tetrachloroethene	164	9.257	9.257	0.000	96	67822	50.0	49.3	
78 1,3-Dichloropropane	76	9.357	9.357	0.000	93	59985	50.0	55.4	
79 2-Hexanone	43	9.428	9.428	0.000	93	41823	100.0	108.8	
81 Chlorodibromomethane	129	9.563	9.563	0.000	89	57487	50.0	55.6	
82 Ethylene Dibromide	107	9.675	9.675	0.000	98	36132	50.0	59.3	
83 Chlorobenzene	112	10.163	10.163	0.000	97	181419	50.0	49.4	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.251	0.000	92	75894	50.0	53.2	
85 Ethylbenzene	106	10.263	10.263	0.000	98	103833	50.0	50.3	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	126402	50.0	48.3	
88 o-Xylene	106	10.775	10.775	0.000	96	125449	50.0	49.6	
89 Styrene	104	10.798	10.798	0.000	94	185809	50.0	49.6	
90 Bromoform	173	10.986	10.986	0.000	97	29405	50.0	56.5	
91 Isopropylbenzene	105	11.145	11.145	0.000	95	356142	50.0	49.8	
94 Bromobenzene	156	11.457	11.457	0.000	85	76363	50.0	49.2	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	94	41070	50.0	53.8	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	67	8369	50.0	49.8	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	84	15637	50.0	55.9	
97 N-Propylbenzene	120	11.563	11.563	0.000	98	105208	50.0	46.9	
98 2-Chlorotoluene	126	11.645	11.645	0.000	98	84565	50.0	45.9	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	95	297007	50.0	46.2	
100 4-Chlorotoluene	126	11.774	11.774	0.000	97	84909	50.0	45.9	
101 tert-Butylbenzene	119	12.057	12.057	0.000	90	300866	50.0	48.2	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	96	289274	50.0	46.8	
104 sec-Butylbenzene	105	12.280	12.280	0.000	94	401481	50.0	47.3	
105 1,3-Dichlorobenzene	146	12.392	12.392	0.000	97	159219	50.0	48.5	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	373208	50.0	47.1	

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	96	163015	50.0	47.9	
110 n-Butylbenzene	91	12.845	12.845	0.000	97	257952	50.0	46.7	
111 1,2-Dichlorobenzene	146	12.857	12.857	0.000	99	142336	50.0	48.6	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	90	6268	50.0	52.3	
114 1,2,4-Trichlorobenzene	180	14.463	14.463	0.000	94	52910	50.0	48.5	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	97	47178	50.0	45.9	
116 Naphthalene	128	14.727	14.727	0.000	96	82676	50.0	50.7	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	96	43341	50.0	50.6	
S 130 1,2-Dichloroethene, Total	96				0		100.0	102.1	
S 129 Xylenes, Total	106				0		100.0	97.9	
S 131 1,3-Dichloropropene, Total	1				0		100.0	110.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

voaWKet2ndRes_00046	Amount Added:	2.00	Units: uL		
VOA8260VOAPRI_00384	Amount Added:	2.00	Units: uL		
VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent	

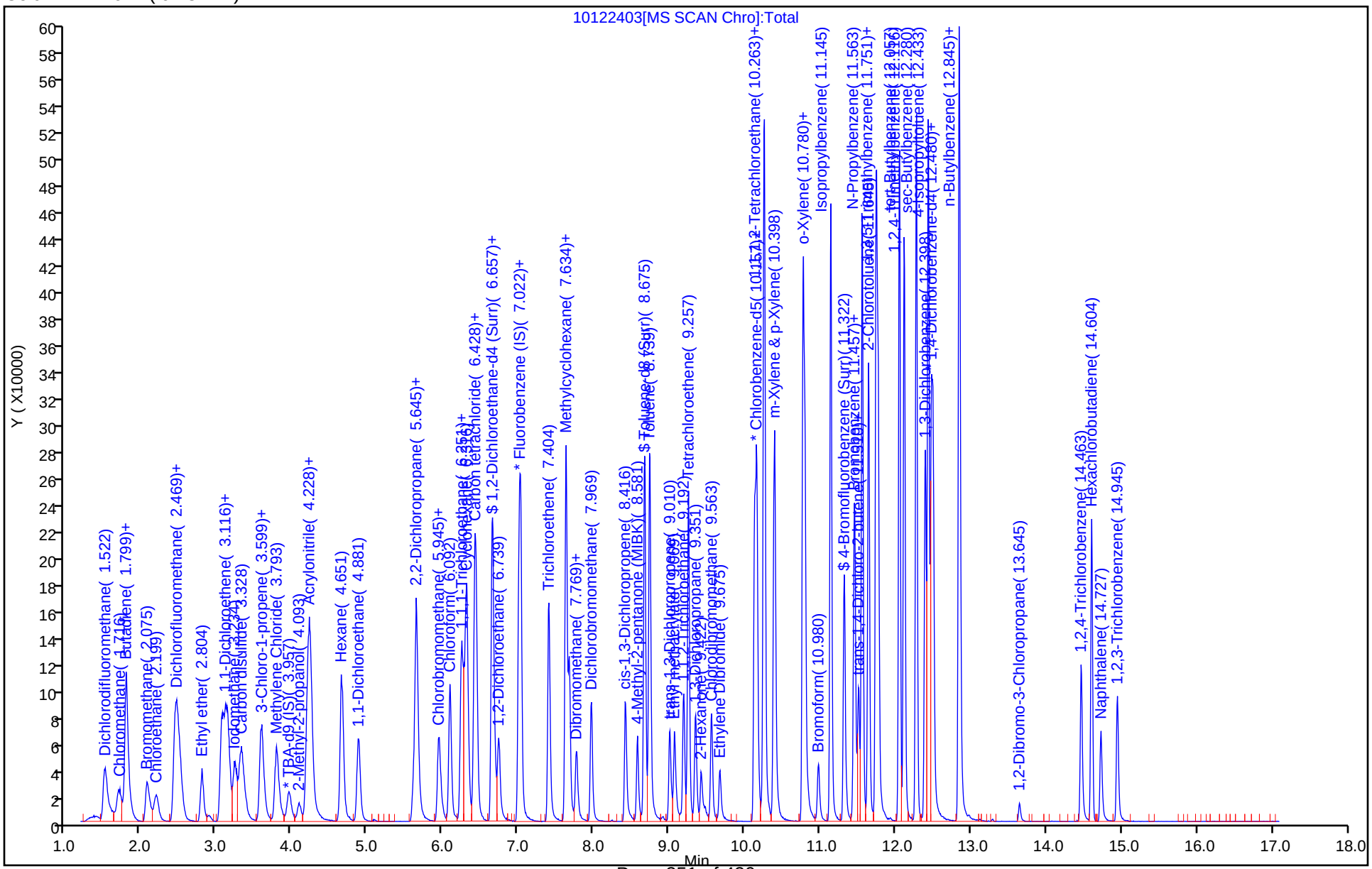
Report Date: 26-Dec-2019 10:28:20 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122403.d

Injection Date:	24-Dec-2019 07:40:30	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

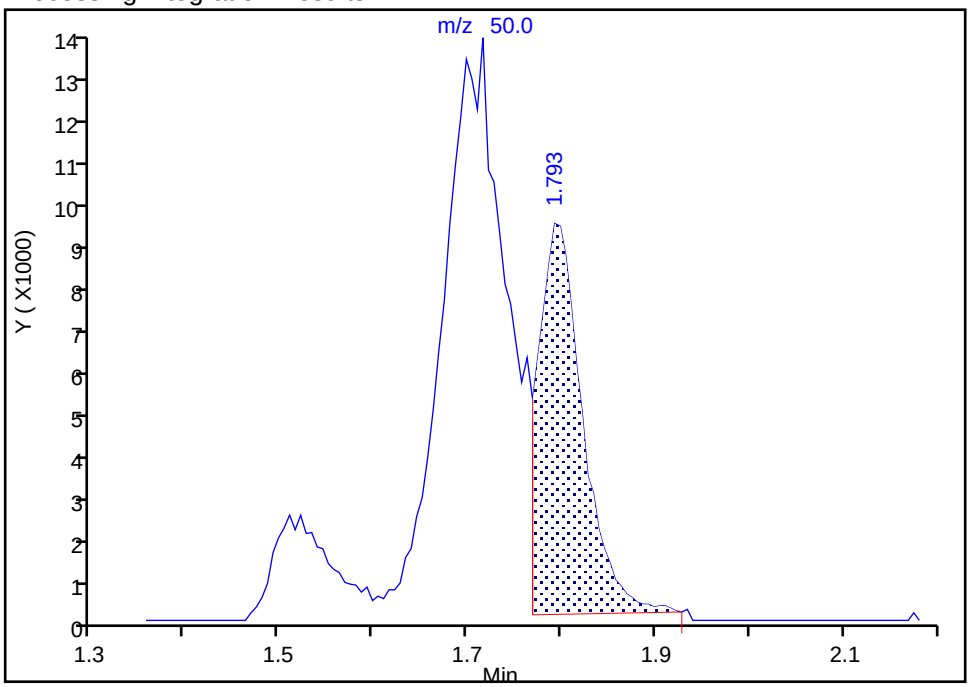
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122403.d
Injection Date: 24-Dec-2019 07:40:30 Instrument ID: CHHP10
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 1

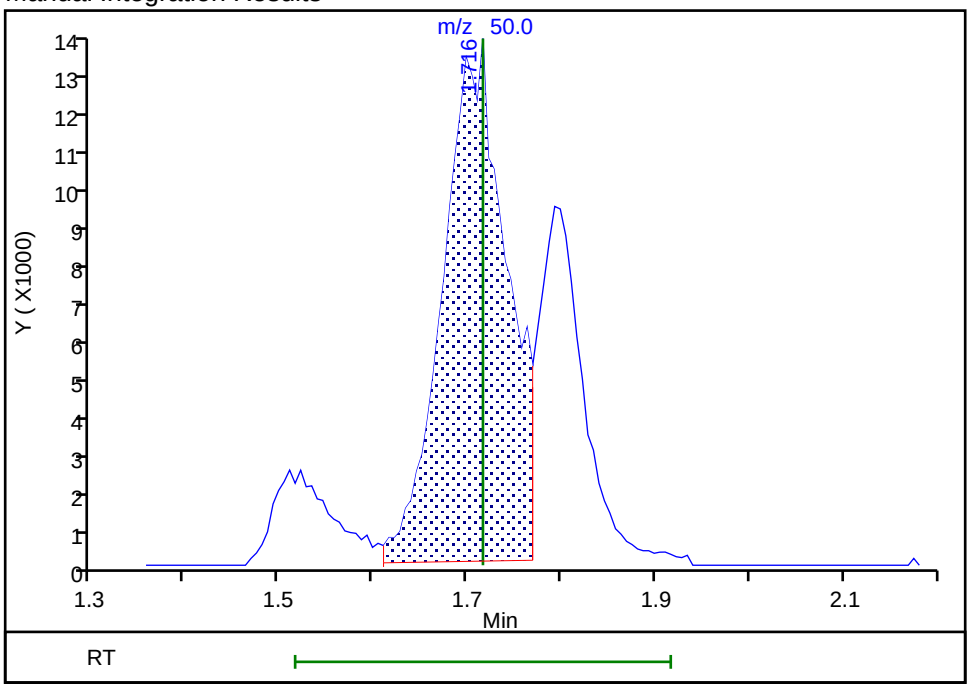
Processing Integration Results

RT: 1.79
Area: 30724
Amount: 21.214320
Amount Units: ng



Manual Integration Results

RT: 1.72
Area: 66151
Amount: 45.675969
Amount Units: ng



Reviewer: journetp, 24-Dec-2019 09:29:01
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Pittsburgh

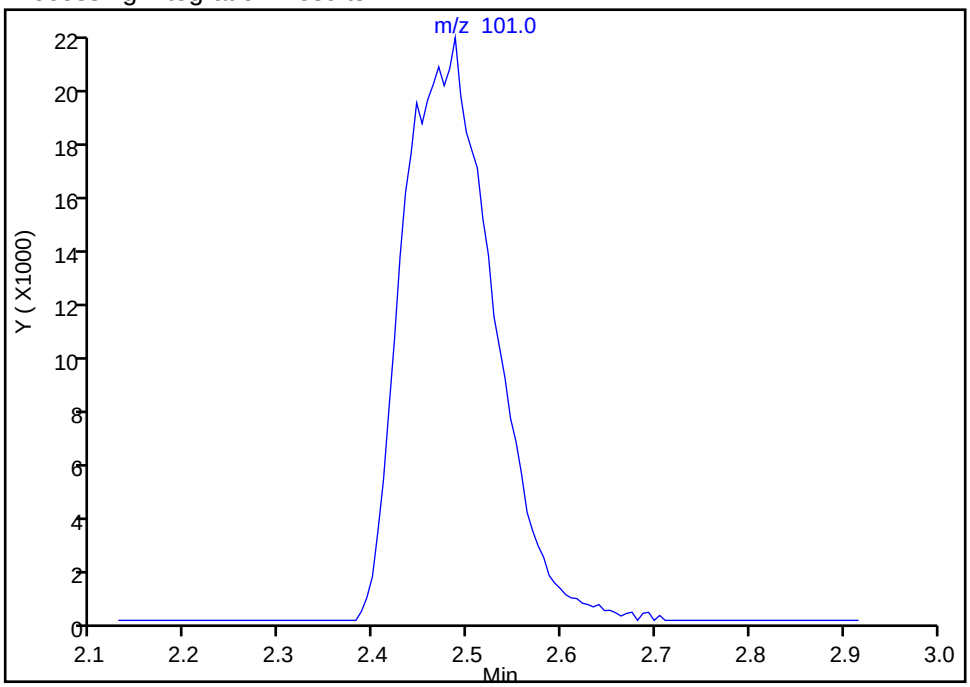
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122403.d
Injection Date: 24-Dec-2019 07:40:30 Instrument ID: CHHP10
Lims ID: CCVIS
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

16 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

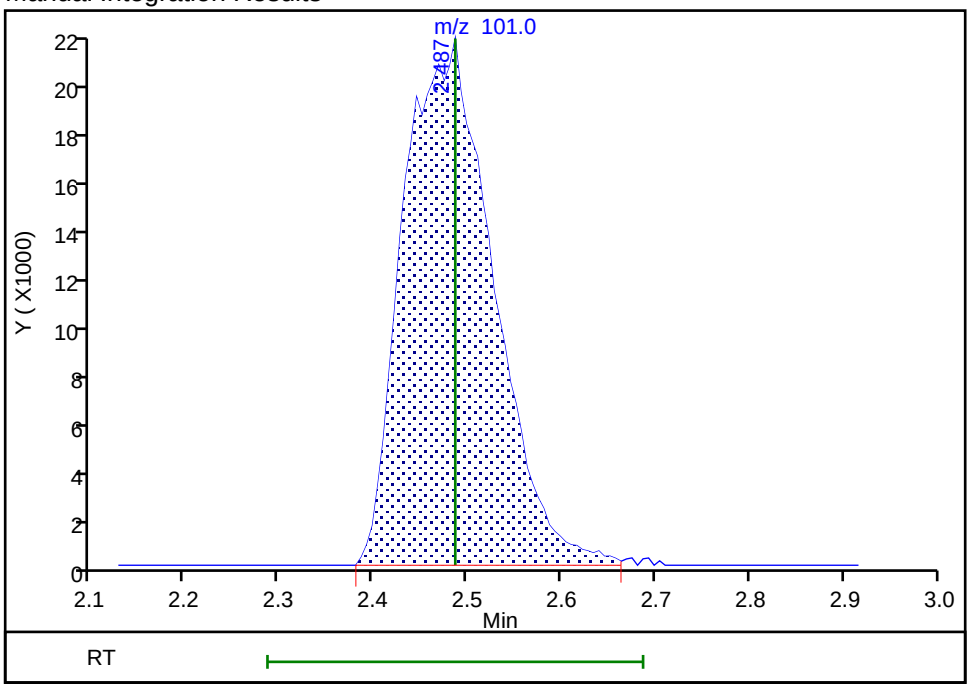
Not Detected
Expected RT: 2.49

Processing Integration Results



Manual Integration Results

RT: 2.49
Area: 141622
Amount: 55.318225
Amount Units: ng



Reviewer: journetp, 24-Dec-2019 09:29:06
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122001.d
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 20-Dec-2019 06:27:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 180-0030094-001
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 23-Dec-2019 07:47:36 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: journetp Date: 23-Dec-2019 07:47:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	11.328	11.328	0.000	0	37482	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

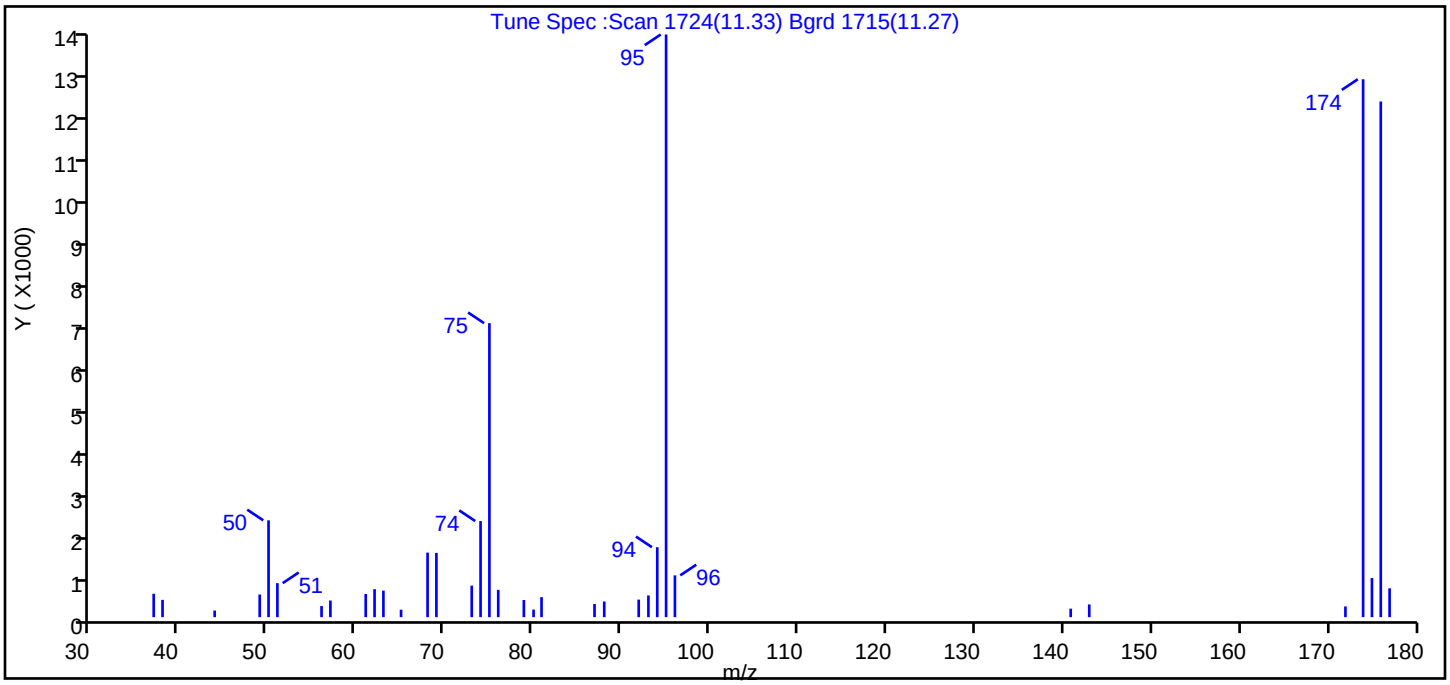
VOA BFB25_00005 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122001.d				
Injection Date:	20-Dec-2019 06:27:30	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	16.6
75	30 to 60% of m/z 95	50.5
96	5 to 9% of m/z 95	7.2
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	92.3
175	5 to 9% of m/z 174	6.7 (7.3)
176	Greater than 95% but less than 101% of m/z 174	88.5 (95.9)
177	5 to 9% of m/z 176	5.0 (5.6)

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122001.d\MSVOA_CHHP10.rslt\spectra.
Injection Date: 20-Dec-2019 06:27:30
Spectrum: Tune Spec :Scan 1724(11.33) Bgrd 1715(11.27)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 35

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	536	62.00	641	78.90	392	96.00	957
38.00	396	63.00	608	80.00	173	140.80	194
43.90	151	65.00	170	80.90	458	142.90	291
49.00	518	68.00	1478	86.90	301	171.90	245
50.00	2218	69.00	1472	88.00	358	173.90	12322
51.00	779	73.00	722	91.90	402	174.90	896
56.00	254	74.00	2201	93.00	497	175.90	11813
57.00	381	75.00	6735	94.00	1602	176.90	661
61.00	531	76.00	625	95.00	13348		

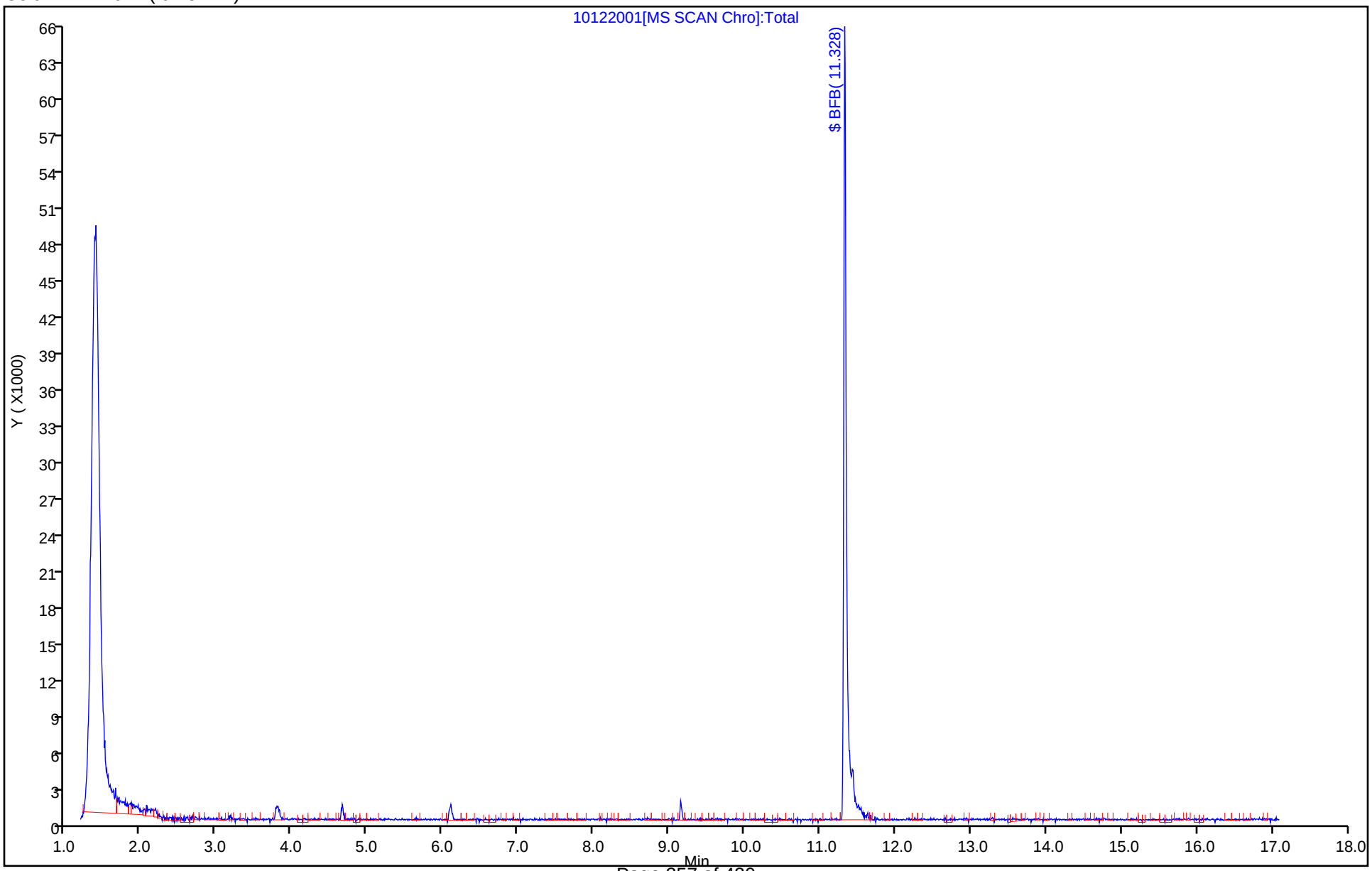
Report Date: 23-Dec-2019 07:47:38 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122001.d

Injection Date:	20-Dec-2019 06:27:30	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\20191223-30123.b\10122301.d				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	23-Dec-2019 08:11:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	180-0030123-001				
Operator ID:	034635	Instrument ID:	CHHP10		
Method:	\\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\MSVOA_CHHP10.m				
Limit Group:	VOA 8260C_D ICAL				
Last Update:	24-Dec-2019 07:18:00	Calib Date:	20-Dec-2019 17:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0309				

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	194992	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

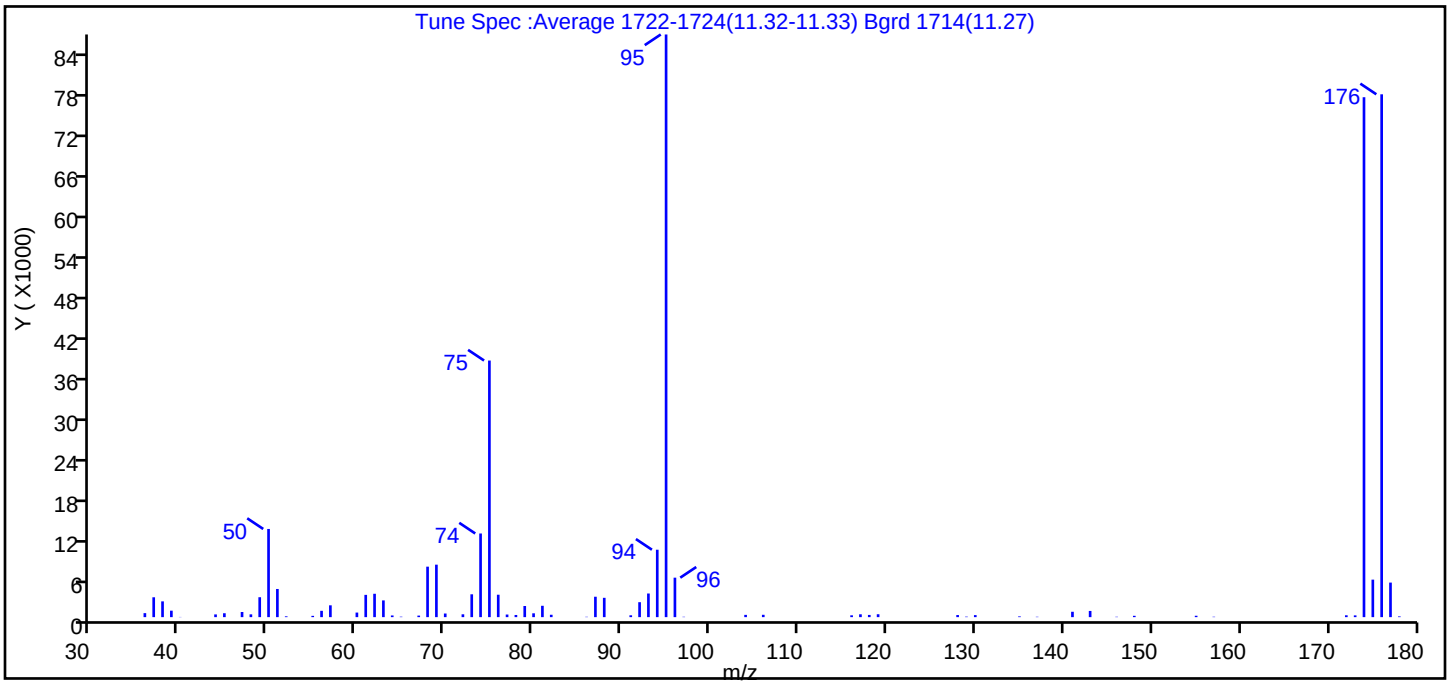
VOA BFB25_00005 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122301.d
Injection Date: 23-Dec-2019 08:11:30 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	15.1
75	30 to 60% of m/z 95	44.0
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.3 (0.3)
174	50 to 120% of m/z 95	89.2
175	5 to 9% of m/z 174	6.4 (7.2)
176	Greater than 95% but less than 101% of m/z 174	89.7 (100.6)
177	5 to 9% of m/z 176	5.9 (6.6)

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122301.d\MSVOA_CHHP10.rslt\spectra.
Injection Date: 23-Dec-2019 08:11:30
Spectrum: Tune Spec :Average 1722-1724(11.32-11.33) Bgrd 1714(11.27)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	592	62.00	3454	82.00	353	129.00	74
37.00	2936	63.00	2474	86.00	51	130.00	299
38.00	2331	64.00	249	87.00	3016	135.00	110
39.00	957	65.00	67	88.00	2856	137.00	55
40.00	28	67.00	229	91.00	272	141.00	795
44.00	404	68.00	7460	92.00	2209	143.00	916
45.00	577	69.00	7755	93.00	3494	146.00	55
47.00	760	70.00	536	94.00	9963	148.00	197
48.00	413	72.00	421	95.00	86104	155.00	205
49.00	2944	73.00	3377	96.00	5833	157.00	58
50.00	13030	74.00	12362	97.00	52	172.00	274
51.00	4162	75.00	37920	104.00	336	173.00	260
52.00	121	76.00	3313	106.00	348	174.00	76832
55.00	190	77.00	385	116.00	271	175.00	5542
56.00	935	78.00	319	117.00	421	176.00	77264
57.00	1747	79.00	1647	118.00	327	177.00	5107
60.00	676	80.00	567	119.00	429	178.00	107
61.00	3291	81.00	1678	128.00	311		

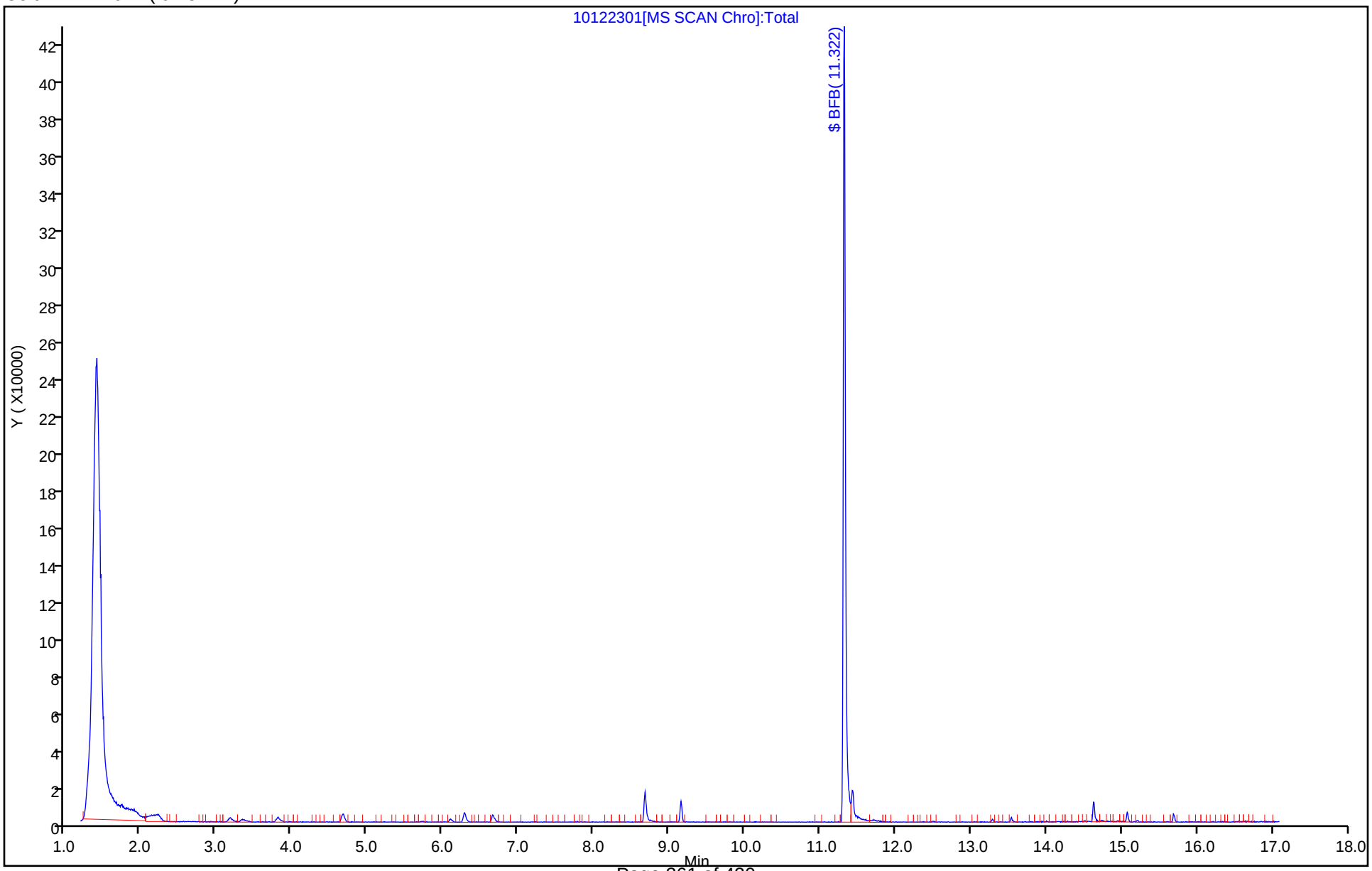
Report Date: 24-Dec-2019 07:18:01 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122301.d

Injection Date:	23-Dec-2019 08:11:30	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\20191224-30134.b\10122402.d
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 24-Dec-2019 07:12:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-002
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:28:23 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 24-Dec-2019 09:28:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	11.316	11.316	0.000	0	76104	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

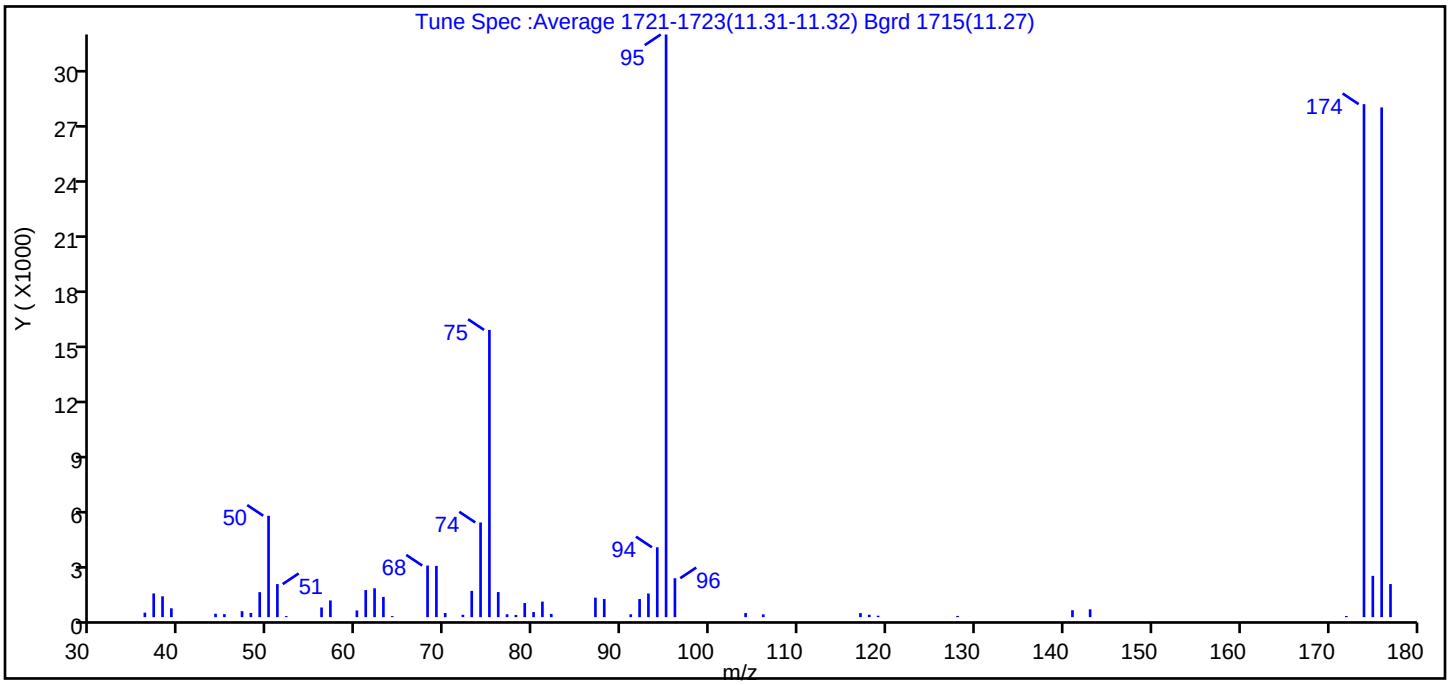
VOA BFB25_00005 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122402.d				
Injection Date:	24-Dec-2019 07:12:30	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	17.4
75	30 to 60% of m/z 95	49.3
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	88.0
175	5 to 9% of m/z 174	7.1 (8.0)
176	Greater than 95% but less than 101% of m/z 174	87.5 (99.4)
177	5 to 9% of m/z 176	5.7 (6.5)

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122402.d\MSVOA_CHHP10.rslt\spectra.
Injection Date: 24-Dec-2019 07:12:30
Spectrum: Tune Spec :Average 1721-1723(11.31-11.32) Bgrd 1715(11.27)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 54

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	244	60.00	363	78.00	119	106.00	151
37.00	1287	61.00	1469	79.00	767	117.00	220
38.00	1132	62.00	1567	80.00	276	118.00	131
39.00	480	63.00	1099	81.00	843	119.00	77
44.00	186	64.00	58	82.00	176	128.00	66
45.00	162	68.00	2800	87.00	1057	141.00	375
47.00	325	69.00	2781	88.00	984	143.00	425
48.00	228	70.00	225	91.00	155	172.00	63
49.00	1357	72.00	130	92.00	983	174.00	27856
50.00	5506	73.00	1426	93.00	1283	175.00	2242
51.00	1795	74.00	5143	94.00	3793	176.00	27680
52.00	59	75.00	15598	95.00	31640	177.00	1797
56.00	525	76.00	1362	96.00	2114		
57.00	908	77.00	157	104.00	225		

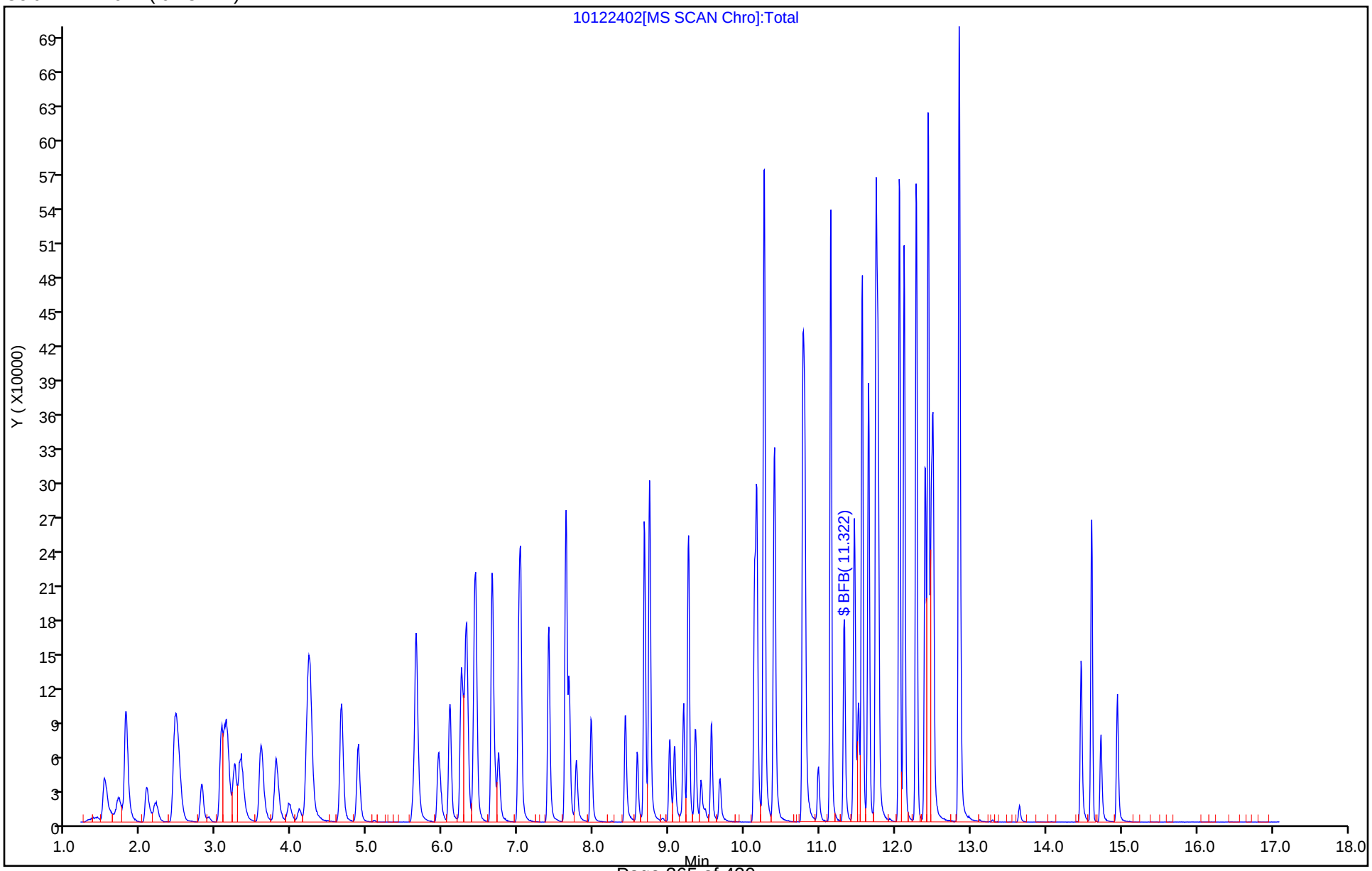
Report Date: 26-Dec-2019 10:28:23 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122402.d

Injection Date:	24-Dec-2019 07:12:30	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.: 180-100176-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-302285/5

Matrix: Water Lab File ID: 10122305.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/23/2019 10:22

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302285 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	0.88
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	0.63
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.: 180-100176-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-302285/5

Matrix: Water Lab File ID: 10122305.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/23/2019 10:22

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302285 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)	91		70-150
2037-26-5	Toluene-d8 (Surr)	97		78-128
460-00-4	4-Bromofluorobenzene (Surr)	87		64-123
1868-53-7	Dibromofluoromethane (Surr)	91		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122305.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 23-Dec-2019 10:22:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030123-005
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 24-Dec-2019 07:11:12 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0309

First Level Reviewer: journetp Date: 24-Dec-2019 06:45:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.963	3.993	-0.030	0	105368	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.004	0.006	99	356446	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.139	10.133	0.006	84	79397	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	93	106558	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	94	81456	50.0	45.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.645	0.006	0	70489	50.0	45.5	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	92	311137	50.0	48.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.327	11.322	0.005	96	91157	50.0	43.4	
37 Isopropyl alcohol	45	3.963	3.987	-0.024	26	4900		NC	
57 Isooctane	57	7.010	7.033	-0.023	34	10957		NC	
116 Naphthalene	128	14.751	14.727	0.024	1	1668		5.98	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

VOA8260INT_00102 Amount Added: 2.00 Units: uL Run Reagent
VOA8260SURR_00102 Amount Added: 2.00 Units: uL Run Reagent

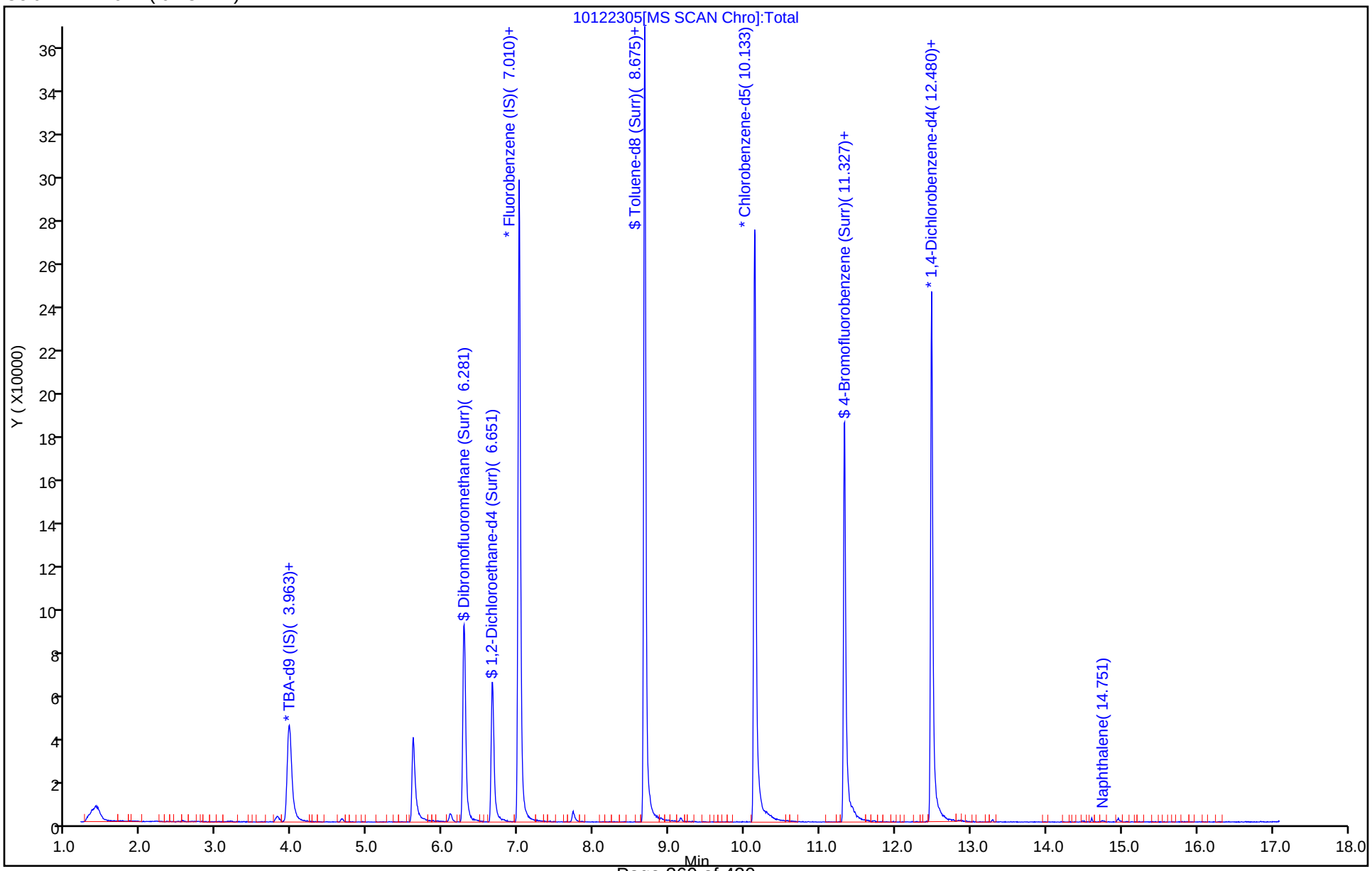
Report Date: 24-Dec-2019 07:17:45 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122305.d

Injection Date:	23-Dec-2019 10:22:30	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\20191223-30123.b\10122305.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 23-Dec-2019 10:22:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030123-005
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 24-Dec-2019 07:11:12 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0309

First Level Reviewer: journetp Date: 24-Dec-2019 06:45:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	45.7	91.35
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	45.5	91.08
$ 7 Toluene-d8 (Surr)	50.0	48.7	97.35
$ 8 4-Bromofluorobenzene (Surr)	50.0	43.4	86.86

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-302393/5

Matrix: Water Lab File ID: 10122405.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 08:35

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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	0.88
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	0.63
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.: 180-100176-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-302393/5

Matrix: Water Lab File ID: 10122405.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 08:35

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 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)	102		70-150
2037-26-5	Toluene-d8 (Surr)	99		78-128
460-00-4	4-Bromofluorobenzene (Surr)	77		64-123
1868-53-7	Dibromofluoromethane (Surr)	101		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122405.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 24-Dec-2019 08:35:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-005
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 24-Dec-2019 09:28:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.963	3.957	0.006	0	58937	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.016	7.010	0.006	99	266170	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	86	61351	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	93	73984	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.287	6.281	0.006	93	67108	50.0	50.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	58736	50.0	50.8	
$ 7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	94	243557	50.0	49.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.327	11.322	0.005	92	62603	50.0	38.6	
37 Isopropyl alcohol	45	3.957	3.987	-0.030	28	1935		NC	
19 Acrolein	56	4.669	4.657	0.012	49	1485		NC	
45 Ethyl acetate	43	5.616	5.616	0.000	31	441		NC	
57 Isooctane	57	7.010	7.033	-0.023	33	8935		NC	
116 Naphthalene	128	14.757	14.727	0.030	1	180		5.23	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

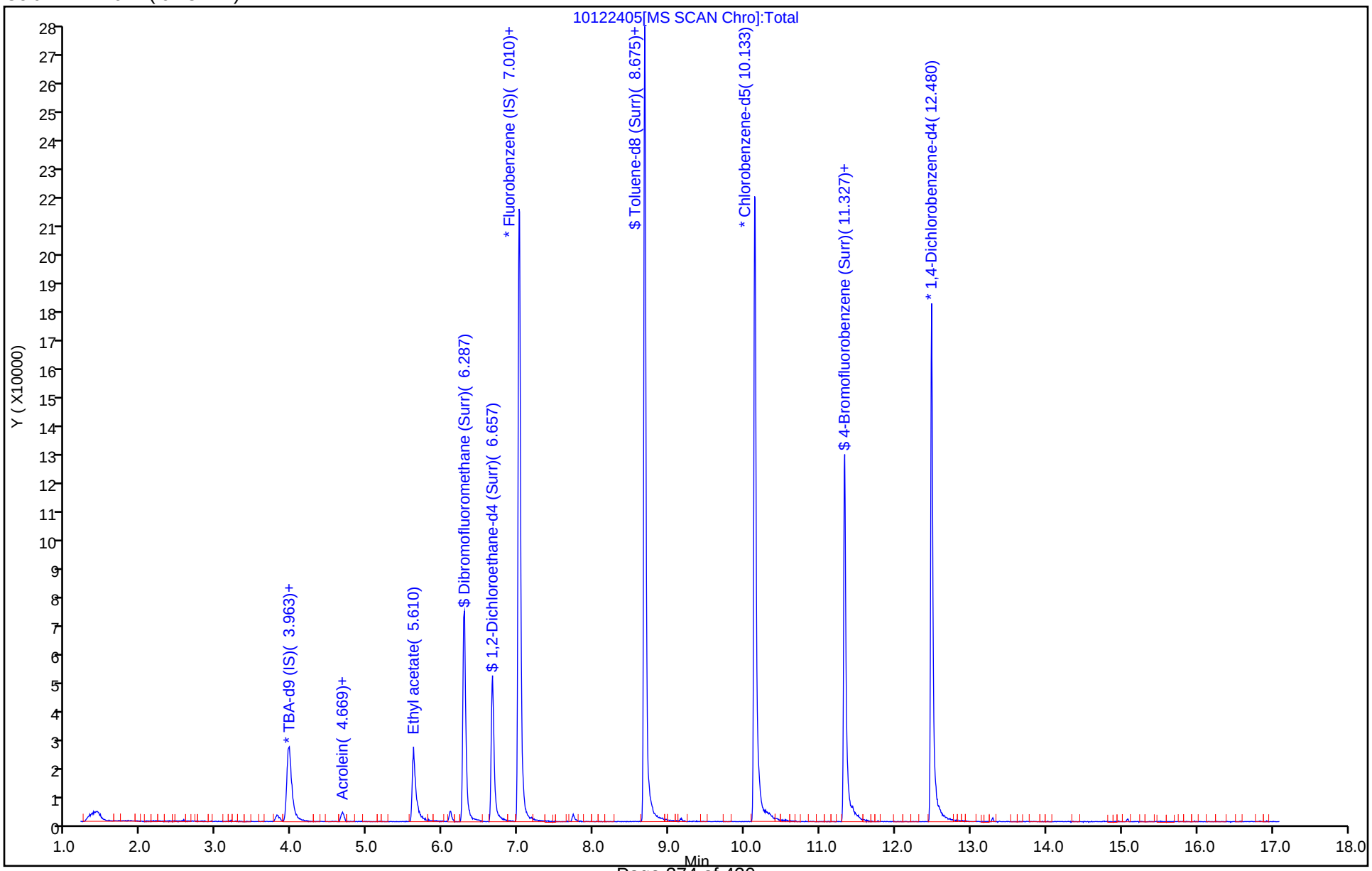
VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 26-Dec-2019 10:28:13 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122405.d				
Injection Date:	24-Dec-2019 08:35:30	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\20191224-30134.b\10122405.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 24-Dec-2019 08:35:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-005
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 24-Dec-2019 09:28:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.4	100.78
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.8	101.64
$ 7 Toluene-d8 (Surr)	50.0	49.3	98.62
$ 8 4-Bromofluorobenzene (Surr)	50.0	38.6	77.20

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-302285/3

Matrix: Water Lab File ID: 10122303.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/23/2019 09:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302285 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	9.40		1.0	0.90
75-01-4	Vinyl chloride	9.88		1.0	0.88
74-83-9	Bromomethane	8.52		1.0	0.89
75-00-3	Chloroethane	7.31		1.0	0.90
75-35-4	1,1-Dichloroethene	9.99		1.0	0.55
67-64-1	Acetone	20.0		5.0	3.4
75-15-0	Carbon disulfide	9.78		1.0	0.88
75-09-2	Methylene Chloride	10.2		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	10.4		1.0	0.67
1634-04-4	Methyl tert-butyl ether	11.0		1.0	0.59
75-34-3	1,1-Dichloroethane	10.1		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	10.0		1.0	0.71
74-97-5	Bromochloromethane	10.2		1.0	0.63
78-93-3	2-Butanone (MEK)	21.8		5.0	2.6
67-66-3	Chloroform	9.65		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.32		1.0	0.60
56-23-5	Carbon tetrachloride	9.11		1.0	0.88
71-43-2	Benzene	9.87		1.0	0.60
107-06-2	1,2-Dichloroethane	10.3		1.0	0.57
79-01-6	Trichloroethene	9.79		1.0	0.69
78-87-5	1,2-Dichloropropane	9.86		1.0	0.66
75-27-4	Bromodichloromethane	10.0		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	11.2		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	22.7		5.0	3.1
108-88-3	Toluene	9.83		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	11.8		1.0	0.58
79-00-5	1,1,2-Trichloroethane	11.0		1.0	0.45
127-18-4	Tetrachloroethene	9.86		1.0	0.47
591-78-6	2-Hexanone	22.1		5.0	3.3
124-48-1	Dibromochloromethane	10.5		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	11.8		1.0	0.50
108-90-7	Chlorobenzene	10.0		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.94		1.0	0.57
100-41-4	Ethylbenzene	10.5		1.0	0.51
1330-20-7	Xylenes, Total	20.3		2.0	0.89
100-42-5	Styrene	10.5		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-302285/3

Matrix: Water Lab File ID: 10122303.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/23/2019 09:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302285 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	11.1		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	11.5		1.0	0.60
107-13-1	Acrylonitrile	124		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-150
2037-26-5	Toluene-d8 (Surr)	99		78-128
460-00-4	4-Bromofluorobenzene (Surr)	104		64-123
1868-53-7	Dibromofluoromethane (Surr)	98		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122303.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 23-Dec-2019 09:20:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030123-003
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 24-Dec-2019 07:11:12 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0309

First Level Reviewer: journetp Date: 23-Dec-2019 12:14:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.998	3.993	0.005	0	79054	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.004	7.004	0.000	99	272249	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	83	67229	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	93	109867	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.275	0.000	93	67037	50.0	49.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.645	6.645	0.000	0	59358	50.0	50.2	
$ 7 Toluene-d8 (Surr)	98	8.675	8.675	0.000	92	266768	50.0	49.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.321	11.322	-0.001	93	92742	50.0	52.2	
10 Dichlorodifluoromethane	85	1.504	1.510	-0.006	98	117130	50.0	48.3	
11 Chloromethane	50	1.699	1.687	0.012	99	84130	50.0	47.0	
13 Butadiene	39	1.793	1.793	0.000	88	75431	50.0	51.0	
12 Vinyl chloride	62	1.810	1.805	0.005	98	87640	50.0	49.4	
14 Bromomethane	94	2.063	2.063	0.000	92	43082	50.0	42.6	
15 Chloroethane	64	2.169	2.169	0.000	99	29618	50.0	36.5	
16 Trichlorofluoromethane	101	2.446	2.428	0.018	97	136586	50.0	43.2	
17 Dichlorofluoromethane	67	2.440	2.440	0.000	97	111402	50.0	43.9	
18 Ethyl ether	59	2.798	2.799	-0.001	89	45373	50.0	53.1	
20 1,1-Dichloroethene	96	3.045	3.046	-0.001	98	74699	50.0	50.0	
21 1,1,2-Trichloro-1,2,2-trif	101	3.104	3.110	-0.006	90	82759	50.0	49.0	
22 Acetone	43	3.169	3.169	0.000	100	30379	100.0	99.9	
23 Iodomethane	142	3.216	3.222	-0.006	99	135079	50.0	49.0	
24 Carbon disulfide	76	3.310	3.316	-0.006	99	212428	50.0	48.9	
26 3-Chloro-1-propene	76	3.569	3.581	-0.012	90	39540	50.0	50.1	
28 Methyl acetate	43	3.622	3.616	0.006	97	47269	100.0	120.4	
29 Methylene Chloride	84	3.781	3.787	-0.006	90	72855	50.0	50.8	
32 2-Methyl-2-propanol	59	4.128	4.128	0.000	98	50201	500.0	538.1	
31 Acrylonitrile	53	4.198	4.199	0.000	98	126168	500.0	618.3	
30 trans-1,2-Dichloroethene	96	4.204	4.204	0.000	98	80649	50.0	52.2	
33 Methyl tert-butyl ether	73	4.240	4.251	-0.011	93	147166	50.0	55.1	
34 Hexane	57	4.640	4.646	-0.006	90	124241	50.0	51.2	
36 1,1-Dichloroethane	63	4.869	4.875	-0.006	96	127629	50.0	50.3	
42 2,2-Dichloropropane	97	5.639	5.634	0.005	89	18768	50.0	50.5	

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	5.639	5.645	-0.006	82	78393	50.0	50.0	
43 2-Butanone (MEK)	43	5.675	5.681	-0.006	99	32646	100.0	109.0	
46 Chlorobromomethane	128	5.939	5.945	-0.006	89	35554	50.0	50.8	
48 Tetrahydrofuran	42	5.969	5.975	-0.006	87	19459	100.0	107.2	
49 Chloroform	83	6.098	6.087	0.011	93	132790	50.0	48.3	
50 1,1,1-Trichloroethane	97	6.245	6.240	0.005	97	124924	50.0	46.6	
52 Cyclohexane	56	6.304	6.304	0.000	89	143292	50.0	47.1	
53 Carbon tetrachloride	117	6.416	6.416	0.000	96	122994	50.0	45.6	
54 1,1-Dichloropropene	75	6.434	6.440	-0.006	96	101519	50.0	46.6	
55 Benzene	78	6.651	6.651	0.000	97	274462	50.0	49.4	
51 Isobutyl alcohol	41	6.698	6.692	0.006	92	33135	1250.0	1532.0	
56 1,2-Dichloroethane	62	6.739	6.734	0.005	98	77914	50.0	51.4	
59 n-Heptane	43	7.028	7.028	0.000	89	103547	50.0	46.2	
60 Trichloroethene	130	7.404	7.398	0.006	95	96079	50.0	49.0	
63 Methylcyclohexane	83	7.633	7.634	-0.001	86	152964	50.0	48.4	
64 1,2-Dichloropropane	63	7.669	7.675	-0.006	95	61012	50.0	49.3	
65 Dibromomethane	93	7.769	7.769	0.000	92	28547	50.0	54.0	
67 1,4-Dioxane	88	7.775	7.775	0.000	37	6657	1000.0	1228.3	
68 Dichlorobromomethane	83	7.963	7.963	0.000	99	85204	50.0	50.2	
71 cis-1,3-Dichloropropene	75	8.416	8.416	0.000	95	87161	50.0	56.0	
72 4-Methyl-2-pentanone (MIBK	43	8.580	8.575	0.005	93	64320	100.0	113.3	
73 Toluene	91	8.745	8.739	0.006	98	312391	50.0	49.2	
74 trans-1,3-Dichloropropene	75	9.004	9.010	-0.006	91	69072	50.0	58.9	
75 Ethyl methacrylate	69	9.075	9.075	-0.001	90	51213	50.0	56.2	
76 1,1,2-Trichloroethane	97	9.186	9.192	-0.006	90	47486	50.0	55.0	
77 Tetrachloroethene	164	9.257	9.257	0.000	96	81261	50.0	49.3	
78 1,3-Dichloropropane	76	9.351	9.345	0.006	92	72370	50.0	55.8	
79 2-Hexanone	43	9.422	9.428	-0.006	94	51007	100.0	110.5	
81 Chlorodibromomethane	129	9.557	9.563	-0.006	91	65312	50.0	52.7	
82 Ethylene Dibromide	107	9.669	9.675	-0.006	97	42955	50.0	58.8	
83 Chlorobenzene	112	10.157	10.163	-0.006	98	220328	50.0	50.0	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.257	-0.006	95	84969	50.0	49.7	
85 Ethylbenzene	106	10.263	10.263	0.000	97	129279	50.0	52.3	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	153795	50.0	49.0	
88 o-Xylene	106	10.774	10.775	-0.001	95	158449	50.0	52.3	
89 Styrene	104	10.798	10.798	0.000	95	235111	50.0	52.4	
90 Bromoform	173	10.980	10.980	0.000	97	34585	50.0	55.5	
91 Isopropylbenzene	105	11.145	11.145	0.000	95	418957	50.0	48.8	
94 Bromobenzene	156	11.457	11.457	0.000	85	94157	50.0	52.4	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	96	52807	50.0	57.7	
95 1,2,3-Trichloropropane	110	11.516	11.510	0.006	86	18483	50.0	57.0	
96 trans-1,4-Dichloro-2-buten	53	11.510	11.510	0.000	68	9996	50.0	51.2	
97 N-Propylbenzene	120	11.563	11.557	0.006	98	128174	50.0	49.2	
98 2-Chlorotoluene	126	11.645	11.639	0.006	98	103533	50.0	48.5	
99 1,3,5-Trimethylbenzene	105	11.745	11.739	0.006	96	363511	50.0	48.8	
100 4-Chlorotoluene	126	11.774	11.769	0.005	96	102961	50.0	48.1	
101 tert-Butylbenzene	119	12.051	12.051	0.000	90	348353	50.0	48.2	
103 1,2,4-Trimethylbenzene	105	12.115	12.116	-0.001	95	346468	50.0	48.3	
104 sec-Butylbenzene	105	12.274	12.280	-0.006	93	469880	50.0	47.8	
105 1,3-Dichlorobenzene	146	12.398	12.398	0.000	97	192533	50.0	50.6	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	442928	50.0	48.2	
107 1,4-Dichlorobenzene	146	12.498	12.504	-0.006	96	198686	50.0	50.3	

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	97	322996	50.0	50.5	
111 1,2-Dichlorobenzene	146	12.851	12.857	-0.006	98	180311	50.0	53.1	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	90	9070	50.0	64.1	
114 1,2,4-Trichlorobenzene	180	14.462	14.463	-0.001	93	83310	50.0	65.8	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	98	67283	50.0	56.4	
116 Naphthalene	128	14.727	14.727	0.000	96	131325	50.0	66.1	
117 1,2,3-Trichlorobenzene	180	14.945	14.939	0.006	95	65170	50.0	65.6	
S 129 Xylenes, Total	106				0		100.0	101.3	
S 130 1,2-Dichloroethene, Total	96				0		100.0	102.1	
S 131 1,3-Dichloropropene, Total	1				0		100.0	114.9	
S 145 Total BTEX	1				0		250.0	252.1	

Reagents:

voaWKet2ndRes_00046	Amount Added:	2.00	Units: uL		
VOA8260VOA2ND_00383	Amount Added:	2.00	Units: uL		
VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent	

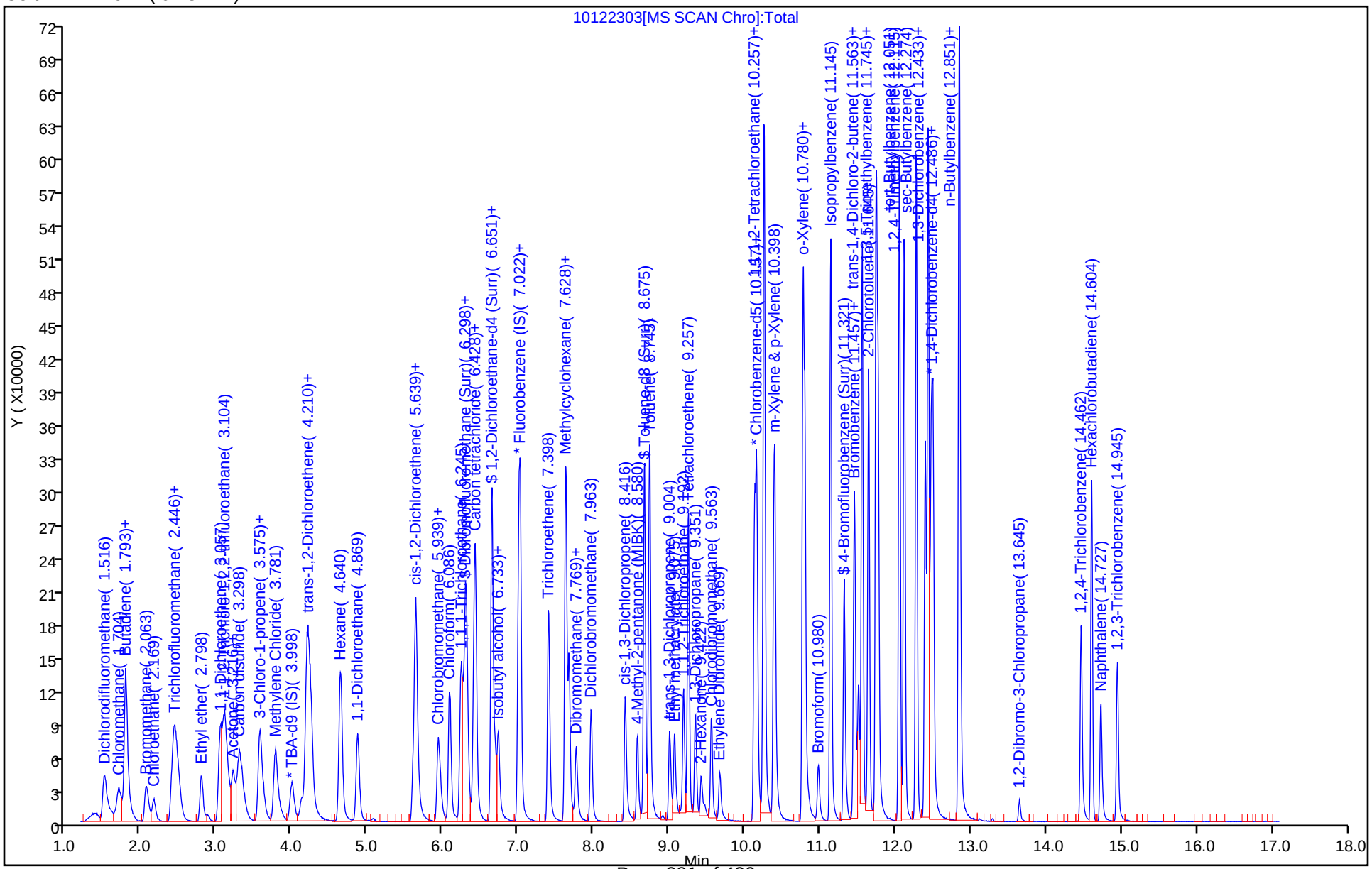
Report Date: 24-Dec-2019 07:17:48 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\10122303.d

Injection Date:	23-Dec-2019 09:20:30	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\20191223-30123.b\10122303.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 23-Dec-2019 09:20:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030123-003
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191223-30123.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 24-Dec-2019 07:11:12 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0309

First Level Reviewer: journetp Date: 23-Dec-2019 12:14:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.2	98.43
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.2	100.42
$ 7 Toluene-d8 (Surr)	50.0	49.3	98.57
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.2	104.37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-302393/12

Matrix: Water Lab File ID: 10122412.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 11:46

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	8.02		1.0	0.90
75-01-4	Vinyl chloride	8.73		1.0	0.88
74-83-9	Bromomethane	10.3		1.0	0.89
75-00-3	Chloroethane	10.7		1.0	0.90
75-35-4	1,1-Dichloroethene	9.04		1.0	0.55
67-64-1	Acetone	12.7		5.0	3.4
75-15-0	Carbon disulfide	8.63		1.0	0.88
75-09-2	Methylene Chloride	8.79		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	8.70		1.0	0.67
1634-04-4	Methyl tert-butyl ether	10.0		1.0	0.59
75-34-3	1,1-Dichloroethane	9.02		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	8.93		1.0	0.71
74-97-5	Bromochloromethane	9.59		1.0	0.63
78-93-3	2-Butanone (MEK)	16.3		5.0	2.6
67-66-3	Chloroform	9.34		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.13		1.0	0.60
56-23-5	Carbon tetrachloride	9.18		1.0	0.88
71-43-2	Benzene	8.54		1.0	0.60
107-06-2	1,2-Dichloroethane	10.0		1.0	0.57
79-01-6	Trichloroethene	8.42		1.0	0.69
78-87-5	1,2-Dichloropropane	8.49		1.0	0.66
75-27-4	Bromodichloromethane	9.14		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	9.22		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	19.3		5.0	3.1
108-88-3	Toluene	8.32		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	9.87		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.11		1.0	0.45
127-18-4	Tetrachloroethene	8.16		1.0	0.47
591-78-6	2-Hexanone	16.1		5.0	3.3
124-48-1	Dibromochloromethane	9.11		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.45		1.0	0.50
108-90-7	Chlorobenzene	8.33		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.22		1.0	0.57
100-41-4	Ethylbenzene	8.69		1.0	0.51
1330-20-7	Xylenes, Total	16.7		2.0	0.89
100-42-5	Styrene	8.26		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-302393/12

Matrix: Water Lab File ID: 10122412.d

Analysis Method: EPA 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 11:46

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 302393 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.68		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	9.68		1.0	0.60
107-13-1	Acrylonitrile	102		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-150
2037-26-5	Toluene-d8 (Surr)	93		78-128
460-00-4	4-Bromofluorobenzene (Surr)	88		64-123
1868-53-7	Dibromofluoromethane (Surr)	102		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122412.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 24-Dec-2019 11:46:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-012
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:28:23 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 24-Dec-2019 13:03:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.963	3.957	0.006	0	52480	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	225651	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	84	58420	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.480	12.474	0.006	93	89884	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	93	57406	50.0	50.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	49500	50.0	50.5	
$ 7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	93	217770	50.0	46.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.321	11.322	-0.001	96	67964	50.0	44.0	
10 Dichlorodifluoromethane	85	1.522	1.522	0.000	99	92623	50.0	46.1	
11 Chloromethane	50	1.710	1.716	-0.006	98	59515	50.0	40.1	
13 Butadiene	39	1.804	1.799	0.005	90	53190	50.0	43.4	
12 Vinyl chloride	62	1.822	1.816	0.006	95	64176	50.0	43.7	
14 Bromomethane	94	2.110	2.075	0.035	92	43237	50.0	51.6	
15 Chloroethane	64	2.216	2.199	0.017	100	35907	50.0	53.4	
17 Dichlorofluoromethane	67	2.463	2.457	0.006	97	94938	50.0	45.1	
16 Trichlorofluoromethane	101	2.493	2.487	0.006	97	124207	50.0	47.4	
18 Ethyl ether	59	2.810	2.804	0.006	90	37315	50.0	52.7	
20 1,1-Dichloroethene	96	3.081	3.063	0.018	97	56053	50.0	45.2	
21 1,1,2-Trichloro-1,2,2-trif	101	3.151	3.146	0.005	93	63640	50.0	45.5	
22 Acetone	43	3.169	3.175	-0.006	100	16022	100.0	63.6	a
23 Iodomethane	142	3.246	3.234	0.012	99	107285	50.0	46.9	
24 Carbon disulfide	76	3.334	3.328	0.006	99	155399	50.0	43.1	
26 3-Chloro-1-propene	76	3.598	3.599	0.000	89	30160	50.0	46.1	
28 Methyl acetate	43	3.628	3.622	0.006	97	34675	100.0	106.6	
29 Methylene Chloride	84	3.798	3.793	0.005	91	52930	50.0	44.0	
32 2-Methyl-2-propanol	59	4.093	4.093	0.000	96	25332	500.0	409.0	
31 Acrylonitrile	53	4.210	4.193	0.017	99	86055	500.0	508.8	
30 trans-1,2-Dichloroethene	96	4.228	4.228	0.000	99	55726	50.0	43.5	
33 Methyl tert-butyl ether	73	4.251	4.246	0.005	95	110779	50.0	50.1	
34 Hexane	57	4.663	4.651	0.012	91	87320	50.0	43.4	
36 1,1-Dichloroethane	63	4.881	4.881	0.000	97	94742	50.0	45.1	
42 2,2-Dichloropropane	97	5.645	5.640	0.005	93	13864	50.0	45.0	

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	5.663	5.645	0.018	82	58036	50.0	44.6	
43 2-Butanone (MEK)	43	5.675	5.681	-0.006	100	20175	100.0	81.3	
46 Chlorobromomethane	128	5.945	5.940	0.005	87	27815	50.0	48.0	
48 Tetrahydrofuran	42	5.969	5.975	-0.006	83	12739	100.0	85.8	
49 Chloroform	83	6.098	6.092	0.006	93	106774	50.0	46.7	
50 1,1,1-Trichloroethane	97	6.245	6.245	0.000	98	101411	50.0	45.7	
52 Cyclohexane	56	6.316	6.322	-0.006	89	105436	50.0	41.8	
53 Carbon tetrachloride	117	6.422	6.422	0.000	96	102671	50.0	45.9	
54 1,1-Dichloropropene	75	6.445	6.440	0.005	95	78101	50.0	43.3	
55 Benzene	78	6.657	6.657	0.000	97	196837	50.0	42.7	
51 Isobutyl alcohol	41	6.692	6.692	0.000	93	19434	1250.0	1099.9	
56 1,2-Dichloroethane	62	6.745	6.739	0.006	98	63028	50.0	50.1	
59 n-Heptane	43	7.034	7.034	0.000	91	77285	50.0	41.6	
60 Trichloroethene	130	7.404	7.398	0.006	95	68469	50.0	42.1	
63 Methylcyclohexane	83	7.633	7.634	-0.001	86	115306	50.0	44.0	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	89	43516	50.0	42.4	a
65 Dibromomethane	93	7.775	7.775	0.000	92	21505	50.0	49.1	
67 1,4-Dioxane	88	7.781	7.775	0.006	38	3838	1000.0	870.7	
68 Dichlorobromomethane	83	7.969	7.969	0.000	99	64230	50.0	45.7	
71 cis-1,3-Dichloropropene	75	8.422	8.416	0.006	93	59463	50.0	46.1	
72 4-Methyl-2-pentanone (MIBK	43	8.580	8.581	-0.001	94	47624	100.0	96.5	
73 Toluene	91	8.745	8.739	0.006	98	229802	50.0	41.6	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	92	50298	50.0	49.4	
75 Ethyl methacrylate	69	9.075	9.069	0.006	89	39041	50.0	49.6	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	92	34146	50.0	45.5	
77 Tetrachloroethene	164	9.257	9.257	0.000	97	58454	50.0	40.8	
78 1,3-Dichloropropane	76	9.351	9.357	-0.006	90	51747	50.0	45.9	
79 2-Hexanone	43	9.427	9.428	-0.001	94	30442	100.0	80.3	
81 Chlorodibromomethane	129	9.563	9.563	0.000	89	49039	50.0	45.6	
82 Ethylene Dibromide	107	9.675	9.675	0.000	98	29980	50.0	47.2	
83 Chlorobenzene	112	10.163	10.163	0.000	98	159410	50.0	41.7	
84 1,1,1,2-Tetrachloroethane	131	10.257	10.251	0.006	93	68491	50.0	46.1	
85 Ethylbenzene	106	10.263	10.263	0.000	98	93295	50.0	43.4	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	114467	50.0	42.0	
88 o-Xylene	106	10.774	10.775	0.000	95	109946	50.0	41.8	
89 Styrene	104	10.798	10.798	0.000	94	161098	50.0	41.3	
90 Bromoform	173	10.980	10.986	-0.006	97	26229	50.0	48.4	
91 Isopropylbenzene	105	11.145	11.145	0.000	95	308655	50.0	41.4	
94 Bromobenzene	156	11.457	11.457	0.000	85	67088	50.0	45.6	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	96	38457	50.0	48.4	
96 trans-1,4-Dichloro-2-buten	53	11.516	11.504	0.012	67	7125	50.0	45.1	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	85	13769	50.0	51.9	
97 N-Propylbenzene	120	11.557	11.563	-0.006	98	92834	50.0	43.6	
98 2-Chlorotoluene	126	11.645	11.645	0.000	98	77005	50.0	44.1	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	96	263112	50.0	43.1	
100 4-Chlorotoluene	126	11.769	11.774	-0.006	96	71601	50.0	40.9	
101 tert-Butylbenzene	119	12.057	12.057	0.000	90	261602	50.0	44.2	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	96	249651	50.0	42.6	
104 sec-Butylbenzene	105	12.274	12.280	-0.006	93	339047	50.0	42.1	
105 1,3-Dichlorobenzene	146	12.398	12.392	0.006	97	134937	50.0	43.3	
106 4-Isopropyltoluene	119	12.439	12.433	0.006	97	323648	50.0	43.0	
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	97	142098	50.0	44.0	

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	97	212553	50.0	40.6	
111 1,2-Dichlorobenzene	146	12.857	12.857	0.000	99	123775	50.0	44.5	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	89	5774	50.0	50.9	
114 1,2,4-Trichlorobenzene	180	14.468	14.463	0.006	96	42865	50.0	41.4	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	97	40954	50.0	42.0	
116 Naphthalene	128	14.727	14.727	0.000	96	74867	50.0	48.8	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	96	35658	50.0	43.9	
S 130 1,2-Dichloroethene, Total	96				0		100.0	88.1	
S 129 Xylenes, Total	106				0		100.0	83.7	
S 131 1,3-Dichloropropene, Total	1				0		100.0	95.5	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VOA8260VOAPRI_00384	Amount Added:	2.00	Units: uL	
voaWKet2ndRes_00046	Amount Added:	2.00	Units: uL	
VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent

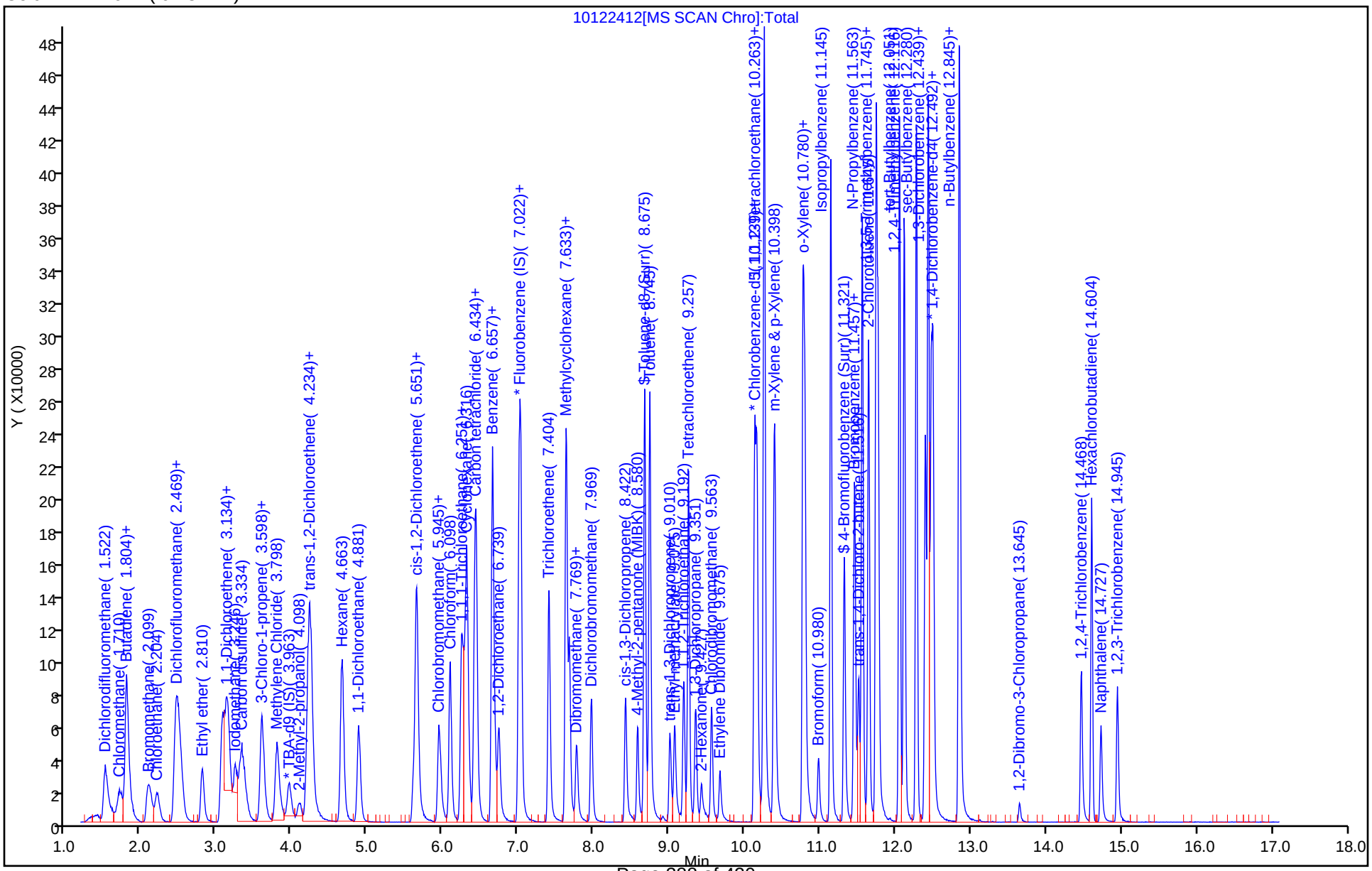
Report Date: 26-Dec-2019 10:54:29 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122412.d

Injection Date:	24-Dec-2019 11:46:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	lcs			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\20191224-30134.b\10122412.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 24-Dec-2019 11:46:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-012
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:28:23 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 24-Dec-2019 13:03:54

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.8	101.69
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.5	101.04
$ 7 Toluene-d8 (Surr)	50.0	46.3	92.60
$ 8 4-Bromofluorobenzene (Surr)	50.0	44.0	88.01

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

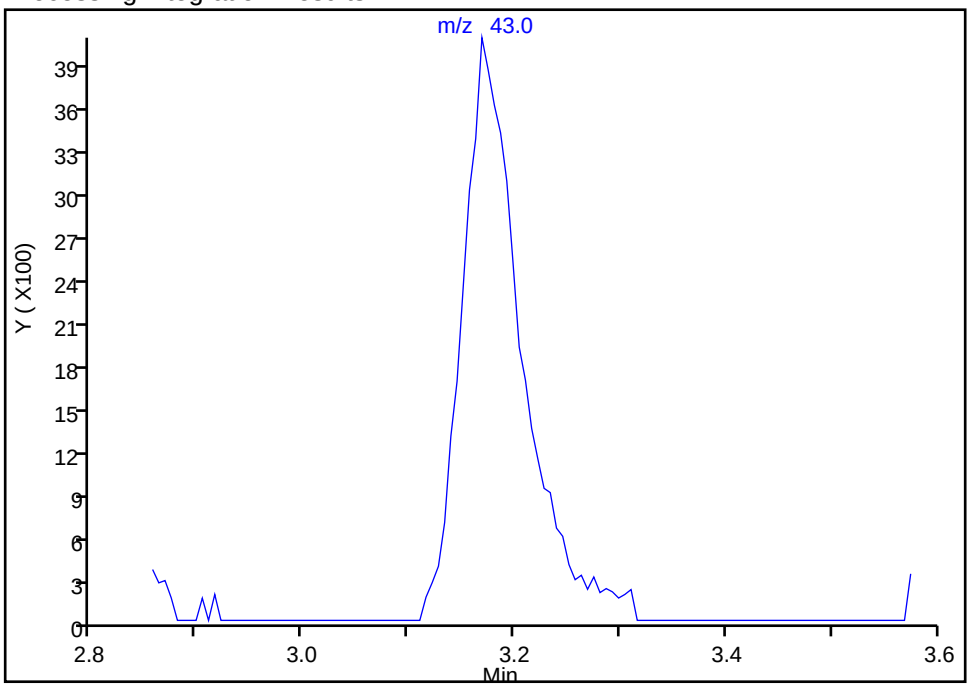
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122412.d
Injection Date: 24-Dec-2019 11:46:30 Instrument ID: CHHP10
Lims ID: lcs
Client ID:
Operator ID: 034635 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

22 Acetone, CAS: 67-64-1

Signal: 1

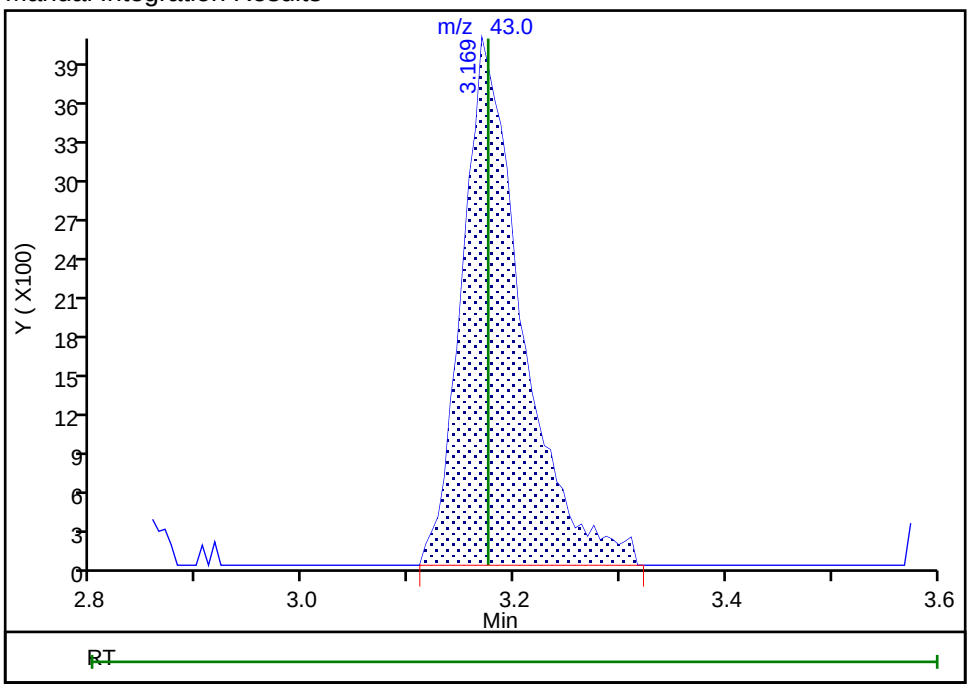
Not Detected
Expected RT: 3.18

Processing Integration Results



Manual Integration Results

RT: 3.17
Area: 16022
Amount: 63.592462
Amount Units: ng



Reviewer: journetp, 24-Dec-2019 13:02:54
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

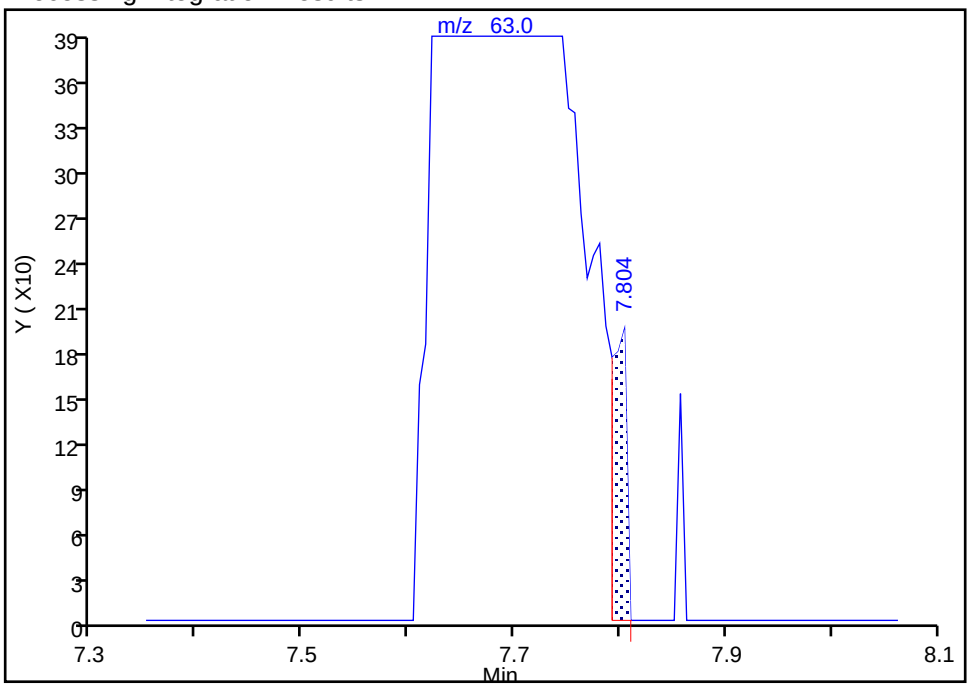
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122412.d
Injection Date: 24-Dec-2019 11:46:30 Instrument ID: CHHP10
Lims ID: lcs
Client ID:
Operator ID: 034635 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

64 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

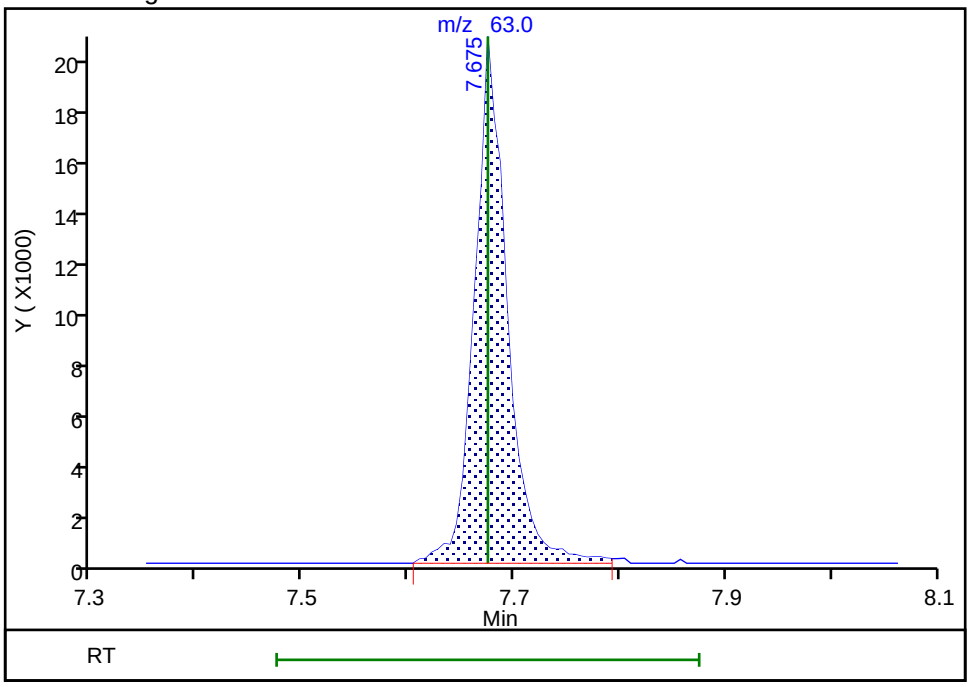
Processing Integration Results

RT: 7.80
Area: 193
Amount: 0.188175
Amount Units: ng



Manual Integration Results

RT: 7.67
Area: 43516
Amount: 42.427988
Amount Units: ng



Reviewer: journetp, 24-Dec-2019 13:03:40
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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 MS Lab Sample ID: 180-100176-2 MS

Matrix: Water Lab File ID: 10122410.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 13:37

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 10:52

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.: 302393 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	7.22		1.0	0.90
75-01-4	Vinyl chloride	8.02		1.0	0.88
74-83-9	Bromomethane	10.0		1.0	0.89
75-00-3	Chloroethane	9.83		1.0	0.90
75-35-4	1,1-Dichloroethene	8.60		1.0	0.55
67-64-1	Acetone	15.8		5.0	3.4
75-15-0	Carbon disulfide	8.39		1.0	0.88
75-09-2	Methylene Chloride	8.67		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	8.64		1.0	0.67
1634-04-4	Methyl tert-butyl ether	10.0		1.0	0.59
75-34-3	1,1-Dichloroethane	8.41		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	8.65		1.0	0.71
74-97-5	Bromochloromethane	9.59		1.0	0.63
78-93-3	2-Butanone (MEK)	18.4		5.0	2.6
67-66-3	Chloroform	9.57		1.0	0.60
71-55-6	1,1,1-Trichloroethane	8.95		1.0	0.60
56-23-5	Carbon tetrachloride	9.10		1.0	0.88
71-43-2	Benzene	8.08		1.0	0.60
107-06-2	1,2-Dichloroethane	10.3		1.0	0.57
79-01-6	Trichloroethene	8.82		1.0	0.69
78-87-5	1,2-Dichloropropane	7.94		1.0	0.66
75-27-4	Bromodichloromethane	9.46		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)	20.8		5.0	3.1
108-88-3	Toluene	8.14		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	9.51		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.19		1.0	0.45
127-18-4	Tetrachloroethene	8.08		1.0	0.47
591-78-6	2-Hexanone	16.8		5.0	3.3
124-48-1	Dibromochloromethane	9.78		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.49		1.0	0.50
108-90-7	Chlorobenzene	8.33		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	8.91		1.0	0.57
100-41-4	Ethylbenzene	8.10		1.0	0.51
1330-20-7	Xylenes, Total	16.4		2.0	0.89
100-42-5	Styrene	8.64		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 MS Lab Sample ID: 180-100176-2 MS

Matrix: Water Lab File ID: 10122410.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 13:37

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 10:52

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.: 302393 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.5		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	9.96		1.0	0.60
107-13-1	Acrylonitrile	106		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		70-150
2037-26-5	Toluene-d8 (Surr)	92		78-128
460-00-4	4-Bromofluorobenzene (Surr)	94		64-123
1868-53-7	Dibromofluoromethane (Surr)	106		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122410.d
Lims ID: 180-100176-A-2 MS
Client ID:
Sample Type: MS
Inject. Date: 24-Dec-2019 10:52:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-010
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:06:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.963	3.957	0.006	0	56766	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	207539	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	83	54165	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	93	90440	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.275	6.281	-0.006	93	54954	50.0	52.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.651	6.651	0.000	0	52927	50.0	58.7	
$ 7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	94	200046	50.0	45.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.322	0.000	93	67174	50.0	46.9	
10 Dichlorodifluoromethane	85	1.516	1.522	-0.006	99	87368	50.0	47.3	
11 Chloromethane	50	1.705	1.716	-0.011	99	49283	50.0	36.1	
13 Butadiene	39	1.799	1.799	0.000	88	44344	50.0	39.3	
12 Vinyl chloride	62	1.816	1.816	0.000	98	54227	50.0	40.1	
14 Bromomethane	94	2.093	2.075	0.018	92	38649	50.0	50.1	
15 Chloroethane	64	2.199	2.199	0.000	99	30380	50.0	49.1	
17 Dichlorofluoromethane	67	2.469	2.457	0.012	97	85524	50.0	44.2	
16 Trichlorofluoromethane	101	2.475	2.487	-0.012	98	113660	50.0	47.1	
18 Ethyl ether	59	2.810	2.804	0.006	91	32731	50.0	50.2	
20 1,1-Dichloroethene	96	3.069	3.063	0.006	95	49025	50.0	43.0	
21 1,1,2-Trichloro-1,2,2-trif	101	3.122	3.146	-0.024	89	55886	50.0	43.4	
22 Acetone	43	3.169	3.175	-0.006	100	18330	100.0	79.1	
23 Iodomethane	142	3.252	3.234	0.018	100	96369	50.0	45.8	
24 Carbon disulfide	76	3.328	3.328	0.000	98	139040	50.0	42.0	a
26 3-Chloro-1-propene	76	3.593	3.599	-0.005	88	26308	50.0	43.7	
28 Methyl acetate	43	3.634	3.622	0.012	99	32308	100.0	108.0	a
29 Methylene Chloride	84	3.799	3.793	0.006	91	48049	50.0	43.3	
32 2-Methyl-2-propanol	59	4.099	4.093	0.006	95	27563	500.0	411.5	
31 Acrylonitrile	53	4.199	4.193	0.005	99	82354	500.0	529.4	
30 trans-1,2-Dichloroethene	96	4.234	4.228	0.006	98	50898	50.0	43.2	
33 Methyl tert-butyl ether	73	4.251	4.246	0.005	96	102265	50.0	50.2	
34 Hexane	57	4.657	4.651	0.006	90	72357	50.0	39.1	
36 1,1-Dichloroethane	63	4.875	4.881	-0.006	97	81294	50.0	42.1	
42 2,2-Dichloropropane	97	5.645	5.640	0.005	89	13001	50.0	45.9	

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	5.657	5.645	0.012	84	51711	50.0	43.2	
43 2-Butanone (MEK)	43	5.693	5.681	0.012	96	21011	100.0	92.0	a
46 Chlorobromomethane	128	5.945	5.940	0.005	86	25587	50.0	48.0	
48 Tetrahydrofuran	42	5.975	5.975	0.000	83	12372	100.0	90.3	
49 Chloroform	83	6.098	6.092	0.006	92	100480	50.0	47.9	
50 1,1,1-Trichloroethane	97	6.245	6.245	0.000	98	91392	50.0	44.7	
52 Cyclohexane	56	6.316	6.322	-0.006	90	90798	50.0	39.2	
53 Carbon tetrachloride	117	6.422	6.422	0.000	97	93680	50.0	45.5	
54 1,1-Dichloropropene	75	6.440	6.440	0.000	94	69140	50.0	41.6	
55 Benzene	78	6.657	6.657	0.000	97	171220	50.0	40.4	
51 Isobutyl alcohol	41	6.692	6.692	0.000	93	21965	1250.0	1337.1	
56 1,2-Dichloroethane	62	6.740	6.739	0.001	98	59767	50.0	51.7	
59 n-Heptane	43	7.034	7.034	0.000	86	66016	50.0	38.7	
60 Trichloroethene	130	7.404	7.398	0.006	93	65966	50.0	44.1	
63 Methylcyclohexane	83	7.634	7.634	0.000	89	98542	50.0	40.9	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	87	37471	50.0	39.7	
65 Dibromomethane	93	7.769	7.775	-0.006	91	19944	50.0	49.5	
67 1,4-Dioxane	88	7.775	7.775	0.000	37	4196	1000.0	1024.9	
68 Dichlorobromomethane	83	7.969	7.969	0.000	99	61191	50.0	47.3	
71 cis-1,3-Dichloropropene	75	8.422	8.416	0.006	96	56642	50.0	47.8	
72 4-Methyl-2-pentanone (MIBK	43	8.581	8.581	0.000	94	47560	100.0	104.0	
73 Toluene	91	8.739	8.739	0.000	98	208342	50.0	40.7	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	93	44915	50.0	47.5	
75 Ethyl methacrylate	69	9.075	9.069	0.006	90	35829	50.0	49.1	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	92	31956	50.0	46.0	
77 Tetrachloroethene	164	9.257	9.257	0.000	97	53675	50.0	40.4	
78 1,3-Dichloropropane	76	9.351	9.357	-0.006	91	49524	50.0	47.4	
79 2-Hexanone	43	9.428	9.428	0.000	96	29858	100.0	84.1	
81 Chlorodibromomethane	129	9.557	9.563	-0.006	89	48807	50.0	48.9	
82 Ethylene Dibromide	107	9.675	9.675	0.000	100	27919	50.0	47.4	
83 Chlorobenzene	112	10.163	10.163	0.000	98	147835	50.0	41.7	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.251	0.000	94	61371	50.0	44.5	
85 Ethylbenzene	106	10.263	10.263	0.000	98	80673	50.0	40.5	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	102568	50.0	40.6	
88 o-Xylene	106	10.775	10.775	0.001	98	101604	50.0	41.6	
89 Styrene	104	10.798	10.798	0.000	95	156110	50.0	43.2	
90 Bromoform	173	10.980	10.986	-0.006	97	26256	50.0	52.3	
91 Isopropylbenzene	105	11.145	11.145	0.000	95	290830	50.0	42.1	
94 Bromobenzene	156	11.457	11.457	0.000	88	63235	50.0	42.7	
93 1,1,2,2-Tetrachloroethane	83	11.463	11.463	0.000	96	36677	50.0	49.8	
96 trans-1,4-Dichloro-2-buten	53	11.510	11.504	0.006	74	6968	50.0	44.0	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	85	13703	50.0	51.3	
97 N-Propylbenzene	120	11.563	11.563	0.000	98	84072	50.0	39.2	
98 2-Chlorotoluene	126	11.645	11.645	0.000	97	68197	50.0	38.8	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	97	238071	50.0	38.8	
100 4-Chlorotoluene	126	11.769	11.774	-0.005	98	70441	50.0	39.9	
101 tert-Butylbenzene	119	12.051	12.057	-0.006	90	239543	50.0	40.3	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	97	234487	50.0	39.7	
104 sec-Butylbenzene	105	12.280	12.280	0.000	94	308949	50.0	38.1	
105 1,3-Dichlorobenzene	146	12.398	12.392	0.006	97	125654	50.0	40.1	
106 4-Isopropyltoluene	119	12.439	12.433	0.006	97	296658	50.0	39.2	
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	96	127194	50.0	39.1	

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	97	201195	50.0	38.2	
111 1,2-Dichlorobenzene	146	12.851	12.857	-0.006	98	115170	50.0	41.2	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	89	5372	50.0	47.5	
114 1,2,4-Trichlorobenzene	180	14.463	14.463	0.001	95	38109	50.0	36.6	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	96	35573	50.0	36.2	
116 Naphthalene	128	14.733	14.727	0.006	96	65634	50.0	43.5	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	97	33236	50.0	40.6	
S 130 1,2-Dichloroethene, Total	96				0		100.0	86.4	
S 129 Xylenes, Total	106				0		100.0	82.2	
S 131 1,3-Dichloropropene, Total	1				0		100.0	95.3	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VOA8260VOAPRI_00384	Amount Added:	2.00	Units: uL	
voaWKet2ndRes_00046	Amount Added:	2.00	Units: uL	
VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent

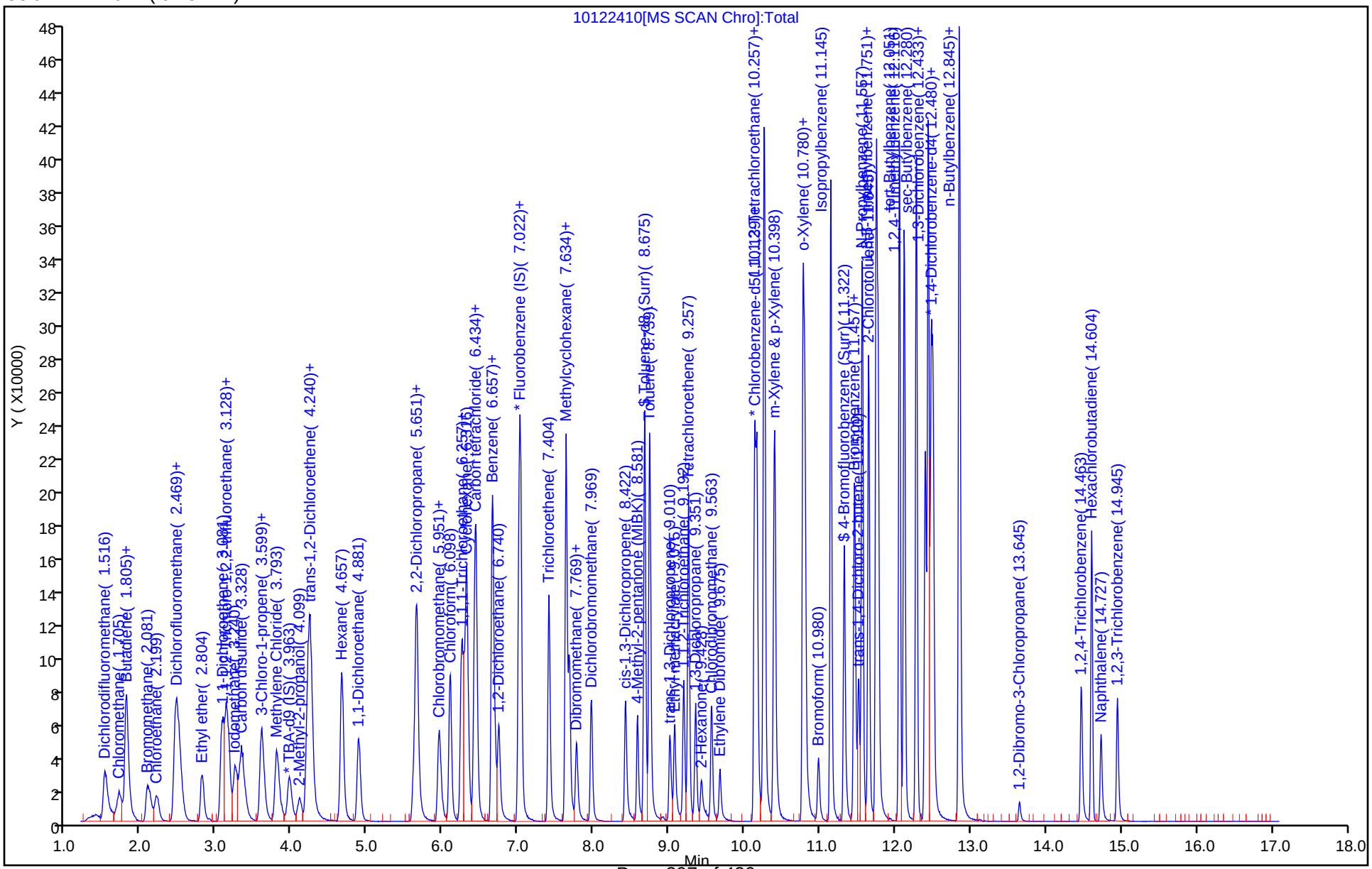
Report Date: 26-Dec-2019 10:28:01 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122410.d

Injection Date:	24-Dec-2019 10:52:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-A-2 MS			Worklist Smp#:	10
Client ID:					
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\20191224-30134.b\10122410.d
Lims ID: 180-100176-A-2 MS
Client ID:
Sample Type: MS
Inject. Date: 24-Dec-2019 10:52:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-010
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:06:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	52.9	105.84
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	58.7	117.46
$ 7 Toluene-d8 (Surr)	50.0	45.9	91.75
$ 8 4-Bromofluorobenzene (Surr)	50.0	46.9	93.83

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

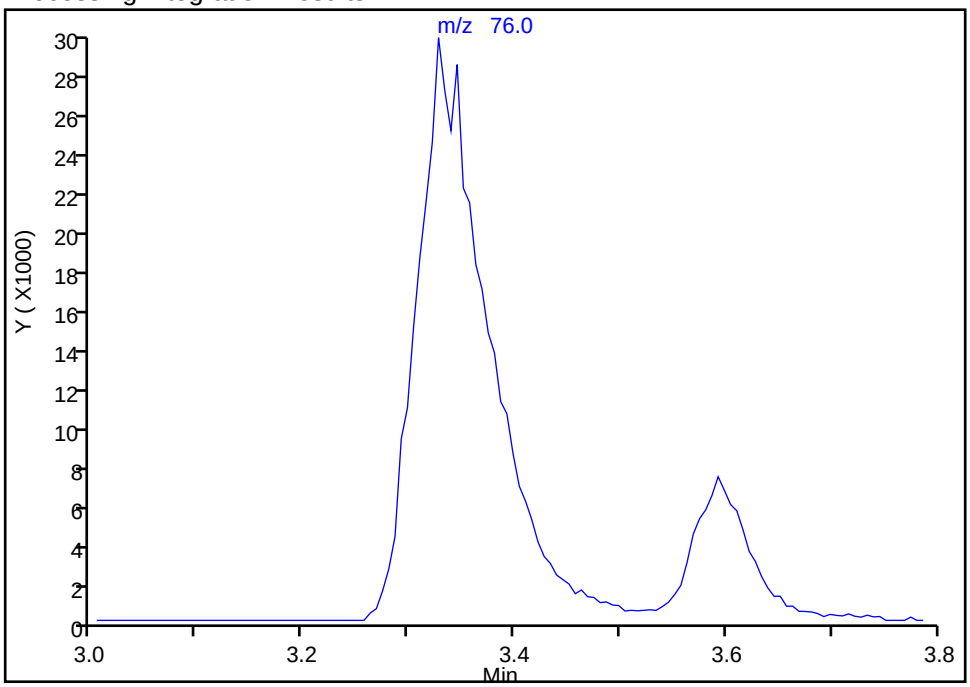
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122410.d
Injection Date: 24-Dec-2019 10:52:30 Instrument ID: CHHP10
Lims ID: 180-100176-A-2 MS
Client ID:
Operator ID: 034635 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

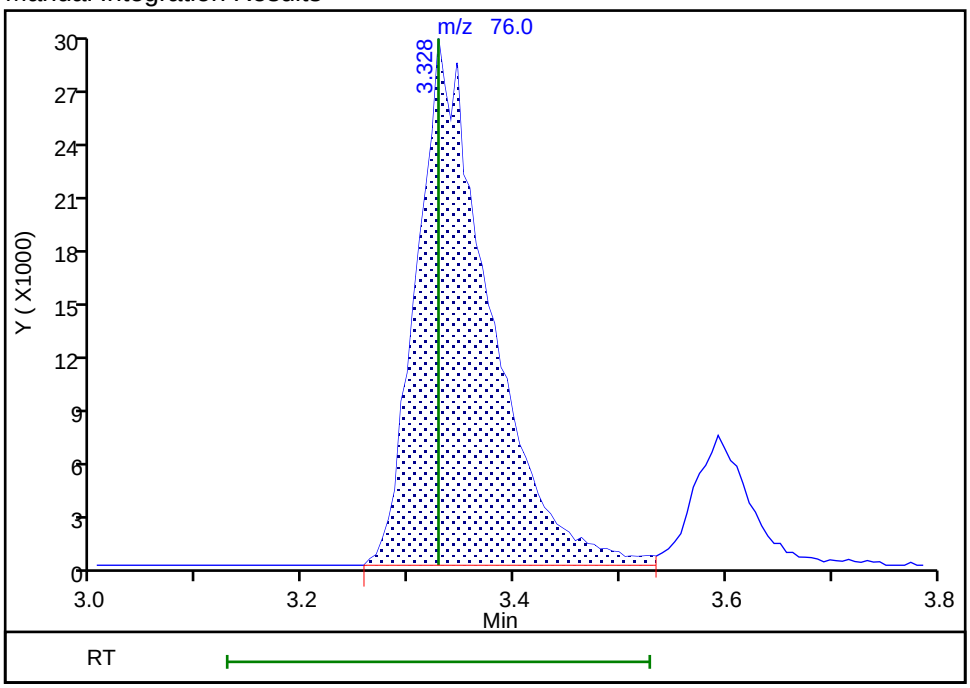
Not Detected
Expected RT: 3.33

Processing Integration Results



Manual Integration Results

RT: 3.33
Area: 139040
Amount: 41.973592
Amount Units: ng



Reviewer: journetp, 26-Dec-2019 10:06:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

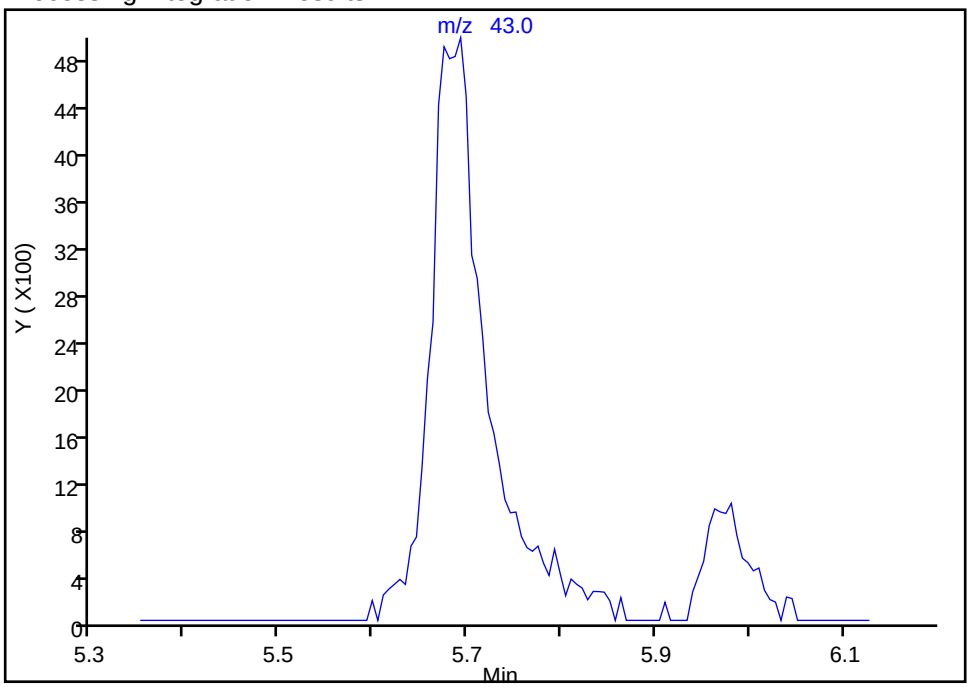
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122410.d
Injection Date: 24-Dec-2019 10:52:30 Instrument ID: CHHP10
Lims ID: 180-100176-A-2 MS
Client ID:
Operator ID: 034635 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

43 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

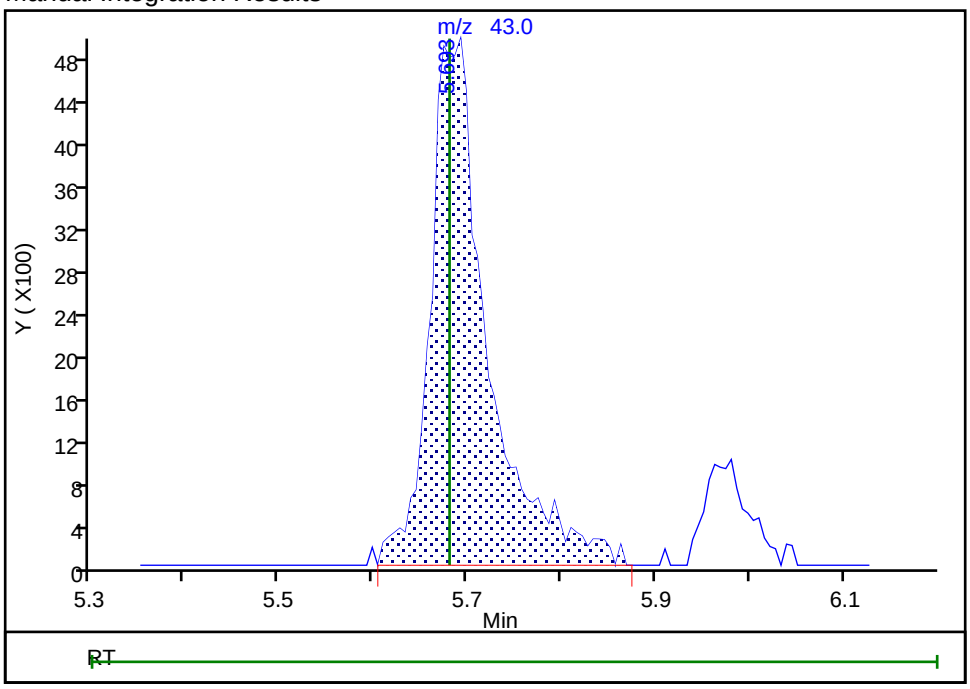
Not Detected
Expected RT: 5.68

Processing Integration Results



Manual Integration Results

RT: 5.69
Area: 21011
Amount: 92.033033
Amount Units: ng



Reviewer: journetp, 26-Dec-2019 10:06:31
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.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 MSD Lab Sample ID: 180-100176-2 MSD

Matrix: Water Lab File ID: 10122411.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 13:37

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 11:19

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.: 302393 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	7.82		1.0	0.90
75-01-4	Vinyl chloride	8.34		1.0	0.88
74-83-9	Bromomethane	10.4		1.0	0.89
75-00-3	Chloroethane	10.8		1.0	0.90
75-35-4	1,1-Dichloroethene	9.09		1.0	0.55
67-64-1	Acetone	13.6		5.0	3.4
75-15-0	Carbon disulfide	8.54		1.0	0.88
75-09-2	Methylene Chloride	8.66		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	8.57		1.0	0.67
1634-04-4	Methyl tert-butyl ether	10.1		1.0	0.59
75-34-3	1,1-Dichloroethane	8.90		1.0	0.63
156-59-2	cis-1,2-Dichloroethene	8.84		1.0	0.71
74-97-5	Bromochloromethane	9.77		1.0	0.63
78-93-3	2-Butanone (MEK)	18.0		5.0	2.6
67-66-3	Chloroform	9.33		1.0	0.60
71-55-6	1,1,1-Trichloroethane	9.26		1.0	0.60
56-23-5	Carbon tetrachloride	9.28		1.0	0.88
71-43-2	Benzene	8.58		1.0	0.60
107-06-2	1,2-Dichloroethane	10.3		1.0	0.57
79-01-6	Trichloroethene	8.61		1.0	0.69
78-87-5	1,2-Dichloropropane	8.46		1.0	0.66
75-27-4	Bromodichloromethane	9.37		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	9.27		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	22.5		5.0	3.1
108-88-3	Toluene	8.98		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	10.6		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.92		1.0	0.45
127-18-4	Tetrachloroethene	8.76		1.0	0.47
591-78-6	2-Hexanone	16.5		5.0	3.3
124-48-1	Dibromochloromethane	9.92		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	10.8		1.0	0.50
108-90-7	Chlorobenzene	8.91		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.43		1.0	0.57
100-41-4	Ethylbenzene	8.90		1.0	0.51
1330-20-7	Xylenes, Total	17.7		2.0	0.89
100-42-5	Styrene	8.96		1.0	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 MSD Lab Sample ID: 180-100176-2 MSD

Matrix: Water Lab File ID: 10122411.d

Analysis Method: EPA 8260C Date Collected: 12/18/2019 13:37

Sample wt/vol: 5(mL) Date Analyzed: 12/24/2019 11:19

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.: 302393 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.9		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	10.5		1.0	0.60
107-13-1	Acrylonitrile	108		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		70-150
2037-26-5	Toluene-d8 (Surr)	94		78-128
460-00-4	4-Bromofluorobenzene (Surr)	96		64-123
1868-53-7	Dibromofluoromethane (Surr)	98		75-147

Eurofins TestAmerica, Pittsburgh
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122411.d
Lims ID: 180-100176-A-2 MSD
Client ID:
Sample Type: MSD
Inject. Date: 24-Dec-2019 11:19:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-011
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:07:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.975	3.957	0.018	0	57353	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.010	7.010	0.000	99	230865	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.133	10.133	0.000	85	56160	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.474	12.474	0.000	93	95332	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.281	6.281	0.000	94	56885	50.0	49.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.657	6.651	0.006	0	55775	50.0	55.6	
$ 7 Toluene-d8 (Surr)	98	8.675	8.669	0.006	92	212283	50.0	46.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.322	11.322	0.000	94	71343	50.0	48.1	
10 Dichlorodifluoromethane	85	1.528	1.522	0.006	99	102625	50.0	49.9	
11 Chloromethane	50	1.710	1.716	-0.006	98	59306	50.0	39.1	M
13 Butadiene	39	1.799	1.799	0.000	89	53875	50.0	42.9	
12 Vinyl chloride	62	1.828	1.816	0.012	97	62725	50.0	41.7	
14 Bromomethane	94	2.087	2.075	0.012	92	44674	50.0	52.1	
15 Chloroethane	64	2.205	2.199	0.006	99	37115	50.0	54.0	
17 Dichlorofluoromethane	67	2.463	2.457	0.006	97	97745	50.0	45.4	
16 Trichlorofluoromethane	101	2.481	2.487	-0.006	97	129195	50.0	48.2	
18 Ethyl ether	59	2.799	2.804	-0.005	92	37648	50.0	51.9	
20 1,1-Dichloroethene	96	3.075	3.063	0.012	97	57634	50.0	45.4	
21 1,1,2-Trichloro-1,2,2-trif	101	3.134	3.146	-0.012	89	65259	50.0	45.6	
22 Acetone	43	3.169	3.175	-0.006	99	17465	100.0	67.8	a
23 Iodomethane	142	3.246	3.234	0.012	99	111161	50.0	47.5	
24 Carbon disulfide	76	3.328	3.328	0.000	100	157377	50.0	42.7	a
26 3-Chloro-1-propene	76	3.587	3.599	-0.011	89	29709	50.0	44.4	
28 Methyl acetate	43	3.628	3.622	0.006	97	36733	100.0	110.3	
29 Methylene Chloride	84	3.804	3.793	0.011	93	53382	50.0	43.3	
32 2-Methyl-2-propanol	59	4.099	4.093	0.006	97	30353	500.0	448.5	
31 Acrylonitrile	53	4.204	4.193	0.011	98	93372	500.0	539.6	
30 trans-1,2-Dichloroethene	96	4.228	4.228	0.000	98	56175	50.0	42.8	
33 Methyl tert-butyl ether	73	4.257	4.246	0.011	97	113980	50.0	50.3	
34 Hexane	57	4.657	4.651	0.006	90	87434	50.0	42.5	
36 1,1-Dichloroethane	63	4.881	4.881	0.000	97	95664	50.0	44.5	
42 2,2-Dichloropropane	97	5.640	5.640	0.000	89	14111	50.0	44.8	

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	5.645	0.006	82	58772	50.0	44.2	
43 2-Butanone (MEK)	43	5.687	5.681	0.006	99	22829	100.0	89.9	
46 Chlorobromomethane	128	5.945	5.940	0.005	85	28991	50.0	48.9	
48 Tetrahydrofuran	42	5.969	5.975	-0.006	84	14539	100.0	95.1	
49 Chloroform	83	6.098	6.092	0.006	93	109151	50.0	46.7	
50 1,1,1-Trichloroethane	97	6.251	6.245	0.006	97	105171	50.0	46.3	
52 Cyclohexane	56	6.316	6.322	-0.006	90	107082	50.0	41.5	
53 Carbon tetrachloride	117	6.422	6.422	0.000	96	106244	50.0	46.4	
54 1,1-Dichloropropene	75	6.434	6.440	-0.006	94	78283	50.0	42.4	
55 Benzene	78	6.657	6.657	0.000	97	202148	50.0	42.9	
51 Isobutyl alcohol	41	6.693	6.692	0.000	92	22843	1250.0	1253.6	
56 1,2-Dichloroethane	62	6.740	6.739	0.001	98	66361	50.0	51.6	
59 n-Heptane	43	7.034	7.034	0.000	88	77572	50.0	40.8	
60 Trichloroethene	130	7.398	7.398	0.000	96	71667	50.0	43.1	
63 Methylcyclohexane	83	7.634	7.634	0.000	84	118904	50.0	44.3	
64 1,2-Dichloropropane	63	7.675	7.675	0.000	89	44405	50.0	42.3	
65 Dibromomethane	93	7.769	7.775	-0.006	92	23393	50.0	52.2	
67 1,4-Dioxane	88	7.781	7.775	0.006	36	4740	1000.0	1040.0	
68 Dichlorobromomethane	83	7.969	7.969	0.000	99	67363	50.0	46.8	
71 cis-1,3-Dichloropropene	75	8.422	8.416	0.006	94	61155	50.0	46.4	
72 4-Methyl-2-pentanone (MIBK	43	8.581	8.581	0.000	96	53454	100.0	112.7	
73 Toluene	91	8.745	8.739	0.006	99	238437	50.0	44.9	
74 trans-1,3-Dichloropropene	75	9.010	9.010	0.000	92	52136	50.0	53.2	
75 Ethyl methacrylate	69	9.069	9.069	0.000	90	37953	50.0	50.1	
76 1,1,2-Trichloroethane	97	9.192	9.192	0.000	93	35775	50.0	49.6	
77 Tetrachloroethene	164	9.257	9.257	0.000	97	60285	50.0	43.8	
78 1,3-Dichloropropane	76	9.351	9.357	-0.006	92	55755	50.0	51.4	
79 2-Hexanone	43	9.434	9.428	0.006	95	30281	100.0	82.6	
81 Chlorodibromomethane	129	9.563	9.563	0.000	90	51297	50.0	49.6	
82 Ethylene Dibromide	107	9.675	9.675	0.000	97	32942	50.0	54.0	
83 Chlorobenzene	112	10.163	10.163	0.000	98	163863	50.0	44.5	
84 1,1,1,2-Tetrachloroethane	131	10.251	10.251	0.000	93	67384	50.0	47.2	
85 Ethylbenzene	106	10.263	10.263	0.000	97	91894	50.0	44.5	
86 m-Xylene & p-Xylene	106	10.398	10.398	0.000	0	115074	50.0	43.9	
88 o-Xylene	106	10.775	10.775	0.001	96	112454	50.0	44.4	
89 Styrene	104	10.798	10.798	0.000	94	167961	50.0	44.8	
90 Bromoform	173	10.980	10.986	-0.006	97	28390	50.0	54.5	
91 Isopropylbenzene	105	11.145	11.145	0.000	95	317476	50.0	44.3	
94 Bromobenzene	156	11.457	11.457	0.000	87	67970	50.0	43.6	
93 1,1,2,2-Tetrachloroethane	83	11.457	11.463	-0.006	96	40193	50.0	52.6	
96 trans-1,4-Dichloro-2-buten	53	11.504	11.504	0.000	68	10702	50.0	62.3	
95 1,2,3-Trichloropropane	110	11.516	11.516	0.000	85	14542	50.0	51.7	
97 N-Propylbenzene	120	11.557	11.563	-0.006	98	93644	50.0	41.5	
98 2-Chlorotoluene	126	11.645	11.645	0.000	98	82516	50.0	44.6	
99 1,3,5-Trimethylbenzene	105	11.745	11.745	0.000	96	270210	50.0	41.8	
100 4-Chlorotoluene	126	11.775	11.774	0.001	97	79267	50.0	42.6	
101 tert-Butylbenzene	119	12.051	12.057	-0.006	90	269893	50.0	43.0	
103 1,2,4-Trimethylbenzene	105	12.116	12.116	0.000	96	266106	50.0	42.8	
104 sec-Butylbenzene	105	12.280	12.280	0.000	93	357327	50.0	41.9	
105 1,3-Dichlorobenzene	146	12.398	12.392	0.006	97	144119	50.0	43.6	
106 4-Isopropyltoluene	119	12.433	12.433	0.000	97	336454	50.0	42.2	
107 1,4-Dichlorobenzene	146	12.498	12.498	0.000	97	147731	50.0	43.1	

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	97	232606	50.0	41.9	
111 1,2-Dichlorobenzene	146	12.857	12.857	0.000	98	133980	50.0	45.5	
112 1,2-Dibromo-3-Chloropropan	157	13.645	13.645	0.000	87	6478	50.0	53.6	
114 1,2,4-Trichlorobenzene	180	14.463	14.463	0.001	93	49134	50.0	44.7	
115 Hexachlorobutadiene	225	14.604	14.604	0.000	97	40302	50.0	39.0	
116 Naphthalene	128	14.727	14.727	0.000	96	83610	50.0	51.0	
117 1,2,3-Trichlorobenzene	180	14.945	14.945	0.000	95	39628	50.0	46.0	
S 130 1,2-Dichloroethene, Total	96				0		100.0	87.0	
S 129 Xylenes, Total	106				0		100.0	88.3	
S 131 1,3-Dichloropropene, Total	1				0		100.0	99.6	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

VOA8260VOAPRI_00384	Amount Added:	2.00	Units: uL		
voaWKet2ndRes_00046	Amount Added:	2.00	Units: uL		
VOA8260INT_00102	Amount Added:	2.00	Units: uL	Run Reagent	
VOA8260SURR_00102	Amount Added:	2.00	Units: uL	Run Reagent	

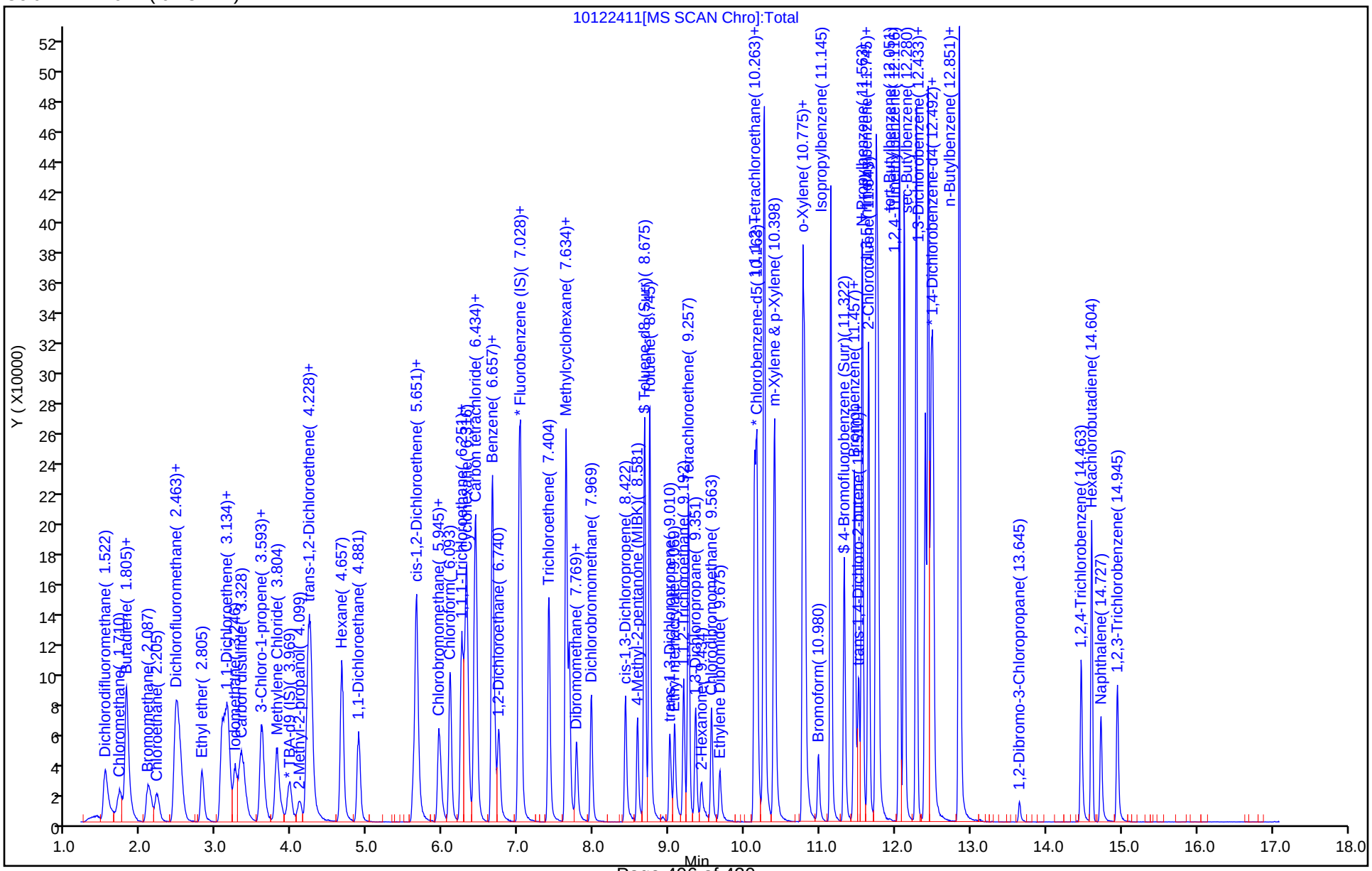
Report Date: 26-Dec-2019 10:28:05 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122411.d

Injection Date:	24-Dec-2019 11:19:30	Instrument ID:	CHHP10	Operator ID:	034635
Lims ID:	180-100176-A-2 MSD			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\20191224-30134.b\10122411.d
Lims ID: 180-100176-A-2 MSD
Client ID:
Sample Type: MSD
Inject. Date: 24-Dec-2019 11:19:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-0030134-011
Operator ID: 034635 Instrument ID: CHHP10

Method: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\MSVOA_CHHP10.m
Limit Group: VOA 8260C_D ICAL
Last Update: 26-Dec-2019 10:25:25 Calib Date: 20-Dec-2019 17:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP10\20191220-30094.b\10122024.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: journetp Date: 26-Dec-2019 10:07:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.2	98.49
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	55.6	111.27
$ 7 Toluene-d8 (Surr)	50.0	46.9	93.90
$ 8 4-Bromofluorobenzene (Surr)	50.0	48.1	96.11

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

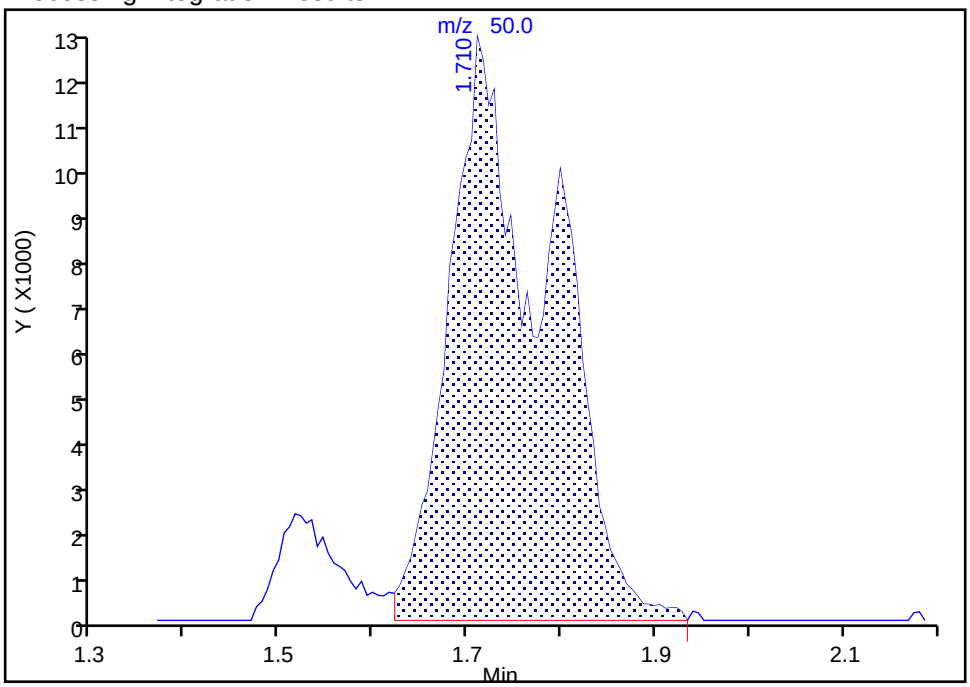
Data File:	\\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122411.d				
Injection Date:	24-Dec-2019 11:19:30	Instrument ID:	CHHP10		
Lims ID:	180-100176-A-2 MSD				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP10	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Chloromethane, CAS: 74-87-3

Signal: 1

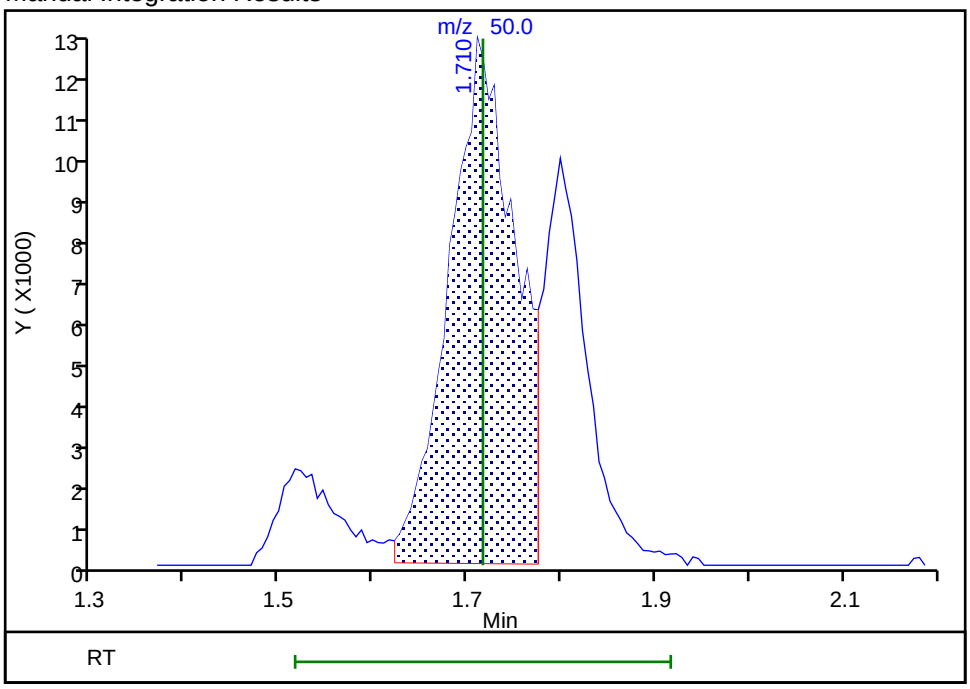
Processing Integration Results

RT: 1.71
Area: 88164
Amount: 58.088896
Amount Units: ng



Manual Integration Results

RT: 1.71
Area: 59306
Amount: 39.075134
Amount Units: ng



Reviewer: journetp, 26-Dec-2019 10:07:13

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

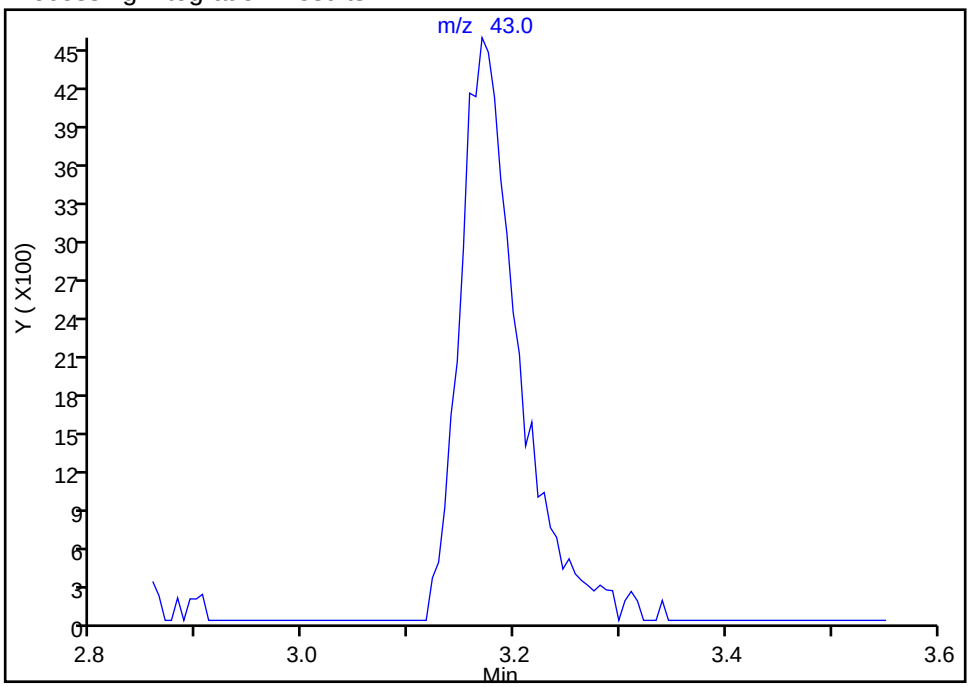
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122411.d
Injection Date: 24-Dec-2019 11:19:30 Instrument ID: CHHP10
Lims ID: 180-100176-A-2 MSD
Client ID:
Operator ID: 034635 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

22 Acetone, CAS: 67-64-1

Signal: 1

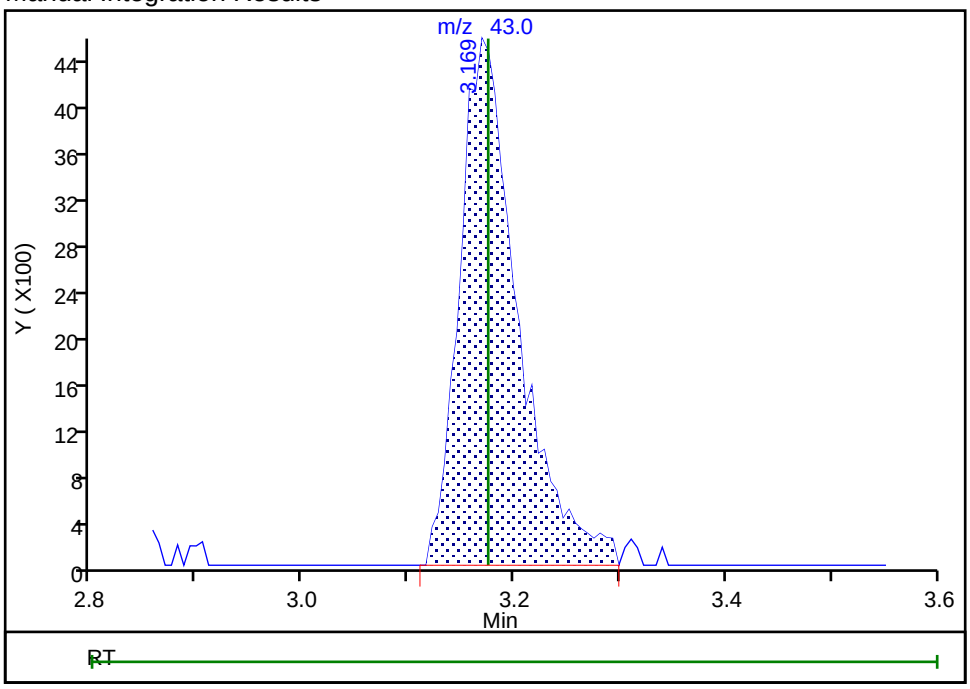
Not Detected
Expected RT: 3.18

Processing Integration Results



Manual Integration Results

RT: 3.17
Area: 17465
Amount: 67.754269
Amount Units: ng



Reviewer: journetp, 26-Dec-2019 10:06:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Pittsburgh

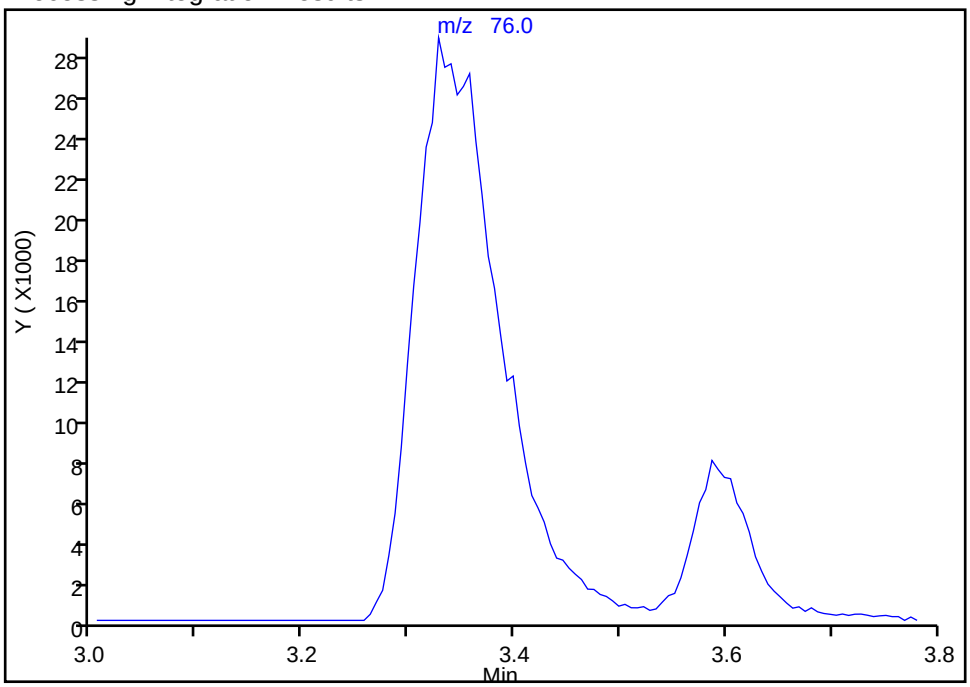
Data File: \\chromna\Pittsburgh\ChromData\CHHP10\20191224-30134.b\10122411.d
Injection Date: 24-Dec-2019 11:19:30 Instrument ID: CHHP10
Lims ID: 180-100176-A-2 MSD
Client ID:
Operator ID: 034635 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP10 Limit Group: VOA 8260C_D ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

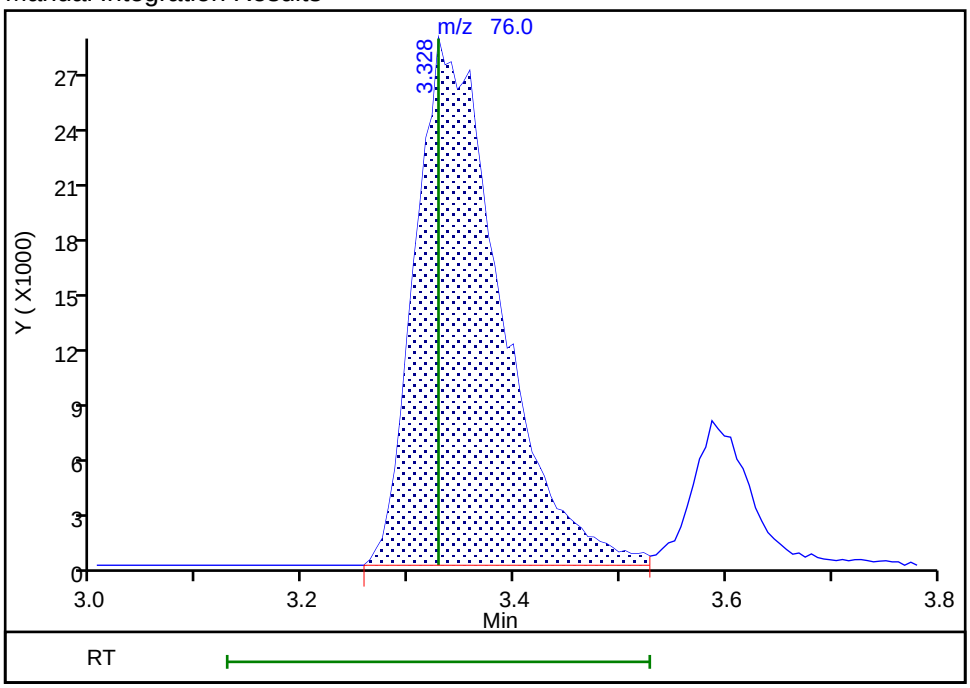
Not Detected
Expected RT: 3.33

Processing Integration Results



Manual Integration Results

RT: 3.33
Area: 157377
Amount: 42.708986
Amount Units: ng



Reviewer: journetp, 26-Dec-2019 10:06:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Instrument ID: CHHP10 Start Date: 12/20/2019 06:27

Analysis Batch Number: 302077 End Date: 12/23/2019 08:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-302077/1		12/20/2019 06:27	1	10122001.d	DB-624 0.18(mm)
IC 180-302077/14		12/20/2019 12:55	1	10122014.d	DB-624 0.18(mm)
ICIS 180-302077/15		12/20/2019 13:22	1	10122015.d	DB-624 0.18(mm)
IC 180-302077/16		12/20/2019 13:49	1	10122016.d	DB-624 0.18(mm)
IC 180-302077/17		12/20/2019 14:16	1	10122017.d	DB-624 0.18(mm)
IC 180-302077/18		12/20/2019 14:44	1	10122018.d	DB-624 0.18(mm)
IC 180-302077/19		12/20/2019 15:11	1	10122019.d	DB-624 0.18(mm)
IC 180-302077/20		12/20/2019 15:38	1	10122020.d	DB-624 0.18(mm)
ZZZZZ		12/20/2019 17:00	1		DB-624 0.18(mm)
IC 180-302077/24		12/20/2019 17:27	1	10122024.d	DB-624 0.18(mm)
ZZZZZ		12/20/2019 17:54	1		DB-624 0.18(mm)
ZZZZZ		12/20/2019 18:22	1		DB-624 0.18(mm)
ZZZZZ		12/20/2019 18:22	1		DB-624 0.18(mm)
ICV 180-302077/27		12/23/2019 08:52	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Instrument ID: CHHP10 Start Date: 12/23/2019 08:11

Analysis Batch Number: 302285 End Date: 12/23/2019 19:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-302285/1		12/23/2019 08:11	1	10122301.d	DB-624 0.18(mm)
CCVIS 180-302285/2		12/23/2019 08:52	1	10122302.d	DB-624 0.18(mm)
LCS 180-302285/3		12/23/2019 09:20	1	10122303.d	DB-624 0.18(mm)
ZZZZZ		12/23/2019 09:54	1		DB-624 0.18(mm)
MB 180-302285/5		12/23/2019 10:22	1	10122305.d	DB-624 0.18(mm)
ZZZZZ		12/23/2019 10:49	1		DB-624 0.18(mm)
ZZZZZ		12/23/2019 11:17	1		DB-624 0.18(mm)
ZZZZZ		12/23/2019 11:45	1		DB-624 0.18(mm)
ZZZZZ		12/23/2019 12:12	1000		DB-624 0.18(mm)
180-100176-13		12/23/2019 13:07	1	10122311.d	DB-624 0.18(mm)
ZZZZZ		12/23/2019 13:35	1		DB-624 0.18(mm)
ZZZZZ		12/23/2019 14:02	1		DB-624 0.18(mm)
180-100176-1		12/23/2019 14:29	1	10122314.d	DB-624 0.18(mm)
ZZZZZ		12/23/2019 14:56	5		DB-624 0.18(mm)
ZZZZZ		12/23/2019 15:23	1		DB-624 0.18(mm)
ZZZZZ		12/23/2019 15:50	1		DB-624 0.18(mm)
ZZZZZ		12/23/2019 16:18	1		DB-624 0.18(mm)
ZZZZZ		12/23/2019 16:45	1		DB-624 0.18(mm)
ZZZZZ		12/23/2019 17:13	1		DB-624 0.18(mm)
ZZZZZ		12/23/2019 17:41	1		DB-624 0.18(mm)
ZZZZZ		12/23/2019 18:08	1		DB-624 0.18(mm)
ZZZZZ		12/23/2019 18:36	1		DB-624 0.18(mm)
ZZZZZ		12/23/2019 19:04	1		DB-624 0.18(mm)
ZZZZZ		12/23/2019 19:31	10		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-100176-1

SDG No.:

Instrument ID: CHHP10 Start Date: 12/24/2019 07:12

Analysis Batch Number: 302393 End Date: 12/24/2019 19:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-302393/2		12/24/2019 07:12	1	10122402.d	DB-624 0.18(mm)
CCVIS 180-302393/3		12/24/2019 07:40	1	10122403.d	DB-624 0.18(mm)
ZZZZZ		12/24/2019 08:07	1		DB-624 0.18(mm)
MB 180-302393/5		12/24/2019 08:35	1	10122405.d	DB-624 0.18(mm)
180-100176-2		12/24/2019 09:03	1	10122406.d	DB-624 0.18(mm)
180-100176-3		12/24/2019 09:30	1	10122407.d	DB-624 0.18(mm)
180-100176-4		12/24/2019 09:57	1	10122408.d	DB-624 0.18(mm)
180-100176-5		12/24/2019 10:25	1	10122409.d	DB-624 0.18(mm)
180-100176-2 MS		12/24/2019 10:52	1	10122410.d	DB-624 0.18(mm)
180-100176-2 MSD		12/24/2019 11:19	1	10122411.d	DB-624 0.18(mm)
LCS 180-302393/12		12/24/2019 11:46	1	10122412.d	DB-624 0.18(mm)
180-100176-6		12/24/2019 12:14	1	10122413.d	DB-624 0.18(mm)
180-100176-7		12/24/2019 12:41	1	10122414.d	DB-624 0.18(mm)
180-100176-8		12/24/2019 13:08	1	10122415.d	DB-624 0.18(mm)
180-100176-9		12/24/2019 13:35	1	10122416.d	DB-624 0.18(mm)
180-100176-10		12/24/2019 14:03	1	10122417.d	DB-624 0.18(mm)
180-100176-11		12/24/2019 14:30	1	10122418.d	DB-624 0.18(mm)
180-100176-12		12/24/2019 14:58	1	10122419.d	DB-624 0.18(mm)
180-100176-14		12/24/2019 15:25	1	10122420.d	DB-624 0.18(mm)
ZZZZZ		12/24/2019 17:14	1		DB-624 0.18(mm)
ZZZZZ		12/24/2019 17:41	1		DB-624 0.18(mm)
ZZZZZ		12/24/2019 18:08	1		DB-624 0.18(mm)
ZZZZZ		12/24/2019 19:03	200		DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-100176-1

SDG No.:

Batch Number: 302285 Batch Start Date: 12/23/19 08:11 Batch Analyst: Journet, Patrick

Batch Method: EPA 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VOA BFB25 00005	VOA8260INT 00102	VOA8260SURR 00102
BFB 180-302285/1		EPA 8260C		5 mL	5 mL		1 uL		
CCVIS 180-302285/2		EPA 8260C		5 mL	5 mL			2 uL	2 uL
LCS 180-302285/3		EPA 8260C		5 mL	5 mL			2 uL	2 uL
MB 180-302285/5		EPA 8260C		5 mL	5 mL			2 uL	2 uL
180-100176-B-13	HD-QC1-0/1-2	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
180-100176-C-1	HD-COD-SW-6-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOA8260VOA2ND 00383	voaWKet2ndRes 00046				
BFB 180-302285/1		EPA 8260C							
CCVIS 180-302285/2		EPA 8260C		2 uL	2 uL				
LCS 180-302285/3		EPA 8260C		2 uL	2 uL				
MB 180-302285/5		EPA 8260C							
180-100176-B-13	HD-QC1-0/1-2	EPA 8260C	T						
180-100176-C-1	HD-COD-SW-6-0/1-0	EPA 8260C	T						

Batch Notes	
Batch Comment	3167192-MEOH
pH Indicator ID	HC987808
Vial Lot Number	0103701E

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.: 180-100176-1

SDG No.:

Batch Number: 302393 Batch Start Date: 12/24/19 07:12 Batch Analyst: Journet, Patrick

Batch Method: EPA 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VOA BFB25 00005	VOA8260INT 00102	VOA8260SURR 00102
BFB 180-302393/2		EPA 8260C		5 mL	5 mL		1 uL		
CCVIS 180-302393/3		EPA 8260C		5 mL	5 mL			2 uL	2 uL
MB 180-302393/5		EPA 8260C		5 mL	5 mL			2 uL	2 uL
180-100176-B-2	HD-COD-SW-7-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
180-100176-A-3	HD-COD-SW-8-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
180-100176-A-4	HD-COD-SW-9-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
180-100176-A-5	HD-COD-SW-13-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
180-100176-A-2 MS	HD-COD-SW-7-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
180-100176-A-2 MSD	HD-COD-SW-7-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
LCS 180-302393/12		EPA 8260C		5 mL	5 mL			2 uL	2 uL
180-100176-B-6	HD-COD-SW-15-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
180-100176-B-7	HD-COD-SW-16-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
180-100176-B-8	HD-COD-SW-17-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
180-100176-B-9	HD-COD-SW-26-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
180-100176-B-10	HD-COD-SW-27-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
180-100176-B-11	HD-COD-SW-28-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
180-100176-B-12	HD-COD-SW-29-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU		2 uL	2 uL
180-100176-B-14	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	VOA8260VOAPRI 00384	voaWKet2ndRes 00046				
BFB 180-302393/2		EPA 8260C							
CCVIS 180-302393/3		EPA 8260C		2 uL	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.: 180-100176-1

SDG No.:

Batch Number: 302393 Batch Start Date: 12/24/19 07:12 Batch Analyst: Journet, Patrick

Batch Method: EPA 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOA8260VOAPRI 00384	voaWKet2ndRes 00046				
MB 180-302393/5		EPA 8260C							
180-100176-B-2	HD-COD-SW-7-0/1-0	EPA 8260C	T						
180-100176-A-3	HD-COD-SW-8-0/1-0	EPA 8260C	T						
180-100176-A-4	HD-COD-SW-9-0/1-0	EPA 8260C	T						
180-100176-A-5	HD-COD-SW-13-0/1-0	EPA 8260C	T						
180-100176-A-2 MS	HD-COD-SW-7-0/1-0	EPA 8260C	T	2 uL	2 uL				
180-100176-A-2 MSD	HD-COD-SW-7-0/1-0	EPA 8260C	T	2 uL	2 uL				
LCS 180-302393/12		EPA 8260C		2 uL	2 uL				
180-100176-B-6	HD-COD-SW-15-0/1-0	EPA 8260C	T						
180-100176-B-7	HD-COD-SW-16-0/1-0	EPA 8260C	T						
180-100176-B-8	HD-COD-SW-17-0/1-0	EPA 8260C	T						
180-100176-B-9	HD-COD-SW-26-0/1-0	EPA 8260C	T						
180-100176-B-10	HD-COD-SW-27-0/1-0	EPA 8260C	T						
180-100176-B-11	HD-COD-SW-28-0/1-0	EPA 8260C	T						
180-100176-B-12	HD-COD-SW-29-0/1-0	EPA 8260C	T						
180-100176-B-14	HD-QC1-0/1-1	EPA 8260C	T						

Batch Notes	
Batch Comment	3167192-MEOH
pH Indicator ID	HC987808
Vial Lot Number	0103701E

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

Harrisburg #267

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Chris O'Neil	Site Contact: Casey Littlefield	DateSubmitted: 12/18/19	COC No: 20191218TAP
Groundwater Sciences Corporation	Tel/Fax: 717-901-8176 / (717) 756-1246	Lab Contact: Carrie Gamber	Carrier: FEDEX	1 of 1 COCs
2601 Market Place St. Suite 310	Analysis Turnaround Time			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: 2019 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	12.18.19	1235	Surface Water	Water	3	X	
HD-COD-SW-7-0/1-0	12.18.19	1337	Surface Water	Water	3	X	
HD-COD-SW-8-0/1-0	12.18.19	0938	Surface Water	Water	3	X	
HD-COD-SW-9-0/1-0	12.18.19	1424	Surface Water	Water	3	X	
HD-COD-SW-13-0/1-0	12.18.19	0958	Surface Water	Water	3	X	
HD-COD-SW-15-0/1-0	12.18.19	1357	Surface Water	Water	3	X	
HD-COD-SW-16-0/1-0	12.18.19	1015	Surface Water	Water	3	X	
HD-COD-SW-17-0/1-0	12.18.19	1030	Surface Water	Water	3	X	
HD-COD-SW-26-0/1-0	12.18.19	1315	Surface Water	Water	3	X	
HD-COD-SW-27-0/1-0	12.18.19	1350 ~~1337~~	Surface Water	Water	3	X	
HD-COD-SW-28-0/1-0	12.18.19	1440	Surface Water	Water	3	X	
HD-COD-SW-29-0/1-0	12.18.19	0918	Surface Water	Water	3	X	
HD-QC1-0/1-2	12/18/19	—	Trip Blank	Water	2	X	
HD-QC1-0/1-1	12.18.19	1200	Duplicate	W	2	X	
				Number of Containers		38	
				Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Unpreserved 7=Na2S2O3		2	
				Field Filter		N	

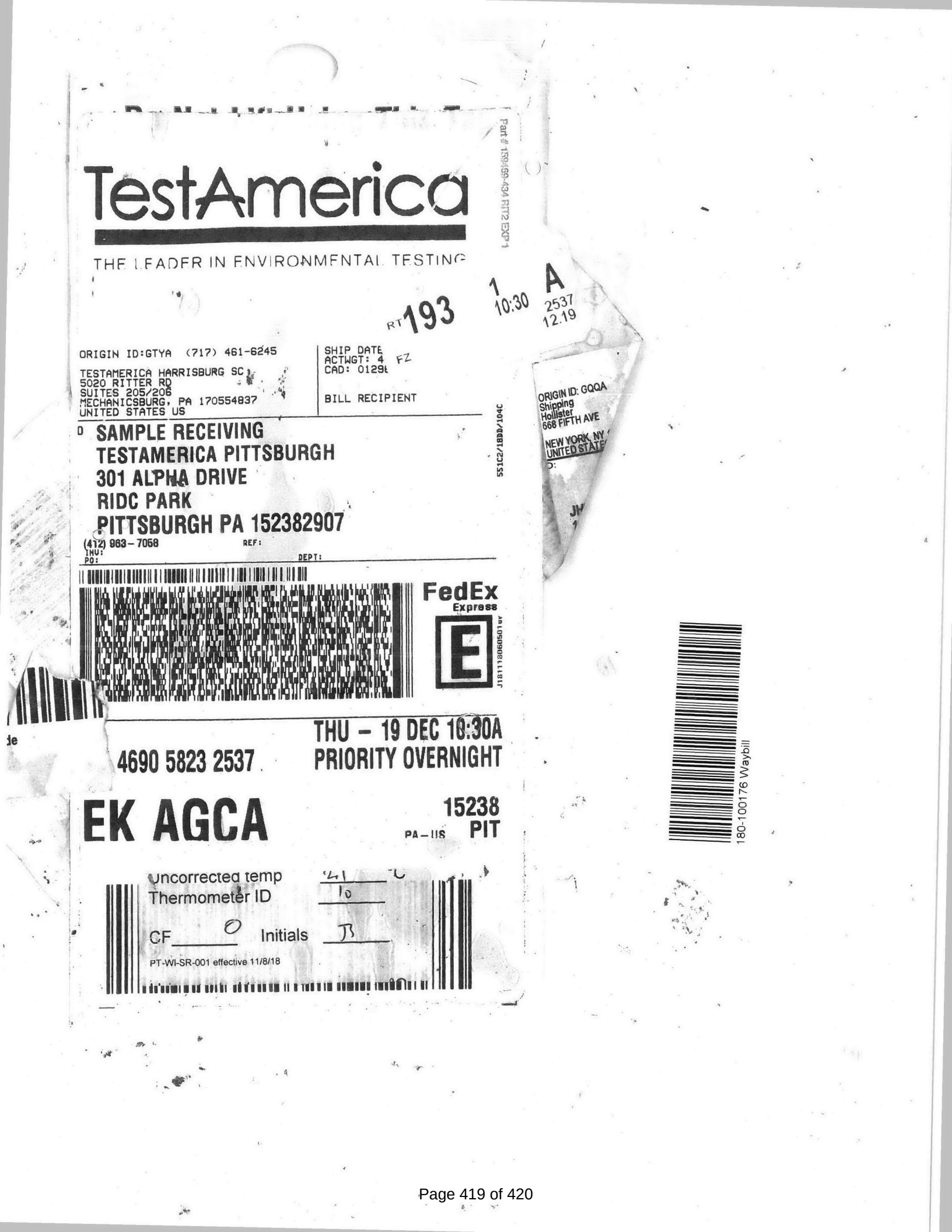
180-100176 Chain of Custody

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	12/18/19 1530	Dennis Ronn	ETA	12/18/19 1530
Dennis Ronn	ETA	12/18/19	FED EX		
			Debbie Watson	TAPT	12-19-19 10:00



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Part # 158469-494 RT2 EXP1

RT 193 1 10:30 A 2537 12.19

ORIGIN ID:GTYA (717) 461-6245

TESTAMERICA HARRISBURG SC
5020 RITTER RD
SUITES 205/206
MECHANICSBURG, PA 170554837
UNITED STATES US

SHIP DATE
ACTWGT: 4 FZ
CAD: 0129t

BILL RECIPIENT

ORIGIN ID: GQQA
Shipping
Hollister
668 FIFTH AVE
NEW YORK NY
UNITED STATE

D SAMPLE RECEIVING
TESTAMERICA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 152382907

(412) 983-7058 REF:
INV:
PO: DEPT:

551C2/18BB/104C

FedEx Express

J181118060501uv

THU - 19 DEC 10:30A
PRIORITY OVERNIGHT

4690 5823 2537

EK AGCA

15238
PA-US PIT

Uncorrected temp 41 C
Thermometer ID 10
CF 0 Initials JB

PT-WI-SR-001 effective 11/8/18

180-100176 Waybill

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-100176-1

Login Number: 100176
List Number: 1
Creator: Kovitch, Christina M

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	