

 **ANALYTICAL REPORT****PREPARED FOR**

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Generated 12/7/2022 4:14 PM

**JOB DESCRIPTION**

fYNOP Monthly Surface Water

**JOB NUMBER**

410-106467-1

## Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization



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Authorized for release by  
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# Definitions/Glossary

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^c	CCV Recovery is outside acceptance limits.
cn	Refer to Case Narrative for further detail
FH	MS and/or MSD recovery above control 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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

**Job Narrative**  
**410-106467-1**

**Receipt**

The samples were received on 11/18/2022 4:24 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.1°C

**GC/MS VOA**

Method 8260D\_LL: The continuing calibration verification (CCV) associated with batch 410-322544 recovered above the upper control limit for Bromoform, Carbon disulfide, Chloromethane and trans-1,3-Dichloropropene. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260D\_LL: The continuing calibration verification (CCV) associated with batch 410-322841 recovered above the upper control limit for 2-Hexanone, 4-Methyl-2-pentanone (MIBK) and Chloromethane. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260D\_LL: The method blank for 410-322841 contained Toluene above the method detection limit (MDL). Associated samples were not re-analyzed because results were less than the reporting limit (RL).

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

# Detection Summary

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

## Lab Sample ID: 410-106467-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.0	J	5.0	1.0	ug/L	1		8260D	Total/NA

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

## Lab Sample ID: 410-106467-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.6	J	5.0	1.0	ug/L	1		8260D	Total/NA
Chloroform	0.11	J	0.50	0.090	ug/L	1		8260D	Total/NA
Chloromethane	0.10	J ^c cn	0.50	0.10	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.18	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.20	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

## Lab Sample ID: 410-106467-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.5	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.17	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.66		0.50	0.20	ug/L	1		8260D	Total/NA
Trichloroethene	0.18	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

## Lab Sample ID: 410-106467-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.6	J	5.0	1.0	ug/L	1		8260D	Total/NA
Chloroform	0.095	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.14	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.23	J	0.50	0.20	ug/L	1		8260D	Total/NA
Toluene	0.090	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.14	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

## Lab Sample ID: 410-106467-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.0	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.17	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.98		0.50	0.20	ug/L	1		8260D	Total/NA
Trichloroethene	0.19	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

## Lab Sample ID: 410-106467-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.45	J	0.50	0.080	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.18	J	0.50	0.10	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.23	J	0.50	0.10	ug/L	1		8260D	Total/NA
Chloroform	0.34	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	2.2		0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	5.8		0.50	0.20	ug/L	1		8260D	Total/NA
Trichloroethene	1.8		0.50	0.080	ug/L	1		8260D	Total/NA

## Client Sample ID: HD-COD-SW-16-0/1-0

## Lab Sample ID: 410-106467-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.10	J	0.50	0.080	ug/L	1		8260D	Total/NA
Acetone	1.9	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.21	J	0.50	0.080	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## Client Sample ID: HD-COD-SW-16-0/1-0 (Continued)

Lab Sample ID: 410-106467-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.5		0.50	0.20	ug/L	1		8260D	Total/NA
Toluene	0.13	J cn	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.21	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-106467-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	5.9		0.50	0.080	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	1.1		0.50	0.10	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.51		0.50	0.10	ug/L	1		8260D	Total/NA
Acetone	1.9	J	5.0	1.0	ug/L	1		8260D	Total/NA
Chloroform	0.29	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.4		0.50	0.080	ug/L	1		8260D	Total/NA
Toluene	0.13	J cn	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	4.3		0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene - DL	65		5.0	2.0	ug/L	10		8260D	Total/NA

## Client Sample ID: HD-COD-SW-26-0/1-0

Lab Sample ID: 410-106467-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.17	J	0.50	0.10	ug/L	1		8260D	Total/NA
Acetone	1.5	J	5.0	1.0	ug/L	1		8260D	Total/NA
Chloroform	0.59		0.50	0.090	ug/L	1		8260D	Total/NA
Tetrachloroethene	3.8		0.50	0.20	ug/L	1		8260D	Total/NA
Toluene	0.16	J cn	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.17	J	0.50	0.080	ug/L	1		8260D	Total/NA

## Client Sample ID: HD-COD-SW-27-0/1-0

Lab Sample ID: 410-106467-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.2	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.20	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.20	J	0.50	0.20	ug/L	1		8260D	Total/NA
Toluene	0.15	J cn	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.20	J	0.50	0.080	ug/L	1		8260D	Total/NA

## Client Sample ID: HD-COD-SW-28-0/1-0

Lab Sample ID: 410-106467-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.2	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.18	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.22	J	0.50	0.20	ug/L	1		8260D	Total/NA
Toluene	0.13	J cn	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.17	J	0.50	0.080	ug/L	1		8260D	Total/NA

## Client Sample ID: HD-COD-SW-29-0/1-0

Lab Sample ID: 410-106467-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.1	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.17	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.48	J	0.50	0.20	ug/L	1		8260D	Total/NA
Toluene	0.095	J cn	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.17	J	0.50	0.080	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.



# Detection Summary

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

## Lab Sample ID: 410-106467-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	5.7		0.50	0.080	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	1.1		0.50	0.10	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.51		0.50	0.10	ug/L	1		8260D	Total/NA
Acetone	1.3	J	5.0	1.0	ug/L	1		8260D	Total/NA
Chloroform	0.30	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.3		0.50	0.080	ug/L	1		8260D	Total/NA
Toluene	0.086	J cn	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	4.1		0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene - DL	67		5.0	2.0	ug/L	10		8260D	Total/NA

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

## Lab Sample ID: 410-106467-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.3	J	5.0	1.0	ug/L	1		8260D	Total/NA
Toluene	0.29	J cn	0.50	0.080	ug/L	1		8260D	Total/NA
Xylenes, Total	0.096	J	1.0	0.070	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

**Lab Sample ID: 410-106467-1**

Date Collected: 11/18/22 10:20

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/01/22 12:03	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 12:03	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/01/22 12:03	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 12:03	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/01/22 12:03	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 12:03	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/01/22 12:03	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/01/22 12:03	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/01/22 12:03	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/01/22 12:03	1
2-Hexanone	ND		5.0	0.10	ug/L			12/01/22 12:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/01/22 12:03	1
<b>Acetone</b>	<b>2.0</b>	<b>J</b>	5.0	1.0	ug/L			12/01/22 12:03	1
Benzene	ND		0.50	0.10	ug/L			12/01/22 12:03	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/01/22 12:03	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/01/22 12:03	1
Bromoform	ND	^c cn	1.0	0.30	ug/L			12/01/22 12:03	1
Bromomethane	ND		0.50	0.10	ug/L			12/01/22 12:03	1
Carbon disulfide	ND	^c ** cn	1.0	0.10	ug/L			12/01/22 12:03	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/01/22 12:03	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/01/22 12:03	1
Chloroethane	ND		0.50	0.10	ug/L			12/01/22 12:03	1
Chloroform	ND		0.50	0.090	ug/L			12/01/22 12:03	1
Chloromethane	ND	^c cn	0.50	0.10	ug/L			12/01/22 12:03	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/01/22 12:03	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/01/22 12:03	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/01/22 12:03	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/01/22 12:03	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/01/22 12:03	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/01/22 12:03	1
Styrene	ND		0.50	0.070	ug/L			12/01/22 12:03	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/01/22 12:03	1
Toluene	ND		0.50	0.080	ug/L			12/01/22 12:03	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 12:03	1
trans-1,3-Dichloropropene	ND	^c cn	0.50	0.080	ug/L			12/01/22 12:03	1
Trichloroethene	ND		0.50	0.080	ug/L			12/01/22 12:03	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/01/22 12:03	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/01/22 12:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		12/01/22 12:03	1
4-Bromofluorobenzene (Surr)	101		80 - 120		12/01/22 12:03	1
Dibromofluoromethane (Surr)	99		80 - 120		12/01/22 12:03	1
Toluene-d8 (Surr)	105		80 - 120		12/01/22 12:03	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

**Lab Sample ID: 410-106467-2**

Date Collected: 11/18/22 11:00

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/01/22 12:25	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 12:25	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/01/22 12:25	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 12:25	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/01/22 12:25	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 12:25	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/01/22 12:25	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/01/22 12:25	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/01/22 12:25	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/01/22 12:25	1
2-Hexanone	ND		5.0	0.10	ug/L			12/01/22 12:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/01/22 12:25	1
<b>Acetone</b>	<b>2.6</b>	<b>J</b>	5.0	1.0	ug/L			12/01/22 12:25	1
Benzene	ND		0.50	0.10	ug/L			12/01/22 12:25	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/01/22 12:25	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/01/22 12:25	1
Bromoform	ND	^c cn	1.0	0.30	ug/L			12/01/22 12:25	1
Bromomethane	ND		0.50	0.10	ug/L			12/01/22 12:25	1
Carbon disulfide	ND	^c ** cn	1.0	0.10	ug/L			12/01/22 12:25	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/01/22 12:25	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/01/22 12:25	1
Chloroethane	ND		0.50	0.10	ug/L			12/01/22 12:25	1
<b>Chloroform</b>	<b>0.11</b>	<b>J</b>	0.50	0.090	ug/L			12/01/22 12:25	1
<b>Chloromethane</b>	<b>0.10</b>	<b>J ^c cn</b>	0.50	0.10	ug/L			12/01/22 12:25	1
<b>cis-1,2-Dichloroethene</b>	<b>0.18</b>	<b>J</b>	0.50	0.080	ug/L			12/01/22 12:25	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/01/22 12:25	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/01/22 12:25	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/01/22 12:25	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/01/22 12:25	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/01/22 12:25	1
Styrene	ND		0.50	0.070	ug/L			12/01/22 12:25	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/01/22 12:25	1
Toluene	ND		0.50	0.080	ug/L			12/01/22 12:25	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 12:25	1
trans-1,3-Dichloropropene	ND	^c cn	0.50	0.080	ug/L			12/01/22 12:25	1
<b>Trichloroethene</b>	<b>0.20</b>	<b>J</b>	0.50	0.080	ug/L			12/01/22 12:25	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/01/22 12:25	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/01/22 12:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		12/01/22 12:25	1
4-Bromofluorobenzene (Surr)	101		80 - 120		12/01/22 12:25	1
Dibromofluoromethane (Surr)	101		80 - 120		12/01/22 12:25	1
Toluene-d8 (Surr)	105		80 - 120		12/01/22 12:25	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

**Lab Sample ID: 410-106467-3**

Date Collected: 11/18/22 09:20

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/01/22 12:48	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 12:48	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/01/22 12:48	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 12:48	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/01/22 12:48	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 12:48	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/01/22 12:48	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/01/22 12:48	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/01/22 12:48	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/01/22 12:48	1
2-Hexanone	ND		5.0	0.10	ug/L			12/01/22 12:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/01/22 12:48	1
<b>Acetone</b>	<b>2.5</b>	<b>J</b>	5.0	1.0	ug/L			12/01/22 12:48	1
Benzene	ND		0.50	0.10	ug/L			12/01/22 12:48	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/01/22 12:48	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/01/22 12:48	1
Bromoform	ND	^c cn	1.0	0.30	ug/L			12/01/22 12:48	1
Bromomethane	ND		0.50	0.10	ug/L			12/01/22 12:48	1
Carbon disulfide	ND	^c ** cn	1.0	0.10	ug/L			12/01/22 12:48	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/01/22 12:48	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/01/22 12:48	1
Chloroethane	ND		0.50	0.10	ug/L			12/01/22 12:48	1
Chloroform	ND		0.50	0.090	ug/L			12/01/22 12:48	1
Chloromethane	ND	^c cn	0.50	0.10	ug/L			12/01/22 12:48	1
<b>cis-1,2-Dichloroethene</b>	<b>0.17</b>	<b>J</b>	0.50	0.080	ug/L			12/01/22 12:48	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/01/22 12:48	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/01/22 12:48	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/01/22 12:48	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/01/22 12:48	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/01/22 12:48	1
Styrene	ND		0.50	0.070	ug/L			12/01/22 12:48	1
<b>Tetrachloroethene</b>	<b>0.66</b>		0.50	0.20	ug/L			12/01/22 12:48	1
Toluene	ND		0.50	0.080	ug/L			12/01/22 12:48	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 12:48	1
trans-1,3-Dichloropropene	ND	^c cn	0.50	0.080	ug/L			12/01/22 12:48	1
<b>Trichloroethene</b>	<b>0.18</b>	<b>J</b>	0.50	0.080	ug/L			12/01/22 12:48	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/01/22 12:48	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/01/22 12:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		12/01/22 12:48	1
4-Bromofluorobenzene (Surr)	99		80 - 120		12/01/22 12:48	1
Dibromofluoromethane (Surr)	99		80 - 120		12/01/22 12:48	1
Toluene-d8 (Surr)	104		80 - 120		12/01/22 12:48	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

**Lab Sample ID: 410-106467-4**

Date Collected: 11/18/22 12:25

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/01/22 13:10	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 13:10	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/01/22 13:10	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 13:10	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/01/22 13:10	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 13:10	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/01/22 13:10	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/01/22 13:10	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/01/22 13:10	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/01/22 13:10	1
2-Hexanone	ND		5.0	0.10	ug/L			12/01/22 13:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/01/22 13:10	1
<b>Acetone</b>	<b>3.6</b>	<b>J</b>	5.0	1.0	ug/L			12/01/22 13:10	1
Benzene	ND		0.50	0.10	ug/L			12/01/22 13:10	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/01/22 13:10	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/01/22 13:10	1
Bromoform	ND	^c cn	1.0	0.30	ug/L			12/01/22 13:10	1
Bromomethane	ND		0.50	0.10	ug/L			12/01/22 13:10	1
Carbon disulfide	ND	^c ** cn	1.0	0.10	ug/L			12/01/22 13:10	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/01/22 13:10	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/01/22 13:10	1
Chloroethane	ND		0.50	0.10	ug/L			12/01/22 13:10	1
<b>Chloroform</b>	<b>0.095</b>	<b>J</b>	0.50	0.090	ug/L			12/01/22 13:10	1
Chloromethane	ND	^c cn	0.50	0.10	ug/L			12/01/22 13:10	1
<b>cis-1,2-Dichloroethene</b>	<b>0.14</b>	<b>J</b>	0.50	0.080	ug/L			12/01/22 13:10	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/01/22 13:10	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/01/22 13:10	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/01/22 13:10	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/01/22 13:10	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/01/22 13:10	1
Styrene	ND		0.50	0.070	ug/L			12/01/22 13:10	1
<b>Tetrachloroethene</b>	<b>0.23</b>	<b>J</b>	0.50	0.20	ug/L			12/01/22 13:10	1
<b>Toluene</b>	<b>0.090</b>	<b>J</b>	0.50	0.080	ug/L			12/01/22 13:10	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 13:10	1
trans-1,3-Dichloropropene	ND	^c cn	0.50	0.080	ug/L			12/01/22 13:10	1
<b>Trichloroethene</b>	<b>0.14</b>	<b>J</b>	0.50	0.080	ug/L			12/01/22 13:10	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/01/22 13:10	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/01/22 13:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		12/01/22 13:10	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/01/22 13:10	1
Dibromofluoromethane (Surr)	99		80 - 120		12/01/22 13:10	1
Toluene-d8 (Surr)	104		80 - 120		12/01/22 13:10	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

**Lab Sample ID: 410-106467-5**

Date Collected: 11/18/22 09:40

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/01/22 13:32	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 13:32	1
1,1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/01/22 13:32	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 13:32	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/01/22 13:32	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 13:32	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/01/22 13:32	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/01/22 13:32	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/01/22 13:32	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/01/22 13:32	1
2-Hexanone	ND		5.0	0.10	ug/L			12/01/22 13:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/01/22 13:32	1
<b>Acetone</b>	<b>2.0</b>	<b>J</b>	5.0	1.0	ug/L			12/01/22 13:32	1
Benzene	ND		0.50	0.10	ug/L			12/01/22 13:32	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/01/22 13:32	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/01/22 13:32	1
Bromoform	ND	^c cn	1.0	0.30	ug/L			12/01/22 13:32	1
Bromomethane	ND		0.50	0.10	ug/L			12/01/22 13:32	1
Carbon disulfide	ND	^c ** cn	1.0	0.10	ug/L			12/01/22 13:32	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/01/22 13:32	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/01/22 13:32	1
Chloroethane	ND		0.50	0.10	ug/L			12/01/22 13:32	1
Chloroform	ND		0.50	0.090	ug/L			12/01/22 13:32	1
Chloromethane	ND	^c cn	0.50	0.10	ug/L			12/01/22 13:32	1
<b>cis-1,2-Dichloroethene</b>	<b>0.17</b>	<b>J</b>	0.50	0.080	ug/L			12/01/22 13:32	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/01/22 13:32	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/01/22 13:32	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/01/22 13:32	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/01/22 13:32	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/01/22 13:32	1
Styrene	ND		0.50	0.070	ug/L			12/01/22 13:32	1
<b>Tetrachloroethene</b>	<b>0.98</b>		0.50	0.20	ug/L			12/01/22 13:32	1
Toluene	ND		0.50	0.080	ug/L			12/01/22 13:32	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 13:32	1
trans-1,3-Dichloropropene	ND	^c cn	0.50	0.080	ug/L			12/01/22 13:32	1
<b>Trichloroethene</b>	<b>0.19</b>	<b>J</b>	0.50	0.080	ug/L			12/01/22 13:32	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/01/22 13:32	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/01/22 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		12/01/22 13:32	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/01/22 13:32	1
Dibromofluoromethane (Surr)	99		80 - 120		12/01/22 13:32	1
Toluene-d8 (Surr)	105		80 - 120		12/01/22 13:32	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

**Lab Sample ID: 410-106467-6**

Date Collected: 11/18/22 11:15

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/01/22 13:54	1
<b>1,1,1-Trichloroethane</b>	<b>0.45</b>	<b>J</b>	0.50	0.080	ug/L			12/01/22 13:54	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/01/22 13:54	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 13:54	1
<b>1,1-Dichloroethane</b>	<b>0.18</b>	<b>J</b>	0.50	0.10	ug/L			12/01/22 13:54	1
<b>1,1-Dichloroethene</b>	<b>0.23</b>	<b>J</b>	0.50	0.10	ug/L			12/01/22 13:54	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/01/22 13:54	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/01/22 13:54	1
1,2-Dichloropropane	ND	FH	0.50	0.10	ug/L			12/01/22 13:54	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/01/22 13:54	1
2-Hexanone	ND		5.0	0.10	ug/L			12/01/22 13:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/01/22 13:54	1
Acetone	ND		5.0	1.0	ug/L			12/01/22 13:54	1
Benzene	ND		0.50	0.10	ug/L			12/01/22 13:54	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/01/22 13:54	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/01/22 13:54	1
Bromoform	ND	^c cn	1.0	0.30	ug/L			12/01/22 13:54	1
Bromomethane	ND		0.50	0.10	ug/L			12/01/22 13:54	1
Carbon disulfide	ND	^c ** FH cn	1.0	0.10	ug/L			12/01/22 13:54	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/01/22 13:54	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/01/22 13:54	1
Chloroethane	ND	FH	0.50	0.10	ug/L			12/01/22 13:54	1
<b>Chloroform</b>	<b>0.34</b>	<b>J</b>	0.50	0.090	ug/L			12/01/22 13:54	1
Chloromethane	ND	^c FH cn	0.50	0.10	ug/L			12/01/22 13:54	1
<b>cis-1,2-Dichloroethene</b>	<b>2.2</b>		0.50	0.080	ug/L			12/01/22 13:54	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/01/22 13:54	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/01/22 13:54	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/01/22 13:54	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/01/22 13:54	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/01/22 13:54	1
Styrene	ND		0.50	0.070	ug/L			12/01/22 13:54	1
<b>Tetrachloroethene</b>	<b>5.8</b>		0.50	0.20	ug/L			12/01/22 13:54	1
Toluene	ND		0.50	0.080	ug/L			12/01/22 13:54	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 13:54	1
trans-1,3-Dichloropropene	ND	^c cn	0.50	0.080	ug/L			12/01/22 13:54	1
<b>Trichloroethene</b>	<b>1.8</b>		0.50	0.080	ug/L			12/01/22 13:54	1
Vinyl chloride	ND	FH	0.50	0.10	ug/L			12/01/22 13:54	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/01/22 13:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		12/01/22 13:54	1
4-Bromofluorobenzene (Surr)	99		80 - 120		12/01/22 13:54	1
Dibromofluoromethane (Surr)	100		80 - 120		12/01/22 13:54	1
Toluene-d8 (Surr)	103		80 - 120		12/01/22 13:54	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

**Client Sample ID: HD-COD-SW-16-0/1-0**

**Lab Sample ID: 410-106467-7**

Date Collected: 11/18/22 09:55

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/01/22 23:58	1
<b>1,1,1-Trichloroethane</b>	<b>0.10</b>	<b>J</b>	0.50	0.080	ug/L			12/01/22 23:58	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/01/22 23:58	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 23:58	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/01/22 23:58	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 23:58	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/01/22 23:58	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/01/22 23:58	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/01/22 23:58	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/01/22 23:58	1
2-Hexanone	ND	^c cn	5.0	0.10	ug/L			12/01/22 23:58	1
4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0	ug/L			12/01/22 23:58	1
<b>Acetone</b>	<b>1.9</b>	<b>J</b>	5.0	1.0	ug/L			12/01/22 23:58	1
Benzene	ND		0.50	0.10	ug/L			12/01/22 23:58	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/01/22 23:58	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/01/22 23:58	1
Bromoform	ND		1.0	0.30	ug/L			12/01/22 23:58	1
Bromomethane	ND		0.50	0.10	ug/L			12/01/22 23:58	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/01/22 23:58	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/01/22 23:58	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/01/22 23:58	1
Chloroethane	ND		0.50	0.10	ug/L			12/01/22 23:58	1
Chloroform	ND		0.50	0.090	ug/L			12/01/22 23:58	1
Chloromethane	ND	^c FH cn	0.50	0.10	ug/L			12/01/22 23:58	1
<b>cis-1,2-Dichloroethene</b>	<b>0.21</b>	<b>J</b>	0.50	0.080	ug/L			12/01/22 23:58	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/01/22 23:58	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/01/22 23:58	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/01/22 23:58	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/01/22 23:58	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/01/22 23:58	1
Styrene	ND		0.50	0.070	ug/L			12/01/22 23:58	1
<b>Tetrachloroethene</b>	<b>1.5</b>		0.50	0.20	ug/L			12/01/22 23:58	1
<b>Toluene</b>	<b>0.13</b>	<b>J cn</b>	0.50	0.080	ug/L			12/01/22 23:58	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 23:58	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/01/22 23:58	1
<b>Trichloroethene</b>	<b>0.21</b>	<b>J</b>	0.50	0.080	ug/L			12/01/22 23:58	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/01/22 23:58	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/01/22 23:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		12/01/22 23:58	1
4-Bromofluorobenzene (Surr)	99		80 - 120		12/01/22 23:58	1
Dibromofluoromethane (Surr)	101		80 - 120		12/01/22 23:58	1
Toluene-d8 (Surr)	99		80 - 120		12/01/22 23:58	1



# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

**Lab Sample ID: 410-106467-8**

Date Collected: 11/18/22 10:10

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/02/22 00:18	1
<b>1,1,1-Trichloroethane</b>	<b>5.9</b>		0.50	0.080	ug/L			12/02/22 00:18	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/02/22 00:18	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/02/22 00:18	1
<b>1,1-Dichloroethane</b>	<b>1.1</b>		0.50	0.10	ug/L			12/02/22 00:18	1
<b>1,1-Dichloroethene</b>	<b>0.51</b>		0.50	0.10	ug/L			12/02/22 00:18	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/02/22 00:18	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/02/22 00:18	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/02/22 00:18	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/02/22 00:18	1
2-Hexanone	ND	^c cn	5.0	0.10	ug/L			12/02/22 00:18	1
4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0	ug/L			12/02/22 00:18	1
<b>Acetone</b>	<b>1.9</b>	<b>J</b>	5.0	1.0	ug/L			12/02/22 00:18	1
Benzene	ND		0.50	0.10	ug/L			12/02/22 00:18	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/02/22 00:18	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/02/22 00:18	1
Bromoform	ND		1.0	0.30	ug/L			12/02/22 00:18	1
Bromomethane	ND		0.50	0.10	ug/L			12/02/22 00:18	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/02/22 00:18	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/02/22 00:18	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/02/22 00:18	1
Chloroethane	ND		0.50	0.10	ug/L			12/02/22 00:18	1
<b>Chloroform</b>	<b>0.29</b>	<b>J</b>	0.50	0.090	ug/L			12/02/22 00:18	1
Chloromethane	ND	^c cn	0.50	0.10	ug/L			12/02/22 00:18	1
<b>cis-1,2-Dichloroethene</b>	<b>3.4</b>		0.50	0.080	ug/L			12/02/22 00:18	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/02/22 00:18	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/02/22 00:18	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/02/22 00:18	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/02/22 00:18	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/02/22 00:18	1
Styrene	ND		0.50	0.070	ug/L			12/02/22 00:18	1
<b>Toluene</b>	<b>0.13</b>	<b>J cn</b>	0.50	0.080	ug/L			12/02/22 00:18	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/02/22 00:18	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/02/22 00:18	1
<b>Trichloroethene</b>	<b>4.3</b>		0.50	0.080	ug/L			12/02/22 00:18	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/02/22 00:18	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/02/22 00:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		12/02/22 00:18	1
4-Bromofluorobenzene (Surr)	98		80 - 120		12/02/22 00:18	1
Dibromofluoromethane (Surr)	102		80 - 120		12/02/22 00:18	1
Toluene-d8 (Surr)	99		80 - 120		12/02/22 00:18	1

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Tetrachloroethene</b>	<b>65</b>		5.0	2.0	ug/L			12/02/22 19:43	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		12/02/22 19:43	10

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

**Lab Sample ID: 410-106467-8**

Date Collected: 11/18/22 10:10

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL (Continued)**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		80 - 120		12/02/22 19:43	10
Dibromofluoromethane (Surr)	102		80 - 120		12/02/22 19:43	10
Toluene-d8 (Surr)	97		80 - 120		12/02/22 19:43	10

**Client Sample ID: HD-COD-SW-26-0/1-0**

**Lab Sample ID: 410-106467-9**

Date Collected: 11/18/22 10:40

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/02/22 00:38	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/02/22 00:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/02/22 00:38	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/02/22 00:38	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/02/22 00:38	1
<b>1,1-Dichloroethene</b>	<b>0.17</b>	<b>J</b>	0.50	0.10	ug/L			12/02/22 00:38	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/02/22 00:38	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/02/22 00:38	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/02/22 00:38	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/02/22 00:38	1
2-Hexanone	ND	^c cn	5.0	0.10	ug/L			12/02/22 00:38	1
4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0	ug/L			12/02/22 00:38	1
<b>Acetone</b>	<b>1.5</b>	<b>J</b>	5.0	1.0	ug/L			12/02/22 00:38	1
Benzene	ND		0.50	0.10	ug/L			12/02/22 00:38	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/02/22 00:38	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/02/22 00:38	1
Bromoform	ND		1.0	0.30	ug/L			12/02/22 00:38	1
Bromomethane	ND		0.50	0.10	ug/L			12/02/22 00:38	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/02/22 00:38	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/02/22 00:38	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/02/22 00:38	1
Chloroethane	ND		0.50	0.10	ug/L			12/02/22 00:38	1
<b>Chloroform</b>	<b>0.59</b>		0.50	0.090	ug/L			12/02/22 00:38	1
Chloromethane	ND	^c cn	0.50	0.10	ug/L			12/02/22 00:38	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/02/22 00:38	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/02/22 00:38	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/02/22 00:38	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/02/22 00:38	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/02/22 00:38	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/02/22 00:38	1
Styrene	ND		0.50	0.070	ug/L			12/02/22 00:38	1
<b>Tetrachloroethene</b>	<b>3.8</b>		0.50	0.20	ug/L			12/02/22 00:38	1
<b>Toluene</b>	<b>0.16</b>	<b>J cn</b>	0.50	0.080	ug/L			12/02/22 00:38	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/02/22 00:38	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/02/22 00:38	1
<b>Trichloroethene</b>	<b>0.17</b>	<b>J</b>	0.50	0.080	ug/L			12/02/22 00:38	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/02/22 00:38	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/02/22 00:38	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

**Client Sample ID: HD-COD-SW-26-0/1-0**

**Lab Sample ID: 410-106467-9**

Date Collected: 11/18/22 10:40

Matrix: Water

Date Received: 11/18/22 16:24

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		12/02/22 00:38	1
4-Bromofluorobenzene (Surr)	99		80 - 120		12/02/22 00:38	1
Dibromofluoromethane (Surr)	101		80 - 120		12/02/22 00:38	1
Toluene-d8 (Surr)	99		80 - 120		12/02/22 00:38	1

**Client Sample ID: HD-COD-SW-27-0/1-0**

**Lab Sample ID: 410-106467-10**

Date Collected: 11/18/22 11:10

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/02/22 00:59	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/02/22 00:59	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/02/22 00:59	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/02/22 00:59	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/02/22 00:59	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/02/22 00:59	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/02/22 00:59	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/02/22 00:59	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/02/22 00:59	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/02/22 00:59	1
2-Hexanone	ND	^c cn	5.0	0.10	ug/L			12/02/22 00:59	1
4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0	ug/L			12/02/22 00:59	1
<b>Acetone</b>	<b>3.2</b>	<b>J</b>	5.0	1.0	ug/L			12/02/22 00:59	1
Benzene	ND		0.50	0.10	ug/L			12/02/22 00:59	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/02/22 00:59	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/02/22 00:59	1
Bromoform	ND		1.0	0.30	ug/L			12/02/22 00:59	1
Bromomethane	ND		0.50	0.10	ug/L			12/02/22 00:59	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/02/22 00:59	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/02/22 00:59	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/02/22 00:59	1
Chloroethane	ND		0.50	0.10	ug/L			12/02/22 00:59	1
Chloroform	ND		0.50	0.090	ug/L			12/02/22 00:59	1
Chloromethane	ND	^c cn	0.50	0.10	ug/L			12/02/22 00:59	1
<b>cis-1,2-Dichloroethene</b>	<b>0.20</b>	<b>J</b>	0.50	0.080	ug/L			12/02/22 00:59	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/02/22 00:59	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/02/22 00:59	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/02/22 00:59	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/02/22 00:59	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/02/22 00:59	1
Styrene	ND		0.50	0.070	ug/L			12/02/22 00:59	1
<b>Tetrachloroethene</b>	<b>0.20</b>	<b>J</b>	0.50	0.20	ug/L			12/02/22 00:59	1
<b>Toluene</b>	<b>0.15</b>	<b>J cn</b>	0.50	0.080	ug/L			12/02/22 00:59	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/02/22 00:59	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/02/22 00:59	1
<b>Trichloroethene</b>	<b>0.20</b>	<b>J</b>	0.50	0.080	ug/L			12/02/22 00:59	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/02/22 00:59	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/02/22 00:59	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

**Client Sample ID: HD-COD-SW-27-0/1-0**

**Lab Sample ID: 410-106467-10**

Date Collected: 11/18/22 11:10

Matrix: Water

Date Received: 11/18/22 16:24

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		12/02/22 00:59	1
4-Bromofluorobenzene (Surr)	99		80 - 120		12/02/22 00:59	1
Dibromofluoromethane (Surr)	101		80 - 120		12/02/22 00:59	1
Toluene-d8 (Surr)	99		80 - 120		12/02/22 00:59	1

**Client Sample ID: HD-COD-SW-28-0/1-0**

**Lab Sample ID: 410-106467-11**

Date Collected: 11/18/22 12:40

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/02/22 01:19	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/02/22 01:19	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/02/22 01:19	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/02/22 01:19	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/02/22 01:19	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/02/22 01:19	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/02/22 01:19	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/02/22 01:19	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/02/22 01:19	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/02/22 01:19	1
2-Hexanone	ND	^c cn	5.0	0.10	ug/L			12/02/22 01:19	1
4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0	ug/L			12/02/22 01:19	1
<b>Acetone</b>	<b>2.2</b>	<b>J</b>	5.0	1.0	ug/L			12/02/22 01:19	1
Benzene	ND		0.50	0.10	ug/L			12/02/22 01:19	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/02/22 01:19	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/02/22 01:19	1
Bromoform	ND		1.0	0.30	ug/L			12/02/22 01:19	1
Bromomethane	ND		0.50	0.10	ug/L			12/02/22 01:19	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/02/22 01:19	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/02/22 01:19	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/02/22 01:19	1
Chloroethane	ND		0.50	0.10	ug/L			12/02/22 01:19	1
Chloroform	ND		0.50	0.090	ug/L			12/02/22 01:19	1
Chloromethane	ND	^c cn	0.50	0.10	ug/L			12/02/22 01:19	1
<b>cis-1,2-Dichloroethene</b>	<b>0.18</b>	<b>J</b>	0.50	0.080	ug/L			12/02/22 01:19	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/02/22 01:19	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/02/22 01:19	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/02/22 01:19	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/02/22 01:19	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/02/22 01:19	1
Styrene	ND		0.50	0.070	ug/L			12/02/22 01:19	1
<b>Tetrachloroethene</b>	<b>0.22</b>	<b>J</b>	0.50	0.20	ug/L			12/02/22 01:19	1
<b>Toluene</b>	<b>0.13</b>	<b>J cn</b>	0.50	0.080	ug/L			12/02/22 01:19	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/02/22 01:19	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/02/22 01:19	1
<b>Trichloroethene</b>	<b>0.17</b>	<b>J</b>	0.50	0.080	ug/L			12/02/22 01:19	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/02/22 01:19	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/02/22 01:19	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

**Client Sample ID: HD-COD-SW-28-0/1-0**

**Lab Sample ID: 410-106467-11**

Date Collected: 11/18/22 12:40

Matrix: Water

Date Received: 11/18/22 16:24

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		12/02/22 01:19	1
4-Bromofluorobenzene (Surr)	98		80 - 120		12/02/22 01:19	1
Dibromofluoromethane (Surr)	100		80 - 120		12/02/22 01:19	1
Toluene-d8 (Surr)	99		80 - 120		12/02/22 01:19	1

**Client Sample ID: HD-COD-SW-29-0/1-0**

**Lab Sample ID: 410-106467-12**

Date Collected: 11/18/22 09:05

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/02/22 01:39	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/02/22 01:39	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/02/22 01:39	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/02/22 01:39	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/02/22 01:39	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/02/22 01:39	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/02/22 01:39	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/02/22 01:39	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/02/22 01:39	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/02/22 01:39	1
2-Hexanone	ND	^c cn	5.0	0.10	ug/L			12/02/22 01:39	1
4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0	ug/L			12/02/22 01:39	1
<b>Acetone</b>	<b>2.1</b>	<b>J</b>	5.0	1.0	ug/L			12/02/22 01:39	1
Benzene	ND		0.50	0.10	ug/L			12/02/22 01:39	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/02/22 01:39	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/02/22 01:39	1
Bromoform	ND		1.0	0.30	ug/L			12/02/22 01:39	1
Bromomethane	ND		0.50	0.10	ug/L			12/02/22 01:39	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/02/22 01:39	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/02/22 01:39	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/02/22 01:39	1
Chloroethane	ND		0.50	0.10	ug/L			12/02/22 01:39	1
Chloroform	ND		0.50	0.090	ug/L			12/02/22 01:39	1
Chloromethane	ND	^c cn	0.50	0.10	ug/L			12/02/22 01:39	1
<b>cis-1,2-Dichloroethene</b>	<b>0.17</b>	<b>J</b>	0.50	0.080	ug/L			12/02/22 01:39	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/02/22 01:39	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/02/22 01:39	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/02/22 01:39	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/02/22 01:39	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/02/22 01:39	1
Styrene	ND		0.50	0.070	ug/L			12/02/22 01:39	1
<b>Tetrachloroethene</b>	<b>0.48</b>	<b>J</b>	0.50	0.20	ug/L			12/02/22 01:39	1
<b>Toluene</b>	<b>0.095</b>	<b>J cn</b>	0.50	0.080	ug/L			12/02/22 01:39	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/02/22 01:39	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/02/22 01:39	1
<b>Trichloroethene</b>	<b>0.17</b>	<b>J</b>	0.50	0.080	ug/L			12/02/22 01:39	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/02/22 01:39	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/02/22 01:39	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

**Client Sample ID: HD-COD-SW-29-0/1-0**

**Lab Sample ID: 410-106467-12**

Date Collected: 11/18/22 09:05

Matrix: Water

Date Received: 11/18/22 16:24

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		12/02/22 01:39	1
4-Bromofluorobenzene (Surr)	99		80 - 120		12/02/22 01:39	1
Dibromofluoromethane (Surr)	102		80 - 120		12/02/22 01:39	1
Toluene-d8 (Surr)	100		80 - 120		12/02/22 01:39	1

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

**Lab Sample ID: 410-106467-13**

Date Collected: 11/18/22 10:15

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/02/22 02:00	1
<b>1,1,1-Trichloroethane</b>	<b>5.7</b>		0.50	0.080	ug/L			12/02/22 02:00	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/02/22 02:00	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/02/22 02:00	1
<b>1,1-Dichloroethane</b>	<b>1.1</b>		0.50	0.10	ug/L			12/02/22 02:00	1
<b>1,1-Dichloroethene</b>	<b>0.51</b>		0.50	0.10	ug/L			12/02/22 02:00	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/02/22 02:00	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/02/22 02:00	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/02/22 02:00	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/02/22 02:00	1
2-Hexanone	ND	^c cn	5.0	0.10	ug/L			12/02/22 02:00	1
4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0	ug/L			12/02/22 02:00	1
<b>Acetone</b>	<b>1.3</b>	<b>J</b>	5.0	1.0	ug/L			12/02/22 02:00	1
Benzene	ND		0.50	0.10	ug/L			12/02/22 02:00	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/02/22 02:00	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/02/22 02:00	1
Bromoform	ND		1.0	0.30	ug/L			12/02/22 02:00	1
Bromomethane	ND		0.50	0.10	ug/L			12/02/22 02:00	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/02/22 02:00	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/02/22 02:00	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/02/22 02:00	1
Chloroethane	ND		0.50	0.10	ug/L			12/02/22 02:00	1
<b>Chloroform</b>	<b>0.30</b>	<b>J</b>	0.50	0.090	ug/L			12/02/22 02:00	1
Chloromethane	ND	^c cn	0.50	0.10	ug/L			12/02/22 02:00	1
<b>cis-1,2-Dichloroethene</b>	<b>3.3</b>		0.50	0.080	ug/L			12/02/22 02:00	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/02/22 02:00	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/02/22 02:00	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/02/22 02:00	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/02/22 02:00	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/02/22 02:00	1
Styrene	ND		0.50	0.070	ug/L			12/02/22 02:00	1
<b>Toluene</b>	<b>0.086</b>	<b>J cn</b>	0.50	0.080	ug/L			12/02/22 02:00	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/02/22 02:00	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/02/22 02:00	1
<b>Trichloroethene</b>	<b>4.1</b>		0.50	0.080	ug/L			12/02/22 02:00	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/02/22 02:00	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/02/22 02:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		12/02/22 02:00	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

**Lab Sample ID: 410-106467-13**

Date Collected: 11/18/22 10:15

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		12/02/22 02:00	1
Dibromofluoromethane (Surr)	101		80 - 120		12/02/22 02:00	1
Toluene-d8 (Surr)	98		80 - 120		12/02/22 02:00	1

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	67		5.0	2.0	ug/L			12/02/22 20:04	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		12/02/22 20:04	10
4-Bromofluorobenzene (Surr)	98		80 - 120		12/02/22 20:04	10
Dibromofluoromethane (Surr)	101		80 - 120		12/02/22 20:04	10
Toluene-d8 (Surr)	98		80 - 120		12/02/22 20:04	10

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

**Lab Sample ID: 410-106467-14**

Date Collected: 11/18/22 00:00

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/01/22 23:17	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 23:17	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/01/22 23:17	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 23:17	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/01/22 23:17	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 23:17	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/01/22 23:17	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/01/22 23:17	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/01/22 23:17	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/01/22 23:17	1
2-Hexanone	ND	^c cn	5.0	0.10	ug/L			12/01/22 23:17	1
4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0	ug/L			12/01/22 23:17	1
Acetone	1.3	J	5.0	1.0	ug/L			12/01/22 23:17	1
Benzene	ND		0.50	0.10	ug/L			12/01/22 23:17	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/01/22 23:17	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/01/22 23:17	1
Bromoform	ND		1.0	0.30	ug/L			12/01/22 23:17	1
Bromomethane	ND		0.50	0.10	ug/L			12/01/22 23:17	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/01/22 23:17	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/01/22 23:17	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/01/22 23:17	1
Chloroethane	ND		0.50	0.10	ug/L			12/01/22 23:17	1
Chloroform	ND		0.50	0.090	ug/L			12/01/22 23:17	1
Chloromethane	ND	^c cn	0.50	0.10	ug/L			12/01/22 23:17	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/01/22 23:17	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/01/22 23:17	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/01/22 23:17	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/01/22 23:17	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/01/22 23:17	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/01/22 23:17	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

**Lab Sample ID: 410-106467-14**

Date Collected: 11/18/22 00:00

Matrix: Water

Date Received: 11/18/22 16:24

**Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.50	0.070	ug/L			12/01/22 23:17	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/01/22 23:17	1
<b>Toluene</b>	<b>0.29</b>	<b>J cn</b>	0.50	0.080	ug/L			12/01/22 23:17	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 23:17	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/01/22 23:17	1
Trichloroethene	ND		0.50	0.080	ug/L			12/01/22 23:17	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/01/22 23:17	1
<b>Xylenes, Total</b>	<b>0.096</b>	<b>J</b>	1.0	0.070	ug/L			12/01/22 23:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120					12/01/22 23:17	1
4-Bromofluorobenzene (Surr)	98		80 - 120					12/01/22 23:17	1
Dibromofluoromethane (Surr)	101		80 - 120					12/01/22 23:17	1
Toluene-d8 (Surr)	99		80 - 120					12/01/22 23:17	1



## Default Detection Limits

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

### Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	RL	MDL	Units
1,1,1,2-Tetrachloroethane	0.50	0.070	ug/L
1,1,1-Trichloroethane	0.50	0.080	ug/L
1,1,2,2-Tetrachloroethane	0.50	0.10	ug/L
1,1,2-Trichloroethane	0.50	0.080	ug/L
1,1-Dichloroethane	0.50	0.10	ug/L
1,1-Dichloroethene	0.50	0.10	ug/L
1,2-Dibromoethane (EDB)	0.50	0.080	ug/L
1,2-Dichloroethane	0.50	0.070	ug/L
1,2-Dichloropropane	0.50	0.10	ug/L
2-Butanone (MEK)	5.0	1.0	ug/L
2-Hexanone	5.0	0.10	ug/L
4-Methyl-2-pentanone (MIBK)	5.0	1.0	ug/L
Acetone	5.0	1.0	ug/L
Benzene	0.50	0.10	ug/L
Bromochloromethane	0.50	0.080	ug/L
Bromodichloromethane	0.50	0.080	ug/L
Bromoform	1.0	0.30	ug/L
Bromomethane	0.50	0.10	ug/L
Carbon disulfide	1.0	0.10	ug/L
Carbon tetrachloride	0.50	0.10	ug/L
Chlorobenzene	0.50	0.070	ug/L
Chloroethane	0.50	0.10	ug/L
Chloroform	0.50	0.090	ug/L
Chloromethane	0.50	0.10	ug/L
cis-1,2-Dichloroethene	0.50	0.080	ug/L
cis-1,3-Dichloropropene	0.50	0.10	ug/L
Dibromochloromethane	0.50	0.080	ug/L
Ethylbenzene	0.50	0.080	ug/L
Methyl tert-butyl ether	0.50	0.080	ug/L
Methylene Chloride	0.50	0.10	ug/L
Styrene	0.50	0.070	ug/L
Tetrachloroethene	0.50	0.20	ug/L
Toluene	0.50	0.080	ug/L
trans-1,2-Dichloroethene	0.50	0.10	ug/L
trans-1,3-Dichloropropene	0.50	0.080	ug/L
Trichloroethene	0.50	0.080	ug/L
Vinyl chloride	0.50	0.10	ug/L
Xylenes, Total	1.0	0.070	ug/L

# Surrogate Summary

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	BFB (80-120)	DBFM (80-120)	TOL (80-120)
410-106467-1	HD-COD-SW-6-0/1-0	99	101	99	105
410-106467-2	HD-COD-SW-7-0/1-0	102	101	101	105
410-106467-3	HD-COD-SW-8-0/1-0	99	99	99	104
410-106467-4	HD-COD-SW-9-0/1-0	99	100	99	104
410-106467-5	HD-COD-SW-13-0/1-0	101	100	99	105
410-106467-6	HD-COD-SW-15-0/1-0	99	99	100	103
410-106467-6 MS	HD-COD-SW-15-0/1-0 MS	93	105	97	108
410-106467-6 MSD	HD-COD-SW-15-0/1-0 MSD	96	104	96	107
410-106467-7	HD-COD-SW-16-0/1-0	103	99	101	99
410-106467-7 MS	HD-COD-SW-16-0/1-0	102	99	102	99
410-106467-7 MSD	HD-COD-SW-16-0/1-0	103	99	101	99
410-106467-8	HD-COD-SW-17-0/1-0	101	98	102	99
410-106467-8 - DL	HD-COD-SW-17-0/1-0	103	98	102	97
410-106467-9	HD-COD-SW-26-0/1-0	102	99	101	99
410-106467-10	HD-COD-SW-27-0/1-0	103	99	101	99
410-106467-11	HD-COD-SW-28-0/1-0	102	98	100	99
410-106467-12	HD-COD-SW-29-0/1-0	105	99	102	100
410-106467-13	HD-QC1-0/1-1	107	97	101	98
410-106467-13 - DL	HD-QC1-0/1-1	99	98	101	98
410-106467-14	HD-QC1-0/1-2	103	98	101	99
LCS 410-322544/4	Lab Control Sample	97	104	97	106
LCS 410-322841/4	Lab Control Sample	100	99	101	101
LCS 410-322942/4	Lab Control Sample	103	99	102	98
MB 410-322544/6	Method Blank	104	101	100	104
MB 410-322841/6	Method Blank	100	97	101	100
MB 410-322942/6	Method Blank	100	100	101	99

**Surrogate Legend**

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

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-322544/6  
 Matrix: Water  
 Analysis Batch: 322544

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/01/22 11:41	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 11:41	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/01/22 11:41	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 11:41	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/01/22 11:41	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 11:41	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/01/22 11:41	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/01/22 11:41	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/01/22 11:41	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/01/22 11:41	1
2-Hexanone	ND		5.0	0.10	ug/L			12/01/22 11:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/01/22 11:41	1
Acetone	ND		5.0	1.0	ug/L			12/01/22 11:41	1
Benzene	ND		0.50	0.10	ug/L			12/01/22 11:41	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/01/22 11:41	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/01/22 11:41	1
Bromoform	ND		1.0	0.30	ug/L			12/01/22 11:41	1
Bromomethane	ND		0.50	0.10	ug/L			12/01/22 11:41	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/01/22 11:41	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/01/22 11:41	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/01/22 11:41	1
Chloroethane	ND		0.50	0.10	ug/L			12/01/22 11:41	1
Chloroform	ND		0.50	0.090	ug/L			12/01/22 11:41	1
Chloromethane	ND		0.50	0.10	ug/L			12/01/22 11:41	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/01/22 11:41	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/01/22 11:41	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/01/22 11:41	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/01/22 11:41	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/01/22 11:41	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/01/22 11:41	1
Styrene	ND		0.50	0.070	ug/L			12/01/22 11:41	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/01/22 11:41	1
Toluene	ND		0.50	0.080	ug/L			12/01/22 11:41	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 11:41	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/01/22 11:41	1
Trichloroethene	ND		0.50	0.080	ug/L			12/01/22 11:41	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/01/22 11:41	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/01/22 11:41	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		12/01/22 11:41	1
4-Bromofluorobenzene (Surr)	101		80 - 120		12/01/22 11:41	1
Dibromofluoromethane (Surr)	100		80 - 120		12/01/22 11:41	1
Toluene-d8 (Surr)	104		80 - 120		12/01/22 11:41	1

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 410-322544/4**  
**Matrix: Water**  
**Analysis Batch: 322544**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier			Limits	
1,1,1,2-Tetrachloroethane	5.00	5.13		ug/L		103	71 - 134
1,1,1-Trichloroethane	5.00	4.83		ug/L		97	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.55		ug/L		111	75 - 123
1,1,2-Trichloroethane	5.00	5.10		ug/L		102	80 - 120
1,1-Dichloroethane	5.00	5.20		ug/L		104	74 - 120
1,1-Dichloroethene	5.00	4.96		ug/L		99	80 - 131
1,2-Dibromoethane (EDB)	5.00	4.85		ug/L		97	80 - 120
1,2-Dichloroethane	5.00	5.00		ug/L		100	69 - 122
1,2-Dichloropropane	5.00	5.40		ug/L		108	80 - 120
2-Butanone (MEK)	62.5	60.6		ug/L		97	59 - 141
2-Hexanone	62.5	63.1		ug/L		101	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	62.4		ug/L		100	55 - 140
Acetone	62.5	53.9		ug/L		86	60 - 146
Benzene	5.00	5.01		ug/L		100	80 - 120
Bromochloromethane	5.00	4.64		ug/L		93	80 - 120
Bromodichloromethane	5.00	5.39		ug/L		108	73 - 124
Bromoform	5.00	5.86		ug/L		117	49 - 144
Bromomethane	5.00	4.65		ug/L		93	60 - 136
Carbon disulfide	5.00	6.75	*+	ug/L		135	67 - 130
Carbon tetrachloride	5.00	4.82		ug/L		96	64 - 141
Chlorobenzene	5.00	4.75		ug/L		95	80 - 120
Chloroethane	5.00	5.24		ug/L		105	63 - 120
Chloroform	5.00	4.82		ug/L		96	80 - 120
Chloromethane	5.00	5.57		ug/L		111	56 - 124
cis-1,2-Dichloroethene	5.00	4.93		ug/L		99	80 - 122
cis-1,3-Dichloropropene	5.00	5.24		ug/L		105	67 - 121
Dibromochloromethane	5.00	5.57		ug/L		111	64 - 138
Ethylbenzene	5.00	5.04		ug/L		101	80 - 120
Methyl tert-butyl ether	5.00	5.10		ug/L		102	69 - 120
Methylene Chloride	5.00	5.10		ug/L		102	80 - 120
Styrene	5.00	4.85		ug/L		97	80 - 120
Tetrachloroethene	5.00	4.51		ug/L		90	80 - 120
Toluene	5.00	4.99		ug/L		100	80 - 120
trans-1,2-Dichloroethene	5.00	4.75		ug/L		95	80 - 122
trans-1,3-Dichloropropene	5.00	6.01		ug/L		120	61 - 129
Trichloroethene	5.00	4.63		ug/L		93	80 - 120
Vinyl chloride	5.00	5.30		ug/L		106	60 - 125
Xylenes, Total	15.0	14.6		ug/L		97	80 - 120

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	97		80 - 120
Toluene-d8 (Surr)	106		80 - 120

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-106467-6 MS  
 Matrix: Water  
 Analysis Batch: 322544

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

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier			Limits	
1,1,1,2-Tetrachloroethane	ND		5.00	5.70		ug/L		114	71 - 134
1,1,1-Trichloroethane	0.45	J	5.00	6.03		ug/L		111	78 - 126
1,1,2,2-Tetrachloroethane	ND		5.00	5.92		ug/L		118	75 - 123
1,1,2-Trichloroethane	ND		5.00	5.58		ug/L		112	80 - 120
1,1-Dichloroethane	0.18	J	5.00	6.12		ug/L		119	74 - 120
1,1-Dichloroethene	0.23	J	5.00	6.22		ug/L		120	80 - 131
1,2-Dibromoethane (EDB)	ND		5.00	5.31		ug/L		106	80 - 120
1,2-Dichloroethane	ND		5.00	5.43		ug/L		109	69 - 122
1,2-Dichloropropane	ND	FH	5.00	6.07	FH	ug/L		121	80 - 120
2-Butanone (MEK)	ND		62.6	79.0		ug/L		126	59 - 141
2-Hexanone	ND		62.6	81.6		ug/L		131	52 - 140
4-Methyl-2-pentanone (MIBK)	ND		62.6	81.0		ug/L		129	55 - 140
Acetone	ND		62.6	69.4		ug/L		111	60 - 146
Benzene	ND		5.00	5.76		ug/L		115	80 - 120
Bromochloromethane	ND		5.00	5.08		ug/L		101	80 - 120
Bromodichloromethane	ND		5.00	5.88		ug/L		117	73 - 124
Bromoform	ND	^c cn	5.00	6.03		ug/L		120	49 - 144
Bromomethane	ND		5.00	5.00		ug/L		100	60 - 136
Carbon disulfide	ND	^c *+ FH cn	5.00	8.16	FH	ug/L		163	67 - 130
Carbon tetrachloride	ND		5.00	5.77		ug/L		115	64 - 141
Chlorobenzene	ND		5.00	5.36		ug/L		107	80 - 120
Chloroethane	ND	FH	5.00	5.75		ug/L		115	63 - 120
Chloroform	0.34	J	5.00	5.79		ug/L		109	80 - 120
Chloromethane	ND	^c FH cn	5.00	6.25	FH	ug/L		125	80 - 120
cis-1,2-Dichloroethene	2.2		5.00	7.83		ug/L		112	80 - 122
cis-1,3-Dichloropropene	ND		5.00	5.53		ug/L		111	67 - 121
Dibromochloromethane	ND		5.00	5.92		ug/L		118	64 - 138
Ethylbenzene	ND		5.00	5.80		ug/L		116	80 - 120
Methyl tert-butyl ether	ND		5.00	5.45		ug/L		109	69 - 120
Methylene Chloride	ND		5.00	5.63		ug/L		112	80 - 120
Styrene	ND		5.00	5.42		ug/L		108	80 - 120
Tetrachloroethene	5.8		5.00	10.8		ug/L		101	80 - 120
Toluene	ND		5.00	5.76		ug/L		115	80 - 120
trans-1,2-Dichloroethene	ND		5.00	5.45		ug/L		109	80 - 122
trans-1,3-Dichloropropene	ND	^c cn	5.00	6.44		ug/L		129	61 - 129
Trichloroethene	1.8		5.00	6.97		ug/L		104	80 - 120
Vinyl chloride	ND	FH	5.00	6.11		ug/L		122	60 - 125
Xylenes, Total	ND		15.0	16.7		ug/L		111	80 - 120
		<b>MS MS</b>							
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
1,2-Dichloroethane-d4 (Surr)	93		80 - 120						
4-Bromofluorobenzene (Surr)	105		80 - 120						
Dibromofluoromethane (Surr)	97		80 - 120						
Toluene-d8 (Surr)	108		80 - 120						

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-106467-6 MSD

Matrix: Water

Analysis Batch: 322544

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

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
1,1,1,2-Tetrachloroethane	ND		5.00	5.69		ug/L		114	71 - 134	0	30
1,1,1-Trichloroethane	0.45	J	5.00	6.11		ug/L		113	78 - 126	1	30
1,1,2,2-Tetrachloroethane	ND		5.00	5.91		ug/L		118	75 - 123	0	30
1,1,2-Trichloroethane	ND		5.00	5.48		ug/L		109	80 - 120	2	30
1,1-Dichloroethane	0.18	J	5.00	6.18		ug/L		120	74 - 120	1	30
1,1-Dichloroethene	0.23	J	5.00	6.23		ug/L		120	80 - 131	0	30
1,2-Dibromoethane (EDB)	ND		5.00	5.26		ug/L		105	80 - 120	1	30
1,2-Dichloroethane	ND		5.00	5.41		ug/L		108	69 - 122	0	30
1,2-Dichloropropane	ND	FH	5.00	6.05	FH	ug/L		121	80 - 120	0	30
2-Butanone (MEK)	ND		62.6	68.3		ug/L		109	59 - 141	15	30
2-Hexanone	ND		62.6	69.9		ug/L		112	52 - 140	16	30
4-Methyl-2-pentanone (MIBK)	ND		62.6	69.5		ug/L		111	55 - 140	15	30
Acetone	ND		62.6	60.1		ug/L		96	60 - 146	14	30
Benzene	ND		5.00	5.75		ug/L		115	80 - 120	0	30
Bromochloromethane	ND		5.00	5.02		ug/L		100	80 - 120	1	30
Bromodichloromethane	ND		5.00	5.78		ug/L		116	73 - 124	2	30
Bromoform	ND	^c cn	5.00	6.02		ug/L		120	49 - 144	0	30
Bromomethane	ND		5.00	5.16		ug/L		103	60 - 136	3	30
Carbon disulfide	ND	^c *+ FH cn	5.00	8.10	FH	ug/L		162	67 - 130	1	30
Carbon tetrachloride	ND		5.00	5.84		ug/L		117	64 - 141	1	30
Chlorobenzene	ND		5.00	5.34		ug/L		107	80 - 120	0	30
Chloroethane	ND	FH	5.00	6.03	FH	ug/L		121	63 - 120	5	30
Chloroform	0.34	J	5.00	5.79		ug/L		109	80 - 120	0	30
Chloromethane	ND	^c FH cn	5.00	6.62	FH	ug/L		132	80 - 120	6	30
cis-1,2-Dichloroethene	2.2		5.00	7.82		ug/L		112	80 - 122	0	30
cis-1,3-Dichloropropene	ND		5.00	5.55		ug/L		111	67 - 121	0	30
Dibromochloromethane	ND		5.00	5.91		ug/L		118	64 - 138	0	30
Ethylbenzene	ND		5.00	5.76		ug/L		115	80 - 120	1	30
Methyl tert-butyl ether	ND		5.00	5.44		ug/L		109	69 - 120	0	30
Methylene Chloride	ND		5.00	5.68		ug/L		113	80 - 120	1	30
Styrene	ND		5.00	5.42		ug/L		108	80 - 120	0	30
Tetrachloroethene	5.8		5.00	10.9		ug/L		102	80 - 120	1	30
Toluene	ND		5.00	5.83		ug/L		116	80 - 120	1	30
trans-1,2-Dichloroethene	ND		5.00	5.52		ug/L		110	80 - 122	1	30
trans-1,3-Dichloropropene	ND	^c cn	5.00	6.39		ug/L		128	61 - 129	1	30
Trichloroethene	1.8		5.00	6.97		ug/L		104	80 - 120	0	30
Vinyl chloride	ND	FH	5.00	6.41	FH	ug/L		128	60 - 125	5	30
Xylenes, Total	ND		15.0	16.7		ug/L		111	80 - 120	0	30

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	96		80 - 120
Toluene-d8 (Surr)	107		80 - 120

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-322841/6

Matrix: Water

Analysis Batch: 322841

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/01/22 21:36	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 21:36	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/01/22 21:36	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/01/22 21:36	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/01/22 21:36	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 21:36	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/01/22 21:36	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/01/22 21:36	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/01/22 21:36	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/01/22 21:36	1
2-Hexanone	ND		5.0	0.10	ug/L			12/01/22 21:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/01/22 21:36	1
Acetone	ND		5.0	1.0	ug/L			12/01/22 21:36	1
Benzene	ND		0.50	0.10	ug/L			12/01/22 21:36	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/01/22 21:36	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/01/22 21:36	1
Bromoform	ND		1.0	0.30	ug/L			12/01/22 21:36	1
Bromomethane	ND		0.50	0.10	ug/L			12/01/22 21:36	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/01/22 21:36	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/01/22 21:36	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/01/22 21:36	1
Chloroethane	ND		0.50	0.10	ug/L			12/01/22 21:36	1
Chloroform	ND		0.50	0.090	ug/L			12/01/22 21:36	1
Chloromethane	ND		0.50	0.10	ug/L			12/01/22 21:36	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/01/22 21:36	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/01/22 21:36	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/01/22 21:36	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/01/22 21:36	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/01/22 21:36	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/01/22 21:36	1
Styrene	ND		0.50	0.070	ug/L			12/01/22 21:36	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/01/22 21:36	1
Toluene	0.0976	J	0.50	0.080	ug/L			12/01/22 21:36	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/01/22 21:36	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/01/22 21:36	1
Trichloroethene	ND		0.50	0.080	ug/L			12/01/22 21:36	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/01/22 21:36	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/01/22 21:36	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		12/01/22 21:36	1
4-Bromofluorobenzene (Surr)	97		80 - 120		12/01/22 21:36	1
Dibromofluoromethane (Surr)	101		80 - 120		12/01/22 21:36	1
Toluene-d8 (Surr)	100		80 - 120		12/01/22 21:36	1

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 410-322841/4**  
**Matrix: Water**  
**Analysis Batch: 322841**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier			Limits	
1,1,1,2-Tetrachloroethane	5.00	5.04		ug/L		101	71 - 134
1,1,1-Trichloroethane	5.00	5.17		ug/L		103	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.93		ug/L		99	75 - 123
1,1,2-Trichloroethane	5.00	5.18		ug/L		104	80 - 120
1,1-Dichloroethane	5.00	5.20		ug/L		104	74 - 120
1,1-Dichloroethene	5.00	5.29		ug/L		106	80 - 131
1,2-Dibromoethane (EDB)	5.00	5.09		ug/L		102	80 - 120
1,2-Dichloroethane	5.00	5.39		ug/L		108	69 - 122
1,2-Dichloropropane	5.00	5.16		ug/L		103	80 - 120
2-Butanone (MEK)	62.5	71.9		ug/L		115	59 - 141
2-Hexanone	62.5	76.7		ug/L		123	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	73.7		ug/L		118	55 - 140
Acetone	62.5	60.7		ug/L		97	60 - 146
Benzene	5.00	5.17		ug/L		103	80 - 120
Bromochloromethane	5.00	5.20		ug/L		104	80 - 120
Bromodichloromethane	5.00	5.20		ug/L		104	73 - 124
Bromoform	5.00	4.82		ug/L		96	49 - 144
Bromomethane	5.00	4.99		ug/L		100	60 - 136
Carbon disulfide	5.00	5.58		ug/L		112	67 - 130
Carbon tetrachloride	5.00	5.16		ug/L		103	64 - 141
Chlorobenzene	5.00	5.03		ug/L		101	80 - 120
Chloroethane	5.00	5.32		ug/L		106	63 - 120
Chloroform	5.00	5.11		ug/L		102	80 - 120
Chloromethane	5.00	5.47		ug/L		109	56 - 124
cis-1,2-Dichloroethene	5.00	5.26		ug/L		105	80 - 122
cis-1,3-Dichloropropene	5.00	4.84		ug/L		97	67 - 121
Dibromochloromethane	5.00	4.88		ug/L		98	64 - 138
Ethylbenzene	5.00	5.12		ug/L		102	80 - 120
Methyl tert-butyl ether	5.00	5.24		ug/L		105	69 - 120
Methylene Chloride	5.00	5.20		ug/L		104	80 - 120
Styrene	5.00	5.15		ug/L		103	80 - 120
Tetrachloroethene	5.00	4.97		ug/L		99	80 - 120
Toluene	5.00	5.16		ug/L		103	80 - 120
trans-1,2-Dichloroethene	5.00	5.10		ug/L		102	80 - 122
trans-1,3-Dichloropropene	5.00	5.09		ug/L		102	61 - 129
Trichloroethene	5.00	5.10		ug/L		102	80 - 120
Vinyl chloride	5.00	5.33		ug/L		107	60 - 125
Xylenes, Total	15.0	15.3		ug/L		102	80 - 120

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120
Toluene-d8 (Surr)	101		80 - 120



# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-106467-7 MS

Matrix: Water

Analysis Batch: 322841

Client Sample ID: HD-COD-SW-16-0/1-0

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier			Limits	
1,1,1,2-Tetrachloroethane	ND		5.00	5.14		ug/L		103	71 - 134
1,1,1-Trichloroethane	0.10	J	5.00	5.82		ug/L		114	78 - 126
1,1,2,2-Tetrachloroethane	ND		5.00	4.73		ug/L		94	75 - 123
1,1,2-Trichloroethane	ND		5.00	5.08		ug/L		101	80 - 120
1,1-Dichloroethane	ND		5.00	5.66		ug/L		113	74 - 120
1,1-Dichloroethene	ND		5.00	6.03		ug/L		120	80 - 131
1,2-Dibromoethane (EDB)	ND		5.00	5.19		ug/L		104	80 - 120
1,2-Dichloroethane	ND		5.00	5.94		ug/L		119	69 - 122
1,2-Dichloropropane	ND		5.00	5.52		ug/L		110	80 - 120
2-Butanone (MEK)	ND		62.6	77.0		ug/L		123	59 - 141
2-Hexanone	ND	^c cn	62.6	81.4		ug/L		130	52 - 140
4-Methyl-2-pentanone (MIBK)	ND	^c cn	62.6	79.3		ug/L		127	55 - 140
Acetone	1.9	J	62.6	64.3		ug/L		100	60 - 146
Benzene	ND		5.00	5.58		ug/L		112	80 - 120
Bromochloromethane	ND		5.00	5.36		ug/L		107	80 - 120
Bromodichloromethane	ND		5.00	5.53		ug/L		111	73 - 124
Bromoform	ND		5.00	4.70		ug/L		94	49 - 144
Bromomethane	ND		5.00	5.23		ug/L		105	60 - 136
Carbon disulfide	ND		5.00	6.03		ug/L		121	67 - 130
Carbon tetrachloride	ND		5.00	5.75		ug/L		115	64 - 141
Chlorobenzene	ND		5.00	5.16		ug/L		103	80 - 120
Chloroethane	ND		5.00	5.62		ug/L		112	63 - 120
Chloroform	ND		5.00	5.65		ug/L		113	80 - 120
Chloromethane	ND	^c FH cn	5.00	5.90		ug/L		118	80 - 120
cis-1,2-Dichloroethene	0.21	J	5.00	5.81		ug/L		112	80 - 122
cis-1,3-Dichloropropene	ND		5.00	5.36		ug/L		107	67 - 121
Dibromochloromethane	ND		5.00	4.97		ug/L		99	64 - 138
Ethylbenzene	ND		5.00	5.21		ug/L		104	80 - 120
Methyl tert-butyl ether	ND		5.00	5.51		ug/L		110	69 - 120
Methylene Chloride	ND		5.00	5.57		ug/L		111	80 - 120
Styrene	ND		5.00	5.22		ug/L		104	80 - 120
Tetrachloroethene	1.5		5.00	6.66		ug/L		103	80 - 120
Toluene	0.13	J cn	5.00	5.29		ug/L		103	80 - 120
trans-1,2-Dichloroethene	ND		5.00	5.67		ug/L		113	80 - 122
trans-1,3-Dichloropropene	ND		5.00	5.31		ug/L		106	61 - 129
Trichloroethene	0.21	J	5.00	5.77		ug/L		111	80 - 120
Vinyl chloride	ND		5.00	5.69		ug/L		114	60 - 125
Xylenes, Total	ND		15.0	15.5		ug/L		104	80 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	102		80 - 120
Toluene-d8 (Surr)	99		80 - 120

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 410-106467-7 MSD**

**Matrix: Water**

**Analysis Batch: 322841**

**Client Sample ID: HD-COD-SW-16-0/1-0**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
1,1,1,2-Tetrachloroethane	ND		5.00	5.10		ug/L		102	71 - 134	1	30
1,1,1-Trichloroethane	0.10	J	5.00	5.97		ug/L		117	78 - 126	3	30
1,1,2,2-Tetrachloroethane	ND		5.00	5.15		ug/L		103	75 - 123	9	30
1,1,2-Trichloroethane	ND		5.00	5.20		ug/L		104	80 - 120	2	30
1,1-Dichloroethane	ND		5.00	5.73		ug/L		115	74 - 120	1	30
1,1-Dichloroethene	ND		5.00	6.03		ug/L		121	80 - 131	0	30
1,2-Dibromoethane (EDB)	ND		5.00	5.36		ug/L		107	80 - 120	3	30
1,2-Dichloroethane	ND		5.00	6.00		ug/L		120	69 - 122	1	30
1,2-Dichloropropane	ND		5.00	5.64		ug/L		113	80 - 120	2	30
2-Butanone (MEK)	ND		62.6	68.8		ug/L		110	59 - 141	11	30
2-Hexanone	ND	^c cn	62.6	70.9		ug/L		113	52 - 140	14	30
4-Methyl-2-pentanone (MIBK)	ND	^c cn	62.6	68.2		ug/L		109	55 - 140	15	30
Acetone	1.9	J	62.6	58.6		ug/L		91	60 - 146	9	30
Benzene	ND		5.00	5.72		ug/L		114	80 - 120	3	30
Bromochloromethane	ND		5.00	5.58		ug/L		112	80 - 120	4	30
Bromodichloromethane	ND		5.00	5.66		ug/L		113	73 - 124	2	30
Bromoform	ND		5.00	4.93		ug/L		99	49 - 144	5	30
Bromomethane	ND		5.00	5.42		ug/L		108	60 - 136	4	30
Carbon disulfide	ND		5.00	6.10		ug/L		122	67 - 130	1	30
Carbon tetrachloride	ND		5.00	5.92		ug/L		118	64 - 141	3	30
Chlorobenzene	ND		5.00	5.35		ug/L		107	80 - 120	4	30
Chloroethane	ND		5.00	5.79		ug/L		116	63 - 120	3	30
Chloroform	ND		5.00	5.73		ug/L		114	80 - 120	1	30
Chloromethane	ND	^c FH cn	5.00	6.32	FH	ug/L		126	80 - 120	7	30
cis-1,2-Dichloroethene	0.21	J	5.00	5.91		ug/L		114	80 - 122	2	30
cis-1,3-Dichloropropene	ND		5.00	5.42		ug/L		108	67 - 121	1	30
Dibromochloromethane	ND		5.00	5.12		ug/L		102	64 - 138	3	30
Ethylbenzene	ND		5.00	5.36		ug/L		107	80 - 120	3	30
Methyl tert-butyl ether	ND		5.00	5.57		ug/L		111	69 - 120	1	30
Methylene Chloride	ND		5.00	5.66		ug/L		113	80 - 120	2	30
Styrene	ND		5.00	5.35		ug/L		107	80 - 120	2	30
Tetrachloroethene	1.5		5.00	6.70		ug/L		104	80 - 120	1	30
Toluene	0.13	J cn	5.00	5.34		ug/L		104	80 - 120	1	30
trans-1,2-Dichloroethene	ND		5.00	5.69		ug/L		114	80 - 122	0	30
trans-1,3-Dichloropropene	ND		5.00	5.41		ug/L		108	61 - 129	2	30
Trichloroethene	0.21	J	5.00	5.79		ug/L		111	80 - 120	0	30
Vinyl chloride	ND		5.00	6.18		ug/L		123	60 - 125	8	30
Xylenes, Total	ND		15.0	16.0		ug/L		106	80 - 120	3	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120
Toluene-d8 (Surr)	99		80 - 120

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-322942/6

Matrix: Water

Analysis Batch: 322942

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/02/22 10:55	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/02/22 10:55	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/02/22 10:55	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/02/22 10:55	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/02/22 10:55	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/02/22 10:55	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/02/22 10:55	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/02/22 10:55	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/02/22 10:55	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/02/22 10:55	1
2-Hexanone	ND		5.0	0.10	ug/L			12/02/22 10:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/02/22 10:55	1
Acetone	ND		5.0	1.0	ug/L			12/02/22 10:55	1
Benzene	ND		0.50	0.10	ug/L			12/02/22 10:55	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/02/22 10:55	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/02/22 10:55	1
Bromoform	ND		1.0	0.30	ug/L			12/02/22 10:55	1
Bromomethane	ND		0.50	0.10	ug/L			12/02/22 10:55	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/02/22 10:55	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/02/22 10:55	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/02/22 10:55	1
Chloroethane	ND		0.50	0.10	ug/L			12/02/22 10:55	1
Chloroform	ND		0.50	0.090	ug/L			12/02/22 10:55	1
Chloromethane	ND		0.50	0.10	ug/L			12/02/22 10:55	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/02/22 10:55	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/02/22 10:55	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/02/22 10:55	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/02/22 10:55	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/02/22 10:55	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/02/22 10:55	1
Styrene	ND		0.50	0.070	ug/L			12/02/22 10:55	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/02/22 10:55	1
Toluene	ND		0.50	0.080	ug/L			12/02/22 10:55	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/02/22 10:55	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/02/22 10:55	1
Trichloroethene	ND		0.50	0.080	ug/L			12/02/22 10:55	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/02/22 10:55	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/02/22 10:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		12/02/22 10:55	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/02/22 10:55	1
Dibromofluoromethane (Surr)	101		80 - 120		12/02/22 10:55	1
Toluene-d8 (Surr)	99		80 - 120		12/02/22 10:55	1

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 410-322942/4**  
**Matrix: Water**  
**Analysis Batch: 322942**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier			Limits	
1,1,1,2-Tetrachloroethane	5.00	4.98		ug/L		100	71 - 134
1,1,1-Trichloroethane	5.00	5.36		ug/L		107	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.93		ug/L		99	75 - 123
1,1,2-Trichloroethane	5.00	5.00		ug/L		100	80 - 120
1,1-Dichloroethane	5.00	5.40		ug/L		108	74 - 120
1,1-Dichloroethene	5.00	5.54		ug/L		111	80 - 131
1,2-Dibromoethane (EDB)	5.00	5.11		ug/L		102	80 - 120
1,2-Dichloroethane	5.00	5.91		ug/L		118	69 - 122
1,2-Dichloropropane	5.00	5.35		ug/L		107	80 - 120
2-Butanone (MEK)	62.5	58.7		ug/L		94	59 - 141
2-Hexanone	62.5	59.4		ug/L		95	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	56.7		ug/L		91	55 - 140
Acetone	62.5	51.6		ug/L		83	60 - 146
Benzene	5.00	5.32		ug/L		106	80 - 120
Bromochloromethane	5.00	5.26		ug/L		105	80 - 120
Bromodichloromethane	5.00	5.36		ug/L		107	73 - 124
Bromoform	5.00	4.71		ug/L		94	49 - 144
Bromomethane	5.00	5.02		ug/L		100	60 - 136
Carbon disulfide	5.00	5.53		ug/L		111	67 - 130
Carbon tetrachloride	5.00	5.30		ug/L		106	64 - 141
Chlorobenzene	5.00	5.02		ug/L		100	80 - 120
Chloroethane	5.00	5.24		ug/L		105	63 - 120
Chloroform	5.00	5.40		ug/L		108	80 - 120
Chloromethane	5.00	5.64		ug/L		113	56 - 124
cis-1,2-Dichloroethene	5.00	5.52		ug/L		110	80 - 122
cis-1,3-Dichloropropene	5.00	5.17		ug/L		103	67 - 121
Dibromochloromethane	5.00	4.91		ug/L		98	64 - 138
Ethylbenzene	5.00	5.08		ug/L		102	80 - 120
Methyl tert-butyl ether	5.00	5.54		ug/L		111	69 - 120
Methylene Chloride	5.00	5.38		ug/L		108	80 - 120
Styrene	5.00	5.14		ug/L		103	80 - 120
Tetrachloroethene	5.00	4.90		ug/L		98	80 - 120
Toluene	5.00	5.02		ug/L		100	80 - 120
trans-1,2-Dichloroethene	5.00	5.35		ug/L		107	80 - 122
trans-1,3-Dichloropropene	5.00	5.16		ug/L		103	61 - 129
Trichloroethene	5.00	5.21		ug/L		104	80 - 120
Vinyl chloride	5.00	5.28		ug/L		106	60 - 125
Xylenes, Total	15.0	15.2		ug/L		101	80 - 120

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	102		80 - 120
Toluene-d8 (Surr)	98		80 - 120

# QC Association Summary

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

## GC/MS VOA

### Analysis Batch: 322544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-106467-1	HD-COD-SW-6-0/1-0	Total/NA	Water	8260D	
410-106467-2	HD-COD-SW-7-0/1-0	Total/NA	Water	8260D	
410-106467-3	HD-COD-SW-8-0/1-0	Total/NA	Water	8260D	
410-106467-4	HD-COD-SW-9-0/1-0	Total/NA	Water	8260D	
410-106467-5	HD-COD-SW-13-0/1-0	Total/NA	Water	8260D	
410-106467-6	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
MB 410-322544/6	Method Blank	Total/NA	Water	8260D	
LCS 410-322544/4	Lab Control Sample	Total/NA	Water	8260D	
410-106467-6 MS	HD-COD-SW-15-0/1-0 MS	Total/NA	Water	8260D	
410-106467-6 MSD	HD-COD-SW-15-0/1-0 MSD	Total/NA	Water	8260D	

### Analysis Batch: 322841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-106467-7	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	
410-106467-8	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-106467-9	HD-COD-SW-26-0/1-0	Total/NA	Water	8260D	
410-106467-10	HD-COD-SW-27-0/1-0	Total/NA	Water	8260D	
410-106467-11	HD-COD-SW-28-0/1-0	Total/NA	Water	8260D	
410-106467-12	HD-COD-SW-29-0/1-0	Total/NA	Water	8260D	
410-106467-13	HD-QC1-0/1-1	Total/NA	Water	8260D	
410-106467-14	HD-QC1-0/1-2	Total/NA	Water	8260D	
MB 410-322841/6	Method Blank	Total/NA	Water	8260D	
LCS 410-322841/4	Lab Control Sample	Total/NA	Water	8260D	
410-106467-7 MS	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	
410-106467-7 MSD	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	

### Analysis Batch: 322942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-106467-8 - DL	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-106467-13 - DL	HD-QC1-0/1-1	Total/NA	Water	8260D	
MB 410-322942/6	Method Blank	Total/NA	Water	8260D	
LCS 410-322942/4	Lab Control Sample	Total/NA	Water	8260D	

# Lab Chronicle

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

**Lab Sample ID: 410-106467-1**

Date Collected: 11/18/22 10:20

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322544	DVW2	ELLE	12/01/22 12:03

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

**Lab Sample ID: 410-106467-2**

Date Collected: 11/18/22 11:00

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322544	DVW2	ELLE	12/01/22 12:25

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

**Lab Sample ID: 410-106467-3**

Date Collected: 11/18/22 09:20

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322544	DVW2	ELLE	12/01/22 12:48

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

**Lab Sample ID: 410-106467-4**

Date Collected: 11/18/22 12:25

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322544	DVW2	ELLE	12/01/22 13:10

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

**Lab Sample ID: 410-106467-5**

Date Collected: 11/18/22 09:40

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322544	DVW2	ELLE	12/01/22 13:32

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

**Lab Sample ID: 410-106467-6**

Date Collected: 11/18/22 11:15

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322544	DVW2	ELLE	12/01/22 13:54

**Client Sample ID: HD-COD-SW-16-0/1-0**

**Lab Sample ID: 410-106467-7**

Date Collected: 11/18/22 09:55

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322841	USEJ	ELLE	12/01/22 23:58

# Lab Chronicle

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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

**Lab Sample ID: 410-106467-8**

Date Collected: 11/18/22 10:10

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322841	USEJ	ELLE	12/02/22 00:18
Total/NA	Analysis	8260D	DL	10	322942	DVW2	ELLE	12/02/22 19:43

**Client Sample ID: HD-COD-SW-26-0/1-0**

**Lab Sample ID: 410-106467-9**

Date Collected: 11/18/22 10:40

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322841	USEJ	ELLE	12/02/22 00:38

**Client Sample ID: HD-COD-SW-27-0/1-0**

**Lab Sample ID: 410-106467-10**

Date Collected: 11/18/22 11:10

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322841	USEJ	ELLE	12/02/22 00:59

**Client Sample ID: HD-COD-SW-28-0/1-0**

**Lab Sample ID: 410-106467-11**

Date Collected: 11/18/22 12:40

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322841	USEJ	ELLE	12/02/22 01:19

**Client Sample ID: HD-COD-SW-29-0/1-0**

**Lab Sample ID: 410-106467-12**

Date Collected: 11/18/22 09:05

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322841	USEJ	ELLE	12/02/22 01:39

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

**Lab Sample ID: 410-106467-13**

Date Collected: 11/18/22 10:15

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322841	USEJ	ELLE	12/02/22 02:00
Total/NA	Analysis	8260D	DL	10	322942	DVW2	ELLE	12/02/22 20:04

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

**Lab Sample ID: 410-106467-14**

Date Collected: 11/18/22 00:00

Matrix: Water

Date Received: 11/18/22 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	322841	USEJ	ELLE	12/01/22 23:17

# Lab Chronicle

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

**Laboratory References:**

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300



# Accreditation/Certification Summary

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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## Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

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Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-23

# Method Summary

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

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<b>Method</b>	<b>Method Description</b>	<b>Protocol</b>	<b>Laboratory</b>
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

**Protocol References:**

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

**Laboratory References:**

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

# Sample Summary

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP Monthly Surface Water

Job ID: 410-106467-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-106467-1	HD-COD-SW-6-0/1-0	Water	11/18/22 10:20	11/18/22 16:24
410-106467-2	HD-COD-SW-7-0/1-0	Water	11/18/22 11:00	11/18/22 16:24
410-106467-3	HD-COD-SW-8-0/1-0	Water	11/18/22 09:20	11/18/22 16:24
410-106467-4	HD-COD-SW-9-0/1-0	Water	11/18/22 12:25	11/18/22 16:24
410-106467-5	HD-COD-SW-13-0/1-0	Water	11/18/22 09:40	11/18/22 16:24
410-106467-6	HD-COD-SW-15-0/1-0	Water	11/18/22 11:15	11/18/22 16:24
410-106467-7	HD-COD-SW-16-0/1-0	Water	11/18/22 09:55	11/18/22 16:24
410-106467-8	HD-COD-SW-17-0/1-0	Water	11/18/22 10:10	11/18/22 16:24
410-106467-9	HD-COD-SW-26-0/1-0	Water	11/18/22 10:40	11/18/22 16:24
410-106467-10	HD-COD-SW-27-0/1-0	Water	11/18/22 11:10	11/18/22 16:24
410-106467-11	HD-COD-SW-28-0/1-0	Water	11/18/22 12:40	11/18/22 16:24
410-106467-12	HD-COD-SW-29-0/1-0	Water	11/18/22 09:05	11/18/22 16:24
410-106467-13	HD-QC1-0/1-1	Water	11/18/22 10:15	11/18/22 16:24
410-106467-14	HD-QC1-0/1-2	Water	11/18/22 00:00	11/18/22 16:24

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 16334 Analysis Batch Number: 286414Lab Sample ID: IC 410-286414/13 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/16/22 17:26 Lab File ID: GG16X12.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.22	Incomplete Integration	DVW2	08/17/22 11:31
Ethyl ether	3.14	Incomplete Integration	DVW2	08/17/22 11:31
Acetone	3.49	Incomplete Integration	DVW2	08/17/22 11:31
Carbon disulfide	3.71	Incomplete Integration	DVW2	08/17/22 11:31
Methyl acetate	3.88	Incomplete Integration	DVW2	08/17/22 11:32
1,1-Dichloroethane	5.14	Incomplete Integration	DVW2	08/17/22 11:32
1,4-Dioxane	8.56	Incomplete Integration	DVW2	08/17/22 11:32
Bromodichloromethane	8.73	Incomplete Integration	DVW2	08/17/22 11:32
2-Nitropropane	9.00	Incomplete Integration	DVW2	08/17/22 11:32

Lab Sample ID: IC 410-286414/14 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/16/22 17:48 Lab File ID: GG16X13.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.22	Incomplete Integration	DVW2	08/17/22 11:33
Methyl acetate	3.87	Incomplete Integration	DVW2	08/17/22 11:34
t-Butyl alcohol	4.26	Incomplete Integration	DVW2	08/17/22 11:34
Propionitrile	6.04	Incomplete Integration	DVW2	08/17/22 11:34
1,4-Dioxane	8.52	Incomplete Integration	DVW2	08/17/22 11:35

Lab Sample ID: IC 410-286414/15 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/16/22 18:10 Lab File ID: GG16X14.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.22	Incomplete Integration	DVW2	08/17/22 11:36
Acetone	3.47	Incomplete Integration	DVW2	08/17/22 11:36
1,4-Dioxane	8.52	Incomplete Integration	DVW2	08/17/22 11:37

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 16334 Analysis Batch Number: 286414Lab Sample ID: IC 410-286414/16 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/16/22 18:32 Lab File ID: GG16X15.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.48	Incomplete Integration	DVW2	08/17/22 11:38
Methylcyclohexane	8.35	Incomplete Integration	DVW2	08/17/22 11:39
1,4-Dioxane	8.51	Incomplete Integration	DVW2	08/17/22 11:39

Lab Sample ID: IC 410-286414/17 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/16/22 18:54 Lab File ID: GG16X16.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
t-Butyl alcohol-d10 (IS)	4.13	Incomplete Integration	DVW2	08/17/22 11:41

Lab Sample ID: ICIS 410-286414/18 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/16/22 19:17 Lab File ID: GG16X17.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.46	Incomplete Integration	DVW2	08/17/22 11:42
Methyl acetate	3.86	Incomplete Integration	DVW2	08/17/22 11:43
t-Butyl alcohol-d10 (IS)	4.11	Incomplete Integration	DVW2	08/17/22 11:43

Lab Sample ID: IC 410-286414/19 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/16/22 19:38 Lab File ID: GG16X18.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.86	Incomplete Integration	DVW2	08/17/22 11:45
t-Butyl alcohol-d10 (IS)	4.15	Incomplete Integration	DVW2	08/17/22 11:45

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 16334 Analysis Batch Number: 286414Lab Sample ID: ICV 410-286414/21 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/16/22 20:22 Lab File ID: GG16X20.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.52	Incomplete Integration	DVW2	08/17/22 11:46

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 16334 Analysis Batch Number: 322544Lab Sample ID: MB 410-322544/6 Client Sample ID: \_\_\_\_\_Date Analyzed: 12/01/22 11:41 Lab File ID: GD01X05.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone		Invalid Compound ID	pongsawat p	12/02/22 16:08

Lab Sample ID: 410-106467-1 Client Sample ID: HD-COD-SW-6-0/1-0Date Analyzed: 12/01/22 12:03 Lab File ID: GD01X06.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane		Invalid Compound ID	pongsawat p	12/02/22 16:08

Lab Sample ID: 410-106467-3 Client Sample ID: HD-COD-SW-8-0/1-0Date Analyzed: 12/01/22 12:48 Lab File ID: GD01X08.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1-Trichloroethane		Invalid Compound ID	pongsawat p	12/02/22 16:10

Lab Sample ID: 410-106467-5 Client Sample ID: HD-COD-SW-13-0/1-0Date Analyzed: 12/01/22 13:32 Lab File ID: GD01X10.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.48	Incomplete Integration	pongsawat p	12/02/22 16:11

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 16334 Analysis Batch Number: 322544Lab Sample ID: 410-106467-6 Client Sample ID: HD-COD-SW-15-0/1-0Date Analyzed: 12/01/22 13:54 Lab File ID: GD01X11.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone		Invalid Compound ID	pongsawat p	12/02/22 16:12



GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 19094 Analysis Batch Number: 274149

Lab Sample ID: IC 410-274149/12 Client Sample ID: \_\_\_\_\_

Date Analyzed: 07/11/22 16:51 Lab File ID: HL11X12.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.90	Baseline	UKAD	07/12/22 09:48
1,4-Dioxane	8.54	Split Peak	UKAD	07/12/22 09:48

Lab Sample ID: ICIS 410-274149/13 Client Sample ID: \_\_\_\_\_

Date Analyzed: 07/11/22 17:11 Lab File ID: HL11X13.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.88	Baseline	UKAD	07/12/22 09:49

Lab Sample ID: IC 410-274149/14 Client Sample ID: \_\_\_\_\_

Date Analyzed: 07/11/22 17:31 Lab File ID: HL11X14.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.54	Split Peak	UKAD	07/12/22 09:51

Lab Sample ID: IC 410-274149/15 Client Sample ID: \_\_\_\_\_

Date Analyzed: 07/11/22 17:51 Lab File ID: HL11X15.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.91	Baseline	UKAD	07/12/22 09:51

Lab Sample ID: IC 410-274149/16 Client Sample ID: \_\_\_\_\_

Date Analyzed: 07/11/22 18:11 Lab File ID: HL11X16.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.89	Baseline	UKAD	07/12/22 09:53
Acrylonitrile	4.47	Incomplete Integration	UKAD	07/12/22 10:11

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 19094 Analysis Batch Number: 274149Lab Sample ID: IC 410-274149/17 Client Sample ID: \_\_\_\_\_Date Analyzed: 07/11/22 18:32 Lab File ID: HL11X17.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.95	Baseline	UKAD	07/12/22 09:54
Acrylonitrile	4.48	Incomplete Integration	UKAD	07/12/22 10:11
1,4-Dioxane	8.56	Incomplete Integration	UKAD	07/12/22 10:13

Lab Sample ID: IC 410-274149/18 Client Sample ID: \_\_\_\_\_Date Analyzed: 07/11/22 18:52 Lab File ID: Copy\_HL11X18.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.95	Split Peak	UKAD	07/12/22 09:57
Acrylonitrile	4.48	Incomplete Integration	UKAD	07/12/22 10:11
Propionitrile	6.09	Incomplete Integration	UKAD	07/12/22 09:57
1,4-Dioxane	8.56	Incomplete Integration	UKAD	07/12/22 09:58
Ethyl methacrylate	10.07	Incomplete Integration	UKAD	07/12/22 09:58

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 19094 Analysis Batch Number: 275687Lab Sample ID: ICV 410-275687/4 Client Sample ID: \_\_\_\_\_Date Analyzed: 07/14/22 20:04 Lab File ID: copy\_HL14X03.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.93	Incomplete Integration	K4WN	07/14/22 20:43
1,3-Butadiene	2.24	Incomplete Integration	K4WN	07/14/22 20:44
Vinyl chloride	2.24	Incomplete Integration	K4WN	07/14/22 20:44
Methyl acetate	3.90	Incomplete Integration	K4WN	07/14/22 20:44
t-Butyl alcohol	4.25	Incomplete Integration	K4WN	07/14/22 20:45

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 19094 Analysis Batch Number: 322841

Lab Sample ID: CCVIS 410-322841/3 Client Sample ID: \_\_\_\_\_

Date Analyzed: 12/01/22 20:35 Lab File ID: HD01X32.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.92	Baseline	USEJ	12/01/22 20:59

Lab Sample ID: MB 410-322841/6 Client Sample ID: \_\_\_\_\_

Date Analyzed: 12/01/22 21:36 Lab File ID: HD01X35.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.54	Split Peak	USEJ	12/01/22 22:13

Lab Sample ID: 410-106467-7 Client Sample ID: HD-COD-SW-16-0/1-0

Date Analyzed: 12/01/22 23:58 Lab File ID: HD01X42.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.82	Incomplete Integration	DVW2	12/02/22 13:13

Lab Sample ID: 410-106467-10 Client Sample ID: HD-COD-SW-27-0/1-0

Date Analyzed: 12/02/22 00:59 Lab File ID: HD01X45.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.80	Incomplete Integration	DVW2	12/02/22 13:19

Lab Sample ID: 410-106467-11 Client Sample ID: HD-COD-SW-28-0/1-0

Date Analyzed: 12/02/22 01:19 Lab File ID: HD01X46.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.80	Incomplete Integration	DVW2	12/02/22 13:19
Trichloroethene	8.12	Incomplete Integration	DVW2	12/02/22 13:20

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 19094 Analysis Batch Number: 322841Lab Sample ID: 410-106467-12 Client Sample ID: HD-COD-SW-29-0/1-0Date Analyzed: 12/02/22 01:39 Lab File ID: HD01X47.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	8.13	Incomplete Integration	kaewrungr ueangp	12/05/22 10:15

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 19094 Analysis Batch Number: 322942Lab Sample ID: MB 410-322942/6 Client Sample ID: \_\_\_\_\_Date Analyzed: 12/02/22 10:55 Lab File ID: HD02X05.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone		Invalid Compound ID	kaewrungr ueangp	12/05/22 14:44

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration					
					Reagent ID	Volume Added							
MSV_29_826ISS_00037	02/02/23	08/02/22	Methanol, Lot EB679	10 mL	MSV_8260_SS_00715	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL					
							4-Bromofluorobenzene (Surr)	250 ug/mL					
							Dibromofluoromethane (Surr)	250 ug/mL					
											1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
												Chlorobenzene-d5 (IS)	250 ug/mL
												Fluorobenzene (IS)	250 ug/mL
							t-Butyl alcohol-d10 (IS)	1250 ug/mL					
.MSV_8260_SS_00715	03/31/25		Restek, Lot A0183565				(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				
.MSV_Cus826_IS_00473	04/30/25		Restek, Lot A0184225				(Purchased Reagent)	1,4-Dichlorobenzene-d4	2500 ug/mL				
								Chlorobenzene-d5 (IS)	2500 ug/mL				
								Fluorobenzene (IS)	2500 ug/mL				
								t-Butyl alcohol-d10 (IS)	12500 ug/mL				
MSV_29_826ISS_00040	05/28/23	11/29/22	Methanol, Lot EB679	10 mL	MSV_Cus826_IS_00514	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL					
							Chlorobenzene-d5 (IS)	250 ug/mL					
							Fluorobenzene (IS)	250 ug/mL					
							t-Butyl alcohol-d10 (IS)	1250 ug/mL					
.MSV_Cus826_IS_00514	04/30/25		Restek, Lot A0184225				(Purchased Reagent)	1,4-Dichlorobenzene-d4	2500 ug/mL				
								Chlorobenzene-d5 (IS)	2500 ug/mL				
								Fluorobenzene (IS)	2500 ug/mL				
								t-Butyl alcohol-d10 (IS)	12500 ug/mL				
MSV_29_826ISS_00040	05/28/23	11/29/22	Methanol, Lot EB679	10 mL	MSV_8260_SS_00798	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL					
							4-Bromofluorobenzene (Surr)	250 ug/mL					
							Dibromofluoromethane (Surr)	250 ug/mL					
							Toluene-d8 (Surr)	250 ug/mL					
.MSV_8260_SS_00798	03/31/25		Restek, Lot A0183565				(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				
MSV_LCS_VOC#1_00063	08/09/22	07/10/22	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00076	1 mL	1,1,1,2-Tetrachloroethane	40 ug/mL					
							1,1,1-Trichloroethane	40 ug/mL					
							1,1,2,2-Tetrachloroethane	40 ug/mL					
							1,1,2-Trichloroethane	40 ug/mL					
							1,1-Dichloroethane	40 ug/mL					
							1,1-Dichloroethene	40 ug/mL					
							1,2-Dibromoethane (EDB)	40 ug/mL					
							1,2-Dichloroethane	40 ug/mL					
							1,2-Dichloropropane	40 ug/mL					
							Benzene	40 ug/mL					
							Bromochloromethane	40 ug/mL					
							Bromodichloromethane	40 ug/mL					
							Bromoform	40 ug/mL					
							Carbon tetrachloride	40 ug/mL					
Chlorobenzene	40 ug/mL												

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Ethylbenzene	40 ug/mL
							Methylene Chloride	40 ug/mL
							Styrene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							Trichloroethene	40 ug/mL
					MSV_M_MIX2SEC_00073	1 mL	Carbon disulfide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
					MSV_Q_Ketones_00075	1 mL	2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
.MSV_M_MIX1SEC_00076	04/30/24		Restek, Lot A0171815			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_M_MIX2SEC_00073	04/30/24		Restek, Lot A0171837			(Purchased Reagent)	Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00075	01/31/24		Restek, Lot A0178490			(Purchased Reagent)	2-Butanone (MEK)	12500 ug/mL



REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
							2-Hexanone	12500 ug/mL	
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL	
							Acetone	12500 ug/mL	
MSV_LCS_VOC#1_00068	09/13/22	08/14/22	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00082	1 mL	1,1,1,2-Tetrachloroethane	40 ug/mL	
							1,1,1-Trichloroethane	40 ug/mL	
							1,1,2,2-Tetrachloroethane	40 ug/mL	
							1,1,2-Trichloroethane	40 ug/mL	
							1,1-Dichloroethane	40 ug/mL	
							1,1-Dichloroethene	40 ug/mL	
							1,2-Dibromoethane (EDB)	40 ug/mL	
							1,2-Dichloroethane	40 ug/mL	
							1,2-Dichloropropane	40 ug/mL	
							Benzene	40 ug/mL	
							Bromochloromethane	40 ug/mL	
							Bromodichloromethane	40 ug/mL	
							Bromoform	40 ug/mL	
							Carbon tetrachloride	40 ug/mL	
							Chlorobenzene	40 ug/mL	
							Chloroform	40 ug/mL	
							cis-1,2-Dichloroethene	40 ug/mL	
							cis-1,3-Dichloropropene	40 ug/mL	
							Dibromochloromethane	40 ug/mL	
							Ethylbenzene	40 ug/mL	
							Methylene Chloride	40 ug/mL	
							Styrene	40 ug/mL	
							Tetrachloroethene	40 ug/mL	
					Toluene	40 ug/mL			
					trans-1,2-Dichloroethene	40 ug/mL			
					trans-1,3-Dichloropropene	40 ug/mL			
					Trichloroethene	40 ug/mL			
MSV_M_MIX2SEC_00081					1 mL	Carbon disulfide	40 ug/mL		
MSV_Q_Ketones_00081					1 mL	Methyl tert-butyl ether	40 ug/mL		
						2-Butanone (MEK)	500 ug/mL		
						2-Hexanone	500 ug/mL		
						4-Methyl-2-pentanone (MIBK)	500 ug/mL		
						Acetone	500 ug/mL		
.MSV_M_MIX1SEC_00082	04/30/24		Restek, Lot A0171815				(Purchased Reagent)	1,1,1,2-Tetrachloroethane	1000 ug/mL
								1,1,1-Trichloroethane	1000 ug/mL
								1,1,2,2-Tetrachloroethane	1000 ug/mL
								1,1,2-Trichloroethane	1000 ug/mL
								1,1-Dichloroethane	1000 ug/mL
								1,1-Dichloroethene	1000 ug/mL
								1,2-Dibromoethane (EDB)	1000 ug/mL
								1,2-Dichloroethane	1000 ug/mL
								1,2-Dichloropropane	1000 ug/mL
								Benzene	1000 ug/mL
								Bromochloromethane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_M_MIX2SEC_00081	04/30/24		Restek, Lot A0171837		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00081	01/31/24		Restek, Lot A0178490		(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
MSV_LCS_VOC#1_00084	12/27/22	11/27/22	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00101	1 mL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,2-Dibromoethane (EDB)	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							Benzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Ethylbenzene	40 ug/mL
							Methylene Chloride	40 ug/mL
							Styrene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration		
					Reagent ID	Volume Added				
							trans-1,3-Dichloropropene	40 ug/mL		
							Trichloroethene	40 ug/mL		
							MSV_M_MIX2SEC_00098	1 mL	Carbon disulfide	40 ug/mL
									Methyl tert-butyl ether	40 ug/mL
							MSV_Q_Ketones_00101	1 mL	2-Butanone (MEK)	500 ug/mL
									2-Hexanone	500 ug/mL
.MSV_M_MIX1SEC_00101	04/30/25		Restek, Lot A0184354			(Purchased Reagent)	4-Methyl-2-pentanone (MIBK)	500 ug/mL		
							Acetone	500 ug/mL		
							1,1,1,2-Tetrachloroethane	1000 ug/mL		
							1,1,1-Trichloroethane	1000 ug/mL		
							1,1,2,2-Tetrachloroethane	1000 ug/mL		
							1,1,2-Trichloroethane	1000 ug/mL		
							1,1-Dichloroethane	1000 ug/mL		
							1,1-Dichloroethene	1000 ug/mL		
							1,2-Dibromoethane (EDB)	1000 ug/mL		
							1,2-Dichloroethane	1000 ug/mL		
							1,2-Dichloropropane	1000 ug/mL		
							Benzene	1000 ug/mL		
							Bromochloromethane	1000 ug/mL		
							Bromodichloromethane	1000 ug/mL		
							Bromoform	1000 ug/mL		
							Carbon tetrachloride	1000 ug/mL		
							Chlorobenzene	1000 ug/mL		
							Chloroform	1000 ug/mL		
							cis-1,2-Dichloroethene	1000 ug/mL		
							cis-1,3-Dichloropropene	1000 ug/mL		
Dibromochloromethane	1000 ug/mL									
Ethylbenzene	1000 ug/mL									
Methylene Chloride	1000 ug/mL									
Styrene	1000 ug/mL									
Tetrachloroethene	1000 ug/mL									
Toluene	1000 ug/mL									
trans-1,2-Dichloroethene	1000 ug/mL									
trans-1,3-Dichloropropene	1000 ug/mL									
Trichloroethene	1000 ug/mL									
.MSV_M_MIX2SEC_00098	04/30/25		Restek, Lot A0184412			(Purchased Reagent)	Carbon disulfide	1000 ug/mL		
							Methyl tert-butyl ether	1000 ug/mL		
.MSV_Q_Ketones_00101	11/30/24		Restek, Lot A0178490			(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		
MSV_LL_#1_826_00049	07/23/22	07/11/22	Methanol, Lot EB679		1 mL	MSV_CCV_VOC#1_00078	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL	
								1,1,1-Trichloroethane	50 ug/mL	
								1,1,2,2-Tetrachloroethane	50 ug/mL	
								1,1,2-Trichloroethane	50 ug/mL	
								1,1-Dichloroethane	50 ug/mL	
								1,1-Dichloroethene	50 ug/mL	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration					
					Reagent ID	Volume Added							
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL					
							1,2,3-Trimethylbenzene	50 ug/mL					
							1,3,5-Trichlorobenzene	50 ug/mL					
							1,4-Dioxane	2500 ug/mL					
							1-Chlorohexane	50 ug/mL					
							2-Chloro-1,3-butadiene	50 ug/mL					
							2-Methyl-2-propanol	1000 ug/mL					
							2-Nitropropane	250 ug/mL					
							3-Chloro-1-propene	50 ug/mL					
							Acrylonitrile	125 ug/mL					
							Benzyl chloride	50 ug/mL					
							Carbon disulfide	50 ug/mL					
							Cyclohexane	50 ug/mL					
							Ethyl methacrylate	50 ug/mL					
							Hexane	50 ug/mL					
							Iodomethane	50 ug/mL					
							Isobutyl alcohol	2500 ug/mL					
							Isopropyl ether	50 ug/mL					
							Methacrylonitrile	500 ug/mL					
							Methyl acetate	50 ug/mL					
							Methyl methacrylate	50 ug/mL					
							Methyl tert-butyl ether	50 ug/mL					
							Methylcyclohexane	50 ug/mL					
							n-Butanol	4375 ug/mL					
							n-Heptane	50 ug/mL					
							Propionitrile	1000 ug/mL					
							Tert-amyl methyl ether	50 ug/mL					
							Tert-butyl ethyl ether	50 ug/mL					
							Tetrahydrofuran	250 ug/mL					
							trans-1,4-Dichloro-2-butene	500 ug/mL					
							MSV_CCV_VOC#3_00078				200 uL	Acrolein	2500 ug/mL
												2-Butanone (MEK)	500 ug/mL
												2-Hexanone	500 ug/mL
					4-Methyl-2-pentanone (MIBK)	500 ug/mL							
					Acetone	500 ug/mL							
				MSV_V_VOA2_00148	150 uL	1,4-Dioxane	2500 ug/mL						
						2-Methyl-2-propanol	1000 ug/mL						
						Isobutyl alcohol	2500 ug/mL						
						Methacrylonitrile	500 ug/mL						
						n-Butanol	4375 ug/mL						
						Propionitrile	1000 ug/mL						
						trans-1,4-Dichloro-2-butene	500 ug/mL						
.MSV_CCV_VOC#1_00078	08/09/22	07/10/22	Methanol, Lot EB679	5 mL	MSV_MegaMIX#1_00076	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL					
							1,1,1-Trichloroethane	1000 ug/mL					
							1,1,2,2-Tetrachloroethane	1000 ug/mL					
							1,1,2-Trichloroethane	1000 ug/mL					
							1,1-Dichloroethane	1000 ug/mL					

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	1000 ug/mL
							1,1-Dichloropropene	1000 ug/mL
							1,2,3-Trichlorobenzene	1000 ug/mL
							1,2,3-Trichloropropane	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2,4-Trimethylbenzene	1000 ug/mL
							1,2-Dibromo-3-Chloropropane	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							1,3,5-Trimethylbenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dichloropropane	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2-Dichloropropane	1000 ug/mL
							2-Chlorotoluene	1000 ug/mL
							4-Chlorotoluene	1000 ug/mL
							4-Isopropyltoluene	1000 ug/mL
							Benzene	1000 ug/mL
							Bromobenzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Dibromomethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Isopropylbenzene	1000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methylene Chloride	1000 ug/mL
							n-Butylbenzene	1000 ug/mL
							N-Propylbenzene	1000 ug/mL
							Naphthalene	1000 ug/mL
							o-Xylene	1000 ug/mL
							sec-Butylbenzene	1000 ug/mL
							Styrene	1000 ug/mL
							tert-Butylbenzene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
					MSV_MegaMix#2_00076	1 mL	1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL	
							1,2,3-Trimethylbenzene	1000 ug/mL	
							1,3,5-Trichlorobenzene	1000 ug/mL	
							1,4-Dioxane	12500 ug/mL	
							1-Chlorohexane	1000 ug/mL	
							2-Chloro-1,3-butadiene	1000 ug/mL	
							2-Methyl-2-propanol	5000 ug/mL	
							2-Nitropropane	5000 ug/mL	
							3-Chloro-1-propene	1000 ug/mL	
							Acrylonitrile	2500 ug/mL	
							Benzyl chloride	1000 ug/mL	
							Carbon disulfide	1000 ug/mL	
							Cyclohexane	1000 ug/mL	
							Ethyl methacrylate	1000 ug/mL	
							Hexane	1000 ug/mL	
							Iodomethane	1000 ug/mL	
							Isobutyl alcohol	12500 ug/mL	
							Isopropyl ether	1000 ug/mL	
							Methacrylonitrile	2500 ug/mL	
							Methyl acetate	1000 ug/mL	
							Methyl methacrylate	1000 ug/mL	
							Methyl tert-butyl ether	1000 ug/mL	
							Methylcyclohexane	1000 ug/mL	
							n-Butanol	12500 ug/mL	
							n-Heptane	1000 ug/mL	
							Propionitrile	5000 ug/mL	
Tert-amyl methyl ether	1000 ug/mL								
Tert-butyl ethyl ether	1000 ug/mL								
Tetrahydrofuran	5000 ug/mL								
trans-1,4-Dichloro-2-butene	2500 ug/mL								
..MSV_MegaMIX#1_00076	08/09/22		Restek, Lot A0171634				(Purchased Reagent)	1,1,1,2-Tetrachloroethane	5000 ug/mL
								1,1,1-Trichloroethane	5000 ug/mL
								1,1,2,2-Tetrachloroethane	5000 ug/mL
								1,1,2-Trichloroethane	5000 ug/mL
								1,1-Dichloroethane	5000 ug/mL
								1,1-Dichloroethene	5000 ug/mL
								1,1-Dichloropropene	5000 ug/mL
								1,2,3-Trichlorobenzene	5000 ug/mL
								1,2,3-Trichloropropane	5000 ug/mL
								1,2,4-Trichlorobenzene	5000 ug/mL
								1,2,4-Trimethylbenzene	5000 ug/mL
								1,2-Dibromo-3-Chloropropane	5000 ug/mL
								1,2-Dibromoethane (EDB)	5000 ug/mL
								1,2-Dichlorobenzene	5000 ug/mL
								1,2-Dichloroethane	5000 ug/mL
								1,2-Dichloropropane	5000 ug/mL
								1,3,5-Trimethylbenzene	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							2,2-Dichloropropane	5000 ug/mL
							2-Chlorotoluene	5000 ug/mL
							4-Chlorotoluene	5000 ug/mL
							4-Isopropyltoluene	5000 ug/mL
							Benzene	5000 ug/mL
							Bromobenzene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Hexachlorobutadiene	5000 ug/mL
							Isopropylbenzene	5000 ug/mL
							m-Xylene & p-Xylene	10000 ug/mL
							Methylene Chloride	5000 ug/mL
							n-Butylbenzene	5000 ug/mL
							N-Propylbenzene	5000 ug/mL
							Naphthalene	5000 ug/mL
							o-Xylene	5000 ug/mL
							sec-Butylbenzene	5000 ug/mL
							Styrene	5000 ug/mL
							tert-Butylbenzene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
..MSV_MegaMix#2_00076	08/09/22		Restek, Lot A0173454		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,2,3-Trimethylbenzene	5000 ug/mL
							1,3,5-Trichlorobenzene	5000 ug/mL
							1,4-Dioxane	62500 ug/mL
							1-Chlorohexane	5000 ug/mL
							2-Chloro-1,3-butadiene	5000 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							2-Nitropropane	25000 ug/mL
							3-Chloro-1-propene	5000 ug/mL
							Acrylonitrile	12500 ug/mL
							Benzyl chloride	5000 ug/mL



REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon disulfide	5000 ug/mL
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Hexane	5000 ug/mL
							Iodomethane	5000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropyl ether	5000 ug/mL
							Methacrylonitrile	12500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							n-Butanol	62500 ug/mL
							n-Heptane	5000 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
							Tetrahydrofuran	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_CCV_VOC#3_00078	07/23/22	07/10/22	Methanol, Lot EB679	5 mL	MSV_CCV_ACR_00004	0.5 mL	Acrolein	12500 ug/mL
					MSV_V_Ketones_00074	1 mL	2-Butanone (MEK)	2500 ug/mL
							2-Hexanone	2500 ug/mL
							4-Methyl-2-pentanone (MIBK)	2500 ug/mL
							Acetone	2500 ug/mL
..MSV_CCV_ACR_00004	07/23/22	05/24/22	Methanol, Lot EB679	10 mL	MSV_VACR_STK_00026	9.17 mL	Acrolein	125000 ug/mL
...MSV_VACR_STK_00026	07/23/22	05/24/22	Methanol, Lot EB679	10 mL	MSV_ACROLEIN_00019	1.4626 g	Acrolein	136314 ug/mL
...MSV_ACROLEIN_00019	02/28/23		Chem Service, Lot 12926800				Acrolein	0.932 g/g
..MSV_V_Ketones_00074	01/31/24		Restek, Lot A0174287				2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MSV_V_VOA2_00148	08/09/22	07/10/22	Methanol, Lot EB679	5 mL	MSV_V#2B_00277	1 mL	1,4-Dioxane	12500 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Methacrylonitrile	2500 ug/mL
							n-Butanol	25000 ug/mL
							Propionitrile	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_V#2B_00277	04/30/24		Restek, Lot A0184378				1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
MSV_LL_#1_826_00052	09/11/22	08/15/22	Methanol, Lot EB679	1 mL	MSV_CCV_VOC#1_00083	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1,4-Dioxane	2500 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							2-Nitropropane	250 ug/mL
							3-Chloro-1-propene	50 ug/mL
							Acrylonitrile	125 ug/mL
							Benzyl chloride	50 ug/mL
							Carbon disulfide	50 ug/mL
							Cyclohexane	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Isopropyl ether	50 ug/mL
							Methacrylonitrile	500 ug/mL
							Methyl acetate	50 ug/mL
							Methyl methacrylate	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							n-Butanol	4375 ug/mL
							n-Heptane	50 ug/mL
							Propionitrile	1000 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
							Tetrahydrofuran	250 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
MSV_CCV_VOC#3_00084	200 uL	Acrolein	2499.94 ug/mL					
		2-Butanone (MEK)	500 ug/mL					
		2-Hexanone	500 ug/mL					
		4-Methyl-2-pentanone (MIBK)	500 ug/mL					
		Acetone	500 ug/mL					
MSV_V_VOA2_00153	150 uL	1,4-Dioxane	2500 ug/mL					
		2-Methyl-2-propanol	1000 ug/mL					
		Isobutyl alcohol	2500 ug/mL					
		Methacrylonitrile	500 ug/mL					
		n-Butanol	4375 ug/mL					
		Propionitrile	1000 ug/mL					
		trans-1,4-Dichloro-2-butene	500 ug/mL					
.MSV_CCV_VOC#1_00083	09/13/22	08/14/22	Methanol, Lot EB679	5 mL	MSV_MegaMIX#1_00082	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,1-Dichloropropene	1000 ug/mL
							1,2,3-Trichlorobenzene	1000 ug/mL
							1,2,3-Trichloropropane	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2,4-Trimethylbenzene	1000 ug/mL
							1,2-Dibromo-3-Chloropropane	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							1,3,5-Trimethylbenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dichloropropane	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2-Dichloropropane	1000 ug/mL
							2-Chlorotoluene	1000 ug/mL
							4-Chlorotoluene	1000 ug/mL
							4-Isopropyltoluene	1000 ug/mL
							Benzene	1000 ug/mL
							Bromobenzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Dibromomethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Isopropylbenzene	1000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methylene Chloride	1000 ug/mL
							n-Butylbenzene	1000 ug/mL
							N-Propylbenzene	1000 ug/mL
							Naphthalene	1000 ug/mL
							o-Xylene	1000 ug/mL
							sec-Butylbenzene	1000 ug/mL
							Styrene	1000 ug/mL
							tert-Butylbenzene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
					MSV_MegaMix#2_00081	1 mL	trans-1,2-Dichloroethene	1000 ug/mL	
							trans-1,3-Dichloropropene	1000 ug/mL	
							Trichloroethene	1000 ug/mL	
							1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL	
							1,2,3-Trimethylbenzene	1000 ug/mL	
							1,3,5-Trichlorobenzene	1000 ug/mL	
							1,4-Dioxane	12500 ug/mL	
							1-Chlorohexane	1000 ug/mL	
							2-Chloro-1,3-butadiene	1000 ug/mL	
							2-Methyl-2-propanol	5000 ug/mL	
							2-Nitropropane	5000 ug/mL	
							3-Chloro-1-propene	1000 ug/mL	
							Acrylonitrile	2500 ug/mL	
							Benzyl chloride	1000 ug/mL	
							Carbon disulfide	1000 ug/mL	
							Cyclohexane	1000 ug/mL	
							Ethyl methacrylate	1000 ug/mL	
							Hexane	1000 ug/mL	
							Iodomethane	1000 ug/mL	
							Isobutyl alcohol	12500 ug/mL	
							Isopropyl ether	1000 ug/mL	
							Methacrylonitrile	2500 ug/mL	
							Methyl acetate	1000 ug/mL	
							Methyl methacrylate	1000 ug/mL	
							Methyl tert-butyl ether	1000 ug/mL	
							Methylcyclohexane	1000 ug/mL	
							n-Butanol	12500 ug/mL	
							n-Heptane	1000 ug/mL	
							Propionitrile	5000 ug/mL	
							Tert-amyl methyl ether	1000 ug/mL	
Tert-butyl ethyl ether	1000 ug/mL								
Tetrahydrofuran	5000 ug/mL								
trans-1,4-Dichloro-2-butene	2500 ug/mL								
..MSV_MegaMIX#1_00082	09/13/22		Restek, Lot A0171634				(Purchased Reagent)	1,1,1,2-Tetrachloroethane	5000 ug/mL
								1,1,1-Trichloroethane	5000 ug/mL
								1,1,2,2-Tetrachloroethane	5000 ug/mL
								1,1,2-Trichloroethane	5000 ug/mL
								1,1-Dichloroethane	5000 ug/mL
								1,1-Dichloroethene	5000 ug/mL
								1,1-Dichloropropene	5000 ug/mL
								1,2,3-Trichlorobenzene	5000 ug/mL
								1,2,3-Trichloropropene	5000 ug/mL
								1,2,4-Trichlorobenzene	5000 ug/mL
								1,2,4-Trimethylbenzene	5000 ug/mL
								1,2-Dibromo-3-Chloropropane	5000 ug/mL
								1,2-Dibromoethane (EDB)	5000 ug/mL
								1,2-Dichlorobenzene	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							1,3,5-Trimethylbenzene	5000 ug/mL
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							2,2-Dichloropropane	5000 ug/mL
							2-Chlorotoluene	5000 ug/mL
							4-Chlorotoluene	5000 ug/mL
							4-Isopropyltoluene	5000 ug/mL
							Benzene	5000 ug/mL
							Bromobenzene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Hexachlorobutadiene	5000 ug/mL
							Isopropylbenzene	5000 ug/mL
							m-Xylene & p-Xylene	10000 ug/mL
							Methylene Chloride	5000 ug/mL
							n-Butylbenzene	5000 ug/mL
							N-Propylbenzene	5000 ug/mL
							Naphthalene	5000 ug/mL
							o-Xylene	5000 ug/mL
							sec-Butylbenzene	5000 ug/mL
							Styrene	5000 ug/mL
							tert-Butylbenzene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
..MSV_MegaMix#2_00081	09/13/22		Restek, Lot A0173454		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,2,3-Trimethylbenzene	5000 ug/mL
							1,3,5-Trichlorobenzene	5000 ug/mL
							1,4-Dioxane	62500 ug/mL
							1-Chlorohexane	5000 ug/mL
							2-Chloro-1,3-butadiene	5000 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							2-Nitropropane	25000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Chloro-1-propene	5000 ug/mL
							Acrylonitrile	12500 ug/mL
							Benzyl chloride	5000 ug/mL
							Carbon disulfide	5000 ug/mL
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Hexane	5000 ug/mL
							Iodomethane	5000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropyl ether	5000 ug/mL
							Methacrylonitrile	12500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							n-Butanol	62500 ug/mL
							n-Heptane	5000 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
							Tetrahydrofuran	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_CCV_VOC#3_00084	09/11/22	08/14/22	Methanol, Lot EB679	5 mL	MSV_CCV_ACR_00005	0.5 mL	Acrolein	12499.7 ug/mL
					MSV_V_Ketones_00079	1 mL	2-Butanone (MEK)	2500 ug/mL
							2-Hexanone	2500 ug/mL
							4-Methyl-2-pentanone (MIBK)	2500 ug/mL
							Acetone	2500 ug/mL
..MSV_CCV_ACR_00005	09/11/22	07/13/22	Methanol, Lot EB679	10 mL	MSV_VACR_STK_00027	9.205 mL	Acrolein	124997 ug/mL
...MSV_VACR_STK_00027	09/11/22	07/13/22	Methanol, Lot EB679	10 mL	MSV_ACROLEIN_00020	1.457 g	Acrolein	135792 ug/mL
...MSV_ACROLEIN_00020	02/28/23		Chem Service, Lot 12926800				Acrolein	0.932 g/g
..MSV_V_Ketones_00079	01/31/24		Restek, Lot A0174287				2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MSV_V_VOA2_00153	09/13/22	08/14/22	Methanol, Lot EB679	5 mL	MSV_V#2B_00282	1 mL	1,4-Dioxane	12500 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Methacrylonitrile	2500 ug/mL
							n-Butanol	25000 ug/mL
							Propionitrile	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_V#2B_00282	04/30/24		Restek, Lot A0184378				1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSV_LL_#1_826_00060	12/06/22	11/10/22	Methanol, Lot EB679	1 mL	MSV_CCV_VOC#1_00096	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Methylene Chloride	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
					Toluene	50 ug/mL		
					trans-1,2-Dichloroethene	50 ug/mL		
					trans-1,3-Dichloropropene	50 ug/mL		
					Trichloroethene	50 ug/mL		
Carbon disulfide	50 ug/mL							
Methyl tert-butyl ether	50 ug/mL							
MSV_CCV_VOC#3_00096					200 uL	2-Butanone (MEK)	500 ug/mL	
						2-Hexanone	500 ug/mL	
						4-Methyl-2-pentanone (MIBK)	500 ug/mL	
						Acetone	500 ug/mL	
.MSV_CCV_VOC#1_00096	12/06/22	11/06/22	Methanol, Lot EB679	5 mL	MSV_MegaMIX#1_00096	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
Chlorobenzene	1000 ug/mL							



REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
					MSV_MegaMix#2_00093	1 mL	Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
..MSV_MegaMIX#1_00096	12/06/22		Restek, Lot A0171634		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,2-Dibromoethane (EDB)	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							Benzene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Methylene Chloride	5000 ug/mL
							Styrene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
..MSV_MegaMix#2_00093	12/06/22		Restek, Lot A0173454		(Purchased Reagent)		Carbon disulfide	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
..MSV_CCV_VOC#3_00096	12/06/22	11/06/22	Methanol, Lot EB679	5 mL	MSV_V_Ketones_00090	1 mL	2-Butanone (MEK)	2500 ug/mL
							2-Hexanone	2500 ug/mL
							4-Methyl-2-pentanone (MIBK)	2500 ug/mL
							Acetone	2500 ug/mL
..MSV_V_Ketones_00090	01/31/24		Restek, Lot A0180742		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
							2-Hexanone	12500 ug/mL	
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL	
							Acetone	12500 ug/mL	
<b>MSV_LL_#2_826_00053</b>	08/09/22	07/11/22	Methanol, Lot EB679	1 mL	MSV_CCV_EE_00003	50 uL	Ethyl ether	50.0143 ug/mL	
					MSV_V_PentaCL_00019	10 uL	Pentachloroethane	50 ug/mL	
.MSV_CCV_EE_00003	11/20/22	05/20/22	Methanol, Lot EB679	100 mL	MSV_EE_MISCSK_00010	1.73 mL	Ethyl ether	1000.29 ug/mL	
..MSV_EE_MISCSK_00010	11/20/22	05/20/22	Methanol, Lot EB679	10 mL	MSV_EE_Neat_00007	0.5782 g	Ethyl ether	57820 ug/mL	
...MSV_EE_Neat_00007	12/31/25		Chem Service, Lot 12123300				(Purchased Reagent)	Ethyl ether	1 g/g
.MSV_V_PentaCL_00019	08/09/22		Restek, Lot A0171341				(Purchased Reagent)	Pentachloroethane	5000 ug/mL
<b>MSV_LL_#2_826_00056</b>	09/07/22	08/16/22	Methanol, Lot EB679	1 mL	MSV_CCV_EE_00003	50 uL	Ethyl ether	50.0143 ug/mL	
					MSV_V_PentaCL_00020	10 uL	Pentachloroethane	50 ug/mL	
.MSV_CCV_EE_00003	11/20/22	05/20/22	Methanol, Lot EB679	100 mL	MSV_EE_MISCSK_00010	1.73 mL	Ethyl ether	1000.29 ug/mL	
..MSV_EE_MISCSK_00010	11/20/22	05/20/22	Methanol, Lot EB679	10 mL	MSV_EE_Neat_00007	0.5782 g	Ethyl ether	57820 ug/mL	
...MSV_EE_Neat_00007	12/31/25		Chem Service, Lot 12123300				(Purchased Reagent)	Ethyl ether	1 g/g
.MSV_V_PentaCL_00020	09/07/22		Restek, Lot A0171341				(Purchased Reagent)	Pentachloroethane	5000 ug/mL
<b>MSV_LL_GAS826_00101</b>	07/18/22	07/11/22	Methanol, Lot EB679	1 mL	MSV_CCV_GASES_00221	25 uL	1,2-Dichloro-1,1,2-trifluoroethane	50 ug/mL	
							Bromomethane	50 ug/mL	
							Butadiene	50 ug/mL	
							Chloroethane	50 ug/mL	
							Chloromethane	50 ug/mL	
							Dichlorodifluoromethane	50 ug/mL	
							Dichlorofluoromethane	50 ug/mL	
							Trichlorofluoromethane	50 ug/mL	
							Vinyl chloride	50 ug/mL	
.MSV_CCV_GASES_00221	07/18/22		Restek, Lot A0172364				(Purchased Reagent)	1,2-Dichloro-1,1,2-trifluoroethane	2000 ug/mL
								Bromomethane	2000 ug/mL
								Butadiene	2000 ug/mL
								Chloroethane	2000 ug/mL
								Chloromethane	2000 ug/mL
								Dichlorodifluoromethane	2000 ug/mL
								Dichlorofluoromethane	2000 ug/mL
								Trichlorofluoromethane	2000 ug/mL
								Vinyl chloride	2000 ug/mL
<b>MSV_LL_GAS826_00108</b>	08/22/22	08/15/22	Methanol, Lot EB679	1 mL	MSV_CCV_GASES_00250	25 uL	1,2-Dichloro-1,1,2-trifluoroethane	50 ug/mL	
							Bromomethane	50 ug/mL	
							Butadiene	50 ug/mL	
							Chloroethane	50 ug/mL	
							Chloromethane	50 ug/mL	
							Dichlorodifluoromethane	50 ug/mL	
							Dichlorofluoromethane	50 ug/mL	
							Trichlorofluoromethane	50 ug/mL	
							Vinyl chloride	50 ug/mL	
.MSV_CCV_GASES_00250	08/22/22		Restek, Lot A0172364				(Purchased Reagent)	1,2-Dichloro-1,1,2-trifluoroethane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromomethane	2000 ug/mL
							Butadiene	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_LL_GAS826_00124	12/05/22	11/28/22	Methanol, Lot EB679	1 mL	MSV_CCV_GASES_00320	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_CCV_GASES_00320	12/05/22		Restek, Lot A0184815			(Purchased Reagent)	Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_LLcentISS_00005	11/30/22	05/30/22	Methanol, Lot EB679	50 mL	MSV_8260_SS_00668	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
					MSV_Cus826_IS_00451	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5 (IS)	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
							t-Butyl alcohol-d10 (IS)	250 ug/mL
.MSV_8260_SS_00668	11/30/22		Restek, Lot A0183565			(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
.MSV_Cus826_IS_00451	11/30/22		Restek, Lot A0179696			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_LLcentISS_00006	04/27/23	10/27/22	Methanol, Lot EB679	50 mL	MSV_Cus826_IS_00505	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5 (IS)	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
							t-Butyl alcohol-d10 (IS)	250 ug/mL
.MSV_Cus826_IS_00505	04/30/25		Restek, Lot A0184225			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_LLcentISS_00006	04/27/23	10/27/22	Methanol, Lot EB679	50 mL	MSV_8260_SS_00779	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.MSV_8260_SS_00779	03/31/25		Restek, Lot A0183565			(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-106467-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene-d8 (Surr)	2500 ug/mL
<b>MSV_QC_Gas826_00089</b>	07/17/22	07/11/22	Methanol, Lot EB679	1 mL	MSV_QC_2K_GAS_00096	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00096	07/17/22		Restek, Lot A0172021		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
<b>MSV_QC_Gas826_00095</b>	08/21/22	08/15/22	Methanol, Lot EB679	1 mL	MSV_QC_2K_GAS_00103	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00103	08/21/22		Restek, Lot A0172021		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
<b>MSV_QC_Gas826_00111</b>	12/04/22	11/28/22	Methanol, Lot EB679	1 mL	MSV_QC_2K_GAS_00119	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00119	12/04/22		Restek, Lot A0172021		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
<b>MSV_V_BFB_00008</b>							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Xylenes, Total	
					MSV_VBFB_STK_00008	0.128 mL	BFB	49.8125 ug/mL
.MSV_VBFB_STK_00008	12/27/22	06/27/22	Methanol, Lot EB679	10 mL	MSV_4BFB_NEAT_00008	0.9729 g	BFB	97290 ug/mL
..MSV_4BFB_NEAT_00008	02/28/25		Chem Service, Lot 13233000		(Purchased Reagent)		BFB	1 g/g

Reagent

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**MSV\_8260\_SS\_00779**



# CERTIFIED REFERENCE MATERIAL

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

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## Certificate of Analysis



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

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

**Catalog No. :** 55671 **Lot No.:** A0183565

**Description :** 8260A Surrogate Mix  
8260A Surrogate Mix 2,500µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** March 31, 2025 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dibromofluoromethane	2,500.5 µg/mL	+/-	14.5381	µg/mL	Gravimetric
	<b>CAS #</b> 1868-53-7 (Lot 012021)		+/-	140.2006	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	143.4811	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,500.5 µg/mL	+/-	14.5381	µg/mL	Gravimetric
	<b>CAS #</b> 17060-07-0 (Lot PR-32845)		+/-	140.2006	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	143.4811	µg/mL	Stressed
3	Toluene-d8	2,500.5 µg/mL	+/-	14.5381	µg/mL	Gravimetric
	<b>CAS #</b> 2037-26-5 (Lot PR-31958)		+/-	140.2006	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	143.4811	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,502.0 µg/mL	+/-	14.5468	µg/mL	Gravimetric
	<b>CAS #</b> 460-00-4 (Lot 20401KO)		+/-	140.2847	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	143.5671	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)

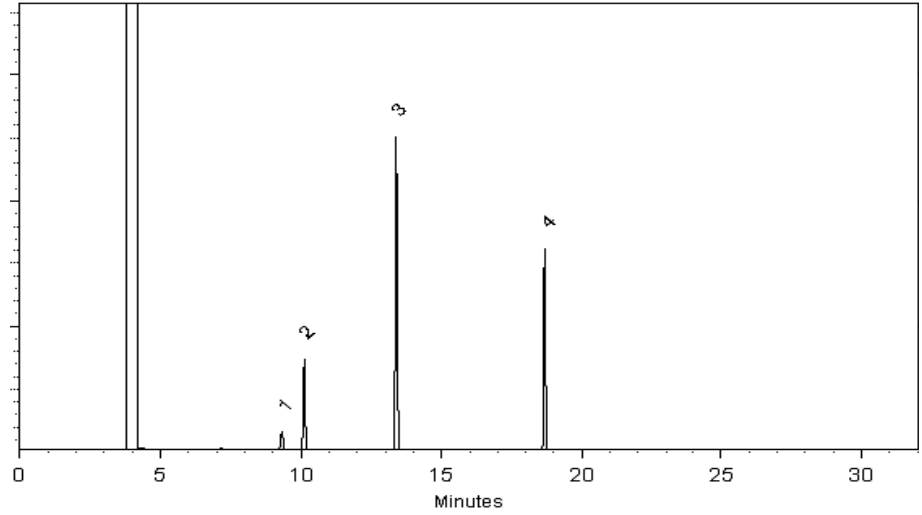
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

  
Russ Bookhamer - Operations Technician I

**Date Mixed:** 31-Mar-2022      **Balance:** 1127510105

  
Fang-Yun Lo - QC Analyst

**Date Passed:** 04-Apr-2022

**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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.



Reagent

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**MSV\_ACROLEIN\_00019**

## CERTIFICATE OF ANALYSIS

### Acrolein

CATALOG NUMBER RPN-11030-1G  
LOT NUMBER 12926800  
DATE CERTIFIED 02/03/22  
EXPIRATION DATE 02/28/23  
CAS NUMBER 107-02-8  
MOLECULAR FORMULA C3H4O  
MOLECULAR WEIGHT 56.06  
STORAGE Refrigerator storage (2 - 8 °C)  
HANDLING See Safety Data Sheet  
INTENDED USE For laboratory use only.  
NOTES Contains water and hydroquinone as an inhibitor.

<u>Analytical Test</u>	<u>Value</u>
FT-IR SPECTROSCOPY	CONFORMS TO STRUCTURE
% PURITY (GC/TCD)	93.2
% WATER (KARL FISCHER)	2.2

Chem Service, Inc. is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015.



COA Form  
Revision 3 (3/2015)

Print Date: 02/14/22

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PM

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599  
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729  
[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

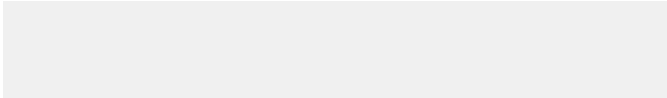
Certified By:

*Mary Beth O'Donnell*

Mary Beth O'Donnell  
CSM/TC

Chem Service, Inc. is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015.

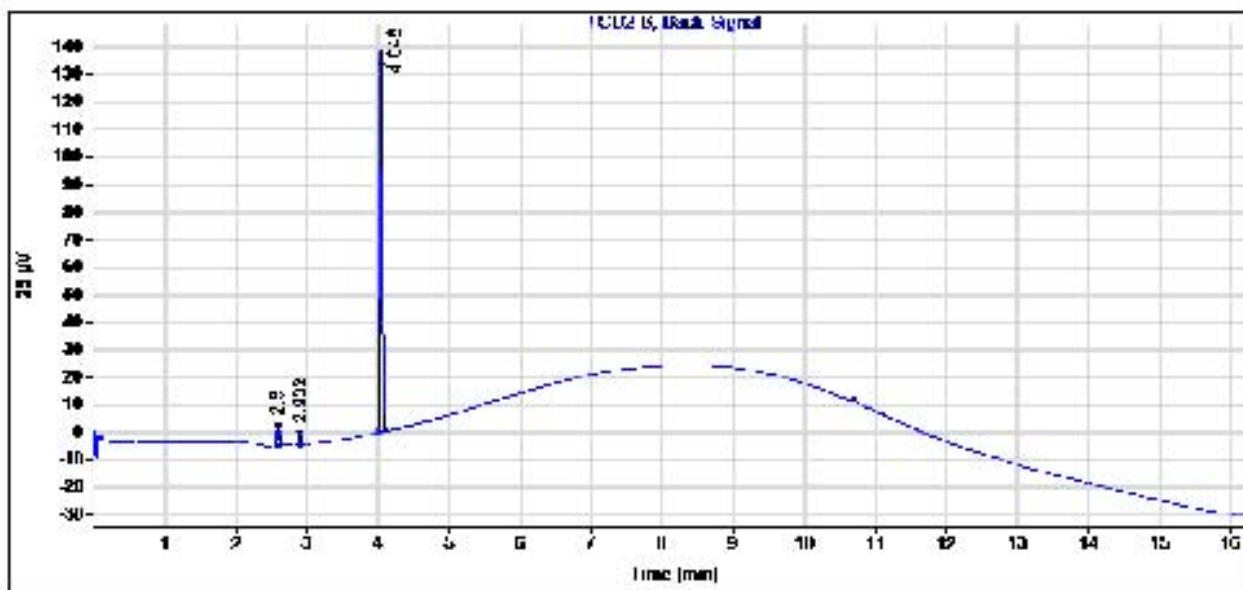




## CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

<b>Data file:</b>	C:\CHEM32\1\DATA\2022 DATA\0222\SIG2022990.D		
<b>Sample name:</b>	Acrolein		
<b>Instrument:</b>	GC 1	<b>Sample type:</b>	Sample
<b>Injection date:</b>	2/3/2022 2:54:32 PM	<b>Location:</b>	Vial 1
<b>Acq. method:</b>	GASBOMB_TCD.M	<b>Injection volume:</b>	1.0uL
<b>Column name:</b>	DB-624 (30m x 0.53mm x 3.0um)		



**Signal:** TCD2 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
2.600	BB	0.0362	14.5715	6.2387	4.5336
2.902	BB	0.0314	7.2404	3.5582	2.2527
4.046	BB	0.0340	299.5987	134.8697	93.2137
Sum			321.4106		

Chem Service, Inc. is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015.



Reagent

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**MSV\_ACROLEIN\_00020**

## CERTIFICATE OF ANALYSIS

### Acrolein

CATALOG NUMBER RPN-11030-1G  
LOT NUMBER 12926800  
DATE CERTIFIED 02/03/22  
EXPIRATION DATE 02/28/23  
CAS NUMBER 107-02-8  
MOLECULAR FORMULA C3H4O  
MOLECULAR WEIGHT 56.06  
STORAGE Refrigerator storage (2 - 8 °C)  
HANDLING See Safety Data Sheet  
INTENDED USE For laboratory use only.  
NOTES Contains water and hydroquinone as an inhibitor.

<u>Analytical Test</u>	<u>Value</u>
FT-IR SPECTROSCOPY	CONFORMS TO STRUCTURE
% PURITY (GC/TCD)	93.2
% WATER (KARL FISCHER)	2.2

Chem Service, Inc. is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015.



COA Form  
Revision 3 (3/2015)

Print Date: 02/14/22

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Page 1 of 3

12/7/2022 4:14  
PM

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[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

*Mary Beth O'Donnell*

Mary Beth O'Donnell  
CSM/TC

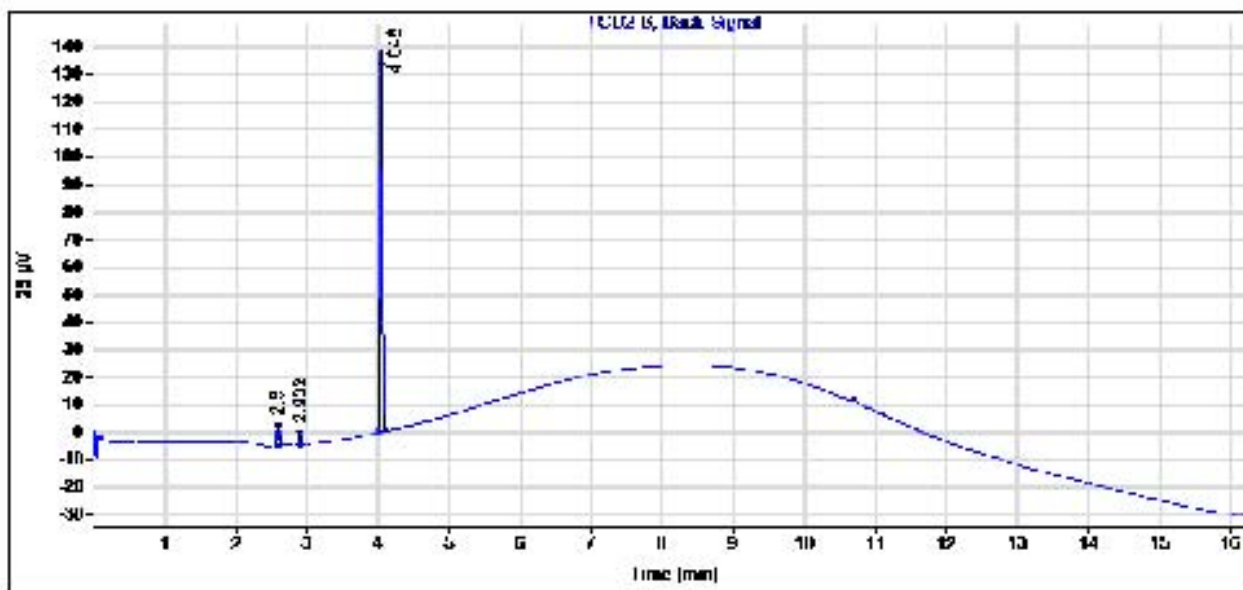
Chem Service, Inc. is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015.



## CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2022 DATA\0222\SIG2022990.D  
Sample name: Acrolein  
Instrument: GC 1  
Injection date: 2/3/2022 2:54:32 PM  
Acq. method: GASBOMB\_TCD.M  
Column name: DB-624 (30m x 0.53mm x 3.0um)  
Sample type: Sample  
Location: Vial 1  
Injection volume: 1.0uL



Signal: TCD2 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
2.600	BB	0.0362	14.5715	6.2387	4.5336
2.902	BB	0.0314	7.2404	3.5582	2.2527
4.046	BB	0.0349	299.5987	134.8697	93.2137
Sum			321.4106		

Chem Service, Inc. is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015.





Reagent

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**MSV\_CCV\_GASES\_00221**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

Catalog No. : 577488 Lot No.: A0172364

Description : Custom Gases Standard  
Custom Gases Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : May 31, 2024 Storage: 0°C or colder

Ship: Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,001.0 µg/mL	+/-	15.5104	µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/-	112.6642	µg/mL	Unstressed
	Purity 99%		+/-	115.2788	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,000.2 µg/mL	+/-	19.3792	µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/-	113.2161	µg/mL	Unstressed
	Purity 99%		+/-	115.8161	µg/mL	Stressed
3	Vinyl chloride	2,003.2 µg/mL	+/-	20.1104	µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/-	113.5093	µg/mL	Unstressed
	Purity 99%		+/-	116.1105	µg/mL	Stressed
4	1,3-Butadiene	1,999.6 µg/mL	+/-	14.5225	µg/mL	Gravimetric
	CAS # 106-99-0 (Lot 00019375)		+/-	112.4545	µg/mL	Unstressed
	Purity 99%		+/-	115.0702	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,002.8 µg/mL	+/-	14.8201	µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/-	112.6669	µg/mL	Unstressed
	Purity 99%		+/-	115.2859	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,001.0 µg/mL	+/-	14.9955	µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/-	112.5912	µg/mL	Unstressed
	Purity 99%		+/-	115.2073	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 11778600)		+/-	112.1380	µg/mL	Unstressed
	Purity 99%		+/-	114.7619	µg/mL	Stressed

8	Trichlorofluoromethane ( CFC-11 )	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot MKCJ8658)			+/-	112.1380	µg/mL	Unstressed
	Purity 99%			+/-	114.7619	µg/mL	Stressed
9	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)	2,000.2	µg/mL	+/-	17.2773	µg/mL	Gravimetric
	CAS # 354-23-4 (Lot Q9B-64)			+/-	112.8726	µg/mL	Unstressed
	Purity 99%			+/-	115.4802	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 flow 2.0 mL/min.

**Temp. Program:**

40°C (hold 6 min.) to 100°C  
 @ 6°C/min.

**Inj. Temp:**

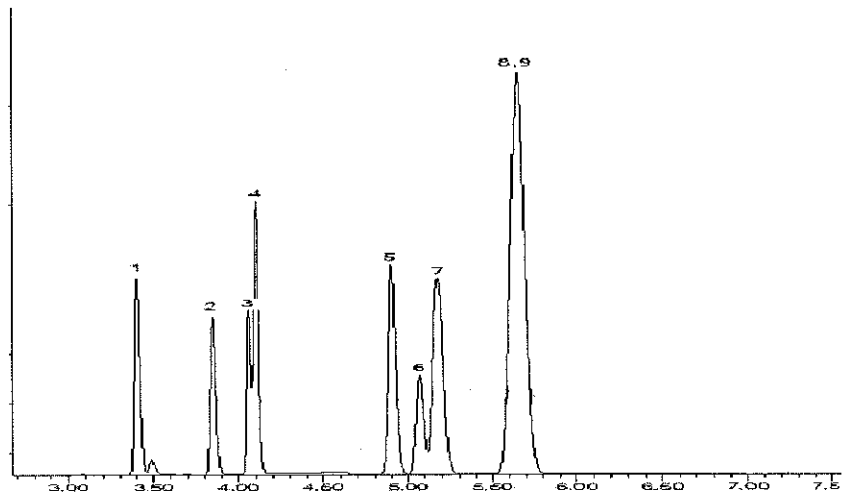
200°C

**Det. Temp:**

250°C

**Det. Type:**

MSD



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

*[Signature]*  
 Tom Suckal - Mix Technician

Date Mixed: 13-May-2021 Balance: B251644995

*[Signature]*  
 Alexis Shelow - Operations Tech I

Date Passed: 17-May-2021

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/ $\mu$ ECD, 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:

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

$k$  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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_CCV\_GASES\_00250**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

Catalog No. : 577488 Lot No.: A0172364

Description : Custom Gases Standard  
Custom Gases Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : May 31, 2024 Storage: 0°C or colder

Ship: Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,001.0 µg/mL	+/-	15.5104	µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/-	112.6642	µg/mL	Unstressed
	Purity 99%		+/-	115.2788	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,000.2 µg/mL	+/-	19.3792	µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/-	113.2161	µg/mL	Unstressed
	Purity 99%		+/-	115.8161	µg/mL	Stressed
3	Vinyl chloride	2,003.2 µg/mL	+/-	20.1104	µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/-	113.5093	µg/mL	Unstressed
	Purity 99%		+/-	116.1105	µg/mL	Stressed
4	1,3-Butadiene	1,999.6 µg/mL	+/-	14.5225	µg/mL	Gravimetric
	CAS # 106-99-0 (Lot 00019375)		+/-	112.4545	µg/mL	Unstressed
	Purity 99%		+/-	115.0702	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,002.8 µg/mL	+/-	14.8201	µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/-	112.6669	µg/mL	Unstressed
	Purity 99%		+/-	115.2859	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,001.0 µg/mL	+/-	14.9955	µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/-	112.5912	µg/mL	Unstressed
	Purity 99%		+/-	115.2073	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 11778600)		+/-	112.1380	µg/mL	Unstressed
	Purity 99%		+/-	114.7619	µg/mL	Stressed

8	Trichlorofluoromethane ( CFC-11 )	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot MKCJ8658)			+/-	112.1380	µg/mL	Unstressed
	Purity 99%			+/-	114.7619	µg/mL	Stressed
9	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)	2,000.2	µg/mL	+/-	17.2773	µg/mL	Gravimetric
	CAS # 354-23-4 (Lot Q9B-64)			+/-	112.8726	µg/mL	Unstressed
	Purity 99%			+/-	115.4802	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 flow 2.0 mL/min.

**Temp. Program:**

40°C (hold 6 min.) to 100°C  
 @ 6°C/min.

**Inj. Temp:**

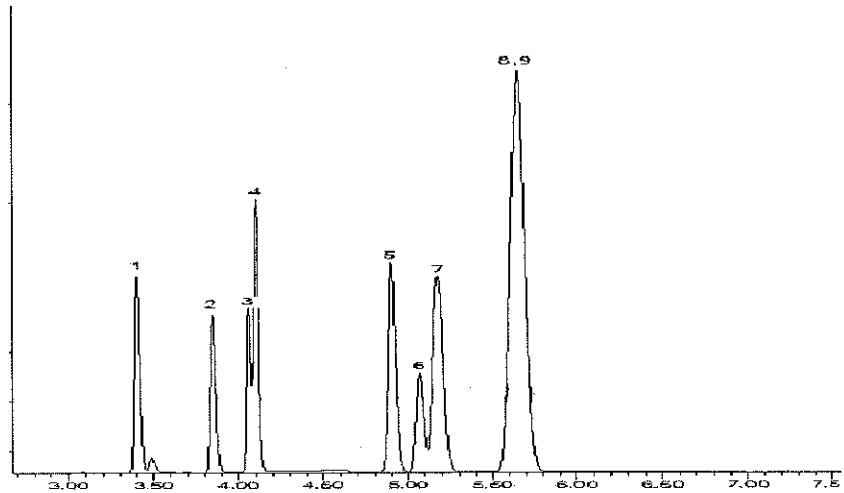
200°C

**Det. Temp:**

250°C

**Det. Type:**

MSD



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

*[Signature]*  
 Tom Suckal - Mix Technician

Date Mixed: 13-May-2021 Balance: B251644995

*[Signature]*  
 Alexis Shelow - Operations Tech I

Date Passed: 17-May-2021

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/ $\mu$ ECD, 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:

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

$k$  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](http://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) -20°C or colder (Deep 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](http://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.



Reagent

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**MSV\_CCV\_GASES\_00320**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577488 **Lot No.:** A0184815

**Description :** Custom Gases Standard  
Custom Gases Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** May 31, 2025 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,008.5 µg/mL	+/-	16.4522	µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/-	113.2099	µg/mL	Unstressed
	Purity 99%		+/-	115.8314	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,017.9 µg/mL	+/-	17.1593	µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/-	113.8303	µg/mL	Unstressed
	Purity 99%		+/-	116.4619	µg/mL	Stressed
3	Vinyl chloride	2,023.8 µg/mL	+/-	20.0801	µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/-	114.6342	µg/mL	Unstressed
	Purity 99%		+/-	117.2631	µg/mL	Stressed
4	1,3-Butadiene	2,021.2 µg/mL	+/-	16.5562	µg/mL	Gravimetric
	CAS # 106-99-0 (Lot 00019375)		+/-	113.9252	µg/mL	Unstressed
	Purity 99%		+/-	116.5633	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,003.9 µg/mL	+/-	16.6513	µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/-	112.9858	µg/mL	Unstressed
	Purity 99%		+/-	115.6006	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,024.9 µg/mL	+/-	16.7845	µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/-	114.1621	µg/mL	Unstressed
	Purity 99%		+/-	116.8044	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,000.0 µg/mL	+/-	11.6550	µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 12841600)		+/-	112.1408	µg/mL	Unstressed
	Purity 99%		+/-	114.7646	µg/mL	Stressed

8	Trichlorofluoromethane ( CFC-11 ) <b>CAS #</b> 75-69-4 <b>Purity</b> 99%	(Lot MKCL8411)	2,015.0 µg/mL	+/- 11.7425 +/- 112.9819 +/- 115.6254	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a) <b>CAS #</b> 354-23-4 <b>Purity</b> 99%	(Lot Q9B-64)	2,002.3 µg/mL	+/- 20.4087 +/- 113.5126 +/- 116.1114	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
<b>Solvent:</b>	P&T Methanol <b>CAS #</b> 67-56-1 <b>Purity</b> 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 flow 2.0 mL/min.

**Temp. Program:**

40°C (hold 6 min.) to 100°C  
@ 6°C/min.

**Inj. Temp:**

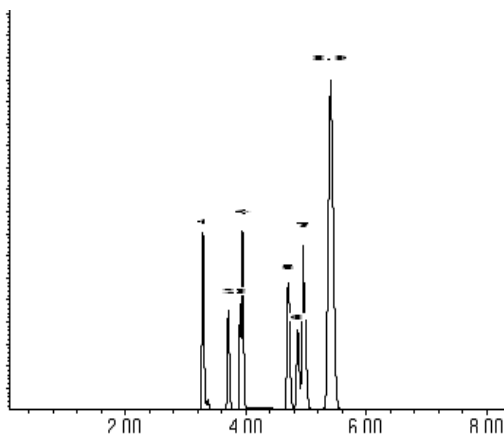
200°C

**Det. Temp:**

250°C

**Det. Type:**

MSD



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

*Miranda Kline*

Miranda Kline - Operations Technician I

**Date Mixed:** 03-May-2022

**Balance:** B707717271

*Christie Mills*

Christie Mills - Operations Technician II

**Date Passed:** 09-May-2022

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_Cus826\_IS\_00451**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 558267 **Lot No.:** A0179696

**Description :** Custom 8260A IS Mix  
Custom 8260A IS Mix 2,500-12,500µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** December 31, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	2-Methyl-2-propanol-d10 CAS # 53001-22-2 (Lot PR-29961) Purity 99%	12,510.0 µg/mL	+/- 73.4157 µg/mL	+/- 268.0265 µg/mL	+/- 275.8078 µg/mL	Gravimetric Unstressed Stressed
2	Fluorobenzene CAS # 462-06-6 (Lot BCBZ5549) Purity 99%	2,502.0 µg/mL	+/- 14.8611 µg/mL	+/- 53.6543 µg/mL	+/- 55.2092 µg/mL	Gravimetric Unstressed Stressed
3	Chlorobenzene-d5 CAS # 3114-55-4 (Lot PR-29571) Purity 99%	2,512.0 µg/mL	+/- 14.9205 µg/mL	+/- 53.8688 µg/mL	+/- 55.4299 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 (Lot PR-30447) Purity 99%	2,512.0 µg/mL	+/- 14.9205 µg/mL	+/- 53.8688 µg/mL	+/- 55.4299 µg/mL	Gravimetric Unstressed Stressed

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

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

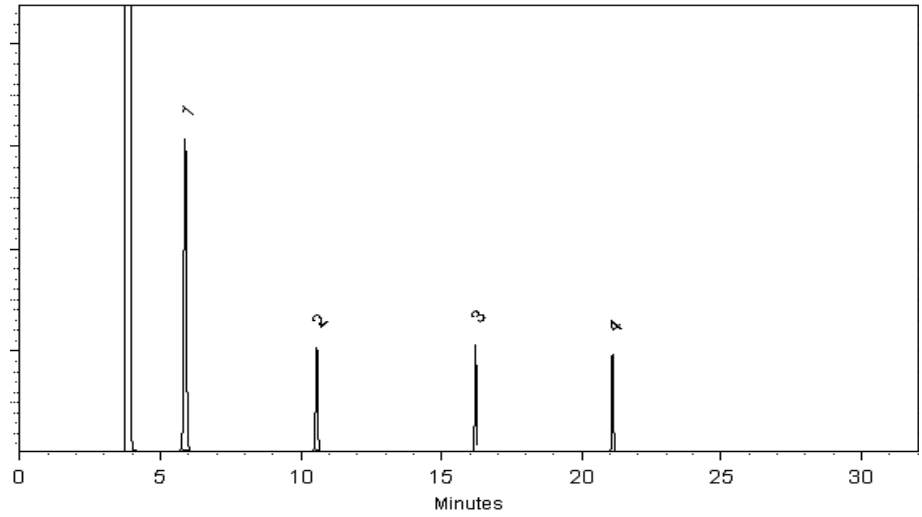
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

Russ Bookhamer - Operations Technician I

**Date Mixed:** 17-Dec-2021

**Balance:** B442140311

Clara Windle - Operations Technician I

**Date Passed:** 28-Dec-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.



Reagent

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**MSV\_EE\_Neat\_00007**

## CERTIFICATE OF ANALYSIS

### Ethyl ether

CATALOG NUMBER N-11897-1G  
LOT NUMBER 12123300  
DATE CERTIFIED 12/04/20  
EXPIRATION DATE 12/31/25  
CAS NUMBER 60-29-7  
MOLECULAR FORMULA C<sub>4</sub>H<sub>10</sub>O  
MOLECULAR WEIGHT 74.12  
STORAGE Refrigerator storage (2 - 8 °C)  
HANDLING See Safety Data Sheet  
INTENDED USE For laboratory use only.

<u>Analytical Test</u>	<u>Value</u>
% PURITY (GC/TCD)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

*Mary Beth O'Donnell*

Mary Beth O'Donnell  
CSM/TC

COA Form  
Revision 3 (3/2015)



Print Date: 07/26/21

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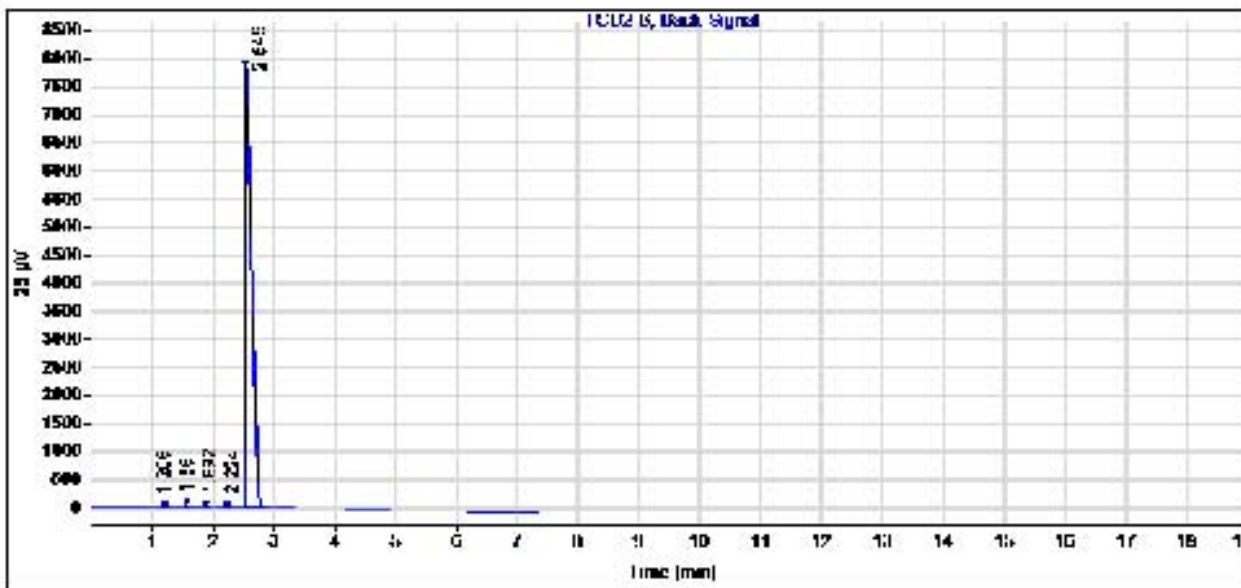
Page 1 of 2

12/7/2022 4:14  
PM

## CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

**Data file:** C:\CHEM32\1\DATA\2020 DATA\1220\SIG2022771.D  
**Sample name:** Ethylether  
**Instrument:** GC 1 **Sample type:** Sample  
**Injection date:** 12/4/2020 10:52:03 AM **Location:** Vial 21  
**Acq. method:** TCD SCREEN.M **Injection volume:** 1.0uL  
**Column name:** DB-624 (30m x 0.53mm x 3.0um)



**Signal:** TCD2 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
1.206	BB	0.0364	16.2548	6.6898	0.0305
1.560	BB	0.0278	55.8996	29.9782	0.1049
1.892	BB	0.0328	64.6527	28.1084	0.1214
2.224	BB	0.0347	9.6188	4.3673	0.0181
2.545	BB S	0.0880	53125.6797	7942.5742	99.7251
<b>Sum</b>			<b>53272.1055</b>		



Reagent

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**MSV\_M\_MIX1SEC\_00076**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577493 **Lot No.:** A0171815

**Description :** Custom VOC MegaMix®.SEC #1 Standard  
Custom VOC MegaMix®.SEC #1 Standard 1,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** April 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,1-Dichloroethene	1,003.8 µg/mL	+/-	7.1628	µg/mL	Gravimetric
	<b>CAS #</b> 75-35-4.SEC (Lot 9201700)		+/-	56.4323	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	57.7457	µg/mL	Stressed
2	Methylene chloride (dichloromethane)	1,001.8 µg/mL	+/-	7.1486	µg/mL	Gravimetric
	<b>CAS #</b> 75-09-2.SEC (Lot FGM02)		+/-	56.3199	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	57.6306	µg/mL	Stressed
3	trans-1,2-Dichloroethene	1,000.3 µg/mL	+/-	7.1382	µg/mL	Gravimetric
	<b>CAS #</b> 156-60-5.SEC (Lot TS5UB)		+/-	56.2383	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	57.5472	µg/mL	Stressed
4	1,1-Dichloroethane	1,002.0 µg/mL	+/-	7.1503	µg/mL	Gravimetric
	<b>CAS #</b> 75-34-3.SEC (Lot 7482000)		+/-	56.3339	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	57.6450	µg/mL	Stressed
5	2,2-Dichloropropane	1,000.0 µg/mL	+/-	7.1026	µg/mL	Gravimetric
	<b>CAS #</b> 594-20-7.SEC (Lot I7E8E)		+/-	56.2188	µg/mL	Unstressed
	<b>Purity</b> 98%		+/-	57.5274	µg/mL	Stressed
6	cis-1,2-Dichloroethene	1,000.1 µg/mL	+/-	7.1028	µg/mL	Gravimetric
	<b>CAS #</b> 156-59-2.SEC (Lot YZO5O)		+/-	56.2207	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	57.5294	µg/mL	Stressed
7	Chloroform	1,000.8 µg/mL	+/-	7.1414	µg/mL	Gravimetric
	<b>CAS #</b> 67-66-3.SEC (Lot 1297547)		+/-	56.2636	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	57.5731	µg/mL	Stressed

8	Bromochloromethane <b>CAS #</b> 74-97-5.SEC <b>Purity</b> 99%	(Lot 8529200)	1,000.1	µg/mL	+/- 7.1033 +/- 56.2242 +/- 57.5330	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,1,1-trichloroethane <b>CAS #</b> 71-55-6 <b>Purity</b> 98%	(Lot 190123CG)	1,000.3	µg/mL	+/- 7.1383 +/- 56.2391 +/- 57.5479	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,1-Dichloropropene <b>CAS #</b> 563-58-6.SEC <b>Purity</b> 95%	(Lot 8541600)	1,002.5	µg/mL	+/- 7.1204 +/- 56.3597 +/- 57.6716	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Carbon tetrachloride <b>CAS #</b> 56-23-5.SEC <b>Purity</b> 99%	(Lot 11466)	1,000.8	µg/mL	+/- 7.1414 +/- 56.2636 +/- 57.5731	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	1,2-Dichloroethane <b>CAS #</b> 107-06-2.SEC <b>Purity</b> 99%	(Lot 00016165)	1,000.6	µg/mL	+/- 7.1407 +/- 56.2576 +/- 57.5669	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Benzene <b>CAS #</b> 71-43-2.SEC <b>Purity</b> 99%	(Lot B28Y008)	1,000.1	µg/mL	+/- 7.1031 +/- 56.2228 +/- 57.5315	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Trichloroethene <b>CAS #</b> 79-01-6.SEC <b>Purity</b> 99%	(Lot H04X050)	1,000.9	µg/mL	+/- 7.1423 +/- 56.2708 +/- 57.5804	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	1,2-Dichloropropane <b>CAS #</b> 78-87-5.SEC <b>Purity</b> 99%	(Lot ERRBI-RH)	1,000.1	µg/mL	+/- 7.1371 +/- 56.2293 +/- 57.5380	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Bromodichloromethane <b>CAS #</b> 75-27-4.SEC <b>Purity</b> 99%	(Lot 13780)	1,000.8	µg/mL	+/- 7.1418 +/- 56.2662 +/- 57.5757	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Dibromomethane <b>CAS #</b> 74-95-3.SEC <b>Purity</b> 99%	(Lot MOKKJ)	1,000.1	µg/mL	+/- 7.1033 +/- 56.2242 +/- 57.5330	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	cis-1,3-Dichloropropene <b>CAS #</b> 10061-01-5.SEC <b>Purity</b> 98%	(Lot 4870A)	1,000.9	µg/mL	+/- 7.1425 +/- 56.2723 +/- 57.5819	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Toluene <b>CAS #</b> 108-88-3.SEC <b>Purity</b> 99%	(Lot YND2B-BD)	1,000.0	µg/mL	+/- 7.1026 +/- 56.2193 +/- 57.5279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	trans-1,3-Dichloropropene <b>CAS #</b> 10061-02-6.SEC <b>Purity</b> 96%	(Lot ZDMSL)	1,002.1	µg/mL	+/- 7.1513 +/- 56.3417 +/- 57.6530	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,2-Trichloroethane <b>CAS #</b> 79-00-5.SEC <b>Purity</b> 99%	(Lot 7871500)	1,001.3	µg/mL	+/- 7.1450 +/- 56.2917 +/- 57.6018	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	1,3-Dichloropropane <b>CAS #</b> 142-28-9.SEC <b>Purity</b> 99%	(Lot AGN01-EFPC)	1,000.1	µg/mL	+/- 7.1031 +/- 56.2228 +/- 57.5315	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Tetrachloroethene <b>CAS #</b> 127-18-4.SEC <b>Purity</b> 99%	(Lot F09W014)	1,000.2	µg/mL	+/- 7.1378 +/- 56.2350 +/- 57.5437	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Dibromochloromethane <b>CAS #</b> 124-48-1.SEC <b>Purity</b> 97%	(Lot 10206360)	1,000.5	µg/mL	+/- +/- +/-	7.1396 56.2489 57.5580	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dibromoethane (EDB) <b>CAS #</b> 106-93-4.SEC <b>Purity</b> 99%	(Lot 7511900)	1,000.1	µg/mL	+/- +/- +/-	7.1032 56.2235 57.5322	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene <b>CAS #</b> 108-90-7.SEC <b>Purity</b> 99%	(Lot 1161936)	1,001.4	µg/mL	+/- +/- +/-	7.1460 56.2995 57.6098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane <b>CAS #</b> 630-20-6.SEC <b>Purity</b> 99%	(Lot GC01)	1,000.1	µg/mL	+/- +/- +/-	7.1032 56.2235 57.5322	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene <b>CAS #</b> 100-41-4.SEC <b>Purity</b> 99%	(Lot PI4SE)	1,000.2	µg/mL	+/- +/- +/-	7.1035 56.2263 57.5351	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene <b>CAS #</b> 108-38-3.SEC <b>Purity</b> 99%	(Lot 7ZV6F)	1,000.2	µg/mL	+/- +/- +/-	7.1035 56.2263 57.5351	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene <b>CAS #</b> 106-42-3.SEC <b>Purity</b> 99%	(Lot D6UOA)	1,000.1	µg/mL	+/- +/- +/-	7.1027 56.2200 57.5286	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene <b>CAS #</b> 95-47-6.SEC <b>Purity</b> 99%	(Lot FGL01)	1,000.1	µg/mL	+/- +/- +/-	7.1028 56.2207 57.5294	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene <b>CAS #</b> 100-42-5.SEC <b>Purity</b> 99%	(Lot OFIOL-IA)	1,000.1	µg/mL	+/- +/- +/-	7.1033 56.2242 57.5330	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) <b>CAS #</b> 98-82-8.SEC <b>Purity</b> 99%	(Lot JN4EC)	1,000.0	µg/mL	+/- +/- +/-	7.1025 56.2179 57.5265	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Bromoform <b>CAS #</b> 75-25-2.SEC <b>Purity</b> 99%	(Lot 9170700)	1,001.7	µg/mL	+/- +/- +/-	7.1485 56.3193 57.6300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,1,2,2-Tetrachloroethane <b>CAS #</b> 79-34-5.SEC <b>Purity</b> 98%	(Lot BCCB0724)	1,001.6	µg/mL	+/- +/- +/-	7.1478 56.3139 57.6245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane <b>CAS #</b> 96-18-4.SEC <b>Purity</b> 99%	(Lot GUHZN)	1,000.0	µg/mL	+/- +/- +/-	7.1026 56.2193 57.5279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene <b>CAS #</b> 103-65-1.SEC <b>Purity</b> 99%	(Lot T2HFC)	1,000.1	µg/mL	+/- +/- +/-	7.1027 56.2200 57.5286	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene <b>CAS #</b> 108-86-1.SEC <b>Purity</b> 99%	(Lot 8DKWJ)	1,000.2	µg/mL	+/- +/- +/-	7.1034 56.2256 57.5344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trimethylbenzene <b>CAS #</b> 108-67-8.SEC <b>Purity</b> 99%	(Lot TOOOF)	1,000.1	µg/mL	+/- +/- +/-	7.1028 56.2207 57.5294	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene <b>CAS #</b> 95-49-8.SEC <b>Purity</b> 99%	(Lot BRHPM)	1,000.0	µg/mL	+/-	7.1025 56.2179 57.5265	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	4-Chlorotoluene <b>CAS #</b> 106-43-4.SEC <b>Purity</b> 99%	(Lot S5SKD)	1,000.1	µg/mL	+/-	7.1030 56.2221 57.5308	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	tert-Butylbenzene <b>CAS #</b> 98-06-6.SEC <b>Purity</b> 99%	(Lot D6OHC)	1,000.1	µg/mL	+/-	7.1029 56.2214 57.5301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,2,4-Trimethylbenzene <b>CAS #</b> 95-63-6.SEC <b>Purity</b> 99%	(Lot JMIYD)	1,000.1	µg/mL	+/-	7.1031 56.2228 57.5315	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	sec-Butylbenzene <b>CAS #</b> 135-98-8.SEC <b>Purity</b> 99%	(Lot O4HRF)	1,000.1	µg/mL	+/-	7.1029 56.2214 57.5301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	4-Isopropyltoluene (p-cymene) <b>CAS #</b> 99-87-6.SEC <b>Purity</b> 99%	(Lot 8380000)	1,000.1	µg/mL	+/-	7.1029 56.2214 57.5301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,3-Dichlorobenzene <b>CAS #</b> 541-73-1.SEC <b>Purity</b> 99%	(Lot FMDFD)	1,000.1	µg/mL	+/-	7.1365 56.2251 57.5337	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	1,4-Dichlorobenzene <b>CAS #</b> 106-46-7.SEC <b>Purity</b> 99%	(Lot YWKDC-MK)	1,002.5	µg/mL	+/-	7.1538 56.3612 57.6729	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	n-Butylbenzene <b>CAS #</b> 104-51-8.SEC <b>Purity</b> 99%	(Lot MMPGA)	1,000.1	µg/mL	+/-	7.1031 56.2228 57.5315	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	1,2-Dichlorobenzene <b>CAS #</b> 95-50-1.SEC <b>Purity</b> 99%	(Lot R6QDM)	1,001.6	µg/mL	+/-	7.1475 56.3114 57.6220	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	1,2-Dibromo-3-chloropropane <b>CAS #</b> 96-12-8.SEC <b>Purity</b> 99%	(Lot Q135-105)	1,000.0	µg/mL	+/-	7.1025 56.2179 57.5265	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,2,4-Trichlorobenzene <b>CAS #</b> 120-82-1.SEC <b>Purity</b> 99%	(Lot IGLFA)	1,000.1	µg/mL	+/-	7.1027 56.2200 57.5286	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Hexachlorobutadiene <b>CAS #</b> 87-68-3.SEC <b>Purity</b> 97%	(Lot 8532700)	1,000.8	µg/mL	+/-	7.1079 56.2614 57.5709	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Naphthalene <b>CAS #</b> 91-20-3.SEC <b>Purity</b> 99%	(Lot SKZ5N)	1,000.1	µg/mL	+/-	7.1031 56.2228 57.5315	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	1,2,3-Trichlorobenzene <b>CAS #</b> 87-61-6.SEC <b>Purity</b> 98%	(Lot A0043055)	1,000.7	µg/mL	+/-	7.1076 56.2588 57.5683	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed



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

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

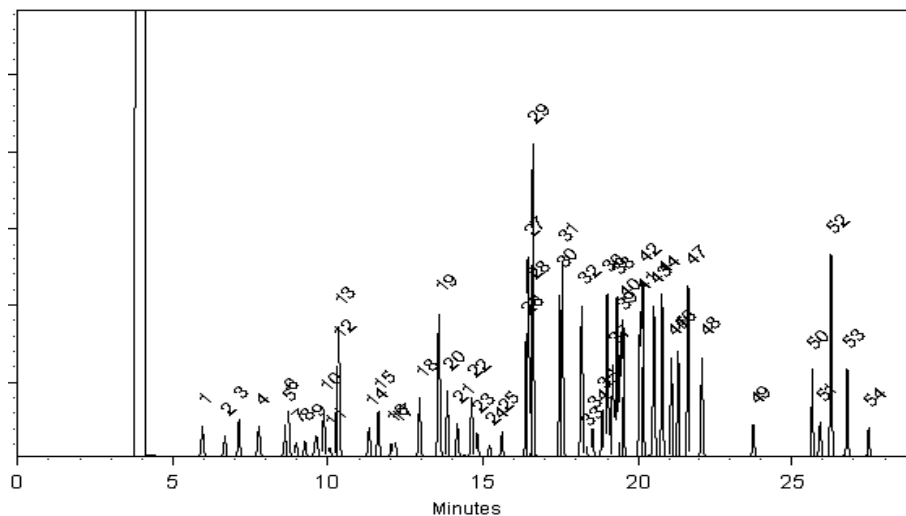
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

*Bradley Meyer*  
Bradley Meyer - Mix Technician

**Date Mixed:** 28-Apr-2021      **Balance:** 1127510105

*Alexis Shelow*  
Alexis Shelow - Operations Tech I

**Date Passed:** 30-Apr-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_M\_MIX1SEC\_00082**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577493 **Lot No.:** A0171815

**Description :** Custom VOC MegaMix®.SEC #1 Standard  
Custom VOC MegaMix®.SEC #1 Standard 1,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** April 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,1-Dichloroethene	1,003.8 µg/mL	+/-	7.1628	µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 9201700)		+/-	56.4323	µg/mL	Unstressed
	Purity 99%		+/-	57.7457	µg/mL	Stressed
2	Methylene chloride (dichloromethane)	1,001.8 µg/mL	+/-	7.1486	µg/mL	Gravimetric
	CAS # 75-09-2.SEC (Lot FGM02)		+/-	56.3199	µg/mL	Unstressed
	Purity 99%		+/-	57.6306	µg/mL	Stressed
3	trans-1,2-Dichloroethene	1,000.3 µg/mL	+/-	7.1382	µg/mL	Gravimetric
	CAS # 156-60-5.SEC (Lot TS5UB)		+/-	56.2383	µg/mL	Unstressed
	Purity 99%		+/-	57.5472	µg/mL	Stressed
4	1,1-Dichloroethane	1,002.0 µg/mL	+/-	7.1503	µg/mL	Gravimetric
	CAS # 75-34-3.SEC (Lot 7482000)		+/-	56.3339	µg/mL	Unstressed
	Purity 99%		+/-	57.6450	µg/mL	Stressed
5	2,2-Dichloropropane	1,000.0 µg/mL	+/-	7.1026	µg/mL	Gravimetric
	CAS # 594-20-7.SEC (Lot I7E8E)		+/-	56.2188	µg/mL	Unstressed
	Purity 98%		+/-	57.5274	µg/mL	Stressed
6	cis-1,2-Dichloroethene	1,000.1 µg/mL	+/-	7.1028	µg/mL	Gravimetric
	CAS # 156-59-2.SEC (Lot YZO5O)		+/-	56.2207	µg/mL	Unstressed
	Purity 99%		+/-	57.5294	µg/mL	Stressed
7	Chloroform	1,000.8 µg/mL	+/-	7.1414	µg/mL	Gravimetric
	CAS # 67-66-3.SEC (Lot 1297547)		+/-	56.2636	µg/mL	Unstressed
	Purity 99%		+/-	57.5731	µg/mL	Stressed

8	Bromochloromethane <b>CAS #</b> 74-97-5.SEC <b>Purity</b> 99%	(Lot 8529200)	1,000.1	µg/mL	+/- 7.1033 +/- 56.2242 +/- 57.5330	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,1,1-trichloroethane <b>CAS #</b> 71-55-6 <b>Purity</b> 98%	(Lot 190123CG)	1,000.3	µg/mL	+/- 7.1383 +/- 56.2391 +/- 57.5479	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,1-Dichloropropene <b>CAS #</b> 563-58-6.SEC <b>Purity</b> 95%	(Lot 8541600)	1,002.5	µg/mL	+/- 7.1204 +/- 56.3597 +/- 57.6716	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Carbon tetrachloride <b>CAS #</b> 56-23-5.SEC <b>Purity</b> 99%	(Lot 11466)	1,000.8	µg/mL	+/- 7.1414 +/- 56.2636 +/- 57.5731	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	1,2-Dichloroethane <b>CAS #</b> 107-06-2.SEC <b>Purity</b> 99%	(Lot 00016165)	1,000.6	µg/mL	+/- 7.1407 +/- 56.2576 +/- 57.5669	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Benzene <b>CAS #</b> 71-43-2.SEC <b>Purity</b> 99%	(Lot B28Y008)	1,000.1	µg/mL	+/- 7.1031 +/- 56.2228 +/- 57.5315	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Trichloroethene <b>CAS #</b> 79-01-6.SEC <b>Purity</b> 99%	(Lot H04X050)	1,000.9	µg/mL	+/- 7.1423 +/- 56.2708 +/- 57.5804	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	1,2-Dichloropropane <b>CAS #</b> 78-87-5.SEC <b>Purity</b> 99%	(Lot ERRBI-RH)	1,000.1	µg/mL	+/- 7.1371 +/- 56.2293 +/- 57.5380	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Bromodichloromethane <b>CAS #</b> 75-27-4.SEC <b>Purity</b> 99%	(Lot 13780)	1,000.8	µg/mL	+/- 7.1418 +/- 56.2662 +/- 57.5757	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Dibromomethane <b>CAS #</b> 74-95-3.SEC <b>Purity</b> 99%	(Lot MOKKJ)	1,000.1	µg/mL	+/- 7.1033 +/- 56.2242 +/- 57.5330	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	cis-1,3-Dichloropropene <b>CAS #</b> 10061-01-5.SEC <b>Purity</b> 98%	(Lot 4870A)	1,000.9	µg/mL	+/- 7.1425 +/- 56.2723 +/- 57.5819	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Toluene <b>CAS #</b> 108-88-3.SEC <b>Purity</b> 99%	(Lot YND2B-BD)	1,000.0	µg/mL	+/- 7.1026 +/- 56.2193 +/- 57.5279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	trans-1,3-Dichloropropene <b>CAS #</b> 10061-02-6.SEC <b>Purity</b> 96%	(Lot ZDMSL)	1,002.1	µg/mL	+/- 7.1513 +/- 56.3417 +/- 57.6530	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,2-Trichloroethane <b>CAS #</b> 79-00-5.SEC <b>Purity</b> 99%	(Lot 7871500)	1,001.3	µg/mL	+/- 7.1450 +/- 56.2917 +/- 57.6018	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	1,3-Dichloropropane <b>CAS #</b> 142-28-9.SEC <b>Purity</b> 99%	(Lot AGN01-EFPC)	1,000.1	µg/mL	+/- 7.1031 +/- 56.2228 +/- 57.5315	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Tetrachloroethene <b>CAS #</b> 127-18-4.SEC <b>Purity</b> 99%	(Lot F09W014)	1,000.2	µg/mL	+/- 7.1378 +/- 56.2350 +/- 57.5437	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Dibromochloromethane <b>CAS #</b> 124-48-1.SEC <b>Purity</b> 97%	(Lot 10206360)	1,000.5	µg/mL	+/- +/- +/-	7.1396 56.2489 57.5580	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dibromoethane (EDB) <b>CAS #</b> 106-93-4.SEC <b>Purity</b> 99%	(Lot 7511900)	1,000.1	µg/mL	+/- +/- +/-	7.1032 56.2235 57.5322	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene <b>CAS #</b> 108-90-7.SEC <b>Purity</b> 99%	(Lot 1161936)	1,001.4	µg/mL	+/- +/- +/-	7.1460 56.2995 57.6098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane <b>CAS #</b> 630-20-6.SEC <b>Purity</b> 99%	(Lot GC01)	1,000.1	µg/mL	+/- +/- +/-	7.1032 56.2235 57.5322	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene <b>CAS #</b> 100-41-4.SEC <b>Purity</b> 99%	(Lot PI4SE)	1,000.2	µg/mL	+/- +/- +/-	7.1035 56.2263 57.5351	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene <b>CAS #</b> 108-38-3.SEC <b>Purity</b> 99%	(Lot 7ZV6F)	1,000.2	µg/mL	+/- +/- +/-	7.1035 56.2263 57.5351	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene <b>CAS #</b> 106-42-3.SEC <b>Purity</b> 99%	(Lot D6UOA)	1,000.1	µg/mL	+/- +/- +/-	7.1027 56.2200 57.5286	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene <b>CAS #</b> 95-47-6.SEC <b>Purity</b> 99%	(Lot FGL01)	1,000.1	µg/mL	+/- +/- +/-	7.1028 56.2207 57.5294	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene <b>CAS #</b> 100-42-5.SEC <b>Purity</b> 99%	(Lot OFIOL-IA)	1,000.1	µg/mL	+/- +/- +/-	7.1033 56.2242 57.5330	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) <b>CAS #</b> 98-82-8.SEC <b>Purity</b> 99%	(Lot JN4EC)	1,000.0	µg/mL	+/- +/- +/-	7.1025 56.2179 57.5265	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Bromoform <b>CAS #</b> 75-25-2.SEC <b>Purity</b> 99%	(Lot 9170700)	1,001.7	µg/mL	+/- +/- +/-	7.1485 56.3193 57.6300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,1,2,2-Tetrachloroethane <b>CAS #</b> 79-34-5.SEC <b>Purity</b> 98%	(Lot BCCB0724)	1,001.6	µg/mL	+/- +/- +/-	7.1478 56.3139 57.6245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane <b>CAS #</b> 96-18-4.SEC <b>Purity</b> 99%	(Lot GUHZN)	1,000.0	µg/mL	+/- +/- +/-	7.1026 56.2193 57.5279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene <b>CAS #</b> 103-65-1.SEC <b>Purity</b> 99%	(Lot T2HFC)	1,000.1	µg/mL	+/- +/- +/-	7.1027 56.2200 57.5286	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene <b>CAS #</b> 108-86-1.SEC <b>Purity</b> 99%	(Lot 8DKWJ)	1,000.2	µg/mL	+/- +/- +/-	7.1034 56.2256 57.5344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trimethylbenzene <b>CAS #</b> 108-67-8.SEC <b>Purity</b> 99%	(Lot TOOOF)	1,000.1	µg/mL	+/- +/- +/-	7.1028 56.2207 57.5294	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene <b>CAS #</b> 95-49-8.SEC <b>Purity</b> 99%	(Lot BRHPM)	1,000.0	µg/mL	+/- 7.1025 +/- 56.2179 +/- 57.5265	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	4-Chlorotoluene <b>CAS #</b> 106-43-4.SEC <b>Purity</b> 99%	(Lot S5SKD)	1,000.1	µg/mL	+/- 7.1030 +/- 56.2221 +/- 57.5308	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	tert-Butylbenzene <b>CAS #</b> 98-06-6.SEC <b>Purity</b> 99%	(Lot D6OHC)	1,000.1	µg/mL	+/- 7.1029 +/- 56.2214 +/- 57.5301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,2,4-Trimethylbenzene <b>CAS #</b> 95-63-6.SEC <b>Purity</b> 99%	(Lot JMIYD)	1,000.1	µg/mL	+/- 7.1031 +/- 56.2228 +/- 57.5315	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	sec-Butylbenzene <b>CAS #</b> 135-98-8.SEC <b>Purity</b> 99%	(Lot O4HRF)	1,000.1	µg/mL	+/- 7.1029 +/- 56.2214 +/- 57.5301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	4-Isopropyltoluene (p-cymene) <b>CAS #</b> 99-87-6.SEC <b>Purity</b> 99%	(Lot 8380000)	1,000.1	µg/mL	+/- 7.1029 +/- 56.2214 +/- 57.5301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,3-Dichlorobenzene <b>CAS #</b> 541-73-1.SEC <b>Purity</b> 99%	(Lot FMDFD)	1,000.1	µg/mL	+/- 7.1365 +/- 56.2251 +/- 57.5337	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	1,4-Dichlorobenzene <b>CAS #</b> 106-46-7.SEC <b>Purity</b> 99%	(Lot YWKDC-MK)	1,002.5	µg/mL	+/- 7.1538 +/- 56.3612 +/- 57.6729	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	n-Butylbenzene <b>CAS #</b> 104-51-8.SEC <b>Purity</b> 99%	(Lot MMPGA)	1,000.1	µg/mL	+/- 7.1031 +/- 56.2228 +/- 57.5315	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	1,2-Dichlorobenzene <b>CAS #</b> 95-50-1.SEC <b>Purity</b> 99%	(Lot R6QDM)	1,001.6	µg/mL	+/- 7.1475 +/- 56.3114 +/- 57.6220	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	1,2-Dibromo-3-chloropropane <b>CAS #</b> 96-12-8.SEC <b>Purity</b> 99%	(Lot Q135-105)	1,000.0	µg/mL	+/- 7.1025 +/- 56.2179 +/- 57.5265	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,2,4-Trichlorobenzene <b>CAS #</b> 120-82-1.SEC <b>Purity</b> 99%	(Lot IGLFA)	1,000.1	µg/mL	+/- 7.1027 +/- 56.2200 +/- 57.5286	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Hexachlorobutadiene <b>CAS #</b> 87-68-3.SEC <b>Purity</b> 97%	(Lot 8532700)	1,000.8	µg/mL	+/- 7.1079 +/- 56.2614 +/- 57.5709	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Naphthalene <b>CAS #</b> 91-20-3.SEC <b>Purity</b> 99%	(Lot SKZ5N)	1,000.1	µg/mL	+/- 7.1031 +/- 56.2228 +/- 57.5315	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	1,2,3-Trichlorobenzene <b>CAS #</b> 87-61-6.SEC <b>Purity</b> 98%	(Lot A0043055)	1,000.7	µg/mL	+/- 7.1076 +/- 56.2588 +/- 57.5683	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

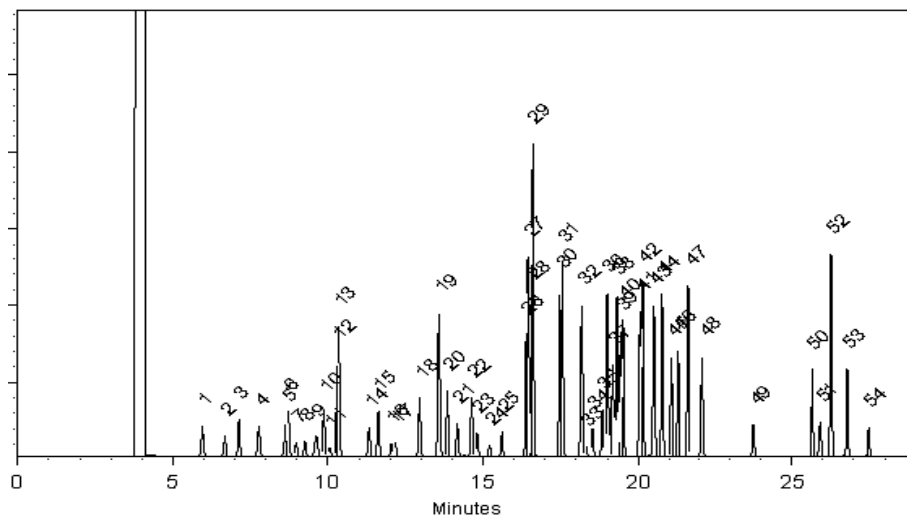
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

*Bradley Meyer*  
Bradley Meyer - Mix Technician

**Date Mixed:** 28-Apr-2021      **Balance:** 1127510105

*Alexis Shelow*  
Alexis Shelow - Operations Tech I

**Date Passed:** 30-Apr-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_M\_MIX1SEC\_00101**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577493 **Lot No.:** A0184354

**Description :** Custom VOC MegaMix®.SEC #1 Standard  
Custom VOC MegaMix®.SEC #1 Standard 1,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** April 30, 2025 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,1-Dichloroethene	1,003.8 µg/mL	+/- 9.9833 µg/mL Gravimetric	
	CAS # 75-35-4.SEC (Lot 9201700)			+/- 56.8592 µg/mL Unstressed
	Purity 99%			+/- 58.1629 µg/mL Stressed
2	Methylene chloride (dichloromethane)	1,001.8 µg/mL	+/- 9.9634 µg/mL Gravimetric	
	CAS # 75-09-2.SEC (Lot FGM02)			+/- 56.7459 µg/mL Unstressed
	Purity 99%			+/- 58.0470 µg/mL Stressed
3	trans-1,2-Dichloroethene	1,000.3 µg/mL	+/- 9.9490 µg/mL Gravimetric	
	CAS # 156-60-5.SEC (Lot TS5UB)			+/- 56.6637 µg/mL Unstressed
	Purity 99%			+/- 57.9630 µg/mL Stressed
4	1,1-Dichloroethane	1,002.0 µg/mL	+/- 9.9659 µg/mL Gravimetric	
	CAS # 75-34-3.SEC (Lot 7482000)			+/- 56.7600 µg/mL Unstressed
	Purity 99%			+/- 58.0615 µg/mL Stressed
5	2,2-Dichloropropane	1,000.0 µg/mL	+/- 9.9222 µg/mL Gravimetric	
	CAS # 594-20-7.SEC (Lot I7E8E)			+/- 56.6441 µg/mL Unstressed
	Purity 98%			+/- 57.9431 µg/mL Stressed
6	cis-1,2-Dichloroethene	1,000.1 µg/mL	+/- 9.9225 µg/mL Gravimetric	
	CAS # 156-59-2.SEC (Lot YZO5O)			+/- 56.6460 µg/mL Unstressed
	Purity 99%			+/- 57.9451 µg/mL Stressed
7	Chloroform	1,000.8 µg/mL	+/- 9.9535 µg/mL Gravimetric	
	CAS # 67-66-3.SEC (Lot 1297547)			+/- 56.6892 µg/mL Unstressed
	Purity 99%			+/- 57.9891 µg/mL Stressed

8	Bromochloromethane <b>CAS #</b> 74-97-5.SEC <b>Purity</b> 99%	(Lot 8529200)	1,000.1	µg/mL	+/-	9.9231 56.6496 57.9487	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,1,1-trichloroethane <b>CAS #</b> 71-55-6 <b>Purity</b> 98%	(Lot 190123CG)	1,000.3	µg/mL	+/-	9.9491 56.6645 57.9637	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,1-Dichloropropene <b>CAS #</b> 563-58-6.SEC <b>Purity</b> 95%	(Lot 8541600)	1,002.5	µg/mL	+/-	9.9470 56.7861 58.0883	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Carbon tetrachloride <b>CAS #</b> 56-23-5.SEC <b>Purity</b> 99%	(Lot 11466)	1,000.8	µg/mL	+/-	9.9535 56.6892 57.9891	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	1,2-Dichloroethane <b>CAS #</b> 107-06-2.SEC <b>Purity</b> 99%	(Lot 00016165)	1,000.6	µg/mL	+/-	9.9524 56.6831 57.9828	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Benzene <b>CAS #</b> 71-43-2.SEC <b>Purity</b> 99%	(Lot B28Y008)	1,000.1	µg/mL	+/-	9.9229 56.6482 57.9473	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Trichloroethene <b>CAS #</b> 79-01-6.SEC <b>Purity</b> 99%	(Lot H04X050)	1,000.9	µg/mL	+/-	9.9548 56.6965 57.9965	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	1,2-Dichloropropane <b>CAS #</b> 78-87-5.SEC <b>Purity</b> 99%	(Lot ERRBI-RH)	1,000.1	µg/mL	+/-	9.9474 56.6547 57.9537	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Bromodichloromethane <b>CAS #</b> 75-27-4.SEC <b>Purity</b> 99%	(Lot 13780)	1,000.8	µg/mL	+/-	9.9539 56.6918 57.9917	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Dibromomethane <b>CAS #</b> 74-95-3.SEC <b>Purity</b> 99%	(Lot MOKKJ)	1,000.1	µg/mL	+/-	9.9231 56.6496 57.9487	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	cis-1,3-Dichloropropene <b>CAS #</b> 10061-01-5.SEC <b>Purity</b> 98%	(Lot 4870A)	1,000.9	µg/mL	+/-	9.9550 56.6979 57.9980	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Toluene <b>CAS #</b> 108-88-3.SEC <b>Purity</b> 99%	(Lot YND2B-BD)	1,000.0	µg/mL	+/-	9.9222 56.6446 57.9436	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	trans-1,3-Dichloropropene <b>CAS #</b> 10061-02-6.SEC <b>Purity</b> 96%	(Lot ZDMSL)	1,002.1	µg/mL	+/-	9.9673 56.7679 58.0696	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,2-Trichloroethane <b>CAS #</b> 79-00-5.SEC <b>Purity</b> 99%	(Lot 7871500)	1,001.3	µg/mL	+/-	9.9585 56.7176 58.0180	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	1,3-Dichloropropane <b>CAS #</b> 142-28-9.SEC <b>Purity</b> 99%	(Lot AGN01-EFPC)	1,000.1	µg/mL	+/-	9.9229 56.6482 57.9473	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Tetrachloroethene <b>CAS #</b> 127-18-4.SEC <b>Purity</b> 99%	(Lot F09W014)	1,000.2	µg/mL	+/-	9.9484 56.6603 57.9595	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Dibromochloromethane <b>CAS #</b> 124-48-1.SEC <b>Purity</b> 97%	(Lot 10206360)	1,000.5	µg/mL	+/-	9.9509 56.6743 57.9738	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dibromoethane (EDB) <b>CAS #</b> 106-93-4.SEC <b>Purity</b> 99%	(Lot 7511900)	1,000.1	µg/mL	+/-	9.9230 56.6489 57.9480	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene <b>CAS #</b> 108-90-7.SEC <b>Purity</b> 99%	(Lot 1161936)	1,001.4	µg/mL	+/-	9.9598 56.7253 58.0260	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane <b>CAS #</b> 630-20-6.SEC <b>Purity</b> 99%	(Lot GC01)	1,000.1	µg/mL	+/-	9.9230 56.6489 57.9480	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene <b>CAS #</b> 100-41-4.SEC <b>Purity</b> 99%	(Lot PI4SE)	1,000.2	µg/mL	+/-	9.9235 56.6517 57.9509	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene <b>CAS #</b> 108-38-3.SEC <b>Purity</b> 99%	(Lot 7ZV6F)	1,000.2	µg/mL	+/-	9.9235 56.6517 57.9509	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene <b>CAS #</b> 106-42-3.SEC <b>Purity</b> 99%	(Lot D6UOA)	1,000.1	µg/mL	+/-	9.9224 56.6453 57.9444	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene <b>CAS #</b> 95-47-6.SEC <b>Purity</b> 99%	(Lot FGL01)	1,000.1	µg/mL	+/-	9.9225 56.6460 57.9451	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene <b>CAS #</b> 100-42-5.SEC <b>Purity</b> 99%	(Lot OFIOL-IA)	1,000.1	µg/mL	+/-	9.9231 56.6496 57.9487	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) <b>CAS #</b> 98-82-8.SEC <b>Purity</b> 99%	(Lot JN4EC)	1,000.0	µg/mL	+/-	9.9220 56.6432 57.9422	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Bromoform <b>CAS #</b> 75-25-2.SEC <b>Purity</b> 99%	(Lot 9170700)	1,001.7	µg/mL	+/-	9.9633 56.7453 58.0464	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,1,2-Tetrachloroethane <b>CAS #</b> 79-34-5.SEC <b>Purity</b> 98%	(Lot BCCB0724)	1,001.6	µg/mL	+/-	9.9624 56.7398 58.0408	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane <b>CAS #</b> 96-18-4.SEC <b>Purity</b> 99%	(Lot GUHZN)	1,000.0	µg/mL	+/-	9.9222 56.6446 57.9436	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene <b>CAS #</b> 103-65-1.SEC <b>Purity</b> 99%	(Lot T2HFC)	1,000.1	µg/mL	+/-	9.9224 56.6453 57.9444	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene <b>CAS #</b> 108-86-1.SEC <b>Purity</b> 99%	(Lot 8DKWJ)	1,000.2	µg/mL	+/-	9.9234 56.6510 57.9502	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trimethylbenzene <b>CAS #</b> 108-67-8.SEC <b>Purity</b> 99%	(Lot TOOOF)	1,000.1	µg/mL	+/-	9.9225 56.6460 57.9451	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene <b>CAS #</b> 95-49-8.SEC <b>Purity</b> 99%	(Lot BRHPM)	1,000.0	µg/mL	+/-	9.9220 56.6432 57.9422	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	4-Chlorotoluene <b>CAS #</b> 106-43-4.SEC <b>Purity</b> 99%	(Lot S5SKD)	1,000.1	µg/mL	+/-	9.9227 56.6475 57.9465	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	tert-Butylbenzene <b>CAS #</b> 98-06-6.SEC <b>Purity</b> 99%	(Lot D6OHC)	1,000.1	µg/mL	+/-	9.9226 56.6468 57.9458	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,2,4-Trimethylbenzene <b>CAS #</b> 95-63-6.SEC <b>Purity</b> 99%	(Lot JMIYD)	1,000.1	µg/mL	+/-	9.9229 56.6482 57.9473	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	sec-Butylbenzene <b>CAS #</b> 135-98-8.SEC <b>Purity</b> 99%	(Lot O4HRF)	1,000.1	µg/mL	+/-	9.9226 56.6468 57.9458	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	4-Isopropyltoluene (p-cymene) <b>CAS #</b> 99-87-6.SEC <b>Purity</b> 99%	(Lot 8380000)	1,000.1	µg/mL	+/-	9.9226 56.6468 57.9458	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,3-Dichlorobenzene <b>CAS #</b> 541-73-1.SEC <b>Purity</b> 99%	(Lot FMDFD)	1,000.1	µg/mL	+/-	9.9467 56.6504 57.9494	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	1,4-Dichlorobenzene <b>CAS #</b> 106-46-7.SEC <b>Purity</b> 99%	(Lot YWKDC-MK)	1,002.5	µg/mL	+/-	9.9708 56.7875 58.0896	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	n-Butylbenzene <b>CAS #</b> 104-51-8.SEC <b>Purity</b> 99%	(Lot MMPGA)	1,000.1	µg/mL	+/-	9.9229 56.6482 57.9473	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	1,2-Dichlorobenzene <b>CAS #</b> 95-50-1.SEC <b>Purity</b> 99%	(Lot R6QDM)	1,001.6	µg/mL	+/-	9.9619 56.7374 58.0383	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	1,2-Dibromo-3-chloropropane <b>CAS #</b> 96-12-8.SEC <b>Purity</b> 99%	(Lot Q135-105)	1,000.0	µg/mL	+/-	9.9220 56.6432 57.9422	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,2,4-Trichlorobenzene <b>CAS #</b> 120-82-1.SEC <b>Purity</b> 99%	(Lot IGLFA)	1,000.1	µg/mL	+/-	9.9224 56.6453 57.9444	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Hexachlorobutadiene <b>CAS #</b> 87-68-3.SEC <b>Purity</b> 97%	(Lot 8532700)	1,000.8	µg/mL	+/-	9.9297 56.6870 57.9870	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Naphthalene <b>CAS #</b> 91-20-3.SEC <b>Purity</b> 99%	(Lot SKZ5N)	1,000.1	µg/mL	+/-	9.9229 56.6482 57.9473	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	1,2,3-Trichlorobenzene <b>CAS #</b> 87-61-6.SEC <b>Purity</b> 98%	(Lot A0043055)	1,000.7	µg/mL	+/-	9.9292 56.6844 57.9843	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

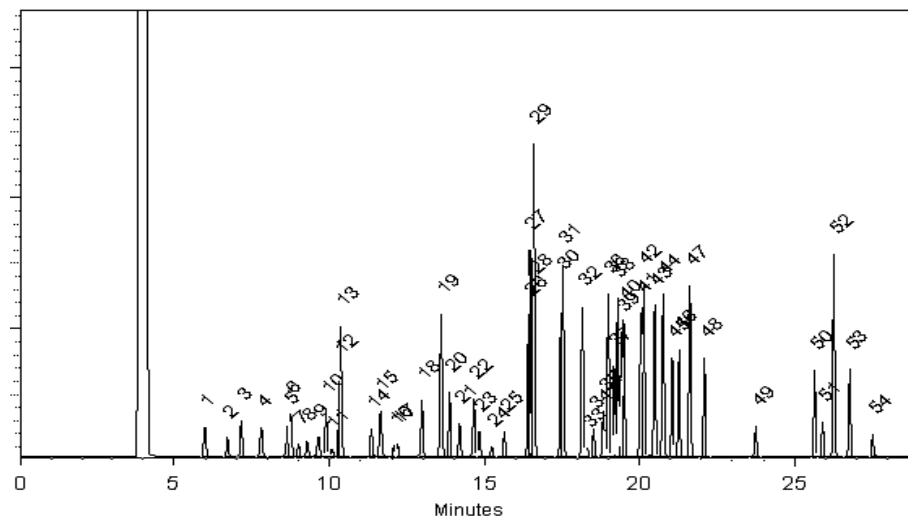
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

  
Katelyn McGinni - Operations Tech I

**Date Mixed:** 21-Apr-2022      **Balance:** B345965662

  
Marlina Cowan - Operations Tech I

**Date Passed:** 27-Apr-2022

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.



Reagent

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**MSV\_M\_MIX2SEC\_00073**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577494 **Lot No.:** A0171837

**Description :** Custom VOC MegaMix®.SEC #2 Standard  
Custom VOC MegaMix®.SEC #2 Standard 1,000-50,000µg/mL, P&T  
Methanol, 1mL/ampul

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

**Expiration Date :** April 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Pentane (C5)	1,002.0 µg/mL	+/- 5.8803 µg/mL Gravimetric	
	CAS # 109-66-0.SEC (Lot FGH02)			+/- 49.5732 µg/mL Unstressed
	Purity 99%			+/- 50.8056 µg/mL Stressed
2	2-Propanol (isopropanol)	7,501.5 µg/mL	+/- 43.9229 µg/mL Gravimetric	
	CAS # 67-63-0.SEC (Lot TFT5I)			+/- 371.1195 µg/mL Unstressed
	Purity 99%			+/- 380.3459 µg/mL Stressed
3	1,1,2-Trichlorotrifluoroethane (CFC-113)	1,002.0 µg/mL	+/- 5.8803 µg/mL Gravimetric	
	CAS # 76-13-1.SEC (Lot 18342)			+/- 49.5732 µg/mL Unstressed
	Purity 99%			+/- 50.8056 µg/mL Stressed
4	tert-Butanol (TBA)	10,001.0 µg/mL	+/- 58.5581 µg/mL Gravimetric	
	CAS # 75-65-0.SEC (Lot 5REPK)			+/- 494.7765 µg/mL Unstressed
	Purity 99%			+/- 507.0771 µg/mL Stressed
5	Methyl acetate	1,002.5 µg/mL	+/- 5.8832 µg/mL Gravimetric	
	CAS # 79-20-9.SEC (Lot YDGVD)			+/- 49.5980 µg/mL Unstressed
	Purity 99%			+/- 50.8309 µg/mL Stressed
6	Iodomethane (methyl iodide)	1,001.5 µg/mL	+/- 5.8774 µg/mL Gravimetric	
	CAS # 74-88-4.SEC (Lot Y25A027)			+/- 49.5485 µg/mL Unstressed
	Purity 99%			+/- 50.7802 µg/mL Stressed
7	Allyl chloride ( 3-chloropropene )	1,002.0 µg/mL	+/- 5.8803 µg/mL Gravimetric	
	CAS # 107-05-1.SEC (Lot H3HGC)			+/- 49.5732 µg/mL Unstressed
	Purity 99%			+/- 50.8056 µg/mL Stressed

8	Carbon disulfide <b>CAS #</b> 75-15-0.SEC <b>Purity</b> 99%	(Lot MKBL1376V)	1,001.5	µg/mL	+/- +/- +/-	5.8774 49.5485 50.7802	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Acrylonitrile <b>CAS #</b> 107-13-1.SEC <b>Purity</b> 99%	(Lot V54AD)	5,000.5	µg/mL	+/- +/- +/-	29.2790 247.3882 253.5386	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Methyl-tert-butyl ether ( MTBE ) <b>CAS #</b> 1634-04-4.SEC <b>Purity</b> 99%	(Lot ZHKYA)	1,001.5	µg/mL	+/- +/- +/-	5.8774 49.5485 50.7802	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Hexane (C6) <b>CAS #</b> 110-54-3.SEC <b>Purity</b> 99%	(Lot 10188491)	1,001.0	µg/mL	+/- +/- +/-	5.8744 49.5238 50.7549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Diisopropyl ether ( DIPE ) <b>CAS #</b> 108-20-3.SEC <b>Purity</b> 99%	(Lot LL7TN-SH)	1,003.0	µg/mL	+/- +/- +/-	5.8862 49.6227 50.8563	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Chloroprene (2-chloro-1,3-butadiene) <b>CAS #</b> 126-99-8 <b>Purity</b> 99%	(Lot 210413JLM)	1,001.5	µg/mL	+/- +/- +/-	5.8774 49.5485 50.7802	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Ethyl-tert-butyl ether (ETBE) <b>CAS #</b> 637-92-3.SEC <b>Purity</b> 98%	(Lot UC15B)	1,002.1	µg/mL	+/- +/- +/-	5.8806 49.5757 50.8081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Propionitrile <b>CAS #</b> 107-12-0.SEC <b>Purity</b> 99%	(Lot N44LF)	7,501.5	µg/mL	+/- +/- +/-	43.9229 371.1195 380.3459	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Methacrylonitrile <b>CAS #</b> 126-98-7 <b>Purity</b> 99%	(Lot 1012014)	7,501.5	µg/mL	+/- +/- +/-	43.9229 371.1195 380.3459	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) <b>CAS #</b> 78-83-1.SEC <b>Purity</b> 99%	(Lot YNG3K)	25,001.0	µg/mL	+/- +/- +/-	146.3864 1,236.8670 1,267.6168	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Tetrahydrofuran <b>CAS #</b> 109-99-9.SEC <b>Purity</b> 99%	(Lot 3NYHE)	5,000.5	µg/mL	+/- +/- +/-	29.2790 247.3882 253.5386	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Cyclohexane <b>CAS #</b> 110-82-7.SEC <b>Purity</b> 99%	(Lot YADRA)	1,000.0	µg/mL	+/- +/- +/-	5.8686 49.4743 50.7042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1-Butanol <b>CAS #</b> 71-36-3.SEC <b>Purity</b> 99%	(Lot 6B6UL)	50,004.5	µg/mL	+/- +/- +/-	292.7722 2,473.8558 2,535.3586	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	tert-Amyl methyl ether (TAME) <b>CAS #</b> 994-05-8.SEC <b>Purity</b> 99%	(Lot 11010100)	1,001.0	µg/mL	+/- +/- +/-	5.8744 49.5238 50.7549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	n-Heptane (C7) <b>CAS #</b> 142-82-5.SEC <b>Purity</b> 99%	(Lot TFHUC)	1,002.5	µg/mL	+/- +/- +/-	5.8832 49.5980 50.8309	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	tert-Amyl ethyl ether (TAEE) <b>CAS #</b> 919-94-8.SEC <b>Purity</b> 99%	(Lot 11370700)	1,000.5	µg/mL	+/- +/- +/-	5.8715 49.4990 50.7295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Methylcyclohexane <b>CAS #</b> 108-87-2.SEC <b>Purity</b> 99%	(Lot Q02QG)	1,001.0	µg/mL	+/-	5.8744 49.5238 50.7549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	Methyl methacrylate <b>CAS #</b> 80-62-6.SEC <b>Purity</b> 99%	(Lot G01X021)	1,000.5	µg/mL	+/-	5.8715 49.4990 50.7295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,4-Dioxane <b>CAS #</b> 123-91-1.SEC <b>Purity</b> 99%	(Lot KLE2K)	25,004.0	µg/mL	+/-	146.4039 1,237.0154 1,267.7689	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	2-Nitropropane <b>CAS #</b> 79-46-9.SEC <b>Purity</b> 99%	(Lot F43IA)	1,001.5	µg/mL	+/-	5.8774 49.5485 50.7802	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethyl methacrylate <b>CAS #</b> 97-63-2.SEC <b>Purity</b> 99%	(Lot MLWYK-LS)	1,000.0	µg/mL	+/-	5.8686 49.4743 50.7042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1-Chlorohexane <b>CAS #</b> 544-10-5.SEC <b>Purity</b> 99%	(Lot 8171700)	1,001.0	µg/mL	+/-	5.8744 49.5238 50.7549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	trans-1,4-Dichloro-2-butene <b>CAS #</b> 110-57-6.SEC <b>Purity</b> 97%	(Lot 100700-3)	5,000.4	µg/mL	+/-	29.2781 247.3808 253.5310	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,2,3-Trimethylbenzene <b>CAS #</b> 526-73-8.SEC <b>Purity</b> 98%	(Lot 11386600)	1,001.1	µg/mL	+/-	5.8748 49.5272 50.7584	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	1,3-Diethylbenzene <b>CAS #</b> 141-93-5.SEC <b>Purity</b> 99%	(Lot 113566-1)	1,003.5	µg/mL	+/-	5.8891 49.6474 50.8816	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Benzyl chloride <b>CAS #</b> 100-44-7.SEC <b>Purity</b> 99%	(Lot H29N03)	1,001.0	µg/mL	+/-	5.8744 49.5238 50.7549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	1,4-Diethylbenzene <b>CAS #</b> 105-05-5.SEC <b>Purity</b> 98%	(Lot FBQ02)	1,002.1	µg/mL	+/-	5.8806 49.5757 50.8081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,2-Diethylbenzene <b>CAS #</b> 135-01-3.SEC <b>Purity</b> 99%	(Lot BCBF3667V)	1,000.5	µg/mL	+/-	5.8715 49.4990 50.7295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,3,5-Trichlorobenzene <b>CAS #</b> 108-70-3.SEC <b>Purity</b> 99%	(Lot I28U021)	1,001.5	µg/mL	+/-	5.8774 49.5485 50.7802	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	2-Methylnaphthalene <b>CAS #</b> 91-57-6.SEC <b>Purity</b> 99%	(Lot 76023-1)	1,000.0	µg/mL	+/-	5.8686 49.4743 50.7042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

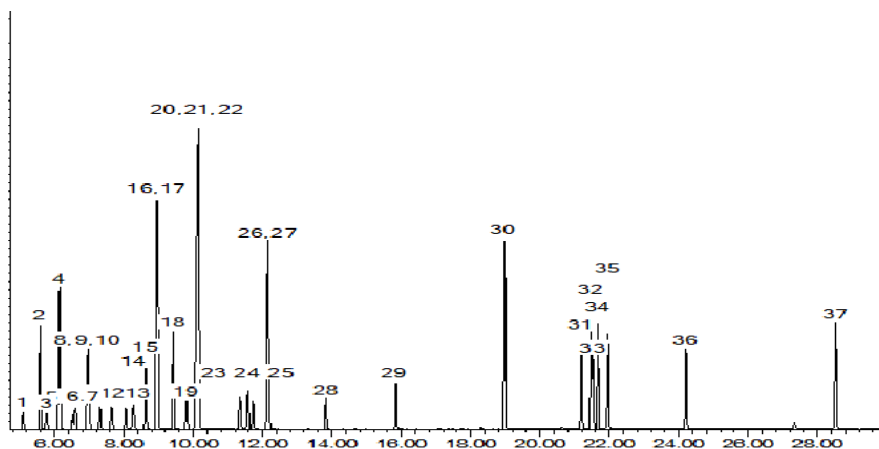
**Carrier Gas:**  
helium-constant pressure 30 psi

**Temp. Program:**  
40°C (hold 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.

*Michael Maje*

**Date Mixed:** 28-Apr-2021      **Balance:** 1128353505

*Alexis Shelow*  
Alexis Shelow - Operations Tech I

**Date Passed:** 04-May-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_M\_MIX2SEC\_00081**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577494 **Lot No.:** A0171837

**Description :** Custom VOC MegaMix®.SEC #2 Standard  
Custom VOC MegaMix®.SEC #2 Standard 1,000-50,000µg/mL, P&T  
Methanol, 1mL/ampul

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

**Expiration Date :** April 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	n-Pentane (C5)	1,002.0 µg/mL	+/-	5.8803	µg/mL	Gravimetric
	CAS # 109-66-0.SEC (Lot FGH02)		+/-	49.5732	µg/mL	Unstressed
	Purity 99%		+/-	50.8056	µg/mL	Stressed
2	2-Propanol (isopropanol)	7,501.5 µg/mL	+/-	43.9229	µg/mL	Gravimetric
	CAS # 67-63-0.SEC (Lot TFT5I)		+/-	371.1195	µg/mL	Unstressed
	Purity 99%		+/-	380.3459	µg/mL	Stressed
3	1,1,2-Trichlorotrifluoroethane (CFC-113)	1,002.0 µg/mL	+/-	5.8803	µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/-	49.5732	µg/mL	Unstressed
	Purity 99%		+/-	50.8056	µg/mL	Stressed
4	tert-Butanol (TBA)	10,001.0 µg/mL	+/-	58.5581	µg/mL	Gravimetric
	CAS # 75-65-0.SEC (Lot 5REPK)		+/-	494.7765	µg/mL	Unstressed
	Purity 99%		+/-	507.0771	µg/mL	Stressed
5	Methyl acetate	1,002.5 µg/mL	+/-	5.8832	µg/mL	Gravimetric
	CAS # 79-20-9.SEC (Lot YDGVD)		+/-	49.5980	µg/mL	Unstressed
	Purity 99%		+/-	50.8309	µg/mL	Stressed
6	Iodomethane (methyl iodide)	1,001.5 µg/mL	+/-	5.8774	µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/-	49.5485	µg/mL	Unstressed
	Purity 99%		+/-	50.7802	µg/mL	Stressed
7	Allyl chloride ( 3-chloropropene )	1,002.0 µg/mL	+/-	5.8803	µg/mL	Gravimetric
	CAS # 107-05-1.SEC (Lot H3HGC)		+/-	49.5732	µg/mL	Unstressed
	Purity 99%		+/-	50.8056	µg/mL	Stressed



8	Carbon disulfide <b>CAS #</b> 75-15-0.SEC <b>Purity</b> 99%	(Lot MKBL1376V)	1,001.5	µg/mL	+/- +/- +/-	5.8774 49.5485 50.7802	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Acrylonitrile <b>CAS #</b> 107-13-1.SEC <b>Purity</b> 99%	(Lot V54AD)	5,000.5	µg/mL	+/- +/- +/-	29.2790 247.3882 253.5386	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Methyl-tert-butyl ether ( MTBE ) <b>CAS #</b> 1634-04-4.SEC <b>Purity</b> 99%	(Lot ZHKYA)	1,001.5	µg/mL	+/- +/- +/-	5.8774 49.5485 50.7802	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Hexane (C6) <b>CAS #</b> 110-54-3.SEC <b>Purity</b> 99%	(Lot 10188491)	1,001.0	µg/mL	+/- +/- +/-	5.8744 49.5238 50.7549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Diisopropyl ether ( DIPE ) <b>CAS #</b> 108-20-3.SEC <b>Purity</b> 99%	(Lot LL7TN-SH)	1,003.0	µg/mL	+/- +/- +/-	5.8862 49.6227 50.8563	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Chloroprene (2-chloro-1,3-butadiene) <b>CAS #</b> 126-99-8 <b>Purity</b> 99%	(Lot 210413JLM)	1,001.5	µg/mL	+/- +/- +/-	5.8774 49.5485 50.7802	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Ethyl-tert-butyl ether (ETBE) <b>CAS #</b> 637-92-3.SEC <b>Purity</b> 98%	(Lot UC15B)	1,002.1	µg/mL	+/- +/- +/-	5.8806 49.5757 50.8081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Propionitrile <b>CAS #</b> 107-12-0.SEC <b>Purity</b> 99%	(Lot N44LF)	7,501.5	µg/mL	+/- +/- +/-	43.9229 371.1195 380.3459	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Methacrylonitrile <b>CAS #</b> 126-98-7 <b>Purity</b> 99%	(Lot 1012014)	7,501.5	µg/mL	+/- +/- +/-	43.9229 371.1195 380.3459	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) <b>CAS #</b> 78-83-1.SEC <b>Purity</b> 99%	(Lot YNG3K)	25,001.0	µg/mL	+/- +/- +/-	146.3864 1,236.8670 1,267.6168	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Tetrahydrofuran <b>CAS #</b> 109-99-9.SEC <b>Purity</b> 99%	(Lot 3NYHE)	5,000.5	µg/mL	+/- +/- +/-	29.2790 247.3882 253.5386	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Cyclohexane <b>CAS #</b> 110-82-7.SEC <b>Purity</b> 99%	(Lot YADRA)	1,000.0	µg/mL	+/- +/- +/-	5.8686 49.4743 50.7042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1-Butanol <b>CAS #</b> 71-36-3.SEC <b>Purity</b> 99%	(Lot 6B6UL)	50,004.5	µg/mL	+/- +/- +/-	292.7722 2,473.8558 2,535.3586	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	tert-Amyl methyl ether (TAME) <b>CAS #</b> 994-05-8.SEC <b>Purity</b> 99%	(Lot 11010100)	1,001.0	µg/mL	+/- +/- +/-	5.8744 49.5238 50.7549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	n-Heptane (C7) <b>CAS #</b> 142-82-5.SEC <b>Purity</b> 99%	(Lot TFHUC)	1,002.5	µg/mL	+/- +/- +/-	5.8832 49.5980 50.8309	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	tert-Amyl ethyl ether (TAEE) <b>CAS #</b> 919-94-8.SEC <b>Purity</b> 99%	(Lot 11370700)	1,000.5	µg/mL	+/- +/- +/-	5.8715 49.4990 50.7295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Methylcyclohexane <b>CAS #</b> 108-87-2.SEC <b>Purity</b> 99%	(Lot Q02QG)	1,001.0	µg/mL	+/-	5.8744 49.5238 50.7549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	Methyl methacrylate <b>CAS #</b> 80-62-6.SEC <b>Purity</b> 99%	(Lot G01X021)	1,000.5	µg/mL	+/-	5.8715 49.4990 50.7295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,4-Dioxane <b>CAS #</b> 123-91-1.SEC <b>Purity</b> 99%	(Lot KLE2K)	25,004.0	µg/mL	+/-	146.4039 1,237.0154 1,267.7689	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	2-Nitropropane <b>CAS #</b> 79-46-9.SEC <b>Purity</b> 99%	(Lot F43IA)	1,001.5	µg/mL	+/-	5.8774 49.5485 50.7802	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethyl methacrylate <b>CAS #</b> 97-63-2.SEC <b>Purity</b> 99%	(Lot MLWYK-LS)	1,000.0	µg/mL	+/-	5.8686 49.4743 50.7042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1-Chlorohexane <b>CAS #</b> 544-10-5.SEC <b>Purity</b> 99%	(Lot 8171700)	1,001.0	µg/mL	+/-	5.8744 49.5238 50.7549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	trans-1,4-Dichloro-2-butene <b>CAS #</b> 110-57-6.SEC <b>Purity</b> 97%	(Lot 100700-3)	5,000.4	µg/mL	+/-	29.2781 247.3808 253.5310	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,2,3-Trimethylbenzene <b>CAS #</b> 526-73-8.SEC <b>Purity</b> 98%	(Lot 11386600)	1,001.1	µg/mL	+/-	5.8748 49.5272 50.7584	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	1,3-Diethylbenzene <b>CAS #</b> 141-93-5.SEC <b>Purity</b> 99%	(Lot 113566-1)	1,003.5	µg/mL	+/-	5.8891 49.6474 50.8816	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Benzyl chloride <b>CAS #</b> 100-44-7.SEC <b>Purity</b> 99%	(Lot H29N03)	1,001.0	µg/mL	+/-	5.8744 49.5238 50.7549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	1,4-Diethylbenzene <b>CAS #</b> 105-05-5.SEC <b>Purity</b> 98%	(Lot FBQ02)	1,002.1	µg/mL	+/-	5.8806 49.5757 50.8081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,2-Diethylbenzene <b>CAS #</b> 135-01-3.SEC <b>Purity</b> 99%	(Lot BCBF3667V)	1,000.5	µg/mL	+/-	5.8715 49.4990 50.7295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,3,5-Trichlorobenzene <b>CAS #</b> 108-70-3.SEC <b>Purity</b> 99%	(Lot I28U021)	1,001.5	µg/mL	+/-	5.8774 49.5485 50.7802	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	2-Methylnaphthalene <b>CAS #</b> 91-57-6.SEC <b>Purity</b> 99%	(Lot 76023-1)	1,000.0	µg/mL	+/-	5.8686 49.4743 50.7042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

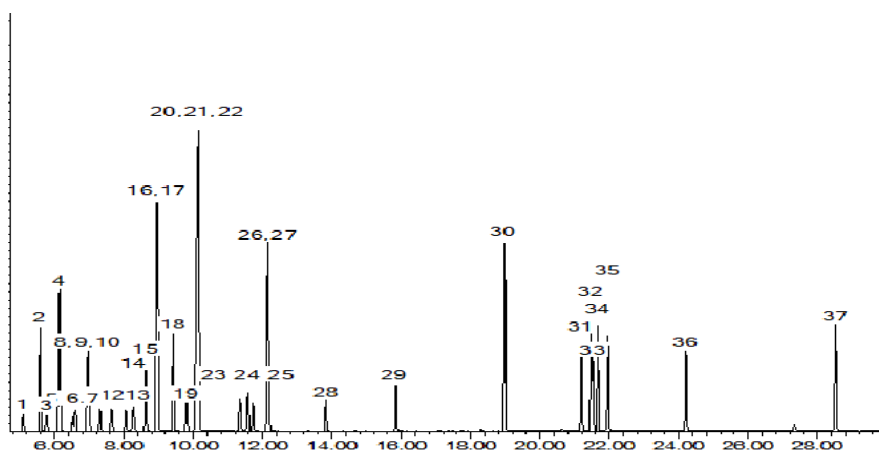
**Carrier Gas:**  
helium-constant pressure 30 psi

**Temp. Program:**  
40°C (hold 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.

*Michael Maje*

**Date Mixed:** 28-Apr-2021      **Balance:** 1128353505

*Alexis Shelow*  
Alexis Shelow - Operations Tech I

**Date Passed:** 04-May-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_M\_MIX2SEC\_00098**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577494 **Lot No.:** A0184412

**Description :** Custom VOC MegaMix®.SEC #2 Standard  
Custom VOC MegaMix®.SEC #2 Standard 1,000-50,000µg/mL, P&T  
Methanol, 1mL/ampul

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

**Expiration Date :** April 30, 2025 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	n-Pentane (C5)	1,008.7 µg/mL	+/-	5.9912	µg/mL	Gravimetric
	CAS # 109-66-0.SEC (Lot FGH02)		+/-	49.9116	µg/mL	Unstressed
	Purity 99%		+/-	51.1520	µg/mL	Stressed
2	2-Propanol (isopropanol)	7,505.3 µg/mL	+/-	43.9454	µg/mL	Gravimetric
	CAS # 67-63-0.SEC (Lot G6HNF)		+/-	371.3091	µg/mL	Unstressed
	Purity 99%		+/-	380.5402	µg/mL	Stressed
3	1,1,2-Trichlorotrifluoroethane (CFC-113)	1,010.0 µg/mL	+/-	5.9991	µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/-	49.9776	µg/mL	Unstressed
	Purity 99%		+/-	51.2196	µg/mL	Stressed
4	tert-Butanol (TBA)	10,043.3 µg/mL	+/-	58.8059	µg/mL	Gravimetric
	CAS # 75-65-0.SEC (Lot ZSJ2O)		+/-	496.8708	µg/mL	Unstressed
	Purity 99%		+/-	509.2235	µg/mL	Stressed
5	Methyl acetate	1,002.0 µg/mL	+/-	5.9516	µg/mL	Gravimetric
	CAS # 79-20-9.SEC (Lot UCNEL)		+/-	49.5817	µg/mL	Unstressed
	Purity 99%		+/-	50.8139	µg/mL	Stressed
6	Iodomethane (methyl iodide)	1,003.3 µg/mL	+/-	5.9595	µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/-	49.6477	µg/mL	Unstressed
	Purity 99%		+/-	50.8815	µg/mL	Stressed
7	Allyl chloride ( 3-chloropropene )	1,003.3 µg/mL	+/-	5.9595	µg/mL	Gravimetric
	CAS # 107-05-1.SEC (Lot RD210329)		+/-	49.6477	µg/mL	Unstressed
	Purity 99%		+/-	50.8815	µg/mL	Stressed

8	Carbon disulfide <b>CAS #</b> 75-15-0.SEC <b>Purity</b> 99%	(Lot MKBL1376V)	1,008.7	µg/mL	+/-	5.9912 49.9116 51.1520	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Acrylonitrile <b>CAS #</b> 107-13-1.SEC <b>Purity</b> 99%	(Lot V54AD)	5,034.7	µg/mL	+/-	29.5462 249.0865 255.2787	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Methyl-tert-butyl ether ( MTBE ) <b>CAS #</b> 1634-04-4.SEC <b>Purity</b> 99%	(Lot ZHKYA)	1,008.0	µg/mL	+/-	5.9872 49.8786 51.1182	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Hexane (C6) <b>CAS #</b> 110-54-3.SEC <b>Purity</b> 99%	(Lot 10188491)	1,002.7	µg/mL	+/-	5.9555 49.6147 50.8477	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Diisopropyl ether ( DIPE ) <b>CAS #</b> 108-20-3.SEC <b>Purity</b> 99%	(Lot LL7TN-SH)	1,002.7	µg/mL	+/-	5.9555 49.6147 50.8477	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Chloroprene (2-chloro-1,3-butadiene) <b>CAS #</b> 126-99-8 <b>Purity</b> 99%	(Lot 210927JLM)	1,006.7	µg/mL	+/-	5.9793 49.8127 51.0506	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Ethyl-tert-butyl ether (ETBE) <b>CAS #</b> 637-92-3.SEC <b>Purity</b> 98%	(Lot UC15B)	1,004.2	µg/mL	+/-	5.9645 49.6893 50.9241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Propionitrile <b>CAS #</b> 107-12-0.SEC <b>Purity</b> 99%	(Lot PS480)	7,512.7	µg/mL	+/-	43.9883 371.6719 380.9121	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Methacrylonitrile <b>CAS #</b> 126-98-7 <b>Purity</b> 99%	(Lot 1012020)	7,502.7	µg/mL	+/-	43.9298 371.1772 380.4050	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) <b>CAS #</b> 78-83-1.SEC <b>Purity</b> 99%	(Lot YNG3K)	25,034.0	µg/mL	+/-	146.5796 1,238.4996 1,269.2900	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Tetrahydrofuran <b>CAS #</b> 109-99-9.SEC <b>Purity</b> 99%	(Lot 3NYHE)	5,008.7	µg/mL	+/-	29.3937 247.8002 253.9604	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Cyclohexane <b>CAS #</b> 110-82-7.SEC <b>Purity</b> 99%	(Lot YADRA)	1,004.0	µg/mL	+/-	5.9635 49.6807 50.9153	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1-Butanol <b>CAS #</b> 71-36-3.SEC <b>Purity</b> 99%	(Lot RSHAH)	50,012.0	µg/mL	+/-	292.8313 2,474.2286 2,535.7406	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	tert-Amyl methyl ether (TAME) <b>CAS #</b> 994-05-8.SEC <b>Purity</b> 98%	(Lot 12075100)	1,009.4	µg/mL	+/-	5.9955 49.9479 51.1892	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	n-Heptane (C7) <b>CAS #</b> 142-82-5.SEC <b>Purity</b> 99%	(Lot TFHUC)	1,007.3	µg/mL	+/-	5.9833 49.8456 51.0844	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	tert-Amyl ethyl ether (TAEE) <b>CAS #</b> 919-94-8.SEC <b>Purity</b> 99%	(Lot 11370700)	1,004.7	µg/mL	+/-	5.9674 49.7137 50.9491	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Methylcyclohexane <b>CAS #</b> 108-87-2.SEC <b>Purity</b> 99%	(Lot Q02QG)	1,005.3	µg/mL	+/- 5.9714 +/- 49.7467 +/- 50.9829	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	Methyl methacrylate <b>CAS #</b> 80-62-6.SEC <b>Purity</b> 99%	(Lot G01X021)	1,004.0	µg/mL	+/- 5.9635 +/- 49.6807 +/- 50.9153	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,4-Dioxane <b>CAS #</b> 123-91-1.SEC <b>Purity</b> 99%	(Lot KLE2K)	25,019.3	µg/mL	+/- 146.4937 +/- 1,237.7740 +/- 1,268.5463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	2-Nitropropane <b>CAS #</b> 79-46-9.SEC <b>Purity</b> 99%	(Lot F43IA)	1,010.0	µg/mL	+/- 5.9991 +/- 49.9776 +/- 51.2196	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethyl methacrylate <b>CAS #</b> 97-63-2.SEC <b>Purity</b> 99%	(Lot AQSP0)	1,001.3	µg/mL	+/- 5.9476 +/- 49.5487 +/- 50.7801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1-Chlorohexane <b>CAS #</b> 544-10-5.SEC <b>Purity</b> 99%	(Lot 13075400)	1,000.7	µg/mL	+/- 5.9437 +/- 49.5158 +/- 50.7463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	trans-1,4-Dichloro-2-butene <b>CAS #</b> 110-57-6.SEC <b>Purity</b> 97%	(Lot RD220126S)	5,014.9	µg/mL	+/- 29.4302 +/- 248.1086 +/- 254.2764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,2,3-Trimethylbenzene <b>CAS #</b> 526-73-8.SEC <b>Purity</b> 98%	(Lot 11386600)	1,003.5	µg/mL	+/- 5.9606 +/- 49.6569 +/- 50.8910	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	1,3-Diethylbenzene <b>CAS #</b> 141-93-5.SEC <b>Purity</b> 99%	(Lot 113566-1)	1,001.3	µg/mL	+/- 5.9476 +/- 49.5487 +/- 50.7801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Benzyl chloride <b>CAS #</b> 100-44-7.SEC <b>Purity</b> 99%	(Lot H29N03)	1,001.3	µg/mL	+/- 5.9476 +/- 49.5487 +/- 50.7801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	1,4-Diethylbenzene <b>CAS #</b> 105-05-5.SEC <b>Purity</b> 98%	(Lot FBQ02)	1,001.6	µg/mL	+/- 5.9490 +/- 49.5600 +/- 50.7916	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,2-Diethylbenzene <b>CAS #</b> 135-01-3.SEC <b>Purity</b> 99%	(Lot BCBF3667V)	1,002.0	µg/mL	+/- 5.9516 +/- 49.5817 +/- 50.8139	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,3,5-Trichlorobenzene <b>CAS #</b> 108-70-3.SEC <b>Purity</b> 99%	(Lot I28U021)	1,009.3	µg/mL	+/- 5.9951 +/- 49.9446 +/- 51.1858	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	2-Methylnaphthalene <b>CAS #</b> 91-57-6.SEC <b>Purity</b> 99%	(Lot 76023-1)	1,002.7	µg/mL	+/- 5.9555 +/- 49.6147 +/- 50.8477	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed



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

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

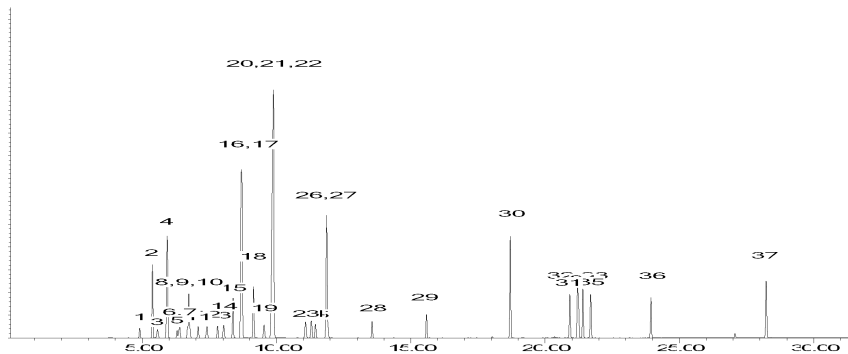
**Carrier Gas:**  
helium-constant pressure 30 psi

**Temp. Program:**  
40°C (hold 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*  
**Lane Kibe - Mix Technician**

**Date Mixed:** 22-Apr-2022      **Balance:** B707717271

*Jennifer I. Pollino*  
**Jennifer Pollino - Operations Tech-ARM QC**

**Date Passed:** 27-Apr-2022

**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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_MegaMIX#1\_00076**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577486 **Lot No.:** A0171634

**Description :** Custom VOC MegaMix® #1 Standard  
Custom VOC MegaMix® #1 Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** April 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,1-dichloroethene	5,000.3 µg/mL	+/-	31.7051	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBK2437)		+/-	280.6478	µg/mL	Unstressed
	Purity 99%		+/-	287.2014	µg/mL	Stressed
2	Methylene chloride (dichloromethane)	5,000.3 µg/mL	+/-	31.7051	µg/mL	Gravimetric
	CAS # 75-09-2 (Lot SHBL6169)		+/-	280.6478	µg/mL	Unstressed
	Purity 99%		+/-	287.2014	µg/mL	Stressed
3	trans-1,2-Dichloroethene	5,000.3 µg/mL	+/-	31.7051	µg/mL	Gravimetric
	CAS # 156-60-5 (Lot MKBH9850V)		+/-	280.6478	µg/mL	Unstressed
	Purity 99%		+/-	287.2014	µg/mL	Stressed
4	1,1-Dichloroethane	5,000.8 µg/mL	+/-	31.7079	µg/mL	Gravimetric
	CAS # 75-34-3 (Lot 580900)		+/-	280.6723	µg/mL	Unstressed
	Purity 99%		+/-	287.2265	µg/mL	Stressed
5	2,2-Dichloropropane	5,000.8 µg/mL	+/-	31.8970	µg/mL	Gravimetric
	CAS # 594-20-7 (Lot RD201111)		+/-	280.6965	µg/mL	Unstressed
	Purity 99%		+/-	287.2503	µg/mL	Stressed
6	cis-1,2-Dichloroethene	5,000.6 µg/mL	+/-	31.8957	µg/mL	Gravimetric
	CAS # 156-59-2 (Lot MKCK1803)		+/-	280.6853	µg/mL	Unstressed
	Purity 99%		+/-	287.2388	µg/mL	Stressed
7	chloroform	5,000.6 µg/mL	+/-	31.7067	µg/mL	Gravimetric
	CAS # 67-66-3 (Lot SHBL6923)		+/-	280.6618	µg/mL	Unstressed
	Purity 99%		+/-	287.2158	µg/mL	Stressed

8	Bromochloromethane <b>CAS #</b> 74-97-5 <b>Purity</b> 99%	(Lot 00008541)	5,000.9	µg/mL	+/-	31.8976 280.7022 287.2560	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,1,1-trichloroethane <b>CAS #</b> 71-55-6 <b>Purity</b> 98%	(Lot 190123CG)	5,000.1	µg/mL	+/-	31.7041 280.6383 287.1917	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,1-Dichloropropene <b>CAS #</b> 563-58-6 <b>Purity</b> 99%	(Lot 201106JLM)	5,000.9	µg/mL	+/-	31.8976 280.7022 287.2560	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	carbon tetrachloride <b>CAS #</b> 56-23-5 <b>Purity</b> 99%	(Lot SHBJ2110)	5,000.5	µg/mL	+/-	31.7063 280.6583 287.2122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	1,2-Dichloroethane <b>CAS #</b> 107-06-2 <b>Purity</b> 99%	(Lot MKCM8716)	5,000.4	µg/mL	+/-	31.7059 280.6548 287.2086	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Benzene <b>CAS #</b> 71-43-2 <b>Purity</b> 99%	(Lot SHBM3620)	5,001.0	µg/mL	+/-	31.8982 280.7078 287.2618	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Trichloroethene <b>CAS #</b> 79-01-6 <b>Purity</b> 99%	(Lot SHBL5816)	5,000.8	µg/mL	+/-	31.7079 280.6723 287.2265	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	1,2-Dichloropropane <b>CAS #</b> 78-87-5 <b>Purity</b> 99%	(Lot BCBR0882V)	5,001.1	µg/mL	+/-	31.7099 280.6899 287.2445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	bromodichloromethane <b>CAS #</b> 75-27-4 <b>Purity</b> 99%	(Lot MKCK3742)	5,000.2	µg/mL	+/-	31.7043 280.6408 287.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Dibromomethane <b>CAS #</b> 74-95-3 <b>Purity</b> 99%	(Lot 10215970)	5,000.2	µg/mL	+/-	31.8931 280.6629 287.2158	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	cis-1,3-Dichloropropene <b>CAS #</b> 10061-01-5 <b>Purity</b> 99%	(Lot D26147-1217)	5,001.9	µg/mL	+/-	31.7154 280.7390 287.2947	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Toluene <b>CAS #</b> 108-88-3 <b>Purity</b> 99%	(Lot SHBM6128)	5,001.3	µg/mL	+/-	31.9001 280.7246 287.2790	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	trans-1,3-Dichloropropene <b>CAS #</b> 10061-02-6 <b>Purity</b> 99%	(Lot RP201030)	5,000.5	µg/mL	+/-	31.7063 280.6583 287.2122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,2-Trichloroethane <b>CAS #</b> 79-00-5 <b>Purity</b> 99%	(Lot FGB01)	5,000.9	µg/mL	+/-	31.7087 280.6794 287.2337	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	1,3-Dichloropropane <b>CAS #</b> 142-28-9 <b>Purity</b> 99%	(Lot BCBC6265)	5,000.5	µg/mL	+/-	31.8950 280.6797 287.2331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Tetrachloroethene <b>CAS #</b> 127-18-4 <b>Purity</b> 99%	(Lot SHBJ7422)	5,000.8	µg/mL	+/-	31.7079 280.6723 287.2265	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	dibromochloromethane <b>CAS #</b> 124-48-1 <b>Purity</b> 99%	(Lot MKCK6472)	5,001.1	µg/mL	+/-	31.7099 280.6899 287.2445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dibromoethane (EDB) <b>CAS #</b> 106-93-4 <b>Purity</b> 99%	(Lot BCBP2268V)	5,000.5	µg/mL	+/-	31.8950 280.6797 287.2331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene <b>CAS #</b> 108-90-7 <b>Purity</b> 99%	(Lot SHBL8110)	5,000.2	µg/mL	+/-	31.7043 280.6408 287.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane <b>CAS #</b> 630-20-6 <b>Purity</b> 99%	(Lot GC01)	5,000.9	µg/mL	+/-	31.8976 280.7022 287.2560	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene <b>CAS #</b> 100-41-4 <b>Purity</b> 99%	(Lot SHBL9192)	5,000.8	µg/mL	+/-	31.8970 280.6965 287.2503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene <b>CAS #</b> 108-38-3 <b>Purity</b> 99%	(Lot SHBM4841)	5,001.8	µg/mL	+/-	31.9033 280.7527 287.3077	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene <b>CAS #</b> 106-42-3 <b>Purity</b> 99%	(Lot SHBJ7329)	5,000.5	µg/mL	+/-	31.8950 280.6797 287.2331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene <b>CAS #</b> 95-47-6 <b>Purity</b> 98%	(Lot SHBL3963)	5,001.8	µg/mL	+/-	31.9035 280.7539 287.3090	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene <b>CAS #</b> 100-42-5 <b>Purity</b> 99%	(Lot MKCM3200)	5,001.7	µg/mL	+/-	31.9027 280.7471 287.3020	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) <b>CAS #</b> 98-82-8 <b>Purity</b> 99%	(Lot P15E008)	5,001.0	µg/mL	+/-	31.8982 280.7078 287.2618	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	bromoform <b>CAS #</b> 75-25-2 <b>Purity</b> 99%	(Lot SHBJ4835)	5,000.4	µg/mL	+/-	31.7055 280.6513 287.2050	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,1,2,2-Tetrachloroethane <b>CAS #</b> 79-34-5 <b>Purity</b> 99%	(Lot CFA4D)	5,000.4	µg/mL	+/-	31.7059 280.6548 287.2086	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane <b>CAS #</b> 96-18-4 <b>Purity</b> 99%	(Lot BCBH8722V)	5,000.0	µg/mL	+/-	31.8918 280.6516 287.2044	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene <b>CAS #</b> 103-65-1 <b>Purity</b> 99%	(Lot MKCM4174)	5,001.6	µg/mL	+/-	31.9021 280.7414 287.2963	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene <b>CAS #</b> 108-86-1 <b>Purity</b> 99%	(Lot WXBC5147V)	5,001.1	µg/mL	+/-	31.8989 280.7134 287.2675	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trimethylbenzene <b>CAS #</b> 108-67-8 <b>Purity</b> 99%	(Lot BCCD0427)	5,001.6	µg/mL	+/-	31.9021 280.7414 287.2963	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene <b>CAS #</b> 95-49-8 <b>Purity</b> 99%	(Lot MKCF5243)	5,000.2	µg/mL	+/-	31.8931 280.6629 287.2158	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	4-Chlorotoluene <b>CAS #</b> 106-43-4 <b>Purity</b> 99%	(Lot MKCC8496)	5,000.1	µg/mL	+/-	31.8925 280.6572 287.2101	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	tert-Butylbenzene <b>CAS #</b> 98-06-6 <b>Purity</b> 99%	(Lot STBJ1937)	5,001.3	µg/mL	+/-	31.9001 280.7246 287.2790	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,2,4-Trimethylbenzene <b>CAS #</b> 95-63-6 <b>Purity</b> 98%	(Lot WXBC9428V)	5,000.6	µg/mL	+/-	31.8960 280.6879 287.2415	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	sec-Butylbenzene <b>CAS #</b> 135-98-8 <b>Purity</b> 99%	(Lot MKCN2920)	5,000.2	µg/mL	+/-	31.8931 280.6629 287.2158	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	p-Isopropyltoluene (p-Cymene) <b>CAS #</b> 99-87-6 <b>Purity</b> 99%	(Lot MKCN1411)	5,001.1	µg/mL	+/-	31.8989 280.7134 287.2675	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,3-Dichlorobenzene <b>CAS #</b> 541-73-1 <b>Purity</b> 99%	(Lot BCBZ7498)	5,000.5	µg/mL	+/-	31.7063 280.6583 287.2122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	1,4-Dichlorobenzene <b>CAS #</b> 106-46-7 <b>Purity</b> 99%	(Lot MKBS4401V)	5,000.8	µg/mL	+/-	31.7083 280.6759 287.2301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	n-Butylbenzene <b>CAS #</b> 104-51-8 <b>Purity</b> 99%	(Lot 09804AE)	5,001.6	µg/mL	+/-	31.9021 280.7414 287.2963	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	1,2-Dichlorobenzene <b>CAS #</b> 95-50-1 <b>Purity</b> 99%	(Lot SHBK7741)	5,000.1	µg/mL	+/-	31.7036 280.6338 287.1871	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	1,2-Dibromo-3-chloropropane <b>CAS #</b> 96-12-8 <b>Purity</b> 97%	(Lot FBL01)	5,000.3	µg/mL	+/-	31.8935 280.6658 287.2189	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,2,4-Trichlorobenzene <b>CAS #</b> 120-82-1 <b>Purity</b> 99%	(Lot SHBJ9215)	5,000.8	µg/mL	+/-	31.8970 280.6965 287.2503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Hexachlorobutadiene <b>CAS #</b> 87-68-3 <b>Purity</b> 99%	(Lot 664800)	5,001.3	µg/mL	+/-	31.9001 280.7246 287.2790	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Naphthalene <b>CAS #</b> 91-20-3 <b>Purity</b> 99%	(Lot MKBZ8680V)	5,000.8	µg/mL	+/-	31.8970 280.6965 287.2503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	1,2,3-Trichlorobenzene <b>CAS #</b> 87-61-6 <b>Purity</b> 99%	(Lot MKBX7627V)	5,000.4	µg/mL	+/-	31.8944 280.6741 287.2273	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

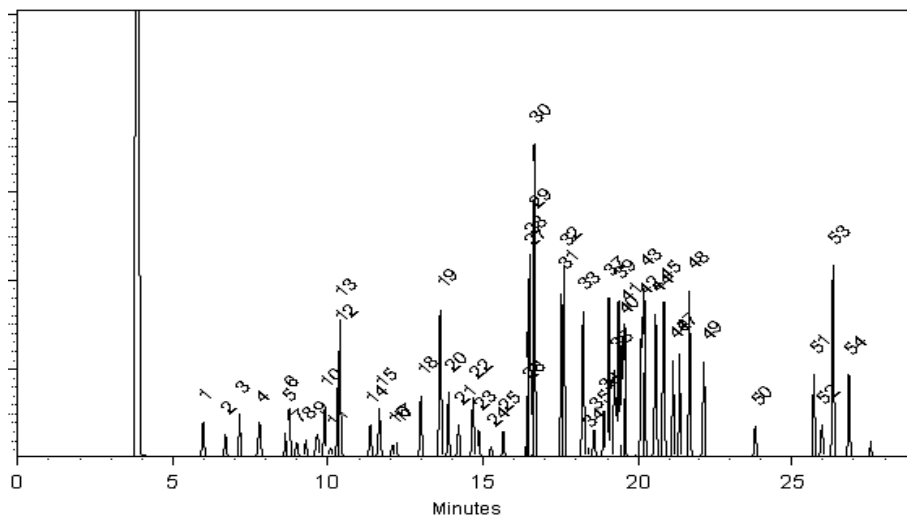
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

  
Walker Workman - Operations Technician I

**Date Mixed:** 22-Apr-2021      **Balance:** 1128360905

  
Alexis Shelow - Operations Tech I

**Date Passed:** 26-Apr-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_MegaMIX#1\_00082**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577486 **Lot No.:** A0171634

**Description :** Custom VOC MegaMix® #1 Standard  
Custom VOC MegaMix® #1 Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** April 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,1-dichloroethene	5,000.3 µg/mL	+/-	31.7051	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBK2437)		+/-	280.6478	µg/mL	Unstressed
	Purity 99%		+/-	287.2014	µg/mL	Stressed
2	Methylene chloride (dichloromethane)	5,000.3 µg/mL	+/-	31.7051	µg/mL	Gravimetric
	CAS # 75-09-2 (Lot SHBL6169)		+/-	280.6478	µg/mL	Unstressed
	Purity 99%		+/-	287.2014	µg/mL	Stressed
3	trans-1,2-Dichloroethene	5,000.3 µg/mL	+/-	31.7051	µg/mL	Gravimetric
	CAS # 156-60-5 (Lot MKBH9850V)		+/-	280.6478	µg/mL	Unstressed
	Purity 99%		+/-	287.2014	µg/mL	Stressed
4	1,1-Dichloroethane	5,000.8 µg/mL	+/-	31.7079	µg/mL	Gravimetric
	CAS # 75-34-3 (Lot 580900)		+/-	280.6723	µg/mL	Unstressed
	Purity 99%		+/-	287.2265	µg/mL	Stressed
5	2,2-Dichloropropane	5,000.8 µg/mL	+/-	31.8970	µg/mL	Gravimetric
	CAS # 594-20-7 (Lot RD201111)		+/-	280.6965	µg/mL	Unstressed
	Purity 99%		+/-	287.2503	µg/mL	Stressed
6	cis-1,2-Dichloroethene	5,000.6 µg/mL	+/-	31.8957	µg/mL	Gravimetric
	CAS # 156-59-2 (Lot MKCK1803)		+/-	280.6853	µg/mL	Unstressed
	Purity 99%		+/-	287.2388	µg/mL	Stressed
7	chloroform	5,000.6 µg/mL	+/-	31.7067	µg/mL	Gravimetric
	CAS # 67-66-3 (Lot SHBL6923)		+/-	280.6618	µg/mL	Unstressed
	Purity 99%		+/-	287.2158	µg/mL	Stressed

8	Bromochloromethane <b>CAS #</b> 74-97-5 <b>Purity</b> 99%	(Lot 00008541)	5,000.9	µg/mL	+/-	31.8976 280.7022 287.2560	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,1,1-trichloroethane <b>CAS #</b> 71-55-6 <b>Purity</b> 98%	(Lot 190123CG)	5,000.1	µg/mL	+/-	31.7041 280.6383 287.1917	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,1-Dichloropropene <b>CAS #</b> 563-58-6 <b>Purity</b> 99%	(Lot 201106JLM)	5,000.9	µg/mL	+/-	31.8976 280.7022 287.2560	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	carbon tetrachloride <b>CAS #</b> 56-23-5 <b>Purity</b> 99%	(Lot SHBJ2110)	5,000.5	µg/mL	+/-	31.7063 280.6583 287.2122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	1,2-Dichloroethane <b>CAS #</b> 107-06-2 <b>Purity</b> 99%	(Lot MKCM8716)	5,000.4	µg/mL	+/-	31.7059 280.6548 287.2086	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Benzene <b>CAS #</b> 71-43-2 <b>Purity</b> 99%	(Lot SHBM3620)	5,001.0	µg/mL	+/-	31.8982 280.7078 287.2618	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Trichloroethene <b>CAS #</b> 79-01-6 <b>Purity</b> 99%	(Lot SHBL5816)	5,000.8	µg/mL	+/-	31.7079 280.6723 287.2265	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	1,2-Dichloropropane <b>CAS #</b> 78-87-5 <b>Purity</b> 99%	(Lot BCBR0882V)	5,001.1	µg/mL	+/-	31.7099 280.6899 287.2445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	bromodichloromethane <b>CAS #</b> 75-27-4 <b>Purity</b> 99%	(Lot MKCK3742)	5,000.2	µg/mL	+/-	31.7043 280.6408 287.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Dibromomethane <b>CAS #</b> 74-95-3 <b>Purity</b> 99%	(Lot 10215970)	5,000.2	µg/mL	+/-	31.8931 280.6629 287.2158	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	cis-1,3-Dichloropropene <b>CAS #</b> 10061-01-5 <b>Purity</b> 99%	(Lot D26147-1217)	5,001.9	µg/mL	+/-	31.7154 280.7390 287.2947	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Toluene <b>CAS #</b> 108-88-3 <b>Purity</b> 99%	(Lot SHBM6128)	5,001.3	µg/mL	+/-	31.9001 280.7246 287.2790	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	trans-1,3-Dichloropropene <b>CAS #</b> 10061-02-6 <b>Purity</b> 99%	(Lot RP201030)	5,000.5	µg/mL	+/-	31.7063 280.6583 287.2122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,2-Trichloroethane <b>CAS #</b> 79-00-5 <b>Purity</b> 99%	(Lot FGB01)	5,000.9	µg/mL	+/-	31.7087 280.6794 287.2337	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	1,3-Dichloropropane <b>CAS #</b> 142-28-9 <b>Purity</b> 99%	(Lot BCBC6265)	5,000.5	µg/mL	+/-	31.8950 280.6797 287.2331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Tetrachloroethene <b>CAS #</b> 127-18-4 <b>Purity</b> 99%	(Lot SHBJ7422)	5,000.8	µg/mL	+/-	31.7079 280.6723 287.2265	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	dibromochloromethane <b>CAS #</b> 124-48-1 <b>Purity</b> 99%	(Lot MKCK6472)	5,001.1	µg/mL	+/-	31.7099 280.6899 287.2445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dibromoethane (EDB) <b>CAS #</b> 106-93-4 <b>Purity</b> 99%	(Lot BCBP2268V)	5,000.5	µg/mL	+/-	31.8950 280.6797 287.2331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene <b>CAS #</b> 108-90-7 <b>Purity</b> 99%	(Lot SHBL8110)	5,000.2	µg/mL	+/-	31.7043 280.6408 287.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane <b>CAS #</b> 630-20-6 <b>Purity</b> 99%	(Lot GC01)	5,000.9	µg/mL	+/-	31.8976 280.7022 287.2560	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene <b>CAS #</b> 100-41-4 <b>Purity</b> 99%	(Lot SHBL9192)	5,000.8	µg/mL	+/-	31.8970 280.6965 287.2503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene <b>CAS #</b> 108-38-3 <b>Purity</b> 99%	(Lot SHBM4841)	5,001.8	µg/mL	+/-	31.9033 280.7527 287.3077	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene <b>CAS #</b> 106-42-3 <b>Purity</b> 99%	(Lot SHBJ7329)	5,000.5	µg/mL	+/-	31.8950 280.6797 287.2331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene <b>CAS #</b> 95-47-6 <b>Purity</b> 98%	(Lot SHBL3963)	5,001.8	µg/mL	+/-	31.9035 280.7539 287.3090	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene <b>CAS #</b> 100-42-5 <b>Purity</b> 99%	(Lot MKCM3200)	5,001.7	µg/mL	+/-	31.9027 280.7471 287.3020	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) <b>CAS #</b> 98-82-8 <b>Purity</b> 99%	(Lot P15E008)	5,001.0	µg/mL	+/-	31.8982 280.7078 287.2618	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	bromoform <b>CAS #</b> 75-25-2 <b>Purity</b> 99%	(Lot SHBJ4835)	5,000.4	µg/mL	+/-	31.7055 280.6513 287.2050	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,1,2,2-Tetrachloroethane <b>CAS #</b> 79-34-5 <b>Purity</b> 99%	(Lot CFA4D)	5,000.4	µg/mL	+/-	31.7059 280.6548 287.2086	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane <b>CAS #</b> 96-18-4 <b>Purity</b> 99%	(Lot BCBH8722V)	5,000.0	µg/mL	+/-	31.8918 280.6516 287.2044	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene <b>CAS #</b> 103-65-1 <b>Purity</b> 99%	(Lot MKCM4174)	5,001.6	µg/mL	+/-	31.9021 280.7414 287.2963	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene <b>CAS #</b> 108-86-1 <b>Purity</b> 99%	(Lot WXBC5147V)	5,001.1	µg/mL	+/-	31.8989 280.7134 287.2675	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trimethylbenzene <b>CAS #</b> 108-67-8 <b>Purity</b> 99%	(Lot BCCD0427)	5,001.6	µg/mL	+/-	31.9021 280.7414 287.2963	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene <b>CAS #</b> 95-49-8 <b>Purity</b> 99%	(Lot MKCF5243)	5,000.2	µg/mL	+/-	31.8931 280.6629 287.2158	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	4-Chlorotoluene <b>CAS #</b> 106-43-4 <b>Purity</b> 99%	(Lot MKCC8496)	5,000.1	µg/mL	+/-	31.8925 280.6572 287.2101	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	tert-Butylbenzene <b>CAS #</b> 98-06-6 <b>Purity</b> 99%	(Lot STBJ1937)	5,001.3	µg/mL	+/-	31.9001 280.7246 287.2790	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,2,4-Trimethylbenzene <b>CAS #</b> 95-63-6 <b>Purity</b> 98%	(Lot WXBC9428V)	5,000.6	µg/mL	+/-	31.8960 280.6879 287.2415	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	sec-Butylbenzene <b>CAS #</b> 135-98-8 <b>Purity</b> 99%	(Lot MKCN2920)	5,000.2	µg/mL	+/-	31.8931 280.6629 287.2158	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	p-Isopropyltoluene (p-Cymene) <b>CAS #</b> 99-87-6 <b>Purity</b> 99%	(Lot MKCN1411)	5,001.1	µg/mL	+/-	31.8989 280.7134 287.2675	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,3-Dichlorobenzene <b>CAS #</b> 541-73-1 <b>Purity</b> 99%	(Lot BCBZ7498)	5,000.5	µg/mL	+/-	31.7063 280.6583 287.2122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	1,4-Dichlorobenzene <b>CAS #</b> 106-46-7 <b>Purity</b> 99%	(Lot MKBS4401V)	5,000.8	µg/mL	+/-	31.7083 280.6759 287.2301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	n-Butylbenzene <b>CAS #</b> 104-51-8 <b>Purity</b> 99%	(Lot 09804AE)	5,001.6	µg/mL	+/-	31.9021 280.7414 287.2963	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	1,2-Dichlorobenzene <b>CAS #</b> 95-50-1 <b>Purity</b> 99%	(Lot SHBK7741)	5,000.1	µg/mL	+/-	31.7036 280.6338 287.1871	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	1,2-Dibromo-3-chloropropane <b>CAS #</b> 96-12-8 <b>Purity</b> 97%	(Lot FBL01)	5,000.3	µg/mL	+/-	31.8935 280.6658 287.2189	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,2,4-Trichlorobenzene <b>CAS #</b> 120-82-1 <b>Purity</b> 99%	(Lot SHBJ9215)	5,000.8	µg/mL	+/-	31.8970 280.6965 287.2503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Hexachlorobutadiene <b>CAS #</b> 87-68-3 <b>Purity</b> 99%	(Lot 664800)	5,001.3	µg/mL	+/-	31.9001 280.7246 287.2790	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Naphthalene <b>CAS #</b> 91-20-3 <b>Purity</b> 99%	(Lot MKBZ8680V)	5,000.8	µg/mL	+/-	31.8970 280.6965 287.2503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	1,2,3-Trichlorobenzene <b>CAS #</b> 87-61-6 <b>Purity</b> 99%	(Lot MKBX7627V)	5,000.4	µg/mL	+/-	31.8944 280.6741 287.2273	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

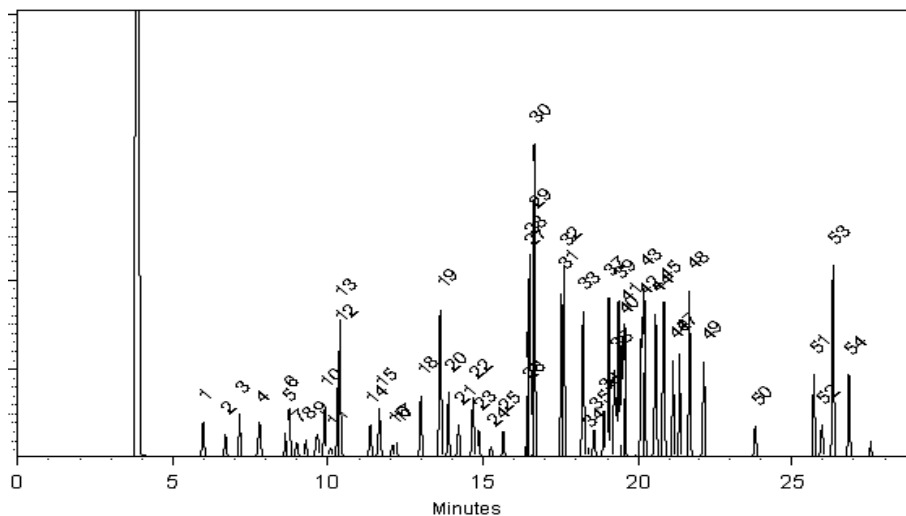
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

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

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

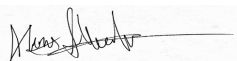
**Det. Type:**  
FID



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.

  
Walker Workman - Operations Technician I

**Date Mixed:** 22-Apr-2021      **Balance:** 1128360905

  
Alexis Shelow - Operations Tech I

**Date Passed:** 26-Apr-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.



Reagent

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**MSV\_MegaMIX#1\_00096**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577486 **Lot No.:** A0171634

**Description :** Custom VOC MegaMix® #1 Standard  
Custom VOC MegaMix® #1 Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** April 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,1-dichloroethene	5,000.3 µg/mL	+/-	31.7051	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBK2437)		+/-	280.6478	µg/mL	Unstressed
	Purity 99%		+/-	287.2014	µg/mL	Stressed
2	Methylene chloride (dichloromethane)	5,000.3 µg/mL	+/-	31.7051	µg/mL	Gravimetric
	CAS # 75-09-2 (Lot SHBL6169)		+/-	280.6478	µg/mL	Unstressed
	Purity 99%		+/-	287.2014	µg/mL	Stressed
3	trans-1,2-Dichloroethene	5,000.3 µg/mL	+/-	31.7051	µg/mL	Gravimetric
	CAS # 156-60-5 (Lot MKBH9850V)		+/-	280.6478	µg/mL	Unstressed
	Purity 99%		+/-	287.2014	µg/mL	Stressed
4	1,1-Dichloroethane	5,000.8 µg/mL	+/-	31.7079	µg/mL	Gravimetric
	CAS # 75-34-3 (Lot 580900)		+/-	280.6723	µg/mL	Unstressed
	Purity 99%		+/-	287.2265	µg/mL	Stressed
5	2,2-Dichloropropane	5,000.8 µg/mL	+/-	31.8970	µg/mL	Gravimetric
	CAS # 594-20-7 (Lot RD201111)		+/-	280.6965	µg/mL	Unstressed
	Purity 99%		+/-	287.2503	µg/mL	Stressed
6	cis-1,2-Dichloroethene	5,000.6 µg/mL	+/-	31.8957	µg/mL	Gravimetric
	CAS # 156-59-2 (Lot MKCK1803)		+/-	280.6853	µg/mL	Unstressed
	Purity 99%		+/-	287.2388	µg/mL	Stressed
7	chloroform	5,000.6 µg/mL	+/-	31.7067	µg/mL	Gravimetric
	CAS # 67-66-3 (Lot SHBL6923)		+/-	280.6618	µg/mL	Unstressed
	Purity 99%		+/-	287.2158	µg/mL	Stressed

8	Bromochloromethane <b>CAS #</b> 74-97-5 <b>Purity</b> 99%	(Lot 00008541)	5,000.9	µg/mL	+/-	31.8976 280.7022 287.2560	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,1,1-trichloroethane <b>CAS #</b> 71-55-6 <b>Purity</b> 98%	(Lot 190123CG)	5,000.1	µg/mL	+/-	31.7041 280.6383 287.1917	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,1-Dichloropropene <b>CAS #</b> 563-58-6 <b>Purity</b> 99%	(Lot 201106JLM)	5,000.9	µg/mL	+/-	31.8976 280.7022 287.2560	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	carbon tetrachloride <b>CAS #</b> 56-23-5 <b>Purity</b> 99%	(Lot SHBJ2110)	5,000.5	µg/mL	+/-	31.7063 280.6583 287.2122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	1,2-Dichloroethane <b>CAS #</b> 107-06-2 <b>Purity</b> 99%	(Lot MKCM8716)	5,000.4	µg/mL	+/-	31.7059 280.6548 287.2086	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Benzene <b>CAS #</b> 71-43-2 <b>Purity</b> 99%	(Lot SHBM3620)	5,001.0	µg/mL	+/-	31.8982 280.7078 287.2618	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Trichloroethene <b>CAS #</b> 79-01-6 <b>Purity</b> 99%	(Lot SHBL5816)	5,000.8	µg/mL	+/-	31.7079 280.6723 287.2265	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	1,2-Dichloropropane <b>CAS #</b> 78-87-5 <b>Purity</b> 99%	(Lot BCBR0882V)	5,001.1	µg/mL	+/-	31.7099 280.6899 287.2445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	bromodichloromethane <b>CAS #</b> 75-27-4 <b>Purity</b> 99%	(Lot MKCK3742)	5,000.2	µg/mL	+/-	31.7043 280.6408 287.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Dibromomethane <b>CAS #</b> 74-95-3 <b>Purity</b> 99%	(Lot 10215970)	5,000.2	µg/mL	+/-	31.8931 280.6629 287.2158	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	cis-1,3-Dichloropropene <b>CAS #</b> 10061-01-5 <b>Purity</b> 99%	(Lot D26147-1217)	5,001.9	µg/mL	+/-	31.7154 280.7390 287.2947	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Toluene <b>CAS #</b> 108-88-3 <b>Purity</b> 99%	(Lot SHBM6128)	5,001.3	µg/mL	+/-	31.9001 280.7246 287.2790	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	trans-1,3-Dichloropropene <b>CAS #</b> 10061-02-6 <b>Purity</b> 99%	(Lot RP201030)	5,000.5	µg/mL	+/-	31.7063 280.6583 287.2122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,2-Trichloroethane <b>CAS #</b> 79-00-5 <b>Purity</b> 99%	(Lot FGB01)	5,000.9	µg/mL	+/-	31.7087 280.6794 287.2337	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	1,3-Dichloropropane <b>CAS #</b> 142-28-9 <b>Purity</b> 99%	(Lot BCBC6265)	5,000.5	µg/mL	+/-	31.8950 280.6797 287.2331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Tetrachloroethene <b>CAS #</b> 127-18-4 <b>Purity</b> 99%	(Lot SHBJ7422)	5,000.8	µg/mL	+/-	31.7079 280.6723 287.2265	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	dibromochloromethane <b>CAS #</b> 124-48-1 <b>Purity</b> 99%	(Lot MKCK6472)	5,001.1	µg/mL	+/-	31.7099 280.6899 287.2445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dibromoethane (EDB) <b>CAS #</b> 106-93-4 <b>Purity</b> 99%	(Lot BCBP2268V)	5,000.5	µg/mL	+/-	31.8950 280.6797 287.2331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene <b>CAS #</b> 108-90-7 <b>Purity</b> 99%	(Lot SHBL8110)	5,000.2	µg/mL	+/-	31.7043 280.6408 287.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane <b>CAS #</b> 630-20-6 <b>Purity</b> 99%	(Lot GC01)	5,000.9	µg/mL	+/-	31.8976 280.7022 287.2560	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene <b>CAS #</b> 100-41-4 <b>Purity</b> 99%	(Lot SHBL9192)	5,000.8	µg/mL	+/-	31.8970 280.6965 287.2503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene <b>CAS #</b> 108-38-3 <b>Purity</b> 99%	(Lot SHBM4841)	5,001.8	µg/mL	+/-	31.9033 280.7527 287.3077	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene <b>CAS #</b> 106-42-3 <b>Purity</b> 99%	(Lot SHBJ7329)	5,000.5	µg/mL	+/-	31.8950 280.6797 287.2331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene <b>CAS #</b> 95-47-6 <b>Purity</b> 98%	(Lot SHBL3963)	5,001.8	µg/mL	+/-	31.9035 280.7539 287.3090	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene <b>CAS #</b> 100-42-5 <b>Purity</b> 99%	(Lot MKCM3200)	5,001.7	µg/mL	+/-	31.9027 280.7471 287.3020	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) <b>CAS #</b> 98-82-8 <b>Purity</b> 99%	(Lot P15E008)	5,001.0	µg/mL	+/-	31.8982 280.7078 287.2618	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	bromoform <b>CAS #</b> 75-25-2 <b>Purity</b> 99%	(Lot SHBJ4835)	5,000.4	µg/mL	+/-	31.7055 280.6513 287.2050	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,1,2,2-Tetrachloroethane <b>CAS #</b> 79-34-5 <b>Purity</b> 99%	(Lot CFA4D)	5,000.4	µg/mL	+/-	31.7059 280.6548 287.2086	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane <b>CAS #</b> 96-18-4 <b>Purity</b> 99%	(Lot BCBH8722V)	5,000.0	µg/mL	+/-	31.8918 280.6516 287.2044	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene <b>CAS #</b> 103-65-1 <b>Purity</b> 99%	(Lot MKCM4174)	5,001.6	µg/mL	+/-	31.9021 280.7414 287.2963	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene <b>CAS #</b> 108-86-1 <b>Purity</b> 99%	(Lot WXBC5147V)	5,001.1	µg/mL	+/-	31.8989 280.7134 287.2675	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trimethylbenzene <b>CAS #</b> 108-67-8 <b>Purity</b> 99%	(Lot BCCD0427)	5,001.6	µg/mL	+/-	31.9021 280.7414 287.2963	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene <b>CAS #</b> 95-49-8 <b>Purity</b> 99%	(Lot MKCF5243)	5,000.2	µg/mL	+/- +/- +/-	31.8931 280.6629 287.2158	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	4-Chlorotoluene <b>CAS #</b> 106-43-4 <b>Purity</b> 99%	(Lot MKCC8496)	5,000.1	µg/mL	+/- +/- +/-	31.8925 280.6572 287.2101	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	tert-Butylbenzene <b>CAS #</b> 98-06-6 <b>Purity</b> 99%	(Lot STBJ1937)	5,001.3	µg/mL	+/- +/- +/-	31.9001 280.7246 287.2790	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,2,4-Trimethylbenzene <b>CAS #</b> 95-63-6 <b>Purity</b> 98%	(Lot WXBC9428V)	5,000.6	µg/mL	+/- +/- +/-	31.8960 280.6879 287.2415	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	sec-Butylbenzene <b>CAS #</b> 135-98-8 <b>Purity</b> 99%	(Lot MKCN2920)	5,000.2	µg/mL	+/- +/- +/-	31.8931 280.6629 287.2158	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	p-Isopropyltoluene (p-Cymene) <b>CAS #</b> 99-87-6 <b>Purity</b> 99%	(Lot MKCN1411)	5,001.1	µg/mL	+/- +/- +/-	31.8989 280.7134 287.2675	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,3-Dichlorobenzene <b>CAS #</b> 541-73-1 <b>Purity</b> 99%	(Lot BCBZ7498)	5,000.5	µg/mL	+/- +/- +/-	31.7063 280.6583 287.2122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	1,4-Dichlorobenzene <b>CAS #</b> 106-46-7 <b>Purity</b> 99%	(Lot MKBS4401V)	5,000.8	µg/mL	+/- +/- +/-	31.7083 280.6759 287.2301	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	n-Butylbenzene <b>CAS #</b> 104-51-8 <b>Purity</b> 99%	(Lot 09804AE)	5,001.6	µg/mL	+/- +/- +/-	31.9021 280.7414 287.2963	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	1,2-Dichlorobenzene <b>CAS #</b> 95-50-1 <b>Purity</b> 99%	(Lot SHBK7741)	5,000.1	µg/mL	+/- +/- +/-	31.7036 280.6338 287.1871	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	1,2-Dibromo-3-chloropropane <b>CAS #</b> 96-12-8 <b>Purity</b> 97%	(Lot FBL01)	5,000.3	µg/mL	+/- +/- +/-	31.8935 280.6658 287.2189	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,2,4-Trichlorobenzene <b>CAS #</b> 120-82-1 <b>Purity</b> 99%	(Lot SHBJ9215)	5,000.8	µg/mL	+/- +/- +/-	31.8970 280.6965 287.2503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Hexachlorobutadiene <b>CAS #</b> 87-68-3 <b>Purity</b> 99%	(Lot 664800)	5,001.3	µg/mL	+/- +/- +/-	31.9001 280.7246 287.2790	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Naphthalene <b>CAS #</b> 91-20-3 <b>Purity</b> 99%	(Lot MKBZ8680V)	5,000.8	µg/mL	+/- +/- +/-	31.8970 280.6965 287.2503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	1,2,3-Trichlorobenzene <b>CAS #</b> 87-61-6 <b>Purity</b> 99%	(Lot MKBX7627V)	5,000.4	µg/mL	+/- +/- +/-	31.8944 280.6741 287.2273	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

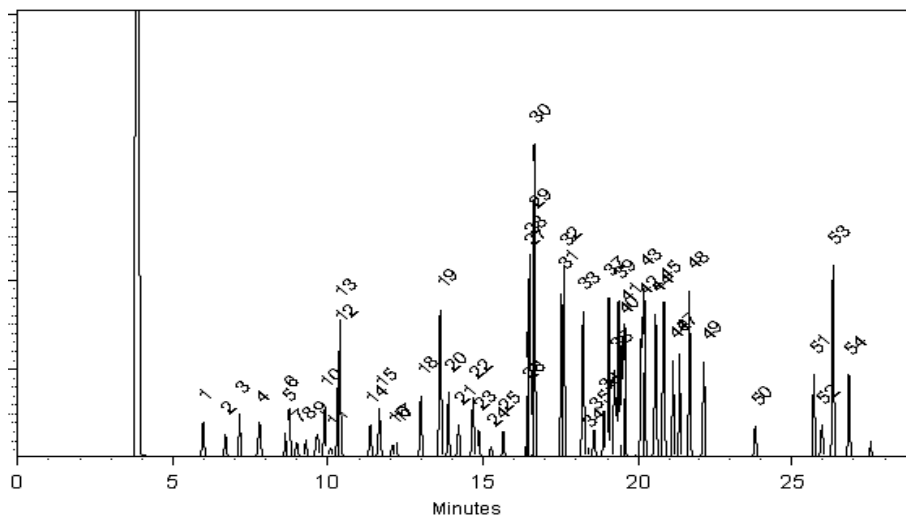
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

  
Walker Workman - Operations Technician I

**Date Mixed:** 22-Apr-2021      **Balance:** 1128360905

  
Alexis Shelow - Operations Tech I

**Date Passed:** 26-Apr-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_MegaMix#2\_00076**





# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577487 **Lot No.:** A0173454

**Description :** Custom VOC MegaMix® #2 Standard  
Custom VOC MegaMix® #2 Standard 5000-62500µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** June 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Pentane (C5)	5,000.8 µg/mL	+/- 34.9563 µg/mL Gravimetric	
	CAS # 109-66-0 (Lot SHBM6577)			+/- 248.1404 µg/mL Unstressed
	Purity 99%			+/- 254.2734 µg/mL Stressed
2	2-Propanol (isopropanol)	25,000.0 µg/mL	+/- 146.3805 µg/mL Gravimetric	
	CAS # 67-63-0 (Lot SHBH7211)			+/- 1,236.8175 µg/mL Unstressed
	Purity 99%			+/- 1,267.5661 µg/mL Stressed
3	1,1,2-Trichlorotrifluoroethane (CFC-113)	5,000.0 µg/mL	+/- 34.9505 µg/mL Gravimetric	
	CAS # 76-13-1 (Lot 00016133)			+/- 248.0991 µg/mL Unstressed
	Purity 99%			+/- 254.2310 µg/mL Stressed
4	tert-Butanol (TBA)	25,010.0 µg/mL	+/- 146.4390 µg/mL Gravimetric	
	CAS # 75-65-0 (Lot SHBM7694)			+/- 1,237.3122 µg/mL Unstressed
	Purity 99%			+/- 1,268.0731 µg/mL Stressed
5	Methyl acetate	5,000.2 µg/mL	+/- 34.9516 µg/mL Gravimetric	
	CAS # 79-20-9 (Lot SHBM1320)			+/- 248.1073 µg/mL Unstressed
	Purity 99%			+/- 254.2395 µg/mL Stressed
6	Iodomethane (methyl iodide)	5,001.7 µg/mL	+/- 34.9621 µg/mL Gravimetric	
	CAS # 74-88-4 (Lot RD210503)			+/- 248.1818 µg/mL Unstressed
	Purity 99%			+/- 254.3157 µg/mL Stressed
7	Allyl chloride ( 3-chloropropene )	5,000.7 µg/mL	+/- 34.9551 µg/mL Gravimetric	
	CAS # 107-05-1 (Lot RD210402)			+/- 248.1321 µg/mL Unstressed
	Purity 99%			+/- 254.2649 µg/mL Stressed

8	Carbon disulfide <b>CAS #</b> 75-15-0 <b>Purity</b> 99%	(Lot N28F701)	5,004.2	µg/mL	+/-	34.9796 248.3058 254.4428	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Acrylonitrile <b>CAS #</b> 107-13-1 <b>Purity</b> 99%	(Lot M25F024)	12,506.0	µg/mL	+/-	73.2254 618.7056 634.0873	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Methyl-tert-butyl ether ( MTBE ) <b>CAS #</b> 1634-04-4 <b>Purity</b> 99%	(Lot SHBM3541)	5,000.8	µg/mL	+/-	34.9563 248.1404 254.2734	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Hexane (C6) <b>CAS #</b> 110-54-3 <b>Purity</b> 99%	(Lot SHBL9879)	5,000.5	µg/mL	+/-	34.9540 248.1239 254.2564	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Diisopropyl ether ( DIPE ) <b>CAS #</b> 108-20-3 <b>Purity</b> 99%	(Lot SHBH1927V)	5,003.3	µg/mL	+/-	34.9738 248.2645 254.4005	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Chloroprene (2-chloro-1,3-butadiene) <b>CAS #</b> 126-99-8 <b>Purity</b> 99%	(Lot 210413JLM)	5,001.2	µg/mL	+/-	34.9586 248.1570 254.2903	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Ethyl-tert-butyl ether (ETBE) <b>CAS #</b> 637-92-3 <b>Purity</b> 99%	(Lot MKCM3774)	5,001.7	µg/mL	+/-	34.9621 248.1818 254.3157	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Propionitrile <b>CAS #</b> 107-12-0 <b>Purity</b> 99%	(Lot BCCC1173)	25,006.7	µg/mL	+/-	146.4195 1,237.1473 1,267.9041	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Methacrylonitrile <b>CAS #</b> 126-98-7 <b>Purity</b> 99%	(Lot 1012020)	12,500.7	µg/mL	+/-	73.1942 618.4417 633.8168	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) <b>CAS #</b> 78-83-1 <b>Purity</b> 99%	(Lot SHBM4836)	62,500.7	µg/mL	+/-	365.9551 3,092.0767 3,168.9490	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Tetrahydrofuran <b>CAS #</b> 109-99-9 <b>Purity</b> 99%	(Lot SHBM8962)	25,010.0	µg/mL	+/-	146.4390 1,237.3122 1,268.0731	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Cyclohexane <b>CAS #</b> 110-82-7 <b>Purity</b> 99%	(Lot MKCF5831)	5,001.7	µg/mL	+/-	34.9621 248.1818 254.3157	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1-Butanol <b>CAS #</b> 71-36-3 <b>Purity</b> 99%	(Lot SHBM5061)	62,504.0	µg/mL	+/-	365.9747 3,092.2416 3,169.1180	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	tert-Amyl methyl ether (TAME) <b>CAS #</b> 994-05-8 <b>Purity</b> 99%	(Lot HMBG7745V)	5,001.7	µg/mL	+/-	34.9621 248.1818 254.3157	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	n-Heptane (C7) <b>CAS #</b> 142-82-5 <b>Purity</b> 99%	(Lot SHBL9221)	5,002.3	µg/mL	+/-	34.9668 248.2148 254.3496	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	tert-Amyl ethyl ether (TAEE) <b>CAS #</b> 919-94-8 <b>Purity</b> 99%	(Lot 76U3A)	5,000.2	µg/mL	+/-	34.9516 248.1073 254.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Methylcyclohexane <b>CAS #</b> 108-87-2 <b>Purity</b> 99%	(Lot SHBL0078)	5,000.2	µg/mL	+/- +/- +/-	34.9516 248.1073 254.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	Methyl methacrylate <b>CAS #</b> 80-62-6 <b>Purity</b> 99%	(Lot MKCN3027)	5,001.0	µg/mL	+/- +/- +/-	34.9574 248.1487 254.2818	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,4-Dioxane <b>CAS #</b> 123-91-1 <b>Purity</b> 99%	(Lot SHBM5092)	62,503.3	µg/mL	+/- +/- +/-	365.9708 3,092.2086 3,169.0842	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	2-Nitropropane <b>CAS #</b> 79-46-9 <b>Purity</b> 97%	(Lot BCCB9352)	25,000.8	µg/mL	+/- +/- +/-	146.3851 1,236.8561 1,267.6056	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethyl methacrylate <b>CAS #</b> 97-63-2 <b>Purity</b> 99%	(Lot MKCL0907)	5,000.8	µg/mL	+/- +/- +/-	34.9563 248.1404 254.2734	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1-Chlorohexane <b>CAS #</b> 544-10-5 <b>Purity</b> 98%	(Lot BCBS3368V)	5,000.0	µg/mL	+/- +/- +/-	34.9502 248.0971 254.2290	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	trans-1,4-dichloro-2-butene <b>CAS #</b> 110-57-6 <b>Purity</b> 95%	(Lot RD210617)	12,510.9	µg/mL	+/- +/- +/-	73.2539 618.9463 634.3340	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,2,3-Trimethylbenzene <b>CAS #</b> 526-73-8 <b>Purity</b> 98%	(Lot 8776.10-36)	5,000.0	µg/mL	+/- +/- +/-	34.9502 248.0971 254.2290	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	1,3-Diethylbenzene <b>CAS #</b> 141-93-5 <b>Purity</b> 98%	(Lot BCBT8967)	5,000.9	µg/mL	+/- +/- +/-	34.9570 248.1457 254.2788	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Benzyl chloride <b>CAS #</b> 100-44-7 <b>Purity</b> 99%	(Lot SHBH2102V)	5,000.8	µg/mL	+/- +/- +/-	34.9563 248.1404 254.2734	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	1,4-Diethylbenzene <b>CAS #</b> 105-05-5 <b>Purity</b> 98%	(Lot RLHJK)	5,001.4	µg/mL	+/- +/- +/-	34.9605 248.1700 254.3037	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,2-Diethylbenzene <b>CAS #</b> 135-01-3 <b>Purity</b> 99%	(Lot ECH2970181)	5,000.5	µg/mL	+/- +/- +/-	34.9540 248.1239 254.2564	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,3,5-Trichlorobenzene <b>CAS #</b> 108-70-3 <b>Purity</b> 99%	(Lot 11319AS)	5,000.2	µg/mL	+/- +/- +/-	34.9516 248.1073 254.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	2-Methylnaphthalene <b>CAS #</b> 91-57-6 <b>Purity</b> 99%	(Lot STBG8884)	5,001.0	µg/mL	+/- +/- +/-	34.9574 248.1487 254.2818	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

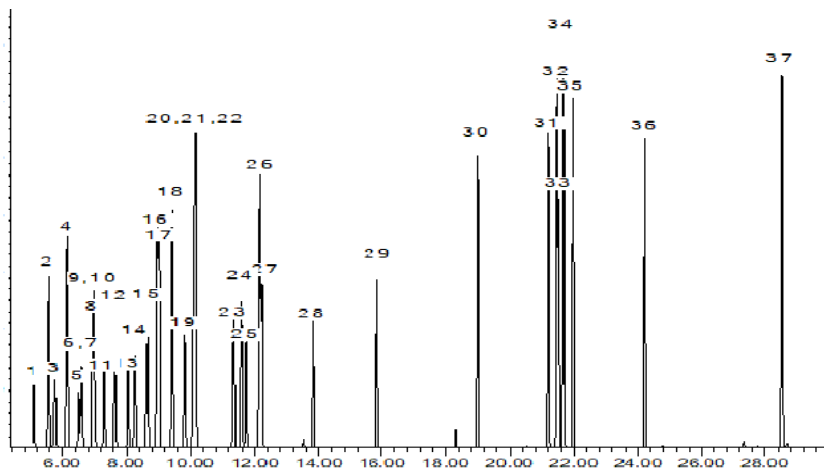
**Carrier Gas:**  
helium-constant pressure 30 psi

**Temp. Program:**  
40°C (hold 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.

Russ Bookhamer - Operations Technician I

**Date Mixed:** 16-Jun-2021

**Balance:** B707717271

Alexis Shelow - Operations Tech I

**Date Passed:** 30-Jun-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_MegaMix#2\_00081**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577487 **Lot No.:** A0173454

**Description :** Custom VOC MegaMix® #2 Standard  
Custom VOC MegaMix® #2 Standard 5000-62500µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** June 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	n-Pentane (C5) CAS # 109-66-0 (Lot SHBM6577) Purity 99%	5,000.8 µg/mL	+/- 34.9563 µg/mL Gravimetric +/- 248.1404 µg/mL Unstressed +/- 254.2734 µg/mL Stressed
2	2-Propanol (isopropanol) CAS # 67-63-0 (Lot SHBH7211) Purity 99%	25,000.0 µg/mL	+/- 146.3805 µg/mL Gravimetric +/- 1,236.8175 µg/mL Unstressed +/- 1,267.5661 µg/mL Stressed
3	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00016133) Purity 99%	5,000.0 µg/mL	+/- 34.9505 µg/mL Gravimetric +/- 248.0991 µg/mL Unstressed +/- 254.2310 µg/mL Stressed
4	tert-Butanol (TBA) CAS # 75-65-0 (Lot SHBM7694) Purity 99%	25,010.0 µg/mL	+/- 146.4390 µg/mL Gravimetric +/- 1,237.3122 µg/mL Unstressed +/- 1,268.0731 µg/mL Stressed
5	Methyl acetate CAS # 79-20-9 (Lot SHBM1320) Purity 99%	5,000.2 µg/mL	+/- 34.9516 µg/mL Gravimetric +/- 248.1073 µg/mL Unstressed +/- 254.2395 µg/mL Stressed
6	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot RD210503) Purity 99%	5,001.7 µg/mL	+/- 34.9621 µg/mL Gravimetric +/- 248.1818 µg/mL Unstressed +/- 254.3157 µg/mL Stressed
7	Allyl chloride ( 3-chloropropene ) CAS # 107-05-1 (Lot RD210402) Purity 99%	5,000.7 µg/mL	+/- 34.9551 µg/mL Gravimetric +/- 248.1321 µg/mL Unstressed +/- 254.2649 µg/mL Stressed

8	Carbon disulfide <b>CAS #</b> 75-15-0 <b>Purity</b> 99%	(Lot N28F701)	5,004.2	µg/mL	+/- +/- +/-	34.9796 248.3058 254.4428	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Acrylonitrile <b>CAS #</b> 107-13-1 <b>Purity</b> 99%	(Lot M25F024)	12,506.0	µg/mL	+/- +/- +/-	73.2254 618.7056 634.0873	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Methyl-tert-butyl ether ( MTBE ) <b>CAS #</b> 1634-04-4 <b>Purity</b> 99%	(Lot SHBM3541)	5,000.8	µg/mL	+/- +/- +/-	34.9563 248.1404 254.2734	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Hexane (C6) <b>CAS #</b> 110-54-3 <b>Purity</b> 99%	(Lot SHBL9879)	5,000.5	µg/mL	+/- +/- +/-	34.9540 248.1239 254.2564	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Diisopropyl ether ( DIPE ) <b>CAS #</b> 108-20-3 <b>Purity</b> 99%	(Lot SHBH1927V)	5,003.3	µg/mL	+/- +/- +/-	34.9738 248.2645 254.4005	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Chloroprene (2-chloro-1,3-butadiene) <b>CAS #</b> 126-99-8 <b>Purity</b> 99%	(Lot 210413JLM)	5,001.2	µg/mL	+/- +/- +/-	34.9586 248.1570 254.2903	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Ethyl-tert-butyl ether (ETBE) <b>CAS #</b> 637-92-3 <b>Purity</b> 99%	(Lot MKCM3774)	5,001.7	µg/mL	+/- +/- +/-	34.9621 248.1818 254.3157	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Propionitrile <b>CAS #</b> 107-12-0 <b>Purity</b> 99%	(Lot BCCC1173)	25,006.7	µg/mL	+/- +/- +/-	146.4195 1,237.1473 1,267.9041	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Methacrylonitrile <b>CAS #</b> 126-98-7 <b>Purity</b> 99%	(Lot 1012020)	12,500.7	µg/mL	+/- +/- +/-	73.1942 618.4417 633.8168	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) <b>CAS #</b> 78-83-1 <b>Purity</b> 99%	(Lot SHBM4836)	62,500.7	µg/mL	+/- +/- +/-	365.9551 3,092.0767 3,168.9490	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Tetrahydrofuran <b>CAS #</b> 109-99-9 <b>Purity</b> 99%	(Lot SHBM8962)	25,010.0	µg/mL	+/- +/- +/-	146.4390 1,237.3122 1,268.0731	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Cyclohexane <b>CAS #</b> 110-82-7 <b>Purity</b> 99%	(Lot MKCF5831)	5,001.7	µg/mL	+/- +/- +/-	34.9621 248.1818 254.3157	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1-Butanol <b>CAS #</b> 71-36-3 <b>Purity</b> 99%	(Lot SHBM5061)	62,504.0	µg/mL	+/- +/- +/-	365.9747 3,092.2416 3,169.1180	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	tert-Amyl methyl ether (TAME) <b>CAS #</b> 994-05-8 <b>Purity</b> 99%	(Lot HMBG7745V)	5,001.7	µg/mL	+/- +/- +/-	34.9621 248.1818 254.3157	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	n-Heptane (C7) <b>CAS #</b> 142-82-5 <b>Purity</b> 99%	(Lot SHBL9221)	5,002.3	µg/mL	+/- +/- +/-	34.9668 248.2148 254.3496	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	tert-Amyl ethyl ether (TAEE) <b>CAS #</b> 919-94-8 <b>Purity</b> 99%	(Lot 76U3A)	5,000.2	µg/mL	+/- +/- +/-	34.9516 248.1073 254.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed



24	Methylcyclohexane <b>CAS #</b> 108-87-2 <b>Purity</b> 99%	(Lot SHBL0078)	5,000.2	µg/mL	+/- +/- +/-	34.9516 248.1073 254.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	Methyl methacrylate <b>CAS #</b> 80-62-6 <b>Purity</b> 99%	(Lot MKCN3027)	5,001.0	µg/mL	+/- +/- +/-	34.9574 248.1487 254.2818	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,4-Dioxane <b>CAS #</b> 123-91-1 <b>Purity</b> 99%	(Lot SHBM5092)	62,503.3	µg/mL	+/- +/- +/-	365.9708 3,092.2086 3,169.0842	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	2-Nitropropane <b>CAS #</b> 79-46-9 <b>Purity</b> 97%	(Lot BCCB9352)	25,000.8	µg/mL	+/- +/- +/-	146.3851 1,236.8561 1,267.6056	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethyl methacrylate <b>CAS #</b> 97-63-2 <b>Purity</b> 99%	(Lot MKCL0907)	5,000.8	µg/mL	+/- +/- +/-	34.9563 248.1404 254.2734	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1-Chlorohexane <b>CAS #</b> 544-10-5 <b>Purity</b> 98%	(Lot BCBS3368V)	5,000.0	µg/mL	+/- +/- +/-	34.9502 248.0971 254.2290	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	trans-1,4-dichloro-2-butene <b>CAS #</b> 110-57-6 <b>Purity</b> 95%	(Lot RD210617)	12,510.9	µg/mL	+/- +/- +/-	73.2539 618.9463 634.3340	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,2,3-Trimethylbenzene <b>CAS #</b> 526-73-8 <b>Purity</b> 98%	(Lot 8776.10-36)	5,000.0	µg/mL	+/- +/- +/-	34.9502 248.0971 254.2290	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	1,3-Diethylbenzene <b>CAS #</b> 141-93-5 <b>Purity</b> 98%	(Lot BCBT8967)	5,000.9	µg/mL	+/- +/- +/-	34.9570 248.1457 254.2788	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Benzyl chloride <b>CAS #</b> 100-44-7 <b>Purity</b> 99%	(Lot SHBH2102V)	5,000.8	µg/mL	+/- +/- +/-	34.9563 248.1404 254.2734	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	1,4-Diethylbenzene <b>CAS #</b> 105-05-5 <b>Purity</b> 98%	(Lot RLHJK)	5,001.4	µg/mL	+/- +/- +/-	34.9605 248.1700 254.3037	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,2-Diethylbenzene <b>CAS #</b> 135-01-3 <b>Purity</b> 99%	(Lot ECH2970181)	5,000.5	µg/mL	+/- +/- +/-	34.9540 248.1239 254.2564	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,3,5-Trichlorobenzene <b>CAS #</b> 108-70-3 <b>Purity</b> 99%	(Lot 11319AS)	5,000.2	µg/mL	+/- +/- +/-	34.9516 248.1073 254.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	2-Methylnaphthalene <b>CAS #</b> 91-57-6 <b>Purity</b> 99%	(Lot STBG8884)	5,001.0	µg/mL	+/- +/- +/-	34.9574 248.1487 254.2818	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

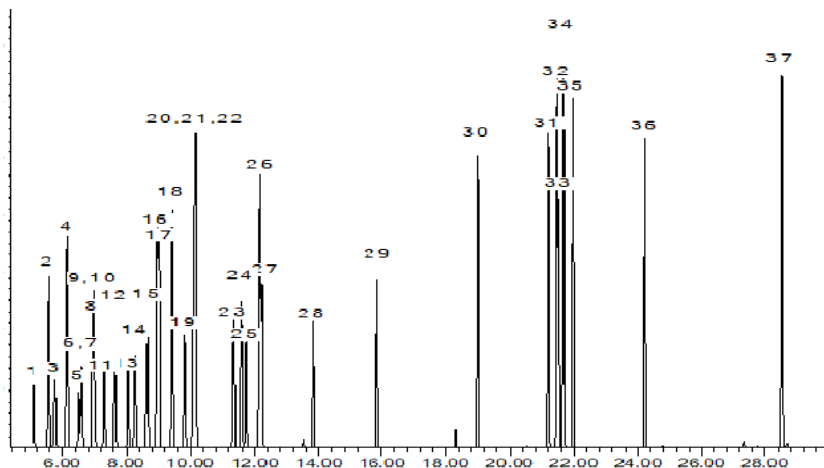
**Carrier Gas:**  
helium-constant pressure 30 psi

**Temp. Program:**  
40°C (hold 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.

Russ Bookhamer - Operations Technician I

**Date Mixed:** 16-Jun-2021 **Balance:** B707717271

Alexis Shelow - Operations Tech I

**Date Passed:** 30-Jun-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_MegaMix#2\_00093**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577487 **Lot No.:** A0173454

**Description :** Custom VOC MegaMix® #2 Standard  
Custom VOC MegaMix® #2 Standard 5000-62500µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** June 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	n-Pentane (C5) CAS # 109-66-0 (Lot SHBM6577) Purity 99%	5,000.8 µg/mL	+/- 34.9563 µg/mL Gravimetric +/- 248.1404 µg/mL Unstressed +/- 254.2734 µg/mL Stressed
2	2-Propanol (isopropanol) CAS # 67-63-0 (Lot SHBH7211) Purity 99%	25,000.0 µg/mL	+/- 146.3805 µg/mL Gravimetric +/- 1,236.8175 µg/mL Unstressed +/- 1,267.5661 µg/mL Stressed
3	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00016133) Purity 99%	5,000.0 µg/mL	+/- 34.9505 µg/mL Gravimetric +/- 248.0991 µg/mL Unstressed +/- 254.2310 µg/mL Stressed
4	tert-Butanol (TBA) CAS # 75-65-0 (Lot SHBM7694) Purity 99%	25,010.0 µg/mL	+/- 146.4390 µg/mL Gravimetric +/- 1,237.3122 µg/mL Unstressed +/- 1,268.0731 µg/mL Stressed
5	Methyl acetate CAS # 79-20-9 (Lot SHBM1320) Purity 99%	5,000.2 µg/mL	+/- 34.9516 µg/mL Gravimetric +/- 248.1073 µg/mL Unstressed +/- 254.2395 µg/mL Stressed
6	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot RD210503) Purity 99%	5,001.7 µg/mL	+/- 34.9621 µg/mL Gravimetric +/- 248.1818 µg/mL Unstressed +/- 254.3157 µg/mL Stressed
7	Allyl chloride ( 3-chloropropene ) CAS # 107-05-1 (Lot RD210402) Purity 99%	5,000.7 µg/mL	+/- 34.9551 µg/mL Gravimetric +/- 248.1321 µg/mL Unstressed +/- 254.2649 µg/mL Stressed

8	Carbon disulfide <b>CAS #</b> 75-15-0 <b>Purity</b> 99%	(Lot N28F701)	5,004.2	µg/mL	+/- +/- +/-	34.9796 248.3058 254.4428	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Acrylonitrile <b>CAS #</b> 107-13-1 <b>Purity</b> 99%	(Lot M25F024)	12,506.0	µg/mL	+/- +/- +/-	73.2254 618.7056 634.0873	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Methyl-tert-butyl ether ( MTBE ) <b>CAS #</b> 1634-04-4 <b>Purity</b> 99%	(Lot SHBM3541)	5,000.8	µg/mL	+/- +/- +/-	34.9563 248.1404 254.2734	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Hexane (C6) <b>CAS #</b> 110-54-3 <b>Purity</b> 99%	(Lot SHBL9879)	5,000.5	µg/mL	+/- +/- +/-	34.9540 248.1239 254.2564	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Diisopropyl ether ( DIPE ) <b>CAS #</b> 108-20-3 <b>Purity</b> 99%	(Lot SHBH1927V)	5,003.3	µg/mL	+/- +/- +/-	34.9738 248.2645 254.4005	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Chloroprene (2-chloro-1,3-butadiene) <b>CAS #</b> 126-99-8 <b>Purity</b> 99%	(Lot 210413JLM)	5,001.2	µg/mL	+/- +/- +/-	34.9586 248.1570 254.2903	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Ethyl-tert-butyl ether (ETBE) <b>CAS #</b> 637-92-3 <b>Purity</b> 99%	(Lot MKCM3774)	5,001.7	µg/mL	+/- +/- +/-	34.9621 248.1818 254.3157	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Propionitrile <b>CAS #</b> 107-12-0 <b>Purity</b> 99%	(Lot BCCC1173)	25,006.7	µg/mL	+/- +/- +/-	146.4195 1,237.1473 1,267.9041	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Methacrylonitrile <b>CAS #</b> 126-98-7 <b>Purity</b> 99%	(Lot 1012020)	12,500.7	µg/mL	+/- +/- +/-	73.1942 618.4417 633.8168	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) <b>CAS #</b> 78-83-1 <b>Purity</b> 99%	(Lot SHBM4836)	62,500.7	µg/mL	+/- +/- +/-	365.9551 3,092.0767 3,168.9490	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Tetrahydrofuran <b>CAS #</b> 109-99-9 <b>Purity</b> 99%	(Lot SHBM8962)	25,010.0	µg/mL	+/- +/- +/-	146.4390 1,237.3122 1,268.0731	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Cyclohexane <b>CAS #</b> 110-82-7 <b>Purity</b> 99%	(Lot MKCF5831)	5,001.7	µg/mL	+/- +/- +/-	34.9621 248.1818 254.3157	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1-Butanol <b>CAS #</b> 71-36-3 <b>Purity</b> 99%	(Lot SHBM5061)	62,504.0	µg/mL	+/- +/- +/-	365.9747 3,092.2416 3,169.1180	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	tert-Amyl methyl ether (TAME) <b>CAS #</b> 994-05-8 <b>Purity</b> 99%	(Lot HMBG7745V)	5,001.7	µg/mL	+/- +/- +/-	34.9621 248.1818 254.3157	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	n-Heptane (C7) <b>CAS #</b> 142-82-5 <b>Purity</b> 99%	(Lot SHBL9221)	5,002.3	µg/mL	+/- +/- +/-	34.9668 248.2148 254.3496	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	tert-Amyl ethyl ether (TAEE) <b>CAS #</b> 919-94-8 <b>Purity</b> 99%	(Lot 76U3A)	5,000.2	µg/mL	+/- +/- +/-	34.9516 248.1073 254.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Methylcyclohexane <b>CAS #</b> 108-87-2 <b>Purity</b> 99%	(Lot SHBL0078)	5,000.2	µg/mL	+/- +/- +/-	34.9516 248.1073 254.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	Methyl methacrylate <b>CAS #</b> 80-62-6 <b>Purity</b> 99%	(Lot MKCN3027)	5,001.0	µg/mL	+/- +/- +/-	34.9574 248.1487 254.2818	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,4-Dioxane <b>CAS #</b> 123-91-1 <b>Purity</b> 99%	(Lot SHBM5092)	62,503.3	µg/mL	+/- +/- +/-	365.9708 3,092.2086 3,169.0842	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	2-Nitropropane <b>CAS #</b> 79-46-9 <b>Purity</b> 97%	(Lot BCCB9352)	25,000.8	µg/mL	+/- +/- +/-	146.3851 1,236.8561 1,267.6056	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethyl methacrylate <b>CAS #</b> 97-63-2 <b>Purity</b> 99%	(Lot MKCL0907)	5,000.8	µg/mL	+/- +/- +/-	34.9563 248.1404 254.2734	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1-Chlorohexane <b>CAS #</b> 544-10-5 <b>Purity</b> 98%	(Lot BCBS3368V)	5,000.0	µg/mL	+/- +/- +/-	34.9502 248.0971 254.2290	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	trans-1,4-dichloro-2-butene <b>CAS #</b> 110-57-6 <b>Purity</b> 95%	(Lot RD210617)	12,510.9	µg/mL	+/- +/- +/-	73.2539 618.9463 634.3340	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,2,3-Trimethylbenzene <b>CAS #</b> 526-73-8 <b>Purity</b> 98%	(Lot 8776.10-36)	5,000.0	µg/mL	+/- +/- +/-	34.9502 248.0971 254.2290	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	1,3-Diethylbenzene <b>CAS #</b> 141-93-5 <b>Purity</b> 98%	(Lot BCBT8967)	5,000.9	µg/mL	+/- +/- +/-	34.9570 248.1457 254.2788	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Benzyl chloride <b>CAS #</b> 100-44-7 <b>Purity</b> 99%	(Lot SHBH2102V)	5,000.8	µg/mL	+/- +/- +/-	34.9563 248.1404 254.2734	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	1,4-Diethylbenzene <b>CAS #</b> 105-05-5 <b>Purity</b> 98%	(Lot RLHJK)	5,001.4	µg/mL	+/- +/- +/-	34.9605 248.1700 254.3037	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,2-Diethylbenzene <b>CAS #</b> 135-01-3 <b>Purity</b> 99%	(Lot ECH2970181)	5,000.5	µg/mL	+/- +/- +/-	34.9540 248.1239 254.2564	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,3,5-Trichlorobenzene <b>CAS #</b> 108-70-3 <b>Purity</b> 99%	(Lot 11319AS)	5,000.2	µg/mL	+/- +/- +/-	34.9516 248.1073 254.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	2-Methylnaphthalene <b>CAS #</b> 91-57-6 <b>Purity</b> 99%	(Lot STBG8884)	5,001.0	µg/mL	+/- +/- +/-	34.9574 248.1487 254.2818	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

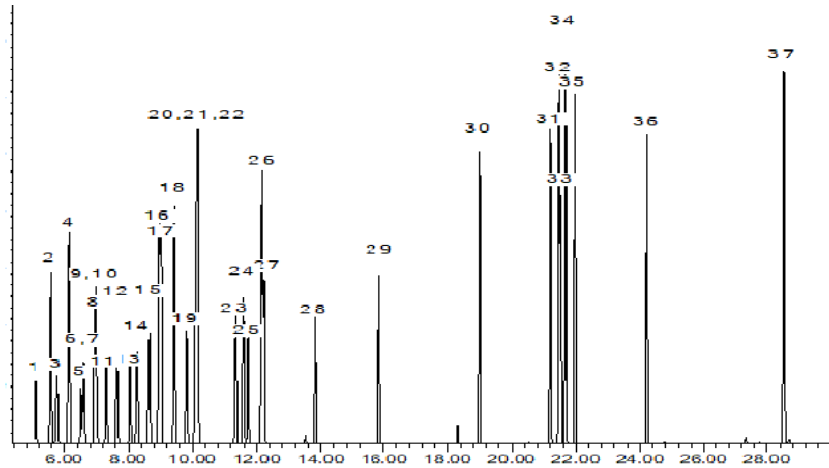
**Carrier Gas:**  
helium-constant pressure 30 psi

**Temp. Program:**  
40°C (hold 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.

Russ Bookhamer - Operations Technician I

**Date Mixed:** 16-Jun-2021 **Balance:** B707717271

Alexis Shelow - Operations Tech I

**Date Passed:** 30-Jun-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_Q\_Ketones\_00075**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 569721.SEC **Lot No.:** A0178490

**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 :** November 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,504.0 µg/mL	+/-	73.2137	µg/mL	Gravimetric
	<b>CAS #</b> 67-64-1.SEC (Lot S25F025)		+/-	754.4715	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	756.2625	µg/mL	Stressed
2	2-Butanone (MEK)	12,502.0 µg/mL	+/-	73.2020	µg/mL	Gravimetric
	<b>CAS #</b> 78-93-3.SEC (Lot RGZ2A)		+/-	754.3508	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	756.1415	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,508.7 µg/mL	+/-	73.2410	µg/mL	Gravimetric
	<b>CAS #</b> 108-10-1.SEC (Lot E29T040)		+/-	754.7530	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	756.5447	µg/mL	Stressed
4	2-Hexanone	12,507.3 µg/mL	+/-	73.2332	µg/mL	Gravimetric
	<b>CAS #</b> 591-78-6.SEC (Lot Y3TUO)		+/-	754.6726	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	756.4641	µg/mL	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)

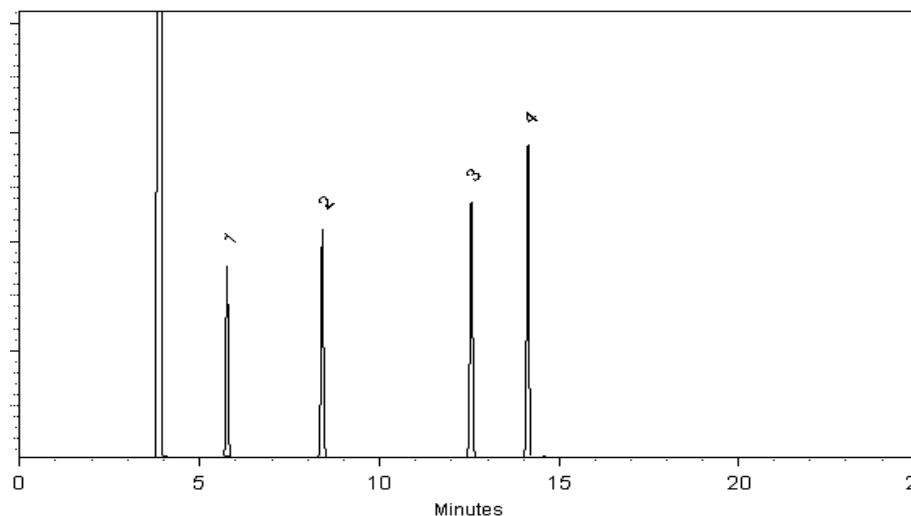
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

Jeff Rhoades - Mix Technician

**Date Mixed:** 15-Nov-2021      **Balance:** 1127510105

Clara Windle - Operations Technician I

**Date Passed:** 16-Nov-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_Q\_Ketones\_00081**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 569721.SEC **Lot No.:** A0178490

**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 :** November 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,504.0 µg/mL	+/-	73.2137	µg/mL	Gravimetric
	<b>CAS #</b> 67-64-1.SEC (Lot S25F025)		+/-	754.4715	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	756.2625	µg/mL	Stressed
2	2-Butanone (MEK)	12,502.0 µg/mL	+/-	73.2020	µg/mL	Gravimetric
	<b>CAS #</b> 78-93-3.SEC (Lot RGZ2A)		+/-	754.3508	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	756.1415	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,508.7 µg/mL	+/-	73.2410	µg/mL	Gravimetric
	<b>CAS #</b> 108-10-1.SEC (Lot E29T040)		+/-	754.7530	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	756.5447	µg/mL	Stressed
4	2-Hexanone	12,507.3 µg/mL	+/-	73.2332	µg/mL	Gravimetric
	<b>CAS #</b> 591-78-6.SEC (Lot Y3TUO)		+/-	754.6726	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	756.4641	µg/mL	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)

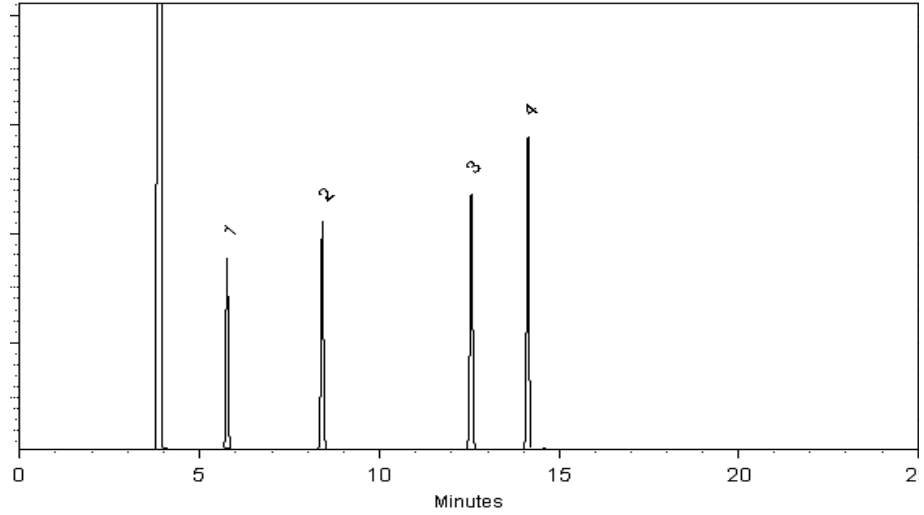
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

Jeff Rhoades - Mix Technician

**Date Mixed:** 15-Nov-2021      **Balance:** 1127510105

Clara Winda - Operations Technician I

**Date Passed:** 16-Nov-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_Q\_Ketones\_00101**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 569721.SEC **Lot No.:** A0178490

**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 :** November 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,504.0 µg/mL	+/-	73.2137	µg/mL	Gravimetric
	<b>CAS #</b> 67-64-1.SEC (Lot S25F025)		+/-	754.4715	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	756.2625	µg/mL	Stressed
2	2-Butanone (MEK)	12,502.0 µg/mL	+/-	73.2020	µg/mL	Gravimetric
	<b>CAS #</b> 78-93-3.SEC (Lot RGZ2A)		+/-	754.3508	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	756.1415	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,508.7 µg/mL	+/-	73.2410	µg/mL	Gravimetric
	<b>CAS #</b> 108-10-1.SEC (Lot E29T040)		+/-	754.7530	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	756.5447	µg/mL	Stressed
4	2-Hexanone	12,507.3 µg/mL	+/-	73.2332	µg/mL	Gravimetric
	<b>CAS #</b> 591-78-6.SEC (Lot Y3TUO)		+/-	754.6726	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	756.4641	µg/mL	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)

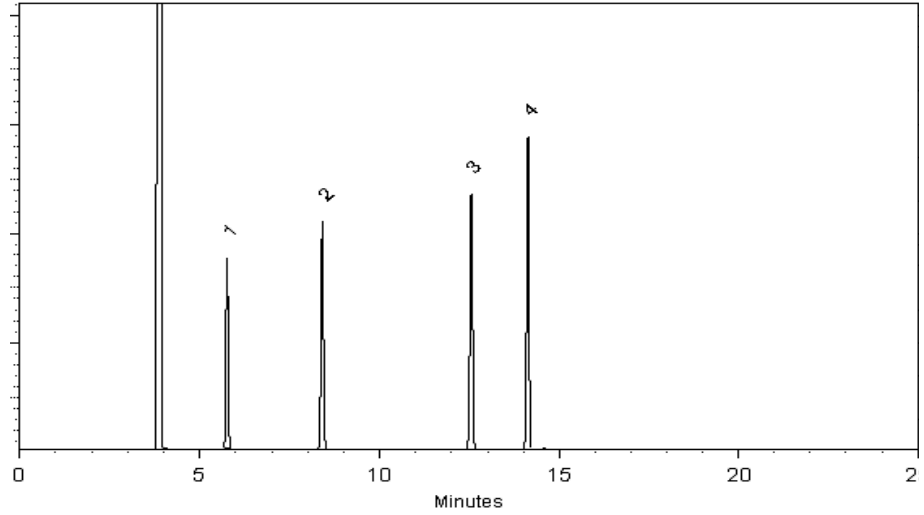
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

  
Jeff Rhoades - Mix Technician

**Date Mixed:** 15-Nov-2021      **Balance:** 1127510105

  
Clara Windle - Operations Technician I

**Date Passed:** 16-Nov-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_QC\_2K\_GAS\_00096**



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 577488.SEC Lot No.: A0172021
Description: Custom Gases.SEC Standard
Custom Gases.SEC Standard 2,000µg/mL, P&T Methanol, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: May 31, 2024 Storage: 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Table with 7 columns: Elution Order, Compound, Grav. Conc. (weight/volume), Expanded Uncertainty (95% C.L.; K=2), and three additional columns for measurement details. Rows 1-7 list compounds like Dichlorodifluoromethane, Chloromethane, Vinyl chloride, 1,3-Butadiene, Bromomethane, Chloroethane, and Dichlorofluoromethane.

8	Trichlorofluoromethane (CFC-11)	2,010.6	µg/mL	+/-	32.3019	µg/mL	Gravimetric
	CAS # 75-69-4.SEC (Lot 253600)			+/-	116.6827	µg/mL	Unstressed
	Purity 99%			+/-	119.2330	µg/mL	Stressed
9	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)	2,020.4	µg/mL	+/-	21.8150	µg/mL	Gravimetric
	CAS # 354-23-4 * (Lot Q9B-64)			+/-	114.7647	µg/mL	Unstressed
	Purity 99%			+/-	117.3819	µg/mL	Stressed
<b>Solvent:</b>	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 flow 2.0 mL/min.

**Temp. Program:**

40°C (hold 6 min.) to 100°C  
@ 6°C/min.

**Inj. Temp:**

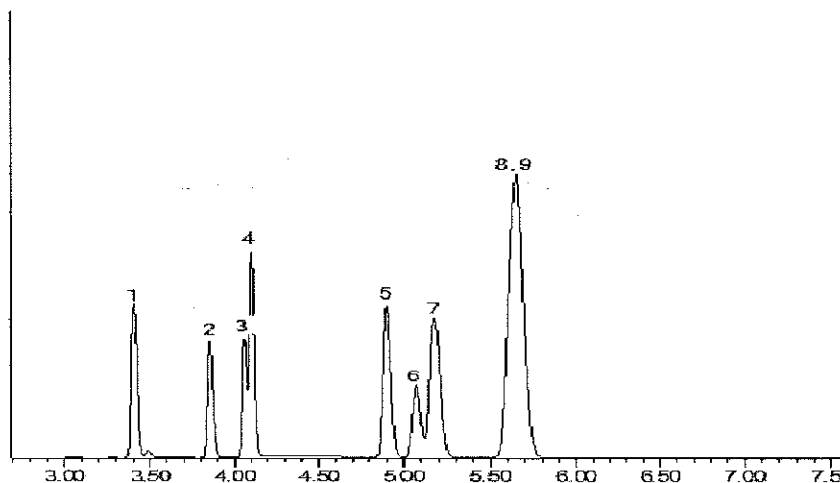
200°C

**Det. Temp:**

250°C

**Det. Type:**

MSD



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

*Lane Kibe*  
Lane Kibe - Mix Technician

Date Mixed: 04-May-2021 Balance: 1127510105

*Alexis Shelow*  
Alexis Shelow - Operations Tech I

Date Passed: 17-May-2021

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.
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- 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:

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

$k$  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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_QC\_2K\_GAS\_00103**



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 577488.SEC Lot No.: A0172021
Description: Custom Gases.SEC Standard
Custom Gases.SEC Standard 2,000µg/mL, P&T Methanol, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: May 31, 2024 Storage: 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Table with 7 columns: Elution Order, Compound, Grav. Conc. (weight/volume), Expanded Uncertainty (95% C.L.; K=2), and three additional columns for measurement details. Rows 1-7 list compounds like Dichlorodifluoromethane, Chloromethane, Vinyl chloride, 1,3-Butadiene, Bromomethane, Chloroethane, and Dichlorofluoromethane.

8	Trichlorofluoromethane (CFC-11)		2,010.6	µg/mL	+/-	32.3019	µg/mL	Gravimetric				
	CAS #	75-69-4.SEC (Lot 253600)							+/-	116.6827	µg/mL	Unstressed
	Purity	99%							+/-	119.2330	µg/mL	Stressed
9	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)		2,020.4	µg/mL	+/-	21.8150	µg/mL	Gravimetric				
	CAS #	354-23-4 * (Lot Q9B-64)							+/-	114.7647	µg/mL	Unstressed
	Purity	99%							+/-	117.3819	µg/mL	Stressed
<b>Solvent:</b>		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 flow 2.0 mL/min.

#### Temp. Program:

40°C (hold 6 min.) to 100°C  
@ 6°C/min.

#### Inj. Temp:

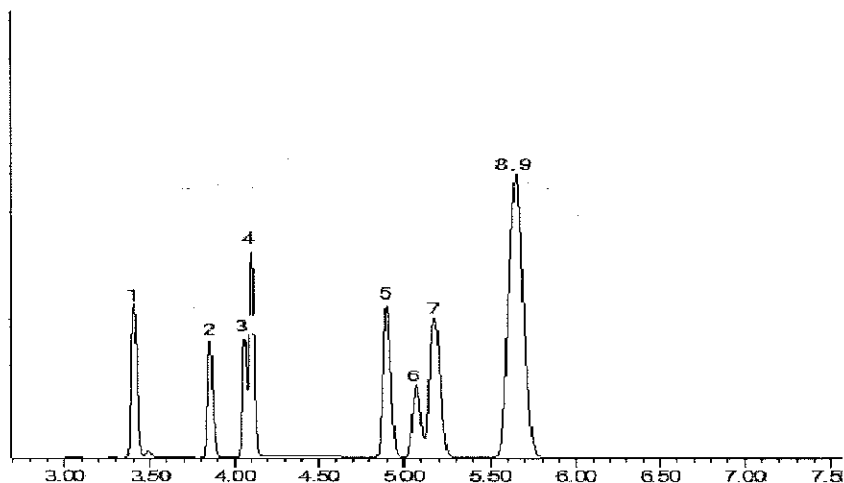
200°C

#### Det. Temp:

250°C

#### Det. Type:

MSD



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

*Lane Kibe*  
Lane Kibe - Mix Technician

Date Mixed: 04-May-2021 Balance: 1127510105

*Alexis Shelow*  
Alexis Shelow - Operations Tech I

Date Passed: 17-May-2021

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:

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

$k$  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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_QC\_2K\_GAS\_00119**



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 577488.SEC Lot No.: A0172021
Description: Custom Gases.SEC Standard
Custom Gases.SEC Standard 2,000µg/mL, P&T Methanol, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: May 31, 2024 Storage: 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Table with 7 columns: Elution Order, Compound, Grav. Conc. (weight/volume), Expanded Uncertainty (95% C.L.; K=2), and three additional columns for measurement details. Rows 1-7 list compounds like Dichlorodifluoromethane, Chloromethane, Vinyl chloride, 1,3-Butadiene, Bromomethane, Chloroethane, and Dichlorofluoromethane.

8	Trichlorofluoromethane (CFC-11)	2,010.6	µg/mL	+/-	32.3019	µg/mL	Gravimetric
	CAS # 75-69-4.SEC (Lot 253600)			+/-	116.6827	µg/mL	Unstressed
	Purity 99%			+/-	119.2330	µg/mL	Stressed
9	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)	2,020.4	µg/mL	+/-	21.8150	µg/mL	Gravimetric
	CAS # 354-23-4 * (Lot Q9B-64)			+/-	114.7647	µg/mL	Unstressed
	Purity 99%			+/-	117.3819	µg/mL	Stressed
<b>Solvent:</b>	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 flow 2.0 mL/min.

**Temp. Program:**

40°C (hold 6 min.) to 100°C  
@ 6°C/min.

**Inj. Temp:**

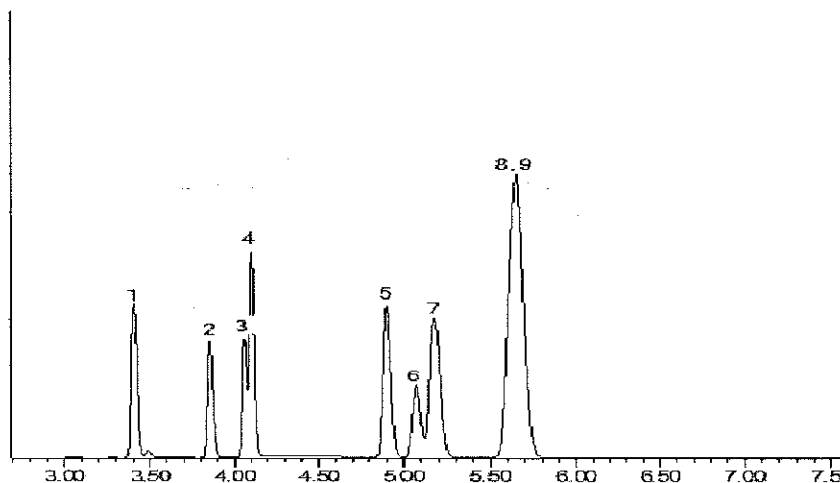
200°C

**Det. Temp:**

250°C

**Det. Type:**

MSD



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

*Lane Kibe*  
Lane Kibe - Mix Technician

Date Mixed: 04-May-2021 Balance: 1127510105

*Alexis Shelow*  
Alexis Shelow - Operations Tech I

Date Passed: 17-May-2021

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:

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

$k$  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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_V#2B\_00277**



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

www.restek.com

# Certificate of Analysis

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

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

**Catalog No. :** 56734 **Lot No.:** A0184378  
**Description :** Custom V # 2B Standard  
Custom V #2B Standard 12,500-125,000µg/mL, P&T Methanol, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** April 30, 2024 **Storage:** 0°C or colder  
**Ship:** Ambient

Elution Order	Compound	CAS #	Percent Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Propanol (isopropanol)	67-63-0	99%	25,003.0 µg/mL	+/- 146.3981 µg/mL
2	tert-Butanol (TBA)	75-65-0	99%	25,000.0 µg/mL	+/- 146.3805 µg/mL
3	Propionitrile	107-12-0	99%	25,003.0 µg/mL	+/- 146.3981 µg/mL
4	Methacrylonitrile	126-98-7	99%	12,502.0 µg/mL	+/- 73.2020 µg/mL
5	Isobutanol (2-Methyl-1-propanol)	78-83-1	99%	62,503.0 µg/mL	+/- 365.9688 µg/mL
6	1-Butanol	71-36-3	98%	124,982.3 µg/mL	+/- 731.7613 µg/mL
7	1,4-Dioxane	123-91-1	99%	62,530.0 µg/mL	+/- 366.1269 µg/mL
8	trans-1,4-dichloro-2-butene	110-57-6	95%	12,496.3 µg/mL	+/- 73.1686 µg/mL
<b>Solvent:</b>	P&T Methanol	67-56-1	99%		

**Specific Reference Material Notes:**

This RM (Reference Material) is not a CRM (Certified Reference Material) due to the 1-butanol concentration exceeding the maximum concentration on Restek's ISO Guide 34 scope of accreditation.

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

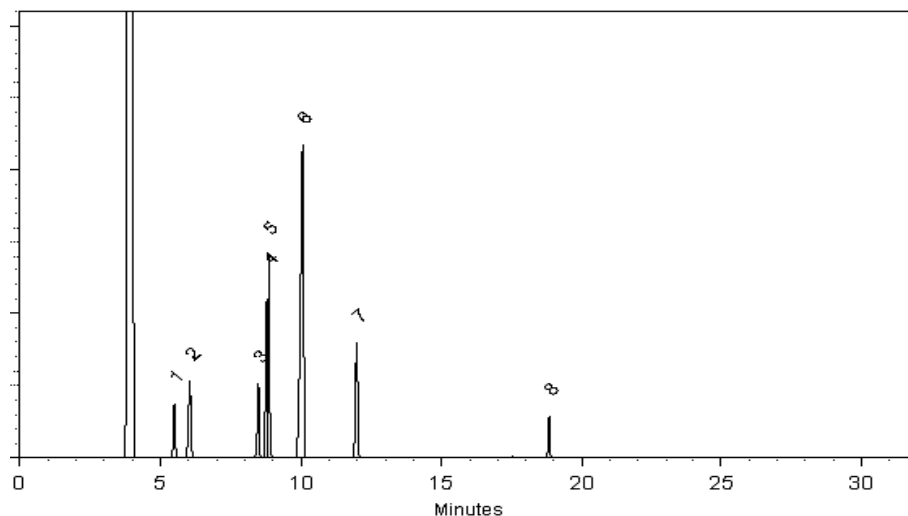
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

Josh McCloskey - Operations Technician I

**Date Mixed:** 21-Apr-2022

**Balance:** B707717271

Christie Mills - Operations Technician II

**Date Passed:** 27-Apr-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## **General Reference Material Notes**

### **Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the RM 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/ $\mu$ ECD, 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.

### **Uncertainty Value Notes:**

- Uncertainties are determined using data from balances and glassware, raw material purity, and, when significant, equipment tolerances or calibration results.

### **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

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**MSV\_V#2B\_00282**



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

www.restek.com

# Certificate of Analysis

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

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

**Catalog No. :** 56734 **Lot No.:** A0184378  
**Description :** Custom V # 2B Standard  
Custom V #2B Standard 12,500-125,000µg/mL, P&T Methanol, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** April 30, 2024 **Storage:** 0°C or colder  
**Ship:** Ambient

Elution Order	Compound	CAS #	Percent Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Propanol (isopropanol)	67-63-0	99%	25,003.0 µg/mL	+/- 146.3981 µg/mL
2	tert-Butanol (TBA)	75-65-0	99%	25,000.0 µg/mL	+/- 146.3805 µg/mL
3	Propionitrile	107-12-0	99%	25,003.0 µg/mL	+/- 146.3981 µg/mL
4	Methacrylonitrile	126-98-7	99%	12,502.0 µg/mL	+/- 73.2020 µg/mL
5	Isobutanol (2-Methyl-1-propanol)	78-83-1	99%	62,503.0 µg/mL	+/- 365.9688 µg/mL
6	1-Butanol	71-36-3	98%	124,982.3 µg/mL	+/- 731.7613 µg/mL
7	1,4-Dioxane	123-91-1	99%	62,530.0 µg/mL	+/- 366.1269 µg/mL
8	trans-1,4-dichloro-2-butene	110-57-6	95%	12,496.3 µg/mL	+/- 73.1686 µg/mL
<b>Solvent:</b>	P&T Methanol	67-56-1	99%		

**Specific Reference Material Notes:**

This RM (Reference Material) is not a CRM (Certified Reference Material) due to the 1-butanol concentration exceeding the maximum concentration on Restek's ISO Guide 34 scope of accreditation.

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

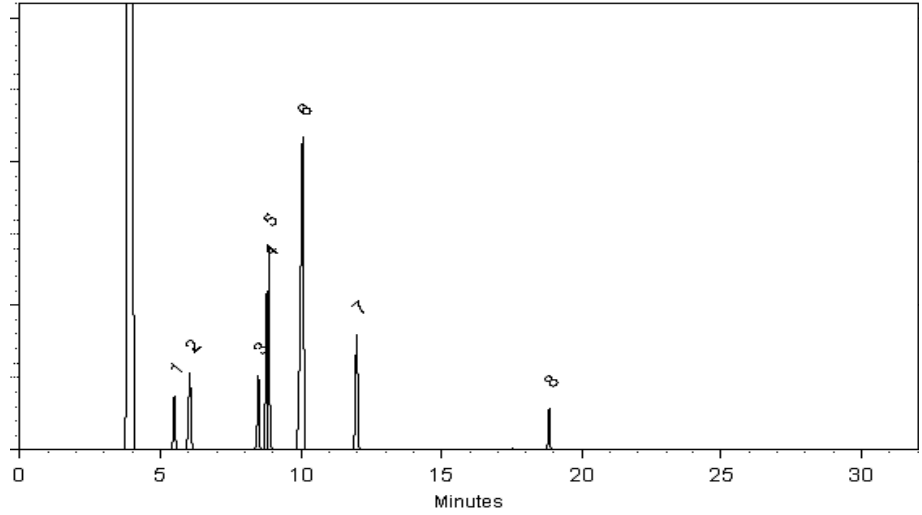
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

*Josh McCloskey*  
Josh McCloskey - Operations Technician I

**Date Mixed:** 21-Apr-2022      **Balance:** B707717271

*Christie Mills*  
Christie Mills - Operations Technician II

**Date Passed:** 27-Apr-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



## **General Reference Material Notes**

### **Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the RM 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/ $\mu$ ECD, 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.

### **Uncertainty Value Notes:**

- Uncertainties are determined using data from balances and glassware, raw material purity, and, when significant, equipment tolerances or calibration results.

### **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

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**MSV\_V\_Ketones\_00074**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 569721 **Lot No.:** A0174287

**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 :** July 31, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,526.4 µg/mL	+/-	73.3448	µg/mL	Gravimetric
	CAS # 67-64-1 (Lot SHBN3661)		+/-	755.8230	µg/mL	Unstressed
	Purity 99%		+/-	757.6173	µg/mL	Stressed
2	2-Butanone (MEK)	12,543.6 µg/mL	+/-	73.4455	µg/mL	Gravimetric
	CAS # 78-93-3 (Lot SHBL5543)		+/-	756.8609	µg/mL	Unstressed
	Purity 99%		+/-	758.6575	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,534.8 µg/mL	+/-	73.3940	µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBM7956)		+/-	756.3299	µg/mL	Unstressed
	Purity 99%		+/-	758.1253	µg/mL	Stressed
4	2-Hexanone	12,617.6 µg/mL	+/-	73.8788	µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKCL1599)		+/-	761.3259	µg/mL	Unstressed
	Purity 99%		+/-	763.1332	µg/mL	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)

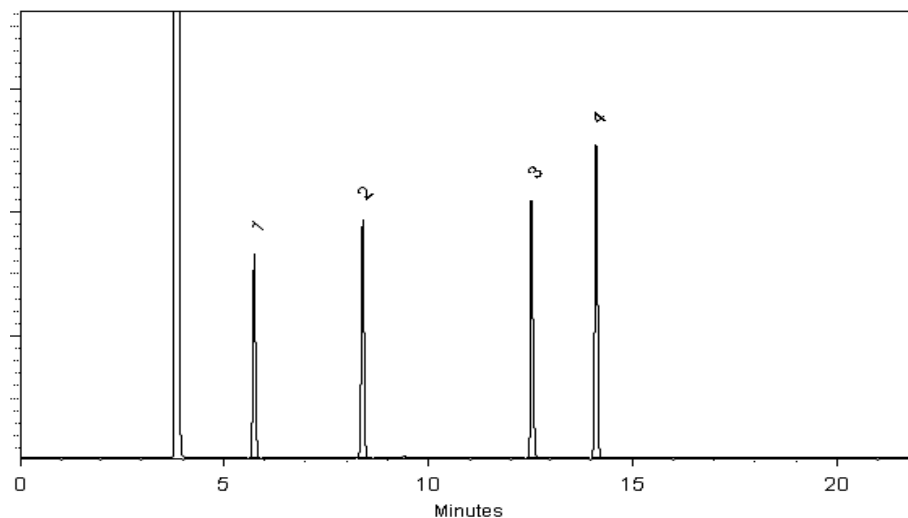
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

*Sam Moodler*  
Sam Moodler - Operations Tech I

**Date Mixed:** 11-Jul-2021      **Balance:** B707717271

*Marlina Cowan*  
Marlina Cowan - Operations Tech I

**Date Passed:** 13-Jul-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_V\_Ketones\_00079**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 569721 **Lot No.:** A0174287

**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 :** July 31, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone CAS # 67-64-1 (Lot SHBN3661) Purity 99%	12,526.4 µg/mL	+/- 73.3448 µg/mL	+/- 755.8230 µg/mL	+/- 757.6173 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) CAS # 78-93-3 (Lot SHBL5543) Purity 99%	12,543.6 µg/mL	+/- 73.4455 µg/mL	+/- 756.8609 µg/mL	+/- 758.6575 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 (Lot SHBM7956) Purity 99%	12,534.8 µg/mL	+/- 73.3940 µg/mL	+/- 756.3299 µg/mL	+/- 758.1253 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone CAS # 591-78-6 (Lot MKCL1599) Purity 99%	12,617.6 µg/mL	+/- 73.8788 µg/mL	+/- 761.3259 µg/mL	+/- 763.1332 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)

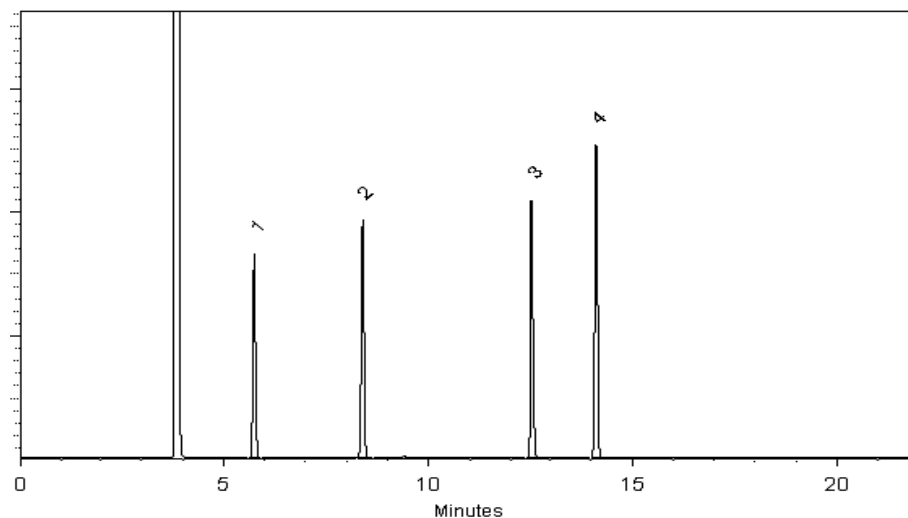
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

*Sam Moodler*  
Sam Moodler - Operations Tech I

**Date Mixed:** 11-Jul-2021      **Balance:** B707717271

*Marlina Cowan*  
Marlina Cowan - Operations Tech I

**Date Passed:** 13-Jul-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_V\_Ketones\_00090**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 569721 **Lot No.:** A0174287

**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 :** July 31, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,526.4 µg/mL	+/-	73.3448	µg/mL	Gravimetric
	<b>CAS #</b> 67-64-1 (Lot SHBN3661)		+/-	755.8230	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	757.6173	µg/mL	Stressed
2	2-Butanone (MEK)	12,543.6 µg/mL	+/-	73.4455	µg/mL	Gravimetric
	<b>CAS #</b> 78-93-3 (Lot SHBL5543)		+/-	756.8609	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	758.6575	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,534.8 µg/mL	+/-	73.3940	µg/mL	Gravimetric
	<b>CAS #</b> 108-10-1 (Lot SHBM7956)		+/-	756.3299	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	758.1253	µg/mL	Stressed
4	2-Hexanone	12,617.6 µg/mL	+/-	73.8788	µg/mL	Gravimetric
	<b>CAS #</b> 591-78-6 (Lot MKCL1599)		+/-	761.3259	µg/mL	Unstressed
	<b>Purity</b> 99%		+/-	763.1332	µg/mL	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)

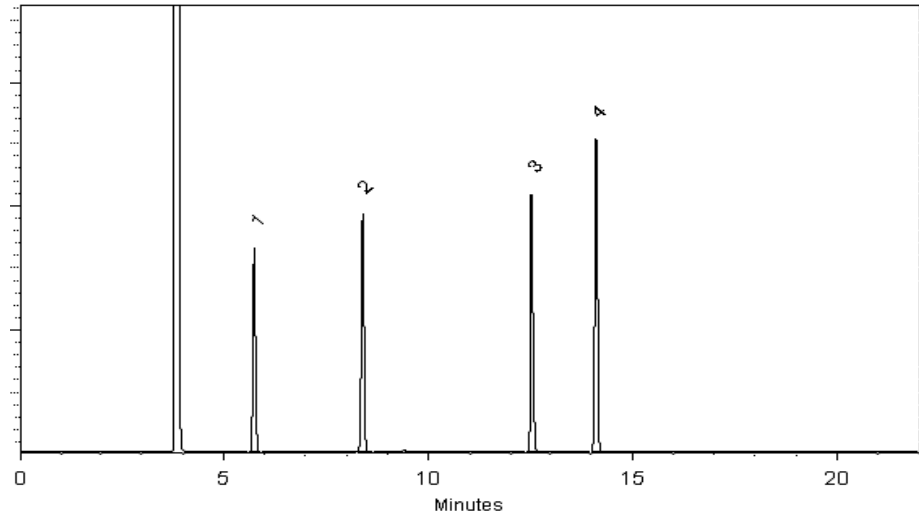
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

*Sam Moodler*  
Sam Moodler - Operations Tech I

**Date Mixed:** 11-Jul-2021      **Balance:** B707717271

*Marlina Cowan*  
Marlina Cowan - Operations Tech I

**Date Passed:** 13-Jul-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_V\_PentaCL\_00019**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577491 **Lot No.:** A0171341

**Description :** Custom Pentachloroethane Standard  
Custom Pentachloroethane Standard 5,000µg/mL, P&T Methanol,  
1mL/ampul

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

**Expiration Date :** April 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Pentachloroethane CAS # 76-01-7 Purity 99% (Lot 10518800)	5,006.0 µg/mL	+/- 29.3780 µg/mL Gravimetric +/- 280.7099 µg/mL Unstressed +/- 287.2768 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)

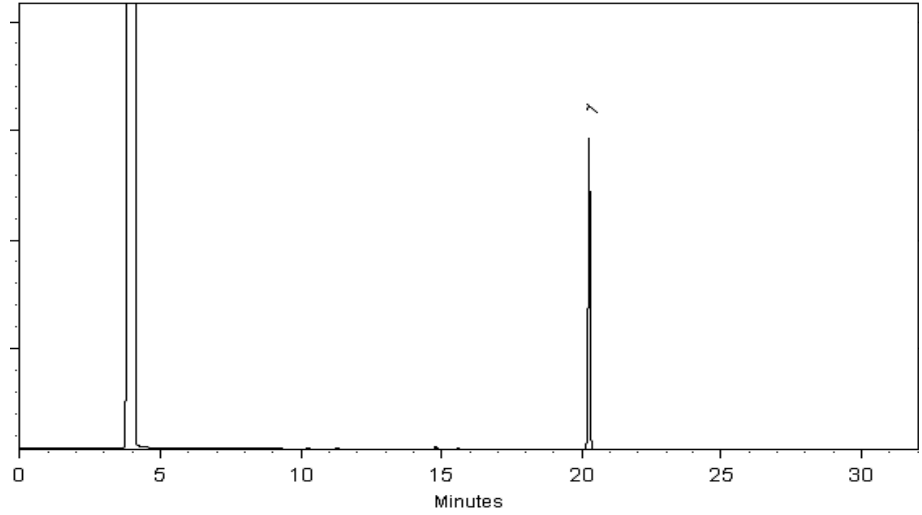
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

  
Jeremy Warefield - Operations Tech I

**Date Mixed:** 14-Apr-2021      **Balance:** 1127510105

  
Alexis Shelow - Operations Tech I

**Date Passed:** 19-Apr-2021

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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

Reagent

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**MSV\_V\_PentaCL\_00020**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

**Catalog No. :** 577491 **Lot No.:** A0171341

**Description :** Custom Pentachloroethane Standard  
Custom Pentachloroethane Standard 5,000µg/mL, P&T Methanol,  
1mL/ampul

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

**Expiration Date :** April 30, 2024 **Storage:** 0°C or colder

**Ship:** Ambient

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Pentachloroethane CAS # 76-01-7 Purity 99% (Lot 10518800)	5,006.0 µg/mL	+/- 29.3780 µg/mL Gravimetric +/- 280.7099 µg/mL Unstressed +/- 287.2768 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)

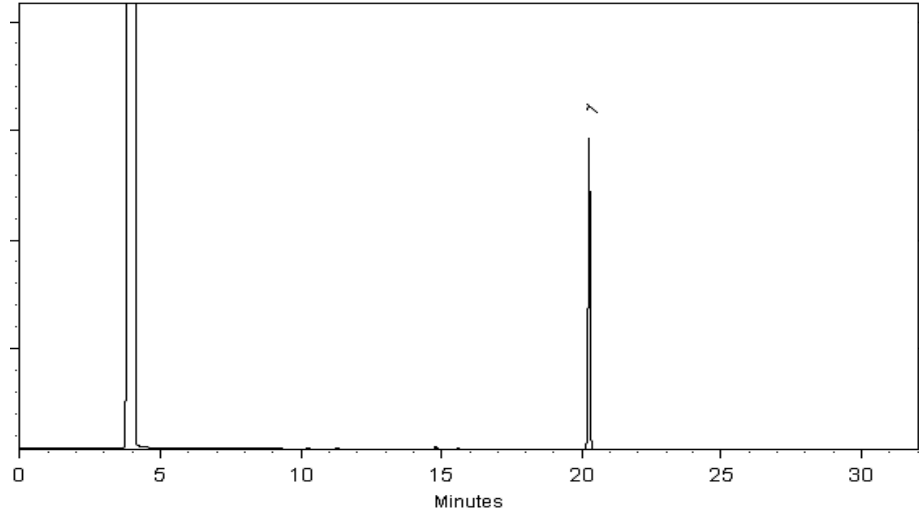
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

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

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

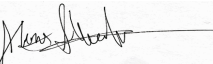
**Det. Type:**  
FID



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.

  
Jeremy Warefield - Operations Tech I

**Date Mixed:** 14-Apr-2021      **Balance:** 1127510105

  
Alexis Shelow - Operations Tech I

**Date Passed:** 19-Apr-2021

**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:

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

*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](http://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) -20°C or colder (Deep 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](http://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.

# Method 8260D Low Level

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

FORM II  
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low

GC Column (1): R-624SilMS 3 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-COD-SW-6-0/1-0	410-106467-1	99	99	105	101
HD-COD-SW-7-0/1-0	410-106467-2	101	102	105	101
HD-COD-SW-8-0/1-0	410-106467-3	99	99	104	99
HD-COD-SW-9-0/1-0	410-106467-4	99	99	104	100
HD-COD-SW-13-0/1-0	410-106467-5	99	101	105	100
HD-COD-SW-15-0/1-0	410-106467-6	100	99	103	99
HD-COD-SW-16-0/1-0	410-106467-7	101	103	99	99
HD-COD-SW-17-0/1-0	410-106467-8	102	101	99	98
HD-COD-SW-17-0/1-0 DL	410-106467-8 DL	102	103	97	98
HD-COD-SW-26-0/1-0	410-106467-9	101	102	99	99
HD-COD-SW-27-0/1-0	410-106467-10	101	103	99	99
HD-COD-SW-28-0/1-0	410-106467-11	100	102	99	98
HD-COD-SW-29-0/1-0	410-106467-12	102	105	100	99
HD-QC1-0/1-1	410-106467-13	101	107	98	97
HD-QC1-0/1-1 DL	410-106467-13 DL	101	99	98	98
HD-QC1-0/1-2	410-106467-14	101	103	99	98
	MB 410-322544/6	100	104	104	101
	MB 410-322841/6	101	100	100	97
	MB 410-322942/6	101	100	99	100
	LCS 410-322544/4	97	97	106	104
	LCS 410-322841/4	101	100	101	99
	LCS 410-322942/4	102	103	98	99
HD-COD-SW-15-0/1-0 MS MS	410-106467-6 MS	97	93	108	105
HD-COD-SW-16-0/1-0 MS	410-106467-7 MS	102	102	99	99
HD-COD-SW-15-0/1-0 MSD MSD	410-106467-6 MSD	96	96	107	104
HD-COD-SW-16-0/1-0 MSD	410-106467-7 MSD	101	103	99	99

	<u>QC LIMITS</u>
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	80-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	80-120

# Column to be used to flag recovery values

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Matrix: Water

Level: Low

Lab File ID: GD01X03.D

Lab ID: LCS 410-322544/4

Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.13	103	71-134	
1,1,1-Trichloroethane	5.00	4.83	97	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.55	111	75-123	
1,1,2-Trichloroethane	5.00	5.10	102	80-120	
1,1-Dichloroethane	5.00	5.20	104	74-120	
1,1-Dichloroethene	5.00	4.96	99	80-131	
1,2-Dibromoethane (EDB)	5.00	4.85	97	80-120	
1,2-Dichloroethane	5.00	5.00	100	69-122	
1,2-Dichloropropane	5.00	5.40	108	80-120	
2-Butanone (MEK)	62.5	60.6	97	59-141	
2-Hexanone	62.5	63.1	101	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	62.4	100	55-140	
Acetone	62.5	53.9	86	60-146	
Benzene	5.00	5.01	100	80-120	
Bromochloromethane	5.00	4.64	93	80-120	
Bromodichloromethane	5.00	5.39	108	73-124	
Bromoform	5.00	5.86	117	49-144	
Bromomethane	5.00	4.65	93	60-136	
Carbon disulfide	5.00	6.75	135	67-130	*+
Carbon tetrachloride	5.00	4.82	96	64-141	
Chlorobenzene	5.00	4.75	95	80-120	
Chloroethane	5.00	5.24	105	63-120	
Chloroform	5.00	4.82	96	80-120	
Chloromethane	5.00	5.57	111	56-124	
cis-1,2-Dichloroethene	5.00	4.93	99	80-122	
cis-1,3-Dichloropropene	5.00	5.24	105	67-121	
Dibromochloromethane	5.00	5.57	111	64-138	
Ethylbenzene	5.00	5.04	101	80-120	
Methyl tert-butyl ether	5.00	5.10	102	69-120	
Methylene Chloride	5.00	5.10	102	80-120	
Styrene	5.00	4.85	97	80-120	
Tetrachloroethene	5.00	4.51	90	80-120	
Toluene	5.00	4.99	100	80-120	
trans-1,2-Dichloroethene	5.00	4.75	95	80-122	
trans-1,3-Dichloropropene	5.00	6.01	120	61-129	
Trichloroethene	5.00	4.63	93	80-120	
Vinyl chloride	5.00	5.30	106	60-125	
Xylenes, Total	15.0	14.6	97	80-120	

# Column to be used to flag recovery and RPD values

FORM III 8260D



FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Matrix: Water Level: Low

Lab File ID: HD01X33.D

Lab ID: LCS 410-322841/4

Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.04	101	71-134	
1,1,1-Trichloroethane	5.00	5.17	103	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.93	99	75-123	
1,1,2-Trichloroethane	5.00	5.18	104	80-120	
1,1-Dichloroethane	5.00	5.20	104	74-120	
1,1-Dichloroethene	5.00	5.29	106	80-131	
1,2-Dibromoethane (EDB)	5.00	5.09	102	80-120	
1,2-Dichloroethane	5.00	5.39	108	69-122	
1,2-Dichloropropane	5.00	5.16	103	80-120	
2-Butanone (MEK)	62.5	71.9	115	59-141	
2-Hexanone	62.5	76.7	123	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	73.7	118	55-140	
Acetone	62.5	60.7	97	60-146	
Benzene	5.00	5.17	103	80-120	
Bromochloromethane	5.00	5.20	104	80-120	
Bromodichloromethane	5.00	5.20	104	73-124	
Bromoform	5.00	4.82	96	49-144	
Bromomethane	5.00	4.99	100	60-136	
Carbon disulfide	5.00	5.58	112	67-130	
Carbon tetrachloride	5.00	5.16	103	64-141	
Chlorobenzene	5.00	5.03	101	80-120	
Chloroethane	5.00	5.32	106	63-120	
Chloroform	5.00	5.11	102	80-120	
Chloromethane	5.00	5.47	109	56-124	
cis-1,2-Dichloroethene	5.00	5.26	105	80-122	
cis-1,3-Dichloropropene	5.00	4.84	97	67-121	
Dibromochloromethane	5.00	4.88	98	64-138	
Ethylbenzene	5.00	5.12	102	80-120	
Methyl tert-butyl ether	5.00	5.24	105	69-120	
Methylene Chloride	5.00	5.20	104	80-120	
Styrene	5.00	5.15	103	80-120	
Tetrachloroethene	5.00	4.97	99	80-120	
Toluene	5.00	5.16	103	80-120	
trans-1,2-Dichloroethene	5.00	5.10	102	80-122	
trans-1,3-Dichloropropene	5.00	5.09	102	61-129	
Trichloroethene	5.00	5.10	102	80-120	
Vinyl chloride	5.00	5.33	107	60-125	
Xylenes, Total	15.0	15.3	102	80-120	

# Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Matrix: Water

Level: Low

Lab File ID: HD02X03.D

Lab ID: LCS 410-322942/4

Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.98	100	71-134	
1,1,1-Trichloroethane	5.00	5.36	107	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.93	99	75-123	
1,1,2-Trichloroethane	5.00	5.00	100	80-120	
1,1-Dichloroethane	5.00	5.40	108	74-120	
1,1-Dichloroethene	5.00	5.54	111	80-131	
1,2-Dibromoethane (EDB)	5.00	5.11	102	80-120	
1,2-Dichloroethane	5.00	5.91	118	69-122	
1,2-Dichloropropane	5.00	5.35	107	80-120	
2-Butanone (MEK)	62.5	58.7	94	59-141	
2-Hexanone	62.5	59.4	95	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	56.7	91	55-140	
Acetone	62.5	51.6	83	60-146	
Benzene	5.00	5.32	106	80-120	
Bromochloromethane	5.00	5.26	105	80-120	
Bromodichloromethane	5.00	5.36	107	73-124	
Bromoform	5.00	4.71	94	49-144	
Bromomethane	5.00	5.02	100	60-136	
Carbon disulfide	5.00	5.53	111	67-130	
Carbon tetrachloride	5.00	5.30	106	64-141	
Chlorobenzene	5.00	5.02	100	80-120	
Chloroethane	5.00	5.24	105	63-120	
Chloroform	5.00	5.40	108	80-120	
Chloromethane	5.00	5.64	113	56-124	
cis-1,2-Dichloroethene	5.00	5.52	110	80-122	
cis-1,3-Dichloropropene	5.00	5.17	103	67-121	
Dibromochloromethane	5.00	4.91	98	64-138	
Ethylbenzene	5.00	5.08	102	80-120	
Methyl tert-butyl ether	5.00	5.54	111	69-120	
Methylene Chloride	5.00	5.38	108	80-120	
Styrene	5.00	5.14	103	80-120	
Tetrachloroethene	5.00	4.90	98	80-120	
Toluene	5.00	5.02	100	80-120	
trans-1,2-Dichloroethene	5.00	5.35	107	80-122	
trans-1,3-Dichloropropene	5.00	5.16	103	61-129	
Trichloroethene	5.00	5.21	104	80-120	
Vinyl chloride	5.00	5.28	106	60-125	
Xylenes, Total	15.0	15.2	101	80-120	

# Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III  
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Matrix: Water

Level: Low

Lab File ID: GD01X12.D

Lab ID: 410-106467-6 MS

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

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	ND	5.70	114	71-134	
1,1,1-Trichloroethane	5.00	0.45 J	6.03	111	78-126	
1,1,2,2-Tetrachloroethane	5.00	ND	5.92	118	75-123	
1,1,2-Trichloroethane	5.00	ND	5.58	112	80-120	
1,1-Dichloroethane	5.00	0.18 J	6.12	119	74-120	
1,1-Dichloroethene	5.00	0.23 J	6.22	120	80-131	
1,2-Dibromoethane (EDB)	5.00	ND	5.31	106	80-120	
1,2-Dichloroethane	5.00	ND	5.43	109	69-122	
1,2-Dichloropropane	5.00	ND	6.07	121	80-120	FH
2-Butanone (MEK)	62.6	ND	79.0	126	59-141	
2-Hexanone	62.6	ND	81.6	131	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	ND	81.0	129	55-140	
Acetone	62.6	ND	69.4	111	60-146	
Benzene	5.00	ND	5.76	115	80-120	
Bromochloromethane	5.00	ND	5.08	101	80-120	
Bromodichloromethane	5.00	ND	5.88	117	73-124	
Bromoform	5.00	ND	6.03	120	49-144	
Bromomethane	5.00	ND	5.00	100	60-136	
Carbon disulfide	5.00	ND	8.16	163	67-130	FH
Carbon tetrachloride	5.00	ND	5.77	115	64-141	
Chlorobenzene	5.00	ND	5.36	107	80-120	
Chloroethane	5.00	ND	5.75	115	63-120	
Chloroform	5.00	0.34 J	5.79	109	80-120	
Chloromethane	5.00	ND	6.25	125	80-120	FH
cis-1,2-Dichloroethene	5.00	2.2	7.83	112	80-122	
cis-1,3-Dichloropropene	5.00	ND	5.53	111	67-121	
Dibromochloromethane	5.00	ND	5.92	118	64-138	
Ethylbenzene	5.00	ND	5.80	116	80-120	
Methyl tert-butyl ether	5.00	ND	5.45	109	69-120	
Methylene Chloride	5.00	ND	5.63	112	80-120	
Styrene	5.00	ND	5.42	108	80-120	
Tetrachloroethene	5.00	5.8	10.8	101	80-120	
Toluene	5.00	ND	5.76	115	80-120	
trans-1,2-Dichloroethene	5.00	ND	5.45	109	80-122	
trans-1,3-Dichloropropene	5.00	ND	6.44	129	61-129	
Trichloroethene	5.00	1.8	6.97	104	80-120	
Vinyl chloride	5.00	ND	6.11	122	60-125	
Xylenes, Total	15.0	ND	16.7	111	80-120	

# Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III  
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Matrix: Water Level: Low

Lab File ID: HD01X56.D

Lab ID: 410-106467-7 MS

Client ID: HD-COD-SW-16-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	ND	5.14	103	71-134	
1,1,1-Trichloroethane	5.00	0.10 J	5.82	114	78-126	
1,1,2,2-Tetrachloroethane	5.00	ND	4.73	94	75-123	
1,1,2-Trichloroethane	5.00	ND	5.08	101	80-120	
1,1-Dichloroethane	5.00	ND	5.66	113	74-120	
1,1-Dichloroethene	5.00	ND	6.03	120	80-131	
1,2-Dibromoethane (EDB)	5.00	ND	5.19	104	80-120	
1,2-Dichloroethane	5.00	ND	5.94	119	69-122	
1,2-Dichloropropane	5.00	ND	5.52	110	80-120	
2-Butanone (MEK)	62.6	ND	77.0	123	59-141	
2-Hexanone	62.6	ND	81.4	130	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	ND	79.3	127	55-140	
Acetone	62.6	1.9 J	64.3	100	60-146	
Benzene	5.00	ND	5.58	112	80-120	
Bromochloromethane	5.00	ND	5.36	107	80-120	
Bromodichloromethane	5.00	ND	5.53	111	73-124	
Bromoform	5.00	ND	4.70	94	49-144	
Bromomethane	5.00	ND	5.23	105	60-136	
Carbon disulfide	5.00	ND	6.03	121	67-130	
Carbon tetrachloride	5.00	ND	5.75	115	64-141	
Chlorobenzene	5.00	ND	5.16	103	80-120	
Chloroethane	5.00	ND	5.62	112	63-120	
Chloroform	5.00	ND	5.65	113	80-120	
Chloromethane	5.00	ND	5.90	118	80-120	
cis-1,2-Dichloroethene	5.00	0.21 J	5.81	112	80-122	
cis-1,3-Dichloropropene	5.00	ND	5.36	107	67-121	
Dibromochloromethane	5.00	ND	4.97	99	64-138	
Ethylbenzene	5.00	ND	5.21	104	80-120	
Methyl tert-butyl ether	5.00	ND	5.51	110	69-120	
Methylene Chloride	5.00	ND	5.57	111	80-120	
Styrene	5.00	ND	5.22	104	80-120	
Tetrachloroethene	5.00	1.5	6.66	103	80-120	
Toluene	5.00	0.13 J	5.29	103	80-120	
trans-1,2-Dichloroethene	5.00	ND	5.67	113	80-122	
trans-1,3-Dichloropropene	5.00	ND	5.31	106	61-129	
Trichloroethene	5.00	0.21 J	5.77	111	80-120	
Vinyl chloride	5.00	ND	5.69	114	60-125	
Xylenes, Total	15.0	ND	15.5	104	80-120	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Matrix: Water Level: Low

Lab File ID: GD01X13.D

Lab ID: 410-106467-6 MSD

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

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1,2-Tetrachloroethane	5.00	5.69	114	0	30	71-134	
1,1,1-Trichloroethane	5.00	6.11	113	1	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.91	118	0	30	75-123	
1,1,2-Trichloroethane	5.00	5.48	109	2	30	80-120	
1,1-Dichloroethane	5.00	6.18	120	1	30	74-120	
1,1-Dichloroethene	5.00	6.23	120	0	30	80-131	
1,2-Dibromoethane (EDB)	5.00	5.26	105	1	30	80-120	
1,2-Dichloroethane	5.00	5.41	108	0	30	69-122	
1,2-Dichloropropane	5.00	6.05	121	0	30	80-120	FH
2-Butanone (MEK)	62.6	68.3	109	15	30	59-141	
2-Hexanone	62.6	69.9	112	16	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	69.5	111	15	30	55-140	
Acetone	62.6	60.1	96	14	30	60-146	
Benzene	5.00	5.75	115	0	30	80-120	
Bromochloromethane	5.00	5.02	100	1	30	80-120	
Bromodichloromethane	5.00	5.78	116	2	30	73-124	
Bromoform	5.00	6.02	120	0	30	49-144	
Bromomethane	5.00	5.16	103	3	30	60-136	
Carbon disulfide	5.00	8.10	162	1	30	67-130	FH
Carbon tetrachloride	5.00	5.84	117	1	30	64-141	
Chlorobenzene	5.00	5.34	107	0	30	80-120	
Chloroethane	5.00	6.03	121	5	30	63-120	FH
Chloroform	5.00	5.79	109	0	30	80-120	
Chloromethane	5.00	6.62	132	6	30	80-120	FH
cis-1,2-Dichloroethene	5.00	7.82	112	0	30	80-122	
cis-1,3-Dichloropropene	5.00	5.55	111	0	30	67-121	
Dibromochloromethane	5.00	5.91	118	0	30	64-138	
Ethylbenzene	5.00	5.76	115	1	30	80-120	
Methyl tert-butyl ether	5.00	5.44	109	0	30	69-120	
Methylene Chloride	5.00	5.68	113	1	30	80-120	
Styrene	5.00	5.42	108	0	30	80-120	
Tetrachloroethene	5.00	10.9	102	1	30	80-120	
Toluene	5.00	5.83	116	1	30	80-120	
trans-1,2-Dichloroethene	5.00	5.52	110	1	30	80-122	
trans-1,3-Dichloropropene	5.00	6.39	128	1	30	61-129	
Trichloroethene	5.00	6.97	104	0	30	80-120	
Vinyl chloride	5.00	6.41	128	5	30	60-125	FH
Xylenes, Total	15.0	16.7	111	0	30	80-120	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Matrix: Water Level: Low

Lab File ID: HD01X57.D

Lab ID: 410-106467-7 MSD

Client ID: HD-COD-SW-16-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1,2-Tetrachloroethane	5.00	5.10	102	1	30	71-134	
1,1,1-Trichloroethane	5.00	5.97	117	3	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.15	103	9	30	75-123	
1,1,2-Trichloroethane	5.00	5.20	104	2	30	80-120	
1,1-Dichloroethane	5.00	5.73	115	1	30	74-120	
1,1-Dichloroethene	5.00	6.03	121	0	30	80-131	
1,2-Dibromoethane (EDB)	5.00	5.36	107	3	30	80-120	
1,2-Dichloroethane	5.00	6.00	120	1	30	69-122	
1,2-Dichloropropane	5.00	5.64	113	2	30	80-120	
2-Butanone (MEK)	62.6	68.8	110	11	30	59-141	
2-Hexanone	62.6	70.9	113	14	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	68.2	109	15	30	55-140	
Acetone	62.6	58.6	91	9	30	60-146	
Benzene	5.00	5.72	114	3	30	80-120	
Bromochloromethane	5.00	5.58	112	4	30	80-120	
Bromodichloromethane	5.00	5.66	113	2	30	73-124	
Bromoform	5.00	4.93	99	5	30	49-144	
Bromomethane	5.00	5.42	108	4	30	60-136	
Carbon disulfide	5.00	6.10	122	1	30	67-130	
Carbon tetrachloride	5.00	5.92	118	3	30	64-141	
Chlorobenzene	5.00	5.35	107	4	30	80-120	
Chloroethane	5.00	5.79	116	3	30	63-120	
Chloroform	5.00	5.73	114	1	30	80-120	
Chloromethane	5.00	6.32	126	7	30	80-120	FH
cis-1,2-Dichloroethene	5.00	5.91	114	2	30	80-122	
cis-1,3-Dichloropropene	5.00	5.42	108	1	30	67-121	
Dibromochloromethane	5.00	5.12	102	3	30	64-138	
Ethylbenzene	5.00	5.36	107	3	30	80-120	
Methyl tert-butyl ether	5.00	5.57	111	1	30	69-120	
Methylene Chloride	5.00	5.66	113	2	30	80-120	
Styrene	5.00	5.35	107	2	30	80-120	
Tetrachloroethene	5.00	6.70	104	1	30	80-120	
Toluene	5.00	5.34	104	1	30	80-120	
trans-1,2-Dichloroethene	5.00	5.69	114	0	30	80-122	
trans-1,3-Dichloropropene	5.00	5.41	108	2	30	61-129	
Trichloroethene	5.00	5.79	111	0	30	80-120	
Vinyl chloride	5.00	6.18	123	8	30	60-125	
Xylenes, Total	15.0	16.0	106	3	30	80-120	

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-106467-1  
Environment Testing, LLC

SDG No.: \_\_\_\_\_

Lab File ID: GD01X05.D Lab Sample ID: MB 410-322544/6

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

Instrument ID: 16334 Date Analyzed: 12/01/2022 11:41

GC Column: R-624SilMS 30m ID: 0.25 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-322544/4	GD01X03.D	12/01/2022 10:56
HD-COD-SW-6-0/1-0	410-106467-1	GD01X06.D	12/01/2022 12:03
HD-COD-SW-7-0/1-0	410-106467-2	GD01X07.D	12/01/2022 12:25
HD-COD-SW-8-0/1-0	410-106467-3	GD01X08.D	12/01/2022 12:48
HD-COD-SW-9-0/1-0	410-106467-4	GD01X09.D	12/01/2022 13:10
HD-COD-SW-13-0/1-0	410-106467-5	GD01X10.D	12/01/2022 13:32
HD-COD-SW-15-0/1-0	410-106467-6	GD01X11.D	12/01/2022 13:54
HD-COD-SW-15-0/1-0 MS MS	410-106467-6 MS	GD01X12.D	12/01/2022 14:16
HD-COD-SW-15-0/1-0 MSD MSD	410-106467-6 MSD	GD01X13.D	12/01/2022 14:38

FORM IV  
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-106467-1  
Environment Testing, LLC

SDG No.: \_\_\_\_\_

Lab File ID: HD01X35.D Lab Sample ID: MB 410-322841/6

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

Instrument ID: 19094 Date Analyzed: 12/01/2022 21:36

GC Column: R-624SilMS 30m ID: 0.25 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-322841/4	HD01X33.D	12/01/2022 20:55
HD-QC1-0/1-2	410-106467-14	HD01X40.D	12/01/2022 23:17
HD-COD-SW-16-0/1-0	410-106467-7	HD01X42.D	12/01/2022 23:58
HD-COD-SW-17-0/1-0	410-106467-8	HD01X43.D	12/02/2022 00:18
HD-COD-SW-26-0/1-0	410-106467-9	HD01X44.D	12/02/2022 00:38
HD-COD-SW-27-0/1-0	410-106467-10	HD01X45.D	12/02/2022 00:59
HD-COD-SW-28-0/1-0	410-106467-11	HD01X46.D	12/02/2022 01:19
HD-COD-SW-29-0/1-0	410-106467-12	HD01X47.D	12/02/2022 01:39
HD-QC1-0/1-1	410-106467-13	HD01X48.D	12/02/2022 02:00
HD-COD-SW-16-0/1-0 MS	410-106467-7 MS	HD01X56.D	12/02/2022 04:42
HD-COD-SW-16-0/1-0 MSD	410-106467-7 MSD	HD01X57.D	12/02/2022 05:02



FORM IV  
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Lab File ID: HD02X05.D

Lab Sample ID: MB 410-322942/6

Matrix: Water

Heated Purge: (Y/N) N

Instrument ID: 19094

Date Analyzed: 12/02/2022 10:55

GC Column: R-624SilMS 30m ID: 0.25 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-322942/4	HD02X03.D	12/02/2022 10:14
HD-COD-SW-17-0/1-0 DL	410-106467-8 DL	HD02X31.D	12/02/2022 19:43
HD-QC1-0/1-1 DL	410-106467-13 DL	HD02X32.D	12/02/2022 20:04

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

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab File ID: GG16T01.D BFB Injection Date: 08/16/2022

Instrument ID: 16334 BFB Injection Time: 13:07

Analysis Batch No.: 286414

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.6	
75	30.0 - 60.0 % of mass 95	44.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	96.9	
175	5.0 - 9.0 % of mass 174	7.4	(7.7) 1
176	95.0 - 101.0 % of mass 174	95.5	(98.6) 1
177	5.0 - 9.0 % of mass 176	6.1	(6.4) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-286414/13	GG16X12.D	08/16/2022	17:26
	IC 410-286414/14	GG16X13.D	08/16/2022	17:48
	IC 410-286414/15	GG16X14.D	08/16/2022	18:10
	IC 410-286414/16	GG16X15.D	08/16/2022	18:32
	IC 410-286414/17	GG16X16.D	08/16/2022	18:54
	ICIS 410-286414/18	GG16X17.D	08/16/2022	19:17
	IC 410-286414/19	GG16X18.D	08/16/2022	19:38
	ICV 410-286414/21	GG16X20.D	08/16/2022	20:22

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

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab File ID: GD01T01.D BFB Injection Date: 12/01/2022

Instrument ID: 16334 BFB Injection Time: 09:58

Analysis Batch No.: 322544

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	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	83.1	
175	5.0 - 9.0 % of mass 174	6.8	(8.1) 1
176	95.0 - 101.0 % of mass 174	83.0	(99.9) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.4) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-322544/3	GD01X02.D	12/01/2022	10:33
	LCS 410-322544/4	GD01X03.D	12/01/2022	10:56
	MB 410-322544/6	GD01X05.D	12/01/2022	11:41
HD-COD-SW-6-0/1-0	410-106467-1	GD01X06.D	12/01/2022	12:03
HD-COD-SW-7-0/1-0	410-106467-2	GD01X07.D	12/01/2022	12:25
HD-COD-SW-8-0/1-0	410-106467-3	GD01X08.D	12/01/2022	12:48
HD-COD-SW-9-0/1-0	410-106467-4	GD01X09.D	12/01/2022	13:10
HD-COD-SW-13-0/1-0	410-106467-5	GD01X10.D	12/01/2022	13:32
HD-COD-SW-15-0/1-0	410-106467-6	GD01X11.D	12/01/2022	13:54
HD-COD-SW-15-0/1-0 MS MS	410-106467-6 MS	GD01X12.D	12/01/2022	14:16
HD-COD-SW-15-0/1-0 MSD MSD	410-106467-6 MSD	GD01X13.D	12/01/2022	14:38

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

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab File ID: HL11T03.D BFB Injection Date: 07/11/2022

Instrument ID: 19094 BFB Injection Time: 13:17

Analysis Batch No.: 274149

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.2	
75	30.0 - 60.0 % of mass 95	45.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	1.0	(1.2) 1
174	Greater than 50% of mass 95	86.4	
175	5.0 - 9.0 % of mass 174	6.4	(7.4) 1
176	95.0 - 101.0 % of mass 174	83.6	(96.8) 1
177	5.0 - 9.0 % of mass 176	5.9	(7.0) 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 410-274149/12	HL11X12.D	07/11/2022	16:51
	ICIS 410-274149/13	HL11X13.D	07/11/2022	17:11
	IC 410-274149/14	HL11X14.D	07/11/2022	17:31
	IC 410-274149/15	HL11X15.D	07/11/2022	17:51
	IC 410-274149/16	HL11X16.D	07/11/2022	18:11
	IC 410-274149/17	HL11X17.D	07/11/2022	18:32
	IC 410-274149/18	Copy_HL11X18.D	07/11/2022	18:52

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

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab File ID: copy\_HL14T01.D BFB Injection Date: 07/14/2022

Instrument ID: 19094 BFB Injection Time: 19:09

Analysis Batch No.: 275687

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.2	
75	30.0 - 60.0 % of mass 95	45.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	1.0	(1.3) 1
174	Greater than 50% of mass 95	80.0	
175	5.0 - 9.0 % of mass 174	6.3	(7.9) 1
176	95.0 - 101.0 % of mass 174	78.2	(97.7) 1
177	5.0 - 9.0 % of mass 176	4.9	(6.2) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICV 410-275687/4	copy_HL14X03.D	07/14/2022	20:04

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

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab File ID: HD01T05.D BFB Injection Date: 12/01/2022

Instrument ID: 19094 BFB Injection Time: 20:00

Analysis Batch No.: 322841

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.2
75	30.0 - 60.0 % of mass 95	46.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.5
173	Less than 2.0 % of mass 174	0.1 (0.1) 1
174	Greater than 50% of mass 95	89.2
175	5.0 - 9.0 % of mass 174	6.6 (7.4) 1
176	95.0 - 101.0 % of mass 174	87.0 (97.6) 1
177	5.0 - 9.0 % of mass 176	6.0 (6.9) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-322841/3	HD01X32.D	12/01/2022	20:35
	LCS 410-322841/4	HD01X33.D	12/01/2022	20:55
	MB 410-322841/6	HD01X35.D	12/01/2022	21:36
HD-QC1-0/1-2	410-106467-14	HD01X40.D	12/01/2022	23:17
HD-COD-SW-16-0/1-0	410-106467-7	HD01X42.D	12/01/2022	23:58
HD-COD-SW-17-0/1-0	410-106467-8	HD01X43.D	12/02/2022	0:18
HD-COD-SW-26-0/1-0	410-106467-9	HD01X44.D	12/02/2022	0:38
HD-COD-SW-27-0/1-0	410-106467-10	HD01X45.D	12/02/2022	0:59
HD-COD-SW-28-0/1-0	410-106467-11	HD01X46.D	12/02/2022	1:19
HD-COD-SW-29-0/1-0	410-106467-12	HD01X47.D	12/02/2022	1:39
HD-QC1-0/1-1	410-106467-13	HD01X48.D	12/02/2022	2:00
HD-COD-SW-16-0/1-0 MS	410-106467-7 MS	HD01X56.D	12/02/2022	4:42
HD-COD-SW-16-0/1-0 MSD	410-106467-7 MSD	HD01X57.D	12/02/2022	5:02

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

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab File ID: HD02T01.D BFB Injection Date: 12/02/2022

Instrument ID: 19094 BFB Injection Time: 09:21

Analysis Batch No.: 322942

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	48.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.0
173	Less than 2.0 % of mass 174	0.6 (0.7) 1
174	Greater than 50% of mass 95	83.8
175	5.0 - 9.0 % of mass 174	6.1 (7.2) 1
176	95.0 - 101.0 % of mass 174	84.1 (100.4) 1
177	5.0 - 9.0 % of mass 176	5.6 (6.7) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-322942/3	HD02X02.D	12/02/2022	9:54
	LCS 410-322942/4	HD02X03.D	12/02/2022	10:14
	MB 410-322942/6	HD02X05.D	12/02/2022	10:55
HD-COD-SW-17-0/1-0 DL	410-106467-8 DL	HD02X31.D	12/02/2022	19:43
HD-QC1-0/1-1 DL	410-106467-13 DL	HD02X32.D	12/02/2022	20:04

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

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: ICIS 410-286414/18 Date Analyzed: 08/16/2022 19:17  
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25(mm)  
 Lab File ID (Standard): GG16X17.D Heated Purge: (Y/N) N  
 Calibration ID: 41911

	TBAd10		FB		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	142576	4.11	2328270	7.56	1837007	11.07
UPPER LIMIT	285152	4.61	4656540	8.06	3674014	11.57
LOWER LIMIT	71288	3.61	1164135	7.06	918504	10.57
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-286414/21	132771	4.12	2350459	7.56	1861581	11.07
CCVIS 410-322544/3	192332	4.15	2841106	7.57	2099895	11.07

TBAd10 = t-Butyl alcohol-d10 (IS)  
 FB = Fluorobenzene (IS)  
 CBZd5 = Chlorobenzene-d5 (IS)

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  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: ICIS 410-286414/18 Date Analyzed: 08/16/2022 19:17  
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 Lab File ID (Standard): GG16X17.D Heated Purge: (Y/N) N  
 Calibration ID: 41911

	DCBd4		#	RT #	#	RT #
	AREA #	RT #				
INITIAL CALIBRATION MID-POINT	1096296	12.96				
UPPER LIMIT	2192592	13.46				
LOWER LIMIT	548148	12.46				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-286414/21		1110282	12.96			
CCVIS 410-322544/3		1228728	12.94			

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  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 410-322544/3 Date Analyzed: 12/01/2022 10:33  
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 Lab File ID (Standard): GD01X02.D Heated Purge: (Y/N) N  
 Calibration ID: 41911

	TBAd10		FB		CBZd5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	192332	4.15	2841106	7.57	2099895	11.07	
UPPER LIMIT	384664	4.65	5682212	8.07	4199790	11.57	
LOWER LIMIT	96166	3.65	1420553	7.07	1049948	10.57	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-322544/4		209969	4.14	2959344	7.57	2202920	11.07
MB 410-322544/6		168326	4.15	2751700	7.57	2045209	11.07
410-106467-1	HD-COD-SW-6-0/1-0	174099	4.16	2851922	7.57	2123005	11.07
410-106467-2	HD-COD-SW-7-0/1-0	178423	4.12	2613736	7.57	1945173	11.07
410-106467-3	HD-COD-SW-8-0/1-0	166269	4.15	2617949	7.57	1959105	11.07
410-106467-4	HD-COD-SW-9-0/1-0	179546	4.15	2676750	7.57	2010430	11.07
410-106467-5	HD-COD-SW-13-0/1-0	186383	4.15	2730305	7.57	2036471	11.07
410-106467-6	HD-COD-SW-15-0/1-0	139131	4.15	2543608	7.57	1910026	11.07
410-106467-6 MS	HD-COD-SW-15-0/1-0 MS MS	161420	4.15	2855309	7.57	2095988	11.07
410-106467-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	186651	4.12	2833276	7.57	2085625	11.07

TBAd10 = t-Butyl alcohol-d10 (IS)  
 FB = Fluorobenzene (IS)  
 CBZd5 = Chlorobenzene-d5 (IS)

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  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 410-322544/3 Date Analyzed: 12/01/2022 10:33  
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 Lab File ID (Standard): GD01X02.D Heated Purge: (Y/N) N  
 Calibration ID: 41911

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		1228728	12.94				
UPPER LIMIT		2457456	13.44				
LOWER LIMIT		614364	12.44				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-322544/4		1279644	12.94				
MB 410-322544/6		1175527	12.94				
410-106467-1	HD-COD-SW-6-0/1-0	1194688	12.94				
410-106467-2	HD-COD-SW-7-0/1-0	1116934	12.94				
410-106467-3	HD-COD-SW-8-0/1-0	1092403	12.94				
410-106467-4	HD-COD-SW-9-0/1-0	1122550	12.94				
410-106467-5	HD-COD-SW-13-0/1-0	1154237	12.94				
410-106467-6	HD-COD-SW-15-0/1-0	1059164	12.94				
410-106467-6 MS	HD-COD-SW-15-0/1-0 MS	1225896	12.94				
410-106467-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	1214066	12.94				

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  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: ICIS 410-274149/13 Date Analyzed: 07/11/2022 17:11  
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25(mm)  
 Lab File ID (Standard): HL11X13.D Heated Purge: (Y/N) N  
 Calibration ID: 40553

	TBAd10		FB		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	101370	4.12	2081655	7.63	1866823	11.13
UPPER LIMIT	202740	4.62	4163310	8.13	3733646	11.63
LOWER LIMIT	50685	3.62	1040828	7.13	933412	10.63
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-275687/4	96858	4.13	2450189	7.63	1821571	11.13
CCVIS 410-322841/3	117538	4.12	2642938	7.64	2366200	11.12
CCVIS 410-322942/3	137214	4.15	2472527	7.64	2317479	11.12

TBAd10 = t-Butyl alcohol-d10 (IS)  
 FB = Fluorobenzene (IS)  
 CBZd5 = Chlorobenzene-d5 (IS)

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  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: ICIS 410-274149/13 Date Analyzed: 07/11/2022 17:11  
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 Lab File ID (Standard): HL11X13.D Heated Purge: (Y/N) N  
 Calibration ID: 40553

	DCBd4		#	RT #	#	RT #
	AREA #	RT #				
INITIAL CALIBRATION MID-POINT	1051287	13.02				
UPPER LIMIT	2102574	13.52				
LOWER LIMIT	525644	12.52				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-275687/4		981185	13.02			
CCVIS 410-322841/3		1360836	13.00			
CCVIS 410-322942/3		1355984	13.00			

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  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 410-322841/3 Date Analyzed: 12/01/2022 20:35  
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 Lab File ID (Standard): HD01X32.D Heated Purge: (Y/N) N  
 Calibration ID: 40553

	TBAd10		FB		CBZd5			
	AREA #	RT #	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	117538	4.12	2642938	7.64	2366200	11.12		
UPPER LIMIT	235076	4.62	5285876	8.14	4732400	11.62		
LOWER LIMIT	58769	3.62	1321469	7.14	1183100	10.62		
LAB SAMPLE ID	CLIENT SAMPLE ID							
LCS 410-322841/4			118345	4.16	2685124	7.64	2386307	11.12
MB 410-322841/6			129208	4.17	2577418	7.64	2333630	11.12
410-106467-14	HD-QC1-0/1-2		132767	4.15	2633578	7.64	2401119	11.12
410-106467-7	HD-COD-SW-16-0/1-0		162735	4.15	2556882	7.65	2332020	11.12
410-106467-8	HD-COD-SW-17-0/1-0		151908	4.15	2506075	7.65	2291483	11.12
410-106467-9	HD-COD-SW-26-0/1-0		155538	4.17	2522097	7.64	2310778	11.12
410-106467-10	HD-COD-SW-27-0/1-0		180597	4.17	2541411	7.64	2323474	11.12
410-106467-11	HD-COD-SW-28-0/1-0		171257	4.17	2557741	7.64	2343775	11.12
410-106467-12	HD-COD-SW-29-0/1-0		175675	4.16	2548906	7.65	2326050	11.12
410-106467-13	HD-QC1-0/1-1		157426	4.17	2538247	7.65	2350117	11.12
410-106467-7 MS	HD-COD-SW-16-0/1-0 MS		102669	4.12	2469198	7.65	2283773	11.12
410-106467-7 MSD	HD-COD-SW-16-0/1-0 MSD		128894	4.15	2550149	7.64	2366099	11.12

TBAd10 = t-Butyl alcohol-d10 (IS)  
 FB = Fluorobenzene (IS)  
 CBZd5 = Chlorobenzene-d5 (IS)

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  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 410-322841/3 Date Analyzed: 12/01/2022 20:35  
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 Lab File ID (Standard): HD01X32.D Heated Purge: (Y/N) N  
 Calibration ID: 40553

	DCBd4		#	RT #	#	RT #
	AREA #	RT #				
12/24 HOUR STD	1360836	13.00				
UPPER LIMIT	2721672	13.50				
LOWER LIMIT	680418	12.50				
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 410-322841/4		1370093	13.00			
MB 410-322841/6		1319947	13.00			
410-106467-14	HD-QC1-0/1-2	1357936	13.00			
410-106467-7	HD-COD-SW-16-0/1-0	1336839	13.00			
410-106467-8	HD-COD-SW-17-0/1-0	1287675	13.00			
410-106467-9	HD-COD-SW-26-0/1-0	1318617	13.00			
410-106467-10	HD-COD-SW-27-0/1-0	1337941	13.00			
410-106467-11	HD-COD-SW-28-0/1-0	1329924	13.00			
410-106467-12	HD-COD-SW-29-0/1-0	1344235	13.00			
410-106467-13	HD-QC1-0/1-1	1334973	13.00			
410-106467-7 MS	HD-COD-SW-16-0/1-0 MS	1359022	13.00			
410-106467-7 MSD	HD-COD-SW-16-0/1-0 MSD	1358449	13.00			

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  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 410-322942/3 Date Analyzed: 12/02/2022 09:54  
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25(mm)  
 Lab File ID (Standard): HD02X02.D Heated Purge: (Y/N) N  
 Calibration ID: 40553

	TBAd10		FB		CBZd5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	137214	4.15	2472527	7.64	2317479	11.12	
UPPER LIMIT	274428	4.65	4945054	8.14	4634958	11.62	
LOWER LIMIT	68607	3.65	1236264	7.14	1158740	10.62	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-322942/4	157952	4.14	2582509	7.64	2390859	11.12	
MB 410-322942/6	127929	4.15	2491608	7.64	2285105	11.12	
410-106467-8 DL	HD-COD-SW-17-0/1-0 DL	98661	4.11	2356926	7.64	2219604	11.12
410-106467-13 DL	HD-QC1-0/1-1 DL	114471	4.17	2407303	7.65	2254088	11.12

TBAd10 = t-Butyl alcohol-d10 (IS)  
 FB = Fluorobenzene (IS)  
 CBZd5 = Chlorobenzene-d5 (IS)

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  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 410-322942/3 Date Analyzed: 12/02/2022 09:54  
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 Lab File ID (Standard): HD02X02.D Heated Purge: (Y/N) N  
 Calibration ID: 40553

	DCBd4		#	RT #	#	RT #
	AREA #	RT #				
12/24 HOUR STD	1355984	13.00				
UPPER LIMIT	2711968	13.50				
LOWER LIMIT	677992	12.50				
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 410-322942/4		1389139	13.00			
MB 410-322942/6		1297612	13.00			
410-106467-8 DL	HD-COD-SW-17-0/1-0 DL	1255155	13.00			
410-106467-13 DL	HD-QC1-0/1-1 DL	1295995	13.00			

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 I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-1

Matrix: Water

Lab File ID: GD01X06.D

Analysis Method: 8260D

Date Collected: 11/18/2022 10:20

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 12:03

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	2.0	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND	^c cn	1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND	^c *+ cn	1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	^c cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-1

Matrix: Water

Lab File ID: GD01X06.D

Analysis Method: 8260D

Date Collected: 11/18/2022 10:20

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 12:03

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND	^c cn	0.50	0.080
79-01-6	Trichloroethene	ND		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	101		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	105		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X06.D  
 Lims ID: 410-106467-A-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 12:03:30 ALS Bottle#: 6 Worklist Smp#: 7  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-007  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:09:04 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongasawatp

Date: 02-Dec-2022 16:09:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.087				ND	U
6 Vinyl chloride	62		2.202				ND	
9 Bromomethane	94		2.519				ND	
10 Chloroethane	64		2.599				ND	
18 1,1-Dichloroethene	96		3.422				ND	
20 Acetone	43	3.501	3.477	0.024	97	17630	2.00	
23 Carbon disulfide	76		3.708				ND	7
29 Methylene Chloride	84		4.062				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.160	4.147	0.013	35	174099	50.0	
33 Methyl tert-butyl ether	73		4.458				ND	
34 trans-1,2-Dichloroethene	96		4.464				ND	
37 1,1-Dichloroethane	63		5.135				ND	
41 2-Butanone (MEK)	43		5.940				ND	
42 cis-1,2-Dichloroethene	96	5.995	5.970	0.025	75	3169	0.0404	
49 Chlorobromomethane	128		6.299				ND	
51 Chloroform	83	6.464	6.458	0.006	84	4757	0.0381	
\$ 52 Dibromofluoromethane (Surr)	113	6.677	6.671	0.006	93	697783	9.86	
53 1,1,1-Trichloroethane	97		6.677				ND	
56 Carbon tetrachloride	117		6.891				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.128	7.122	0.006	63	148133	9.85	
60 Benzene	78		7.159				ND	
61 1,2-Dichloroethane	62		7.226				ND	
* 64 Fluorobenzene (IS)	96	7.567	7.567	0.000	99	2851922	10.0	
68 Trichloroethene	95		8.043				ND	
70 1,2-Dichloropropane	63		8.378				ND	
76 Dichlorobromomethane	83		8.726				ND	
81 cis-1,3-Dichloropropene	75		9.280				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.463				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.598	9.597	0.001	94	2847203	10.5	
84 Toluene	92	9.677	9.671	0.006	97	6535	0.0355	
85 trans-1,3-Dichloropropene	75		9.933				ND	
106 1,1,2-Trichloroethane	97		10.140				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166		10.225				ND	7
109 2-Hexanone	43		10.359				ND	
111 Chlorodibromomethane	129		10.518				ND	
112 Ethylene Dibromide	107		10.628				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.067	11.067	0.000	86	2123005	10.0	
115 Chlorobenzene	112		11.091				ND	
117 1,1,1,2-Tetrachloroethane	131		11.176				ND	
116 Ethylbenzene	91		11.176				ND	7
S 118 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.292				ND	7
120 o-Xylene	106		11.627				ND	7
121 Styrene	104		11.640				ND	
122 Bromoform	173		11.792				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.067	12.066	0.001	90	1017697	10.1	
127 1,1,2,2-Tetrachloroethane	83		12.170				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.944	12.944	0.000	95	1194688	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

U - Marked Undetected

### Reagents:

MSV\_29\_826ISS\_00040

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X06.D

Injection Date: 01-Dec-2022 12:03:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: 410-106467-A-1

Lab Sample ID: 410-106467-1

Worklist Smp#: 7

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

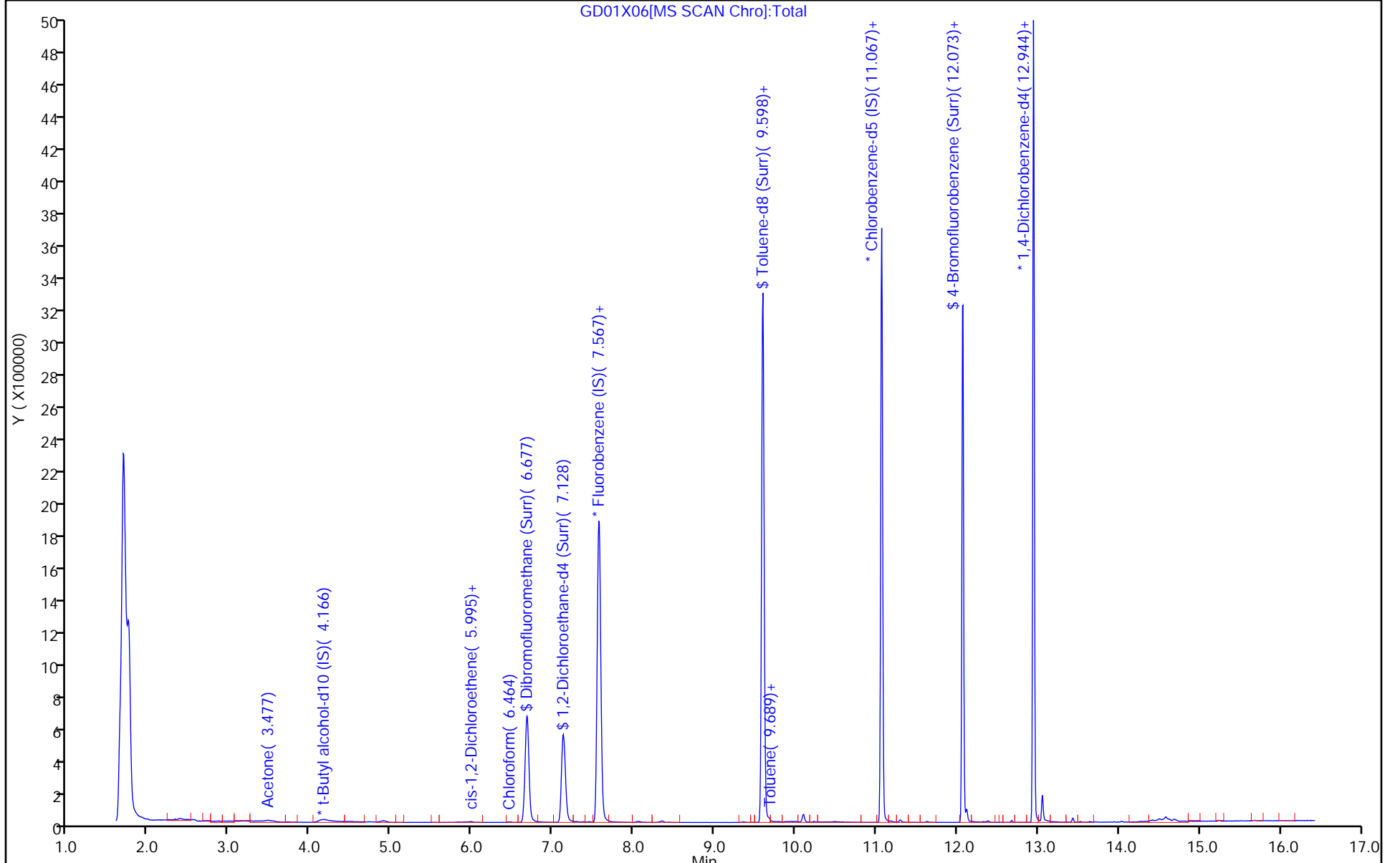
ALS Bottle#: 6

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X06.D  
 Lims ID: 410-106467-A-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 12:03:30 ALS Bottle#: 6 Worklist Smp#: 7  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-007  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:09:04 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongsawatp Date: 02-Dec-2022 16:09:04

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.86	98.55
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.85	98.51
\$ 83 Toluene-d8 (Surr)	10.0	10.5	104.72
\$ 126 4-Bromofluorobenzene (Surr)	10.0	10.1	100.56

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X06.D

Injection Date: 01-Dec-2022 12:03:30

Instrument ID: 16334

Lims ID: 410-106467-A-1

Lab Sample ID: 410-106467-1

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

Operator ID: knk41612

ALS Bottle#: 6

Worklist Smp#: 7

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

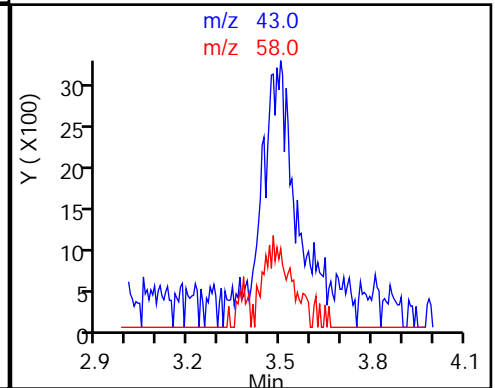
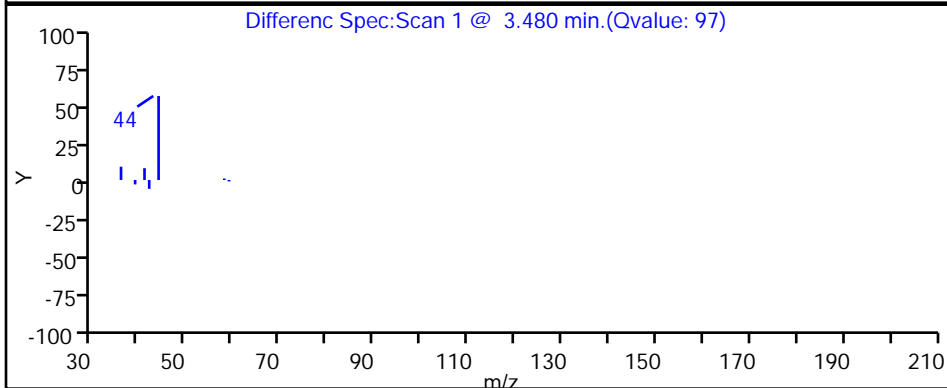
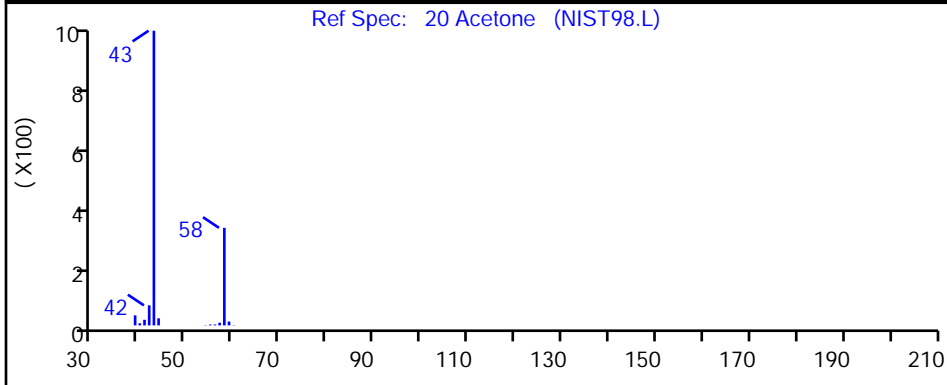
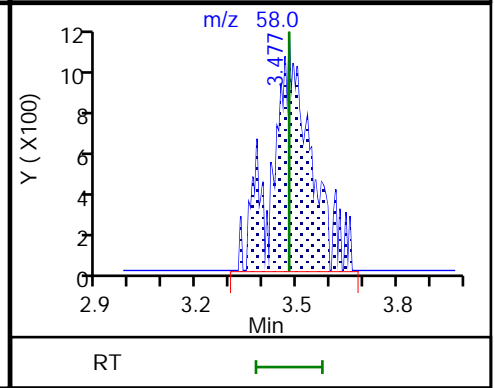
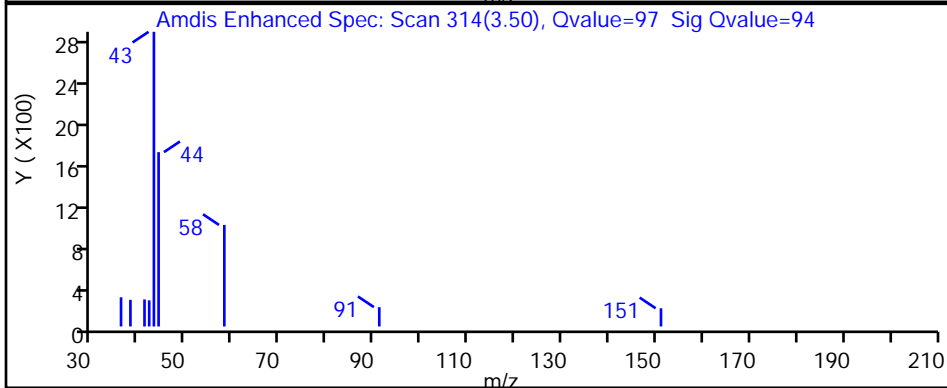
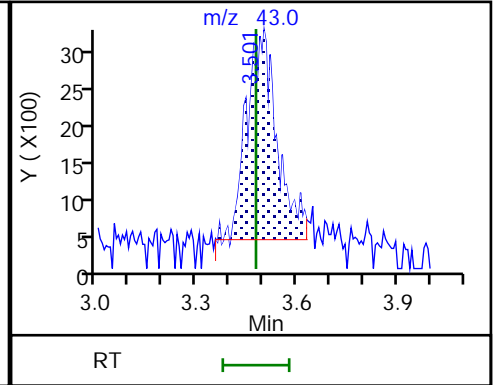
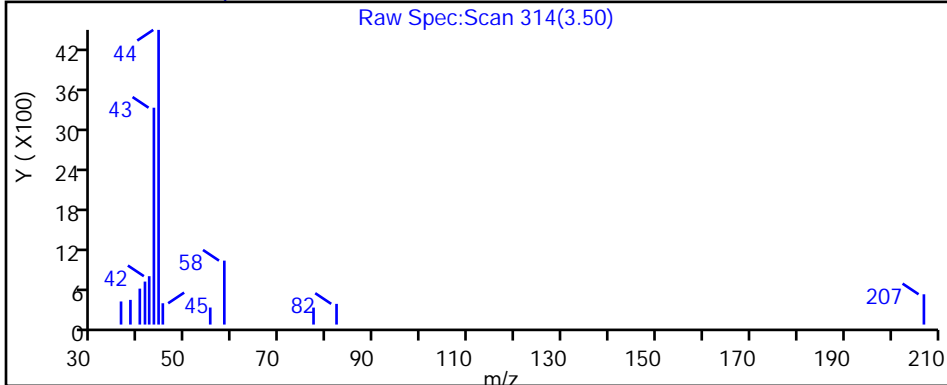
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

20 Acetone, CAS: 67-64-1



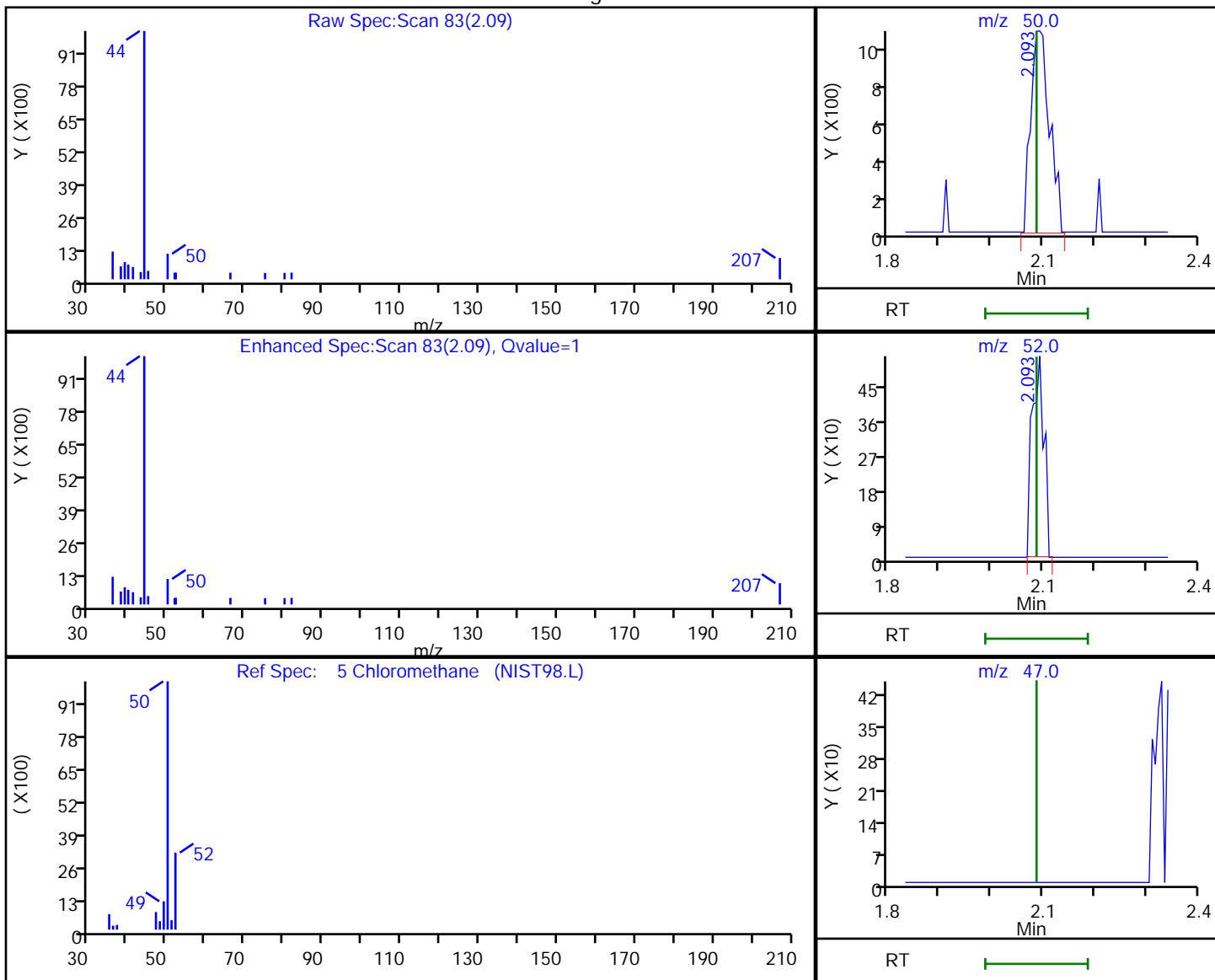


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X06.D  
Injection Date: 01-Dec-2022 12:03:30 Instrument ID: 16334  
Lims ID: 410-106467-A-1 Lab Sample ID: 410-106467-1  
Client ID: HD-COD-SW-6-0/1-0  
Operator ID: knk41612 ALS Bottle#: 6 Worklist Smp#: 7  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

### 5 Chloromethane, CAS: 74-87-3

#### Processing Results



RT	Mass	Response	Amount
2.09	50.00	2608	0.031229
2.09	52.00	851	
2.09	47.00	0	

Reviewer: pongawatp, 02-Dec-2022 16:08:46

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-2

Matrix: Water

Lab File ID: GD01X07.D

Analysis Method: 8260D

Date Collected: 11/18/2022 11:00

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 12:25

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	2.6	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND	^c cn	1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND	^c *+ cn	1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	0.11	J	0.50	0.090
74-87-3	Chloromethane	0.10	J ^c cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.18	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-2

Matrix: Water

Lab File ID: GD01X07.D

Analysis Method: 8260D

Date Collected: 11/18/2022 11:00

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 12:25

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-88-3	Toluene	ND		0.50	0.080
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND	^c cn	0.50	0.080
79-01-6	Trichloroethene	0.20	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	101		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	105		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X07.D  
 Lims ID: 410-106467-A-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 12:25:30 ALS Bottle#: 7 Worklist Smp#: 8  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-008  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:09:04 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongasawatp Date: 02-Dec-2022 16:09:47

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.081	2.087	-0.006	98	7974	0.1042	
6 Vinyl chloride	62		2.202				ND	7
9 Bromomethane	94		2.519				ND	7
10 Chloroethane	64		2.599				ND	
18 1,1-Dichloroethene	96		3.422				ND	
20 Acetone	43	3.483	3.477	0.006	90	23718	2.62	
23 Carbon disulfide	76	3.702	3.708	-0.006	97	10534	0.0767	
29 Methylene Chloride	84		4.062				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.123	4.147	-0.024	35	178423	50.0	
33 Methyl tert-butyl ether	73		4.458				ND	
34 trans-1,2-Dichloroethene	96		4.464				ND	
37 1,1-Dichloroethane	63		5.135				ND	
41 2-Butanone (MEK)	43		5.940				ND	
42 cis-1,2-Dichloroethene	96	5.976	5.970	0.006	79	12906	0.1796	
49 Chlorobromomethane	128		6.299				ND	
51 Chloroform	83	6.458	6.458	0.000	92	12211	0.1067	
\$ 52 Dibromofluoromethane (Surr)	113	6.677	6.671	0.006	93	654462	10.1	
53 1,1,1-Trichloroethane	97		6.677				ND	
56 Carbon tetrachloride	117		6.891				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.128	7.122	0.006	63	140272	10.2	
60 Benzene	78		7.159				ND	7
61 1,2-Dichloroethane	62		7.226				ND	
* 64 Fluorobenzene (IS)	96	7.567	7.567	0.000	99	2613736	10.0	
68 Trichloroethene	95	8.049	8.043	0.006	96	14817	0.2028	
70 1,2-Dichloropropane	63		8.378				ND	
76 Dichlorobromomethane	83		8.726				ND	7
81 cis-1,3-Dichloropropene	75		9.280				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.463				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.597	9.597	0.000	94	2613314	10.5	
84 Toluene	92	9.677	9.671	0.006	96	7279	0.0431	
85 trans-1,3-Dichloropropene	75		9.933				ND	
106 1,1,2-Trichloroethane	97		10.140				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.232	10.225	0.007	95	7971	0.0938	
109 2-Hexanone	43		10.359				ND	
111 Chlorodibromomethane	129		10.518				ND	
112 Ethylene Dibromide	107		10.628				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.067	11.067	0.000	86	1945173	10.0	
115 Chlorobenzene	112		11.091				ND	
117 1,1,1,2-Tetrachloroethane	131		11.176				ND	
116 Ethylbenzene	91		11.176				ND	7
S 118 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.292				ND	7
120 o-Xylene	106		11.627				ND	7
121 Styrene	104		11.640				ND	
122 Bromoform	173		11.792				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.067	12.066	0.000	90	932691	10.1	
127 1,1,2,2-Tetrachloroethane	83		12.170				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.944	12.944	0.000	95	1116934	10.0	

**QC Flag Legend**

Processing Flags

7 - Failed Limit of Detection

**Reagents:**

MSV\_29\_826ISS\_00040

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X07.D

Injection Date: 01-Dec-2022 12:25:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: 410-106467-A-2

Lab Sample ID: 410-106467-2

Worklist Smp#: 8

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

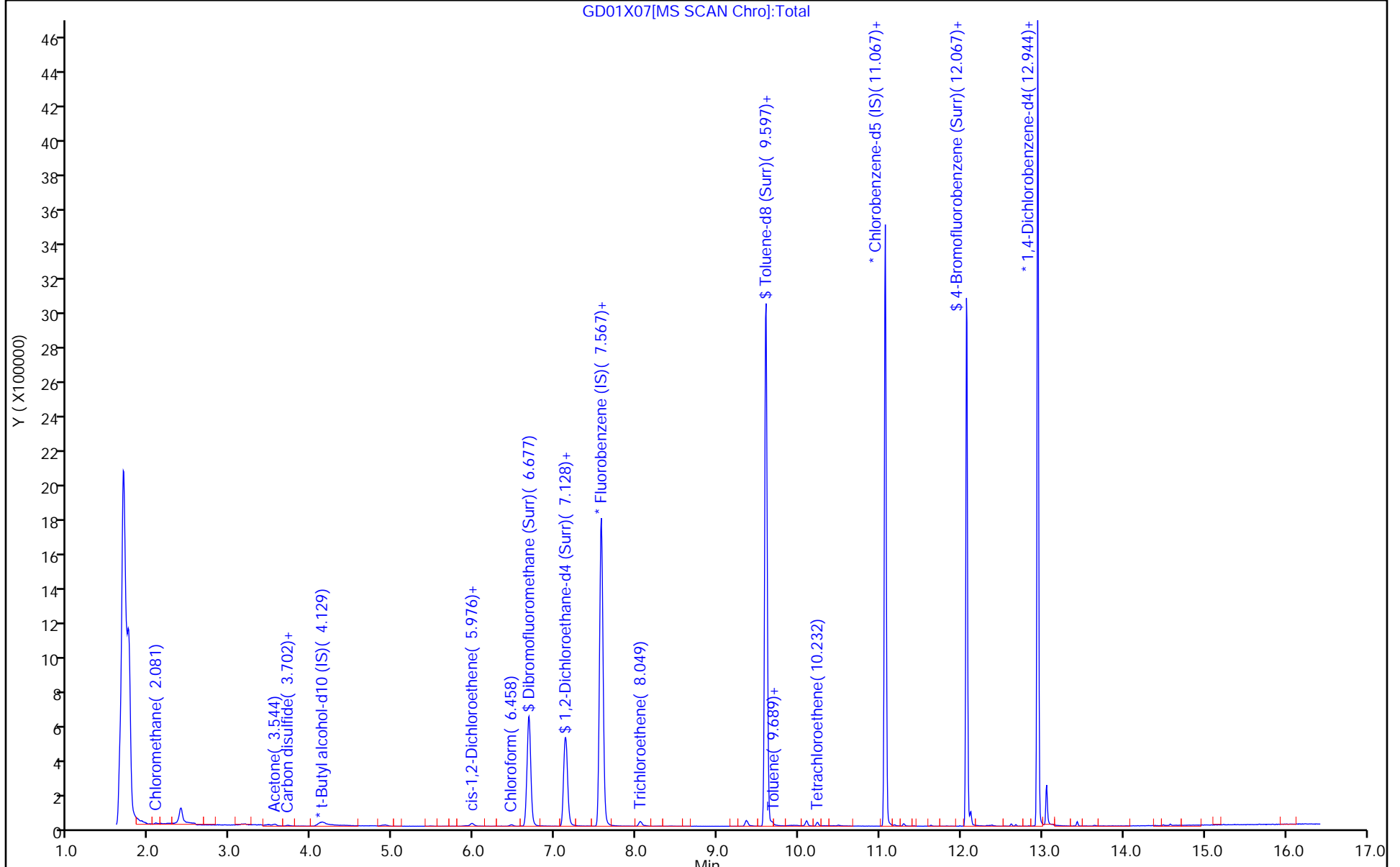
ALS Bottle#: 7

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X07.D  
 Lims ID: 410-106467-A-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 12:25:30 ALS Bottle#: 7 Worklist Smp#: 8  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-008  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:09:04 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongsawatp

Date: 02-Dec-2022 16:09:47

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.1	100.86
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.78
\$ 83 Toluene-d8 (Surr)	10.0	10.5	104.91
\$ 126 4-Bromofluorobenzene (Surr)	10.0	10.1	100.59

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X07.D

Injection Date: 01-Dec-2022 12:25:30

Instrument ID: 16334

Lims ID: 410-106467-A-2

Lab Sample ID: 410-106467-2

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

Operator ID: knk41612

ALS Bottle#: 7

Worklist Smp#: 8

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

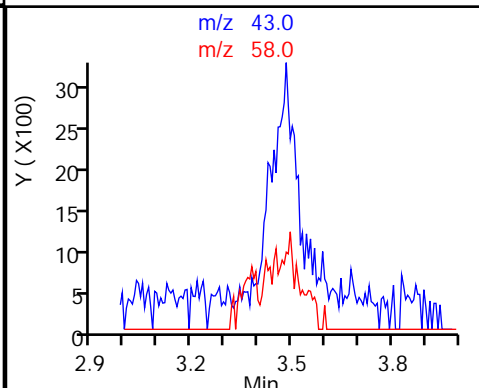
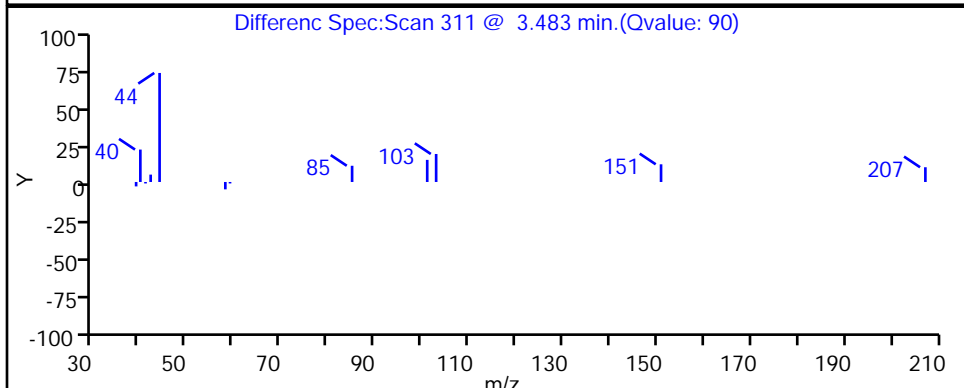
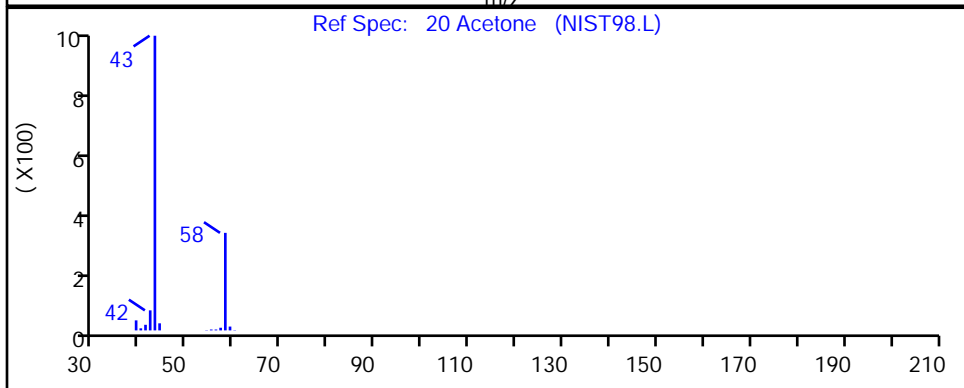
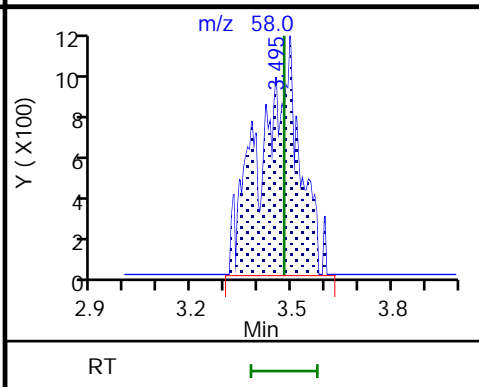
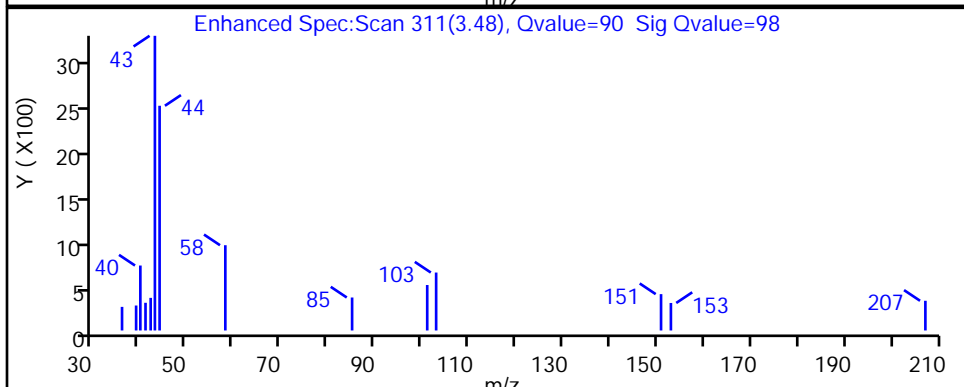
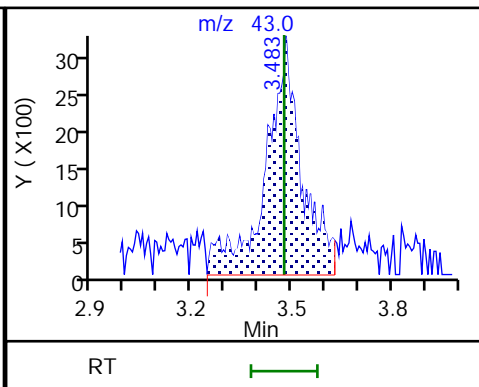
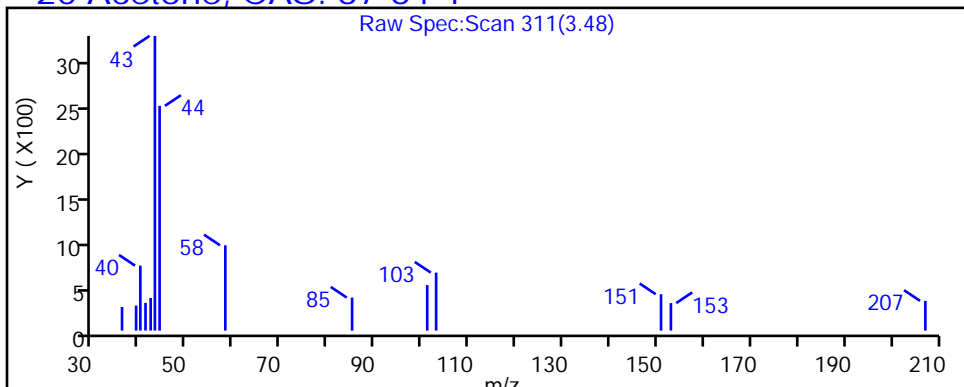
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

20 Acetone, CAS: 67-64-1





Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X07.D

Injection Date: 01-Dec-2022 12:25:30

Instrument ID: 16334

Lims ID: 410-106467-A-2

Lab Sample ID: 410-106467-2

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

Operator ID: knk41612

ALS Bottle#: 7

Worklist Smp#: 8

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

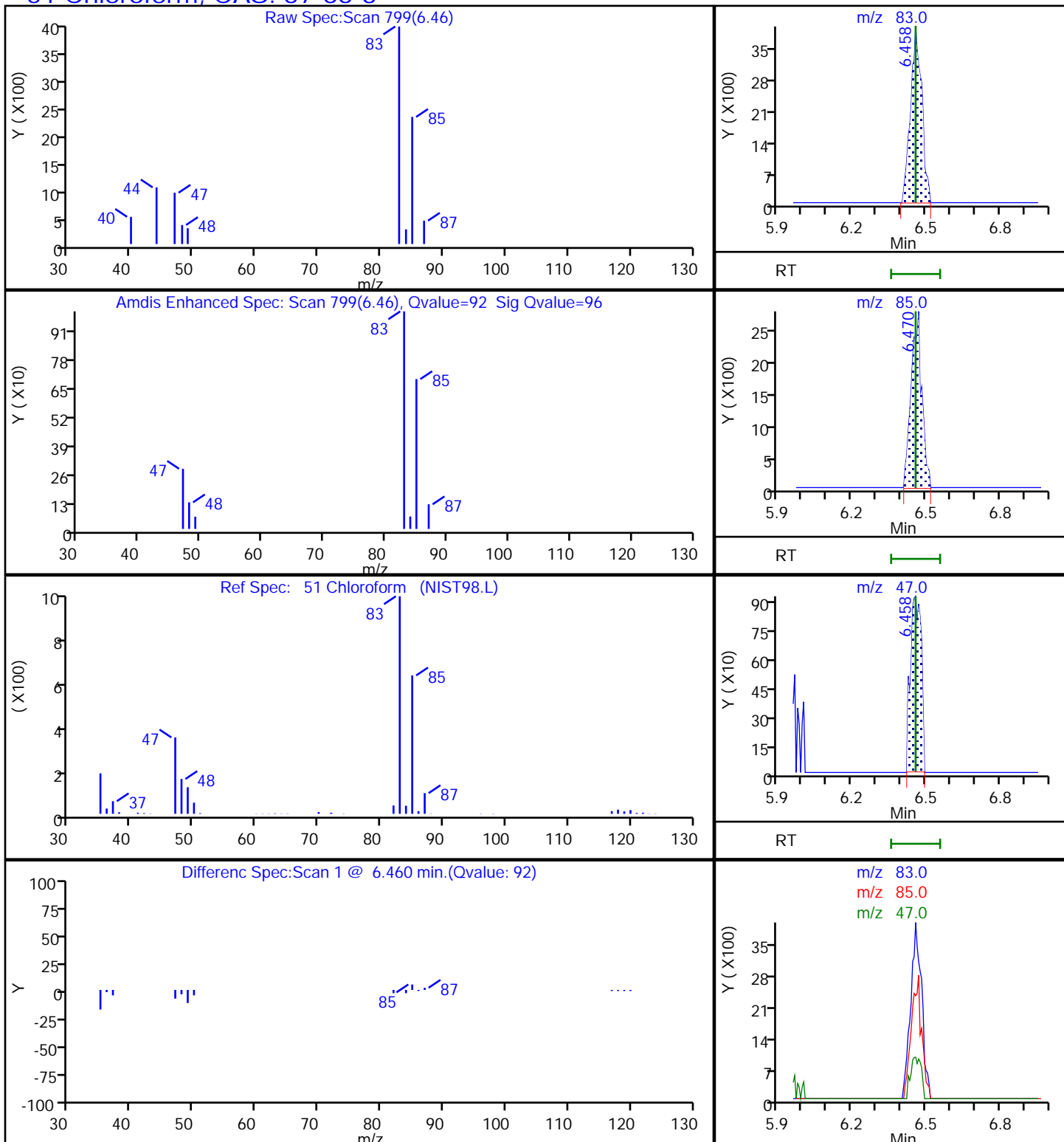
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

51 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X07.D

Injection Date: 01-Dec-2022 12:25:30

Instrument ID: 16334

Lims ID: 410-106467-A-2

Lab Sample ID: 410-106467-2

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

Operator ID: knk41612

ALS Bottle#: 7

Worklist Smp#: 8

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

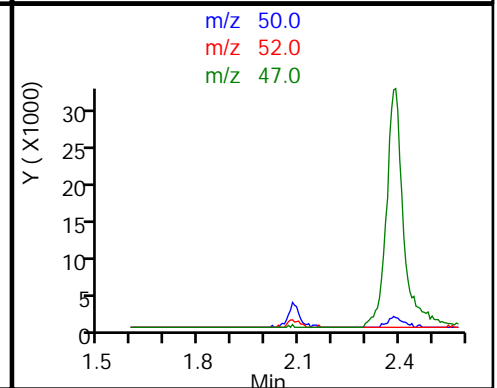
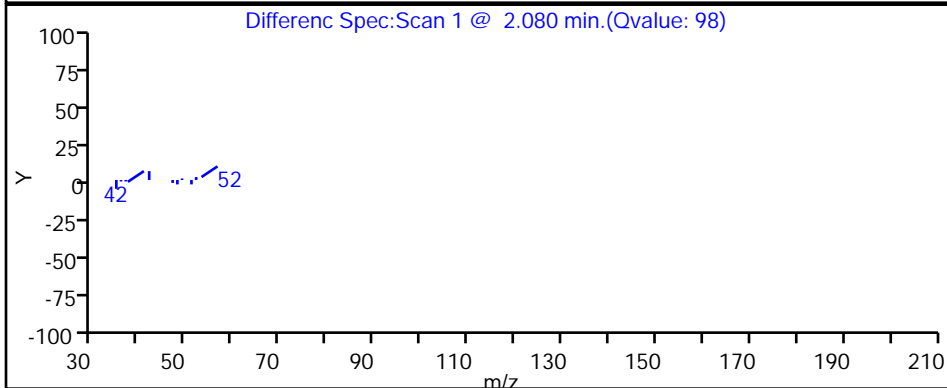
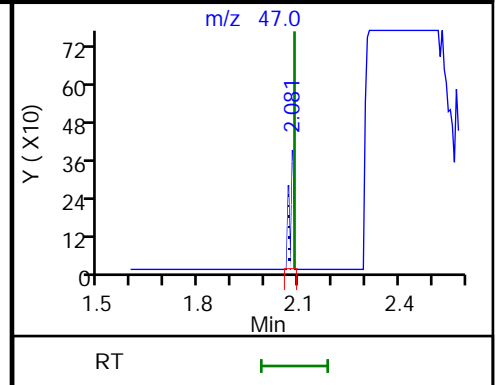
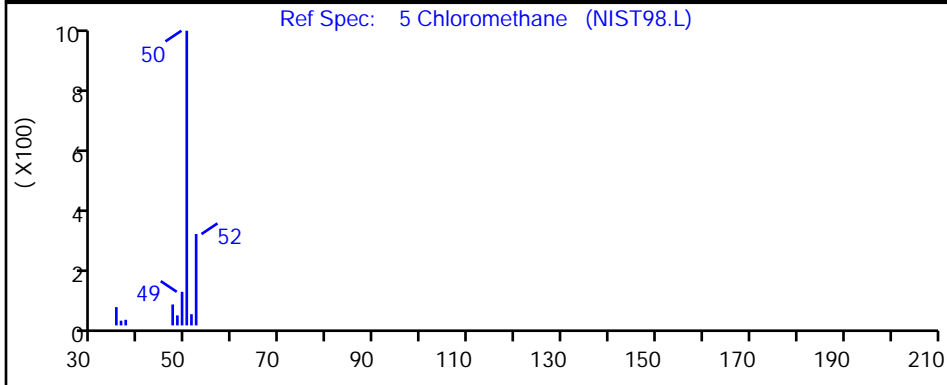
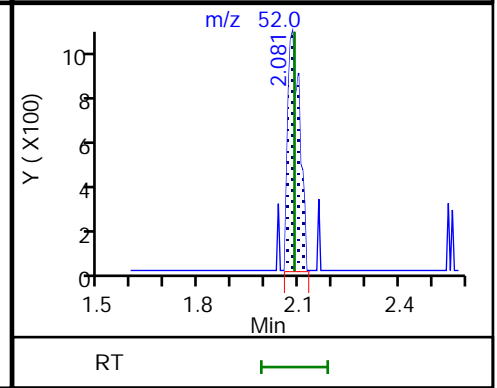
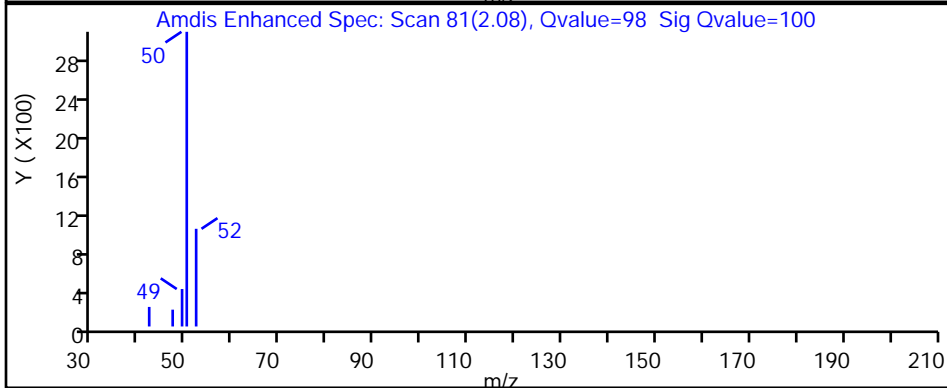
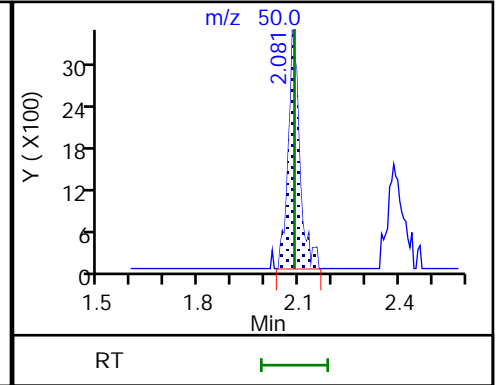
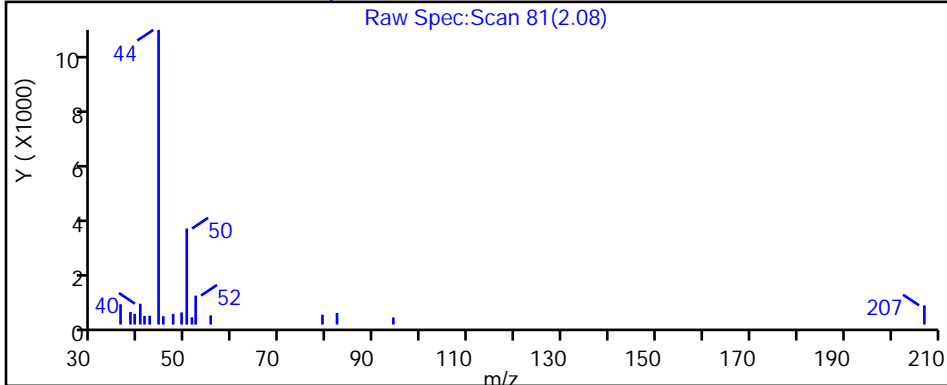
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

5 Chloromethane, CAS: 74-87-3



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X07.D

Injection Date: 01-Dec-2022 12:25:30

Instrument ID: 16334

Lims ID: 410-106467-A-2

Lab Sample ID: 410-106467-2

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

Operator ID: knk41612

ALS Bottle#: 7

Worklist Smp#: 8

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

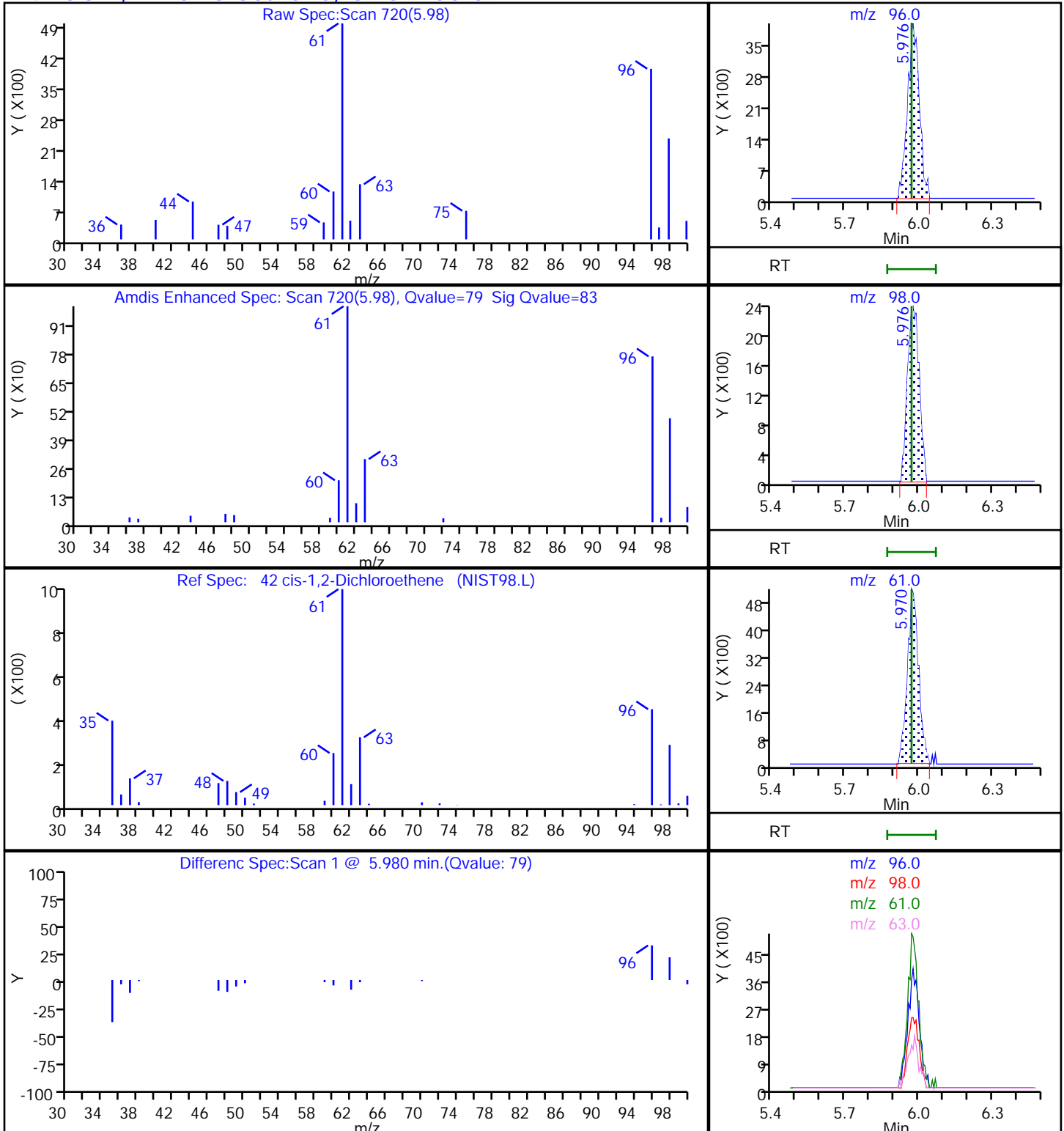
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X07.D

Injection Date: 01-Dec-2022 12:25:30

Instrument ID: 16334

Lims ID: 410-106467-A-2

Lab Sample ID: 410-106467-2

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

Operator ID: knk41612

ALS Bottle#: 7

Worklist Smp#: 8

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

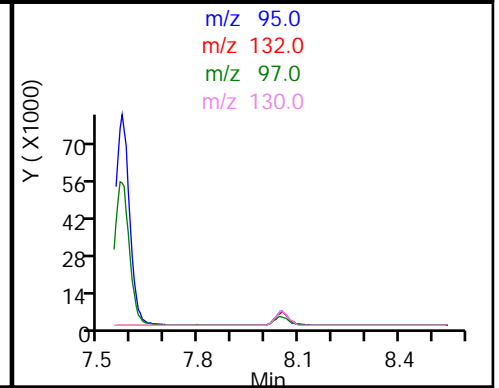
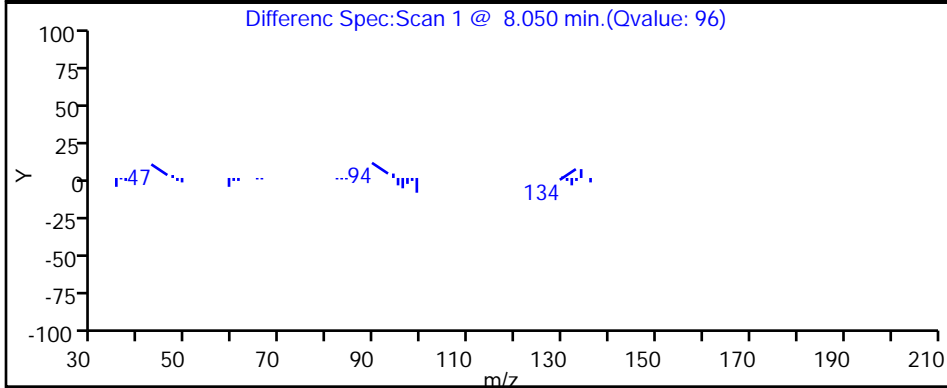
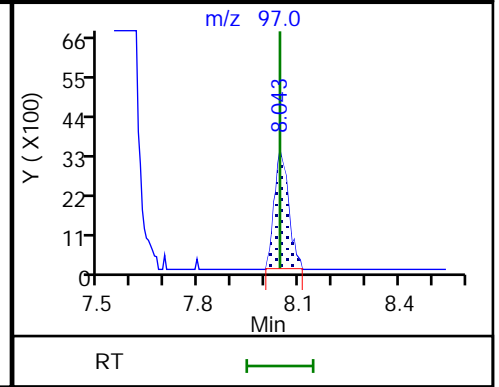
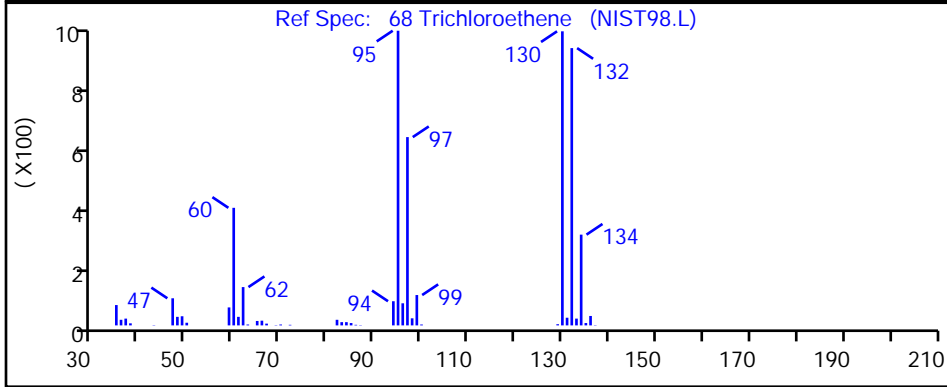
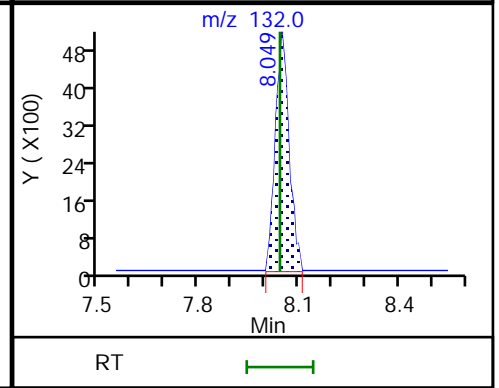
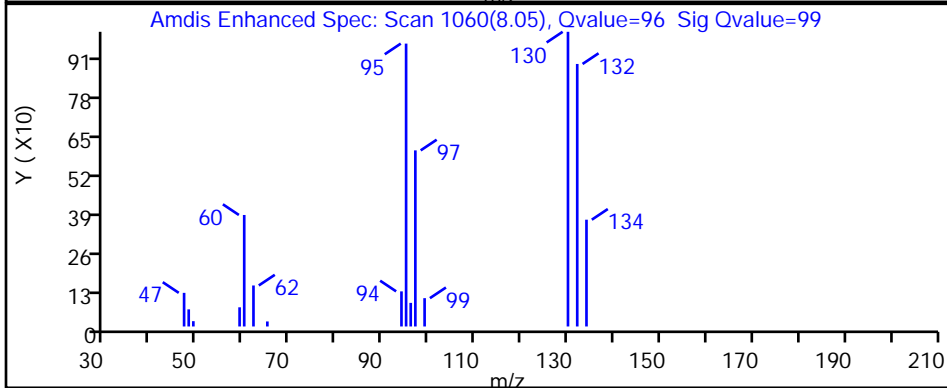
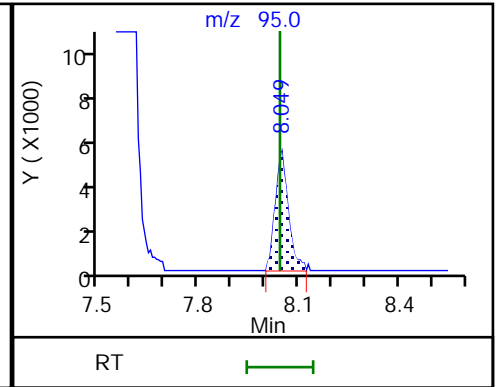
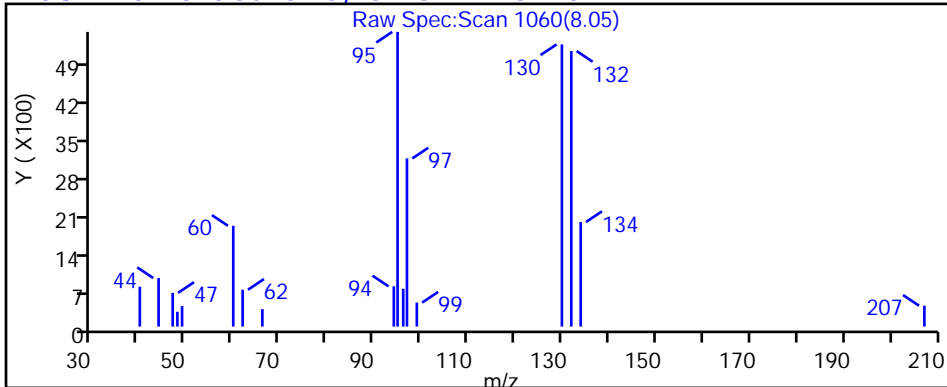
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

68 Trichloroethene, CAS: 79-01-6



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-3

Matrix: Water

Lab File ID: GD01X08.D

Analysis Method: 8260D

Date Collected: 11/18/2022 09:20

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 12:48

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	2.5	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND	^c cn	1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND	^c *+ cn	1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	^c cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.17	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.66		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-3

Matrix: Water

Lab File ID: GD01X08.D

Analysis Method: 8260D

Date Collected: 11/18/2022 09:20

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 12:48

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND	^c cn	0.50	0.080
79-01-6	Trichloroethene	0.18	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	104		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X08.D  
 Lims ID: 410-106467-A-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 12:48:30 ALS Bottle#: 8 Worklist Smp#: 9  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-009  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:10:22 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongasawatp Date: 02-Dec-2022 16:10:22

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.081	2.087	-0.006	97	5384	0.0702	
6 Vinyl chloride	62		2.202				ND	7
9 Bromomethane	94		2.519				ND	7
10 Chloroethane	64		2.599				ND	
18 1,1-Dichloroethene	96		3.422				ND	7
20 Acetone	43	3.495	3.477	0.018	98	21080	2.50	
23 Carbon disulfide	76	3.702	3.708	-0.006	88	5337	0.0388	
29 Methylene Chloride	84		4.062				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.147	4.147	0.000	34	166269	50.0	
33 Methyl tert-butyl ether	73		4.458				ND	
34 trans-1,2-Dichloroethene	96		4.464				ND	
37 1,1-Dichloroethane	63		5.135				ND	
41 2-Butanone (MEK)	43		5.940				ND	
42 cis-1,2-Dichloroethene	96	5.976	5.970	0.006	78	12314	0.1711	
49 Chlorobromomethane	128		6.299				ND	
51 Chloroform	83	6.464	6.458	0.006	90	6832	0.0596	
\$ 52 Dibromofluoromethane (Surr)	113	6.677	6.671	0.006	93	642529	9.89	
53 1,1,1-Trichloroethane	97		6.677				ND	U
56 Carbon tetrachloride	117		6.891				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.129	7.122	0.007	63	136786	9.91	
60 Benzene	78		7.159				ND	
61 1,2-Dichloroethane	62		7.226				ND	
* 64 Fluorobenzene (IS)	96	7.567	7.567	0.000	99	2617949	10.0	
68 Trichloroethene	95	8.049	8.043	0.006	96	13508	0.1846	
70 1,2-Dichloropropane	63		8.378				ND	
76 Dichlorobromomethane	83		8.726				ND	7
81 cis-1,3-Dichloropropene	75		9.280				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.463				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.598	9.597	0.001	94	2601344	10.4	
84 Toluene	92	9.677	9.671	0.006	99	5196	0.0306	
85 trans-1,3-Dichloropropene	75		9.933				ND	
106 1,1,2-Trichloroethane	97		10.140				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.232	10.225	0.007	97	56721	0.6627	
109 2-Hexanone	43		10.359				ND	
111 Chlorodibromomethane	129		10.518				ND	
112 Ethylene Dibromide	107		10.628				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.067	11.067	0.000	86	1959105	10.0	
115 Chlorobenzene	112		11.091				ND	
117 1,1,1,2-Tetrachloroethane	131		11.176				ND	
116 Ethylbenzene	91		11.176				ND	7
S 118 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.292				ND	7
120 o-Xylene	106		11.627				ND	7
121 Styrene	104		11.640				ND	7
122 Bromoform	173		11.792				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.067	12.066	0.001	90	925767	9.91	
127 1,1,2,2-Tetrachloroethane	83		12.170				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.944	12.944	0.000	95	1092403	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

U - Marked Undetected

### Reagents:

MSV\_29\_826ISS\_00040

Amount Added: 1.00

Units: uL

Run Reagent



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X08.D

Injection Date: 01-Dec-2022 12:48:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: 410-106467-A-3

Lab Sample ID: 410-106467-3

Worklist Smp#: 9

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

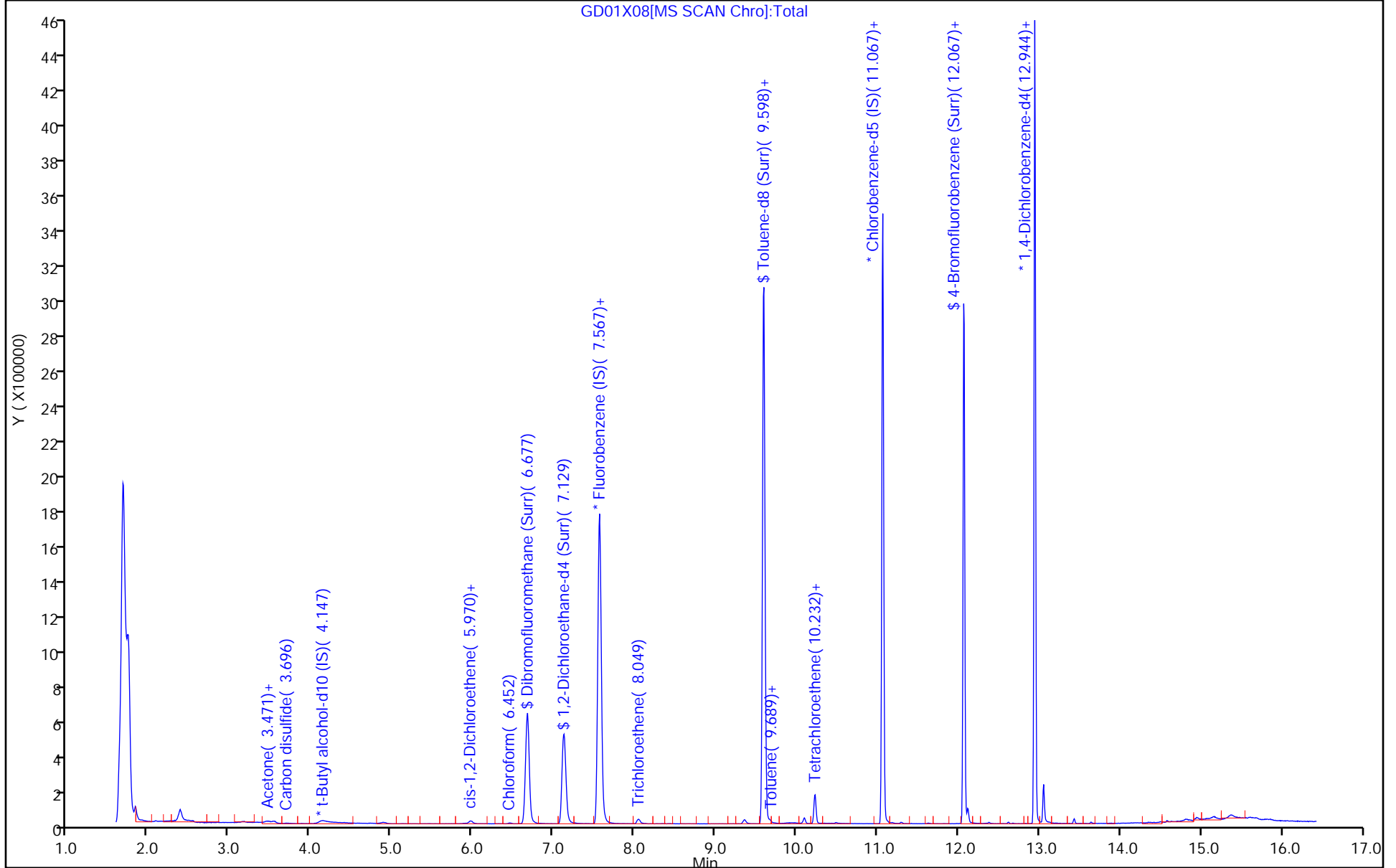
ALS Bottle#: 8

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X08.D  
 Lims ID: 410-106467-A-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 12:48:30 ALS Bottle#: 8 Worklist Smp#: 9  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-009  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:10:22 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongsawatp

Date: 02-Dec-2022 16:10:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.89	98.86
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.91	99.09
\$ 83 Toluene-d8 (Surr)	10.0	10.4	103.69
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.91	99.13

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X08.D

Injection Date: 01-Dec-2022 12:48:30

Instrument ID: 16334

Lims ID: 410-106467-A-3

Lab Sample ID: 410-106467-3

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

Operator ID: knk41612

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

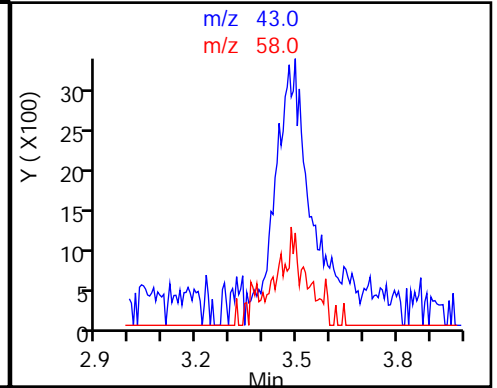
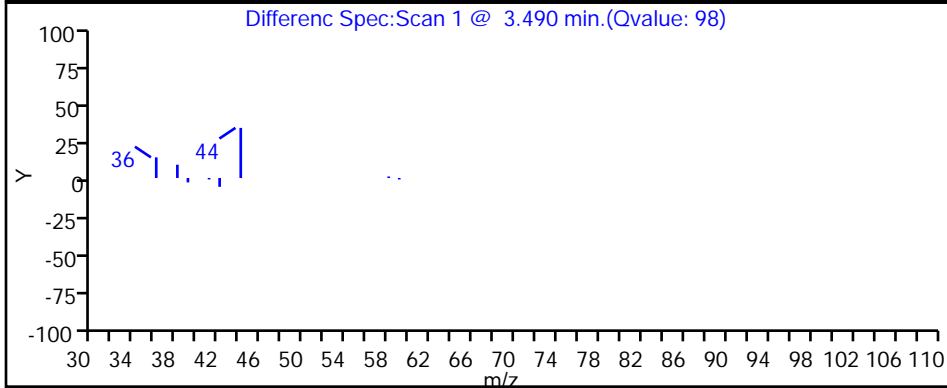
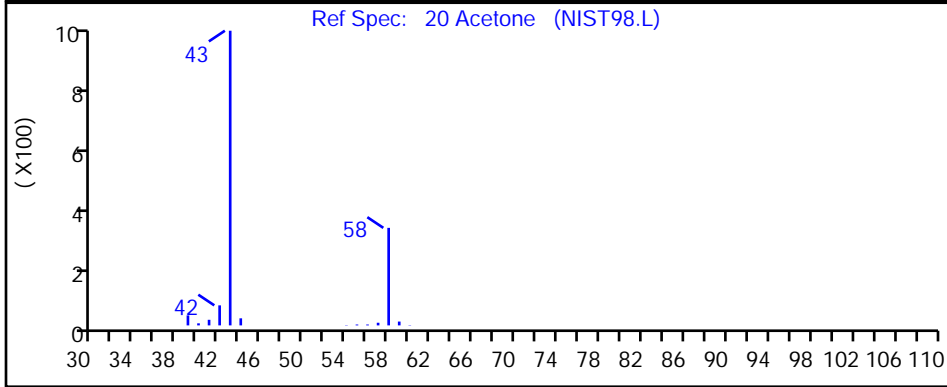
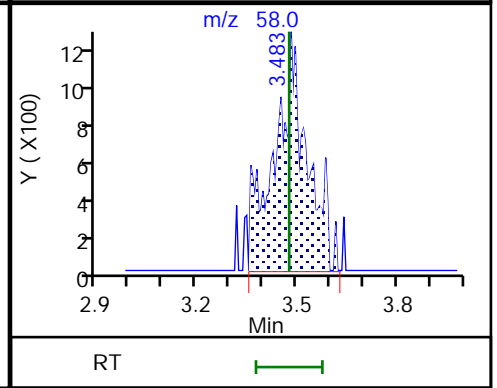
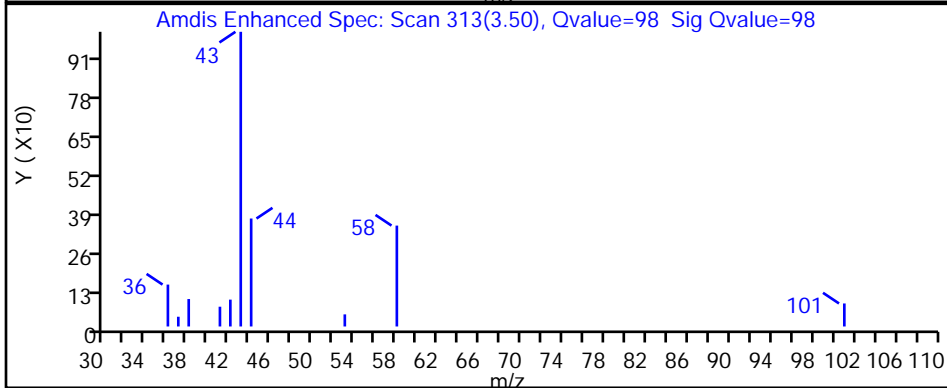
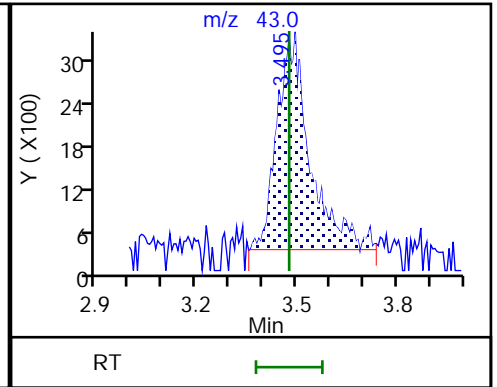
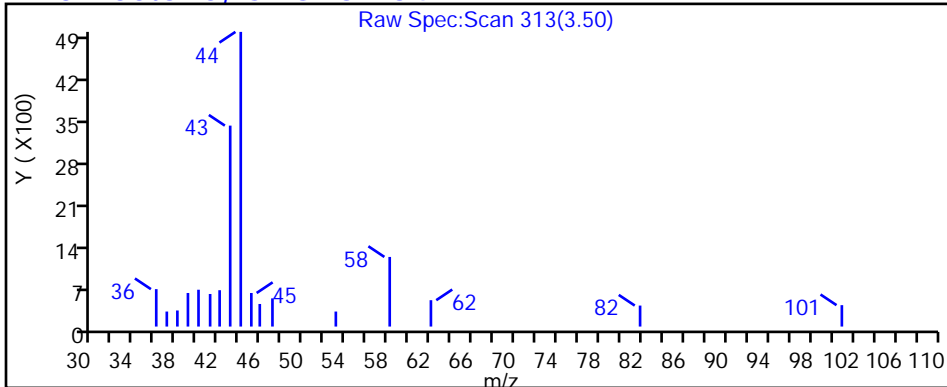
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 100m

MS Quad

20 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X08.D

Injection Date: 01-Dec-2022 12:48:30

Instrument ID: 16334

Lims ID: 410-106467-A-3

Lab Sample ID: 410-106467-3

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

Operator ID: knk41612

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

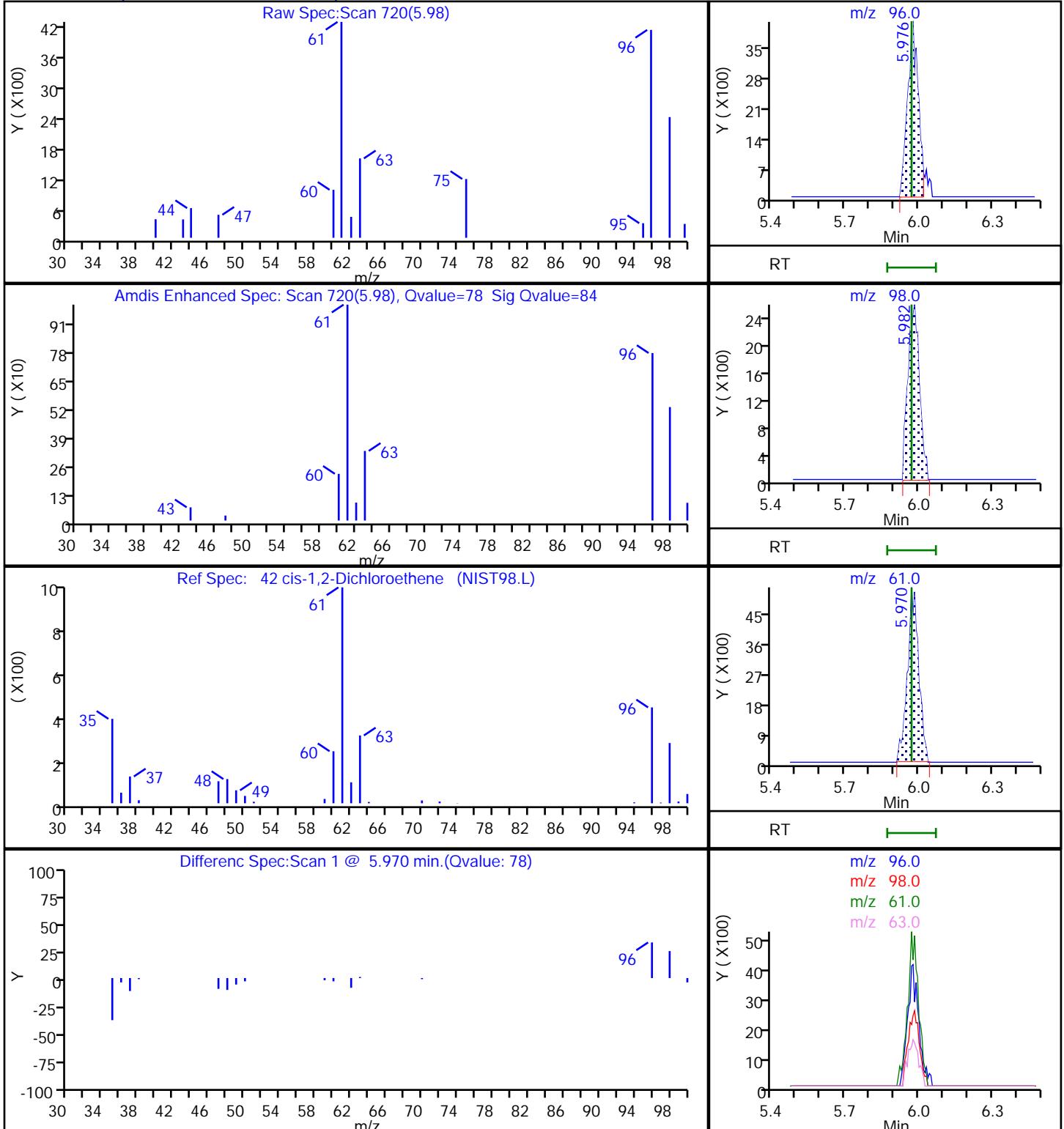
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

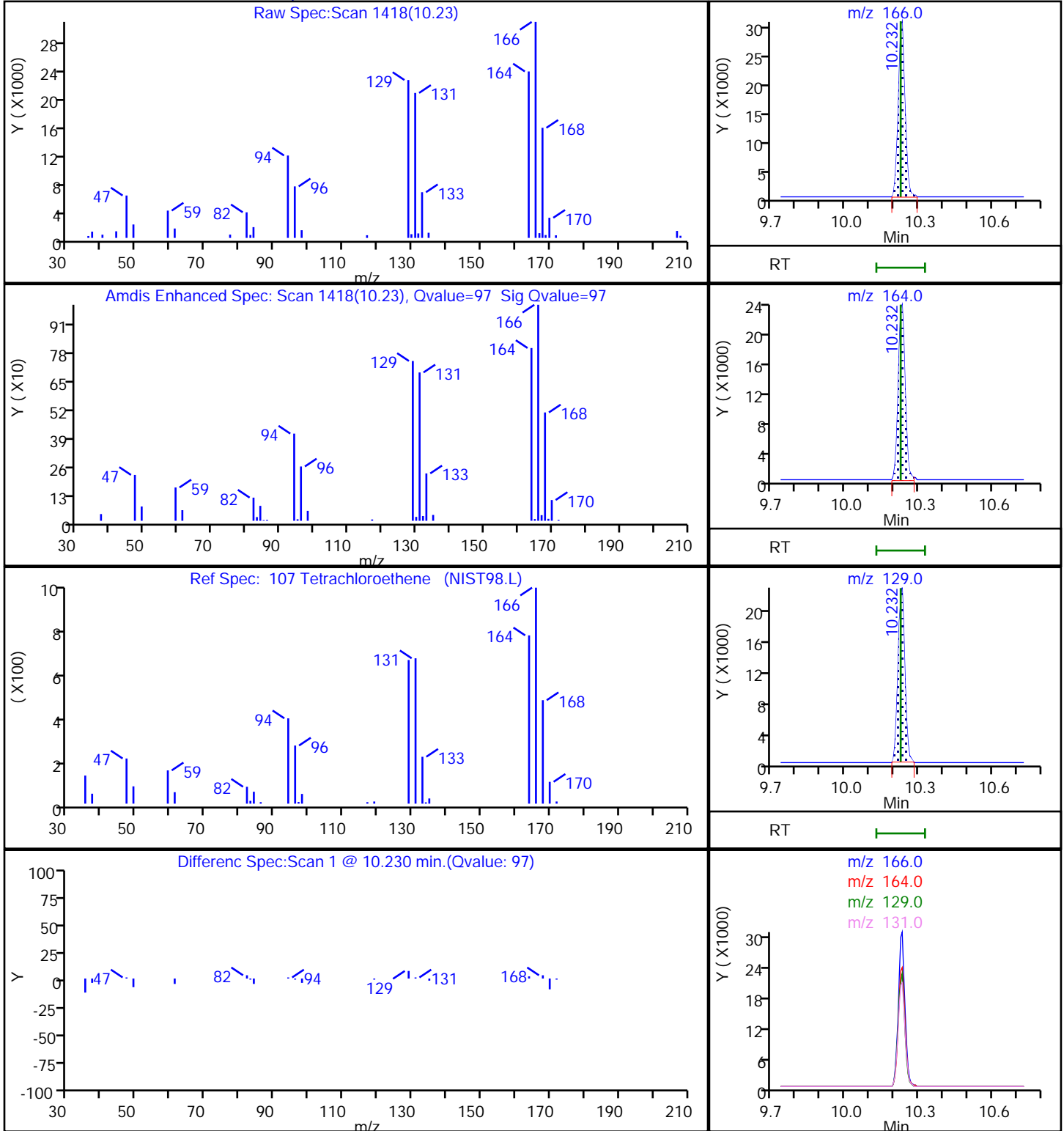
MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X08.D  
Injection Date: 01-Dec-2022 12:48:30 Instrument ID: 16334  
Lims ID: 410-106467-A-3 Lab Sample ID: 410-106467-3  
Client ID: HD-COD-SW-8-0/1-0  
Operator ID: knk41612 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X08.D

Injection Date: 01-Dec-2022 12:48:30

Instrument ID: 16334

Lims ID: 410-106467-A-3

Lab Sample ID: 410-106467-3

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

Operator ID: knk41612

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

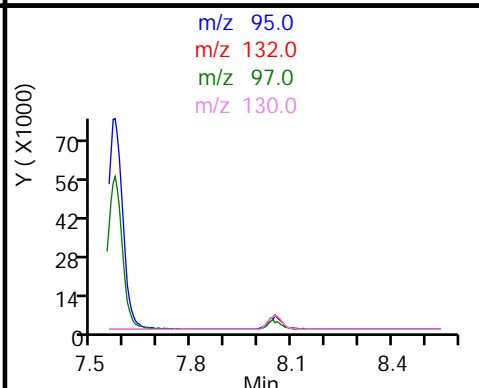
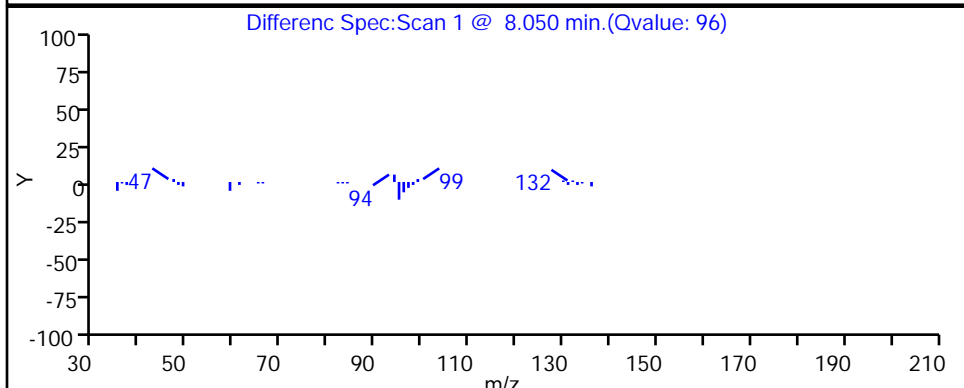
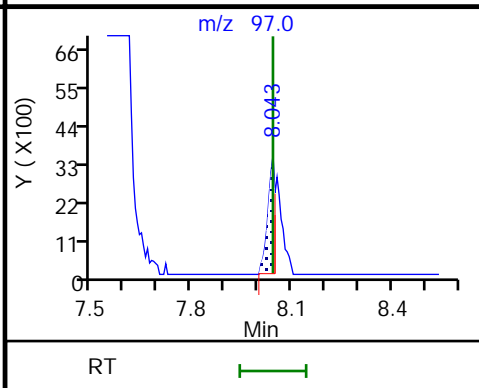
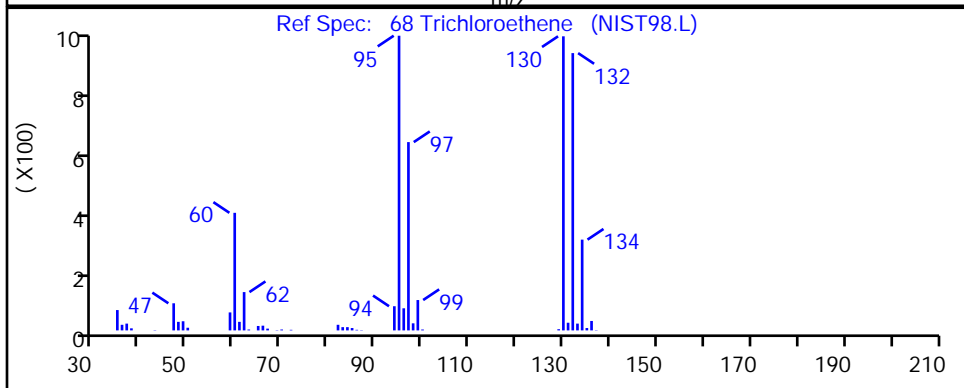
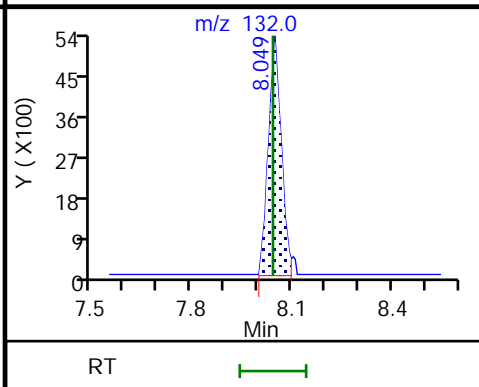
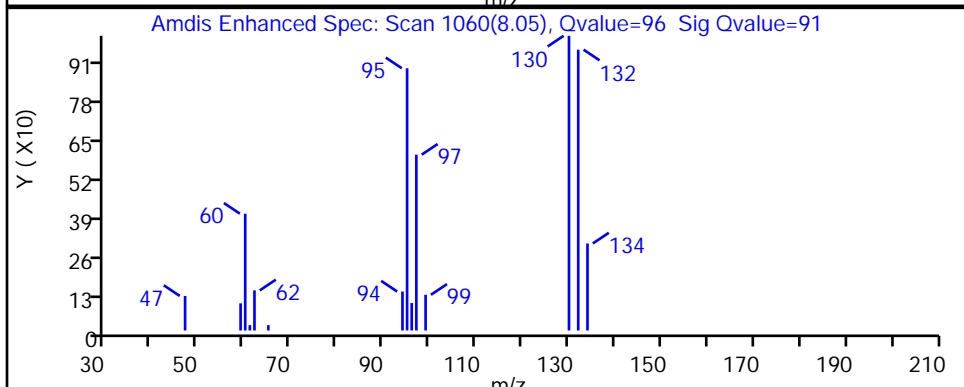
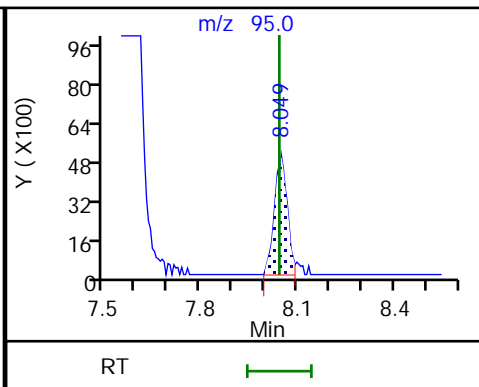
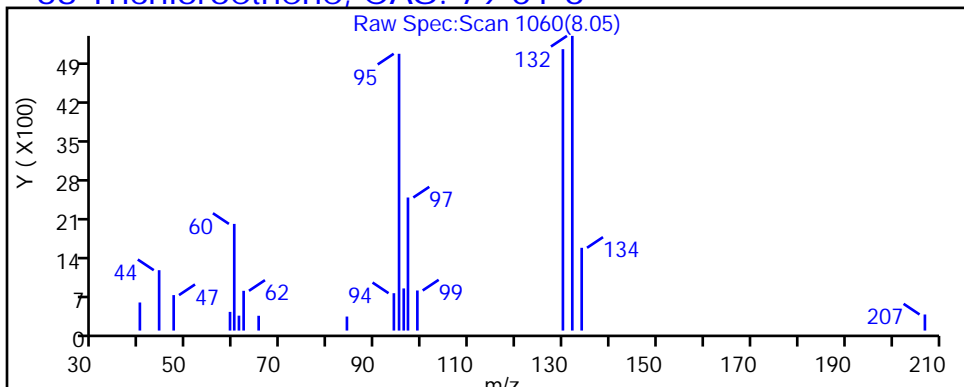
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

### 68 Trichloroethene, CAS: 79-01-6

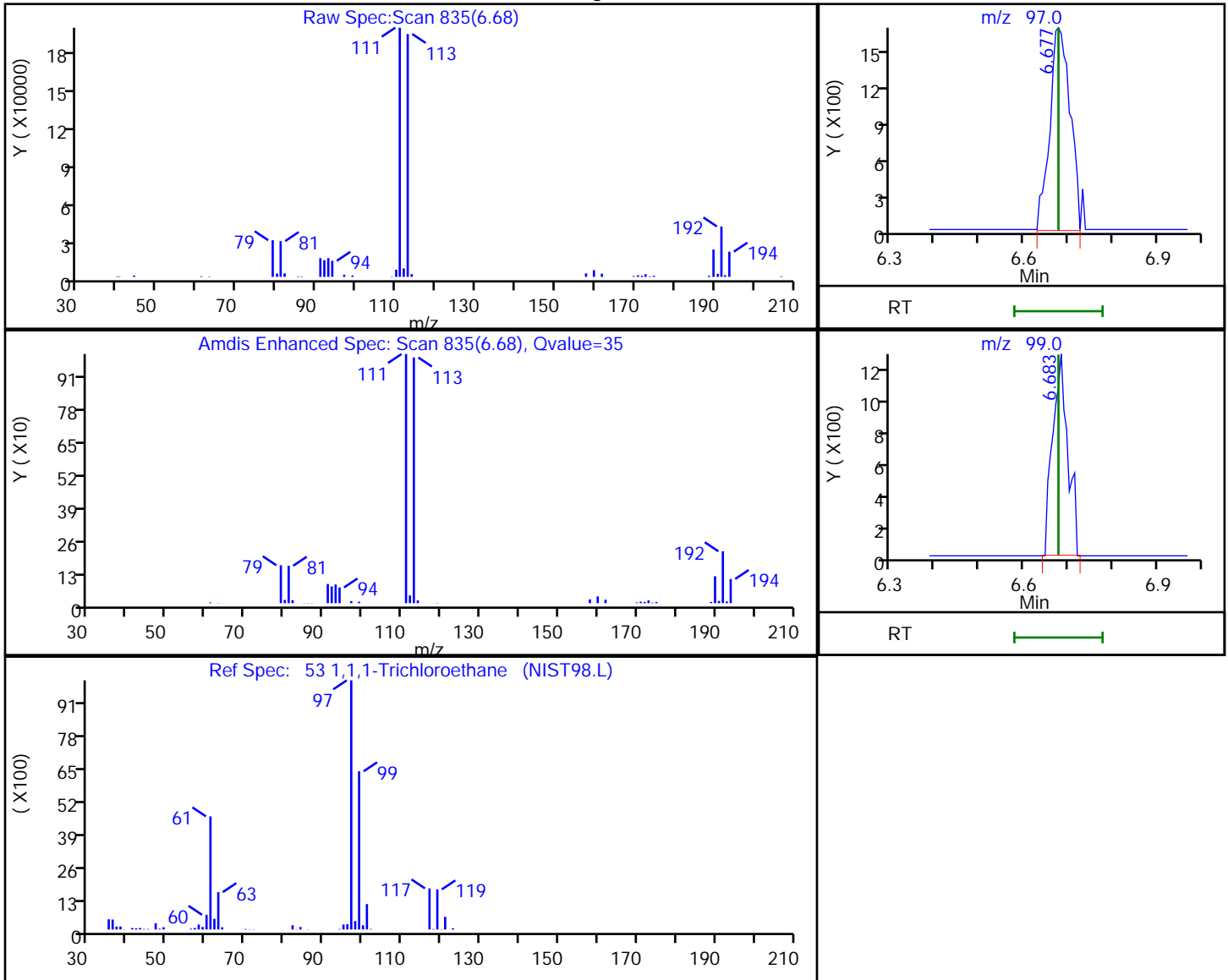


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfms\Lancaster\ChromData\16334\20221201-72294.b\GD01X08.D  
 Injection Date: 01-Dec-2022 12:48:30 Instrument ID: 16334  
 Lims ID: 410-106467-A-3 Lab Sample ID: 410-106467-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Operator ID: knk41612 ALS Bottle#: 8 Worklist Smp#: 9  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

#### Processing Results



RT	Mass	Response	Amount
6.68	97.00	5412	0.054098
6.68	99.00	3040	

Reviewer: pongsawatp, 02-Dec-2022 16:10:10

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-4

Matrix: Water

Lab File ID: GD01X09.D

Analysis Method: 8260D

Date Collected: 11/18/2022 12:25

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 13:10

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	3.6	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND	^c cn	1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND	^c *+ cn	1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	0.095	J	0.50	0.090
74-87-3	Chloromethane	ND	^c cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.14	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.23	J	0.50	0.20
108-88-3	Toluene	0.090	J	0.50	0.080



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-4

Matrix: Water

Lab File ID: GD01X09.D

Analysis Method: 8260D

Date Collected: 11/18/2022 12:25

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 13:10

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND	^c cn	0.50	0.080
79-01-6	Trichloroethene	0.14	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	104		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X09.D  
 Lims ID: 410-106467-A-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 13:10:30 ALS Bottle#: 9 Worklist Smp#: 10  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-010  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:10:22 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongasawatp

Date: 02-Dec-2022 16:11:24

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.087				ND	
6 Vinyl chloride	62		2.202				ND	7
9 Bromomethane	94		2.519				ND	7
10 Chloroethane	64		2.599				ND	
18 1,1-Dichloroethene	96		3.422				ND	7
20 Acetone	43	3.495	3.477	0.018	69	32698	3.59	
23 Carbon disulfide	76	3.714	3.708	0.006	97	6800	0.0483	
29 Methylene Chloride	84		4.062				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	4.147	4.147	0.000	34	179546	50.0	
33 Methyl tert-butyl ether	73		4.458				ND	
34 trans-1,2-Dichloroethene	96		4.464				ND	
37 1,1-Dichloroethane	63		5.135				ND	
41 2-Butanone (MEK)	43		5.940				ND	
42 cis-1,2-Dichloroethene	96	5.976	5.970	0.006	78	10320	0.1402	
49 Chlorobromomethane	128		6.299				ND	
51 Chloroform	83	6.464	6.458	0.006	90	11161	0.0952	
\$ 52 Dibromofluoromethane (Surr)	113	6.677	6.671	0.006	93	659438	9.92	
53 1,1,1-Trichloroethane	97		6.677				ND	
56 Carbon tetrachloride	117		6.891				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.135	7.122	0.013	63	140284	9.94	
60 Benzene	78		7.159				ND	7
61 1,2-Dichloroethane	62		7.226				ND	
* 64 Fluorobenzene (IS)	96	7.567	7.567	0.000	99	2676750	10.0	
68 Trichloroethene	95	8.049	8.043	0.006	98	10568	0.1412	
70 1,2-Dichloropropane	63		8.378				ND	
76 Dichlorobromomethane	83		8.726				ND	7
81 cis-1,3-Dichloropropene	75		9.280				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.463				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.597	9.597	0.000	93	2678259	10.4	
84 Toluene	92	9.671	9.671	0.000	97	15749	0.0903	
85 trans-1,3-Dichloropropene	75		9.933				ND	
106 1,1,2-Trichloroethane	97		10.140				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.231	10.225	0.006	96	20310	0.2312	
109 2-Hexanone	43		10.359				ND	7
111 Chlorodibromomethane	129		10.518				ND	
112 Ethylene Dibromide	107		10.628				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.067	11.067	0.000	86	2010430	10.0	
115 Chlorobenzene	112		11.091				ND	
117 1,1,1,2-Tetrachloroethane	131		11.176				ND	
116 Ethylbenzene	91		11.176				ND	7
S 118 Xylenes, Total	106				0		0.1059	
119 m-Xylene & p-Xylene	106	11.298	11.292	0.006	89	10569	0.0778	
120 o-Xylene	106	11.628	11.627	0.001	95	3778	0.0281	
121 Styrene	104		11.640				ND	
122 Bromoform	173		11.792				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.073	12.066	0.007	92	959197	10.0	
127 1,1,2,2-Tetrachloroethane	83		12.170				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.944	12.944	0.000	95	1122550	10.0	

**QC Flag Legend**

## Processing Flags

7 - Failed Limit of Detection

**Reagents:**

MSV\_29\_826ISS\_00040

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X09.D

Injection Date: 01-Dec-2022 13:10:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: 410-106467-A-4

Lab Sample ID: 410-106467-4

Worklist Smp#: 10

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

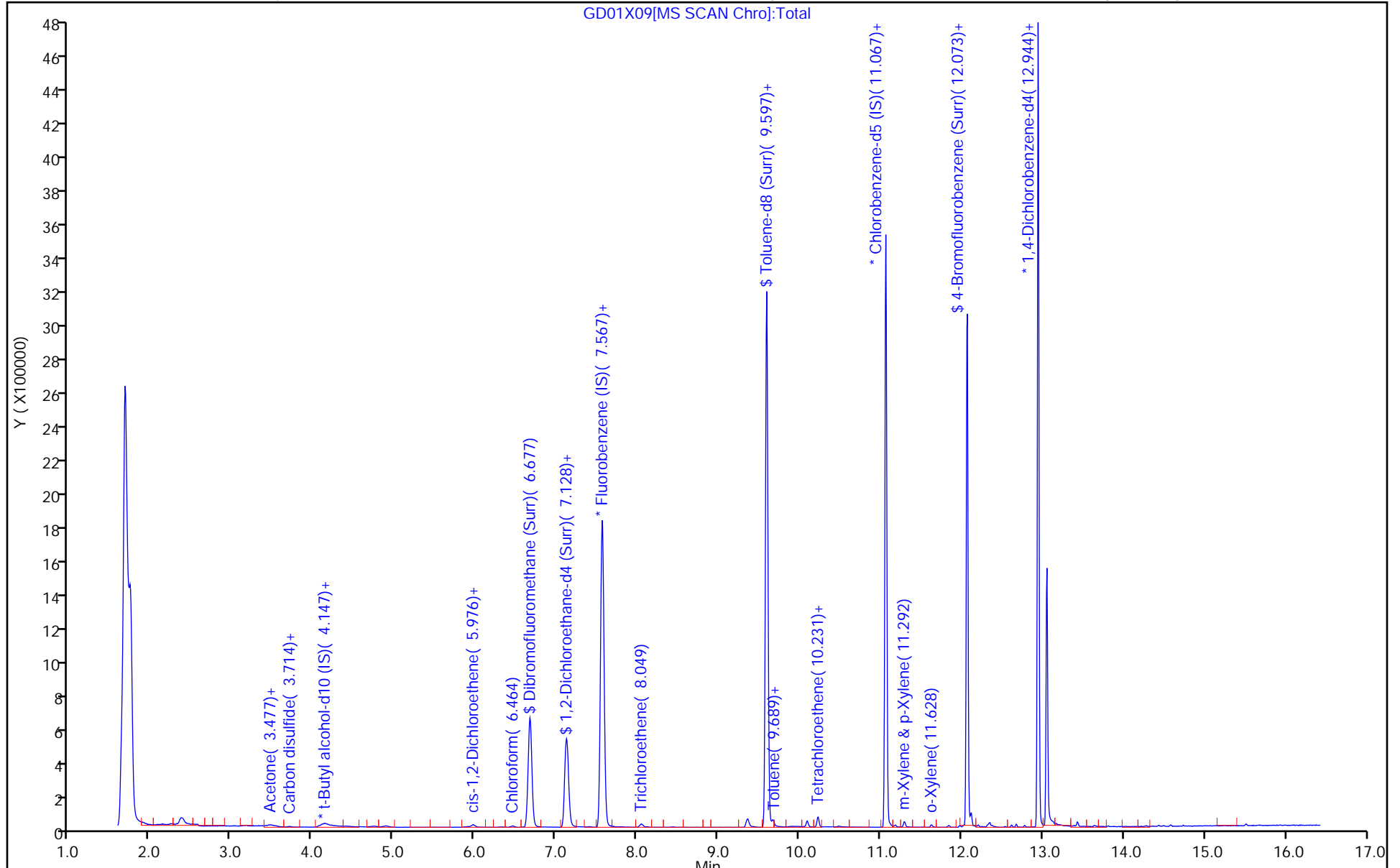
ALS Bottle#: 9

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X09.D  
 Lims ID: 410-106467-A-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 13:10:30 ALS Bottle#: 9 Worklist Smp#: 10  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-010  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:10:22 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongsawatp Date: 02-Dec-2022 16:11:24

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.92	99.23
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.94	99.39
\$ 83 Toluene-d8 (Surr)	10.0	10.4	104.03
\$ 126 4-Bromofluorobenzene (Surr)	10.0	10.0	100.09

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X09.D

Injection Date: 01-Dec-2022 13:10:30

Instrument ID: 16334

Lims ID: 410-106467-A-4

Lab Sample ID: 410-106467-4

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

Operator ID: knk41612

ALS Bottle#: 9

Worklist Smp#: 10

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

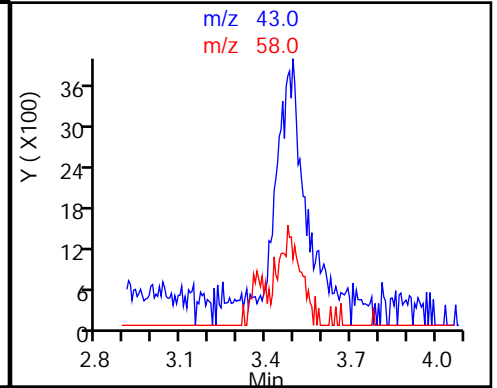
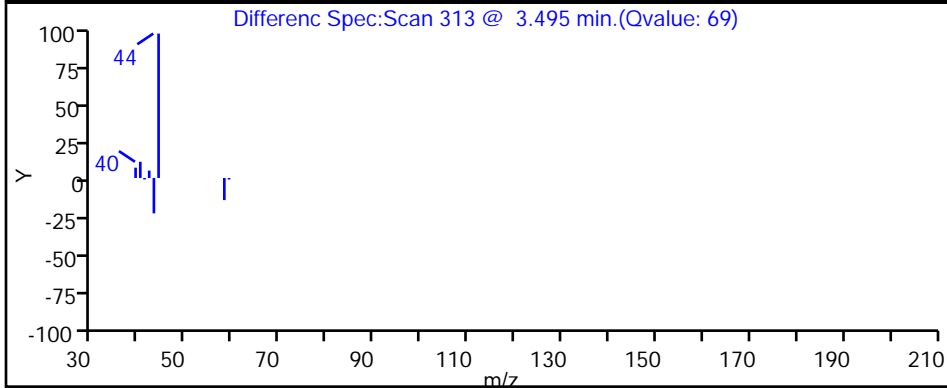
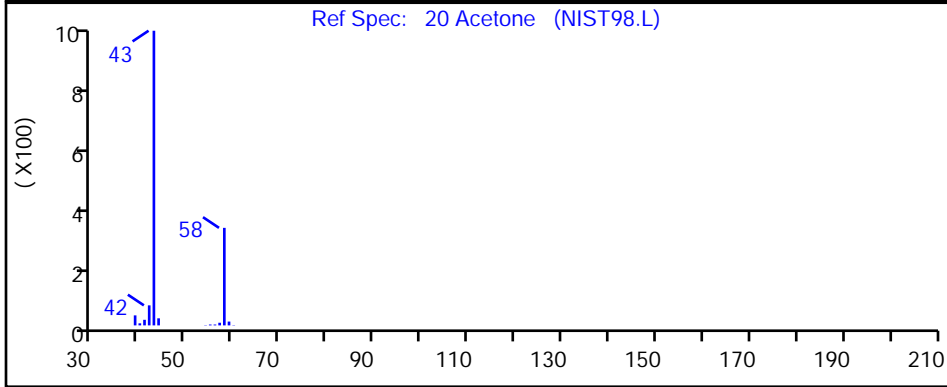
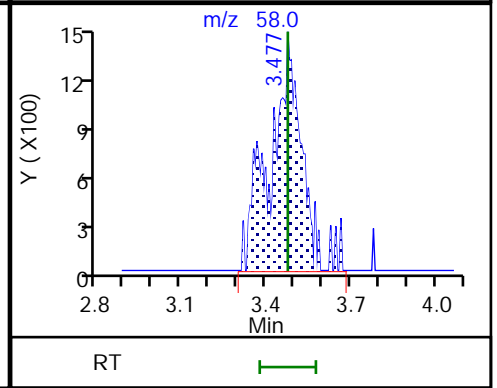
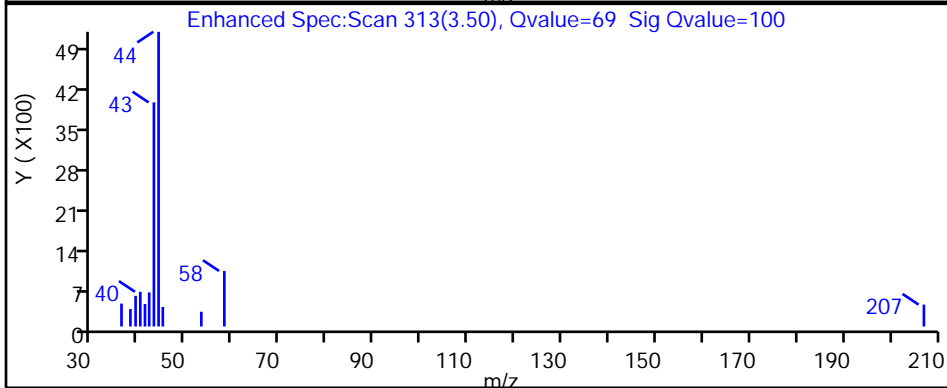
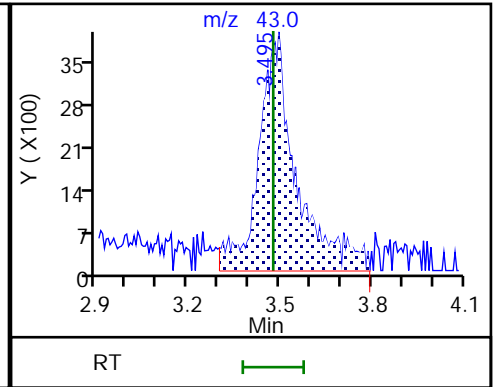
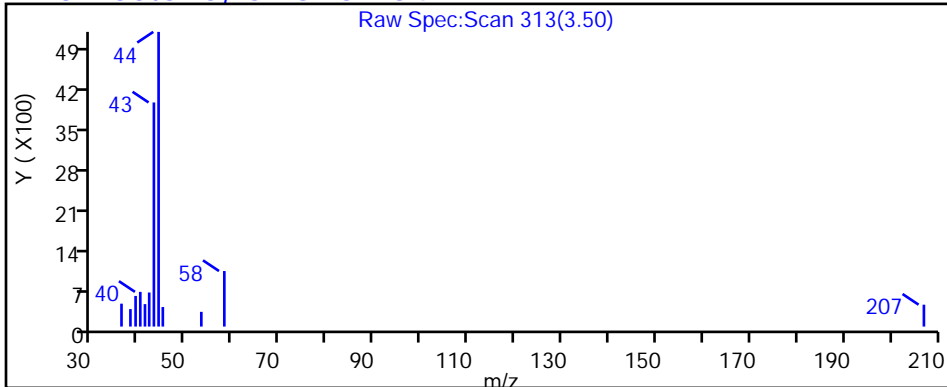
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

20 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X09.D

Injection Date: 01-Dec-2022 13:10:30

Instrument ID: 16334

Lims ID: 410-106467-A-4

Lab Sample ID: 410-106467-4

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

Operator ID: knk41612

ALS Bottle#: 9

Worklist Smp#: 10

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

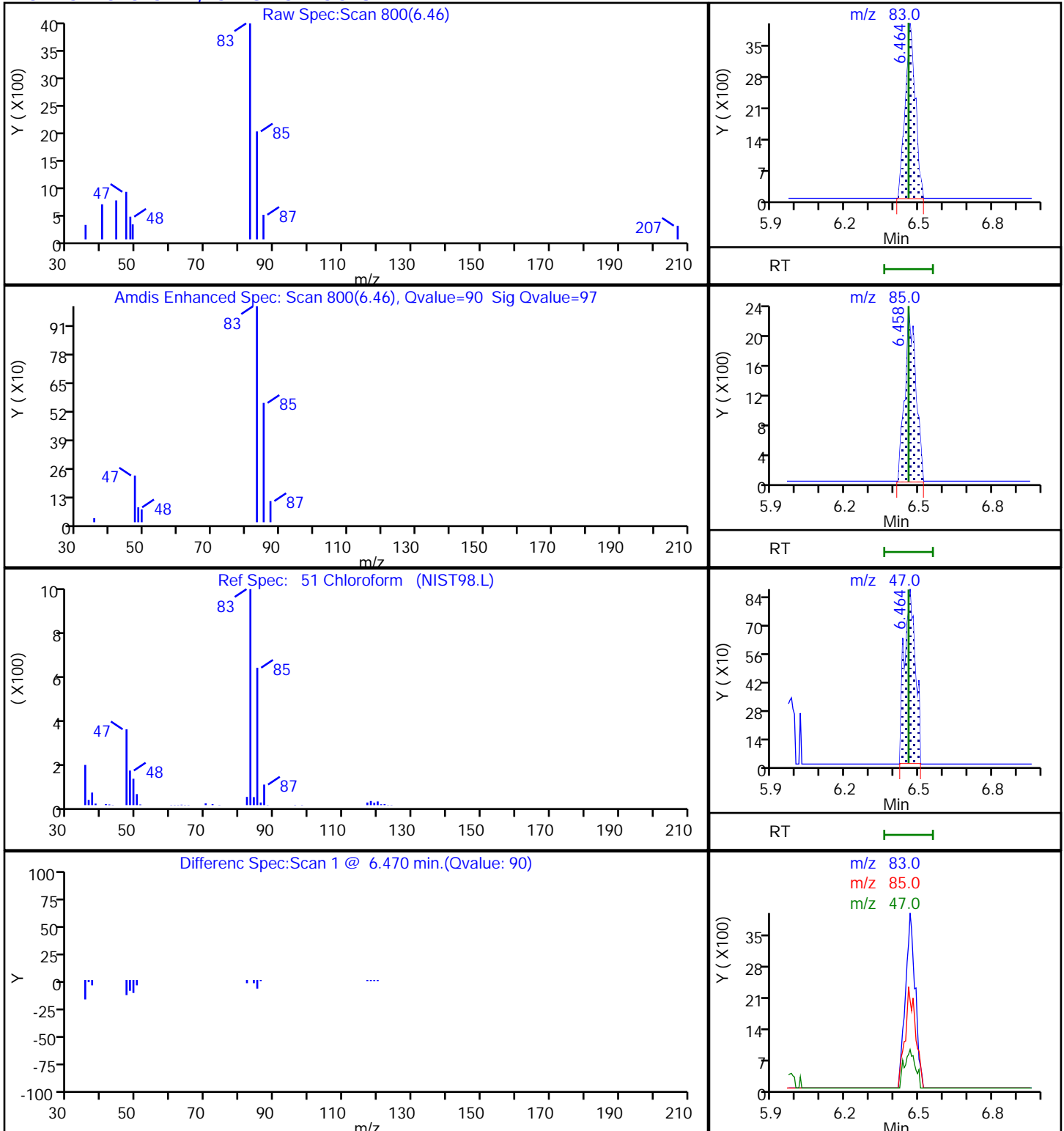
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

51 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X09.D

Injection Date: 01-Dec-2022 13:10:30

Instrument ID: 16334

Lims ID: 410-106467-A-4

Lab Sample ID: 410-106467-4

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

Operator ID: knk41612

ALS Bottle#: 9

Worklist Smp#: 10

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

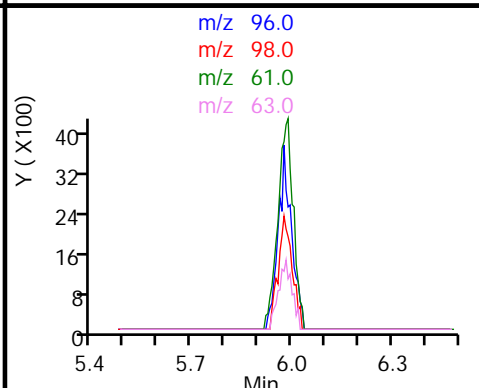
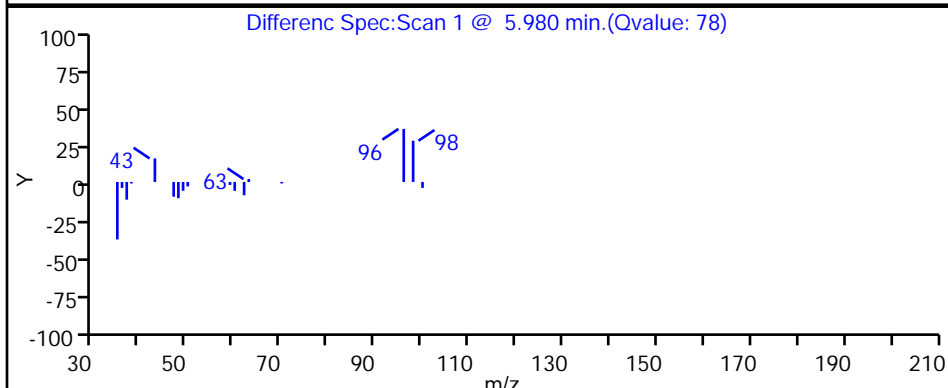
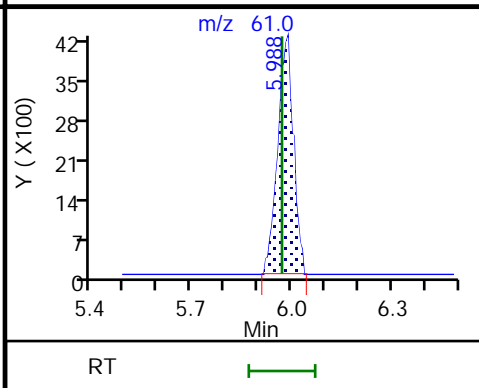
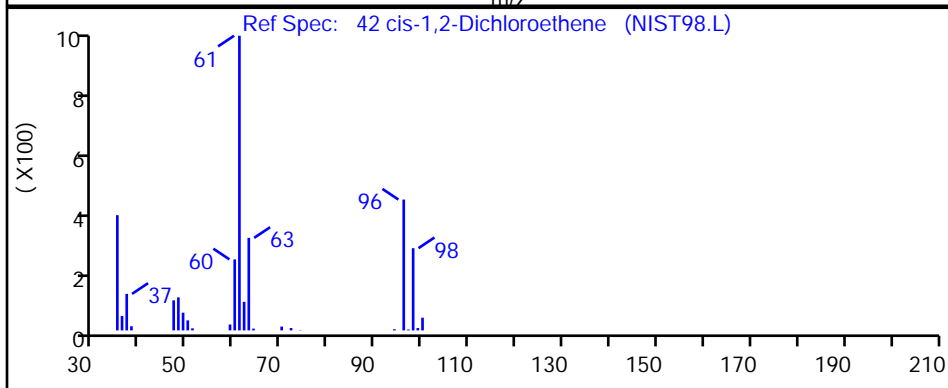
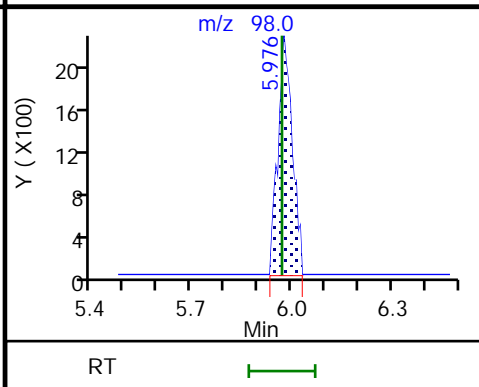
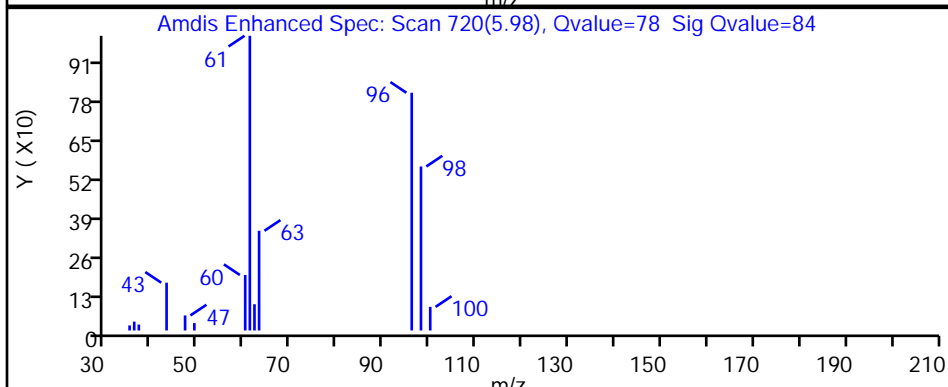
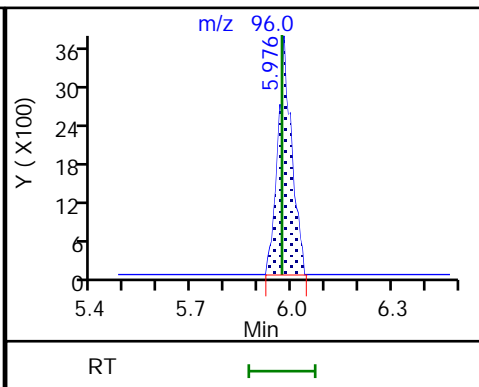
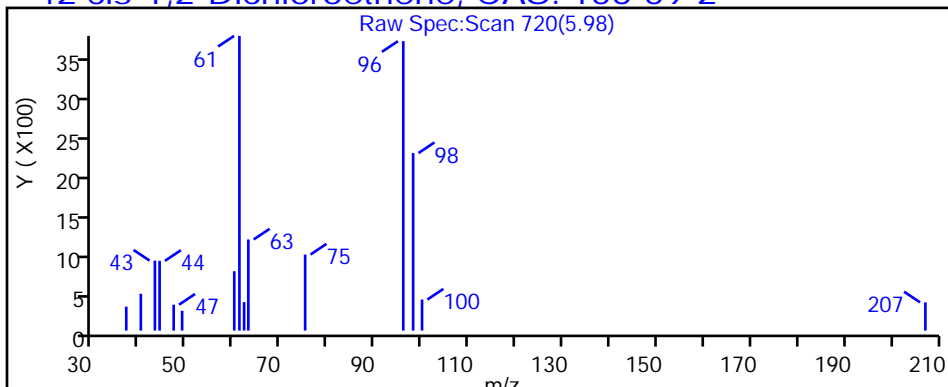
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

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





Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X09.D

Injection Date: 01-Dec-2022 13:10:30

Instrument ID: 16334

Lims ID: 410-106467-A-4

Lab Sample ID: 410-106467-4

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

Operator ID: knk41612

ALS Bottle#: 9

Worklist Smp#: 10

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

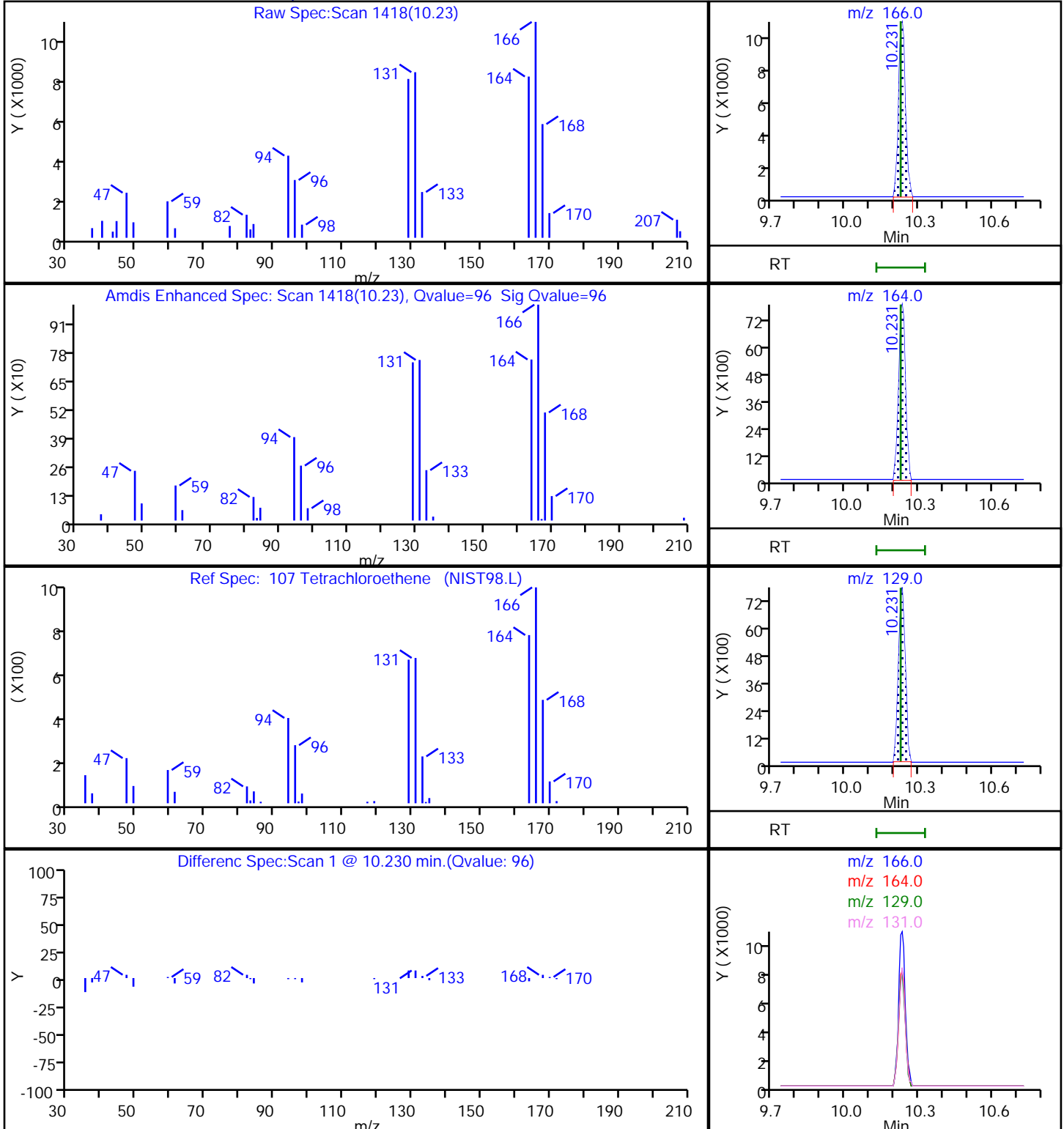
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

### 107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X09.D

Injection Date: 01-Dec-2022 13:10:30

Instrument ID: 16334

Lims ID: 410-106467-A-4

Lab Sample ID: 410-106467-4

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

Operator ID: knk41612

ALS Bottle#: 9

Worklist Smp#: 10

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

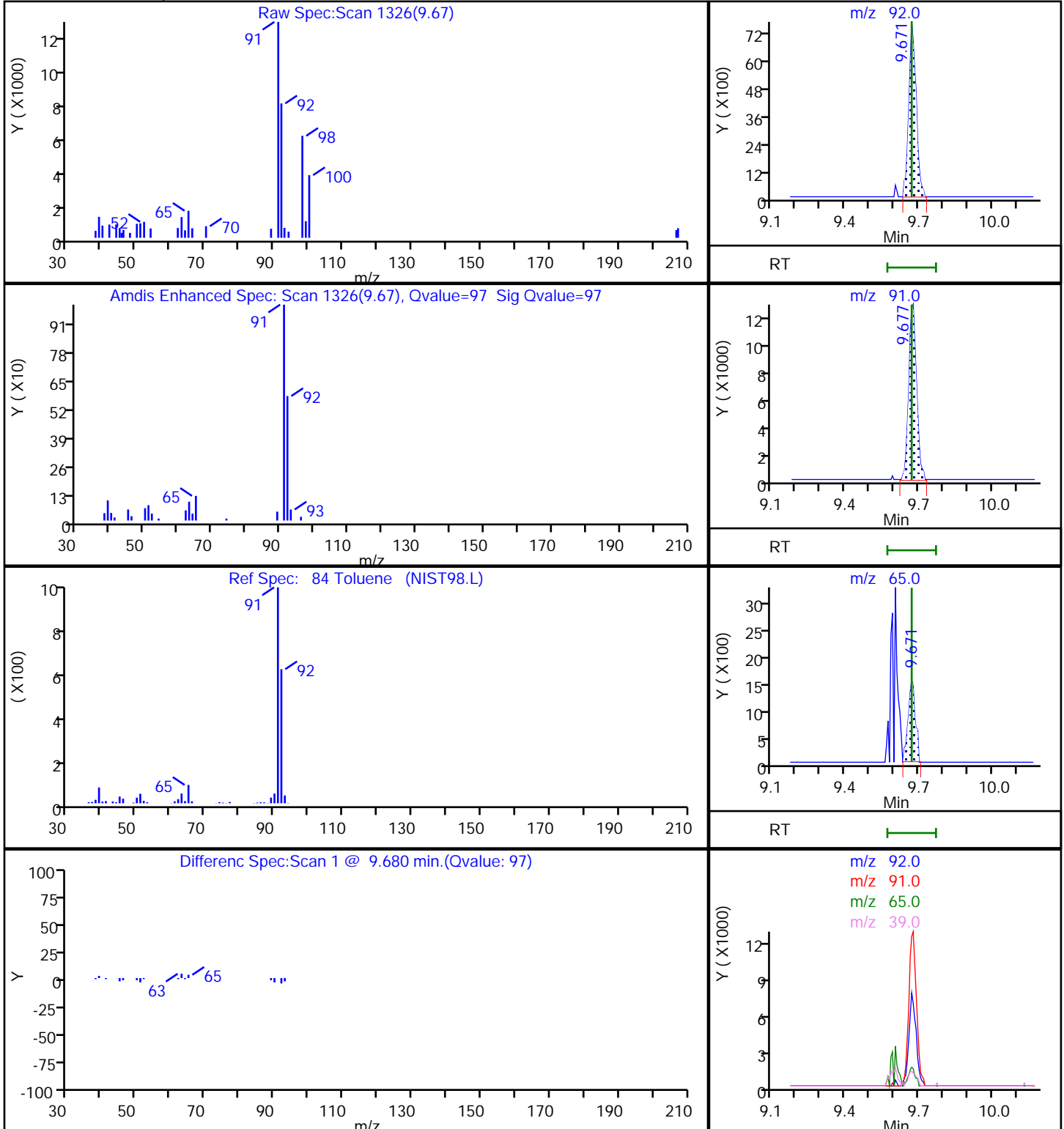
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

84 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X09.D

Injection Date: 01-Dec-2022 13:10:30

Instrument ID: 16334

Lims ID: 410-106467-A-4

Lab Sample ID: 410-106467-4

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

Operator ID: knk41612

ALS Bottle#: 9

Worklist Smp#: 10

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

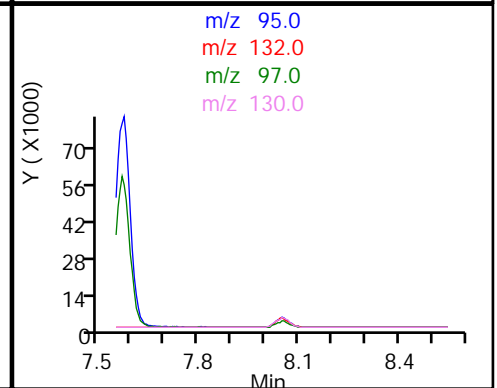
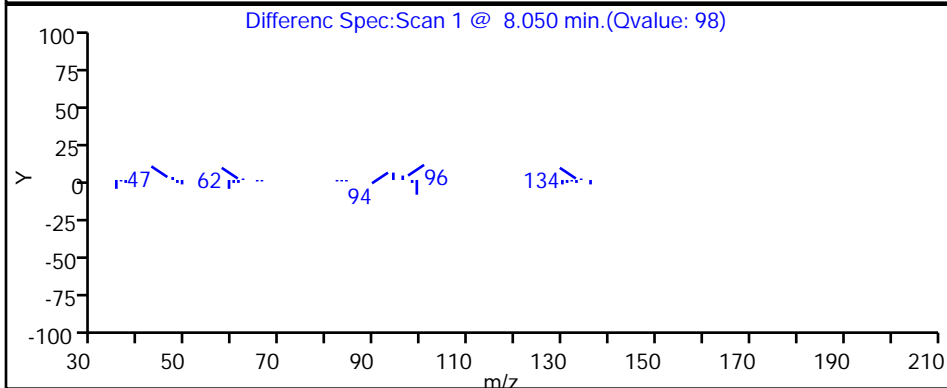
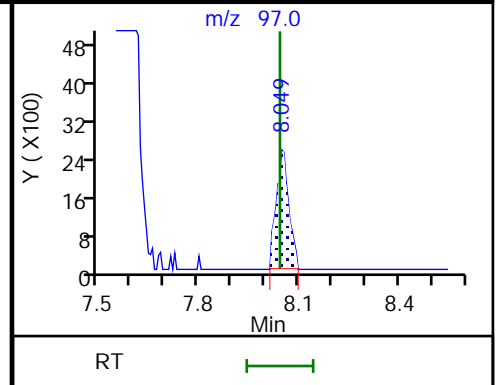
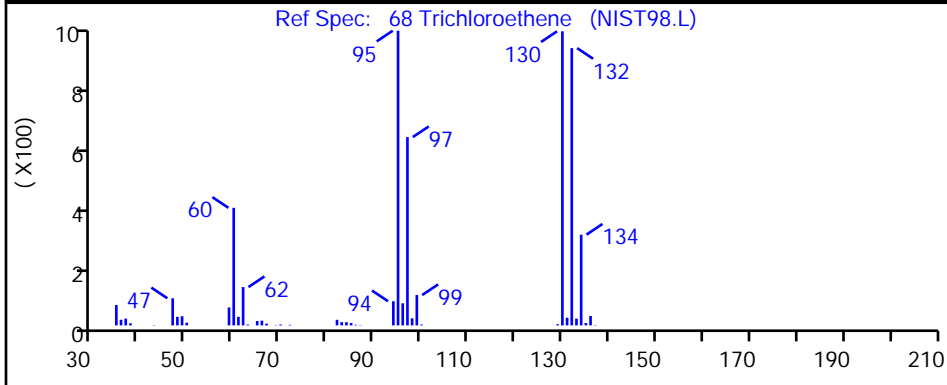
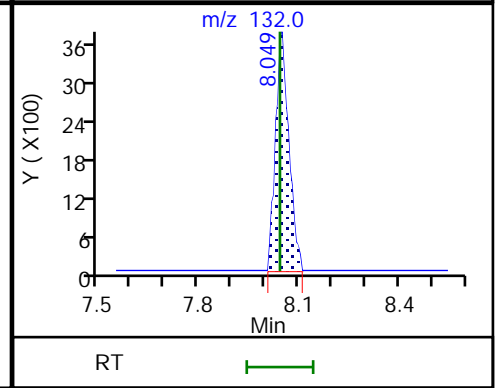
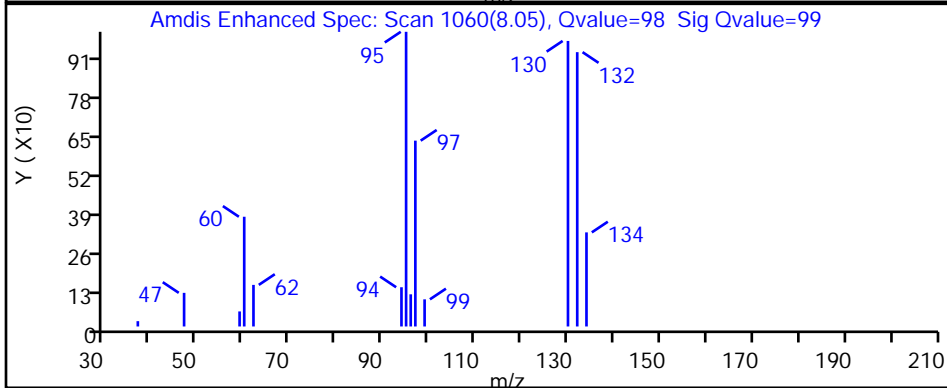
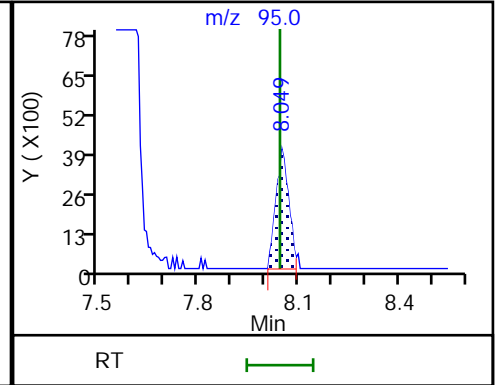
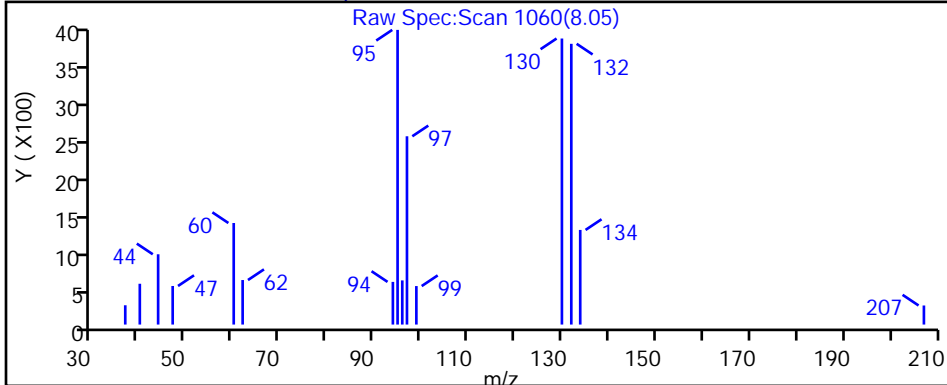
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

68 Trichloroethene, CAS: 79-01-6



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-5

Matrix: Water

Lab File ID: GD01X10.D

Analysis Method: 8260D

Date Collected: 11/18/2022 09:40

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 13:32

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	2.0	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND	^c cn	1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND	^c *+ cn	1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	^c cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.17	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.98		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-5

Matrix: Water

Lab File ID: GD01X10.D

Analysis Method: 8260D

Date Collected: 11/18/2022 09:40

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 13:32

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND	^c cn	0.50	0.080
79-01-6	Trichloroethene	0.19	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	105		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X10.D  
 Lims ID: 410-106467-A-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 13:32:30 ALS Bottle#: 10 Worklist Smp#: 11  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-011  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:12:17 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongasawatp Date: 02-Dec-2022 16:12:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.087				ND	
6 Vinyl chloride	62		2.202				ND	7
9 Bromomethane	94		2.519				ND	7
10 Chloroethane	64		2.599				ND	
18 1,1-Dichloroethene	96		3.422				ND	
20 Acetone	43	3.477	3.477	0.000	86	19044	2.02	M
23 Carbon disulfide	76	3.702	3.708	-0.006	93	5323	0.0371	
29 Methylene Chloride	84		4.062				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.147	4.147	0.000	34	186383	50.0	
33 Methyl tert-butyl ether	73		4.458				ND	7
34 trans-1,2-Dichloroethene	96		4.464				ND	
37 1,1-Dichloroethane	63		5.135				ND	
41 2-Butanone (MEK)	43		5.940				ND	
42 cis-1,2-Dichloroethene	96	5.988	5.970	0.018	79	12968	0.1727	
49 Chlorobromomethane	128		6.299				ND	
51 Chloroform	83		6.458				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.677	6.671	0.006	93	673529	9.94	
53 1,1,1-Trichloroethane	97	6.689	6.677	0.012	35	7364	0.0706	
56 Carbon tetrachloride	117		6.891				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.128	7.122	0.006	63	145390	10.1	
60 Benzene	78		7.159				ND	
61 1,2-Dichloroethane	62		7.226				ND	
* 64 Fluorobenzene (IS)	96	7.567	7.567	0.000	99	2730305	10.0	
68 Trichloroethene	95	8.049	8.043	0.006	96	14421	0.1889	
70 1,2-Dichloropropane	63		8.378				ND	
76 Dichlorobromomethane	83		8.726				ND	
81 cis-1,3-Dichloropropene	75		9.280				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.463				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.597	9.597	0.000	93	2734544	10.5	
84 Toluene	92	9.670	9.671	-0.001	97	5020	0.0284	
85 trans-1,3-Dichloropropene	75		9.933				ND	
106 1,1,2-Trichloroethane	97		10.140				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.231	10.225	0.006	96	87391	0.9823	
109 2-Hexanone	43		10.359				ND	
111 Chlorodibromomethane	129		10.518				ND	
112 Ethylene Dibromide	107		10.628				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.067	11.067	0.000	86	2036471	10.0	
115 Chlorobenzene	112		11.091				ND	
117 1,1,1,2-Tetrachloroethane	131		11.176				ND	
116 Ethylbenzene	91		11.176				ND	7
S 118 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.292				ND	7
120 o-Xylene	106		11.627				ND	
121 Styrene	104		11.640				ND	
122 Bromoform	173		11.792				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.066	12.066	0.000	91	970150	10.0	
127 1,1,2,2-Tetrachloroethane	83		12.170				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.944	12.944	0.000	95	1154237	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_29\_826ISS\_00040

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X10.D

Injection Date: 01-Dec-2022 13:32:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: 410-106467-A-5

Lab Sample ID: 410-106467-5

Worklist Smp#: 11

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

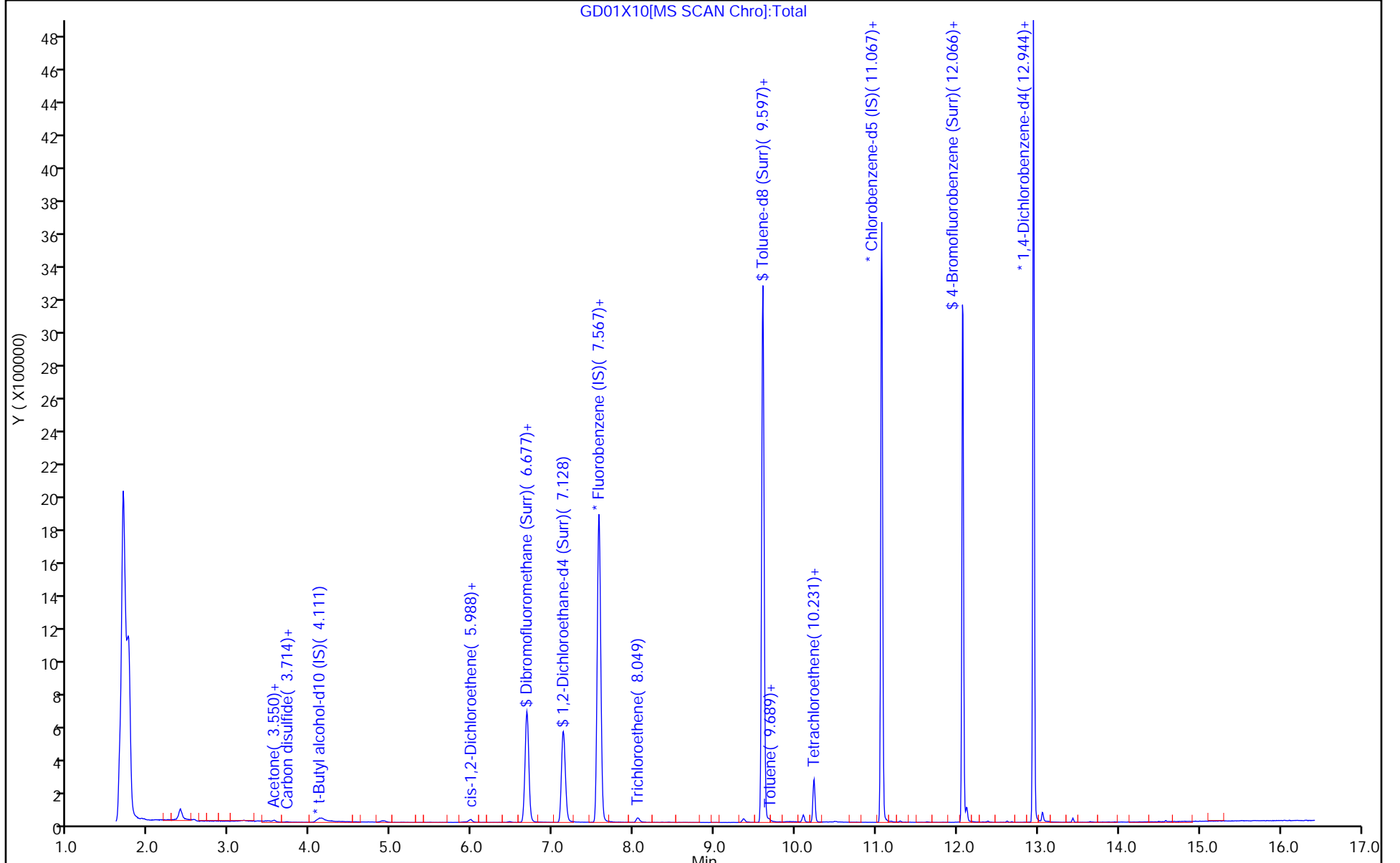
ALS Bottle#: 10

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1





Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X10.D  
 Lims ID: 410-106467-A-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 13:32:30 ALS Bottle#: 10 Worklist Smp#: 11  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-011  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:12:17 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongsawatp

Date: 02-Dec-2022 16:12:17

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.94	99.36
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.99
\$ 83 Toluene-d8 (Surr)	10.0	10.5	104.85
\$ 126 4-Bromofluorobenzene (Surr)	10.0	10.0	99.94

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X10.D

Injection Date: 01-Dec-2022 13:32:30

Instrument ID: 16334

Lims ID: 410-106467-A-5

Lab Sample ID: 410-106467-5

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

Operator ID: knk41612

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

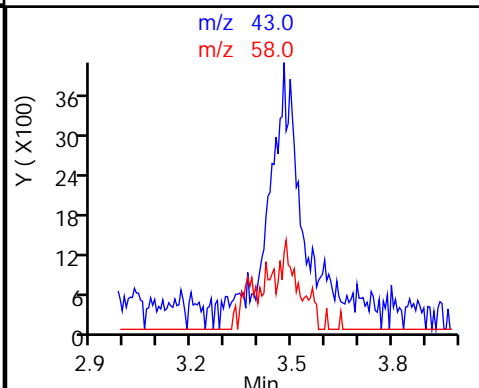
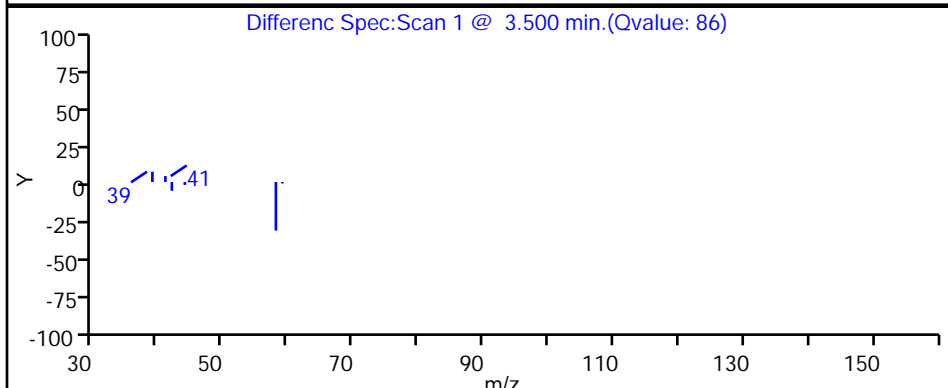
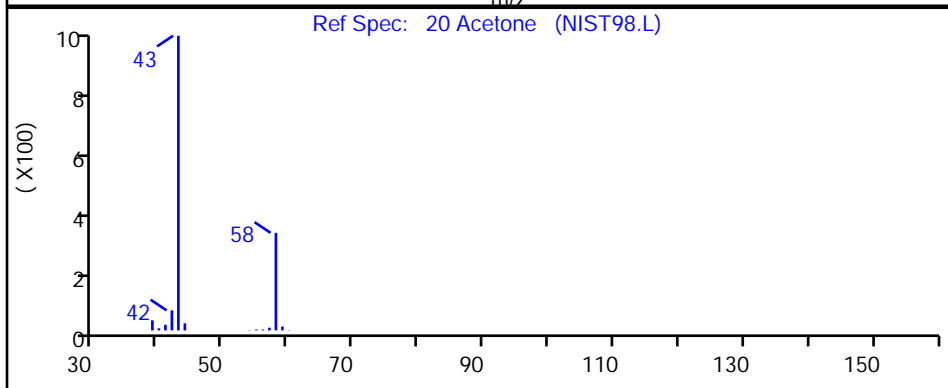
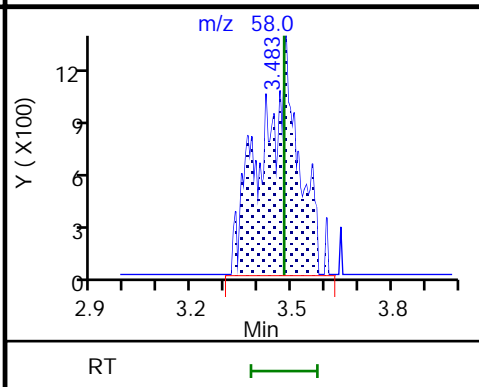
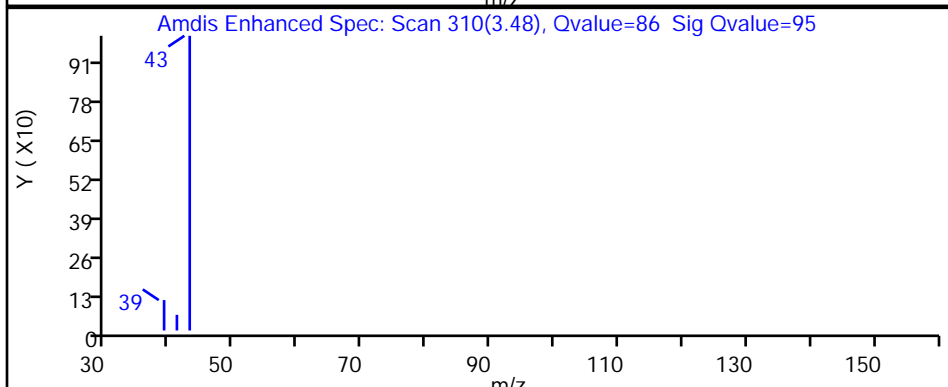
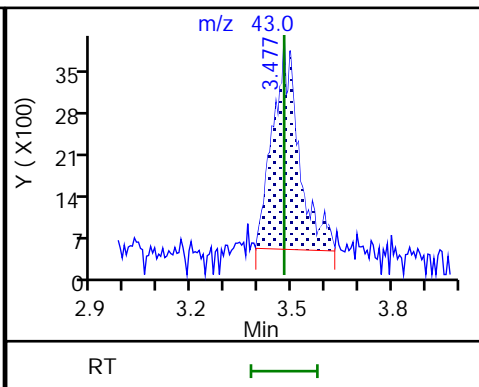
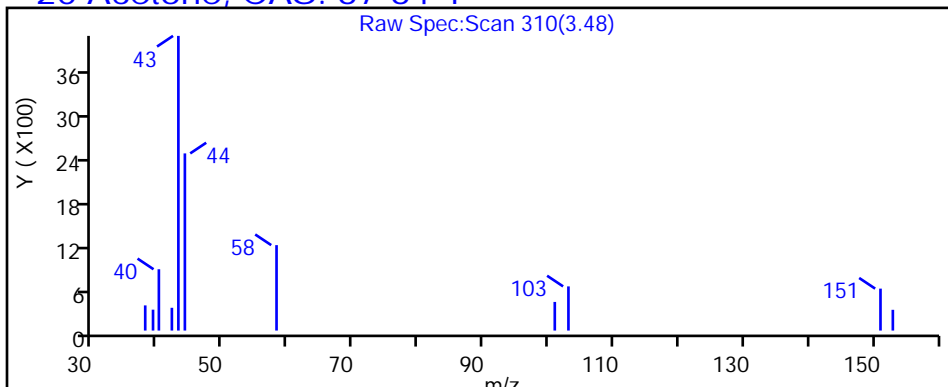
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

### 20 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X10.D

Injection Date: 01-Dec-2022 13:32:30

Instrument ID: 16334

Lims ID: 410-106467-A-5

Lab Sample ID: 410-106467-5

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

Operator ID: knk41612

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

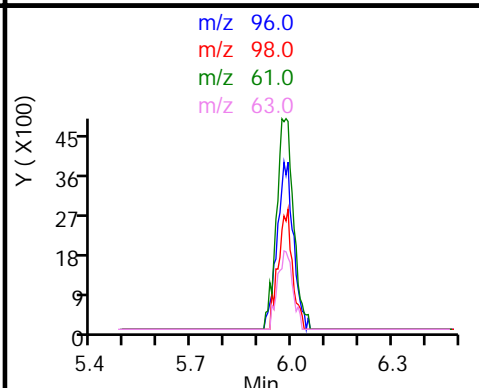
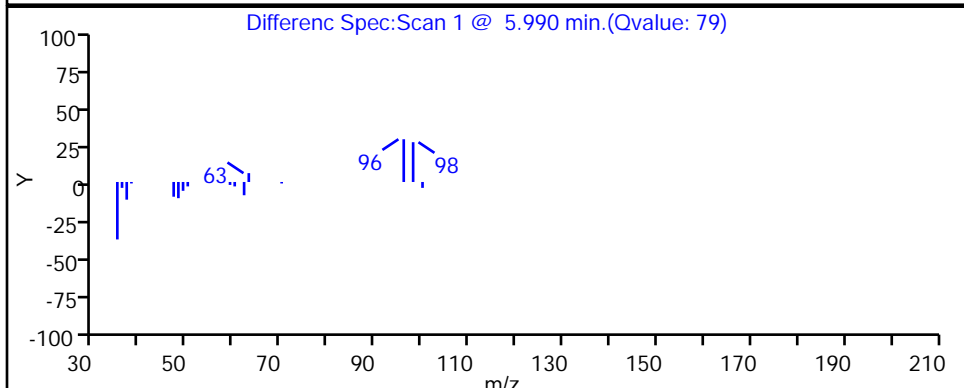
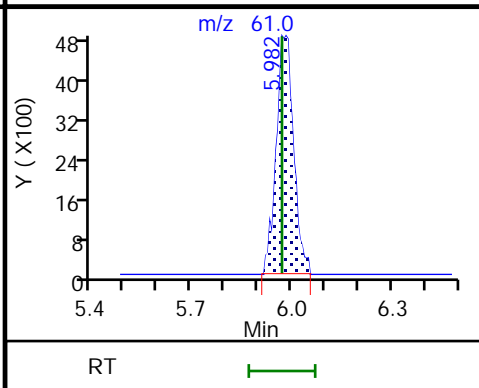
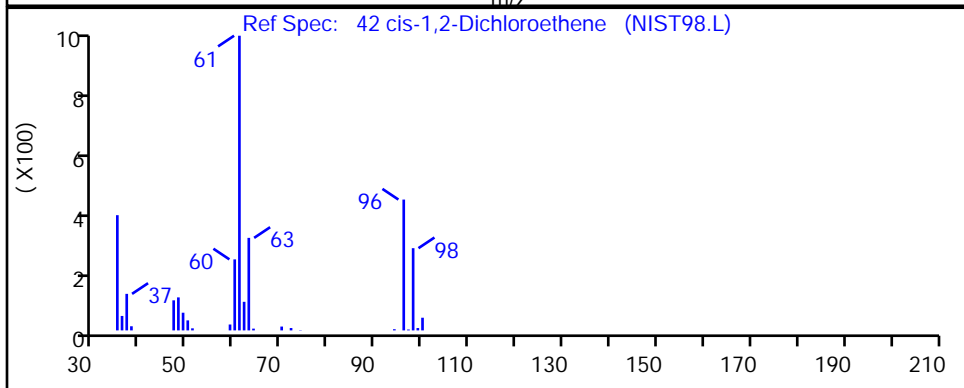
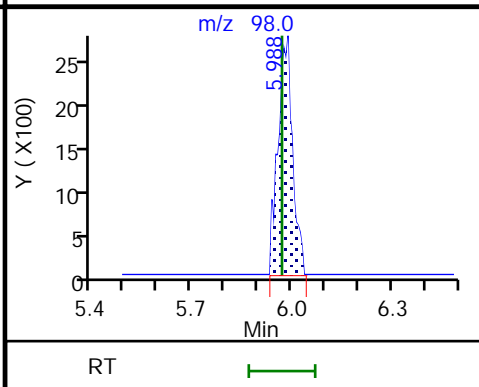
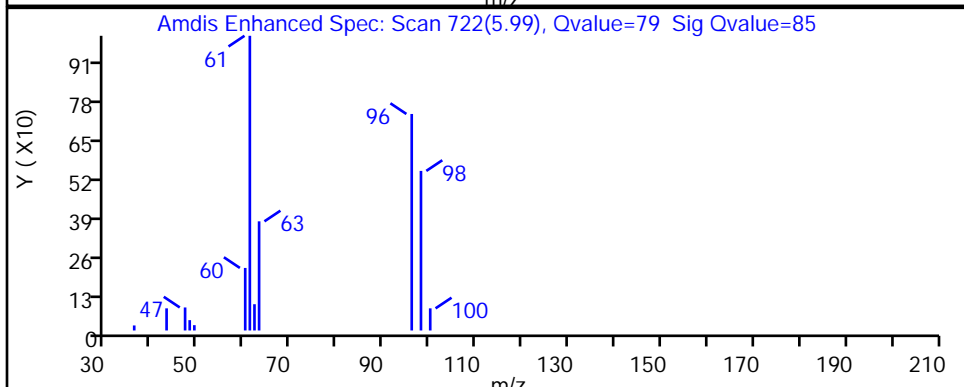
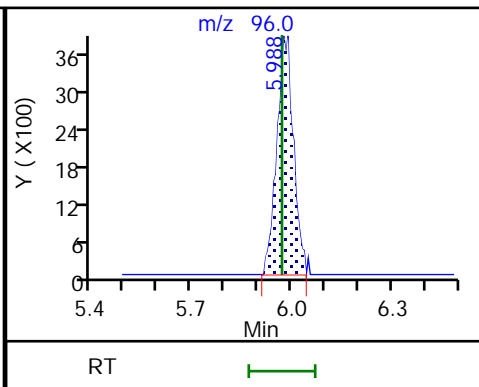
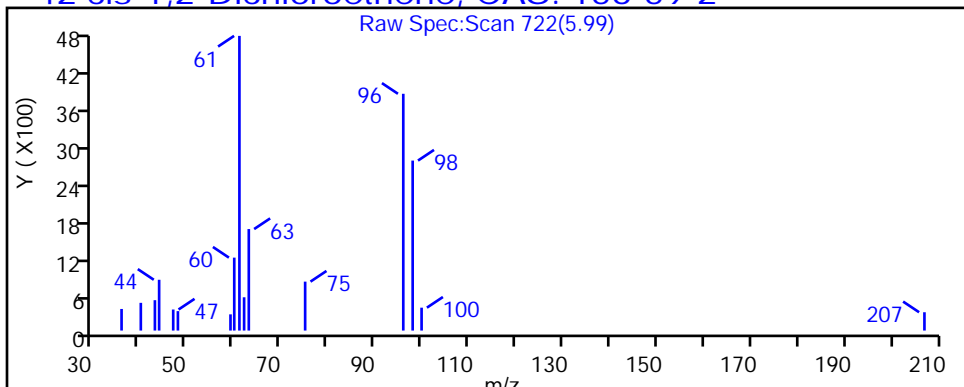
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

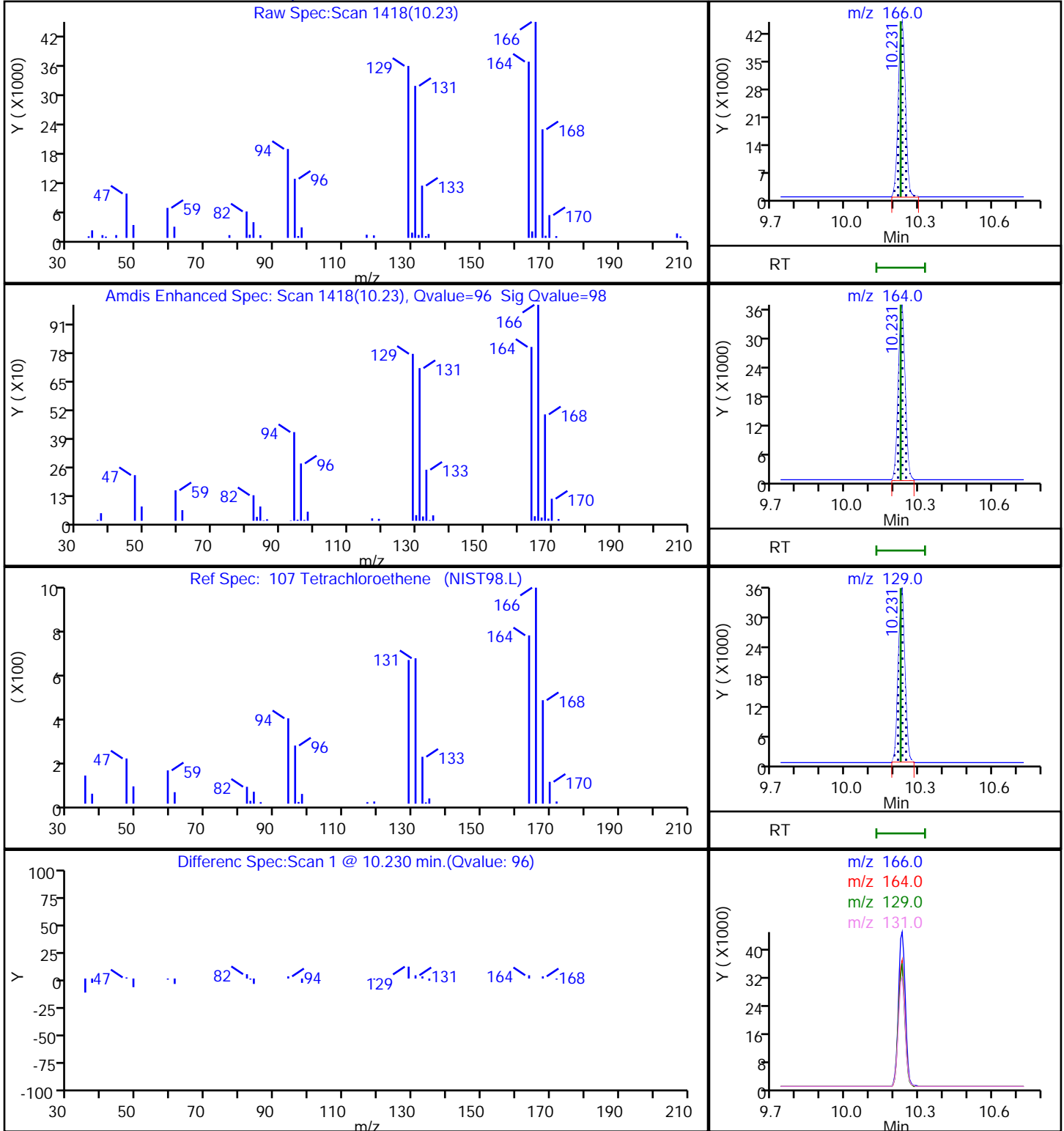
MS Quad

### 42 cis-1,2-Dichloroethene, CAS: 156-59-2



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X10.D  
Injection Date: 01-Dec-2022 13:32:30 Instrument ID: 16334  
Lims ID: 410-106467-A-5 Lab Sample ID: 410-106467-5  
Client ID: HD-COD-SW-13-0/1-0  
Operator ID: knk41612 ALS Bottle#: 10 Worklist Smp#: 11  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X10.D

Injection Date: 01-Dec-2022 13:32:30

Instrument ID: 16334

Lims ID: 410-106467-A-5

Lab Sample ID: 410-106467-5

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

Operator ID: knk41612

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

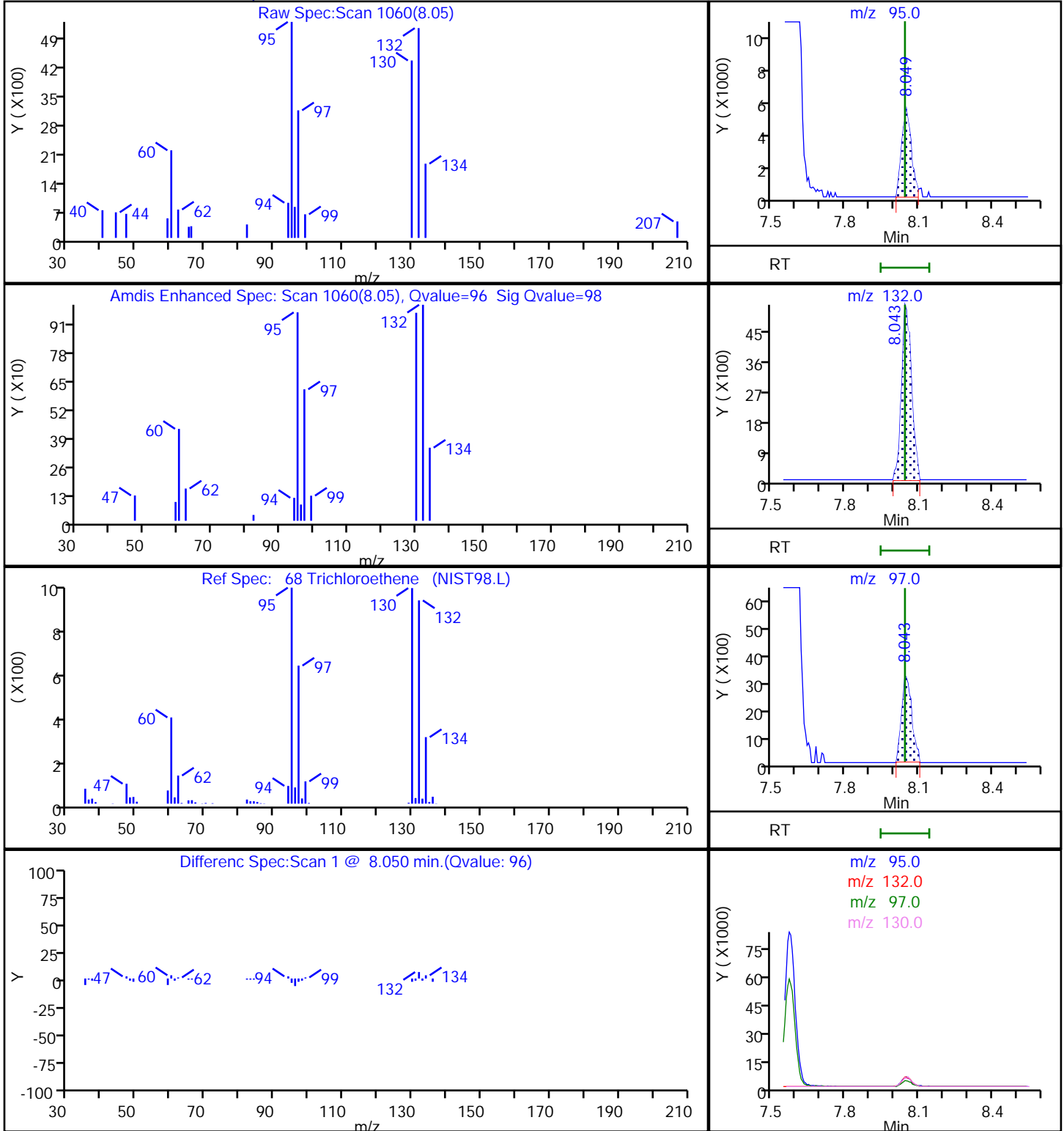
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm i.d.)

MS Quad

### 68 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Environment Testing, LLC

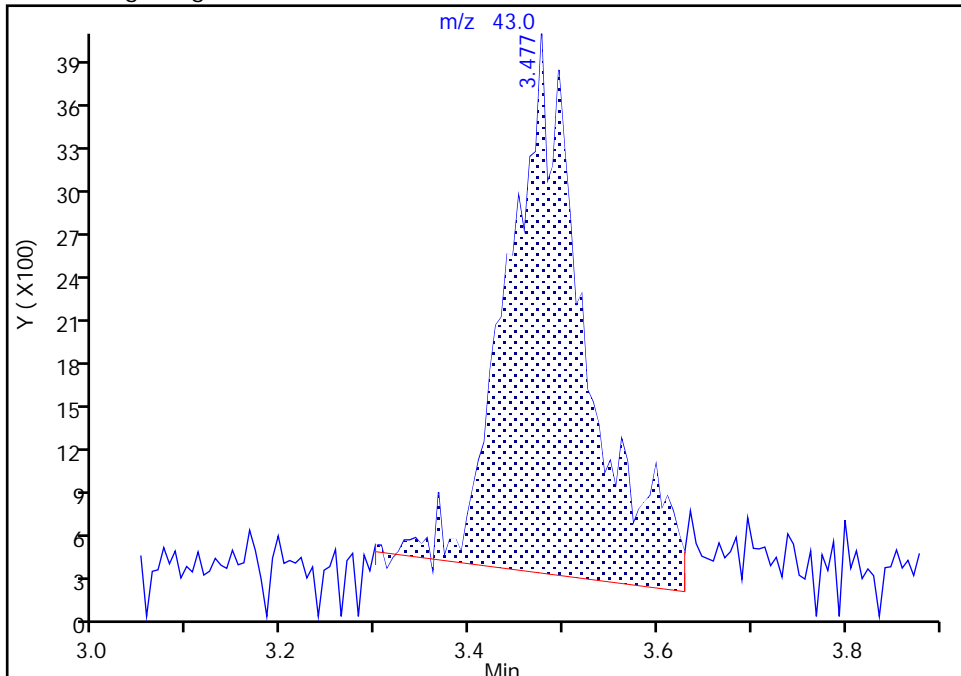
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Injection Date: 01-Dec-2022 13:32:30 Instrument ID: 16334  
Lims ID: 410-106467-A-5 Lab Sample ID: 410-106467-5  
Client ID: HD-COD-SW-13-0/1-0  
Operator ID: knk41612 ALS Bottle#: 10 Worklist Smp#: 11  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

20 Acetone, CAS: 67-64-1

Signal: 1

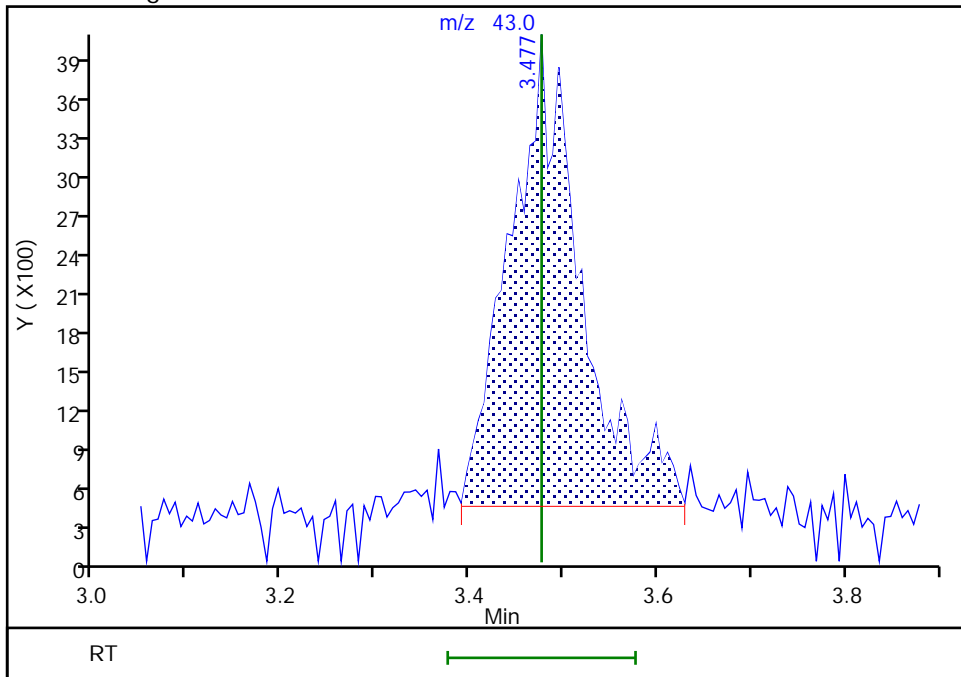
RT: 3.48  
Area: 21907  
Amount: 2.318361  
Amount Units: ug/l

Processing Integration Results



RT: 3.48  
Area: 19044  
Amount: 2.015377  
Amount Units: ug/l

Manual Integration Results



Reviewer: pongawatp, 02-Dec-2022 16:11:47  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration  
Page 318 of 959

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-6

Matrix: Water

Lab File ID: GD01X11.D

Analysis Method: 8260D

Date Collected: 11/18/2022 11:15

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 13:54

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	0.45	J	0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	0.18	J	0.50	0.10
75-35-4	1,1-Dichloroethene	0.23	J	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND	FH	0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND	^c cn	1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND	^c *+ FH cn	1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND	FH	0.50	0.10
67-66-3	Chloroform	0.34	J	0.50	0.090
74-87-3	Chloromethane	ND	^c FH cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	2.2		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	5.8		0.50	0.20

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-6

Matrix: Water

Lab File ID: GD01X11.D

Analysis Method: 8260D

Date Collected: 11/18/2022 11:15

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 13:54

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-88-3	Toluene	ND		0.50	0.080
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND	^c cn	0.50	0.080
79-01-6	Trichloroethene	1.8		0.50	0.080
75-01-4	Vinyl chloride	ND	FH	0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	103		80-120



Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X11.D  
 Lims ID: 410-106467-A-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 13:54:30 ALS Bottle#: 11 Worklist Smp#: 12  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-012  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:13:40 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pong sawatp Date: 02-Dec-2022 16:13:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.867				ND	
2 Dichlorodifluoromethane	85		1.892				ND	
3 Chlorodifluoromethane	51		1.916				ND	U
4 Dimethyl ether	45		1.983				ND	7
5 Chloromethane	50	2.087	2.087	0.000	8	7208	0.0968	
6 Vinyl chloride	62		2.202				ND	
7 Butadiene	39		2.209				ND	7
8 2-Chloro-1,1,1-Trifluoroethane	118		2.294				ND	
9 Bromomethane	94		2.519				ND	7
10 Chloroethane	64		2.599				ND	
11 Dichlorofluoromethane	67		2.830				ND	7
12 Trichlorofluoromethane	101		2.897				ND	
13 Ethyl ether	59		3.129				ND	
14 Ethanol	45	3.196	3.190	0.006	3	243	NC	
T 15 Ethanol TIC	45		3.190				ND	7
16 1,2-Dichloro-1,1,2-trifluoroethane	67		3.214				ND	7
17 Acrolein	56		3.300				ND	7
18 1,1-Dichloroethene	96	3.428	3.422	0.006	98	12365	0.2257	
19 1,1,2-Trichloro-1,2,2-trifluoroethane	101		3.464				ND	
20 Acetone	43		3.477				ND	MU
21 Iodomethane	142		3.611				ND	
22 Ethyl bromide	108		3.635				ND	
24 Isopropyl alcohol	45		3.690				ND	
23 Carbon disulfide	76		3.708				ND	7
25 Methyl acetate	43		3.873				ND	7
26 Acetonitrile	41		3.873				ND	
27 3-Chloro-1-propene	41		3.885				ND	
T 28 Acetonitrile TIC	41		3.961				ND	
29 Methylene Chloride	84		4.062				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.153	4.147	0.006	35	139131	50.0	
31 2-Methyl-2-propanol	59		4.251				ND	
32 Acrylonitrile	53		4.409				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
33 Methyl tert-butyl ether	73	4.464	4.458	0.006	78	7037	0.0450	
34 trans-1,2-Dichloroethene	96		4.464				ND	
35 Hexane	57	4.903	4.897	0.006	90	10814	0.1548	
36 Vinyl acetate	43		5.123				ND	
37 1,1-Dichloroethane	63	5.141	5.135	0.006	96	18784	0.1807	
38 Isopropyl ether	45		5.196				ND	
39 2-Chloro-1,3-butadiene	53		5.245				ND	
40 Tert-butyl ethyl ether	59		5.732				ND	7
41 2-Butanone (MEK)	43		5.940				ND	
42 cis-1,2-Dichloroethene	96	5.976	5.970	0.006	80	156272	2.23	
43 2,2-Dichloropropane	77		5.988				ND	
44 Ethyl acetate	43		6.007				ND	7
45 Propionitrile	54		6.031				ND	
46 Methyl acrylate	55		6.141				ND	
S 47 1,2-Dichloroethene, Total	100				0		2.23	
48 Methacrylonitrile	67		6.244				ND	
49 Chlorobromomethane	128		6.299				ND	
50 Tetrahydrofuran	71		6.305				ND	
51 Chloroform	83	6.464	6.458	0.006	92	37377	0.3355	
\$ 52 Dibromofluoromethane (Surr)	113	6.683	6.671	0.012	93	632570	10.0	
53 1,1,1-Trichloroethane	97	6.695	6.677	0.018	38	43666	0.4492	
54 Cyclohexane	56		6.775				ND	
56 Carbon tetrachloride	117		6.891				ND	7
57 1,1-Dichloropropene	75		6.897				ND	
55 1-Chlorobutane	56		6.940				ND	
58 Isobutyl alcohol	41		7.086				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.134	7.122	0.012	63	132612	9.89	
60 Benzene	78		7.159				ND	7
61 1,2-Dichloroethane	62		7.226				ND	
62 Isopropyl acetate	43		7.244				ND	
63 Tert-amyl methyl ether	73		7.354				ND	
* 64 Fluorobenzene (IS)	96	7.573	7.567	0.006	99	2543608	10.0	
65 n-Heptane	43		7.579				ND	7
66 t-Amyl alcohol	73		7.842				ND	
67 n-Butanol	56		7.976				ND	
68 Trichloroethene	95	8.049	8.043	0.006	97	124739	1.75	
69 Methylcyclohexane	83		8.348				ND	
70 1,2-Dichloropropane	63		8.378				ND	
71 2-ethoxy-2-methyl butane	87		8.390				ND	
72 Methyl methacrylate	69		8.463				ND	
73 Dibromomethane	93		8.482				ND	
74 1,4-Dioxane	88		8.512				ND	
75 n-Propyl acetate	61		8.549				ND	
76 Dichlorobromomethane	83		8.726				ND	
77 2-Nitropropane	41		9.000				ND	
78 2-Chloroethyl vinyl ether	63		9.098				ND	
79 1-Bromo-2-chloroethane	63		9.116				ND	
80 Chloroacetonitrile	75		9.189				ND	
81 cis-1,3-Dichloropropene	75		9.280				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.463				ND	
\$ 83 Toluene-d8 (Surr)	98	9.597	9.597	0.000	94	2518319	10.3	
84 Toluene	92	9.671	9.671	-0.001	96	6711	0.0405	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
85 trans-1,3-Dichloropropene	75		9.933				ND	
104 Ethyl methacrylate	69		10.000				ND	
T 86 3-Chloro-1,2-propanediol TIC	44	9.969	10.000	-0.031	1	636	0.002500	
T 92 Ethylene oxide TIC	44		10.000				ND	
T 91 Decamethylcyclotrasiloxane TIC	71	9.597	10.000	-0.403	1	1116	0.004387	
T 90 2-Bromo-3-chloropropene TIC	75	10.091	10.000	0.091	1	274	0.001077	
T 93 2-Chloroethanol TIC	44		10.000				ND	
T 88 Octamethylcyclotetrasiloxane TIC	78	12.121	10.000	2.121	91	35917	0.1412	
T 89 Epibromohydrin TIC	57		10.000				ND	
T 94 Nitrobenzene TIC	77	10.006	10.000	0.006	1	1683	0.006617	
T 208 Methyl acrylate TIC	55	9.597	10.000	-0.403	13	9682	0.0381	
T 96 Monochloroacetic acid TIC	50		10.000				ND	
T 100 2,3-Dibromopropene TIC	119	10.079	10.000	0.079	1	213	0.000837	
T 97 Isopropyl alcohol TIC	45	10.018	10.000	0.018	1	204	0.000802	
T 103 Vinyl acetate (TIC)	43	9.591	10.000	-0.409	24	9738	0.0383	
T 98 2-Bromoethanol TIC	45		10.000				ND	
T 99 Epichlorohydrin TIC	57	9.616	10.000	-0.384	29	633	0.002489	
T 87 2,3-Dibromo-1-propanol TIC	57	9.616	10.000	-0.384	1	633	0.002489	
T 101 Vinyl bromide TIC	106	11.188	10.000	1.188	1	873	0.003432	
T 102 Hexachloroethane TIC	117	10.231	10.000	0.231	11	4022	0.0158	
T 95 Chloroacetaldehyde TIC	50	9.890	10.000	-0.110	1	440	0.001730	
S 105 1,3-Dichloropropene, Total	100		10.060				ND	7
106 1,1,2-Trichloroethane	97		10.140				ND	7
107 Tetrachloroethene	166	10.231	10.225	0.006	97	482051	5.78	
108 1,3-Dichloropropane	76		10.305				ND	
109 2-Hexanone	43		10.359				ND	
110 n-Butyl acetate	43		10.487				ND	
111 Chlorodibromomethane	129		10.518				ND	
112 Ethylene Dibromide	107		10.628				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.067	11.067	0.000	86	1910026	10.0	
114 1-Chlorohexane	91		11.079				ND	7
115 Chlorobenzene	112		11.091				ND	
117 1,1,1,2-Tetrachloroethane	131		11.176				ND	
116 Ethylbenzene	91		11.176				ND	7
S 118 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.292				ND	7
120 o-Xylene	106		11.627				ND	7
121 Styrene	104		11.640				ND	
122 Bromoform	173		11.792				ND	
123 Isopropylbenzene	105		11.926				ND	
124 cis-1,4-Dichloro-2-butene	88		11.987				ND	
125 Cyclohexanone	55		12.018				ND	7
\$ 126 4-Bromofluorobenzene (Surr)	95	12.066	12.066	0.000	91	900925	9.90	
127 1,1,2,2-Tetrachloroethane	83		12.170				ND	
128 Bromobenzene	156		12.182				ND	
129 trans-1,4-Dichloro-2-butene	53		12.194				ND	
130 1,2,3-Trichloropropane	110		12.219				ND	
131 N-Propylbenzene	91		12.255				ND	
132 2-Chlorotoluene	126		12.329				ND	
133 1,3,5-Trimethylbenzene	105		12.390				ND	7
134 4-Chlorotoluene	126		12.420				ND	
135 tert-Butylbenzene	134		12.627				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
136 Pentachloroethane	167		12.664				ND	
137 1,2,4-Trimethylbenzene	105		12.670				ND	7
138 sec-Butylbenzene	105		12.792				ND	
139 1,3-Dichlorobenzene	146		12.889				ND	7
140 4-Isopropyltoluene	119		12.902				ND	7
* 141 1,4-Dichlorobenzene-d4	152	12.944	12.944	0.000	95	1059164	10.0	
142 1,4-Dichlorobenzene	146		12.963				ND	7
143 1,2,3-Trimethylbenzene	120		12.975				ND	7
144 Benzyl chloride	126		13.042				ND	
145 p-Diethylbenzene	119		13.097				ND	
146 n-Butylbenzene	92		13.188				ND	
147 1,2-Dichlorobenzene	146		13.225				ND	
148 Hexachloroethane	201		13.499				ND	
149 1,2-Dibromo-3-Chloropropane	155		13.761				ND	
150 1,3,5-Trichlorobenzene	180		13.883				ND	
151 1,2,4-Trichlorobenzene	180		14.304				ND	
152 Hexachlorobutadiene	225		14.389				ND	
153 Naphthalene	128		14.487				ND	7
154 1,2,3-Trichlorobenzene	180		14.627				ND	7
155 2-Methylnaphthalene	142		15.230				ND	
156 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
157 1,1-Dichloroacetone	1		0.000				ND	
158 tert-Butyl Formate	1		0.000				ND	
159 Methylal	1		0.000				ND	
160 n-Decane	57		0.000				ND	
161 Propene oxide	1		0.000				ND	
162 1-Bromo-3-Chloropropane	1		0.000				ND	
163 1-Chloropropane	1		0.000				ND	
164 2-Bromo-1-chloropropane	1		0.000				ND	
165 Dodecane	57		0.000				ND	
207 1,1,2-Trifluoroethane TIC	1		0.000				ND	
197 Chlorofluoromethane TIC	1		0.000				ND	
198 Dichloro-1,1,2,2-tetrafluoroetha	1		0.000				ND	
199 1-Chloro-1,1-difluoroethane TIC	1		0.000				ND	
200 Ethyl ether TIC	1		0.000				ND	
201 Freon 115 TIC	1		0.000				ND	
202 Fluoromethane TIC	1		0.000				ND	
203 1,1,1-Trifluoro-2,2-dichloroetha	1		0.000				ND	
204 1,2-Dichlorofluoroethane TIC	1		0.000				ND	
205 1,1,1-Trichloro-2,2,2-trifluoroe	1		0.000				ND	
206 Vinyl Fluoride TIC	1		0.000				ND	
166 Pentane	43	2.940	2.928	0.012	9	396	NR	

### QC Flag Legend

#### Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV\_29\_826ISS\_00040

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X11.D

Injection Date: 01-Dec-2022 13:54:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: 410-106467-A-6

Lab Sample ID: 410-106467-6

Worklist Smp#: 12

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

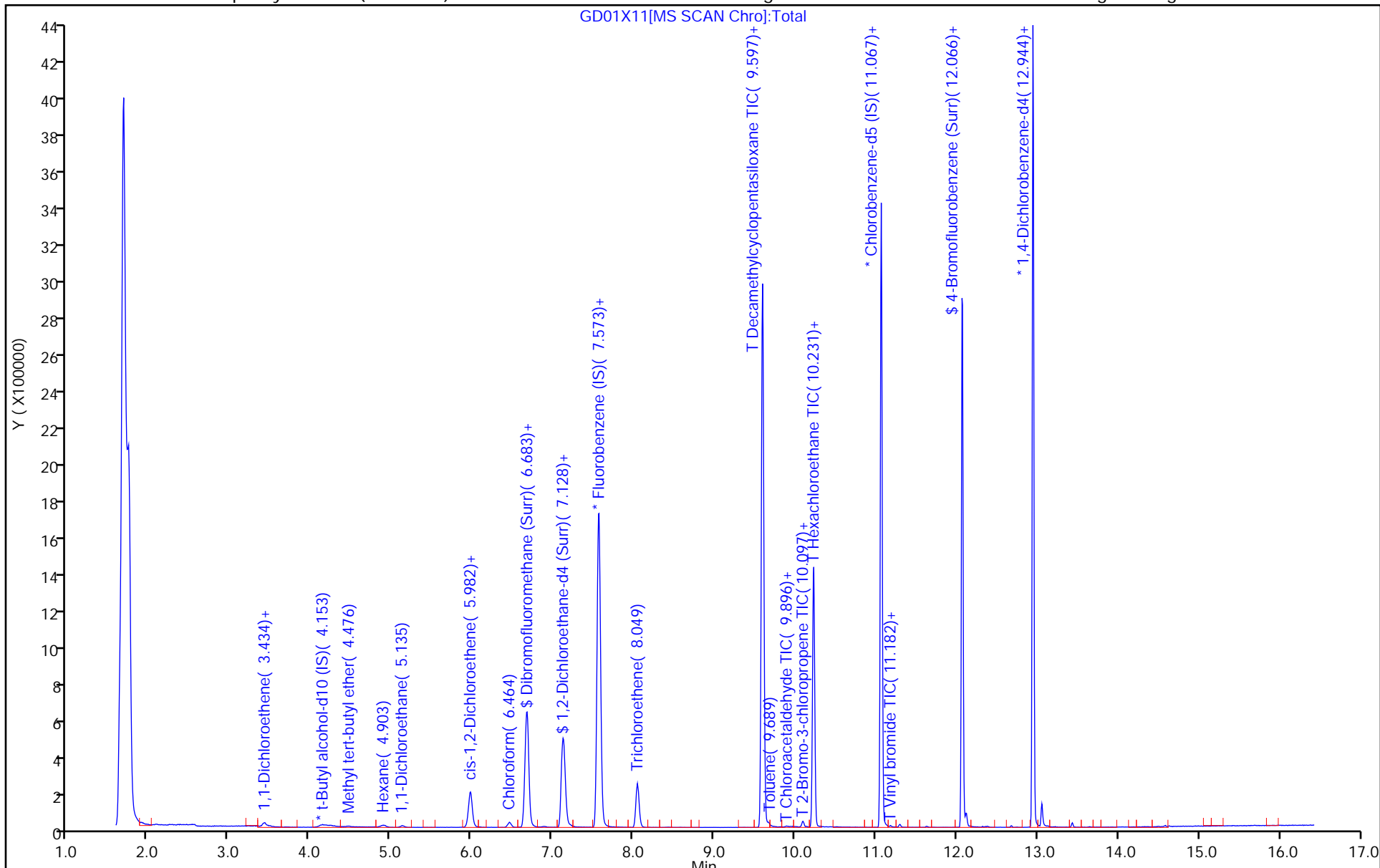
ALS Bottle#: 11

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

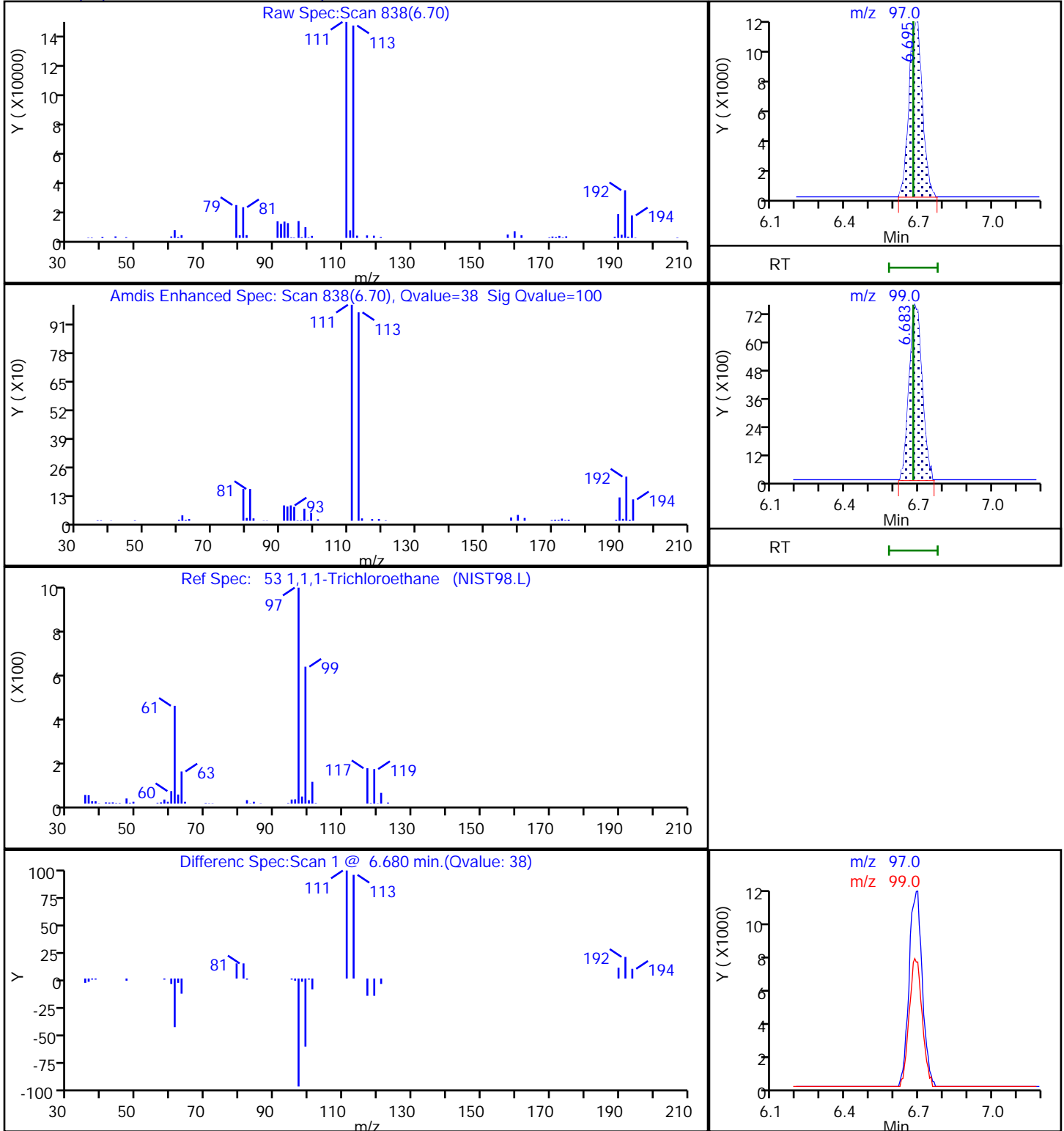
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 Lims ID: 410-106467-A-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 13:54:30 ALS Bottle#: 11 Worklist Smp#: 12  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-012  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:13:40 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongsawatp Date: 02-Dec-2022 16:13:40

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.0	100.17
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.89	98.88
\$ 83 Toluene-d8 (Surr)	10.0	10.3	102.96
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.90	98.95

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X11.D  
Injection Date: 01-Dec-2022 13:54:30 Instrument ID: 16334  
Lims ID: 410-106467-A-6 Lab Sample ID: 410-106467-6  
Client ID: HD-COD-SW-15-0/1-0  
Operator ID: knk41612 ALS Bottle#: 11 Worklist Smp#: 12  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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





Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X11.D

Injection Date: 01-Dec-2022 13:54:30

Instrument ID: 16334

Lims ID: 410-106467-A-6

Lab Sample ID: 410-106467-6

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

Operator ID: knk41612

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

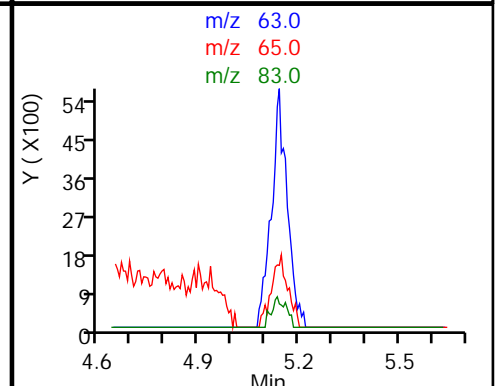
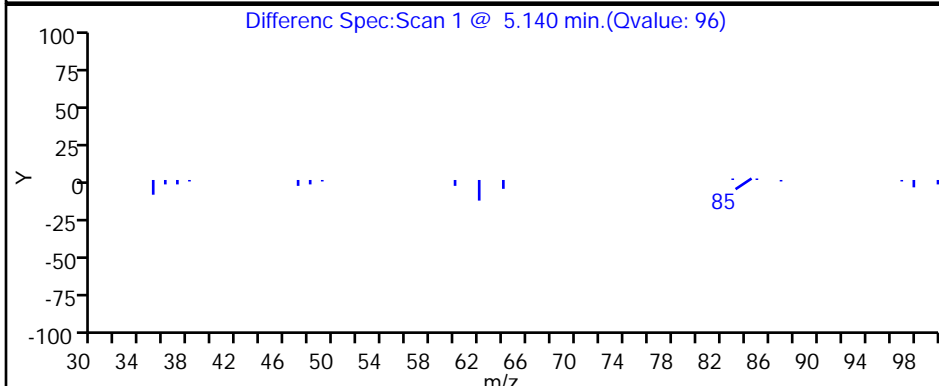
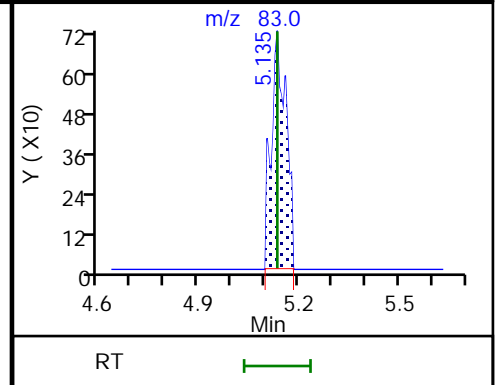
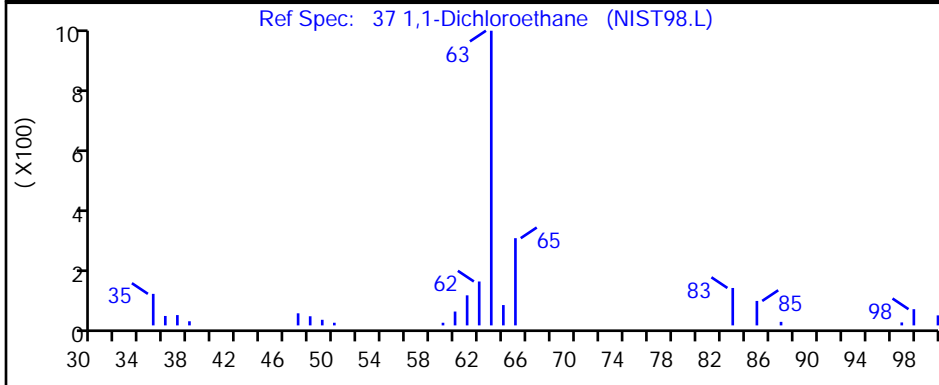
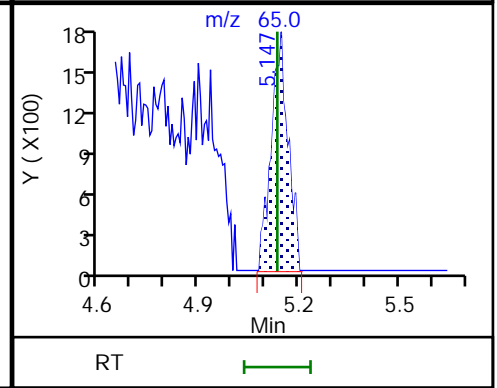
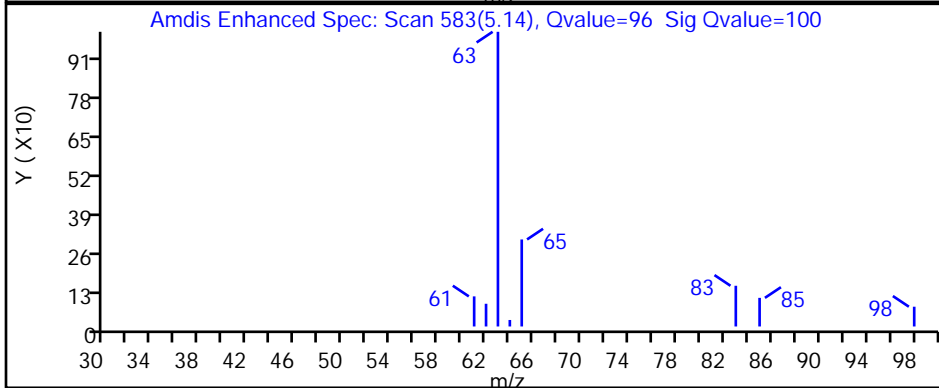
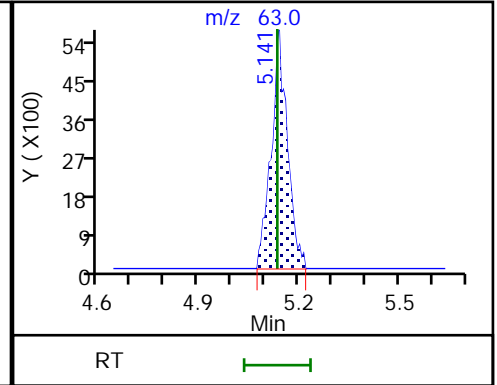
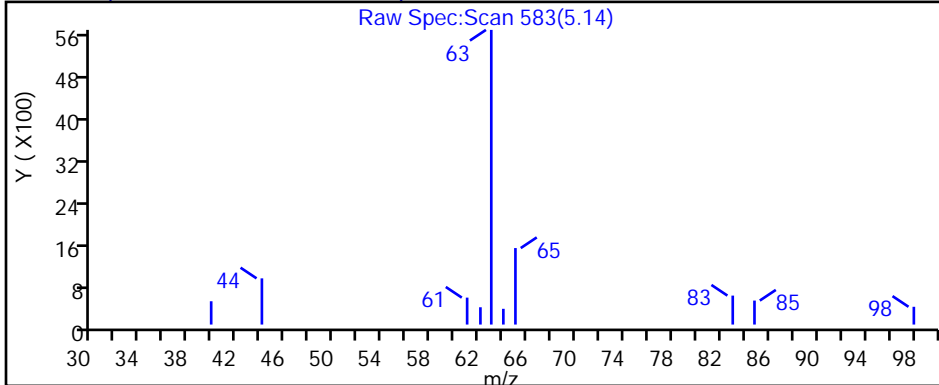
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X11.D

Injection Date: 01-Dec-2022 13:54:30

Instrument ID: 16334

Lims ID: 410-106467-A-6

Lab Sample ID: 410-106467-6

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

Operator ID: knk41612

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

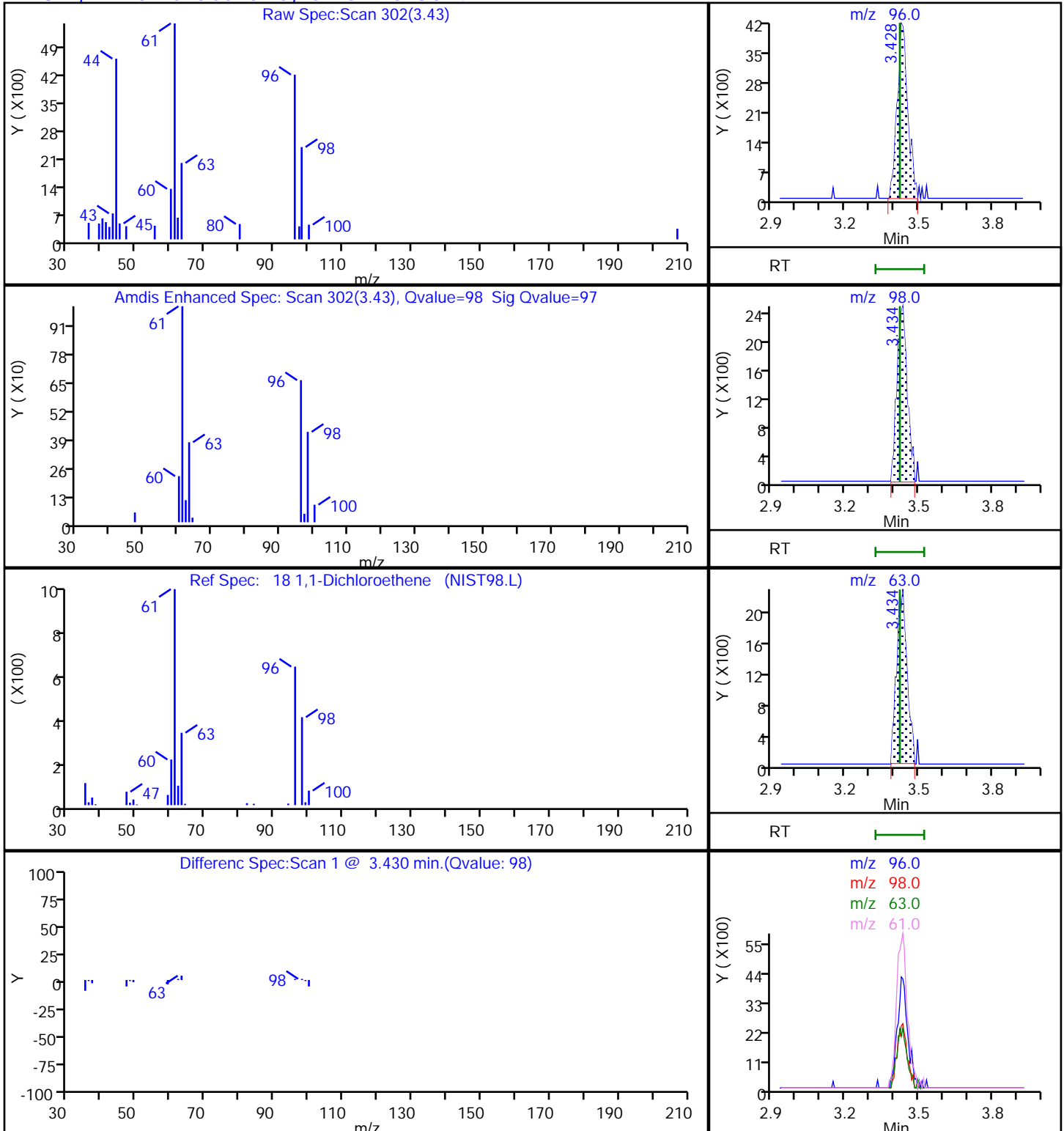
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

18 1,1-Dichloroethene, CAS: 75-35-4



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X11.D

Injection Date: 01-Dec-2022 13:54:30

Instrument ID: 16334

Lims ID: 410-106467-A-6

Lab Sample ID: 410-106467-6

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

Operator ID: knk41612

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

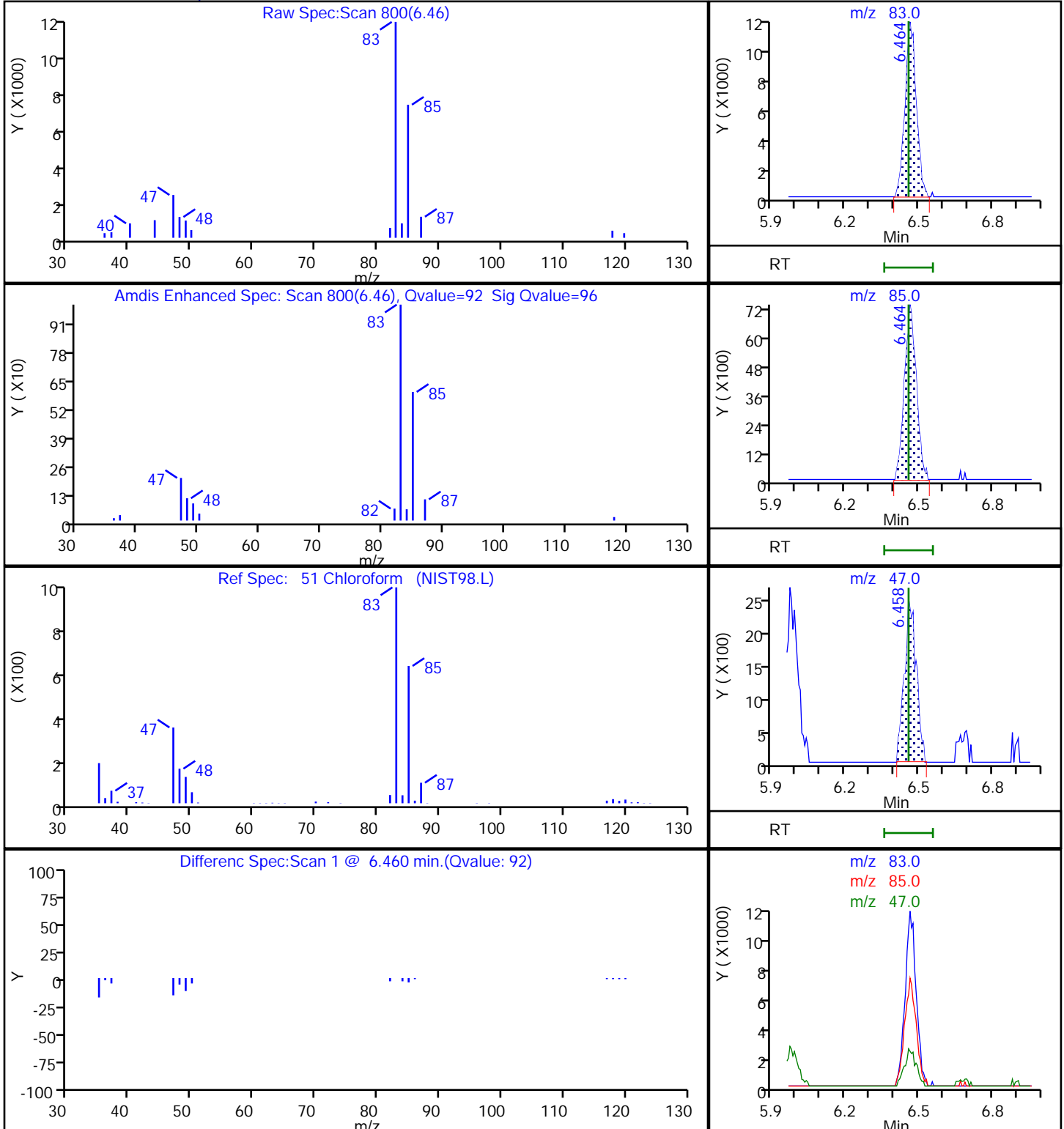
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

51 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X11.D

Injection Date: 01-Dec-2022 13:54:30

Instrument ID: 16334

Lims ID: 410-106467-A-6

Lab Sample ID: 410-106467-6

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

Operator ID: knk41612

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

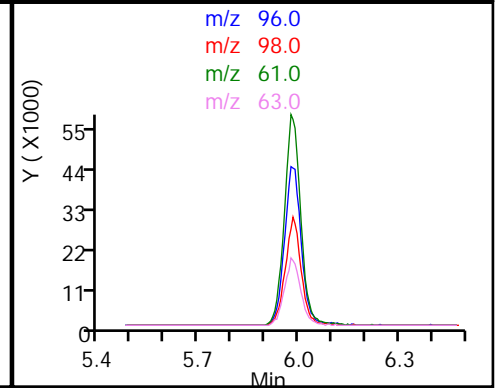
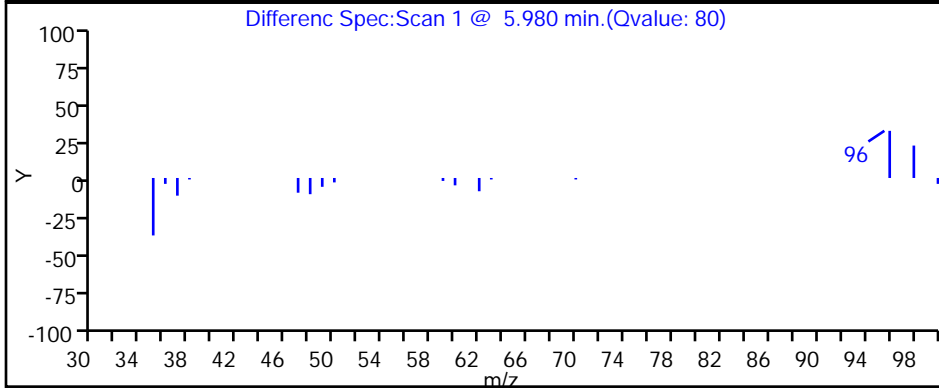
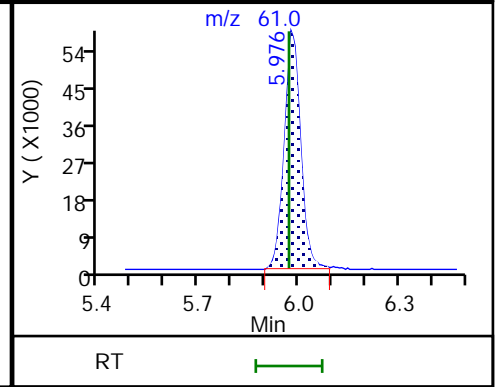
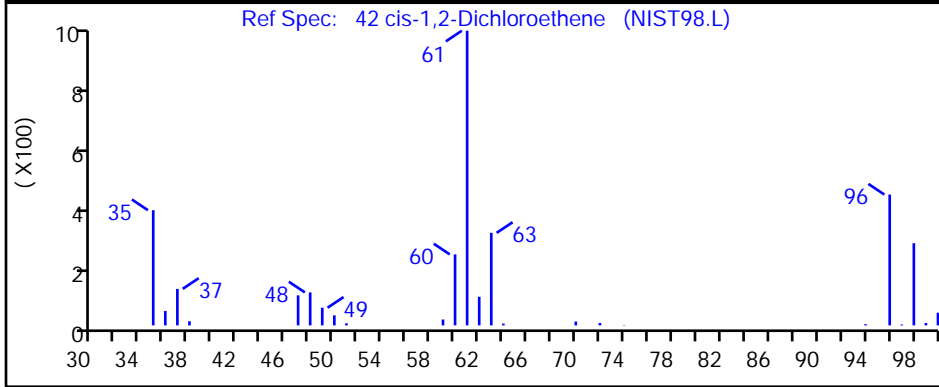
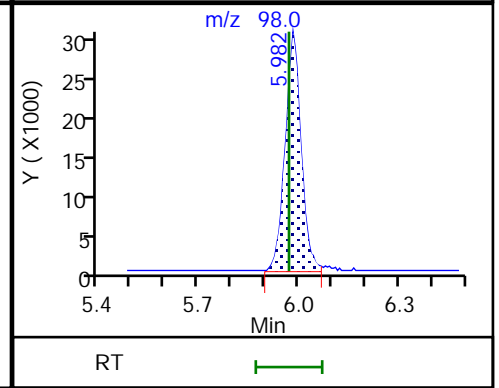
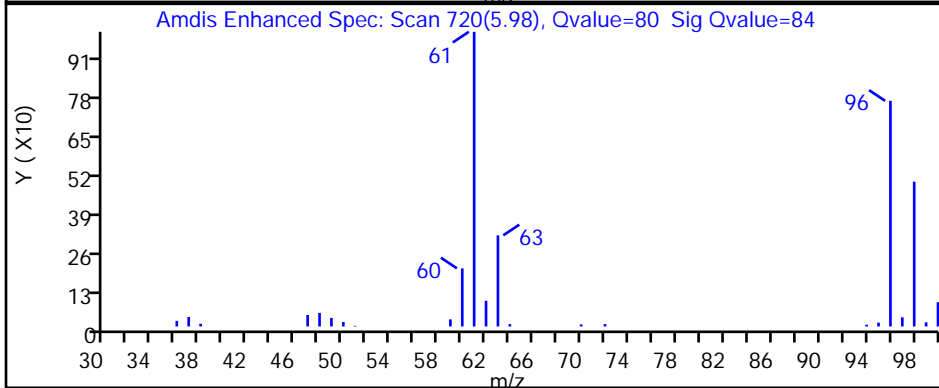
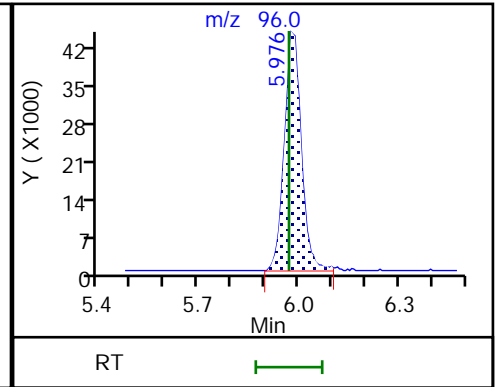
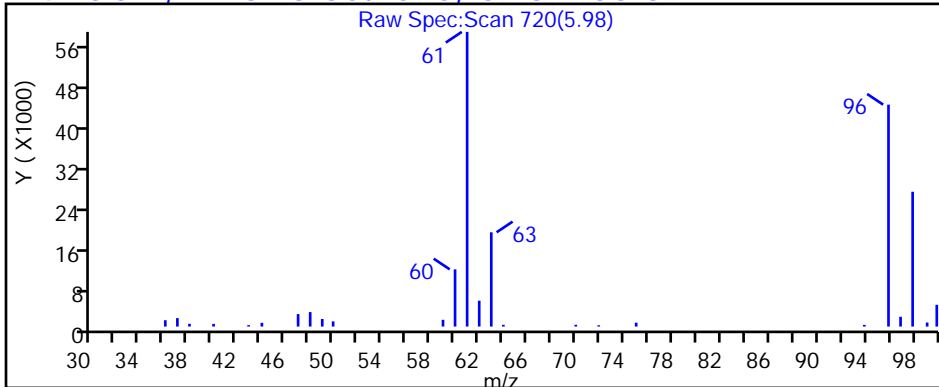
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

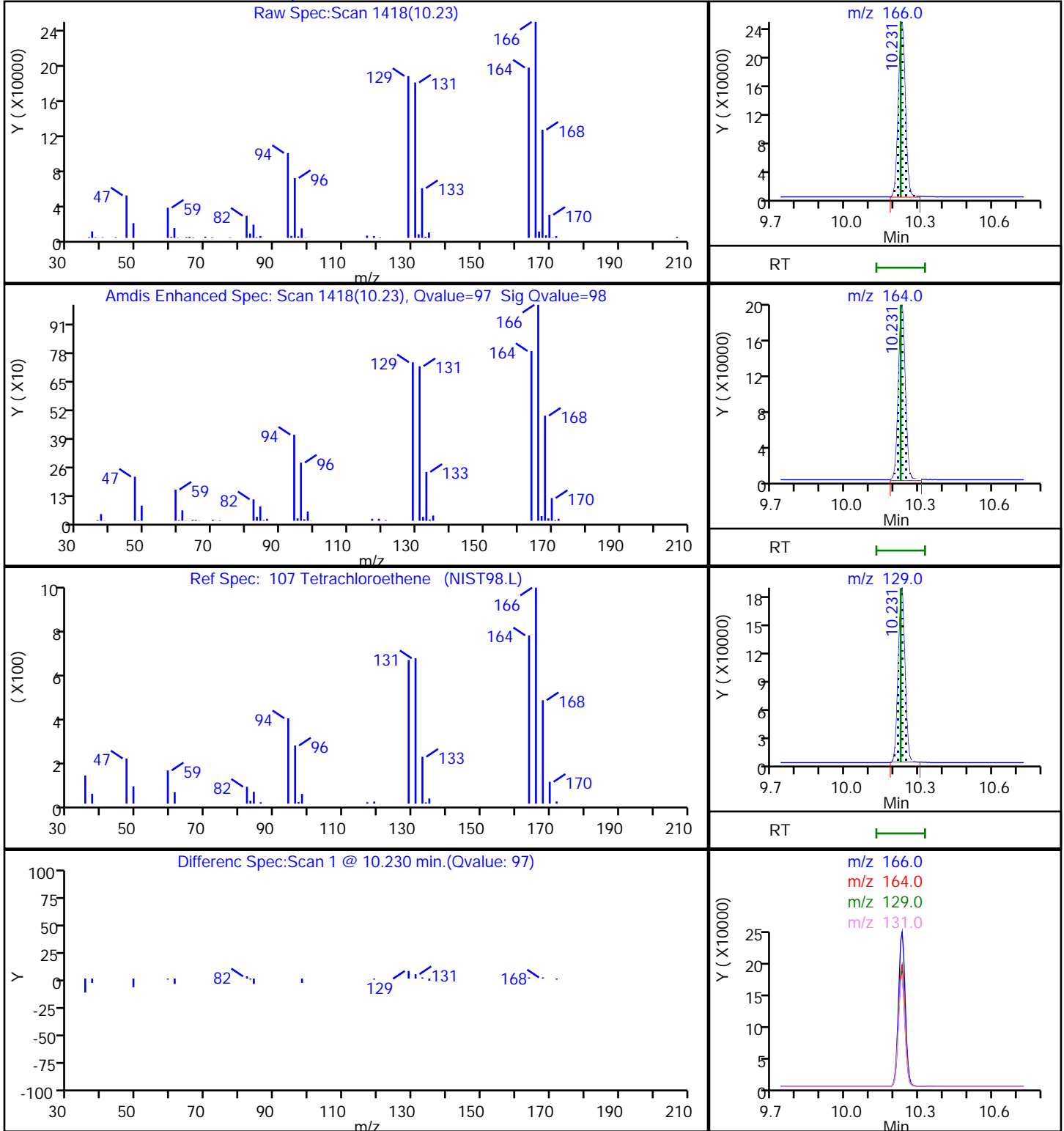
MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X11.D  
Injection Date: 01-Dec-2022 13:54:30 Instrument ID: 16334  
Lims ID: 410-106467-A-6 Lab Sample ID: 410-106467-6  
Client ID: HD-COD-SW-15-0/1-0  
Operator ID: knk41612 ALS Bottle#: 11 Worklist Smp#: 12  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X11.D

Injection Date: 01-Dec-2022 13:54:30

Instrument ID: 16334

Lims ID: 410-106467-A-6

Lab Sample ID: 410-106467-6

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

Operator ID: knk41612

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

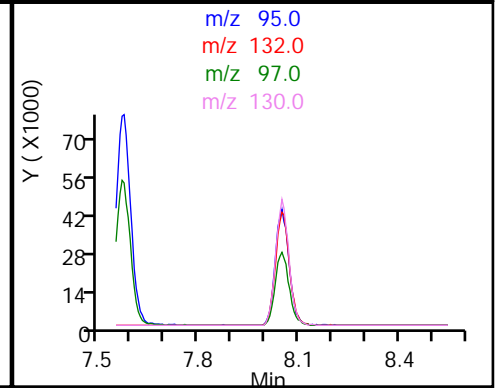
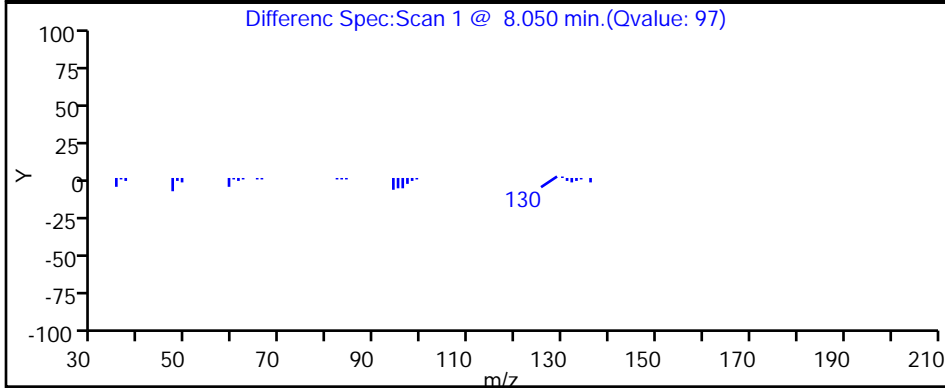
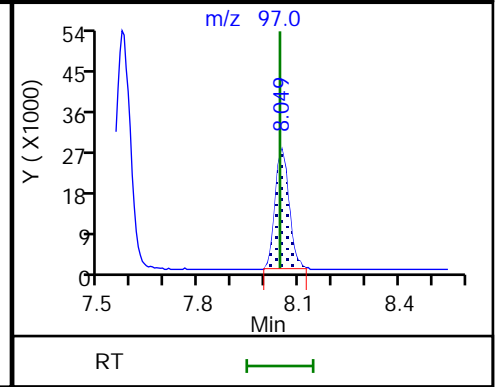
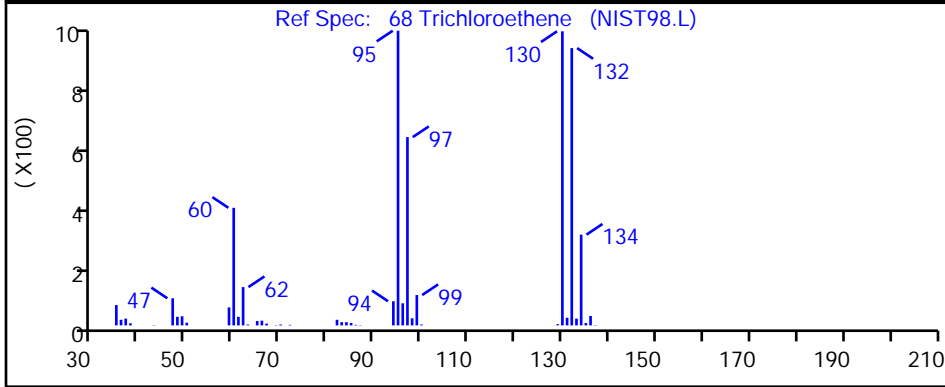
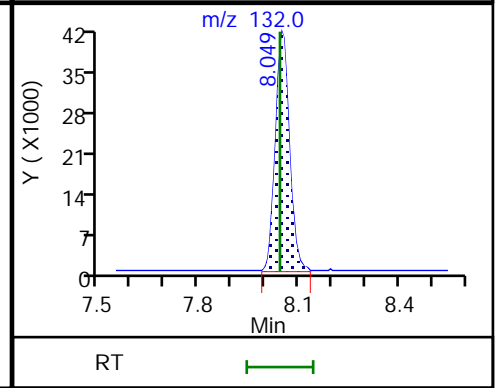
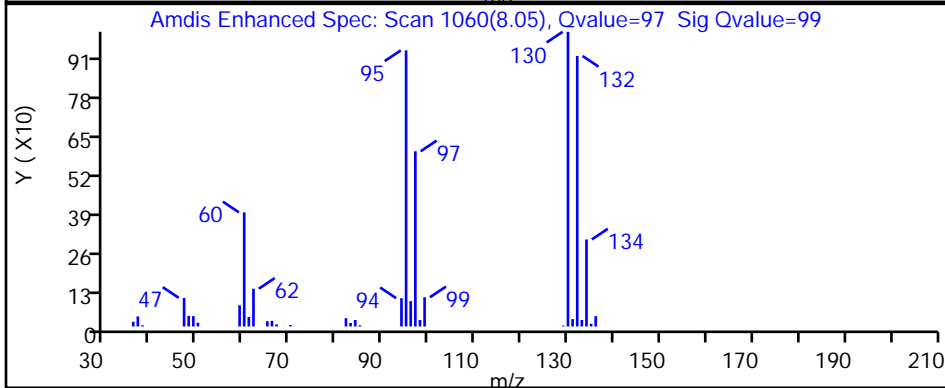
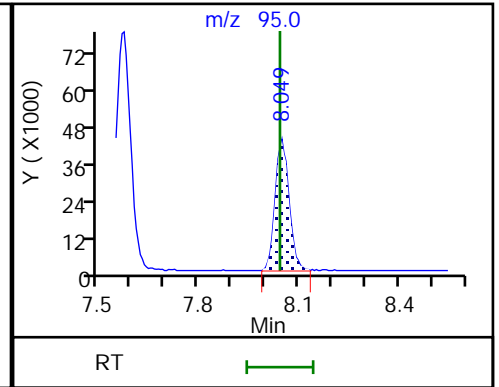
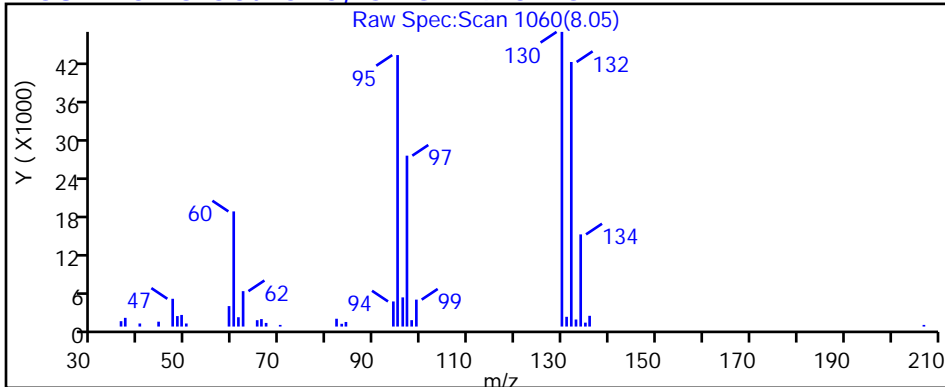
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

68 Trichloroethene, CAS: 79-01-6

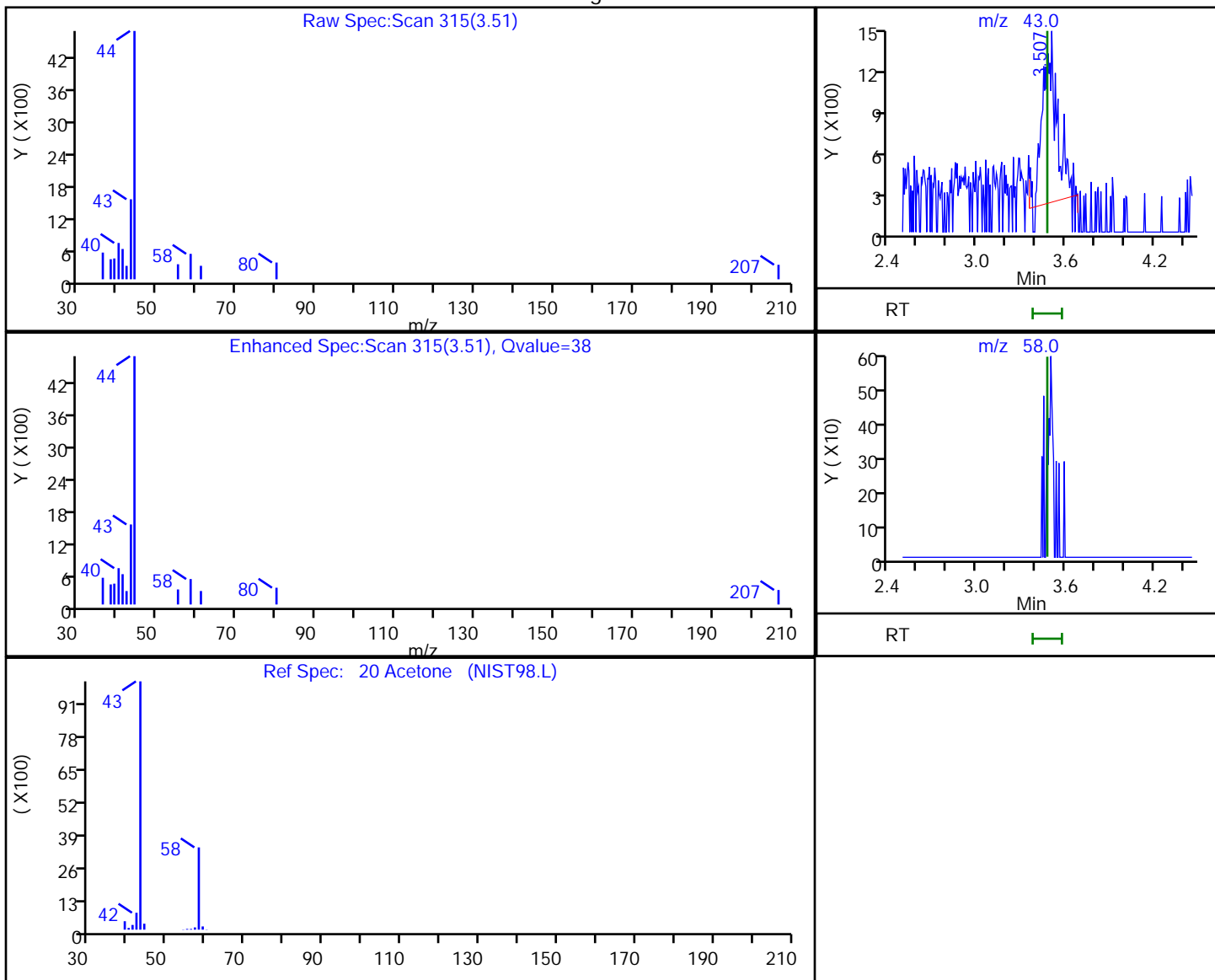


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X11.D  
Injection Date: 01-Dec-2022 13:54:30 Instrument ID: 16334  
Lims ID: 410-106467-A-6 Lab Sample ID: 410-106467-6  
Client ID: HD-COD-SW-15-0/1-0  
Operator ID: knk41612 ALS Bottle#: 11 Worklist Smp#: 12  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

20 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
3.51	43.00	8206	1.163355
3.48	58.00	0	

Reviewer: pongawtp, 02-Dec-2022 16:12:57

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0

Lab Sample ID: 410-106467-7

Matrix: Water

Lab File ID: HD01X42.D

Analysis Method: 8260D

Date Collected: 11/18/2022 09:55

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 23:58

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	0.10	J	0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND	^c cn	5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0
67-64-1	Acetone	1.9	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	^c FH cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.21	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	1.5		0.50	0.20
108-88-3	Toluene	0.13	J cn	0.50	0.080



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0

Lab Sample ID: 410-106467-7

Matrix: Water

Lab File ID: HD01X42.D

Analysis Method: 8260D

Date Collected: 11/18/2022 09:55

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 23:58

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.21	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X42.D  
 Lims ID: 410-106467-A-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 23:58:30 ALS Bottle#: 12 Worklist Smp#: 13  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-013  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2 Date: 02-Dec-2022 13:16:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.886				ND	
2 Dichlorodifluoromethane	85		1.922				ND	
3 Chlorodifluoromethane	51		1.934				ND	7
4 Dimethyl ether	45		2.001				ND	
5 Chloromethane	50	2.123	2.117	0.006	92	8070	0.0822	
6 Butadiene	39		2.233				ND	7
7 Vinyl chloride	62		2.239				ND	7
8 2-Chloro-1,1,1-Trifluoroethane	118		2.312				ND	
9 Bromomethane	94		2.556				ND	
10 Chloroethane	64		2.642				ND	7
11 Dichlorofluoromethane	67		2.867				ND	
12 Trichlorofluoromethane	101		2.946				ND	
13 Ethanol	45	3.202	3.111	0.091	1	522	NC	
14 Ethyl ether	59		3.178				ND	
15 1,2-Dichloro-1,1,2-trifluoroethane	67		3.269				ND	
16 Acrolein	56		3.355				ND	
T 17 Ethanol TIC	45		3.440				ND	7
18 1,1-Dichloroethene	96		3.495				ND	7
19 Acetone	43	3.562	3.501	0.061	99	20174	1.94	
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.550	3.538	0.012	60	2412	0.0372	
21 Isopropyl alcohol	45	3.617	3.647	-0.030	56	5928	5.68	
22 Iodomethane	142		3.684				ND	
23 Ethyl bromide	108		3.715				ND	
24 Carbon disulfide	76	3.818	3.794	0.024	56	8226	0.0462	M
26 Acetonitrile	41		3.897				ND	
25 Methyl acetate	43		3.922				ND	
27 3-Chloro-1-propene	41		3.958				ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.147	4.117	0.030	27	162735	50.0	
28 Methylene Chloride	84		4.147				ND	
T 30 Acetonitrile TIC	41	4.184	4.214	-0.030	5	102	0.000399	7
31 2-Methyl-2-propanol	59		4.233				ND	
32 Acrylonitrile	53		4.477				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
33 Methyl tert-butyl ether	73		4.550				ND	7
34 trans-1,2-Dichloroethene	96		4.568				ND	7
35 Hexane	57	4.995	4.983	0.012	95	12847	0.1243	
36 Vinyl acetate	43		5.214				ND	
37 1,1-Dichloroethane	63		5.220				ND	7
38 Isopropyl ether	45		5.269				ND	
39 2-Chloro-1,3-butadiene	53		5.330				ND	
T 40 Vinyl acetate (TIC)	43		5.537				ND	
41 Tert-butyl ethyl ether	59		5.806				ND	
42 2-Butanone (MEK)	43		6.001				ND	7
43 cis-1,2-Dichloroethene	96	6.062	6.049	0.013	78	17114	0.2109	
44 2,2-Dichloropropane	77		6.068				ND	
45 Propionitrile	54		6.080				ND	
46 Ethyl acetate	43	6.074	6.098	-0.024	27	2854	0.0866	
S 47 1,2-Dichloroethene, Total	100				0		0.2109	
48 Methacrylonitrile	67		6.299				ND	
50 Tetrahydrofuran	71		6.379				ND	
49 Chlorobromomethane	128		6.385				ND	
51 Methyl acrylate	55		6.482				ND	
52 Chloroform	83	6.543	6.531	0.012	92	8630	0.0662	
\$ 53 Dibromofluoromethane (Surr)	113	6.757	6.751	0.007	93	651539	10.1	
54 1,1,1-Trichloroethane	97	6.781	6.763	0.018	35	12656	0.1044	
55 Cyclohexane	56		6.866				ND	
56 1,1-Dichloropropene	75		6.976				ND	
57 Carbon tetrachloride	117		6.976				ND	
58 Isobutyl alcohol	41		7.098				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.202	0.006	52	121924	10.3	
60 Benzene	78	7.250	7.238	0.012	41	14962	0.0468	
61 1-Chlorobutane	56		7.250				ND	
62 1,2-Dichloroethane	62		7.305				ND	7
63 Isopropyl acetate	43		7.324				ND	
64 Tert-amyl methyl ether	73		7.427				ND	
* 65 Fluorobenzene (IS)	96	7.647	7.641	0.006	99	2556882	10.0	
66 n-Heptane	43		7.659				ND	7
67 t-Amyl alcohol	73		7.842				ND	
68 n-Butanol	56		7.994				ND	
69 Trichloroethene	95	8.134	8.122	0.012	95	17941	0.2132	
70 Methylcyclohexane	83		8.433				ND	7
71 1,2-Dichloropropane	63		8.451				ND	
72 2-ethoxy-2-methyl butane	87		8.457				ND	
74 Methyl methacrylate	69		8.537				ND	
73 1,4-Dioxane	88		8.549				ND	
75 Dibromomethane	93		8.561				ND	
76 n-Propyl acetate	61		8.622				ND	
77 Dichlorobromomethane	83		8.799				ND	7
78 2-Nitropropane	41		9.061				ND	
79 2-Chloroethyl vinyl ether	63		9.171				ND	
80 1-Bromo-2-chloroethane	63		9.189				ND	
81 cis-1,3-Dichloropropene	75		9.348				ND	
82 Chloroacetonitrile	75		9.427				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.518				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.665	9.658	0.007	93	2826262	9.91	

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
85 Toluene	92	9.738	9.738	0.000	98	27951	0.1319	
86 trans-1,3-Dichloropropene	75		9.994				ND	
T 90 Decamethylcyclotrasiloxane TIC	71	10.134	10.000	0.134	1	271	0.001060	7
T 93 2,3-Dibromo-1-propanol TIC	57	9.671	10.000	-0.329	1	1531	0.005988	7
T 97 2-Bromo-3-chloropropene TIC	75	10.134	10.000	0.134	1	329	0.001287	7
T 91 Epibromohydrin TIC	57	9.671	10.000	-0.329	11	1531	0.005988	7
T 98 3-Chloro-1,2-propanediol TIC	44	9.896	10.000	-0.104	1	1107	0.004329	7
T 89 Octamethylcyclotetrasiloxane TIC	71	12.158	10.000	2.158	97	43221	0.1690	7
T 88 Nitrobenzene TIC	77	9.988	10.000	-0.012	1	542	0.002120	7
T 94 2,3-Dibromopropene TIC	119	10.128	10.000	0.128	1	555	0.002171	7
T 87 Hexachloroethane TIC	117	10.280	10.000	0.280	5	1114	0.004357	7
T 96 Chloroacetaldehyde TIC	50	9.750	10.000	-0.250	1	1350	0.005280	7
T 208 Methyl acrylate TIC	55	9.969	10.000	-0.031	1	214	0.000837	
T 92 Monochloroacetic acid TIC	50	9.750	10.000	-0.250	1	1350	0.005280	7
T 95 2-Chloroethanol TIC	44	9.896	10.000	-0.104	1	1107	0.004329	7
T 99 Isopropyl alcohol TIC	45	10.146	10.000	0.146	1	452	0.001768	7
T 100 Ethylene oxide TIC	44	9.896	10.000	-0.104	29	1107	0.004329	7
T 101 Vinyl bromide TIC	106	11.237	10.000	1.237	6	5615	0.0220	7
T 102 Epichlorohydrin TIC	57	9.671	10.000	-0.329	31	1531	0.005988	7
T 103 2-Bromoethanol TIC	45	10.146	10.000	0.146	1	452	0.001768	7
105 Ethyl methacrylate	69		10.055				ND	7
S 104 1,3-Dichloropropene, Total	100		10.060				ND	7
106 1,1,2-Trichloroethane	97		10.195				ND	7
107 Tetrachloroethene	166	10.293	10.292	0.000	97	145103	1.48	
108 1,3-Dichloropropane	76		10.360				ND	
109 2-Hexanone	43		10.408				ND	7
110 n-Butyl acetate	43	10.555	10.530	0.025	37	1256	0.0184	
111 Chlorodibromomethane	129		10.579				ND	
112 Ethylene Dibromide	107		10.689				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.122	11.122	0.000	86	2332020	10.0	
114 1-Chlorohexane	91		11.128				ND	7
115 Chlorobenzene	112		11.146				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91	11.237	11.231	0.006	94	14789	0.0357	
S 117 Xylenes, Total	106				0		0.0780	
119 m-Xylene & p-Xylene	106	11.341	11.347	-0.006	98	7484	0.0474	
120 o-Xylene	106	11.676	11.676	0.000	95	4664	0.0306	
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.847				ND	
123 Isopropylbenzene	105		11.975				ND	7
124 cis-1,4-Dichloro-2-butene	88		12.012				ND	
125 Cyclohexanone	55		12.042				ND	7
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	92	1147527	9.91	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
128 Bromobenzene	156		12.237				ND	
129 trans-1,4-Dichloro-2-butene	53		12.243				ND	
130 1,2,3-Trichloropropane	110		12.268				ND	
131 N-Propylbenzene	91		12.304				ND	7
132 2-Chlorotoluene	126		12.377				ND	
133 1,3,5-Trimethylbenzene	105		12.438				ND	7
134 4-Chlorotoluene	126		12.475				ND	
135 tert-Butylbenzene	134		12.682				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
136 Pentachloroethane	167		12.713				ND	
137 1,2,4-Trimethylbenzene	105		12.725				ND	7
138 sec-Butylbenzene	105		12.847				ND	7
139 1,3-Dichlorobenzene	146		12.944				ND	
140 4-Isopropyltoluene	119		12.951				ND	7
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1336839	10.0	
142 1,4-Dichlorobenzene	146		13.018				ND	
143 1,2,3-Trimethylbenzene	120		13.024				ND	7
144 Benzyl chloride	126		13.091				ND	7
145 p-Diethylbenzene	119	13.152	13.152	0.000	1	500	0.002163	
146 n-Butylbenzene	92		13.243				ND	
147 1,2-Dichlorobenzene	146		13.274				ND	
148 Hexachloroethane	201		13.682				ND	
149 1,2-Dibromo-3-Chloropropane	155		13.816				ND	
150 1,3,5-Trichlorobenzene	180		13.944				ND	
151 1,2,4-Trichlorobenzene	180		14.365				ND	
152 Hexachlorobutadiene	225		14.444				ND	7
153 Naphthalene	128		14.542				ND	7
154 1,2,3-Trichlorobenzene	180		14.688				ND	
155 2-Methylnaphthalene	142	15.316	15.304	0.012	1	247	0.002046	
156 tert-Butyl Formate	1		0.000				ND	
157 Dodecane	57		0.000				ND	
158 Pentane	43		0.000				ND	
159 1,1-Dichloroacetone	1		0.000				ND	
160 n-Decane	57		0.000				ND	
161 1-Bromo-3-Chloropropane	1		0.000				ND	
162 1-Chloropropane	1		0.000				ND	
163 Propene oxide	1		0.000				ND	
164 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
165 Methylal	1		0.000				ND	
166 2-Bromo-1-chloropropane	1		0.000				ND	

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_LLcentISS\_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X42.D

Injection Date: 01-Dec-2022 23:58:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: 410-106467-A-7

Lab Sample ID: 410-106467-7

Worklist Smp#: 13

Client ID: HD-COD-SW-16-0/1-0

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

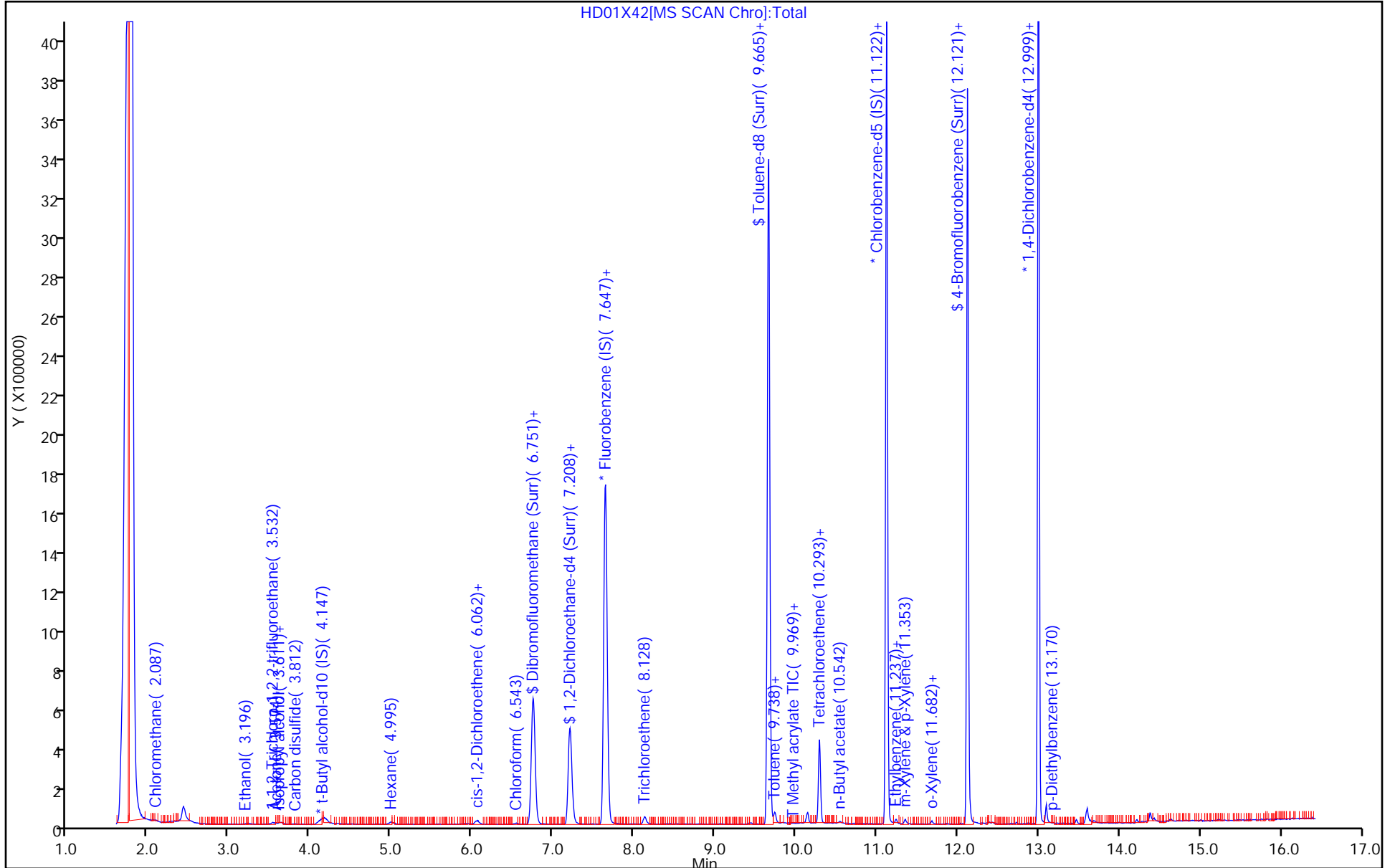
ALS Bottle#: 12

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

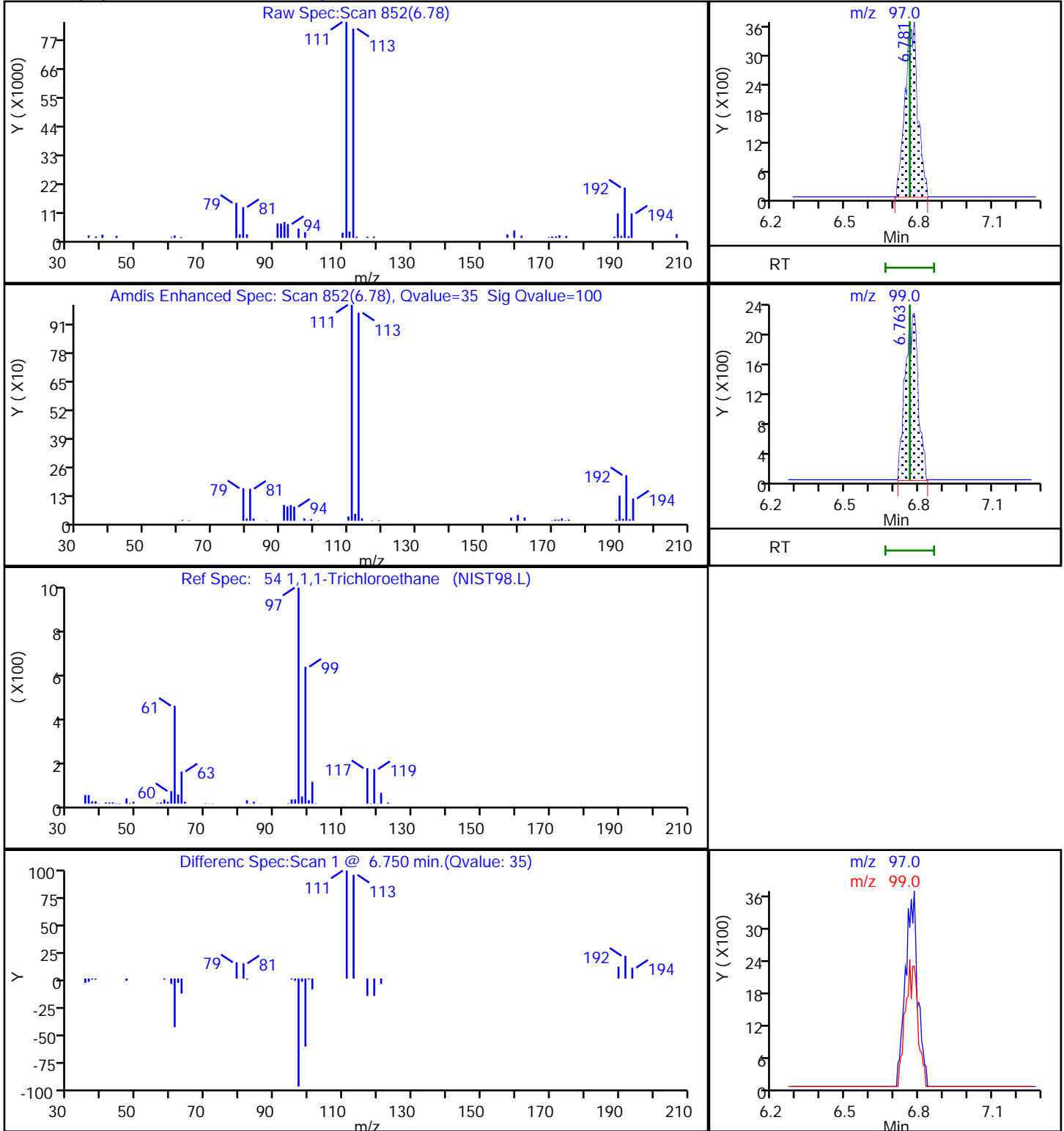
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 Client ID: HD-COD-SW-16-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 23:58:30 ALS Bottle#: 12 Worklist Smp#: 13  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-013  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2 Date: 02-Dec-2022 13:16:56

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.1	100.68
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.25
\$ 84 Toluene-d8 (Surr)	10.0	9.91	99.07
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.91	99.08

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X42.D  
Injection Date: 01-Dec-2022 23:58:30 Instrument ID: 19094  
Lims ID: 410-106467-A-7 Lab Sample ID: 410-106467-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: sej02002 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

54 1,1,1-Trichloroethane, CAS: 71-55-6





Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X42.D

Injection Date: 01-Dec-2022 23:58:30

Instrument ID: 19094

Lims ID: 410-106467-A-7

Lab Sample ID: 410-106467-7

Client ID: HD-COD-SW-16-0/1-0

Operator ID: sej02002

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

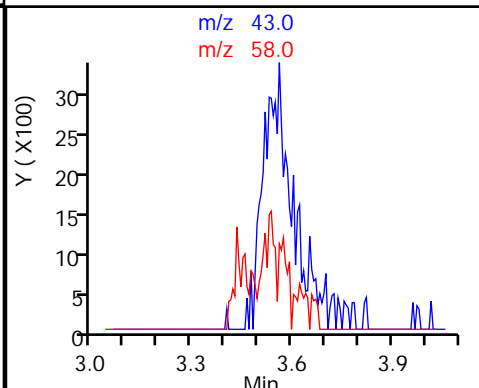
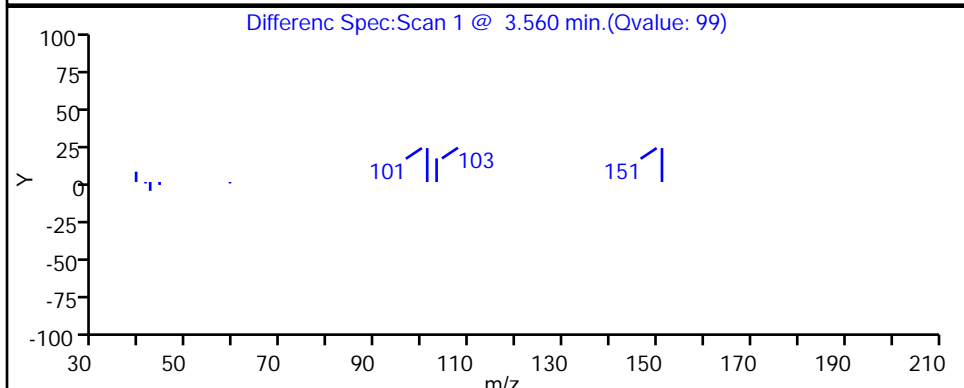
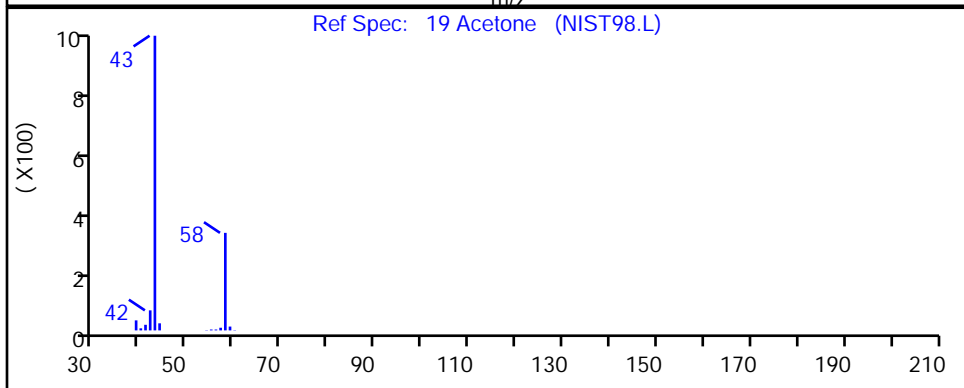
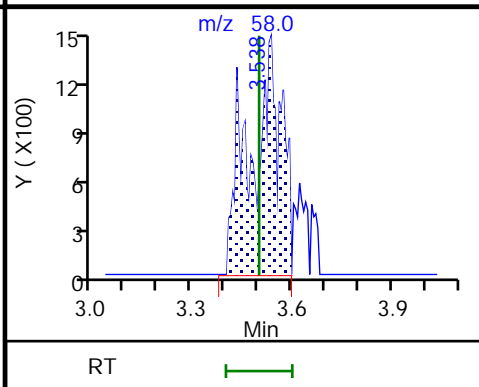
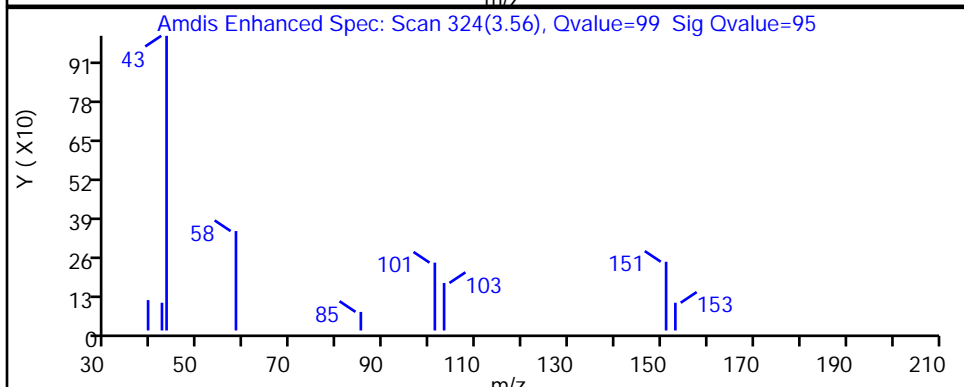
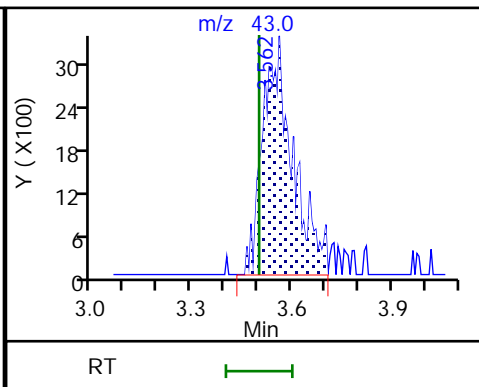
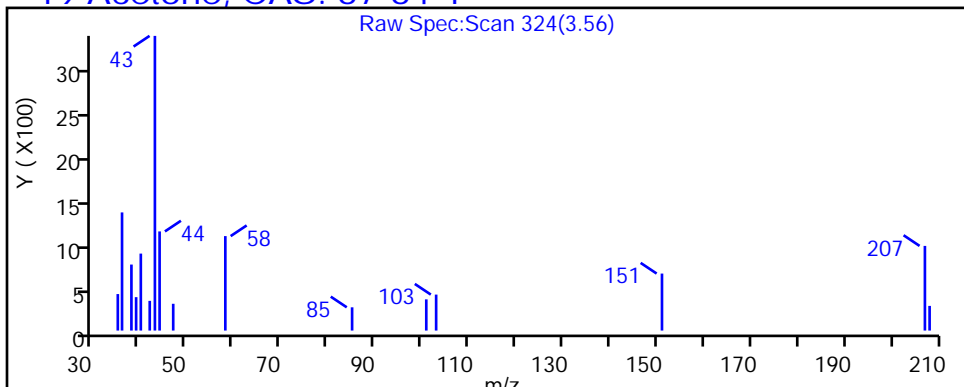
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X42.D

Injection Date: 01-Dec-2022 23:58:30 Instrument ID: 19094

Lims ID: 410-106467-A-7 Lab Sample ID: 410-106467-7

Client ID: HD-COD-SW-16-0/1-0

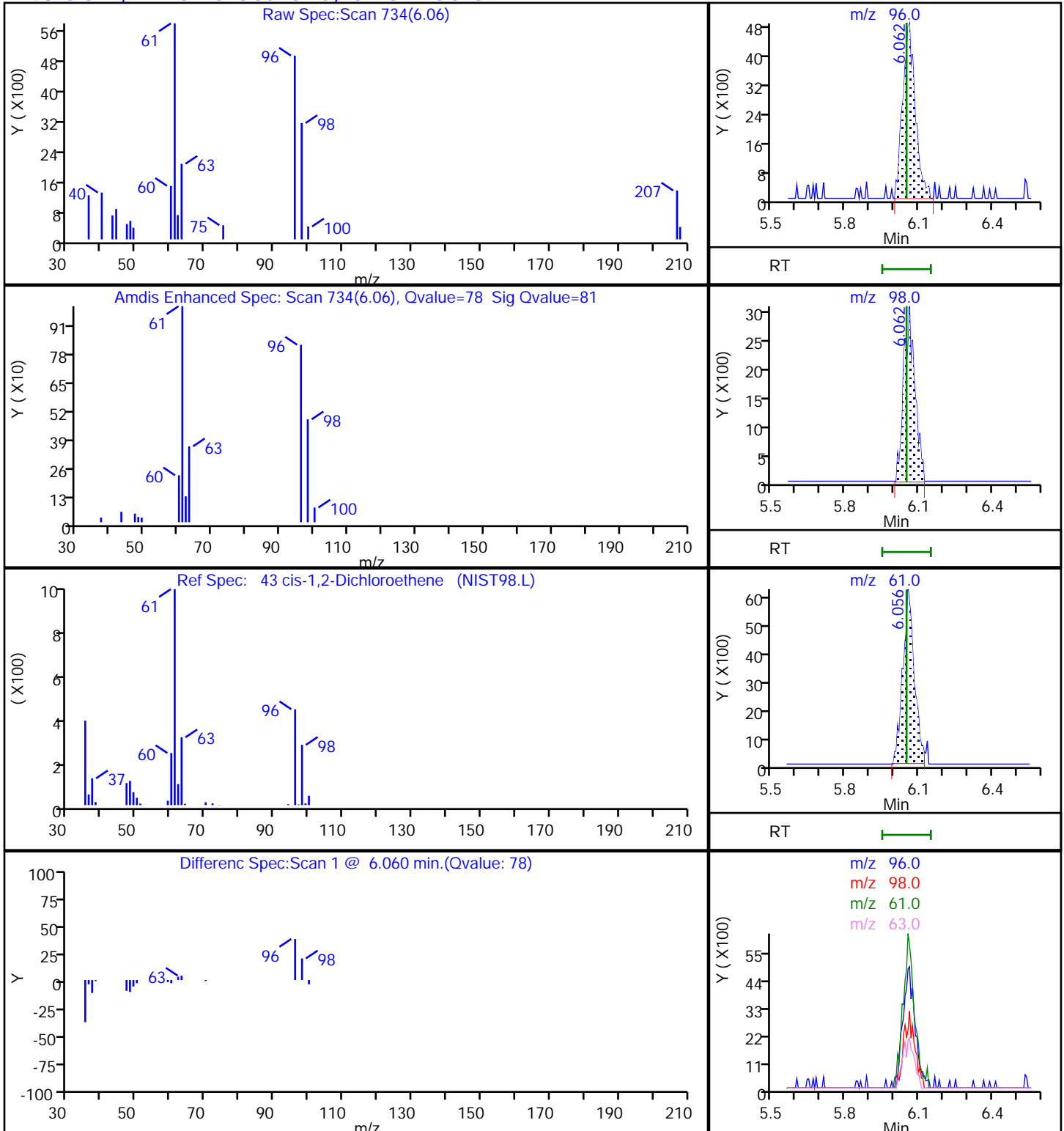
Operator ID: sej02002 ALS Bottle#: 12 Worklist Smp#: 13

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X42.D

Injection Date: 01-Dec-2022 23:58:30

Instrument ID: 19094

Lims ID: 410-106467-A-7

Lab Sample ID: 410-106467-7

Client ID: HD-COD-SW-16-0/1-0

Operator ID: sej02002

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

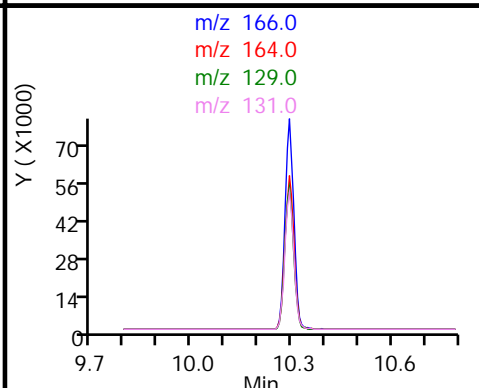
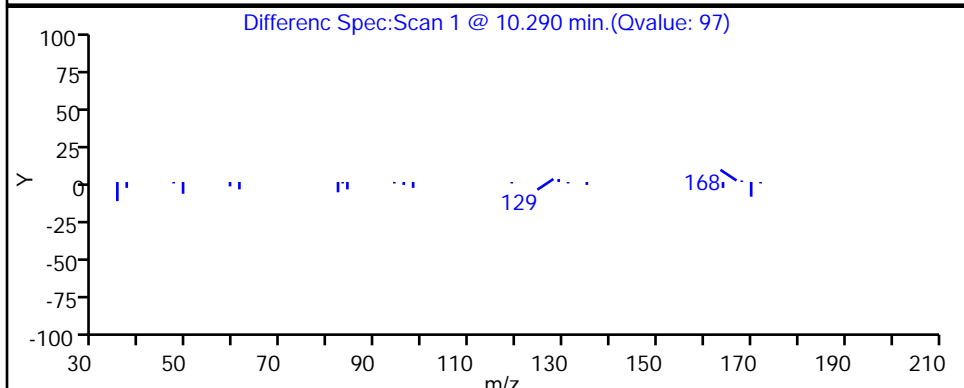
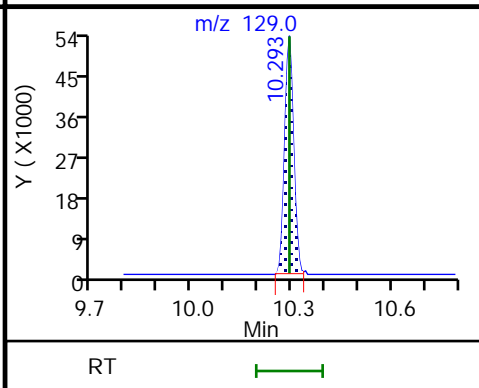
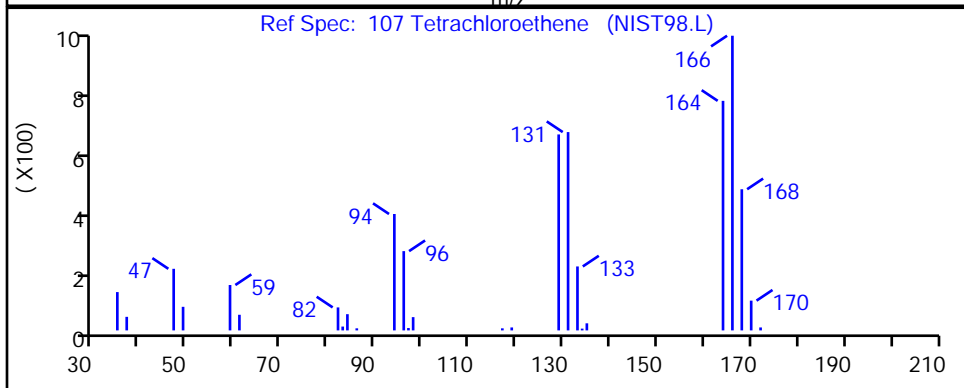
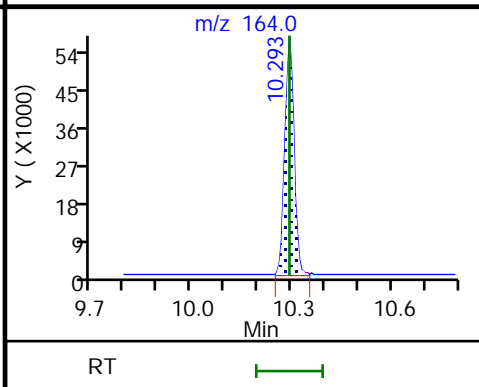
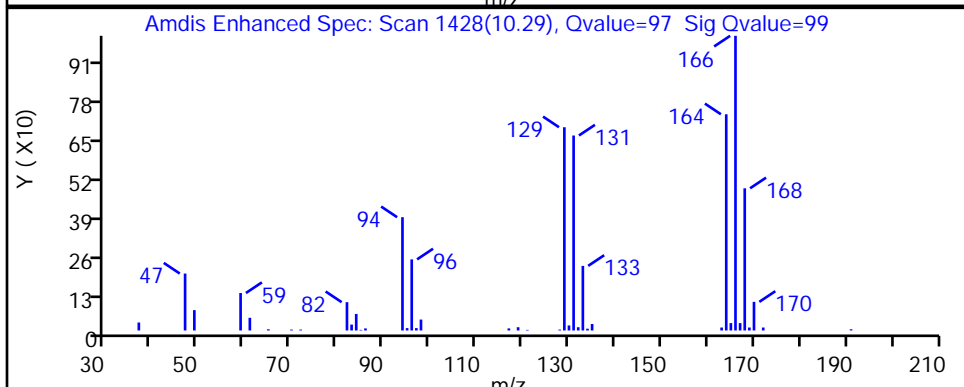
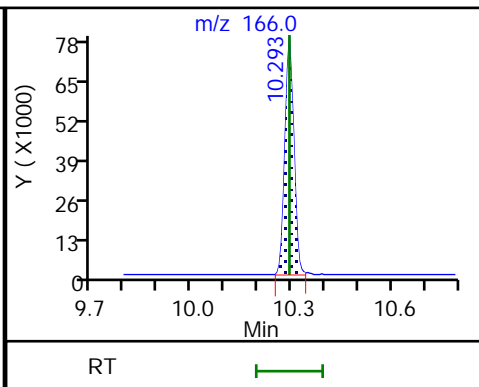
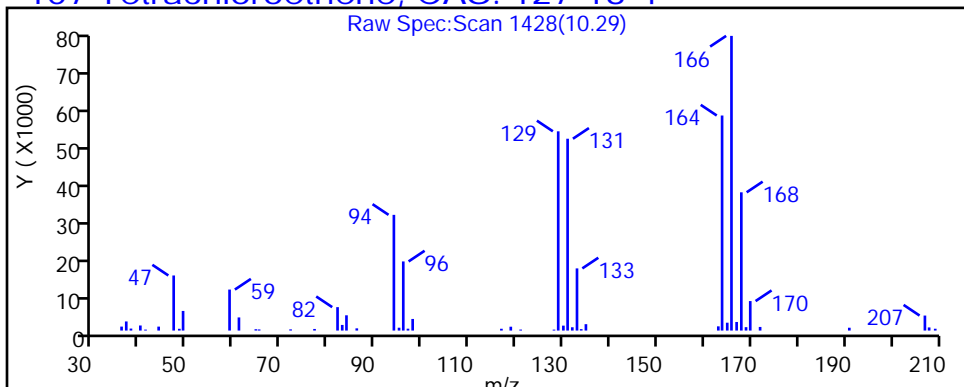
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

### 107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X42.D

Injection Date: 01-Dec-2022 23:58:30

Instrument ID: 19094

Lims ID: 410-106467-A-7

Lab Sample ID: 410-106467-7

Client ID: HD-COD-SW-16-0/1-0

Operator ID: sej02002

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

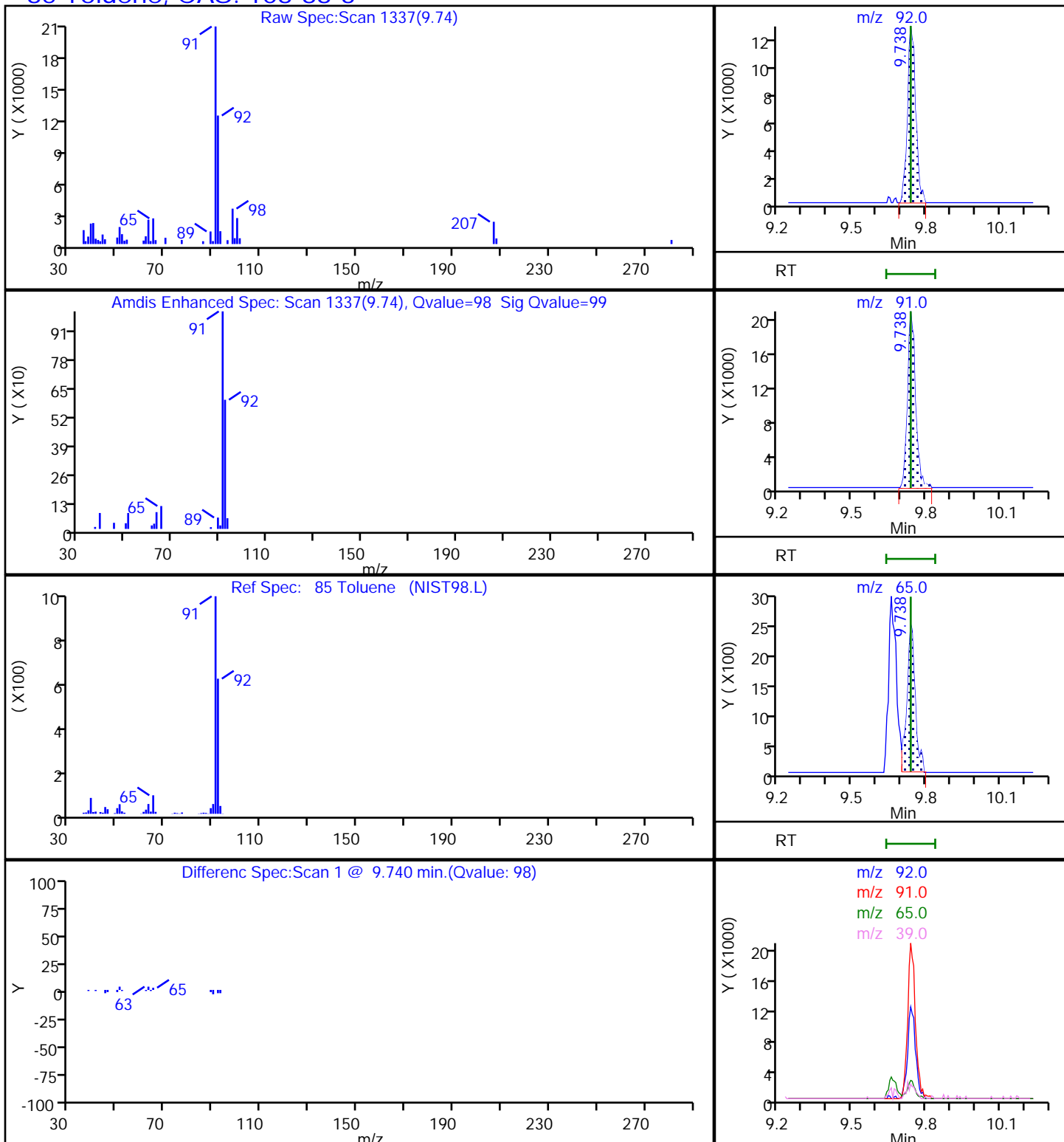
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

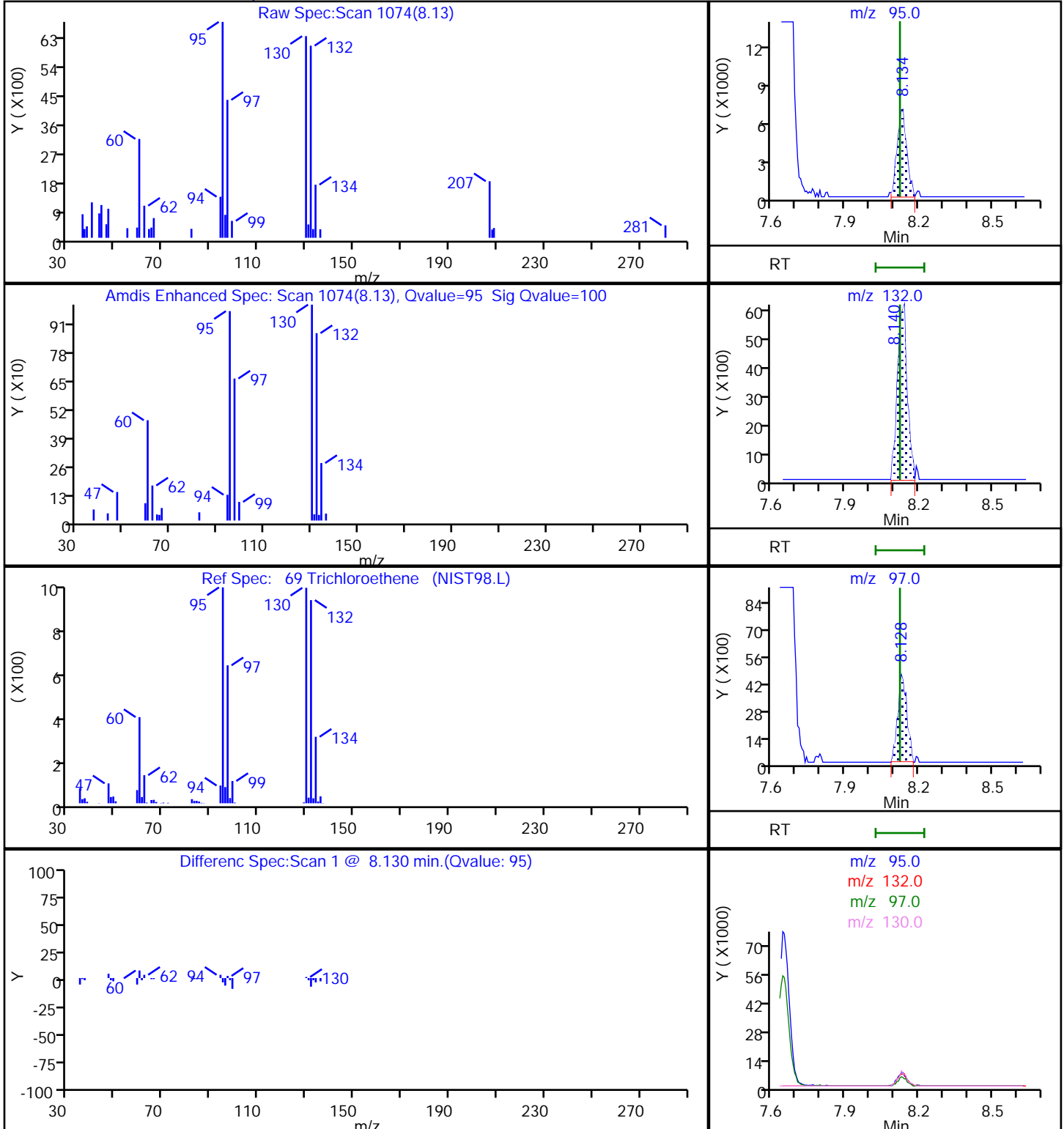
MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X42.D  
Injection Date: 01-Dec-2022 23:58:30 Instrument ID: 19094  
Lims ID: 410-106467-A-7 Lab Sample ID: 410-106467-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: sej02002 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

69 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Environment Testing, LLC

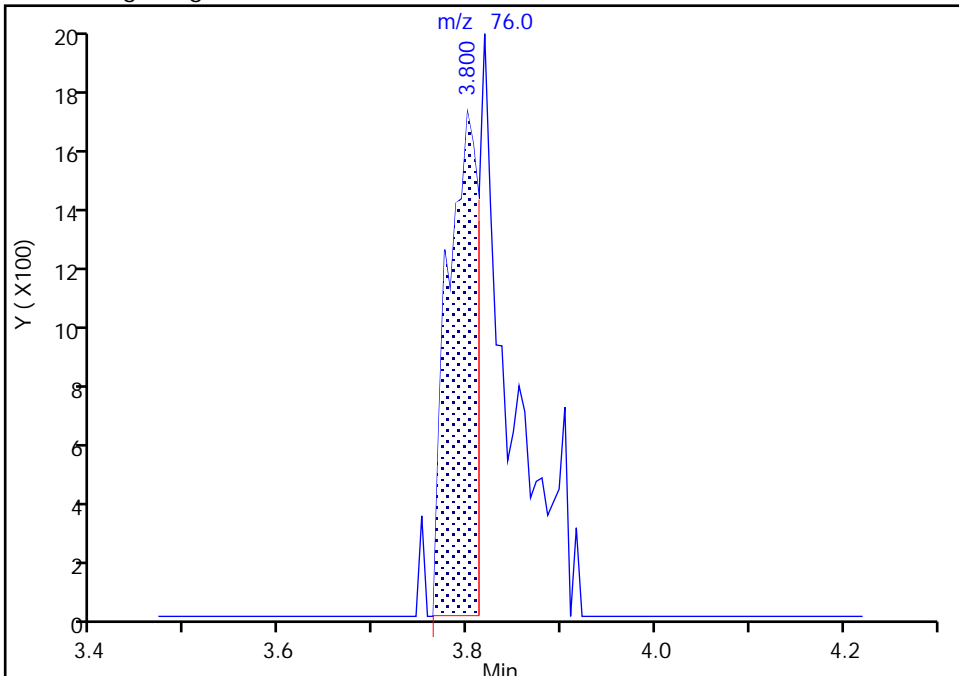
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Injection Date:	01-Dec-2022 23:58:30	Instrument ID:	19094
Lims ID:	410-106467-A-7	Lab Sample ID:	410-106467-7
Client ID:	HD-COD-SW-16-0/1-0		
Operator ID:	sej02002	ALS Bottle#:	12
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	13

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

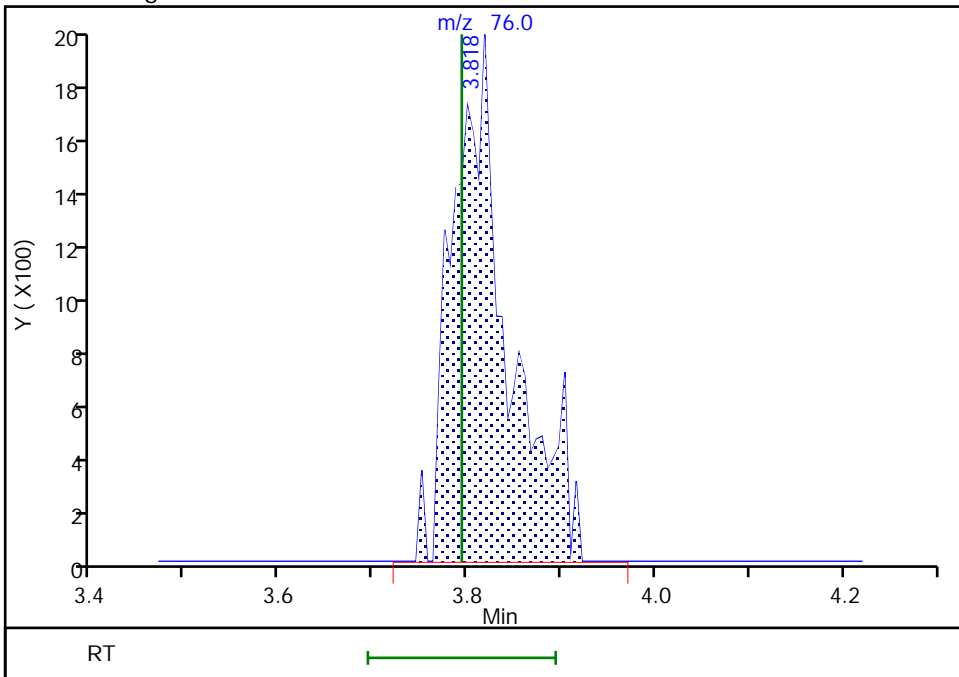
RT: 3.80  
 Area: 3902  
 Amount: 0.021921  
 Amount Units: ug/l

Processing Integration Results



RT: 3.82  
 Area: 8226  
 Amount: 0.046212  
 Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 02-Dec-2022 13:13:22  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-8

Matrix: Water

Lab File ID: HD01X43.D

Analysis Method: 8260D

Date Collected: 11/18/2022 10:10

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 00:18

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.9		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	1.1		0.50	0.10
75-35-4	1,1-Dichloroethene	0.51		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND	^c cn	5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0
67-64-1	Acetone	1.9	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	0.29	J	0.50	0.090
74-87-3	Chloromethane	ND	^c cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	3.4		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
108-88-3	Toluene	0.13	J cn	0.50	0.080
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-8

Matrix: Water

Lab File ID: HD01X43.D

Analysis Method: 8260D

Date Collected: 11/18/2022 10:10

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 00:18

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	4.3		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120



Eurofins Lancaster Laboratories Environment Testing, LLC  
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X43.D  
 Lims ID: 410-106467-A-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 00:18:30 ALS Bottle#: 13 Worklist Smp#: 14  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-014  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2 Date: 02-Dec-2022 13:17:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.117				ND	7
7 Vinyl chloride	62		2.239				ND	7
9 Bromomethane	94		2.556				ND	
10 Chloroethane	64		2.642				ND	7
18 1,1-Dichloroethene	96	3.501	3.495	0.006	98	33342	0.5116	
19 Acetone	43	3.532	3.501	0.031	24	18534	1.91	
24 Carbon disulfide	76		3.794				ND	7
* 29 t-Butyl alcohol-d10 (IS)	65	4.147	4.117	0.030	20	151908	50.0	
28 Methylene Chloride	84		4.147				ND	
33 Methyl tert-butyl ether	73	4.562	4.550	0.012	46	6235	0.0428	
34 trans-1,2-Dichloroethene	96	4.580	4.568	0.012	47	1988	0.0275	
37 1,1-Dichloroethane	63	5.226	5.220	0.006	96	145677	1.08	
42 2-Butanone (MEK)	43		6.001				ND	7
43 cis-1,2-Dichloroethene	96	6.055	6.049	0.006	80	267614	3.37	
49 Chlorobromomethane	128		6.385				ND	
52 Chloroform	83	6.543	6.531	0.012	92	37031	0.2900	
\$ 53 Dibromofluoromethane (Surr)	113	6.750	6.751	0.000	93	648326	10.2	
54 1,1,1-Trichloroethane	97	6.769	6.763	0.006	98	701657	5.90	
57 Carbon tetrachloride	117	6.970	6.976	-0.006	4	3175	0.0309	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.202	0.006	52	116507	10.1	
60 Benzene	78	7.244	7.238	0.006	40	14887	0.0475	
62 1,2-Dichloroethane	62		7.305				ND	7
* 65 Fluorobenzene (IS)	96	7.647	7.641	0.006	99	2506075	10.0	
69 Trichloroethene	95	8.128	8.122	0.006	98	350832	4.25	
71 1,2-Dichloropropane	63		8.451				ND	
77 Dichlorobromomethane	83		8.799				ND	
81 cis-1,3-Dichloropropene	75		9.348				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.518				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.658	9.658	0.000	94	2773449	9.89	
85 Toluene	92	9.744	9.738	0.006	98	26116	0.1254	
86 trans-1,3-Dichloropropene	75		9.994				ND	
106 1,1,2-Trichloroethane	97		10.195				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.292	10.292	0.000	98	7463592	77.6	E
109 2-Hexanone	43		10.408				ND	
111 Chlorodibromomethane	129		10.579				ND	7
112 Ethylene Dibromide	107		10.689				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.121	11.122	-0.001	86	2291483	10.0	
115 Chlorobenzene	112		11.146				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91	11.237	11.231	0.006	98	15564	0.0383	
S 117 Xylenes, Total	106				0		0.0795	
119 m-Xylene & p-Xylene	106	11.353	11.347	0.006	97	7611	0.0491	
120 o-Xylene	106	11.676	11.676	0.000	97	4561	0.0304	
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.847				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	92	1111221	9.76	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1287675	10.0	

### QC Flag Legend

#### Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

### Reagents:

MSV\_LLcentISS\_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X43.D

Injection Date: 02-Dec-2022 00:18:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: 410-106467-A-8

Lab Sample ID: 410-106467-8

Worklist Smp#: 14

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

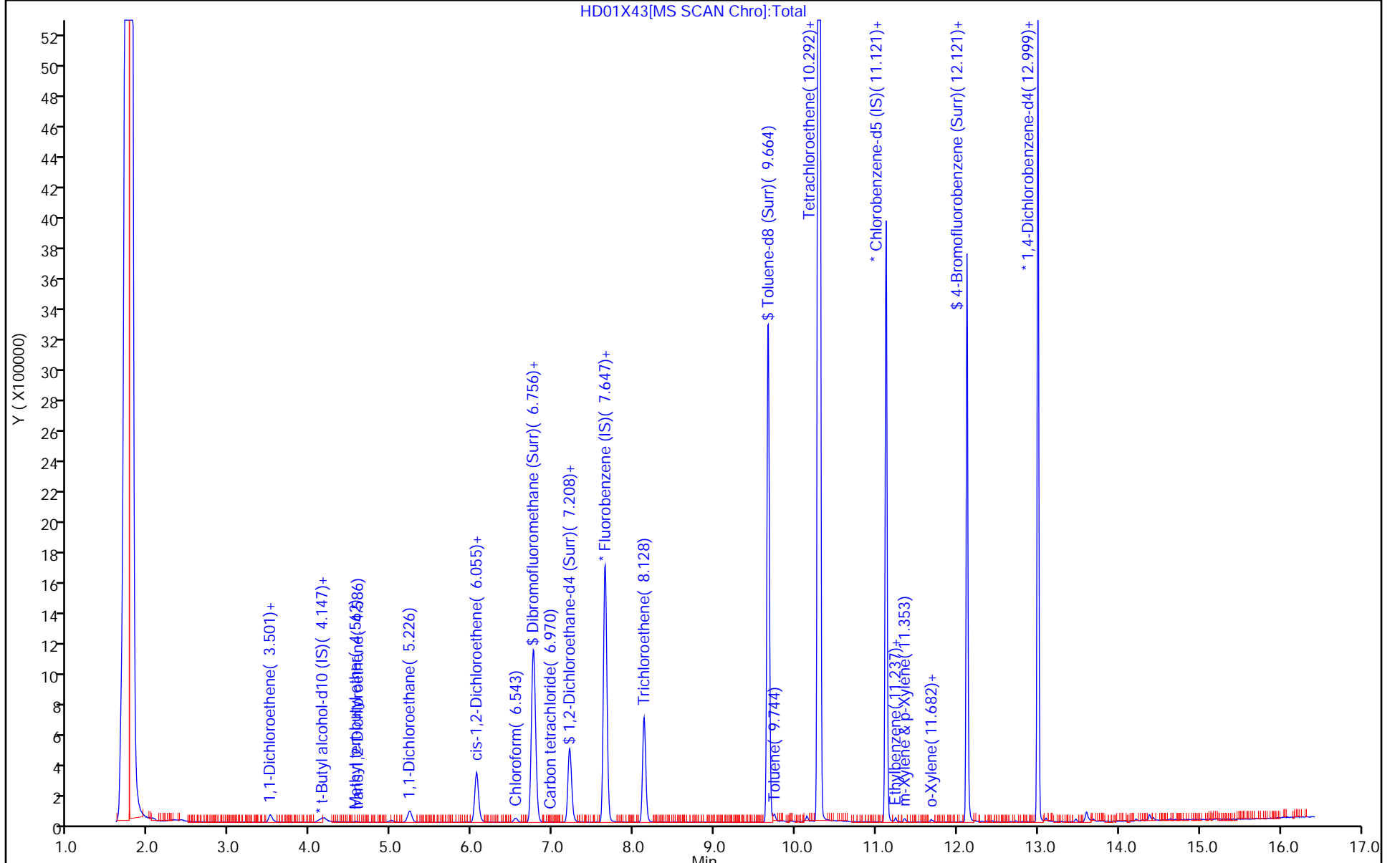
ALS Bottle#: 13

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X43.D  
 Lims ID: 410-106467-A-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 00:18:30 ALS Bottle#: 13 Worklist Smp#: 14  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-014  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2

Date: 02-Dec-2022 13:17:56

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.2	102.21
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.66
\$ 84 Toluene-d8 (Surr)	10.0	9.89	98.93
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.76	97.64

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X43.D

Injection Date: 02-Dec-2022 00:18:30

Instrument ID: 19094

Lims ID: 410-106467-A-8

Lab Sample ID: 410-106467-8

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

Operator ID: sej02002

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

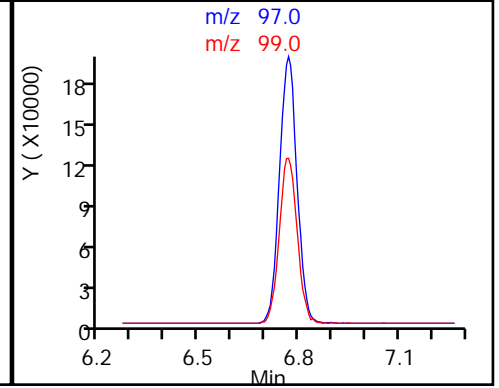
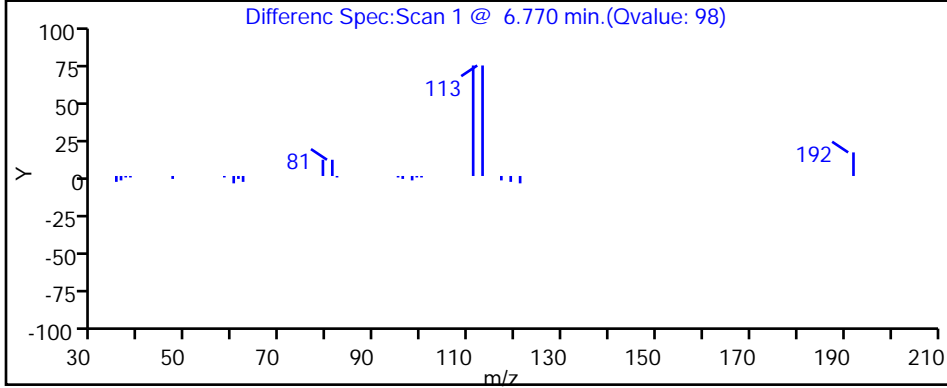
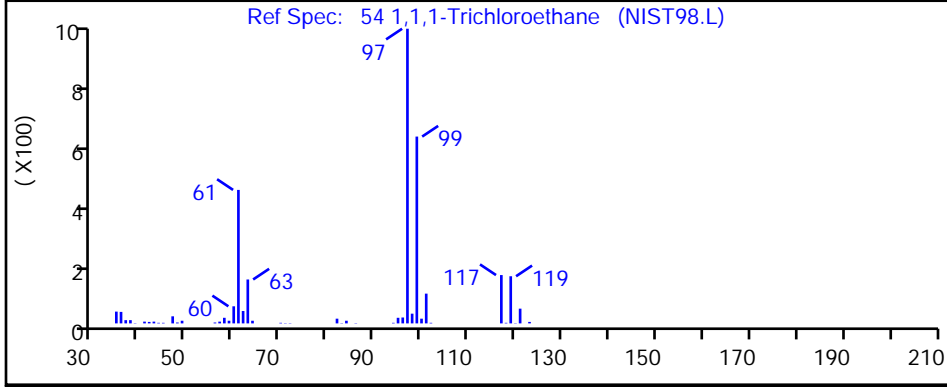
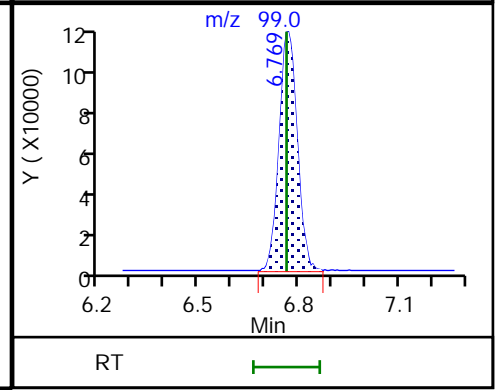
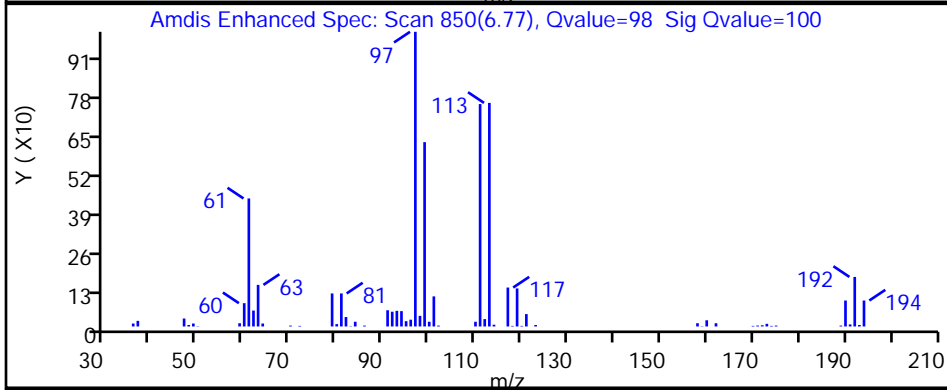
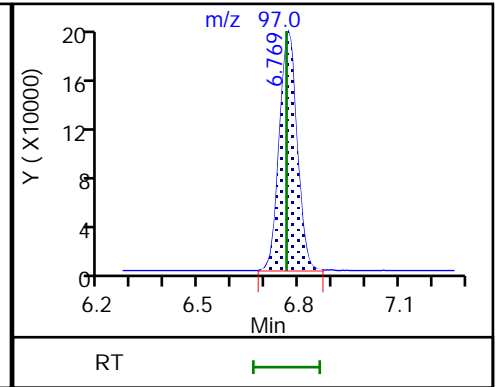
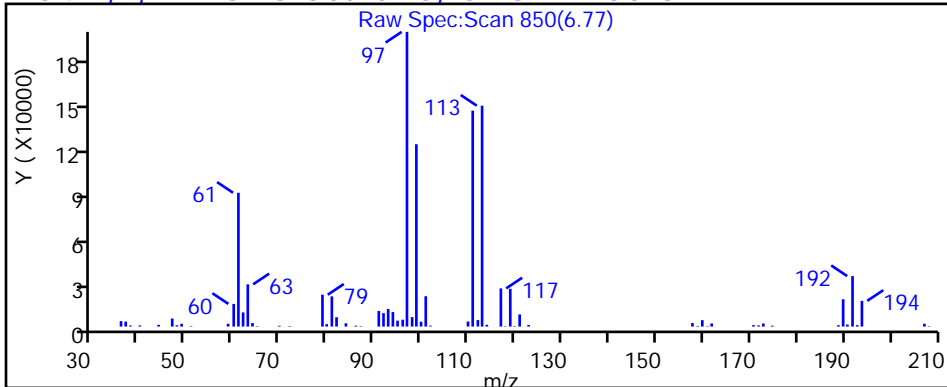
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

54 1,1,1-Trichloroethane, CAS: 71-55-6



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X43.D

Injection Date: 02-Dec-2022 00:18:30

Instrument ID: 19094

Lims ID: 410-106467-A-8

Lab Sample ID: 410-106467-8

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

Operator ID: sej02002

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

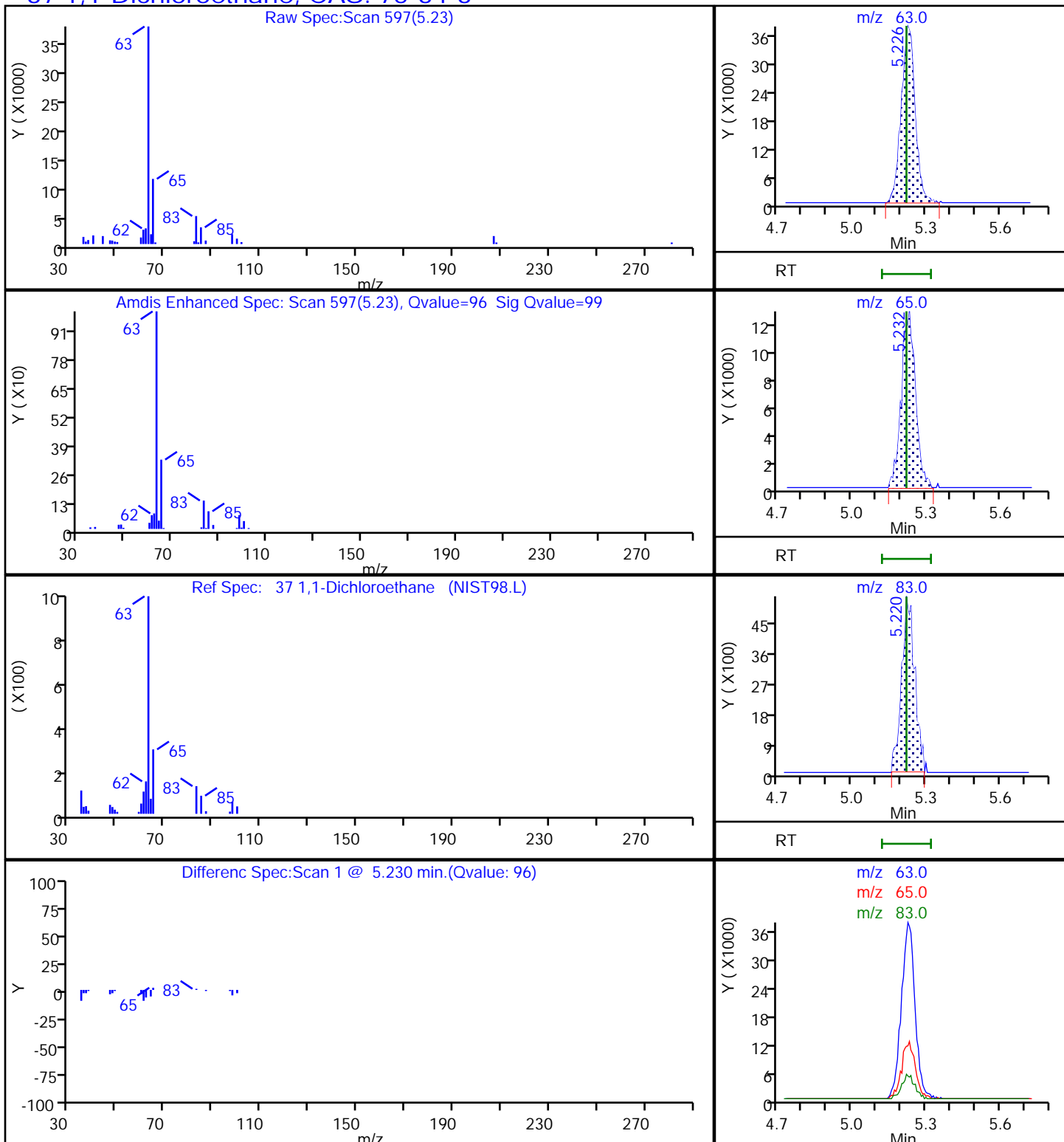
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X43.D

Injection Date: 02-Dec-2022 00:18:30

Instrument ID: 19094

Lims ID: 410-106467-A-8

Lab Sample ID: 410-106467-8

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

Operator ID: sej02002

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

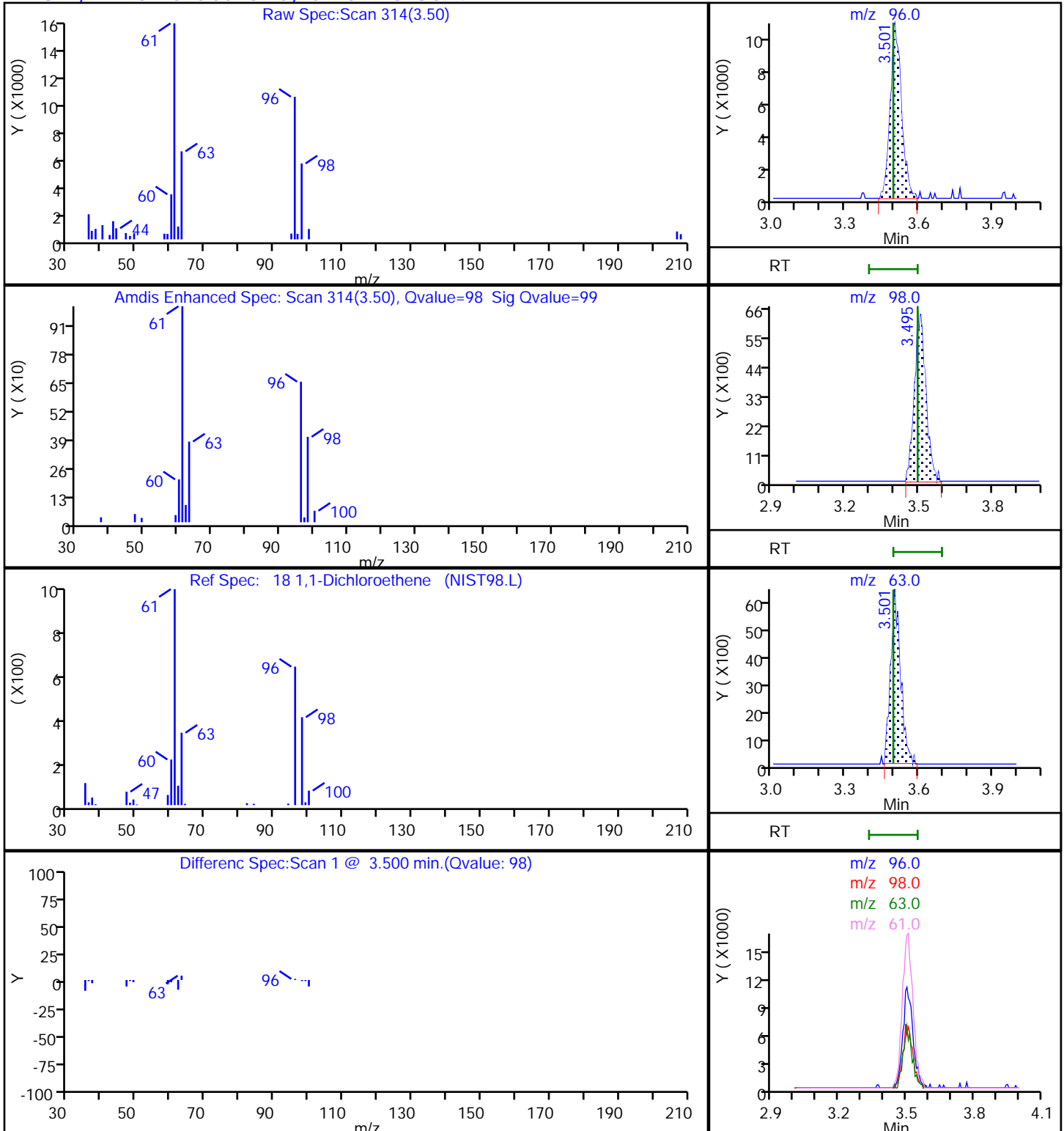
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

18 1,1-Dichloroethene, CAS: 75-35-4



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X43.D

Injection Date: 02-Dec-2022 00:18:30

Instrument ID: 19094

Lims ID: 410-106467-A-8

Lab Sample ID: 410-106467-8

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

Operator ID: sej02002

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

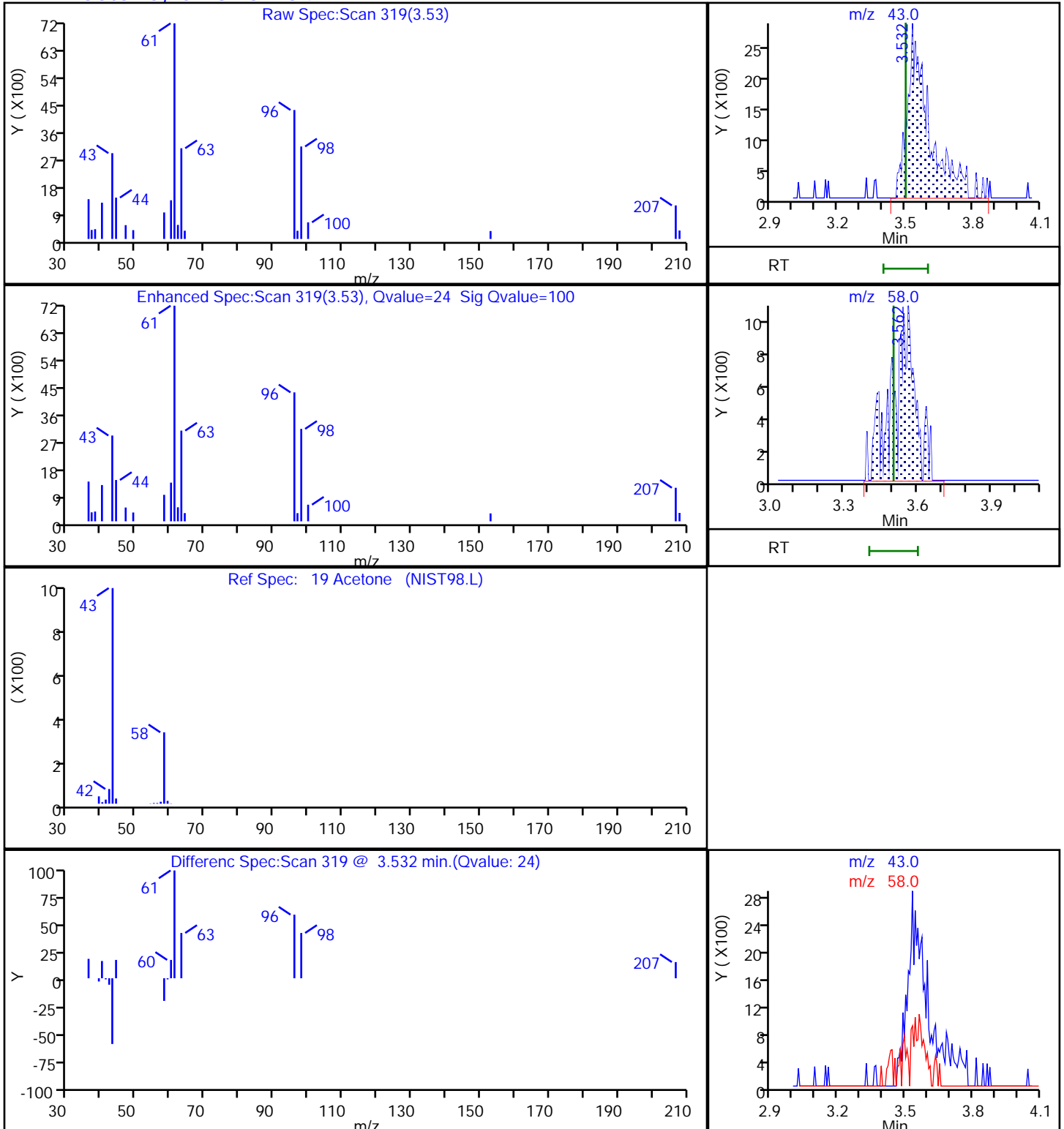
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

19 Acetone, CAS: 67-64-1





Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X43.D

Injection Date: 02-Dec-2022 00:18:30 Instrument ID: 19094

Lims ID: 410-106467-A-8 Lab Sample ID: 410-106467-8

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

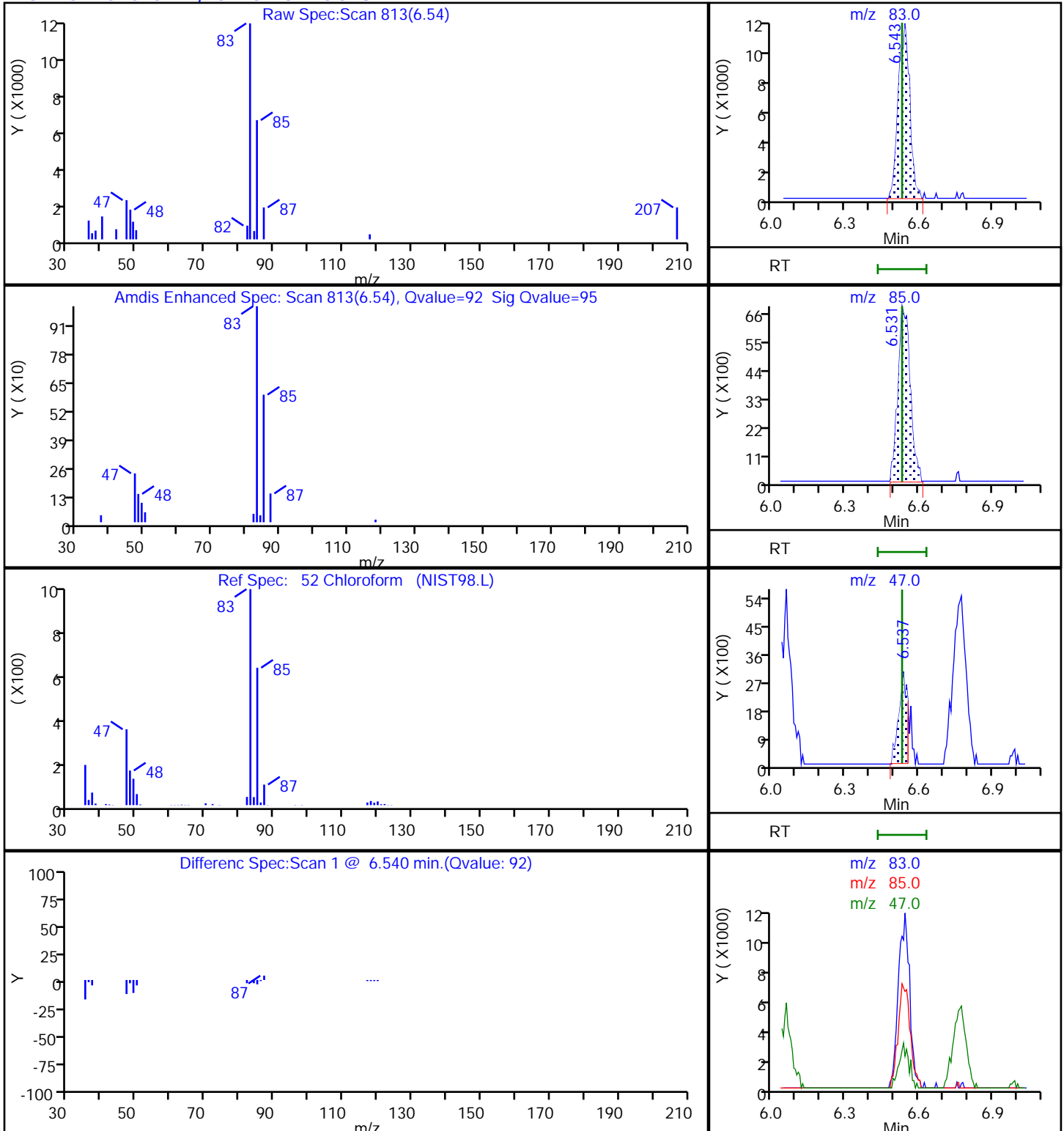
Operator ID: sej02002 ALS Bottle#: 13 Worklist Smp#: 14

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

52 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X43.D

Injection Date: 02-Dec-2022 00:18:30 Instrument ID: 19094

Lims ID: 410-106467-A-8 Lab Sample ID: 410-106467-8

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

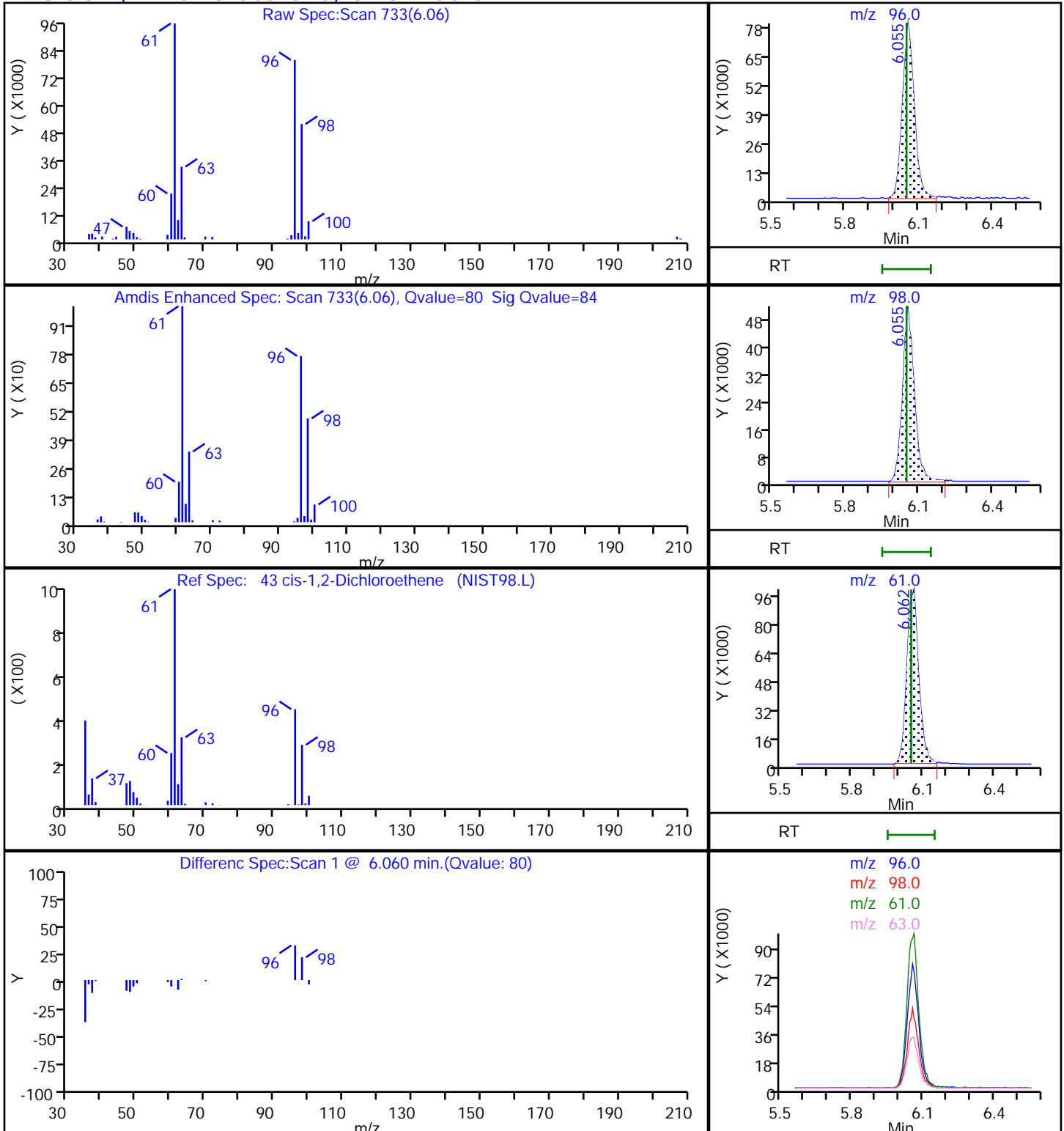
Operator ID: sej02002 ALS Bottle#: 13 Worklist Smp#: 14

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X43.D

Injection Date: 02-Dec-2022 00:18:30

Instrument ID: 19094

Lims ID: 410-106467-A-8

Lab Sample ID: 410-106467-8

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

Operator ID: sej02002

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

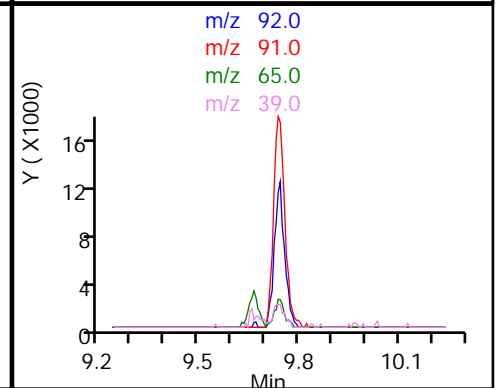
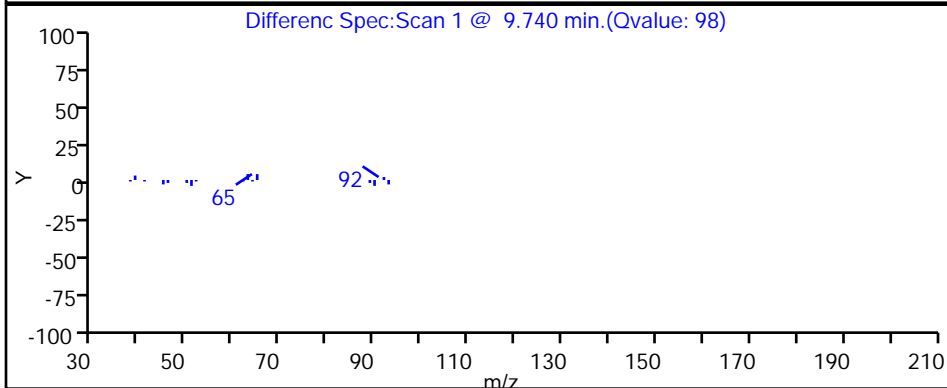
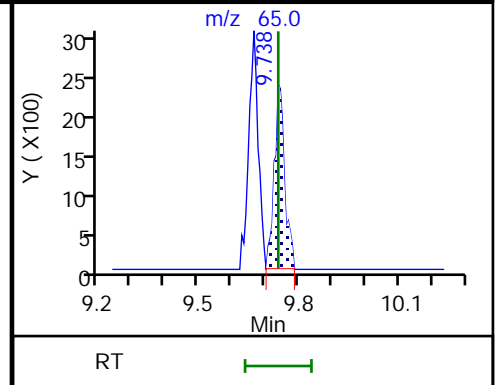
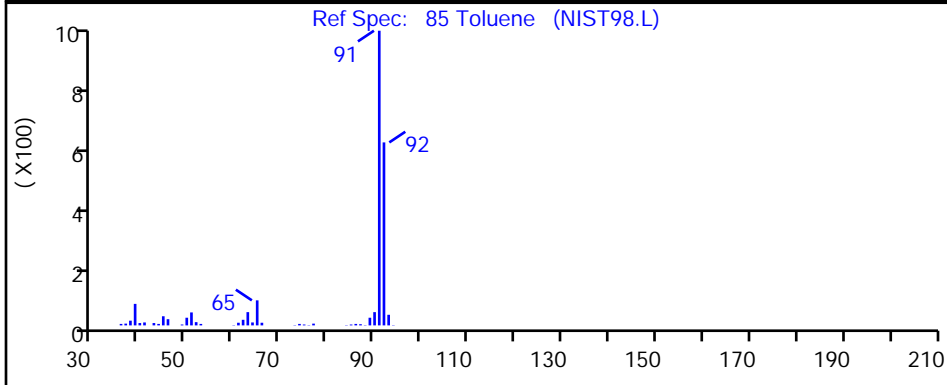
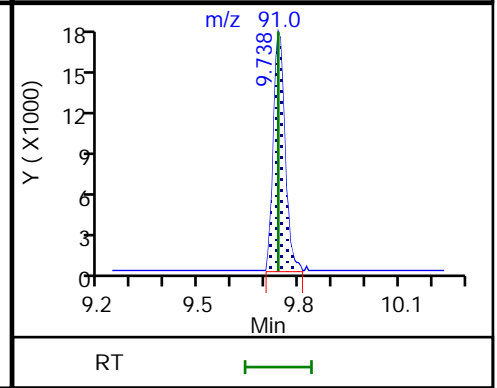
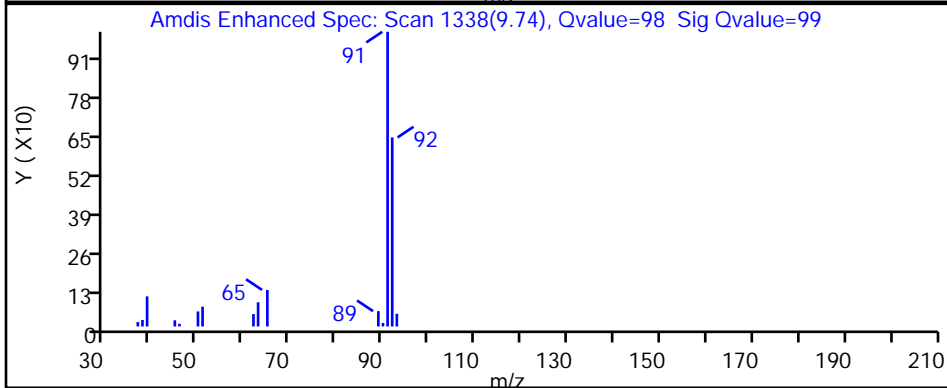
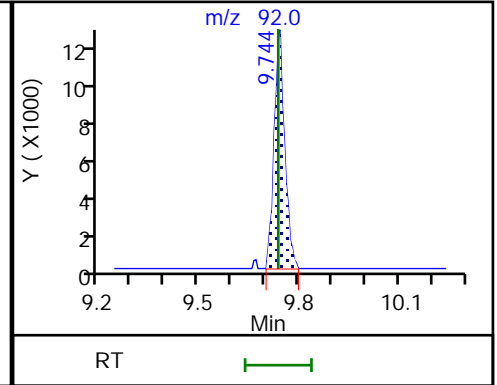
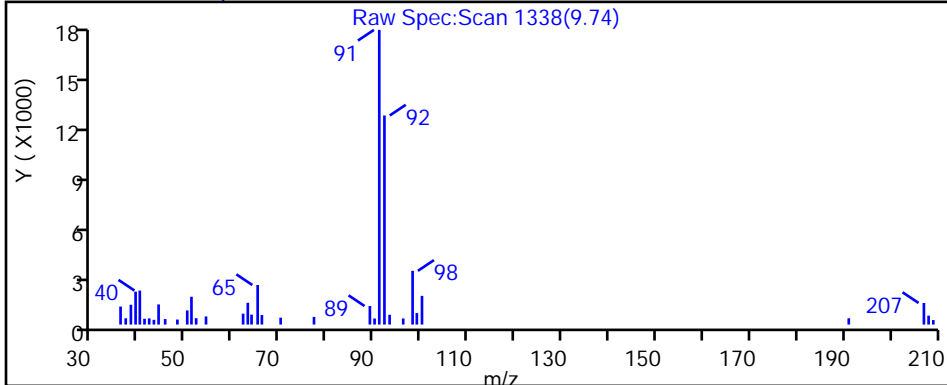
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X43.D

Injection Date: 02-Dec-2022 00:18:30 Instrument ID: 19094

Lims ID: 410-106467-A-8 Lab Sample ID: 410-106467-8

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

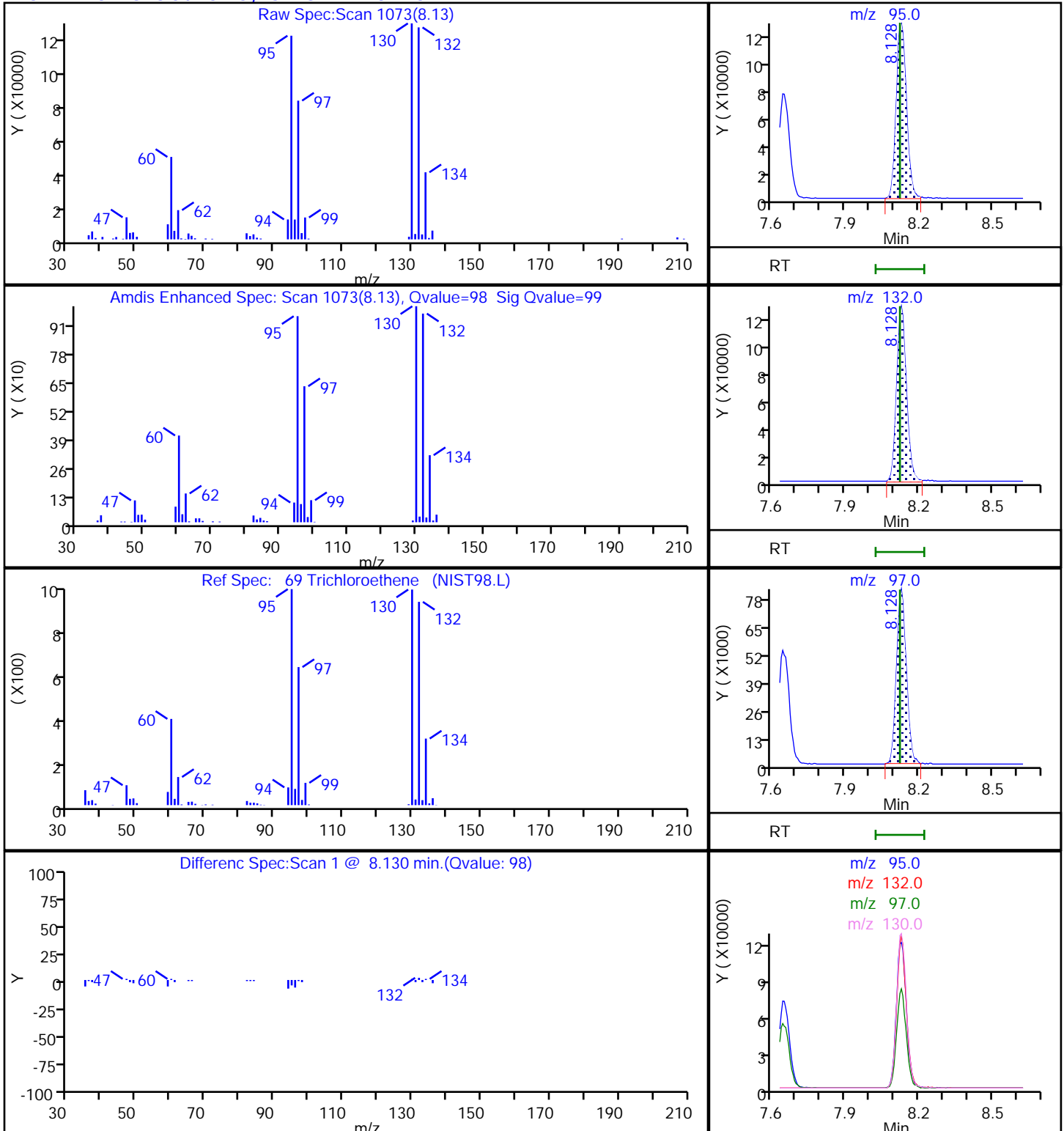
Operator ID: sej02002 ALS Bottle#: 13 Worklist Smp#: 14

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

69 Trichloroethene, CAS: 79-01-6



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-8 DL

Matrix: Water

Lab File ID: HD02X31.D

Analysis Method: 8260D

Date Collected: 11/18/2022 10:10

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 19:43

Soil Aliquot Vol:

Dilution Factor: 10

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322942

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	65		5.0	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X31.D  
 Lims ID: 410-106467-B-8 DL  
 Client ID: HD-COD-SW-17-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 19:43:30 ALS Bottle#: 31 Worklist Smp#: 32  
 Purge Vol: 25.000 mL Dil. Factor: 10.0000  
 Sample Info: 410-0072389-032  
 Operator ID: knk41612 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 05-Dec-2022 15:04:06 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1604

First Level Reviewer: kaewrungrueangp Date: 05-Dec-2022 15:04:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.129				ND	U
7 Vinyl chloride	62		2.245				ND	7
9 Bromomethane	94		2.562				ND	
10 Chloroethane	64		2.647				ND	7
18 1,1-Dichloroethene	96	3.501	3.501	0.000	49	2763	0.0451	
19 Acetone	43	3.556	3.513	0.043	70	14782	2.34	
24 Carbon disulfide	76	3.806	3.800	0.006	63	9266	0.0565	
* 29 t-Butyl alcohol-d10 (IS)	65	4.111	4.147	-0.036	19	98661	50.0	
28 Methylene Chloride	84		4.147				ND	
33 Methyl tert-butyl ether	73		4.550				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63	5.202	5.226	-0.024	90	13084	0.1028	Ma
42 2-Butanone (MEK)	43		6.001				ND	7
43 cis-1,2-Dichloroethene	96	6.049	6.049	0.000	79	24095	0.3222	
49 Chlorobromomethane	128		6.378				ND	
52 Chloroform	83	6.531	6.531	0.000	18	3393	0.0283	
\$ 53 Dibromofluoromethane (Surr)	113	6.744	6.744	0.000	94	606891	10.2	
54 1,1,1-Trichloroethane	97	6.756	6.769	-0.013	98	57058	0.5105	
57 Carbon tetrachloride	117		6.982				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.201	7.208	-0.007	52	111649	10.3	
60 Benzene	78		7.238				ND	7
62 1,2-Dichloroethane	62		7.305				ND	7
* 65 Fluorobenzene (IS)	96	7.640	7.640	0.000	99	2356926	10.0	
69 Trichloroethene	95	8.128	8.122	0.006	96	30994	0.3995	
71 1,2-Dichloropropane	63		8.451				ND	
77 Dichlorobromomethane	83		8.799				ND	
81 cis-1,3-Dichloropropene	75		9.347				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.512				ND	
\$ 84 Toluene-d8 (Surr)	98	9.658	9.658	0.000	94	2625811	9.67	
85 Toluene	92	9.744	9.738	0.006	97	6862	0.0340	
86 trans-1,3-Dichloropropene	75		9.994				ND	
106 1,1,2-Trichloroethane	97		10.201				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.292	10.292	0.000	98	609756	6.55	
109 2-Hexanone	43		10.408				ND	
111 Chlorodibromomethane	129		10.579				ND	
112 Ethylene Dibromide	107		10.689				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.121	11.121	0.000	86	2219604	10.0	
115 Chlorobenzene	112		11.146				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.231				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.347				ND	7
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.688				ND	
122 Bromoform	173		11.847				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	91	1076653	9.77	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1255155	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

### Reagents:

MSV\_LLcentISS\_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X31.D

Injection Date: 02-Dec-2022 19:43:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-106467-B-8 DL

Lab Sample ID: 410-106467-8

Worklist Smp#: 32

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

Purge Vol: 25.000 mL

Dil. Factor: 10.0000

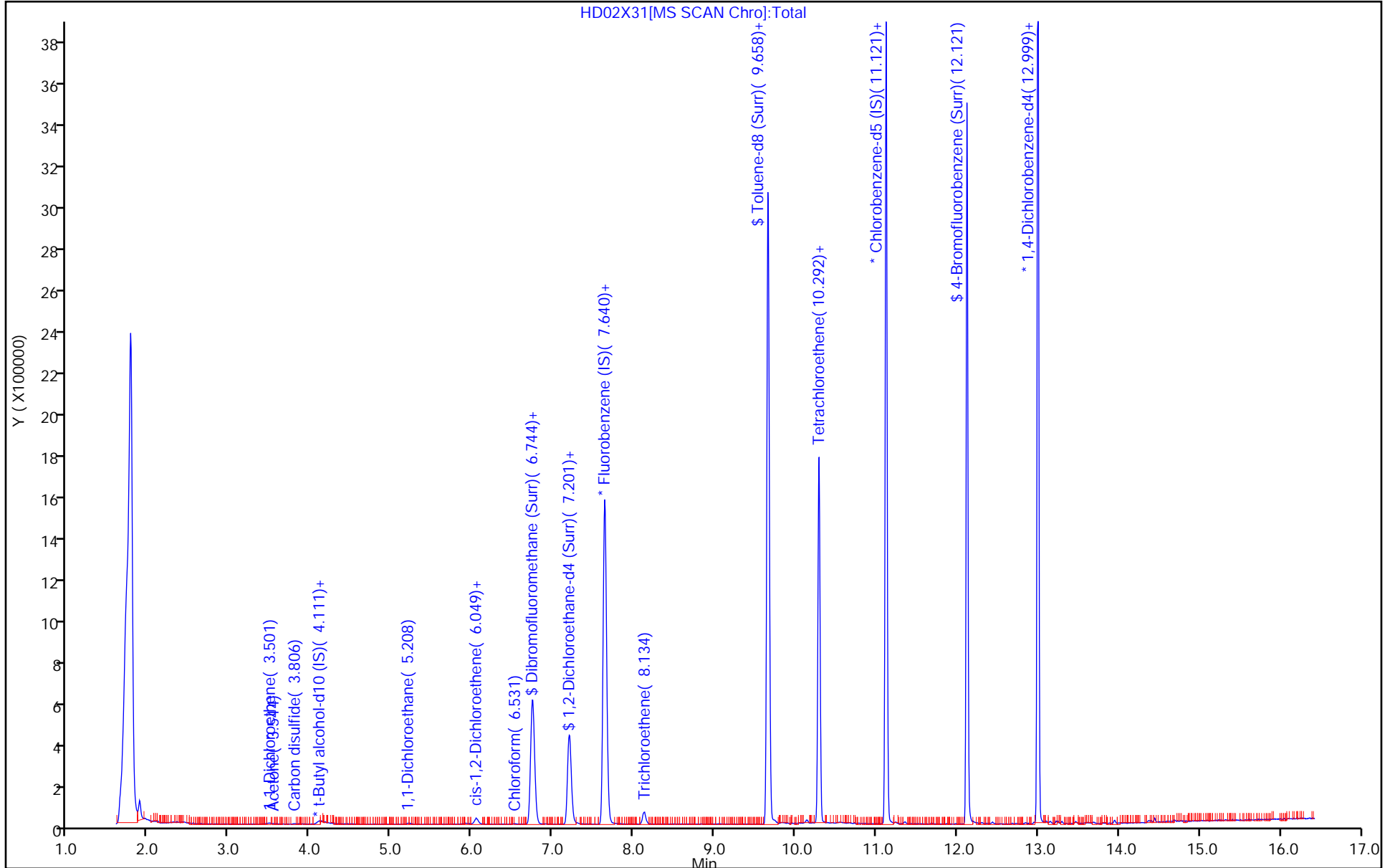
ALS Bottle#: 31

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2





Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X31.D  
 Lims ID: 410-106467-B-8 DL  
 Client ID: HD-COD-SW-17-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 19:43:30 ALS Bottle#: 31 Worklist Smp#: 32  
 Purge Vol: 25.000 mL Dil. Factor: 10.0000  
 Sample Info: 410-0072389-032  
 Operator ID: knk41612 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 05-Dec-2022 15:04:06 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1604

First Level Reviewer: kaewrungrueangp

Date: 05-Dec-2022 15:04:06

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.2	101.73
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.57
\$ 84 Toluene-d8 (Surr)	10.0	9.67	96.70
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.77	97.67

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X31.D

Injection Date: 02-Dec-2022 19:43:30

Instrument ID: 19094

Lims ID: 410-106467-B-8 DL

Lab Sample ID: 410-106467-8

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

Operator ID: knk41612

ALS Bottle#: 31

Worklist Smp#: 32

Purge Vol: 25.000 mL

Dil. Factor: 10.0000

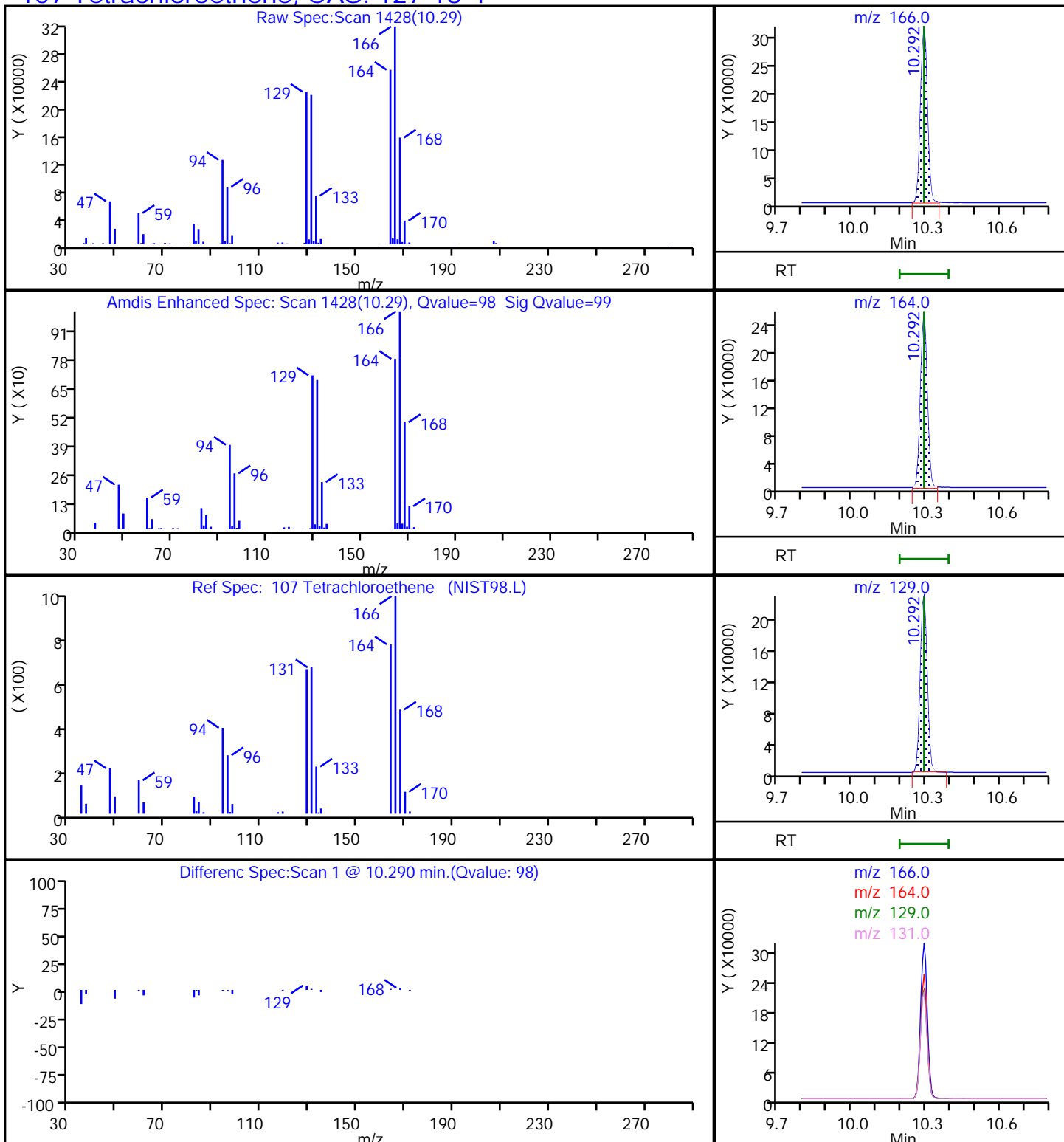
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

### 107 Tetrachloroethene, CAS: 127-18-4



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0

Lab Sample ID: 410-106467-9

Matrix: Water

Lab File ID: HD01X44.D

Analysis Method: 8260D

Date Collected: 11/18/2022 10:40

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 00:38

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	0.17	J	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND	^c cn	5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0
67-64-1	Acetone	1.5	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	0.59		0.50	0.090
74-87-3	Chloromethane	ND	^c cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	3.8		0.50	0.20
108-88-3	Toluene	0.16	J cn	0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0

Lab Sample ID: 410-106467-9

Matrix: Water

Lab File ID: HD01X44.D

Analysis Method: 8260D

Date Collected: 11/18/2022 10:40

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 00:38

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.17	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

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

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X44.D  
 Lims ID: 410-106467-A-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 00:38:30 ALS Bottle#: 14 Worklist Smp#: 15  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-015  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2

Date: 02-Dec-2022 13:18:22

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.117	2.117	0.000	55	4125	0.0426	
7 Vinyl chloride	62		2.239				ND	
9 Bromomethane	94		2.556				ND	
10 Chloroethane	64		2.642				ND	7
18 1,1-Dichloroethene	96	3.501	3.495	0.006	97	10918	0.1665	
19 Acetone	43	3.526	3.501	0.025	70	15010	1.51	
24 Carbon disulfide	76		3.794				ND	7
* 29 t-Butyl alcohol-d10 (IS)	65	4.172	4.117	0.055	19	155538	50.0	
28 Methylene Chloride	84		4.147				ND	
33 Methyl tert-butyl ether	73		4.550				ND	7
34 trans-1,2-Dichloroethene	96		4.568				ND	7
37 1,1-Dichloroethane	63		5.220				ND	7
42 2-Butanone (MEK)	43		6.001				ND	
43 cis-1,2-Dichloroethene	96	6.068	6.049	0.019	82	5334	0.0666	
49 Chlorobromomethane	128		6.385				ND	
52 Chloroform	83	6.537	6.531	0.006	94	75249	0.5856	
\$ 53 Dibromofluoromethane (Surr)	113	6.744	6.751	-0.006	94	645479	10.1	
54 1,1,1-Trichloroethane	97	6.763	6.763	0.000	35	4091	0.0342	
57 Carbon tetrachloride	117		6.976				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.202	0.006	52	119262	10.2	
60 Benzene	78	7.238	7.238	0.000	52	14922	0.0474	
62 1,2-Dichloroethane	62		7.305				ND	7
* 65 Fluorobenzene (IS)	96	7.641	7.641	0.000	99	2522097	10.0	
69 Trichloroethene	95	8.128	8.122	0.006	94	14204	0.1711	
71 1,2-Dichloropropane	63		8.451				ND	
77 Dichlorobromomethane	83		8.799				ND	7
81 cis-1,3-Dichloropropene	75		9.348				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.518				ND	
\$ 84 Toluene-d8 (Surr)	98	9.659	9.658	0.000	94	2788266	9.86	
85 Toluene	92	9.732	9.738	-0.006	95	32601	0.1552	
86 trans-1,3-Dichloropropene	75		9.994				ND	
106 1,1,2-Trichloroethane	97		10.195				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.293	10.292	0.001	98	364743	3.76	
109 2-Hexanone	43		10.408				ND	
111 Chlorodibromomethane	129		10.579				ND	
112 Ethylene Dibromide	107		10.689				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.122	11.122	0.000	86	2310778	10.0	
115 Chlorobenzene	112		11.146				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91	11.237	11.231	0.006	97	18977	0.0463	
S 117 Xylenes, Total	106				0		0.1479	
119 m-Xylene & p-Xylene	106	11.353	11.347	0.006	98	16029	0.1025	
120 o-Xylene	106	11.683	11.676	0.006	96	6867	0.0454	
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.847				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	91	1138619	9.92	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1318617	10.0	

**QC Flag Legend**

Processing Flags

7 - Failed Limit of Detection

**Reagents:**

MSV\_LLcentISS\_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X44.D

Injection Date: 02-Dec-2022 00:38:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: 410-106467-A-9

Lab Sample ID: 410-106467-9

Worklist Smp#: 15

Client ID: HD-COD-SW-26-0/1-0

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

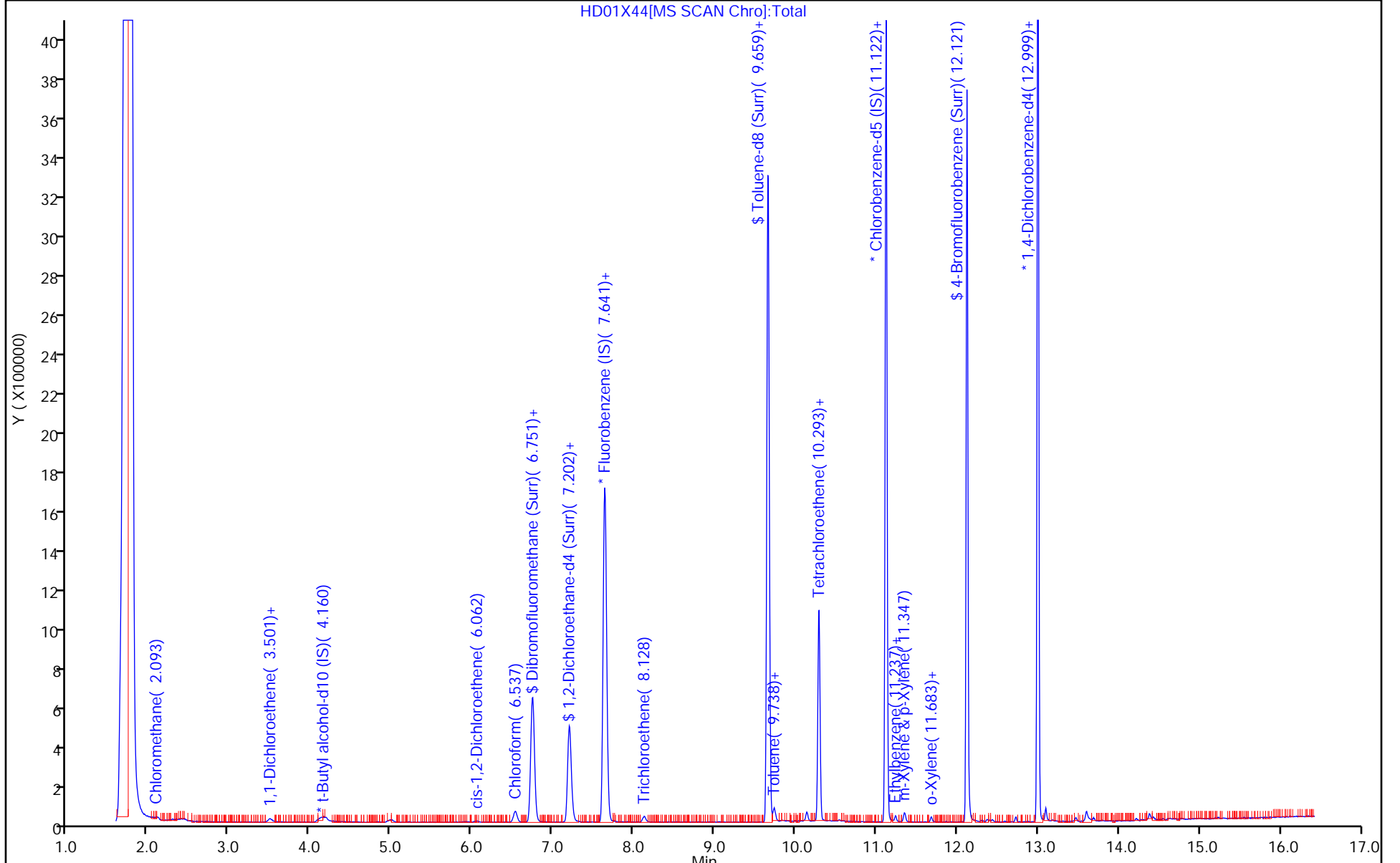
ALS Bottle#: 14

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X44.D  
 Lims ID: 410-106467-A-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 00:38:30 ALS Bottle#: 14 Worklist Smp#: 15  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-015  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2

Date: 02-Dec-2022 13:18:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.1	101.12
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.38
\$ 84 Toluene-d8 (Surr)	10.0	9.86	98.63
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.92	99.21



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X44.D

Injection Date: 02-Dec-2022 00:38:30

Instrument ID: 19094

Lims ID: 410-106467-A-9

Lab Sample ID: 410-106467-9

Client ID: HD-COD-SW-26-0/1-0

Operator ID: sej02002

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

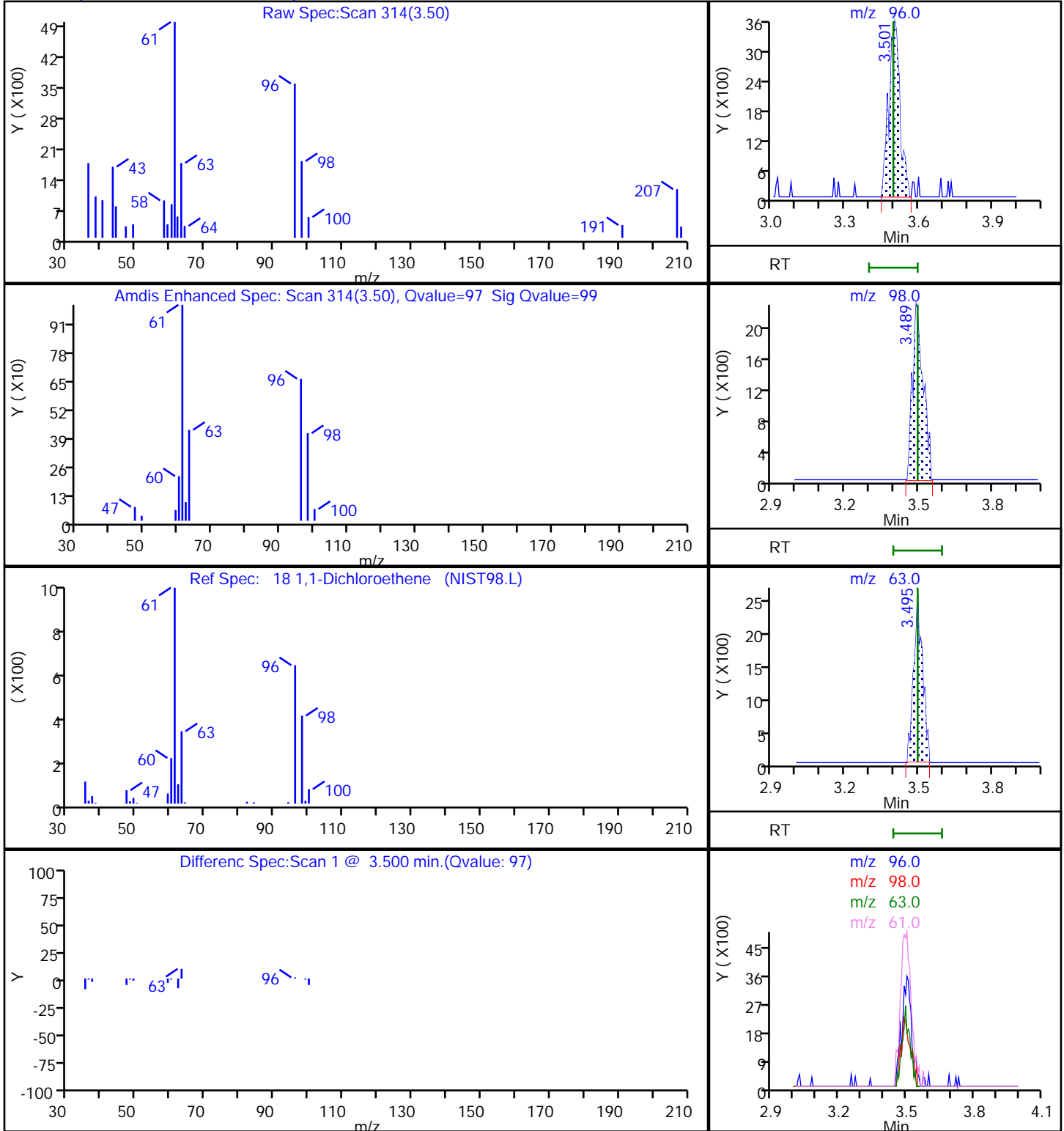
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

18 1,1-Dichloroethene, CAS: 75-35-4



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X44.D

Injection Date: 02-Dec-2022 00:38:30

Instrument ID: 19094

Lims ID: 410-106467-A-9

Lab Sample ID: 410-106467-9

Client ID: HD-COD-SW-26-0/1-0

Operator ID: sej02002

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

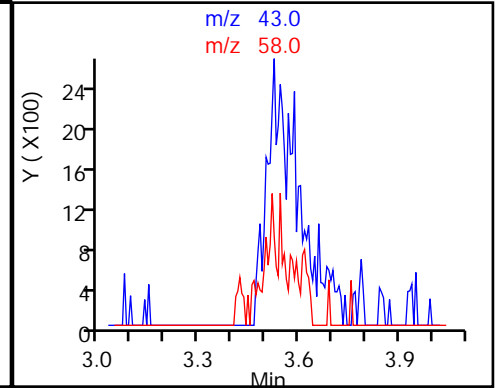
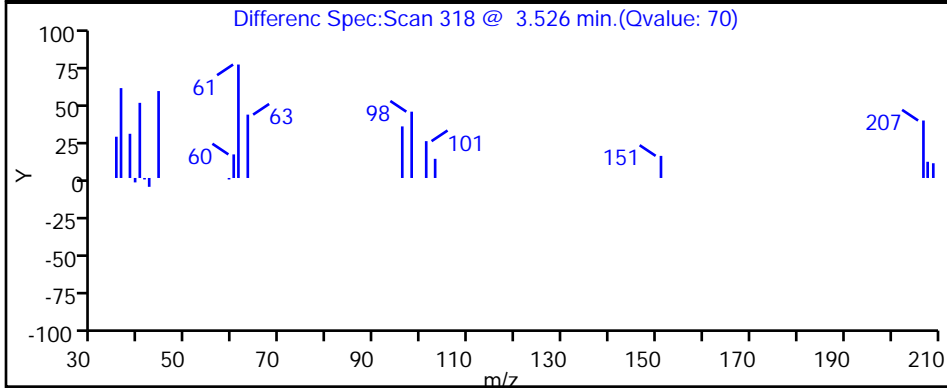
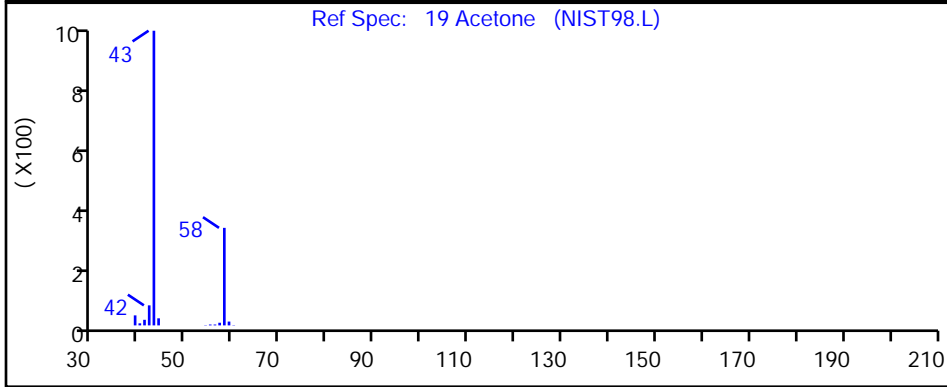
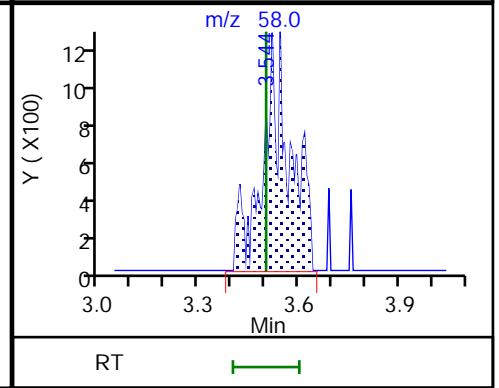
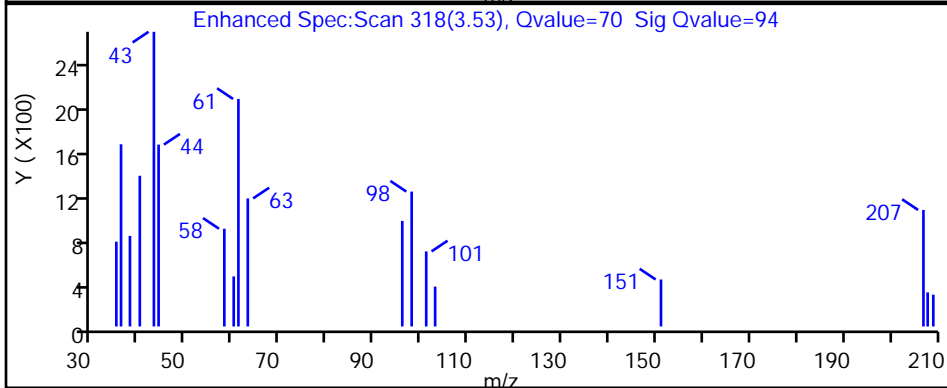
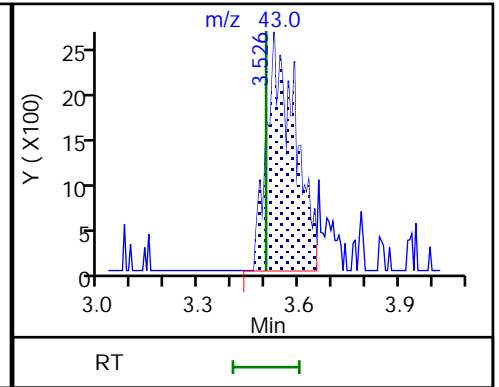
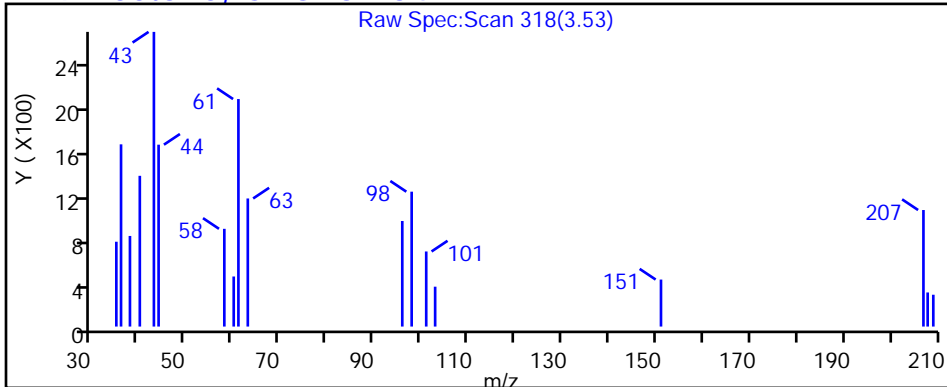
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X44.D

Injection Date: 02-Dec-2022 00:38:30

Instrument ID: 19094

Lims ID: 410-106467-A-9

Lab Sample ID: 410-106467-9

Client ID: HD-COD-SW-26-0/1-0

Operator ID: sej02002

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

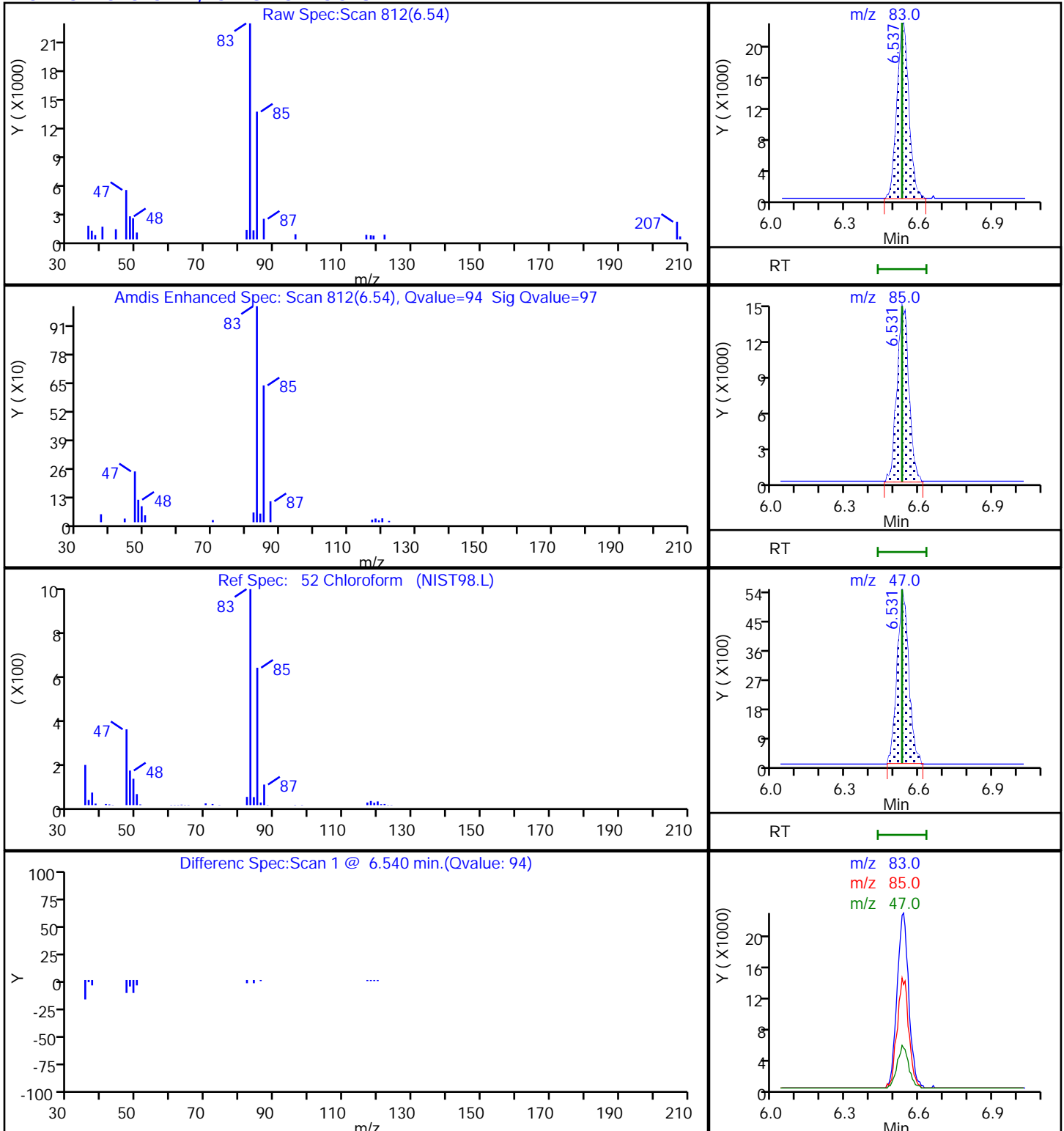
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

52 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X44.D

Injection Date: 02-Dec-2022 00:38:30

Instrument ID: 19094

Lims ID: 410-106467-A-9

Lab Sample ID: 410-106467-9

Client ID: HD-COD-SW-26-0/1-0

Operator ID: sej02002

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

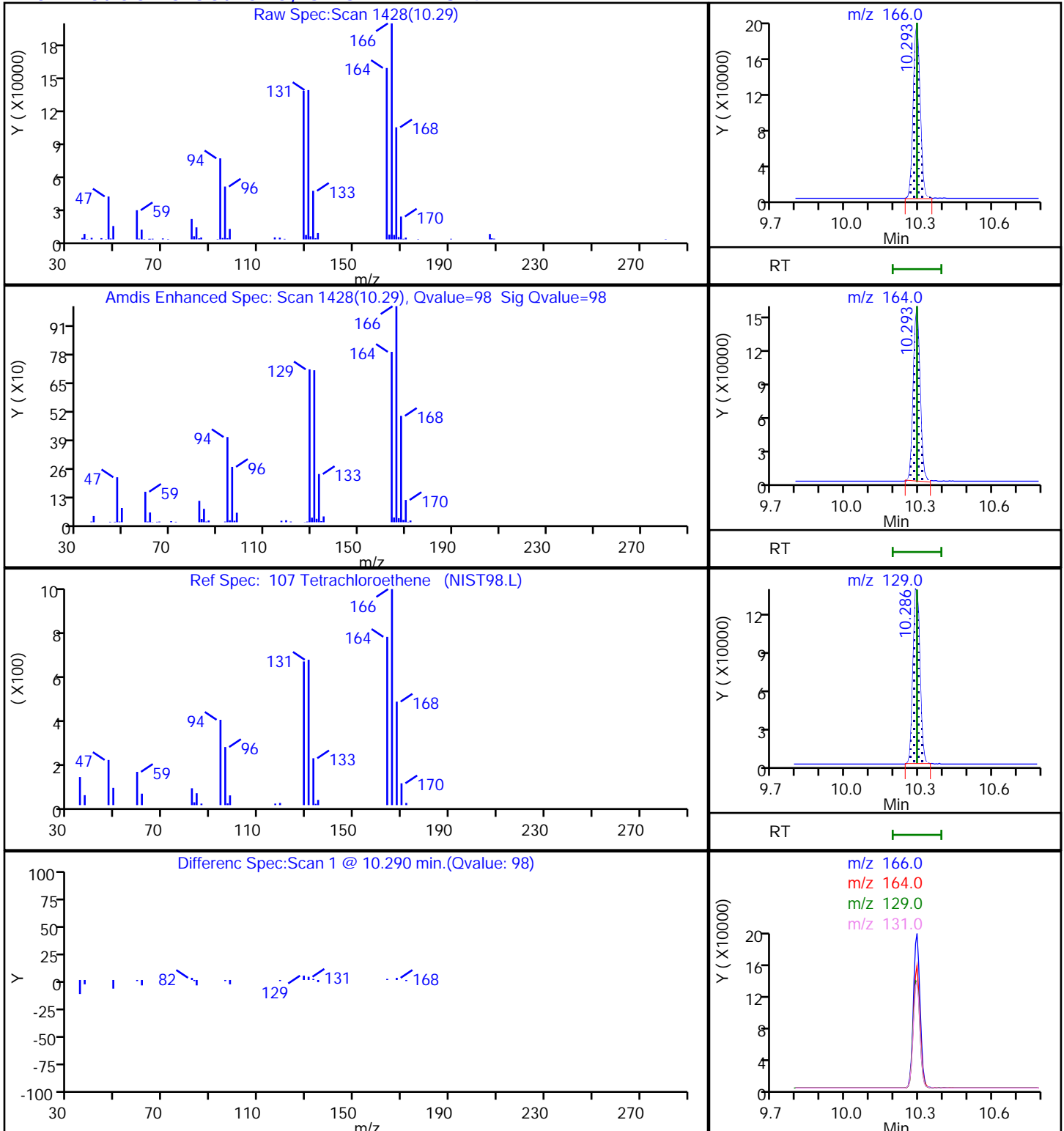
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

### 107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X44.D

Injection Date: 02-Dec-2022 00:38:30

Instrument ID: 19094

Lims ID: 410-106467-A-9

Lab Sample ID: 410-106467-9

Client ID: HD-COD-SW-26-0/1-0

Operator ID: sej02002

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

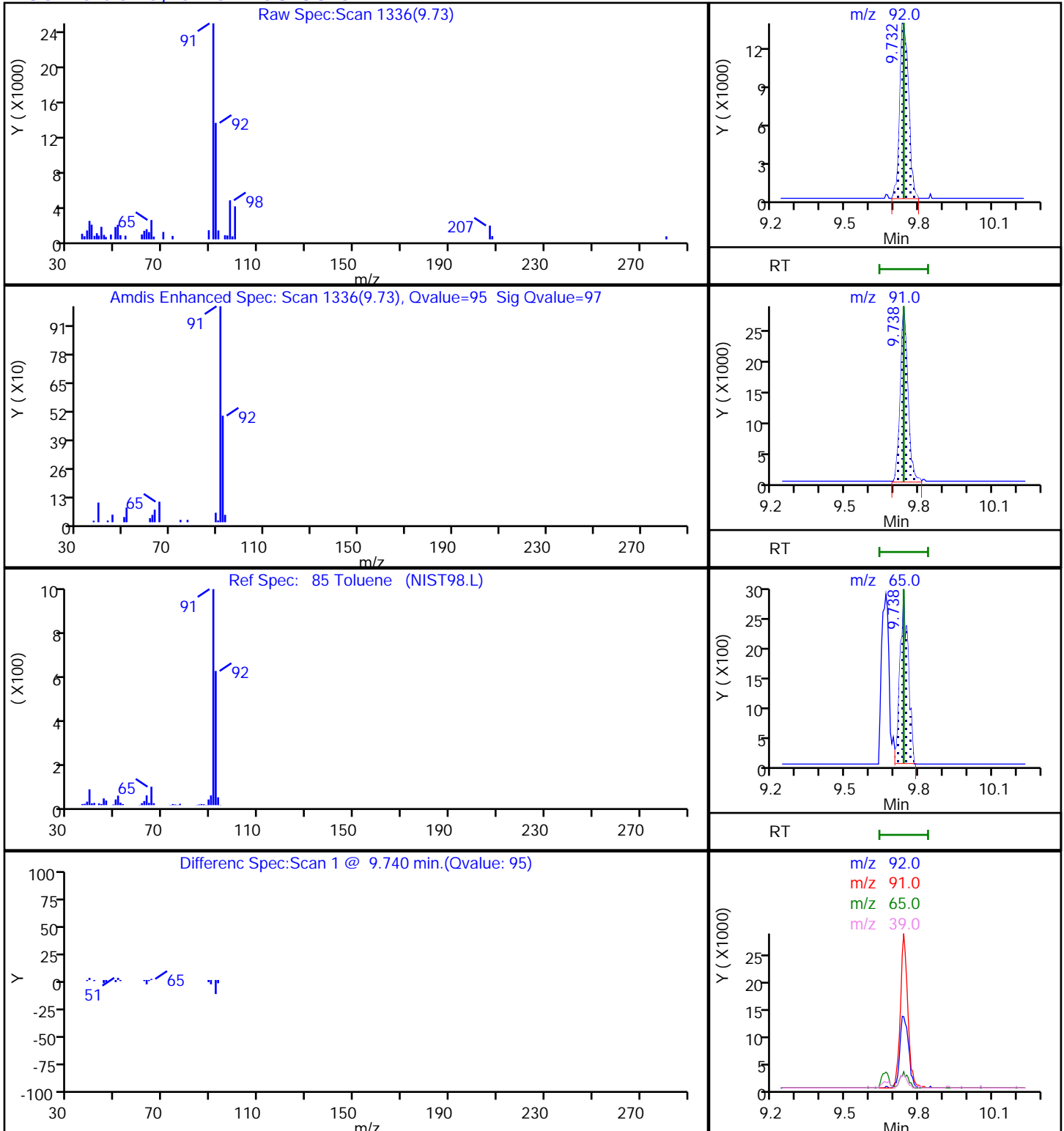
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

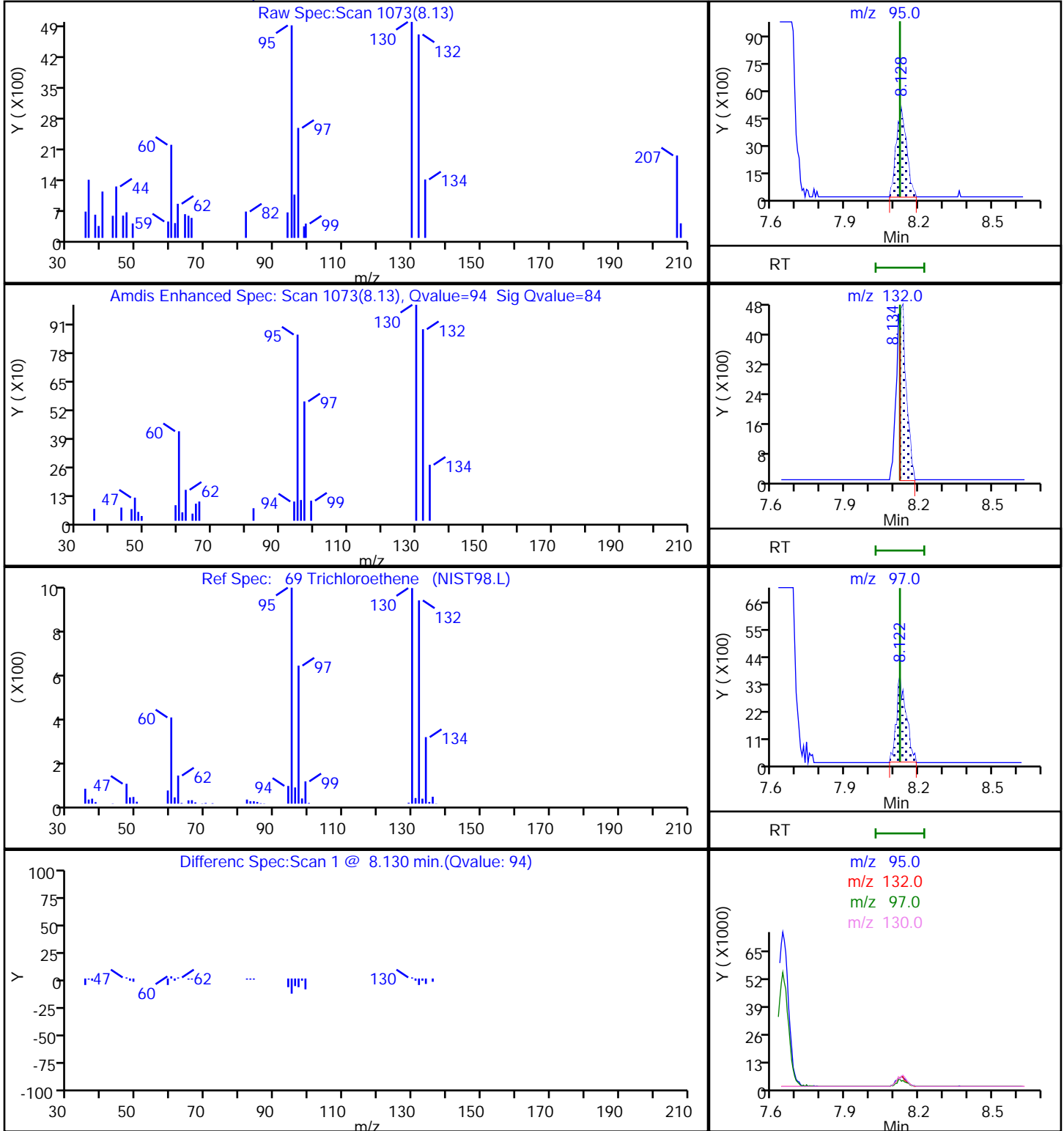
MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X44.D  
Injection Date: 02-Dec-2022 00:38:30 Instrument ID: 19094  
Lims ID: 410-106467-A-9 Lab Sample ID: 410-106467-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: sej02002 ALS Bottle#: 14 Worklist Smp#: 15  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

69 Trichloroethene, CAS: 79-01-6



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0

Lab Sample ID: 410-106467-10

Matrix: Water

Lab File ID: HD01X45.D

Analysis Method: 8260D

Date Collected: 11/18/2022 11:10

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 00:59

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND	^c cn	5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0
67-64-1	Acetone	3.2	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	^c cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.20	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.20	J	0.50	0.20
108-88-3	Toluene	0.15	J cn	0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0

Lab Sample ID: 410-106467-10

Matrix: Water

Lab File ID: HD01X45.D

Analysis Method: 8260D

Date Collected: 11/18/2022 11:10

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 00:59

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.20	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120



Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X45.D  
 Lims ID: 410-106467-A-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 00:59:30 ALS Bottle#: 15 Worklist Smp#: 16  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-016  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2 Date: 02-Dec-2022 13:19:41

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.111	2.117	-0.006	40	7269	0.0745	
7 Vinyl chloride	62		2.239				ND	7
9 Bromomethane	94		2.556				ND	
10 Chloroethane	64		2.642				ND	
18 1,1-Dichloroethene	96		3.495				ND	
19 Acetone	43	3.525	3.501	0.024	77	37041	3.21	
24 Carbon disulfide	76	3.800	3.794	0.006	95	12497	0.0706	M
* 29 t-Butyl alcohol-d10 (IS)	65	4.166	4.117	0.049	19	180597	50.0	
28 Methylene Chloride	84		4.147				ND	
33 Methyl tert-butyl ether	73		4.550				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	7
37 1,1-Dichloroethane	63		5.220				ND	
42 2-Butanone (MEK)	43		6.001				ND	7
43 cis-1,2-Dichloroethene	96	6.049	6.049	0.000	77	16306	0.2022	
49 Chlorobromomethane	128		6.385				ND	
52 Chloroform	83	6.537	6.531	0.006	91	10099	0.0780	
\$ 53 Dibromofluoromethane (Surr)	113	6.750	6.751	0.000	94	648385	10.1	
54 1,1,1-Trichloroethane	97		6.763				ND	7
57 Carbon tetrachloride	117		6.976				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.202	0.006	74	121035	10.3	
60 Benzene	78	7.232	7.238	-0.006	90	14385	0.0453	
62 1,2-Dichloroethane	62		7.305				ND	7
* 65 Fluorobenzene (IS)	96	7.640	7.641	-0.001	99	2541411	10.0	
69 Trichloroethene	95	8.122	8.122	0.000	95	17045	0.2038	
71 1,2-Dichloropropane	63		8.451				ND	
77 Dichlorobromomethane	83		8.799				ND	7
81 cis-1,3-Dichloropropene	75		9.348				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.518				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.658	9.658	0.000	93	2808517	9.88	
85 Toluene	92	9.732	9.738	-0.006	98	32086	0.1519	
86 trans-1,3-Dichloropropene	75		9.994				ND	
106 1,1,2-Trichloroethane	97		10.195				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.292	10.292	0.000	94	19178	0.1967	
109 2-Hexanone	43		10.408				ND	7
111 Chlorodibromomethane	129		10.579				ND	
112 Ethylene Dibromide	107		10.689				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.122	11.122	0.000	86	2323474	10.0	
115 Chlorobenzene	112		11.146				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91	11.237	11.231	0.006	97	17504	0.0424	
S 117 Xylenes, Total	106				0		0.1464	
119 m-Xylene & p-Xylene	106	11.347	11.347	0.000	99	15576	0.0991	
120 o-Xylene	106	11.682	11.676	0.006	97	7201	0.0474	
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.847				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	92	1142024	9.90	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1337941	10.0	

**QC Flag Legend**

## Processing Flags

7 - Failed Limit of Detection

## Review Flags

M - Manually Integrated

**Reagents:**

MSV\_LLcentISS\_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X45.D

Injection Date: 02-Dec-2022 00:59:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: 410-106467-A-10

Lab Sample ID: 410-106467-10

Worklist Smp#: 16

Client ID: HD-COD-SW-27-0/1-0

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

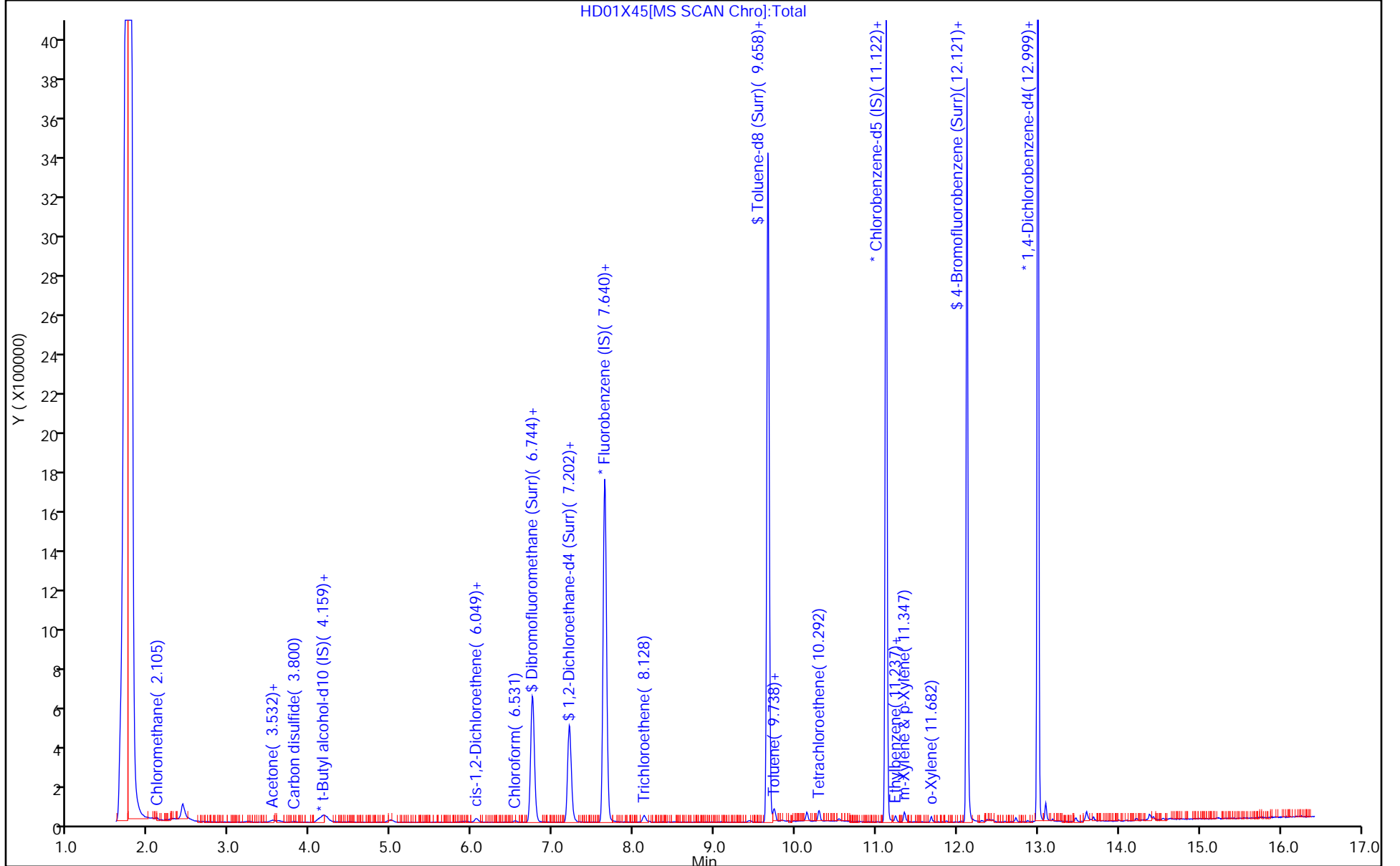
ALS Bottle#: 15

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X45.D  
 Lims ID: 410-106467-A-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 00:59:30 ALS Bottle#: 15 Worklist Smp#: 16  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-016  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2

Date: 02-Dec-2022 13:19:41

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.1	100.80
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.12
\$ 84 Toluene-d8 (Surr)	10.0	9.88	98.81
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.90	98.97

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X45.D

Injection Date: 02-Dec-2022 00:59:30

Instrument ID: 19094

Lims ID: 410-106467-A-10

Lab Sample ID: 410-106467-10

Client ID: HD-COD-SW-27-0/1-0

Operator ID: sej02002

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

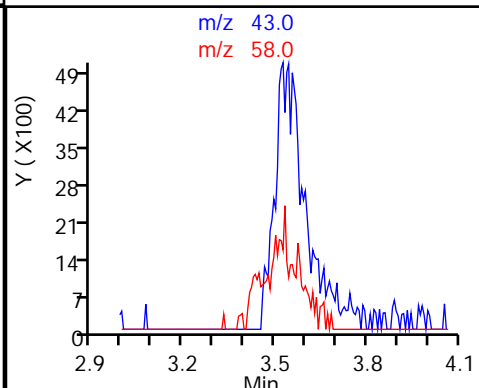
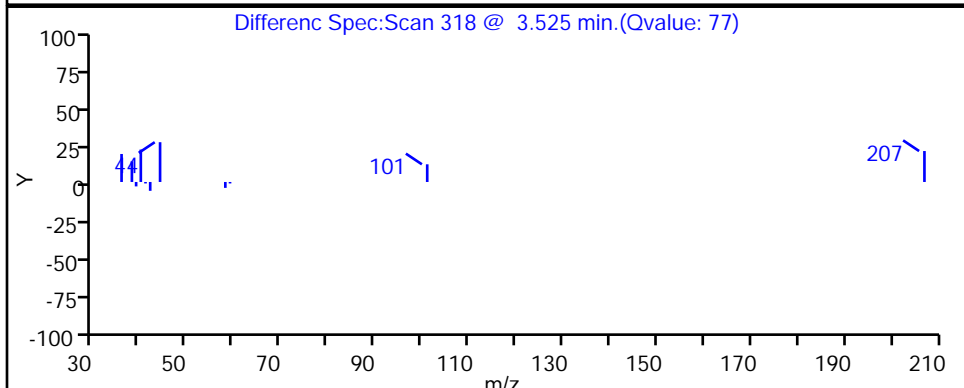
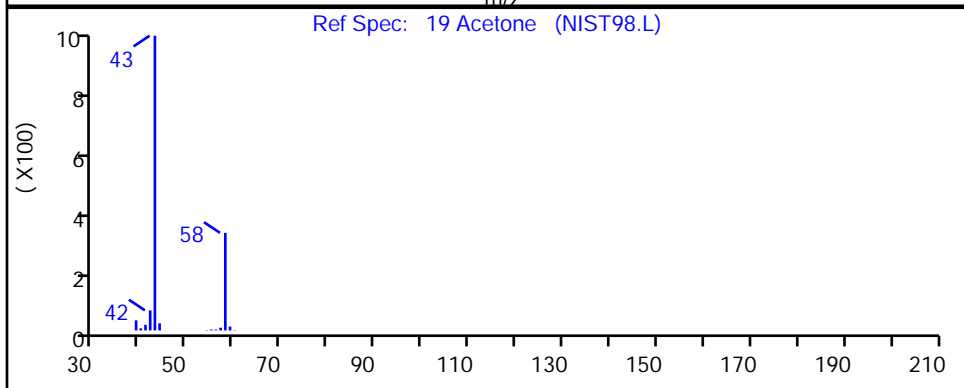
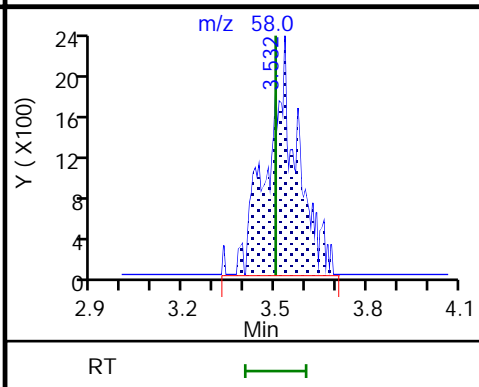
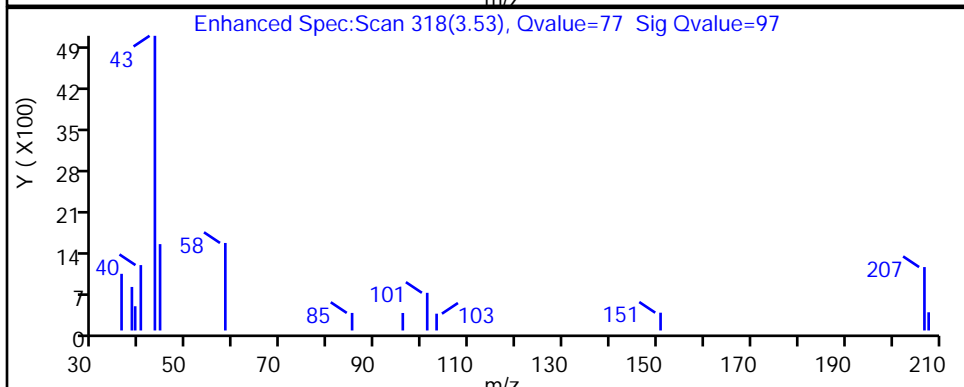
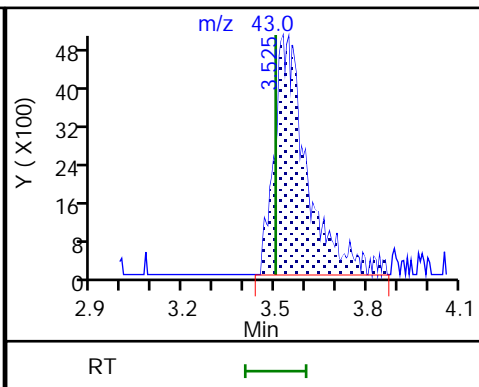
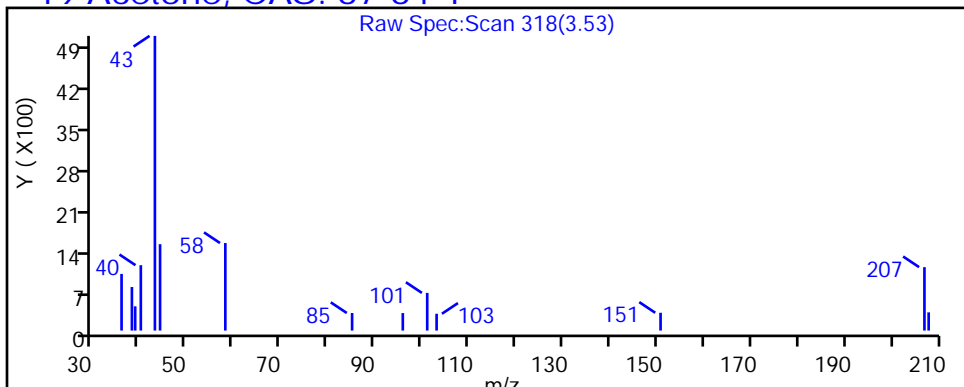
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

### 19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X45.D

Injection Date: 02-Dec-2022 00:59:30

Instrument ID: 19094

Lims ID: 410-106467-A-10

Lab Sample ID: 410-106467-10

Client ID: HD-COD-SW-27-0/1-0

Operator ID: sej02002

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

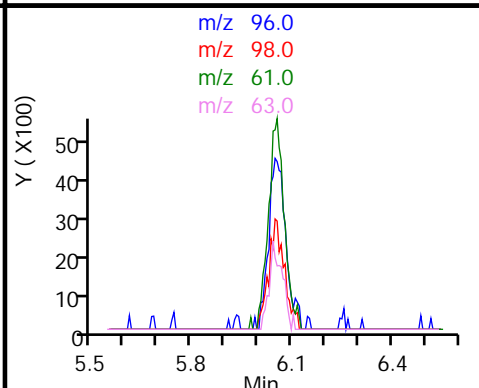
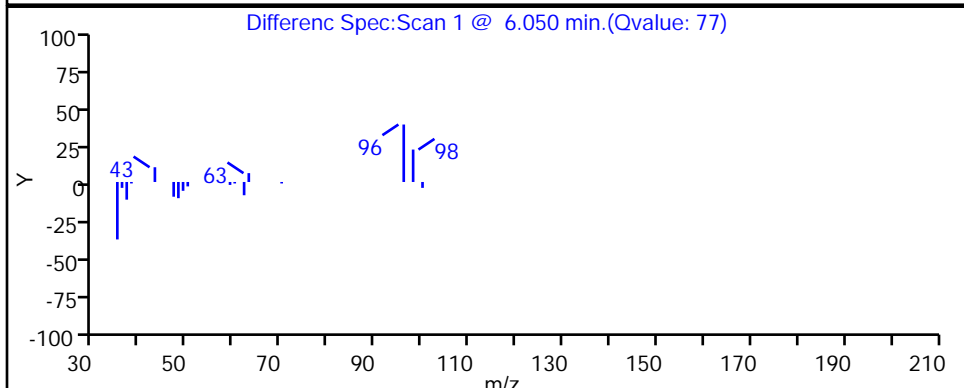
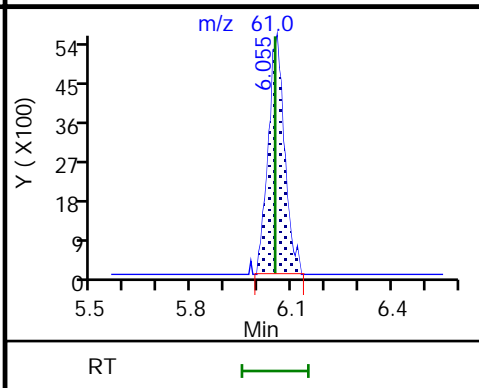
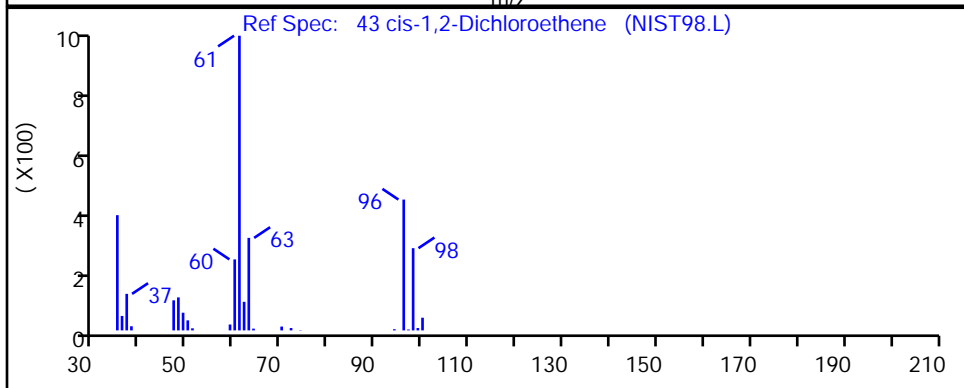
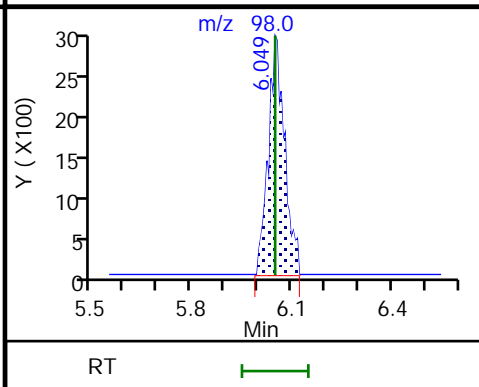
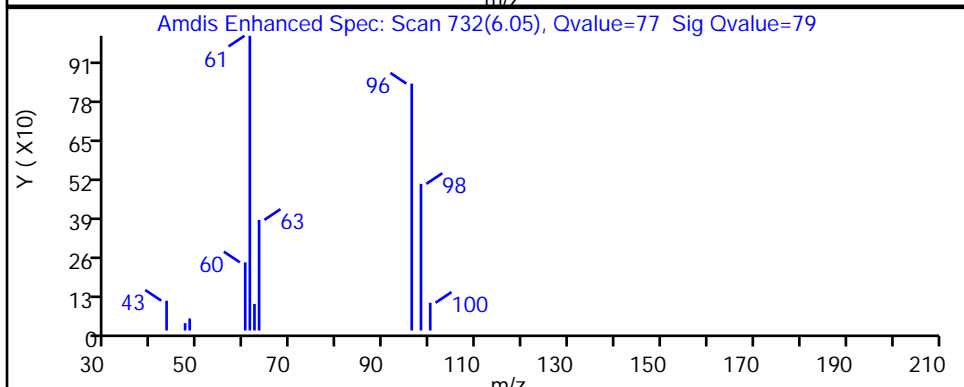
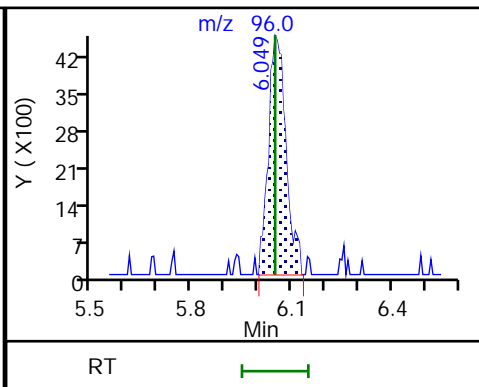
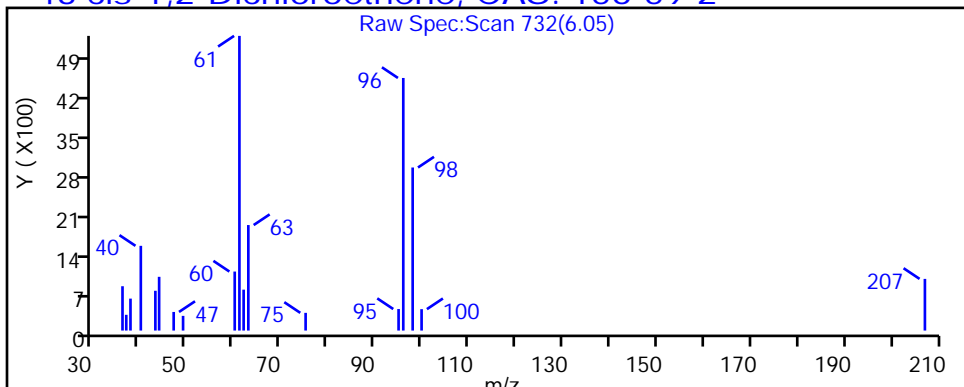
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

### 43 cis-1,2-Dichloroethene, CAS: 156-59-2



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X45.D

Injection Date: 02-Dec-2022 00:59:30

Instrument ID: 19094

Lims ID: 410-106467-A-10

Lab Sample ID: 410-106467-10

Client ID: HD-COD-SW-27-0/1-0

Operator ID: sej02002

ALS Bottle#: 15 Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

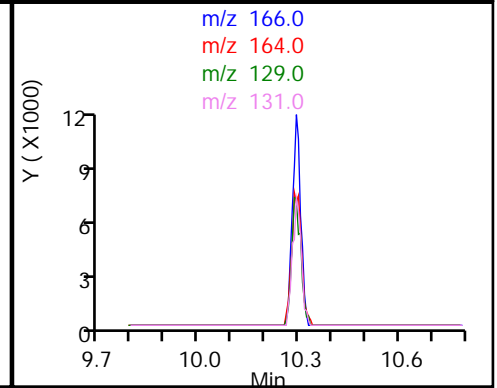
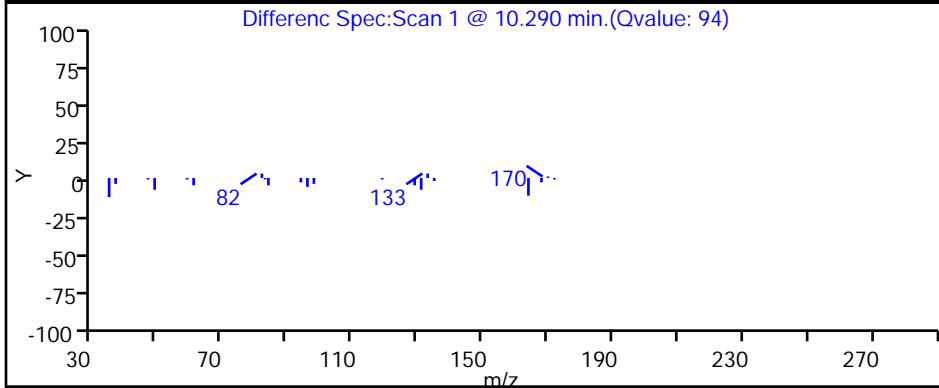
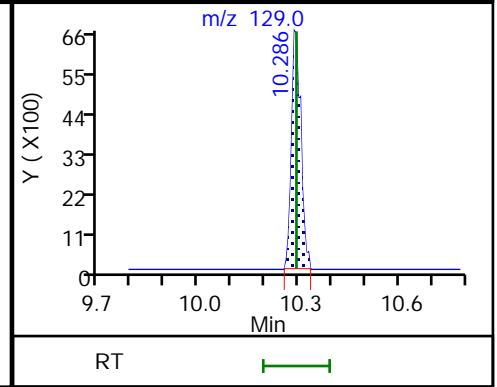
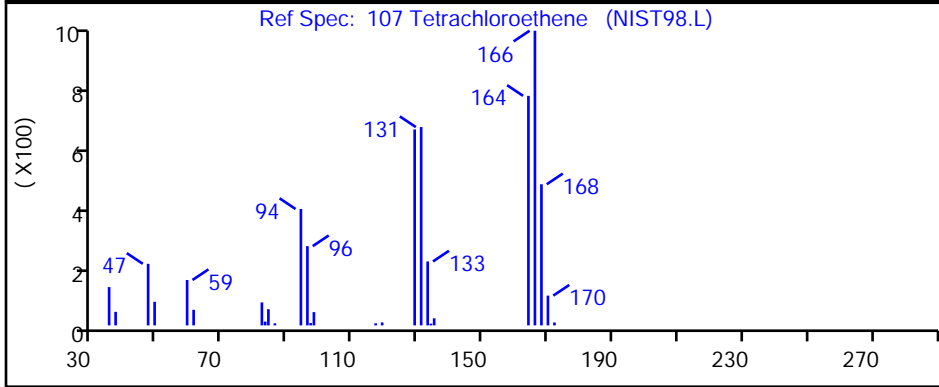
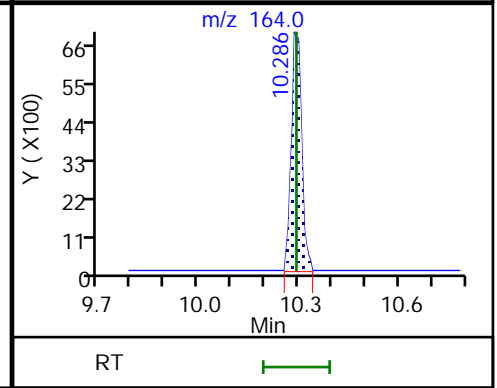
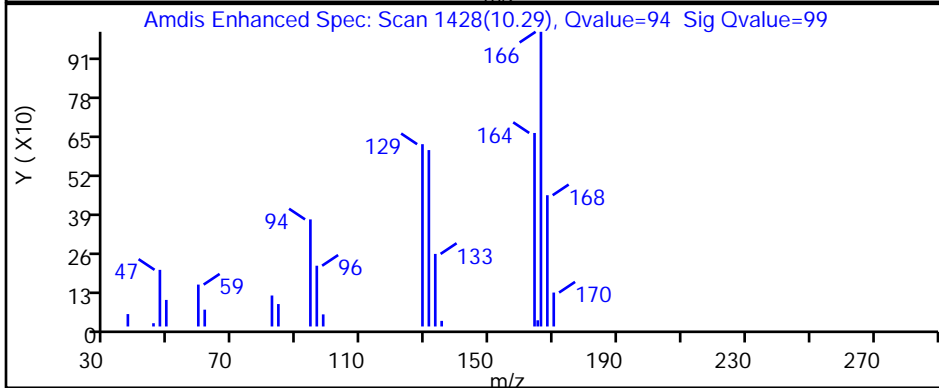
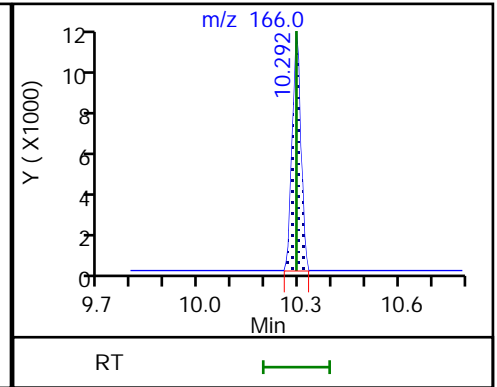
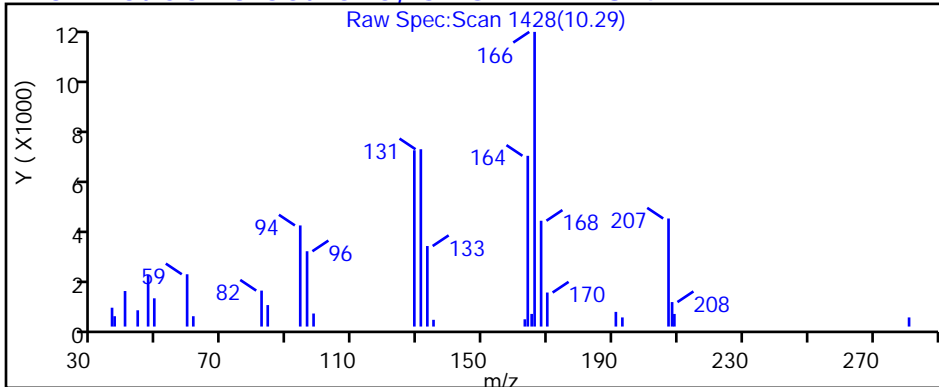
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X45.D

Injection Date: 02-Dec-2022 00:59:30

Instrument ID: 19094

Lims ID: 410-106467-A-10

Lab Sample ID: 410-106467-10

Client ID: HD-COD-SW-27-0/1-0

Operator ID: sej02002

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

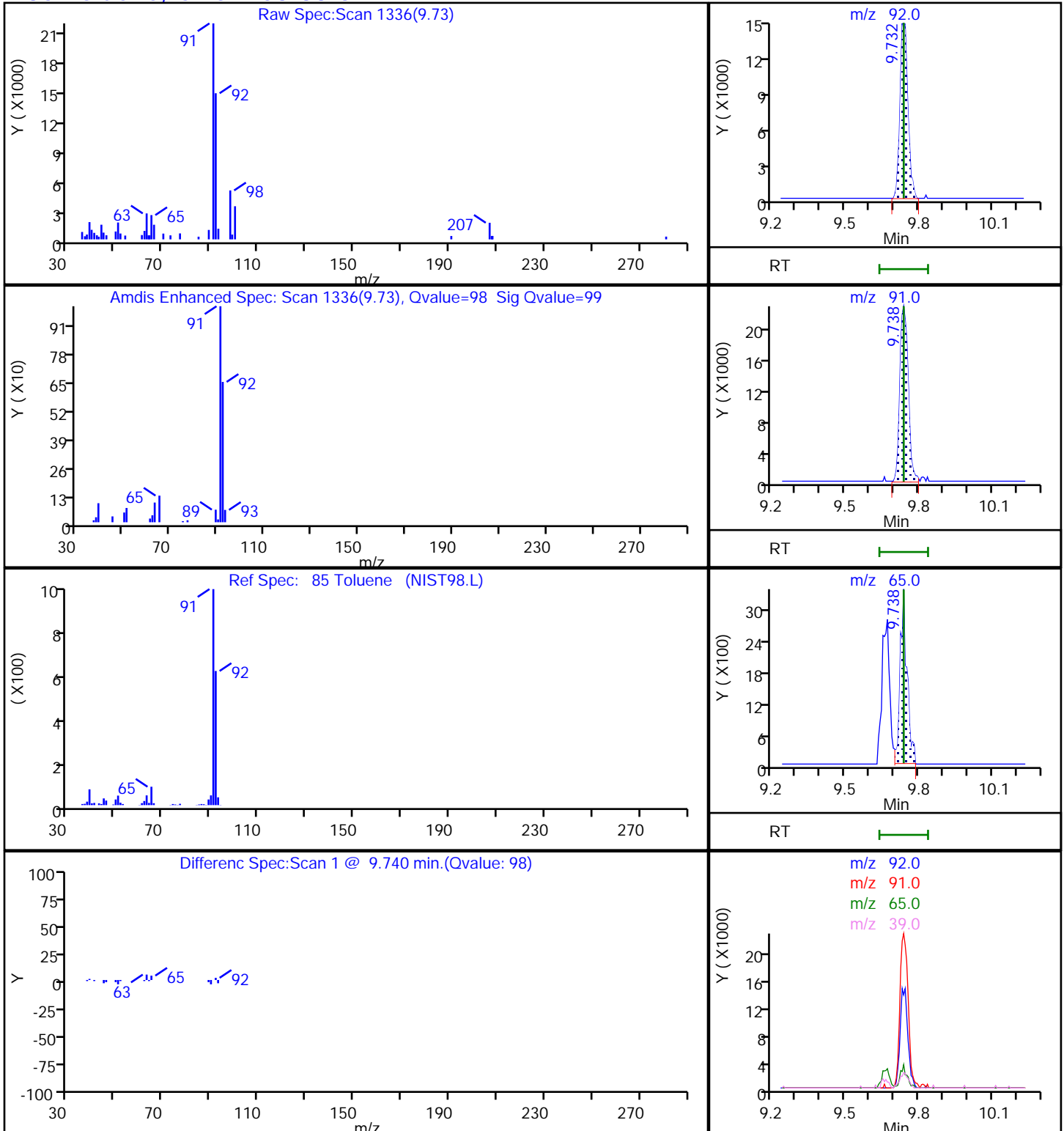
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

85 Toluene, CAS: 108-88-3





Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X45.D

Injection Date: 02-Dec-2022 00:59:30

Instrument ID: 19094

Lims ID: 410-106467-A-10

Lab Sample ID: 410-106467-10

Client ID: HD-COD-SW-27-0/1-0

Operator ID: sej02002

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

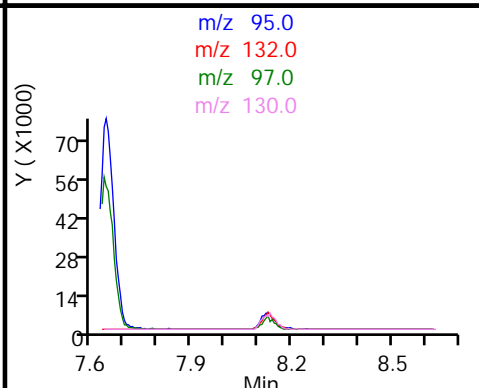
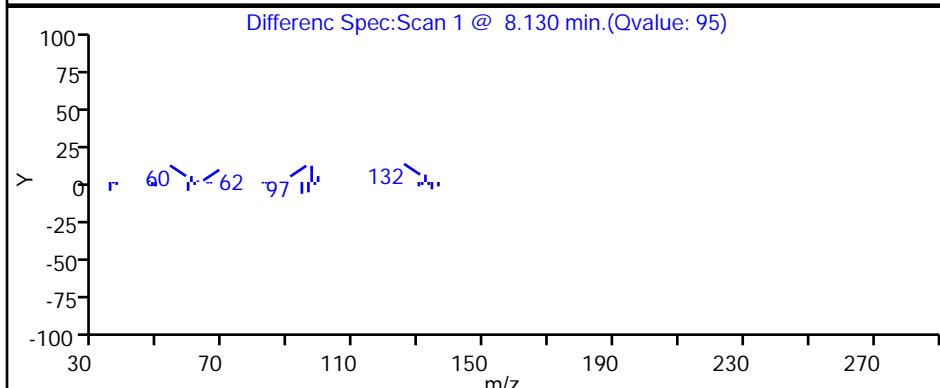
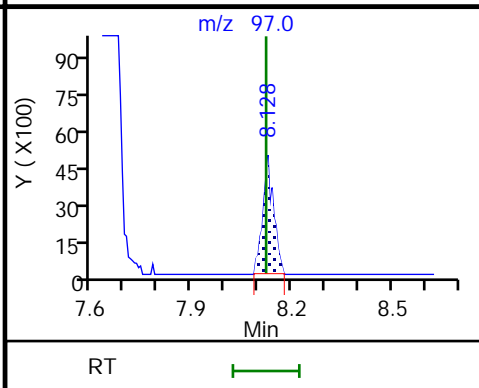
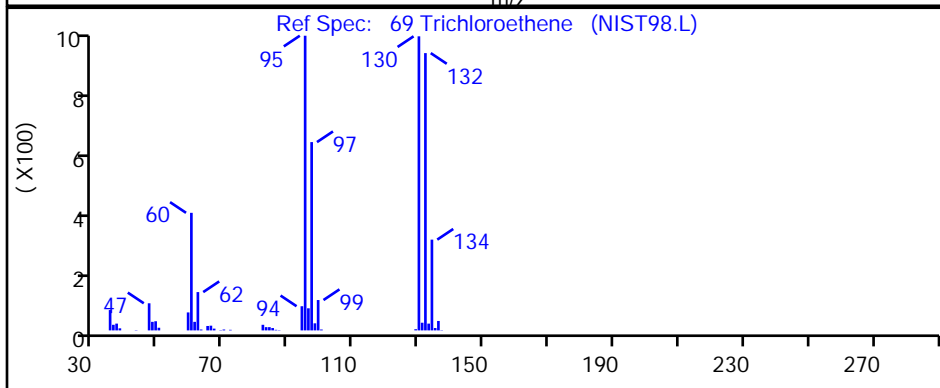
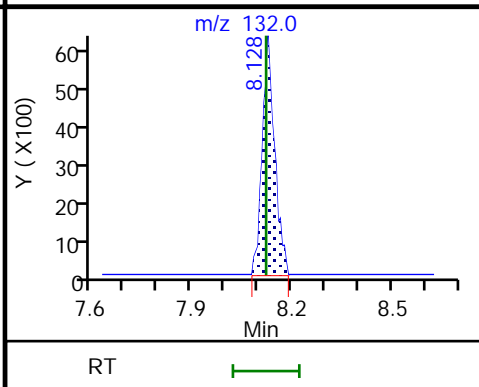
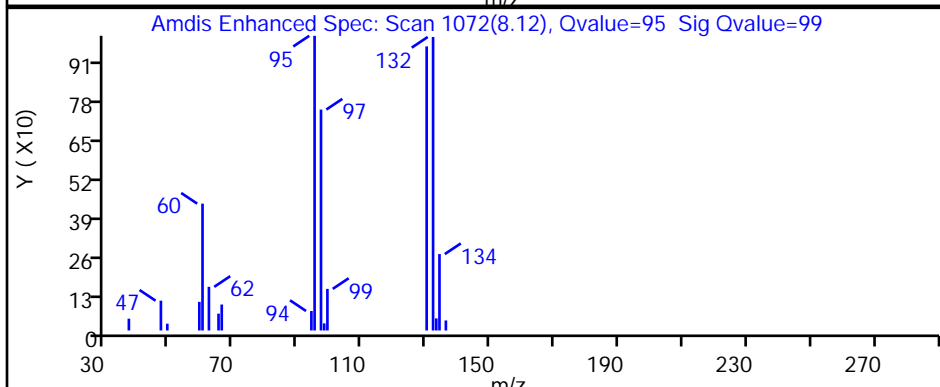
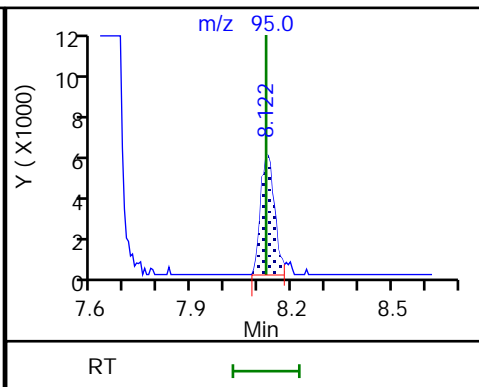
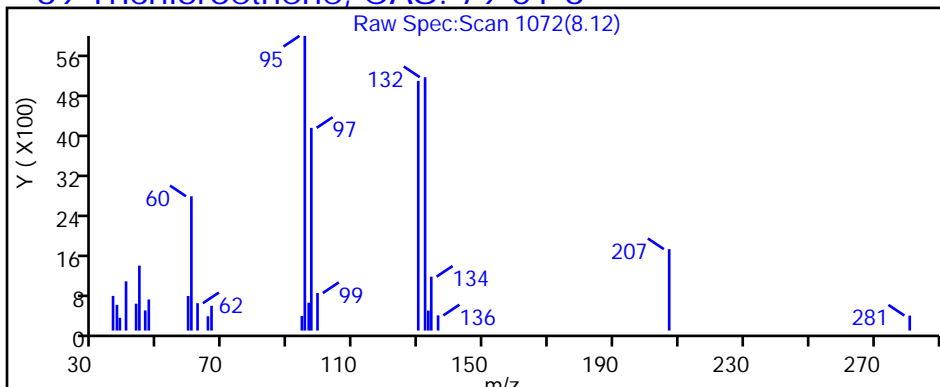
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

69 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Environment Testing, LLC

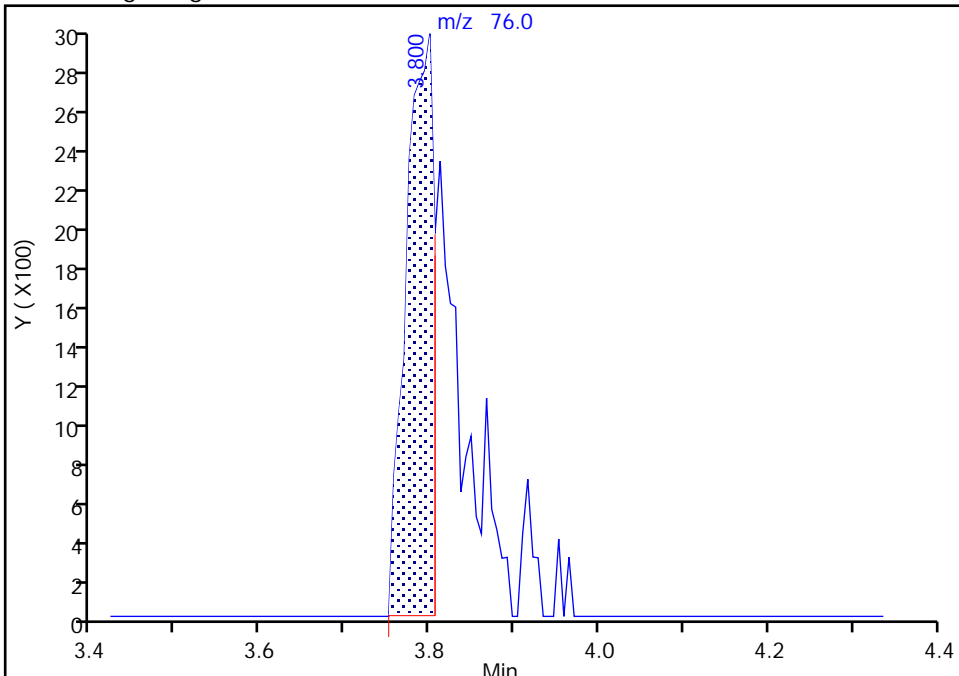
Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X45.D  
Injection Date: 02-Dec-2022 00:59:30 Instrument ID: 19094  
Lims ID: 410-106467-A-10 Lab Sample ID: 410-106467-10  
Client ID: HD-COD-SW-27-0/1-0  
Operator ID: sej02002 ALS Bottle#: 15 Worklist Smp#: 16  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

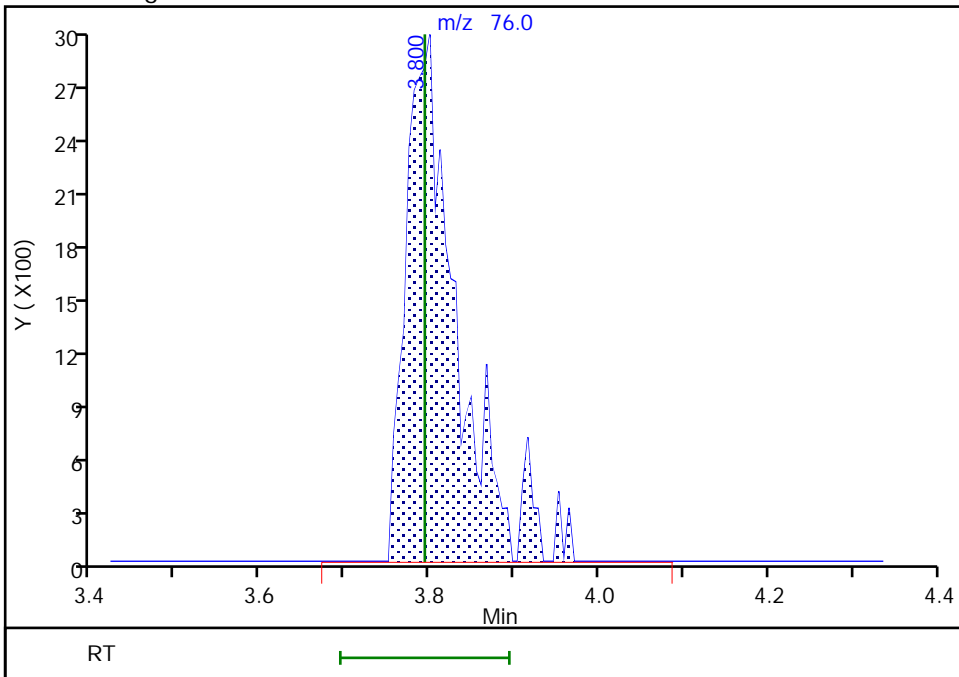
RT: 3.80  
Area: 6761  
Amount: 0.038214  
Amount Units: ug/l

Processing Integration Results



RT: 3.80  
Area: 12497  
Amount: 0.070634  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 02-Dec-2022 13:19:20  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0

Lab Sample ID: 410-106467-11

Matrix: Water

Lab File ID: HD01X46.D

Analysis Method: 8260D

Date Collected: 11/18/2022 12:40

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 01:19

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND	^c cn	5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0
67-64-1	Acetone	2.2	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	^c cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.18	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.22	J	0.50	0.20
108-88-3	Toluene	0.13	J cn	0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0

Lab Sample ID: 410-106467-11

Matrix: Water

Lab File ID: HD01X46.D

Analysis Method: 8260D

Date Collected: 11/18/2022 12:40

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 01:19

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.17	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X46.D  
 Lims ID: 410-106467-A-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 01:19:30 ALS Bottle#: 16 Worklist Smp#: 17  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-017  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2

Date: 02-Dec-2022 13:20:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.117	2.117	0.000	92	6812	0.0694	
7 Vinyl chloride	62		2.239				ND	
9 Bromomethane	94		2.556				ND	
10 Chloroethane	64		2.642				ND	7
18 1,1-Dichloroethene	96		3.495				ND	7
19 Acetone	43	3.562	3.501	0.061	71	23659	2.16	
24 Carbon disulfide	76	3.800	3.794	0.006	94	9635	0.0541	M
* 29 t-Butyl alcohol-d10 (IS)	65	4.166	4.117	0.049	28	171257	50.0	
28 Methylene Chloride	84		4.147				ND	
33 Methyl tert-butyl ether	73		4.550				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	7
37 1,1-Dichloroethane	63		5.220				ND	7
42 2-Butanone (MEK)	43		6.001				ND	7
43 cis-1,2-Dichloroethene	96	6.055	6.049	0.006	81	14915	0.1838	
49 Chlorobromomethane	128		6.385				ND	
52 Chloroform	83	6.537	6.531	0.006	92	11184	0.0858	
\$ 53 Dibromofluoromethane (Surr)	113	6.744	6.751	-0.006	94	648262	10.0	
54 1,1,1-Trichloroethane	97		6.763				ND	7
57 Carbon tetrachloride	117		6.976				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.202	7.202	0.000	52	120567	10.2	
60 Benzene	78	7.232	7.238	-0.006	41	13144	0.0411	
62 1,2-Dichloroethane	62		7.305				ND	7
* 65 Fluorobenzene (IS)	96	7.640	7.641	-0.001	99	2557741	10.0	
69 Trichloroethene	95	8.122	8.122	0.000	92	14423	0.1713	M
71 1,2-Dichloropropane	63		8.451				ND	
77 Dichlorobromomethane	83		8.799				ND	7
81 cis-1,3-Dichloropropene	75		9.348				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.518				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.658	9.658	0.000	93	2828861	9.87	
85 Toluene	92	9.738	9.738	0.000	98	28339	0.1330	
86 trans-1,3-Dichloropropene	75		9.994				ND	
106 1,1,2-Trichloroethane	97		10.195				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.286	10.292	-0.006	96	21647	0.2201	
109 2-Hexanone	43		10.408				ND	7
111 Chlorodibromomethane	129		10.579				ND	
112 Ethylene Dibromide	107		10.689				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.121	11.122	-0.001	86	2343775	10.0	
115 Chlorobenzene	112		11.146				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91	11.243	11.231	0.012	96	15127	0.0364	
S 117 Xylenes, Total	106				0		0.1176	
119 m-Xylene & p-Xylene	106	11.347	11.347	0.000	99	12580	0.0793	
120 o-Xylene	106	11.676	11.676	0.000	96	5871	0.0383	
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.847				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	91	1145362	9.84	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1329924	10.0	

**QC Flag Legend**

## Processing Flags

7 - Failed Limit of Detection

## Review Flags

M - Manually Integrated

**Reagents:**

MSV\_LLcentISS\_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X46.D

Injection Date: 02-Dec-2022 01:19:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: 410-106467-A-11

Lab Sample ID: 410-106467-11

Worklist Smp#: 17

Client ID: HD-COD-SW-28-0/1-0

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

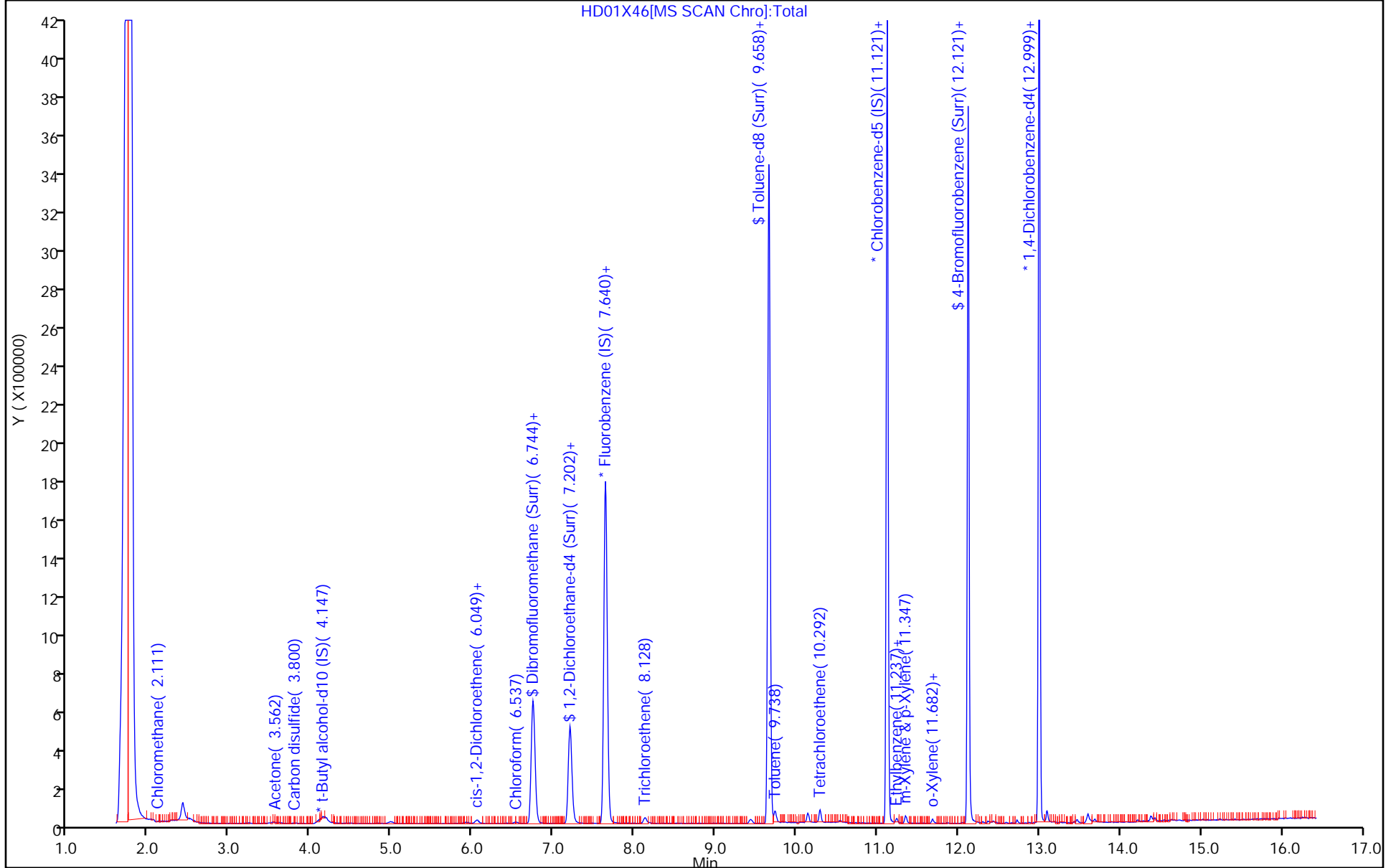
ALS Bottle#: 16

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X46.D  
 Lims ID: 410-106467-A-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 01:19:30 ALS Bottle#: 16 Worklist Smp#: 17  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-017  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2

Date: 02-Dec-2022 13:20:29

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.0	100.14
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.06
\$ 84 Toluene-d8 (Surr)	10.0	9.87	98.66
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.84	98.40



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X46.D

Injection Date: 02-Dec-2022 01:19:30

Instrument ID: 19094

Lims ID: 410-106467-A-11

Lab Sample ID: 410-106467-11

Client ID: HD-COD-SW-28-0/1-0

Operator ID: sej02002

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

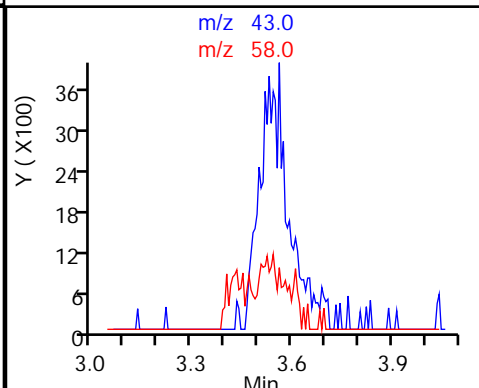
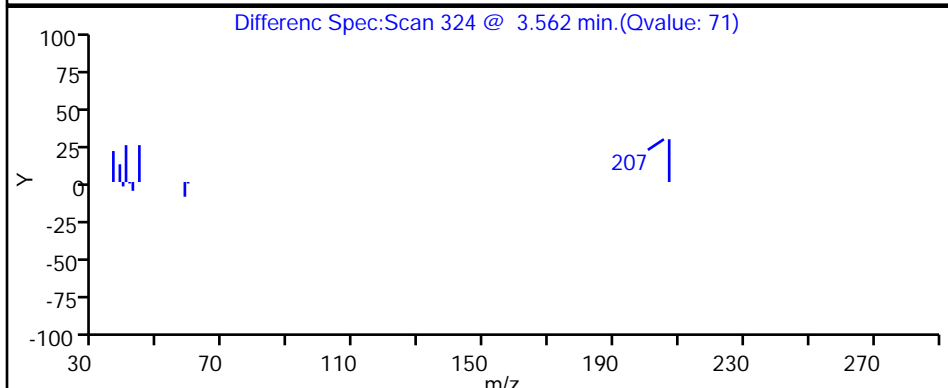
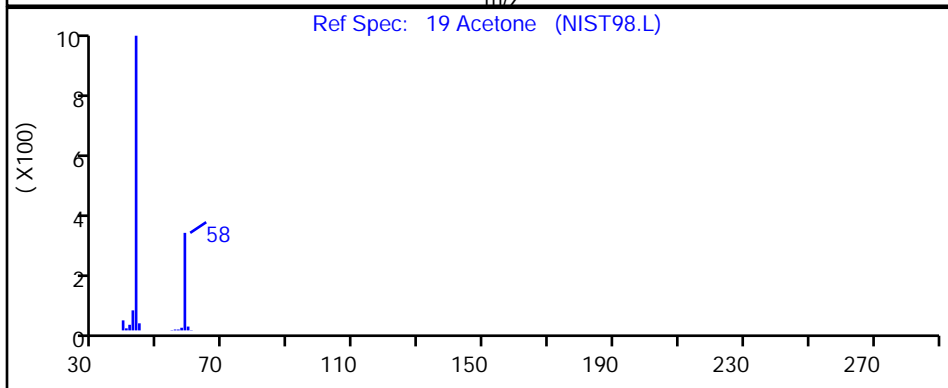
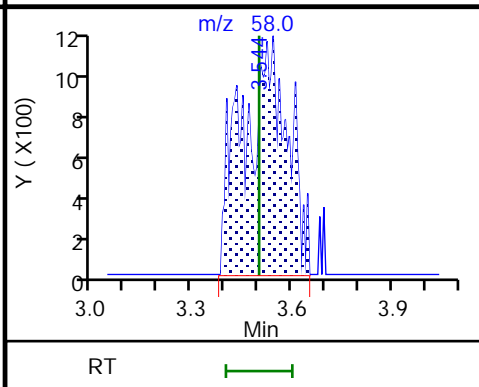
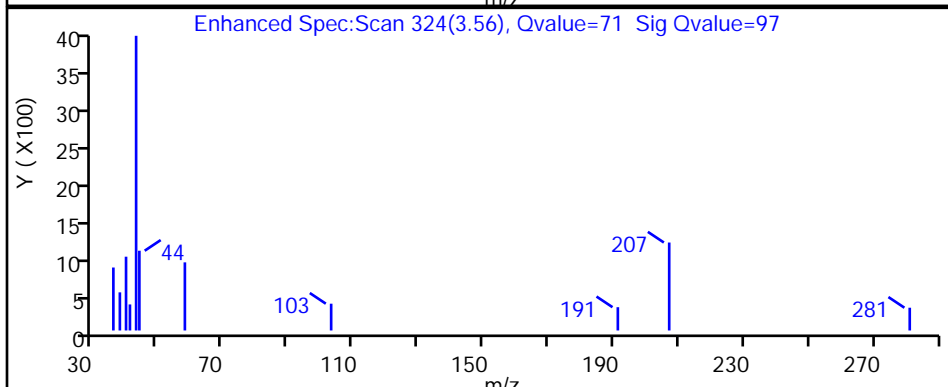
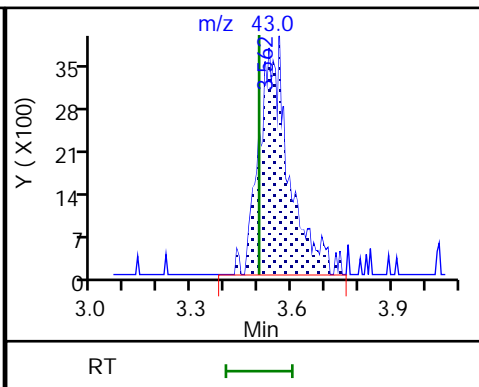
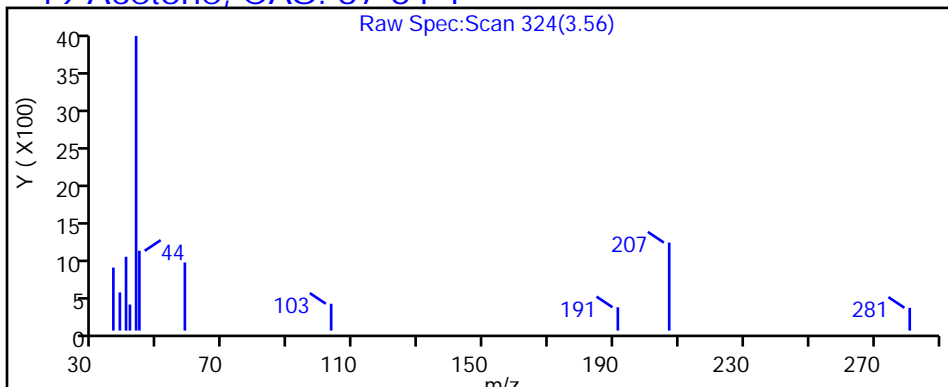
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X46.D

Injection Date: 02-Dec-2022 01:19:30 Instrument ID: 19094

Lims ID: 410-106467-A-11 Lab Sample ID: 410-106467-11

Client ID: HD-COD-SW-28-0/1-0

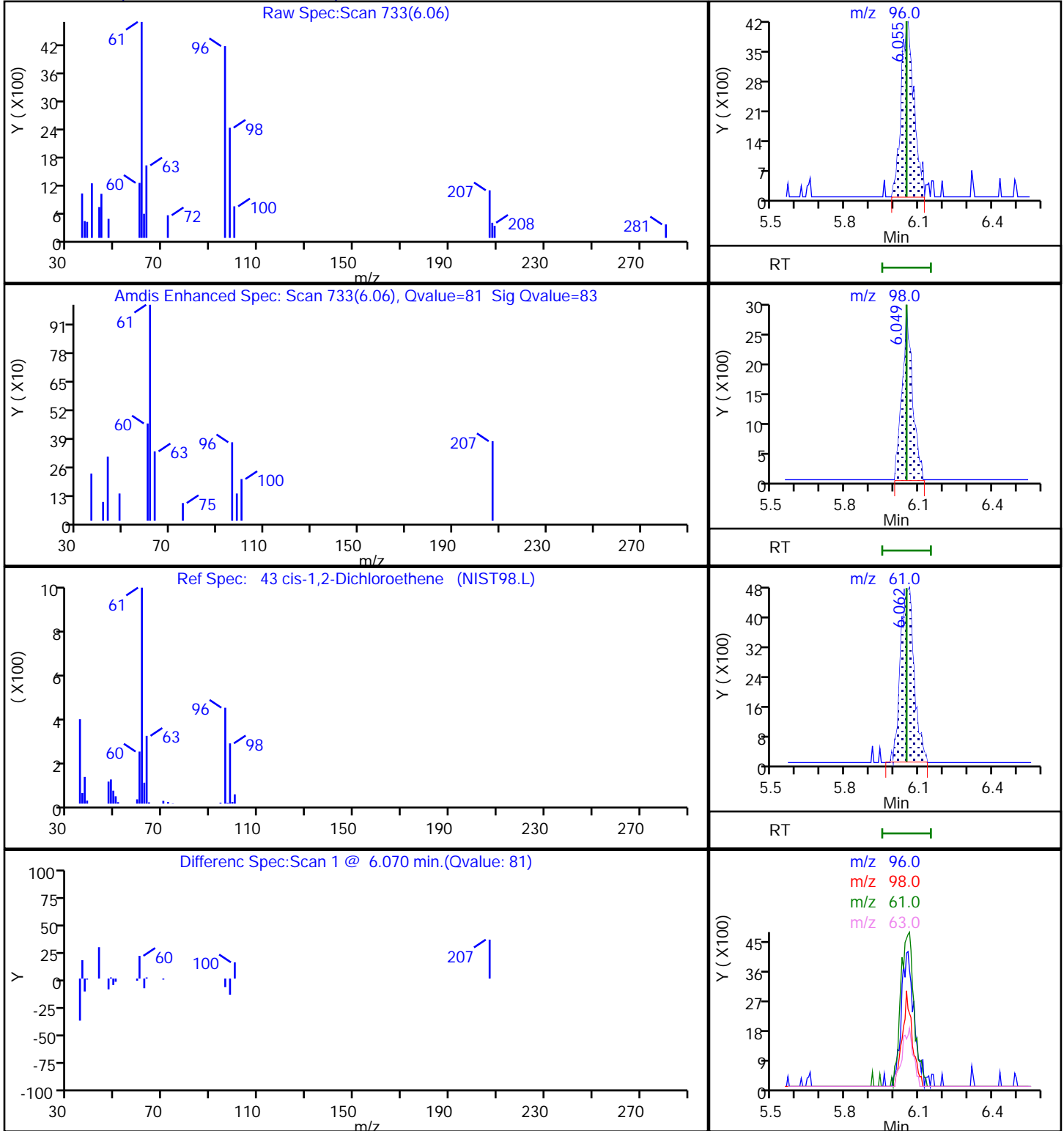
Operator ID: sej02002 ALS Bottle#: 16 Worklist Smp#: 17

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X46.D

Injection Date: 02-Dec-2022 01:19:30

Instrument ID: 19094

Lims ID: 410-106467-A-11

Lab Sample ID: 410-106467-11

Client ID: HD-COD-SW-28-0/1-0

Operator ID: sej02002

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

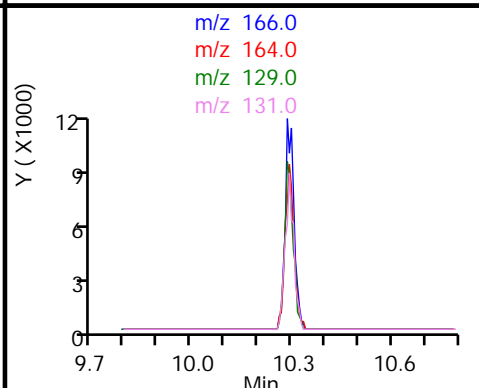
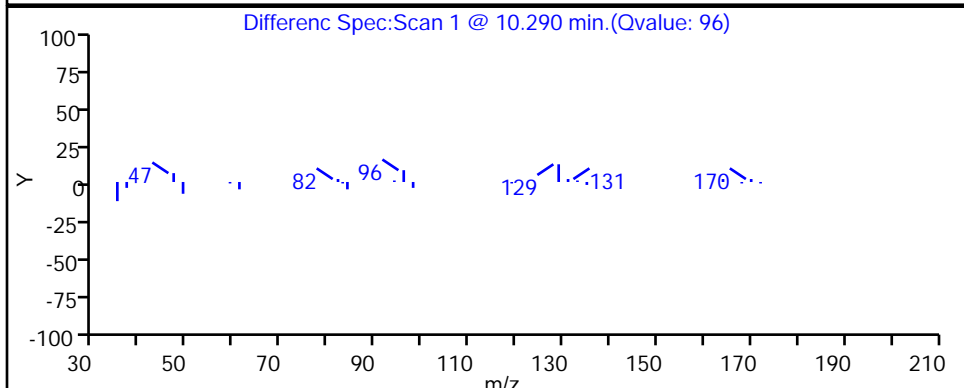
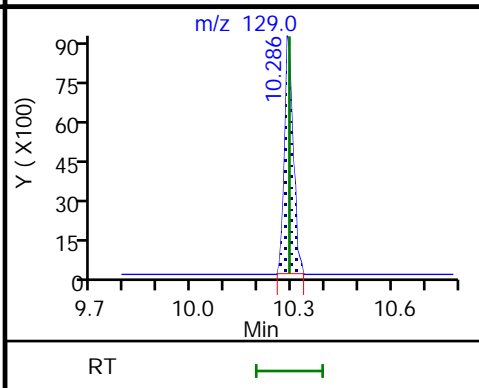
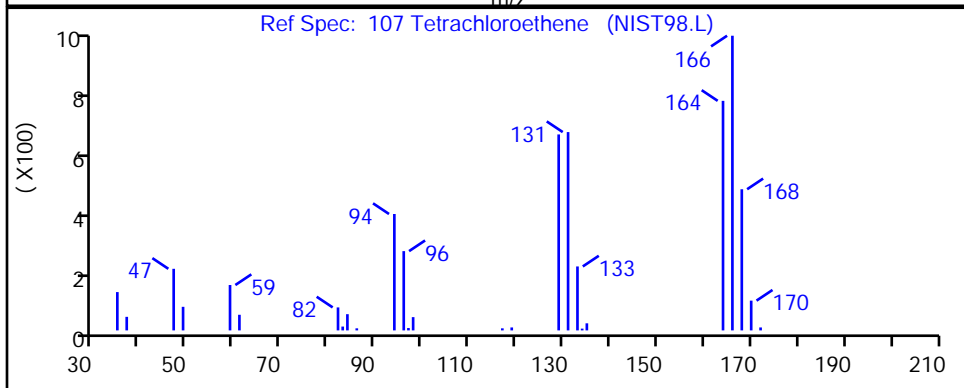
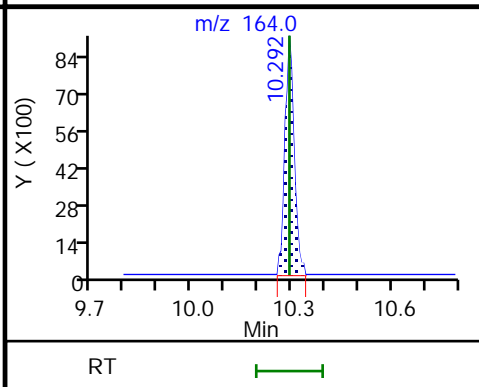
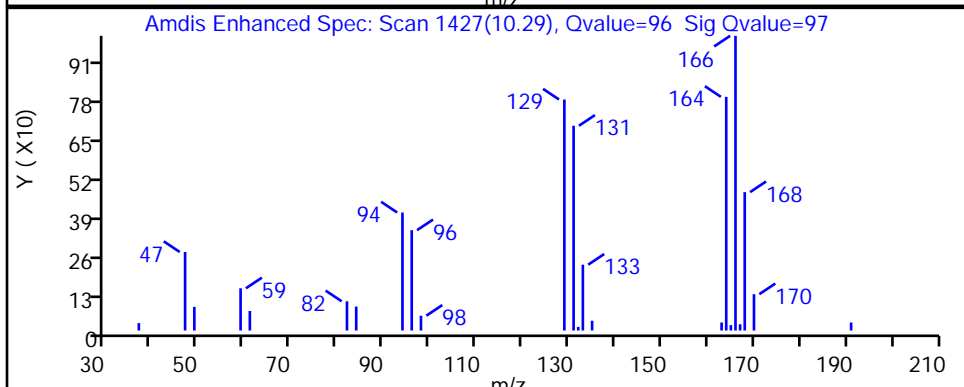
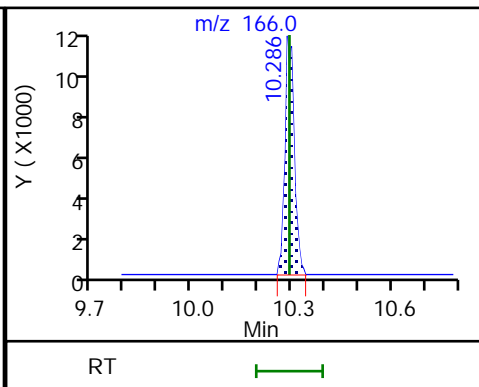
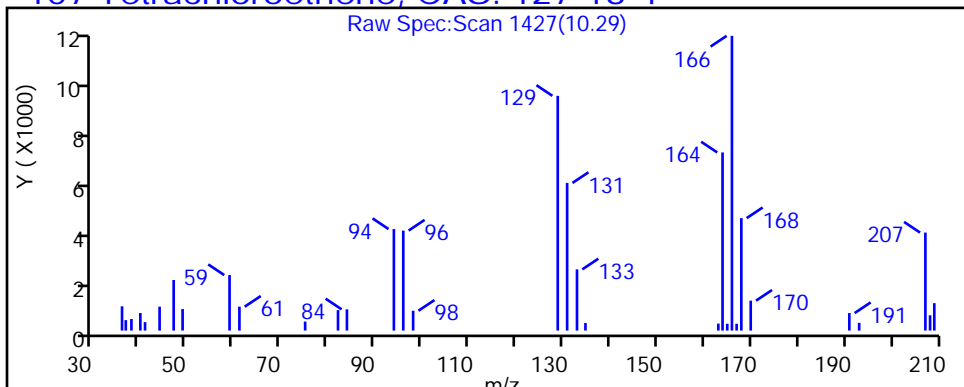
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X46.D

Injection Date: 02-Dec-2022 01:19:30

Instrument ID: 19094

Lims ID: 410-106467-A-11

Lab Sample ID: 410-106467-11

Client ID: HD-COD-SW-28-0/1-0

Operator ID: sej02002

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

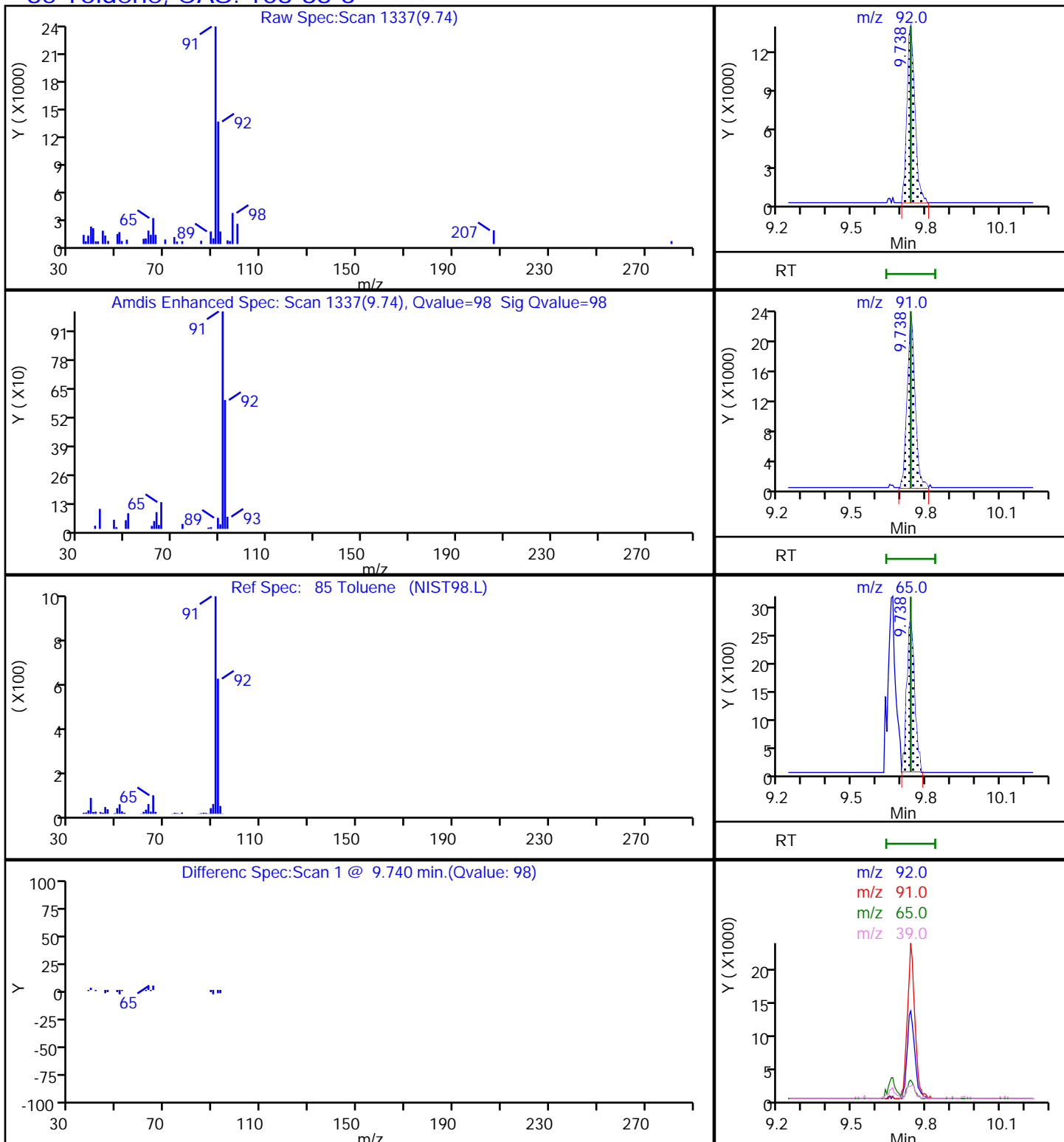
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X46.D

Injection Date: 02-Dec-2022 01:19:30

Instrument ID: 19094

Lims ID: 410-106467-A-11

Lab Sample ID: 410-106467-11

Client ID: HD-COD-SW-28-0/1-0

Operator ID: sej02002

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

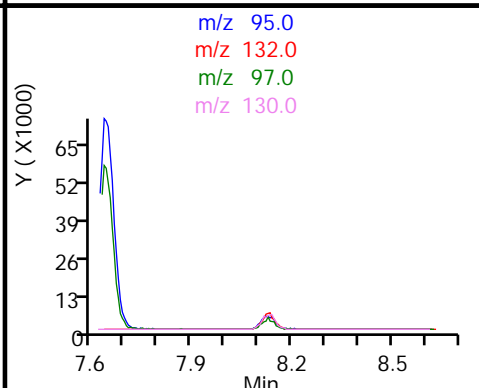
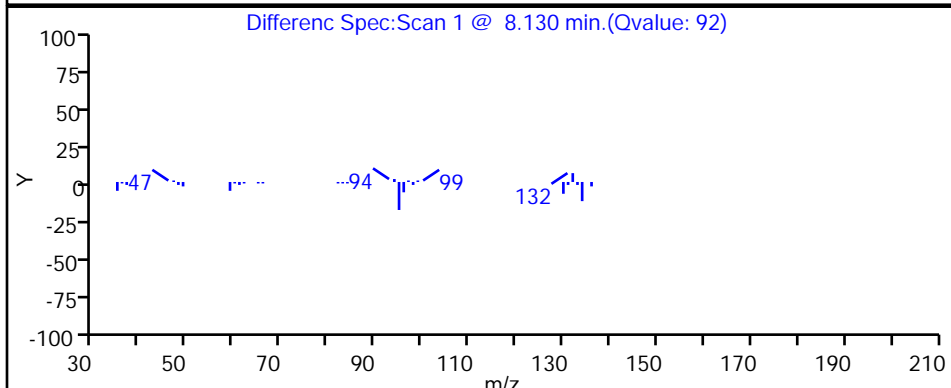
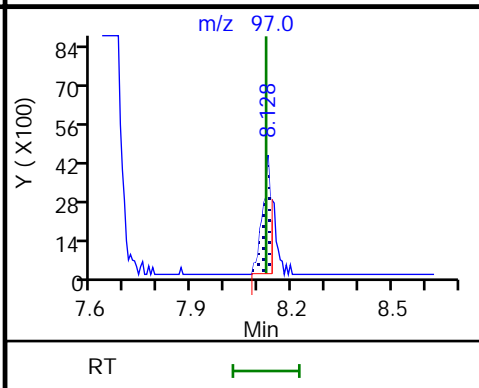
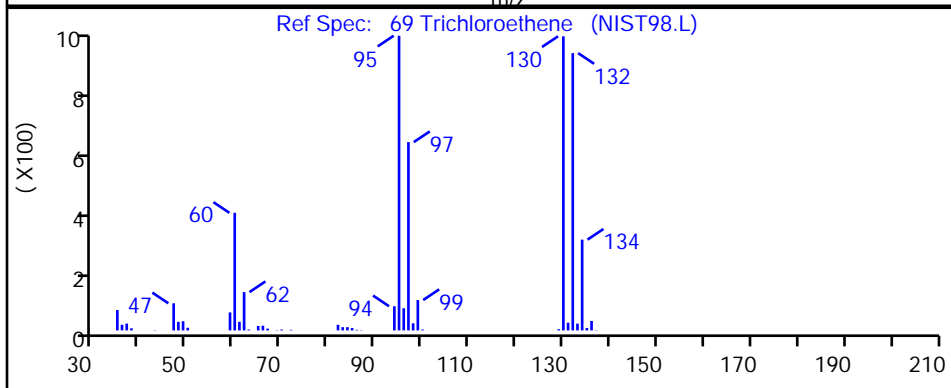
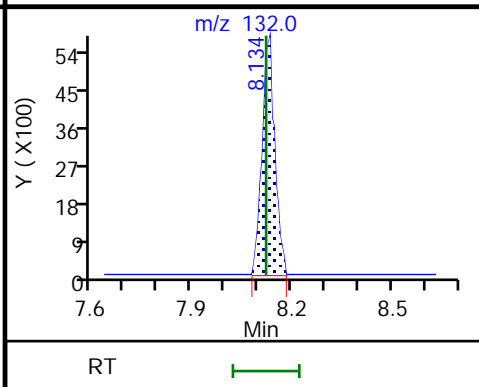
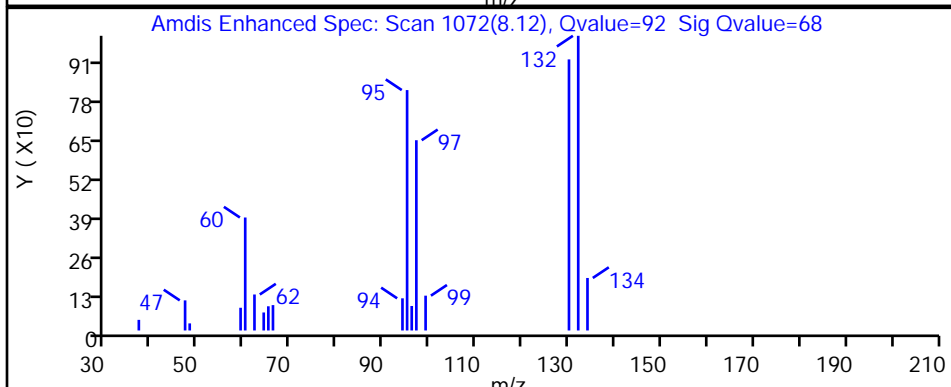
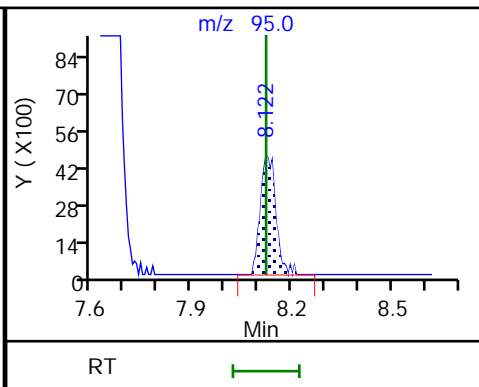
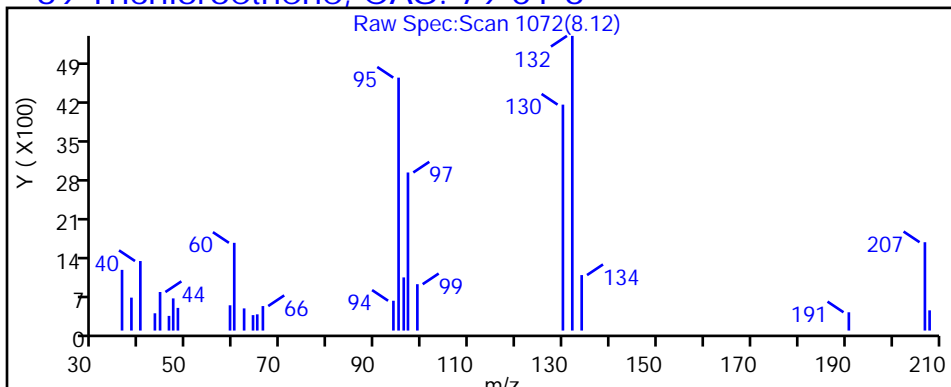
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

### 69 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Environment Testing, LLC

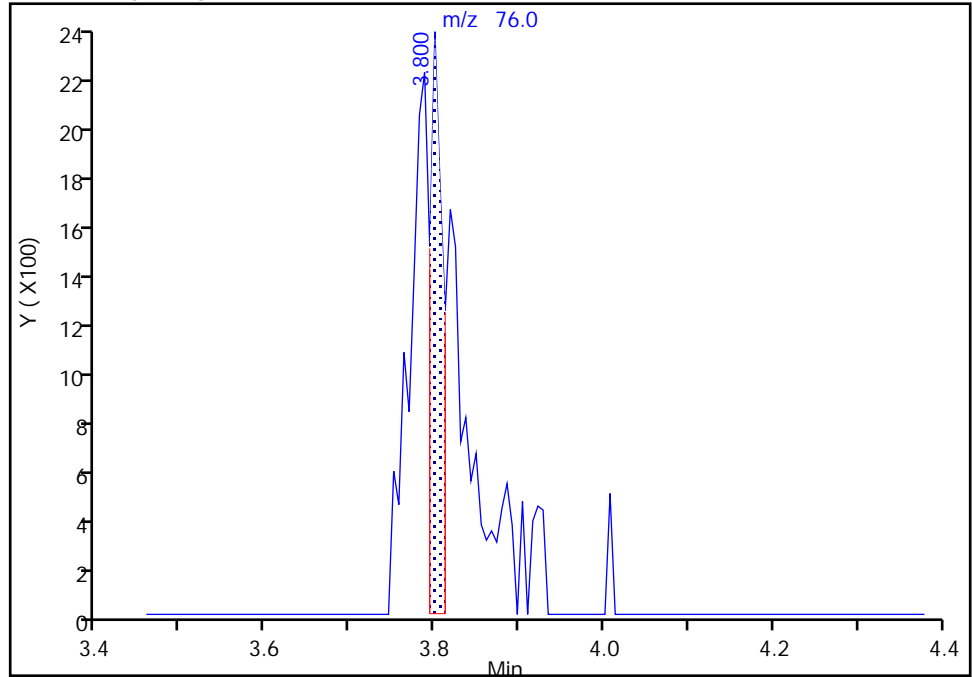
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Injection Date: 02-Dec-2022 01:19:30 Instrument ID: 19094  
Lims ID: 410-106467-A-11 Lab Sample ID: 410-106467-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: sej02002 ALS Bottle#: 16 Worklist Smp#: 17  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

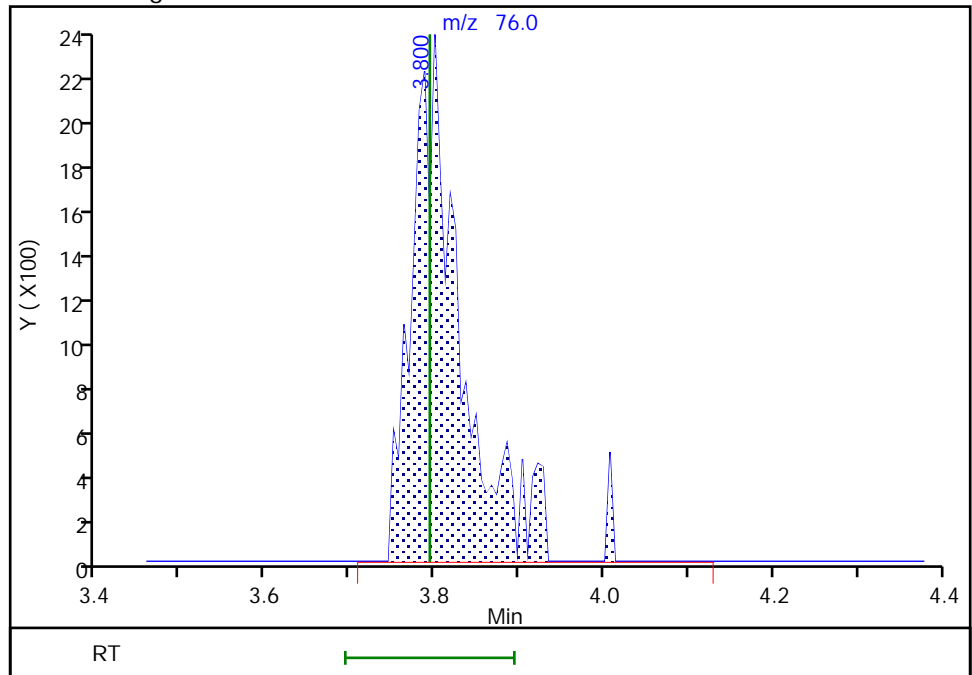
RT: 3.80  
Area: 2529  
Amount: 0.014203  
Amount Units: ug/l

Processing Integration Results



RT: 3.80  
Area: 9635  
Amount: 0.054110  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 02-Dec-2022 13:19:58  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

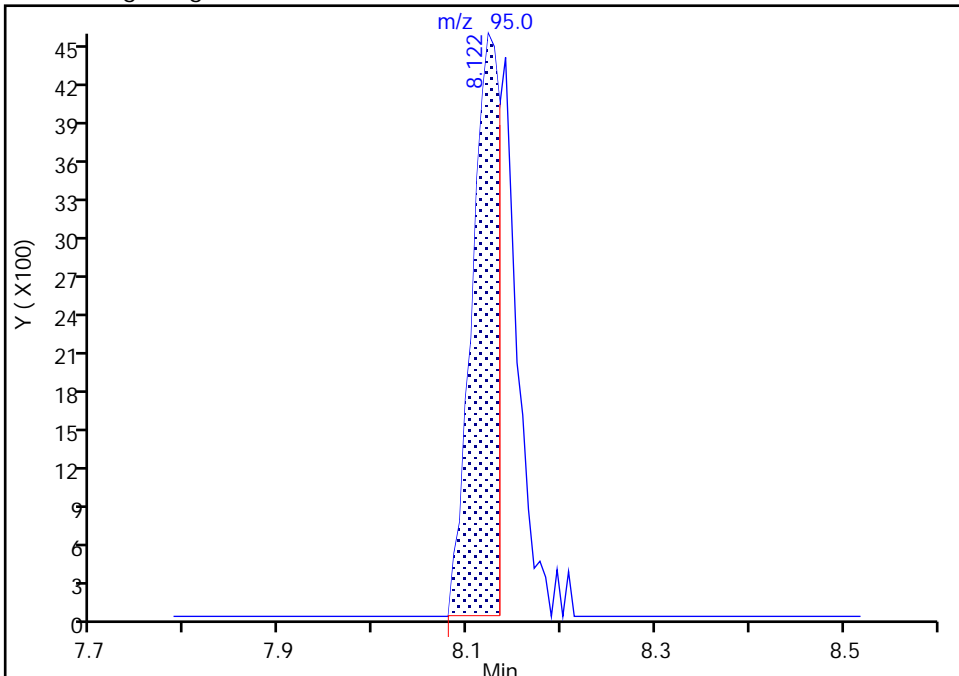
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Injection Date: 02-Dec-2022 01:19:30 Instrument ID: 19094  
Lims ID: 410-106467-A-11 Lab Sample ID: 410-106467-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: sej02002 ALS Bottle#: 16 Worklist Smp#: 17  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

69 Trichloroethene, CAS: 79-01-6

Signal: 1

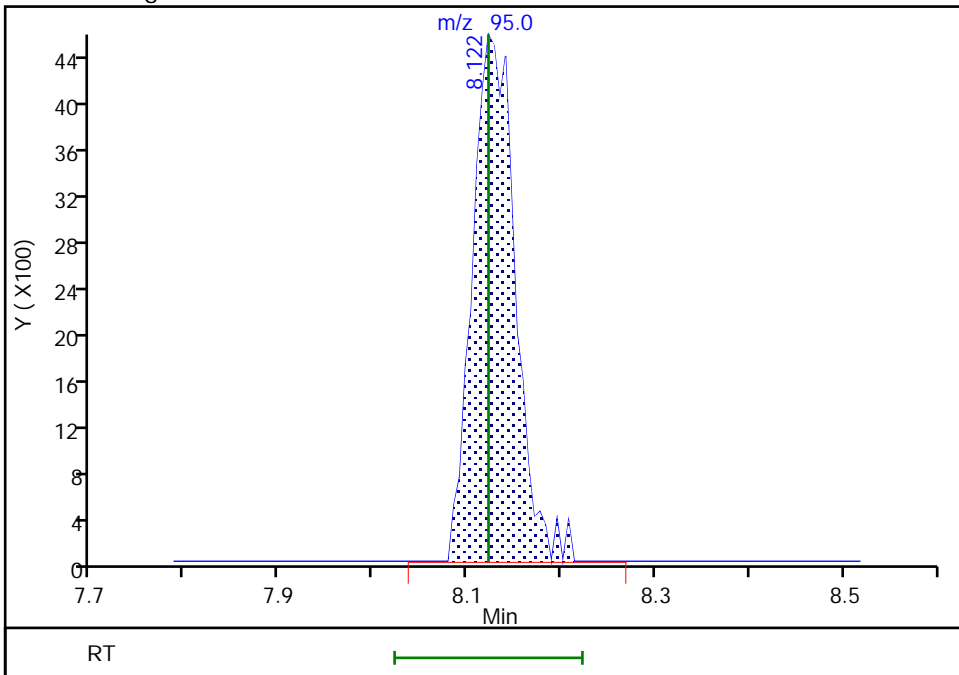
RT: 8.12  
Area: 9378  
Amount: 0.111386  
Amount Units: ug/l

Processing Integration Results



RT: 8.12  
Area: 14423  
Amount: 0.171307  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 02-Dec-2022 13:20:09  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration  
Page 407 of 959

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0

Lab Sample ID: 410-106467-12

Matrix: Water

Lab File ID: HD01X47.D

Analysis Method: 8260D

Date Collected: 11/18/2022 09:05

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 01:39

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND	^c cn	5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0
67-64-1	Acetone	2.1	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	^c cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.17	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.48	J	0.50	0.20
108-88-3	Toluene	0.095	J cn	0.50	0.080



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0

Lab Sample ID: 410-106467-12

Matrix: Water

Lab File ID: HD01X47.D

Analysis Method: 8260D

Date Collected: 11/18/2022 09:05

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 01:39

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.17	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X47.D  
 Lims ID: 410-106467-A-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 01:39:30 ALS Bottle#: 17 Worklist Smp#: 18  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-018  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 05-Dec-2022 10:15:29 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1653

First Level Reviewer: kaewrungrueangp Date: 05-Dec-2022 10:15:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.117	2.117	0.000	67	8006	0.0818	
7 Vinyl chloride	62		2.239				ND	
9 Bromomethane	94		2.556				ND	
10 Chloroethane	64		2.642				ND	
18 1,1-Dichloroethene	96		3.495				ND	7
19 Acetone	43	3.568	3.501	0.067	83	24021	2.14	
24 Carbon disulfide	76		3.794				ND	7
* 29 t-Butyl alcohol-d10 (IS)	65	4.159	4.117	0.042	25	175675	50.0	
28 Methylene Chloride	84		4.147				ND	
33 Methyl tert-butyl ether	73		4.550				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63		5.220				ND	7
42 2-Butanone (MEK)	43		6.001				ND	7
43 cis-1,2-Dichloroethene	96	6.055	6.049	0.006	80	13971	0.1727	
49 Chlorobromomethane	128		6.385				ND	
52 Chloroform	83	6.537	6.531	0.006	89	7909	0.0609	
\$ 53 Dibromofluoromethane (Surr)	113	6.750	6.751	0.000	93	658850	10.2	
54 1,1,1-Trichloroethane	97	6.763	6.763	0.000	35	3930	0.0325	
57 Carbon tetrachloride	117		6.976				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.202	0.006	59	123185	10.5	
60 Benzene	78	7.256	7.238	0.018	79	12470	0.0392	
62 1,2-Dichloroethane	62		7.305				ND	7
* 65 Fluorobenzene (IS)	96	7.646	7.641	0.005	99	2548906	10.0	
69 Trichloroethene	95	8.128	8.122	0.006	94	14022	0.1671	M
71 1,2-Dichloropropane	63		8.451				ND	
77 Dichlorobromomethane	83		8.799				ND	
81 cis-1,3-Dichloropropene	75		9.348				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.518				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.664	9.658	0.006	93	2834438	9.96	
85 Toluene	92	9.738	9.738	0.000	98	20074	0.0949	
86 trans-1,3-Dichloropropene	75		9.994				ND	
106 1,1,2-Trichloroethane	97		10.195				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.292	10.292	0.000	97	46652	0.4779	
109 2-Hexanone	43		10.408				ND	
111 Chlorodibromomethane	129		10.579				ND	
112 Ethylene Dibromide	107		10.689				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.121	11.122	-0.001	86	2326050	10.0	
115 Chlorobenzene	112		11.146				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91	11.243	11.231	0.012	97	10807	0.0262	
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.347				ND	7
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.847				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	92	1138686	9.86	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1344235	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_LLcentISS\_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X47.D

Injection Date: 02-Dec-2022 01:39:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: 410-106467-A-12

Lab Sample ID: 410-106467-12

Worklist Smp#: 18

Client ID: HD-COD-SW-29-0/1-0

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

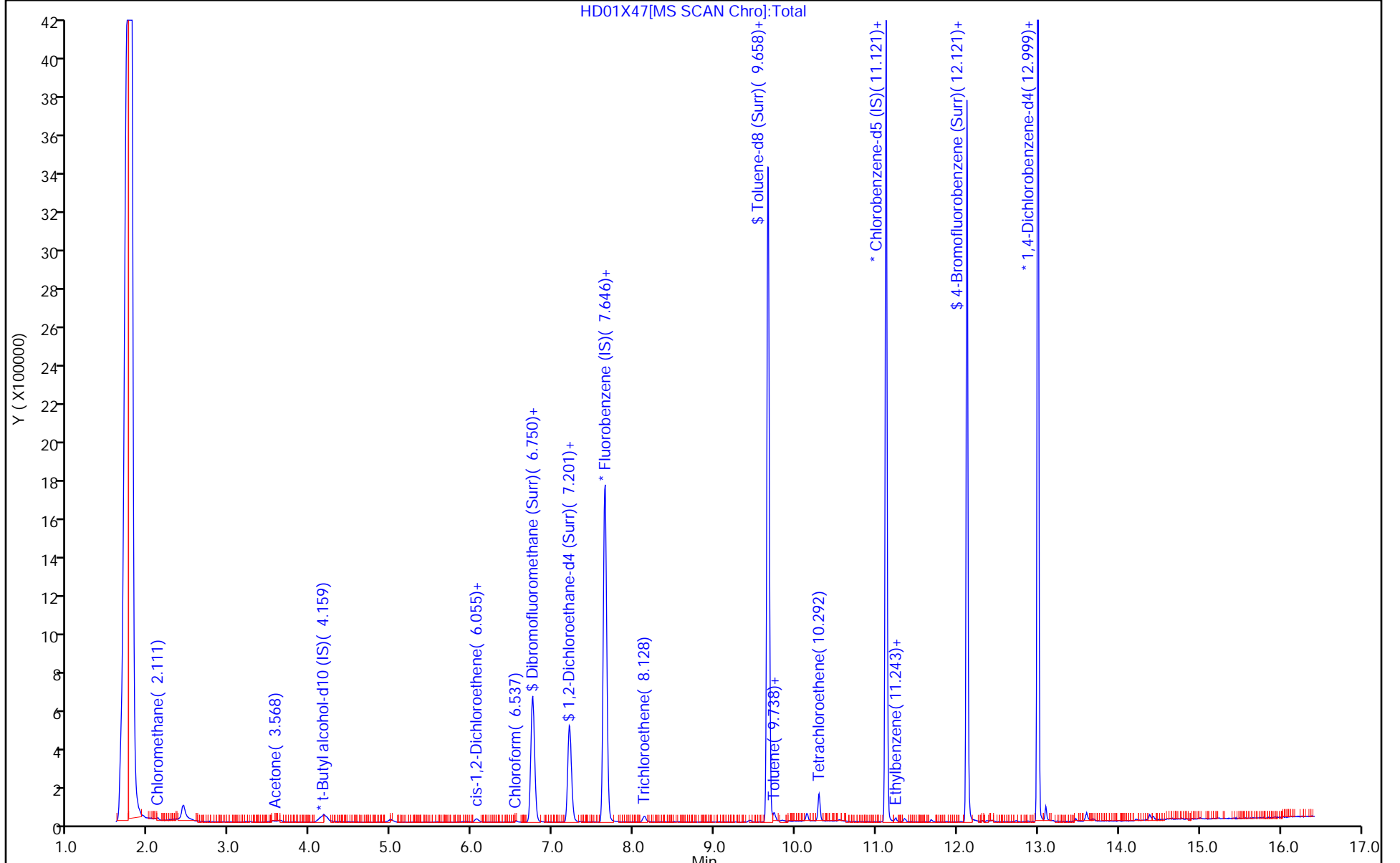
ALS Bottle#: 17

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X47.D  
 Lims ID: 410-106467-A-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 01:39:30 ALS Bottle#: 17 Worklist Smp#: 18  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-018  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 05-Dec-2022 10:15:29 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1653

First Level Reviewer: kaewrungrueangp Date: 05-Dec-2022 10:15:29

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.2	102.12
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	104.64
\$ 84 Toluene-d8 (Surr)	10.0	9.96	99.61
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.86	98.57

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X47.D

Injection Date: 02-Dec-2022 01:39:30

Instrument ID: 19094

Lims ID: 410-106467-A-12

Lab Sample ID: 410-106467-12

Client ID: HD-COD-SW-29-0/1-0

Operator ID: sej02002

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

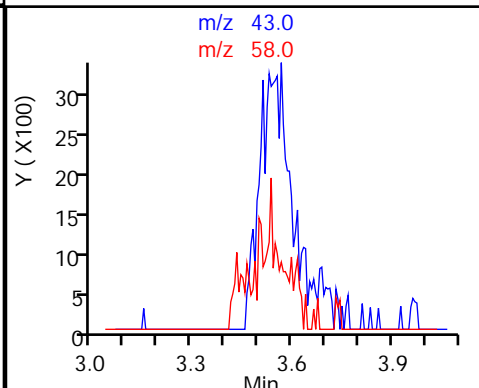
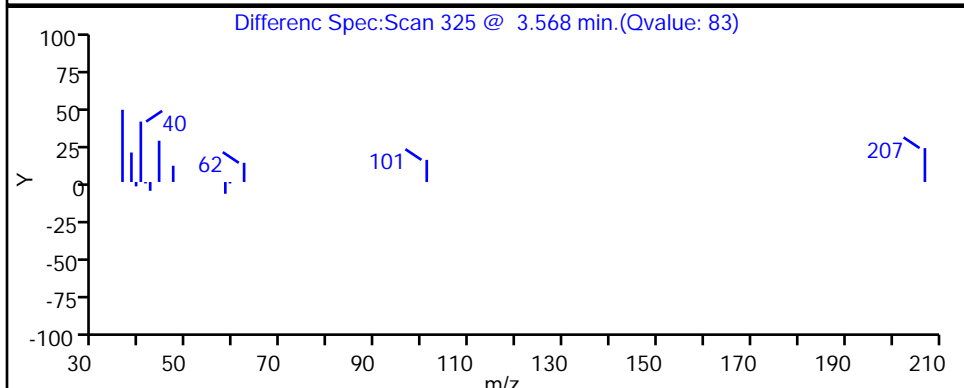
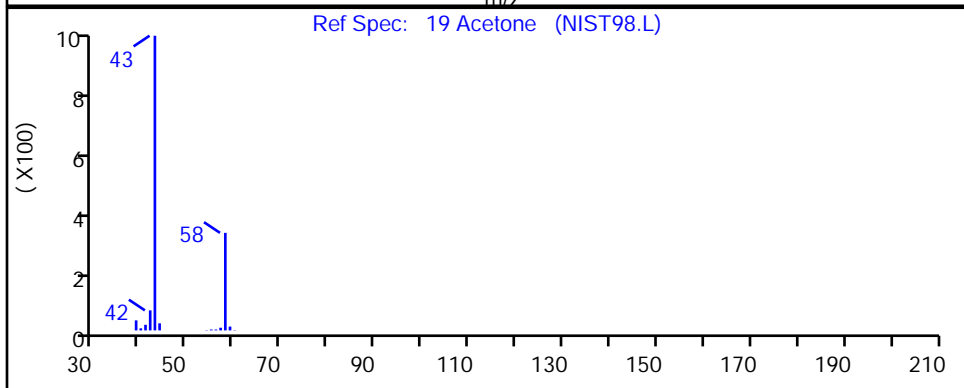
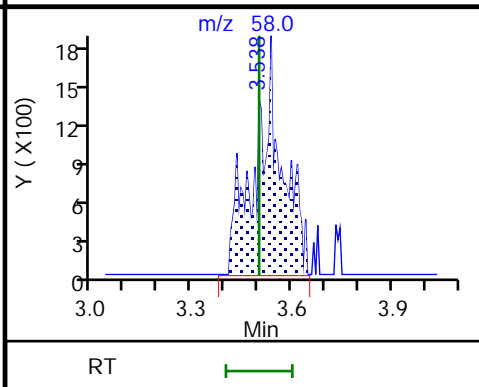
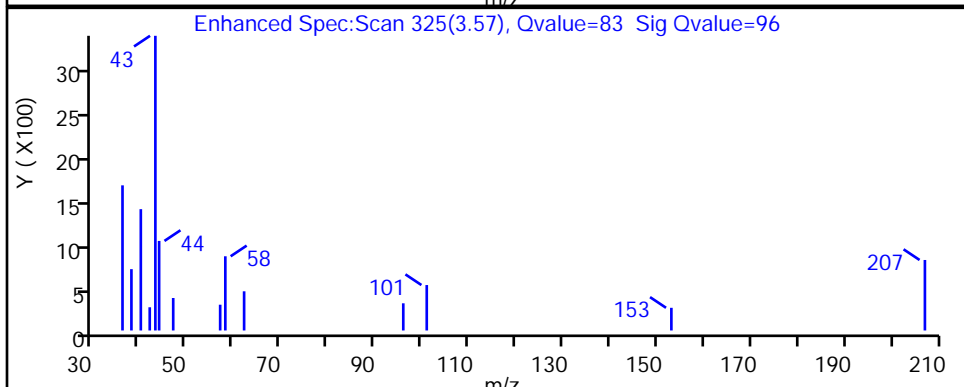
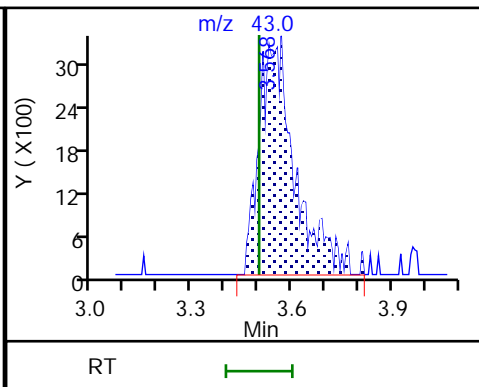
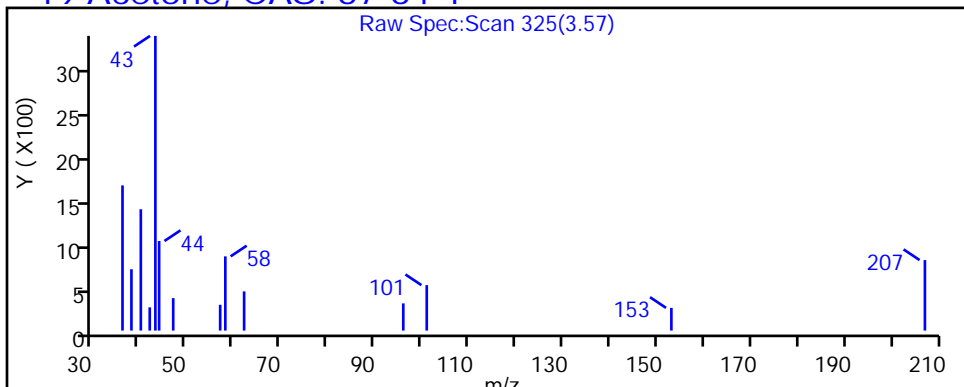
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

### 19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X47.D

Injection Date: 02-Dec-2022 01:39:30

Instrument ID: 19094

Lims ID: 410-106467-A-12

Lab Sample ID: 410-106467-12

Client ID: HD-COD-SW-29-0/1-0

Operator ID: sej02002

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

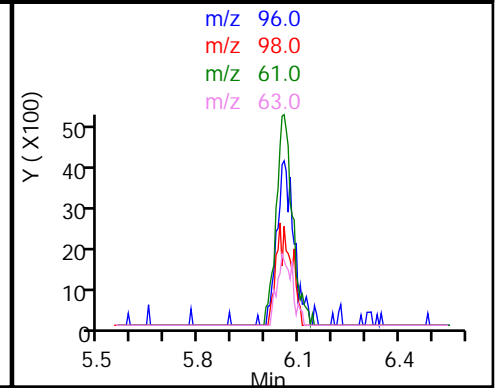
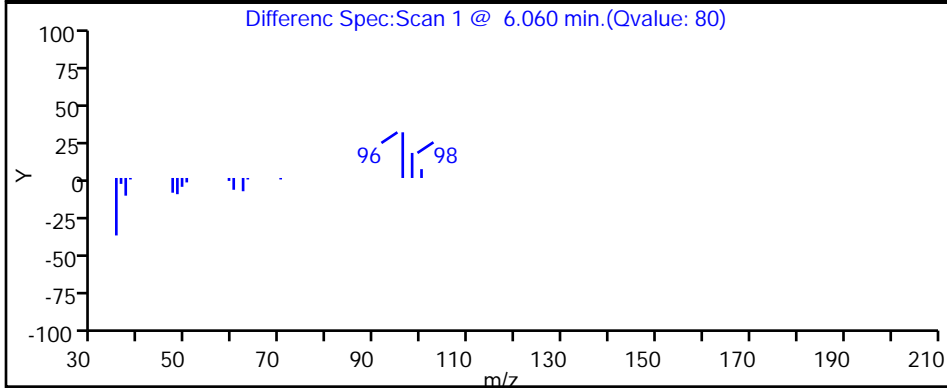
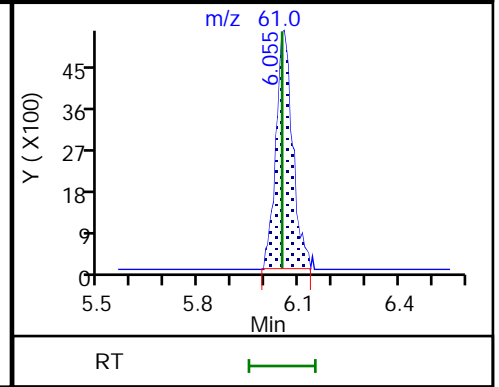
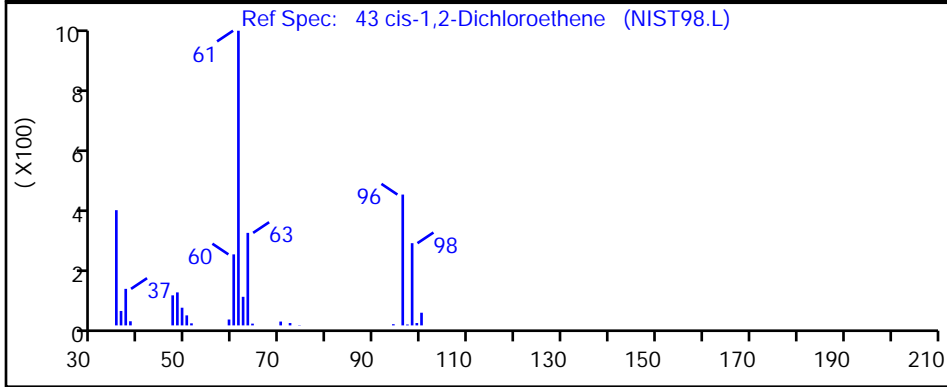
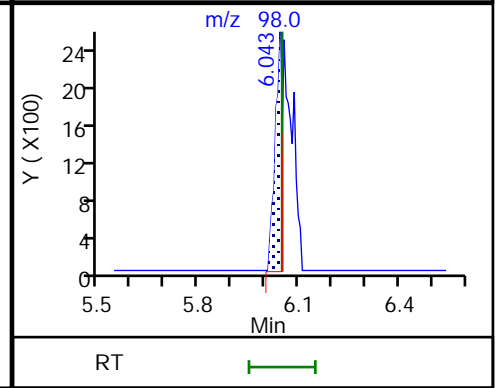
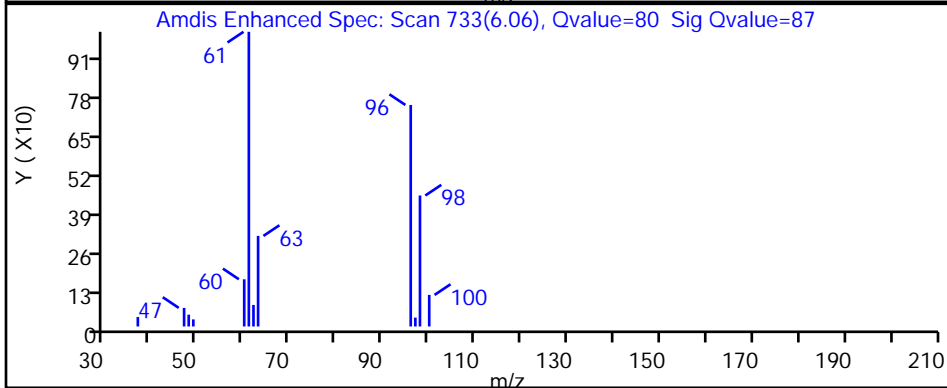
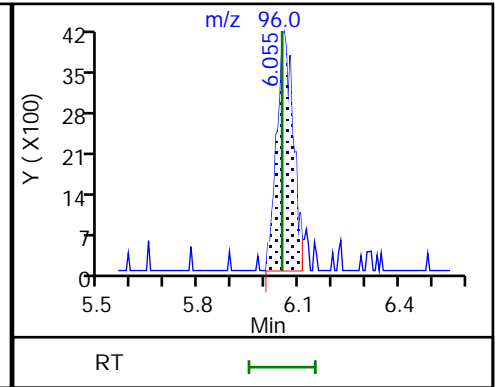
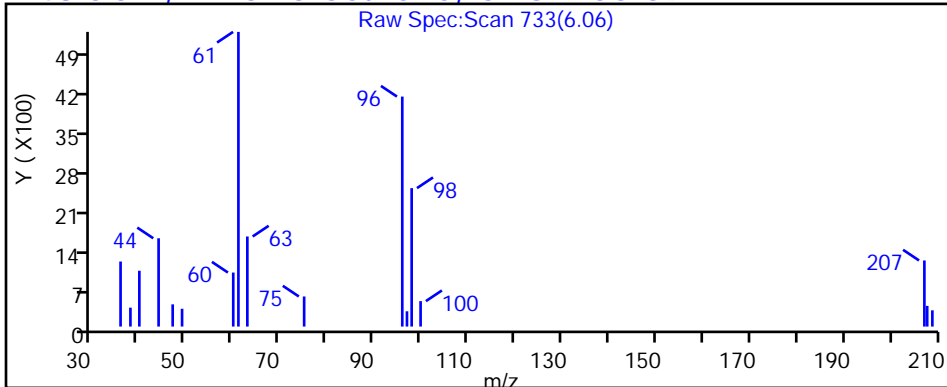
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X47.D

Injection Date: 02-Dec-2022 01:39:30

Instrument ID: 19094

Lims ID: 410-106467-A-12

Lab Sample ID: 410-106467-12

Client ID: HD-COD-SW-29-0/1-0

Operator ID: sej02002

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

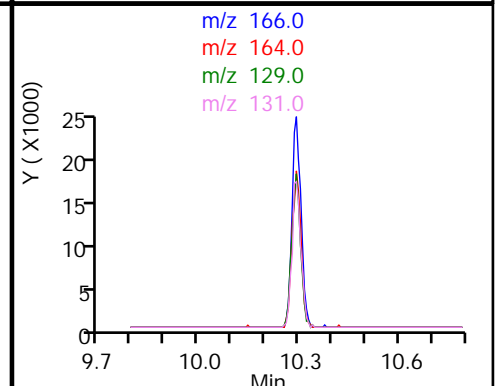
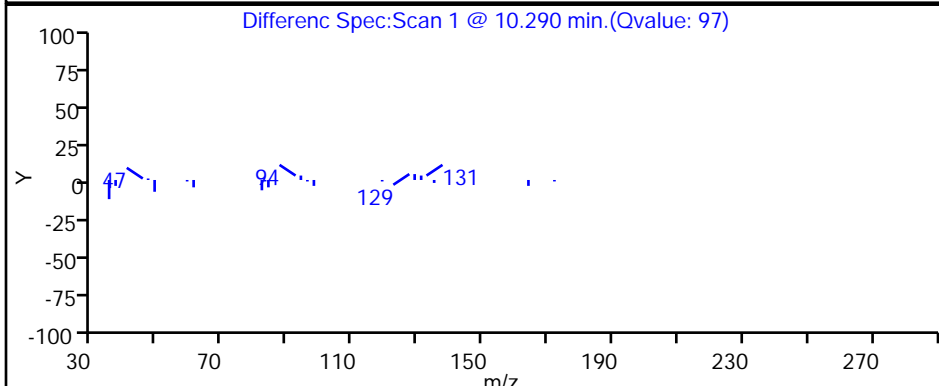
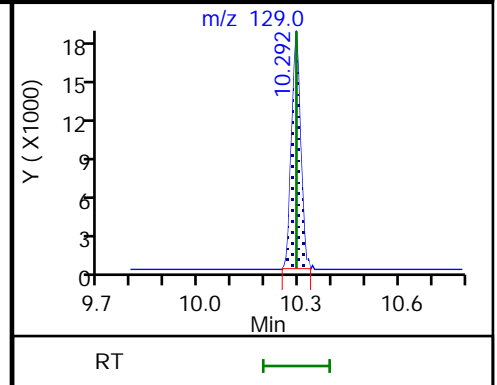
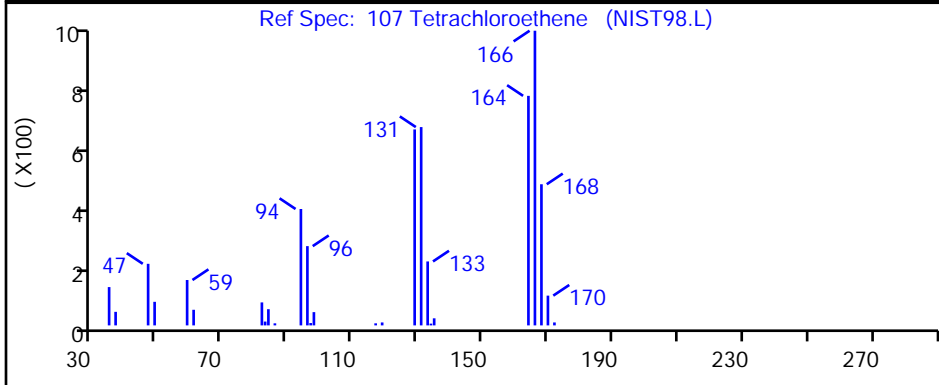
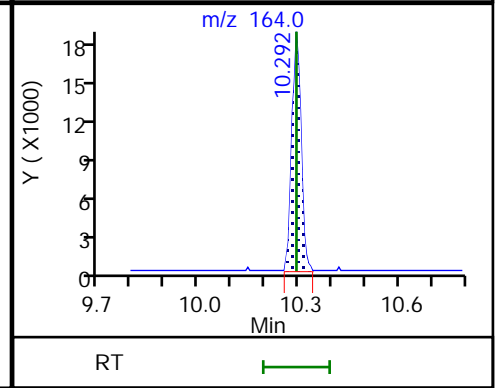
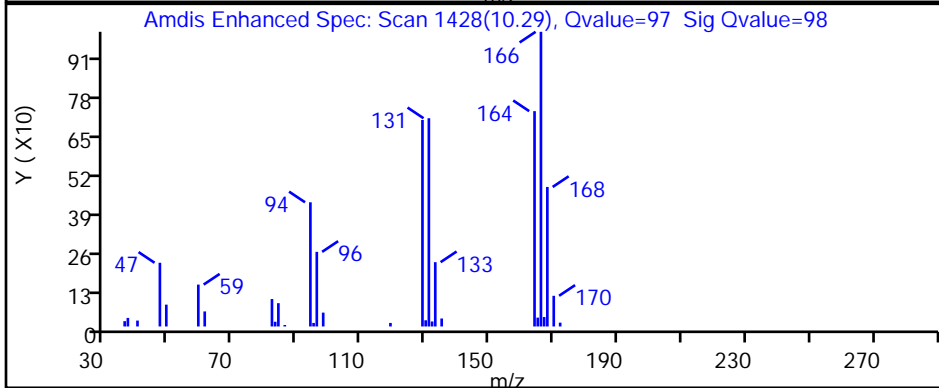
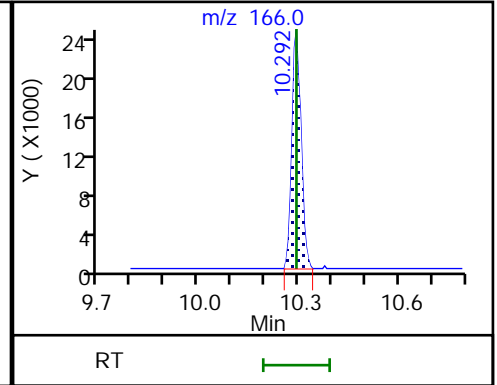
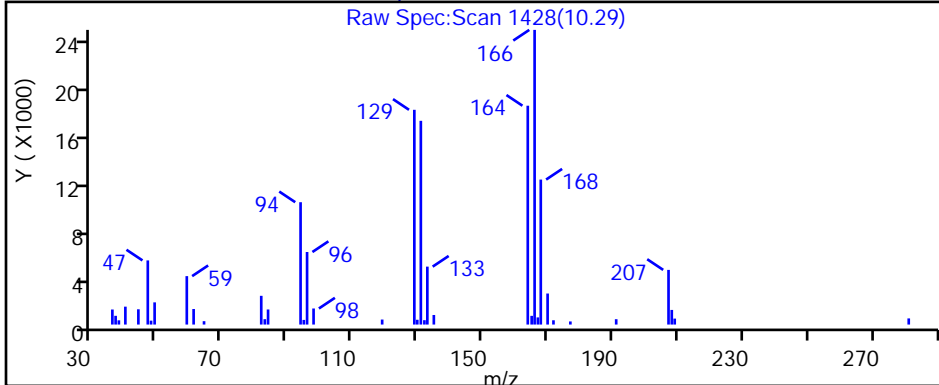
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

107 Tetrachloroethene, CAS: 127-18-4





Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X47.D

Injection Date: 02-Dec-2022 01:39:30

Instrument ID: 19094

Lims ID: 410-106467-A-12

Lab Sample ID: 410-106467-12

Client ID: HD-COD-SW-29-0/1-0

Operator ID: sej02002

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

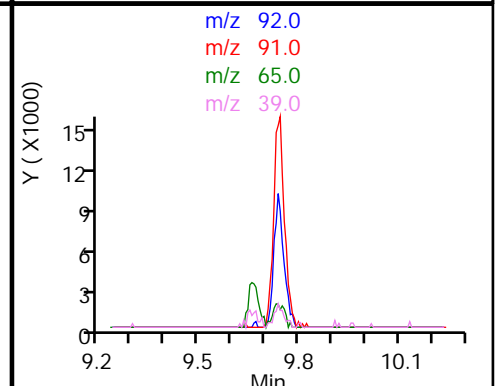
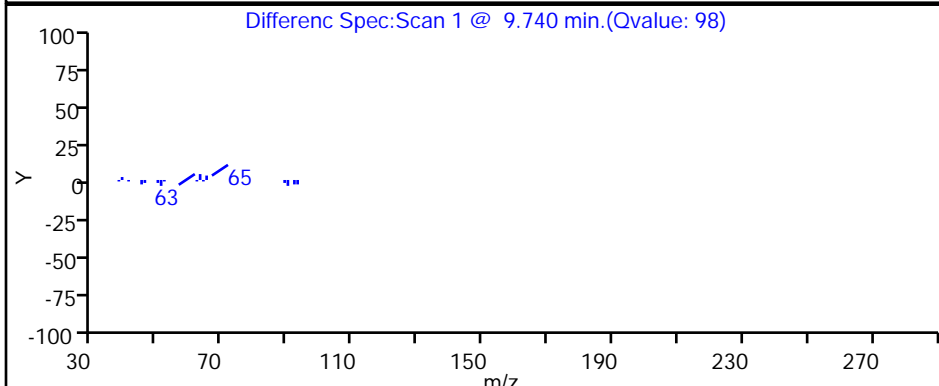
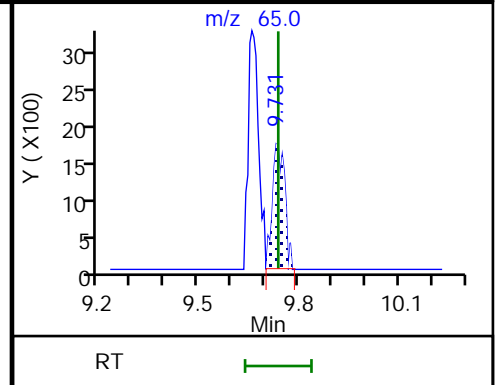
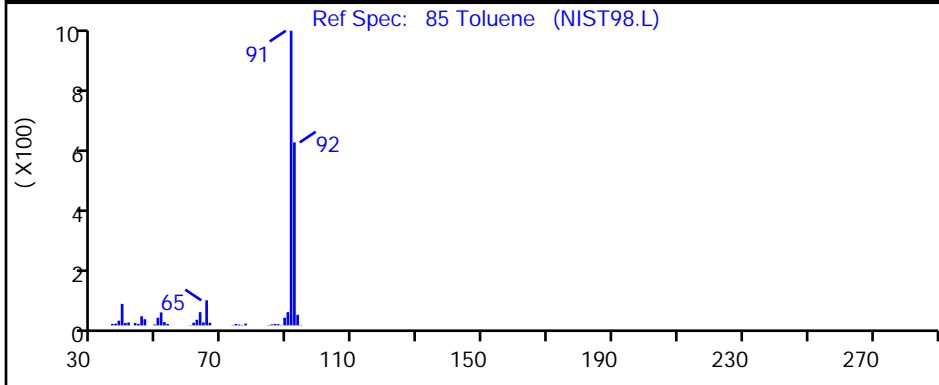
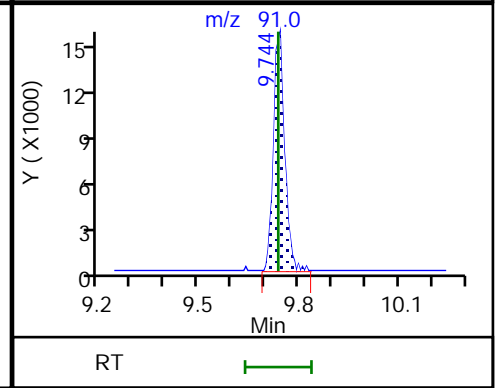
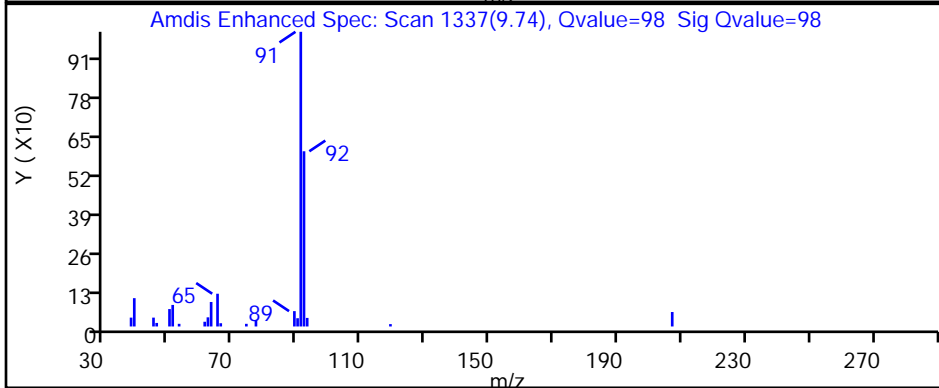
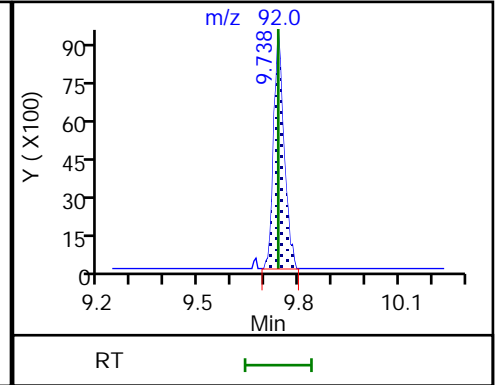
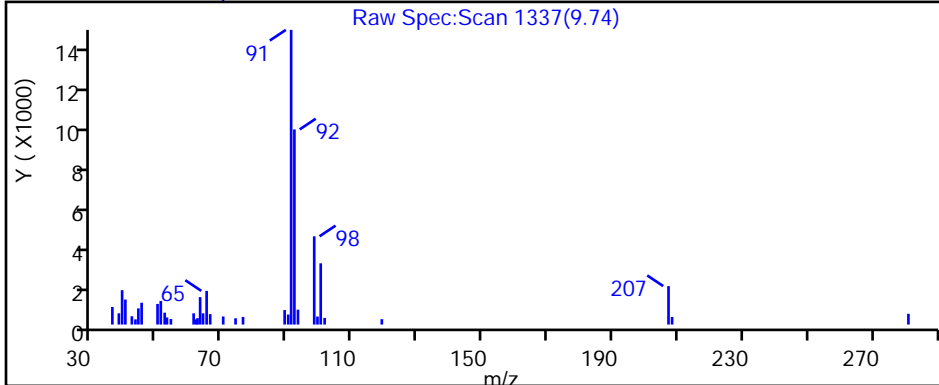
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X47.D

Injection Date: 02-Dec-2022 01:39:30

Instrument ID: 19094

Lims ID: 410-106467-A-12

Lab Sample ID: 410-106467-12

Client ID: HD-COD-SW-29-0/1-0

Operator ID: sej02002

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

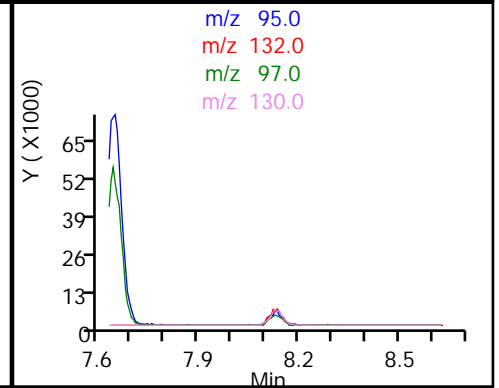
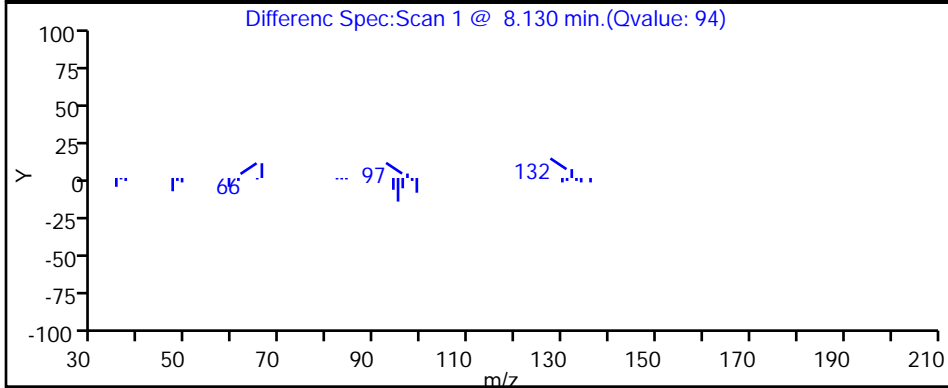
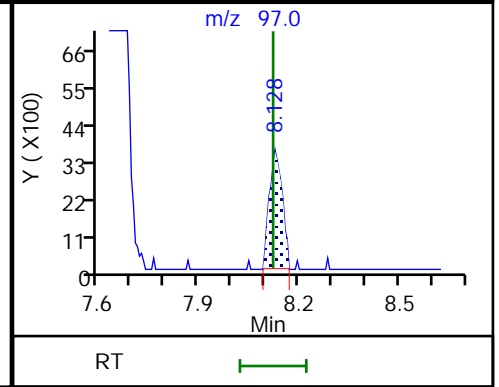
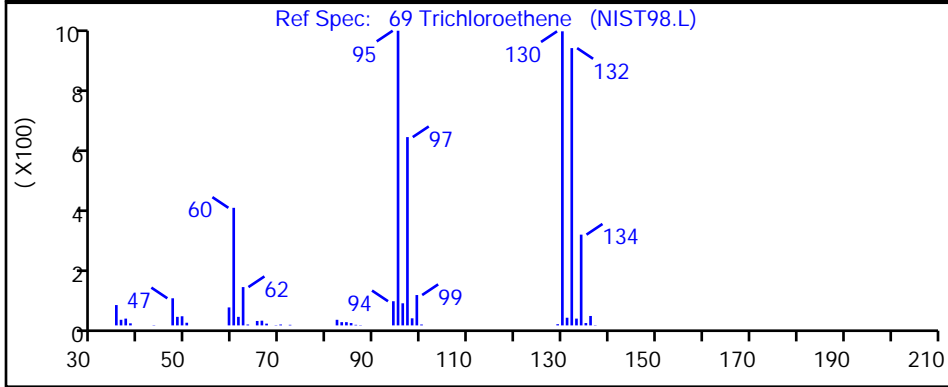
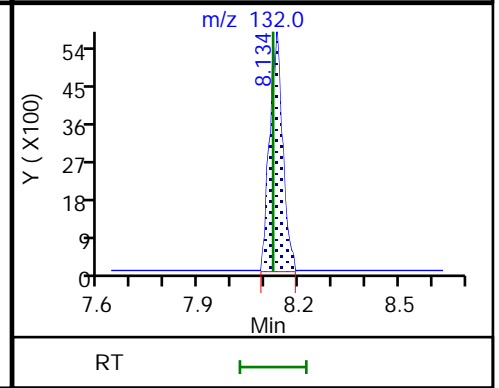
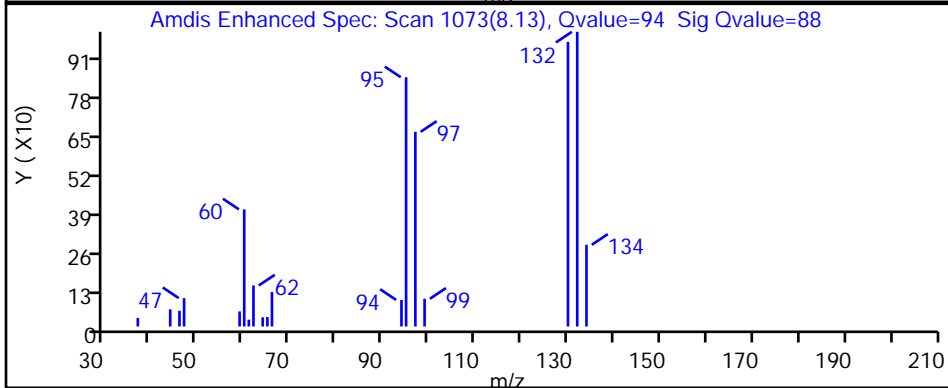
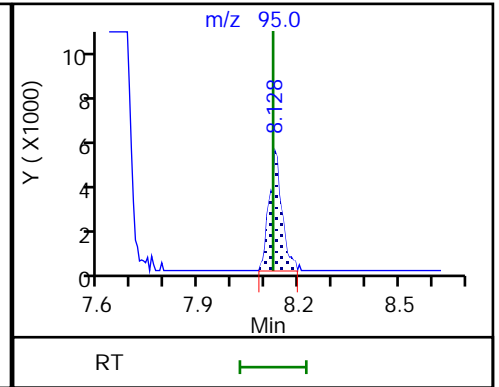
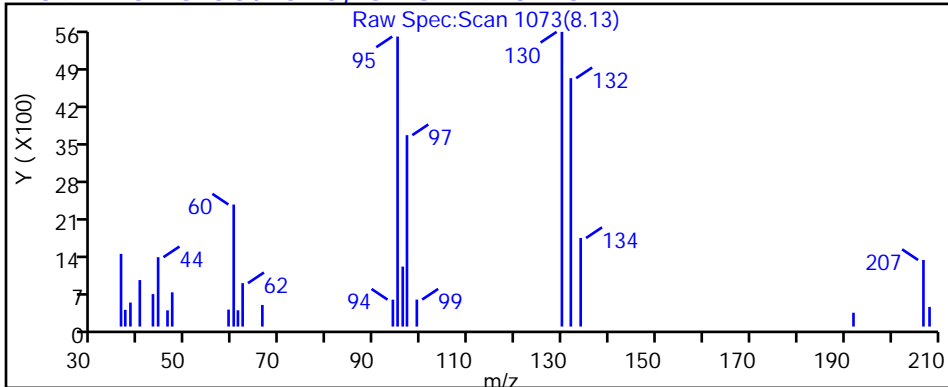
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

69 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Environment Testing, LLC

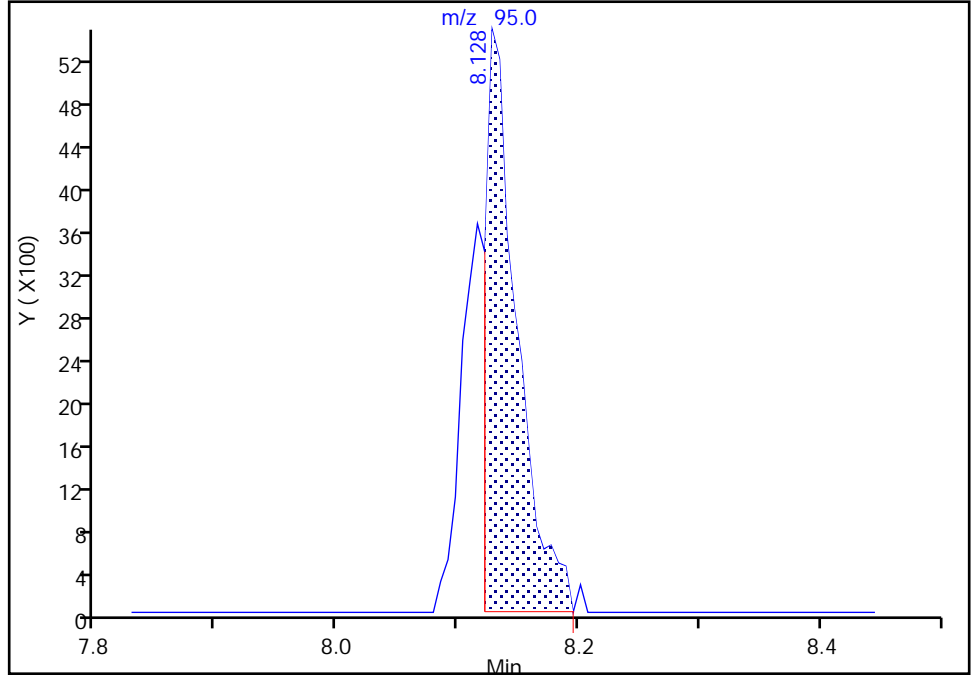
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Injection Date: 02-Dec-2022 01:39:30 Instrument ID: 19094  
Lims ID: 410-106467-A-12 Lab Sample ID: 410-106467-12  
Client ID: HD-COD-SW-29-0/1-0  
Operator ID: sej02002 ALS Bottle#: 17 Worklist Smp#: 18  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

69 Trichloroethene, CAS: 79-01-6

Signal: 1

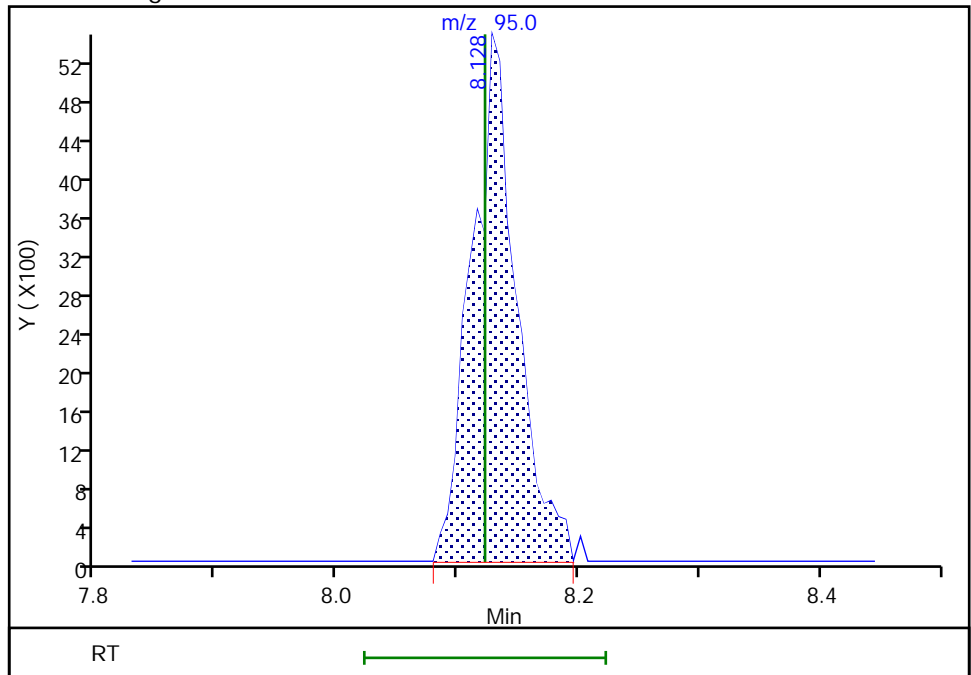
RT: 8.13  
Area: 9945  
Amount: 0.118530  
Amount Units: ug/l

Processing Integration Results



RT: 8.13  
Area: 14022  
Amount: 0.167122  
Amount Units: ug/l

Manual Integration Results



Reviewer: kaewrungrueangp, 05-Dec-2022 10:15:14  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-13

Matrix: Water

Lab File ID: HD01X48.D

Analysis Method: 8260D

Date Collected: 11/18/2022 10:15

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 02:00

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.7		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	1.1		0.50	0.10
75-35-4	1,1-Dichloroethene	0.51		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND	^c cn	5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0
67-64-1	Acetone	1.3	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	0.30	J	0.50	0.090
74-87-3	Chloromethane	ND	^c cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	3.3		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
108-88-3	Toluene	0.086	J cn	0.50	0.080
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-13

Matrix: Water

Lab File ID: HD01X48.D

Analysis Method: 8260D

Date Collected: 11/18/2022 10:15

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 02:00

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	4.1		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X48.D  
 Lims ID: 410-106467-A-13  
 Client ID: HD-QC1-0/1-1  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 02:00:30 ALS Bottle#: 18 Worklist Smp#: 19  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-019  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2

Date: 02-Dec-2022 13:22:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.123	2.117	0.006	1	3225	0.0331	
7 Vinyl chloride	62		2.239				ND	7
9 Bromomethane	94		2.556				ND	
10 Chloroethane	64		2.642				ND	7
18 1,1-Dichloroethene	96	3.495	3.495	0.000	95	33652	0.5098	
19 Acetone	43	3.519	3.501	0.018	20	12792	1.27	
24 Carbon disulfide	76		3.794				ND	7
* 29 t-Butyl alcohol-d10 (IS)	65	4.172	4.117	0.055	20	157426	50.0	
28 Methylene Chloride	84		4.147				ND	
33 Methyl tert-butyl ether	73	4.562	4.550	0.012	1	6142	0.0416	
34 trans-1,2-Dichloroethene	96	4.574	4.568	0.006	22	2535	0.0346	
37 1,1-Dichloroethane	63	5.226	5.220	0.006	96	144040	1.05	
42 2-Butanone (MEK)	43		6.001				ND	7
43 cis-1,2-Dichloroethene	96	6.049	6.049	0.000	80	269015	3.34	
49 Chlorobromomethane	128		6.385				ND	
52 Chloroform	83	6.543	6.531	0.012	93	38639	0.2988	
\$ 53 Dibromofluoromethane (Surr)	113	6.744	6.751	-0.006	94	650009	10.1	
54 1,1,1-Trichloroethane	97	6.769	6.763	0.006	99	688734	5.72	
57 Carbon tetrachloride	117		6.976				ND	7
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.202	0.006	72	125144	10.7	
60 Benzene	78	7.232	7.238	-0.006	90	12102	0.0382	
62 1,2-Dichloroethane	62		7.305				ND	7
* 65 Fluorobenzene (IS)	96	7.647	7.641	0.006	99	2538247	10.0	
69 Trichloroethene	95	8.122	8.122	0.000	98	339795	4.07	
71 1,2-Dichloropropane	63		8.451				ND	
77 Dichlorobromomethane	83		8.799				ND	
81 cis-1,3-Dichloropropene	75		9.348				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.518				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.658	9.658	0.000	94	2810920	9.78	
85 Toluene	92	9.738	9.738	0.000	97	18322	0.0858	
86 trans-1,3-Dichloropropene	75		9.994				ND	
106 1,1,2-Trichloroethane	97		10.195				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.292	10.292	0.000	98	7335093	74.4	E
109 2-Hexanone	43		10.408				ND	
111 Chlorodibromomethane	129		10.579				ND	7
112 Ethylene Dibromide	107		10.689				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.122	11.122	0.000	86	2350117	10.0	
115 Chlorobenzene	112		11.146				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	7
118 Ethylbenzene	91		11.231				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.347				ND	7
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.847				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	92	1133338	9.71	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1334973	10.0	

### QC Flag Legend

#### Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

### Reagents:

MSV\_LLcentISS\_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X48.D

Injection Date: 02-Dec-2022 02:00:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: 410-106467-A-13

Lab Sample ID: 410-106467-13

Worklist Smp#: 19

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

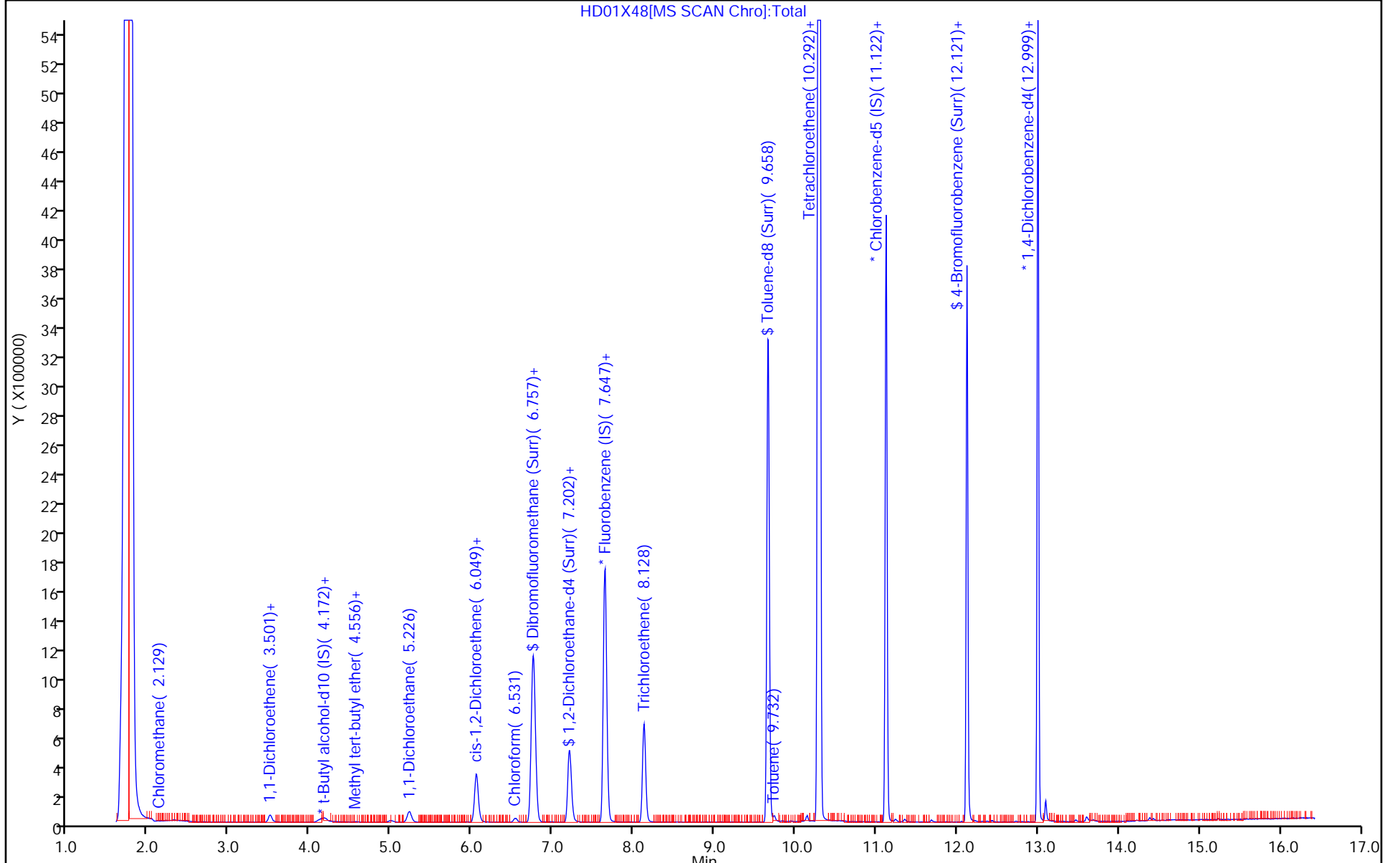
ALS Bottle#: 18

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2





Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X48.D  
 Lims ID: 410-106467-A-13  
 Client ID: HD-QC1-0/1-1  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 02:00:30 ALS Bottle#: 18 Worklist Smp#: 19  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-019  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2

Date: 02-Dec-2022 13:22:40

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.1	101.18
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	106.75
\$ 84 Toluene-d8 (Surr)	10.0	9.78	97.77
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.71	97.10

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X48.D

Injection Date: 02-Dec-2022 02:00:30

Instrument ID: 19094

Lims ID: 410-106467-A-13

Lab Sample ID: 410-106467-13

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

Operator ID: sej02002

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

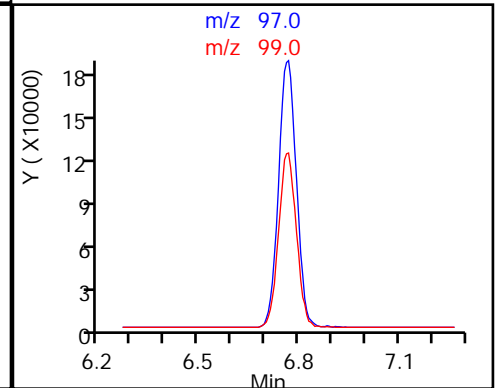
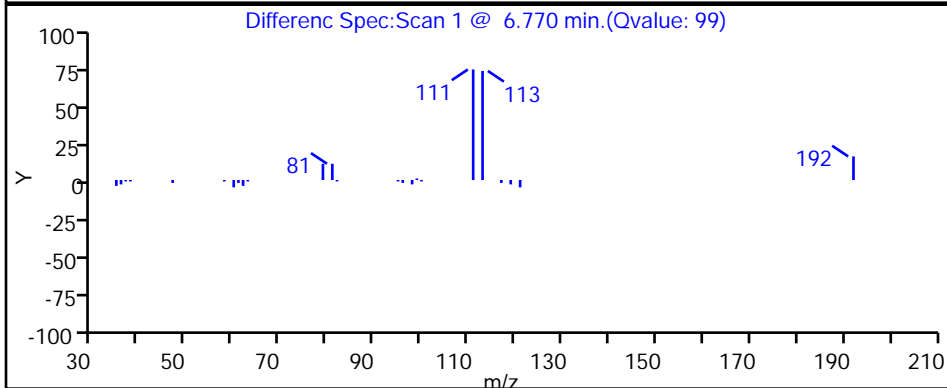
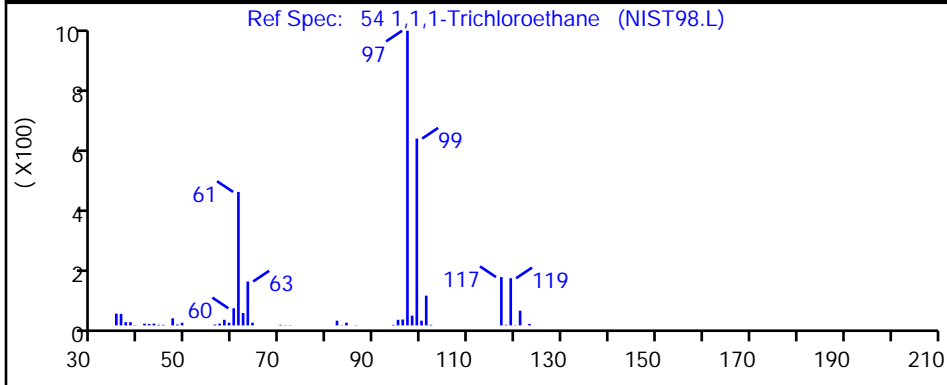
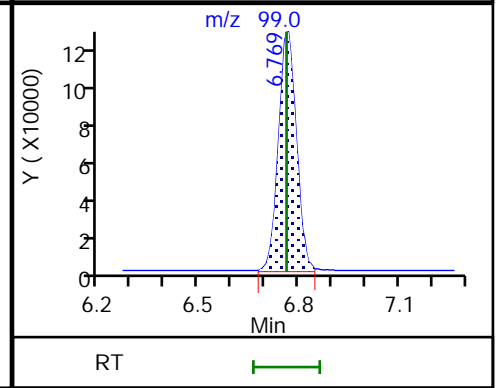
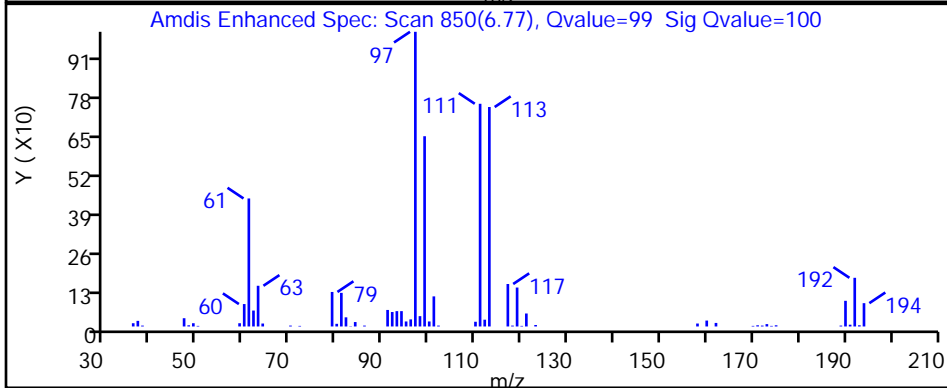
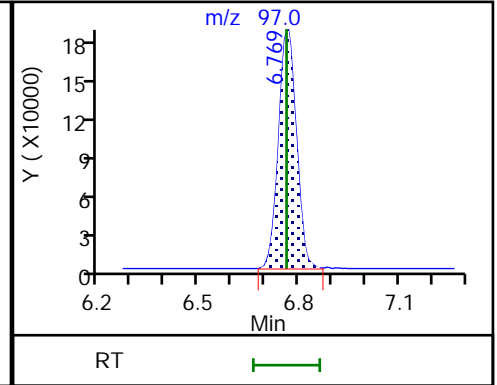
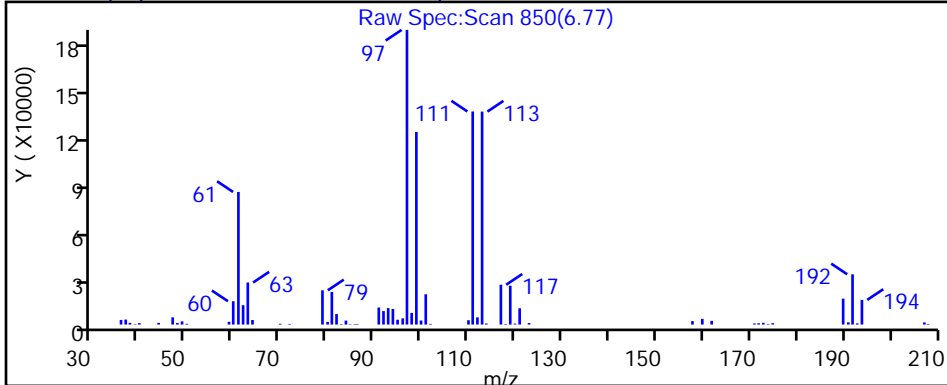
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

54 1,1,1-Trichloroethane, CAS: 71-55-6



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X48.D

Injection Date: 02-Dec-2022 02:00:30

Instrument ID: 19094

Lims ID: 410-106467-A-13

Lab Sample ID: 410-106467-13

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

Operator ID: sej02002

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

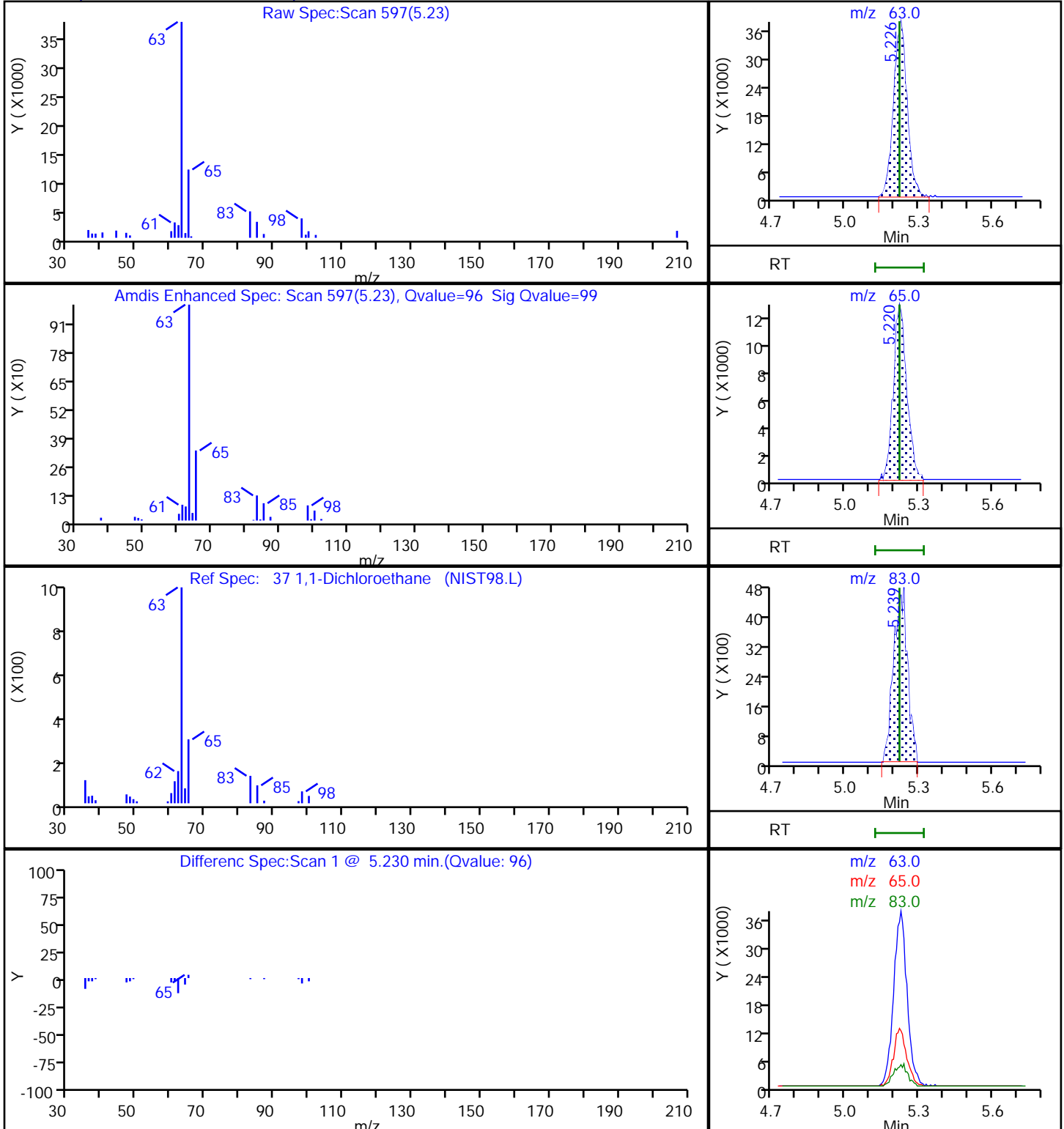
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X48.D

Injection Date: 02-Dec-2022 02:00:30

Instrument ID: 19094

Lims ID: 410-106467-A-13

Lab Sample ID: 410-106467-13

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

Operator ID: sej02002

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

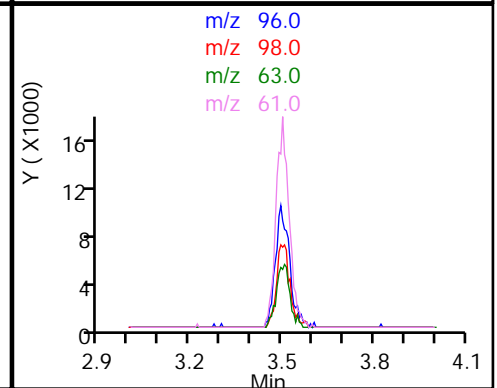
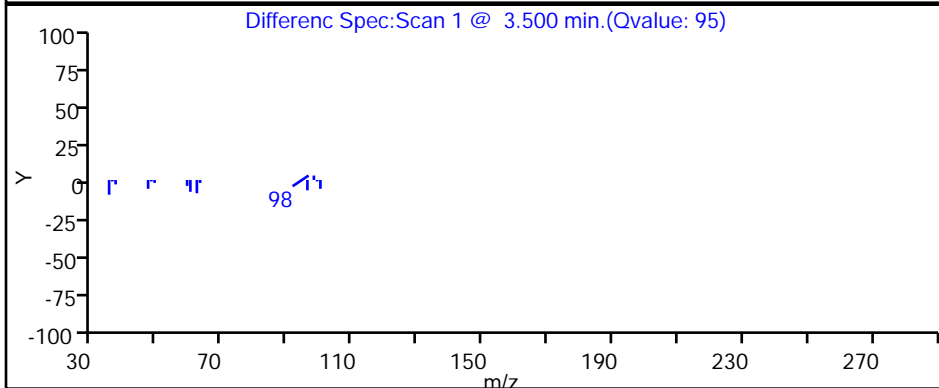
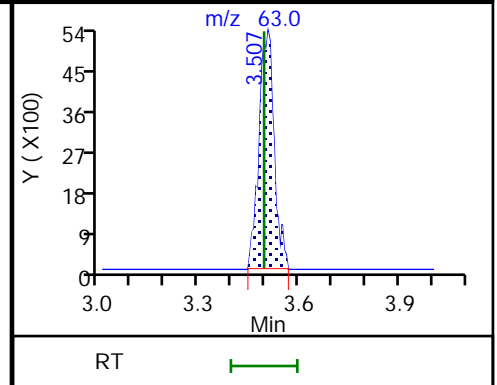
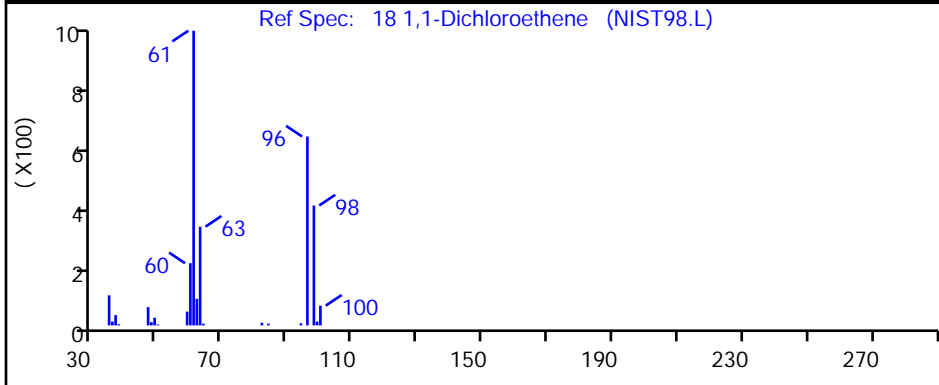
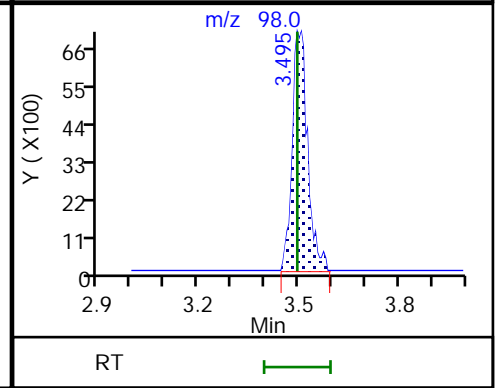
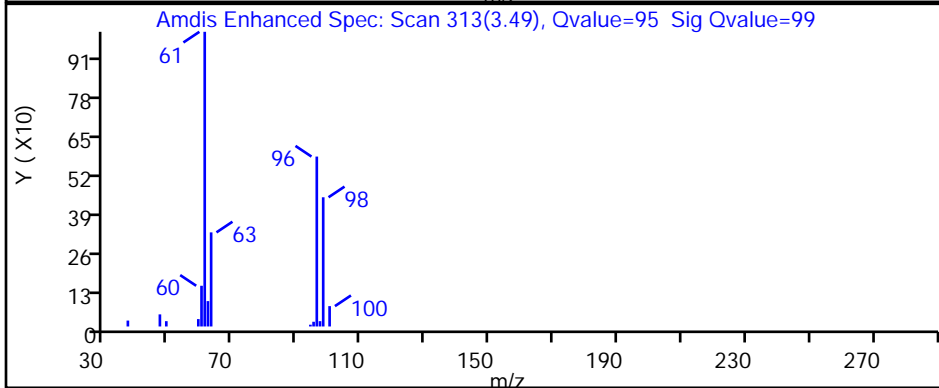
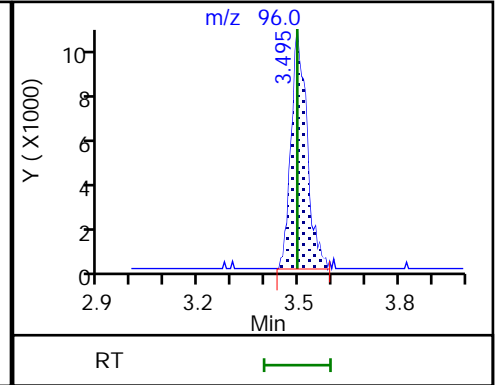
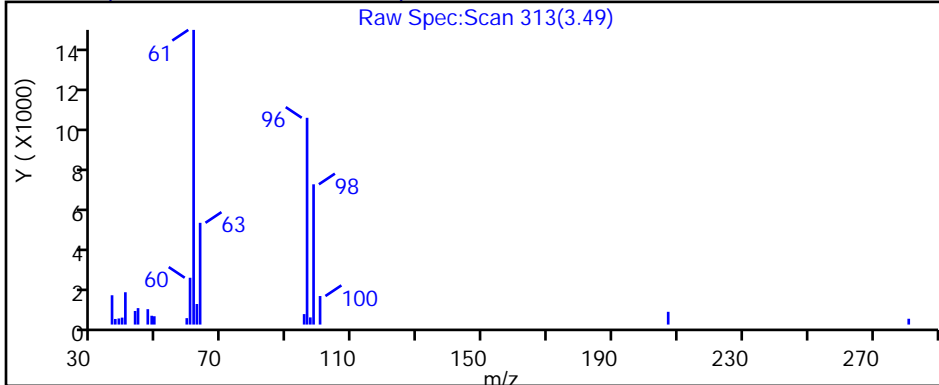
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

18 1,1-Dichloroethene, CAS: 75-35-4



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X48.D

Injection Date: 02-Dec-2022 02:00:30

Instrument ID: 19094

Lims ID: 410-106467-A-13

Lab Sample ID: 410-106467-13

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

Operator ID: sej02002

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

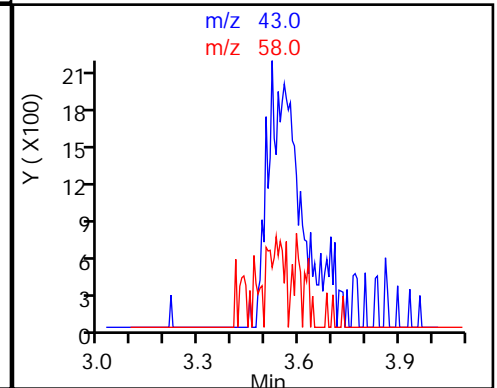
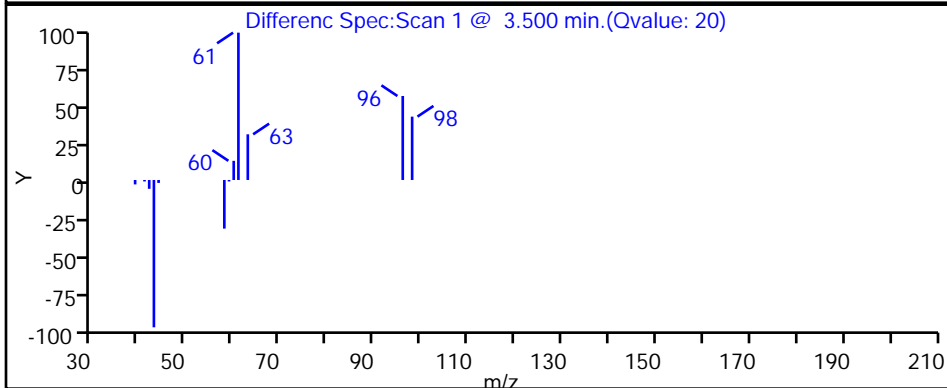
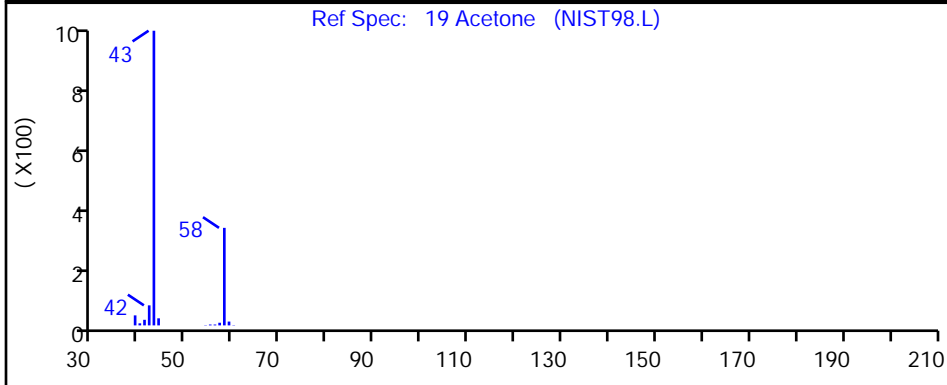
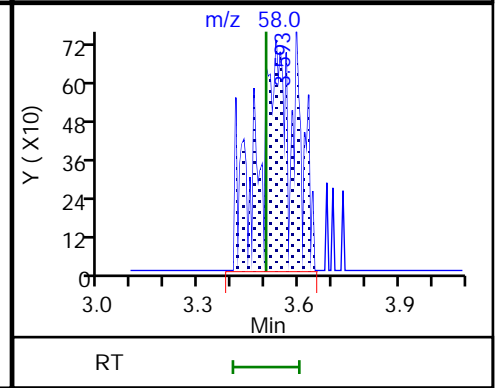
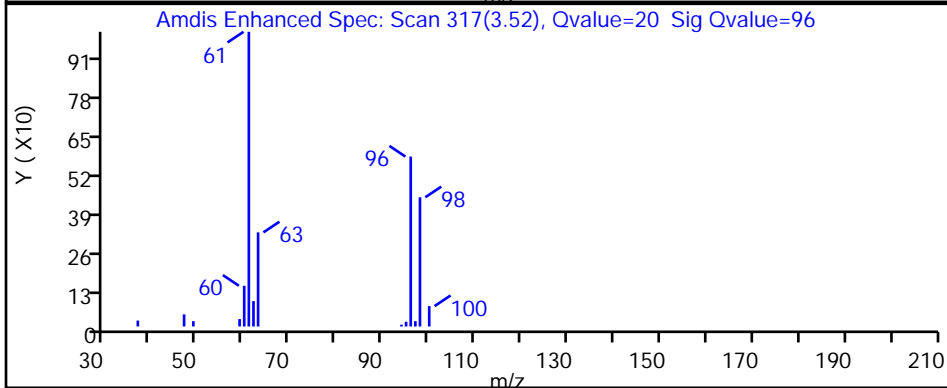
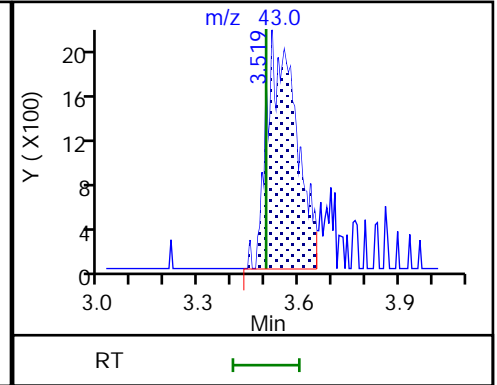
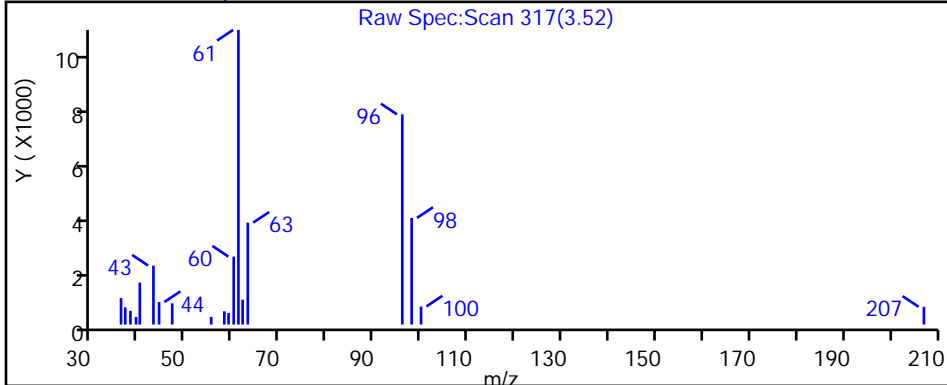
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X48.D

Injection Date: 02-Dec-2022 02:00:30

Instrument ID: 19094

Lims ID: 410-106467-A-13

Lab Sample ID: 410-106467-13

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

Operator ID: sej02002

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

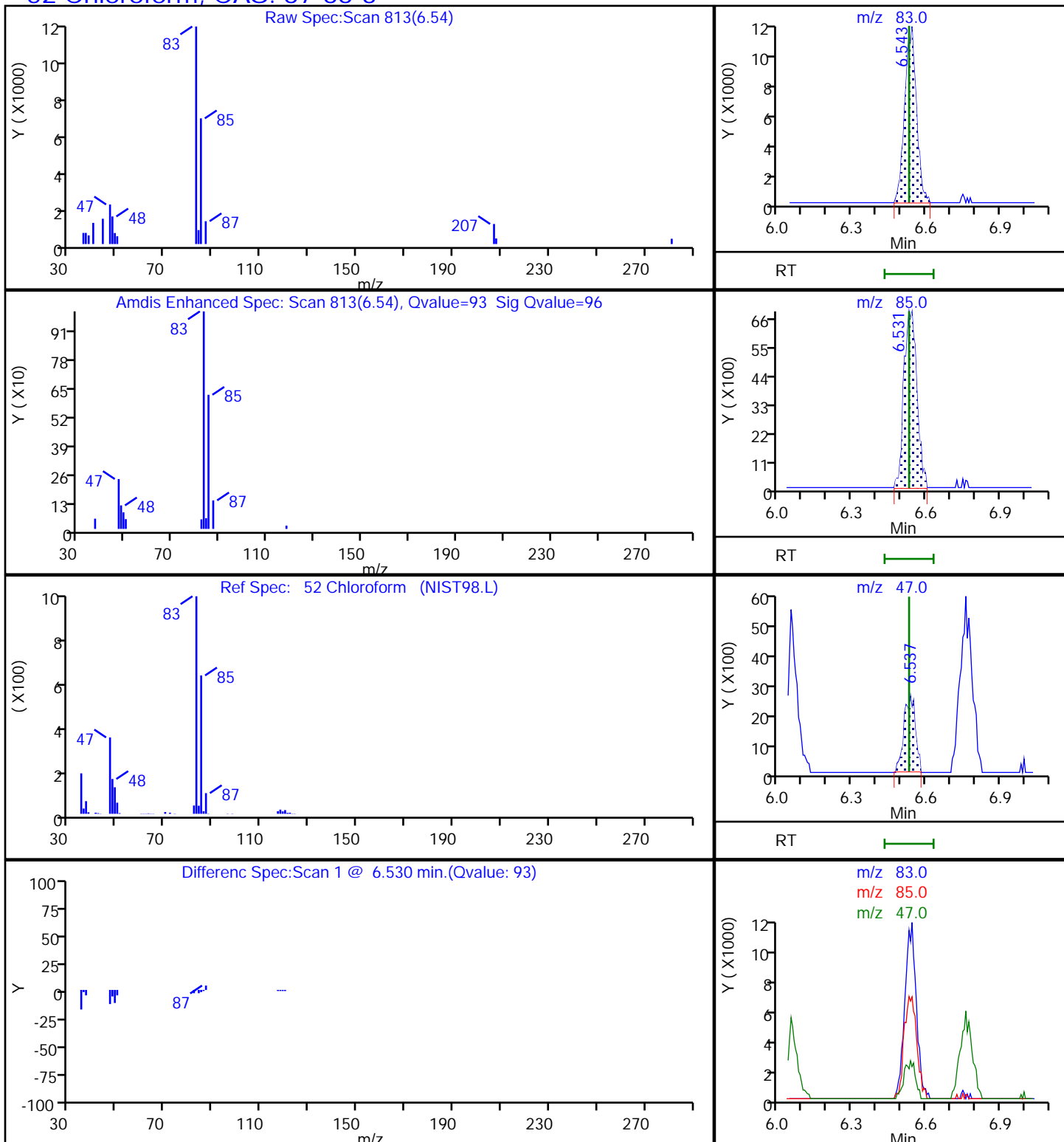
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

### 52 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X48.D

Injection Date: 02-Dec-2022 02:00:30

Instrument ID: 19094

Lims ID: 410-106467-A-13

Lab Sample ID: 410-106467-13

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

Operator ID: sej02002

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

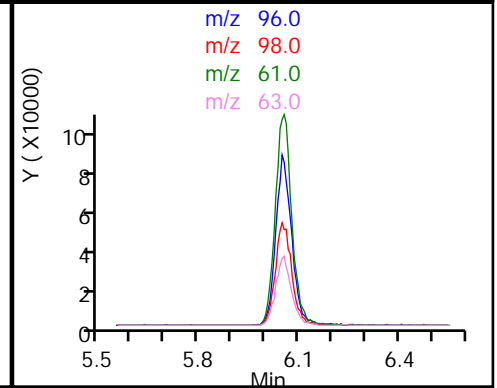
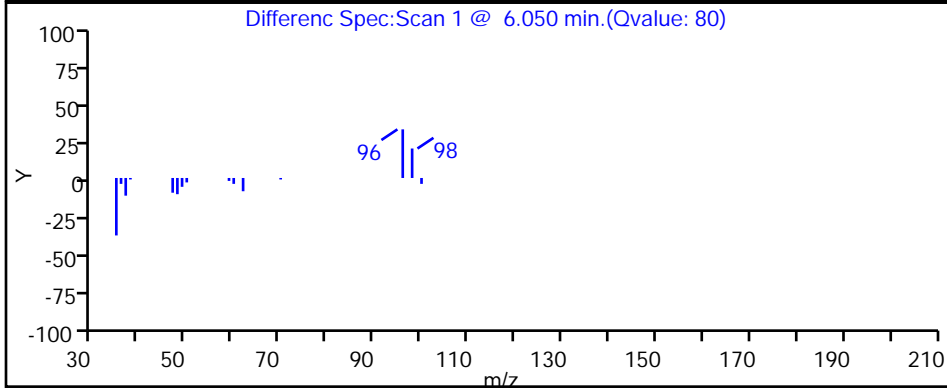
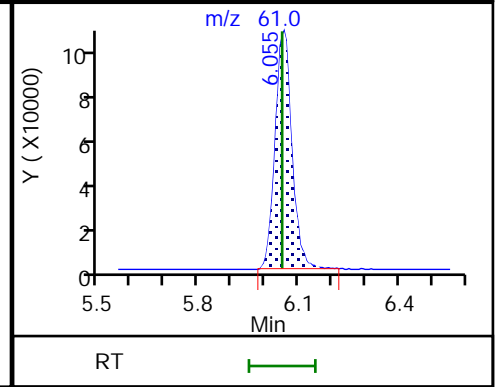
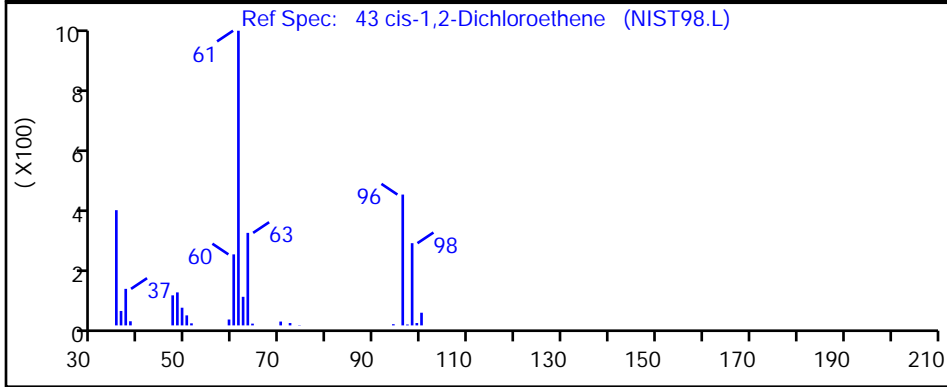
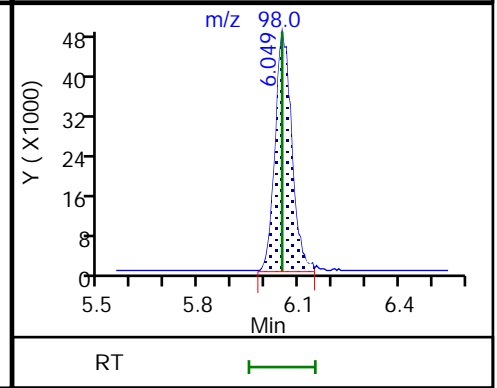
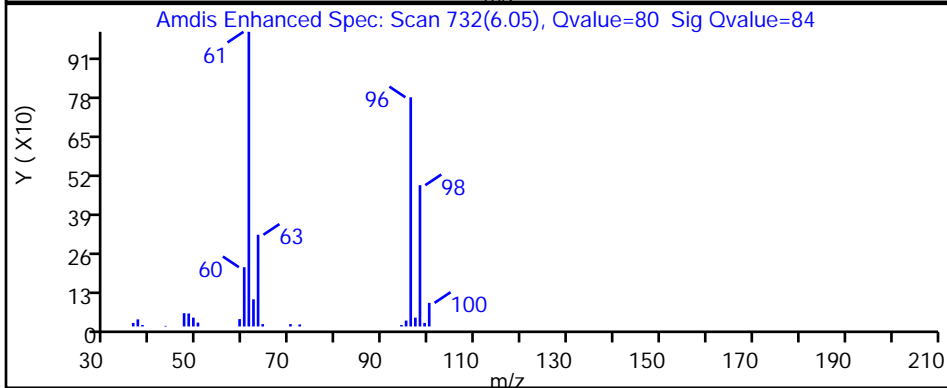
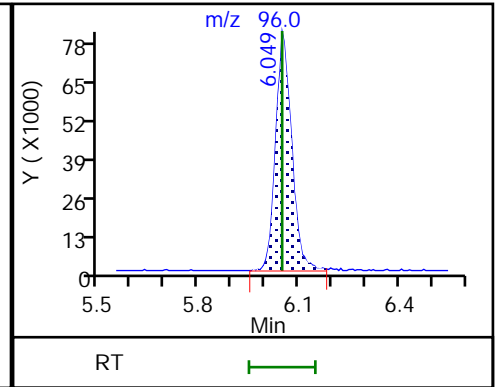
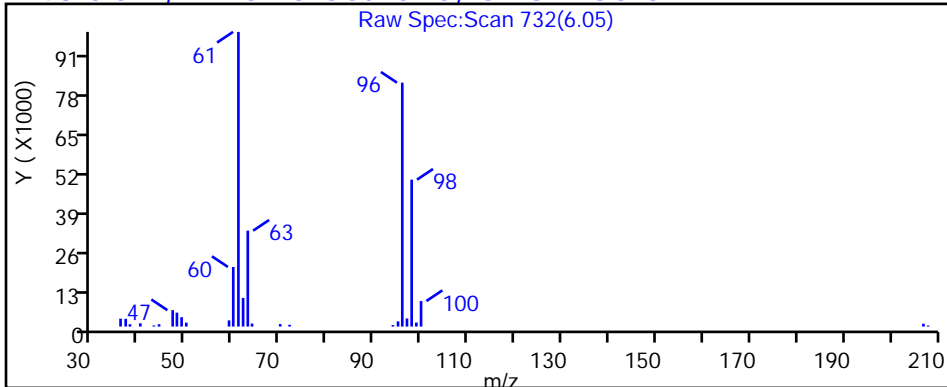
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X48.D

Injection Date: 02-Dec-2022 02:00:30

Instrument ID: 19094

Lims ID: 410-106467-A-13

Lab Sample ID: 410-106467-13

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

Operator ID: sej02002

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

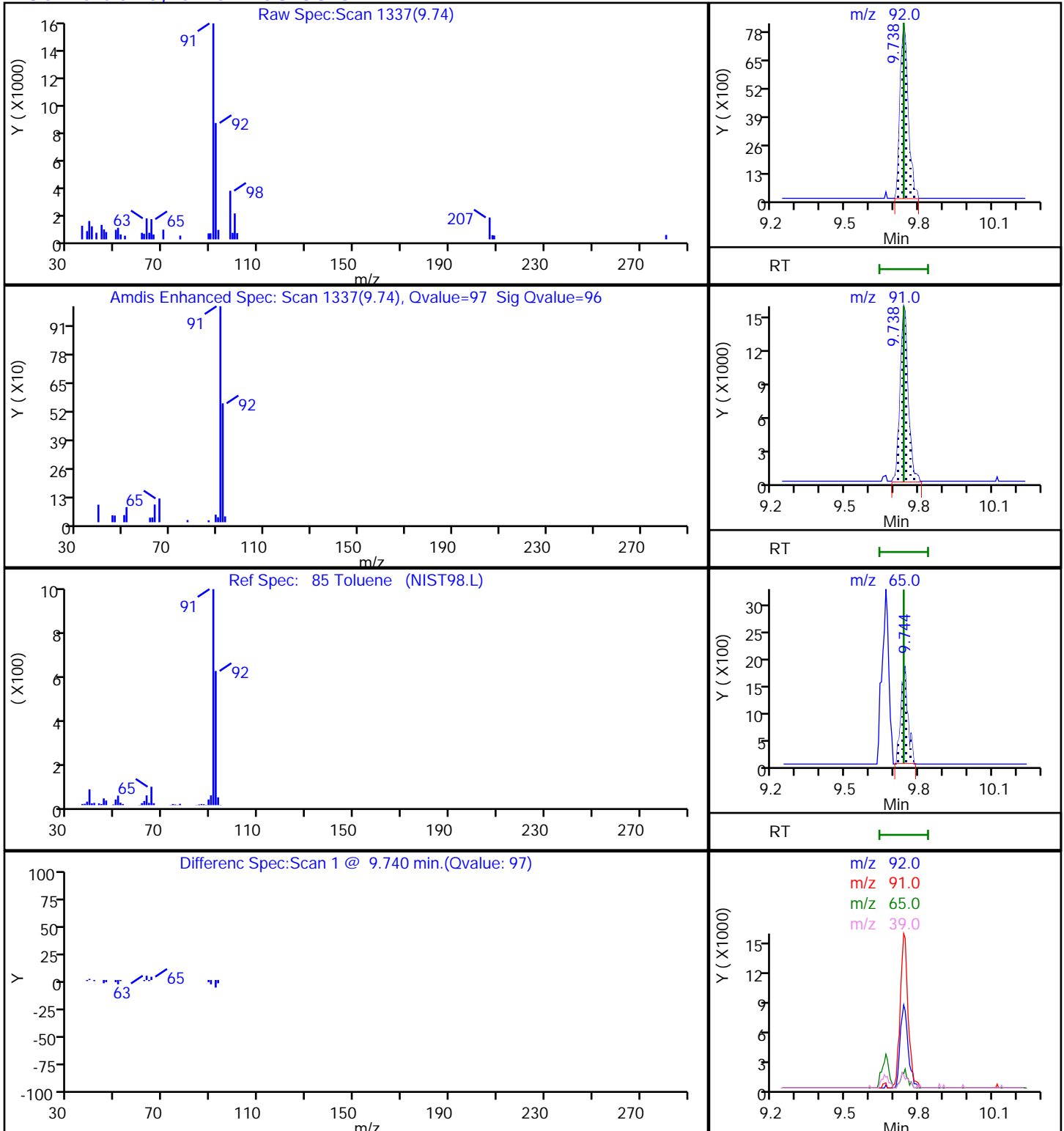
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

85 Toluene, CAS: 108-88-3





Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X48.D

Injection Date: 02-Dec-2022 02:00:30

Instrument ID: 19094

Lims ID: 410-106467-A-13

Lab Sample ID: 410-106467-13

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

Operator ID: sej02002

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

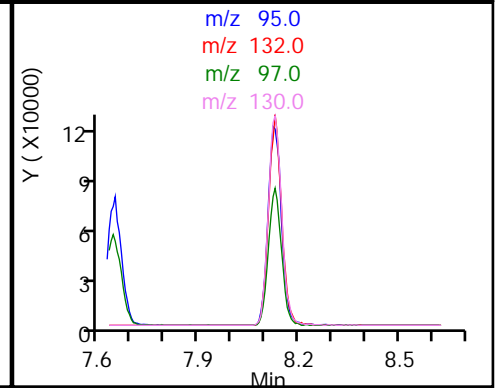
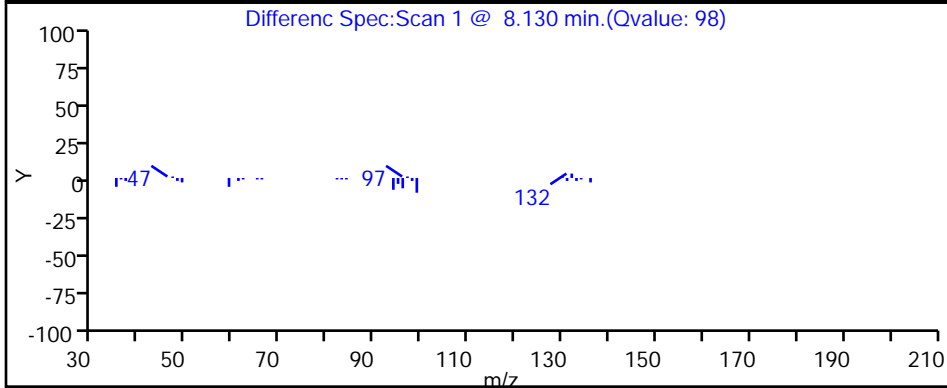
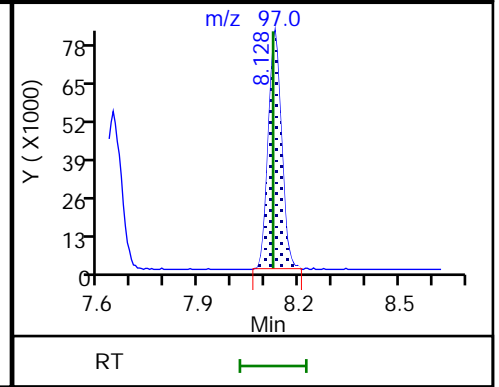
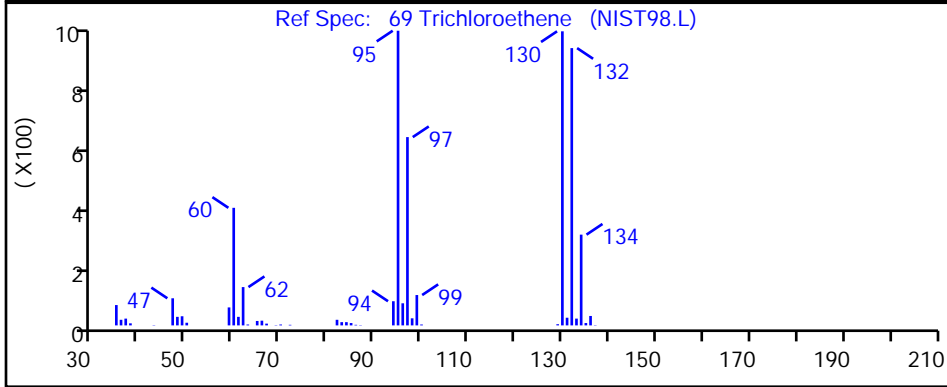
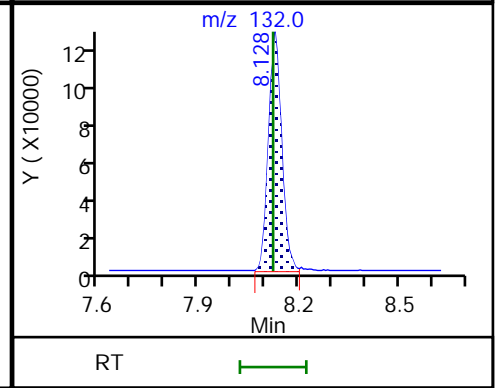
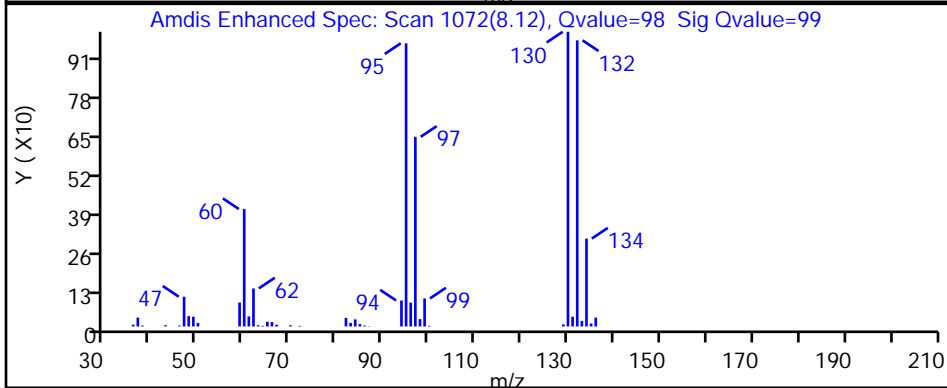
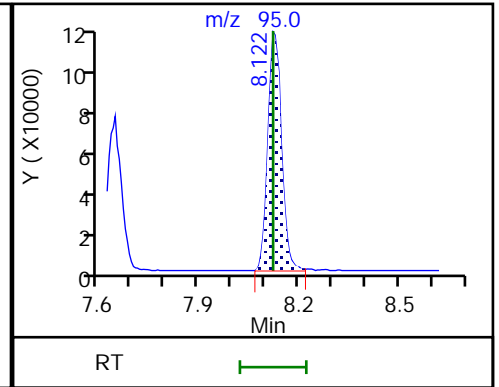
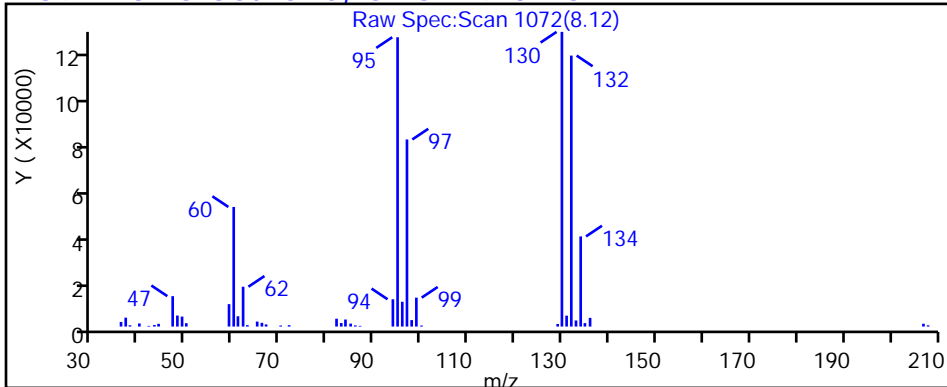
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

69 Trichloroethene, CAS: 79-01-6



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-13 DL

Matrix: Water

Lab File ID: HD02X32.D

Analysis Method: 8260D

Date Collected: 11/18/2022 10:15

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 20:04

Soil Aliquot Vol:

Dilution Factor: 10

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322942

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	67		5.0	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X32.D  
 Lims ID: 410-106467-B-13 DL  
 Client ID: HD-QC1-0/1-1  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 20:04:30 ALS Bottle#: 32 Worklist Smp#: 33  
 Purge Vol: 25.000 mL Dil. Factor: 10.0000  
 Sample Info: 410-0072389-033  
 Operator ID: knk41612 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 05-Dec-2022 15:04:44 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1604

First Level Reviewer: kaewrungrueangp

Date: 05-Dec-2022 15:04:44

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.129				ND	7
7 Vinyl chloride	62		2.245				ND	
9 Bromomethane	94		2.562				ND	
10 Chloroethane	64		2.647				ND	7
18 1,1-Dichloroethene	96	3.501	3.501	0.000	55	2366	0.0378	
19 Acetone	43	3.550	3.513	0.037	68	14819	2.02	
24 Carbon disulfide	76		3.800				ND	7
* 29 t-Butyl alcohol-d10 (IS)	65	4.172	4.147	0.025	20	114471	50.0	
28 Methylene Chloride	84		4.147				ND	
33 Methyl tert-butyl ether	73		4.550				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63	5.220	5.226	-0.006	92	13406	0.1031	
42 2-Butanone (MEK)	43		6.001				ND	7
43 cis-1,2-Dichloroethene	96	6.062	6.049	0.013	80	24895	0.3259	
49 Chlorobromomethane	128		6.378				ND	
52 Chloroform	83	6.537	6.531	0.006	1	3579	0.0292	
\$ 53 Dibromofluoromethane (Surr)	113	6.750	6.744	0.006	94	613146	10.1	
54 1,1,1-Trichloroethane	97	6.763	6.769	-0.006	85	59532	0.5215	
57 Carbon tetrachloride	117		6.982				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.208	0.000	52	110305	9.92	
60 Benzene	78		7.238				ND	7
62 1,2-Dichloroethane	62		7.305				ND	7
* 65 Fluorobenzene (IS)	96	7.647	7.640	0.007	99	2407303	10.0	
69 Trichloroethene	95	8.128	8.122	0.006	94	30282	0.3821	
71 1,2-Dichloropropane	63		8.451				ND	
77 Dichlorobromomethane	83		8.799				ND	
81 cis-1,3-Dichloropropene	75		9.347				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.512				ND	
\$ 84 Toluene-d8 (Surr)	98	9.658	9.658	0.000	94	2713358	9.84	
85 Toluene	92	9.738	9.738	0.000	97	6216	0.0303	
86 trans-1,3-Dichloropropene	75		9.994				ND	
106 1,1,2-Trichloroethane	97		10.201				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.292	10.292	0.000	98	635465	6.72	
109 2-Hexanone	43		10.408				ND	
111 Chlorodibromomethane	129		10.579				ND	
112 Ethylene Dibromide	107		10.689				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.122	11.121	0.001	86	2254088	10.0	
115 Chlorobenzene	112		11.146				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.231				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.347				ND	7
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.688				ND	
122 Bromoform	173		11.847				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	92	1096871	9.80	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1295995	10.0	

**QC Flag Legend**

## Processing Flags

7 - Failed Limit of Detection

## Review Flags

U - Marked Undetected

**Reagents:**

MSV\_LLcentISS\_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X32.D

Injection Date: 02-Dec-2022 20:04:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-106467-B-13 DL

Lab Sample ID: 410-106467-13

Worklist Smp#: 33

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

Purge Vol: 25.000 mL

Dil. Factor: 10.0000

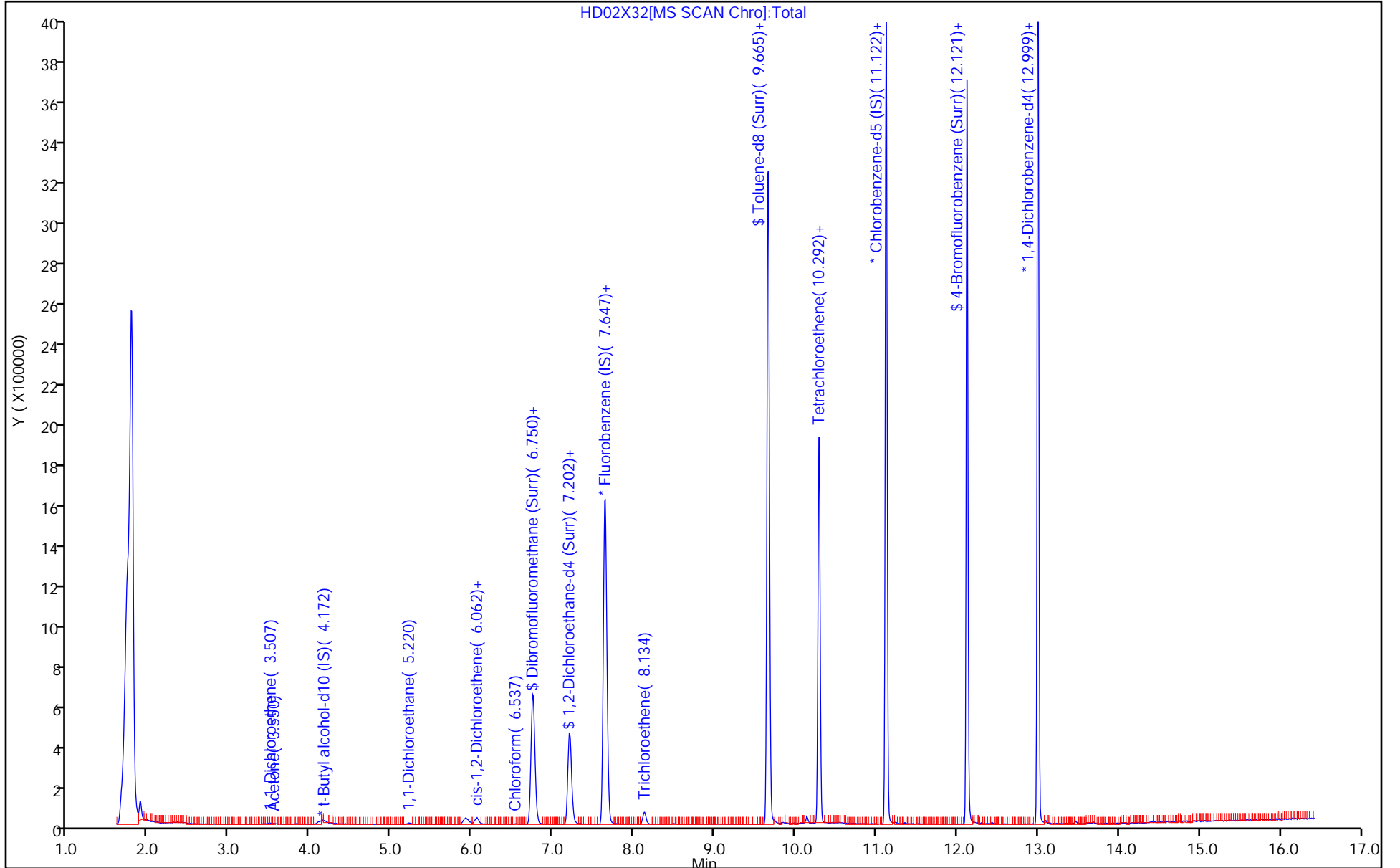
ALS Bottle#: 32

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X32.D  
 Lims ID: 410-106467-B-13 DL  
 Client ID: HD-QC1-0/1-1  
 Sample Type: Client  
 Inject. Date: 02-Dec-2022 20:04:30 ALS Bottle#: 32 Worklist Smp#: 33  
 Purge Vol: 25.000 mL Dil. Factor: 10.0000  
 Sample Info: 410-0072389-033  
 Operator ID: knk41612 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 05-Dec-2022 15:04:44 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1604

First Level Reviewer: kaewrungrueangp

Date: 05-Dec-2022 15:04:44

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.1	100.63
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.92	99.21
\$ 84 Toluene-d8 (Surr)	10.0	9.84	98.40
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.80	97.98

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X32.D

Injection Date: 02-Dec-2022 20:04:30

Instrument ID: 19094

Lims ID: 410-106467-B-13 DL

Lab Sample ID: 410-106467-13

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

Operator ID: knk41612

ALS Bottle#: 32

Worklist Smp#: 33

Purge Vol: 25.000 mL

Dil. Factor: 10.0000

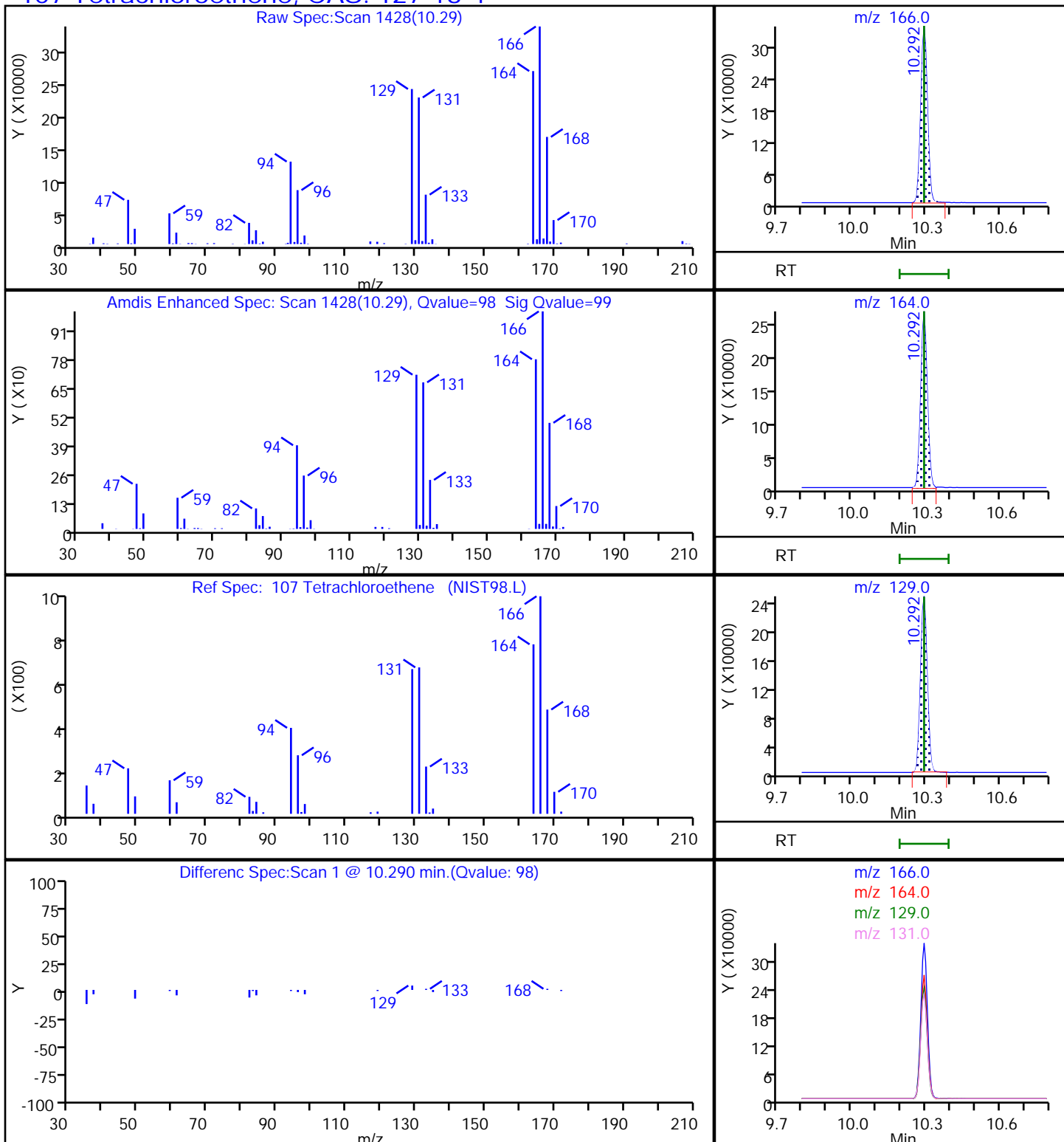
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

### 107 Tetrachloroethene, CAS: 127-18-4



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-14

Matrix: Water

Lab File ID: HD01X40.D

Analysis Method: 8260D

Date Collected: 11/18/2022 00:00

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 23:17

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND	^c cn	5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c cn	5.0	1.0
67-64-1	Acetone	1.3	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	^c cn	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	0.29	J cn	0.50	0.080



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-14

Matrix: Water

Lab File ID: HD01X40.D

Analysis Method: 8260D

Date Collected: 11/18/2022 00:00

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 23:17

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	ND		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	0.096	J	1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X40.D  
 Lims ID: 410-106467-A-14  
 Client ID: HD-QC1-0/1-2  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 23:17:30 ALS Bottle#: 10 Worklist Smp#: 11  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-011  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2

Date: 02-Dec-2022 13:12:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.117	2.117	0.000	93	4666	0.0462	
7 Vinyl chloride	62		2.239				ND	
9 Bromomethane	94		2.556				ND	
10 Chloroethane	64		2.642				ND	7
18 1,1-Dichloroethene	96		3.495				ND	7
19 Acetone	43	3.544	3.501	0.043	69	10969	1.29	
24 Carbon disulfide	76		3.794				ND	7
* 29 t-Butyl alcohol-d10 (IS)	65	4.153	4.117	0.036	21	132767	50.0	
28 Methylene Chloride	84		4.147				ND	
33 Methyl tert-butyl ether	73		4.550				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63		5.220				ND	
42 2-Butanone (MEK)	43		6.001				ND	7
43 cis-1,2-Dichloroethene	96		6.049				ND	7
49 Chlorobromomethane	128		6.385				ND	
52 Chloroform	83		6.531				ND	
\$ 53 Dibromofluoromethane (Surr)	113	6.751	6.751	0.001	94	670518	10.1	
54 1,1,1-Trichloroethane	97		6.763				ND	
57 Carbon tetrachloride	117		6.976				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.202	7.202	0.000	85	125245	10.3	
60 Benzene	78	7.232	7.238	-0.006	90	25412	0.0772	
62 1,2-Dichloroethane	62		7.305				ND	7
* 65 Fluorobenzene (IS)	96	7.641	7.641	0.000	99	2633578	10.0	
69 Trichloroethene	95		8.122				ND	
71 1,2-Dichloropropane	63		8.451				ND	
77 Dichlorobromomethane	83		8.799				ND	
81 cis-1,3-Dichloropropene	75		9.348				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.518				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.665	9.658	0.007	94	2915601	9.93	
85 Toluene	92	9.738	9.738	0.000	98	62539	0.2865	
86 trans-1,3-Dichloropropene	75		9.994				ND	
106 1,1,2-Trichloroethane	97		10.195				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166		10.292				ND	
109 2-Hexanone	43		10.408				ND	7
111 Chlorodibromomethane	129		10.579				ND	
112 Ethylene Dibromide	107		10.689				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.122	11.122	0.000	85	2401119	10.0	
115 Chlorobenzene	112		11.146				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91	11.237	11.231	0.006	98	27614	0.0648	
S 117 Xylenes, Total	106				0		0.2360	
119 m-Xylene & p-Xylene	106	11.353	11.347	0.006	98	22818	0.1404	
120 o-Xylene	106	11.676	11.676	0.000	97	15013	0.0956	
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.847				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	92	1165166	9.77	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1357936	10.0	

**QC Flag Legend**

## Processing Flags

7 - Failed Limit of Detection

**Reagents:**

MSV\_LLcentISS\_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X40.D

Injection Date: 01-Dec-2022 23:17:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: 410-106467-A-14

Lab Sample ID: 410-106467-14

Worklist Smp#: 11

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

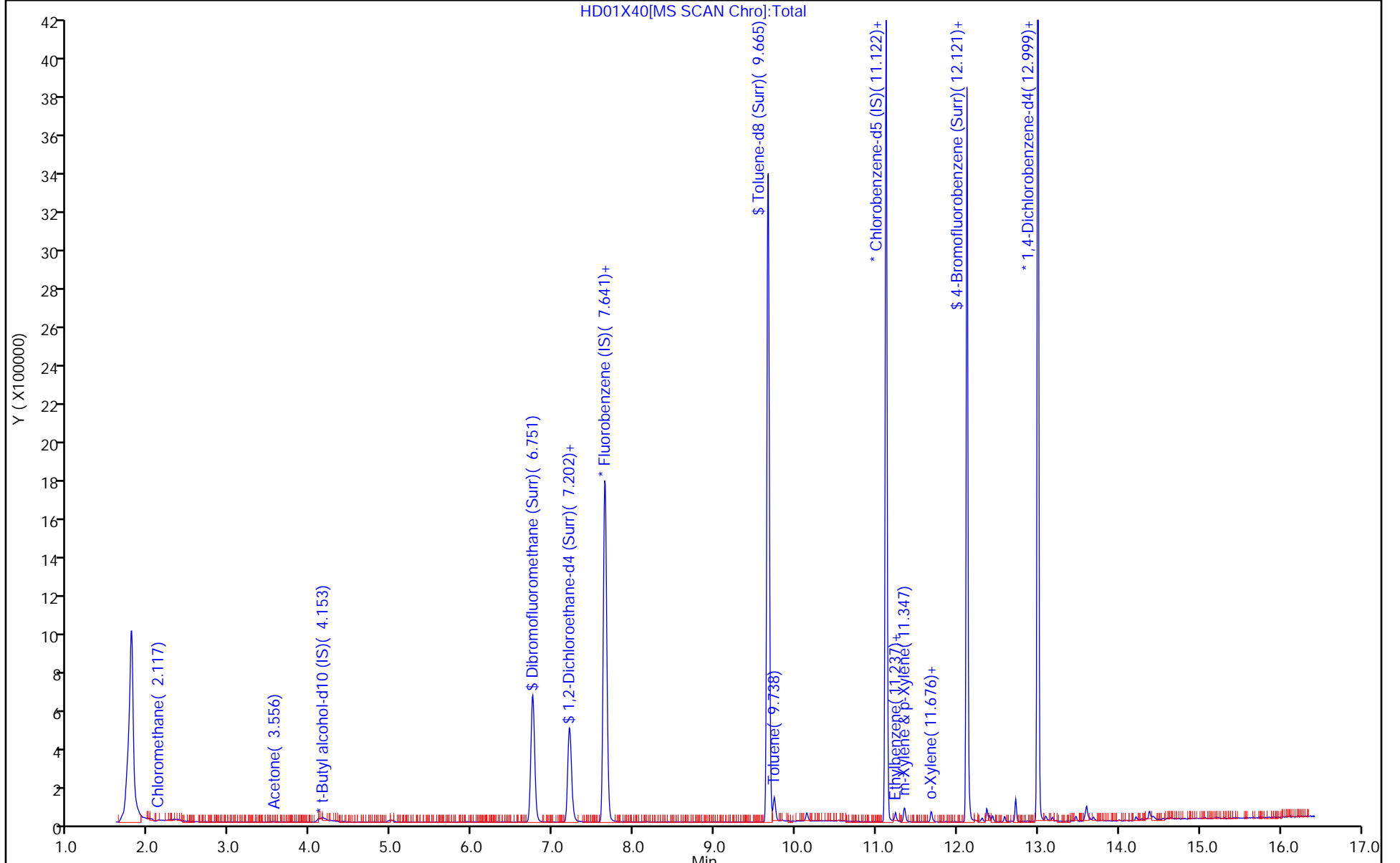
ALS Bottle#: 10

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X40.D  
 Lims ID: 410-106467-A-14  
 Client ID: HD-QC1-0/1-2  
 Sample Type: Client  
 Inject. Date: 01-Dec-2022 23:17:30 ALS Bottle#: 10 Worklist Smp#: 11  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-011  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:24:18 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2 Date: 02-Dec-2022 13:12:56

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.1	100.59
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.97
\$ 84 Toluene-d8 (Surr)	10.0	9.93	99.26
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.77	97.71

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X40.D

Injection Date: 01-Dec-2022 23:17:30

Instrument ID: 19094

Lims ID: 410-106467-A-14

Lab Sample ID: 410-106467-14

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

Operator ID: sej02002

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

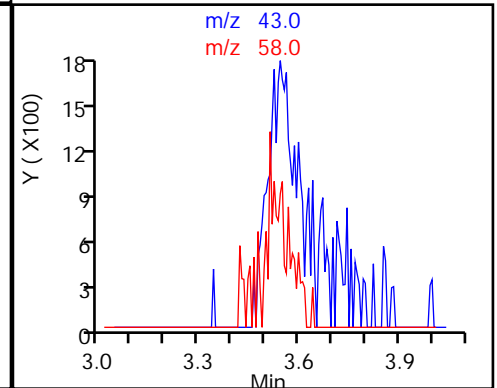
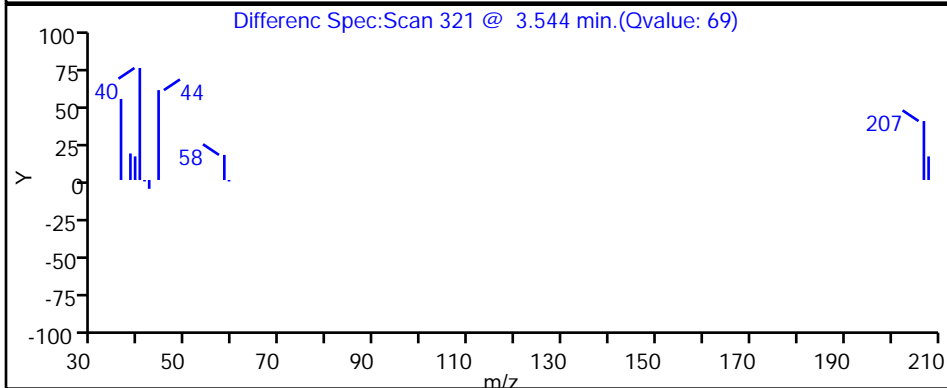
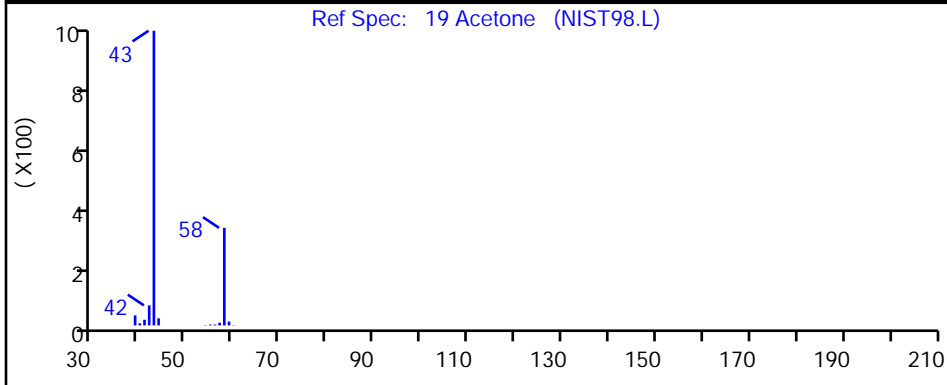
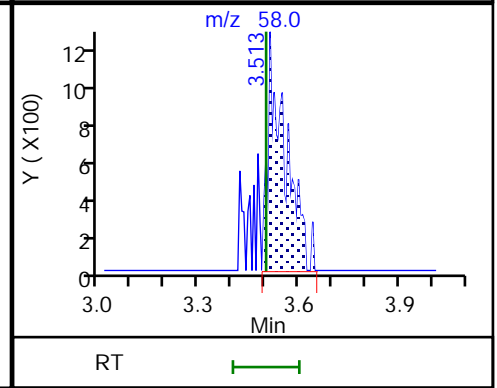
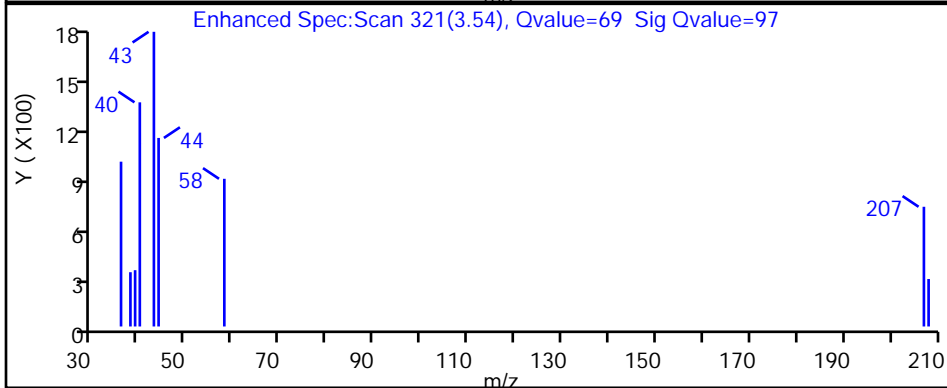
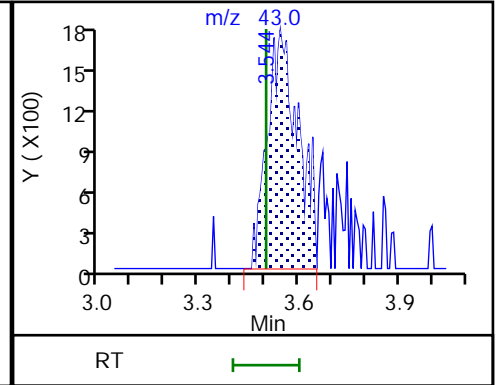
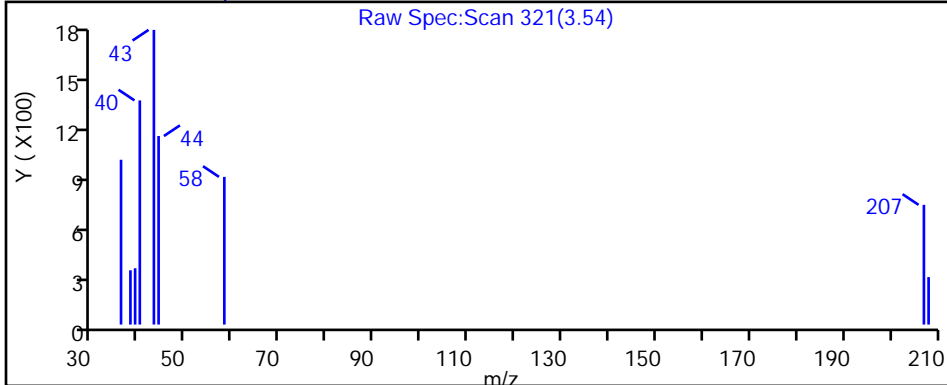
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X40.D

Injection Date: 01-Dec-2022 23:17:30

Instrument ID: 19094

Lims ID: 410-106467-A-14

Lab Sample ID: 410-106467-14

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

Operator ID: sej02002

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

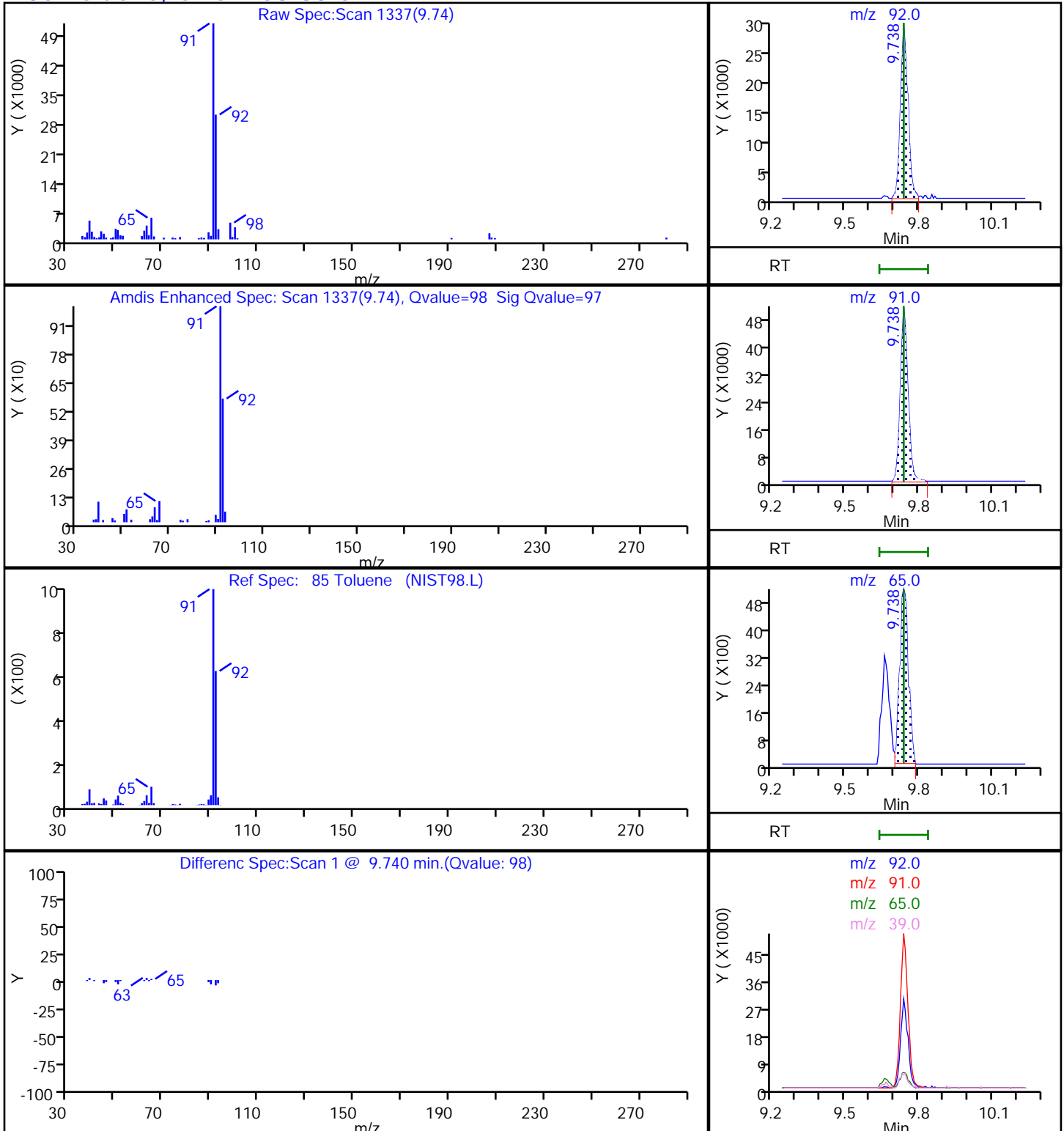
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X40.D

Injection Date: 01-Dec-2022 23:17:30

Instrument ID: 19094

Lims ID: 410-106467-A-14

Lab Sample ID: 410-106467-14

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

Operator ID: sej02002

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

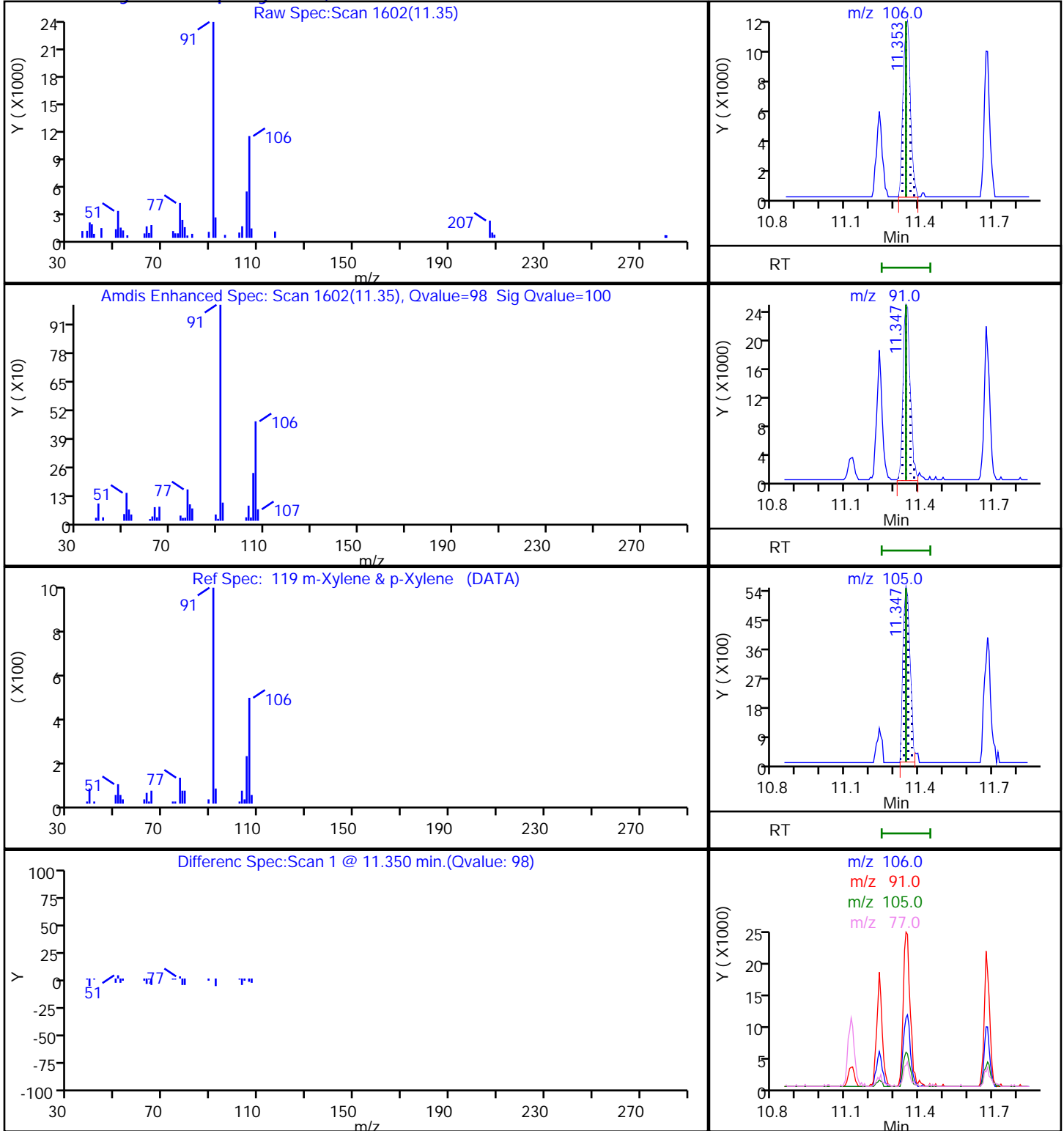
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

### 119 m-Xylene & p-Xylene, CAS: 179601-23-1





Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X40.D

Injection Date: 01-Dec-2022 23:17:30

Instrument ID: 19094

Lims ID: 410-106467-A-14

Lab Sample ID: 410-106467-14

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

Operator ID: sej02002

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

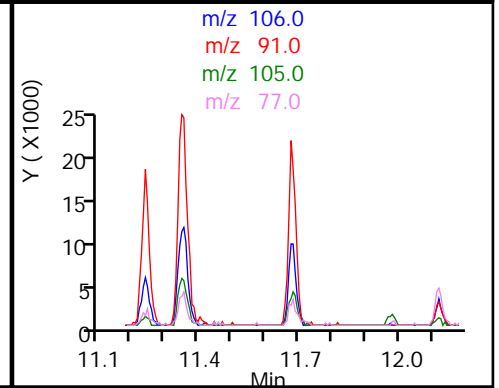
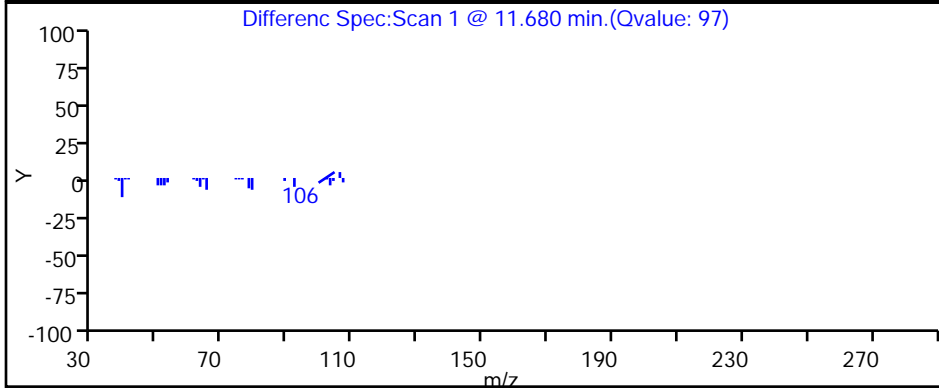
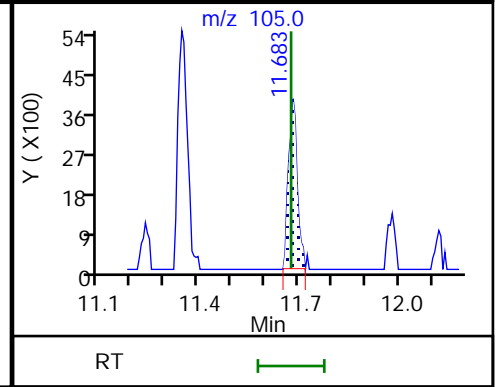
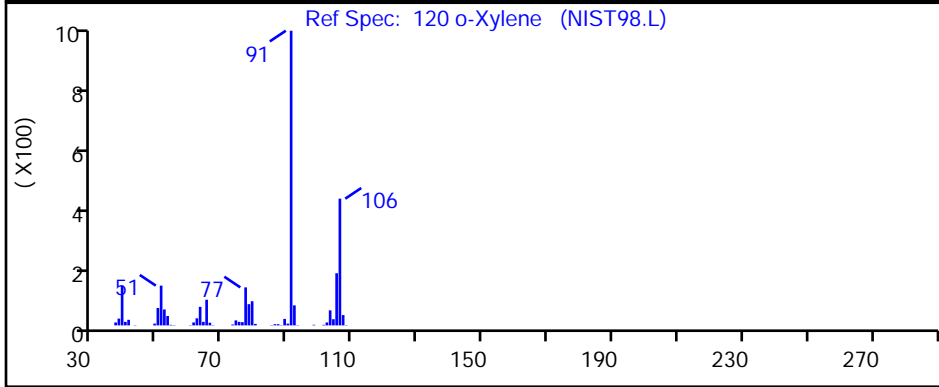
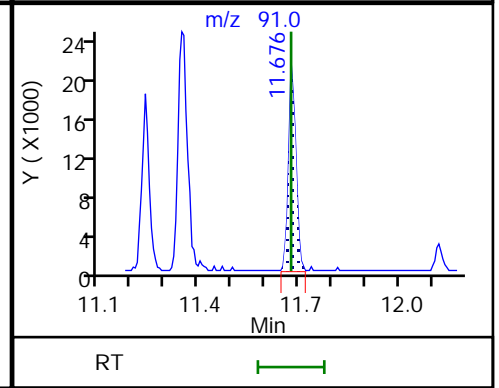
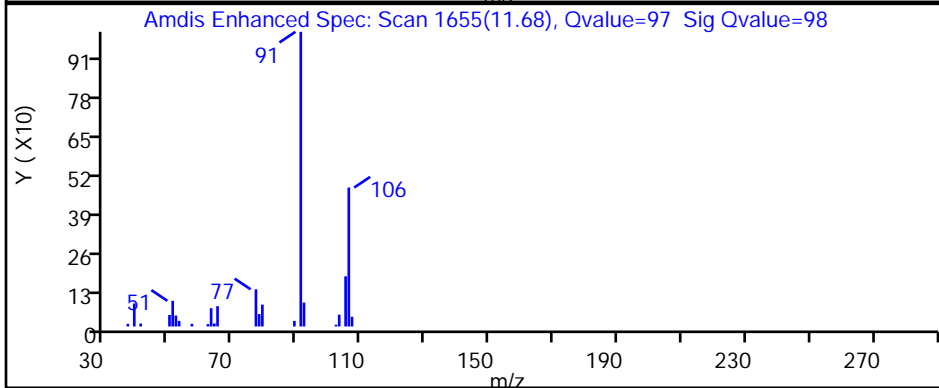
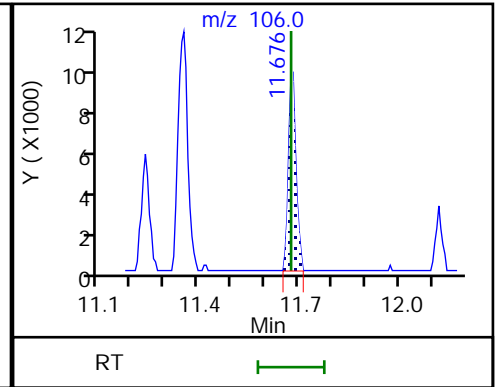
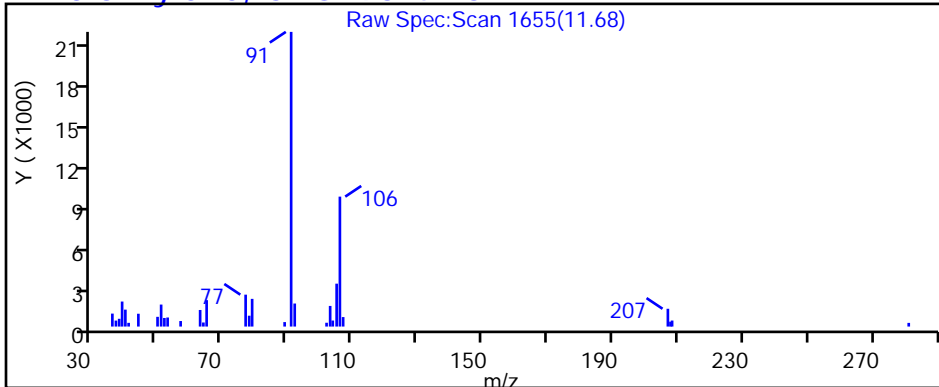
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

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



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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-286414/13	GG16X12.D
Level 2	IC 410-286414/14	GG16X13.D
Level 3	IC 410-286414/15	GG16X14.D
Level 4	IC 410-286414/16	GG16X15.D
Level 5	IC 410-286414/17	GG16X16.D
Level 6	ICIS 410-286414/18	GG16X17.D
Level 7	IC 410-286414/19	GG16X18.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dichlorodifluoromethane	0.2457 0.2333	0.2679 0.2376	0.2913	0.2716	0.2695	Ave		0.259 6		0.1000	8.2		20.0				
Chloromethane	0.3010 0.2680	0.3209 0.2557	0.3202	0.3015	0.2825	Ave		0.292 8		0.1000	8.6		20.0				
Vinyl chloride	0.2750 0.2798	0.3136 0.2769	0.3400	0.3113	0.2981	Ave		0.299 2		0.1000	8.1		20.0				
1,3-Butadiene	0.3962 0.2361	0.2987 0.2316	0.2963	0.2712	0.2617	Ave		0.284 5			19.6		20.0				
Bromomethane	0.2261 0.2243	0.2483 0.2244	0.2546	0.2408	0.2343	Ave		0.236 1		0.1000	5.2		20.0				
Chloroethane	0.1711 0.1694	0.1824 0.1694	0.1965	0.1836	0.1764	Ave		0.178 4		0.1000	5.6		20.0				
Dichlorofluoromethane	0.4293 0.4078	0.4569 0.4009	0.4800	0.4495	0.4294	Ave		0.436 2		0.1000	6.4		20.0				
Trichlorofluoromethane	0.3753 0.3790	0.4358 0.3852	0.4475	0.4330	0.4236	Ave		0.411 4		0.1000	7.4		20.0				
Ethyl ether	0.1833 0.1897	0.1994 0.1892	0.1984	0.1939	0.1823	Ave		0.190 9			3.5		20.0				
Freon 123a	0.3032 0.2609	0.3088 0.2619	0.3227	0.2915	0.2851	Ave		0.290 6			8.0		20.0				
Acrolein	2.6239 2.1232	2.3576 2.1818	2.1655	2.5762	2.1491	Ave		2.311 0			9.2		20.0				
1,1-Dichloroethene	0.2157 0.2028	0.2147 0.2103	0.2350	0.2161	0.2133	Ave		0.215 4		0.1000	4.5		20.0				
Freon 113	0.2086 0.1914	0.2084 0.1997	0.2322	0.2167	0.2127	Ave		0.210 0		0.1000	6.2		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 Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Acetone	3.4778 2.1455	2.5760 2.2092	2.4701	2.6493	2.2166	Ave		2.534 9		0.1000	18.1		20.0				
Methyl iodide	0.4106 0.3938	0.4131 0.3949	0.4284	0.4138	0.4002	Ave		0.407 8			3.0		20.0				
Carbon disulfide	0.4919 0.5411	0.4859 0.5815	0.5418	0.5089	0.5272	Ave		0.525 5		0.1000	6.3		20.0				
Methyl acetate	10.313 6.2877	9.3831 6.9017	6.8543	8.4020	6.8845	Ave		7.860 9		0.1000	19.4		20.0				
Allyl chloride	0.3032 0.2813	0.2953 0.2871	0.3053	0.2818	0.2808	Ave		0.290 7			3.6		20.0				
Methylene Chloride	0.2445 0.2293	0.2399 0.2317	0.2458	0.2471	0.2324	Ave		0.238 7		0.1000	3.1		20.0				
t-Butyl alcohol	0.9975 0.7912	1.0123 0.7800	0.8639	0.9552	0.8038	Ave		0.886 3			11.3		20.0				
Acrylonitrile	3.2430 3.1698	3.2122 3.2622	3.2828	4.0348	3.3342	Ave		3.362 7			8.9		20.0				
Methyl tert-butyl ether	0.6462 0.5929	0.6119 0.5920	0.6317	0.6281	0.6000	Ave		0.614 7		0.1000	3.4		20.0				
trans-1,2-Dichloroethene	0.2496 0.2428	0.2524 0.2450	0.2698	0.2577	0.2438	Ave		0.251 6		0.1000	3.8		20.0				
n-Hexane	0.2811 0.2487	0.2748 0.2591	0.3013	0.2783	0.2787	Ave		0.274 6			6.1		20.0				
1,1-Dichloroethane	0.4064 0.3951	0.4071 0.4018	0.4350	0.4119	0.4039	Ave		0.408 7		0.2000	3.1		20.0				
di-Isopropyl ether	0.6760 0.6619	0.6788 0.6625	0.7011	0.6879	0.6647	Ave		0.676 1			2.2		20.0				
2-Chloro-1,3-butadiene	0.3164 0.3173	0.3198 0.3220	0.3513	0.3301	0.3202	Ave		0.325 3			3.8		20.0				
Ethyl t-butyl ether	0.7048 0.6794	0.7045 0.6779	0.7128	0.7086	0.6813	Ave		0.695 6			2.2		20.0				
2-Butanone (MEK)	5.5023 4.6054	5.1446 4.6640	5.0361	5.4656	4.6368	Ave		5.007 8		0.1000	7.7		20.0				
cis-1,2-Dichloroethene	0.2744 0.2657	0.2693 0.2699	0.2949	0.2793	0.2711	Ave		0.274 9		0.1000	3.6		20.0				
2,2-Dichloropropane	0.3257 0.3224	0.3174 0.3286	0.3642	0.3296	0.3262	Ave		0.330 6			4.6		20.0				

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

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Propionitrile	1.1974 1.1438	1.2290 1.1642	1.1852	1.2956	1.0910	Ave		1.186 6			5.5		20.0				
Methacrylonitrile	5.5175 5.0373	5.2919 5.2107	5.1311	6.0603	5.1499	Ave		5.342 7			6.6		20.0				
Bromochloromethane	0.1284 0.1297	0.1306 0.1313	0.1342	0.1370	0.1307	Ave		0.131 7			2.2		20.0				
Tetrahydrofuran	1.5483 1.3898	1.5357 1.4131	1.4452	1.6678	1.4061	Ave		1.486 6			6.8		20.0				
Chloroform	0.4259 0.4271	0.4441 0.4282	0.4655	0.4460	0.4292	Ave		0.438 0		0.2000	3.4		20.0				
1,1,1-Trichloroethane	0.3682 0.3772	0.3765 0.3819	0.4083	0.3826	0.3803	Ave		0.382 1		0.1000	3.3		20.0				
Cyclohexane	0.3514 0.3240	0.3424 0.3362	0.3762	0.3534	0.3486	Ave		0.347 5		0.1000	4.7		20.0				
Carbon tetrachloride	0.3098 0.3271	0.3130 0.3404	0.3520	0.3295	0.3303	Ave		0.328 9		0.1000	4.5		20.0				
1,1-Dichloropropene	0.3344 0.3239	0.3391 0.3275	0.3783	0.3436	0.3302	Ave		0.339 6			5.4		20.0				
Isobutyl alcohol	0.0040 0.0035	0.0035 0.0035	0.0036	0.0035	0.0036	Ave		0.003 6			5.3		20.0				
Benzene	1.0137 0.9691	1.0044 0.9700	1.0664	1.0122	0.9747	Ave		1.001 5		0.5000	3.5		20.0				
1,2-Dichloroethane	0.3028 0.2669	0.2991 0.2702	0.2930	0.2949	0.2719	Ave		0.285 5		0.1000	5.3		20.0				
t-Amyl methyl ether	0.6645 0.6467	0.6622 0.6516	0.6741	0.6704	0.6463	Ave		0.659 4			1.7		20.0				
n-Heptane	0.3036 0.2605	0.2903 0.2677	0.3149	0.2897	0.2831	Ave		0.287 1			6.6		20.0				
n-Butanol	0.1974 0.2718	0.2570 0.2795	0.2579	0.2757	0.2709	Ave		0.258 6			10.9		20.0				
Trichloroethene	0.2822 0.2691	0.2774 0.2738	0.3033	0.2802	0.2709	Ave		0.279 6		0.2000	4.1		20.0				
Methylcyclohexane	0.4045 0.3915	0.3997 0.4088	0.4542	0.4293	0.4252	Ave		0.416 2		0.1000	5.2		20.0				
1,2-Dichloropropane	0.2360 0.2409	0.2485 0.2430	0.2562	0.2467	0.2429	Ave		0.244 9		0.1000	2.6		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 Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Methyl methacrylate	9.4928 10.459	10.168 10.755	9.6380	11.724	10.611	Ave		10.40 7			7.2		20.0				
Dibromomethane	0.1349 0.1326	0.1299 0.1339	0.1400	0.1379	0.1318	Ave		0.134 4			2.6		20.0				
1,4-Dioxane	0.0084 0.0576	0.0363 0.0532	0.0586	0.0549	0.0578	Lin2	-0.50 3	0.059 4		0.0050				0.9920		0.9900	
Bromodichloromethane	0.2777 0.3038	0.2789 0.3132	0.2991	0.2924	0.2949	Ave		0.294 3		0.2000	4.4		20.0				
2-Nitropropane	2.2316 2.4388	2.1338 2.6914	2.0614	2.4994	2.3243	Ave		2.340 1			9.4		20.0				
cis-1,3-Dichloropropene	0.3279 0.3901	0.3438 0.3988	0.3562	0.3731	0.3797	Ave		0.367 1		0.2000	7.0		20.0				
4-Methyl-2-pentanone (MIBK)	13.414 12.675	13.132 12.621	12.971	14.741	12.720	Ave		13.18 2		0.1000	5.6		20.0				
Toluene	0.8603 0.8405	0.8617 0.8434	0.9414	0.8781	0.8467	Ave		0.867 4		0.4000	4.0		20.0				
trans-1,3-Dichloropropene	0.3451 0.4212	0.3423 0.4346	0.3711	0.3901	0.4004	Ave		0.386 4		0.1000	9.2		20.0				
Ethyl methacrylate	0.3178 0.3541	0.3039 0.3583	0.3247	0.3373	0.3335	Ave		0.332 8			5.8		20.0				
1,1,2-Trichloroethane	0.2596 0.2488	0.2551 0.2487	0.2682	0.2560	0.2494	Ave		0.255 1		0.1000	2.8		20.0				
Tetrachloroethene	0.4436 0.4166	0.4329 0.4188	0.4833	0.4359	0.4269	Ave		0.436 9		0.2000	5.2		20.0				
1,3-Dichloropropane	0.4134 0.4111	0.4179 0.4133	0.4361	0.4240	0.4140	Ave		0.418 5			2.1		20.0				
2-Hexanone	8.9214 9.6179	9.4983 9.6918	9.4755	10.658	9.4019	Ave		9.609 3		0.1000	5.5		20.0				
Dibromochloromethane	0.2258 0.3074	0.2493 0.3246	0.2752	0.2842	0.2866	Ave		0.279 0			12.0		20.0				
1,2-Dibromoethane (EDB)	0.2447 0.2523	0.2417 0.2531	0.2589	0.2567	0.2507	Ave		0.251 1		0.1000	2.5		20.0				
1-Chlorohexane	0.5490 0.4480	0.4868 0.4594	0.5262	0.4744	0.4594	Ave		0.486 2			7.8		20.0				
Chlorobenzene	1.0482 1.0083	1.0601 1.0055	1.1566	1.0573	1.0132	Ave		1.049 9		0.5000	5.0		20.0				

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

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
1,1,1,2-Tetrachloroethane	0.2938 0.3519	0.3212 0.3637	0.3419	0.3427	0.3438	Ave		0.337 0			6.8		20.0				
Ethylbenzene	1.6784 1.6334	1.6670 1.6426	1.8094	1.6932	1.6472	Ave		1.681 6		0.1000	3.6		20.0				
m&p-Xylene	0.6469 0.6636	0.6606 0.6717	0.7412	0.6842	0.6627	Ave		0.675 9		0.1000	4.6		20.0				
o-Xylene	0.6588 0.6598	0.6540 0.6672	0.7102	0.6763	0.6606	Ave		0.669 6		0.3000	2.9		20.0				
Styrene	1.0568 1.1343	1.0818 1.1457	1.2498	1.1465	1.1246	Ave		1.134 2		0.3000	5.4		20.0				
Bromoform	0.1170 0.1861	0.1199 0.2036	0.1523	0.1536	0.1668	Ave		0.157 0		0.1000	20.3	*	20.0				
Isopropylbenzene	1.6553 1.6820	1.6901 1.6850	1.8459	1.7215	1.7026	Ave		1.711 8		0.1000	3.7		20.0				
1,1,2,2-Tetrachloroethane	0.5362 0.5348	0.5068 0.5294	0.5612	0.5429	0.5278	Ave		0.534 2		0.3000	3.1		20.0				
Bromobenzene	0.7422 0.7469	0.7508 0.7407	0.8801	0.7780	0.7496	Ave		0.769 7			6.5		20.0				
trans-1,4-Dichloro-2-butene	4.1093 5.1577	4.4104 5.3912	4.6035	5.3346	4.9205	Ave		4.846 7			10.1		20.0				
1,2,3-Trichloropropane	0.1557 0.1524	0.1486 0.1521	0.1630	0.1531	0.1490	Ave		0.153 4			3.2		20.0				
N-Propylbenzene	3.3134 3.2595	3.3169 3.2002	3.7553	3.3749	3.3206	Ave		3.363 0			5.4		20.0				
2-Chlorotoluene	0.7494 0.7128	0.7310 0.7169	0.8148	0.7280	0.7237	Ave		0.739 5			4.8		20.0				
1,3,5-Trimethylbenzene	2.4462 2.4797	2.4910 2.4712	2.7107	2.5334	2.5017	Ave		2.519 1			3.5		20.0				
4-Chlorotoluene	0.7402 0.7391	0.7448 0.7436	0.9316	0.7592	0.7517	Ave		0.772 9			9.1		20.0				
tert-Butylbenzene	0.5675 0.5876	0.5700 0.5499	0.6245	0.5593	0.6048	Ave		0.580 5			4.6		20.0				
Pentachloroethane	0.3155 0.4701	0.3711 0.4858	0.4066	0.4193	0.4393	Ave		0.415 4			14.1		20.0				
1,2,4-Trimethylbenzene	2.4618 2.5720	2.5342 2.5672	2.8300	2.6244	2.5763	Ave		2.595 1			4.4		20.0				

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

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
sec-Butylbenzene	3.0209 3.0995	3.0817 3.0692	3.5161	3.1802	3.1487	Ave		3.159 5			5.2		20.0				
1,3-Dichlorobenzene	1.5442 1.5232	1.5453 1.5246	1.8960	1.5646	1.5295	Ave		1.589 6		0.6000	8.5		20.0				
p-Isopropyltoluene	2.7640 2.8429	2.7684 2.8386	3.1775	2.9138	2.8617	Ave		2.881 0			4.9		20.0				
1,4-Dichlorobenzene	1.6405 1.5530	1.6011 1.5446	2.1605	1.5914	1.5595	Ave		1.664 4		0.5000	13.3		20.0				
1,2,3-Trimethylbenzene	1.1622 1.1557	1.2054 1.1712	1.2839	1.1941	1.1676	Ave		1.191 4			3.7		20.0				
Benzyl chloride	0.1168 0.2030	0.1277 0.2213	0.1528	0.1677	0.1857	Lin1	-0.03 6	0.213 2						0.9950		0.9900	
n-Butylbenzene	1.3860 1.3654	1.3448 1.3744	1.6035	1.3852	1.3906	Ave		1.407 1			6.3		20.0				
1,2-Dichlorobenzene	1.4594 1.4234	1.4457 1.4307	1.7714	1.4790	1.4319	Ave		1.491 6		0.4000	8.4		20.0				
1,2-Dibromo-3-Chloropropane	0.0658 0.0888	0.0624 0.0903	0.0820	0.0794	0.0820	Ave		0.078 7		0.0500	13.6		20.0				
1,3,5-Trichlorobenzene	1.2395 1.2312	1.2450 1.2236	1.5527	1.2483	1.2304	Ave		1.281 5			9.4		20.0				
1,2,4-Trichlorobenzene	1.1208 1.1481	1.0886 1.1425	1.6215	1.1511	1.1395	Ave		1.201 7		0.2000	15.5		20.0				
Hexachlorobutadiene	0.5384 0.5484	0.5610 0.5478	0.6878	0.5522	0.5513	Ave		0.569 5			9.2		20.0				
Naphthalene	1.8901 2.0290	1.8524 2.0047	2.5023	1.9831	1.9750	Ave		2.033 8			10.6		20.0				
1,2,3-Trichlorobenzene	1.0098 1.0256	0.9910 1.0107	1.3766	1.0111	1.0095	Ave		1.062 1			13.1		20.0				
Dibromofluoromethane (Surr)	0.2463 0.2469	0.2483 0.2506	0.2474	0.2505	0.2479	Ave		0.248 3			0.7		20.0				
1,2-Dichloroethane-d4 (Surr)	0.0544 0.0519	0.0530 0.0521	0.0525	0.0529	0.0523	Ave		0.052 7			1.6		20.0				
Toluene-d8 (Surr)	1.2730 1.2819	1.2824 1.2832	1.2802	1.2839	1.2798	Ave		1.280 6			0.3		20.0				
4-Bromofluorobenzene (Surr)	0.4749 0.4773	0.4762 0.4769	0.4759	0.4777	0.4778	Ave		0.476 7			0.2		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 Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-286414/13	GG16X12.D
Level 2	IC 410-286414/14	GG16X13.D
Level 3	IC 410-286414/15	GG16X14.D
Level 4	IC 410-286414/16	GG16X15.D
Level 5	IC 410-286414/17	GG16X16.D
Level 6	ICIS 410-286414/18	GG16X17.D
Level 7	IC 410-286414/19	GG16X18.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7				LVL 6	LVL 7			
Dichlorodifluoromethane	FB	Ave	10833 543104	29864 1418980	64970	121942	309456	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	13270 623926	35763 1527322	71408	135367	324413	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	12126 651365	34951 1653785	75827	139755	342332	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	17469 549707	33291 1383220	66066	121727	300502	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	9970 522151	27671 1340018	56777	108098	269090	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	7546 394390	20330 1011950	43829	82418	202614	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	18929 949402	50922 2394155	107037	201792	493140	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	16549 882397	48579 2300799	99801	194398	486482	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	8083 441887	22237 1130526	44254	87075	209424	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 123a	FB	Ave	13369 607384	34418 1564197	71956	130855	327426	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBA 10	Ave	69888 3027113	151628 7837578	296541	643594	1523859	10.00 500	25.0 1250	50.0	100.0	250
1,1-Dichloroethene	FB	Ave	9511 472163	23932 1255687	52396	96997	245013	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 113	FB	Ave	9199 445620	23226 1192898	51784	97302	244299	0.200 10.0	0.500 25.0	1.00	2.00	5.00



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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Acetone	TBAd 10	Ave	18527	33136	67653	132378	314354	2.00	5.00	10.0	20.0	50.0
			611780	1587280				100	250			
Methyl iodide	FB	Ave	18105	46041	95536	185762	459604	0.200	0.500	1.00	2.00	5.00
			916804	2358489				10.0	25.0			
Carbon disulfide	FB	Ave	21688	54155	120809	228472	605450	0.200	0.500	1.00	2.00	5.00
			1259914	3472934				10.0	25.0			
Methyl acetate	TBAd 10	Ave	5494	12070	18773	41982	97635	0.200	0.500	1.00	2.00	5.00
			179295	495870				10.0	25.0			
Allyl chloride	FB	Ave	13371	32910	68077	126514	322428	0.200	0.500	1.00	2.00	5.00
			654957	1714730				10.0	25.0			
Methylene Chloride	FB	Ave	10782	26736	54805	110925	266839	0.200	0.500	1.00	2.00	5.00
			533973	1383829				10.0	25.0			
t-Butyl alcohol	TBAd 10	Ave	10628	26043	47324	95457	227979	4.00	10.0	20.0	40.0	100
			451212	1120844				200	500			
Acrylonitrile	TBAd 10	Ave	4319	10330	22478	50401	118213	0.500	1.25	2.50	5.00	12.5
			225968	585945				25.0	62.5			
Methyl tert-butyl ether	FB	Ave	28492	68201	140874	281948	689081	0.200	0.500	1.00	2.00	5.00
			1380419	3535898				10.0	25.0			
trans-1,2-Dichloroethene	FB	Ave	11005	28136	60166	115672	280004	0.200	0.500	1.00	2.00	5.00
			565209	1463454				10.0	25.0			
n-Hexane	FB	Ave	12394	30635	67189	124939	320065	0.200	0.500	1.00	2.00	5.00
			578952	1547621				10.0	25.0			
1,1-Dichloroethane	FB	Ave	17921	45372	96997	184918	463810	0.200	0.500	1.00	2.00	5.00
			919788	2399785				10.0	25.0			
di-Isopropyl ether	FB	Ave	29808	75661	156342	308794	763339	0.200	0.500	1.00	2.00	5.00
			1541107	3956491				10.0	25.0			
2-Chloro-1,3-butadiene	FB	Ave	13953	35647	78331	148170	367689	0.200	0.500	1.00	2.00	5.00
			738815	1923095				10.0	25.0			
Ethyl t-butyl ether	FB	Ave	31075	78529	158948	318098	782406	0.200	0.500	1.00	2.00	5.00
			1581755	4048605				10.0	25.0			
2-Butanone (MEK)	TBAd 10	Ave	29312	66177	137933	273098	657590	2.00	5.00	10.0	20.0	50.0

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1313238	3350978				100	250			
cis-1,2-Dichloroethene	FB	Ave	12099 618550	30021 1611946	65758	125389	311354	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	14359 750727	35373 1962445	81208	147961	374656	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd 10	Ave	12758 652308	31618 1672892	64922	129473	309435	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd 10	Ave	29393 1436385	68072 3743786	140534	302812	730347	2.00 100	5.00 250	10.0	20.0	50.0
Bromochloromethane	FB	Ave	5663 302068	14558 784323	29925	61518	150087	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd 10	Ave	4124 198158	9877 507621	19791	41668	99709	1.00 50.0	2.50 125	5.00	10.0	25.0
Chloroform	FB	Ave	18779 994318	49500 2557412	103813	200225	492942	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	16235 878121	41961 2280597	91058	171777	436738	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	15495 754352	38165 2007902	83885	158669	400341	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	13659 761646	34892 2033131	78504	147932	379275	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	14746 754145	37795 1956120	84366	154228	379228	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	FB	Ave	8806 402616	19769 1033218	39678	77842	207990	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	44699 2256270	111956 5793032	237804	454392	1119385	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	13351 621312	33333 1613440	65349	132376	312259	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	29301 1505621	73806 3891489	150323	300963	742232	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	13386 606617	32359 1598920	70226	130073	325135	0.200 10.0	0.500 25.0	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
n-Butanol	TBAd 10	Ave	9201	28924	61810	120549	336181	17.5	43.8	87.5	175	438
			678077	1757161				875	2188			
Trichloroethene	FB	Ave	12445	30922	67641	125798	311065	0.200	0.500	1.00	2.00	5.00
			626486	1634955				10.0	25.0			
Methylcyclohexane	FB	Ave	17837	44548	101289	192698	488253	0.200	0.500	1.00	2.00	5.00
			911479	2441489				10.0	25.0			
1,2-Dichloropropane	FB	Ave	10406	27694	57142	110737	278961	0.200	0.500	1.00	2.00	5.00
			560993	1450984				10.0	25.0			
Methyl methacrylate	TBAd 10	Ave	5057	13080	26397	58583	150481	0.200	0.500	1.00	2.00	5.00
			298228	772725				10.0	25.0			
Dibromomethane	FB	Ave	5946	14481	31212	61890	151360	0.200	0.500	1.00	2.00	5.00
			308678	799889				10.0	25.0			
1,4-Dioxane	TBAd 10	Lin2	225	2333	8023	13711	40992	10.0	25.0	50.0	100	250
			82057	191177				500	1250			
Bromodichloromethane	FB	Ave	12244	31086	66707	131278	338682	0.200	0.500	1.00	2.00	5.00
			707245	1870494				10.0	25.0			
2-Nitropropane	TBAd 10	Ave	5944	13724	28229	62444	164814	1.00	2.50	5.00	10.0	25.0
			347717	966836				50.0	125			
cis-1,3-Dichloropropene	FB	Ave	14460	38315	79430	167481	436053	0.200	0.500	1.00	2.00	5.00
			908206	2381867				10.0	25.0			
4-Methyl-2-pentanone (MIBK)	TBAd 10	Ave	71460	168921	355253	736571	1803882	2.00	5.00	10.0	20.0	50.0
			3614306	9067989				100	250			
Toluene	CBZd 5	Ave	29966	75624	166283	310469	768926	0.200	0.500	1.00	2.00	5.00
			1543929	3979367				10.0	25.0			
trans-1,3-Dichloropropene	CBZd 5	Ave	12020	30039	65556	137931	363656	0.200	0.500	1.00	2.00	5.00
			773723	2050452				10.0	25.0			
Ethyl methacrylate	CBZd 5	Ave	11070	26673	57347	119274	302877	0.200	0.500	1.00	2.00	5.00
			650478	1690447				10.0	25.0			

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,1,2-Trichloroethane	CBZd 5	Ave	9043	22386	47367	90526	226496	0.200	0.500	1.00	2.00	5.00
			457075	1173341					10.0	25.0		
Tetrachloroethene	CBZd 5	Ave	15452	37991	85370	154129	387678	0.200	0.500	1.00	2.00	5.00
			765371	1975922					10.0	25.0		
1,3-Dichloropropane	CBZd 5	Ave	14400	36673	77024	149909	375996	0.200	0.500	1.00	2.00	5.00
			755285	1950083					10.0	25.0		
2-Hexanone	TBAd 10	Ave	47526	122181	259520	532561	1333367	2.00	5.00	10.0	20.0	50.0
			2742555	6963294					100	250		
Dibromochloromethane	CBZd 5	Ave	7866	21881	48615	100469	260325	0.200	0.500	1.00	2.00	5.00
			564766	1531577					10.0	25.0		
1,2-Dibromoethane (EDB)	CBZd 5	Ave	8523	21212	45733	90775	227669	0.200	0.500	1.00	2.00	5.00
			463425	1193896					10.0	25.0		
1-Chlorohexane	CBZd 5	Ave	19124	42721	92947	167744	417226	0.200	0.500	1.00	2.00	5.00
			822913	2167500					10.0	25.0		
Chlorobenzene	CBZd 5	Ave	36514	93034	204292	373854	920189	0.200	0.500	1.00	2.00	5.00
			1852203	4743809					10.0	25.0		
1,1,1,2-Tetrachloroethane	CBZd 5	Ave	10235	28190	60398	121181	312197	0.200	0.500	1.00	2.00	5.00
			646499	1716072					10.0	25.0		
Ethylbenzene	CBZd 5	Ave	58464	146301	319592	598666	1495963	0.200	0.500	1.00	2.00	5.00
			3000498	7749772					10.0	25.0		
m&p-Xylene	CBZd 5	Ave	45066	115958	261822	483843	1203658	0.400	1.00	2.00	4.00	10.0
			2438249	6338596					20.0	50.0		
o-Xylene	CBZd 5	Ave	22948	57392	125445	239128	599982	0.200	0.500	1.00	2.00	5.00
			1212115	3147850					10.0	25.0		

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Styrene	CBZd 5	Ave	36813	94941	220754	405386	1021299	0.200	0.500	1.00	2.00	5.00
			2083651	5405404					10.0	25.0		
Bromoform	CBZd 5	Ave	4074	10522	26899	54321	151523	0.200	0.500	1.00	2.00	5.00
			341791	960530					10.0	25.0		
Isopropylbenzene	CBZd 5	Ave	57659	148324	326045	608693	1546232	0.200	0.500	1.00	2.00	5.00
			3089905	7949878					10.0	25.0		
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	11082	26537	58969	114734	283824	0.200	0.500	1.00	2.00	5.00
			586290	1506637					10.0	25.0		
Bromobenzene	DCBd 4	Ave	15338	39314	92485	164416	403102	0.200	0.500	1.00	2.00	5.00
			818805	2107684					10.0	25.0		
trans-1,4-Dichloro-2-butene	TBAd 10	Ave	21891	56733	126083	266551	697816	2.00	5.00	10.0	20.0	50.0
			1470724	3873432					100	250		
1,2,3-Trichloropropane	DCBd 4	Ave	3217	7781	17133	32366	80131	0.200	0.500	1.00	2.00	5.00
			167099	432760					10.0	25.0		
N-Propylbenzene	DCBd 4	Ave	68475	173695	394622	713265	1785725	0.200	0.500	1.00	2.00	5.00
			3573339	9106742					10.0	25.0		
2-Chlorotoluene	DCBd 4	Ave	15487	38278	85619	153864	389174	0.200	0.500	1.00	2.00	5.00
			781491	2040219					10.0	25.0		
1,3,5-Trimethylbenzene	DCBd 4	Ave	50554	130441	284846	535420	1345338	0.200	0.500	1.00	2.00	5.00
			2718476	7032261					10.0	25.0		
4-Chlorotoluene	DCBd 4	Ave	15297	39001	97891	160453	404234	0.200	0.500	1.00	2.00	5.00
			810236	2115951					10.0	25.0		
tert-Butylbenzene	DCBd 4	Ave	11728	29851	65628	118213	325244	0.200	0.500	1.00	2.00	5.00
			644132	1564947					10.0	25.0		

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Pentachloroethane	DCBd 4	Ave	6521	19435	42730	88614	236231	0.200	0.500	1.00	2.00	5.00
			515383	1382400				10.0	25.0			
1,2,4-Trimethylbenzene	DCBd 4	Ave	50876	132706	297385	554653	1385450	0.200	0.500	1.00	2.00	5.00
			2819726	7305524				10.0	25.0			
sec-Butylbenzene	DCBd 4	Ave	62431	161376	369489	672099	1693291	0.200	0.500	1.00	2.00	5.00
			3397918	8733955				10.0	25.0			
1,3-Dichlorobenzene	DCBd 4	Ave	31913	80921	199241	330665	822505	0.200	0.500	1.00	2.00	5.00
			1669850	4338435				10.0	25.0			
p-Isopropyltoluene	DCBd 4	Ave	57121	144968	333901	615806	1538963	0.200	0.500	1.00	2.00	5.00
			3116611	8077811				10.0	25.0			
1,4-Dichlorobenzene	DCBd 4	Ave	33904	83845	227035	336330	838636	0.200	0.500	1.00	2.00	5.00
			1702506	4395359				10.0	25.0			
1,2,3-Trimethylbenzene	DCBd 4	Ave	24019	63120	134921	252371	627888	0.200	0.500	1.00	2.00	5.00
			1267015	3332795				10.0	25.0			
Benzyl chloride	DCBd 4	Linl	2414	6688	16060	35450	99881	0.200	0.500	1.00	2.00	5.00
			222558	629836				10.0	25.0			
n-Butylbenzene	DCBd 4	Ave	28644	70421	168500	292758	747850	0.200	0.500	1.00	2.00	5.00
			1496880	3911257				10.0	25.0			
1,2-Dichlorobenzene	DCBd 4	Ave	30160	75705	186141	312578	770054	0.200	0.500	1.00	2.00	5.00
			1560520	4071402				10.0	25.0			
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1359	3270	8619	16770	44123	0.200	0.500	1.00	2.00	5.00
			97321	256886				10.0	25.0			
1,3,5-Trichlorobenzene	DCBd 4	Ave	25616	65196	163162	263813	661659	0.200	0.500	1.00	2.00	5.00
			1349753	3481934				10.0	25.0			

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2,4-Trichlorobenzene	DCBd 4	Ave	23162	57005	170397	243272	612781	0.200	0.500	1.00	2.00	5.00
			1258666	3251198				10.0	25.0			
Hexachlorobutadiene	DCBd 4	Ave	11127	29376	72272	116692	296487	0.200	0.500	1.00	2.00	5.00
			601182	1558972				10.0	25.0			
Naphthalene	DCBd 4	Ave	39062	97004	262955	419110	1062115	0.200	0.500	1.00	2.00	5.00
			2224425	5704671				10.0	25.0			
1,2,3-Trichlorobenzene	DCBd 4	Ave	20869	51896	144662	213681	542883	0.200	0.500	1.00	2.00	5.00
			1124358	2876206				10.0	25.0			
Dibromofluoromethane (Surr)	FB	Ave	542956	553438	551657	562381	569458	10.0	10.0	10.0	10.0	10.0
			574786	598690				10.0	10.0			
1,2-Dichloroethane-d4 (Surr)	FB	Ave	119857	118255	117134	118676	120145	10.0	10.0	10.0	10.0	10.0
			120860	124380				10.0	10.0			
Toluene-d8 (Surr)	CBZd 5	Ave	2217229	2250850	2261224	2269767	2324549	10.0	10.0	10.0	10.0	10.0
			2354853	2421715				10.0	10.0			
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	827194	835927	840581	844497	867829	10.0	10.0	10.0	10.0	10.0
			876789	899968				10.0	10.0			

Curve Type Legend

Ave = Average ISTD  
Lin1 = Linear 1/conc ISTD  
Lin2 = Linear 1/conc^2 ISTD

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-286414/13	GG16X12.D
Level 2	IC 410-286414/14	GG16X13.D
Level 3	IC 410-286414/15	GG16X14.D
Level 4	IC 410-286414/16	GG16X15.D
Level 5	IC 410-286414/17	GG16X16.D
Level 6	ICIS 410-286414/18	GG16X17.D
Level 7	IC 410-286414/19	GG16X18.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Dichlorodifluoromethane	-5.3 -8.5	3.2	12.2	4.7	3.8	-10.1	50 30	30	30	30	30	30
Chloromethane	2.8 -12.7	9.6	9.4	3.0	-3.5	-8.5	50 30	30	30	30	30	30
Vinyl chloride	-8.1 -7.5	4.8	13.6	4.0	-0.4	-6.5	50 30	30	30	30	30	30
1,3-Butadiene	39.2 -18.6	5.0	4.1	-4.7	-8.0	-17.0	50 30	30	30	30	30	30
Bromomethane	-4.2 -5.0	5.1	7.8	2.0	-0.8	-5.0	50 30	30	30	30	30	30
Chloroethane	-4.1 -5.0	2.2	10.2	2.9	-1.1	-5.1	50 30	30	30	30	30	30
Dichlorofluoromethane	-1.6 -8.1	4.7	10.0	3.0	-1.6	-6.5	50 30	30	30	30	30	30
Trichlorofluoromethane	-8.8 -6.4	5.9	8.8	5.3	3.0	-7.9	50 30	30	30	30	30	30
Ethyl ether	-4.0 -0.9	4.5	3.9	1.6	-4.5	-0.6	50 30	30	30	30	30	30
Freon 123a	4.3 -9.9	6.3	11.0	0.3	-1.9	-10.2	50 30	30	30	30	30	30
Acrolein	13.5 -5.6	2.0	-6.3	11.5	-7.0	-8.1	50 30	30	30	30	30	30
1,1-Dichloroethene	0.1 -2.4	-0.3	9.1	0.3	-1.0	-5.9	50 30	30	30	30	30	30
Freon 113	-0.6 -4.9	-0.8	10.6	3.2	1.3	-8.8	50 30	30	30	30	30	30
Acetone	37.2 -12.8	1.6	-2.6	4.5	-12.6	-15.4	50 30	30	30	30	30	30



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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Methyl iodide	0.7 -3.2	1.3	5.0	1.5	-1.9	-3.4	50 30	30	30	30	30	30
Carbon disulfide	-6.4 10.7	-7.5	3.1	-3.1	0.3	3.0	50 30	30	30	30	30	30
Methyl acetate	31.2 -12.2	19.4	-12.8	6.9	-12.4	-20.0	50 30	30	30	30	30	30
Allyl chloride	4.3 -1.2	1.6	5.0	-3.0	-3.4	-3.2	50 30	30	30	30	30	30
Methylene Chloride	2.5 -2.9	0.5	3.0	3.5	-2.6	-3.9	50 30	30	30	30	30	30
t-Butyl alcohol	12.6 -12.0	14.2	-2.5	7.8	-9.3	-10.7	50 30	30	30	30	30	30
Acrylonitrile	-3.6 -3.0	-4.5	-2.4	20.0	-0.8	-5.7	50 30	30	30	30	30	30
Methyl tert-butyl ether	5.1 -3.7	-0.5	2.8	2.2	-2.4	-3.5	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	-0.8 -2.6	0.3	7.2	2.4	-3.1	-3.5	50 30	30	30	30	30	30
n-Hexane	2.4 -5.6	0.1	9.7	1.4	1.5	-9.4	50 30	30	30	30	30	30
1,1-Dichloroethane	-0.6 -1.7	-0.4	6.4	0.8	-1.2	-3.3	50 30	30	30	30	30	30
di-Isopropyl ether	0.0 -2.0	0.4	3.7	1.7	-1.7	-2.1	50 30	30	30	30	30	30
2-Chloro-1,3-butadiene	-2.7 -1.0	-1.7	8.0	1.5	-1.6	-2.5	50 30	30	30	30	30	30
Ethyl t-butyl ether	1.3 -2.5	1.3	2.5	1.9	-2.1	-2.3	50 30	30	30	30	30	30
2-Butanone (MEK)	9.9 -6.9	2.7	0.6	9.1	-7.4	-8.0	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	-0.2 -1.8	-2.0	7.3	1.6	-1.4	-3.4	50 30	30	30	30	30	30
2,2-Dichloropropane	-1.5 -0.6	-4.0	10.2	-0.3	-1.3	-2.5	50 30	30	30	30	30	30
Propionitrile	0.9 -1.9	3.6	-0.1	9.2	-8.1	-3.6	50 30	30	30	30	30	30
Methacrylonitrile	3.3 -2.5	-1.0	-4.0	13.4	-3.6	-5.7	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromochloromethane	-2.5 -0.3	-0.8	1.9	4.0	-0.8	-1.5	50 30	30	30	30	30	30
Tetrahydrofuran	4.2 -4.9	3.3	-2.8	12.2	-5.4	-6.5	50 30	30	30	30	30	30
Chloroform	-2.8 -2.2	1.4	6.3	1.8	-2.0	-2.5	50 30	30	30	30	30	30
1,1,1-Trichloroethane	-3.6 -0.1	-1.5	6.9	0.1	-0.5	-1.3	50 30	30	30	30	30	30
Cyclohexane	1.1 -3.2	-1.5	8.3	1.7	0.3	-6.8	50 30	30	30	30	30	30
Carbon tetrachloride	-5.8 3.5	-4.8	7.0	0.2	0.4	-0.5	50 30	30	30	30	30	30
1,1-Dichloropropene	-1.5 -3.5	-0.1	11.4	1.2	-2.8	-4.6	50 30	30	30	30	30	30
Isobutyl alcohol	11.4 -3.5	-1.1	-0.8	-3.3	1.0	-3.6	50 30	30	30	30	30	30
Benzene	1.2 -3.1	0.3	6.5	1.1	-2.7	-3.2	50 30	30	30	30	30	30
1,2-Dichloroethane	6.0 -5.4	4.7	2.6	3.3	-4.8	-6.5	50 30	30	30	30	30	30
t-Amyl methyl ether	0.8 -1.2	0.4	2.2	1.7	-2.0	-1.9	50 30	30	30	30	30	30
n-Heptane	5.7 -6.8	1.1	9.7	0.9	-1.4	-9.3	50 30	30	30	30	30	30
n-Butanol	-23.7 8.1	-0.6	-0.3	6.6	4.8	5.1	50 30	30	30	30	30	30
Trichloroethene	1.0 -2.1	-0.8	8.5	0.2	-3.1	-3.7	50 30	30	30	30	30	30
Methylcyclohexane	-2.8 -1.8	-4.0	9.1	3.1	2.2	-5.9	50 30	30	30	30	30	30
1,2-Dichloropropane	-3.6 -0.8	1.5	4.6	0.7	-0.8	-1.6	50 30	30	30	30	30	30
Methyl methacrylate	-8.8 3.3	-2.3	-7.4	12.7	2.0	0.5	50 30	30	30	30	30	30
Dibromomethane	0.3 -0.4	-3.3	4.1	2.6	-1.9	-1.4	50 30	30	30	30	30	30
1,4-Dioxane	-1.1 -9.7	-5.0	15.6	0.9	0.7	-1.4	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromodichloromethane	-5.6 6.4	-5.2	1.6	-0.6	0.2	3.2	50 30	30	30	30	30	30
2-Nitropropane	-4.6 15.0	-8.8	-11.9	6.8	-0.7	4.2	50 30	30	30	30	30	30
cis-1,3-Dichloropropene	-10.7 8.6	-6.4	-3.0	1.6	3.4	6.3	50 30	30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	1.8 -4.3	-0.4	-1.6	11.8	-3.5	-3.8	50 30	30	30	30	30	30
Toluene	-0.8 -2.8	-0.7	8.5	1.2	-2.4	-3.1	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-10.7 12.5	-11.4	-3.9	1.0	3.6	9.0	50 30	30	30	30	30	30
Ethyl methacrylate	-4.5 7.7	-8.7	-2.4	1.4	0.2	6.4	50 30	30	30	30	30	30
1,1,2-Trichloroethane	1.8 -2.5	0.0	5.1	0.4	-2.2	-2.5	50 30	30	30	30	30	30
Tetrachloroethene	1.5 -4.1	-0.9	10.6	-0.2	-2.3	-4.6	50 30	30	30	30	30	30
1,3-Dichloropropane	-1.2 -1.2	-0.2	4.2	1.3	-1.1	-1.8	50 30	30	30	30	30	30
2-Hexanone	-7.2 0.9	-1.2	-1.4	10.9	-2.2	0.1	50 30	30	30	30	30	30
Dibromochloromethane	-19.1 16.3	-10.6	-1.4	1.8	2.7	10.2	50 30	30	30	30	30	30
1,2-Dibromoethane (EDB)	-2.6 0.8	-3.8	3.1	2.2	-0.2	0.4	50 30	30	30	30	30	30
1-Chlorohexane	12.9 -5.5	0.1	8.2	-2.4	-5.5	-7.9	50 30	30	30	30	30	30
Chlorobenzene	-0.2 -4.2	1.0	10.2	0.7	-3.5	-4.0	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-12.8 7.9	-4.7	1.5	1.7	2.0	4.4	50 30	30	30	30	30	30
Ethylbenzene	-0.2 -2.3	-0.9	7.6	0.7	-2.0	-2.9	50 30	30	30	30	30	30
m&p-Xylene	-4.3 -0.6	-2.3	9.7	1.2	-1.9	-1.8	50 30	30	30	30	30	30
o-Xylene	-1.6 -0.4	-2.3	6.1	1.0	-1.3	-1.5	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Styrene	-6.8 1.0	-4.6	10.2	1.1	-0.9	0.0	50 30	30	30	30	30	30
Bromoform	-25.5 29.6	-23.7	-3.0	-2.2	6.2	18.5	50 30	30	30	30	30	30
Isopropylbenzene	-3.3 -1.6	-1.3	7.8	0.6	-0.5	-1.7	50 30	30	30	30	30	30
1,1,2,2-Tetrachloroethane	0.4 -0.9	-5.1	5.1	1.6	-1.2	0.1	50 30	30	30	30	30	30
Bromobenzene	-3.6 -3.8	-2.5	14.3	1.1	-2.6	-3.0	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	-15.2 11.2	-9.0	-5.0	10.1	1.5	6.4	50 30	30	30	30	30	30
1,2,3-Trichloropropane	1.5 -0.9	-3.1	6.3	-0.2	-2.9	-0.7	50 30	30	30	30	30	30
N-Propylbenzene	-1.5 -4.8	-1.4	11.7	0.4	-1.3	-3.1	50 30	30	30	30	30	30
2-Chlorotoluene	1.3 -3.1	-1.2	10.2	-1.6	-2.1	-3.6	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	-2.9 -1.9	-1.1	7.6	0.6	-0.7	-1.6	50 30	30	30	30	30	30
4-Chlorotoluene	-4.2 -3.8	-3.6	20.5	-1.8	-2.7	-4.4	50 30	30	30	30	30	30
tert-Butylbenzene	-2.2 -5.3	-1.8	7.6	-3.6	4.2	1.2	50 30	30	30	30	30	30
Pentachloroethane	-24.0 16.9	-10.7	-2.1	0.9	5.7	13.2	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	-5.1 -1.1	-2.3	9.0	1.1	-0.7	-0.9	50 30	30	30	30	30	30
sec-Butylbenzene	-4.4 -2.9	-2.5	11.3	0.7	-0.3	-1.9	50 30	30	30	30	30	30
1,3-Dichlorobenzene	-2.9 -4.1	-2.8	19.3	-1.6	-3.8	-4.2	50 30	30	30	30	30	30
p-Isopropyltoluene	-4.1 -1.5	-3.9	10.3	1.1	-0.7	-1.3	50 30	30	30	30	30	30
1,4-Dichlorobenzene	-1.4 -7.2	-3.8	29.8	-4.4	-6.3	-6.7	50 30	30	30	30	30	30
1,2,3-Trimethylbenzene	-2.5 -1.7	1.2	7.8	0.2	-2.0	-3.0	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 286414

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2022 17:26 Calibration End Date: 08/16/2022 19:38 Calibration ID: 41911

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Benzyl chloride	39.0 4.5	-6.4	-11.5	-12.9	-9.5	-3.1	50 30	30	30	30	30	30
n-Butylbenzene	-1.5 -2.3	-4.4	14.0	-1.6	-1.2	-3.0	50 30	30	30	30	30	30
1,2-Dichlorobenzene	-2.2 -4.1	-3.1	18.8	-0.8	-4.0	-4.6	50 30	30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-16.4 14.8	-20.6	4.3	0.9	4.3	12.8	50 30	30	30	30	30	30
1,3,5-Trichlorobenzene	-3.3 -4.5	-2.8	21.2	-2.6	-4.0	-3.9	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-6.7 -4.9	-9.4	34.9 *	-4.2	-5.2	-4.5	50 30	30	30	30	30	30
Hexachlorobutadiene	-5.5 -3.8	-1.5	20.8	-3.1	-3.2	-3.7	50 30	30	30	30	30	30
Naphthalene	-7.1 -1.4	-8.9	23.0	-2.5	-2.9	-0.2	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	-4.9 -4.8	-6.7	29.6	-4.8	-4.9	-3.4	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	-0.8 0.9	0.0	-0.4	0.9	-0.1	-0.6	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	3.1 -1.3	0.6	-0.4	0.3	-0.8	-1.6	50 30	30	30	30	30	30
Toluene-d8 (Surr)	-0.6 0.2	0.1	0.0	0.3	-0.1	0.1	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	-0.4 0.0	-0.1	-0.2	0.2	0.2	0.1	50 30	30	30	30	30	30

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X12.D  
 Lims ID: IC std1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 16-Aug-2022 17:26:30 ALS Bottle#: 12 Worklist Smp#: 13  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0064243-013  
 Misc. Info.: IC STD1  
 Operator ID: knk41612 Instrument ID: 16334  
 Sublist: chrom-MSV\_16334\_25mL\*sub4  
 Method: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 30-Aug-2022 10:48:25 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1639

First Level Reviewer: DVW2

Date: 17-Aug-2022 11:33:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.898	1.892	0.006	98	10833	0.2000	0.1893	
5 Chloromethane	50	2.093	2.087	0.006	97	13270	0.2000	0.2056	
6 Vinyl chloride	62	2.209	2.202	0.007	97	12126	0.2000	0.1838	
7 Butadiene	39	2.215	2.215	0.000	92	17469	0.2000	0.2785	M
9 Bromomethane	94	2.538	2.526	0.012	90	9970	0.2000	0.1915	
10 Chloroethane	64	2.605	2.599	0.006	99	7546	0.2000	0.1918	
11 Dichlorofluoromethane	67	2.855	2.836	0.019	96	18929	0.2000	0.1968	
12 Trichlorofluoromethane	101	2.910	2.904	0.006	92	16549	0.2000	0.1825	
13 Ethyl ether	59	3.135	3.123	0.012	85	8083	0.2001	0.1921	M
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.227	3.221	0.006	90	13369	0.2000	0.2087	
17 Acrolein	56	3.300	3.288	0.012	98	69888	10.0	11.4	
18 1,1-Dichloroethene	96	3.428	3.416	0.012	97	9511	0.2000	0.2003	
20 Acetone	43	3.489	3.458	0.031	72	18527	2.00	2.74	M
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.465	3.464	0.000	86	9199	0.2000	0.1987	
21 Iodomethane	142	3.623	3.605	0.018	98	18105	0.2000	0.2014	
22 Ethyl bromide	108	3.635	3.629	0.006	94	8307	0.2000	0.1905	
24 Isopropyl alcohol	45	3.721	3.690	0.031	29	6073	4.00	4.98	
23 Carbon disulfide	76	3.714	3.702	0.012	98	21688	0.2000	0.1872	M
25 Methyl acetate	43	3.879	3.855	0.024	27	5494	0.2000	0.2624	M
27 3-Chloro-1-propene	41	3.879	3.873	0.006	85	13371	0.2000	0.2086	
29 Methylene Chloride	84	4.068	4.056	0.012	88	10782	0.2000	0.2049	
* 30 t-Butyl alcohol-d10 (IS)	65	4.153	4.141	0.012	62	133180	50.0	50.0	
31 2-Methyl-2-propanol	59	4.306	4.245	0.061	28	10628	4.00	4.50	
32 Acrylonitrile	53	4.416	4.391	0.025	27	4319	0.5000	0.4822	
33 Methyl tert-butyl ether	73	4.452	4.446	0.006	91	28492	0.2000	0.2102	
34 trans-1,2-Dichloroethene	96	4.464	4.458	0.006	96	11005	0.2000	0.1984	
35 Hexane	57	4.885	4.885	0.000	89	12394	0.2000	0.2047	
37 1,1-Dichloroethane	63	5.135	5.123	0.012	41	17921	0.2000	0.1989	M
38 Isopropyl ether	45	5.190	5.184	0.006	92	29808	0.2000	0.2000	
39 2-Chloro-1,3-butadiene	53	5.245	5.232	0.013	89	13953	0.2000	0.1946	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.726	5.720	0.006	96	31075	0.2000	0.2026	
41 2-Butanone (MEK)	43	5.946	5.933	0.013	99	29312	2.00	2.20	
42 cis-1,2-Dichloroethene	96	5.964	5.964	0.000	78	12099	0.2000	0.1996	
43 2,2-Dichloropropane	77	5.988	5.976	0.012	58	14359	0.2000	0.1970	
45 Propionitrile	54	6.055	6.025	0.030	96	12758	4.00	4.04	
S 47 1,2-Dichloroethene, Total	100				0			0.3980	
48 Methacrylonitrile	67	6.257	6.238	0.019	90	29393	2.00	2.07	
49 Chlorobromomethane	128	6.299	6.293	0.006	80	5663	0.2000	0.1950	
50 Tetrahydrofuran	71	6.324	6.299	0.025	73	4124	1.00	1.04	
51 Chloroform	83	6.452	6.452	0.000	92	18779	0.2000	0.1945	
\$ 52 Dibromofluoromethane (Surr)	113	6.671	6.665	0.006	94	542956	10.0	9.92	
53 1,1,1-Trichloroethane	97	6.671	6.671	0.000	36	16235	0.2000	0.1927	
54 Cyclohexane	56	6.769	6.769	0.000	89	15495	0.2000	0.2023	
56 Carbon tetrachloride	117	6.885	6.884	0.001	83	13659	0.2000	0.1884	
57 1,1-Dichloropropene	75	6.891	6.891	0.000	94	14746	0.2000	0.1970	
58 Isobutyl alcohol	41	7.104	7.073	0.031	89	8806	10.0	11.1	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.122	7.116	0.006	91	119857	10.0	10.3	
60 Benzene	78	7.153	7.153	0.000	95	44699	0.2000	0.2024	
61 1,2-Dichloroethane	62	7.232	7.220	0.012	97	13351	0.2000	0.2121	
63 Tert-amyl methyl ether	73	7.354	7.348	0.006	97	29301	0.2000	0.2016	
* 64 Fluorobenzene (IS)	96	7.561	7.561	0.000	99	2204666	10.0	10.0	
65 n-Heptane	43	7.573	7.573	0.000	36	13386	0.2000	0.2115	
67 n-Butanol	56	7.994	7.970	0.024	96	9201	17.5	13.4	
68 Trichloroethene	95	8.049	8.043	0.006	93	12445	0.2000	0.2019	
69 Methylcyclohexane	83	8.342	8.341	0.001	89	17837	0.2000	0.1944	
70 1,2-Dichloropropane	63	8.372	8.372	0.000	89	10406	0.2000	0.1927	
71 2-ethoxy-2-methyl butane	87	8.396	8.390	0.006	92	16788	0.2000	0.1943	
72 Methyl methacrylate	69	8.482	8.463	0.019	84	5057	0.2000	0.1824	
73 Dibromomethane	93	8.488	8.482	0.006	92	5946	0.2000	0.2006	
74 1,4-Dioxane	88	8.561	8.512	0.049	1	225	10.0	9.89	M
76 Dichlorobromomethane	83	8.732	8.726	0.006	98	12244	0.2000	0.1887	M
77 2-Nitropropane	41	9.000	9.000	0.000	96	5944	1.00	0.9536	M
79 1-Bromo-2-chloroethane	63	9.116	9.116	0.000	94	10774	0.2000	0.1842	
81 cis-1,3-Dichloropropene	75	9.274	9.280	-0.006	96	14460	0.2000	0.1787	
82 4-Methyl-2-pentanone (MIBK)	43	9.463	9.463	0.000	96	71460	2.00	2.04	
\$ 83 Toluene-d8 (Surr)	98	9.597	9.591	0.006	93	2217229	10.0	9.94	
84 Toluene	92	9.677	9.671	0.007	98	29966	0.2000	0.1983	
85 trans-1,3-Dichloropropene	75	9.945	9.939	0.006	91	12020	0.2000	0.1786	
104 Ethyl methacrylate	69	10.006	10.006	0.000	85	11070	0.2000	0.1910	
S 105 1,3-Dichloropropene, Total	100				0			0.3573	
106 1,1,2-Trichloroethane	97	10.146	10.146	0.000	89	9043	0.2000	0.2035	
107 Tetrachloroethene	166	10.231	10.231	0.000	96	15452	0.2000	0.2031	
108 1,3-Dichloropropane	76	10.305	10.311	-0.006	89	14400	0.2000	0.1975	
109 2-Hexanone	43	10.372	10.365	0.007	95	47526	2.00	1.86	
111 Chlorodibromomethane	129	10.524	10.524	0.000	88	7866	0.2000	0.1619	
112 Ethylene Dibromide	107	10.634	10.634	0.000	97	8523	0.2000	0.1948	
* 113 Chlorobenzene-d5 (IS)	117	11.073	11.073	0.000	84	1741668	10.0	10.0	
114 1-Chlorohexane	91	11.085	11.085	0.000	92	19124	0.2000	0.2259	
115 Chlorobenzene	112	11.097	11.097	0.000	96	36514	0.2000	0.1997	
117 1,1,1,2-Tetrachloroethane	131	11.183	11.182	0.001	89	10235	0.2000	0.1744	
116 Ethylbenzene	91	11.189	11.189	0.001	98	58464	0.2000	0.1996	
S 118 Xylenes, Total	106				0			0.5796	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
119 m-Xylene & p-Xylene	106	11.304	11.304	0.000	100	45066	0.4000	0.3829	
120 o-Xylene	106	11.634	11.634	0.000	95	22948	0.2000	0.1968	
121 Styrene	104	11.652	11.652	0.000	94	36813	0.2000	0.1864	
122 Bromoform	173	11.810	11.804	0.006	95	4074	0.2000	0.1490	
123 Isopropylbenzene	105	11.938	11.938	0.000	95	57659	0.2000	0.1934	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.079	12.079	0.000	94	827194	10.0	9.96	
127 1,1,2,2-Tetrachloroethane	83	12.188	12.188	0.000	93	11082	0.2000	0.2008	
128 Bromobenzene	156	12.195	12.194	0.000	90	15338	0.2000	0.1928	
129 trans-1,4-Dichloro-2-butene	53	12.213	12.213	0.000	85	21891	2.00	1.70	
130 1,2,3-Trichloropropane	110	12.231	12.231	0.000	81	3217	0.2000	0.2029	
131 N-Propylbenzene	91	12.268	12.268	0.000	98	68475	0.2000	0.1970	
132 2-Chlorotoluene	126	12.341	12.341	0.000	97	15487	0.2000	0.2027	
133 1,3,5-Trimethylbenzene	105	12.402	12.402	0.000	93	50554	0.2000	0.1942	
134 4-Chlorotoluene	126	12.438	12.438	0.000	96	15297	0.2000	0.1915	
135 tert-Butylbenzene	134	12.646	12.646	0.000	92	11728	0.2000	0.1955	
136 Pentachloroethane	167	12.676	12.676	0.000	73	6521	0.2000	0.1519	
137 1,2,4-Trimethylbenzene	105	12.688	12.688	0.000	96	50876	0.2000	0.1897	
138 sec-Butylbenzene	105	12.810	12.810	0.000	94	62431	0.2000	0.1912	
139 1,3-Dichlorobenzene	146	12.908	12.908	0.000	97	31913	0.2000	0.1943	
140 4-Isopropyltoluene	119	12.914	12.920	-0.006	97	57121	0.2000	0.1919	
* 141 1,4-Dichlorobenzene-d4	152	12.963	12.963	0.000	94	1033318	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.981	12.981	0.000	95	33904	0.2000	0.1971	
143 1,2,3-Trimethylbenzene	120	12.993	12.993	0.000	97	24019	0.2000	0.1951	
144 Benzyl chloride	126	13.060	13.060	0.000	98	2414	0.2000	0.2780	
145 p-Diethylbenzene	119	13.121	13.121	0.000	91	32778	0.2000	0.1850	
146 n-Butylbenzene	92	13.213	13.206	0.007	97	28644	0.2000	0.1970	
147 1,2-Dichlorobenzene	146	13.243	13.243	0.000	99	30160	0.2000	0.1957	
149 1,2-Dibromo-3-Chloropropane	155	13.786	13.786	0.000	84	1359	0.2000	0.1672	
150 1,3,5-Trichlorobenzene	180	13.908	13.907	0.001	98	25616	0.2000	0.1934	
151 1,2,4-Trichlorobenzene	180	14.334	14.328	0.006	93	23162	0.2000	0.1865	
152 Hexachlorobutadiene	225	14.414	14.413	0.001	96	11127	0.2000	0.1891	
153 Naphthalene	128	14.511	14.511	0.000	97	39062	0.2000	0.1859	
154 1,2,3-Trichlorobenzene	180	14.657	14.651	0.006	96	20869	0.2000	0.1902	
155 2-Methylnaphthalene	142	15.267	15.261	0.006	92	21856	0.2000	0.1885	
166 Pentane	43	2.922	2.916	0.006	90	10860	NR	NR	

## QC Flag Legend

### Processing Flags

NR - Missing Quant Standard

### Review Flags

M - Manually Integrated

## Reagents:

MSV_LL_#1_826_00052	Amount Added: 2.00	Units: uL	
MSV_LL_GAS826_00108	Amount Added: 2.00	Units: uL	
MSV_LL_#2_826_00056	Amount Added: 2.00	Units: uL	
MSV_29_826ISS_00037	Amount Added: 1.00	Units: uL	Run Reagent



Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X12.D

Injection Date: 16-Aug-2022 17:26:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: IC std1

Worklist Smp#: 13

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

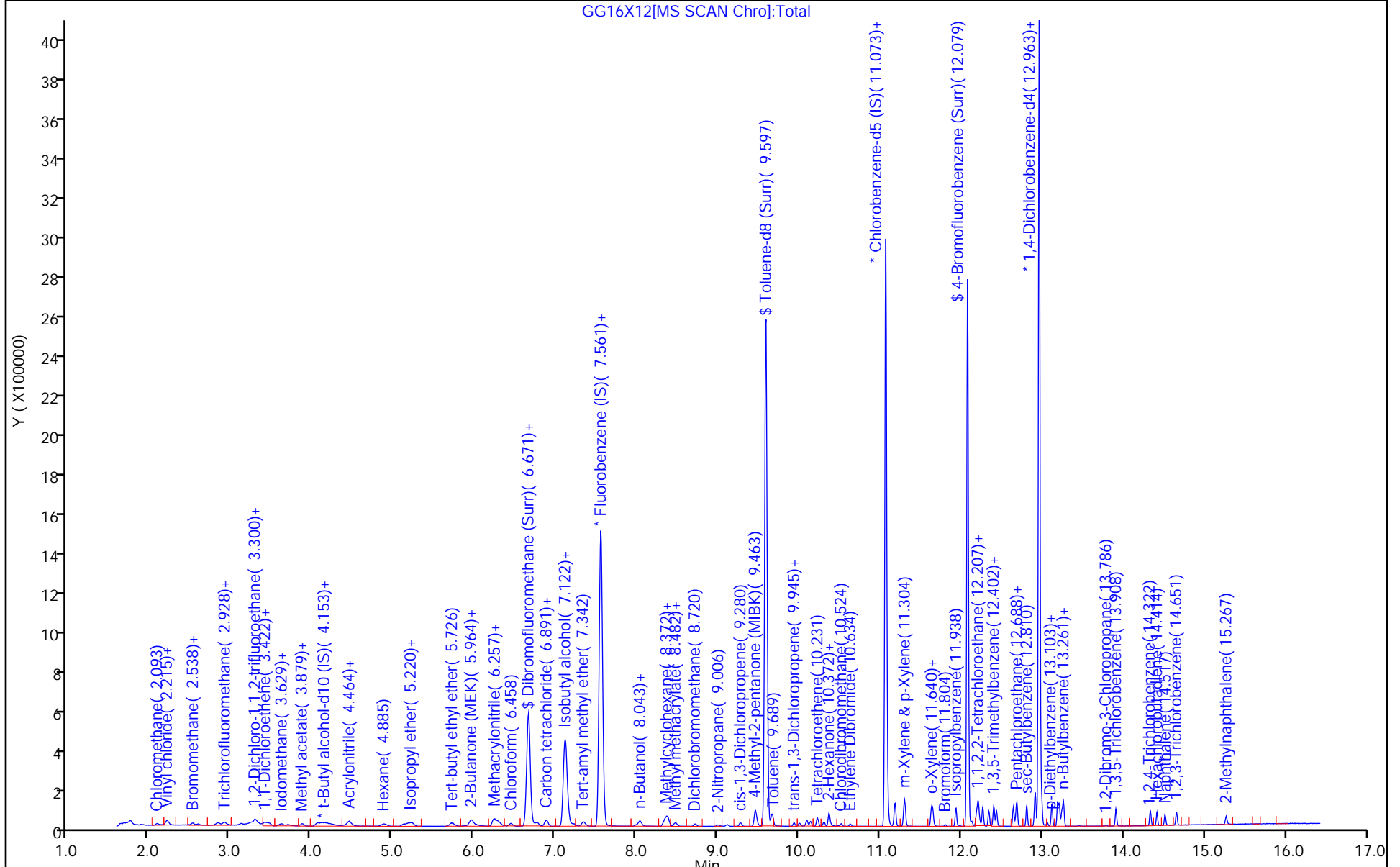
ALS Bottle#: 12

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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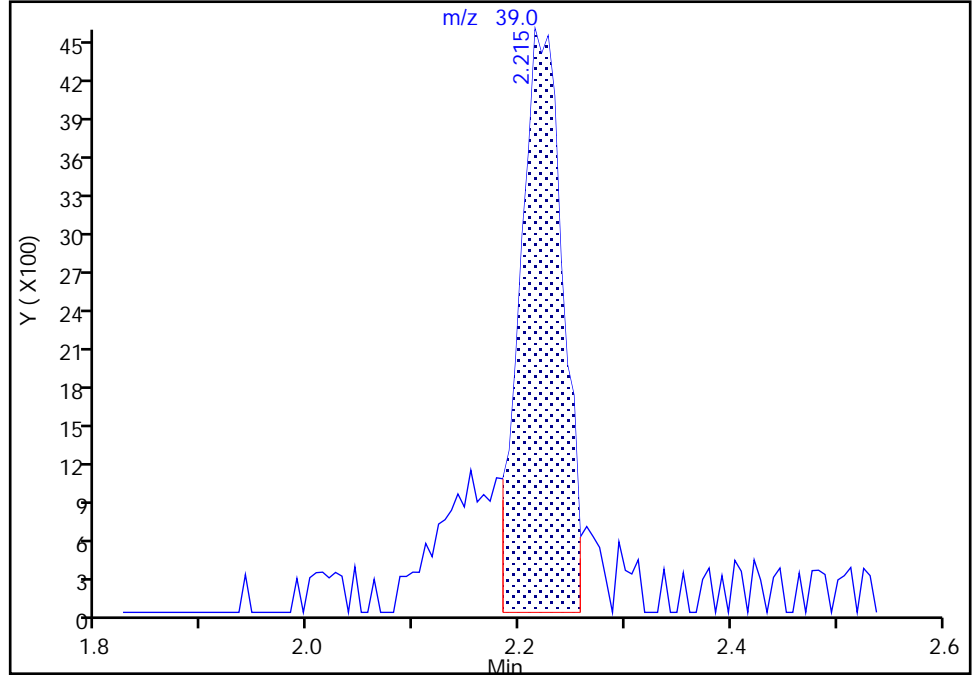
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Injection Date: 16-Aug-2022 17:26:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Butadiene, CAS: 106-99-0

Signal: 1

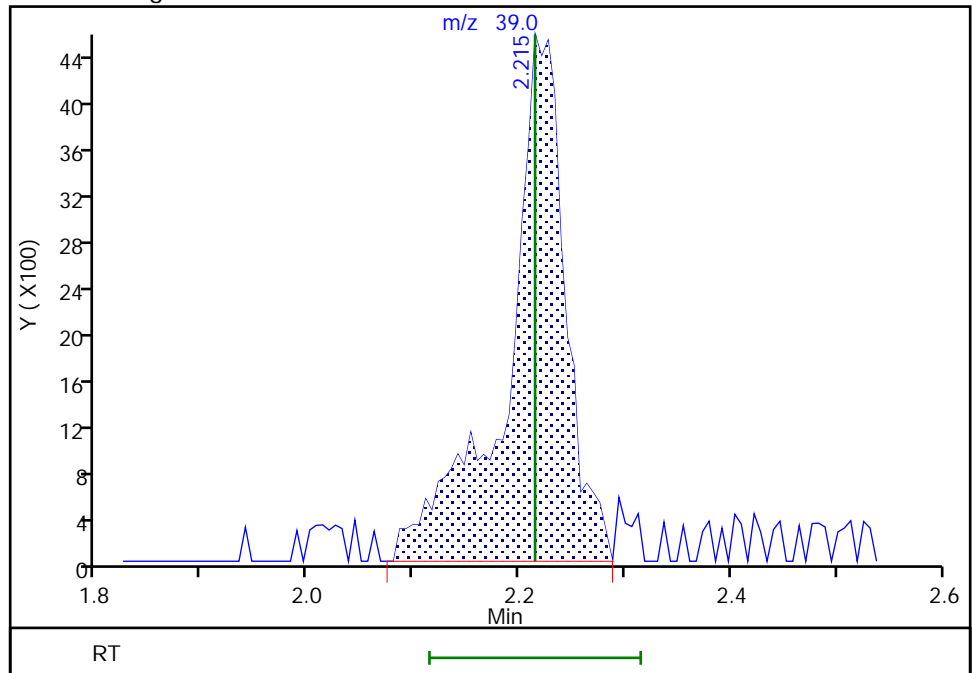
RT: 2.21  
Area: 12773  
Amount: 0.218355  
Amount Units: ug/l

Processing Integration Results



RT: 2.21  
Area: 17469  
Amount: 0.278490  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:31:24  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

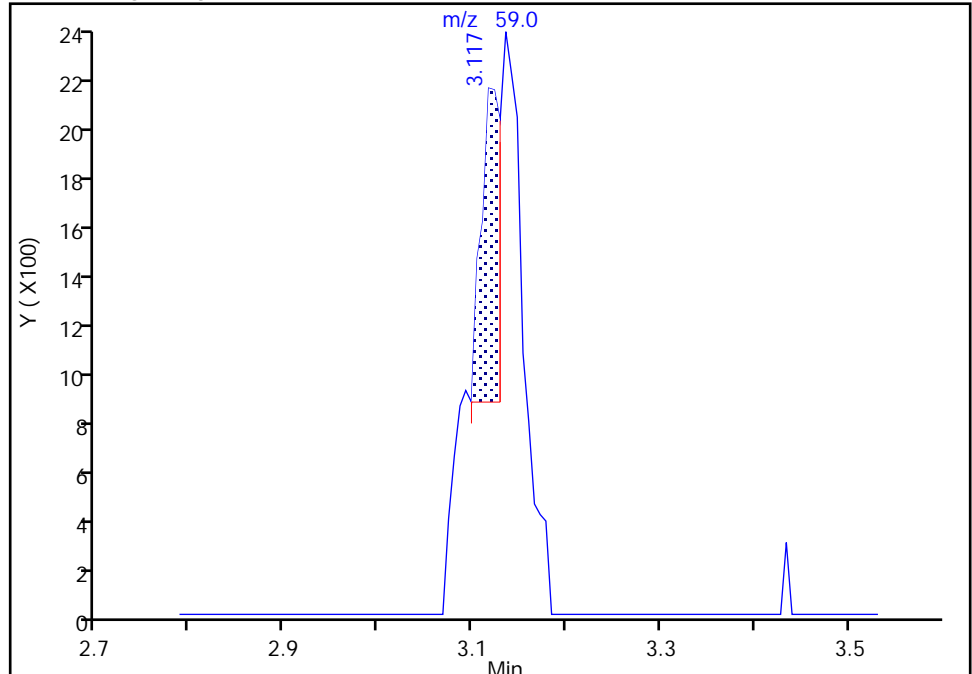
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Injection Date: 16-Aug-2022 17:26:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

13 Ethyl ether, CAS: 60-29-7

Signal: 1

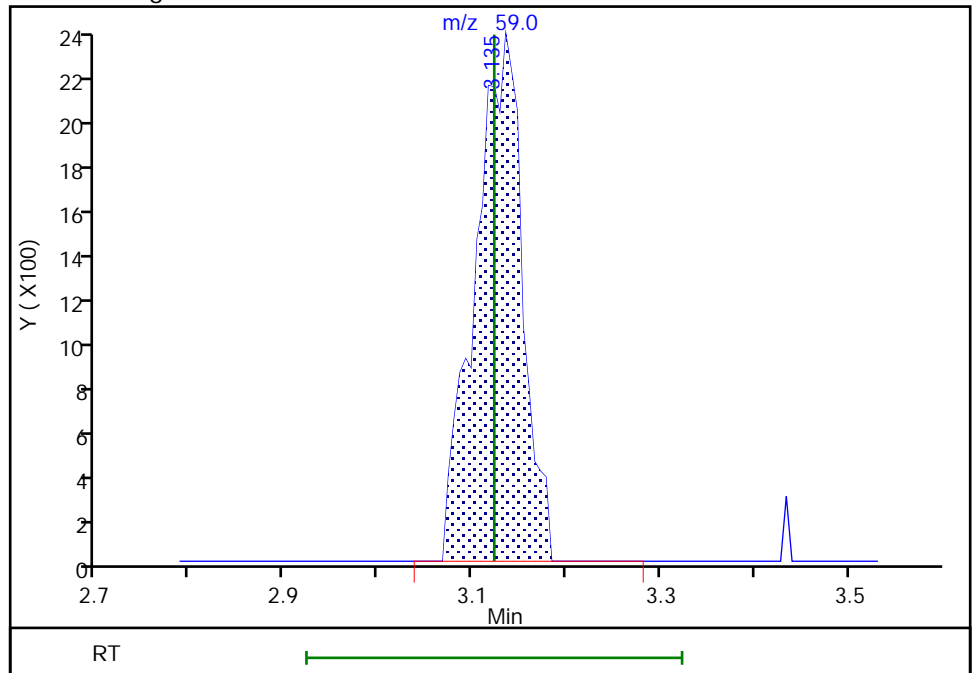
RT: 3.12  
Area: 1789  
Amount: 0.127516  
Amount Units: ug/l

Processing Integration Results



RT: 3.14  
Area: 8083  
Amount: 0.192054  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:31:31  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

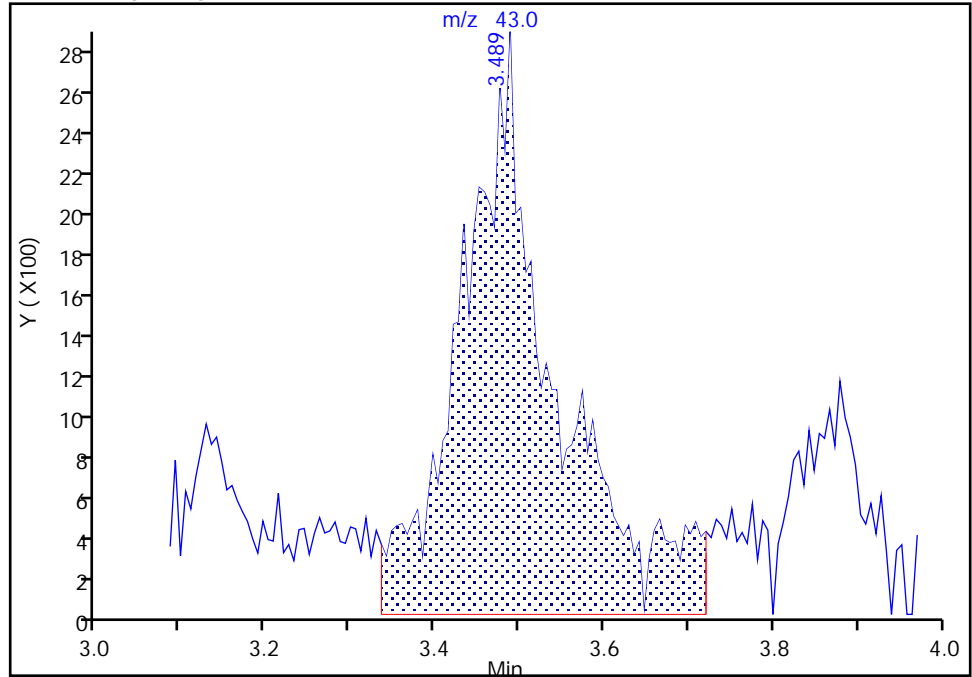
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Lims ID: IC std1  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

20 Acetone, CAS: 67-64-1

Signal: 1

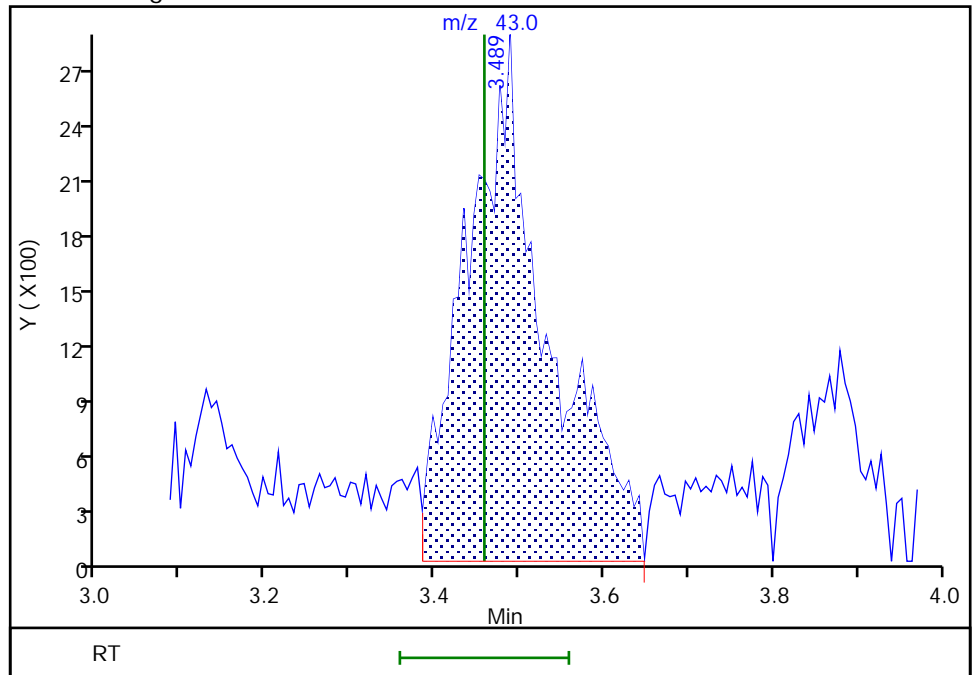
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Area: 21335  
Amount: 3.130359  
Amount Units: ug/l

Processing Integration Results



RT: 3.49  
Area: 18527  
Amount: 2.743915  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:31:46  
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

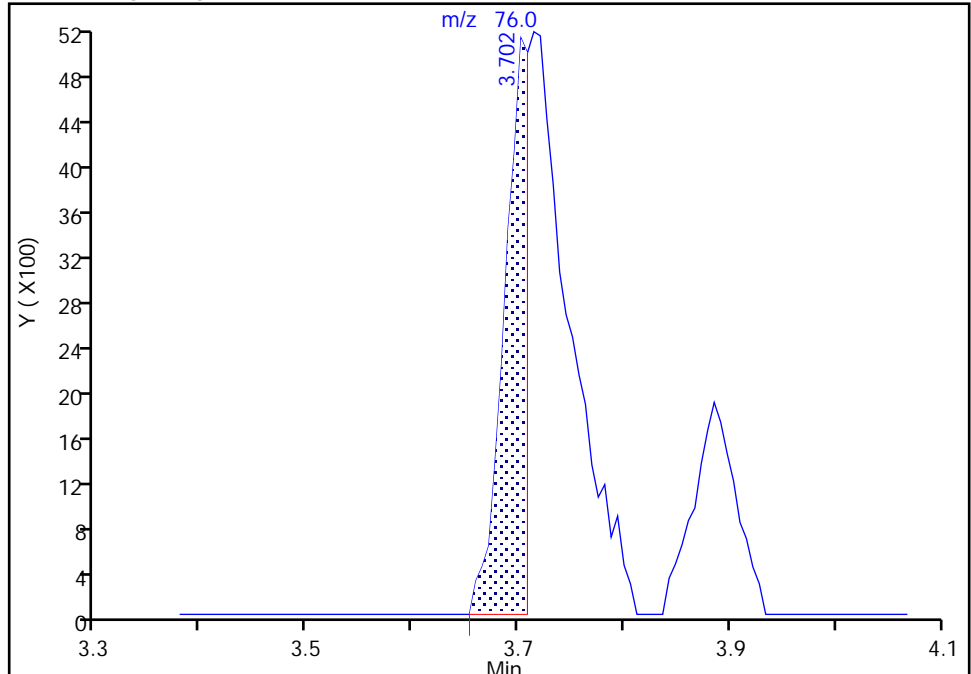
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Injection Date: 16-Aug-2022 17:26:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

23 Carbon disulfide, CAS: 75-15-0

Signal: 1

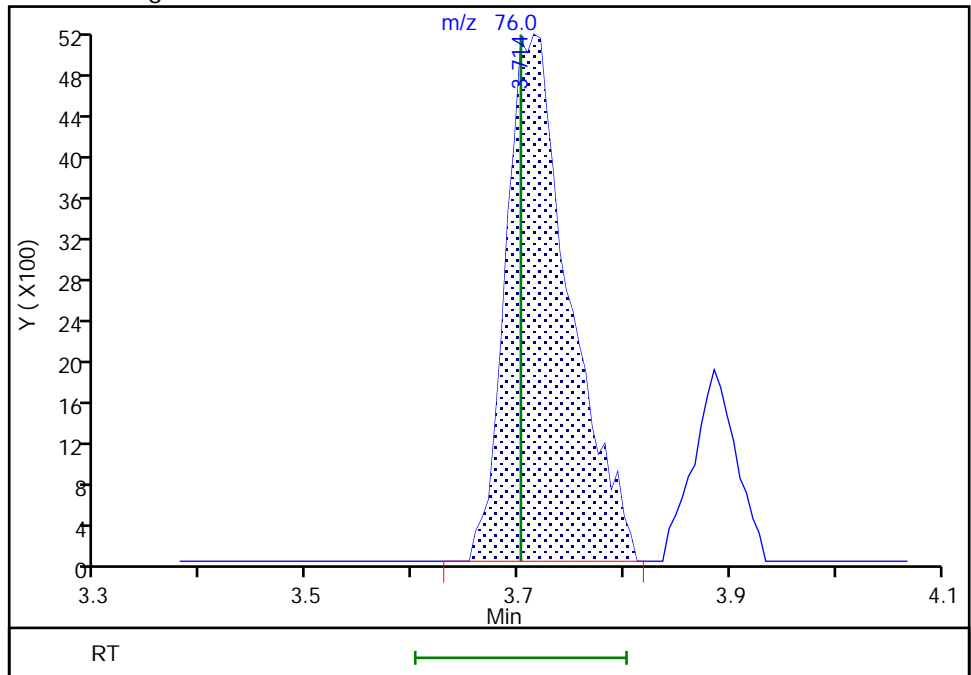
RT: 3.70  
Area: 8291  
Amount: 0.190775  
Amount Units: ug/l

Processing Integration Results



RT: 3.71  
Area: 21688  
Amount: 0.187211  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:31:55  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

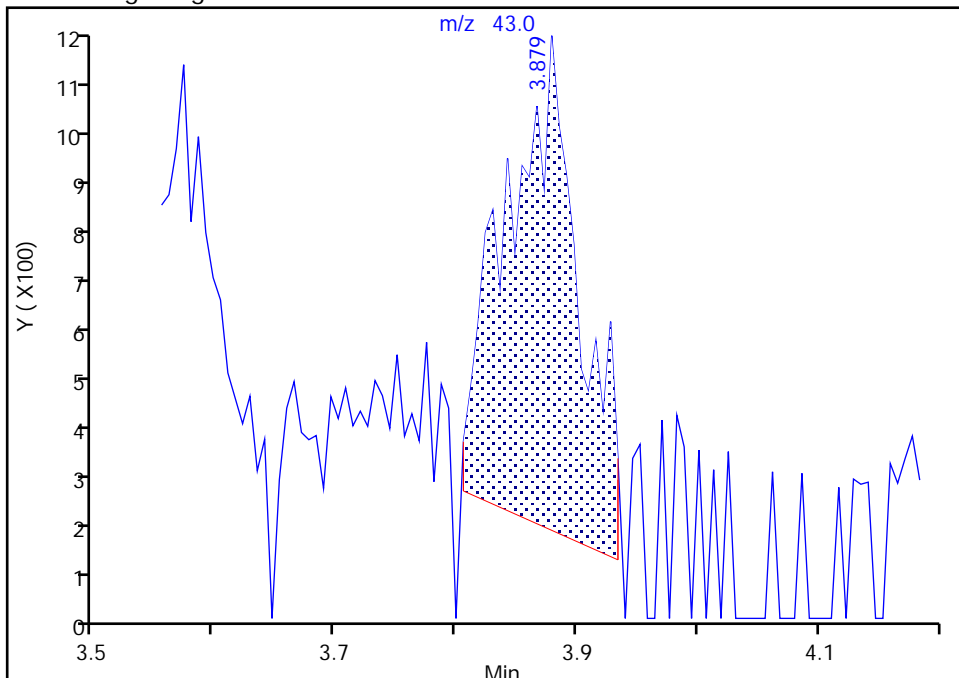
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Injection Date: 16-Aug-2022 17:26:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 Methyl acetate, CAS: 79-20-9

Signal: 1

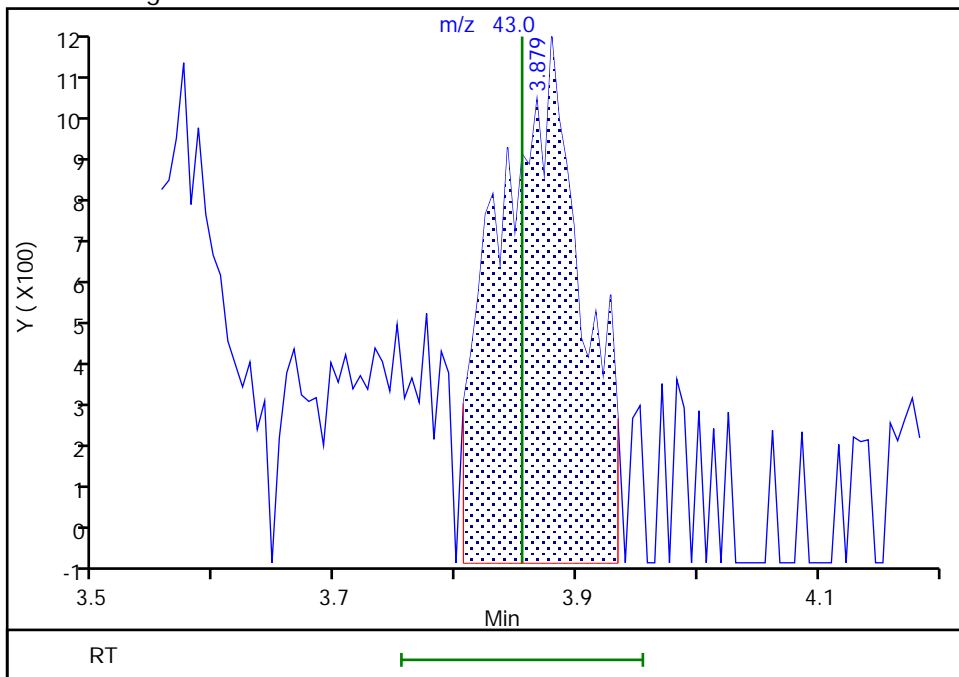
RT: 3.88  
Area: 4042  
Amount: 0.202587  
Amount Units: ug/l

Processing Integration Results



RT: 3.88  
Area: 5494  
Amount: 0.262389  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:32:06  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

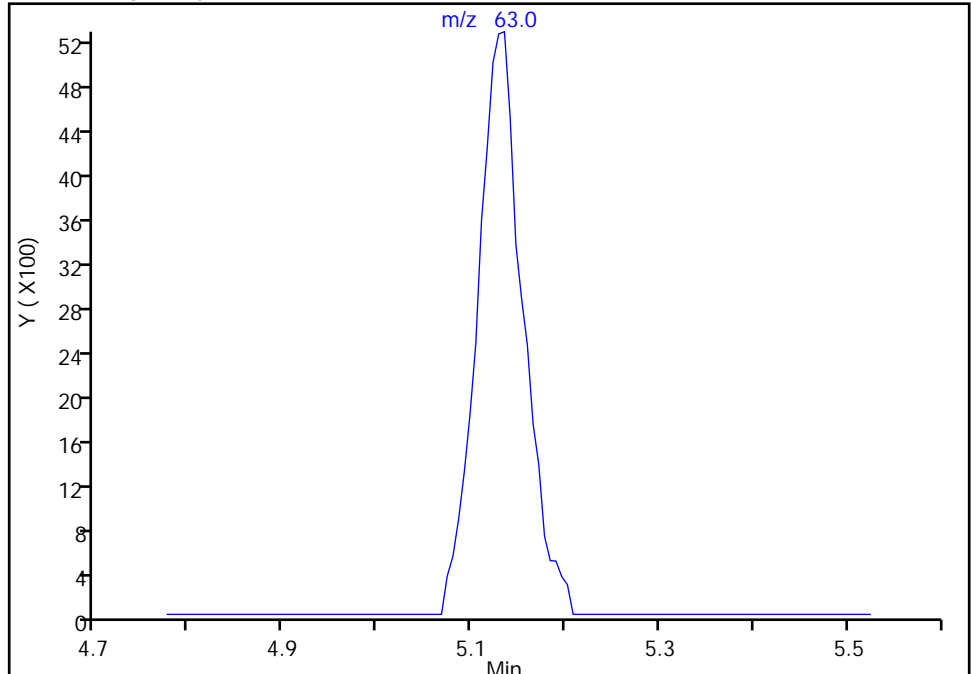
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Injection Date: 16-Aug-2022 17:26:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

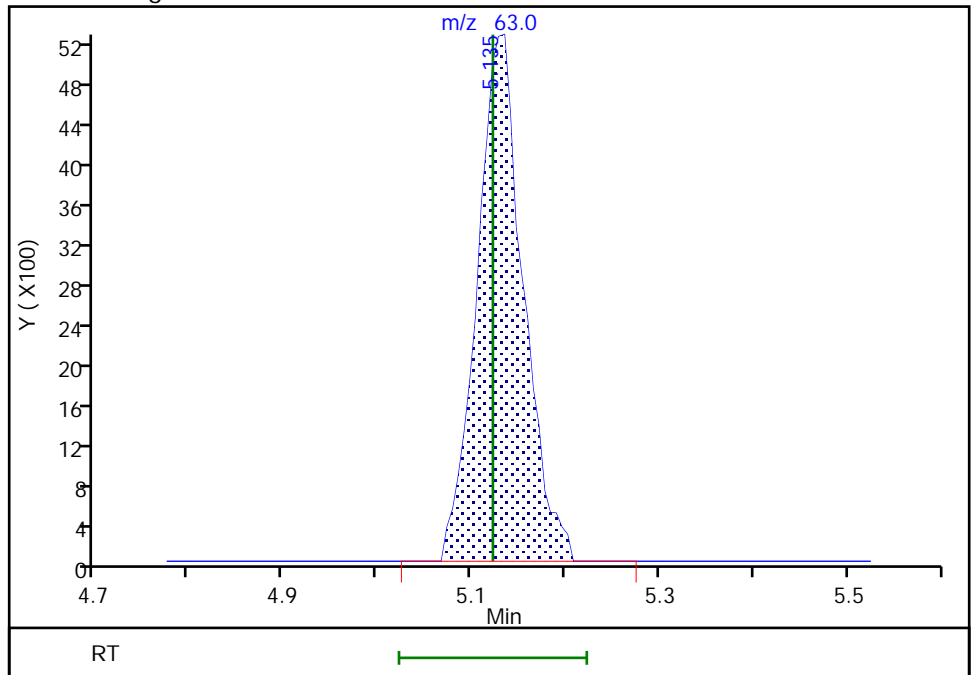
Not Detected  
Expected RT: 5.12

Processing Integration Results



Manual Integration Results

RT: 5.13  
Area: 17921  
Amount: 0.198875  
Amount Units: ug/l



Reviewer: DVW2, 17-Aug-2022 11:32:15  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration  
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Eurofins Lancaster Laboratories Environment Testing, LLC

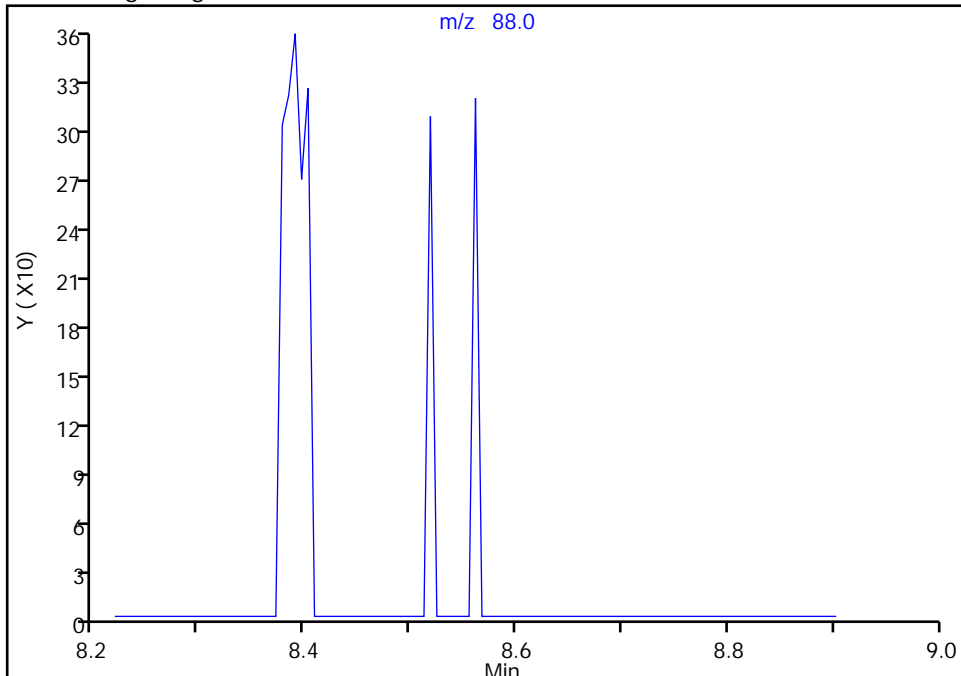
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Injection Date: 16-Aug-2022 17:26:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

74 1,4-Dioxane, CAS: 123-91-1

Signal: 1

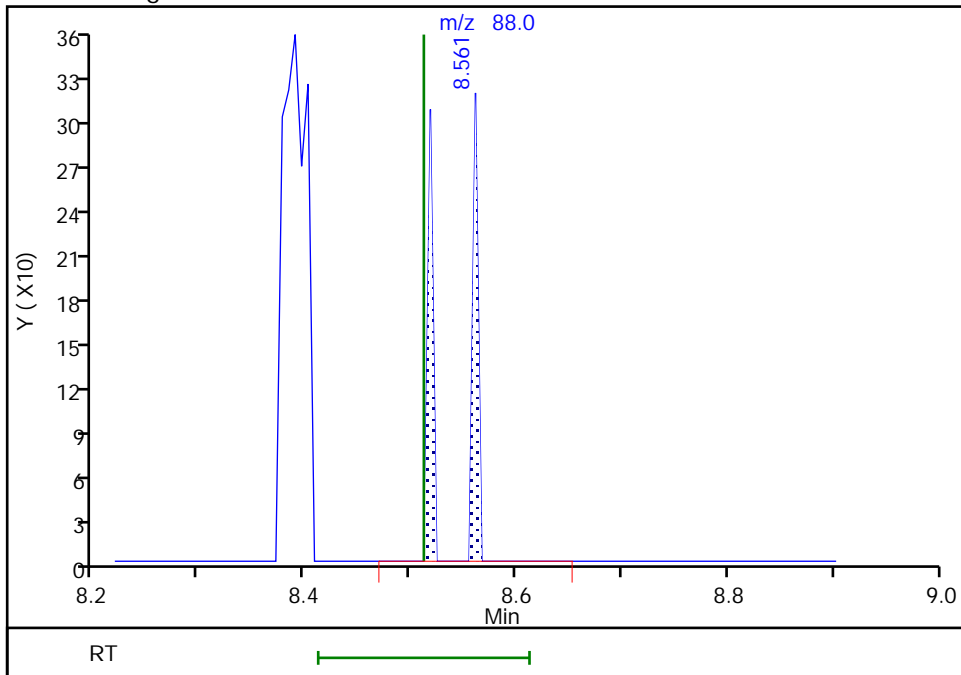
Not Detected  
Expected RT: 8.51

Processing Integration Results



Manual Integration Results

RT: 8.56  
Area: 225  
Amount: 9.888496  
Amount Units: ug/l



Reviewer: DVW2, 17-Aug-2022 11:32:35  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration



Euofins Lancaster Laboratories Environment Testing, LLC

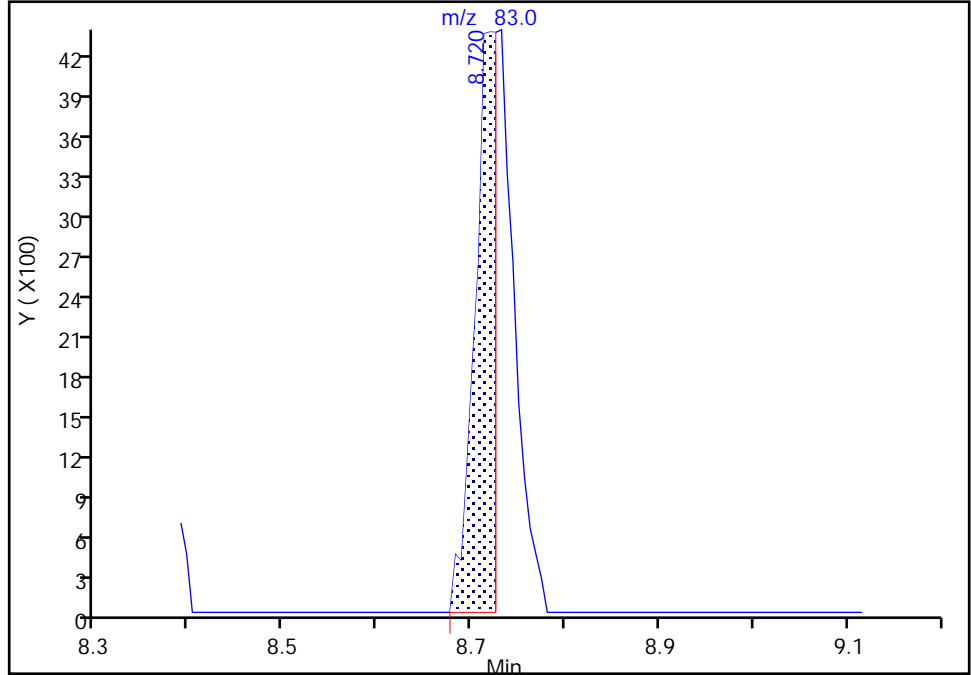
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Injection Date: 16-Aug-2022 17:26:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

76 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

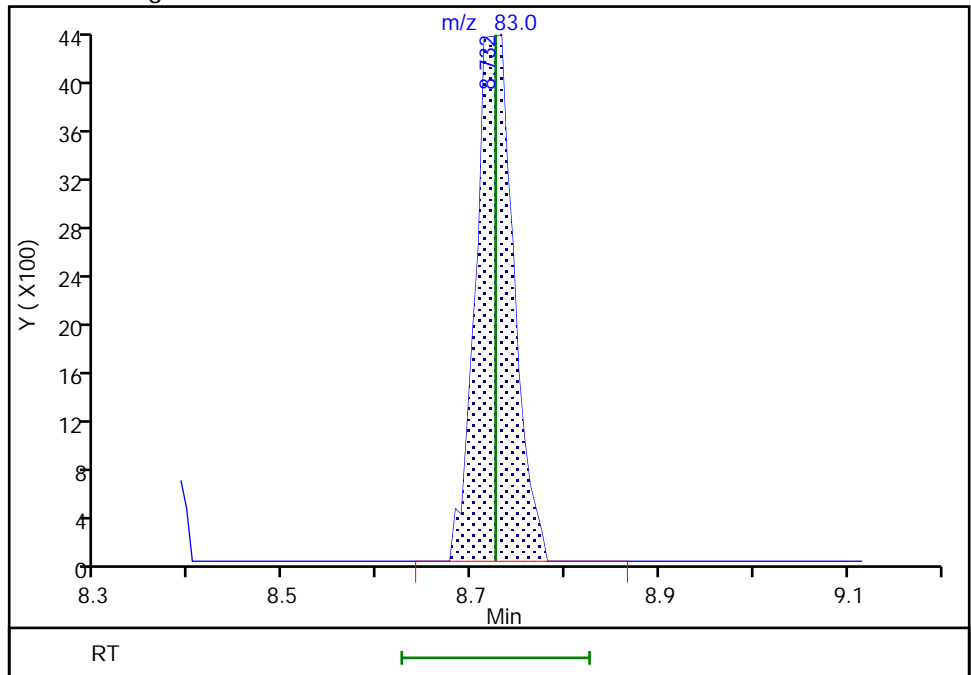
RT: 8.72  
Area: 7087  
Amount: 0.115806  
Amount Units: ug/l

Processing Integration Results



RT: 8.73  
Area: 12244  
Amount: 0.188715  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:32:41  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration  
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Eurofins Lancaster Laboratories Environment Testing, LLC

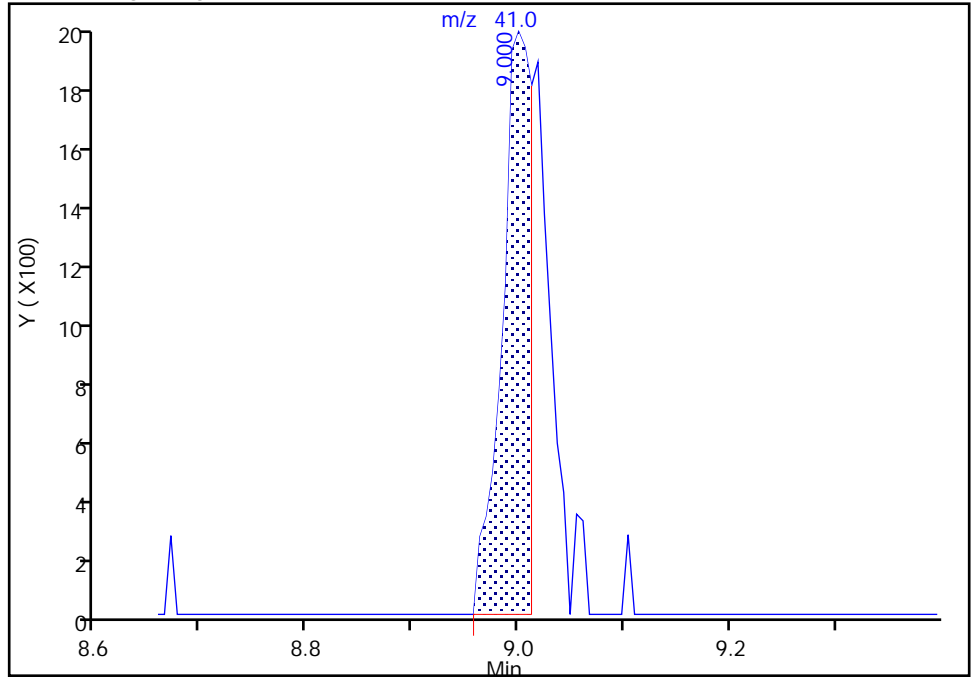
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Injection Date: 16-Aug-2022 17:26:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

77 2-Nitropropane, CAS: 79-46-9

Signal: 1

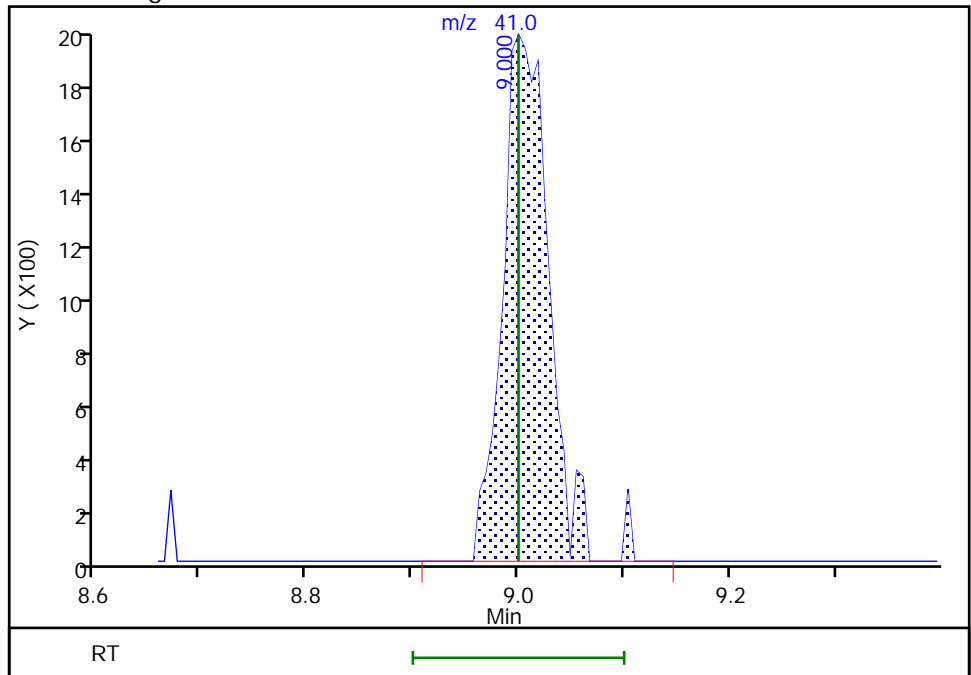
RT: 9.00  
Area: 3764  
Amount: 1.019331  
Amount Units: ug/l

Processing Integration Results



RT: 9.00  
Area: 5944  
Amount: 0.953626  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:32:45  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration  
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Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X13.D  
 Lims ID: IC std2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 16-Aug-2022 17:48:30 ALS Bottle#: 13 Worklist Smp#: 14  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0064243-014  
 Misc. Info.: IC STD2  
 Operator ID: knk41612 Instrument ID: 16334  
 Sublist: chrom-MSV\_16334\_25mL\*sub4

Method: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 30-Aug-2022 10:48:30 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D

Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1639

First Level Reviewer: DVW2 Date: 17-Aug-2022 11:35:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.910	1.892	0.018	97	29864	0.5000	0.5161	
5 Chloromethane	50	2.093	2.087	0.006	99	35763	0.5000	0.5479	
6 Vinyl chloride	62	2.209	2.202	0.007	97	34951	0.5000	0.5239	
7 Butadiene	39	2.221	2.215	0.006	91	33291	0.5000	0.5249	M
9 Bromomethane	94	2.538	2.526	0.012	91	27671	0.5000	0.5257	
10 Chloroethane	64	2.611	2.599	0.012	98	20330	0.5000	0.5111	
11 Dichlorofluoromethane	67	2.843	2.836	0.007	95	50922	0.5000	0.5236	
12 Trichlorofluoromethane	101	2.916	2.904	0.012	71	48579	0.5000	0.5297	
13 Ethyl ether	59	3.135	3.123	0.012	88	22237	0.5001	0.5225	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.227	3.221	0.006	89	34418	0.5000	0.5313	
17 Acrolein	56	3.306	3.288	0.018	99	151628	25.0	25.5	
18 1,1-Dichloroethene	96	3.428	3.416	0.012	97	23932	0.5000	0.4984	
20 Acetone	43	3.477	3.458	0.019	89	33136	5.00	5.08	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.477	3.464	0.013	91	23226	0.5000	0.4962	
21 Iodomethane	142	3.611	3.605	0.006	99	46041	0.5000	0.5064	
22 Ethyl bromide	108	3.635	3.629	0.006	98	23129	0.4999	0.5246	
24 Isopropyl alcohol	45	3.714	3.690	0.024	27	12266	10.0	9.96	
23 Carbon disulfide	76	3.714	3.702	0.012	99	54155	0.5000	0.4623	
25 Methyl acetate	43	3.873	3.855	0.018	24	12070	0.5000	0.5968	M
27 3-Chloro-1-propene	41	3.885	3.873	0.012	88	32910	0.5000	0.5079	
29 Methylene Chloride	84	4.062	4.056	0.006	94	26736	0.5000	0.5025	
* 30 t-Butyl alcohol-d10 (IS)	65	4.141	4.141	0.000	63	128635	50.0	50.0	
31 2-Methyl-2-propanol	59	4.257	4.245	0.012	95	26043	10.0	11.4	M
32 Acrylonitrile	53	4.428	4.391	0.037	98	10330	1.25	1.19	
33 Methyl tert-butyl ether	73	4.458	4.446	0.012	94	68201	0.5000	0.4977	
34 trans-1,2-Dichloroethene	96	4.464	4.458	0.006	96	28136	0.5000	0.5017	
35 Hexane	57	4.897	4.885	0.012	91	30635	0.5000	0.5005	
37 1,1-Dichloroethane	63	5.135	5.123	0.012	95	45372	0.5000	0.4980	
38 Isopropyl ether	45	5.190	5.184	0.006	93	75661	0.5000	0.5020	
39 2-Chloro-1,3-butadiene	53	5.245	5.232	0.013	91	35647	0.5000	0.4916	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.726	5.720	0.006	96	78529	0.5000	0.5064	
41 2-Butanone (MEK)	43	5.952	5.933	0.019	99	66177	5.00	5.14	
42 cis-1,2-Dichloroethene	96	5.976	5.964	0.012	80	30021	0.5000	0.4898	
43 2,2-Dichloropropane	77	5.988	5.976	0.012	74	35373	0.5000	0.4800	
45 Propionitrile	54	6.037	6.025	0.012	98	31618	10.0	10.4	M
S 47 1,2-Dichloroethene, Total	100				0			0.99	
48 Methacrylonitrile	67	6.244	6.238	0.006	90	68072	5.00	4.95	
49 Chlorobromomethane	128	6.299	6.293	0.006	89	14558	0.5000	0.4958	
50 Tetrahydrofuran	71	6.311	6.299	0.012	67	9877	2.50	2.58	
51 Chloroform	83	6.452	6.452	0.000	93	49500	0.5000	0.5070	
\$ 52 Dibromofluoromethane (Surr)	113	6.671	6.665	0.006	94	553438	10.0	10.0	
53 1,1,1-Trichloroethane	97	6.683	6.671	0.012	40	41961	0.5000	0.4926	
54 Cyclohexane	56	6.775	6.769	0.006	88	38165	0.5000	0.4927	
56 Carbon tetrachloride	117	6.885	6.884	0.001	82	34892	0.5000	0.4759	
57 1,1-Dichloropropene	75	6.897	6.891	0.006	96	37795	0.5000	0.4993	
58 Isobutyl alcohol	41	7.092	7.073	0.019	96	19769	25.0	24.7	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.122	7.116	0.006	79	118255	10.0	10.1	
60 Benzene	78	7.153	7.153	0.000	92	111956	0.5000	0.5015	
61 1,2-Dichloroethane	62	7.226	7.220	0.006	97	33333	0.5000	0.5237	
63 Tert-amyl methyl ether	73	7.348	7.348	0.000	98	73806	0.5000	0.5021	
* 64 Fluorobenzene (IS)	96	7.561	7.561	0.000	99	2229222	10.0	10.0	
65 n-Heptane	43	7.580	7.573	0.007	37	32359	0.5000	0.5055	
67 n-Butanol	56	7.988	7.970	0.018	88	28924	43.8	43.5	
68 Trichloroethene	95	8.043	8.043	0.000	97	30922	0.5000	0.4962	
69 Methylcyclohexane	83	8.354	8.341	0.013	89	44548	0.5000	0.4802	
70 1,2-Dichloropropane	63	8.384	8.372	0.012	76	27694	0.5000	0.5073	
71 2-ethoxy-2-methyl butane	87	8.390	8.390	0.000	94	43310	0.5000	0.4956	
72 Methyl methacrylate	69	8.470	8.463	0.007	82	13080	0.5000	0.4885	
73 Dibromomethane	93	8.488	8.482	0.006	91	14481	0.5000	0.4833	
74 1,4-Dioxane	88	8.518	8.512	0.006	1	2333	25.0	23.7	M
76 Dichlorobromomethane	83	8.726	8.726	0.000	99	31086	0.5000	0.4738	
77 2-Nitropropane	41	9.000	9.000	0.000	96	13724	2.50	2.28	
79 1-Bromo-2-chloroethane	63	9.116	9.116	0.000	98	29690	0.5000	0.5021	
81 cis-1,3-Dichloropropene	75	9.286	9.280	0.006	96	38315	0.5000	0.4682	
82 4-Methyl-2-pentanone (MIBK)	43	9.463	9.463	0.000	96	168921	5.00	4.98	
\$ 83 Toluene-d8 (Surr)	98	9.597	9.591	0.006	93	2250850	10.0	10.0	
84 Toluene	92	9.677	9.671	0.007	98	75624	0.5000	0.4967	
85 trans-1,3-Dichloropropene	75	9.939	9.939	0.000	92	30039	0.5000	0.4429	
104 Ethyl methacrylate	69	10.006	10.006	0.000	87	26673	0.5000	0.4566	
S 105 1,3-Dichloropropene, Total	100				0			0.9111	
106 1,1,2-Trichloroethane	97	10.146	10.146	0.000	89	22386	0.5000	0.4999	
107 Tetrachloroethene	166	10.231	10.231	0.000	98	37991	0.5000	0.4954	
108 1,3-Dichloropropane	76	10.311	10.311	0.000	90	36673	0.5000	0.4992	
109 2-Hexanone	43	10.372	10.365	0.007	96	122181	5.00	4.94	
111 Chlorodibromomethane	129	10.524	10.524	0.000	88	21881	0.5000	0.4468	
112 Ethylene Dibromide	107	10.634	10.634	0.000	100	21212	0.5000	0.4812	
* 113 Chlorobenzene-d5 (IS)	117	11.073	11.073	0.000	84	1755239	10.0	10.0	
114 1-Chlorohexane	91	11.085	11.085	0.000	92	42721	0.5000	0.5006	
115 Chlorobenzene	112	11.097	11.097	0.000	96	93034	0.5000	0.5048	
117 1,1,1,2-Tetrachloroethane	131	11.182	11.182	0.000	92	28190	0.5000	0.4765	
116 Ethylbenzene	91	11.189	11.189	0.001	98	146301	0.5000	0.4957	
S 118 Xylenes, Total	106				0			1.47	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
119 m-Xylene & p-Xylene	106	11.304	11.304	0.000	100	115958	1.00	0.9775	
120 o-Xylene	106	11.634	11.634	0.000	95	57392	0.5000	0.4883	
121 Styrene	104	11.652	11.652	0.000	95	94941	0.5000	0.4769	
122 Bromoform	173	11.810	11.804	0.006	97	10522	0.5000	0.3817	
123 Isopropylbenzene	105	11.938	11.938	0.000	95	148324	0.5000	0.4937	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.079	12.079	0.000	94	835927	10.0	10.0	
127 1,1,2,2-Tetrachloroethane	83	12.182	12.188	-0.006	95	26537	0.5000	0.4744	
128 Bromobenzene	156	12.194	12.194	0.000	91	39314	0.5000	0.4877	
129 trans-1,4-Dichloro-2-butene	53	12.213	12.213	0.000	88	56733	5.00	4.55	
130 1,2,3-Trichloropropane	110	12.231	12.231	0.000	81	7781	0.5000	0.4843	
131 N-Propylbenzene	91	12.268	12.268	0.000	98	173695	0.5000	0.4932	
132 2-Chlorotoluene	126	12.341	12.341	0.000	98	38278	0.5000	0.4942	
133 1,3,5-Trimethylbenzene	105	12.402	12.402	0.000	94	130441	0.5000	0.4944	
134 4-Chlorotoluene	126	12.438	12.438	0.000	97	39001	0.5000	0.4818	
135 tert-Butylbenzene	134	12.646	12.646	0.000	91	29851	0.5000	0.4910	
136 Pentachloroethane	167	12.676	12.676	0.000	78	19435	0.5000	0.4467	
137 1,2,4-Trimethylbenzene	105	12.688	12.688	0.000	96	132706	0.5000	0.4883	
138 sec-Butylbenzene	105	12.810	12.810	0.000	94	161376	0.5000	0.4877	
139 1,3-Dichlorobenzene	146	12.908	12.908	0.000	98	80921	0.5000	0.4861	
140 4-Isopropyltoluene	119	12.920	12.920	0.000	97	144968	0.5000	0.4805	
* 141 1,4-Dichlorobenzene-d4	152	12.963	12.963	0.000	93	1047319	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.981	12.981	0.000	96	83845	0.5000	0.4810	
143 1,2,3-Trimethylbenzene	120	12.993	12.993	0.000	97	63120	0.5000	0.5058	
144 Benzyl chloride	126	13.060	13.060	0.000	98	6688	0.5000	0.4679	
145 p-Diethylbenzene	119	13.115	13.121	-0.006	91	86878	0.5000	0.4838	
146 n-Butylbenzene	92	13.206	13.206	0.000	97	70421	0.5000	0.4778	
147 1,2-Dichlorobenzene	146	13.243	13.243	0.000	98	75705	0.5000	0.4846	
149 1,2-Dibromo-3-Chloropropane	155	13.786	13.786	0.000	86	3270	0.5000	0.3969	
150 1,3,5-Trichlorobenzene	180	13.908	13.907	0.001	98	65196	0.5000	0.4858	
151 1,2,4-Trichlorobenzene	180	14.334	14.328	0.006	94	57005	0.5000	0.4529	
152 Hexachlorobutadiene	225	14.414	14.413	0.001	95	29376	0.5000	0.4925	
153 Naphthalene	128	14.511	14.511	0.000	97	97004	0.5000	0.4554	
154 1,2,3-Trichlorobenzene	180	14.651	14.651	0.000	97	51896	0.5000	0.4666	
155 2-Methylnaphthalene	142	15.267	15.261	0.006	92	56001	0.5000	0.4334	
166 Pentane	43	2.928	2.916	0.012	95	34005	NR	NR	

## QC Flag Legend

### Processing Flags

NR - Missing Quant Standard

### Review Flags

M - Manually Integrated

## Reagents:

MSV_LL_#1_826_00052	Amount Added: 2.00	Units: uL	
MSV_LL_GAS826_00108	Amount Added: 2.00	Units: uL	
MSV_LL_#2_826_00056	Amount Added: 2.00	Units: uL	
MSV_29_826ISS_00037	Amount Added: 1.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X13.D

Injection Date: 16-Aug-2022 17:48:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: IC std2

Worklist Smp#: 14

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

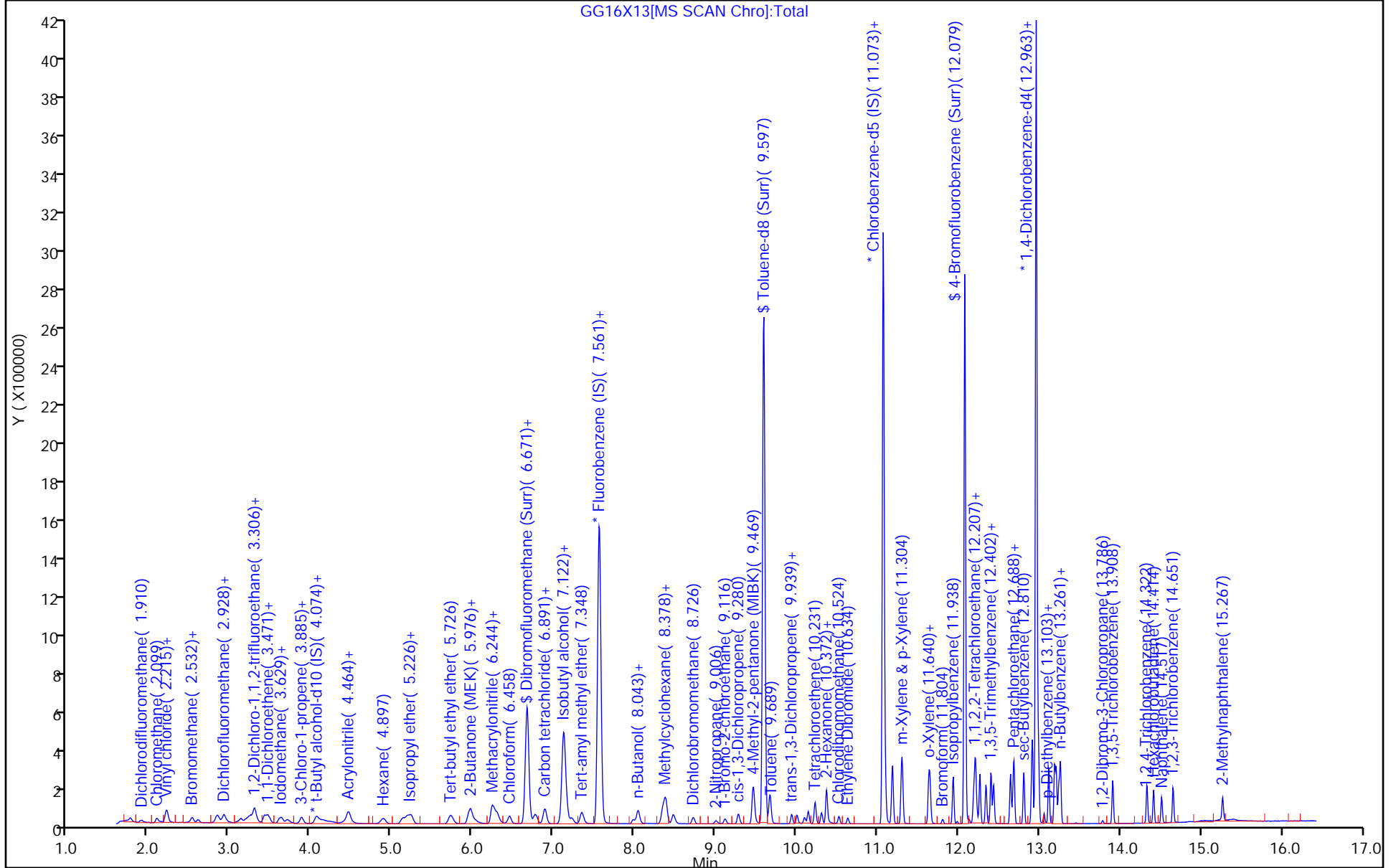
ALS Bottle#: 13

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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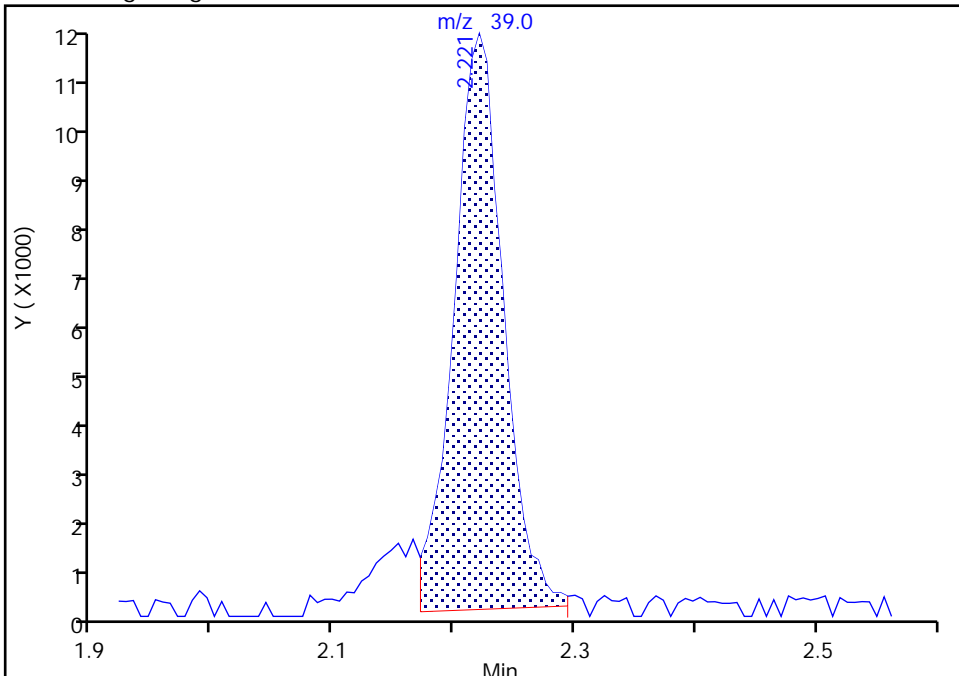
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Injection Date: 16-Aug-2022 17:48:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 13 Worklist Smp#: 14  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Butadiene, CAS: 106-99-0

Signal: 1

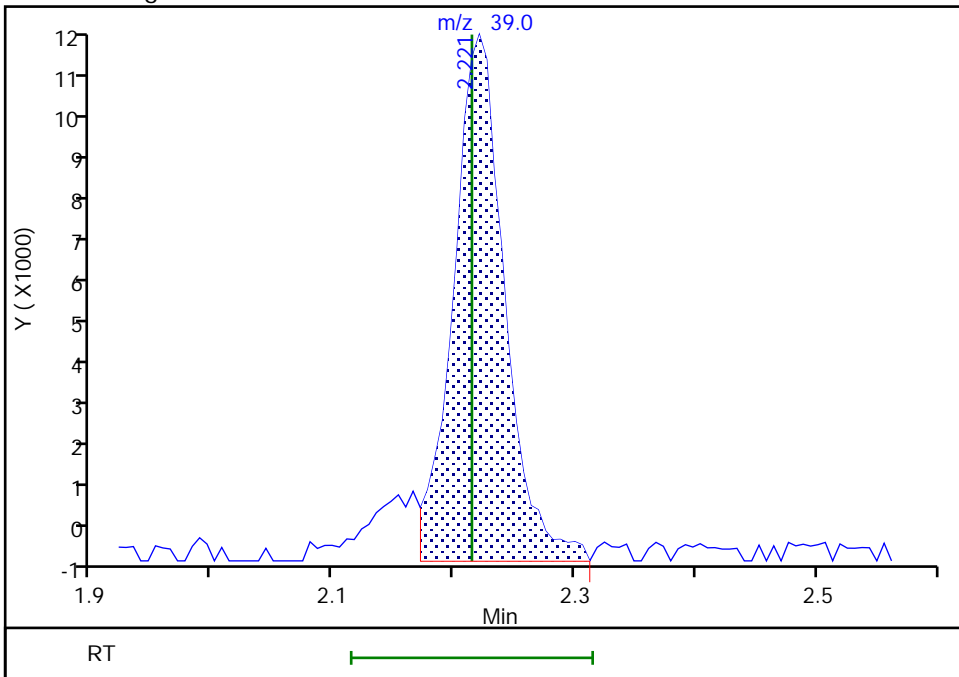
RT: 2.22  
Area: 31835  
Amount: 0.509037  
Amount Units: ug/l

Processing Integration Results



RT: 2.22  
Area: 33291  
Amount: 0.524877  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:33:43  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

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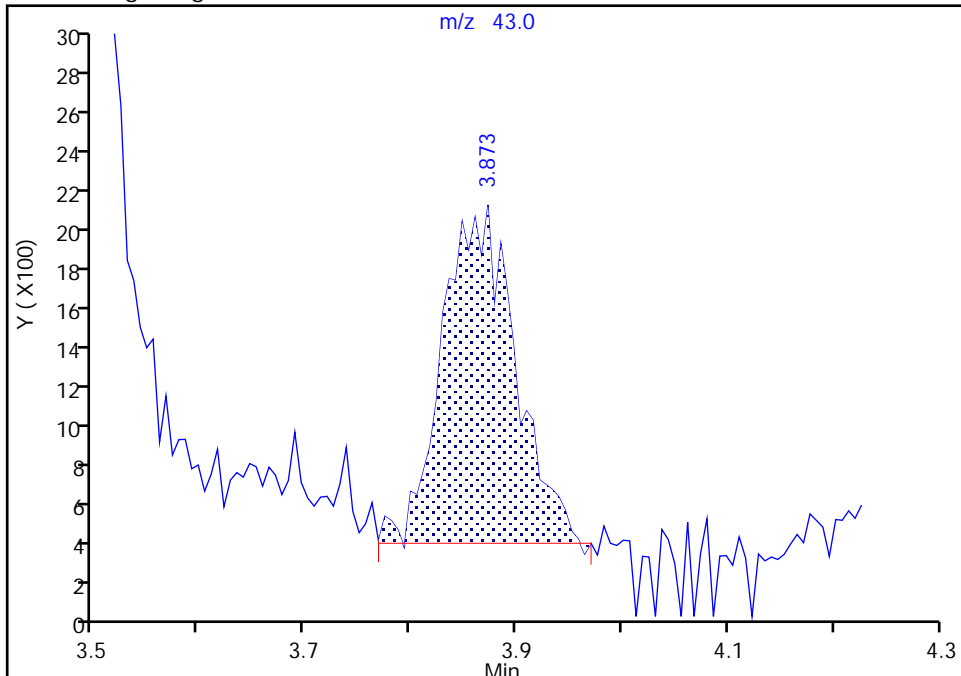
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Injection Date: 16-Aug-2022 17:48:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 13 Worklist Smp#: 14  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 Methyl acetate, CAS: 79-20-9

Signal: 1

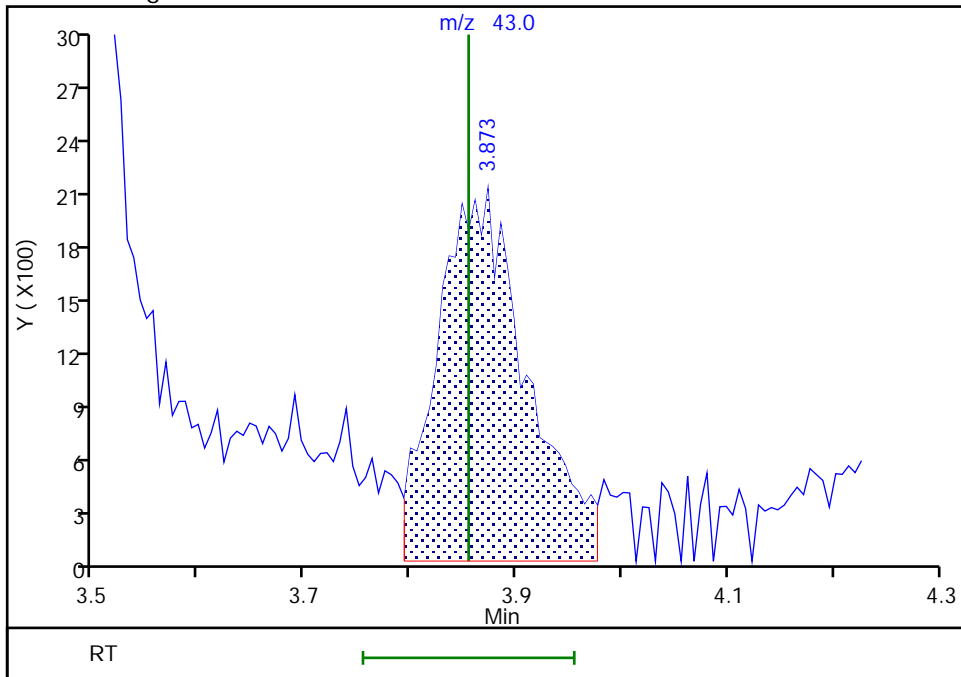
RT: 3.87  
Area: 8074  
Amount: 0.398268  
Amount Units: ug/l

Processing Integration Results



RT: 3.87  
Area: 12070  
Amount: 0.596822  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:34:36  
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration



Eurofins Lancaster Laboratories Environment Testing, LLC

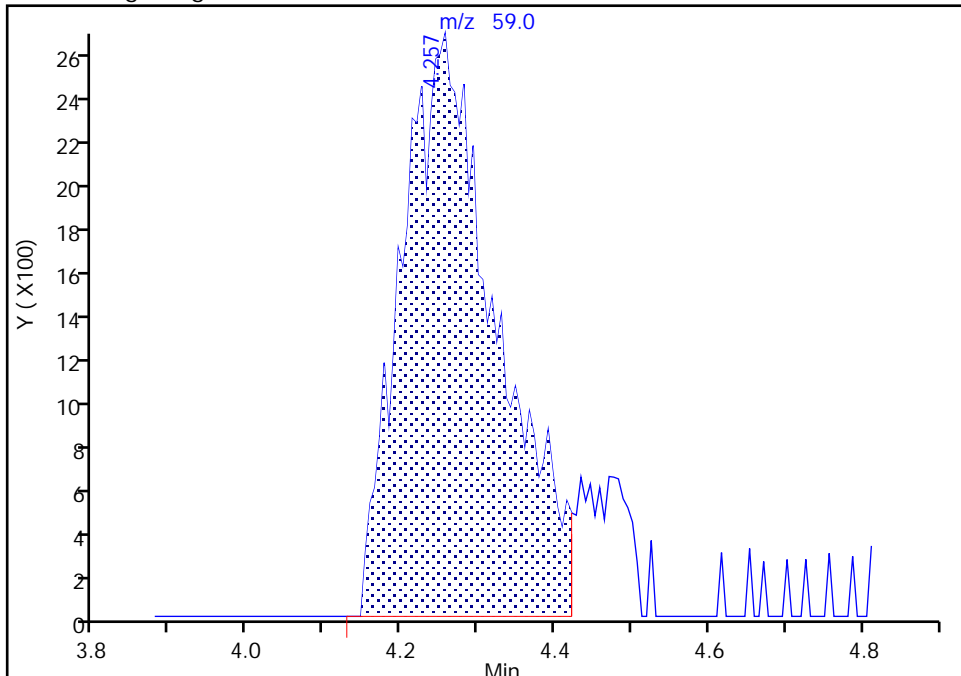
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Injection Date: 16-Aug-2022 17:48:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 13 Worklist Smp#: 14  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

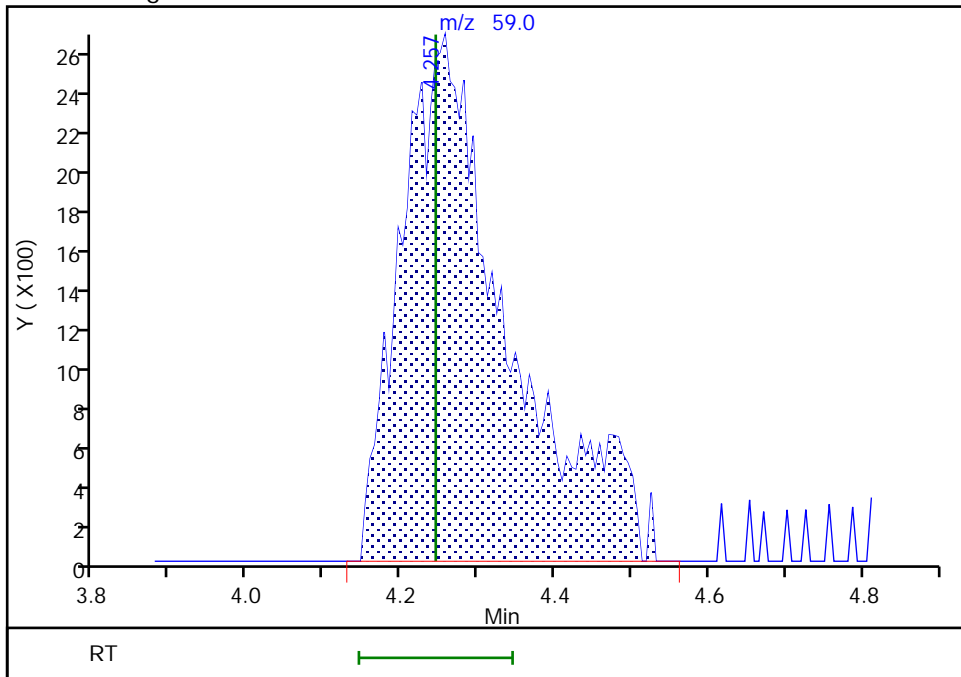
RT: 4.26  
Area: 23199  
Amount: 10.086383  
Amount Units: ug/l

Processing Integration Results



RT: 4.26  
Area: 26043  
Amount: 11.421802  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:34:44  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration  
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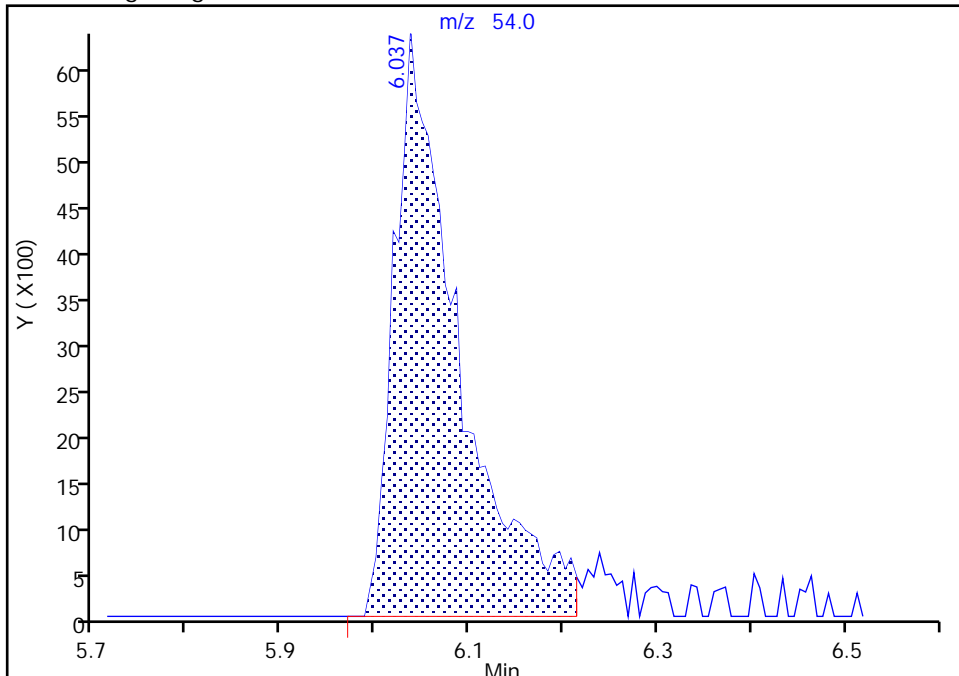
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Injection Date: 16-Aug-2022 17:48:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 13 Worklist Smp#: 14  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

45 Propionitrile, CAS: 107-12-0

Signal: 1

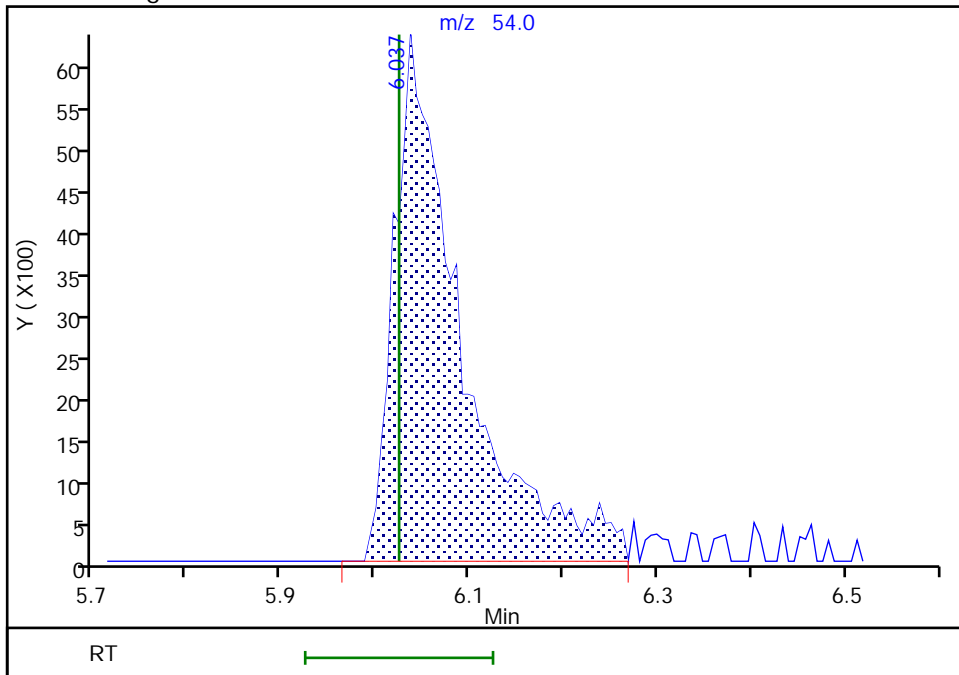
RT: 6.04  
Area: 30308  
Amount: 9.713761  
Amount Units: ug/l

Processing Integration Results



RT: 6.04  
Area: 31618  
Amount: 10.357229  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:34:57  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Environment Testing, LLC

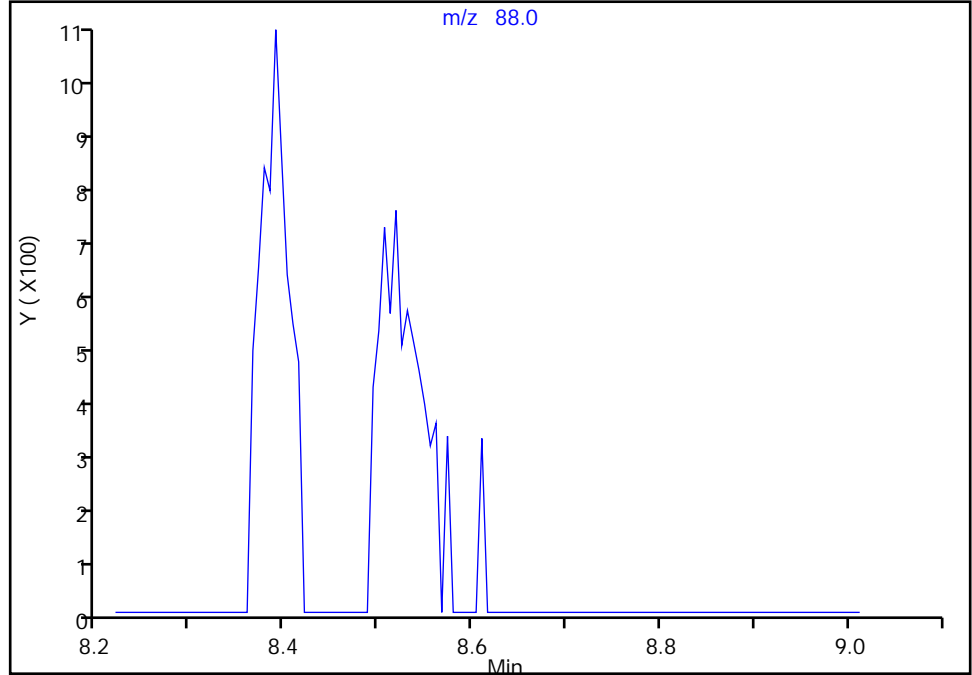
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Injection Date: 16-Aug-2022 17:48:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 13 Worklist Smp#: 14  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

74 1,4-Dioxane, CAS: 123-91-1

Signal: 1

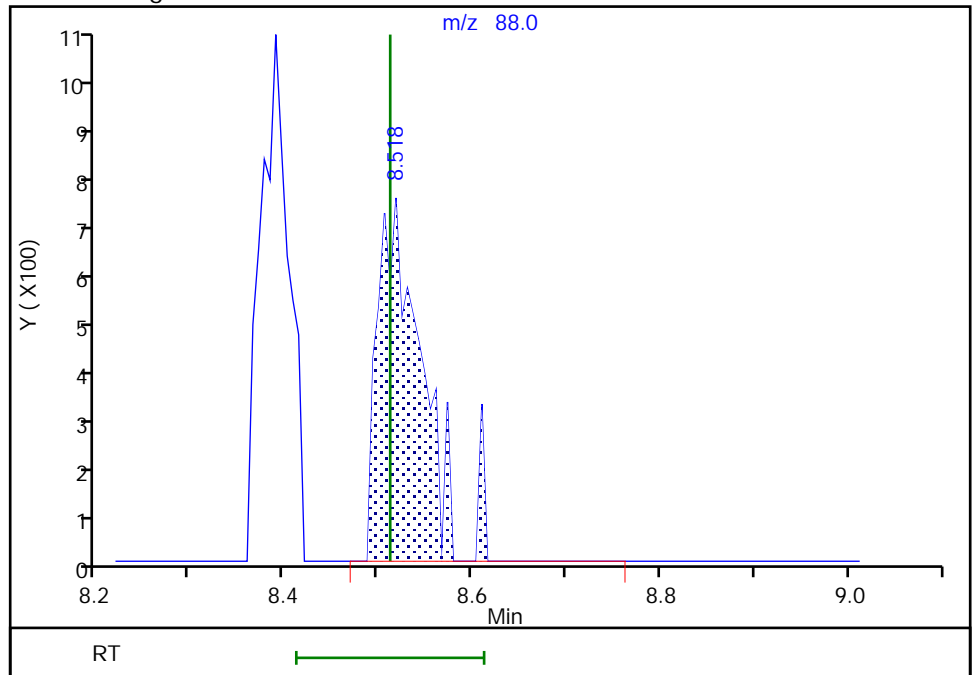
Not Detected  
Expected RT: 8.51

Processing Integration Results



Manual Integration Results

RT: 8.52  
Area: 2333  
Amount: 23.738210  
Amount Units: ug/l



Reviewer: DVW2, 17-Aug-2022 11:35:23  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X14.D  
 Lims ID: IC std3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 16-Aug-2022 18:10:30 ALS Bottle#: 14 Worklist Smp#: 15  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0064243-015  
 Misc. Info.: IC STD3  
 Operator ID: knk41612 Instrument ID: 16334  
 Sublist: chrom-MSV\_16334\_25mL\*sub4  
 Method: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 30-Aug-2022 10:48:35 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1639

First Level Reviewer: DVW2 Date: 17-Aug-2022 11:38:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.898	1.892	0.006	98	64970	1.00	1.12	
5 Chloromethane	50	2.099	2.087	0.012	99	71408	1.00	1.09	
6 Vinyl chloride	62	2.209	2.202	0.007	97	75827	1.00	1.14	
7 Butadiene	39	2.221	2.215	0.006	90	66066	1.00	1.04	M
9 Bromomethane	94	2.538	2.526	0.012	91	56777	1.00	1.08	
10 Chloroethane	64	2.611	2.599	0.012	99	43829	1.00	1.10	
11 Dichlorofluoromethane	67	2.843	2.836	0.007	97	107037	1.00	1.10	
12 Trichlorofluoromethane	101	2.916	2.904	0.012	95	99801	1.00	1.09	
13 Ethyl ether	59	3.135	3.123	0.012	90	44254	1.00	1.04	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.233	3.221	0.012	88	71956	1.00	1.11	
17 Acrolein	56	3.300	3.288	0.012	98	296541	50.0	46.9	
18 1,1-Dichloroethene	96	3.428	3.416	0.012	96	52396	1.00	1.09	
20 Acetone	43	3.471	3.458	0.013	87	67653	10.0	9.74	M
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.465	3.464	0.001	90	51784	1.00	1.11	
21 Iodomethane	142	3.617	3.605	0.012	98	95536	1.00	1.05	
22 Ethyl bromide	108	3.641	3.629	0.012	97	45609	1.00	1.03	
24 Isopropyl alcohol	45	3.678	3.690	-0.012	26	25166	20.0	20.4	M
23 Carbon disulfide	76	3.709	3.702	0.006	99	120809	1.00	1.03	
25 Methyl acetate	43	3.861	3.855	0.006	57	18773	1.00	0.8719	
27 3-Chloro-1-propene	41	3.891	3.873	0.018	89	68077	1.00	1.05	
29 Methylene Chloride	84	4.062	4.056	0.006	87	54805	1.00	1.03	
* 30 t-Butyl alcohol-d10 (IS)	65	4.123	4.141	-0.018	59	136943	50.0	50.0	
31 2-Methyl-2-propanol	59	4.251	4.245	0.006	99	47324	20.0	19.5	
32 Acrylonitrile	53	4.416	4.391	0.025	92	22478	2.50	2.44	
33 Methyl tert-butyl ether	73	4.458	4.446	0.012	93	140874	1.00	1.03	
34 trans-1,2-Dichloroethene	96	4.464	4.458	0.006	96	60166	1.00	1.07	
35 Hexane	57	4.891	4.885	0.006	91	67189	1.00	1.10	
37 1,1-Dichloroethane	63	5.135	5.123	0.012	96	96997	1.00	1.06	
38 Isopropyl ether	45	5.190	5.184	0.006	93	156342	1.00	1.04	
39 2-Chloro-1,3-butadiene	53	5.245	5.232	0.013	91	78331	1.00	1.08	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.726	5.720	0.006	97	158948	1.00	1.02	
41 2-Butanone (MEK)	43	5.946	5.933	0.013	99	137933	10.0	10.1	
42 cis-1,2-Dichloroethene	96	5.970	5.964	0.006	80	65758	1.00	1.07	
43 2,2-Dichloropropane	77	5.989	5.976	0.013	87	81208	1.00	1.10	
45 Propionitrile	54	6.037	6.025	0.012	98	64922	20.0	20.0	
S 47 1,2-Dichloroethene, Total	100				0			2.14	
48 Methacrylonitrile	67	6.245	6.238	0.007	91	140534	10.0	9.60	
49 Chlorobromomethane	128	6.299	6.293	0.006	86	29925	1.00	1.02	
50 Tetrahydrofuran	71	6.312	6.299	0.013	66	19791	5.00	4.86	
51 Chloroform	83	6.452	6.452	0.000	93	103813	1.00	1.06	
\$ 52 Dibromofluoromethane (Surr)	113	6.671	6.665	0.006	94	551657	10.0	9.96	
53 1,1,1-Trichloroethane	97	6.677	6.671	0.006	42	91058	1.00	1.07	
54 Cyclohexane	56	6.769	6.769	0.000	88	83885	1.00	1.08	
56 Carbon tetrachloride	117	6.885	6.884	0.001	81	78504	1.00	1.07	
57 1,1-Dichloropropene	75	6.897	6.891	0.006	96	84366	1.00	1.11	
58 Isobutyl alcohol	41	7.092	7.073	0.019	88	39678	50.0	49.6	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.129	7.116	0.013	81	117134	10.0	9.96	
60 Benzene	78	7.153	7.153	0.000	95	237804	1.00	1.06	
61 1,2-Dichloroethane	62	7.226	7.220	0.006	98	65349	1.00	1.03	
63 Tert-amyl methyl ether	73	7.348	7.348	0.000	99	150323	1.00	1.02	
* 64 Fluorobenzene (IS)	96	7.561	7.561	0.000	99	2229967	10.0	10.0	
65 n-Heptane	43	7.580	7.573	0.007	92	70226	1.00	1.10	
67 n-Butanol	56	7.976	7.970	0.006	90	61810	87.5	87.3	
68 Trichloroethene	95	8.043	8.043	0.000	95	67641	1.00	1.09	
69 Methylcyclohexane	83	8.348	8.341	0.007	90	101289	1.00	1.09	
70 1,2-Dichloropropane	63	8.372	8.372	0.000	97	57142	1.00	1.05	
71 2-ethoxy-2-methyl butane	87	8.391	8.390	0.001	94	89269	1.00	1.02	
72 Methyl methacrylate	69	8.464	8.463	0.001	88	26397	1.00	0.9261	
73 Dibromomethane	93	8.488	8.482	0.006	92	31212	1.00	1.04	
74 1,4-Dioxane	88	8.519	8.512	0.007	74	8023	50.0	57.8	M
76 Dichlorobromomethane	83	8.726	8.726	0.000	98	66707	1.00	1.02	
77 2-Nitropropane	41	9.006	9.000	0.006	97	28229	5.00	4.40	
79 1-Bromo-2-chloroethane	63	9.122	9.116	0.006	98	60702	1.00	1.03	
81 cis-1,3-Dichloropropene	75	9.281	9.280	0.001	96	79430	1.00	0.9703	
82 4-Methyl-2-pentanone (MIBK)	43	9.463	9.463	0.000	96	355253	10.0	9.84	
\$ 83 Toluene-d8 (Surr)	98	9.598	9.591	0.007	93	2261224	10.0	10.0	
84 Toluene	92	9.671	9.671	0.001	99	166283	1.00	1.09	
85 trans-1,3-Dichloropropene	75	9.939	9.939	0.000	92	65556	1.00	0.9605	
104 Ethyl methacrylate	69	10.006	10.006	0.000	87	57347	1.00	0.9756	
S 105 1,3-Dichloropropene, Total	100				0			1.93	
106 1,1,2-Trichloroethane	97	10.146	10.146	0.000	90	47367	1.00	1.05	
107 Tetrachloroethene	166	10.232	10.231	0.001	97	85370	1.00	1.11	
108 1,3-Dichloropropane	76	10.311	10.311	0.000	89	77024	1.00	1.04	
109 2-Hexanone	43	10.372	10.365	0.007	96	259520	10.0	9.86	
111 Chlorodibromomethane	129	10.524	10.524	0.000	89	48615	1.00	0.9864	
112 Ethylene Dibromide	107	10.634	10.634	0.000	99	45733	1.00	1.03	
* 113 Chlorobenzene-d5 (IS)	117	11.073	11.073	0.000	84	1766319	10.0	10.0	
114 1-Chlorohexane	91	11.085	11.085	0.000	94	92947	1.00	1.08	
115 Chlorobenzene	112	11.097	11.097	0.000	97	204292	1.00	1.10	
117 1,1,1,2-Tetrachloroethane	131	11.183	11.182	0.001	95	60398	1.00	1.01	
116 Ethylbenzene	91	11.189	11.189	0.001	98	319592	1.00	1.08	
S 118 Xylenes, Total	106				0			3.25	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
119 m-Xylene & p-Xylene	106	11.305	11.304	0.001	100	261822	2.00	2.19	
120 o-Xylene	106	11.634	11.634	0.000	95	125445	1.00	1.06	
121 Styrene	104	11.652	11.652	0.000	95	220754	1.00	1.10	
122 Bromoform	173	11.804	11.804	0.000	98	26899	1.00	0.9698	
123 Isopropylbenzene	105	11.939	11.938	0.001	95	326045	1.00	1.08	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.079	12.079	0.000	94	840581	10.0	9.98	
127 1,1,2,2-Tetrachloroethane	83	12.182	12.188	-0.006	95	58969	1.00	1.05	
128 Bromobenzene	156	12.195	12.194	0.001	91	92485	1.00	1.14	
129 trans-1,4-Dichloro-2-butene	53	12.213	12.213	0.000	93	126083	10.0	9.50	
130 1,2,3-Trichloropropane	110	12.231	12.231	0.000	81	17133	1.00	1.06	
131 N-Propylbenzene	91	12.268	12.268	0.000	99	394622	1.00	1.12	
132 2-Chlorotoluene	126	12.341	12.341	0.000	97	85619	1.00	1.10	
133 1,3,5-Trimethylbenzene	105	12.402	12.402	0.000	94	284846	1.00	1.08	
134 4-Chlorotoluene	126	12.439	12.438	0.000	97	97891	1.00	1.21	
135 tert-Butylbenzene	134	12.646	12.646	0.000	92	65628	1.00	1.08	
136 Pentachloroethane	167	12.676	12.676	0.000	89	42730	1.00	0.9789	
137 1,2,4-Trimethylbenzene	105	12.688	12.688	0.000	96	297385	1.00	1.09	
138 sec-Butylbenzene	105	12.810	12.810	0.000	94	369489	1.00	1.11	
139 1,3-Dichlorobenzene	146	12.908	12.908	0.000	99	199241	1.00	1.19	
140 4-Isopropyltoluene	119	12.920	12.920	0.000	97	333901	1.00	1.10	
* 141 1,4-Dichlorobenzene-d4	152	12.963	12.963	0.000	93	1050836	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.981	12.981	0.000	96	227035	1.00	1.30	
143 1,2,3-Trimethylbenzene	120	12.993	12.993	0.000	98	134921	1.00	1.08	
144 Benzyl chloride	126	13.060	13.060	0.000	98	16060	1.00	0.8851	
145 p-Diethylbenzene	119	13.115	13.121	-0.006	92	201053	1.00	1.12	
146 n-Butylbenzene	92	13.207	13.206	0.001	97	168500	1.00	1.14	
147 1,2-Dichlorobenzene	146	13.243	13.243	0.000	99	186141	1.00	1.19	
149 1,2-Dibromo-3-Chloropropane	155	13.786	13.786	0.000	88	8619	1.00	1.04	
150 1,3,5-Trichlorobenzene	180	13.908	13.907	0.001	98	163162	1.00	1.21	
151 1,2,4-Trichlorobenzene	180	14.328	14.328	0.000	94	170397	1.00	1.35	
152 Hexachlorobutadiene	225	14.414	14.413	0.001	96	72272	1.00	1.21	
153 Naphthalene	128	14.511	14.511	0.000	96	262955	1.00	1.23	
154 1,2,3-Trichlorobenzene	180	14.651	14.651	0.000	96	144662	1.00	1.30	
155 2-Methylnaphthalene	142	15.267	15.261	0.006	94	176161	1.00	1.30	
166 Pentane	43	2.934	2.916	0.018	98	68584	NR	NR	

## QC Flag Legend

### Processing Flags

NR - Missing Quant Standard

### Review Flags

M - Manually Integrated

## Reagents:

MSV_LL_#1_826_00052	Amount Added: 2.00	Units: uL	
MSV_LL_GAS826_00108	Amount Added: 2.00	Units: uL	
MSV_LL_#2_826_00056	Amount Added: 2.00	Units: uL	
MSV_29_826ISS_00037	Amount Added: 1.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X14.D

Injection Date: 16-Aug-2022 18:10:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: IC std3

Worklist Smp#: 15

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

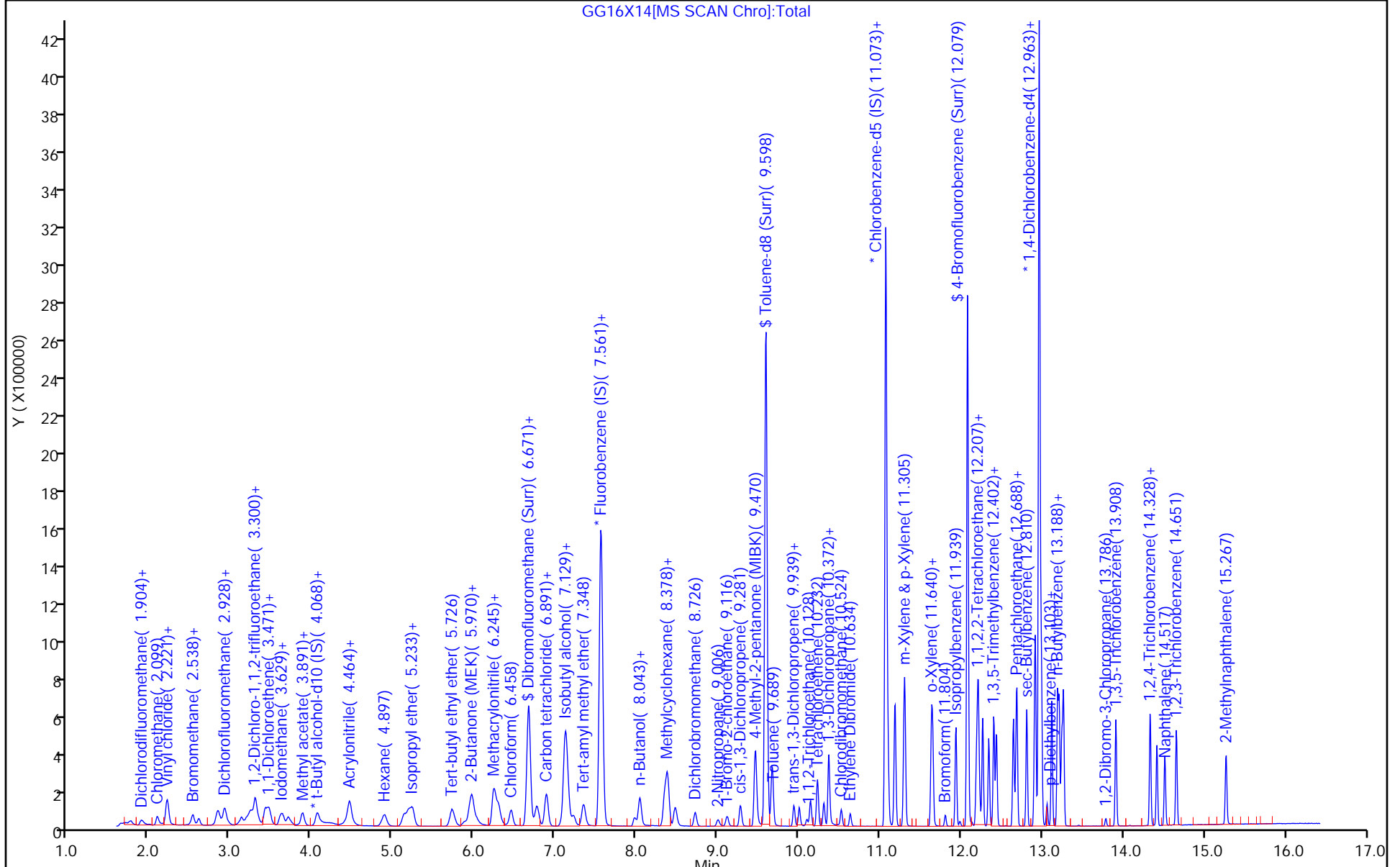
ALS Bottle#: 14

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



GG16X14[MS SCAN Chrom]:Total

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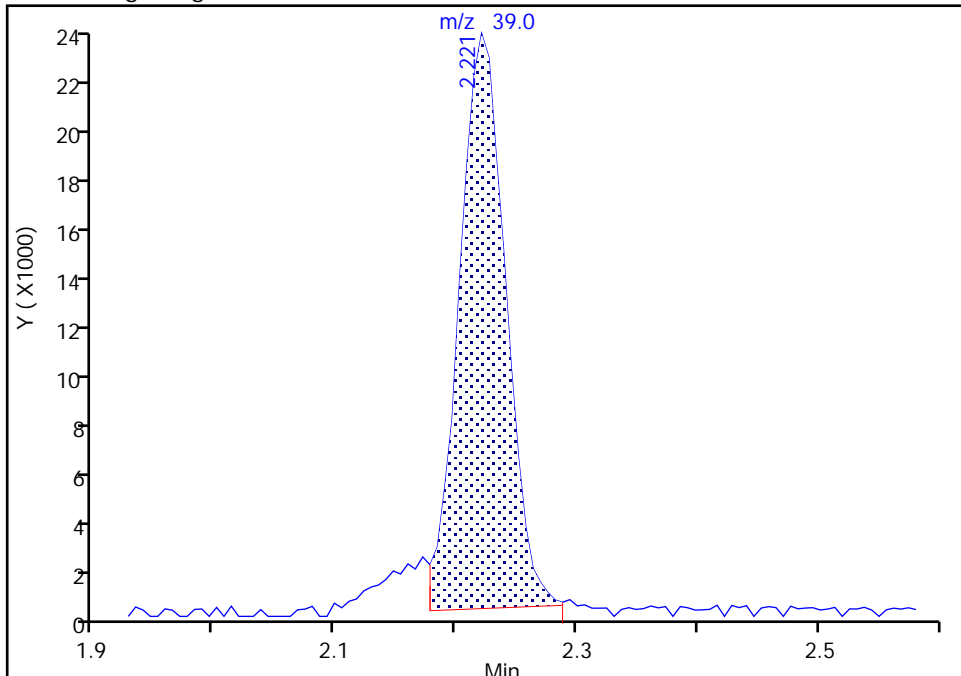
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Injection Date: 16-Aug-2022 18:10:30 Instrument ID: 16334  
Lims ID: IC std3  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 14 Worklist Smp#: 15  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Butadiene, CAS: 106-99-0

Signal: 1

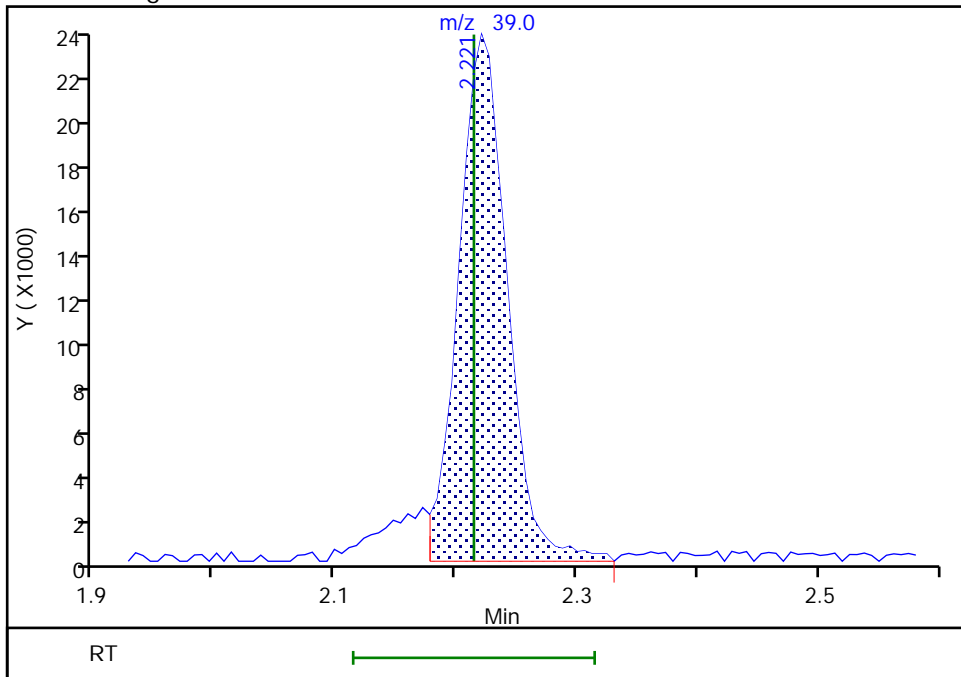
RT: 2.22  
Area: 62770  
Amount: 0.996718  
Amount Units: ug/l

Processing Integration Results



RT: 2.22  
Area: 66066  
Amount: 1.041270  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:36:21  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration



Eurofins Lancaster Laboratories Environment Testing, LLC

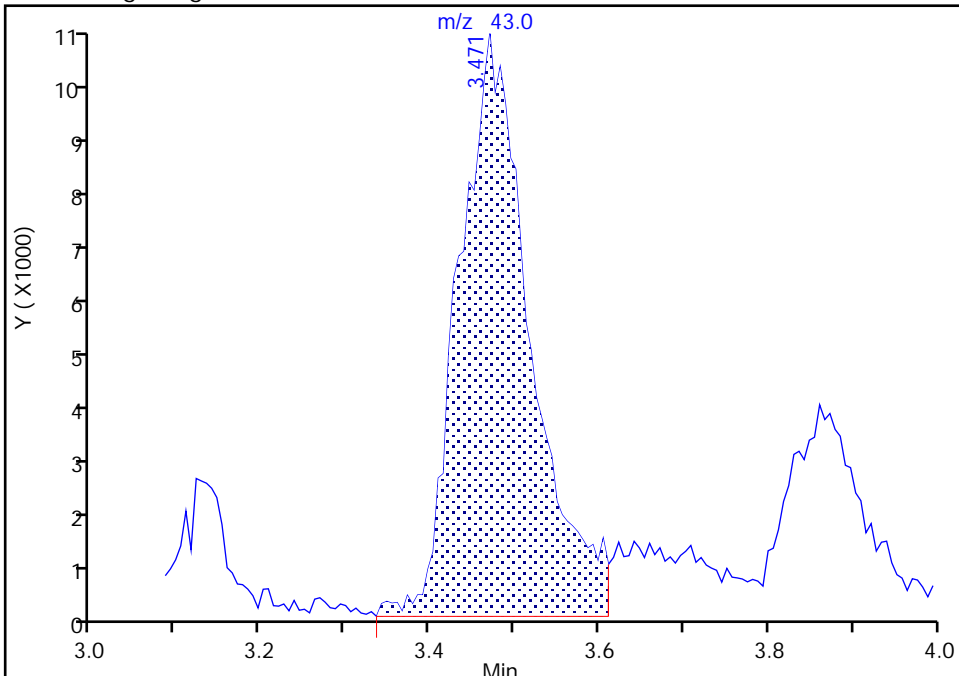
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Injection Date: 16-Aug-2022 18:10:30 Instrument ID: 16334  
Lims ID: IC std3  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 14 Worklist Smp#: 15  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

20 Acetone, CAS: 67-64-1

Signal: 1

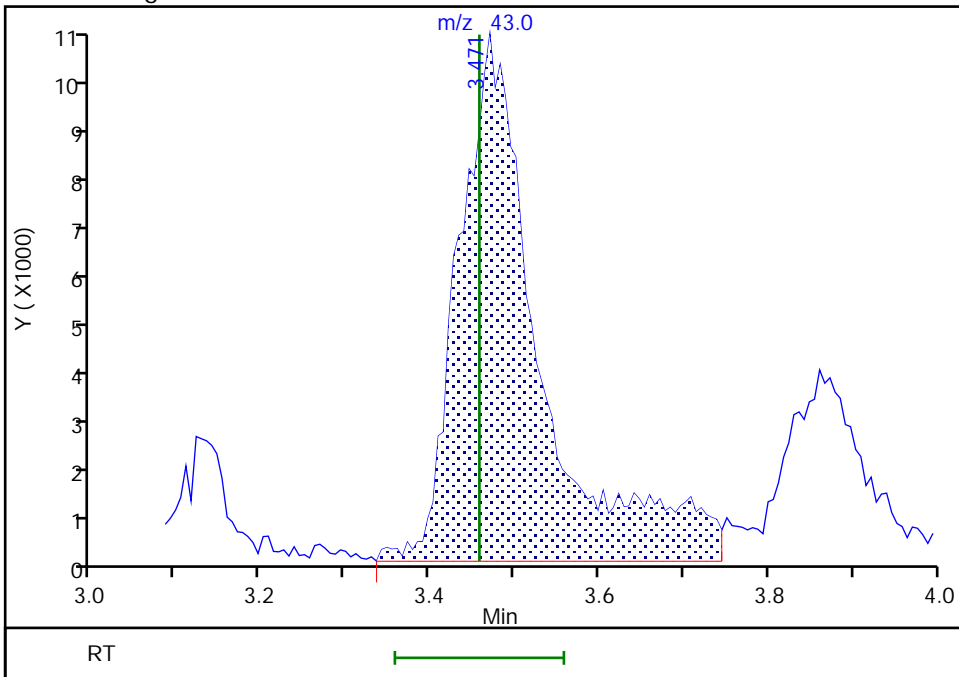
RT: 3.47  
Area: 59249  
Amount: 8.710722  
Amount Units: ug/l

Processing Integration Results



RT: 3.47  
Area: 67653  
Amount: 9.744325  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:36:51  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

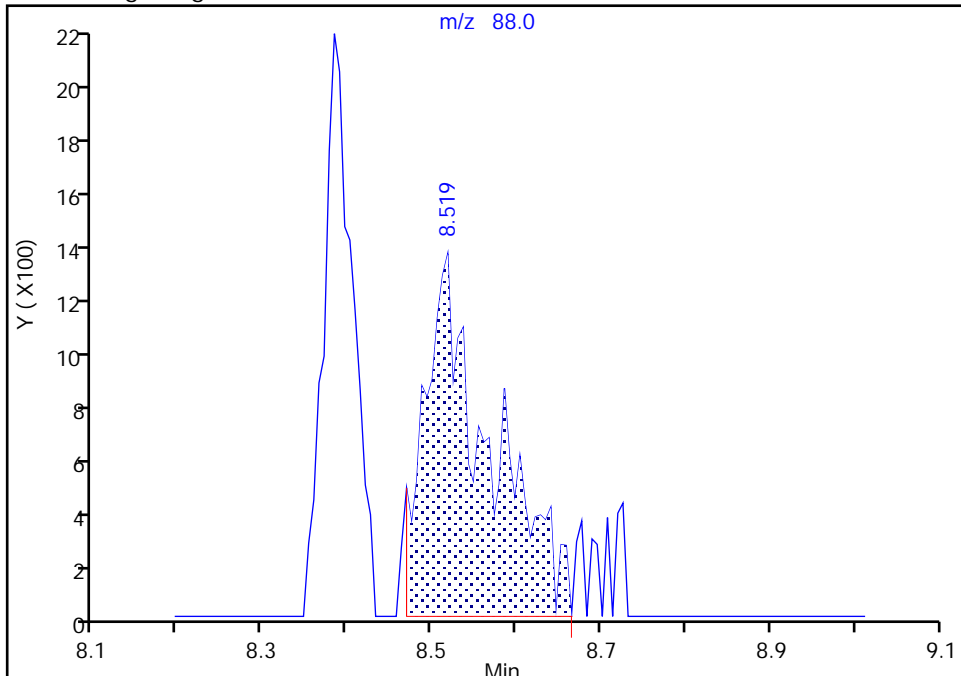
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Injection Date: 16-Aug-2022 18:10:30 Instrument ID: 16334  
Lims ID: IC std3  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 14 Worklist Smp#: 15  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

74 1,4-Dioxane, CAS: 123-91-1

Signal: 1

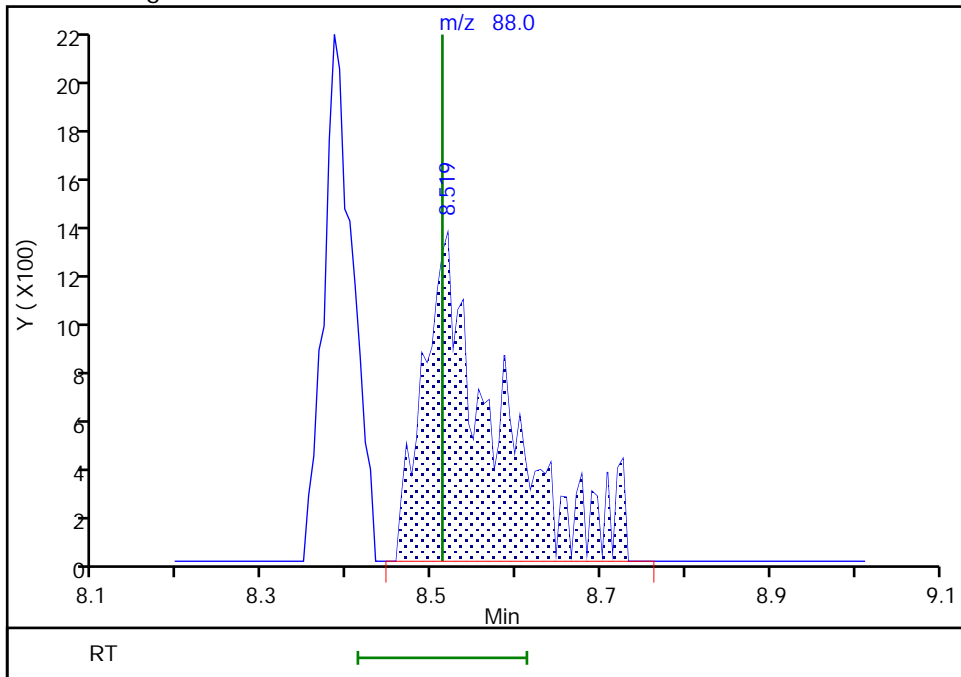
RT: 8.52  
Area: 7082  
Amount: 57.397799  
Amount Units: ug/l

Processing Integration Results



RT: 8.52  
Area: 8023  
Amount: 57.799962  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:37:50  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC  
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X15.D  
 Lims ID: IC std4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 16-Aug-2022 18:32:30 ALS Bottle#: 15 Worklist Smp#: 16  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0064243-016  
 Misc. Info.: IC STD4  
 Operator ID: knk41612 Instrument ID: 16334  
 Sublist: chrom-MSV\_16334\_25mL\*sub4  
 Method: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 30-Aug-2022 10:48:41 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1639

First Level Reviewer: DVW2 Date: 17-Aug-2022 11:40:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.904	1.904	0.000	99	121942	2.00	2.09	
5 Chloromethane	50	2.099	2.099	0.000	99	135367	2.00	2.06	
6 Vinyl chloride	62	2.209	2.209	0.000	98	139755	2.00	2.08	
7 Butadiene	39	2.221	2.221	0.000	93	121727	2.00	1.91	
9 Bromomethane	94	2.532	2.532	0.000	90	108098	2.00	2.04	
10 Chloroethane	64	2.605	2.605	0.000	99	82418	2.00	2.06	
11 Dichlorofluoromethane	67	2.843	2.843	0.000	97	201792	2.00	2.06	
12 Trichlorofluoromethane	101	2.910	2.910	0.000	95	194398	2.00	2.11	
13 Ethyl ether	59	3.135	3.135	0.000	89	87075	2.00	2.03	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.227	3.227	0.000	91	130855	2.00	2.01	
17 Acrolein	56	3.306	3.306	0.000	99	643594	100.0	111.5	
18 1,1-Dichloroethene	96	3.434	3.434	0.000	97	96997	2.00	2.01	
20 Acetone	43	3.477	3.477	0.000	77	132378	20.0	20.9	M
19 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.477	3.477	0.000	89	97302	2.00	2.06	
21 Iodomethane	142	3.611	3.611	0.000	98	185762	2.00	2.03	
22 Ethyl bromide	108	3.641	3.641	0.000	98	89188	2.00	2.01	
24 Isopropyl alcohol	45	3.708	3.708	0.000	26	45850	40.0	37.0	
23 Carbon disulfide	76	3.714	3.714	0.000	99	228472	2.00	1.94	
25 Methyl acetate	43	3.867	3.867	0.000	45	41982	2.00	2.14	
27 3-Chloro-1-propene	41	3.885	3.885	0.000	89	126514	2.00	1.94	
29 Methylene Chloride	84	4.068	4.068	0.000	86	110925	2.00	2.07	
* 30 t-Butyl alcohol-d10 (IS)	65	4.117	4.117	0.000	61	124917	50.0	50.0	
31 2-Methyl-2-propanol	59	4.233	4.233	0.000	97	95457	40.0	43.1	
32 Acrylonitrile	53	4.403	4.403	0.000	98	50401	5.00	6.00	
33 Methyl tert-butyl ether	73	4.458	4.458	0.000	89	281948	2.00	2.04	
34 trans-1,2-Dichloroethene	96	4.470	4.470	0.000	97	115672	2.00	2.05	
35 Hexane	57	4.891	4.891	0.000	91	124939	2.00	2.03	
37 1,1-Dichloroethane	63	5.135	5.135	0.000	96	184918	2.00	2.02	
38 Isopropyl ether	45	5.202	5.202	0.000	93	308794	2.00	2.03	
39 2-Chloro-1,3-butadiene	53	5.245	5.245	0.000	90	148170	2.00	2.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.726	5.726	0.000	97	318098	2.00	2.04	
41 2-Butanone (MEK)	43	5.946	5.946	0.000	99	273098	20.0	21.8	
42 cis-1,2-Dichloroethene	96	5.970	5.970	0.000	80	125389	2.00	2.03	
43 2,2-Dichloropropane	77	5.988	5.988	0.000	87	147961	2.00	1.99	
45 Propionitrile	54	6.037	6.037	0.000	98	129473	40.0	43.7	
S 47 1,2-Dichloroethene, Total	100				0			4.08	
48 Methacrylonitrile	67	6.244	6.244	0.000	90	302812	20.0	22.7	
49 Chlorobromomethane	128	6.305	6.305	0.000	86	61518	2.00	2.08	
50 Tetrahydrofuran	71	6.311	6.311	0.000	70	41668	10.0	11.2	
51 Chloroform	83	6.458	6.458	0.000	93	200225	2.00	2.04	
\$ 52 Dibromofluoromethane (Surr)	113	6.671	6.671	0.000	94	562381	10.0	10.1	
53 1,1,1-Trichloroethane	97	6.683	6.683	0.000	98	171777	2.00	2.00	
54 Cyclohexane	56	6.775	6.775	0.000	88	158669	2.00	2.03	
56 Carbon tetrachloride	117	6.884	6.884	0.000	84	147932	2.00	2.00	
57 1,1-Dichloropropene	75	6.897	6.897	0.000	96	154228	2.00	2.02	
58 Isobutyl alcohol	41	7.086	7.086	0.000	90	77842	100.0	96.7	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.122	7.122	0.000	79	118676	10.0	10.0	
60 Benzene	78	7.159	7.159	0.000	96	454392	2.00	2.02	
61 1,2-Dichloroethane	62	7.220	7.220	0.000	98	132376	2.00	2.07	
63 Tert-amyl methyl ether	73	7.348	7.348	0.000	98	300963	2.00	2.03	
* 64 Fluorobenzene (IS)	96	7.561	7.561	0.000	99	2244586	10.0	10.0	
65 n-Heptane	43	7.573	7.573	0.000	87	130073	2.00	2.02	
67 n-Butanol	56	7.982	7.982	0.000	88	120549	175.0	186.6	
68 Trichloroethene	95	8.043	8.043	0.000	96	125798	2.00	2.00	
69 Methylcyclohexane	83	8.348	8.348	0.000	88	192698	2.00	2.06	M
70 1,2-Dichloropropane	63	8.372	8.372	0.000	95	110737	2.00	2.01	
71 2-ethoxy-2-methyl butane	87	8.384	8.384	0.000	96	177346	2.00	2.02	
72 Methyl methacrylate	69	8.470	8.470	0.000	87	58583	2.00	2.25	
73 Dibromomethane	93	8.482	8.482	0.000	92	61890	2.00	2.05	
74 1,4-Dioxane	88	8.512	8.512	0.000	28	13711	100.0	100.9	M
76 Dichlorobromomethane	83	8.726	8.726	0.000	99	131278	2.00	1.99	
77 2-Nitropropane	41	9.000	9.000	0.000	99	62444	10.0	10.7	
79 1-Bromo-2-chloroethane	63	9.116	9.116	0.000	98	122662	2.00	2.06	
81 cis-1,3-Dichloropropene	75	9.280	9.280	0.000	96	167481	2.00	2.03	
82 4-Methyl-2-pentanone (MIBK)	43	9.463	9.463	0.000	96	736571	20.0	22.4	
\$ 83 Toluene-d8 (Surr)	98	9.597	9.597	0.000	93	2269767	10.0	10.0	
84 Toluene	92	9.677	9.677	0.000	98	310469	2.00	2.02	
85 trans-1,3-Dichloropropene	75	9.939	9.939	0.000	92	137931	2.00	2.02	
104 Ethyl methacrylate	69	10.006	10.006	0.000	88	119274	2.00	2.03	
S 105 1,3-Dichloropropene, Total	100				0			4.05	
106 1,1,2-Trichloroethane	97	10.146	10.146	0.000	90	90526	2.00	2.01	
107 Tetrachloroethene	166	10.231	10.231	0.000	97	154129	2.00	2.00	
108 1,3-Dichloropropane	76	10.311	10.311	0.000	89	149909	2.00	2.03	
109 2-Hexanone	43	10.372	10.372	0.000	96	532561	20.0	22.2	
111 Chlorodibromomethane	129	10.524	10.524	0.000	89	100469	2.00	2.04	
112 Ethylene Dibromide	107	10.634	10.634	0.000	99	90775	2.00	2.04	
* 113 Chlorobenzene-d5 (IS)	117	11.073	11.073	0.000	84	1767884	10.0	10.0	
114 1-Chlorohexane	91	11.085	11.085	0.000	95	167744	2.00	1.95	
115 Chlorobenzene	112	11.097	11.097	0.000	97	373854	2.00	2.01	
117 1,1,1,2-Tetrachloroethane	131	11.182	11.182	0.000	94	121181	2.00	2.03	
116 Ethylbenzene	91	11.188	11.188	0.000	98	598666	2.00	2.01	
S 118 Xylenes, Total	106				0			6.07	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
119 m-Xylene & p-Xylene	106	11.304	11.304	0.000	100	483843	4.00	4.05	
120 o-Xylene	106	11.634	11.634	0.000	96	239128	2.00	2.02	
121 Styrene	104	11.652	11.652	0.000	95	405386	2.00	2.02	
122 Bromoform	173	11.804	11.804	0.000	97	54321	2.00	1.96	
123 Isopropylbenzene	105	11.938	11.938	0.000	95	608693	2.00	2.01	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.079	12.079	0.000	94	844497	10.0	10.0	
127 1,1,2,2-Tetrachloroethane	83	12.188	12.188	0.000	94	114734	2.00	2.03	
128 Bromobenzene	156	12.194	12.194	0.000	93	164416	2.00	2.02	
129 trans-1,4-Dichloro-2-butene	53	12.213	12.213	0.000	94	266551	20.0	22.0	
130 1,2,3-Trichloropropane	110	12.231	12.231	0.000	82	32366	2.00	2.00	
131 N-Propylbenzene	91	12.268	12.268	0.000	98	713265	2.00	2.01	
132 2-Chlorotoluene	126	12.341	12.341	0.000	98	153864	2.00	1.97	
133 1,3,5-Trimethylbenzene	105	12.402	12.402	0.000	94	535420	2.00	2.01	
134 4-Chlorotoluene	126	12.438	12.438	0.000	96	160453	2.00	1.96	
135 tert-Butylbenzene	134	12.646	12.646	0.000	92	118213	2.00	1.93	
136 Pentachloroethane	167	12.676	12.676	0.000	87	88614	2.00	2.02	
137 1,2,4-Trimethylbenzene	105	12.688	12.688	0.000	96	554653	2.00	2.02	
138 sec-Butylbenzene	105	12.810	12.810	0.000	94	672099	2.00	2.01	
139 1,3-Dichlorobenzene	146	12.908	12.908	0.000	99	330665	2.00	1.97	
140 4-Isopropyltoluene	119	12.920	12.920	0.000	97	615806	2.00	2.02	
* 141 1,4-Dichlorobenzene-d4	152	12.963	12.963	0.000	94	1056705	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.981	12.981	0.000	96	336330	2.00	1.91	
143 1,2,3-Trimethylbenzene	120	12.993	12.993	0.000	98	252371	2.00	2.00	
144 Benzyl chloride	126	13.060	13.060	0.000	98	35450	2.00	1.74	
145 p-Diethylbenzene	119	13.121	13.121	0.000	93	363783	2.00	2.01	
146 n-Butylbenzene	92	13.206	13.206	0.000	97	292758	2.00	1.97	
147 1,2-Dichlorobenzene	146	13.243	13.243	0.000	99	312578	2.00	1.98	
149 1,2-Dibromo-3-Chloropropane	155	13.786	13.786	0.000	89	16770	2.00	2.02	
150 1,3,5-Trichlorobenzene	180	13.907	13.907	0.000	98	263813	2.00	1.95	
151 1,2,4-Trichlorobenzene	180	14.328	14.328	0.000	94	243272	2.00	1.92	
152 Hexachlorobutadiene	225	14.413	14.413	0.000	96	116692	2.00	1.94	
153 Naphthalene	128	14.511	14.511	0.000	96	419110	2.00	1.95	
154 1,2,3-Trichlorobenzene	180	14.651	14.651	0.000	96	213681	2.00	1.90	
155 2-Methylnaphthalene	142	15.267	15.267	0.000	93	255287	2.00	1.86	
166 Pentane	43	2.928	2.928	0.000	96	125413	NR	NR	

## QC Flag Legend

### Processing Flags

NR - Missing Quant Standard

### Review Flags

M - Manually Integrated

## Reagents:

MSV_LL_#1_826_00052	Amount Added: 2.00	Units: uL	
MSV_LL_GAS826_00108	Amount Added: 2.00	Units: uL	
MSV_LL_#2_826_00056	Amount Added: 2.00	Units: uL	
MSV_29_826ISS_00037	Amount Added: 1.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X15.D

Injection Date: 16-Aug-2022 18:32:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: IC std4

Worklist Smp#: 16

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

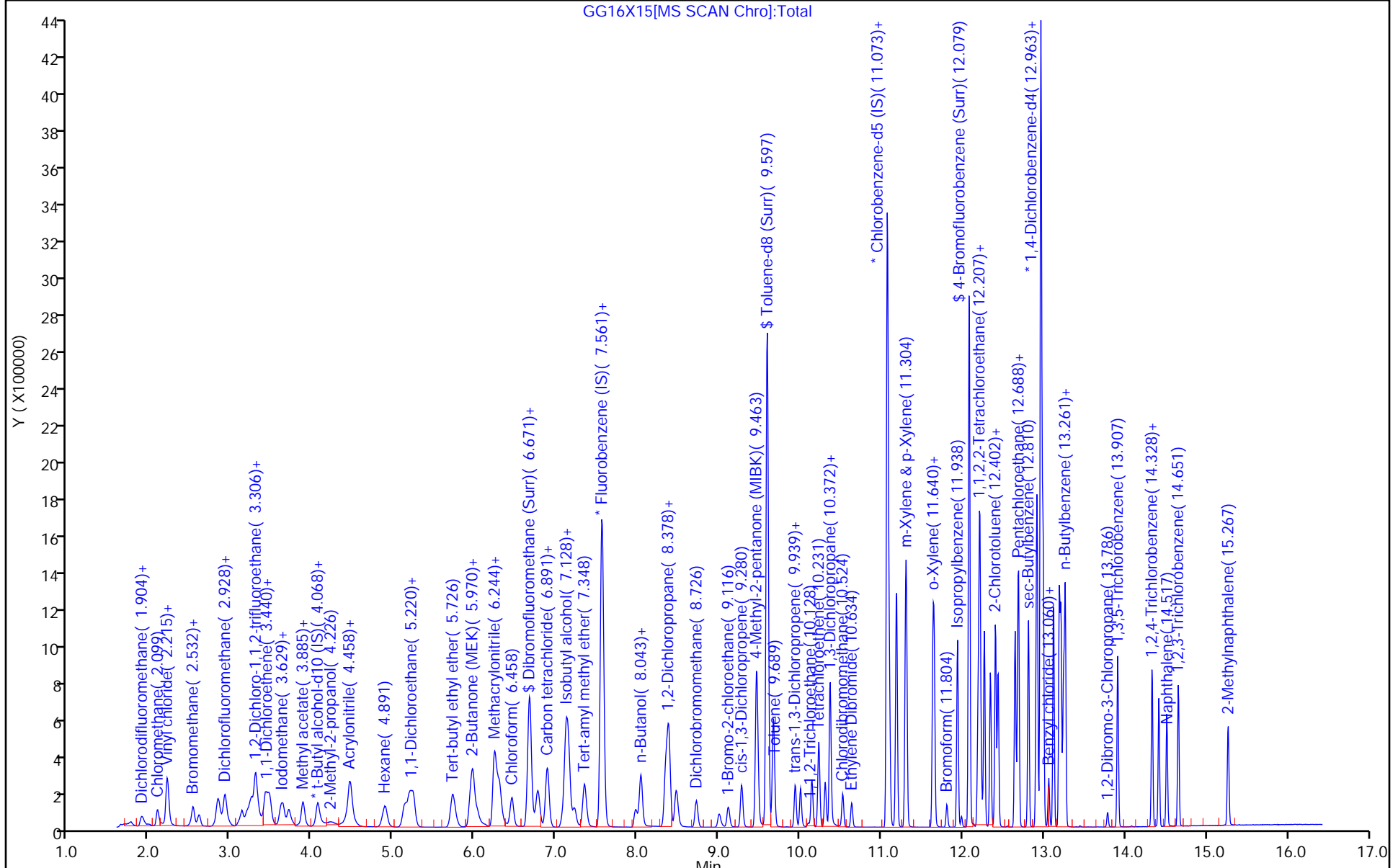
ALS Bottle#: 15

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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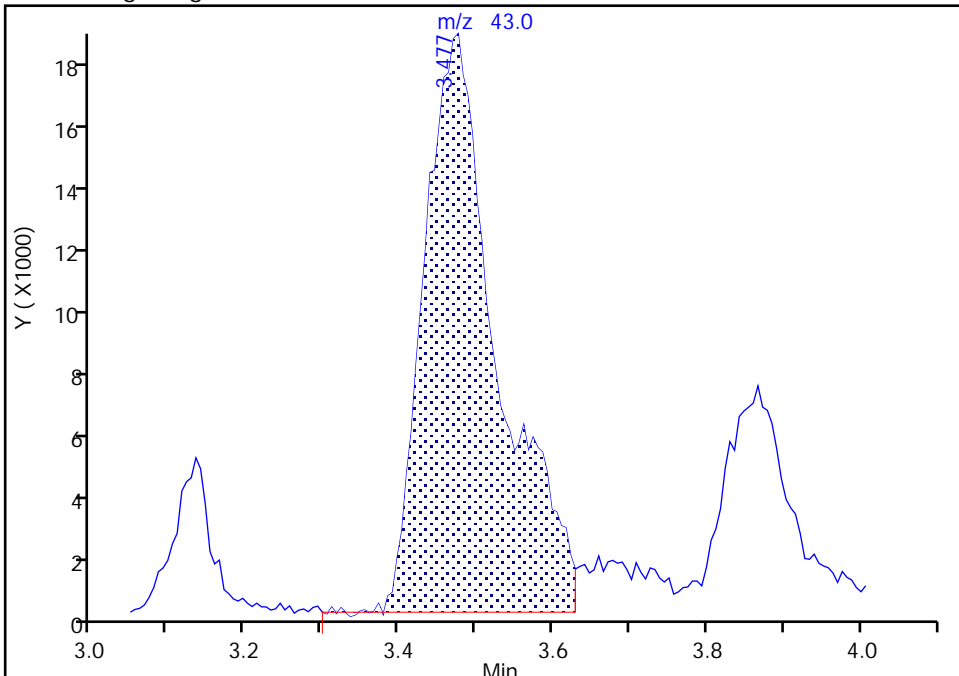
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Injection Date:	16-Aug-2022 18:32:30	Instrument ID:	16334
Lims ID:	IC std4		
Client ID:			
Operator ID:	knk41612	ALS Bottle#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	16

20 Acetone, CAS: 67-64-1

Signal: 1

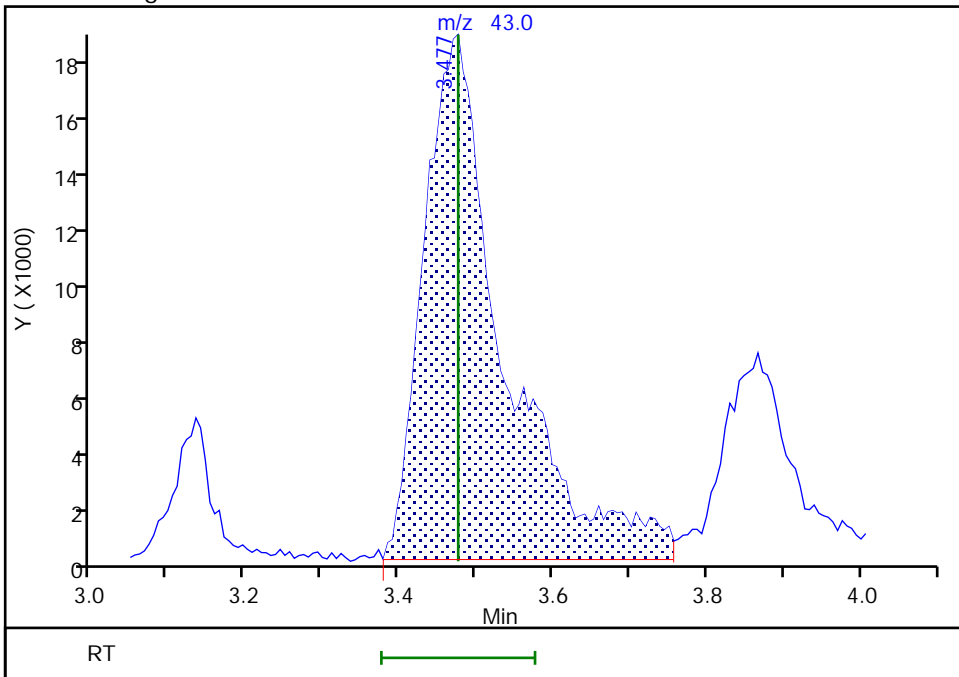
RT: 3.48  
 Area: 120806  
 Amount: 19.132919  
 Amount Units: ug/l

Processing Integration Results



RT: 3.48  
 Area: 132378  
 Amount: 20.902527  
 Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:38:59  
 Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

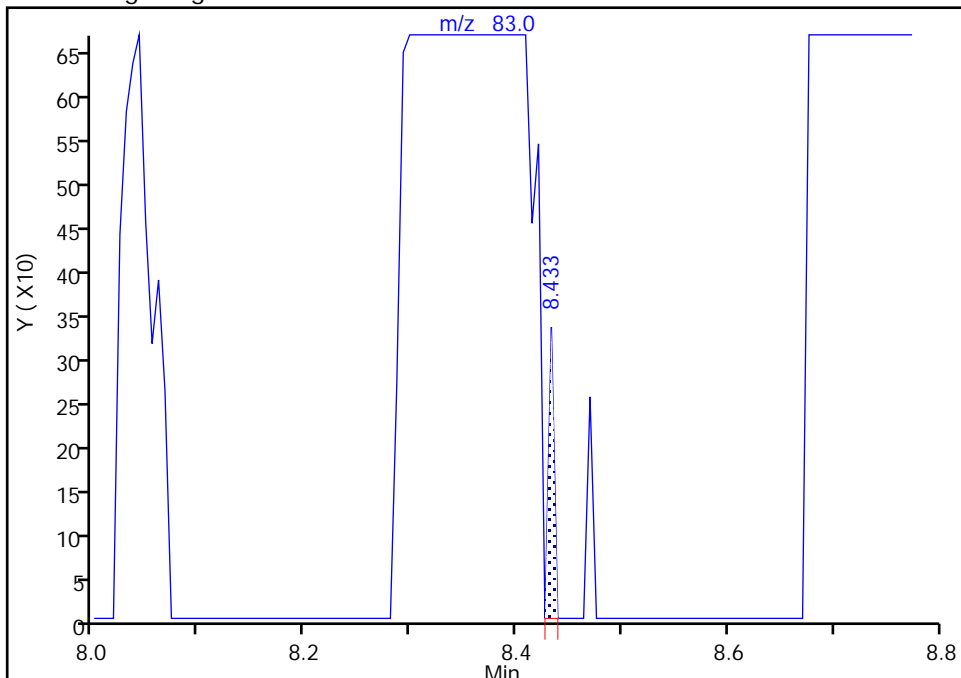
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Injection Date: 16-Aug-2022 18:32:30 Instrument ID: 16334  
Lims ID: IC std4  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 15 Worklist Smp#: 16  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

69 Methylcyclohexane, CAS: 108-87-2

Signal: 1

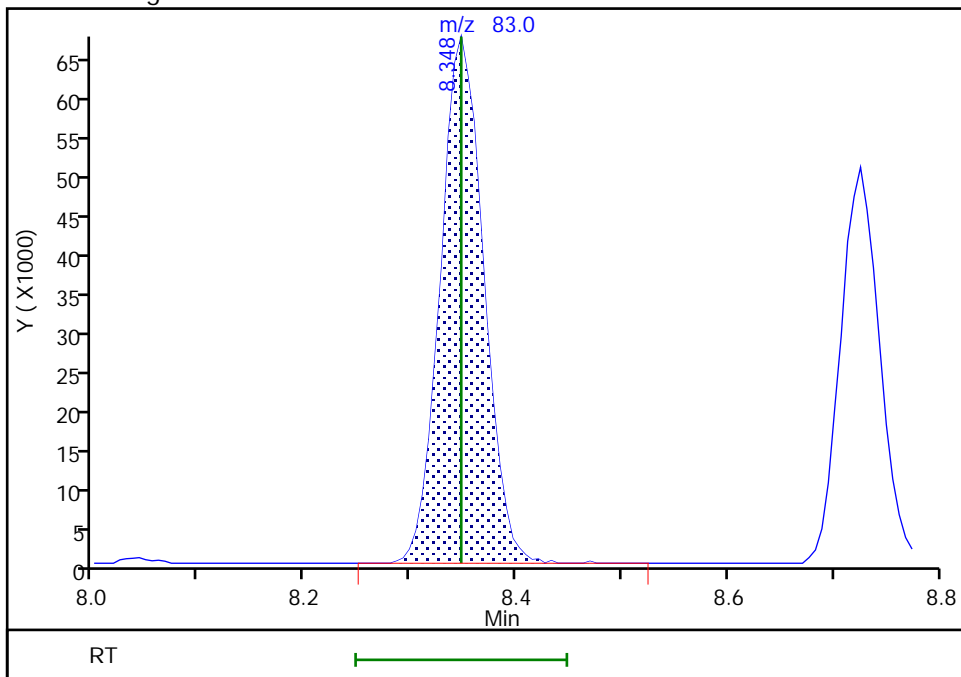
RT: 8.43  
Area: 122  
Amount: 0.001532  
Amount Units: ug/l

Processing Integration Results



RT: 8.35  
Area: 192698  
Amount: 2.062920  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:39:29  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration



Eurofins Lancaster Laboratories Environment Testing, LLC

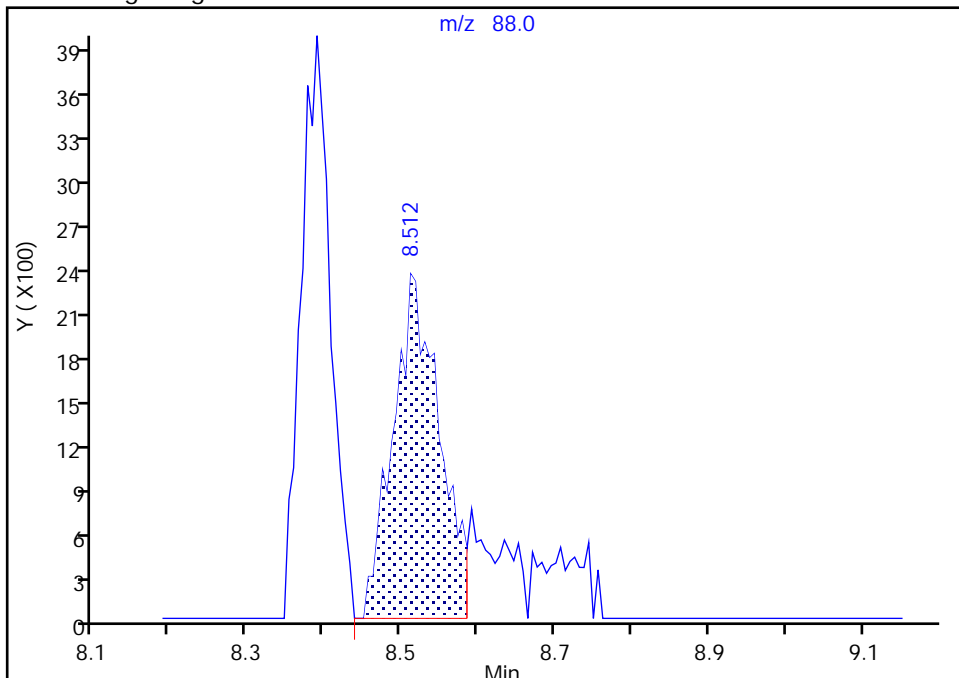
Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X15.D  
Injection Date: 16-Aug-2022 18:32:30 Instrument ID: 16334  
Lims ID: IC std4  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 15 Worklist Smp#: 16  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

74 1,4-Dioxane, CAS: 123-91-1

Signal: 1

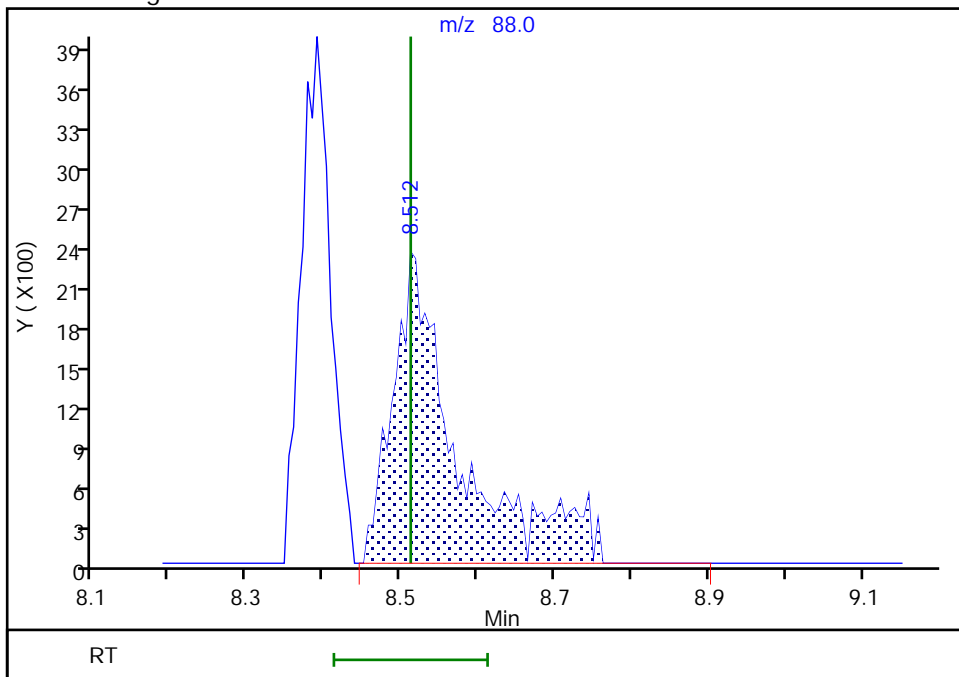
RT: 8.51  
Area: 9681  
Amount: 84.181392  
Amount Units: ug/l

Processing Integration Results



RT: 8.51  
Area: 13711  
Amount: 100.8926  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:39:40  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X16.D  
 Lims ID: IC std5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 16-Aug-2022 18:54:30 ALS Bottle#: 16 Worklist Smp#: 17  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0064243-017  
 Misc. Info.: IC STD5  
 Operator ID: knk41612 Instrument ID: 16334  
 Sublist: chrom-MSV\_16334\_25mL\*sub4  
 Method: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 30-Aug-2022 10:48:48 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1639

First Level Reviewer: DVW2 Date: 17-Aug-2022 11:42:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.898	1.904	-0.006	99	309456	5.00	5.19	
5 Chloromethane	50	2.093	2.099	-0.006	99	324413	5.00	4.82	
6 Vinyl chloride	62	2.209	2.209	0.000	98	342332	5.00	4.98	
7 Butadiene	39	2.221	2.221	0.000	93	300502	5.00	4.60	
9 Bromomethane	94	2.532	2.532	0.000	90	269090	5.00	4.96	
10 Chloroethane	64	2.605	2.605	0.000	100	202614	5.00	4.94	
11 Dichlorofluoromethane	67	2.843	2.843	0.000	97	493140	5.00	4.92	
12 Trichlorofluoromethane	101	2.910	2.910	0.000	98	486482	5.00	5.15	
13 Ethyl ether	59	3.129	3.135	-0.006	89	209424	5.00	4.78	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.227	3.227	0.000	91	327426	5.00	4.91	
17 Acrolein	56	3.300	3.306	-0.006	99	1523859	250.0	232.5	
18 1,1-Dichloroethene	96	3.428	3.434	-0.006	96	245013	5.00	4.95	
20 Acetone	43	3.477	3.477	0.000	100	314354	50.0	43.7	
19 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.465	3.477	-0.012	90	244299	5.00	5.07	
21 Iodomethane	142	3.611	3.611	0.000	99	459604	5.00	4.91	
22 Ethyl bromide	108	3.641	3.641	0.000	98	222658	5.00	4.90	
24 Isopropyl alcohol	45	3.684	3.708	-0.024	98	126180	100.0	99.4	M
23 Carbon disulfide	76	3.708	3.714	-0.006	99	605450	5.00	5.02	
25 Methyl acetate	43	3.861	3.867	-0.006	96	97635	5.00	4.38	
27 3-Chloro-1-propene	41	3.885	3.885	0.000	89	322428	5.00	4.83	
29 Methylene Chloride	84	4.062	4.068	-0.006	88	266839	5.00	4.87	
* 30 t-Butyl alcohol-d10 (IS)	65	4.129	4.117	0.012	59	141819	50.0	50.0	M
31 2-Methyl-2-propanol	59	4.257	4.233	0.024	99	227979	100.0	90.7	
32 Acrylonitrile	53	4.403	4.403	0.000	96	118213	12.5	12.4	
33 Methyl tert-butyl ether	73	4.458	4.458	0.000	95	689081	5.00	4.88	
34 trans-1,2-Dichloroethene	96	4.464	4.470	-0.006	98	280004	5.00	4.85	
35 Hexane	57	4.891	4.891	0.000	92	320065	5.00	5.08	
37 1,1-Dichloroethane	63	5.129	5.135	-0.006	96	463810	5.00	4.94	
38 Isopropyl ether	45	5.196	5.202	-0.006	93	763339	5.00	4.92	
39 2-Chloro-1,3-butadiene	53	5.239	5.245	-0.006	90	367689	5.00	4.92	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.726	5.726	0.000	97	782406	5.00	4.90	
41 2-Butanone (MEK)	43	5.940	5.946	-0.006	99	657590	50.0	46.3	
42 cis-1,2-Dichloroethene	96	5.970	5.970	0.000	79	311354	5.00	4.93	
43 2,2-Dichloropropane	77	5.976	5.988	-0.012	86	374656	5.00	4.93	
45 Propionitrile	54	6.031	6.037	-0.006	98	309435	100.0	91.9	
S 47 1,2-Dichloroethene, Total	100				0			9.78	
48 Methacrylonitrile	67	6.238	6.244	-0.006	89	730347	50.0	48.2	
49 Chlorobromomethane	128	6.299	6.305	-0.006	86	150087	5.00	4.96	
50 Tetrahydrofuran	71	6.312	6.311	0.001	87	99709	25.0	23.6	
51 Chloroform	83	6.458	6.458	0.000	92	492942	5.00	4.90	
\$ 52 Dibromofluoromethane (Surr)	113	6.671	6.671	0.000	94	569458	10.0	9.99	
53 1,1,1-Trichloroethane	97	6.677	6.683	-0.006	98	436738	5.00	4.98	
54 Cyclohexane	56	6.769	6.775	-0.006	88	400341	5.00	5.02	
56 Carbon tetrachloride	117	6.891	6.884	0.007	97	379275	5.00	5.02	
57 1,1-Dichloropropene	75	6.891	6.897	-0.006	98	379228	5.00	4.86	
58 Isobutyl alcohol	41	7.086	7.086	0.000	93	207990	250.0	252.5	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.116	7.122	-0.006	94	120145	10.0	9.92	
60 Benzene	78	7.153	7.159	-0.006	97	1119385	5.00	4.87	
61 1,2-Dichloroethane	62	7.226	7.220	0.006	98	312259	5.00	4.76	
63 Tert-amyl methyl ether	73	7.348	7.348	0.000	99	742232	5.00	4.90	
* 64 Fluorobenzene (IS)	96	7.561	7.561	0.000	99	2296832	10.0	10.0	
65 n-Heptane	43	7.580	7.573	0.007	88	325135	5.00	4.93	
67 n-Butanol	56	7.976	7.982	-0.006	88	336181	437.5	458.3	
68 Trichloroethene	95	8.043	8.043	0.000	96	311065	5.00	4.84	
69 Methylcyclohexane	83	8.348	8.348	0.000	89	488253	5.00	5.11	
70 1,2-Dichloropropane	63	8.372	8.372	0.000	96	278961	5.00	4.96	
71 2-ethoxy-2-methyl butane	87	8.390	8.384	0.006	96	446248	5.00	4.96	
72 Methyl methacrylate	69	8.470	8.470	0.000	89	150481	5.00	5.10	
73 Dibromomethane	93	8.482	8.482	0.000	93	151360	5.00	4.90	
74 1,4-Dioxane	88	8.512	8.512	0.000	77	40992	250.0	251.9	
76 Dichlorobromomethane	83	8.726	8.726	0.000	99	338682	5.00	5.01	
77 2-Nitropropane	41	9.006	9.000	0.006	99	164814	25.0	24.8	
79 1-Bromo-2-chloroethane	63	9.116	9.116	0.000	98	302891	5.00	4.97	
81 cis-1,3-Dichloropropene	75	9.281	9.280	0.001	96	436053	5.00	5.17	
82 4-Methyl-2-pentanone (MIBK)	43	9.463	9.463	0.000	95	1803882	50.0	48.2	
\$ 83 Toluene-d8 (Surr)	98	9.598	9.597	0.001	93	2324549	10.0	10.0	
84 Toluene	92	9.671	9.677	-0.006	98	768926	5.00	4.88	
85 trans-1,3-Dichloropropene	75	9.939	9.939	0.000	92	363656	5.00	5.18	
104 Ethyl methacrylate	69	10.006	10.006	0.000	88	302877	5.00	5.01	
S 105 1,3-Dichloropropene, Total	100				0			10.4	
106 1,1,2-Trichloroethane	97	10.146	10.146	0.000	90	226496	5.00	4.89	
107 Tetrachloroethene	166	10.232	10.231	0.001	98	387678	5.00	4.89	
108 1,3-Dichloropropane	76	10.311	10.311	0.000	88	375996	5.00	4.95	
109 2-Hexanone	43	10.366	10.372	-0.006	96	1333367	50.0	48.9	
111 Chlorodibromomethane	129	10.524	10.524	0.000	90	260325	5.00	5.14	
112 Ethylene Dibromide	107	10.634	10.634	0.000	99	227669	5.00	4.99	
* 113 Chlorobenzene-d5 (IS)	117	11.073	11.073	0.000	84	1816359	10.0	10.0	
114 1-Chlorohexane	91	11.085	11.085	0.000	94	417226	5.00	4.72	
115 Chlorobenzene	112	11.097	11.097	0.000	97	920189	5.00	4.83	
117 1,1,1,2-Tetrachloroethane	131	11.183	11.182	0.001	95	312197	5.00	5.10	
116 Ethylbenzene	91	11.189	11.188	0.001	98	1495963	5.00	4.90	
S 118 Xylenes, Total	106				0			14.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
119 m-Xylene & p-Xylene	106	11.305	11.304	0.001	100	1203658	10.0	9.81	
120 o-Xylene	106	11.634	11.634	0.000	96	599982	5.00	4.93	
121 Styrene	104	11.652	11.652	0.000	95	1021299	5.00	4.96	
122 Bromoform	173	11.804	11.804	0.000	98	151523	5.00	5.31	
123 Isopropylbenzene	105	11.939	11.938	0.001	95	1546232	5.00	4.97	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.079	12.079	0.000	94	867829	10.0	10.0	
127 1,1,2,2-Tetrachloroethane	83	12.182	12.188	-0.006	93	283824	5.00	4.94	
128 Bromobenzene	156	12.195	12.194	0.001	95	403102	5.00	4.87	
129 trans-1,4-Dichloro-2-butene	53	12.213	12.213	0.000	92	697816	50.0	50.8	
130 1,2,3-Trichloropropane	110	12.231	12.231	0.000	81	80131	5.00	4.86	
131 N-Propylbenzene	91	12.268	12.268	0.000	98	1785725	5.00	4.94	
132 2-Chlorotoluene	126	12.341	12.341	0.000	97	389174	5.00	4.89	
133 1,3,5-Trimethylbenzene	105	12.402	12.402	0.000	94	1345338	5.00	4.97	
134 4-Chlorotoluene	126	12.432	12.438	-0.006	97	404234	5.00	4.86	
135 tert-Butylbenzene	134	12.646	12.646	0.000	92	325244	5.00	5.21	
136 Pentachloroethane	167	12.676	12.676	0.000	89	236231	5.00	5.29	
137 1,2,4-Trimethylbenzene	105	12.688	12.688	0.000	96	1385450	5.00	4.96	
138 sec-Butylbenzene	105	12.810	12.810	0.000	94	1693291	5.00	4.98	
139 1,3-Dichlorobenzene	146	12.908	12.908	0.000	99	822505	5.00	4.81	
140 4-Isopropyltoluene	119	12.920	12.920	0.000	97	1538963	5.00	4.97	
* 141 1,4-Dichlorobenzene-d4	152	12.963	12.963	0.000	93	1075545	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.981	12.981	0.000	96	838636	5.00	4.68	
143 1,2,3-Trimethylbenzene	120	12.993	12.993	0.000	98	627888	5.00	4.90	
144 Benzyl chloride	126	13.060	13.060	0.000	98	99881	5.00	4.52	
145 p-Diethylbenzene	119	13.115	13.121	-0.006	92	922469	5.00	5.00	
146 n-Butylbenzene	92	13.207	13.206	0.001	97	747850	5.00	4.94	
147 1,2-Dichlorobenzene	146	13.243	13.243	0.000	99	770054	5.00	4.80	
149 1,2-Dibromo-3-Chloropropane	155	13.786	13.786	0.000	91	44123	5.00	5.21	
150 1,3,5-Trichlorobenzene	180	13.908	13.907	0.001	98	661659	5.00	4.80	
151 1,2,4-Trichlorobenzene	180	14.328	14.328	0.000	94	612781	5.00	4.74	
152 Hexachlorobutadiene	225	14.414	14.413	0.001	96	296487	5.00	4.84	
153 Naphthalene	128	14.511	14.511	0.000	96	1062115	5.00	4.86	
154 1,2,3-Trichlorobenzene	180	14.651	14.651	0.000	96	542883	5.00	4.75	
155 2-Methylnaphthalene	142	15.267	15.267	0.000	92	672244	5.00	4.77	
166 Pentane	43	2.928	2.928	0.000	96	317982	NR	NR	

## QC Flag Legend

### Processing Flags

NR - Missing Quant Standard

### Review Flags

M - Manually Integrated

## Reagents:

MSV_LL_#1_826_00052	Amount Added: 5.00	Units: uL	
MSV_LL_GAS826_00108	Amount Added: 5.00	Units: uL	
MSV_LL_#2_826_00056	Amount Added: 5.00	Units: uL	
MSV_29_826ISS_00037	Amount Added: 1.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X16.D

Injection Date: 16-Aug-2022 18:54:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: IC std5

Worklist Smp#: 17

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

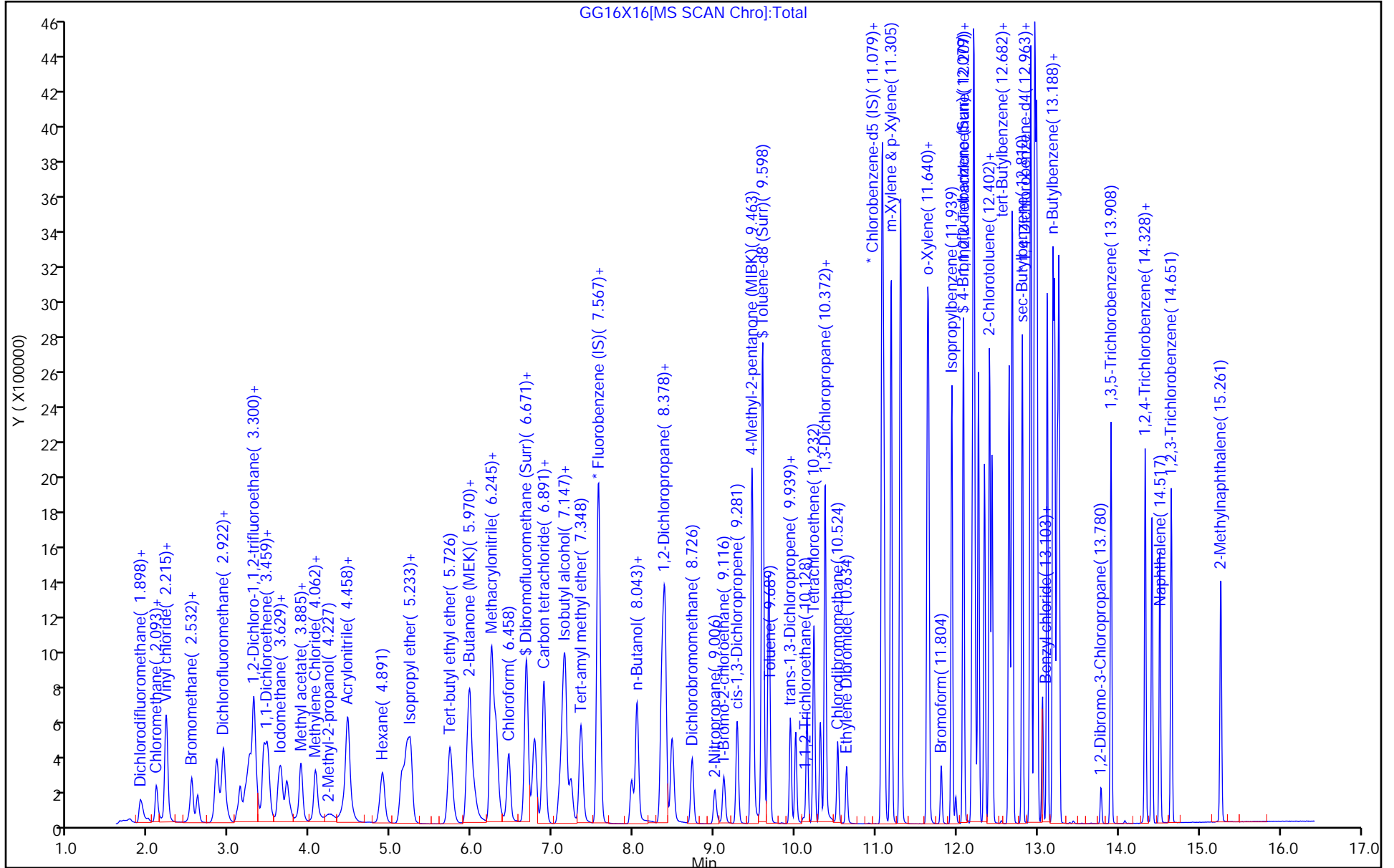
ALS Bottle#: 16

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Environment Testing, LLC

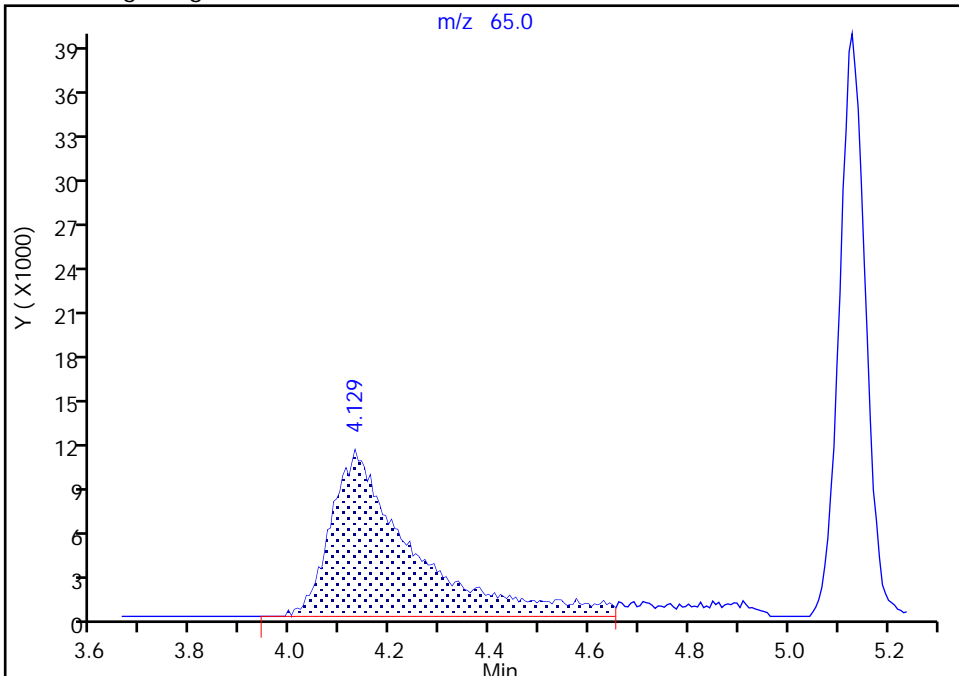
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Injection Date: 16-Aug-2022 18:54:30 Instrument ID: 16334  
Lims ID: IC std5  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 16 Worklist Smp#: 17  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\* 30 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

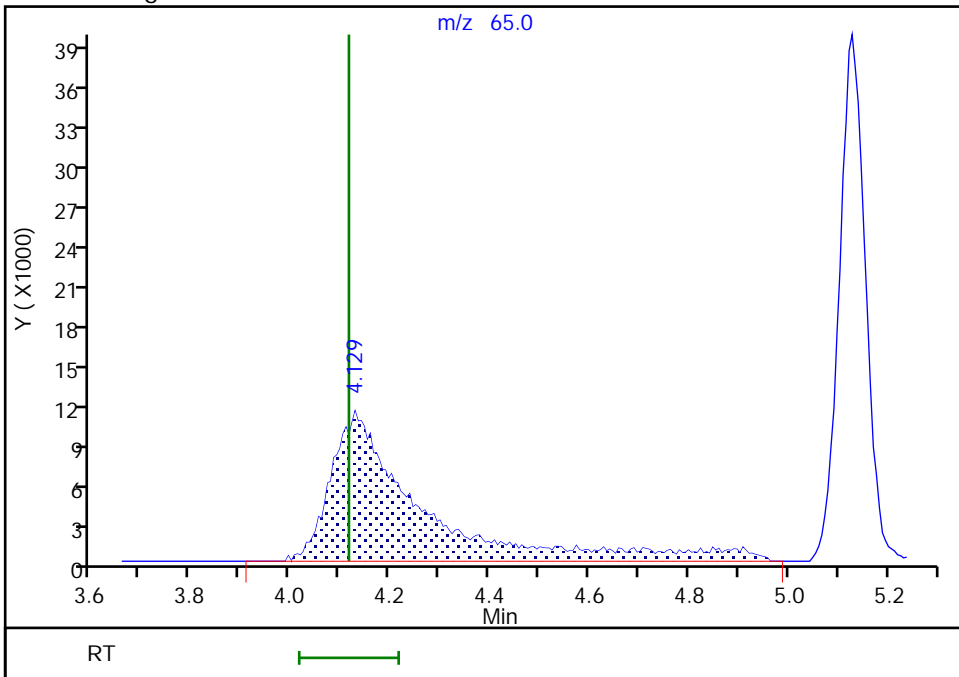
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Area: 128428  
Amount: 50.000000  
Amount Units: ug/l

Processing Integration Results



RT: 4.13  
Area: 141819  
Amount: 50.000000  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:41:15  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration  
Page 510 of 959

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X17.D  
 Lims ID: ICIS std6  
 Client ID:  
 Sample Type: ICIS Calib Level: 6  
 Inject. Date: 16-Aug-2022 19:17:30 ALS Bottle#: 17 Worklist Smp#: 18  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0064243-018  
 Misc. Info.: ICIS STD6  
 Operator ID: knk41612 Instrument ID: 16334  
 Sublist: chrom-MSV\_16334\_25mL\*sub4  
 Method: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 30-Aug-2022 10:48:54 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1639

First Level Reviewer: DVW2

Date: 17-Aug-2022 08:51:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.892	1.892	0.000	99	543104	10.0	8.99	
5 Chloromethane	50	2.087	2.087	0.000	99	623926	10.0	9.15	
6 Vinyl chloride	62	2.202	2.202	0.000	98	651365	10.0	9.35	
7 Butadiene	39	2.215	2.215	0.000	90	549707	10.0	8.30	
9 Bromomethane	94	2.526	2.526	0.000	90	522151	10.0	9.50	
10 Chloroethane	64	2.599	2.599	0.000	99	394390	10.0	9.49	
11 Dichlorofluoromethane	67	2.836	2.836	0.000	97	949402	10.0	9.35	
12 Trichlorofluoromethane	101	2.904	2.904	0.000	98	882397	10.0	9.21	
13 Ethyl ether	59	3.123	3.123	0.000	89	441887	10.0	9.94	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.221	3.221	0.000	89	607384	10.0	8.98	
17 Acrolein	56	3.288	3.288	0.000	99	3027113	500.0	459.4	
18 1,1-Dichloroethene	96	3.416	3.416	0.000	97	472163	10.0	9.41	
20 Acetone	43	3.458	3.458	0.000	91	611780	100.0	84.6	M
19 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.464	3.464	0.000	90	445620	10.0	9.12	
21 Iodomethane	142	3.605	3.605	0.000	99	916804	10.0	9.66	
22 Ethyl bromide	108	3.629	3.629	0.000	98	455305	10.0	9.89	
24 Isopropyl alcohol	45	3.690	3.690	0.000	100	252460	200.0	196.2	M
23 Carbon disulfide	76	3.702	3.702	0.000	99	1259914	10.0	10.3	
25 Methyl acetate	43	3.855	3.855	0.000	97	179295	10.0	8.00	M
27 3-Chloro-1-propene	41	3.873	3.873	0.000	90	654957	10.0	9.68	
29 Methylene Chloride	84	4.056	4.056	0.000	88	533973	10.0	9.61	
* 30 t-Butyl alcohol-d10 (IS)	65	4.111	4.111	0.000	62	142576	50.0	50.0	M
31 2-Methyl-2-propanol	59	4.245	4.245	0.000	99	451212	200.0	178.5	
32 Acrylonitrile	53	4.391	4.391	0.000	99	225968	25.0	23.6	
33 Methyl tert-butyl ether	73	4.446	4.446	0.000	94	1380419	10.0	9.65	
34 trans-1,2-Dichloroethene	96	4.458	4.458	0.000	97	565209	10.0	9.65	
35 Hexane	57	4.885	4.885	0.000	91	578952	10.0	9.06	
37 1,1-Dichloroethane	63	5.123	5.123	0.000	96	919788	10.0	9.67	
38 Isopropyl ether	45	5.184	5.184	0.000	93	1541107	10.0	9.79	
39 2-Chloro-1,3-butadiene	53	5.232	5.232	0.000	90	738815	10.0	9.75	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.720	5.720	0.000	97	1581755	10.0	9.77	
41 2-Butanone (MEK)	43	5.933	5.933	0.000	99	1313238	100.0	92.0	
42 cis-1,2-Dichloroethene	96	5.964	5.964	0.000	80	618550	10.0	9.66	
43 2,2-Dichloropropane	77	5.976	5.976	0.000	86	750727	10.0	9.75	
45 Propionitrile	54	6.025	6.025	0.000	99	652308	200.0	192.8	
48 Methacrylonitrile	67	6.238	6.238	0.000	90	1436385	100.0	94.3	
49 Chlorobromomethane	128	6.293	6.293	0.000	87	302068	10.0	9.85	
50 Tetrahydrofuran	71	6.299	6.299	0.000	88	198158	50.0	46.7	
51 Chloroform	83	6.452	6.452	0.000	93	994318	10.0	9.75	
\$ 52 Dibromofluoromethane (Surr)	113	6.665	6.665	0.000	94	574786	10.0	9.94	
53 1,1,1-Trichloroethane	97	6.671	6.671	0.000	98	878121	10.0	9.87	
54 Cyclohexane	56	6.769	6.769	0.000	88	754352	10.0	9.32	
56 Carbon tetrachloride	117	6.884	6.884	0.000	97	761646	10.0	9.95	
57 1,1-Dichloropropene	75	6.891	6.891	0.000	98	754145	10.0	9.54	
58 Isobutyl alcohol	41	7.073	7.073	0.000	93	402616	500.0	482.1	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.116	7.116	0.000	83	120860	10.0	9.84	
60 Benzene	78	7.153	7.153	0.000	96	2256270	10.0	9.68	
61 1,2-Dichloroethane	62	7.220	7.220	0.000	98	621312	10.0	9.35	
63 Tert-amyl methyl ether	73	7.348	7.348	0.000	99	1505621	10.0	9.81	
* 64 Fluorobenzene (IS)	96	7.561	7.561	0.000	99	2328270	10.0	10.0	
65 n-Heptane	43	7.573	7.573	0.000	89	606617	10.0	9.07	
67 n-Butanol	56	7.970	7.970	0.000	88	678077	875.0	919.6	
68 Trichloroethene	95	8.043	8.043	0.000	96	626486	10.0	9.63	
69 Methylcyclohexane	83	8.341	8.341	0.000	88	911479	10.0	9.41	
70 1,2-Dichloropropane	63	8.372	8.372	0.000	97	560993	10.0	9.84	
71 2-ethoxy-2-methyl butane	87	8.390	8.390	0.000	97	912824	10.0	10.0	
72 Methyl methacrylate	69	8.463	8.463	0.000	89	298228	10.0	10.0	
73 Dibromomethane	93	8.482	8.482	0.000	94	308678	10.0	9.86	
74 1,4-Dioxane	88	8.512	8.512	0.000	85	82057	500.0	493.1	
76 Dichlorobromomethane	83	8.726	8.726	0.000	99	707245	10.0	10.3	
77 2-Nitropropane	41	9.000	9.000	0.000	99	347717	50.0	52.1	
79 1-Bromo-2-chloroethane	63	9.116	9.116	0.000	98	624555	10.0	10.1	
81 cis-1,3-Dichloropropene	75	9.280	9.280	0.000	96	908206	10.0	10.6	
82 4-Methyl-2-pentanone (MIBK)	43	9.463	9.463	0.000	95	3614306	100.0	96.2	
\$ 83 Toluene-d8 (Surr)	98	9.591	9.591	0.000	93	2354853	10.0	10.0	
84 Toluene	92	9.671	9.671	0.000	98	1543929	10.0	9.69	
85 trans-1,3-Dichloropropene	75	9.939	9.939	0.000	91	773723	10.0	10.9	
104 Ethyl methacrylate	69	10.006	10.006	0.000	88	650478	10.0	10.6	
106 1,1,2-Trichloroethane	97	10.146	10.146	0.000	90	457075	10.0	9.75	
107 Tetrachloroethene	166	10.231	10.231	0.000	98	765371	10.0	9.54	
108 1,3-Dichloropropane	76	10.311	10.311	0.000	88	755285	10.0	9.82	
109 2-Hexanone	43	10.365	10.365	0.000	95	2742555	100.0	100.1	
111 Chlorodibromomethane	129	10.524	10.524	0.000	89	564766	10.0	11.0	
112 Ethylene Dibromide	107	10.634	10.634	0.000	98	463425	10.0	10.0	
* 113 Chlorobenzene-d5 (IS)	117	11.073	11.073	0.000	85	1837007	10.0	10.0	
114 1-Chlorohexane	91	11.085	11.085	0.000	94	822913	10.0	9.21	
115 Chlorobenzene	112	11.097	11.097	0.000	97	1852203	10.0	9.60	
117 1,1,1,2-Tetrachloroethane	131	11.182	11.182	0.000	96	646499	10.0	10.4	
116 Ethylbenzene	91	11.189	11.189	0.000	98	3000498	10.0	9.71	
119 m-Xylene & p-Xylene	106	11.304	11.304	0.000	100	2438249	20.0	19.6	
120 o-Xylene	106	11.634	11.634	0.000	96	1212115	10.0	9.85	
121 Styrene	104	11.652	11.652	0.000	95	2083651	10.0	10.0	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
122 Bromoform	173	11.804	11.804	0.000	98	341791	10.0	11.8	
123 Isopropylbenzene	105	11.938	11.938	0.000	95	3089905	10.0	9.83	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.079	12.079	0.000	94	876789	10.0	10.0	
127 1,1,2,2-Tetrachloroethane	83	12.188	12.188	0.000	93	586290	10.0	10.0	
128 Bromobenzene	156	12.194	12.194	0.000	94	818805	10.0	9.70	
129 trans-1,4-Dichloro-2-butene	53	12.213	12.213	0.000	92	1470724	100.0	106.4	
130 1,2,3-Trichloropropane	110	12.231	12.231	0.000	81	167099	10.0	9.93	
131 N-Propylbenzene	91	12.268	12.268	0.000	98	3573339	10.0	9.69	
132 2-Chlorotoluene	126	12.341	12.341	0.000	97	781491	10.0	9.64	
133 1,3,5-Trimethylbenzene	105	12.402	12.402	0.000	94	2718476	10.0	9.84	
134 4-Chlorotoluene	126	12.438	12.438	0.000	96	810236	10.0	9.56	
135 tert-Butylbenzene	134	12.646	12.646	0.000	92	644132	10.0	10.1	
136 Pentachloroethane	167	12.676	12.676	0.000	92	515383	10.0	11.3	
137 1,2,4-Trimethylbenzene	105	12.688	12.688	0.000	96	2819726	10.0	9.91	
138 sec-Butylbenzene	105	12.810	12.810	0.000	94	3397918	10.0	9.81	
139 1,3-Dichlorobenzene	146	12.908	12.908	0.000	99	1669850	10.0	9.58	
140 4-Isopropyltoluene	119	12.920	12.920	0.000	97	3116611	10.0	9.87	
* 141 1,4-Dichlorobenzene-d4	152	12.963	12.963	0.000	93	1096296	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.981	12.981	0.000	96	1702506	10.0	9.33	
143 1,2,3-Trimethylbenzene	120	12.993	12.993	0.000	99	1267015	10.0	9.70	
144 Benzyl chloride	126	13.060	13.060	0.000	98	222558	10.0	9.69	
145 p-Diethylbenzene	119	13.121	13.121	0.000	92	1864979	10.0	9.92	
146 n-Butylbenzene	92	13.206	13.206	0.000	97	1496880	10.0	9.70	
147 1,2-Dichlorobenzene	146	13.243	13.243	0.000	99	1560520	10.0	9.54	
149 1,2-Dibromo-3-Chloropropane	155	13.786	13.786	0.000	91	97321	10.0	11.3	
150 1,3,5-Trichlorobenzene	180	13.907	13.907	0.000	98	1349753	10.0	9.61	
151 1,2,4-Trichlorobenzene	180	14.328	14.328	0.000	94	1258666	10.0	9.55	
152 Hexachlorobutadiene	225	14.413	14.413	0.000	96	601182	10.0	9.63	
153 Naphthalene	128	14.511	14.511	0.000	96	2224425	10.0	9.98	
154 1,2,3-Trichlorobenzene	180	14.651	14.651	0.000	96	1124358	10.0	9.66	
155 2-Methylnaphthalene	142	15.261	15.261	0.000	94	1449950	10.0	10.1	
166 Pentane	43	2.916	2.916	0.000	96	578292	NR	NR	

### QC Flag Legend

#### Processing Flags

NR - Missing Quant Standard

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_LL\_#1\_826\_00052

Amount Added: 10.00

Units: uL

MSV\_LL\_GAS826\_00108

Amount Added: 10.00

Units: uL

MSV\_LL\_#2\_826\_00056

Amount Added: 10.00

Units: uL

MSV\_29\_826ISS\_00037

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X17.D

Injection Date: 16-Aug-2022 19:17:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: ICIS std6

Worklist Smp#: 18

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

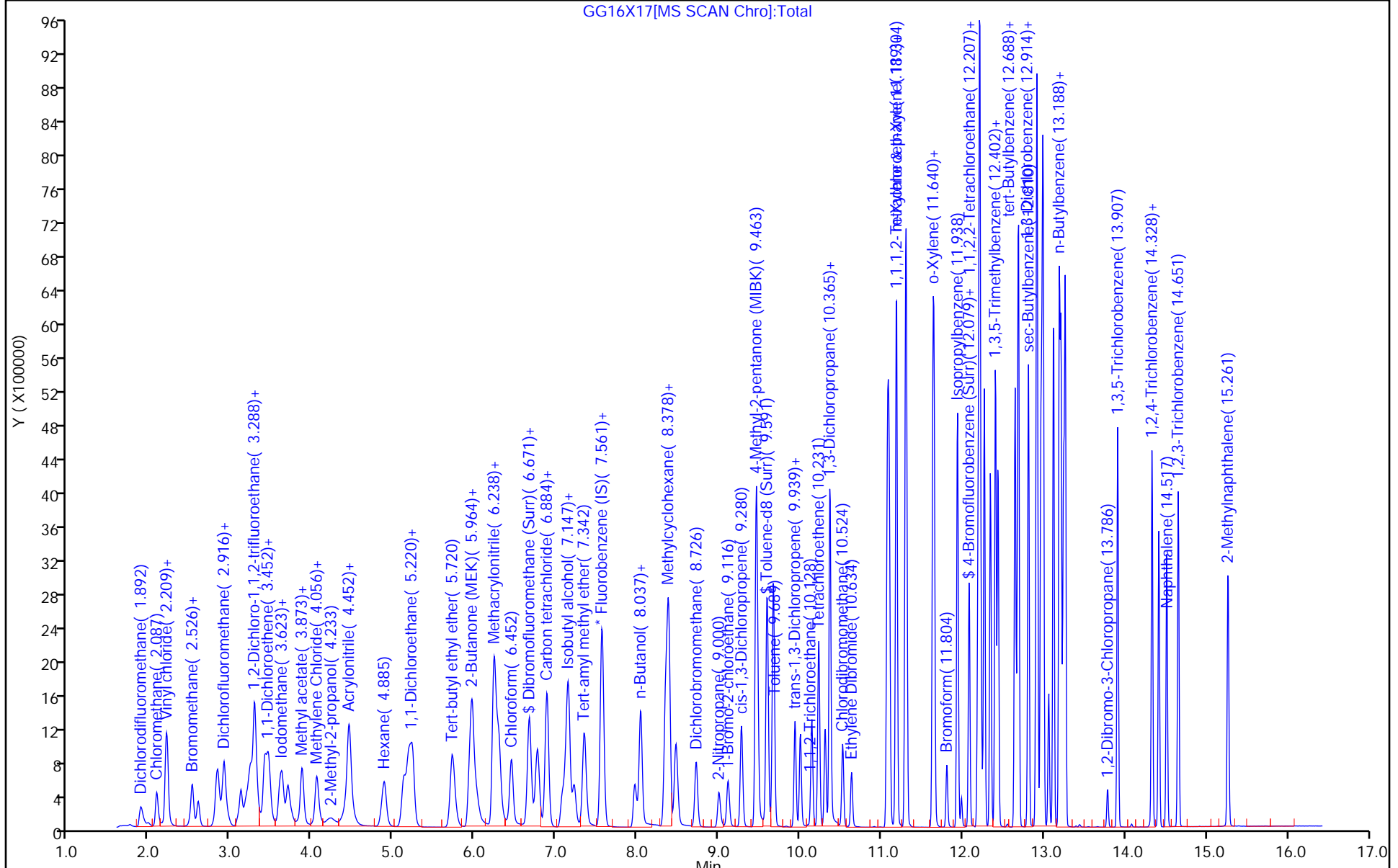
ALS Bottle#: 17

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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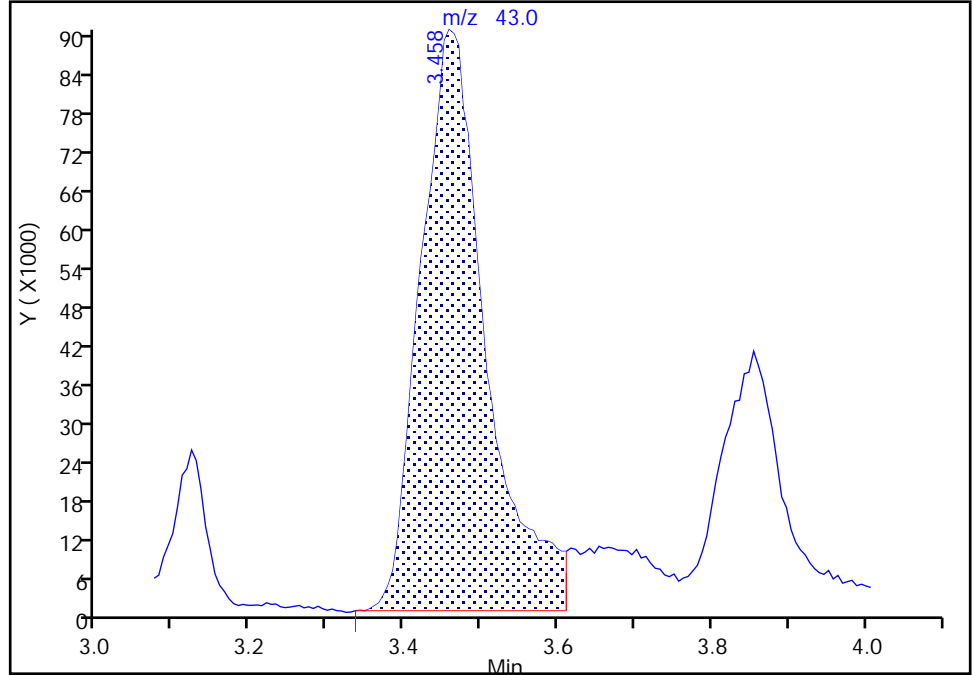
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Injection Date: 16-Aug-2022 19:17:30 Instrument ID: 16334  
Lims ID: ICIS std6  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 17 Worklist Smp#: 18  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

20 Acetone, CAS: 67-64-1

Signal: 1

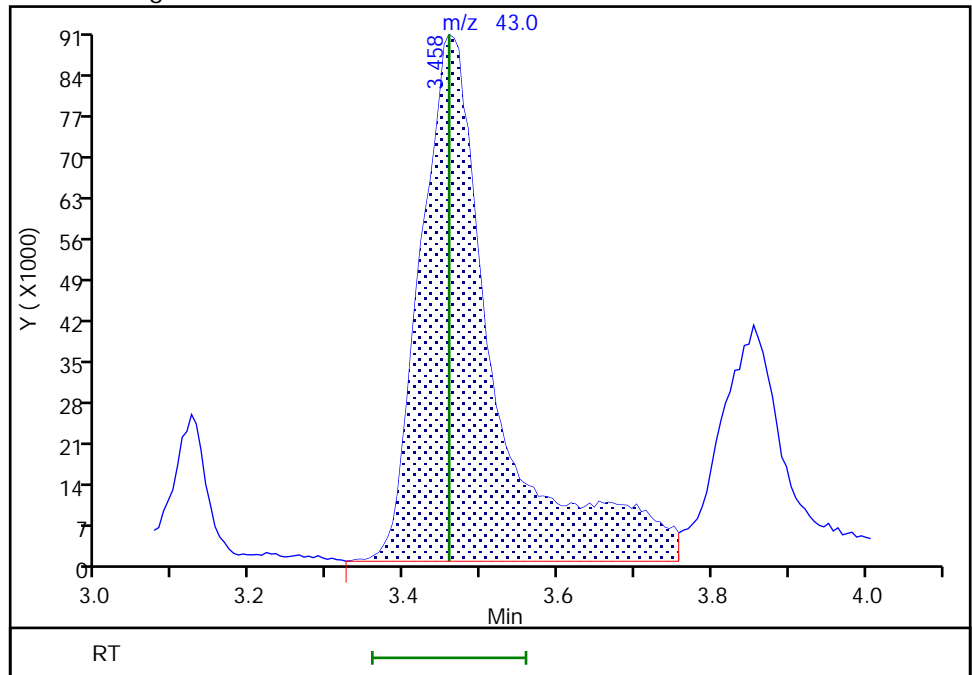
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Area: 532302  
Amount: 74.545257  
Amount Units: ug/l

Processing Integration Results



RT: 3.46  
Area: 611780  
Amount: 84.635656  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:42:49  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

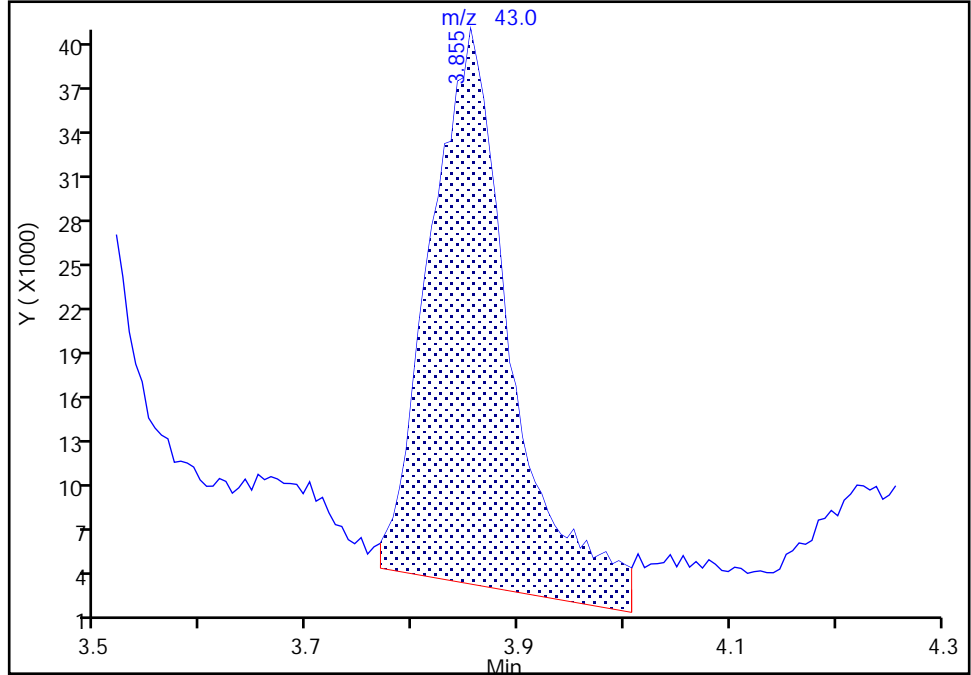
Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X17.D  
Injection Date: 16-Aug-2022 19:17:30 Instrument ID: 16334  
Lims ID: ICIS std6  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 17 Worklist Smp#: 18  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 Methyl acetate, CAS: 79-20-9

Signal: 1

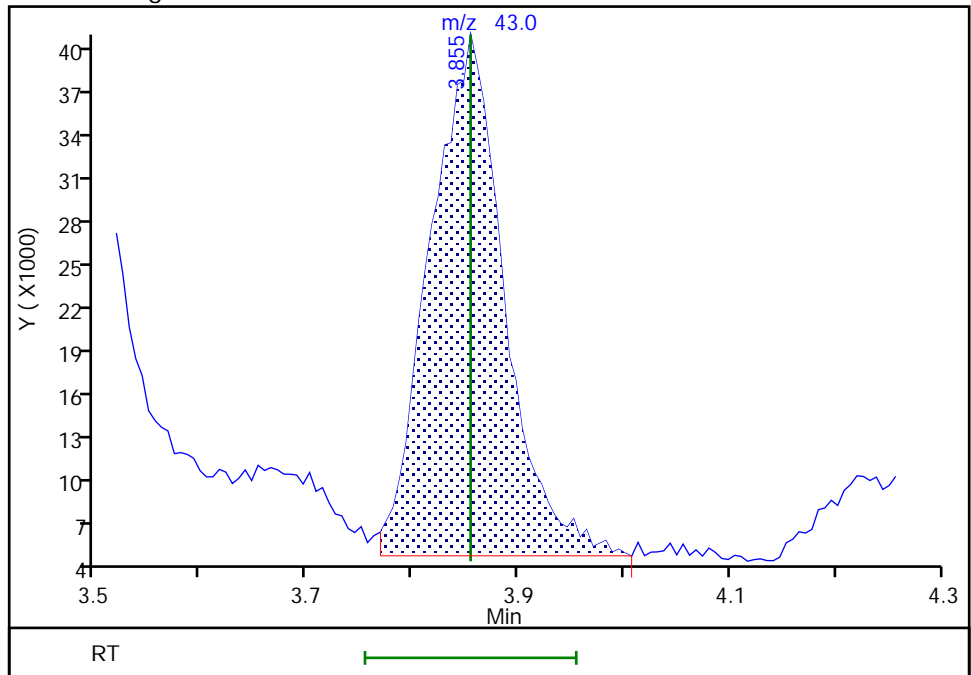
RT: 3.85  
Area: 201688  
Amount: 8.683090  
Amount Units: ug/l

Processing Integration Results



RT: 3.85  
Area: 179295  
Amount: 7.998684  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:43:32  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

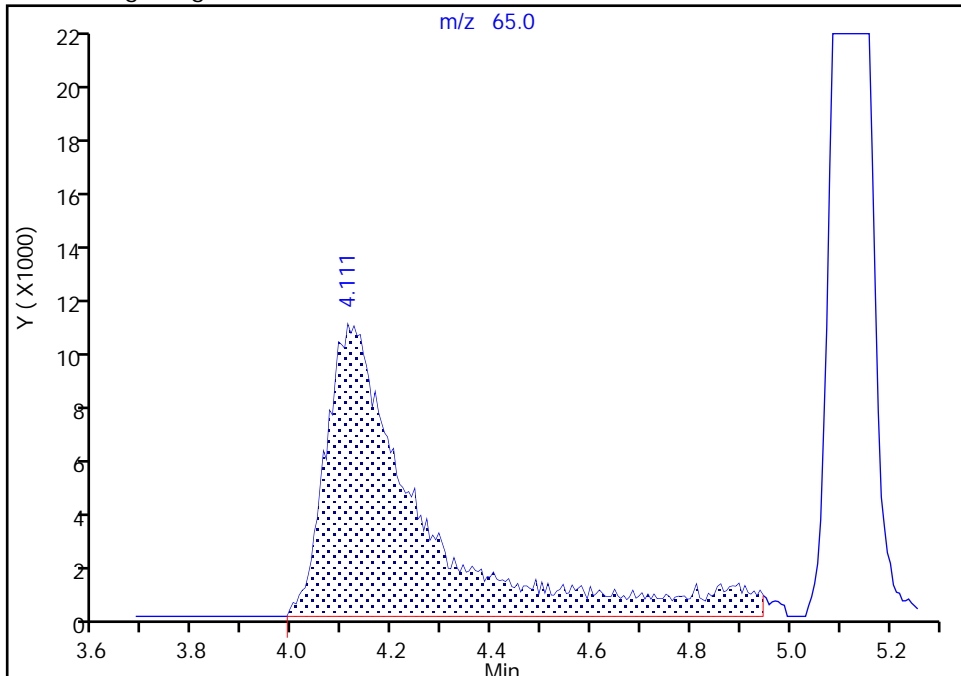
Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X17.D  
Injection Date: 16-Aug-2022 19:17:30 Instrument ID: 16334  
Lims ID: ICIS std6  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 17 Worklist Smp#: 18  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\* 30 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

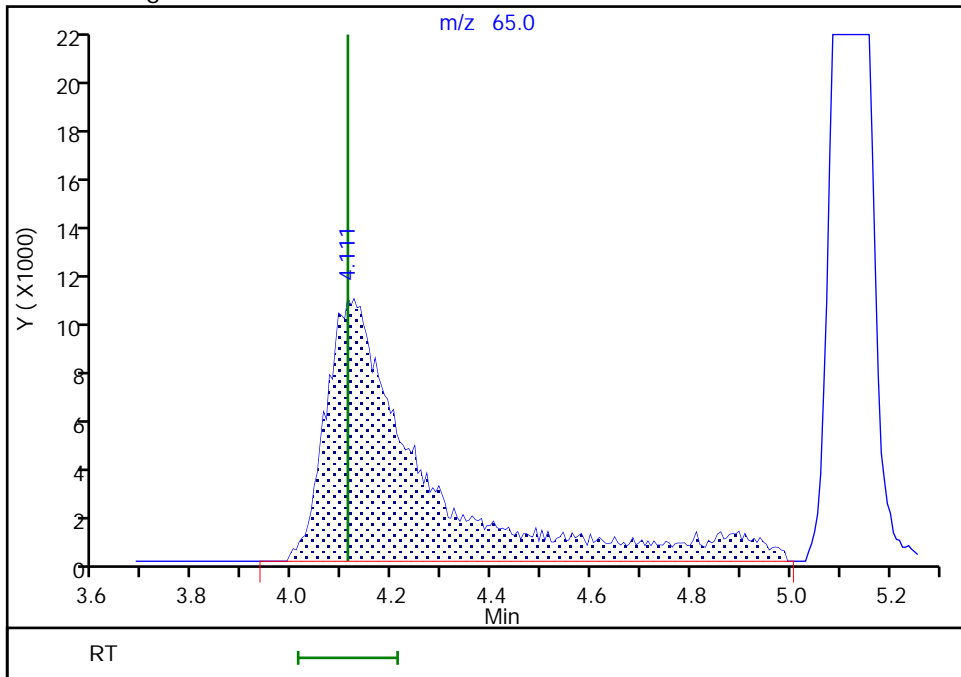
RT: 4.11  
Area: 141267  
Amount: 50.000000  
Amount Units: ug/l

Processing Integration Results



RT: 4.11  
Area: 142576  
Amount: 50.000000  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:43:41  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Lims ID: IC std7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 16-Aug-2022 19:38:30 ALS Bottle#: 18 Worklist Smp#: 19  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0064243-019  
 Misc. Info.: IC STD7  
 Operator ID: knk41612 Instrument ID: 16334  
 Sublist: chrom-MSV\_16334\_25mL\*sub4  
 Method: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 30-Aug-2022 10:49:00 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1639

First Level Reviewer: DVW2

Date: 17-Aug-2022 11:46:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.898	1.892	0.006	99	1418980	25.0	22.9	
5 Chloromethane	50	2.093	2.087	0.006	99	1527322	25.0	21.8	
6 Vinyl chloride	62	2.203	2.202	0.001	98	1653785	25.0	23.1	
7 Butadiene	39	2.215	2.215	0.000	93	1383220	25.0	20.4	
9 Bromomethane	94	2.526	2.526	0.000	90	1340018	25.0	23.8	
10 Chloroethane	64	2.605	2.599	0.006	100	1011950	25.0	23.7	
11 Dichlorofluoromethane	67	2.837	2.836	0.001	97	2394155	25.0	23.0	
12 Trichlorofluoromethane	101	2.904	2.904	0.000	98	2300799	25.0	23.4	
13 Ethyl ether	59	3.123	3.123	0.000	89	1130526	25.0	24.8	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.227	3.221	0.006	89	1564197	25.0	22.5	
17 Acrolein	56	3.294	3.288	0.006	100	7837578	1250.0	1180.1	
18 1,1-Dichloroethene	96	3.422	3.416	0.006	96	1255687	25.0	24.4	
20 Acetone	43	3.465	3.458	0.007	100	1587280	250.0	217.9	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.471	3.464	0.007	90	1192898	25.0	23.8	
21 Iodomethane	142	3.605	3.605	0.000	98	2358489	25.0	24.2	
22 Ethyl bromide	108	3.635	3.629	0.006	98	1168692	25.0	24.7	
24 Isopropyl alcohol	45	3.708	3.690	0.018	29	553111	500.0	419.0	
23 Carbon disulfide	76	3.702	3.702	0.000	99	3472934	25.0	27.7	
25 Methyl acetate	43	3.855	3.855	0.000	96	495870	25.0	21.9	M
27 3-Chloro-1-propene	41	3.879	3.873	0.006	90	1714730	25.0	24.7	
29 Methylene Chloride	84	4.062	4.056	0.006	87	1383829	25.0	24.3	
* 30 t-Butyl alcohol-d10 (IS)	65	4.147	4.111	0.036	72	143695	50.0	50.0	M
31 2-Methyl-2-propanol	59	4.257	4.245	0.012	99	1120844	500.0	440.1	
32 Acrylonitrile	53	4.391	4.391	0.000	98	585945	62.5	60.6	
33 Methyl tert-butyl ether	73	4.452	4.446	0.006	94	3535898	25.0	24.1	
34 trans-1,2-Dichloroethene	96	4.458	4.458	0.000	97	1463454	25.0	24.3	
35 Hexane	57	4.885	4.885	0.000	92	1547621	25.0	23.6	
37 1,1-Dichloroethane	63	5.129	5.123	0.006	96	2399785	25.0	24.6	
38 Isopropyl ether	45	5.190	5.184	0.006	93	3956491	25.0	24.5	
39 2-Chloro-1,3-butadiene	53	5.239	5.232	0.007	91	1923095	25.0	24.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.726	5.720	0.006	97	4048605	25.0	24.4	
41 2-Butanone (MEK)	43	5.940	5.933	0.007	99	3350978	250.0	232.8	
42 cis-1,2-Dichloroethene	96	5.964	5.964	0.000	80	1611946	25.0	24.5	
43 2,2-Dichloropropane	77	5.982	5.976	0.006	88	1962445	25.0	24.8	
45 Propionitrile	54	6.037	6.025	0.012	99	1672892	500.0	490.6	
S 47 1,2-Dichloroethene, Total	100				0			48.9	
48 Methacrylonitrile	67	6.245	6.238	0.006	93	3743786	250.0	243.8	
49 Chlorobromomethane	128	6.299	6.293	0.006	86	784323	25.0	24.9	
50 Tetrahydrofuran	71	6.312	6.299	0.013	75	507621	125.0	118.8	
51 Chloroform	83	6.452	6.452	0.000	92	2557412	25.0	24.4	
\$ 52 Dibromofluoromethane (Surr)	113	6.671	6.665	0.006	94	598690	10.0	10.1	
53 1,1,1-Trichloroethane	97	6.677	6.671	0.006	98	2280597	25.0	25.0	
54 Cyclohexane	56	6.775	6.769	0.006	88	2007902	25.0	24.2	
56 Carbon tetrachloride	117	6.885	6.884	0.001	96	2033131	25.0	25.9	
57 1,1-Dichloropropene	75	6.891	6.891	0.000	96	1956120	25.0	24.1	
58 Isobutyl alcohol	41	7.086	7.073	0.013	94	1033218	1250.0	1205.8	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.128	7.116	0.012	92	124380	10.0	9.87	
60 Benzene	78	7.153	7.153	0.000	96	5793032	25.0	24.2	
61 1,2-Dichloroethane	62	7.226	7.220	0.006	98	1613440	25.0	23.7	
63 Tert-amyl methyl ether	73	7.348	7.348	0.000	98	3891489	25.0	24.7	
* 64 Fluorobenzene (IS)	96	7.561	7.561	0.000	99	2388919	10.0	10.0	
65 n-Heptane	43	7.574	7.573	0.001	88	1598920	25.0	23.3	
67 n-Butanol	56	7.976	7.970	0.006	87	1757161	2187.5	2364.4	
68 Trichloroethene	95	8.043	8.043	0.000	96	1634955	25.0	24.5	
69 Methylcyclohexane	83	8.348	8.341	0.007	89	2441489	25.0	24.6	
70 1,2-Dichloropropane	63	8.378	8.372	0.006	93	1450984	25.0	24.8	
71 2-ethoxy-2-methyl butane	87	8.390	8.390	0.000	96	2380841	25.0	25.4	
72 Methyl methacrylate	69	8.464	8.463	0.001	88	772725	25.0	25.8	
73 Dibromomethane	93	8.482	8.482	0.000	93	799889	25.0	24.9	
74 1,4-Dioxane	88	8.512	8.512	0.000	84	191177	1250.0	1128.8	
76 Dichlorobromomethane	83	8.726	8.726	0.000	99	1870494	25.0	26.6	
77 2-Nitropropane	41	9.006	9.000	0.006	98	966836	125.0	143.8	
79 1-Bromo-2-chloroethane	63	9.116	9.116	0.000	98	1603431	25.0	25.3	
81 cis-1,3-Dichloropropene	75	9.280	9.280	0.000	97	2381867	25.0	27.2	
82 4-Methyl-2-pentanone (MIBK)	43	9.463	9.463	0.000	95	9067989	250.0	239.4	
\$ 83 Toluene-d8 (Surr)	98	9.598	9.591	0.007	93	2421715	10.0	10.0	
84 Toluene	92	9.677	9.671	0.007	98	3979367	25.0	24.3	
85 trans-1,3-Dichloropropene	75	9.939	9.939	0.000	91	2050452	25.0	28.1	
104 Ethyl methacrylate	69	10.006	10.006	0.000	88	1690447	25.0	26.9	
S 105 1,3-Dichloropropene, Total	100				0			55.3	
106 1,1,2-Trichloroethane	97	10.146	10.146	0.000	90	1173341	25.0	24.4	
107 Tetrachloroethene	166	10.232	10.231	0.001	98	1975922	25.0	24.0	
108 1,3-Dichloropropane	76	10.311	10.311	0.000	88	1950083	25.0	24.7	
109 2-Hexanone	43	10.372	10.365	0.007	94	6963294	250.0	252.1	
111 Chlorodibromomethane	129	10.524	10.524	0.000	89	1531577	25.0	29.1	
112 Ethylene Dibromide	107	10.634	10.634	0.000	99	1193896	25.0	25.2	
* 113 Chlorobenzene-d5 (IS)	117	11.073	11.073	0.000	84	1887193	10.0	10.0	
114 1-Chlorohexane	91	11.085	11.085	0.000	93	2167500	25.0	23.6	
115 Chlorobenzene	112	11.097	11.097	0.000	98	4743809	25.0	23.9	
117 1,1,1,2-Tetrachloroethane	131	11.183	11.182	0.001	96	1716072	25.0	27.0	
116 Ethylbenzene	91	11.189	11.189	0.001	98	7749772	25.0	24.4	
S 118 Xylenes, Total	106				0			74.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
119 m-Xylene & p-Xylene	106	11.304	11.304	0.000	99	6338596	50.0	49.7	
120 o-Xylene	106	11.634	11.634	0.000	95	3147850	25.0	24.9	
121 Styrene	104	11.652	11.652	0.000	94	5405404	25.0	25.3	
122 Bromoform	173	11.804	11.804	0.000	98	960530	25.0	32.4	
123 Isopropylbenzene	105	11.939	11.938	0.000	95	7949878	25.0	24.6	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.079	12.079	0.000	95	899968	10.0	10.0	
127 1,1,2,2-Tetrachloroethane	83	12.188	12.188	0.000	93	1506637	25.0	24.8	
128 Bromobenzene	156	12.195	12.194	0.001	94	2107684	25.0	24.1	
129 trans-1,4-Dichloro-2-butene	53	12.213	12.213	0.000	91	3873432	250.0	278.1	
130 1,2,3-Trichloropropane	110	12.231	12.231	0.000	80	432760	25.0	24.8	
131 N-Propylbenzene	91	12.268	12.268	0.000	98	9106742	25.0	23.8	
132 2-Chlorotoluene	126	12.341	12.341	0.000	98	2040219	25.0	24.2	
133 1,3,5-Trimethylbenzene	105	12.402	12.402	0.000	95	7032261	25.0	24.5	
134 4-Chlorotoluene	126	12.438	12.438	0.000	96	2115951	25.0	24.1	
135 tert-Butylbenzene	134	12.646	12.646	0.000	92	1564947	25.0	23.7	
136 Pentachloroethane	167	12.676	12.676	0.000	91	1382400	25.0	29.2	
137 1,2,4-Trimethylbenzene	105	12.688	12.688	0.000	96	7305524	25.0	24.7	
138 sec-Butylbenzene	105	12.810	12.810	0.000	94	8733955	25.0	24.3	
139 1,3-Dichlorobenzene	146	12.908	12.908	0.000	98	4338435	25.0	24.0	
140 4-Isopropyltoluene	119	12.920	12.920	0.000	97	8077811	25.0	24.6	
* 141 1,4-Dichlorobenzene-d4	152	12.963	12.963	0.000	92	1138282	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.981	12.981	0.000	95	4395359	25.0	23.2	
143 1,2,3-Trimethylbenzene	120	12.993	12.993	0.000	98	3332795	25.0	24.6	
144 Benzyl chloride	126	13.060	13.060	0.000	98	629836	25.0	26.1	
145 p-Diethylbenzene	119	13.121	13.121	0.000	92	4853558	25.0	24.9	
146 n-Butylbenzene	92	13.207	13.206	0.001	97	3911257	25.0	24.4	
147 1,2-Dichlorobenzene	146	13.243	13.243	0.000	99	4071402	25.0	24.0	
149 1,2-Dibromo-3-Chloropropane	155	13.786	13.786	0.000	92	256886	25.0	28.7	
150 1,3,5-Trichlorobenzene	180	13.908	13.907	0.001	98	3481934	25.0	23.9	
151 1,2,4-Trichlorobenzene	180	14.328	14.328	0.000	94	3251198	25.0	23.8	
152 Hexachlorobutadiene	225	14.414	14.413	0.001	96	1558972	25.0	24.0	
153 Naphthalene	128	14.511	14.511	0.000	97	5704671	25.0	24.6	
154 1,2,3-Trichlorobenzene	180	14.651	14.651	0.000	96	2876206	25.0	23.8	
155 2-Methylnaphthalene	142	15.267	15.261	0.006	93	3765795	25.0	25.1	
166 Pentane	43	2.922	2.916	0.006	96	1542367	NR	NR	

## QC Flag Legend

### Processing Flags

NR - Missing Quant Standard

### Review Flags

M - Manually Integrated

### Reagents:

MSV_LL_#1_826_00052	Amount Added: 25.00	Units: uL	
MSV_LL_GAS826_00108	Amount Added: 25.00	Units: uL	
MSV_LL_#2_826_00056	Amount Added: 25.00	Units: uL	
MSV_29_826ISS_00037	Amount Added: 1.00	Units: uL	Run Reagent



Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D

Injection Date: 16-Aug-2022 19:38:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: IC std7

Worklist Smp#: 19

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

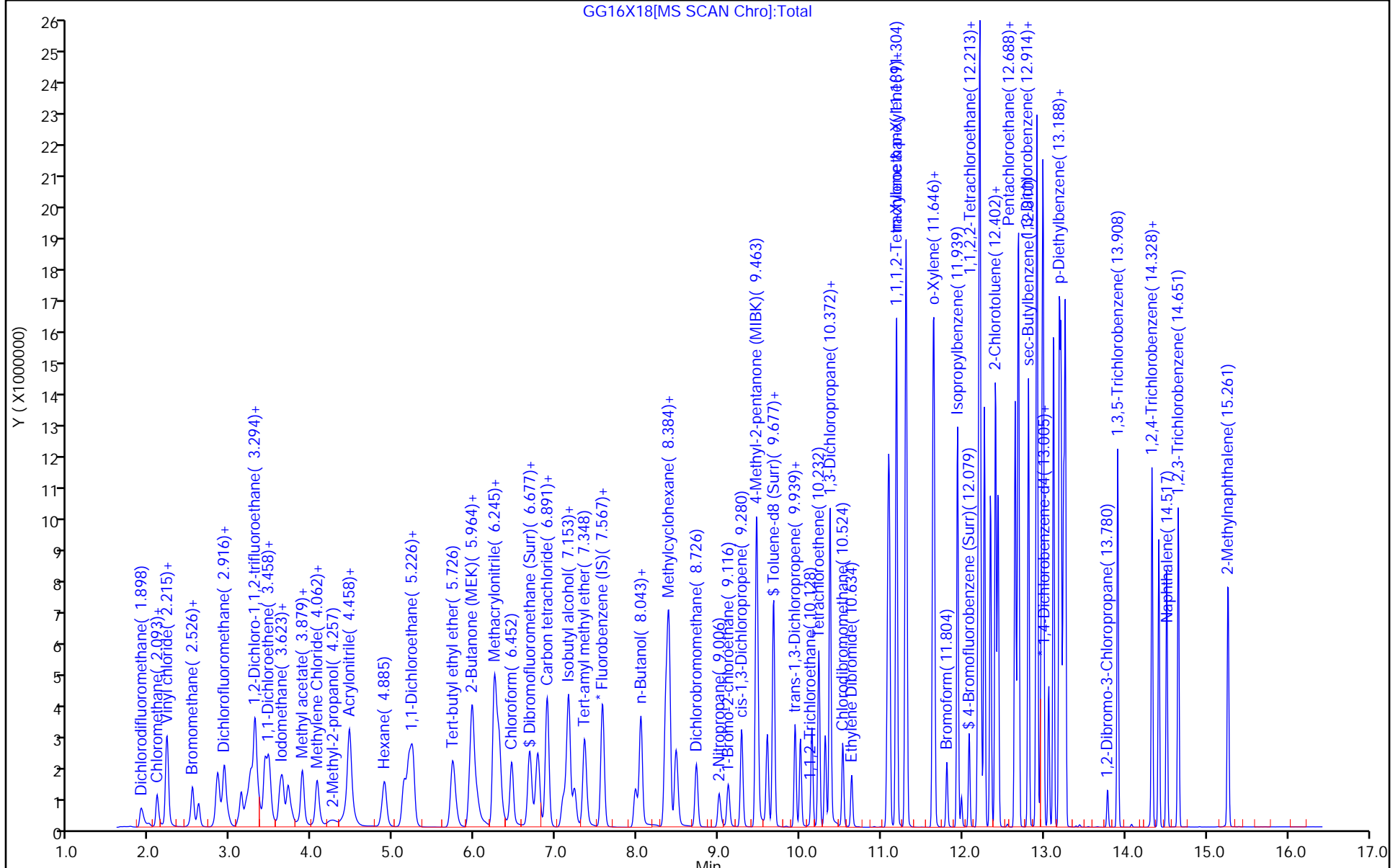
ALS Bottle#: 18

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Environment Testing, LLC

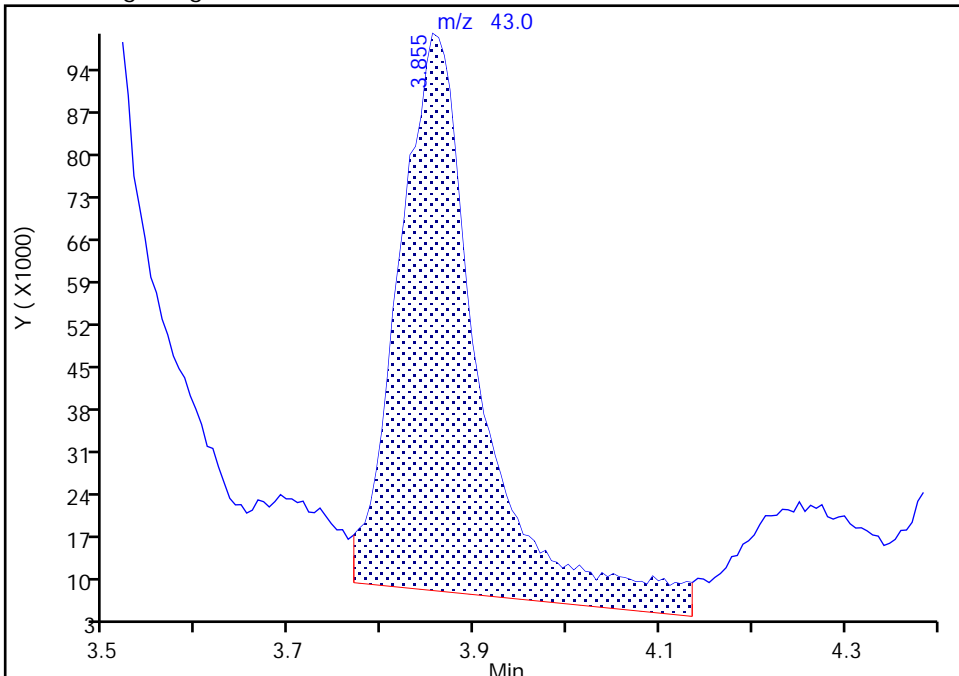
Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
Injection Date: 16-Aug-2022 19:38:30 Instrument ID: 16334  
Lims ID: IC std7  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 18 Worklist Smp#: 19  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 Methyl acetate, CAS: 79-20-9

Signal: 1

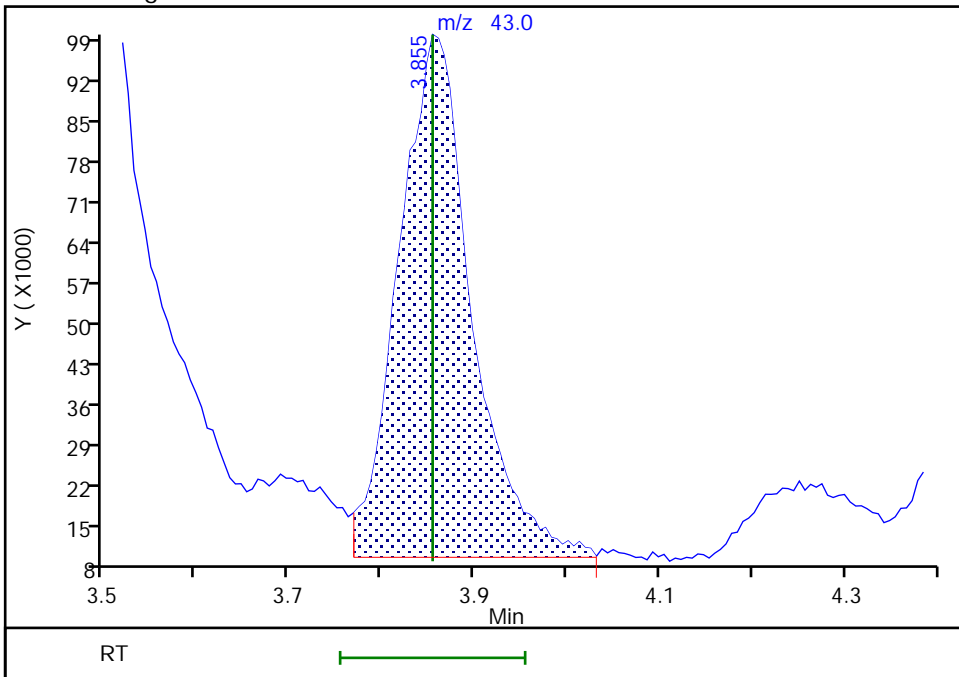
RT: 3.85  
Area: 562827  
Amount: 26.460467  
Amount Units: ug/l

Processing Integration Results



RT: 3.85  
Area: 495870  
Amount: 21.949416  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:45:04  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

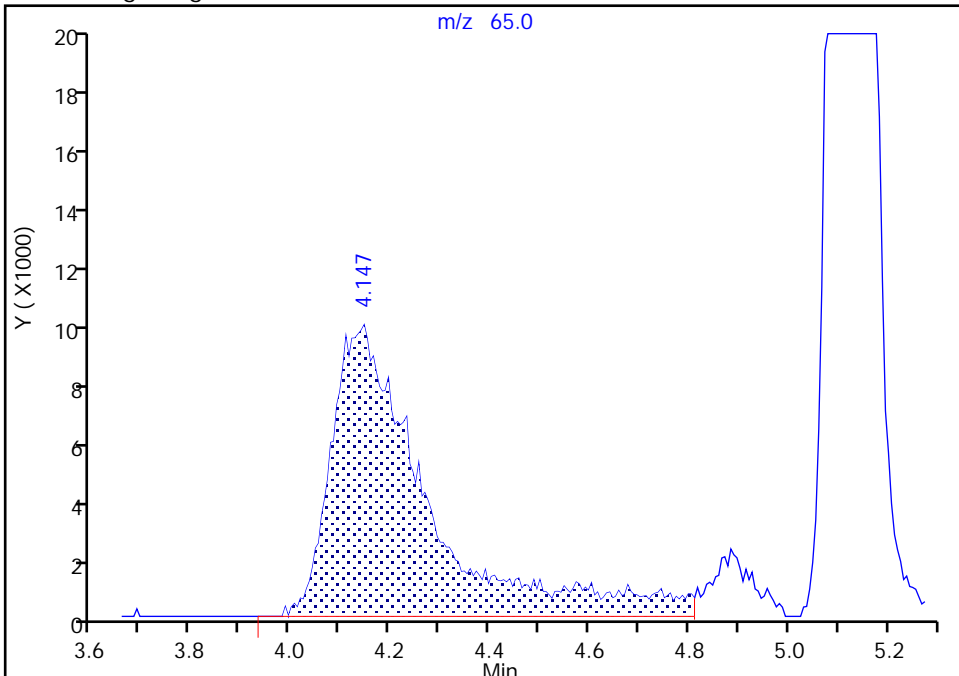
Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Injection Date: 16-Aug-2022 19:38:30 Instrument ID: 16334  
 Lims ID: IC std7  
 Client ID:  
 Operator ID: knk41612 ALS Bottle#: 18 Worklist Smp#: 19  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\* 30 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

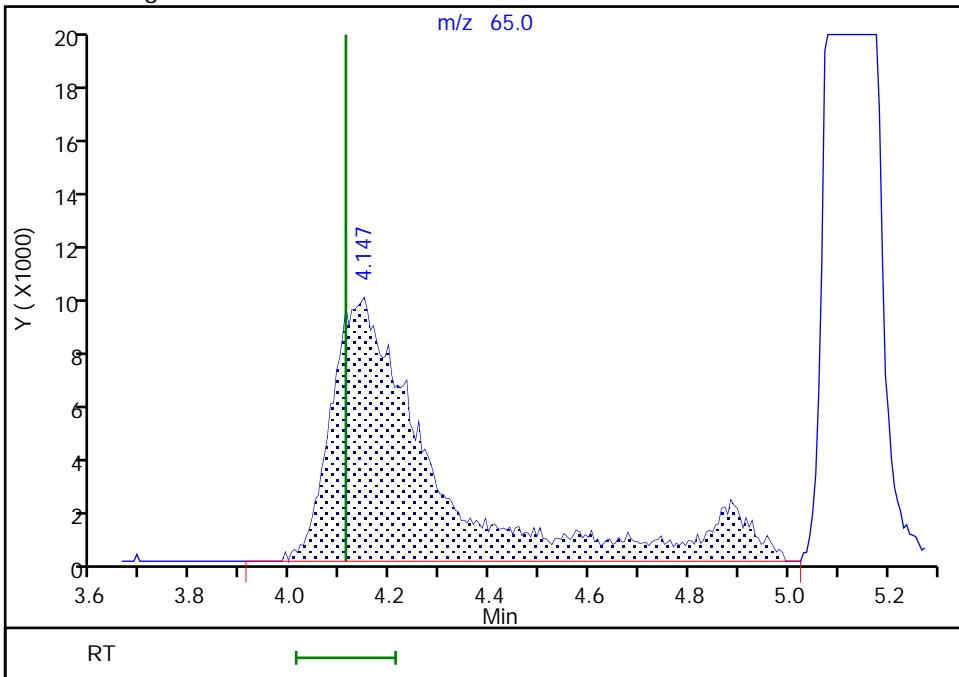
RT: 4.15  
 Area: 131305  
 Amount: 50.000000  
 Amount Units: ug/l

Processing Integration Results



RT: 4.15  
 Area: 143695  
 Amount: 50.000000  
 Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:45:11  
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Calibration

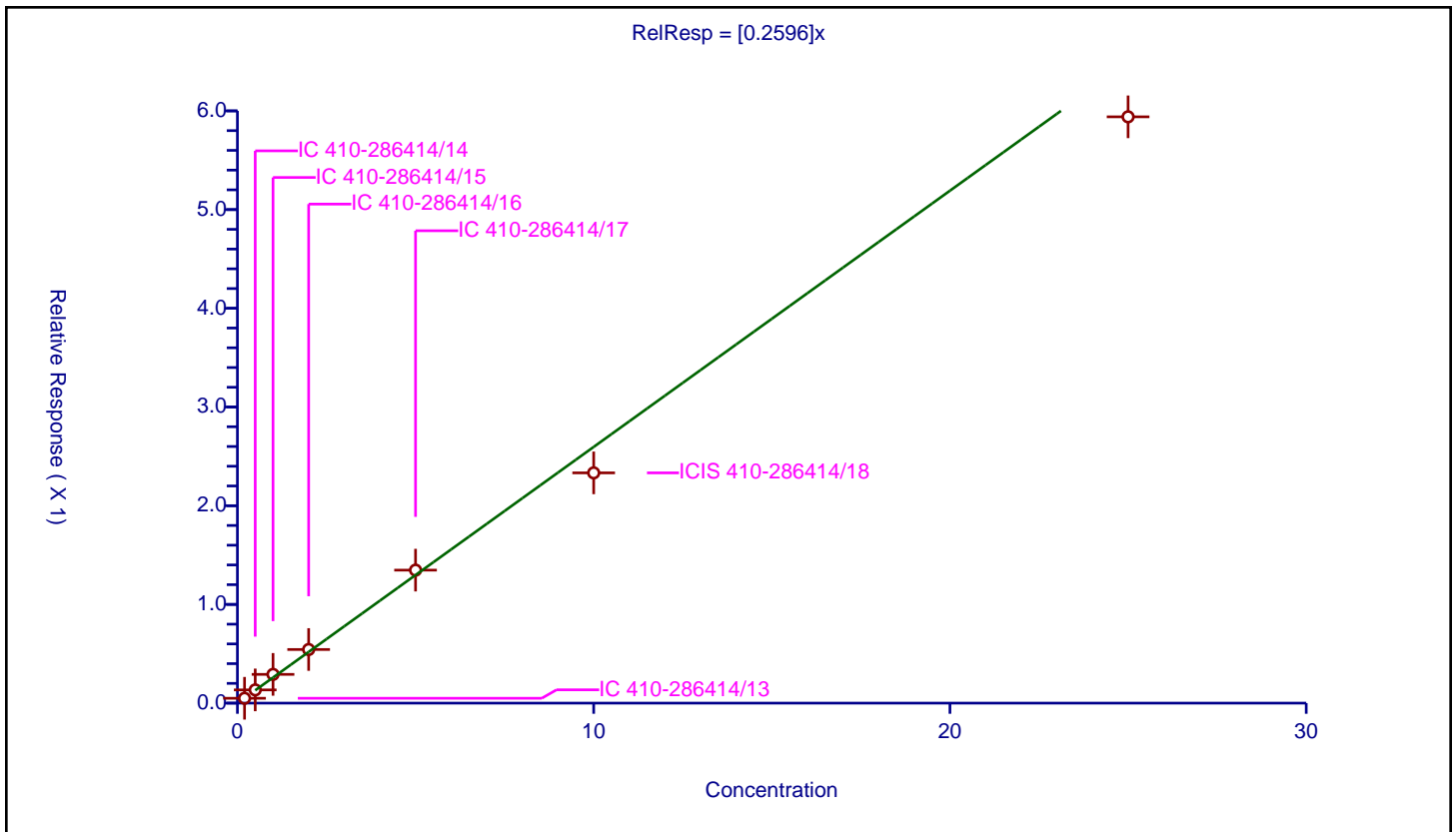
/ Dichlorodifluoromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2596

Error Coefficients	
Standard Error:	636000
Relative Standard Error:	8.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.049137	10.0	2204666.0	0.245683	Y
2	IC 410-286414/14	0.5	0.133966	10.0	2229222.0	0.267932	Y
3	IC 410-286414/15	1.0	0.29135	10.0	2229967.0	0.29135	Y
4	IC 410-286414/16	2.0	0.543272	10.0	2244586.0	0.271636	Y
5	IC 410-286414/17	5.0	1.347317	10.0	2296832.0	0.269463	Y
6	ICIS 410-286414/18	10.0	2.33265	10.0	2328270.0	0.233265	Y
7	IC 410-286414/19	25.0	5.939841	10.0	2388919.0	0.237594	Y



**Calibration**

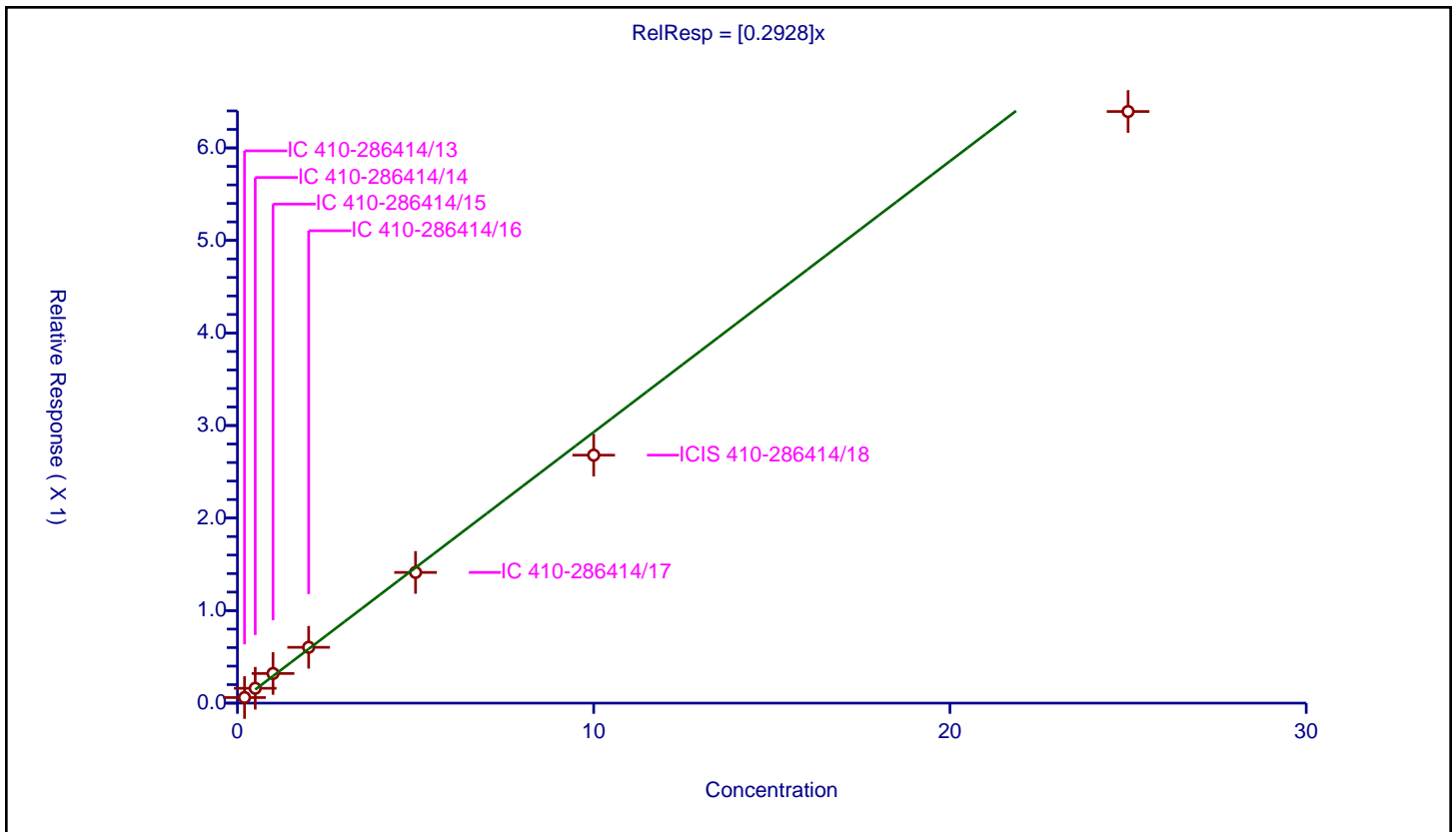
/ Chloromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2928

Error Coefficients	
Standard Error:	689000
Relative Standard Error:	8.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.060191	10.0	2204666.0	0.300953	Y
2	IC 410-286414/14	0.5	0.160428	10.0	2229222.0	0.320856	Y
3	IC 410-286414/15	1.0	0.32022	10.0	2229967.0	0.32022	Y
4	IC 410-286414/16	2.0	0.603082	10.0	2244586.0	0.301541	Y
5	IC 410-286414/17	5.0	1.412437	10.0	2296832.0	0.282487	Y
6	ICIS 410-286414/18	10.0	2.679784	10.0	2328270.0	0.267978	Y
7	IC 410-286414/19	25.0	6.39336	10.0	2388919.0	0.255734	Y



**Calibration**

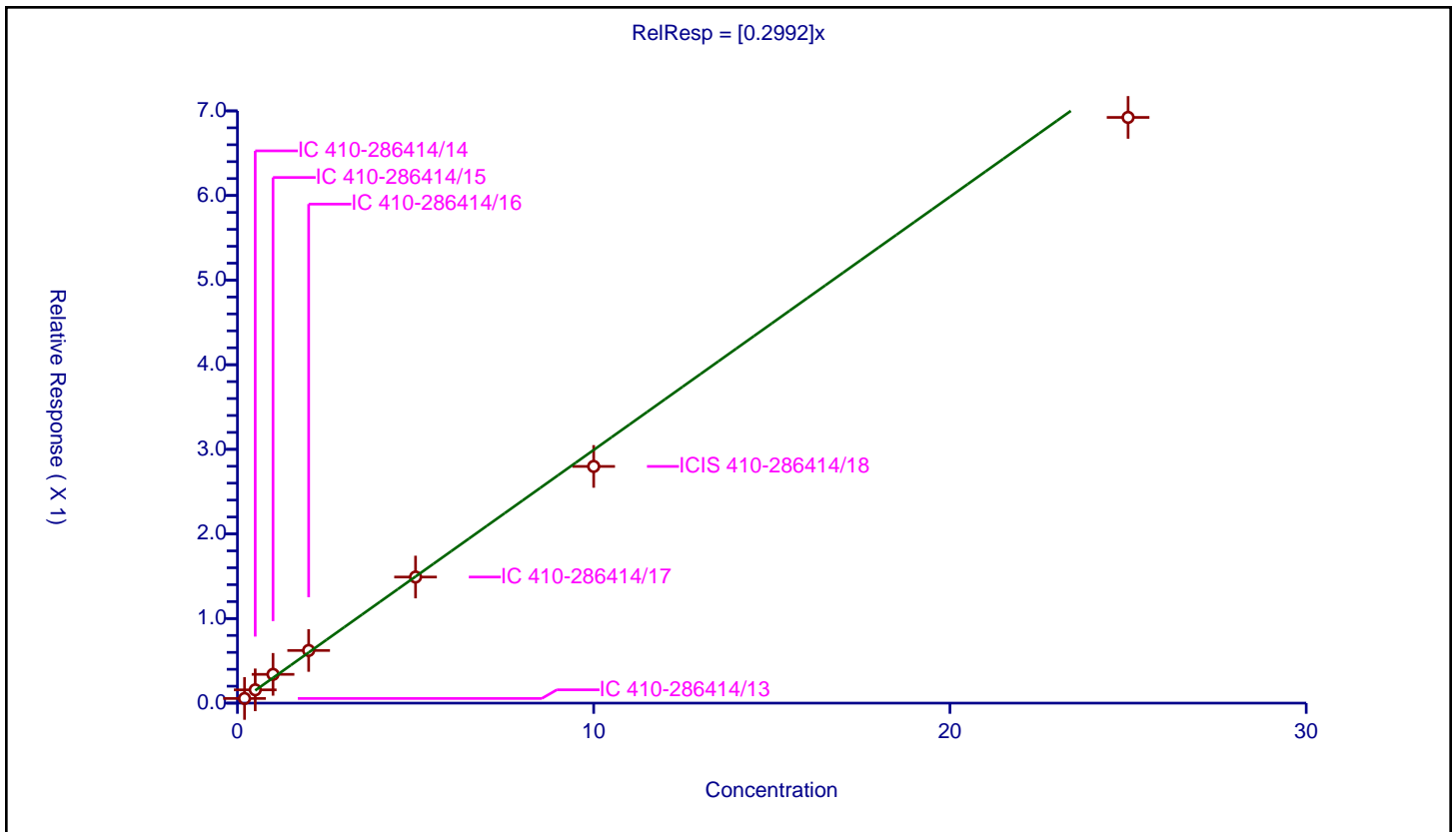
/ Vinyl chloride

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2992

Error Coefficients	
Standard Error:	742000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.055002	10.0	2204666.0	0.275008	Y
2	IC 410-286414/14	0.5	0.156786	10.0	2229222.0	0.313571	Y
3	IC 410-286414/15	1.0	0.340036	10.0	2229967.0	0.340036	Y
4	IC 410-286414/16	2.0	0.622632	10.0	2244586.0	0.311316	Y
5	IC 410-286414/17	5.0	1.490453	10.0	2296832.0	0.298091	Y
6	ICIS 410-286414/18	10.0	2.797635	10.0	2328270.0	0.279764	Y
7	IC 410-286414/19	25.0	6.922734	10.0	2388919.0	0.276909	Y



Calibration

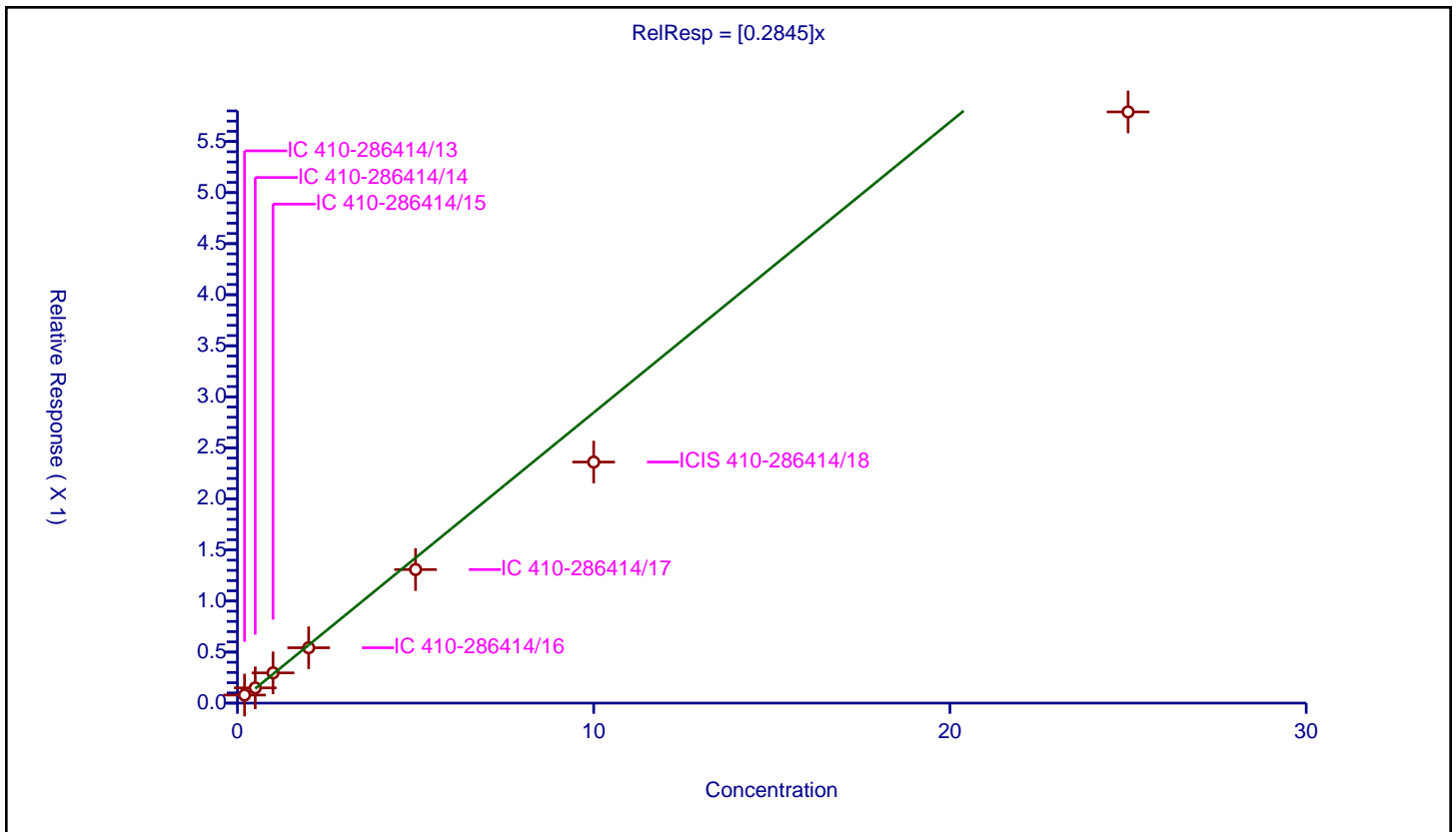
/ Butadiene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2845

Error Coefficients	
Standard Error:	623000
Relative Standard Error:	19.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.931

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.079236	10.0	2204666.0	0.396182	Y
2	IC 410-286414/14	0.5	0.149339	10.0	2229222.0	0.298678	Y
3	IC 410-286414/15	1.0	0.296264	10.0	2229967.0	0.296264	Y
4	IC 410-286414/16	2.0	0.542314	10.0	2244586.0	0.271157	Y
5	IC 410-286414/17	5.0	1.308333	10.0	2296832.0	0.261667	Y
6	ICIS 410-286414/18	10.0	2.361011	10.0	2328270.0	0.236101	Y
7	IC 410-286414/19	25.0	5.79015	10.0	2388919.0	0.231606	Y



Calibration

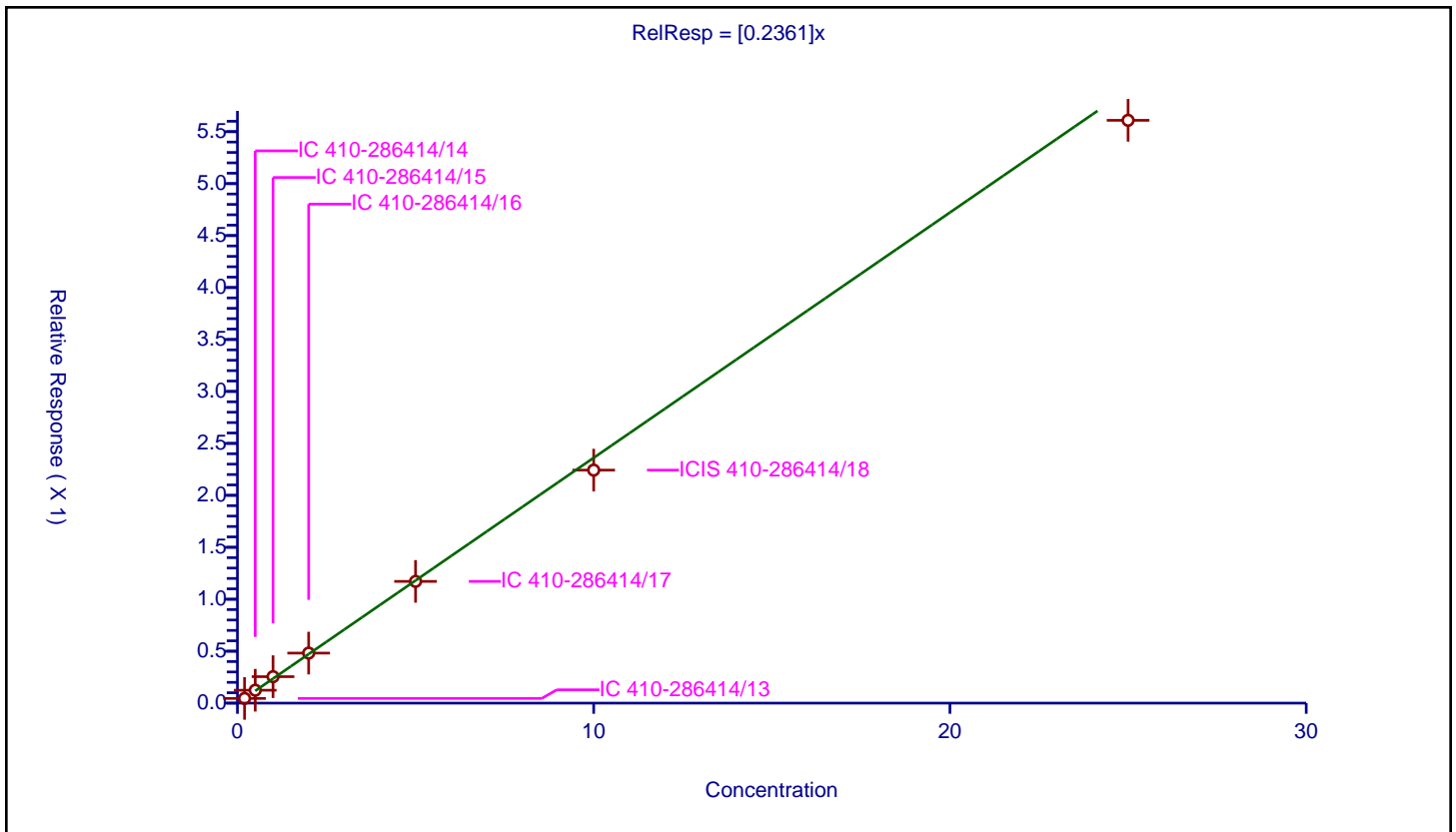
/ Bromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2361

Error Coefficients	
Standard Error:	600000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.045222	10.0	2204666.0	0.226111	Y
2	IC 410-286414/14	0.5	0.124129	10.0	2229222.0	0.248257	Y
3	IC 410-286414/15	1.0	0.254609	10.0	2229967.0	0.254609	Y
4	IC 410-286414/16	2.0	0.481594	10.0	2244586.0	0.240797	Y
5	IC 410-286414/17	5.0	1.17157	10.0	2296832.0	0.234314	Y
6	ICIS 410-286414/18	10.0	2.242657	10.0	2328270.0	0.224266	Y
7	IC 410-286414/19	25.0	5.609307	10.0	2388919.0	0.224372	Y





Calibration

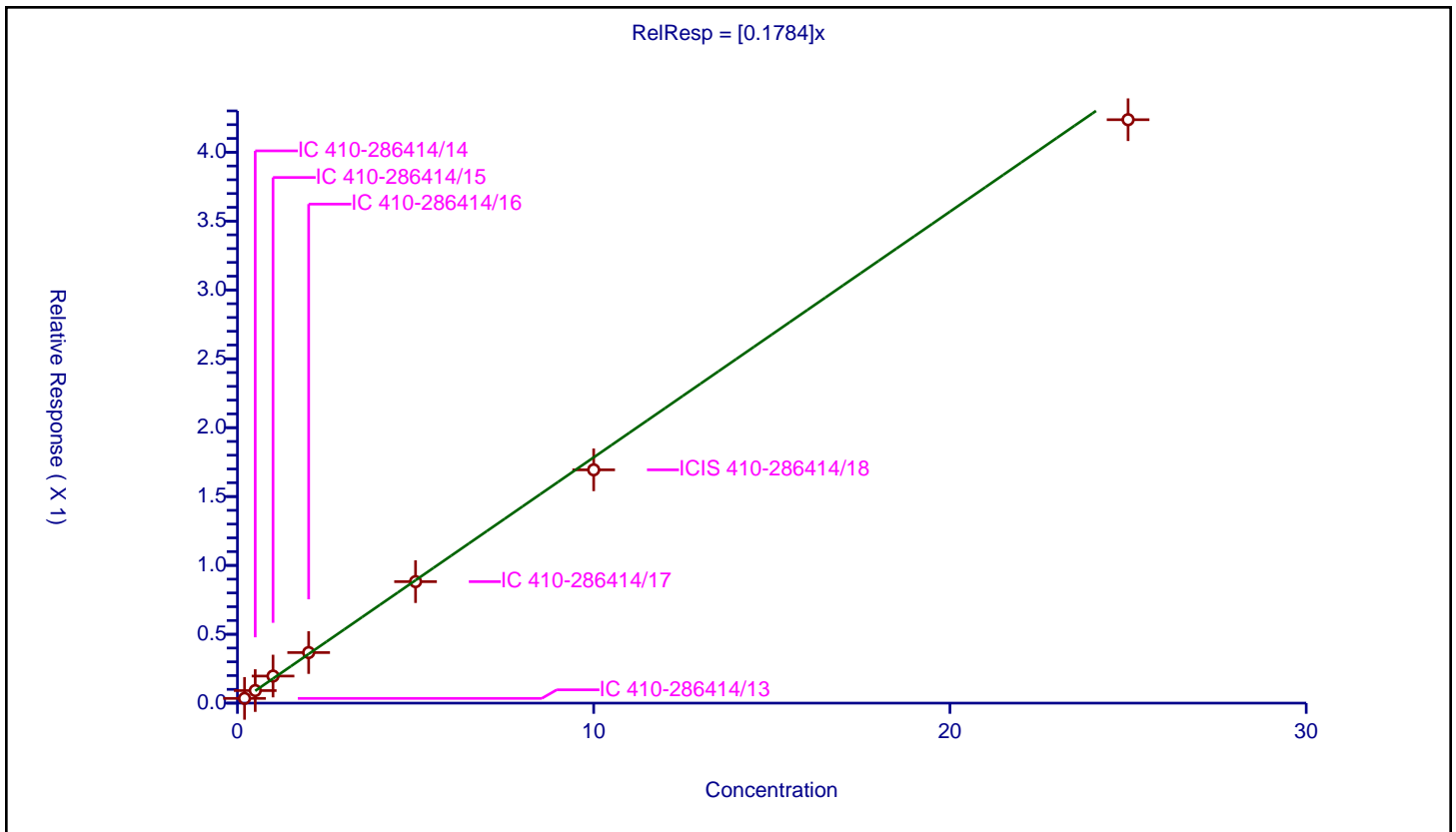
/ Chloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1784

Error Coefficients	
Standard Error:	453000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.034227	10.0	2204666.0	0.171137	Y
2	IC 410-286414/14	0.5	0.091198	10.0	2229222.0	0.182395	Y
3	IC 410-286414/15	1.0	0.196546	10.0	2229967.0	0.196546	Y
4	IC 410-286414/16	2.0	0.367186	10.0	2244586.0	0.183593	Y
5	IC 410-286414/17	5.0	0.882145	10.0	2296832.0	0.176429	Y
6	ICIS 410-286414/18	10.0	1.693919	10.0	2328270.0	0.169392	Y
7	IC 410-286414/19	25.0	4.236016	10.0	2388919.0	0.169441	Y



Calibration

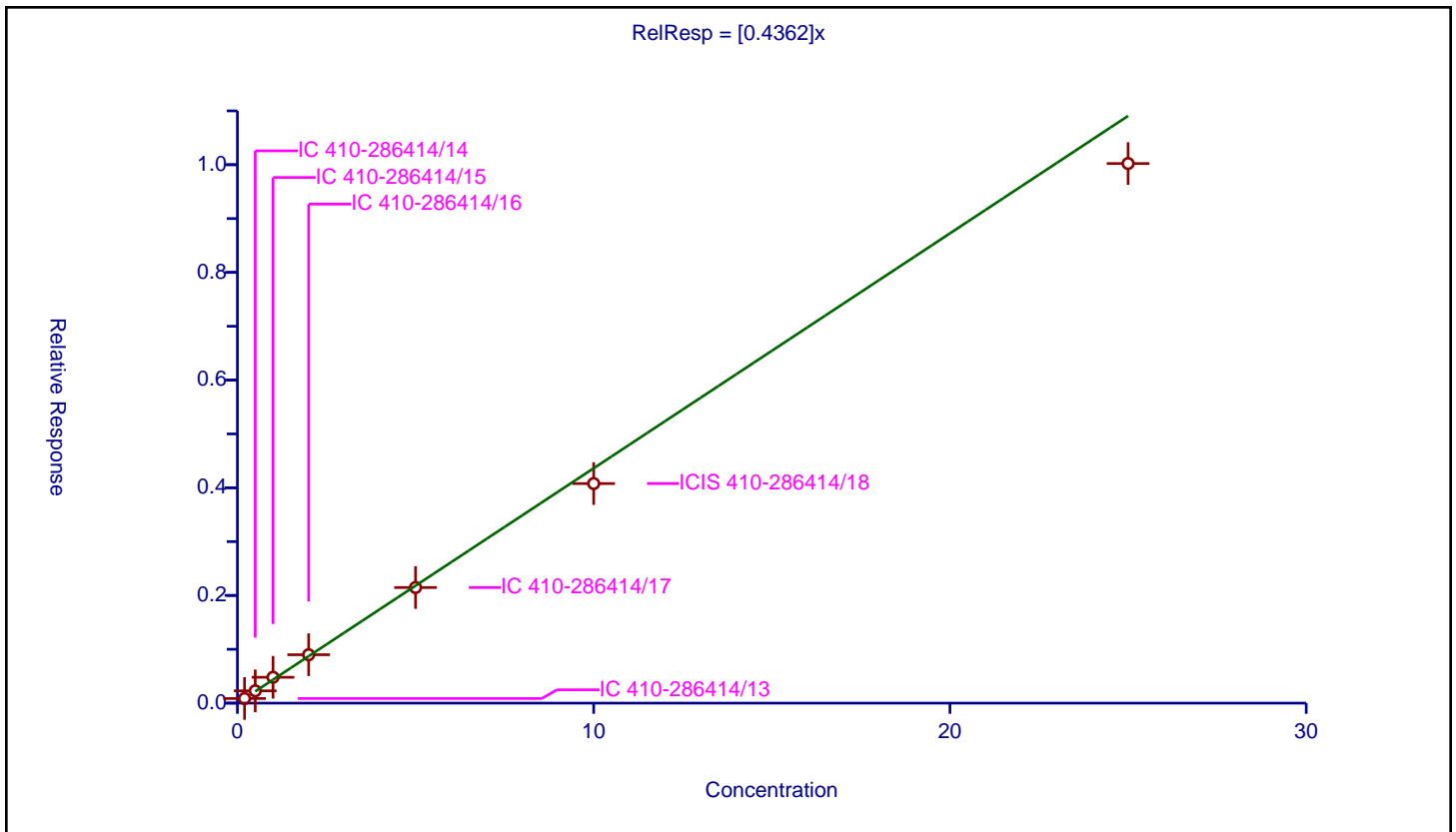
/ Dichlorofluoromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4362

Error Coefficients	
Standard Error:	1070000
Relative Standard Error:	6.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.085859	10.0	2204666.0	0.429294	Y
2	IC 410-286414/14	0.5	0.228429	10.0	2229222.0	0.456859	Y
3	IC 410-286414/15	1.0	0.479994	10.0	2229967.0	0.479994	Y
4	IC 410-286414/16	2.0	0.899017	10.0	2244586.0	0.449508	Y
5	IC 410-286414/17	5.0	2.147044	10.0	2296832.0	0.429409	Y
6	ICIS 410-286414/18	10.0	4.077714	10.0	2328270.0	0.407771	Y
7	IC 410-286414/19	25.0	10.021918	10.0	2388919.0	0.400877	Y



Calibration

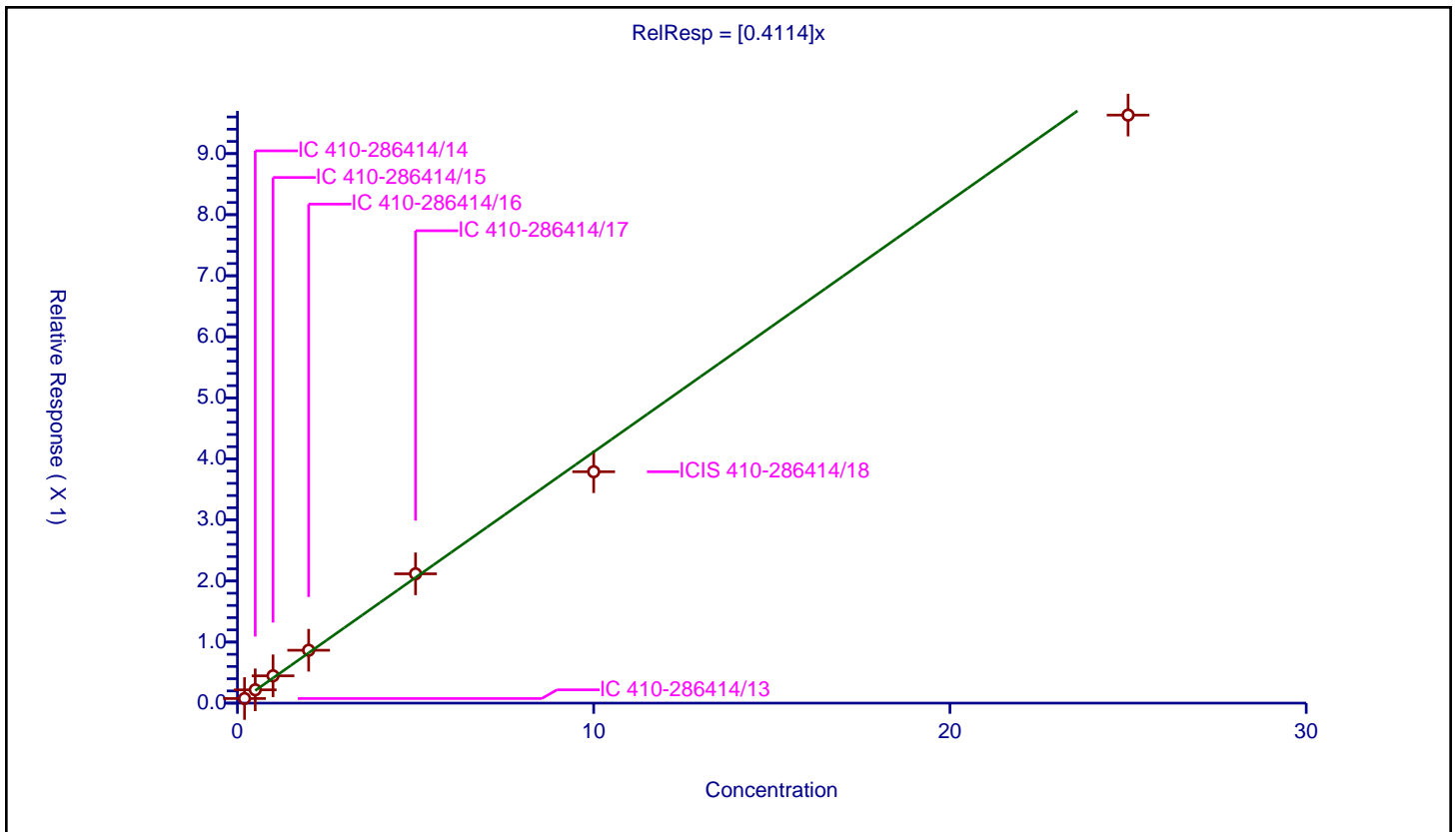
/ Trichlorofluoromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4114

Error Coefficients	
Standard Error:	1030000
Relative Standard Error:	7.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.075064	10.0	2204666.0	0.375318	Y
2	IC 410-286414/14	0.5	0.217919	10.0	2229222.0	0.435838	Y
3	IC 410-286414/15	1.0	0.447545	10.0	2229967.0	0.447545	Y
4	IC 410-286414/16	2.0	0.866075	10.0	2244586.0	0.433038	Y
5	IC 410-286414/17	5.0	2.118057	10.0	2296832.0	0.423611	Y
6	ICIS 410-286414/18	10.0	3.789926	10.0	2328270.0	0.378993	Y
7	IC 410-286414/19	25.0	9.63113	10.0	2388919.0	0.385245	Y



Calibration

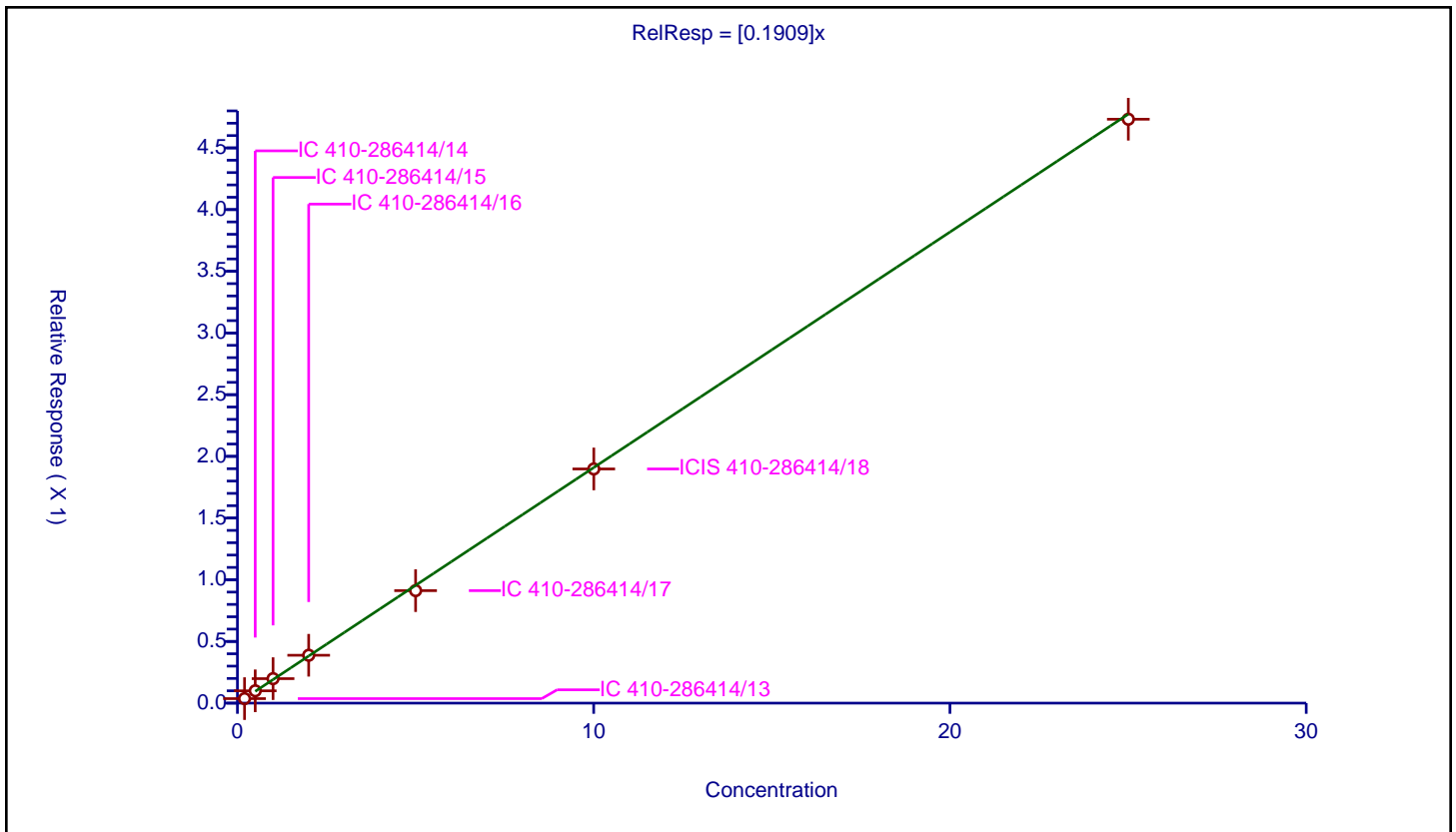
/ Ethyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1909

Error Coefficients	
Standard Error:	505000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.200057	0.036663	10.0	2204666.0	0.183263	Y
2	IC 410-286414/14	0.500143	0.099752	10.0	2229222.0	0.199448	Y
3	IC 410-286414/15	1.000286	0.198451	10.0	2229967.0	0.198395	Y
4	IC 410-286414/16	2.000572	0.387933	10.0	2244586.0	0.193911	Y
5	IC 410-286414/17	5.00143	0.911795	10.0	2296832.0	0.182307	Y
6	ICIS 410-286414/18	10.00286	1.89792	10.0	2328270.0	0.189738	Y
7	IC 410-286414/19	25.00715	4.732375	10.0	2388919.0	0.189241	Y



Calibration

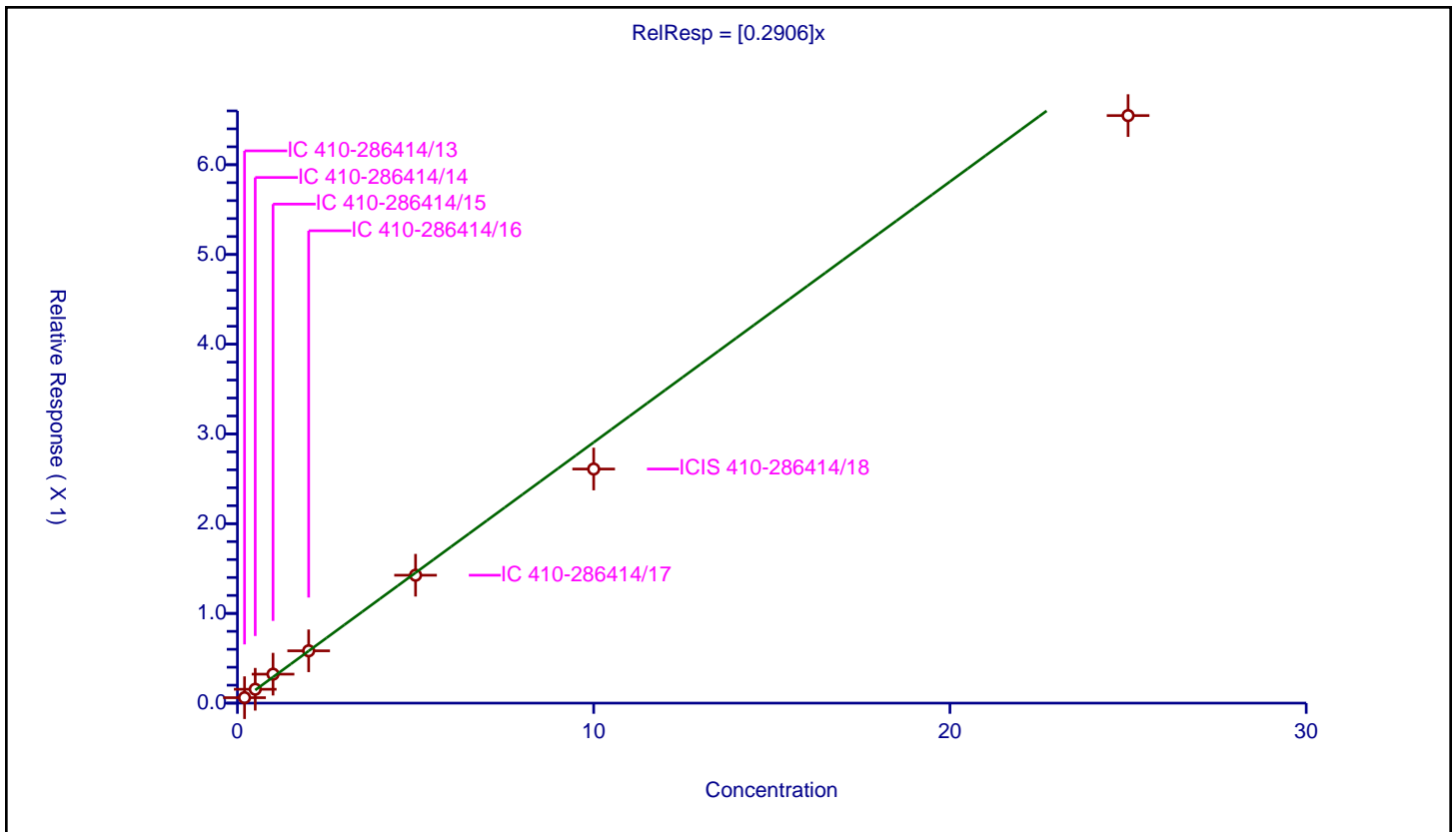
/ 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2906

Error Coefficients	
Standard Error:	701000
Relative Standard Error:	8.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.06064	10.0	2204666.0	0.303198	Y
2	IC 410-286414/14	0.5	0.154395	10.0	2229222.0	0.308789	Y
3	IC 410-286414/15	1.0	0.322677	10.0	2229967.0	0.322677	Y
4	IC 410-286414/16	2.0	0.582981	10.0	2244586.0	0.29149	Y
5	IC 410-286414/17	5.0	1.425555	10.0	2296832.0	0.285111	Y
6	ICIS 410-286414/18	10.0	2.608735	10.0	2328270.0	0.260874	Y
7	IC 410-286414/19	25.0	6.547719	10.0	2388919.0	0.261909	Y



Calibration

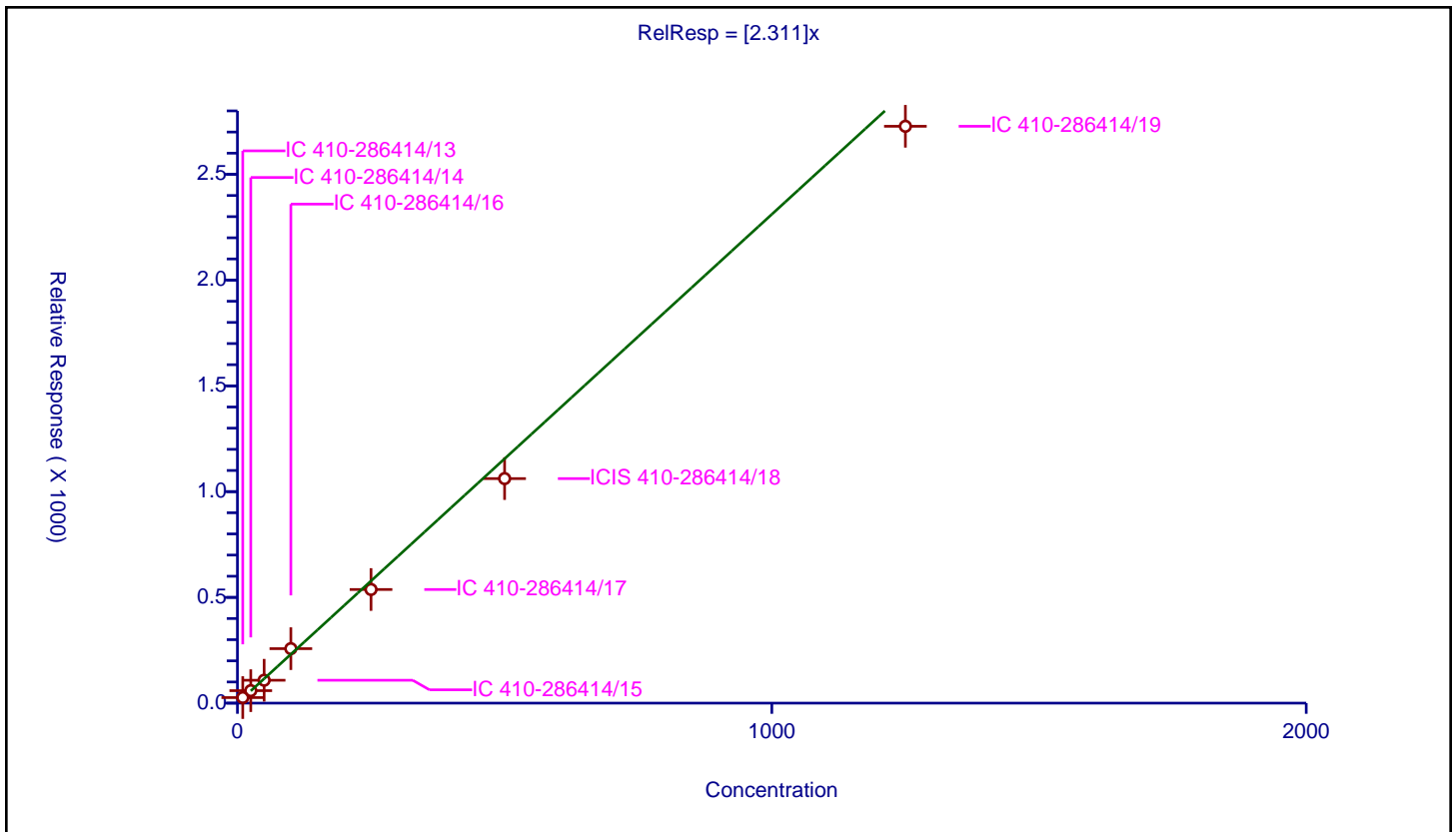
/ Acrolein

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.311

Error Coefficients	
Standard Error:	3500000
Relative Standard Error:	9.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	9.999752	26.238174	50.0	133180.0	2.623882	Y
2	IC 410-286414/14	24.999381	58.937303	50.0	128635.0	2.357551	Y
3	IC 410-286414/15	49.998762	108.27169	50.0	136943.0	2.165487	Y
4	IC 410-286414/16	99.997523	257.608652	50.0	124917.0	2.57615	Y
5	IC 410-286414/17	249.993808	537.254881	50.0	141819.0	2.149073	Y
6	ICIS 410-286414/18	499.987617	1061.578737	50.0	142576.0	2.12321	Y
7	IC 410-286414/19	1249.969042	2727.157521	50.0	143695.0	2.18178	Y



Calibration

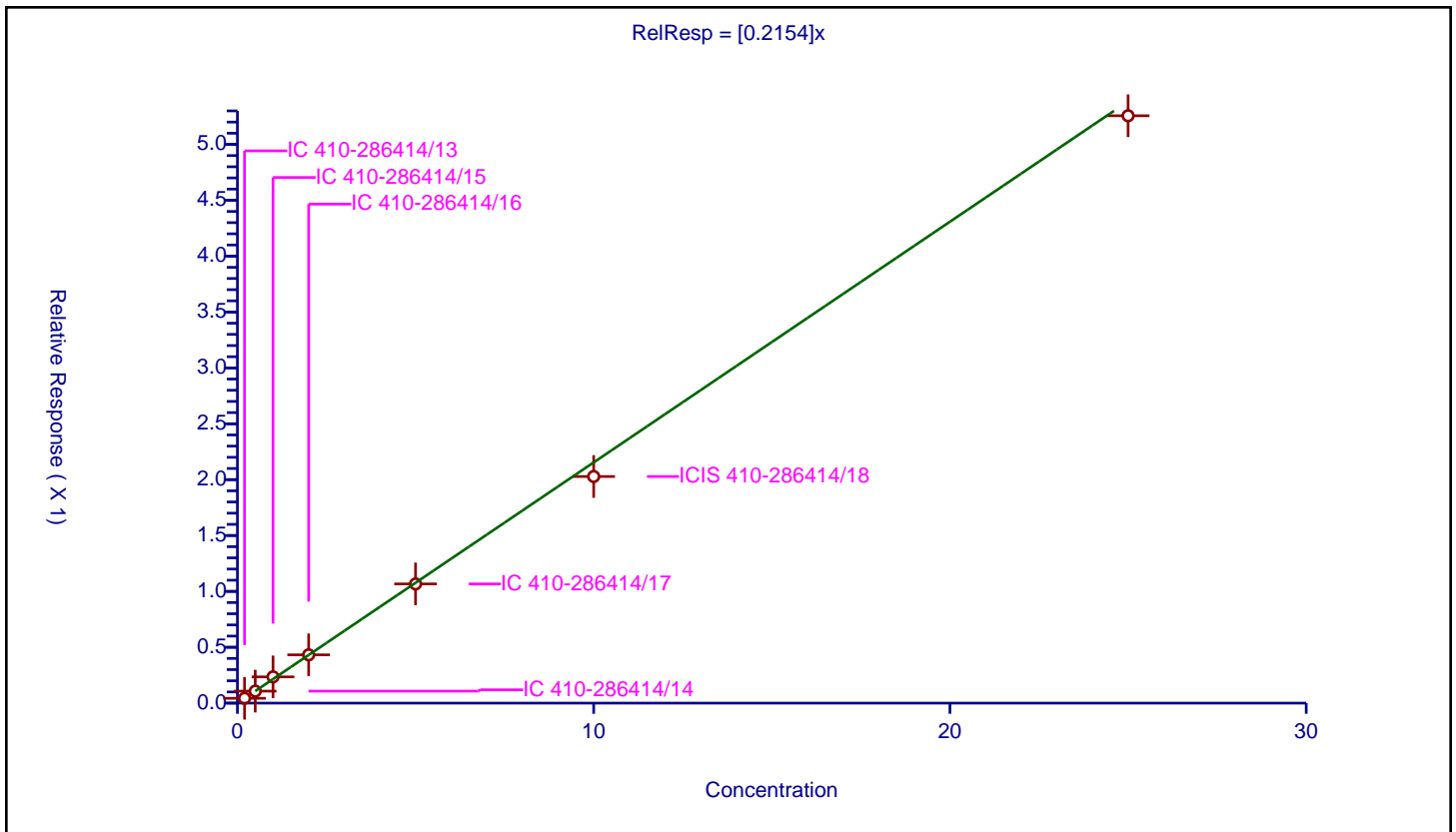
/ 1,1-Dichloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2154

Error Coefficients	
Standard Error:	559000
Relative Standard Error:	4.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.04314	10.0	2204666.0	0.215702	Y
2	IC 410-286414/14	0.5	0.107356	10.0	2229222.0	0.214712	Y
3	IC 410-286414/15	1.0	0.234963	10.0	2229967.0	0.234963	Y
4	IC 410-286414/16	2.0	0.432138	10.0	2244586.0	0.216069	Y
5	IC 410-286414/17	5.0	1.066743	10.0	2296832.0	0.213349	Y
6	ICIS 410-286414/18	10.0	2.027956	10.0	2328270.0	0.202796	Y
7	IC 410-286414/19	25.0	5.256298	10.0	2388919.0	0.210252	Y



Calibration

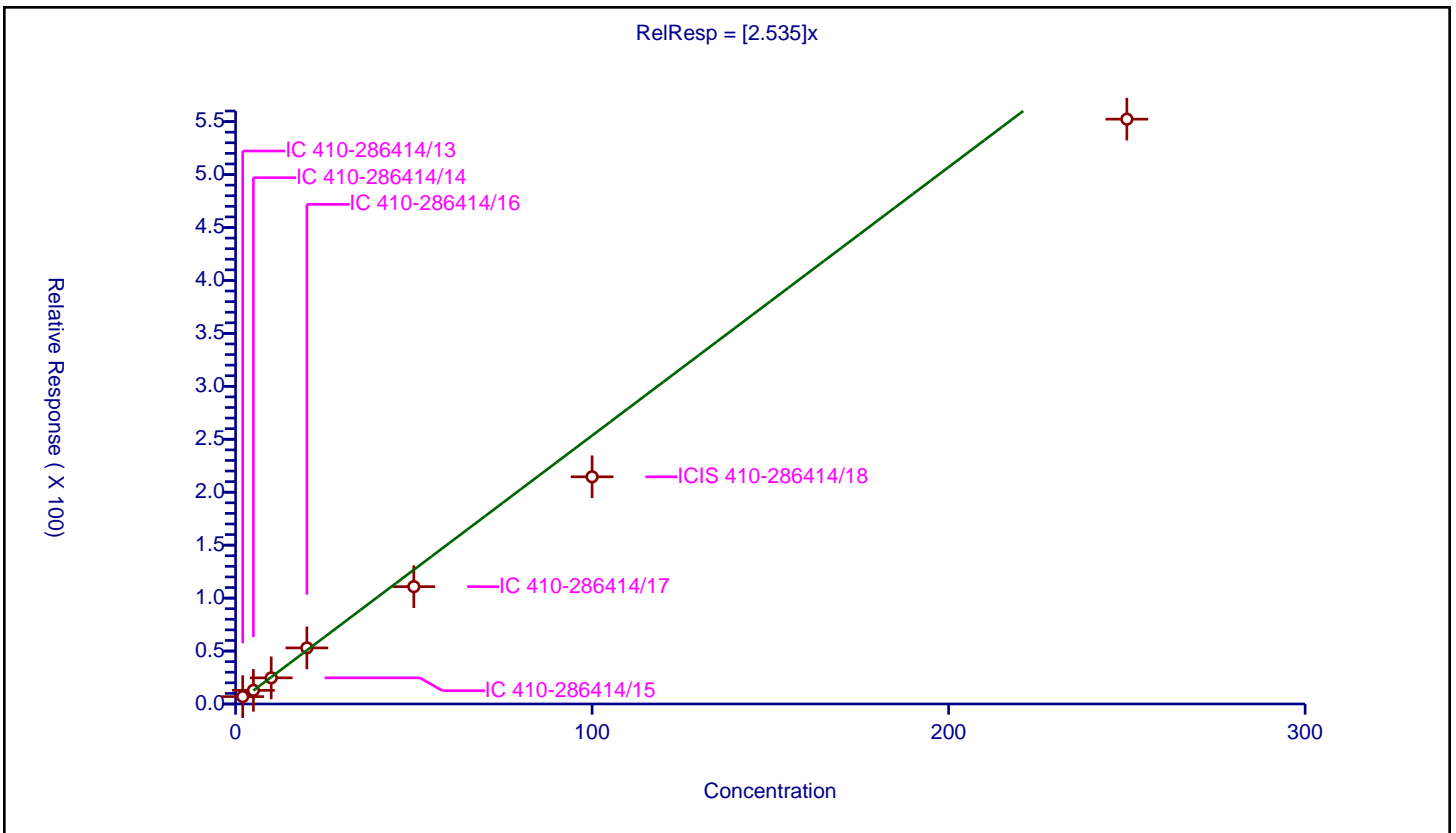
/ Acetone

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.535

Error Coefficients	
Standard Error:	709000
Relative Standard Error:	18.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.943

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	2.0	6.955624	50.0	133180.0	3.477812	Y
2	IC 410-286414/14	5.0	12.879854	50.0	128635.0	2.575971	Y
3	IC 410-286414/15	10.0	24.701153	50.0	136943.0	2.470115	Y
4	IC 410-286414/16	20.0	52.986383	50.0	124917.0	2.649319	Y
5	IC 410-286414/17	50.0	110.829296	50.0	141819.0	2.216586	Y
6	ICIS 410-286414/18	100.0	214.545225	50.0	142576.0	2.145452	Y
7	IC 410-286414/19	250.0	552.308709	50.0	143695.0	2.209235	Y





Calibration

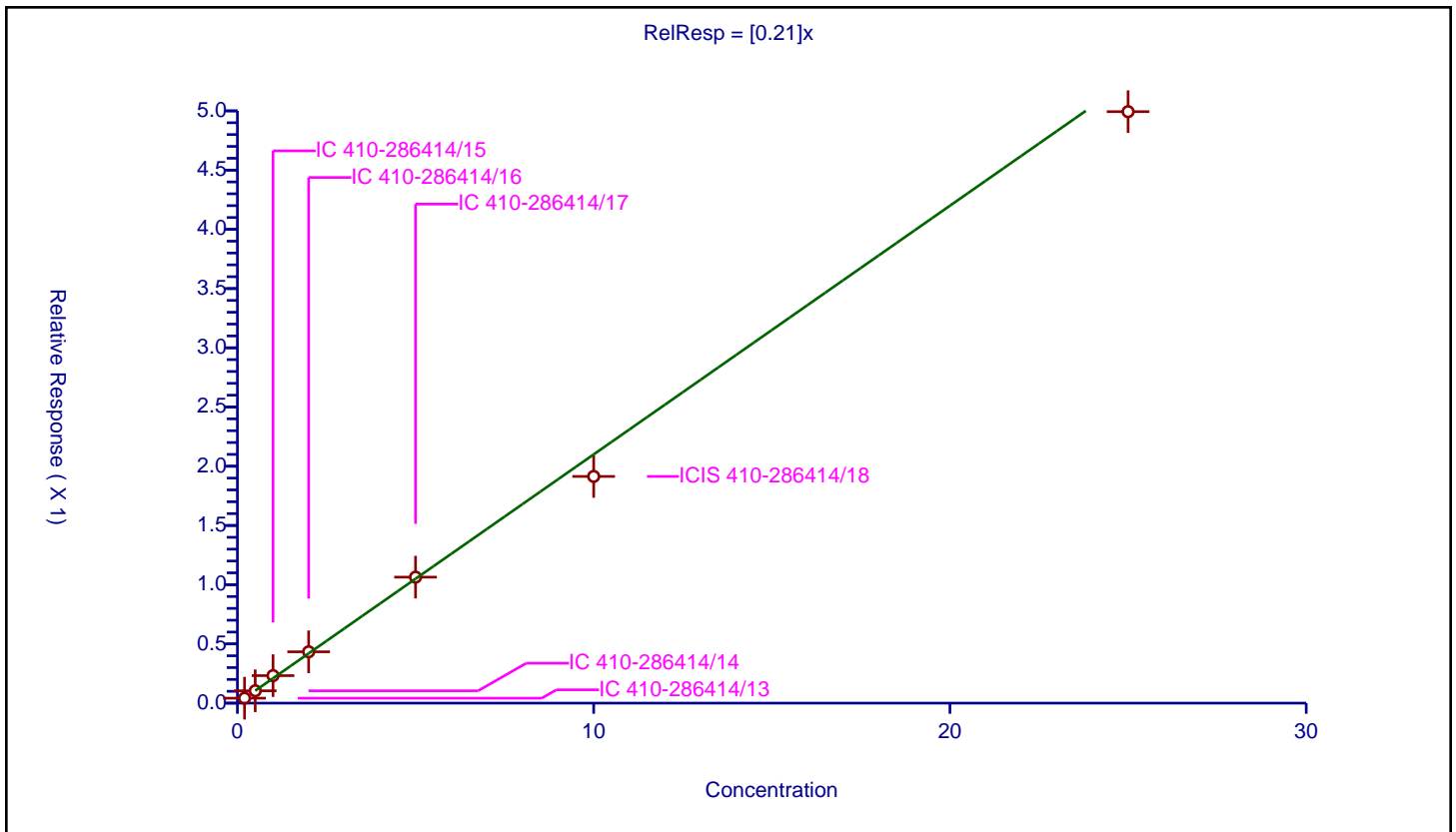
/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.21

Error Coefficients	
Standard Error:	531000
Relative Standard Error:	6.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.041725	10.0	2204666.0	0.208626	Y
2	IC 410-286414/14	0.5	0.104189	10.0	2229222.0	0.208378	Y
3	IC 410-286414/15	1.0	0.232219	10.0	2229967.0	0.232219	Y
4	IC 410-286414/16	2.0	0.433496	10.0	2244586.0	0.216748	Y
5	IC 410-286414/17	5.0	1.063635	10.0	2296832.0	0.212727	Y
6	ICIS 410-286414/18	10.0	1.913953	10.0	2328270.0	0.191395	Y
7	IC 410-286414/19	25.0	4.993464	10.0	2388919.0	0.199739	Y



**Calibration**

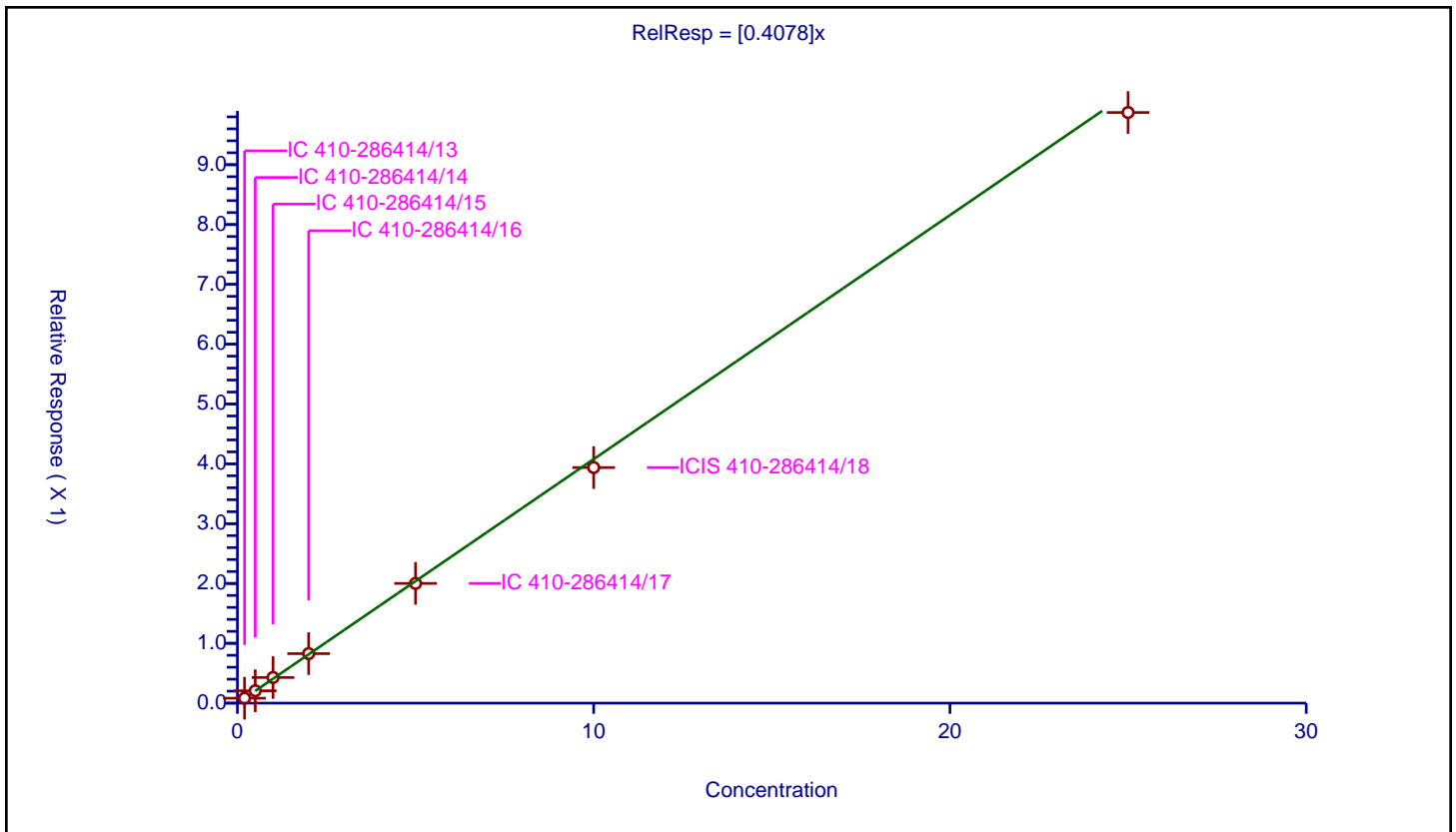
/ Iodomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4078

Error Coefficients	
Standard Error:	1050000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.082121	10.0	2204666.0	0.410606	Y
2	IC 410-286414/14	0.5	0.206534	10.0	2229222.0	0.413068	Y
3	IC 410-286414/15	1.0	0.428419	10.0	2229967.0	0.428419	Y
4	IC 410-286414/16	2.0	0.8276	10.0	2244586.0	0.4138	Y
5	IC 410-286414/17	5.0	2.001034	10.0	2296832.0	0.400207	Y
6	ICIS 410-286414/18	10.0	3.937705	10.0	2328270.0	0.39377	Y
7	IC 410-286414/19	25.0	9.87262	10.0	2388919.0	0.394905	Y



**Calibration**

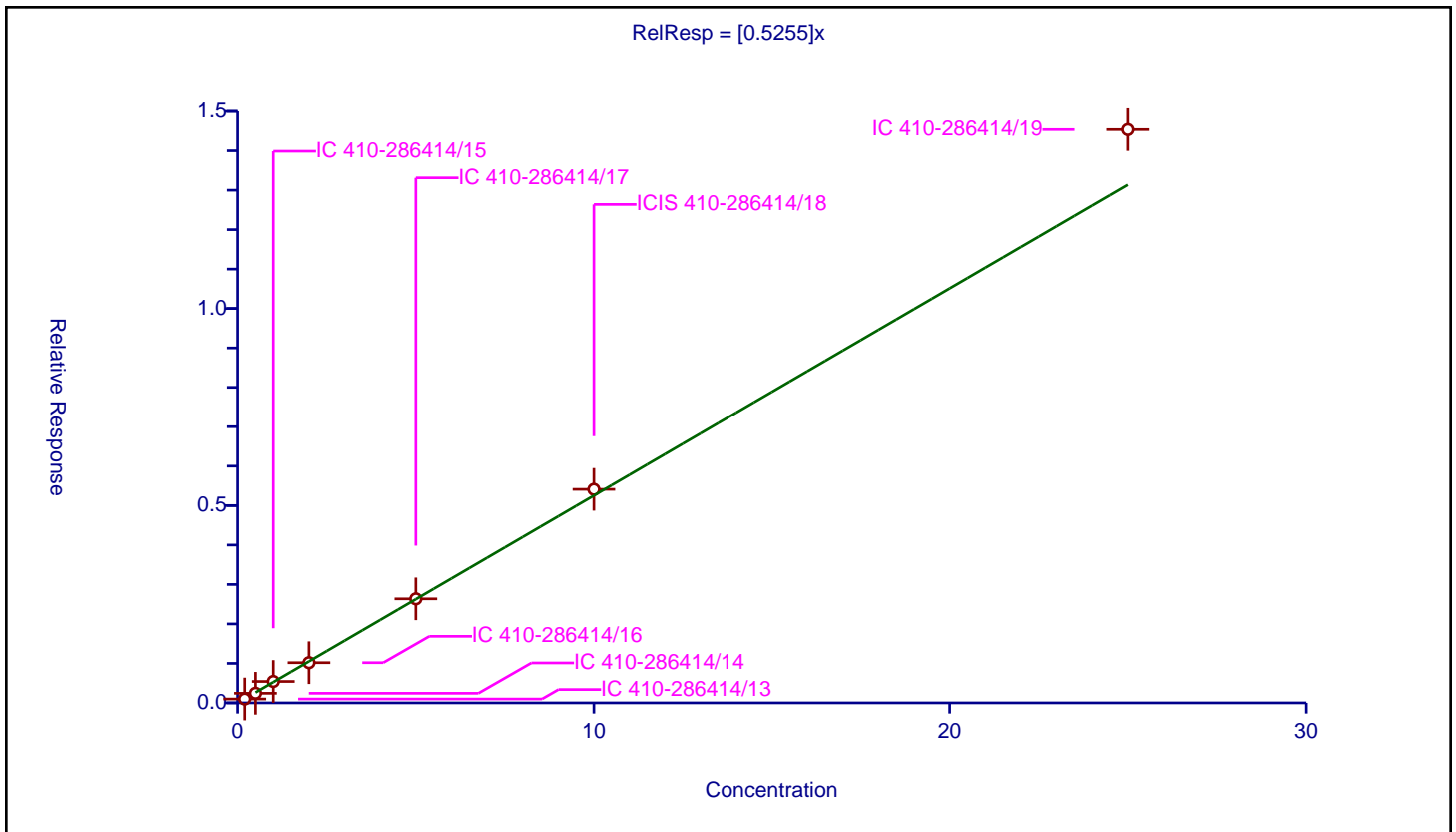
/ Carbon disulfide

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5255

Error Coefficients	
Standard Error:	1530000
Relative Standard Error:	6.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.098373	10.0	2204666.0	0.491866	Y
2	IC 410-286414/14	0.5	0.242932	10.0	2229222.0	0.485865	Y
3	IC 410-286414/15	1.0	0.541752	10.0	2229967.0	0.541752	Y
4	IC 410-286414/16	2.0	1.01788	10.0	2244586.0	0.50894	Y
5	IC 410-286414/17	5.0	2.636022	10.0	2296832.0	0.527204	Y
6	ICIS 410-286414/18	10.0	5.411374	10.0	2328270.0	0.541137	Y
7	IC 410-286414/19	25.0	14.53768	10.0	2388919.0	0.581507	Y



**Calibration**

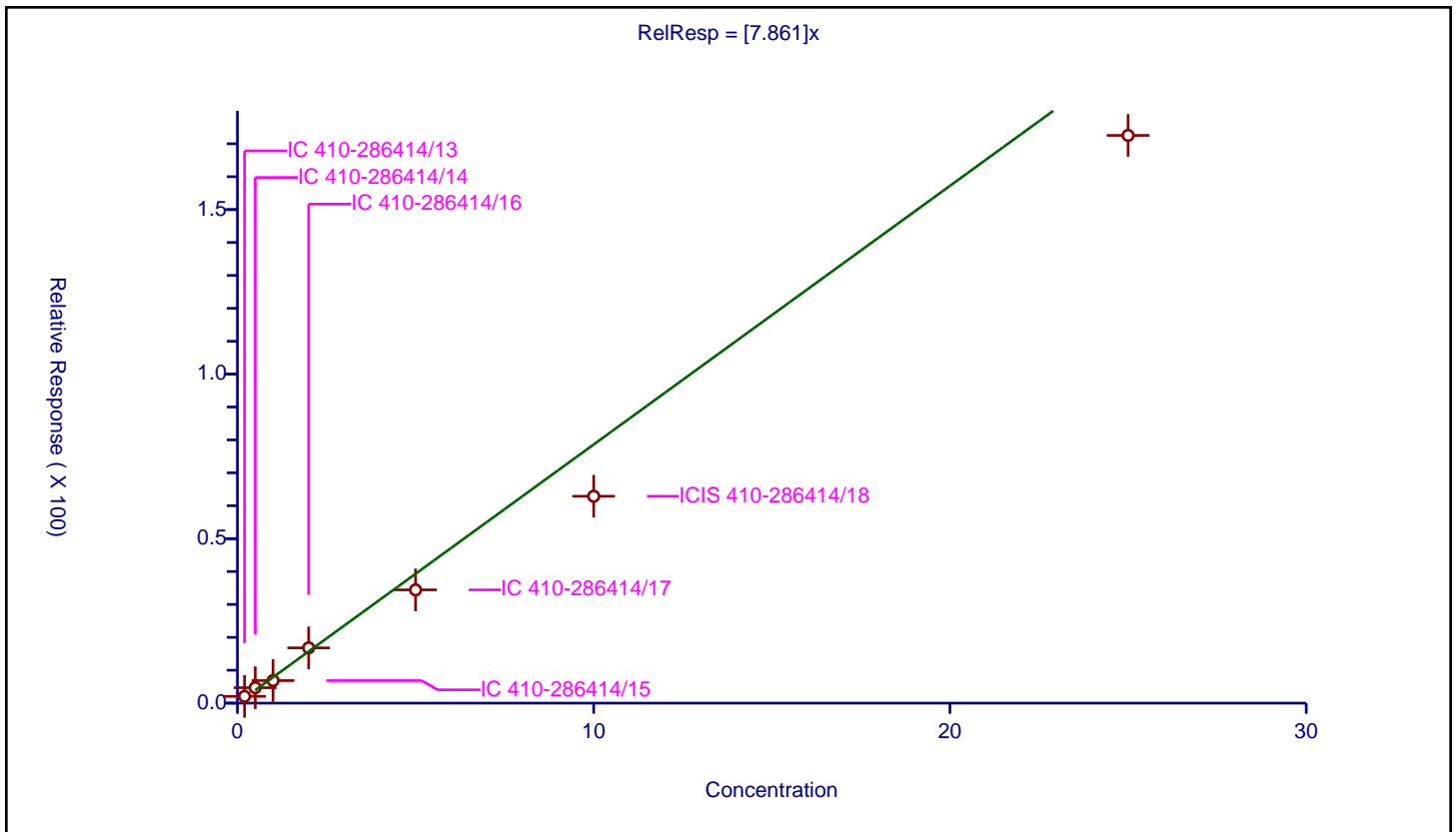
**/ Methyl acetate**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	7.861

Error Coefficients	
Standard Error:	220000
Relative Standard Error:	19.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.935

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	2.062622	50.0	133180.0	10.31311	Y
2	IC 410-286414/14	0.5	4.691569	50.0	128635.0	9.383138	Y
3	IC 410-286414/15	1.0	6.854312	50.0	136943.0	6.854312	Y
4	IC 410-286414/16	2.0	16.803958	50.0	124917.0	8.401979	Y
5	IC 410-286414/17	5.0	34.422398	50.0	141819.0	6.88448	Y
6	ICIS 410-286414/18	10.0	62.876992	50.0	142576.0	6.287699	Y
7	IC 410-286414/19	25.0	172.542538	50.0	143695.0	6.901702	Y



Calibration

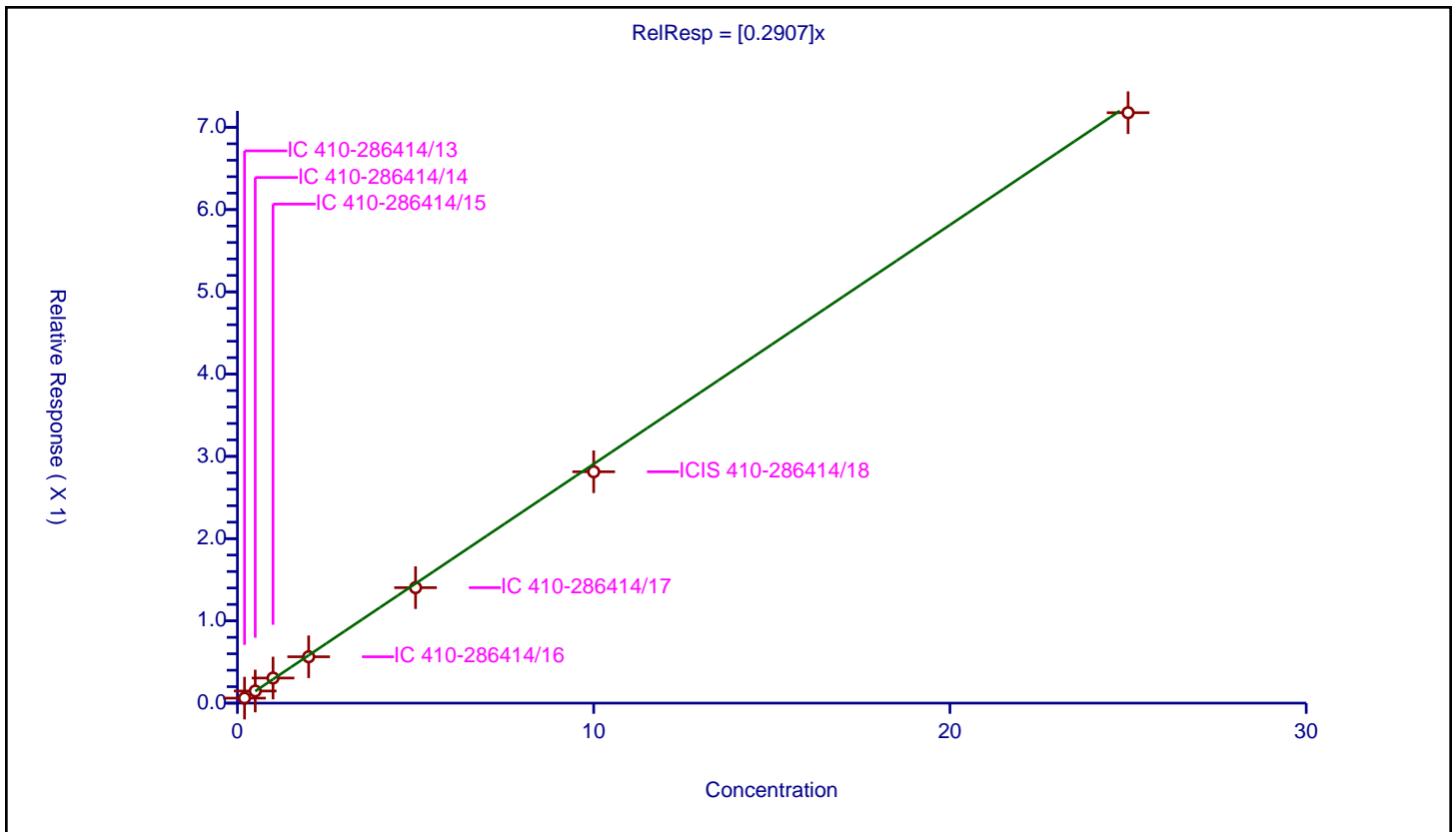
/ 3-Chloro-1-propene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2907

Error Coefficients	
Standard Error:	763000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.060649	10.0	2204666.0	0.303243	Y
2	IC 410-286414/14	0.5	0.14763	10.0	2229222.0	0.29526	Y
3	IC 410-286414/15	1.0	0.305283	10.0	2229967.0	0.305283	Y
4	IC 410-286414/16	2.0	0.563641	10.0	2244586.0	0.28182	Y
5	IC 410-286414/17	5.0	1.403794	10.0	2296832.0	0.280759	Y
6	ICIS 410-286414/18	10.0	2.813063	10.0	2328270.0	0.281306	Y
7	IC 410-286414/19	25.0	7.177849	10.0	2388919.0	0.287114	Y



Calibration

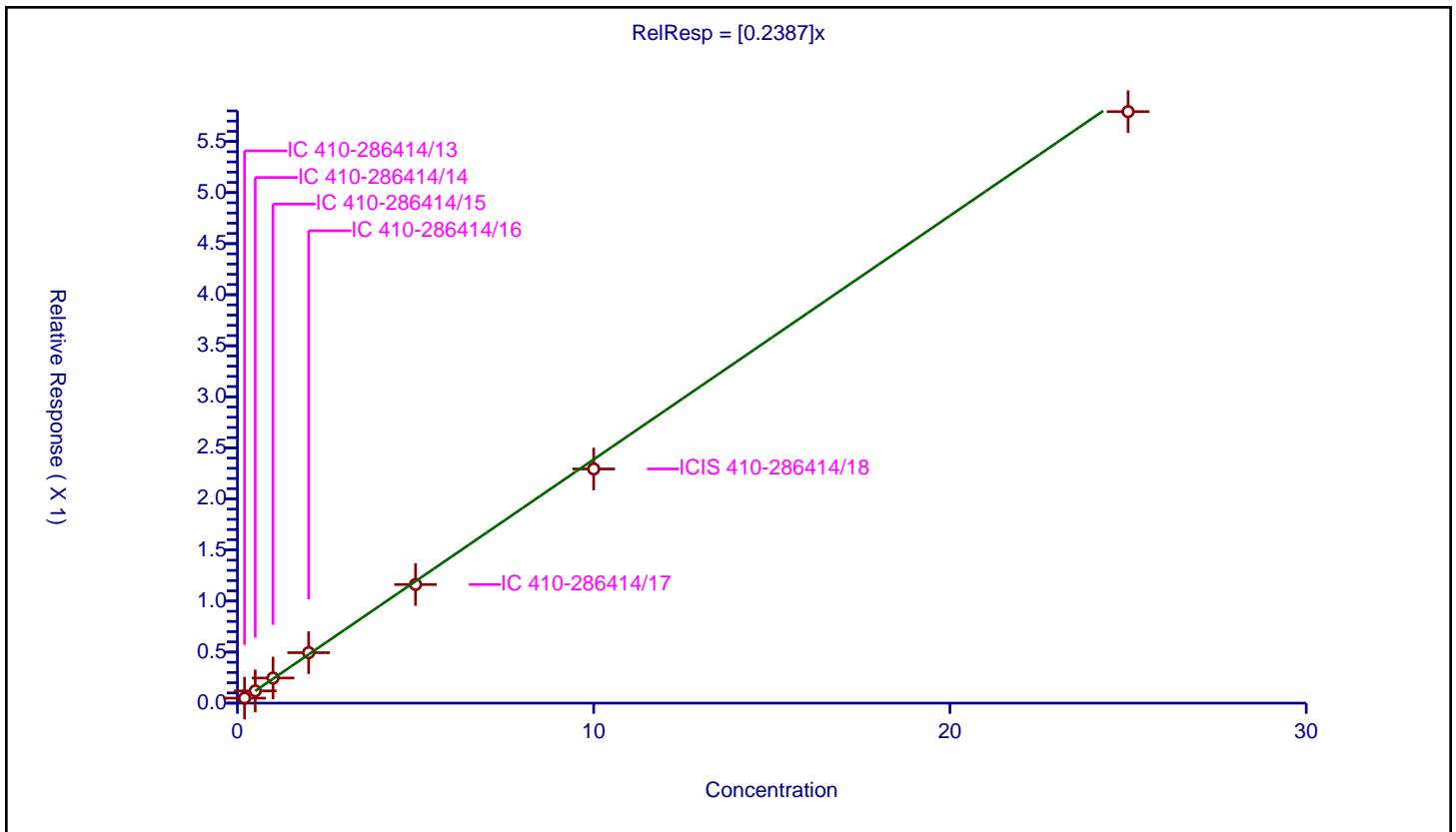
/ Methylene Chloride

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2387

Error Coefficients	
Standard Error:	617000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.048905	10.0	2204666.0	0.244527	Y
2	IC 410-286414/14	0.5	0.119934	10.0	2229222.0	0.239868	Y
3	IC 410-286414/15	1.0	0.245766	10.0	2229967.0	0.245766	Y
4	IC 410-286414/16	2.0	0.494189	10.0	2244586.0	0.247095	Y
5	IC 410-286414/17	5.0	1.16177	10.0	2296832.0	0.232354	Y
6	ICIS 410-286414/18	10.0	2.293432	10.0	2328270.0	0.229343	Y
7	IC 410-286414/19	25.0	5.7927	10.0	2388919.0	0.231708	Y



**Calibration**

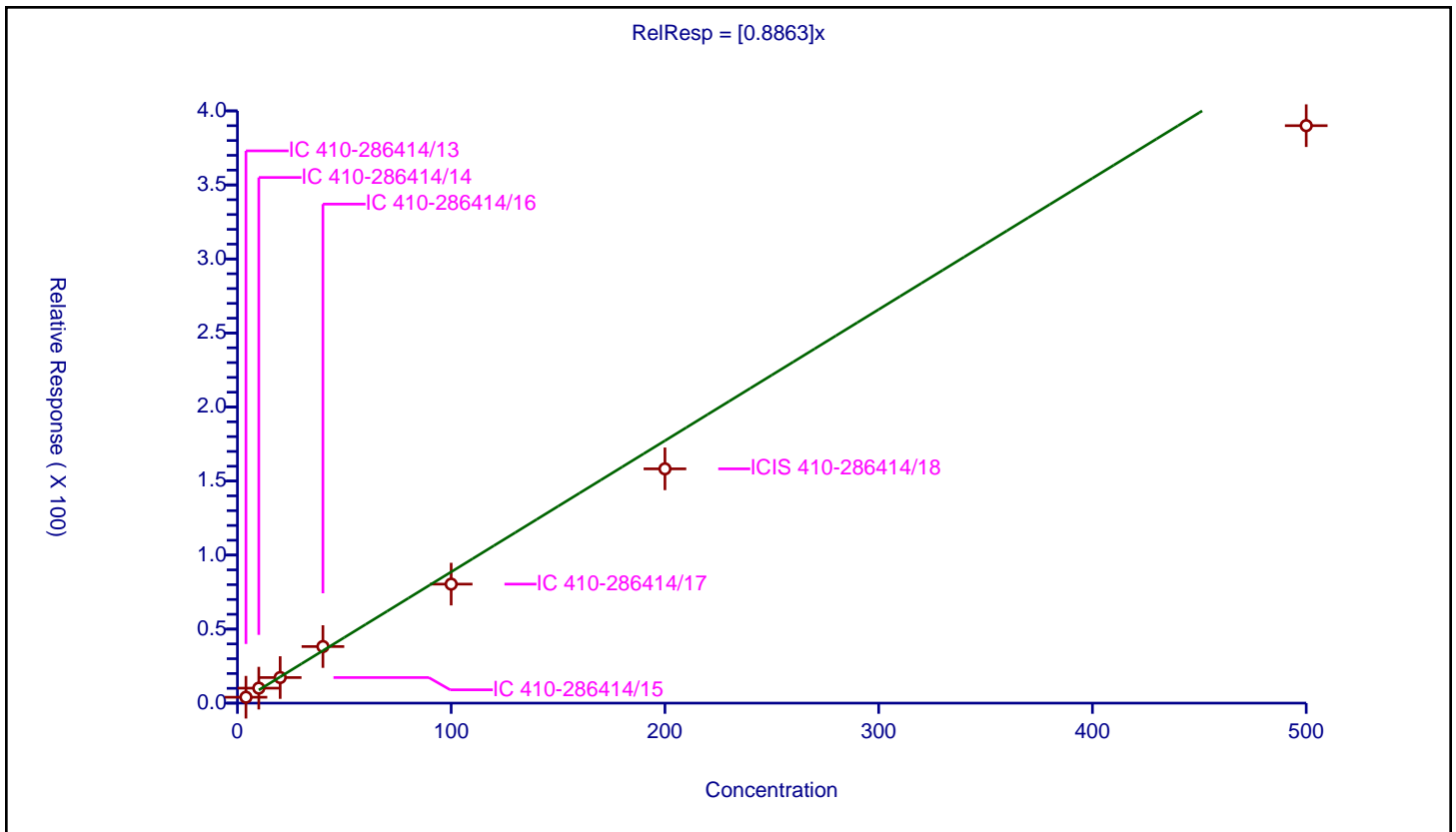
**/ 2-Methyl-2-propanol**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8863

Error Coefficients	
Standard Error:	504000
Relative Standard Error:	11.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	4.0	3.990089	50.0	133180.0	0.997522	Y
2	IC 410-286414/14	10.0	10.122828	50.0	128635.0	1.012283	Y
3	IC 410-286414/15	20.0	17.278722	50.0	136943.0	0.863936	Y
4	IC 410-286414/16	40.0	38.20817	50.0	124917.0	0.955204	Y
5	IC 410-286414/17	100.0	80.376748	50.0	141819.0	0.803767	Y
6	ICIS 410-286414/18	200.0	158.235608	50.0	142576.0	0.791178	Y
7	IC 410-286414/19	500.0	390.008003	50.0	143695.0	0.780016	Y



**Calibration**

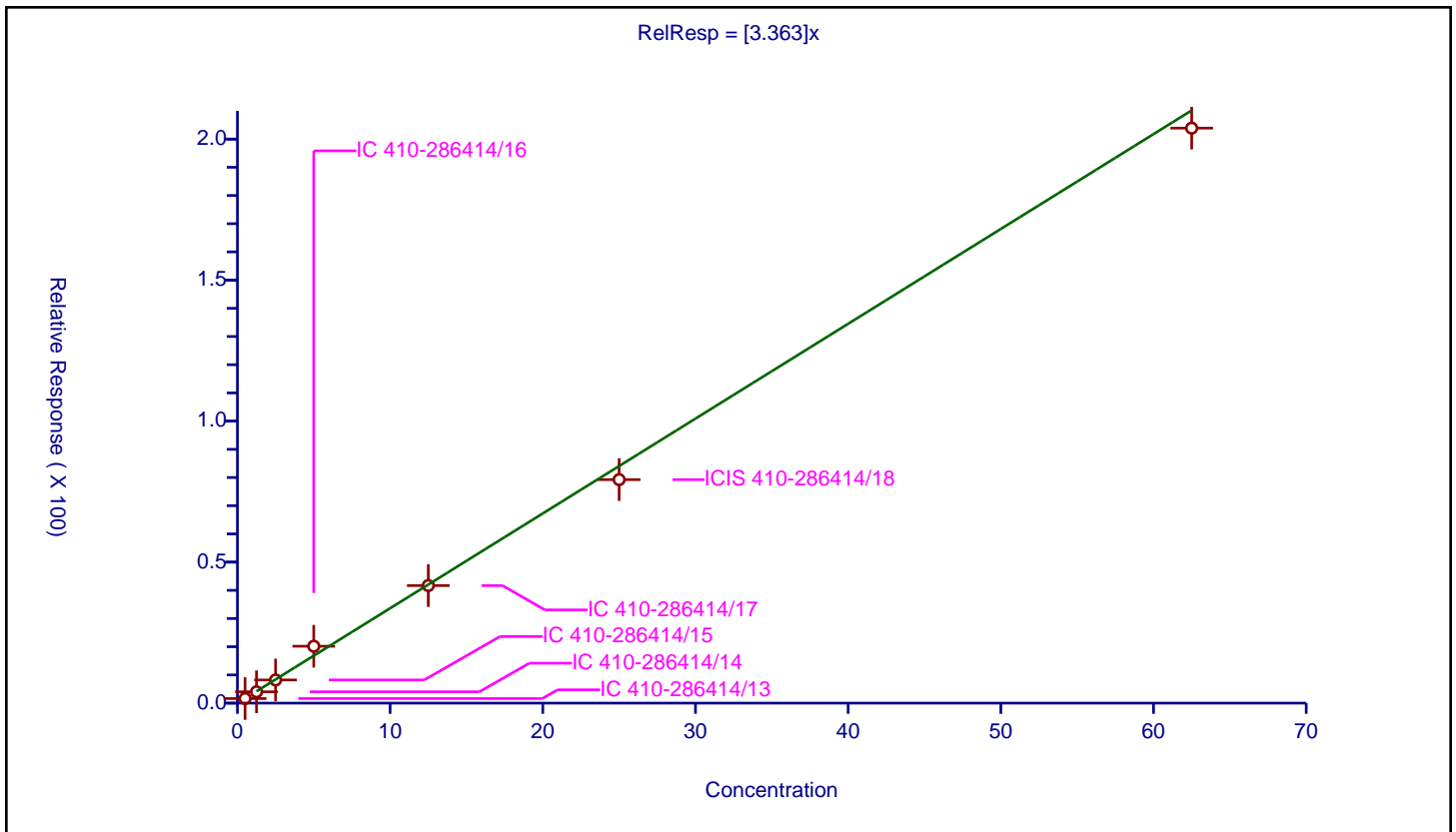
/ Acrylonitrile

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.363

Error Coefficients	
Standard Error:	262000
Relative Standard Error:	8.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.5	1.62149	50.0	133180.0	3.242979	Y
2	IC 410-286414/14	1.25	4.015237	50.0	128635.0	3.21219	Y
3	IC 410-286414/15	2.5	8.207064	50.0	136943.0	3.282826	Y
4	IC 410-286414/16	5.0	20.173795	50.0	124917.0	4.034759	Y
5	IC 410-286414/17	12.5	41.67742	50.0	141819.0	3.334194	Y
6	ICIS 410-286414/18	25.0	79.244754	50.0	142576.0	3.16979	Y
7	IC 410-286414/19	62.5	203.884965	50.0	143695.0	3.262159	Y





Calibration

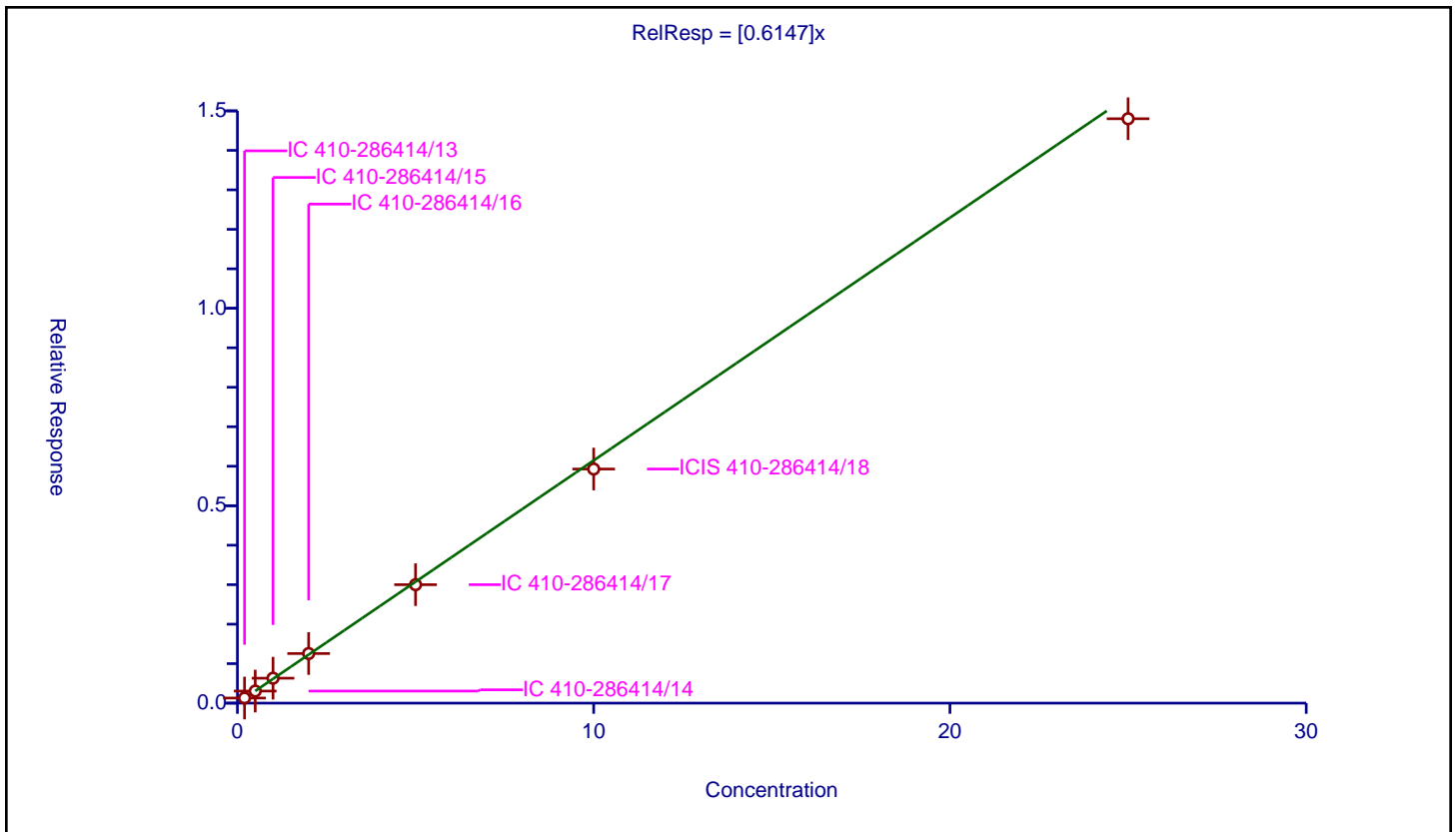
/ Methyl tert-butyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6147

Error Coefficients	
Standard Error:	1580000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.129235	10.0	2204666.0	0.646175	Y
2	IC 410-286414/14	0.5	0.305941	10.0	2229222.0	0.611882	Y
3	IC 410-286414/15	1.0	0.631731	10.0	2229967.0	0.631731	Y
4	IC 410-286414/16	2.0	1.256125	10.0	2244586.0	0.628062	Y
5	IC 410-286414/17	5.0	3.000137	10.0	2296832.0	0.600027	Y
6	ICIS 410-286414/18	10.0	5.928947	10.0	2328270.0	0.592895	Y
7	IC 410-286414/19	25.0	14.801247	10.0	2388919.0	0.59205	Y



Calibration

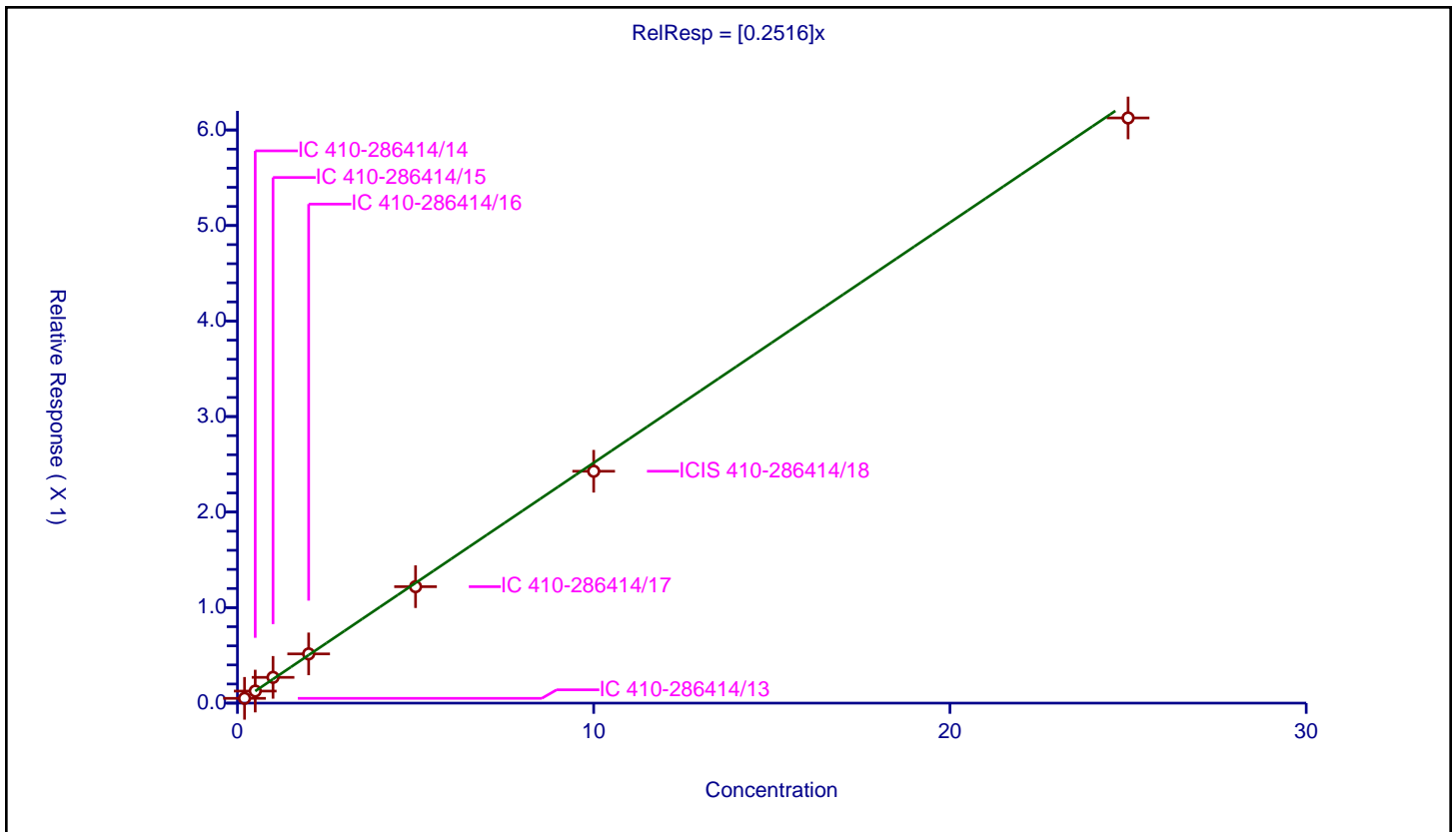
/ trans-1,2-Dichloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2516

Error Coefficients	
Standard Error:	653000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.049917	10.0	2204666.0	0.249584	Y
2	IC 410-286414/14	0.5	0.126214	10.0	2229222.0	0.252429	Y
3	IC 410-286414/15	1.0	0.269807	10.0	2229967.0	0.269807	Y
4	IC 410-286414/16	2.0	0.515338	10.0	2244586.0	0.257669	Y
5	IC 410-286414/17	5.0	1.219088	10.0	2296832.0	0.243818	Y
6	ICIS 410-286414/18	10.0	2.427592	10.0	2328270.0	0.242759	Y
7	IC 410-286414/19	25.0	6.126009	10.0	2388919.0	0.24504	Y



Calibration

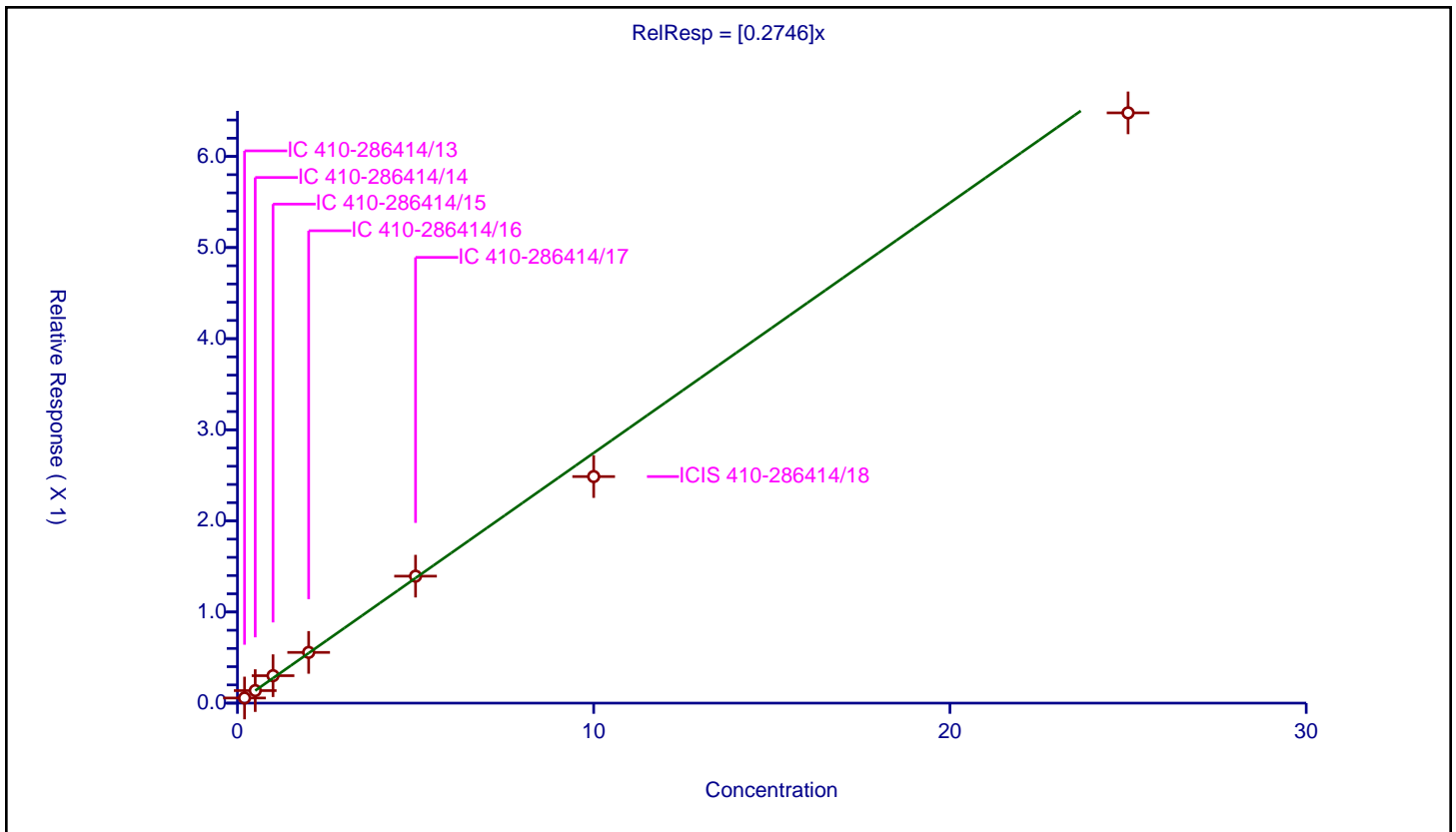
/ Hexane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2746

Error Coefficients	
Standard Error:	690000
Relative Standard Error:	6.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.056217	10.0	2204666.0	0.281086	Y
2	IC 410-286414/14	0.5	0.137425	10.0	2229222.0	0.274849	Y
3	IC 410-286414/15	1.0	0.3013	10.0	2229967.0	0.3013	Y
4	IC 410-286414/16	2.0	0.556624	10.0	2244586.0	0.278312	Y
5	IC 410-286414/17	5.0	1.393506	10.0	2296832.0	0.278701	Y
6	ICIS 410-286414/18	10.0	2.486619	10.0	2328270.0	0.248662	Y
7	IC 410-286414/19	25.0	6.478332	10.0	2388919.0	0.259133	Y



Calibration

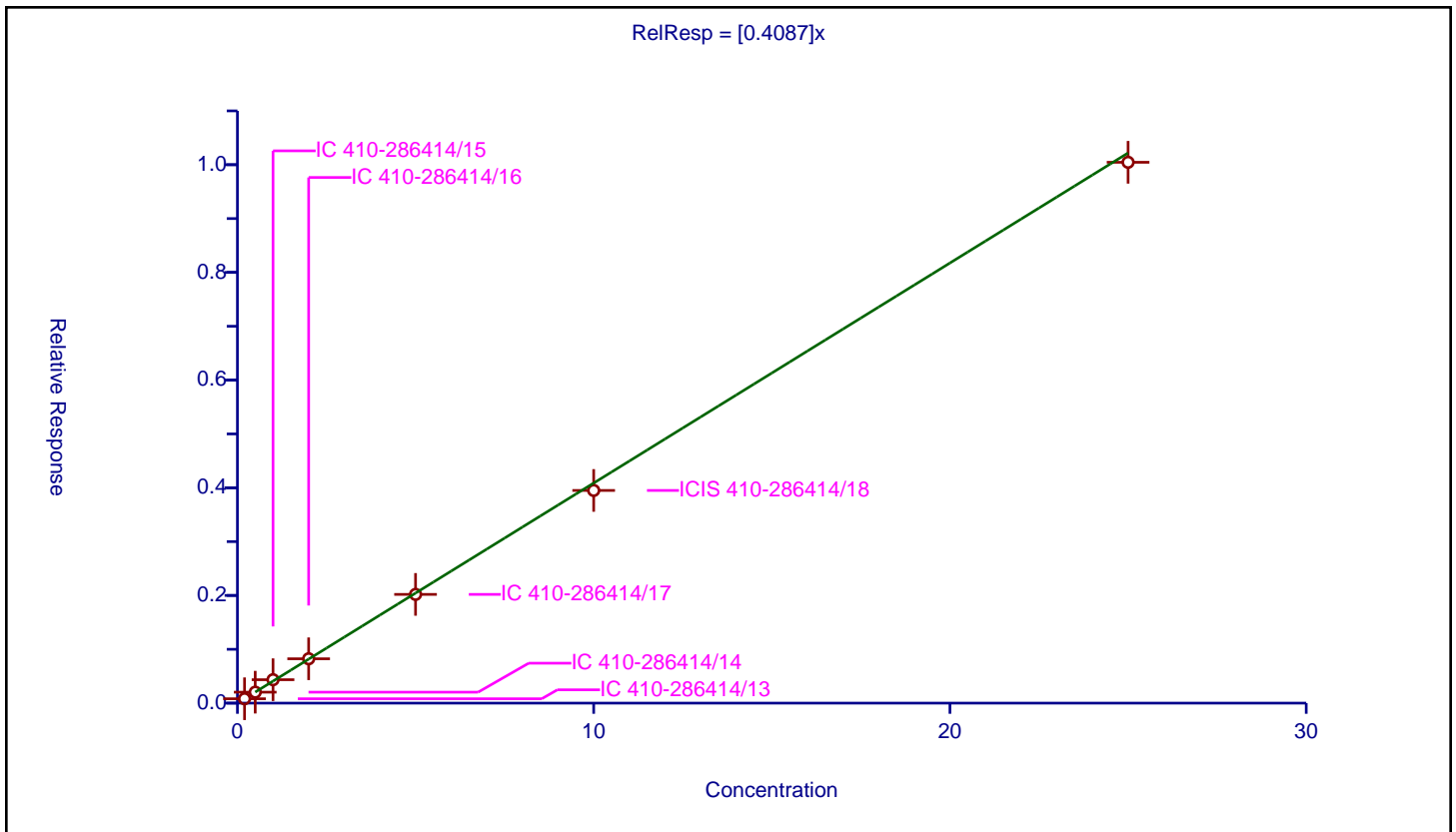
/ 1,1-Dichloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4087

Error Coefficients	
Standard Error:	1070000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.081287	10.0	2204666.0	0.406433	Y
2	IC 410-286414/14	0.5	0.203533	10.0	2229222.0	0.407066	Y
3	IC 410-286414/15	1.0	0.434971	10.0	2229967.0	0.434971	Y
4	IC 410-286414/16	2.0	0.82384	10.0	2244586.0	0.41192	Y
5	IC 410-286414/17	5.0	2.019347	10.0	2296832.0	0.403869	Y
6	ICIS 410-286414/18	10.0	3.950521	10.0	2328270.0	0.395052	Y
7	IC 410-286414/19	25.0	10.045485	10.0	2388919.0	0.401819	Y



Calibration

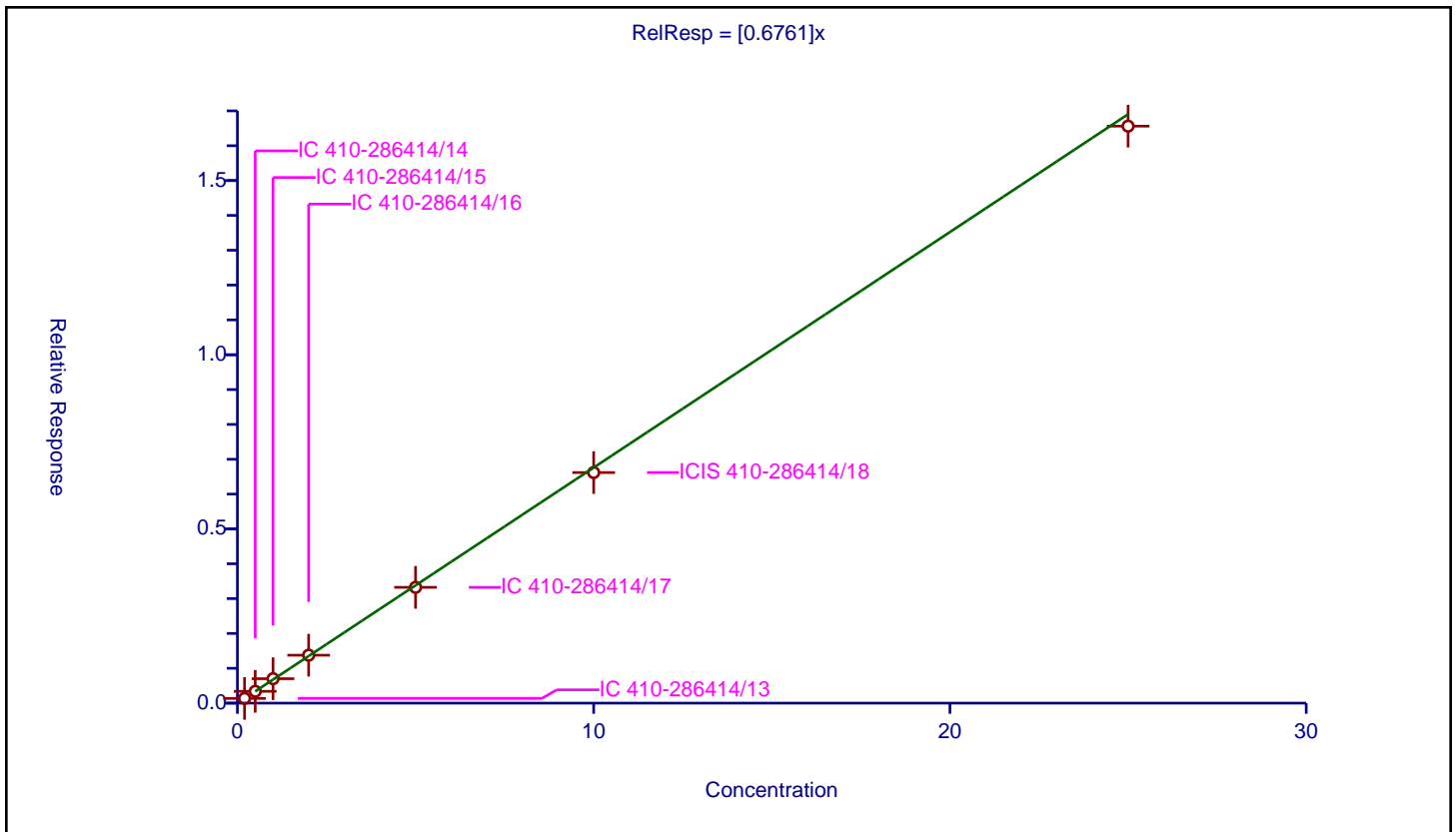
/ Isopropyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6761

Error Coefficients	
Standard Error:	1770000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.135204	10.0	2204666.0	0.676021	Y
2	IC 410-286414/14	0.5	0.339405	10.0	2229222.0	0.678811	Y
3	IC 410-286414/15	1.0	0.701096	10.0	2229967.0	0.701096	Y
4	IC 410-286414/16	2.0	1.375728	10.0	2244586.0	0.687864	Y
5	IC 410-286414/17	5.0	3.323443	10.0	2296832.0	0.664689	Y
6	ICIS 410-286414/18	10.0	6.619108	10.0	2328270.0	0.661911	Y
7	IC 410-286414/19	25.0	16.561847	10.0	2388919.0	0.662474	Y



Calibration

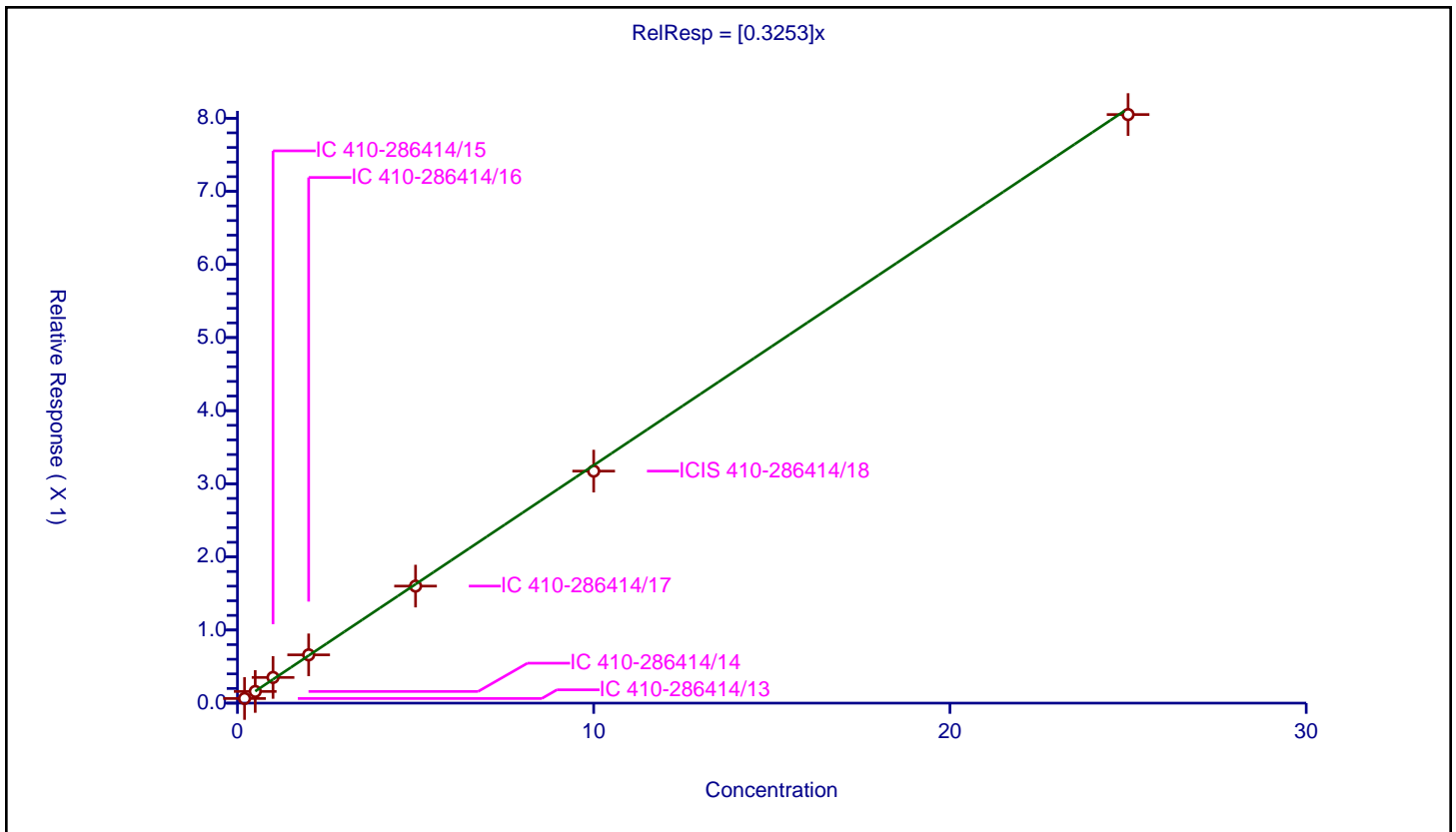
/ 2-Chloro-1,3-butadiene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3253

Error Coefficients	
Standard Error:	857000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.063288	10.0	2204666.0	0.316442	Y
2	IC 410-286414/14	0.5	0.159908	10.0	2229222.0	0.319816	Y
3	IC 410-286414/15	1.0	0.351265	10.0	2229967.0	0.351265	Y
4	IC 410-286414/16	2.0	0.660122	10.0	2244586.0	0.330061	Y
5	IC 410-286414/17	5.0	1.600853	10.0	2296832.0	0.320171	Y
6	ICIS 410-286414/18	10.0	3.173236	10.0	2328270.0	0.317324	Y
7	IC 410-286414/19	25.0	8.050064	10.0	2388919.0	0.322003	Y



**Calibration**

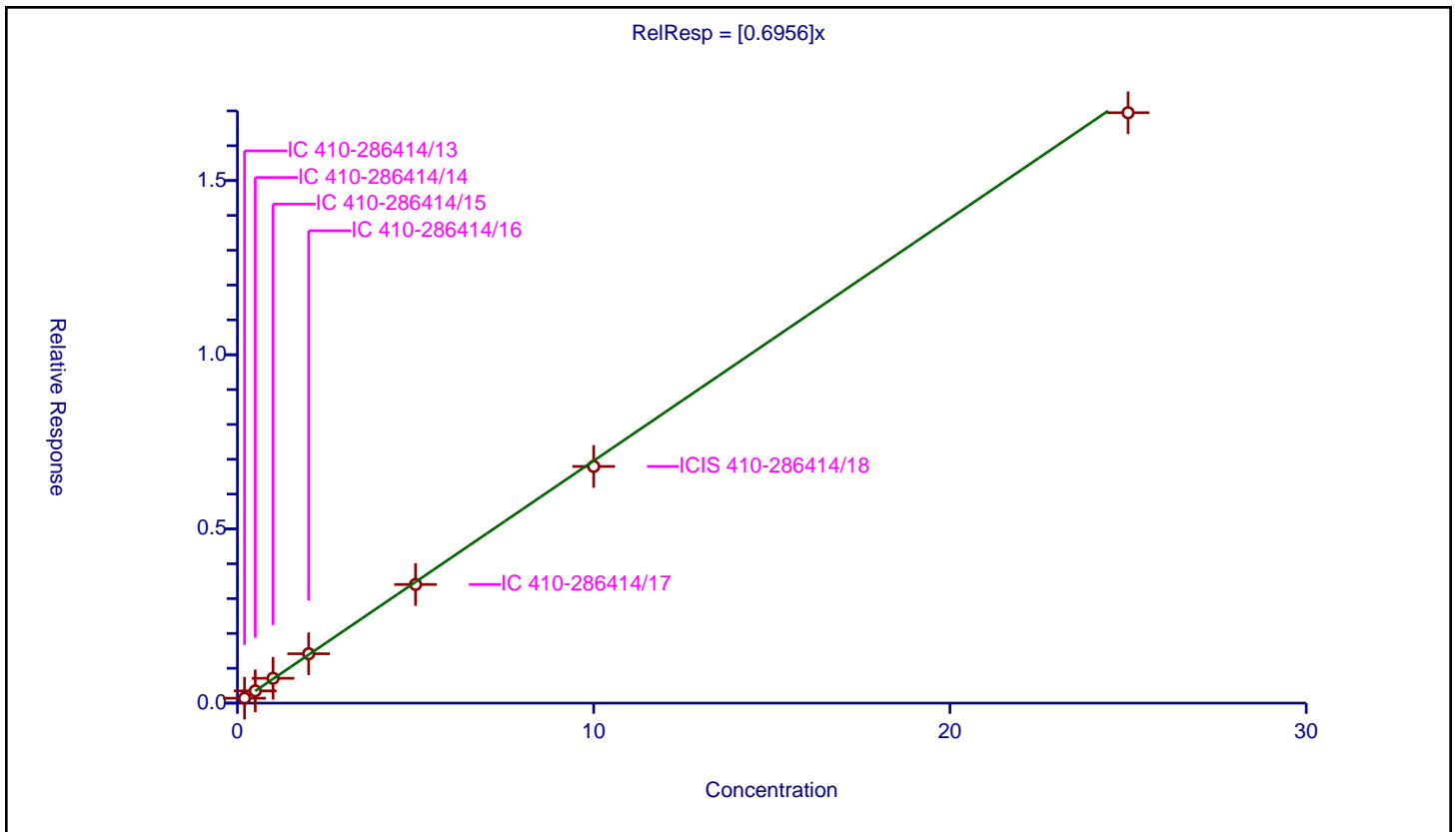
/ Tert-butyl ethyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6956

Error Coefficients	
Standard Error:	1810000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.140951	10.0	2204666.0	0.704755	Y
2	IC 410-286414/14	0.5	0.352271	10.0	2229222.0	0.704542	Y
3	IC 410-286414/15	1.0	0.712782	10.0	2229967.0	0.712782	Y
4	IC 410-286414/16	2.0	1.417179	10.0	2244586.0	0.708589	Y
5	IC 410-286414/17	5.0	3.406457	10.0	2296832.0	0.681291	Y
6	ICIS 410-286414/18	10.0	6.793692	10.0	2328270.0	0.679369	Y
7	IC 410-286414/19	25.0	16.947435	10.0	2388919.0	0.677897	Y



Calibration

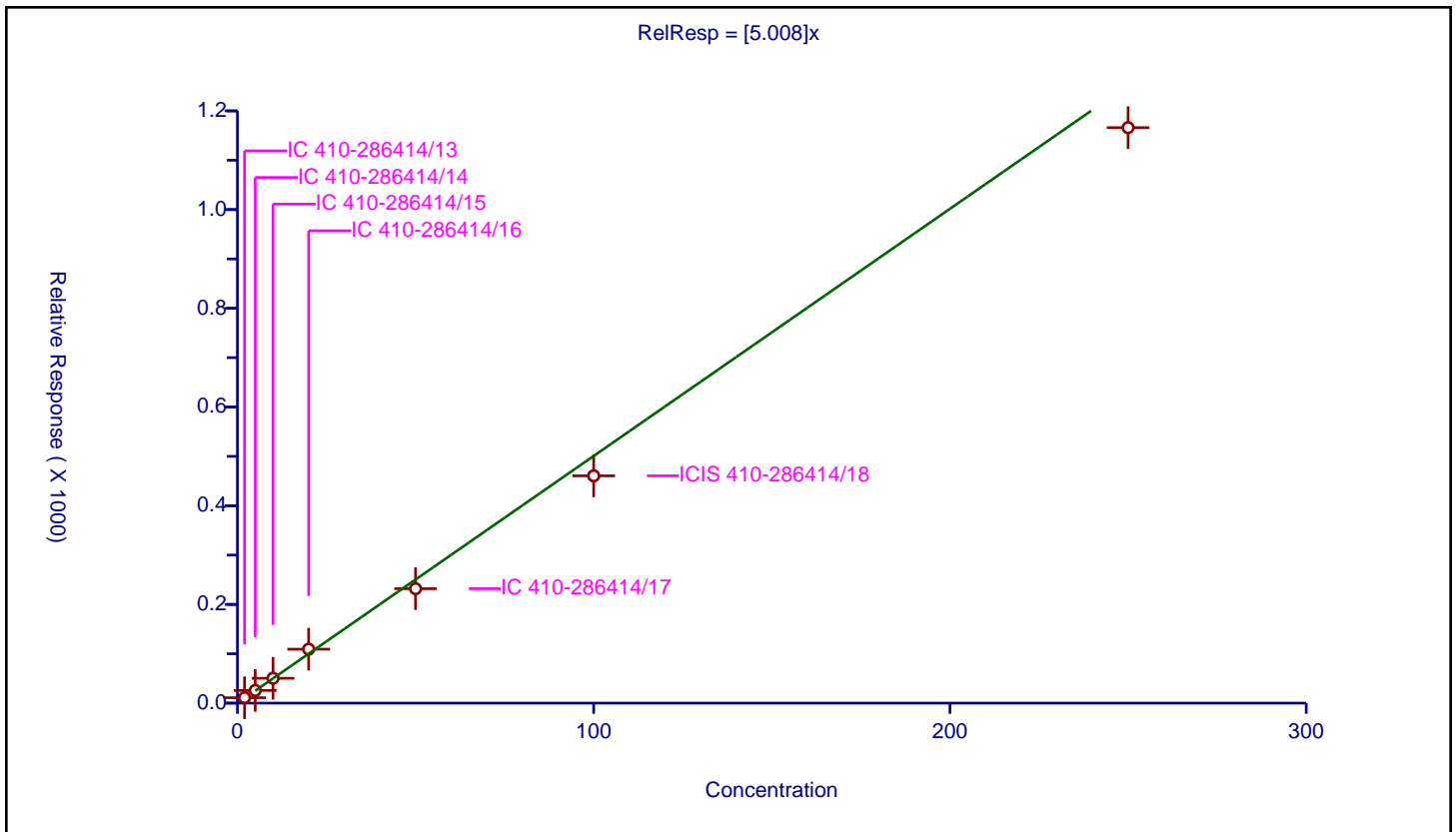
/ 2-Butanone (MEK)

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.008

Error Coefficients	
Standard Error:	1500000
Relative Standard Error:	7.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	2.0	11.004655	50.0	133180.0	5.502328	Y
2	IC 410-286414/14	5.0	25.722782	50.0	128635.0	5.144556	Y
3	IC 410-286414/15	10.0	50.361464	50.0	136943.0	5.036146	Y
4	IC 410-286414/16	20.0	109.311783	50.0	124917.0	5.465589	Y
5	IC 410-286414/17	50.0	231.841291	50.0	141819.0	4.636826	Y
6	ICIS 410-286414/18	100.0	460.539642	50.0	142576.0	4.605396	Y
7	IC 410-286414/19	250.0	1166.003688	50.0	143695.0	4.664015	Y





Calibration

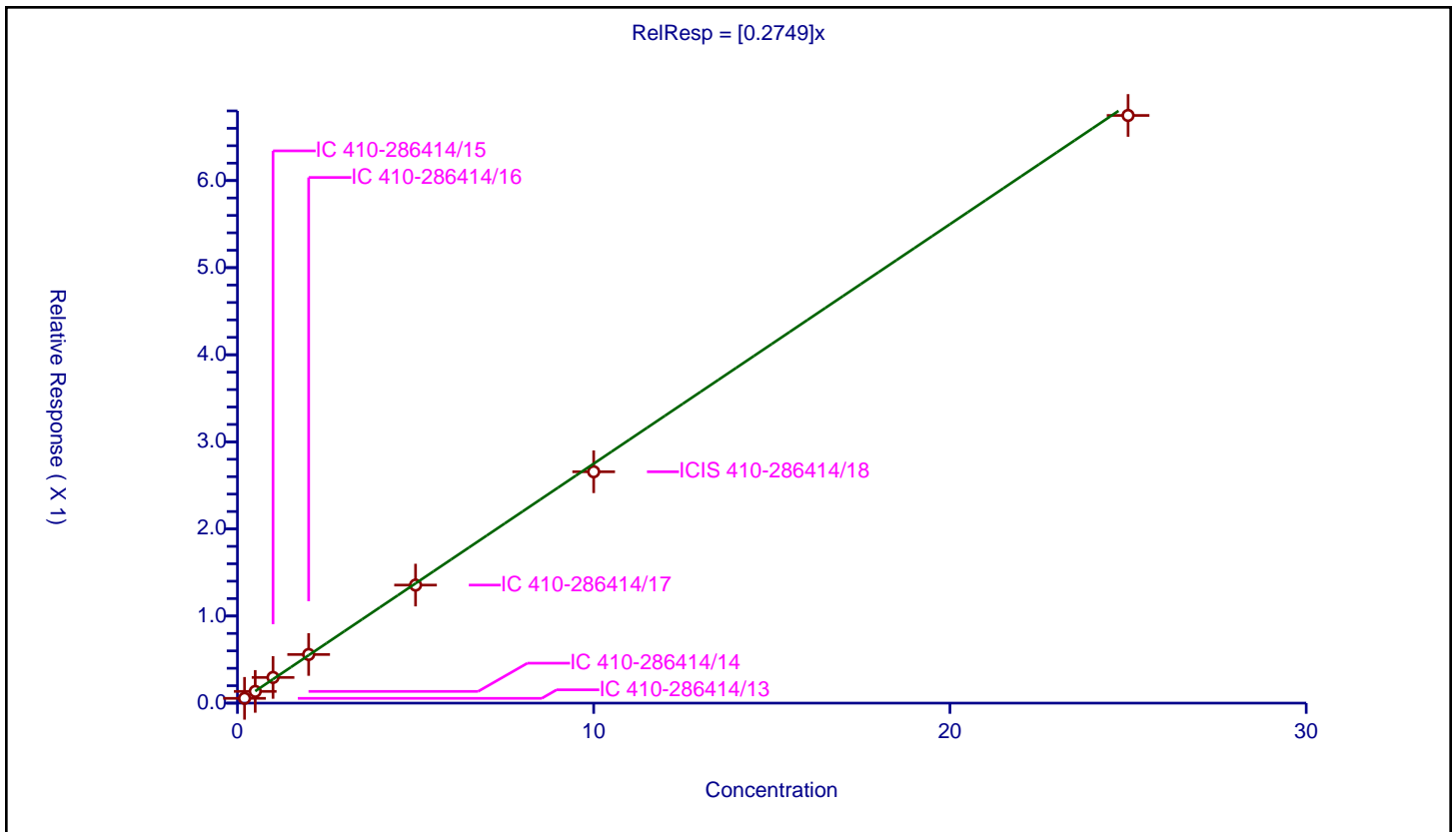
/ cis-1,2-Dichloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2749

Error Coefficients	
Standard Error:	719000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.054879	10.0	2204666.0	0.274395	Y
2	IC 410-286414/14	0.5	0.13467	10.0	2229222.0	0.269341	Y
3	IC 410-286414/15	1.0	0.294883	10.0	2229967.0	0.294883	Y
4	IC 410-286414/16	2.0	0.558629	10.0	2244586.0	0.279314	Y
5	IC 410-286414/17	5.0	1.35558	10.0	2296832.0	0.271116	Y
6	ICIS 410-286414/18	10.0	2.656694	10.0	2328270.0	0.265669	Y
7	IC 410-286414/19	25.0	6.747596	10.0	2388919.0	0.269904	Y



Calibration

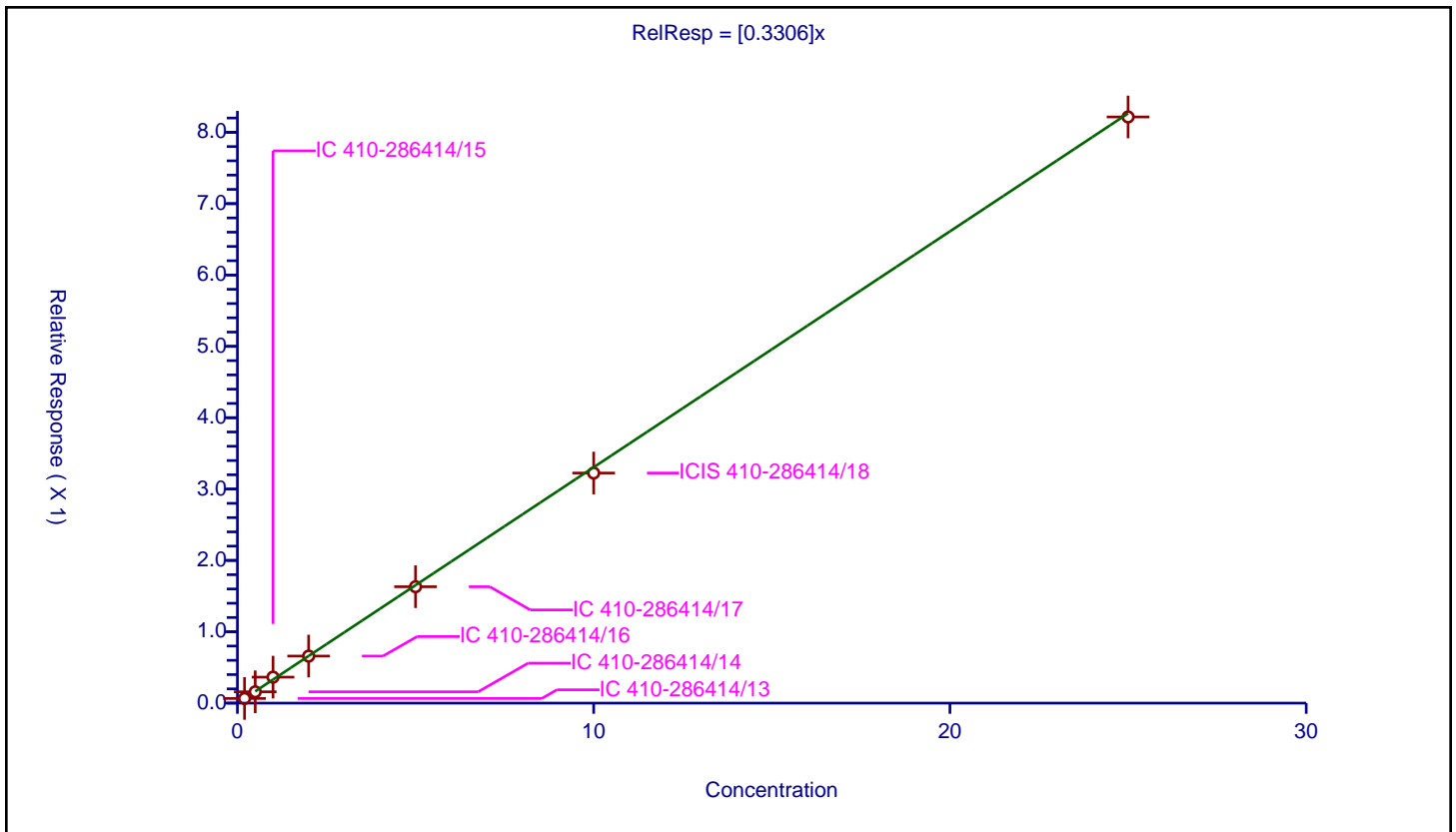
/ 2,2-Dichloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3306

Error Coefficients	
Standard Error:	874000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.06513	10.0	2204666.0	0.32565	Y
2	IC 410-286414/14	0.5	0.158679	10.0	2229222.0	0.317357	Y
3	IC 410-286414/15	1.0	0.364167	10.0	2229967.0	0.364167	Y
4	IC 410-286414/16	2.0	0.659191	10.0	2244586.0	0.329595	Y
5	IC 410-286414/17	5.0	1.631186	10.0	2296832.0	0.326237	Y
6	ICIS 410-286414/18	10.0	3.224398	10.0	2328270.0	0.32244	Y
7	IC 410-286414/19	25.0	8.214783	10.0	2388919.0	0.328591	Y



**Calibration**

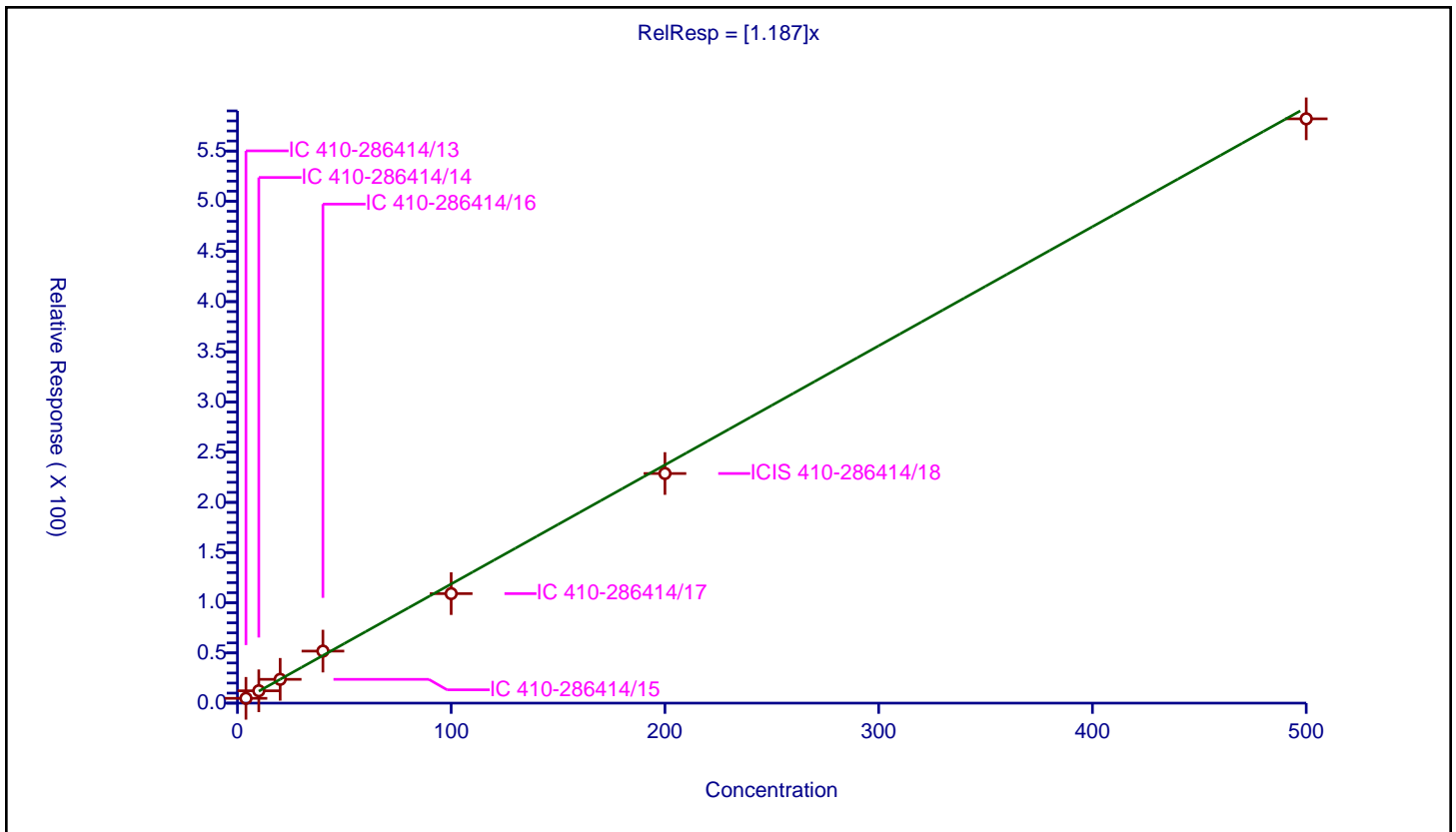
/ Propionitrile

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.187

Error Coefficients	
Standard Error:	746000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	4.0	4.789758	50.0	133180.0	1.19744	Y
2	IC 410-286414/14	10.0	12.289812	50.0	128635.0	1.228981	Y
3	IC 410-286414/15	20.0	23.704023	50.0	136943.0	1.185201	Y
4	IC 410-286414/16	40.0	51.823611	50.0	124917.0	1.29559	Y
5	IC 410-286414/17	100.0	109.095044	50.0	141819.0	1.09095	Y
6	ICIS 410-286414/18	200.0	228.757996	50.0	142576.0	1.14379	Y
7	IC 410-286414/19	500.0	582.098194	50.0	143695.0	1.164196	Y



**Calibration**

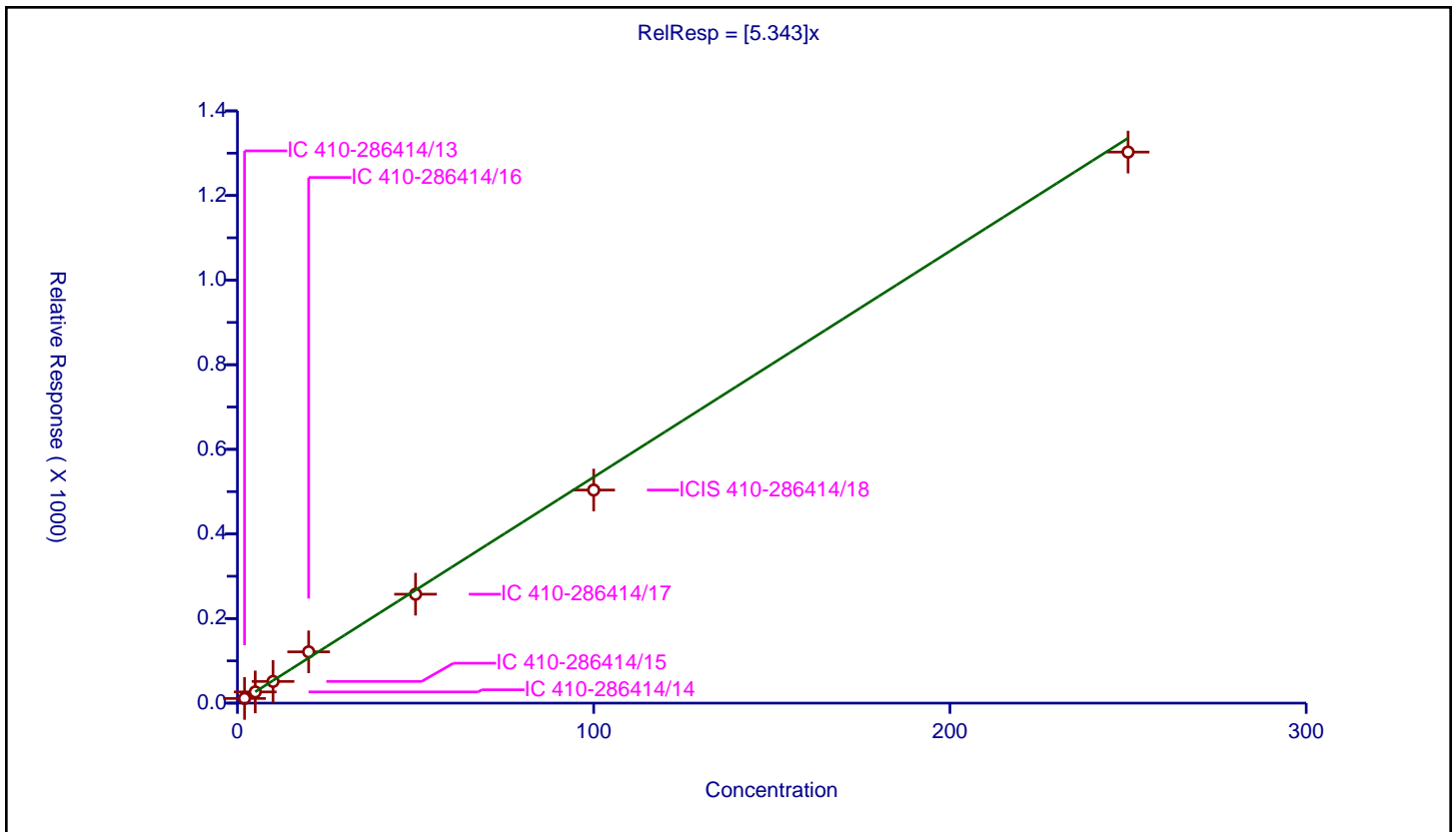
**/ Methacrylonitrile**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.343

Error Coefficients	
Standard Error:	1670000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	2.0	11.035065	50.0	133180.0	5.517533	Y
2	IC 410-286414/14	5.0	26.459362	50.0	128635.0	5.291872	Y
3	IC 410-286414/15	10.0	51.311129	50.0	136943.0	5.131113	Y
4	IC 410-286414/16	20.0	121.20528	50.0	124917.0	6.060264	Y
5	IC 410-286414/17	50.0	257.492649	50.0	141819.0	5.149853	Y
6	ICIS 410-286414/18	100.0	503.726083	50.0	142576.0	5.037261	Y
7	IC 410-286414/19	250.0	1302.684853	50.0	143695.0	5.210739	Y



Calibration

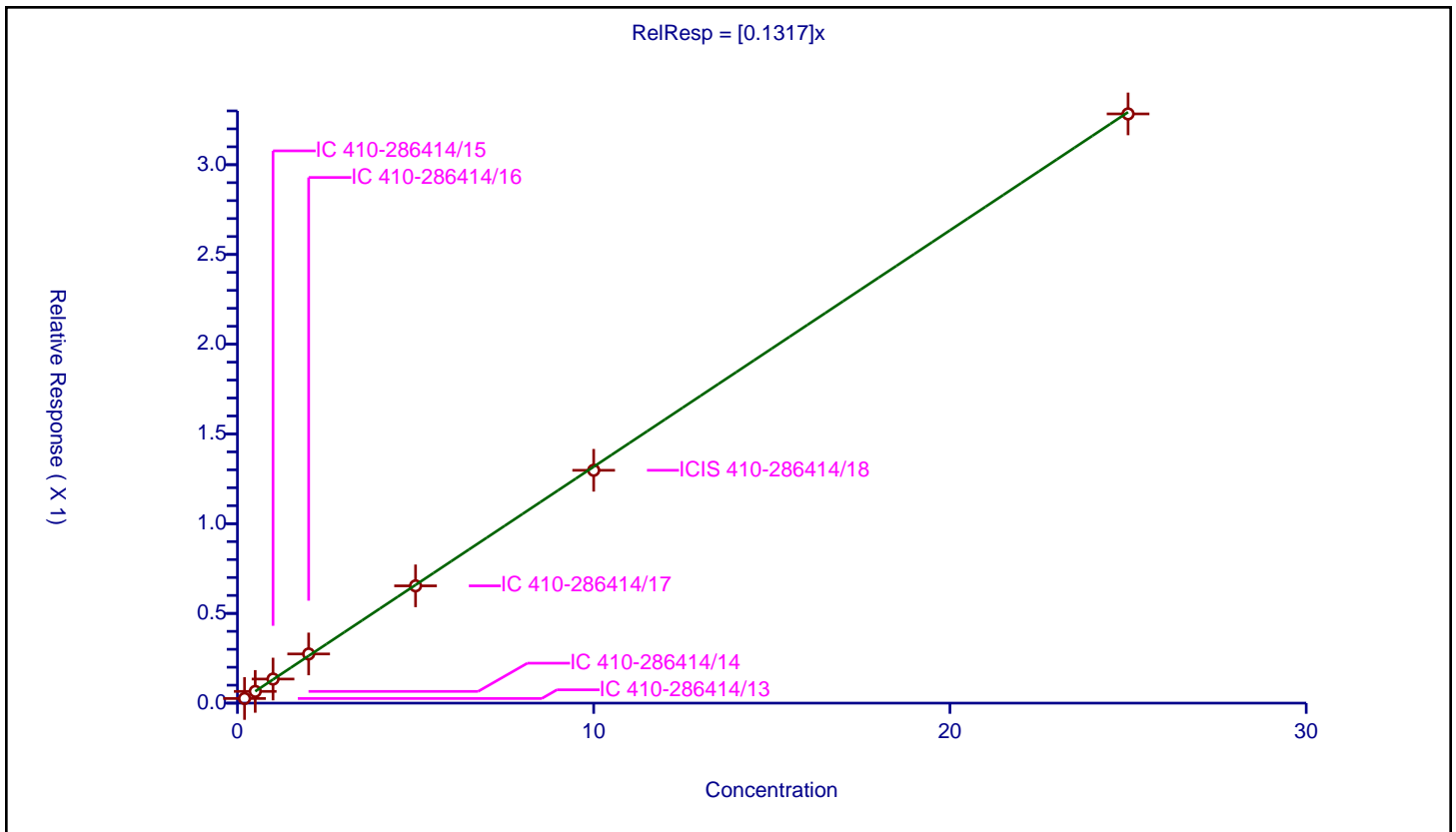
/ Chlorobromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1317

Error Coefficients	
Standard Error:	350000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.025686	10.0	2204666.0	0.128432	Y
2	IC 410-286414/14	0.5	0.065305	10.0	2229222.0	0.130611	Y
3	IC 410-286414/15	1.0	0.134195	10.0	2229967.0	0.134195	Y
4	IC 410-286414/16	2.0	0.274073	10.0	2244586.0	0.137036	Y
5	IC 410-286414/17	5.0	0.653452	10.0	2296832.0	0.13069	Y
6	ICIS 410-286414/18	10.0	1.297392	10.0	2328270.0	0.129739	Y
7	IC 410-286414/19	25.0	3.283171	10.0	2388919.0	0.131327	Y



Calibration

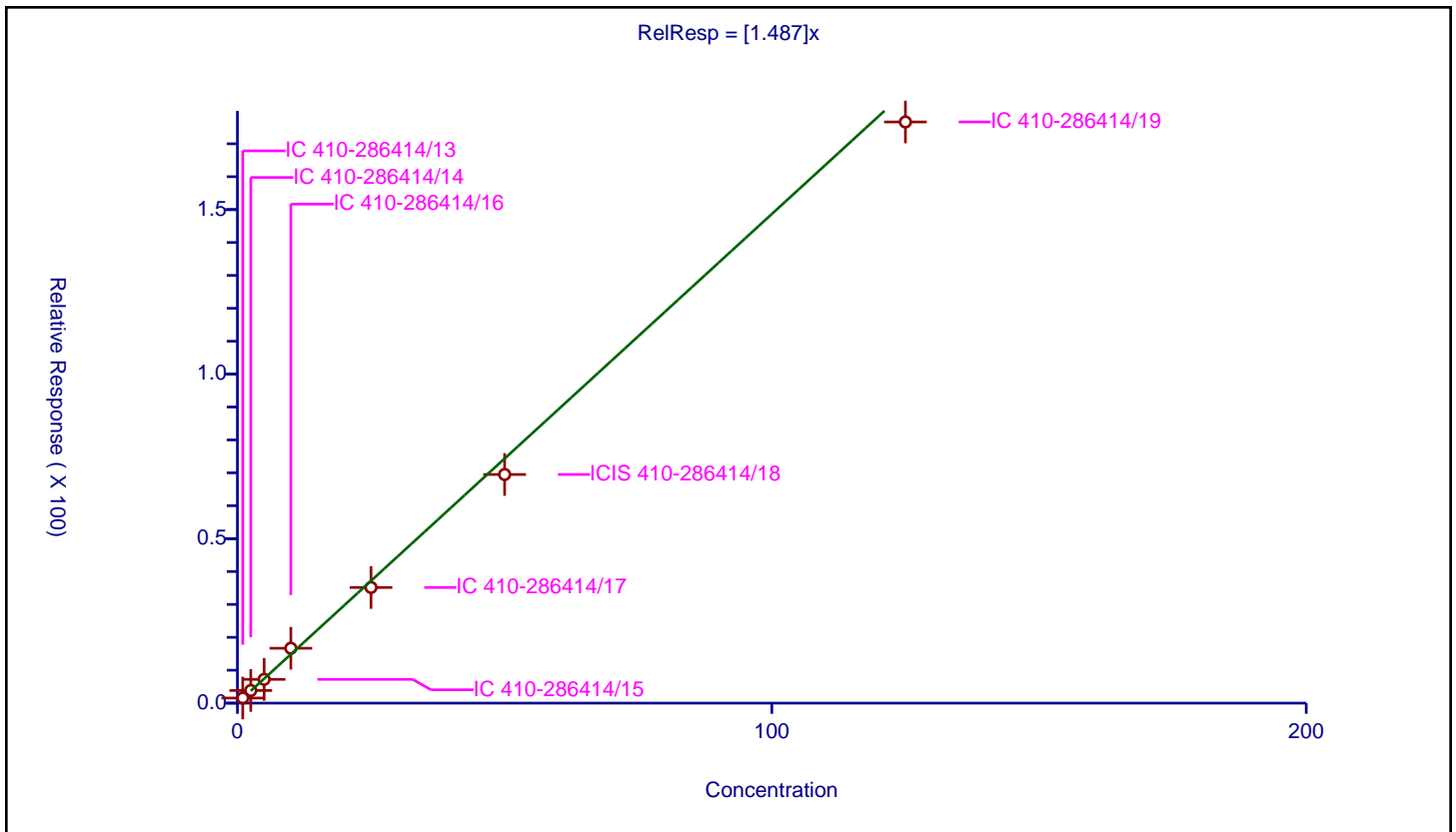
/ Tetrahydrofuran

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.487

Error Coefficients	
Standard Error:	227000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	1.0	1.548281	50.0	133180.0	1.548281	Y
2	IC 410-286414/14	2.5	3.839157	50.0	128635.0	1.535663	Y
3	IC 410-286414/15	5.0	7.225999	50.0	136943.0	1.4452	Y
4	IC 410-286414/16	10.0	16.678274	50.0	124917.0	1.667827	Y
5	IC 410-286414/17	25.0	35.153611	50.0	141819.0	1.406144	Y
6	ICIS 410-286414/18	50.0	69.49206	50.0	142576.0	1.389841	Y
7	IC 410-286414/19	125.0	176.631407	50.0	143695.0	1.413051	Y



Calibration

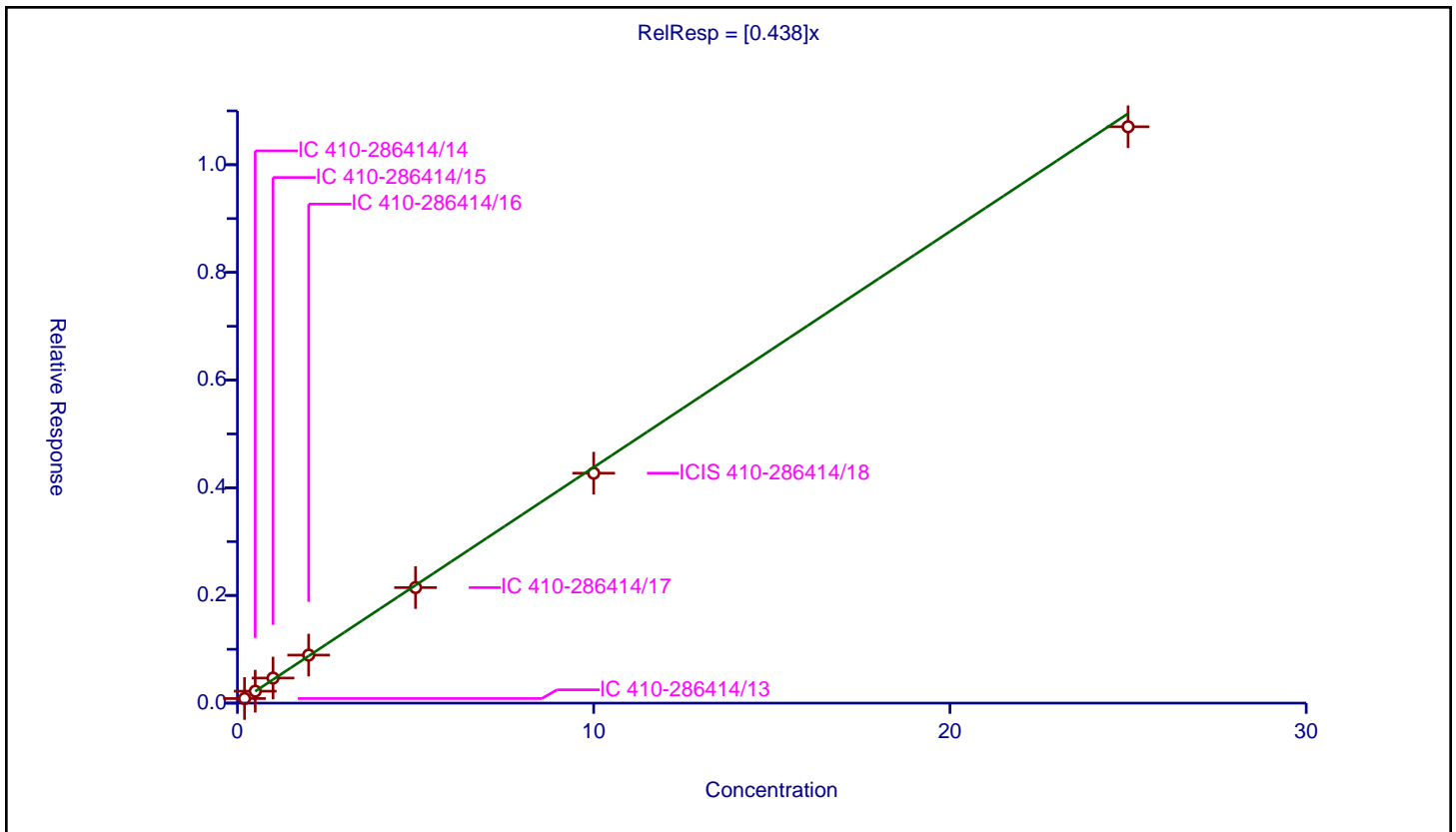
/ Chloroform

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.438

Error Coefficients	
Standard Error:	1140000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.085178	10.0	2204666.0	0.425892	Y
2	IC 410-286414/14	0.5	0.222051	10.0	2229222.0	0.444101	Y
3	IC 410-286414/15	1.0	0.465536	10.0	2229967.0	0.465536	Y
4	IC 410-286414/16	2.0	0.892035	10.0	2244586.0	0.446018	Y
5	IC 410-286414/17	5.0	2.146182	10.0	2296832.0	0.429236	Y
6	ICIS 410-286414/18	10.0	4.27063	10.0	2328270.0	0.427063	Y
7	IC 410-286414/19	25.0	10.705311	10.0	2388919.0	0.428212	Y



**Calibration**

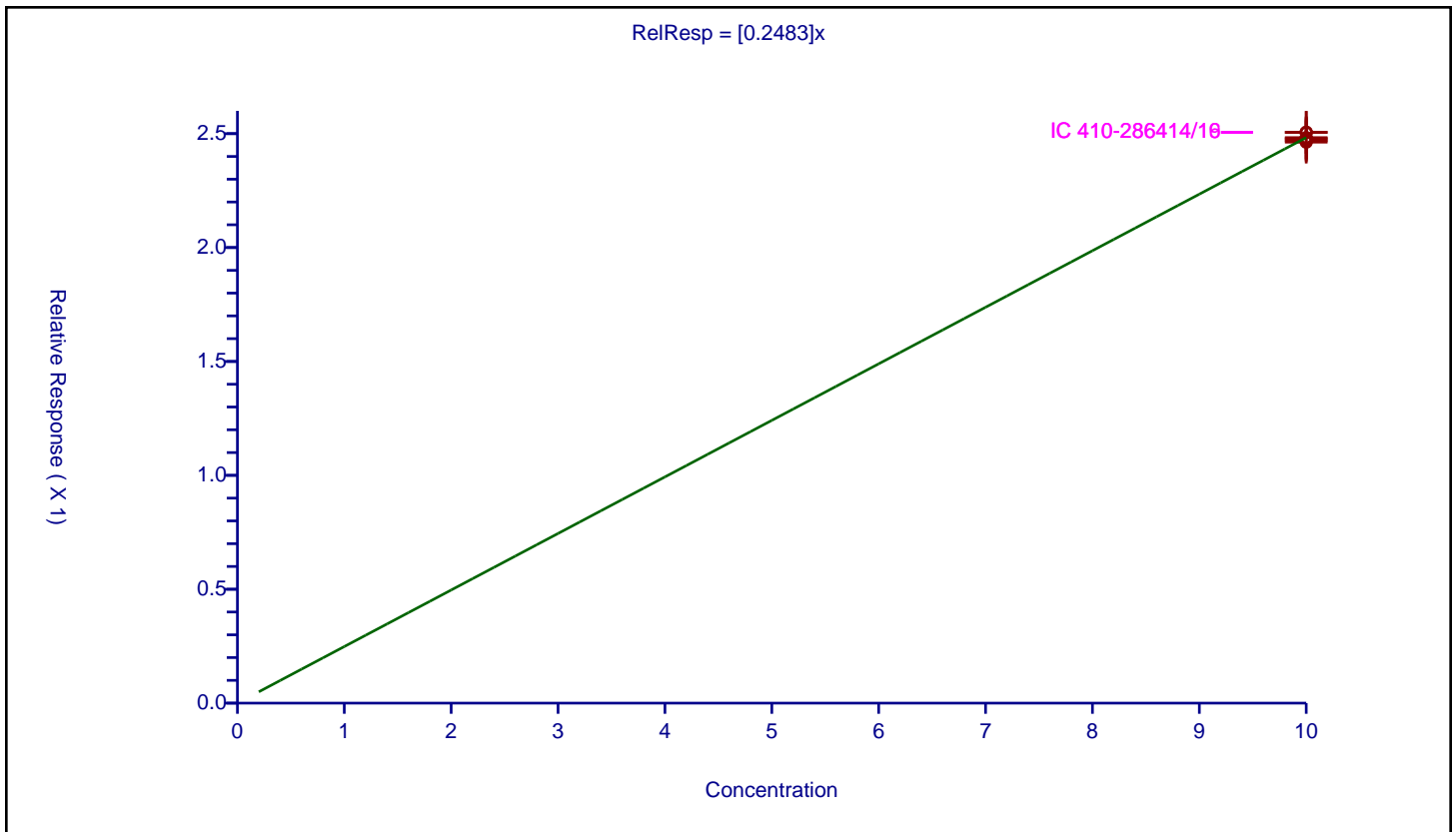
/ Dibromofluoromethane (Surr)

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2483

Error Coefficients	
Standard Error:	610000
Relative Standard Error:	0.7
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	10.0	2.462759	10.0	2204666.0	0.246276	Y
2	IC 410-286414/14	10.0	2.482651	10.0	2229222.0	0.248265	Y
3	IC 410-286414/15	10.0	2.473835	10.0	2229967.0	0.247383	Y
4	IC 410-286414/16	10.0	2.5055	10.0	2244586.0	0.25055	Y
5	IC 410-286414/17	10.0	2.479319	10.0	2296832.0	0.247932	Y
6	ICIS 410-286414/18	10.0	2.468726	10.0	2328270.0	0.246873	Y
7	IC 410-286414/19	10.0	2.506113	10.0	2388919.0	0.250611	Y





Calibration

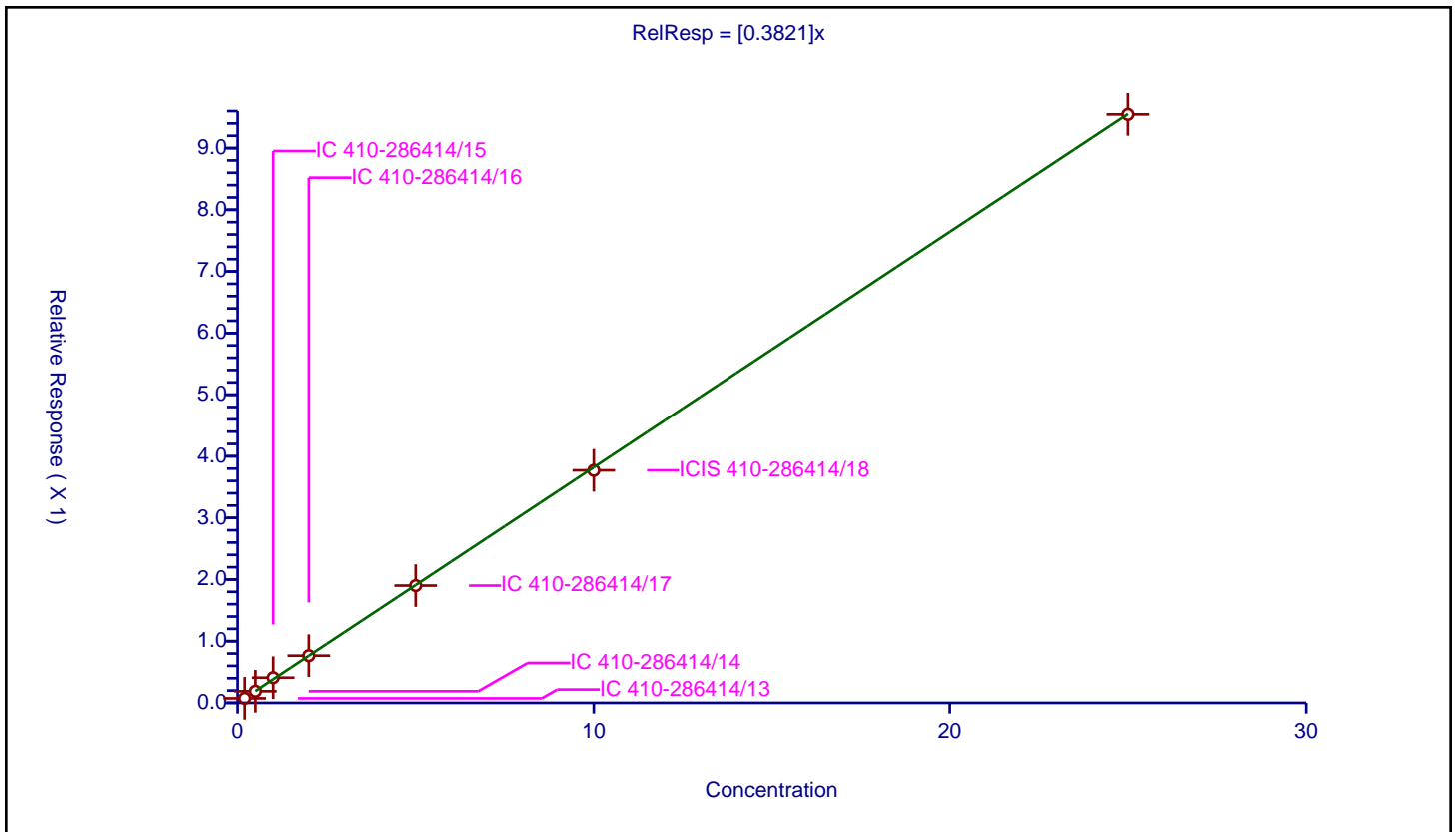
/ 1,1,1-Trichloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3821

Error Coefficients	
Standard Error:	1020000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.073639	10.0	2204666.0	0.368196	Y
2	IC 410-286414/14	0.5	0.188232	10.0	2229222.0	0.376463	Y
3	IC 410-286414/15	1.0	0.408338	10.0	2229967.0	0.408338	Y
4	IC 410-286414/16	2.0	0.765295	10.0	2244586.0	0.382647	Y
5	IC 410-286414/17	5.0	1.90148	10.0	2296832.0	0.380296	Y
6	ICIS 410-286414/18	10.0	3.77156	10.0	2328270.0	0.377156	Y
7	IC 410-286414/19	25.0	9.546565	10.0	2388919.0	0.381863	Y



Calibration

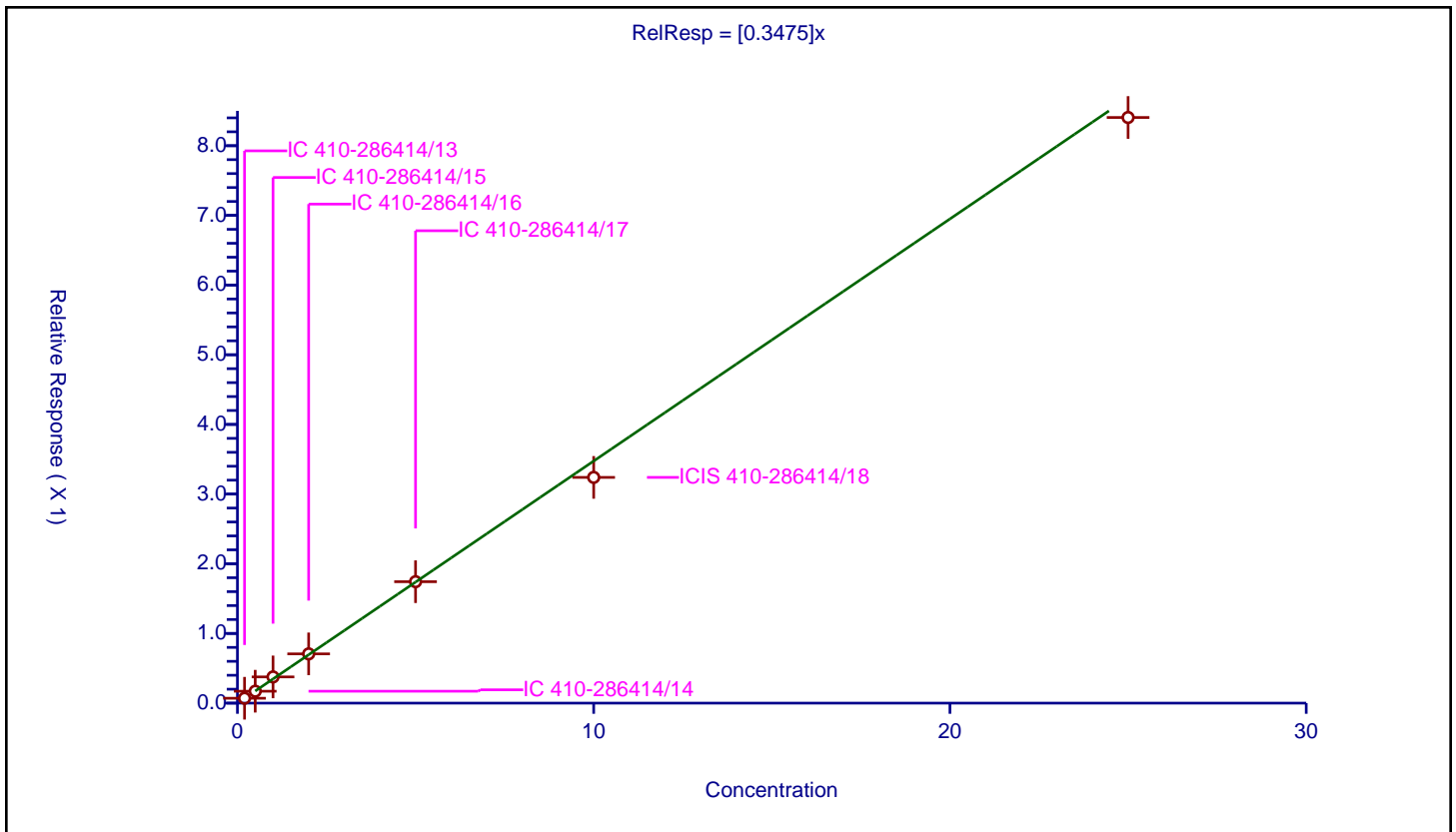
/ Cyclohexane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3475

Error Coefficients	
Standard Error:	894000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.070283	10.0	2204666.0	0.351414	Y
2	IC 410-286414/14	0.5	0.171203	10.0	2229222.0	0.342406	Y
3	IC 410-286414/15	1.0	0.376171	10.0	2229967.0	0.376171	Y
4	IC 410-286414/16	2.0	0.706897	10.0	2244586.0	0.353448	Y
5	IC 410-286414/17	5.0	1.743014	10.0	2296832.0	0.348603	Y
6	ICIS 410-286414/18	10.0	3.239968	10.0	2328270.0	0.323997	Y
7	IC 410-286414/19	25.0	8.405065	10.0	2388919.0	0.336203	Y



Calibration

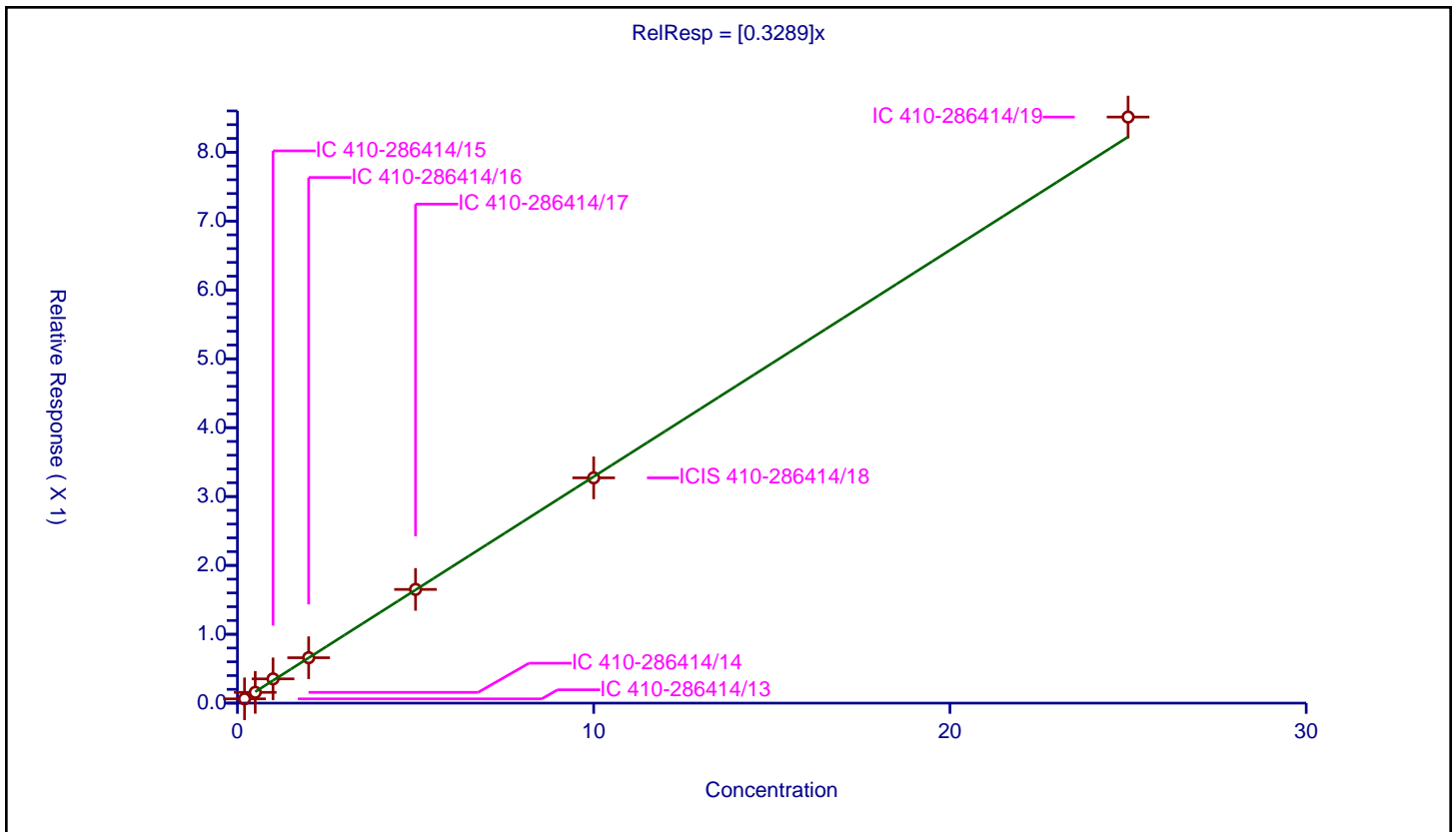
/ Carbon tetrachloride

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3289

Error Coefficients	
Standard Error:	902000
Relative Standard Error:	4.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.061955	10.0	2204666.0	0.309775	Y
2	IC 410-286414/14	0.5	0.156521	10.0	2229222.0	0.313042	Y
3	IC 410-286414/15	1.0	0.352041	10.0	2229967.0	0.352041	Y
4	IC 410-286414/16	2.0	0.659061	10.0	2244586.0	0.329531	Y
5	IC 410-286414/17	5.0	1.651296	10.0	2296832.0	0.330259	Y
6	ICIS 410-286414/18	10.0	3.271296	10.0	2328270.0	0.32713	Y
7	IC 410-286414/19	25.0	8.510674	10.0	2388919.0	0.340427	Y



Calibration

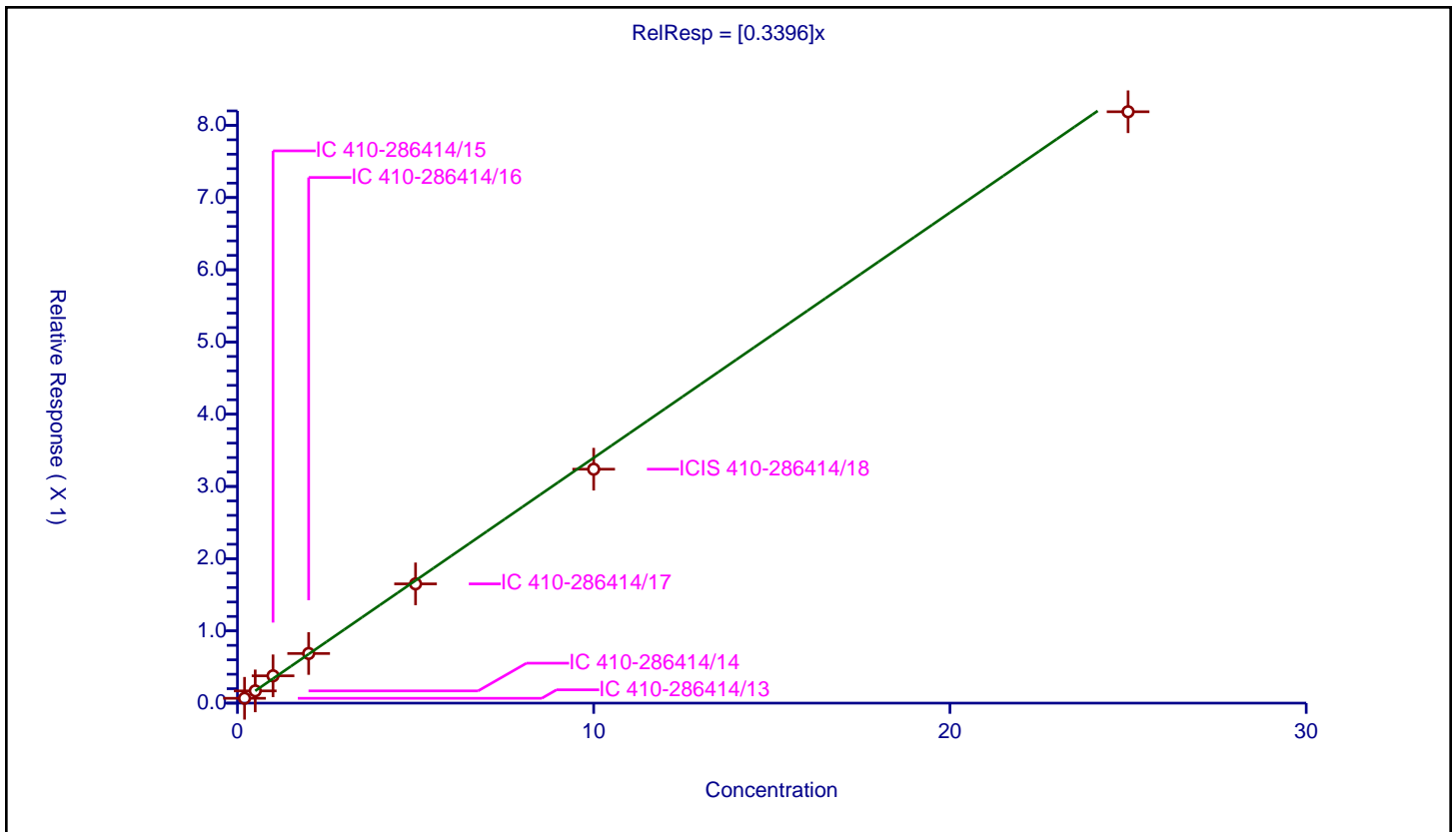
/ 1,1-Dichloropropene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3396

Error Coefficients	
Standard Error:	873000
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.066885	10.0	2204666.0	0.334427	Y
2	IC 410-286414/14	0.5	0.169543	10.0	2229222.0	0.339087	Y
3	IC 410-286414/15	1.0	0.378328	10.0	2229967.0	0.378328	Y
4	IC 410-286414/16	2.0	0.687111	10.0	2244586.0	0.343556	Y
5	IC 410-286414/17	5.0	1.651092	10.0	2296832.0	0.330218	Y
6	ICIS 410-286414/18	10.0	3.239079	10.0	2328270.0	0.323908	Y
7	IC 410-286414/19	25.0	8.188306	10.0	2388919.0	0.327532	Y



**Calibration**

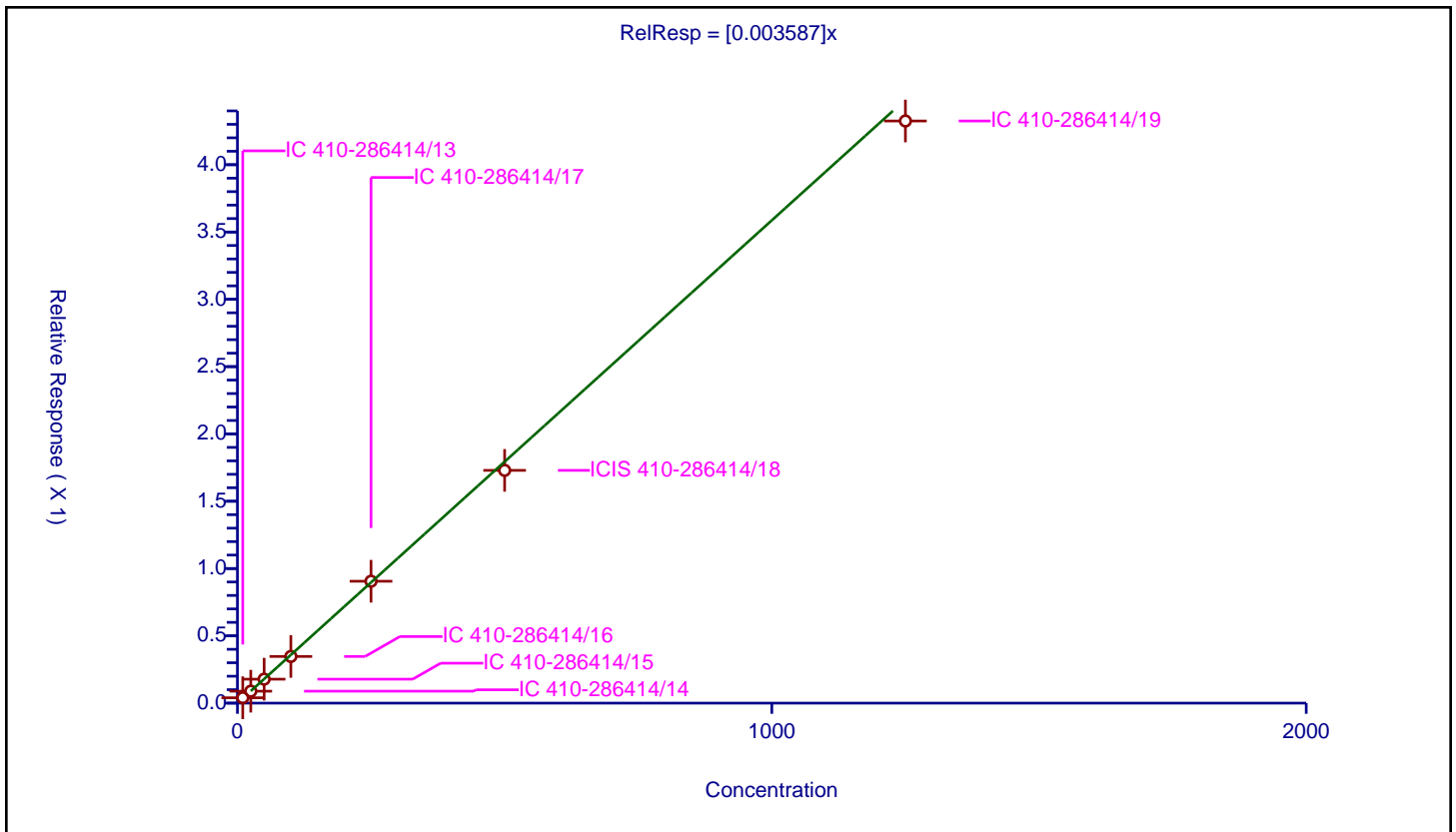
/ Isobutyl alcohol

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.003587

Error Coefficients	
Standard Error:	462000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	10.0	0.039943	10.0	2204666.0	0.003994	Y
2	IC 410-286414/14	25.0	0.088681	10.0	2229222.0	0.003547	Y
3	IC 410-286414/15	50.0	0.177931	10.0	2229967.0	0.003559	Y
4	IC 410-286414/16	100.0	0.346799	10.0	2244586.0	0.003468	Y
5	IC 410-286414/17	250.0	0.905552	10.0	2296832.0	0.003622	Y
6	ICIS 410-286414/18	500.0	1.72925	10.0	2328270.0	0.003458	Y
7	IC 410-286414/19	1250.0	4.325044	10.0	2388919.0	0.00346	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

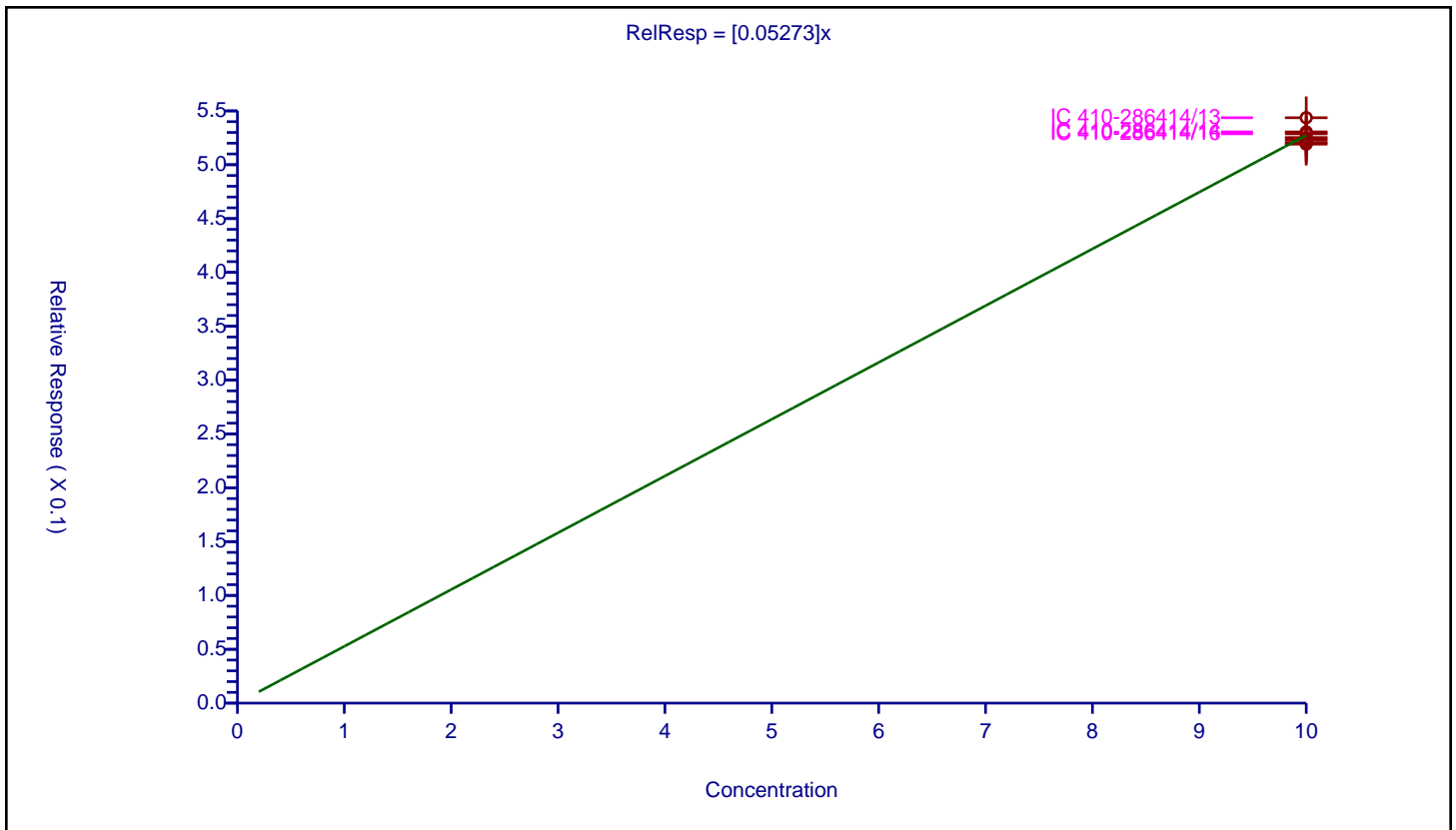
**Curve Coefficients**

Intercept: 0  
 Slope: 0.05273

**Error Coefficients**

Standard Error: 130000  
 Relative Standard Error: 1.6  
 Correlation Coefficient: NA  
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	10.0	0.543652	10.0	2204666.0	0.054365	Y
2	IC 410-286414/14	10.0	0.530477	10.0	2229222.0	0.053048	Y
3	IC 410-286414/15	10.0	0.525272	10.0	2229967.0	0.052527	Y
4	IC 410-286414/16	10.0	0.528721	10.0	2244586.0	0.052872	Y
5	IC 410-286414/17	10.0	0.52309	10.0	2296832.0	0.052309	Y
6	ICIS 410-286414/18	10.0	0.519098	10.0	2328270.0	0.05191	Y
7	IC 410-286414/19	10.0	0.520654	10.0	2388919.0	0.052065	Y



Calibration

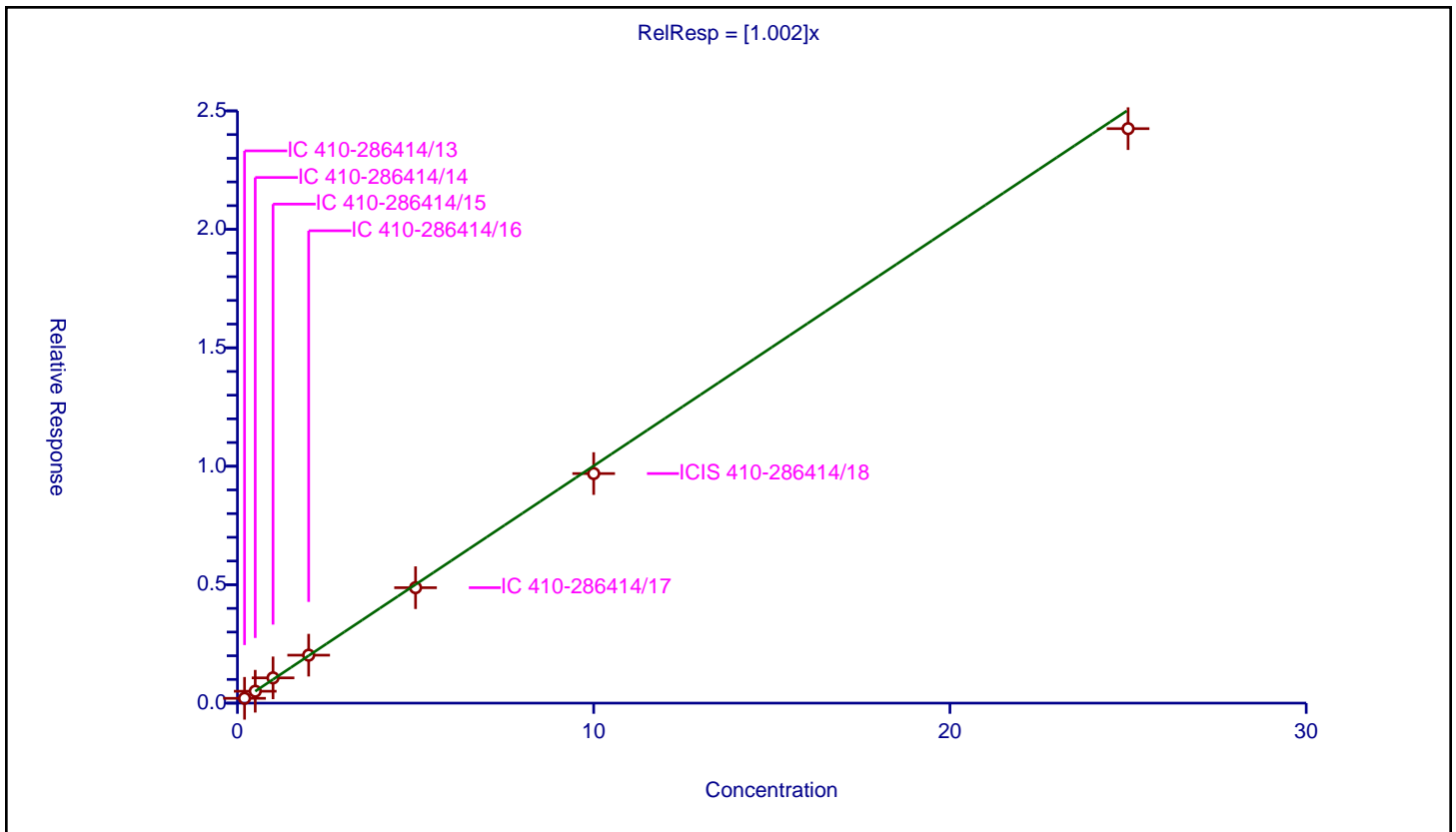
/ Benzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.002

Error Coefficients	
Standard Error:	2590000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.202747	10.0	2204666.0	1.013736	Y
2	IC 410-286414/14	0.5	0.50222	10.0	2229222.0	1.00444	Y
3	IC 410-286414/15	1.0	1.066401	10.0	2229967.0	1.066401	Y
4	IC 410-286414/16	2.0	2.024391	10.0	2244586.0	1.012196	Y
5	IC 410-286414/17	5.0	4.873604	10.0	2296832.0	0.974721	Y
6	ICIS 410-286414/18	10.0	9.690758	10.0	2328270.0	0.969076	Y
7	IC 410-286414/19	25.0	24.249596	10.0	2388919.0	0.969984	Y



Calibration

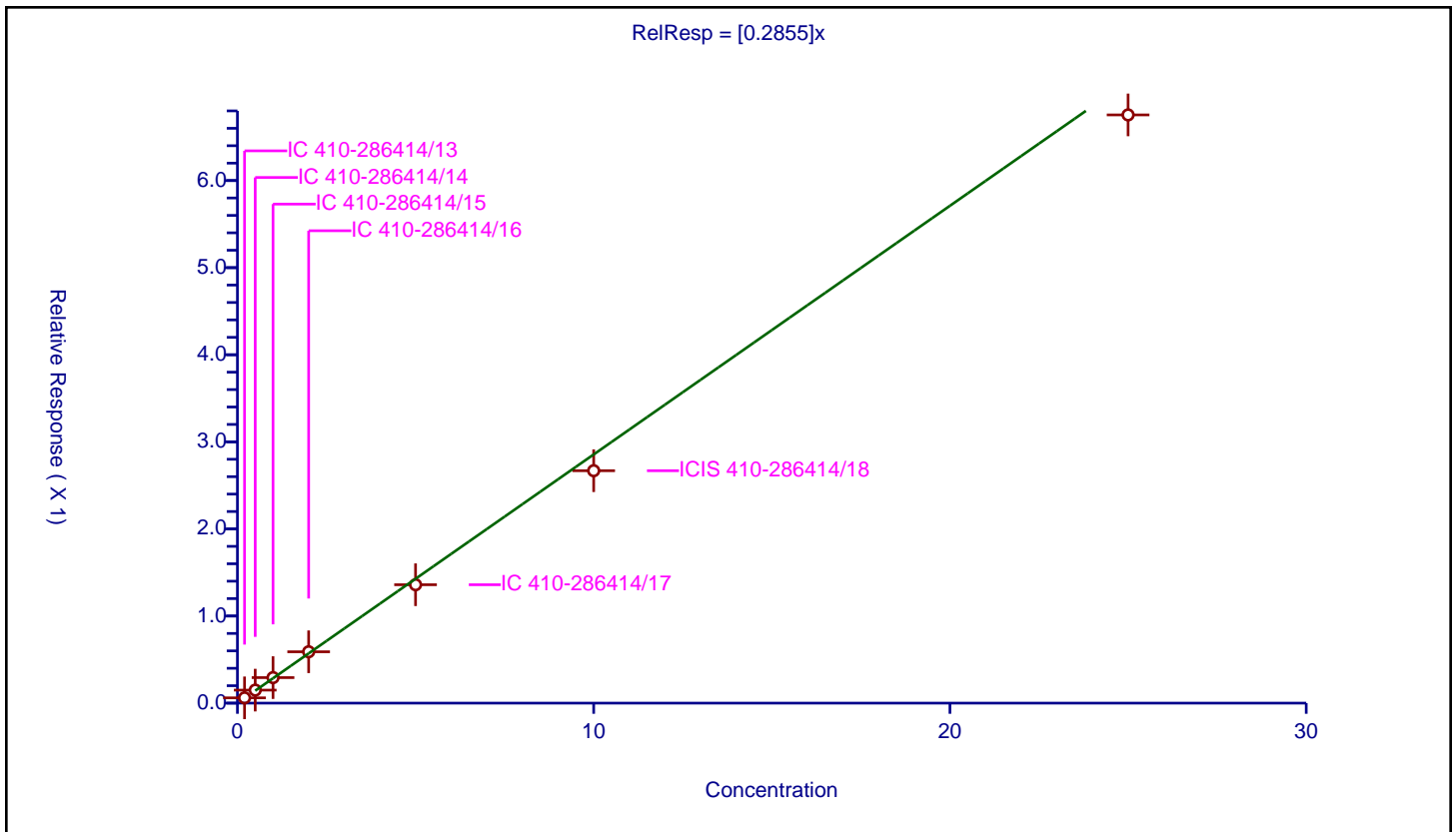
/ 1,2-Dichloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2855

Error Coefficients	
Standard Error:	720000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.060558	10.0	2204666.0	0.30279	Y
2	IC 410-286414/14	0.5	0.149528	10.0	2229222.0	0.299055	Y
3	IC 410-286414/15	1.0	0.293049	10.0	2229967.0	0.293049	Y
4	IC 410-286414/16	2.0	0.589757	10.0	2244586.0	0.294878	Y
5	IC 410-286414/17	5.0	1.35952	10.0	2296832.0	0.271904	Y
6	ICIS 410-286414/18	10.0	2.668556	10.0	2328270.0	0.266856	Y
7	IC 410-286414/19	25.0	6.75385	10.0	2388919.0	0.270154	Y





Calibration

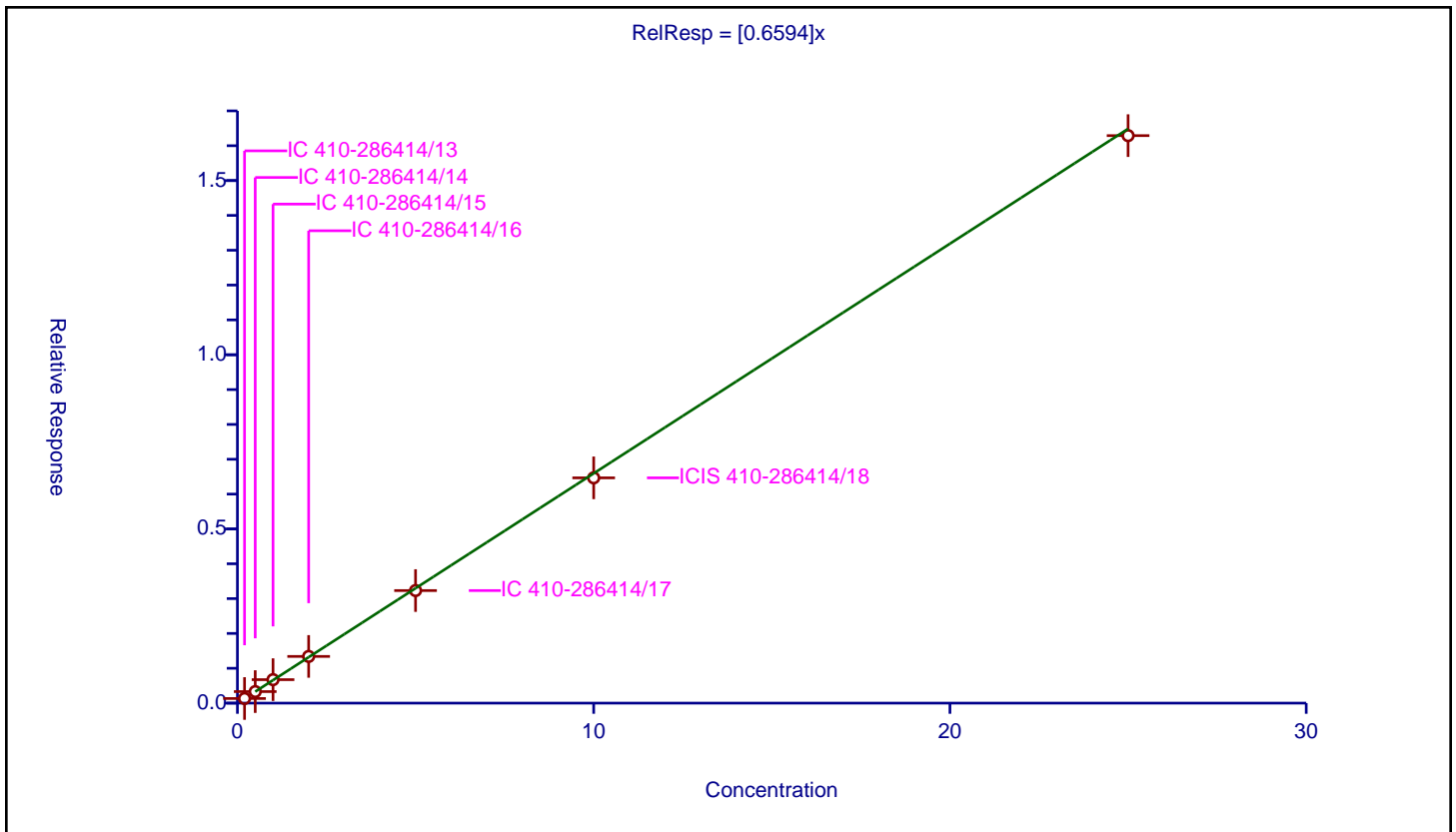
/ Tert-amyl methyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6594

Error Coefficients	
Standard Error:	1740000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.132904	10.0	2204666.0	0.664522	Y
2	IC 410-286414/14	0.5	0.331084	10.0	2229222.0	0.662168	Y
3	IC 410-286414/15	1.0	0.674104	10.0	2229967.0	0.674104	Y
4	IC 410-286414/16	2.0	1.34084	10.0	2244586.0	0.67042	Y
5	IC 410-286414/17	5.0	3.231547	10.0	2296832.0	0.646309	Y
6	ICIS 410-286414/18	10.0	6.466694	10.0	2328270.0	0.646669	Y
7	IC 410-286414/19	25.0	16.289749	10.0	2388919.0	0.65159	Y



Calibration

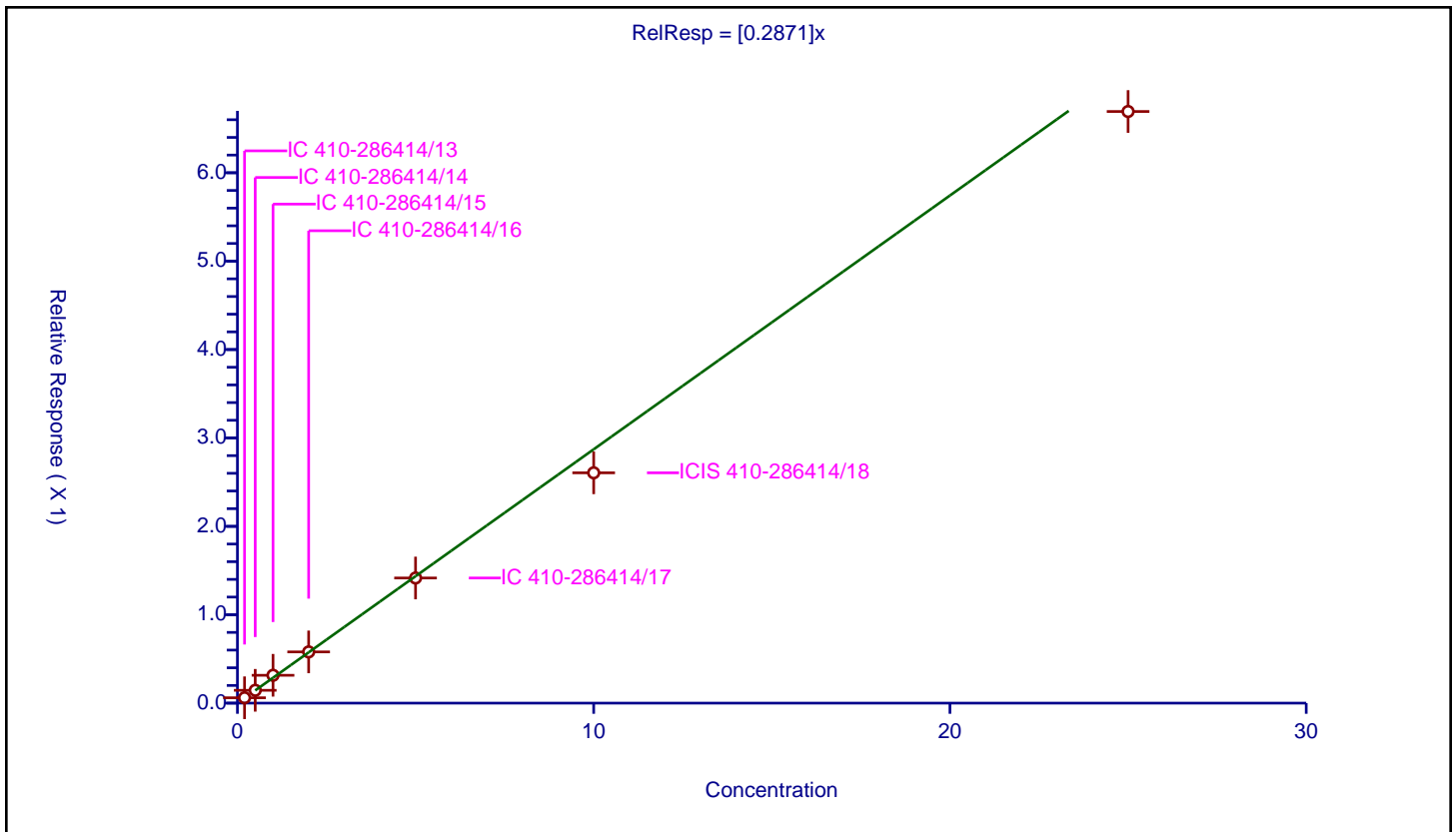
/ n-Heptane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2871

Error Coefficients	
Standard Error:	713000
Relative Standard Error:	6.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.060717	10.0	2204666.0	0.303583	Y
2	IC 410-286414/14	0.5	0.145158	10.0	2229222.0	0.290317	Y
3	IC 410-286414/15	1.0	0.314919	10.0	2229967.0	0.314919	Y
4	IC 410-286414/16	2.0	0.579497	10.0	2244586.0	0.289748	Y
5	IC 410-286414/17	5.0	1.41558	10.0	2296832.0	0.283116	Y
6	ICIS 410-286414/18	10.0	2.605441	10.0	2328270.0	0.260544	Y
7	IC 410-286414/19	25.0	6.693069	10.0	2388919.0	0.267723	Y



Calibration

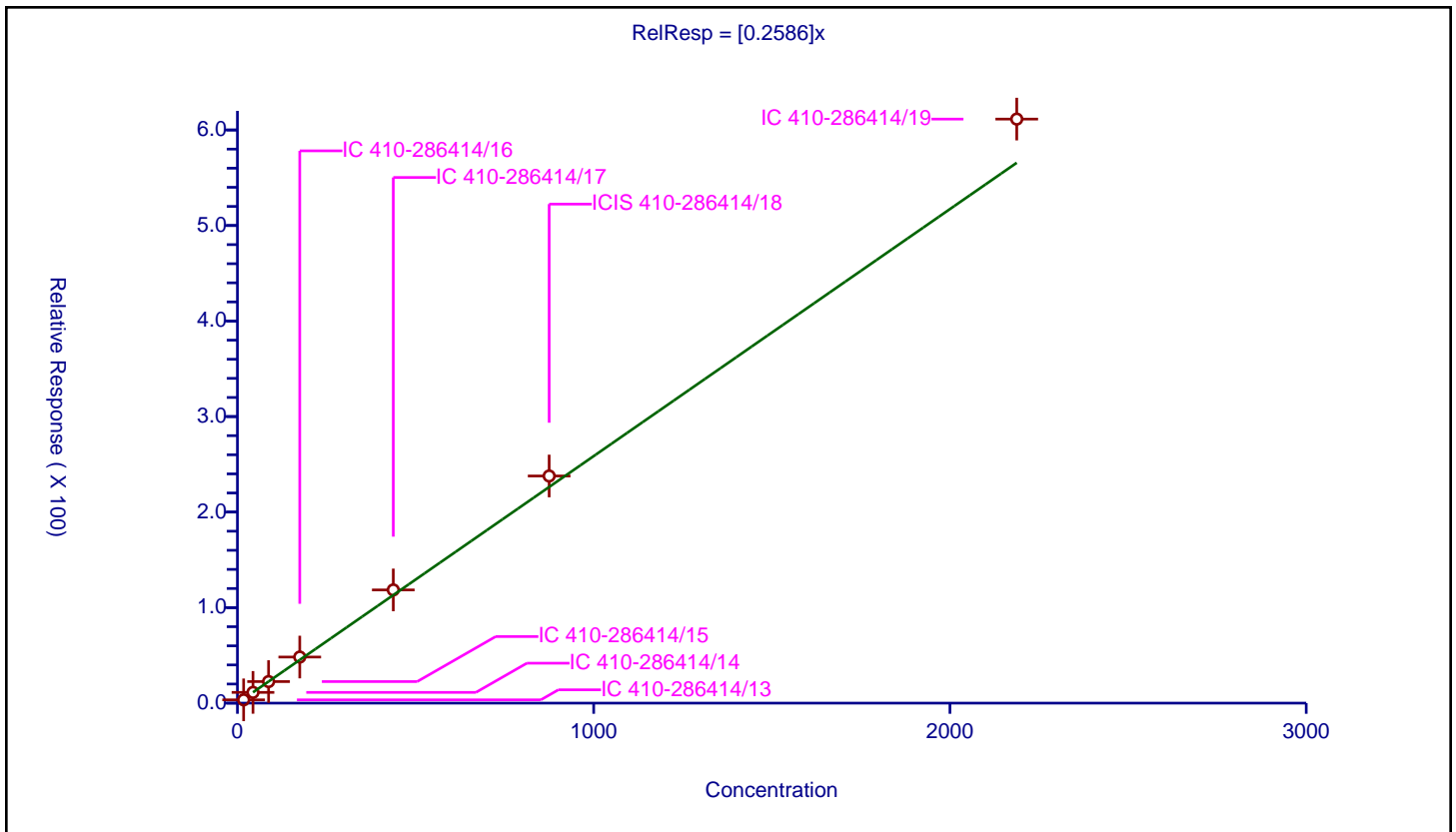
/ n-Butanol

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2586

Error Coefficients	
Standard Error:	783000
Relative Standard Error:	10.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	17.5	3.454347	50.0	133180.0	0.197391	Y
2	IC 410-286414/14	43.75	11.242663	50.0	128635.0	0.256975	Y
3	IC 410-286414/15	87.5	22.567784	50.0	136943.0	0.257918	Y
4	IC 410-286414/16	175.0	48.251639	50.0	124917.0	0.275724	Y
5	IC 410-286414/17	437.5	118.524669	50.0	141819.0	0.270914	Y
6	ICIS 410-286414/18	875.0	237.79493	50.0	142576.0	0.271766	Y
7	IC 410-286414/19	2187.5	611.42037	50.0	143695.0	0.279506	Y



Calibration

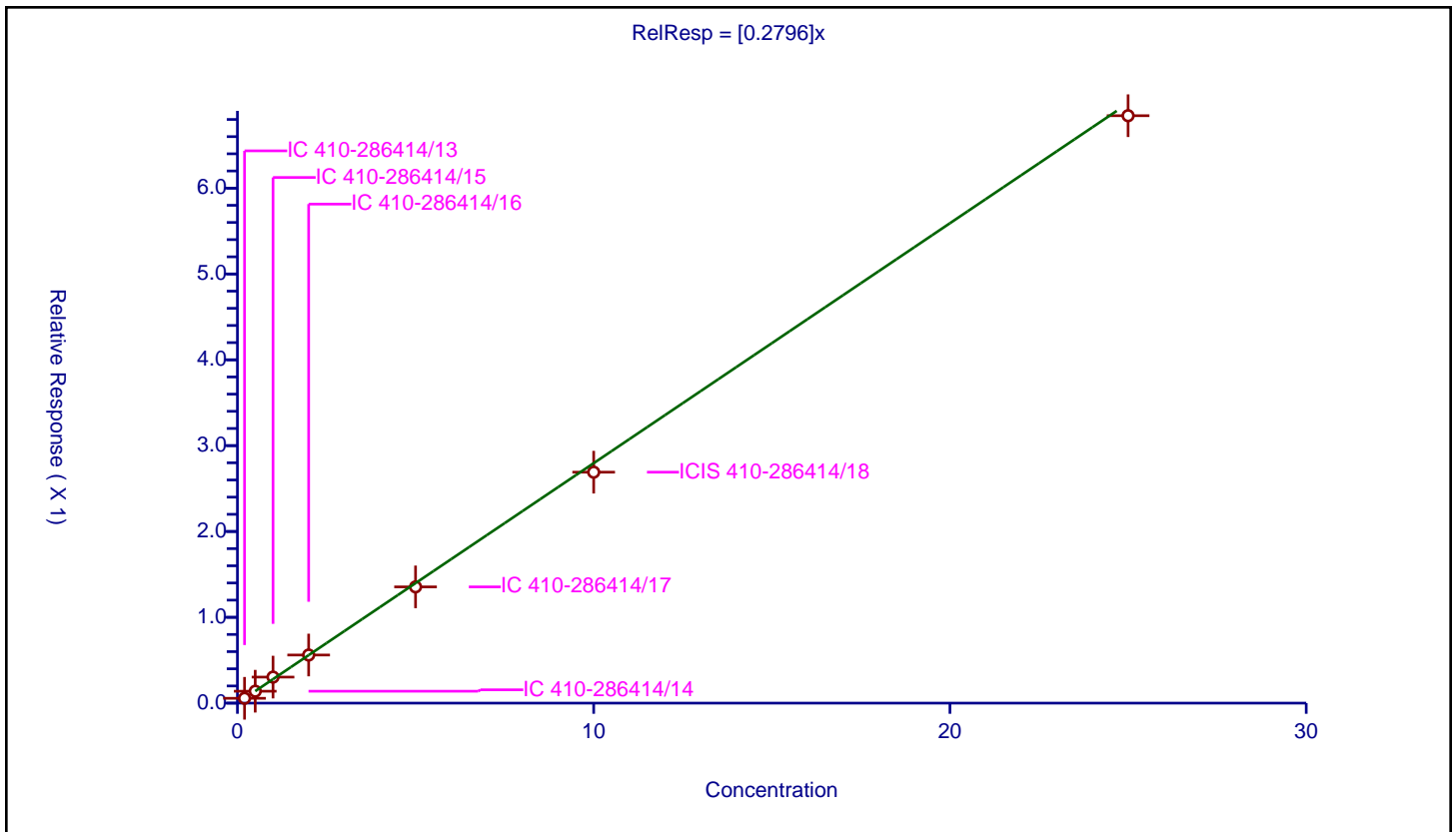
/ Trichloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2796

Error Coefficients	
Standard Error:	728000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.056448	10.0	2204666.0	0.282242	Y
2	IC 410-286414/14	0.5	0.138712	10.0	2229222.0	0.277424	Y
3	IC 410-286414/15	1.0	0.303327	10.0	2229967.0	0.303327	Y
4	IC 410-286414/16	2.0	0.560451	10.0	2244586.0	0.280225	Y
5	IC 410-286414/17	5.0	1.354322	10.0	2296832.0	0.270864	Y
6	ICIS 410-286414/18	10.0	2.690779	10.0	2328270.0	0.269078	Y
7	IC 410-286414/19	25.0	6.843911	10.0	2388919.0	0.273756	Y



Calibration

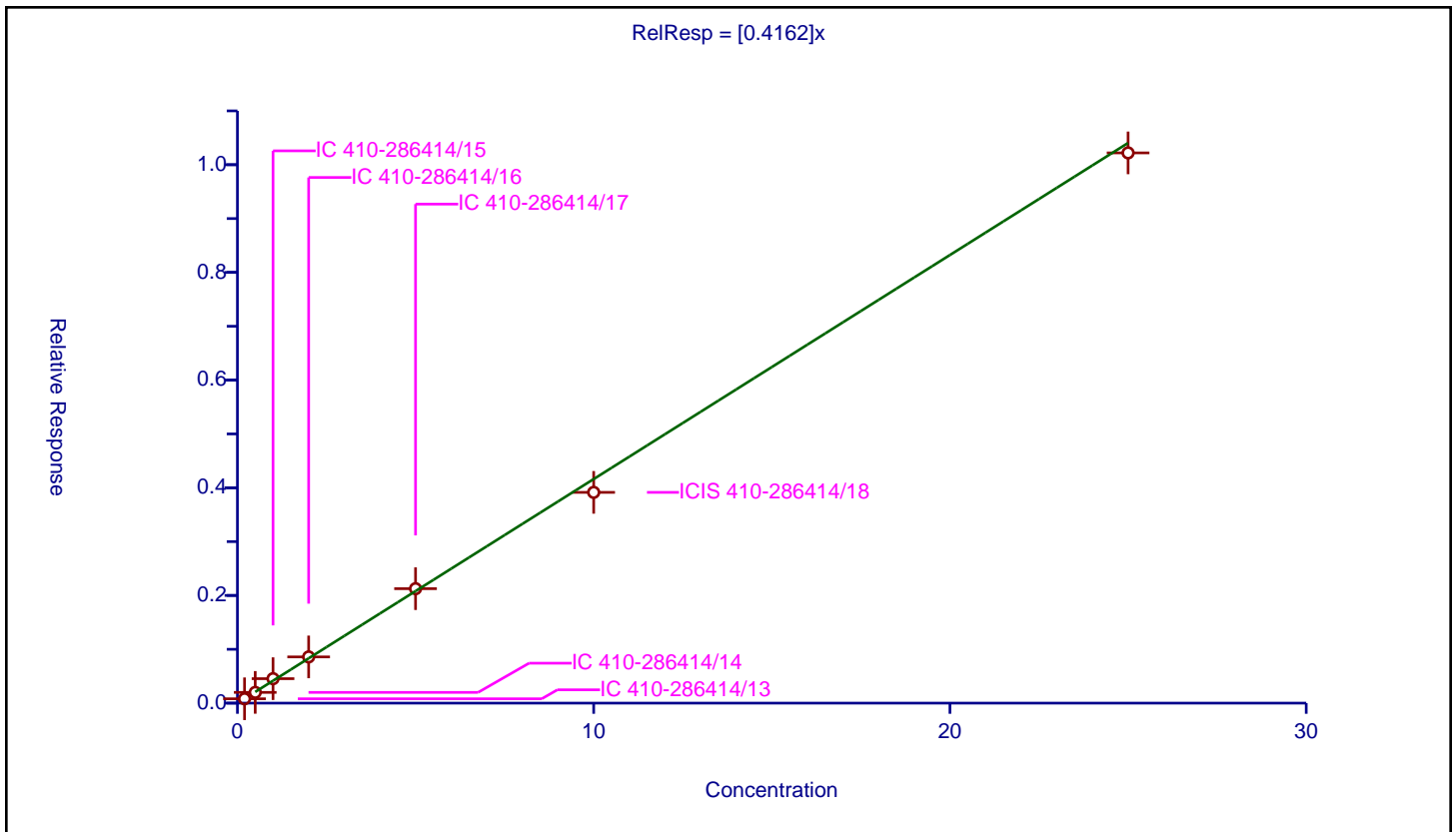
/ Methylcyclohexane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4162

Error Coefficients	
Standard Error:	1090000
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.080906	10.0	2204666.0	0.404528	Y
2	IC 410-286414/14	0.5	0.199837	10.0	2229222.0	0.399673	Y
3	IC 410-286414/15	1.0	0.454217	10.0	2229967.0	0.454217	Y
4	IC 410-286414/16	2.0	0.858501	10.0	2244586.0	0.429251	Y
5	IC 410-286414/17	5.0	2.125767	10.0	2296832.0	0.425153	Y
6	ICIS 410-286414/18	10.0	3.914834	10.0	2328270.0	0.391483	Y
7	IC 410-286414/19	25.0	10.220058	10.0	2388919.0	0.408802	Y



Calibration

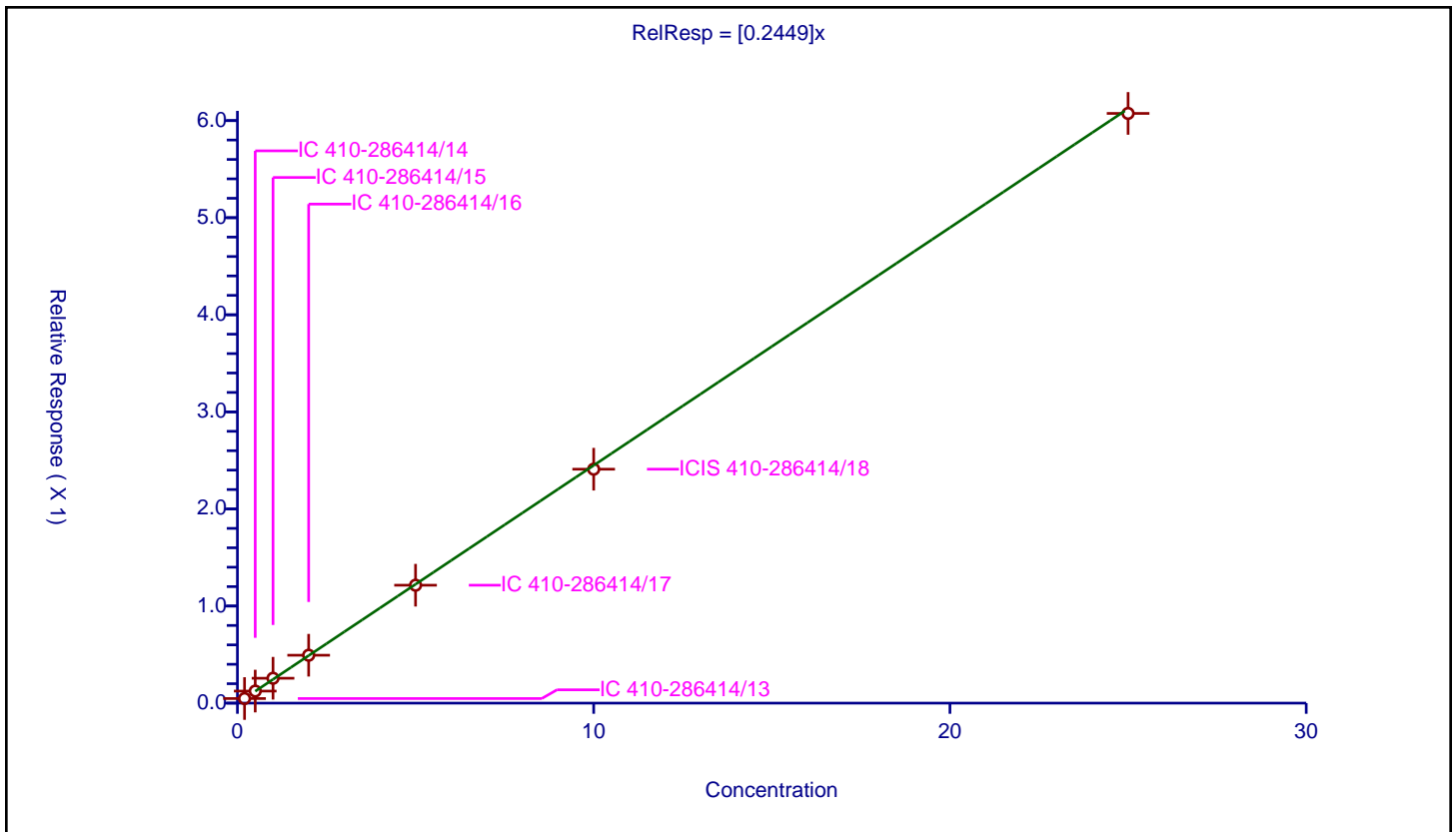
/ 1,2-Dichloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2449

Error Coefficients	
Standard Error:	647000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.0472	10.0	2204666.0	0.235999	Y
2	IC 410-286414/14	0.5	0.124232	10.0	2229222.0	0.248463	Y
3	IC 410-286414/15	1.0	0.256246	10.0	2229967.0	0.256246	Y
4	IC 410-286414/16	2.0	0.493352	10.0	2244586.0	0.246676	Y
5	IC 410-286414/17	5.0	1.214547	10.0	2296832.0	0.242909	Y
6	ICIS 410-286414/18	10.0	2.409484	10.0	2328270.0	0.240948	Y
7	IC 410-286414/19	25.0	6.07381	10.0	2388919.0	0.242952	Y



**Calibration**

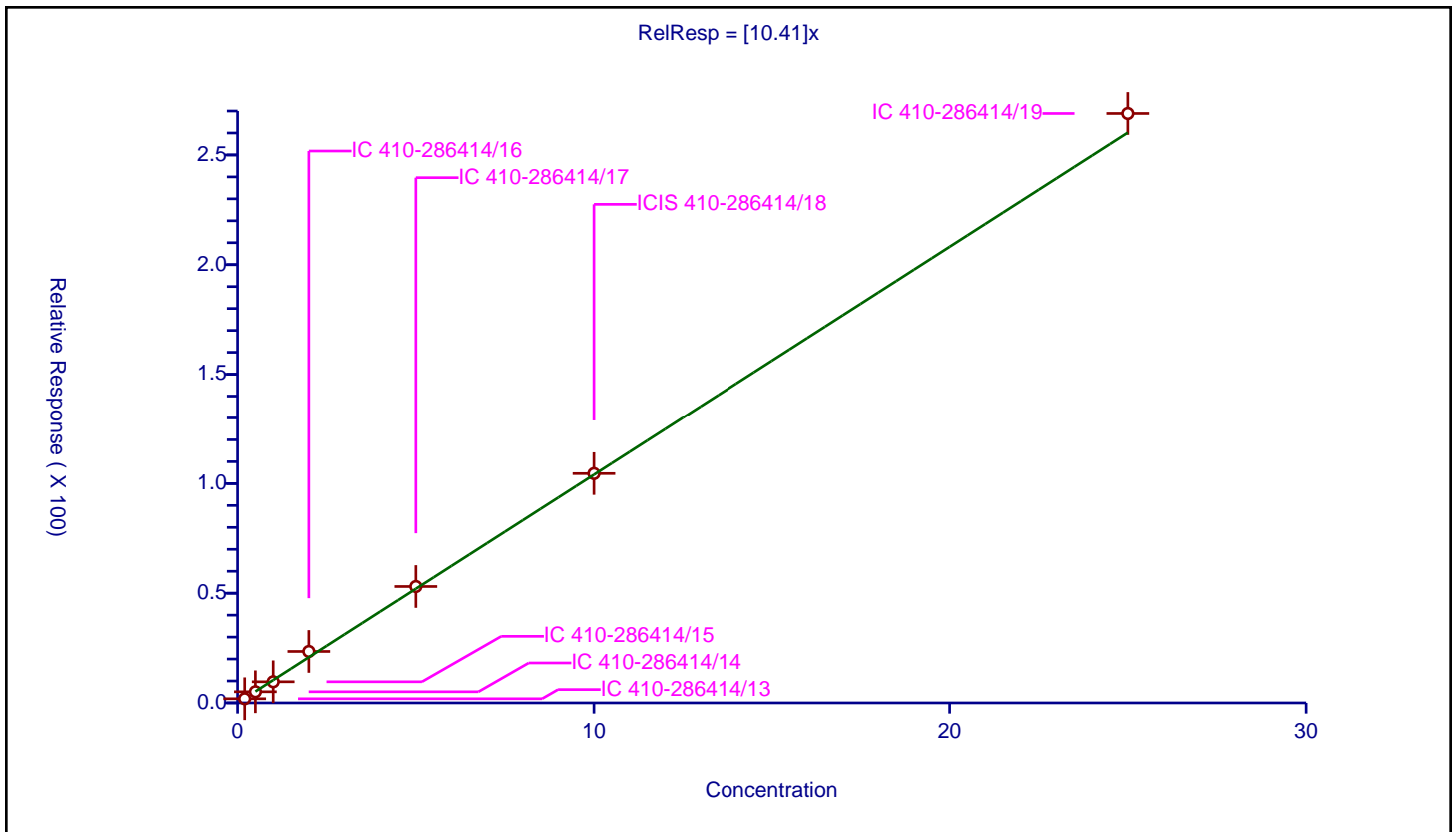
/ Methyl methacrylate

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	10.41

Error Coefficients	
Standard Error:	345000
Relative Standard Error:	7.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	1.898558	50.0	133180.0	9.492792	Y
2	IC 410-286414/14	0.5	5.084153	50.0	128635.0	10.168306	Y
3	IC 410-286414/15	1.0	9.637952	50.0	136943.0	9.637952	Y
4	IC 410-286414/16	2.0	23.44877	50.0	124917.0	11.724385	Y
5	IC 410-286414/17	5.0	53.053893	50.0	141819.0	10.610779	Y
6	ICIS 410-286414/18	10.0	104.585625	50.0	142576.0	10.458562	Y
7	IC 410-286414/19	25.0	268.876788	50.0	143695.0	10.755072	Y



Calibration

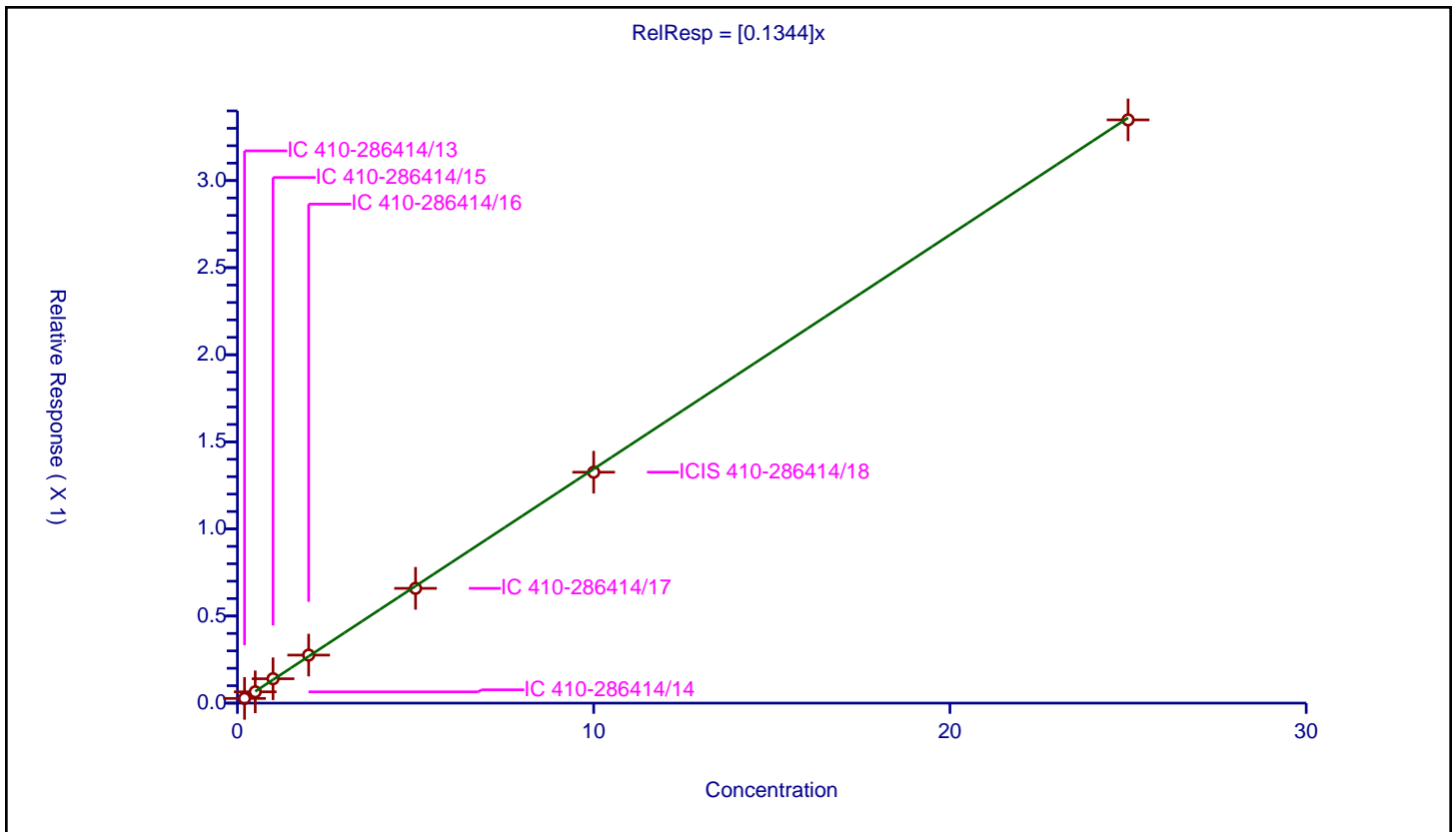
/ Dibromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1344

Error Coefficients	
Standard Error:	357000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.02697	10.0	2204666.0	0.13485	Y
2	IC 410-286414/14	0.5	0.06496	10.0	2229222.0	0.12992	Y
3	IC 410-286414/15	1.0	0.139966	10.0	2229967.0	0.139966	Y
4	IC 410-286414/16	2.0	0.27573	10.0	2244586.0	0.137865	Y
5	IC 410-286414/17	5.0	0.658995	10.0	2296832.0	0.131799	Y
6	ICIS 410-286414/18	10.0	1.325783	10.0	2328270.0	0.132578	Y
7	IC 410-286414/19	25.0	3.34833	10.0	2388919.0	0.133933	Y





Calibration

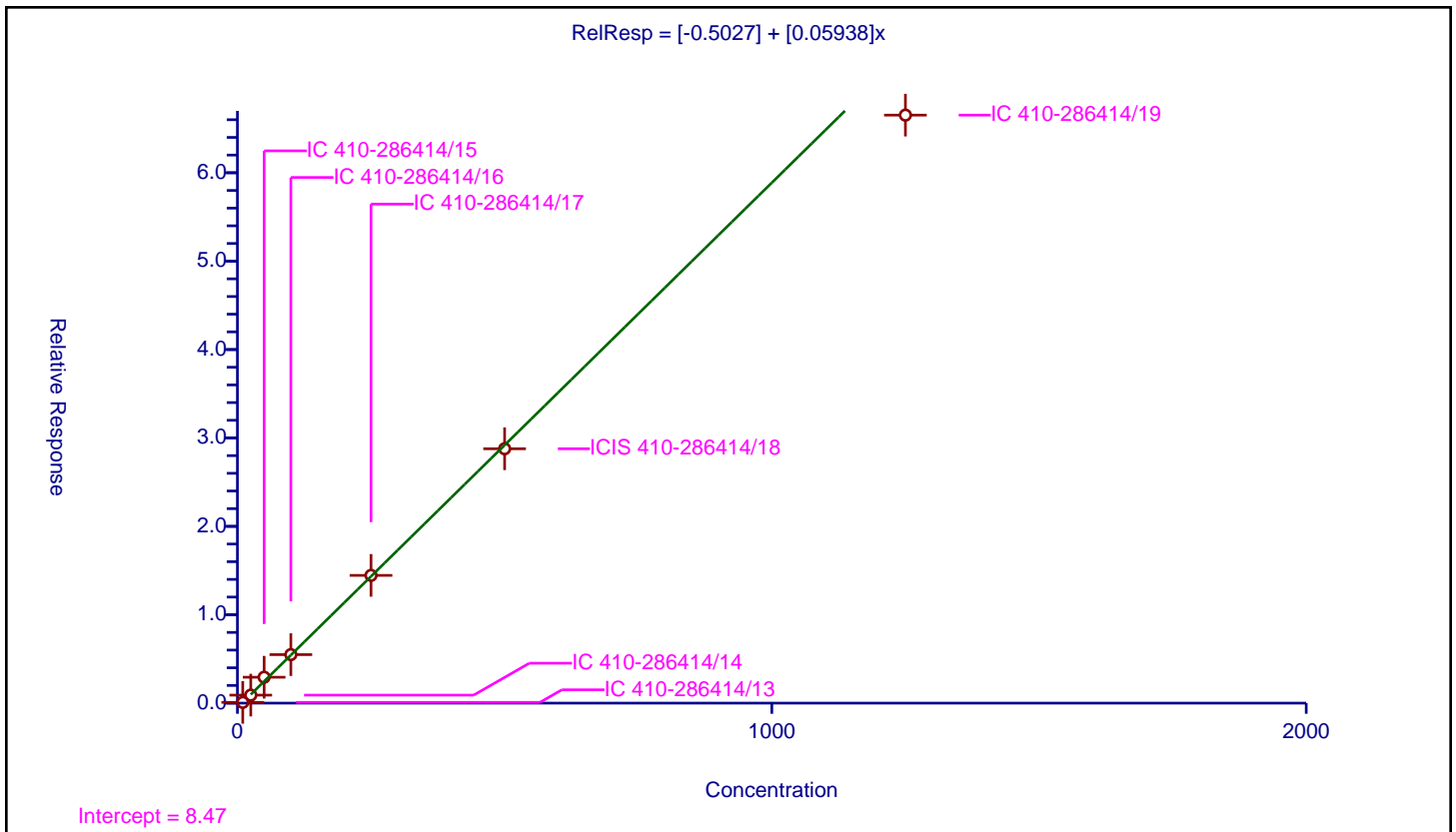
/ 1,4-Dioxane

Curve Type: Linear  
 Weighting: Conc\_Sq  
 Origin: None  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	-0.5027
Slope:	0.05938

Error Coefficients	
Standard Error:	95100
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	10.0	0.084472	50.0	133180.0	0.008447	Y
2	IC 410-286414/14	25.0	0.906829	50.0	128635.0	0.036273	Y
3	IC 410-286414/15	50.0	2.929321	50.0	136943.0	0.058586	Y
4	IC 410-286414/16	100.0	5.488044	50.0	124917.0	0.05488	Y
5	IC 410-286414/17	250.0	14.452224	50.0	141819.0	0.057809	Y
6	ICIS 410-286414/18	500.0	28.776582	50.0	142576.0	0.057553	Y
7	IC 410-286414/19	1250.0	66.5218	50.0	143695.0	0.053217	Y



Calibration

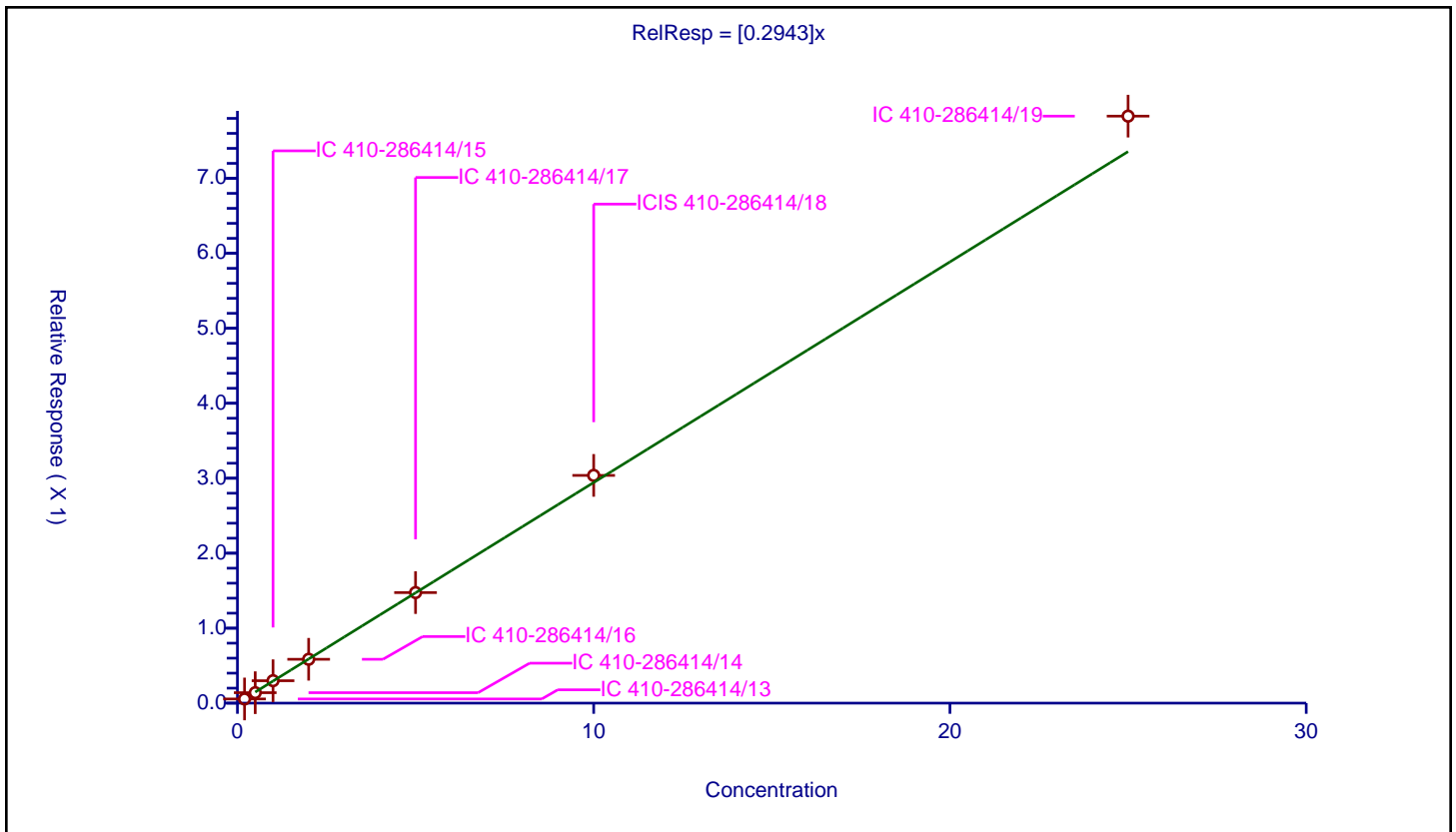
/ Dichlorobromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2943

Error Coefficients	
Standard Error:	830000
Relative Standard Error:	4.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.055537	10.0	2204666.0	0.277684	Y
2	IC 410-286414/14	0.5	0.139448	10.0	2229222.0	0.278896	Y
3	IC 410-286414/15	1.0	0.299139	10.0	2229967.0	0.299139	Y
4	IC 410-286414/16	2.0	0.584865	10.0	2244586.0	0.292433	Y
5	IC 410-286414/17	5.0	1.474561	10.0	2296832.0	0.294912	Y
6	ICIS 410-286414/18	10.0	3.037642	10.0	2328270.0	0.303764	Y
7	IC 410-286414/19	25.0	7.829876	10.0	2388919.0	0.313195	Y



**Calibration**

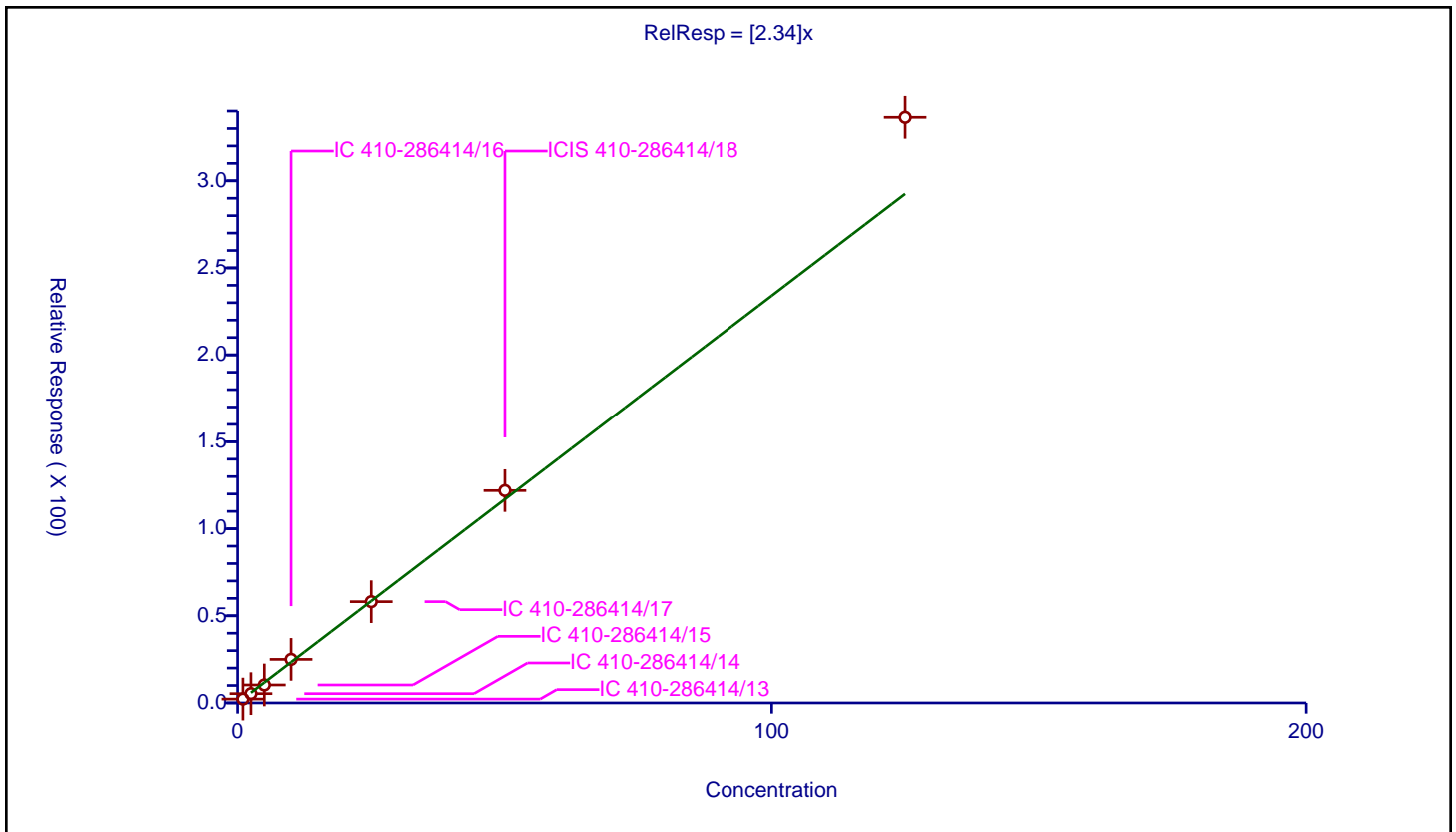
**/ 2-Nitropropane**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.34

Error Coefficients	
Standard Error:	426000
Relative Standard Error:	9.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	1.0	2.231566	50.0	133180.0	2.231566	Y
2	IC 410-286414/14	2.5	5.334474	50.0	128635.0	2.133789	Y
3	IC 410-286414/15	5.0	10.306843	50.0	136943.0	2.061369	Y
4	IC 410-286414/16	10.0	24.994196	50.0	124917.0	2.49942	Y
5	IC 410-286414/17	25.0	58.107165	50.0	141819.0	2.324287	Y
6	ICIS 410-286414/18	50.0	121.94093	50.0	142576.0	2.438819	Y
7	IC 410-286414/19	125.0	336.4195	50.0	143695.0	2.691356	Y



Calibration

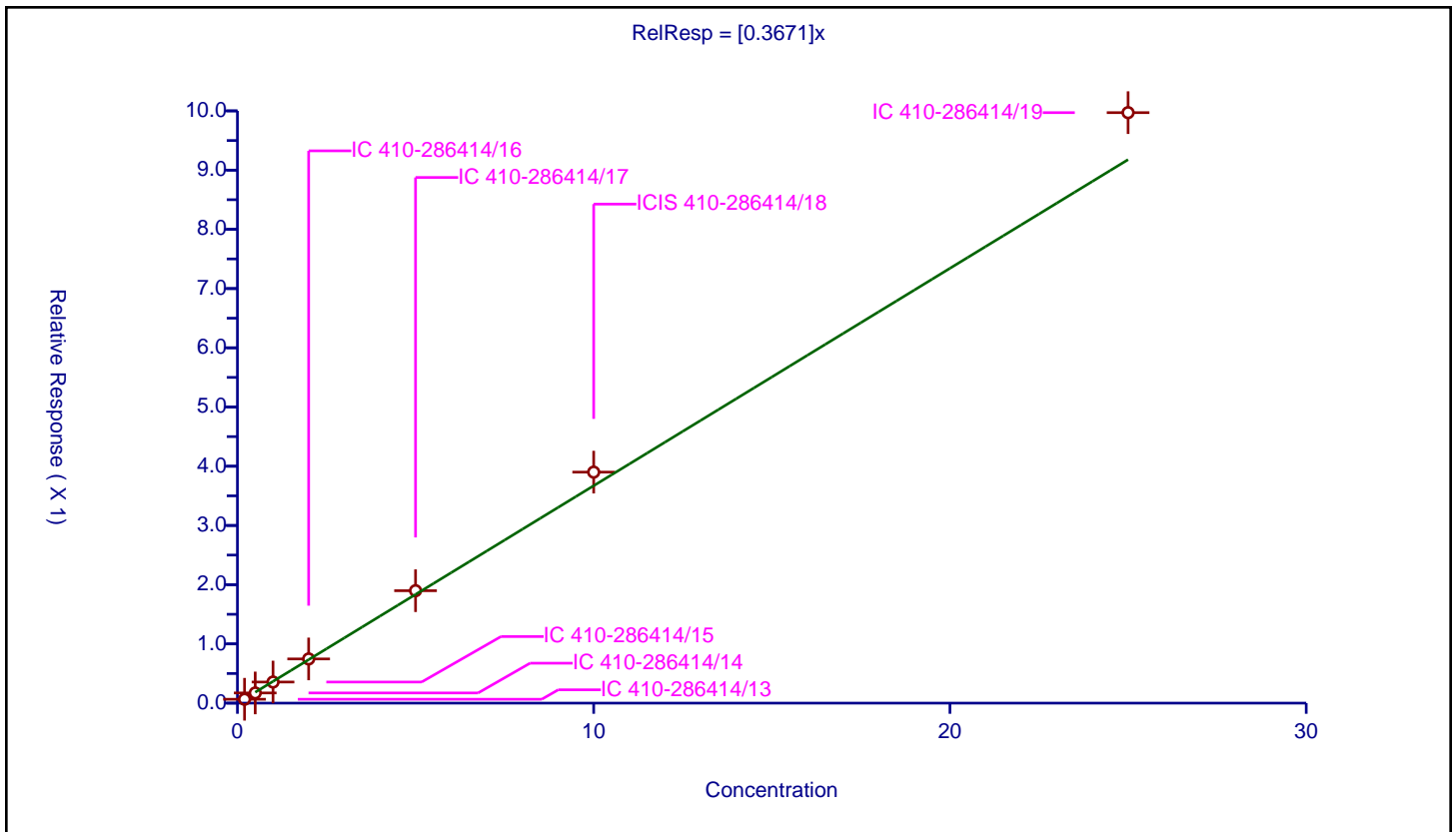
/ cis-1,3-Dichloropropene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3671

Error Coefficients	
Standard Error:	1060000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.065588	10.0	2204666.0	0.327941	Y
2	IC 410-286414/14	0.5	0.171876	10.0	2229222.0	0.343752	Y
3	IC 410-286414/15	1.0	0.356194	10.0	2229967.0	0.356194	Y
4	IC 410-286414/16	2.0	0.746155	10.0	2244586.0	0.373078	Y
5	IC 410-286414/17	5.0	1.898498	10.0	2296832.0	0.3797	Y
6	ICIS 410-286414/18	10.0	3.900776	10.0	2328270.0	0.390078	Y
7	IC 410-286414/19	25.0	9.97048	10.0	2388919.0	0.398819	Y



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

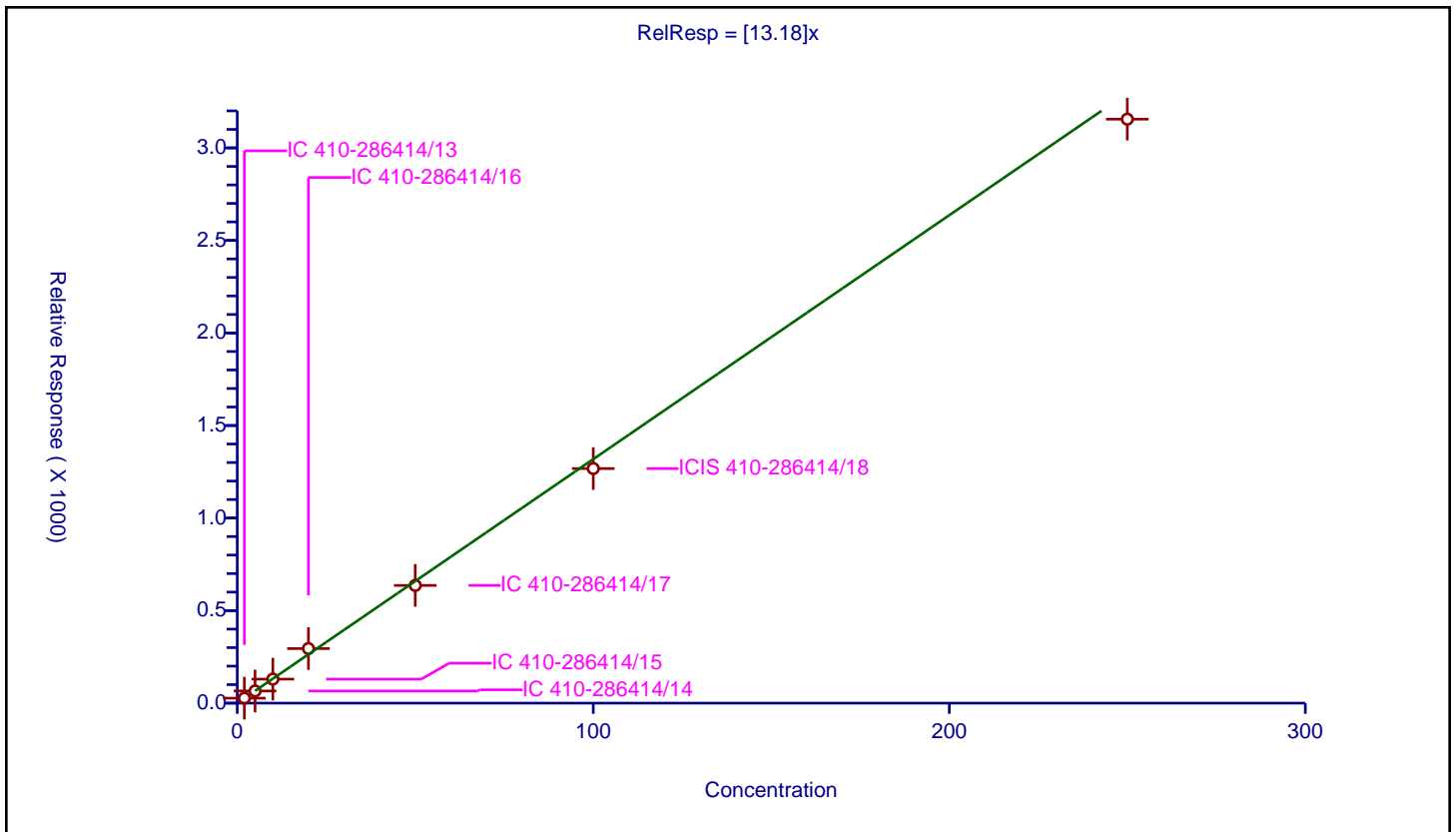
Curve Coefficients

Intercept: 0  
 Slope: 13.18

Error Coefficients

Standard Error: 4070000  
 Relative Standard Error: 5.6  
 Correlation Coefficient: 1.000  
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	2.0	26.828353	50.0	133180.0	13.414176	Y
2	IC 410-286414/14	5.0	65.659035	50.0	128635.0	13.131807	Y
3	IC 410-286414/15	10.0	129.708346	50.0	136943.0	12.970835	Y
4	IC 410-286414/16	20.0	294.824163	50.0	124917.0	14.741208	Y
5	IC 410-286414/17	50.0	635.980369	50.0	141819.0	12.719607	Y
6	ICIS 410-286414/18	100.0	1267.501543	50.0	142576.0	12.675015	Y
7	IC 410-286414/19	250.0	3155.290372	50.0	143695.0	12.621161	Y



**Calibration**

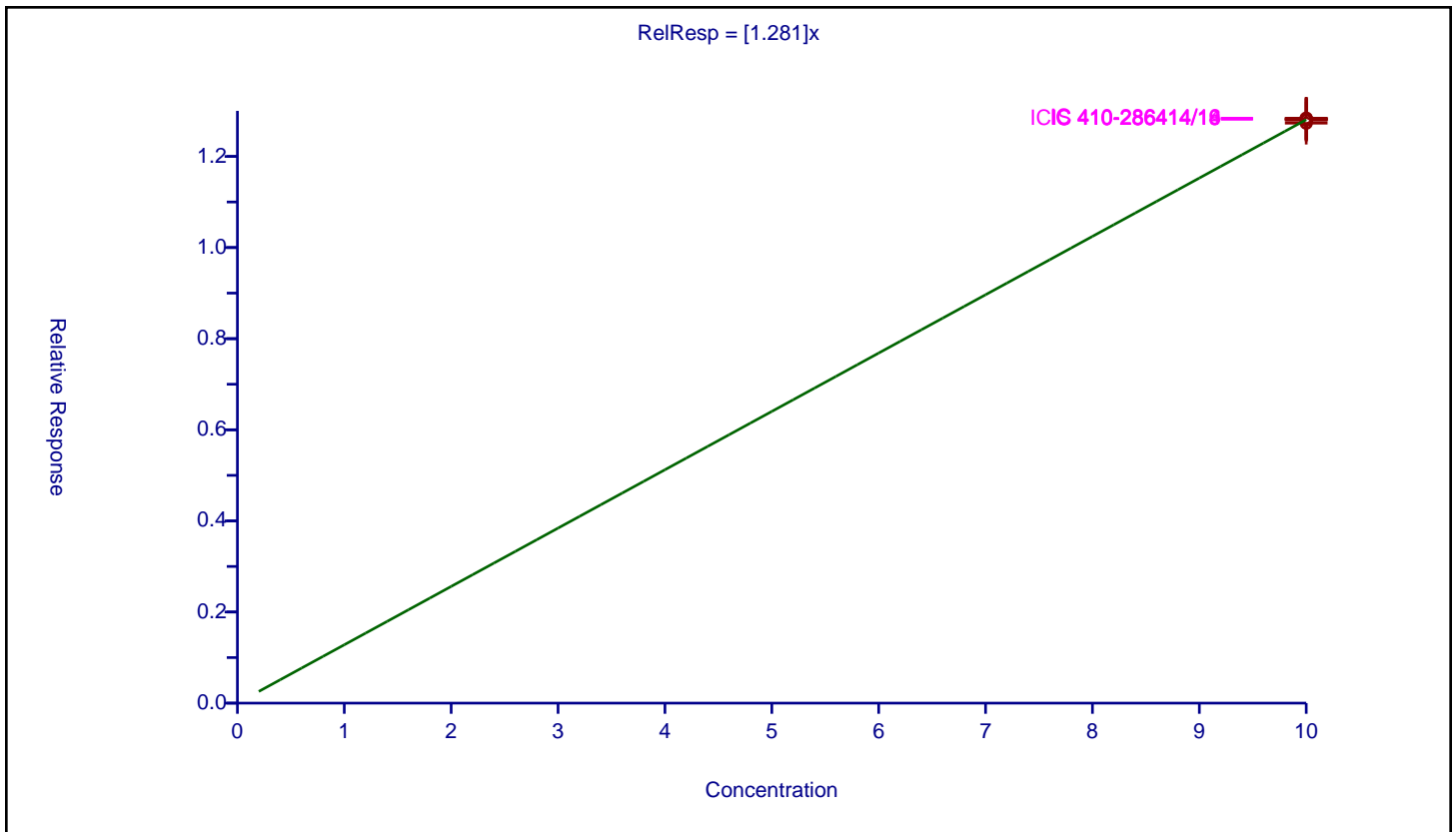
/ Toluene-d8 (Surr)

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.281

Error Coefficients	
Standard Error:	2490000
Relative Standard Error:	0.3
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	10.0	12.730492	10.0	1741668.0	1.273049	Y
2	IC 410-286414/14	10.0	12.82361	10.0	1755239.0	1.282361	Y
3	IC 410-286414/15	10.0	12.8019	10.0	1766319.0	1.28019	Y
4	IC 410-286414/16	10.0	12.838891	10.0	1767884.0	1.283889	Y
5	IC 410-286414/17	10.0	12.79785	10.0	1816359.0	1.279785	Y
6	ICIS 410-286414/18	10.0	12.818966	10.0	1837007.0	1.281897	Y
7	IC 410-286414/19	10.0	12.832365	10.0	1887193.0	1.283237	Y



Calibration

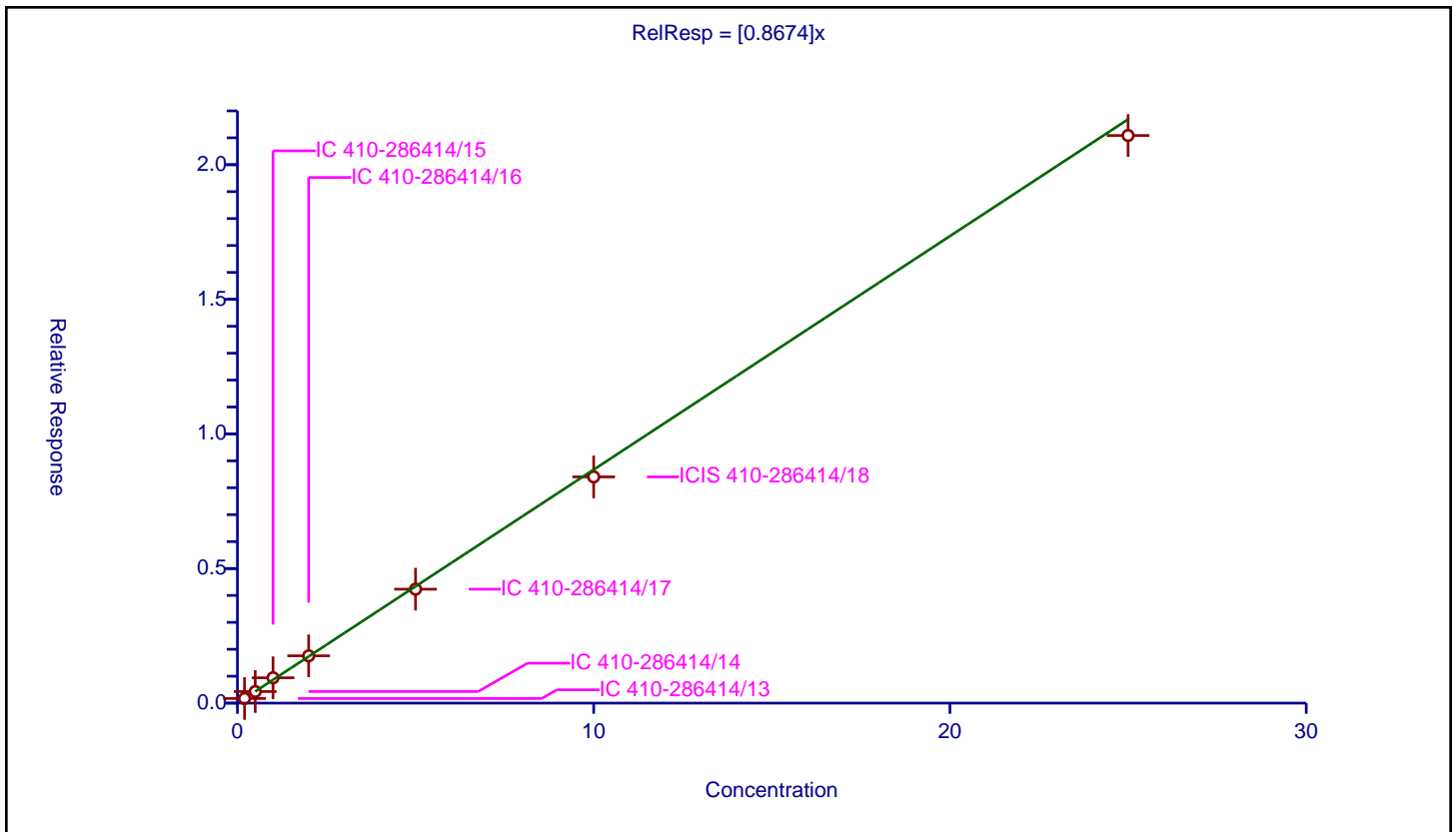
/ Toluene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8674

Error Coefficients	
Standard Error:	1780000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.172053	10.0	1741668.0	0.860267	Y
2	IC 410-286414/14	0.5	0.430847	10.0	1755239.0	0.861695	Y
3	IC 410-286414/15	1.0	0.94141	10.0	1766319.0	0.94141	Y
4	IC 410-286414/16	2.0	1.756162	10.0	1767884.0	0.878081	Y
5	IC 410-286414/17	5.0	4.233337	10.0	1816359.0	0.846667	Y
6	ICIS 410-286414/18	10.0	8.40459	10.0	1837007.0	0.840459	Y
7	IC 410-286414/19	25.0	21.086169	10.0	1887193.0	0.843447	Y



Calibration

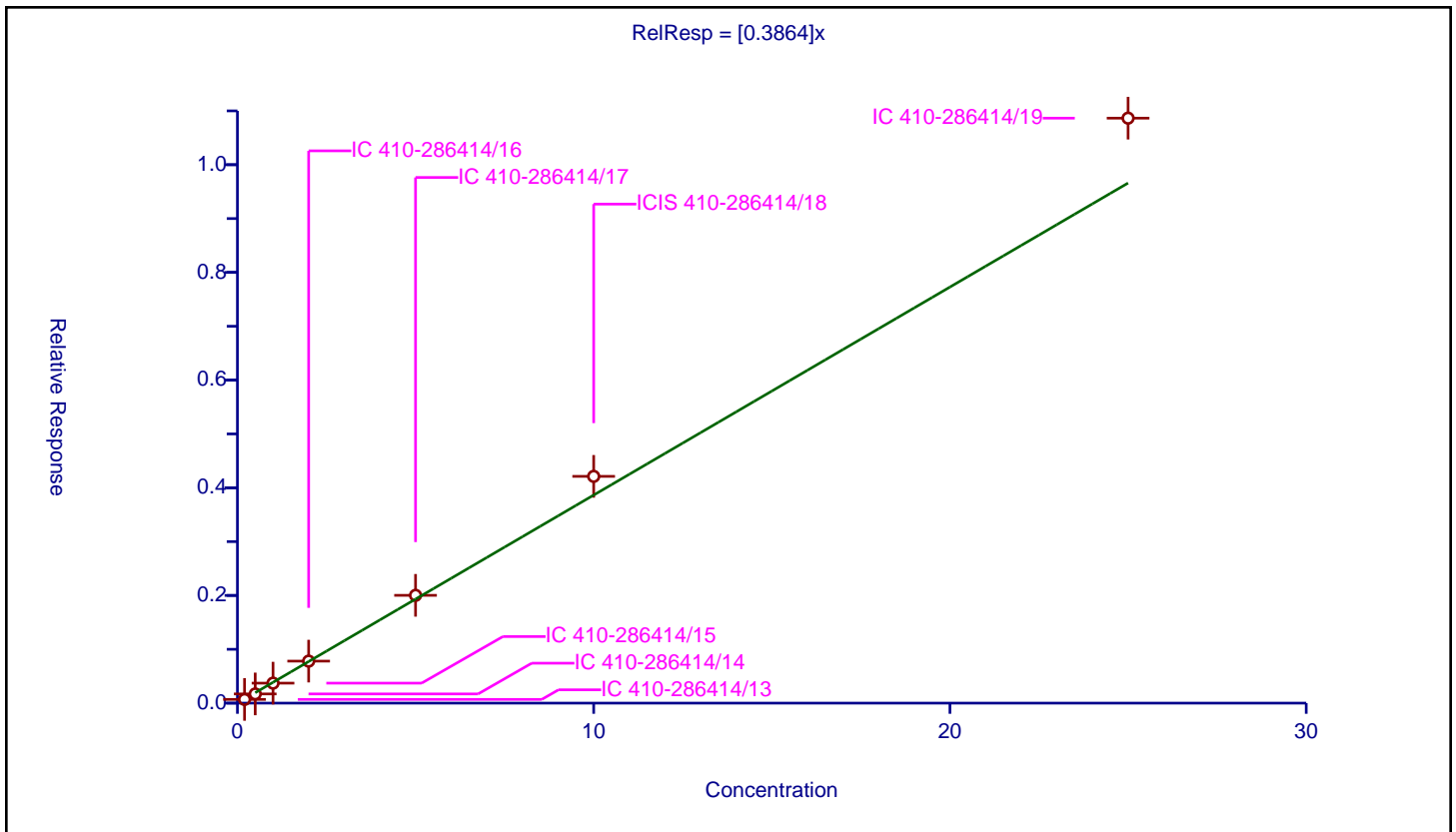
/ trans-1,3-Dichloropropene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3864

Error Coefficients	
Standard Error:	909000
Relative Standard Error:	9.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.069014	10.0	1741668.0	0.345072	Y
2	IC 410-286414/14	0.5	0.171139	10.0	1755239.0	0.342278	Y
3	IC 410-286414/15	1.0	0.371145	10.0	1766319.0	0.371145	Y
4	IC 410-286414/16	2.0	0.780204	10.0	1767884.0	0.390102	Y
5	IC 410-286414/17	5.0	2.002115	10.0	1816359.0	0.400423	Y
6	ICIS 410-286414/18	10.0	4.211867	10.0	1837007.0	0.421187	Y
7	IC 410-286414/19	25.0	10.865089	10.0	1887193.0	0.434604	Y





Calibration

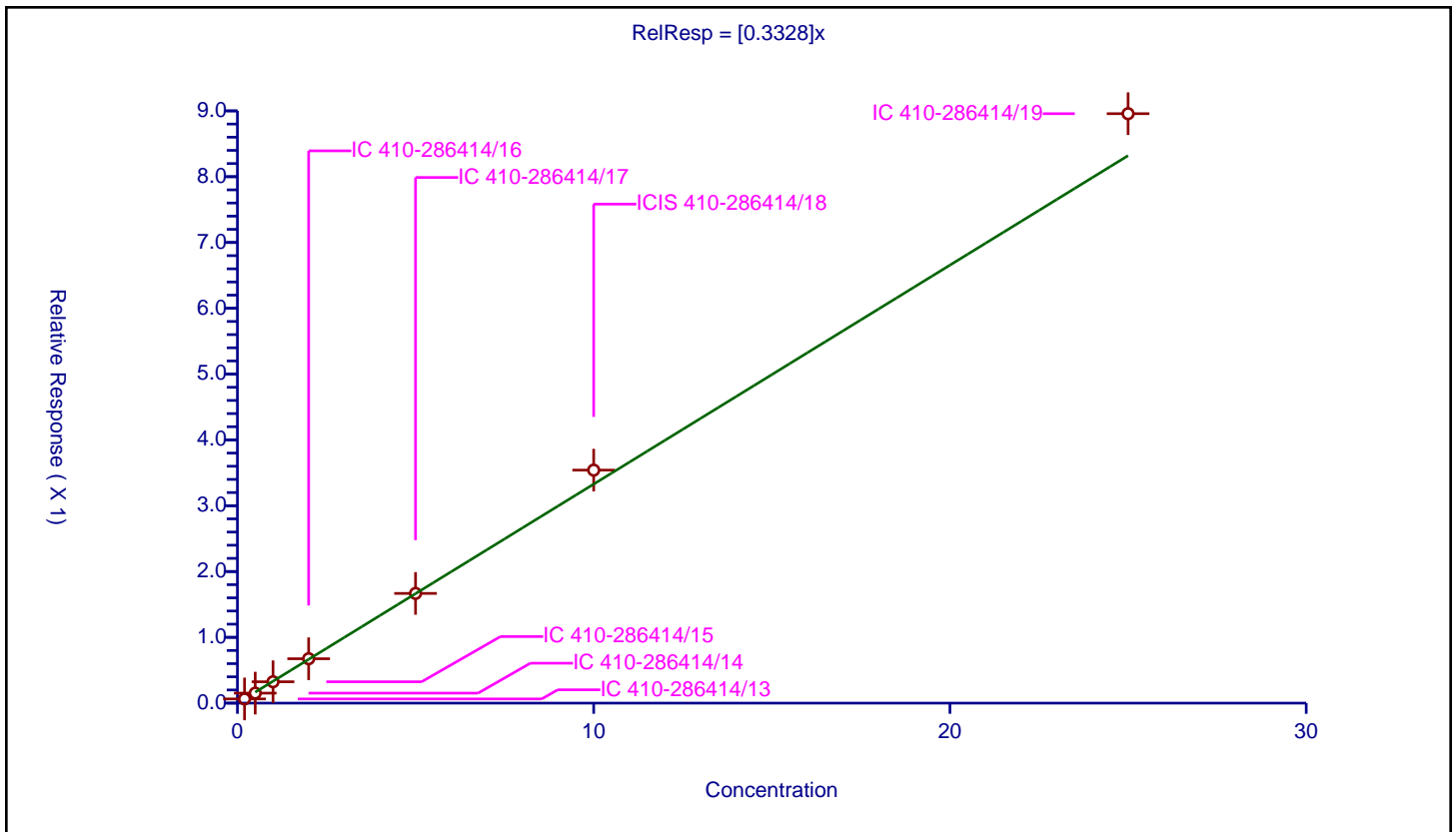
/ Ethyl methacrylate

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3328

Error Coefficients	
Standard Error:	752000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.06356	10.0	1741668.0	0.317799	Y
2	IC 410-286414/14	0.5	0.151962	10.0	1755239.0	0.303924	Y
3	IC 410-286414/15	1.0	0.32467	10.0	1766319.0	0.32467	Y
4	IC 410-286414/16	2.0	0.674671	10.0	1767884.0	0.337335	Y
5	IC 410-286414/17	5.0	1.667495	10.0	1816359.0	0.333499	Y
6	ICIS 410-286414/18	10.0	3.540966	10.0	1837007.0	0.354097	Y
7	IC 410-286414/19	25.0	8.957468	10.0	1887193.0	0.358299	Y



Calibration

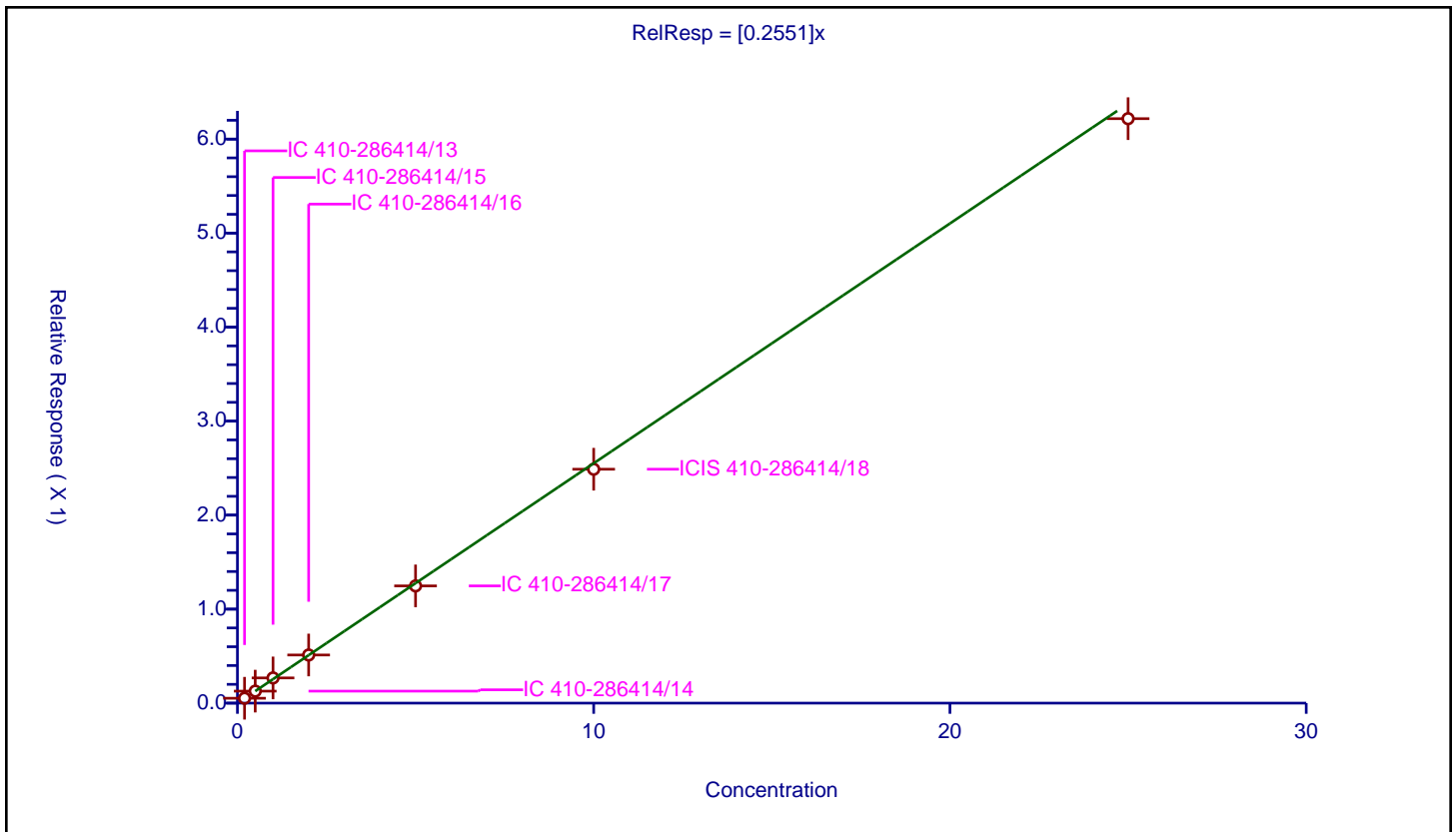
/ 1,1,2-Trichloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2551

Error Coefficients	
Standard Error:	524000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.051921	10.0	1741668.0	0.259607	Y
2	IC 410-286414/14	0.5	0.127538	10.0	1755239.0	0.255076	Y
3	IC 410-286414/15	1.0	0.268168	10.0	1766319.0	0.268168	Y
4	IC 410-286414/16	2.0	0.512058	10.0	1767884.0	0.256029	Y
5	IC 410-286414/17	5.0	1.246978	10.0	1816359.0	0.249396	Y
6	ICIS 410-286414/18	10.0	2.488151	10.0	1837007.0	0.248815	Y
7	IC 410-286414/19	25.0	6.217387	10.0	1887193.0	0.248695	Y



Calibration

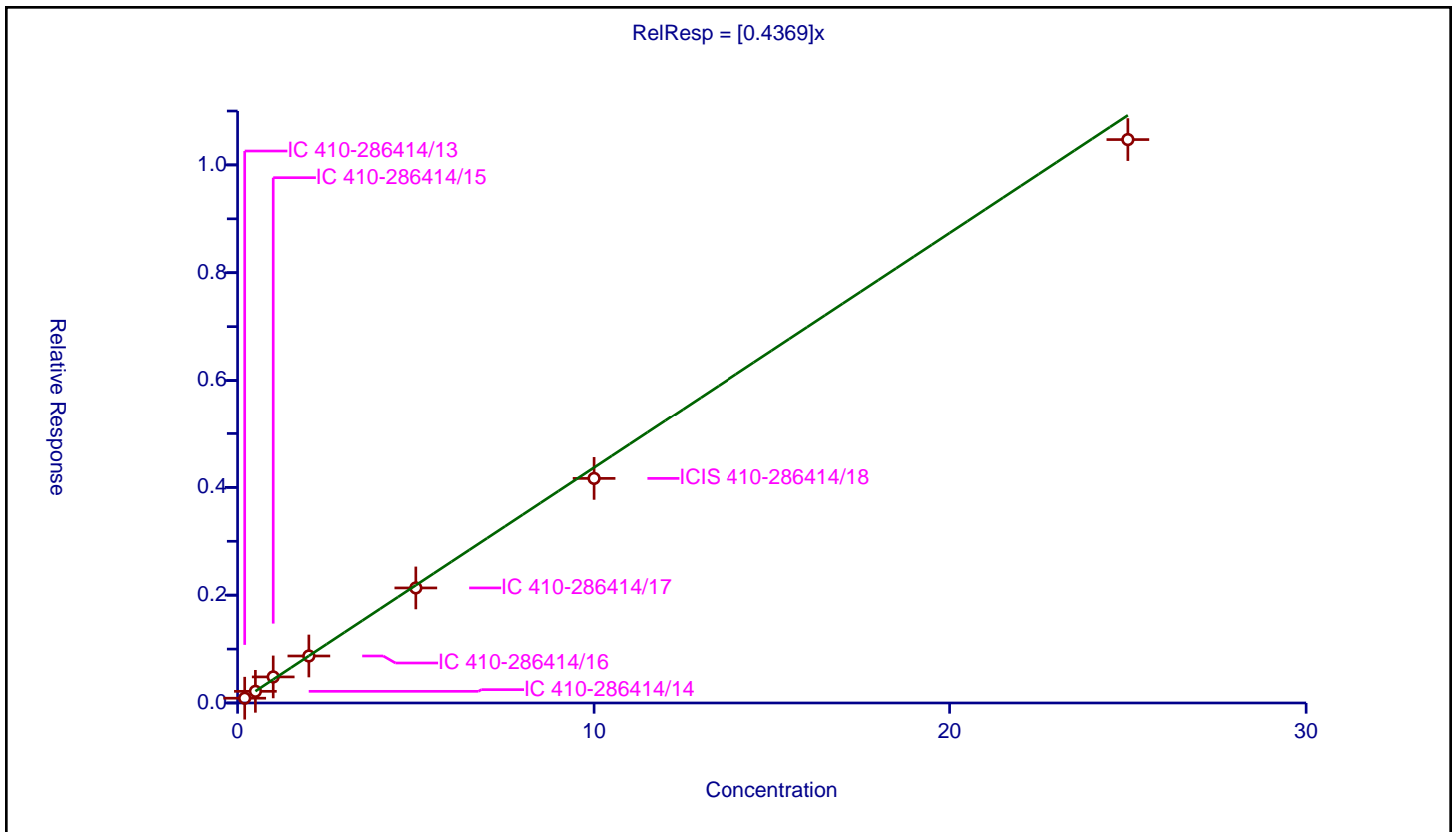
/ Tetrachloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4369

Error Coefficients	
Standard Error:	883000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.08872	10.0	1741668.0	0.443598	Y
2	IC 410-286414/14	0.5	0.216443	10.0	1755239.0	0.432887	Y
3	IC 410-286414/15	1.0	0.483322	10.0	1766319.0	0.483322	Y
4	IC 410-286414/16	2.0	0.871828	10.0	1767884.0	0.435914	Y
5	IC 410-286414/17	5.0	2.134369	10.0	1816359.0	0.426874	Y
6	ICIS 410-286414/18	10.0	4.166402	10.0	1837007.0	0.41664	Y
7	IC 410-286414/19	25.0	10.470164	10.0	1887193.0	0.418807	Y



Calibration

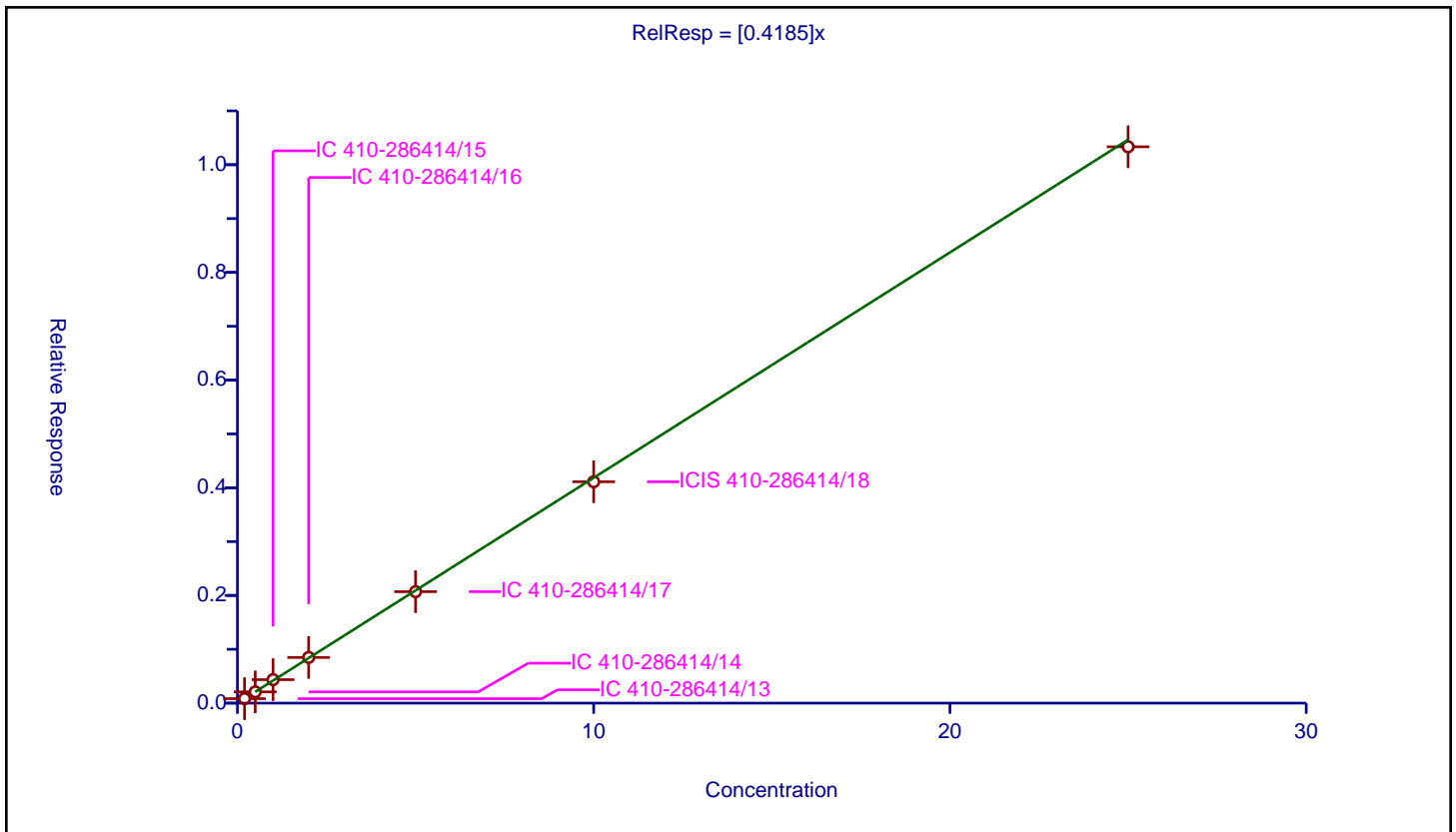
/ 1,3-Dichloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4185

Error Coefficients	
Standard Error:	870000
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.082679	10.0	1741668.0	0.413397	Y
2	IC 410-286414/14	0.5	0.208935	10.0	1755239.0	0.417869	Y
3	IC 410-286414/15	1.0	0.436071	10.0	1766319.0	0.436071	Y
4	IC 410-286414/16	2.0	0.847957	10.0	1767884.0	0.423979	Y
5	IC 410-286414/17	5.0	2.070053	10.0	1816359.0	0.414011	Y
6	ICIS 410-286414/18	10.0	4.111498	10.0	1837007.0	0.41115	Y
7	IC 410-286414/19	25.0	10.333246	10.0	1887193.0	0.41333	Y



Calibration

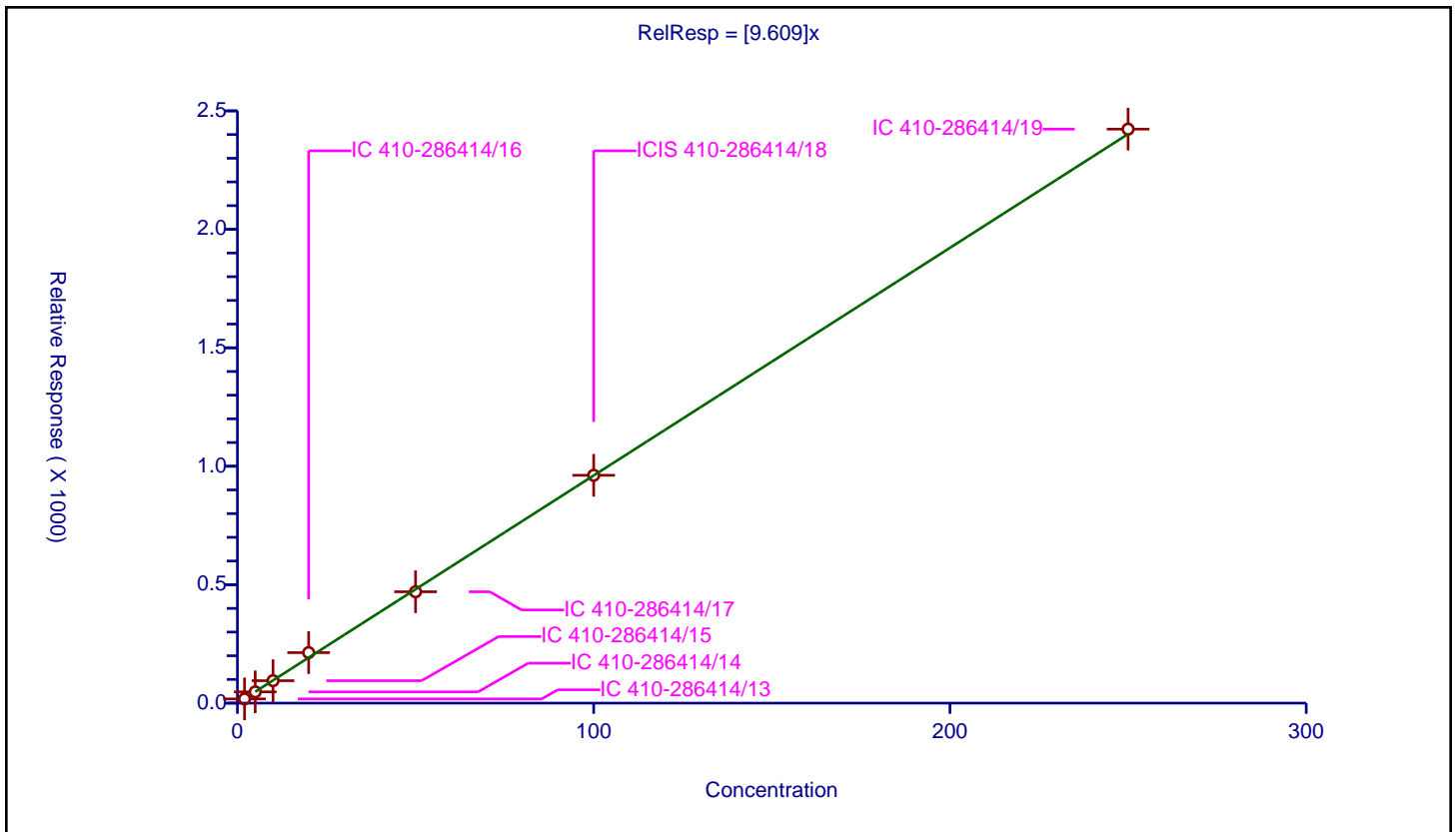
/ 2-Hexanone

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	9.609

Error Coefficients	
Standard Error:	3110000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	2.0	17.842769	50.0	133180.0	8.921385	Y
2	IC 410-286414/14	5.0	47.491351	50.0	128635.0	9.49827	Y
3	IC 410-286414/15	10.0	94.754752	50.0	136943.0	9.475475	Y
4	IC 410-286414/16	20.0	213.165942	50.0	124917.0	10.658297	Y
5	IC 410-286414/17	50.0	470.094628	50.0	141819.0	9.401893	Y
6	ICIS 410-286414/18	100.0	961.787047	50.0	142576.0	9.61787	Y
7	IC 410-286414/19	250.0	2422.942343	50.0	143695.0	9.691769	Y



Calibration

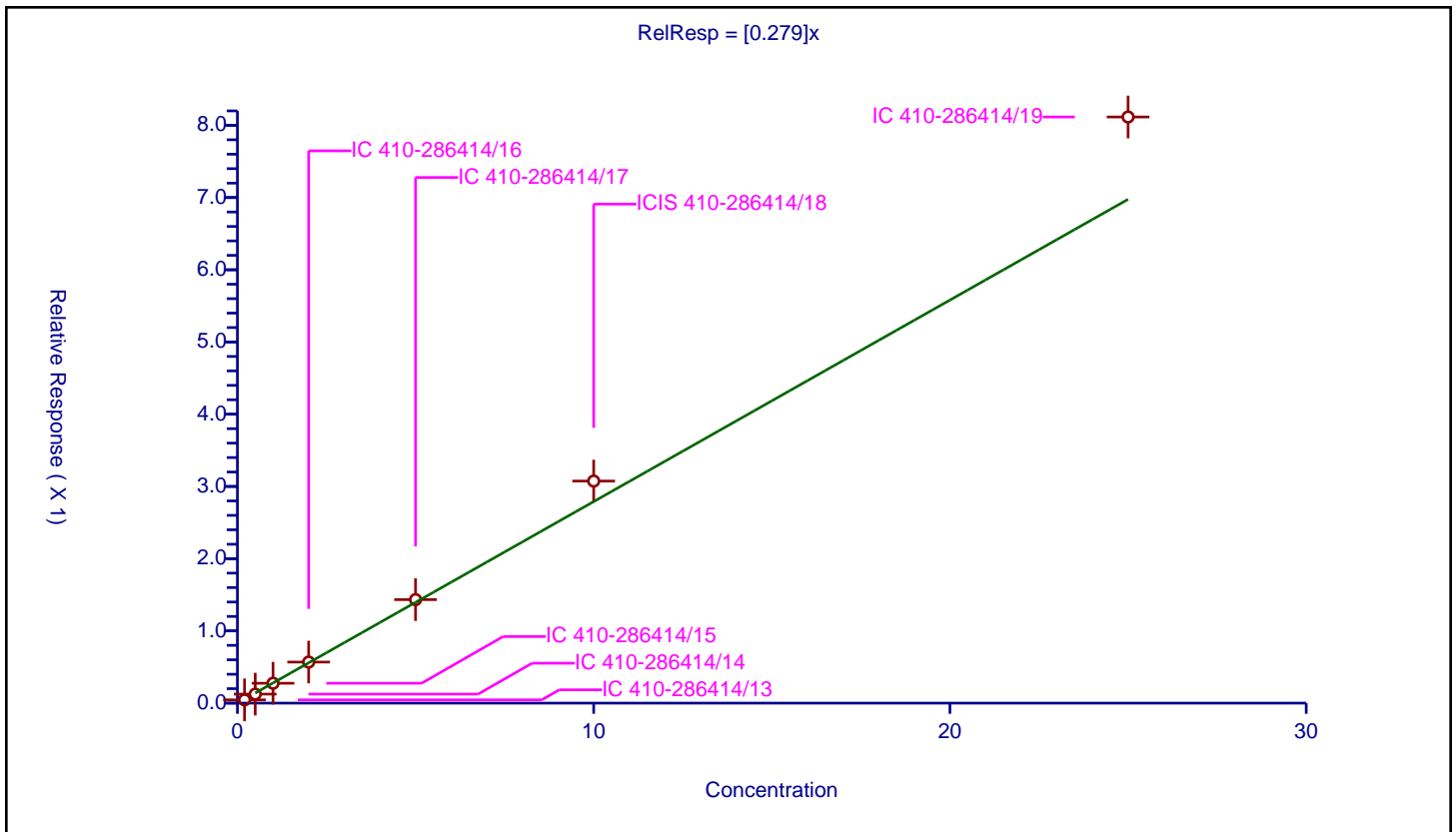
/ Chlorodibromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.279

Error Coefficients	
Standard Error:	676000
Relative Standard Error:	12.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.045164	10.0	1741668.0	0.225818	Y
2	IC 410-286414/14	0.5	0.124661	10.0	1755239.0	0.249322	Y
3	IC 410-286414/15	1.0	0.275233	10.0	1766319.0	0.275233	Y
4	IC 410-286414/16	2.0	0.568301	10.0	1767884.0	0.28415	Y
5	IC 410-286414/17	5.0	1.433224	10.0	1816359.0	0.286645	Y
6	ICIS 410-286414/18	10.0	3.074381	10.0	1837007.0	0.307438	Y
7	IC 410-286414/19	25.0	8.115635	10.0	1887193.0	0.324625	Y



Calibration

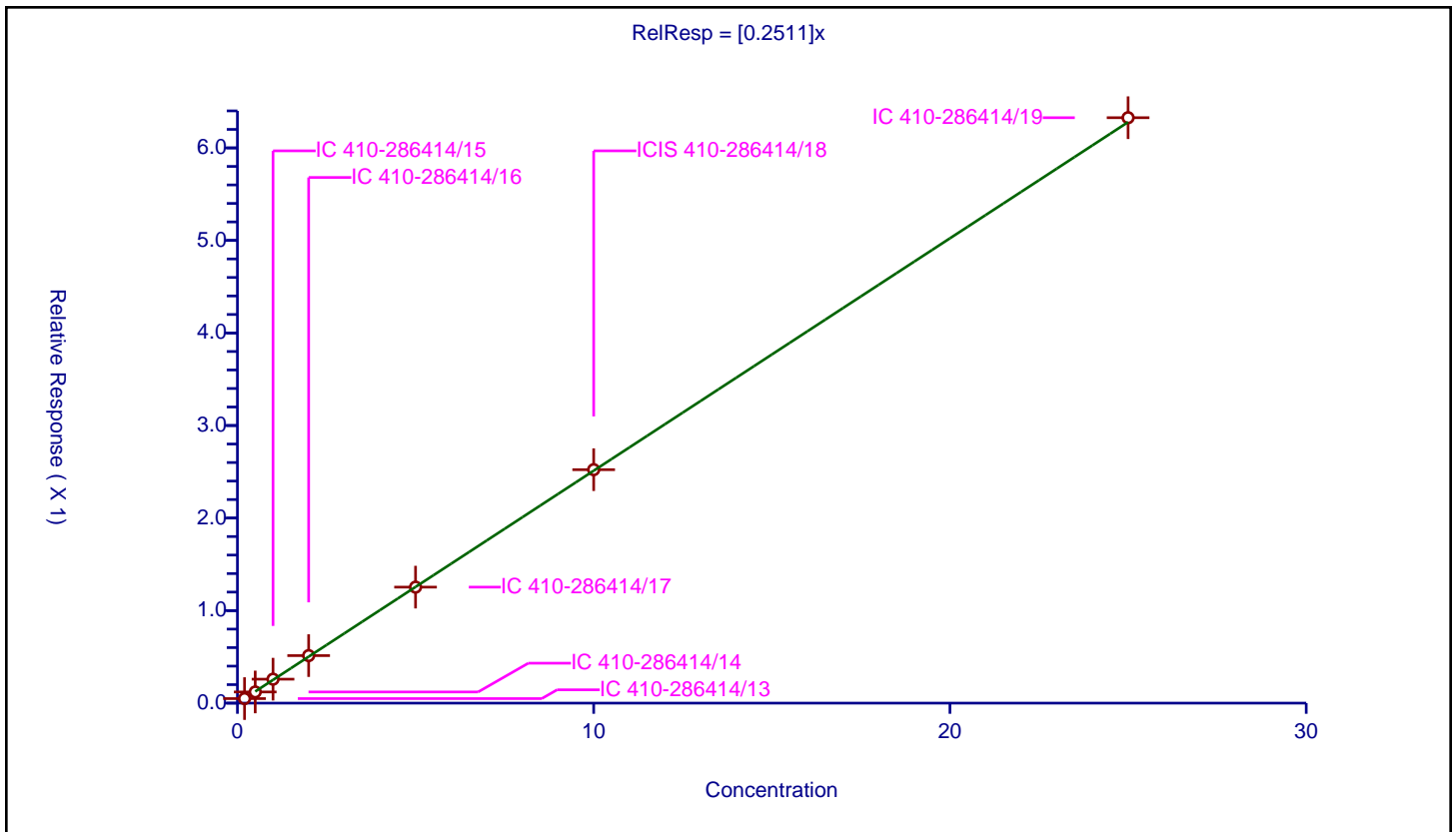
/ Ethylene Dibromide

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2511

Error Coefficients	
Standard Error:	533000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.048936	10.0	1741668.0	0.244679	Y
2	IC 410-286414/14	0.5	0.12085	10.0	1755239.0	0.241699	Y
3	IC 410-286414/15	1.0	0.258917	10.0	1766319.0	0.258917	Y
4	IC 410-286414/16	2.0	0.513467	10.0	1767884.0	0.256733	Y
5	IC 410-286414/17	5.0	1.253436	10.0	1816359.0	0.250687	Y
6	ICIS 410-286414/18	10.0	2.522718	10.0	1837007.0	0.252272	Y
7	IC 410-286414/19	25.0	6.326306	10.0	1887193.0	0.253052	Y



Calibration

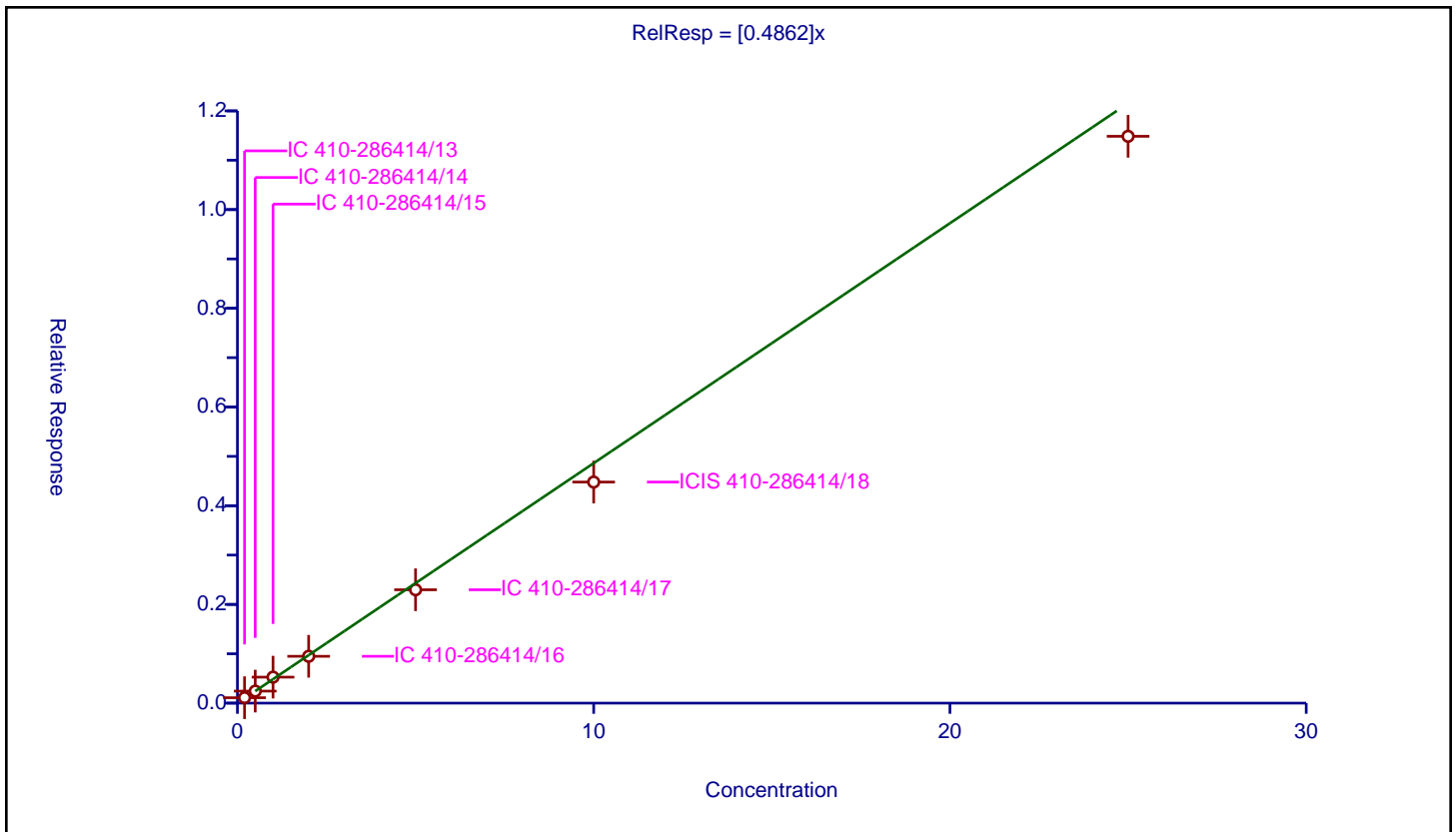
/ 1-Chlorohexane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4862

Error Coefficients	
Standard Error:	965000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.109803	10.0	1741668.0	0.549014	Y
2	IC 410-286414/14	0.5	0.243391	10.0	1755239.0	0.486783	Y
3	IC 410-286414/15	1.0	0.526219	10.0	1766319.0	0.526219	Y
4	IC 410-286414/16	2.0	0.948841	10.0	1767884.0	0.47442	Y
5	IC 410-286414/17	5.0	2.297046	10.0	1816359.0	0.459409	Y
6	ICIS 410-286414/18	10.0	4.47964	10.0	1837007.0	0.447964	Y
7	IC 410-286414/19	25.0	11.485312	10.0	1887193.0	0.459412	Y





Calibration

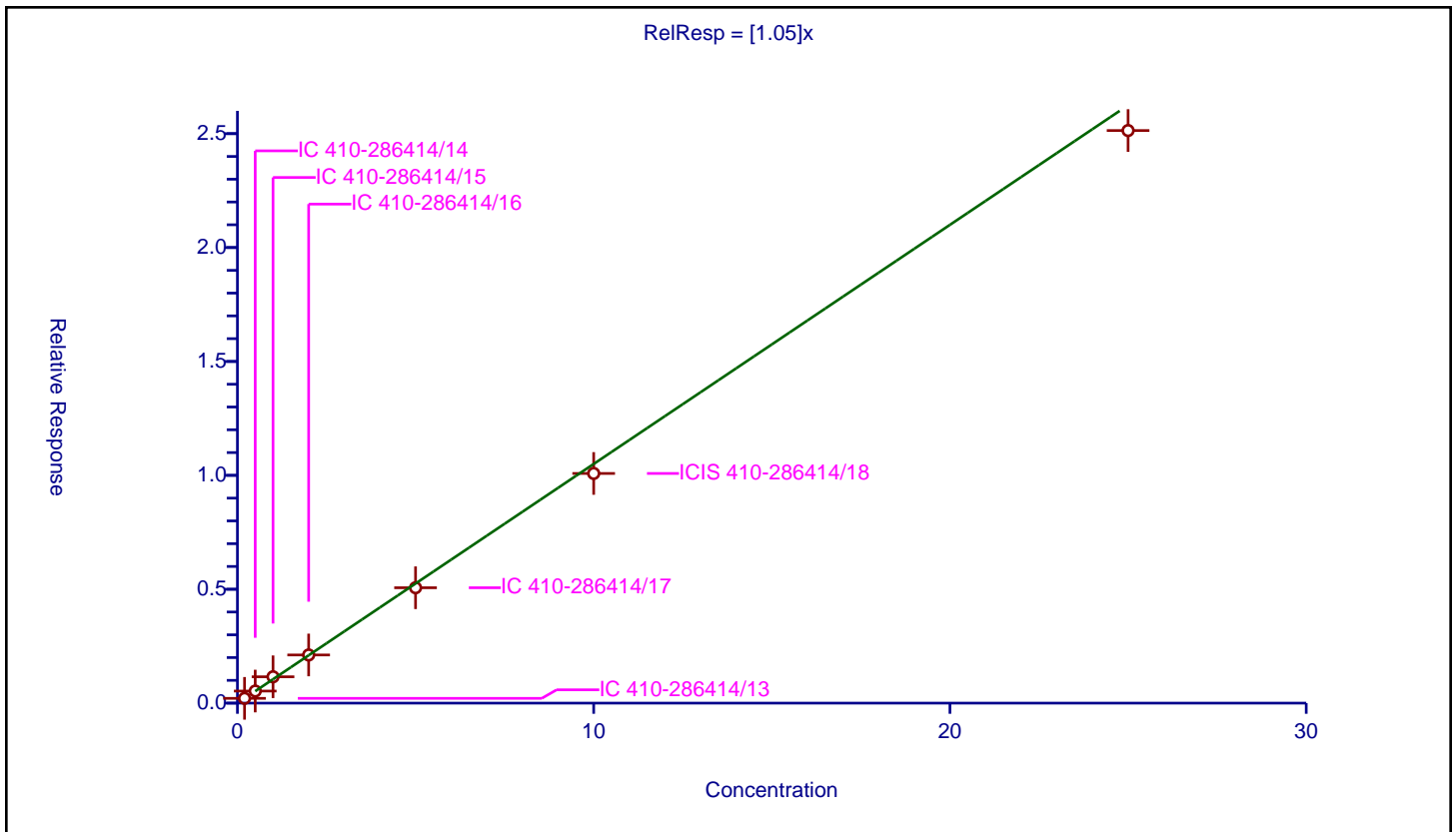
/ Chlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.05

Error Coefficients	
Standard Error:	2120000
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.20965	10.0	1741668.0	1.048248	Y
2	IC 410-286414/14	0.5	0.530036	10.0	1755239.0	1.060072	Y
3	IC 410-286414/15	1.0	1.156597	10.0	1766319.0	1.156597	Y
4	IC 410-286414/16	2.0	2.114698	10.0	1767884.0	1.057349	Y
5	IC 410-286414/17	5.0	5.066119	10.0	1816359.0	1.013224	Y
6	ICIS 410-286414/18	10.0	10.082722	10.0	1837007.0	1.008272	Y
7	IC 410-286414/19	25.0	25.136851	10.0	1887193.0	1.005474	Y



Calibration

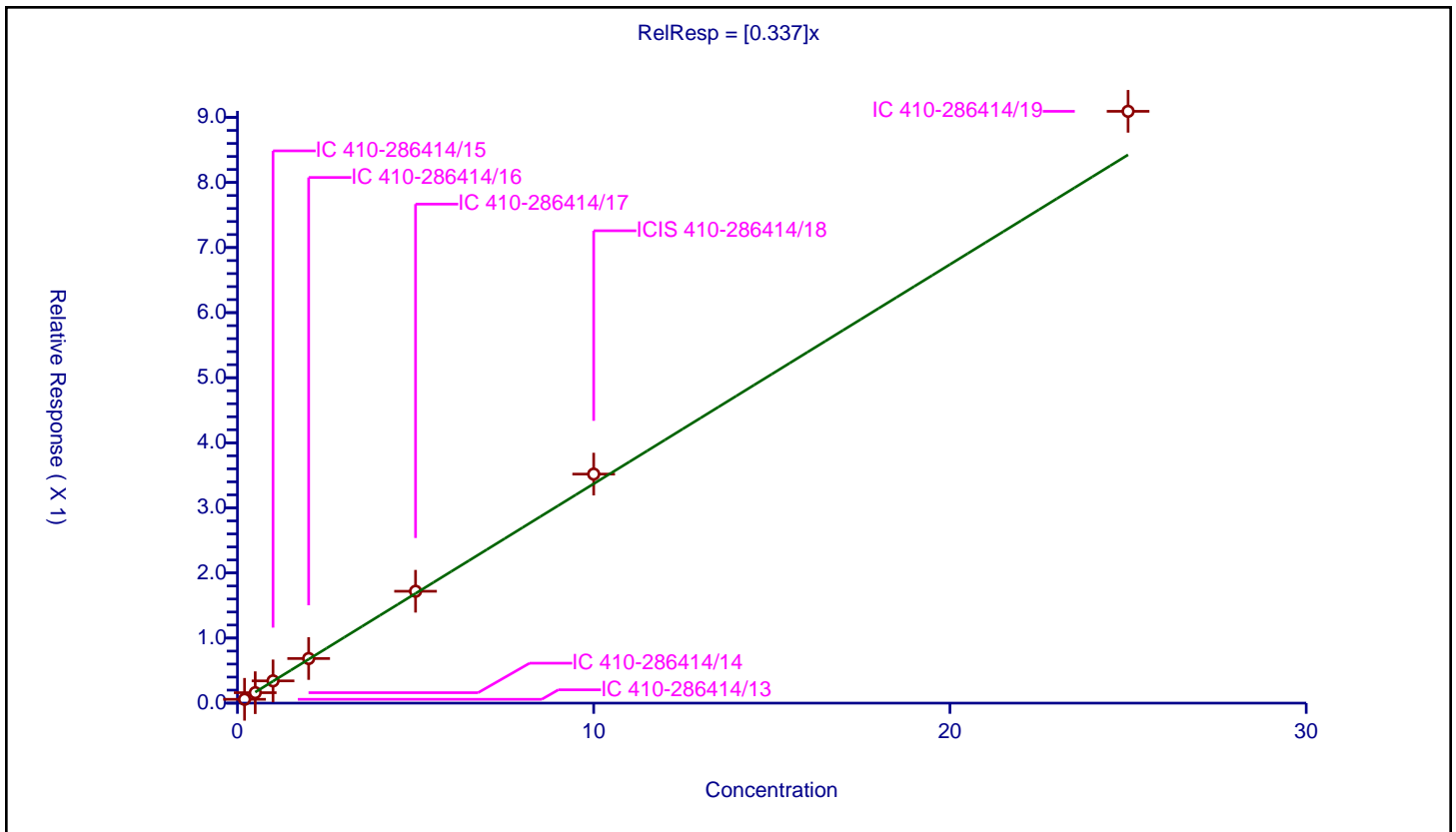
/ 1,1,1,2-Tetrachloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.337

Error Coefficients	
Standard Error:	762000
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.058766	10.0	1741668.0	0.293828	Y
2	IC 410-286414/14	0.5	0.160605	10.0	1755239.0	0.32121	Y
3	IC 410-286414/15	1.0	0.341943	10.0	1766319.0	0.341943	Y
4	IC 410-286414/16	2.0	0.685458	10.0	1767884.0	0.342729	Y
5	IC 410-286414/17	5.0	1.718807	10.0	1816359.0	0.343761	Y
6	ICIS 410-286414/18	10.0	3.519306	10.0	1837007.0	0.351931	Y
7	IC 410-286414/19	25.0	9.093251	10.0	1887193.0	0.36373	Y



Calibration

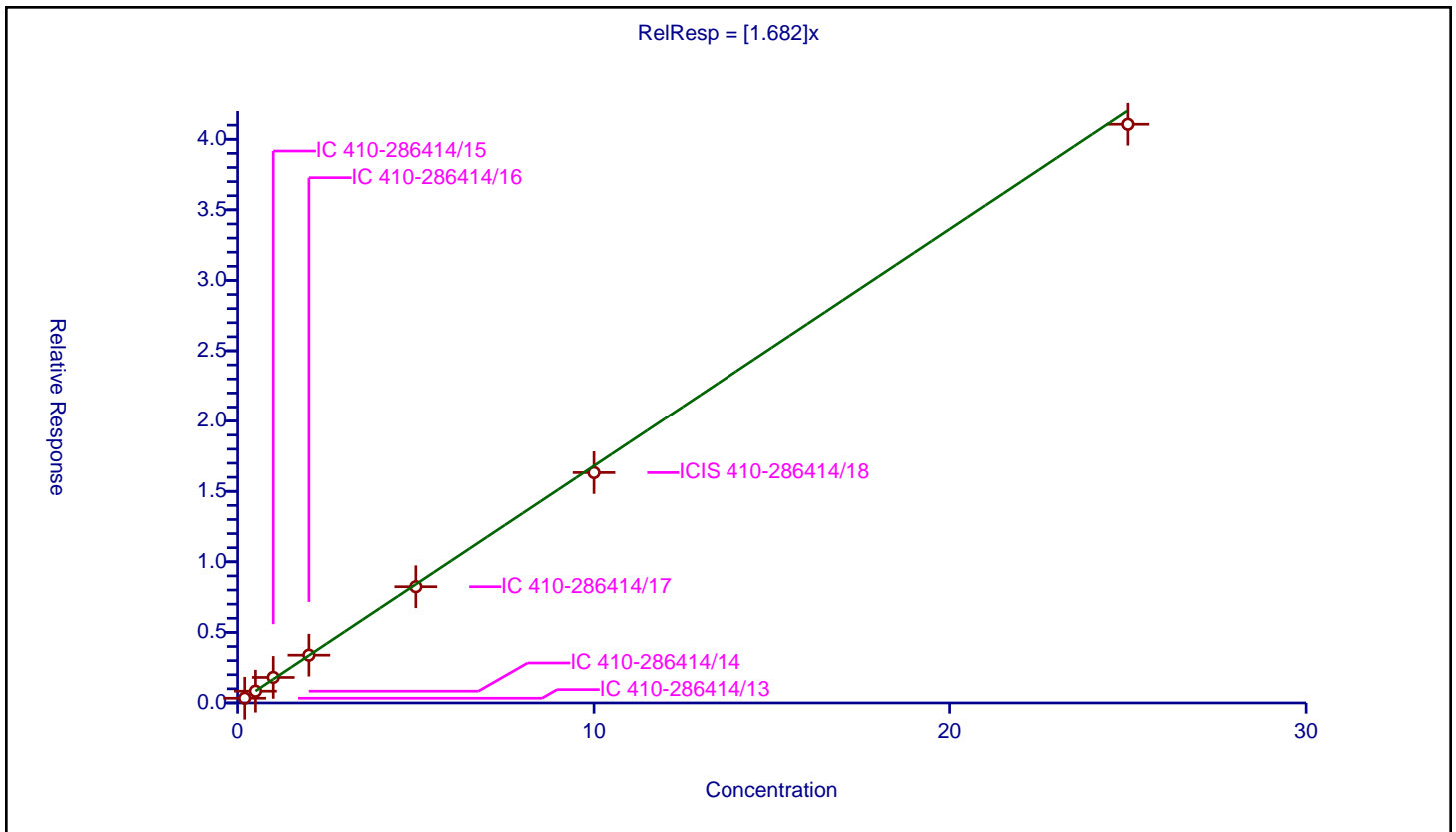
/ Ethylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.682

Error Coefficients	
Standard Error:	3460000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.335678	10.0	1741668.0	1.678391	Y
2	IC 410-286414/14	0.5	0.83351	10.0	1755239.0	1.667021	Y
3	IC 410-286414/15	1.0	1.809367	10.0	1766319.0	1.809367	Y
4	IC 410-286414/16	2.0	3.386342	10.0	1767884.0	1.693171	Y
5	IC 410-286414/17	5.0	8.236054	10.0	1816359.0	1.647211	Y
6	ICIS 410-286414/18	10.0	16.333623	10.0	1837007.0	1.633362	Y
7	IC 410-286414/19	25.0	41.065074	10.0	1887193.0	1.642603	Y



Calibration

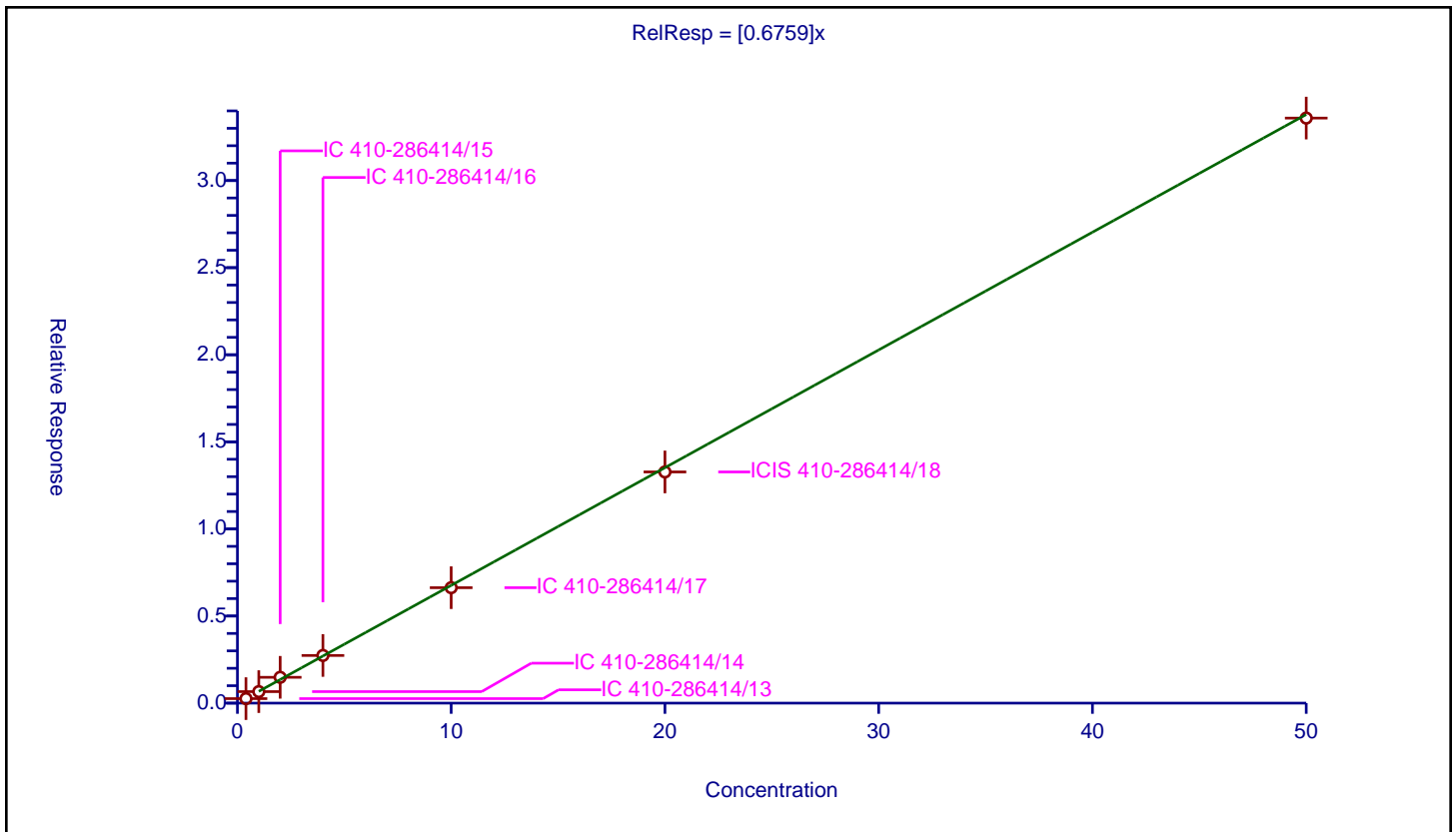
/ m-Xylene & p-Xylene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6759

Error Coefficients	
Standard Error:	2830000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.4	0.258752	10.0	1741668.0	0.64688	Y
2	IC 410-286414/14	1.0	0.660639	10.0	1755239.0	0.660639	Y
3	IC 410-286414/15	2.0	1.482303	10.0	1766319.0	0.741152	Y
4	IC 410-286414/16	4.0	2.736848	10.0	1767884.0	0.684212	Y
5	IC 410-286414/17	10.0	6.626763	10.0	1816359.0	0.662676	Y
6	ICIS 410-286414/18	20.0	13.272943	10.0	1837007.0	0.663647	Y
7	IC 410-286414/19	50.0	33.587429	10.0	1887193.0	0.671749	Y



Calibration

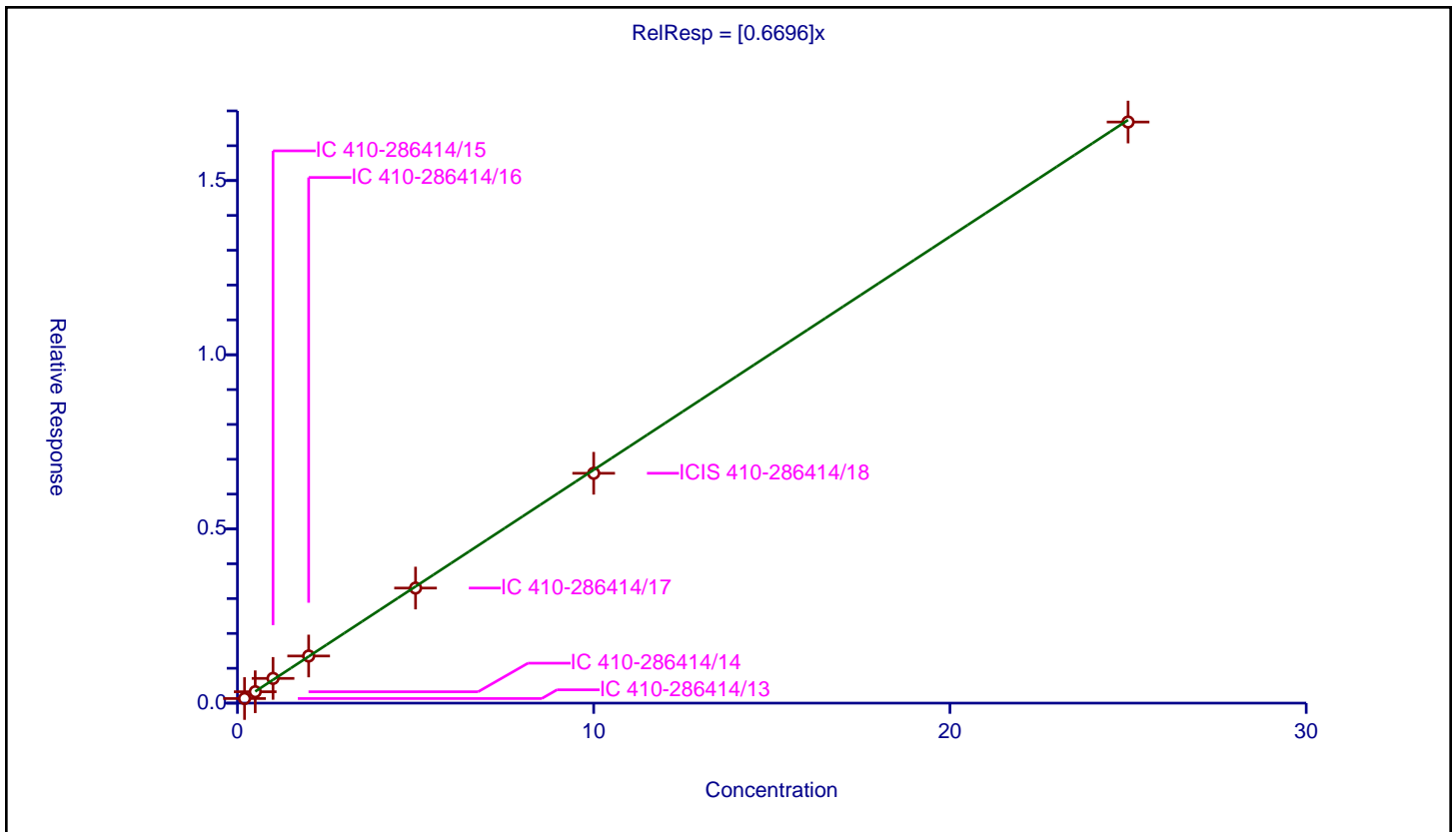
/ o-Xylene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6696

Error Coefficients	
Standard Error:	1400000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.131759	10.0	1741668.0	0.658794	Y
2	IC 410-286414/14	0.5	0.326975	10.0	1755239.0	0.653951	Y
3	IC 410-286414/15	1.0	0.710206	10.0	1766319.0	0.710206	Y
4	IC 410-286414/16	2.0	1.352623	10.0	1767884.0	0.676311	Y
5	IC 410-286414/17	5.0	3.303213	10.0	1816359.0	0.660643	Y
6	ICIS 410-286414/18	10.0	6.598315	10.0	1837007.0	0.659831	Y
7	IC 410-286414/19	25.0	16.680064	10.0	1887193.0	0.667203	Y



Calibration

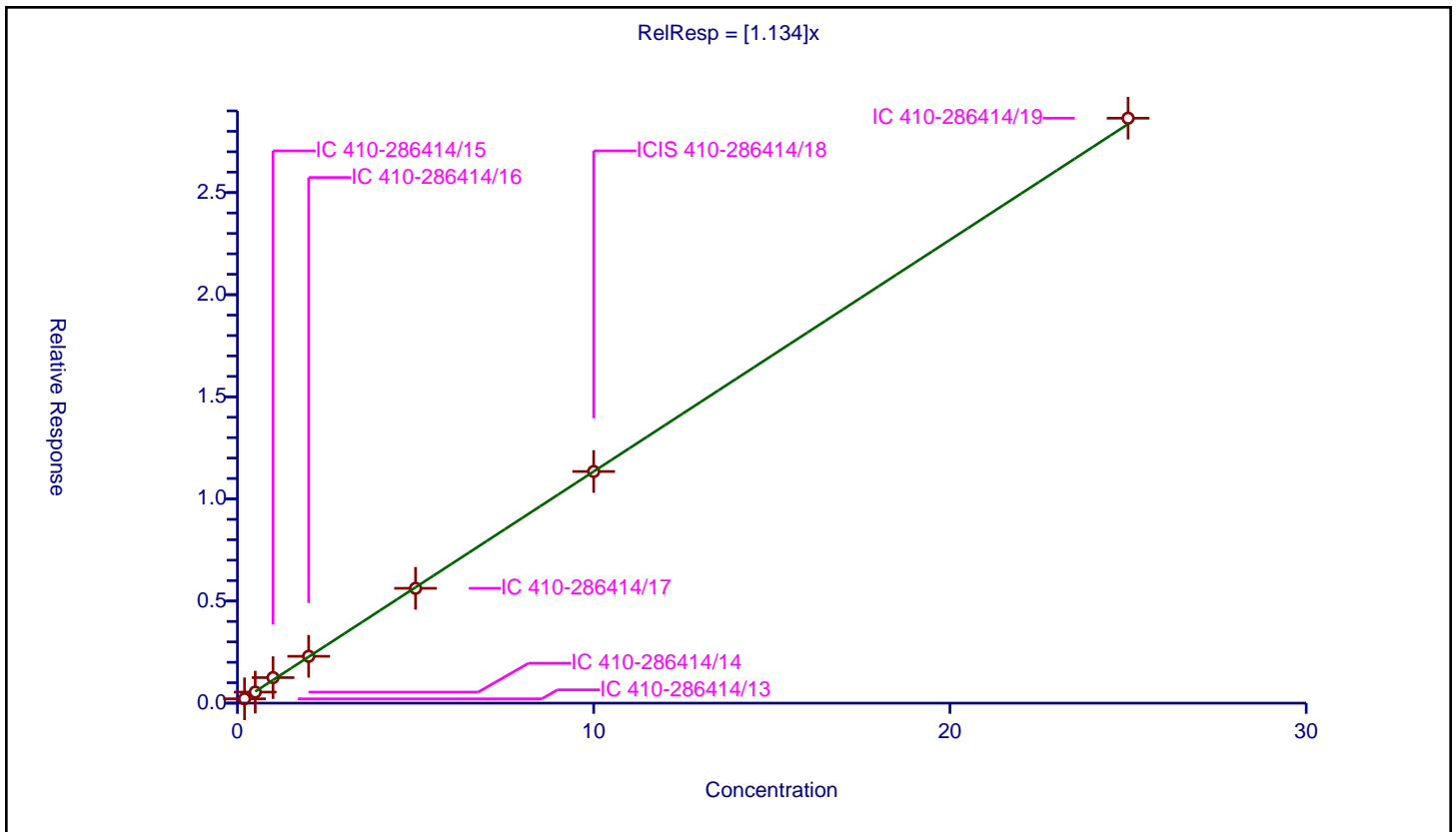
/ Styrene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.134

Error Coefficients	
Standard Error:	2410000
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.211366	10.0	1741668.0	1.056832	Y
2	IC 410-286414/14	0.5	0.540901	10.0	1755239.0	1.081801	Y
3	IC 410-286414/15	1.0	1.249797	10.0	1766319.0	1.249797	Y
4	IC 410-286414/16	2.0	2.293058	10.0	1767884.0	1.146529	Y
5	IC 410-286414/17	5.0	5.622782	10.0	1816359.0	1.124556	Y
6	ICIS 410-286414/18	10.0	11.342641	10.0	1837007.0	1.134264	Y
7	IC 410-286414/19	25.0	28.642561	10.0	1887193.0	1.145702	Y



Calibration

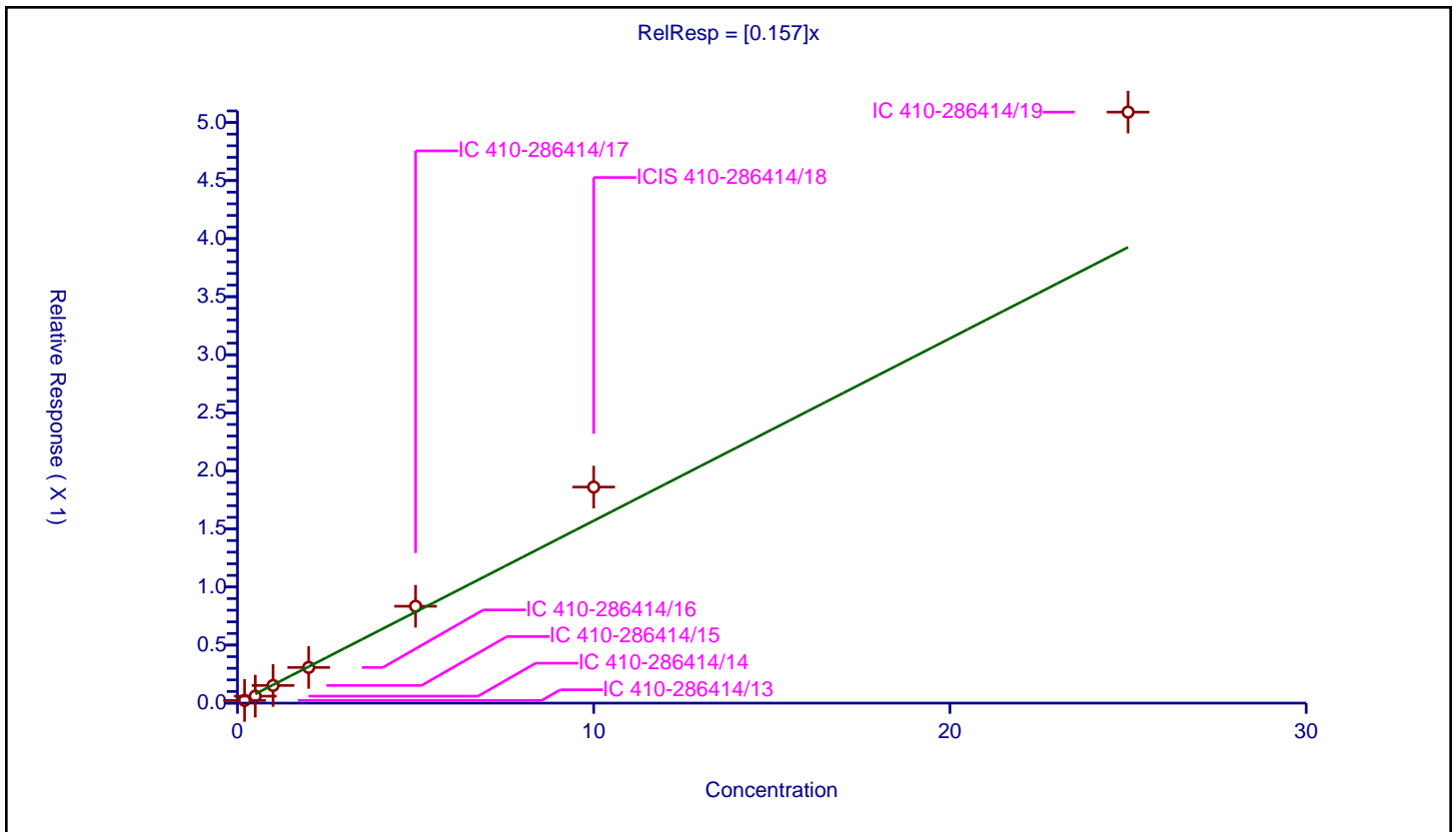
/ Bromoform

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.157

Error Coefficients	
Standard Error:	422000
Relative Standard Error:	20.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.956

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.023391	10.0	1741668.0	0.116957	Y
2	IC 410-286414/14	0.5	0.059946	10.0	1755239.0	0.119893	Y
3	IC 410-286414/15	1.0	0.152288	10.0	1766319.0	0.152288	Y
4	IC 410-286414/16	2.0	0.307266	10.0	1767884.0	0.153633	Y
5	IC 410-286414/17	5.0	0.834213	10.0	1816359.0	0.166843	Y
6	ICIS 410-286414/18	10.0	1.860586	10.0	1837007.0	0.186059	Y
7	IC 410-286414/19	25.0	5.089729	10.0	1887193.0	0.203589	Y



Calibration

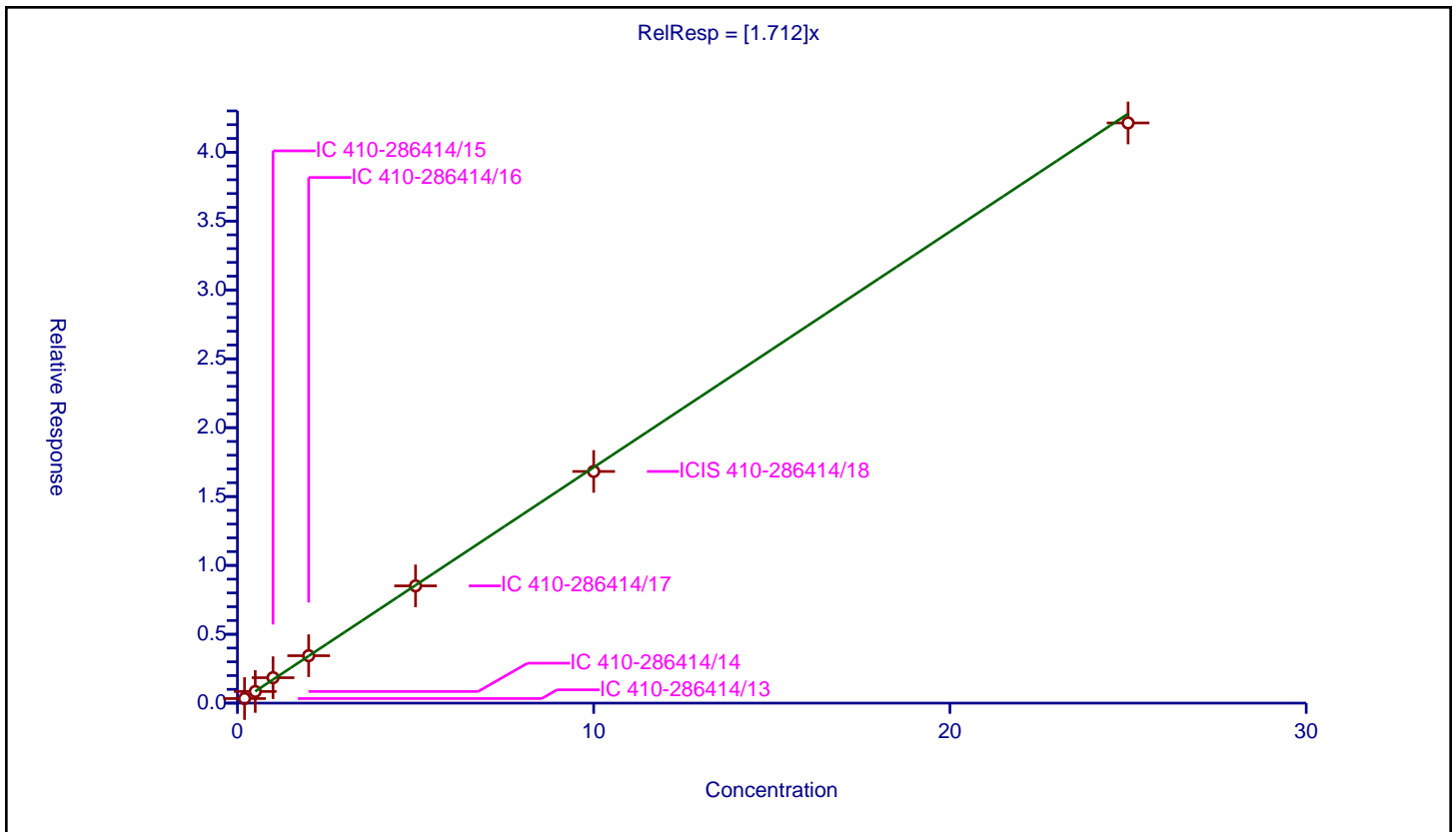
/ Isopropylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.712

Error Coefficients	
Standard Error:	3550000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.331056	10.0	1741668.0	1.655281	Y
2	IC 410-286414/14	0.5	0.845036	10.0	1755239.0	1.690072	Y
3	IC 410-286414/15	1.0	1.845901	10.0	1766319.0	1.845901	Y
4	IC 410-286414/16	2.0	3.44306	10.0	1767884.0	1.72153	Y
5	IC 410-286414/17	5.0	8.512811	10.0	1816359.0	1.702562	Y
6	ICIS 410-286414/18	10.0	16.820322	10.0	1837007.0	1.682032	Y
7	IC 410-286414/19	25.0	42.125411	10.0	1887193.0	1.685016	Y





**Calibration**

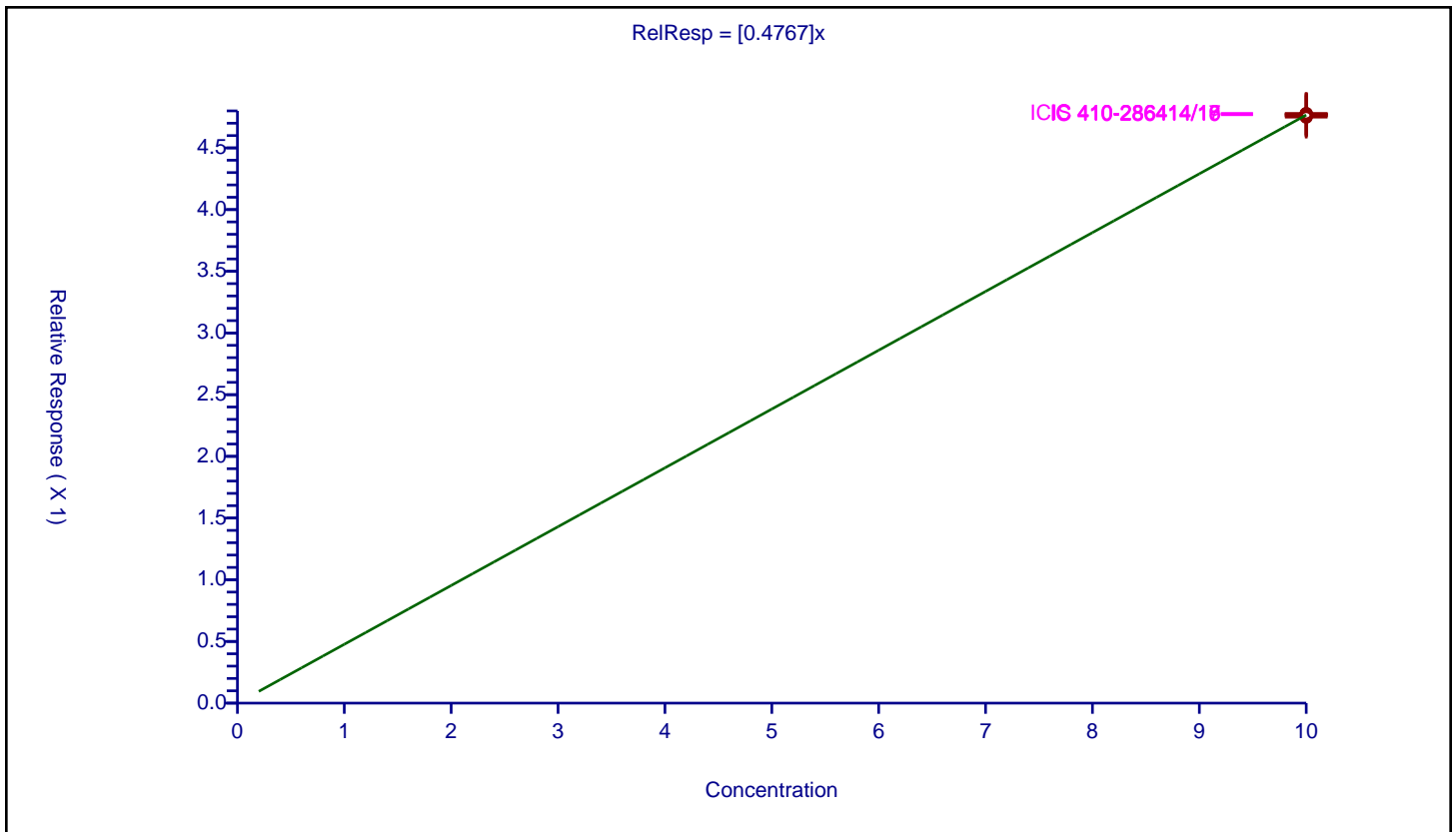
/ 4-Bromofluorobenzene (Surr)

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4767

Error Coefficients	
Standard Error:	925000
Relative Standard Error:	0.2
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	10.0	4.749436	10.0	1741668.0	0.474944	Y
2	IC 410-286414/14	10.0	4.762468	10.0	1755239.0	0.476247	Y
3	IC 410-286414/15	10.0	4.758942	10.0	1766319.0	0.475894	Y
4	IC 410-286414/16	10.0	4.77688	10.0	1767884.0	0.477688	Y
5	IC 410-286414/17	10.0	4.77785	10.0	1816359.0	0.477785	Y
6	ICIS 410-286414/18	10.0	4.772921	10.0	1837007.0	0.477292	Y
7	IC 410-286414/19	10.0	4.768818	10.0	1887193.0	0.476882	Y



Calibration

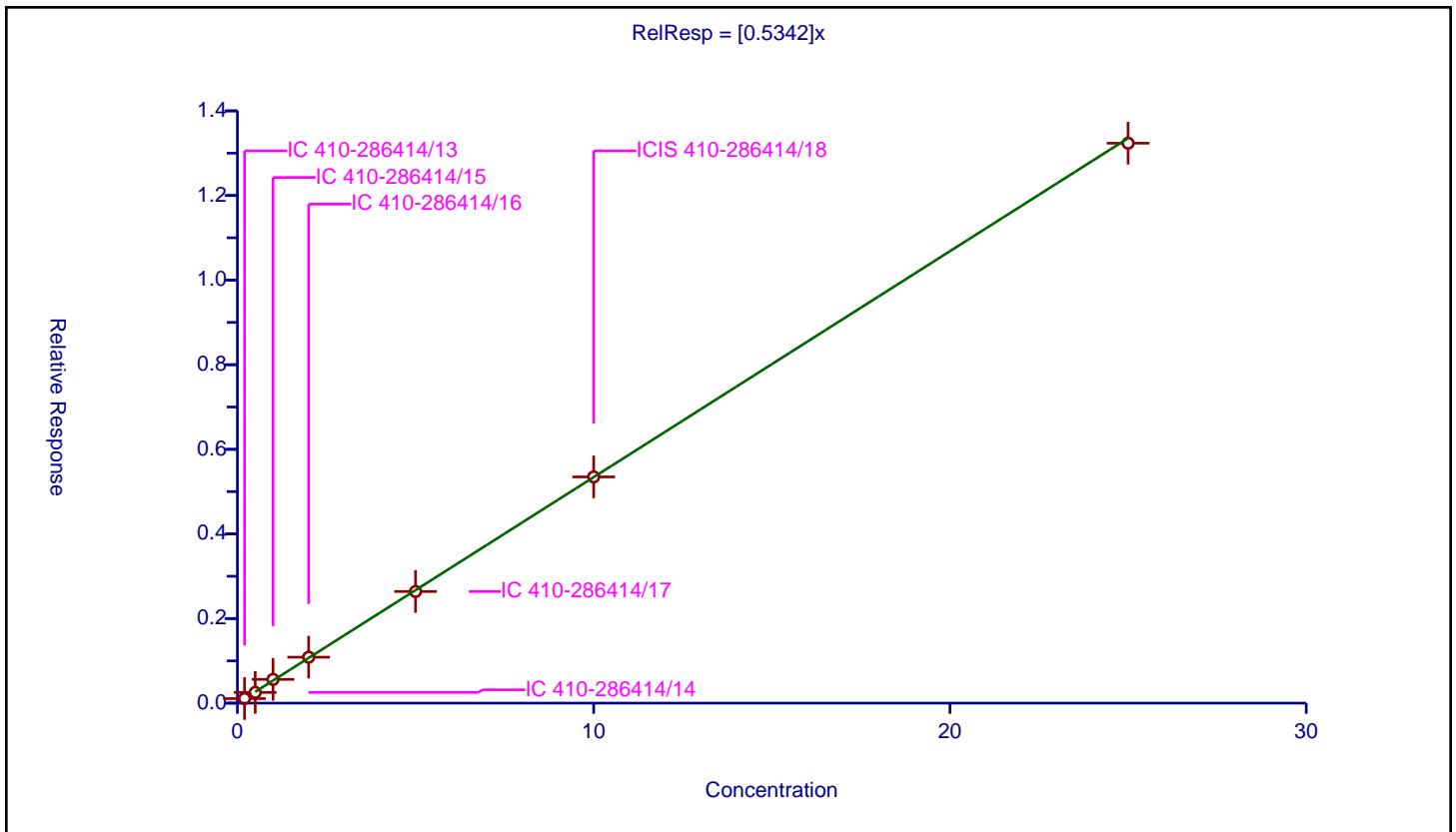
/ 1,1,2,2-Tetrachloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5342

Error Coefficients	
Standard Error:	672000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.107247	10.0	1033318.0	0.536234	Y
2	IC 410-286414/14	0.5	0.25338	10.0	1047319.0	0.506761	Y
3	IC 410-286414/15	1.0	0.561163	10.0	1050836.0	0.561163	Y
4	IC 410-286414/16	2.0	1.085771	10.0	1056705.0	0.542886	Y
5	IC 410-286414/17	5.0	2.638885	10.0	1075545.0	0.527777	Y
6	ICIS 410-286414/18	10.0	5.347917	10.0	1096296.0	0.534792	Y
7	IC 410-286414/19	25.0	13.236061	10.0	1138282.0	0.529442	Y



Calibration

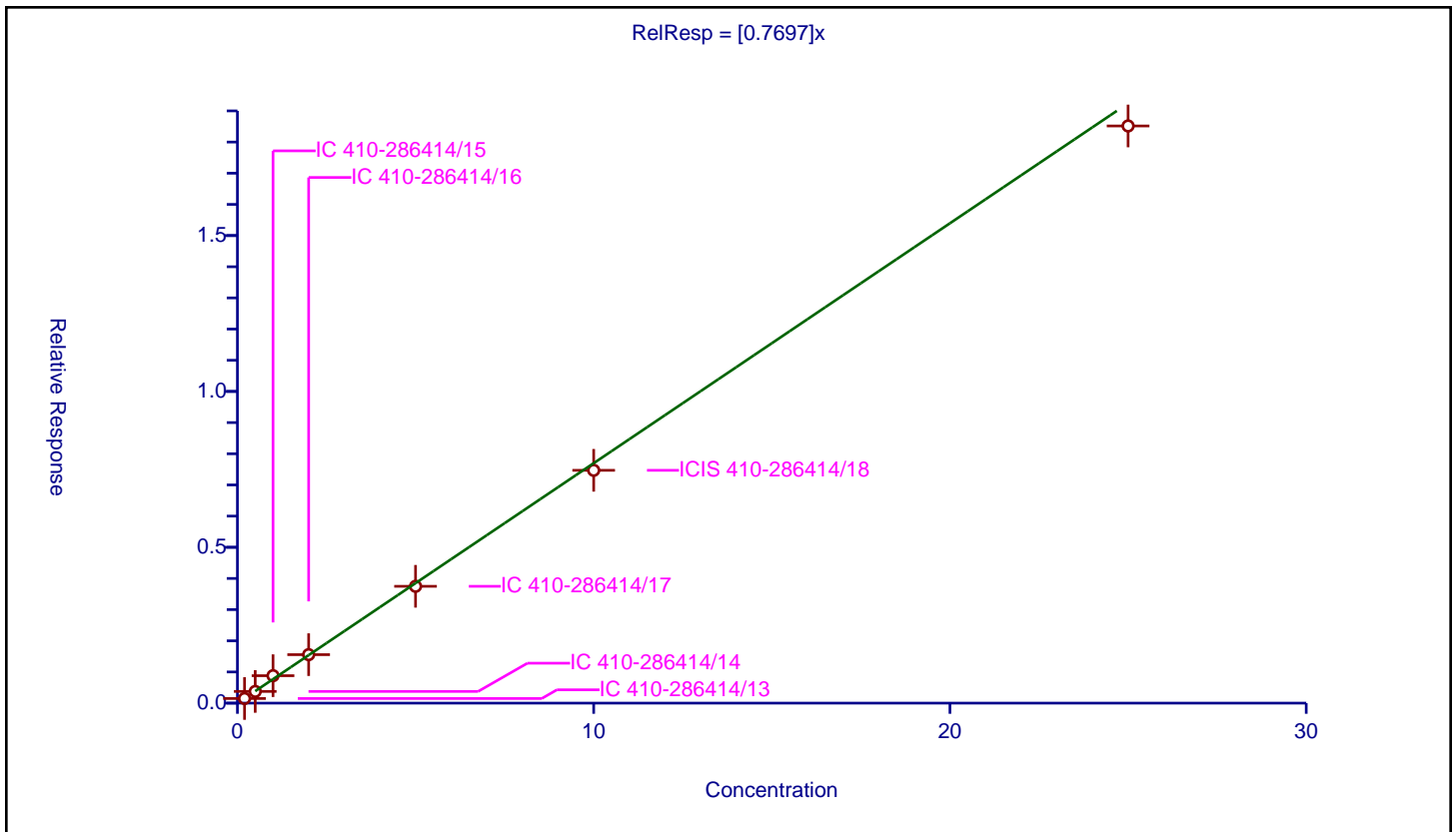
/ Bromobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7697

Error Coefficients	
Standard Error:	941000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.148434	10.0	1033318.0	0.742172	Y
2	IC 410-286414/14	0.5	0.375378	10.0	1047319.0	0.750755	Y
3	IC 410-286414/15	1.0	0.880109	10.0	1050836.0	0.880109	Y
4	IC 410-286414/16	2.0	1.555931	10.0	1056705.0	0.777965	Y
5	IC 410-286414/17	5.0	3.747886	10.0	1075545.0	0.749577	Y
6	ICIS 410-286414/18	10.0	7.468831	10.0	1096296.0	0.746883	Y
7	IC 410-286414/19	25.0	18.516361	10.0	1138282.0	0.740654	Y



Calibration

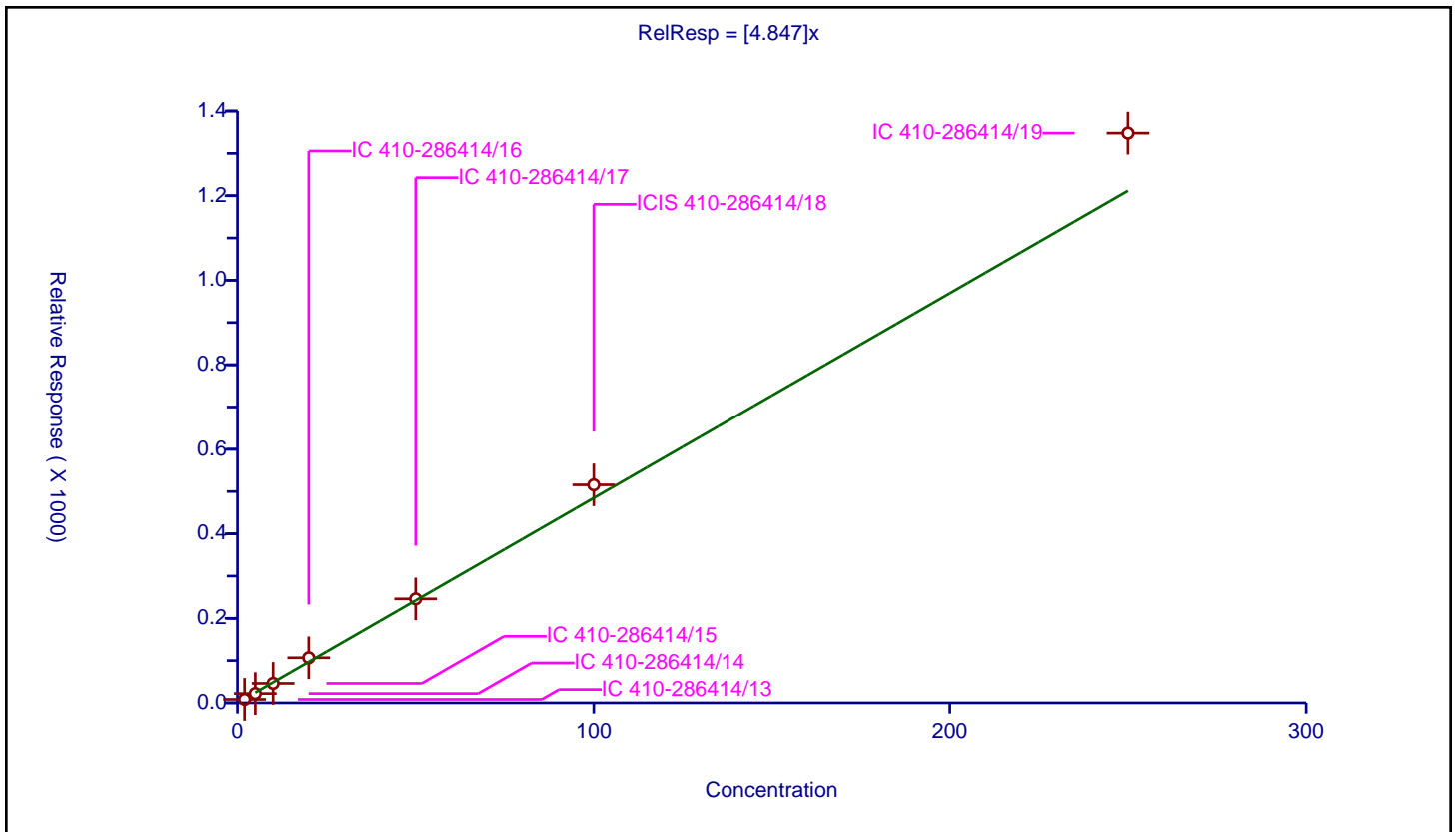
/ trans-1,4-Dichloro-2-butene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.847

Error Coefficients	
Standard Error:	1720000
Relative Standard Error:	10.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	2.0	8.218576	50.0	133180.0	4.109288	Y
2	IC 410-286414/14	5.0	22.05193	50.0	128635.0	4.410386	Y
3	IC 410-286414/15	10.0	46.034847	50.0	136943.0	4.603485	Y
4	IC 410-286414/16	20.0	106.691243	50.0	124917.0	5.334562	Y
5	IC 410-286414/17	50.0	246.023452	50.0	141819.0	4.920469	Y
6	ICIS 410-286414/18	100.0	515.768432	50.0	142576.0	5.157684	Y
7	IC 410-286414/19	250.0	1347.796374	50.0	143695.0	5.391185	Y



Calibration

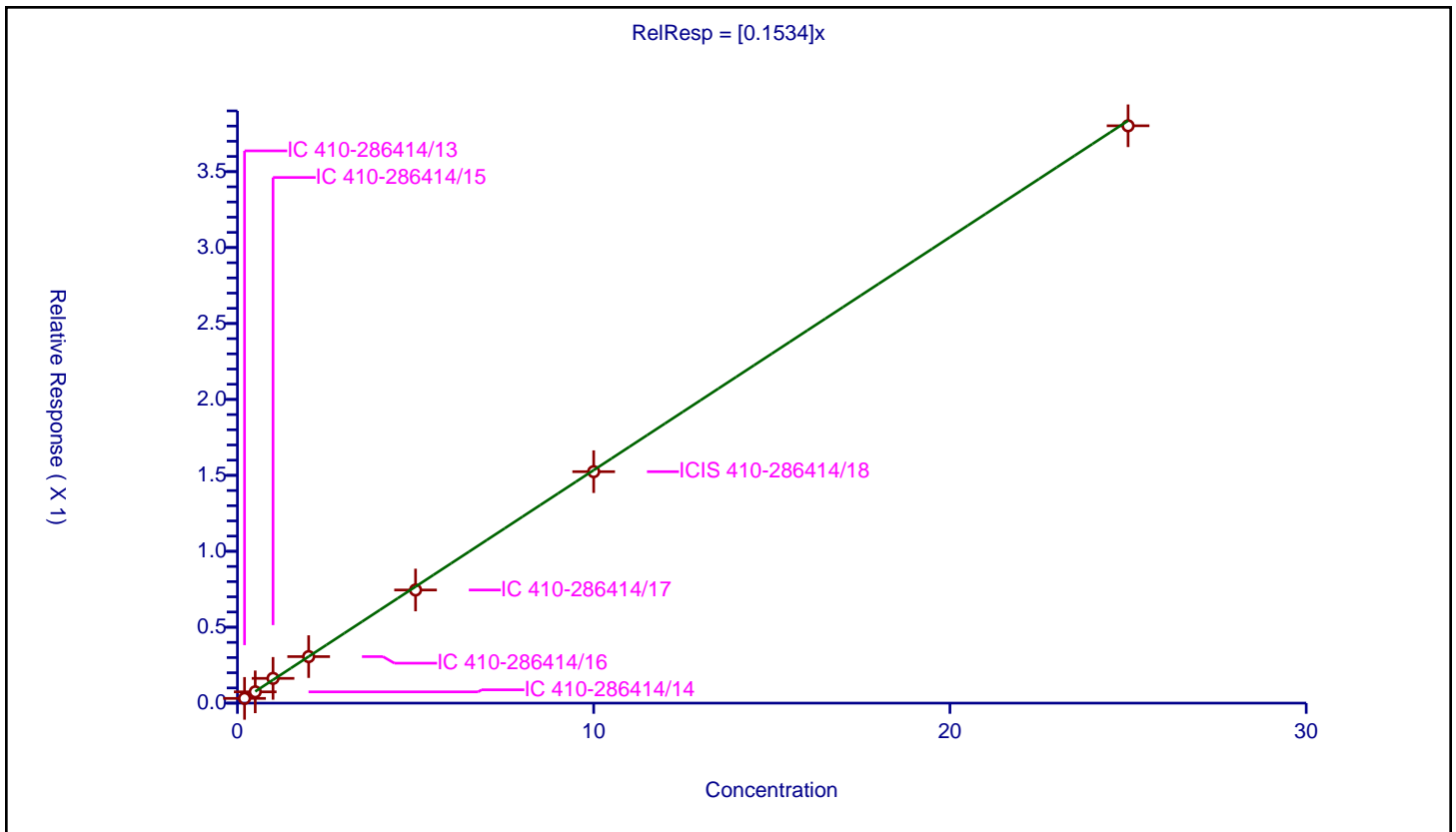
/ 1,2,3-Trichloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1534

Error Coefficients	
Standard Error:	193000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.031133	10.0	1033318.0	0.155664	Y
2	IC 410-286414/14	0.5	0.074294	10.0	1047319.0	0.148589	Y
3	IC 410-286414/15	1.0	0.163042	10.0	1050836.0	0.163042	Y
4	IC 410-286414/16	2.0	0.306292	10.0	1056705.0	0.153146	Y
5	IC 410-286414/17	5.0	0.745027	10.0	1075545.0	0.149005	Y
6	ICIS 410-286414/18	10.0	1.524214	10.0	1096296.0	0.152421	Y
7	IC 410-286414/19	25.0	3.80187	10.0	1138282.0	0.152075	Y



Calibration

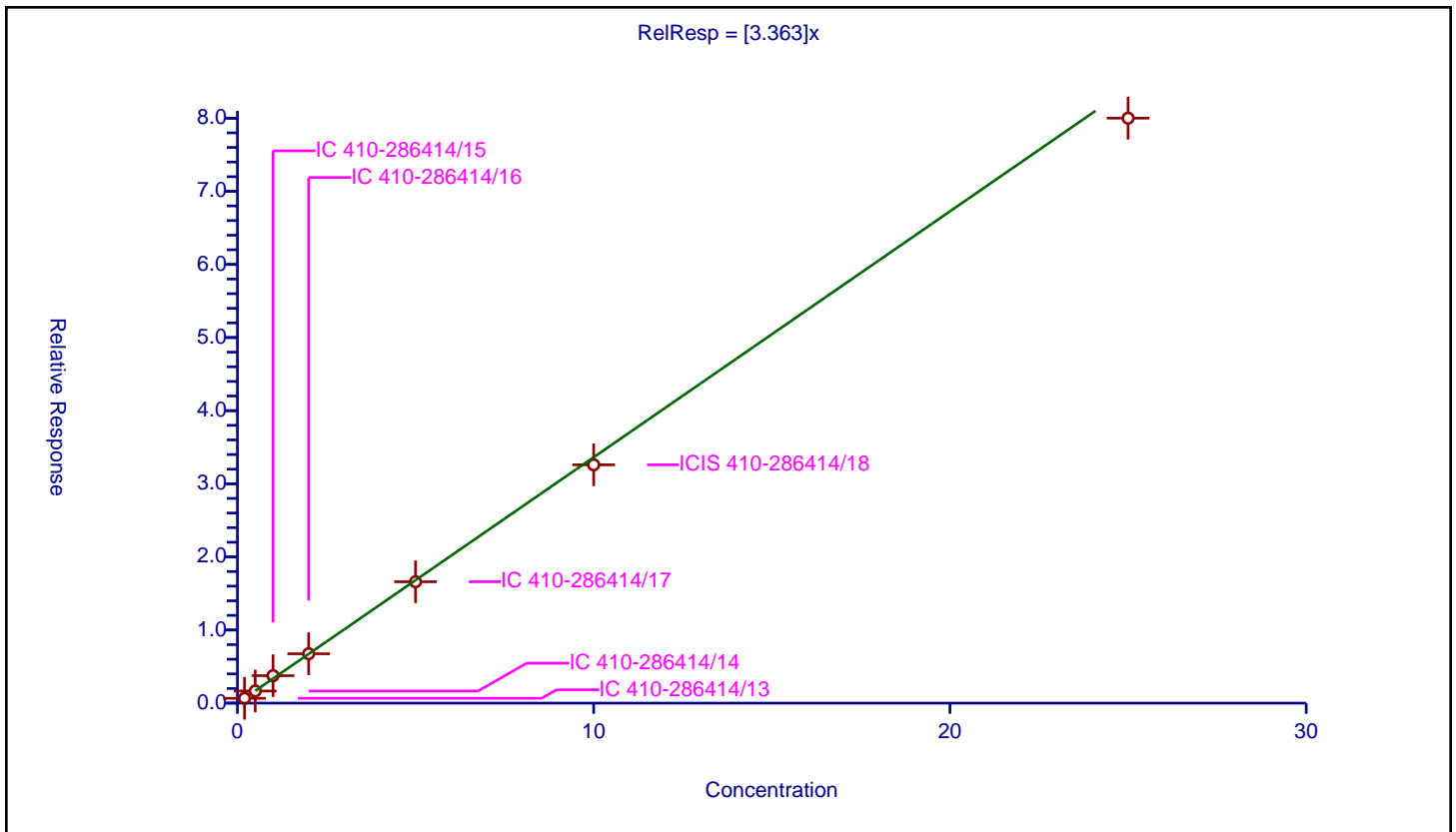
/ N-Propylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.363

Error Coefficients	
Standard Error:	4070000
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.662671	10.0	1033318.0	3.313356	Y
2	IC 410-286414/14	0.5	1.658473	10.0	1047319.0	3.316945	Y
3	IC 410-286414/15	1.0	3.755315	10.0	1050836.0	3.755315	Y
4	IC 410-286414/16	2.0	6.749897	10.0	1056705.0	3.374949	Y
5	IC 410-286414/17	5.0	16.602978	10.0	1075545.0	3.320596	Y
6	ICIS 410-286414/18	10.0	32.594655	10.0	1096296.0	3.259466	Y
7	IC 410-286414/19	25.0	80.00427	10.0	1138282.0	3.200171	Y



Calibration

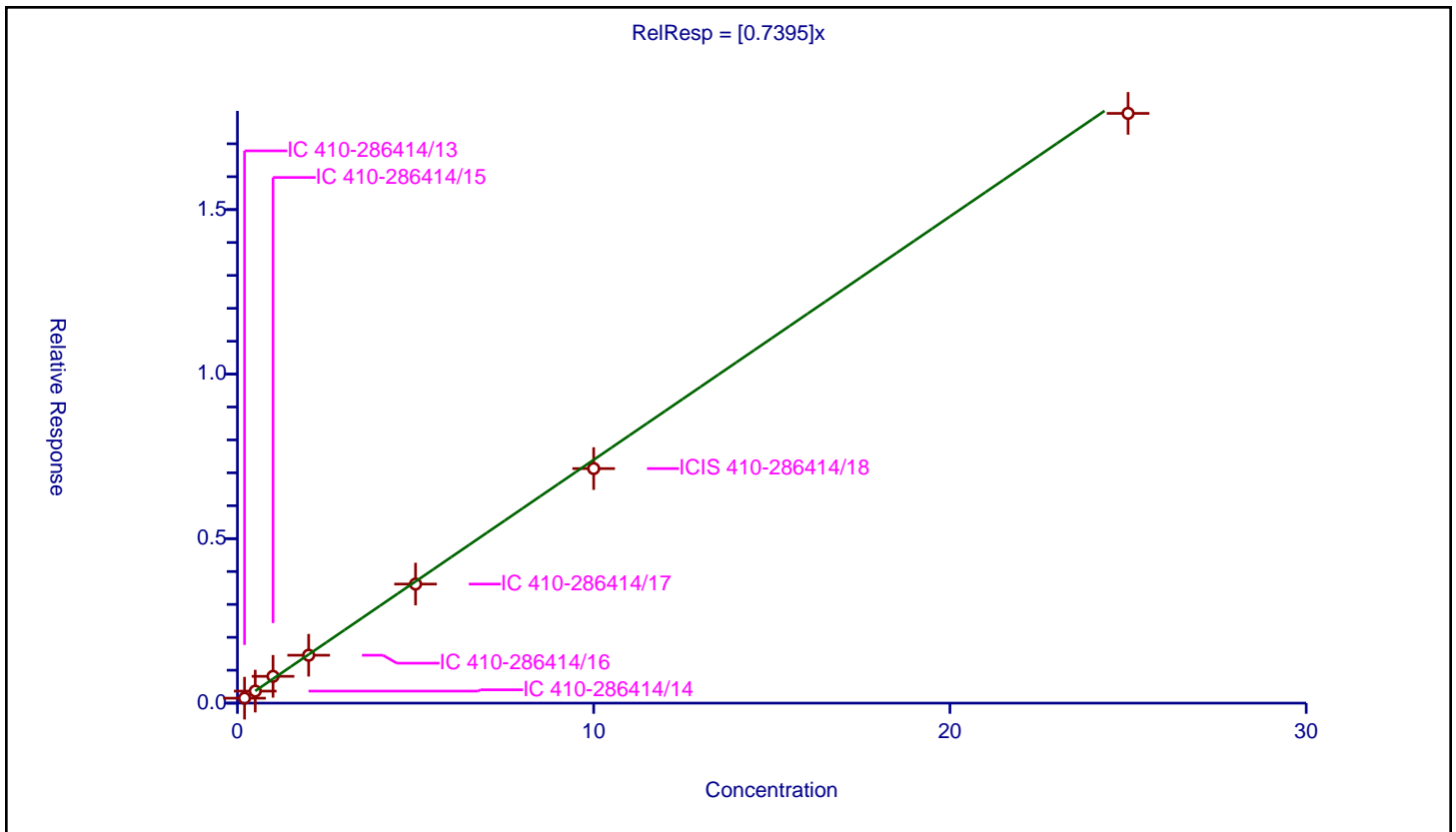
/ 2-Chlorotoluene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7395

Error Coefficients	
Standard Error:	909000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.149876	10.0	1033318.0	0.749382	Y
2	IC 410-286414/14	0.5	0.365486	10.0	1047319.0	0.730971	Y
3	IC 410-286414/15	1.0	0.81477	10.0	1050836.0	0.81477	Y
4	IC 410-286414/16	2.0	1.456073	10.0	1056705.0	0.728037	Y
5	IC 410-286414/17	5.0	3.618389	10.0	1075545.0	0.723678	Y
6	ICIS 410-286414/18	10.0	7.128467	10.0	1096296.0	0.712847	Y
7	IC 410-286414/19	25.0	17.923669	10.0	1138282.0	0.716947	Y



Calibration

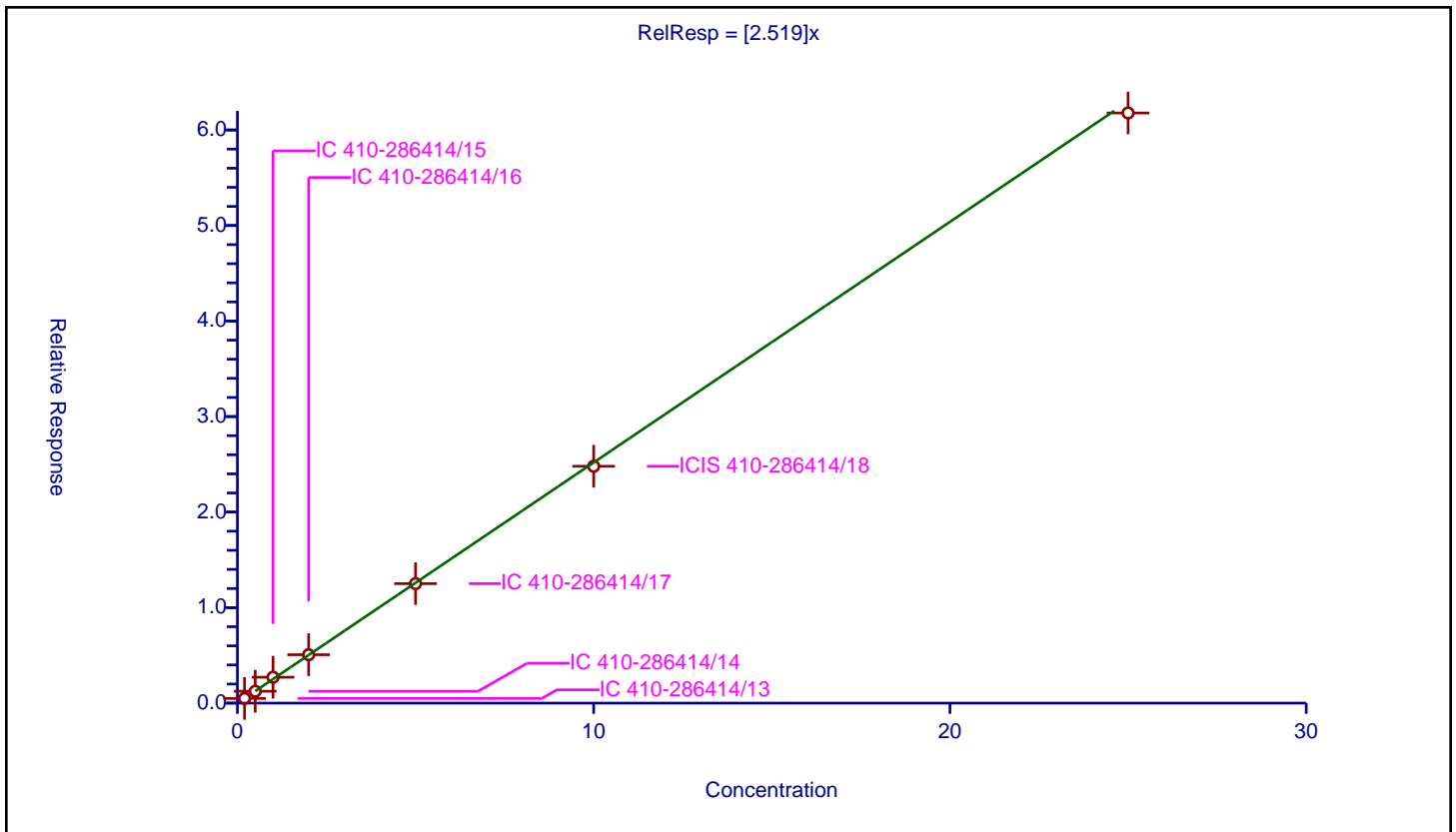
/ 1,3,5-Trimethylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.519

Error Coefficients	
Standard Error:	3140000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.48924	10.0	1033318.0	2.446198	Y
2	IC 410-286414/14	0.5	1.245475	10.0	1047319.0	2.490951	Y
3	IC 410-286414/15	1.0	2.710661	10.0	1050836.0	2.710661	Y
4	IC 410-286414/16	2.0	5.066882	10.0	1056705.0	2.533441	Y
5	IC 410-286414/17	5.0	12.508431	10.0	1075545.0	2.501686	Y
6	ICIS 410-286414/18	10.0	24.796916	10.0	1096296.0	2.479692	Y
7	IC 410-286414/19	25.0	61.779603	10.0	1138282.0	2.471184	Y





Calibration

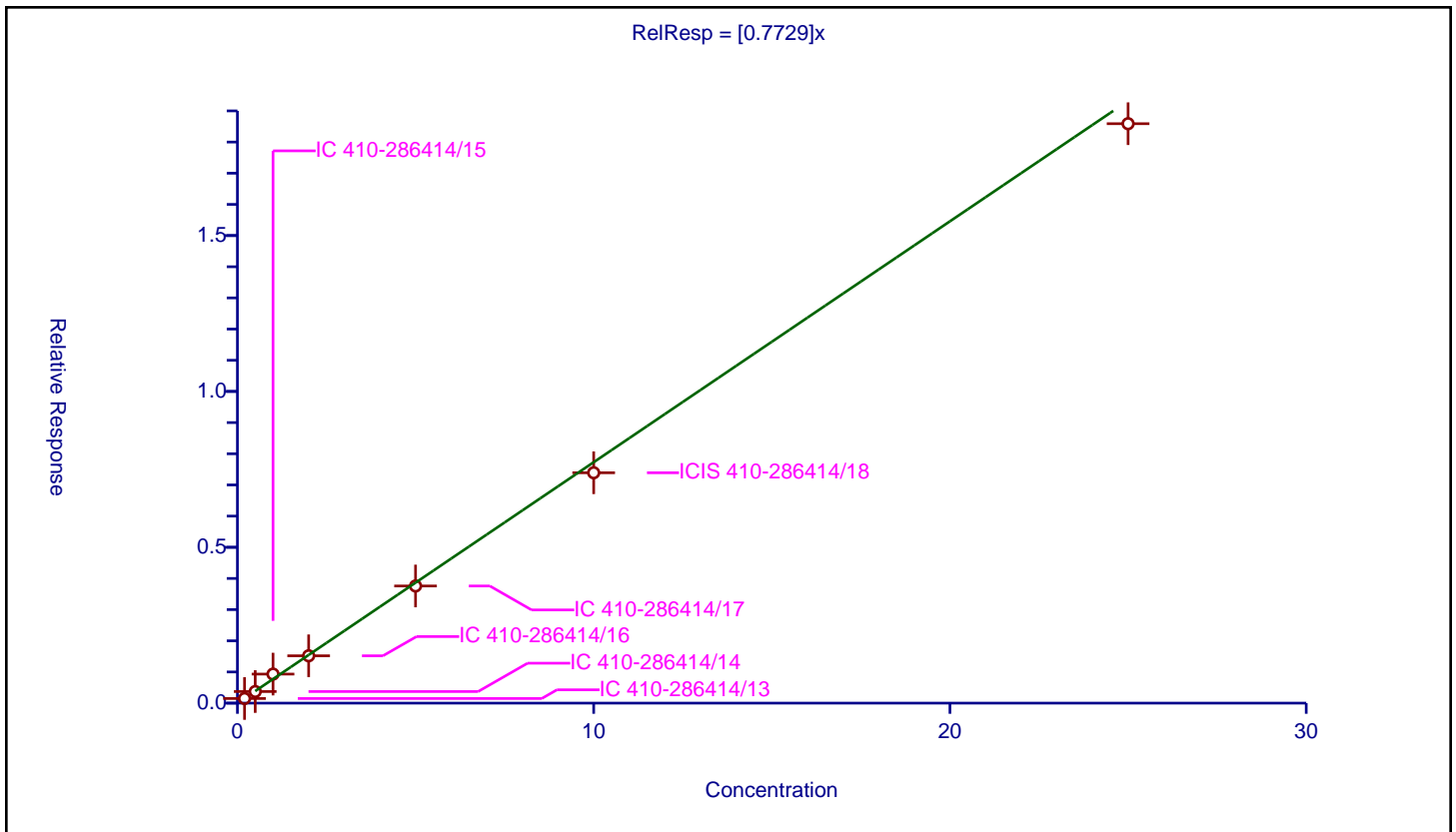
/ 4-Chlorotoluene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7729

Error Coefficients	
Standard Error:	943000
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.148038	10.0	1033318.0	0.740188	Y
2	IC 410-286414/14	0.5	0.372389	10.0	1047319.0	0.744778	Y
3	IC 410-286414/15	1.0	0.931554	10.0	1050836.0	0.931554	Y
4	IC 410-286414/16	2.0	1.518428	10.0	1056705.0	0.759214	Y
5	IC 410-286414/17	5.0	3.758411	10.0	1075545.0	0.751682	Y
6	ICIS 410-286414/18	10.0	7.390668	10.0	1096296.0	0.739067	Y
7	IC 410-286414/19	25.0	18.588988	10.0	1138282.0	0.74356	Y



Calibration

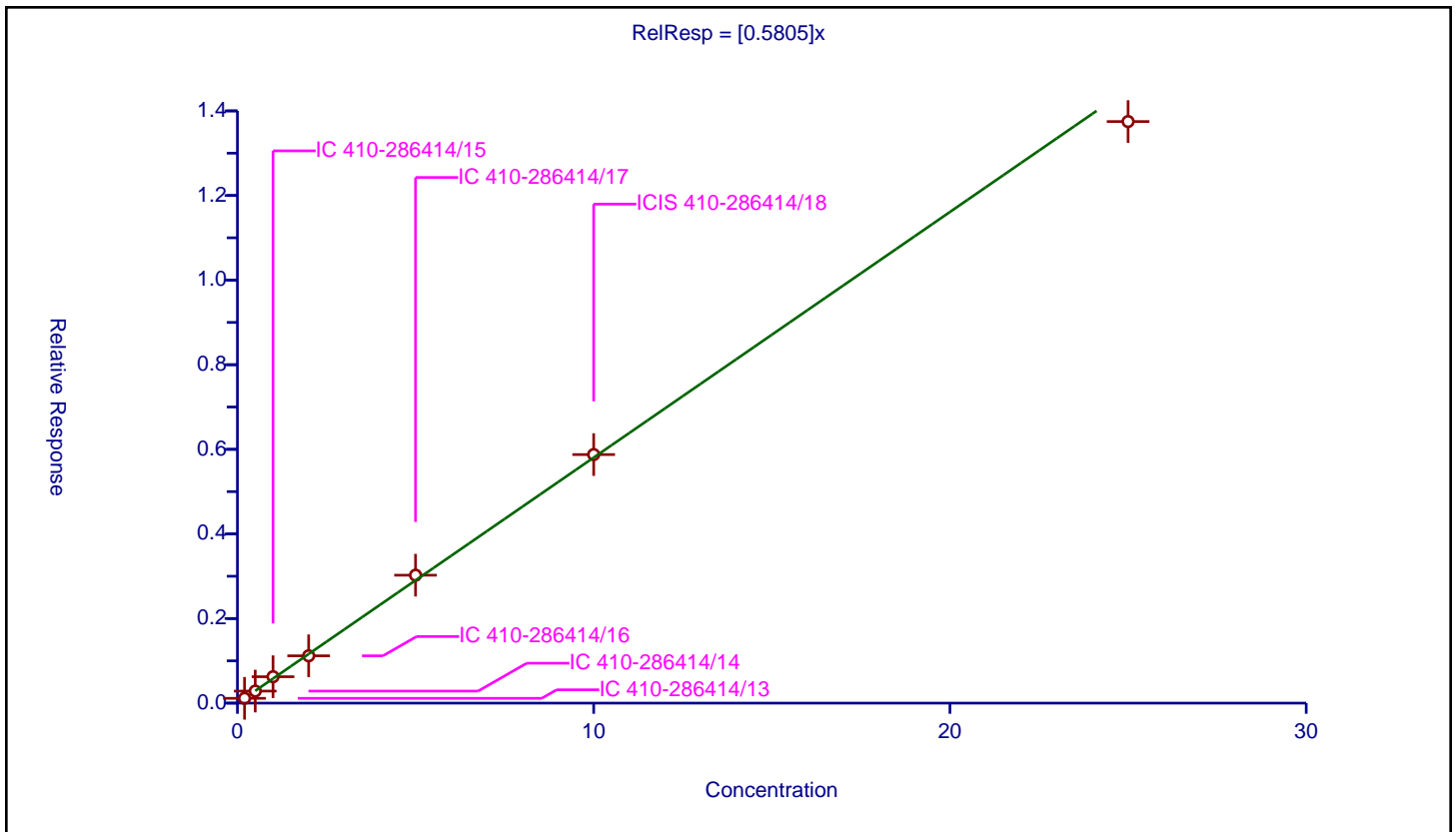
/ tert-Butylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5805

Error Coefficients	
Standard Error:	706000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.113498	10.0	1033318.0	0.567492	Y
2	IC 410-286414/14	0.5	0.285023	10.0	1047319.0	0.570046	Y
3	IC 410-286414/15	1.0	0.624531	10.0	1050836.0	0.624531	Y
4	IC 410-286414/16	2.0	1.118694	10.0	1056705.0	0.559347	Y
5	IC 410-286414/17	5.0	3.023992	10.0	1075545.0	0.604798	Y
6	ICIS 410-286414/18	10.0	5.87553	10.0	1096296.0	0.587553	Y
7	IC 410-286414/19	25.0	13.748324	10.0	1138282.0	0.549933	Y



Calibration

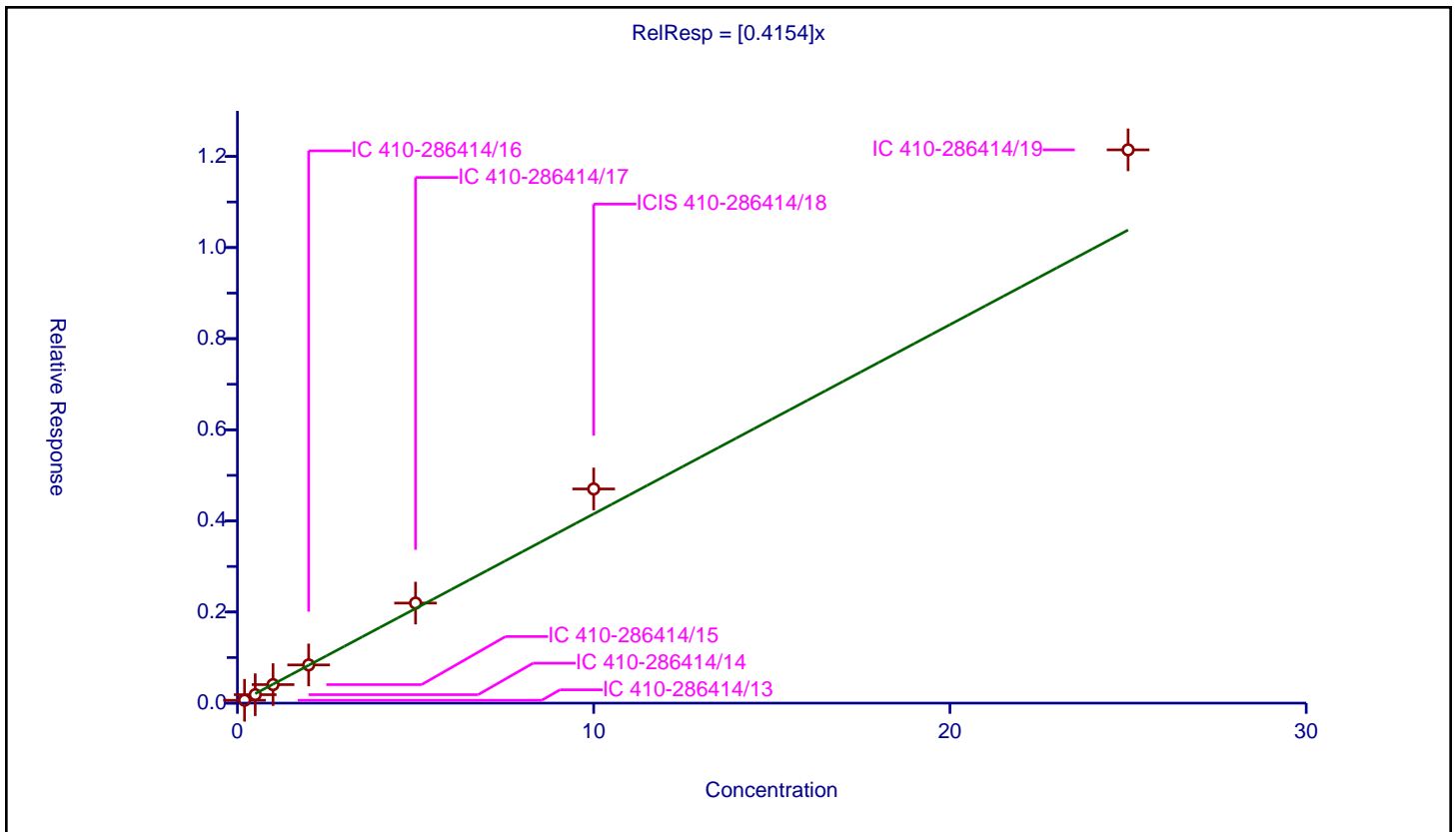
/ Pentachloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4154

Error Coefficients	
Standard Error:	611000
Relative Standard Error:	14.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.063107	10.0	1033318.0	0.315537	Y
2	IC 410-286414/14	0.5	0.185569	10.0	1047319.0	0.371138	Y
3	IC 410-286414/15	1.0	0.406629	10.0	1050836.0	0.406629	Y
4	IC 410-286414/16	2.0	0.838588	10.0	1056705.0	0.419294	Y
5	IC 410-286414/17	5.0	2.196384	10.0	1075545.0	0.439277	Y
6	ICIS 410-286414/18	10.0	4.70113	10.0	1096296.0	0.470113	Y
7	IC 410-286414/19	25.0	12.144618	10.0	1138282.0	0.485785	Y



Calibration

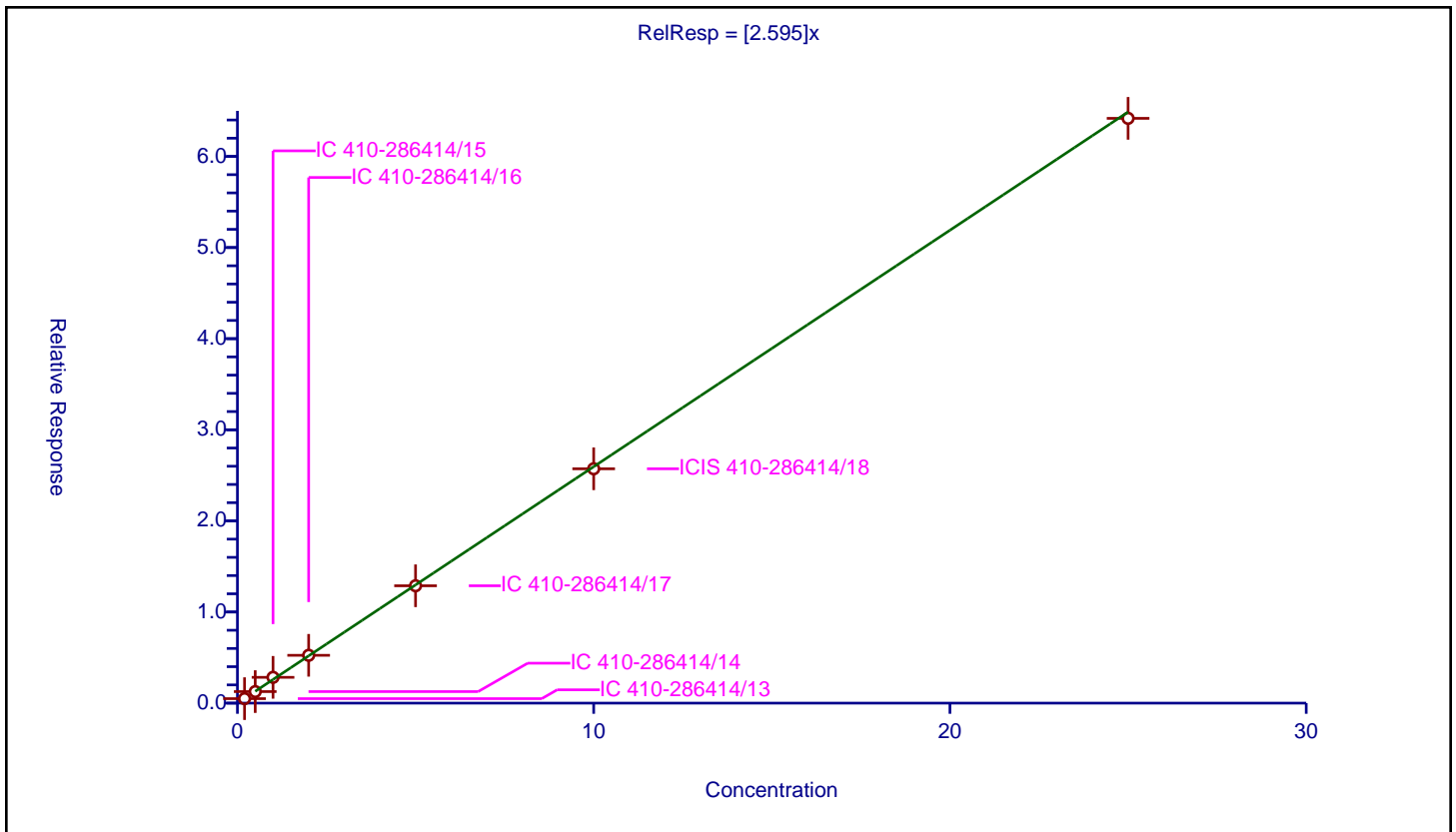
/ 1,2,4-Trimethylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.595

Error Coefficients	
Standard Error:	3260000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.492356	10.0	1033318.0	2.461778	Y
2	IC 410-286414/14	0.5	1.267102	10.0	1047319.0	2.534204	Y
3	IC 410-286414/15	1.0	2.829985	10.0	1050836.0	2.829985	Y
4	IC 410-286414/16	2.0	5.248892	10.0	1056705.0	2.624446	Y
5	IC 410-286414/17	5.0	12.881376	10.0	1075545.0	2.576275	Y
6	ICIS 410-286414/18	10.0	25.720481	10.0	1096296.0	2.572048	Y
7	IC 410-286414/19	25.0	64.180265	10.0	1138282.0	2.567211	Y



Calibration

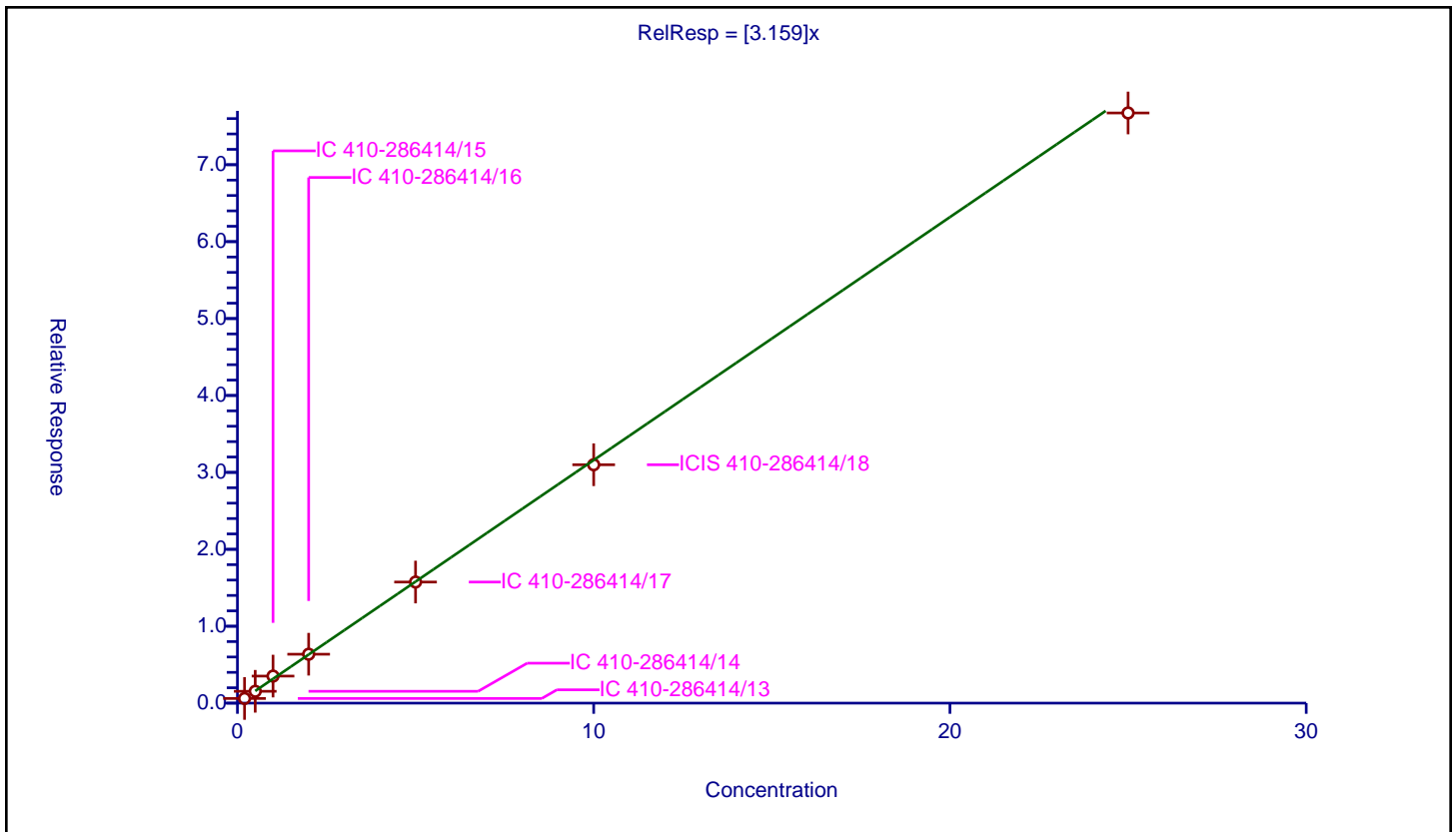
/ sec-Butylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.159

Error Coefficients	
Standard Error:	3900000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.60418	10.0	1033318.0	3.0209	Y
2	IC 410-286414/14	0.5	1.540849	10.0	1047319.0	3.081697	Y
3	IC 410-286414/15	1.0	3.516143	10.0	1050836.0	3.516143	Y
4	IC 410-286414/16	2.0	6.360328	10.0	1056705.0	3.180164	Y
5	IC 410-286414/17	5.0	15.743563	10.0	1075545.0	3.148713	Y
6	ICIS 410-286414/18	10.0	30.994531	10.0	1096296.0	3.099453	Y
7	IC 410-286414/19	25.0	76.729273	10.0	1138282.0	3.069171	Y



Calibration

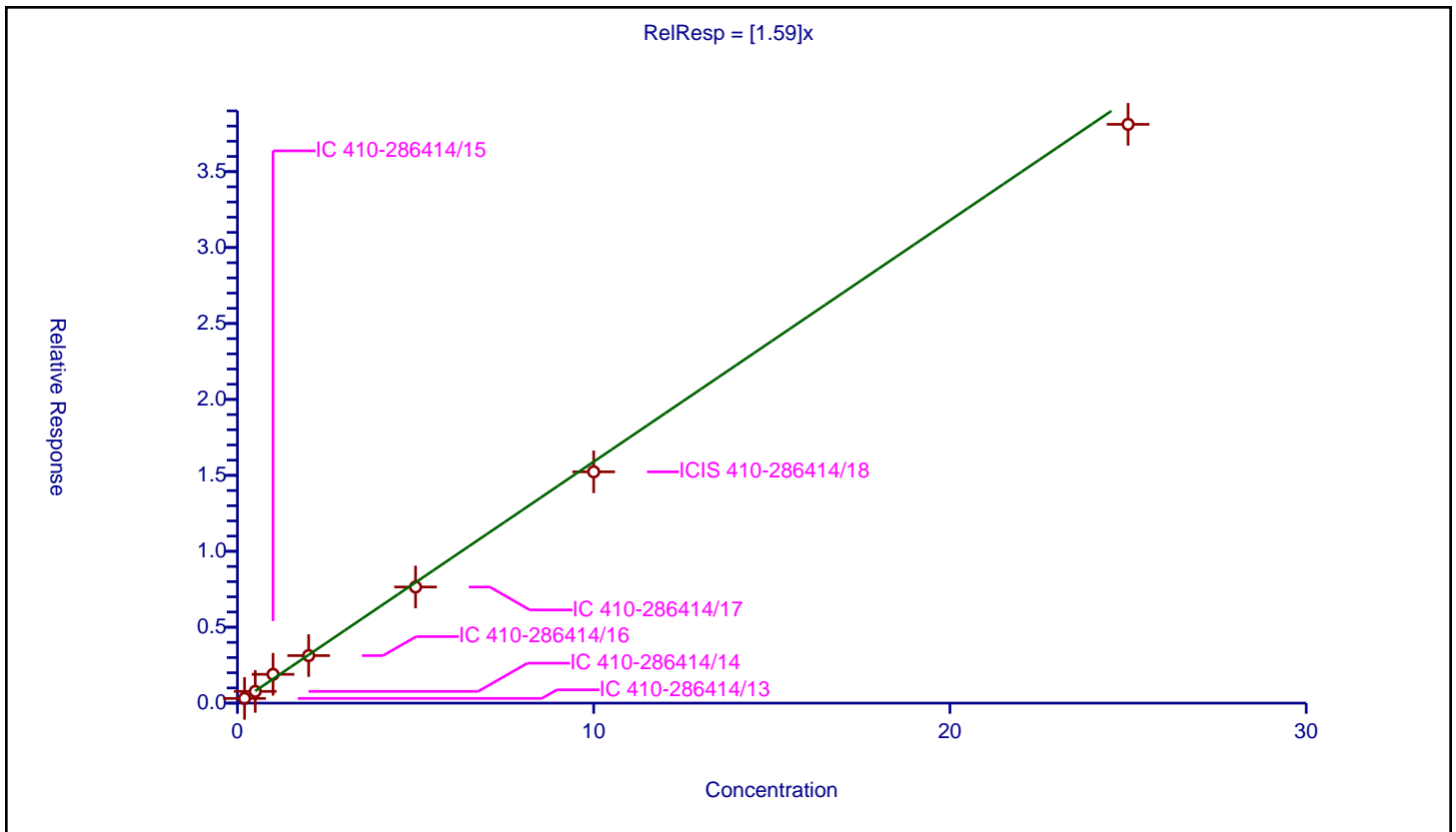
/ 1,3-Dichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.59

Error Coefficients	
Standard Error:	1930000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.30884	10.0	1033318.0	1.5442	Y
2	IC 410-286414/14	0.5	0.772649	10.0	1047319.0	1.545298	Y
3	IC 410-286414/15	1.0	1.896024	10.0	1050836.0	1.896024	Y
4	IC 410-286414/16	2.0	3.129208	10.0	1056705.0	1.564604	Y
5	IC 410-286414/17	5.0	7.647332	10.0	1075545.0	1.529466	Y
6	ICIS 410-286414/18	10.0	15.231744	10.0	1096296.0	1.523174	Y
7	IC 410-286414/19	25.0	38.113886	10.0	1138282.0	1.524555	Y



Calibration

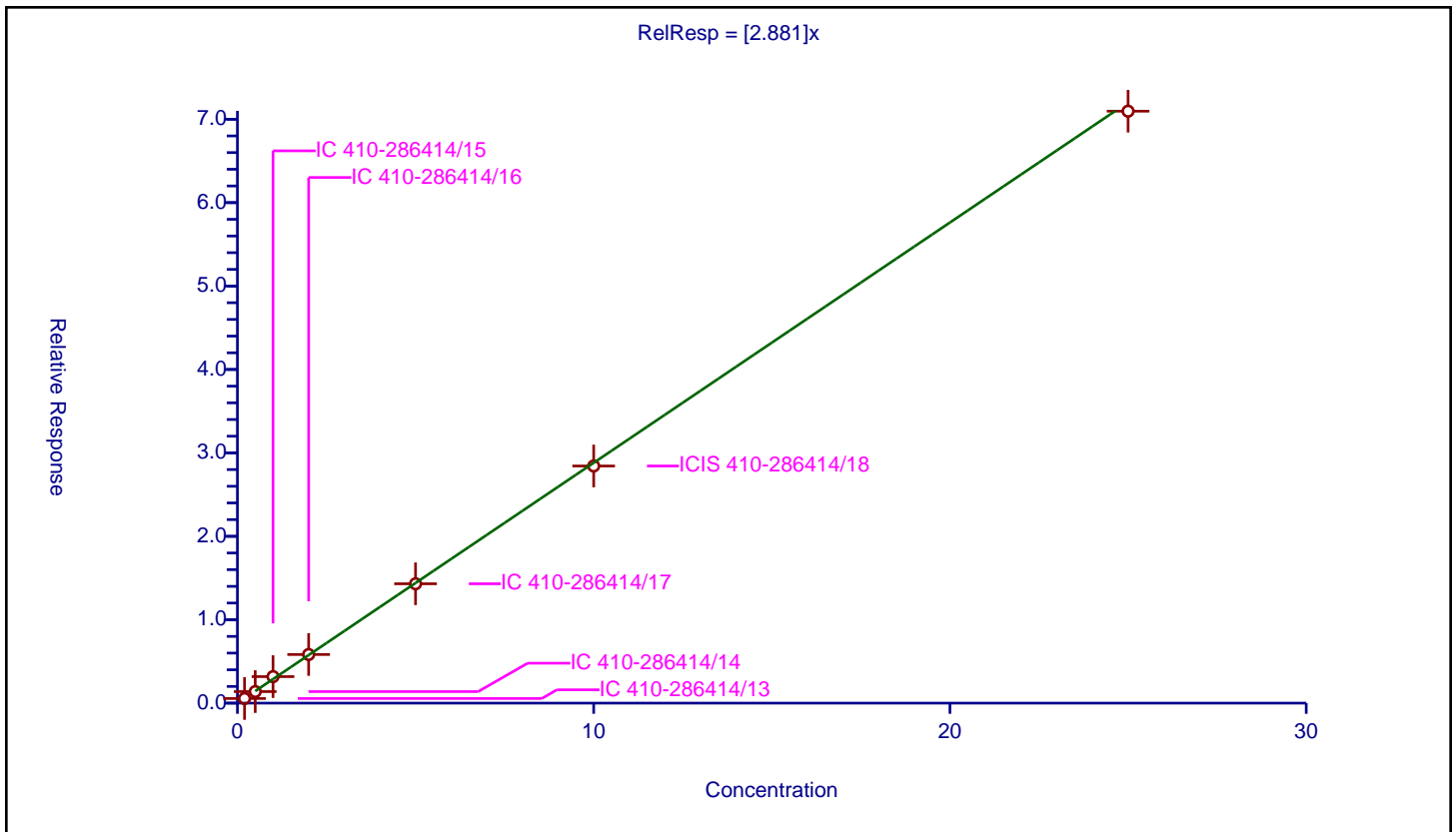
/ 4-Isopropyltoluene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.881

Error Coefficients	
Standard Error:	3600000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.552792	10.0	1033318.0	2.76396	Y
2	IC 410-286414/14	0.5	1.384182	10.0	1047319.0	2.768364	Y
3	IC 410-286414/15	1.0	3.17748	10.0	1050836.0	3.17748	Y
4	IC 410-286414/16	2.0	5.827606	10.0	1056705.0	2.913803	Y
5	IC 410-286414/17	5.0	14.308681	10.0	1075545.0	2.861736	Y
6	ICIS 410-286414/18	10.0	28.428554	10.0	1096296.0	2.842855	Y
7	IC 410-286414/19	25.0	70.964937	10.0	1138282.0	2.838597	Y



Calibration

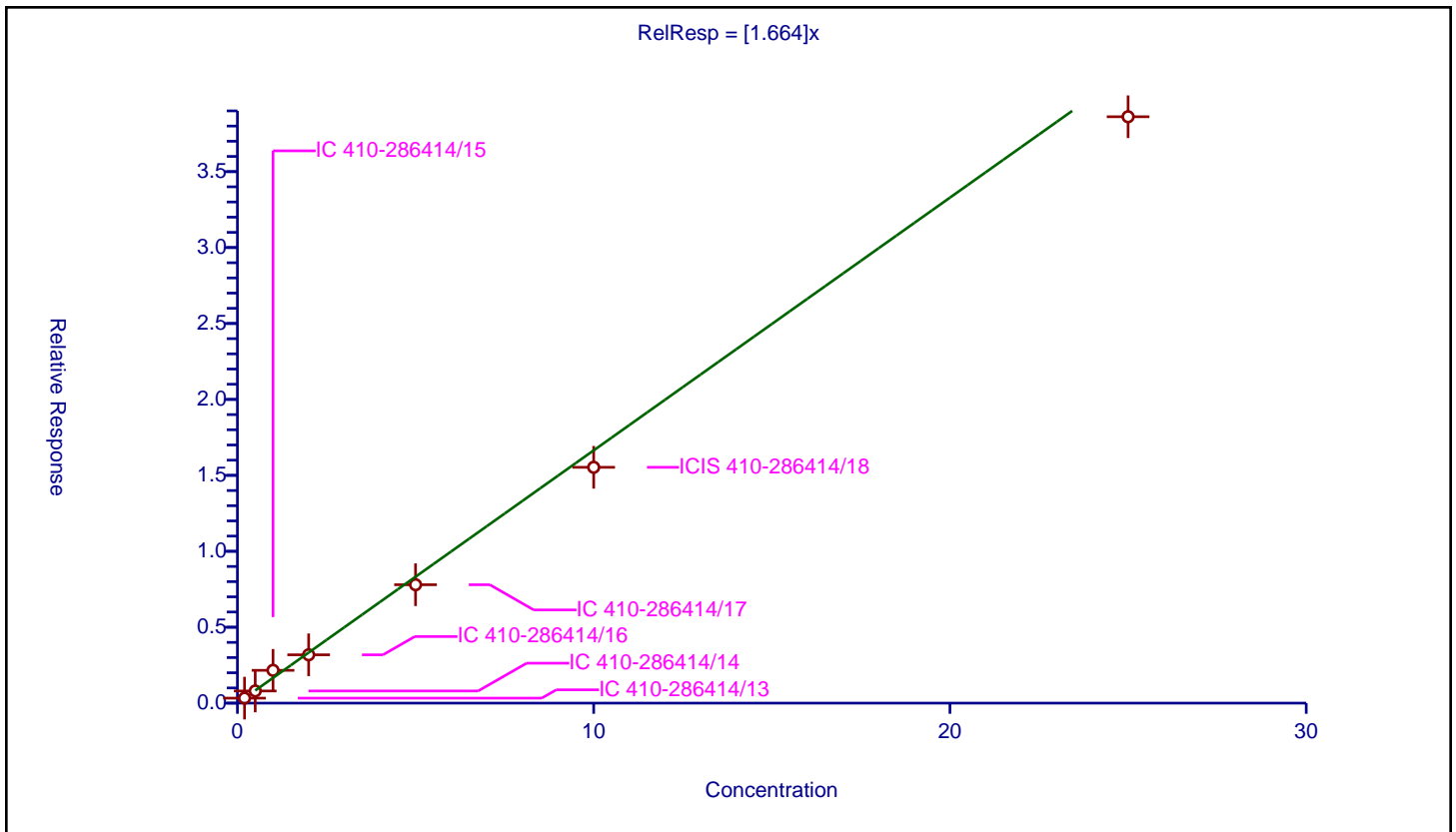
/ 1,4-Dichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.664

Error Coefficients	
Standard Error:	1960000
Relative Standard Error:	13.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.328108	10.0	1033318.0	1.64054	Y
2	IC 410-286414/14	0.5	0.800568	10.0	1047319.0	1.601136	Y
3	IC 410-286414/15	1.0	2.160518	10.0	1050836.0	2.160518	Y
4	IC 410-286414/16	2.0	3.182818	10.0	1056705.0	1.591409	Y
5	IC 410-286414/17	5.0	7.797312	10.0	1075545.0	1.559462	Y
6	ICIS 410-286414/18	10.0	15.52962	10.0	1096296.0	1.552962	Y
7	IC 410-286414/19	25.0	38.613973	10.0	1138282.0	1.544559	Y





Calibration

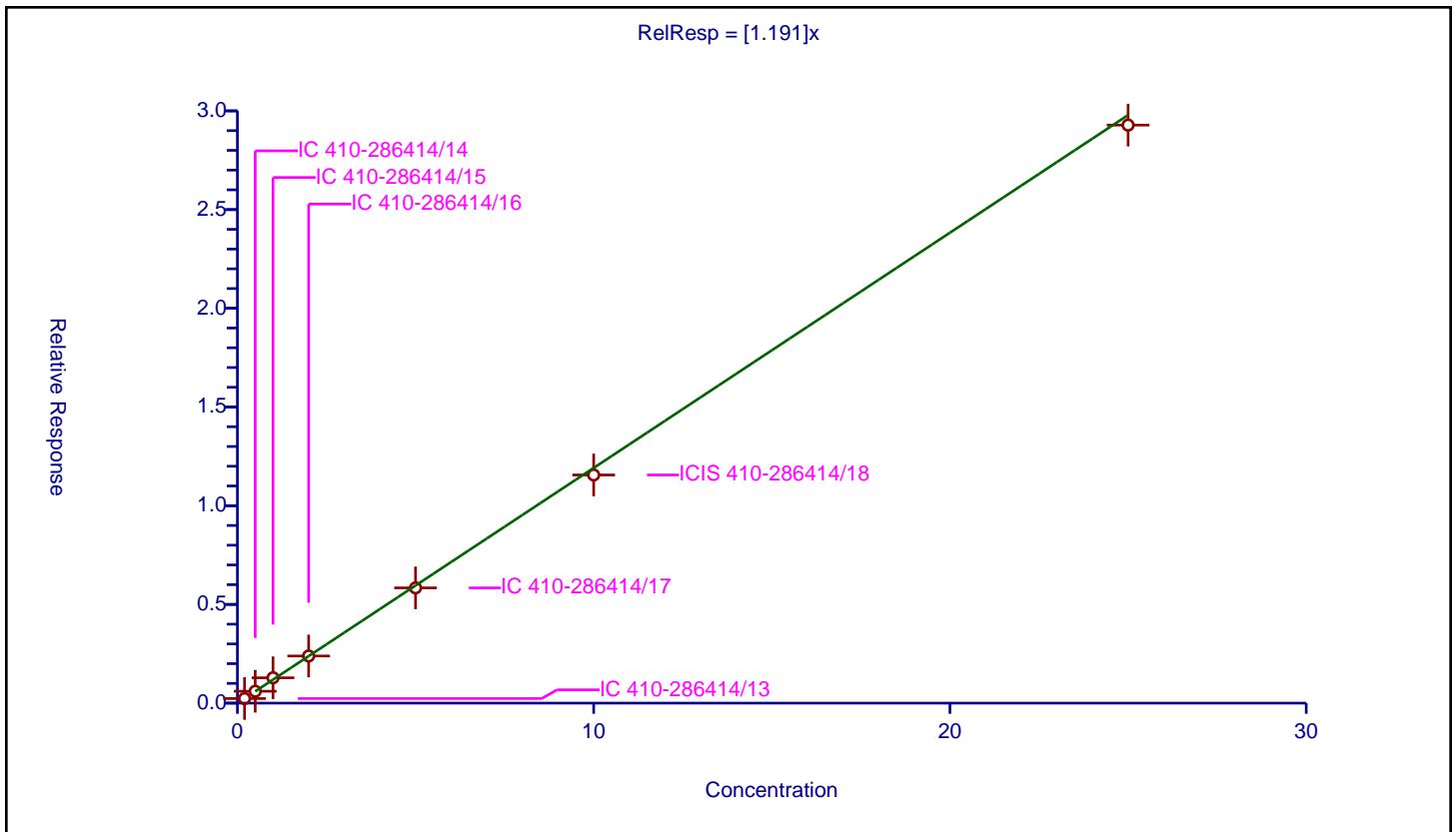
/ 1,2,3-Trimethylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.191

Error Coefficients	
Standard Error:	1480000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.232445	10.0	1033318.0	1.162227	Y
2	IC 410-286414/14	0.5	0.602682	10.0	1047319.0	1.205363	Y
3	IC 410-286414/15	1.0	1.28394	10.0	1050836.0	1.28394	Y
4	IC 410-286414/16	2.0	2.388282	10.0	1056705.0	1.194141	Y
5	IC 410-286414/17	5.0	5.837859	10.0	1075545.0	1.167572	Y
6	ICIS 410-286414/18	10.0	11.557235	10.0	1096296.0	1.155723	Y
7	IC 410-286414/19	25.0	29.279168	10.0	1138282.0	1.171167	Y



Calibration

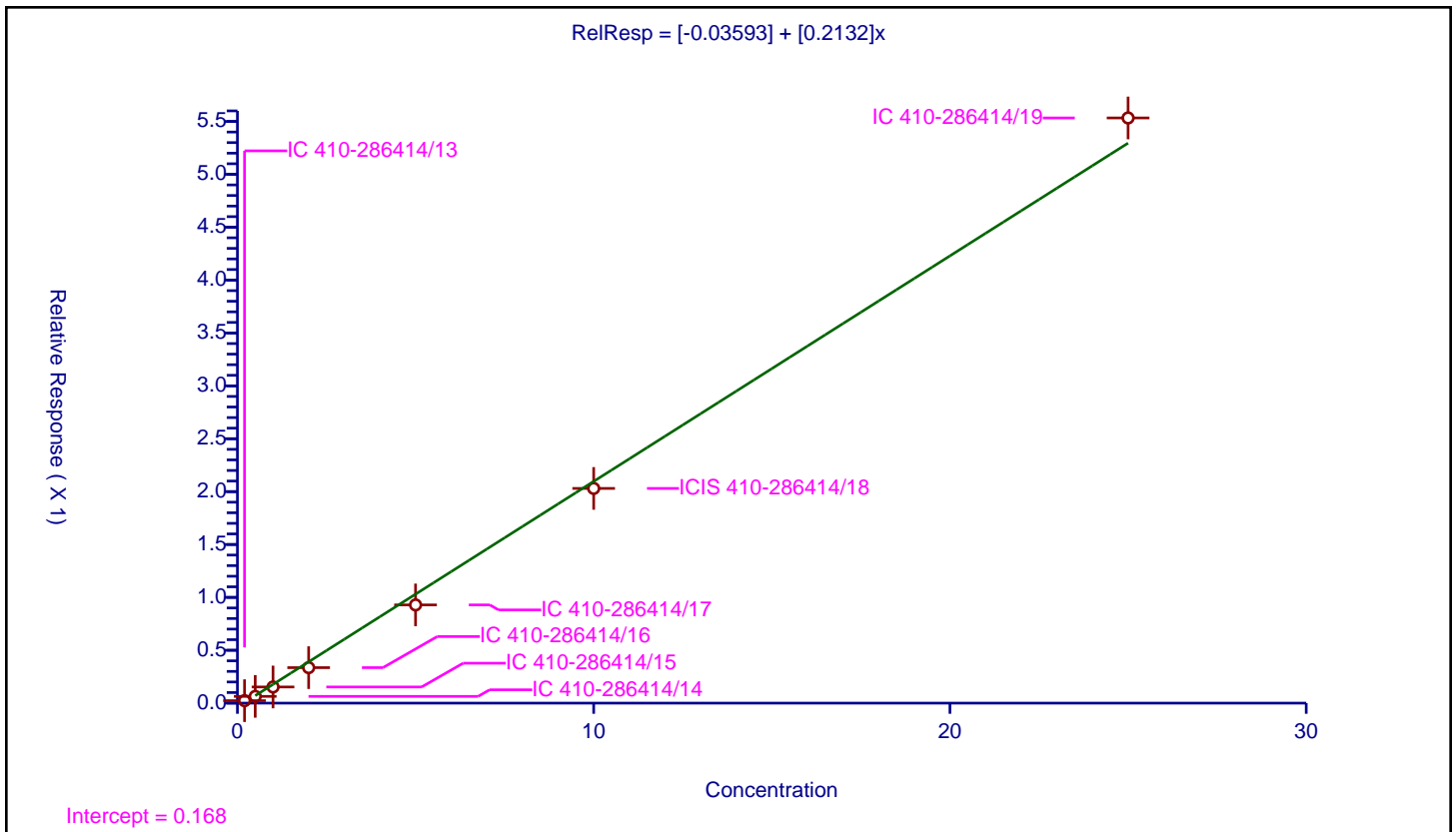
/ Benzyl chloride

Curve Type: Linear  
 Weighting: Conc  
 Origin: None  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	-0.03593
Slope:	0.2132

Error Coefficients	
Standard Error:	303000
Relative Standard Error:	19.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.023362	10.0	1033318.0	0.116808	Y
2	IC 410-286414/14	0.5	0.063858	10.0	1047319.0	0.127717	Y
3	IC 410-286414/15	1.0	0.152831	10.0	1050836.0	0.152831	Y
4	IC 410-286414/16	2.0	0.335477	10.0	1056705.0	0.167738	Y
5	IC 410-286414/17	5.0	0.928655	10.0	1075545.0	0.185731	Y
6	ICIS 410-286414/18	10.0	2.03009	10.0	1096296.0	0.203009	Y
7	IC 410-286414/19	25.0	5.533216	10.0	1138282.0	0.221329	Y



Calibration

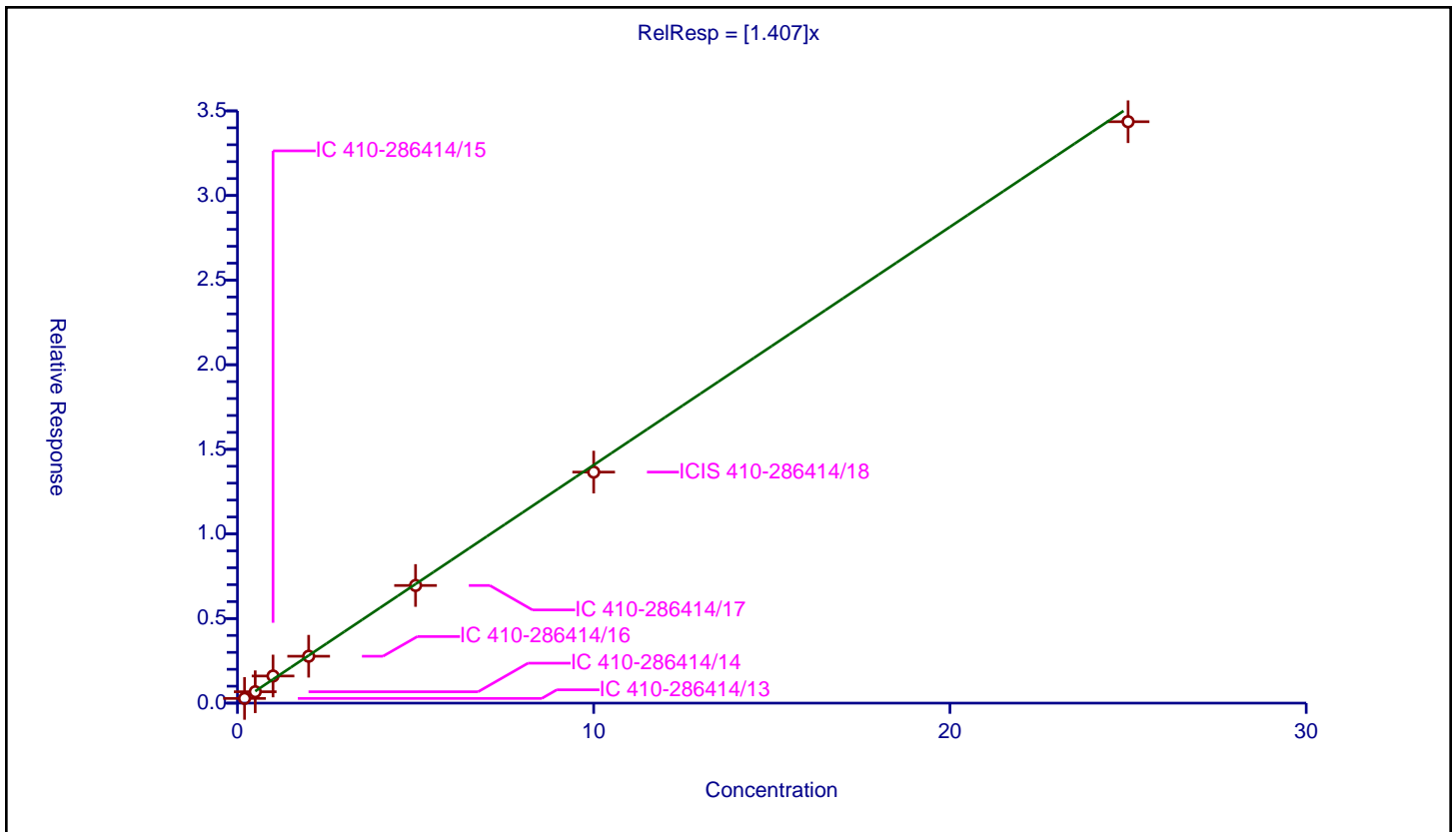
/ n-Butylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.407

Error Coefficients	
Standard Error:	1740000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.277204	10.0	1033318.0	1.386021	Y
2	IC 410-286414/14	0.5	0.672393	10.0	1047319.0	1.344786	Y
3	IC 410-286414/15	1.0	1.603485	10.0	1050836.0	1.603485	Y
4	IC 410-286414/16	2.0	2.77048	10.0	1056705.0	1.38524	Y
5	IC 410-286414/17	5.0	6.953219	10.0	1075545.0	1.390644	Y
6	ICIS 410-286414/18	10.0	13.653977	10.0	1096296.0	1.365398	Y
7	IC 410-286414/19	25.0	34.361055	10.0	1138282.0	1.374442	Y



Calibration

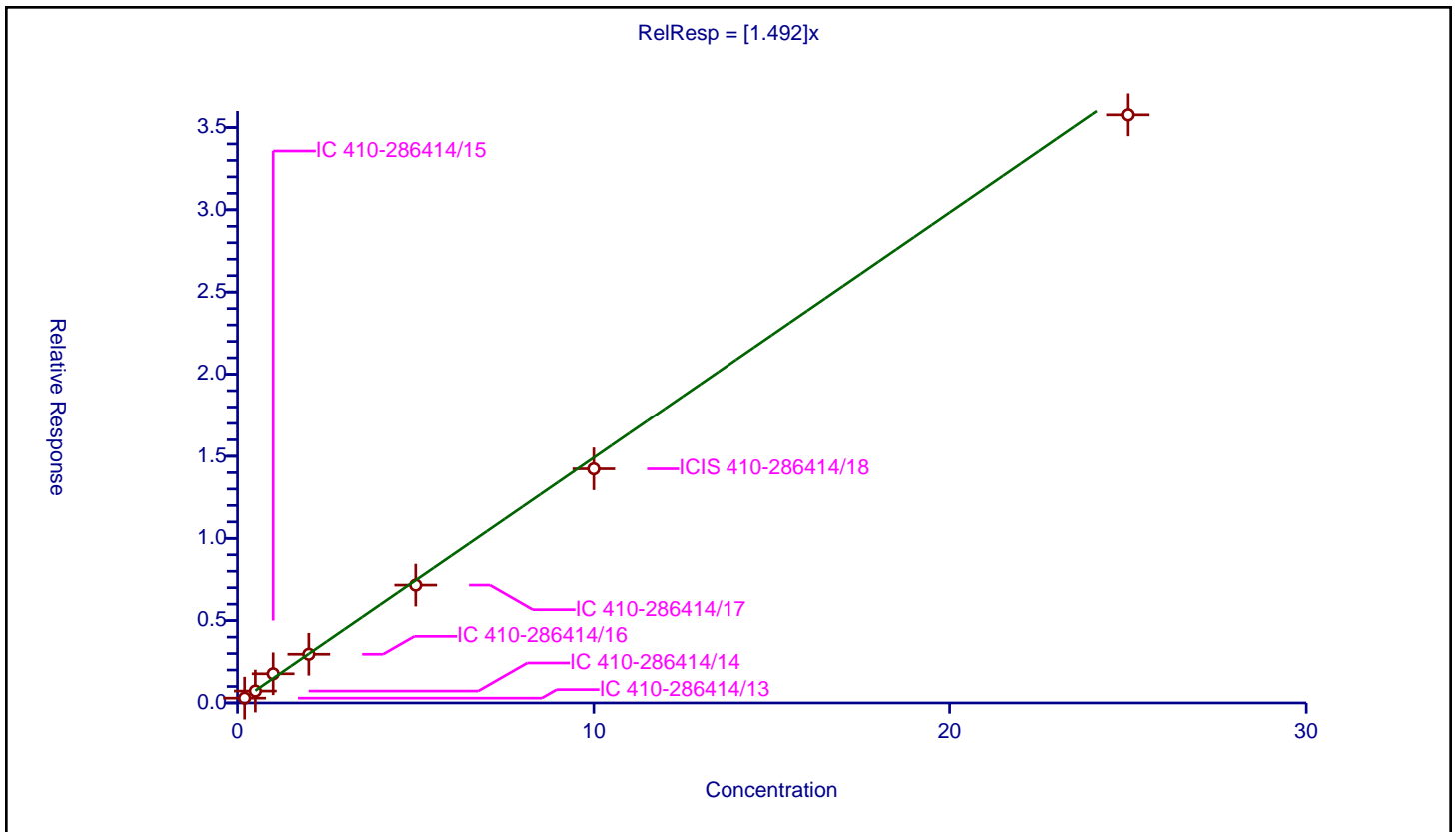
/ 1,2-Dichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.492

Error Coefficients	
Standard Error:	1810000
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.291875	10.0	1033318.0	1.459376	Y
2	IC 410-286414/14	0.5	0.722846	10.0	1047319.0	1.445691	Y
3	IC 410-286414/15	1.0	1.771361	10.0	1050836.0	1.771361	Y
4	IC 410-286414/16	2.0	2.958044	10.0	1056705.0	1.479022	Y
5	IC 410-286414/17	5.0	7.159663	10.0	1075545.0	1.431933	Y
6	ICIS 410-286414/18	10.0	14.234477	10.0	1096296.0	1.423448	Y
7	IC 410-286414/19	25.0	35.767956	10.0	1138282.0	1.430718	Y



Calibration

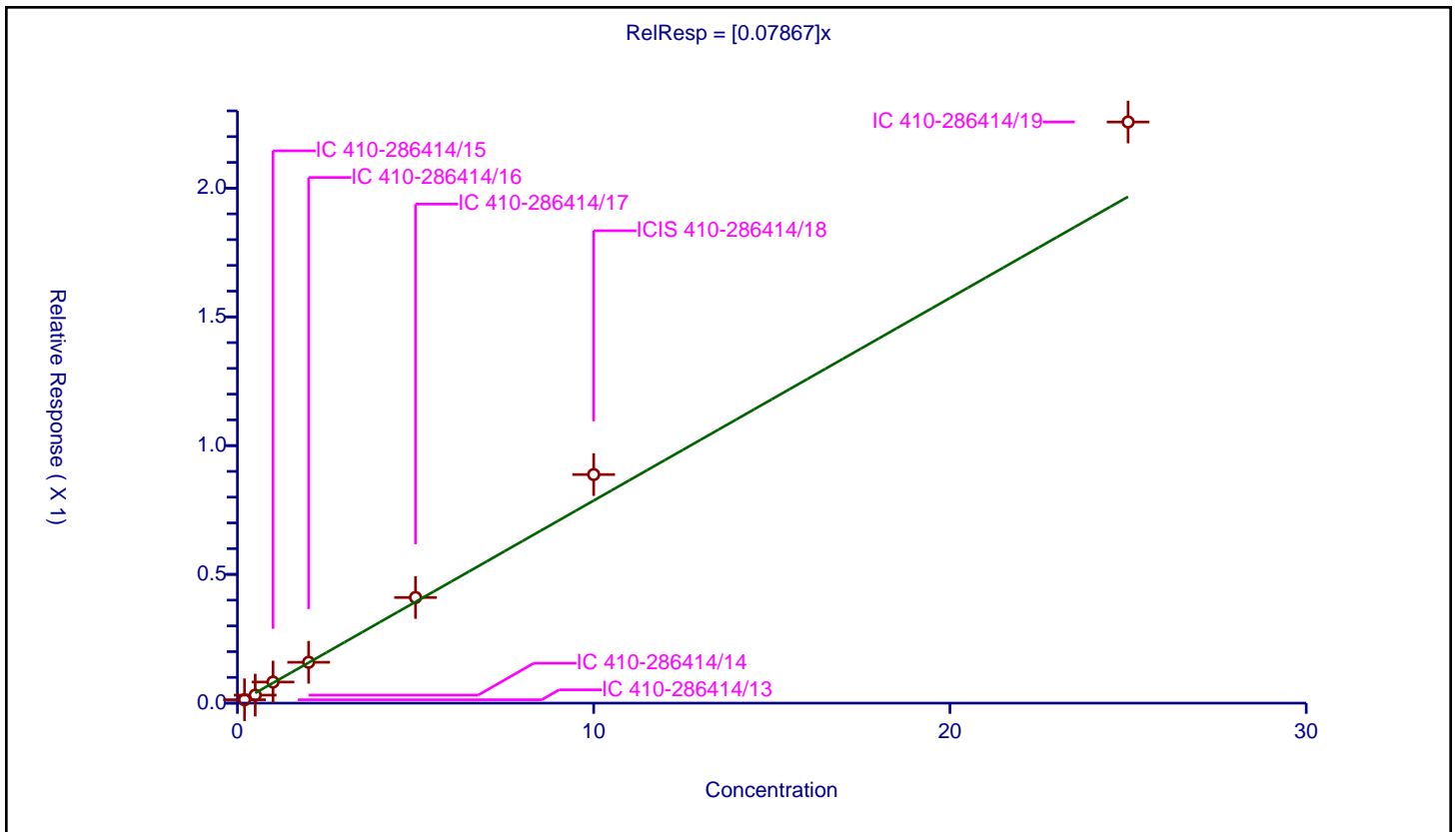
/ 1,2-Dibromo-3-Chloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.07867

Error Coefficients	
Standard Error:	114000
Relative Standard Error:	13.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.013152	10.0	1033318.0	0.065759	Y
2	IC 410-286414/14	0.5	0.031223	10.0	1047319.0	0.062445	Y
3	IC 410-286414/15	1.0	0.08202	10.0	1050836.0	0.08202	Y
4	IC 410-286414/16	2.0	0.158701	10.0	1056705.0	0.07935	Y
5	IC 410-286414/17	5.0	0.410239	10.0	1075545.0	0.082048	Y
6	ICIS 410-286414/18	10.0	0.887726	10.0	1096296.0	0.088773	Y
7	IC 410-286414/19	25.0	2.256787	10.0	1138282.0	0.090271	Y



Calibration

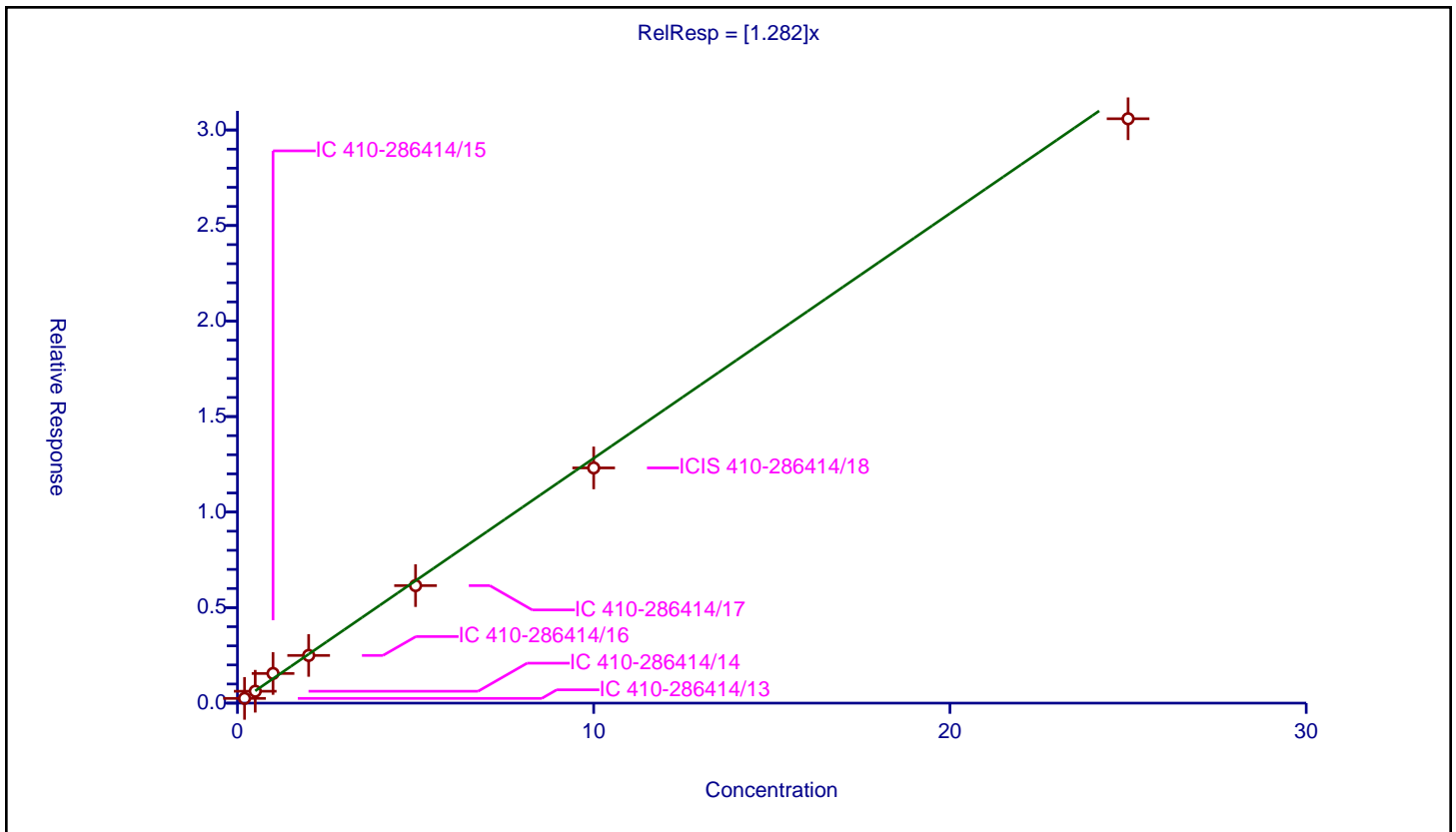
/ 1,3,5-Trichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.282

Error Coefficients	
Standard Error:	1550000
Relative Standard Error:	9.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.2479	10.0	1033318.0	1.239502	Y
2	IC 410-286414/14	0.5	0.622504	10.0	1047319.0	1.245007	Y
3	IC 410-286414/15	1.0	1.552688	10.0	1050836.0	1.552688	Y
4	IC 410-286414/16	2.0	2.496562	10.0	1056705.0	1.248281	Y
5	IC 410-286414/17	5.0	6.151849	10.0	1075545.0	1.23037	Y
6	ICIS 410-286414/18	10.0	12.311939	10.0	1096296.0	1.231194	Y
7	IC 410-286414/19	25.0	30.589379	10.0	1138282.0	1.223575	Y



Calibration

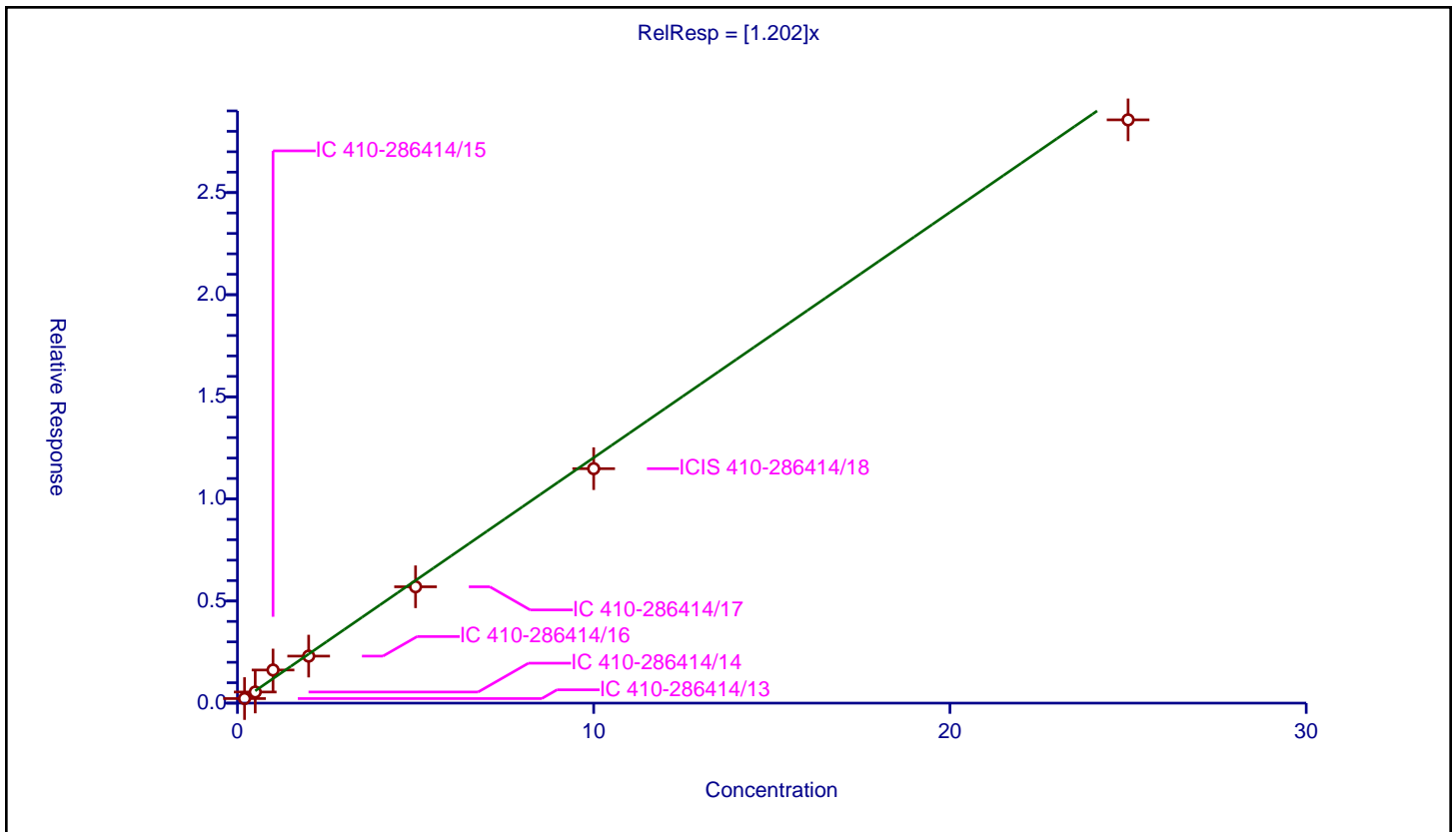
/ 1,2,4-Trichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.202

Error Coefficients	
Standard Error:	1450000
Relative Standard Error:	15.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.224152	10.0	1033318.0	1.120759	Y
2	IC 410-286414/14	0.5	0.544295	10.0	1047319.0	1.088589	Y
3	IC 410-286414/15	1.0	1.621538	10.0	1050836.0	1.621538	Y
4	IC 410-286414/16	2.0	2.302175	10.0	1056705.0	1.151088	Y
5	IC 410-286414/17	5.0	5.6974	10.0	1075545.0	1.13948	Y
6	ICIS 410-286414/18	10.0	11.481078	10.0	1096296.0	1.148108	Y
7	IC 410-286414/19	25.0	28.562325	10.0	1138282.0	1.142493	Y



Calibration

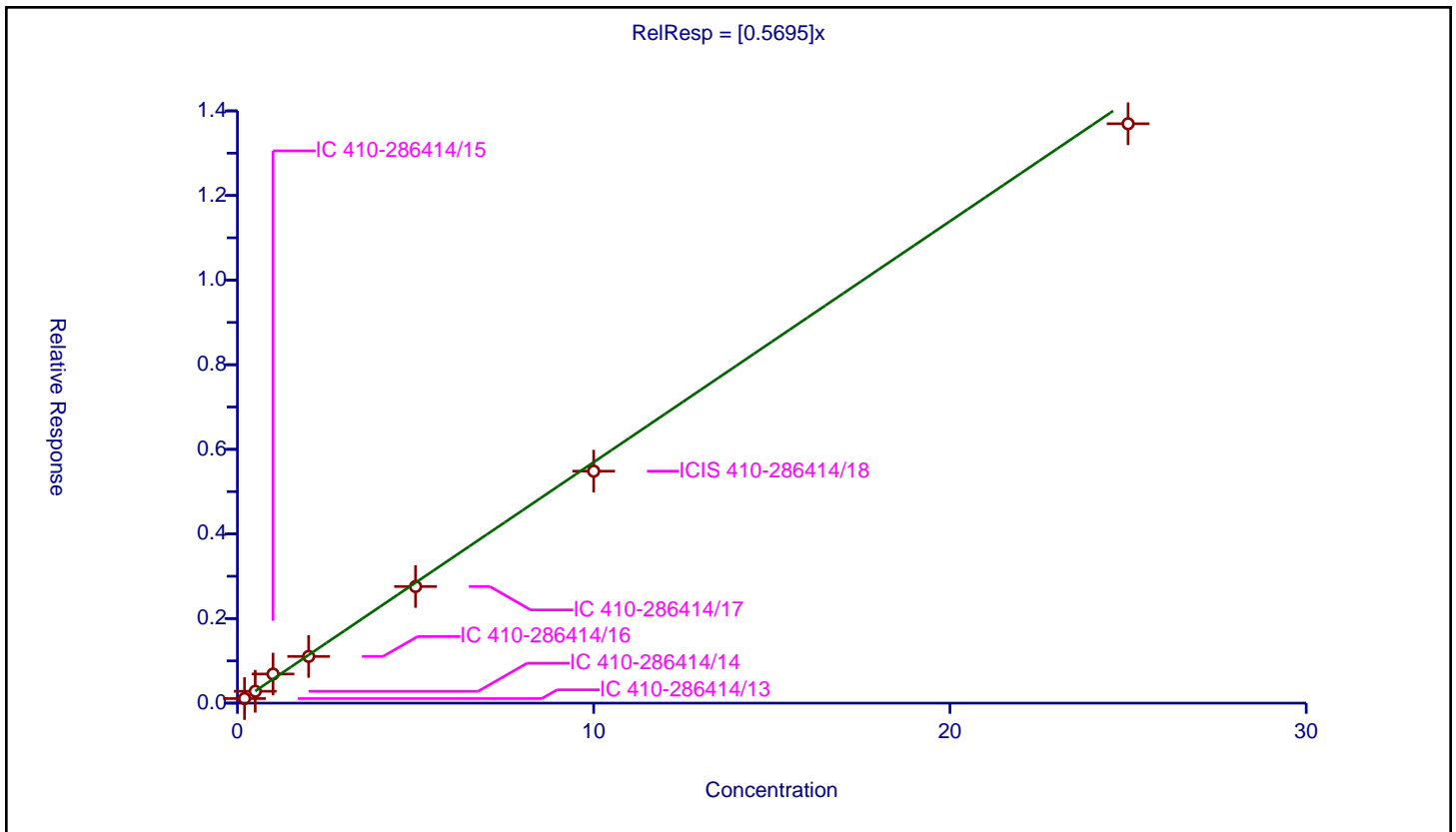
/ Hexachlorobutadiene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5695

Error Coefficients	
Standard Error:	695000
Relative Standard Error:	9.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.107682	10.0	1033318.0	0.538411	Y
2	IC 410-286414/14	0.5	0.280488	10.0	1047319.0	0.560975	Y
3	IC 410-286414/15	1.0	0.687757	10.0	1050836.0	0.687757	Y
4	IC 410-286414/16	2.0	1.104301	10.0	1056705.0	0.55215	Y
5	IC 410-286414/17	5.0	2.756621	10.0	1075545.0	0.551324	Y
6	ICIS 410-286414/18	10.0	5.483756	10.0	1096296.0	0.548376	Y
7	IC 410-286414/19	25.0	13.695833	10.0	1138282.0	0.547833	Y





**Calibration**

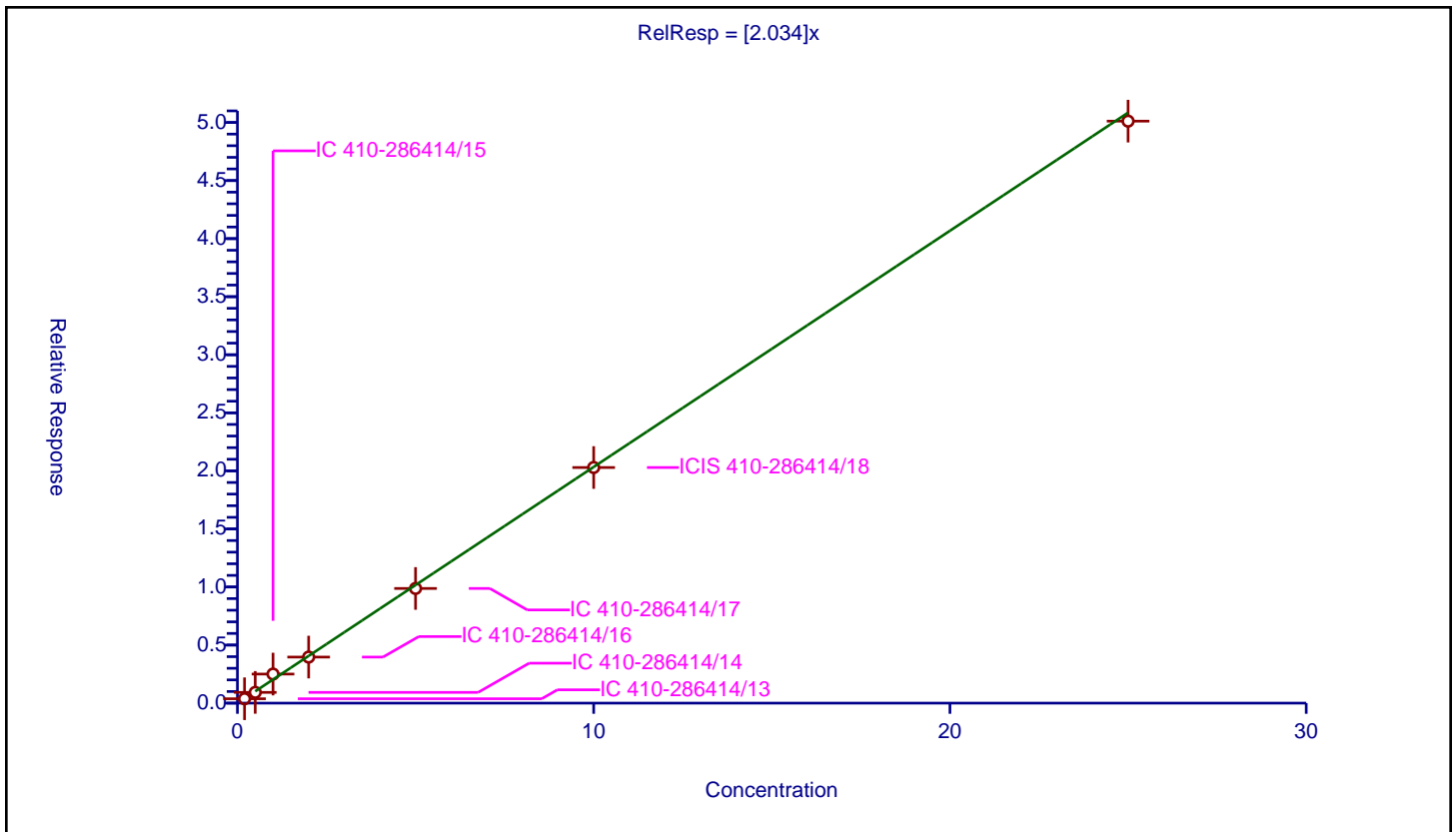
/ Naphthalene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.034

Error Coefficients	
Standard Error:	2550000
Relative Standard Error:	10.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.378025	10.0	1033318.0	1.890125	Y
2	IC 410-286414/14	0.5	0.926213	10.0	1047319.0	1.852425	Y
3	IC 410-286414/15	1.0	2.502341	10.0	1050836.0	2.502341	Y
4	IC 410-286414/16	2.0	3.966197	10.0	1056705.0	1.983098	Y
5	IC 410-286414/17	5.0	9.875133	10.0	1075545.0	1.975027	Y
6	ICIS 410-286414/18	10.0	20.290369	10.0	1096296.0	2.029037	Y
7	IC 410-286414/19	25.0	50.1165	10.0	1138282.0	2.00466	Y



Calibration

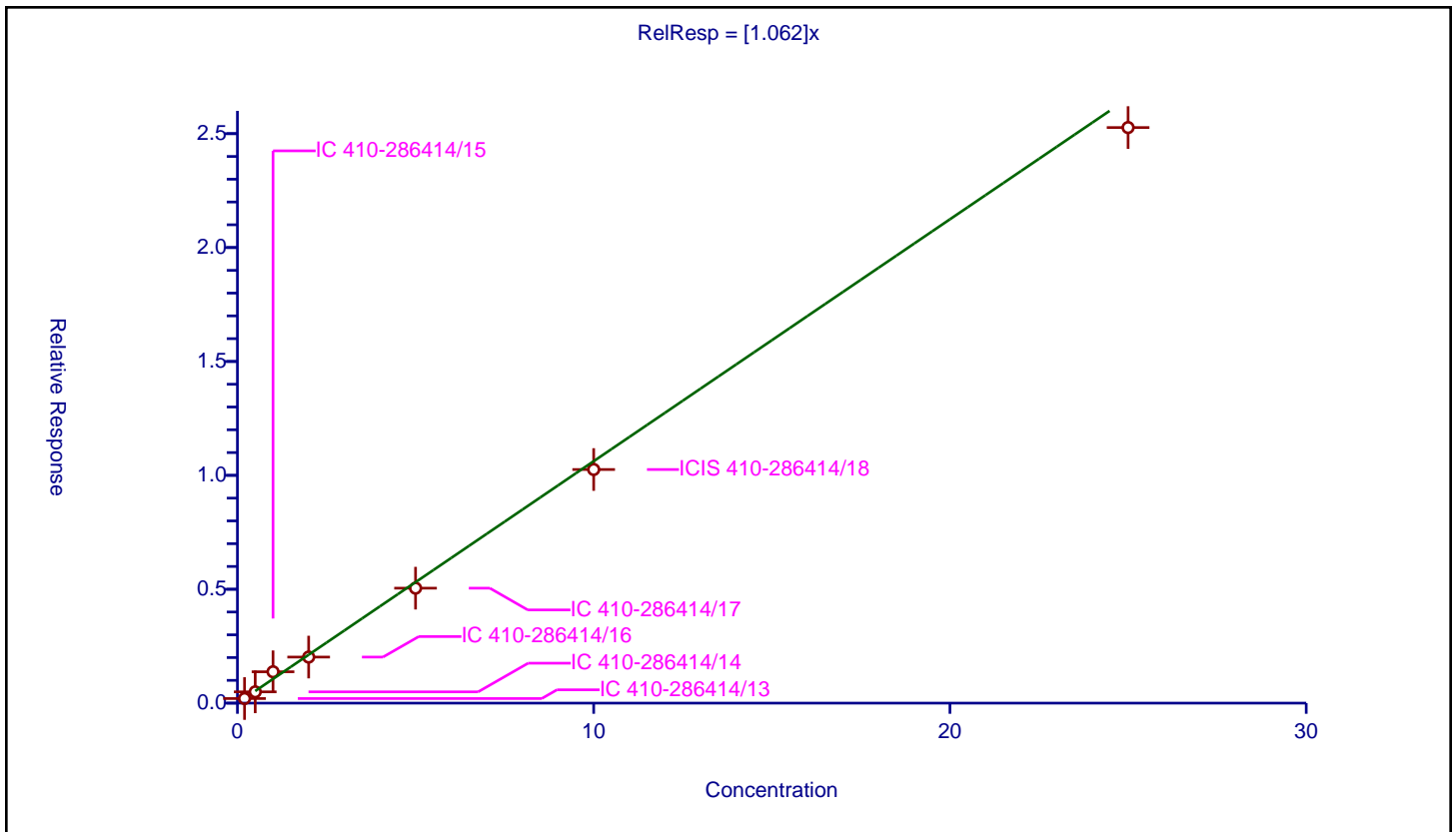
/ 1,2,3-Trichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.062

Error Coefficients	
Standard Error:	1280000
Relative Standard Error:	13.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-286414/13	0.2	0.201961	10.0	1033318.0	1.009805	Y
2	IC 410-286414/14	0.5	0.495513	10.0	1047319.0	0.991026	Y
3	IC 410-286414/15	1.0	1.376637	10.0	1050836.0	1.376637	Y
4	IC 410-286414/16	2.0	2.022144	10.0	1056705.0	1.011072	Y
5	IC 410-286414/17	5.0	5.047515	10.0	1075545.0	1.009503	Y
6	ICIS 410-286414/18	10.0	10.255971	10.0	1096296.0	1.025597	Y
7	IC 410-286414/19	25.0	25.267956	10.0	1138282.0	1.010718	Y



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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-274149/18	Copy_HL11X18.D
Level 2	IC 410-274149/17	HL11X17.D
Level 3	IC 410-274149/16	HL11X16.D
Level 4	IC 410-274149/15	HL11X15.D
Level 5	IC 410-274149/14	HL11X14.D
Level 6	ICIS 410-274149/13	HL11X13.D
Level 7	IC 410-274149/12	HL11X12.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dichlorodifluoromethane	0.2899 0.3243	0.2898 0.3074	0.2915	0.3276	0.3136	Ave	0.306 3			0.1000	5.3		20.0				
Chloromethane	0.3803 0.3959	0.3521 0.3831	0.3530	0.4218	0.4001	Ave	0.383 8			0.1000	6.6		20.0				
1,3-Butadiene	0.4055 0.3689	0.3193 0.3570	0.3445	0.3879	0.3541	Ave	0.362 4				7.8		20.0				
Vinyl chloride	0.3544 0.4008	0.3380 0.3897	0.3606	0.4217	0.3964	Ave	0.380 2			0.1000	7.8		20.0				
Bromomethane	0.2768 0.2762	0.2519 0.2644	0.2409	0.2851	0.2731	Ave	0.266 9			0.1000	5.9		20.0				
Chloroethane	0.2241 0.2379	0.2198 0.2307	0.2148	0.2503	0.2371	Ave	0.230 7			0.1000	5.3		20.0				
Dichlorofluoromethane	0.5070 0.5354	0.4704 0.5193	0.4649	0.5570	0.5251	Ave	0.511 3			0.1000	6.6		20.0				
Trichlorofluoromethane	0.4267 0.4948	0.4087 0.4749	0.4290	0.5040	0.4836	Ave	0.460 2			0.1000	8.2		20.0				
Ethyl ether	0.1851 0.2049	0.1696 0.1924	0.1805	0.2134	0.2012	Ave	0.192 4				7.9		20.0				
Freon 123a	0.3385 0.3748	0.3443 0.3600	0.3305	0.3902	0.3710	Ave	0.358 5				6.0		20.0				
Acrolein	2.1925 2.9237	3.0932 2.9018	2.8924	2.7403	2.4897	Ave	2.747 6				11.2		20.0				
1,1-Dichloroethene	0.2329 0.2740	0.2636 0.2583	0.2505	0.2750	0.2660	Ave	0.260 1			0.1000	5.7		20.0				
Acetone	3.8921 2.9605	3.8819 2.7109	3.2721	2.8654	2.8088	Ave	3.198 8			0.1000	15.7		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 Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Freon 113	0.2250 0.2706	0.2422 0.2558	0.2525	0.2621	0.2670	Ave		0.253 6		0.1000	6.2		20.0				
Methyl iodide	0.4263 0.4671	0.4537 0.4452	0.4414	0.4691	0.4628	Ave		0.452 2			3.4		20.0				
Carbon disulfide	0.6592 0.7282	0.6881 0.6934	0.6636	0.7292	0.7115	Ave		0.696 2		0.1000	4.1		20.0				
Methyl acetate	8.7050 9.1432	8.0756 9.3005	8.7296	8.2006	7.0968	Ave		8.464 5		0.1000	8.9		20.0				
Allyl chloride	0.4589 0.4587	0.4514 0.4442	0.4246	0.4652	0.4563	Ave		0.451 3			3.0		20.0				
Methylene Chloride	0.2481 0.2794	0.2749 0.2683	0.2572	0.2797	0.2780	Ave		0.269 4		0.1000	4.6		20.0				
t-Butyl alcohol	1.0096 1.0682	1.1595 0.8930	1.1662	1.1599	1.1163	Ave		1.081 8			9.4		20.0				
Acrylonitrile	2.5952 4.8609	4.7395 4.9642	4.4206	4.5792	4.0677	Ave		4.318 2			18.9		20.0				
Methyl tert-butyl ether	0.5266 0.6097	0.5807 0.5882	0.5531	0.6069	0.6043	Ave		0.581 4		0.1000	5.4		20.0				
trans-1,2-Dichloroethene	0.2623 0.3005	0.2878 0.2946	0.2788	0.3030	0.2953	Ave		0.288 9		0.1000	4.9		20.0				
n-Hexane	0.3849 0.4227	0.3999 0.4054	0.3819	0.4182	0.4164	Ave		0.404 2			4.0		20.0				
1,1-Dichloroethane	0.4886 0.5634	0.5501 0.5553	0.5126	0.5538	0.5563	Ave		0.540 0		0.2000	5.2		20.0				
di-Isopropyl ether	0.8535 0.9560	0.9006 0.9387	0.8798	0.9481	0.9560	Ave		0.919 0			4.5		20.0				
2-Chloro-1,3-butadiene	0.4022 0.4636	0.4317 0.4607	0.4113	0.4594	0.4584	Ave		0.441 0			5.9		20.0				
Ethyl t-butyl ether	0.7690 0.8422	0.8029 0.8224	0.7792	0.8446	0.8304	Ave		0.813 0			3.7		20.0				
2-Butanone (MEK)	4.5344 6.0368	5.6651 6.1255	5.8778	5.4913	5.2204	Ave		5.564 5		0.1000	9.9		20.0				
cis-1,2-Dichloroethene	0.3052 0.3291	0.3106 0.3220	0.3019	0.3266	0.3258	Ave		0.317 3		0.1000	3.5		20.0				
2,2-Dichloropropane	0.4080 0.4688	0.4528 0.4668	0.4314	0.4725	0.4666	Ave		0.452 4			5.3		20.0				

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

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Propionitrile	1.0525 1.6328	1.3219 1.5249	1.4750	1.5063	1.4751	Ave		1.426 9			13.2		20.0				
Methacrylonitrile	4.5018 6.5489	7.1162 6.8274	6.5565	6.0351	5.5456	Ave		6.161 6			14.5		20.0				
Bromochloromethane	0.1301 0.1308	0.1200 0.1275	0.1187	0.1299	0.1305	Ave		0.126 8			4.1		20.0				
Tetrahydrofuran	1.2863 1.6785	1.6222 1.7068	1.7892	1.5815	1.4719	Ave		1.590 9			10.5		20.0				
Chloroform	0.4541 0.5291	0.5277 0.5209	0.4810	0.5263	0.5271	Ave		0.509 5		0.2000	5.8		20.0				
1,1,1-Trichloroethane	0.4522 0.4958	0.4661 0.4815	0.4504	0.4871	0.4862	Ave		0.474 2		0.1000	3.8		20.0				
Cyclohexane	0.5094 0.5608	0.5380 0.5462	0.5117	0.5568	0.5426	Ave		0.537 9		0.1000	3.8		20.0				
1,1-Dichloropropene	0.4167 0.4429	0.4207 0.4385	0.4059	0.4401	0.4359	Ave		0.428 7			3.3		20.0				
Carbon tetrachloride	0.3749 0.4331	0.3920 0.4280	0.3926	0.4228	0.4271	Ave		0.410 1		0.1000	5.6		20.0				
Isobutyl alcohol	0.3269 0.3867	0.3610 0.3137	0.3554	0.3695	0.3565	Ave		0.352 8			7.1		20.0				
Benzene	1.1897 1.2999	1.2346 1.2702	1.1980	1.2787	1.2755	Ave		1.249 5		0.5000	3.4		20.0				
1,2-Dichloroethane	0.2669 0.2773	0.2742 0.2690	0.2543	0.2762	0.2772	Ave		0.270 8		0.1000	3.1		20.0				
t-Amyl methyl ether	0.6173 0.7276	0.6973 0.7095	0.6683	0.7088	0.7201	Ave		0.692 7			5.5		20.0				
n-Heptane	0.4682 0.4523	0.4498 0.4336	0.4226	0.4328	0.4374	Ave		0.442 4			3.5		20.0				
n-Butanol	0.2883 0.3287	0.2355 0.2501	0.3090	0.3539	0.3464	Ave		0.301 7			15.3		20.0				
Trichloroethene	0.3182 0.3421	0.3246 0.3379	0.3124	0.3332	0.3357	Ave		0.329 2		0.2000	3.3		20.0				
Methylcyclohexane	0.5298 0.5805	0.5438 0.5550	0.5350	0.5691	0.5738	Ave		0.555 3		0.1000	3.6		20.0				
1,2-Dichloropropane	0.2859 0.3269	0.3148 0.3229	0.2995	0.3227	0.3229	Ave		0.313 7		0.1000	4.9		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 Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Methyl methacrylate	7.9673 13.751	13.725 14.205	13.051	12.020	11.199	Ave		12.27 4			17.7		20.0				
1,4-Dioxane	++++ 0.0586	0.0835 ++++	0.0840	0.0865	0.0793	Ave		0.078 4		0.0050	14.5		20.0				
Dibromomethane	0.1301 0.1344	0.1301 0.1318	0.1240	0.1298	0.1340	Ave		0.130 6			2.7		20.0				
Bromodichloromethane	0.3400 0.3712	0.3425 0.3650	0.3280	0.3610	0.3632	Ave		0.353 0		0.2000	4.5		20.0				
2-Nitropropane	2.4865 3.3083	3.3456 3.3399	3.1361	2.9608	2.7261	Ave		3.043 3			11.0		20.0				
cis-1,3-Dichloropropene	0.3880 0.4741	0.4274 0.4691	0.4088	0.4607	0.4718	Ave		0.442 9		0.2000	7.8		20.0				
4-Methyl-2-pentanone (MIBK)	11.162 15.918	17.688 16.156	16.577	14.434	13.643	Ave		15.08 2		0.1000	14.5		20.0				
Toluene	0.8901 0.9385	0.9089 0.9125	0.8572	0.9277	0.9282	Ave		0.909 0		0.4000	3.1		20.0				
trans-1,3-Dichloropropene	0.3614 0.4103	0.3692 0.4040	0.3649	0.3966	0.4037	Ave		0.387 1		0.1000	5.4		20.0				
Ethyl methacrylate	0.2654 0.3179	0.2797 0.3081	0.2847	0.3037	0.3174	Ave		0.296 7			6.8		20.0				
1,1,2-Trichloroethane	0.2326 0.2169	0.2081 0.2116	0.2023	0.2148	0.2209	Ave		0.215 3		0.1000	4.5		20.0				
Tetrachloroethene	0.3952 0.4333	0.4290 0.4232	0.4029	0.4275	0.4264	Ave		0.419 7		0.2000	3.5		20.0				
1,3-Dichloropropane	0.3559 0.3853	0.3661 0.3746	0.3576	0.3741	0.3845	Ave		0.371 1			3.2		20.0				
2-Hexanone	6.9530 10.879	11.395 11.116	10.721	9.7750	9.2405	Ave		10.01 1		0.1000	15.5		20.0				
Dibromochloromethane	0.2584 0.2823	0.2522 0.2783	0.2474	0.2686	0.2783	Ave		0.266 5			5.2		20.0				
1,2-Dibromoethane (EDB)	0.1601 0.2117	0.2006 0.2052	0.1867	0.2071	0.2093	Ave		0.197 2		0.1000	9.3		20.0				
1-Chlorohexane	0.6023 0.5639	0.5613 0.5424	0.5361	0.5700	0.5563	Ave		0.561 7			3.8		20.0				
Chlorobenzene	0.9385 0.9973	0.9603 0.9758	0.9243	0.9876	0.9954	Ave		0.968 4		0.5000	2.9		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 Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
1,1,1,2-Tetrachloroethane	0.3211 0.3472	0.3234 0.3401	0.3097	0.3357	0.3483	Ave		0.332 2			4.4		20.0				
Ethylbenzene	1.7083 1.8388	1.7359 1.7937	1.6923	1.8276	1.8295	Ave		1.775 2		0.1000	3.5		20.0				
m&p-Xylene	0.6472 0.7031	0.6800 0.6834	0.6340	0.6912	0.6984	Ave		0.676 8		0.1000	3.9		20.0				
o-Xylene	0.6202 0.6776	0.6474 0.6663	0.6238	0.6758	0.6684	Ave		0.654 2		0.3000	3.7		20.0				
Styrene	0.9408 1.1299	1.0366 1.1046	1.0051	1.0969	1.1155	Ave		1.061 3		0.3000	6.6		20.0				
Bromoform	0.1367 0.1677	0.1415 0.1668	0.1411	0.1578	0.1633	Ave		0.153 6		0.1000	8.7		20.0				
Isopropylbenzene	1.6512 1.8462	1.7520 1.8070	1.6637	1.8290	1.8339	Ave		1.769 0		0.1000	4.6		20.0				
1,1,2,2-Tetrachloroethane	0.4176 0.4696	0.4600 0.4516	0.4398	0.4858	0.4790	Ave		0.457 6		0.3000	5.2		20.0				
Bromobenzene	0.6575 0.7070	0.6763 0.6801	0.6672	0.6993	0.7077	Ave		0.685 0			2.9		20.0				
trans-1,4-Dichloro-2-butene	3.7180 5.7724	5.6507 6.0271	5.4339	5.0155	4.8649	Ave		5.211 8			14.9		20.0				
1,2,3-Trichloropropane	0.1026 0.1162	0.1237 0.1124	0.1067	0.1237	0.1190	Ave		0.114 9			7.1		20.0				
N-Propylbenzene	3.5065 3.9790	3.8348 3.8071	3.6449	3.9948	3.9727	Ave		3.820 0			4.9		20.0				
2-Chlorotoluene	0.6876 0.7601	0.7303 0.7386	0.7115	0.7522	0.7654	Ave		0.735 1			3.8		20.0				
1,3,5-Trimethylbenzene	2.4679 2.7533	2.6657 2.6501	2.5649	2.7895	2.7584	Ave		2.664 3			4.4		20.0				
4-Chlorotoluene	0.6611 0.7662	0.7575 0.7464	0.7041	0.7583	0.7730	Ave		0.738 1			5.5		20.0				
tert-Butylbenzene	0.5358 0.6306	0.5945 0.5803	0.5855	0.6004	0.5969	Ave		0.589 2			4.8		20.0				
Pentachloroethane	0.3720 0.4466	0.3700 0.4318	0.3906	0.4463	0.4393	Ave		0.413 8			8.4		20.0				
1,2,4-Trimethylbenzene	2.5049 2.7823	2.7162 2.7057	2.5558	2.7691	2.7848	Ave		2.688 4			4.2		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 Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
sec-Butylbenzene	3.3622 3.5869	3.4962 3.4314	3.3383	3.6286	3.5806	Ave		3.489 2			3.3		20.0				
1,3-Dichlorobenzene	1.3649 1.4559	1.4354 1.4133	1.3234	1.4769	1.4596	Ave		1.418 5		0.6000	3.9		20.0				
p-Isopropyltoluene	2.8662 3.0741	3.0004 2.9480	2.8503	3.1152	3.0827	Ave		2.991 0			3.6		20.0				
1,4-Dichlorobenzene	1.3842 1.4450	1.4191 1.3948	1.3216	1.4520	1.4378	Ave		1.407 8		0.5000	3.2		20.0				
1,2,3-Trimethylbenzene	1.1564 1.1744	1.1515 1.1295	1.0721	1.1696	1.1691	Ave		1.146 1			3.1		20.0				
Benzyl chloride	0.1688 0.2024	0.1696 0.1972	0.1763	0.1917	0.1966	Ave		0.186 1			7.6		20.0				
n-Butylbenzene	1.4789 1.5654	1.4558 1.5059	1.4358	1.5738	1.5521	Ave		1.509 7			3.7		20.0				
1,2-Dichlorobenzene	1.2365 1.2987	1.2434 1.2492	1.1807	1.2880	1.3003	Ave		1.256 7		0.4000	3.4		20.0				
1,2-Dibromo-3-Chloropropane	0.0414 0.0672	0.0536 0.0637	0.0554	0.0719	0.0696	Ave		0.060 4		0.0500	18.0		20.0				
1,3,5-Trichlorobenzene	1.0362 1.1307	1.1093 1.0819	1.0701	1.1682	1.1264	Ave		1.103 3			4.0		20.0				
1,2,4-Trichlorobenzene	0.8703 0.9596	0.9079 0.9056	0.8932	1.0010	0.9655	Ave		0.929 0		0.2000	5.0		20.0				
Hexachlorobutadiene	0.5602 0.4200	0.4949 0.3905	0.4298	0.4426	0.4204	Ave		0.451 2			12.8		20.0				
Naphthalene	1.4351 1.5595	1.4872 1.4130	1.4298	1.6005	1.5752	Ave		1.500 0			5.2		20.0				
1,2,3-Trichlorobenzene	0.7394 0.8082	0.8042 0.7280	0.7753	0.8483	0.8176	Ave		0.788 7			5.5		20.0				
Dibromofluoromethane (Surr)	0.2516 0.2536	0.2535 0.2519	0.2512	0.2563	0.2536	Ave		0.253 1			0.7		20.0				
1,2-Dichloroethane-d4 (Surr)	0.0468 0.0461	0.0463 0.0460	0.0450	0.0464	0.0467	Ave		0.046 2			1.3		20.0				
Toluene-d8 (Surr)	1.2501 1.2244	1.2259 1.2138	1.2140	1.2235	1.2119	Ave		1.223 4			1.1		20.0				
4-Bromofluorobenzene (Surr)	0.4975 0.5017	0.4934 0.4963	0.4930	0.4941	0.5005	Ave		0.496 6			0.7		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  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-274149/18	Copy_HL11X18.D
Level 2	IC 410-274149/17	HL11X17.D
Level 3	IC 410-274149/16	HL11X16.D
Level 4	IC 410-274149/15	HL11X15.D
Level 5	IC 410-274149/14	HL11X14.D
Level 6	ICIS 410-274149/13	HL11X13.D
Level 7	IC 410-274149/12	HL11X12.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7				LVL 6	LVL 7			
Dichlorodifluoromethane	FB	Ave	12093 675132	29441 1638876	59403	133086	330210	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	15861 824161	35764 2042758	71922	171365	421301	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	16912 767941	32434 1903361	70198	157585	372846	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	14783 834299	34329 2077605	73466	171314	417386	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	11545 574869	25582 1409920	49078	115842	287601	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	9347 495285	22322 1230005	43768	101707	249635	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	21148 1114554	47783 2768929	94716	226294	552979	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	17796 1030019	41511 2531940	87411	204745	509232	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	7722 426652	17231 1025975	36780	86711	211984	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 123a	FB	Ave	14120 780220	34976 1919633	67338	158543	390670	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd 10	Ave	56027 2963738	126498 7020232	251826	590053	1505959	10.0 500	25.0 1250	50.0	100	250
1,1-Dichloroethene	FB	Ave	9714 570272	26778 1377428	51047	111716	280143	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAd 10	Ave	19892	31750	56977	123401	339789	2.00	5.00	10.0	20.0	50.0

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			600215	1311669				100	250			
Freon 113	FB	Ave	9385 563286	24601 1363934	51449	106489	281165	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl iodide	FB	Ave	17782 972304	46089 2373600	89934	190590	487298	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon disulfide	FB	Ave	27494 1515951	69895 3696914	135219	296255	749209	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd 10	Ave	4449 185370	6605 450003	15201	35316	85854	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	19139 954854	45854 2368143	86514	188981	480474	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	10350 581663	27920 1430268	52410	113641	292795	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd 10	Ave	10320 433119	18967 864137	40615	99901	270086	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd 10	Ave	3316 246376	9691 600481	19244	49301	123022	0.500 25.0	1.25 62.5	2.50	5.00	12.5
Methyl tert-butyl ether	FB	Ave	21966 1269252	58986 3136251	112695	246579	636323	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	10942 625545	29230 1570843	56807	123103	310962	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	16053 879832	40616 2161687	77822	169913	438476	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	20381 1172891	55872 2960872	104448	225005	585799	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	35599 1989982	91474 5004930	179260	385192	1006753	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	16777 965073	43848 2456305	83795	186653	482679	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	32074 1753246	81551 4384857	158776	343121	874477	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone (MEK)	TBAd 10	Ave	23175	46335	102351	236486	631533	2.00	5.00	10.0	20.0	50.0

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1223902	2963836				100	250			
cis-1,2-Dichloroethene	FB	Ave	12731 685145	31554 1716580	61506	132683	343086	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	17016 975977	45990 2488997	87898	191971	491314	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd 10	Ave	10758 662067	21624 1475682	51370	129739	356903	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd 10	Ave	23008 1327716	58203 3303445	114169	259901	670885	2.00 100	5.00 250	10.0	20.0	50.0
Bromochloromethane	FB	Ave	5425 272299	12193 679591	24178	52761	137430	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd 10	Ave	3287 170150	6634 412918	15578	34053	89030	1.00 50.0	2.50 125	5.00	10.0	25.0
Chloroform	FB	Ave	18941 1101450	53597 2777171	98008	213834	555095	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	18862 1032101	47344 2567338	91770	197900	511965	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	21247 1167343	54650 2912163	104255	226192	571420	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	17380 922066	42736 2338039	82705	178784	459004	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	15638 901500	39816 2281907	79987	171753	449741	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	TBAd 10	Ave	8353 391967	14765 759018	30946	79569	215626	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	49624 2705977	125402 6772180	244107	519476	1343156	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	11134 577317	27855 1434259	51817	112224	291944	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	25747 1514685	70827 3782869	136162	287948	758276	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	19527	45690	86111	175823	460581	0.200	0.500	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			941472	2311911				10.0	25.0			
n-Butanol	TBAd 10	Ave	12895	16852	47075	133360	366680	17.5	43.8	87.5	175	438
			583025	1058699				875	2188			
Trichloroethene	FB	Ave	13274	32976	63655	135366	353455	0.200	0.500	1.00	2.00	5.00
			712234	1801642				10.0	25.0			
Methylcyclohexane	FB	Ave	22098	55236	109016	231199	604203	0.200	0.500	1.00	2.00	5.00
			1208386	2958874				10.0	25.0			
1,2-Dichloropropane	FB	Ave	11924	31975	61027	131100	340026	0.200	0.500	1.00	2.00	5.00
			680594	1721801				10.0	25.0			
Methyl methacrylate	TBAd 10	Ave	4072	11226	22726	51766	135474	0.200	0.500	1.00	2.00	5.00
			278786	687315				10.0	25.0			
1,4-Dioxane	TBAd 10	Ave	+++++	3415	7312	18622	47977	+++++	25.0	50.0	100	250
			59377	+++++				500	+++++			
Dibromomethane	FB	Ave	5425	13211	25263	52719	141139	0.200	0.500	1.00	2.00	5.00
			279827	702912				10.0	25.0			
Bromodichloromethane	FB	Ave	14182	34786	66840	146679	382494	0.200	0.500	1.00	2.00	5.00
			772695	1945893				10.0	25.0			
2-Nitropropane	TBAd 10	Ave	6354	13682	27305	63753	164896	1.00	2.50	5.00	10.0	25.0
			335366	808003				50.0	125			
cis-1,3-Dichloropropene	FB	Ave	16185	43415	83305	187149	496791	0.200	0.500	1.00	2.00	5.00
			987001	2501036				10.0	25.0			
4-Methyl-2-pentanone (MIBK)	TBAd 10	Ave	57049	144667	288664	621615	1650404	2.00	5.00	10.0	20.0	50.0
			3227118	7816948				100	250			
Toluene	CBZd 5	Ave	32116	81056	154507	336595	872692	0.200	0.500	1.00	2.00	5.00
			1751935	4396923				10.0	25.0			
trans-1,3-Dichloropropene	CBZd 5	Ave	13040	32928	65774	143896	379506	0.200	0.500	1.00	2.00	5.00
			765868	1946661				10.0	25.0			
Ethyl methacrylate	CBZd 5	Ave	9577	24949	51321	110202	298452	0.200	0.500	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			593374	1484677				10.0	25.0			
1,1,2-Trichloroethane	CBZd 5	Ave	8392	18556	36462	77953	207686	0.200	0.500	1.00	2.00	5.00
			404842	1019488				10.0	25.0			
Tetrachloroethene	CBZd 5	Ave	14261	38259	72632	155095	400926	0.200	0.500	1.00	2.00	5.00
			808937	2039197				10.0	25.0			
1,3-Dichloropropane	CBZd 5	Ave	12843	32646	64455	135730	361499	0.200	0.500	1.00	2.00	5.00
			719249	1804958				10.0	25.0			
2-Hexanone	TBAd 10	Ave	35536	93203	186685	420963	1117872	2.00	5.00	10.0	20.0	50.0
			2205566	5378469				100	250			
Dibromochloromethane	CBZd 5	Ave	9323	22493	44590	97440	261621	0.200	0.500	1.00	2.00	5.00
			526982	1341031				10.0	25.0			
1,2-Dibromoethane (EDB)	CBZd 5	Ave	5776	17888	33650	75141	196751	0.200	0.500	1.00	2.00	5.00
			395194	988803				10.0	25.0			
1-Chlorohexane	CBZd 5	Ave	21731	50063	96628	206815	522985	0.200	0.500	1.00	2.00	5.00
			1052702	2613557				10.0	25.0			
Chlorobenzene	CBZd 5	Ave	33865	85642	166598	358343	935813	0.200	0.500	1.00	2.00	5.00
			1861729	4701939				10.0	25.0			
1,1,1,2-Tetrachloroethane	CBZd 5	Ave	11585	28846	55816	121792	327478	0.200	0.500	1.00	2.00	5.00
			648069	1638763				10.0	25.0			
Ethylbenzene	CBZd 5	Ave	61642	154814	305034	663103	1720096	0.200	0.500	1.00	2.00	5.00
			3432722	8643404				10.0	25.0			
m&p-Xylene	CBZd 5	Ave	46705	121299	228568	501557	1313262	0.400	1.00	2.00	4.00	10.0
			2625259	6586157				20.0	50.0			
o-Xylene	CBZd 5	Ave	22378	57735	112434	245217	628447	0.200	0.500	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1264897	3210811				10.0	25.0			
Styrene	CBZd 5	Ave	33946	92450	181168	398001	1048801	0.200	0.500	1.00	2.00	5.00
			2109282	5322551				10.0	25.0			
Bromoform	CBZd 5	Ave	4931	12623	25426	57271	153558	0.200	0.500	1.00	2.00	5.00
			313065	803826				10.0	25.0			
Isopropylbenzene	CBZd 5	Ave	59579	156254	299877	663631	1724175	0.200	0.500	1.00	2.00	5.00
			3446508	8707027				10.0	25.0			
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	8357	22404	43665	96897	250852	0.200	0.500	1.00	2.00	5.00
			493678	1230941				10.0	25.0			
Bromobenzene	DCBd 4	Ave	13159	32939	66242	139476	370570	0.200	0.500	1.00	2.00	5.00
			743305	1853897				10.0	25.0			
trans-1,4-Dichloro-2-butene	TBAd 10	Ave	19002	46217	94622	215992	588527	2.00	5.00	10.0	20.0	50.0
			1170298	2916204				100	250			
1,2,3-Trichloropropane	DCBd 4	Ave	2053	6024	10598	24664	62318	0.200	0.500	1.00	2.00	5.00
			122178	306446				10.0	25.0			
N-Propylbenzene	DCBd 4	Ave	70175	186777	361905	796754	2080340	0.200	0.500	1.00	2.00	5.00
			4183114	10377351				10.0	25.0			
2-Chlorotoluene	DCBd 4	Ave	13760	35571	70640	150036	400793	0.200	0.500	1.00	2.00	5.00
			799066	2013379				10.0	25.0			
1,3,5-Trimethylbenzene	DCBd 4	Ave	49390	129835	254672	556367	1444446	0.200	0.500	1.00	2.00	5.00
			2894539	7223552				10.0	25.0			
4-Chlorotoluene	DCBd 4	Ave	13230	36896	69914	151238	404813	0.200	0.500	1.00	2.00	5.00
			805513	2034542				10.0	25.0			
tert-Butylbenzene	DCBd 4	Ave	10722	28957	58136	119759	312596	0.200	0.500	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			662962	1581905				10.0	25.0			
Pentachloroethane	DCBd 4	Ave	7445	18023	38784	89007	230027	0.200	0.500	1.00	2.00	5.00
			469487	1176887				10.0	25.0			
1,2,4-Trimethylbenzene	DCBd 4	Ave	50131	132294	253767	552306	1458270	0.200	0.500	1.00	2.00	5.00
			2924954	7375096				10.0	25.0			
sec-Butylbenzene	DCBd 4	Ave	67287	170282	331458	723734	1875046	0.200	0.500	1.00	2.00	5.00
			3770835	9353447				10.0	25.0			
1,3-Dichlorobenzene	DCBd 4	Ave	27316	69911	131401	294576	764311	0.200	0.500	1.00	2.00	5.00
			1530550	3852445				10.0	25.0			
p-Isopropyltoluene	DCBd 4	Ave	57362	146134	283008	621334	1614275	0.200	0.500	1.00	2.00	5.00
			3231751	8035560				10.0	25.0			
1,4-Dichlorobenzene	DCBd 4	Ave	27701	69120	131226	289594	752898	0.200	0.500	1.00	2.00	5.00
			1519120	3801859				10.0	25.0			
1,2,3-Trimethylbenzene	DCBd 4	Ave	23143	56083	106449	233280	612197	0.200	0.500	1.00	2.00	5.00
			1234652	3078858				10.0	25.0			
Benzyl chloride	DCBd 4	Ave	3379	8260	17500	38227	102930	0.200	0.500	1.00	2.00	5.00
			212767	537399				10.0	25.0			
n-Butylbenzene	DCBd 4	Ave	29597	70907	142558	313888	812754	0.200	0.500	1.00	2.00	5.00
			1645635	4104893				10.0	25.0			
1,2-Dichlorobenzene	DCBd 4	Ave	24746	60558	117234	256900	680916	0.200	0.500	1.00	2.00	5.00
			1365343	3405147				10.0	25.0			
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	829	2609	5499	14346	36445	0.200	0.500	1.00	2.00	5.00
			70677	173574				10.0	25.0			
1,3,5-Trichlorobenzene	DCBd 4	Ave	20738	54031	106250	233002	589869	0.200	0.500	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1188689	2949107				10.0	25.0			
1,2,4-Trichlorobenzene	DCBd 4	Ave	17418	44220	88686	199643	505612	0.200	0.500	1.00	2.00	5.00
			1008763	2468365				10.0	25.0			
Hexachlorobutadiene	DCBd 4	Ave	11211	24106	42671	88268	220140	0.200	0.500	1.00	2.00	5.00
			441537	1064480				10.0	25.0			
Naphthalene	DCBd 4	Ave	28721	72436	141968	319229	824852	0.200	0.500	1.00	2.00	5.00
			1639471	3851468				10.0	25.0			
1,2,3-Trichlorobenzene	DCBd 4	Ave	14798	39169	76975	169189	428129	0.200	0.500	1.00	2.00	5.00
			849598	1984437				10.0	25.0			
Dibromofluoromethane (Surr)	FB	Ave	524666	515062	511791	520651	534194	10.0	10.0	10.0	10.0	10.0
			527861	537264				10.0	10.0			
1,2-Dichloroethane-d4 (Surr)	FB	Ave	97667	94092	91709	94159	98328	10.0	10.0	10.0	10.0	10.0
			95893	98178				10.0	10.0			
Toluene-d8 (Surr)	CBZd 5	Ave	2255316	2186651	2188271	2219533	2278814	10.0	10.0	10.0	10.0	10.0
			2285826	2339533				10.0	10.0			
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	897535	880073	888594	896459	941117	10.0	10.0	10.0	10.0	10.0
			936498	956657				10.0	10.0			

Curve Type Legend

Ave = Average ISTD



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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-274149/18	Copy_HL11X18.D
Level 2	IC 410-274149/17	HL11X17.D
Level 3	IC 410-274149/16	HL11X16.D
Level 4	IC 410-274149/15	HL11X15.D
Level 5	IC 410-274149/14	HL11X14.D
Level 6	ICIS 410-274149/13	HL11X13.D
Level 7	IC 410-274149/12	HL11X12.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Dichlorodifluoromethane	-5.3 0.3	-5.4	-4.8	6.9	2.4	5.9	50 30	30	30	30	30	30
Chloromethane	-0.9 -0.2	-8.2	-8.0	9.9	4.3	3.2	50 30	30	30	30	30	30
1,3-Butadiene	11.9 -1.5	-11.9	-4.9	7.0	-2.3	1.8	50 30	30	30	30	30	30
Vinyl chloride	-6.8 2.5	-11.1	-5.2	10.9	4.2	5.4	50 30	30	30	30	30	30
Bromomethane	3.7 -0.9	-5.6	-9.8	6.8	2.3	3.5	50 30	30	30	30	30	30
Chloroethane	-2.9 0.0	-4.7	-6.9	8.5	2.8	3.1	50 30	30	30	30	30	30
Dichlorofluoromethane	-0.8 1.6	-8.0	-9.1	8.9	2.7	4.7	50 30	30	30	30	30	30
Trichlorofluoromethane	-7.3 3.2	-11.2	-6.8	9.5	5.1	7.5	50 30	30	30	30	30	30
Ethyl ether	-3.8 0.0	-11.9	-6.2	10.9	4.6	6.5	50 30	30	30	30	30	30
Freon 123a	-5.6 0.4	-3.9	-7.8	8.9	3.5	4.6	50 30	30	30	30	30	30
Acrolein	-20.2 5.6	12.6	5.3	-0.3	-9.4	6.4	50 30	30	30	30	30	30
1,1-Dichloroethene	-10.4 -0.7	1.4	-3.7	5.7	2.3	5.3	50 30	30	30	30	30	30
Acetone	21.7 -15.3	21.4	2.3	-10.4	-12.2	-7.4	50 30	30	30	30	30	30
Freon 113	-11.3 0.9	-4.5	-0.4	3.4	5.3	6.7	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Methyl iodide	-5.7 -1.6	0.3	-2.4	3.7	2.3	3.3	50 30	30	30	30	30	30
Carbon disulfide	-5.3 -0.4	-1.2	-4.7	4.7	2.2	4.6	50 30	30	30	30	30	30
Methyl acetate	2.8 9.9	-4.6	3.1	-3.1	-16.2	8.0	50 30	30	30	30	30	30
Allyl chloride	1.7 -1.6	0.0	-5.9	3.1	1.1	1.6	50 30	30	30	30	30	30
Methylene Chloride	-7.9 -0.4	2.0	-4.5	3.8	3.2	3.7	50 30	30	30	30	30	30
t-Butyl alcohol	-6.7 -17.5	7.2	7.8	7.2	3.2	-1.3	50 30	30	30	30	30	30
Acrylonitrile	-39.9 15.0	9.8	2.4	6.0	-5.8	12.6	50 30	30	30	30	30	30
Methyl tert-butyl ether	-9.4 1.2	-0.1	-4.9	4.4	3.9	4.9	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	-9.2 2.0	-0.4	-3.5	4.9	2.2	4.0	50 30	30	30	30	30	30
n-Hexane	-4.8 0.3	-1.1	-5.5	3.5	3.0	4.6	50 30	30	30	30	30	30
1,1-Dichloroethane	-9.5 2.8	1.9	-5.1	2.6	3.0	4.3	50 30	30	30	30	30	30
di-Isopropyl ether	-7.1 2.1	-2.0	-4.3	3.2	4.0	4.0	50 30	30	30	30	30	30
2-Chloro-1,3-butadiene	-8.8 4.5	-2.1	-6.8	4.2	3.9	5.1	50 30	30	30	30	30	30
Ethyl t-butyl ether	-5.4 1.2	-1.2	-4.1	3.9	2.1	3.6	50 30	30	30	30	30	30
2-Butanone (MEK)	-18.5 10.1	1.8	5.6	-1.3	-6.2	8.5	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	-3.8 1.5	-2.1	-4.9	2.9	2.7	3.7	50 30	30	30	30	30	30
2,2-Dichloropropane	-9.8 3.2	0.1	-4.6	4.4	3.1	3.6	50 30	30	30	30	30	30
Propionitrile	-26.2 6.9	-7.4	3.4	5.6	3.4	14.4	50 30	30	30	30	30	30
Methacrylonitrile	-26.9 10.8	15.5	6.4	-2.1	-10.0	6.3	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromochloromethane	2.6 0.5	-5.3	-6.4	2.4	2.9	3.2	50 30	30	30	30	30	30
Tetrahydrofuran	-19.1 7.3	2.0	12.5	-0.6	-7.5	5.5	50 30	30	30	30	30	30
Chloroform	-10.9 2.2	3.6	-5.6	3.3	3.5	3.9	50 30	30	30	30	30	30
1,1,1-Trichloroethane	-4.6 1.5	-1.7	-5.0	2.7	2.5	4.6	50 30	30	30	30	30	30
Cyclohexane	-5.3 1.5	0.0	-4.9	3.5	0.9	4.2	50 30	30	30	30	30	30
1,1-Dichloropropene	-2.8 2.3	-1.9	-5.3	2.7	1.7	3.3	50 30	30	30	30	30	30
Carbon tetrachloride	-8.6 4.4	-4.4	-4.3	3.1	4.2	5.6	50 30	30	30	30	30	30
Isobutyl alcohol	-7.4 -11.1	2.3	0.7	4.7	1.0	9.6	50 30	30	30	30	30	30
Benzene	-4.8 1.7	-1.2	-4.1	2.3	2.1	4.0	50 30	30	30	30	30	30
1,2-Dichloroethane	-1.4 -0.6	1.3	-6.1	2.0	2.4	2.4	50 30	30	30	30	30	30
t-Amyl methyl ether	-10.9 2.4	0.7	-3.5	2.3	4.0	5.0	50 30	30	30	30	30	30
n-Heptane	5.8 -2.0	1.7	-4.5	-2.2	-1.1	2.2	50 30	30	30	30	30	30
n-Butanol	-4.4 -17.1	-21.9	2.4	17.3	14.8	8.9	50 30	30	30	30	30	30
Trichloroethene	-3.3 2.7	-1.4	-5.1	1.2	2.0	3.9	50 30	30	30	30	30	30
Methylcyclohexane	-4.6 -0.1	-2.1	-3.6	2.5	3.3	4.5	50 30	30	30	30	30	30
1,2-Dichloropropane	-8.9 3.0	0.4	-4.5	2.9	2.9	4.2	50 30	30	30	30	30	30
Methyl methacrylate	-35.1 15.7	11.8	6.3	-2.1	-8.8	12.0	50 30	30	30	30	30	30
1,4-Dioxane	++++ ++++	6.6	7.2	10.3	1.2	-25.3		50	30	30	30	30
Dibromomethane	-0.4 0.9	-0.4	-5.1	-0.6	2.6	2.9	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromodichloromethane	-3.7 3.4	-3.0	-7.1	2.3	2.9	5.2	50 30	30	30	30	30	30
2-Nitropropane	-18.3 9.7	9.9	3.0	-2.7	-10.4	8.7	50 30	30	30	30	30	30
cis-1,3-Dichloropropene	-12.4 5.9	-3.5	-7.7	4.0	6.5	7.1	50 30	30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	-26.0 7.1	17.3	9.9	-4.3	-9.5	5.5	50 30	30	30	30	30	30
Toluene	-2.1 0.4	0.0	-5.7	2.1	2.1	3.2	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-6.7 4.4	-4.6	-5.7	2.4	4.3	6.0	50 30	30	30	30	30	30
Ethyl methacrylate	-10.5 3.8	-5.7	-4.0	2.4	7.0	7.1	50 30	30	30	30	30	30
1,1,2-Trichloroethane	8.0 -1.7	-3.4	-6.0	-0.2	2.6	0.7	50 30	30	30	30	30	30
Tetrachloroethene	-5.8 0.8	2.2	-4.0	1.9	1.6	3.3	50 30	30	30	30	30	30
1,3-Dichloropropane	-4.1 0.9	-1.4	-3.7	0.8	3.6	3.8	50 30	30	30	30	30	30
2-Hexanone	-30.5 11.0	13.8	7.1	-2.4	-7.7	8.7	50 30	30	30	30	30	30
Dibromochloromethane	-3.0 4.4	-5.4	-7.2	0.8	4.4	5.9	50 30	30	30	30	30	30
1,2-Dibromoethane (EDB)	-18.8 4.0	1.7	-5.3	5.0	6.1	7.3	50 30	30	30	30	30	30
1-Chlorohexane	7.2 -3.4	-0.1	-4.6	1.5	-1.0	0.4	50 30	30	30	30	30	30
Chlorobenzene	-3.1 0.8	-0.8	-4.6	2.0	2.8	3.0	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-3.4 2.4	-2.6	-6.8	1.0	4.9	4.5	50 30	30	30	30	30	30
Ethylbenzene	-3.8 1.0	-2.2	-4.7	3.0	3.1	3.6	50 30	30	30	30	30	30
m&p-Xylene	-4.4 1.0	0.5	-6.3	2.1	3.2	3.9	50 30	30	30	30	30	30
o-Xylene	-5.2 1.9	-1.0	-4.7	3.3	2.2	3.6	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Styrene	-11.4 4.1	-2.3	-5.3	3.4	5.1	6.5	50 30	30	30	30	30	30
Bromoform	-11.0 8.6	-7.8	-8.1	2.8	6.4	9.2	50 30	30	30	30	30	30
Isopropylbenzene	-6.7 2.1	-1.0	-6.0	3.4	3.7	4.4	50 30	30	30	30	30	30
1,1,2,2-Tetrachloroethane	-8.8 -1.3	0.5	-3.9	6.2	4.7	2.6	50 30	30	30	30	30	30
Bromobenzene	-4.0 -0.7	-1.3	-2.6	2.1	3.3	3.2	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	-28.7 15.6	8.4	4.3	-3.8	-6.7	10.8	50 30	30	30	30	30	30
1,2,3-Trichloropropane	-10.7 -2.2	7.6	-7.1	7.6	3.6	1.1	50 30	30	30	30	30	30
N-Propylbenzene	-8.2 -0.3	0.4	-4.6	4.6	4.0	4.2	50 30	30	30	30	30	30
2-Chlorotoluene	-6.5 0.5	-0.6	-3.2	2.3	4.1	3.4	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	-7.4 -0.5	0.1	-3.7	4.7	3.5	3.3	50 30	30	30	30	30	30
4-Chlorotoluene	-10.4 1.1	2.6	-4.6	2.7	4.7	3.8	50 30	30	30	30	30	30
tert-Butylbenzene	-9.1 -1.5	0.9	-0.6	1.9	1.3	7.0	50 30	30	30	30	30	30
Pentachloroethane	-10.1 4.3	-10.6	-5.6	7.8	6.2	7.9	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	-6.8 0.6	1.0	-4.9	3.0	3.6	3.5	50 30	30	30	30	30	30
sec-Butylbenzene	-3.6 -1.7	0.2	-4.3	4.0	2.6	2.8	50 30	30	30	30	30	30
1,3-Dichlorobenzene	-3.8 -0.4	1.2	-6.7	4.1	2.9	2.6	50 30	30	30	30	30	30
p-Isopropyltoluene	-4.2 -1.4	0.3	-4.7	4.2	3.1	2.8	50 30	30	30	30	30	30
1,4-Dichlorobenzene	-1.7 -0.9	0.8	-6.1	3.1	2.1	2.6	50 30	30	30	30	30	30
1,2,3-Trimethylbenzene	0.9 -1.4	0.5	-6.5	2.1	2.0	2.5	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-106467-1 Analy Batch No.: 274149

SDG No.: \_\_\_\_\_

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Benzyl chloride	-9.3 6.0	-8.9	-5.3	3.0	5.6	8.8	50 30	30	30	30	30	30
n-Butylbenzene	-2.0 -0.2	-3.6	-4.9	4.2	2.8	3.7	50 30	30	30	30	30	30
1,2-Dichlorobenzene	-1.6 -0.6	-1.1	-6.0	2.5	3.5	3.3	50 30	30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-31.4 5.4	-11.3	-8.3	19.1	15.2	11.3	50 30	30	30	30	30	30
1,3,5-Trichlorobenzene	-6.1 -1.9	0.5	-3.0	5.9	2.1	2.5	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-6.3 -2.5	-2.3	-3.9	7.7	3.9	3.3	50 30	30	30	30	30	30
Hexachlorobutadiene	24.2 -13.4	9.7	-4.7	-1.9	-6.8	-6.9	50 30	30	30	30	30	30
Naphthalene	-4.3 -5.8	-0.9	-4.7	6.7	5.0	4.0	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	-6.2 -7.7	2.0	-1.7	7.6	3.7	2.5	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	-0.6 -0.5	0.2	-0.8	1.3	0.2	0.2	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	1.4 -0.3	0.3	-2.5	0.4	1.1	-0.3	50 30	30	30	30	30	30
Toluene-d8 (Surr)	2.2 -0.8	0.2	-0.8	0.0	-0.9	0.1	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	0.2 -0.1	-0.7	-0.7	-0.5	0.8	1.0	50 30	30	30	30	30	30

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X12.D  
 Lims ID: IC std7 25  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 11-Jul-2022 16:51:30 ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0052505-012  
 Operator ID: kas02648 Instrument ID: 19094  
 Sublist: chrom-MSV\_19094\_25mL\*sub1  
 Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 12-Jul-2022 11:50:21 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1678

First Level Reviewer: UKAD Date: 12-Jul-2022 09:47:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.940	1.940	0.000	99	1638876	25.0	25.1	
6 Chloromethane	50	2.129	2.129	0.000	99	2042758	25.0	25.0	
8 Butadiene	39	2.245	2.245	0.000	91	1903361	25.0	24.6	
7 Vinyl chloride	62	2.245	2.251	-0.006	98	2077605	25.0	25.6	
9 Bromomethane	94	2.568	2.562	0.006	90	1409920	25.0	24.8	
10 Chloroethane	64	2.647	2.648	-0.001	100	1230005	25.0	25.0	
11 Dichlorofluoromethane	67	2.873	2.873	0.000	97	2768929	25.0	25.4	
13 Trichlorofluoromethane	101	2.952	2.952	0.000	98	2531940	25.0	25.8	
15 Ethyl ether	59	3.178	3.154	0.024	93	1025975	25.0	25.0	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.269	3.257	0.012	94	1919633	25.0	25.1	
17 Acrolein	56	3.342	3.349	-0.007	99	7020232	1250.0	1320.1	
18 1,1-Dichloroethene	96	3.489	3.489	0.000	98	1377428	25.0	24.8	
19 Acetone	43	3.501	3.507	-0.006	100	1311669	250.0	211.9	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.531	3.519	0.012	93	1363934	25.0	25.2	
21 Isopropyl alcohol	45	3.623	3.660	-0.037	96	406572	500.0	NQ	M
22 Iodomethane	142	3.678	3.672	0.006	98	2373600	25.0	24.6	
23 Ethyl bromide	108	3.708	3.708	0.000	98	1255606	25.0	25.8	
24 Carbon disulfide	76	3.788	3.788	0.000	98	3696914	25.0	24.9	
26 Methyl acetate	43	3.897	3.910	-0.013	99	450003	25.0	27.5	M
27 3-Chloro-1-propene	41	3.952	3.952	0.000	94	2368143	25.0	24.6	
29 Methylene Chloride	84	4.129	4.129	0.000	92	1430268	25.0	24.9	
* 28 t-Butyl alcohol-d10 (IS)	65	4.135	4.135	0.000	0	96770	50.0	50.0	
30 2-Methyl-2-propanol	59	4.257	4.275	-0.018	99	864137	500.0	412.7	
31 Acrylonitrile	53	4.446	4.464	-0.018	99	600481	62.5	71.9	
32 Methyl tert-butyl ether	73	4.525	4.519	0.006	94	3136251	25.0	25.3	
33 trans-1,2-Dichloroethene	96	4.543	4.544	-0.001	100	1570843	25.0	25.5	
34 Hexane	57	4.964	4.970	-0.006	92	2161687	25.0	25.1	
35 1,1-Dichloroethane	63	5.202	5.202	0.000	96	2960872	25.0	25.7	
37 Isopropyl ether	45	5.257	5.263	-0.006	96	5004930	25.0	25.5	
38 2-Chloro-1,3-butadiene	53	5.306	5.306	0.000	90	2456305	25.0	26.1	
39 Tert-butyl ethyl ether	59	5.793	5.793	0.000	98	4384857	25.0	25.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.982	5.988	-0.006	100	2963836	250.0	275.2	
42 cis-1,2-Dichloroethene	96	6.031	6.031	0.000	82	1716580	25.0	25.4	
43 2,2-Dichloropropane	77	6.055	6.055	0.000	86	2488997	25.0	25.8	
45 Propionitrile	54	6.068	6.074	-0.006	98	1475682	500.0	534.3	
S 40 1,2-Dichloroethene, Total	100				0			50.9	
47 Methacrylonitrile	67	6.287	6.293	-0.006	92	3303445	250.0	277.0	
48 Chlorobromomethane	128	6.366	6.360	0.006	94	679591	25.0	25.1	
49 Tetrahydrofuran	71	6.366	6.372	-0.006	77	412918	125.0	134.1	
50 Chloroform	83	6.519	6.513	0.006	93	2777171	25.0	25.6	
\$ 51 Dibromofluoromethane (Surr)	113	6.732	6.726	0.006	94	537264	10.0	9.95	
52 1,1,1-Trichloroethane	97	6.756	6.757	-0.001	98	2567338	25.0	25.4	
53 Cyclohexane	56	6.860	6.860	0.000	90	2912163	25.0	25.4	
55 1,1-Dichloropropene	75	6.958	6.958	0.000	98	2338039	25.0	25.6	
56 Carbon tetrachloride	117	6.970	6.964	0.006	97	2281907	25.0	26.1	
57 Isobutyl alcohol	41	7.092	7.098	-0.006	95	759018	1250.0	1111.5	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.183	7.189	-0.006	0	98178	10.0	9.97	
59 Benzene	78	7.220	7.220	0.000	96	6772180	25.0	25.4	
60 1,2-Dichloroethane	62	7.293	7.293	0.000	97	1434259	25.0	24.8	
62 Tert-amyl methyl ether	73	7.421	7.415	0.006	99	3782869	25.0	25.6	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	99	2132698	10.0	10.0	
64 n-Heptane	43	7.647	7.653	-0.007	92	2311911	25.0	24.5	
66 n-Butanol	56	7.982	7.988	-0.006	87	1058699	2187.5	1813.2	
67 Trichloroethene	95	8.116	8.116	0.000	98	1801642	25.0	25.7	
68 Methylcyclohexane	83	8.433	8.433	0.000	94	2958874	25.0	25.0	
70 1,2-Dichloropropane	63	8.451	8.451	0.000	98	1721801	25.0	25.7	
69 2-ethoxy-2-methyl butane	87	8.463	8.451	0.012	92	2422099	25.0	25.8	
71 Methyl methacrylate	69	8.530	8.537	-0.007	91	687315	25.0	28.9	
72 1,4-Dioxane	88	8.537	8.549	-0.012	29	73635	1250.0	485.5	M
73 Dibromomethane	93	8.561	8.555	0.006	96	702912	25.0	25.2	
75 Dichlorobromomethane	83	8.793	8.799	-0.006	100	1945893	25.0	25.8	
76 2-Nitropropane	41	9.061	9.067	-0.006	97	808003	125.0	137.2	
79 1-Bromo-2-chloroethane	63	9.195	9.195	0.000	98	1602309	25.0	26.1	
80 cis-1,3-Dichloropropene	75	9.347	9.354	-0.007	97	2501036	25.0	26.5	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	7816948	250.0	267.8	
\$ 82 Toluene-d8 (Surr)	98	9.664	9.665	-0.001	93	2339533	10.0	9.92	
83 Toluene	92	9.744	9.744	0.000	98	4396923	25.0	25.1	
85 trans-1,3-Dichloropropene	75	10.000	10.000	0.000	92	1946661	25.0	26.1	
S 84 1,3-Dichloropropene, Total	100				0			52.6	
86 Ethyl methacrylate	69	10.061	10.067	-0.006	89	1484677	25.0	26.0	
87 1,1,2-Trichloroethane	97	10.207	10.207	0.000	89	1019488	25.0	24.6	
88 Tetrachloroethene	166	10.298	10.299	-0.001	97	2039197	25.0	25.2	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	89	1804958	25.0	25.2	
91 2-Hexanone	43	10.420	10.420	0.000	97	5378469	250.0	277.6	
93 Chlorodibromomethane	129	10.591	10.591	0.000	90	1341031	25.0	26.1	
94 Ethylene Dibromide	107	10.701	10.701	0.000	99	988803	25.0	26.0	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	85	1927449	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	97	2613557	25.0	24.1	
98 Chlorobenzene	112	11.164	11.164	0.000	99	4701939	25.0	25.2	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	97	1638763	25.0	25.6	
S 95 Xylenes, Total	106				0			76.0	
100 Ethylbenzene	91	11.249	11.250	-0.001	98	8643404	25.0	25.3	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	6586157	50.0	50.5	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 o-Xylene	106	11.694	11.695	-0.001	97	3210811	25.0	25.5	
103 Styrene	104	11.713	11.713	0.000	95	5322551	25.0	26.0	
104 Bromoform	173	11.871	11.871	0.000	98	803826	25.0	27.2	
105 Isopropylbenzene	105	11.999	11.999	0.000	96	8707027	25.0	25.5	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	92	956657	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	91	1230941	25.0	24.7	
111 Bromobenzene	156	12.261	12.262	-0.001	96	1853897	25.0	24.8	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	90	2916204	250.0	289.1	
112 1,2,3-Trichloropropane	110	12.286	12.292	-0.006	79	306446	25.0	24.5	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	10377351	25.0	24.9	
114 2-Chlorotoluene	126	12.402	12.402	0.000	97	2013379	25.0	25.1	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	7223552	25.0	24.9	
116 4-Chlorotoluene	126	12.493	12.493	0.000	97	2034542	25.0	25.3	
118 tert-Butylbenzene	134	12.706	12.707	-0.001	93	1581905	25.0	24.6	
119 Pentachloroethane	167	12.737	12.737	0.000	95	1176887	25.0	26.1	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	7375096	25.0	25.2	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	9353447	25.0	24.6	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	3852445	25.0	24.9	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	8035560	25.0	24.6	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	1090322	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	94	3801859	25.0	24.8	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	3078858	25.0	24.6	
127 Benzyl chloride	126	13.115	13.121	-0.006	98	537399	25.0	26.5	
129 p-Diethylbenzene	119	13.176	13.176	0.000	91	4705394	25.0	25.0	
130 n-Butylbenzene	92	13.267	13.267	0.000	96	4104893	25.0	24.9	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	3405147	25.0	24.9	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	96	173574	25.0	26.4	
135 1,3,5-Trichlorobenzene	180	13.968	13.969	-0.001	98	2949107	25.0	24.5	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	2468365	25.0	24.4	
137 Hexachlorobutadiene	225	14.474	14.475	-0.001	95	1064480	25.0	21.6	
138 Naphthalene	128	14.572	14.572	0.000	97	3851468	25.0	23.5	
139 1,2,3-Trichlorobenzene	180	14.712	14.712	0.000	96	1984437	25.0	23.1	
140 2-Methylnaphthalene	142	15.334	15.340	-0.006	93	2004576	25.0	20.4	
194 Pentane	43		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

ND - Not Detected or Marked ND

NQ - Not Quantifiable

### Review Flags

M - Manually Integrated

## Reagents:

MSV_LL_#1_826_00049	Amount Added: 25.00	Units: uL	
MSV_LL_GAS826_00101	Amount Added: 25.00	Units: uL	
MSV_LL_#2_826_00053	Amount Added: 25.00	Units: uL	
MSV_LLcentISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X12.D

Injection Date: 11-Jul-2022 16:51:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std7 25

Worklist Smp#: 12

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

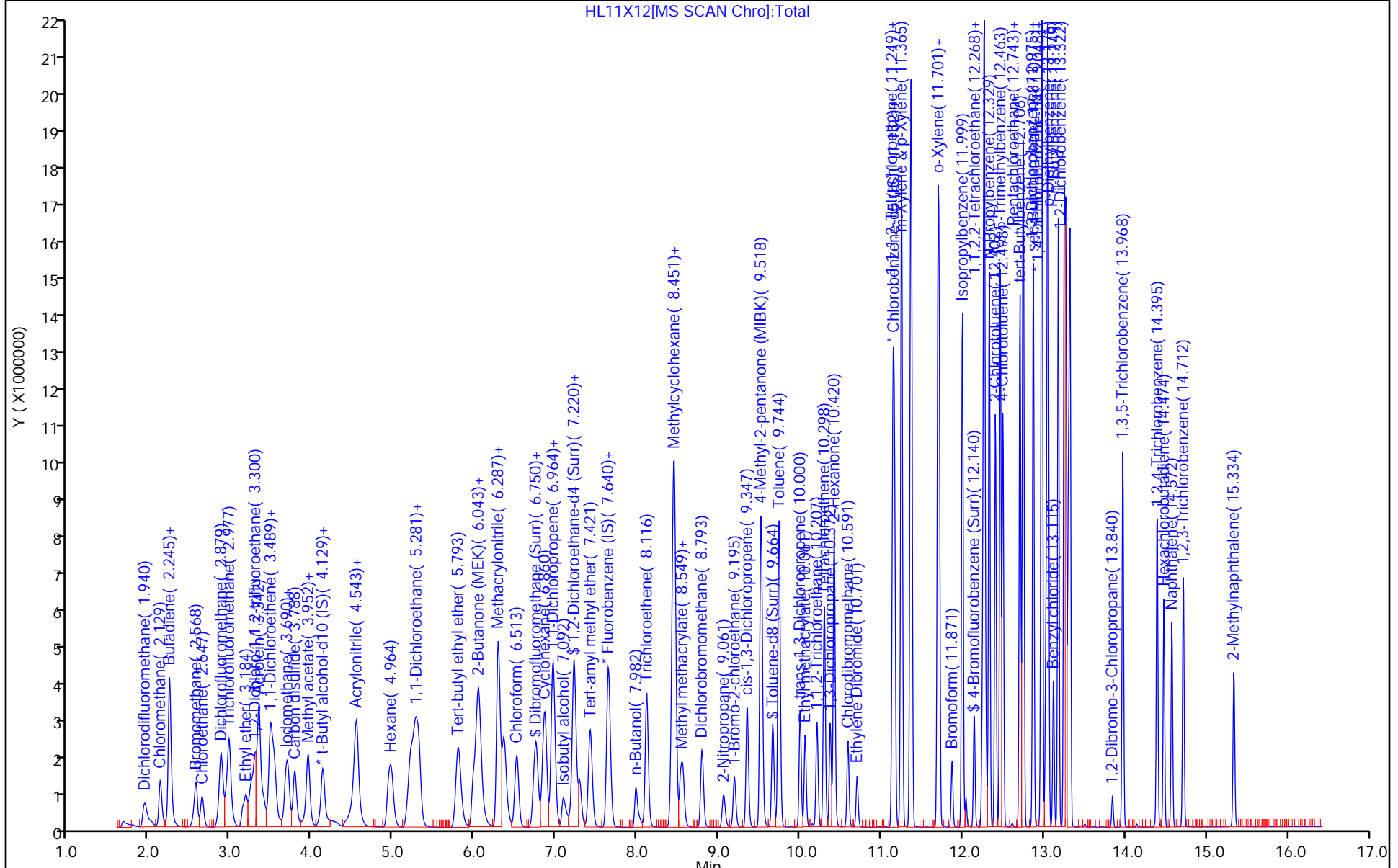
ALS Bottle#: 12

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



HL11X12[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Environment Testing, LLC

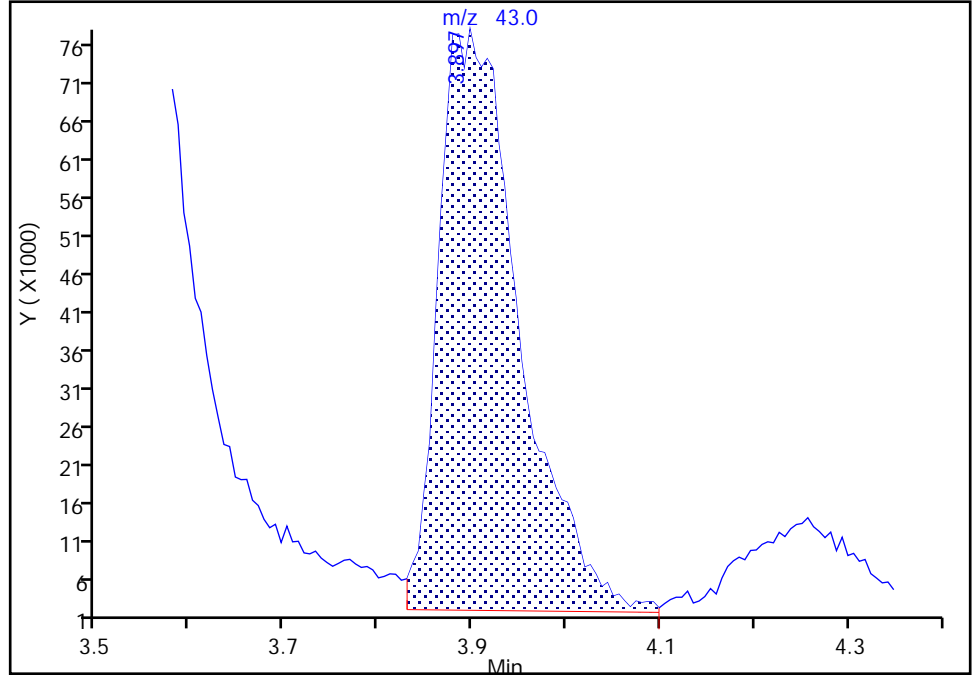
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Injection Date: 11-Jul-2022 16:51:30 Instrument ID: 19094  
Lims ID: IC std7 25  
Client ID:  
Operator ID: kas02648 ALS Bottle#: 12 Worklist Smp#: 12  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

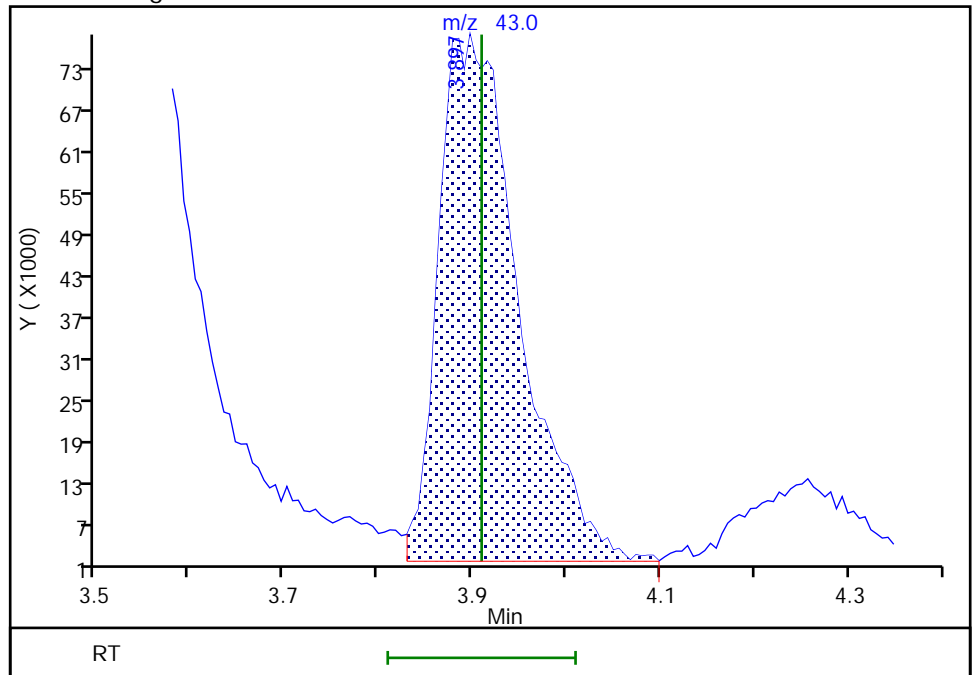
RT: 3.90  
Area: 455739  
Amount: 24.981822  
Amount Units: ug/l

Processing Integration Results



RT: 3.90  
Area: 450003  
Amount: 27.469157  
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:48:02  
Audit Action: Assigned New Baseline

Audit Reason: Baseline  
Page 651 of 959

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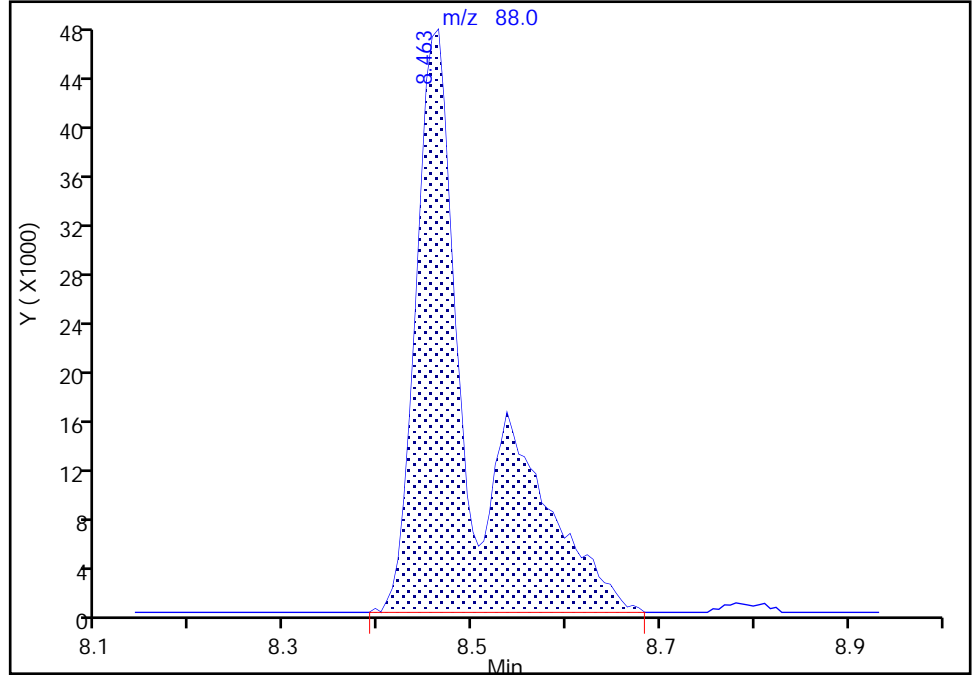
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X12.D  
Injection Date: 11-Jul-2022 16:51:30 Instrument ID: 19094  
Lims ID: IC std7 25  
Client ID:  
Operator ID: kas02648 ALS Bottle#: 12 Worklist Smp#: 12  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

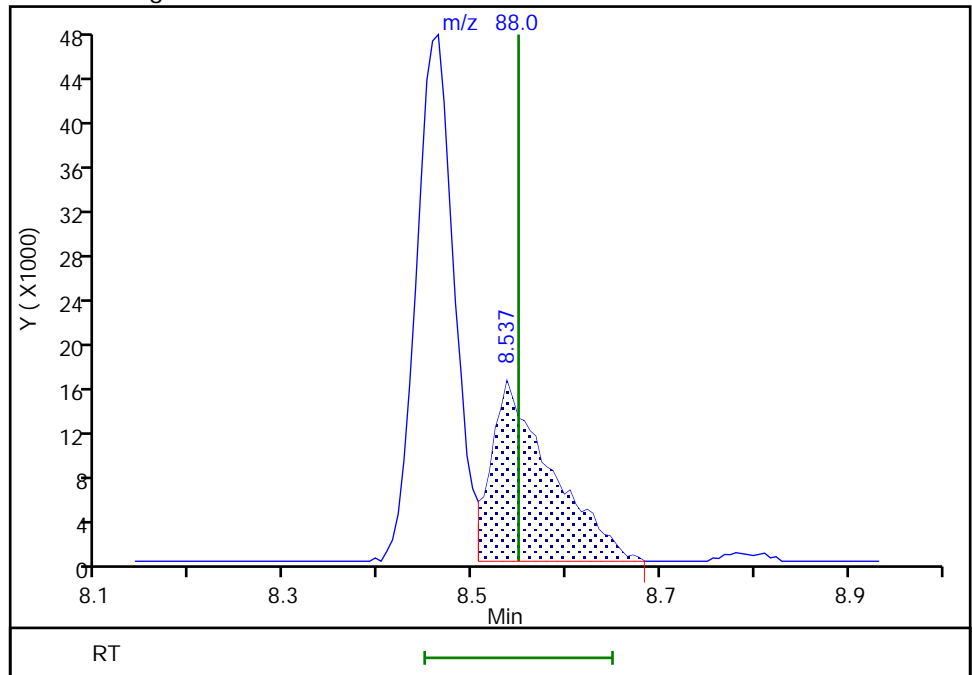
RT: 8.46  
Area: 206080  
Amount: 1481.3689  
Amount Units: ug/l

Processing Integration Results



RT: 8.54  
Area: 73635  
Amount: 485.4549  
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:48:29  
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X13.D  
 Lims ID: ICIS 10  
 Client ID:  
 Sample Type: ICIS Calib Level: 6  
 Inject. Date: 11-Jul-2022 17:11:30 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0052505-013  
 Operator ID: kas02648 Instrument ID: 19094  
 Sublist: chrom-MSV\_19094\_25mL\*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 12-Jul-2022 11:50:31 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1678

First Level Reviewer: UKAD Date: 12-Jul-2022 09:47:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.934	1.934	0.000	99	675132	10.0	10.6	
6 Chloromethane	50	2.123	2.123	0.000	99	824161	10.0	10.3	
8 Butadiene	39	2.239	2.239	0.000	90	767941	10.0	10.2	
7 Vinyl chloride	62	2.245	2.245	0.000	97	834299	10.0	10.5	
9 Bromomethane	94	2.556	2.556	0.000	90	574869	10.0	10.3	
10 Chloroethane	64	2.641	2.641	0.000	100	495285	10.0	10.3	
11 Dichlorofluoromethane	67	2.867	2.867	0.000	97	1114554	10.0	10.5	
13 Trichlorofluoromethane	101	2.946	2.946	0.000	98	1030019	10.0	10.8	
15 Ethyl ether	59	3.172	3.172	0.000	93	426652	10.0	10.7	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.263	3.263	0.000	96	780220	10.0	10.5	
17 Acrolein	56	3.336	3.336	0.000	99	2963738	500.0	532.0	
18 1,1-Dichloroethene	96	3.483	3.483	0.000	98	570272	10.0	10.5	
19 Acetone	43	3.501	3.501	0.000	100	600215	100.0	92.6	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.525	3.525	0.000	92	563286	10.0	10.7	
21 Isopropyl alcohol	45	3.641	3.641	0.000	100	238428	200.0	192.7	
22 Iodomethane	142	3.672	3.672	0.000	98	972304	10.0	10.3	
23 Ethyl bromide	108	3.696	3.696	0.000	98	514602	10.0	10.8	
24 Carbon disulfide	76	3.775	3.775	0.000	98	1515951	10.0	10.5	
26 Methyl acetate	43	3.879	3.879	0.000	96	185370	10.0	10.8	M
27 3-Chloro-1-propene	41	3.940	3.940	0.000	95	954854	10.0	10.2	
29 Methylene Chloride	84	4.123	4.123	0.000	92	581663	10.0	10.4	
* 28 t-Butyl alcohol-d10 (IS)	65	4.123	4.123	0.000	0	101370	50.0	50.0	
30 2-Methyl-2-propanol	59	4.245	4.245	0.000	99	433119	200.0	197.5	
31 Acrylonitrile	53	4.434	4.434	0.000	99	246376	25.0	28.1	
32 Methyl tert-butyl ether	73	4.519	4.519	0.000	95	1269252	10.0	10.5	
33 trans-1,2-Dichloroethene	96	4.543	4.543	0.000	100	625545	10.0	10.4	
34 Hexane	57	4.958	4.958	0.000	92	879832	10.0	10.5	
35 1,1-Dichloroethane	63	5.196	5.196	0.000	95	1172891	10.0	10.4	
37 Isopropyl ether	45	5.257	5.257	0.000	96	1989982	10.0	10.4	
38 2-Chloro-1,3-butadiene	53	5.299	5.299	0.000	89	965073	10.0	10.5	
39 Tert-butyl ethyl ether	59	5.787	5.787	0.000	98	1753246	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.982	5.982	0.000	100	1223902	100.0	108.5	
42 cis-1,2-Dichloroethene	96	6.025	6.025	0.000	82	685145	10.0	10.4	
43 2,2-Dichloropropane	77	6.049	6.049	0.000	87	975977	10.0	10.4	
45 Propionitrile	54	6.061	6.061	0.000	99	662067	200.0	228.9	
47 Methacrylonitrile	67	6.287	6.287	0.000	91	1327716	100.0	106.3	
48 Chlorobromomethane	128	6.360	6.360	0.000	94	272299	10.0	10.3	
49 Tetrahydrofuran	71	6.366	6.366	0.000	77	170150	50.0	52.8	
50 Chloroform	83	6.513	6.513	0.000	92	1101450	10.0	10.4	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	527861	10.0	10.0	
52 1,1,1-Trichloroethane	97	6.750	6.750	0.000	98	1032101	10.0	10.5	
53 Cyclohexane	56	6.854	6.854	0.000	90	1167343	10.0	10.4	
55 1,1-Dichloropropene	75	6.958	6.958	0.000	98	922066	10.0	10.3	
56 Carbon tetrachloride	117	6.964	6.964	0.000	96	901500	10.0	10.6	
57 Isobutyl alcohol	41	7.086	7.086	0.000	95	391967	500.0	548.0	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.189	7.189	0.000	0	95893	10.0	9.97	
59 Benzene	78	7.220	7.220	0.000	96	2705977	10.0	10.4	
60 1,2-Dichloroethane	62	7.287	7.287	0.000	96	577317	10.0	10.2	
62 Tert-amyl methyl ether	73	7.415	7.415	0.000	99	1514685	10.0	10.5	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	99	2081655	10.0	10.0	
64 n-Heptane	43	7.647	7.647	0.000	90	941472	10.0	10.2	
66 n-Butanol	56	7.982	7.982	0.000	87	583025	875.0	953.2	
67 Trichloroethene	95	8.110	8.110	0.000	98	712234	10.0	10.4	
68 Methylcyclohexane	83	8.433	8.433	0.000	94	1208386	10.0	10.5	
70 1,2-Dichloropropane	63	8.445	8.445	0.000	97	680594	10.0	10.4	
69 2-ethoxy-2-methyl butane	87	8.457	8.457	0.000	93	967634	10.0	10.6	
71 Methyl methacrylate	69	8.530	8.530	0.000	93	278786	10.0	11.2	
72 1,4-Dioxane	88	8.537	8.537	0.000	35	59377	500.0	373.7	
73 Dibromomethane	93	8.555	8.555	0.000	97	279827	10.0	10.3	
75 Dichlorobromomethane	83	8.793	8.793	0.000	100	772695	10.0	10.5	
76 2-Nitropropane	41	9.061	9.061	0.000	98	335366	50.0	54.4	
79 1-Bromo-2-chloroethane	63	9.189	9.189	0.000	98	645473	10.0	10.8	
80 cis-1,3-Dichloropropene	75	9.347	9.347	0.000	97	987001	10.0	10.7	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	3227118	100.0	105.5	
\$ 82 Toluene-d8 (Surr)	98	9.664	9.664	0.000	93	2285826	10.0	10.0	
83 Toluene	92	9.744	9.744	0.000	98	1751935	10.0	10.3	
85 trans-1,3-Dichloropropene	75	10.000	10.000	0.000	92	765868	10.0	10.6	
86 Ethyl methacrylate	69	10.061	10.061	0.000	90	593374	10.0	10.7	
87 1,1,2-Trichloroethane	97	10.207	10.207	0.000	89	404842	10.0	10.1	
88 Tetrachloroethene	166	10.298	10.298	0.000	97	808937	10.0	10.3	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	89	719249	10.0	10.4	
91 2-Hexanone	43	10.420	10.420	0.000	97	2205566	100.0	108.7	
93 Chlorodibromomethane	129	10.591	10.591	0.000	90	526982	10.0	10.6	
94 Ethylene Dibromide	107	10.701	10.701	0.000	99	395194	10.0	10.7	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	87	1866823	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	97	1052702	10.0	10.0	
98 Chlorobenzene	112	11.164	11.164	0.000	95	1861729	10.0	10.3	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	95	648069	10.0	10.5	
100 Ethylbenzene	91	11.249	11.249	0.000	98	3432722	10.0	10.4	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	2625259	20.0	20.8	
102 o-Xylene	106	11.695	11.695	0.000	96	1264897	10.0	10.4	
103 Styrene	104	11.713	11.713	0.000	95	2109282	10.0	10.6	
104 Bromoform	173	11.871	11.871	0.000	98	313065	10.0	10.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 Isopropylbenzene	105	11.999	11.999	0.000	96	3446508	10.0	10.4	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	92	936498	10.0	10.1	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	92	493678	10.0	10.3	
111 Bromobenzene	156	12.255	12.255	0.000	96	743305	10.0	10.3	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	91	1170298	100.0	110.8	
112 1,2,3-Trichloropropane	110	12.286	12.286	0.000	80	122178	10.0	10.1	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	4183114	10.0	10.4	
114 2-Chlorotoluene	126	12.402	12.402	0.000	97	799066	10.0	10.3	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	2894539	10.0	10.3	
116 4-Chlorotoluene	126	12.493	12.493	0.000	97	805513	10.0	10.4	
118 tert-Butylbenzene	134	12.707	12.707	0.000	93	662962	10.0	10.7	
119 Pentachloroethane	167	12.737	12.737	0.000	89	469487	10.0	10.8	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	2924954	10.0	10.3	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	3770835	10.0	10.3	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	1530550	10.0	10.3	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	3231751	10.0	10.3	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	1051287	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	94	1519120	10.0	10.3	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	1234652	10.0	10.2	
127 Benzyl chloride	126	13.115	13.115	0.000	98	212767	10.0	10.9	
129 p-Diethylbenzene	119	13.176	13.176	0.000	91	1885445	10.0	10.4	
130 n-Butylbenzene	92	13.267	13.267	0.000	97	1645635	10.0	10.4	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	1365343	10.0	10.3	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	90	70677	10.0	11.1	
135 1,3,5-Trichlorobenzene	180	13.968	13.968	0.000	98	1188689	10.0	10.2	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	1008763	10.0	10.3	
137 Hexachlorobutadiene	225	14.474	14.474	0.000	95	441537	10.0	9.31	
138 Naphthalene	128	14.572	14.572	0.000	97	1639471	10.0	10.4	
139 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	96	849598	10.0	10.2	
140 2-Methylnaphthalene	142	15.334	15.334	0.000	92	1005842	10.0	10.6	
194 Pentane	43		0.000				ND	ND	

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

MSV_LL_#1_826_00049	Amount Added: 10.00	Units: uL	
MSV_LL_GAS826_00101	Amount Added: 10.00	Units: uL	
MSV_LL_#2_826_00053	Amount Added: 10.00	Units: uL	
MSV_LLcentISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X13.D

Injection Date: 11-Jul-2022 17:11:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: ICIS 10

Worklist Smp#: 13

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

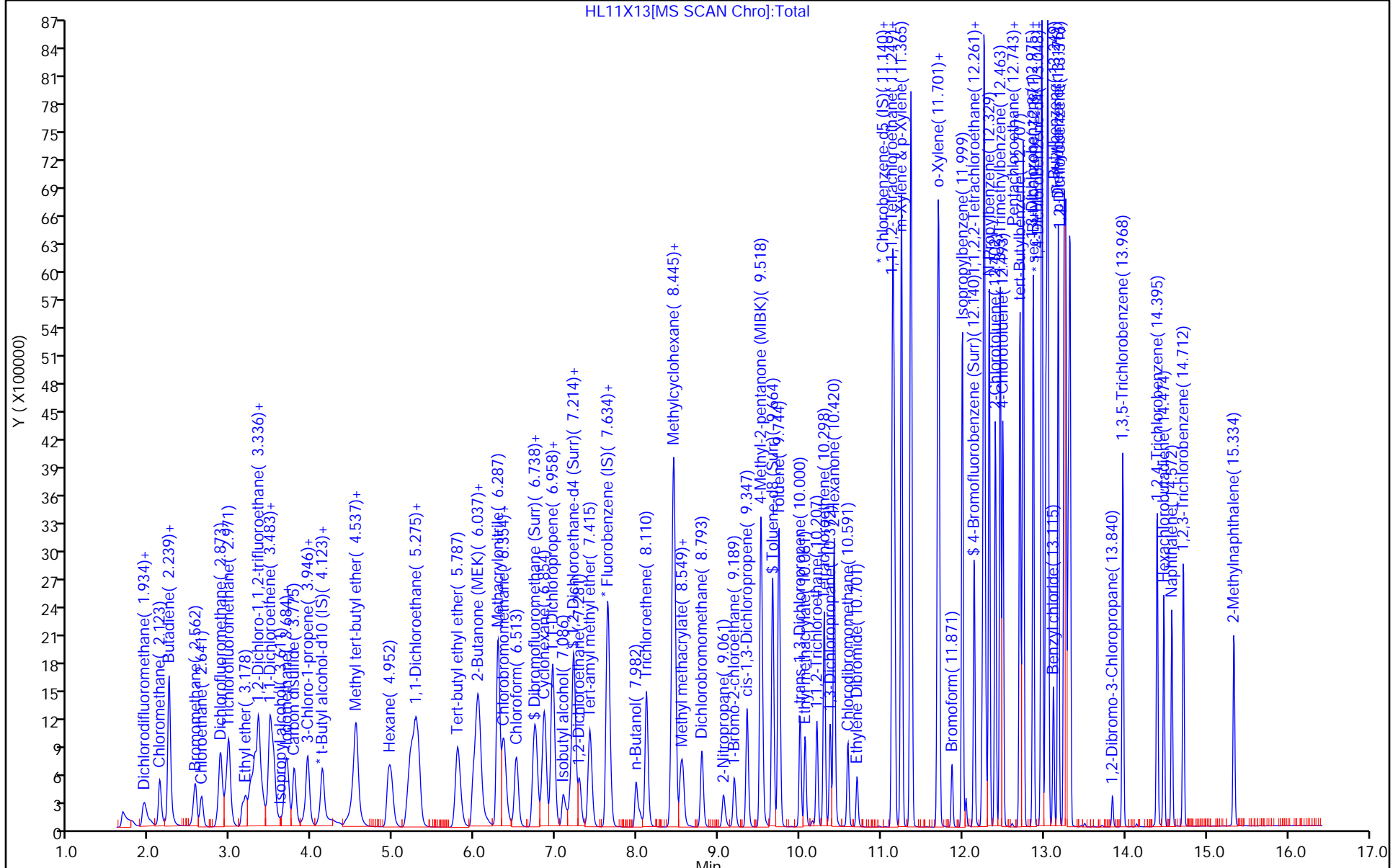
ALS Bottle#: 13

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



HL11X13[MS SCAN Chrom]:Total



Eurofins Lancaster Laboratories Environment Testing, LLC

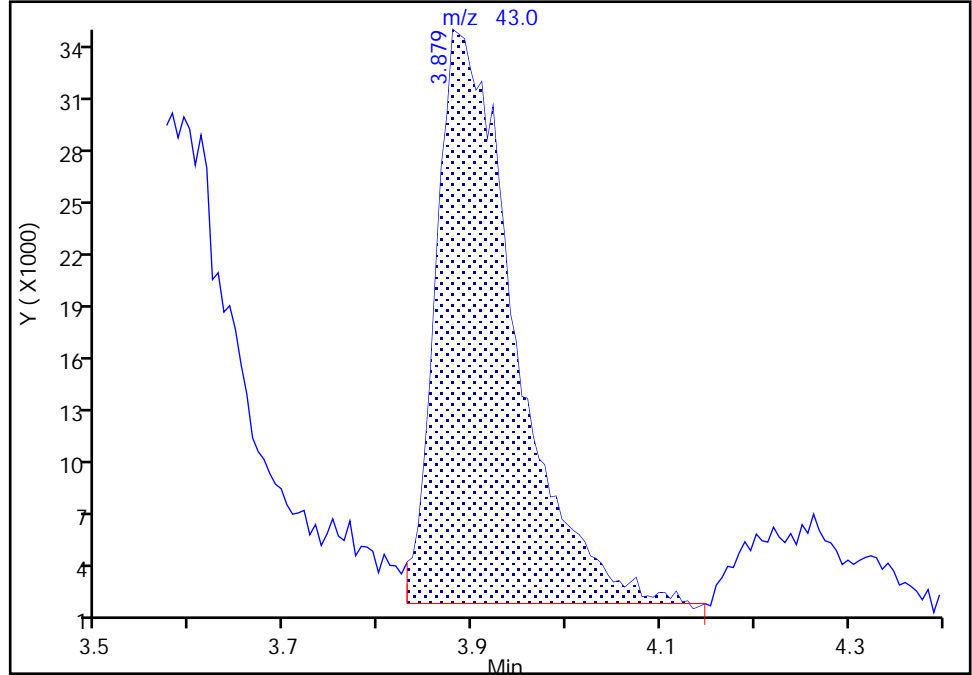
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X13.D  
Injection Date: 11-Jul-2022 17:11:30 Instrument ID: 19094  
Lims ID: ICIS 10  
Client ID:  
Operator ID: kas02648 ALS Bottle#: 13 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

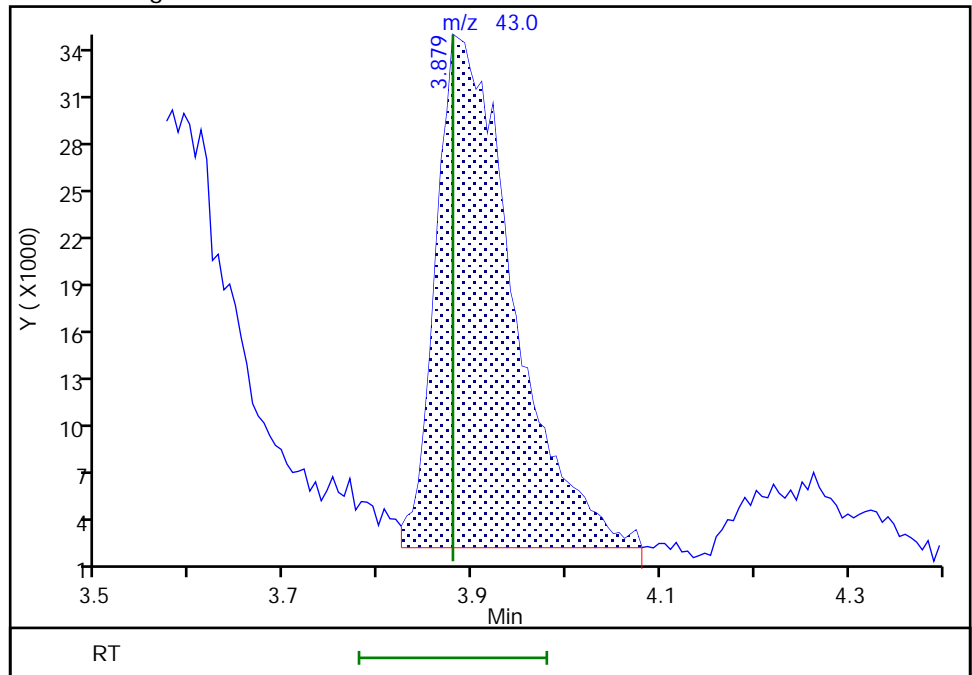
RT: 3.88  
Area: 191239  
Amount: 10.070600  
Amount Units: ug/l

Processing Integration Results



RT: 3.88  
Area: 185370  
Amount: 10.801913  
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:49:27  
Audit Action: Manually Integrated

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X14.D  
 Lims ID: IC std5 5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 11-Jul-2022 17:31:30 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0052505-014  
 Operator ID: kas02648 Instrument ID: 19094  
 Sublist: chrom-MSV\_19094\_25mL\*sub1  
 Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 12-Jul-2022 11:50:46 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1678

First Level Reviewer: UKAD

Date: 12-Jul-2022 09:51:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.934	1.934	0.000	99	330210	5.00	5.12	
6 Chloromethane	50	2.129	2.123	0.006	99	421301	5.00	5.21	
8 Butadiene	39	2.239	2.239	0.000	92	372846	5.00	4.88	
7 Vinyl chloride	62	2.245	2.245	0.000	98	417386	5.00	5.21	
9 Bromomethane	94	2.568	2.556	0.012	91	287601	5.00	5.12	
10 Chloroethane	64	2.641	2.641	0.000	99	249635	5.00	5.14	
11 Dichlorofluoromethane	67	2.873	2.867	0.006	97	552979	5.00	5.14	
13 Trichlorofluoromethane	101	2.946	2.946	0.000	97	509232	5.00	5.25	
15 Ethyl ether	59	3.178	3.172	0.006	91	211984	5.00	5.23	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.269	3.263	0.006	93	390670	5.00	5.17	
17 Acrolein	56	3.343	3.336	0.007	99	1505959	250.0	226.5	
18 1,1-Dichloroethene	96	3.483	3.483	0.000	98	280143	5.00	5.11	
19 Acetone	43	3.507	3.501	0.006	98	339789	50.0	43.9	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.532	3.525	0.007	92	281165	5.00	5.26	
21 Isopropyl alcohol	45	3.660	3.641	0.019	96	148640	100.0	109.1	
22 Iodomethane	142	3.678	3.672	0.006	98	487298	5.00	5.12	
23 Ethyl bromide	108	3.702	3.696	0.006	98	254488	5.00	5.29	
24 Carbon disulfide	76	3.788	3.775	0.013	99	749209	5.00	5.11	
26 Methyl acetate	43	3.903	3.879	0.024	97	85854	5.00	4.19	
27 3-Chloro-1-propene	41	3.952	3.940	0.012	95	480474	5.00	5.05	
29 Methylene Chloride	84	4.129	4.123	0.006	93	292795	5.00	5.16	
* 28 t-Butyl alcohol-d10 (IS)	65	4.123	4.123	0.000	0	120975	50.0	50.0	
30 2-Methyl-2-propanol	59	4.257	4.245	0.012	99	270086	100.0	103.2	
31 Acrylonitrile	53	4.452	4.434	0.018	98	123022	12.5	11.8	
32 Methyl tert-butyl ether	73	4.519	4.519	0.000	94	636323	5.00	5.20	
33 trans-1,2-Dichloroethene	96	4.544	4.543	0.001	99	310962	5.00	5.11	
34 Hexane	57	4.958	4.958	0.000	92	438476	5.00	5.15	
35 1,1-Dichloroethane	63	5.196	5.196	0.000	95	585799	5.00	5.15	
37 Isopropyl ether	45	5.257	5.257	0.000	96	1006753	5.00	5.20	
38 2-Chloro-1,3-butadiene	53	5.312	5.299	0.013	91	482679	5.00	5.20	
39 Tert-butyl ethyl ether	59	5.787	5.787	0.000	98	874477	5.00	5.11	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.982	5.982	0.000	100	631533	50.0	46.9	
42 cis-1,2-Dichloroethene	96	6.025	6.025	0.000	82	343086	5.00	5.13	
43 2,2-Dichloropropane	77	6.049	6.049	0.000	87	491314	5.00	5.16	
45 Propionitrile	54	6.068	6.061	0.007	99	356903	100.0	103.4	
S 40 1,2-Dichloroethene, Total	100				0			10.2	
47 Methacrylonitrile	67	6.293	6.287	0.006	91	670885	50.0	45.0	
48 Chlorobromomethane	128	6.360	6.360	0.000	93	137430	5.00	5.15	
49 Tetrahydrofuran	71	6.366	6.366	0.000	80	89030	25.0	23.1	
50 Chloroform	83	6.513	6.513	0.000	93	555095	5.00	5.17	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	534194	10.0	10.0	
52 1,1,1-Trichloroethane	97	6.750	6.750	0.000	98	511965	5.00	5.13	
53 Cyclohexane	56	6.854	6.854	0.000	90	571420	5.00	5.04	
55 1,1-Dichloropropene	75	6.958	6.958	0.000	98	459004	5.00	5.08	
56 Carbon tetrachloride	117	6.970	6.964	0.006	85	449741	5.00	5.21	
57 Isobutyl alcohol	41	7.092	7.086	0.006	95	215626	250.0	252.6	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.189	7.189	0.000	0	98328	10.0	10.1	
59 Benzene	78	7.220	7.220	0.000	97	1343156	5.00	5.10	
60 1,2-Dichloroethane	62	7.293	7.287	0.006	97	291944	5.00	5.12	
62 Tert-amyl methyl ether	73	7.415	7.415	0.000	99	758276	5.00	5.20	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	98	2106074	10.0	10.0	
64 n-Heptane	43	7.647	7.647	0.000	88	460581	5.00	4.94	
66 n-Butanol	56	7.988	7.982	0.006	87	366680	437.5	502.3	
67 Trichloroethene	95	8.116	8.110	0.006	98	353455	5.00	5.10	
68 Methylcyclohexane	83	8.433	8.433	0.000	93	604203	5.00	5.17	
70 1,2-Dichloropropane	63	8.451	8.445	0.006	85	340026	5.00	5.15	
69 2-ethoxy-2-methyl butane	87	8.457	8.457	0.000	90	477549	5.00	5.16	
71 Methyl methacrylate	69	8.531	8.530	0.001	90	135474	5.00	4.56	
72 1,4-Dioxane	88	8.543	8.537	0.006	33	47977	250.0	253.0	M
73 Dibromomethane	93	8.555	8.555	0.000	96	141139	5.00	5.13	
75 Dichlorobromomethane	83	8.793	8.793	0.000	100	382494	5.00	5.14	
76 2-Nitropropane	41	9.061	9.061	0.000	98	164896	25.0	22.4	
79 1-Bromo-2-chloroethane	63	9.195	9.189	0.006	98	314354	5.00	5.18	
80 cis-1,3-Dichloropropene	75	9.348	9.347	0.001	97	496791	5.00	5.33	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	1650404	50.0	45.2	
\$ 82 Toluene-d8 (Surr)	98	9.665	9.664	0.000	93	2278814	10.0	9.91	
83 Toluene	92	9.744	9.744	0.000	98	872692	5.00	5.11	
85 trans-1,3-Dichloropropene	75	10.000	10.000	0.000	92	379506	5.00	5.21	
S 84 1,3-Dichloropropene, Total	100				0			10.5	
86 Ethyl methacrylate	69	10.061	10.061	0.000	88	298452	5.00	5.35	
87 1,1,2-Trichloroethane	97	10.207	10.207	0.000	89	207686	5.00	5.13	
88 Tetrachloroethene	166	10.299	10.298	0.001	97	400926	5.00	5.08	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	88	361499	5.00	5.18	
91 2-Hexanone	43	10.420	10.420	0.000	97	1117872	50.0	46.2	
93 Chlorodibromomethane	129	10.591	10.591	0.000	90	261621	5.00	5.22	
94 Ethylene Dibromide	107	10.701	10.701	0.000	99	196751	5.00	5.31	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	88	1880356	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	98	522985	5.00	4.95	
98 Chlorobenzene	112	11.164	11.164	0.000	95	935813	5.00	5.14	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	97	327478	5.00	5.24	
S 95 Xylenes, Total	106				0			15.4	
100 Ethylbenzene	91	11.250	11.249	0.001	98	1720096	5.00	5.15	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	1313262	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 o-Xylene	106	11.695	11.695	0.001	97	628447	5.00	5.11	
103 Styrene	104	11.713	11.713	0.000	95	1048801	5.00	5.26	
104 Bromoform	173	11.871	11.871	0.000	98	153558	5.00	5.32	
105 Isopropylbenzene	105	11.999	11.999	0.000	96	1724175	5.00	5.18	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	92	941117	10.0	10.1	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	92	250852	5.00	5.23	
111 Bromobenzene	156	12.262	12.255	0.007	96	370570	5.00	5.17	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	91	588527	50.0	46.7	
112 1,2,3-Trichloropropane	110	12.286	12.286	0.000	80	62318	5.00	5.18	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	2080340	5.00	5.20	
114 2-Chlorotoluene	126	12.402	12.402	0.000	97	400793	5.00	5.21	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	1444446	5.00	5.18	
116 4-Chlorotoluene	126	12.493	12.493	0.000	97	404813	5.00	5.24	
118 tert-Butylbenzene	134	12.707	12.707	0.001	93	312596	5.00	5.07	
119 Pentachloroethane	167	12.737	12.737	0.000	92	230027	5.00	5.31	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	1458270	5.00	5.18	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	1875046	5.00	5.13	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	764311	5.00	5.14	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	1614275	5.00	5.15	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	1047322	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	95	752898	5.00	5.11	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	612197	5.00	5.10	
127 Benzyl chloride	126	13.121	13.115	0.006	98	102930	5.00	5.28	
129 p-Diethylbenzene	119	13.176	13.176	0.000	91	933626	5.00	5.16	
130 n-Butylbenzene	92	13.267	13.267	0.000	98	812754	5.00	5.14	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	680916	5.00	5.17	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	89	36445	5.00	5.76	
135 1,3,5-Trichlorobenzene	180	13.969	13.968	0.001	98	589869	5.00	5.10	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	505612	5.00	5.20	
137 Hexachlorobutadiene	225	14.475	14.474	0.001	95	220140	5.00	4.66	
138 Naphthalene	128	14.572	14.572	0.000	97	824852	5.00	5.25	
139 1,2,3-Trichlorobenzene	180	14.712	14.718	-0.006	96	428129	5.00	5.18	
140 2-Methylnaphthalene	142	15.340	15.334	0.006	92	500575	5.00	5.29	
194 Pentane	43		0.000				ND	ND	

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

MSV_LL_#1_826_00049	Amount Added: 5.00	Units: uL	
MSV_LL_GAS826_00101	Amount Added: 5.00	Units: uL	
MSV_LL_#2_826_00053	Amount Added: 5.00	Units: uL	
MSV_LLcentISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X14.D

Injection Date: 11-Jul-2022 17:31:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std5 5

Worklist Smp#: 14

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

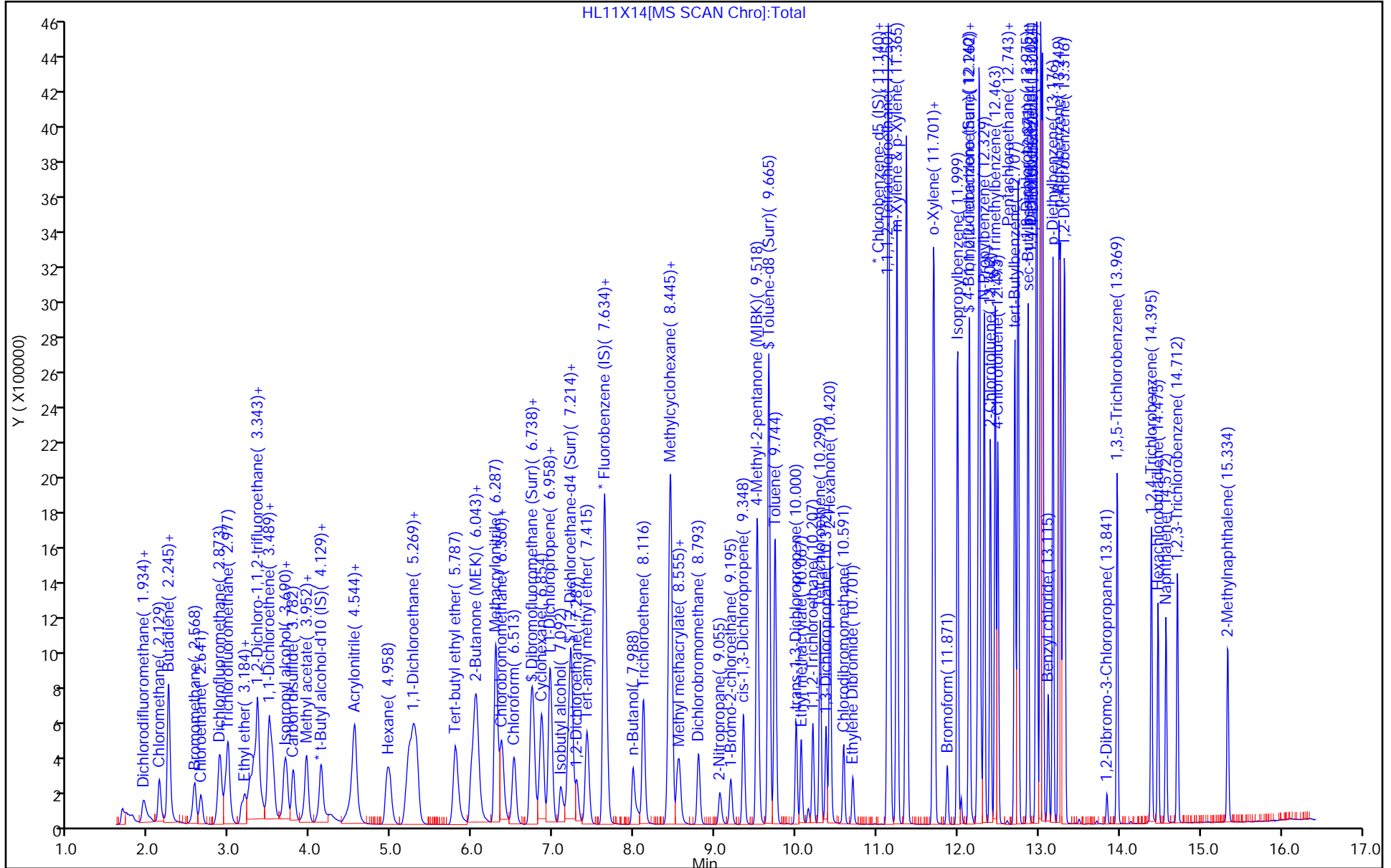
ALS Bottle#: 14

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

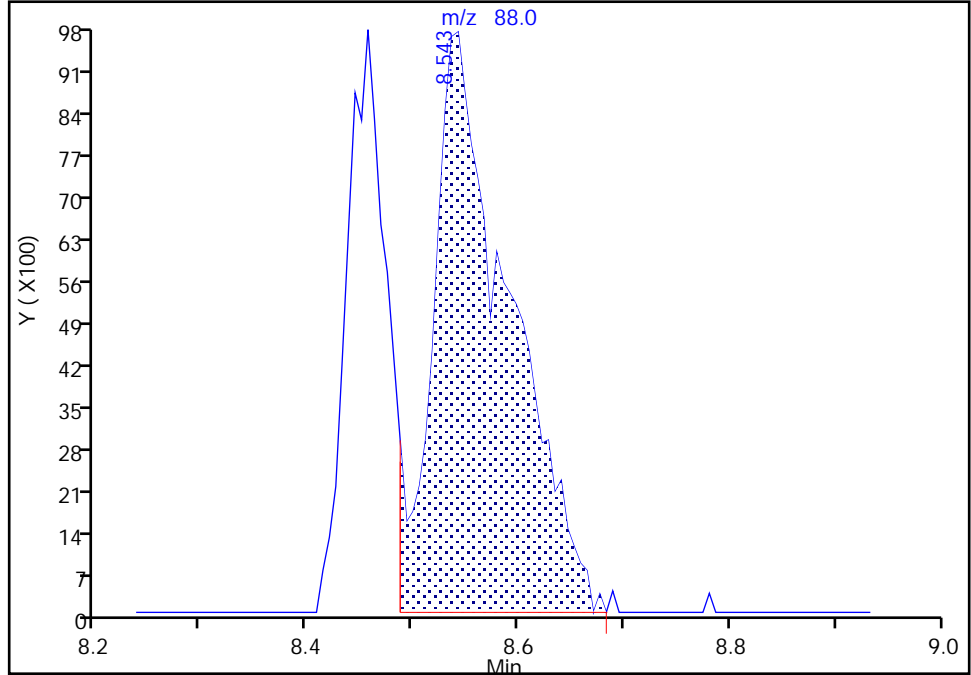
Data File:	\\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X14.D		
Injection Date:	11-Jul-2022 17:31:30	Instrument ID:	19094
Lims ID:	IC std5 5		
Client ID:			
Operator ID:	kas02648	ALS Bottle#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	14

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

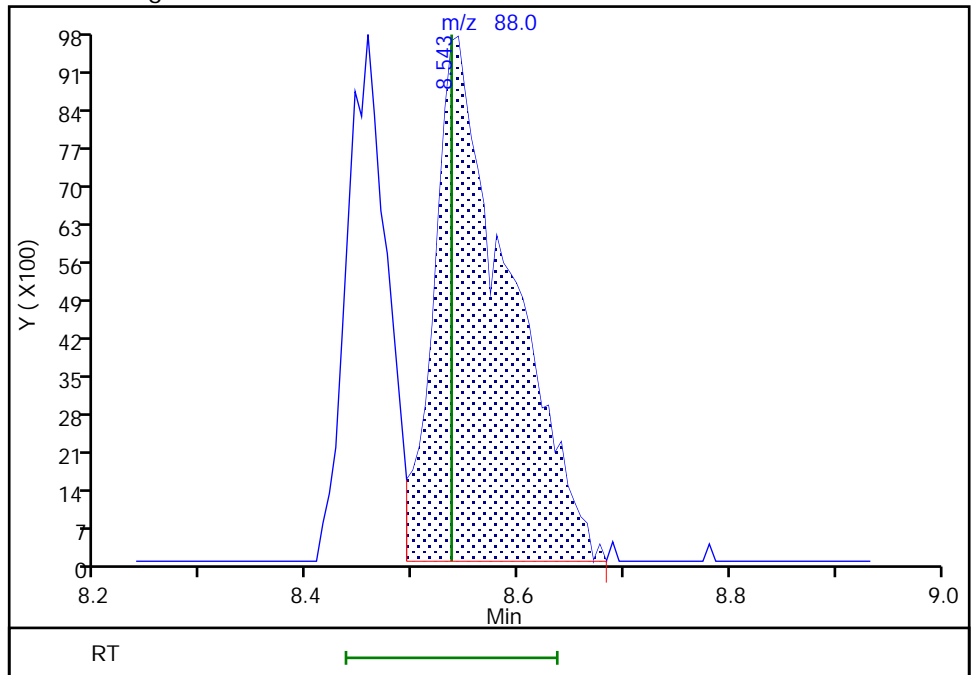
RT: 8.54  
 Area: 49030  
 Amount: 357.4625  
 Amount Units: ug/l

Processing Integration Results



RT: 8.54  
 Area: 47977  
 Amount: 253.0130  
 Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:51:05  
 Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X15.D  
 Lims ID: IC std4 2  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 11-Jul-2022 17:51:30 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0052505-015  
 Operator ID: kas02648 Instrument ID: 19094  
 Sublist: chrom-MSV\_19094\_25mL\*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 12-Jul-2022 11:50:56 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1678

First Level Reviewer: UKAD Date: 12-Jul-2022 09:26:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.940	1.940	0.000	99	133086	2.00	2.14	
6 Chloromethane	50	2.129	2.129	0.000	99	171365	2.00	2.20	
8 Butadiene	39	2.245	2.245	0.000	91	157585	2.00	2.14	
7 Vinyl chloride	62	2.251	2.251	0.000	85	171314	2.00	2.22	
9 Bromomethane	94	2.562	2.562	0.000	90	115842	2.00	2.14	
10 Chloroethane	64	2.648	2.648	0.000	100	101707	2.00	2.17	
11 Dichlorofluoromethane	67	2.873	2.873	0.000	97	226294	2.00	2.18	
13 Trichlorofluoromethane	101	2.952	2.952	0.000	96	204745	2.00	2.19	
15 Ethyl ether	59	3.154	3.154	0.000	92	86711	2.00	2.22	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.257	3.257	0.000	95	158543	2.00	2.18	
17 Acrolein	56	3.349	3.349	0.000	100	590053	100.0	99.7	
18 1,1-Dichloroethene	96	3.489	3.489	0.000	98	111716	2.00	2.11	
19 Acetone	43	3.507	3.507	0.000	63	123401	20.0	17.9	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.519	3.519	0.000	91	106489	2.00	2.07	
21 Isopropyl alcohol	45	3.660	3.660	0.000	95	56636	40.0	41.8	
22 Iodomethane	142	3.672	3.672	0.000	99	190590	2.00	2.07	
23 Ethyl bromide	108	3.708	3.708	0.000	98	101436	2.00	2.19	
24 Carbon disulfide	76	3.788	3.788	0.000	99	296255	2.00	2.09	
26 Methyl acetate	43	3.910	3.910	0.000	20	35316	2.00	1.94	M
27 3-Chloro-1-propene	41	3.952	3.952	0.000	94	188981	2.00	2.06	
29 Methylene Chloride	84	4.129	4.129	0.000	92	113641	2.00	2.08	
* 28 t-Butyl alcohol-d10 (IS)	65	4.123	4.123	0.000	0	107663	50.0	50.0	
30 2-Methyl-2-propanol	59	4.275	4.275	0.000	98	99901	40.0	42.9	
31 Acrylonitrile	53	4.464	4.464	0.000	96	49301	5.00	5.30	
32 Methyl tert-butyl ether	73	4.519	4.519	0.000	94	246579	2.00	2.09	
33 trans-1,2-Dichloroethene	96	4.544	4.544	0.000	99	123103	2.00	2.10	
34 Hexane	57	4.970	4.970	0.000	93	169913	2.00	2.07	
35 1,1-Dichloroethane	63	5.202	5.202	0.000	95	225005	2.00	2.05	
37 Isopropyl ether	45	5.263	5.263	0.000	96	385192	2.00	2.06	
38 2-Chloro-1,3-butadiene	53	5.306	5.306	0.000	89	186653	2.00	2.08	
39 Tert-butyl ethyl ether	59	5.793	5.793	0.000	99	343121	2.00	2.08	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.988	5.988	0.000	100	236486	20.0	19.7	
42 cis-1,2-Dichloroethene	96	6.031	6.031	0.000	82	132683	2.00	2.06	
43 2,2-Dichloropropane	77	6.055	6.055	0.000	85	191971	2.00	2.09	
45 Propionitrile	54	6.074	6.074	0.000	99	129739	40.0	42.2	
S 40 1,2-Dichloroethene, Total	100				0			4.16	
47 Methacrylonitrile	67	6.293	6.293	0.000	91	259901	20.0	19.6	
48 Chlorobromomethane	128	6.360	6.360	0.000	96	52761	2.00	2.05	
49 Tetrahydrofuran	71	6.372	6.372	0.000	79	34053	10.0	9.94	
50 Chloroform	83	6.513	6.513	0.000	93	213834	2.00	2.07	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	520651	10.0	10.1	
52 1,1,1-Trichloroethane	97	6.757	6.757	0.000	98	197900	2.00	2.05	
53 Cyclohexane	56	6.860	6.860	0.000	90	226192	2.00	2.07	
55 1,1-Dichloropropene	75	6.958	6.958	0.000	98	178784	2.00	2.05	
56 Carbon tetrachloride	117	6.964	6.964	0.000	82	171753	2.00	2.06	
57 Isobutyl alcohol	41	7.098	7.098	0.000	96	79569	100.0	104.7	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.189	7.189	0.000	0	94159	10.0	10.0	
59 Benzene	78	7.220	7.220	0.000	97	519476	2.00	2.05	
60 1,2-Dichloroethane	62	7.293	7.293	0.000	96	112224	2.00	2.04	
62 Tert-amyl methyl ether	73	7.415	7.415	0.000	98	287948	2.00	2.05	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	98	2031307	10.0	10.0	
64 n-Heptane	43	7.653	7.653	0.000	93	175823	2.00	1.96	
66 n-Butanol	56	7.988	7.988	0.000	86	133360	175.0	205.3	
67 Trichloroethene	95	8.116	8.116	0.000	98	135366	2.00	2.02	
68 Methylcyclohexane	83	8.433	8.433	0.000	93	231199	2.00	2.05	
70 1,2-Dichloropropane	63	8.451	8.451	0.000	85	131100	2.00	2.06	
69 2-ethoxy-2-methyl butane	87	8.451	8.451	0.000	90	182421	2.00	2.04	
71 Methyl methacrylate	69	8.537	8.537	0.000	89	51766	2.00	1.96	
72 1,4-Dioxane	88	8.549	8.549	0.000	37	18622	100.0	110.3	
73 Dibromomethane	93	8.555	8.555	0.000	94	52719	2.00	1.99	
75 Dichlorobromomethane	83	8.799	8.799	0.000	100	146679	2.00	2.05	
76 2-Nitropropane	41	9.067	9.067	0.000	99	63753	10.0	9.73	
79 1-Bromo-2-chloroethane	63	9.195	9.195	0.000	98	128748	2.00	2.20	
80 cis-1,3-Dichloropropene	75	9.354	9.354	0.000	97	187149	2.00	2.08	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	621615	20.0	19.1	
\$ 82 Toluene-d8 (Surr)	98	9.665	9.665	0.000	93	2219533	10.0	10.0	
83 Toluene	92	9.744	9.744	0.000	99	336595	2.00	2.04	
85 trans-1,3-Dichloropropene	75	10.000	10.000	0.000	92	143896	2.00	2.05	
S 84 1,3-Dichloropropene, Total	100				0			4.13	
86 Ethyl methacrylate	69	10.067	10.067	0.000	88	110202	2.00	2.05	
87 1,1,2-Trichloroethane	97	10.207	10.207	0.000	89	77953	2.00	2.00	
88 Tetrachloroethene	166	10.299	10.299	0.000	97	155095	2.00	2.04	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	90	135730	2.00	2.02	
91 2-Hexanone	43	10.420	10.420	0.000	97	420963	20.0	19.5	
93 Chlorodibromomethane	129	10.591	10.591	0.000	90	97440	2.00	2.02	
94 Ethylene Dibromide	107	10.701	10.701	0.000	99	75141	2.00	2.10	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	85	1814146	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	96	206815	2.00	2.03	
98 Chlorobenzene	112	11.164	11.164	0.000	96	358343	2.00	2.04	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	97	121792	2.00	2.02	
S 95 Xylenes, Total	106				0			6.15	
100 Ethylbenzene	91	11.250	11.250	0.000	98	663103	2.00	2.06	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	501557	4.00	4.09	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 o-Xylene	106	11.695	11.695	0.000	97	245217	2.00	2.07	
103 Styrene	104	11.713	11.713	0.000	95	398001	2.00	2.07	
104 Bromoform	173	11.871	11.871	0.000	98	57271	2.00	2.06	
105 Isopropylbenzene	105	11.999	11.999	0.000	95	663631	2.00	2.07	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	91	896459	10.0	9.95	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	92	96897	2.00	2.12	
111 Bromobenzene	156	12.262	12.262	0.000	97	139476	2.00	2.04	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	91	215992	20.0	19.2	
112 1,2,3-Trichloropropane	110	12.292	12.292	0.000	81	24664	2.00	2.15	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	796754	2.00	2.09	
114 2-Chlorotoluene	126	12.402	12.402	0.000	97	150036	2.00	2.05	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	93	556367	2.00	2.09	
116 4-Chlorotoluene	126	12.493	12.493	0.000	97	151238	2.00	2.05	
118 tert-Butylbenzene	134	12.707	12.707	0.000	92	119759	2.00	2.04	
119 Pentachloroethane	167	12.737	12.737	0.000	93	89007	2.00	2.16	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	552306	2.00	2.06	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	723734	2.00	2.08	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	294576	2.00	2.08	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	621334	2.00	2.08	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	95	997250	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	96	289594	2.00	2.06	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	233280	2.00	2.04	
127 Benzyl chloride	126	13.121	13.121	0.000	98	38227	2.00	2.06	
129 p-Diethylbenzene	119	13.176	13.176	0.000	91	357868	2.00	2.08	
130 n-Butylbenzene	92	13.267	13.267	0.000	97	313888	2.00	2.08	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	256900	2.00	2.05	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	89	14346	2.00	2.38	
135 1,3,5-Trichlorobenzene	180	13.969	13.969	0.000	98	233002	2.00	2.12	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	93	199643	2.00	2.15	
137 Hexachlorobutadiene	225	14.475	14.475	0.000	95	88268	2.00	1.96	
138 Naphthalene	128	14.572	14.572	0.000	97	319229	2.00	2.13	
139 1,2,3-Trichlorobenzene	180	14.712	14.712	0.000	95	169189	2.00	2.15	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	92	196259	2.00	2.18	
194 Pentane	43		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV_LL_#1_826_00049	Amount Added: 2.00	Units: uL	
MSV_LL_GAS826_00101	Amount Added: 2.00	Units: uL	
MSV_LL_#2_826_00053	Amount Added: 2.00	Units: uL	
MSV_LLcentISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X15.D

Injection Date: 11-Jul-2022 17:51:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std4 2

Worklist Smp#: 15

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

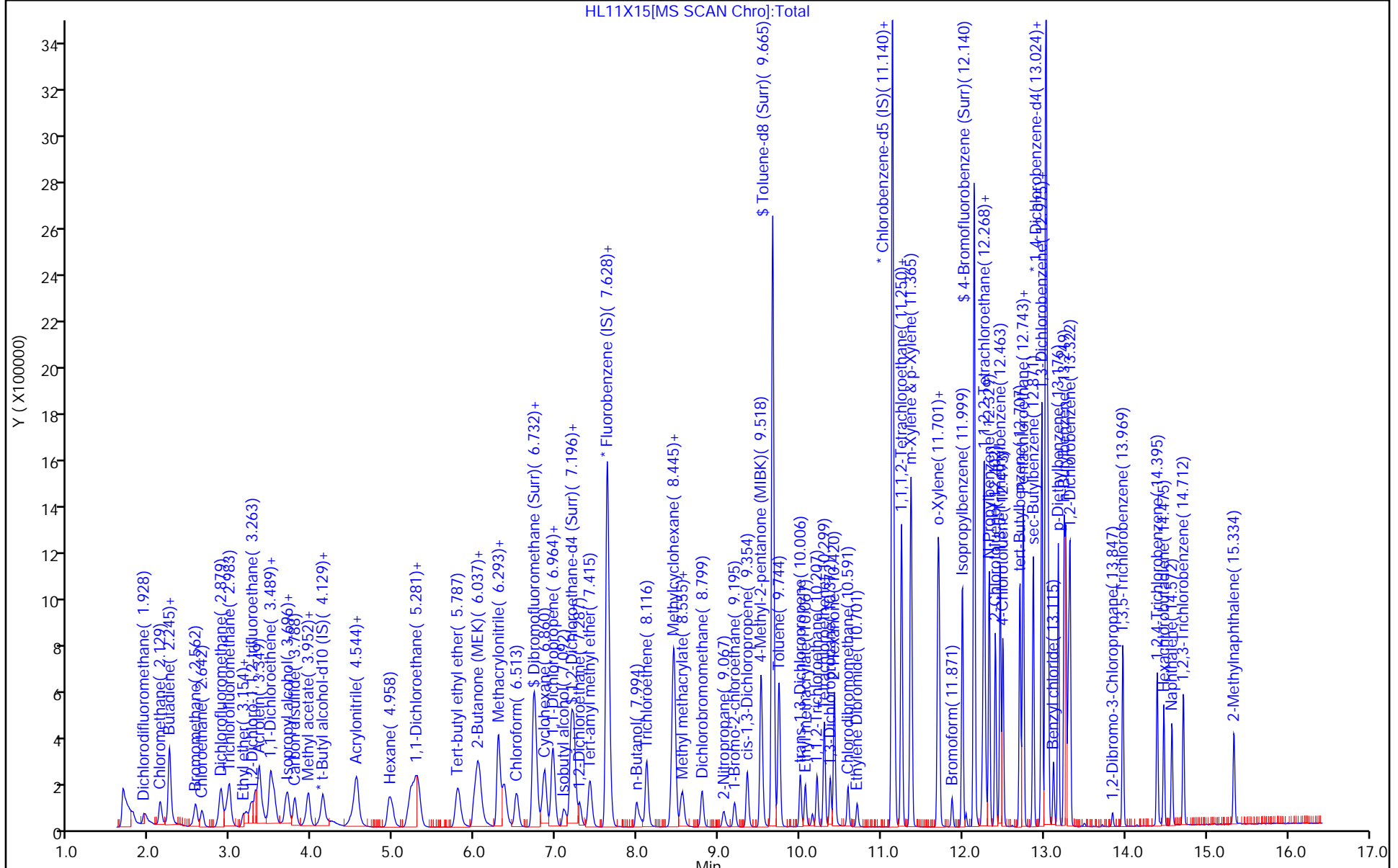
ALS Bottle#: 15

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

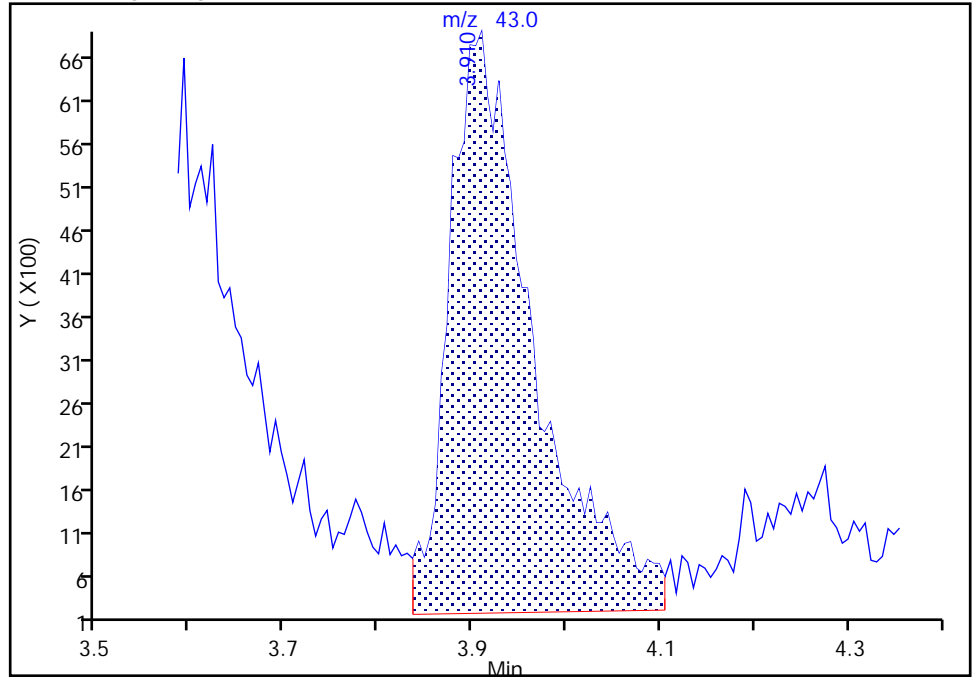
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X15.D  
Injection Date: 11-Jul-2022 17:51:30 Instrument ID: 19094  
Lims ID: IC std4 2  
Client ID:  
Operator ID: kas02648 ALS Bottle#: 15 Worklist Smp#: 15  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

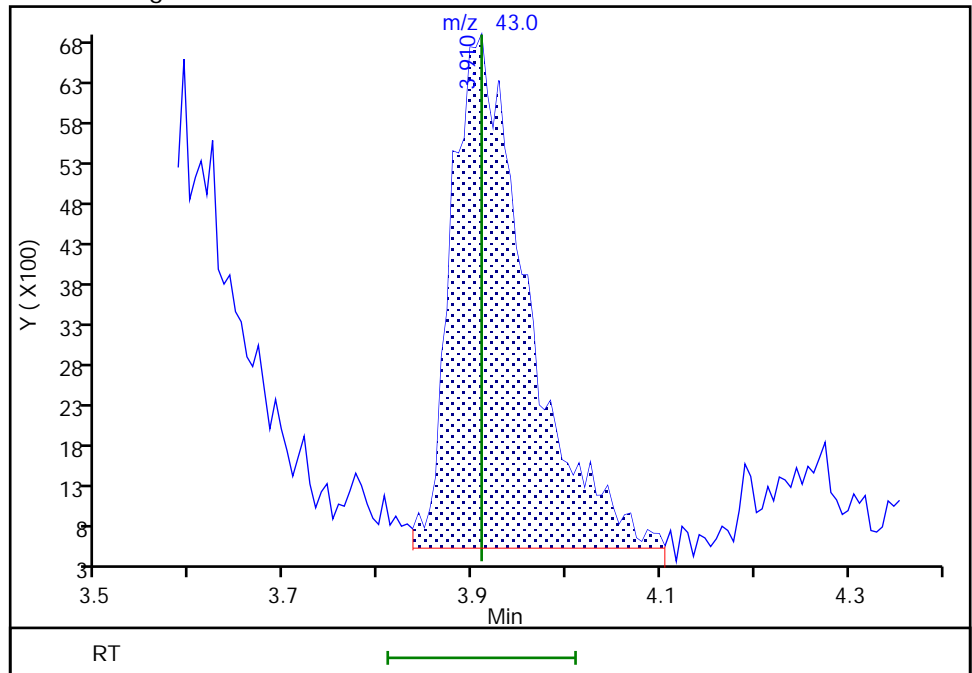
RT: 3.91  
Area: 41579  
Amount: 2.194579  
Amount Units: ug/l

Processing Integration Results



RT: 3.91  
Area: 35316  
Amount: 1.937652  
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:51:53  
Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X16.D  
 Lims ID: IC std3 1  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 11-Jul-2022 18:11:30 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0052505-016  
 Operator ID: kas02648 Instrument ID: 19094  
 Sublist: chrom-MSV\_19094\_25mL\*sub1  
 Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 12-Jul-2022 11:51:06 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1678

First Level Reviewer: UKAD Date: 12-Jul-2022 09:54:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.934	1.940	-0.006	99	59403	1.00	0.9518	
6 Chloromethane	50	2.123	2.129	-0.006	99	71922	1.00	0.9198	
8 Butadiene	39	2.245	2.245	0.000	92	70198	1.00	0.9505	
7 Vinyl chloride	62	2.245	2.251	-0.006	87	73466	1.00	0.9483	
9 Bromomethane	94	2.562	2.562	0.000	88	49078	1.00	0.9024	
10 Chloroethane	64	2.641	2.648	-0.007	99	43768	1.00	0.9312	
11 Dichlorofluoromethane	67	2.873	2.873	0.000	97	94716	1.00	0.9091	
13 Trichlorofluoromethane	101	2.940	2.952	-0.012	96	87411	1.00	0.9321	
15 Ethyl ether	59	3.160	3.154	0.006	90	36780	1.00	0.9380	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.257	3.257	0.000	93	67338	1.00	0.9219	
17 Acrolein	56	3.349	3.349	0.000	99	251826	50.0	52.6	
18 1,1-Dichloroethene	96	3.483	3.489	-0.006	98	51047	1.00	0.9634	
19 Acetone	43	3.507	3.507	0.000	57	56977	10.0	10.2	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.525	3.519	0.006	91	51449	1.00	1.00	
21 Isopropyl alcohol	45	3.672	3.660	0.012	26	19191	20.0	15.4	
22 Iodomethane	142	3.678	3.672	0.006	97	89934	1.00	0.9760	
23 Ethyl bromide	108	3.702	3.708	-0.006	97	43476	1.00	0.9338	
24 Carbon disulfide	76	3.781	3.788	-0.007	98	135219	1.00	0.9533	
26 Methyl acetate	43	3.885	3.910	-0.025	20	15201	1.00	1.03	M
27 3-Chloro-1-propene	41	3.946	3.952	-0.006	94	86514	1.00	0.9408	
* 28 t-Butyl alcohol-d10 (IS)	65	4.147	4.123	0.024	0	87066	50.0	50.0	
29 Methylene Chloride	84	4.135	4.129	0.006	94	52410	1.00	0.9548	
30 2-Methyl-2-propanol	59	4.226	4.275	-0.049	77	40615	20.0	21.6	
31 Acrylonitrile	53	4.470	4.464	0.006	19	19244	2.50	2.56	M
32 Methyl tert-butyl ether	73	4.531	4.519	0.012	93	112695	1.00	0.9513	
33 trans-1,2-Dichloroethene	96	4.556	4.544	0.012	99	56807	1.00	0.9650	
34 Hexane	57	4.946	4.970	-0.024	93	77822	1.00	0.9449	
35 1,1-Dichloroethane	63	5.196	5.202	-0.006	95	104448	1.00	0.9492	
37 Isopropyl ether	45	5.257	5.263	-0.006	96	179260	1.00	0.9574	
38 2-Chloro-1,3-butadiene	53	5.306	5.306	0.000	91	83795	1.00	0.9325	
39 Tert-butyl ethyl ether	59	5.781	5.793	-0.012	99	158776	1.00	0.9585	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.988	5.988	0.000	100	102351	10.0	10.6	
42 cis-1,2-Dichloroethene	96	6.031	6.031	0.000	81	61506	1.00	0.9513	
43 2,2-Dichloropropane	77	6.049	6.055	-0.006	86	87898	1.00	0.9535	
45 Propionitrile	54	6.086	6.074	0.012	98	51370	20.0	20.7	
S 40 1,2-Dichloroethene, Total	100				0			1.92	
47 Methacrylonitrile	67	6.293	6.293	0.000	92	114169	10.0	10.6	
48 Chlorobromomethane	128	6.366	6.360	0.006	94	24178	1.00	0.9360	
49 Tetrahydrofuran	71	6.372	6.372	0.000	83	15578	5.00	5.62	
50 Chloroform	83	6.519	6.513	0.006	92	98008	1.00	0.9441	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	511791	10.0	9.92	
52 1,1,1-Trichloroethane	97	6.756	6.757	-0.001	98	91770	1.00	0.9498	
53 Cyclohexane	56	6.860	6.860	0.000	91	104255	1.00	0.9512	
55 1,1-Dichloropropene	75	6.952	6.958	-0.006	97	82705	1.00	0.9469	
56 Carbon tetrachloride	117	6.964	6.964	0.000	78	79987	1.00	0.9573	
57 Isobutyl alcohol	41	7.098	7.098	0.000	95	30946	50.0	50.4	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.177	7.189	-0.012	0	91709	10.0	9.75	
59 Benzene	78	7.220	7.220	0.000	95	244107	1.00	0.9588	
60 1,2-Dichloroethane	62	7.299	7.293	0.006	97	51817	1.00	0.9393	
62 Tert-amyl methyl ether	73	7.409	7.415	-0.006	98	136162	1.00	0.9647	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	99	2037557	10.0	10.0	
64 n-Heptane	43	7.647	7.653	-0.007	92	86111	1.00	0.9553	
66 n-Butanol	56	7.994	7.988	0.006	88	47075	87.5	89.6	
67 Trichloroethene	95	8.110	8.116	-0.006	98	63655	1.00	0.9491	
68 Methylcyclohexane	83	8.433	8.433	0.000	93	109016	1.00	0.9635	
70 1,2-Dichloropropane	63	8.451	8.451	0.000	88	61027	1.00	0.9549	
69 2-ethoxy-2-methyl butane	87	8.457	8.451	0.006	91	86257	1.00	0.9633	
71 Methyl methacrylate	69	8.537	8.537	0.000	91	22726	1.00	1.06	
72 1,4-Dioxane	88	8.567	8.549	0.018	33	7312	50.0	53.6	
73 Dibromomethane	93	8.561	8.555	0.006	95	25263	1.00	0.9494	
75 Dichlorobromomethane	83	8.793	8.799	-0.006	99	66840	1.00	0.9293	
76 2-Nitropropane	41	9.061	9.067	-0.006	96	27305	5.00	5.15	
79 1-Bromo-2-chloroethane	63	9.195	9.195	0.000	98	54639	1.00	0.9300	
80 cis-1,3-Dichloropropene	75	9.347	9.354	-0.007	96	83305	1.00	0.9232	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	288664	10.0	11.0	
\$ 82 Toluene-d8 (Surr)	98	9.664	9.665	-0.001	93	2188271	10.0	9.92	
83 Toluene	92	9.738	9.744	-0.006	98	154507	1.00	0.9430	
85 trans-1,3-Dichloropropene	75	10.006	10.000	0.006	91	65774	1.00	0.9426	
S 84 1,3-Dichloropropene, Total	100				0			1.87	
86 Ethyl methacrylate	69	10.067	10.067	0.000	88	51321	1.00	0.9596	
87 1,1,2-Trichloroethane	97	10.213	10.207	0.006	90	36462	1.00	0.9395	
88 Tetrachloroethene	166	10.298	10.299	-0.001	97	72632	1.00	0.9602	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	88	64455	1.00	0.9635	
91 2-Hexanone	43	10.420	10.420	0.000	98	186685	10.0	10.7	
93 Chlorodibromomethane	129	10.591	10.591	0.000	89	44590	1.00	0.9283	
94 Ethylene Dibromide	107	10.701	10.701	0.000	97	33650	1.00	0.9465	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	85	1802515	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	97	96628	1.00	0.9543	
98 Chlorobenzene	112	11.164	11.164	0.000	95	166598	1.00	0.9544	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	95	55816	1.00	0.9321	
S 95 Xylenes, Total	106				0			2.83	
100 Ethylbenzene	91	11.249	11.250	-0.001	98	305034	1.00	0.9533	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	228568	2.00	1.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 o-Xylene	106	11.695	11.695	-0.001	97	112434	1.00	0.9535	
103 Styrene	104	11.713	11.713	0.000	96	181168	1.00	0.9470	
104 Bromoform	173	11.871	11.871	0.000	97	25426	1.00	0.9186	
105 Isopropylbenzene	105	11.999	11.999	0.000	95	299877	1.00	0.9405	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	91	888594	10.0	9.93	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	93	43665	1.00	0.9610	
111 Bromobenzene	156	12.261	12.262	-0.001	96	66242	1.00	0.9739	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	91	94622	10.0	10.4	
112 1,2,3-Trichloropropane	110	12.286	12.292	-0.006	79	10598	1.00	0.9290	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	361905	1.00	0.9542	
114 2-Chlorotoluene	126	12.402	12.402	0.000	97	70640	1.00	0.9678	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	254672	1.00	0.9627	
116 4-Chlorotoluene	126	12.493	12.493	0.000	98	69914	1.00	0.9540	
118 tert-Butylbenzene	134	12.706	12.707	-0.001	93	58136	1.00	0.99	
119 Pentachloroethane	167	12.737	12.737	0.000	85	38784	1.00	0.9440	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	253767	1.00	0.9507	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	331458	1.00	0.9568	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	131401	1.00	0.9330	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	283008	1.00	0.9530	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	992900	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	96	131226	1.00	0.9388	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	96	106449	1.00	0.9354	
127 Benzyl chloride	126	13.121	13.121	0.000	98	17500	1.00	0.9473	
129 p-Diethylbenzene	119	13.176	13.176	0.000	92	164633	1.00	0.9591	
130 n-Butylbenzene	92	13.267	13.267	0.000	96	142558	1.00	0.9511	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	98	117234	1.00	0.9395	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	85	5499	1.00	0.9169	
135 1,3,5-Trichlorobenzene	180	13.968	13.969	-0.001	98	106250	1.00	0.9699	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	88686	1.00	0.9615	
137 Hexachlorobutadiene	225	14.474	14.475	-0.001	96	42671	1.00	0.9525	
138 Naphthalene	128	14.572	14.572	0.000	97	141968	1.00	0.9532	
139 1,2,3-Trichlorobenzene	180	14.718	14.712	0.006	96	76975	1.00	0.9830	
140 2-Methylnaphthalene	142	15.334	15.340	-0.006	91	88905	1.00	0.99	
194 Pentane	43		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV_LL_#1_826_00049	Amount Added: 2.00	Units: uL	
MSV_LL_GAS826_00101	Amount Added: 2.00	Units: uL	
MSV_LL_#2_826_00053	Amount Added: 2.00	Units: uL	
MSV_LLcentISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X16.D

Injection Date: 11-Jul-2022 18:11:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std3 1

Worklist Smp#: 16

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

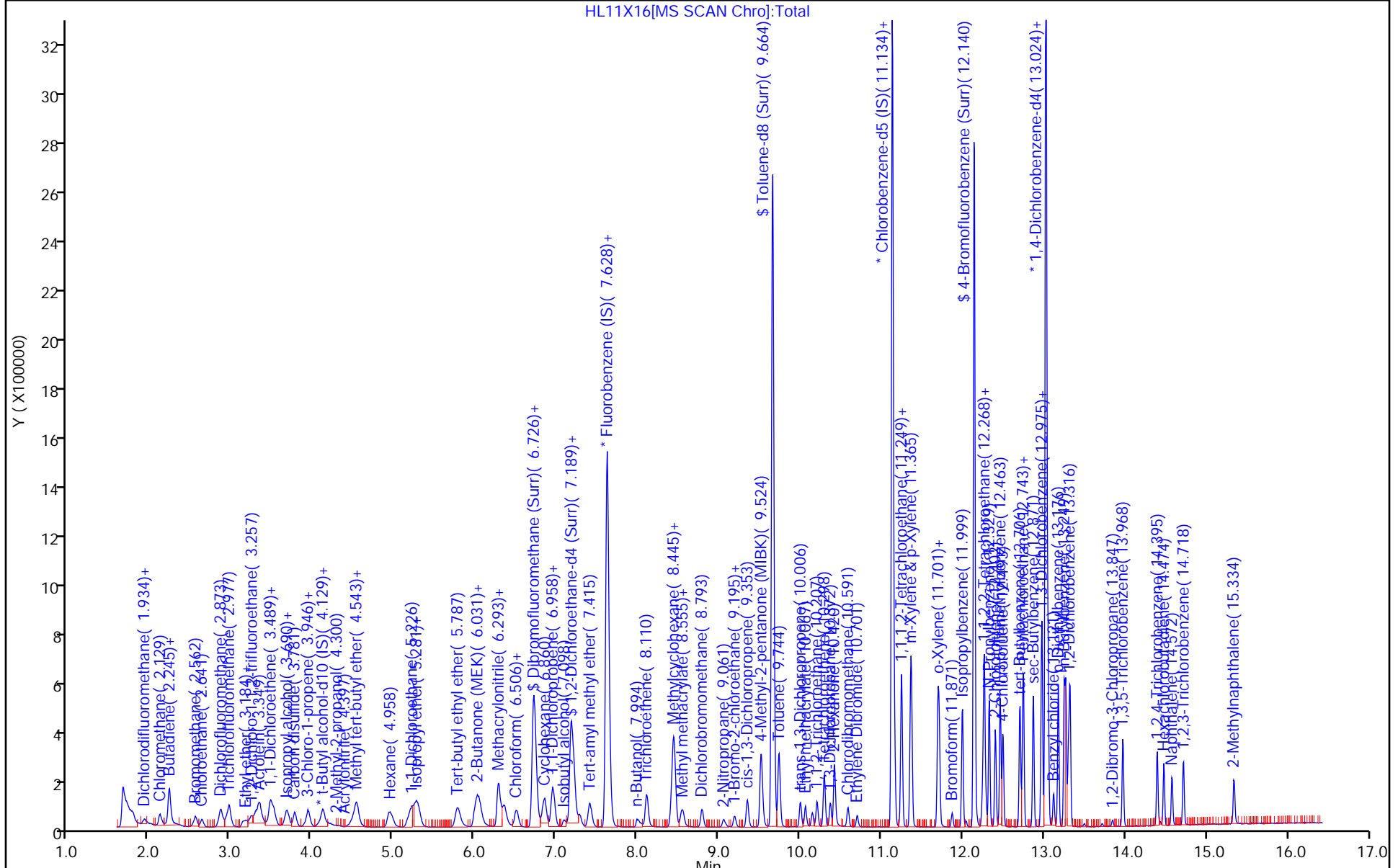
ALS Bottle#: 16

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

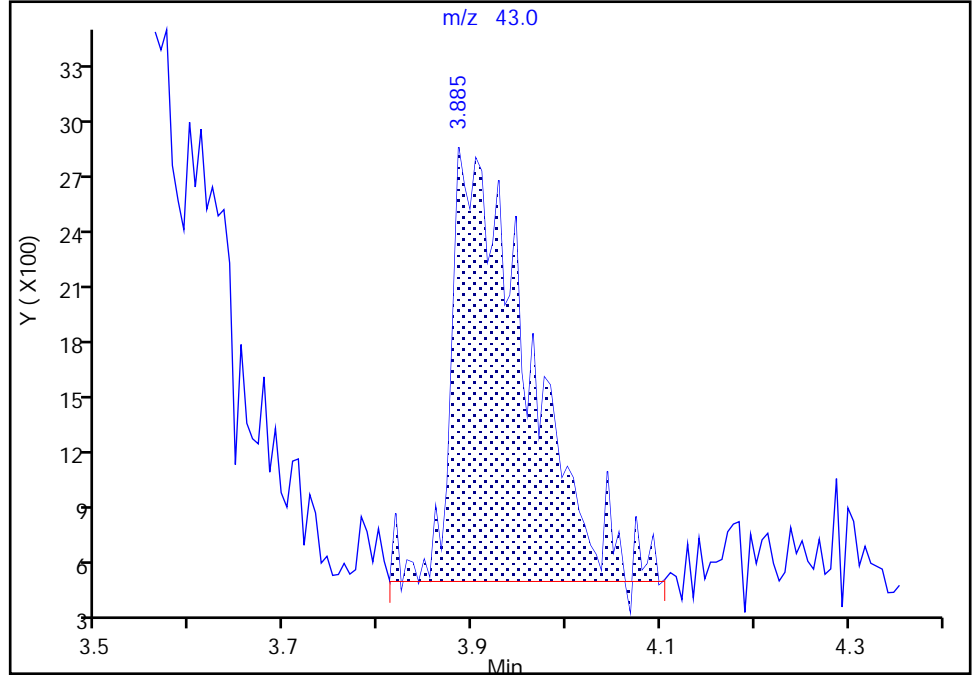
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Injection Date: 11-Jul-2022 18:11:30 Instrument ID: 19094  
Lims ID: IC std3 1  
Client ID:  
Operator ID: kas02648 ALS Bottle#: 16 Worklist Smp#: 16  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

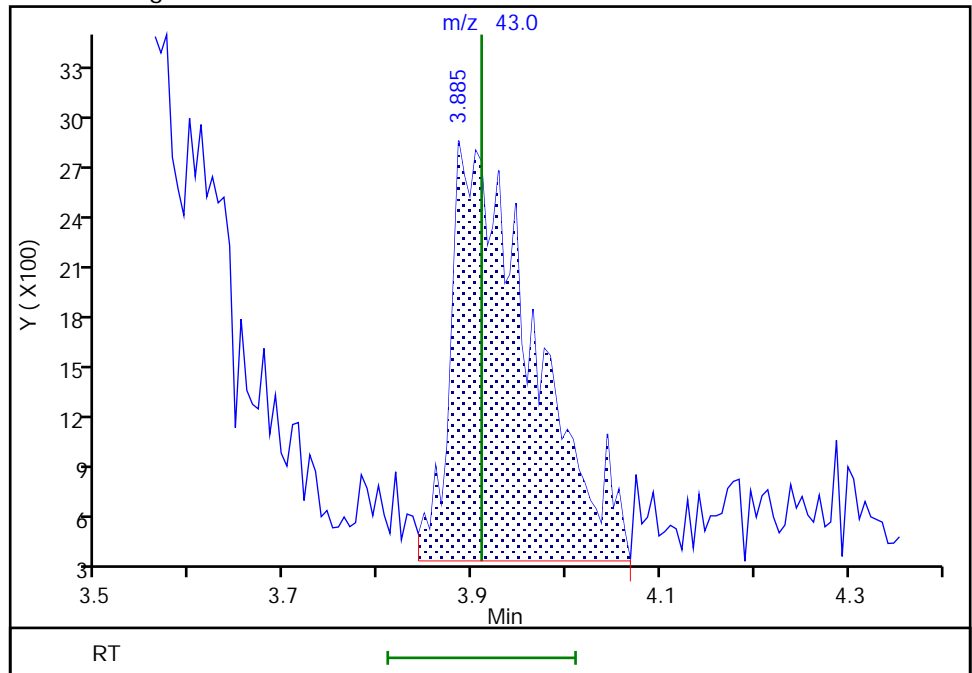
RT: 3.89  
Area: 13369  
Amount: 0.926818  
Amount Units: ug/l

Processing Integration Results



RT: 3.89  
Area: 15201  
Amount: 1.031322  
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:53:38  
Audit Action: Manually Integrated

Audit Reason: Baseline



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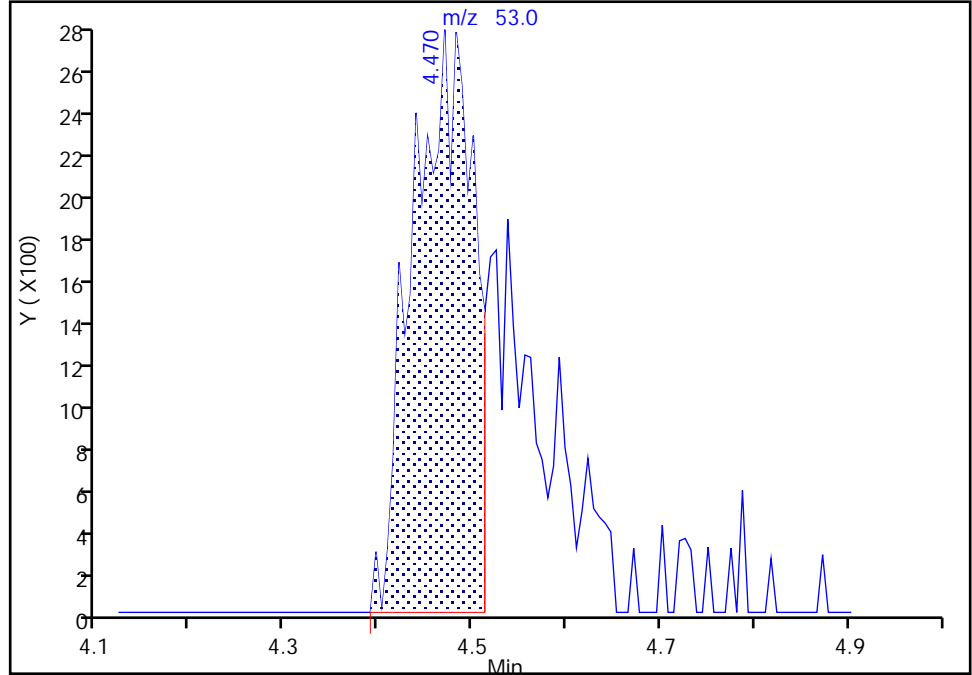
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X16.D  
Injection Date: 11-Jul-2022 18:11:30 Instrument ID: 19094  
Lims ID: IC std3 1  
Client ID:  
Operator ID: kas02648 ALS Bottle#: 16 Worklist Smp#: 16  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

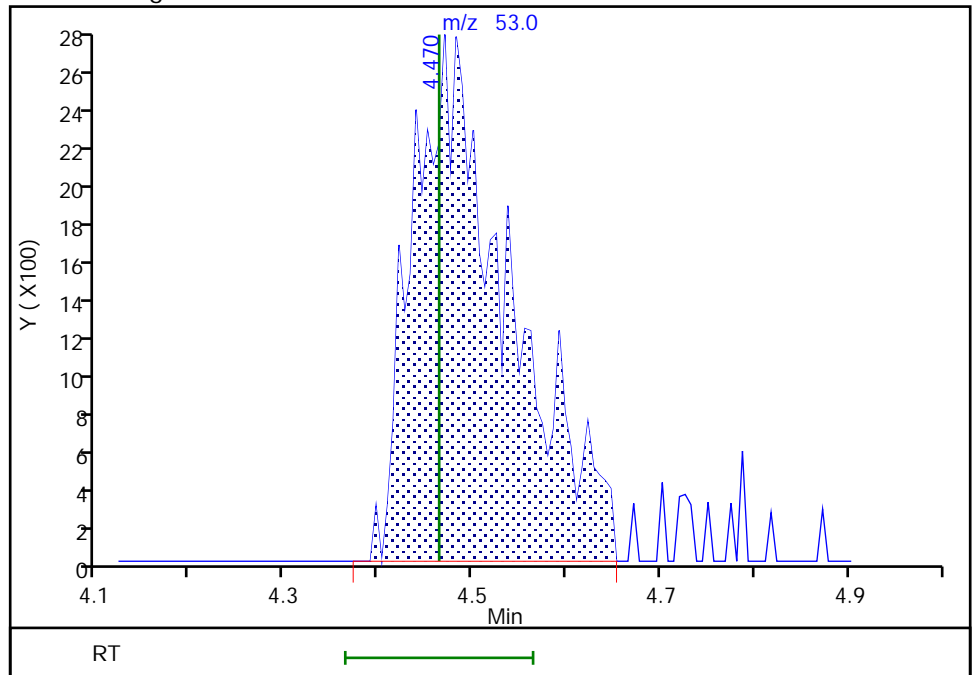
RT: 4.47  
Area: 12185  
Amount: 1.927957  
Amount Units: ug/l

Processing Integration Results



RT: 4.47  
Area: 19244  
Amount: 2.559270  
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 10:11:14  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X17.D  
 Lims ID: IC std2 0.5  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 11-Jul-2022 18:32:30 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0052505-017  
 Operator ID: kas02648 Instrument ID: 19094  
 Sublist: chrom-MSV\_19094\_25mL\*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 12-Jul-2022 11:51:15 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1678

First Level Reviewer: UKAD Date: 12-Jul-2022 09:56:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.946	1.940	0.006	98	29441	0.5000	0.4731	
6 Chloromethane	50	2.129	2.129	0.000	99	35764	0.5000	0.4588	
8 Butadiene	39	2.239	2.245	-0.006	91	32434	0.5000	0.4405	
7 Vinyl chloride	62	2.245	2.251	-0.006	83	34329	0.5000	0.4445	
9 Bromomethane	94	2.568	2.562	0.006	89	25582	0.5000	0.4718	
10 Chloroethane	64	2.641	2.648	-0.007	99	22322	0.5000	0.4764	
11 Dichlorofluoromethane	67	2.867	2.873	-0.006	96	47783	0.5000	0.4600	
13 Trichlorofluoromethane	101	2.952	2.952	0.000	96	41511	0.5000	0.4440	
15 Ethyl ether	59	3.154	3.154	0.000	84	17231	0.5001	0.4408	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.257	3.257	0.000	92	34976	0.5000	0.4803	
17 Acrolein	56	3.355	3.349	0.006	99	126498	25.0	28.1	
18 1,1-Dichloroethene	96	3.483	3.489	-0.006	97	26778	0.5000	0.5069	
19 Acetone	43	3.532	3.507	0.025	68	31750	5.00	6.07	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.525	3.519	0.006	88	24601	0.5000	0.4775	
21 Isopropyl alcohol	45	3.684	3.660	0.024	28	9017	10.0	8.58	M
22 Iodomethane	142	3.678	3.672	0.006	98	46089	0.5000	0.5017	
23 Ethyl bromide	108	3.708	3.708	0.000	97	20594	0.4999	0.4436	
24 Carbon disulfide	76	3.788	3.788	0.000	99	69895	0.5000	0.4942	
26 Methyl acetate	43	3.946	3.910	0.036	24	6605	0.5000	0.4770	M
27 3-Chloro-1-propene	41	3.952	3.952	0.000	93	45854	0.5000	0.5001	
* 28 t-Butyl alcohol-d10 (IS)	65	4.129	4.123	0.006	0	81790	50.0	50.0	
29 Methylene Chloride	84	4.135	4.129	0.006	93	27920	0.5000	0.5102	
30 2-Methyl-2-propanol	59	4.263	4.275	-0.012	63	18967	10.0	10.7	
31 Acrylonitrile	53	4.476	4.464	0.012	19	9691	1.25	1.37	M
32 Methyl tert-butyl ether	73	4.525	4.519	0.006	94	58986	0.5000	0.4994	
33 trans-1,2-Dichloroethene	96	4.550	4.544	0.006	100	29230	0.5000	0.4980	
34 Hexane	57	4.964	4.970	-0.006	90	40616	0.5000	0.4946	
35 1,1-Dichloroethane	63	5.190	5.202	-0.012	95	55872	0.5000	0.5093	
37 Isopropyl ether	45	5.257	5.263	-0.006	97	91474	0.5000	0.4900	
38 2-Chloro-1,3-butadiene	53	5.293	5.306	-0.013	89	43848	0.5000	0.4894	
39 Tert-butyl ethyl ether	59	5.787	5.793	-0.006	98	81551	0.5000	0.4938	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	6.007	5.988	0.019	100	46335	5.00	5.09	
42 cis-1,2-Dichloroethene	96	6.031	6.031	0.000	82	31554	0.5000	0.4895	
43 2,2-Dichloropropane	77	6.049	6.055	-0.006	89	45990	0.5000	0.5004	
45 Propionitrile	54	6.098	6.074	0.024	90	21624	10.0	9.26	
S 40 1,2-Dichloroethene, Total	100				0			0.9875	
47 Methacrylonitrile	67	6.293	6.293	0.000	90	58203	5.00	5.77	
48 Chlorobromomethane	128	6.360	6.360	0.000	92	12193	0.5000	0.4734	
49 Tetrahydrofuran	71	6.366	6.372	-0.006	68	6634	2.50	2.55	
50 Chloroform	83	6.507	6.513	-0.006	93	53597	0.5000	0.5179	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	515062	10.0	10.0	
52 1,1,1-Trichloroethane	97	6.757	6.757	0.000	98	47344	0.5000	0.4915	
53 Cyclohexane	56	6.842	6.860	-0.018	90	54650	0.5000	0.5001	
55 1,1-Dichloropropene	75	6.958	6.958	0.000	97	42736	0.5000	0.4907	
56 Carbon tetrachloride	117	6.964	6.964	0.000	91	39816	0.5000	0.4780	
57 Isobutyl alcohol	41	7.141	7.098	0.043	98	14765	25.0	25.6	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.189	7.189	0.000	0	94092	10.0	10.0	
59 Benzene	78	7.220	7.220	0.000	92	125402	0.5000	0.4940	
60 1,2-Dichloroethane	62	7.293	7.293	0.000	96	27855	0.5000	0.5064	
62 Tert-amyl methyl ether	73	7.409	7.415	-0.006	98	70827	0.5000	0.5033	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	99	2031490	10.0	10.0	
64 n-Heptane	43	7.647	7.653	-0.006	89	45690	0.5000	0.5084	
66 n-Butanol	56	8.012	7.988	0.024	83	16852	43.8	34.1	
67 Trichloroethene	95	8.122	8.116	0.006	97	32976	0.5000	0.4931	
68 Methylcyclohexane	83	8.433	8.433	0.000	93	55236	0.5000	0.4897	
70 1,2-Dichloropropane	63	8.445	8.451	-0.006	74	31975	0.5000	0.5018	
69 2-ethoxy-2-methyl butane	87	8.451	8.451	0.000	90	44274	0.5000	0.4959	
71 Methyl methacrylate	69	8.537	8.537	0.000	95	11226	0.5000	0.5591	
72 1,4-Dioxane	88	8.561	8.549	0.012	34	3415	25.0	26.6	M
73 Dibromomethane	93	8.561	8.555	0.006	93	13211	0.5000	0.4980	
75 Dichlorobromomethane	83	8.793	8.799	-0.006	98	34786	0.5000	0.4851	
76 2-Nitropropane	41	9.067	9.067	0.000	93	13682	2.50	2.75	
79 1-Bromo-2-chloroethane	63	9.201	9.195	0.006	98	25444	0.5000	0.4344	
80 cis-1,3-Dichloropropene	75	9.354	9.354	0.000	97	43415	0.5000	0.4826	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	144667	5.00	5.86	
\$ 82 Toluene-d8 (Surr)	98	9.664	9.665	-0.001	93	2186651	10.0	10.0	
83 Toluene	92	9.744	9.744	0.000	98	81056	0.5000	0.4999	
85 trans-1,3-Dichloropropene	75	10.006	10.000	0.006	91	32928	0.5000	0.4768	
S 84 1,3-Dichloropropene, Total	100				0			0.9594	
86 Ethyl methacrylate	69	10.067	10.067	0.000	88	24949	0.5000	0.4714	
87 1,1,2-Trichloroethane	97	10.213	10.207	0.006	89	18556	0.5000	0.4832	
88 Tetrachloroethene	166	10.299	10.299	-0.001	97	38259	0.5000	0.5111	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	88	32646	0.5000	0.4931	
91 2-Hexanone	43	10.427	10.420	0.007	96	93203	5.00	5.69	
93 Chlorodibromomethane	129	10.591	10.591	0.000	91	22493	0.5000	0.4732	
94 Ethylene Dibromide	107	10.701	10.701	0.000	97	17888	0.5000	0.5085	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	85	1783683	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	97	50063	0.5000	0.4996	
98 Chlorobenzene	112	11.158	11.164	-0.006	95	85642	0.5000	0.4958	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	94	28846	0.5000	0.4868	
S 95 Xylenes, Total	106				0			1.50	
100 Ethylbenzene	91	11.250	11.250	0.000	98	154814	0.5000	0.4889	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	121299	1.00	1.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 o-Xylene	106	11.695	11.695	0.000	96	57735	0.5000	0.4948	
103 Styrene	104	11.713	11.713	0.000	95	92450	0.5000	0.4884	
104 Bromoform	173	11.871	11.871	0.000	97	12623	0.5000	0.4608	
105 Isopropylbenzene	105	11.999	11.999	0.000	95	156254	0.5000	0.4952	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	91	880073	10.0	9.93	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	92	22404	0.5000	0.5026	
111 Bromobenzene	156	12.262	12.262	0.000	95	32939	0.5000	0.4936	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	91	46217	5.00	5.42	
112 1,2,3-Trichloropropane	110	12.292	12.292	0.000	79	6024	0.5000	0.5382	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	186777	0.5000	0.5019	
114 2-Chlorotoluene	126	12.408	12.402	0.006	97	35571	0.5000	0.4968	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	129835	0.5000	0.5003	
116 4-Chlorotoluene	126	12.493	12.493	0.000	97	36896	0.5000	0.5132	
118 tert-Butylbenzene	134	12.707	12.707	0.000	93	28957	0.5000	0.5046	
119 Pentachloroethane	167	12.737	12.737	0.000	82	18023	0.5000	0.4471	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	132294	0.5000	0.5052	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	170282	0.5000	0.5010	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	69911	0.5000	0.5060	
123 4-Isopropyltoluene	119	12.981	12.975	0.006	97	146134	0.5000	0.5016	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	974107	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	93	69120	0.5000	0.5040	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	56083	0.5000	0.5024	
127 Benzyl chloride	126	13.121	13.121	0.000	99	8260	0.5000	0.4557	
129 p-Diethylbenzene	119	13.176	13.176	0.000	90	85170	0.5000	0.5058	
130 n-Butylbenzene	92	13.267	13.267	0.000	97	70907	0.5000	0.4822	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	98	60558	0.5000	0.4947	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	82	2609	0.5000	0.4434	
135 1,3,5-Trichlorobenzene	180	13.975	13.969	0.006	94	54031	0.5000	0.5027	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	44220	0.5000	0.4886	
137 Hexachlorobutadiene	225	14.475	14.475	0.000	93	24106	0.5000	0.5485	
138 Naphthalene	128	14.578	14.572	0.006	97	72436	0.5000	0.4957	
139 1,2,3-Trichlorobenzene	180	14.718	14.712	0.006	96	39169	0.5000	0.5098	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	89	42541	0.5000	0.4835	
194 Pentane	43		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV\_LL\_#1\_826\_00049

Amount Added: 2.00

Units: uL

MSV\_LL\_GAS826\_00101

Amount Added: 2.00

Units: uL

MSV\_LL\_#2\_826\_00053

Amount Added: 2.00

Units: uL

MSV\_LLcentISS\_00005

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X17.D

Injection Date: 11-Jul-2022 18:32:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std2 0.5

Worklist Smp#: 17

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

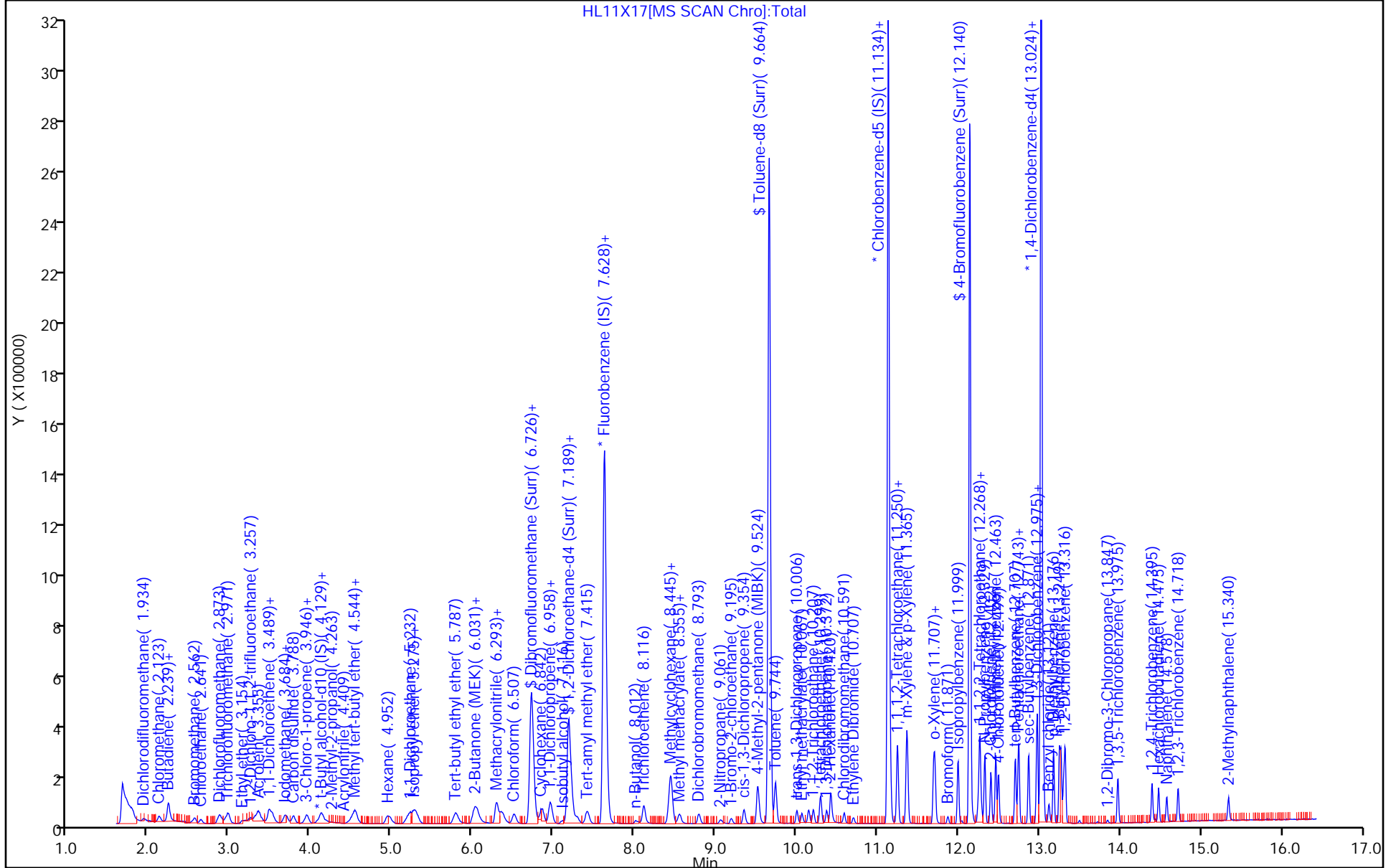
ALS Bottle#: 17

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

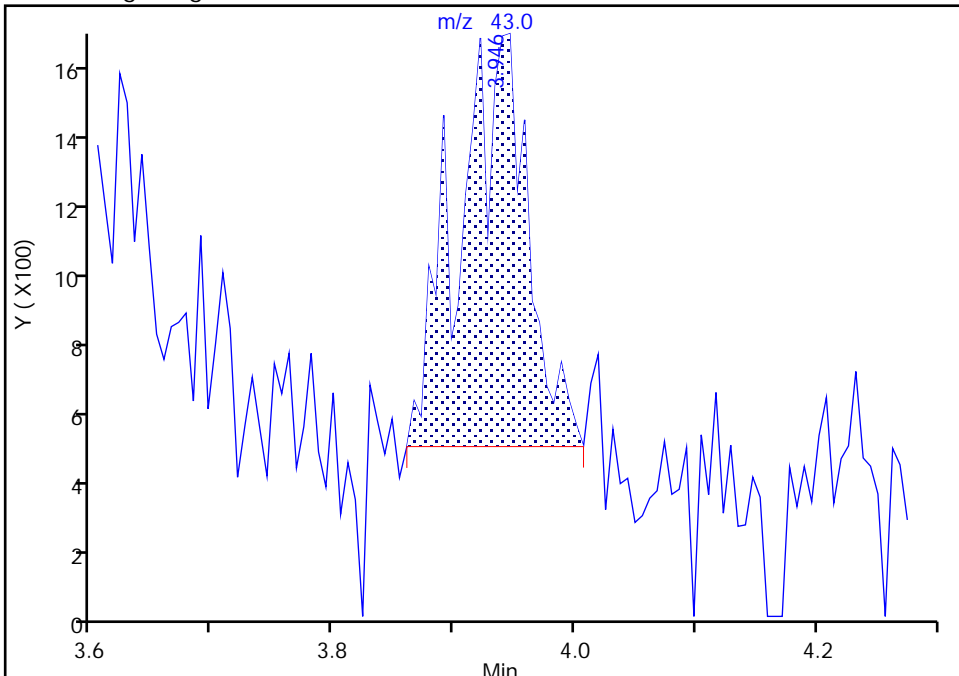
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Injection Date:	11-Jul-2022 18:32:30	Instrument ID:	19094
Lims ID:	IC std2 0.5		
Client ID:			
Operator ID:	kas02648	ALS Bottle#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	17

26 Methyl acetate, CAS: 79-20-9

Signal: 1

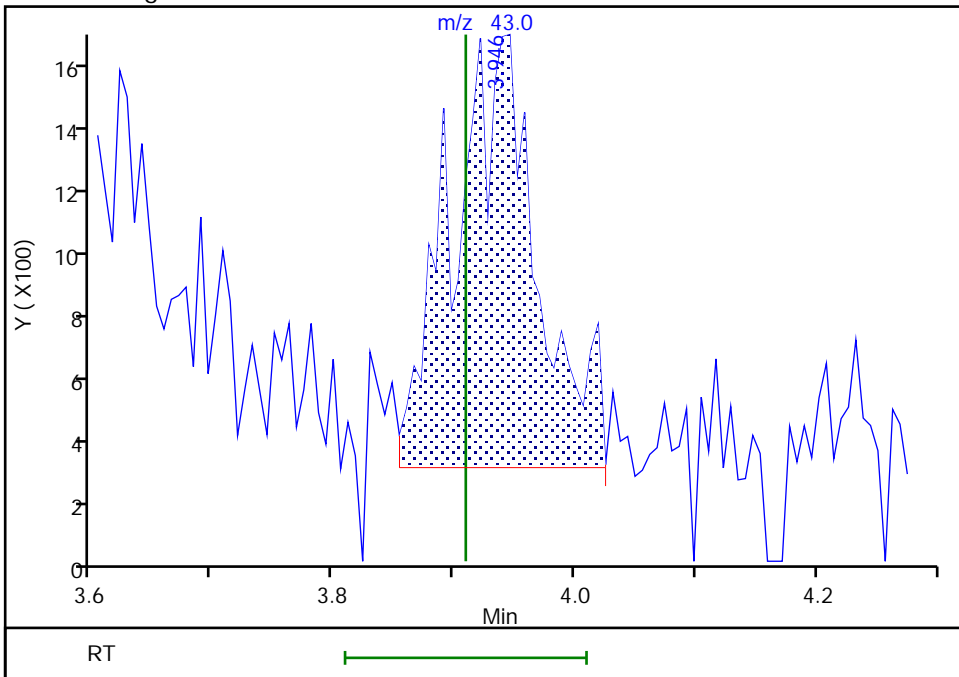
RT: 3.95  
 Area: 4569  
 Amount: 0.348727  
 Amount Units: ug/l

Processing Integration Results



RT: 3.95  
 Area: 6605  
 Amount: 0.477027  
 Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:54:55  
 Audit Action: Manually Integrated

Audit Reason: Baseline  
 Page 678 of 959

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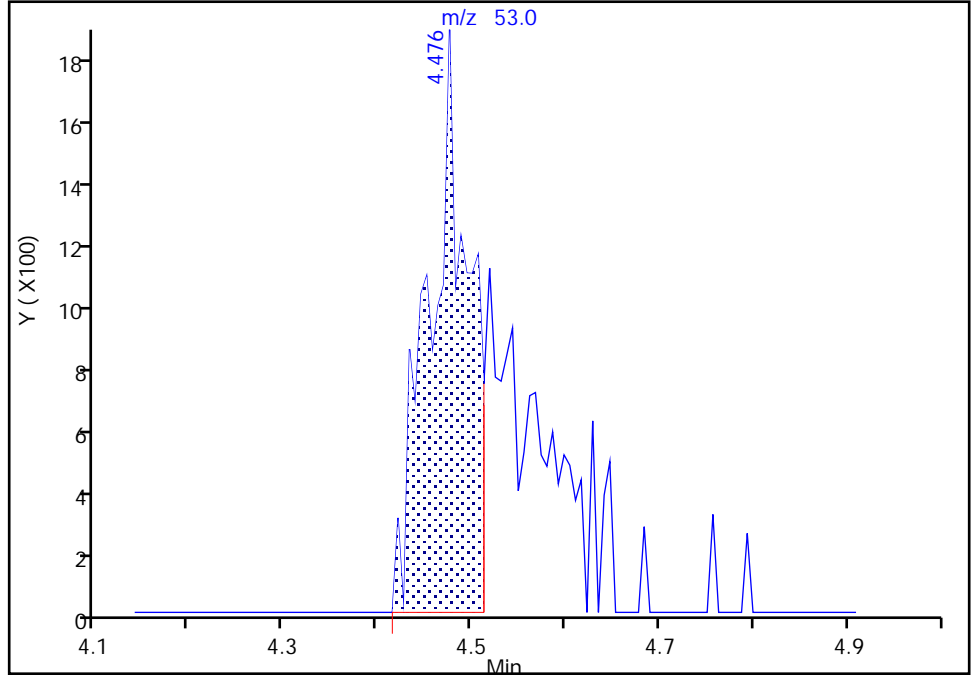
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X17.D  
Injection Date: 11-Jul-2022 18:32:30 Instrument ID: 19094  
Lims ID: IC std2 0.5  
Client ID:  
Operator ID: kas02648 ALS Bottle#: 17 Worklist Smp#: 17  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

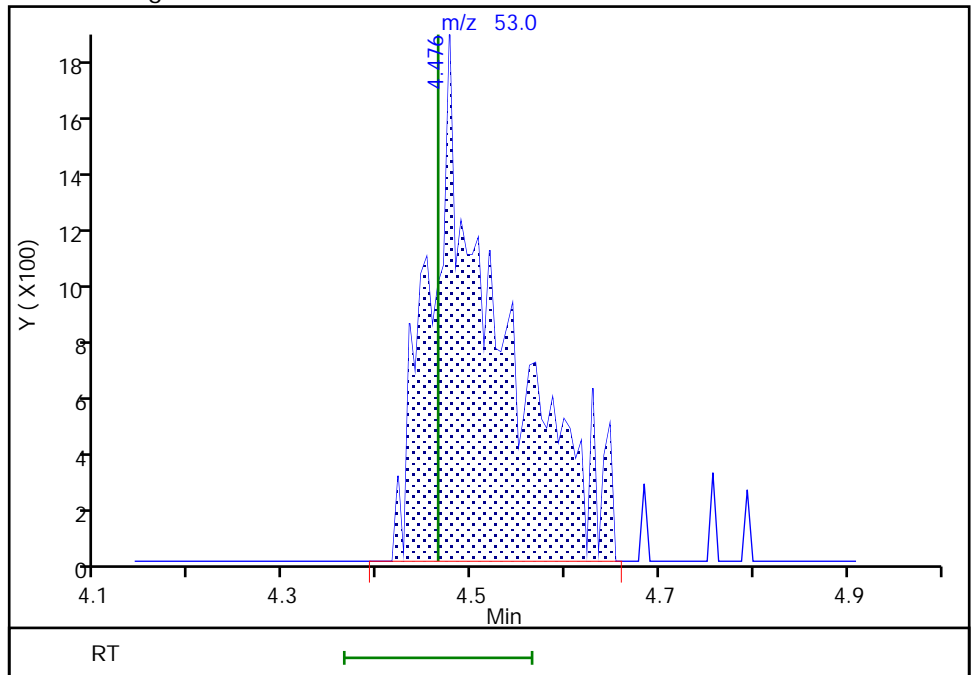
RT: 4.48  
Area: 5403  
Amount: 1.079301  
Amount Units: ug/l

Processing Integration Results



RT: 4.48  
Area: 9691  
Amount: 1.371948  
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 10:11:30  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

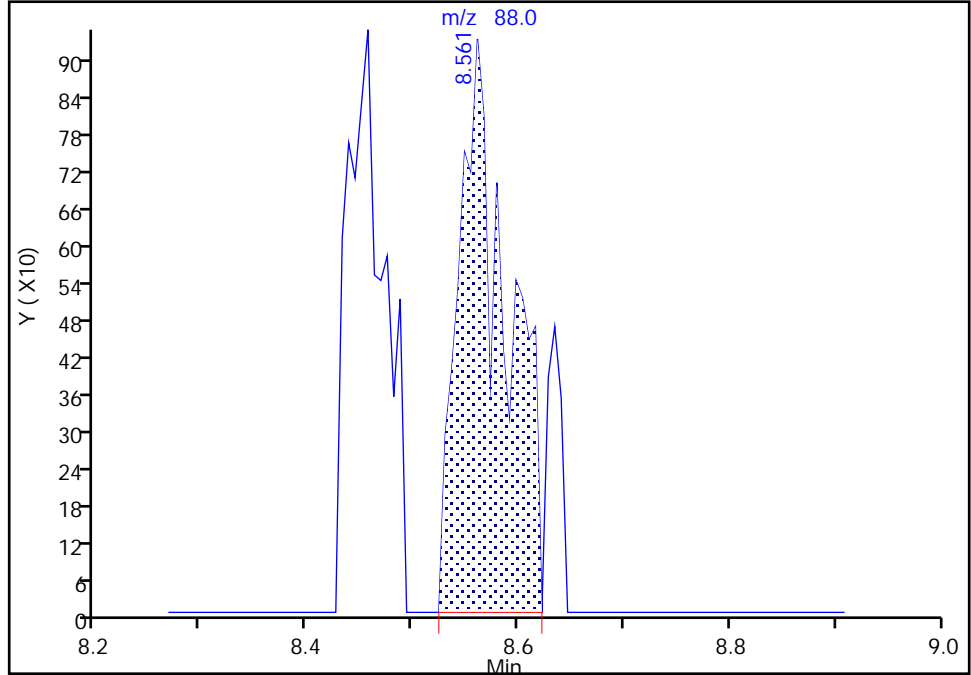
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Lims ID: IC std2 0.5  
Client ID:  
Operator ID: kas02648 ALS Bottle#: 17 Worklist Smp#: 17  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

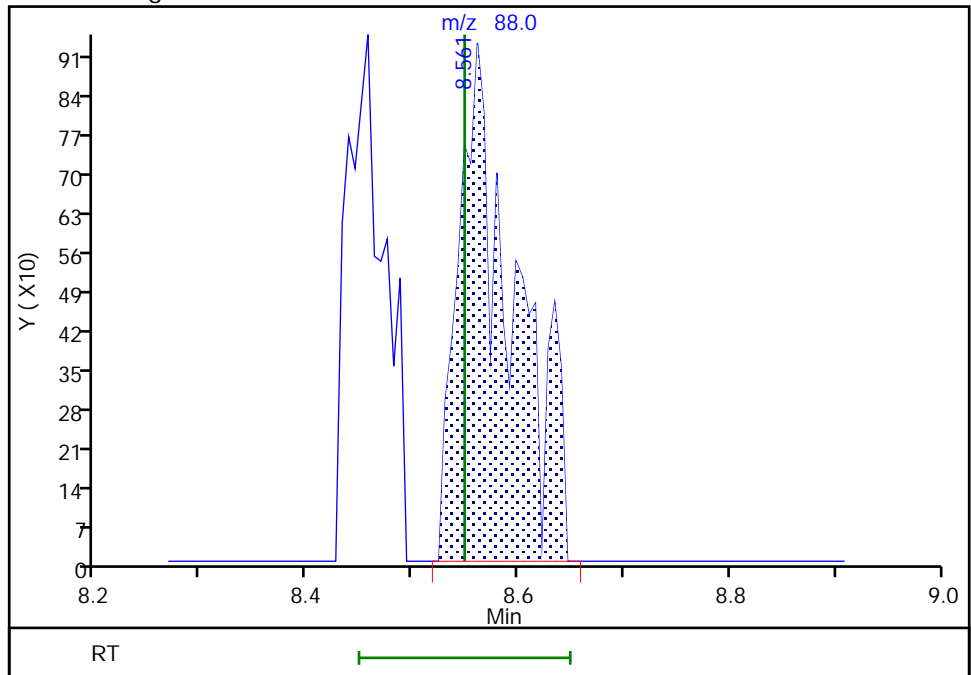
RT: 8.56  
Area: 2977  
Amount: 28.394918  
Amount Units: ug/l

Processing Integration Results



RT: 8.56  
Area: 3415  
Amount: 26.637646  
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 10:13:53  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration  
Page 680 of 959



Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Lims ID: IC std1 0.2  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 11-Jul-2022 18:52:30 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0052505-019  
 Operator ID: kas02648 Instrument ID: 19094  
 Sublist: chrom-MSV\_19094\_25mL\*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 12-Jul-2022 11:51:24 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1678

First Level Reviewer: UKAD Date: 12-Jul-2022 09:59:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.922	1.940	-0.018	97	12093	0.2000	0.1893	
6 Chloromethane	50	2.117	2.129	-0.012	98	15861	0.2000	0.1982	
8 Butadiene	39	2.233	2.245	-0.012	97	16912	0.2000	0.2237	
7 Vinyl chloride	62	2.233	2.251	-0.018	85	14783	0.2000	0.1864	
9 Bromomethane	94	2.550	2.562	-0.012	92	11545	0.2000	0.2074	
10 Chloroethane	64	2.635	2.648	-0.013	98	9347	0.2000	0.1943	
11 Dichlorofluoromethane	67	2.867	2.873	-0.006	96	21148	0.2000	0.1983	
13 Trichlorofluoromethane	101	2.946	2.952	-0.006	93	17796	0.2000	0.1854	
15 Ethyl ether	59	3.172	3.154	0.018	70	7722	0.2001	0.1924	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.251	3.257	-0.006	86	14120	0.2000	0.1889	
17 Acrolein	56	3.336	3.349	-0.013	99	56027	10.0	7.98	
18 1,1-Dichloroethene	96	3.477	3.489	-0.012	97	9714	0.2000	0.1791	
19 Acetone	43	3.507	3.507	0.000	76	19892	2.00	2.43	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.513	3.519	-0.006	89	9385	0.2000	0.1774	
21 Isopropyl alcohol	45	3.611	3.660	-0.049	25	3822	4.00	5.02	M
22 Iodomethane	142	3.653	3.672	-0.019	99	17782	0.2000	0.1885	
23 Ethyl bromide	108	3.696	3.708	-0.012	96	8718	0.2000	0.1829	
24 Carbon disulfide	76	3.775	3.788	-0.013	98	27494	0.2000	0.1894	
26 Methyl acetate	43	3.946	3.910	0.036	22	4449	0.2000	0.2057	M
27 3-Chloro-1-propene	41	3.940	3.952	-0.012	94	19139	0.2000	0.2033	
* 28 t-Butyl alcohol-d10 (IS)	65	4.129	4.123	0.006	0	127772	50.0	50.0	
29 Methylene Chloride	84	4.117	4.129	-0.012	92	10350	0.2000	0.1842	
30 2-Methyl-2-propanol	59	4.239	4.275	-0.036	70	10320	4.00	3.73	
31 Acrylonitrile	53	4.476	4.464	0.012	21	3316	0.5000	0.3005	M
32 Methyl tert-butyl ether	73	4.519	4.519	0.000	93	21966	0.2000	0.1812	
33 trans-1,2-Dichloroethene	96	4.531	4.544	-0.013	96	10942	0.2000	0.1816	
34 Hexane	57	4.940	4.970	-0.030	90	16053	0.2000	0.1904	
35 1,1-Dichloroethane	63	5.196	5.202	-0.006	74	20381	0.2000	0.1810	
37 Isopropyl ether	45	5.232	5.263	-0.031	91	35599	0.2000	0.1858	
38 2-Chloro-1,3-butadiene	53	5.305	5.306	-0.001	43	16777	0.2000	0.1824	
39 Tert-butyl ethyl ether	59	5.781	5.793	-0.012	96	32074	0.2000	0.1892	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	6.007	5.988	0.019	99	23175	2.00	1.63	
42 cis-1,2-Dichloroethene	96	6.031	6.031	0.000	80	12731	0.2000	0.1924	
43 2,2-Dichloropropane	77	6.037	6.055	-0.018	83	17016	0.2000	0.1803	
45 Propionitrile	54	6.086	6.074	0.012	95	10758	4.00	2.95	M
S 40 1,2-Dichloroethene, Total	100				0			0.3740	
47 Methacrylonitrile	67	6.293	6.293	0.000	92	23008	2.00	1.46	
48 Chlorobromomethane	128	6.360	6.360	0.000	75	5425	0.2000	0.2052	
49 Tetrahydrofuran	71	6.360	6.372	-0.012	71	3287	1.00	0.8085	
50 Chloroform	83	6.506	6.513	-0.007	92	18941	0.2000	0.1783	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	524666	10.0	9.94	
52 1,1,1-Trichloroethane	97	6.756	6.757	-0.001	93	18862	0.2000	0.1907	
53 Cyclohexane	56	6.848	6.860	-0.012	88	21247	0.2000	0.1894	
55 1,1-Dichloropropene	75	6.958	6.958	0.000	96	17380	0.2000	0.1944	
56 Carbon tetrachloride	117	6.958	6.964	-0.006	90	15638	0.2000	0.1829	
57 Isobutyl alcohol	41	7.104	7.098	0.006	94	8353	10.0	9.26	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.177	7.189	-0.012	0	97667	10.0	10.1	
59 Benzene	78	7.214	7.220	-0.006	93	49624	0.2000	0.1904	
60 1,2-Dichloroethane	62	7.287	7.293	-0.006	67	11134	0.2000	0.1972	
62 Tert-amyl methyl ether	73	7.403	7.415	-0.012	99	25747	0.2000	0.1782	
* 65 Fluorobenzene (IS)	96	7.622	7.628	-0.006	99	2085513	10.0	10.0	
64 n-Heptane	43	7.646	7.653	-0.007	36	19527	0.2000	0.2117	
66 n-Butanol	56	8.018	7.988	0.030	93	12895	17.5	16.7	
67 Trichloroethene	95	8.110	8.116	-0.006	95	13274	0.2000	0.1934	
68 Methylcyclohexane	83	8.433	8.433	0.000	94	22098	0.2000	0.1908	
70 1,2-Dichloropropane	63	8.445	8.451	-0.006	75	11924	0.2000	0.1823	
69 2-ethoxy-2-methyl butane	87	8.451	8.451	0.000	89	16495	0.2000	0.1800	
71 Methyl methacrylate	69	8.537	8.537	0.000	43	4072	0.2000	0.1298	
72 1,4-Dioxane	88	8.555	8.549	0.006	33	947	10.0	4.73	M
73 Dibromomethane	93	8.561	8.555	0.006	94	5425	0.2000	0.1992	
75 Dichlorobromomethane	83	8.793	8.799	-0.006	94	14182	0.2000	0.1926	
76 2-Nitropropane	41	9.061	9.067	-0.006	98	6354	1.00	0.8170	
79 1-Bromo-2-chloroethane	63	9.189	9.195	-0.006	96	11419	0.2000	0.1899	
80 cis-1,3-Dichloropropene	75	9.353	9.354	-0.001	96	16185	0.2000	0.1752	
81 4-Methyl-2-pentanone (MIBK)	43	9.512	9.518	-0.006	96	57049	2.00	1.48	
\$ 82 Toluene-d8 (Surr)	98	9.658	9.665	-0.007	93	2255316	10.0	10.2	
83 Toluene	92	9.744	9.744	0.000	98	32116	0.2000	0.1958	
85 trans-1,3-Dichloropropene	75	10.006	10.000	0.006	90	13040	0.2000	0.1867	
S 84 1,3-Dichloropropene, Total	100				0			0.3619	
86 Ethyl methacrylate	69	10.067	10.067	0.000	83	9577	0.2000	0.1789	M
87 1,1,2-Trichloroethane	97	10.213	10.207	0.006	86	8392	0.2000	0.2160	
88 Tetrachloroethene	166	10.298	10.299	-0.001	96	14261	0.2000	0.1884	
89 1,3-Dichloropropane	76	10.378	10.372	0.006	88	12843	0.2000	0.1918	
91 2-Hexanone	43	10.426	10.420	0.006	96	35536	2.00	1.39	
93 Chlorodibromomethane	129	10.585	10.591	-0.006	88	9323	0.2000	0.1939	
94 Ethylene Dibromide	107	10.701	10.701	0.000	95	5776	0.2000	0.1623	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	85	1804145	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	33	21731	0.2000	0.2144	
98 Chlorobenzene	112	11.158	11.164	-0.006	94	33865	0.2000	0.1938	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	92	11585	0.2000	0.1933	
S 95 Xylenes, Total	106				0			0.5721	
100 Ethylbenzene	91	11.249	11.250	-0.001	98	61642	0.2000	0.1925	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	46705	0.4000	0.3825	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 o-Xylene	106	11.694	11.695	-0.001	96	22378	0.2000	0.1896	
103 Styrene	104	11.713	11.713	0.000	96	33946	0.2000	0.1773	
104 Bromoform	173	11.871	11.871	0.000	96	4931	0.2000	0.1780	
105 Isopropylbenzene	105	11.993	11.999	-0.006	95	59579	0.2000	0.1867	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	91	897535	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	91	8357	0.2000	0.1825	
111 Bromobenzene	156	12.255	12.262	-0.007	90	13159	0.2000	0.1920	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	92	19002	2.00	1.43	
112 1,2,3-Trichloropropane	110	12.292	12.292	0.000	76	2053	0.2000	0.1786	
113 N-Propylbenzene	91	12.328	12.329	-0.001	99	70175	0.2000	0.1836	
114 2-Chlorotoluene	126	12.402	12.402	0.000	96	13760	0.2000	0.1871	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	93	49390	0.2000	0.1853	
116 4-Chlorotoluene	126	12.499	12.493	0.006	96	13230	0.2000	0.1791	
118 tert-Butylbenzene	134	12.706	12.707	-0.001	92	10722	0.2000	0.1819	
119 Pentachloroethane	167	12.737	12.737	0.000	82	7445	0.2000	0.1798	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	96	50131	0.2000	0.1864	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	67287	0.2000	0.1927	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	27316	0.2000	0.1924	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	57362	0.2000	0.1917	
* 124 1,4-Dichlorobenzene-d4	152	13.023	13.024	-0.001	94	1000650	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	93	27701	0.2000	0.1966	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	96	23143	0.2000	0.2018	
127 Benzyl chloride	126	13.127	13.121	0.006	97	3379	0.2000	0.1815	
129 p-Diethylbenzene	119	13.176	13.176	0.000	91	31975	0.2000	0.1848	
130 n-Butylbenzene	92	13.267	13.267	0.000	98	29597	0.2000	0.1959	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	97	24746	0.2000	0.1968	
134 1,2-Dibromo-3-Chloropropane	155	13.846	13.847	-0.001	83	829	0.2000	0.1372	
135 1,3,5-Trichlorobenzene	180	13.975	13.969	0.005	97	20738	0.2000	0.1878	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	17418	0.2000	0.1874	
137 Hexachlorobutadiene	225	14.474	14.475	-0.001	93	11211	0.2000	0.2483	
138 Naphthalene	128	14.578	14.572	0.006	97	28721	0.2000	0.1913	
139 1,2,3-Trichlorobenzene	180	14.718	14.712	0.006	93	14798	0.2000	0.1875	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	94	18442	0.2000	0.2041	
194 Pentane	43		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV\_LL\_#1\_826\_00049

Amount Added: 2.00

Units: uL

MSV\_LL\_GAS826\_00101

Amount Added: 2.00

Units: uL

MSV\_LL\_#2\_826\_00053

Amount Added: 2.00

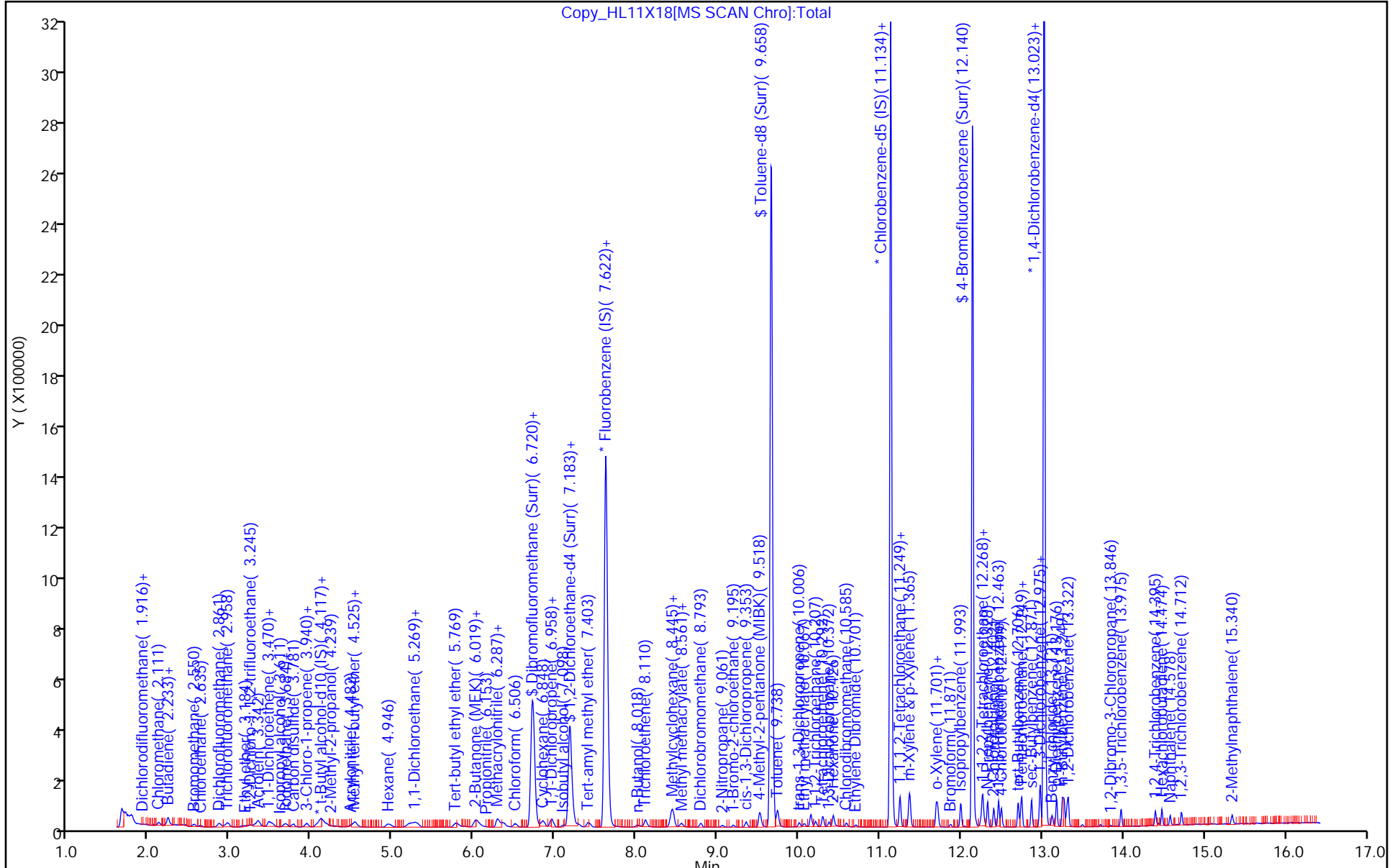
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MSV\_LLcentISS\_00005

Amount Added: 5.00

Units: uL

Run Reagent



Eurofins Lancaster Laboratories Environment Testing, LLC

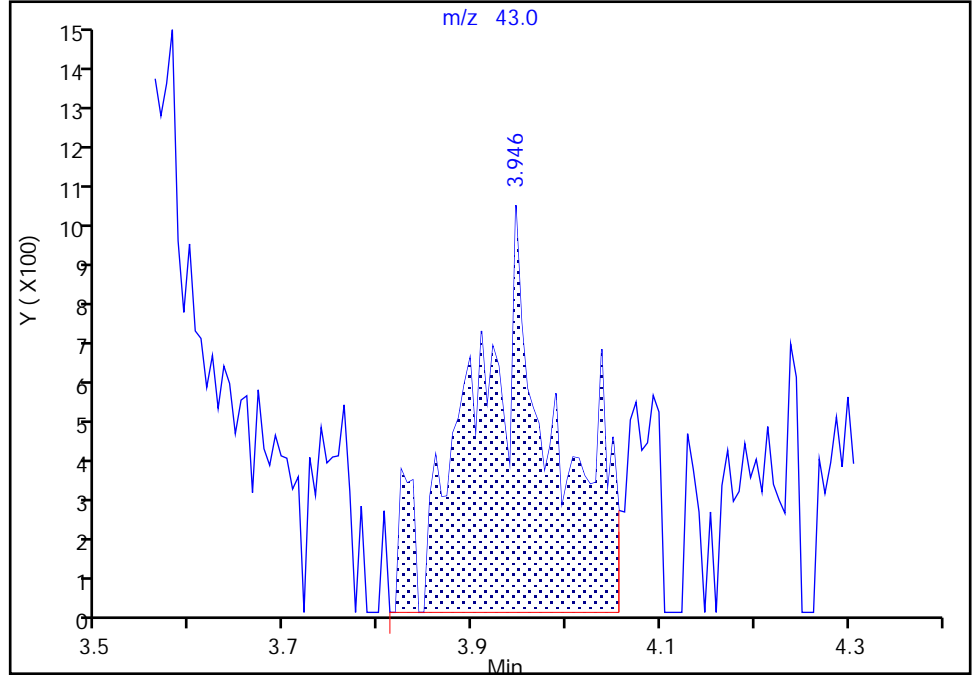
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
Injection Date: 11-Jul-2022 18:52:30 Instrument ID: 19094  
Lims ID: IC std1 0.2  
Client ID:  
Operator ID: kas02648 ALS Bottle#: 18 Worklist Smp#: 18  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

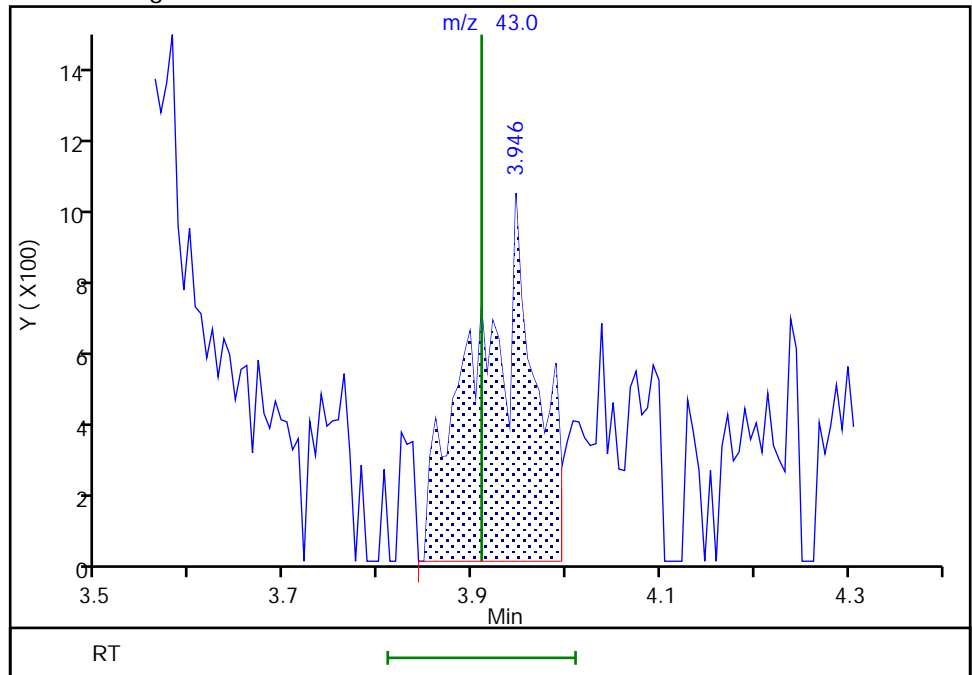
RT: 3.95  
Area: 6208  
Amount: 0.271247  
Amount Units: ug/l

Processing Integration Results



RT: 3.95  
Area: 4449  
Amount: 0.205683  
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:57:38  
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC

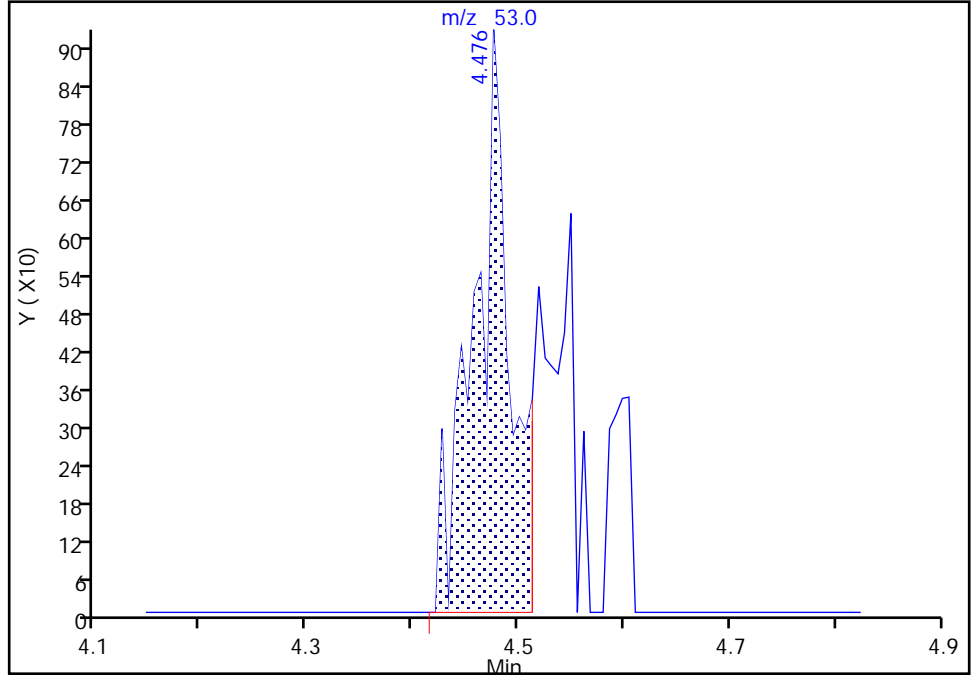
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
Injection Date: 11-Jul-2022 18:52:30 Instrument ID: 19094  
Lims ID: IC std1 0.2  
Client ID:  
Operator ID: kas02648 ALS Bottle#: 18 Worklist Smp#: 18  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

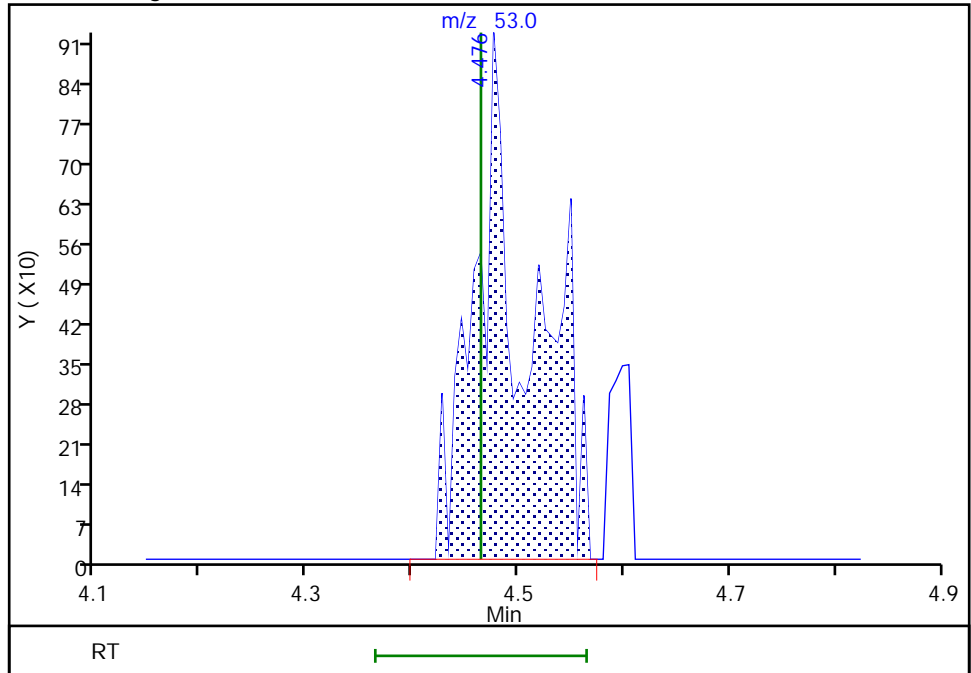
RT: 4.48  
Area: 2201  
Amount: 0.454116  
Amount Units: ug/l

Processing Integration Results



RT: 4.48  
Area: 3316  
Amount: 0.300503  
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 10:11:46  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

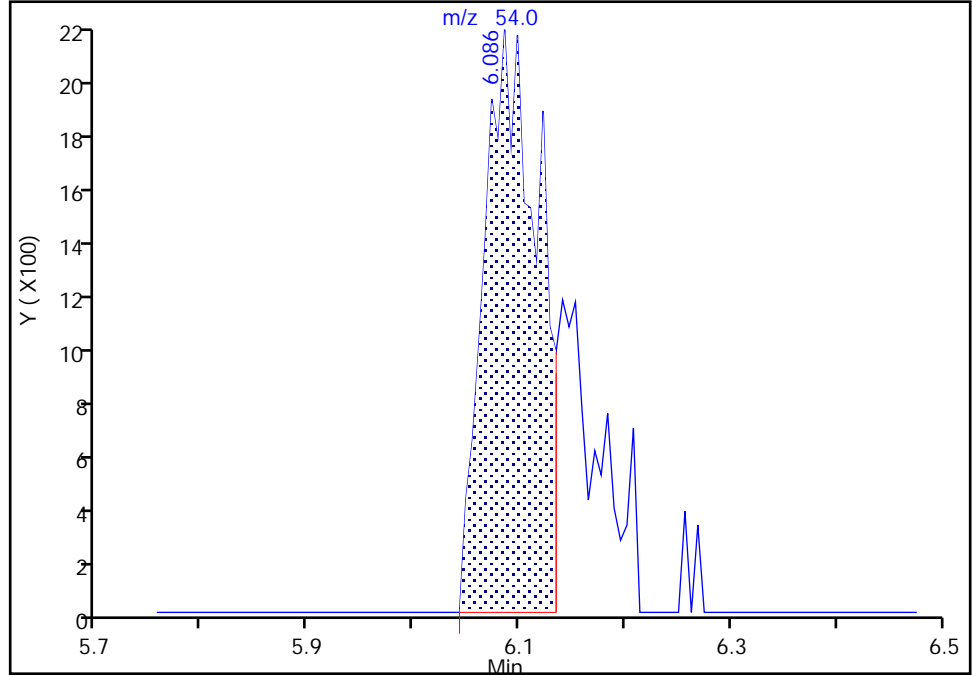
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
Injection Date: 11-Jul-2022 18:52:30 Instrument ID: 19094  
Lims ID: IC std1 0.2  
Client ID:  
Operator ID: kas02648 ALS Bottle#: 18 Worklist Smp#: 18  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

45 Propionitrile, CAS: 107-12-0

Signal: 1

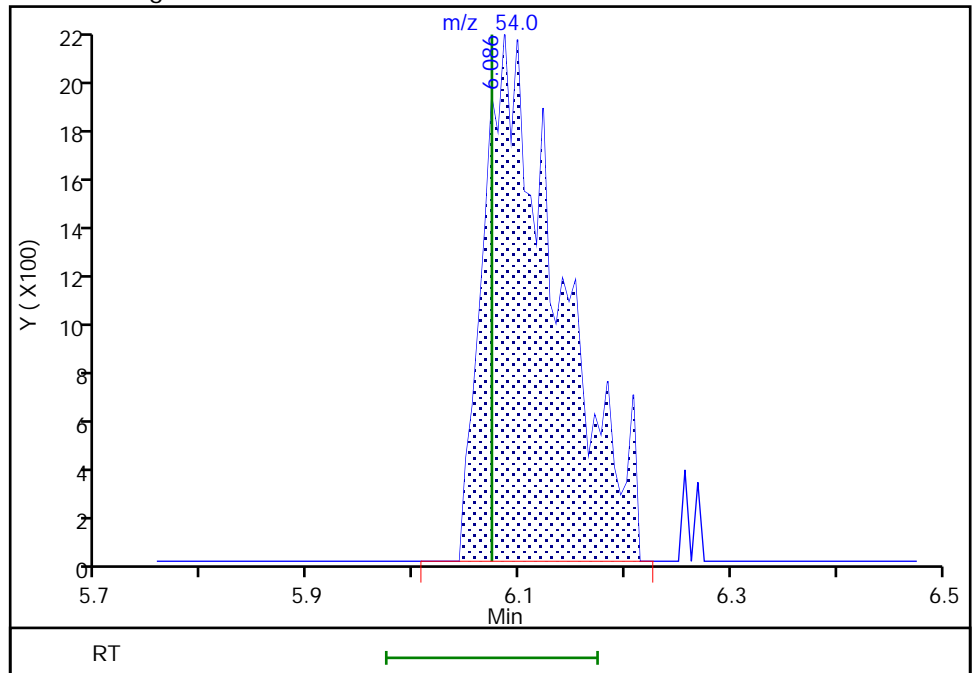
RT: 6.09  
Area: 7805  
Amount: 2.135891  
Amount Units: ug/l

Processing Integration Results



RT: 6.09  
Area: 10758  
Amount: 2.950262  
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:57:55  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

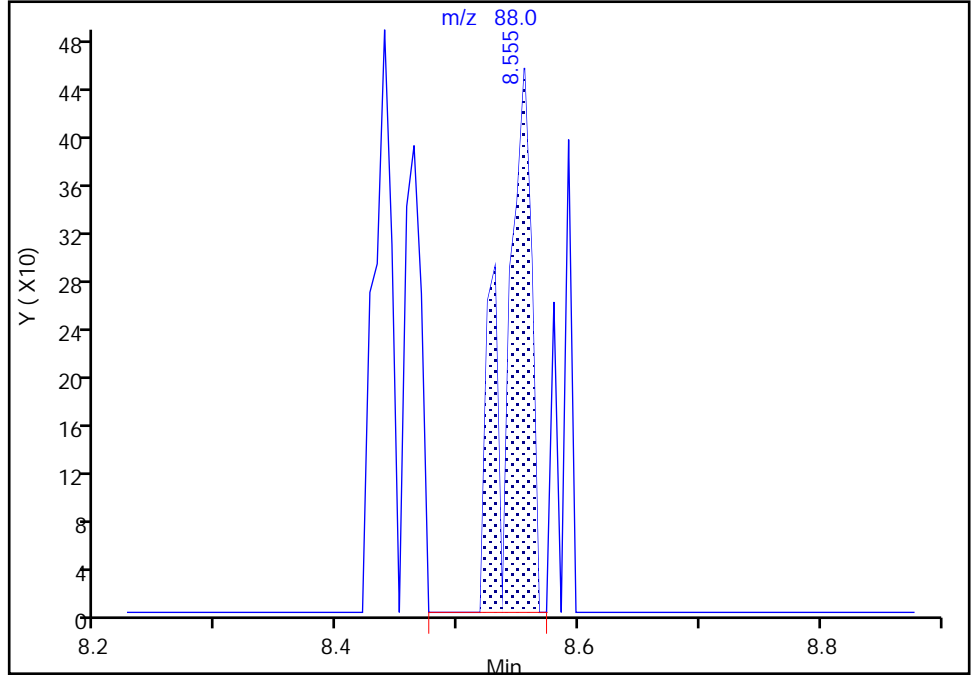
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
Injection Date: 11-Jul-2022 18:52:30 Instrument ID: 19094  
Lims ID: IC std1 0.2  
Client ID:  
Operator ID: kas02648 ALS Bottle#: 18 Worklist Smp#: 18  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

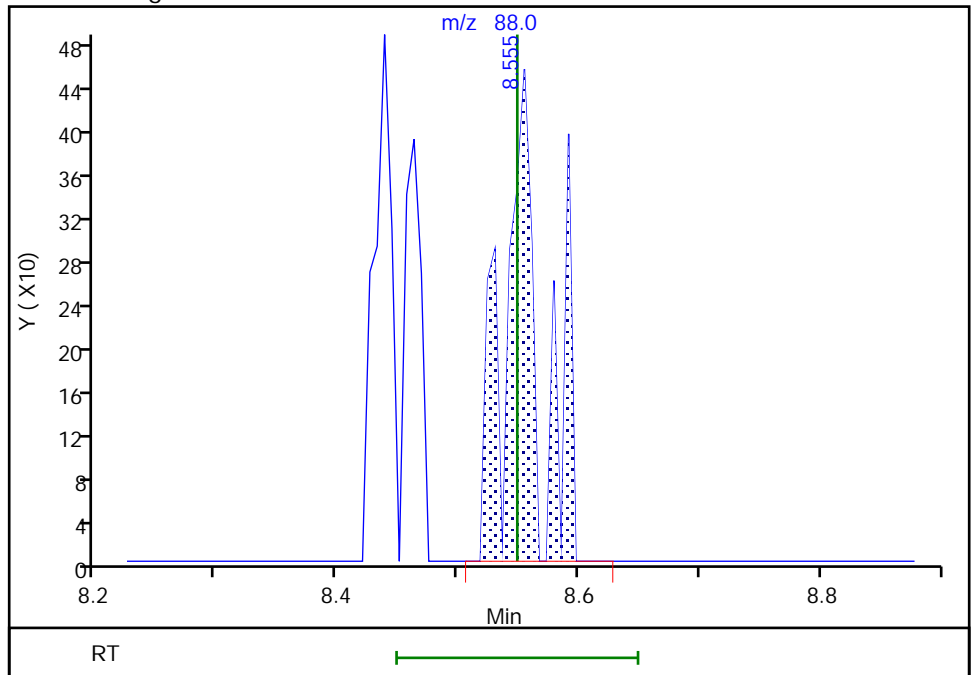
RT: 8.55  
Area: 707  
Amount: 4.408933  
Amount Units: ug/l

Processing Integration Results



RT: 8.55  
Area: 947  
Amount: 4.728459  
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:58:10  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration



Eurofins Lancaster Laboratories Environment Testing, LLC

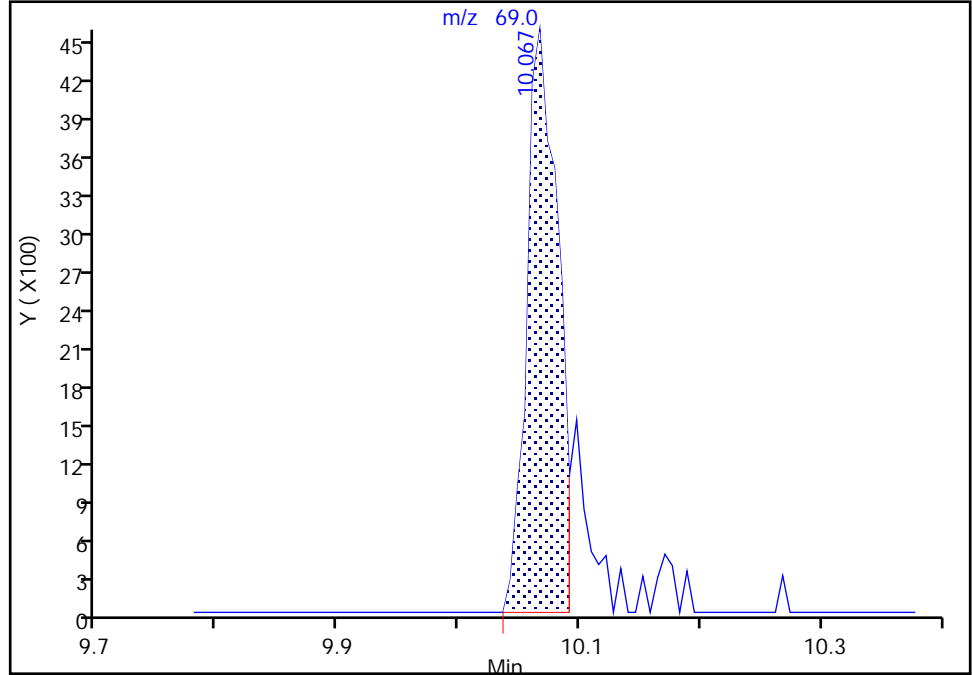
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
Injection Date: 11-Jul-2022 18:52:30 Instrument ID: 19094  
Lims ID: IC std1 0.2  
Client ID:  
Operator ID: kas02648 ALS Bottle#: 18 Worklist Smp#: 18  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

86 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

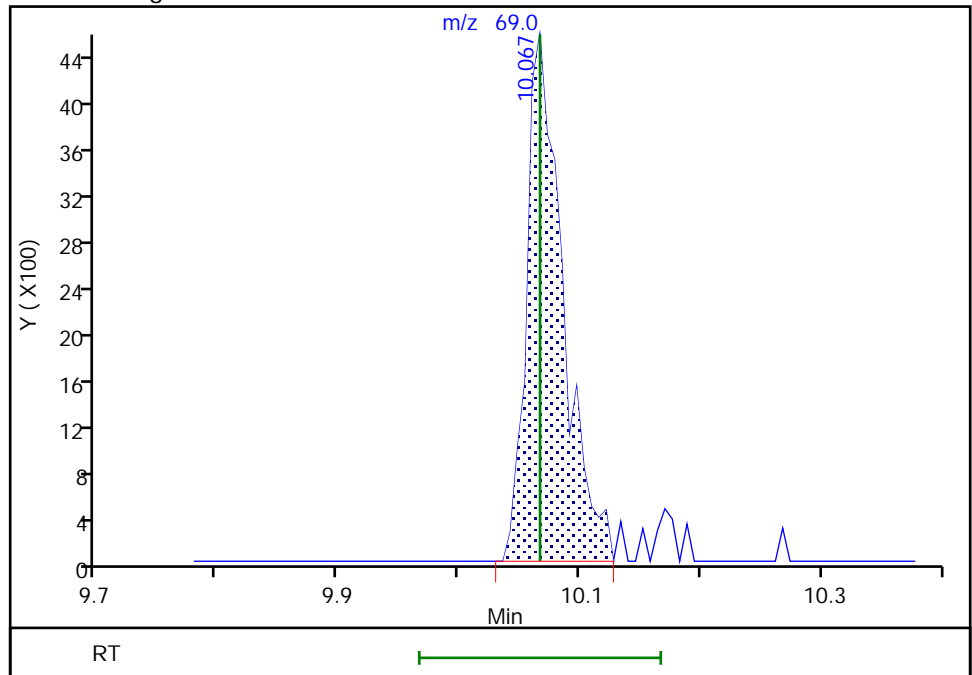
RT: 10.07  
Area: 8246  
Amount: 0.156824  
Amount Units: ug/l

Processing Integration Results



RT: 10.07  
Area: 9577  
Amount: 0.178902  
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:58:23  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

**Calibration**

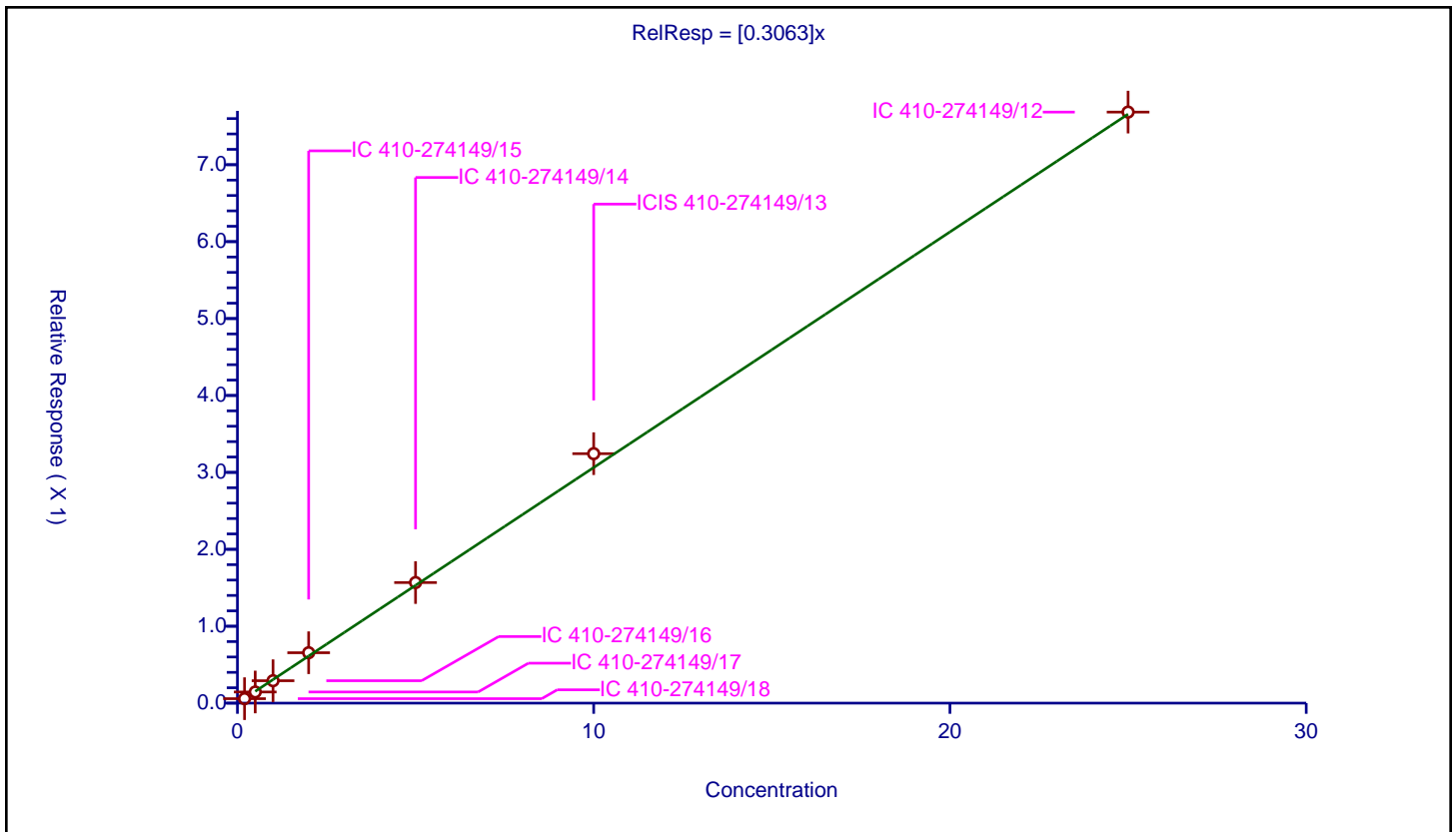
/ Dichlorodifluoromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3063

Error Coefficients	
Standard Error:	739000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.057986	10.0	2085513.0	0.289929	Y
2	IC 410-274149/17	0.5	0.144923	10.0	2031490.0	0.289846	Y
3	IC 410-274149/16	1.0	0.29154	10.0	2037557.0	0.29154	Y
4	IC 410-274149/15	2.0	0.655174	10.0	2031307.0	0.327587	Y
5	IC 410-274149/14	5.0	1.567894	10.0	2106074.0	0.313579	Y
6	ICIS 410-274149/13	10.0	3.243246	10.0	2081655.0	0.324325	Y
7	IC 410-274149/12	25.0	7.68452	10.0	2132698.0	0.307381	Y



**Calibration**

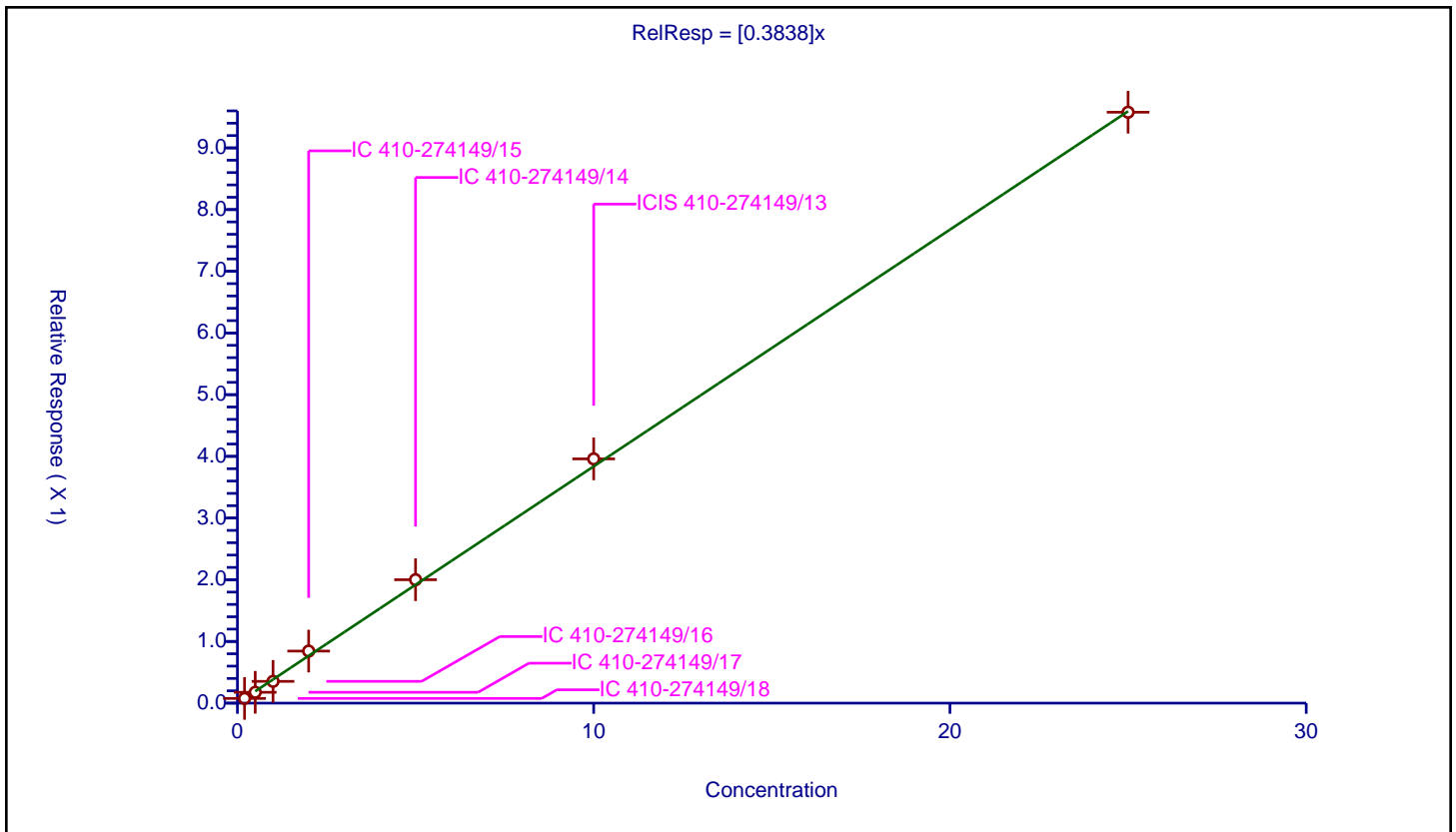
**/ Chloromethane**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3838

Error Coefficients	
Standard Error:	919000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.076053	10.0	2085513.0	0.380266	Y
2	IC 410-274149/17	0.5	0.176048	10.0	2031490.0	0.352096	Y
3	IC 410-274149/16	1.0	0.352982	10.0	2037557.0	0.352982	Y
4	IC 410-274149/15	2.0	0.843619	10.0	2031307.0	0.42181	Y
5	IC 410-274149/14	5.0	2.000409	10.0	2106074.0	0.400082	Y
6	ICIS 410-274149/13	10.0	3.959162	10.0	2081655.0	0.395916	Y
7	IC 410-274149/12	25.0	9.578281	10.0	2132698.0	0.383131	Y



Calibration

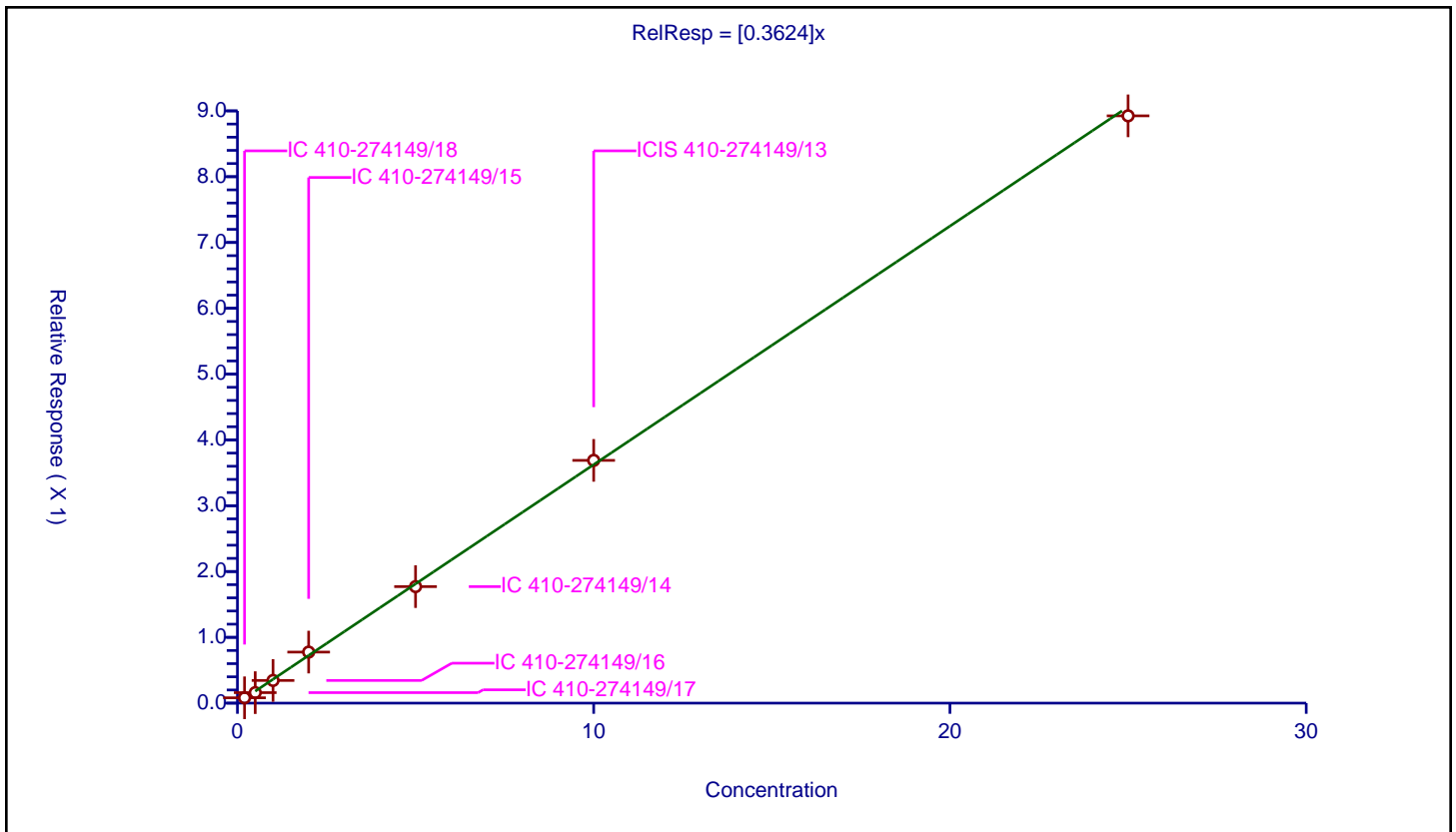
/ Butadiene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3624

Error Coefficients	
Standard Error:	855000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.081093	10.0	2085513.0	0.405464	Y
2	IC 410-274149/17	0.5	0.159656	10.0	2031490.0	0.319312	Y
3	IC 410-274149/16	1.0	0.34452	10.0	2037557.0	0.34452	Y
4	IC 410-274149/15	2.0	0.775781	10.0	2031307.0	0.387891	Y
5	IC 410-274149/14	5.0	1.770337	10.0	2106074.0	0.354067	Y
6	ICIS 410-274149/13	10.0	3.689089	10.0	2081655.0	0.368909	Y
7	IC 410-274149/12	25.0	8.924663	10.0	2132698.0	0.356987	Y



**Calibration**

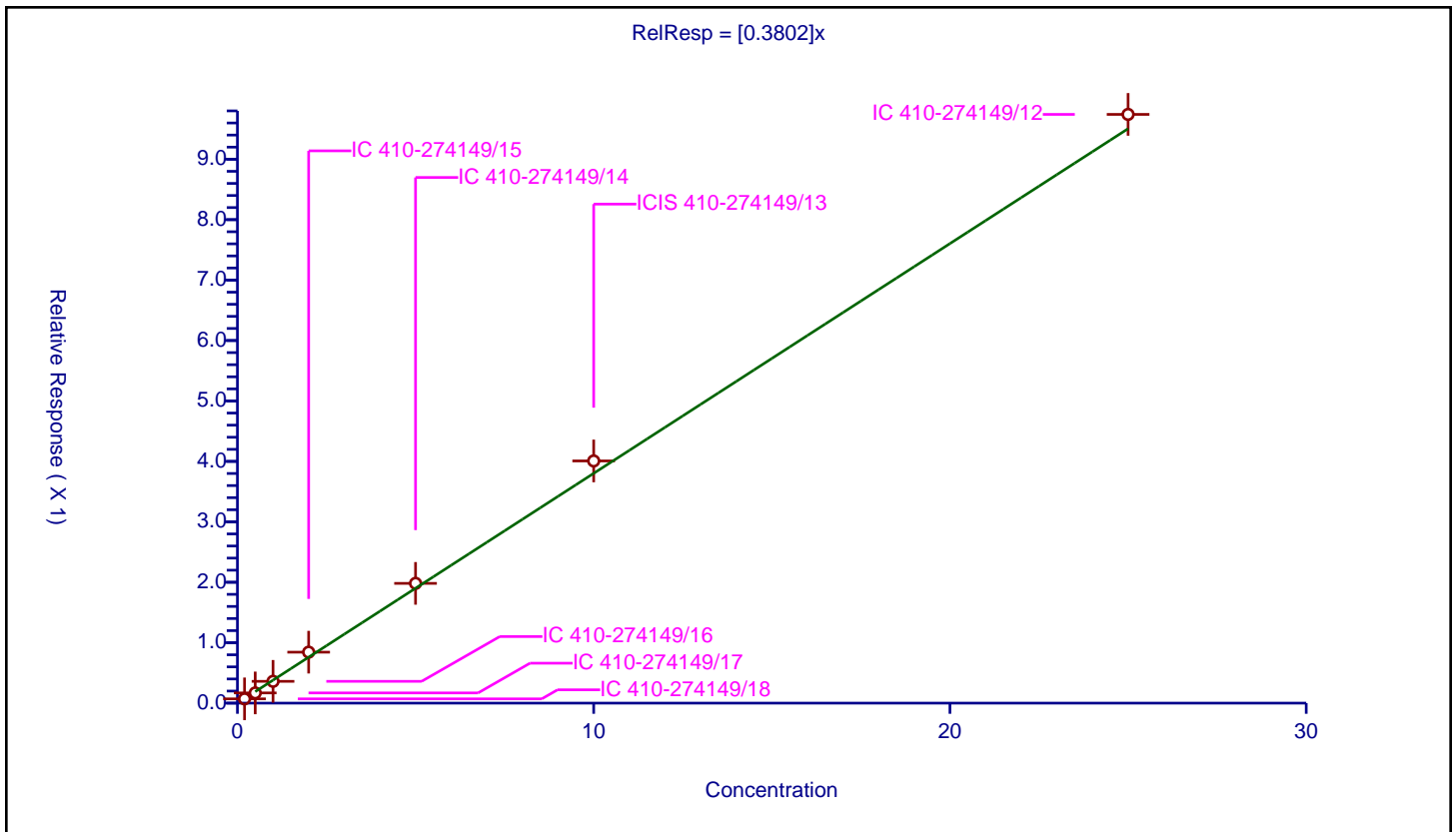
/ Vinyl chloride

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3802

Error Coefficients	
Standard Error:	933000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.070884	10.0	2085513.0	0.354421	Y
2	IC 410-274149/17	0.5	0.168984	10.0	2031490.0	0.337969	Y
3	IC 410-274149/16	1.0	0.360559	10.0	2037557.0	0.360559	Y
4	IC 410-274149/15	2.0	0.843368	10.0	2031307.0	0.421684	Y
5	IC 410-274149/14	5.0	1.98182	10.0	2106074.0	0.396364	Y
6	ICIS 410-274149/13	10.0	4.007864	10.0	2081655.0	0.400786	Y
7	IC 410-274149/12	25.0	9.741675	10.0	2132698.0	0.389667	Y



**Calibration**

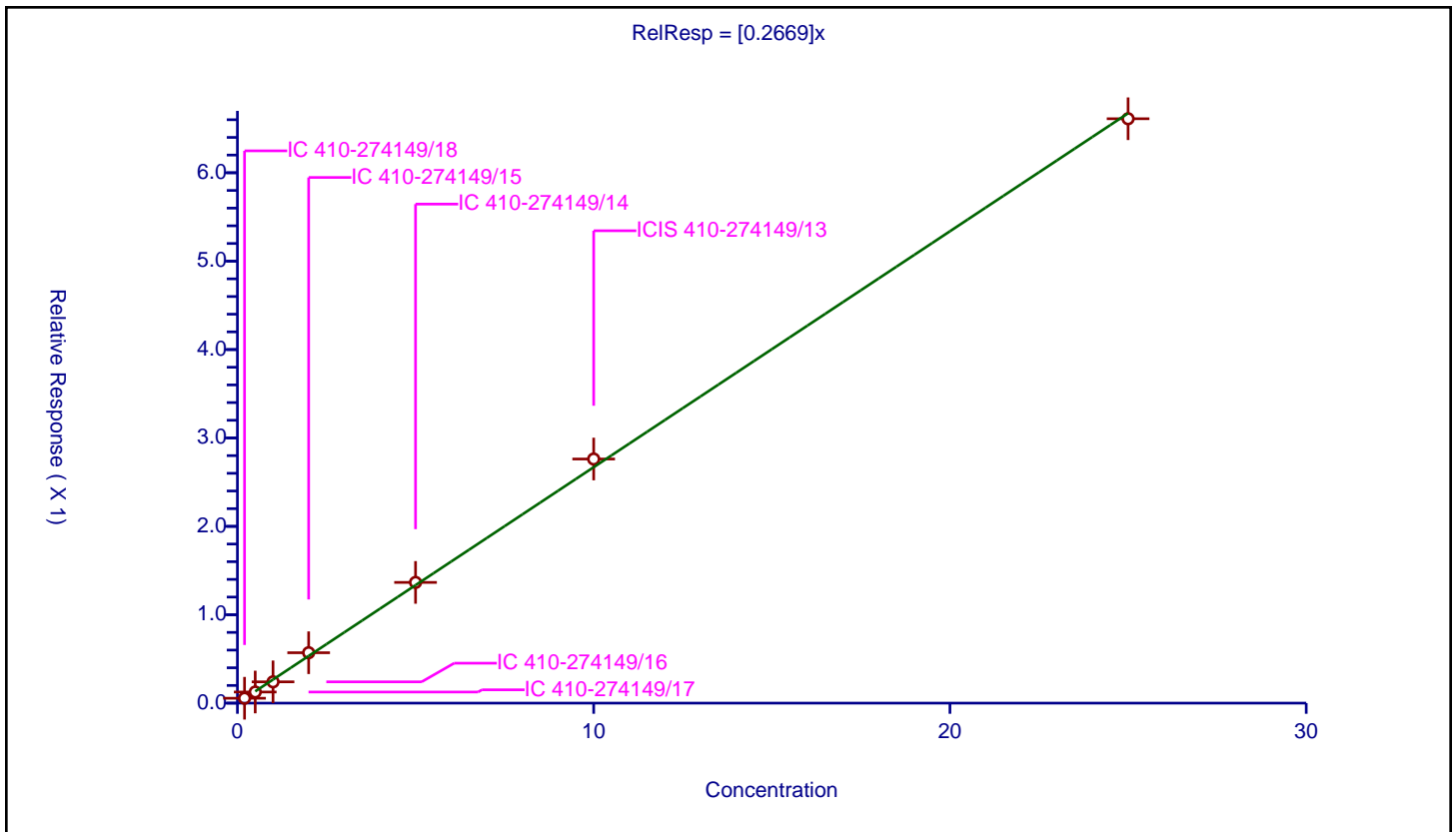
**/ Bromomethane**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2669

Error Coefficients	
Standard Error:	635000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.055358	10.0	2085513.0	0.27679	Y
2	IC 410-274149/17	0.5	0.125927	10.0	2031490.0	0.251855	Y
3	IC 410-274149/16	1.0	0.240867	10.0	2037557.0	0.240867	Y
4	IC 410-274149/15	2.0	0.570283	10.0	2031307.0	0.285142	Y
5	IC 410-274149/14	5.0	1.365579	10.0	2106074.0	0.273116	Y
6	ICIS 410-274149/13	10.0	2.761596	10.0	2081655.0	0.27616	Y
7	IC 410-274149/12	25.0	6.610969	10.0	2132698.0	0.264439	Y



Calibration

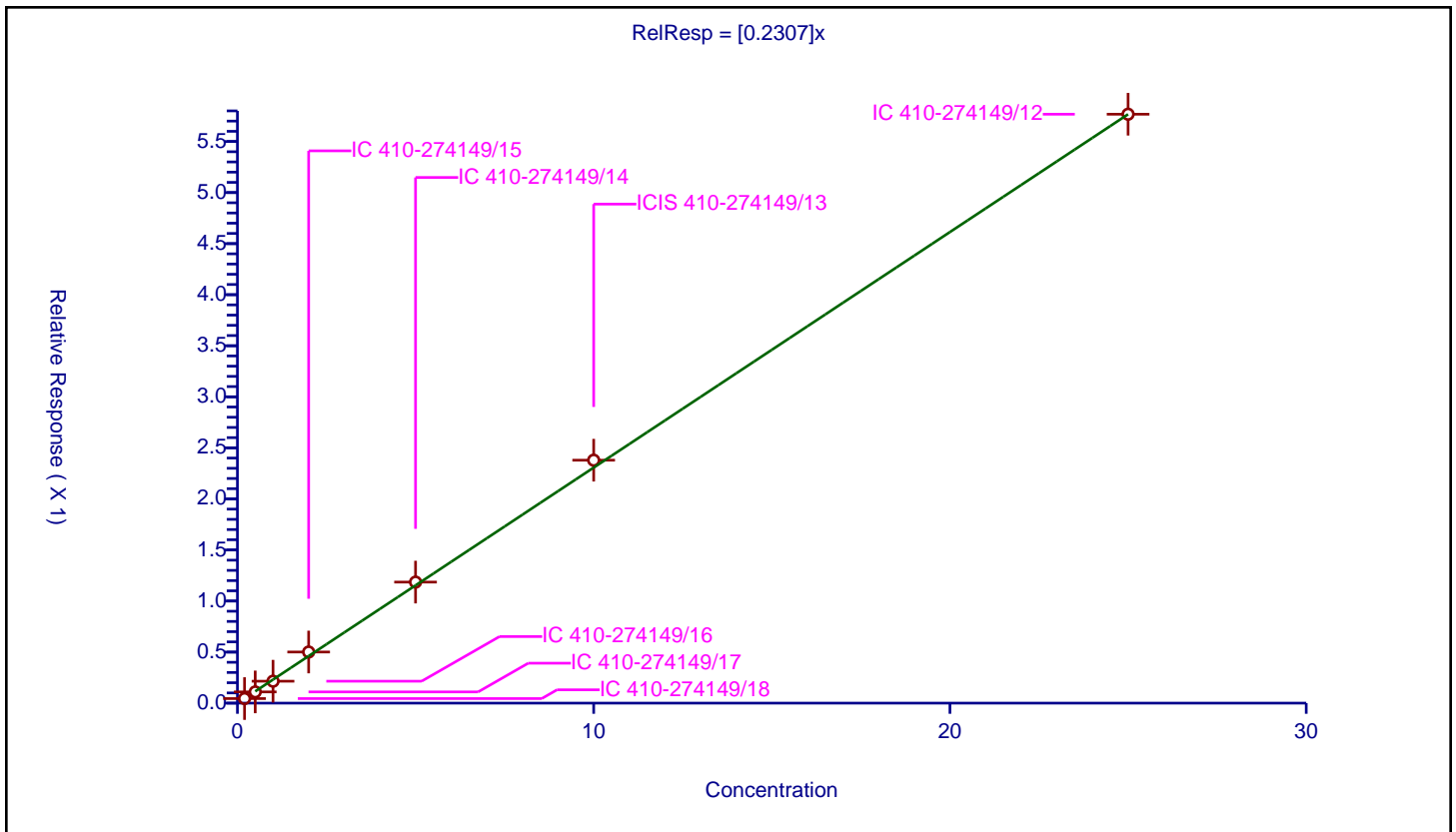
/ Chloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2307

Error Coefficients	
Standard Error:	553000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.044819	10.0	2085513.0	0.224094	Y
2	IC 410-274149/17	0.5	0.10988	10.0	2031490.0	0.21976	Y
3	IC 410-274149/16	1.0	0.214806	10.0	2037557.0	0.214806	Y
4	IC 410-274149/15	2.0	0.500697	10.0	2031307.0	0.250349	Y
5	IC 410-274149/14	5.0	1.18531	10.0	2106074.0	0.237062	Y
6	ICIS 410-274149/13	10.0	2.379285	10.0	2081655.0	0.237928	Y
7	IC 410-274149/12	25.0	5.767366	10.0	2132698.0	0.230695	Y



**Calibration**

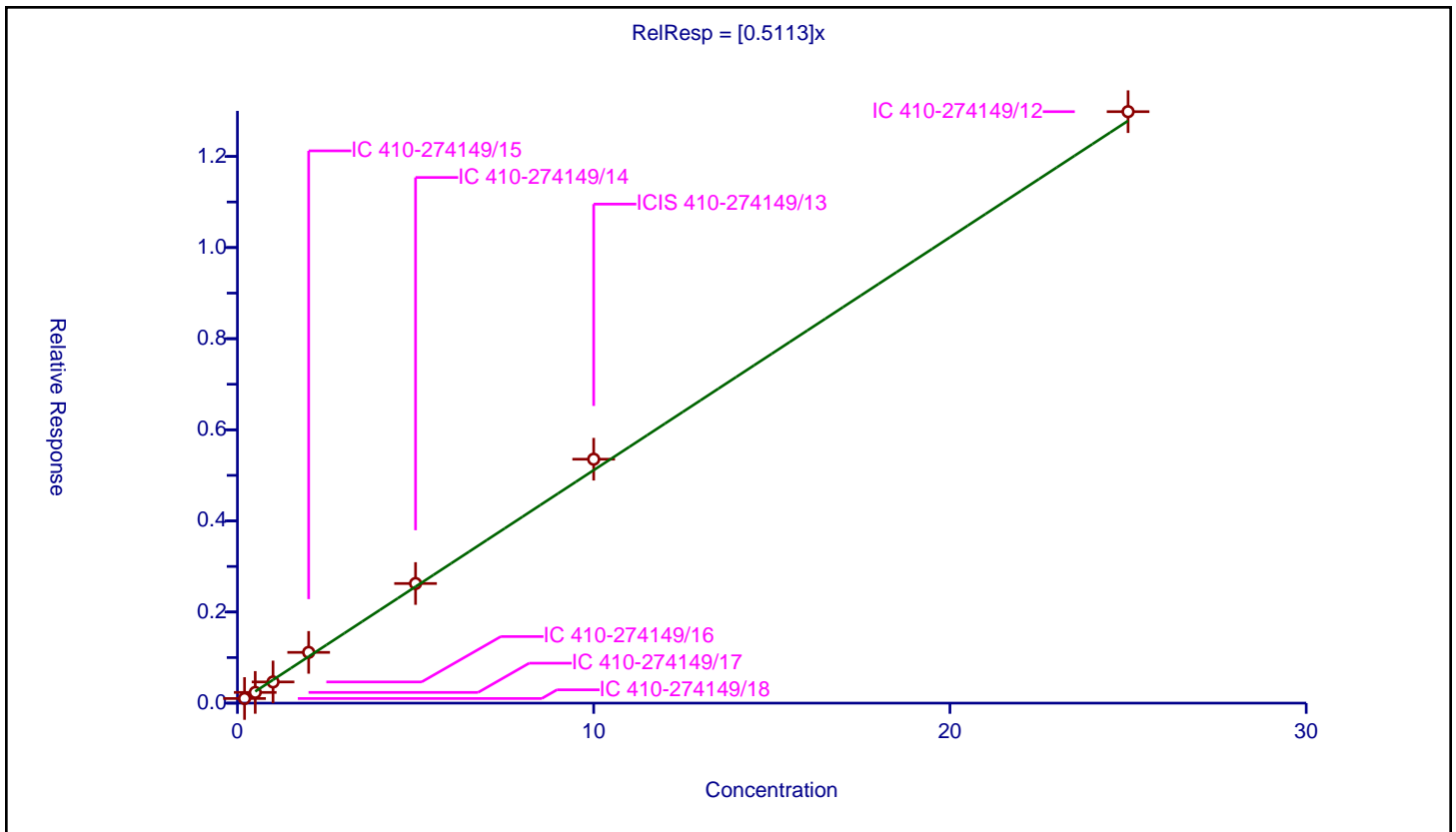
/ Dichlorofluoromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5113

Error Coefficients	
Standard Error:	1240000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.101404	10.0	2085513.0	0.507022	Y
2	IC 410-274149/17	0.5	0.235212	10.0	2031490.0	0.470423	Y
3	IC 410-274149/16	1.0	0.464851	10.0	2037557.0	0.464851	Y
4	IC 410-274149/15	2.0	1.114032	10.0	2031307.0	0.557016	Y
5	IC 410-274149/14	5.0	2.625639	10.0	2106074.0	0.525128	Y
6	ICIS 410-274149/13	10.0	5.354173	10.0	2081655.0	0.535417	Y
7	IC 410-274149/12	25.0	12.983221	10.0	2132698.0	0.519329	Y





Calibration

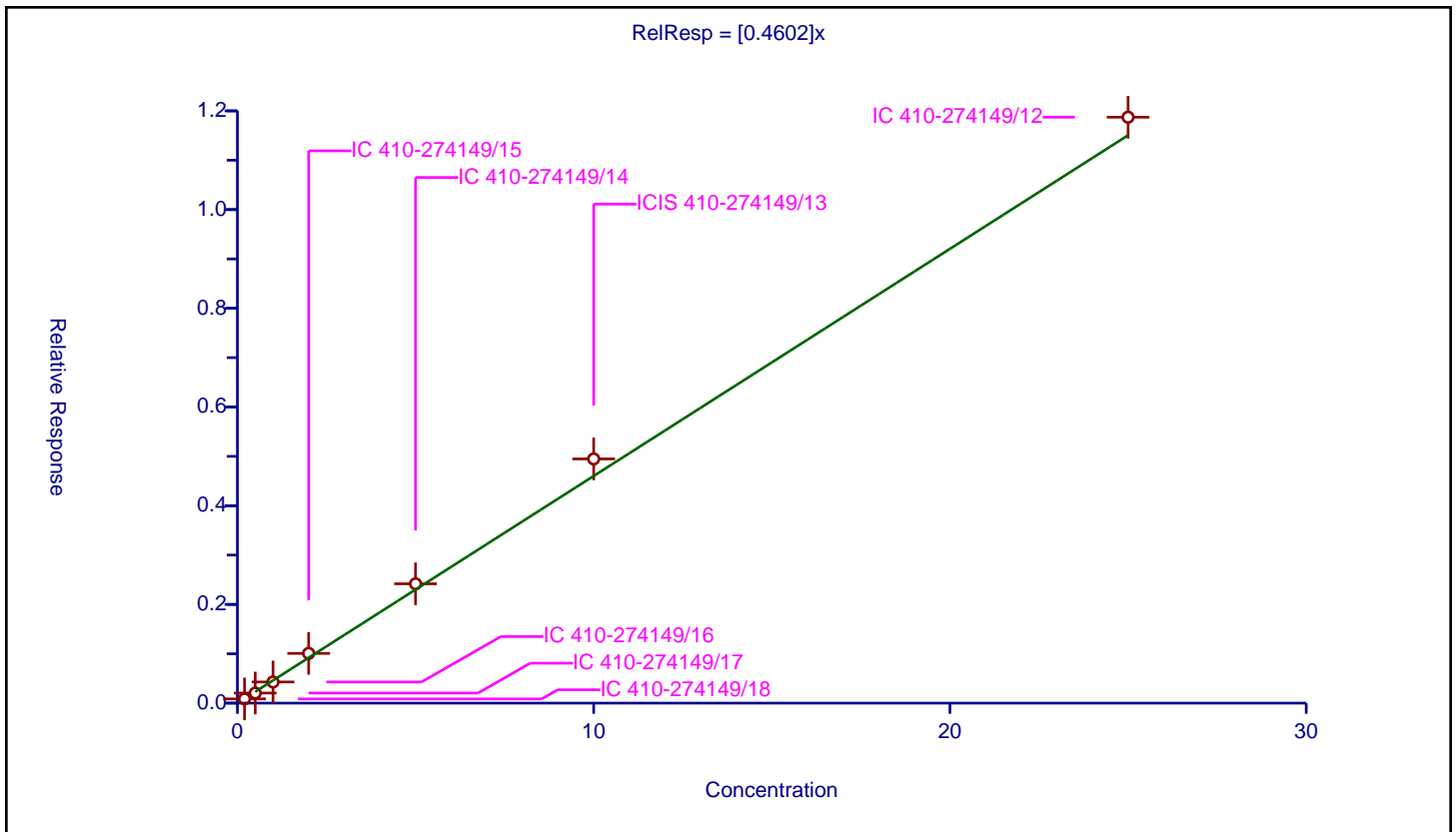
/ Trichlorofluoromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4602

Error Coefficients	
Standard Error:	1140000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.085332	10.0	2085513.0	0.426658	Y
2	IC 410-274149/17	0.5	0.204338	10.0	2031490.0	0.408675	Y
3	IC 410-274149/16	1.0	0.428999	10.0	2037557.0	0.428999	Y
4	IC 410-274149/15	2.0	1.007947	10.0	2031307.0	0.503974	Y
5	IC 410-274149/14	5.0	2.417921	10.0	2106074.0	0.483584	Y
6	ICIS 410-274149/13	10.0	4.948077	10.0	2081655.0	0.494808	Y
7	IC 410-274149/12	25.0	11.872004	10.0	2132698.0	0.47488	Y



Calibration

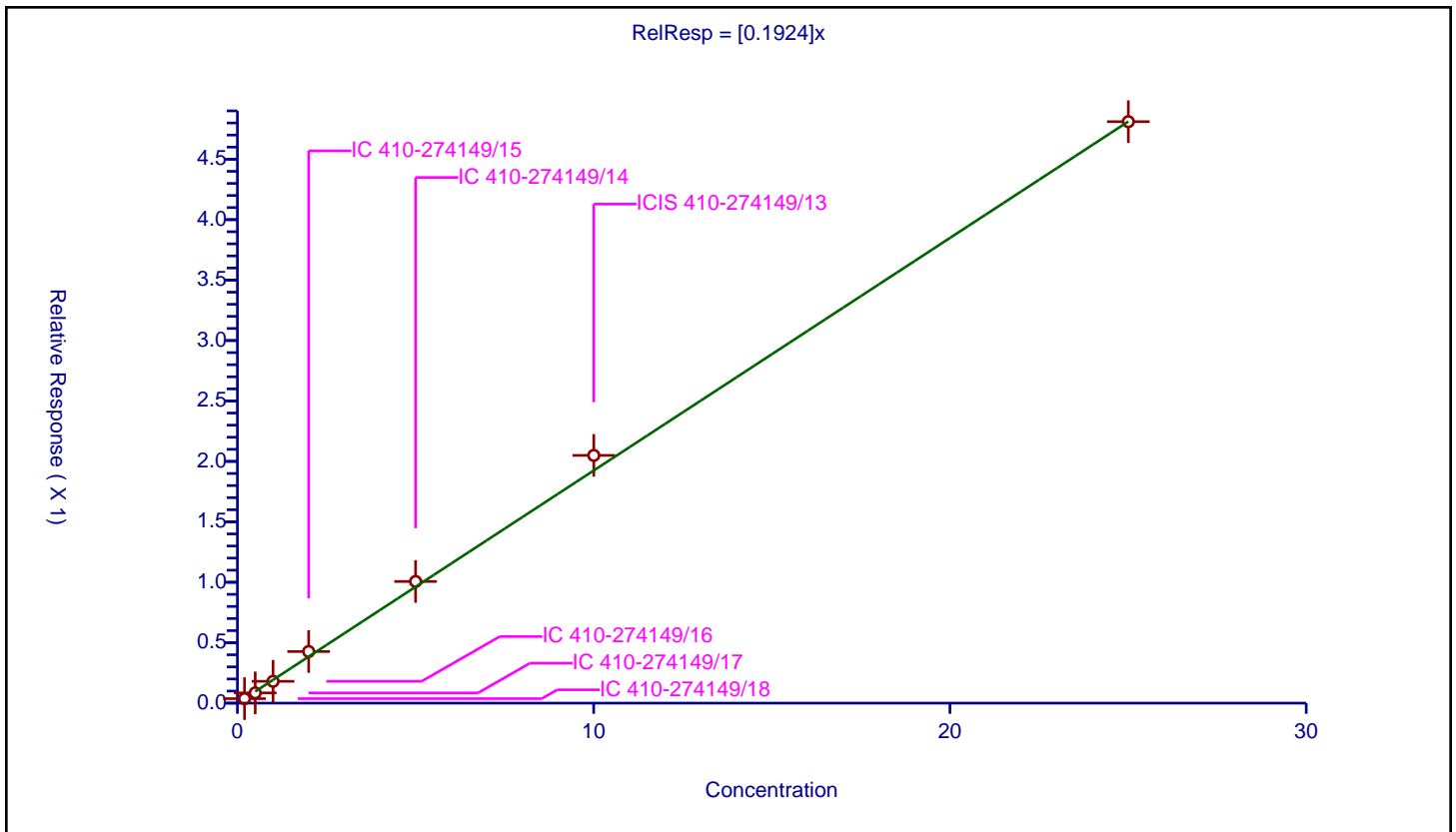
/ Ethyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1924

Error Coefficients	
Standard Error:	463000
Relative Standard Error:	7.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.200057	0.037027	10.0	2085513.0	0.185081	Y
2	IC 410-274149/17	0.500143	0.08482	10.0	2031490.0	0.169591	Y
3	IC 410-274149/16	1.000286	0.18051	10.0	2037557.0	0.180459	Y
4	IC 410-274149/15	2.000572	0.426873	10.0	2031307.0	0.213375	Y
5	IC 410-274149/14	5.00143	1.006536	10.0	2106074.0	0.20125	Y
6	ICIS 410-274149/13	10.00286	2.049581	10.0	2081655.0	0.204899	Y
7	IC 410-274149/12	25.00715	4.81069	10.0	2132698.0	0.192373	Y



Calibration

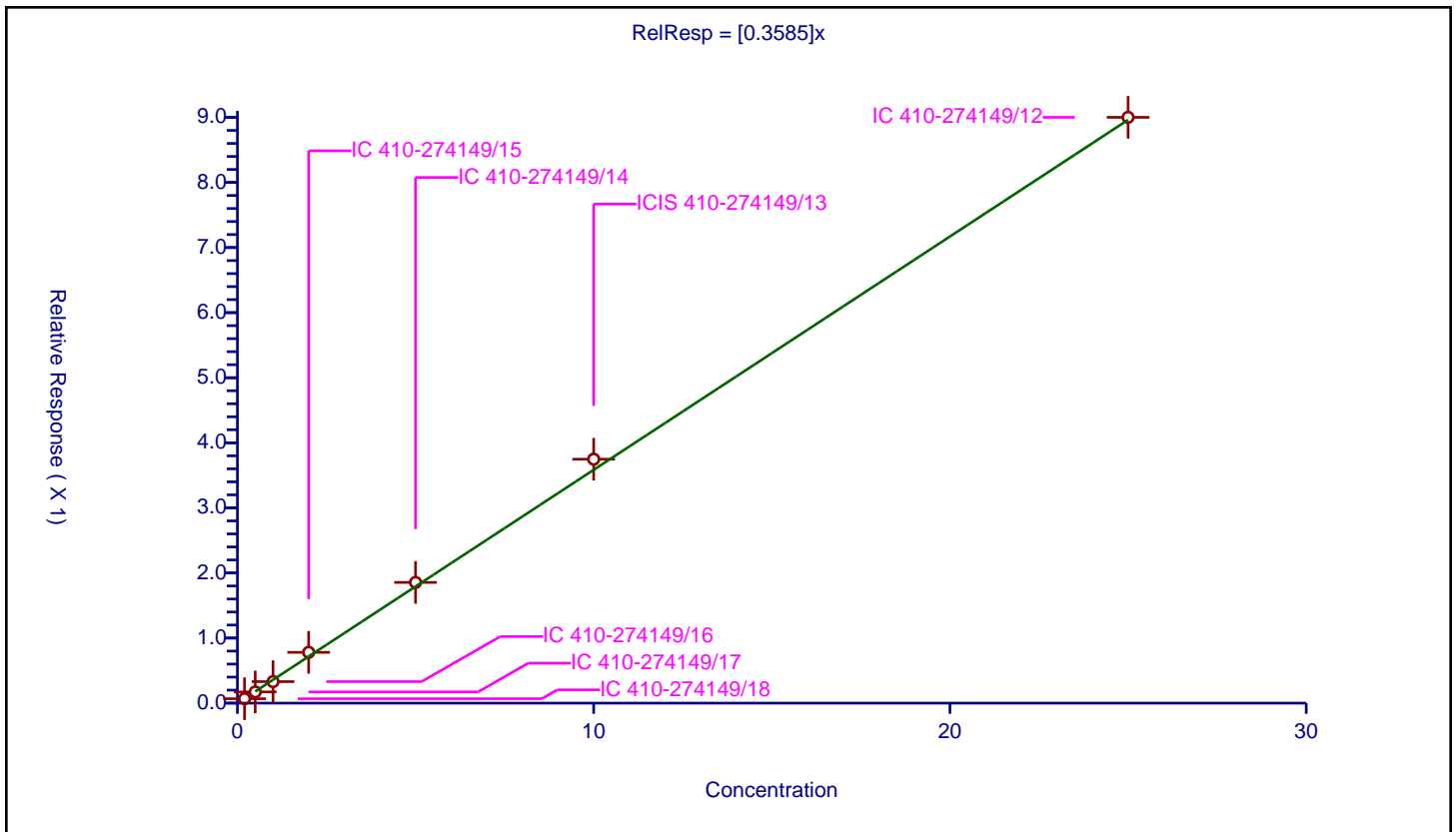
/ 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3585

Error Coefficients	
Standard Error:	864000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.067705	10.0	2085513.0	0.338526	Y
2	IC 410-274149/17	0.5	0.172169	10.0	2031490.0	0.344338	Y
3	IC 410-274149/16	1.0	0.330484	10.0	2037557.0	0.330484	Y
4	IC 410-274149/15	2.0	0.780497	10.0	2031307.0	0.390249	Y
5	IC 410-274149/14	5.0	1.854968	10.0	2106074.0	0.370994	Y
6	ICIS 410-274149/13	10.0	3.748075	10.0	2081655.0	0.374808	Y
7	IC 410-274149/12	25.0	9.00096	10.0	2132698.0	0.360038	Y



Calibration

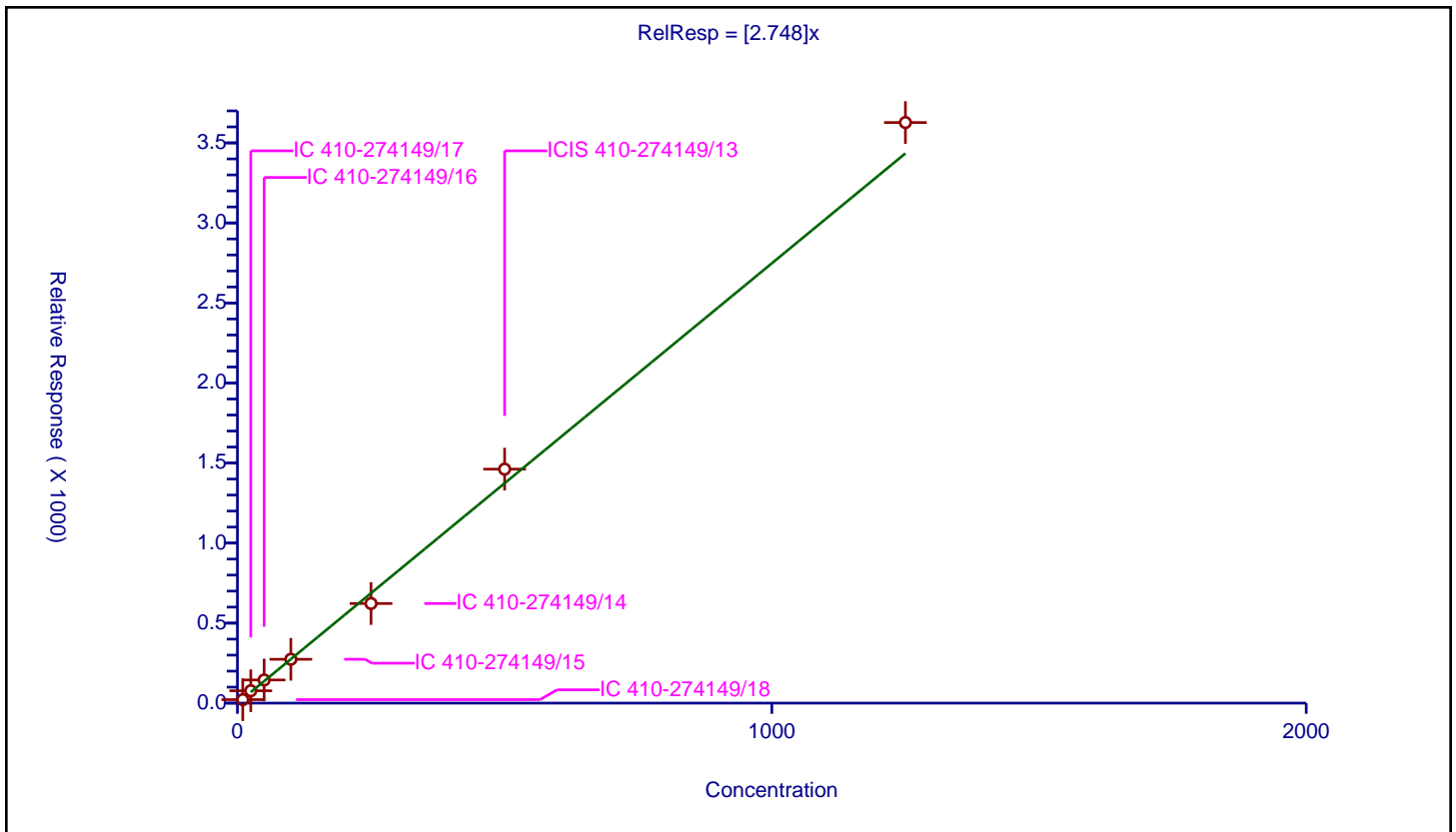
/ Acrolein

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.748

Error Coefficients	
Standard Error:	3180000
Relative Standard Error:	11.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	10.000019	21.9246	50.0	127772.0	2.192456	Y
2	IC 410-274149/17	25.000046	77.33097	50.0	81790.0	3.093233	Y
3	IC 410-274149/16	50.000093	144.617876	50.0	87066.0	2.892352	Y
4	IC 410-274149/15	100.000185	274.027753	50.0	107663.0	2.740272	Y
5	IC 410-274149/14	250.000463	622.425708	50.0	120975.0	2.489698	Y
6	ICIS 410-274149/13	500.000926	1461.841768	50.0	101370.0	2.923678	Y
7	IC 410-274149/12	1250.002314	3627.277049	50.0	96770.0	2.901816	Y



Calibration

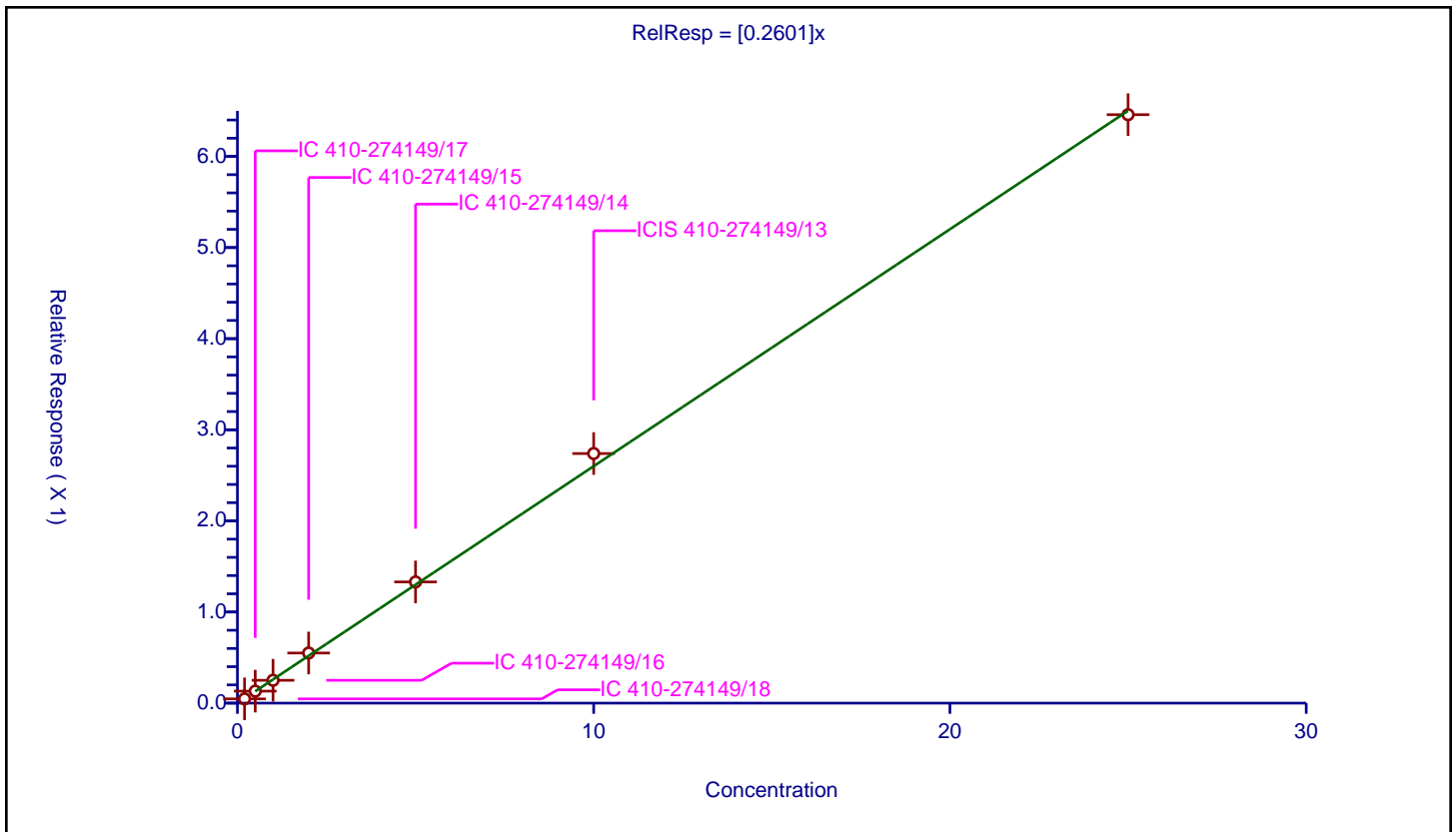
/ 1,1-Dichloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2601

Error Coefficients	
Standard Error:	621000
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.046578	10.0	2085513.0	0.232892	Y
2	IC 410-274149/17	0.5	0.131815	10.0	2031490.0	0.263629	Y
3	IC 410-274149/16	1.0	0.25053	10.0	2037557.0	0.25053	Y
4	IC 410-274149/15	2.0	0.549971	10.0	2031307.0	0.274986	Y
5	IC 410-274149/14	5.0	1.330167	10.0	2106074.0	0.266033	Y
6	ICIS 410-274149/13	10.0	2.739513	10.0	2081655.0	0.273951	Y
7	IC 410-274149/12	25.0	6.458617	10.0	2132698.0	0.258345	Y



Calibration

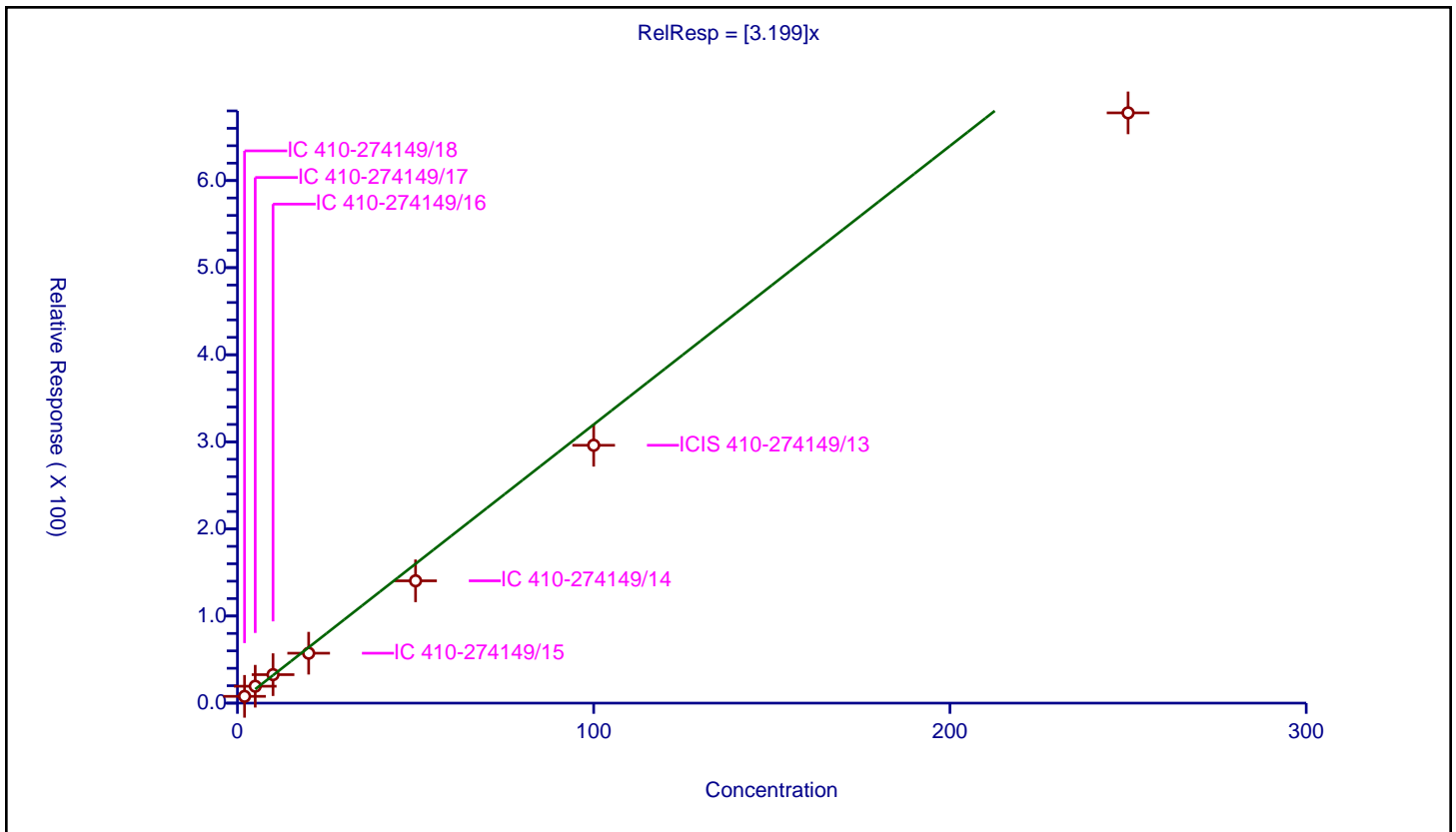
/ Acetone

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.199

Error Coefficients	
Standard Error:	607000
Relative Standard Error:	15.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.960

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	2.0	7.784178	50.0	127772.0	3.892089	Y
2	IC 410-274149/17	5.0	19.409463	50.0	81790.0	3.881893	Y
3	IC 410-274149/16	10.0	32.72058	50.0	87066.0	3.272058	Y
4	IC 410-274149/15	20.0	57.308918	50.0	107663.0	2.865446	Y
5	IC 410-274149/14	50.0	140.437694	50.0	120975.0	2.808754	Y
6	ICIS 410-274149/13	100.0	296.051593	50.0	101370.0	2.960516	Y
7	IC 410-274149/12	250.0	677.725018	50.0	96770.0	2.7109	Y



**Calibration**

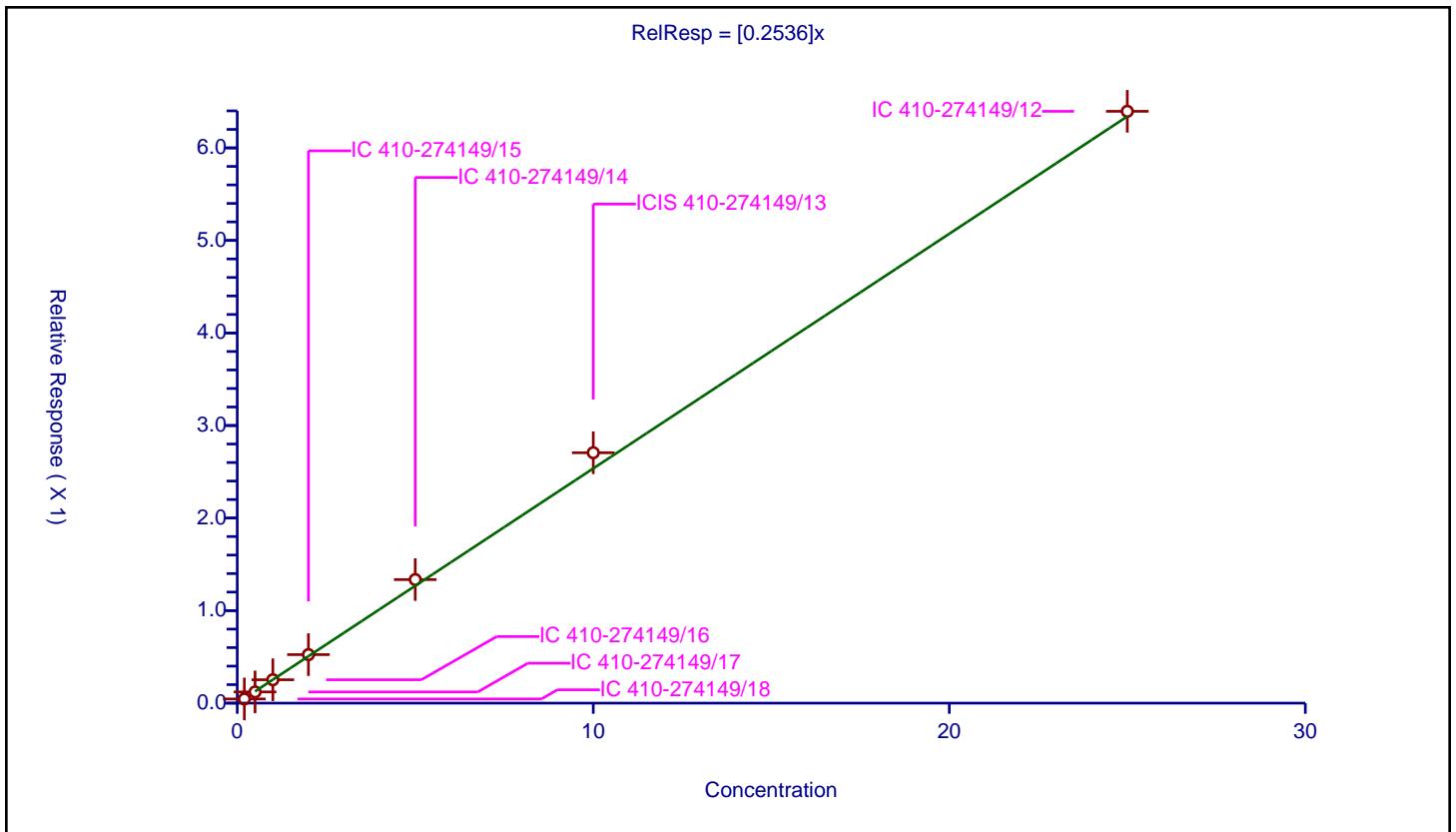
/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2536

Error Coefficients	
Standard Error:	615000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.045001	10.0	2085513.0	0.225005	Y
2	IC 410-274149/17	0.5	0.121098	10.0	2031490.0	0.242197	Y
3	IC 410-274149/16	1.0	0.252503	10.0	2037557.0	0.252503	Y
4	IC 410-274149/15	2.0	0.524239	10.0	2031307.0	0.262119	Y
5	IC 410-274149/14	5.0	1.33502	10.0	2106074.0	0.267004	Y
6	ICIS 410-274149/13	10.0	2.705953	10.0	2081655.0	0.270595	Y
7	IC 410-274149/12	25.0	6.395345	10.0	2132698.0	0.255814	Y



**Calibration**

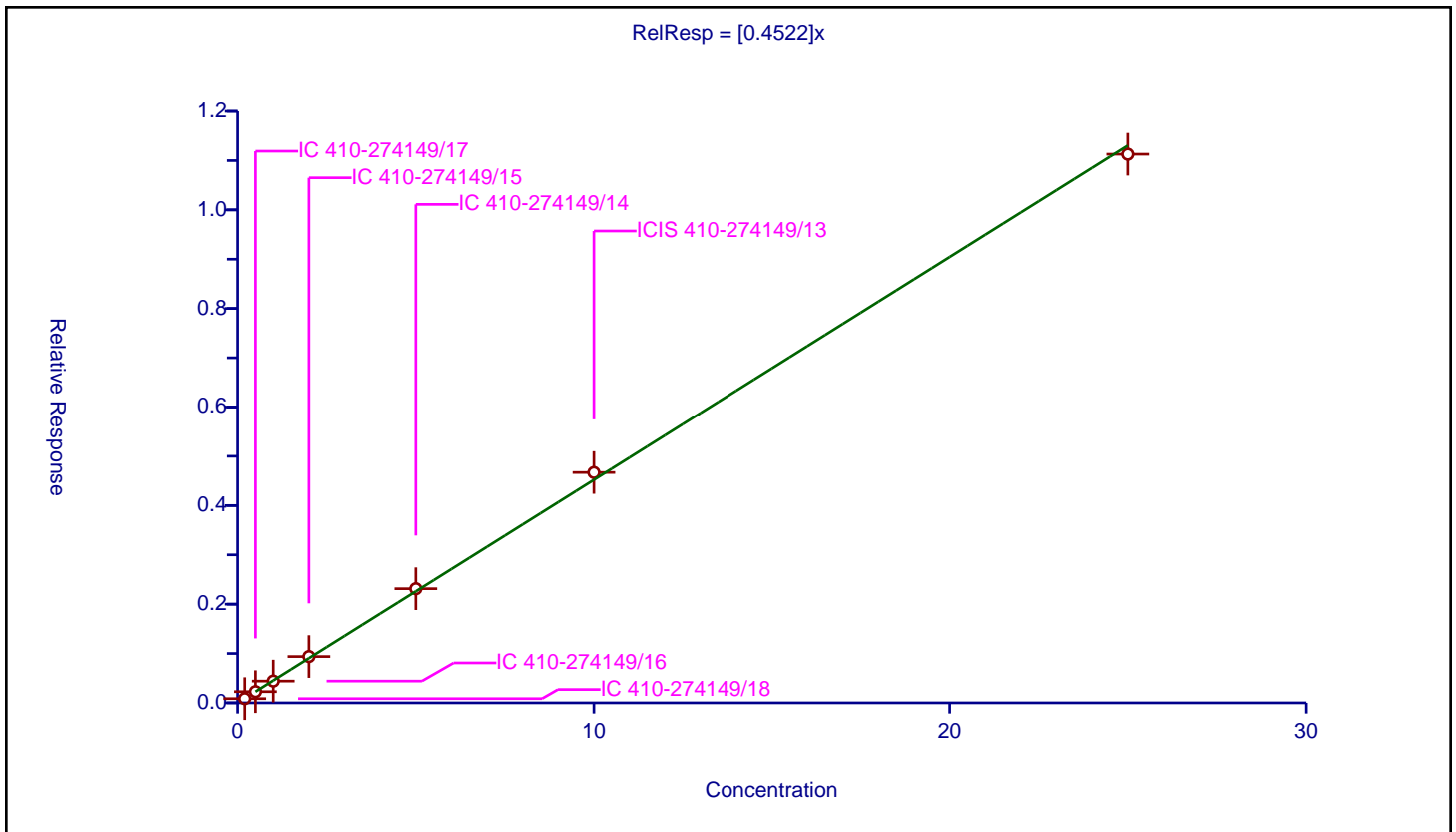
/ Iodomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4522

Error Coefficients	
Standard Error:	1070000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.085264	10.0	2085513.0	0.426322	Y
2	IC 410-274149/17	0.5	0.226873	10.0	2031490.0	0.453746	Y
3	IC 410-274149/16	1.0	0.441382	10.0	2037557.0	0.441382	Y
4	IC 410-274149/15	2.0	0.938263	10.0	2031307.0	0.469131	Y
5	IC 410-274149/14	5.0	2.313774	10.0	2106074.0	0.462755	Y
6	ICIS 410-274149/13	10.0	4.670822	10.0	2081655.0	0.467082	Y
7	IC 410-274149/12	25.0	11.129565	10.0	2132698.0	0.445183	Y





**Calibration**

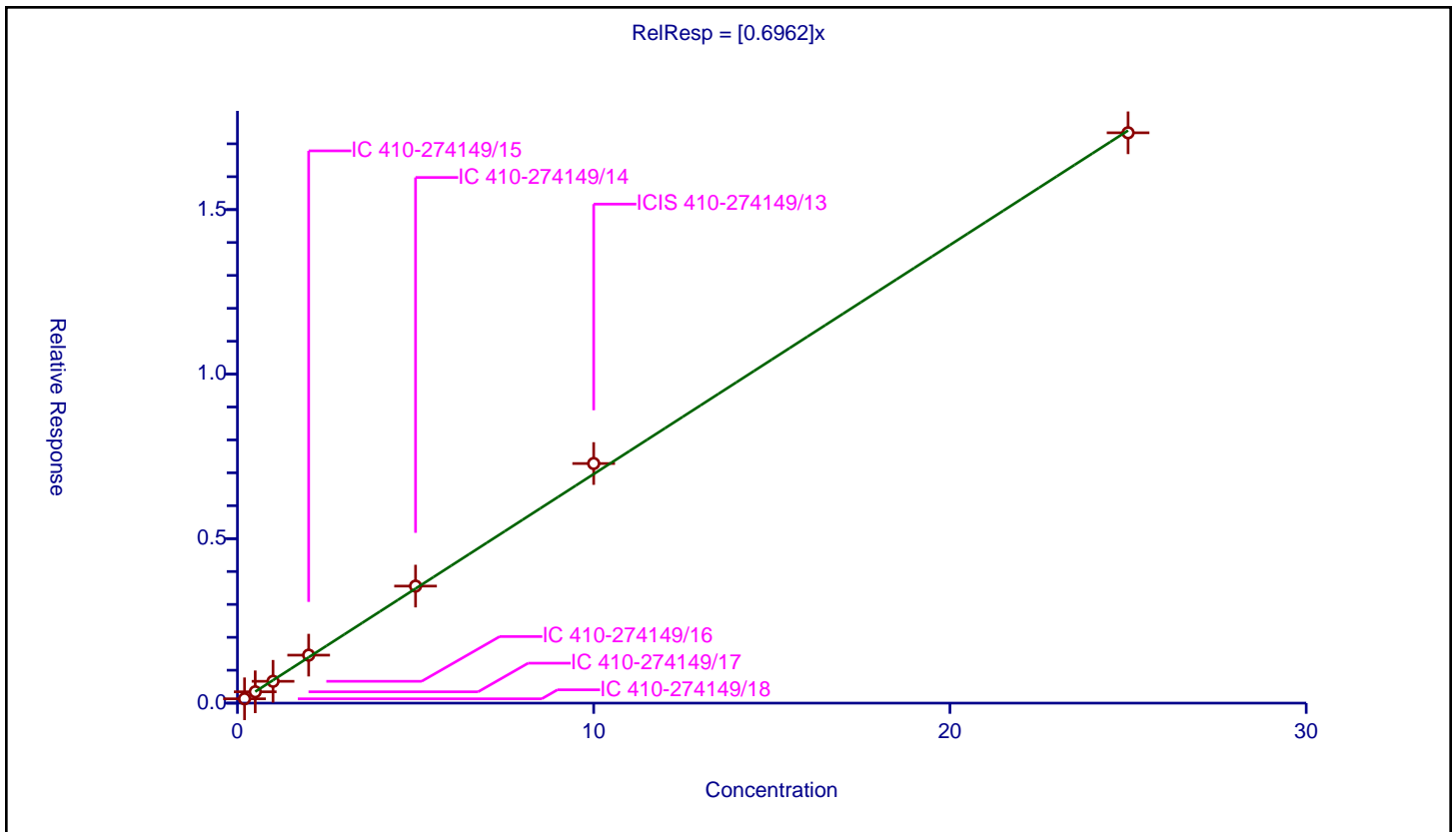
/ Carbon disulfide

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6962

Error Coefficients	
Standard Error:	1670000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.131833	10.0	2085513.0	0.659166	Y
2	IC 410-274149/17	0.5	0.344058	10.0	2031490.0	0.688116	Y
3	IC 410-274149/16	1.0	0.663633	10.0	2037557.0	0.663633	Y
4	IC 410-274149/15	2.0	1.458445	10.0	2031307.0	0.729223	Y
5	IC 410-274149/14	5.0	3.557373	10.0	2106074.0	0.711475	Y
6	ICIS 410-274149/13	10.0	7.282432	10.0	2081655.0	0.728243	Y
7	IC 410-274149/12	25.0	17.334447	10.0	2132698.0	0.693378	Y



**Calibration**

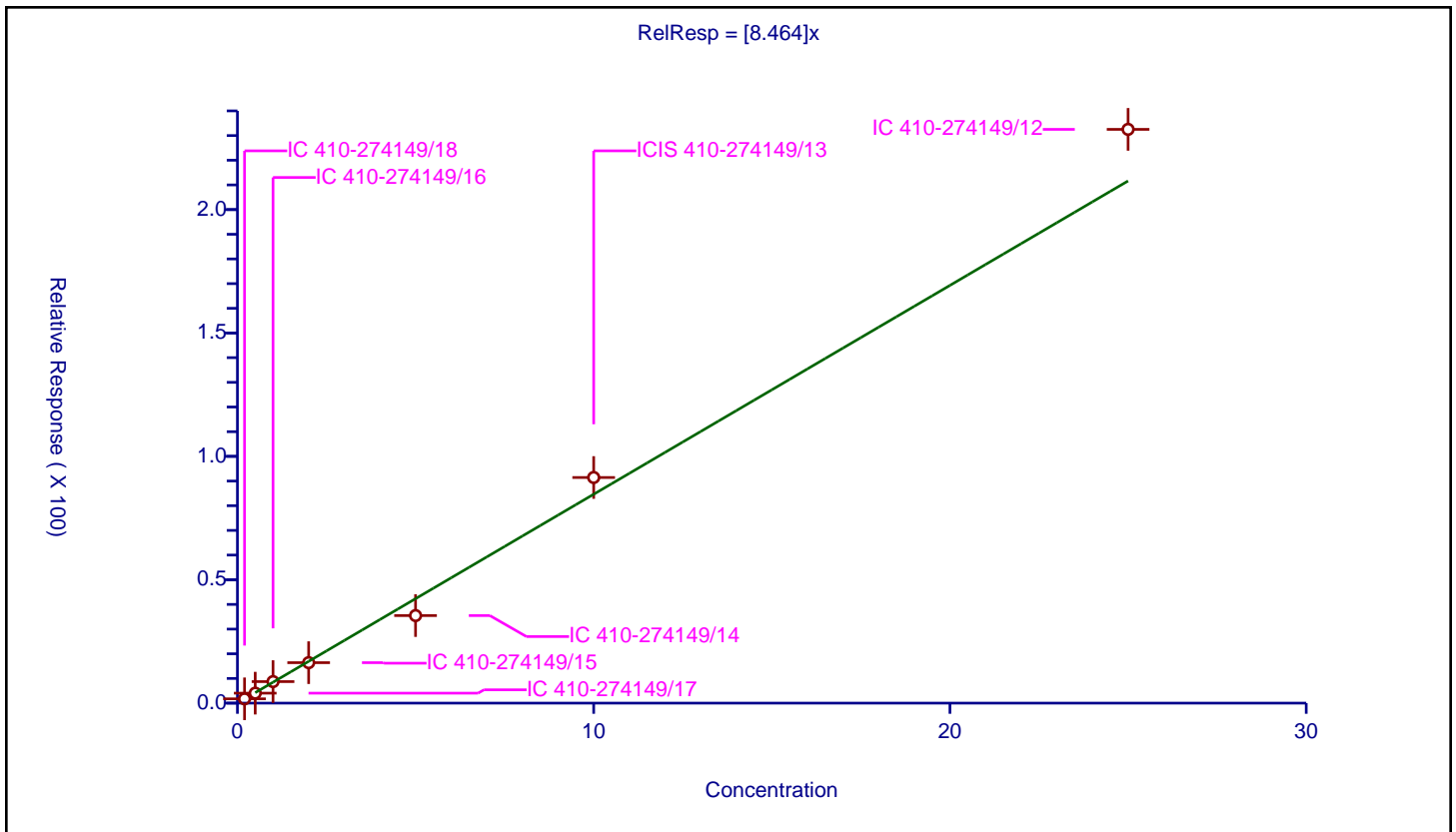
**/ Methyl acetate**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	8.464

Error Coefficients	
Standard Error:	202000
Relative Standard Error:	8.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	1.740992	50.0	127772.0	8.704959	Y
2	IC 410-274149/17	0.5	4.03778	50.0	81790.0	8.075559	Y
3	IC 410-274149/16	1.0	8.729584	50.0	87066.0	8.729584	Y
4	IC 410-274149/15	2.0	16.401178	50.0	107663.0	8.200589	Y
5	IC 410-274149/14	5.0	35.484191	50.0	120975.0	7.096838	Y
6	ICIS 410-274149/13	10.0	91.432376	50.0	101370.0	9.143238	Y
7	IC 410-274149/12	25.0	232.511626	50.0	96770.0	9.300465	Y



Calibration

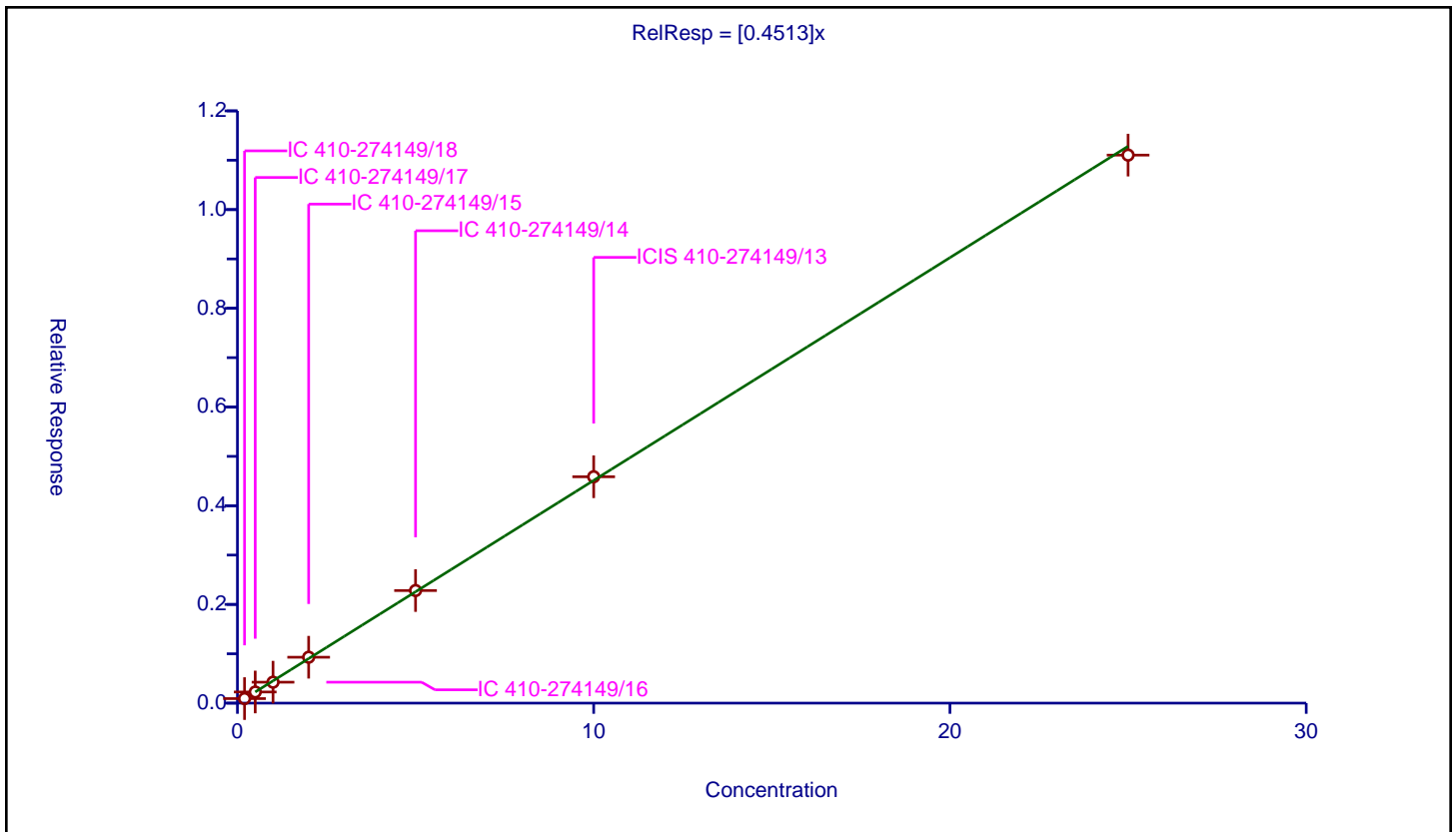
/ 3-Chloro-1-propene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4513

Error Coefficients	
Standard Error:	1060000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.091771	10.0	2085513.0	0.458856	Y
2	IC 410-274149/17	0.5	0.225716	10.0	2031490.0	0.451432	Y
3	IC 410-274149/16	1.0	0.424597	10.0	2037557.0	0.424597	Y
4	IC 410-274149/15	2.0	0.930342	10.0	2031307.0	0.465171	Y
5	IC 410-274149/14	5.0	2.281373	10.0	2106074.0	0.456275	Y
6	ICIS 410-274149/13	10.0	4.586994	10.0	2081655.0	0.458699	Y
7	IC 410-274149/12	25.0	11.103977	10.0	2132698.0	0.444159	Y



Calibration

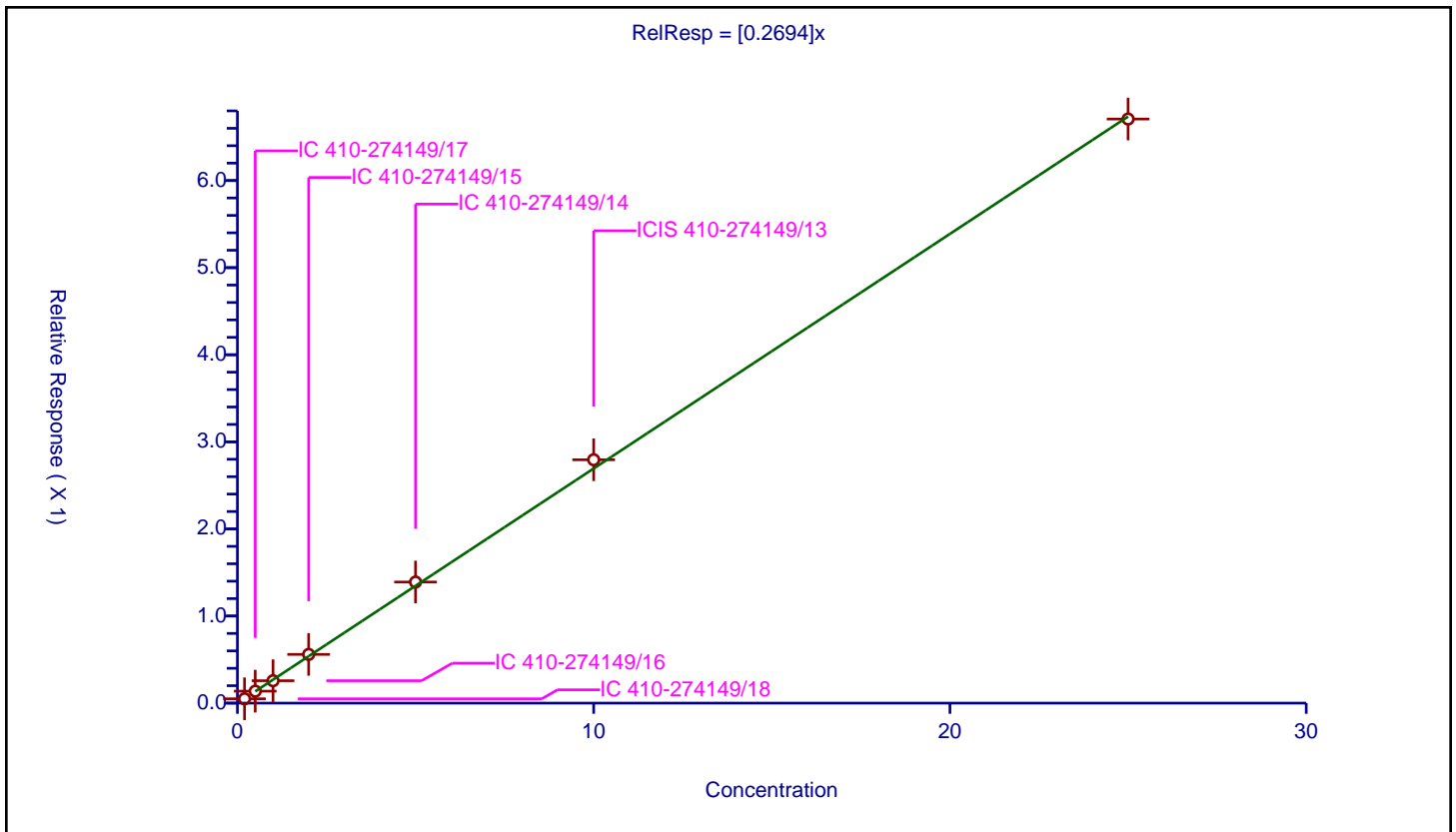
/ Methylene Chloride

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2694

Error Coefficients	
Standard Error:	644000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.049628	10.0	2085513.0	0.24814	Y
2	IC 410-274149/17	0.5	0.137436	10.0	2031490.0	0.274872	Y
3	IC 410-274149/16	1.0	0.25722	10.0	2037557.0	0.25722	Y
4	IC 410-274149/15	2.0	0.559448	10.0	2031307.0	0.279724	Y
5	IC 410-274149/14	5.0	1.390241	10.0	2106074.0	0.278048	Y
6	ICIS 410-274149/13	10.0	2.794233	10.0	2081655.0	0.279423	Y
7	IC 410-274149/12	25.0	6.706378	10.0	2132698.0	0.268255	Y



Calibration

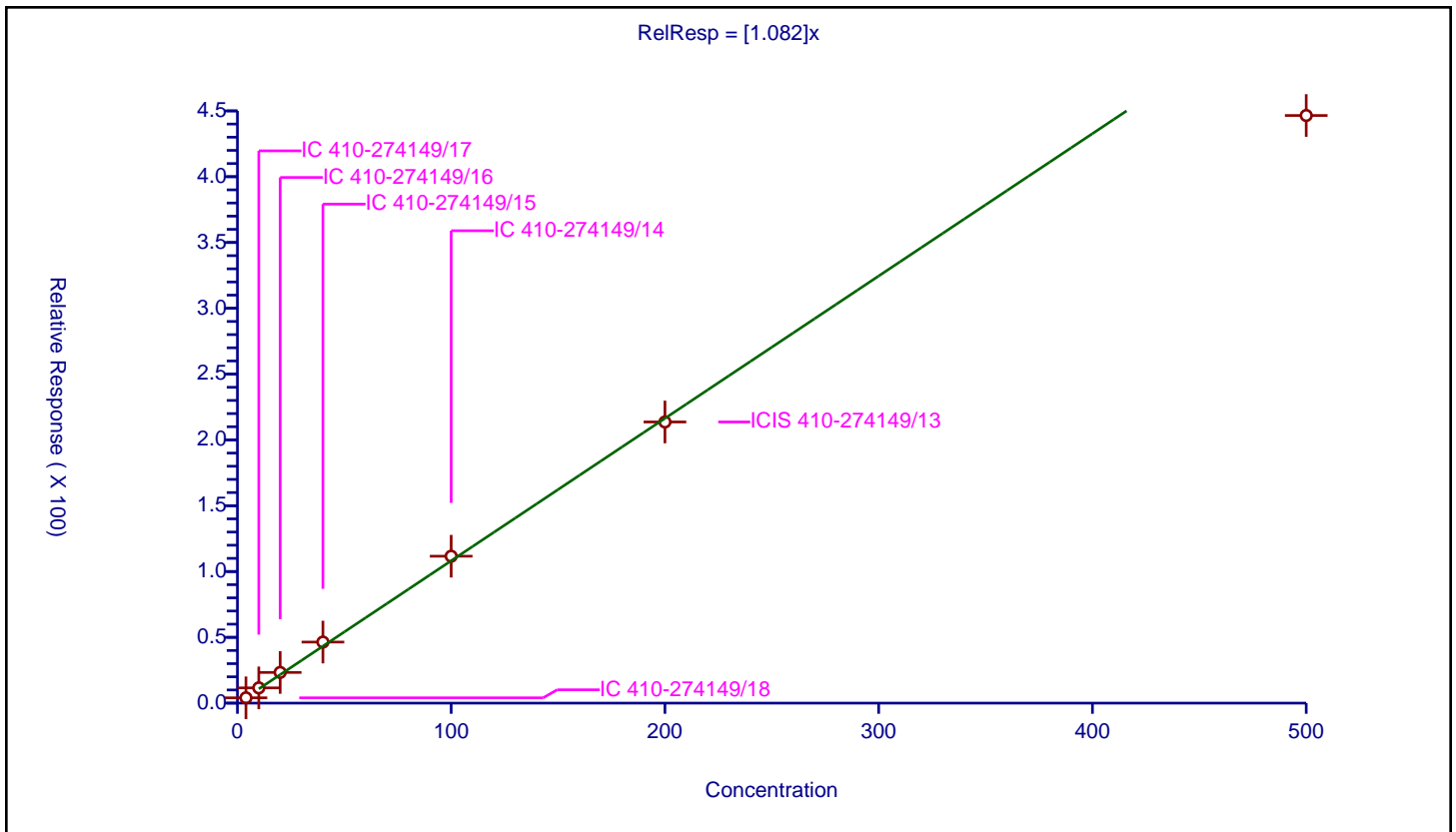
/ 2-Methyl-2-propanol

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.082

Error Coefficients	
Standard Error:	412000
Relative Standard Error:	9.4
Correlation Coefficient:	0.982
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	4.0	4.038443	50.0	127772.0	1.009611	Y
2	IC 410-274149/17	10.0	11.594938	50.0	81790.0	1.159494	Y
3	IC 410-274149/16	20.0	23.32426	50.0	87066.0	1.166213	Y
4	IC 410-274149/15	40.0	46.395233	50.0	107663.0	1.159881	Y
5	IC 410-274149/14	100.0	111.628849	50.0	120975.0	1.116288	Y
6	ICIS 410-274149/13	200.0	213.632732	50.0	101370.0	1.068164	Y
7	IC 410-274149/12	500.0	446.490131	50.0	96770.0	0.89298	Y



Calibration

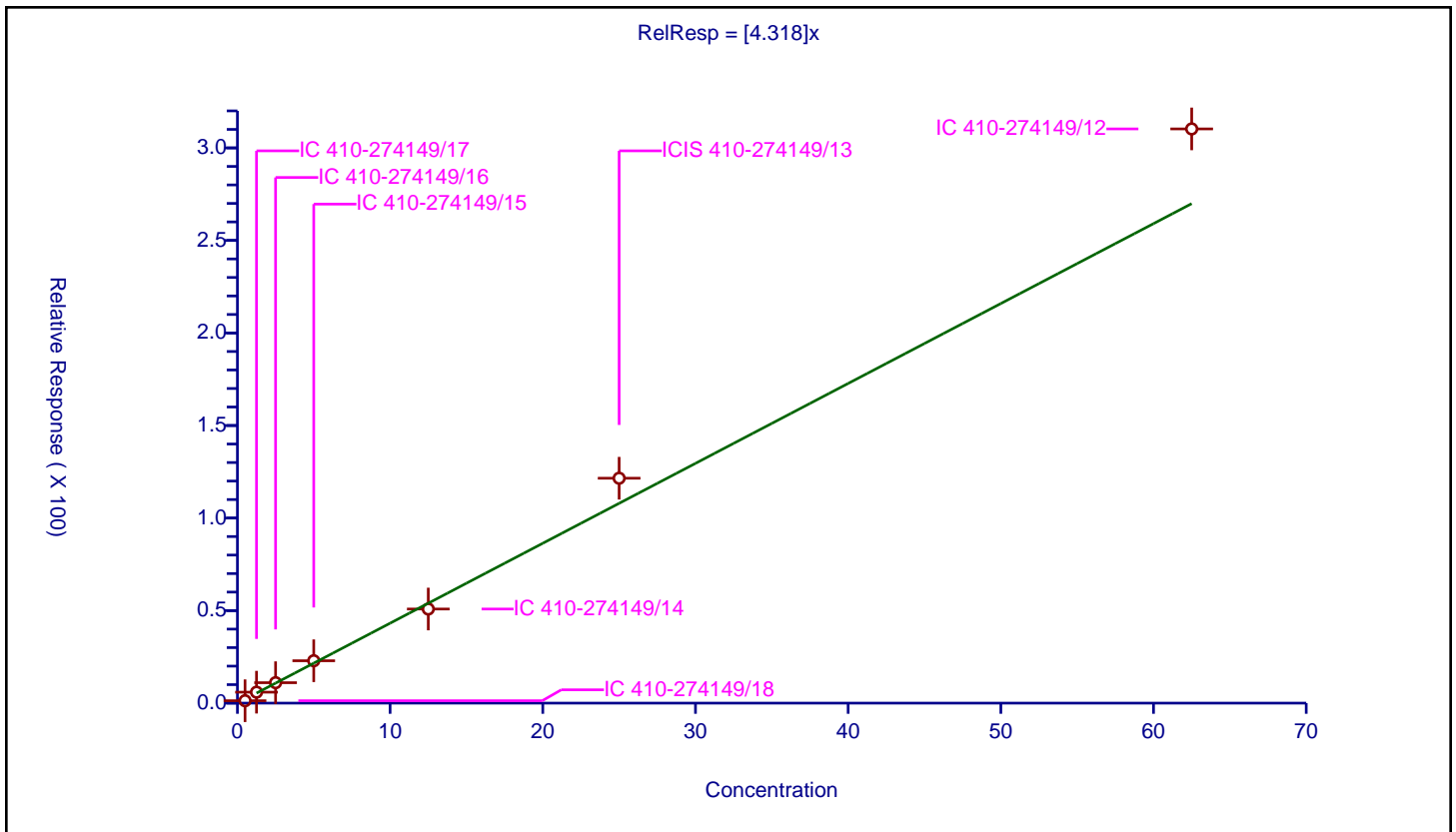
/ Acrylonitrile

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.318

Error Coefficients	
Standard Error:	270000
Relative Standard Error:	18.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.961

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.5	1.297624	50.0	127772.0	2.595248	Y
2	IC 410-274149/17	1.25	5.924318	50.0	81790.0	4.739455	Y
3	IC 410-274149/16	2.5	11.051386	50.0	87066.0	4.420555	Y
4	IC 410-274149/15	5.0	22.895981	50.0	107663.0	4.579196	Y
5	IC 410-274149/14	12.5	50.846043	50.0	120975.0	4.067683	Y
6	ICIS 410-274149/13	25.0	121.523133	50.0	101370.0	4.860925	Y
7	IC 410-274149/12	62.5	310.261961	50.0	96770.0	4.964191	Y



Calibration

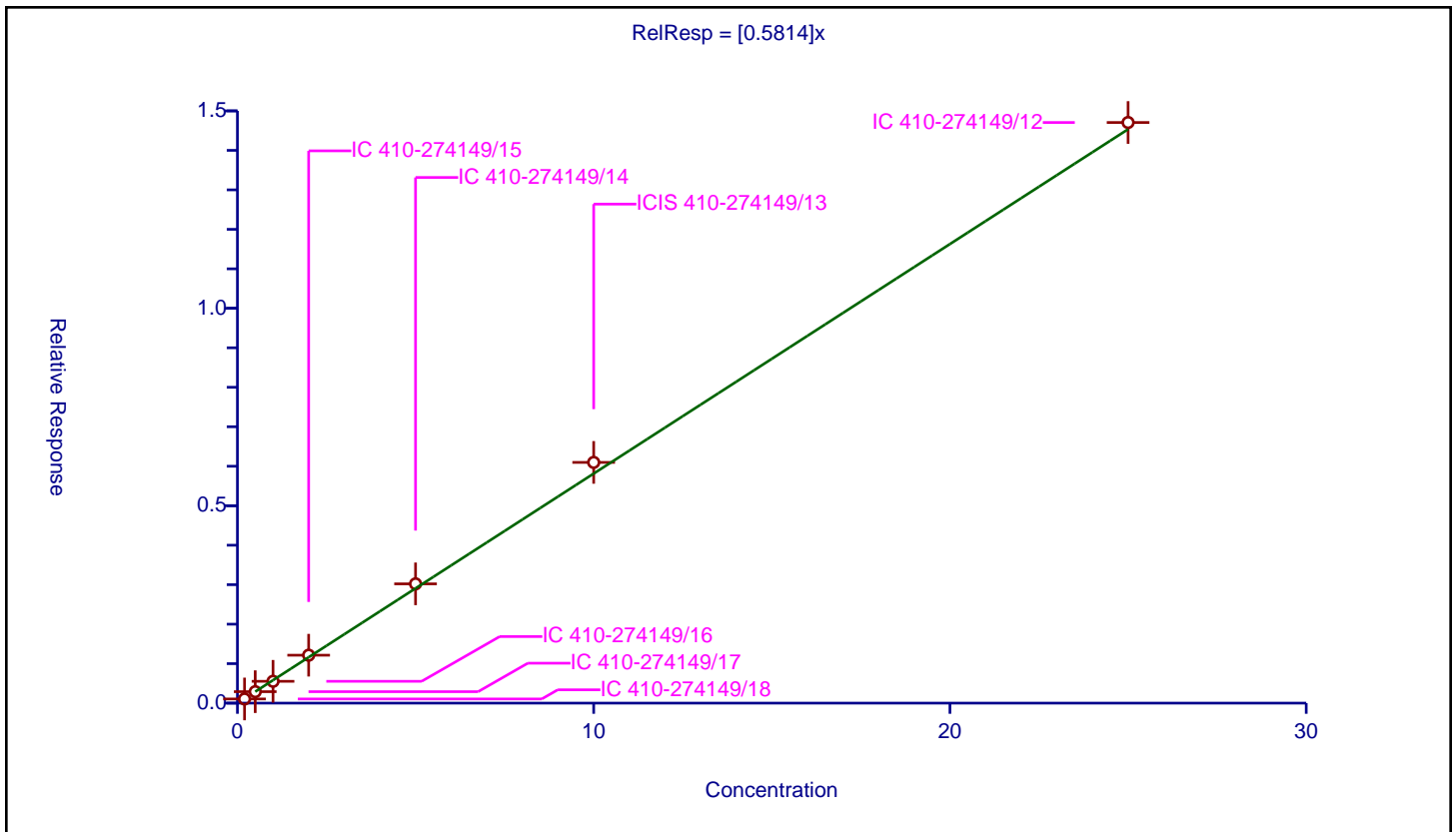
/ Methyl tert-butyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5814

Error Coefficients	
Standard Error:	1410000
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.105327	10.0	2085513.0	0.526633	Y
2	IC 410-274149/17	0.5	0.290358	10.0	2031490.0	0.580717	Y
3	IC 410-274149/16	1.0	0.553089	10.0	2037557.0	0.553089	Y
4	IC 410-274149/15	2.0	1.213893	10.0	2031307.0	0.606947	Y
5	IC 410-274149/14	5.0	3.021371	10.0	2106074.0	0.604274	Y
6	ICIS 410-274149/13	10.0	6.097322	10.0	2081655.0	0.609732	Y
7	IC 410-274149/12	25.0	14.705556	10.0	2132698.0	0.588222	Y



Calibration

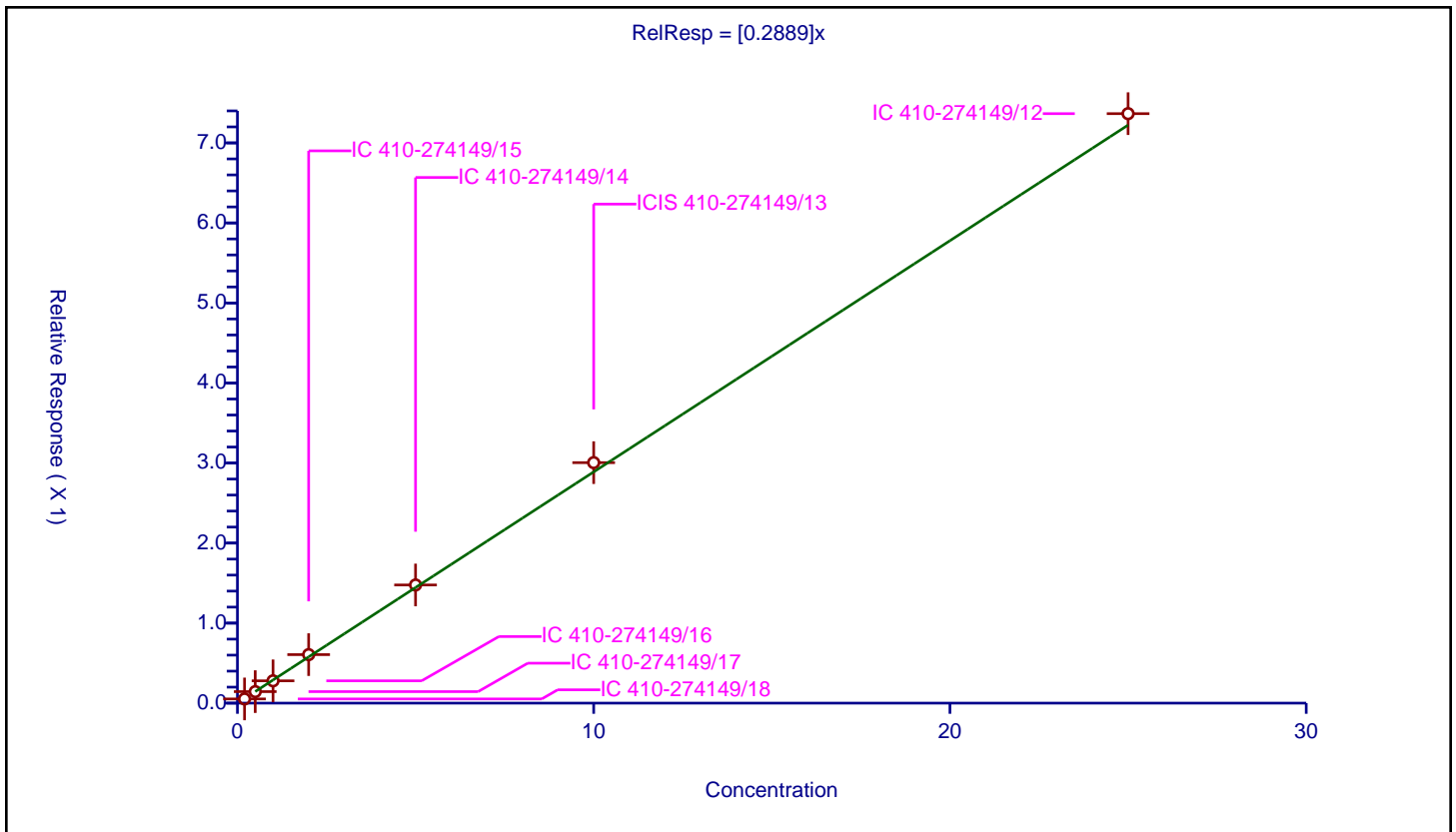
/ trans-1,2-Dichloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2889

Error Coefficients	
Standard Error:	704000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.052467	10.0	2085513.0	0.262334	Y
2	IC 410-274149/17	0.5	0.143885	10.0	2031490.0	0.287769	Y
3	IC 410-274149/16	1.0	0.2788	10.0	2037557.0	0.2788	Y
4	IC 410-274149/15	2.0	0.606029	10.0	2031307.0	0.303014	Y
5	IC 410-274149/14	5.0	1.476501	10.0	2106074.0	0.2953	Y
6	ICIS 410-274149/13	10.0	3.005037	10.0	2081655.0	0.300504	Y
7	IC 410-274149/12	25.0	7.36552	10.0	2132698.0	0.294621	Y





Calibration

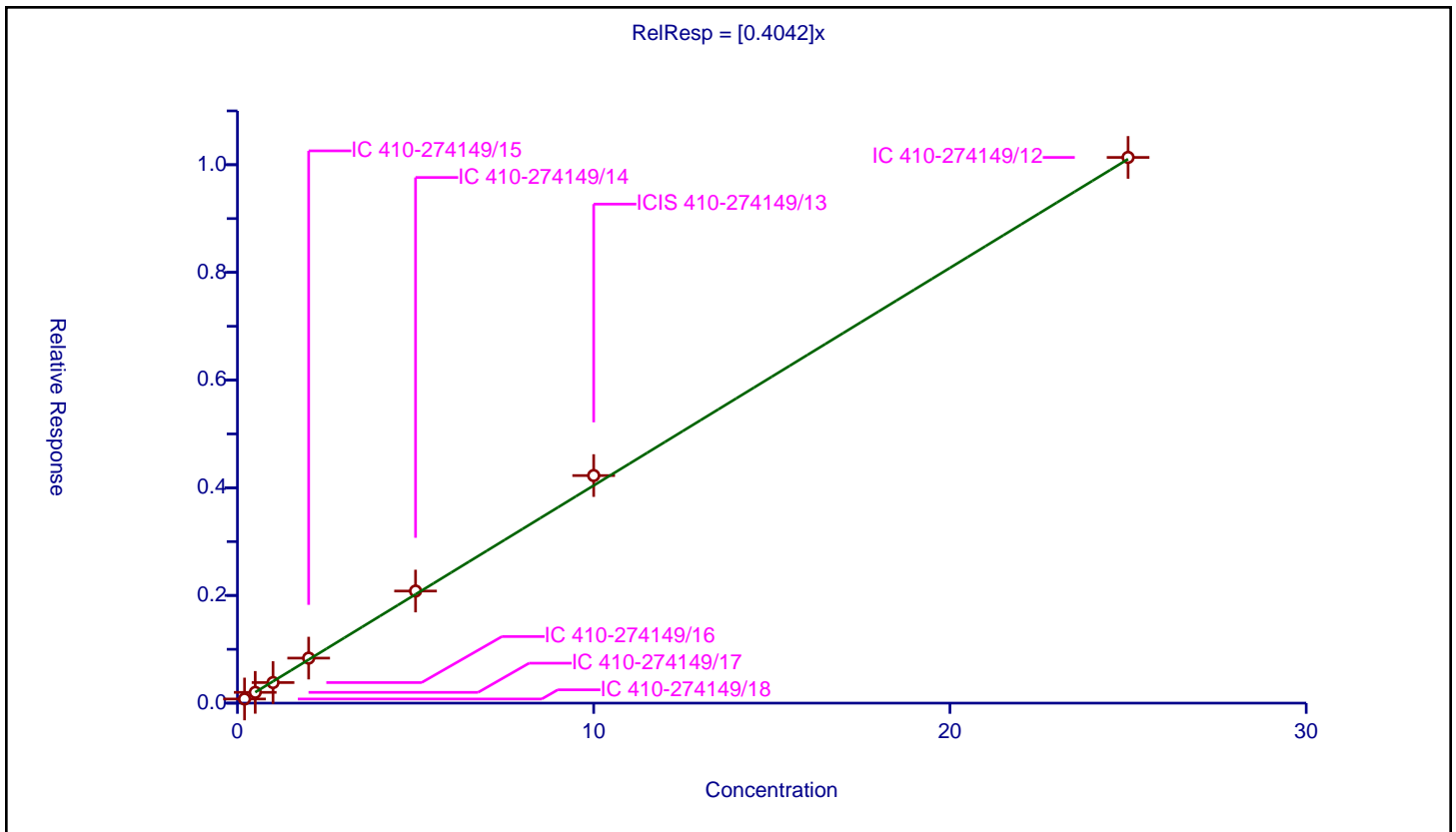
/ Hexane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4042

Error Coefficients	
Standard Error:	973000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.076974	10.0	2085513.0	0.384869	Y
2	IC 410-274149/17	0.5	0.199932	10.0	2031490.0	0.399864	Y
3	IC 410-274149/16	1.0	0.381938	10.0	2037557.0	0.381938	Y
4	IC 410-274149/15	2.0	0.836471	10.0	2031307.0	0.418236	Y
5	IC 410-274149/14	5.0	2.081959	10.0	2106074.0	0.416392	Y
6	ICIS 410-274149/13	10.0	4.226599	10.0	2081655.0	0.42266	Y
7	IC 410-274149/12	25.0	10.135926	10.0	2132698.0	0.405437	Y



Calibration

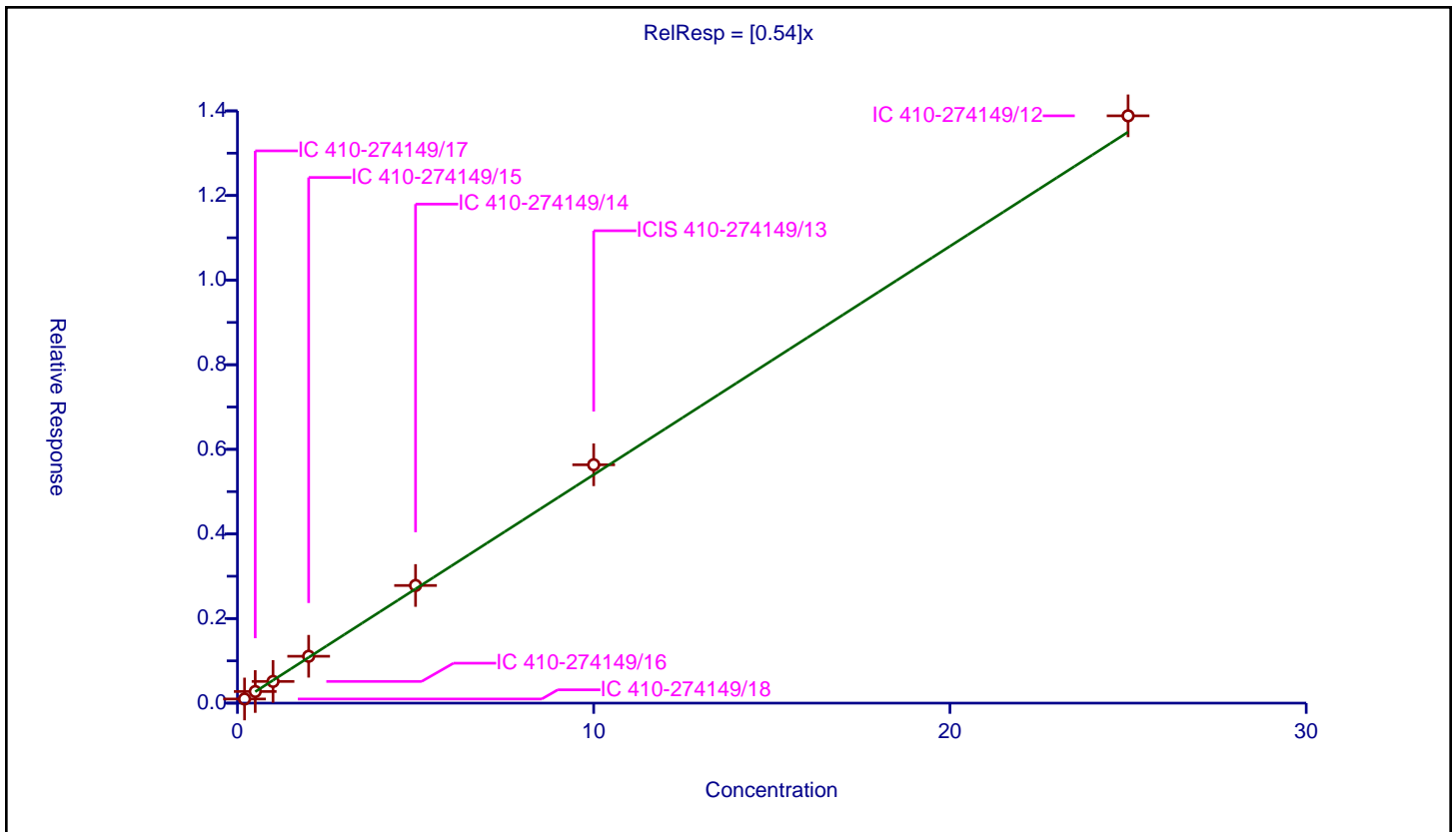
/ 1,1-Dichloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.54

Error Coefficients	
Standard Error:	1330000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.097727	10.0	2085513.0	0.488633	Y
2	IC 410-274149/17	0.5	0.27503	10.0	2031490.0	0.550059	Y
3	IC 410-274149/16	1.0	0.512614	10.0	2037557.0	0.512614	Y
4	IC 410-274149/15	2.0	1.107686	10.0	2031307.0	0.553843	Y
5	IC 410-274149/14	5.0	2.781474	10.0	2106074.0	0.556295	Y
6	ICIS 410-274149/13	10.0	5.634416	10.0	2081655.0	0.563442	Y
7	IC 410-274149/12	25.0	13.883222	10.0	2132698.0	0.555329	Y



Calibration

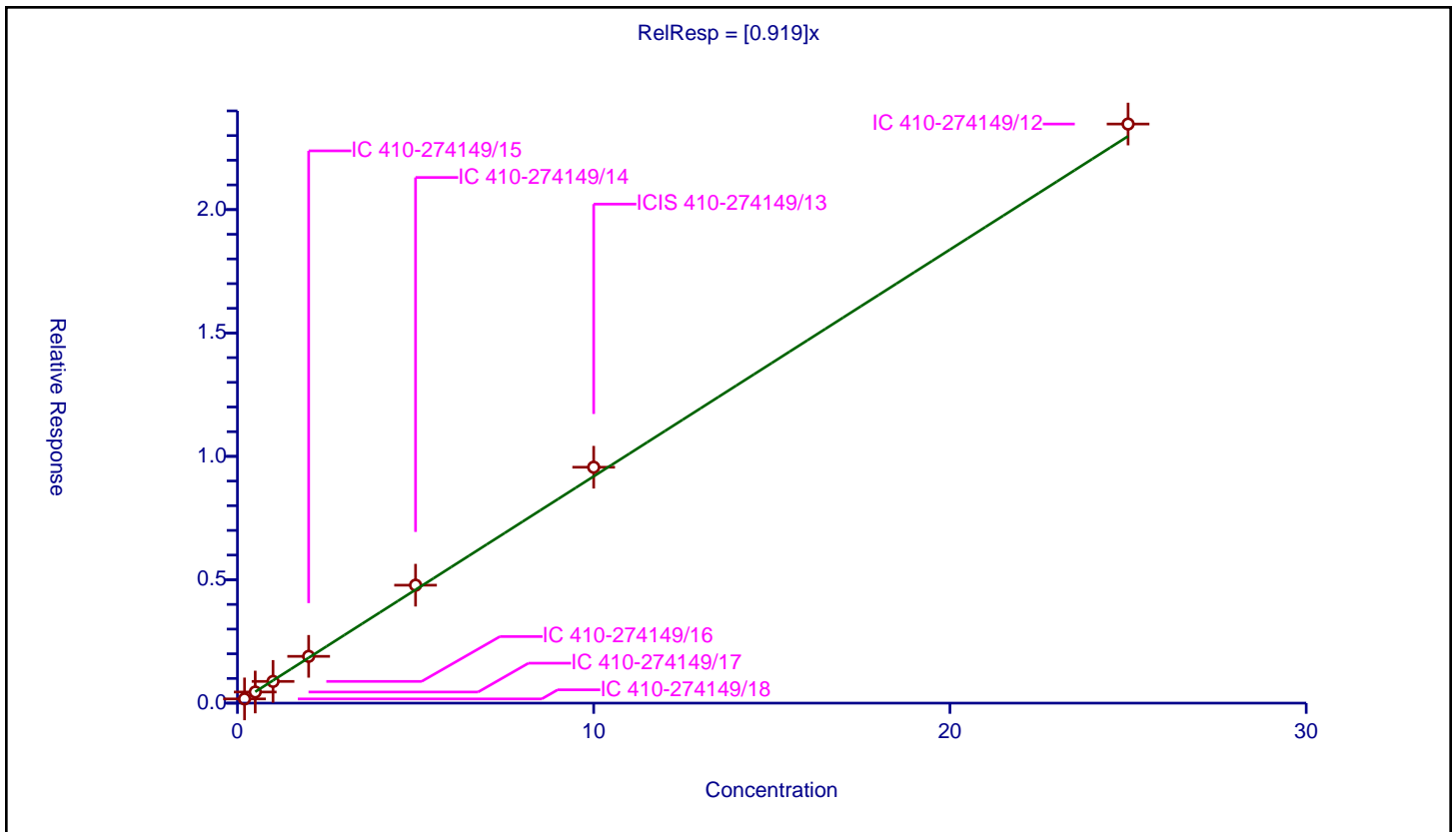
/ Isopropyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.919

Error Coefficients	
Standard Error:	2240000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.170697	10.0	2085513.0	0.853483	Y
2	IC 410-274149/17	0.5	0.45028	10.0	2031490.0	0.900561	Y
3	IC 410-274149/16	1.0	0.879779	10.0	2037557.0	0.879779	Y
4	IC 410-274149/15	2.0	1.896277	10.0	2031307.0	0.948138	Y
5	IC 410-274149/14	5.0	4.780236	10.0	2106074.0	0.956047	Y
6	ICIS 410-274149/13	10.0	9.559615	10.0	2081655.0	0.955961	Y
7	IC 410-274149/12	25.0	23.467598	10.0	2132698.0	0.938704	Y



Calibration

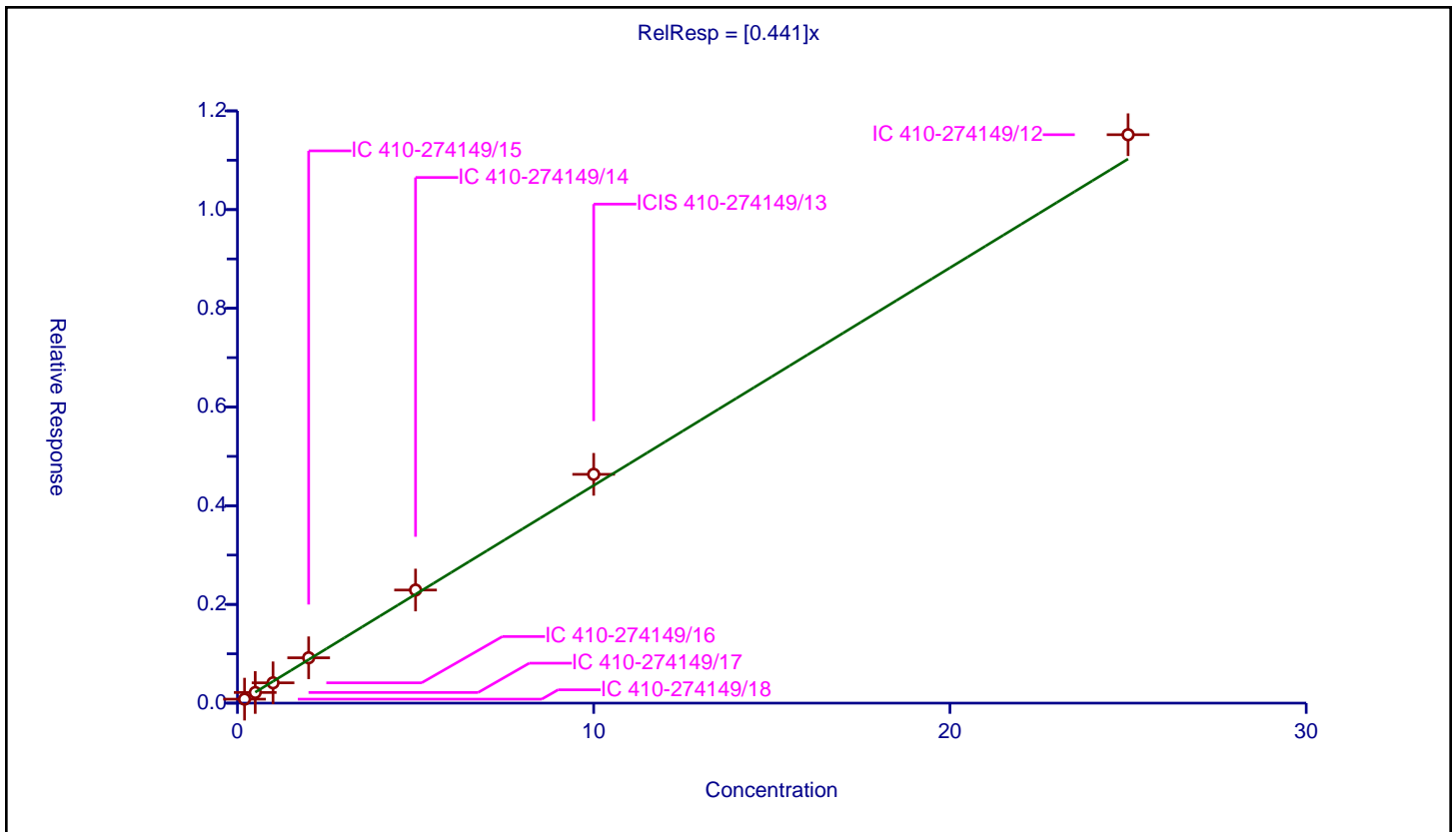
/ 2-Chloro-1,3-butadiene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.441

Error Coefficients	
Standard Error:	1100000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.080445	10.0	2085513.0	0.402227	Y
2	IC 410-274149/17	0.5	0.215842	10.0	2031490.0	0.431683	Y
3	IC 410-274149/16	1.0	0.411252	10.0	2037557.0	0.411252	Y
4	IC 410-274149/15	2.0	0.918881	10.0	2031307.0	0.459441	Y
5	IC 410-274149/14	5.0	2.291843	10.0	2106074.0	0.458369	Y
6	ICIS 410-274149/13	10.0	4.636085	10.0	2081655.0	0.463609	Y
7	IC 410-274149/12	25.0	11.51736	10.0	2132698.0	0.460694	Y



Calibration

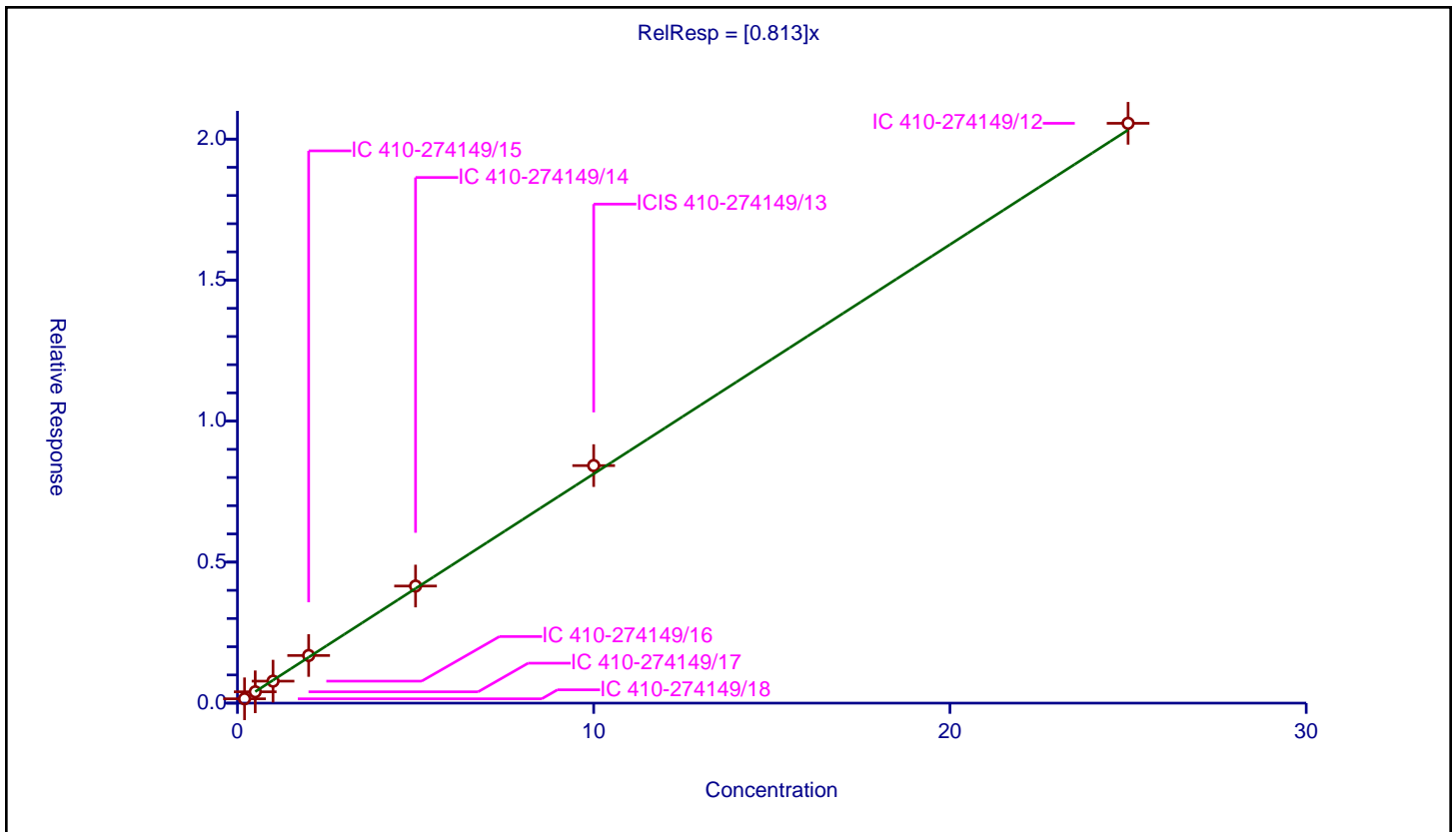
/ Tert-butyl ethyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.813

Error Coefficients	
Standard Error:	1970000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.153794	10.0	2085513.0	0.768971	Y
2	IC 410-274149/17	0.5	0.401434	10.0	2031490.0	0.802869	Y
3	IC 410-274149/16	1.0	0.779247	10.0	2037557.0	0.779247	Y
4	IC 410-274149/15	2.0	1.689164	10.0	2031307.0	0.844582	Y
5	IC 410-274149/14	5.0	4.152167	10.0	2106074.0	0.830433	Y
6	ICIS 410-274149/13	10.0	8.422366	10.0	2081655.0	0.842237	Y
7	IC 410-274149/12	25.0	20.56014	10.0	2132698.0	0.822406	Y



Calibration

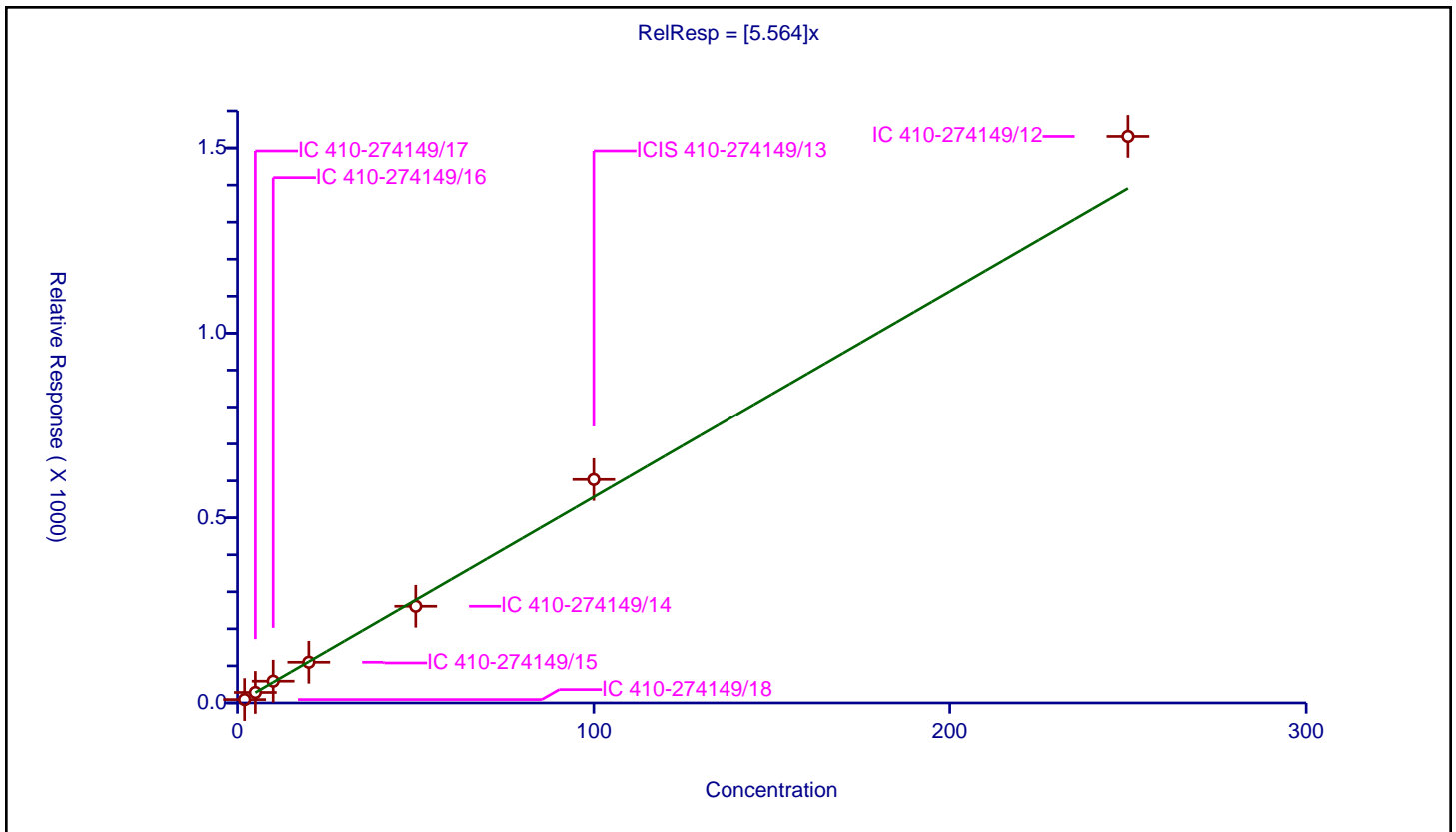
/ 2-Butanone (MEK)

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.564

Error Coefficients	
Standard Error:	1340000
Relative Standard Error:	9.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	2.0	9.068888	50.0	127772.0	4.534444	Y
2	IC 410-274149/17	5.0	28.32559	50.0	81790.0	5.665118	Y
3	IC 410-274149/16	10.0	58.777824	50.0	87066.0	5.877782	Y
4	IC 410-274149/15	20.0	109.82696	50.0	107663.0	5.491348	Y
5	IC 410-274149/14	50.0	261.017979	50.0	120975.0	5.22036	Y
6	ICIS 410-274149/13	100.0	603.680576	50.0	101370.0	6.036806	Y
7	IC 410-274149/12	250.0	1531.381627	50.0	96770.0	6.125527	Y



Calibration

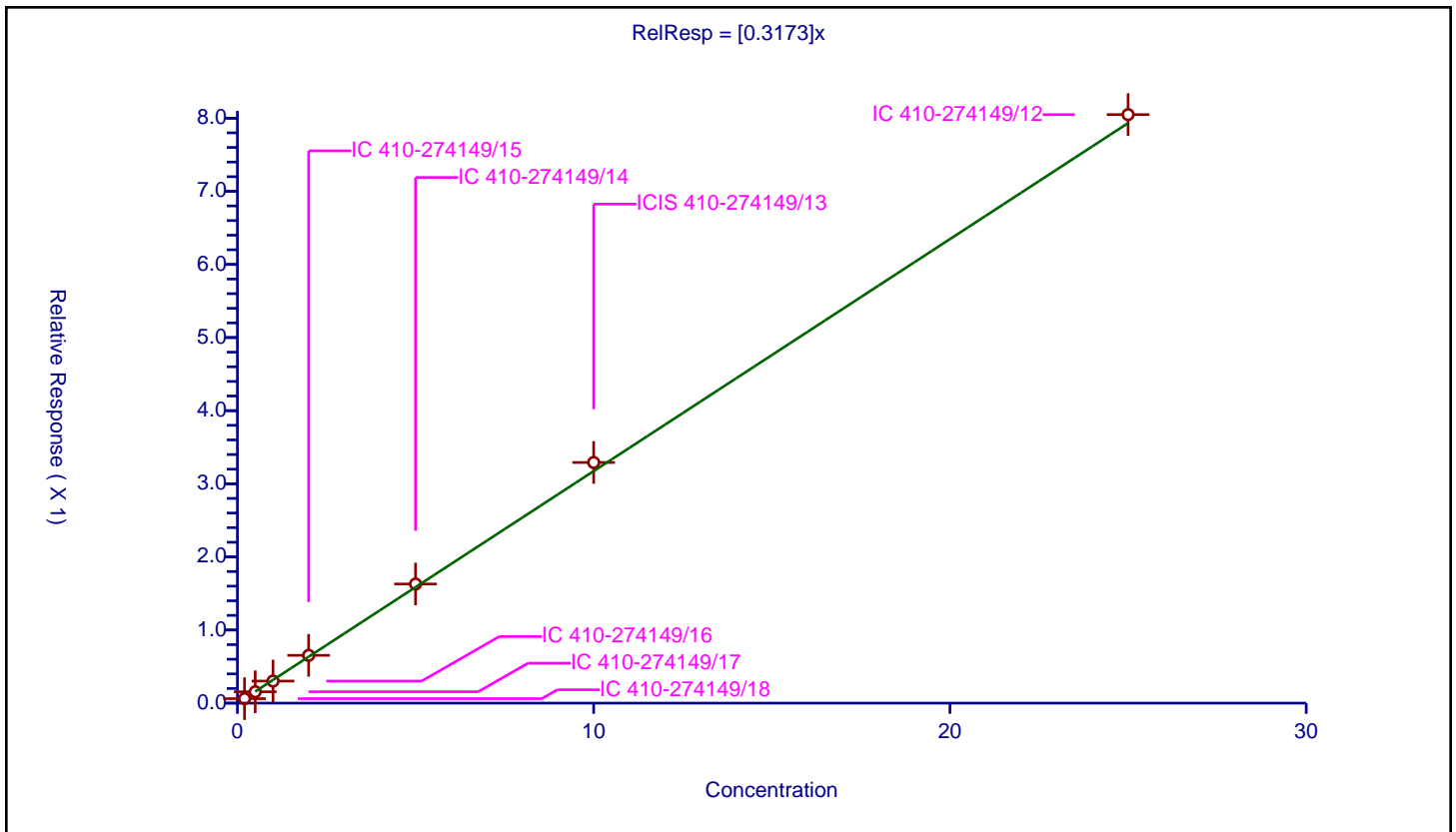
/ cis-1,2-Dichloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3173

Error Coefficients	
Standard Error:	770000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.061045	10.0	2085513.0	0.305225	Y
2	IC 410-274149/17	0.5	0.155324	10.0	2031490.0	0.310649	Y
3	IC 410-274149/16	1.0	0.301861	10.0	2037557.0	0.301861	Y
4	IC 410-274149/15	2.0	0.65319	10.0	2031307.0	0.326595	Y
5	IC 410-274149/14	5.0	1.629031	10.0	2106074.0	0.325806	Y
6	ICIS 410-274149/13	10.0	3.291348	10.0	2081655.0	0.329135	Y
7	IC 410-274149/12	25.0	8.048866	10.0	2132698.0	0.321955	Y



Calibration

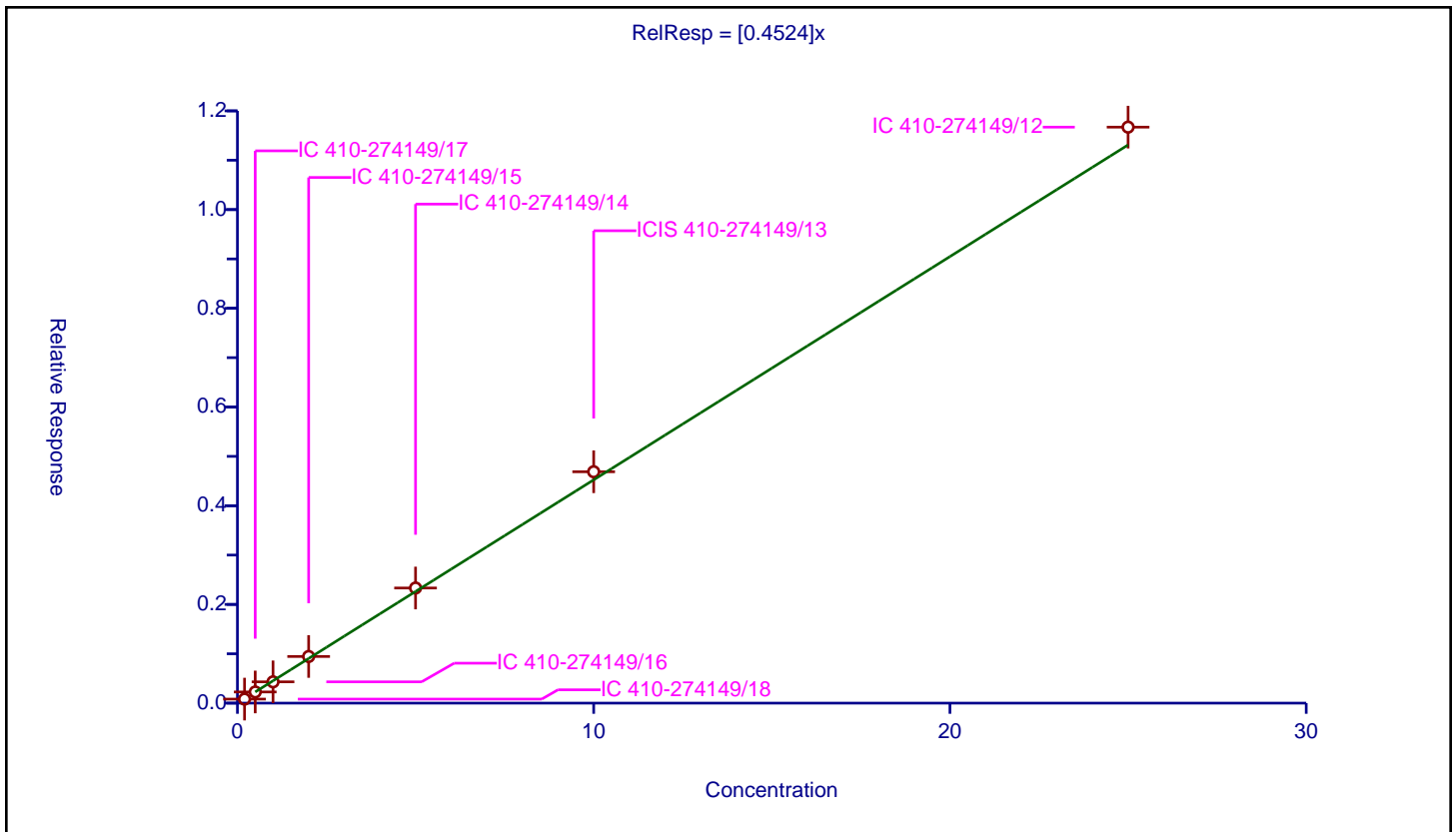
/ 2,2-Dichloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4524

Error Coefficients	
Standard Error:	1110000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.081591	10.0	2085513.0	0.407957	Y
2	IC 410-274149/17	0.5	0.226386	10.0	2031490.0	0.452771	Y
3	IC 410-274149/16	1.0	0.431389	10.0	2037557.0	0.431389	Y
4	IC 410-274149/15	2.0	0.945061	10.0	2031307.0	0.472531	Y
5	IC 410-274149/14	5.0	2.332843	10.0	2106074.0	0.466569	Y
6	ICIS 410-274149/13	10.0	4.688467	10.0	2081655.0	0.468847	Y
7	IC 410-274149/12	25.0	11.670649	10.0	2132698.0	0.466826	Y





Calibration

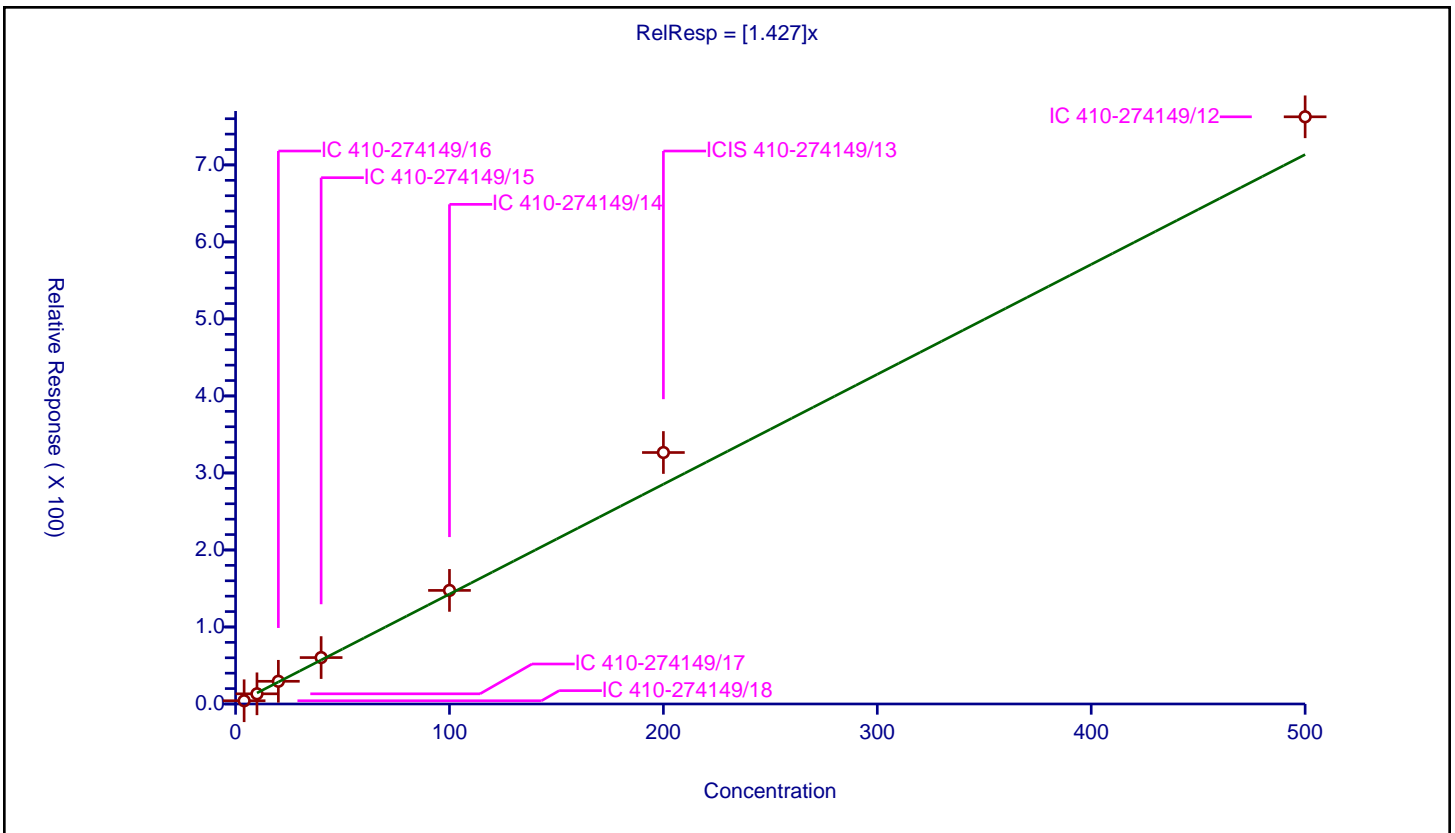
/ Propionitrile

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.427

Error Coefficients	
Standard Error:	678000
Relative Standard Error:	13.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	4.0	4.209843	50.0	127772.0	1.052461	Y
2	IC 410-274149/17	10.0	13.21922	50.0	81790.0	1.321922	Y
3	IC 410-274149/16	20.0	29.500609	50.0	87066.0	1.47503	Y
4	IC 410-274149/15	40.0	60.252362	50.0	107663.0	1.506309	Y
5	IC 410-274149/14	100.0	147.511056	50.0	120975.0	1.475111	Y
6	ICIS 410-274149/13	200.0	326.559633	50.0	101370.0	1.632798	Y
7	IC 410-274149/12	500.0	762.46874	50.0	96770.0	1.524937	Y



**Calibration**

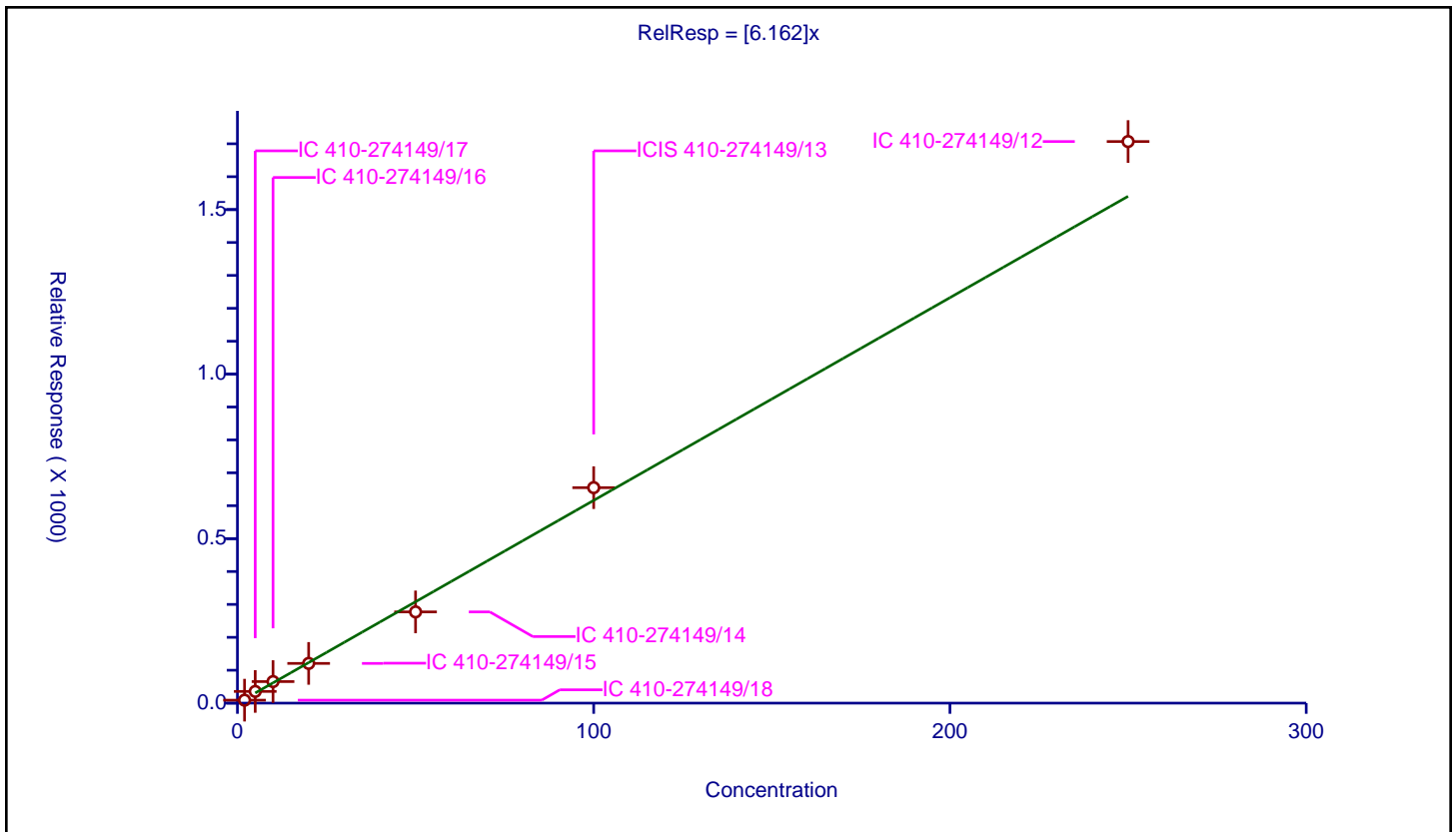
**/ Methacrylonitrile**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	6.162

Error Coefficients	
Standard Error:	1480000
Relative Standard Error:	14.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	2.0	9.003538	50.0	127772.0	4.501769	Y
2	IC 410-274149/17	5.0	35.580756	50.0	81790.0	7.116151	Y
3	IC 410-274149/16	10.0	65.564629	50.0	87066.0	6.556463	Y
4	IC 410-274149/15	20.0	120.701169	50.0	107663.0	6.035058	Y
5	IC 410-274149/14	50.0	277.282496	50.0	120975.0	5.54565	Y
6	ICIS 410-274149/13	100.0	654.886061	50.0	101370.0	6.548861	Y
7	IC 410-274149/12	250.0	1706.85388	50.0	96770.0	6.827416	Y



Calibration

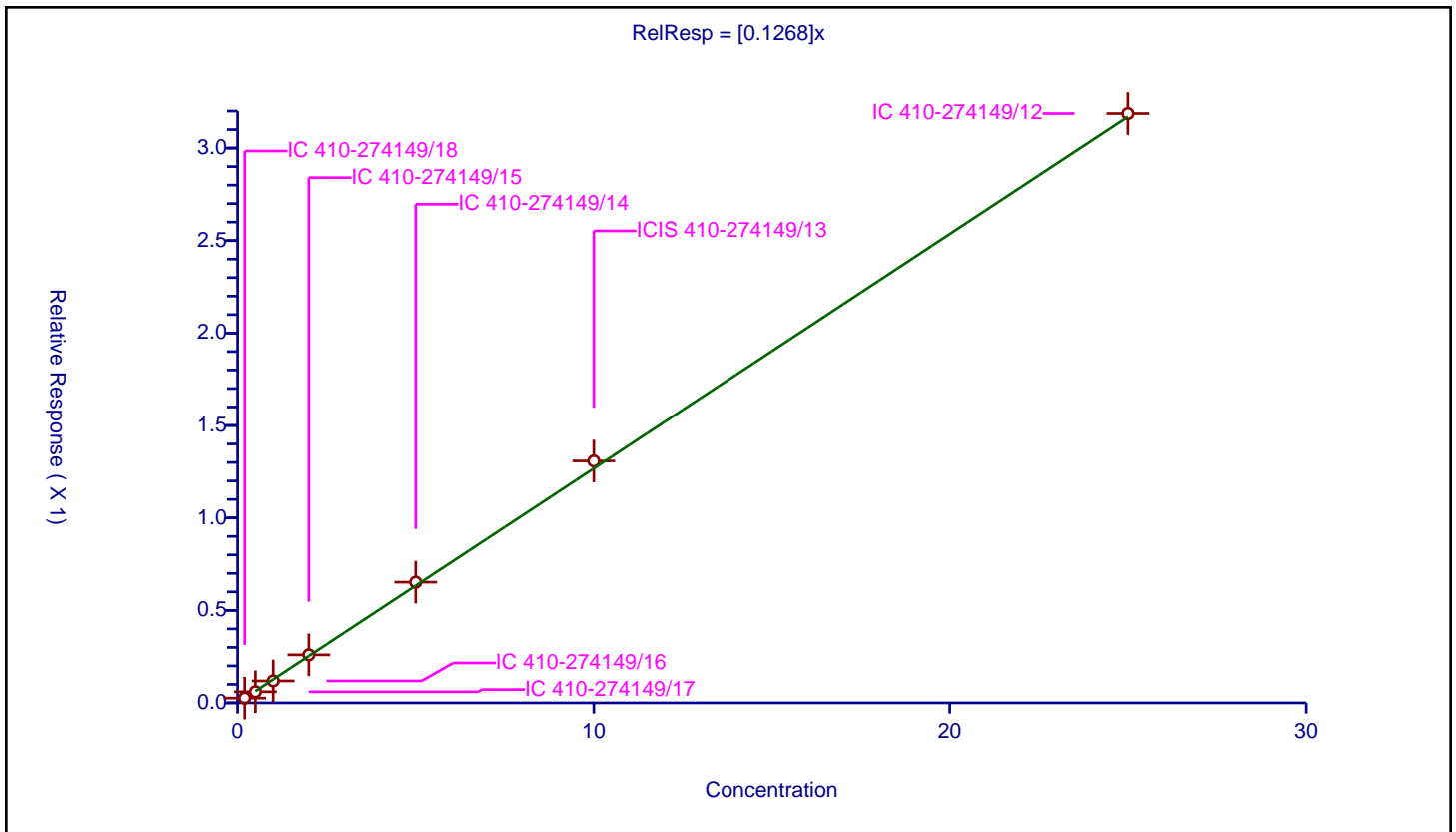
/ Chlorobromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1268

Error Coefficients	
Standard Error:	305000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.026013	10.0	2085513.0	0.130064	Y
2	IC 410-274149/17	0.5	0.06002	10.0	2031490.0	0.12004	Y
3	IC 410-274149/16	1.0	0.118662	10.0	2037557.0	0.118662	Y
4	IC 410-274149/15	2.0	0.259739	10.0	2031307.0	0.12987	Y
5	IC 410-274149/14	5.0	0.652541	10.0	2106074.0	0.130508	Y
6	ICIS 410-274149/13	10.0	1.308089	10.0	2081655.0	0.130809	Y
7	IC 410-274149/12	25.0	3.186532	10.0	2132698.0	0.127461	Y



Calibration

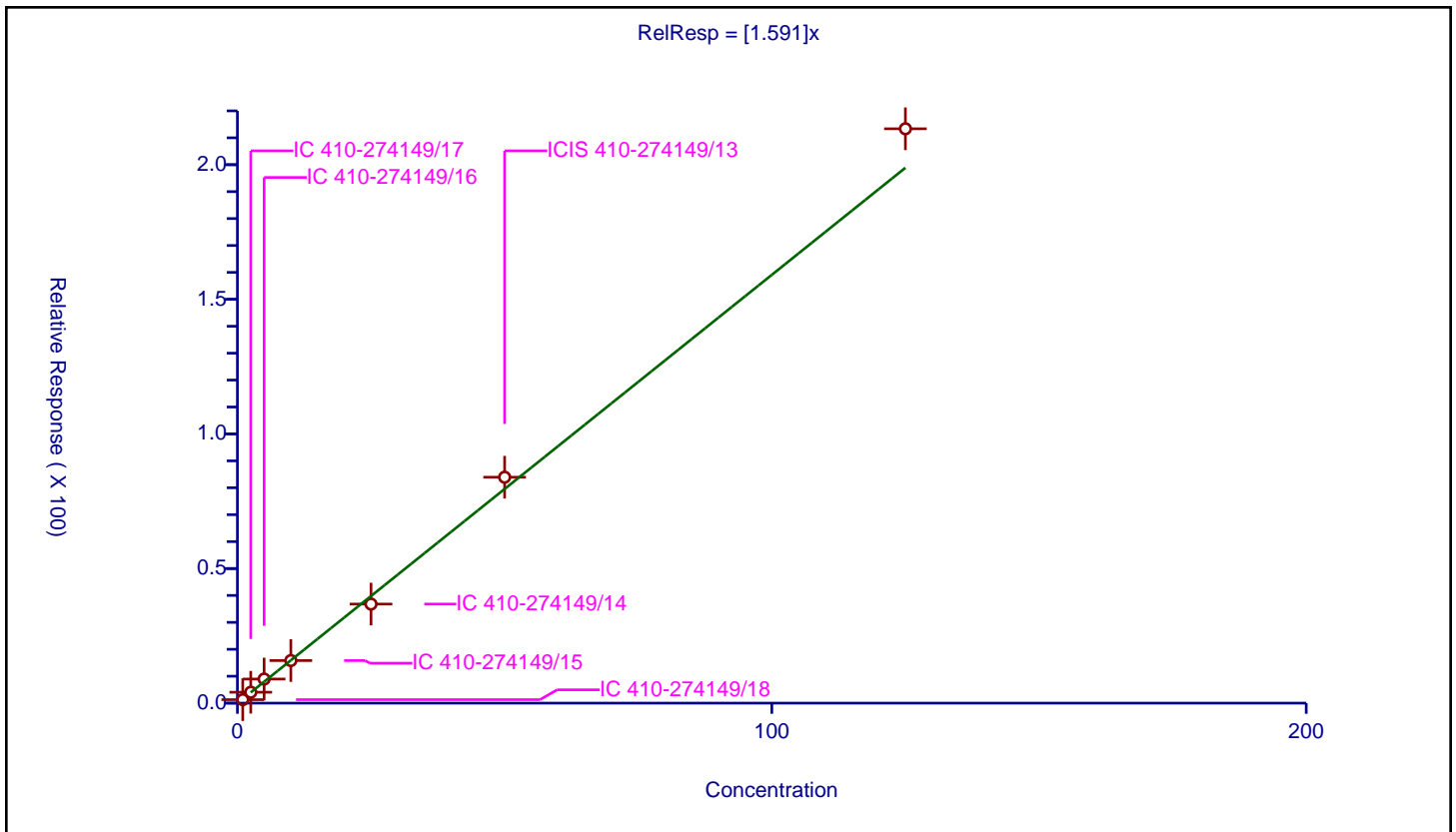
/ Tetrahydrofuran

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.591

Error Coefficients	
Standard Error:	186000
Relative Standard Error:	10.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	1.0	1.286276	50.0	127772.0	1.286276	Y
2	IC 410-274149/17	2.5	4.055508	50.0	81790.0	1.622203	Y
3	IC 410-274149/16	5.0	8.946087	50.0	87066.0	1.789217	Y
4	IC 410-274149/15	10.0	15.814625	50.0	107663.0	1.581463	Y
5	IC 410-274149/14	25.0	36.796859	50.0	120975.0	1.471874	Y
6	ICIS 410-274149/13	50.0	83.925224	50.0	101370.0	1.678504	Y
7	IC 410-274149/12	125.0	213.350212	50.0	96770.0	1.706802	Y



**Calibration**

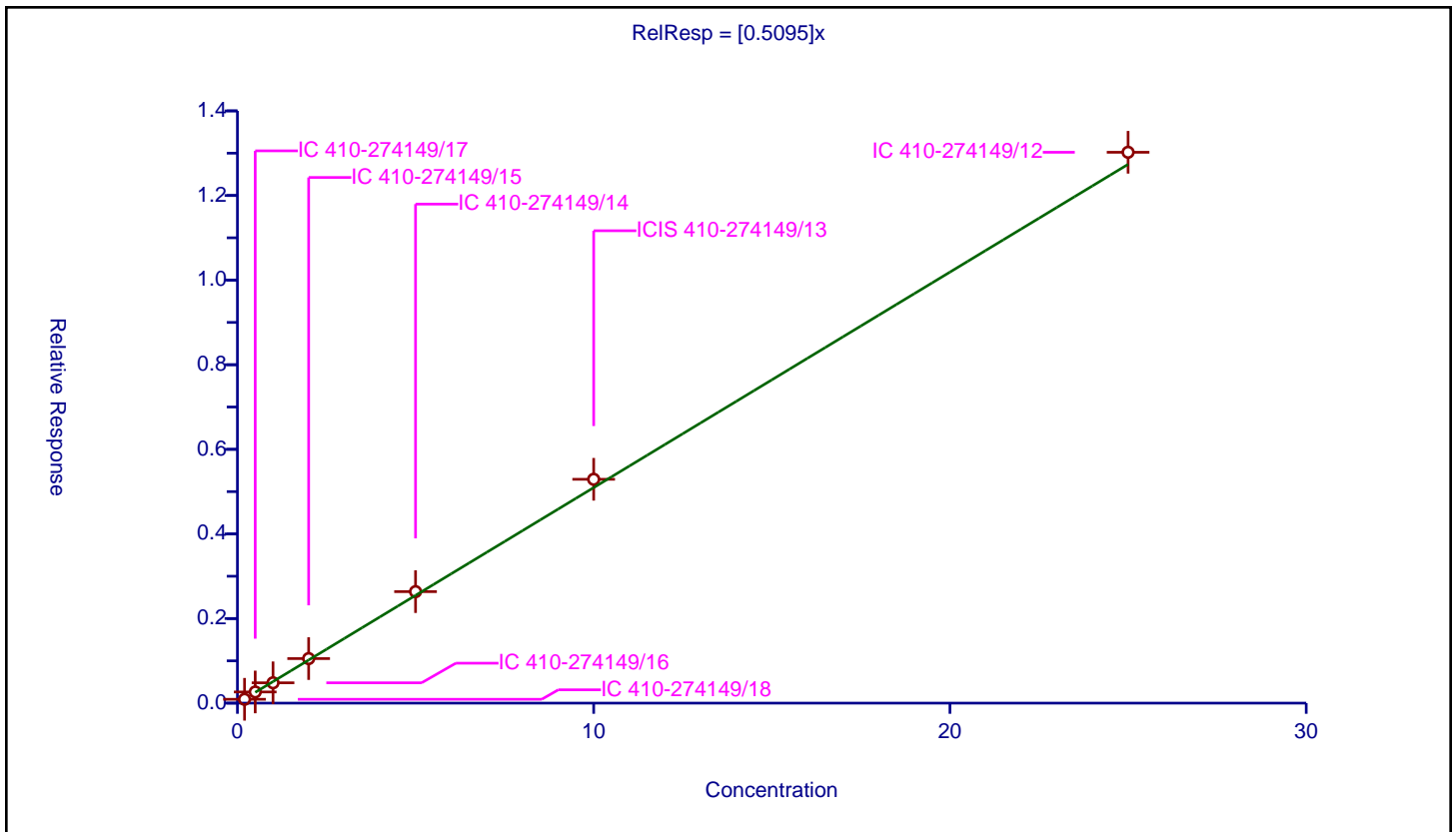
/ Chloroform

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5095

Error Coefficients	
Standard Error:	1240000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.090822	10.0	2085513.0	0.454109	Y
2	IC 410-274149/17	0.5	0.263831	10.0	2031490.0	0.527662	Y
3	IC 410-274149/16	1.0	0.481007	10.0	2037557.0	0.481007	Y
4	IC 410-274149/15	2.0	1.052692	10.0	2031307.0	0.526346	Y
5	IC 410-274149/14	5.0	2.635686	10.0	2106074.0	0.527137	Y
6	ICIS 410-274149/13	10.0	5.291223	10.0	2081655.0	0.529122	Y
7	IC 410-274149/12	25.0	13.021867	10.0	2132698.0	0.520875	Y



**Calibration**

/ Dibromofluoromethane (Surr)

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

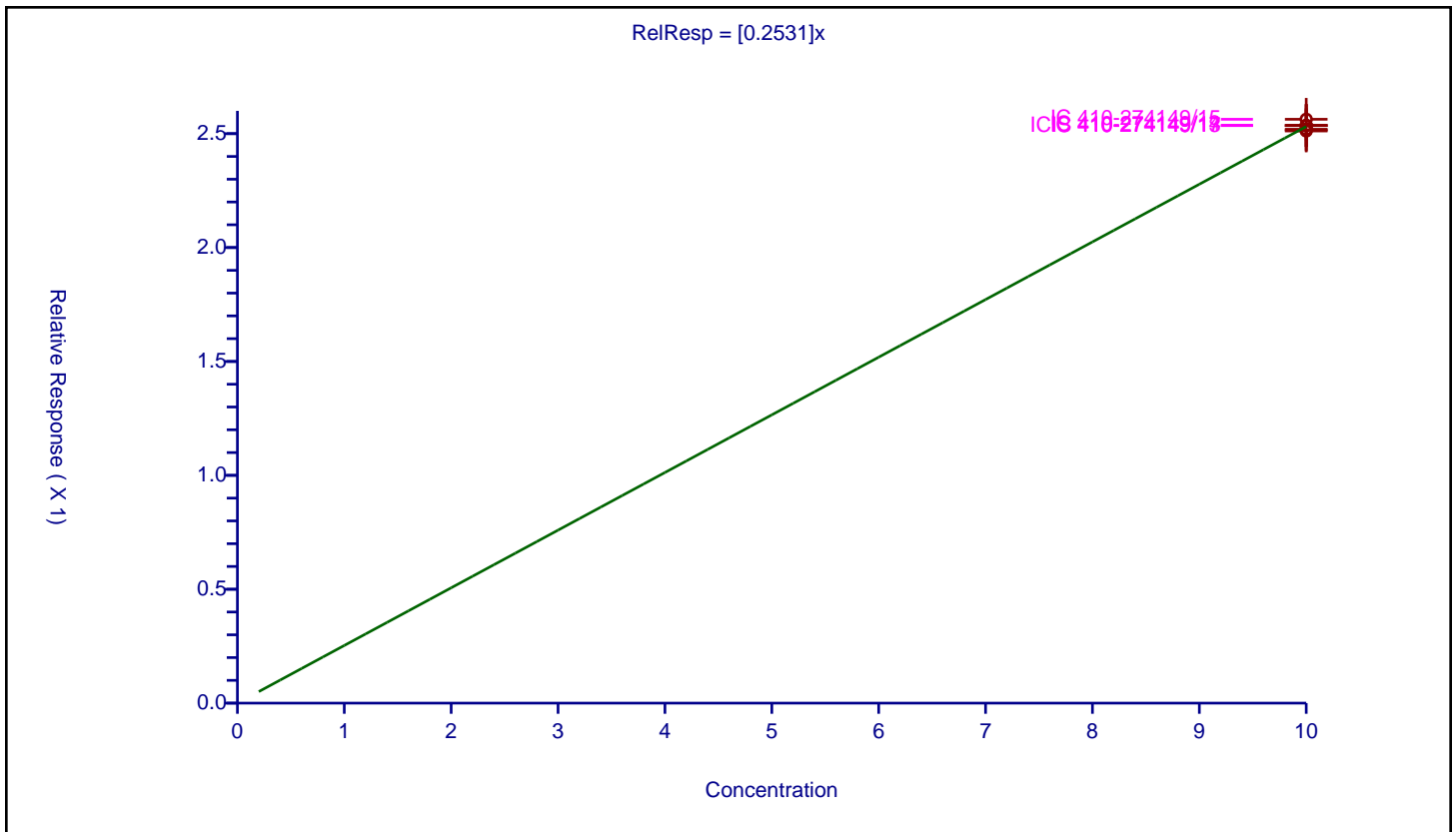
**Curve Coefficients**

Intercept: 0  
 Slope: 0.2531

**Error Coefficients**

Standard Error: 567000  
 Relative Standard Error: 0.7  
 Correlation Coefficient: NA  
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/12	10.0	2.519175	10.0	2132698.0	0.251918	Y
2	ICIS 410-274149/13	10.0	2.535776	10.0	2081655.0	0.253578	Y
3	IC 410-274149/14	10.0	2.536445	10.0	2106074.0	0.253644	Y
4	IC 410-274149/15	10.0	2.563133	10.0	2031307.0	0.256313	Y
5	IC 410-274149/16	10.0	2.511787	10.0	2037557.0	0.251179	Y
6	IC 410-274149/17	10.0	2.53539	10.0	2031490.0	0.253539	Y
7	IC 410-274149/18	10.0	2.515765	10.0	2085513.0	0.251576	Y



Calibration

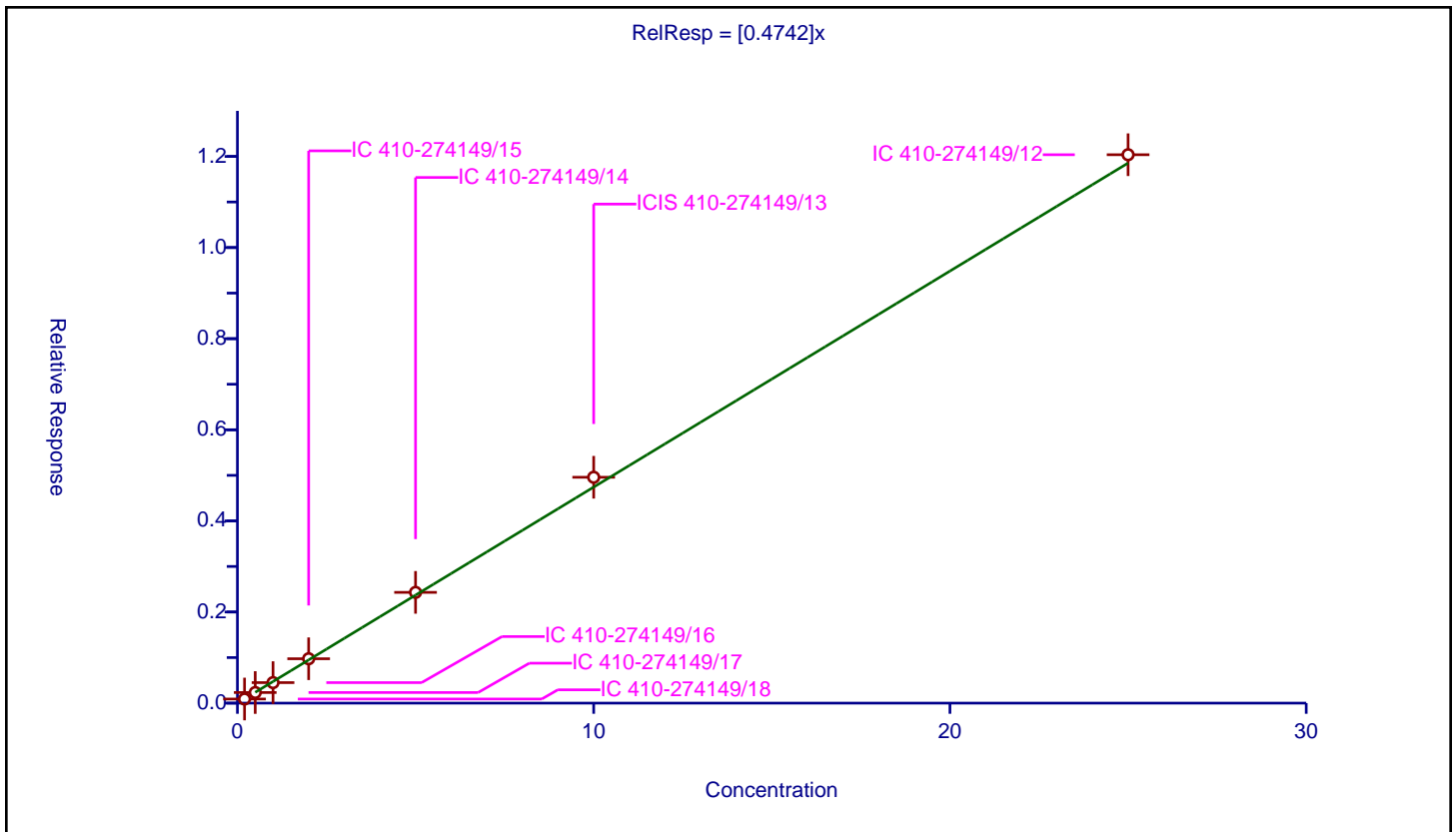
/ 1,1,1-Trichloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4742

Error Coefficients	
Standard Error:	1150000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.090443	10.0	2085513.0	0.452215	Y
2	IC 410-274149/17	0.5	0.233051	10.0	2031490.0	0.466101	Y
3	IC 410-274149/16	1.0	0.450392	10.0	2037557.0	0.450392	Y
4	IC 410-274149/15	2.0	0.97425	10.0	2031307.0	0.487125	Y
5	IC 410-274149/14	5.0	2.430897	10.0	2106074.0	0.486179	Y
6	ICIS 410-274149/13	10.0	4.958079	10.0	2081655.0	0.495808	Y
7	IC 410-274149/12	25.0	12.037982	10.0	2132698.0	0.481519	Y



**Calibration**

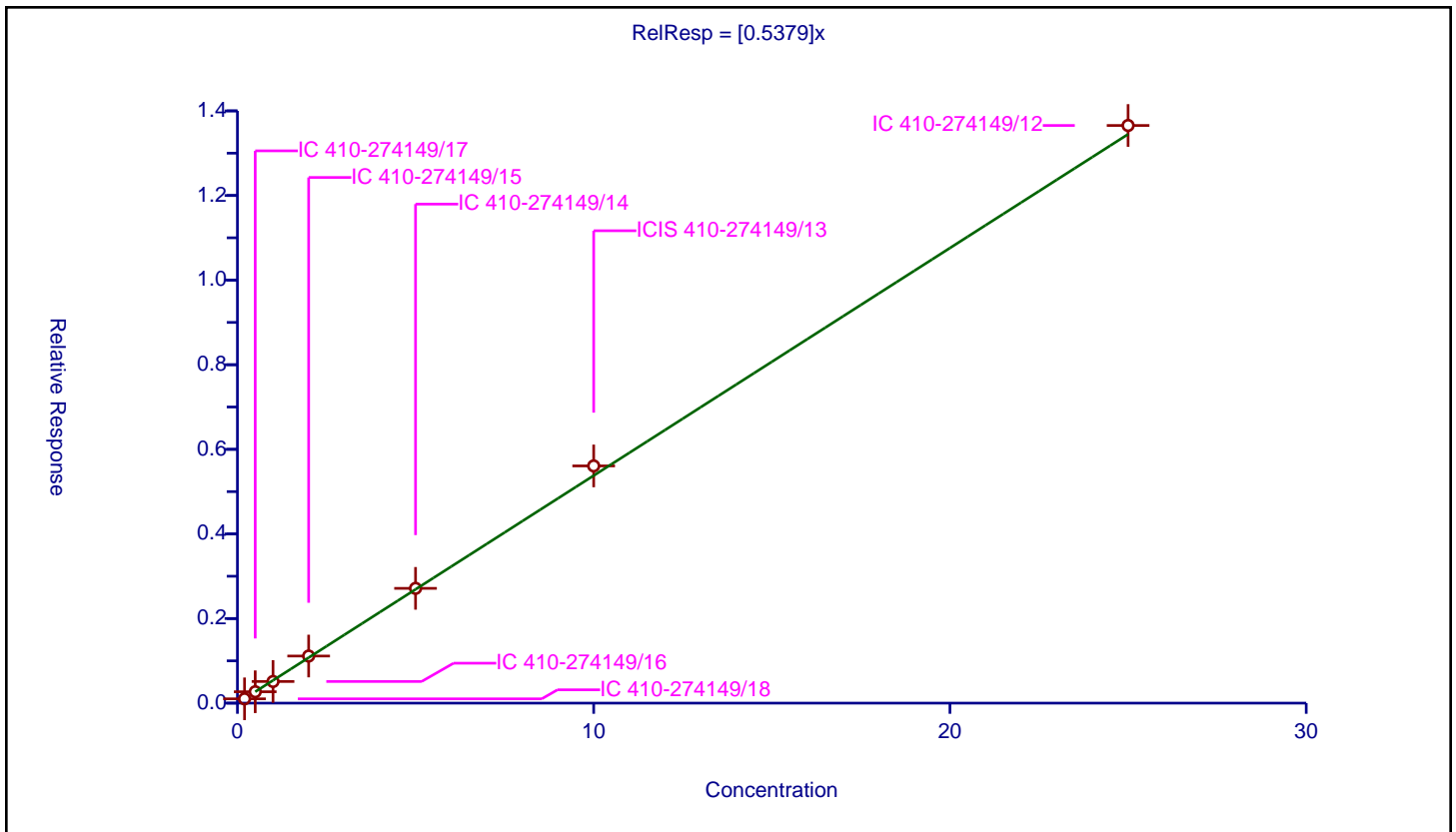
/ Cyclohexane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5379

Error Coefficients	
Standard Error:	1310000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.101879	10.0	2085513.0	0.509395	Y
2	IC 410-274149/17	0.5	0.269014	10.0	2031490.0	0.538029	Y
3	IC 410-274149/16	1.0	0.511667	10.0	2037557.0	0.511667	Y
4	IC 410-274149/15	2.0	1.113529	10.0	2031307.0	0.556765	Y
5	IC 410-274149/14	5.0	2.7132	10.0	2106074.0	0.54264	Y
6	ICIS 410-274149/13	10.0	5.607764	10.0	2081655.0	0.560776	Y
7	IC 410-274149/12	25.0	13.654831	10.0	2132698.0	0.546193	Y





Calibration

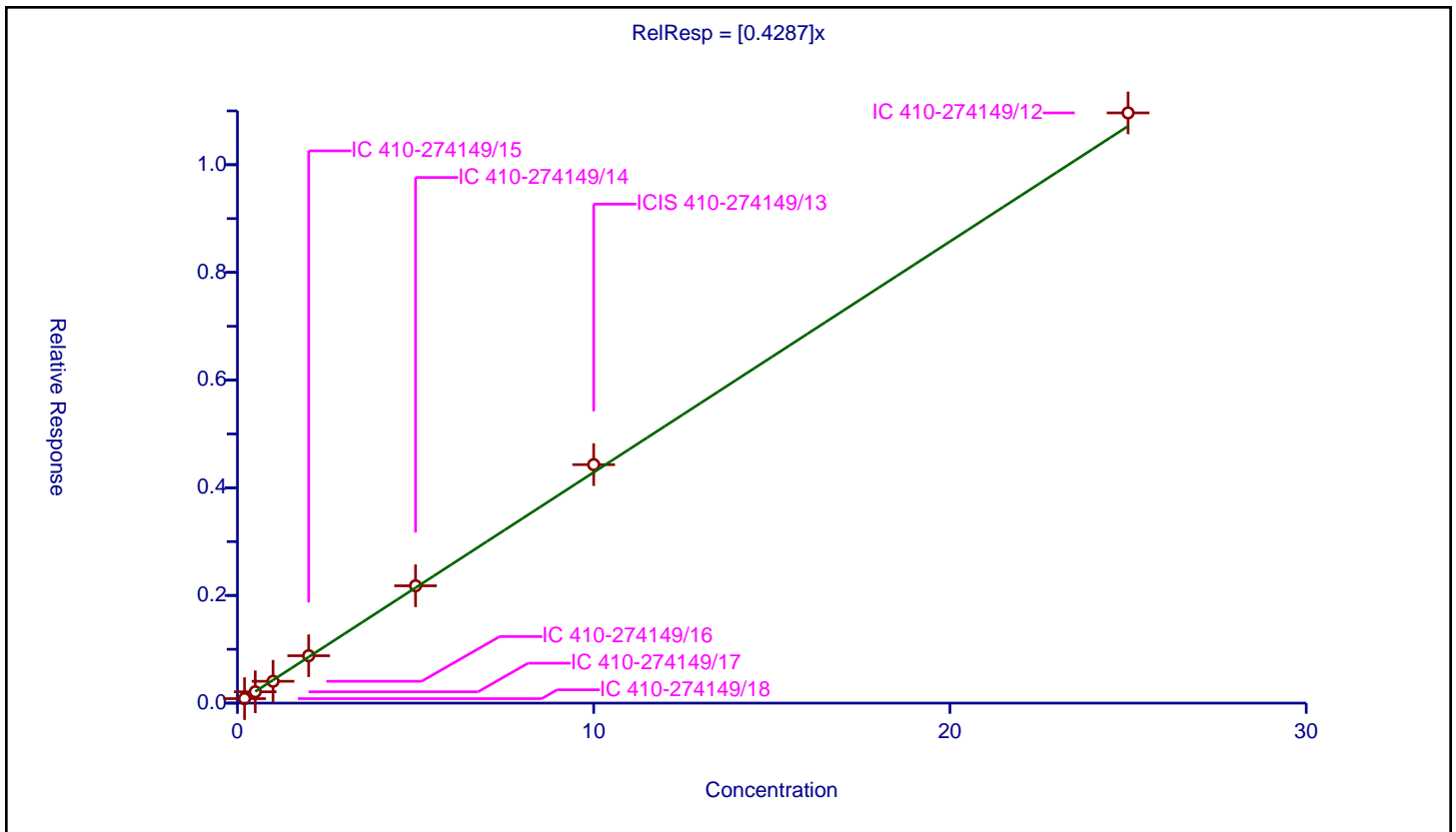
/ 1,1-Dichloropropene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4287

Error Coefficients	
Standard Error:	1050000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.083337	10.0	2085513.0	0.416684	Y
2	IC 410-274149/17	0.5	0.210368	10.0	2031490.0	0.420736	Y
3	IC 410-274149/16	1.0	0.405903	10.0	2037557.0	0.405903	Y
4	IC 410-274149/15	2.0	0.880143	10.0	2031307.0	0.440071	Y
5	IC 410-274149/14	5.0	2.17943	10.0	2106074.0	0.435886	Y
6	ICIS 410-274149/13	10.0	4.429485	10.0	2081655.0	0.442949	Y
7	IC 410-274149/12	25.0	10.962823	10.0	2132698.0	0.438513	Y



**Calibration**

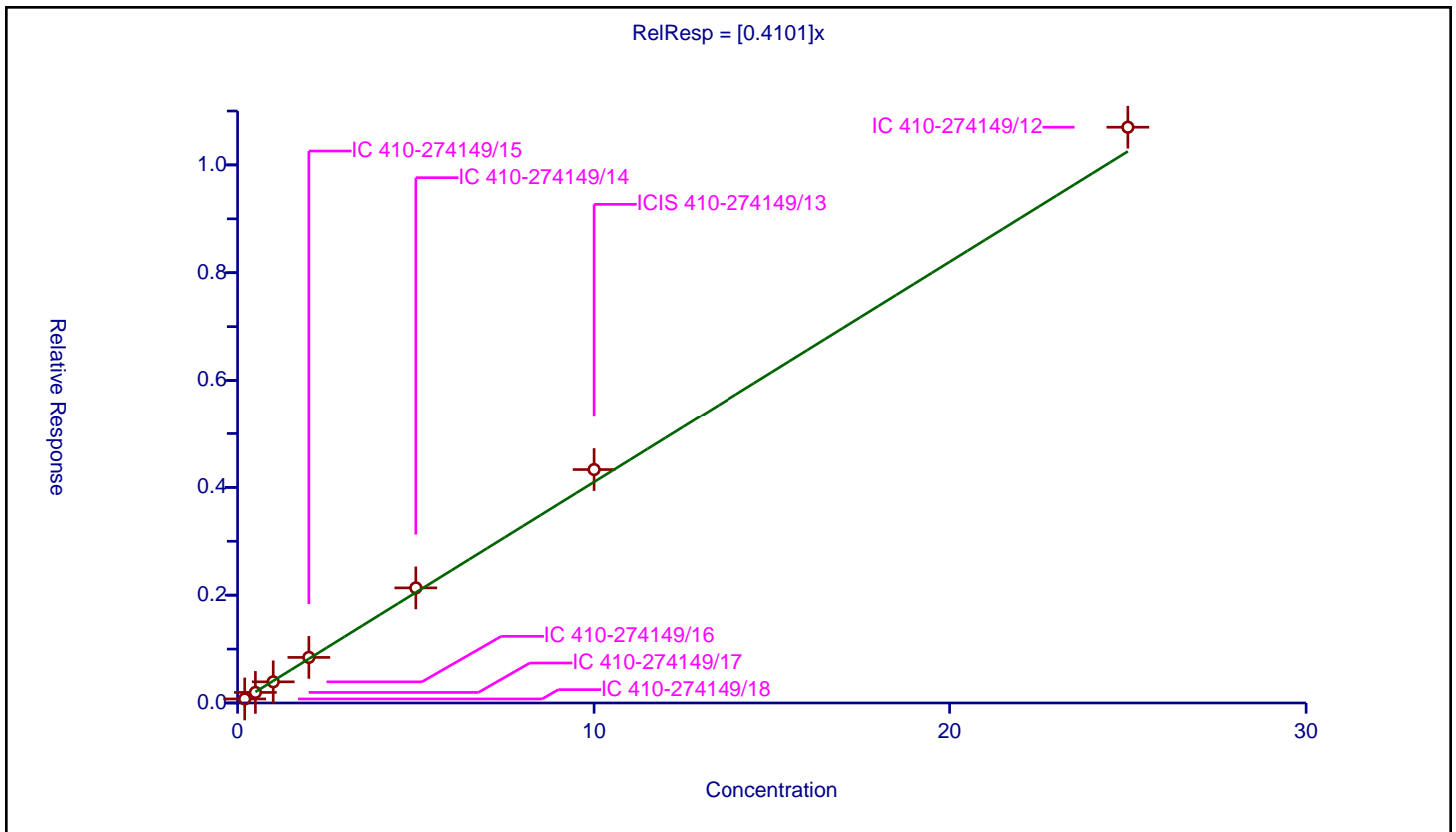
**/ Carbon tetrachloride**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4101

Error Coefficients	
Standard Error:	1020000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.074984	10.0	2085513.0	0.37492	Y
2	IC 410-274149/17	0.5	0.195994	10.0	2031490.0	0.391988	Y
3	IC 410-274149/16	1.0	0.392563	10.0	2037557.0	0.392563	Y
4	IC 410-274149/15	2.0	0.84553	10.0	2031307.0	0.422765	Y
5	IC 410-274149/14	5.0	2.135447	10.0	2106074.0	0.427089	Y
6	ICIS 410-274149/13	10.0	4.330689	10.0	2081655.0	0.433069	Y
7	IC 410-274149/12	25.0	10.699626	10.0	2132698.0	0.427985	Y



**Calibration**

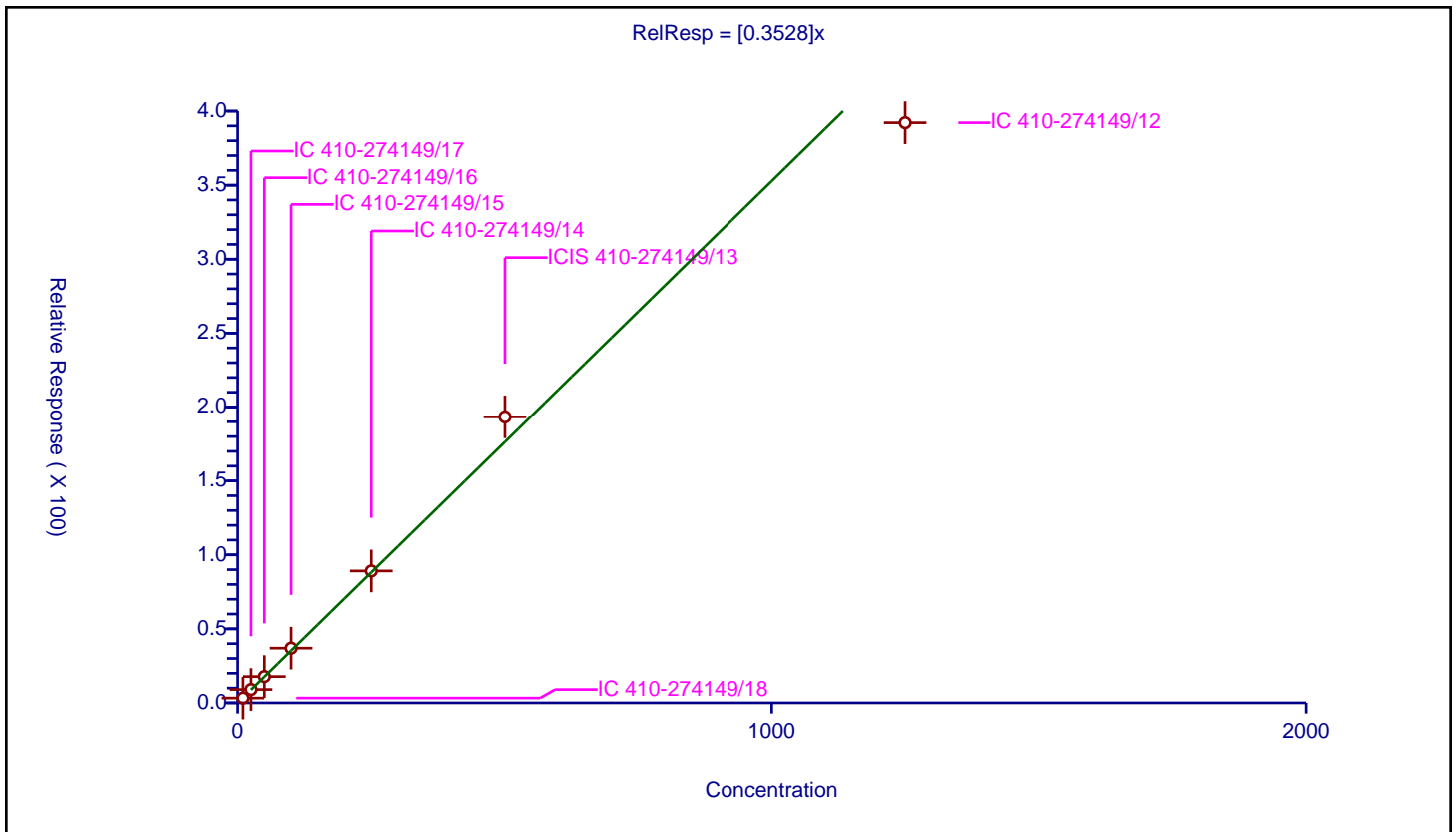
/ Isobutyl alcohol

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3528

Error Coefficients	
Standard Error:	361000
Relative Standard Error:	7.1
Correlation Coefficient:	0.983
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	10.0	3.268713	50.0	127772.0	0.326871	Y
2	IC 410-274149/17	25.0	9.026165	50.0	81790.0	0.361047	Y
3	IC 410-274149/16	50.0	17.771576	50.0	87066.0	0.355432	Y
4	IC 410-274149/15	100.0	36.952806	50.0	107663.0	0.369528	Y
5	IC 410-274149/14	250.0	89.120066	50.0	120975.0	0.35648	Y
6	ICIS 410-274149/13	500.0	193.334813	50.0	101370.0	0.38667	Y
7	IC 410-274149/12	1250.0	392.176294	50.0	96770.0	0.313741	Y



**Calibration**

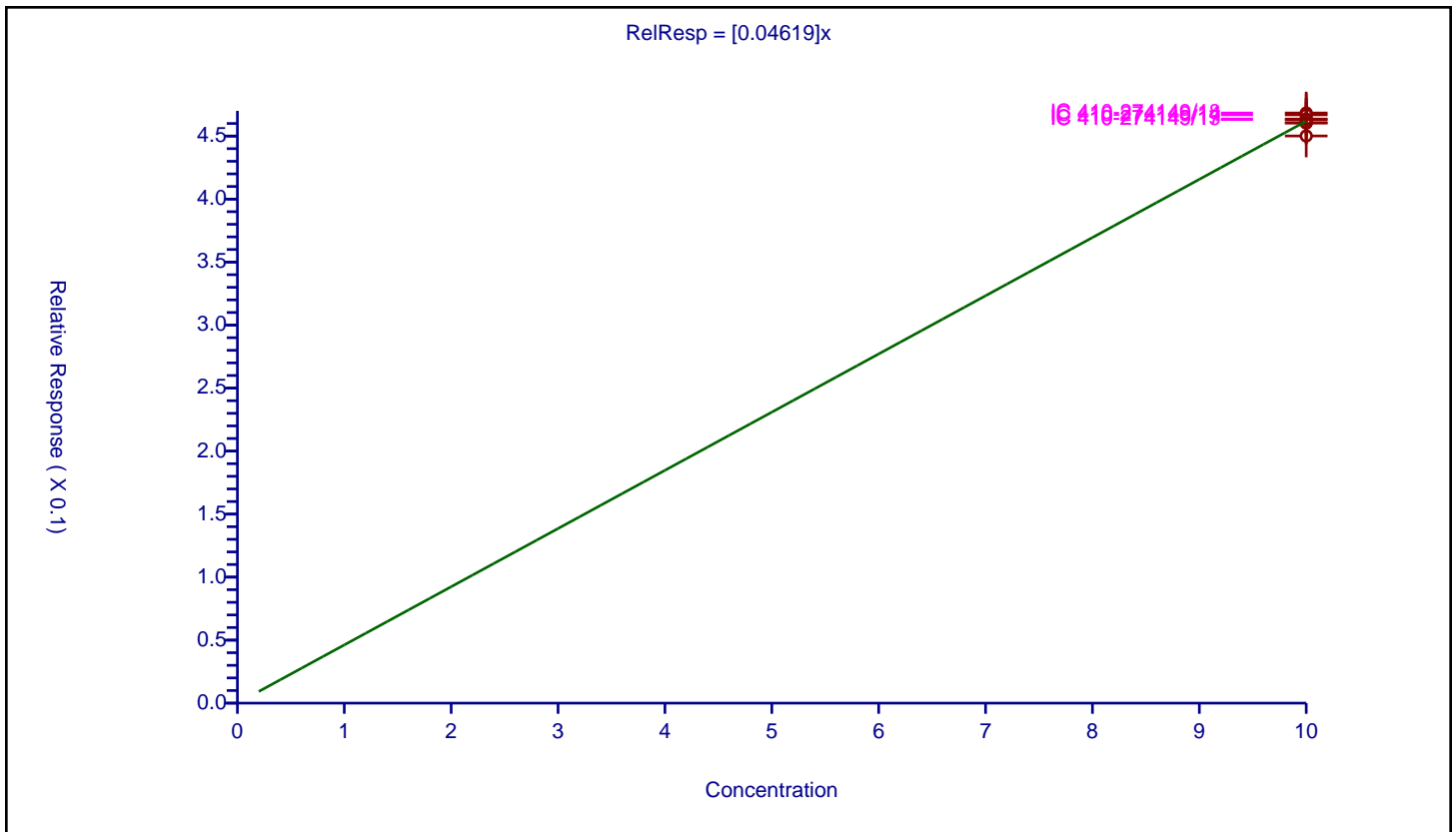
/ 1,2-Dichloroethane-d4 (Surr)

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.04619

Error Coefficients	
Standard Error:	103000
Relative Standard Error:	1.3
Correlation Coefficient:	0
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/12	10.0	0.460346	10.0	2132698.0	0.046035	Y
2	ICIS 410-274149/13	10.0	0.460658	10.0	2081655.0	0.046066	Y
3	IC 410-274149/14	10.0	0.466878	10.0	2106074.0	0.046688	Y
4	IC 410-274149/15	10.0	0.463539	10.0	2031307.0	0.046354	Y
5	IC 410-274149/16	10.0	0.450093	10.0	2037557.0	0.045009	Y
6	IC 410-274149/17	10.0	0.463167	10.0	2031490.0	0.046317	Y
7	IC 410-274149/18	10.0	0.468312	10.0	2085513.0	0.046831	Y



Calibration

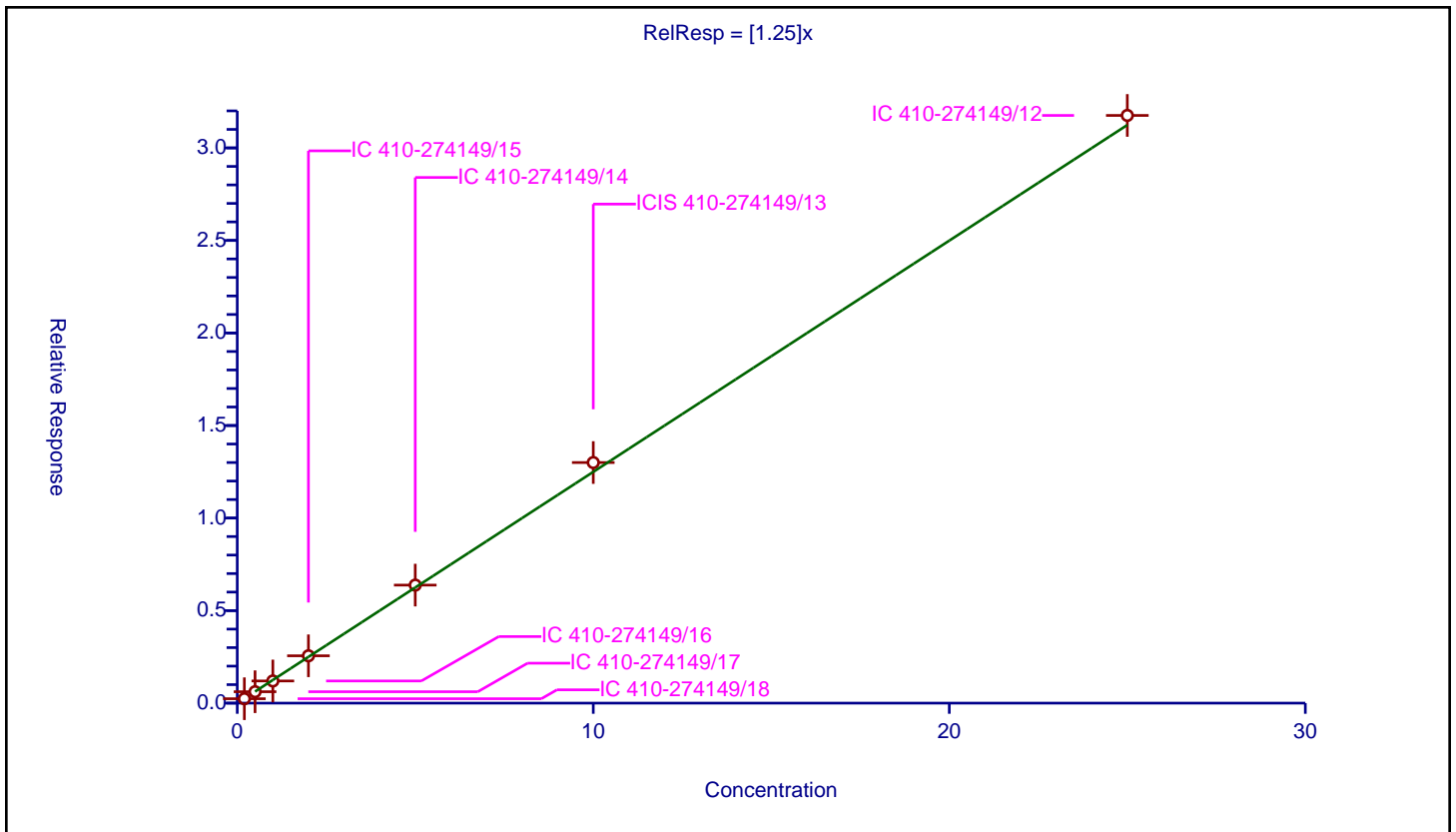
/ Benzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.25

Error Coefficients	
Standard Error:	3040000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.237946	10.0	2085513.0	1.189731	Y
2	IC 410-274149/17	0.5	0.617291	10.0	2031490.0	1.234582	Y
3	IC 410-274149/16	1.0	1.198038	10.0	2037557.0	1.198038	Y
4	IC 410-274149/15	2.0	2.557349	10.0	2031307.0	1.278674	Y
5	IC 410-274149/14	5.0	6.377535	10.0	2106074.0	1.275507	Y
6	ICIS 410-274149/13	10.0	12.999162	10.0	2081655.0	1.299916	Y
7	IC 410-274149/12	25.0	31.754051	10.0	2132698.0	1.270162	Y



Calibration

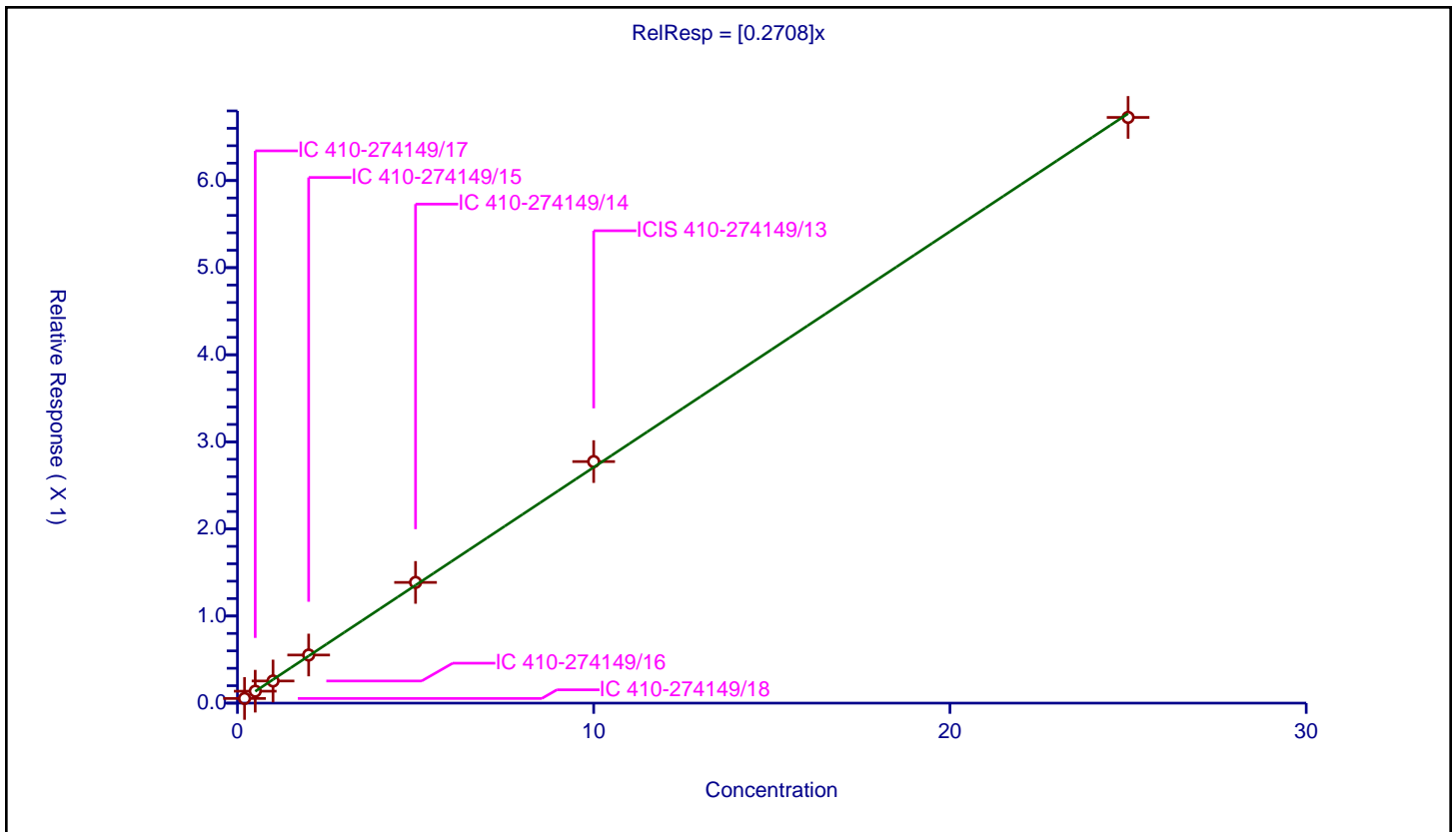
/ 1,2-Dichloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2708

Error Coefficients	
Standard Error:	644000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.053387	10.0	2085513.0	0.266937	Y
2	IC 410-274149/17	0.5	0.137116	10.0	2031490.0	0.274232	Y
3	IC 410-274149/16	1.0	0.254309	10.0	2037557.0	0.254309	Y
4	IC 410-274149/15	2.0	0.552472	10.0	2031307.0	0.276236	Y
5	IC 410-274149/14	5.0	1.3862	10.0	2106074.0	0.27724	Y
6	ICIS 410-274149/13	10.0	2.773356	10.0	2081655.0	0.277336	Y
7	IC 410-274149/12	25.0	6.725092	10.0	2132698.0	0.269004	Y



Calibration

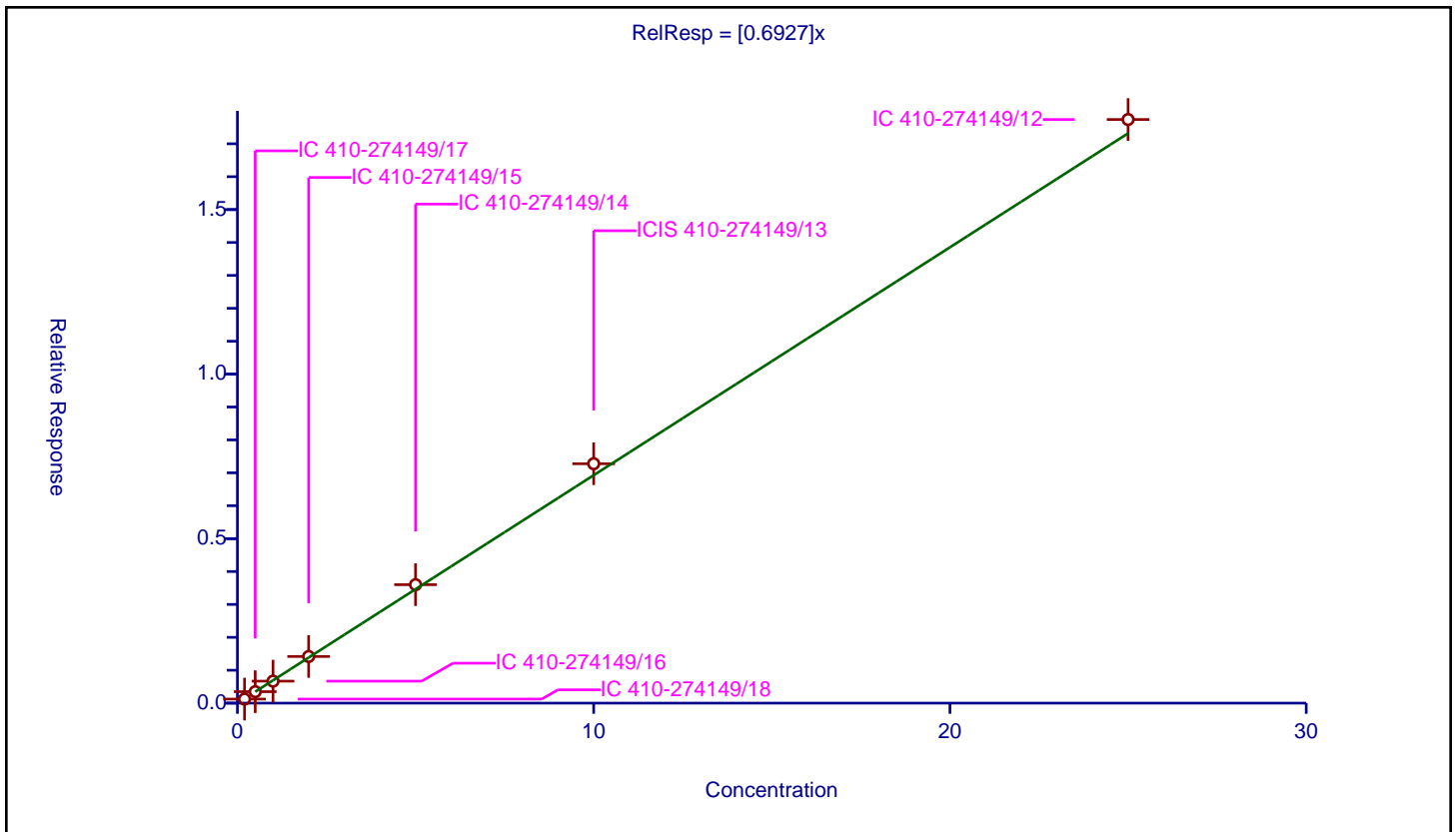
/ Tert-amyl methyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6927

Error Coefficients	
Standard Error:	1700000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.123456	10.0	2085513.0	0.617282	Y
2	IC 410-274149/17	0.5	0.348646	10.0	2031490.0	0.697291	Y
3	IC 410-274149/16	1.0	0.668261	10.0	2037557.0	0.668261	Y
4	IC 410-274149/15	2.0	1.41755	10.0	2031307.0	0.708775	Y
5	IC 410-274149/14	5.0	3.600424	10.0	2106074.0	0.720085	Y
6	ICIS 410-274149/13	10.0	7.27635	10.0	2081655.0	0.727635	Y
7	IC 410-274149/12	25.0	17.737481	10.0	2132698.0	0.709499	Y



Calibration

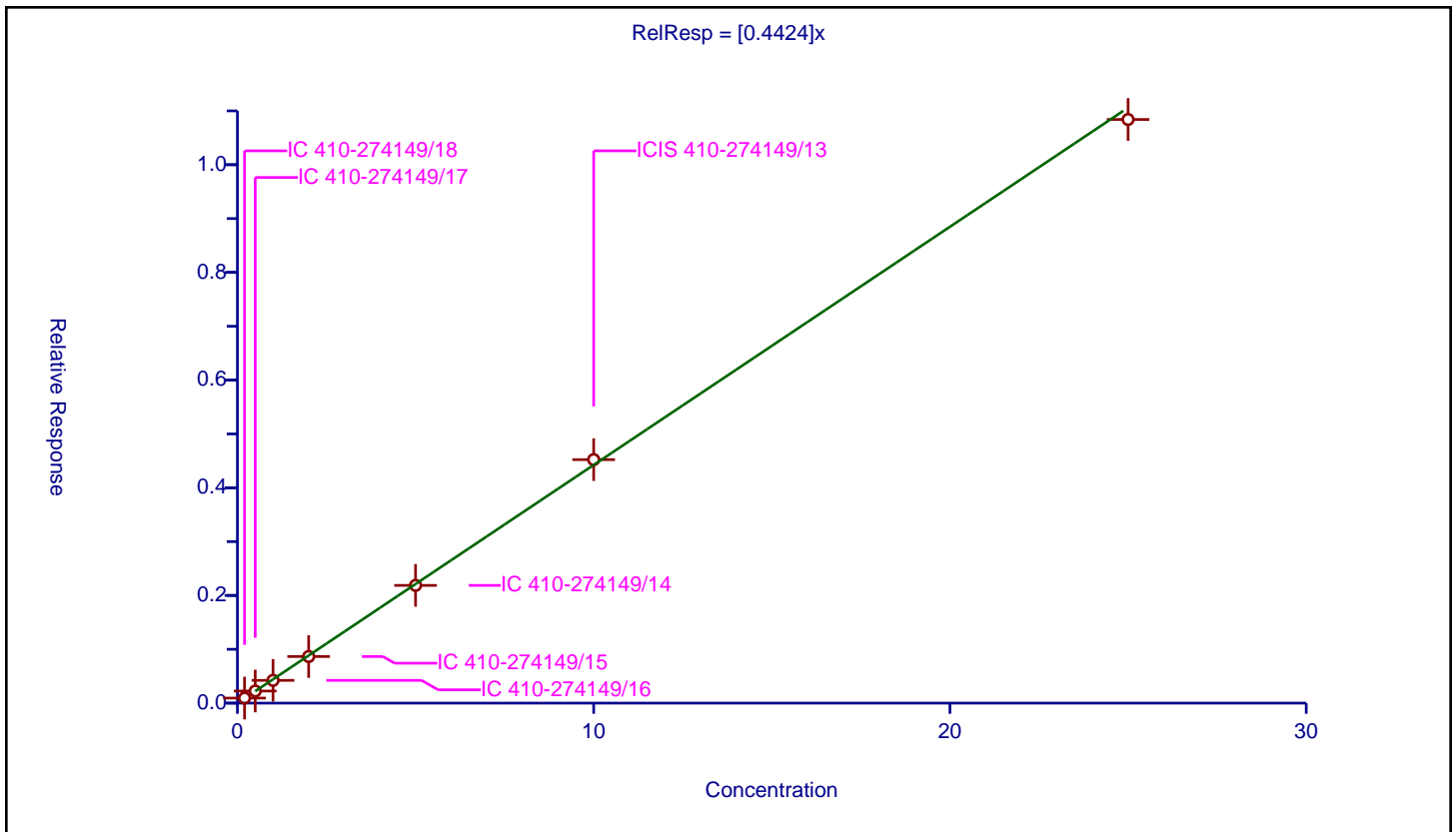
/ n-Heptane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4424

Error Coefficients	
Standard Error:	1040000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.093632	10.0	2085513.0	0.468158	Y
2	IC 410-274149/17	0.5	0.224909	10.0	2031490.0	0.449818	Y
3	IC 410-274149/16	1.0	0.422619	10.0	2037557.0	0.422619	Y
4	IC 410-274149/15	2.0	0.865566	10.0	2031307.0	0.432783	Y
5	IC 410-274149/14	5.0	2.186917	10.0	2106074.0	0.437383	Y
6	ICIS 410-274149/13	10.0	4.522709	10.0	2081655.0	0.452271	Y
7	IC 410-274149/12	25.0	10.840311	10.0	2132698.0	0.433612	Y





**Calibration**

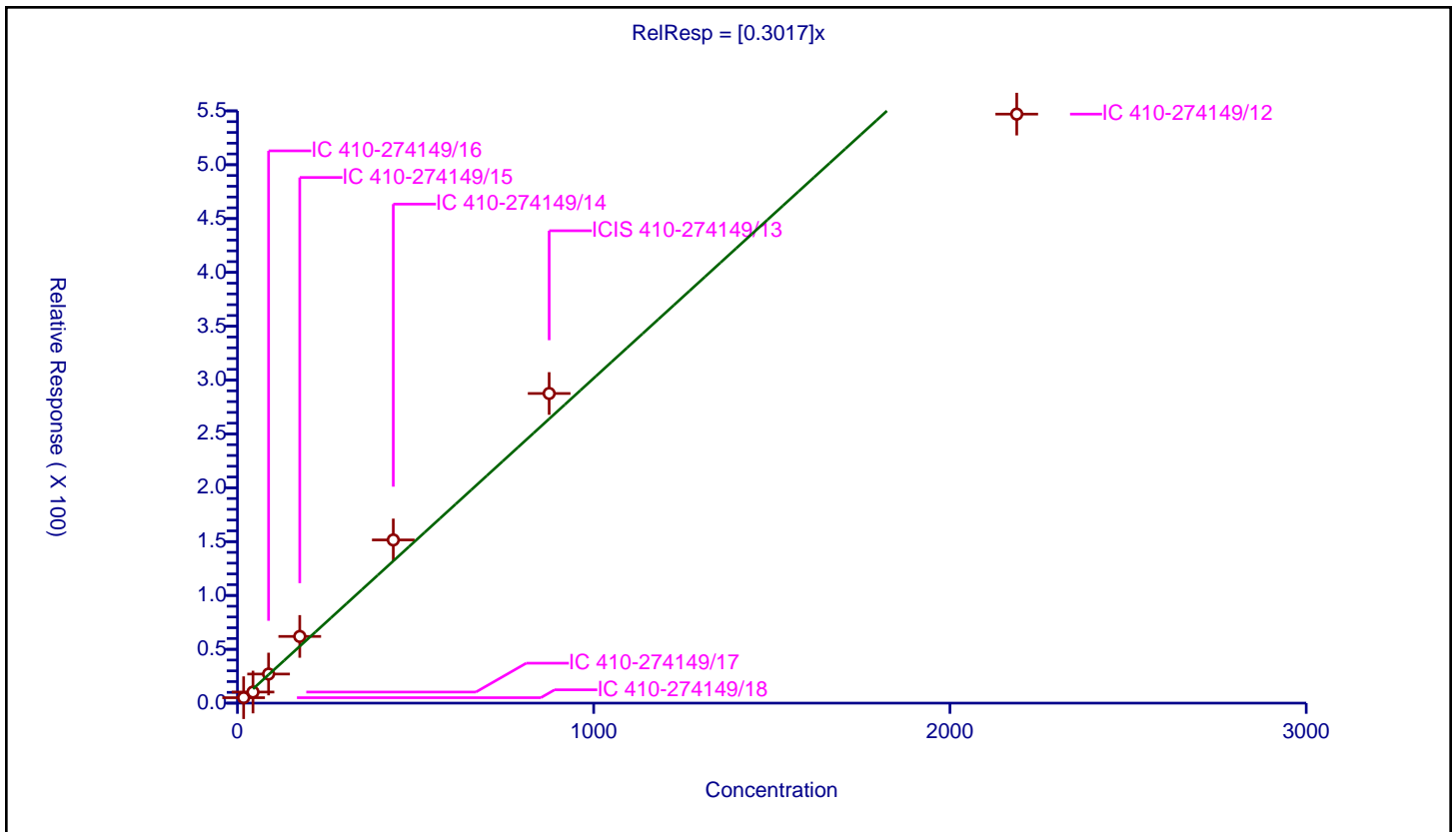
**/ n-Butanol**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3017

Error Coefficients	
Standard Error:	519000
Relative Standard Error:	15.3
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.971

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	17.5	5.046098	50.0	127772.0	0.288348	Y
2	IC 410-274149/17	43.75	10.301993	50.0	81790.0	0.235474	Y
3	IC 410-274149/16	87.5	27.034089	50.0	87066.0	0.308961	Y
4	IC 410-274149/15	175.0	61.933998	50.0	107663.0	0.353909	Y
5	IC 410-274149/14	437.5	151.551974	50.0	120975.0	0.346405	Y
6	ICIS 410-274149/13	875.0	287.572753	50.0	101370.0	0.328655	Y
7	IC 410-274149/12	2187.5	547.018187	50.0	96770.0	0.250065	Y



Calibration

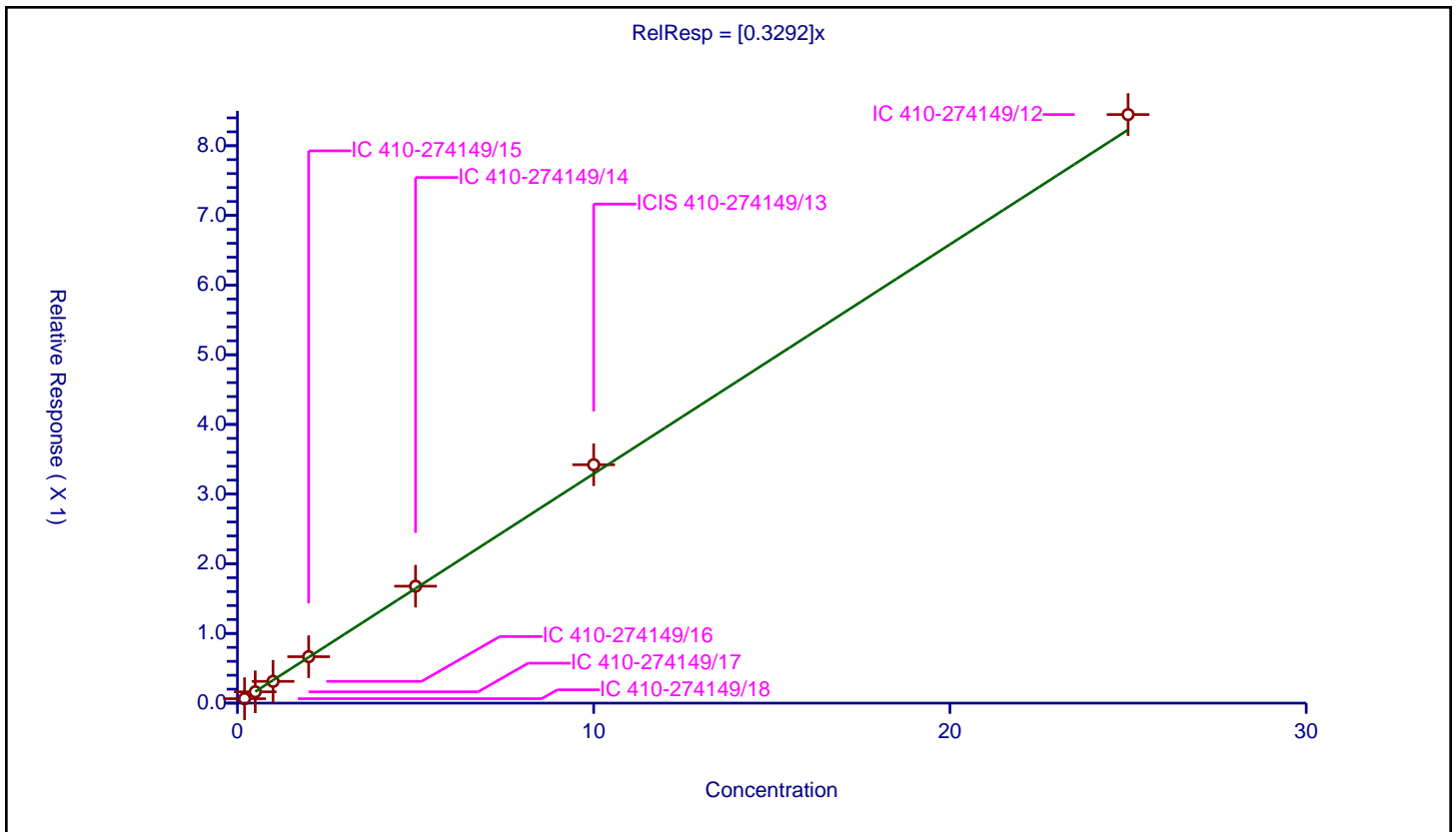
/ Trichloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3292

Error Coefficients	
Standard Error:	806000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.063649	10.0	2085513.0	0.318243	Y
2	IC 410-274149/17	0.5	0.162324	10.0	2031490.0	0.324648	Y
3	IC 410-274149/16	1.0	0.312408	10.0	2037557.0	0.312408	Y
4	IC 410-274149/15	2.0	0.666399	10.0	2031307.0	0.333199	Y
5	IC 410-274149/14	5.0	1.678265	10.0	2106074.0	0.335653	Y
6	ICIS 410-274149/13	10.0	3.42148	10.0	2081655.0	0.342148	Y
7	IC 410-274149/12	25.0	8.447713	10.0	2132698.0	0.337909	Y



Calibration

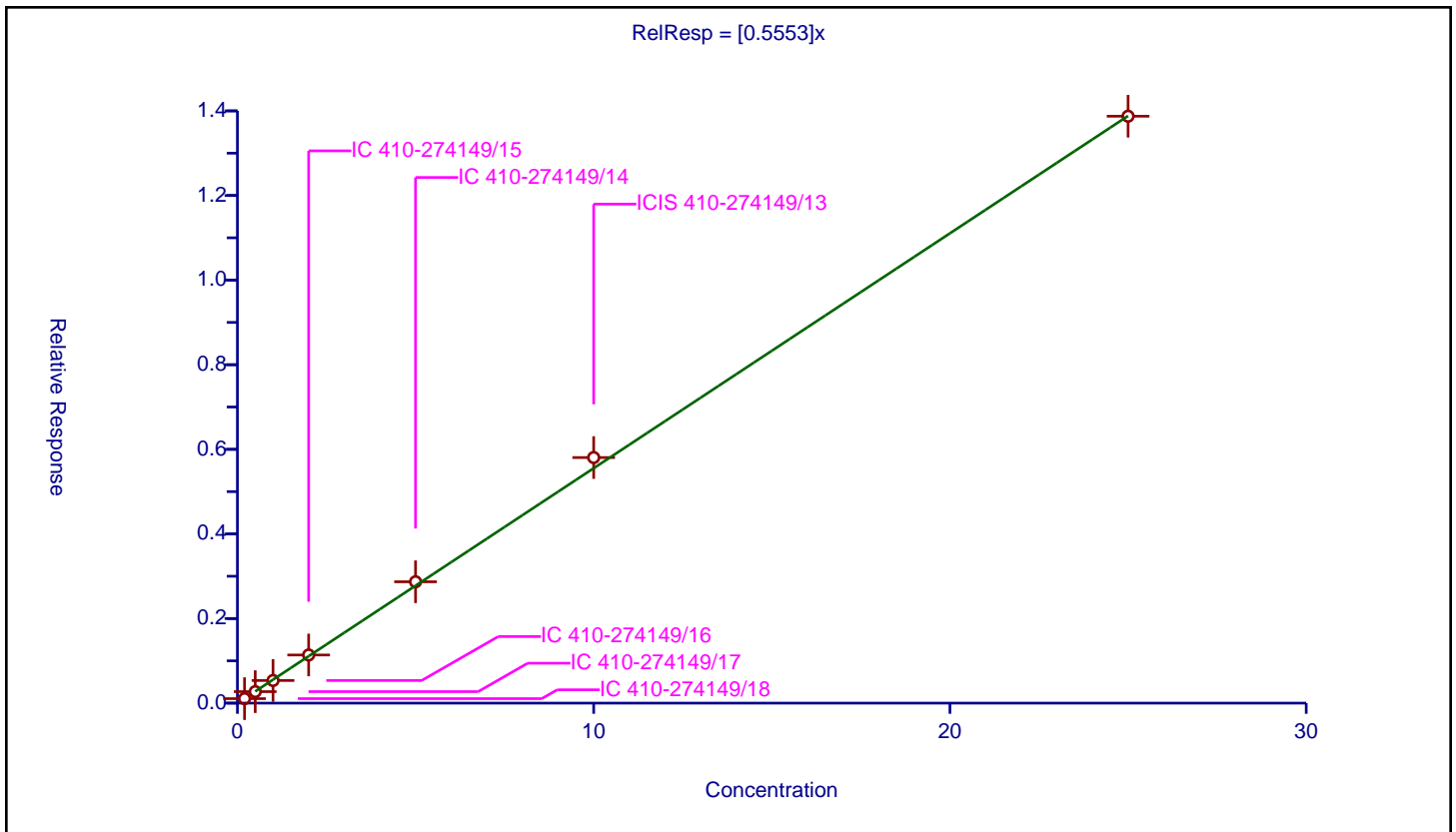
/ Methylcyclohexane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5553

Error Coefficients	
Standard Error:	1330000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.10596	10.0	2085513.0	0.529798	Y
2	IC 410-274149/17	0.5	0.271899	10.0	2031490.0	0.543798	Y
3	IC 410-274149/16	1.0	0.535033	10.0	2037557.0	0.535033	Y
4	IC 410-274149/15	2.0	1.138179	10.0	2031307.0	0.569089	Y
5	IC 410-274149/14	5.0	2.868859	10.0	2106074.0	0.573772	Y
6	ICIS 410-274149/13	10.0	5.804929	10.0	2081655.0	0.580493	Y
7	IC 410-274149/12	25.0	13.873854	10.0	2132698.0	0.554954	Y



Calibration

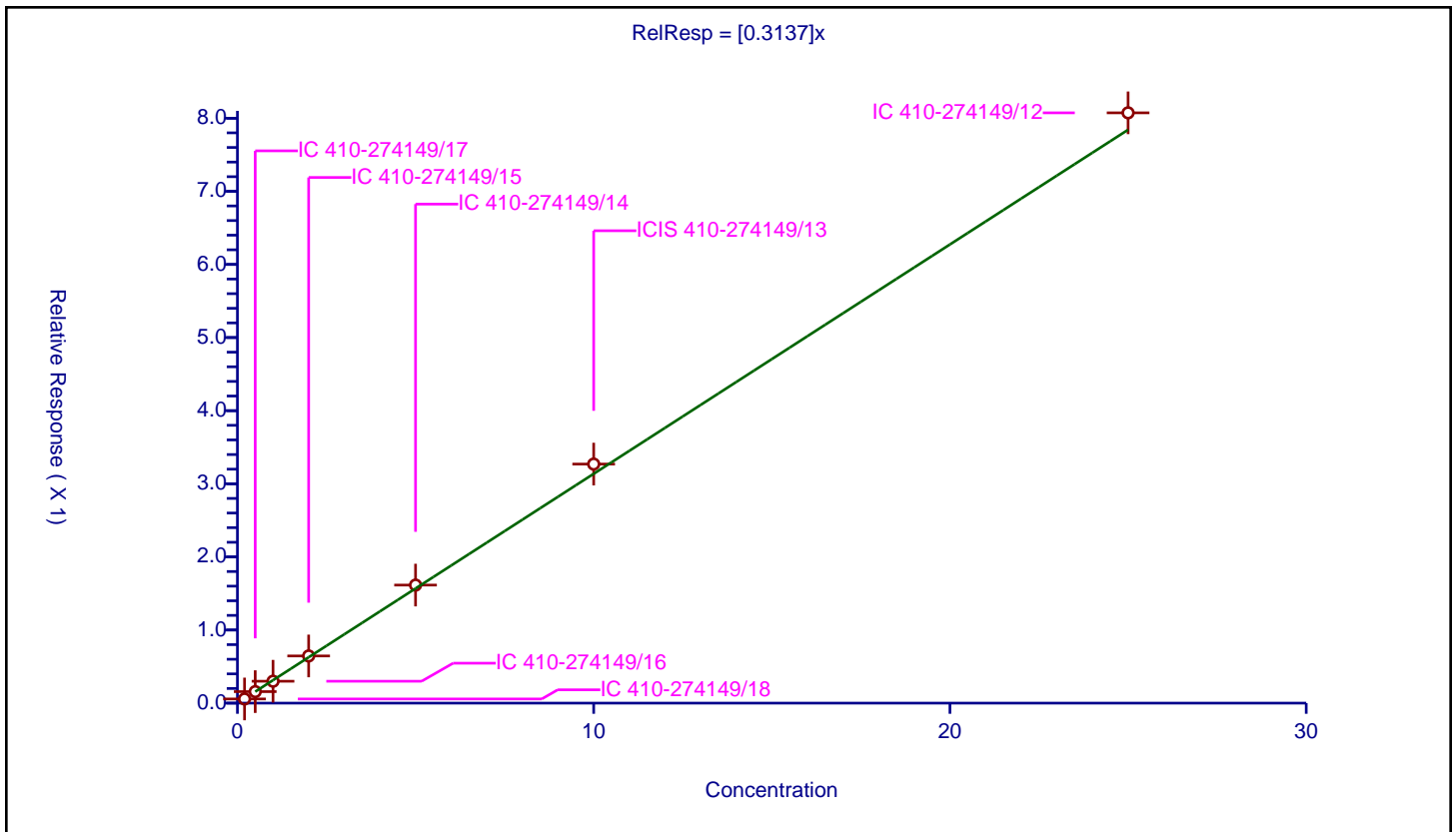
/ 1,2-Dichloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3137

Error Coefficients	
Standard Error:	771000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.057175	10.0	2085513.0	0.285877	Y
2	IC 410-274149/17	0.5	0.157397	10.0	2031490.0	0.314794	Y
3	IC 410-274149/16	1.0	0.299511	10.0	2037557.0	0.299511	Y
4	IC 410-274149/15	2.0	0.645397	10.0	2031307.0	0.322699	Y
5	IC 410-274149/14	5.0	1.614502	10.0	2106074.0	0.3229	Y
6	ICIS 410-274149/13	10.0	3.269485	10.0	2081655.0	0.326949	Y
7	IC 410-274149/12	25.0	8.073347	10.0	2132698.0	0.322934	Y



Calibration

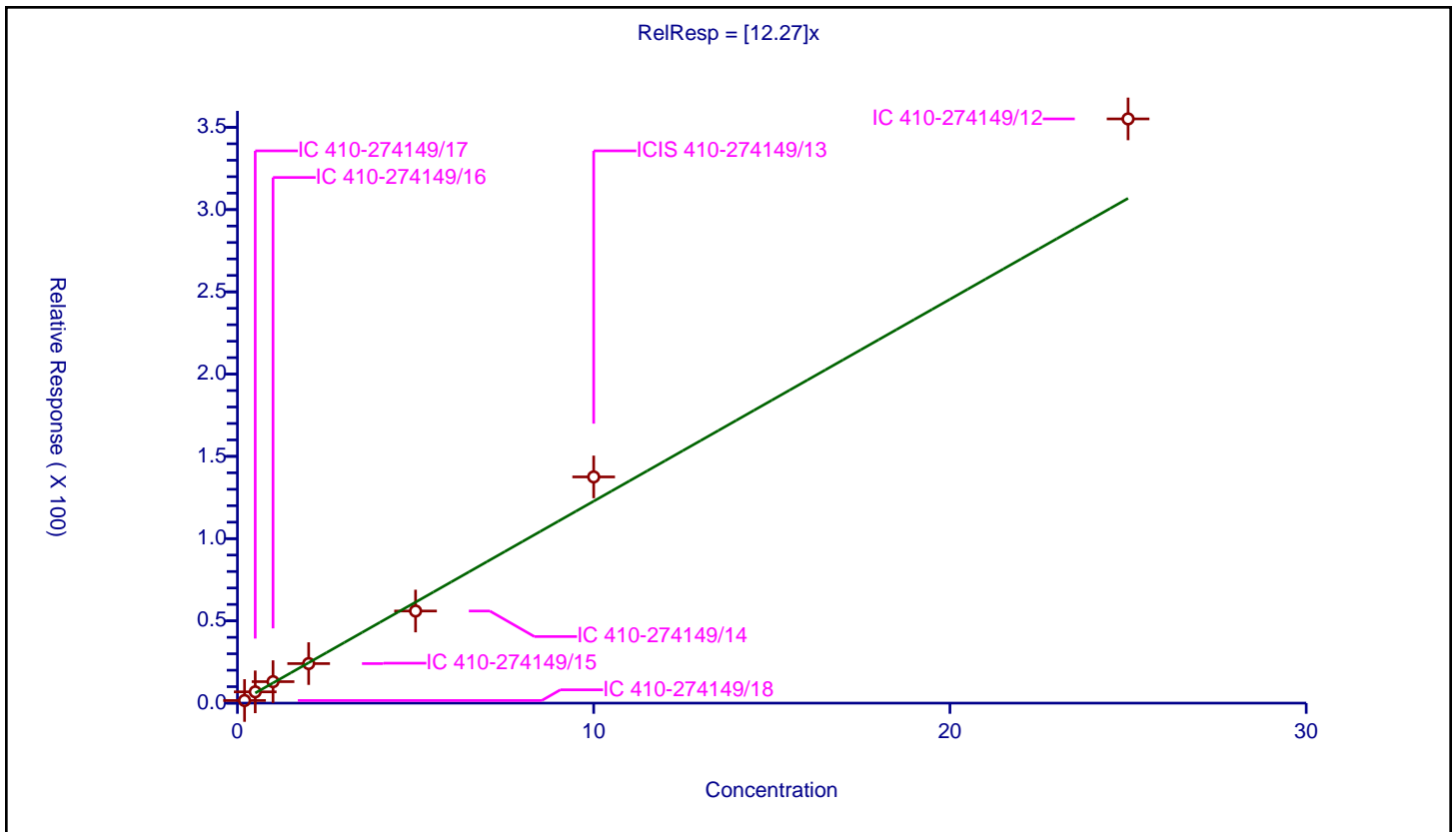
/ Methyl methacrylate

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	12.27

Error Coefficients	
Standard Error:	309000
Relative Standard Error:	17.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	1.593463	50.0	127772.0	7.967317	Y
2	IC 410-274149/17	0.5	6.862697	50.0	81790.0	13.725394	Y
3	IC 410-274149/16	1.0	13.051019	50.0	87066.0	13.051019	Y
4	IC 410-274149/15	2.0	24.040757	50.0	107663.0	12.020378	Y
5	IC 410-274149/14	5.0	55.99256	50.0	120975.0	11.198512	Y
6	ICIS 410-274149/13	10.0	137.509125	50.0	101370.0	13.750912	Y
7	IC 410-274149/12	25.0	355.128139	50.0	96770.0	14.205126	Y



Calibration

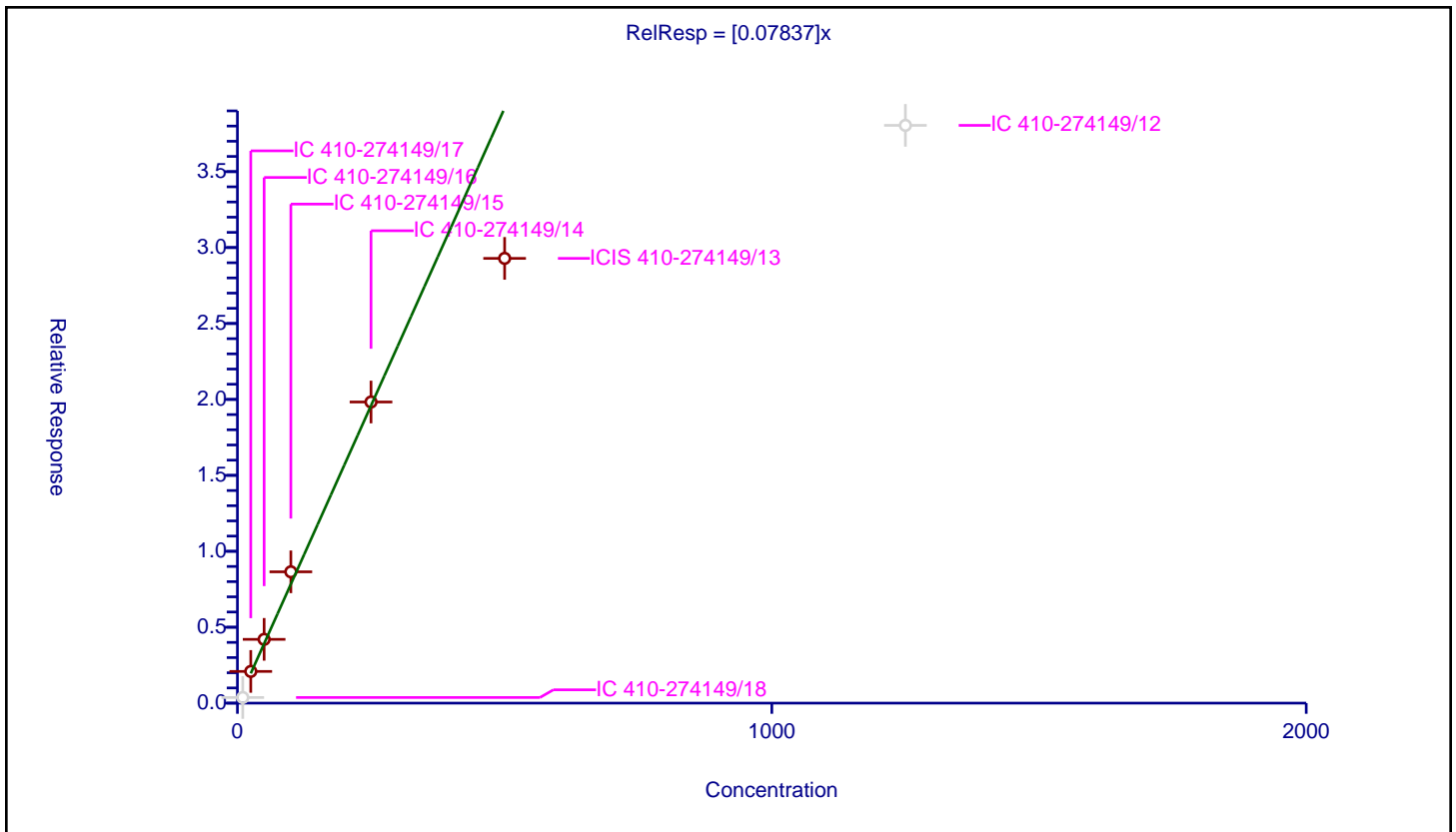
/ 1,4-Dioxane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.07837

Error Coefficients	
Standard Error:	39500
Relative Standard Error:	14.5
Correlation Coefficient:	0.905
Coefficient of Determination (Adjusted):	0.958

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	10.0	0.370582	50.0	127772.0	0.037058	N
2	IC 410-274149/17	25.0	2.087664	50.0	81790.0	0.083507	Y
3	IC 410-274149/16	50.0	4.199113	50.0	87066.0	0.083982	Y
4	IC 410-274149/15	100.0	8.648282	50.0	107663.0	0.086483	Y
5	IC 410-274149/14	250.0	19.829304	50.0	120975.0	0.079317	Y
6	ICIS 410-274149/13	500.0	29.287264	50.0	101370.0	0.058575	Y
7	IC 410-274149/12	1250.0	38.046399	50.0	96770.0	0.030437	N



**Calibration**

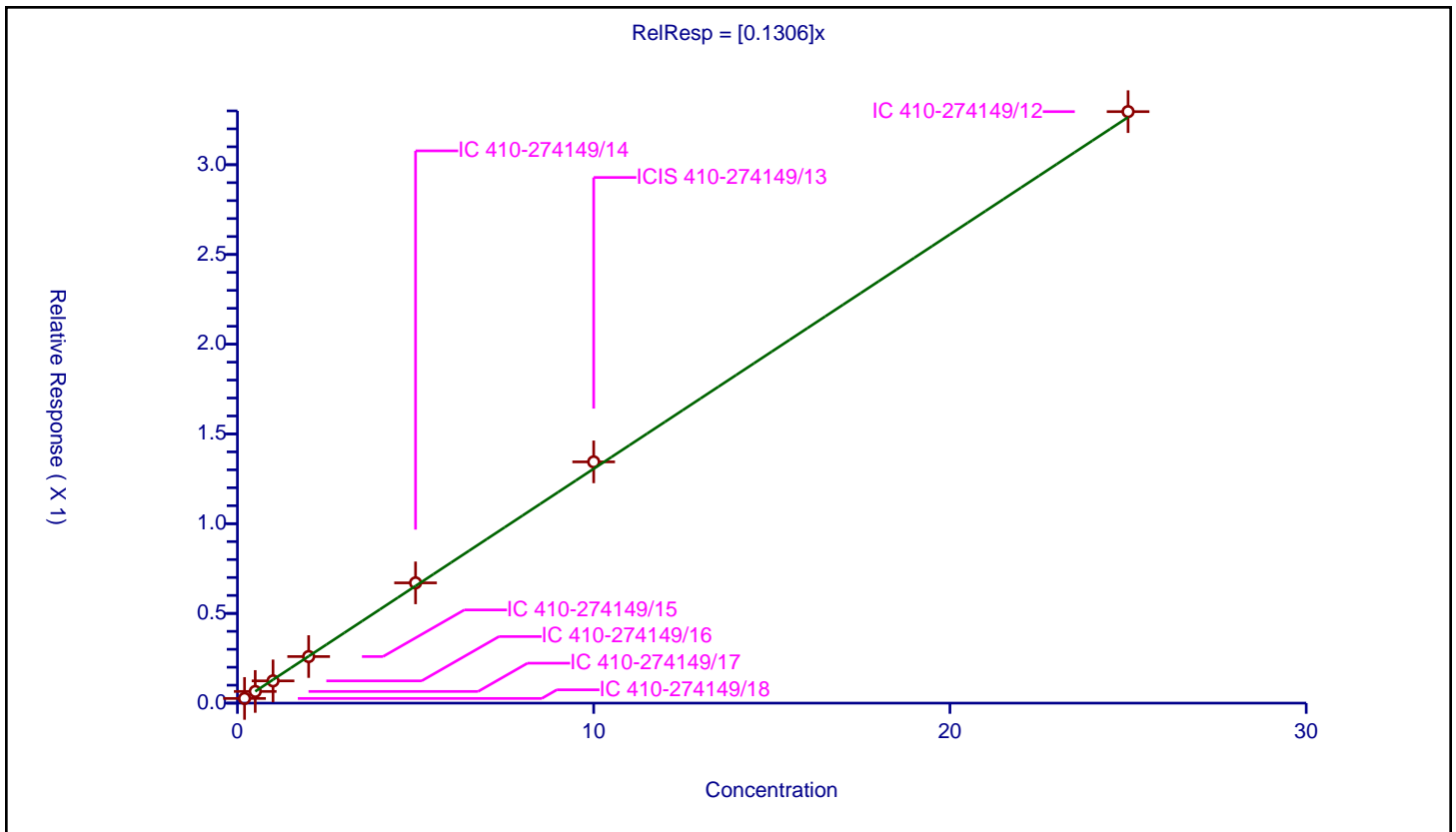
/ Dibromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1306

Error Coefficients	
Standard Error:	315000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.026013	10.0	2085513.0	0.130064	Y
2	IC 410-274149/17	0.5	0.065031	10.0	2031490.0	0.130062	Y
3	IC 410-274149/16	1.0	0.123987	10.0	2037557.0	0.123987	Y
4	IC 410-274149/15	2.0	0.259532	10.0	2031307.0	0.129766	Y
5	IC 410-274149/14	5.0	0.670152	10.0	2106074.0	0.13403	Y
6	ICIS 410-274149/13	10.0	1.344253	10.0	2081655.0	0.134425	Y
7	IC 410-274149/12	25.0	3.295882	10.0	2132698.0	0.131835	Y



**Calibration**

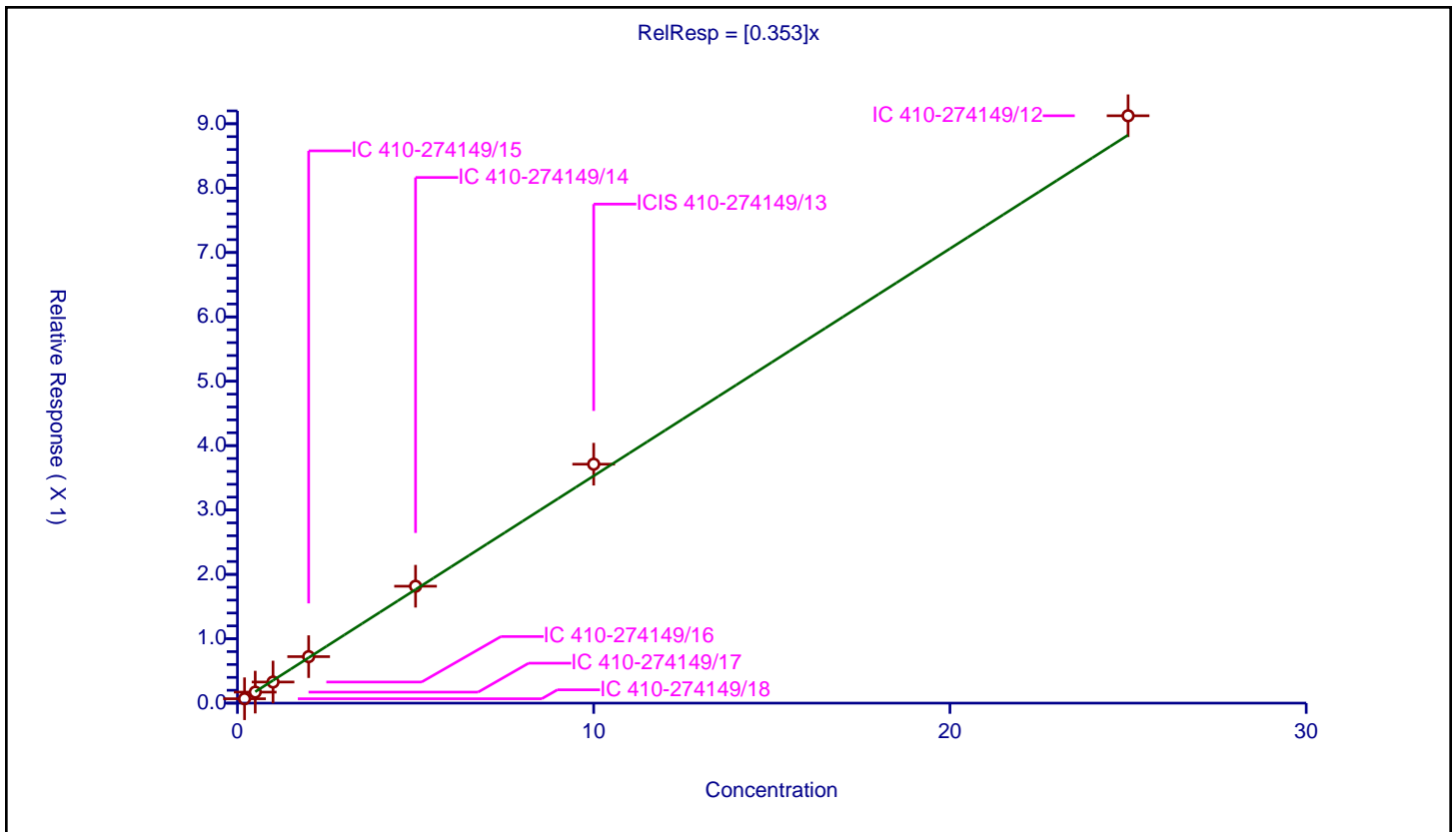
/ Dichlorobromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.353

Error Coefficients	
Standard Error:	872000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.068002	10.0	2085513.0	0.340012	Y
2	IC 410-274149/17	0.5	0.171234	10.0	2031490.0	0.342468	Y
3	IC 410-274149/16	1.0	0.32804	10.0	2037557.0	0.32804	Y
4	IC 410-274149/15	2.0	0.722092	10.0	2031307.0	0.361046	Y
5	IC 410-274149/14	5.0	1.816147	10.0	2106074.0	0.363229	Y
6	ICIS 410-274149/13	10.0	3.711926	10.0	2081655.0	0.371193	Y
7	IC 410-274149/12	25.0	9.124091	10.0	2132698.0	0.364964	Y





Calibration

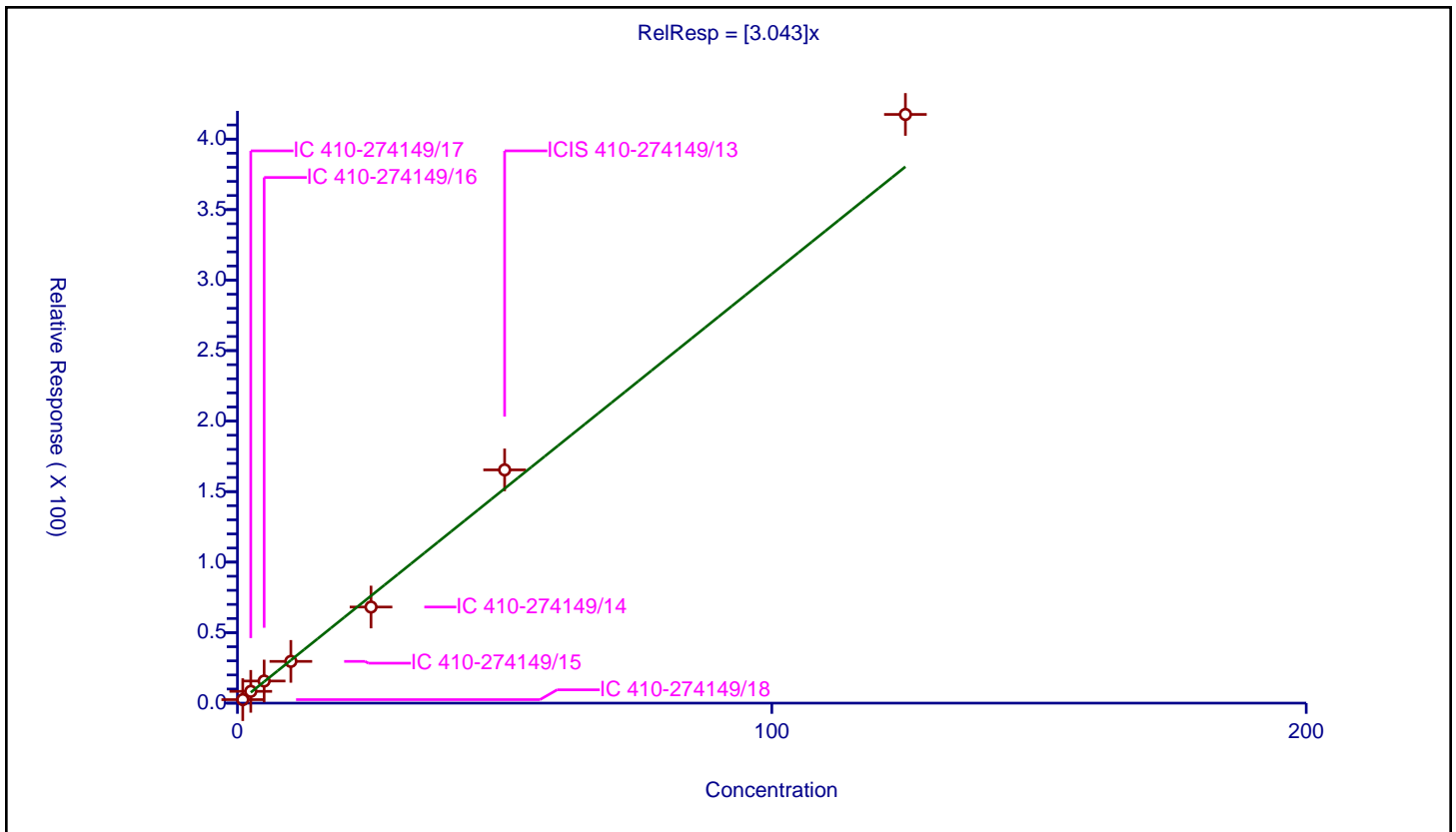
/ 2-Nitropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.043

Error Coefficients	
Standard Error:	364000
Relative Standard Error:	11.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	1.0	2.48646	50.0	127772.0	2.48646	Y
2	IC 410-274149/17	2.5	8.364103	50.0	81790.0	3.345641	Y
3	IC 410-274149/16	5.0	15.680633	50.0	87066.0	3.136127	Y
4	IC 410-274149/15	10.0	29.607665	50.0	107663.0	2.960766	Y
5	IC 410-274149/14	25.0	68.152924	50.0	120975.0	2.726117	Y
6	ICIS 410-274149/13	50.0	165.41679	50.0	101370.0	3.308336	Y
7	IC 410-274149/12	125.0	417.486308	50.0	96770.0	3.33989	Y



Calibration

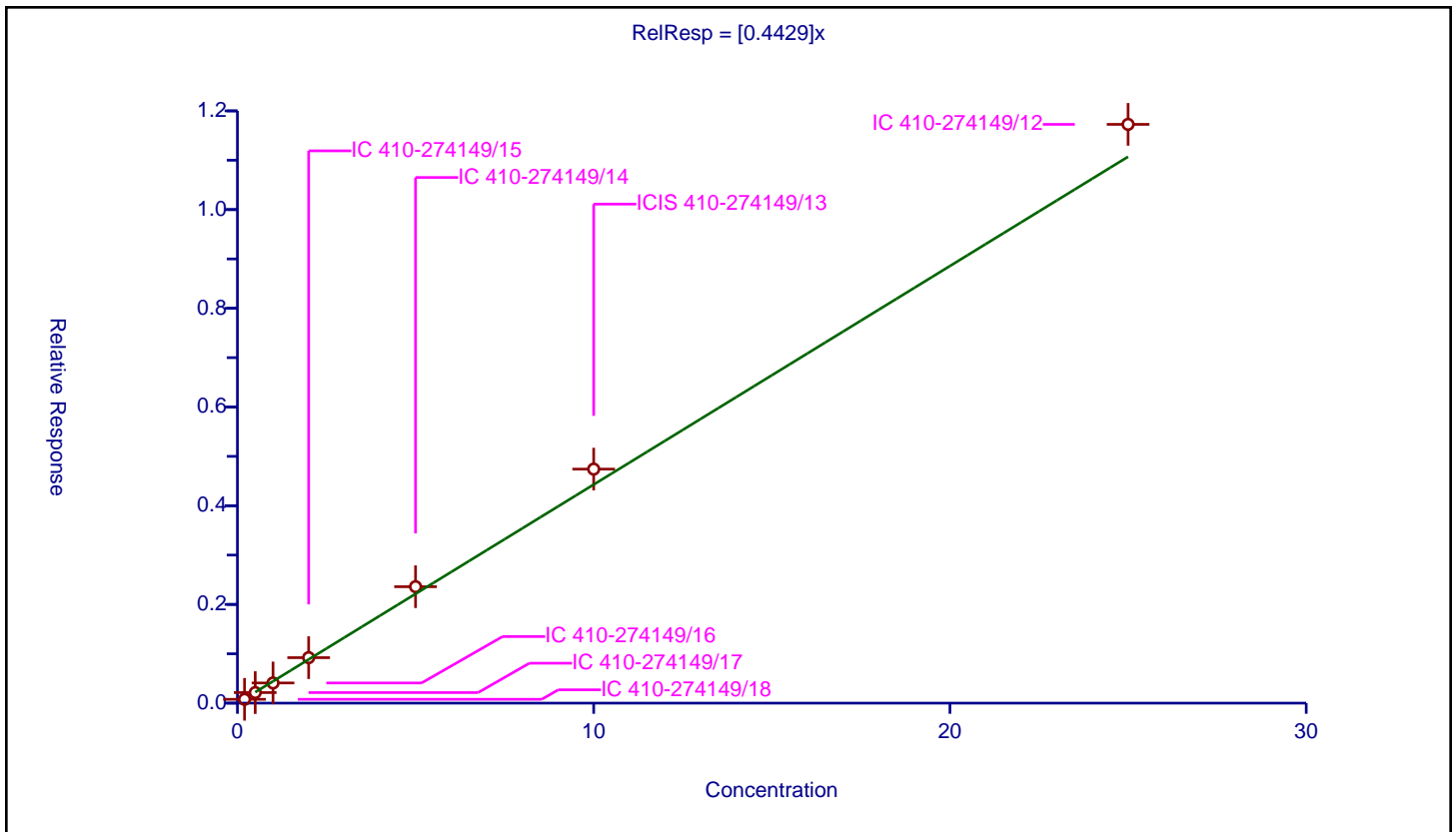
/ cis-1,3-Dichloropropene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4429

Error Coefficients	
Standard Error:	1120000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.077607	10.0	2085513.0	0.388034	Y
2	IC 410-274149/17	0.5	0.21371	10.0	2031490.0	0.42742	Y
3	IC 410-274149/16	1.0	0.408847	10.0	2037557.0	0.408847	Y
4	IC 410-274149/15	2.0	0.921323	10.0	2031307.0	0.460662	Y
5	IC 410-274149/14	5.0	2.358849	10.0	2106074.0	0.47177	Y
6	ICIS 410-274149/13	10.0	4.741424	10.0	2081655.0	0.474142	Y
7	IC 410-274149/12	25.0	11.727099	10.0	2132698.0	0.469084	Y



**Calibration**

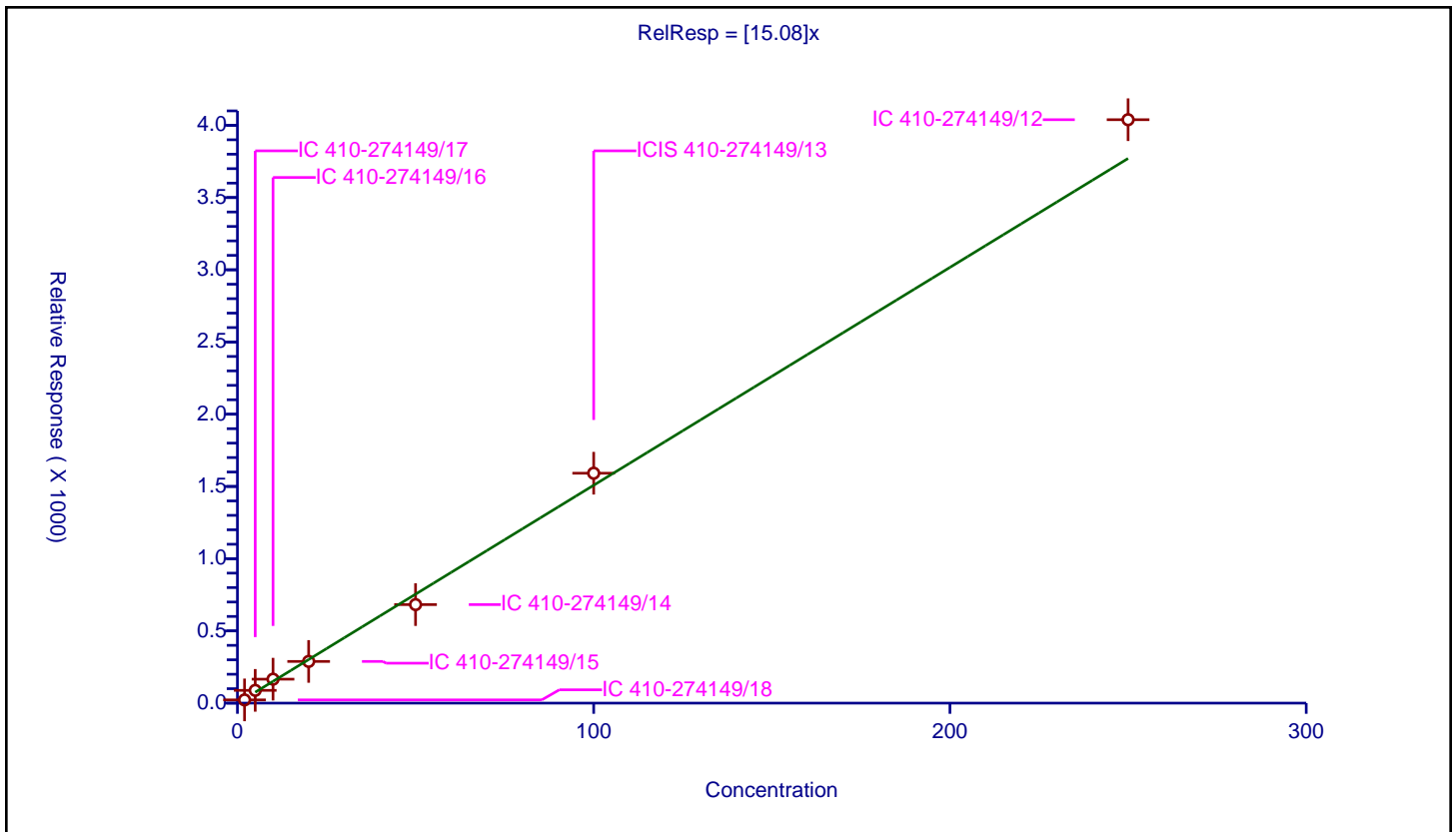
**/ 4-Methyl-2-pentanone (MIBK)**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	15.08

Error Coefficients	
Standard Error:	3530000
Relative Standard Error:	14.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	2.0	22.324531	50.0	127772.0	11.162266	Y
2	IC 410-274149/17	5.0	88.438073	50.0	81790.0	17.687615	Y
3	IC 410-274149/16	10.0	165.773092	50.0	87066.0	16.577309	Y
4	IC 410-274149/15	20.0	288.685528	50.0	107663.0	14.434276	Y
5	IC 410-274149/14	50.0	682.126059	50.0	120975.0	13.642521	Y
6	ICIS 410-274149/13	100.0	1591.751998	50.0	101370.0	15.91752	Y
7	IC 410-274149/12	250.0	4038.931487	50.0	96770.0	16.155726	Y



**Calibration**

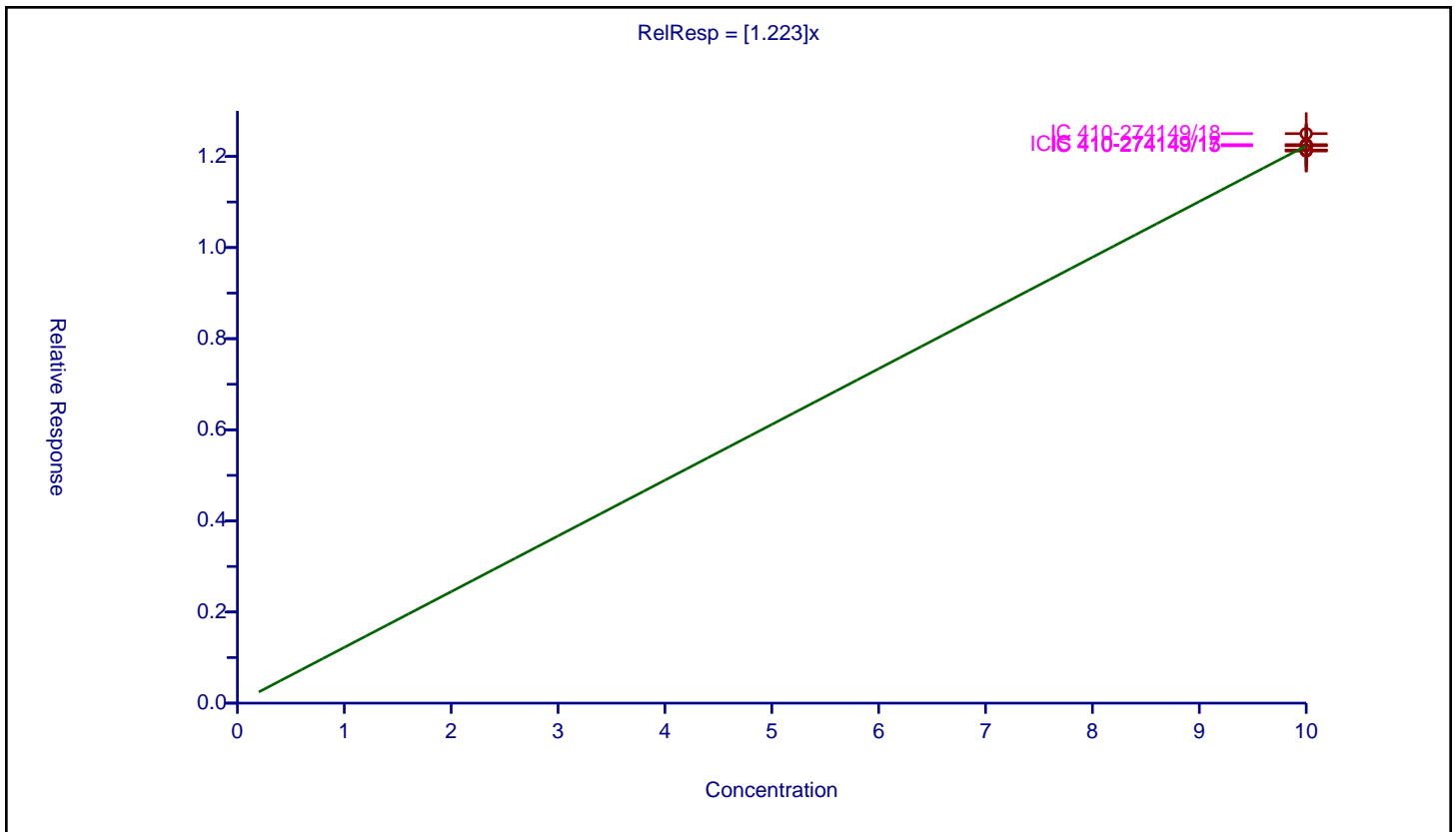
/ Toluene-d8 (Surr)

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.223

Error Coefficients	
Standard Error:	2430000
Relative Standard Error:	1.1
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0.0000000000000000222

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/12	10.0	12.137976	10.0	1927449.0	1.213798	Y
2	ICIS 410-274149/13	10.0	12.244471	10.0	1866823.0	1.224447	Y
3	IC 410-274149/14	10.0	12.119056	10.0	1880356.0	1.211906	Y
4	IC 410-274149/15	10.0	12.234589	10.0	1814146.0	1.223459	Y
5	IC 410-274149/16	10.0	12.140099	10.0	1802515.0	1.21401	Y
6	IC 410-274149/17	10.0	12.259191	10.0	1783683.0	1.225919	Y
7	IC 410-274149/18	10.0	12.500747	10.0	1804145.0	1.250075	Y



Calibration

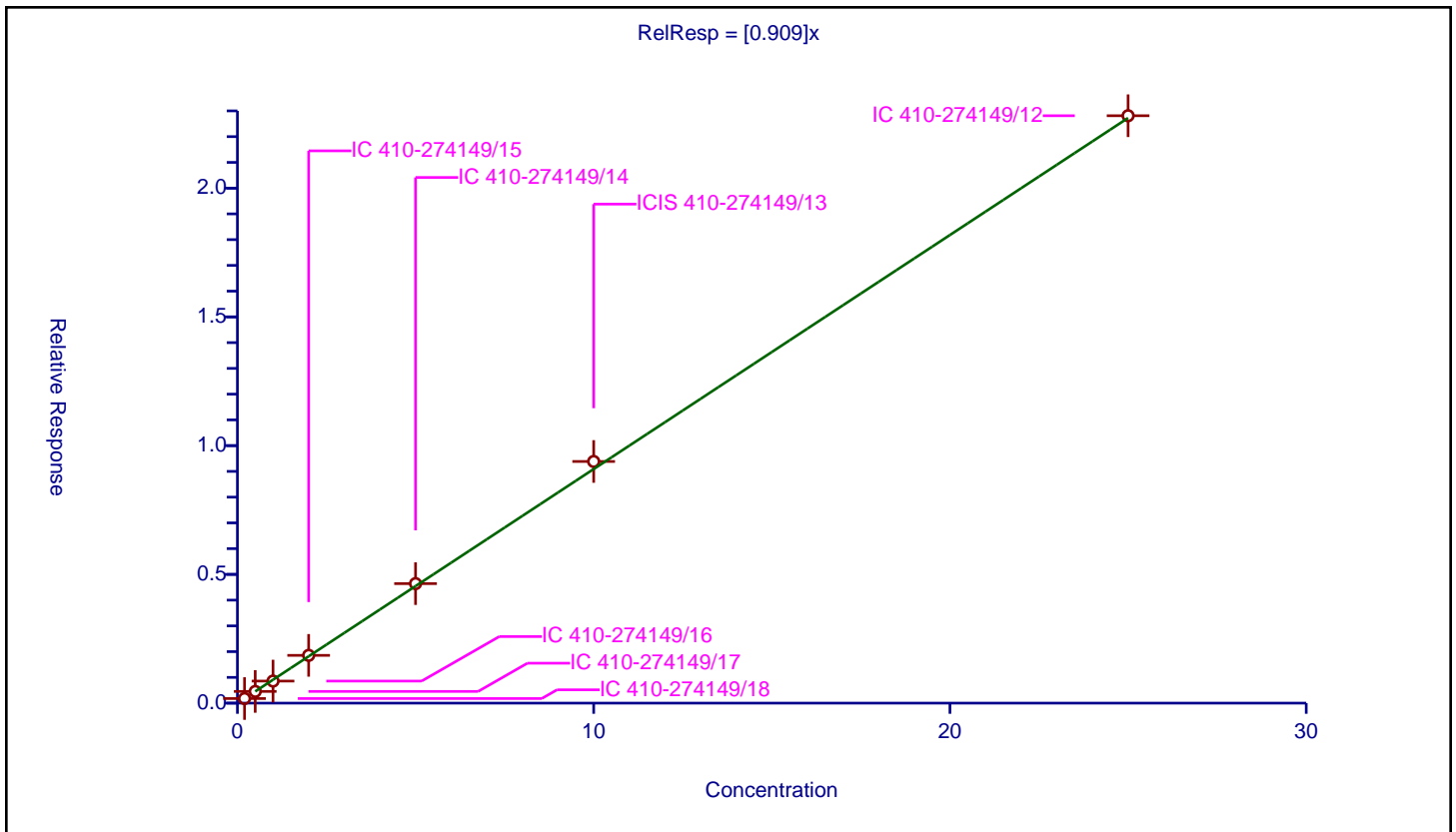
/ Toluene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.909

Error Coefficients	
Standard Error:	1970000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.178012	10.0	1804145.0	0.890061	Y
2	IC 410-274149/17	0.5	0.454431	10.0	1783683.0	0.908861	Y
3	IC 410-274149/16	1.0	0.857175	10.0	1802515.0	0.857175	Y
4	IC 410-274149/15	2.0	1.855391	10.0	1814146.0	0.927695	Y
5	IC 410-274149/14	5.0	4.6411	10.0	1880356.0	0.92822	Y
6	ICIS 410-274149/13	10.0	9.38458	10.0	1866823.0	0.938458	Y
7	IC 410-274149/12	25.0	22.812137	10.0	1927449.0	0.912485	Y



Calibration

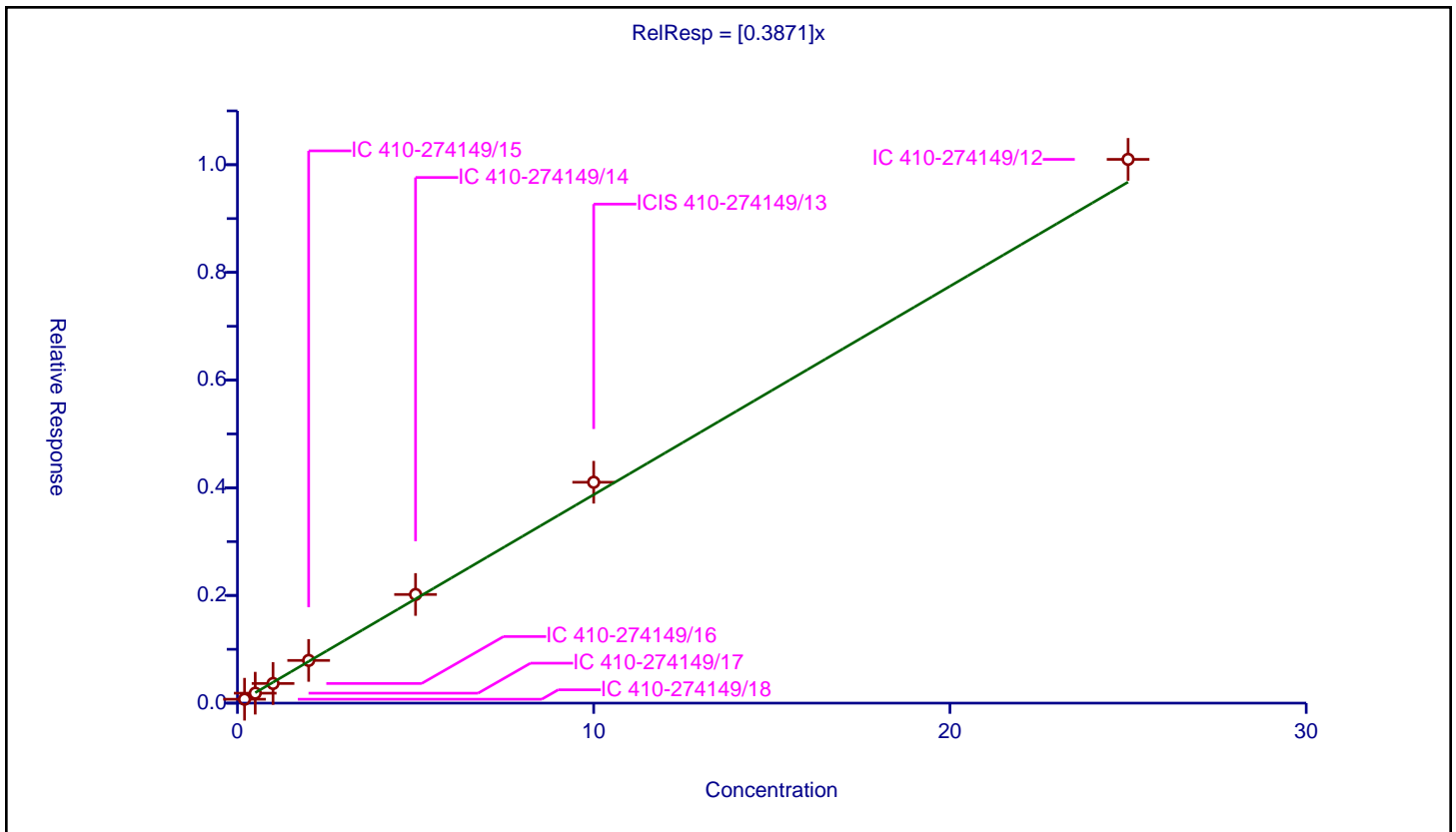
/ trans-1,3-Dichloropropene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3871

Error Coefficients	
Standard Error:	870000
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.072278	10.0	1804145.0	0.36139	Y
2	IC 410-274149/17	0.5	0.184607	10.0	1783683.0	0.369214	Y
3	IC 410-274149/16	1.0	0.364901	10.0	1802515.0	0.364901	Y
4	IC 410-274149/15	2.0	0.793189	10.0	1814146.0	0.396594	Y
5	IC 410-274149/14	5.0	2.018267	10.0	1880356.0	0.403653	Y
6	ICIS 410-274149/13	10.0	4.102521	10.0	1866823.0	0.410252	Y
7	IC 410-274149/12	25.0	10.099676	10.0	1927449.0	0.403987	Y



Calibration

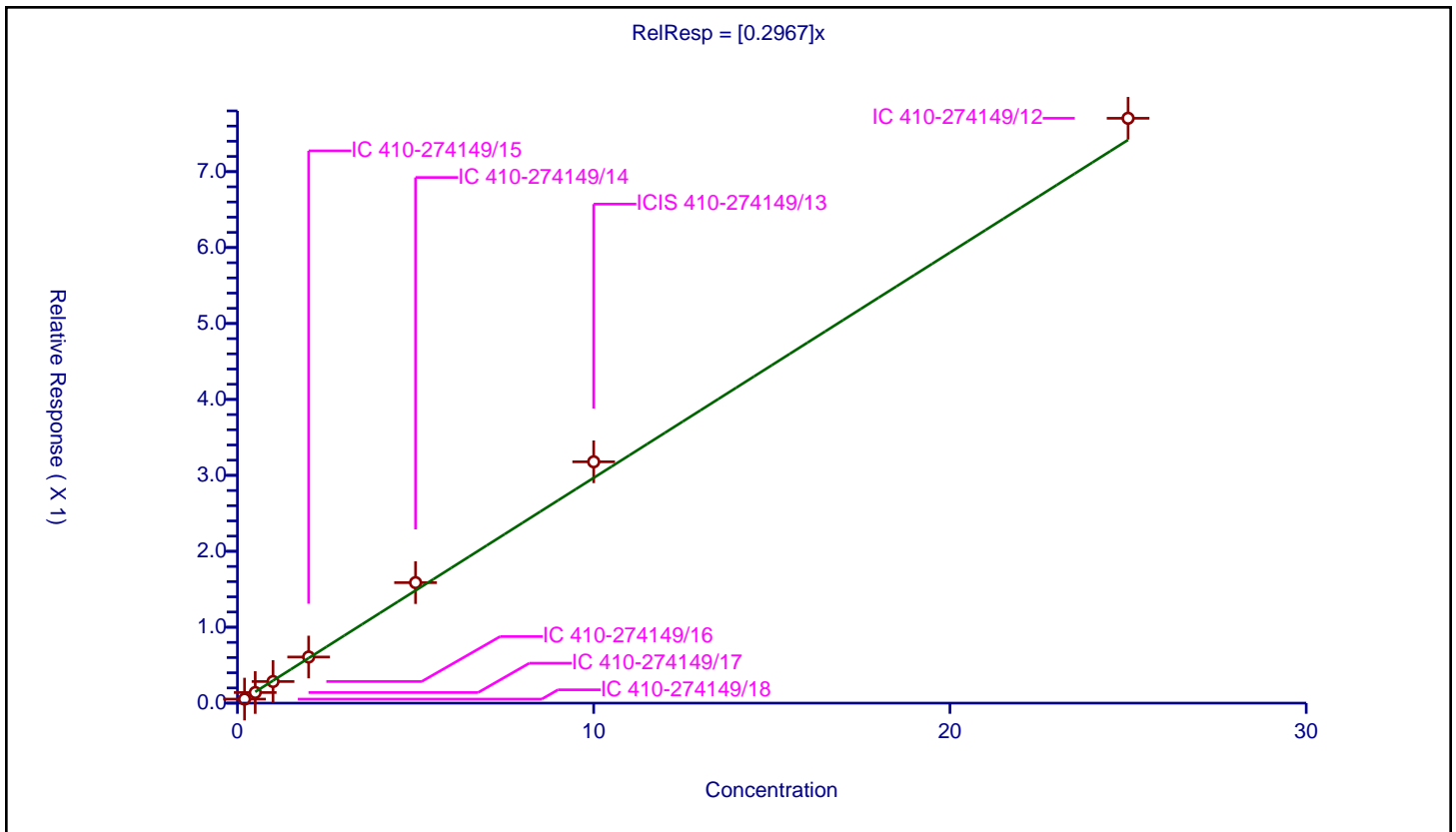
/ Ethyl methacrylate

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2967

Error Coefficients	
Standard Error:	666000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.053083	10.0	1804145.0	0.265417	Y
2	IC 410-274149/17	0.5	0.139874	10.0	1783683.0	0.279747	Y
3	IC 410-274149/16	1.0	0.284719	10.0	1802515.0	0.284719	Y
4	IC 410-274149/15	2.0	0.607459	10.0	1814146.0	0.30373	Y
5	IC 410-274149/14	5.0	1.58721	10.0	1880356.0	0.317442	Y
6	ICIS 410-274149/13	10.0	3.178523	10.0	1866823.0	0.317852	Y
7	IC 410-274149/12	25.0	7.702808	10.0	1927449.0	0.308112	Y



Calibration

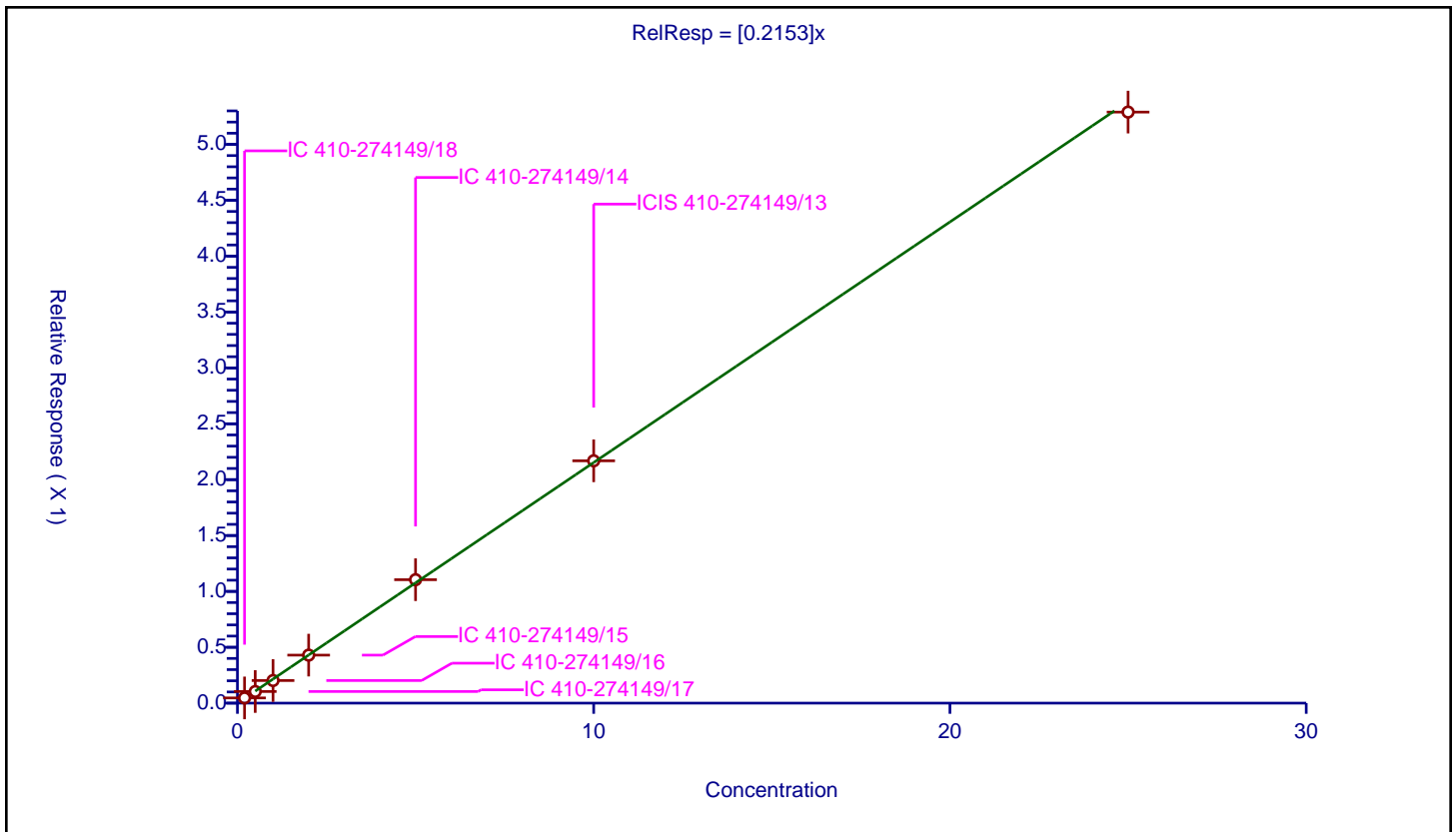
/ 1,1,2-Trichloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2153

Error Coefficients	
Standard Error:	457000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.046515	10.0	1804145.0	0.232576	Y
2	IC 410-274149/17	0.5	0.104032	10.0	1783683.0	0.208064	Y
3	IC 410-274149/16	1.0	0.202284	10.0	1802515.0	0.202284	Y
4	IC 410-274149/15	2.0	0.429695	10.0	1814146.0	0.214848	Y
5	IC 410-274149/14	5.0	1.104504	10.0	1880356.0	0.220901	Y
6	ICIS 410-274149/13	10.0	2.168615	10.0	1866823.0	0.216861	Y
7	IC 410-274149/12	25.0	5.289312	10.0	1927449.0	0.211572	Y





Calibration

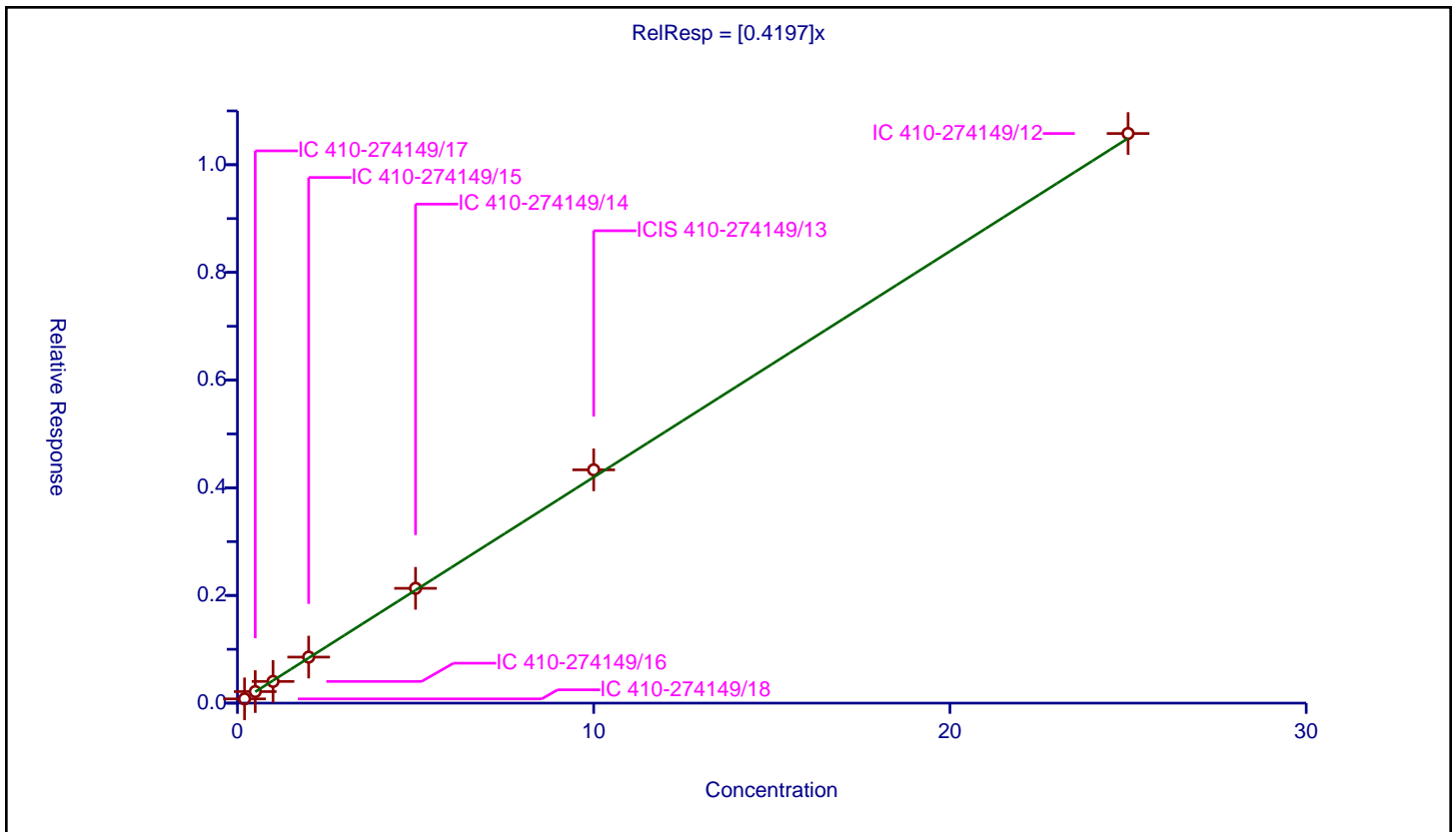
/ Tetrachloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4197

Error Coefficients	
Standard Error:	913000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.079046	10.0	1804145.0	0.395229	Y
2	IC 410-274149/17	0.5	0.214494	10.0	1783683.0	0.428989	Y
3	IC 410-274149/16	1.0	0.402948	10.0	1802515.0	0.402948	Y
4	IC 410-274149/15	2.0	0.85492	10.0	1814146.0	0.42746	Y
5	IC 410-274149/14	5.0	2.132181	10.0	1880356.0	0.426436	Y
6	ICIS 410-274149/13	10.0	4.333228	10.0	1866823.0	0.433323	Y
7	IC 410-274149/12	25.0	10.579772	10.0	1927449.0	0.423191	Y



Calibration

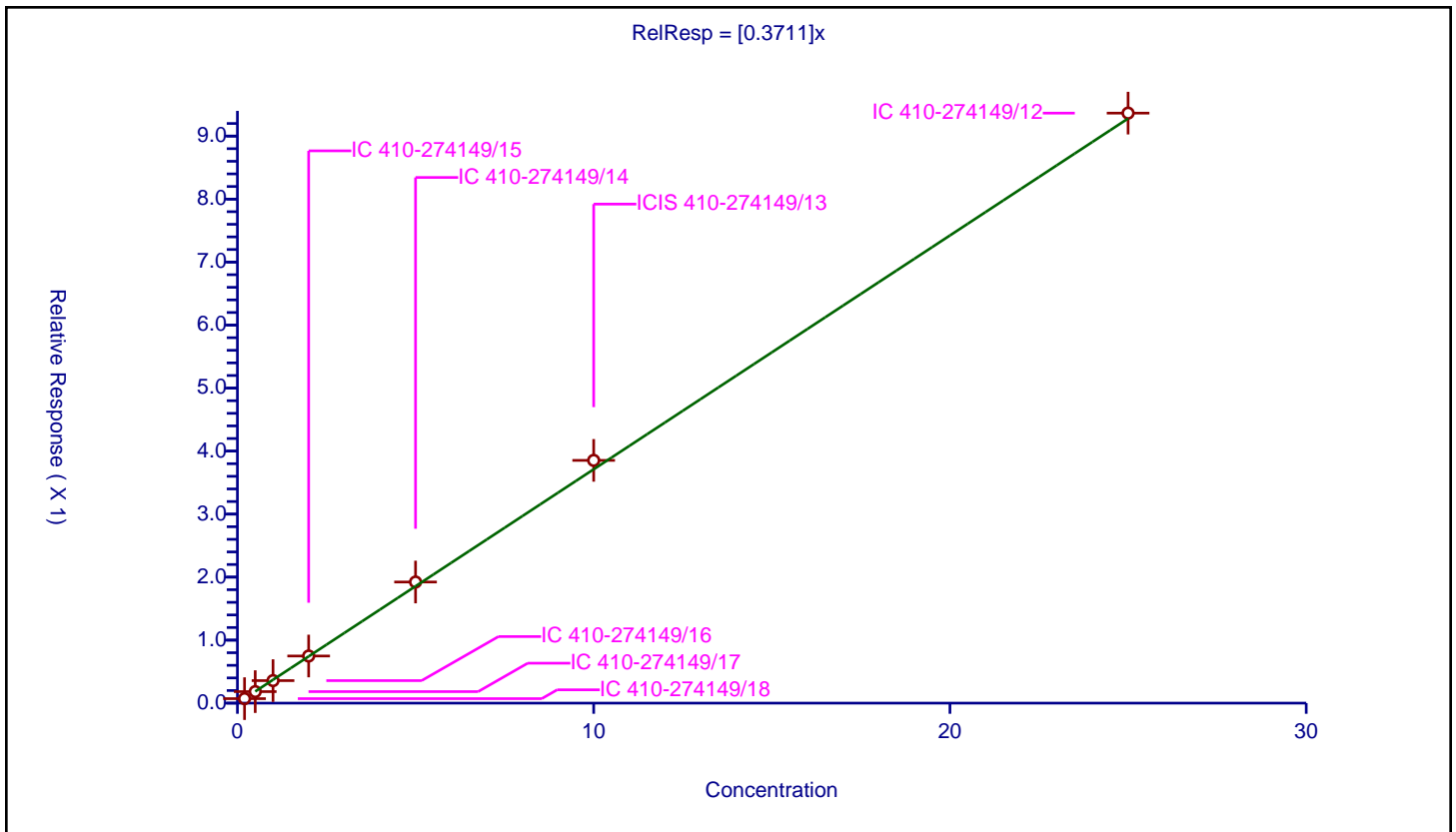
/ 1,3-Dichloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3711

Error Coefficients	
Standard Error:	809000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.071186	10.0	1804145.0	0.35593	Y
2	IC 410-274149/17	0.5	0.183026	10.0	1783683.0	0.366052	Y
3	IC 410-274149/16	1.0	0.357584	10.0	1802515.0	0.357584	Y
4	IC 410-274149/15	2.0	0.748176	10.0	1814146.0	0.374088	Y
5	IC 410-274149/14	5.0	1.922503	10.0	1880356.0	0.384501	Y
6	ICIS 410-274149/13	10.0	3.852797	10.0	1866823.0	0.38528	Y
7	IC 410-274149/12	25.0	9.364492	10.0	1927449.0	0.37458	Y



Calibration

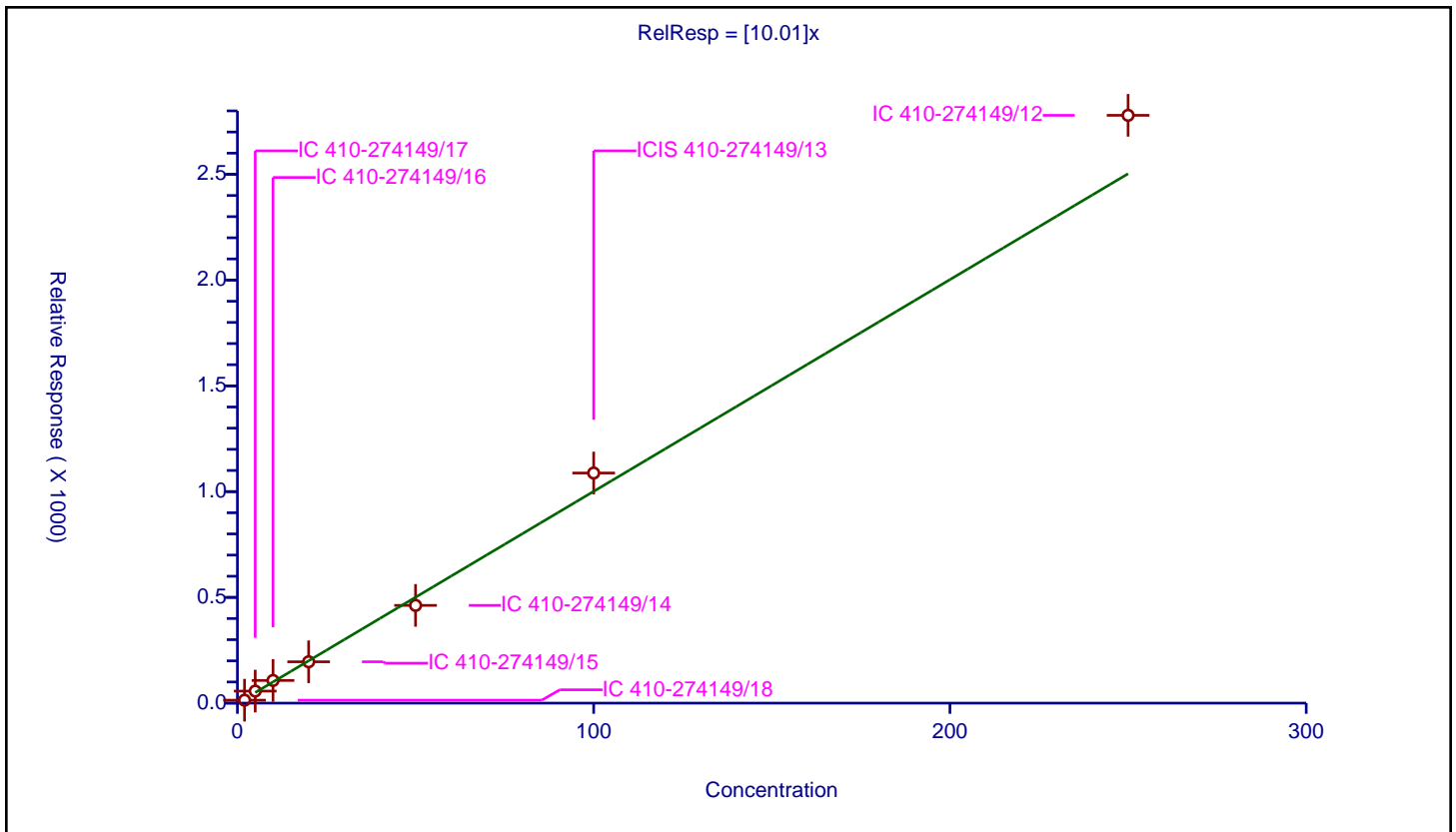
/ 2-Hexanone

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	10.01

Error Coefficients	
Standard Error:	2420000
Relative Standard Error:	15.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	2.0	13.90602	50.0	127772.0	6.95301	Y
2	IC 410-274149/17	5.0	56.977014	50.0	81790.0	11.395403	Y
3	IC 410-274149/16	10.0	107.208899	50.0	87066.0	10.72089	Y
4	IC 410-274149/15	20.0	195.500311	50.0	107663.0	9.775016	Y
5	IC 410-274149/14	50.0	462.026038	50.0	120975.0	9.240521	Y
6	ICIS 410-274149/13	100.0	1087.879057	50.0	101370.0	10.878791	Y
7	IC 410-274149/12	250.0	2778.996073	50.0	96770.0	11.115984	Y



**Calibration**

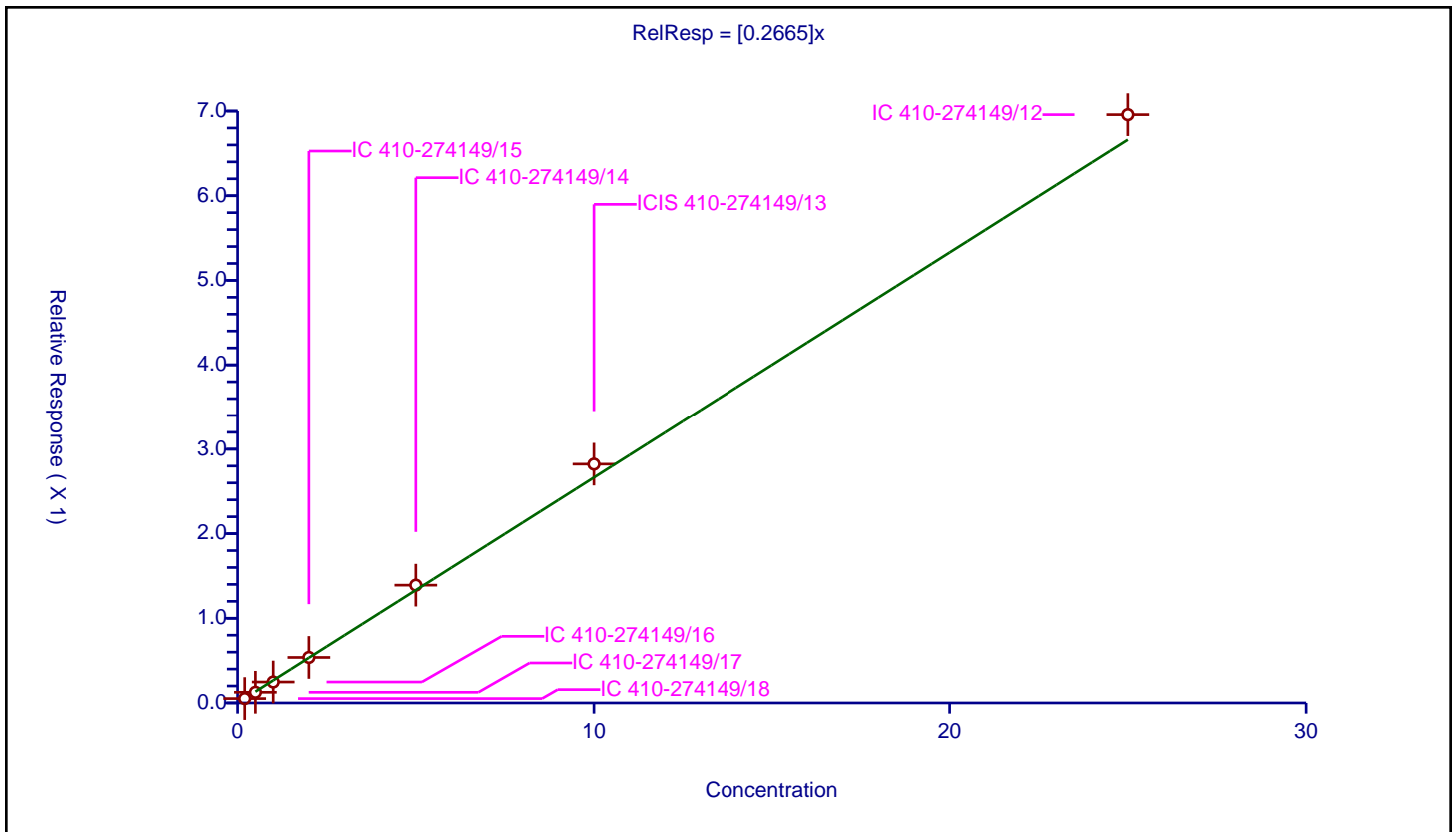
/ Chlorodibromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2665

Error Coefficients	
Standard Error:	600000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.051675	10.0	1804145.0	0.258377	Y
2	IC 410-274149/17	0.5	0.126104	10.0	1783683.0	0.252208	Y
3	IC 410-274149/16	1.0	0.247377	10.0	1802515.0	0.247377	Y
4	IC 410-274149/15	2.0	0.537112	10.0	1814146.0	0.268556	Y
5	IC 410-274149/14	5.0	1.391338	10.0	1880356.0	0.278268	Y
6	ICIS 410-274149/13	10.0	2.822881	10.0	1866823.0	0.282288	Y
7	IC 410-274149/12	25.0	6.957543	10.0	1927449.0	0.278302	Y



**Calibration**

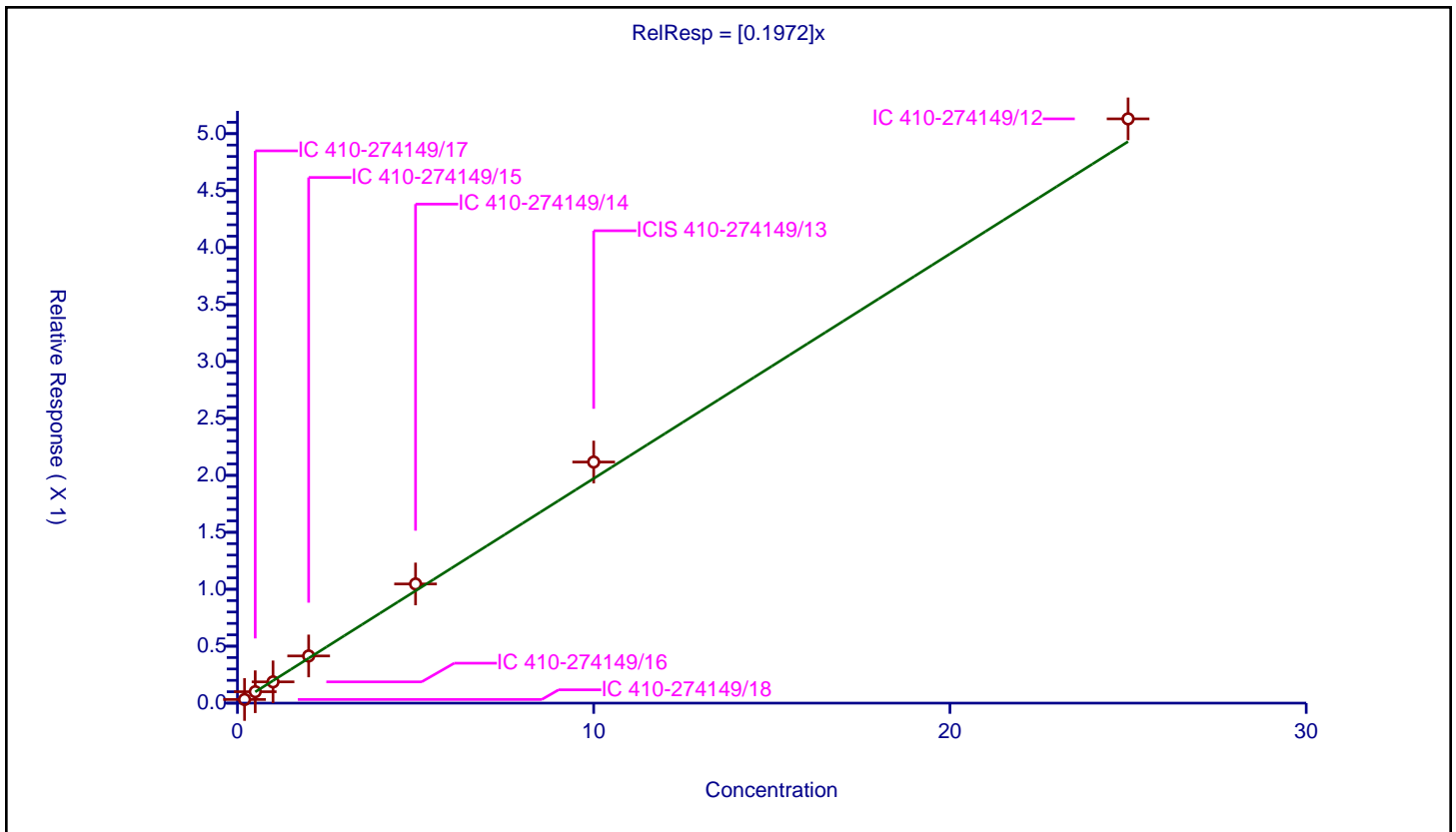
/ Ethylene Dibromide

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1972

Error Coefficients	
Standard Error:	443000
Relative Standard Error:	9.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.032015	10.0	1804145.0	0.160076	Y
2	IC 410-274149/17	0.5	0.100287	10.0	1783683.0	0.200574	Y
3	IC 410-274149/16	1.0	0.186684	10.0	1802515.0	0.186684	Y
4	IC 410-274149/15	2.0	0.414195	10.0	1814146.0	0.207097	Y
5	IC 410-274149/14	5.0	1.04635	10.0	1880356.0	0.20927	Y
6	ICIS 410-274149/13	10.0	2.116933	10.0	1866823.0	0.211693	Y
7	IC 410-274149/12	25.0	5.130112	10.0	1927449.0	0.205204	Y



Calibration

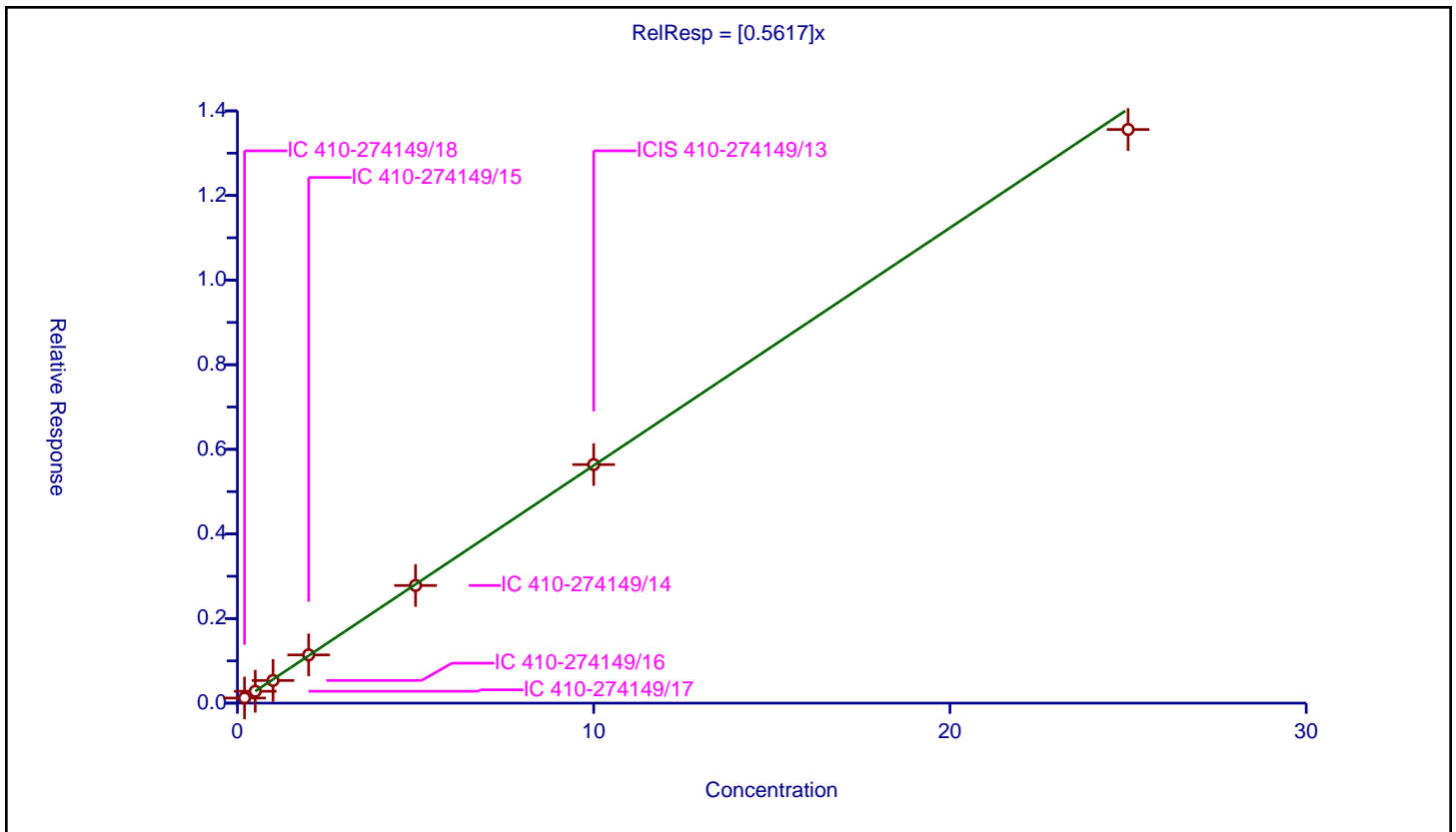
/ 1-Chlorohexane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5617

Error Coefficients	
Standard Error:	1170000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.12045	10.0	1804145.0	0.602252	Y
2	IC 410-274149/17	0.5	0.280672	10.0	1783683.0	0.561344	Y
3	IC 410-274149/16	1.0	0.536073	10.0	1802515.0	0.536073	Y
4	IC 410-274149/15	2.0	1.140013	10.0	1814146.0	0.570006	Y
5	IC 410-274149/14	5.0	2.781308	10.0	1880356.0	0.556262	Y
6	ICIS 410-274149/13	10.0	5.639003	10.0	1866823.0	0.5639	Y
7	IC 410-274149/12	25.0	13.559669	10.0	1927449.0	0.542387	Y



Calibration

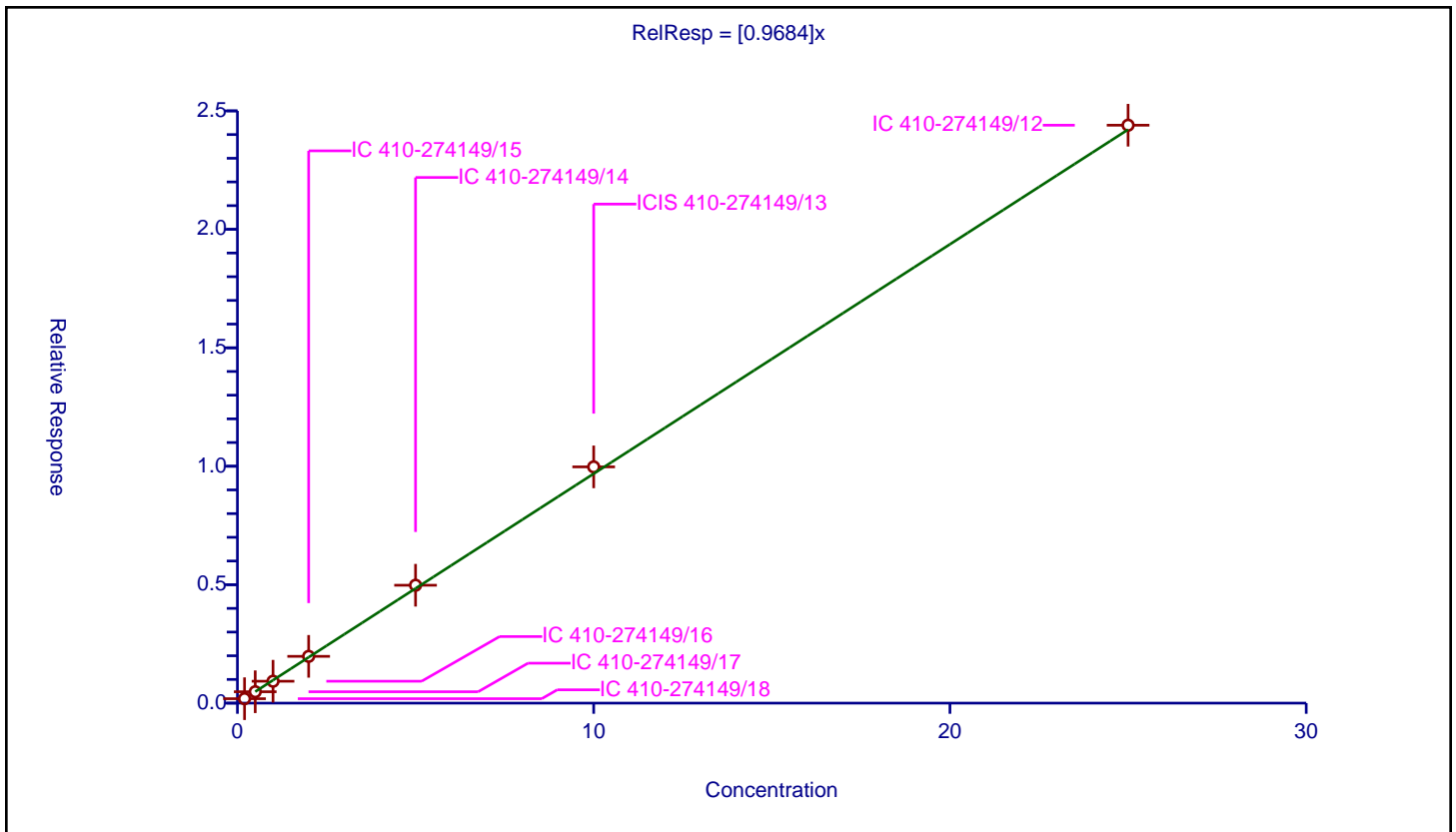
/ Chlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9684

Error Coefficients	
Standard Error:	2110000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.187707	10.0	1804145.0	0.938533	Y
2	IC 410-274149/17	0.5	0.480141	10.0	1783683.0	0.960283	Y
3	IC 410-274149/16	1.0	0.924253	10.0	1802515.0	0.924253	Y
4	IC 410-274149/15	2.0	1.975271	10.0	1814146.0	0.987636	Y
5	IC 410-274149/14	5.0	4.976786	10.0	1880356.0	0.995357	Y
6	ICIS 410-274149/13	10.0	9.972713	10.0	1866823.0	0.997271	Y
7	IC 410-274149/12	25.0	24.394622	10.0	1927449.0	0.975785	Y



Calibration

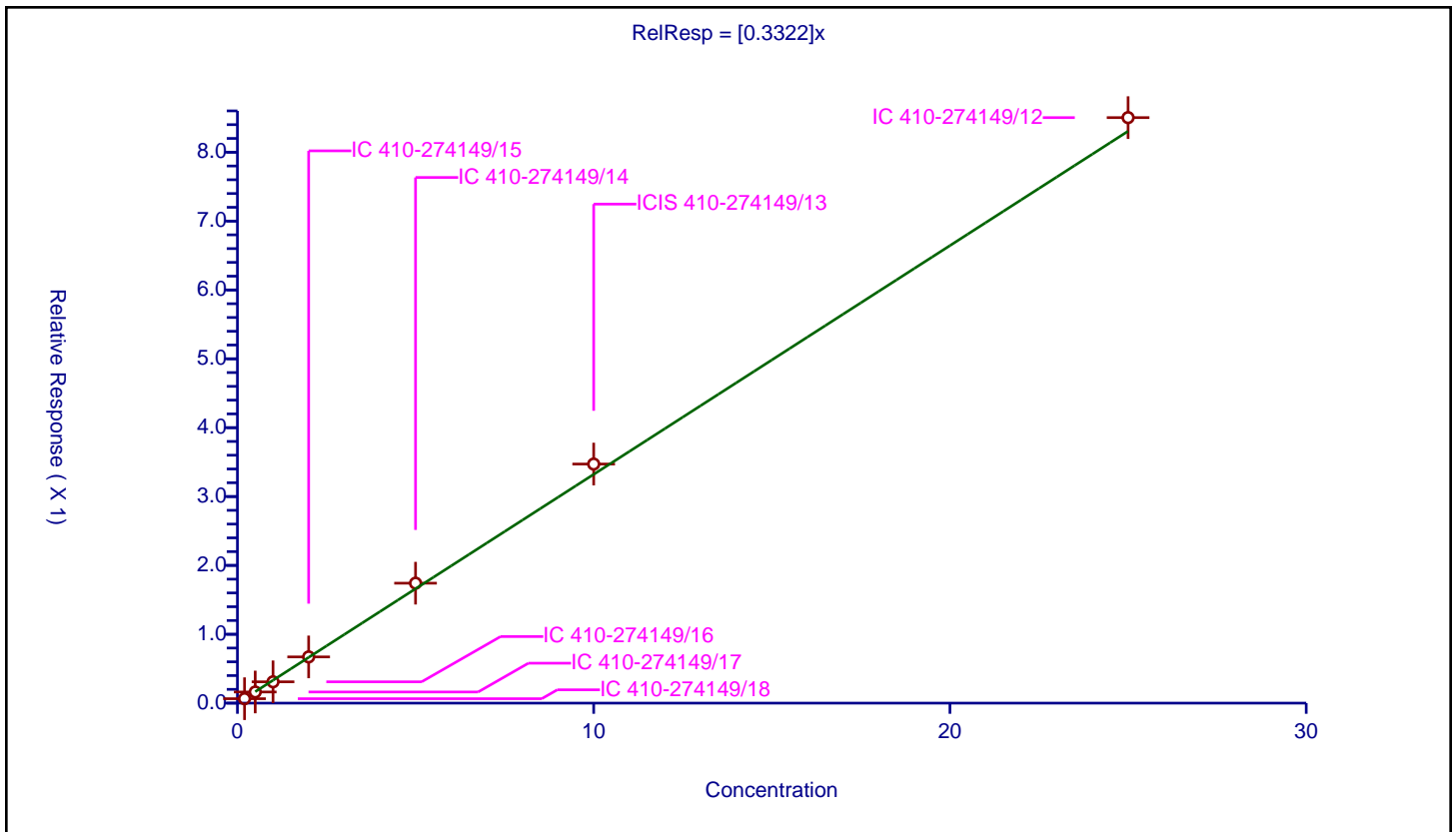
/ 1,1,1,2-Tetrachloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3322

Error Coefficients	
Standard Error:	734000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.064213	10.0	1804145.0	0.321066	Y
2	IC 410-274149/17	0.5	0.161722	10.0	1783683.0	0.323443	Y
3	IC 410-274149/16	1.0	0.309656	10.0	1802515.0	0.309656	Y
4	IC 410-274149/15	2.0	0.671346	10.0	1814146.0	0.335673	Y
5	IC 410-274149/14	5.0	1.741574	10.0	1880356.0	0.348315	Y
6	ICIS 410-274149/13	10.0	3.471507	10.0	1866823.0	0.347151	Y
7	IC 410-274149/12	25.0	8.502238	10.0	1927449.0	0.34009	Y





Calibration

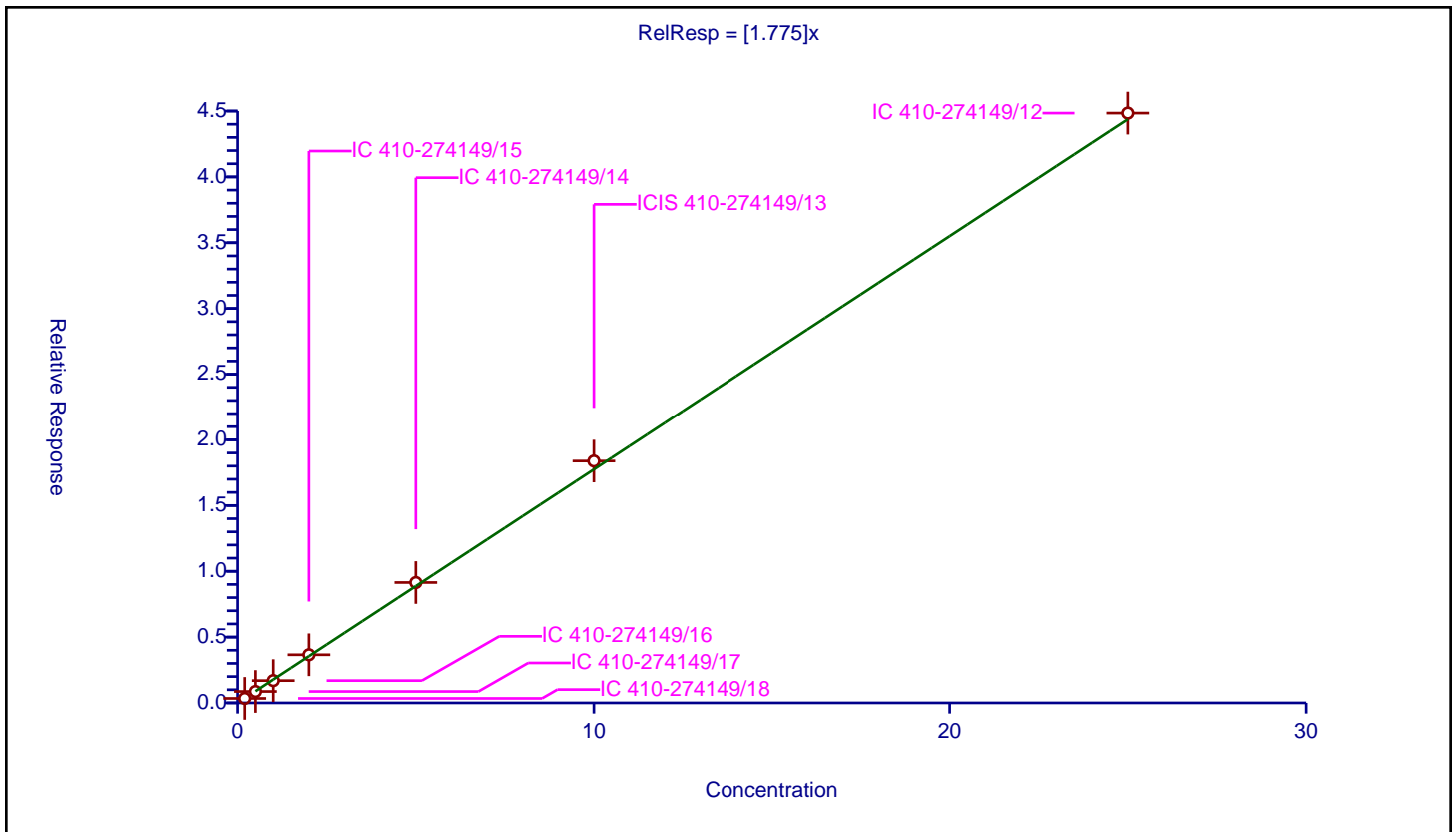
/ Ethylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.775

Error Coefficients	
Standard Error:	3870000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.341669	10.0	1804145.0	1.708344	Y
2	IC 410-274149/17	0.5	0.867946	10.0	1783683.0	1.735891	Y
3	IC 410-274149/16	1.0	1.692269	10.0	1802515.0	1.692269	Y
4	IC 410-274149/15	2.0	3.65518	10.0	1814146.0	1.82759	Y
5	IC 410-274149/14	5.0	9.147715	10.0	1880356.0	1.829543	Y
6	ICIS 410-274149/13	10.0	18.388042	10.0	1866823.0	1.838804	Y
7	IC 410-274149/12	25.0	44.843749	10.0	1927449.0	1.79375	Y



**Calibration**

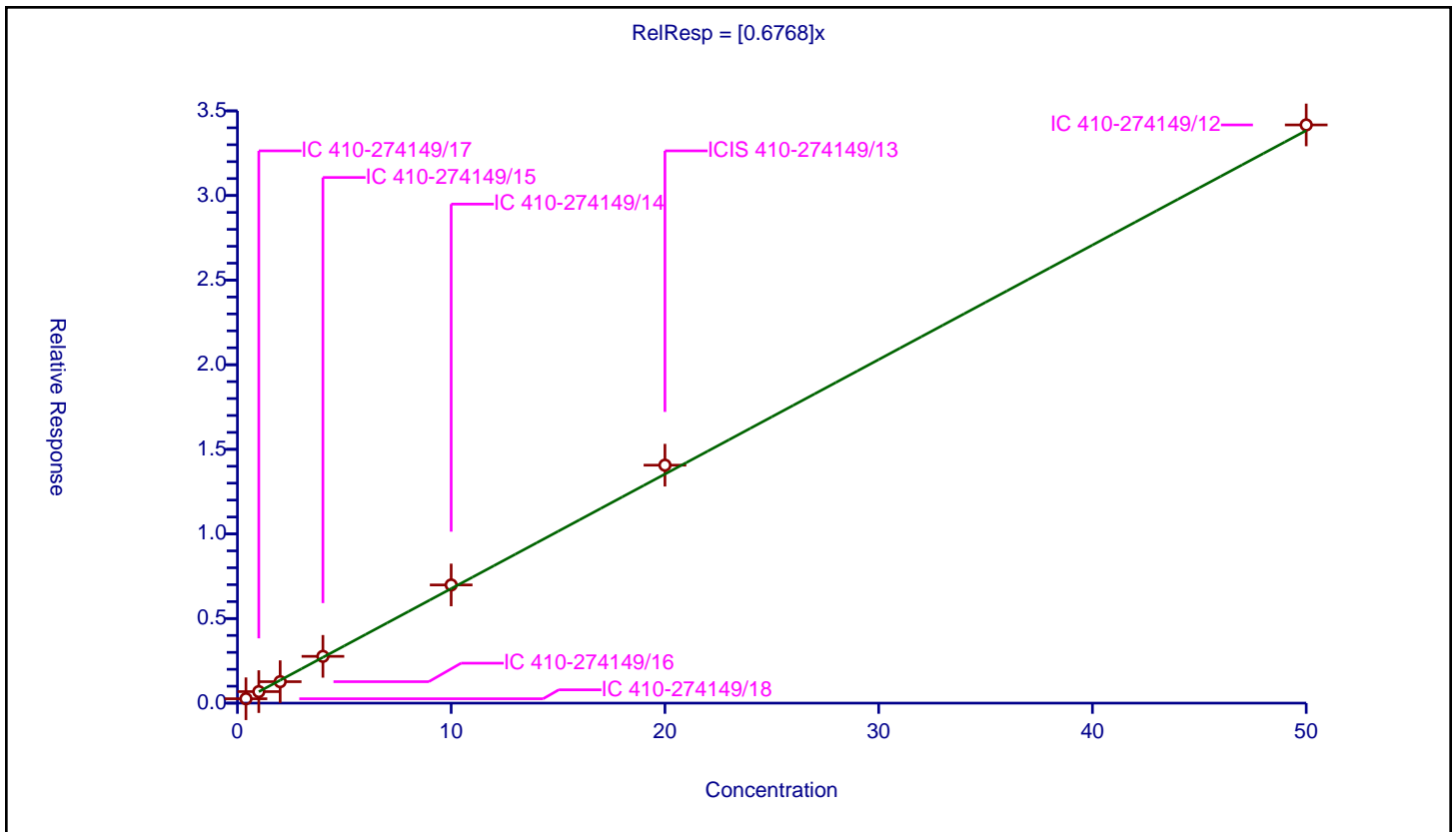
/ m-Xylene & p-Xylene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6768

Error Coefficients	
Standard Error:	2950000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.4	0.258876	10.0	1804145.0	0.64719	Y
2	IC 410-274149/17	1.0	0.680048	10.0	1783683.0	0.680048	Y
3	IC 410-274149/16	2.0	1.26805	10.0	1802515.0	0.634025	Y
4	IC 410-274149/15	4.0	2.7647	10.0	1814146.0	0.691175	Y
5	IC 410-274149/14	10.0	6.984114	10.0	1880356.0	0.698411	Y
6	ICIS 410-274149/13	20.0	14.06271	10.0	1866823.0	0.703135	Y
7	IC 410-274149/12	50.0	34.170331	10.0	1927449.0	0.683407	Y



Calibration

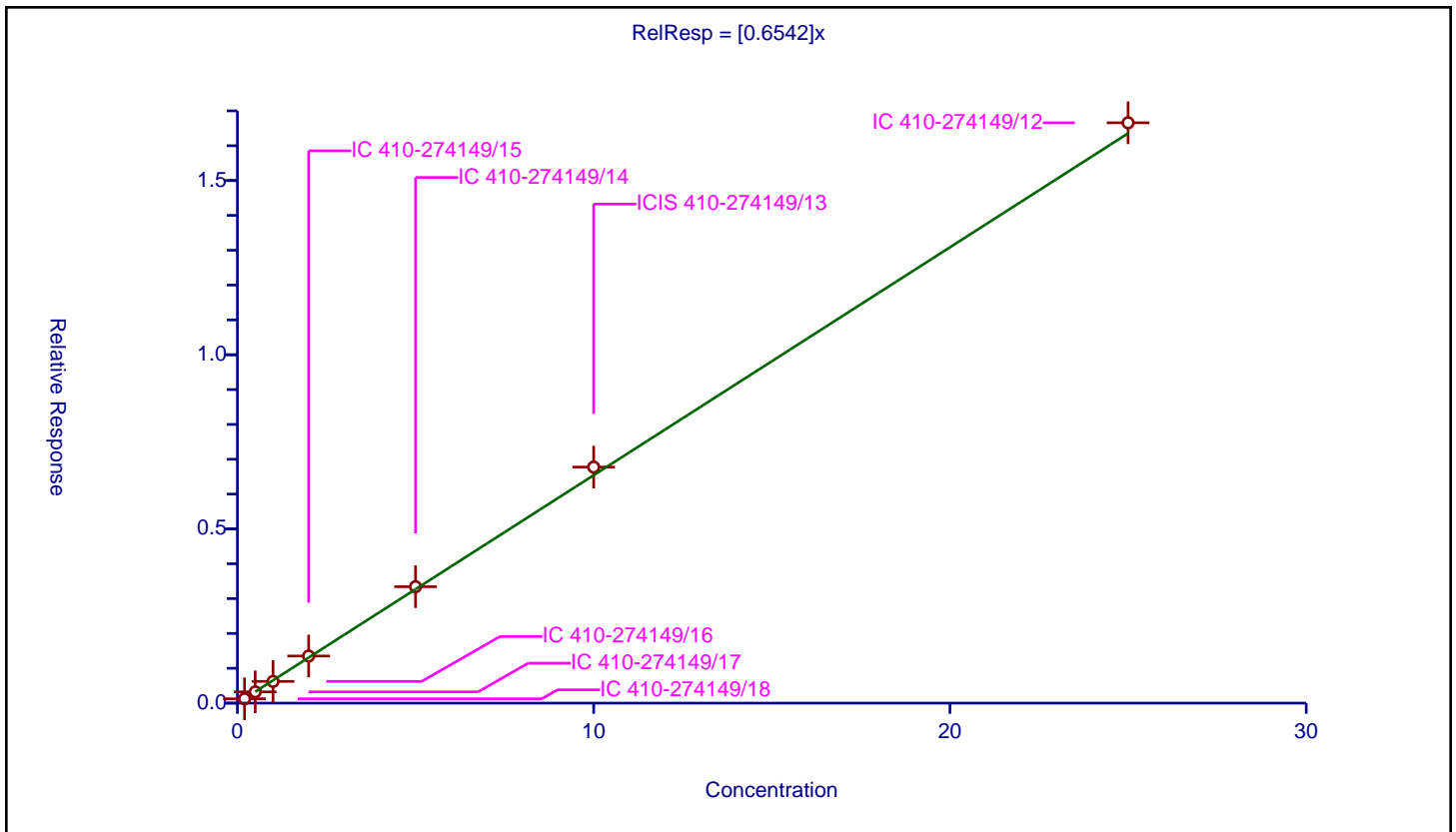
/ o-Xylene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6542

Error Coefficients	
Standard Error:	1440000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.124037	10.0	1804145.0	0.620183	Y
2	IC 410-274149/17	0.5	0.323684	10.0	1783683.0	0.647368	Y
3	IC 410-274149/16	1.0	0.623762	10.0	1802515.0	0.623762	Y
4	IC 410-274149/15	2.0	1.351694	10.0	1814146.0	0.675847	Y
5	IC 410-274149/14	5.0	3.34217	10.0	1880356.0	0.668434	Y
6	ICIS 410-274149/13	10.0	6.775666	10.0	1866823.0	0.677567	Y
7	IC 410-274149/12	25.0	16.658345	10.0	1927449.0	0.666334	Y



Calibration

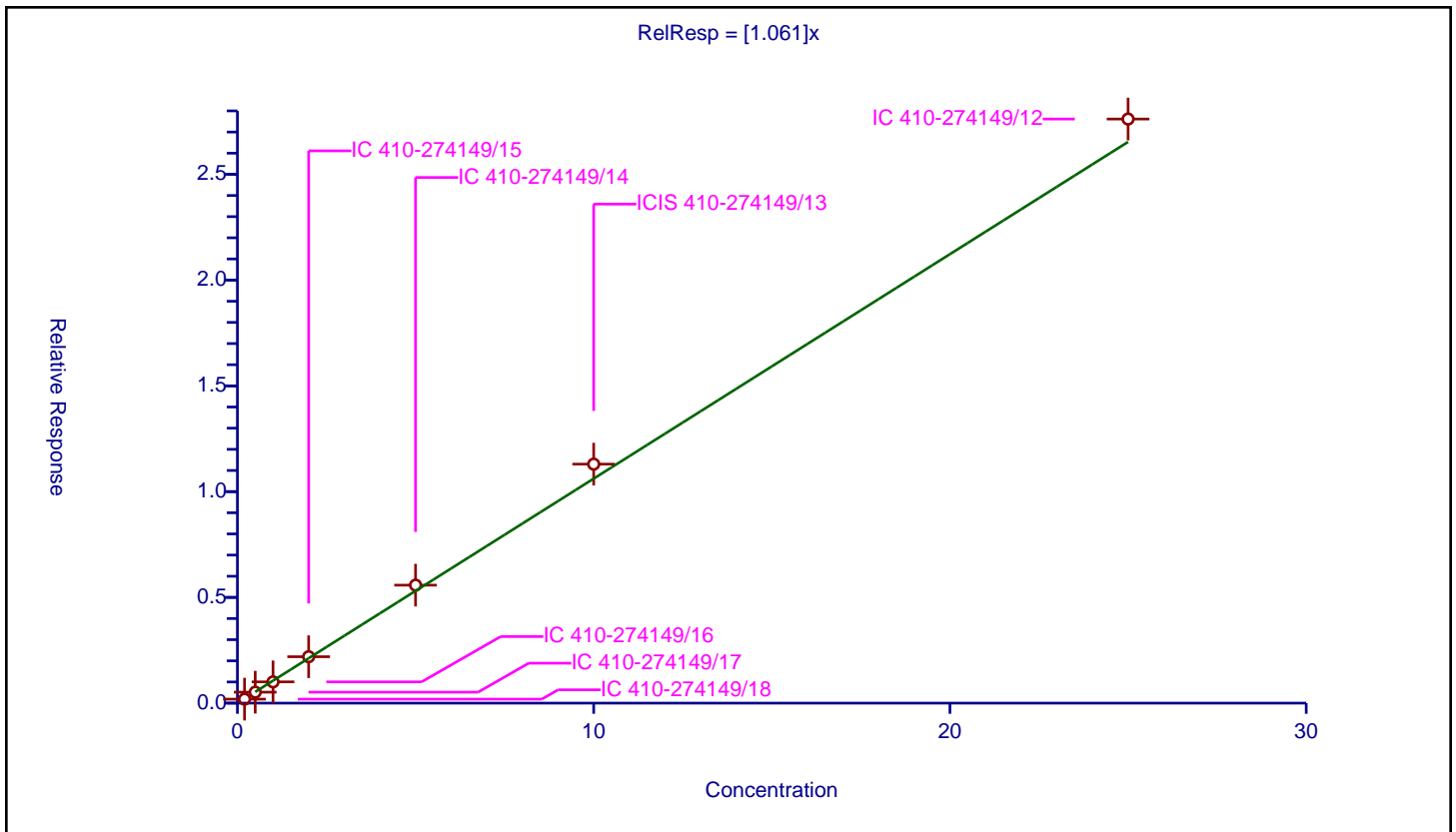
/ Styrene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.061

Error Coefficients	
Standard Error:	2380000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.188156	10.0	1804145.0	0.940778	Y
2	IC 410-274149/17	0.5	0.51831	10.0	1783683.0	1.036619	Y
3	IC 410-274149/16	1.0	1.005085	10.0	1802515.0	1.005085	Y
4	IC 410-274149/15	2.0	2.193875	10.0	1814146.0	1.096938	Y
5	IC 410-274149/14	5.0	5.577673	10.0	1880356.0	1.115535	Y
6	ICIS 410-274149/13	10.0	11.298779	10.0	1866823.0	1.129878	Y
7	IC 410-274149/12	25.0	27.614484	10.0	1927449.0	1.104579	Y



Calibration

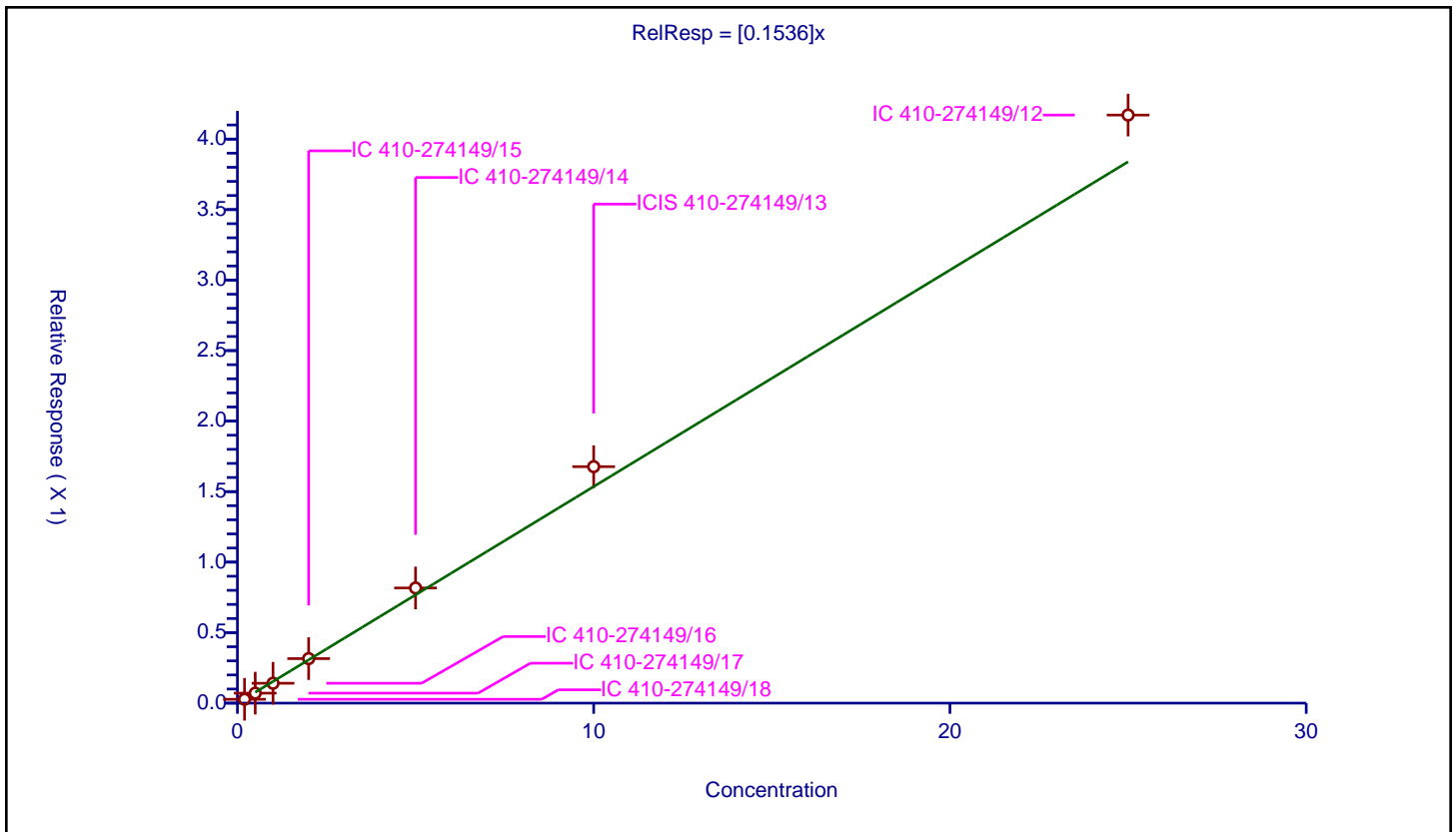
/ Bromoform

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1536

Error Coefficients	
Standard Error:	359000
Relative Standard Error:	8.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.027332	10.0	1804145.0	0.136658	Y
2	IC 410-274149/17	0.5	0.070769	10.0	1783683.0	0.141539	Y
3	IC 410-274149/16	1.0	0.141058	10.0	1802515.0	0.141058	Y
4	IC 410-274149/15	2.0	0.315691	10.0	1814146.0	0.157846	Y
5	IC 410-274149/14	5.0	0.816643	10.0	1880356.0	0.163329	Y
6	ICIS 410-274149/13	10.0	1.676993	10.0	1866823.0	0.167699	Y
7	IC 410-274149/12	25.0	4.170414	10.0	1927449.0	0.166817	Y



Calibration

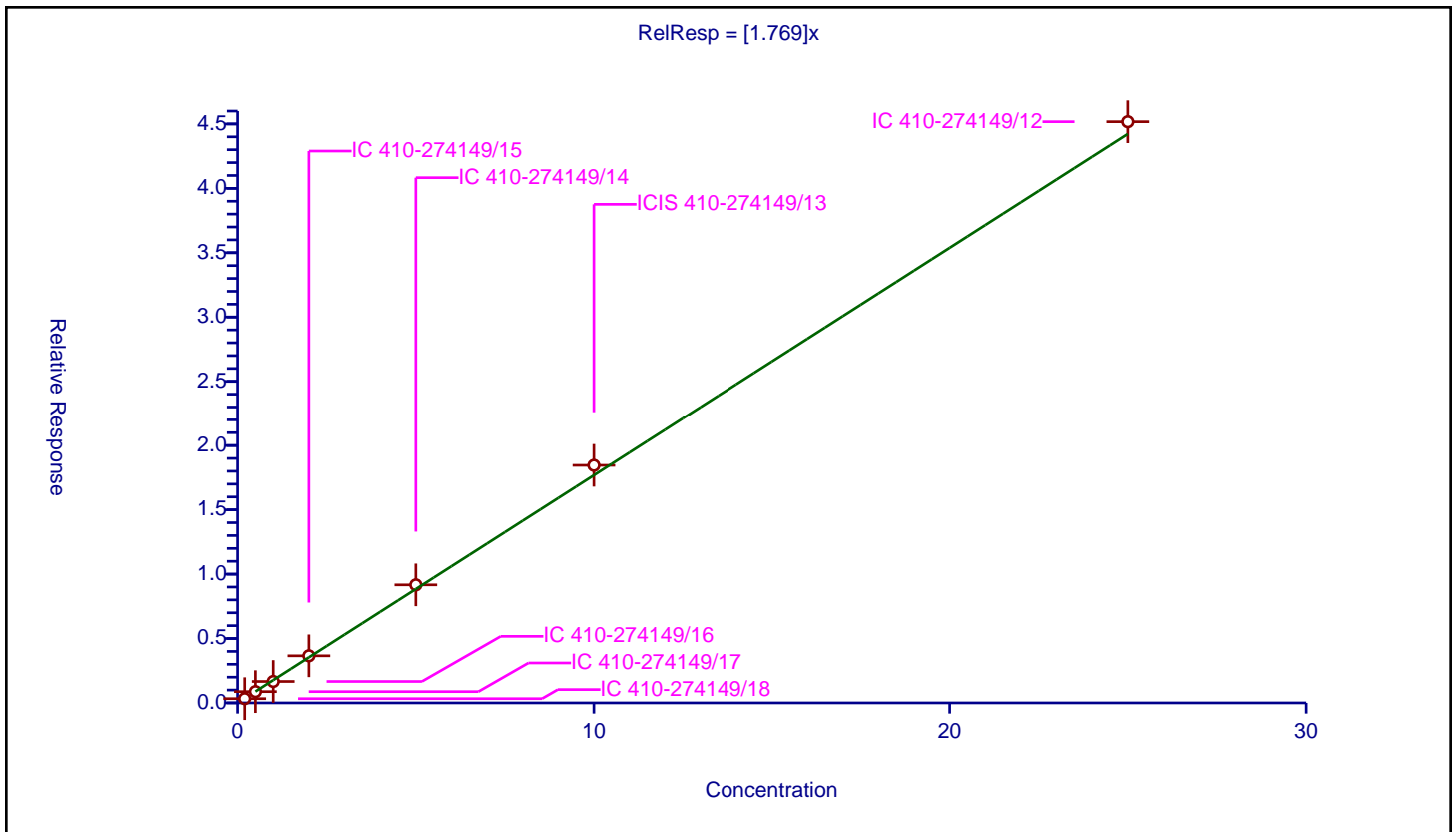
/ Isopropylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.769

Error Coefficients	
Standard Error:	3900000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.330234	10.0	1804145.0	1.65117	Y
2	IC 410-274149/17	0.5	0.876019	10.0	1783683.0	1.752038	Y
3	IC 410-274149/16	1.0	1.663659	10.0	1802515.0	1.663659	Y
4	IC 410-274149/15	2.0	3.65809	10.0	1814146.0	1.829045	Y
5	IC 410-274149/14	5.0	9.169407	10.0	1880356.0	1.833881	Y
6	ICIS 410-274149/13	10.0	18.46189	10.0	1866823.0	1.846189	Y
7	IC 410-274149/12	25.0	45.173839	10.0	1927449.0	1.806954	Y



**Calibration**

/ 4-Bromofluorobenzene (Surr)

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

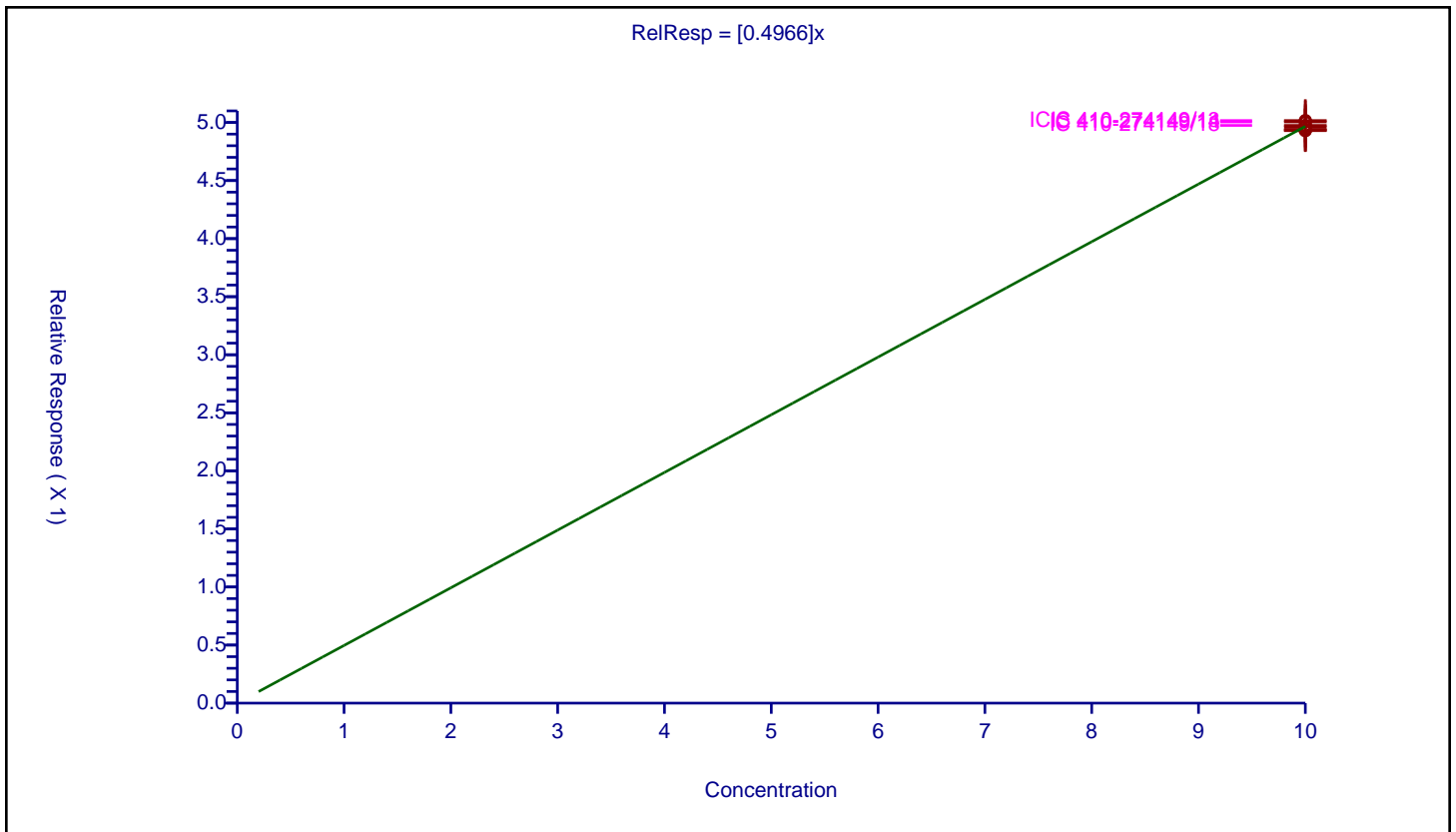
**Curve Coefficients**

Intercept: 0  
 Slope: 0.4966

**Error Coefficients**

Standard Error: 988000  
 Relative Standard Error: 0.7  
 Correlation Coefficient: NA  
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/12	10.0	4.963332	10.0	1927449.0	0.496333	Y
2	ICIS 410-274149/13	10.0	5.016533	10.0	1866823.0	0.501653	Y
3	IC 410-274149/14	10.0	5.004994	10.0	1880356.0	0.500499	Y
4	IC 410-274149/15	10.0	4.941493	10.0	1814146.0	0.494149	Y
5	IC 410-274149/16	10.0	4.929745	10.0	1802515.0	0.492975	Y
6	IC 410-274149/17	10.0	4.934021	10.0	1783683.0	0.493402	Y
7	IC 410-274149/18	10.0	4.97485	10.0	1804145.0	0.497485	Y



Calibration

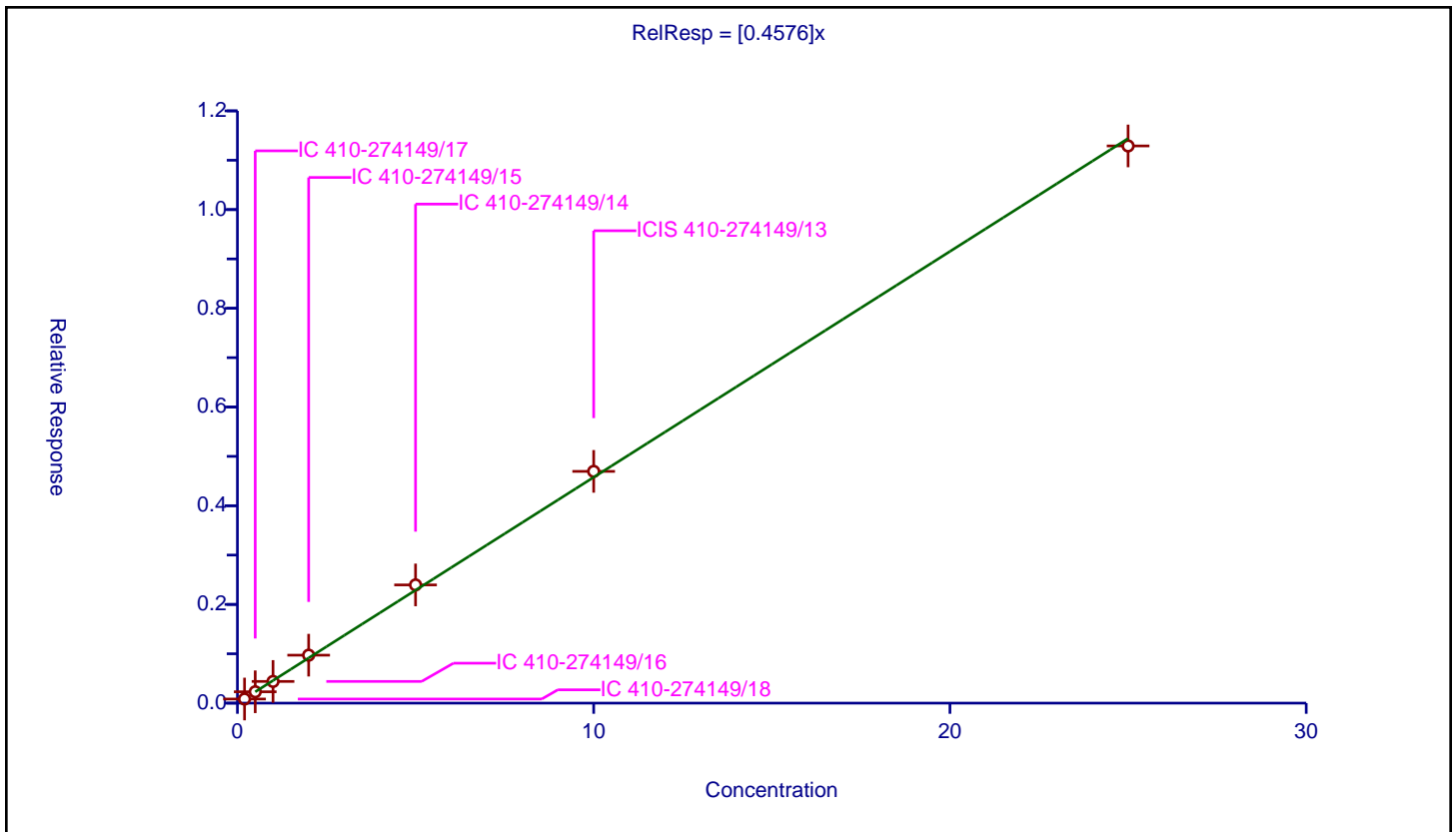
/ 1,1,2,2-Tetrachloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4576

Error Coefficients	
Standard Error:	553000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.083516	10.0	1000650.0	0.417579	Y
2	IC 410-274149/17	0.5	0.229995	10.0	974107.0	0.459991	Y
3	IC 410-274149/16	1.0	0.439772	10.0	992900.0	0.439772	Y
4	IC 410-274149/15	2.0	0.971642	10.0	997250.0	0.485821	Y
5	IC 410-274149/14	5.0	2.395176	10.0	1047322.0	0.479035	Y
6	ICIS 410-274149/13	10.0	4.695939	10.0	1051287.0	0.469594	Y
7	IC 410-274149/12	25.0	11.289702	10.0	1090322.0	0.451588	Y





Calibration

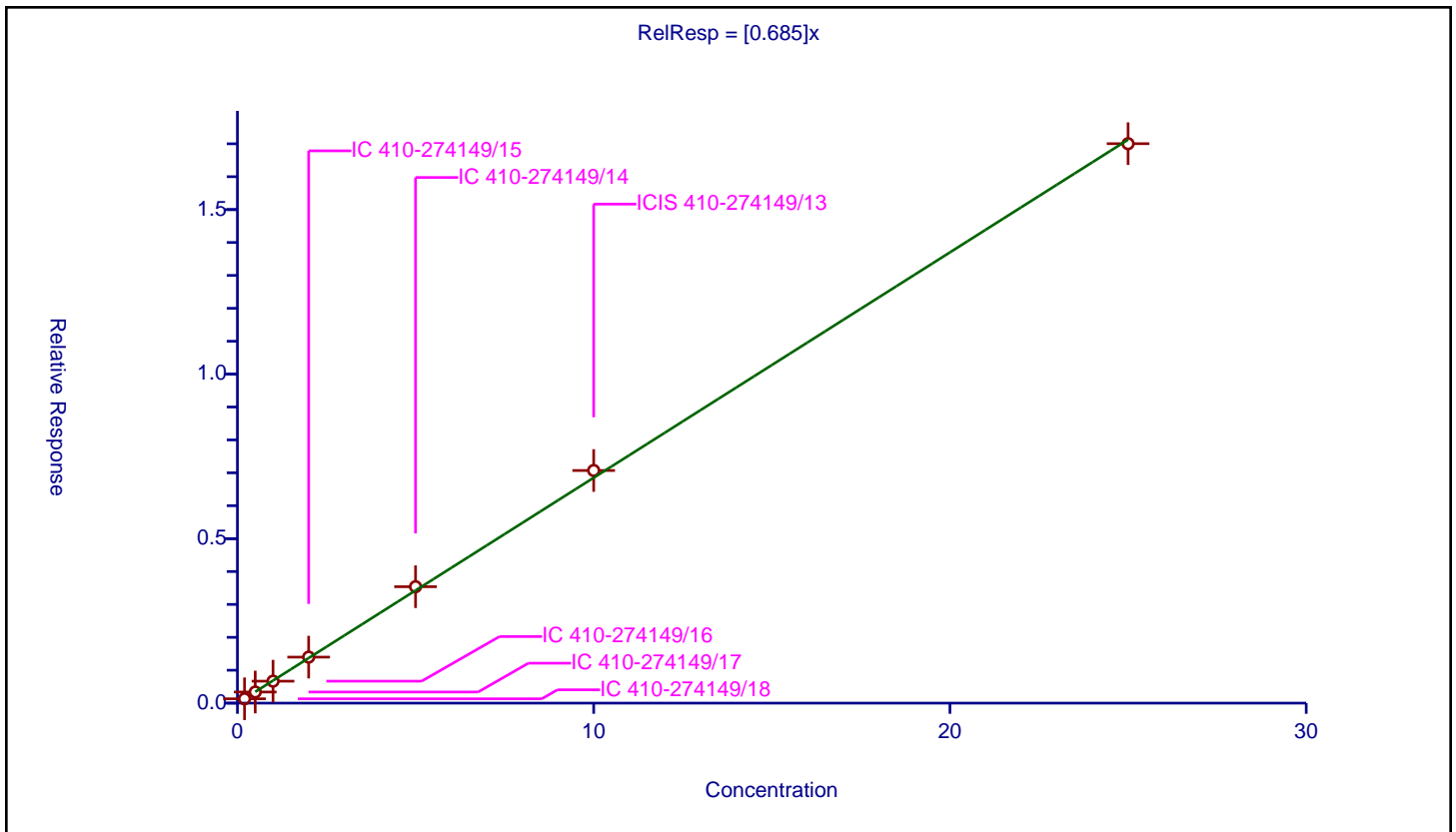
/ Bromobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.685

Error Coefficients	
Standard Error:	832000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.131505	10.0	1000650.0	0.657523	Y
2	IC 410-274149/17	0.5	0.338146	10.0	974107.0	0.676291	Y
3	IC 410-274149/16	1.0	0.667157	10.0	992900.0	0.667157	Y
4	IC 410-274149/15	2.0	1.398606	10.0	997250.0	0.699303	Y
5	IC 410-274149/14	5.0	3.538262	10.0	1047322.0	0.707652	Y
6	ICIS 410-274149/13	10.0	7.070429	10.0	1051287.0	0.707043	Y
7	IC 410-274149/12	25.0	17.003206	10.0	1090322.0	0.680128	Y



Calibration

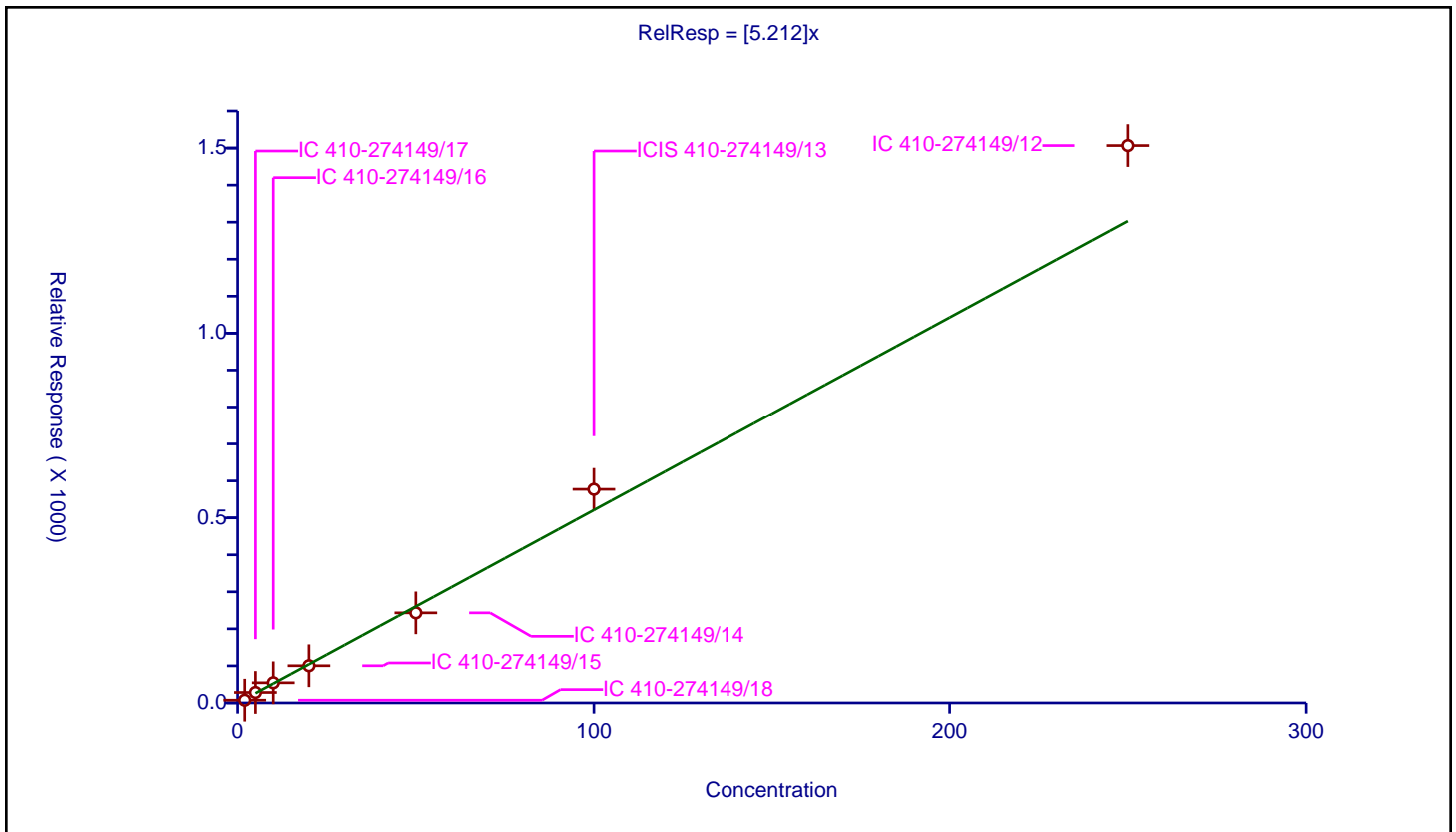
/ trans-1,4-Dichloro-2-butene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.212

Error Coefficients	
Standard Error:	1310000
Relative Standard Error:	14.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	2.0	7.435901	50.0	127772.0	3.717951	Y
2	IC 410-274149/17	5.0	28.253454	50.0	81790.0	5.650691	Y
3	IC 410-274149/16	10.0	54.339237	50.0	87066.0	5.433924	Y
4	IC 410-274149/15	20.0	100.309298	50.0	107663.0	5.015465	Y
5	IC 410-274149/14	50.0	243.243232	50.0	120975.0	4.864865	Y
6	ICIS 410-274149/13	100.0	577.240801	50.0	101370.0	5.772408	Y
7	IC 410-274149/12	250.0	1506.770693	50.0	96770.0	6.027083	Y



Calibration

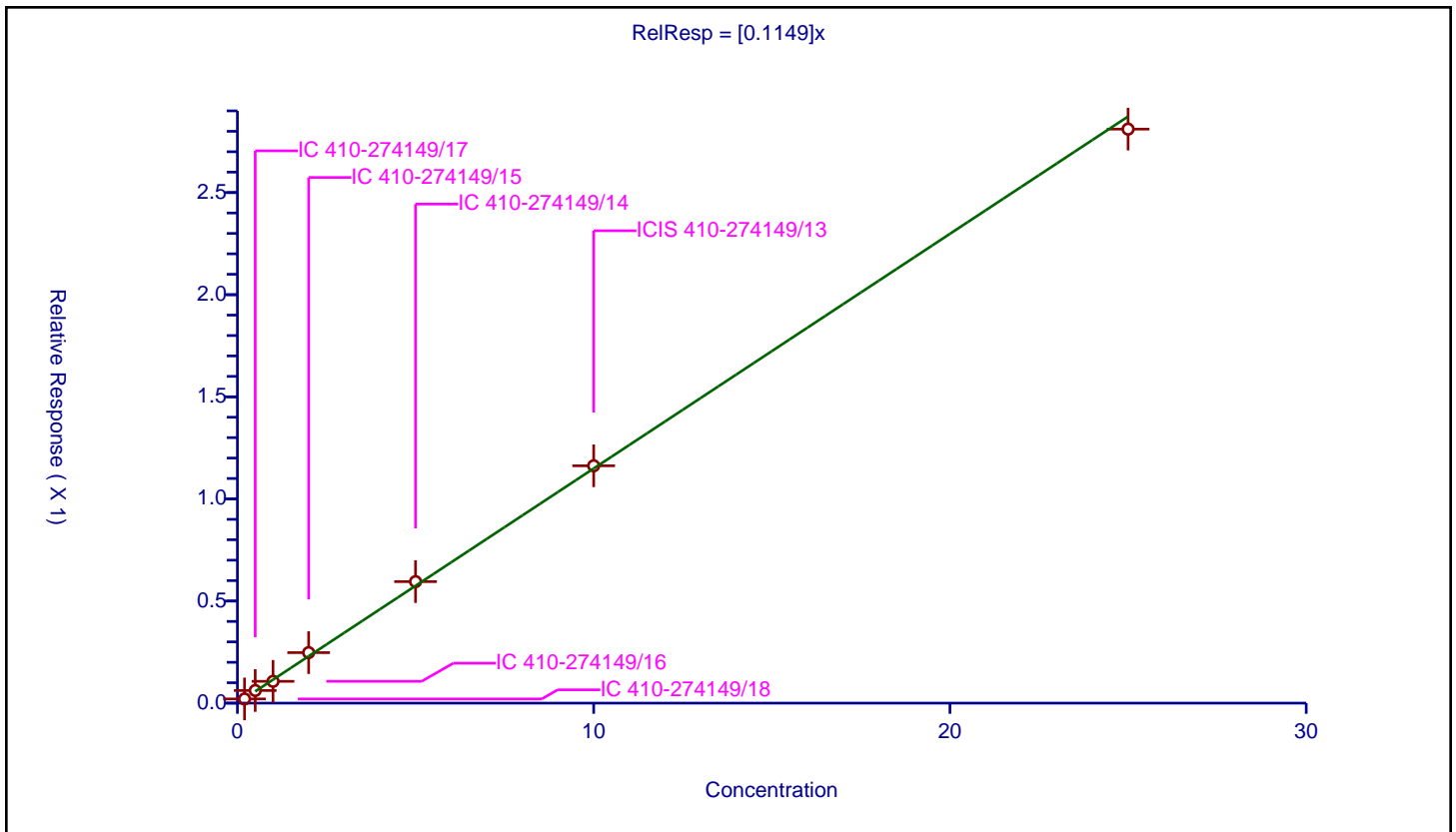
/ 1,2,3-Trichloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1149

Error Coefficients	
Standard Error:	138000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.020517	10.0	1000650.0	0.102583	Y
2	IC 410-274149/17	0.5	0.061841	10.0	974107.0	0.123683	Y
3	IC 410-274149/16	1.0	0.106738	10.0	992900.0	0.106738	Y
4	IC 410-274149/15	2.0	0.24732	10.0	997250.0	0.12366	Y
5	IC 410-274149/14	5.0	0.595022	10.0	1047322.0	0.119004	Y
6	ICIS 410-274149/13	10.0	1.162176	10.0	1051287.0	0.116218	Y
7	IC 410-274149/12	25.0	2.810601	10.0	1090322.0	0.112424	Y



**Calibration**

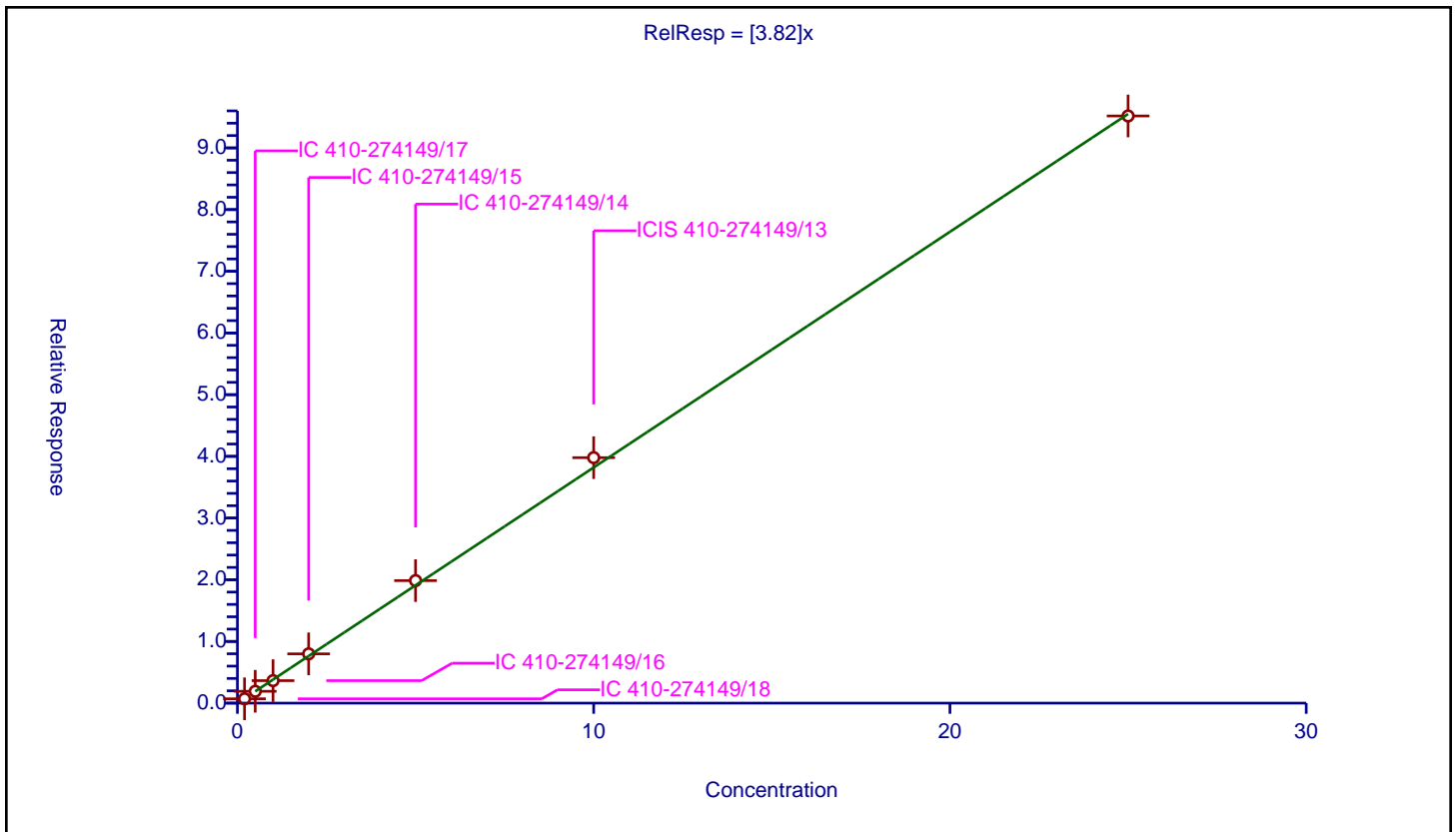
**/ N-Propylbenzene**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.82

Error Coefficients	
Standard Error:	4660000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.701294	10.0	1000650.0	3.506471	Y
2	IC 410-274149/17	0.5	1.917418	10.0	974107.0	3.834835	Y
3	IC 410-274149/16	1.0	3.644929	10.0	992900.0	3.644929	Y
4	IC 410-274149/15	2.0	7.989511	10.0	997250.0	3.994756	Y
5	IC 410-274149/14	5.0	19.863423	10.0	1047322.0	3.972685	Y
6	ICIS 410-274149/13	10.0	39.790409	10.0	1051287.0	3.979041	Y
7	IC 410-274149/12	25.0	95.176939	10.0	1090322.0	3.807078	Y



Calibration

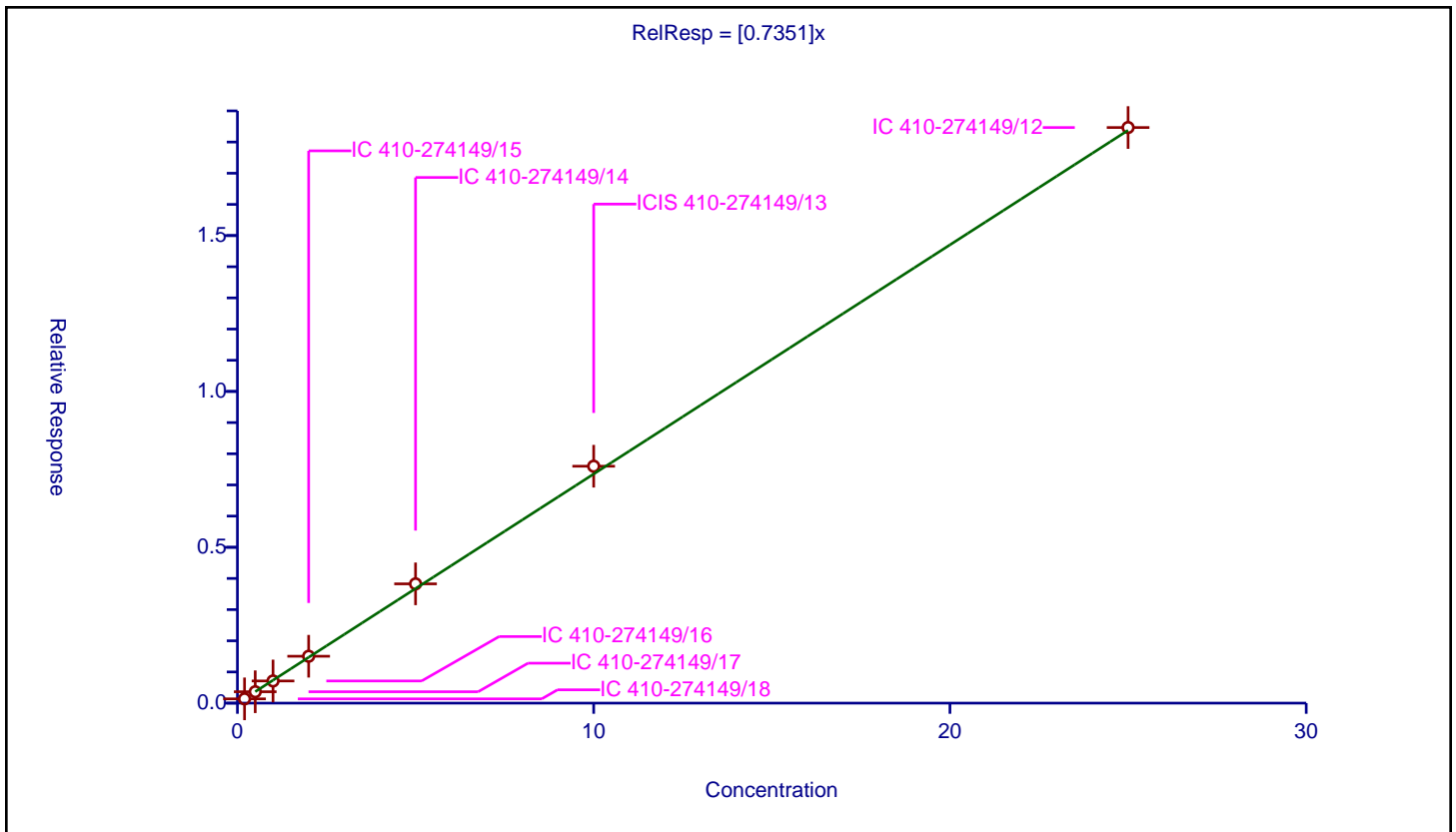
/ 2-Chlorotoluene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7351

Error Coefficients	
Standard Error:	902000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.137511	10.0	1000650.0	0.687553	Y
2	IC 410-274149/17	0.5	0.365165	10.0	974107.0	0.73033	Y
3	IC 410-274149/16	1.0	0.711451	10.0	992900.0	0.711451	Y
4	IC 410-274149/15	2.0	1.504497	10.0	997250.0	0.752249	Y
5	IC 410-274149/14	5.0	3.826836	10.0	1047322.0	0.765367	Y
6	ICIS 410-274149/13	10.0	7.600836	10.0	1051287.0	0.760084	Y
7	IC 410-274149/12	25.0	18.465912	10.0	1090322.0	0.738636	Y



Calibration

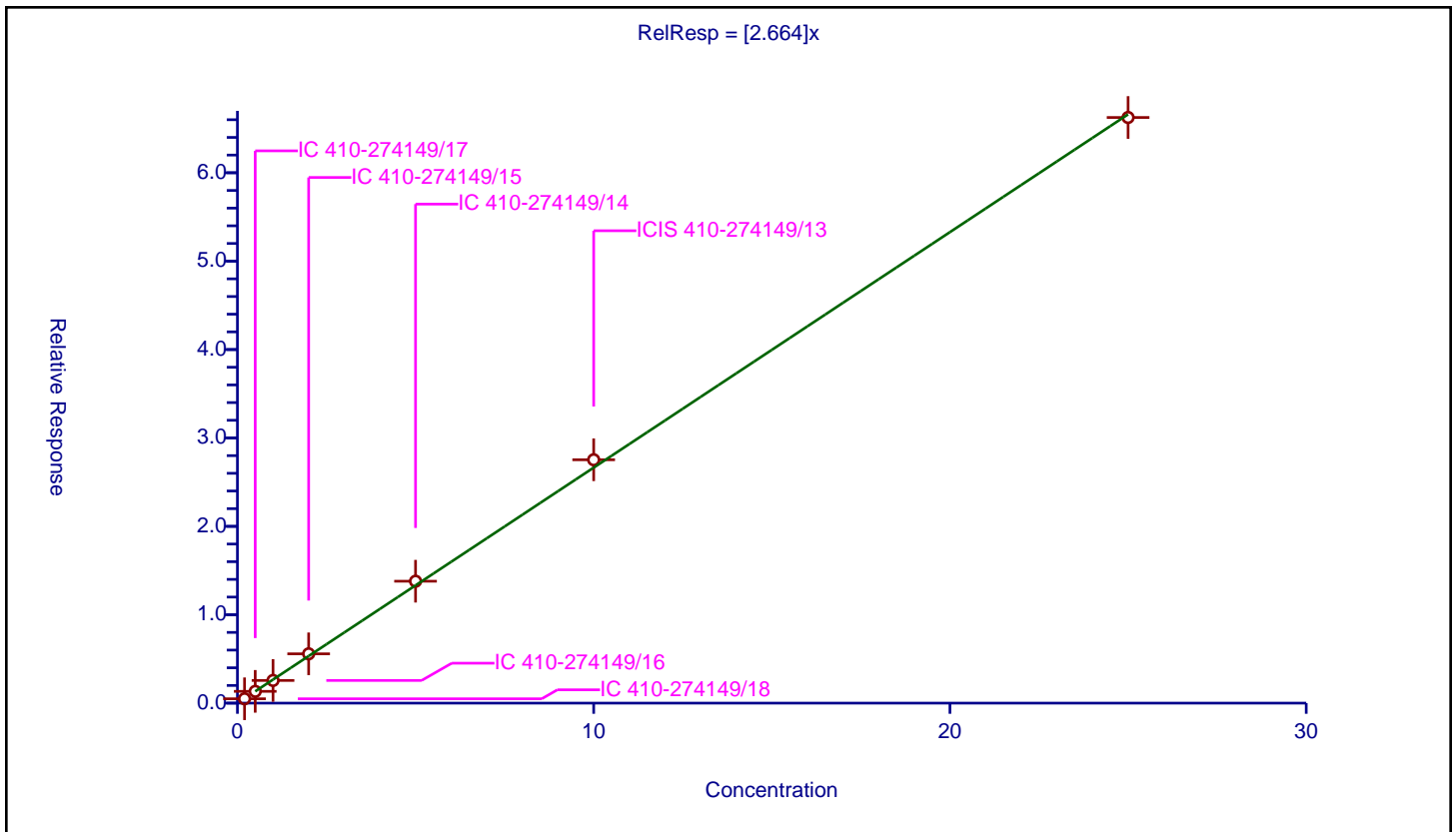
/ 1,3,5-Trimethylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.664

Error Coefficients	
Standard Error:	3240000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.493579	10.0	1000650.0	2.467896	Y
2	IC 410-274149/17	0.5	1.332862	10.0	974107.0	2.665724	Y
3	IC 410-274149/16	1.0	2.564931	10.0	992900.0	2.564931	Y
4	IC 410-274149/15	2.0	5.579012	10.0	997250.0	2.789506	Y
5	IC 410-274149/14	5.0	13.791804	10.0	1047322.0	2.758361	Y
6	ICIS 410-274149/13	10.0	27.53329	10.0	1051287.0	2.753329	Y
7	IC 410-274149/12	25.0	66.251548	10.0	1090322.0	2.650062	Y



**Calibration**

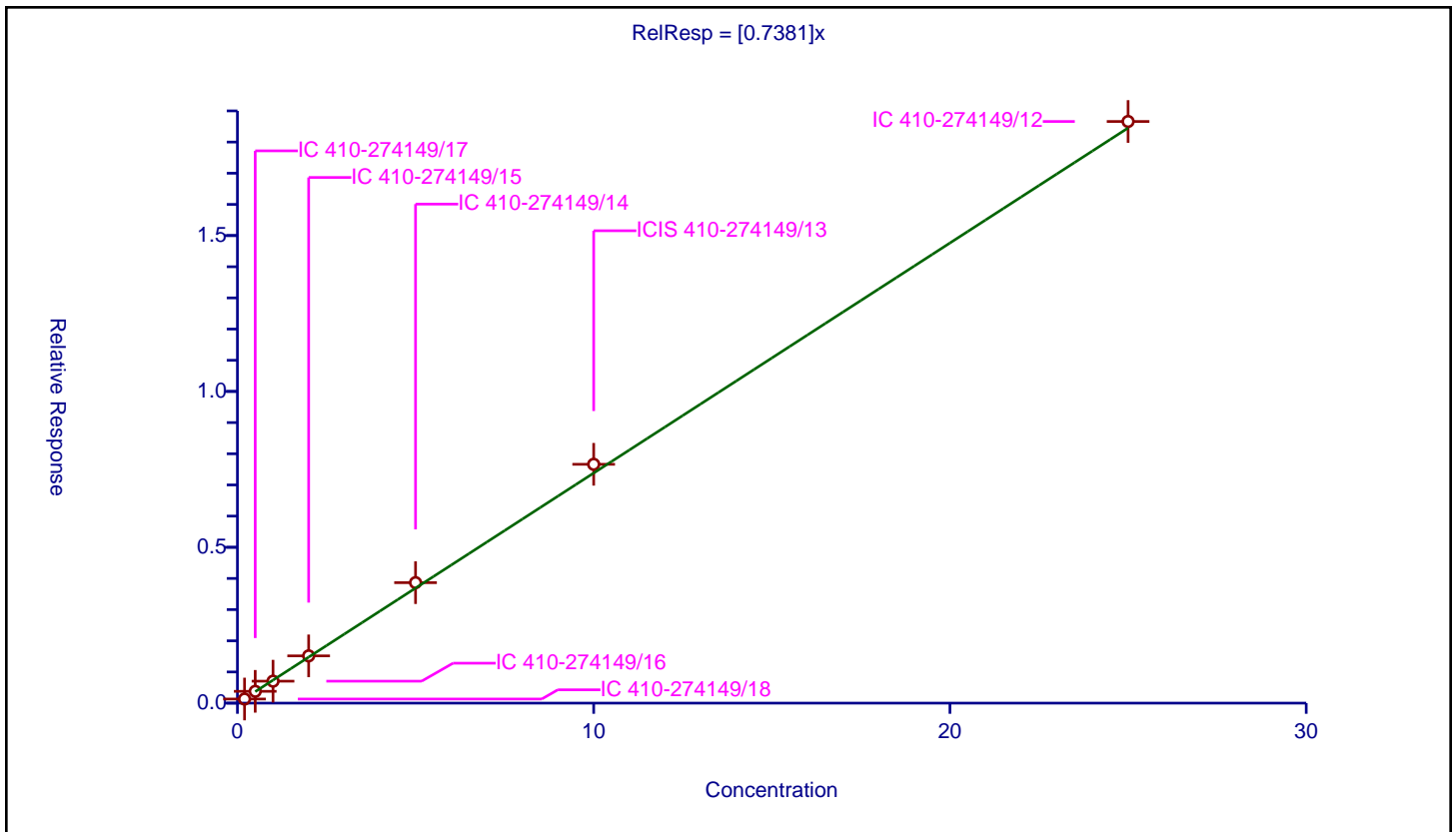
**/ 4-Chlorotoluene**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7381

Error Coefficients	
Standard Error:	911000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.132214	10.0	1000650.0	0.66107	Y
2	IC 410-274149/17	0.5	0.378767	10.0	974107.0	0.757535	Y
3	IC 410-274149/16	1.0	0.704139	10.0	992900.0	0.704139	Y
4	IC 410-274149/15	2.0	1.516551	10.0	997250.0	0.758275	Y
5	IC 410-274149/14	5.0	3.86522	10.0	1047322.0	0.773044	Y
6	ICIS 410-274149/13	10.0	7.662161	10.0	1051287.0	0.766216	Y
7	IC 410-274149/12	25.0	18.660011	10.0	1090322.0	0.7464	Y



Calibration

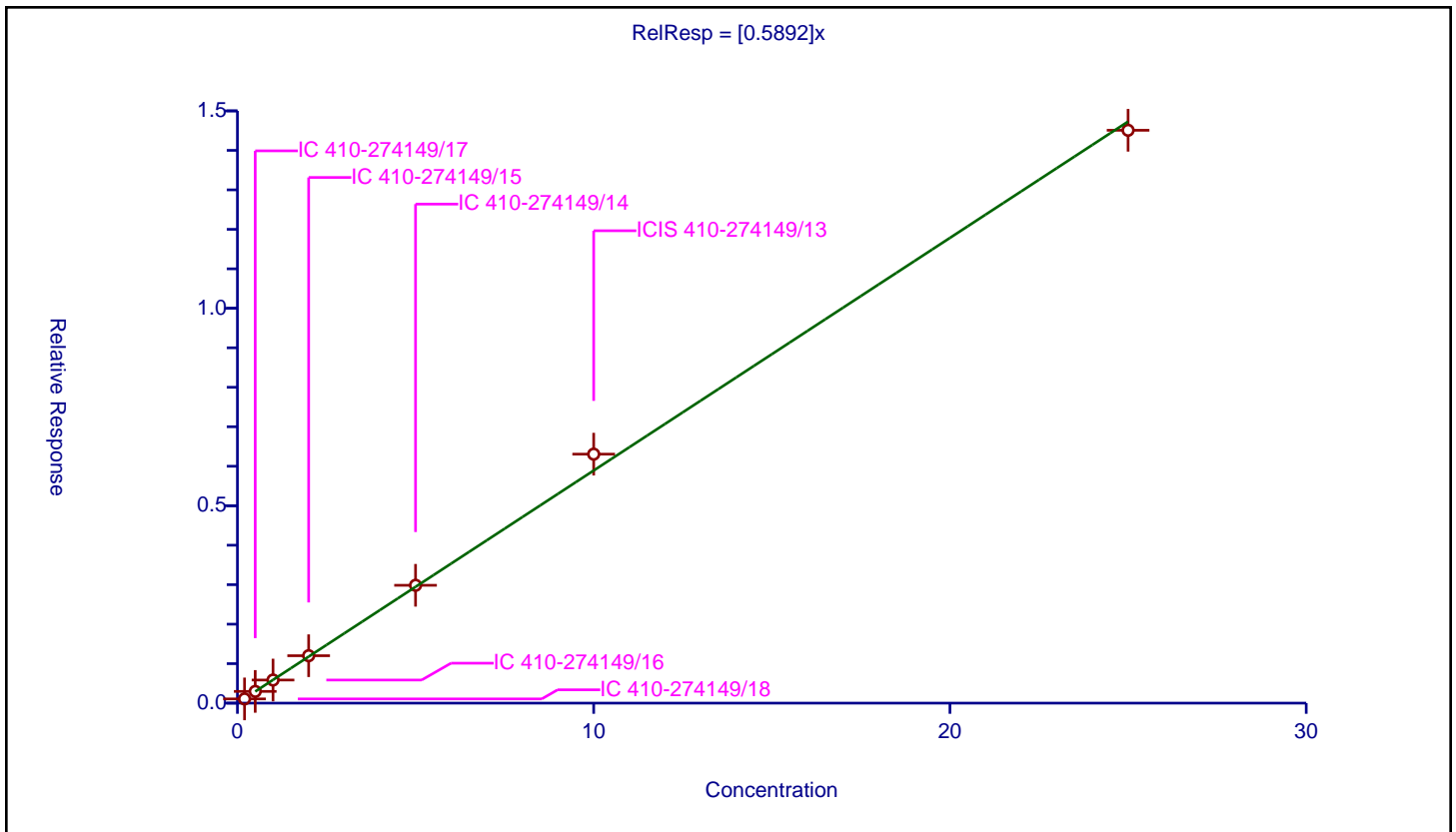
/ tert-Butylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5892

Error Coefficients	
Standard Error:	714000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.10715	10.0	1000650.0	0.535752	Y
2	IC 410-274149/17	0.5	0.297267	10.0	974107.0	0.594534	Y
3	IC 410-274149/16	1.0	0.585517	10.0	992900.0	0.585517	Y
4	IC 410-274149/15	2.0	1.200892	10.0	997250.0	0.600446	Y
5	IC 410-274149/14	5.0	2.984717	10.0	1047322.0	0.596943	Y
6	ICIS 410-274149/13	10.0	6.306194	10.0	1051287.0	0.630619	Y
7	IC 410-274149/12	25.0	14.508604	10.0	1090322.0	0.580344	Y





Calibration

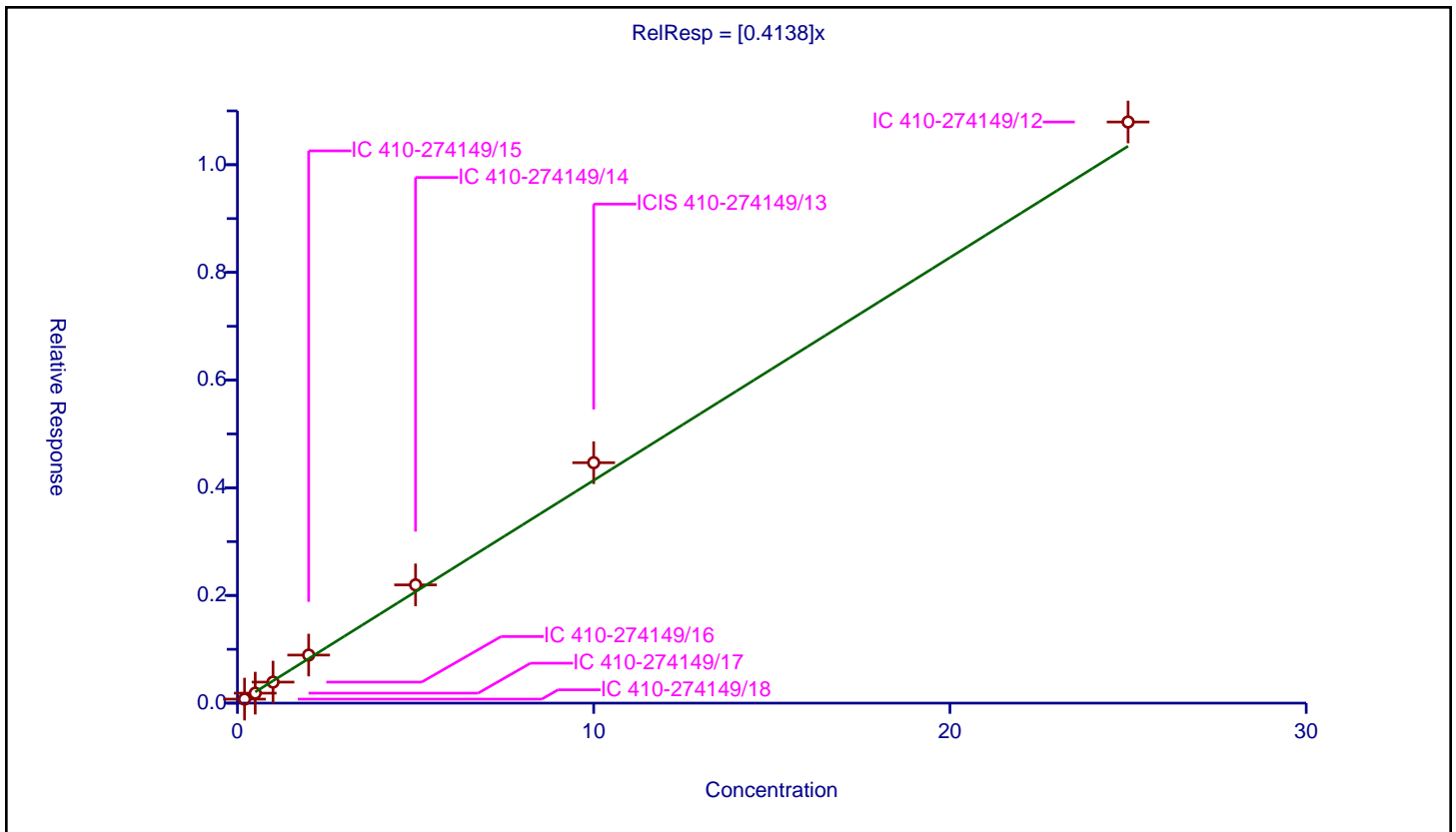
/ Pentachloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4138

Error Coefficients	
Standard Error:	527000
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.074402	10.0	1000650.0	0.372008	Y
2	IC 410-274149/17	0.5	0.185021	10.0	974107.0	0.370041	Y
3	IC 410-274149/16	1.0	0.390613	10.0	992900.0	0.390613	Y
4	IC 410-274149/15	2.0	0.892524	10.0	997250.0	0.446262	Y
5	IC 410-274149/14	5.0	2.196335	10.0	1047322.0	0.439267	Y
6	ICIS 410-274149/13	10.0	4.465831	10.0	1051287.0	0.446583	Y
7	IC 410-274149/12	25.0	10.79394	10.0	1090322.0	0.431758	Y



Calibration

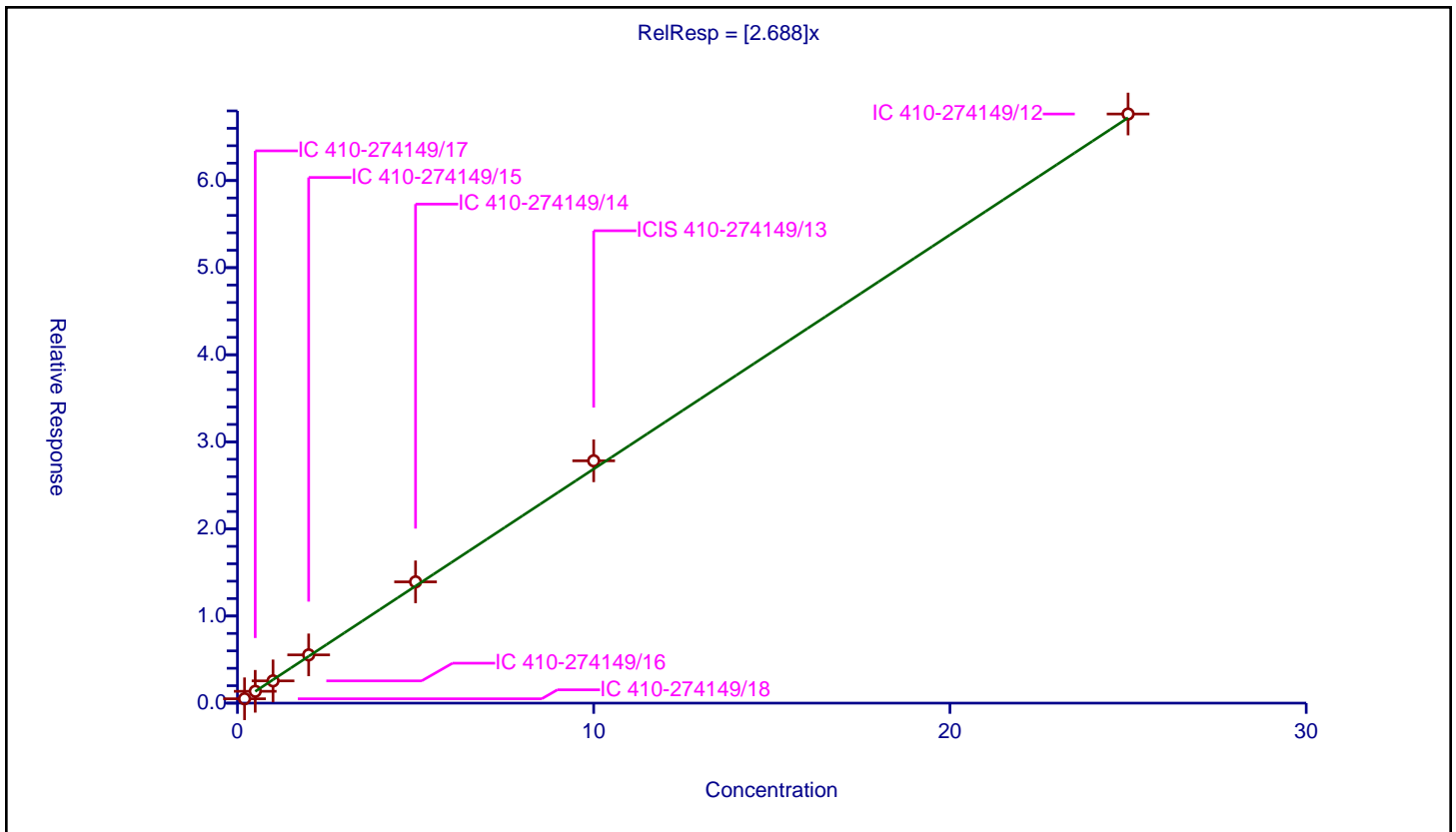
/ 1,2,4-Trimethylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.688

Error Coefficients	
Standard Error:	3300000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.500984	10.0	1000650.0	2.504922	Y
2	IC 410-274149/17	0.5	1.358105	10.0	974107.0	2.716211	Y
3	IC 410-274149/16	1.0	2.555816	10.0	992900.0	2.555816	Y
4	IC 410-274149/15	2.0	5.53829	10.0	997250.0	2.769145	Y
5	IC 410-274149/14	5.0	13.923798	10.0	1047322.0	2.78476	Y
6	ICIS 410-274149/13	10.0	27.822602	10.0	1051287.0	2.78226	Y
7	IC 410-274149/12	25.0	67.641449	10.0	1090322.0	2.705658	Y



Calibration

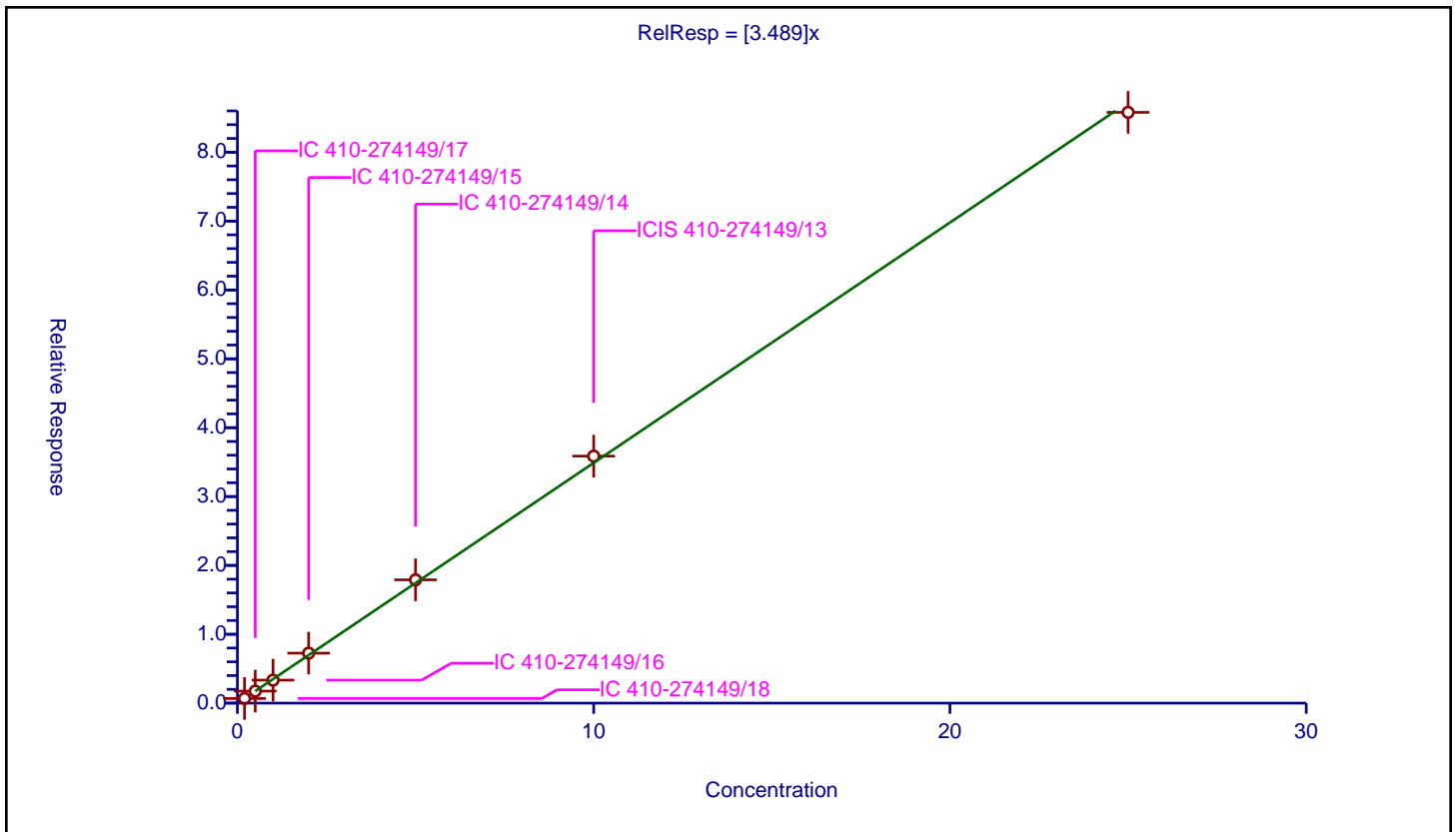
/ sec-Butylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.489

Error Coefficients	
Standard Error:	4200000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.672433	10.0	1000650.0	3.362165	Y
2	IC 410-274149/17	0.5	1.748083	10.0	974107.0	3.496166	Y
3	IC 410-274149/16	1.0	3.338282	10.0	992900.0	3.338282	Y
4	IC 410-274149/15	2.0	7.257298	10.0	997250.0	3.628649	Y
5	IC 410-274149/14	5.0	17.903243	10.0	1047322.0	3.580649	Y
6	ICIS 410-274149/13	10.0	35.868749	10.0	1051287.0	3.586875	Y
7	IC 410-274149/12	25.0	85.786098	10.0	1090322.0	3.431444	Y



Calibration

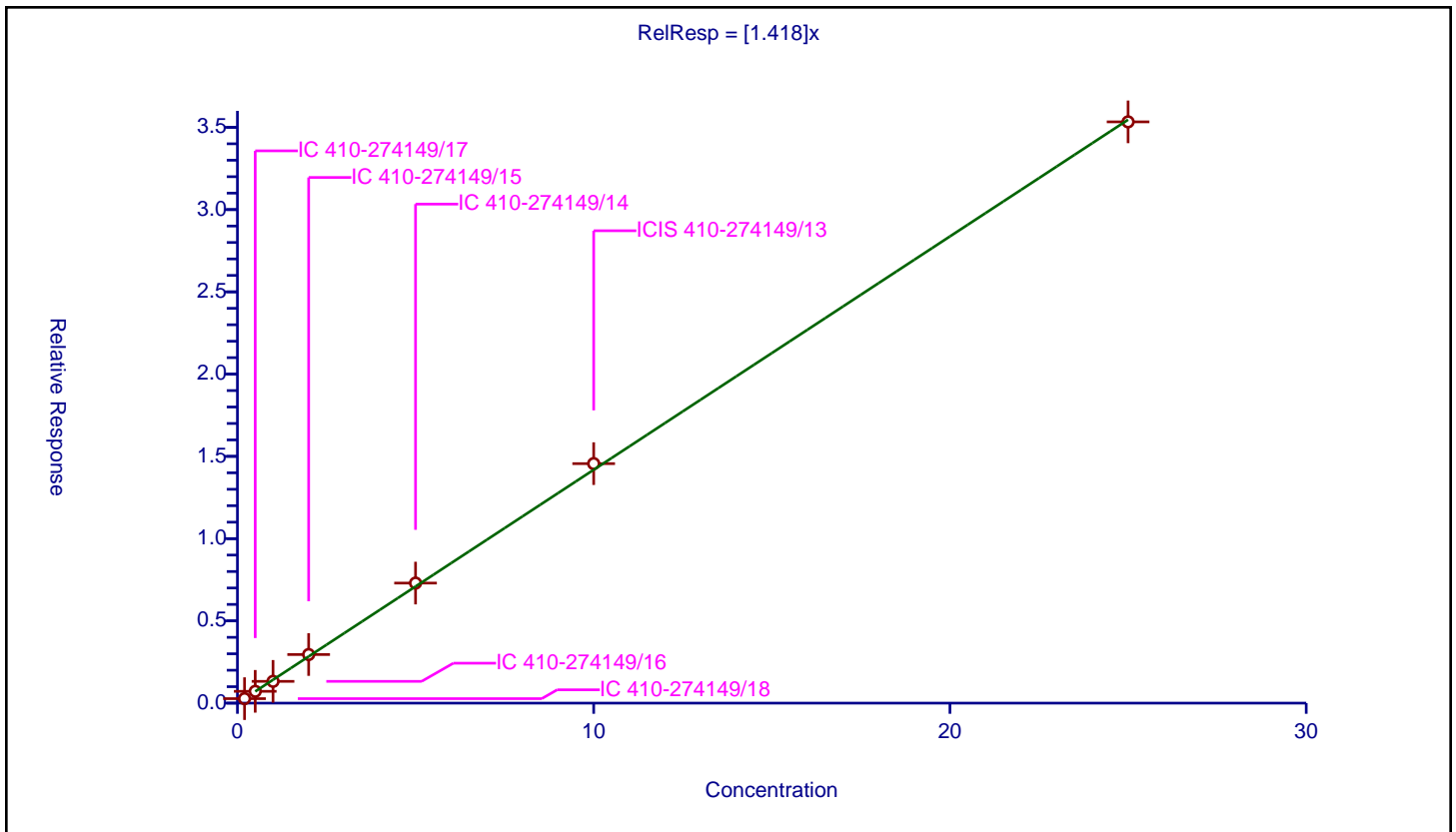
/ 1,3-Dichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.418

Error Coefficients	
Standard Error:	1730000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.272983	10.0	1000650.0	1.364913	Y
2	IC 410-274149/17	0.5	0.717693	10.0	974107.0	1.435386	Y
3	IC 410-274149/16	1.0	1.323406	10.0	992900.0	1.323406	Y
4	IC 410-274149/15	2.0	2.953883	10.0	997250.0	1.476942	Y
5	IC 410-274149/14	5.0	7.297765	10.0	1047322.0	1.459553	Y
6	ICIS 410-274149/13	10.0	14.558822	10.0	1051287.0	1.455882	Y
7	IC 410-274149/12	25.0	35.333094	10.0	1090322.0	1.413324	Y



Calibration

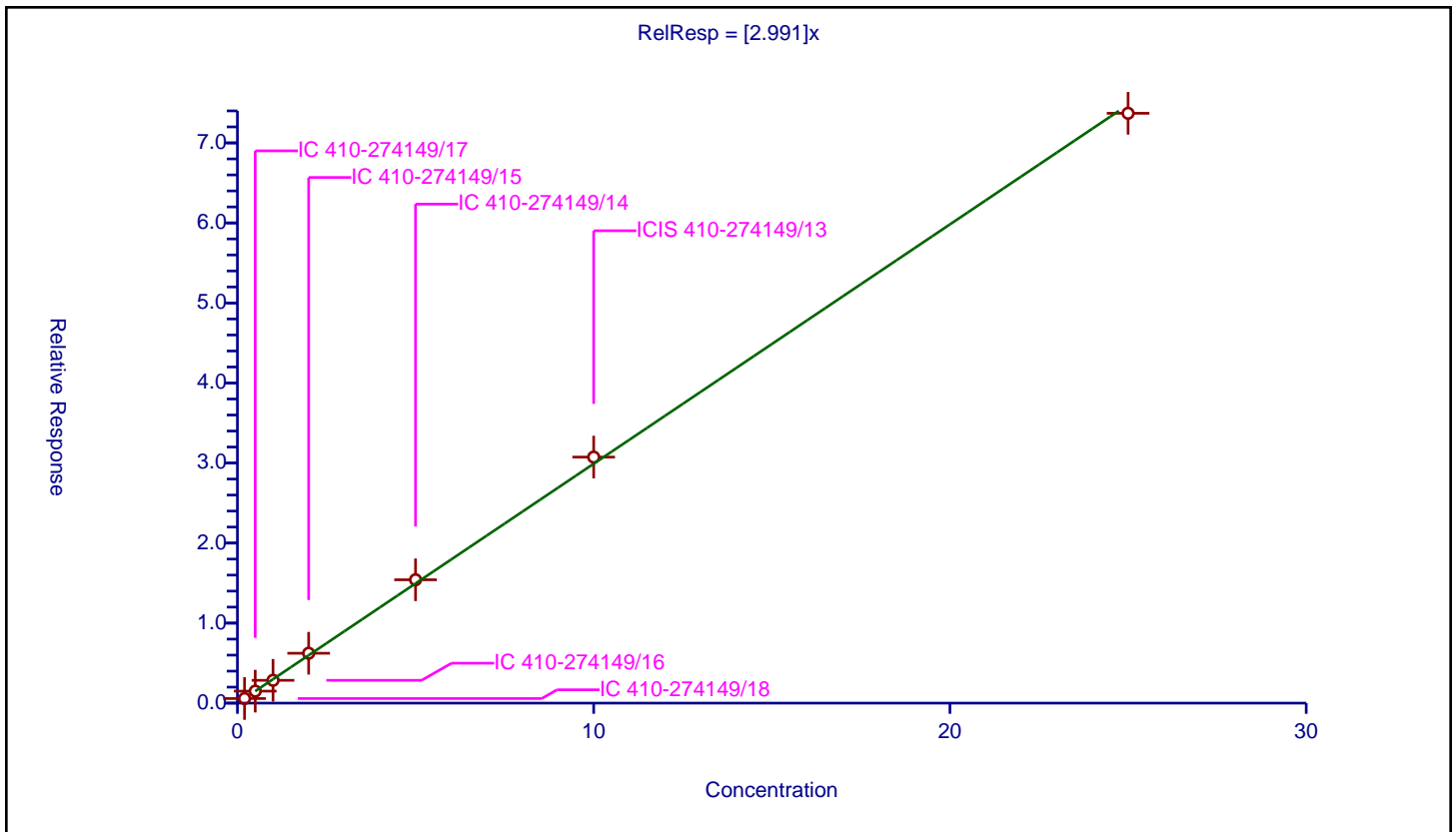
/ 4-Isopropyltoluene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.991

Error Coefficients	
Standard Error:	3610000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.573247	10.0	1000650.0	2.866237	Y
2	IC 410-274149/17	0.5	1.500184	10.0	974107.0	3.000369	Y
3	IC 410-274149/16	1.0	2.850317	10.0	992900.0	2.850317	Y
4	IC 410-274149/15	2.0	6.230474	10.0	997250.0	3.115237	Y
5	IC 410-274149/14	5.0	15.413359	10.0	1047322.0	3.082672	Y
6	ICIS 410-274149/13	10.0	30.740901	10.0	1051287.0	3.07409	Y
7	IC 410-274149/12	25.0	73.698962	10.0	1090322.0	2.947958	Y



Calibration

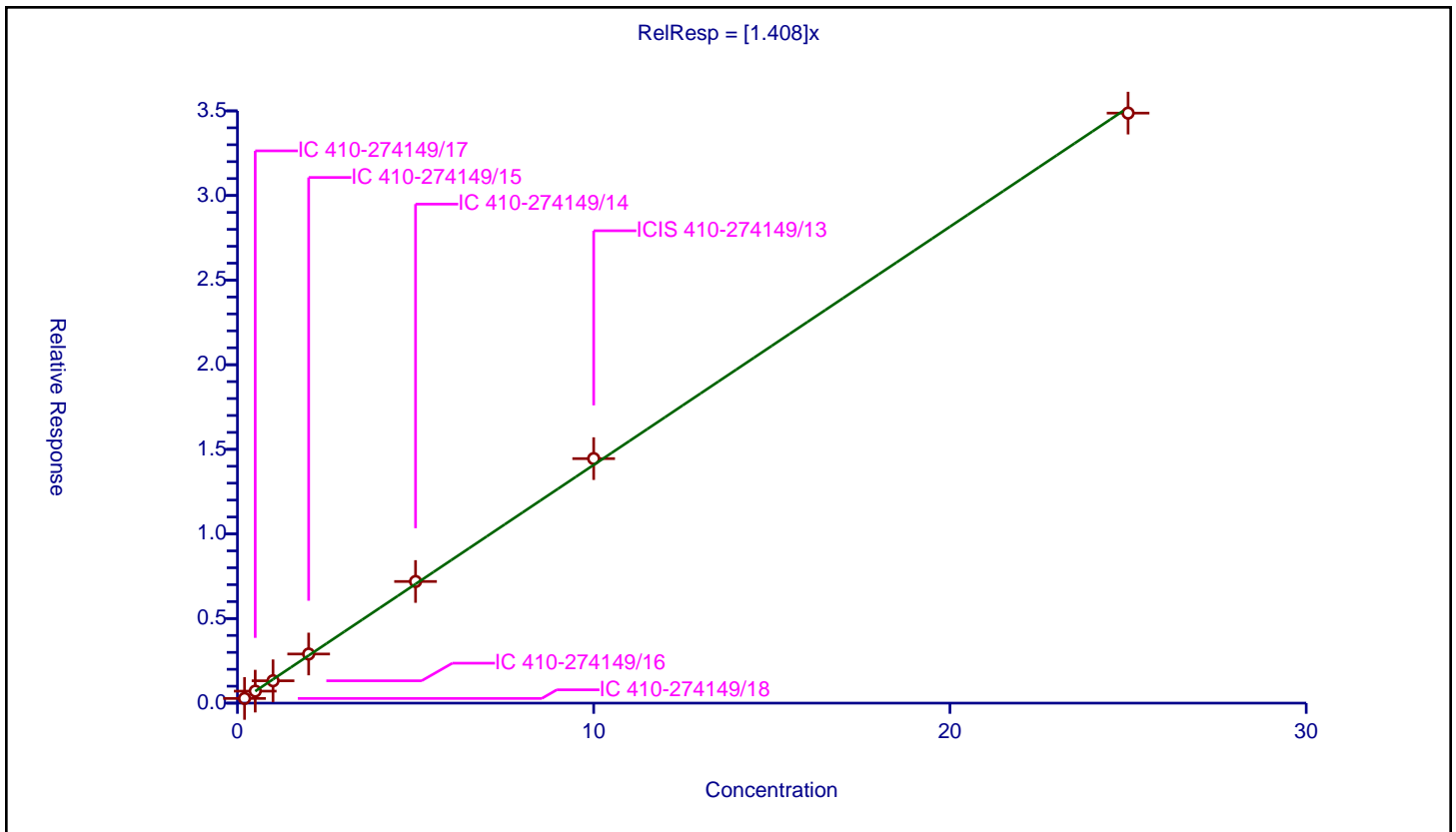
/ 1,4-Dichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.408

Error Coefficients	
Standard Error:	1700000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.27683	10.0	1000650.0	1.38415	Y
2	IC 410-274149/17	0.5	0.709573	10.0	974107.0	1.419146	Y
3	IC 410-274149/16	1.0	1.321644	10.0	992900.0	1.321644	Y
4	IC 410-274149/15	2.0	2.903926	10.0	997250.0	1.451963	Y
5	IC 410-274149/14	5.0	7.188792	10.0	1047322.0	1.437758	Y
6	ICIS 410-274149/13	10.0	14.450098	10.0	1051287.0	1.44501	Y
7	IC 410-274149/12	25.0	34.86914	10.0	1090322.0	1.394766	Y



Calibration

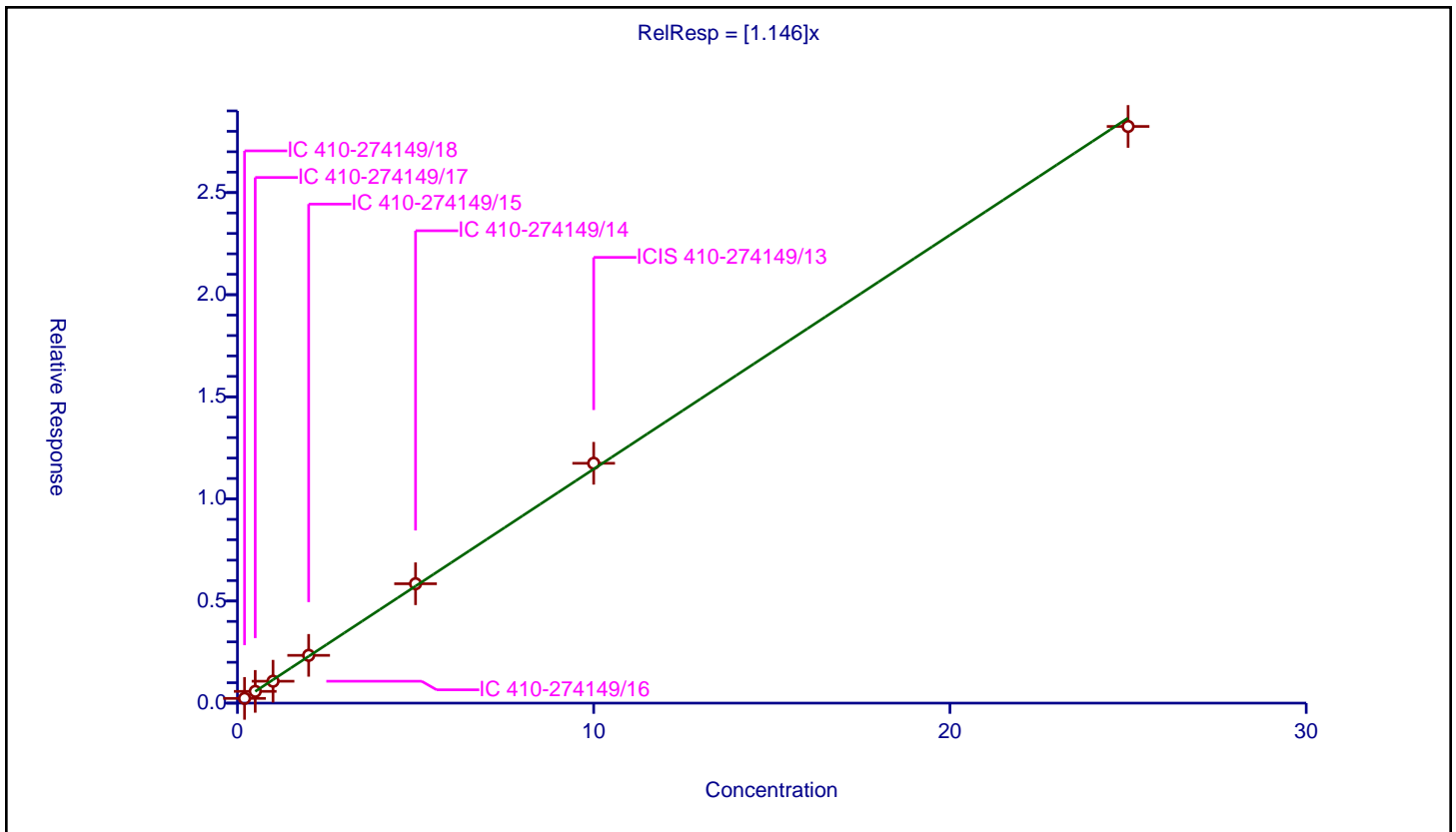
/ 1,2,3-Trimethylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.146

Error Coefficients	
Standard Error:	1380000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.23128	10.0	1000650.0	1.156398	Y
2	IC 410-274149/17	0.5	0.575738	10.0	974107.0	1.151475	Y
3	IC 410-274149/16	1.0	1.072102	10.0	992900.0	1.072102	Y
4	IC 410-274149/15	2.0	2.339233	10.0	997250.0	1.169616	Y
5	IC 410-274149/14	5.0	5.845356	10.0	1047322.0	1.169071	Y
6	ICIS 410-274149/13	10.0	11.744195	10.0	1051287.0	1.17442	Y
7	IC 410-274149/12	25.0	28.238062	10.0	1090322.0	1.129522	Y



**Calibration**

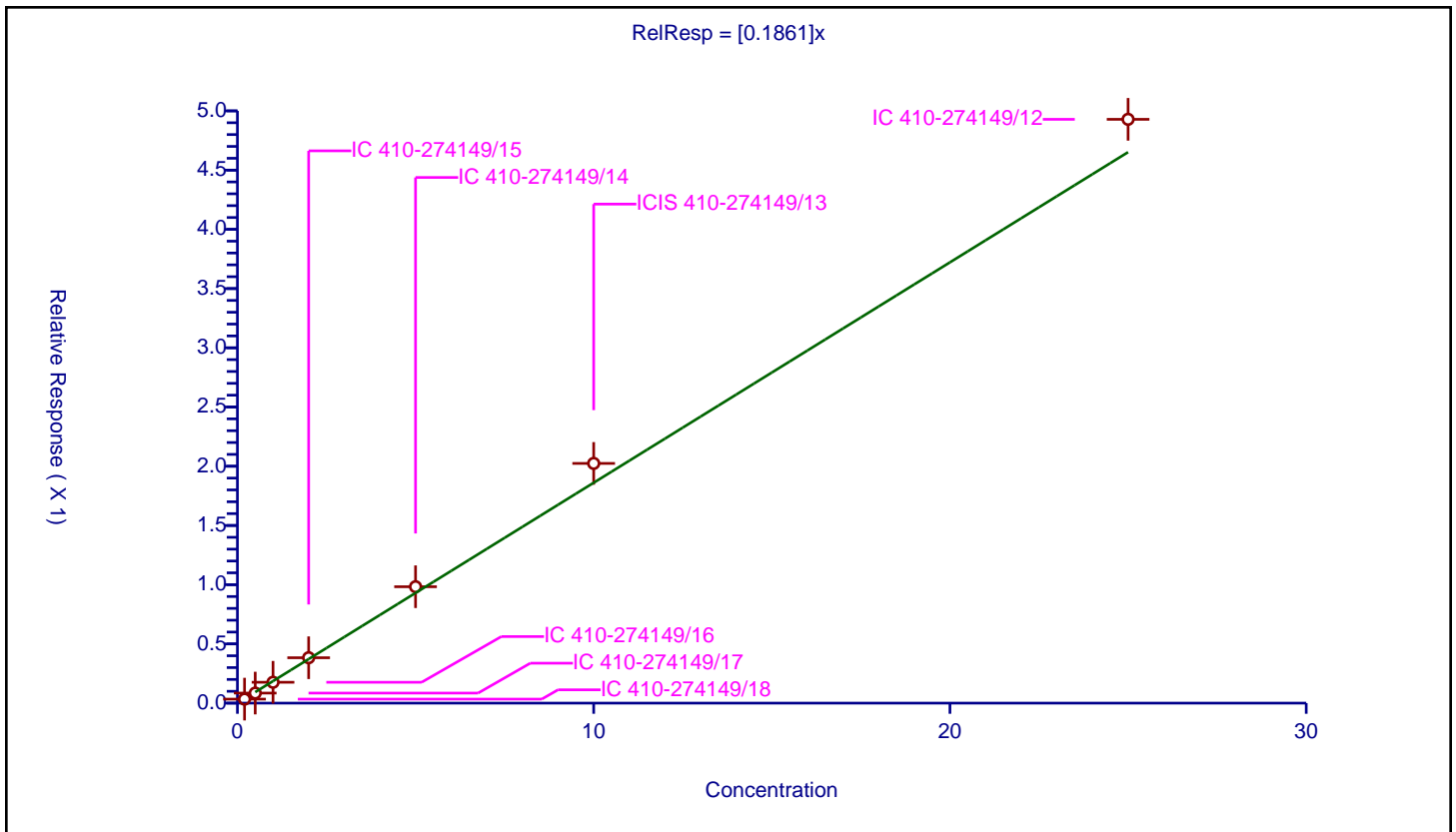
/ Benzyl chloride

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1861

Error Coefficients	
Standard Error:	240000
Relative Standard Error:	7.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.033768	10.0	1000650.0	0.16884	Y
2	IC 410-274149/17	0.5	0.084796	10.0	974107.0	0.169591	Y
3	IC 410-274149/16	1.0	0.176251	10.0	992900.0	0.176251	Y
4	IC 410-274149/15	2.0	0.383324	10.0	997250.0	0.191662	Y
5	IC 410-274149/14	5.0	0.982792	10.0	1047322.0	0.196558	Y
6	ICIS 410-274149/13	10.0	2.023872	10.0	1051287.0	0.202387	Y
7	IC 410-274149/12	25.0	4.92881	10.0	1090322.0	0.197152	Y





Calibration

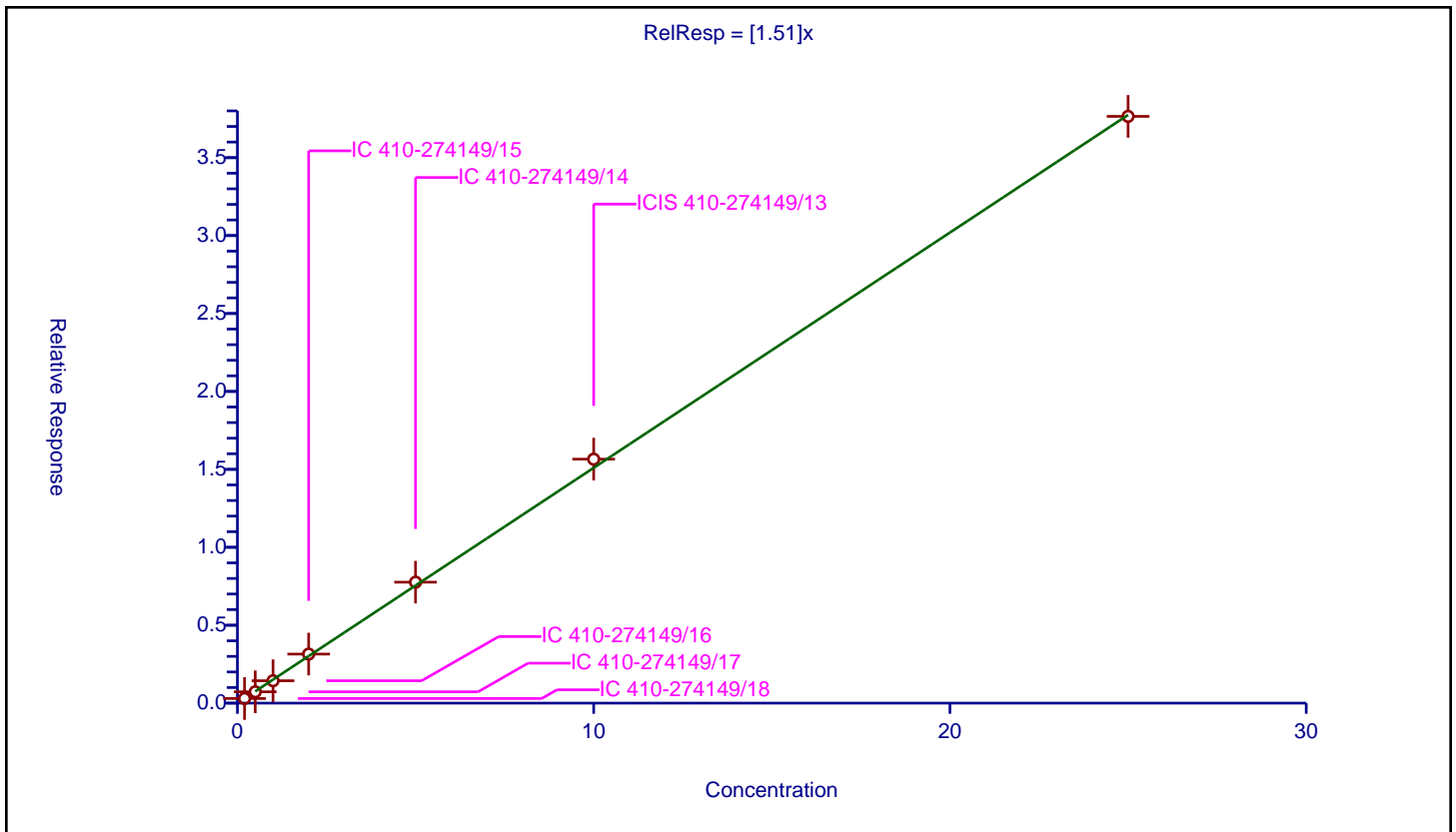
/ n-Butylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.51

Error Coefficients	
Standard Error:	1840000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.295778	10.0	1000650.0	1.478889	Y
2	IC 410-274149/17	0.5	0.727918	10.0	974107.0	1.455836	Y
3	IC 410-274149/16	1.0	1.435774	10.0	992900.0	1.435774	Y
4	IC 410-274149/15	2.0	3.147536	10.0	997250.0	1.573768	Y
5	IC 410-274149/14	5.0	7.760307	10.0	1047322.0	1.552061	Y
6	ICIS 410-274149/13	10.0	15.653528	10.0	1051287.0	1.565353	Y
7	IC 410-274149/12	25.0	37.648447	10.0	1090322.0	1.505938	Y



Calibration

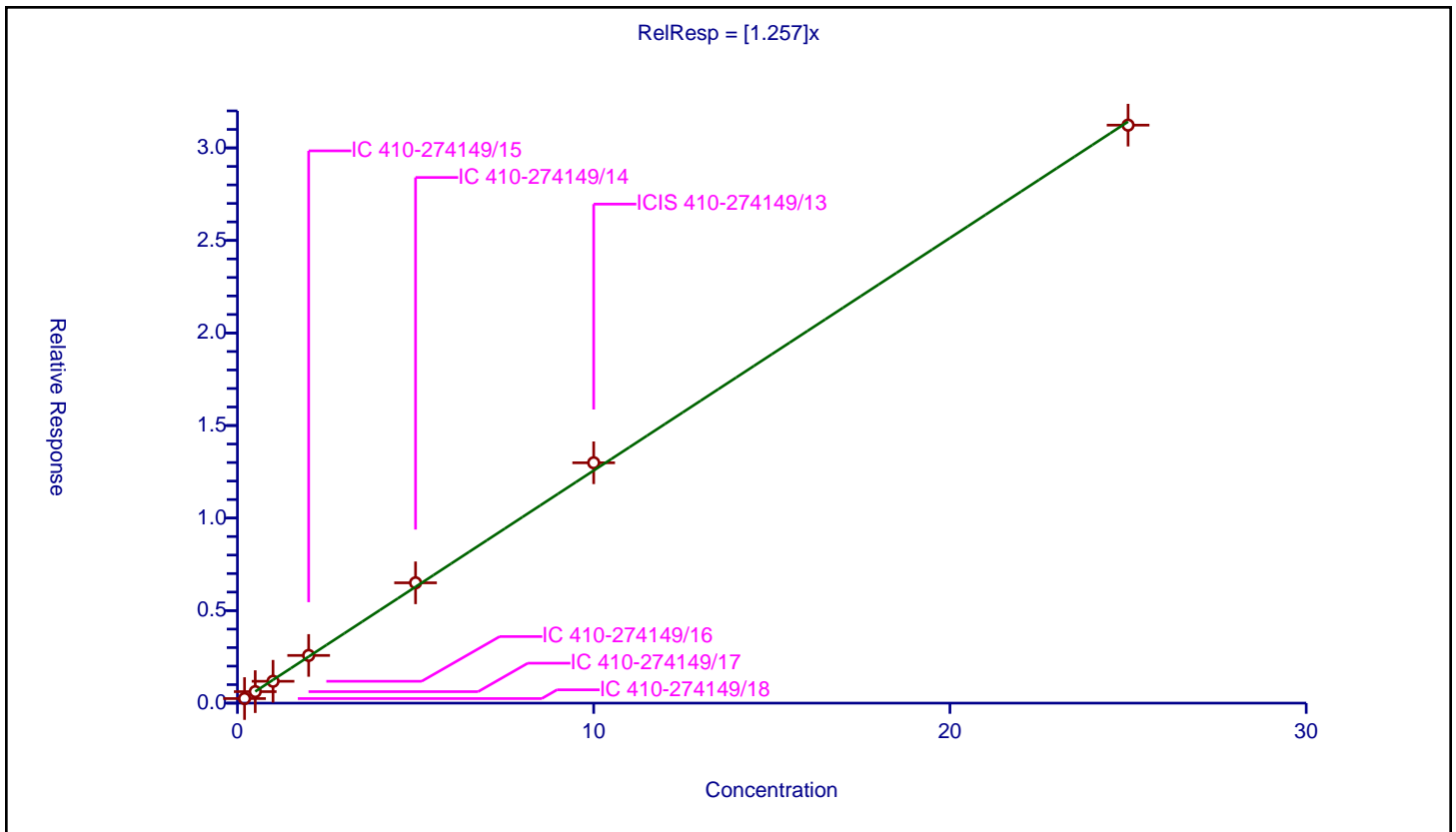
/ 1,2-Dichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.257

Error Coefficients	
Standard Error:	1530000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.247299	10.0	1000650.0	1.236496	Y
2	IC 410-274149/17	0.5	0.621677	10.0	974107.0	1.243354	Y
3	IC 410-274149/16	1.0	1.180723	10.0	992900.0	1.180723	Y
4	IC 410-274149/15	2.0	2.576084	10.0	997250.0	1.288042	Y
5	IC 410-274149/14	5.0	6.501496	10.0	1047322.0	1.300299	Y
6	ICIS 410-274149/13	10.0	12.987348	10.0	1051287.0	1.298735	Y
7	IC 410-274149/12	25.0	31.230655	10.0	1090322.0	1.249226	Y



Calibration

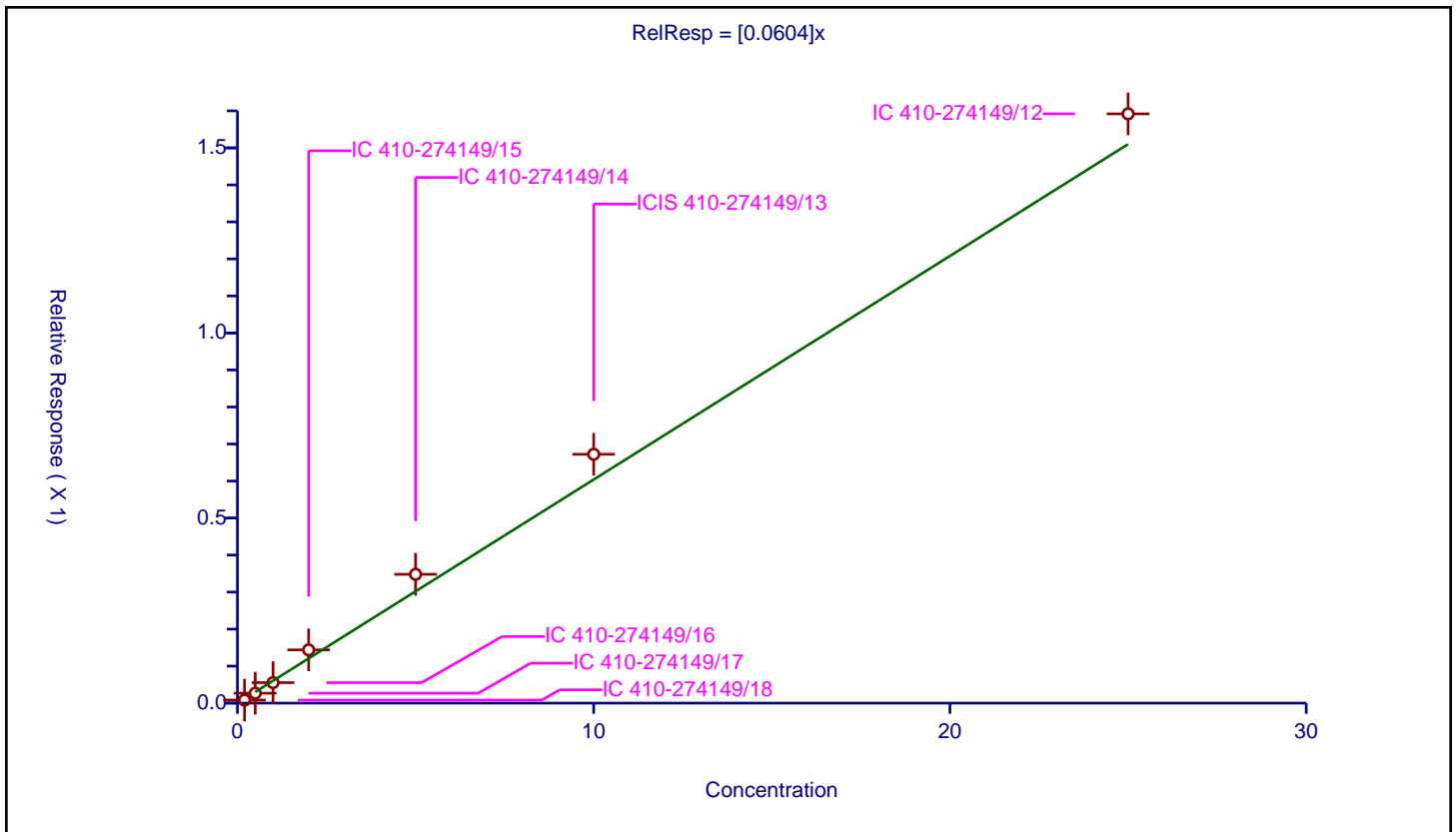
/ 1,2-Dibromo-3-Chloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.0604

Error Coefficients	
Standard Error:	78200
Relative Standard Error:	18.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.008285	10.0	1000650.0	0.041423	Y
2	IC 410-274149/17	0.5	0.026784	10.0	974107.0	0.053567	Y
3	IC 410-274149/16	1.0	0.055383	10.0	992900.0	0.055383	Y
4	IC 410-274149/15	2.0	0.143856	10.0	997250.0	0.071928	Y
5	IC 410-274149/14	5.0	0.347983	10.0	1047322.0	0.069597	Y
6	ICIS 410-274149/13	10.0	0.67229	10.0	1051287.0	0.067229	Y
7	IC 410-274149/12	25.0	1.591952	10.0	1090322.0	0.063678	Y



Calibration

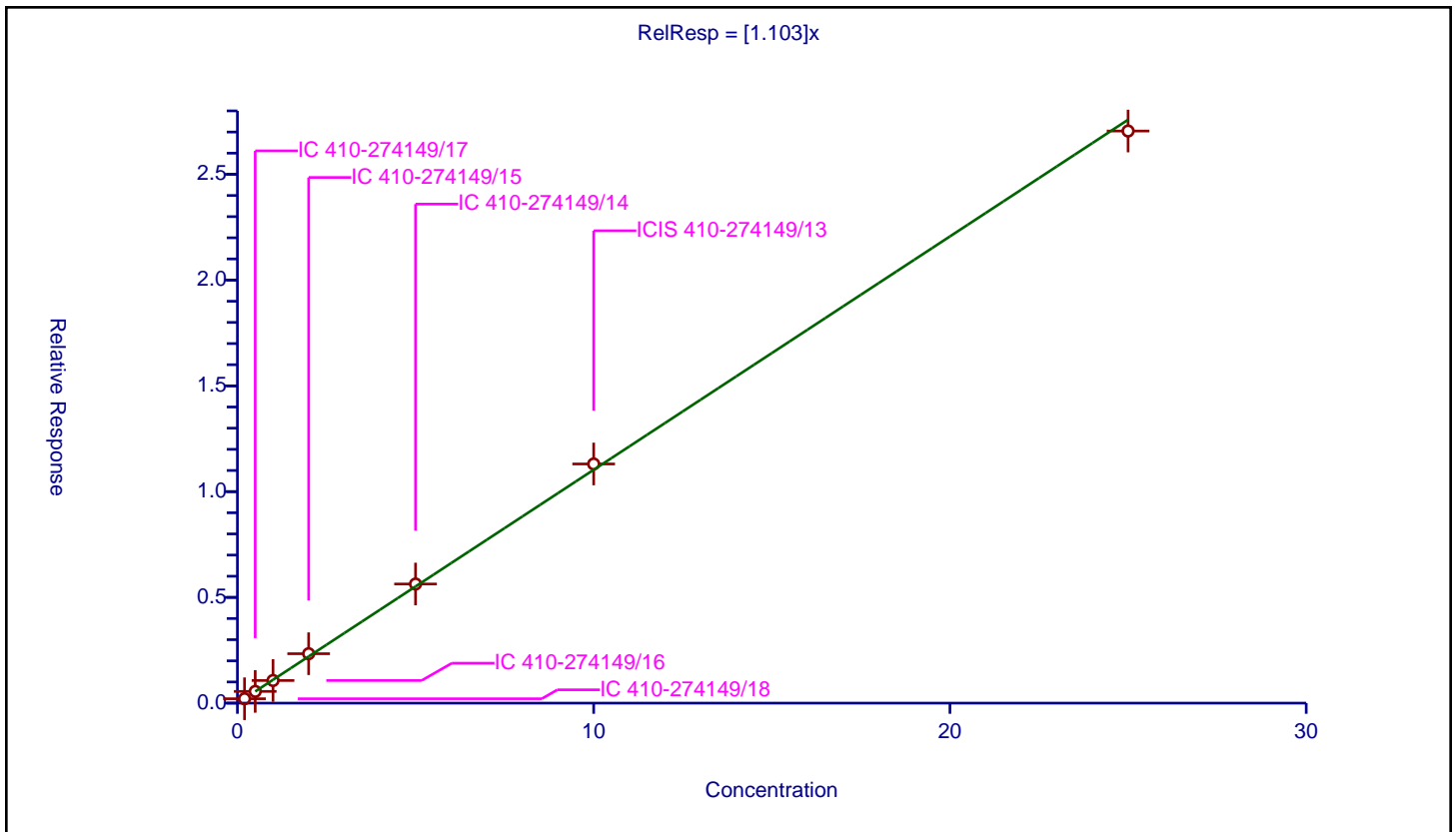
/ 1,3,5-Trichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.103

Error Coefficients	
Standard Error:	1320000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.207245	10.0	1000650.0	1.036226	Y
2	IC 410-274149/17	0.5	0.554672	10.0	974107.0	1.109344	Y
3	IC 410-274149/16	1.0	1.070098	10.0	992900.0	1.070098	Y
4	IC 410-274149/15	2.0	2.336445	10.0	997250.0	1.168223	Y
5	IC 410-274149/14	5.0	5.632165	10.0	1047322.0	1.126433	Y
6	ICIS 410-274149/13	10.0	11.306988	10.0	1051287.0	1.130699	Y
7	IC 410-274149/12	25.0	27.048037	10.0	1090322.0	1.081921	Y



Calibration

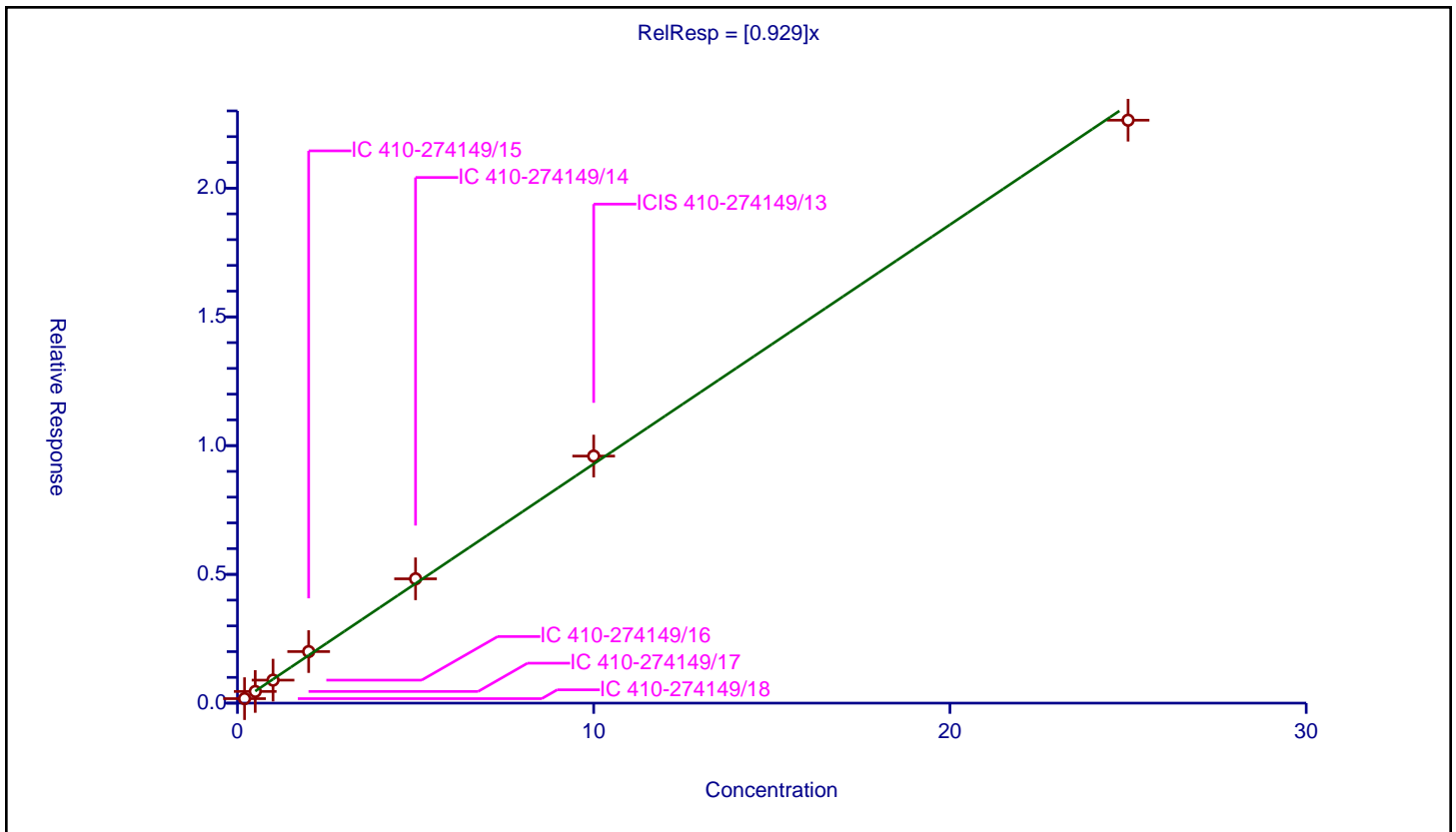
/ 1,2,4-Trichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.929

Error Coefficients	
Standard Error:	1110000
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.174067	10.0	1000650.0	0.870334	Y
2	IC 410-274149/17	0.5	0.453954	10.0	974107.0	0.907908	Y
3	IC 410-274149/16	1.0	0.893202	10.0	992900.0	0.893202	Y
4	IC 410-274149/15	2.0	2.001935	10.0	997250.0	1.000968	Y
5	IC 410-274149/14	5.0	4.827665	10.0	1047322.0	0.965533	Y
6	ICIS 410-274149/13	10.0	9.595505	10.0	1051287.0	0.959551	Y
7	IC 410-274149/12	25.0	22.638863	10.0	1090322.0	0.905555	Y



Calibration

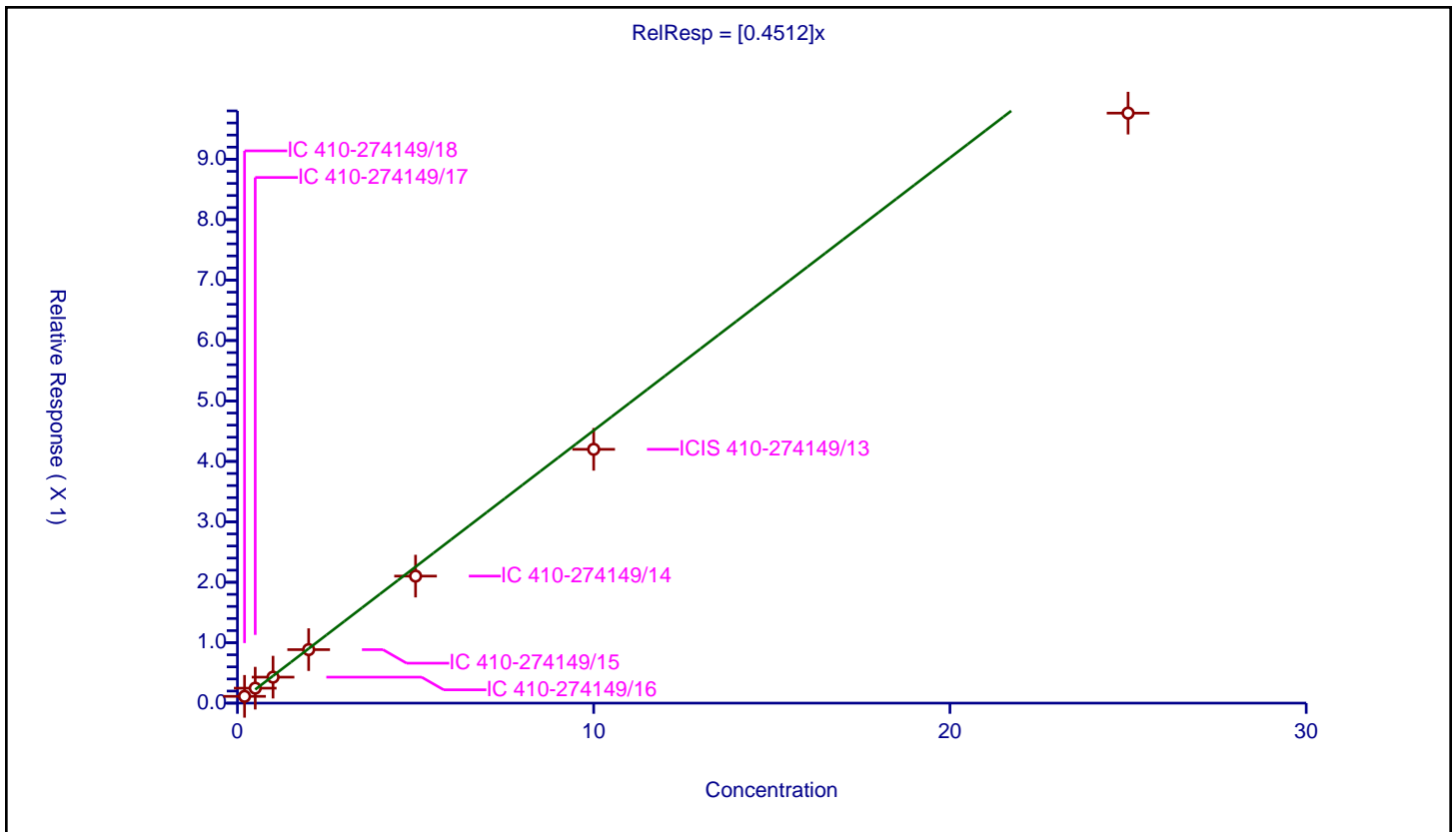
/ Hexachlorobutadiene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4512

Error Coefficients	
Standard Error:	481000
Relative Standard Error:	12.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.112037	10.0	1000650.0	0.560186	Y
2	IC 410-274149/17	0.5	0.247468	10.0	974107.0	0.494935	Y
3	IC 410-274149/16	1.0	0.429761	10.0	992900.0	0.429761	Y
4	IC 410-274149/15	2.0	0.885114	10.0	997250.0	0.442557	Y
5	IC 410-274149/14	5.0	2.101932	10.0	1047322.0	0.420386	Y
6	ICIS 410-274149/13	10.0	4.199966	10.0	1051287.0	0.419997	Y
7	IC 410-274149/12	25.0	9.762987	10.0	1090322.0	0.390519	Y



Calibration

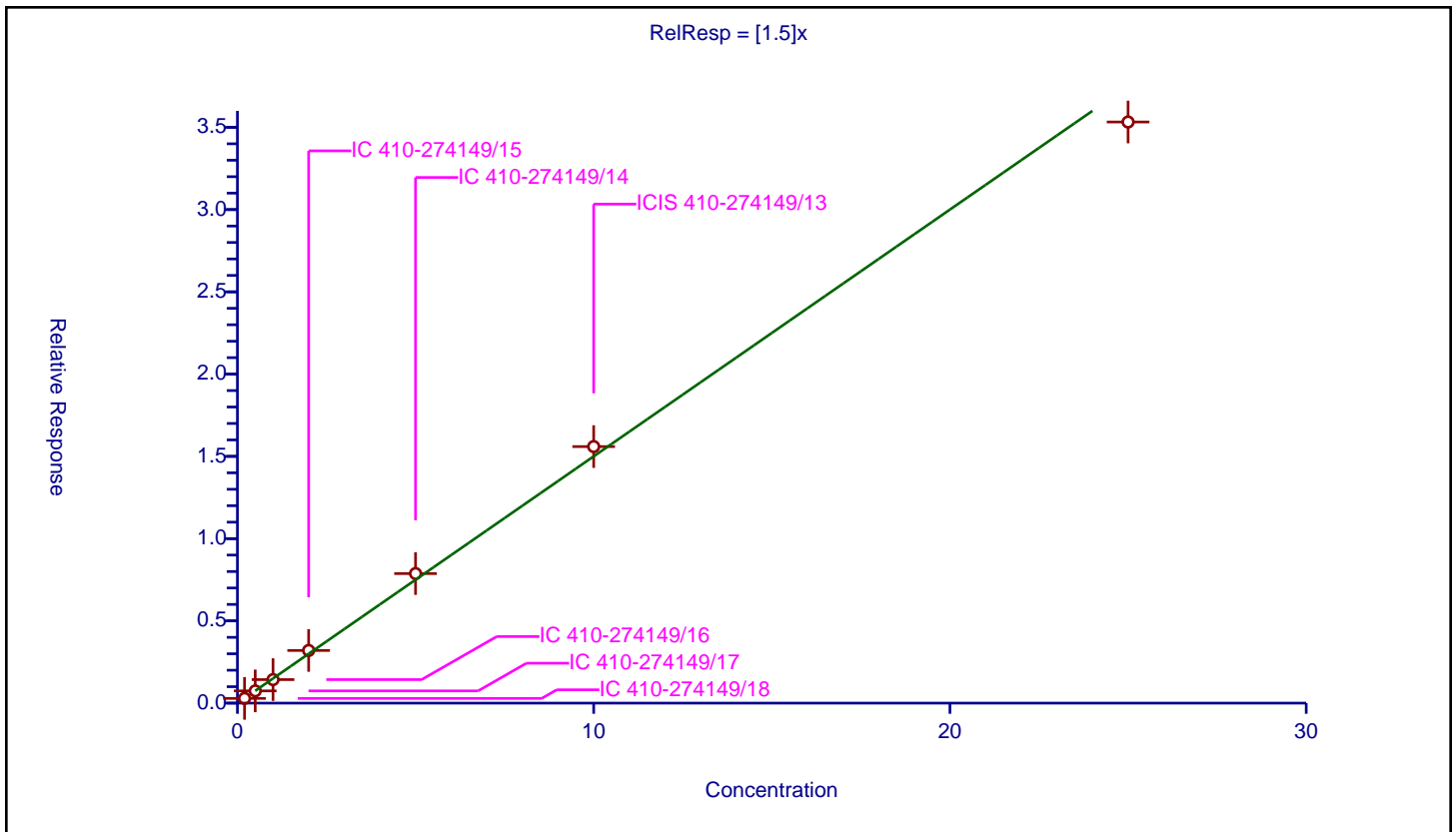
/ Naphthalene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.5

Error Coefficients	
Standard Error:	1750000
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.287023	10.0	1000650.0	1.435117	Y
2	IC 410-274149/17	0.5	0.743614	10.0	974107.0	1.487229	Y
3	IC 410-274149/16	1.0	1.429832	10.0	992900.0	1.429832	Y
4	IC 410-274149/15	2.0	3.201093	10.0	997250.0	1.600547	Y
5	IC 410-274149/14	5.0	7.87582	10.0	1047322.0	1.575164	Y
6	ICIS 410-274149/13	10.0	15.594895	10.0	1051287.0	1.559489	Y
7	IC 410-274149/12	25.0	35.324134	10.0	1090322.0	1.412965	Y



Calibration

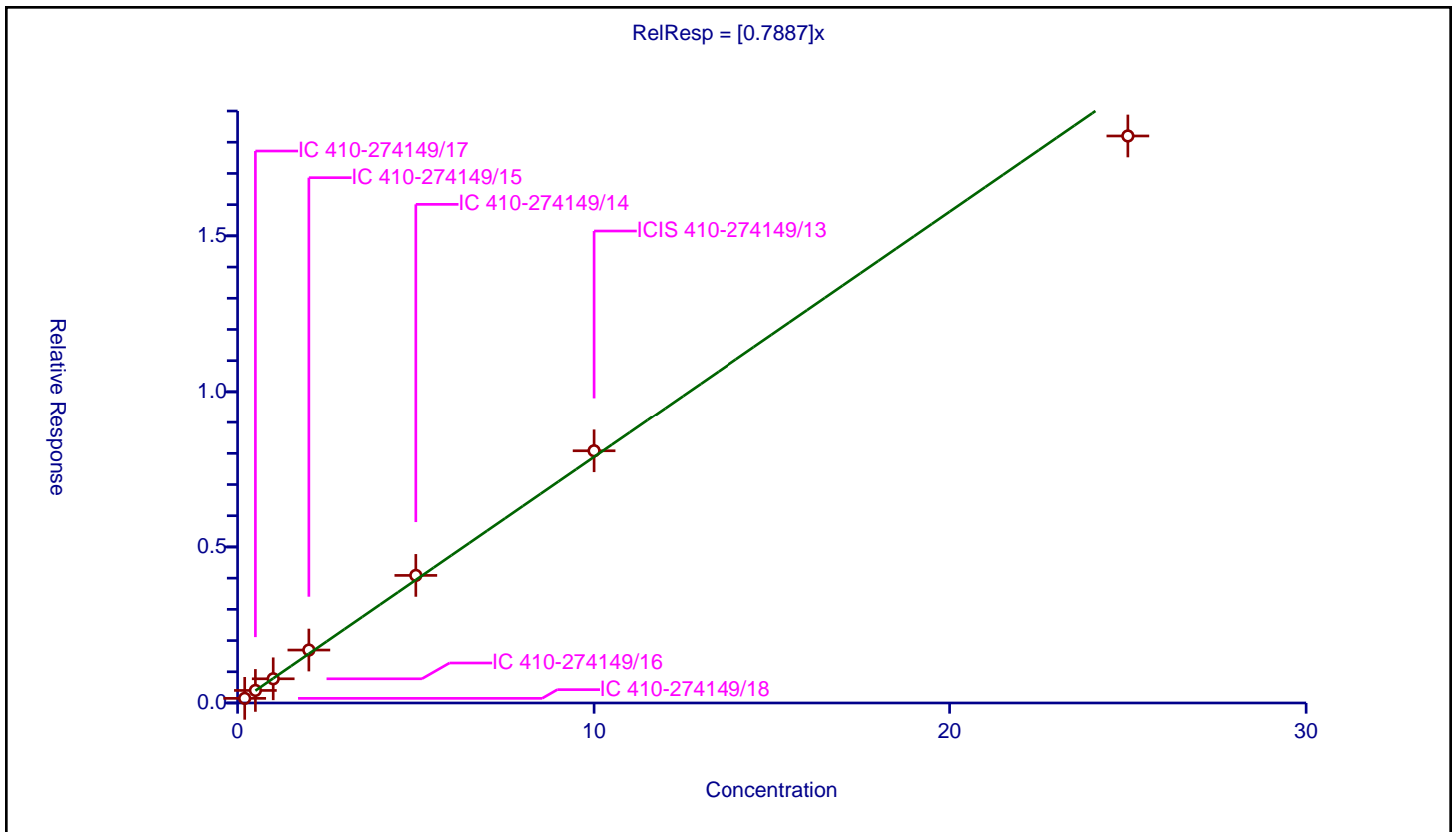
/ 1,2,3-Trichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7887

Error Coefficients	
Standard Error:	902000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.147884	10.0	1000650.0	0.739419	Y
2	IC 410-274149/17	0.5	0.402102	10.0	974107.0	0.804203	Y
3	IC 410-274149/16	1.0	0.775254	10.0	992900.0	0.775254	Y
4	IC 410-274149/15	2.0	1.696556	10.0	997250.0	0.848278	Y
5	IC 410-274149/14	5.0	4.087845	10.0	1047322.0	0.817569	Y
6	ICIS 410-274149/13	10.0	8.081504	10.0	1051287.0	0.80815	Y
7	IC 410-274149/12	25.0	18.200467	10.0	1090322.0	0.728019	Y





FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 410-286414/21 Calibration Date: 08/16/2022 20:22  
 Instrument ID: 16334 Calib Start Date: 08/16/2022 17:26  
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 08/16/2022 19:38  
 Lab File ID: GG16X20.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	0.2596	0.2619	0.1000	5.04	5.00	0.9	30.0
Chloromethane	Ave	0.2928	0.2624	0.1000	4.48	5.00	-10.4	30.0
Vinyl chloride	Ave	0.2992	0.2820	0.1000	4.71	5.00	-5.8	30.0
1,3-Butadiene	Ave	0.2845	0.2407		4.23	5.00	-15.4	30.0
Bromomethane	Ave	0.2361	0.2205	0.1000	4.67	5.00	-6.6	30.0
Chloroethane	Ave	0.1784	0.1689	0.1000	4.73	5.00	-5.3	30.0
Dichlorofluoromethane	Ave	0.4362	0.4183		4.79	5.00	-4.1	30.0
Trichlorofluoromethane	Ave	0.4114	0.3973	0.1000	4.83	5.00	-3.4	30.0
Pentane	None					5.00		30.0
Ethyl ether	Ave	0.1909	0.1892		4.94	4.98	-0.9	30.0
Freon 123a	Ave	0.2906	0.2656		4.57	5.00	-8.6	30.0
Acrolein	Ave	2.311	2.358		38.2	37.5	2.0	30.0
1,1-Dichloroethene	Ave	0.2154	0.2171	0.1000	5.04	5.00	0.8	30.0
Acetone	Ave	2.535	2.365	0.1000	58.3	62.5	-6.7	30.0
Freon 113	Ave	0.2100	0.2267	0.1000	5.40	5.00	8.0	30.0
Methyl iodide	Ave	0.4078	0.4238		5.20	5.00	3.9	30.0
Ethyl bromide	Ave	0.1978	0.1727		4.27	4.89	-12.7	30.0
Carbon disulfide	Ave	0.5255	0.6002	0.1000	5.71	5.00	14.2	30.0
Methyl acetate	Ave	7.861	7.210	0.1000	4.59	5.00	-8.3	30.0
Allyl chloride	Ave	0.2907	0.2968		5.10	5.00	2.1	30.0
Methylene Chloride	Ave	0.2387	0.2326	0.1000	4.87	5.00	-2.5	30.0
t-Butyl alcohol	Ave	0.8863	0.8949		50.5	50.0	1.0	30.0
Acrylonitrile	Ave	3.363	3.691		27.4	25.0	9.8	30.0
Methyl tert-butyl ether	Ave	0.6147	0.6020	0.1000	4.90	5.00	-2.1	30.0
trans-1,2-Dichloroethene	Ave	0.2516	0.2404	0.1000	4.78	5.00	-4.5	30.0
n-Hexane	Ave	0.2746	0.2771		5.05	5.00	0.9	30.0
1,1-Dichloroethane	Ave	0.4087	0.3886	0.2000	4.75	5.00	-4.9	30.0
di-Isopropyl ether	Ave	0.6761	0.6647		4.92	5.00	-1.7	30.0
2-Chloro-1,3-butadiene	Ave	0.3253	0.3376		5.19	5.00	3.8	30.0
Ethyl t-butyl ether	Ave	0.6956	0.7019		5.04	5.00	0.9	30.0
2-Butanone (MEK)	Ave	5.008	5.156	0.1000	64.4	62.5	3.0	30.0
cis-1,2-Dichloroethene	Ave	0.2749	0.2751	0.1000	5.00	5.00	0.0	30.0
2,2-Dichloropropane	Ave	0.3306	0.3330		5.04	5.00	0.7	30.0
Propionitrile	Ave	1.187	1.133		35.8	37.5	-4.5	30.0
Methacrylonitrile	Ave	5.343	5.541		38.9	37.5	3.7	30.0
Bromochloromethane	Ave	0.1317	0.1318		5.00	5.00	0.0	30.0
Tetrahydrofuran	Ave	1.487	1.599		26.9	25.0	7.6	30.0
Chloroform	Ave	0.4380	0.4236	0.2000	4.84	5.00	-3.3	30.0
1,1,1-Trichloroethane	Ave	0.3821	0.3761	0.1000	4.92	5.00	-1.6	30.0
Cyclohexane	Ave	0.3475	0.3480	0.1000	5.01	5.00	0.2	30.0
1,1-Dichloropropene	Ave	0.3396	0.3298		4.86	5.00	-2.9	30.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 410-286414/21 Calibration Date: 08/16/2022 20:22  
 Instrument ID: 16334 Calib Start Date: 08/16/2022 17:26  
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 08/16/2022 19:38  
 Lab File ID: GG16X20.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
Carbon tetrachloride	Ave	0.3289	0.3311	0.1000	5.03	5.00	0.7	30.0
Isobutyl alcohol	Ave	0.0036	0.0034		118	125	-5.6	30.0
Benzene	Ave	1.002	0.9679	0.5000	4.83	5.00	-3.4	30.0
1,2-Dichloroethane	Ave	0.2855	0.2659	0.1000	4.66	5.00	-6.9	30.0
t-Amyl methyl ether	Ave	0.6594	0.6520		4.94	5.00	-1.1	30.0
n-Heptane	Ave	0.2871	0.2886		5.03	5.00	0.5	30.0
n-Butanol	Ave	0.2586	0.2738		265	250	5.9	30.0
Trichloroethene	Ave	0.2796	0.2693	0.2000	4.82	5.00	-3.7	30.0
Methylcyclohexane	Ave	0.4162	0.4253	0.1000	5.11	5.00	2.2	30.0
1,2-Dichloropropane	Ave	0.2449	0.2364	0.1000	4.83	5.00	-3.5	30.0
Methyl methacrylate	Ave	10.41	10.96		5.27	5.00	5.3	30.0
Dibromomethane	Ave	0.1344	0.1307		4.86	5.00	-2.8	30.0
1,4-Dioxane	Lin2		0.0557	0.0050	126	125	0.6	30.0
Bromodichloromethane	Ave	0.2943	0.2974	0.2000	5.05	5.00	1.1	30.0
2-Nitropropane	Ave	2.340	2.234		4.77	5.00	-4.5	30.0
1-Bromo-2-chloroethane	Ave	0.2652	0.2581		4.87	5.00	-2.7	30.0
cis-1,3-Dichloropropene	Ave	0.3671	0.3656	0.2000	4.98	5.00	-0.4	30.0
4-Methyl-2-pentanone (MIBK)	Ave	13.18	13.65	0.1000	64.7	62.5	3.6	30.0
Toluene	Ave	0.8674	0.8290	0.4000	4.78	5.00	-4.4	30.0
trans-1,3-Dichloropropene	Ave	0.3864	0.4020	0.1000	5.20	5.00	4.0	30.0
Ethyl methacrylate	Ave	0.3328	0.3458		5.19	5.00	3.9	30.0
1,1,2-Trichloroethane	Ave	0.2551	0.2462	0.1000	4.83	5.00	-3.5	30.0
Tetrachloroethene	Ave	0.4369	0.4251	0.2000	4.87	5.00	-2.7	30.0
1,3-Dichloropropane	Ave	0.4185	0.4041		4.83	5.00	-3.4	30.0
2-Hexanone	Ave	9.609	10.34	0.1000	67.2	62.5	7.6	30.0
Dibromochloromethane	Ave	0.2790	0.2904		5.20	5.00	4.1	30.0
1,2-Dibromoethane (EDB)	Ave	0.2511	0.2447	0.1000	4.87	5.00	-2.6	30.0
1-Chlorohexane	Ave	0.4862	0.4615		4.75	5.00	-5.1	30.0
Chlorobenzene	Ave	1.050	0.996	0.5000	4.75	5.00	-5.1	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3370	0.3374		5.01	5.00	0.1	30.0
Ethylbenzene	Ave	1.682	1.628	0.1000	4.84	5.00	-3.2	30.0
m&p-Xylene	Ave	0.6759	0.6591	0.1000	9.75	10.0	-2.5	30.0
o-Xylene	Ave	0.6696	0.6479	0.3000	4.84	5.00	-3.2	30.0
Styrene	Ave	1.134	1.107	0.3000	4.88	5.00	-2.4	30.0
Bromoform	Ave	0.1570	0.1703	0.1000	5.42	5.00	8.4	30.0
Isopropylbenzene	Ave	1.712	1.696	0.1000	4.95	5.00	-0.9	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5342	0.5202	0.3000	4.87	5.00	-2.6	30.0
Bromobenzene	Ave	0.7697	0.7509		4.88	5.00	-2.4	30.0
trans-1,4-Dichloro-2-butene	Ave	4.847	5.279		27.2	25.0	8.9	30.0
1,2,3-Trichloropropane	Ave	0.1534	0.1490		4.86	5.00	-2.9	30.0
N-Propylbenzene	Ave	3.363	3.241		4.82	5.00	-3.6	30.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab Sample ID: ICV 410-286414/21 Calibration Date: 08/16/2022 20:22

Instrument ID: 16334 Calib Start Date: 08/16/2022 17:26

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 08/16/2022 19:38

Lab File ID: GG16X20.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
2-Chlorotoluene	Ave	0.7395	0.7057		4.77	5.00	-4.6	30.0
1,3,5-Trimethylbenzene	Ave	2.519	2.430		4.82	5.00	-3.5	30.0
4-Chlorotoluene	Ave	0.7729	0.7353		4.76	5.00	-4.9	30.0
tert-Butylbenzene	Ave	0.5805	0.5420		4.67	5.00	-6.6	30.0
Pentachloroethane	Ave	0.4154	0.4496		5.41	5.00	8.2	30.0
1,2,4-Trimethylbenzene	Ave	2.595	2.516		4.85	5.00	-3.0	30.0
sec-Butylbenzene	Ave	3.159	3.154		4.99	5.00	-0.2	30.0
1,3-Dichlorobenzene	Ave	1.590	1.493	0.6000	4.70	5.00	-6.1	30.0
p-Isopropyltoluene	Ave	2.881	2.837		4.92	5.00	-1.5	30.0
1,4-Dichlorobenzene	Ave	1.664	1.537	0.5000	4.62	5.00	-7.7	30.0
1,2,3-Trimethylbenzene	Ave	1.191	1.149		4.82	5.00	-3.5	30.0
Benzyl chloride	Lin1		0.1805		4.40	5.00	-12.0	30.0
n-Butylbenzene	Ave	1.407	1.346		4.78	5.00	-4.4	30.0
1,2-Dichlorobenzene	Ave	1.492	1.397	0.4000	4.68	5.00	-6.3	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0787	0.0768	0.0500	4.88	5.00	-2.4	30.0
1,3,5-Trichlorobenzene	Ave	1.282	1.230		4.80	5.00	-4.0	30.0
1,2,4-Trichlorobenzene	Ave	1.202	1.122	0.2000	4.67	5.00	-6.6	30.0
Hexachlorobutadiene	Ave	0.5695	0.5612		4.93	5.00	-1.5	30.0
Naphthalene	Ave	2.034	1.907		4.69	5.00	-6.2	30.0
1,2,3-Trichlorobenzene	Ave	1.062	1.001		4.71	5.00	-5.8	30.0
Dibromofluoromethane (Surr)	Ave	0.2483	0.2512		10.1	10.0	1.2	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0527	0.0526		9.98	10.0	-0.2	30.0
Toluene-d8 (Surr)	Ave	1.281	1.282		10.0	10.0	0.0	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4767	0.4785		10.0	10.0	0.4	30.0

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X20.D  
 Lims ID: ICV  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 16-Aug-2022 20:22:30 ALS Bottle#: 20 Worklist Smp#: 21  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0064243-021  
 Misc. Info.: ICV  
 Operator ID: knk41612 Instrument ID: 16334  
 Sublist:

Method: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 30-Aug-2022 10:58:17 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D

Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1639

First Level Reviewer: DVW2 Date: 17-Aug-2022 11:50:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.892	1.892	0.000	99	307761	5.00	5.04	
5 Chloromethane	50	2.087	2.087	0.000	99	308422	5.00	4.48	
6 Vinyl chloride	62	2.203	2.202	0.001	98	331418	5.00	4.71	
7 Butadiene	39	2.209	2.215	-0.006	93	282851	5.00	4.23	
9 Bromomethane	94	2.520	2.526	-0.006	90	259137	5.00	4.67	
10 Chloroethane	64	2.599	2.599	0.000	99	198479	5.00	4.73	
11 Dichlorofluoromethane	67	2.837	2.836	0.001	97	491576	5.00	4.79	
12 Trichlorofluoromethane	101	2.898	2.904	-0.006	96	466899	5.00	4.83	
13 Ethyl ether	59	3.123	3.123	0.000	89	221726	4.98	4.94	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.215	3.221	-0.006	90	312094	5.00	4.57	
17 Acrolein	56	3.294	3.288	0.006	99	234718	37.5	38.2	
18 1,1-Dichloroethene	96	3.416	3.416	0.000	97	255181	5.00	5.04	
20 Acetone	43	3.465	3.458	0.007	85	392587	62.5	58.3	
19 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.465	3.464	0.001	91	266412	5.00	5.40	
21 Iodomethane	142	3.599	3.605	-0.006	98	498058	5.00	5.20	
22 Ethyl bromide	108	3.635	3.629	0.006	98	198307	4.89	4.27	
24 Isopropyl alcohol	45	3.690	3.690	0.000	30	44454	37.5	34.2	
23 Carbon disulfide	76	3.702	3.702	0.000	99	705397	5.00	5.71	
25 Methyl acetate	43	3.861	3.855	0.006	40	95732	5.00	4.59	
27 3-Chloro-1-propene	41	3.873	3.873	0.000	91	348751	5.00	5.10	
29 Methylene Chloride	84	4.056	4.056	0.000	88	273356	5.00	4.87	
* 30 t-Butyl alcohol-d10 (IS)	65	4.123	4.111	0.012	59	132771	50.0	50.0	M
31 2-Methyl-2-propanol	59	4.245	4.245	0.000	99	118811	50.0	50.5	
32 Acrylonitrile	53	4.403	4.391	0.012	98	245044	25.0	27.4	
33 Methyl tert-butyl ether	73	4.446	4.446	0.000	89	707491	5.00	4.90	
34 trans-1,2-Dichloroethene	96	4.458	4.458	0.000	97	282507	5.00	4.78	
35 Hexane	57	4.885	4.885	0.000	92	325649	5.00	5.05	
37 1,1-Dichloroethane	63	5.123	5.123	0.000	96	456730	5.00	4.75	
38 Isopropyl ether	45	5.190	5.184	0.006	93	781214	5.00	4.92	
39 2-Chloro-1,3-butadiene	53	5.233	5.232	0.001	90	396778	5.00	5.19	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.726	5.720	0.006	97	824842	5.00	5.04	
41 2-Butanone (MEK)	43	5.934	5.933	0.001	99	855767	62.5	64.4	
42 cis-1,2-Dichloroethene	96	5.964	5.964	0.000	80	323301	5.00	5.00	
43 2,2-Dichloropropane	77	5.982	5.976	0.006	86	391351	5.00	5.04	
45 Propionitrile	54	6.037	6.025	0.012	99	112818	37.5	35.8	
48 Methacrylonitrile	67	6.232	6.238	-0.006	90	551714	37.5	38.9	
49 Chlorobromomethane	128	6.293	6.293	0.000	86	154844	5.00	5.00	
50 Tetrahydrofuran	71	6.306	6.299	0.007	85	106182	25.0	26.9	
51 Chloroform	83	6.446	6.452	-0.006	93	497805	5.00	4.84	
\$ 52 Dibromofluoromethane (Surr)	113	6.665	6.665	0.000	94	590378	10.0	10.1	
53 1,1,1-Trichloroethane	97	6.677	6.671	0.006	98	442027	5.00	4.92	
54 Cyclohexane	56	6.769	6.769	0.000	88	409009	5.00	5.01	
56 Carbon tetrachloride	117	6.885	6.884	0.001	97	389158	5.00	5.03	
57 1,1-Dichloropropene	75	6.885	6.891	-0.006	96	387591	5.00	4.86	
58 Isobutyl alcohol	41	7.086	7.073	0.013	91	99512	125.0	118.0	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.116	7.116	0.000	94	123699	10.0	9.98	
60 Benzene	78	7.147	7.153	-0.006	96	1137519	5.00	4.83	
61 1,2-Dichloroethane	62	7.220	7.220	0.000	98	312510	5.00	4.66	
63 Tert-amyl methyl ether	73	7.348	7.348	0.000	99	766290	5.00	4.94	
* 64 Fluorobenzene (IS)	96	7.561	7.561	0.000	99	2350459	10.0	10.0	
65 n-Heptane	43	7.574	7.573	0.001	90	339225	5.00	5.03	
67 n-Butanol	56	7.976	7.970	0.006	87	181781	250.0	264.7	
68 Trichloroethene	95	8.037	8.043	-0.006	96	316512	5.00	4.82	
69 Methylcyclohexane	83	8.342	8.341	0.001	91	499858	5.00	5.11	
70 1,2-Dichloropropane	63	8.372	8.372	0.000	91	277833	5.00	4.83	
71 2-ethoxy-2-methyl butane	87	8.384	8.390	-0.006	95	458374	5.00	4.97	
72 Methyl methacrylate	69	8.464	8.463	0.001	88	145562	5.00	5.27	
73 Dibromomethane	93	8.482	8.482	0.000	93	153569	5.00	4.86	
74 1,4-Dioxane	88	8.519	8.512	0.007	75	18487	125.0	125.7	M
76 Dichlorobromomethane	83	8.720	8.726	-0.006	99	349554	5.00	5.05	
77 2-Nitropropane	41	9.000	9.000	0.000	99	29662	5.00	4.77	
79 1-Bromo-2-chloroethane	63	9.116	9.116	0.000	98	303348	5.00	4.87	
81 cis-1,3-Dichloropropene	75	9.281	9.280	0.001	97	429717	5.00	4.98	
82 4-Methyl-2-pentanone (MIBK)	43	9.463	9.463	0.000	96	2265574	62.5	64.7	
\$ 83 Toluene-d8 (Surr)	98	9.591	9.591	0.000	93	2385812	10.0	10.0	
84 Toluene	92	9.671	9.671	0.001	98	771618	5.00	4.78	
85 trans-1,3-Dichloropropene	75	9.939	9.939	0.000	92	374183	5.00	5.20	
104 Ethyl methacrylate	69	10.006	10.006	0.000	88	321821	5.00	5.19	
106 1,1,2-Trichloroethane	97	10.146	10.146	0.000	91	229187	5.00	4.83	
107 Tetrachloroethene	166	10.232	10.231	0.001	97	395687	5.00	4.87	
108 1,3-Dichloropropane	76	10.311	10.311	0.000	88	376142	5.00	4.83	
109 2-Hexanone	43	10.366	10.365	0.001	95	1715735	62.5	67.2	
111 Chlorodibromomethane	129	10.524	10.524	0.000	89	270329	5.00	5.20	
112 Ethylene Dibromide	107	10.634	10.634	0.000	98	227735	5.00	4.87	
* 113 Chlorobenzene-d5 (IS)	117	11.073	11.073	0.000	84	1861581	10.0	10.0	
114 1-Chlorohexane	91	11.085	11.085	0.000	94	429543	5.00	4.75	
115 Chlorobenzene	112	11.097	11.097	0.000	96	927506	5.00	4.75	
117 1,1,1,2-Tetrachloroethane	131	11.183	11.182	0.001	95	314073	5.00	5.01	
116 Ethylbenzene	91	11.189	11.189	0.001	98	1515158	5.00	4.84	
119 m-Xylene & p-Xylene	106	11.305	11.304	0.001	100	1227054	10.0	9.75	
120 o-Xylene	106	11.634	11.634	0.000	96	603021	5.00	4.84	
121 Styrene	104	11.652	11.652	0.000	94	1030067	5.00	4.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
122 Bromoform	173	11.804	11.804	0.000	98	158473	5.00	5.42	
123 Isopropylbenzene	105	11.939	11.938	0.001	95	1578173	5.00	4.95	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.079	12.079	0.000	94	890713	10.0	10.0	
127 1,1,2,2-Tetrachloroethane	83	12.182	12.188	-0.006	94	288804	5.00	4.87	
128 Bromobenzene	156	12.195	12.194	0.001	94	416846	5.00	4.88	
129 trans-1,4-Dichloro-2-butene	53	12.207	12.213	-0.006	93	350468	25.0	27.2	
130 1,2,3-Trichloropropane	110	12.231	12.231	0.000	83	82700	5.00	4.86	
131 N-Propylbenzene	91	12.268	12.268	0.000	98	1799402	5.00	4.82	
132 2-Chlorotoluene	126	12.341	12.341	0.000	97	391783	5.00	4.77	
133 1,3,5-Trimethylbenzene	105	12.402	12.402	0.000	94	1349009	5.00	4.82	
134 4-Chlorotoluene	126	12.438	12.438	0.000	96	408191	5.00	4.76	
135 tert-Butylbenzene	134	12.646	12.646	0.000	92	300913	5.00	4.67	
136 Pentachloroethane	167	12.676	12.676	0.000	91	249612	5.00	5.41	
137 1,2,4-Trimethylbenzene	105	12.688	12.688	0.000	96	1396929	5.00	4.85	
138 sec-Butylbenzene	105	12.810	12.810	0.000	93	1750858	5.00	4.99	
139 1,3-Dichlorobenzene	146	12.908	12.908	0.000	99	828712	5.00	4.70	
140 4-Isopropyltoluene	119	12.914	12.920	-0.006	97	1574703	5.00	4.92	
* 141 1,4-Dichlorobenzene-d4	152	12.963	12.963	0.000	93	1110282	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.981	12.981	0.000	95	853063	5.00	4.62	
143 1,2,3-Trimethylbenzene	120	12.993	12.993	0.000	98	637988	5.00	4.82	
144 Benzyl chloride	126	13.060	13.060	0.000	98	100226	5.00	4.40	
145 p-Diethylbenzene	119	13.115	13.121	-0.006	92	933769	5.00	4.91	
146 n-Butylbenzene	92	13.207	13.206	0.001	97	747142	5.00	4.78	
147 1,2-Dichlorobenzene	146	13.243	13.243	0.000	99	775495	5.00	4.68	
149 1,2-Dibromo-3-Chloropropane	155	13.786	13.786	0.000	90	42627	5.00	4.88	
150 1,3,5-Trichlorobenzene	180	13.908	13.907	0.001	98	682932	5.00	4.80	
151 1,2,4-Trichlorobenzene	180	14.328	14.328	0.000	94	623059	5.00	4.67	
152 Hexachlorobutadiene	225	14.414	14.413	0.001	96	311571	5.00	4.93	
153 Naphthalene	128	14.511	14.511	0.000	97	1058669	5.00	4.69	
154 1,2,3-Trichlorobenzene	180	14.651	14.651	0.000	96	555591	5.00	4.71	
155 2-Methylnaphthalene	142	15.267	15.261	0.006	92	704869	5.00	4.84	
166 Pentane	43	2.916	2.916	0.000	97	356365	NR	NR	

## QC Flag Legend

### Processing Flags

NR - Missing Quant Standard

### Review Flags

M - Manually Integrated

## Reagents:

MSV_LCS_Penta_00018	Amount Added: 12.50	Units: uL	
MSV_LCS_VOC#1_00068	Amount Added: 12.50	Units: uL	
LCS_ETBR_00003	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00095	Amount Added: 12.50	Units: uL	
MSV_LCS_ACROL_00071	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00003	Amount Added: 12.50	Units: uL	
MSV_29_826ISS_00037	Amount Added: 1.00	Units: uL	Run Reagent

Data File: \\chromf\Lancaster\ChromData\16334\20220816-64243.b\GG16X20.D

Injection Date: 16-Aug-2022 20:22:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: ICV

Worklist Smp#: 21

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

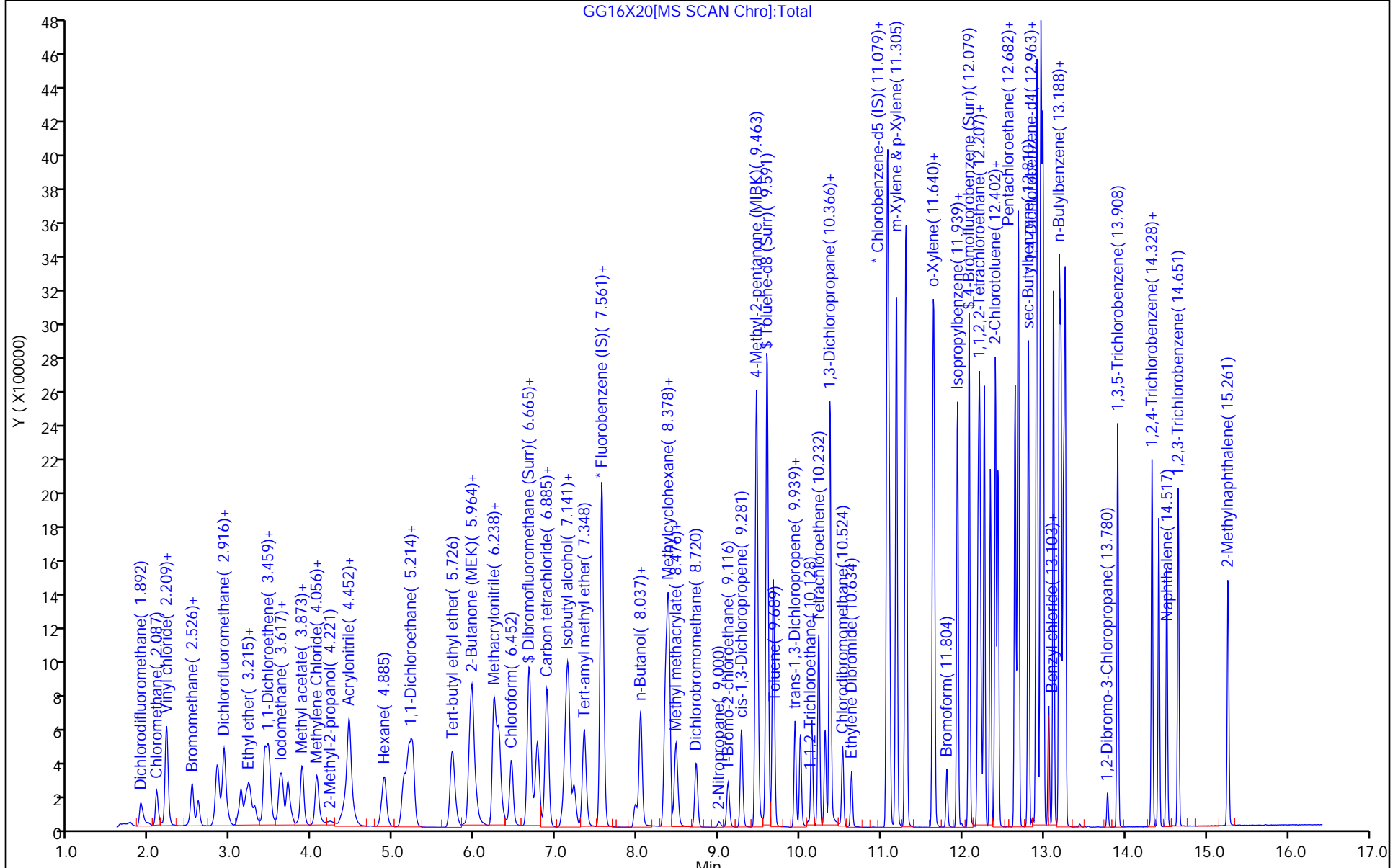
ALS Bottle#: 20

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



GG16X20[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Environment Testing, LLC

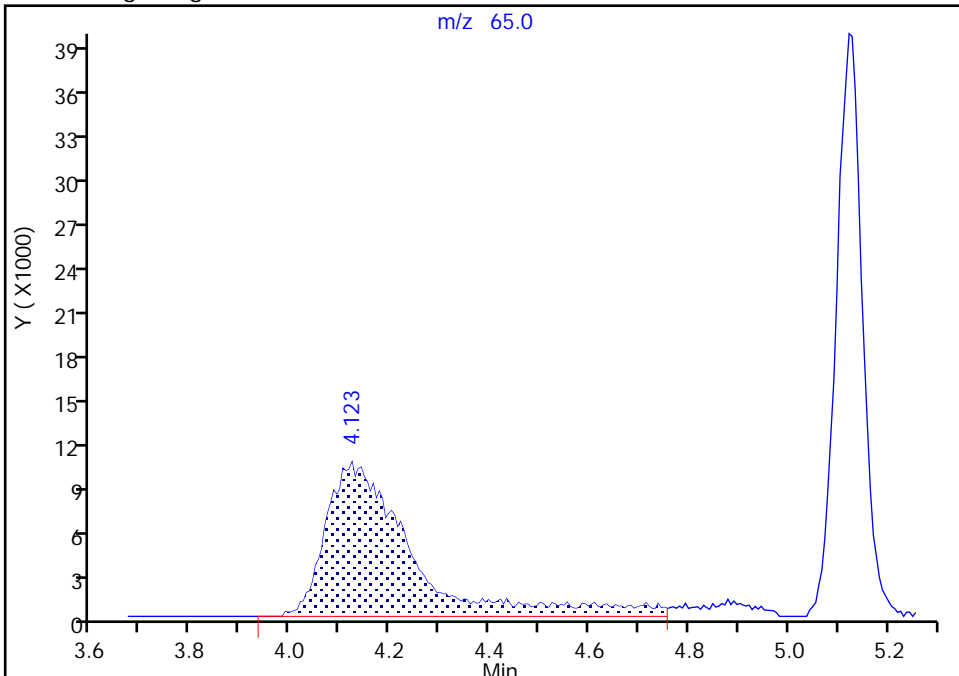
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Injection Date: 16-Aug-2022 20:22:30 Instrument ID: 16334  
Lims ID: ICV  
Client ID:  
Operator ID: knk41612 ALS Bottle#: 20 Worklist Smp#: 21  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\* 30 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

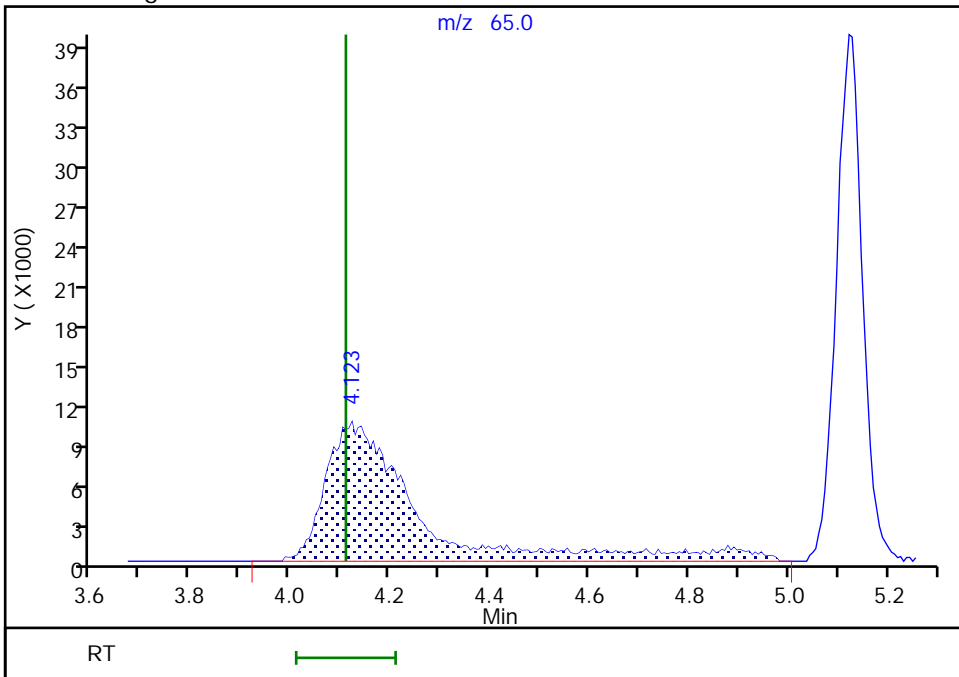
RT: 4.12  
Area: 124171  
Amount: 50.000000  
Amount Units: ug/l

Processing Integration Results



RT: 4.12  
Area: 132771  
Amount: 50.000000  
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:46:33  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration  
Page 800 of 959



Eurofins Lancaster Laboratories Environment Testing, LLC

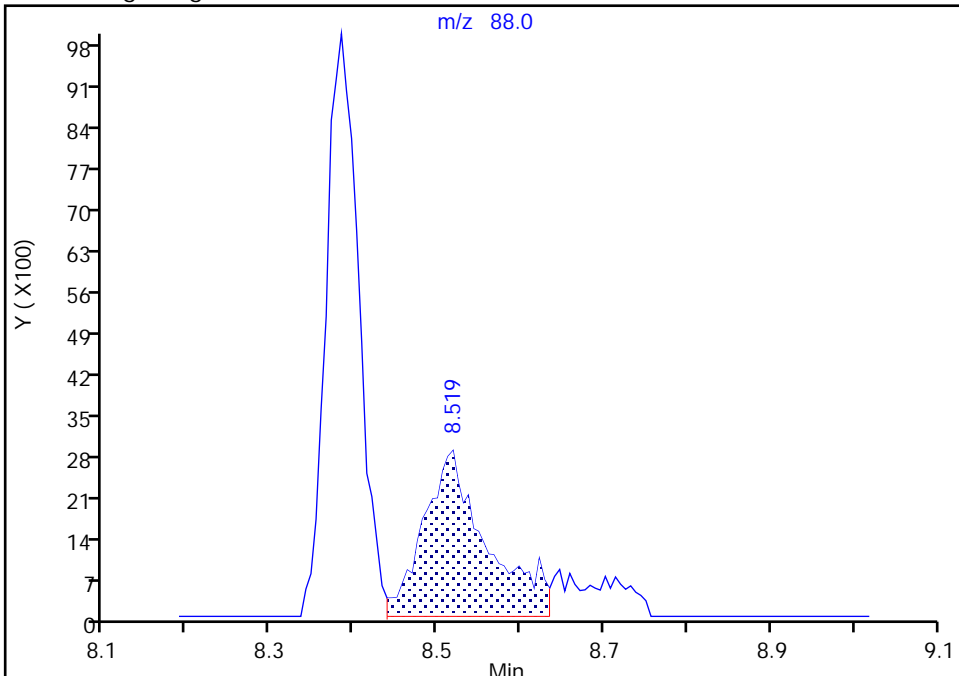
Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X20.D  
 Injection Date: 16-Aug-2022 20:22:30 Instrument ID: 16334  
 Lims ID: ICV  
 Client ID:  
 Operator ID: knk41612 ALS Bottle#: 20 Worklist Smp#: 21  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

74 1,4-Dioxane, CAS: 123-91-1

Signal: 1

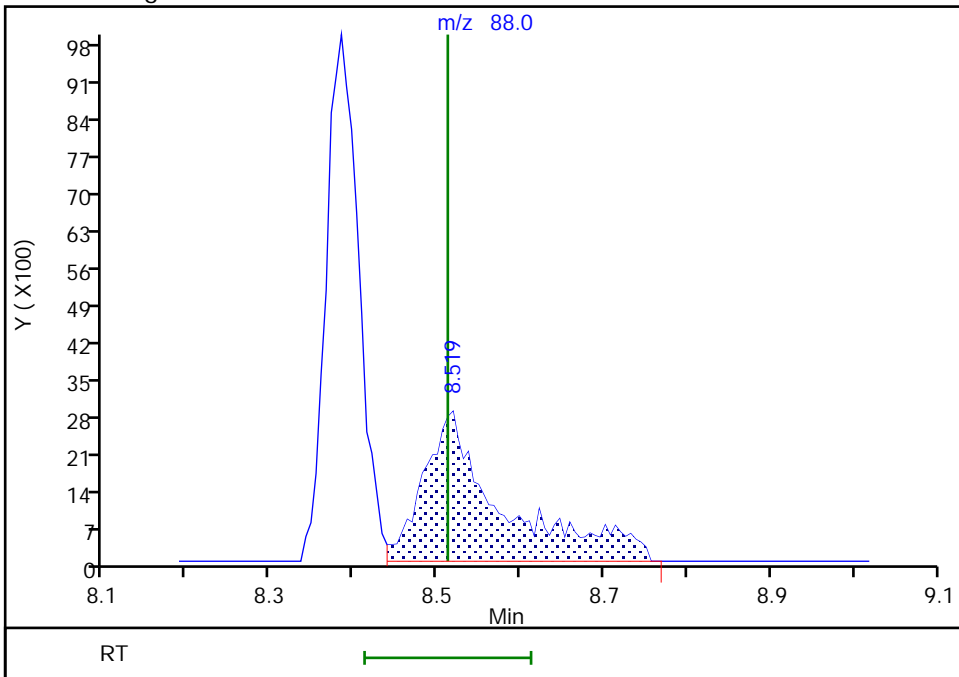
RT: 8.52  
 Area: 14846  
 Amount: 119.7668  
 Amount Units: ug/l

Processing Integration Results



RT: 8.52  
 Area: 18487  
 Amount: 125.7160  
 Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 17-Aug-2022 11:46:59  
 Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 410-322544/3 Calibration Date: 12/01/2022 10:33  
 Instrument ID: 16334 Calib Start Date: 08/16/2022 17:26  
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 08/16/2022 19:38  
 Lab File ID: GD01X02.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	0.2596	0.3254	0.1000	15.7	12.5	25.4*	20.0
Chloromethane	Ave	0.2928	0.3600	0.1000	15.4	12.5	22.9*	20.0
Vinyl chloride	Ave	0.2992	0.3503	0.1000	14.6	12.5	17.1	20.0
1,3-Butadiene	Ave	0.2845	0.3023		13.3	12.5	6.2	20.0
Bromomethane	Ave	0.2361	0.2287	0.1000	12.1	12.5	-3.1	20.0
Chloroethane	Ave	0.1784	0.1990	0.1000	13.9	12.5	11.5	20.0
Dichlorofluoromethane	Ave	0.4362	0.4629		13.3	12.5	6.1	20.0
Trichlorofluoromethane	Ave	0.4114	0.4396	0.1000	13.4	12.5	6.9	20.0
Pentane	None					12.5		20.0
Ethyl ether	Ave	0.1909	0.2129		13.9	12.5	11.5	20.0
Freon 123a	Ave	0.2906	0.3004		12.9	12.5	3.4	20.0
Acrolein	Ave	2.311	2.415		653	625	4.5	20.0
1,1-Dichloroethene	Ave	0.2154	0.2125	0.1000	12.3	12.5	-1.3	20.0
Freon 113	Ave	0.2100	0.2050	0.1000	12.2	12.5	-2.4	20.0
Acetone	Ave	2.535	2.109	0.1000	104	125	-16.8	20.0
Methyl iodide	Ave	0.4078	0.3609		11.1	12.5	-11.5	20.0
Ethyl bromide	Ave	0.1978	0.1946		12.3	12.5	-1.6	20.0
Carbon disulfide	Ave	0.5255	0.6663	0.1000	15.9	12.5	26.8*	20.0
Methyl acetate	Ave	7.861	7.594	0.1000	12.1	12.5	-3.4	20.0
Allyl chloride	Ave	0.2907	0.3489		15.0	12.5	20.0	20.0
Methylene Chloride	Ave	0.2387	0.2435	0.1000	12.8	12.5	2.0	20.0
t-Butyl alcohol	Ave	0.8863	0.7279		205	250	-17.9	20.0
Acrylonitrile	Ave	3.363	3.495		32.5	31.3	3.9	20.0
Methyl tert-butyl ether	Ave	0.6147	0.6318	0.1000	12.8	12.5	2.8	20.0
trans-1,2-Dichloroethene	Ave	0.2516	0.2470	0.1000	12.3	12.5	-1.8	20.0
n-Hexane	Ave	0.2746	0.3223		14.7	12.5	17.4	20.0
1,1-Dichloroethane	Ave	0.4087	0.4448	0.2000	13.6	12.5	8.8	20.0
di-Isopropyl ether	Ave	0.6761	0.7822		14.5	12.5	15.7	20.0
2-Chloro-1,3-butadiene	Ave	0.3253	0.3525		13.5	12.5	8.4	20.0
Ethyl t-butyl ether	Ave	0.6956	0.7318		13.2	12.5	5.2	20.0
2-Butanone (MEK)	Ave	5.008	5.195	0.1000	130	125	3.7	20.0
cis-1,2-Dichloroethene	Ave	0.2749	0.2706	0.1000	12.3	12.5	-1.6	20.0
2,2-Dichloropropane	Ave	0.3306	0.3566		13.5	12.5	7.9	20.0
Propionitrile	Ave	1.187	1.377		290	250	16.0	20.0
Methacrylonitrile	Ave	5.343	5.260		123	125	-1.6	20.0
Bromochloromethane	Ave	0.1317	0.1224		11.6	12.5	-7.1	20.0
Tetrahydrofuran	Ave	1.487	1.461		61.4	62.5	-1.7	20.0
Chloroform	Ave	0.4380	0.4365	0.2000	12.5	12.5	-0.3	20.0
1,1,1-Trichloroethane	Ave	0.3821	0.3714	0.1000	12.1	12.5	-2.8	20.0
Cyclohexane	Ave	0.3475	0.3998	0.1000	14.4	12.5	15.1	20.0
Carbon tetrachloride	Ave	0.3289	0.3310	0.1000	12.6	12.5	0.6	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 410-322544/3 Calibration Date: 12/01/2022 10:33

Instrument ID: 16334 Calib Start Date: 08/16/2022 17:26

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 08/16/2022 19:38

Lab File ID: GD01X02.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
1,1-Dichloropropene	Ave	0.3396	0.3422		12.6	12.5	0.8	20.0
Isobutyl alcohol	Ave	0.0036	0.0044		765	625	22.4*	20.0
Benzene	Ave	1.002	1.014	0.5000	12.7	12.5	1.2	20.0
1,2-Dichloroethane	Ave	0.2855	0.2912	0.1000	12.7	12.5	2.0	20.0
t-Amyl methyl ether	Ave	0.6594	0.6900		13.1	12.5	4.6	20.0
n-Heptane	Ave	0.2871	0.3542		15.4	12.5	23.3*	20.0
n-Butanol	Ave	0.2586	0.3119		1320	1090	20.6*	20.0
Trichloroethene	Ave	0.2796	0.2702	0.2000	12.1	12.5	-3.3	20.0
Methylcyclohexane	Ave	0.4162	0.4333	0.1000	13.0	12.5	4.1	20.0
1,2-Dichloropropane	Ave	0.2449	0.2737	0.1000	14.0	12.5	11.7	20.0
Methyl methacrylate	Ave	10.41	9.846		11.8	12.5	-5.4	20.0
Dibromomethane	Ave	0.1344	0.1318		12.3	12.5	-2.0	20.0
1,4-Dioxane	Lin2		0.0524	0.0050	560	625	-10.5	20.0
Bromodichloromethane	Ave	0.2943	0.3268	0.2000	13.9	12.5	11.1	20.0
2-Nitropropane	Ave	2.340	2.581		68.9	62.5	10.3	20.0
cis-1,3-Dichloropropene	Ave	0.3671	0.4202	0.2000	14.3	12.5	14.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	13.18	14.22	0.1000	135	125	7.9	20.0
Toluene	Ave	0.8674	0.8972	0.4000	12.9	12.5	3.4	20.0
trans-1,3-Dichloropropene	Ave	0.3864	0.4960	0.1000	16.0	12.5	28.4*	20.0
Ethyl methacrylate	Ave	0.3328	0.3959		14.9	12.5	19.0	20.0
1,1,2-Trichloroethane	Ave	0.2551	0.2663	0.1000	13.0	12.5	4.4	20.0
Tetrachloroethene	Ave	0.4369	0.4123	0.2000	11.8	12.5	-5.6	20.0
1,3-Dichloropropane	Ave	0.4185	0.4589		13.7	12.5	9.6	20.0
2-Hexanone	Ave	9.609	10.41	0.1000	135	125	8.3	20.0
Dibromochloromethane	Ave	0.2790	0.3295		14.8	12.5	18.1	20.0
1,2-Dibromoethane (EDB)	Ave	0.2511	0.2534	0.1000	12.6	12.5	0.9	20.0
1-Chlorohexane	Ave	0.4862	0.4936		12.7	12.5	1.5	20.0
Chlorobenzene	Ave	1.050	1.039	0.5000	12.4	12.5	-1.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3370	0.3544		13.1	12.5	5.2	20.0
Ethylbenzene	Ave	1.682	1.760	0.1000	13.1	12.5	4.6	20.0
m&p-Xylene	Ave	0.6759	0.6871	0.1000	25.4	25.0	1.7	20.0
o-Xylene	Ave	0.6696	0.6663	0.3000	12.4	12.5	-0.5	20.0
Styrene	Ave	1.134	1.141	0.3000	12.6	12.5	0.6	20.0
Bromoform	Ave	0.1570	0.2036	0.1000	16.2	12.5	29.6*	20.0
Isopropylbenzene	Ave	1.712	1.734	0.1000	12.7	12.5	1.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5342	0.6149	0.3000	14.4	12.5	15.1	20.0
Bromobenzene	Ave	0.7697	0.7418		12.0	12.5	-3.6	20.0
trans-1,4-Dichloro-2-butene	Ave	4.847	5.478		141	125	13.0	20.0
1,2,3-Trichloropropane	Ave	0.1534	0.1616		13.2	12.5	5.4	20.0
N-Propylbenzene	Ave	3.363	3.643		13.5	12.5	8.3	20.0
2-Chlorotoluene	Ave	0.7395	0.7271		12.3	12.5	-1.7	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 410-322544/3 Calibration Date: 12/01/2022 10:33  
 Instrument ID: 16334 Calib Start Date: 08/16/2022 17:26  
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 08/16/2022 19:38  
 Lab File ID: GD01X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.519	2.644		13.1	12.5	4.9	20.0
4-Chlorotoluene	Ave	0.7729	0.7630		12.3	12.5	-1.3	20.0
tert-Butylbenzene	Ave	0.5805	0.5627		12.1	12.5	-3.1	20.0
Pentachloroethane	Ave	0.4154	0.4974		15.0	12.5	19.7	20.0
1,2,4-Trimethylbenzene	Ave	2.595	2.740		13.2	12.5	5.6	20.0
sec-Butylbenzene	Ave	3.159	3.371		13.3	12.5	6.7	20.0
1,3-Dichlorobenzene	Ave	1.590	1.525	0.6000	12.0	12.5	-4.1	20.0
p-Isopropyltoluene	Ave	2.881	2.997		13.0	12.5	4.0	20.0
1,4-Dichlorobenzene	Ave	1.664	1.491	0.5000	11.2	12.5	-10.4	20.0
1,2,3-Trimethylbenzene	Ave	1.191	1.202		12.6	12.5	0.9	20.0
Benzyl chloride	Lin1		0.2499		14.8	12.5	18.5	20.0
n-Butylbenzene	Ave	1.407	1.540		13.7	12.5	9.4	20.0
1,2-Dichlorobenzene	Ave	1.492	1.437	0.4000	12.0	12.5	-3.7	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0787	0.0877	0.0500	13.9	12.5	11.5	20.0
1,3,5-Trichlorobenzene	Ave	1.282	1.185		11.6	12.5	-7.5	20.0
1,2,4-Trichlorobenzene	Ave	1.202	1.063	0.2000	11.1	12.5	-11.5	20.0
Hexachlorobutadiene	Ave	0.5695	0.5331		11.7	12.5	-6.4	20.0
Naphthalene	Ave	2.034	1.988		12.2	12.5	-2.2	20.0
1,2,3-Trichlorobenzene	Ave	1.062	0.9609		11.3	12.5	-9.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2483	0.2412		9.71	10.0	-2.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0527	0.0511		9.69	10.0	-3.1	20.0
Toluene-d8 (Surr)	Ave	1.281	1.365		10.7	10.0	6.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4767	0.5030		10.6	10.0	5.5	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X02.D  
 Lims ID: CCVIS VSTD12.5  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 01-Dec-2022 10:33:30 ALS Bottle#: 2 Worklist Smp#: 3  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-003  
 Misc. Info.: CCVIS VSTD12.5  
 Operator ID: knk41612 Instrument ID: 16334  
 Sublist: chrom-MSV\_16334\_25mL\*sub49  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:06:39 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: DVW2

Date: 01-Dec-2022 11:03:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.892	1.892	0.000	99	1155543	12.5	15.7	
5 Chloromethane	50	2.087	2.087	0.000	99	1278462	12.5	15.4	
6 Vinyl chloride	62	2.202	2.202	0.000	98	1244226	12.5	14.6	
7 Butadiene	39	2.209	2.209	0.000	93	1073531	12.5	13.3	
9 Bromomethane	94	2.519	2.519	0.000	90	812220	12.5	12.1	
10 Chloroethane	64	2.599	2.599	0.000	100	706705	12.5	13.9	
11 Dichlorofluoromethane	67	2.830	2.830	0.000	97	1643951	12.5	13.3	
12 Trichlorofluoromethane	101	2.897	2.897	0.000	97	1561363	12.5	13.4	
13 Ethyl ether	59	3.129	3.129	0.000	91	755959	12.5	13.9	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.214	3.214	0.000	93	1066714	12.5	12.9	
17 Acrolein	56	3.300	3.300	0.000	99	5806012	625.0	653.1	
18 1,1-Dichloroethene	96	3.422	3.422	0.000	98	754799	12.5	12.3	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.464	3.464	0.000	92	728127	12.5	12.2	
20 Acetone	43	3.477	3.477	0.000	100	1014214	125.0	104.0	
21 Iodomethane	142	3.611	3.611	0.000	99	1281623	12.5	11.1	
22 Ethyl bromide	108	3.635	3.635	0.000	98	690916	12.5	12.3	
24 Isopropyl alcohol	45	3.690	3.690	0.000	31	356255	250.0	226.9	
23 Carbon disulfide	76	3.708	3.708	0.000	99	2366285	12.5	15.9	
25 Methyl acetate	43	3.873	3.873	0.000	37	365160	12.5	12.1	
27 3-Chloro-1-propene	41	3.885	3.885	0.000	93	1238945	12.5	15.0	
29 Methylene Chloride	84	4.062	4.062	0.000	93	864713	12.5	12.8	
* 30 t-Butyl alcohol-d10 (IS)	65	4.147	4.147	0.000	83	192332	50.0	50.0	
31 2-Methyl-2-propanol	59	4.251	4.251	0.000	99	700011	250.0	205.3	
32 Acrylonitrile	53	4.409	4.409	0.000	98	420158	31.3	32.5	
33 Methyl tert-butyl ether	73	4.458	4.458	0.000	93	2243825	12.5	12.8	
34 trans-1,2-Dichloroethene	96	4.464	4.464	0.000	98	877160	12.5	12.3	
35 Hexane	57	4.897	4.897	0.000	92	1144605	12.5	14.7	
37 1,1-Dichloroethane	63	5.135	5.135	0.000	96	1579551	12.5	13.6	
38 Isopropyl ether	45	5.196	5.196	0.000	94	2777879	12.5	14.5	
39 2-Chloro-1,3-butadiene	53	5.245	5.245	0.000	91	1251967	12.5	13.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.732	5.732	0.000	98	2598957	12.5	13.2	
41 2-Butanone (MEK)	43	5.940	5.940	0.000	100	2497976	125.0	129.7	
42 cis-1,2-Dichloroethene	96	5.970	5.970	0.000	82	961073	12.5	12.3	
43 2,2-Dichloropropane	77	5.988	5.988	0.000	85	1266401	12.5	13.5	
45 Propionitrile	54	6.031	6.031	0.000	99	1323799	250.0	290.0	
48 Methacrylonitrile	67	6.244	6.244	0.000	92	2529025	125.0	123.1	
49 Chlorobromomethane	128	6.299	6.299	0.000	97	434517	12.5	11.6	
50 Tetrahydrofuran	71	6.305	6.305	0.000	84	351197	62.5	61.4	
51 Chloroform	83	6.458	6.458	0.000	93	1550146	12.5	12.5	
\$ 52 Dibromofluoromethane (Surr)	113	6.671	6.671	0.000	94	685186	10.0	9.71	
53 1,1,1-Trichloroethane	97	6.677	6.677	0.000	98	1319007	12.5	12.1	
54 Cyclohexane	56	6.775	6.775	0.000	91	1419689	12.5	14.4	
56 Carbon tetrachloride	117	6.891	6.891	0.000	95	1175428	12.5	12.6	
57 1,1-Dichloropropene	75	6.897	6.897	0.000	97	1215435	12.5	12.6	
58 Isobutyl alcohol	41	7.086	7.086	0.000	95	779350	625.0	764.7	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.122	7.122	0.000	93	145137	10.0	9.69	
60 Benzene	78	7.159	7.159	0.000	97	3600951	12.5	12.7	
61 1,2-Dichloroethane	62	7.226	7.226	0.000	97	1034253	12.5	12.7	
63 Tert-amyl methyl ether	73	7.354	7.354	0.000	99	2450416	12.5	13.1	
* 64 Fluorobenzene (IS)	96	7.567	7.567	0.000	99	2841106	10.0	10.0	
65 n-Heptane	43	7.579	7.579	0.000	92	1257762	12.5	15.4	
67 n-Butanol	56	7.976	7.976	0.000	89	1312154	1093.8	1319.1	
68 Trichloroethene	95	8.043	8.043	0.000	98	959683	12.5	12.1	
69 Methylcyclohexane	83	8.348	8.348	0.000	92	1538850	12.5	13.0	
70 1,2-Dichloropropane	63	8.378	8.378	0.000	90	971844	12.5	14.0	
71 2-ethoxy-2-methyl butane	87	8.390	8.390	0.000	93	1399315	12.5	12.6	
72 Methyl methacrylate	69	8.463	8.463	0.000	91	473426	12.5	11.8	
73 Dibromomethane	93	8.482	8.482	0.000	96	468020	12.5	12.3	
74 1,4-Dioxane	88	8.512	8.512	0.000	82	125891	625.0	559.6	
76 Dichlorobromomethane	83	8.726	8.726	0.000	100	1160755	12.5	13.9	
77 2-Nitropropane	41	9.000	9.000	0.000	98	620605	62.5	68.9	
81 cis-1,3-Dichloropropene	75	9.280	9.280	0.000	96	1492372	12.5	14.3	
82 4-Methyl-2-pentanone (MIBK)	43	9.463	9.463	0.000	96	6836211	125.0	134.8	
\$ 83 Toluene-d8 (Surr)	98	9.597	9.597	0.000	93	2866383	10.0	10.7	
84 Toluene	92	9.671	9.671	0.000	98	2355128	12.5	12.9	
85 trans-1,3-Dichloropropene	75	9.933	9.933	0.000	92	1301899	12.5	16.0	
104 Ethyl methacrylate	69	10.000	10.000	0.000	89	1039214	12.5	14.9	
106 1,1,2-Trichloroethane	97	10.140	10.140	0.000	90	698923	12.5	13.0	
107 Tetrachloroethene	166	10.225	10.225	0.000	98	1082232	12.5	11.8	
108 1,3-Dichloropropane	76	10.305	10.305	0.000	90	1204551	12.5	13.7	
109 2-Hexanone	43	10.359	10.359	0.000	97	5004953	125.0	135.4	
111 Chlorodibromomethane	129	10.518	10.518	0.000	90	864796	12.5	14.8	
112 Ethylene Dibromide	107	10.628	10.628	0.000	99	665041	12.5	12.6	
* 113 Chlorobenzene-d5 (IS)	117	11.067	11.067	0.000	85	2099895	10.0	10.0	
114 1-Chlorohexane	91	11.079	11.079	0.000	98	1295562	12.5	12.7	
115 Chlorobenzene	112	11.091	11.091	0.000	95	2726828	12.5	12.4	
117 1,1,1,2-Tetrachloroethane	131	11.176	11.176	0.000	96	930271	12.5	13.1	
116 Ethylbenzene	91	11.176	11.176	0.000	98	4619088	12.5	13.1	
119 m-Xylene & p-Xylene	106	11.292	11.292	0.000	89	3607052	25.0	25.4	
120 o-Xylene	106	11.627	11.627	0.000	96	1748829	12.5	12.4	
121 Styrene	104	11.640	11.640	0.000	95	2995087	12.5	12.6	
122 Bromoform	173	11.792	11.792	0.000	97	534336	12.5	16.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 Isopropylbenzene	105	11.926	11.926	0.000	96	4552341	12.5	12.7	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.066	12.066	0.000	90	1056192	10.0	10.6	
127 1,1,2,2-Tetrachloroethane	83	12.170	12.170	0.000	92	944432	12.5	14.4	
128 Bromobenzene	156	12.182	12.182	0.000	95	1139264	12.5	12.0	
129 trans-1,4-Dichloro-2-butene	53	12.194	12.194	0.000	93	2633852	125.0	141.3	
130 1,2,3-Trichloropropane	110	12.219	12.219	0.000	81	248266	12.5	13.2	
131 N-Propylbenzene	91	12.255	12.255	0.000	99	5594904	12.5	13.5	
132 2-Chlorotoluene	126	12.329	12.329	0.000	97	1116711	12.5	12.3	
133 1,3,5-Trimethylbenzene	105	12.390	12.390	0.000	93	4060363	12.5	13.1	
134 4-Chlorotoluene	126	12.420	12.420	0.000	97	1171932	12.5	12.3	
135 tert-Butylbenzene	134	12.627	12.627	0.000	93	864297	12.5	12.1	
136 Pentachloroethane	167	12.664	12.664	0.000	94	763967	12.5	15.0	
137 1,2,4-Trimethylbenzene	105	12.670	12.670	0.000	97	4207719	12.5	13.2	
138 sec-Butylbenzene	105	12.792	12.792	0.000	94	5177505	12.5	13.3	
139 1,3-Dichlorobenzene	146	12.889	12.889	0.000	98	2342223	12.5	12.0	
140 4-Isopropyltoluene	119	12.902	12.902	0.000	97	4603254	12.5	13.0	
* 141 1,4-Dichlorobenzene-d4	152	12.944	12.944	0.000	94	1228728	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.963	12.963	0.000	94	2289468	12.5	11.2	
143 1,2,3-Trimethylbenzene	120	12.975	12.975	0.000	98	1845908	12.5	12.6	
144 Benzyl chloride	126	13.042	13.042	0.000	99	383823	12.5	14.8	
145 p-Diethylbenzene	119	13.097	13.097	0.000	92	2752521	12.5	13.1	
146 n-Butylbenzene	92	13.188	13.188	0.000	98	2365130	12.5	13.7	
147 1,2-Dichlorobenzene	146	13.225	13.225	0.000	98	2207009	12.5	12.0	
149 1,2-Dibromo-3-Chloropropane	155	13.761	13.761	0.000	85	134741	12.5	13.9	
150 1,3,5-Trichlorobenzene	180	13.883	13.883	0.000	98	1819694	12.5	11.6	
151 1,2,4-Trichlorobenzene	180	14.304	14.304	0.000	94	1632568	12.5	11.1	
152 Hexachlorobutadiene	225	14.389	14.389	0.000	97	818719	12.5	11.7	
153 Naphthalene	128	14.487	14.487	0.000	97	3053671	12.5	12.2	
154 1,2,3-Trichlorobenzene	180	14.627	14.627	0.000	96	1475925	12.5	11.3	
155 2-Methylnaphthalene	142	15.230	15.230	0.000	92	1901155	12.5	11.8	
166 Pentane	43	2.928	2.928	0.000	97	1188866	NR	NR	

### QC Flag Legend

#### Processing Flags

NR - Missing Quant Standard

#### Reagents:

MSV_LL_#1_826_00060	Amount Added: 25.00	Units: uL	
MSV_LL_GAS826_00124	Amount Added: 25.00	Units: uL	
MSV_LL_#2-bce_00001	Amount Added: 25.00	Units: uL	
MSV_29_826ISS_00040	Amount Added: 1.00	Units: uL	Run Reagent





FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab Sample ID: ICV 410-275687/4 Calibration Date: 07/14/2022 20:04

Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52

Lab File ID: copy\_HL14X03.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	0.3063	0.2590	0.1000	4.23	5.00	-15.5	30.0
Chloromethane	Ave	0.3838	0.3406	0.1000	4.44	5.00	-11.2	30.0
1,3-Butadiene	Ave	0.3624	0.2894		3.99	5.00	-20.1	30.0
Vinyl chloride	Ave	0.3802	0.3321	0.1000	4.37	5.00	-12.6	30.0
Bromomethane	Ave	0.2669	0.2374	0.1000	4.45	5.00	-11.1	30.0
Chloroethane	Ave	0.2307	0.2091	0.1000	4.53	5.00	-9.4	30.0
Dichlorofluoromethane	Ave	0.5113	0.4758		4.65	5.00	-7.0	30.0
Trichlorofluoromethane	Ave	0.4602	0.4030	0.1000	4.38	5.00	-12.4	30.0
Ethyl ether	Ave	0.1924	0.1740		4.51	4.98	-9.6	30.0
Freon 123a	Ave	0.3585	0.3120		4.35	5.00	-13.0	30.0
Acrolein	Ave	2.748	2.918		39.8	37.5	6.2	30.0
1,1-Dichloroethene	Ave	0.2601	0.2385	0.1000	4.58	5.00	-8.3	30.0
Acetone	Ave	3.199	2.905	0.1000	56.8	62.5	-9.2	30.0
Freon 113	Ave	0.2536	0.2389	0.1000	4.71	5.00	-5.8	30.0
Methyl iodide	Ave	0.4522	0.4407		4.87	5.00	-2.5	30.0
Ethyl bromide	Ave	0.2285	0.1794		3.84	4.89	-21.5	30.0
Carbon disulfide	Ave	0.6962	0.6999	0.1000	5.03	5.00	0.5	30.0
Methyl acetate	Ave	8.464	10.17	0.1000	6.01	5.00	20.2	30.0
Allyl chloride	Ave	0.4513	0.4237		4.69	5.00	-6.1	30.0
Methylene Chloride	Ave	0.2694	0.2461	0.1000	4.57	5.00	-8.6	30.0
t-Butyl alcohol	Ave	1.082	1.257		58.1	50.0	16.2	30.0
Acrylonitrile	Ave	4.318	4.902		28.4	25.0	13.5	30.0
Methyl tert-butyl ether	Ave	0.5814	0.5286	0.1000	4.55	5.00	-9.1	30.0
trans-1,2-Dichloroethene	Ave	0.2889	0.2589	0.1000	4.48	5.00	-10.4	30.0
n-Hexane	Ave	0.4042	0.3482		4.31	5.00	-13.8	30.0
1,1-Dichloroethane	Ave	0.5400	0.4802	0.2000	4.45	5.00	-11.1	30.0
di-Isopropyl ether	Ave	0.9190	0.8318		4.53	5.00	-9.5	30.0
2-Chloro-1,3-butadiene	Ave	0.4410	0.4111		4.66	5.00	-6.8	30.0
Ethyl t-butyl ether	Ave	0.8130	0.7399		4.55	5.00	-9.0	30.0
2-Butanone (MEK)	Ave	5.564	6.373	0.1000	71.6	62.5	14.5	30.0
cis-1,2-Dichloroethene	Ave	0.3173	0.2894	0.1000	4.56	5.00	-8.8	30.0
2,2-Dichloropropane	Ave	0.4524	0.4185		4.63	5.00	-7.5	30.0
Propionitrile	Ave	1.427	1.628		42.8	37.5	14.1	30.0
Methacrylonitrile	Ave	6.162	6.912		42.1	37.5	12.2	30.0
Bromochloromethane	Ave	0.1268	0.1101		4.34	5.00	-13.1	30.0
Tetrahydrofuran	Ave	1.591	1.765		27.7	25.0	10.9	30.0
Chloroform	Ave	0.5095	0.4508	0.2000	4.42	5.00	-11.5	30.0
1,1,1-Trichloroethane	Ave	0.4742	0.4165	0.1000	4.39	5.00	-12.2	30.0
Cyclohexane	Ave	0.5379	0.4679	0.1000	4.35	5.00	-13.0	30.0
1,1-Dichloropropene	Ave	0.4287	0.3790		4.42	5.00	-11.6	30.0
Carbon tetrachloride	Ave	0.4101	0.3658	0.1000	4.46	5.00	-10.8	30.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 410-275687/4 Calibration Date: 07/14/2022 20:04  
 Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51  
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52  
 Lab File ID: copy\_HL14X03.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
Isobutyl alcohol	Ave	0.3528	0.4228		150	125	19.8	30.0
Benzene	Ave	1.250	1.112	0.5000	4.45	5.00	-11.0	30.0
1,2-Dichloroethane	Ave	0.2708	0.2363	0.1000	4.36	5.00	-12.7	30.0
t-Amyl methyl ether	Ave	0.6927	0.6217		4.49	5.00	-10.3	30.0
n-Heptane	Ave	0.4424	0.3695		4.18	5.00	-16.5	30.0
n-Butanol	Ave	0.3017	0.3876		321	250	28.5	30.0
Trichloroethene	Ave	0.3292	0.2871	0.2000	4.36	5.00	-12.8	30.0
Methylcyclohexane	Ave	0.5553	0.4738	0.1000	4.27	5.00	-14.7	30.0
1,2-Dichloropropane	Ave	0.3137	0.2794	0.1000	4.45	5.00	-10.9	30.0
Methyl methacrylate	Ave	12.27	14.09		5.74	5.00	14.8	30.0
1,4-Dioxane	Ave	0.0784	0.1088	0.0050	174	125	38.8*	30.0
Dibromomethane	Ave	0.1306	0.1128		4.32	5.00	-13.6	30.0
Bromodichloromethane	Ave	0.3530	0.3184	0.2000	4.51	5.00	-9.8	30.0
2-Nitropropane	Ave	3.043	3.335		5.48	5.00	9.6	30.0
1-Bromo-2-chloroethane	Ave	0.2884	0.2512		4.36	5.00	-12.9	30.0
cis-1,3-Dichloropropene	Ave	0.4429	0.3951	0.2000	4.46	5.00	-10.8	30.0
4-Methyl-2-pentanone (MIBK)	Ave	15.08	17.02	0.1000	70.5	62.5	12.9	30.0
Toluene	Ave	0.9090	0.9510	0.4000	5.23	5.00	4.6	30.0
trans-1,3-Dichloropropene	Ave	0.3871	0.4277	0.1000	5.52	5.00	10.5	30.0
Ethyl methacrylate	Ave	0.2967	0.3279		5.53	5.00	10.5	30.0
1,1,2-Trichloroethane	Ave	0.2153	0.2263	0.1000	5.26	5.00	5.1	30.0
Tetrachloroethene	Ave	0.4197	0.4390	0.2000	5.23	5.00	4.6	30.0
1,3-Dichloropropane	Ave	0.3711	0.3928		5.29	5.00	5.8	30.0
2-Hexanone	Ave	10.01	11.61	0.1000	72.5	62.5	16.0	30.0
Dibromochloromethane	Ave	0.2665	0.2917		5.47	5.00	9.5	30.0
1,2-Dibromoethane (EDB)	Ave	0.1972	0.2124	0.1000	5.39	5.00	7.7	30.0
1-Chlorohexane	Ave	0.5617	0.5539		4.93	5.00	-1.4	30.0
Chlorobenzene	Ave	0.9684	1.013	0.5000	5.23	5.00	4.6	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3322	0.3578		5.39	5.00	7.7	30.0
Ethylbenzene	Ave	1.775	1.871	0.1000	5.27	5.00	5.4	30.0
m&p-Xylene	Ave	0.6768	0.7128	0.1000	10.5	10.0	5.3	30.0
o-Xylene	Ave	0.6542	0.6926	0.3000	5.29	5.00	5.9	30.0
Styrene	Ave	1.061	1.144	0.3000	5.39	5.00	7.8	30.0
Bromoform	Ave	0.1536	0.1691	0.1000	5.51	5.00	10.1	30.0
Isopropylbenzene	Ave	1.769	1.898	0.1000	5.37	5.00	7.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4576	0.5046	0.3000	5.51	5.00	10.3	30.0
Bromobenzene	Ave	0.6850	0.7706		5.62	5.00	12.5	30.0
trans-1,4-Dichloro-2-butene	Ave	5.212	6.058		29.1	25.0	16.2	30.0
1,2,3-Trichloropropane	Ave	0.1149	0.1261		5.49	5.00	9.7	30.0
N-Propylbenzene	Ave	3.820	4.163		5.45	5.00	9.0	30.0
2-Chlorotoluene	Ave	0.7351	0.8087		5.50	5.00	10.0	30.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab Sample ID: ICV 410-275687/4 Calibration Date: 07/14/2022 20:04

Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52

Lab File ID: copy\_HL14X03.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.664	2.897		5.44	5.00	8.7	30.0
4-Chlorotoluene	Ave	0.7381	0.8125		5.50	5.00	10.1	30.0
tert-Butylbenzene	Ave	0.5892	0.6228		5.29	5.00	5.7	30.0
Pentachloroethane	Ave	0.4138	0.4711		5.69	5.00	13.9	30.0
1,2,4-Trimethylbenzene	Ave	2.688	2.935		5.46	5.00	9.2	30.0
sec-Butylbenzene	Ave	3.489	3.813		5.46	5.00	9.3	30.0
1,3-Dichlorobenzene	Ave	1.418	1.530	0.6000	5.39	5.00	7.8	30.0
p-Isopropyltoluene	Ave	2.991	3.252		5.44	5.00	8.7	30.0
1,4-Dichlorobenzene	Ave	1.408	1.536	0.5000	5.46	5.00	9.1	30.0
1,2,3-Trimethylbenzene	Ave	1.146	1.244		5.43	5.00	8.6	30.0
Benzyl chloride	Ave	0.1861	0.2164		5.81	5.00	16.3	30.0
n-Butylbenzene	Ave	1.510	1.613		5.34	5.00	6.8	30.0
1,2-Dichlorobenzene	Ave	1.257	1.361	0.4000	5.41	5.00	8.3	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0604	0.0657	0.0500	5.44	5.00	8.8	30.0
1,3,5-Trichlorobenzene	Ave	1.103	1.206		5.46	5.00	9.3	30.0
1,2,4-Trichlorobenzene	Ave	0.9290	1.003	0.2000	5.40	5.00	8.0	30.0
Hexachlorobutadiene	Ave	0.4512	0.4475		4.96	5.00	-0.8	30.0
Naphthalene	Ave	1.500	1.590		5.30	5.00	6.0	30.0
1,2,3-Trichlorobenzene	Ave	0.7887	0.8508		5.39	5.00	7.9	30.0
Dibromofluoromethane (Surr)	Ave	0.2531	0.2329		9.20	10.0	-8.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0462	0.0444		9.60	10.0	-4.0	30.0
Toluene-d8 (Surr)	Ave	1.223	1.331		10.9	10.0	8.8	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4966	0.4783		9.63	10.0	-3.7	30.0

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy\_HL14X03.D  
 Lims ID: ICV  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 14-Jul-2022 20:04:30 ALS Bottle#: 3 Worklist Smp#: 4  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0061844-004  
 Misc. Info.: LCS  
 Operator ID: MEC29284 Instrument ID: 19094  
 Sublist:  
 Method: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 14-Jul-2022 20:49:54 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1670

First Level Reviewer: K4WN

Date: 14-Jul-2022 20:47:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.928	1.934	-0.006	99	317261	5.00	4.23	M
6 Chloromethane	50	2.123	2.123	0.000	99	417299	5.00	4.44	
8 Butadiene	39	2.239	2.239	0.000	91	354600	5.00	3.99	M
7 Vinyl chloride	62	2.239	2.245	-0.006	87	406878	5.00	4.37	M
9 Bromomethane	94	2.562	2.562	0.000	90	290804	5.00	4.45	
10 Chloroethane	64	2.636	2.642	-0.006	100	256155	5.00	4.53	
11 Dichlorofluoromethane	67	2.867	2.873	-0.006	97	582865	5.00	4.65	
13 Trichlorofluoromethane	101	2.946	2.946	0.000	97	493715	5.00	4.38	
15 Ethyl ether	59	3.172	3.178	-0.006	92	212494	4.98	4.51	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.257	3.257	0.000	93	382207	5.00	4.35	
17 Acrolein	56	3.343	3.343	0.000	97	211963	37.5	39.8	
18 1,1-Dichloroethene	96	3.483	3.483	0.000	98	292133	5.00	4.58	
19 Acetone	43	3.501	3.501	0.000	100	351741	62.5	56.8	
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.526	3.520	0.006	92	292691	5.00	4.71	
21 Isopropyl alcohol	45	3.654	3.623	0.031	96	66567	37.5	40.7	M
22 Iodomethane	142	3.672	3.672	0.000	98	539919	5.00	4.87	
23 Ethyl bromide	108	3.702	3.702	0.000	98	214737	4.89	3.84	
24 Carbon disulfide	76	3.782	3.782	0.000	98	857500	5.00	5.03	
26 Methyl acetate	43	3.904	3.897	0.007	97	98544	5.00	6.01	M
27 3-Chloro-1-propene	41	3.946	3.946	0.000	94	519083	5.00	4.69	
29 Methylene Chloride	84	4.123	4.123	0.000	92	301496	5.00	4.57	
* 28 t-Butyl alcohol-d10 (IS)	65	4.129	4.129	0.000	0	96858	50.0	50.0	
30 2-Methyl-2-propanol	59	4.245	4.245	0.000	100	121776	50.0	58.1	M
31 Acrylonitrile	53	4.440	4.446	-0.006	99	237419	25.0	28.4	
32 Methyl tert-butyl ether	73	4.519	4.525	-0.006	95	647586	5.00	4.55	
33 trans-1,2-Dichloroethene	96	4.544	4.544	0.000	100	317139	5.00	4.48	
34 Hexane	57	4.952	4.952	0.000	92	426626	5.00	4.31	
35 1,1-Dichloroethane	63	5.202	5.196	0.006	95	588266	5.00	4.45	
37 Isopropyl ether	45	5.251	5.251	0.000	96	1018982	5.00	4.53	
38 2-Chloro-1,3-butadiene	53	5.306	5.306	0.000	89	503677	5.00	4.66	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.793	5.787	0.006	98	906405	5.00	4.55	
41 2-Butanone (MEK)	43	5.982	5.982	0.000	100	771623	62.5	71.6	
42 cis-1,2-Dichloroethene	96	6.025	6.025	0.000	82	354488	5.00	4.56	
43 2,2-Dichloropropane	77	6.049	6.056	-0.007	86	512736	5.00	4.63	
45 Propionitrile	54	6.062	6.062	0.000	98	118244	37.5	42.8	
47 Methacrylonitrile	67	6.287	6.287	0.000	92	502139	37.5	42.1	
48 Chlorobromomethane	128	6.360	6.360	0.000	95	134934	5.00	4.34	
49 Tetrahydrofuran	71	6.360	6.367	-0.006	84	85478	25.0	27.7	
50 Chloroform	83	6.507	6.513	-0.006	93	552291	5.00	4.42	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	570532	10.0	9.20	
52 1,1,1-Trichloroethane	97	6.757	6.751	0.006	98	510286	5.00	4.39	
53 Cyclohexane	56	6.848	6.854	-0.006	90	573185	5.00	4.35	
55 1,1-Dichloropropene	75	6.952	6.958	-0.006	99	464331	5.00	4.42	
56 Carbon tetrachloride	117	6.970	6.964	0.006	96	448172	5.00	4.46	
57 Isobutyl alcohol	41	7.086	7.086	0.000	95	102383	125.0	149.8	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.183	7.183	0.000	0	108671	10.0	9.60	
59 Benzene	78	7.214	7.220	-0.006	97	1362583	5.00	4.45	
60 1,2-Dichloroethane	62	7.293	7.287	0.006	97	289443	5.00	4.36	
62 Tert-amyl methyl ether	73	7.415	7.415	0.000	99	761612	5.00	4.49	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	98	2450189	10.0	10.0	
64 n-Heptane	43	7.647	7.647	0.000	92	452715	5.00	4.18	
66 n-Butanol	56	7.988	7.982	0.006	86	187727	250.0	321.2	
67 Trichloroethene	95	8.110	8.110	0.000	98	351712	5.00	4.36	
68 Methylcyclohexane	83	8.433	8.427	0.006	93	580483	5.00	4.27	
70 1,2-Dichloropropane	63	8.445	8.445	0.000	80	342293	5.00	4.45	
69 2-ethoxy-2-methyl butane	87	8.451	8.458	-0.007	90	484021	5.00	4.50	
72 1,4-Dioxane	88	8.543	8.531	0.012	31	26349	125.0	173.6	
71 Methyl methacrylate	69	8.537	8.531	0.006	89	136500	5.00	5.74	
73 Dibromomethane	93	8.555	8.555	0.000	95	138155	5.00	4.32	
75 Dichlorobromomethane	83	8.793	8.793	0.000	100	390074	5.00	4.51	
76 2-Nitropropane	41	9.061	9.061	0.000	97	32304	5.00	5.48	
79 1-Bromo-2-chloroethane	63	9.189	9.195	-0.006	99	307741	5.00	4.36	
80 cis-1,3-Dichloropropene	75	9.348	9.348	0.000	97	484052	5.00	4.46	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	2061124	62.5	70.5	
\$ 82 Toluene-d8 (Surr)	98	9.665	9.665	0.000	93	2424916	10.0	10.9	
83 Toluene	92	9.744	9.738	0.006	99	866148	5.00	5.23	
85 trans-1,3-Dichloropropene	75	10.000	10.000	0.000	91	389562	5.00	5.52	
86 Ethyl methacrylate	69	10.061	10.061	0.000	89	298664	5.00	5.53	
87 1,1,2-Trichloroethane	97	10.207	10.207	0.000	89	206112	5.00	5.26	
88 Tetrachloroethene	166	10.299	10.299	0.000	97	399862	5.00	5.23	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	89	357771	5.00	5.29	
91 2-Hexanone	43	10.421	10.421	0.000	97	1405955	62.5	72.5	
93 Chlorodibromomethane	129	10.591	10.591	0.000	89	265663	5.00	5.47	
94 Ethylene Dibromide	107	10.701	10.701	0.000	99	193481	5.00	5.39	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	85	1821571	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	98	504456	5.00	4.93	
98 Chlorobenzene	112	11.164	11.164	0.000	95	922229	5.00	5.23	
99 1,1,1,2-Tetrachloroethane	131	11.244	11.244	0.000	96	325896	5.00	5.39	
100 Ethylbenzene	91	11.250	11.250	0.000	98	1703874	5.00	5.27	
101 m-Xylene & p-Xylene	106	11.366	11.366	0.000	0	1298435	10.0	10.5	
102 o-Xylene	106	11.695	11.695	0.000	96	630822	5.00	5.29	
103 Styrene	104	11.713	11.707	0.006	95	1041579	5.00	5.39	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	11.872	11.872	0.000	98	154007	5.00	5.51	
105 Isopropylbenzene	105	11.993	11.993	0.000	96	1728871	5.00	5.37	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	92	871254	10.0	9.63	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	92	247560	5.00	5.51	
111 Bromobenzene	156	12.256	12.256	0.000	96	378040	5.00	5.62	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	91	293360	25.0	29.1	
112 1,2,3-Trichloropropane	110	12.286	12.286	0.000	81	61842	5.00	5.49	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	2042179	5.00	5.45	
114 2-Chlorotoluene	126	12.402	12.402	0.000	97	396739	5.00	5.50	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	1421117	5.00	5.44	
116 4-Chlorotoluene	126	12.493	12.493	0.000	97	398583	5.00	5.50	
118 tert-Butylbenzene	134	12.707	12.707	0.000	93	305540	5.00	5.29	
119 Pentachloroethane	167	12.737	12.737	0.000	94	231131	5.00	5.69	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	1439971	5.00	5.46	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	1870814	5.00	5.46	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	750424	5.00	5.39	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	1595293	5.00	5.44	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	981185	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	95	753566	5.00	5.46	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	610505	5.00	5.43	
127 Benzyl chloride	126	13.115	13.115	0.000	98	106143	5.00	5.81	
129 p-Diethylbenzene	119	13.176	13.176	0.000	92	932730	5.00	5.50	
130 n-Butylbenzene	92	13.268	13.268	0.000	97	791229	5.00	5.34	
131 1,2-Dichlorobenzene	146	13.298	13.298	0.000	99	667486	5.00	5.41	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	89	32241	5.00	5.44	
135 1,3,5-Trichlorobenzene	180	13.969	13.969	0.000	98	591489	5.00	5.46	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	492177	5.00	5.40	
137 Hexachlorobutadiene	225	14.475	14.475	0.000	95	219557	5.00	4.96	
138 Naphthalene	128	14.572	14.572	0.000	97	780013	5.00	5.30	
139 1,2,3-Trichlorobenzene	180	14.712	14.712	0.000	95	417400	5.00	5.39	
140 2-Methylnaphthalene	142	15.334	15.334	0.000	93	464135	5.00	5.24	
194 Pentane	43		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV_LCS_VOC#1_00063	Amount Added: 12.50	Units: uL	
MSV_LCS_ACROL_00066	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00003	Amount Added: 12.50	Units: uL	
LCS_ETBR_00003	Amount Added: 12.50	Units: uL	
MSV_LCS_Penta_00017	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00089	Amount Added: 12.50	Units: uL	
MSV_LLcentISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromf\Lancaster\ChromData\19094\20220714-61834.b\copy\_HL14X03.D

Injection Date: 14-Jul-2022 20:04:30

Instrument ID: 19094

Operator ID: MEC29284

Lims ID: ICV

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

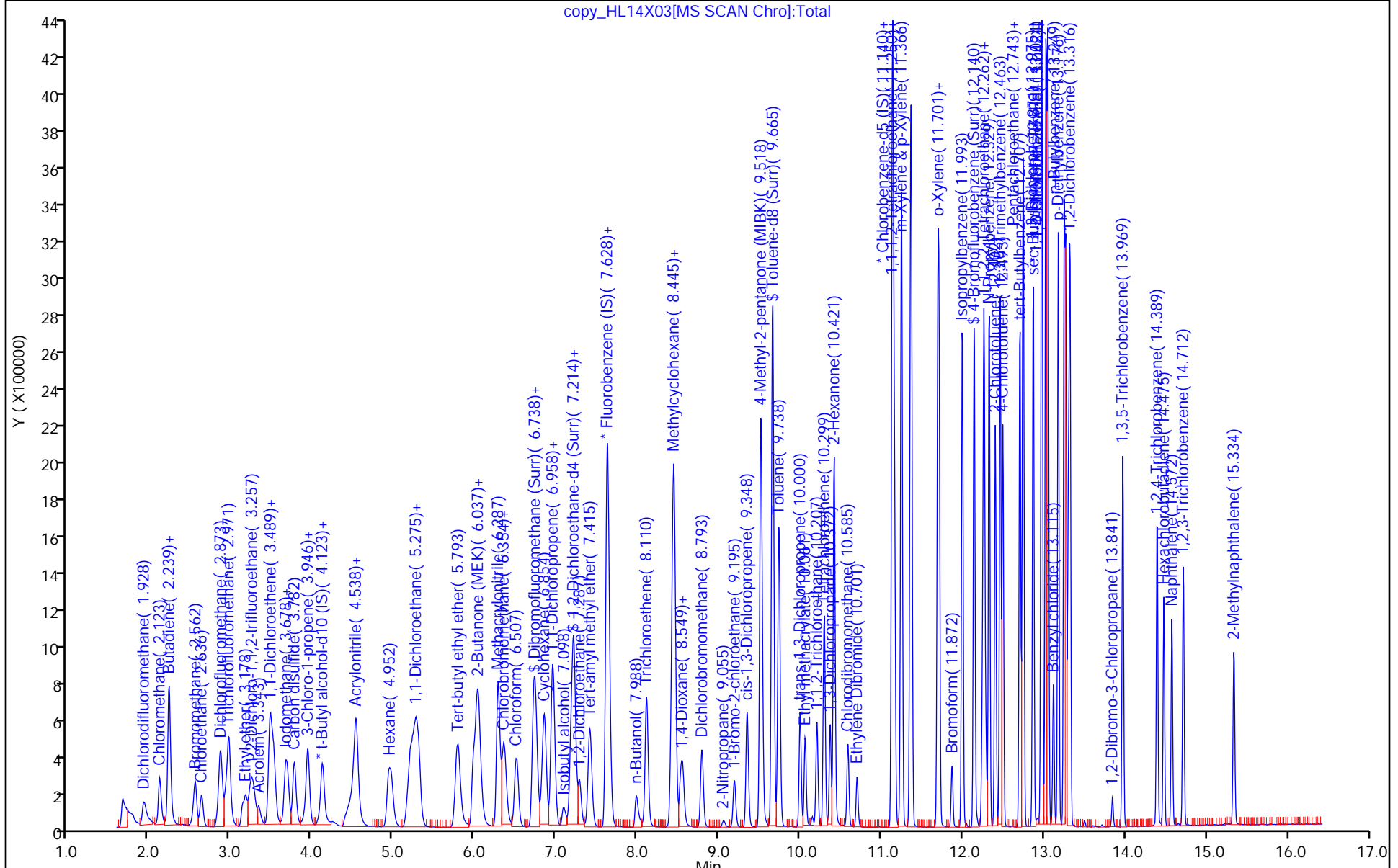
ALS Bottle#: 3

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column ( 0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

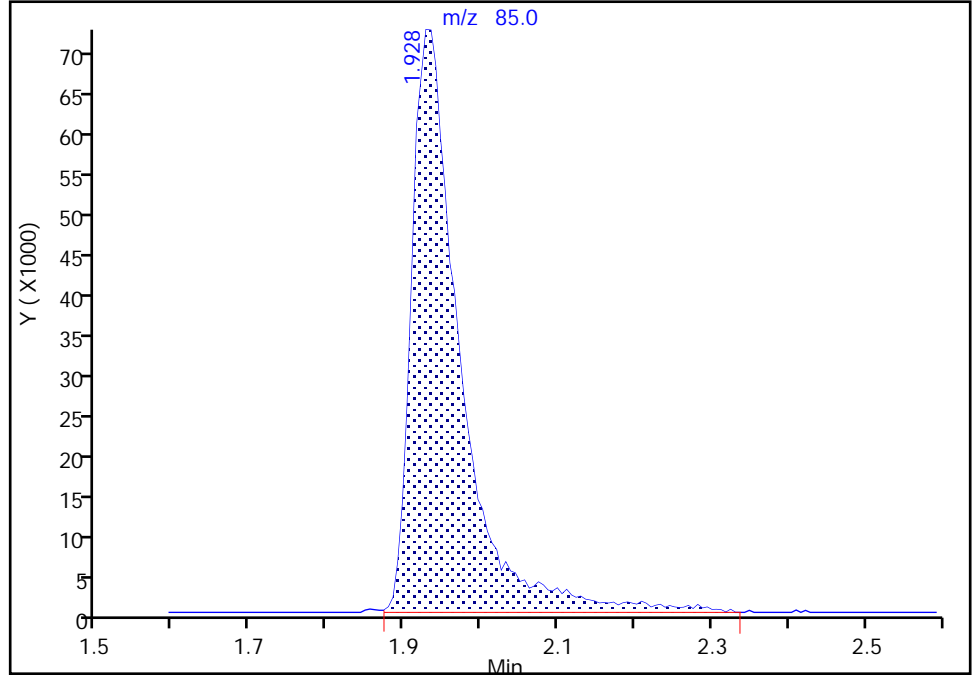
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Injection Date: 14-Jul-2022 20:04:30 Instrument ID: 19094  
Lims ID: ICV  
Client ID:  
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

3 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

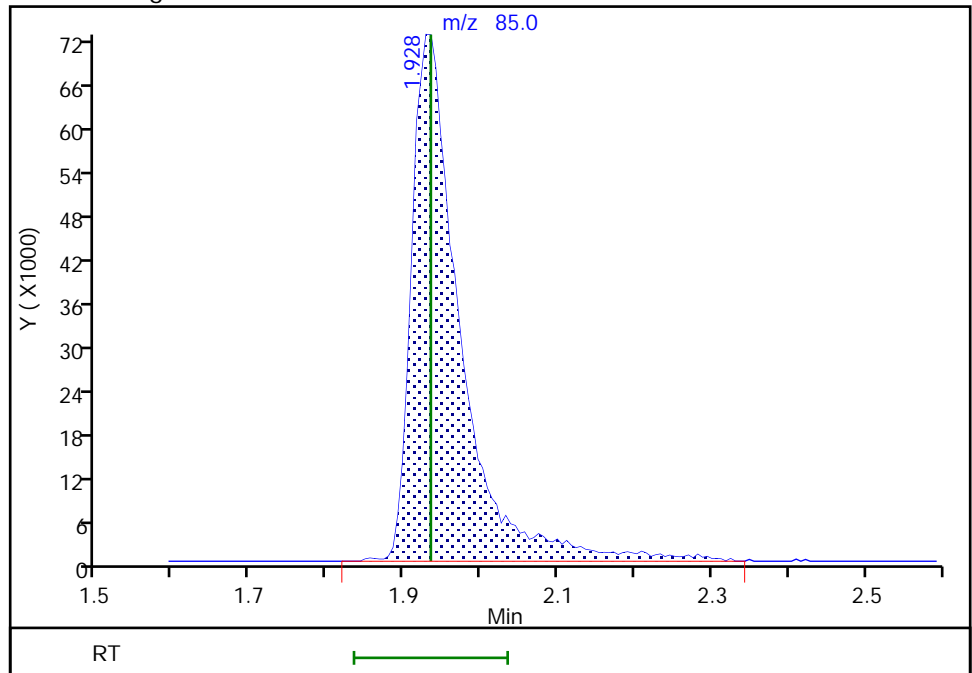
RT: 1.93  
Area: 316797  
Amount: 4.221015  
Amount Units: ug/l

Processing Integration Results



RT: 1.93  
Area: 317261  
Amount: 4.227198  
Amount Units: ug/l

Manual Integration Results



Reviewer: K4WN, 14-Jul-2022 20:43:53  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration



Eurofins Lancaster Laboratories Environment Testing, LLC

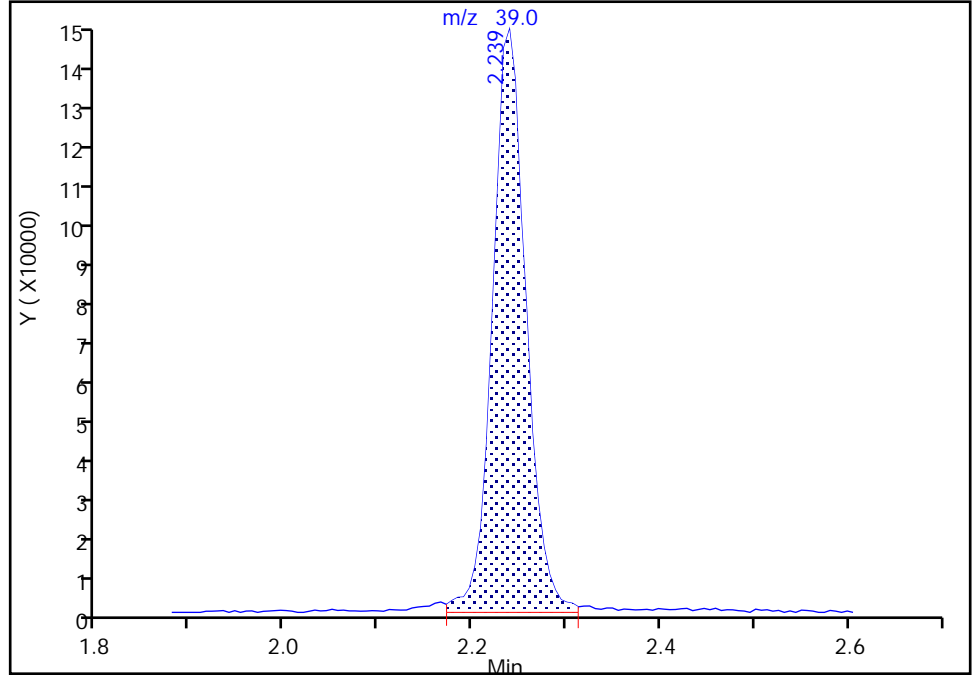
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Injection Date: 14-Jul-2022 20:04:30 Instrument ID: 19094  
Lims ID: ICV  
Client ID:  
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

8 Butadiene, CAS: 106-99-0

Signal: 1

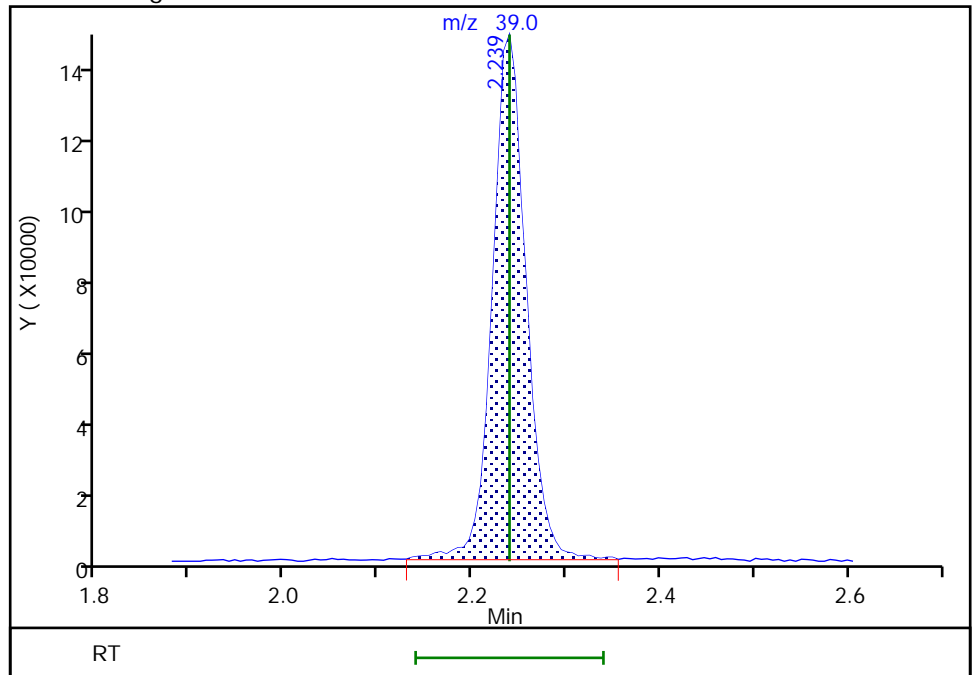
RT: 2.24  
Area: 353737  
Amount: 3.983206  
Amount Units: ug/l

Processing Integration Results



RT: 2.24  
Area: 354600  
Amount: 3.992924  
Amount Units: ug/l

Manual Integration Results



Reviewer: K4WN, 14-Jul-2022 20:44:09  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

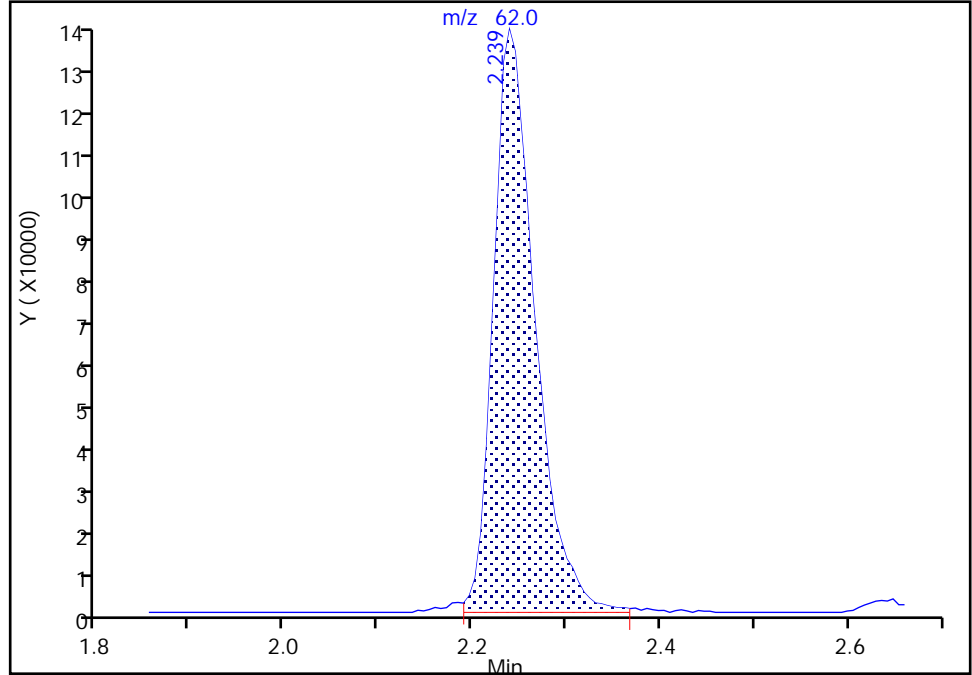
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Injection Date: 14-Jul-2022 20:04:30 Instrument ID: 19094  
Lims ID: ICV  
Client ID:  
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Vinyl chloride, CAS: 75-01-4

Signal: 1

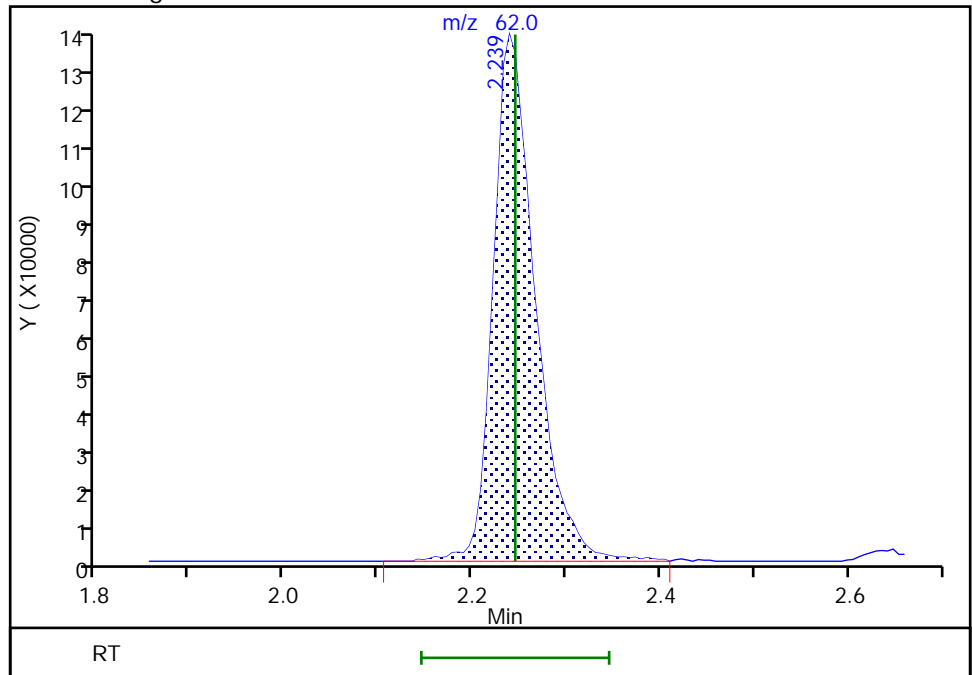
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Area: 402254  
Amount: 4.317978  
Amount Units: ug/l

Processing Integration Results



RT: 2.24  
Area: 406878  
Amount: 4.367614  
Amount Units: ug/l

Manual Integration Results



Reviewer: K4WN, 14-Jul-2022 20:44:16  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration  
Page 818 of 959

Eurofins Lancaster Laboratories Environment Testing, LLC

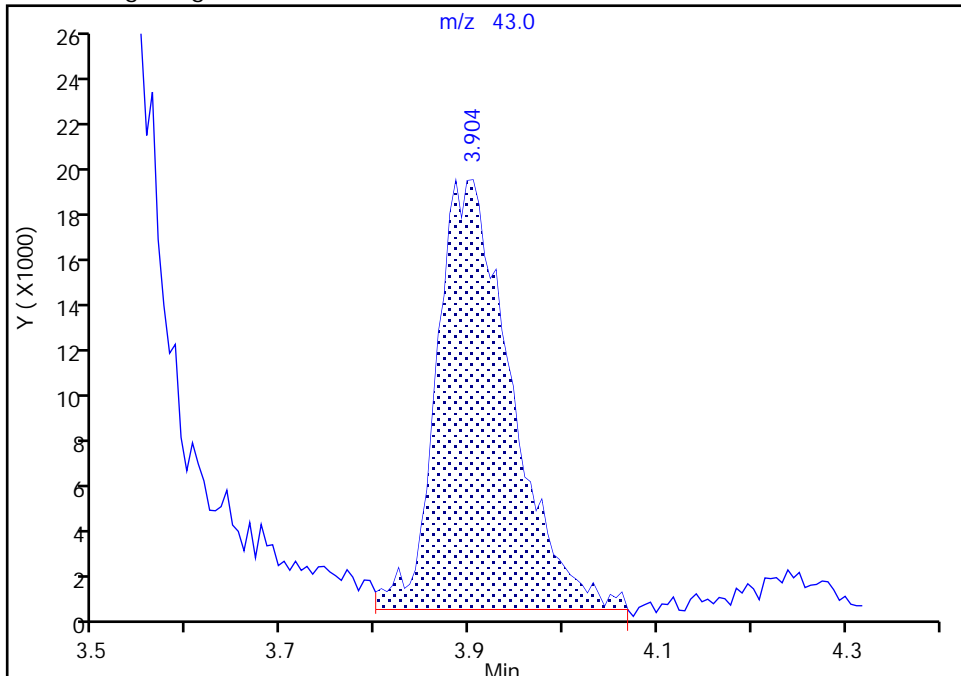
Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy\_HL14X03.D  
Injection Date: 14-Jul-2022 20:04:30 Instrument ID: 19094  
Lims ID: ICV  
Client ID:  
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

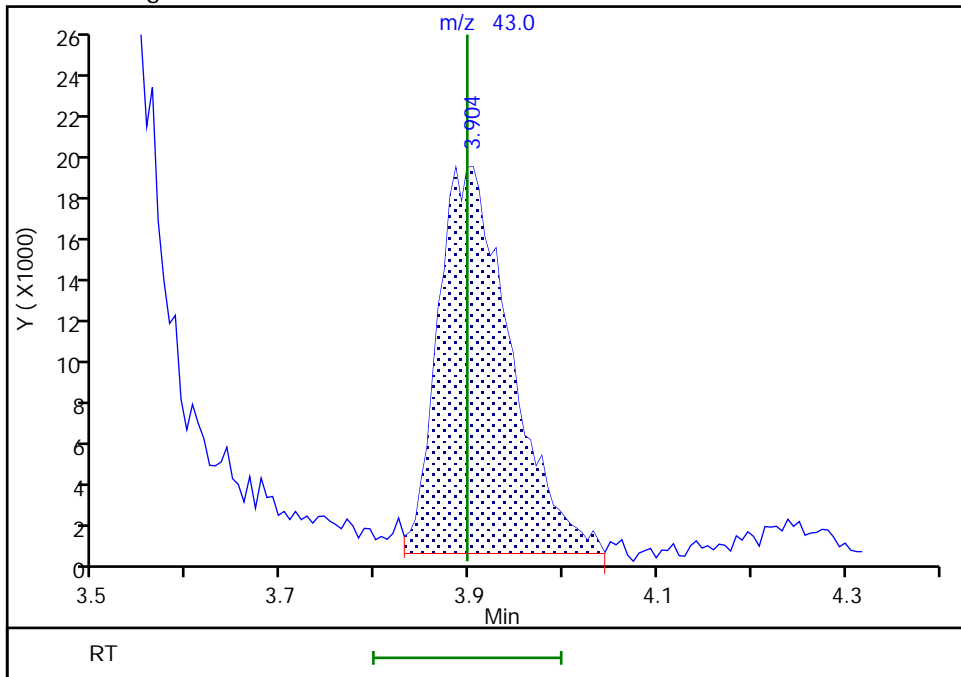
RT: 3.90  
Area: 102033  
Amount: 6.222656  
Amount Units: ug/l

Processing Integration Results



RT: 3.90  
Area: 98544  
Amount: 6.009874  
Amount Units: ug/l

Manual Integration Results



Reviewer: K4WN, 14-Jul-2022 20:44:53  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

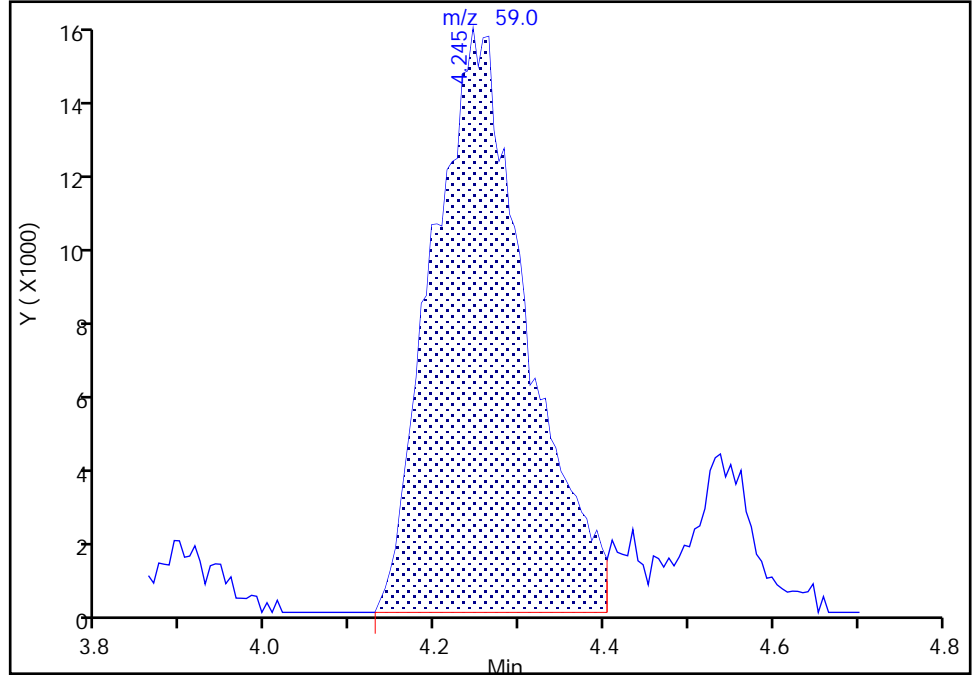
Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy\_HL14X03.D  
Injection Date: 14-Jul-2022 20:04:30 Instrument ID: 19094  
Lims ID: ICV  
Client ID:  
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

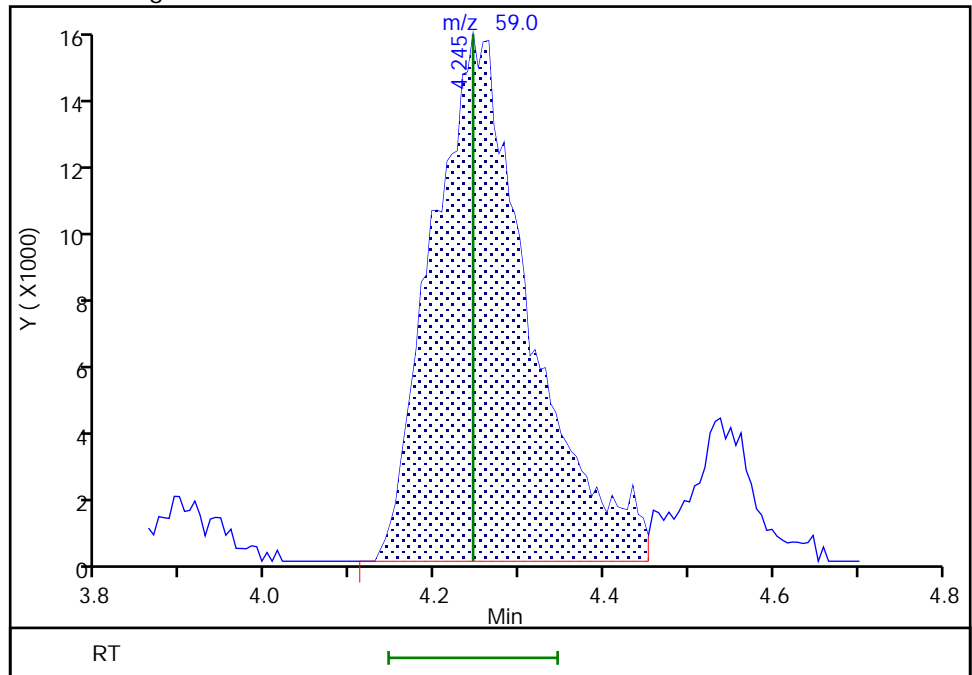
RT: 4.24  
Area: 117435  
Amount: 56.038088  
Amount Units: ug/l

Processing Integration Results



RT: 4.24  
Area: 121776  
Amount: 58.109543  
Amount Units: ug/l

Manual Integration Results



Reviewer: K4WN, 14-Jul-2022 20:45:07  
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 410-322841/3 Calibration Date: 12/01/2022 20:35

Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52

Lab File ID: HD01X32.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	0.3063	0.3985	0.1000	16.3	12.5	30.1*	20.0
Chloromethane	Ave	0.3838	0.4824	0.1000	15.7	12.5	25.7*	20.0
1,3-Butadiene	Ave	0.3624	0.7350		25.3	12.5	102.8*	20.0
Vinyl chloride	Ave	0.3802	0.4394	0.1000	14.4	12.5	15.6	20.0
Bromomethane	Ave	0.2669	0.2780	0.1000	13.0	12.5	4.1	20.0
Chloroethane	Ave	0.2307	0.2541	0.1000	13.8	12.5	10.2	20.0
Dichlorofluoromethane	Ave	0.5113	0.5667		13.9	12.5	10.8	20.0
Trichlorofluoromethane	Ave	0.4602	0.5412	0.1000	14.7	12.5	17.6	20.0
Ethyl ether	Ave	0.1924	0.2036		13.2	12.5	5.8	20.0
Freon 123a	Ave	0.3585	0.3752		13.1	12.5	4.7	20.0
Acrolein	Ave	2.748	2.951		671	625	7.4	20.0
1,1-Dichloroethene	Ave	0.2601	0.2759	0.1000	13.3	12.5	6.1	20.0
Acetone	Ave	3.199	2.981	0.1000	116	125	-6.8	20.0
Freon 113	Ave	0.2536	0.2669	0.1000	13.2	12.5	5.3	20.0
Methyl iodide	Ave	0.4522	0.4713		13.0	12.5	4.2	20.0
Ethyl bromide	Ave	0.2285	0.2403		13.1	12.5	5.1	20.0
Carbon disulfide	Ave	0.6962	0.7210	0.1000	12.9	12.5	3.6	20.0
Methyl acetate	Ave	8.464	9.428	0.1000	13.9	12.5	11.4	20.0
Allyl chloride	Ave	0.4513	0.4563		12.6	12.5	1.1	20.0
Methylene Chloride	Ave	0.2694	0.2835	0.1000	13.2	12.5	5.2	20.0
t-Butyl alcohol	Ave	1.082	0.9515		220	250	-12.0	20.0
Acrylonitrile	Ave	4.318	4.469		32.3	31.3	3.5	20.0
Methyl tert-butyl ether	Ave	0.5814	0.6088	0.1000	13.1	12.5	4.7	20.0
trans-1,2-Dichloroethene	Ave	0.2889	0.3036	0.1000	13.1	12.5	5.1	20.0
n-Hexane	Ave	0.4042	0.4302		13.3	12.5	6.4	20.0
1,1-Dichloroethane	Ave	0.5400	0.5864	0.2000	13.6	12.5	8.6	20.0
di-Isopropyl ether	Ave	0.9190	0.9694		13.2	12.5	5.5	20.0
2-Chloro-1,3-butadiene	Ave	0.4410	0.4887		13.9	12.5	10.8	20.0
Ethyl t-butyl ether	Ave	0.8130	0.8147		12.5	12.5	0.2	20.0
2-Butanone (MEK)	Ave	5.564	5.829	0.1000	131	125	4.8	20.0
cis-1,2-Dichloroethene	Ave	0.3173	0.3287	0.1000	12.9	12.5	3.6	20.0
2,2-Dichloropropane	Ave	0.4524	0.4888		13.5	12.5	8.0	20.0
Propionitrile	Ave	1.427	1.650		289	250	15.6	20.0
Methacrylonitrile	Ave	6.162	6.836		139	125	10.9	20.0
Tetrahydrofuran	Ave	1.591	1.629		64.0	62.5	2.4	20.0
Bromochloromethane	Ave	0.1268	0.1306		12.9	12.5	3.0	20.0
Chloroform	Ave	0.5095	0.5460	0.2000	13.4	12.5	7.2	20.0
1,1,1-Trichloroethane	Ave	0.4742	0.4919	0.1000	13.0	12.5	3.7	20.0
Cyclohexane	Ave	0.5379	0.5533	0.1000	12.9	12.5	2.9	20.0
1,1-Dichloropropene	Ave	0.4287	0.4544		13.3	12.5	6.0	20.0
Carbon tetrachloride	Ave	0.4101	0.4386	0.1000	13.4	12.5	7.0	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 410-322841/3 Calibration Date: 12/01/2022 20:35  
 Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51  
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52  
 Lab File ID: HD01X32.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
Isobutyl alcohol	Ave	0.3528	0.3506		621	625	-0.6	20.0
Benzene	Ave	1.250	1.286	0.5000	12.9	12.5	2.9	20.0
1,2-Dichloroethane	Ave	0.2708	0.3108	0.1000	14.3	12.5	14.8	20.0
t-Amyl methyl ether	Ave	0.6927	0.6828		12.3	12.5	-1.4	20.0
n-Heptane	Ave	0.4424	0.4408		12.5	12.5	-0.4	20.0
n-Butanol	Ave	0.3017	0.2853		1030	1090	-5.4	20.0
Trichloroethene	Ave	0.3292	0.3445	0.2000	13.1	12.5	4.6	20.0
Methylcyclohexane	Ave	0.5553	0.5688	0.1000	12.8	12.5	2.4	20.0
1,2-Dichloropropane	Ave	0.3137	0.3310	0.1000	13.2	12.5	5.5	20.0
Methyl methacrylate	Ave	12.27	14.69		15.0	12.5	19.7	20.0
1,4-Dioxane	Ave	0.0784	0.0428	0.0050	341	625	-45.4*	20.0
Dibromomethane	Ave	0.1306	0.1334		12.8	12.5	2.1	20.0
Bromodichloromethane	Ave	0.3530	0.3809	0.2000	13.5	12.5	7.9	20.0
2-Nitropropane	Ave	3.043	3.572		73.4	62.5	17.4	20.0
cis-1,3-Dichloropropene	Ave	0.4429	0.4705	0.2000	13.3	12.5	6.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	15.08	18.25	0.1000	151	125	21.0*	20.0
Toluene	Ave	0.9090	0.9261	0.4000	12.7	12.5	1.9	20.0
trans-1,3-Dichloropropene	Ave	0.3871	0.4223	0.1000	13.6	12.5	9.1	20.0
Ethyl methacrylate	Ave	0.2967	0.3129		13.2	12.5	5.5	20.0
1,1,2-Trichloroethane	Ave	0.2153	0.2183	0.1000	12.7	12.5	1.4	20.0
Tetrachloroethene	Ave	0.4197	0.4276	0.2000	12.7	12.5	1.9	20.0
1,3-Dichloropropane	Ave	0.3711	0.3859		13.0	12.5	4.0	20.0
2-Hexanone	Ave	10.01	12.69	0.1000	158	125	26.8*	20.0
Dibromochloromethane	Ave	0.2665	0.2782		13.0	12.5	4.4	20.0
1,2-Dibromoethane (EDB)	Ave	0.1972	0.2064	0.1000	13.1	12.5	4.7	20.0
1-Chlorohexane	Ave	0.5617	0.5526		12.3	12.5	-1.6	20.0
Chlorobenzene	Ave	0.9684	1.006	0.5000	13.0	12.5	3.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3322	0.3332		12.5	12.5	0.3	20.0
Ethylbenzene	Ave	1.775	1.824	0.1000	12.8	12.5	2.8	20.0
m&p-Xylene	Ave	0.6768	0.6949	0.1000	25.7	25.0	2.7	20.0
o-Xylene	Ave	0.6542	0.6573	0.3000	12.6	12.5	0.5	20.0
Styrene	Ave	1.061	1.100	0.3000	13.0	12.5	3.6	20.0
Bromoform	Ave	0.1536	0.1575	0.1000	12.8	12.5	2.6	20.0
Isopropylbenzene	Ave	1.769	1.786	0.1000	12.6	12.5	0.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4576	0.4560	0.3000	12.5	12.5	-0.4	20.0
Bromobenzene	Ave	0.6850	0.6905		12.6	12.5	0.8	20.0
trans-1,4-Dichloro-2-butene	Ave	5.212	2.958		71.0	125	-43.2*	20.0
1,2,3-Trichloropropane	Ave	0.1149	0.1118		12.2	12.5	-2.7	20.0
N-Propylbenzene	Ave	3.820	3.805		12.5	12.5	-0.4	20.0
2-Chlorotoluene	Ave	0.7351	0.7234		12.3	12.5	-1.6	20.0
1,3,5-Trimethylbenzene	Ave	2.664	2.609		12.2	12.5	-2.1	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 410-322841/3 Calibration Date: 12/01/2022 20:35

Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52

Lab File ID: HD01X32.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Chlorotoluene	Ave	0.7381	0.7430		12.6	12.5	0.7	20.0
tert-Butylbenzene	Ave	0.5892	0.5674		12.0	12.5	-3.7	20.0
Pentachloroethane	Ave	0.4138	0.4526		13.7	12.5	9.4	20.0
1,2,4-Trimethylbenzene	Ave	2.688	2.629		12.2	12.5	-2.2	20.0
sec-Butylbenzene	Ave	3.489	3.396		12.2	12.5	-2.7	20.0
1,3-Dichlorobenzene	Ave	1.418	1.435	0.6000	12.6	12.5	1.1	20.0
p-Isopropyltoluene	Ave	2.991	2.916		12.2	12.5	-2.5	20.0
1,4-Dichlorobenzene	Ave	1.408	1.345	0.5000	11.9	12.5	-4.5	20.0
1,2,3-Trimethylbenzene	Ave	1.146	1.122		12.2	12.5	-2.1	20.0
Benzyl chloride	Ave	0.1861	0.1902		12.8	12.5	2.2	20.0
n-Butylbenzene	Ave	1.510	1.437		11.9	12.5	-4.8	20.0
1,2-Dichlorobenzene	Ave	1.257	1.245	0.4000	12.4	12.5	-1.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0604	0.0574	0.0500	11.9	12.5	-5.0	20.0
1,3,5-Trichlorobenzene	Ave	1.103	1.058		12.0	12.5	-4.1	20.0
1,2,4-Trichlorobenzene	Ave	0.9290	0.8432	0.2000	11.3	12.5	-9.2	20.0
Hexachlorobutadiene	Ave	0.4512	0.3368		9.33	12.5	-25.4*	20.0
Naphthalene	Ave	1.500	1.297		10.8	12.5	-13.6	20.0
1,2,3-Trichlorobenzene	Ave	0.7887	0.6616		10.5	12.5	-16.1	20.0
Dibromofluoromethane (Surr)	Ave	0.2531	0.2561		10.1	10.0	1.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0462	0.0464		10.0	10.0	0.5	20.0
Toluene-d8 (Surr)	Ave	1.223	1.239		10.1	10.0	1.3	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4966	0.4986		10.0	10.0	0.4	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X32.D  
 Lims ID: CCVIS VSTD12.5  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 01-Dec-2022 20:35:30 ALS Bottle#: 2 Worklist Smp#: 3  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-003  
 Misc. Info.: CCVIS VSTD12.5  
 Operator ID: sej02002 Instrument ID: 19094  
 Sublist: chrom-MSV\_19094\_25mL\*sub48  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 01-Dec-2022 21:56:30 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1643

First Level Reviewer: USEJ Date: 01-Dec-2022 21:03:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.922	1.922	0.000	99	1316465	12.5	16.3	
5 Chloromethane	50	2.117	2.117	0.000	99	1593784	12.5	15.7	
6 Butadiene	39	2.233	2.233	0.000	92	2428092	12.5	25.3	E
7 Vinyl chloride	62	2.239	2.239	0.000	79	1451595	12.5	14.4	
9 Bromomethane	94	2.556	2.556	0.000	90	918336	12.5	13.0	
10 Chloroethane	64	2.642	2.642	0.000	100	839465	12.5	13.8	
11 Dichlorofluoromethane	67	2.867	2.867	0.000	97	1872286	12.5	13.9	
12 Trichlorofluoromethane	101	2.946	2.946	0.000	98	1787929	12.5	14.7	
14 Ethyl ether	59	3.178	3.178	0.000	92	672692	12.5	13.2	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.269	3.269	0.000	94	1239693	12.5	13.1	
16 Acrolein	56	3.355	3.355	0.000	98	4335204	625.0	671.2	
18 1,1-Dichloroethene	96	3.495	3.495	0.000	97	911595	12.5	13.3	
19 Acetone	43	3.501	3.501	0.000	39	875826	125.0	116.5	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.538	3.538	0.000	92	881824	12.5	13.2	
21 Isopropyl alcohol	45	3.647	3.647	0.000	96	284286	250.0	178.0	
22 Iodomethane	142	3.684	3.684	0.000	99	1557084	12.5	13.0	
23 Ethyl bromide	108	3.715	3.715	0.000	98	793571	12.5	13.1	
24 Carbon disulfide	76	3.794	3.794	0.000	99	2382067	12.5	12.9	
25 Methyl acetate	43	3.922	3.922	0.000	98	277034	12.5	13.9	M
27 3-Chloro-1-propene	41	3.958	3.958	0.000	93	1507324	12.5	12.6	
* 29 t-Butyl alcohol-d10 (IS)	65	4.117	4.117	0.000	98	117538	50.0	50.0	
28 Methylene Chloride	84	4.147	4.147	0.000	94	936603	12.5	13.2	
31 2-Methyl-2-propanol	59	4.233	4.233	0.000	99	559207	250.0	219.9	
32 Acrylonitrile	53	4.477	4.477	0.000	97	328281	31.3	32.3	
33 Methyl tert-butyl ether	73	4.550	4.550	0.000	95	2011226	12.5	13.1	
34 trans-1,2-Dichloroethene	96	4.568	4.568	0.000	98	1003025	12.5	13.1	
35 Hexane	57	4.983	4.983	0.000	93	1421129	12.5	13.3	
37 1,1-Dichloroethane	63	5.220	5.220	0.000	97	1937109	12.5	13.6	
38 Isopropyl ether	45	5.269	5.269	0.000	97	3202662	12.5	13.2	
39 2-Chloro-1,3-butadiene	53	5.330	5.330	0.000	91	1614590	12.5	13.9	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 Tert-butyl ethyl ether	59	5.806	5.806	0.000	98	2691492	12.5	12.5	
42 2-Butanone (MEK)	43	6.001	6.001	0.000	100	1712928	125.0	131.0	
43 cis-1,2-Dichloroethene	96	6.049	6.049	0.000	83	1085848	12.5	12.9	
44 2,2-Dichloropropane	77	6.068	6.068	0.000	87	1614805	12.5	13.5	
45 Propionitrile	54	6.080	6.080	0.000	83	969511	250.0	289.0	
48 Methacrylonitrile	67	6.299	6.299	0.000	92	2008708	125.0	138.7	
50 Tetrahydrofuran	71	6.379	6.379	0.000	80	239328	62.5	64.0	
49 Chlorobromomethane	128	6.385	6.385	0.000	94	431349	12.5	12.9	
52 Chloroform	83	6.531	6.531	0.000	93	1803730	12.5	13.4	
\$ 53 Dibromofluoromethane (Surr)	113	6.751	6.751	0.000	93	676853	10.0	10.1	
54 1,1,1-Trichloroethane	97	6.763	6.763	0.000	99	1625171	12.5	13.0	
55 Cyclohexane	56	6.866	6.866	0.000	91	1828037	12.5	12.9	
56 1,1-Dichloropropene	75	6.976	6.976	0.000	96	1501298	12.5	13.3	
57 Carbon tetrachloride	117	6.976	6.976	0.000	96	1448841	12.5	13.4	
58 Isobutyl alcohol	41	7.098	7.098	0.000	95	515135	625.0	621.1	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.202	7.202	0.000	95	122657	10.0	10.0	
60 Benzene	78	7.238	7.238	0.000	96	4247079	12.5	12.9	
62 1,2-Dichloroethane	62	7.305	7.305	0.000	97	1026667	12.5	14.3	
64 Tert-amyl methyl ether	73	7.427	7.427	0.000	98	2255811	12.5	12.3	
* 65 Fluorobenzene (IS)	96	7.641	7.641	0.000	99	2642938	10.0	10.0	
66 n-Heptane	43	7.659	7.659	0.000	92	1456103	12.5	12.5	
68 n-Butanol	56	7.994	7.994	0.000	90	733611	1093.8	1034.4	
69 Trichloroethene	95	8.122	8.122	0.000	99	1138033	12.5	13.1	
70 Methylcyclohexane	83	8.433	8.433	0.000	94	1879252	12.5	12.8	
71 1,2-Dichloropropane	63	8.451	8.451	0.000	85	1093665	12.5	13.2	
72 2-ethoxy-2-methyl butane	87	8.457	8.457	0.000	90	1385269	12.5	11.9	
74 Methyl methacrylate	69	8.537	8.537	0.000	91	431559	12.5	15.0	
73 1,4-Dioxane	88	8.549	8.549	0.000	32	62837	625.0	341.1	
75 Dibromomethane	93	8.561	8.561	0.000	95	440575	12.5	12.8	
77 Dichlorobromomethane	83	8.799	8.799	0.000	99	1258399	12.5	13.5	
78 2-Nitropropane	41	9.061	9.061	0.000	98	524793	62.5	73.4	
81 cis-1,3-Dichloropropene	75	9.348	9.348	0.000	96	1554454	12.5	13.3	
83 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	97	5363402	125.0	151.3	
\$ 84 Toluene-d8 (Surr)	98	9.658	9.658	0.000	94	2931252	10.0	10.1	
85 Toluene	92	9.738	9.738	0.000	98	2739238	12.5	12.7	
86 trans-1,3-Dichloropropene	75	9.994	9.994	0.000	92	1249071	12.5	13.6	
105 Ethyl methacrylate	69	10.055	10.055	0.000	89	925585	12.5	13.2	
106 1,1,2-Trichloroethane	97	10.195	10.195	0.000	90	645535	12.5	12.7	
107 Tetrachloroethene	166	10.292	10.292	0.000	98	1264629	12.5	12.7	
108 1,3-Dichloropropane	76	10.360	10.360	0.000	90	1141470	12.5	13.0	
109 2-Hexanone	43	10.408	10.408	0.000	98	3729919	125.0	158.5	
111 Chlorodibromomethane	129	10.579	10.579	0.000	90	822838	12.5	13.0	
112 Ethylene Dibromide	107	10.689	10.689	0.000	99	610570	12.5	13.1	
* 113 Chlorobenzene-d5 (IS)	117	11.122	11.122	0.000	85	2366200	10.0	10.0	
114 1-Chlorohexane	91	11.128	11.128	0.000	98	1634531	12.5	12.3	
115 Chlorobenzene	112	11.146	11.146	0.000	96	2975345	12.5	13.0	
116 1,1,1,2-Tetrachloroethane	131	11.231	11.231	0.000	96	985439	12.5	12.5	
118 Ethylbenzene	91	11.231	11.231	0.000	98	5395298	12.5	12.8	
119 m-Xylene & p-Xylene	106	11.347	11.347	0.000	100	4110583	25.0	25.7	
120 o-Xylene	106	11.676	11.676	0.000	96	1944127	12.5	12.6	
121 Styrene	104	11.695	11.695	0.000	95	3252505	12.5	13.0	
122 Bromoform	173	11.847	11.847	0.000	98	465993	12.5	12.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 Isopropylbenzene	105	11.975	11.975	0.000	96	5281682	12.5	12.6	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	91	1179768	10.0	10.0	
127 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	93	775713	12.5	12.5	
128 Bromobenzene	156	12.237	12.237	0.000	96	1174621	12.5	12.6	
129 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	89	869273	125.0	71.0	
130 1,2,3-Trichloropropane	110	12.268	12.268	0.000	84	190120	12.5	12.2	
131 N-Propylbenzene	91	12.304	12.304	0.000	99	6472336	12.5	12.5	
132 2-Chlorotoluene	126	12.377	12.377	0.000	96	1230504	12.5	12.3	
133 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	94	4437942	12.5	12.2	
134 4-Chlorotoluene	126	12.475	12.475	0.000	97	1263821	12.5	12.6	
135 tert-Butylbenzene	134	12.682	12.682	0.000	93	965121	12.5	12.0	
136 Pentachloroethane	167	12.713	12.713	0.000	94	769809	12.5	13.7	
137 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	4471456	12.5	12.2	
138 sec-Butylbenzene	105	12.847	12.847	0.000	94	5776648	12.5	12.2	
139 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	2440196	12.5	12.6	
140 4-Isopropyltoluene	119	12.951	12.951	0.000	97	4959719	12.5	12.2	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1360836	10.0	10.0	
142 1,4-Dichlorobenzene	146	13.018	13.018	0.000	93	2287118	12.5	11.9	
143 1,2,3-Trimethylbenzene	120	13.024	13.024	0.000	99	1908499	12.5	12.2	
144 Benzyl chloride	126	13.091	13.091	0.000	98	323601	12.5	12.8	
145 p-Diethylbenzene	119	13.152	13.152	0.000	92	2882363	12.5	12.3	
146 n-Butylbenzene	92	13.243	13.243	0.000	98	2444236	12.5	11.9	
147 1,2-Dichlorobenzene	146	13.274	13.274	0.000	98	2116954	12.5	12.4	
149 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	87	97606	12.5	11.9	
150 1,3,5-Trichlorobenzene	180	13.944	13.944	0.000	98	1800179	12.5	12.0	
151 1,2,4-Trichlorobenzene	180	14.365	14.365	0.000	94	1434379	12.5	11.3	
152 Hexachlorobutadiene	225	14.444	14.444	0.000	95	572833	12.5	9.33	
153 Naphthalene	128	14.542	14.542	0.000	97	2205566	12.5	10.8	
154 1,2,3-Trichlorobenzene	180	14.688	14.688	0.000	96	1125402	12.5	10.5	
155 2-Methylnaphthalene	142	15.304	15.304	0.000	92	937081	12.5	7.62	
158 Pentane	43		0.000				ND	ND	

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

E - Exceeded Maximum Amount

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_LL\_#2-bce\_00001

Amount Added: 25.00

Units: uL

MSV\_LL\_#1\_826\_00060

Amount Added: 25.00

Units: uL

MSV\_LL\_GAS826\_00124

Amount Added: 25.00

Units: uL

MSV\_LLcentISS\_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X32.D

Injection Date: 01-Dec-2022 20:35:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: CCVIS VSTD12.5

Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

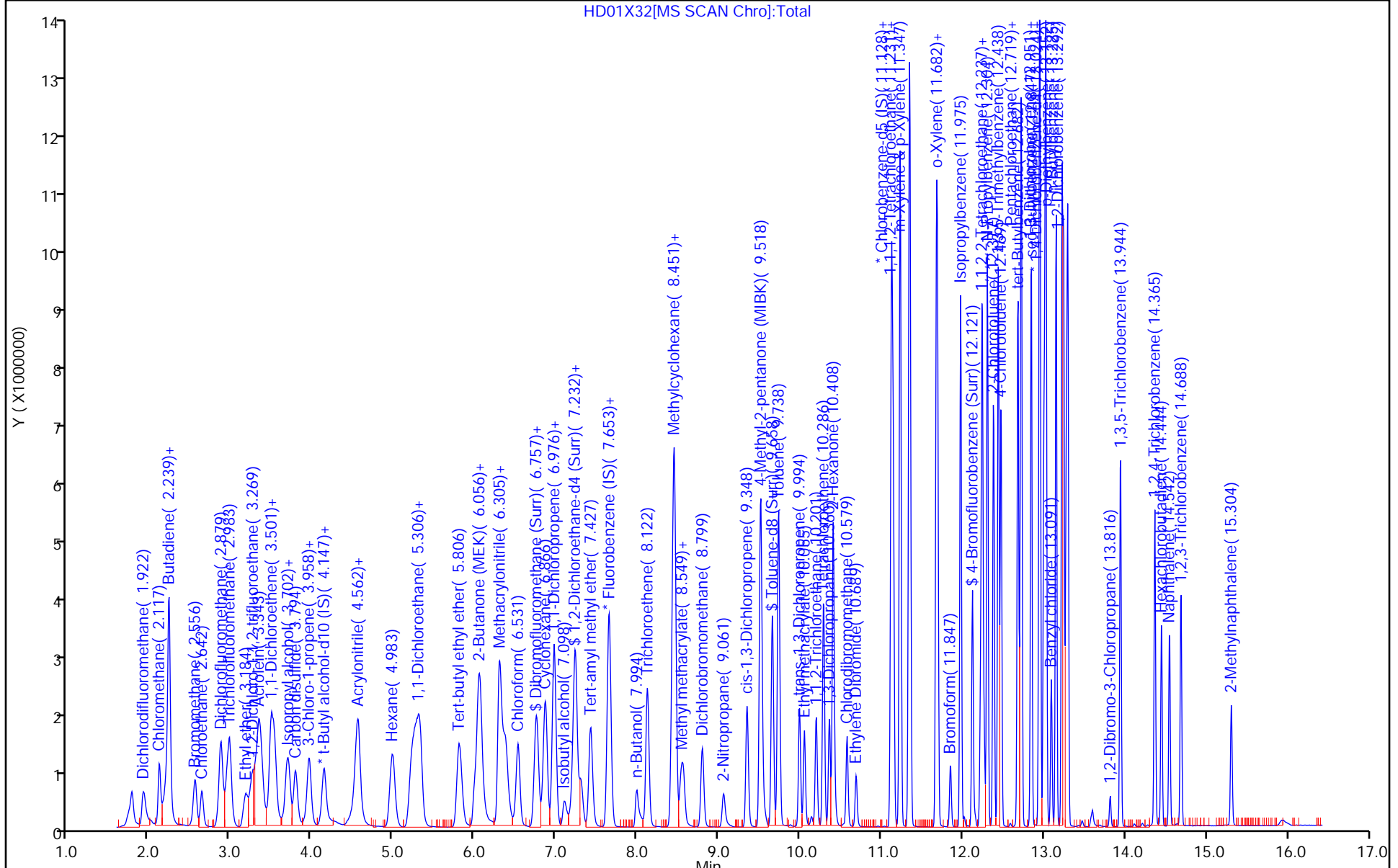
ALS Bottle#: 2

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

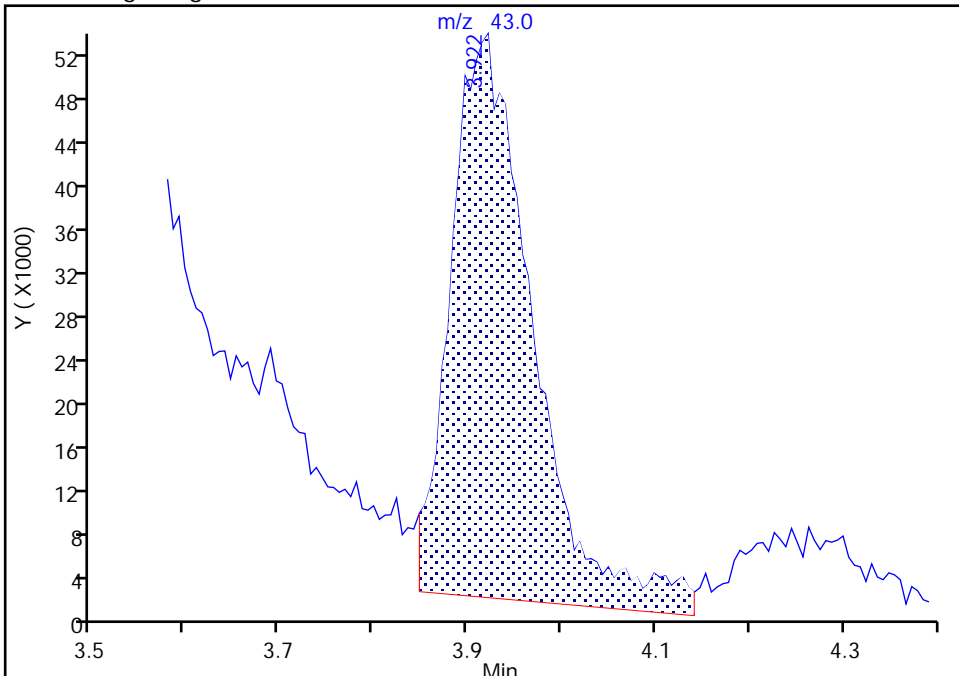
Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X32.D  
Injection Date: 01-Dec-2022 20:35:30 Instrument ID: 19094  
Lims ID: CCVIS VSTD12.5  
Client ID:  
Operator ID: sej02002 ALS Bottle#: 2 Worklist Smp#: 3  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 Methyl acetate, CAS: 79-20-9

Signal: 1

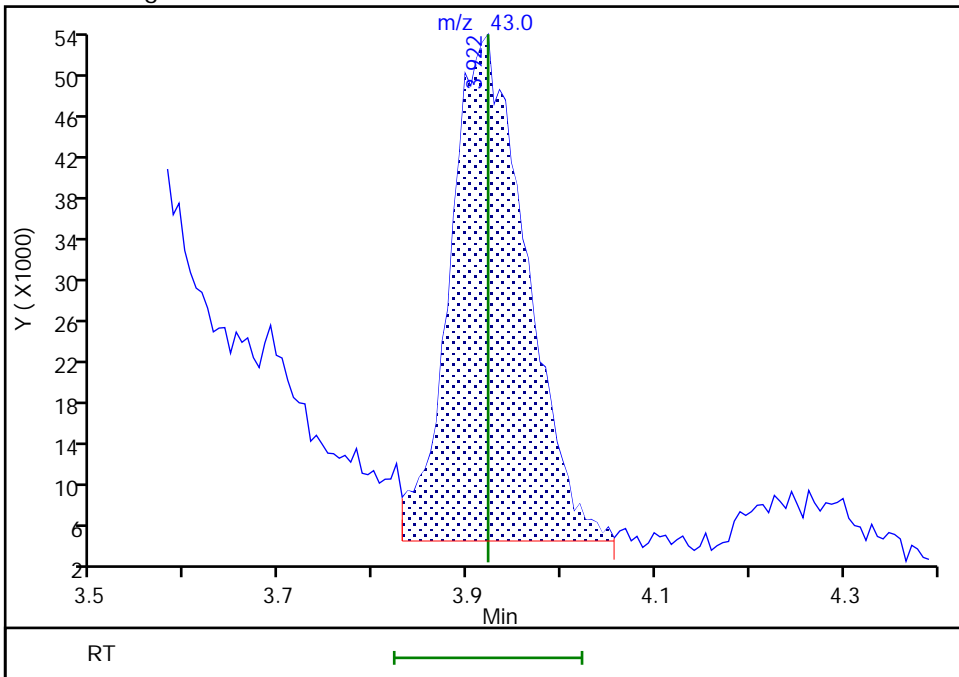
RT: 3.92  
Area: 308942  
Amount: 15.526348  
Amount Units: ug/l

Processing Integration Results



RT: 3.92  
Area: 277034  
Amount: 13.922763  
Amount Units: ug/l

Manual Integration Results



Reviewer: USEJ, 01-Dec-2022 20:59:44  
Audit Action: Manually Integrated

Audit Reason: Baseline  
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FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 410-322942/3 Calibration Date: 12/02/2022 09:54

Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52

Lab File ID: HD02X02.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	0.3063	0.3654	0.1000	11.9	10.0	19.3	20.0
Chloromethane	Ave	0.3838	0.4773	0.1000	12.4	10.0	24.4*	20.0
1,3-Butadiene	Ave	0.3624	0.6175		17.0	10.0	70.4*	20.0
Vinyl chloride	Ave	0.3802	0.4236	0.1000	11.1	10.0	11.4	20.0
Bromomethane	Ave	0.2669	0.2691	0.1000	10.1	10.0	0.8	20.0
Chloroethane	Ave	0.2307	0.2453	0.1000	10.6	10.0	6.3	20.0
Dichlorofluoromethane	Ave	0.5113	0.5510		10.8	10.0	7.8	20.0
Trichlorofluoromethane	Ave	0.4602	0.5042	0.1000	11.0	10.0	9.6	20.0
Ethyl ether	Ave	0.1924	0.1991		10.3	10.0	3.5	20.0
Freon 123a	Ave	0.3585	0.3545		9.89	10.0	-1.1	20.0
Acrolein	Ave	2.748	2.647		482	500	-3.7	20.0
1,1-Dichloroethene	Ave	0.2601	0.2482	0.1000	9.54	10.0	-4.6	20.0
Acetone	Ave	3.199	2.786	0.1000	87.1	100	-12.9	20.0
Freon 113	Ave	0.2536	0.2312	0.1000	9.12	10.0	-8.8	20.0
Methyl iodide	Ave	0.4522	0.4323		9.56	10.0	-4.4	20.0
Ethyl bromide	Ave	0.2285	0.2359		10.3	10.0	3.2	20.0
Carbon disulfide	Ave	0.6962	0.6435	0.1000	9.24	10.0	-7.6	20.0
Methyl acetate	Ave	8.464	8.268	0.1000	9.77	10.0	-2.3	20.0
Allyl chloride	Ave	0.4513	0.4289		9.50	10.0	-5.0	20.0
Methylene Chloride	Ave	0.2694	0.2640	0.1000	9.80	10.0	-2.0	20.0
t-Butyl alcohol	Ave	1.082	0.7581		140	200	-29.9*	20.0
Acrylonitrile	Ave	4.318	4.131		23.9	25.0	-4.3	20.0
Methyl tert-butyl ether	Ave	0.5814	0.5744	0.1000	9.88	10.0	-1.2	20.0
trans-1,2-Dichloroethene	Ave	0.2889	0.2802	0.1000	9.70	10.0	-3.0	20.0
n-Hexane	Ave	0.4042	0.3673		9.09	10.0	-9.1	20.0
1,1-Dichloroethane	Ave	0.5400	0.5419	0.2000	10.0	10.0	0.3	20.0
di-Isopropyl ether	Ave	0.9190	0.9082		9.88	10.0	-1.2	20.0
2-Chloro-1,3-butadiene	Ave	0.4410	0.4482		10.2	10.0	1.6	20.0
Ethyl t-butyl ether	Ave	0.8130	0.7770		9.56	10.0	-4.4	20.0
2-Butanone (MEK)	Ave	5.564	5.545	0.1000	99.6	100	-0.4	20.0
cis-1,2-Dichloroethene	Ave	0.3173	0.3045	0.1000	9.59	10.0	-4.1	20.0
2,2-Dichloropropane	Ave	0.4524	0.4479		9.90	10.0	-1.0	20.0
Propionitrile	Ave	1.427	1.395		196	200	-2.2	20.0
Methacrylonitrile	Ave	6.162	5.752		93.3	100	-6.7	20.0
Bromochloromethane	Ave	0.1268	0.1217		9.60	10.0	-4.0	20.0
Tetrahydrofuran	Ave	1.591	1.372		43.1	50.0	-13.8	20.0
Chloroform	Ave	0.5095	0.5021	0.2000	9.86	10.0	-1.4	20.0
1,1,1-Trichloroethane	Ave	0.4742	0.4543	0.1000	9.58	10.0	-4.2	20.0
Cyclohexane	Ave	0.5379	0.4783	0.1000	8.89	10.0	-11.1	20.0
1,1-Dichloropropene	Ave	0.4287	0.4184		9.76	10.0	-2.4	20.0
Carbon tetrachloride	Ave	0.4101	0.3988	0.1000	9.73	10.0	-2.7	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 410-322942/3 Calibration Date: 12/02/2022 09:54

Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52

Lab File ID: HD02X02.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
Isobutyl alcohol	Ave	0.3528	0.3372		478	500	-4.4	20.0
Benzene	Ave	1.250	1.203	0.5000	9.63	10.0	-3.7	20.0
1,2-Dichloroethane	Ave	0.2708	0.2877	0.1000	10.6	10.0	6.3	20.0
t-Amyl methyl ether	Ave	0.6927	0.6588		9.51	10.0	-4.9	20.0
n-Heptane	Ave	0.4424	0.3852		8.71	10.0	-12.9	20.0
n-Butanol	Ave	0.3017	0.2816		817	875	-6.6	20.0
Trichloroethene	Ave	0.3292	0.3271	0.2000	9.94	10.0	-0.6	20.0
Methylcyclohexane	Ave	0.5553	0.5014	0.1000	9.03	10.0	-9.7	20.0
1,2-Dichloropropane	Ave	0.3137	0.3155	0.1000	10.1	10.0	0.6	20.0
Methyl methacrylate	Ave	12.27	11.46		9.34	10.0	-6.6	20.0
1,4-Dioxane	Ave	0.0784	0.0511	0.0050	326	500	-34.8*	20.0
Dibromomethane	Ave	0.1306	0.1288		9.86	10.0	-1.4	20.0
Bromodichloromethane	Ave	0.3530	0.3651	0.2000	10.3	10.0	3.4	20.0
2-Nitropropane	Ave	3.043	3.122		51.3	50.0	2.6	20.0
cis-1,3-Dichloropropene	Ave	0.4429	0.4560	0.2000	10.3	10.0	3.0	20.0
4-Methyl-2-pentanone (MIBK)	Ave	15.08	15.00	0.1000	99.5	100	-0.5	20.0
Toluene	Ave	0.9090	0.8520	0.4000	9.37	10.0	-6.3	20.0
trans-1,3-Dichloropropene	Ave	0.3871	0.3907	0.1000	10.1	10.0	0.9	20.0
Ethyl methacrylate	Ave	0.2967	0.2870		9.67	10.0	-3.3	20.0
1,1,2-Trichloroethane	Ave	0.2153	0.2055	0.1000	9.54	10.0	-4.6	20.0
Tetrachloroethene	Ave	0.4197	0.3897	0.2000	9.29	10.0	-7.1	20.0
1,3-Dichloropropane	Ave	0.3711	0.3574		9.63	10.0	-3.7	20.0
2-Hexanone	Ave	10.01	10.33	0.1000	103	100	3.2	20.0
Dibromochloromethane	Ave	0.2665	0.2568		9.64	10.0	-3.6	20.0
1,2-Dibromoethane (EDB)	Ave	0.1972	0.1938	0.1000	9.82	10.0	-1.8	20.0
1-Chlorohexane	Ave	0.5617	0.4977		8.86	10.0	-11.4	20.0
Chlorobenzene	Ave	0.9684	0.9248	0.5000	9.55	10.0	-4.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3322	0.3083		9.28	10.0	-7.2	20.0
Ethylbenzene	Ave	1.775	1.670	0.1000	9.41	10.0	-5.9	20.0
m&p-Xylene	Ave	0.6768	0.6310	0.1000	18.6	20.0	-6.8	20.0
o-Xylene	Ave	0.6542	0.6076	0.3000	9.29	10.0	-7.1	20.0
Styrene	Ave	1.061	1.015	0.3000	9.57	10.0	-4.3	20.0
Bromoform	Ave	0.1536	0.1474	0.1000	9.60	10.0	-4.0	20.0
Isopropylbenzene	Ave	1.769	1.632	0.1000	9.22	10.0	-7.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4576	0.4288	0.3000	9.37	10.0	-6.3	20.0
Bromobenzene	Ave	0.6850	0.6295		9.19	10.0	-8.1	20.0
trans-1,4-Dichloro-2-butene	Ave	5.212	3.111		59.7	100	-40.3*	20.0
1,2,3-Trichloropropane	Ave	0.1149	0.1045		9.10	10.0	-9.0	20.0
N-Propylbenzene	Ave	3.820	3.418		8.95	10.0	-10.5	20.0
2-Chlorotoluene	Ave	0.7351	0.6634		9.02	10.0	-9.8	20.0
1,3,5-Trimethylbenzene	Ave	2.664	2.331		8.75	10.0	-12.5	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 410-322942/3 Calibration Date: 12/02/2022 09:54  
 Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51  
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52  
 Lab File ID: HD02X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Chlorotoluene	Ave	0.7381	0.6743		9.14	10.0	-8.6	20.0
tert-Butylbenzene	Ave	0.5892	0.5134		8.71	10.0	-12.9	20.0
Pentachloroethane	Ave	0.4138	0.4287		10.4	10.0	3.6	20.0
1,2,4-Trimethylbenzene	Ave	2.688	2.410		8.97	10.0	-10.3	20.0
sec-Butylbenzene	Ave	3.489	3.030		8.68	10.0	-13.2	20.0
1,3-Dichlorobenzene	Ave	1.418	1.285	0.6000	9.06	10.0	-9.4	20.0
p-Isopropyltoluene	Ave	2.991	2.627		8.78	10.0	-12.2	20.0
1,4-Dichlorobenzene	Ave	1.408	1.232	0.5000	8.75	10.0	-12.5	20.0
1,2,3-Trimethylbenzene	Ave	1.146	1.011		8.82	10.0	-11.8	20.0
Benzyl chloride	Ave	0.1861	0.1785		9.59	10.0	-4.1	20.0
n-Butylbenzene	Ave	1.510	1.294		8.57	10.0	-14.3	20.0
1,2-Dichlorobenzene	Ave	1.257	1.144	0.4000	9.10	10.0	-9.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0604	0.0566	0.0500	9.37	10.0	-6.3	20.0
1,3,5-Trichlorobenzene	Ave	1.103	0.9608		8.71	10.0	-12.9	20.0
1,2,4-Trichlorobenzene	Ave	0.9290	0.7632	0.2000	8.22	10.0	-17.8	20.0
Hexachlorobutadiene	Ave	0.4512	0.3030		6.72	10.0	-32.8*	20.0
Naphthalene	Ave	1.500	1.198		7.99	10.0	-20.1*	20.0
1,2,3-Trichlorobenzene	Ave	0.7887	0.5843		7.41	10.0	-25.9*	20.0
Dibromofluoromethane (Surr)	Ave	0.2531	0.2525		9.98	10.0	-0.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0462	0.0468		10.1	10.0	1.3	20.0
Toluene-d8 (Surr)	Ave	1.223	1.211		9.90	10.0	-1.0	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4966	0.5010		10.1	10.0	0.9	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X02.D  
 Lims ID: CCVIS VSTD10  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 02-Dec-2022 09:54:30 ALS Bottle#: 2 Worklist Smp#: 3  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072389-003  
 Misc. Info.: CCVIS VSTD10  
 Operator ID: knk41612 Instrument ID: 19094  
 Sublist: chrom-MSV\_19094\_25mL\*sub48  
 Method: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 05-Dec-2022 14:38:39 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1604

First Level Reviewer: DVW2

Date: 02-Dec-2022 10:18:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.934	1.934	0.000	99	903385	10.0	11.9	
5 Chloromethane	50	2.129	2.129	0.000	99	1180037	10.0	12.4	
6 Butadiene	39	2.245	2.245	0.000	92	1526676	10.0	17.0	
7 Vinyl chloride	62	2.245	2.245	0.000	89	1047265	10.0	11.1	
9 Bromomethane	94	2.562	2.562	0.000	91	665349	10.0	10.1	
10 Chloroethane	64	2.647	2.647	0.000	100	606473	10.0	10.6	
11 Dichlorofluoromethane	67	2.879	2.879	0.000	97	1362274	10.0	10.8	
12 Trichlorofluoromethane	101	2.958	2.958	0.000	98	1246641	10.0	11.0	
14 Ethyl ether	59	3.184	3.184	0.000	94	492366	10.0	10.3	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.269	3.269	0.000	94	876572	10.0	9.89	
16 Acrolein	56	3.355	3.355	0.000	99	3632253	500.0	481.7	
18 1,1-Dichloroethene	96	3.501	3.501	0.000	97	613567	10.0	9.54	
19 Acetone	43	3.513	3.513	0.000	99	764518	100.0	87.1	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.544	3.544	0.000	92	571603	10.0	9.12	
21 Isopropyl alcohol	45	3.672	3.672	0.000	97	222815	200.0	143.9	
22 Iodomethane	142	3.690	3.690	0.000	99	1068981	10.0	9.56	
23 Ethyl bromide	108	3.720	3.720	0.000	98	583130	10.0	10.3	
24 Carbon disulfide	76	3.800	3.800	0.000	99	1591088	10.0	9.24	
25 Methyl acetate	43	3.934	3.934	0.000	99	226895	10.0	9.77	
27 3-Chloro-1-propene	41	3.970	3.970	0.000	93	1060582	10.0	9.50	
* 29 t-Butyl alcohol-d10 (IS)	65	4.147	4.147	0.000	99	137214	50.0	50.0	
28 Methylene Chloride	84	4.147	4.147	0.000	93	652825	10.0	9.80	
31 2-Methyl-2-propanol	59	4.281	4.281	0.000	100	416097	200.0	140.2	
32 Acrylonitrile	53	4.476	4.476	0.000	98	283411	25.0	23.9	
33 Methyl tert-butyl ether	73	4.550	4.550	0.000	96	1420097	10.0	9.88	
34 trans-1,2-Dichloroethene	96	4.568	4.568	0.000	98	692816	10.0	9.70	
35 Hexane	57	4.995	4.995	0.000	92	908249	10.0	9.09	
37 1,1-Dichloroethane	63	5.226	5.226	0.000	96	1339888	10.0	10.0	
38 Isopropyl ether	45	5.281	5.281	0.000	95	2245607	10.0	9.88	
39 2-Chloro-1,3-butadiene	53	5.330	5.330	0.000	93	1108283	10.0	10.2	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 Tert-butyl ethyl ether	59	5.805	5.805	0.000	98	1921206	10.0	9.56	
42 2-Butanone (MEK)	43	6.001	6.001	0.000	100	1521676	100.0	99.6	
43 cis-1,2-Dichloroethene	96	6.049	6.049	0.000	83	752782	10.0	9.59	
44 2,2-Dichloropropane	77	6.061	6.061	0.000	87	1107508	10.0	9.90	
45 Propionitrile	54	6.098	6.098	0.000	99	765652	200.0	195.5	
48 Methacrylonitrile	67	6.305	6.305	0.000	92	1578419	100.0	93.3	
50 Tetrahydrofuran	71	6.378	6.378	0.000	68	188200	50.0	43.1	
49 Chlorobromomethane	128	6.378	6.378	0.000	95	300953	10.0	9.60	
52 Chloroform	83	6.531	6.531	0.000	93	1241512	10.0	9.86	
\$ 53 Dibromofluoromethane (Surr)	113	6.744	6.744	0.000	94	624345	10.0	9.98	
54 1,1,1-Trichloroethane	97	6.769	6.769	0.000	99	1123245	10.0	9.58	
55 Cyclohexane	56	6.872	6.872	0.000	91	1182685	10.0	8.89	
56 1,1-Dichloropropene	75	6.976	6.976	0.000	97	1034577	10.0	9.76	
57 Carbon tetrachloride	117	6.982	6.982	0.000	97	986065	10.0	9.73	
58 Isobutyl alcohol	41	7.110	7.110	0.000	94	462642	500.0	477.8	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.208	0.000	93	115694	10.0	10.1	
60 Benzene	78	7.238	7.238	0.000	96	2974812	10.0	9.63	
62 1,2-Dichloroethane	62	7.305	7.305	0.000	97	711362	10.0	10.6	
64 Tert-amyl methyl ether	73	7.427	7.427	0.000	98	1628988	10.0	9.51	
* 65 Fluorobenzene (IS)	96	7.640	7.640	0.000	96	2472527	10.0	10.0	
66 n-Heptane	43	7.659	7.659	0.000	93	952411	10.0	8.71	
68 n-Butanol	56	7.994	7.994	0.000	89	676254	875.0	816.8	
69 Trichloroethene	95	8.122	8.122	0.000	99	808792	10.0	9.94	
70 Methylcyclohexane	83	8.433	8.433	0.000	93	1239786	10.0	9.03	
71 1,2-Dichloropropane	63	8.451	8.451	0.000	87	779973	10.0	10.1	
72 2-ethoxy-2-methyl butane	87	8.457	8.457	0.000	90	999609	10.0	9.20	
74 Methyl methacrylate	69	8.530	8.530	0.000	88	314512	10.0	9.34	
73 1,4-Dioxane	88	8.543	8.543	0.000	34	70147	500.0	326.1	
75 Dibromomethane	93	8.561	8.561	0.000	96	318536	10.0	9.86	
77 Dichlorobromomethane	83	8.799	8.799	0.000	100	902675	10.0	10.3	
78 2-Nitropropane	41	9.061	9.061	0.000	98	428315	50.0	51.3	
81 cis-1,3-Dichloropropene	75	9.347	9.347	0.000	96	1127594	10.0	10.3	
83 4-Methyl-2-pentanone (MIBK)	43	9.512	9.512	0.000	97	4116653	100.0	99.5	
\$ 84 Toluene-d8 (Surr)	98	9.658	9.658	0.000	93	2806068	10.0	9.90	
85 Toluene	92	9.738	9.738	0.000	98	1974390	10.0	9.37	
86 trans-1,3-Dichloropropene	75	9.994	9.994	0.000	92	905373	10.0	10.1	
105 Ethyl methacrylate	69	10.055	10.055	0.000	90	665114	10.0	9.67	
106 1,1,2-Trichloroethane	97	10.201	10.201	0.000	90	476185	10.0	9.54	
107 Tetrachloroethene	166	10.292	10.292	0.000	98	903014	10.0	9.29	
108 1,3-Dichloropropane	76	10.359	10.359	0.000	90	828355	10.0	9.63	
109 2-Hexanone	43	10.408	10.408	0.000	98	2834823	100.0	103.2	
111 Chlorodibromomethane	129	10.579	10.579	0.000	90	595211	10.0	9.64	
112 Ethylene Dibromide	107	10.689	10.689	0.000	99	449037	10.0	9.82	
* 113 Chlorobenzene-d5 (IS)	117	11.121	11.121	0.000	86	2317479	10.0	10.0	
114 1-Chlorohexane	91	11.128	11.128	0.000	98	1153302	10.0	8.86	
115 Chlorobenzene	112	11.146	11.146	0.000	95	2143145	10.0	9.55	
116 1,1,1,2-Tetrachloroethane	131	11.231	11.231	0.000	95	714407	10.0	9.28	
118 Ethylbenzene	91	11.231	11.231	0.000	98	3869517	10.0	9.41	
119 m-Xylene & p-Xylene	106	11.347	11.347	0.000	100	2924493	20.0	18.6	
120 o-Xylene	106	11.676	11.676	0.000	96	1408045	10.0	9.29	
121 Styrene	104	11.688	11.688	0.000	95	2353013	10.0	9.57	
122 Bromoform	173	11.847	11.847	0.000	97	341681	10.0	9.60	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 Isopropylbenzene	105	11.975	11.975	0.000	96	3781409	10.0	9.22	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	91	1161060	10.0	10.1	
127 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	93	581455	10.0	9.37	
128 Bromobenzene	156	12.237	12.237	0.000	97	853577	10.0	9.19	
129 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	92	853689	100.0	59.7	
130 1,2,3-Trichloropropane	110	12.261	12.261	0.000	80	141746	10.0	9.10	
131 N-Propylbenzene	91	12.304	12.304	0.000	99	4634783	10.0	8.95	
132 2-Chlorotoluene	126	12.377	12.377	0.000	97	899526	10.0	9.02	
133 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	94	3161197	10.0	8.75	
134 4-Chlorotoluene	126	12.475	12.475	0.000	97	914355	10.0	9.14	
135 tert-Butylbenzene	134	12.682	12.682	0.000	94	696178	10.0	8.71	
136 Pentachloroethane	167	12.713	12.713	0.000	90	581344	10.0	10.4	
137 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	3268368	10.0	8.97	
138 sec-Butylbenzene	105	12.841	12.841	0.000	94	4108255	10.0	8.68	
139 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	1742839	10.0	9.06	
140 4-Isopropyltoluene	119	12.950	12.950	0.000	97	3562838	10.0	8.78	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1355984	10.0	10.0	
142 1,4-Dichlorobenzene	146	13.017	13.017	0.000	94	1670853	10.0	8.75	
143 1,2,3-Trimethylbenzene	120	13.024	13.024	0.000	98	1371102	10.0	8.82	
144 Benzyl chloride	126	13.091	13.091	0.000	98	242035	10.0	9.59	
145 p-Diethylbenzene	119	13.152	13.152	0.000	92	2073636	10.0	8.85	
146 n-Butylbenzene	92	13.243	13.243	0.000	98	1754875	10.0	8.57	
147 1,2-Dichlorobenzene	146	13.273	13.273	0.000	98	1550816	10.0	9.10	
149 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	88	76714	10.0	9.37	
150 1,3,5-Trichlorobenzene	180	13.944	13.944	0.000	98	1302800	10.0	8.71	
151 1,2,4-Trichlorobenzene	180	14.365	14.365	0.000	94	1034911	10.0	8.22	
152 Hexachlorobutadiene	225	14.444	14.444	0.000	95	410866	10.0	6.72	
153 Naphthalene	128	14.542	14.542	0.000	97	1624240	10.0	7.99	
154 1,2,3-Trichlorobenzene	180	14.688	14.688	0.000	95	792265	10.0	7.41	
155 2-Methylnaphthalene	142	15.304	15.304	0.000	92	666676	10.0	5.44	
158 Pentane	43		0.000				ND	ND	

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

### Reagents:

MSV_LL_#2-bce_00001	Amount Added: 20.00	Units: uL	
MSV_LL_#1_826_00060	Amount Added: 20.00	Units: uL	
MSV_LL_GAS826_00124	Amount Added: 20.00	Units: uL	
MSV_LLcentISS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X02.D

Injection Date: 02-Dec-2022 09:54:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: CCVIS VSTD10

Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

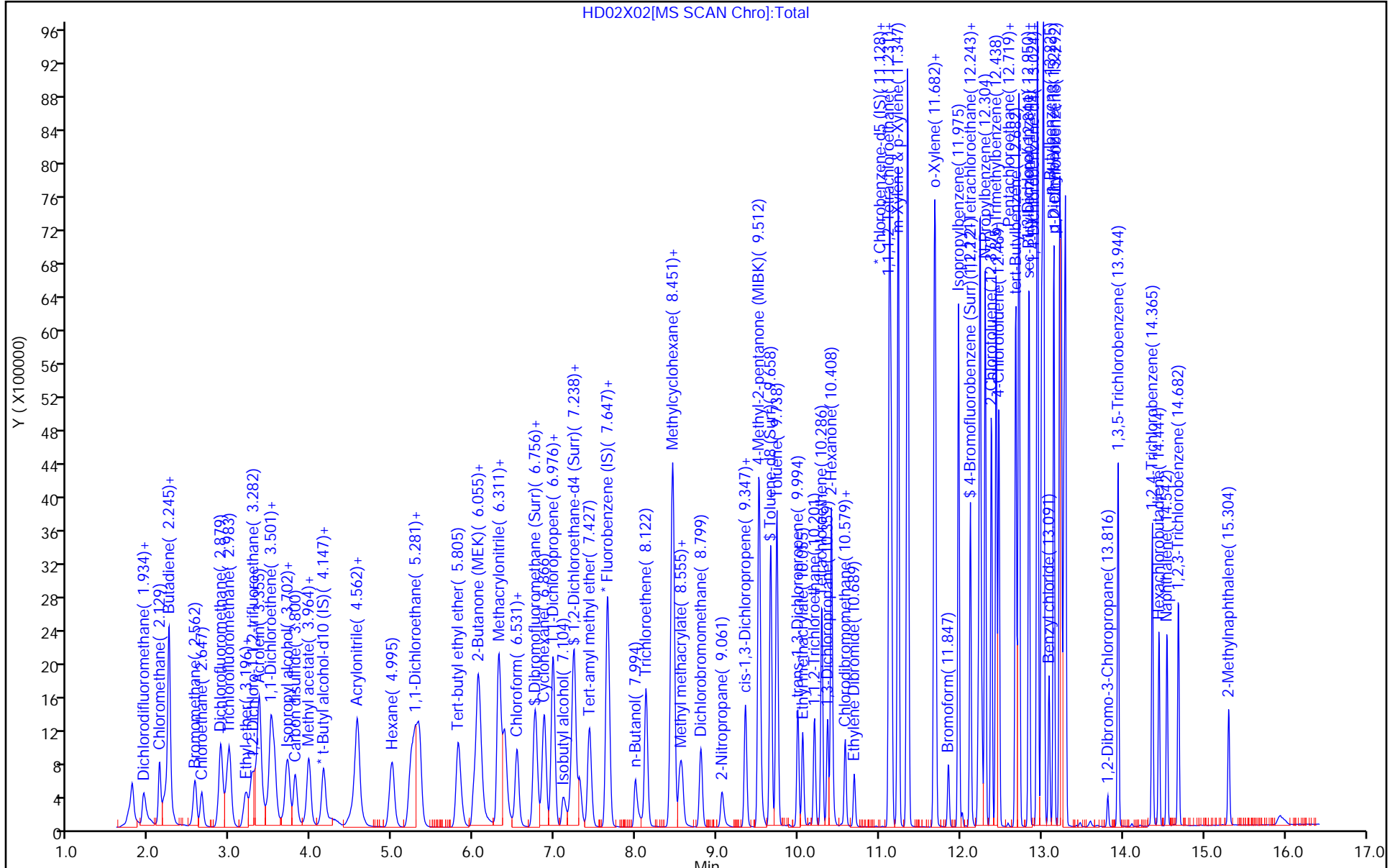
ALS Bottle#: 2

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



HD02X02[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Environment Testing, LLC  
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16T01.D  
 Lims ID: bfb  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 16-Aug-2022 13:07:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Sample Info: 410-0064243-001  
 Misc. Info.: BFB  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 30-Aug-2022 10:58:17 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1639

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 167 BFB	95	5.127	5.127	0.000	0	221756	NR	NR	

**QC Flag Legend**

Processing Flags  
 NR - Missing Quant Standard

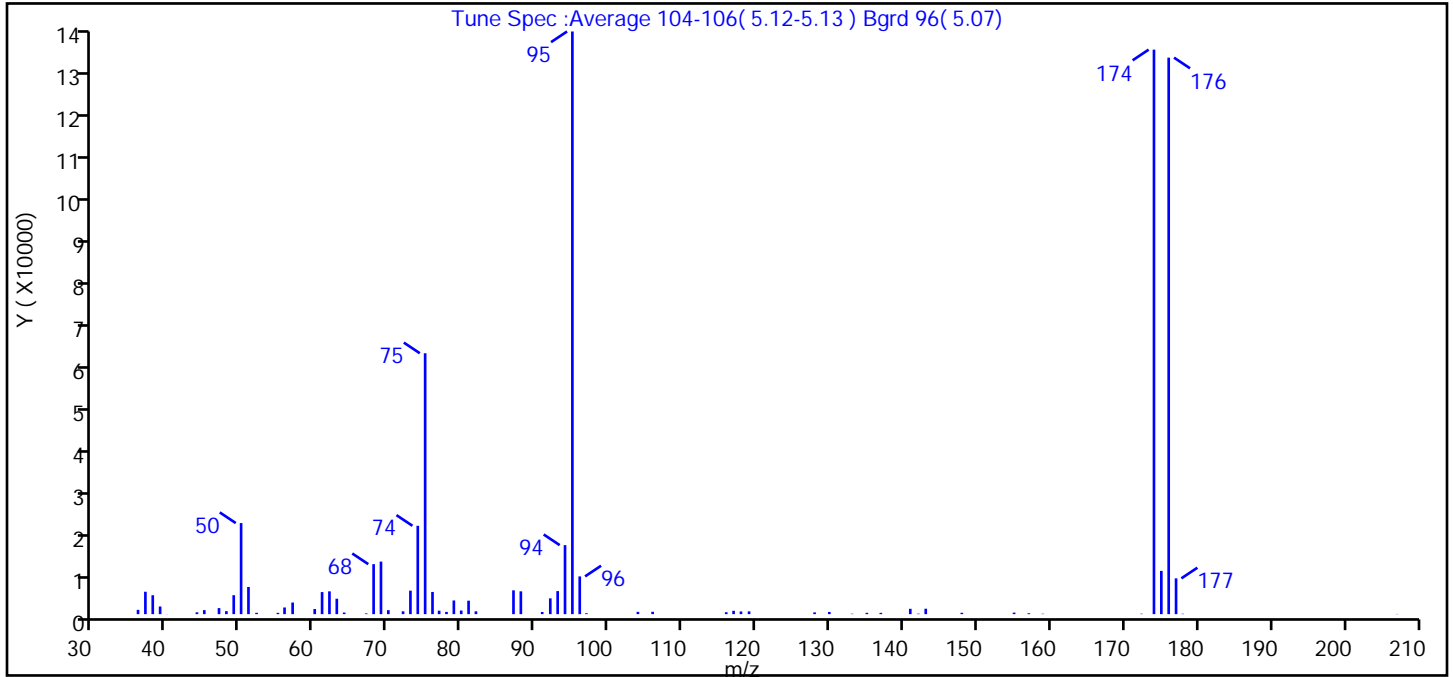
**Reagents:**

MSV\_V\_BFB\_00008 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16T01.D  
 Injection Date: 16-Aug-2022 13:07:30 Instrument ID: 16334  
 Lims ID: bfb  
 Client ID:  
 Operator ID: knk41612 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
 Tune Method: BFB Method 8260

\$ 167 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.6
75	30 to 60% of m/z 95	44.8
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	96.9
175	5 to 9% of m/z 174	7.4 (7.7)
176	Greater than 95% but less than 101% of m/z 174	95.5 (98.6)
177	5 to 9% of m/z 176	6.1 (6.4)

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16T01.D\MSV\_16334\_25mL.rsl\spectra.d  
 Injection Date: 16-Aug-2022 13:07:30  
 Spectrum: Tune Spec :Average 104-106( 5.12-5.13 ) Bgrd 96( 5.07)  
 Base Peak: 95.00  
 Minimum % Base Peak: 0  
 Number of Points: 70

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	971	62.00	5167	87.00	5399	135.00	297
37.00	5082	63.00	3498	88.00	5173	137.00	296
38.00	4289	64.00	361	91.00	486	141.00	1209
39.00	1733	67.00	162	92.00	3581	142.00	110
40.00	24	68.00	11339	93.00	5229	143.00	1229
44.00	414	69.00	11920	94.00	15654	148.00	313
45.00	913	70.00	902	95.00	132160	155.00	351
47.00	1370	72.00	643	96.00	8562	157.00	205
48.00	677	73.00	5331	97.00	197	159.00	88
49.00	4300	74.00	20040	104.00	517	172.00	99
50.00	20656	75.00	59176	106.00	538	174.00	128040
51.00	6158	76.00	5033	116.00	437	175.00	9813
52.00	305	77.00	782	117.00	759	176.00	126224
55.00	295	78.00	504	118.00	610	177.00	8116
56.00	1511	79.00	3102	119.00	626	178.00	87
57.00	2637	80.00	820	128.00	402	207.00	47
60.00	1159	81.00	3054	130.00	495		
61.00	5004	82.00	644	133.00	88		

Report Date: 30-Aug-2022 10:58:17

Chrom Revision: 2.3 25-Aug-2022 20:53:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16T01.D

Injection Date: 16-Aug-2022 13:07:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

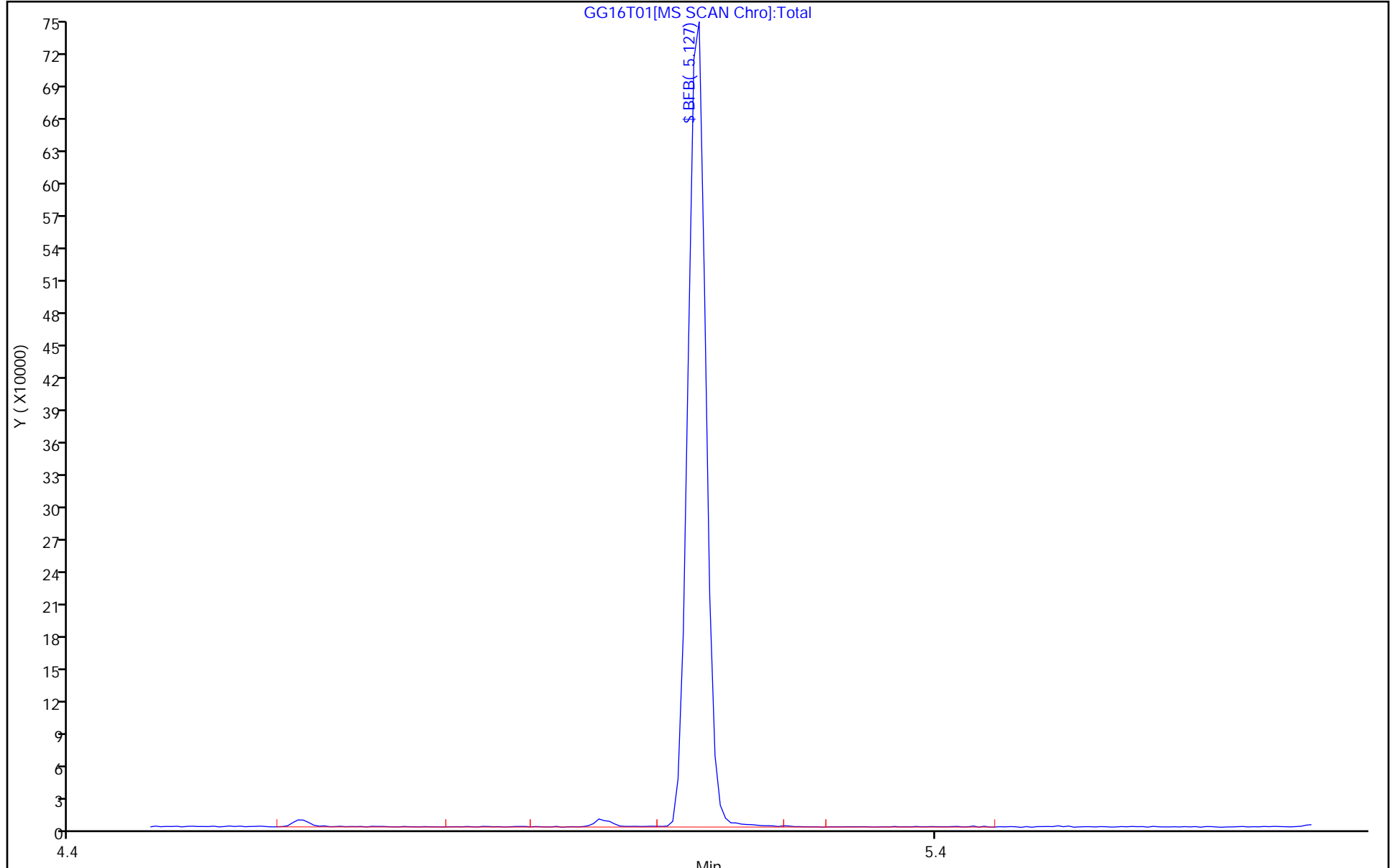
ALS Bottle#: 1

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column ( 0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Environment Testing, LLC  
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01T01.D  
 Lims ID: BFB  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 01-Dec-2022 09:58:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-001  
 Misc. Info.: BFB  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 01-Dec-2022 12:23:23 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1623

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 167 BFB	95	5.109	5.109	0.000	0	349731	NR	NR	
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**QC Flag Legend**

Processing Flags  
 NR - Missing Quant Standard

**Reagents:**

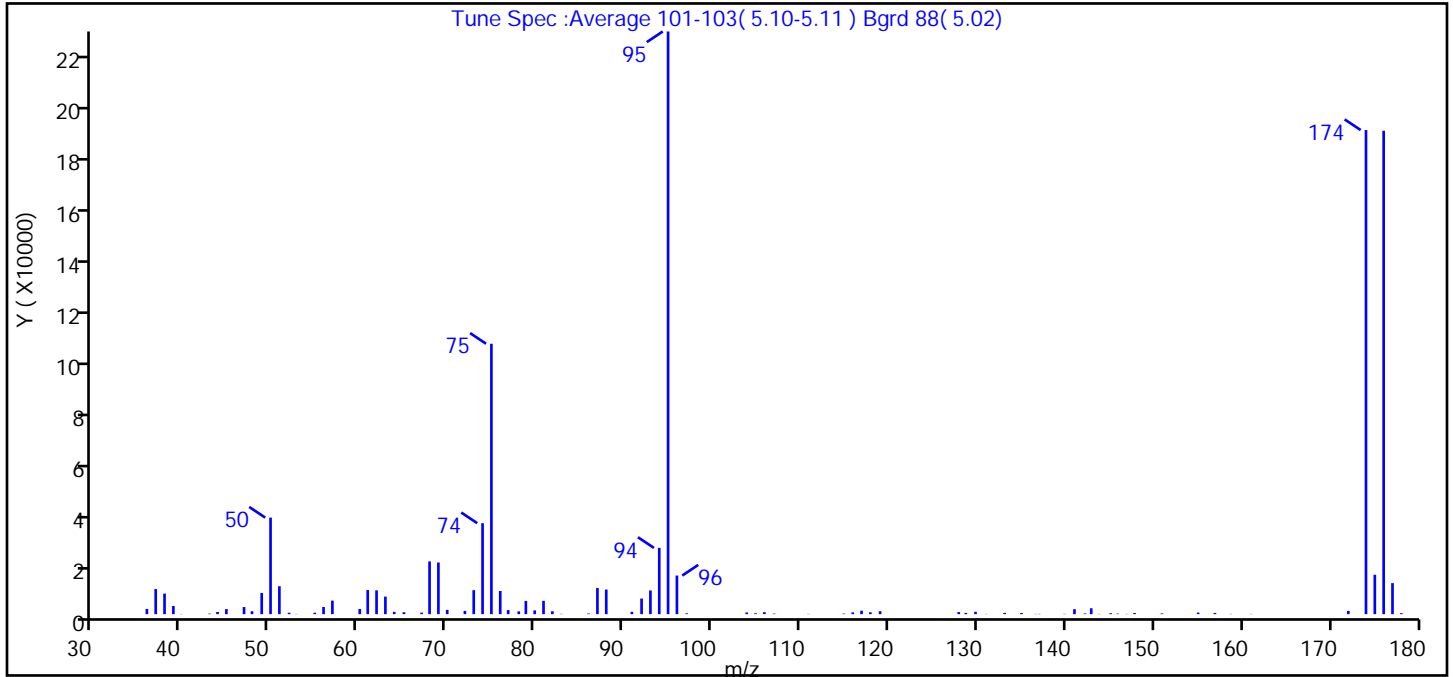
MSV\_V\_BFB\_00008 Amount Added: 1.00 Units: uL



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01T01.D  
 Injection Date: 01-Dec-2022 09:58:30 Instrument ID: 16334  
 Lims ID: BFB  
 Client ID:  
 Operator ID: knk41612 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
 Tune Method: BFB Method 8260

\$ 167 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	46.4
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	83.1
175	5 to 9% of m/z 174	6.8 (8.1)
176	Greater than 95% but less than 101% of m/z 174	83.0 (99.9)
177	5 to 9% of m/z 176	5.3 (6.4)

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01T01.D\MSV\_16334\_25mL.rsl\spectra.d  
 Injection Date: 01-Dec-2022 09:58:30  
 Spectrum: Tune Spec :Average 101-103( 5.10-5.11 ) Bgrd 88( 5.02)  
 Base Peak: 95.00  
 Minimum % Base Peak: 0  
 Number of Points: 88

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1954	64.00	869	92.00	5893	137.00	87
37.00	9472	65.00	726	93.00	8946	137.00	95
38.00	7769	67.00	554	94.00	25032	140.00	104
39.00	3072	68.00	19928	95.00	220160	141.00	1881
40.00	63	69.00	19512	96.00	14582	142.00	257
43.00	202	70.00	1603	97.00	300	143.00	2218
44.00	811	72.00	1227	104.00	631	144.00	88
45.00	1919	73.00	9067	105.00	329	145.00	361
47.00	2684	74.00	34368	106.00	730	146.00	202
48.00	1103	75.00	102168	107.00	214	147.00	88
49.00	8000	76.00	8764	111.00	89	148.00	427
50.00	36472	77.00	1535	115.00	216	151.00	270
51.00	10545	78.00	1050	116.00	668	155.00	586
52.00	537	79.00	4990	117.00	1304	157.00	451
53.00	86	80.00	1411	118.00	692	159.00	93
55.00	523	81.00	5029	119.00	1113	161.00	85
56.00	2706	82.00	1084	128.00	772	172.00	1206
57.00	5113	83.00	105	129.00	453	174.00	182912
60.00	1952	86.00	252	130.00	890	175.00	14889
61.00	9105	87.00	9875	131.00	86	176.00	182656
62.00	8983	88.00	9305	133.00	464	177.00	11725
63.00	6623	91.00	888	135.00	446	178.00	371

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01T01.D

Injection Date: 01-Dec-2022 09:58:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

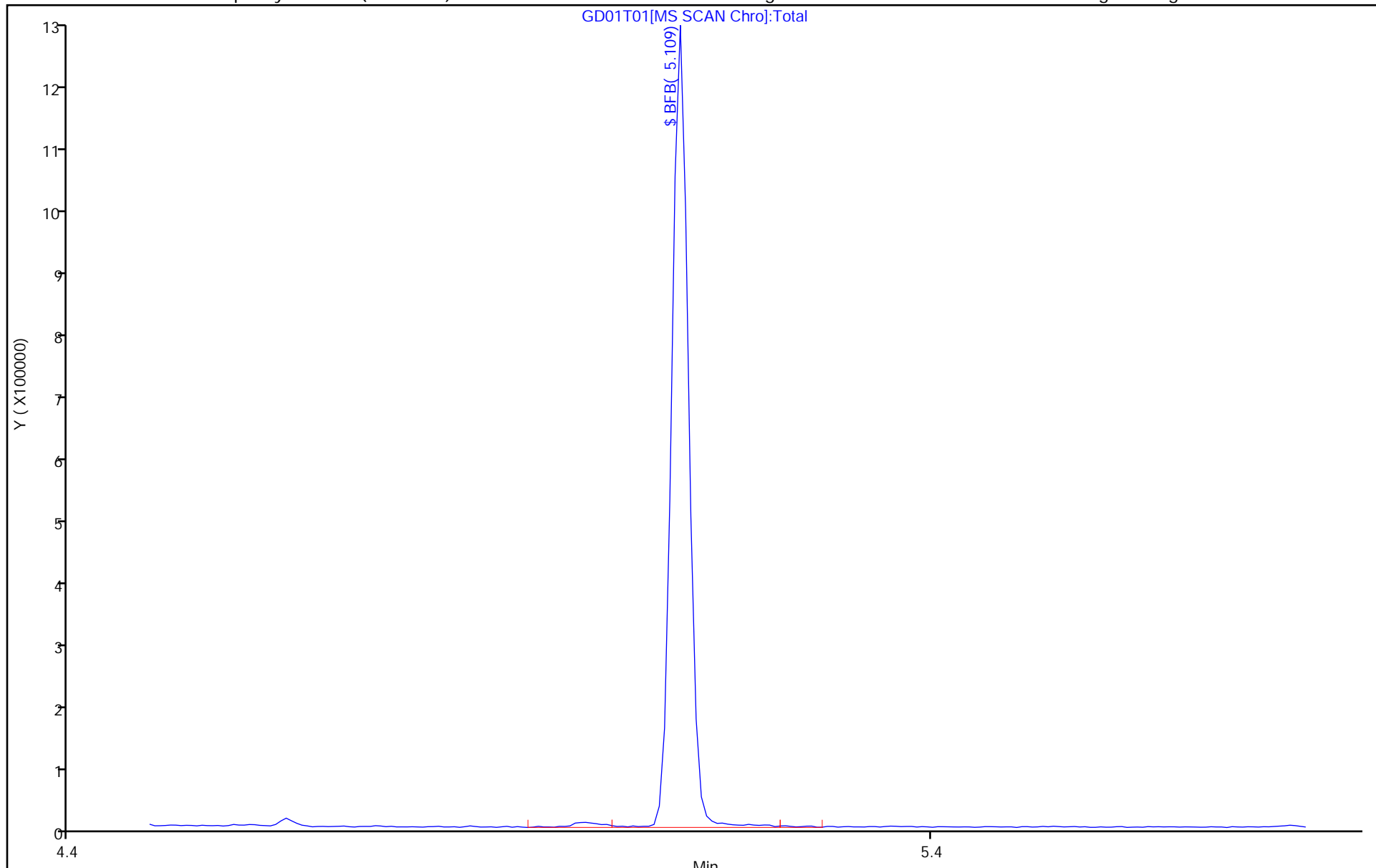
ALS Bottle#: 1

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Environment Testing, LLC  
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11T03.D  
 Lims ID: bfb  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 11-Jul-2022 13:17:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Sample Info: 410-0061489-001  
 Misc. Info.: BFB  
 Operator ID: kas02648 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 12-Jul-2022 11:53:41 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1678

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 165 BFB	95	5.154	5.154	0.000	91	142888	NR	NR	
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**QC Flag Legend**

Processing Flags  
 NR - Missing Quant Standard

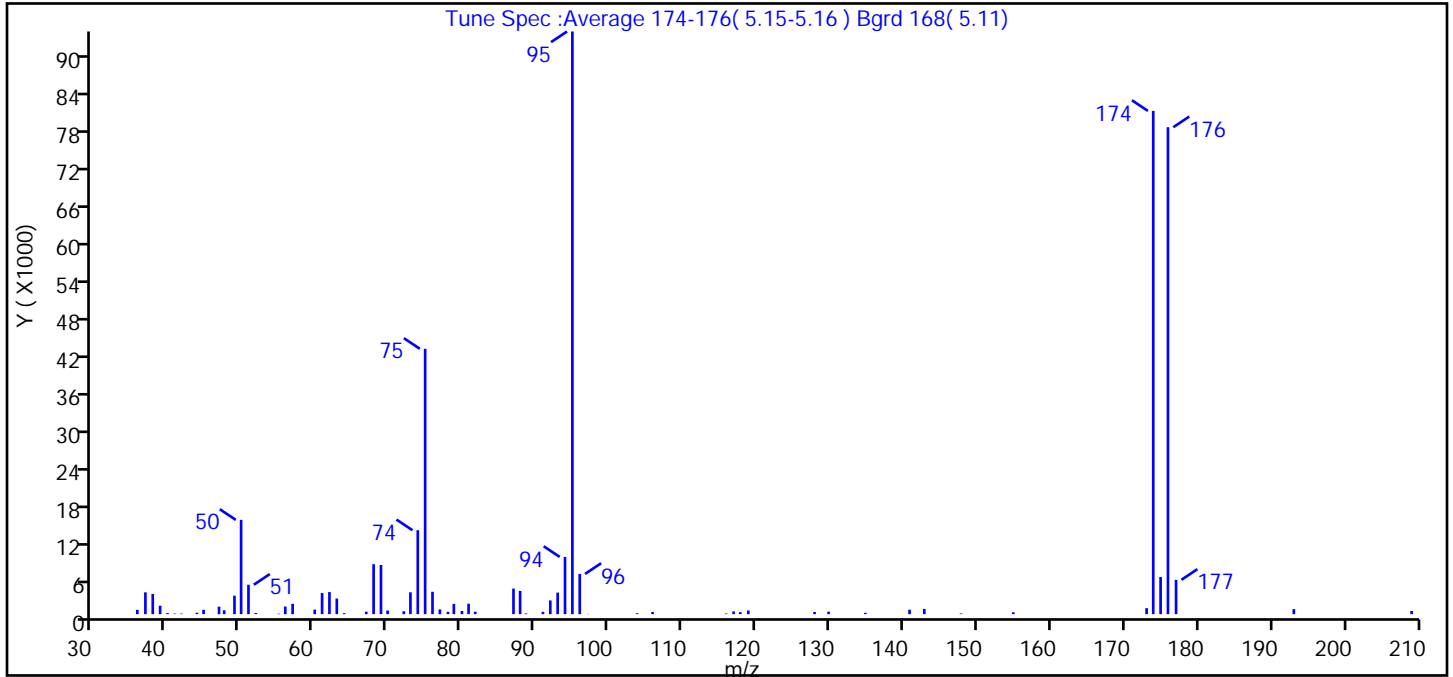
**Reagents:**

MSV\_V\_BFB\_00008 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11T03.D  
 Injection Date: 11-Jul-2022 13:17:30 Instrument ID: 19094  
 Lims ID: bfb  
 Client ID:  
 Operator ID: kas02648 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
 Tune Method: BFB Method 8260

\$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.2
75	30 to 60% of m/z 95	45.5
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	1.0 (1.2)
174	50 to 120% of m/z 95	86.4
175	5 to 9% of m/z 174	6.4 (7.4)
176	Greater than 95% but less than 101% of m/z 174	83.6 (96.8)
177	5 to 9% of m/z 176	5.9 (7.0)

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11T03.D\MSV\_19094\_25mL.rslt\spectra.d  
Injection Date: 11-Jul-2022 13:17:30  
Spectrum: Tune Spec :Average 174-176( 5.15-5.16 ) Bgrd 168( 5.11)  
Base Peak: 95.00  
Minimum % Base Peak: 0  
Number of Points: 68

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	695	57.00	1653	79.00	1645	117.00	438
37.00	3502	60.00	727	80.00	510	118.00	322
38.00	3232	61.00	3386	81.00	1681	119.00	588
39.00	1351	62.00	3541	82.00	393	128.00	347
40.00	173	63.00	2508	87.00	4103	130.00	405
41.00	83	64.00	160	88.00	3731	135.00	218
42.00	90	67.00	394	89.00	119	141.00	714
44.00	225	68.00	8019	91.00	368	143.00	839
45.00	706	69.00	7887	92.00	2197	148.00	109
47.00	1201	70.00	582	93.00	3461	155.00	296
48.00	623	72.00	470	94.00	9186	173.00	966
49.00	2967	73.00	3505	95.00	93544	174.00	80792
50.00	15136	74.00	13476	96.00	6457	175.00	5961
51.00	4721	75.00	42600	97.00	34	176.00	78176
52.00	181	76.00	3592	104.00	150	177.00	5509
55.00	69	77.00	760	106.00	344	193.00	809
56.00	1220	78.00	370	116.00	104	209.00	506

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11T03.D

Injection Date: 11-Jul-2022 13:17:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

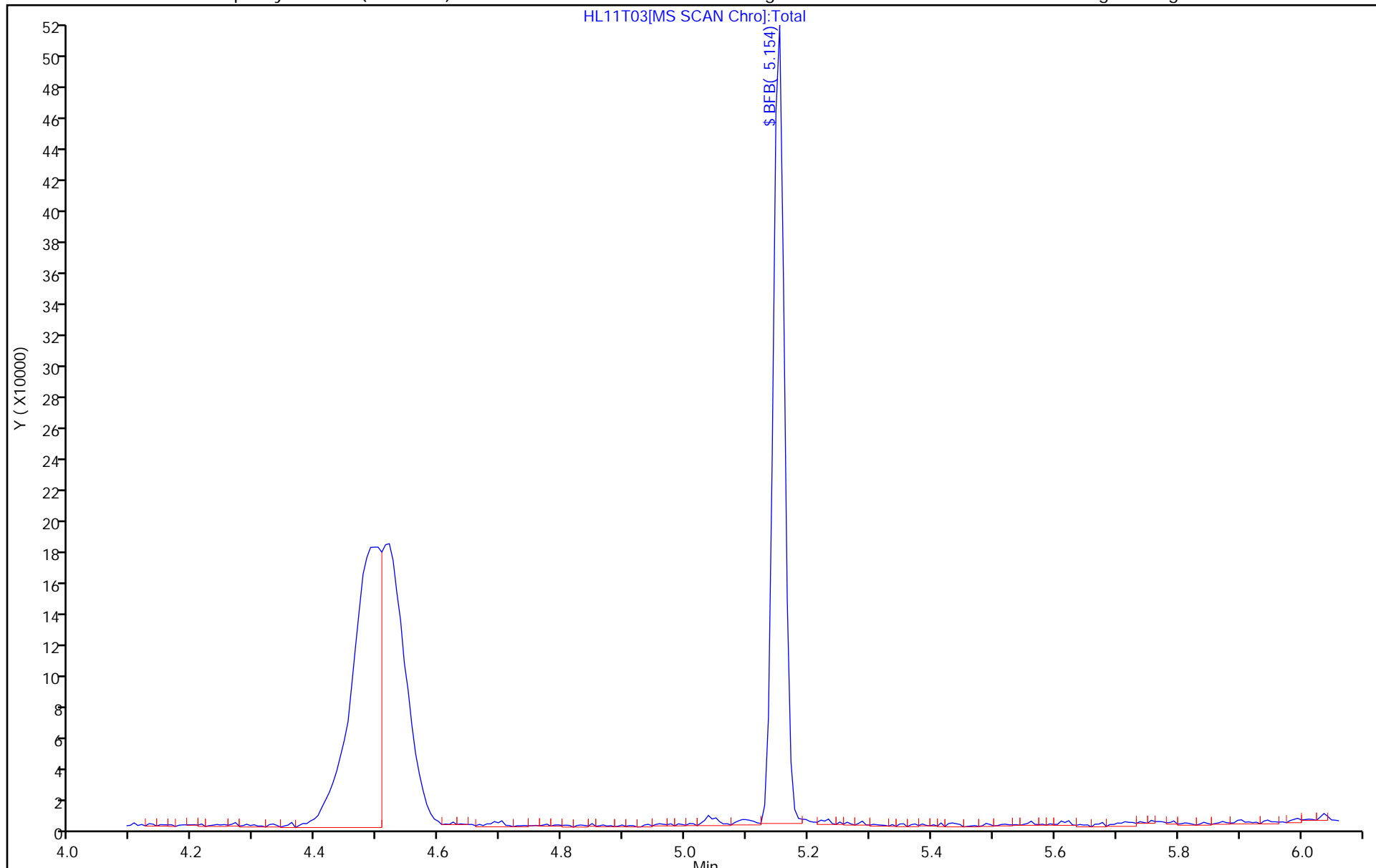
ALS Bottle#: 1

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy\_HL14T01.D  
 Lims ID: bfb  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 14-Jul-2022 19:09:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Sample Info:  
 Misc. Info.: BFB  
 Operator ID: MEC29284 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 14-Jul-2022 20:50:16 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1670

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 165 BFB	95	5.148	5.148	0.000	87	217282	NR	NR	
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**QC Flag Legend**

Processing Flags  
 NR - Missing Quant Standard

**Reagents:**

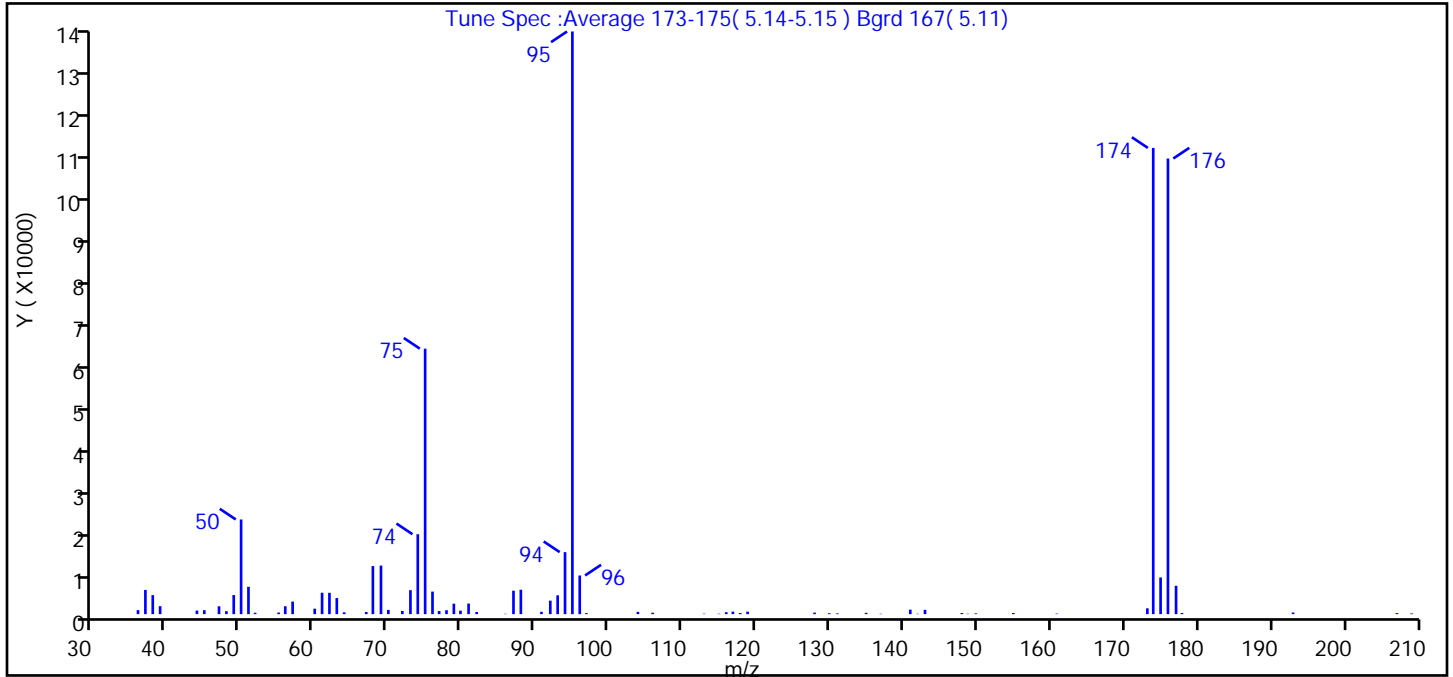
MSV\_V\_BFB\_00008 Amount Added: 1.00 Units: uL



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy\_HL14T01.D  
 Injection Date: 14-Jul-2022 19:09:30 Instrument ID: 19094  
 Lims ID: bfb  
 Client ID:  
 Operator ID: MEC29284 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
 Tune Method: BFB Method 8260

\$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.2
75	30 to 60% of m/z 95	45.6
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	1.0 (1.3)
174	50 to 120% of m/z 95	80.0
175	5 to 9% of m/z 174	6.3 (7.9)
176	Greater than 95% but less than 101% of m/z 174	78.2 (97.7)
177	5 to 9% of m/z 176	4.9 (6.2)

Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy\_HL14T01.D\MSV\_19094\_25mL.rsl\spec  
 Injection Date: 14-Jul-2022 19:09:30  
 Spectrum: Tune Spec :Average 173-175( 5.14-5.15 ) Bgrd 167( 5.11)  
 Base Peak: 95.00  
 Minimum % Base Peak: 0  
 Number of Points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	949	64.00	430	91.00	552	137.00	93
37.00	5703	67.00	499	92.00	3178	141.00	1057
38.00	4480	68.00	11322	93.00	4431	142.00	88
39.00	1876	69.00	11439	94.00	14605	143.00	1023
44.00	845	70.00	999	95.00	137216	148.00	258
45.00	933	72.00	745	96.00	9108	149.00	85
47.00	1853	73.00	5647	97.00	244	150.00	181
48.00	699	74.00	18824	104.00	539	155.00	272
49.00	4499	75.00	62520	106.00	345	161.00	122
50.00	22296	76.00	5309	113.00	101	173.00	1373
51.00	6441	77.00	732	115.00	99	174.00	109792
52.00	325	78.00	920	116.00	465	175.00	8634
55.00	376	79.00	2467	117.00	593	176.00	107296
56.00	1858	80.00	822	118.00	264	177.00	6682
57.00	2957	81.00	2489	119.00	592	178.00	274
60.00	1291	82.00	506	128.00	361	193.00	390
61.00	5042	86.00	86	130.00	222	207.00	254
62.00	5025	87.00	5525	131.00	173	209.00	168
63.00	3790	88.00	5746	135.00	309		

Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy\_HL14T01.D

Injection Date: 14-Jul-2022 19:09:30

Instrument ID: 19094

Operator ID: MEC29284

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

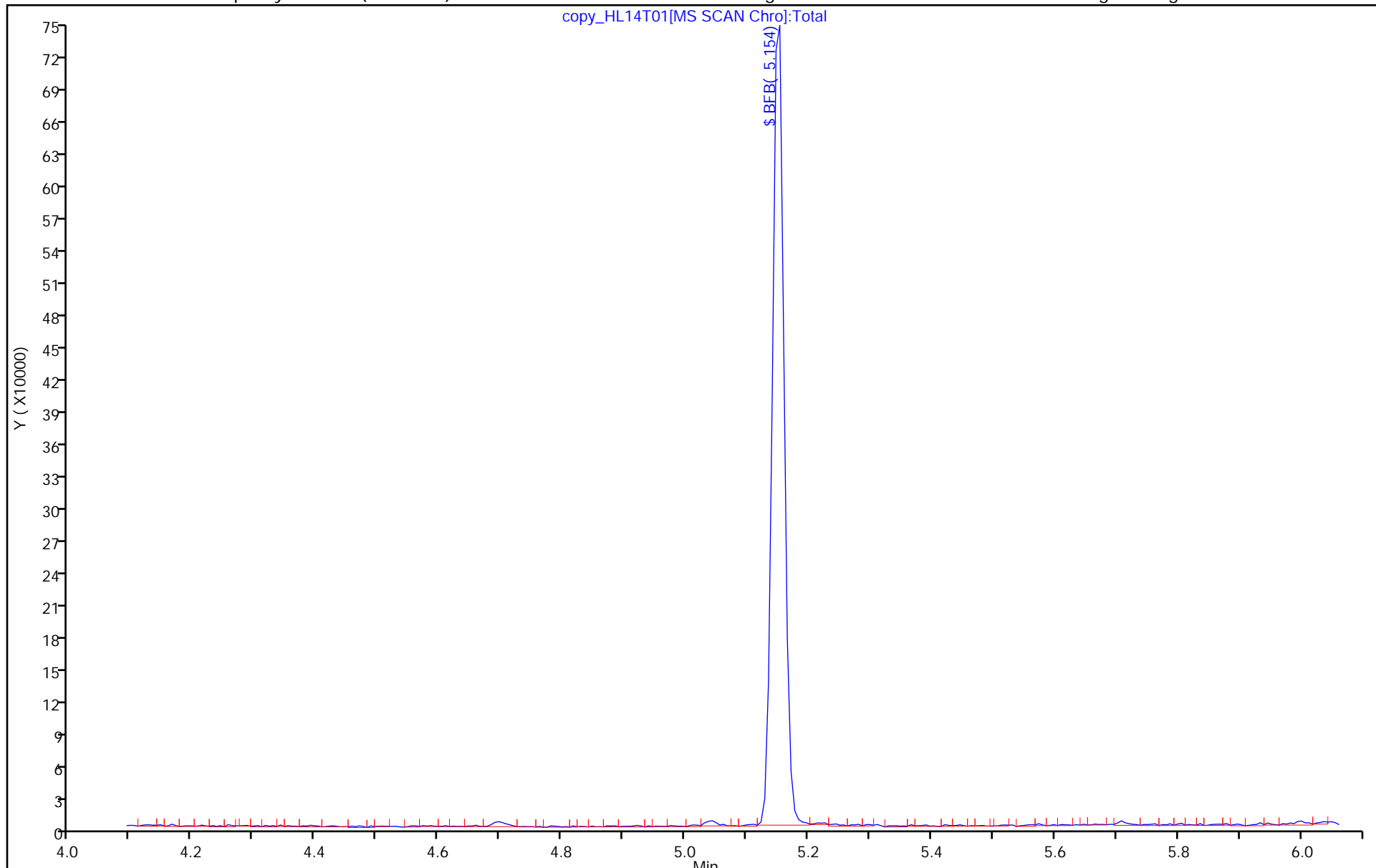
ALS Bottle#: 1

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column ( 0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01T05.D  
 Lims ID: BFB  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 01-Dec-2022 20:00:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-001  
 Misc. Info.: BFB  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 01-Dec-2022 21:56:28 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 167 BFB	95	5.129	5.129	0.000	92	213722	NR	NR	

**QC Flag Legend**

Processing Flags  
 NR - Missing Quant Standard

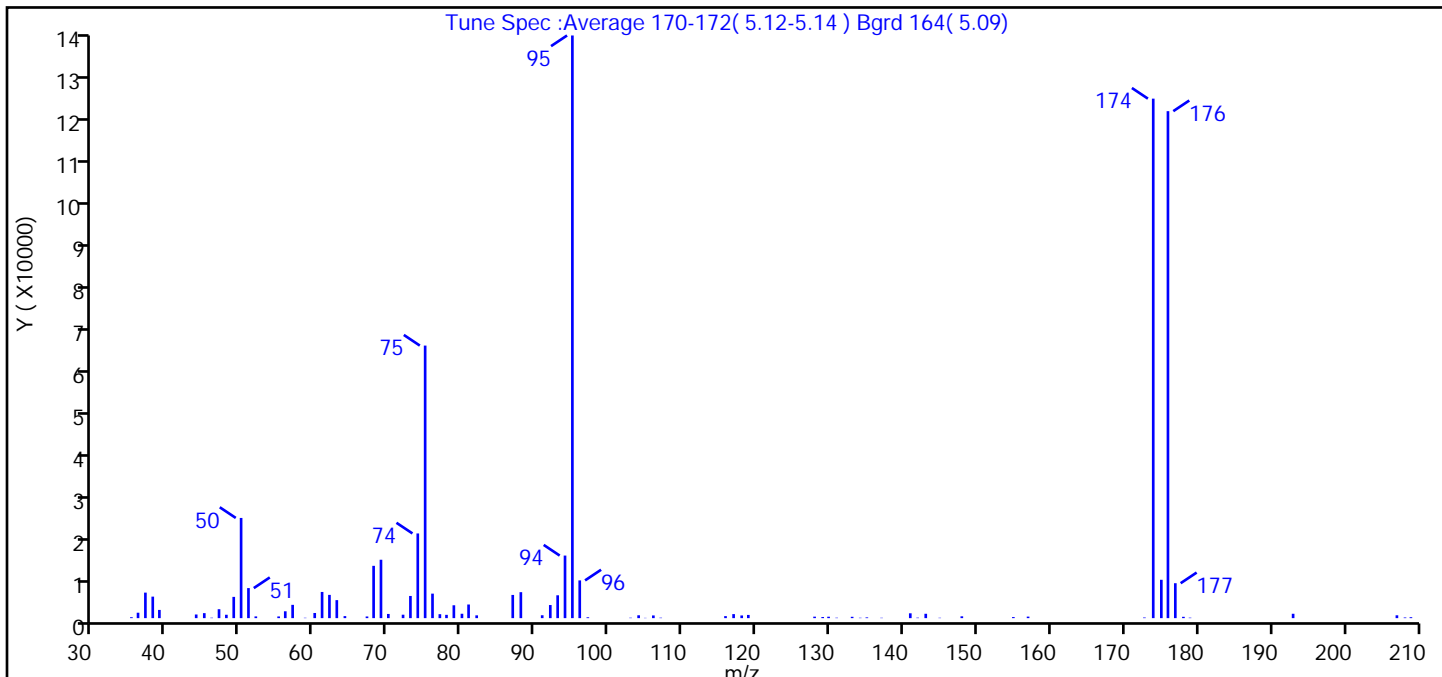
**Reagents:**

MSV\_V\_BFB\_00008 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01T05.D  
 Injection Date: 01-Dec-2022 20:00:30 Instrument ID: 19094  
 Lims ID: BFB  
 Client ID:  
 Operator ID: sej02002 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
 Tune Method: BFB Method 8260

\$ 167 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.2
75	30 to 60% of m/z 95	46.8
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.1 (0.1)
174	50 to 120% of m/z 95	89.2
175	5 to 9% of m/z 174	6.6 (7.4)
176	Greater than 95% but less than 101% of m/z 174	87.0 (97.6)
177	5 to 9% of m/z 176	6.0 (6.9)

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01T05.D\MSV\_19094\_25mL.rsl\spectra.d  
 Injection Date: 01-Dec-2022 20:00:30  
 Spectrum: Tune Spec :Average 170-172( 5.12-5.14 ) Bgrd 164( 5.09)  
 Base Peak: 95.00  
 Minimum % Base Peak: 0  
 Number of Points: 82

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	215	63.00	4191	93.00	5318	137.00	84
36.00	1261	64.00	473	94.00	14557	141.00	1125
37.00	5938	67.00	388	95.00	135552	142.00	113
38.00	5005	68.00	12170	96.00	8780	143.00	1016
39.00	1913	69.00	13587	97.00	199	145.00	86
44.00	849	70.00	978	103.00	97	148.00	426
45.00	1164	72.00	801	104.00	665	155.00	247
46.00	101	73.00	5161	105.00	63	157.00	357
47.00	2078	74.00	19704	106.00	629	173.00	145
48.00	788	75.00	63408	107.00	103	174.00	120856
49.00	4947	76.00	5703	116.00	471	175.00	8924
50.00	23312	77.00	921	117.00	940	176.00	117944
51.00	6992	78.00	768	118.00	628	177.00	8125
52.00	402	79.00	2994	119.00	747	178.00	309
55.00	394	80.00	1023	128.00	345	179.00	110
56.00	1596	81.00	3173	129.00	258	193.00	1019
57.00	3094	82.00	652	130.00	332	207.00	664
59.00	85	87.00	5399	131.00	99	208.00	152
60.00	1200	88.00	6042	133.00	314	209.00	216
61.00	6093	91.00	674	134.00	88		
62.00	5411	92.00	3048	135.00	174		

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01T05.D

Injection Date: 01-Dec-2022 20:00:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

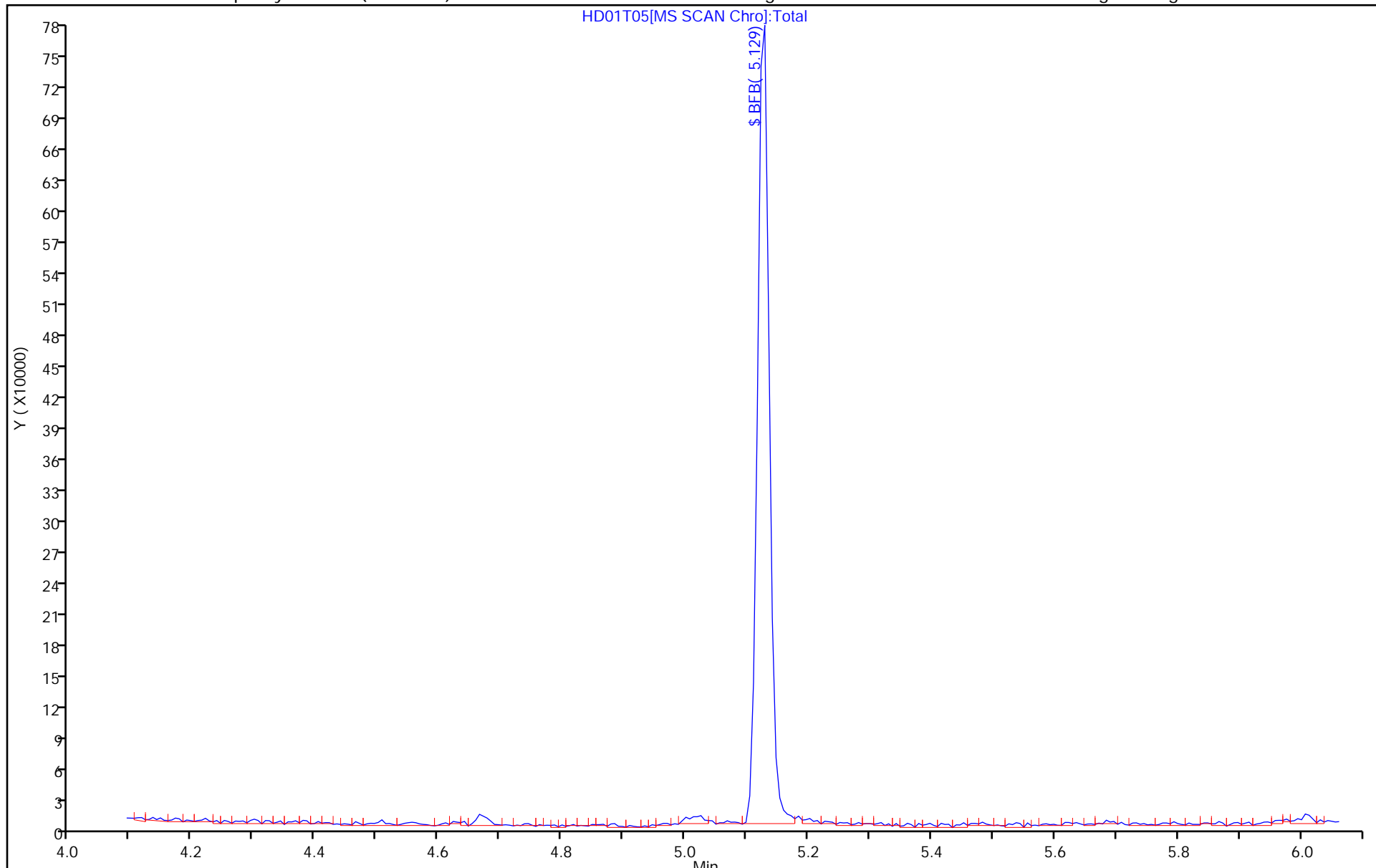
ALS Bottle#: 1

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column ( 0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02T01.D  
 Lims ID: BFB  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 02-Dec-2022 09:21:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Sample Info: 410-0072389-001  
 Misc. Info.: BFB  
 Operator ID: knk41612 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 11:27:44 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 167 BFB	95	5.123	5.123	0.000	90	322477	NR	NR	
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**QC Flag Legend**

Processing Flags

NR - Missing Quant Standard

**Reagents:**

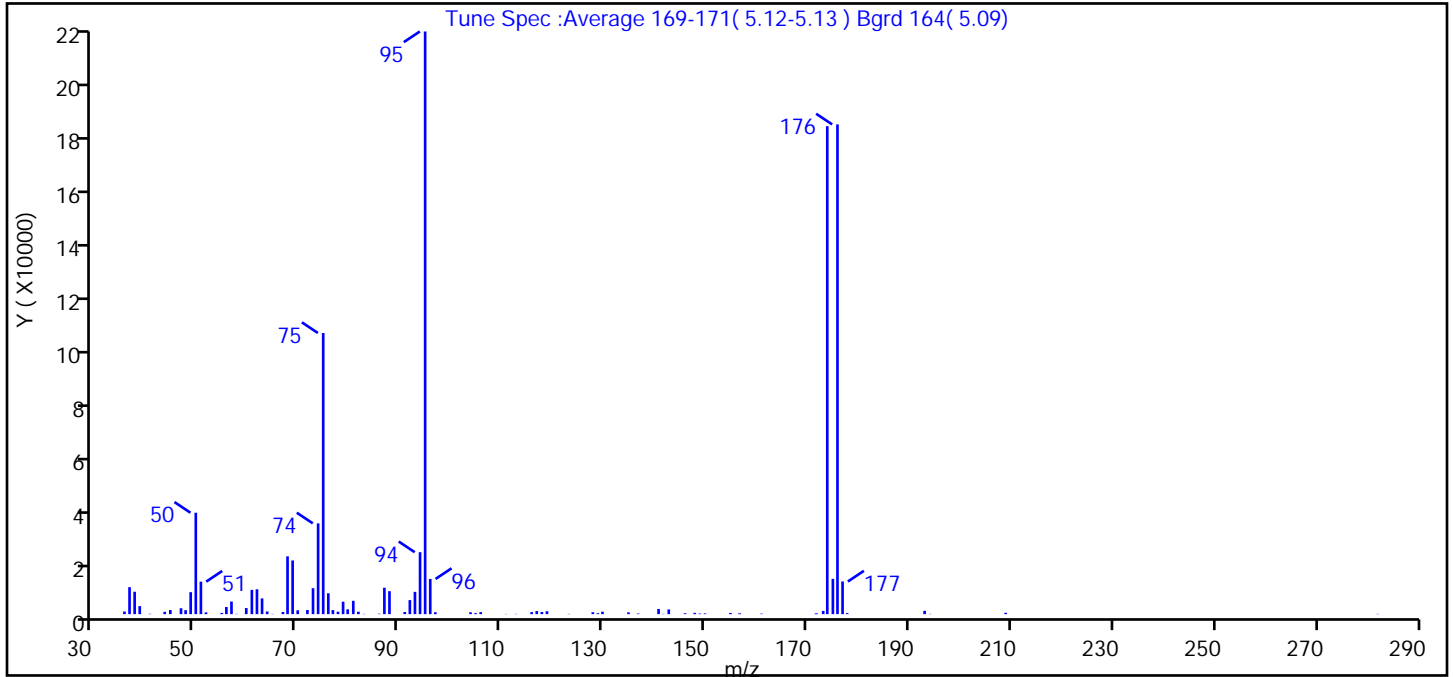
MSV\_V\_BFB\_00008 Amount Added: 1.00 Units: uL



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02T01.D  
 Injection Date: 02-Dec-2022 09:21:30 Instrument ID: 19094  
 Lims ID: BFB  
 Client ID:  
 Operator ID: knk41612 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
 Tune Method: BFB Method 8260

\$ 167 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	48.3
96	5 to 9% of m/z 95	6.0
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	83.8
175	5 to 9% of m/z 174	6.1 (7.2)
176	Greater than 95% but less than 101% of m/z 174	84.1 (100.4)
177	5 to 9% of m/z 176	5.6 (6.7)

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02T01.D\MSV\_19094\_25mL.rsl\spectra.d  
 Injection Date: 02-Dec-2022 09:21:30  
 Spectrum: Tune Spec :Average 169-171( 5.12-5.13 ) Bgrd 164( 5.09)  
 Base Peak: 95.00  
 Minimum % Base Peak: 0  
 Number of Points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	955	65.00	92	93.00	8109	143.00	1708
37.00	9808	67.00	792	94.00	22528	146.00	317
38.00	8144	68.00	21024	95.00	211904	148.00	476
39.00	2918	69.00	19520	96.00	12803	149.00	220
41.00	138	70.00	1401	97.00	694	150.00	270
44.00	844	72.00	1508	104.00	688	155.00	439
45.00	1495	73.00	9435	105.00	380	157.00	321
47.00	2145	74.00	33016	106.00	737	161.00	183
48.00	1445	75.00	102248	111.00	84	172.00	150
49.00	7997	76.00	7592	113.00	97	172.00	276
50.00	36880	77.00	1489	116.00	748	173.00	1179
51.00	11820	78.00	891	117.00	1126	174.00	177472
52.00	640	79.00	4537	118.00	794	175.00	12831
55.00	461	80.00	1734	119.00	1051	176.00	178112
56.00	2610	81.00	4847	123.00	95	177.00	11873
57.00	4594	82.00	869	128.00	705	178.00	370
58.00	104	83.00	94	129.00	343	193.00	1208
60.00	2222	86.00	165	130.00	900	194.00	102
61.00	8835	87.00	9613	135.00	653	209.00	493
62.00	9039	88.00	8355	137.00	222	282.00	102
63.00	5717	91.00	788	141.00	1885		
64.00	967	92.00	5110	142.00	94		

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02T01.D

Injection Date: 02-Dec-2022 09:21:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

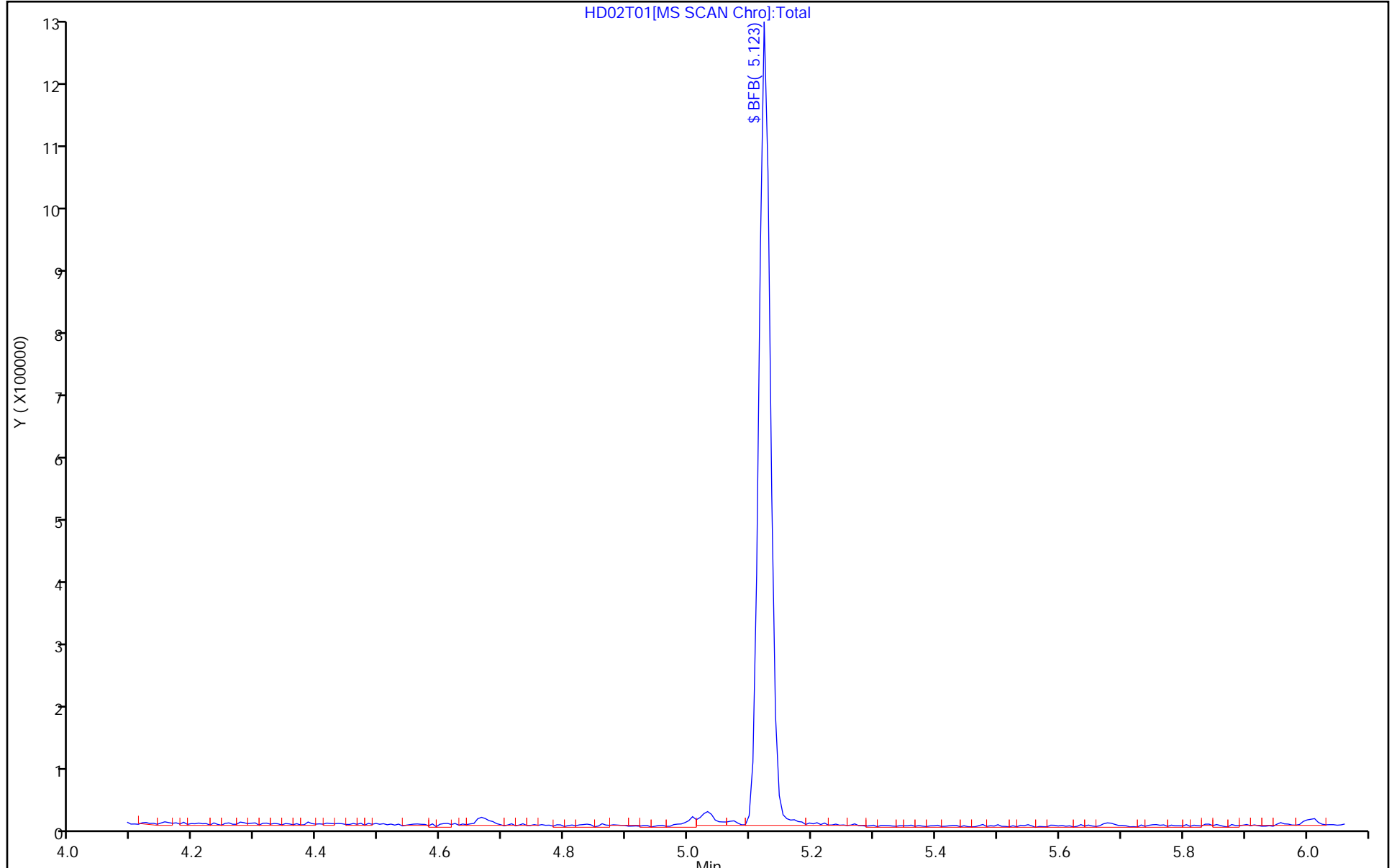
ALS Bottle#: 1

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID:

Lab Sample ID: MB 410-322544/6

Matrix: Water

Lab File ID: GD01X05.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 11:41

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID:

Lab Sample ID: MB 410-322544/6

Matrix: Water

Lab File ID: GD01X05.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 11:41

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	ND		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	101		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	104		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X05.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 01-Dec-2022 11:41:30 ALS Bottle#: 5 Worklist Smp#: 6  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-006  
 Misc. Info.: MB  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:08:34 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: DVW2 Date: 01-Dec-2022 12:20:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.867					ND	
2 Dichlorodifluoromethane	85		1.892					ND	
3 Chlorodifluoromethane	51		1.916					ND	7
4 Dimethyl ether	45		1.983					ND	7
5 Chloromethane	50		2.087					ND	
6 Vinyl chloride	62		2.202					ND	
7 Butadiene	39		2.209					ND	7
8 2-Chloro-1,1,1-Trifluoroethane	118		2.294					ND	
9 Bromomethane	94		2.519					ND	
10 Chloroethane	64		2.599					ND	
11 Dichlorofluoromethane	67		2.830					ND	
12 Trichlorofluoromethane	101		2.897					ND	
13 Ethyl ether	59		3.129					ND	
14 Ethanol	45	3.190	3.190	0.000	5	261		NC	
16 1,2-Dichloro-1,1,2-trifluoroethane	67		3.214					ND	
17 Acrolein	56		3.300					ND	7
18 1,1-Dichloroethene	96		3.422					ND	
19 1,1,2-Trichloro-1,2,2-trifluoroethane	101		3.464					ND	
20 Acetone	43		3.477					ND	MU
21 Iodomethane	142		3.611					ND	
22 Ethyl bromide	108		3.635					ND	
24 Isopropyl alcohol	45		3.690					ND	
23 Carbon disulfide	76		3.708					ND	7
25 Methyl acetate	43		3.873					ND	
26 Acetonitrile	41		3.873					ND	
27 3-Chloro-1-propene	41		3.885					ND	
29 Methylene Chloride	84		4.062					ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.154	4.147	0.007	35	168326	50.0	50.0	
31 2-Methyl-2-propanol	59		4.251					ND	U
32 Acrylonitrile	53		4.409					ND	
33 Methyl tert-butyl ether	73		4.458					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	96		4.464					ND	
35 Hexane	57		4.897					ND	
36 Vinyl acetate	43		5.123					ND	
37 1,1-Dichloroethane	63		5.135					ND	
38 Isopropyl ether	45		5.196					ND	
39 2-Chloro-1,3-butadiene	53		5.245					ND	
40 Tert-butyl ethyl ether	59		5.732					ND	
41 2-Butanone (MEK)	43		5.940					ND	
42 cis-1,2-Dichloroethene	96		5.970					ND	
43 2,2-Dichloropropane	77		5.988					ND	
44 Ethyl acetate	43		6.007					ND	
45 Propionitrile	54		6.031					ND	
46 Methyl acrylate	55		6.141					ND	
S 47 1,2-Dichloroethene, Total	100		6.155					ND	7
48 Methacrylonitrile	67		6.244					ND	
49 Chlorobromomethane	128		6.299					ND	
50 Tetrahydrofuran	71		6.305					ND	
51 Chloroform	83		6.458					ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.677	6.671	0.006	94	680845	10.0	9.97	
53 1,1,1-Trichloroethane	97		6.677					ND	
54 Cyclohexane	56		6.775					ND	
56 Carbon tetrachloride	117		6.891					ND	
57 1,1-Dichloropropene	75		6.897					ND	
55 1-Chlorobutane	56		6.940					ND	
58 Isobutyl alcohol	41		7.086					ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.129	7.122	0.007	63	150698	10.0	10.4	
60 Benzene	78		7.159					ND	
61 1,2-Dichloroethane	62		7.226					ND	
62 Isopropyl acetate	43		7.244					ND	
63 Tert-amyl methyl ether	73		7.354					ND	
* 64 Fluorobenzene (IS)	96	7.567	7.567	0.000	99	2751700	10.0	10.0	
65 n-Heptane	43		7.579					ND	7
66 t-Amyl alcohol	73		7.842					ND	
67 n-Butanol	56		7.976					ND	
68 Trichloroethene	95		8.043					ND	
69 Methylcyclohexane	83		8.348					ND	
70 1,2-Dichloropropane	63		8.378					ND	
71 2-ethoxy-2-methyl butane	87		8.390					ND	
72 Methyl methacrylate	69		8.463					ND	
73 Dibromomethane	93		8.482					ND	
74 1,4-Dioxane	88		8.512					ND	
75 n-Propyl acetate	61		8.549					ND	
76 Dichlorobromomethane	83		8.726					ND	
77 2-Nitropropane	41		9.000					ND	
78 2-Chloroethyl vinyl ether	63		9.098					ND	
79 1-Bromo-2-chloroethane	63		9.116					ND	
80 Chloroacetonitrile	75		9.189					ND	
81 cis-1,3-Dichloropropene	75		9.280					ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.463					ND	
\$ 83 Toluene-d8 (Surr)	98	9.591	9.597	-0.006	94	2733745	10.0	10.4	
84 Toluene	92		9.671					ND	7
85 trans-1,3-Dichloropropene	75		9.933					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Ethyl methacrylate	69		10.000					ND	
S 105 1,3-Dichloropropene, Total	100		10.060					ND	7
106 1,1,2-Trichloroethane	97		10.140					ND	
107 Tetrachloroethene	166		10.225					ND	
108 1,3-Dichloropropane	76		10.305					ND	
109 2-Hexanone	43		10.359					ND	7
110 n-Butyl acetate	43		10.487					ND	
111 Chlorodibromomethane	129		10.518					ND	
112 Ethylene Dibromide	107		10.628					ND	
* 113 Chlorobenzene-d5 (IS)	117	11.067	11.067	0.000	86	2045209	10.0	10.0	
114 1-Chlorohexane	91		11.079					ND	7
115 Chlorobenzene	112		11.091					ND	
117 1,1,1,2-Tetrachloroethane	131		11.176					ND	
116 Ethylbenzene	91		11.176					ND	
S 118 Xylenes, Total	106		11.245					ND	7
119 m-Xylene & p-Xylene	106		11.292					ND	
120 o-Xylene	106		11.627					ND	
121 Styrene	104		11.640					ND	
122 Bromoform	173		11.792					ND	
123 Isopropylbenzene	105		11.926					ND	
124 cis-1,4-Dichloro-2-butene	88		11.987					ND	U
125 Cyclohexanone	55		12.018					ND	7
\$ 126 4-Bromofluorobenzene (Surr)	95	12.067	12.066	0.001	90	989339	10.0	10.1	
127 1,1,2,2-Tetrachloroethane	83		12.170					ND	
128 Bromobenzene	156		12.182					ND	
129 trans-1,4-Dichloro-2-butene	53		12.194					ND	
130 1,2,3-Trichloropropane	110		12.219					ND	
131 N-Propylbenzene	91		12.255					ND	
132 2-Chlorotoluene	126		12.329					ND	
133 1,3,5-Trimethylbenzene	105		12.390					ND	
134 4-Chlorotoluene	126		12.420					ND	
135 tert-Butylbenzene	134		12.627					ND	
136 Pentachloroethane	167		12.664					ND	
137 1,2,4-Trimethylbenzene	105		12.670					ND	
138 sec-Butylbenzene	105		12.792					ND	
139 1,3-Dichlorobenzene	146		12.889					ND	
140 4-Isopropyltoluene	119		12.902					ND	7
* 141 1,4-Dichlorobenzene-d4	152	12.944	12.944	0.000	95	1175527	10.0	10.0	
142 1,4-Dichlorobenzene	146		12.963					ND	
143 1,2,3-Trimethylbenzene	120		12.975					ND	7
144 Benzyl chloride	126		13.042					ND	U
145 p-Diethylbenzene	119		13.097					ND	U
146 n-Butylbenzene	92		13.188					ND	7
147 1,2-Dichlorobenzene	146		13.225					ND	
148 Hexachloroethane	201		13.499					ND	
149 1,2-Dibromo-3-Chloropropane	155		13.761					ND	
150 1,3,5-Trichlorobenzene	180		13.883					ND	7
151 1,2,4-Trichlorobenzene	180		14.304					ND	7
152 Hexachlorobutadiene	225		14.389					ND	7
153 Naphthalene	128		14.487					ND	7
154 1,2,3-Trichlorobenzene	180		14.627					ND	7
155 2-Methylnaphthalene	142	15.237	15.230	0.007	94	5583		0.0642	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
156 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
165 Dodecane	57		0.000					ND	
207 1,1,2-Trifluoroethane TIC	1		0.000					ND	
157 1,1-Dichloroacetone	1		0.000					ND	
158 tert-Butyl Formate	1		0.000					ND	
159 Methylal	1		0.000					ND	
160 n-Decane	57		0.000					ND	
161 Propene oxide	1		0.000					ND	
162 1-Bromo-3-Chloropropane	1		0.000					ND	
163 1-Chloropropane	1		0.000					ND	
164 2-Bromo-1-chloropropane	1		0.000					ND	
199 1-Chloro-1,1-difluoroethane TIC			0.000					ND	
200 Ethyl ether TIC	1		0.000					ND	
201 Freon 115 TIC	1		0.000					ND	
202 Fluoromethane TIC	1		0.000					ND	
203 1,1,1-Trifluoro-2,2-dichloroetha	1		0.000					ND	
204 1,2-Dichlorofluoroethane TIC	1		0.000					ND	
205 1,1,1-Trichloro-2,2,2-trifluoroe	1		0.000					ND	
206 Vinyl Fluoride TIC	1		0.000					ND	
197 Chlorofluoromethane TIC	1		0.000					ND	
198 Dichloro-1,1,2,2-tetrafluoroetha	1		0.000					ND	
166 Pentane	43	2.922	2.928	-0.006	9	318			NR

### QC Flag Legend

#### Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

U - Marked Undetected

### Reagents:

MSV\_29\_826ISS\_00040

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X05.D

Injection Date: 01-Dec-2022 11:41:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: MB

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

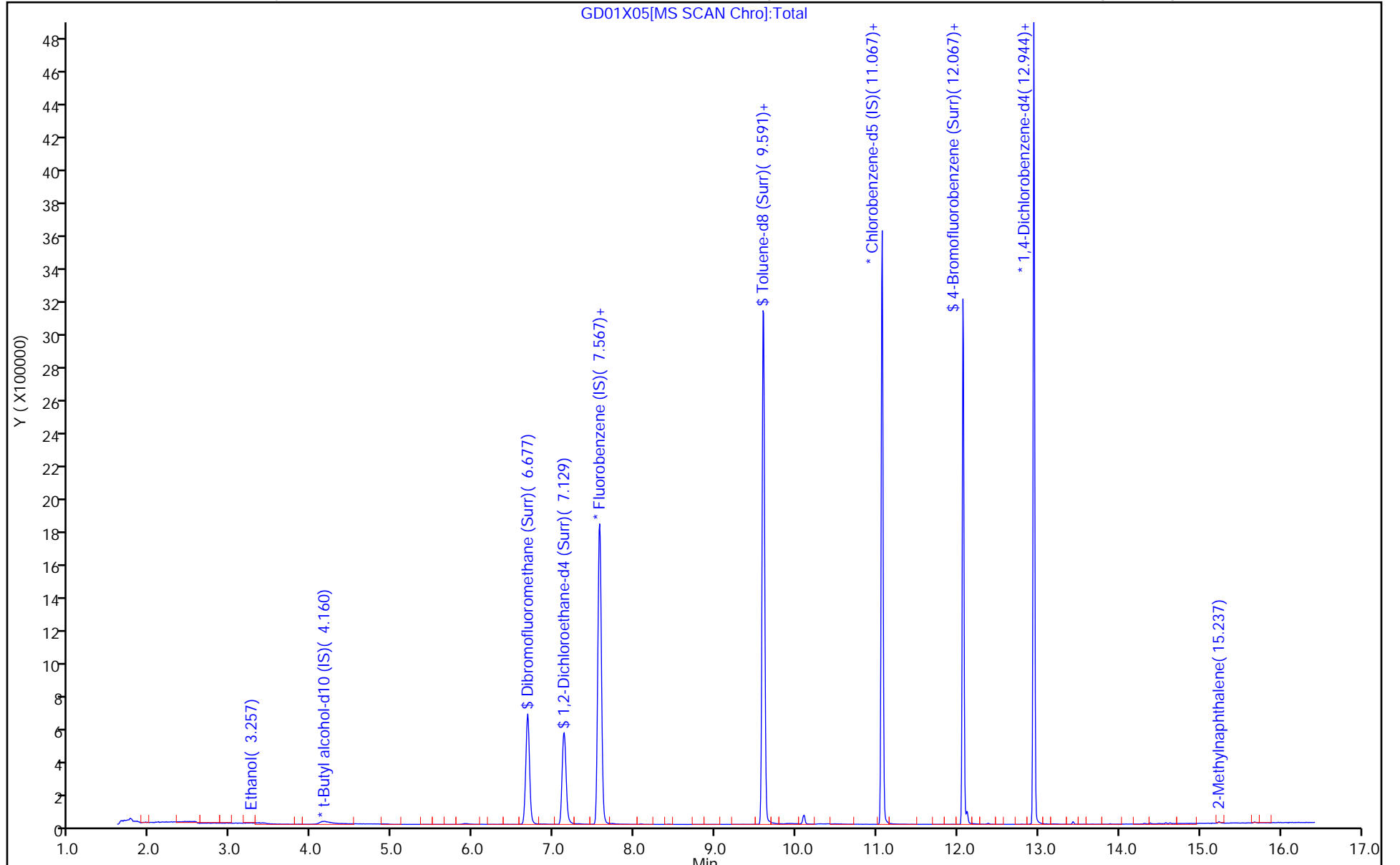
ALS Bottle#: 5

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X05.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 01-Dec-2022 11:41:30 ALS Bottle#: 5 Worklist Smp#: 6  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-006  
 Misc. Info.: MB  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:08:34 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: DVW2 Date: 01-Dec-2022 12:20:04

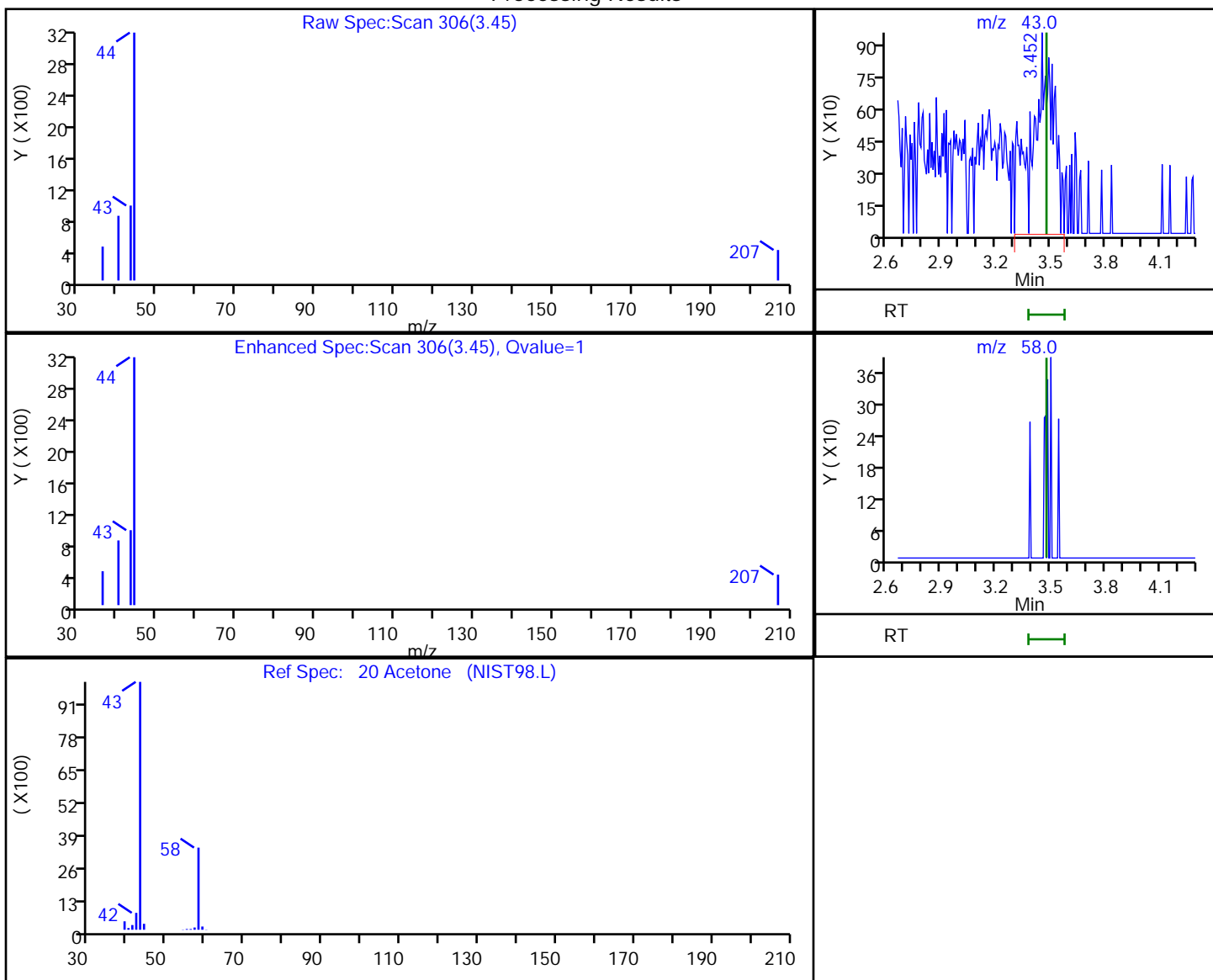
Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.97	99.66
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.86
\$ 83 Toluene-d8 (Surr)	10.0	10.4	104.38
\$ 126 4-Bromofluorobenzene (Surr)	10.0	10.1	101.48

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X05.D  
 Injection Date: 01-Dec-2022 11:41:30 Instrument ID: 16334  
 Lims ID: MB  
 Client ID:  
 Operator ID: knk41612 ALS Bottle#: 5 Worklist Smp#: 6  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
 Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

20 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
3.45	43.00	7653	0.896778
3.48	58.00	0	

Reviewer: pongsawatp, 02-Dec-2022 16:08:05

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID:

Lab Sample ID: MB 410-322841/6

Matrix: Water

Lab File ID: HD01X35.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 21:36

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	0.0976	J	0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID:

Lab Sample ID: MB 410-322841/6

Matrix: Water

Lab File ID: HD01X35.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 21:36

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	ND		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X35.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 01-Dec-2022 21:36:30 ALS Bottle#: 5 Worklist Smp#: 6  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-006  
 Misc. Info.: MRL  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 03:23:26 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: USEJ

Date: 01-Dec-2022 22:15:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.886					ND	
2 Dichlorodifluoromethane	85		1.922					ND	
3 Chlorodifluoromethane	51		1.934					ND	
4 Dimethyl ether	45		2.001					ND	
5 Chloromethane	50		2.117					ND	7
6 Butadiene	39		2.233					ND	7
7 Vinyl chloride	62		2.239					ND	
8 2-Chloro-1,1,1-Trifluoroethane	118		2.312					ND	
9 Bromomethane	94		2.556					ND	
10 Chloroethane	64		2.642					ND	7
11 Dichlorofluoromethane	67		2.867					ND	
12 Trichlorofluoromethane	101		2.946					ND	
13 Ethanol	45		3.111					ND	
14 Ethyl ether	59		3.178					ND	
15 1,2-Dichloro-1,1,2-trifluoroethane	67		3.269					ND	
16 Acrolein	56		3.355					ND	
18 1,1-Dichloroethene	96		3.495					ND	7
19 Acetone	43	3.538	3.501	0.037	49	7917		0.9578	M
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101		3.538					ND	
21 Isopropyl alcohol	45		3.647					ND	
22 Iodomethane	142		3.684					ND	
23 Ethyl bromide	108		3.715					ND	
24 Carbon disulfide	76		3.794					ND	7
26 Acetonitrile	41		3.897					ND	
25 Methyl acetate	43		3.922					ND	
27 3-Chloro-1-propene	41		3.958					ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.172	4.117	0.055	21	129208	50.0	50.0	
28 Methylene Chloride	84		4.147					ND	7
31 2-Methyl-2-propanol	59	4.245	4.233	0.012	1	3294		1.18	
32 Acrylonitrile	53		4.477					ND	
33 Methyl tert-butyl ether	73		4.550					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	96		4.568					ND	
35 Hexane	57		4.983					ND	
36 Vinyl acetate	43		5.214					ND	
37 1,1-Dichloroethane	63		5.220					ND	
38 Isopropyl ether	45		5.269					ND	
39 2-Chloro-1,3-butadiene	53		5.330					ND	
41 Tert-butyl ethyl ether	59		5.806					ND	
42 2-Butanone (MEK)	43		6.001					ND	7
43 cis-1,2-Dichloroethene	96		6.049					ND	7
44 2,2-Dichloropropane	77		6.068					ND	
45 Propionitrile	54		6.080					ND	
46 Ethyl acetate	43		6.098					ND	
S 47 1,2-Dichloroethene, Total	100		6.155					ND	7
48 Methacrylonitrile	67		6.299					ND	
50 Tetrahydrofuran	71		6.379					ND	
49 Chlorobromomethane	128		6.385					ND	
51 Methyl acrylate	55		6.482					ND	
52 Chloroform	83		6.531					ND	
\$ 53 Dibromofluoromethane (Surr)	113	6.744	6.751	-0.006	93	660074	10.0	10.1	
54 1,1,1-Trichloroethane	97		6.763					ND	
55 Cyclohexane	56		6.866					ND	
56 1,1-Dichloropropene	75		6.976					ND	
57 Carbon tetrachloride	117		6.976					ND	
58 Isobutyl alcohol	41		7.098					ND	7
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.196	7.202	-0.006	73	119301	10.0	10.0	
60 Benzene	78	7.238	7.238	0.000	91	13433		0.0417	
61 1-Chlorobutane	56		7.250					ND	
62 1,2-Dichloroethane	62		7.305					ND	7
63 Isopropyl acetate	43		7.324					ND	
64 Tert-amyl methyl ether	73		7.427					ND	
* 65 Fluorobenzene (IS)	96	7.641	7.641	0.000	99	2577418	10.0	10.0	
66 n-Heptane	43		7.659					ND	U
67 t-Amyl alcohol	73	7.805	7.842	-0.037	1	201		NC	
68 n-Butanol	56		7.994					ND	
69 Trichloroethene	95		8.122					ND	
70 Methylcyclohexane	83		8.433					ND	7
71 1,2-Dichloropropane	63		8.451					ND	
72 2-ethoxy-2-methyl butane	87		8.457					ND	
74 Methyl methacrylate	69		8.537					ND	
73 1,4-Dioxane	88		8.549					ND	
75 Dibromomethane	93		8.561					ND	
76 n-Propyl acetate	61		8.622					ND	
77 Dichlorobromomethane	83		8.799					ND	
78 2-Nitropropane	41		9.061					ND	
79 2-Chloroethyl vinyl ether	63		9.171					ND	
80 1-Bromo-2-chloroethane	63		9.189					ND	
81 cis-1,3-Dichloropropene	75		9.348					ND	
82 Chloroacetonitrile	75		9.427					ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.518					ND	7
\$ 84 Toluene-d8 (Surr)	98	9.658	9.658	0.000	94	2851032	10.0	9.99	
85 Toluene	92	9.738	9.738	0.000	97	20712		0.0976	
86 trans-1,3-Dichloropropene	75		9.994					ND	7



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 Ethyl methacrylate	69		10.055					ND	
S 104 1,3-Dichloropropene, Total	100		10.060					ND	7
106 1,1,2-Trichloroethane	97		10.195					ND	7
107 Tetrachloroethene	166		10.292					ND	
108 1,3-Dichloropropane	76		10.360					ND	
109 2-Hexanone	43		10.408					ND	7
110 n-Butyl acetate	43		10.530					ND	U
111 Chlorodibromomethane	129		10.579					ND	
112 Ethylene Dibromide	107		10.689					ND	
* 113 Chlorobenzene-d5 (IS)	117	11.122	11.122	0.000	86	2333630	10.0	10.0	
114 1-Chlorohexane	91		11.128					ND	7
115 Chlorobenzene	112		11.146					ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231					ND	
118 Ethylbenzene	91	11.231	11.231	0.000	97	13615		0.0329	
S 117 Xylenes, Total	106		11.245					ND	7
119 m-Xylene & p-Xylene	106		11.347					ND	7
120 o-Xylene	106		11.676					ND	7
121 Styrene	104		11.695					ND	7
122 Bromoform	173		11.847					ND	
123 Isopropylbenzene	105		11.975					ND	7
124 cis-1,4-Dichloro-2-butene	88		12.012					ND	
125 Cyclohexanone	55		12.042					ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	92	1126906	10.0	9.72	
127 1,1,2,2-Tetrachloroethane	83		12.219					ND	
128 Bromobenzene	156		12.237					ND	
129 trans-1,4-Dichloro-2-butene	53		12.243					ND	
130 1,2,3-Trichloropropane	110		12.268					ND	
131 N-Propylbenzene	91		12.304					ND	7
132 2-Chlorotoluene	126		12.377					ND	
133 1,3,5-Trimethylbenzene	105		12.438					ND	7
134 4-Chlorotoluene	126		12.475					ND	
135 tert-Butylbenzene	134		12.682					ND	7
136 Pentachloroethane	167		12.713					ND	
137 1,2,4-Trimethylbenzene	105		12.725					ND	7
138 sec-Butylbenzene	105		12.847					ND	7
139 1,3-Dichlorobenzene	146		12.944					ND	7
140 4-Isopropyltoluene	119		12.951					ND	7
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1319947	10.0	10.0	
142 1,4-Dichlorobenzene	146		13.018					ND	7
143 1,2,3-Trimethylbenzene	120		13.024					ND	7
144 Benzyl chloride	126		13.091					ND	7
145 p-Diethylbenzene	119	13.152	13.152	0.000	88	4586		0.0201	
146 n-Butylbenzene	92		13.243					ND	7
147 1,2-Dichlorobenzene	146		13.274					ND	7
148 Hexachloroethane	201		13.682					ND	
149 1,2-Dibromo-3-Chloropropane	155		13.816					ND	
150 1,3,5-Trichlorobenzene	180	13.944	13.944	0.000	93	4580		0.0315	
151 1,2,4-Trichlorobenzene	180	14.365	14.365	0.000	43	4931		0.0402	
152 Hexachlorobutadiene	225	14.444	14.444	0.000	91	5109		0.0858	
153 Naphthalene	128	14.554	14.542	0.012	93	5980		0.0302	
154 1,2,3-Trichlorobenzene	180	14.694	14.688	0.006	93	5583		0.0536	
155 2-Methylnaphthalene	142	15.310	15.304	0.006	89	12600		0.1057	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
156 tert-Butyl Formate	1		0.000						ND
157 Dodecane	57		0.000						ND
158 Pentane	43		0.000						ND
159 1,1-Dichloroacetone	1		0.000						ND
160 n-Decane	57		0.000						ND
161 1-Bromo-3-Chloropropane	1		0.000						ND
162 1-Chloropropane	1		0.000						ND
163 Propene oxide	1		0.000						ND
164 1,1-Dichloro-1-fluoroethane	1		0.000						ND
165 Methylal	1		0.000						ND
166 2-Bromo-1-chloropropane	1		0.000						ND

**QC Flag Legend**

## Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

## Review Flags

M - Manually Integrated

U - Marked Undetected

**Reagents:**

MSV\_LLcentISS\_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X35.D

Injection Date: 01-Dec-2022 21:36:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: MB

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

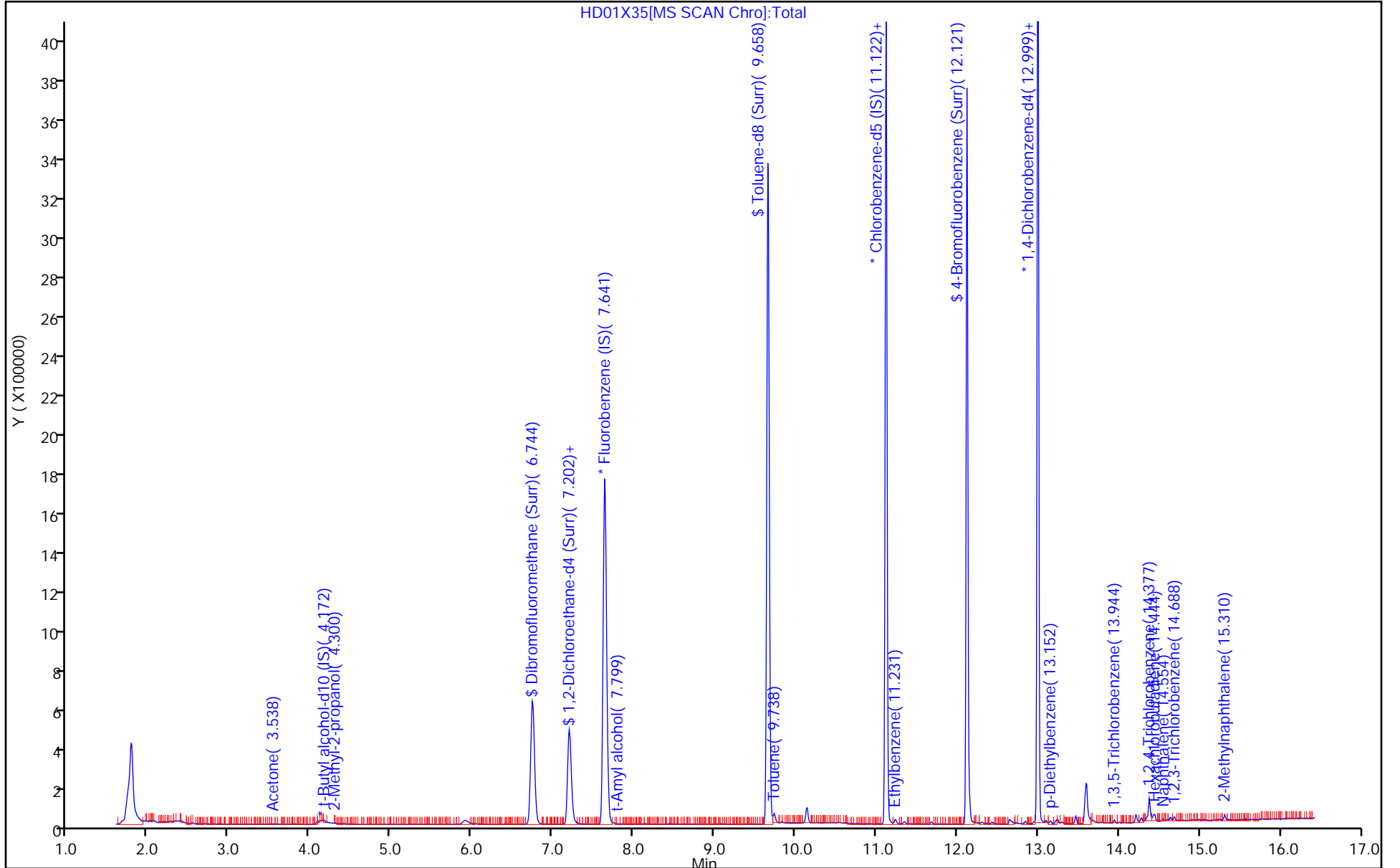
ALS Bottle#: 5

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X35.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 01-Dec-2022 21:36:30 ALS Bottle#: 5 Worklist Smp#: 6  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-006  
 Misc. Info.: MRL  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 03:23:26 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: USEJ Date: 01-Dec-2022 22:15:06

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.1	101.18
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.22
\$ 84 Toluene-d8 (Surr)	10.0	9.99	99.86
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.72	97.23

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X35.D

Injection Date: 01-Dec-2022 21:36:30 Instrument ID: 19094

Lims ID: MB

Client ID:

Operator ID: sej02002

ALS Bottle#: 5

Worklist Smp#: 6

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

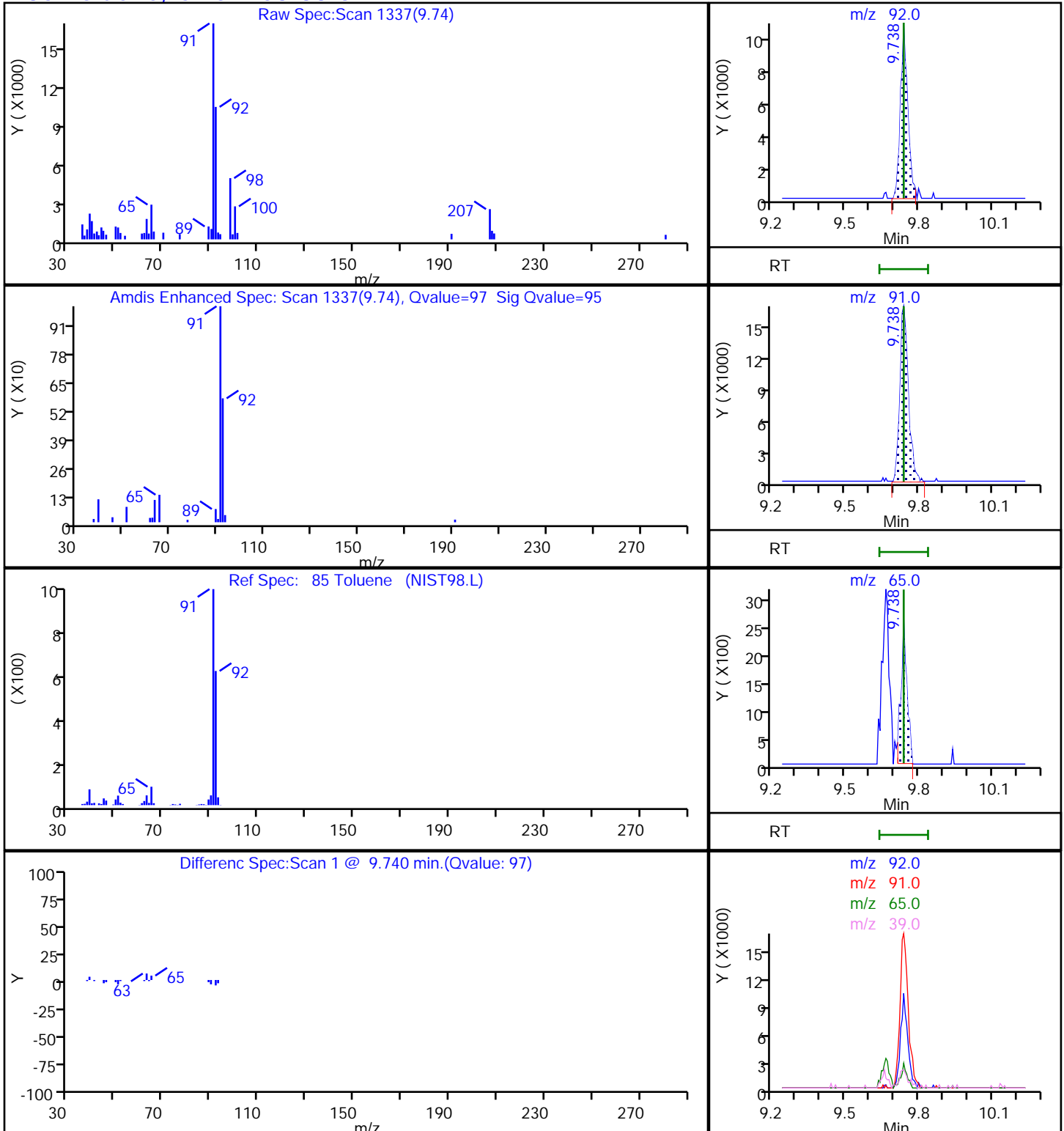
Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

85 Toluene, CAS: 108-88-3



Eurofins Lancaster Laboratories Environment Testing, LLC

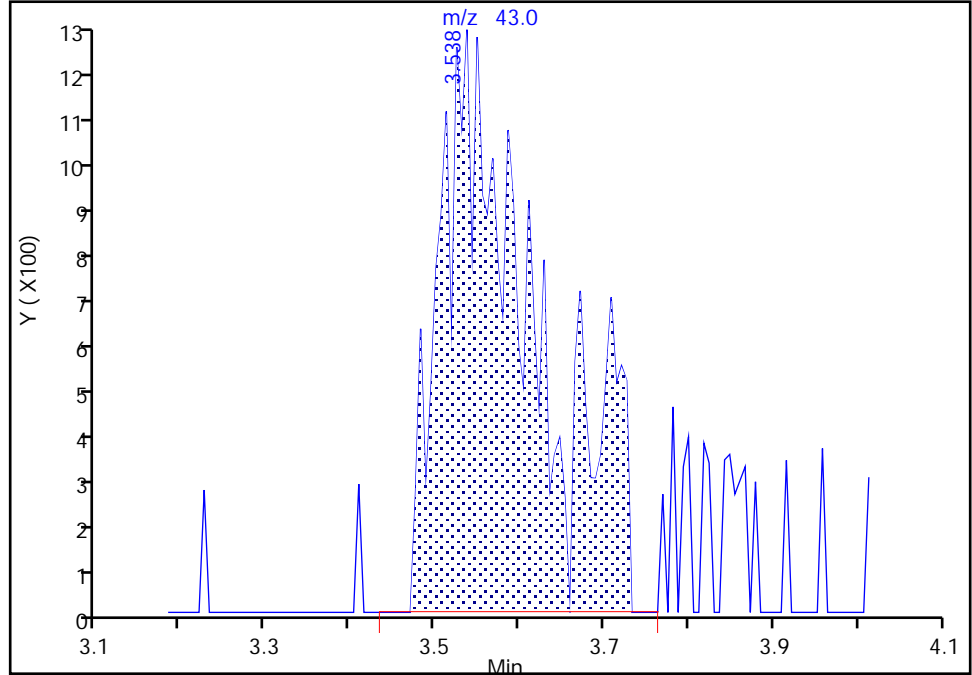
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Injection Date: 01-Dec-2022 21:36:30 Instrument ID: 19094  
Lims ID: MB  
Client ID:  
Operator ID: sej02002 ALS Bottle#: 5 Worklist Smp#: 6  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

19 Acetone, CAS: 67-64-1

Signal: 1

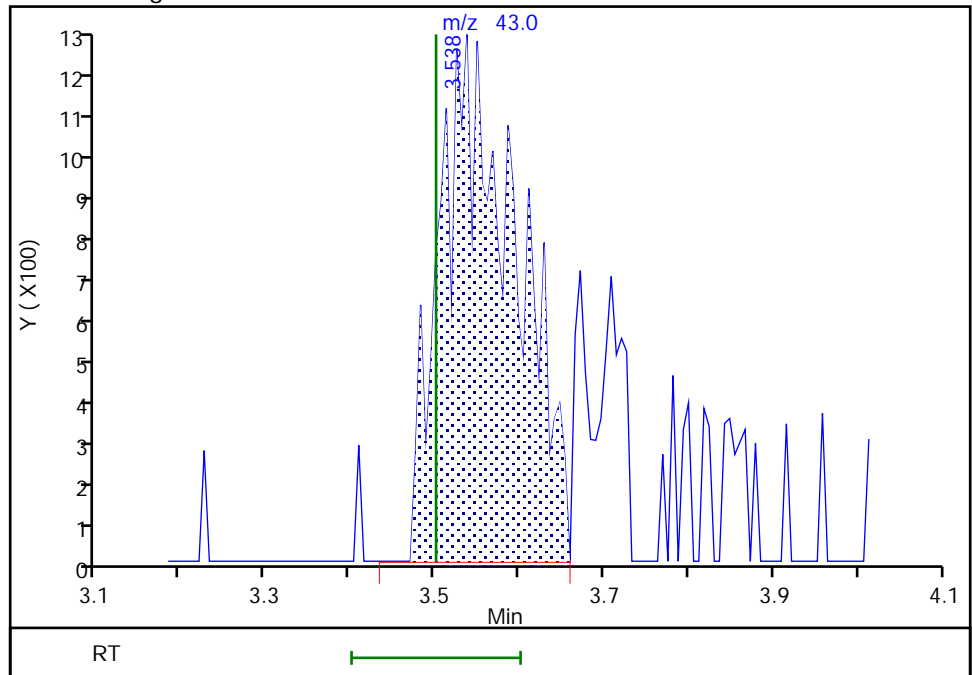
RT: 3.54  
Area: 9888  
Amount: 1.196192  
Amount Units: ug/l

Processing Integration Results



RT: 3.54  
Area: 7917  
Amount: 0.957752  
Amount Units: ug/l

Manual Integration Results



Reviewer: USEJ, 01-Dec-2022 22:13:00  
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID:

Lab Sample ID: MB 410-322942/6

Matrix: Water

Lab File ID: HD02X05.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 10:55

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322942

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories      Job No.: 410-106467-1  
 Environment Testing, LLC

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_      Lab Sample ID: MB 410-322942/6

Matrix: Water      Lab File ID: HD02X05.D

Analysis Method: 8260D      Date Collected: \_\_\_\_\_

Sample wt/vol: 25 (mL)      Date Analyzed: 12/02/2022 10:55

Soil Aliquot Vol: \_\_\_\_\_      Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_      GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)      Heated Purge: (Y/N) N pH: \_\_\_\_\_

% Moisture: \_\_\_\_\_ % Solids: \_\_\_\_\_      Level: (low/med) Low

Analysis Batch No.: 322942      Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	ND		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120



Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X05.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 02-Dec-2022 10:55:30 ALS Bottle#: 5 Worklist Smp#: 6  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072389-006  
 Misc. Info.: MB  
 Operator ID: knk41612 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 05-Dec-2022 14:45:01 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1604

First Level Reviewer: DVW2 Date: 02-Dec-2022 11:26:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.886					ND	
2 Dichlorodifluoromethane	85		1.934					ND	
3 Chlorodifluoromethane	51		1.934					ND	
4 Dimethyl ether	45		2.001					ND	
5 Chloromethane	50		2.129					ND	7
6 Butadiene	39		2.245					ND	7
7 Vinyl chloride	62		2.245					ND	
8 2-Chloro-1,1,1-Trifluoroethane	118		2.312					ND	
9 Bromomethane	94		2.562					ND	
10 Chloroethane	64		2.647					ND	
11 Dichlorofluoromethane	67		2.879					ND	
12 Trichlorofluoromethane	101		2.958					ND	
13 Ethanol	45		3.111					ND	
14 Ethyl ether	59		3.184					ND	
15 1,2-Dichloro-1,1,2-trifluoroethane	67		3.269					ND	
16 Acrolein	56		3.355					ND	
18 1,1-Dichloroethene	96		3.501					ND	
19 Acetone	43		3.513					ND	U
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101		3.544					ND	
21 Isopropyl alcohol	45		3.672					ND	
22 Iodomethane	142		3.690					ND	
23 Ethyl bromide	108		3.720					ND	
24 Carbon disulfide	76		3.800					ND	7
26 Acetonitrile	41		3.897					ND	
25 Methyl acetate	43		3.934					ND	
27 3-Chloro-1-propene	41		3.970					ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.153	4.147	0.006	19	127929	50.0	50.0	
28 Methylene Chloride	84		4.147					ND	
31 2-Methyl-2-propanol	59	4.257	4.281	-0.024	1	4526		1.64	
32 Acrylonitrile	53		4.476					ND	
33 Methyl tert-butyl ether	73		4.550					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	96		4.568					ND	
35 Hexane	57		4.995					ND	
36 Vinyl acetate	43		5.214					ND	
37 1,1-Dichloroethane	63		5.226					ND	
38 Isopropyl ether	45		5.281					ND	
39 2-Chloro-1,3-butadiene	53		5.330					ND	
41 Tert-butyl ethyl ether	59		5.805					ND	
42 2-Butanone (MEK)	43		6.001					ND	7
43 cis-1,2-Dichloroethene	96		6.049					ND	
44 2,2-Dichloropropane	77		6.061					ND	7
45 Propionitrile	54		6.098					ND	
46 Ethyl acetate	43		6.098					ND	7
S 47 1,2-Dichloroethene, Total	100		6.155					ND	7
48 Methacrylonitrile	67		6.305					ND	
50 Tetrahydrofuran	71		6.378					ND	
49 Chlorobromomethane	128		6.378					ND	
51 Methyl acrylate	55		6.482					ND	
52 Chloroform	83		6.531					ND	
\$ 53 Dibromofluoromethane (Surr)	113	6.750	6.744	0.006	94	635726	10.0	10.1	
54 1,1,1-Trichloroethane	97		6.769					ND	
55 Cyclohexane	56		6.872					ND	
56 1,1-Dichloropropene	75		6.976					ND	
57 Carbon tetrachloride	117		6.982					ND	
58 Isobutyl alcohol	41		7.110					ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.208	0.000	63	114800	10.0	9.98	
60 Benzene	78	7.244	7.238	0.006	83	7921		0.0254	
61 1-Chlorobutane	56		7.250					ND	
62 1,2-Dichloroethane	62		7.305					ND	7
63 Isopropyl acetate	43		7.324					ND	
64 Tert-amyl methyl ether	73		7.427					ND	
* 65 Fluorobenzene (IS)	96	7.640	7.640	0.000	99	2491608	10.0	10.0	
66 n-Heptane	43		7.659					ND	7
67 t-Amyl alcohol	73		7.842					ND	
68 n-Butanol	56		7.994					ND	
69 Trichloroethene	95		8.122					ND	
70 Methylcyclohexane	83		8.433					ND	7
71 1,2-Dichloropropane	63		8.451					ND	
72 2-ethoxy-2-methyl butane	87		8.457					ND	
74 Methyl methacrylate	69		8.530					ND	
73 1,4-Dioxane	88		8.543					ND	
75 Dibromomethane	93		8.561					ND	
76 n-Propyl acetate	61		8.622					ND	
77 Dichlorobromomethane	83		8.799					ND	
78 2-Nitropropane	41		9.061					ND	
79 2-Chloroethyl vinyl ether	63		9.171					ND	
80 1-Bromo-2-chloroethane	63		9.189					ND	
81 cis-1,3-Dichloropropene	75		9.347					ND	
82 Chloroacetonitrile	75		9.427					ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.512					ND	7
\$ 84 Toluene-d8 (Surr)	98	9.664	9.658	0.006	93	2767655	10.0	9.90	
85 Toluene	92	9.738	9.738	0.000	98	10802		0.0520	
86 trans-1,3-Dichloropropene	75		9.994					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 Ethyl methacrylate	69		10.055					ND	
S 104 1,3-Dichloropropene, Total	100		10.060					ND	7
106 1,1,2-Trichloroethane	97		10.201					ND	7
107 Tetrachloroethene	166		10.292					ND	
108 1,3-Dichloropropane	76		10.359					ND	
109 2-Hexanone	43		10.408					ND	7
110 n-Butyl acetate	43		10.530					ND	
111 Chlorodibromomethane	129		10.579					ND	
112 Ethylene Dibromide	107		10.689					ND	
* 113 Chlorobenzene-d5 (IS)	117	11.121	11.121	0.000	86	2285105	10.0	10.0	
114 1-Chlorohexane	91		11.128					ND	7
115 Chlorobenzene	112		11.146					ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231					ND	
118 Ethylbenzene	91		11.231					ND	7
S 117 Xylenes, Total	106		11.245					ND	7
119 m-Xylene & p-Xylene	106		11.347					ND	7
120 o-Xylene	106		11.676					ND	7
121 Styrene	104		11.688					ND	
122 Bromoform	173		11.847					ND	
123 Isopropylbenzene	105		11.975					ND	7
124 cis-1,4-Dichloro-2-butene	88		12.012					ND	
125 Cyclohexanone	55		12.042					ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	91	1131370	10.0	9.97	
127 1,1,2,2-Tetrachloroethane	83		12.219					ND	
128 Bromobenzene	156		12.237					ND	
129 trans-1,4-Dichloro-2-butene	53		12.243					ND	
130 1,2,3-Trichloropropane	110		12.261					ND	
131 N-Propylbenzene	91		12.304					ND	7
132 2-Chlorotoluene	126		12.377					ND	
133 1,3,5-Trimethylbenzene	105		12.438					ND	7
134 4-Chlorotoluene	126		12.475					ND	
135 tert-Butylbenzene	134		12.682					ND	7
136 Pentachloroethane	167		12.713					ND	
137 1,2,4-Trimethylbenzene	105		12.725					ND	7
138 sec-Butylbenzene	105		12.841					ND	7
139 1,3-Dichlorobenzene	146		12.944					ND	7
140 4-Isopropyltoluene	119		12.950					ND	7
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1297612	10.0	10.0	
142 1,4-Dichlorobenzene	146		13.017					ND	7
143 1,2,3-Trimethylbenzene	120		13.024					ND	7
144 Benzyl chloride	126		13.091					ND	
145 p-Diethylbenzene	119	13.158	13.152	0.006	89	3286		0.0146	
146 n-Butylbenzene	92		13.243					ND	7
147 1,2-Dichlorobenzene	146		13.273					ND	7
148 Hexachloroethane	201		13.682					ND	
149 1,2-Dibromo-3-Chloropropane	155		13.816					ND	
150 1,3,5-Trichlorobenzene	180		13.944					ND	7
151 1,2,4-Trichlorobenzene	180	14.371	14.365	0.006	90	4084		0.0339	
152 Hexachlorobutadiene	225	14.450	14.444	0.006	92	4125		0.0705	
153 Naphthalene	128		14.542					ND	7
154 1,2,3-Trichlorobenzene	180	14.694	14.688	0.006	93	3769		0.0368	
155 2-Methylnaphthalene	142	15.310	15.304	0.006	94	7260		0.0619	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
156 tert-Butyl Formate	1		0.000					ND	
157 Dodecane	57		0.000					ND	
158 Pentane	43		0.000					ND	
159 1,1-Dichloroacetone	1		0.000					ND	
160 n-Decane	57		0.000					ND	
161 1-Bromo-3-Chloropropane	1		0.000					ND	
162 1-Chloropropane	1		0.000					ND	
163 Propene oxide	1		0.000					ND	
164 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
165 Methylal	1		0.000					ND	
166 2-Bromo-1-chloropropane	1		0.000					ND	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

U - Marked Undetected

### Reagents:

MSV\_LLcentISS\_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X05.D

Injection Date: 02-Dec-2022 10:55:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: MB

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

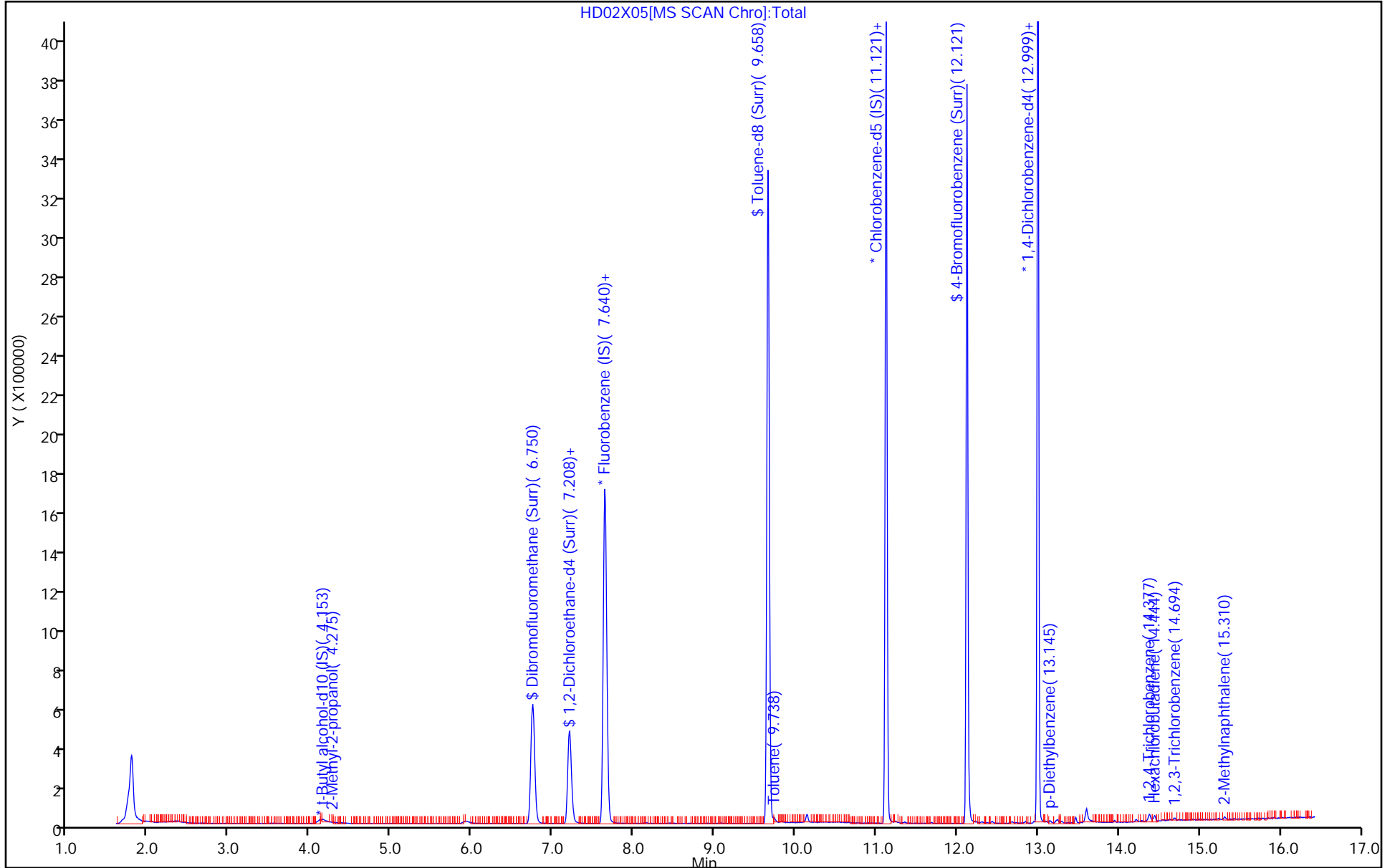
ALS Bottle#: 5

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X05.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 02-Dec-2022 10:55:30      ALS Bottle#: 5      Worklist Smp#: 6  
 Purge Vol: 25.000 mL      Dil. Factor: 1.0000  
 Sample Info: 410-0072389-006  
 Misc. Info.: MB  
 Operator ID: knk41612      Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 05-Dec-2022 14:45:01      Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE      ID Type: Deconvolution ID  
 Quant Method: Internal Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm)      Det: MS Quad  
 Process Host: CTX1604

First Level Reviewer: DVW2      Date: 02-Dec-2022 11:26:40

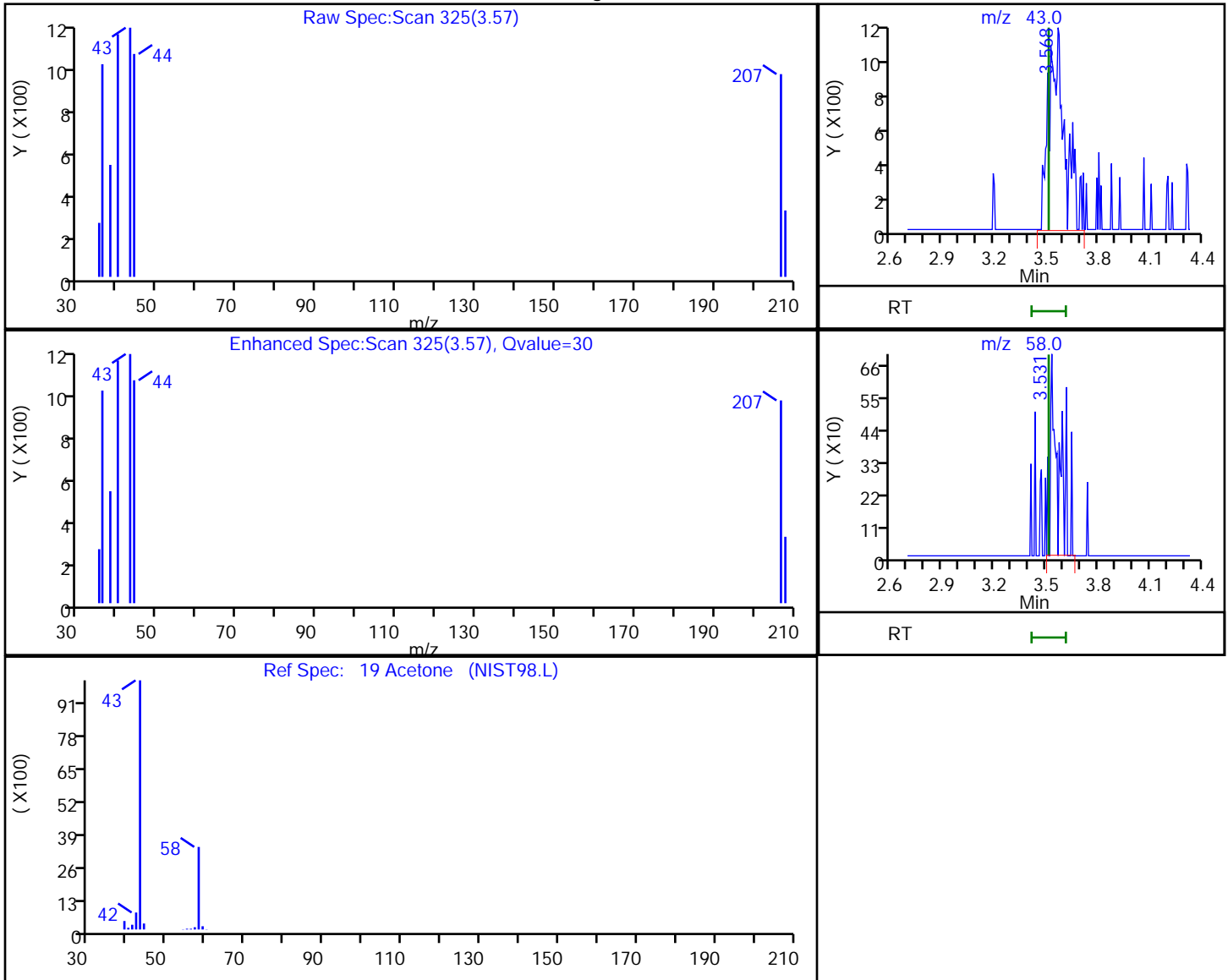
Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.1	100.81
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.98	99.76
\$ 84 Toluene-d8 (Surr)	10.0	9.90	99.00
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.97	99.69

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X05.D  
 Injection Date: 02-Dec-2022 10:55:30 Instrument ID: 19094  
 Lims ID: MB  
 Client ID:  
 Operator ID: knk41612 ALS Bottle#: 5 Worklist Smp#: 6  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Method: MSV\_19094\_25mL Limit Group: MSV - 8260C\_D  
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

19 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
3.57	43.00	7735	0.945090
3.53	58.00	2394	

Reviewer: kaewrungrueangp, 05-Dec-2022 14:44:39

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID:

Lab Sample ID: LCS 410-322544/4

Matrix: Water

Lab File ID: GD01X03.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 10:56

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.13		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.83		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	5.55		0.50	0.10
79-00-5	1,1,2-Trichloroethane	5.10		0.50	0.080
75-34-3	1,1-Dichloroethane	5.20		0.50	0.10
75-35-4	1,1-Dichloroethene	4.96		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	4.85		0.50	0.080
107-06-2	1,2-Dichloroethane	5.00		0.50	0.070
78-87-5	1,2-Dichloropropane	5.40		0.50	0.10
78-93-3	2-Butanone (MEK)	60.6		5.0	1.0
591-78-6	2-Hexanone	63.1		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	62.4		5.0	1.0
67-64-1	Acetone	53.9		5.0	1.0
71-43-2	Benzene	5.01		0.50	0.10
74-97-5	Bromochloromethane	4.64		0.50	0.080
75-27-4	Bromodichloromethane	5.39		0.50	0.080
75-25-2	Bromoform	5.86		1.0	0.30
74-83-9	Bromomethane	4.65		0.50	0.10
75-15-0	Carbon disulfide	6.75		1.0	0.10
56-23-5	Carbon tetrachloride	4.82		0.50	0.10
108-90-7	Chlorobenzene	4.75		0.50	0.070
75-00-3	Chloroethane	5.24		0.50	0.10
67-66-3	Chloroform	4.82		0.50	0.090
74-87-3	Chloromethane	5.57		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	4.93		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.24		0.50	0.10
124-48-1	Dibromochloromethane	5.57		0.50	0.080
100-41-4	Ethylbenzene	5.04		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.10		0.50	0.080
75-09-2	Methylene Chloride	5.10		0.50	0.10
100-42-5	Styrene	4.85		0.50	0.070
127-18-4	Tetrachloroethene	4.51		0.50	0.20
108-88-3	Toluene	4.99		0.50	0.080



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID:

Lab Sample ID: LCS 410-322544/4

Matrix: Water

Lab File ID: GD01X03.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 10:56

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	4.75		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	6.01		0.50	0.080
79-01-6	Trichloroethene	4.63		0.50	0.080
75-01-4	Vinyl chloride	5.30		0.50	0.10
1330-20-7	Xylenes, Total	14.6		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	104		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-120
2037-26-5	Toluene-d8 (Surr)	106		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X03.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 01-Dec-2022 10:56:30 ALS Bottle#: 3 Worklist Smp#: 4  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-004  
 Misc. Info.: LCS  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:06:39 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: DVW2

Date: 01-Dec-2022 11:18:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.898	1.892	0.006	99	349369	5.00	4.55	
5 Chloromethane	50	2.093	2.087	0.006	99	482802	5.00	5.57	
6 Vinyl chloride	62	2.203	2.202	0.001	98	469195	5.00	5.30	
7 Butadiene	39	2.209	2.209	0.000	93	396255	5.00	4.71	
9 Bromomethane	94	2.526	2.519	0.007	91	324941	5.00	4.65	
10 Chloroethane	64	2.605	2.599	0.006	100	276886	5.00	5.24	
11 Dichlorofluoromethane	67	2.830	2.830	0.000	97	679012	5.00	5.26	
12 Trichlorofluoromethane	101	2.898	2.897	0.001	96	558487	5.00	4.59	
13 Ethyl ether	59	3.135	3.129	0.006	91	224347	4.99	3.97	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.221	3.214	0.007	93	427727	5.00	4.97	
17 Acrolein	56	3.312	3.300	0.012	100	336489	37.5	34.7	
18 1,1-Dichloroethene	96	3.428	3.422	0.006	98	316124	5.00	4.96	
19 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.471	3.464	0.007	93	312500	5.00	5.03	
20 Acetone	43	3.483	3.477	0.006	100	573741	62.5	53.9	
21 Iodomethane	142	3.611	3.611	0.000	100	550567	5.00	4.56	
22 Ethyl bromide	108	3.641	3.635	0.006	98	296873	4.89	5.07	
24 Isopropyl alcohol	45	3.714	3.690	0.024	26	66939	37.5	40.9	
23 Carbon disulfide	76	3.708	3.708	0.000	99	1049021	5.00	6.75	
25 Methyl acetate	43	3.879	3.873	0.006	98	161086	5.00	4.88	M
27 3-Chloro-1-propene	41	3.885	3.885	0.000	93	522890	5.00	6.08	
29 Methylene Chloride	84	4.068	4.062	0.006	92	360183	5.00	5.10	
* 30 t-Butyl alcohol-d10 (IS)	65	4.141	4.147	-0.006	84	209969	50.0	50.0	
31 2-Methyl-2-propanol	59	4.251	4.251	0.000	93	165964	50.0	44.6	
32 Acrylonitrile	53	4.409	4.409	0.000	97	381301	25.0	27.0	
33 Methyl tert-butyl ether	73	4.458	4.458	0.000	95	928114	5.00	5.10	
34 trans-1,2-Dichloroethene	96	4.470	4.464	0.006	99	353627	5.00	4.75	
35 Hexane	57	4.897	4.897	0.000	92	472426	5.00	5.81	
37 1,1-Dichloroethane	63	5.141	5.135	0.006	96	629586	5.00	5.20	
38 Isopropyl ether	45	5.196	5.196	0.000	94	1133966	5.00	5.67	
39 2-Chloro-1,3-butadiene	53	5.251	5.245	0.006	91	516284	5.00	5.36	
40 Tert-butyl ethyl ether	59	5.732	5.732	0.000	97	1080228	5.00	5.25	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.946	5.940	0.006	100	1275258	62.5	60.6	
42 cis-1,2-Dichloroethene	96	5.976	5.970	0.006	82	400959	5.00	4.93	
43 2,2-Dichloropropane	77	5.988	5.988	0.000	85	531833	5.00	5.44	
45 Propionitrile	54	6.043	6.031	0.012	98	179734	37.5	36.1	
48 Methacrylonitrile	67	6.244	6.244	0.000	92	758622	37.5	33.8	
49 Chlorobromomethane	128	6.311	6.299	0.012	93	180936	5.00	4.64	
50 Tetrahydrofuran	71	6.318	6.305	0.013	72	142099	25.0	22.8	
51 Chloroform	83	6.464	6.458	0.006	93	624798	5.00	4.82	
\$ 52 Dibromofluoromethane (Surr)	113	6.677	6.671	0.006	94	710840	10.0	9.68	
53 1,1,1-Trichloroethane	97	6.683	6.677	0.006	99	546330	5.00	4.83	
54 Cyclohexane	56	6.781	6.775	0.006	91	570981	5.00	5.55	
56 Carbon tetrachloride	117	6.891	6.891	0.000	98	468784	5.00	4.82	
57 1,1-Dichloropropene	75	6.897	6.897	0.000	98	502918	5.00	5.00	
58 Isobutyl alcohol	41	7.092	7.086	0.006	89	149828	125.0	141.1	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.128	7.122	0.006	90	151550	10.0	9.71	
60 Benzene	78	7.165	7.159	0.006	97	1483451	5.00	5.01	
61 1,2-Dichloroethane	62	7.232	7.226	0.006	97	422106	5.00	5.00	
63 Tert-amyl methyl ether	73	7.354	7.354	0.000	99	1015188	5.00	5.20	
* 64 Fluorobenzene (IS)	96	7.567	7.567	0.000	99	2959344	10.0	10.0	
65 n-Heptane	43	7.580	7.579	0.001	92	499244	5.00	5.88	
67 n-Butanol	56	7.982	7.976	0.006	90	341306	250.0	314.3	
68 Trichloroethene	95	8.049	8.043	0.006	98	383057	5.00	4.63	
69 Methylcyclohexane	83	8.354	8.348	0.006	93	603000	5.00	4.90	
70 1,2-Dichloropropane	63	8.378	8.378	0.000	97	391481	5.00	5.40	
71 2-ethoxy-2-methyl butane	87	8.390	8.390	0.000	93	564327	5.00	4.86	
72 Methyl methacrylate	69	8.476	8.463	0.013	90	195162	5.00	4.47	
73 Dibromomethane	93	8.488	8.482	0.006	96	191769	5.00	4.82	
74 1,4-Dioxane	88	8.549	8.512	0.037	82	55224	125.0	229.9	
76 Dichlorobromomethane	83	8.726	8.726	0.000	99	469560	5.00	5.39	
77 2-Nitropropane	41	9.006	9.000	0.006	99	48408	5.00	4.93	
81 cis-1,3-Dichloropropene	75	9.280	9.280	0.000	96	569080	5.00	5.24	
82 4-Methyl-2-pentanone (MIBK)	43	9.463	9.463	0.000	97	3455615	62.5	62.4	
\$ 83 Toluene-d8 (Surr)	98	9.597	9.597	0.000	93	2993768	10.0	10.6	
84 Toluene	92	9.671	9.671	0.000	98	952727	5.00	4.99	
85 trans-1,3-Dichloropropene	75	9.939	9.933	0.006	92	511320	5.00	6.01	
104 Ethyl methacrylate	69	10.006	10.000	0.006	89	399448	5.00	5.45	
106 1,1,2-Trichloroethane	97	10.140	10.140	0.000	91	286698	5.00	5.10	
107 Tetrachloroethene	166	10.231	10.225	0.006	98	434405	5.00	4.51	
108 1,3-Dichloropropane	76	10.305	10.305	0.000	89	501505	5.00	5.44	
109 2-Hexanone	43	10.366	10.359	0.007	96	2546520	62.5	63.1	
111 Chlorodibromomethane	129	10.518	10.518	0.000	90	342087	5.00	5.57	
112 Ethylene Dibromide	107	10.628	10.628	0.000	99	268495	5.00	4.85	
* 113 Chlorobenzene-d5 (IS)	117	11.067	11.067	0.000	85	2202920	10.0	10.0	
114 1-Chlorohexane	91	11.079	11.079	0.000	97	517396	5.00	4.83	
115 Chlorobenzene	112	11.091	11.091	0.000	95	1098262	5.00	4.75	
117 1,1,1,2-Tetrachloroethane	131	11.176	11.176	0.000	95	380684	5.00	5.13	
116 Ethylbenzene	91	11.182	11.176	0.006	98	1866130	5.00	5.04	
119 m-Xylene & p-Xylene	106	11.298	11.292	0.006	89	1454638	10.0	9.77	
120 o-Xylene	106	11.628	11.627	0.001	96	713844	5.00	4.84	
121 Styrene	104	11.640	11.640	0.000	95	1210609	5.00	4.85	
122 Bromoform	173	11.798	11.792	0.006	96	202799	5.00	5.86	
123 Isopropylbenzene	105	11.926	11.926	0.000	96	1861230	5.00	4.94	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 126 4-Bromofluorobenzene (Surr)	95	12.066	12.066	0.000	90	1097304	10.0	10.4	
127 1,1,2,2-Tetrachloroethane	83	12.170	12.170	0.000	93	379346	5.00	5.55	
128 Bromobenzene	156	12.182	12.182	0.000	97	465028	5.00	4.72	
129 trans-1,4-Dichloro-2-butene	53	12.201	12.194	0.007	93	517894	25.0	25.4	
130 1,2,3-Trichloropropane	110	12.219	12.219	0.000	83	103062	5.00	5.25	
131 N-Propylbenzene	91	12.255	12.255	0.000	99	2254475	5.00	5.24	
132 2-Chlorotoluene	126	12.329	12.329	0.000	97	450698	5.00	4.76	
133 1,3,5-Trimethylbenzene	105	12.390	12.390	0.000	94	1596878	5.00	4.95	
134 4-Chlorotoluene	126	12.420	12.420	0.000	98	478433	5.00	4.84	
135 tert-Butylbenzene	134	12.633	12.627	0.006	93	337861	5.00	4.55	
136 Pentachloroethane	167	12.664	12.664	0.000	92	274046	5.00	5.16	
137 1,2,4-Trimethylbenzene	105	12.676	12.670	0.006	97	1689421	5.00	5.09	
138 sec-Butylbenzene	105	12.792	12.792	0.000	94	2071119	5.00	5.12	
139 1,3-Dichlorobenzene	146	12.889	12.889	0.000	98	927538	5.00	4.56	
140 4-Isopropyltoluene	119	12.902	12.902	0.000	97	1833534	5.00	4.97	
* 141 1,4-Dichlorobenzene-d4	152	12.944	12.944	0.000	94	1279644	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.963	12.963	0.000	95	975103	5.00	4.58	
143 1,2,3-Trimethylbenzene	120	12.975	12.975	0.000	99	733638	5.00	4.81	
144 Benzyl chloride	126	13.042	13.042	0.000	99	150529	5.00	5.68	
145 p-Diethylbenzene	119	13.103	13.097	0.006	92	1081477	5.00	4.93	
146 n-Butylbenzene	92	13.188	13.188	0.000	96	947686	5.00	5.26	
147 1,2-Dichlorobenzene	146	13.225	13.225	0.000	98	895302	5.00	4.69	
149 1,2-Dibromo-3-Chloropropane	155	13.761	13.761	0.000	86	53445	5.00	5.31	
150 1,3,5-Trichlorobenzene	180	13.883	13.883	0.000	98	741453	5.00	4.52	
151 1,2,4-Trichlorobenzene	180	14.304	14.304	0.000	94	679560	5.00	4.42	
152 Hexachlorobutadiene	225	14.389	14.389	0.000	97	344432	5.00	4.73	
153 Naphthalene	128	14.487	14.487	0.000	97	1250612	5.00	4.81	
154 1,2,3-Trichlorobenzene	180	14.627	14.627	0.000	96	630545	5.00	4.64	
155 2-Methylnaphthalene	142	15.230	15.230	0.000	92	802325	5.00	4.78	
166 Pentane	43	2.928	2.928	0.000	97	520379	NR	NR	

## QC Flag Legend

### Processing Flags

NR - Missing Quant Standard

### Review Flags

M - Manually Integrated

## Reagents:

MSV_LCS_VOC#1_00084	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00111	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00004	Amount Added: 12.50	Units: uL	
LCS_ETBR_00004	Amount Added: 12.50	Units: uL	
MSV_LCS_Penta_00023	Amount Added: 12.50	Units: uL	
MSV_LCS_ACROL_00086	Amount Added: 12.50	Units: uL	
MSV_29_826ISS_00040	Amount Added: 1.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X03.D

Injection Date: 01-Dec-2022 10:56:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

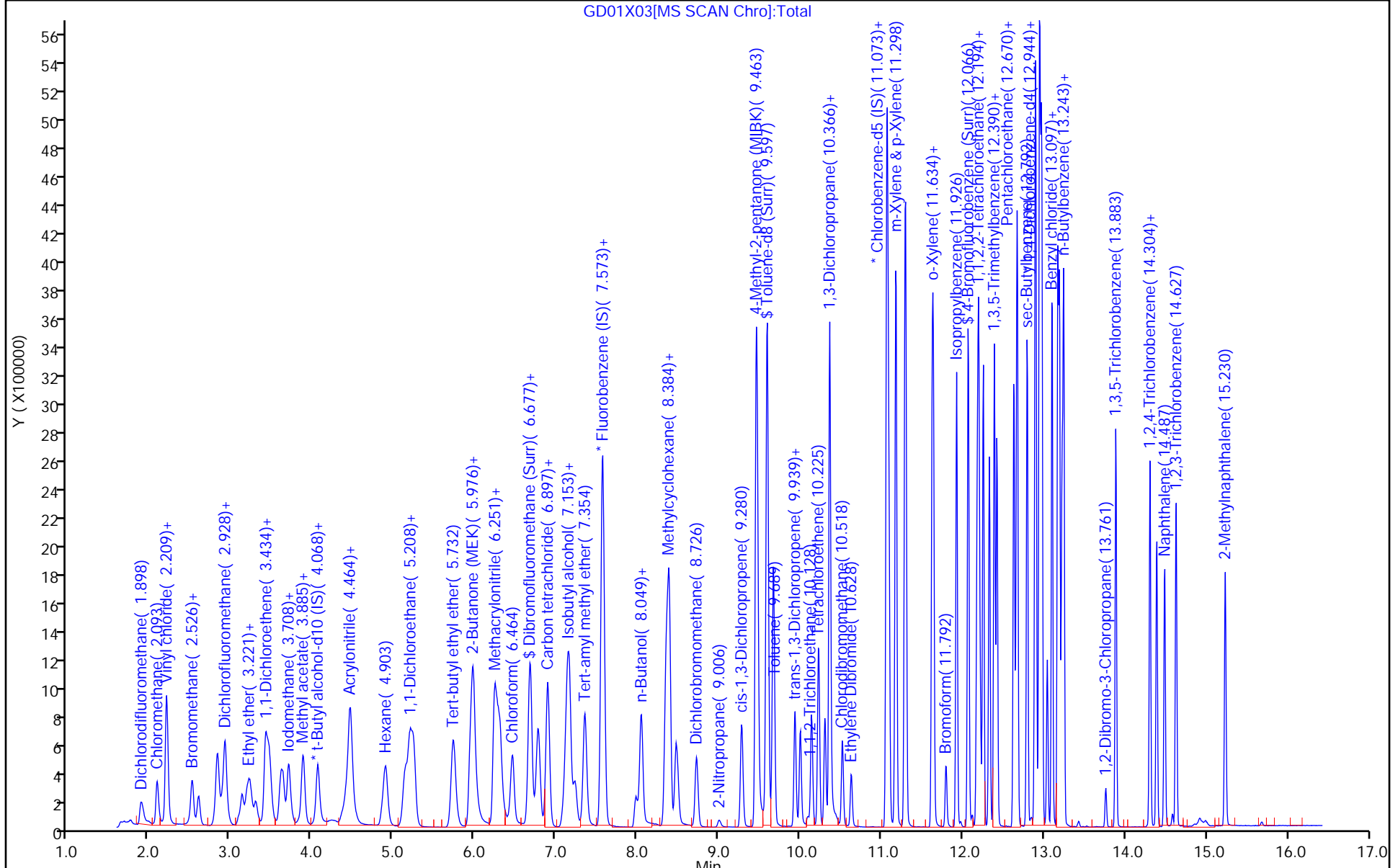
ALS Bottle#: 3

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



GD01X03[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X03.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 01-Dec-2022 10:56:30 ALS Bottle#: 3 Worklist Smp#: 4  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-004  
 Misc. Info.: LCS  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:06:39 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: DVW2 Date: 01-Dec-2022 11:18:35

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.68	96.75
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.71	97.12
\$ 83 Toluene-d8 (Surr)	10.0	10.6	106.12
\$ 126 4-Bromofluorobenzene (Surr)	10.0	10.4	104.50

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID:

Lab Sample ID: LCS 410-322841/4

Matrix: Water

Lab File ID: HD01X33.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 20:55

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.04		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.17		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	4.93		0.50	0.10
79-00-5	1,1,2-Trichloroethane	5.18		0.50	0.080
75-34-3	1,1-Dichloroethane	5.20		0.50	0.10
75-35-4	1,1-Dichloroethene	5.29		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.09		0.50	0.080
107-06-2	1,2-Dichloroethane	5.39		0.50	0.070
78-87-5	1,2-Dichloropropane	5.16		0.50	0.10
78-93-3	2-Butanone (MEK)	71.9		5.0	1.0
591-78-6	2-Hexanone	76.7		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	73.7		5.0	1.0
67-64-1	Acetone	60.7		5.0	1.0
71-43-2	Benzene	5.17		0.50	0.10
74-97-5	Bromochloromethane	5.20		0.50	0.080
75-27-4	Bromodichloromethane	5.20		0.50	0.080
75-25-2	Bromoform	4.82		1.0	0.30
74-83-9	Bromomethane	4.99		0.50	0.10
75-15-0	Carbon disulfide	5.58		1.0	0.10
56-23-5	Carbon tetrachloride	5.16		0.50	0.10
108-90-7	Chlorobenzene	5.03		0.50	0.070
75-00-3	Chloroethane	5.32		0.50	0.10
67-66-3	Chloroform	5.11		0.50	0.090
74-87-3	Chloromethane	5.47		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	5.26		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	4.84		0.50	0.10
124-48-1	Dibromochloromethane	4.88		0.50	0.080
100-41-4	Ethylbenzene	5.12		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.24		0.50	0.080
75-09-2	Methylene Chloride	5.20		0.50	0.10
100-42-5	Styrene	5.15		0.50	0.070
127-18-4	Tetrachloroethene	4.97		0.50	0.20
108-88-3	Toluene	5.16		0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories      Job No.: 410-106467-1  
Environment Testing, LLC

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_      Lab Sample ID: LCS 410-322841/4

Matrix: Water      Lab File ID: HD01X33.D

Analysis Method: 8260D      Date Collected: \_\_\_\_\_

Sample wt/vol: 25 (mL)      Date Analyzed: 12/01/2022 20:55

Soil Aliquot Vol: \_\_\_\_\_      Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_      GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)      Heated Purge: (Y/N) N pH: \_\_\_\_\_

% Moisture: \_\_\_\_\_ % Solids: \_\_\_\_\_      Level: (low/med) Low

Analysis Batch No.: 322841      Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	5.10		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	5.09		0.50	0.080
79-01-6	Trichloroethene	5.10		0.50	0.080
75-01-4	Vinyl chloride	5.33		0.50	0.10
1330-20-7	Xylenes, Total	15.3		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120



Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X33.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 01-Dec-2022 20:55:30 ALS Bottle#: 3 Worklist Smp#: 4  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-004  
 Misc. Info.: LCS  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 01-Dec-2022 21:56:30 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1643

First Level Reviewer: USEJ

Date: 01-Dec-2022 21:25:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.928	1.922	0.006	99	396343	5.00	4.82	
5 Chloromethane	50	2.123	2.117	0.006	99	564071	5.00	5.47	
6 Butadiene	39	2.245	2.233	0.012	93	739631	5.00	7.60	
7 Vinyl chloride	62	2.245	2.239	0.006	86	543757	5.00	5.33	
9 Bromomethane	94	2.562	2.556	0.006	91	357920	5.00	4.99	
10 Chloroethane	64	2.648	2.642	0.006	100	329458	5.00	5.32	
11 Dichlorofluoromethane	67	2.873	2.867	0.006	97	746357	5.00	5.44	
12 Trichlorofluoromethane	101	2.959	2.946	0.013	97	618109	5.00	5.00	
14 Ethyl ether	59	3.184	3.178	0.006	95	189110	4.99	3.66	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.270	3.269	0.001	93	494645	5.00	5.14	
16 Acrolein	56	3.361	3.355	0.006	100	267648	37.5	41.2	
18 1,1-Dichloroethene	96	3.495	3.495	0.000	97	369090	5.00	5.29	
19 Acetone	43	3.519	3.501	0.018	98	459891	62.5	60.7	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.538	3.538	0.000	93	360369	5.00	5.29	
21 Isopropyl alcohol	45	3.648	3.647	0.001	96	39336	37.5	22.8	
22 Iodomethane	142	3.690	3.684	0.006	99	655651	5.00	5.40	
23 Ethyl bromide	108	3.721	3.715	0.007	98	345924	4.89	5.64	
24 Carbon disulfide	76	3.800	3.794	0.006	99	1042208	5.00	5.58	
25 Methyl acetate	43	3.940	3.922	0.018	97	118053	5.00	5.89	M
27 3-Chloro-1-propene	41	3.965	3.958	0.007	93	633275	5.00	5.23	
* 29 t-Butyl alcohol-d10 (IS)	65	4.160	4.117	0.043	97	118345	50.0	50.0	
28 Methylene Chloride	84	4.147	4.147	0.000	95	376036	5.00	5.20	
31 2-Methyl-2-propanol	59	4.251	4.233	0.018	98	146387	50.0	57.2	
32 Acrylonitrile	53	4.477	4.477	0.000	98	297422	25.0	29.1	
33 Methyl tert-butyl ether	73	4.544	4.550	-0.006	96	817912	5.00	5.24	
34 trans-1,2-Dichloroethene	96	4.568	4.568	0.000	97	395627	5.00	5.10	
35 Hexane	57	5.001	4.983	0.018	93	581790	5.00	5.36	
37 1,1-Dichloroethane	63	5.220	5.220	0.000	96	753358	5.00	5.20	
38 Isopropyl ether	45	5.275	5.269	0.006	96	1293327	5.00	5.24	
39 2-Chloro-1,3-butadiene	53	5.330	5.330	0.000	90	677967	5.00	5.72	
41 Tert-butyl ethyl ether	59	5.806	5.806	0.000	99	1105729	5.00	5.07	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 2-Butanone (MEK)	43	6.007	6.001	0.006	100	947016	62.5	71.9	
43 cis-1,2-Dichloroethene	96	6.056	6.049	0.007	83	447847	5.00	5.26	
44 2,2-Dichloropropane	77	6.074	6.068	0.006	89	670796	5.00	5.52	
45 Propionitrile	54	6.092	6.080	0.012	98	161673	37.5	47.9	
48 Methacrylonitrile	67	6.318	6.299	0.019	92	637255	37.5	43.7	
50 Tetrahydrofuran	71	6.391	6.379	0.012	80	107268	25.0	28.5	
49 Chlorobromomethane	128	6.385	6.385	0.000	96	176952	5.00	5.20	
52 Chloroform	83	6.537	6.531	0.006	93	699708	5.00	5.11	
\$ 53 Dibromofluoromethane (Surr)	113	6.751	6.751	0.001	94	687367	10.0	10.1	
54 1,1,1-Trichloroethane	97	6.763	6.763	0.000	99	658753	5.00	5.17	
55 Cyclohexane	56	6.872	6.866	0.006	91	719643	5.00	4.98	
56 1,1-Dichloropropene	75	6.982	6.976	0.006	96	618349	5.00	5.37	
57 Carbon tetrachloride	117	6.976	6.976	0.000	85	567673	5.00	5.16	
58 Isobutyl alcohol	41	7.110	7.098	0.012	95	126544	125.0	151.5	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.202	7.202	0.000	78	123465	10.0	9.96	
60 Benzene	78	7.238	7.238	0.000	97	1734908	5.00	5.17	
62 1,2-Dichloroethane	62	7.311	7.305	0.006	97	391735	5.00	5.39	
64 Tert-amyl methyl ether	73	7.427	7.427	0.000	98	922944	5.00	4.96	
* 65 Fluorobenzene (IS)	96	7.641	7.641	0.000	97	2685124	10.0	10.0	
66 n-Heptane	43	7.659	7.659	0.000	92	578360	5.00	4.87	
68 n-Butanol	56	8.000	7.994	0.006	88	211680	250.0	296.4	
69 Trichloroethene	95	8.122	8.122	0.000	99	450605	5.00	5.10	
70 Methylcyclohexane	83	8.439	8.433	0.006	94	731036	5.00	4.90	
71 1,2-Dichloropropane	63	8.458	8.451	0.007	87	434493	5.00	5.16	
72 2-ethoxy-2-methyl butane	87	8.464	8.457	0.007	89	552302	5.00	4.68	
74 Methyl methacrylate	69	8.537	8.537	0.000	90	165897	5.00	5.71	
73 1,4-Dioxane	88	8.555	8.549	0.006	28	26431	125.0	142.5	
75 Dibromomethane	93	8.567	8.561	0.006	95	176890	5.00	5.04	
77 Dichlorobromomethane	83	8.799	8.799	0.000	99	493124	5.00	5.20	
78 2-Nitropropane	41	9.061	9.061	0.000	97	41322	5.00	5.74	
81 cis-1,3-Dichloropropene	75	9.354	9.348	0.006	96	575719	5.00	4.84	
83 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	97	2629768	62.5	73.7	
\$ 84 Toluene-d8 (Surr)	98	9.659	9.658	0.001	93	2936312	10.0	10.1	
85 Toluene	92	9.738	9.738	0.000	98	1120097	5.00	5.16	
86 trans-1,3-Dichloropropene	75	9.994	9.994	0.000	93	469845	5.00	5.09	
105 Ethyl methacrylate	69	10.055	10.055	0.000	90	367951	5.00	5.20	
106 1,1,2-Trichloroethane	97	10.201	10.195	0.006	89	266049	5.00	5.18	
107 Tetrachloroethene	166	10.293	10.292	0.001	97	498101	5.00	4.97	
108 1,3-Dichloropropane	76	10.366	10.360	0.006	89	460786	5.00	5.20	
109 2-Hexanone	43	10.408	10.408	0.000	98	1817439	62.5	76.7	
111 Chlorodibromomethane	129	10.579	10.579	0.000	90	310562	5.00	4.88	
112 Ethylene Dibromide	107	10.689	10.689	0.000	97	239674	5.00	5.09	
* 113 Chlorobenzene-d5 (IS)	117	11.122	11.122	0.000	86	2386307	10.0	10.0	
114 1-Chlorohexane	91	11.128	11.128	0.000	98	636628	5.00	4.75	
115 Chlorobenzene	112	11.146	11.146	0.000	94	1163379	5.00	5.03	
116 1,1,1,2-Tetrachloroethane	131	11.231	11.231	0.000	95	399530	5.00	5.04	
118 Ethylbenzene	91	11.231	11.231	0.000	99	2169379	5.00	5.12	
119 m-Xylene & p-Xylene	106	11.347	11.347	0.000	100	1641337	10.0	10.2	
120 o-Xylene	106	11.676	11.676	0.000	96	795583	5.00	5.10	
121 Styrene	104	11.695	11.695	0.000	95	1304386	5.00	5.15	
122 Bromoform	173	11.853	11.847	0.006	98	176684	5.00	4.82	
123 Isopropylbenzene	105	11.975	11.975	0.000	96	2141734	5.00	5.07	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	92	1177888	10.0	9.94	
127 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	93	309139	5.00	4.93	
128 Bromobenzene	156	12.237	12.237	0.000	94	470376	5.00	5.01	
129 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	89	113914	25.0	9.23	
130 1,2,3-Trichloropropane	110	12.268	12.268	0.000	84	77002	5.00	4.89	
131 N-Propylbenzene	91	12.304	12.304	0.000	99	2541540	5.00	4.86	
132 2-Chlorotoluene	126	12.384	12.377	0.007	97	494542	5.00	4.91	
133 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	94	1762540	5.00	4.83	
134 4-Chlorotoluene	126	12.475	12.475	0.000	97	503296	5.00	4.98	
135 tert-Butylbenzene	134	12.682	12.682	0.000	93	380895	5.00	4.72	
136 Pentachloroethane	167	12.713	12.713	0.000	92	287008	5.00	5.06	
137 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1772172	5.00	4.81	
138 sec-Butylbenzene	105	12.847	12.847	0.000	94	2275787	5.00	4.76	
139 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	948782	5.00	4.88	
140 4-Isopropyltoluene	119	12.951	12.951	0.001	97	1965967	5.00	4.80	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1370093	10.0	10.0	
142 1,4-Dichlorobenzene	146	13.018	13.018	0.000	94	943107	5.00	4.89	
143 1,2,3-Trimethylbenzene	120	13.024	13.024	0.000	99	743922	5.00	4.74	
144 Benzyl chloride	126	13.091	13.091	0.000	98	121251	5.00	4.76	
145 p-Diethylbenzene	119	13.152	13.152	0.000	91	1114330	5.00	4.70	
146 n-Butylbenzene	92	13.243	13.243	0.000	97	944967	5.00	4.57	
147 1,2-Dichlorobenzene	146	13.274	13.274	0.000	99	823015	5.00	4.78	
149 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	88	36733	5.00	4.44	
150 1,3,5-Trichlorobenzene	180	13.944	13.944	0.000	98	700283	5.00	4.63	
151 1,2,4-Trichlorobenzene	180	14.365	14.365	0.000	94	565458	5.00	4.44	
152 Hexachlorobutadiene	225	14.444	14.444	0.000	95	232270	5.00	3.76	
153 Naphthalene	128	14.542	14.542	0.000	97	872226	5.00	4.24	
154 1,2,3-Trichlorobenzene	180	14.688	14.688	0.000	95	446755	5.00	4.13	
155 2-Methylnaphthalene	142	15.304	15.304	0.000	93	377943	5.00	3.05	
158 Pentane	43		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV_LCS_VOC#1_00084	Amount Added: 12.50	Units: uL	
LCS_ETBR_00003	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00004	Amount Added: 12.50	Units: uL	
MSV_LCS_ACROL_00086	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00111	Amount Added: 12.50	Units: uL	
MSV_LCS_Penta_00023	Amount Added: 12.50	Units: uL	
MSV_LLcentISS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X33.D

Injection Date: 01-Dec-2022 20:55:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

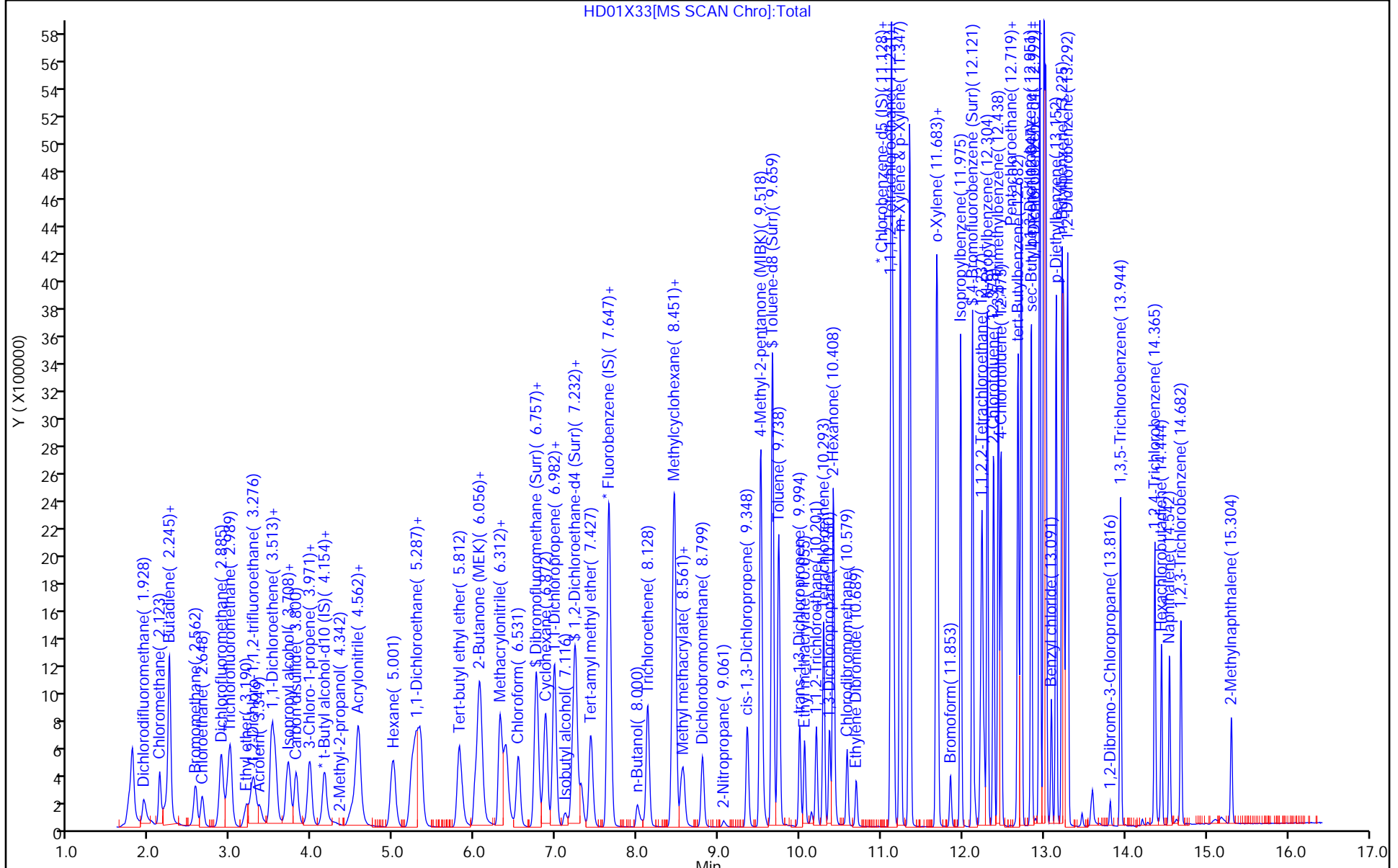
ALS Bottle#: 3

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column ( 0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



HD01X33[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X33.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 01-Dec-2022 20:55:30      ALS Bottle#: 3      Worklist Smp#: 4  
 Purge Vol: 25.000 mL      Dil. Factor: 1.0000  
 Sample Info: 410-0072349-004  
 Misc. Info.: LCS  
 Operator ID: sej02002      Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 01-Dec-2022 21:56:30      Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE      ID Type: Deconvolution ID  
 Quant Method: Internal Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm)      Det: MS Quad  
 Process Host: CTX1643

First Level Reviewer: USEJ      Date: 01-Dec-2022 21:25:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.1	101.14
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.96	99.56
\$ 84 Toluene-d8 (Surr)	10.0	10.1	100.58
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.94	99.39

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID:

Lab Sample ID: LCS 410-322942/4

Matrix: Water

Lab File ID: HD02X03.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 10:14

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322942

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.98		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.36		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	4.93		0.50	0.10
79-00-5	1,1,2-Trichloroethane	5.00		0.50	0.080
75-34-3	1,1-Dichloroethane	5.40		0.50	0.10
75-35-4	1,1-Dichloroethene	5.54		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.11		0.50	0.080
107-06-2	1,2-Dichloroethane	5.91		0.50	0.070
78-87-5	1,2-Dichloropropane	5.35		0.50	0.10
78-93-3	2-Butanone (MEK)	58.7		5.0	1.0
591-78-6	2-Hexanone	59.4		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	56.7		5.0	1.0
67-64-1	Acetone	51.6		5.0	1.0
71-43-2	Benzene	5.32		0.50	0.10
74-97-5	Bromochloromethane	5.26		0.50	0.080
75-27-4	Bromodichloromethane	5.36		0.50	0.080
75-25-2	Bromoform	4.71		1.0	0.30
74-83-9	Bromomethane	5.02		0.50	0.10
75-15-0	Carbon disulfide	5.53		1.0	0.10
56-23-5	Carbon tetrachloride	5.30		0.50	0.10
108-90-7	Chlorobenzene	5.02		0.50	0.070
75-00-3	Chloroethane	5.24		0.50	0.10
67-66-3	Chloroform	5.40		0.50	0.090
74-87-3	Chloromethane	5.64		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	5.52		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.17		0.50	0.10
124-48-1	Dibromochloromethane	4.91		0.50	0.080
100-41-4	Ethylbenzene	5.08		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.54		0.50	0.080
75-09-2	Methylene Chloride	5.38		0.50	0.10
100-42-5	Styrene	5.14		0.50	0.070
127-18-4	Tetrachloroethene	4.90		0.50	0.20
108-88-3	Toluene	5.02		0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories      Job No.: 410-106467-1  
Environment Testing, LLC

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_      Lab Sample ID: LCS 410-322942/4

Matrix: Water      Lab File ID: HD02X03.D

Analysis Method: 8260D      Date Collected: \_\_\_\_\_

Sample wt/vol: 25 (mL)      Date Analyzed: 12/02/2022 10:14

Soil Aliquot Vol: \_\_\_\_\_      Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_      GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)      Heated Purge: (Y/N) N pH: \_\_\_\_\_

% Moisture: \_\_\_\_\_ % Solids: \_\_\_\_\_      Level: (low/med) Low

Analysis Batch No.: 322942      Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	5.35		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	5.16		0.50	0.080
79-01-6	Trichloroethene	5.21		0.50	0.080
75-01-4	Vinyl chloride	5.28		0.50	0.10
1330-20-7	Xylenes, Total	15.2		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X03.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 02-Dec-2022 10:14:30 ALS Bottle#: 3 Worklist Smp#: 4  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072389-004  
 Misc. Info.: LCS  
 Operator ID: knk41612 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 05-Dec-2022 14:38:39 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1604

First Level Reviewer: DVW2

Date: 02-Dec-2022 10:40:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.922	1.934	-0.012	99	375094	5.00	4.74	
5 Chloromethane	50	2.117	2.129	-0.012	99	558847	5.00	5.64	
6 Butadiene	39	2.233	2.245	-0.012	92	637554	5.00	6.81	
7 Vinyl chloride	62	2.239	2.245	-0.006	97	518333	5.00	5.28	
9 Bromomethane	94	2.550	2.562	-0.012	90	346214	5.00	5.02	
10 Chloroethane	64	2.641	2.647	-0.006	100	312286	5.00	5.24	
11 Dichlorofluoromethane	67	2.867	2.879	-0.012	97	728144	5.00	5.51	
12 Trichlorofluoromethane	101	2.946	2.958	-0.012	97	600525	5.00	5.05	
14 Ethyl ether	59	3.184	3.184	0.000	92	189159	4.99	3.81	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.276	3.269	0.007	96	473276	5.00	5.11	
16 Acrolein	56	3.343	3.355	-0.012	95	298156	37.5	34.4	
18 1,1-Dichloroethene	96	3.489	3.501	-0.012	98	372338	5.00	5.54	
19 Acetone	43	3.513	3.513	0.000	98	521609	62.5	51.6	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.532	3.544	-0.012	93	356387	5.00	5.44	
21 Isopropyl alcohol	45	3.653	3.672	-0.019	31	42142	37.5	25.1	
22 Iodomethane	142	3.690	3.690	0.000	99	658111	5.00	5.64	
23 Ethyl bromide	108	3.714	3.720	-0.006	98	339070	4.89	5.75	
24 Carbon disulfide	76	3.794	3.800	-0.006	99	994047	5.00	5.53	
25 Methyl acetate	43	3.934	3.934	0.000	98	130669	5.00	4.89	M
27 3-Chloro-1-propene	41	3.964	3.970	-0.006	93	635455	5.00	5.45	
* 29 t-Butyl alcohol-d10 (IS)	65	4.135	4.147	-0.012	98	157952	50.0	50.0	
28 Methylene Chloride	84	4.147	4.147	0.000	94	374607	5.00	5.38	
31 2-Methyl-2-propanol	59	4.275	4.281	-0.006	98	173507	50.0	50.8	
32 Acrylonitrile	53	4.464	4.476	-0.012	99	308349	25.0	22.6	
33 Methyl tert-butyl ether	73	4.537	4.550	-0.013	96	832092	5.00	5.54	
34 trans-1,2-Dichloroethene	96	4.568	4.568	0.000	98	399398	5.00	5.35	
35 Hexane	57	4.982	4.995	-0.013	93	546927	5.00	5.24	
37 1,1-Dichloroethane	63	5.214	5.226	-0.012	96	752611	5.00	5.40	
38 Isopropyl ether	45	5.275	5.281	-0.006	96	1294411	5.00	5.45	
39 2-Chloro-1,3-butadiene	53	5.324	5.330	-0.006	90	657029	5.00	5.77	
41 Tert-butyl ethyl ether	59	5.812	5.805	0.007	99	1126647	5.00	5.37	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 2-Butanone (MEK)	43	6.007	6.001	0.007	100	1031564	62.5	58.7	
43 cis-1,2-Dichloroethene	96	6.043	6.049	-0.006	83	452441	5.00	5.52	
44 2,2-Dichloropropane	77	6.068	6.061	0.007	87	673479	5.00	5.76	
45 Propionitrile	54	6.092	6.098	-0.006	97	157791	37.5	35.0	
48 Methacrylonitrile	67	6.318	6.305	0.013	93	640373	37.5	32.9	
50 Tetrahydrofuran	71	6.397	6.378	0.019	75	109351	25.0	21.8	
49 Chlorobromomethane	128	6.379	6.378	0.001	96	172191	5.00	5.26	
52 Chloroform	83	6.531	6.531	0.000	93	710841	5.00	5.40	
\$ 53 Dibromofluoromethane (Surr)	113	6.744	6.744	0.000	94	665536	10.0	10.2	
54 1,1,1-Trichloroethane	97	6.763	6.769	-0.006	98	656523	5.00	5.36	
55 Cyclohexane	56	6.866	6.872	-0.006	92	709992	5.00	5.11	
56 1,1-Dichloropropene	75	6.976	6.976	0.000	96	605941	5.00	5.47	
57 Carbon tetrachloride	117	6.976	6.982	-0.006	83	560794	5.00	5.30	
58 Isobutyl alcohol	41	7.116	7.110	0.006	96	145157	125.0	130.2	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.208	0.000	91	122625	10.0	10.3	
60 Benzene	78	7.238	7.238	0.000	97	1716423	5.00	5.32	
62 1,2-Dichloroethane	62	7.305	7.305	0.000	97	412949	5.00	5.91	
64 Tert-amyl methyl ether	73	7.421	7.427	-0.006	98	939912	5.00	5.25	
* 65 Fluorobenzene (IS)	96	7.641	7.640	0.000	98	2582509	10.0	10.0	
66 n-Heptane	43	7.659	7.659	0.000	93	557366	5.00	4.88	
68 n-Butanol	56	7.994	7.994	0.000	89	247636	250.0	259.8	
69 Trichloroethene	95	8.122	8.122	0.000	98	442713	5.00	5.21	
70 Methylcyclohexane	83	8.433	8.433	0.000	94	714216	5.00	4.98	
71 1,2-Dichloropropane	63	8.451	8.451	0.000	95	433733	5.00	5.35	
72 2-ethoxy-2-methyl butane	87	8.464	8.457	0.007	91	551193	5.00	4.86	
74 Methyl methacrylate	69	8.537	8.530	0.007	91	168640	5.00	4.35	
73 1,4-Dioxane	88	8.543	8.543	0.000	29	32595	125.0	131.7	M
75 Dibromomethane	93	8.567	8.561	0.006	95	177791	5.00	5.27	
77 Dichlorobromomethane	83	8.799	8.799	0.000	99	488251	5.00	5.36	
78 2-Nitropropane	41	9.061	9.061	0.000	96	45852	5.00	4.77	
81 cis-1,3-Dichloropropene	75	9.354	9.347	0.007	96	591763	5.00	5.17	
83 4-Methyl-2-pentanone (MIBK)	43	9.518	9.512	0.006	97	2701494	62.5	56.7	
\$ 84 Toluene-d8 (Surr)	98	9.658	9.658	0.000	93	2863293	10.0	9.79	
85 Toluene	92	9.738	9.738	0.000	98	1090385	5.00	5.02	
86 trans-1,3-Dichloropropene	75	9.994	9.994	0.000	93	477874	5.00	5.16	
105 Ethyl methacrylate	69	10.055	10.055	0.000	89	371327	5.00	5.23	
106 1,1,2-Trichloroethane	97	10.201	10.201	0.000	89	257160	5.00	5.00	
107 Tetrachloroethene	166	10.292	10.292	0.000	98	491187	5.00	4.90	
108 1,3-Dichloropropane	76	10.359	10.359	0.000	91	457965	5.00	5.16	
109 2-Hexanone	43	10.408	10.408	0.000	98	1879405	62.5	59.4	
111 Chlorodibromomethane	129	10.579	10.579	0.000	89	312745	5.00	4.91	
112 Ethylene Dibromide	107	10.689	10.689	0.000	100	240780	5.00	5.11	
* 113 Chlorobenzene-d5 (IS)	117	11.122	11.121	0.001	86	2390859	10.0	10.0	
114 1-Chlorohexane	91	11.128	11.128	0.000	98	619914	5.00	4.62	
115 Chlorobenzene	112	11.146	11.146	0.000	95	1162912	5.00	5.02	
116 1,1,1,2-Tetrachloroethane	131	11.231	11.231	0.000	96	395549	5.00	4.98	
118 Ethylbenzene	91	11.231	11.231	0.000	98	2156071	5.00	5.08	
119 m-Xylene & p-Xylene	106	11.347	11.347	0.000	99	1652646	10.0	10.2	
120 o-Xylene	106	11.676	11.676	0.000	96	781014	5.00	4.99	
121 Styrene	104	11.695	11.688	0.007	95	1303415	5.00	5.14	
122 Bromoform	173	11.853	11.847	0.006	97	173105	5.00	4.71	
123 Isopropylbenzene	105	11.975	11.975	0.000	96	2132569	5.00	5.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	91	1181161	10.0	9.95	
127 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	93	313525	5.00	4.93	
128 Bromobenzene	156	12.237	12.237	0.000	93	473371	5.00	4.97	
129 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	89	148625	25.0	9.03	
130 1,2,3-Trichloropropane	110	12.268	12.261	0.007	83	77422	5.00	4.85	
131 N-Propylbenzene	91	12.304	12.304	0.000	99	2561547	5.00	4.83	
132 2-Chlorotoluene	126	12.383	12.377	0.006	98	500053	5.00	4.90	
133 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	95	1760053	5.00	4.76	
134 4-Chlorotoluene	126	12.475	12.475	0.000	97	506826	5.00	4.94	
135 tert-Butylbenzene	134	12.682	12.682	0.000	93	379818	5.00	4.64	
136 Pentachloroethane	167	12.713	12.713	0.000	93	281255	5.00	4.89	
137 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1796157	5.00	4.81	
138 sec-Butylbenzene	105	12.847	12.841	0.006	94	2318028	5.00	4.78	
139 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	943597	5.00	4.79	
140 4-Isopropyltoluene	119	12.950	12.950	0.000	97	1986058	5.00	4.78	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1389139	10.0	10.0	
142 1,4-Dichlorobenzene	146	13.018	13.017	0.001	95	960068	5.00	4.91	
143 1,2,3-Trimethylbenzene	120	13.024	13.024	0.000	98	769108	5.00	4.83	
144 Benzyl chloride	126	13.091	13.091	0.000	98	130032	5.00	5.03	
145 p-Diethylbenzene	119	13.152	13.152	0.000	91	1146276	5.00	4.77	
146 n-Butylbenzene	92	13.243	13.243	0.000	97	981952	5.00	4.68	
147 1,2-Dichlorobenzene	146	13.274	13.273	0.001	98	849395	5.00	4.87	
149 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	87	40507	5.00	4.83	
150 1,3,5-Trichlorobenzene	180	13.944	13.944	0.000	98	736795	5.00	4.81	
151 1,2,4-Trichlorobenzene	180	14.365	14.365	0.000	94	618002	5.00	4.79	
152 Hexachlorobutadiene	225	14.450	14.444	0.006	95	253614	5.00	4.05	
153 Naphthalene	128	14.548	14.542	0.006	97	946824	5.00	4.54	
154 1,2,3-Trichlorobenzene	180	14.688	14.688	0.000	96	496578	5.00	4.53	
155 2-Methylnaphthalene	142	15.310	15.304	0.006	94	467433	5.00	3.73	
158 Pentane	43		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV_LCS_VOC#1_00084	Amount Added: 12.50	Units: uL	
LCS_ETBR_00003	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00004	Amount Added: 12.50	Units: uL	
MSV_LCS_ACROL_00086	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00111	Amount Added: 12.50	Units: uL	
MSV_LCS_Penta_00023	Amount Added: 12.50	Units: uL	
MSV_LLcentISS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X03.D

Injection Date: 02-Dec-2022 10:14:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

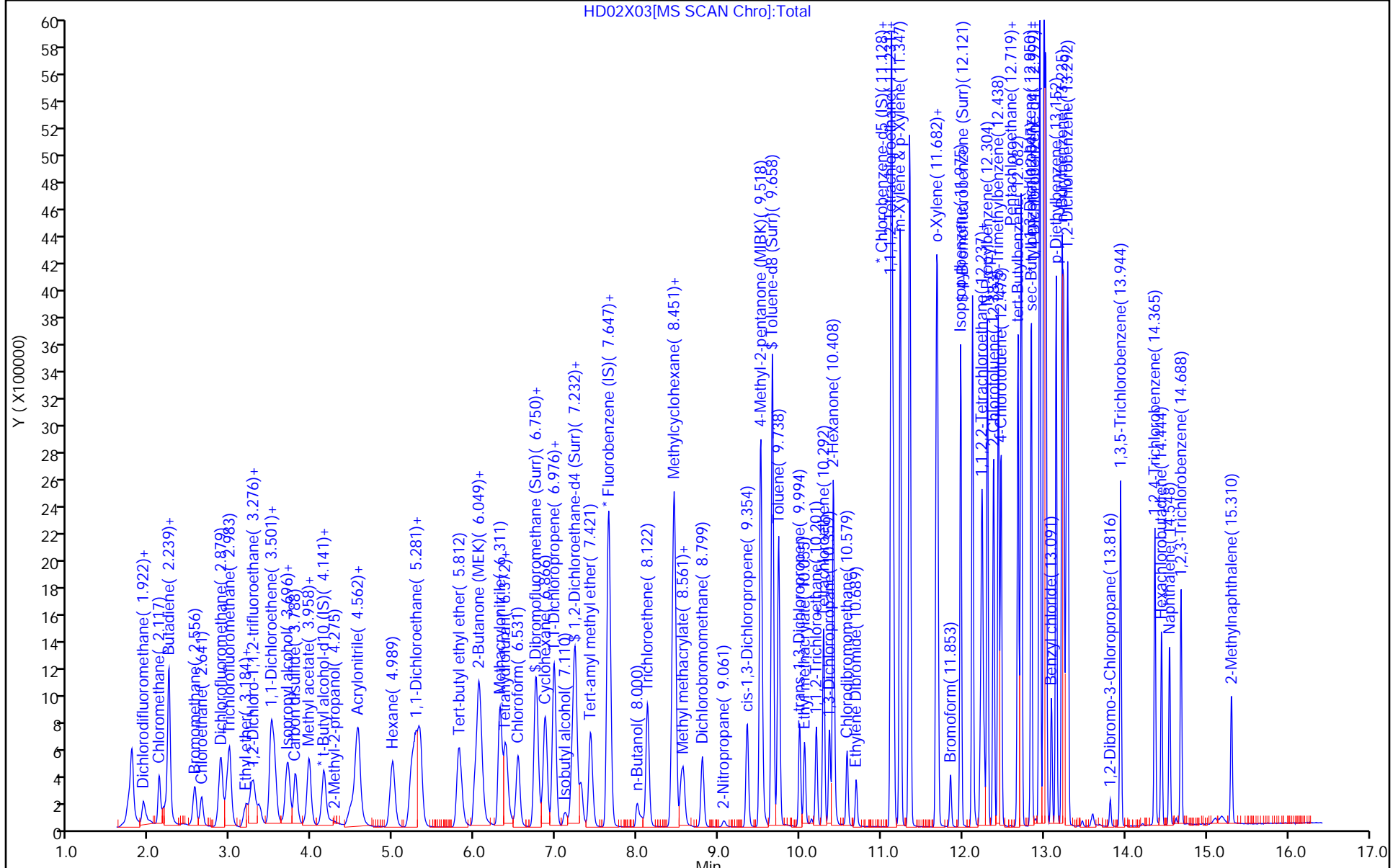
ALS Bottle#: 3

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column ( 0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\HD02X03.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 02-Dec-2022 10:14:30 ALS Bottle#: 3 Worklist Smp#: 4  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072389-004  
 Misc. Info.: LCS  
 Operator ID: knk41612 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221202-72389.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 05-Dec-2022 14:38:39 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1604

First Level Reviewer: DVW2 Date: 02-Dec-2022 10:40:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.2	101.82
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.81
\$ 84 Toluene-d8 (Surr)	10.0	9.79	97.89
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.95	99.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-6 MS

Matrix: Water

Lab File ID: GD01X12.D

Analysis Method: 8260D

Date Collected: 11/18/2022 11:15

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 14:16

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.70		0.50	0.070
71-55-6	1,1,1-Trichloroethane	6.03		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	5.92		0.50	0.10
79-00-5	1,1,2-Trichloroethane	5.58		0.50	0.080
75-34-3	1,1-Dichloroethane	6.12		0.50	0.10
75-35-4	1,1-Dichloroethene	6.22		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.31		0.50	0.080
107-06-2	1,2-Dichloroethane	5.43		0.50	0.070
78-87-5	1,2-Dichloropropane	6.07		0.50	0.10
78-93-3	2-Butanone (MEK)	79.0		5.0	1.0
591-78-6	2-Hexanone	81.6		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	81.0		5.0	1.0
67-64-1	Acetone	69.4		5.0	1.0
71-43-2	Benzene	5.76		0.50	0.10
74-97-5	Bromochloromethane	5.08		0.50	0.080
75-27-4	Bromodichloromethane	5.88		0.50	0.080
75-25-2	Bromoform	6.03		1.0	0.30
74-83-9	Bromomethane	5.00		0.50	0.10
75-15-0	Carbon disulfide	8.16		1.0	0.10
56-23-5	Carbon tetrachloride	5.77		0.50	0.10
108-90-7	Chlorobenzene	5.36		0.50	0.070
75-00-3	Chloroethane	5.75		0.50	0.10
67-66-3	Chloroform	5.79		0.50	0.090
74-87-3	Chloromethane	6.25		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	7.83		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.53		0.50	0.10
124-48-1	Dibromochloromethane	5.92		0.50	0.080
100-41-4	Ethylbenzene	5.80		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.45		0.50	0.080
75-09-2	Methylene Chloride	5.63		0.50	0.10
100-42-5	Styrene	5.42		0.50	0.070
127-18-4	Tetrachloroethene	10.8		0.50	0.20
108-88-3	Toluene	5.76		0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-6 MS

Matrix: Water

Lab File ID: GD01X12.D

Analysis Method: 8260D

Date Collected: 11/18/2022 11:15

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 14:16

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	5.45		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	6.44		0.50	0.080
79-01-6	Trichloroethene	6.97		0.50	0.080
75-01-4	Vinyl chloride	6.11		0.50	0.10
1330-20-7	Xylenes, Total	16.7		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene (Surr)	105		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-120
2037-26-5	Toluene-d8 (Surr)	108		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X12.D  
 Lims ID: 410-106467-A-6 MS  
 Client ID: HD-COD-SW-15-0/1-0 MS  
 Sample Type: MS  
 Inject. Date: 01-Dec-2022 14:16:30 ALS Bottle#: 12 Worklist Smp#: 13  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-013  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:13:40 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pong sawatp

Date: 02-Dec-2022 16:15:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.898	1.892	0.006	99	425580	5.00	5.74	
5 Chloromethane	50	2.087	2.087	0.000	99	522701	5.00	6.25	
6 Vinyl chloride	62	2.203	2.202	0.001	98	522265	5.00	6.11	
7 Butadiene	39	2.209	2.209	0.000	94	557469	5.00	6.86	
9 Bromomethane	94	2.520	2.519	0.001	91	336817	5.00	5.00	
10 Chloroethane	64	2.605	2.599	0.006	100	292971	5.00	5.75	
11 Dichlorofluoromethane	67	2.830	2.830	0.000	97	712253	5.00	5.72	
12 Trichlorofluoromethane	101	2.898	2.897	0.001	98	647169	5.00	5.51	
13 Ethyl ether	59	3.135	3.129	0.006	92	222630	4.99	4.08	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.221	3.214	0.007	93	474570	5.00	5.72	
17 Acrolein	56	3.312	3.300	0.012	99	270688	37.5	36.3	
18 1,1-Dichloroethene	96	3.428	3.422	0.006	97	382741	5.00	6.22	
19 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.471	3.464	0.007	92	403175	5.00	6.72	
20 Acetone	43	3.483	3.477	0.006	100	567863	62.6	69.4	
21 Iodomethane	142	3.611	3.611	0.000	99	612310	5.00	5.26	
22 Ethyl bromide	108	3.641	3.635	0.006	98	307505	4.89	5.44	
24 Isopropyl alcohol	45	3.721	3.690	0.031	26	33607	37.5	21.3	
23 Carbon disulfide	76	3.708	3.708	0.000	99	1224015	5.00	8.16	
25 Methyl acetate	43	3.879	3.873	0.006	98	132746	5.00	5.23	
27 3-Chloro-1-propene	41	3.885	3.885	0.000	92	586683	5.00	7.07	
29 Methylene Chloride	84	4.068	4.062	0.006	93	383472	5.00	5.63	
* 30 t-Butyl alcohol-d10 (IS)	65	4.153	4.147	0.006	83	161420	50.0	50.0	
31 2-Methyl-2-propanol	59	4.275	4.251	0.024	99	117266	50.0	41.0	
32 Acrylonitrile	53	4.409	4.409	0.000	99	369615	25.0	34.0	
33 Methyl tert-butyl ether	73	4.458	4.458	0.000	96	957381	5.00	5.45	
34 trans-1,2-Dichloroethene	96	4.470	4.464	0.006	99	391482	5.00	5.45	
35 Hexane	57	4.903	4.897	0.006	93	630351	5.00	8.04	
37 1,1-Dichloroethane	63	5.135	5.135	0.000	96	714031	5.00	6.12	
38 Isopropyl ether	45	5.202	5.196	0.006	94	1205412	5.00	6.24	
39 2-Chloro-1,3-butadiene	53	5.251	5.245	0.006	91	590833	5.00	6.36	
40 Tert-butyl ethyl ether	59	5.738	5.732	0.006	97	1114522	5.00	5.61	
41 2-Butanone (MEK)	43	5.952	5.940	0.012	100	1277467	62.6	79.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	5.976	5.970	0.006	82	614787	5.00	7.83	
43 2,2-Dichloropropane	77	5.988	5.988	0.000	86	603317	5.00	6.39	
45 Propionitrile	54	6.049	6.031	0.018	99	208142	37.5	54.3	
48 Methacrylonitrile	67	6.251	6.244	0.007	91	782680	37.5	45.4	
49 Chlorobromomethane	128	6.305	6.299	0.006	93	190925	5.00	5.08	
50 Tetrahydrofuran	71	6.318	6.305	0.013	70	147849	25.0	30.8	
51 Chloroform	83	6.464	6.458	0.006	93	723872	5.00	5.79	
\$ 52 Dibromofluoromethane (Surr)	113	6.677	6.671	0.006	93	685963	10.0	9.68	
53 1,1,1-Trichloroethane	97	6.683	6.677	0.006	98	657629	5.00	6.03	
54 Cyclohexane	56	6.781	6.775	0.006	91	727237	5.00	7.33	
56 Carbon tetrachloride	117	6.891	6.891	0.000	97	541728	5.00	5.77	
57 1,1-Dichloropropene	75	6.903	6.897	0.006	99	575095	5.00	5.93	
58 Isobutyl alcohol	41	7.098	7.086	0.012	90	119140	125.1	116.3	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.128	7.122	0.006	87	140461	10.0	9.33	
60 Benzene	78	7.159	7.159	0.000	97	1648391	5.00	5.76	
61 1,2-Dichloroethane	62	7.232	7.226	0.006	97	442724	5.00	5.43	
63 Tert-amyl methyl ether	73	7.354	7.354	0.000	98	1035821	5.00	5.50	
* 64 Fluorobenzene (IS)	96	7.567	7.567	0.000	99	2855309	10.0	10.0	
65 n-Heptane	43	7.580	7.579	0.001	93	674090	5.00	8.22	
67 n-Butanol	56	7.994	7.976	0.018	90	195310	250.2	233.9	
68 Trichloroethene	95	8.049	8.043	0.006	98	556256	5.00	6.97	
69 Methylcyclohexane	83	8.354	8.348	0.006	93	766080	5.00	6.45	
70 1,2-Dichloropropane	63	8.378	8.378	0.000	91	424680	5.00	6.07	
71 2-ethoxy-2-methyl butane	87	8.396	8.390	0.006	93	582268	5.00	5.20	
72 Methyl methacrylate	69	8.470	8.463	0.007	91	191932	5.00	5.71	
73 Dibromomethane	93	8.488	8.482	0.006	96	200827	5.00	5.23	
74 1,4-Dioxane	88	8.537	8.512	0.025	41	12854	125.1	75.5	
76 Dichlorobromomethane	83	8.726	8.726	0.000	99	493820	5.00	5.88	
77 2-Nitropropane	41	9.006	9.000	0.006	98	46002	5.00	6.09	
81 cis-1,3-Dichloropropene	75	9.280	9.280	0.000	96	579798	5.00	5.53	
82 4-Methyl-2-pentanone (MIBK)	43	9.463	9.463	0.000	97	3445836	62.6	81.0	
\$ 83 Toluene-d8 (Surr)	98	9.597	9.597	0.000	93	2886934	10.0	10.8	
84 Toluene	92	9.671	9.671	0.000	98	1047941	5.00	5.76	
85 trans-1,3-Dichloropropene	75	9.939	9.933	0.006	92	521396	5.00	6.44	
104 Ethyl methacrylate	69	10.006	10.000	0.006	90	410401	5.00	5.88	
106 1,1,2-Trichloroethane	97	10.140	10.140	0.000	91	298633	5.00	5.58	
107 Tetrachloroethene	166	10.225	10.225	0.000	98	990333	5.00	10.8	
108 1,3-Dichloropropane	76	10.311	10.305	0.006	89	517635	5.00	5.90	
109 2-Hexanone	43	10.366	10.359	0.007	97	2532837	62.6	81.6	
111 Chlorodibromomethane	129	10.524	10.518	0.006	89	346378	5.00	5.92	
112 Ethylene Dibromide	107	10.628	10.628	0.000	98	279728	5.00	5.31	
* 113 Chlorobenzene-d5 (IS)	117	11.067	11.067	0.000	86	2095988	10.0	10.0	
114 1-Chlorohexane	91	11.079	11.079	0.000	98	584984	5.00	5.74	
115 Chlorobenzene	112	11.091	11.091	0.000	95	1179143	5.00	5.36	
117 1,1,1,2-Tetrachloroethane	131	11.176	11.176	0.000	95	402397	5.00	5.70	
116 Ethylbenzene	91	11.183	11.176	0.006	98	2045496	5.00	5.80	
119 m-Xylene & p-Xylene	106	11.298	11.292	0.006	89	1601949	10.0	11.3	
120 o-Xylene	106	11.628	11.627	0.001	95	756332	5.00	5.39	
121 Styrene	104	11.640	11.640	0.000	94	1288977	5.00	5.42	
122 Bromoform	173	11.792	11.792	0.000	96	198453	5.00	6.03	
123 Isopropylbenzene	105	11.926	11.926	0.000	96	2045710	5.00	5.70	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.066	12.066	0.000	90	1046496	10.0	10.5	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,1,2,2-Tetrachloroethane	83	12.176	12.170	0.006	93	387631	5.00	5.92	
128 Bromobenzene	156	12.182	12.182	0.000	97	492795	5.00	5.22	
129 trans-1,4-Dichloro-2-butene	53	12.201	12.194	0.007	95	432581	25.0	27.6	
130 1,2,3-Trichloropropane	110	12.219	12.219	0.000	83	102883	5.00	5.47	
131 N-Propylbenzene	91	12.255	12.255	0.000	99	2467354	5.00	5.98	
132 2-Chlorotoluene	126	12.329	12.329	0.000	96	484085	5.00	5.34	
133 1,3,5-Trimethylbenzene	105	12.390	12.390	0.000	94	1759400	5.00	5.70	
134 4-Chlorotoluene	126	12.420	12.420	0.000	98	503735	5.00	5.32	
135 tert-Butylbenzene	134	12.633	12.627	0.006	93	369662	5.00	5.19	
136 Pentachloroethane	167	12.664	12.664	0.000	92	282118	5.00	5.54	
137 1,2,4-Trimethylbenzene	105	12.676	12.670	0.006	97	1822726	5.00	5.73	
138 sec-Butylbenzene	105	12.792	12.792	0.000	94	2323744	5.00	6.00	
139 1,3-Dichlorobenzene	146	12.889	12.889	0.000	98	995639	5.00	5.11	
140 4-Isopropyltoluene	119	12.902	12.902	0.000	97	2003656	5.00	5.67	
* 141 1,4-Dichlorobenzene-d4	152	12.944	12.944	0.000	95	1225896	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.963	12.963	0.000	95	1030153	5.00	5.05	
143 1,2,3-Trimethylbenzene	120	12.975	12.975	0.000	98	786347	5.00	5.38	
144 Benzyl chloride	126	13.042	13.042	0.000	99	150413	5.00	5.92	
145 p-Diethylbenzene	119	13.103	13.097	0.006	92	1191300	5.00	5.67	
146 n-Butylbenzene	92	13.188	13.188	0.000	97	1050925	5.00	6.09	
147 1,2-Dichlorobenzene	146	13.225	13.225	0.000	98	930288	5.00	5.09	
149 1,2-Dibromo-3-Chloropropane	155	13.761	13.761	0.000	87	50520	5.00	5.24	
150 1,3,5-Trichlorobenzene	180	13.883	13.883	0.000	97	789580	5.00	5.03	
151 1,2,4-Trichlorobenzene	180	14.304	14.304	0.000	94	690836	5.00	4.69	
152 Hexachlorobutadiene	225	14.389	14.389	0.000	97	380025	5.00	5.44	
153 Naphthalene	128	14.487	14.487	0.000	97	1209977	5.00	4.85	
154 1,2,3-Trichlorobenzene	180	14.627	14.627	0.000	95	628174	5.00	4.82	
155 2-Methylnaphthalene	142	15.231	15.230	0.000	92	695456	5.00	4.33	
166 Pentane	43	2.928	2.928	0.000	97	719737	NR	NR	

## QC Flag Legend

### Processing Flags

NR - Missing Quant Standard

### Reagents:

MSV_LCS_VOC#1_00084	Amount Added: 5.38	Units: uL	
MSV_QC_Gas826_00111	Amount Added: 5.38	Units: uL	
MSV_LCS_EE_00004	Amount Added: 5.38	Units: uL	
LCS_ETBR_00004	Amount Added: 5.38	Units: uL	
MSV_LCS_Penta_00023	Amount Added: 5.38	Units: uL	
MSV_LCS_ACROL_00086	Amount Added: 5.38	Units: uL	
MSV_29_826ISS_00040	Amount Added: 1.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X12.D

Injection Date: 01-Dec-2022 14:16:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: 410-106467-A-6 MS

Worklist Smp#: 13

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

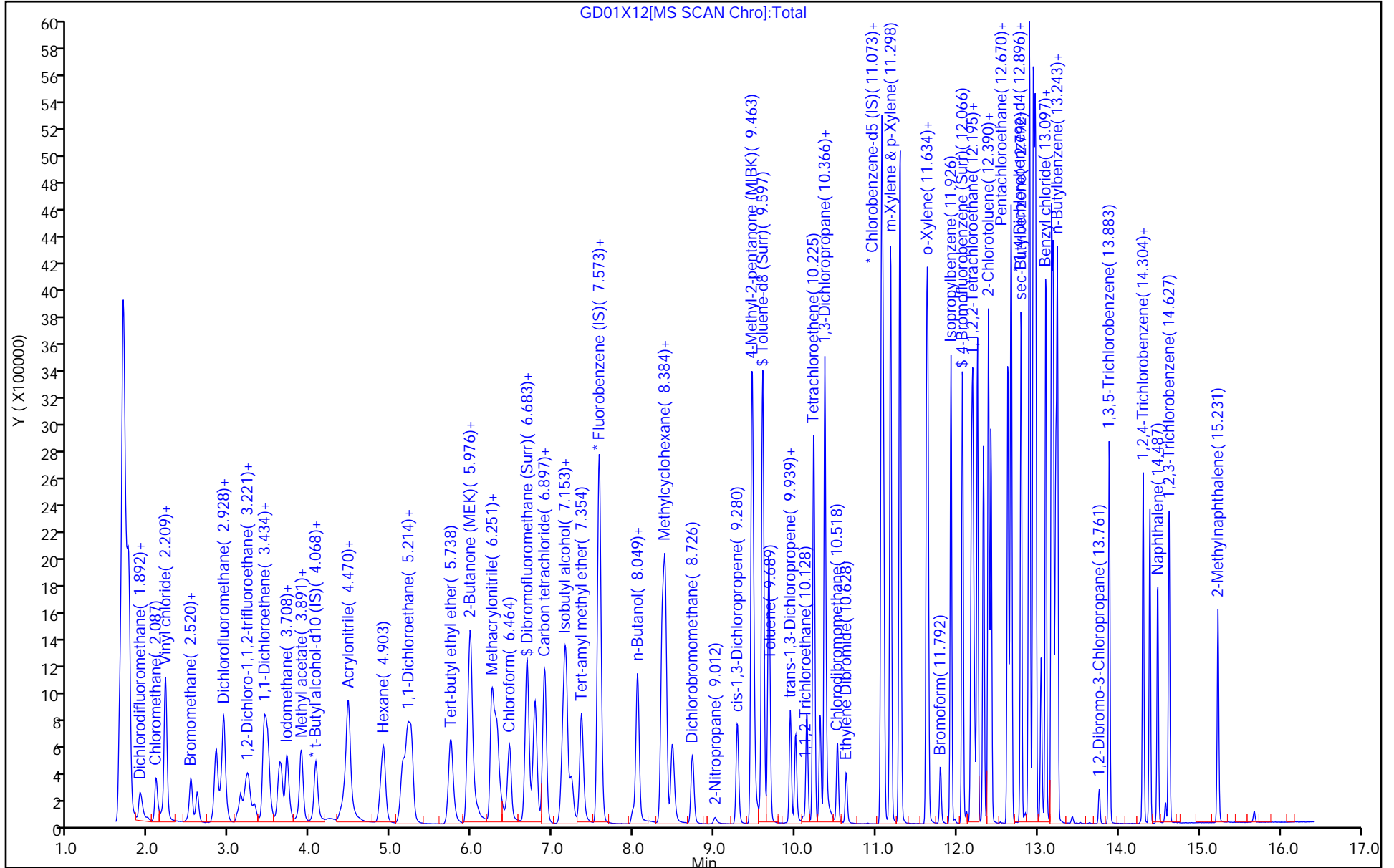
ALS Bottle#: 12

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



GD01X12[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X12.D  
 Lims ID: 410-106467-A-6 MS  
 Client ID: HD-COD-SW-15-0/1-0 MS  
 Sample Type: MS  
 Inject. Date: 01-Dec-2022 14:16:30      ALS Bottle#: 12      Worklist Smp#: 13  
 Purge Vol: 25.000 mL      Dil. Factor: 1.0000  
 Sample Info: 410-0072294-013  
 Operator ID: knk41612      Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:13:40      Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE      ID Type: Deconvolution ID  
 Quant Method: Internal Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm)      Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongsawatp      Date: 02-Dec-2022 16:15:17

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.68	96.77
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.33	93.30
\$ 83 Toluene-d8 (Surr)	10.0	10.8	107.55
\$ 126 4-Bromofluorobenzene (Surr)	10.0	10.5	104.74

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 MS

Lab Sample ID: 410-106467-7 MS

Matrix: Water

Lab File ID: HD01X56.D

Analysis Method: 8260D

Date Collected: 11/18/2022 09:55

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 04:42

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.14		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.82		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	4.73		0.50	0.10
79-00-5	1,1,2-Trichloroethane	5.08		0.50	0.080
75-34-3	1,1-Dichloroethane	5.66		0.50	0.10
75-35-4	1,1-Dichloroethene	6.03		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.19		0.50	0.080
107-06-2	1,2-Dichloroethane	5.94		0.50	0.070
78-87-5	1,2-Dichloropropane	5.52		0.50	0.10
78-93-3	2-Butanone (MEK)	77.0		5.0	1.0
591-78-6	2-Hexanone	81.4		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	79.3		5.0	1.0
67-64-1	Acetone	64.3		5.0	1.0
71-43-2	Benzene	5.58		0.50	0.10
74-97-5	Bromochloromethane	5.36		0.50	0.080
75-27-4	Bromodichloromethane	5.53		0.50	0.080
75-25-2	Bromoform	4.70		1.0	0.30
74-83-9	Bromomethane	5.23		0.50	0.10
75-15-0	Carbon disulfide	6.03		1.0	0.10
56-23-5	Carbon tetrachloride	5.75		0.50	0.10
108-90-7	Chlorobenzene	5.16		0.50	0.070
75-00-3	Chloroethane	5.62		0.50	0.10
67-66-3	Chloroform	5.65		0.50	0.090
74-87-3	Chloromethane	5.90		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	5.81		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.36		0.50	0.10
124-48-1	Dibromochloromethane	4.97		0.50	0.080
100-41-4	Ethylbenzene	5.21		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.51		0.50	0.080
75-09-2	Methylene Chloride	5.57		0.50	0.10
100-42-5	Styrene	5.22		0.50	0.070
127-18-4	Tetrachloroethene	6.66		0.50	0.20
108-88-3	Toluene	5.29		0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories      Job No.: 410-106467-1  
 Environment Testing, LLC

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 MS      Lab Sample ID: 410-106467-7 MS

Matrix: Water      Lab File ID: HD01X56.D

Analysis Method: 8260D      Date Collected: 11/18/2022 09:55

Sample wt/vol: 25 (mL)      Date Analyzed: 12/02/2022 04:42

Soil Aliquot Vol:      Dilution Factor: 1

Soil Extract Vol.:      GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)      Heated Purge: (Y/N) N pH:     

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

Analysis Batch No.: 322841      Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	5.67		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	5.31		0.50	0.080
79-01-6	Trichloroethene	5.77		0.50	0.080
75-01-4	Vinyl chloride	5.69		0.50	0.10
1330-20-7	Xylenes, Total	15.5		1.0	0.070

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

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X56.D  
 Lims ID: 410-106467-B-7 MS  
 Client ID:  
 Sample Type: MS  
 Inject. Date: 02-Dec-2022 04:42:30 ALS Bottle#: 26 Worklist Smp#: 27  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-027  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:35:13 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2

Date: 02-Dec-2022 13:28:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.934	1.922	0.012	99	436383	5.00	5.77	
5 Chloromethane	50	2.129	2.117	0.012	99	558719	5.00	5.90	
6 Butadiene	39	2.245	2.233	0.012	91	653837	5.00	7.31	
7 Vinyl chloride	62	2.245	2.239	0.006	91	534557	5.00	5.69	
9 Bromomethane	94	2.568	2.556	0.012	91	344958	5.00	5.23	
10 Chloroethane	64	2.648	2.642	0.006	100	319902	5.00	5.62	
11 Dichlorofluoromethane	67	2.879	2.867	0.012	97	740176	5.00	5.86	
12 Trichlorofluoromethane	101	2.965	2.946	0.019	98	660214	5.00	5.81	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.288	3.269	0.019	93	495572	5.00	5.60	
16 Acrolein	56	3.361	3.355	0.006	99	238642	37.5	42.3	
18 1,1-Dichloroethene	96	3.507	3.495	0.012	97	387174	5.00	6.03	
19 Acetone	43	3.507	3.501	0.006	40	422352	62.6	64.3	
20 1,1,2-Trichloro-1,2,2-trifluoro	101	3.544	3.538	0.006	92	392519	5.00	6.27	
21 Isopropyl alcohol	45	3.666	3.647	0.019	32	29758	37.5	19.1	
22 Iodomethane	142	3.696	3.684	0.012	98	658235	5.00	5.89	
23 Ethyl bromide	108	3.733	3.715	0.019	98	347734	4.89	6.16	
24 Carbon disulfide	76	3.812	3.794	0.018	99	1036961	5.00	6.03	
25 Methyl acetate	43	3.928	3.922	0.006	97	122828	5.00	7.07	
27 3-Chloro-1-propene	41	3.977	3.958	0.019	92	648451	5.00	5.82	
* 29 t-Butyl alcohol-d10 (IS)	65	4.123	4.117	0.006	98	102669	50.0	50.0	
28 Methylene Chloride	84	4.159	4.147	0.012	94	370267	5.00	5.57	
31 2-Methyl-2-propanol	59	4.245	4.233	0.012	95	80779	50.0	36.4	
32 Acrylonitrile	53	4.495	4.477	0.018	99	273914	25.0	30.9	
33 Methyl tert-butyl ether	73	4.556	4.550	0.006	95	791032	5.00	5.51	
34 trans-1,2-Dichloroethene	96	4.580	4.568	0.012	98	404772	5.00	5.67	
35 Hexane	57	5.001	4.983	0.018	92	612757	5.00	6.14	
37 1,1-Dichloroethane	63	5.226	5.220	0.006	96	754841	5.00	5.66	
38 Isopropyl ether	45	5.287	5.269	0.018	95	1251461	5.00	5.52	
39 2-Chloro-1,3-butadiene	53	5.336	5.330	0.006	91	688585	5.00	6.32	
41 Tert-butyl ethyl ether	59	5.812	5.806	0.006	98	1095357	5.00	5.46	
42 2-Butanone (MEK)	43	6.013	6.001	0.012	100	880172	62.6	77.0	
43 cis-1,2-Dichloroethene	96	6.061	6.049	0.012	83	455078	5.00	5.81	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2,2-Dichloropropane	77	6.080	6.068	0.012	88	658860	5.00	5.90	
45 Propionitrile	54	6.092	6.080	0.012	41	113764	37.5	38.8	
48 Methacrylonitrile	67	6.318	6.299	0.019	93	585504	37.5	46.3	
50 Tetrahydrofuran	71	6.385	6.379	0.006	68	96460	25.0	29.5	
49 Chlorobromomethane	128	6.397	6.385	0.012	95	167650	5.00	5.36	
52 Chloroform	83	6.543	6.531	0.012	93	710600	5.00	5.65	
\$ 53 Dibromofluoromethane (Surr)	113	6.750	6.751	0.000	94	637186	10.0	10.2	
54 1,1,1-Trichloroethane	97	6.769	6.763	0.006	98	681033	5.00	5.82	
55 Cyclohexane	56	6.878	6.866	0.012	91	788857	5.00	5.94	
56 1,1-Dichloropropene	75	6.982	6.976	0.006	96	630588	5.00	5.96	
57 Carbon tetrachloride	117	6.982	6.976	0.006	85	581839	5.00	5.75	
58 Isobutyl alcohol	41	7.110	7.098	0.012	94	67686	125.1	93.4	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.202	0.006	79	116152	10.0	10.2	
60 Benzene	78	7.244	7.238	0.006	97	1722550	5.00	5.58	
62 1,2-Dichloroethane	62	7.311	7.305	0.006	98	396978	5.00	5.94	
64 Tert-amyl methyl ether	73	7.433	7.427	0.006	99	931508	5.00	5.45	
* 65 Fluorobenzene (IS)	96	7.647	7.641	0.006	99	2469198	10.0	10.0	
66 n-Heptane	43	7.665	7.659	0.006	90	583927	5.00	5.35	
68 n-Butanol	56	8.000	7.994	0.006	90	138862	250.2	224.2	
69 Trichloroethene	95	8.128	8.122	0.006	98	469167	5.00	5.77	
70 Methylcyclohexane	83	8.445	8.433	0.012	93	773850	5.00	5.64	
71 1,2-Dichloropropane	63	8.457	8.451	0.006	85	427396	5.00	5.52	
72 2-ethoxy-2-methyl butane	87	8.470	8.457	0.013	91	563009	5.00	5.19	
74 Methyl methacrylate	69	8.537	8.537	0.000	91	157799	5.00	6.26	
73 1,4-Dioxane	88	8.561	8.549	0.012	27	11836	125.1	73.5	M
75 Dibromomethane	93	8.573	8.561	0.012	95	170707	5.00	5.29	
77 Dichlorobromomethane	83	8.799	8.799	0.000	99	482058	5.00	5.53	
78 2-Nitropropane	41	9.067	9.061	0.006	96	35921	5.00	5.75	
81 cis-1,3-Dichloropropene	75	9.354	9.348	0.006	96	585684	5.00	5.36	
83 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	97	2457209	62.6	79.3	
\$ 84 Toluene-d8 (Surr)	98	9.664	9.658	0.006	94	2761460	10.0	9.88	
85 Toluene	92	9.738	9.738	0.000	98	1098475	5.00	5.29	
86 trans-1,3-Dichloropropene	75	10.000	9.994	0.006	92	469226	5.00	5.31	
105 Ethyl methacrylate	69	10.061	10.055	0.006	90	344672	5.00	5.09	
106 1,1,2-Trichloroethane	97	10.201	10.195	0.006	90	249638	5.00	5.08	
107 Tetrachloroethene	166	10.292	10.292	0.000	98	638176	5.00	6.66	
108 1,3-Dichloropropane	76	10.366	10.360	0.006	89	448837	5.00	5.30	
109 2-Hexanone	43	10.414	10.408	0.006	97	1672535	62.6	81.4	
111 Chlorodibromomethane	129	10.579	10.579	0.000	91	302289	5.00	4.97	
112 Ethylene Dibromide	107	10.695	10.689	0.006	99	233973	5.00	5.19	
* 113 Chlorobenzene-d5 (IS)	117	11.121	11.122	-0.001	86	2283773	10.0	10.0	
114 1-Chlorohexane	91	11.134	11.128	0.006	98	649443	5.00	5.06	
115 Chlorobenzene	112	11.152	11.146	0.006	95	1141584	5.00	5.16	
116 1,1,1,2-Tetrachloroethane	131	11.231	11.231	0.000	94	390129	5.00	5.14	
118 Ethylbenzene	91	11.237	11.231	0.006	99	2111567	5.00	5.21	
119 m-Xylene & p-Xylene	106	11.347	11.347	0.000	100	1607794	10.0	10.4	
120 o-Xylene	106	11.676	11.676	0.000	97	768197	5.00	5.14	
121 Styrene	104	11.695	11.695	0.000	94	1266276	5.00	5.22	
122 Bromoform	173	11.853	11.847	0.006	97	164968	5.00	4.70	
123 Isopropylbenzene	105	11.975	11.975	0.000	96	2124810	5.00	5.26	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	92	1126208	10.0	9.93	
127 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	93	293961	5.00	4.73	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
128 Bromobenzene	156	12.237	12.237	0.000	96	459569	5.00	4.94	
129 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	84	205451	25.0	19.2	
130 1,2,3-Trichloropropane	110	12.268	12.268	0.000	83	72629	5.00	4.65	
131 N-Propylbenzene	91	12.304	12.304	0.000	99	2494448	5.00	4.80	
132 2-Chlorotoluene	126	12.383	12.377	0.006	97	490038	5.00	4.91	
133 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	95	1714329	5.00	4.73	
134 4-Chlorotoluene	126	12.475	12.475	0.000	97	497526	5.00	4.96	
135 tert-Butylbenzene	134	12.682	12.682	0.000	93	369784	5.00	4.62	
137 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1769896	5.00	4.84	
138 sec-Butylbenzene	105	12.847	12.847	0.000	94	2269920	5.00	4.79	
139 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	938576	5.00	4.87	
140 4-Isopropyltoluene	119	12.950	12.951	0.000	97	1953965	5.00	4.81	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1359022	10.0	10.0	
142 1,4-Dichlorobenzene	146	13.017	13.018	-0.001	95	947776	5.00	4.95	
143 1,2,3-Trimethylbenzene	120	13.024	13.024	0.000	98	754546	5.00	4.84	
144 Benzyl chloride	126	13.097	13.091	0.006	99	120596	5.00	4.77	
145 p-Diethylbenzene	119	13.152	13.152	0.000	91	1104170	5.00	4.70	
146 n-Butylbenzene	92	13.243	13.243	0.000	96	941438	5.00	4.59	
147 1,2-Dichlorobenzene	146	13.274	13.274	0.000	98	828528	5.00	4.85	
149 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	87	34423	5.00	4.19	
150 1,3,5-Trichlorobenzene	180	13.944	13.944	0.000	98	694671	5.00	4.63	
151 1,2,4-Trichlorobenzene	180	14.365	14.365	0.000	94	552031	5.00	4.37	
152 Hexachlorobutadiene	225	14.450	14.444	0.006	95	224837	5.00	3.67	
153 Naphthalene	128	14.548	14.542	0.006	97	837163	5.00	4.11	
154 1,2,3-Trichlorobenzene	180	14.688	14.688	0.000	96	424357	5.00	3.96	
155 2-Methylnaphthalene	142	15.304	15.304	0.000	93	343821	5.00	2.80	
158 Pentane	43		0.000				ND	ND	

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

MSV_LCS_VOC#1_00084	Amount Added: 5.38	Units: uL	
MSV_LCS_ACROL_00086	Amount Added: 5.38	Units: uL	
LCS_ETBR_00003	Amount Added: 5.38	Units: uL	
MSV_QC_Gas826_00111	Amount Added: 5.38	Units: uL	
MSV_LLcentISS_00006	Amount Added: 5.00	Units: uL	Run Reagent



Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X56.D

Injection Date: 02-Dec-2022 04:42:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: 410-106467-B-7 MS

Worklist Smp#: 27

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

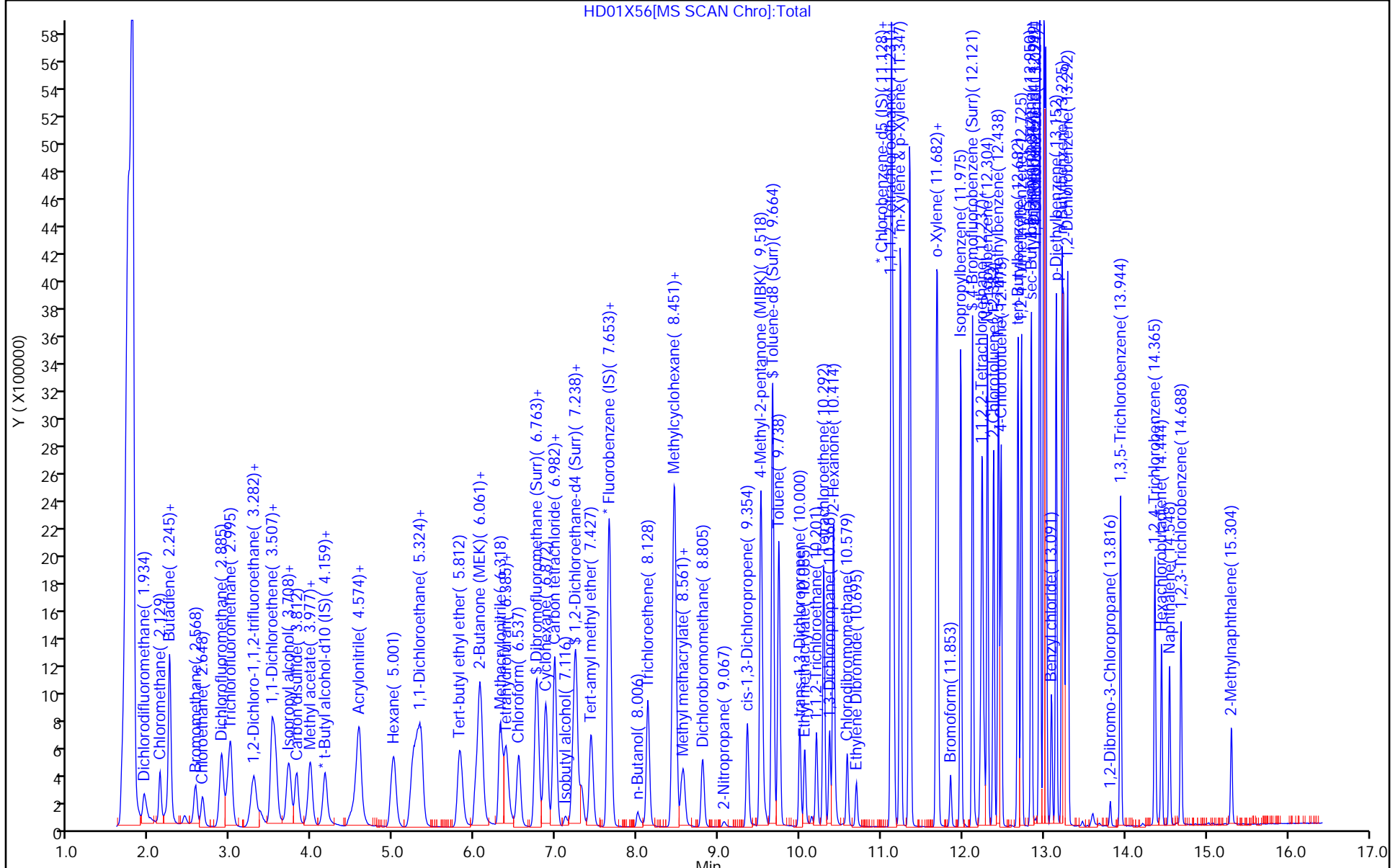
ALS Bottle#: 26

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column ( 0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X56.D  
 Lims ID: 410-106467-B-7 MS  
 Client ID:  
 Sample Type: MS  
 Inject. Date: 02-Dec-2022 04:42:30 ALS Bottle#: 26 Worklist Smp#: 27  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-027  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:35:13 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2

Date: 02-Dec-2022 13:28:31

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.2	101.95
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.85
\$ 84 Toluene-d8 (Surr)	10.0	9.88	98.84
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.93	99.29

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

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

Lab Sample ID: 410-106467-6 MSD

Matrix: Water

Lab File ID: GD01X13.D

Analysis Method: 8260D

Date Collected: 11/18/2022 11:15

Sample wt/vol: 25 (mL)

Date Analyzed: 12/01/2022 14:38

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322544

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.69		0.50	0.070
71-55-6	1,1,1-Trichloroethane	6.11		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	5.91		0.50	0.10
79-00-5	1,1,2-Trichloroethane	5.48		0.50	0.080
75-34-3	1,1-Dichloroethane	6.18		0.50	0.10
75-35-4	1,1-Dichloroethene	6.23		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.26		0.50	0.080
107-06-2	1,2-Dichloroethane	5.41		0.50	0.070
78-87-5	1,2-Dichloropropane	6.05		0.50	0.10
78-93-3	2-Butanone (MEK)	68.3		5.0	1.0
591-78-6	2-Hexanone	69.9		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	69.5		5.0	1.0
67-64-1	Acetone	60.1		5.0	1.0
71-43-2	Benzene	5.75		0.50	0.10
74-97-5	Bromochloromethane	5.02		0.50	0.080
75-27-4	Bromodichloromethane	5.78		0.50	0.080
75-25-2	Bromoform	6.02		1.0	0.30
74-83-9	Bromomethane	5.16		0.50	0.10
75-15-0	Carbon disulfide	8.10		1.0	0.10
56-23-5	Carbon tetrachloride	5.84		0.50	0.10
108-90-7	Chlorobenzene	5.34		0.50	0.070
75-00-3	Chloroethane	6.03		0.50	0.10
67-66-3	Chloroform	5.79		0.50	0.090
74-87-3	Chloromethane	6.62		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	7.82		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.55		0.50	0.10
124-48-1	Dibromochloromethane	5.91		0.50	0.080
100-41-4	Ethylbenzene	5.76		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.44		0.50	0.080
75-09-2	Methylene Chloride	5.68		0.50	0.10
100-42-5	Styrene	5.42		0.50	0.070
127-18-4	Tetrachloroethene	10.9		0.50	0.20
108-88-3	Toluene	5.83		0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories      Job No.: 410-106467-1  
 Environment Testing, LLC

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD      Lab Sample ID: 410-106467-6 MSD  
 MSD

Matrix: Water      Lab File ID: GD01X13.D

Analysis Method: 8260D      Date Collected: 11/18/2022 11:15

Sample wt/vol: 25 (mL)      Date Analyzed: 12/01/2022 14:38

Soil Aliquot Vol:      Dilution Factor: 1

Soil Extract Vol.:      GC Column: R-624SilMS 30m      ID: 0.25 (mm)

Purge Volume: 25.0 (mL)      Heated Purge: (Y/N) N      pH:     

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

Analysis Batch No.: 322544      Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	5.52		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	6.39		0.50	0.080
79-01-6	Trichloroethene	6.97		0.50	0.080
75-01-4	Vinyl chloride	6.41		0.50	0.10
1330-20-7	Xylenes, Total	16.7		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	104		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	107		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X13.D  
 Lims ID: 410-106467-A-6 MSD  
 Client ID: HD-COD-SW-15-0/1-0 MSD  
 Sample Type: MSD  
 Inject. Date: 01-Dec-2022 14:38:30 ALS Bottle#: 13 Worklist Smp#: 14  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-014  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:13:40 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongasawatp

Date: 02-Dec-2022 16:16:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.892	1.892	0.000	99	470632	5.00	6.40	
5 Chloromethane	50	2.087	2.087	0.000	99	549610	5.00	6.62	
6 Vinyl chloride	62	2.196	2.202	-0.006	98	543185	5.00	6.41	
7 Butadiene	39	2.203	2.209	-0.006	93	583583	5.00	7.24	
9 Bromomethane	94	2.513	2.519	-0.006	91	345434	5.00	5.16	
10 Chloroethane	64	2.593	2.599	-0.006	100	304961	5.00	6.03	
11 Dichlorofluoromethane	67	2.824	2.830	-0.006	97	742531	5.00	6.01	
12 Trichlorofluoromethane	101	2.891	2.897	-0.006	98	669300	5.00	5.74	
13 Ethyl ether	59	3.129	3.129	0.000	92	229404	4.99	4.24	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.221	3.214	0.007	93	491019	5.00	5.96	
17 Acrolein	56	3.300	3.300	0.000	98	289492	37.5	33.6	
18 1,1-Dichloroethene	96	3.422	3.422	0.000	98	380174	5.00	6.23	
19 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.458	3.464	-0.006	92	397317	5.00	6.68	
20 Acetone	43	3.477	3.477	0.000	96	568368	62.6	60.1	
21 Iodomethane	142	3.605	3.611	-0.006	99	609584	5.00	5.28	
22 Ethyl bromide	108	3.635	3.635	0.000	98	324210	4.89	5.79	
24 Isopropyl alcohol	45	3.702	3.690	0.012	26	37063	37.5	23.7	
23 Carbon disulfide	76	3.708	3.708	0.000	99	1205406	5.00	8.10	
25 Methyl acetate	43	3.867	3.873	-0.006	97	136063	5.00	4.64	
27 3-Chloro-1-propene	41	3.885	3.885	0.000	92	584796	5.00	7.10	
29 Methylene Chloride	84	4.062	4.062	0.000	93	383797	5.00	5.68	
* 30 t-Butyl alcohol-d10 (IS)	65	4.117	4.147	-0.030	85	186651	50.0	50.0	
31 2-Methyl-2-propanol	59	4.257	4.251	0.006	97	133221	50.0	40.3	
32 Acrylonitrile	53	4.409	4.409	0.000	99	370625	25.0	29.5	
33 Methyl tert-butyl ether	73	4.458	4.458	0.000	92	946986	5.00	5.44	
34 trans-1,2-Dichloroethene	96	4.464	4.464	0.000	99	393334	5.00	5.52	
35 Hexane	57	4.897	4.897	0.000	92	628084	5.00	8.07	
37 1,1-Dichloroethane	63	5.135	5.135	0.000	96	715386	5.00	6.18	
38 Isopropyl ether	45	5.196	5.196	0.000	94	1200984	5.00	6.27	
39 2-Chloro-1,3-butadiene	53	5.239	5.245	-0.006	90	592998	5.00	6.43	
40 Tert-butyl ethyl ether	59	5.738	5.732	0.006	97	1098120	5.00	5.57	
41 2-Butanone (MEK)	43	5.946	5.940	0.006	100	1276182	62.6	68.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	5.976	5.970	0.006	83	609411	5.00	7.82	
43 2,2-Dichloropropane	77	5.982	5.988	-0.006	86	595550	5.00	6.36	
45 Propionitrile	54	6.049	6.031	0.018	98	176928	37.5	39.9	
48 Methacrylonitrile	67	6.244	6.244	0.000	92	752499	37.5	37.7	
49 Chlorobromomethane	128	6.305	6.299	0.006	93	187423	5.00	5.02	
50 Tetrahydrofuran	71	6.305	6.305	0.000	73	143054	25.0	25.8	
51 Chloroform	83	6.458	6.458	0.000	93	718868	5.00	5.79	
\$ 52 Dibromofluoromethane (Surr)	113	6.677	6.671	0.006	93	677100	10.0	9.63	
53 1,1,1-Trichloroethane	97	6.677	6.677	0.000	98	661399	5.00	6.11	
54 Cyclohexane	56	6.781	6.775	0.006	91	720374	5.00	7.32	
56 Carbon tetrachloride	117	6.891	6.891	0.000	96	544173	5.00	5.84	
57 1,1-Dichloropropene	75	6.897	6.897	0.000	96	573629	5.00	5.96	
58 Isobutyl alcohol	41	7.092	7.086	0.006	91	134054	125.1	131.9	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.122	7.122	0.000	90	142678	10.0	9.55	
60 Benzene	78	7.159	7.159	0.000	97	1631685	5.00	5.75	
61 1,2-Dichloroethane	62	7.226	7.226	0.000	97	437555	5.00	5.41	
63 Tert-amyl methyl ether	73	7.354	7.354	0.000	98	1035614	5.00	5.54	
* 64 Fluorobenzene (IS)	96	7.567	7.567	0.000	99	2833276	10.0	10.0	
65 n-Heptane	43	7.580	7.579	0.001	93	657002	5.00	8.08	
67 n-Butanol	56	7.982	7.976	0.006	90	248528	250.2	257.4	
68 Trichloroethene	95	8.043	8.043	0.000	98	551719	5.00	6.97	
69 Methylcyclohexane	83	8.348	8.348	0.000	93	765923	5.00	6.50	
70 1,2-Dichloropropane	63	8.378	8.378	0.000	97	419568	5.00	6.05	
71 2-ethoxy-2-methyl butane	87	8.390	8.390	0.000	94	578985	5.00	5.21	
72 Methyl methacrylate	69	8.470	8.463	0.007	90	179300	5.00	4.62	
73 Dibromomethane	93	8.482	8.482	0.000	96	197992	5.00	5.20	
74 1,4-Dioxane	88	8.518	8.512	0.006	30	29174	125.1	140.1	
76 Dichlorobromomethane	83	8.726	8.726	0.000	99	482120	5.00	5.78	
77 2-Nitropropane	41	9.006	9.000	0.006	99	43614	5.00	4.99	
81 cis-1,3-Dichloropropene	75	9.280	9.280	0.000	96	577062	5.00	5.55	
82 4-Methyl-2-pentanone (MIBK)	43	9.463	9.463	0.000	97	3418839	62.6	69.5	
\$ 83 Toluene-d8 (Surr)	98	9.597	9.597	0.000	93	2852650	10.0	10.7	
84 Toluene	92	9.671	9.671	0.000	98	1054117	5.00	5.83	
85 trans-1,3-Dichloropropene	75	9.939	9.933	0.006	92	514987	5.00	6.39	
104 Ethyl methacrylate	69	10.006	10.000	0.006	89	403373	5.00	5.81	
106 1,1,2-Trichloroethane	97	10.140	10.140	0.000	91	291442	5.00	5.48	
107 Tetrachloroethene	166	10.231	10.225	0.006	98	991994	5.00	10.9	
108 1,3-Dichloropropane	76	10.305	10.305	0.000	90	510624	5.00	5.85	
109 2-Hexanone	43	10.366	10.359	0.007	96	2506020	62.6	69.9	
111 Chlorodibromomethane	129	10.518	10.518	0.000	89	343727	5.00	5.91	
112 Ethylene Dibromide	107	10.628	10.628	0.000	99	275367	5.00	5.26	
* 113 Chlorobenzene-d5 (IS)	117	11.067	11.067	0.000	86	2085625	10.0	10.0	
114 1-Chlorohexane	91	11.079	11.079	0.000	98	575959	5.00	5.68	
115 Chlorobenzene	112	11.091	11.091	0.000	94	1169263	5.00	5.34	
117 1,1,1,2-Tetrachloroethane	131	11.176	11.176	0.000	95	399806	5.00	5.69	
116 Ethylbenzene	91	11.183	11.176	0.007	98	2020476	5.00	5.76	
119 m-Xylene & p-Xylene	106	11.298	11.292	0.006	89	1591102	10.0	11.3	
120 o-Xylene	106	11.628	11.627	0.001	96	751809	5.00	5.38	
121 Styrene	104	11.640	11.640	0.000	94	1281067	5.00	5.42	
122 Bromoform	173	11.798	11.792	0.006	97	197225	5.00	6.02	
123 Isopropylbenzene	105	11.926	11.926	0.000	96	2017864	5.00	5.65	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.066	12.066	0.000	90	1038891	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,1,2,2-Tetrachloroethane	83	12.170	12.170	0.000	94	383224	5.00	5.91	
128 Bromobenzene	156	12.182	12.182	0.000	97	482687	5.00	5.17	
129 trans-1,4-Dichloro-2-butene	53	12.195	12.194	0.000	94	417094	25.0	23.1	
130 1,2,3-Trichloropropane	110	12.219	12.219	0.000	83	101772	5.00	5.46	
131 N-Propylbenzene	91	12.255	12.255	0.000	99	2435791	5.00	5.97	
132 2-Chlorotoluene	126	12.329	12.329	0.000	97	481415	5.00	5.36	
133 1,3,5-Trimethylbenzene	105	12.390	12.390	0.000	94	1744237	5.00	5.70	
134 4-Chlorotoluene	126	12.420	12.420	0.000	97	507452	5.00	5.41	
135 tert-Butylbenzene	134	12.627	12.627	0.000	93	370156	5.00	5.25	
136 Pentachloroethane	167	12.664	12.664	0.000	81	289196	5.00	5.73	
137 1,2,4-Trimethylbenzene	105	12.670	12.670	0.000	97	1801408	5.00	5.72	
138 sec-Butylbenzene	105	12.792	12.792	0.000	94	2291273	5.00	5.97	
139 1,3-Dichlorobenzene	146	12.890	12.889	0.001	98	982144	5.00	5.09	
140 4-Isopropyltoluene	119	12.902	12.902	0.000	97	2004239	5.00	5.73	
* 141 1,4-Dichlorobenzene-d4	152	12.944	12.944	0.000	94	1214066	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.963	12.963	0.000	94	1027144	5.00	5.08	
143 1,2,3-Trimethylbenzene	120	12.975	12.975	0.000	98	784383	5.00	5.42	
144 Benzyl chloride	126	13.042	13.042	0.000	98	150148	5.00	5.97	
145 p-Diethylbenzene	119	13.097	13.097	0.000	91	1173518	5.00	5.64	
146 n-Butylbenzene	92	13.188	13.188	0.000	98	1036225	5.00	6.07	
147 1,2-Dichlorobenzene	146	13.225	13.225	0.000	98	928408	5.00	5.13	
149 1,2-Dibromo-3-Chloropropane	155	13.761	13.761	0.000	86	49461	5.00	5.18	
150 1,3,5-Trichlorobenzene	180	13.883	13.883	0.000	98	781909	5.00	5.03	
151 1,2,4-Trichlorobenzene	180	14.304	14.304	0.000	94	682896	5.00	4.68	
152 Hexachlorobutadiene	225	14.389	14.389	0.000	97	380025	5.00	5.50	
153 Naphthalene	128	14.481	14.487	-0.006	97	1213132	5.00	4.91	
154 1,2,3-Trichlorobenzene	180	14.627	14.627	0.000	95	627353	5.00	4.87	
155 2-Methylnaphthalene	142	15.231	15.230	0.000	92	726181	5.00	4.56	
166 Pentane	43	2.922	2.928	-0.006	97	710296	NR	NR	

## QC Flag Legend

### Processing Flags

NR - Missing Quant Standard

### Reagents:

MSV_LCS_VOC#1_00084	Amount Added: 5.38	Units: uL	
MSV_QC_Gas826_00111	Amount Added: 5.38	Units: uL	
MSV_LCS_EE_00004	Amount Added: 5.38	Units: uL	
LCS_ETBR_00004	Amount Added: 5.38	Units: uL	
MSV_LCS_Penta_00023	Amount Added: 5.38	Units: uL	
MSV_LCS_ACROL_00086	Amount Added: 5.38	Units: uL	
MSV_29_826ISS_00040	Amount Added: 1.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X13.D

Injection Date: 01-Dec-2022 14:38:30

Instrument ID: 16334

Operator ID: knk41612

Lims ID: 410-106467-A-6 MSD

Worklist Smp#: 14

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

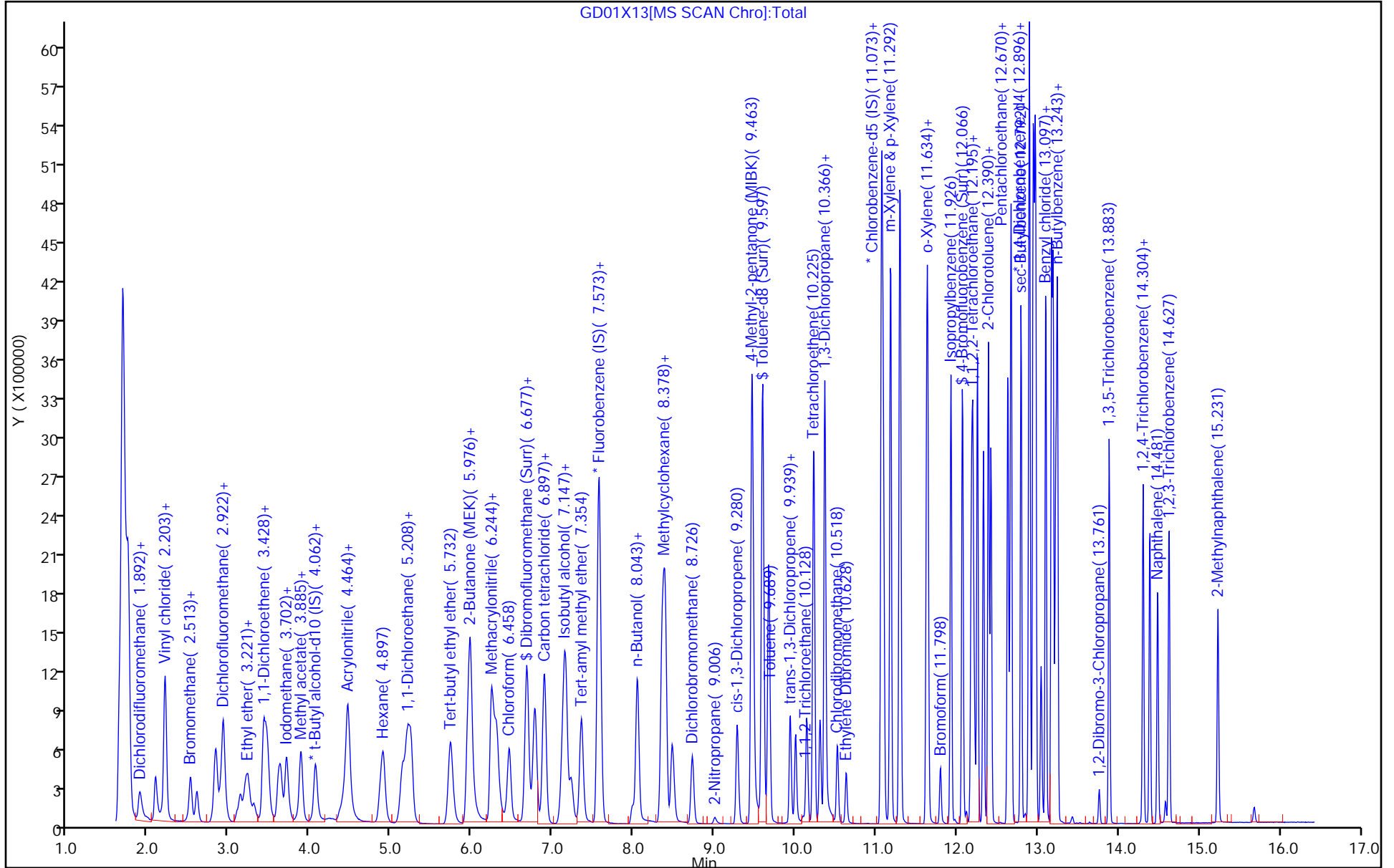
ALS Bottle#: 13

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1





Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\GD01X13.D  
 Lims ID: 410-106467-A-6 MSD  
 Client ID: HD-COD-SW-15-0/1-0 MSD  
 Sample Type: MSD  
 Inject. Date: 01-Dec-2022 14:38:30 ALS Bottle#: 13 Worklist Smp#: 14  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072294-014  
 Operator ID: knk41612 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20221201-72294.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 16:13:40 Calib Date: 16-Aug-2022 19:38:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20220816-64243.b\GG16X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1616

First Level Reviewer: pongsawatp Date: 02-Dec-2022 16:16:01

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.63	96.26
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.55	95.51
\$ 83 Toluene-d8 (Surr)	10.0	10.7	106.80
\$ 126 4-Bromofluorobenzene (Surr)	10.0	10.4	104.50

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 MSD

Lab Sample ID: 410-106467-7 MSD

Matrix: Water

Lab File ID: HD01X57.D

Analysis Method: 8260D

Date Collected: 11/18/2022 09:55

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 05:02

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.10		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.97		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	5.15		0.50	0.10
79-00-5	1,1,2-Trichloroethane	5.20		0.50	0.080
75-34-3	1,1-Dichloroethane	5.73		0.50	0.10
75-35-4	1,1-Dichloroethene	6.03		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.36		0.50	0.080
107-06-2	1,2-Dichloroethane	6.00		0.50	0.070
78-87-5	1,2-Dichloropropane	5.64		0.50	0.10
78-93-3	2-Butanone (MEK)	68.8		5.0	1.0
591-78-6	2-Hexanone	70.9		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	68.2		5.0	1.0
67-64-1	Acetone	58.6		5.0	1.0
71-43-2	Benzene	5.72		0.50	0.10
74-97-5	Bromochloromethane	5.58		0.50	0.080
75-27-4	Bromodichloromethane	5.66		0.50	0.080
75-25-2	Bromoform	4.93		1.0	0.30
74-83-9	Bromomethane	5.42		0.50	0.10
75-15-0	Carbon disulfide	6.10		1.0	0.10
56-23-5	Carbon tetrachloride	5.92		0.50	0.10
108-90-7	Chlorobenzene	5.35		0.50	0.070
75-00-3	Chloroethane	5.79		0.50	0.10
67-66-3	Chloroform	5.73		0.50	0.090
74-87-3	Chloromethane	6.32		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	5.91		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.42		0.50	0.10
124-48-1	Dibromochloromethane	5.12		0.50	0.080
100-41-4	Ethylbenzene	5.36		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.57		0.50	0.080
75-09-2	Methylene Chloride	5.66		0.50	0.10
100-42-5	Styrene	5.35		0.50	0.070
127-18-4	Tetrachloroethene	6.70		0.50	0.20
108-88-3	Toluene	5.34		0.50	0.080

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories  
Environment Testing, LLC

Job No.: 410-106467-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 MSD

Lab Sample ID: 410-106467-7 MSD

Matrix: Water

Lab File ID: HD01X57.D

Analysis Method: 8260D

Date Collected: 11/18/2022 09:55

Sample wt/vol: 25 (mL)

Date Analyzed: 12/02/2022 05:02

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 322841

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	5.69		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	5.41		0.50	0.080
79-01-6	Trichloroethene	5.79		0.50	0.080
75-01-4	Vinyl chloride	6.18		0.50	0.10
1330-20-7	Xylenes, Total	16.0		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X57.D  
 Lims ID: 410-106467-C-7 MSD  
 Client ID:  
 Sample Type: MSD  
 Inject. Date: 02-Dec-2022 05:02:30 ALS Bottle#: 27 Worklist Smp#: 28  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-028  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:35:13 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2

Date: 02-Dec-2022 13:35:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.928	1.922	0.006	99	454663	5.00	5.82	
5 Chloromethane	50	2.117	2.117	0.000	99	618126	5.00	6.32	
6 Butadiene	39	2.233	2.233	0.000	93	689165	5.00	7.46	
7 Vinyl chloride	62	2.239	2.239	0.000	88	598885	5.00	6.18	
9 Bromomethane	94	2.556	2.556	0.000	90	369053	5.00	5.42	
10 Chloroethane	64	2.641	2.642	-0.001	100	340744	5.00	5.79	
11 Dichlorofluoromethane	67	2.873	2.867	0.006	97	789287	5.00	6.05	
12 Trichlorofluoromethane	101	2.952	2.946	0.006	97	707360	5.00	6.03	
15 1,2-Dichloro-1,1,2-trifluoroethane	67	3.269	3.269	0.000	93	537461	5.00	5.88	
16 Acrolein	56	3.355	3.355	0.000	92	278544	37.5	39.3	
18 1,1-Dichloroethene	96	3.495	3.495	0.000	98	399992	5.00	6.03	
19 Acetone	43	3.519	3.501	0.018	70	483194	62.6	58.6	
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.532	3.538	-0.006	92	415499	5.00	6.42	
21 Isopropyl alcohol	45	3.660	3.647	0.013	33	44537	37.5	26.7	
22 Iodomethane	142	3.690	3.684	0.006	99	686329	5.00	5.95	
23 Ethyl bromide	108	3.714	3.715	0.000	97	364549	4.89	6.26	
24 Carbon disulfide	76	3.800	3.794	0.006	99	1083018	5.00	6.10	
25 Methyl acetate	43	3.940	3.922	0.018	38	120349	5.00	5.52	
27 3-Chloro-1-propene	41	3.964	3.958	0.006	92	670971	5.00	5.83	
* 29 t-Butyl alcohol-d10 (IS)	65	4.153	4.117	0.036	99	128894	50.0	50.0	
28 Methylene Chloride	84	4.147	4.147	0.000	95	388853	5.00	5.66	
31 2-Methyl-2-propanol	59	4.263	4.233	0.030	98	123392	50.0	44.2	
32 Acrylonitrile	53	4.489	4.477	0.012	99	295664	25.0	26.6	
33 Methyl tert-butyl ether	73	4.537	4.550	-0.013	95	825965	5.00	5.57	
34 trans-1,2-Dichloroethene	96	4.568	4.568	0.000	98	418968	5.00	5.69	
35 Hexane	57	4.989	4.983	0.006	93	643046	5.00	6.24	
37 1,1-Dichloroethane	63	5.226	5.220	0.006	96	789399	5.00	5.73	
38 Isopropyl ether	45	5.281	5.269	0.012	96	1316523	5.00	5.62	
39 2-Chloro-1,3-butadiene	53	5.336	5.330	0.006	91	726317	5.00	6.46	
41 Tert-butyl ethyl ether	59	5.812	5.806	0.006	98	1136502	5.00	5.48	
42 2-Butanone (MEK)	43	6.007	6.001	0.006	100	987305	62.6	68.8	
43 cis-1,2-Dichloroethene	96	6.049	6.049	0.000	83	478542	5.00	5.91	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2,2-Dichloropropane	77	6.068	6.068	0.000	88	687366	5.00	5.96	
45 Propionitrile	54	6.098	6.080	0.018	98	136769	37.5	37.2	
48 Methacrylonitrile	67	6.318	6.299	0.019	92	639402	37.5	40.3	
50 Tetrahydrofuran	71	6.391	6.379	0.012	76	102877	25.0	25.1	
49 Chlorobromomethane	128	6.391	6.385	0.006	95	180511	5.00	5.58	
52 Chloroform	83	6.531	6.531	0.000	94	744060	5.00	5.73	
\$ 53 Dibromofluoromethane (Surr)	113	6.744	6.751	-0.006	94	652590	10.0	10.1	
54 1,1,1-Trichloroethane	97	6.769	6.763	0.006	98	722450	5.00	5.97	
55 Cyclohexane	56	6.866	6.866	0.000	91	831214	5.00	6.06	
56 1,1-Dichloropropene	75	6.976	6.976	0.000	96	657411	5.00	6.01	
57 Carbon tetrachloride	117	6.976	6.976	0.000	85	619062	5.00	5.92	
58 Isobutyl alcohol	41	7.098	7.098	0.000	96	117242	125.1	128.9	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.202	7.202	0.000	78	121676	10.0	10.3	
60 Benzene	78	7.238	7.238	0.000	97	1824118	5.00	5.72	
62 1,2-Dichloroethane	62	7.305	7.305	0.000	97	414192	5.00	6.00	
64 Tert-amyl methyl ether	73	7.427	7.427	0.000	99	954571	5.00	5.40	
* 65 Fluorobenzene (IS)	96	7.641	7.641	-0.001	98	2550149	10.0	10.0	
66 n-Heptane	43	7.665	7.659	0.006	92	604030	5.00	5.35	
68 n-Butanol	56	8.006	7.994	0.012	90	196090	250.2	252.1	
69 Trichloroethene	95	8.128	8.122	0.006	99	485731	5.00	5.79	
70 Methylcyclohexane	83	8.439	8.433	0.006	93	820698	5.00	5.80	
71 1,2-Dichloropropane	63	8.457	8.451	0.006	95	451151	5.00	5.64	
72 2-ethoxy-2-methyl butane	87	8.464	8.457	0.007	93	572925	5.00	5.11	
74 Methyl methacrylate	69	8.537	8.537	0.000	92	166596	5.00	5.27	
73 1,4-Dioxane	88	8.543	8.549	-0.006	28	19586	125.1	96.9	M
75 Dibromomethane	93	8.561	8.561	0.000	96	185173	5.00	5.56	
77 Dichlorobromomethane	83	8.799	8.799	0.000	99	509459	5.00	5.66	
78 2-Nitropropane	41	9.061	9.061	0.000	97	43189	5.00	5.51	
81 cis-1,3-Dichloropropene	75	9.354	9.348	0.006	96	611847	5.00	5.42	
83 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	97	2650385	62.6	68.2	
\$ 84 Toluene-d8 (Surr)	98	9.658	9.658	0.000	94	2854679	10.0	9.86	
85 Toluene	92	9.738	9.738	0.000	98	1148117	5.00	5.34	
86 trans-1,3-Dichloropropene	75	9.994	9.994	0.000	93	495373	5.00	5.41	
105 Ethyl methacrylate	69	10.055	10.055	0.000	90	369595	5.00	5.26	
106 1,1,2-Trichloroethane	97	10.201	10.195	0.006	90	265066	5.00	5.20	
107 Tetrachloroethene	166	10.292	10.292	0.000	97	665388	5.00	6.70	
108 1,3-Dichloropropane	76	10.366	10.360	0.006	90	467457	5.00	5.32	
109 2-Hexanone	43	10.408	10.408	0.000	98	1829882	62.6	70.9	
111 Chlorodibromomethane	129	10.579	10.579	0.000	90	323140	5.00	5.12	
112 Ethylene Dibromide	107	10.689	10.689	0.000	98	249903	5.00	5.36	
* 113 Chlorobenzene-d5 (IS)	117	11.122	11.122	0.000	85	2366099	10.0	10.0	
114 1-Chlorohexane	91	11.128	11.128	0.000	98	680169	5.00	5.12	
115 Chlorobenzene	112	11.146	11.146	0.000	95	1224957	5.00	5.35	
116 1,1,1,2-Tetrachloroethane	131	11.231	11.231	0.000	96	400528	5.00	5.10	
118 Ethylbenzene	91	11.231	11.231	0.000	99	2251608	5.00	5.36	
119 m-Xylene & p-Xylene	106	11.347	11.347	0.000	99	1720459	10.0	10.7	
120 o-Xylene	106	11.676	11.676	0.000	97	811974	5.00	5.25	
121 Styrene	104	11.695	11.695	0.000	95	1344525	5.00	5.35	
122 Bromoform	173	11.853	11.847	0.006	97	179276	5.00	4.93	
123 Isopropylbenzene	105	11.975	11.975	0.000	96	2225670	5.00	5.32	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	91	1166022	10.0	9.92	
127 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	93	319947	5.00	5.15	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
128 Bromobenzene	156	12.237	12.237	0.000	94	493527	5.00	5.30	
129 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	93	230954	25.0	17.2	
130 1,2,3-Trichloropropane	110	12.268	12.268	0.000	83	78454	5.00	5.03	
131 N-Propylbenzene	91	12.304	12.304	0.000	99	2658678	5.00	5.12	
132 2-Chlorotoluene	126	12.383	12.377	0.006	96	505030	5.00	5.06	
133 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	94	1822866	5.00	5.04	
134 4-Chlorotoluene	126	12.475	12.475	0.000	97	516398	5.00	5.15	
135 tert-Butylbenzene	134	12.682	12.682	0.000	93	387840	5.00	4.85	
137 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1816606	5.00	4.97	
138 sec-Butylbenzene	105	12.847	12.847	0.000	94	2379704	5.00	5.02	
139 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	959628	5.00	4.98	
140 4-Isopropyltoluene	119	12.950	12.951	0.000	97	2018803	5.00	4.97	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1358449	10.0	10.0	
142 1,4-Dichlorobenzene	146	13.018	13.018	0.000	95	970310	5.00	5.07	
143 1,2,3-Trimethylbenzene	120	13.030	13.024	0.006	98	777683	5.00	5.00	
144 Benzyl chloride	126	13.091	13.091	0.000	99	118146	5.00	4.67	
145 p-Diethylbenzene	119	13.152	13.152	0.000	92	1161787	5.00	4.95	
146 n-Butylbenzene	92	13.243	13.243	0.000	98	973123	5.00	4.75	
147 1,2-Dichlorobenzene	146	13.274	13.274	0.000	98	850508	5.00	4.98	
149 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	88	37956	5.00	4.63	
150 1,3,5-Trichlorobenzene	180	13.944	13.944	0.000	98	716603	5.00	4.78	
151 1,2,4-Trichlorobenzene	180	14.365	14.365	0.000	93	580448	5.00	4.60	
152 Hexachlorobutadiene	225	14.444	14.444	0.000	96	242989	5.00	3.96	
153 Naphthalene	128	14.548	14.542	0.006	97	902517	5.00	4.43	
154 1,2,3-Trichlorobenzene	180	14.688	14.688	0.000	95	458445	5.00	4.28	
155 2-Methylnaphthalene	142	15.304	15.304	0.000	92	387703	5.00	3.16	
158 Pentane	43		0.000				ND	ND	

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

MSV_LCS_VOC#1_00084	Amount Added: 5.38	Units: uL	
MSV_LCS_ACROL_00086	Amount Added: 5.38	Units: uL	
LCS_ETBR_00003	Amount Added: 5.38	Units: uL	
MSV_QC_Gas826_00111	Amount Added: 5.38	Units: uL	
MSV_LLcentISS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X57.D

Injection Date: 02-Dec-2022 05:02:30

Instrument ID: 19094

Operator ID: sej02002

Lims ID: 410-106467-C-7 MSD

Worklist Smp#: 28

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

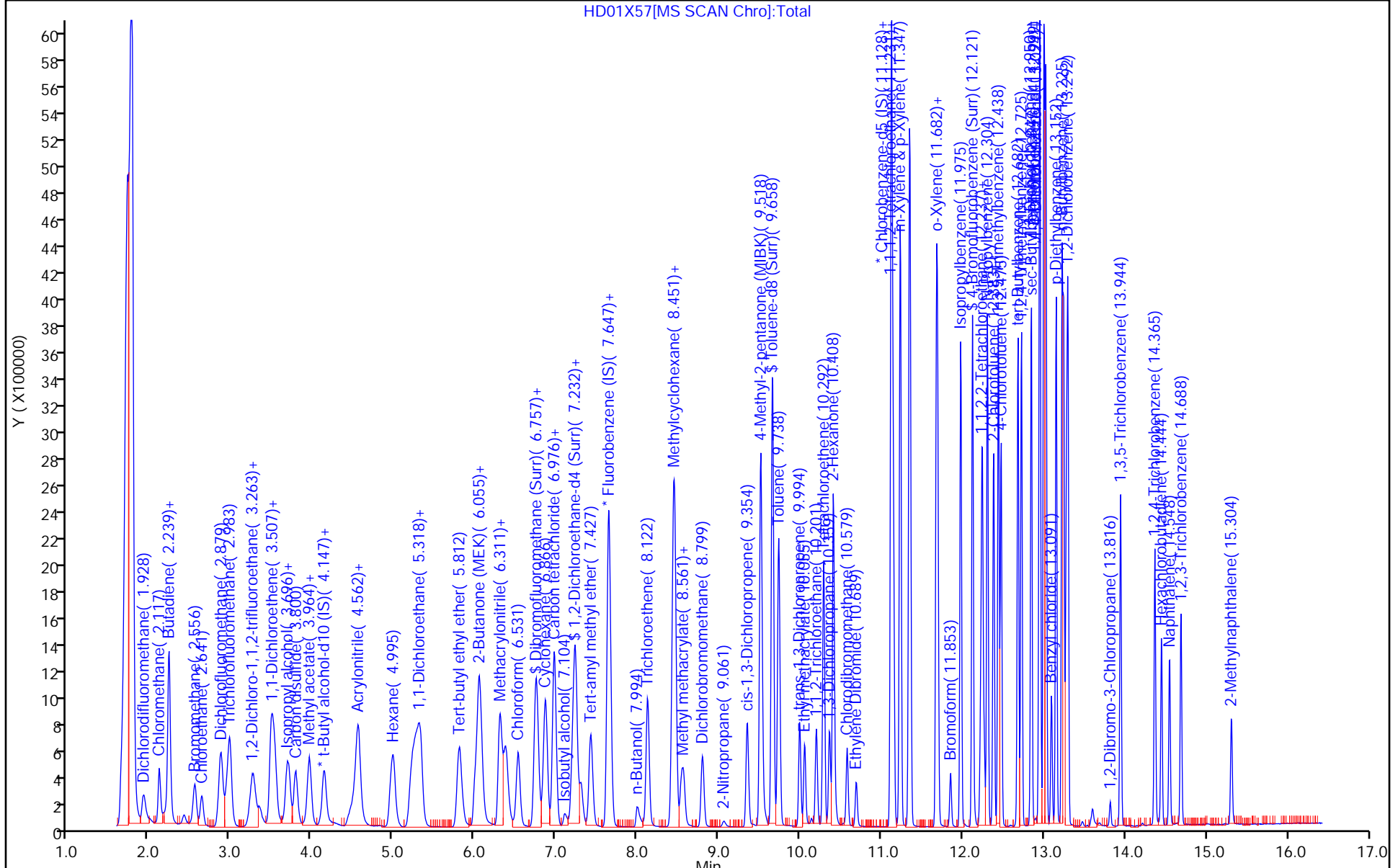
ALS Bottle#: 27

Method: MSV\_19094\_25mL

Limit Group: MSV - 8260C\_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\HD01X57.D  
 Lims ID: 410-106467-C-7 MSD  
 Client ID:  
 Sample Type: MSD  
 Inject. Date: 02-Dec-2022 05:02:30 ALS Bottle#: 27 Worklist Smp#: 28  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0072349-028  
 Operator ID: sej02002 Instrument ID: 19094  
 Method: \\chromfs\Lancaster\ChromData\19094\20221201-72349.b\MSV\_19094\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 02-Dec-2022 13:35:13 Calib Date: 11-Jul-2022 18:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy\_HL11X18.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1679

First Level Reviewer: DVW2

Date: 02-Dec-2022 13:35:13

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.1	101.10
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.31
\$ 84 Toluene-d8 (Surr)	10.0	9.86	98.62
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.92	99.23



## GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 19094Start Date: 07/11/2022 13:17Analysis Batch Number: 274149End Date: 07/11/2022 20:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-274149/1		07/11/2022 13:17	1	HL11T03.D	R-624Si1MS 30m 0.25 (mm)
IC 410-274149/3		07/11/2022 13:50	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/4		07/11/2022 14:10	1		R-624Si1MS 30m 0.25 (mm)
CCV 410-274149/1004		07/11/2022 14:10	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/5		07/11/2022 14:30	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/6		07/11/2022 14:50	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/7		07/11/2022 15:10	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/8		07/11/2022 15:30	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/9		07/11/2022 15:51	1		R-624Si1MS 30m 0.25 (mm)
ICV 410-274149/10		07/11/2022 16:11	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/12		07/11/2022 16:51	1	HL11X12.D	R-624Si1MS 30m 0.25 (mm)
ICIS 410-274149/13		07/11/2022 17:11	1	HL11X13.D	R-624Si1MS 30m 0.25 (mm)
CCVIS 410-274149/1013		07/11/2022 17:11	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/14		07/11/2022 17:31	1	HL11X14.D	R-624Si1MS 30m 0.25 (mm)
IC 410-274149/15		07/11/2022 17:51	1	HL11X15.D	R-624Si1MS 30m 0.25 (mm)
IC 410-274149/16		07/11/2022 18:11	1	HL11X16.D	R-624Si1MS 30m 0.25 (mm)
IC 410-274149/17		07/11/2022 18:32	1	HL11X17.D	R-624Si1MS 30m 0.25 (mm)
IC 410-274149/18		07/11/2022 18:52	1	Copy_HL11X18.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		07/11/2022 19:52	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		07/11/2022 20:12	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		07/11/2022 20:32	1		R-624Si1MS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 19094 Start Date: 07/14/2022 19:09

Analysis Batch Number: 275687 End Date: 07/14/2022 20:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-275687/1		07/14/2022 19:09	1	copy_HL14T01.D	R-624Si1MS 30m 0.25 (mm)
CCVIS 410-275687/3		07/14/2022 19:44	1		R-624Si1MS 30m 0.25 (mm)
ICV 410-275687/4		07/14/2022 20:04	1	copy_HL14X03.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		07/14/2022 20:04	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		07/14/2022 20:24	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		07/14/2022 20:44	1		R-624Si1MS 30m 0.25 (mm)

## GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 16334Start Date: 08/16/2022 13:07Analysis Batch Number: 286414End Date: 08/16/2022 20:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-286414/1		08/16/2022 13:07	1	GG16T01.D	R-624Si1MS 30m 0.25 (mm)
IC 410-286414/3		08/16/2022 13:45	1		R-624Si1MS 30m 0.25 (mm)
IC 410-286414/4		08/16/2022 14:07	1		R-624Si1MS 30m 0.25 (mm)
IC 410-286414/5		08/16/2022 14:29	1		R-624Si1MS 30m 0.25 (mm)
IC 410-286414/6		08/16/2022 14:51	1		R-624Si1MS 30m 0.25 (mm)
IC 410-286414/7		08/16/2022 15:13	1		R-624Si1MS 30m 0.25 (mm)
IC 410-286414/8		08/16/2022 15:35	1		R-624Si1MS 30m 0.25 (mm)
IC 410-286414/9		08/16/2022 15:58	1		R-624Si1MS 30m 0.25 (mm)
ICV 410-286414/11		08/16/2022 16:42	1		R-624Si1MS 30m 0.25 (mm)
IC 410-286414/13		08/16/2022 17:26	1	GG16X12.D	R-624Si1MS 30m 0.25 (mm)
IC 410-286414/14		08/16/2022 17:48	1	GG16X13.D	R-624Si1MS 30m 0.25 (mm)
IC 410-286414/15		08/16/2022 18:10	1	GG16X14.D	R-624Si1MS 30m 0.25 (mm)
IC 410-286414/16		08/16/2022 18:32	1	GG16X15.D	R-624Si1MS 30m 0.25 (mm)
IC 410-286414/17		08/16/2022 18:54	1	GG16X16.D	R-624Si1MS 30m 0.25 (mm)
ICIS 410-286414/18		08/16/2022 19:17	1	GG16X17.D	R-624Si1MS 30m 0.25 (mm)
IC 410-286414/19		08/16/2022 19:38	1	GG16X18.D	R-624Si1MS 30m 0.25 (mm)
ICV 410-286414/21		08/16/2022 20:22	1	GG16X20.D	R-624Si1MS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 16334 Start Date: 12/01/2022 09:58

Analysis Batch Number: 322544 End Date: 12/01/2022 19:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-322544/1		12/01/2022 09:58	1	GD01T01.D	R-624Si1MS 30m 0.25 (mm)
CCVIS 410-322544/3		12/01/2022 10:33	1	GD01X02.D	R-624Si1MS 30m 0.25 (mm)
LCS 410-322544/4		12/01/2022 10:56	1	GD01X03.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 11:18	1		R-624Si1MS 30m 0.25 (mm)
MB 410-322544/6		12/01/2022 11:41	1	GD01X05.D	R-624Si1MS 30m 0.25 (mm)
410-106467-1	HD-COD-SW-6-0/1-0	12/01/2022 12:03	1	GD01X06.D	R-624Si1MS 30m 0.25 (mm)
410-106467-2	HD-COD-SW-7-0/1-0	12/01/2022 12:25	1	GD01X07.D	R-624Si1MS 30m 0.25 (mm)
410-106467-3	HD-COD-SW-8-0/1-0	12/01/2022 12:48	1	GD01X08.D	R-624Si1MS 30m 0.25 (mm)
410-106467-4	HD-COD-SW-9-0/1-0	12/01/2022 13:10	1	GD01X09.D	R-624Si1MS 30m 0.25 (mm)
410-106467-5	HD-COD-SW-13-0/1-0	12/01/2022 13:32	1	GD01X10.D	R-624Si1MS 30m 0.25 (mm)
410-106467-6	HD-COD-SW-15-0/1-0	12/01/2022 13:54	1	GD01X11.D	R-624Si1MS 30m 0.25 (mm)
410-106467-6 MS	HD-COD-SW-15-0/1-0 MS MS	12/01/2022 14:16	1	GD01X12.D	R-624Si1MS 30m 0.25 (mm)
410-106467-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	12/01/2022 14:38	1	GD01X13.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 15:00	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 15:22	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 15:44	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 16:06	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 16:28	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 16:50	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 17:12	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 17:34	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 17:57	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 18:19	50		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 18:41	1000		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 19:03	5		R-624Si1MS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 19094 Start Date: 12/01/2022 20:00

Analysis Batch Number: 322841 End Date: 12/02/2022 05:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-322841/1		12/01/2022 20:00	1	HD01T05.D	R-624Si1MS 30m 0.25 (mm)
CCVIS 410-322841/3		12/01/2022 20:35	1	HD01X32.D	R-624Si1MS 30m 0.25 (mm)
LCS 410-322841/4		12/01/2022 20:55	1	HD01X33.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 21:15	1		R-624Si1MS 30m 0.25 (mm)
MB 410-322841/6		12/01/2022 21:36	1	HD01X35.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 21:56	20		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 22:16	100		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 22:36	100		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 22:57	20		R-624Si1MS 30m 0.25 (mm)
410-106467-14	HD-QC1-0/1-2	12/01/2022 23:17	1	HD01X40.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/01/2022 23:37	1		R-624Si1MS 30m 0.25 (mm)
410-106467-7	HD-COD-SW-16-0/1-0	12/01/2022 23:58	1	HD01X42.D	R-624Si1MS 30m 0.25 (mm)
410-106467-8	HD-COD-SW-17-0/1-0	12/02/2022 00:18	1	HD01X43.D	R-624Si1MS 30m 0.25 (mm)
410-106467-9	HD-COD-SW-26-0/1-0	12/02/2022 00:38	1	HD01X44.D	R-624Si1MS 30m 0.25 (mm)
410-106467-10	HD-COD-SW-27-0/1-0	12/02/2022 00:59	1	HD01X45.D	R-624Si1MS 30m 0.25 (mm)
410-106467-11	HD-COD-SW-28-0/1-0	12/02/2022 01:19	1	HD01X46.D	R-624Si1MS 30m 0.25 (mm)
410-106467-12	HD-COD-SW-29-0/1-0	12/02/2022 01:39	1	HD01X47.D	R-624Si1MS 30m 0.25 (mm)
410-106467-13	HD-QC1-0/1-1	12/02/2022 02:00	1	HD01X48.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 02:20	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 02:40	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 03:00	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 03:21	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 03:41	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 04:01	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 04:22	1		R-624Si1MS 30m 0.25 (mm)
410-106467-7 MS	HD-COD-SW-16-0/1-0 MS	12/02/2022 04:42	1	HD01X56.D	R-624Si1MS 30m 0.25 (mm)
410-106467-7 MSD	HD-COD-SW-16-0/1-0 MSD	12/02/2022 05:02	1	HD01X57.D	R-624Si1MS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Instrument ID: 19094 Start Date: 12/02/2022 09:21

Analysis Batch Number: 322942 End Date: 12/02/2022 20:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-322942/1		12/02/2022 09:21	1	HD02T01.D	R-624Si1MS 30m 0.25 (mm)
CCVIS 410-322942/3		12/02/2022 09:54	1	HD02X02.D	R-624Si1MS 30m 0.25 (mm)
LCS 410-322942/4		12/02/2022 10:14	1	HD02X03.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 10:34	1		R-624Si1MS 30m 0.25 (mm)
MB 410-322942/6		12/02/2022 10:55	1	HD02X05.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 11:15	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 11:35	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 11:56	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 12:16	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 12:36	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 12:57	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 13:17	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 13:37	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 13:58	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 14:18	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 14:38	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 14:59	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 15:19	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 15:39	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 16:00	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 16:20	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 16:41	20		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 17:01	200		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 17:21	100		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 17:42	1000		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 18:02	200		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 18:22	2000		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 18:42	1000		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 19:03	1000		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/02/2022 19:23	1		R-624Si1MS 30m 0.25 (mm)
410-106467-8 DL	HD-COD-SW-17-0/1-0 DL	12/02/2022 19:43	10	HD02X31.D	R-624Si1MS 30m 0.25 (mm)
410-106467-13 DL	HD-QC1-0/1-1 DL	12/02/2022 20:04	10	HD02X32.D	R-624Si1MS 30m 0.25 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Batch Number: 274149 Batch Start Date: 07/11/22 13:17 Batch Analyst: Sposito, Kevin A

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	MSV_LL #1_826 00049	MSV_LL #2_826 00053	MSV_LL_GAS826 00101
BFB 410-274149/1		8260D		1 uL	1 uL				
IC 410-274149/12		8260D		25 mL	25 mL	2646	25 uL	25 uL	25 uL
ICIS 410-274149/13		8260D		25 mL	25 mL	2646	10 uL	10 uL	10 uL
IC 410-274149/14		8260D		25 mL	25 mL	2646	5 uL	5 uL	5 uL
IC 410-274149/15		8260D		25 mL	25 mL	2646	2 uL	2 uL	2 uL
IC 410-274149/16		8260D		25 mL	25 mL	2646	2 uL	2 uL	2 uL
IC 410-274149/17		8260D		25 mL	25 mL	2646	2 uL	2 uL	2 uL
IC 410-274149/18		8260D		25 mL	25 mL	2646	2 uL	2 uL	2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LLcentISS 00005	MSV_V_BFB 00008				
BFB 410-274149/1		8260D			1 uL				
IC 410-274149/12		8260D		5 uL					
ICIS 410-274149/13		8260D		5 uL					
IC 410-274149/14		8260D		5 uL					
IC 410-274149/15		8260D		5 uL					
IC 410-274149/16		8260D		5 uL					
IC 410-274149/17		8260D		5 uL					
IC 410-274149/18		8260D		5 uL					

Batch Notes	

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 Lancaster Laboratories Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Batch Number: 274149 Batch Start Date: 07/11/22 13:17 Batch Analyst: Sposito, Kevin A

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.



GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Batch Number: 275687 Batch Start Date: 07/14/22 19:09 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	LCS_ETBR 00003	MSV_LCS_ACROL 00066	MSV_LCS_EE 00003
BFB 410-275687/1		8260D		1 uL	1 uL				
ICV 410-275687/4		8260D		25 mL	25 mL	2646	12.5 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_Penta 00017	MSV_LCS_VOC#1 00063	MSV_LLcentISS 00005	MSV_QC_Gas826 00089	MSV_V_BFB 00008
BFB 410-275687/1		8260D						1 uL
ICV 410-275687/4		8260D		12.5 uL	12.5 uL	5 uL	12.5 uL	

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Batch Number: 286414 Batch Start Date: 08/16/22 13:07 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	LCS_ETBR 00003	MSV_29_826ISS 00037	MSV_LCS_ACROL 00071
BFB 410-286414/1		8260D		1 uL	1 uL				
IC 410-286414/13		8260D		25 mL	25 mL	2656		1 uL	
IC 410-286414/14		8260D		25 mL	25 mL	2656		1 uL	
IC 410-286414/15		8260D		25 mL	25 mL	2656		1 uL	
IC 410-286414/16		8260D		25 mL	25 mL	2656		1 uL	
IC 410-286414/17		8260D		25 mL	25 mL	2656		1 uL	
ICIS 410-286414/18		8260D		25 mL	25 mL	2656		1 uL	
IC 410-286414/19		8260D		25 mL	25 mL	2656		1 uL	
ICV 410-286414/21		8260D		25 mL	25 mL	2656	12.5 uL	1 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_EE 00003	MSV_LCS_Penta 00018	MSV_LCS_VOC#1 00068	MSV_LL_#1_826 00052	MSV_LL_#2_826 00056	MSV_LL_GAS826 00108
BFB 410-286414/1		8260D							
IC 410-286414/13		8260D					2 uL	2 uL	2 uL
IC 410-286414/14		8260D					2 uL	2 uL	2 uL
IC 410-286414/15		8260D					2 uL	2 uL	2 uL
IC 410-286414/16		8260D					2 uL	2 uL	2 uL
IC 410-286414/17		8260D					5 uL	5 uL	5 uL
ICIS 410-286414/18		8260D					10 uL	10 uL	10 uL
IC 410-286414/19		8260D					25 uL	25 uL	25 uL
ICV 410-286414/21		8260D		12.5 uL	12.5 uL	12.5 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 Lancaster Laboratories Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Batch Number: 286414 Batch Start Date: 08/16/22 13:07 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QC_Gas826 00095	MSV_V_BFB 00008				
BFB 410-286414/1		8260D			1 uL				
IC 410-286414/13		8260D							
IC 410-286414/14		8260D							
IC 410-286414/15		8260D							
IC 410-286414/16		8260D							
IC 410-286414/17		8260D							
ICIS 410-286414/18		8260D							
IC 410-286414/19		8260D							
ICV 410-286414/21		8260D		12.5 uL					

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Batch Number: 322544 Batch Start Date: 12/01/22 09:58 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloChe ck	Headspace	Lot#Vial
BFB 410-322544/1		8260D		1 uL	1 uL				
CCVIS 410-322544/3		8260D		25 mL	25 mL				2663
LCS 410-322544/4		8260D		25 mL	25 mL				2663
MB 410-322544/6		8260D		25 mL	25 mL				2663
410-106467-A-1	HD-COD-SW-6-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-2	HD-COD-SW-7-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-3	HD-COD-SW-8-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-4	HD-COD-SW-9-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-5	HD-COD-SW-13-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-6	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCS_ETBR 00004	MSV_29_826ISS 00040	MSV_LCS_ACROL 00086	MSV_LCS_EE 00004	MSV_LCS_Penta 00023	MSV_LCS_VOC#1 00084
BFB 410-322544/1		8260D							
CCVIS 410-322544/3		8260D			1 uL				
LCS 410-322544/4		8260D		12.5 uL	1 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
MB 410-322544/6		8260D			1 uL				
410-106467-A-1	HD-COD-SW-6-0/1-0	8260D	T		1 uL				
410-106467-A-2	HD-COD-SW-7-0/1-0	8260D	T		1 uL				
410-106467-A-3	HD-COD-SW-8-0/1-0	8260D	T		1 uL				
410-106467-A-4	HD-COD-SW-9-0/1-0	8260D	T		1 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 Lancaster Laboratories Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Batch Number: 322544 Batch Start Date: 12/01/22 09:58 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCS_ETBR 00004	MSV_29_826ISS 00040	MSV_LCS_ACROL 00086	MSV_LCS_EE 00004	MSV_LCS_Penta 00023	MSV_LCS_VOC#1 00084
410-106467-A-5	HD-COD-SW-13-0/1-0	8260D	T		1 uL				
410-106467-A-6	HD-COD-SW-15-0/1-0	8260D	T		1 uL				
410-106467-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	5.38 uL	1 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL
410-106467-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	5.38 uL	1 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL #1_826 00060	MSV_LL #2-bce 00001	MSV_LL_GAS826 00124	MSV_QC_Gas826 00111	MSV_V_BFB 00008
BFB 410-322544/1		8260D						1 uL
CCVIS 410-322544/3		8260D		25 uL	25 uL	25 uL		
LCS 410-322544/4		8260D					12.5 uL	
MB 410-322544/6		8260D						
410-106467-A-1	HD-COD-SW-6-0/1-0	8260D	T					
410-106467-A-2	HD-COD-SW-7-0/1-0	8260D	T					
410-106467-A-3	HD-COD-SW-8-0/1-0	8260D	T					
410-106467-A-4	HD-COD-SW-9-0/1-0	8260D	T					
410-106467-A-5	HD-COD-SW-13-0/1-0	8260D	T					
410-106467-A-6	HD-COD-SW-15-0/1-0	8260D	T					
410-106467-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T				5.38 uL	
410-106467-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T				5.38 uL	

Batch Notes	

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 Lancaster Laboratories Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Batch Number: 322544 Batch Start Date: 12/01/22 09:58 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date: \_\_\_\_\_

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 Lancaster Laboratories Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Batch Number: 322841 Batch Start Date: 12/01/22 20:00 Batch Analyst: Johnson, Sara E

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloChe ck	Headspace	Lot#Vial
BFB 410-322841/1		8260D		1 uL	1 uL				
CCVIS 410-322841/3		8260D		25 mL	25 mL				2663
LCS 410-322841/4		8260D		25 mL	25 mL				2663
MB 410-322841/6		8260D		25 mL	25 mL				2663
410-106467-A-14	HD-QC1-0/1-2	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-7	HD-COD-SW-16-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-8	HD-COD-SW-17-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-9	HD-COD-SW-26-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-10	HD-COD-SW-27-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-11	HD-COD-SW-28-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-12	HD-COD-SW-29-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-A-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-B-7 MS	HD-COD-SW-16-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-106467-C-7 MSD	HD-COD-SW-16-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCS_ETBR 00003	MSV_LCS_ACROL 00086	MSV_LCS_EE 00004	MSV_LCS_Penta 00023	MSV_LCS_VOC#1 00084	MSV_LL #1_826 00060
BFB 410-322841/1		8260D							
CCVIS 410-322841/3		8260D							25 uL
LCS 410-322841/4		8260D		12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	
MB 410-322841/6		8260D							
410-106467-A-14	HD-QC1-0/1-2	8260D	T						
410-106467-A-7	HD-COD-SW-16-0/1 -0	8260D	T						
410-106467-A-8	HD-COD-SW-17-0/1 -0	8260D	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Batch Number: 322841 Batch Start Date: 12/01/22 20:00 Batch Analyst: Johnson, Sara E

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCS_ETBR 00003	MSV_LCS ACROL 00086	MSV_LCS_EE 00004	MSV_LCS_Penta 00023	MSV_LCS_VOC#1 00084	MSV_LL_#1_826 00060
410-106467-A-9	HD-COD-SW-26-0/1 -0	8260D	T						
410-106467-A-10	HD-COD-SW-27-0/1 -0	8260D	T						
410-106467-A-11	HD-COD-SW-28-0/1 -0	8260D	T						
410-106467-A-12	HD-COD-SW-29-0/1 -0	8260D	T						
410-106467-A-13	HD-QC1-0/1-1	8260D	T						
410-106467-B-7 MS	HD-COD-SW-16-0/1 -0	8260D	T	5.38 uL	5.38 uL			5.38 uL	
410-106467-C-7 MSD	HD-COD-SW-16-0/1 -0	8260D	T	5.38 uL	5.38 uL			5.38 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_#2-bce 00001	MSV_LL_GAS826 00124	MSV_LLcentISS 00006	MSV_QC_Gas826 00111	MSV_V_BFB 00008
BFB 410-322841/1		8260D						1 uL
CCVIS 410-322841/3		8260D		25 uL	25 uL	5 uL		
LCS 410-322841/4		8260D				5 uL	12.5 uL	
MB 410-322841/6		8260D				5 uL		
410-106467-A-14	HD-QC1-0/1-2	8260D	T			5 uL		
410-106467-A-7	HD-COD-SW-16-0/1 -0	8260D	T			5 uL		
410-106467-A-8	HD-COD-SW-17-0/1 -0	8260D	T			5 uL		
410-106467-A-9	HD-COD-SW-26-0/1 -0	8260D	T			5 uL		
410-106467-A-10	HD-COD-SW-27-0/1 -0	8260D	T			5 uL		
410-106467-A-11	HD-COD-SW-28-0/1 -0	8260D	T			5 uL		
410-106467-A-12	HD-COD-SW-29-0/1 -0	8260D	T			5 uL		
410-106467-A-13	HD-QC1-0/1-1	8260D	T			5 uL		
410-106467-B-7 MS	HD-COD-SW-16-0/1 -0	8260D	T			5 uL	5.38 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 Lancaster Laboratories Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Batch Number: 322841 Batch Start Date: 12/01/22 20:00 Batch Analyst: Johnson, Sara E

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_#2-bce 00001	MSV_LL_GAS826 00124	MSV_LLcentISS 00006	MSV_QC_Gas826 00111	MSV_V_BFB 00008	
410-106467-C-7 MSD	HD-COD-SW-16-0/1 -0	8260D	T			5 uL	5.38 uL		

Batch Notes	

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 Lancaster Laboratories Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Batch Number: 322942 Batch Start Date: 12/02/22 09:21 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloChe ck	Headspace	Lot#Vial
BFB 410-322942/1		8260D		1 uL	1 uL				
CCVIS 410-322942/3		8260D		25 mL	25 mL				2663
LCS 410-322942/4		8260D		25 mL	25 mL				2663
MB 410-322942/6		8260D		25 mL	25 mL				2663
410-106467-B-8	HD-COD-SW-17-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	2663
410-106467-B-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	2663

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCS_ETBR 00003	MSV_LCS ACROL 00086	MSV_LCS_EE 00004	MSV_LCS Penta 00023	MSV_LCS_VOC#1 00084	MSV_LL #1_826 00060
BFB 410-322942/1		8260D							
CCVIS 410-322942/3		8260D							20 uL
LCS 410-322942/4		8260D		12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	
MB 410-322942/6		8260D							
410-106467-B-8	HD-COD-SW-17-0/1 -0	8260D	T						
410-106467-B-13	HD-QC1-0/1-1	8260D	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_#2-bce 00001	MSV_LL_GAS826 00124	MSV_LLcentISS 00006	MSV_QC_Gas826 00111	MSV_V_BFB 00008	
BFB 410-322942/1		8260D						1 uL	
CCVIS 410-322942/3		8260D		20 uL	20 uL	5 uL			
LCS 410-322942/4		8260D				5 uL	12.5 uL		
MB 410-322942/6		8260D				5 uL			
410-106467-B-8	HD-COD-SW-17-0/1 -0	8260D	T			5 uL			
410-106467-B-13	HD-QC1-0/1-1	8260D	T			5 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 Lancaster Laboratories Job No.: 410-106467-1

SDG No.: \_\_\_\_\_

Batch Number: 322942 Batch Start Date: 12/02/22 09:21 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Batch Notes	

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



410-106467 Chain of Custody

72

JRG PA

# Environmental Analysis Request/Chain of Custody

page 1 of 2

Environmental

Acct. # \_\_\_\_\_ Group # \_\_\_\_\_ Sample # \_\_\_\_\_

Client: <b>Groundwater Sciences Corporation</b>				<b>Matrix</b>			<b>Analyses Requested</b>										<b>For Lab Use Only</b>				
Project Name/#: <b>FYNOP Monthly Surface Water</b>		Site ID #: <b>FYNOP, York PA</b>		<input type="checkbox"/> Tissue	<input type="checkbox"/> Ground	<input checked="" type="checkbox"/> Surface	<b>Preservation Codes</b>										SF #: _____				
Project Manager: <b>Chris O'Neil</b>		P.O. #: <b>10012.49</b>		<input type="checkbox"/> Potable	<input type="checkbox"/> NPDES	Other:	Total # of Containers	Aqueous VOCs via 8260D (low level - 25 ml purge)	H										SCR #: _____		
Sampler: <b>Casey Littlefield / Jason Fritz</b>		PWSID #: <b>N/A</b>		<input type="checkbox"/> Water	<input type="checkbox"/> Other:														<b>Preservation Codes</b> H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> P = H <sub>3</sub> PO <sub>4</sub> O = Other		
Phone #: <b>(717) 901-8176 / (717) 756-1246</b>		Quote #:		<input type="checkbox"/> Sediment											<b>Remarks</b>						
State where samples were collected: <b>York, PA</b>		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		<b>Collection</b>		Grab	Composite														
		Date	Time																		
<b>Sample Identification</b>																					
HD-COD-SW-6-0/1-0		11/18/22	1020	X			X	3	X												
HD-COD-SW-7-0/1-0			1100	X			X	3	X												
HD-COD-SW-8-0/1-0			0920	X			X	3	X												
HD-COD-SW-9-0/1-0			1225	X			X	3	X												
HD-COD-SW-13-0/1-0			0940	X			X	3	X												
HD-COD-SW-15-0/1-0			1115	X			X	3	X												
HD-COD-SW-15-0/1-0 MS			1115	X			X	3	X												
HD-COD-SW-15-0/1-0 MSD			1115	X			X	3	X												
HD-COD-SW-16-0/1-0			0955	X			X	3	X												
HD-COD-SW-17-0/1-0			1010	X			X	3	X												
<b>Turnaround Time Requested (TAT)</b> (please check):				Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>		Relinquished by:		Date	Time	Received by:		Date	Time								
(Rush TAT is subject to laboratory approval and surcharges.)						<i>[Signature]</i>		11/18/22	1330	<i>[Signature]</i>		11/18/22	1330								
Date results are needed:						Relinquished by:		Date	Time	Received by:		Date	Time								
Rush results requested by (please check):				E-Mail <input checked="" type="checkbox"/> Phone <input type="checkbox"/>		<i>[Signature]</i>		11/18/22	1505	<i>[Signature]</i>		11/18/22	1505								
E-mail Address: <b>ON-FILE</b>						Relinquished by:		Date	Time	Received by:		Date	Time								
Phone:						<i>[Signature]</i>		11/18/22	1624												
<b>Data Package Options</b> (please check if required)						Relinquished by:		Date	Time	Received by:		Date	Time								
Type I (Validation/non-CLP)	<input type="checkbox"/>	MA MCP	<input type="checkbox"/>			<i>[Signature]</i>				<i>[Signature]</i>		11/18/22	1624								
Type III (Reduced non-CLP)	<input type="checkbox"/>	CT RCP	<input type="checkbox"/>			Relinquished by:		Date	Time	Received by:		Date	Time								
Type VI (Raw Data Only)	<input type="checkbox"/>	TX TRRP-13	<input type="checkbox"/>			<i>[Signature]</i>				<i>[Signature]</i>											
NJ DKQP	<input type="checkbox"/>	NYSDEC Category	<input type="checkbox"/>	A or	<input type="checkbox"/>	B	Relinquished by Commercial Carrier:				Temperature upon receipt		1.1 °C								
EDD Required?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, format: _____ List				UPS _____ FedEx _____ Other _____															

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HARRISBURG

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories Environmental

Acct. # \_\_\_\_\_ Group # \_\_\_\_\_ Sample # \_\_\_\_\_

Page 2 of 2

Client: <b>Groundwater Sciences Corporation</b>				<b>Matrix</b>			<b>Analyses Requested</b>										<b>For Lab Use Only</b>				
Project Name#: <b>YNOP Monthly Surface Water</b>		Site ID #: <b>YNOP, York PA</b>		<input type="checkbox"/> Tissue	<input type="checkbox"/> Ground	<input checked="" type="checkbox"/> Surface	<b>Preservation Codes</b>										SF #: _____				
Project Manager: <b>Chris O'Neil</b>		P.O. #: <b>10012.49</b>		<input type="checkbox"/> Potable	<input type="checkbox"/> NPDES	<input type="checkbox"/> Other: Trip Blank											SCR #: _____				
Sampler: <b>Casey Littlefield / Jason Fritz</b>		PWSID #: <b>N/A</b>		<input type="checkbox"/> Soil	<input type="checkbox"/> Sediment												<b>Preservation Codes</b> H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> P = H <sub>3</sub> PO <sub>4</sub> O = Other				
Phone #: <b>(717) 901-8176 / (717) 756-1246</b>		Quote #:																			
State where samples were collected: <b>York, PA</b>		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																			
Sample Identification		Collection		Grab	Composite	Soil	Water	Other: Trip Blank	Total # of Containers	Aqueous VOCs via 8260D (low level - 25 ml purge)											Remarks
		Date	Time																		
HD-COD-SW-26-0/1-0		11/18/22	1040	X			X		3	X											
HD-COD-SW-27-0/1-0			1110	X			X		3	X											
HD-COD-SW-28-0/1-0			1240	X			X		3	X											
HD-COD-SW-29-0/1-0			0905	X			X		3	X											
HD-QC1-0/1-1			1015	X			X		3	X											Dup.
HD-QC1-0/1-2				X				X	2	X											Trip Blank
Turnaround Time Requested (TAT) (please check):				Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>		Relinquished by: <i>[Signature]</i>		Date	Time	Received by: <i>[Signature]</i>		Date	Time								
(Rush TAT is subject to laboratory approval and surcharges.)								11/18/22	1330			11/18/22	1330								
Date results are needed:				Rush results requested by (please check):		Relinquished by: <i>[Signature]</i>		Date	Time	Received by: <i>[Signature]</i>		Date	Time								
E-Mail <input checked="" type="checkbox"/> Phone <input type="checkbox"/>				E-mail Address: <b>ON-FILE</b>				11/18/22	1505			11/18/22	1505								
Data Package Options (please check if required)				E-mail Address: <b>ON-FILE</b>		Relinquished by: <i>[Signature]</i>		Date	Time	Received by: <i>[Signature]</i>		Date	Time								
Type I (Validation/non-CLP) <input type="checkbox"/> MA MCP <input type="checkbox"/>				Type III (Reduced non-CLP) <input type="checkbox"/> CT RCP <input type="checkbox"/>				11/18/22	1624												
Type VI (Raw Data Only) <input type="checkbox"/> TX TRRP-13 <input type="checkbox"/>				NJ DKQP <input type="checkbox"/> NYSDEC Category <input type="checkbox"/> A or <input type="checkbox"/> B		Relinquished by: <i>[Signature]</i>		Date	Time	Received by: <i>[Signature]</i>		Date	Time								
CLP Like Deliverables, Project Specific Analyte List				Relinquished by Commercial Carrier:								11/18/22	11024								
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				If yes, format: _____		UPS _____ FedEx _____ Other _____				Temperature upon receipt		1.1 °C									

SR

# Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-106467-1

**Login Number: 106467**  
**List Number: 1**  
**Creator: Roth, Stephanie**

**List Source: Eurofins Lancaster Laboratories Environment Testing, LLC**

<b>Question</b>	<b>Answer</b>	<b>Comment</b>
The cooler's custody seal is intact.	N/A	
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 ( $\leq 6^{\circ}\text{C}$ , not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable ( $\leq 6^{\circ}\text{C}$ , not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	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	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace $>6\text{mm}$ in diameter (none, if from WV)?	True	