

ANALYTICAL REPORT

Job Number: 410-85437-1

Job Description: fYNOP Monthly Surface Water

For:

Groundwater Sciences Corporation
2550 Interstate Drive
Suite 303
Harrisburg, PA 17110

Attention: Christopher O'Neil



Approved for release.
Marrison C Williams
Project Manager
6/7/2022 12:23 PM

Marrison C Williams, Project Manager
2425 New Holland Pike, Lancaster, PA, 17601
(717)556-7246
Marrison.Williams@et.eurofinsus.com
06/07/2022

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. This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Table of Contents

Cover Title Page	1
Data Summaries	4
Definitions	4
Case Narrative	5
Detection Summary	6
Client Sample Results	9
Default Detection Limits	24
Surrogate Summary	25
QC Sample Results	26
QC Association	31
Chronicle	32
Certification Summary	35
Method Summary	36
Sample Summary	37
Manual Integration Summary	38
Reagent Traceability	45
COAs	58
Organic Sample Data	176
GC/MS VOA	176
Method 8260D Low Level	176
Method 8260D Low Level QC Summary	177
Method 8260D Low Level Sample Data	189
Standards Data	385
Method 8260D Low Level ICAL Data	385
Method 8260D Low Level CCAL Data	567
Raw QC Data	586

Table of Contents

Method 8260D Low Level Tune Data	586
Method 8260D Low Level Blank Data	594
Method 8260D Low Level LCS/LCSD Data	602
Method 8260D Low Level MS/MSD Data	617
Method 8260D Low Level Run Logs	631
Method 8260D Low Level Prep Data	633
Shipping and Receiving Documents	639
Client Chain of Custody	640
Sample Receipt Checklist	642

Definitions/Glossary

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

Job ID: 410-85437-1

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
410-85437-1

Receipt

The samples were received on 5/26/2022 6:20 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 1.5°C

GC/MS VOA

Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 410-261977 recovered outside acceptance criteria, low biased, for Bromomethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

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: 410-85437-1

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

Lab Sample ID: 410-85437-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.4	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.058	J	0.50	0.050	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-85437-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.6	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.062	J	0.50	0.050	ug/L	1		8260D	Total/NA
Toluene	0.078	J	0.50	0.070	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-85437-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.2	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.088	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.39	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.093	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-85437-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.5	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.091	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.21	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.086	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	0.096	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-85437-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.1	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.087	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.54	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.086	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-85437-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.34	J	0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.15	J	0.50	0.070	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.20	J	0.50	0.060	ug/L	1		8260D	Total/NA
Acetone	1.2	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.27	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	2.1	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	6.5	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	1.9	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-85437-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.1	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.086	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.52	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.092	J	0.50	0.070	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: 410-85437-1

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

Lab Sample ID: 410-85437-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.081	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-85437-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.8		0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.58		0.50	0.070	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.27	J	0.50	0.060	ug/L	1		8260D	Total/NA
Acetone	2.0	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.10	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.4		0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	2.4		0.50	0.060	ug/L	1		8260D	Total/NA
Vinyl chloride	0.18	J	0.50	0.10	ug/L	1		8260D	Total/NA
Tetrachloroethene - DL	28		5.0	0.60	ug/L	10		8260D	Total/NA

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

Lab Sample ID: 410-85437-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.074	J	0.50	0.060	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	0.97	J	5.0	0.60	ug/L	1		8260D	Total/NA
Acetone	2.0	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.23	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.061	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	1.4		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.093	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-85437-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	1.3	J	5.0	0.60	ug/L	1		8260D	Total/NA
Acetone	2.8	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.081	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.082	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.12	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	0.080	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-85437-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.9	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.089	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.20	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.087	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	0.088	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-85437-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.0	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.072	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.26	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.071	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	0.082	J	0.50	0.060	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: 410-85437-1

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

Lab Sample ID: 410-85437-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.8		0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.59		0.50	0.070	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.28	J	0.50	0.060	ug/L	1		8260D	Total/NA
Acetone	1.7	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.10	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.3		0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	2.4		0.50	0.060	ug/L	1		8260D	Total/NA
Vinyl chloride	0.20	J	0.50	0.10	ug/L	1		8260D	Total/NA
Tetrachloroethene - DL	29		5.0	0.60	ug/L	10		8260D	Total/NA

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

Lab Sample ID: 410-85437-14

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-1

Date Collected: 05/25/22 10:50

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 14:09	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 14:09	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 14:09	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 14:09	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/06/22 14:09	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 14:09	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 14:09	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 14:09	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 14:09	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/06/22 14:09	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 14:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 14:09	1
Acetone	2.4	J	5.0	0.90	ug/L			06/06/22 14:09	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 14:09	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 14:09	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 14:09	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 14:09	1
Bromomethane	ND	^c	0.50	0.070	ug/L			06/06/22 14:09	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 14:09	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 14:09	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 14:09	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 14:09	1
Chloroform	ND		0.50	0.090	ug/L			06/06/22 14:09	1
Chloromethane	ND	*+	0.50	0.060	ug/L			06/06/22 14:09	1
cis-1,2-Dichloroethene	0.058	J	0.50	0.050	ug/L			06/06/22 14:09	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 14:09	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 14:09	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 14:09	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 14:09	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 14:09	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 14:09	1
Tetrachloroethene	ND		0.50	0.060	ug/L			06/06/22 14:09	1
Toluene	ND		0.50	0.070	ug/L			06/06/22 14:09	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 14:09	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 14:09	1
Trichloroethene	ND		0.50	0.060	ug/L			06/06/22 14:09	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/06/22 14:09	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 14:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		06/06/22 14:09	1
4-Bromofluorobenzene (Surr)	93		80 - 120		06/06/22 14:09	1
Dibromofluoromethane (Surr)	96		80 - 120		06/06/22 14:09	1
Toluene-d8 (Surr)	101		80 - 120		06/06/22 14:09	1

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-2

Date Collected: 05/25/22 12:05

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 14:31	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 14:31	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 14:31	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 14:31	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/06/22 14:31	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 14:31	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 14:31	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 14:31	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 14:31	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/06/22 14:31	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 14:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 14:31	1
Acetone	2.6	J	5.0	0.90	ug/L			06/06/22 14:31	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 14:31	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 14:31	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 14:31	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 14:31	1
Bromomethane	ND	^c	0.50	0.070	ug/L			06/06/22 14:31	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 14:31	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 14:31	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 14:31	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 14:31	1
Chloroform	ND		0.50	0.090	ug/L			06/06/22 14:31	1
Chloromethane	ND	*+	0.50	0.060	ug/L			06/06/22 14:31	1
cis-1,2-Dichloroethene	0.062	J	0.50	0.050	ug/L			06/06/22 14:31	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 14:31	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 14:31	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 14:31	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 14:31	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 14:31	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 14:31	1
Tetrachloroethene	ND		0.50	0.060	ug/L			06/06/22 14:31	1
Toluene	0.078	J	0.50	0.070	ug/L			06/06/22 14:31	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 14:31	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 14:31	1
Trichloroethene	ND		0.50	0.060	ug/L			06/06/22 14:31	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/06/22 14:31	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 14:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		80 - 120		06/06/22 14:31	1
4-Bromofluorobenzene (Surr)	92		80 - 120		06/06/22 14:31	1
Dibromofluoromethane (Surr)	95		80 - 120		06/06/22 14:31	1
Toluene-d8 (Surr)	100		80 - 120		06/06/22 14:31	1

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-3

Date Collected: 05/25/22 09:40

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 14:54	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 14:54	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 14:54	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 14:54	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/06/22 14:54	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 14:54	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 14:54	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 14:54	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 14:54	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/06/22 14:54	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 14:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 14:54	1
Acetone	2.2	J	5.0	0.90	ug/L			06/06/22 14:54	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 14:54	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 14:54	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 14:54	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 14:54	1
Bromomethane	ND	^c cn	0.50	0.070	ug/L			06/06/22 14:54	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 14:54	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 14:54	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 14:54	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 14:54	1
Chloroform	ND		0.50	0.090	ug/L			06/06/22 14:54	1
Chloromethane	ND	*+	0.50	0.060	ug/L			06/06/22 14:54	1
cis-1,2-Dichloroethene	0.088	J	0.50	0.050	ug/L			06/06/22 14:54	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 14:54	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 14:54	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 14:54	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 14:54	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 14:54	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 14:54	1
Tetrachloroethene	0.39	J	0.50	0.060	ug/L			06/06/22 14:54	1
Toluene	ND		0.50	0.070	ug/L			06/06/22 14:54	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 14:54	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 14:54	1
Trichloroethene	0.093	J	0.50	0.060	ug/L			06/06/22 14:54	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/06/22 14:54	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 14:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		06/06/22 14:54	1
4-Bromofluorobenzene (Surr)	92		80 - 120		06/06/22 14:54	1
Dibromofluoromethane (Surr)	96		80 - 120		06/06/22 14:54	1
Toluene-d8 (Surr)	100		80 - 120		06/06/22 14:54	1

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-4

Date Collected: 05/25/22 13:15

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 15:16	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 15:16	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 15:16	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 15:16	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/06/22 15:16	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 15:16	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 15:16	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 15:16	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 15:16	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/06/22 15:16	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 15:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 15:16	1
Acetone	3.5	J	5.0	0.90	ug/L			06/06/22 15:16	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 15:16	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 15:16	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 15:16	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 15:16	1
Bromomethane	ND	^c cn	0.50	0.070	ug/L			06/06/22 15:16	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 15:16	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 15:16	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 15:16	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 15:16	1
Chloroform	ND		0.50	0.090	ug/L			06/06/22 15:16	1
Chloromethane	ND	*+	0.50	0.060	ug/L			06/06/22 15:16	1
cis-1,2-Dichloroethene	0.091	J	0.50	0.050	ug/L			06/06/22 15:16	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 15:16	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 15:16	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 15:16	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 15:16	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 15:16	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 15:16	1
Tetrachloroethene	0.21	J	0.50	0.060	ug/L			06/06/22 15:16	1
Toluene	0.086	J	0.50	0.070	ug/L			06/06/22 15:16	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 15:16	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 15:16	1
Trichloroethene	0.096	J	0.50	0.060	ug/L			06/06/22 15:16	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/06/22 15:16	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 15:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		06/06/22 15:16	1
4-Bromofluorobenzene (Surr)	91		80 - 120		06/06/22 15:16	1
Dibromofluoromethane (Surr)	97		80 - 120		06/06/22 15:16	1
Toluene-d8 (Surr)	100		80 - 120		06/06/22 15:16	1

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-5

Date Collected: 05/25/22 09:55

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 15:38	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 15:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 15:38	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 15:38	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/06/22 15:38	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 15:38	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 15:38	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 15:38	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 15:38	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/06/22 15:38	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 15:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 15:38	1
Acetone	2.1	J	5.0	0.90	ug/L			06/06/22 15:38	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 15:38	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 15:38	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 15:38	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 15:38	1
Bromomethane	ND	^c cn	0.50	0.070	ug/L			06/06/22 15:38	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 15:38	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 15:38	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 15:38	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 15:38	1
Chloroform	ND		0.50	0.090	ug/L			06/06/22 15:38	1
Chloromethane	ND	*+	0.50	0.060	ug/L			06/06/22 15:38	1
cis-1,2-Dichloroethene	0.087	J	0.50	0.050	ug/L			06/06/22 15:38	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 15:38	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 15:38	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 15:38	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 15:38	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 15:38	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 15:38	1
Tetrachloroethene	0.54		0.50	0.060	ug/L			06/06/22 15:38	1
Toluene	ND		0.50	0.070	ug/L			06/06/22 15:38	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 15:38	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 15:38	1
Trichloroethene	0.086	J	0.50	0.060	ug/L			06/06/22 15:38	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/06/22 15:38	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 15:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		80 - 120		06/06/22 15:38	1
4-Bromofluorobenzene (Surr)	91		80 - 120		06/06/22 15:38	1
Dibromofluoromethane (Surr)	95		80 - 120		06/06/22 15:38	1
Toluene-d8 (Surr)	102		80 - 120		06/06/22 15:38	1

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-6

Date Collected: 05/25/22 12:25

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 16:01	1
1,1,1-Trichloroethane	0.34	J	0.50	0.060	ug/L			06/06/22 16:01	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 16:01	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 16:01	1
1,1-Dichloroethane	0.15	J	0.50	0.070	ug/L			06/06/22 16:01	1
1,1-Dichloroethene	0.20	J	0.50	0.060	ug/L			06/06/22 16:01	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 16:01	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 16:01	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 16:01	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/06/22 16:01	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 16:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 16:01	1
Acetone	1.2	J	5.0	0.90	ug/L			06/06/22 16:01	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 16:01	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 16:01	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 16:01	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 16:01	1
Bromomethane	ND	^c cn	0.50	0.070	ug/L			06/06/22 16:01	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 16:01	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 16:01	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 16:01	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 16:01	1
Chloroform	0.27	J	0.50	0.090	ug/L			06/06/22 16:01	1
Chloromethane	ND	*+ FH	0.50	0.060	ug/L			06/06/22 16:01	1
cis-1,2-Dichloroethene	2.1		0.50	0.050	ug/L			06/06/22 16:01	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 16:01	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 16:01	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 16:01	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 16:01	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 16:01	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 16:01	1
Tetrachloroethene	6.5		0.50	0.060	ug/L			06/06/22 16:01	1
Toluene	ND		0.50	0.070	ug/L			06/06/22 16:01	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 16:01	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 16:01	1
Trichloroethene	1.9		0.50	0.060	ug/L			06/06/22 16:01	1
Vinyl chloride	ND	FH	0.50	0.10	ug/L			06/06/22 16:01	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		06/06/22 16:01	1
4-Bromofluorobenzene (Surr)	93		80 - 120		06/06/22 16:01	1
Dibromofluoromethane (Surr)	96		80 - 120		06/06/22 16:01	1
Toluene-d8 (Surr)	103		80 - 120		06/06/22 16:01	1

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-7

Date Collected: 05/25/22 10:25

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 17:30	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 17:30	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 17:30	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 17:30	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/06/22 17:30	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 17:30	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 17:30	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 17:30	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 17:30	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/06/22 17:30	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 17:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 17:30	1
Acetone	2.1	J	5.0	0.90	ug/L			06/06/22 17:30	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 17:30	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 17:30	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 17:30	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 17:30	1
Bromomethane	ND	^c cn	0.50	0.070	ug/L			06/06/22 17:30	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 17:30	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 17:30	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 17:30	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 17:30	1
Chloroform	ND		0.50	0.090	ug/L			06/06/22 17:30	1
Chloromethane	ND	*+	0.50	0.060	ug/L			06/06/22 17:30	1
cis-1,2-Dichloroethene	0.086	J	0.50	0.050	ug/L			06/06/22 17:30	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 17:30	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 17:30	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 17:30	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 17:30	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 17:30	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 17:30	1
Tetrachloroethene	0.52		0.50	0.060	ug/L			06/06/22 17:30	1
Toluene	0.092	J	0.50	0.070	ug/L			06/06/22 17:30	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 17:30	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 17:30	1
Trichloroethene	0.081	J	0.50	0.060	ug/L			06/06/22 17:30	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/06/22 17:30	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 17:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		06/06/22 17:30	1
4-Bromofluorobenzene (Surr)	92		80 - 120		06/06/22 17:30	1
Dibromofluoromethane (Surr)	102		80 - 120		06/06/22 17:30	1
Toluene-d8 (Surr)	101		80 - 120		06/06/22 17:30	1

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-8

Date Collected: 05/25/22 10:35

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 17:52	1
1,1,1-Trichloroethane	2.8		0.50	0.060	ug/L			06/06/22 17:52	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 17:52	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 17:52	1
1,1-Dichloroethane	0.58		0.50	0.070	ug/L			06/06/22 17:52	1
1,1-Dichloroethene	0.27	J	0.50	0.060	ug/L			06/06/22 17:52	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 17:52	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 17:52	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 17:52	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/06/22 17:52	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 17:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 17:52	1
Acetone	2.0	J	5.0	0.90	ug/L			06/06/22 17:52	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 17:52	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 17:52	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 17:52	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 17:52	1
Bromomethane	ND	^c cn	0.50	0.070	ug/L			06/06/22 17:52	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 17:52	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 17:52	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 17:52	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 17:52	1
Chloroform	0.10	J	0.50	0.090	ug/L			06/06/22 17:52	1
Chloromethane	ND	*+	0.50	0.060	ug/L			06/06/22 17:52	1
cis-1,2-Dichloroethene	3.4		0.50	0.050	ug/L			06/06/22 17:52	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 17:52	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 17:52	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 17:52	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 17:52	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 17:52	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 17:52	1
Toluene	ND		0.50	0.070	ug/L			06/06/22 17:52	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 17:52	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 17:52	1
Trichloroethene	2.4		0.50	0.060	ug/L			06/06/22 17:52	1
Vinyl chloride	0.18	J	0.50	0.10	ug/L			06/06/22 17:52	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 17:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		06/06/22 17:52	1
4-Bromofluorobenzene (Surr)	90		80 - 120		06/06/22 17:52	1
Dibromofluoromethane (Surr)	98		80 - 120		06/06/22 17:52	1
Toluene-d8 (Surr)	105		80 - 120		06/06/22 17:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	28		5.0	0.60	ug/L			06/06/22 18:14	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		06/06/22 18:14	10

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-8

Date Collected: 05/25/22 10:35

Matrix: Water

Date Received: 05/26/22 18:20

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		80 - 120		06/06/22 18:14	10
Dibromofluoromethane (Surr)	96		80 - 120		06/06/22 18:14	10
Toluene-d8 (Surr)	101		80 - 120		06/06/22 18:14	10

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

Lab Sample ID: 410-85437-9

Date Collected: 05/25/22 11:45

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 18:36	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 18:36	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 18:36	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 18:36	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/06/22 18:36	1
1,1-Dichloroethene	0.074	J	0.50	0.060	ug/L			06/06/22 18:36	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 18:36	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 18:36	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 18:36	1
2-Butanone (MEK)	0.97	J	5.0	0.60	ug/L			06/06/22 18:36	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 18:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 18:36	1
Acetone	2.0	J	5.0	0.90	ug/L			06/06/22 18:36	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 18:36	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 18:36	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 18:36	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 18:36	1
Bromomethane	ND	^c cn	0.50	0.070	ug/L			06/06/22 18:36	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 18:36	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 18:36	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 18:36	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 18:36	1
Chloroform	0.23	J	0.50	0.090	ug/L			06/06/22 18:36	1
Chloromethane	ND	*+	0.50	0.060	ug/L			06/06/22 18:36	1
cis-1,2-Dichloroethene	0.061	J	0.50	0.050	ug/L			06/06/22 18:36	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 18:36	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 18:36	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 18:36	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 18:36	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 18:36	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 18:36	1
Tetrachloroethene	1.4		0.50	0.060	ug/L			06/06/22 18:36	1
Toluene	ND		0.50	0.070	ug/L			06/06/22 18:36	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 18:36	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 18:36	1
Trichloroethene	0.093	J	0.50	0.060	ug/L			06/06/22 18:36	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/06/22 18:36	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 18:36	1

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-9

Date Collected: 05/25/22 11:45

Matrix: Water

Date Received: 05/26/22 18:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		06/06/22 18:36	1
4-Bromofluorobenzene (Surr)	90		80 - 120		06/06/22 18:36	1
Dibromofluoromethane (Surr)	96		80 - 120		06/06/22 18:36	1
Toluene-d8 (Surr)	101		80 - 120		06/06/22 18:36	1

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

Lab Sample ID: 410-85437-10

Date Collected: 05/25/22 12:20

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 18:59	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 18:59	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 18:59	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 18:59	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/06/22 18:59	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 18:59	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 18:59	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 18:59	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 18:59	1
2-Butanone (MEK)	1.3	J	5.0	0.60	ug/L			06/06/22 18:59	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 18:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 18:59	1
Acetone	2.8	J	5.0	0.90	ug/L			06/06/22 18:59	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 18:59	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 18:59	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 18:59	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 18:59	1
Bromomethane	ND	^c cn	0.50	0.070	ug/L			06/06/22 18:59	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 18:59	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 18:59	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 18:59	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 18:59	1
Chloroform	ND		0.50	0.090	ug/L			06/06/22 18:59	1
Chloromethane	ND	*+	0.50	0.060	ug/L			06/06/22 18:59	1
cis-1,2-Dichloroethene	0.081	J	0.50	0.050	ug/L			06/06/22 18:59	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 18:59	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 18:59	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 18:59	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 18:59	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 18:59	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 18:59	1
Tetrachloroethene	0.082	J	0.50	0.060	ug/L			06/06/22 18:59	1
Toluene	0.12	J	0.50	0.070	ug/L			06/06/22 18:59	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 18:59	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 18:59	1
Trichloroethene	0.080	J	0.50	0.060	ug/L			06/06/22 18:59	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/06/22 18:59	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 18:59	1

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-10

Date Collected: 05/25/22 12:20

Matrix: Water

Date Received: 05/26/22 18:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		06/06/22 18:59	1
4-Bromofluorobenzene (Surr)	91		80 - 120		06/06/22 18:59	1
Dibromofluoromethane (Surr)	100		80 - 120		06/06/22 18:59	1
Toluene-d8 (Surr)	101		80 - 120		06/06/22 18:59	1

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

Lab Sample ID: 410-85437-11

Date Collected: 05/25/22 13:30

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 19:21	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 19:21	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 19:21	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 19:21	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/06/22 19:21	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 19:21	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 19:21	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 19:21	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 19:21	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/06/22 19:21	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 19:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 19:21	1
Acetone	2.9	J	5.0	0.90	ug/L			06/06/22 19:21	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 19:21	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 19:21	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 19:21	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 19:21	1
Bromomethane	ND	^c cn	0.50	0.070	ug/L			06/06/22 19:21	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 19:21	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 19:21	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 19:21	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 19:21	1
Chloroform	ND		0.50	0.090	ug/L			06/06/22 19:21	1
Chloromethane	ND	*+	0.50	0.060	ug/L			06/06/22 19:21	1
cis-1,2-Dichloroethene	0.089	J	0.50	0.050	ug/L			06/06/22 19:21	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 19:21	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 19:21	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 19:21	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 19:21	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 19:21	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 19:21	1
Tetrachloroethene	0.20	J	0.50	0.060	ug/L			06/06/22 19:21	1
Toluene	0.087	J	0.50	0.070	ug/L			06/06/22 19:21	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 19:21	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 19:21	1
Trichloroethene	0.088	J	0.50	0.060	ug/L			06/06/22 19:21	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/06/22 19:21	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 19:21	1

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-11

Date Collected: 05/25/22 13:30

Matrix: Water

Date Received: 05/26/22 18:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		06/06/22 19:21	1
4-Bromofluorobenzene (Surr)	91		80 - 120		06/06/22 19:21	1
Dibromofluoromethane (Surr)	97		80 - 120		06/06/22 19:21	1
Toluene-d8 (Surr)	101		80 - 120		06/06/22 19:21	1

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

Lab Sample ID: 410-85437-12

Date Collected: 05/25/22 09:20

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 19:43	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 19:43	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 19:43	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 19:43	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/06/22 19:43	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 19:43	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 19:43	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 19:43	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 19:43	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/06/22 19:43	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 19:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 19:43	1
Acetone	2.0	J	5.0	0.90	ug/L			06/06/22 19:43	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 19:43	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 19:43	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 19:43	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 19:43	1
Bromomethane	ND	^c	0.50	0.070	ug/L			06/06/22 19:43	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 19:43	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 19:43	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 19:43	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 19:43	1
Chloroform	ND		0.50	0.090	ug/L			06/06/22 19:43	1
Chloromethane	ND	*+	0.50	0.060	ug/L			06/06/22 19:43	1
cis-1,2-Dichloroethene	0.072	J	0.50	0.050	ug/L			06/06/22 19:43	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 19:43	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 19:43	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 19:43	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 19:43	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 19:43	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 19:43	1
Tetrachloroethene	0.26	J	0.50	0.060	ug/L			06/06/22 19:43	1
Toluene	0.071	J	0.50	0.070	ug/L			06/06/22 19:43	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 19:43	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 19:43	1
Trichloroethene	0.082	J	0.50	0.060	ug/L			06/06/22 19:43	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/06/22 19:43	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 19:43	1

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-12

Date Collected: 05/25/22 09:20

Matrix: Water

Date Received: 05/26/22 18:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		06/06/22 19:43	1
4-Bromofluorobenzene (Surr)	92		80 - 120		06/06/22 19:43	1
Dibromofluoromethane (Surr)	96		80 - 120		06/06/22 19:43	1
Toluene-d8 (Surr)	98		80 - 120		06/06/22 19:43	1

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

Lab Sample ID: 410-85437-13

Date Collected: 05/25/22 12:00

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 20:05	1
1,1,1-Trichloroethane	2.8		0.50	0.060	ug/L			06/06/22 20:05	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 20:05	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 20:05	1
1,1-Dichloroethane	0.59		0.50	0.070	ug/L			06/06/22 20:05	1
1,1-Dichloroethene	0.28	J	0.50	0.060	ug/L			06/06/22 20:05	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 20:05	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 20:05	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 20:05	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/06/22 20:05	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 20:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 20:05	1
Acetone	1.7	J	5.0	0.90	ug/L			06/06/22 20:05	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 20:05	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 20:05	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 20:05	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 20:05	1
Bromomethane	ND	^c cn	0.50	0.070	ug/L			06/06/22 20:05	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 20:05	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 20:05	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 20:05	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 20:05	1
Chloroform	0.10	J	0.50	0.090	ug/L			06/06/22 20:05	1
Chloromethane	ND	*+	0.50	0.060	ug/L			06/06/22 20:05	1
cis-1,2-Dichloroethene	3.3		0.50	0.050	ug/L			06/06/22 20:05	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 20:05	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 20:05	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 20:05	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 20:05	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 20:05	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 20:05	1
Toluene	ND		0.50	0.070	ug/L			06/06/22 20:05	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 20:05	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 20:05	1
Trichloroethene	2.4		0.50	0.060	ug/L			06/06/22 20:05	1
Vinyl chloride	0.20	J	0.50	0.10	ug/L			06/06/22 20:05	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 20:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		06/06/22 20:05	1

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-13

Date Collected: 05/25/22 12:00

Matrix: Water

Date Received: 05/26/22 18:20

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		80 - 120		06/06/22 20:05	1
Dibromofluoromethane (Surr)	96		80 - 120		06/06/22 20:05	1
Toluene-d8 (Surr)	98		80 - 120		06/06/22 20:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	29		5.0	0.60	ug/L			06/06/22 20:28	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		06/06/22 20:28	10
4-Bromofluorobenzene (Surr)	91		80 - 120		06/06/22 20:28	10
Dibromofluoromethane (Surr)	98		80 - 120		06/06/22 20:28	10
Toluene-d8 (Surr)	100		80 - 120		06/06/22 20:28	10

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

Lab Sample ID: 410-85437-14

Date Collected: 05/25/22 00:00

Matrix: Water

Date Received: 05/26/22 18:20

Method: 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			06/06/22 13:02	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 13:02	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 13:02	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 13:02	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/06/22 13:02	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 13:02	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 13:02	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 13:02	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 13:02	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/06/22 13:02	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 13:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 13:02	1
Acetone	ND		5.0	0.90	ug/L			06/06/22 13:02	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 13:02	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 13:02	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 13:02	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 13:02	1
Bromomethane	ND	^c cn	0.50	0.070	ug/L			06/06/22 13:02	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 13:02	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 13:02	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 13:02	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 13:02	1
Chloroform	ND		0.50	0.090	ug/L			06/06/22 13:02	1
Chloromethane	ND	*+	0.50	0.060	ug/L			06/06/22 13:02	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			06/06/22 13:02	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 13:02	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 13:02	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 13:02	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 13:02	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 13:02	1

Client Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-14

Date Collected: 05/25/22 00:00

Matrix: Water

Date Received: 05/26/22 18:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.50	0.050	ug/L			06/06/22 13:02	1
Tetrachloroethene	ND		0.50	0.060	ug/L			06/06/22 13:02	1
Toluene	ND		0.50	0.070	ug/L			06/06/22 13:02	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 13:02	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 13:02	1
Trichloroethene	ND		0.50	0.060	ug/L			06/06/22 13:02	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/06/22 13:02	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 13:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		06/06/22 13:02	1
4-Bromofluorobenzene (Surr)	93		80 - 120		06/06/22 13:02	1
Dibromofluoromethane (Surr)	94		80 - 120		06/06/22 13:02	1
Toluene-d8 (Surr)	102		80 - 120		06/06/22 13:02	1

Default Detection Limits

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

Job ID: 410-85437-1

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	0.060	ug/L
1,1,2,2-Tetrachloroethane	0.50	0.070	ug/L
1,1,2-Trichloroethane	0.50	0.060	ug/L
1,1-Dichloroethane	0.50	0.070	ug/L
1,1-Dichloroethene	0.50	0.060	ug/L
1,2-Dibromoethane (EDB)	0.50	0.060	ug/L
1,2-Dichloroethane	0.50	0.050	ug/L
1,2-Dichloropropane	0.50	0.060	ug/L
2-Butanone (MEK)	5.0	0.60	ug/L
2-Hexanone	5.0	0.60	ug/L
4-Methyl-2-pentanone (MIBK)	5.0	0.70	ug/L
Acetone	5.0	0.90	ug/L
Benzene	0.50	0.050	ug/L
Bromochloromethane	0.50	0.050	ug/L
Bromodichloromethane	0.50	0.050	ug/L
Bromoform	1.0	0.30	ug/L
Bromomethane	0.50	0.070	ug/L
Carbon disulfide	1.0	0.060	ug/L
Carbon tetrachloride	0.50	0.070	ug/L
Chlorobenzene	0.50	0.060	ug/L
Chloroethane	0.50	0.070	ug/L
Chloroform	0.50	0.090	ug/L
Chloromethane	0.50	0.060	ug/L
cis-1,2-Dichloroethene	0.50	0.050	ug/L
cis-1,3-Dichloropropene	0.50	0.050	ug/L
Dibromochloromethane	0.50	0.070	ug/L
Ethylbenzene	0.50	0.060	ug/L
Methyl tert-butyl ether	0.50	0.050	ug/L
Methylene Chloride	0.50	0.070	ug/L
Styrene	0.50	0.050	ug/L
Tetrachloroethene	0.50	0.060	ug/L
Toluene	0.50	0.070	ug/L
trans-1,2-Dichloroethene	0.50	0.060	ug/L
trans-1,3-Dichloropropene	0.50	0.060	ug/L
Trichloroethene	0.50	0.060	ug/L
Vinyl chloride	0.50	0.10	ug/L
Xylenes, Total	1.0	0.15	ug/L

Surrogate Summary

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

Job ID: 410-85437-1

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)
410-85437-1	HD-COD-SW-6-0/1-0	97	93	96	101
410-85437-2	HD-COD-SW-7-0/1-0	91	92	95	100
410-85437-3	HD-COD-SW-8-0/1-0	94	92	96	100
410-85437-4	HD-COD-SW-9-0/1-0	92	91	97	100
410-85437-5	HD-COD-SW-13-0/1-0	91	91	95	102
410-85437-6	HD-COD-SW-15-0/1-0	93	93	96	103
410-85437-6 MS	HD-COD-SW-15-0/1-0 MS	91	94	93	103
410-85437-6 MSD	HD-COD-SW-15-0/1-0 MSD	96	95	97	104
410-85437-7	HD-COD-SW-16-0/1-0	93	92	102	101
410-85437-8	HD-COD-SW-17-0/1-0	96	90	98	105
410-85437-8 - DL	HD-COD-SW-17-0/1-0	93	92	96	101
410-85437-9	HD-COD-SW-26-0/1-0	93	90	96	101
410-85437-10	HD-COD-SW-27-0/1-0	95	91	100	101
410-85437-11	HD-COD-SW-28-0/1-0	93	91	97	101
410-85437-12	HD-COD-SW-29-0/1-0	94	92	96	98
410-85437-13	HD-QC1-0/1-1	92	90	96	98
410-85437-13 - DL	HD-QC1-0/1-1	97	91	98	100
410-85437-14	HD-QC1-0/1-2	94	93	94	102
LCS 410-261977/4	Lab Control Sample	88	98	94	106
LCSD 410-261977/5	Lab Control Sample Dup	86	97	93	103
MB 410-261977/7	Method Blank	93	93	94	102

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: 410-85437-1

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

Lab Sample ID: MB 410-261977/7

Matrix: Water

Analysis Batch: 261977

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			06/06/22 12:17	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 12:17	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/06/22 12:17	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/06/22 12:17	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/06/22 12:17	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 12:17	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/06/22 12:17	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/06/22 12:17	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/06/22 12:17	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/06/22 12:17	1
2-Hexanone	ND		5.0	0.60	ug/L			06/06/22 12:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/06/22 12:17	1
Acetone	ND		5.0	0.90	ug/L			06/06/22 12:17	1
Benzene	ND		0.50	0.050	ug/L			06/06/22 12:17	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/06/22 12:17	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/06/22 12:17	1
Bromoform	ND		1.0	0.30	ug/L			06/06/22 12:17	1
Bromomethane	ND		0.50	0.070	ug/L			06/06/22 12:17	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/06/22 12:17	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/06/22 12:17	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/06/22 12:17	1
Chloroethane	ND		0.50	0.070	ug/L			06/06/22 12:17	1
Chloroform	ND		0.50	0.090	ug/L			06/06/22 12:17	1
Chloromethane	ND		0.50	0.060	ug/L			06/06/22 12:17	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			06/06/22 12:17	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/06/22 12:17	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/06/22 12:17	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/06/22 12:17	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/06/22 12:17	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/06/22 12:17	1
Styrene	ND		0.50	0.050	ug/L			06/06/22 12:17	1
Tetrachloroethene	ND		0.50	0.060	ug/L			06/06/22 12:17	1
Toluene	ND		0.50	0.070	ug/L			06/06/22 12:17	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/06/22 12:17	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/06/22 12:17	1
Trichloroethene	ND		0.50	0.060	ug/L			06/06/22 12:17	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/06/22 12:17	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/06/22 12:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		06/06/22 12:17	1
4-Bromofluorobenzene (Surr)	93		80 - 120		06/06/22 12:17	1
Dibromofluoromethane (Surr)	94		80 - 120		06/06/22 12:17	1
Toluene-d8 (Surr)	102		80 - 120		06/06/22 12:17	1

QC Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: LCS 410-261977/4

Matrix: Water

Analysis Batch: 261977

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	4.75		ug/L		95	71 - 134
1,1,1-Trichloroethane	5.00	4.35		ug/L		87	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.23		ug/L		85	75 - 123
1,1,2-Trichloroethane	5.00	4.38		ug/L		88	80 - 120
1,1-Dichloroethane	5.00	4.65		ug/L		93	74 - 120
1,1-Dichloroethene	5.00	4.66		ug/L		93	80 - 131
1,2-Dibromoethane (EDB)	5.00	4.15		ug/L		83	80 - 120
1,2-Dichloroethane	5.00	3.96		ug/L		79	69 - 122
1,2-Dichloropropane	5.00	4.82		ug/L		96	80 - 120
2-Butanone (MEK)	62.5	69.6		ug/L		111	59 - 141
2-Hexanone	62.5	63.8		ug/L		102	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	64.5		ug/L		103	55 - 140
Acetone	62.5	67.5		ug/L		108	60 - 146
Benzene	5.00	4.73		ug/L		95	80 - 120
Bromochloromethane	5.00	4.32		ug/L		86	80 - 120
Bromodichloromethane	5.00	4.46		ug/L		89	73 - 124
Bromoform	5.00	3.88		ug/L		78	49 - 144
Bromomethane	5.00	4.53		ug/L		91	60 - 136
Carbon disulfide	5.00	5.33		ug/L		107	67 - 130
Carbon tetrachloride	5.00	4.33		ug/L		87	64 - 141
Chlorobenzene	5.00	4.78		ug/L		96	80 - 120
Chloroethane	5.00	5.09		ug/L		102	63 - 120
Chloroform	5.00	4.44		ug/L		89	80 - 120
Chloromethane	5.00	6.21		ug/L		124	56 - 124
cis-1,2-Dichloroethene	5.00	4.72		ug/L		94	80 - 122
cis-1,3-Dichloropropene	5.00	4.14		ug/L		83	67 - 121
Dibromochloromethane	5.00	4.19		ug/L		84	64 - 138
Ethylbenzene	5.00	4.89		ug/L		98	80 - 120
Methyl tert-butyl ether	5.00	4.23		ug/L		85	69 - 120
Methylene Chloride	5.00	4.42		ug/L		88	80 - 120
Styrene	5.00	4.75		ug/L		95	80 - 120
Tetrachloroethene	5.00	4.75		ug/L		95	80 - 120
Toluene	5.00	4.85		ug/L		97	80 - 120
trans-1,2-Dichloroethene	5.00	4.54		ug/L		91	80 - 122
trans-1,3-Dichloropropene	5.00	4.48		ug/L		90	61 - 129
Trichloroethene	5.00	4.33		ug/L		87	80 - 120
Vinyl chloride	5.00	5.21		ug/L		104	60 - 125
Xylenes, Total	15.0	14.5		ug/L		96	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	88		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	94		80 - 120
Toluene-d8 (Surr)	106		80 - 120

QC Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: LCSD 410-261977/5

Matrix: Water

Analysis Batch: 261977

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	RPD Limit
							Limits	RPD		
1,1,1,2-Tetrachloroethane	5.00	4.81		ug/L		96	71 - 134	1	30	
1,1,1-Trichloroethane	5.00	4.42		ug/L		88	78 - 126	2	30	
1,1,2,2-Tetrachloroethane	5.00	4.34		ug/L		87	75 - 123	3	30	
1,1,2-Trichloroethane	5.00	4.50		ug/L		90	80 - 120	3	30	
1,1-Dichloroethane	5.00	4.63		ug/L		93	74 - 120	0	30	
1,1-Dichloroethene	5.00	5.06		ug/L		101	80 - 131	8	30	
1,2-Dibromoethane (EDB)	5.00	4.29		ug/L		86	80 - 120	3	30	
1,2-Dichloroethane	5.00	4.07		ug/L		81	69 - 122	3	30	
1,2-Dichloropropane	5.00	4.75		ug/L		95	80 - 120	1	30	
2-Butanone (MEK)	62.5	68.0		ug/L		109	59 - 141	2	30	
2-Hexanone	62.5	72.5		ug/L		116	52 - 140	13	30	
4-Methyl-2-pentanone (MIBK)	62.5	70.7		ug/L		113	55 - 140	9	30	
Acetone	62.5	77.4		ug/L		124	60 - 146	14	30	
Benzene	5.00	4.79		ug/L		96	80 - 120	1	30	
Bromochloromethane	5.00	4.30		ug/L		86	80 - 120	0	30	
Bromodichloromethane	5.00	4.43		ug/L		89	73 - 124	1	30	
Bromoform	5.00	3.90		ug/L		78	49 - 144	1	30	
Bromomethane	5.00	4.94		ug/L		99	60 - 136	9	30	
Carbon disulfide	5.00	5.66		ug/L		113	67 - 130	6	30	
Carbon tetrachloride	5.00	4.43		ug/L		89	64 - 141	2	30	
Chlorobenzene	5.00	4.91		ug/L		98	80 - 120	3	30	
Chloroethane	5.00	5.58		ug/L		112	63 - 120	9	30	
Chloroform	5.00	4.44		ug/L		89	80 - 120	0	30	
Chloromethane	5.00	6.67	*+	ug/L		133	56 - 124	7	30	
cis-1,2-Dichloroethene	5.00	4.69		ug/L		94	80 - 122	1	30	
cis-1,3-Dichloropropene	5.00	4.29		ug/L		86	67 - 121	3	30	
Dibromochloromethane	5.00	4.24		ug/L		85	64 - 138	1	30	
Ethylbenzene	5.00	5.01		ug/L		100	80 - 120	2	30	
Methyl tert-butyl ether	5.00	4.15		ug/L		83	69 - 120	2	30	
Methylene Chloride	5.00	4.42		ug/L		88	80 - 120	0	30	
Styrene	5.00	4.91		ug/L		98	80 - 120	3	30	
Tetrachloroethene	5.00	4.84		ug/L		97	80 - 120	2	30	
Toluene	5.00	4.95		ug/L		99	80 - 120	2	30	
trans-1,2-Dichloroethene	5.00	4.55		ug/L		91	80 - 122	0	30	
trans-1,3-Dichloropropene	5.00	4.56		ug/L		91	61 - 129	2	30	
Trichloroethene	5.00	4.47		ug/L		89	80 - 120	3	30	
Vinyl chloride	5.00	5.66		ug/L		113	60 - 125	8	30	
Xylenes, Total	15.0	14.9		ug/L		99	80 - 120	3	30	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	86		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	93		80 - 120
Toluene-d8 (Surr)	103		80 - 120

QC Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-6 MS

Matrix: Water

Analysis Batch: 261977

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	Limits
	Result	Qualifier		Added	Result					
1,1,1,2-Tetrachloroethane	ND		5.00	5.22		ug/L		104	71 - 134	
1,1,1-Trichloroethane	0.34	J	5.00	5.23		ug/L		98	78 - 126	
1,1,2,2-Tetrachloroethane	ND		5.00	4.37		ug/L		87	75 - 123	
1,1,2-Trichloroethane	ND		5.00	4.60		ug/L		92	80 - 120	
1,1-Dichloroethane	0.15	J	5.00	4.95		ug/L		96	74 - 120	
1,1-Dichloroethene	0.20	J	5.00	6.13		ug/L		118	80 - 131	
1,2-Dibromoethane (EDB)	ND		5.00	4.42		ug/L		88	80 - 120	
1,2-Dichloroethane	ND		5.00	4.25		ug/L		85	69 - 122	
1,2-Dichloropropane	ND		5.00	4.94		ug/L		99	80 - 120	
2-Butanone (MEK)	ND		62.6	64.5		ug/L		103	59 - 141	
2-Hexanone	ND		62.6	64.9		ug/L		104	52 - 140	
4-Methyl-2-pentanone (MIBK)	ND		62.6	64.5		ug/L		103	55 - 140	
Acetone	1.2	J	62.6	77.4		ug/L		122	60 - 146	
Benzene	ND		5.00	5.11		ug/L		102	80 - 120	
Bromochloromethane	ND		5.00	4.73		ug/L		95	80 - 120	
Bromodichloromethane	ND		5.00	4.64		ug/L		93	73 - 124	
Bromoform	ND		5.00	4.44		ug/L		89	49 - 144	
Bromomethane	ND	^c cn	5.00	5.03		ug/L		101	60 - 136	
Carbon disulfide	ND		5.00	6.34		ug/L		127	67 - 130	
Carbon tetrachloride	ND		5.00	5.14		ug/L		103	64 - 141	
Chlorobenzene	ND		5.00	5.25		ug/L		105	80 - 120	
Chloroethane	ND		5.00	5.56		ug/L		111	63 - 120	
Chloroform	0.27	J	5.00	4.99		ug/L		94	80 - 120	
Chloromethane	ND	*+ FH	5.00	6.45	FH	ug/L		129	80 - 120	
cis-1,2-Dichloroethene	2.1		5.00	7.17		ug/L		102	80 - 122	
cis-1,3-Dichloropropene	ND		5.00	4.46		ug/L		89	67 - 121	
Dibromochloromethane	ND		5.00	4.63		ug/L		93	64 - 138	
Ethylbenzene	ND		5.00	5.35		ug/L		107	80 - 120	
Methyl tert-butyl ether	ND		5.00	4.35		ug/L		87	69 - 120	
Methylene Chloride	ND		5.00	4.77		ug/L		95	80 - 120	
Styrene	ND		5.00	5.14		ug/L		103	80 - 120	
Tetrachloroethene	6.5		5.00	12.0		ug/L		111	80 - 120	
Toluene	ND		5.00	5.28		ug/L		106	80 - 120	
trans-1,2-Dichloroethene	ND		5.00	5.11		ug/L		102	80 - 122	
trans-1,3-Dichloropropene	ND		5.00	4.66		ug/L		93	61 - 129	
Trichloroethene	1.9		5.00	6.68		ug/L		96	80 - 120	
Vinyl chloride	ND	FH	5.00	5.95		ug/L		119	60 - 125	
Xylenes, Total	ND		15.0	16.0		ug/L		106	80 - 120	

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		80 - 120
4-Bromofluorobenzene (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	93		80 - 120
Toluene-d8 (Surr)	103		80 - 120

QC Sample Results

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-6 MSD

Matrix: Water

Analysis Batch: 261977

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	5.29		ug/L		106	71 - 134	1	30
1,1,1-Trichloroethane	0.34	J	5.00	5.48		ug/L		103	78 - 126	5	30
1,1,2,2-Tetrachloroethane	ND		5.00	4.45		ug/L		89	75 - 123	2	30
1,1,2-Trichloroethane	ND		5.00	4.77		ug/L		95	80 - 120	4	30
1,1-Dichloroethane	0.15	J	5.00	4.97		ug/L		96	74 - 120	1	30
1,1-Dichloroethene	0.20	J	5.00	5.86		ug/L		113	80 - 131	4	30
1,2-Dibromoethane (EDB)	ND		5.00	4.65		ug/L		93	80 - 120	5	30
1,2-Dichloroethane	ND		5.00	4.53		ug/L		90	69 - 122	6	30
1,2-Dichloropropane	ND		5.00	5.15		ug/L		103	80 - 120	4	30
2-Butanone (MEK)	ND		62.6	76.3		ug/L		122	59 - 141	17	30
2-Hexanone	ND		62.6	75.4		ug/L		121	52 - 140	15	30
4-Methyl-2-pentanone (MIBK)	ND		62.6	74.0		ug/L		118	55 - 140	14	30
Acetone	1.2	J	62.6	85.3		ug/L		135	60 - 146	10	30
Benzene	ND		5.00	5.20		ug/L		104	80 - 120	2	30
Bromochloromethane	ND		5.00	4.83		ug/L		97	80 - 120	2	30
Bromodichloromethane	ND		5.00	4.73		ug/L		94	73 - 124	2	30
Bromoform	ND		5.00	4.47		ug/L		89	49 - 144	1	30
Bromomethane	ND	^c cn	5.00	5.34		ug/L		107	60 - 136	6	30
Carbon disulfide	ND		5.00	6.31		ug/L		126	67 - 130	0	30
Carbon tetrachloride	ND		5.00	5.31		ug/L		106	64 - 141	3	30
Chlorobenzene	ND		5.00	5.30		ug/L		106	80 - 120	1	30
Chloroethane	ND		5.00	5.88		ug/L		118	63 - 120	6	30
Chloroform	0.27	J	5.00	5.11		ug/L		97	80 - 120	3	30
Chloromethane	ND	*+ FH	5.00	6.93	FH	ug/L		138	80 - 120	7	30
cis-1,2-Dichloroethene	2.1		5.00	7.34		ug/L		105	80 - 122	2	30
cis-1,3-Dichloropropene	ND		5.00	4.45		ug/L		89	67 - 121	0	30
Dibromochloromethane	ND		5.00	4.80		ug/L		96	64 - 138	4	30
Ethylbenzene	ND		5.00	5.40		ug/L		108	80 - 120	1	30
Methyl tert-butyl ether	ND		5.00	4.19		ug/L		84	69 - 120	4	30
Methylene Chloride	ND		5.00	4.69		ug/L		94	80 - 120	2	30
Styrene	ND		5.00	5.17		ug/L		103	80 - 120	1	30
Tetrachloroethene	6.5		5.00	12.2		ug/L		114	80 - 120	1	30
Toluene	ND		5.00	5.38		ug/L		107	80 - 120	2	30
trans-1,2-Dichloroethene	ND		5.00	4.85		ug/L		97	80 - 122	5	30
trans-1,3-Dichloropropene	ND		5.00	5.00		ug/L		100	61 - 129	7	30
Trichloroethene	1.9		5.00	6.71		ug/L		96	80 - 120	1	30
Vinyl chloride	ND	FH	5.00	6.35	FH	ug/L		127	60 - 125	7	30
Xylenes, Total	ND		15.0	15.9		ug/L		106	80 - 120	0	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	97		80 - 120
Toluene-d8 (Surr)	104		80 - 120

QC Association Summary

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

Job ID: 410-85437-1

GC/MS VOA

Analysis Batch: 261977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-85437-1	HD-COD-SW-6-0/1-0	Total/NA	Water	8260D	
410-85437-2	HD-COD-SW-7-0/1-0	Total/NA	Water	8260D	
410-85437-3	HD-COD-SW-8-0/1-0	Total/NA	Water	8260D	
410-85437-4	HD-COD-SW-9-0/1-0	Total/NA	Water	8260D	
410-85437-5	HD-COD-SW-13-0/1-0	Total/NA	Water	8260D	
410-85437-6	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
410-85437-7	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	
410-85437-8	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-85437-8 - DL	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-85437-9	HD-COD-SW-26-0/1-0	Total/NA	Water	8260D	
410-85437-10	HD-COD-SW-27-0/1-0	Total/NA	Water	8260D	
410-85437-11	HD-COD-SW-28-0/1-0	Total/NA	Water	8260D	
410-85437-12	HD-COD-SW-29-0/1-0	Total/NA	Water	8260D	
410-85437-13	HD-QC1-0/1-1	Total/NA	Water	8260D	
410-85437-13 - DL	HD-QC1-0/1-1	Total/NA	Water	8260D	
410-85437-14	HD-QC1-0/1-2	Total/NA	Water	8260D	
MB 410-261977/7	Method Blank	Total/NA	Water	8260D	
LCS 410-261977/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-261977/5	Lab Control Sample Dup	Total/NA	Water	8260D	
410-85437-6 MS	HD-COD-SW-15-0/1-0 MS	Total/NA	Water	8260D	
410-85437-6 MSD	HD-COD-SW-15-0/1-0 MSD	Total/NA	Water	8260D	

Lab Chronicle

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-1

Date Collected: 05/25/22 10:50

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 14:09	USEJ	ELLE

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

Lab Sample ID: 410-85437-2

Date Collected: 05/25/22 12:05

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 14:31	USEJ	ELLE

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

Lab Sample ID: 410-85437-3

Date Collected: 05/25/22 09:40

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 14:54	USEJ	ELLE

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

Lab Sample ID: 410-85437-4

Date Collected: 05/25/22 13:15

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 15:16	USEJ	ELLE

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

Lab Sample ID: 410-85437-5

Date Collected: 05/25/22 09:55

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 15:38	USEJ	ELLE

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

Lab Sample ID: 410-85437-6

Date Collected: 05/25/22 12:25

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 16:01	USEJ	ELLE

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

Lab Sample ID: 410-85437-7

Date Collected: 05/25/22 10:25

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 17:30	USEJ	ELLE

Lab Chronicle

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

Job ID: 410-85437-1

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

Lab Sample ID: 410-85437-8

Date Collected: 05/25/22 10:35

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 17:52	USEJ	ELLE
Total/NA	Analysis	8260D	DL	10	261977	06/06/22 18:14	USEJ	ELLE

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

Lab Sample ID: 410-85437-9

Date Collected: 05/25/22 11:45

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 18:36	USEJ	ELLE

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

Lab Sample ID: 410-85437-10

Date Collected: 05/25/22 12:20

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 18:59	USEJ	ELLE

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

Lab Sample ID: 410-85437-11

Date Collected: 05/25/22 13:30

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 19:21	USEJ	ELLE

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

Lab Sample ID: 410-85437-12

Date Collected: 05/25/22 09:20

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 19:43	USEJ	ELLE

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

Lab Sample ID: 410-85437-13

Date Collected: 05/25/22 12:00

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 20:05	USEJ	ELLE
Total/NA	Analysis	8260D	DL	10	261977	06/06/22 20:28	USEJ	ELLE

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

Lab Sample ID: 410-85437-14

Date Collected: 05/25/22 00:00

Matrix: Water

Date Received: 05/26/22 18:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	261977	06/06/22 13:02	USEJ	ELLE

Lab Chronicle

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

Job ID: 410-85437-1

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: 410-85437-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

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: 410-85437-1

Method	Method Description	Protocol	Laboratory
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: 410-85437-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-85437-1	HD-COD-SW-6-0/1-0	Water	05/25/22 10:50	05/26/22 18:20
410-85437-2	HD-COD-SW-7-0/1-0	Water	05/25/22 12:05	05/26/22 18:20
410-85437-3	HD-COD-SW-8-0/1-0	Water	05/25/22 09:40	05/26/22 18:20
410-85437-4	HD-COD-SW-9-0/1-0	Water	05/25/22 13:15	05/26/22 18:20
410-85437-5	HD-COD-SW-13-0/1-0	Water	05/25/22 09:55	05/26/22 18:20
410-85437-6	HD-COD-SW-15-0/1-0	Water	05/25/22 12:25	05/26/22 18:20
410-85437-7	HD-COD-SW-16-0/1-0	Water	05/25/22 10:25	05/26/22 18:20
410-85437-8	HD-COD-SW-17-0/1-0	Water	05/25/22 10:35	05/26/22 18:20
410-85437-9	HD-COD-SW-26-0/1-0	Water	05/25/22 11:45	05/26/22 18:20
410-85437-10	HD-COD-SW-27-0/1-0	Water	05/25/22 12:20	05/26/22 18:20
410-85437-11	HD-COD-SW-28-0/1-0	Water	05/25/22 13:30	05/26/22 18:20
410-85437-12	HD-COD-SW-29-0/1-0	Water	05/25/22 09:20	05/26/22 18:20
410-85437-13	HD-QC1-0/1-1	Water	05/25/22 12:00	05/26/22 18:20
410-85437-14	HD-QC1-0/1-2	Water	05/25/22 00:00	05/26/22 18:20

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-85437-1

SDG No.: _____

Instrument ID: 10193 Analysis Batch Number: 220276Lab Sample ID: IC 410-220276/13 Client Sample ID: _____Date Analyzed: 02/02/22 18:57 Lab File ID: CF02X13.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethyl ether	2.93	Incomplete Integration	longj	02/07/22 14:06
Freon 123a	3.02	Incomplete Integration	longj	02/07/22 14:06
Acetone	3.25	Baseline	longj	02/07/22 14:06
Methyl acetate	3.64	Baseline	longj	02/07/22 14:06
t-Butyl alcohol	3.96	Incomplete Integration	longj	02/07/22 14:07
Ethyl t-butyl ether	5.45	Incomplete Integration	longj	02/07/22 14:07
1,1-Dichloropropene	6.62	Incomplete Integration	longj	02/07/22 14:08
Trichloroethene	7.80	Incomplete Integration	longj	02/07/22 14:08
2-Nitropropane	8.77	Incomplete Integration	longj	02/07/22 14:08
1,4-Dichlorobenzene-d4	12.84	Incomplete Integration	kellerk	02/08/22 18:36

Lab Sample ID: IC 410-220276/14 Client Sample ID: _____Date Analyzed: 02/02/22 19:20 Lab File ID: CF02X14.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane	6.96	Baseline	kellerk	02/08/22 19:03
1,4-Dioxane	8.23	Incomplete Integration	longj	02/07/22 14:05
1,4-Dichlorobenzene-d4	12.84	Incomplete Integration	kellerk	02/08/22 18:37

Lab Sample ID: IC 410-220276/15 Client Sample ID: _____Date Analyzed: 02/02/22 19:42 Lab File ID: CF02X15.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.64	Baseline	longj	02/07/22 14:03
1,2-Dichloroethane	6.96	Baseline	kellerk	02/08/22 19:03
1,4-Dioxane	8.23	Incomplete Integration	longj	02/07/22 14:03
1,4-Dichlorobenzene-d4	12.84	Incomplete Integration	kellerk	02/08/22 18:37

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-85437-1

SDG No.: _____

Instrument ID: 10193 Analysis Batch Number: 220276Lab Sample ID: IC 410-220276/16 Client Sample ID: _____Date Analyzed: 02/02/22 20:04 Lab File ID: CF02X16.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane	6.96	Baseline	kellerk	02/08/22 19:04
1,4-Dioxane	8.22	Split Peak	longj	02/07/22 14:02
1,4-Dichlorobenzene-d4	12.84	Incomplete Integration	kellerk	02/08/22 18:37

Lab Sample ID: IC 410-220276/17 Client Sample ID: _____Date Analyzed: 02/02/22 20:26 Lab File ID: CF02X17.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.23	Incomplete Integration	kellerk	02/08/22 19:09
Methyl acetate	3.62	Baseline	longj	02/07/22 14:00
1,4-Dioxane	8.23	Split Peak	longj	02/07/22 14:01
1,4-Dichlorobenzene-d4	12.84	Incomplete Integration	kellerk	02/08/22 18:38

Lab Sample ID: ICIS 410-220276/18 Client Sample ID: _____Date Analyzed: 02/02/22 20:49 Lab File ID: CF02X18.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.62	Baseline	longj	02/07/22 13:49
t-Butyl alcohol-d10 (IS)	3.82	Split Peak	kellerk	02/08/22 19:06
1,4-Dioxane	8.22	Split Peak	longj	02/07/22 13:50
1,4-Dichlorobenzene-d4	12.84	Incomplete Integration	kellerk	02/08/22 18:39

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-85437-1

SDG No.: _____

Instrument ID: 10193 Analysis Batch Number: 220276Lab Sample ID: IC 410-220276/19 Client Sample ID: _____Date Analyzed: 02/02/22 21:11 Lab File ID: CF02X19.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.62	Baseline	longj	02/07/22 13:59
1,4-Dioxane	8.22	Split Peak	longj	02/07/22 13:59
1,4-Dichlorobenzene-d4	12.84	Incomplete Integration	kellerk	02/08/22 18:39

Lab Sample ID: ICV 410-220276/21 Client Sample ID: _____Date Analyzed: 02/02/22 21:55 Lab File ID: CF02X21.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.60	Baseline	longj	02/07/22 14:25
1,4-Dioxane	8.23	Split Peak	longj	02/07/22 14:24

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-85437-1

SDG No.: _____

Instrument ID: 10193 Analysis Batch Number: 261977Lab Sample ID: CCVIS 410-261977/3 Client Sample ID: _____Date Analyzed: 06/06/22 10:48 Lab File ID: CU06X002.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.60	Incomplete Integration	kephartk	06/06/22 11:12

Lab Sample ID: LCS 410-261977/4 Client Sample ID: _____Date Analyzed: 06/06/22 11:11 Lab File ID: CU06X003.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.24	Incomplete Integration	kephartk	06/06/22 11:44

Lab Sample ID: 410-85437-1 Client Sample ID: HD-COD-SW-6-0/1-0Date Analyzed: 06/06/22 14:09 Lab File ID: CU06X011.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	5.69	Missed Peak	mellottr	06/07/22 10:02
2-Butanone (MEK)		Invalid Compound ID	johnsons	06/06/22 21:59
m-Xylene & p-Xylene	11.13	Incomplete Integration	johnsons	06/06/22 21:59

Lab Sample ID: 410-85437-2 Client Sample ID: HD-COD-SW-7-0/1-0Date Analyzed: 06/06/22 14:31 Lab File ID: CU06X012.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	5.68	Missed Peak	mellottr	06/07/22 10:02
Chloroform	6.18	Incomplete Integration	johnsons	06/06/22 22:00
2-Butanone (MEK)		Invalid Compound ID	johnsons	06/06/22 22:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-85437-1

SDG No.: _____

Instrument ID: 10193 Analysis Batch Number: 261977Lab Sample ID: 410-85437-4 Client Sample ID: HD-COD-SW-9-0/1-0Date Analyzed: 06/06/22 15:16 Lab File ID: CU06X014.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	7.78	Missed Peak	johnsons	06/06/22 22:01
2-Butanone (MEK)		Invalid Compound ID	johnsons	06/06/22 22:01
Chloromethane		Invalid Compound ID	johnsons	06/06/22 22:01

Lab Sample ID: 410-85437-5 Client Sample ID: HD-COD-SW-13-0/1-0Date Analyzed: 06/06/22 15:38 Lab File ID: CU06X015.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	7.78	Incomplete Integration	johnsons	06/06/22 22:02
1,1,1-Trichloroethane		Invalid Compound ID	johnsons	06/06/22 22:02
Chloromethane		Invalid Compound ID	johnsons	06/06/22 22:02

Lab Sample ID: 410-85437-6 Client Sample ID: HD-COD-SW-15-0/1-0Date Analyzed: 06/06/22 16:01 Lab File ID: CU06X016.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,2-Trichloroethane		Invalid Compound ID	johnsons	06/06/22 22:03

Lab Sample ID: 410-85437-7 Client Sample ID: HD-COD-SW-16-0/1-0Date Analyzed: 06/06/22 17:30 Lab File ID: CU06X020.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	5.70	Missed Peak	johnsons	06/06/22 22:06
2-Butanone (MEK)		Invalid Compound ID	johnsons	06/06/22 22:05

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-85437-1

SDG No.: _____

Instrument ID: 10193 Analysis Batch Number: 261977Lab Sample ID: 410-85437-8 Client Sample ID: HD-COD-SW-17-0/1-0Date Analyzed: 06/06/22 17:52 Lab File ID: CU06X021.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,2-Trichloroethane		Invalid Compound ID	johnsons	06/06/22 22:07

Lab Sample ID: 410-85437-9 Client Sample ID: HD-COD-SW-26-0/1-0Date Analyzed: 06/06/22 18:36 Lab File ID: CU06X023.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.46	Incomplete Integration	johnsons	06/06/22 22:08
2-Butanone (MEK)	5.68	Other	johnsons	06/06/22 22:08

Lab Sample ID: 410-85437-10 Client Sample ID: HD-COD-SW-27-0/1-0Date Analyzed: 06/06/22 18:59 Lab File ID: CU06X024.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.25	Baseline	johnsons	06/06/22 22:25
Carbon disulfide	3.46	Incomplete Integration	johnsons	06/06/22 22:26
cis-1,2-Dichloroethene	5.68	Incomplete Integration	johnsons	06/06/22 22:26
2-Butanone (MEK)	5.69	Split Peak	johnsons	06/06/22 22:26
Trichloroethene	7.78	Missed Peak	johnsons	06/06/22 22:26

Lab Sample ID: 410-85437-11 Client Sample ID: HD-COD-SW-28-0/1-0Date Analyzed: 06/06/22 19:21 Lab File ID: CU06X025.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.17	Missed Peak	johnsons	06/06/22 22:27
2-Butanone (MEK)		Invalid Compound ID	johnsons	06/06/22 22:27

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-85437-1

SDG No.: _____

Instrument ID: 10193 Analysis Batch Number: 261977Lab Sample ID: 410-85437-12 Client Sample ID: HD-COD-SW-29-0/1-0Date Analyzed: 06/06/22 19:43 Lab File ID: CU06X026.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	7.78	Missed Peak	mellottr	06/07/22 10:01

Lab Sample ID: 410-85437-13 Client Sample ID: HD-QC1-0/1-1Date Analyzed: 06/06/22 20:05 Lab File ID: CU06X027.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.25	Baseline	johnsons	06/06/22 22:28
1,1,2-Trichloroethane		Invalid Compound ID	johnsons	06/06/22 22:28

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration					
					Reagent ID	Volume Added							
MSV_HP25_ISSS_00046	07/27/22	01/27/22	Methanol, Lot EB679	10 mL	MSV_8260_SS_00577	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL					
							4-Bromofluorobenzene (Surr)	250 ug/mL					
							Dibromofluoromethane (Surr)	250 ug/mL					
					.MSV_8260_SS_00577	07/27/22		Restek, Lot A0171410		(Purchased Reagent)		Toluene-d8 (Surr)	250 ug/mL
												1,4-Dichlorobenzene-d4	250 ug/mL
												Chlorobenzene-d5 (IS)	250 ug/mL
												Fluorobenzene (IS)	250 ug/mL
.MSV_Cus826_IS_00411	07/27/22		Restek, Lot A0178373		(Purchased Reagent)		t-Butyl alcohol-d10 (IS)	1250 ug/mL					
							1,2-Dichloroethane-d4 (Surr)	2500 ug/mL					
							4-Bromofluorobenzene (Surr)	2500 ug/mL					
							Dibromofluoromethane (Surr)	2500 ug/mL					
.MSV_Cus826_IS_00411	07/27/22		Restek, Lot A0178373		(Purchased Reagent)		Toluene-d8 (Surr)	2500 ug/mL					
							1,4-Dichlorobenzene-d4	2500 ug/mL					
							Chlorobenzene-d5 (IS)	2500 ug/mL					
							Fluorobenzene (IS)	2500 ug/mL					
.MSV_Cus826_IS_00411	07/27/22		Restek, Lot A0178373		(Purchased Reagent)		t-Butyl alcohol-d10 (IS)	12500 ug/mL					
							1,4-Dichlorobenzene-d4	2500 ug/mL					
							Chlorobenzene-d5 (IS)	2500 ug/mL					
							Fluorobenzene (IS)	2500 ug/mL					
MSV_HP25_ISSS_00054	10/28/22	05/27/22	Methanol, Lot EB679	10 mL	MSV_Cus826_IS_00450	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_00450	10/28/22		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_HP25_ISSS_00054	10/28/22	05/27/22	Methanol, Lot EB679	10 mL	MSV_8260_SS_00667	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_00667	11/27/22		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_LCS_VOC#1_00038	03/02/22	01/31/22	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00054	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 Env Job No.: 410-85437-1

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_00048	1 mL	Carbon disulfide	40 ug/mL
									Methyl tert-butyl ether	40 ug/mL
MSV_Q_Ketones_00047	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_00054	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_00048	04/30/24	Restek, Lot A0171837	(Purchased Reagent)	Carbon disulfide	1000 ug/mL					
				Methyl tert-butyl ether	1000 ug/mL					
.MSV_Q_Ketones_00047	01/31/24	Restek, Lot A0167987	(Purchased Reagent)	2-Butanone (MEK)	12500 ug/mL					

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1

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_00057	06/28/22	05/29/22	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00066	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_00066					1 mL	Carbon disulfide	40 ug/mL		
MSV_Q_Ketones_00067						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_00066	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 Env Job No.: 410-85437-1

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_00066	04/30/24		Restek, Lot A0171837			(Purchased Reagent)	Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00067	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_LL_#1_826_00034	02/19/22	01/31/22	Methanol, Lot EB679	1 mL	MSV_CCV_VOC#1_00050	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
							1,1-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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1

SDG No.: _____

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl acetate	50 ug/mL
							Methyl 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_00049	200 uL	Acrolein	2500.13 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_00125	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_00050	03/02/22	01/31/22	Methanol, Lot EB679	5 mL	MSV_MegaMIX#1_00048	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
							1,1-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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
					MSV_MegaMix#2_00048	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00048	03/02/22		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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00048	03/02/22		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
							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_00049	02/19/22	01/31/22	Methanol, Lot EB679	5 mL	MSV_CCV_ACR_00001	0.5 mL	Acrolein	12500.7 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSV_V_Ketones_00047	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_00001	02/19/22	12/20/21	Methanol, Lot EB679	10 mL	MSV_VACR_STK_00023	8.413 mL	Acrolein	125007 ug/mL
...MSV_VACR_STK_00023	02/19/22	12/20/21	Methanol, Lot EB679	10 mL	MSV_ACROLEIN_00016	1.596 g	Acrolein	148588 ug/mL
...MSV_ACROLEIN_00016	11/30/22		Chem Service, Lot 12671800				Acrolein	0.931 g/g
..MSV_V_Ketones_00047	01/31/24		Restek, Lot A0168313				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_00125	03/02/22	01/31/22	Methanol, Lot EB679	5 mL	MSV_V#2B_00254	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_00254	04/30/22		Restek, Lot A0171518				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_00046	06/28/22	05/30/22	Methanol, Lot EB679	1 mL	MSV_CCV_VOC#1_00071	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00072	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_00071	06/28/22	05/29/22	Methanol, Lot EB679	5 mL	MSV_MegaMIX#1_00070	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
							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_00070	1 mL	Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
..MSV_MegaMIX#1_00070	06/28/22		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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	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_00070	06/28/22		Restek, Lot A0173454			(Purchased Reagent)	Carbon disulfide	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
.MSV_CCV_VOC#3_00072	06/28/22	05/29/22	Methanol, Lot EB679	5 mL	MSV_V_Ketones_00068	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_00068	01/31/24		Restek, Lot A0174287			(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_#2_826_00038	02/23/22	01/31/22	Methanol, Lot EB679	1 mL	MSV_CCV_EE_00001	50 uL	Ethyl ether	49.9999 ug/mL
					MSV_V_PentaCL_00012	10 uL	Pentachloroethane	50 ug/mL
.MSV_CCV_EE_00001	05/29/22	11/29/21	Methanol, Lot EB679	50 mL	MSV_EE_MISCSK_00009	0.999 mL	Ethyl ether	999.999 ug/mL
..MSV_EE_MISCSK_00009	05/29/22	11/29/21	Methanol, Lot EB679	10 mL	MSV_EE_Neat_00006	0.5005 g	Ethyl ether	50050 ug/mL
...MSV_EE_Neat_00006	12/31/25		Chem Service, Lot 12123300			(Purchased Reagent)	Ethyl ether	1 g/g
.MSV_V_PentaCL_00012	03/02/22		Restek, Lot A0171341			(Purchased Reagent)	Pentachloroethane	5000 ug/mL
MSV_LL_GAS826_00063	02/07/22	01/31/22	Methanol, Lot EB679	1 mL	MSV_CCV_GASES_00140	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_00140	02/07/22		Restek, Lot A0172364			(Purchased Reagent)	1,2-Dichloro-1,1,2-trifluoroethane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1

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_00091	06/07/22	05/31/22	Methanol, Lot EB679	1 mL	MSV_CCV_GASES_00203	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_CCV_GASES_00203	06/07/22		Restek, Lot A0172364		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_QC_Gas826_00063	02/07/22	01/31/22	Methanol, Lot EB679	1 mL	MSV_QC_2K_GAS_00073	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00073	02/07/22		Restek, Lot A0172021		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_QC_Gas826_00084	06/12/22	06/06/22	Methanol, Lot EB679	1 mL	MSV_QC_2K_GAS_00094	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00094	06/12/22		Restek, Lot A0172021		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_V_BFB_00007							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Xylenes, Total	
					MSV_VBFB_STK_00007	0.116 mL	BFB	50.0099 ug/mL
.MSV_VBFB_STK_00007	06/29/22	12/29/21	Methanol, Lot EB679	10 mL	MSV_4BFB_NEAT_00005	1.0778 g	BFB	107780 ug/mL
.MSV_4BFB_NEAT_00005	02/28/25		Chem Service, Lot 11130200		(Purchased Reagent)		BFB	1 g/g

Reagent

MSV_4BFB_NEAT_00005

CHEM SERVICE INC.

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 • www.chemservice.com

CERTIFICATE OF ANALYSIS

4-Bromofluorobenzene

CATALOG NUMBER	N-10809-1G ✓
LOT NUMBER	11130200 ✓
DATE CERTIFIED	02/03/20 ✓
EXPIRATION DATE	02/28/25 ✓
CAS NUMBER	460-00-4
MOLECULAR FORMULA	C6H4BrF
MOLECULAR WEIGHT	175.00
STORAGE	Store at room temperature (20 - 25 °C).
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

Analytical Test	Value
GC/MS SPECTRA ID	MATCHES NIST
FT-IR SPECTROSCOPY	CONFORMS TO STRUCTURE
% PURITY (GC/FID)	99.5
PHYSICAL APPEARANCE	COLORLESS LIQUID

WLR 2032
2-16-21

COA Form
Revision 3 (3/2015)



Print Date: 06/07/21

CHEM SERVICE INC.

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 • 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

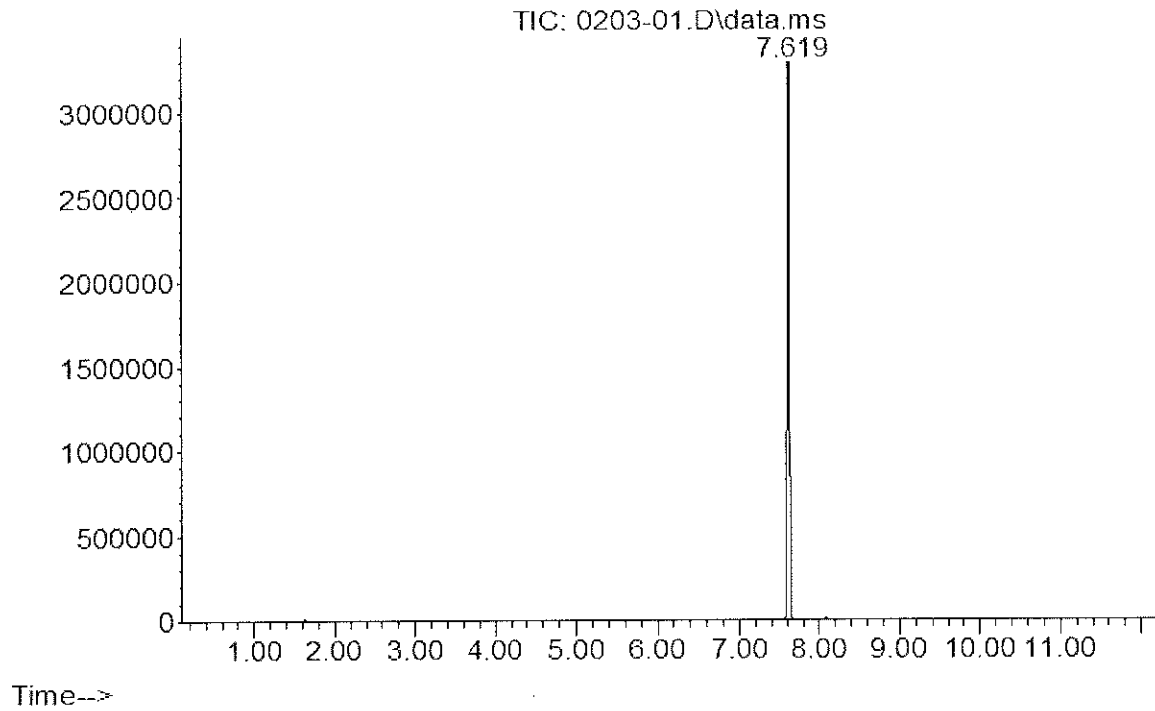
Mary Beth O'Donnell
CSM/TC



CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number: N-10809-1G
Description: 4-Bromofluorobenzene
Lot Number: 11130200
Expiration Date: 02/28/25
Abundance

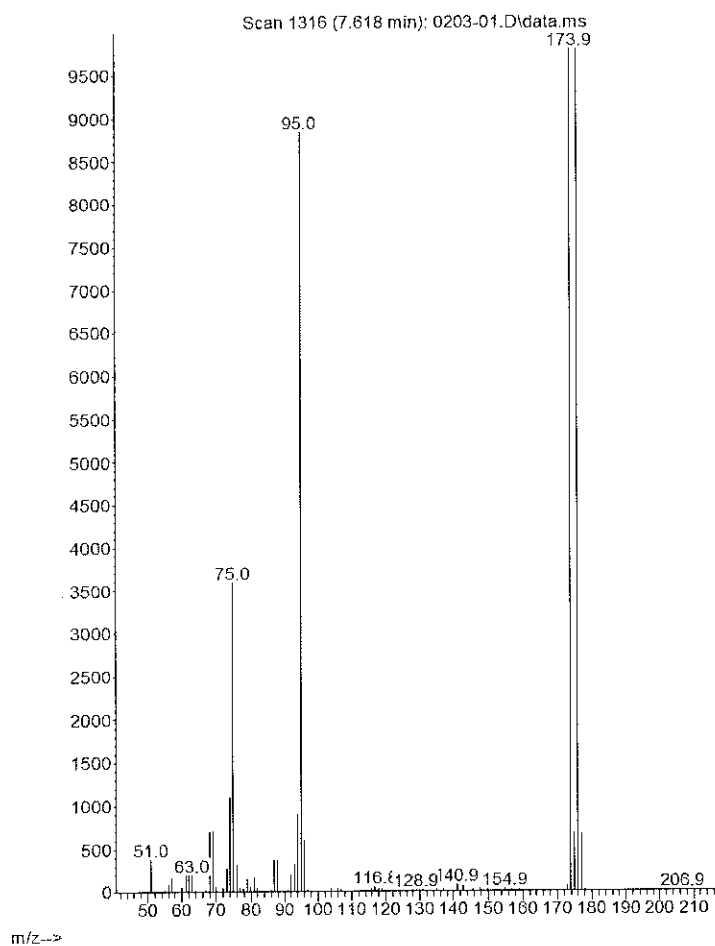


CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number: N-10809-1G
Description: 4-Bromofluorobenzene
Lot Number: 11130200
Expiration Date: 02/28/25

Abundance



CHEM SERVICE INC.

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 • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number: N-10809-1G
Description: 4-Bromofluorobenzene
Lot Number: 11130200
Expiration Date: 02/28/25
Chem Service Inc Area Percent Report

Data File: D:\msdchem\2020 DATA\0220\0203-01.D
Acq On : 3 Feb 2020 10:08
Operator :
Sample : N-10809
Misc :
ALS Vial : 96

Integration Parameters: autoint1.e
Integrator: ChemStation

DataAcq Meth: METH1.M
Method : D:\msdchem\2020 DATA\0120\0122-03.D\M-CS5242M2.M

Signal : TIC: 0203-01.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.619	1306	1316	1331	BB	3424525	65045319	100.00%	100.000%

Sum of corrected areas: 65045319

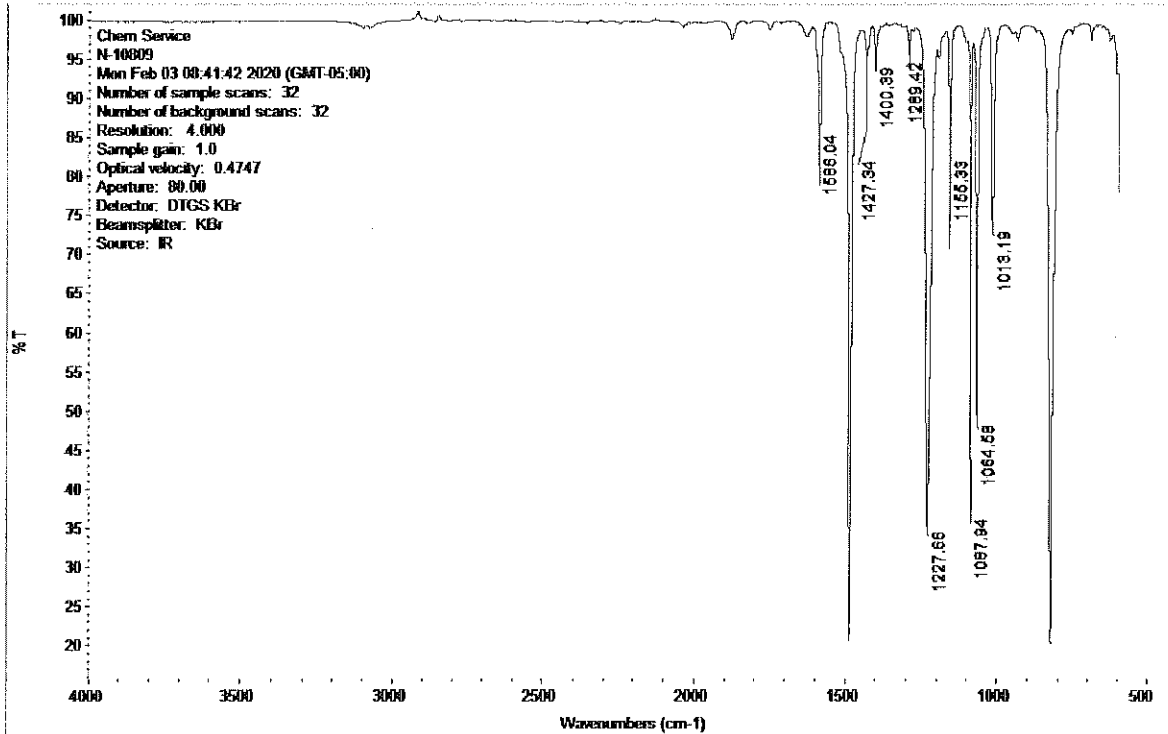
M-CS5242M2.M Mon Feb 03 10:28:54 2020



CERTIFICATE OF ANALYSIS

Analysis Method:

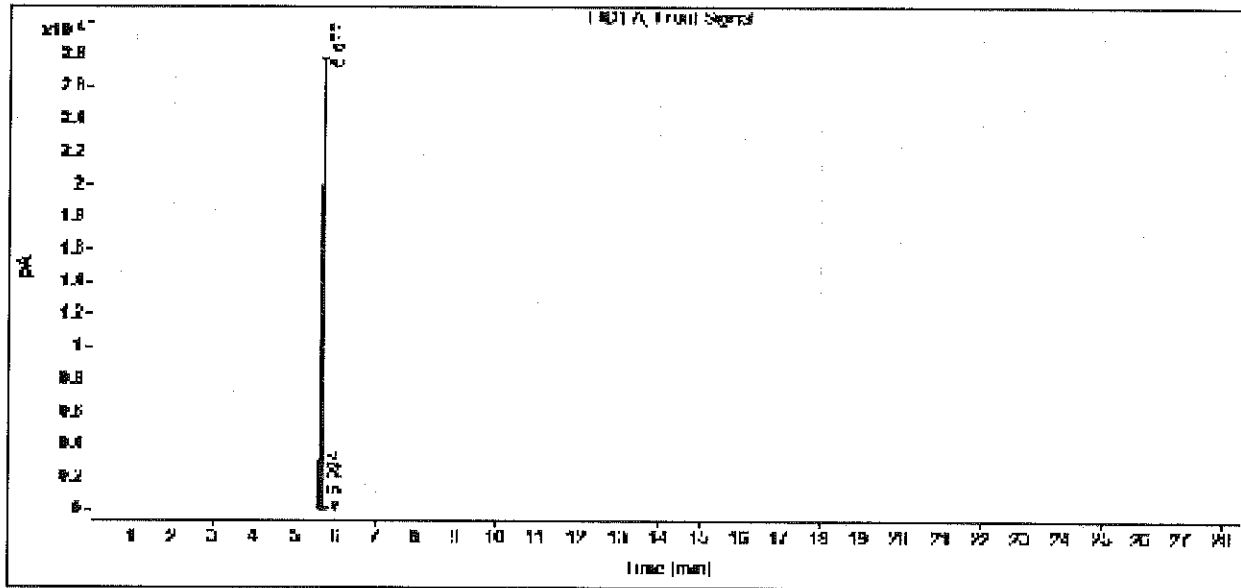
Catalog Number: N-10809-1G
Description: 4-Bromofluorobenzene
Lot Number: 11130200
Expiration Date: 02/28/25



CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2020 DATA\0220\013120 2020-01-31 16-11-28\141F0404.D
Sample name: N-10809
Instrument: GC 1
Injection date: 1/31/2020 10:29:42 PM
Acq. method: SCREEN.M
Column name: Rxi-624Sil (30m x 0.32mm x 1.8um)
Sample type: Sample
Location: Vial 141
Injection volume: 1.0uL



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
5.677	BB S	0.0413	82400.8016	27241.2129	99.7369
5.924	VB	0.0298	217.3897	117.5644	0.2631
Sum			82617.9712		



Reagent

MSV_8260_SS_00577



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. : 55671 **Lot No.:** A0171410

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 : 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	Dibromofluoromethane	2,509.0 µg/mL	+/-	14.7242	µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 0012016)		+/-	140.6914	µg/mL	Unstressed
	Purity 99%		+/-	143.9827	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,503.0 µg/mL	+/-	14.6890	µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot PR-29377)		+/-	140.3549	µg/mL	Unstressed
	Purity 99%		+/-	143.6384	µg/mL	Stressed
3	Toluene-d8	2,501.5 µg/mL	+/-	14.6802	µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-31750)		+/-	140.2708	µg/mL	Unstressed
	Purity 99%		+/-	143.5523	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,520.0 µg/mL	+/-	14.7888	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/-	141.3082	µg/mL	Unstressed
	Purity 99%		+/-	144.6140	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)

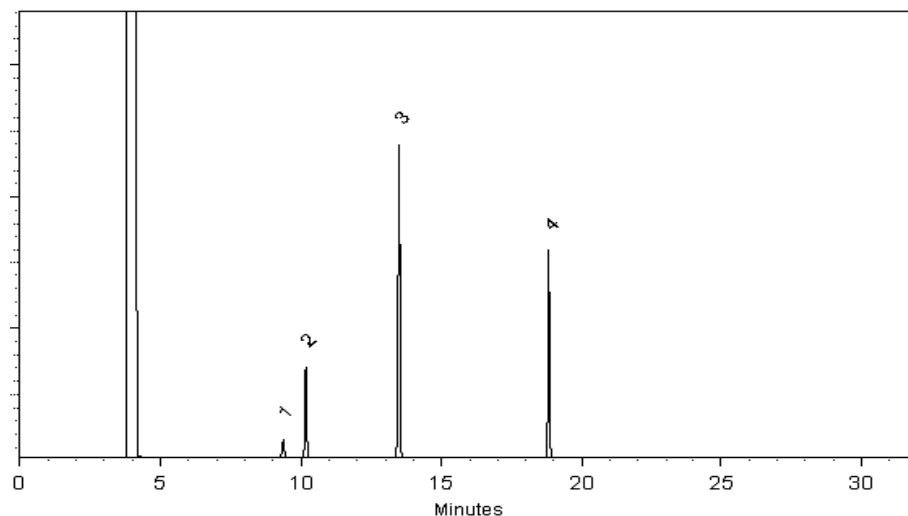
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Sam Moodler
Sam Moodler - Operations Tech I

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

Alexis Shelov
Alexis Shelov - 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 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.
- 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

MSV_ACROLEIN_00016

CERTIFICATE OF ANALYSIS

Acrolein

CATALOG NUMBER RPN-11030-1G
LOT NUMBER 12671800
DATE CERTIFIED 11/30/21
EXPIRATION DATE 11/30/22
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>
% PURITY (GC/TCD)	93.1
% WATER (KARL FISCHER)	3.7

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.



COA Form
Revision 3 (3/2015)

Print Date: 12/01/21

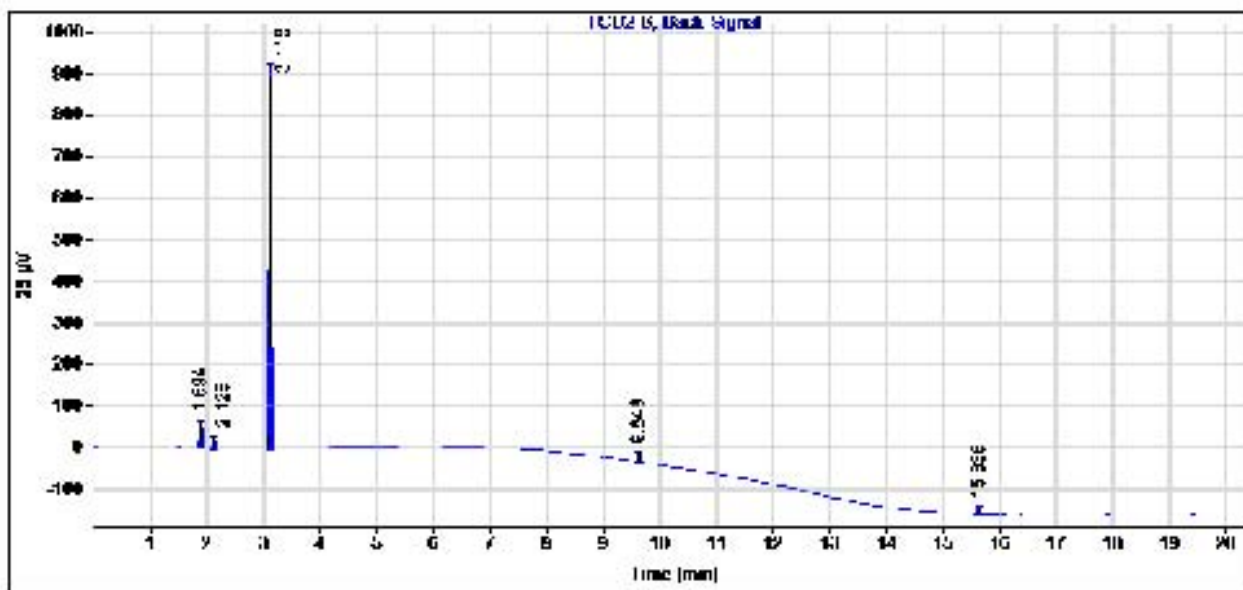
Page 71 of 643

06/07/2022

CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2021 DATA\1121\SIG2022966.D
 Sample name: Acrolein
 Instrument: GC 1
 Injection date: 11/30/2021 8:07:19 AM
 Acq. method: N-10129-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%
1.894	BB	0.0219	75.2808	55.4051	3.7452
2.128	BB	0.0203	27.3468	20.9134	1.3605
3.116	BB	0.0328	1873.1121	917.3733	93.1873
9.648	BB	0.0286	23.4982	12.6856	1.1690
15.638	BB	0.0274	10.8118	6.1875	0.5379
Sum			2010.0498		

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



Reagent

MSV_CCV_GASES_00140



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:

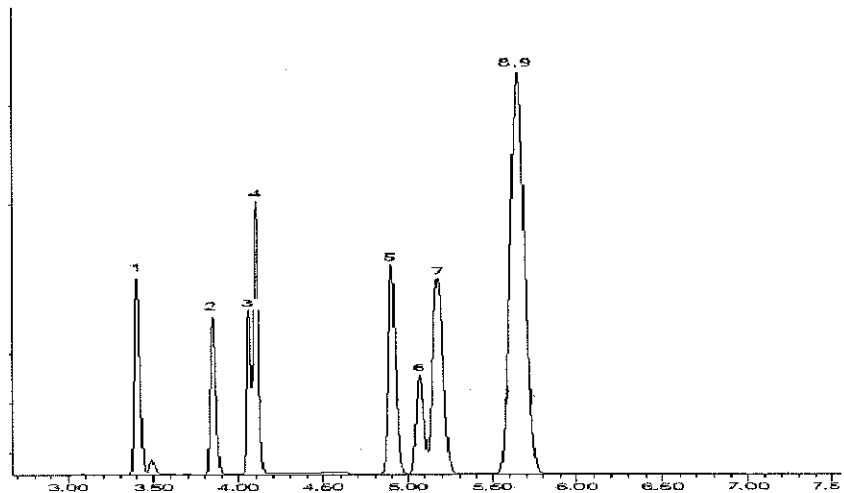
200°C

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 Suckar - 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/ μ 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 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.
- 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

MSV_CCV_GASES_00203



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:

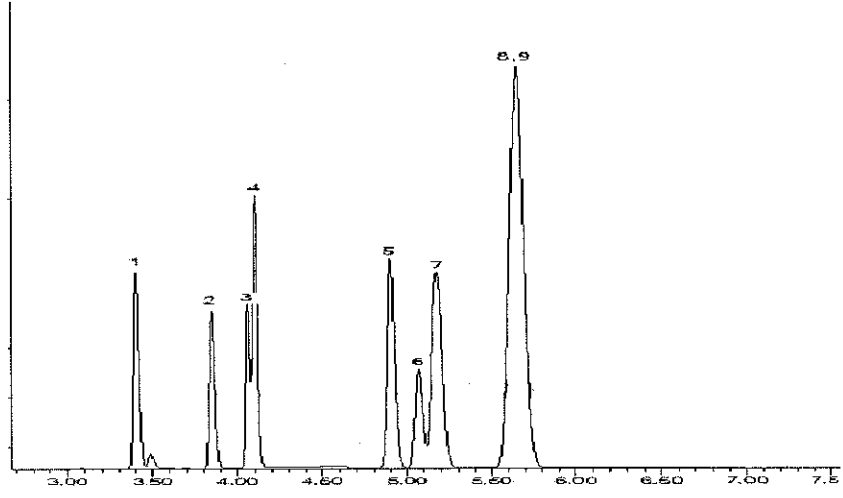
200°C

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/ μ 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 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.
- 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

MSV_Cus826_IS_00411



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.:** A0178373

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 : 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	2-Methyl-2-propanol-d10 CAS # 53001-22-2 (Lot I-433) Purity 99%	12,494.0 µg/mL	+/- 73.3218 µg/mL	+/- 267.6837 µg/mL	+/- 275.4550 µg/mL	Gravimetric Unstressed Stressed
2	Fluorobenzene CAS # 462-06-6 (Lot BCBZ5549) Purity 99%	2,508.0 µg/mL	+/- 14.8968 µg/mL	+/- 53.7830 µg/mL	+/- 55.3416 µg/mL	Gravimetric Unstressed Stressed
3	Chlorobenzene-d5 CAS # 3114-55-4 (Lot PR-29571) Purity 99%	2,514.0 µg/mL	+/- 14.9324 µg/mL	+/- 53.9117 µg/mL	+/- 55.4740 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 (Lot PR-30447) Purity 99%	2,488.0 µg/mL	+/- 14.7780 µg/mL	+/- 53.3541 µg/mL	+/- 54.9003 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)

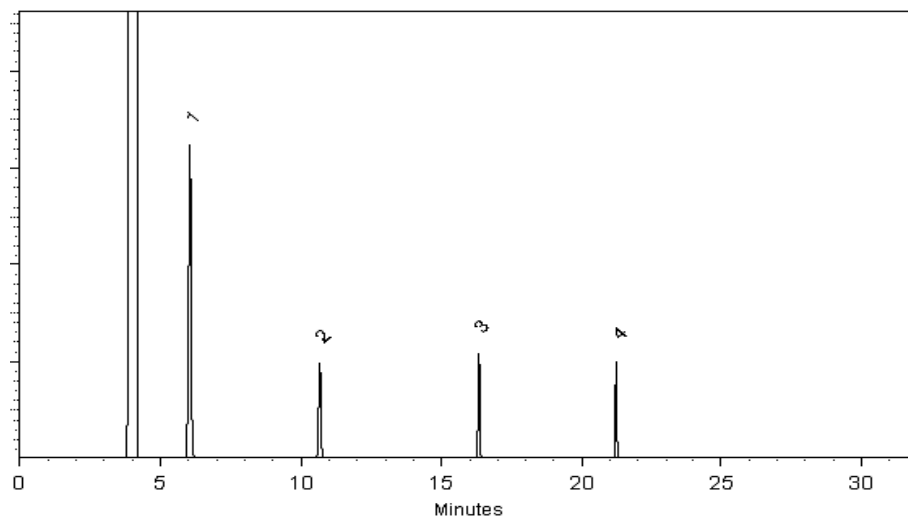
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.


Morgan Craighead - Mix Technician

Date Mixed: 10-Nov-2021 **Balance:** B251644995


Clara Windle - Operations Technician I

Date Passed: 12-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 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.
- 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

MSV_Cus826_IS_00450



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	12,510.0 µg/mL	+/-	73.4157	µg/mL	Gravimetric
	CAS # 53001-22-2 (Lot PR-29961)		+/-	268.0265	µg/mL	Unstressed
	Purity 99%		+/-	275.8078	µg/mL	Stressed
2	Fluorobenzene	2,502.0 µg/mL	+/-	14.8611	µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBZ5549)		+/-	53.6543	µg/mL	Unstressed
	Purity 99%		+/-	55.2092	µg/mL	Stressed
3	Chlorobenzene-d5	2,512.0 µg/mL	+/-	14.9205	µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-29571)		+/-	53.8688	µg/mL	Unstressed
	Purity 99%		+/-	55.4299	µg/mL	Stressed
4	1,4-Dichlorobenzene-d4	2,512.0 µg/mL	+/-	14.9205	µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-30447)		+/-	53.8688	µg/mL	Unstressed
	Purity 99%		+/-	55.4299	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)

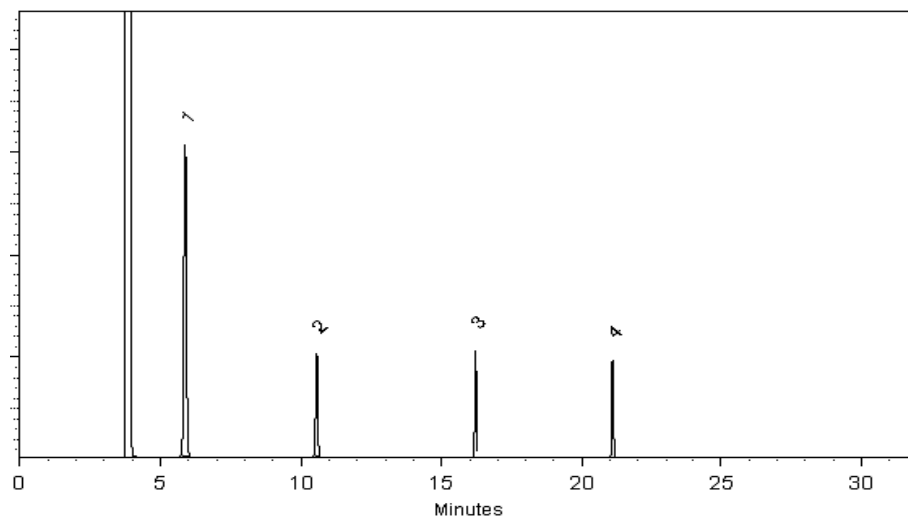
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 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 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.
- 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

MSV_EE_Neat_00006

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 C₄H₁₀O
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:

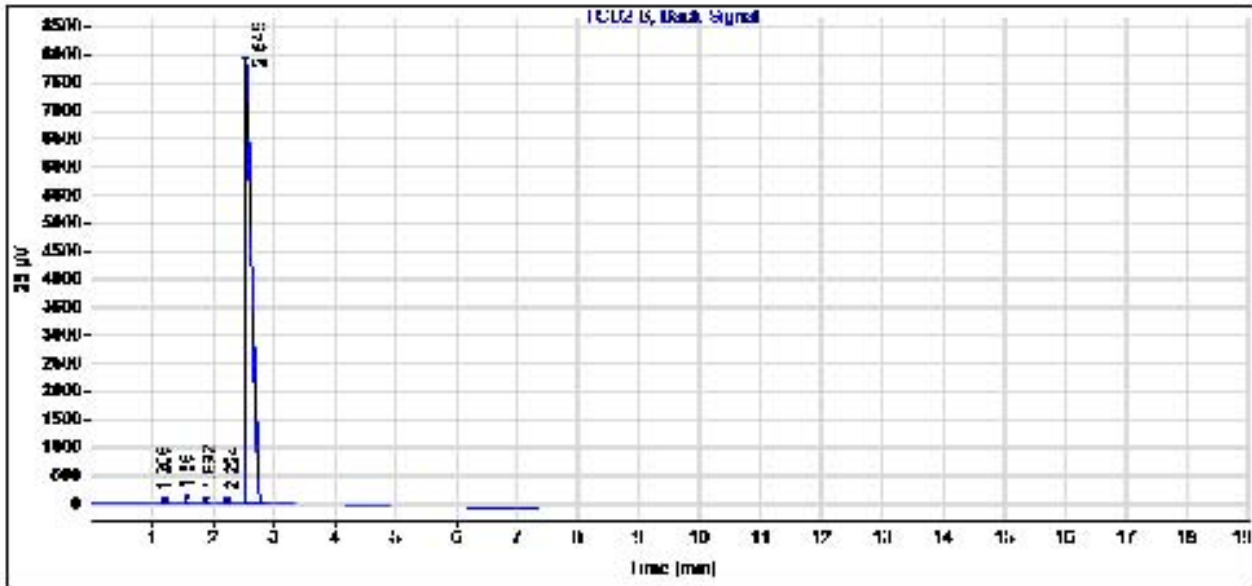
Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

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
Injection date: 12/4/2020 10:52:03 AM
Acq. method: TCD SCREEN.M
Column name: DB-624 (30m x 0.53mm x 3.0um)
Sample type: Sample
Location: Vial 21
Injection volume: 1.0uL



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
Sum			53272.1055		

Reagent

MSV_M_MIX1SEC_00054



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 CAS # 74-97-5.SEC Purity 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 CAS # 71-55-6 Purity 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 CAS # 563-58-6.SEC Purity 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 CAS # 56-23-5.SEC Purity 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 CAS # 107-06-2.SEC Purity 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 CAS # 71-43-2.SEC Purity 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 CAS # 79-01-6.SEC Purity 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 CAS # 78-87-5.SEC Purity 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 CAS # 75-27-4.SEC Purity 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 CAS # 74-95-3.SEC Purity 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 CAS # 10061-01-5.SEC Purity 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 CAS # 108-88-3.SEC Purity 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 CAS # 10061-02-6.SEC Purity 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 CAS # 79-00-5.SEC Purity 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 CAS # 142-28-9.SEC Purity 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 CAS # 127-18-4.SEC Purity 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 CAS # 124-48-1.SEC Purity 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) CAS # 106-93-4.SEC Purity 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 CAS # 108-90-7.SEC Purity 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 CAS # 630-20-6.SEC Purity 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 CAS # 100-41-4.SEC Purity 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 CAS # 108-38-3.SEC Purity 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 CAS # 106-42-3.SEC Purity 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 CAS # 95-47-6.SEC Purity 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 CAS # 100-42-5.SEC Purity 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) CAS # 98-82-8.SEC Purity 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 CAS # 75-25-2.SEC Purity 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-Tetrachloroethane CAS # 79-34-5.SEC Purity 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 CAS # 96-18-4.SEC Purity 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 CAS # 103-65-1.SEC Purity 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 CAS # 108-86-1.SEC Purity 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 CAS # 108-67-8.SEC Purity 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 CAS # 95-49-8.SEC Purity 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 CAS # 106-43-4.SEC Purity 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 CAS # 98-06-6.SEC Purity 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 CAS # 95-63-6.SEC Purity 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 CAS # 135-98-8.SEC Purity 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) CAS # 99-87-6.SEC Purity 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 CAS # 541-73-1.SEC Purity 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 CAS # 106-46-7.SEC Purity 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 CAS # 104-51-8.SEC Purity 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 CAS # 95-50-1.SEC Purity 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 CAS # 96-12-8.SEC Purity 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 CAS # 120-82-1.SEC Purity 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 CAS # 87-68-3.SEC Purity 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 CAS # 91-20-3.SEC Purity 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 CAS # 87-61-6.SEC Purity 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)

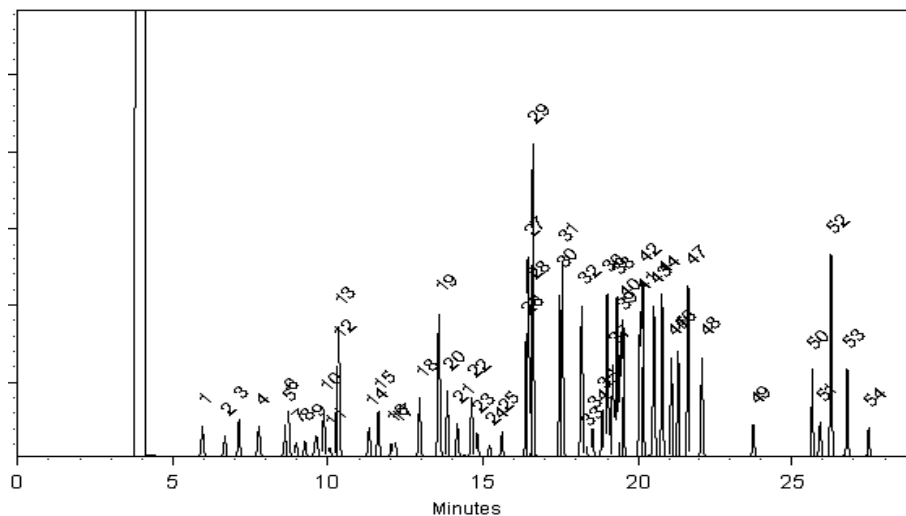
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 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.
- 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

MSV_M_MIX1SEC_00066



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 CAS # 74-97-5.SEC Purity 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 CAS # 71-55-6 Purity 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 CAS # 563-58-6.SEC Purity 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 CAS # 56-23-5.SEC Purity 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 CAS # 107-06-2.SEC Purity 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 CAS # 71-43-2.SEC Purity 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 CAS # 79-01-6.SEC Purity 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 CAS # 78-87-5.SEC Purity 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 CAS # 75-27-4.SEC Purity 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 CAS # 74-95-3.SEC Purity 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 CAS # 10061-01-5.SEC Purity 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 CAS # 108-88-3.SEC Purity 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 CAS # 10061-02-6.SEC Purity 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 CAS # 79-00-5.SEC Purity 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 CAS # 142-28-9.SEC Purity 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 CAS # 127-18-4.SEC Purity 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 CAS # 124-48-1.SEC Purity 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) CAS # 106-93-4.SEC Purity 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 CAS # 108-90-7.SEC Purity 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 CAS # 630-20-6.SEC Purity 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 CAS # 100-41-4.SEC Purity 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 CAS # 108-38-3.SEC Purity 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 CAS # 106-42-3.SEC Purity 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 CAS # 95-47-6.SEC Purity 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 CAS # 100-42-5.SEC Purity 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) CAS # 98-82-8.SEC Purity 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 CAS # 75-25-2.SEC Purity 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-Tetrachloroethane CAS # 79-34-5.SEC Purity 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 CAS # 96-18-4.SEC Purity 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 CAS # 103-65-1.SEC Purity 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 CAS # 108-86-1.SEC Purity 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 CAS # 108-67-8.SEC Purity 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 CAS # 95-49-8.SEC Purity 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 CAS # 106-43-4.SEC Purity 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 CAS # 98-06-6.SEC Purity 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 CAS # 95-63-6.SEC Purity 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 CAS # 135-98-8.SEC Purity 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) CAS # 99-87-6.SEC Purity 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 CAS # 541-73-1.SEC Purity 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 CAS # 106-46-7.SEC Purity 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 CAS # 104-51-8.SEC Purity 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 CAS # 95-50-1.SEC Purity 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 CAS # 96-12-8.SEC Purity 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 CAS # 120-82-1.SEC Purity 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 CAS # 87-68-3.SEC Purity 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 CAS # 91-20-3.SEC Purity 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 CAS # 87-61-6.SEC Purity 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)

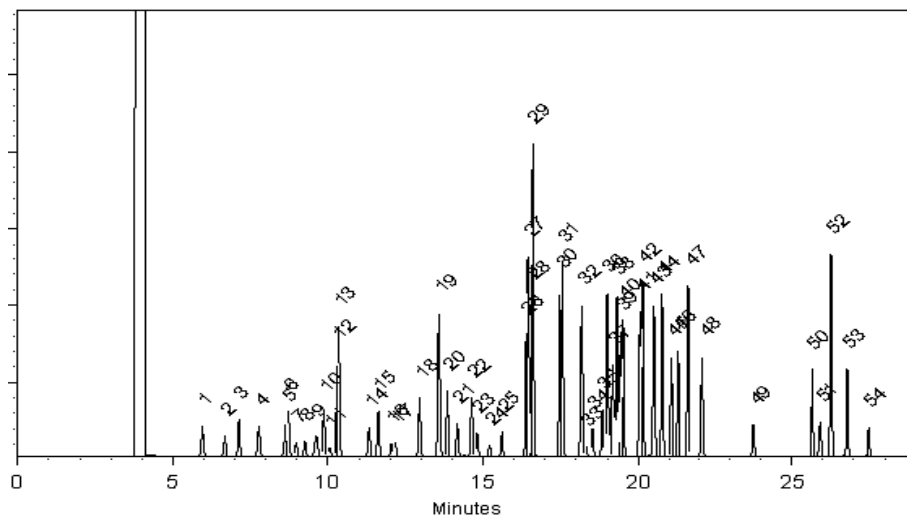
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 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.
- 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

MSV_M_MIX2SEC_00048



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 CAS # 75-15-0.SEC Purity 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 CAS # 107-13-1.SEC Purity 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) CAS # 1634-04-4.SEC Purity 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) CAS # 110-54-3.SEC Purity 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) CAS # 108-20-3.SEC Purity 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) CAS # 126-99-8 Purity 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) CAS # 637-92-3.SEC Purity 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 CAS # 107-12-0.SEC Purity 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 CAS # 126-98-7 Purity 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) CAS # 78-83-1.SEC Purity 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 CAS # 109-99-9.SEC Purity 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 CAS # 110-82-7.SEC Purity 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 CAS # 71-36-3.SEC Purity 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) CAS # 994-05-8.SEC Purity 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) CAS # 142-82-5.SEC Purity 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) CAS # 919-94-8.SEC Purity 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 CAS # 108-87-2.SEC Purity 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 CAS # 80-62-6.SEC Purity 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 CAS # 123-91-1.SEC Purity 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 CAS # 79-46-9.SEC Purity 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 CAS # 97-63-2.SEC Purity 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 CAS # 544-10-5.SEC Purity 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 CAS # 110-57-6.SEC Purity 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 CAS # 526-73-8.SEC Purity 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 CAS # 141-93-5.SEC Purity 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 CAS # 100-44-7.SEC Purity 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 CAS # 105-05-5.SEC Purity 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 CAS # 135-01-3.SEC Purity 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 CAS # 108-70-3.SEC Purity 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 CAS # 91-57-6.SEC Purity 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)

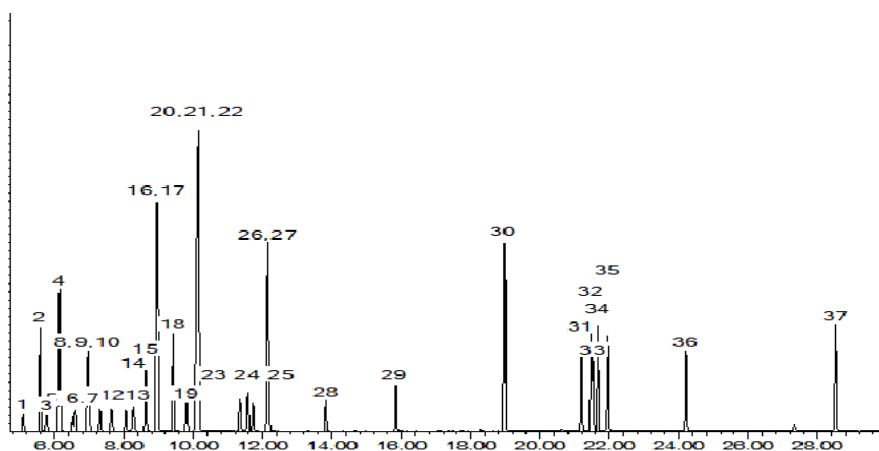
Carrier Gas:
helium-constant pressure 30 psi

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 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.
- 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

MSV_M_MIX2SEC_00066



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 CAS # 75-15-0.SEC Purity 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 CAS # 107-13-1.SEC Purity 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) CAS # 1634-04-4.SEC Purity 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) CAS # 110-54-3.SEC Purity 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) CAS # 108-20-3.SEC Purity 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) CAS # 126-99-8 Purity 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) CAS # 637-92-3.SEC Purity 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 CAS # 107-12-0.SEC Purity 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 CAS # 126-98-7 Purity 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) CAS # 78-83-1.SEC Purity 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 CAS # 109-99-9.SEC Purity 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 CAS # 110-82-7.SEC Purity 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 CAS # 71-36-3.SEC Purity 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) CAS # 994-05-8.SEC Purity 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) CAS # 142-82-5.SEC Purity 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) CAS # 919-94-8.SEC Purity 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 CAS # 108-87-2.SEC Purity 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 CAS # 80-62-6.SEC Purity 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 CAS # 123-91-1.SEC Purity 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 CAS # 79-46-9.SEC Purity 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 CAS # 97-63-2.SEC Purity 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 CAS # 544-10-5.SEC Purity 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 CAS # 110-57-6.SEC Purity 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 CAS # 526-73-8.SEC Purity 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 CAS # 141-93-5.SEC Purity 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 CAS # 100-44-7.SEC Purity 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 CAS # 105-05-5.SEC Purity 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 CAS # 135-01-3.SEC Purity 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 CAS # 108-70-3.SEC Purity 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 CAS # 91-57-6.SEC Purity 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)

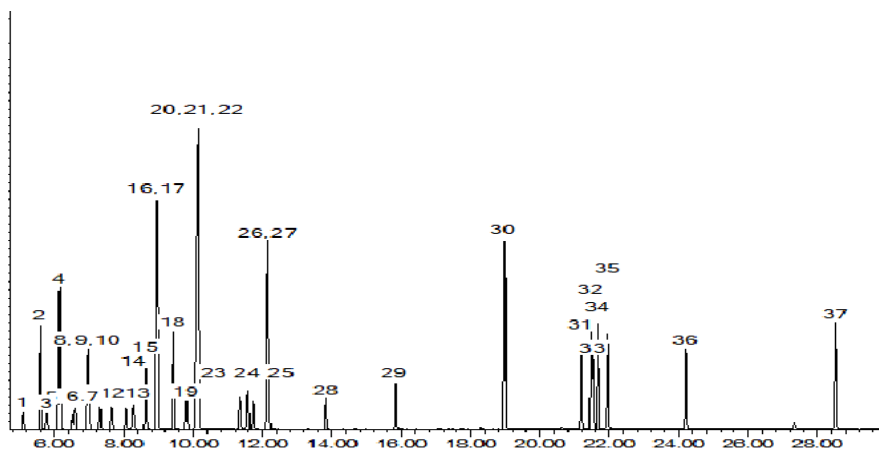
Carrier Gas:
helium-constant pressure 30 psi

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 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.
- 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

MSV_MegaMIX#1_00048



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 CAS # 74-97-5 Purity 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 CAS # 71-55-6 Purity 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 CAS # 563-58-6 Purity 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 CAS # 56-23-5 Purity 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 CAS # 107-06-2 Purity 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 CAS # 71-43-2 Purity 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 CAS # 79-01-6 Purity 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 CAS # 78-87-5 Purity 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 CAS # 75-27-4 Purity 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 CAS # 74-95-3 Purity 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 CAS # 10061-01-5 Purity 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 CAS # 108-88-3 Purity 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 CAS # 10061-02-6 Purity 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 CAS # 79-00-5 Purity 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 CAS # 142-28-9 Purity 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 CAS # 127-18-4 Purity 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 CAS # 124-48-1 Purity 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) CAS # 106-93-4 Purity 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 CAS # 108-90-7 Purity 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 CAS # 630-20-6 Purity 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 CAS # 100-41-4 Purity 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 CAS # 108-38-3 Purity 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 CAS # 106-42-3 Purity 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 CAS # 95-47-6 Purity 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 CAS # 100-42-5 Purity 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) CAS # 98-82-8 Purity 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 CAS # 75-25-2 Purity 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-Tetrachloroethane CAS # 79-34-5 Purity 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 CAS # 96-18-4 Purity 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 CAS # 103-65-1 Purity 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 CAS # 108-86-1 Purity 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 CAS # 108-67-8 Purity 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 CAS # 95-49-8 Purity 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 CAS # 106-43-4 Purity 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 CAS # 98-06-6 Purity 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 CAS # 95-63-6 Purity 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 CAS # 135-98-8 Purity 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) CAS # 99-87-6 Purity 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 CAS # 541-73-1 Purity 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 CAS # 106-46-7 Purity 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 CAS # 104-51-8 Purity 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 CAS # 95-50-1 Purity 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 CAS # 96-12-8 Purity 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 CAS # 120-82-1 Purity 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 CAS # 87-68-3 Purity 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 CAS # 91-20-3 Purity 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 CAS # 87-61-6 Purity 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)

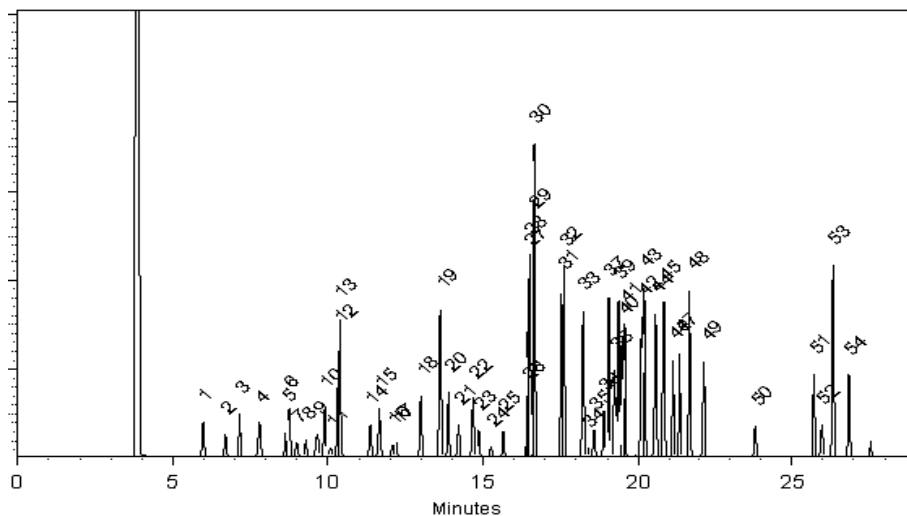
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 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.
- 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

MSV_MegaMIX#1_00070



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 CAS # 74-97-5 Purity 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 CAS # 71-55-6 Purity 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 CAS # 563-58-6 Purity 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 CAS # 56-23-5 Purity 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 CAS # 107-06-2 Purity 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 CAS # 71-43-2 Purity 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 CAS # 79-01-6 Purity 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 CAS # 78-87-5 Purity 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 CAS # 75-27-4 Purity 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 CAS # 74-95-3 Purity 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 CAS # 10061-01-5 Purity 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 CAS # 108-88-3 Purity 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 CAS # 10061-02-6 Purity 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 CAS # 79-00-5 Purity 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 CAS # 142-28-9 Purity 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 CAS # 127-18-4 Purity 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 CAS # 124-48-1 Purity 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) CAS # 106-93-4 Purity 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 CAS # 108-90-7 Purity 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 CAS # 630-20-6 Purity 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 CAS # 100-41-4 Purity 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 CAS # 108-38-3 Purity 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 CAS # 106-42-3 Purity 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 CAS # 95-47-6 Purity 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 CAS # 100-42-5 Purity 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) CAS # 98-82-8 Purity 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 CAS # 75-25-2 Purity 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-Tetrachloroethane CAS # 79-34-5 Purity 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 CAS # 96-18-4 Purity 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 CAS # 103-65-1 Purity 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 CAS # 108-86-1 Purity 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 CAS # 108-67-8 Purity 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 CAS # 95-49-8 Purity 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 CAS # 106-43-4 Purity 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 CAS # 98-06-6 Purity 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 CAS # 95-63-6 Purity 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 CAS # 135-98-8 Purity 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) CAS # 99-87-6 Purity 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 CAS # 541-73-1 Purity 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 CAS # 106-46-7 Purity 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 CAS # 104-51-8 Purity 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 CAS # 95-50-1 Purity 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 CAS # 96-12-8 Purity 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 CAS # 120-82-1 Purity 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 CAS # 87-68-3 Purity 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 CAS # 91-20-3 Purity 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 CAS # 87-61-6 Purity 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)

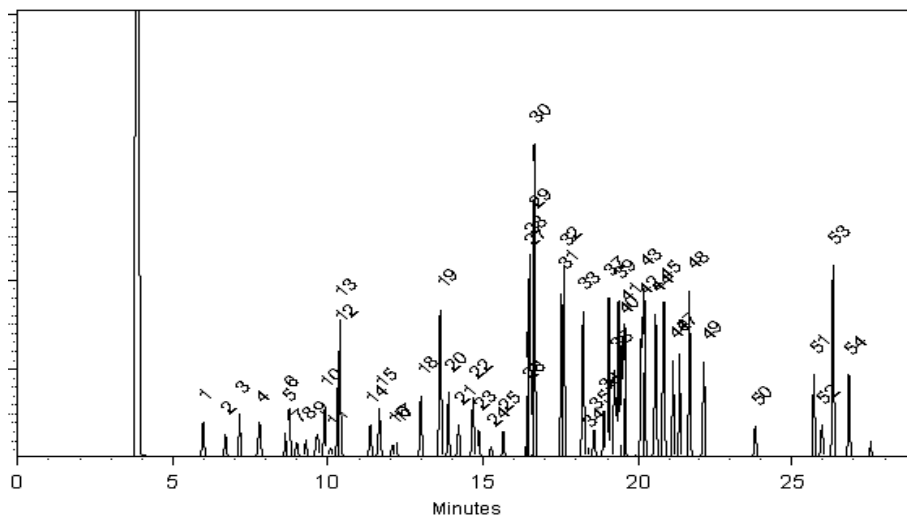
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

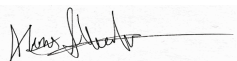
Det. Type:
FID



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 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.
- 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

MSV_MegaMix#2_00048



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 CAS # 75-15-0 Purity 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 CAS # 107-13-1 Purity 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) CAS # 1634-04-4 Purity 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) CAS # 110-54-3 Purity 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) CAS # 108-20-3 Purity 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) CAS # 126-99-8 Purity 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) CAS # 637-92-3 Purity 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 CAS # 107-12-0 Purity 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 CAS # 126-98-7 Purity 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) CAS # 78-83-1 Purity 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 CAS # 109-99-9 Purity 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 CAS # 110-82-7 Purity 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 CAS # 71-36-3 Purity 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) CAS # 994-05-8 Purity 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) CAS # 142-82-5 Purity 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) CAS # 919-94-8 Purity 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 CAS # 108-87-2 Purity 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 CAS # 80-62-6 Purity 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 CAS # 123-91-1 Purity 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 CAS # 79-46-9 Purity 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 CAS # 97-63-2 Purity 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 CAS # 544-10-5 Purity 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 CAS # 110-57-6 Purity 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 CAS # 526-73-8 Purity 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 CAS # 141-93-5 Purity 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 CAS # 100-44-7 Purity 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 CAS # 105-05-5 Purity 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 CAS # 135-01-3 Purity 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 CAS # 108-70-3 Purity 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 CAS # 91-57-6 Purity 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)

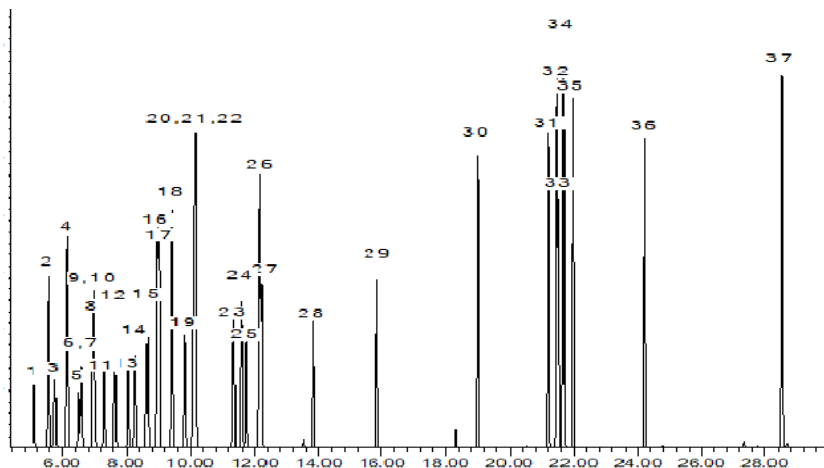
Carrier Gas:
helium-constant pressure 30 psi

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 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.
- 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

MSV_MegaMix#2_00070



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 CAS # 75-15-0 Purity 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 CAS # 107-13-1 Purity 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) CAS # 1634-04-4 Purity 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) CAS # 110-54-3 Purity 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) CAS # 108-20-3 Purity 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) CAS # 126-99-8 Purity 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) CAS # 637-92-3 Purity 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 CAS # 107-12-0 Purity 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 CAS # 126-98-7 Purity 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) CAS # 78-83-1 Purity 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 CAS # 109-99-9 Purity 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 CAS # 110-82-7 Purity 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 CAS # 71-36-3 Purity 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) CAS # 994-05-8 Purity 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) CAS # 142-82-5 Purity 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) CAS # 919-94-8 Purity 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 CAS # 108-87-2 Purity 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 CAS # 80-62-6 Purity 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 CAS # 123-91-1 Purity 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 CAS # 79-46-9 Purity 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 CAS # 97-63-2 Purity 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 CAS # 544-10-5 Purity 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 CAS # 110-57-6 Purity 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 CAS # 526-73-8 Purity 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 CAS # 141-93-5 Purity 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 CAS # 100-44-7 Purity 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 CAS # 105-05-5 Purity 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 CAS # 135-01-3 Purity 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 CAS # 108-70-3 Purity 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 CAS # 91-57-6 Purity 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)

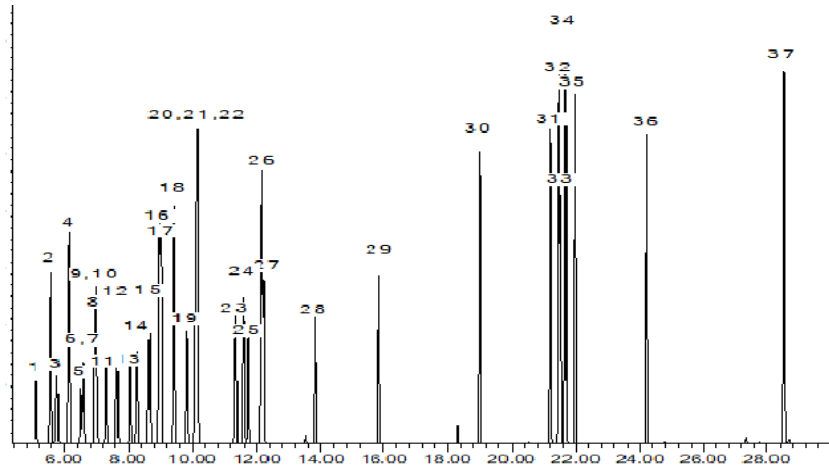
Carrier Gas:
helium-constant pressure 30 psi

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 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.
- 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

MSV_Q_Ketones_00047



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.:** A0167987

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 : January 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	12,567.5 µg/mL	+/-	73.5855	µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot S25F025)		+/-	758.3030	µg/mL	Unstressed
	Purity 99%		+/-	760.1031	µg/mL	Stressed
2	2-Butanone (MEK)	12,553.0 µg/mL	+/-	73.5006	µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RGZ2A)		+/-	757.4280	µg/mL	Unstressed
	Purity 99%		+/-	759.2261	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,563.5 µg/mL	+/-	73.5621	µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/-	758.0616	µg/mL	Unstressed
	Purity 99%		+/-	759.8611	µg/mL	Stressed
4	2-Hexanone	12,527.8 µg/mL	+/-	73.3532	µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot Y3TUO)		+/-	755.9093	µg/mL	Unstressed
	Purity 98%		+/-	757.7037	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)

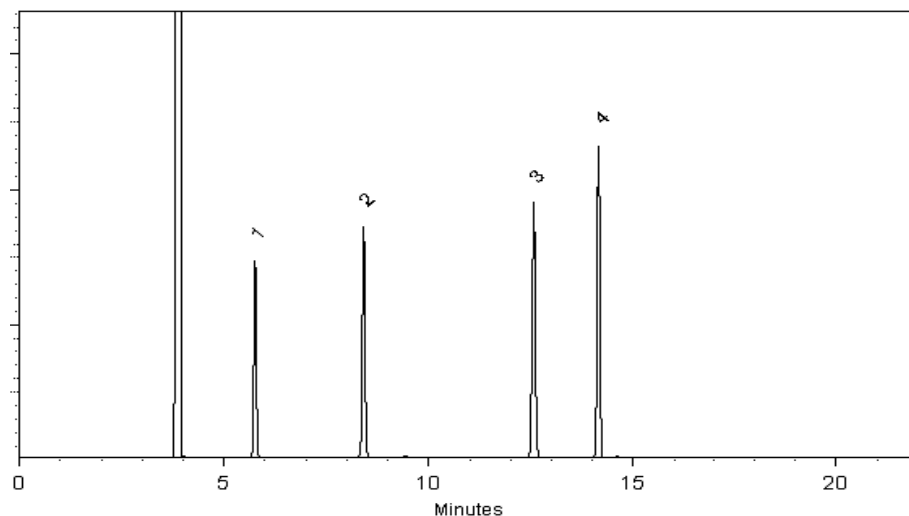
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.


Cory Meyer - Operations Tech I

Date Mixed: 11-Jan-2021 **Balance:** 1127510105


Marlina Cowan - Operations Tech I

Date Passed: 14-Jan-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 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.
- 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

MSV_Q_Ketones_00067



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
	CAS # 67-64-1.SEC (Lot S25F025)		+/-	754.4715	µg/mL	Unstressed
	Purity 99%		+/-	756.2625	µg/mL	Stressed
2	2-Butanone (MEK)	12,502.0 µg/mL	+/-	73.2020	µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RGZ2A)		+/-	754.3508	µg/mL	Unstressed
	Purity 99%		+/-	756.1415	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,508.7 µg/mL	+/-	73.2410	µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/-	754.7530	µg/mL	Unstressed
	Purity 99%		+/-	756.5447	µg/mL	Stressed
4	2-Hexanone	12,507.3 µg/mL	+/-	73.2332	µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot Y3TUO)		+/-	754.6726	µg/mL	Unstressed
	Purity 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)

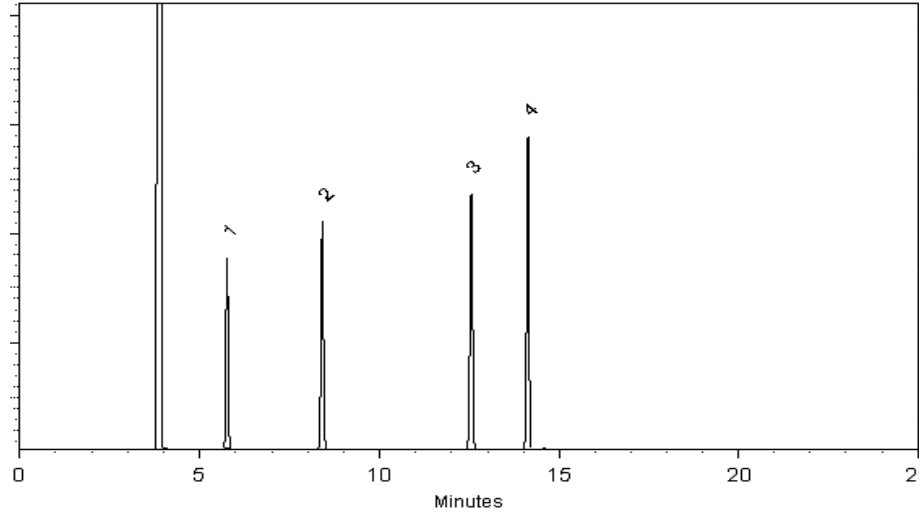
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 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.
- 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

MSV_QC_2K_GAS_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. :	<u>577488.SEC</u>	Lot No.:	<u>A0172021</u>
Description :	<u>Custom Gases.SEC Standard</u>		
	<u>Custom Gases.SEC Standard 2,000µg/mL, P&T Methanol, 1mL/ampul</u>		
Container Size :	<u>2 mL</u>	Pkg Amt:	<u>> 1 mL</u>
Expiration Date :	<u>May 31, 2024</u>	Storage:	<u>0°C or colder</u>
		Ship:	<u>Ambient</u>

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,014.7 µg/mL	+/-	21.3347	µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 26871)		+/-	114.3626	µg/mL	Unstressed
	Purity 99%		+/-	116.9742	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,018.4 µg/mL	+/-	22.6573	µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/-	114.8157	µg/mL	Unstressed
	Purity 99%		+/-	117.4265	µg/mL	Stressed
3	Vinyl chloride	2,011.6 µg/mL	+/-	18.1502	µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/-	113.6387	µg/mL	Unstressed
	Purity 99%		+/-	116.2584	µg/mL	Stressed
4	1,3-Butadiene	2,020.9 µg/mL	+/-	15.6985	µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 26996)		+/-	113.7849	µg/mL	Unstressed
	Purity 99%		+/-	116.4253	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,014.3 µg/mL	+/-	52.5641	µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot 00017022)		+/-	124.0186	µg/mL	Unstressed
	Purity 99%		+/-	126.4297	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,009.7 µg/mL	+/-	28.6335	µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/-	115.6738	µg/mL	Unstressed
	Purity 99%		+/-	118.2437	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,000.0 µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 10930400)		+/-	112.1494	µg/mL	Unstressed
	Purity 99%		+/-	114.7730	µg/mL	Stressed

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

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

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:

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

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

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

Inj. Temp:

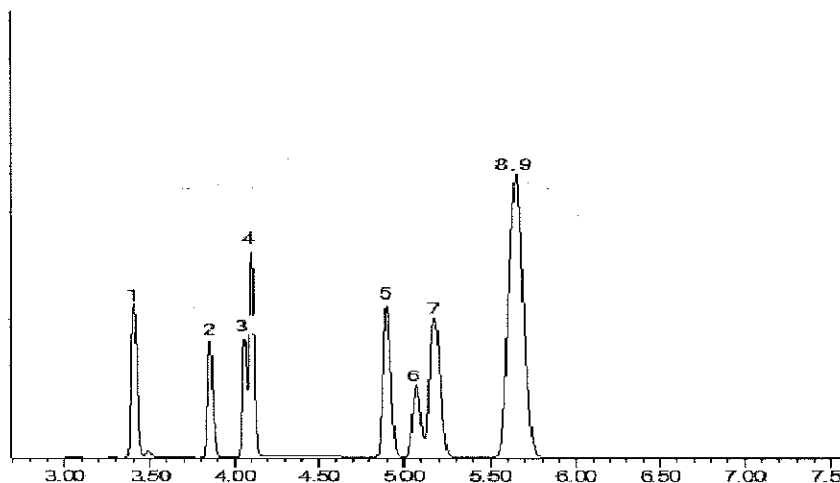
200°C

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/ μ 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 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.
- 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

MSV_QC_2K_GAS_00094



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

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

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:

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

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

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

Inj. Temp:

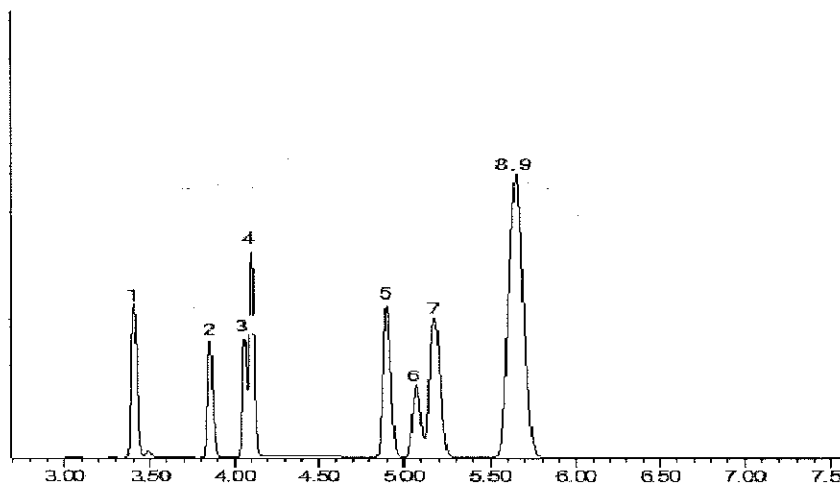
200°C

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 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.
- 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

MSV_V#2B_00254



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.:** A0171518
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, 2023 **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%	25,038.0 µg/mL	+/- 146.6030 µg/mL
2	tert-Butanol (TBA)	75-65-0	99%	25,047.0 µg/mL	+/- 146.6557 µg/mL
3	Propionitrile	107-12-0	99%	25,015.0 µg/mL	+/- 146.4683 µg/mL
4	Methacrylonitrile	126-98-7	99%	12,515.0 µg/mL	+/- 73.2781 µg/mL
5	Isobutanol (2-Methyl-1-propanol)	78-83-1	99%	62,529.0 µg/mL	+/- 366.1210 µg/mL
6	1-Butanol	71-36-3	99%	125,072.0 µg/mL	+/- 732.2863 µg/mL
7	1,4-Dioxane	123-91-1	99%	62,509.0 µg/mL	+/- 366.0039 µg/mL
8	trans-1,4-dichloro-2-butene	110-57-6	95%	12,504.9 µg/mL	+/- 73.2186 µg/mL
Solvent:	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)

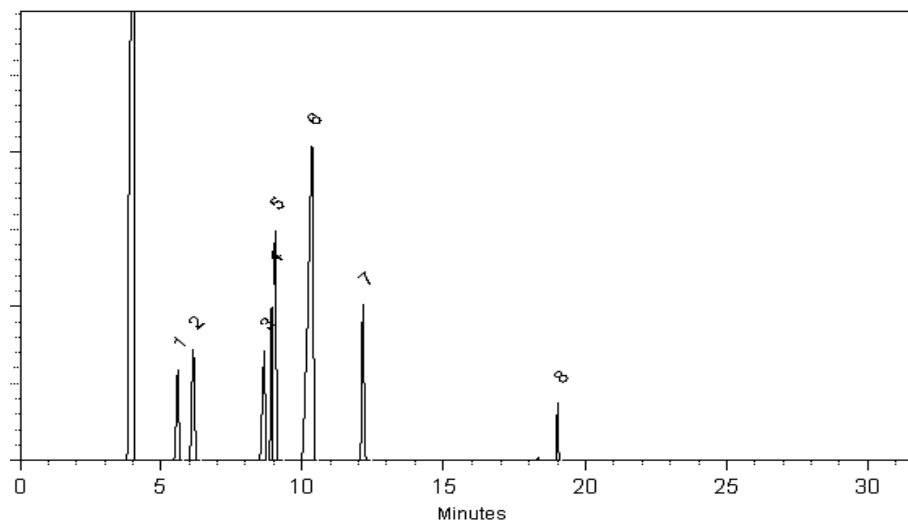
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.


Erik Strommer - Operations Tech I

Date Mixed: 20-Apr-2021 **Balance:** B707717271


Marlina Cowan - Operations Tech I

Date Passed: 23-Apr-2021

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/ μ 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

MSV_V_Ketones_00047



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.:** A0168313

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 : January 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	12,516.4 µg/mL	+/-	73.2863	µg/mL	Gravimetric
	CAS # 67-64-1 (Lot SHBM6699)		+/-	755.2197	µg/mL	Unstressed
	Purity 99%		+/-	757.0124	µg/mL	Stressed
2	2-Butanone (MEK)	12,515.2 µg/mL	+/-	73.2792	µg/mL	Gravimetric
	CAS # 78-93-3 (Lot SHBL6194)		+/-	755.1473	µg/mL	Unstressed
	Purity 99%		+/-	756.9399	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,512.0 µg/mL	+/-	73.2605	µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBM2797)		+/-	754.9542	µg/mL	Unstressed
	Purity 99%		+/-	756.7463	µg/mL	Stressed
4	2-Hexanone	12,504.4 µg/mL	+/-	73.2160	µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKCL1599)		+/-	754.4956	µg/mL	Unstressed
	Purity 99%		+/-	756.2867	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)

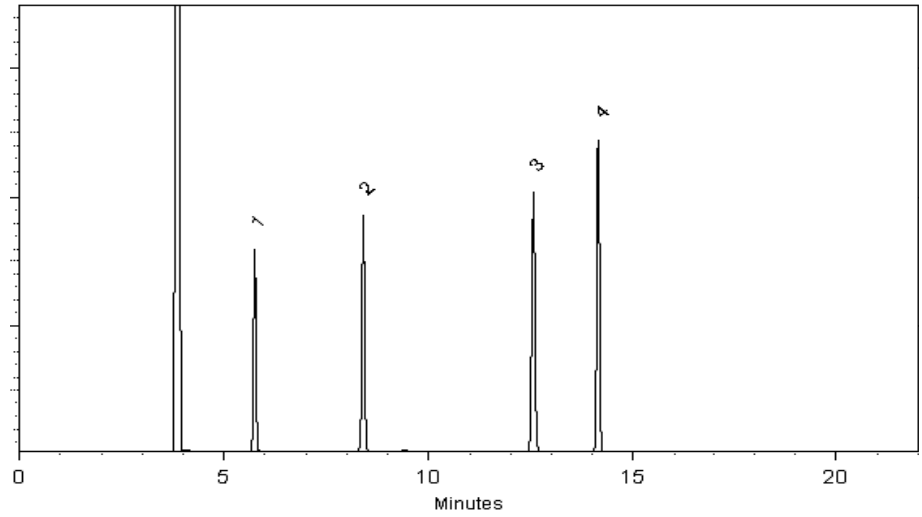
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

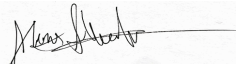


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Cathleen Soltis - Mix Technician

Date Mixed: 20-Jan-2021

Balance: B251644995


Alexis Shelov - Operations Tech I

Date Passed: 21-Jan-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 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.
- 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

MSV_V_Ketones_00068



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)

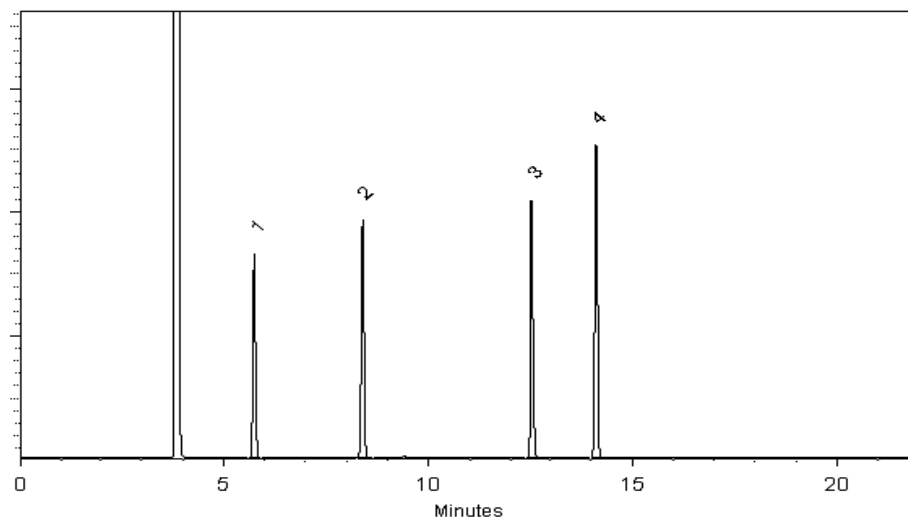
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 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.
- 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

MSV_V_PentaCL_00012



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)

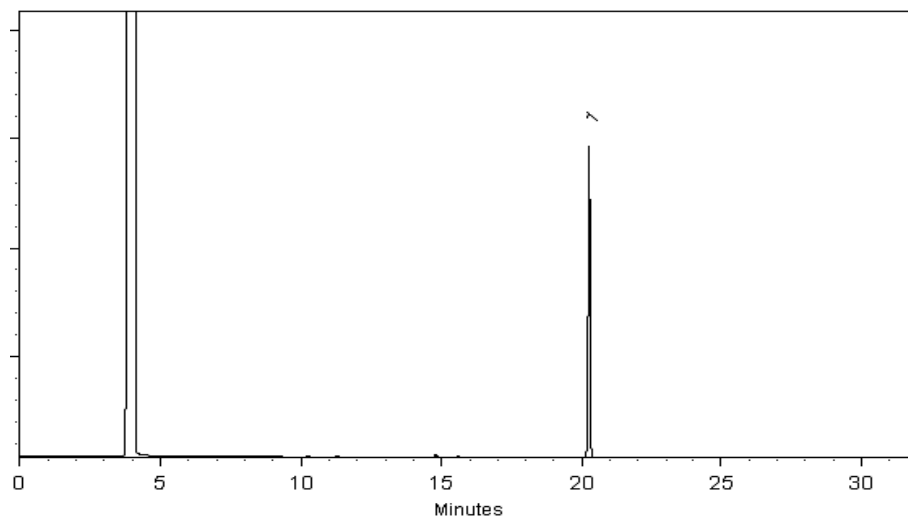
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

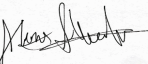
Det. Type:
FID



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 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.
- 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

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-85437-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): R-624SilMS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-COD-SW-6-0/1-0	410-85437-1	96	97	101	93
HD-COD-SW-7-0/1-0	410-85437-2	95	91	100	92
HD-COD-SW-8-0/1-0	410-85437-3	96	94	100	92
HD-COD-SW-9-0/1-0	410-85437-4	97	92	100	91
HD-COD-SW-13-0/1-0	410-85437-5	95	91	102	91
HD-COD-SW-15-0/1-0	410-85437-6	96	93	103	93
HD-COD-SW-16-0/1-0	410-85437-7	102	93	101	92
HD-COD-SW-17-0/1-0	410-85437-8	98	96	105	90
HD-COD-SW-17-0/1-0 DL	410-85437-8 DL	96	93	101	92
HD-COD-SW-26-0/1-0	410-85437-9	96	93	101	90
HD-COD-SW-27-0/1-0	410-85437-10	100	95	101	91
HD-COD-SW-28-0/1-0	410-85437-11	97	93	101	91
HD-COD-SW-29-0/1-0	410-85437-12	96	94	98	92
HD-QC1-0/1-1	410-85437-13	96	92	98	90
HD-QC1-0/1-1 DL	410-85437-13 DL	98	97	100	91
HD-QC1-0/1-2	410-85437-14	94	94	102	93
	MB 410-261977/7	94	93	102	93
	LCS 410-261977/4	94	88	106	98
	LCSD 410-261977/5	93	86	103	97
HD-COD-SW-15-0/1-0 MS MS	410-85437-6 MS	93	91	103	94
HD-COD-SW-15-0/1-0 MSD MSD	410-85437-6 MSD	97	96	104	95

	<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.: 410-85437-1

SDG No.:

Matrix: Water Level: Low

Lab File ID: CU06X003.D

Lab ID: LCS 410-261977/4

Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.75	95	71-134	
1,1,1-Trichloroethane	5.00	4.35	87	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.23	85	75-123	
1,1,2-Trichloroethane	5.00	4.38	88	80-120	
1,1-Dichloroethane	5.00	4.65	93	74-120	
1,1-Dichloroethene	5.00	4.66	93	80-131	
1,2-Dibromoethane (EDB)	5.00	4.15	83	80-120	
1,2-Dichloroethane	5.00	3.96	79	69-122	
1,2-Dichloropropane	5.00	4.82	96	80-120	
2-Butanone (MEK)	62.5	69.6	111	59-141	
2-Hexanone	62.5	63.8	102	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	64.5	103	55-140	
Acetone	62.5	67.5	108	60-146	
Benzene	5.00	4.73	95	80-120	
Bromochloromethane	5.00	4.32	86	80-120	
Bromodichloromethane	5.00	4.46	89	73-124	
Bromoform	5.00	3.88	78	49-144	
Bromomethane	5.00	4.53	91	60-136	
Carbon disulfide	5.00	5.33	107	67-130	
Carbon tetrachloride	5.00	4.33	87	64-141	
Chlorobenzene	5.00	4.78	96	80-120	
Chloroethane	5.00	5.09	102	63-120	
Chloroform	5.00	4.44	89	80-120	
Chloromethane	5.00	6.21	124	56-124	
cis-1,2-Dichloroethene	5.00	4.72	94	80-122	
cis-1,3-Dichloropropene	5.00	4.14	83	67-121	
Dibromochloromethane	5.00	4.19	84	64-138	
Ethylbenzene	5.00	4.89	98	80-120	
Methyl tert-butyl ether	5.00	4.23	85	69-120	
Methylene Chloride	5.00	4.42	88	80-120	
Styrene	5.00	4.75	95	80-120	
Tetrachloroethene	5.00	4.75	95	80-120	
Toluene	5.00	4.85	97	80-120	
trans-1,2-Dichloroethene	5.00	4.54	91	80-122	
trans-1,3-Dichloropropene	5.00	4.48	90	61-129	
Trichloroethene	5.00	4.33	87	80-120	
Vinyl chloride	5.00	5.21	104	60-125	
Xylenes, Total	15.0	14.5	96	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

Matrix: Water Level: Low

Lab File ID: CU06X004.D

Lab ID: LCS D 410-261977/5

Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS D CONCENTRATION (ug/L)	LCS D % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1,2-Tetrachloroethane	5.00	4.81	96	1	30	71-134	
1,1,1-Trichloroethane	5.00	4.42	88	2	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.34	87	3	30	75-123	
1,1,2-Trichloroethane	5.00	4.50	90	3	30	80-120	
1,1-Dichloroethane	5.00	4.63	93	0	30	74-120	
1,1-Dichloroethene	5.00	5.06	101	8	30	80-131	
1,2-Dibromoethane (EDB)	5.00	4.29	86	3	30	80-120	
1,2-Dichloroethane	5.00	4.07	81	3	30	69-122	
1,2-Dichloropropane	5.00	4.75	95	1	30	80-120	
2-Butanone (MEK)	62.5	68.0	109	2	30	59-141	
2-Hexanone	62.5	72.5	116	13	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	70.7	113	9	30	55-140	
Acetone	62.5	77.4	124	14	30	60-146	
Benzene	5.00	4.79	96	1	30	80-120	
Bromochloromethane	5.00	4.30	86	0	30	80-120	
Bromodichloromethane	5.00	4.43	89	1	30	73-124	
Bromoform	5.00	3.90	78	1	30	49-144	
Bromomethane	5.00	4.94	99	9	30	60-136	
Carbon disulfide	5.00	5.66	113	6	30	67-130	
Carbon tetrachloride	5.00	4.43	89	2	30	64-141	
Chlorobenzene	5.00	4.91	98	3	30	80-120	
Chloroethane	5.00	5.58	112	9	30	63-120	
Chloroform	5.00	4.44	89	0	30	80-120	
Chloromethane	5.00	6.67	133	7	30	56-124	*+
cis-1,2-Dichloroethene	5.00	4.69	94	1	30	80-122	
cis-1,3-Dichloropropene	5.00	4.29	86	3	30	67-121	
Dibromochloromethane	5.00	4.24	85	1	30	64-138	
Ethylbenzene	5.00	5.01	100	2	30	80-120	
Methyl tert-butyl ether	5.00	4.15	83	2	30	69-120	
Methylene Chloride	5.00	4.42	88	0	30	80-120	
Styrene	5.00	4.91	98	3	30	80-120	
Tetrachloroethene	5.00	4.84	97	2	30	80-120	
Toluene	5.00	4.95	99	2	30	80-120	
trans-1,2-Dichloroethene	5.00	4.55	91	0	30	80-122	
trans-1,3-Dichloropropene	5.00	4.56	91	2	30	61-129	
Trichloroethene	5.00	4.47	89	3	30	80-120	
Vinyl chloride	5.00	5.66	113	8	30	60-125	
Xylenes, Total	15.0	14.9	99	3	30	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

Matrix: Water Level: Low

Lab File ID: CU06X017.D

Lab ID: 410-85437-6 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	5.22	104	71-134	
1,1,1-Trichloroethane	5.00	0.34 J	5.23	98	78-126	
1,1,2,2-Tetrachloroethane	5.00	ND	4.37	87	75-123	
1,1,2-Trichloroethane	5.00	ND	4.60	92	80-120	
1,1-Dichloroethane	5.00	0.15 J	4.95	96	74-120	
1,1-Dichloroethene	5.00	0.20 J	6.13	118	80-131	
1,2-Dibromoethane (EDB)	5.00	ND	4.42	88	80-120	
1,2-Dichloroethane	5.00	ND	4.25	85	69-122	
1,2-Dichloropropane	5.00	ND	4.94	99	80-120	
2-Butanone (MEK)	62.6	ND	64.5	103	59-141	
2-Hexanone	62.6	ND	64.9	104	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	ND	64.5	103	55-140	
Acetone	62.6	1.2 J	77.4	122	60-146	
Benzene	5.00	ND	5.11	102	80-120	
Bromochloromethane	5.00	ND	4.73	95	80-120	
Bromodichloromethane	5.00	ND	4.64	93	73-124	
Bromoform	5.00	ND	4.44	89	49-144	
Bromomethane	5.00	ND	5.03	101	60-136	
Carbon disulfide	5.00	ND	6.34	127	67-130	
Carbon tetrachloride	5.00	ND	5.14	103	64-141	
Chlorobenzene	5.00	ND	5.25	105	80-120	
Chloroethane	5.00	ND	5.56	111	63-120	
Chloroform	5.00	0.27 J	4.99	94	80-120	
Chloromethane	5.00	ND	6.45	129	80-120	FH
cis-1,2-Dichloroethene	5.00	2.1	7.17	102	80-122	
cis-1,3-Dichloropropene	5.00	ND	4.46	89	67-121	
Dibromochloromethane	5.00	ND	4.63	93	64-138	
Ethylbenzene	5.00	ND	5.35	107	80-120	
Methyl tert-butyl ether	5.00	ND	4.35	87	69-120	
Methylene Chloride	5.00	ND	4.77	95	80-120	
Styrene	5.00	ND	5.14	103	80-120	
Tetrachloroethene	5.00	6.5	12.0	111	80-120	
Toluene	5.00	ND	5.28	106	80-120	
trans-1,2-Dichloroethene	5.00	ND	5.11	102	80-122	
trans-1,3-Dichloropropene	5.00	ND	4.66	93	61-129	
Trichloroethene	5.00	1.9	6.68	96	80-120	
Vinyl chloride	5.00	ND	5.95	119	60-125	
Xylenes, Total	15.0	ND	16.0	106	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

Matrix: Water Level: Low

Lab File ID: CU06X018.D

Lab ID: 410-85437-6 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	5.29	106	1	30	71-134	
1,1,1-Trichloroethane	5.00	5.48	103	5	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.45	89	2	30	75-123	
1,1,2-Trichloroethane	5.00	4.77	95	4	30	80-120	
1,1-Dichloroethane	5.00	4.97	96	1	30	74-120	
1,1-Dichloroethene	5.00	5.86	113	4	30	80-131	
1,2-Dibromoethane (EDB)	5.00	4.65	93	5	30	80-120	
1,2-Dichloroethane	5.00	4.53	90	6	30	69-122	
1,2-Dichloropropane	5.00	5.15	103	4	30	80-120	
2-Butanone (MEK)	62.6	76.3	122	17	30	59-141	
2-Hexanone	62.6	75.4	121	15	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	74.0	118	14	30	55-140	
Acetone	62.6	85.3	135	10	30	60-146	
Benzene	5.00	5.20	104	2	30	80-120	
Bromochloromethane	5.00	4.83	97	2	30	80-120	
Bromodichloromethane	5.00	4.73	94	2	30	73-124	
Bromoform	5.00	4.47	89	1	30	49-144	
Bromomethane	5.00	5.34	107	6	30	60-136	
Carbon disulfide	5.00	6.31	126	0	30	67-130	
Carbon tetrachloride	5.00	5.31	106	3	30	64-141	
Chlorobenzene	5.00	5.30	106	1	30	80-120	
Chloroethane	5.00	5.88	118	6	30	63-120	
Chloroform	5.00	5.11	97	3	30	80-120	
Chloromethane	5.00	6.93	138	7	30	80-120	FH
cis-1,2-Dichloroethene	5.00	7.34	105	2	30	80-122	
cis-1,3-Dichloropropene	5.00	4.45	89	0	30	67-121	
Dibromochloromethane	5.00	4.80	96	4	30	64-138	
Ethylbenzene	5.00	5.40	108	1	30	80-120	
Methyl tert-butyl ether	5.00	4.19	84	4	30	69-120	
Methylene Chloride	5.00	4.69	94	2	30	80-120	
Styrene	5.00	5.17	103	1	30	80-120	
Tetrachloroethene	5.00	12.2	114	1	30	80-120	
Toluene	5.00	5.38	107	2	30	80-120	
trans-1,2-Dichloroethene	5.00	4.85	97	5	30	80-122	
trans-1,3-Dichloropropene	5.00	5.00	100	7	30	61-129	
Trichloroethene	5.00	6.71	96	1	30	80-120	
Vinyl chloride	5.00	6.35	127	7	30	60-125	FH
Xylenes, Total	15.0	15.9	106	0	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
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

Lab File ID: CU06X006.D

Lab Sample ID: MB 410-261977/7

Matrix: Water

Heated Purge: (Y/N) N

Instrument ID: 10193

Date Analyzed: 06/06/2022 12:17

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 410-261977/4	CU06X003.D	06/06/2022 11:11
	LCSD 410-261977/5	CU06X004.D	06/06/2022 11:33
HD-QC1-0/1-2	410-85437-14	CU06X008.D	06/06/2022 13:02
HD-COD-SW-6-0/1-0	410-85437-1	CU06X011.D	06/06/2022 14:09
HD-COD-SW-7-0/1-0	410-85437-2	CU06X012.D	06/06/2022 14:31
HD-COD-SW-8-0/1-0	410-85437-3	CU06X013.D	06/06/2022 14:54
HD-COD-SW-9-0/1-0	410-85437-4	CU06X014.D	06/06/2022 15:16
HD-COD-SW-13-0/1-0	410-85437-5	CU06X015.D	06/06/2022 15:38
HD-COD-SW-15-0/1-0	410-85437-6	CU06X016.D	06/06/2022 16:01
HD-COD-SW-15-0/1-0 MS MS	410-85437-6 MS	CU06X017.D	06/06/2022 16:23
HD-COD-SW-15-0/1-0 MSD MSD	410-85437-6 MSD	CU06X018.D	06/06/2022 16:45
HD-COD-SW-16-0/1-0	410-85437-7	CU06X020.D	06/06/2022 17:30
HD-COD-SW-17-0/1-0	410-85437-8	CU06X021.D	06/06/2022 17:52
HD-COD-SW-17-0/1-0 DL	410-85437-8 DL	CU06X022.D	06/06/2022 18:14
HD-COD-SW-26-0/1-0	410-85437-9	CU06X023.D	06/06/2022 18:36
HD-COD-SW-27-0/1-0	410-85437-10	CU06X024.D	06/06/2022 18:59
HD-COD-SW-28-0/1-0	410-85437-11	CU06X025.D	06/06/2022 19:21
HD-COD-SW-29-0/1-0	410-85437-12	CU06X026.D	06/06/2022 19:43
HD-QC1-0/1-1	410-85437-13	CU06X027.D	06/06/2022 20:05
HD-QC1-0/1-1 DL	410-85437-13 DL	CU06X028.D	06/06/2022 20:28

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-85437-1

SDG No.: _____

Lab File ID: CF02T01.D BFB Injection Date: 02/02/2022

Instrument ID: 10193 BFB Injection Time: 14:37

Analysis Batch No.: 220276

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	16.7
75	30.0 - 60.0 % of mass 95	47.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.6
173	Less than 2.0 % of mass 174	0.8 (0.9) 1
174	Greater than 50% of mass 95	85.7
175	5.0 - 9.0 % of mass 174	6.3 (7.4) 1
176	95.0 - 101.0 % of mass 174	84.1 (98.2) 1
177	5.0 - 9.0 % of mass 176	5.4 (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 410-220276/13	CF02X13.D	02/02/2022	18:57
	IC 410-220276/14	CF02X14.D	02/02/2022	19:20
	IC 410-220276/15	CF02X15.D	02/02/2022	19:42
	IC 410-220276/16	CF02X16.D	02/02/2022	20:04
	IC 410-220276/17	CF02X17.D	02/02/2022	20:26
	ICIS 410-220276/18	CF02X18.D	02/02/2022	20:49
	IC 410-220276/19	CF02X19.D	02/02/2022	21:11
	ICV 410-220276/21	CF02X21.D	02/02/2022	21:55

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-85437-1

SDG No.: _____

Lab File ID: CU06T001.D BFB Injection Date: 06/06/2022

Instrument ID: 10193 BFB Injection Time: 10:13

Analysis Batch No.: 261977

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.9
75	30.0 - 60.0 % of mass 95	48.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	1.1 (1.1) 1
174	Greater than 50% of mass 95	96.3
175	5.0 - 9.0 % of mass 174	7.3 (7.5) 1
176	95.0 - 101.0 % of mass 174	93.0 (96.6) 1
177	5.0 - 9.0 % of mass 176	6.2 (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 410-261977/3	CU06X002.D	06/06/2022	10:48
	LCS 410-261977/4	CU06X003.D	06/06/2022	11:11
	LCSD 410-261977/5	CU06X004.D	06/06/2022	11:33
	MB 410-261977/7	CU06X006.D	06/06/2022	12:17
HD-QC1-0/1-2	410-85437-14	CU06X008.D	06/06/2022	13:02
HD-COD-SW-6-0/1-0	410-85437-1	CU06X011.D	06/06/2022	14:09
HD-COD-SW-7-0/1-0	410-85437-2	CU06X012.D	06/06/2022	14:31
HD-COD-SW-8-0/1-0	410-85437-3	CU06X013.D	06/06/2022	14:54
HD-COD-SW-9-0/1-0	410-85437-4	CU06X014.D	06/06/2022	15:16
HD-COD-SW-13-0/1-0	410-85437-5	CU06X015.D	06/06/2022	15:38
HD-COD-SW-15-0/1-0	410-85437-6	CU06X016.D	06/06/2022	16:01
HD-COD-SW-15-0/1-0 MS MS	410-85437-6 MS	CU06X017.D	06/06/2022	16:23
HD-COD-SW-15-0/1-0 MSD MSD	410-85437-6 MSD	CU06X018.D	06/06/2022	16:45
HD-COD-SW-16-0/1-0	410-85437-7	CU06X020.D	06/06/2022	17:30
HD-COD-SW-17-0/1-0	410-85437-8	CU06X021.D	06/06/2022	17:52
HD-COD-SW-17-0/1-0 DL	410-85437-8 DL	CU06X022.D	06/06/2022	18:14
HD-COD-SW-26-0/1-0	410-85437-9	CU06X023.D	06/06/2022	18:36
HD-COD-SW-27-0/1-0	410-85437-10	CU06X024.D	06/06/2022	18:59
HD-COD-SW-28-0/1-0	410-85437-11	CU06X025.D	06/06/2022	19:21
HD-COD-SW-29-0/1-0	410-85437-12	CU06X026.D	06/06/2022	19:43
HD-QC1-0/1-1	410-85437-13	CU06X027.D	06/06/2022	20:05
HD-QC1-0/1-1 DL	410-85437-13 DL	CU06X028.D	06/06/2022	20:28

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-85437-1
 SDG No.: _____
 Sample No.: ICIS 410-220276/18 Date Analyzed: 02/02/2022 20:49
 Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): CF02X18.D Heated Purge: (Y/N) N
 Calibration ID: 35216

	TBAd10		FB		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	123127	3.82	1913666	7.30	1592159	10.91
UPPER LIMIT	246254	4.32	3827332	7.80	3184318	11.41
LOWER LIMIT	61564	3.32	956833	6.80	796080	10.41
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-220276/21	119739	3.81	1916842	7.29	1565528	10.91
CCVIS 410-261977/3	115636	3.81	1987693	7.29	1602682	10.90

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 E Job No.: 410-85437-1
 SDG No.: _____
 Sample No.: ICIS 410-220276/18 Date Analyzed: 02/02/2022 20:49
 Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): CF02X18.D Heated Purge: (Y/N) N
 Calibration ID: 35216

	DCBd4		#	RT #	#	RT #
	AREA #	RT #				
INITIAL CALIBRATION MID-POINT	931787	12.84				
UPPER LIMIT	1863574	13.34				
LOWER LIMIT	465894	12.34				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-220276/21		919181	12.84			
CCVIS 410-261977/3		968319	12.83			

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 E Job No.: 410-85437-1
 SDG No.: _____
 Sample No.: CCVIS 410-261977/3 Date Analyzed: 06/06/2022 10:48
 Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): CU06X002.D Heated Purge: (Y/N) N
 Calibration ID: 35216

	TBAd10		FB		CBZd5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	115636	3.81	1987693	7.29	1602682	10.90	
UPPER LIMIT	231272	4.31	3975386	7.79	3205364	11.40	
LOWER LIMIT	57818	3.31	993847	6.79	801341	10.40	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-261977/4		119770	3.81	2065377	7.29	1548981	10.90
LCSD 410-261977/5		106245	3.82	1951329	7.29	1545405	10.90
MB 410-261977/7		122180	3.82	1941187	7.29	1551051	10.90
410-85437-14	HD-QC1-0/1-2	108912	3.82	1905327	7.29	1510052	10.90
410-85437-1	HD-COD-SW-6-0/1-0	107562	3.81	1808424	7.29	1452339	10.90
410-85437-2	HD-COD-SW-7-0/1-0	105800	3.84	1773476	7.29	1424527	10.90
410-85437-3	HD-COD-SW-8-0/1-0	105022	3.84	1771377	7.29	1413971	10.90
410-85437-4	HD-COD-SW-9-0/1-0	98983	3.81	1750962	7.29	1403407	10.90
410-85437-5	HD-COD-SW-13-0/1-0	111122	3.82	1735528	7.29	1379656	10.90
410-85437-6	HD-COD-SW-15-0/1-0	109580	3.82	1887872	7.29	1456083	10.90
410-85437-6 MS	HD-COD-SW-15-0/1-0 MS MS	105556	3.82	1761306	7.29	1398192	10.90
410-85437-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	97344	3.82	1811597	7.29	1418761	10.90
410-85437-7	HD-COD-SW-16-0/1-0	122219	3.83	1642807	7.29	1316317	10.90
410-85437-8	HD-COD-SW-17-0/1-0	108136	3.83	1709493	7.28	1380702	10.90
410-85437-8 DL	HD-COD-SW-17-0/1-0 DL	122660	3.82	1880419	7.29	1496368	10.90
410-85437-9	HD-COD-SW-26-0/1-0	118053	3.84	1796459	7.29	1329043	10.90
410-85437-10	HD-COD-SW-27-0/1-0	116537	3.84	1667024	7.29	1337293	10.90
410-85437-11	HD-COD-SW-28-0/1-0	110047	3.82	1614127	7.28	1329961	10.90
410-85437-12	HD-COD-SW-29-0/1-0	114251	3.84	1623555	7.29	1310164	10.90
410-85437-13	HD-QC1-0/1-1	98567	3.84	1620718	7.29	1345222	10.90
410-85437-13 DL	HD-QC1-0/1-1 DL	93419	3.83	1726439	7.29	1306528	10.90

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 E Job No.: 410-85437-1
 SDG No.: _____
 Sample No.: CCVIS 410-261977/3 Date Analyzed: 06/06/2022 10:48
 Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): CU06X002.D Heated Purge: (Y/N) N
 Calibration ID: 35216

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		968319	12.83				
UPPER LIMIT		1936638	13.33				
LOWER LIMIT		484160	12.33				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-261977/4		944142	12.83				
LCSD 410-261977/5		933524	12.83				
MB 410-261977/7		899243	12.83				
410-85437-14	HD-QC1-0/1-2	865229	12.83				
410-85437-1	HD-COD-SW-6-0/1-0	848142	12.83				
410-85437-2	HD-COD-SW-7-0/1-0	817213	12.83				
410-85437-3	HD-COD-SW-8-0/1-0	825703	12.83				
410-85437-4	HD-COD-SW-9-0/1-0	807918	12.83				
410-85437-5	HD-COD-SW-13-0/1-0	808885	12.83				
410-85437-6	HD-COD-SW-15-0/1-0	852906	12.83				
410-85437-6 MS	HD-COD-SW-15-0/1-0 MS	857366	12.83				
410-85437-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	852607	12.83				
410-85437-7	HD-COD-SW-16-0/1-0	780722	12.83				
410-85437-8	HD-COD-SW-17-0/1-0	806079	12.83				
410-85437-8 DL	HD-COD-SW-17-0/1-0 DL	860784	12.83				
410-85437-9	HD-COD-SW-26-0/1-0	770915	12.83				
410-85437-10	HD-COD-SW-27-0/1-0	789611	12.83				
410-85437-11	HD-COD-SW-28-0/1-0	771852	12.83				
410-85437-12	HD-COD-SW-29-0/1-0	773928	12.83				
410-85437-13	HD-QC1-0/1-1	773413	12.83				
410-85437-13 DL	HD-QC1-0/1-1 DL	769714	12.83				

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.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-1

Matrix: Water

Lab File ID: CU06X011.D

Analysis Method: 8260D

Date Collected: 05/25/2022 10:50

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 14:09

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.: 261977

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	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.4	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	*+	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.058	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-1

Matrix: Water

Lab File ID: CU06X011.D

Analysis Method: 8260D

Date Collected: 05/25/2022 10:50

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 14:09

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		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\10193\20220603-58749.b\CU06X011.D
 Lims ID: 410-85437-A-1
 Client ID: HD-COD-SW-6-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 14:09:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-012
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 07-Jun-2022 10:02:46 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1637

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:00:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50	1.940	1.959	-0.019	96	2910	0.0480	
5 Vinyl chloride	62		2.069				ND	
6 Bromomethane	94		2.355				ND	7
7 Chloroethane	64		2.434				ND	
14 1,1-Dichloroethene	96		3.196				ND	7
16 Acetone	43	3.251	3.227	0.024	88	11657	2.37	
20 Carbon disulfide	76		3.459				ND	7
24 Methylene Chloride	84		3.794				ND	
* 25 t-Butyl alcohol-d10 (IS)	65	3.812	3.812	0.000	91	107562	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63		4.824				ND	
36 2-Butanone (MEK)	43		5.641				ND	U
37 cis-1,2-Dichloroethene	96	5.690	5.672	0.018	19	3298	0.0584	M
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83	6.165	6.165	0.000	20	2943	0.0319	
48 1,1,1-Trichloroethane	97		6.385				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.391	6.385	0.006	94	430191	9.56	
50 Carbon tetrachloride	117		6.598				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.842	6.848	-0.006	71	83918	9.68	
54 Benzene	78		6.873				ND	7
55 1,2-Dichloroethane	62		6.946				ND	7
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1808424	10.0	
60 Trichloroethene	95		7.769				ND	
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1811128	10.1	
75 Toluene	92	9.445	9.445	0.000	96	9303	0.0683	
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.030	10.030	0.000	85	2232	0.0331	
82 2-Hexanone	43		10.183				ND	7
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1452339	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106	11.134	11.140	-0.006	97	4773	0.0449	M
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	7
93 Styrene	104		11.494				ND	7
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	659258	9.25	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.828	12.829	-0.001	93	848142	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X011.D

Injection Date: 06-Jun-2022 14:09:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-1

Lab Sample ID: 410-85437-1

Worklist Smp#: 12

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

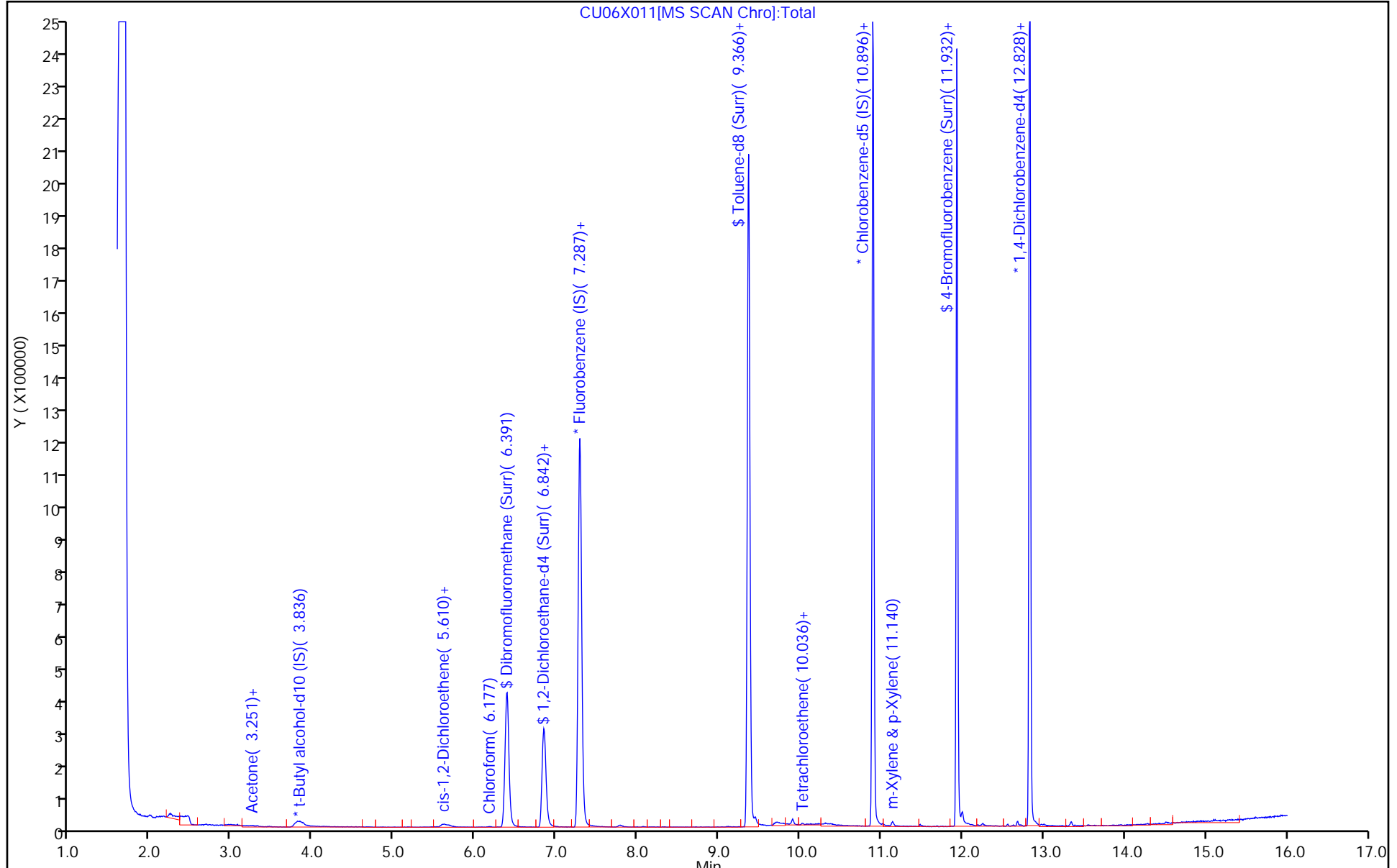
ALS Bottle#: 11

Method: MSV_10193_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\10193\20220603-58749.b\CU06X011.D
 Lims ID: 410-85437-A-1
 Client ID: HD-COD-SW-6-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 14:09:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-012
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 07-Jun-2022 10:02:46 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1637

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:00:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.56	95.59
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.68	96.83
\$ 74 Toluene-d8 (Surr)	10.0	10.1	101.22
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.25	92.50

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X011.D

Injection Date: 06-Jun-2022 14:09:30

Instrument ID: 10193

Lims ID: 410-85437-A-1

Lab Sample ID: 410-85437-1

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

Operator ID: knk41612

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

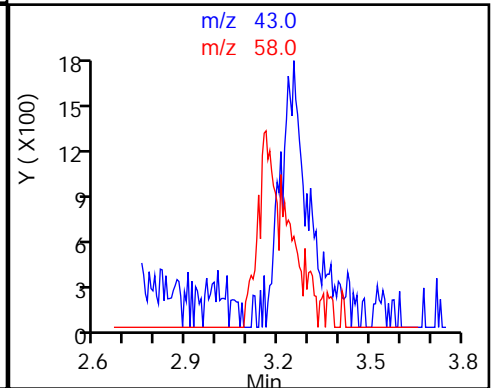
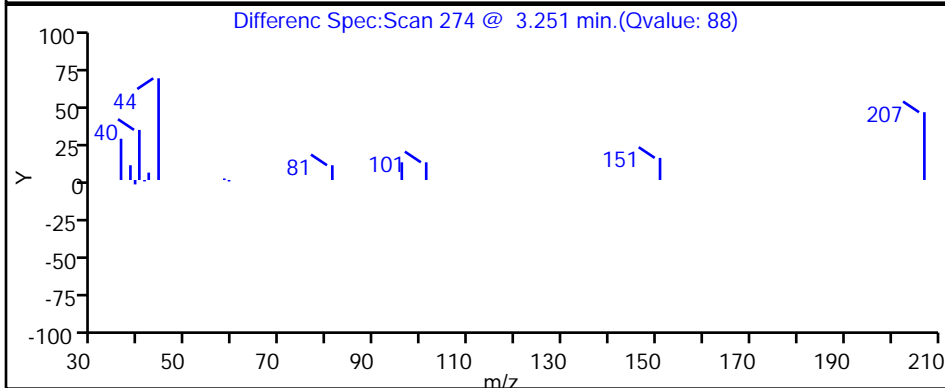
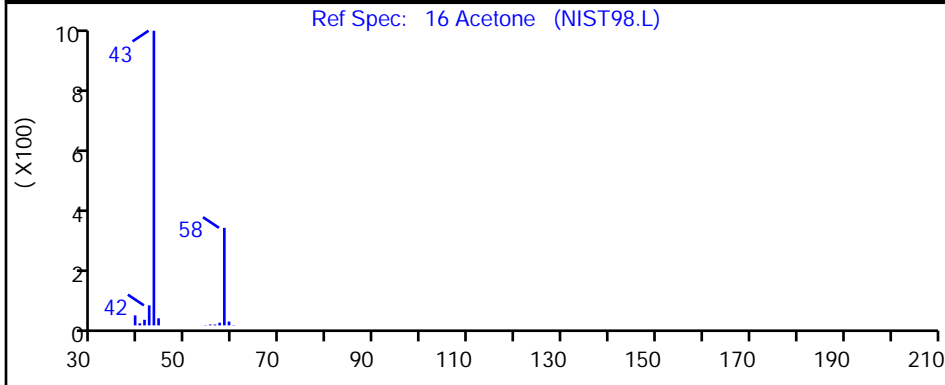
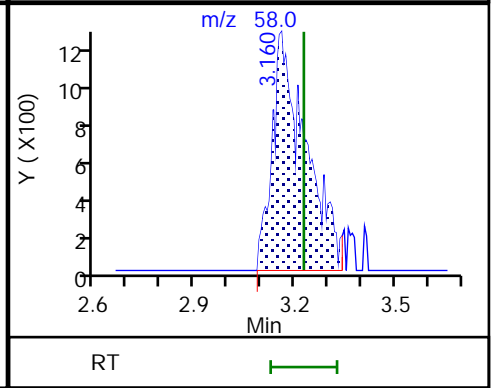
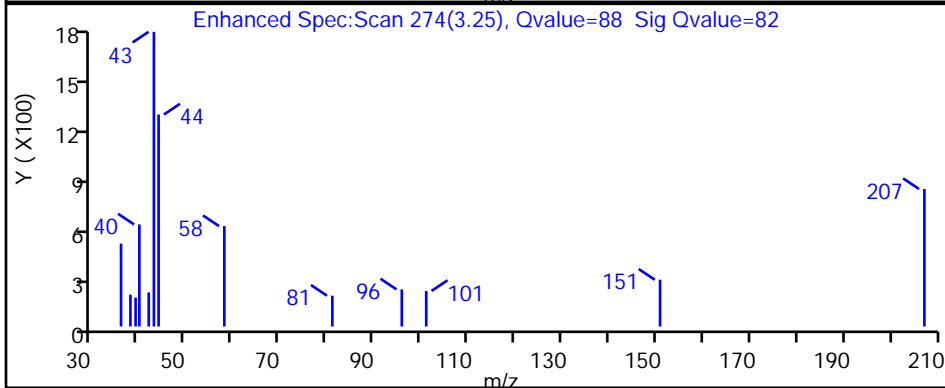
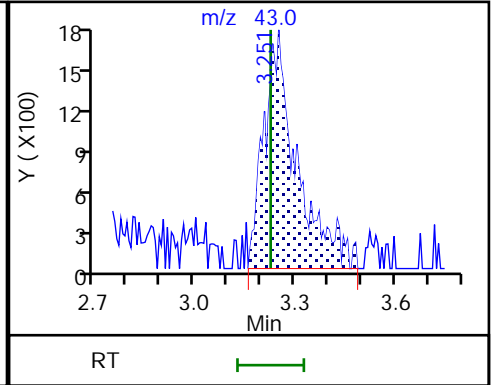
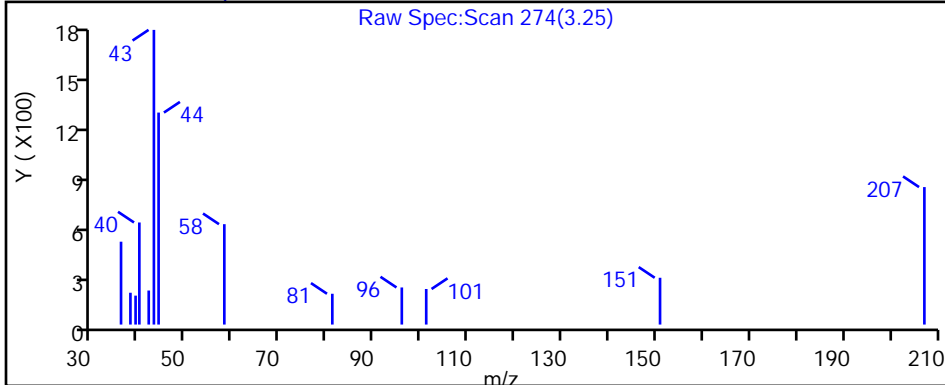
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

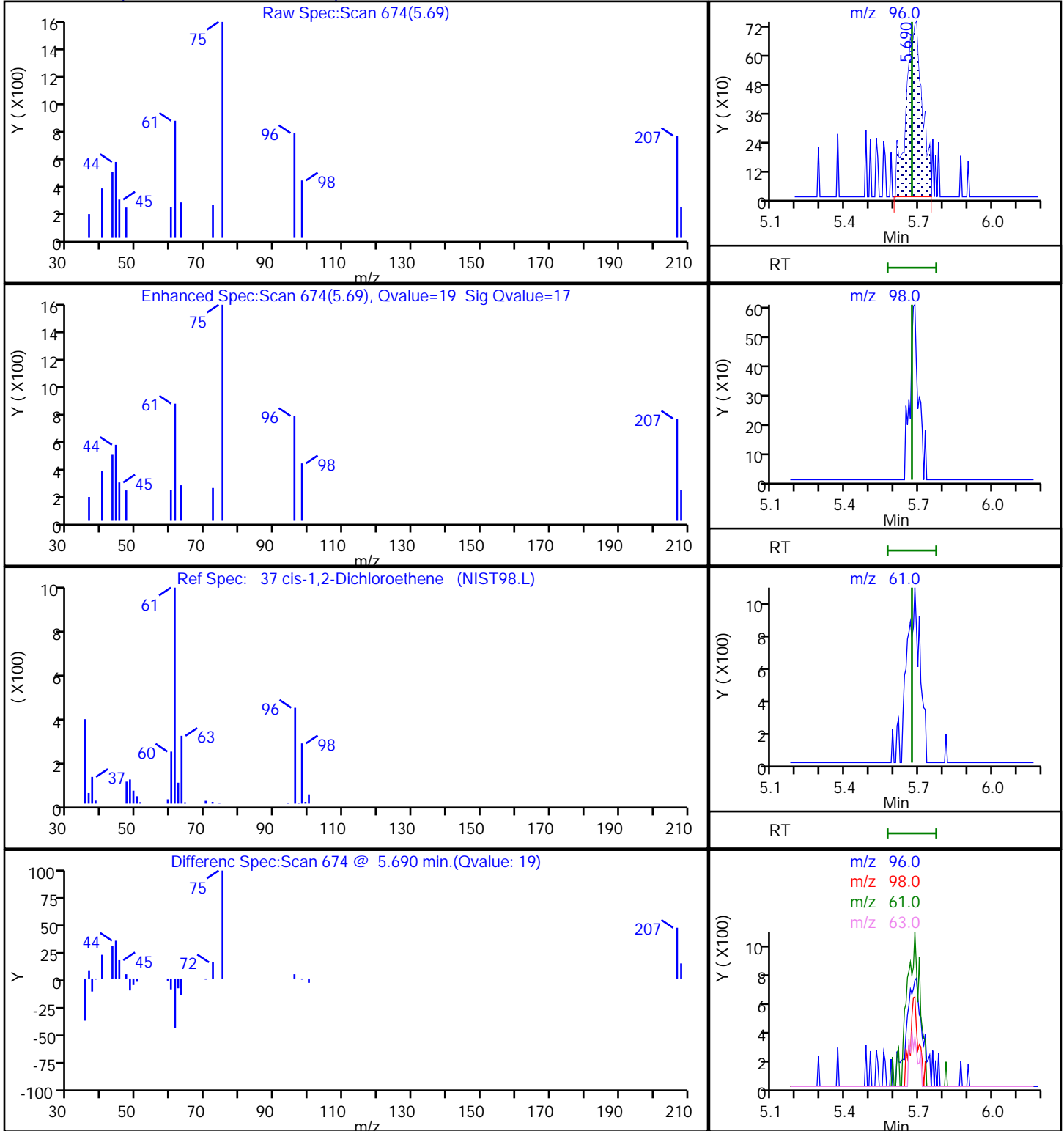
MS Quad

16 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X011.D
Injection Date: 06-Jun-2022 14:09:30 Instrument ID: 10193
Lims ID: 410-85437-A-1 Lab Sample ID: 410-85437-1
Client ID: HD-COD-SW-6-0/1-0
Operator ID: knk41612 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

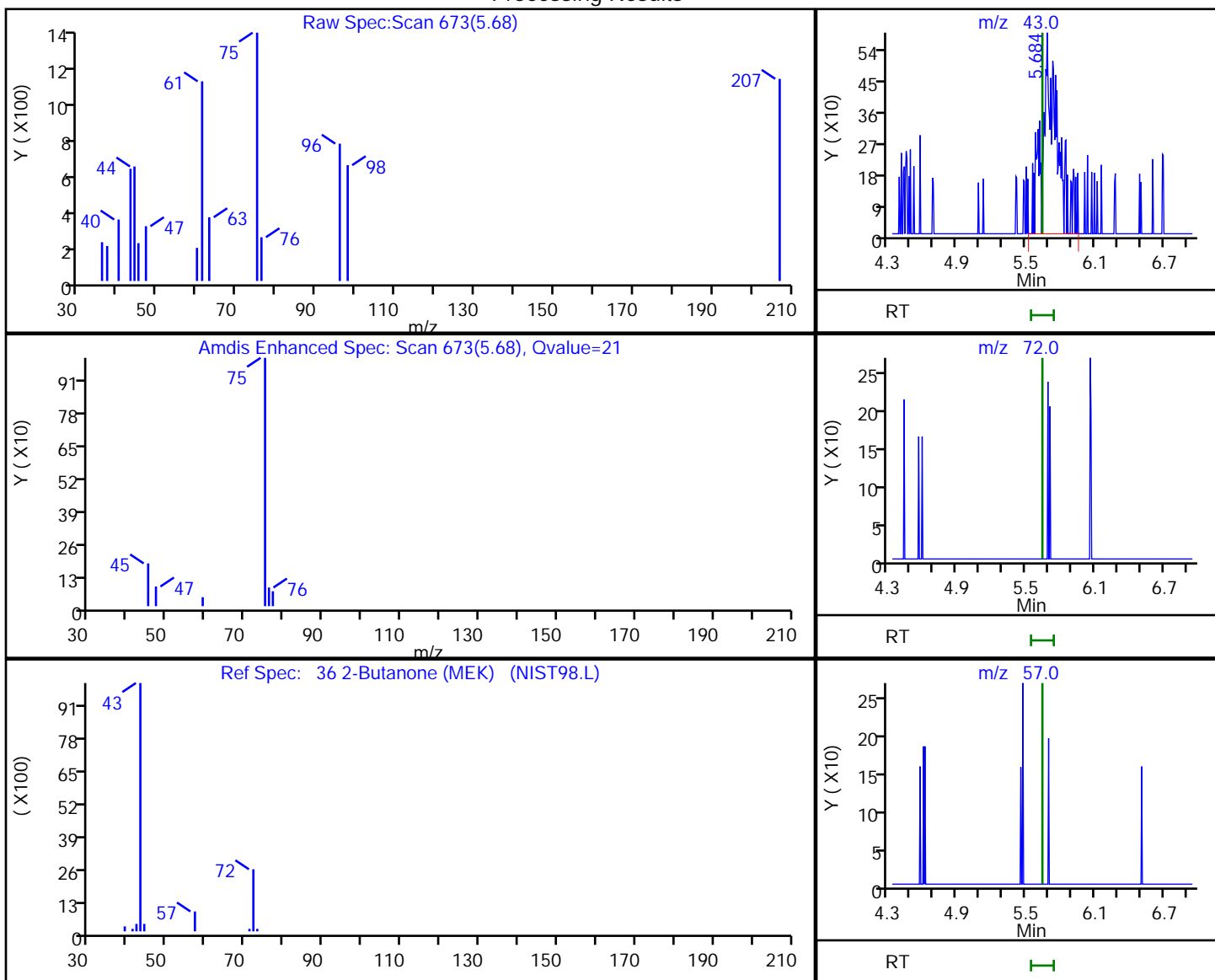


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfms\Lancaster\ChromData\10193\20220603-58749.b\CU06X011.D
 Injection Date: 06-Jun-2022 14:09:30 Instrument ID: 10193
 Lims ID: 410-85437-A-1 Lab Sample ID: 410-85437-1
 Client ID: HD-COD-SW-6-0/1-0
 Operator ID: knk41612 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
5.68	43.00	5341	0.530381
5.64	72.00	0	
5.64	57.00	0	

Reviewer: johnsons, 06-Jun-2022 21:59:42

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

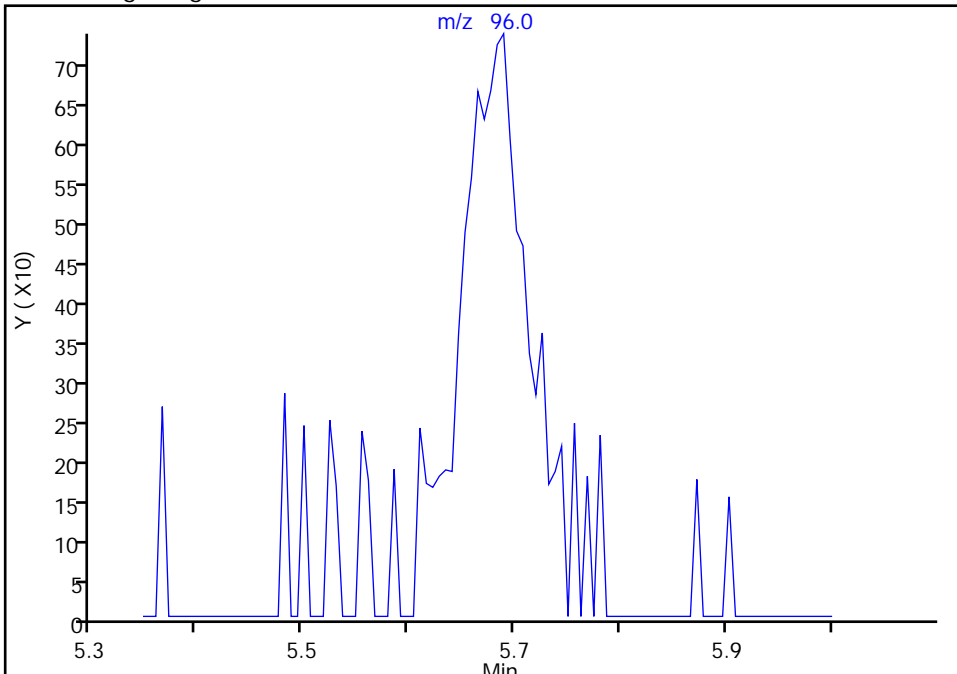
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X011.D
Injection Date: 06-Jun-2022 14:09:30 Instrument ID: 10193
Lims ID: 410-85437-A-1 Lab Sample ID: 410-85437-1
Client ID: HD-COD-SW-6-0/1-0
Operator ID: knk41612 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

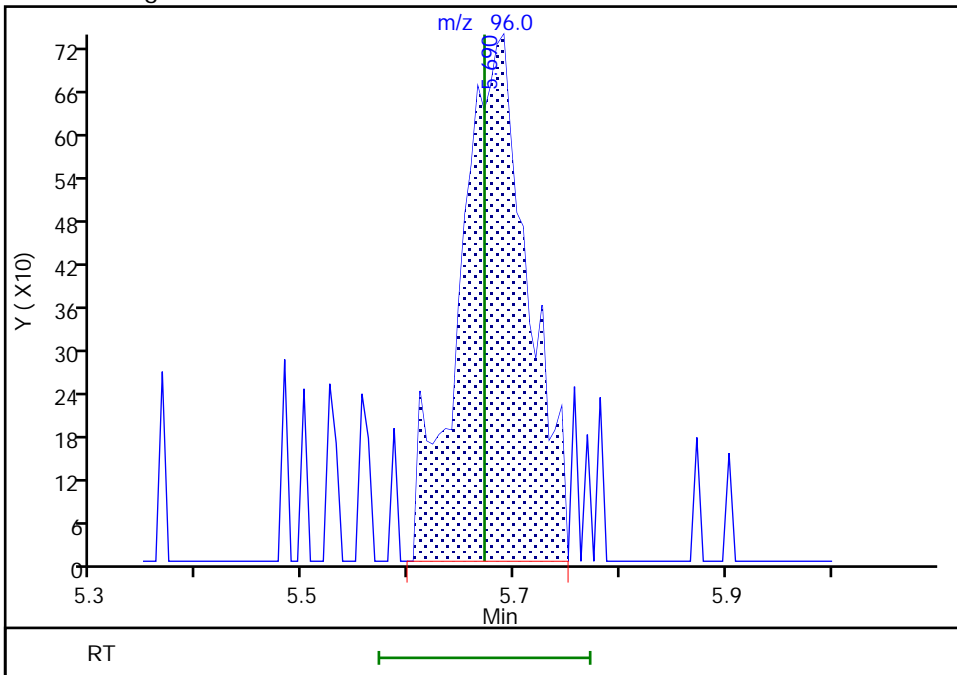
Not Detected
Expected RT: 5.67

Processing Integration Results



Manual Integration Results

RT: 5.69
Area: 3298
Amount: 0.058371
Amount Units: ug/l



Reviewer: mellotr, 07-Jun-2022 10:02:38
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Environment Testing, LLC

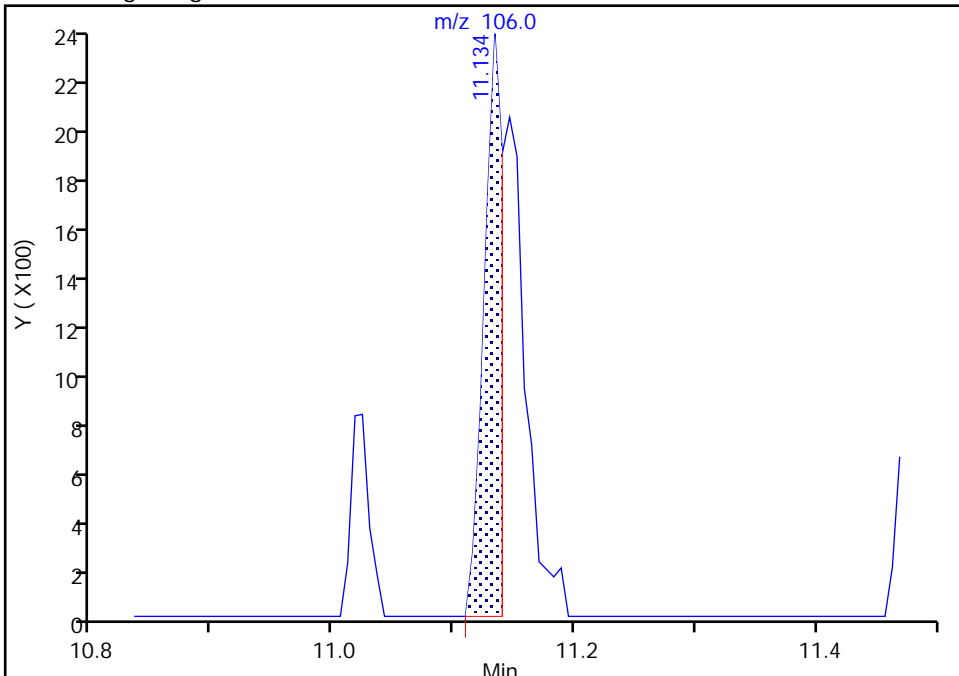
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X011.D
Injection Date: 06-Jun-2022 14:09:30 Instrument ID: 10193
Lims ID: 410-85437-A-1 Lab Sample ID: 410-85437-1
Client ID: HD-COD-SW-6-0/1-0
Operator ID: knk41612 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

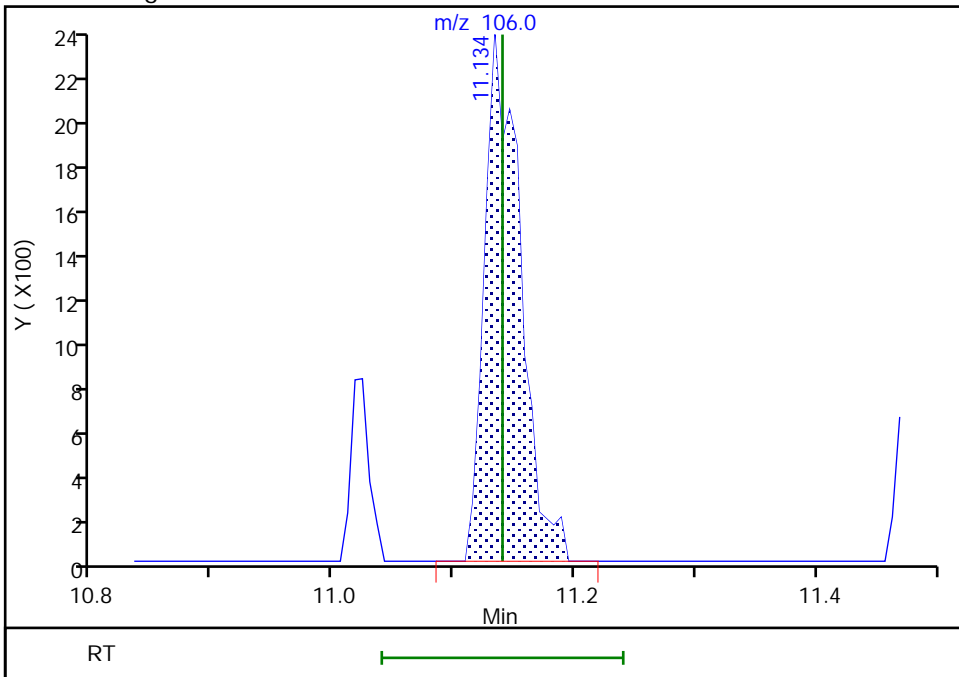
RT: 11.13
Area: 2522
Amount: 0.023722
Amount Units: ug/l

Processing Integration Results



RT: 11.13
Area: 4773
Amount: 0.044896
Amount Units: ug/l

Manual Integration Results



Reviewer: johnsons, 06-Jun-2022 21:59:56
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.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-2

Matrix: Water

Lab File ID: CU06X012.D

Analysis Method: 8260D

Date Collected: 05/25/2022 12:05

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 14:31

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.: 261977

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	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.6	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	*+	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.062	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	0.078	J	0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-2

Matrix: Water

Lab File ID: CU06X012.D

Analysis Method: 8260D

Date Collected: 05/25/2022 12:05

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 14:31

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		80-120
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	95		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\10193\20220603-58749.b\CU06X012.D
 Lims ID: 410-85437-A-2
 Client ID: HD-COD-SW-7-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 14:31:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-013
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 07-Jun-2022 10:02:46 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1637

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:00:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50	1.953	1.959	-0.007	1	2317	0.0389	
5 Vinyl chloride	62		2.069				ND	
6 Bromomethane	94		2.355				ND	7
7 Chloroethane	64		2.434				ND	
14 1,1-Dichloroethene	96		3.196				ND	7
16 Acetone	43	3.245	3.227	0.018	92	12533	2.59	
20 Carbon disulfide	76		3.459				ND	7
24 Methylene Chloride	84		3.794				ND	7
* 25 t-Butyl alcohol-d10 (IS)	65	3.836	3.812	0.024	90	105800	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63		4.824				ND	
36 2-Butanone (MEK)	43		5.641				ND	U
37 cis-1,2-Dichloroethene	96	5.683	5.672	0.011	21	3456	0.0624	M
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83	6.183	6.165	0.018	91	5111	0.0565	M
48 1,1,1-Trichloroethane	97		6.385				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.391	6.385	0.006	94	418959	9.49	
50 Carbon tetrachloride	117		6.598				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.848	6.848	0.000	48	77603	9.13	
54 Benzene	78		6.873				ND	
55 1,2-Dichloroethane	62		6.946				ND	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1773476	10.0	
60 Trichloroethene	95	7.787	7.769	0.018	93	3347	0.0589	
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	7
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1756840	10.0	
75 Toluene	92	9.445	9.445	0.000	97	10492	0.0785	
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.030	10.030	0.000	88	3540	0.0535	
82 2-Hexanone	43		10.183				ND	7
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1424527	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106	11.140	11.140	0.000	98	5268	0.0505	
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	7
93 Styrene	104		11.494				ND	7
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	639790	9.15	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.828	12.829	-0.001	93	817213	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X012.D

Injection Date: 06-Jun-2022 14:31:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-2

Lab Sample ID: 410-85437-2

Worklist Smp#: 13

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

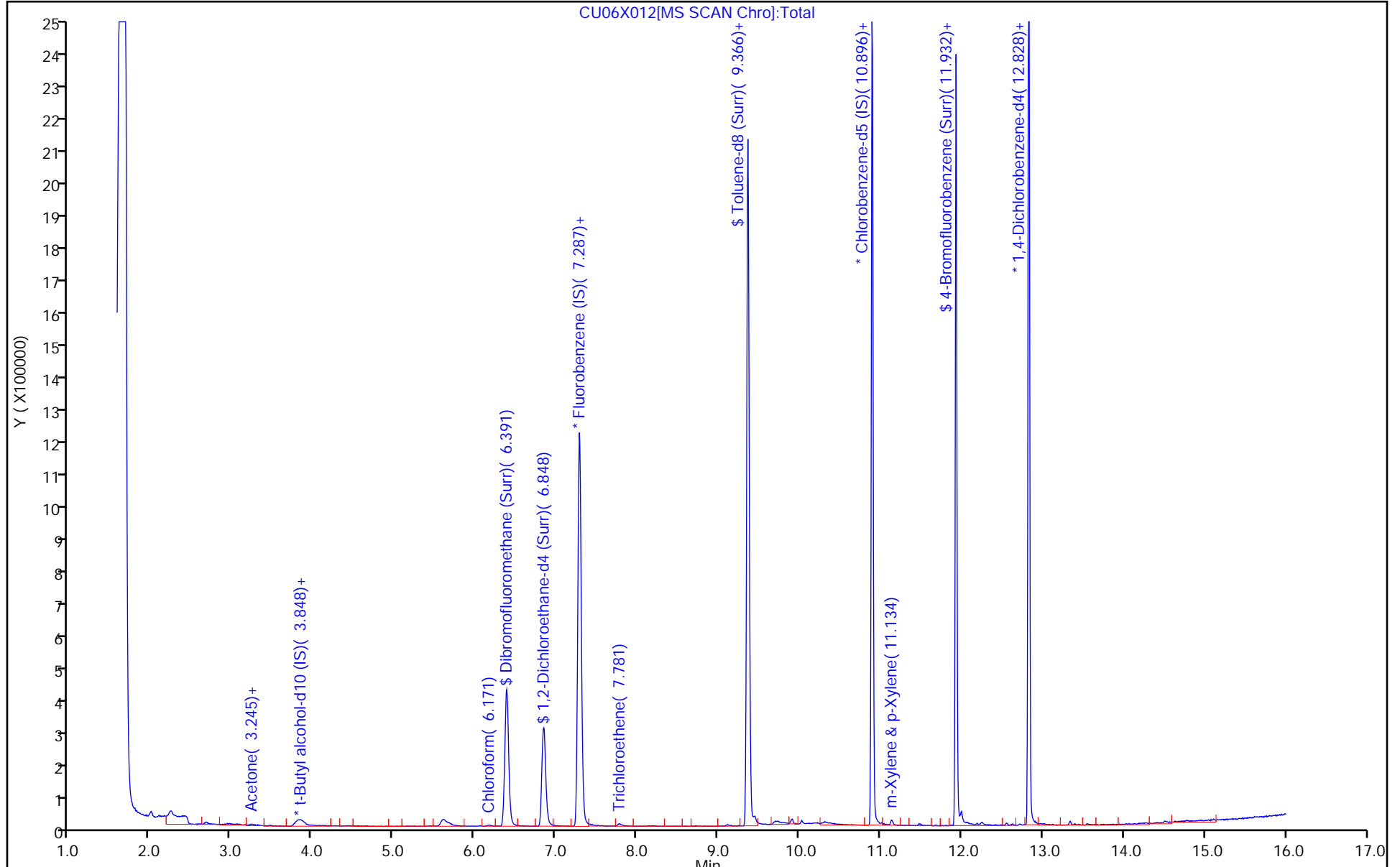
ALS Bottle#: 12

Method: MSV_10193_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\10193\20220603-58749.b\CU06X012.D
 Lims ID: 410-85437-A-2
 Client ID: HD-COD-SW-7-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 14:31:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-013
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 07-Jun-2022 10:02:46 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1637

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:00:38

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.49	94.93
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.13	91.31
\$ 74 Toluene-d8 (Surr)	10.0	10.0	100.10
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.15	91.52

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X012.D

Injection Date: 06-Jun-2022 14:31:30

Instrument ID: 10193

Lims ID: 410-85437-A-2

Lab Sample ID: 410-85437-2

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

Operator ID: knk41612

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

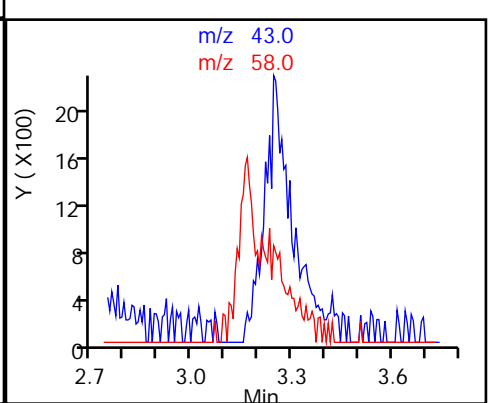
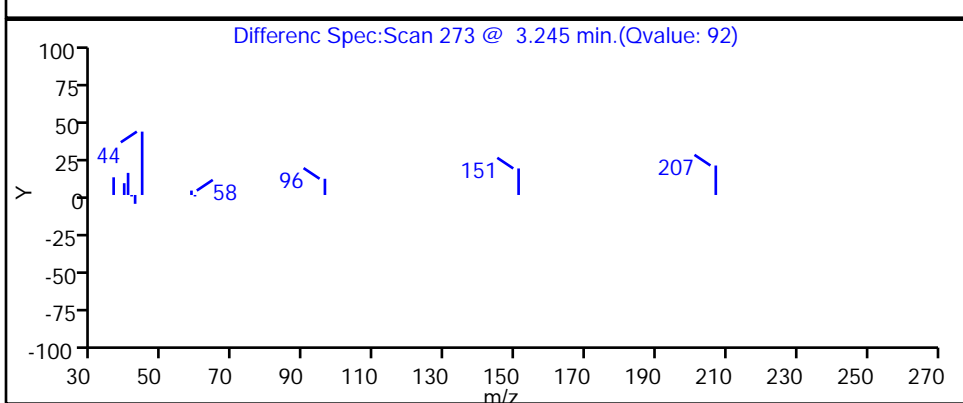
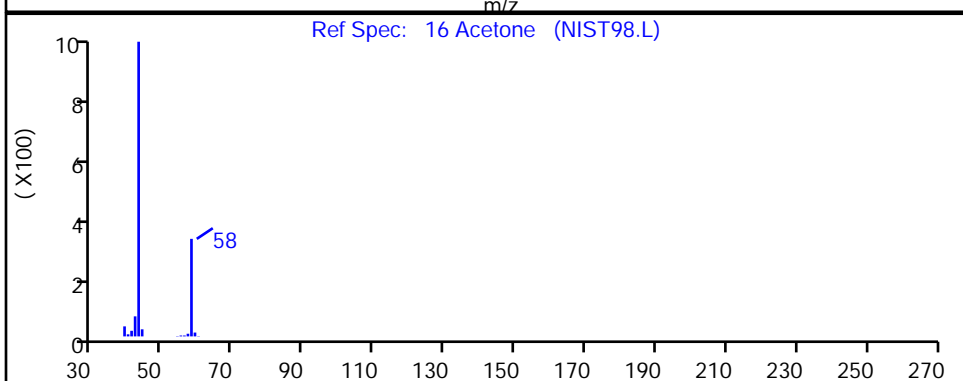
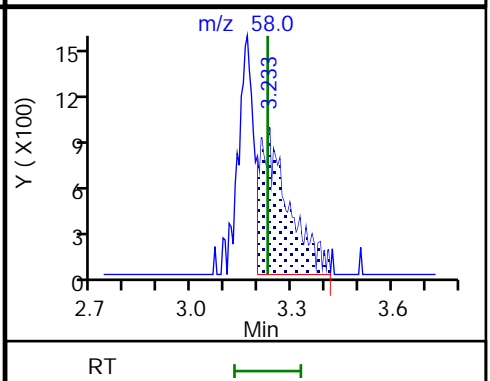
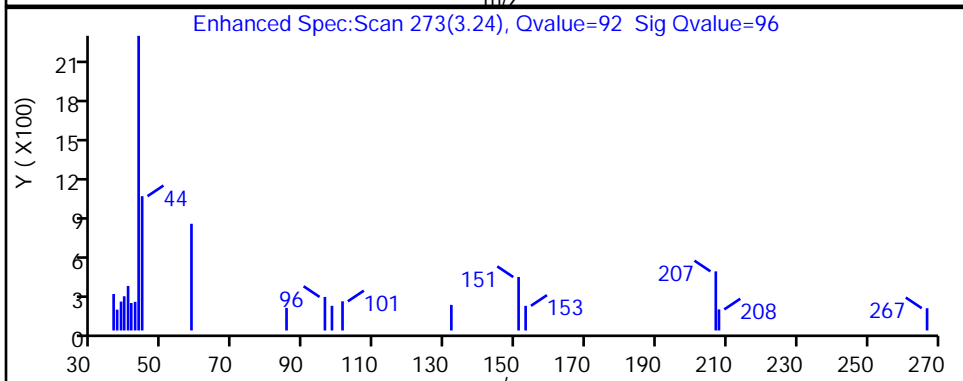
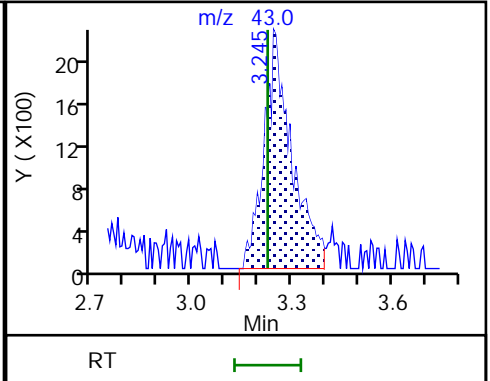
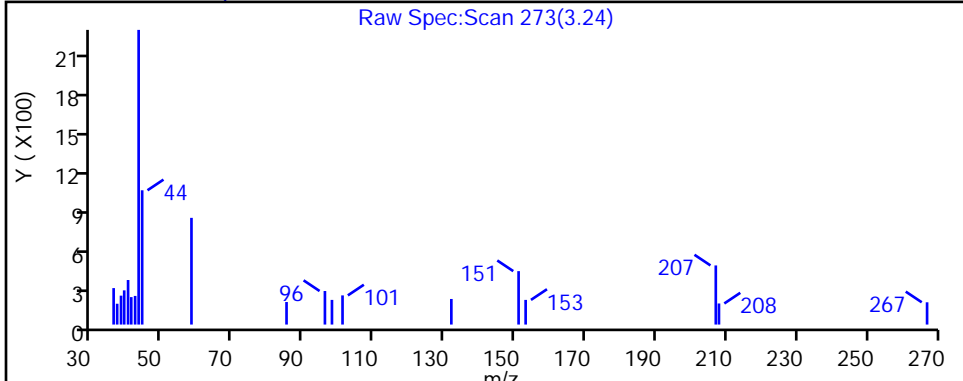
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

16 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X012.D

Injection Date: 06-Jun-2022 14:31:30

Instrument ID: 10193

Lims ID: 410-85437-A-2

Lab Sample ID: 410-85437-2

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

Operator ID: knk41612

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

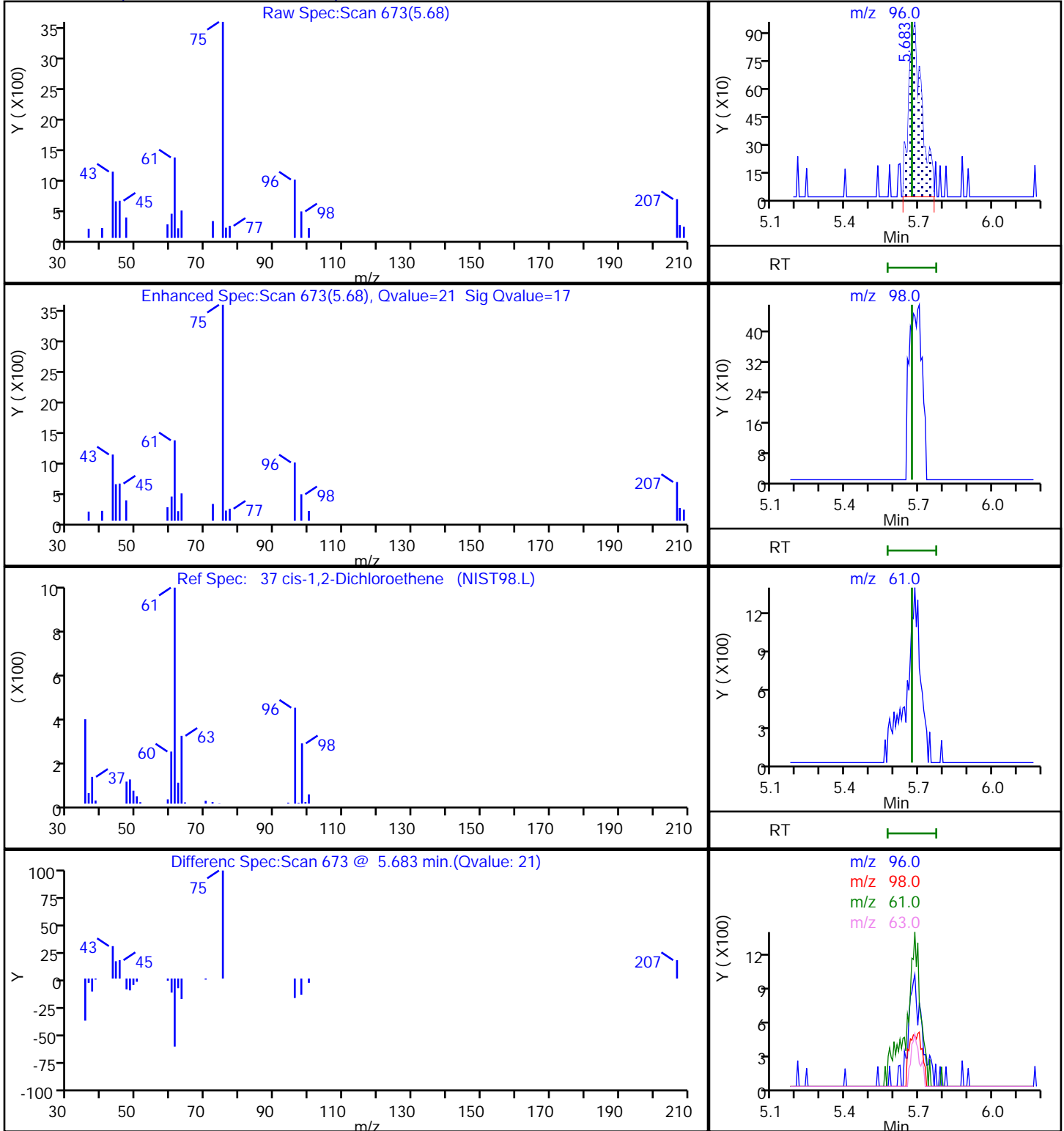
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X012.D

Injection Date: 06-Jun-2022 14:31:30

Instrument ID: 10193

Lims ID: 410-85437-A-2

Lab Sample ID: 410-85437-2

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

Operator ID: knk41612

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

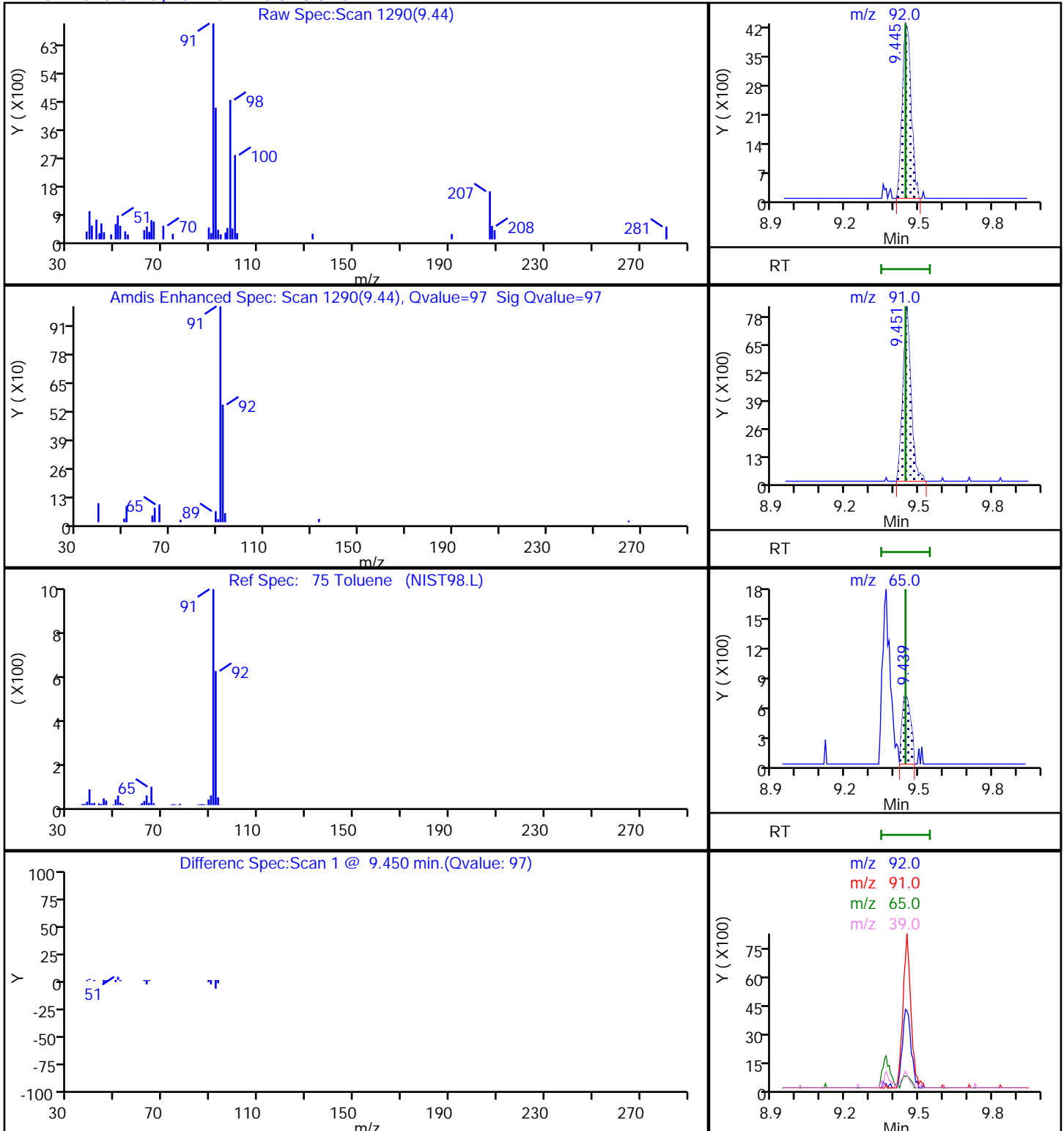
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

75 Toluene, CAS: 108-88-3

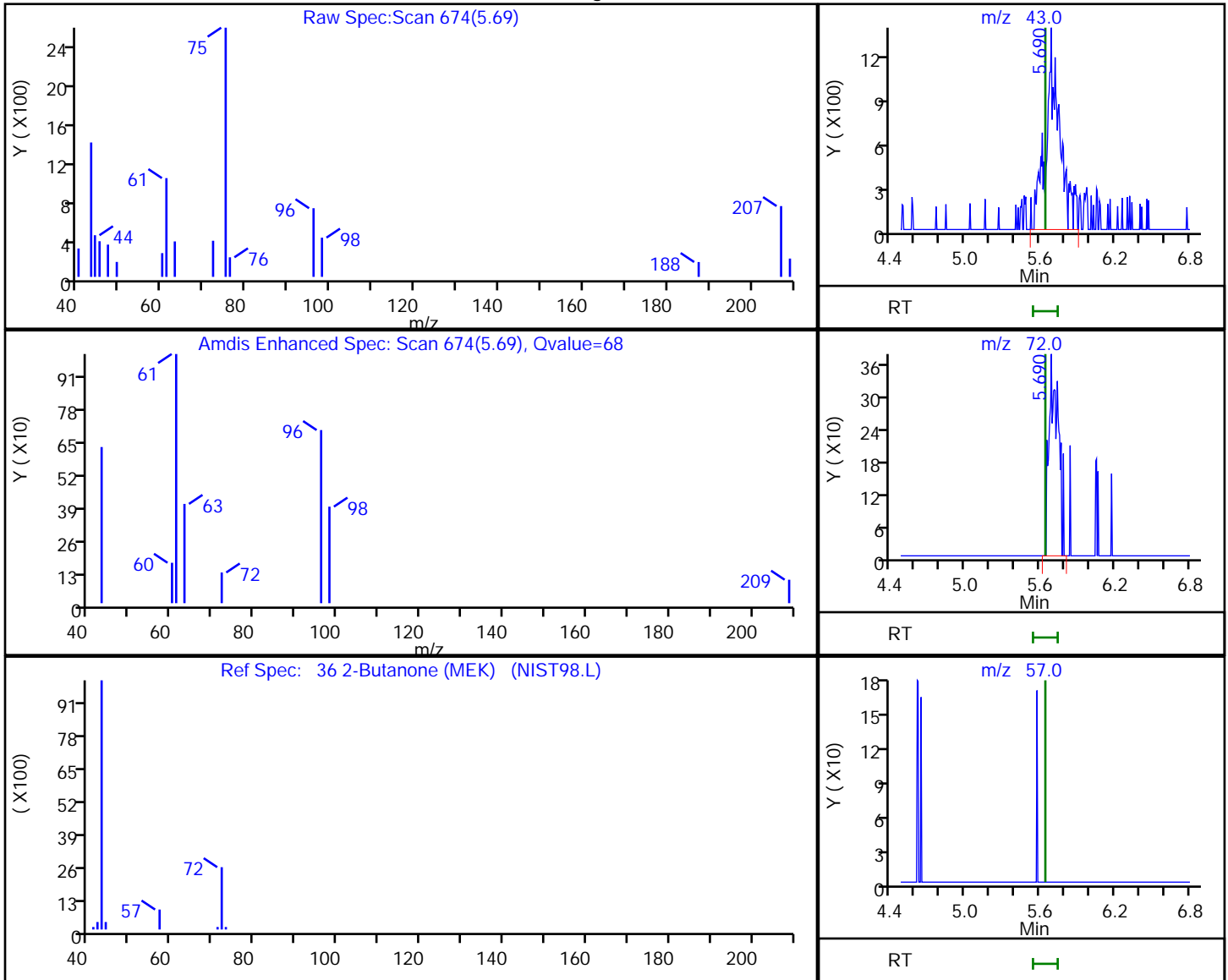


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X012.D
 Injection Date: 06-Jun-2022 14:31:30 Instrument ID: 10193
 Lims ID: 410-85437-A-2 Lab Sample ID: 410-85437-2
 Client ID: HD-COD-SW-7-0/1-0
 Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
5.69	43.00	10686	1.078833
5.69	72.00	1890	
5.64	57.00	0	

Reviewer: johnsons, 06-Jun-2022 22:00:20
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

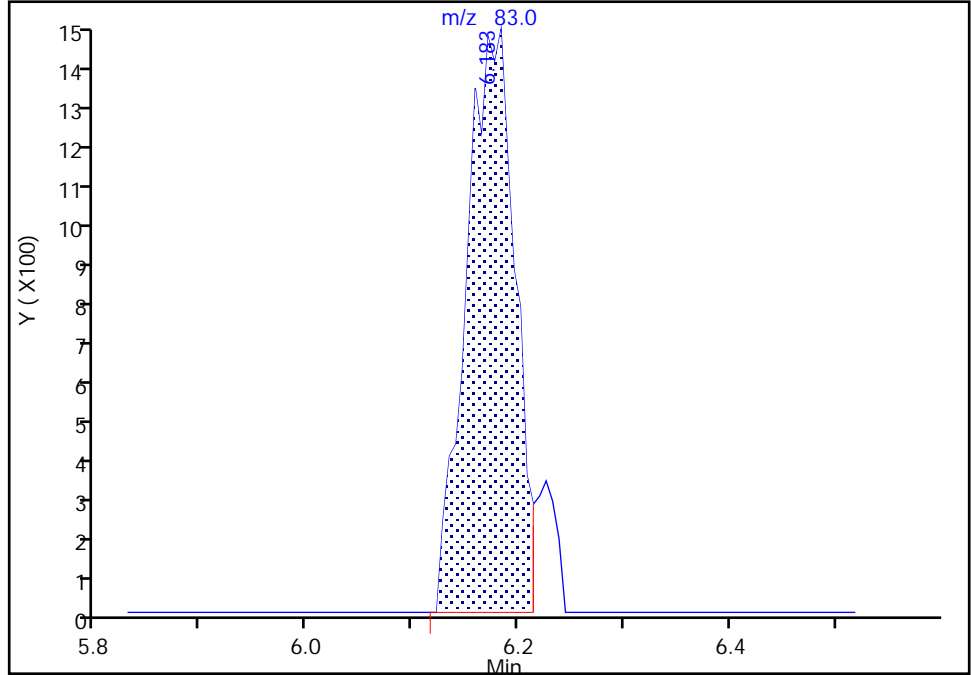
Data File:	\\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X012.D		
Injection Date:	06-Jun-2022 14:31:30	Instrument ID:	10193
Lims ID:	410-85437-A-2	Lab Sample ID:	410-85437-2
Client ID:	HD-COD-SW-7-0/1-0		
Operator ID:	knk41612	ALS Bottle#:	12
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	13

46 Chloroform, CAS: 67-66-3

Signal: 1

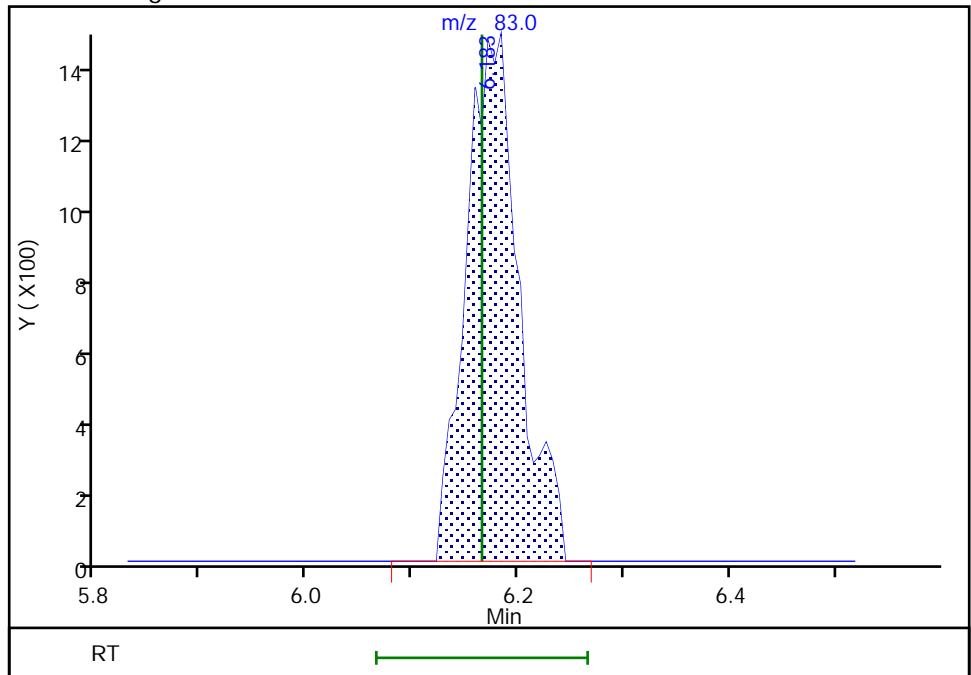
RT: 6.18
 Area: 4711
 Amount: 0.052074
 Amount Units: ug/l

Processing Integration Results



RT: 6.18
 Area: 5111
 Amount: 0.056495
 Amount Units: ug/l

Manual Integration Results



Reviewer: johnsons, 06-Jun-2022 22:00:27
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

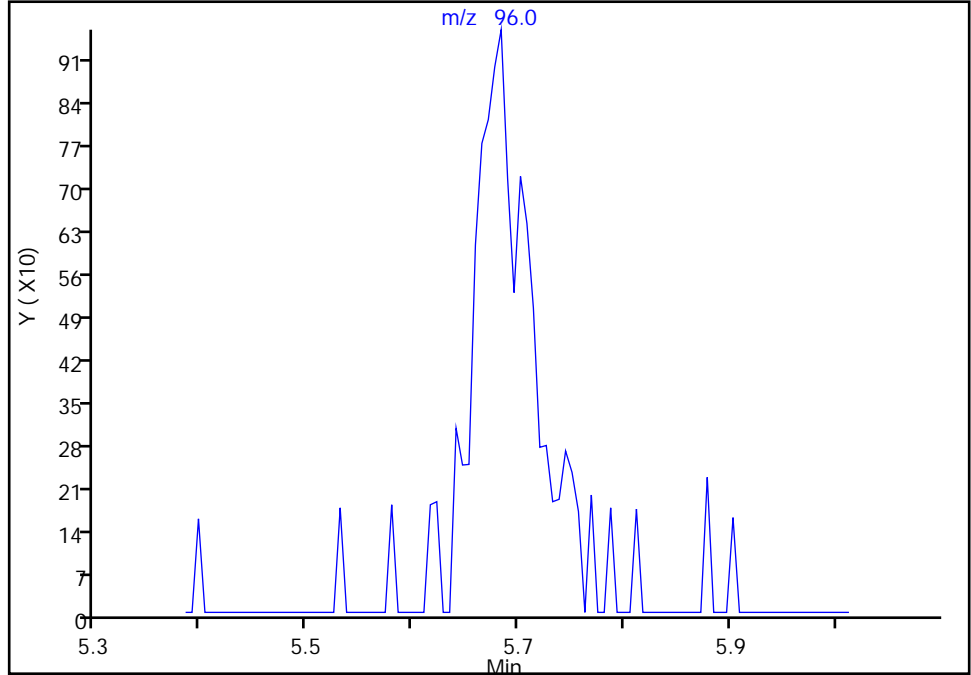
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X012.D
Injection Date: 06-Jun-2022 14:31:30 Instrument ID: 10193
Lims ID: 410-85437-A-2 Lab Sample ID: 410-85437-2
Client ID: HD-COD-SW-7-0/1-0
Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

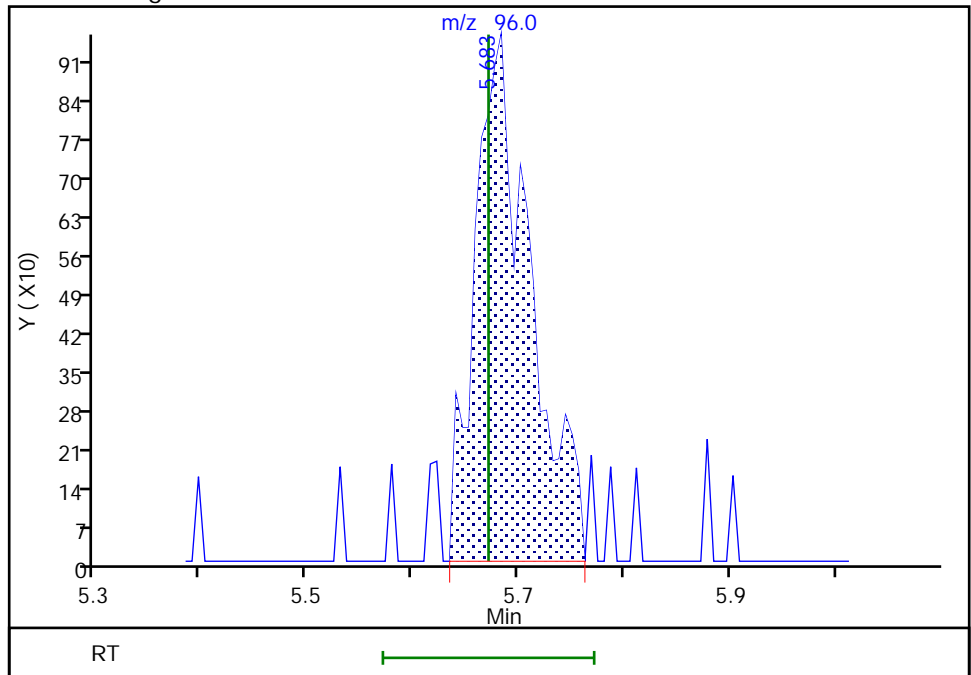
Not Detected
Expected RT: 5.67

Processing Integration Results



Manual Integration Results

RT: 5.68
Area: 3456
Amount: 0.062372
Amount Units: ug/l



Reviewer: mellotr, 07-Jun-2022 10:02:10
Audit Action: Manually Integrated

Audit Reason: Missed Peak
Page 211 of 643

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-3

Matrix: Water

Lab File ID: CU06X013.D

Analysis Method: 8260D

Date Collected: 05/25/2022 09:40

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 14:54

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.: 261977

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	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.2	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c cn	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	*+	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.088	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.39	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-3

Matrix: Water

Lab File ID: CU06X013.D

Analysis Method: 8260D

Date Collected: 05/25/2022 09:40

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 14:54

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.093	J	0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		80-120
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		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\10193\20220603-58749.b\CU06X013.D
 Lims ID: 410-85437-A-3
 Client ID: HD-COD-SW-8-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 14:54:30 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-014
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:01:03

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50	1.946	1.959	-0.013	1	2595	0.0437	
5 Vinyl chloride	62		2.069				ND	
6 Bromomethane	94		2.355				ND	
7 Chloroethane	64		2.434				ND	
14 1,1-Dichloroethene	96		3.196				ND	7
16 Acetone	43	3.239	3.227	0.012	87	10799	2.25	
20 Carbon disulfide	76		3.459				ND	7
24 Methylene Chloride	84		3.794				ND	7
* 25 t-Butyl alcohol-d10 (IS)	65	3.836	3.812	0.024	90	105022	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63		4.824				ND	7
36 2-Butanone (MEK)	43		5.641				ND	7
37 cis-1,2-Dichloroethene	96	5.683	5.672	0.011	76	4868	0.0880	
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83		6.165				ND	
48 1,1,1-Trichloroethane	97		6.385				ND	7
\$ 47 Dibromofluoromethane (Surr)	113	6.391	6.385	0.006	93	423014	9.60	
50 Carbon tetrachloride	117		6.598				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.848	6.848	0.000	48	79649	9.38	
54 Benzene	78		6.873				ND	7
55 1,2-Dichloroethane	62		6.946				ND	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1771377	10.0	
60 Trichloroethene	95	7.781	7.769	0.012	93	5293	0.0933	
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	7
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1748173	10.0	
75 Toluene	92	9.445	9.445	0.000	97	8155	0.0615	
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.030	10.030	0.000	96	25781	0.3925	
82 2-Hexanone	43		10.183				ND	
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.902	10.902	0.000	84	1413971	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106		11.140				ND	7
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	7
93 Styrene	104		11.494				ND	7
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	637520	9.19	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.828	12.829	-0.001	93	825703	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X013.D

Injection Date: 06-Jun-2022 14:54:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-3

Lab Sample ID: 410-85437-3

Worklist Smp#: 14

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

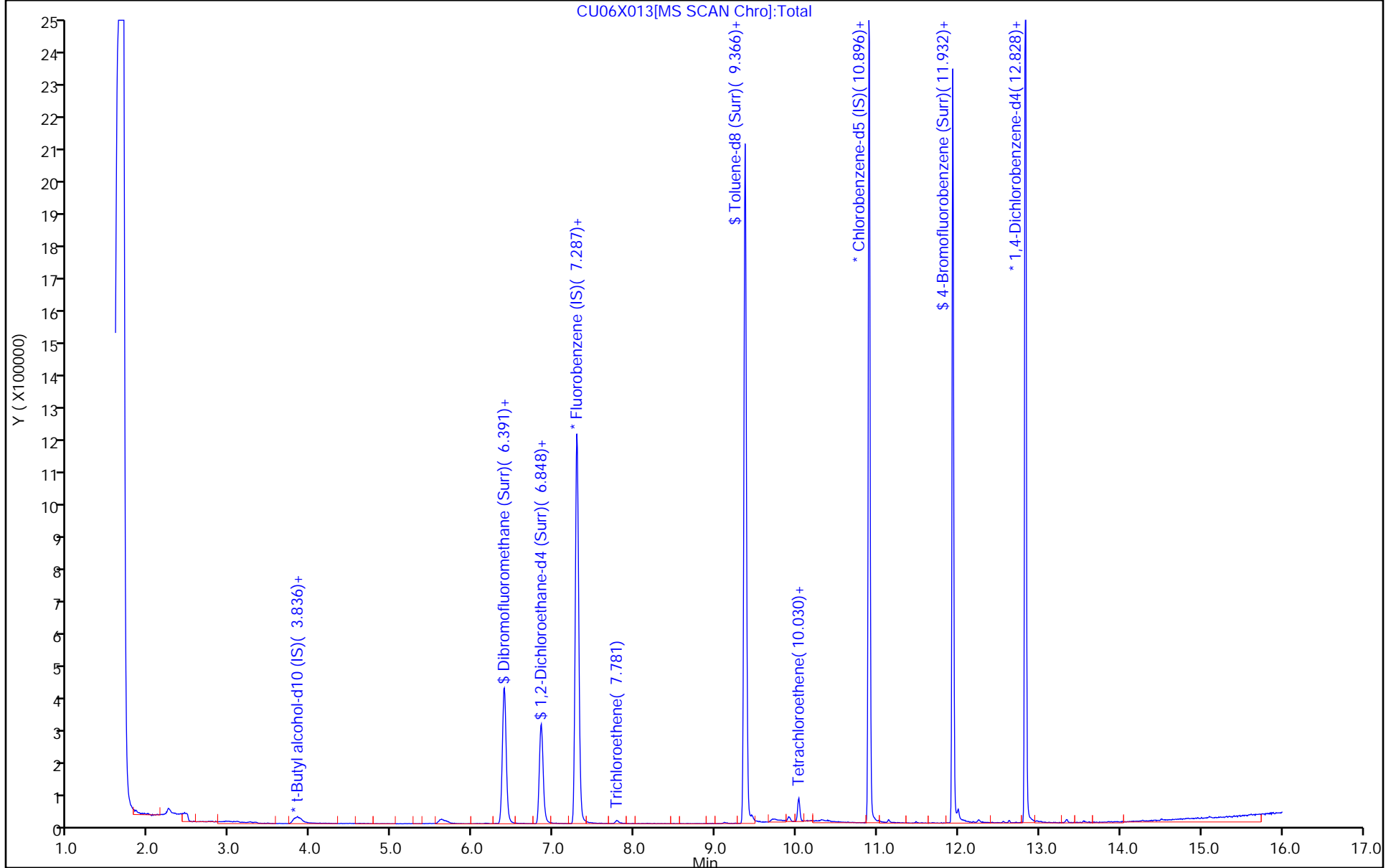
ALS Bottle#: 13

Method: MSV_10193_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\10193\20220603-58749.b\CU06X013.D
 Lims ID: 410-85437-A-3
 Client ID: HD-COD-SW-8-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 14:54:30 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-014
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:01:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.60	95.96
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.38	93.83
\$ 74 Toluene-d8 (Surr)	10.0	10.0	100.35
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.19	91.88

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X013.D

Injection Date: 06-Jun-2022 14:54:30

Instrument ID: 10193

Lims ID: 410-85437-A-3

Lab Sample ID: 410-85437-3

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

Operator ID: knk41612

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

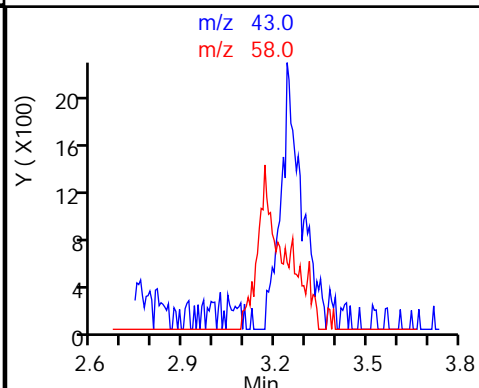
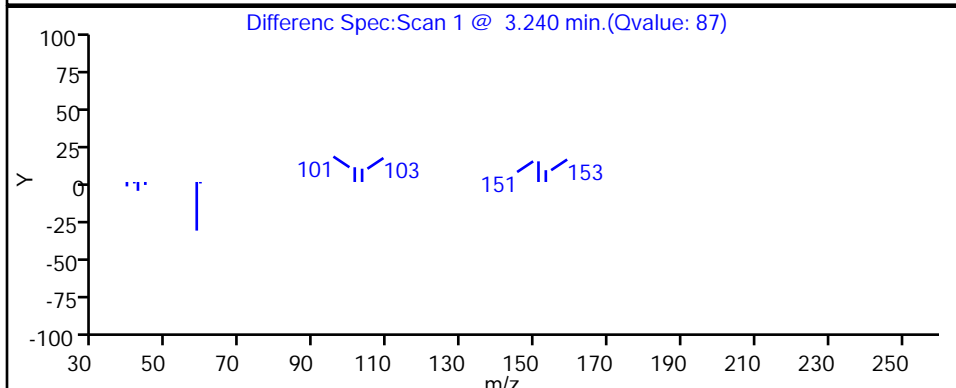
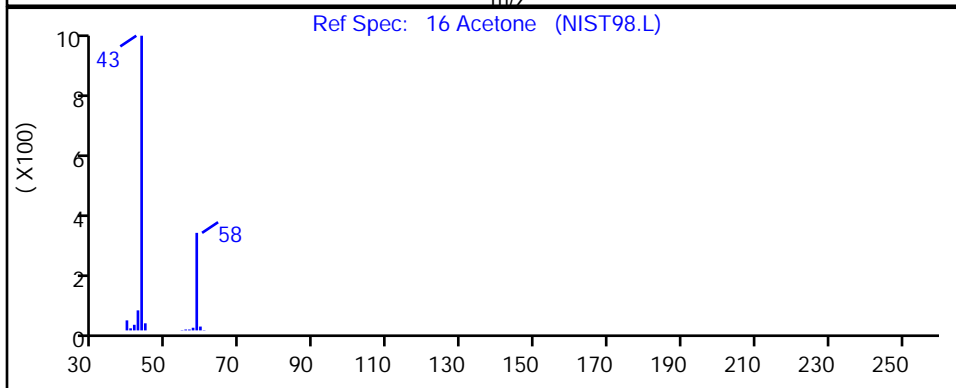
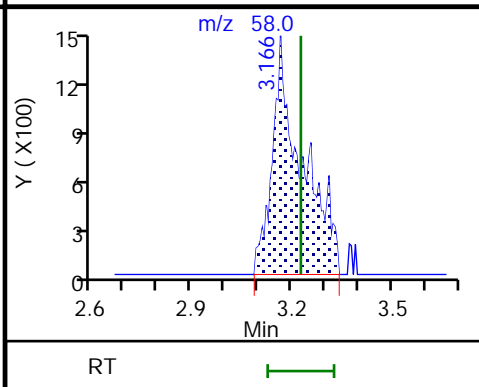
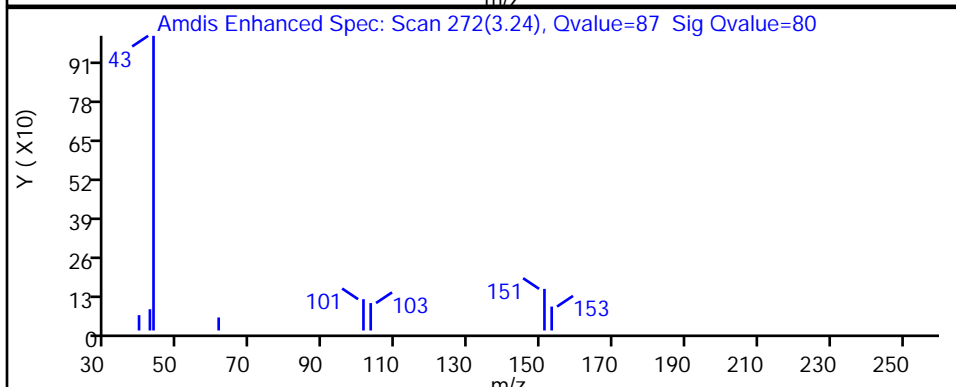
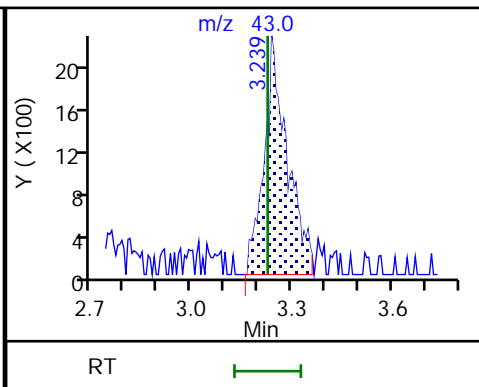
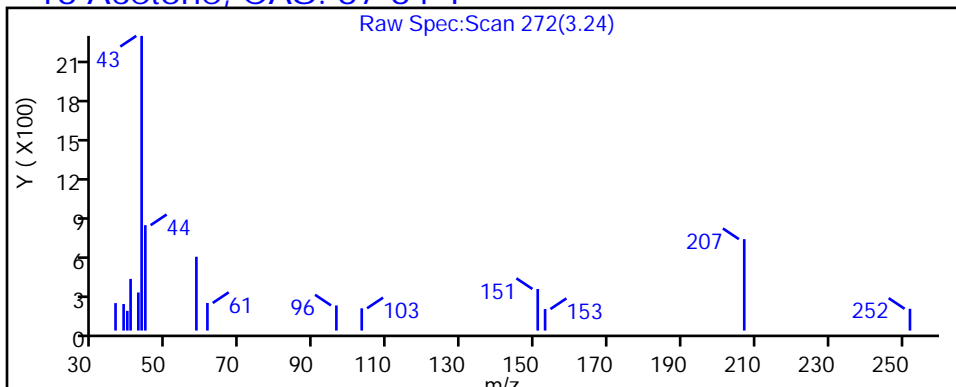
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

16 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X013.D

Injection Date: 06-Jun-2022 14:54:30

Instrument ID: 10193

Lims ID: 410-85437-A-3

Lab Sample ID: 410-85437-3

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

Operator ID: knk41612

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

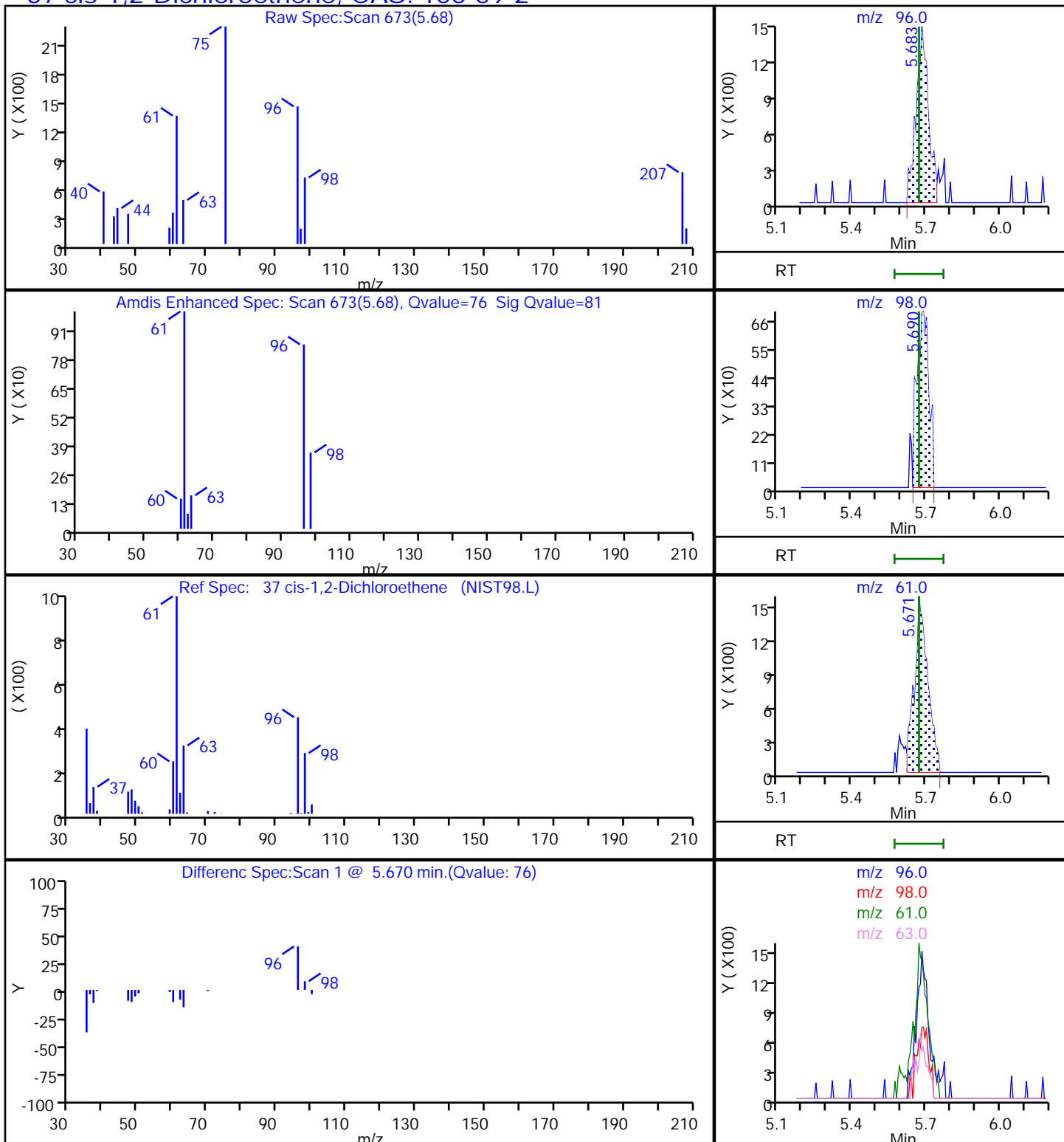
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X013.D

Injection Date: 06-Jun-2022 14:54:30

Instrument ID: 10193

Lims ID: 410-85437-A-3

Lab Sample ID: 410-85437-3

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

Operator ID: knk41612

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

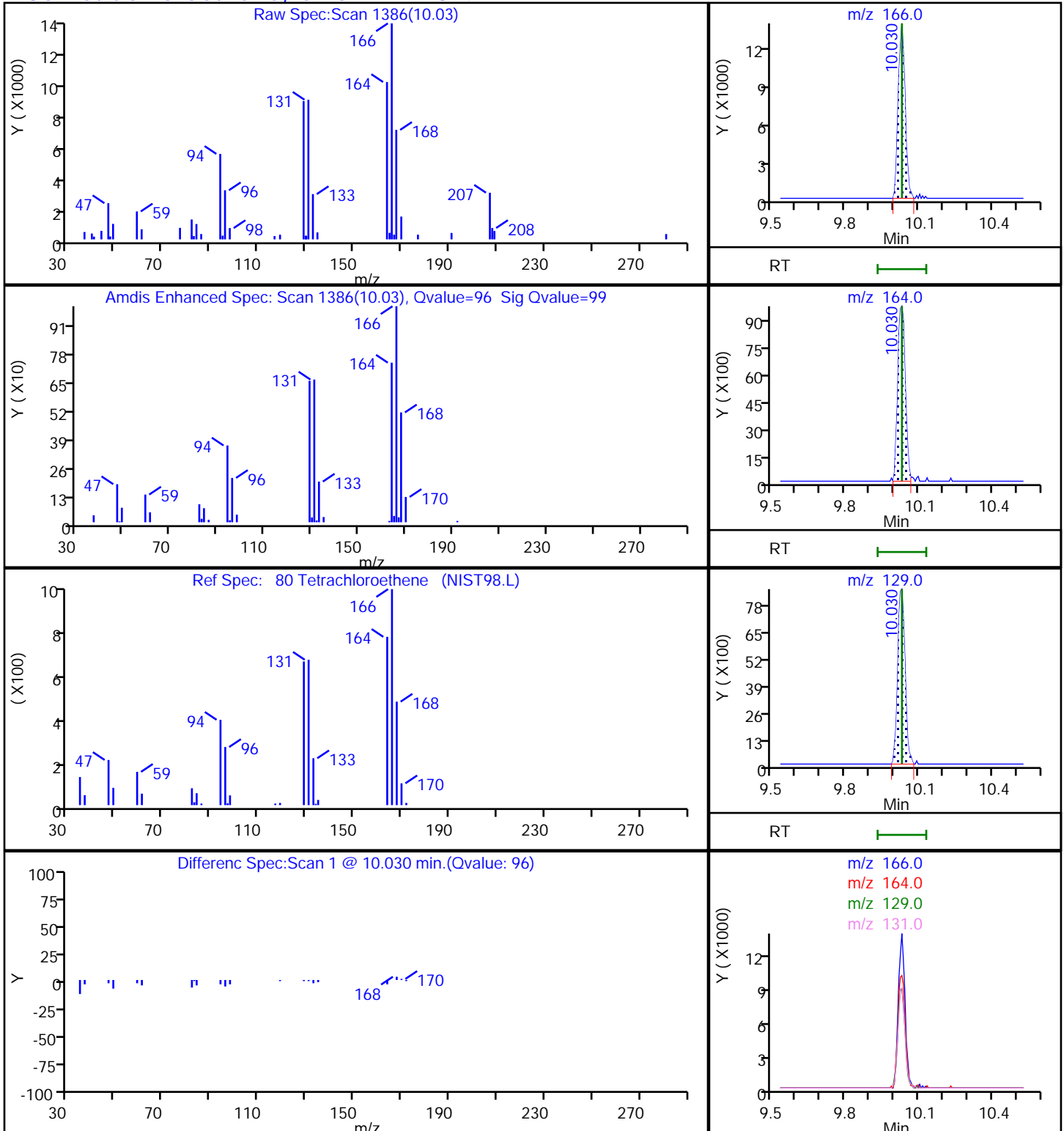
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

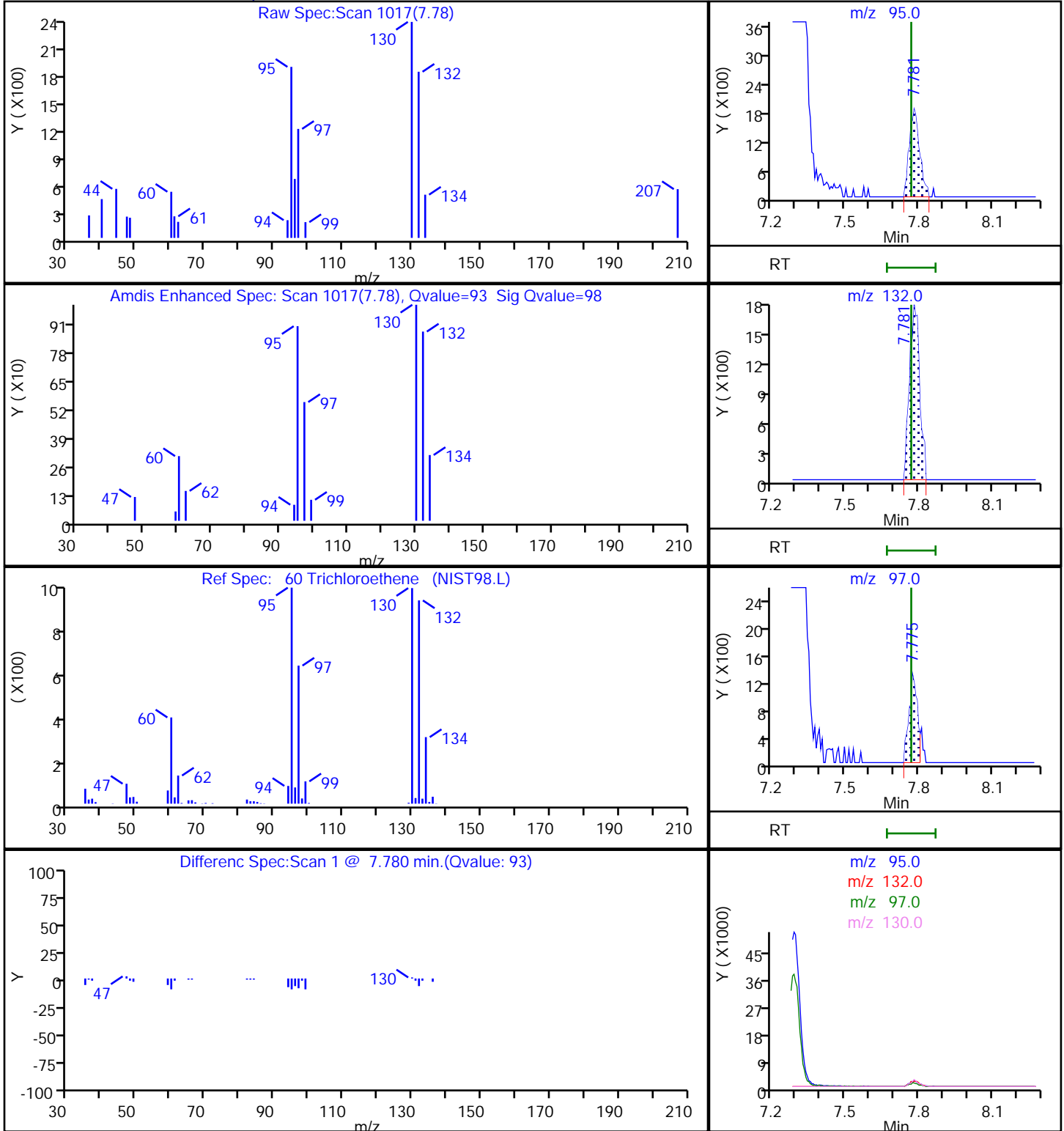
MS Quad

80 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X013.D
Injection Date: 06-Jun-2022 14:54:30 Instrument ID: 10193
Lims ID: 410-85437-A-3 Lab Sample ID: 410-85437-3
Client ID: HD-COD-SW-8-0/1-0
Operator ID: knk41612 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

60 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-4

Matrix: Water

Lab File ID: CU06X014.D

Analysis Method: 8260D

Date Collected: 05/25/2022 13:15

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 15:16

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.: 261977

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	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	3.5	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c cn	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	*+	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.091	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.21	J	0.50	0.060
108-88-3	Toluene	0.086	J	0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-4

Matrix: Water

Lab File ID: CU06X014.D

Analysis Method: 8260D

Date Collected: 05/25/2022 13:15

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 15:16

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.096	J	0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		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\10193\20220603-58749.b\CU06X014.D
 Lims ID: 410-85437-A-4
 Client ID: HD-COD-SW-9-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 15:16:30 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-015
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:01:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50		1.959				ND	MU
5 Vinyl chloride	62		2.069				ND	
6 Bromomethane	94		2.355				ND	7
7 Chloroethane	64		2.434				ND	7
14 1,1-Dichloroethene	96		3.196				ND	7
16 Acetone	43	3.245	3.227	0.018	94	15798	3.49	
20 Carbon disulfide	76	3.458	3.459	-0.001	94	3941	0.0312	
24 Methylene Chloride	84		3.794				ND	7
* 25 t-Butyl alcohol-d10 (IS)	65	3.812	3.812	0.000	90	98983	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63		4.824				ND	7
36 2-Butanone (MEK)	43		5.641				ND	U
37 cis-1,2-Dichloroethene	96	5.677	5.672	0.005	80	4968	0.0908	
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83		6.165				ND	
48 1,1,1-Trichloroethane	97		6.385				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.385	6.385	0.000	94	423869	9.73	
50 Carbon tetrachloride	117		6.598				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.842	6.848	-0.006	48	77539	9.24	
54 Benzene	78		6.873				ND	7
55 1,2-Dichloroethane	62		6.946				ND	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1750962	10.0	
60 Trichloroethene	95	7.781	7.769	0.012	0	5376	0.0958	M
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	7
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1725808	9.98	
75 Toluene	92	9.451	9.445	0.006	97	11302	0.0858	
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.024	10.030	-0.006	97	13596	0.2086	
82 2-Hexanone	43		10.183				ND	7
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1403407	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106	11.140	11.140	0.000	97	4826	0.0470	
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	7
93 Styrene	104		11.494				ND	7
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	623931	9.06	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.828	12.829	-0.001	93	807918	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X014.D

Injection Date: 06-Jun-2022 15:16:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-4

Lab Sample ID: 410-85437-4

Worklist Smp#: 15

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

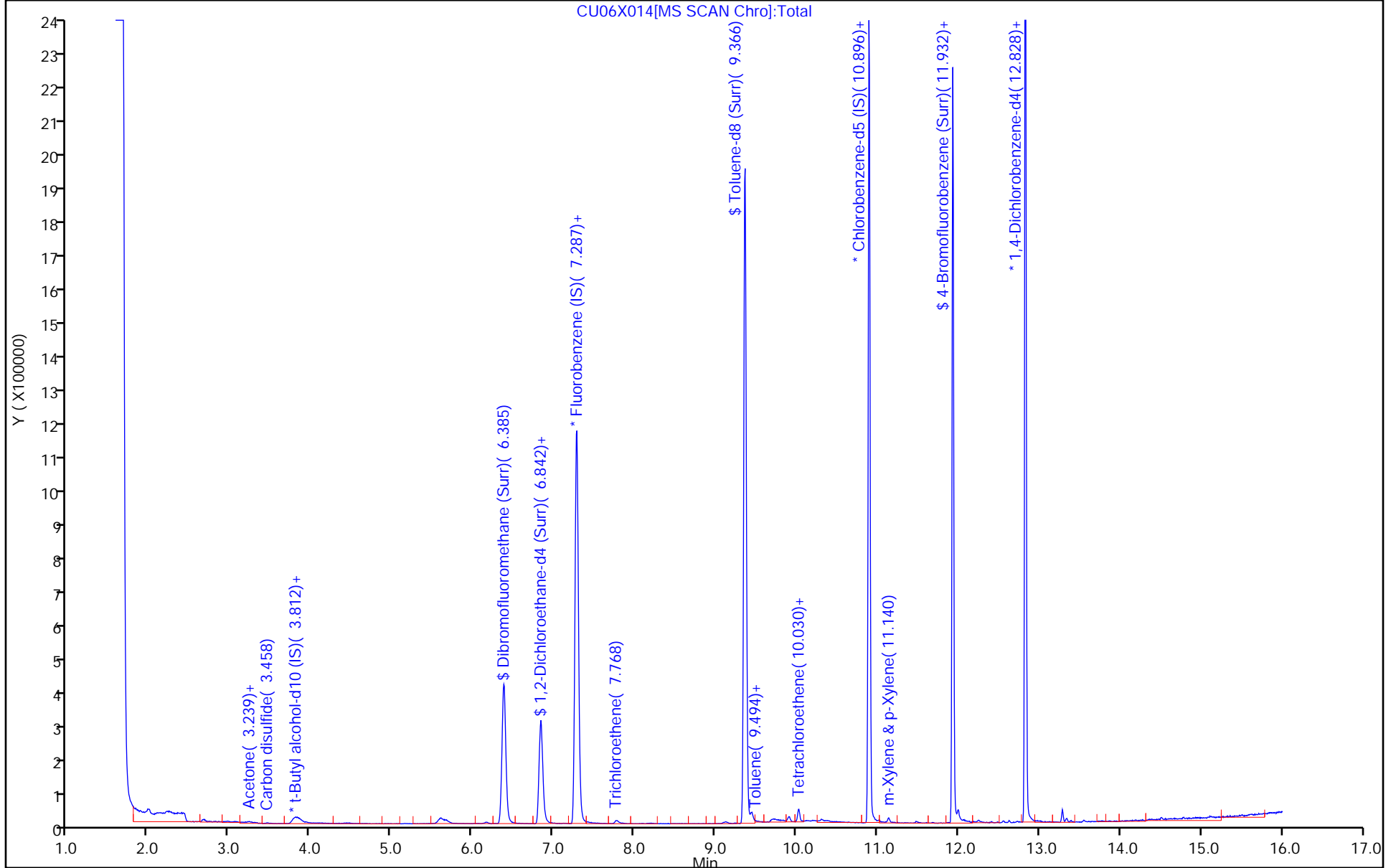
ALS Bottle#: 14

Method: MSV_10193_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\10193\20220603-58749.b\CU06X014.D
 Lims ID: 410-85437-A-4
 Client ID: HD-COD-SW-9-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 15:16:30 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-015
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:01:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.73	97.28
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.24	92.40
\$ 74 Toluene-d8 (Surr)	10.0	9.98	99.81
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.06	90.60

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X014.D

Injection Date: 06-Jun-2022 15:16:30

Instrument ID: 10193

Lims ID: 410-85437-A-4

Lab Sample ID: 410-85437-4

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

Operator ID: knk41612

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

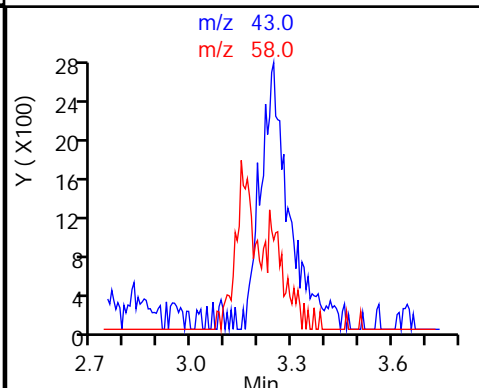
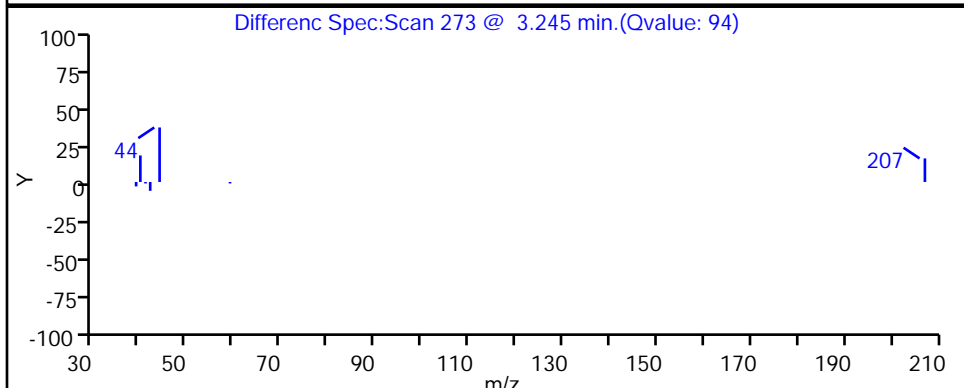
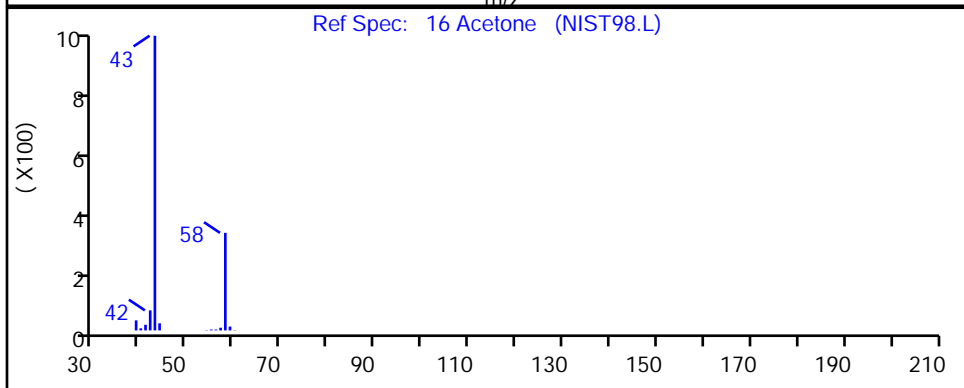
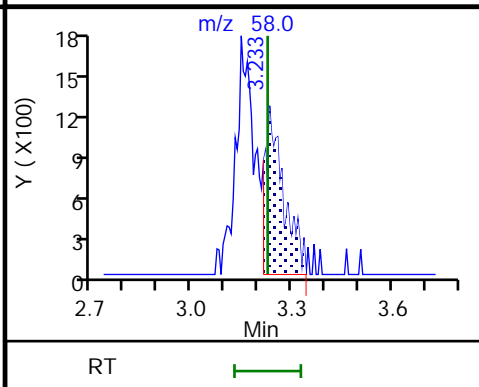
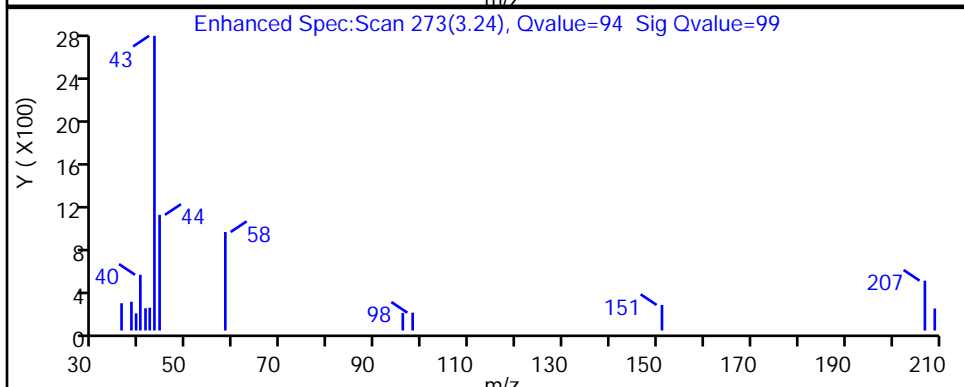
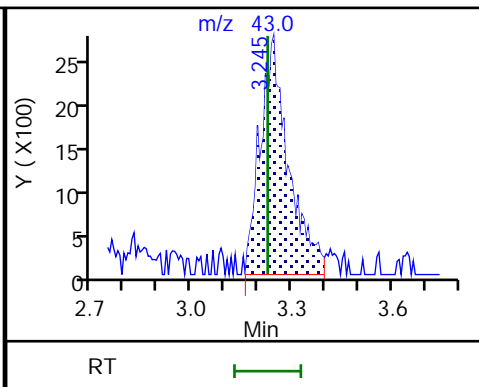
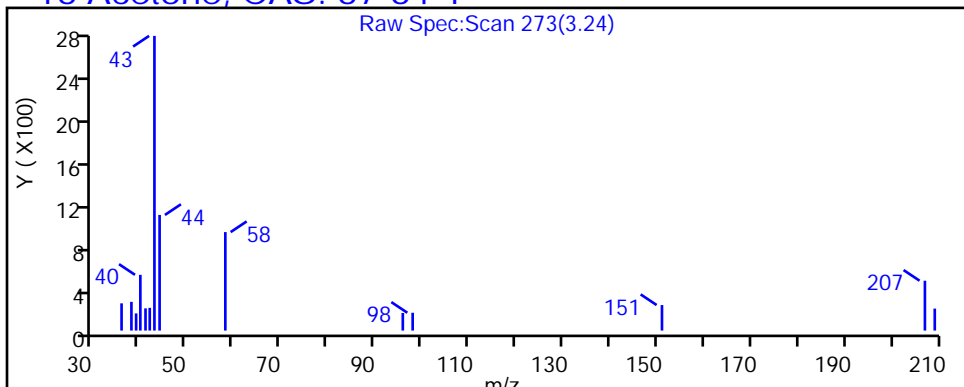
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

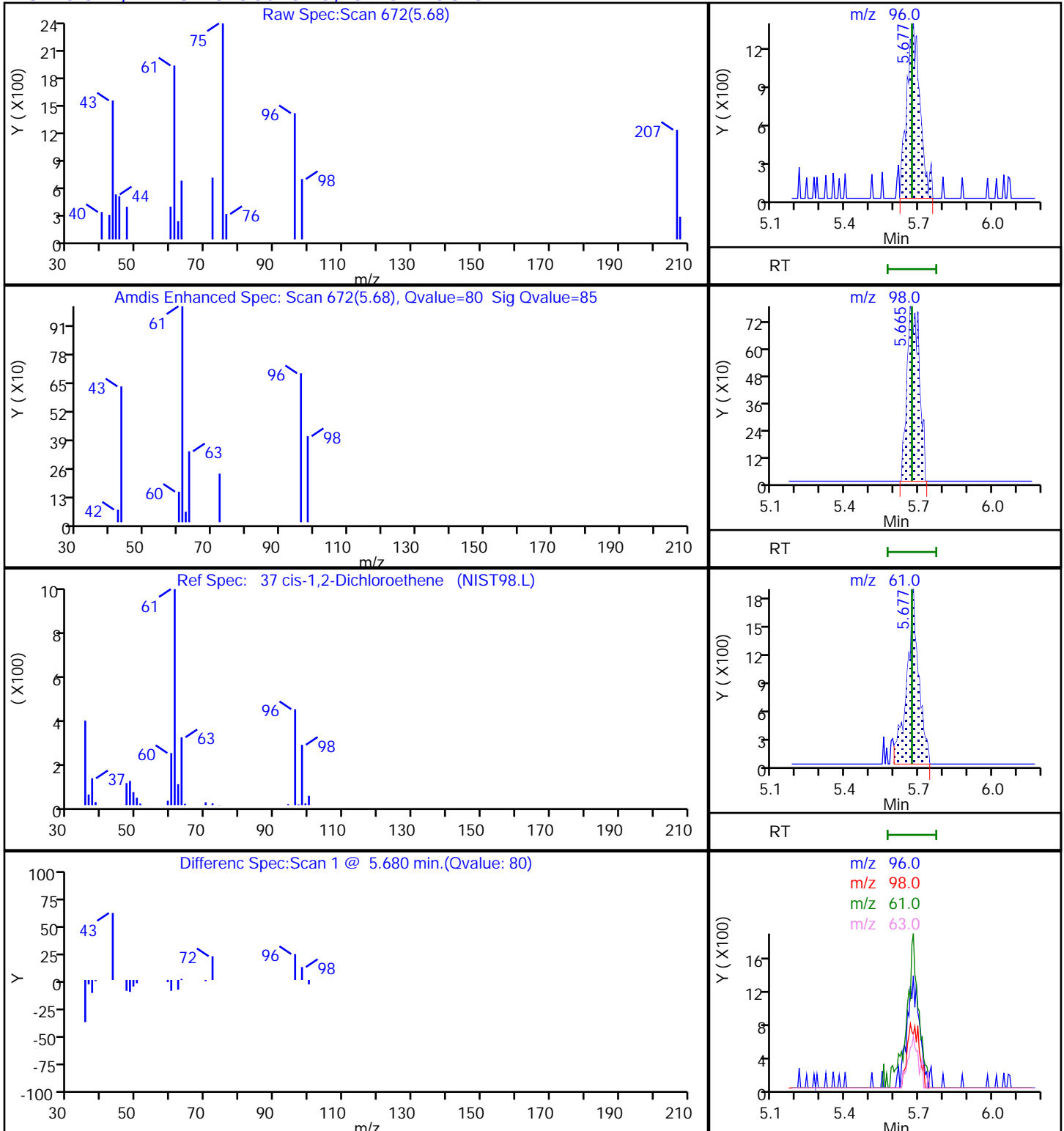
MS Quad

16 Acetone, CAS: 67-64-1



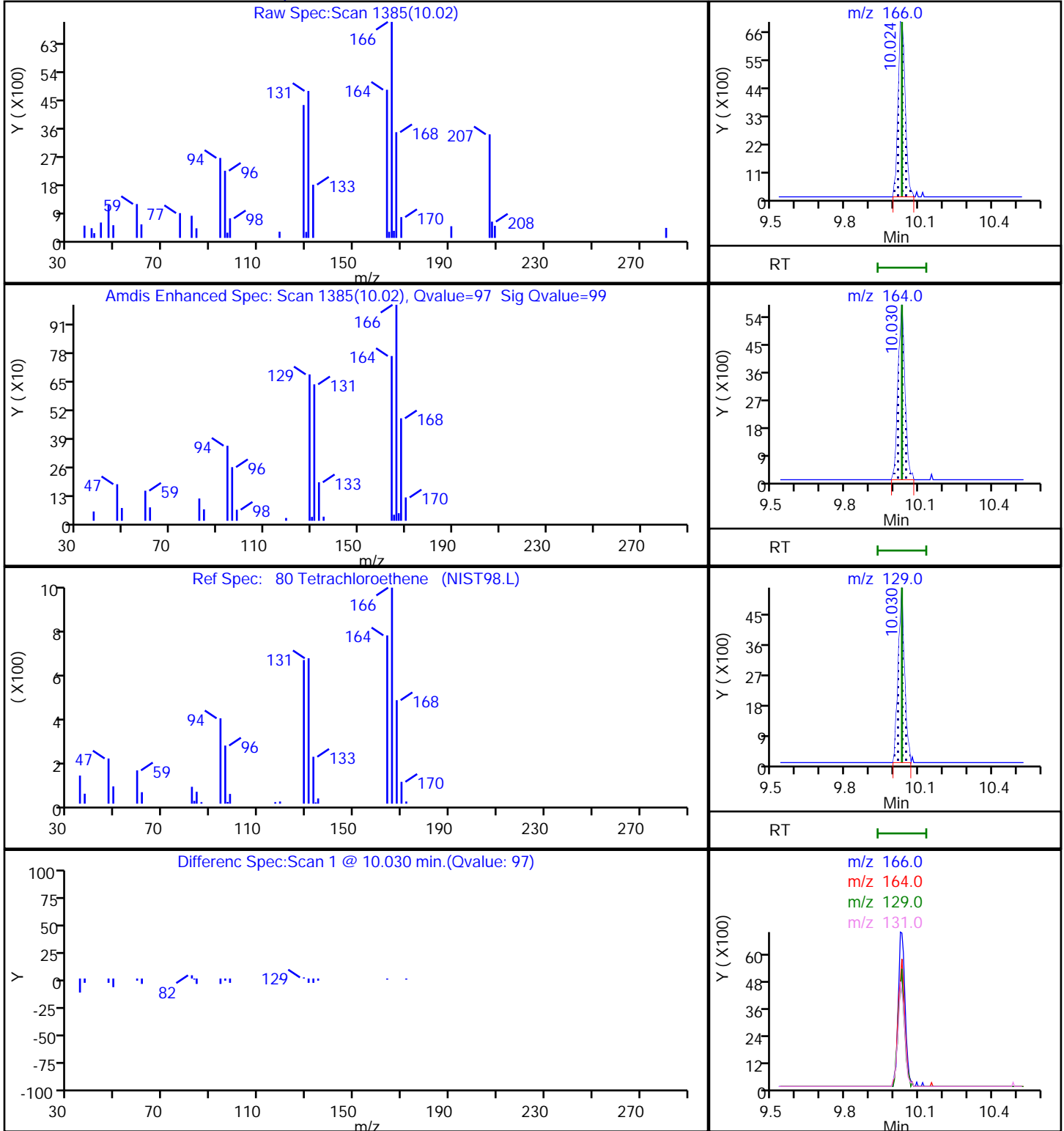
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X014.D
Injection Date: 06-Jun-2022 15:16:30 Instrument ID: 10193
Lims ID: 410-85437-A-4 Lab Sample ID: 410-85437-4
Client ID: HD-COD-SW-9-0/1-0
Operator ID: knk41612 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X014.D
Injection Date: 06-Jun-2022 15:16:30 Instrument ID: 10193
Lims ID: 410-85437-A-4 Lab Sample ID: 410-85437-4
Client ID: HD-COD-SW-9-0/1-0
Operator ID: knk41612 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

80 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X014.D

Injection Date: 06-Jun-2022 15:16:30

Instrument ID: 10193

Lims ID: 410-85437-A-4

Lab Sample ID: 410-85437-4

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

Operator ID: knk41612

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

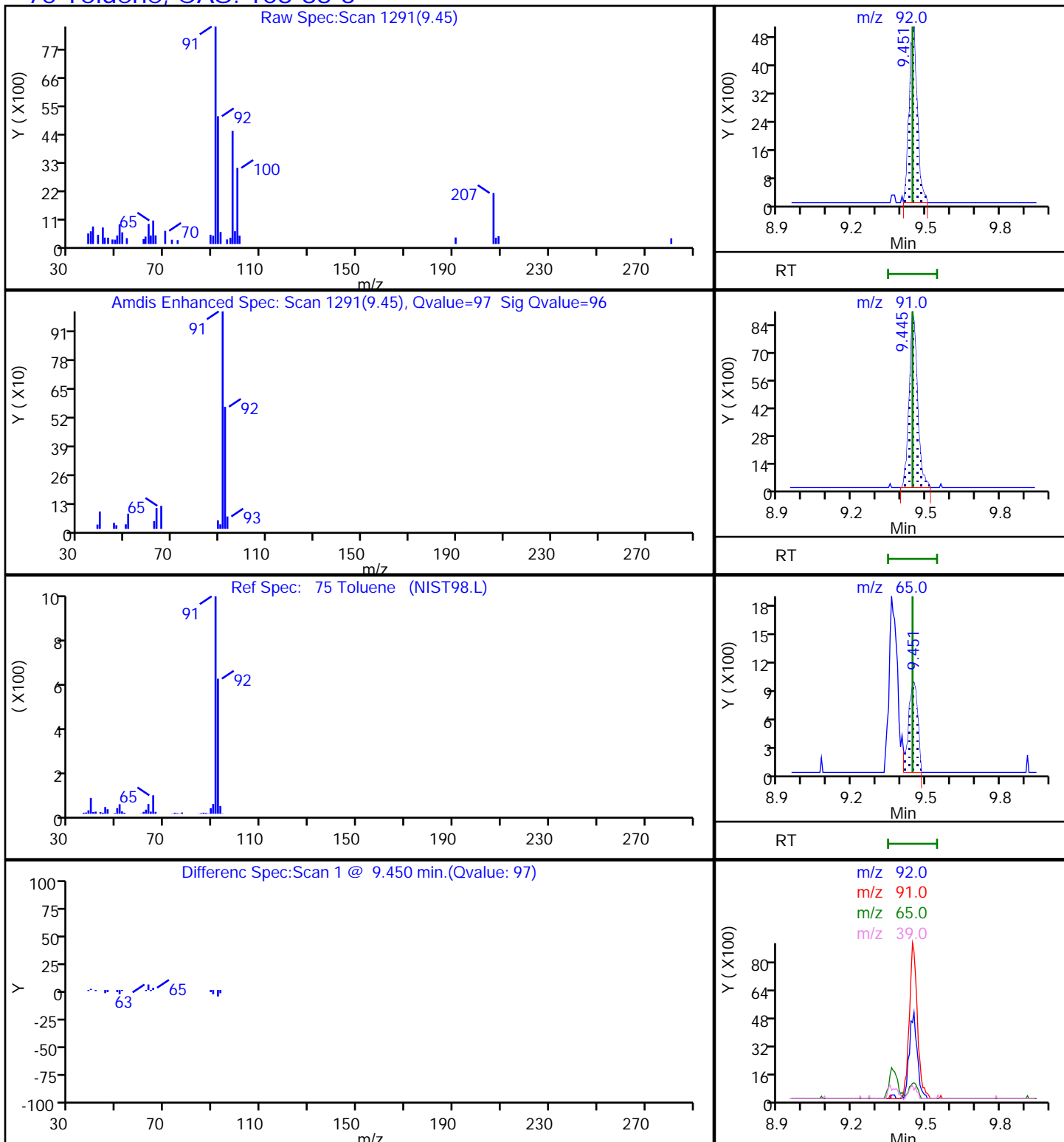
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

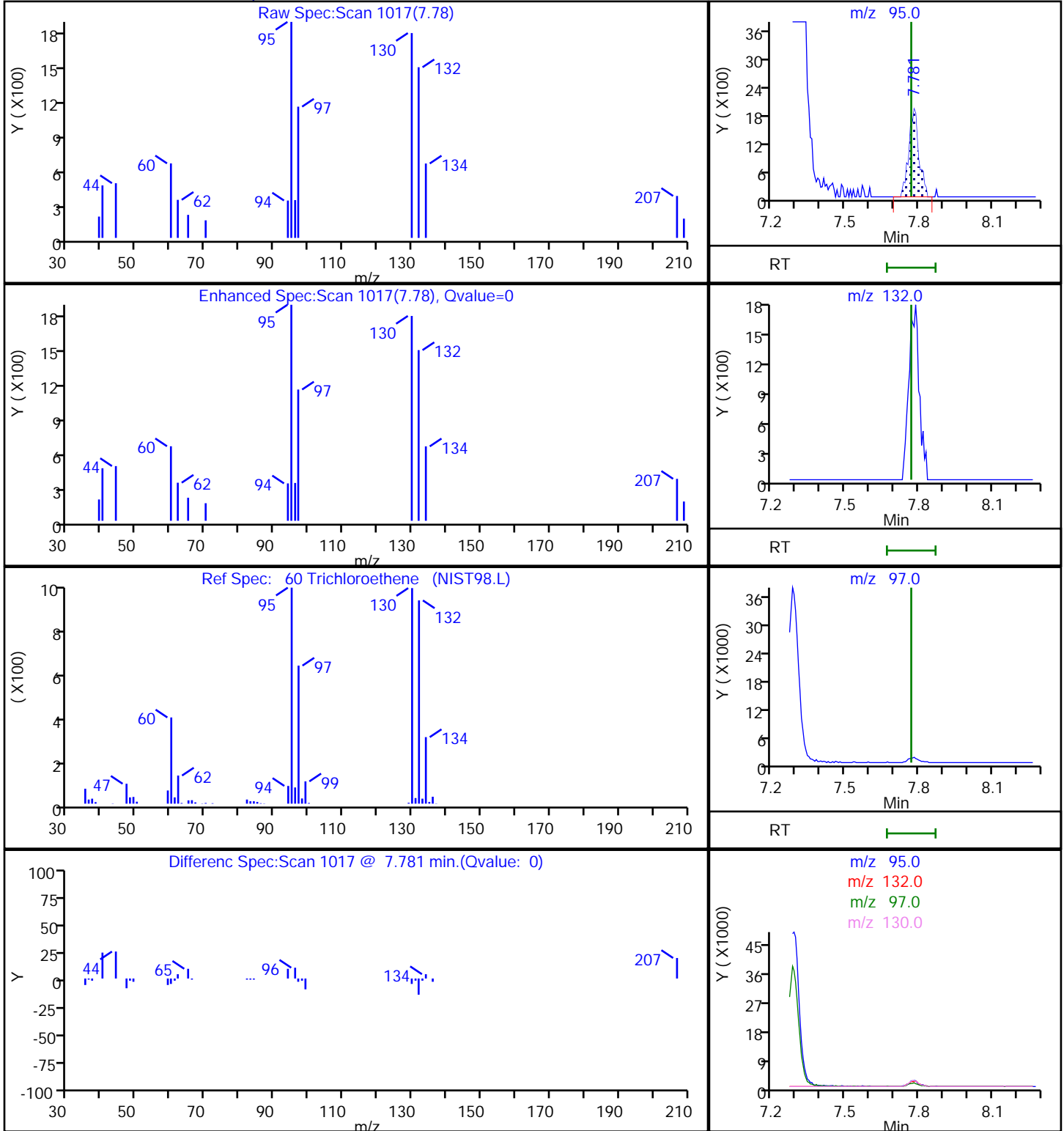
MS Quad

75 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X014.D
Injection Date: 06-Jun-2022 15:16:30 Instrument ID: 10193
Lims ID: 410-85437-A-4 Lab Sample ID: 410-85437-4
Client ID: HD-COD-SW-9-0/1-0
Operator ID: knk41612 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

60 Trichloroethene, CAS: 79-01-6

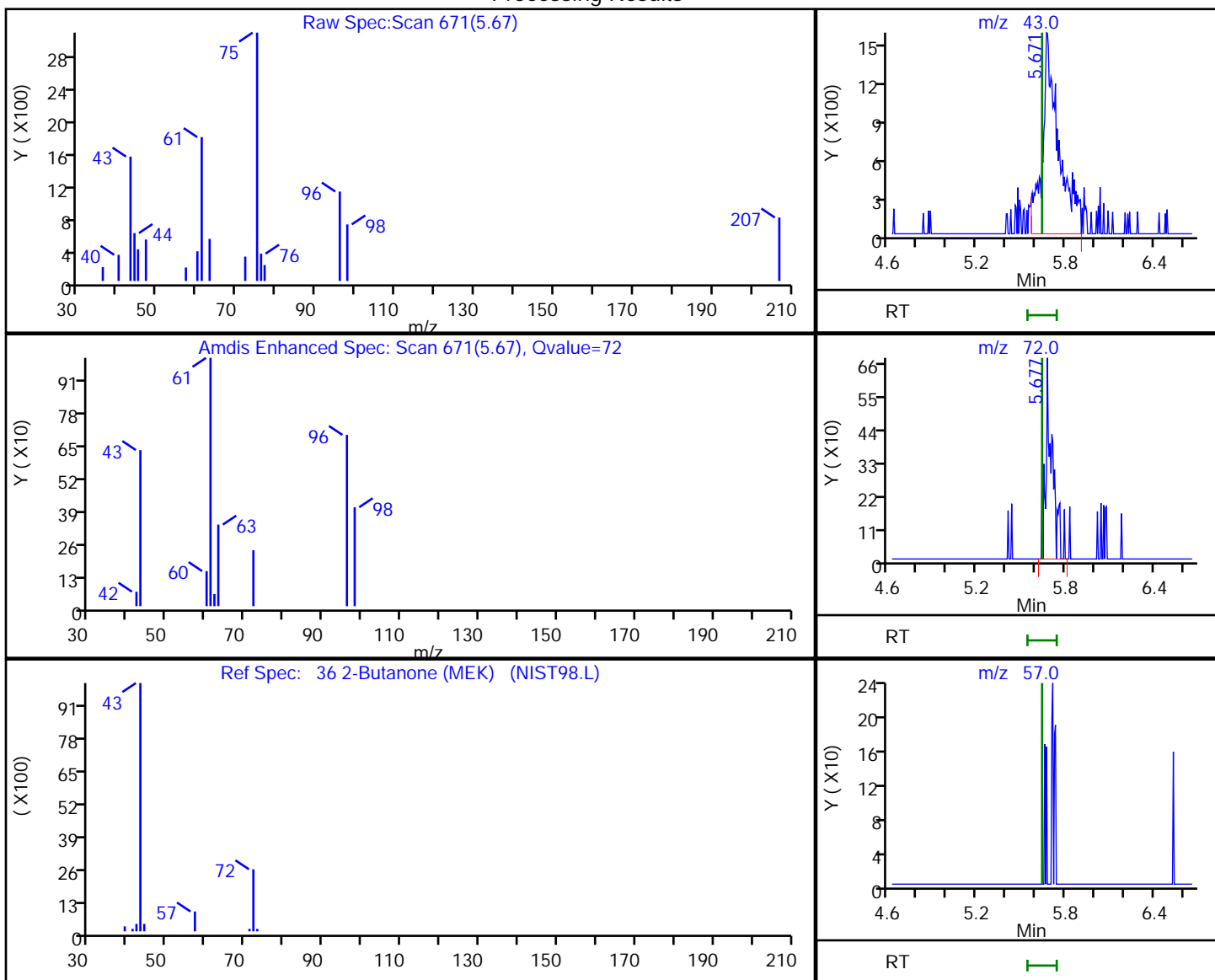


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X014.D
 Injection Date: 06-Jun-2022 15:16:30 Instrument ID: 10193
 Lims ID: 410-85437-A-4 Lab Sample ID: 410-85437-4
 Client ID: HD-COD-SW-9-0/1-0
 Operator ID: knk41612 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
5.67	43.00	11712	1.263849
5.68	72.00	2097	
5.64	57.00	0	

Reviewer: johnsons, 06-Jun-2022 22:01:31
 Audit Action: Marked Compound Undetected

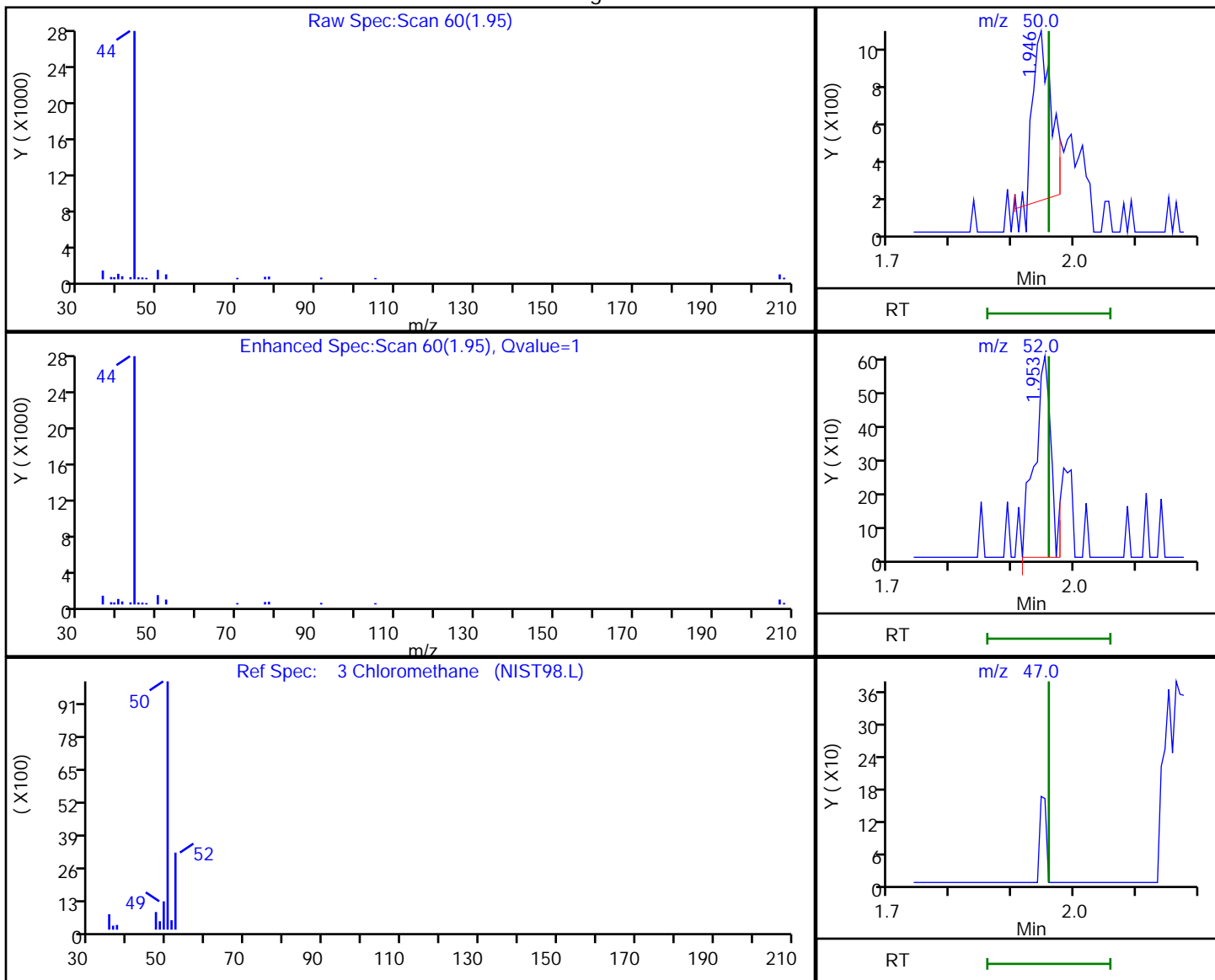
Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X014.D
 Injection Date: 06-Jun-2022 15:16:30 Instrument ID: 10193
 Lims ID: 410-85437-A-4 Lab Sample ID: 410-85437-4
 Client ID: HD-COD-SW-9-0/1-0
 Operator ID: knk41612 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

3 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.95	50.00	1812	0.030842
1.95	52.00	1132	
1.96	47.00	0	

Reviewer: johnsons, 06-Jun-2022 22:01:24

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

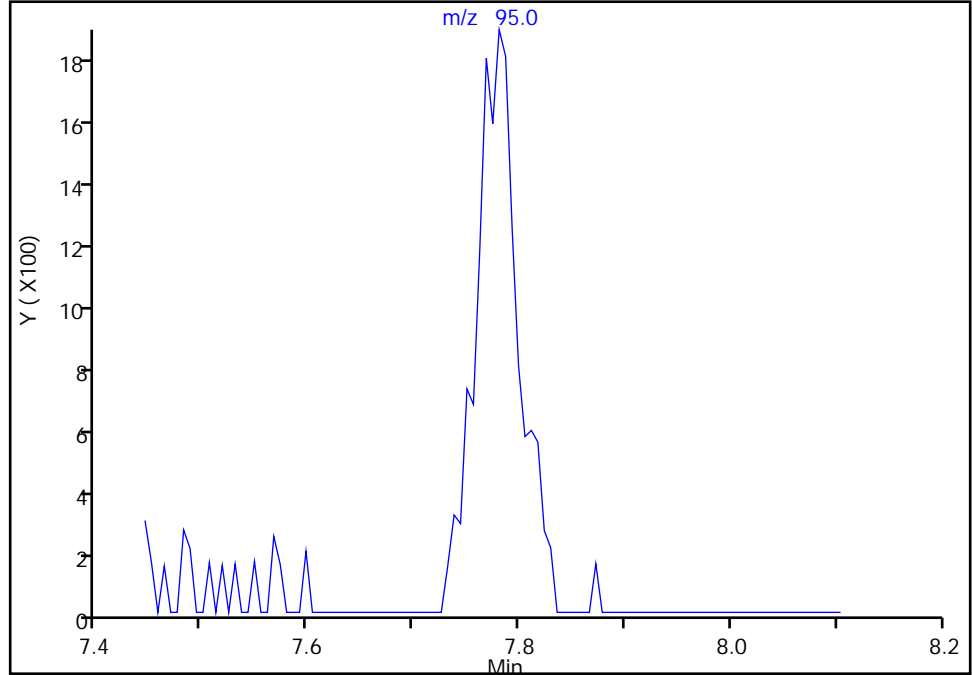
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X014.D
Injection Date: 06-Jun-2022 15:16:30 Instrument ID: 10193
Lims ID: 410-85437-A-4 Lab Sample ID: 410-85437-4
Client ID: HD-COD-SW-9-0/1-0
Operator ID: knk41612 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 Trichloroethene, CAS: 79-01-6

Signal: 1

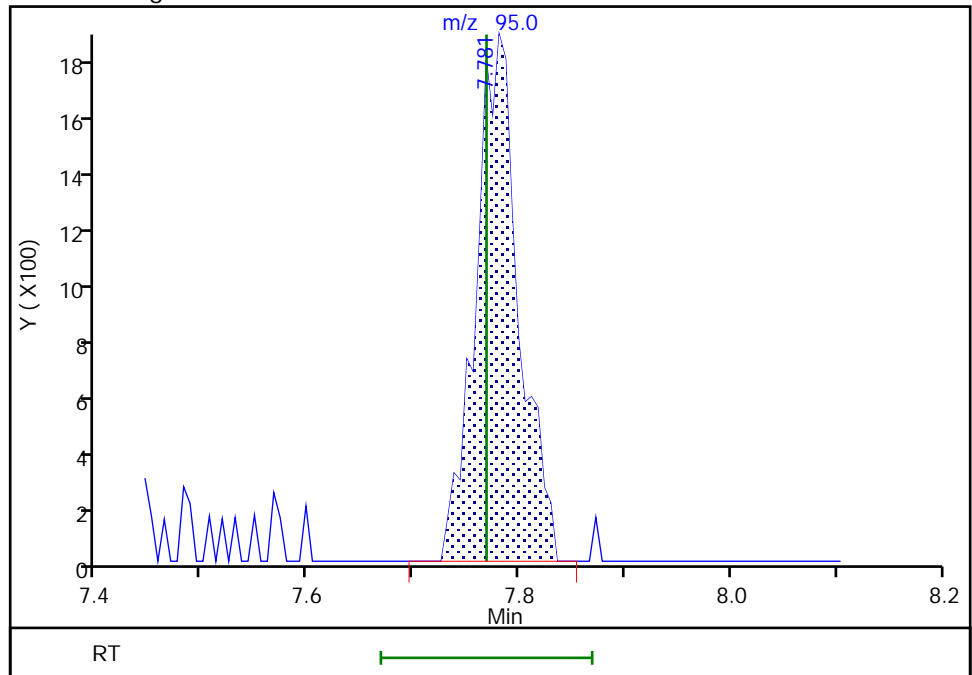
Not Detected
Expected RT: 7.77

Processing Integration Results



Manual Integration Results

RT: 7.78
Area: 5376
Amount: 0.095822
Amount Units: ug/l



Reviewer: johnsons, 06-Jun-2022 22:01:44
Audit Action: Manually Integrated

Audit Reason: Missed Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-5

Matrix: Water

Lab File ID: CU06X015.D

Analysis Method: 8260D

Date Collected: 05/25/2022 09:55

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 15:38

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.: 261977

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	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.1	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c cn	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	*+	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.087	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.54		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-85437-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-85437-5

Matrix: Water Lab File ID: CU06X015.D

Analysis Method: 8260D Date Collected: 05/25/2022 09:55

Sample wt/vol: 25 (mL) Date Analyzed: 06/06/2022 15:38

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.: 261977 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.086	J	0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		80-120
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120
1868-53-7	Dibromofluoromethane (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	102		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X015.D
 Lims ID: 410-85437-A-5
 Client ID: HD-COD-SW-13-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 15:38:30 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-016
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:02:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50		1.959				ND	U
5 Vinyl chloride	62		2.069				ND	7
6 Bromomethane	94		2.355				ND	7
7 Chloroethane	64		2.434				ND	
14 1,1-Dichloroethene	96		3.196				ND	7
16 Acetone	43	3.245	3.227	0.018	86	10555	2.08	
20 Carbon disulfide	76		3.459				ND	7
24 Methylene Chloride	84		3.794				ND	7
* 25 t-Butyl alcohol-d10 (IS)	65	3.818	3.812	0.006	90	111122	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63		4.824				ND	7
36 2-Butanone (MEK)	43		5.641				ND	7
37 cis-1,2-Dichloroethene	96	5.684	5.672	0.012	73	4742	0.0875	
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83		6.165				ND	7
48 1,1,1-Trichloroethane	97		6.385				ND	U
\$ 47 Dibromofluoromethane (Surr)	113	6.385	6.385	0.000	95	409081	9.47	
50 Carbon tetrachloride	117		6.598				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.848	6.848	0.000	48	75545	9.08	
54 Benzene	78		6.873				ND	7
55 1,2-Dichloroethane	62		6.946				ND	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1735528	10.0	
60 Trichloroethene	95	7.775	7.769	0.006	92	4798	0.0863	M
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1726736	10.2	
75 Toluene	92	9.451	9.445	0.006	96	6606	0.0510	
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.030	10.030	0.000	97	34666	0.5409	
82 2-Hexanone	43		10.183				ND	7
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1379656	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106		11.140				ND	7
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	7
93 Styrene	104		11.494				ND	7
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	617159	9.12	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.829	12.829	0.000	93	808885	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X015.D

Injection Date: 06-Jun-2022 15:38:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-5

Lab Sample ID: 410-85437-5

Worklist Smp#: 16

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

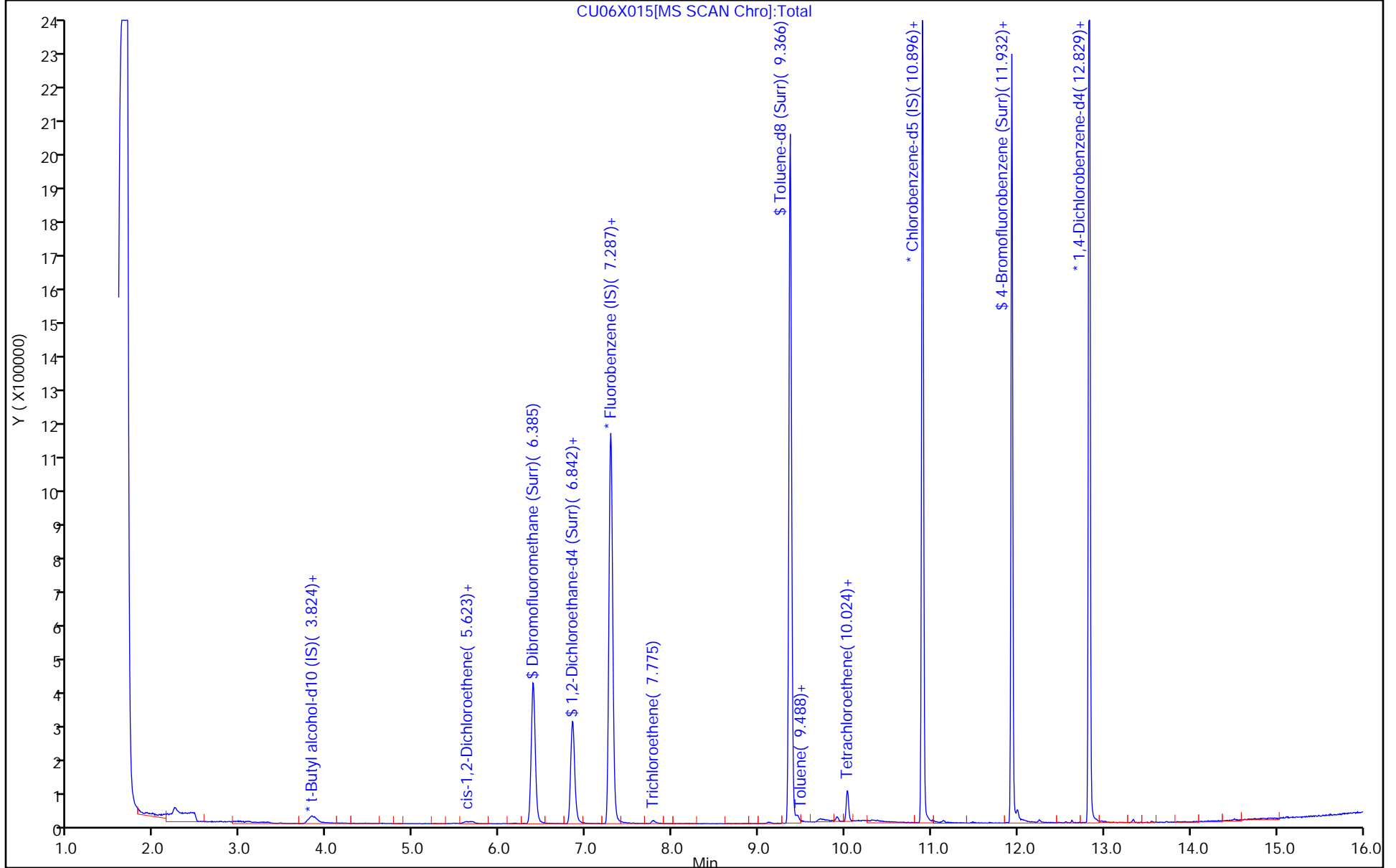
ALS Bottle#: 15

Method: MSV_10193_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\10193\20220603-58749.b\CU06X015.D
 Lims ID: 410-85437-A-5
 Client ID: HD-COD-SW-13-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 15:38:30 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-016
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:02:35

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.47	94.72
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.08	90.83
\$ 74 Toluene-d8 (Surr)	10.0	10.2	101.58
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.12	91.16

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X015.D

Injection Date: 06-Jun-2022 15:38:30

Instrument ID: 10193

Lims ID: 410-85437-A-5

Lab Sample ID: 410-85437-5

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

Operator ID: knk41612

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

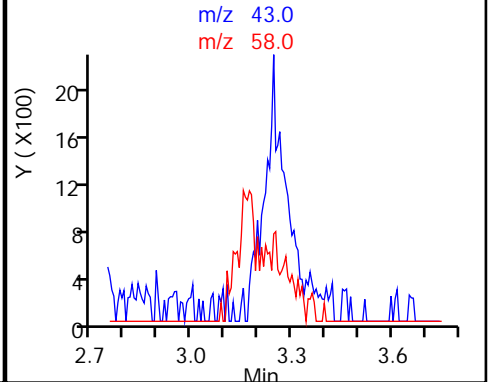
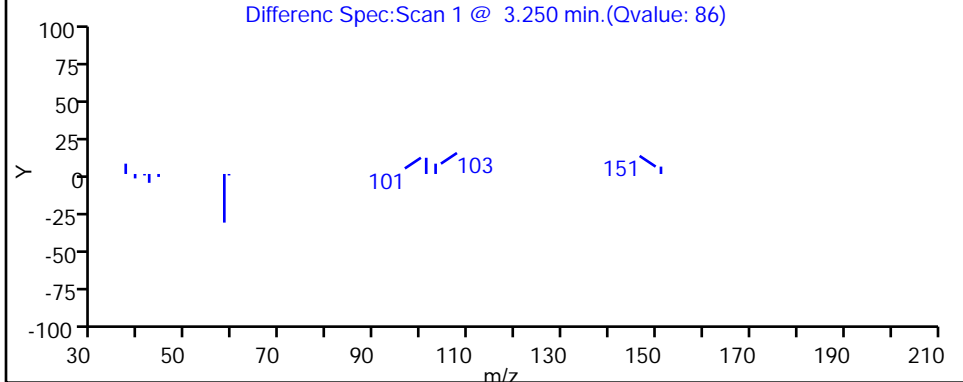
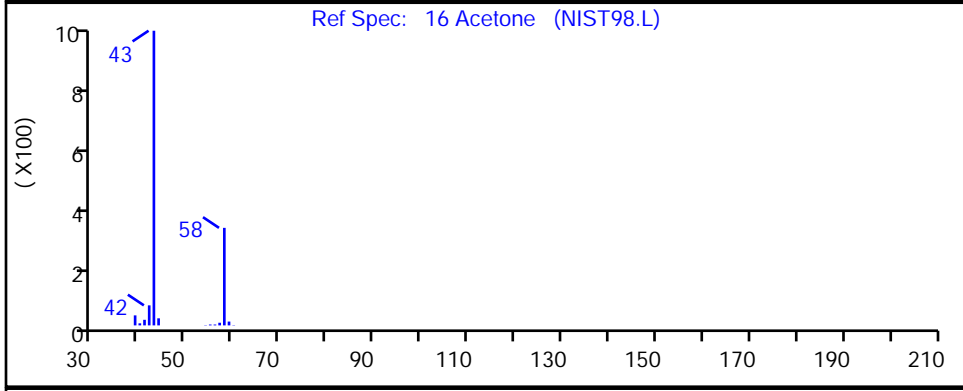
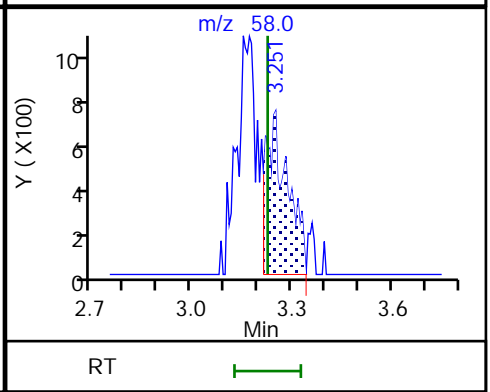
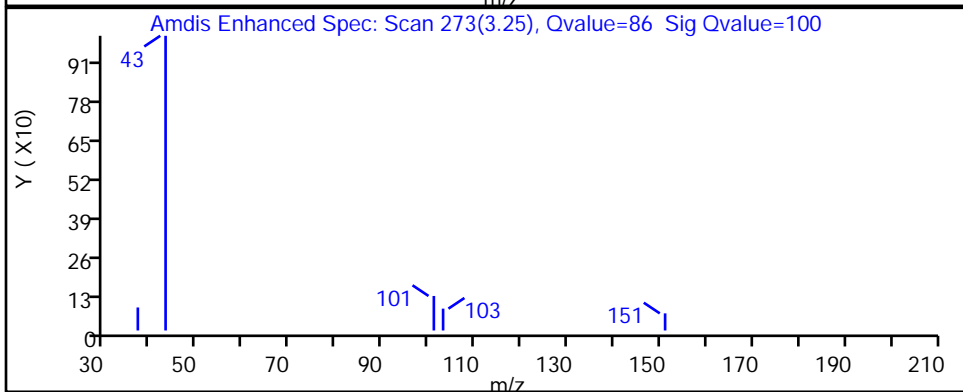
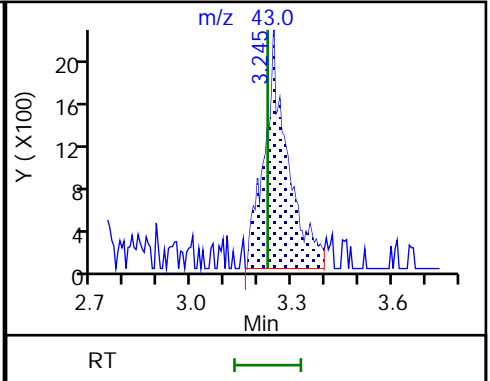
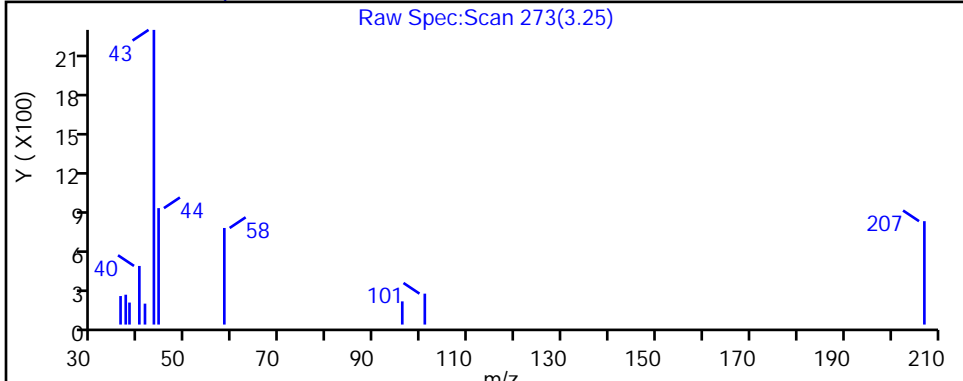
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

16 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X015.D

Injection Date: 06-Jun-2022 15:38:30

Instrument ID: 10193

Lims ID: 410-85437-A-5

Lab Sample ID: 410-85437-5

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

Operator ID: knk41612

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

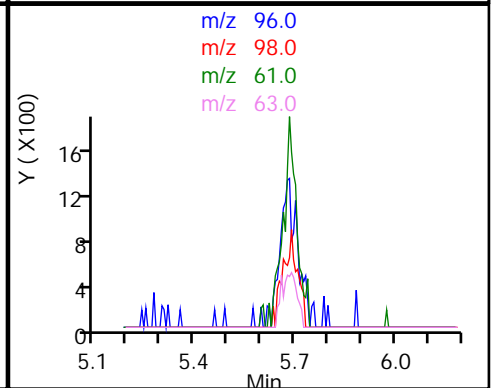
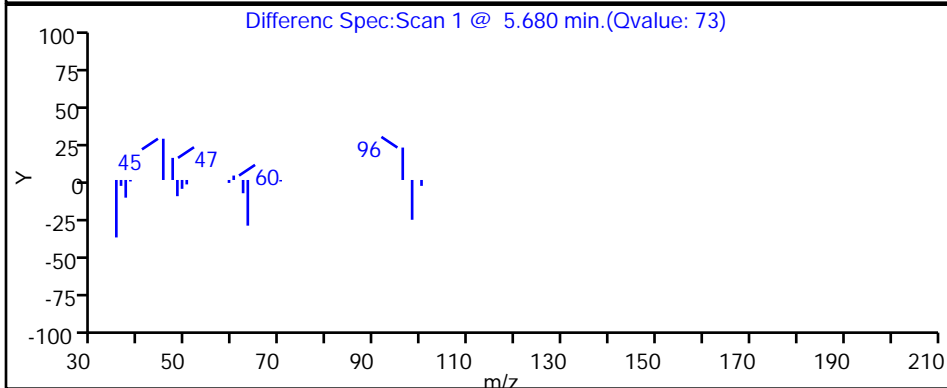
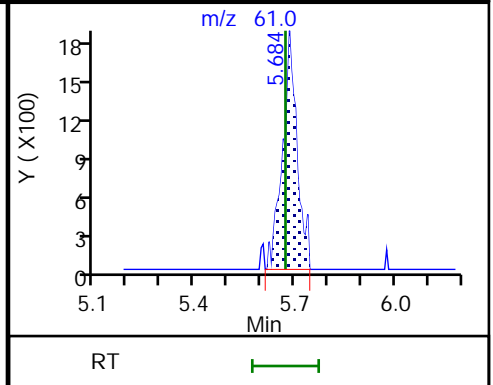
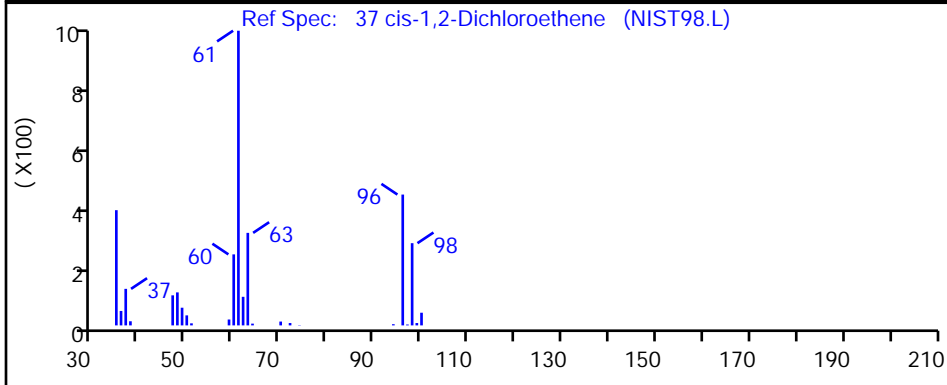
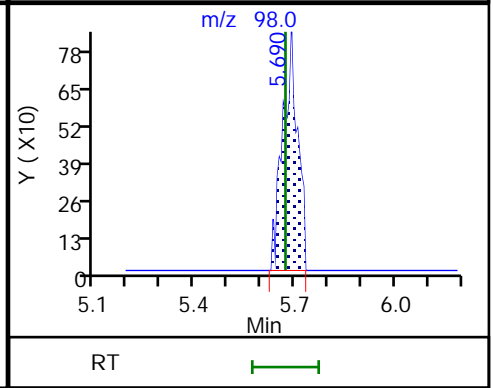
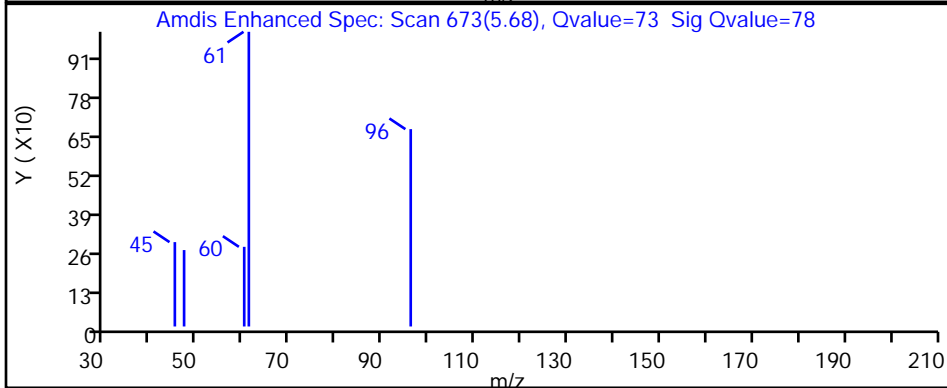
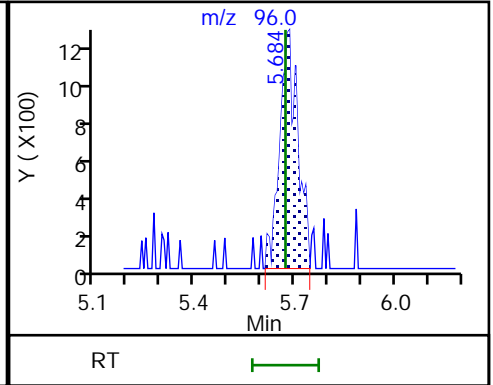
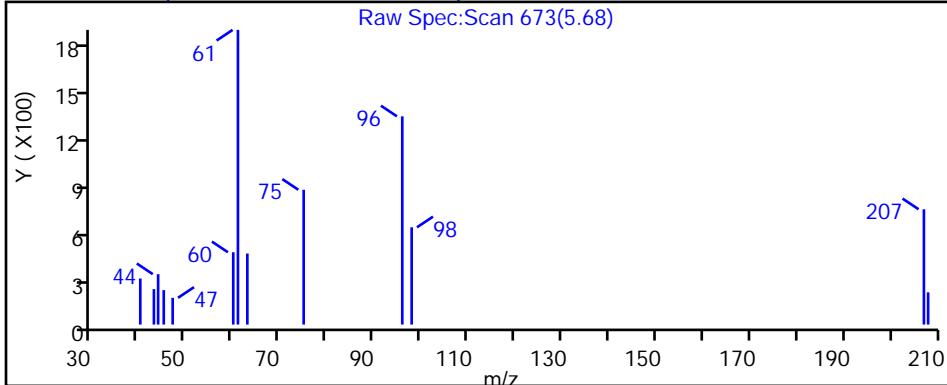
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X015.D

Injection Date: 06-Jun-2022 15:38:30

Instrument ID: 10193

Lims ID: 410-85437-A-5

Lab Sample ID: 410-85437-5

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

Operator ID: knk41612

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

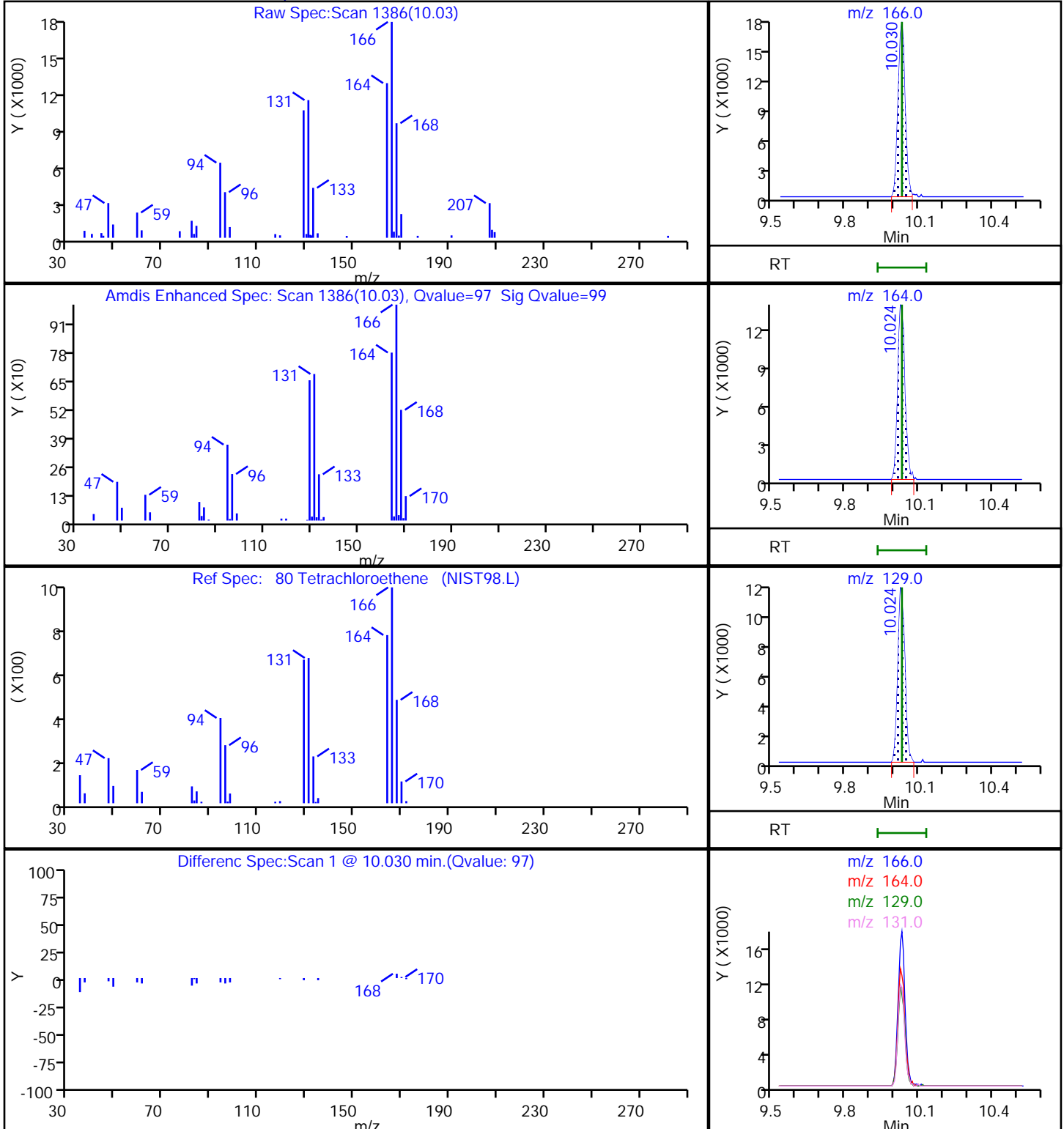
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

80 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X015.D

Injection Date: 06-Jun-2022 15:38:30

Instrument ID: 10193

Lims ID: 410-85437-A-5

Lab Sample ID: 410-85437-5

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

Operator ID: knk41612

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

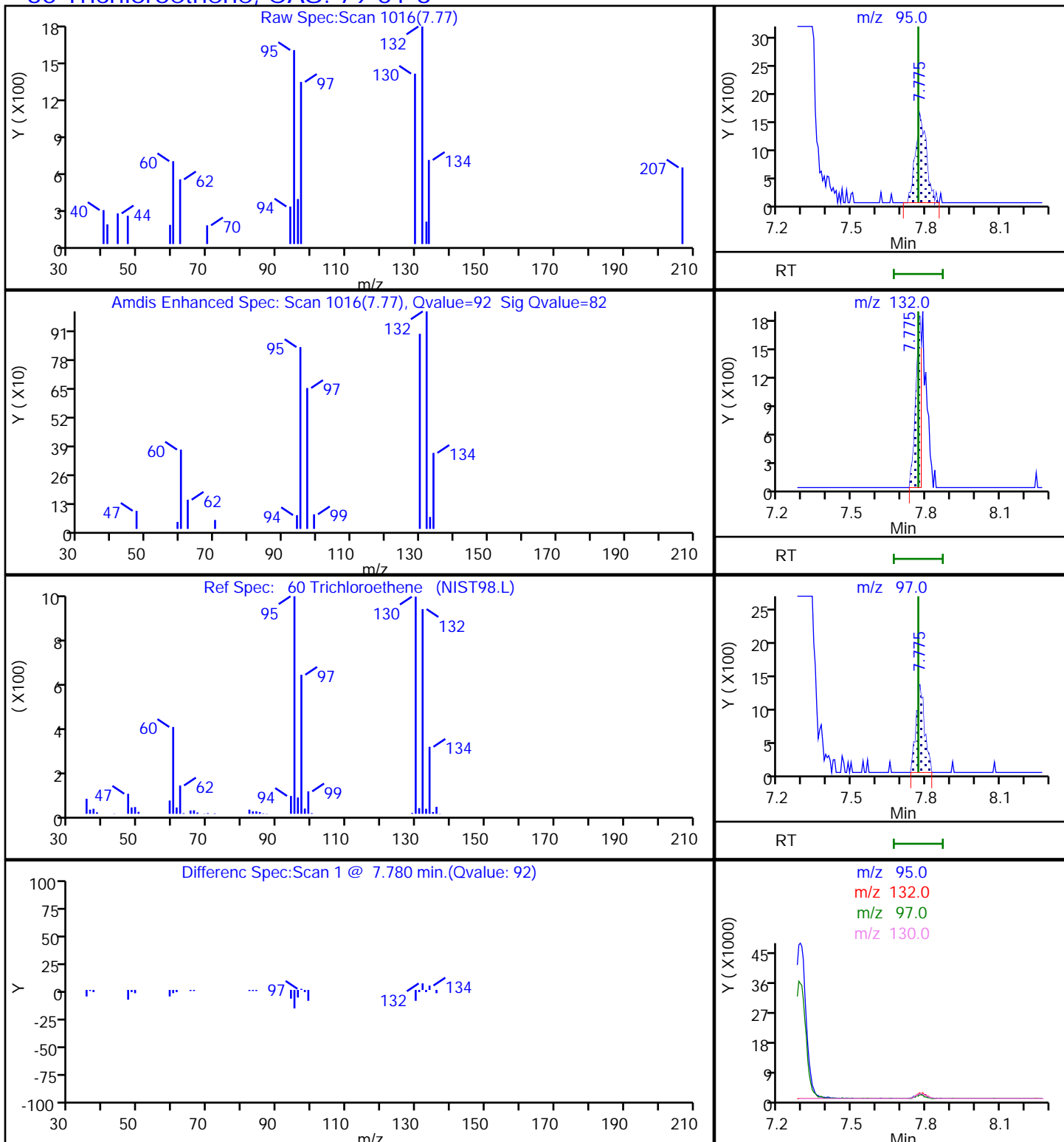
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

60 Trichloroethene, CAS: 79-01-6

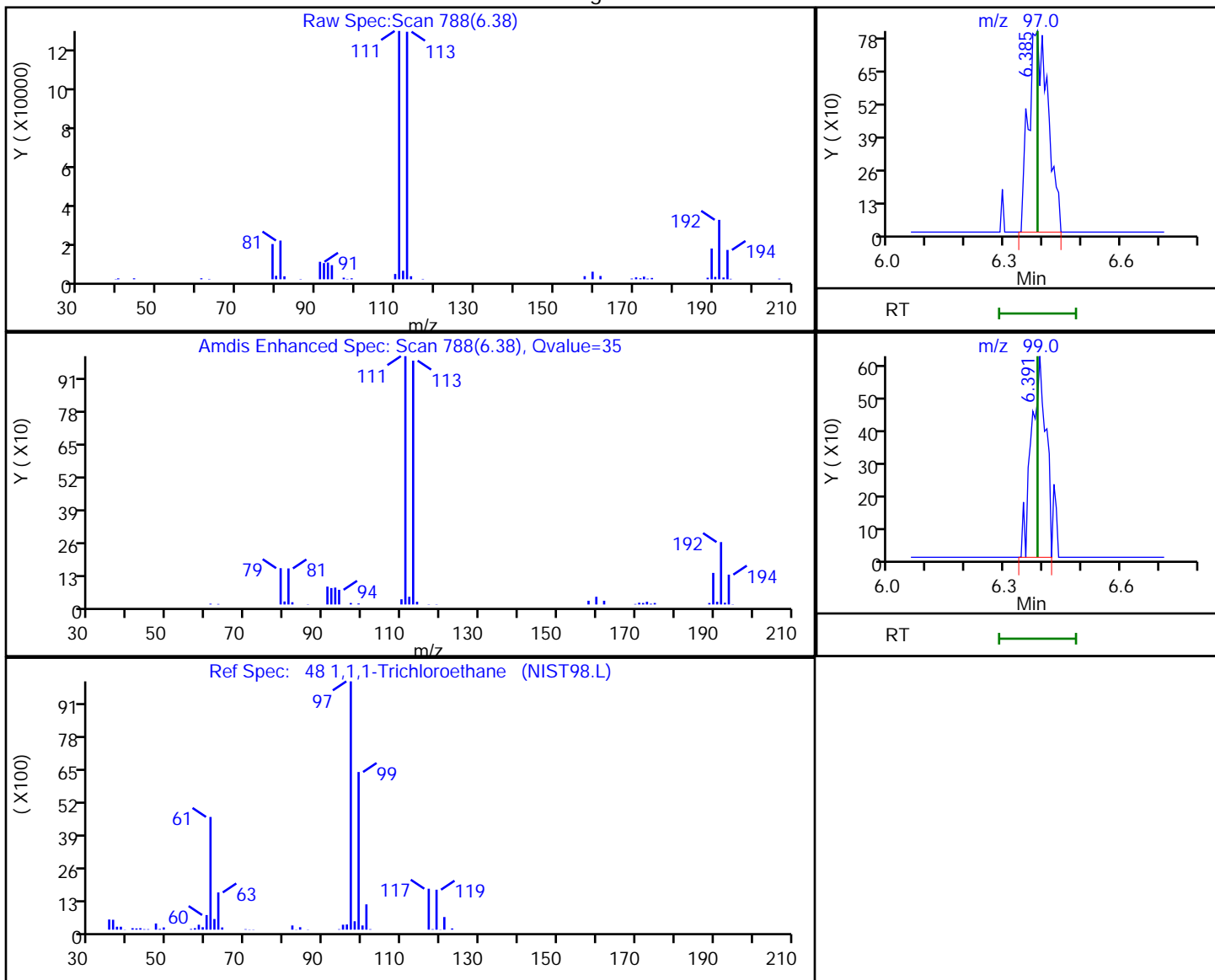


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X015.D
 Injection Date: 06-Jun-2022 15:38:30 Instrument ID: 10193
 Lims ID: 410-85437-A-5 Lab Sample ID: 410-85437-5
 Client ID: HD-COD-SW-13-0/1-0
 Operator ID: knk41612 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

48 1,1,1-Trichloroethane, CAS: 71-55-6

Processing Results



RT	Mass	Response	Amount
6.38	97.00	2846	0.035192
6.39	99.00	1602	

Reviewer: johnsons, 06-Jun-2022 22:02:17

Audit Action: Marked Compound Undetected

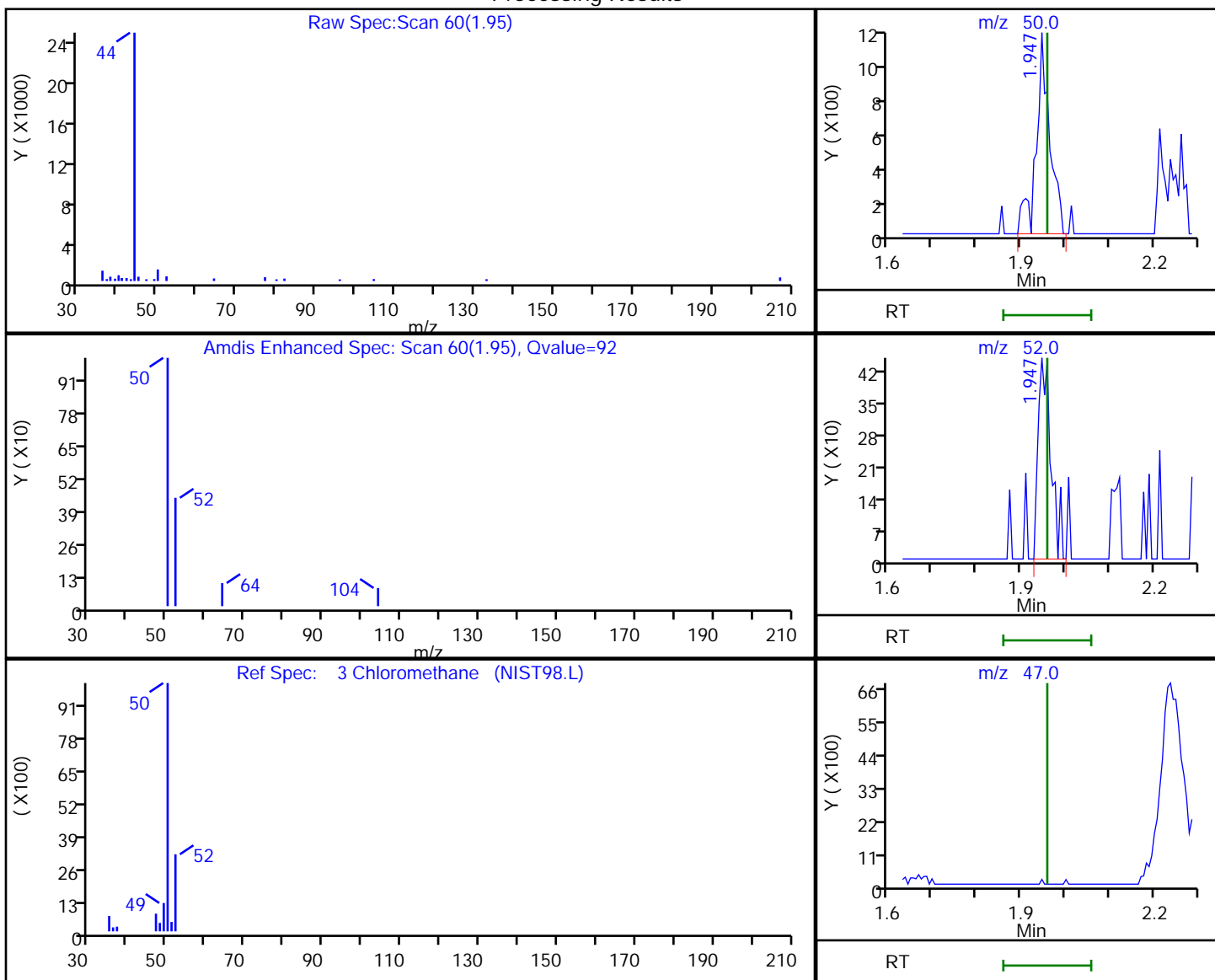
Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X015.D
 Injection Date: 06-Jun-2022 15:38:30 Instrument ID: 10193
 Lims ID: 410-85437-A-5 Lab Sample ID: 410-85437-5
 Client ID: HD-COD-SW-13-0/1-0
 Operator ID: knk41612 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

3 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.95	50.00	2378	0.040836
1.95	52.00	917	
1.96	47.00	0	

Reviewer: johnsons, 06-Jun-2022 22:02:06
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

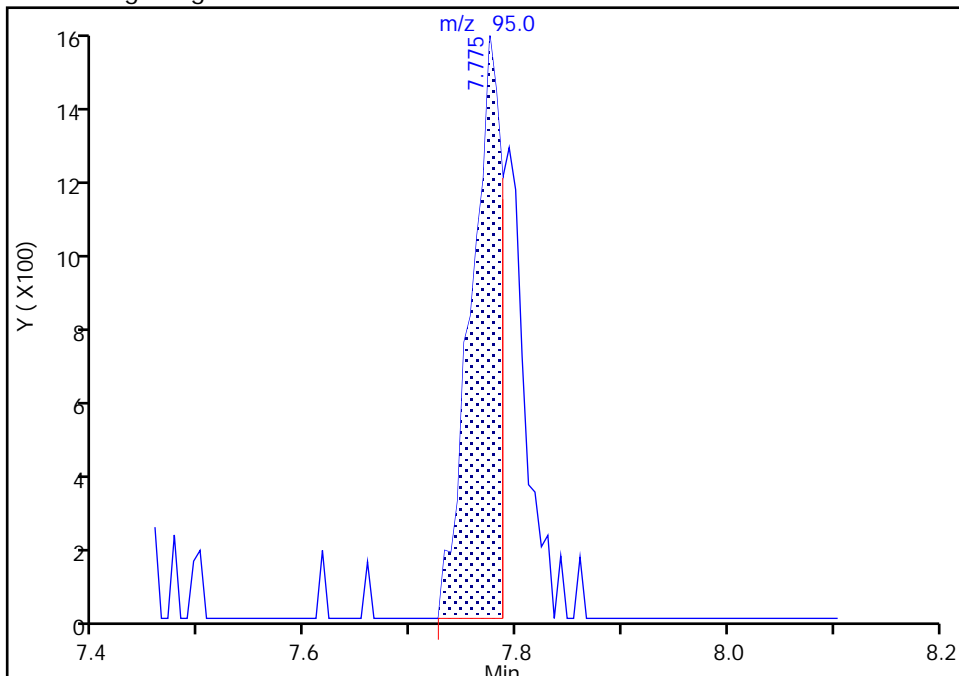
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X015.D
Injection Date: 06-Jun-2022 15:38:30 Instrument ID: 10193
Lims ID: 410-85437-A-5 Lab Sample ID: 410-85437-5
Client ID: HD-COD-SW-13-0/1-0
Operator ID: knk41612 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 Trichloroethene, CAS: 79-01-6

Signal: 1

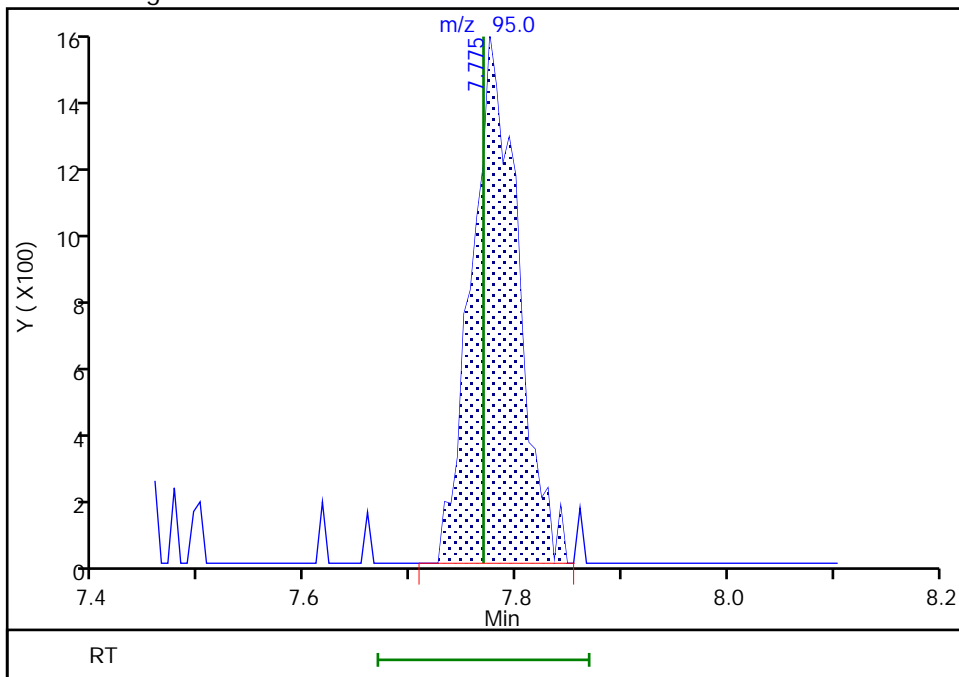
RT: 7.77
Area: 3174
Amount: 0.057077
Amount Units: ug/l

Processing Integration Results



RT: 7.77
Area: 4798
Amount: 0.086280
Amount Units: ug/l

Manual Integration Results



Reviewer: johnsons, 06-Jun-2022 22:02:25
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.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-6

Matrix: Water

Lab File ID: CU06X016.D

Analysis Method: 8260D

Date Collected: 05/25/2022 12:25

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 16:01

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.: 261977

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	0.34	J	0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	0.15	J	0.50	0.070
75-35-4	1,1-Dichloroethene	0.20	J	0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.2	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c cn	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.27	J	0.50	0.090
74-87-3	Chloromethane	ND	*+ FH	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	2.1		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	6.5		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-85437-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-85437-6

Matrix: Water Lab File ID: CU06X016.D

Analysis Method: 8260D Date Collected: 05/25/2022 12:25

Sample wt/vol: 25 (mL) Date Analyzed: 06/06/2022 16:01

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.: 261977 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	1.9		0.50	0.060
75-01-4	Vinyl chloride	ND	FH	0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		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\10193\20220603-58749.b\CU06X016.D
 Lims ID: 410-85437-A-6
 Client ID: HD-COD-SW-15-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 16:01:30 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-017
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:03:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
149 Chlorotrifluoroethene	116		1.764				ND	
2 Dichlorodifluoromethane	85		1.788				ND	
1 Chlorodifluoromethane	51		1.819				ND	7
140 Dimethyl ether	45		1.873				ND	
3 Chloromethane	50		1.959				ND	
5 Vinyl chloride	62		2.069				ND	
4 Butadiene	39		2.069				ND	7
155 2-Chloro-1,1,1-Trifluoroethane	118		2.172				ND	
6 Bromomethane	94		2.355				ND	
7 Chloroethane	64		2.434				ND	
8 Dichlorofluoromethane	67		2.648				ND	7
9 Trichlorofluoromethane	101		2.654				ND	
225 Pentane	43		2.733				ND	U
T 213 Vinyl bromide TIC	106		2.830				ND	
11 Ethyl ether	59		2.922				ND	
12 1,2-Dichloro-1,1,2-trifluoroethane	67		3.001				ND	7
13 Acrolein	56		3.074				ND	7
T 219 Ethanol TIC	45	3.093	3.099	-0.006	1	56	0.000297	
14 1,1-Dichloroethene	96	3.209	3.196	0.013	96	9590	0.2031	
16 Acetone	43	3.251	3.227	0.024	70	6002	1.20	
15 112TCTFE	101		3.239				ND	
17 Iodomethane	142		3.367				ND	
18 Isopropyl alcohol	45		3.385				ND	U
19 Ethyl bromide	108		3.398				ND	
20 Carbon disulfide	76		3.459				ND	7
22 Methyl acetate	43		3.599				ND	7
21 Acetonitrile	41		3.611				ND	
23 3-Chloro-1-propene	41		3.623				ND	
24 Methylene Chloride	84		3.794				ND	
* 25 t-Butyl alcohol-d10 (IS)	65	3.824	3.812	0.012	89	109580	50.0	
26 2-Methyl-2-propanol	59		3.928				ND	
27 Acrylonitrile	53		4.105				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
28 Methyl tert-butyl ether	73	4.147	4.154	-0.007	78	3939	0.0305	
29 trans-1,2-Dichloroethene	96		4.160				ND	
30 Hexane	57		4.580				ND	
32 1,1-Dichloroethane	63	4.824	4.824	0.000	96	13792	0.1488	
31 Vinyl acetate	43		4.830				ND	
33 Isopropyl ether	45		4.885				ND	
34 2-Chloro-1,3-butadiene	53		4.934				ND	
35 Tert-butyl ethyl ether	59		5.428				ND	7
36 2-Butanone (MEK)	43		5.641				ND	
37 cis-1,2-Dichloroethene	96	5.678	5.672	0.006	79	122531	2.08	
38 2,2-Dichloropropane	77		5.678				ND	7
39 Ethyl acetate	43		5.726				ND	U
40 Propionitrile	54		5.732				ND	
43 Methacrylonitrile	67		5.952				ND	
44 Chlorobromomethane	128		6.007				ND	
41 Methyl acrylate	55		6.013				ND	
45 Tetrahydrofuran	71		6.013				ND	
S 42 1,2-Dichloroethene, Total	100				0		2.08	
46 Chloroform	83	6.177	6.165	0.012	94	25556	0.2654	
48 1,1,1-Trichloroethane	97	6.397	6.385	0.012	38	30156	0.3428	
\$ 47 Dibromofluoromethane (Surr)	113	6.385	6.385	0.000	94	450300	9.58	
49 Cyclohexane	56		6.476				ND	
50 Carbon tetrachloride	117	6.598	6.598	0.000	71	3226	0.0427	
51 1,1-Dichloropropene	75		6.604				ND	
145 1-Chlorobutane	56		6.781				ND	
52 Isobutyl alcohol	41		6.799				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.848	6.848	0.000	48	84399	9.33	
54 Benzene	78		6.873				ND	7
55 1,2-Dichloroethane	62		6.946				ND	
152 Isopropyl acetate	43		6.982				ND	
56 Tert-amyl methyl ether	73		7.074				ND	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1887872	10.0	
58 n-Heptane	43		7.299				ND	7
59 n-Butanol	56		7.702				ND	
60 Trichloroethene	95	7.775	7.769	0.006	96	114252	1.89	
61 Methylcyclohexane	83		8.080				ND	
62 1,2-Dichloropropane	63		8.110				ND	
63 2-ethoxy-2-methyl butane	87		8.128				ND	
64 Methyl methacrylate	69		8.208				ND	
65 1,4-Dioxane	88		8.214				ND	7
66 Dibromomethane	93		8.220				ND	
160 n-Propyl acetate	61		8.311				ND	
67 Dichlorobromomethane	83		8.470				ND	7
68 2-Nitropropane	41		8.756				ND	
69 2-Chloroethyl vinyl ether	63		8.860				ND	
71 1-Bromo-2-chloroethane	63		8.860				ND	
72 cis-1,3-Dichloropropene	75		9.037				ND	
70 Chloroacetonitrile	75		9.067				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1846902	10.3	
75 Toluene	92	9.451	9.445	0.006	96	6599	0.0483	
76 trans-1,3-Dichloropropene	75		9.732				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
78 Ethyl methacrylate	69		9.811				ND	
79 1,1,2-Trichloroethane	97		9.945				ND	U
T 215 2-Bromo-3-chloropropene TIC	75	9.933	10.000	-0.067	1	89	0.000471	
T 209 Monochloroacetic acid TIC	50		10.000				ND	
T 211 Epibromohydrin TIC	57		10.000				ND	
T 214 Epichlorohydrin TIC	57	10.299	10.000	0.299	1	153	0.000810	
T 207 2,3-Dibromo-1-propanol TIC	57		10.000				ND	
T 231 Octamethylcyclotetrasiloxane TIC	280	12.000	10.000	2.000	91	18190	0.0964	
T 216 Ethylene oxide TIC	44		10.000				ND	
T 210 2-Chloroethanol TIC	44	10.036	10.000	0.036	1	396	0.002098	
T 217 2,3-Dibromopropene TIC	119	10.024	10.000	0.024	1	3504	0.0186	
T 208 2-Bromoethanol TIC	45	10.018	10.000	0.018	1	163	0.000863	
T 212 Chloroacetaldehyde TIC	50	10.030	10.000	0.030	1	299	0.001584	
T 218 3-Chloro-1,2-propanediol TIC	44		10.000				ND	
T 230 Nitrobenzene TIC	77	10.036	10.000	0.036	1	520	0.002754	
T 228 Decamethylcyclopentasiloxane TIC	73	9.902	10.000	-0.098	1	197	0.001044	
80 Tetrachloroethene	166	10.024	10.030	-0.006	97	439570	6.50	
S 77 1,3-Dichloropropene, Total	100		10.060				ND	7
81 1,3-Dichloropropane	76		10.116				ND	
82 2-Hexanone	43		10.183				ND	7
161 n-Butyl acetate	43		10.317				ND	U
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1456083	10.0	
86 1-Chlorohexane	91		10.914				ND	7
87 Chlorobenzene	112		10.927				ND	7
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	7
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106		11.140				ND	7
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	7
93 Styrene	104		11.494				ND	7
94 Bromoform	173		11.652				ND	
95 Isopropylbenzene	105		11.786				ND	
96 cis-1,4-Dichloro-2-butene	88		11.847				ND	
97 Cyclohexanone	55		11.871				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	667433	9.34	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
100 Bromobenzene	156		12.048				ND	
101 trans-1,4-Dichloro-2-butene	53		12.073				ND	
102 1,2,3-Trichloropropane	110		12.091				ND	
103 N-Propylbenzene	91		12.121				ND	
104 2-Chlorotoluene	126		12.201				ND	
105 1,3,5-Trimethylbenzene	105		12.268				ND	7
106 4-Chlorotoluene	126		12.292				ND	
107 tert-Butylbenzene	134		12.512				ND	
108 Pentachloroethane	167		12.542				ND	
109 1,2,4-Trimethylbenzene	105		12.554				ND	7
110 sec-Butylbenzene	105		12.676				ND	
111 1,3-Dichlorobenzene	146		12.774				ND	7
112 4-Isopropyltoluene	119		12.786				ND	7
* 113 1,4-Dichlorobenzene-d4	152	12.829	12.829	0.000	93	852906	10.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
114 1,4-Dichlorobenzene	146		12.847				ND	7
115 1,2,3-Trimethylbenzene	120		12.865				ND	7
116 Benzyl chloride	126		12.932				ND	
119 n-Butylbenzene	92		13.085				ND	
120 1,2-Dichlorobenzene	146		13.115				ND	
118 p-Diethylbenzene	119		13.140				ND	
T 229 Hexachloroethane TIC	117		13.444				ND	
122 Hexachloroethane	117		13.444				ND	
123 1,2-Dibromo-3-Chloropropane	155		13.664				ND	
124 1,3,5-Trichlorobenzene	180		13.792				ND	
125 1,2,4-Trichlorobenzene	180		14.219				ND	
126 Hexachlorobutadiene	225		14.304				ND	
127 Naphthalene	128		14.402				ND	7
128 1,2,3-Trichlorobenzene	180		14.548				ND	
129 2-Methylnaphthalene	142		15.151				ND	
130 Dodecane	57		0.000				ND	
138 n-Decane	57		0.000				ND	
220 Acetonitrile TIC	1		0.000				ND	
162 Ethanol	45		0.000				ND	
158 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
157 t-Amyl alcohol	1		0.000				ND	
151 Propene oxide	1		0.000				ND	
221 Isopropyl alcohol TIC	1		0.000				ND	
142 1-Bromo-3-Chloropropane	1		0.000				ND	
136 Methylal	1		0.000				ND	
226 1,1-Dichloroacetone	1		0.000				ND	
133 1-Chloropropane	1		0.000				ND	
131 2-Bromo-1-chloropropane	1		0.000				ND	
159 tert-Butyl Formate	1		0.000				ND	
222 Vinyl acetate (TIC)	1		0.000				ND	
223 1,3-Dichloro-2-propanol TIC	1		0.000				ND	
224 Propargyl alcohol TIC	1		0.000				ND	
227 Pentachloroethane TIC	1		0.000				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X016.D

Injection Date: 06-Jun-2022 16:01:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-6

Lab Sample ID: 410-85437-6

Worklist Smp#: 17

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

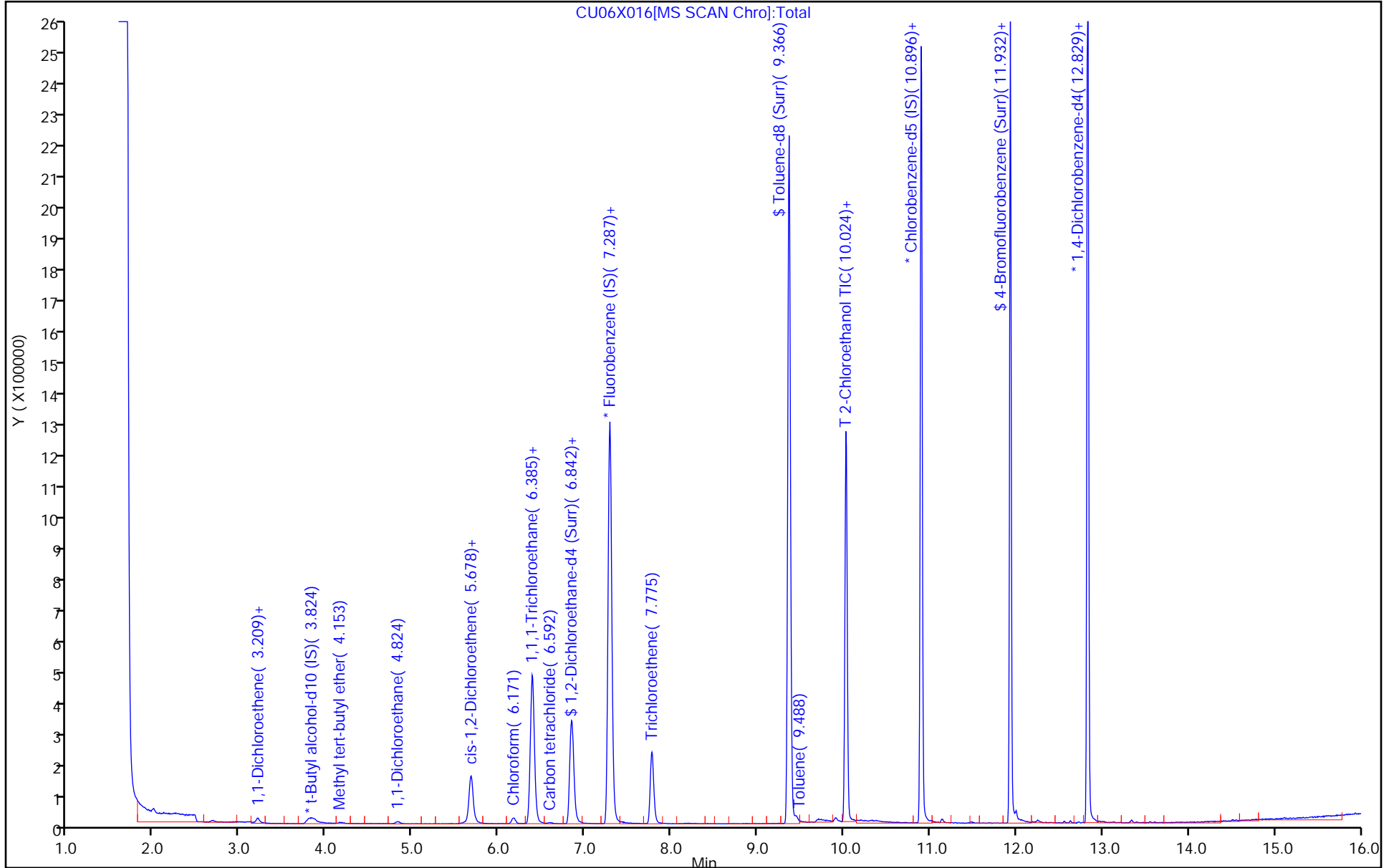
ALS Bottle#: 16

Method: MSV_10193_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\10193\20220603-58749.b\CU06X016.D
 Lims ID: 410-85437-A-6
 Client ID: HD-COD-SW-15-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 16:01:30 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-017
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:03:51

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.58	95.85
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.33	93.29
\$ 74 Toluene-d8 (Surr)	10.0	10.3	102.95
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.34	93.41

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X016.D

Injection Date: 06-Jun-2022 16:01:30

Instrument ID: 10193

Lims ID: 410-85437-A-6

Lab Sample ID: 410-85437-6

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

Operator ID: knk41612

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

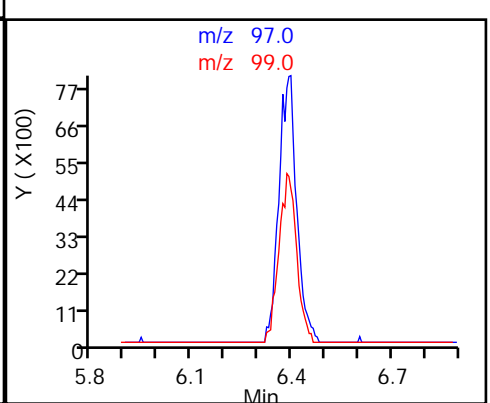
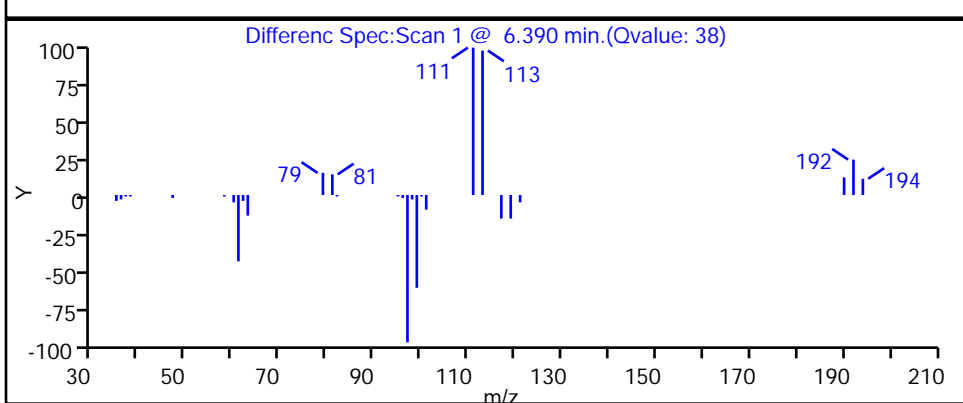
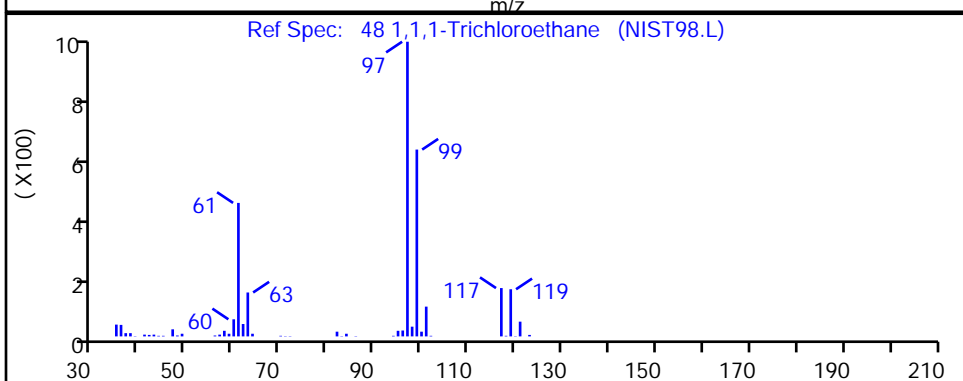
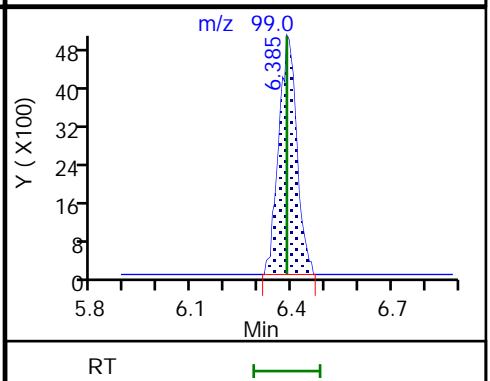
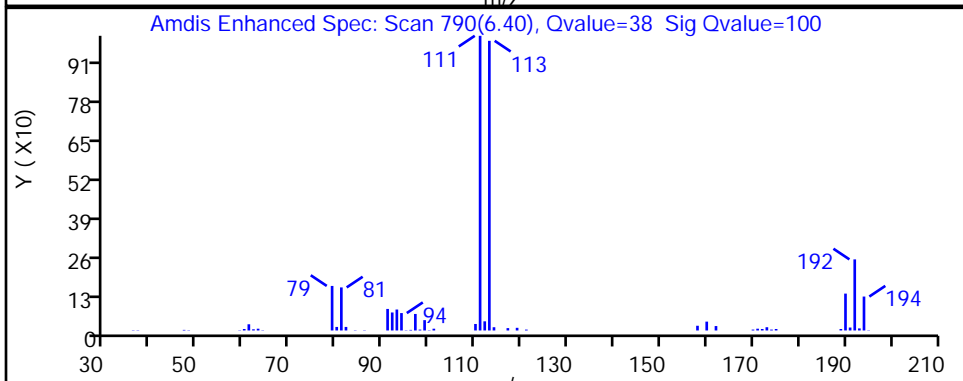
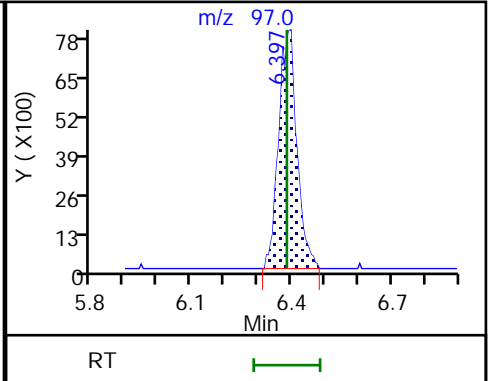
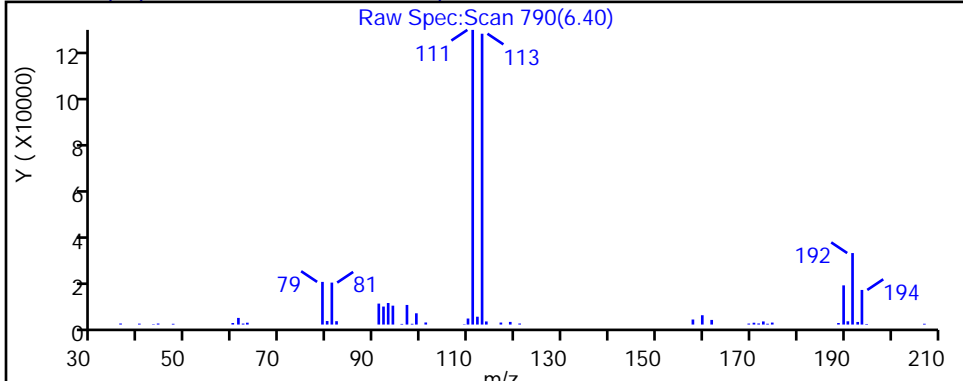
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

48 1,1,1-Trichloroethane, CAS: 71-55-6



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X016.D

Injection Date: 06-Jun-2022 16:01:30

Instrument ID: 10193

Lims ID: 410-85437-A-6

Lab Sample ID: 410-85437-6

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

Operator ID: knk41612

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

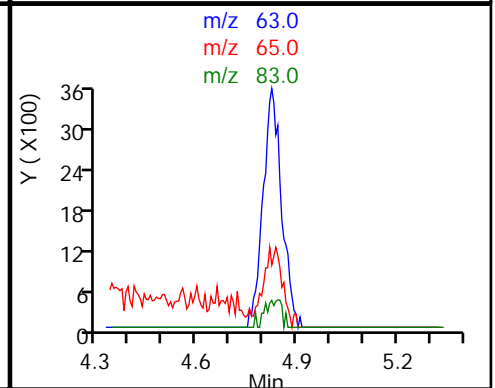
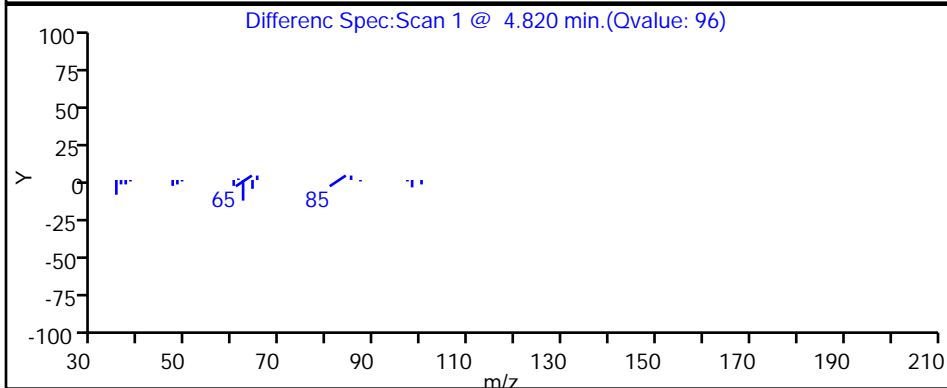
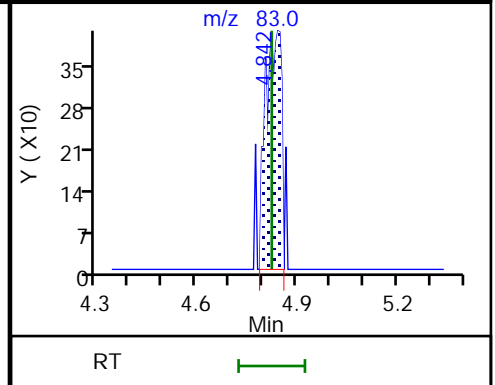
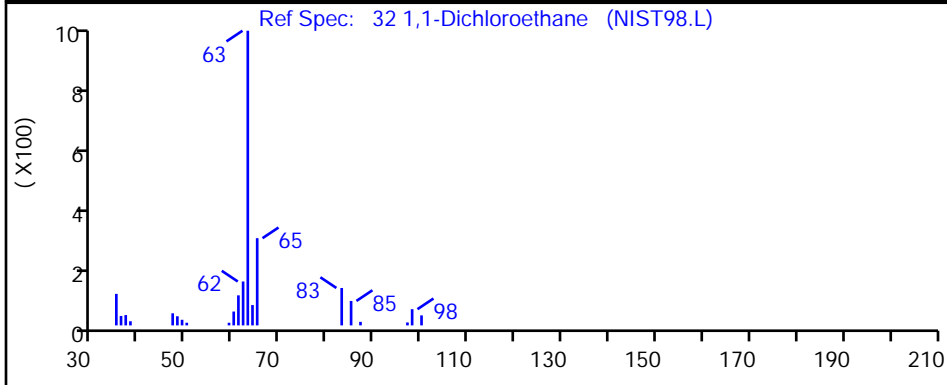
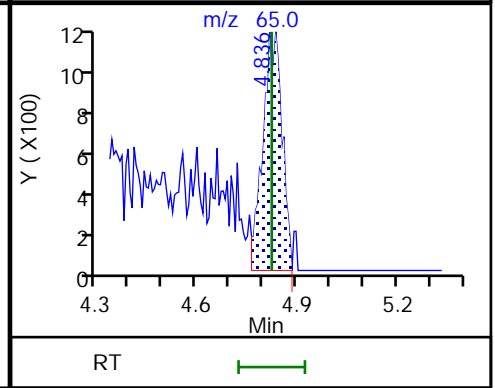
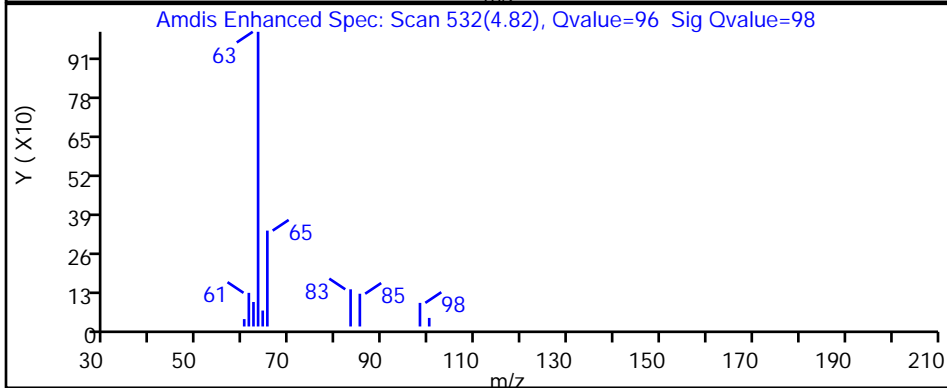
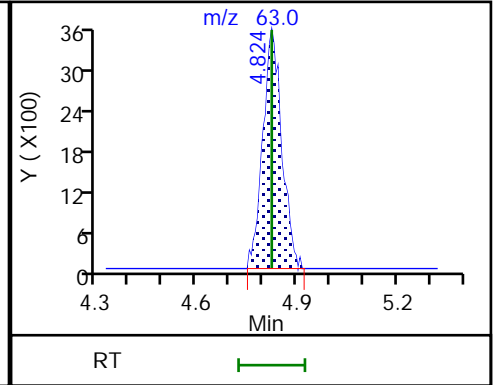
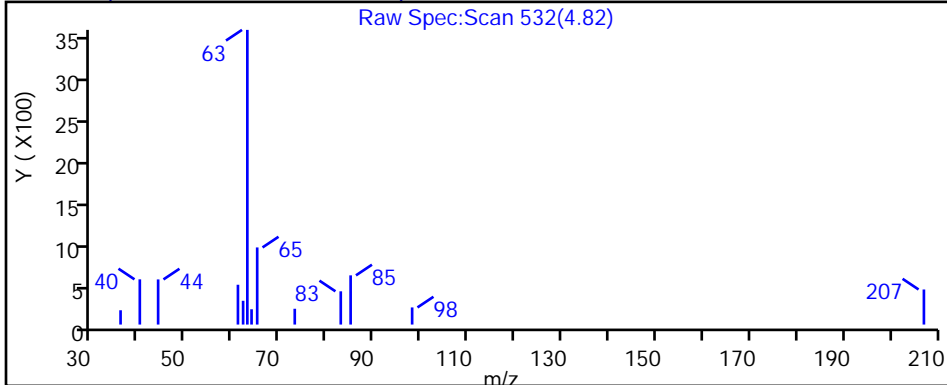
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

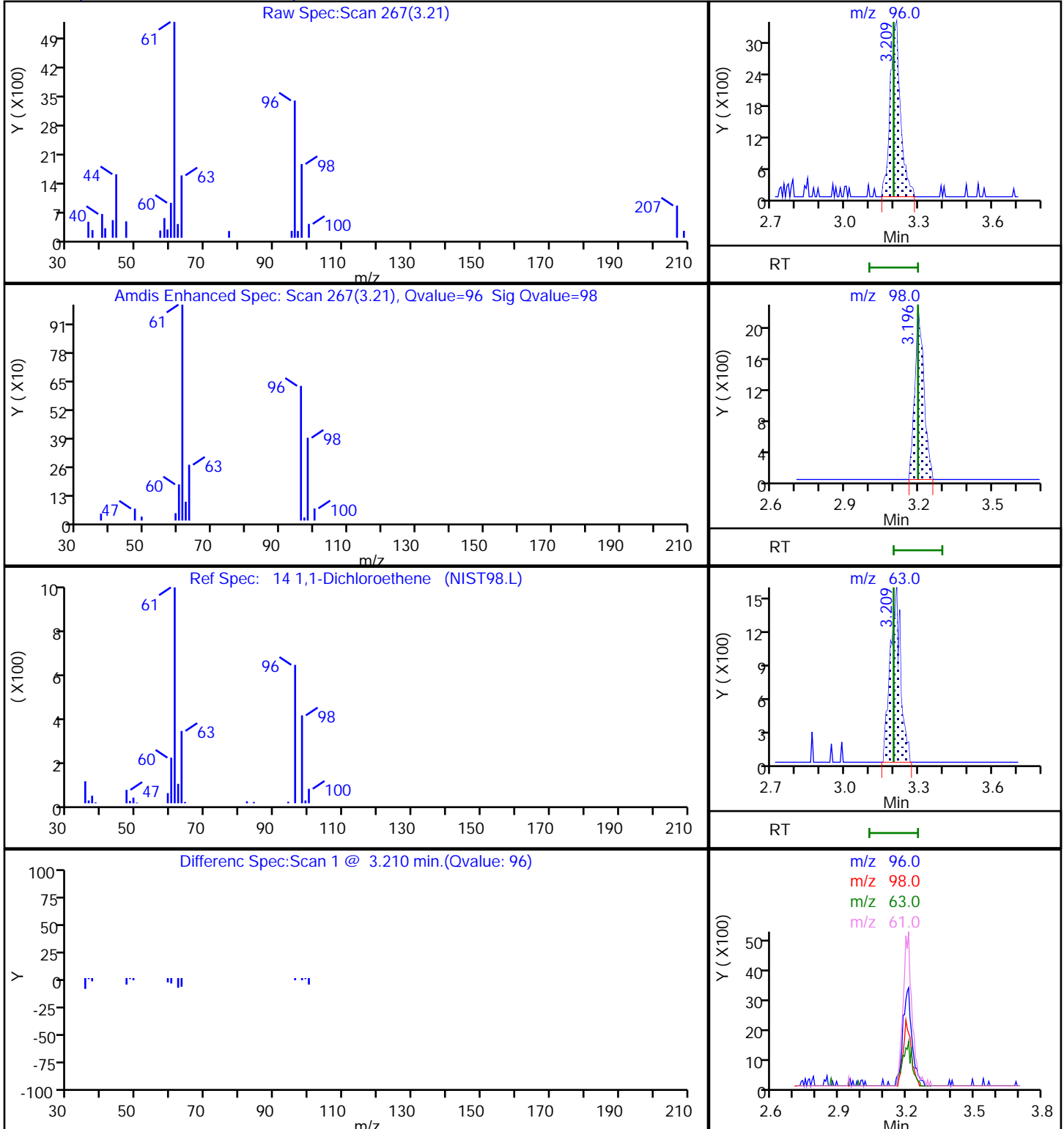
MS Quad

32 1,1-Dichloroethane, CAS: 75-34-3



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X016.D
Injection Date: 06-Jun-2022 16:01:30 Instrument ID: 10193
Lims ID: 410-85437-A-6 Lab Sample ID: 410-85437-6
Client ID: HD-COD-SW-15-0/1-0
Operator ID: knk41612 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

14 1,1-Dichloroethene, CAS: 75-35-4



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X016.D

Injection Date: 06-Jun-2022 16:01:30

Instrument ID: 10193

Lims ID: 410-85437-A-6

Lab Sample ID: 410-85437-6

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

Operator ID: knk41612

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

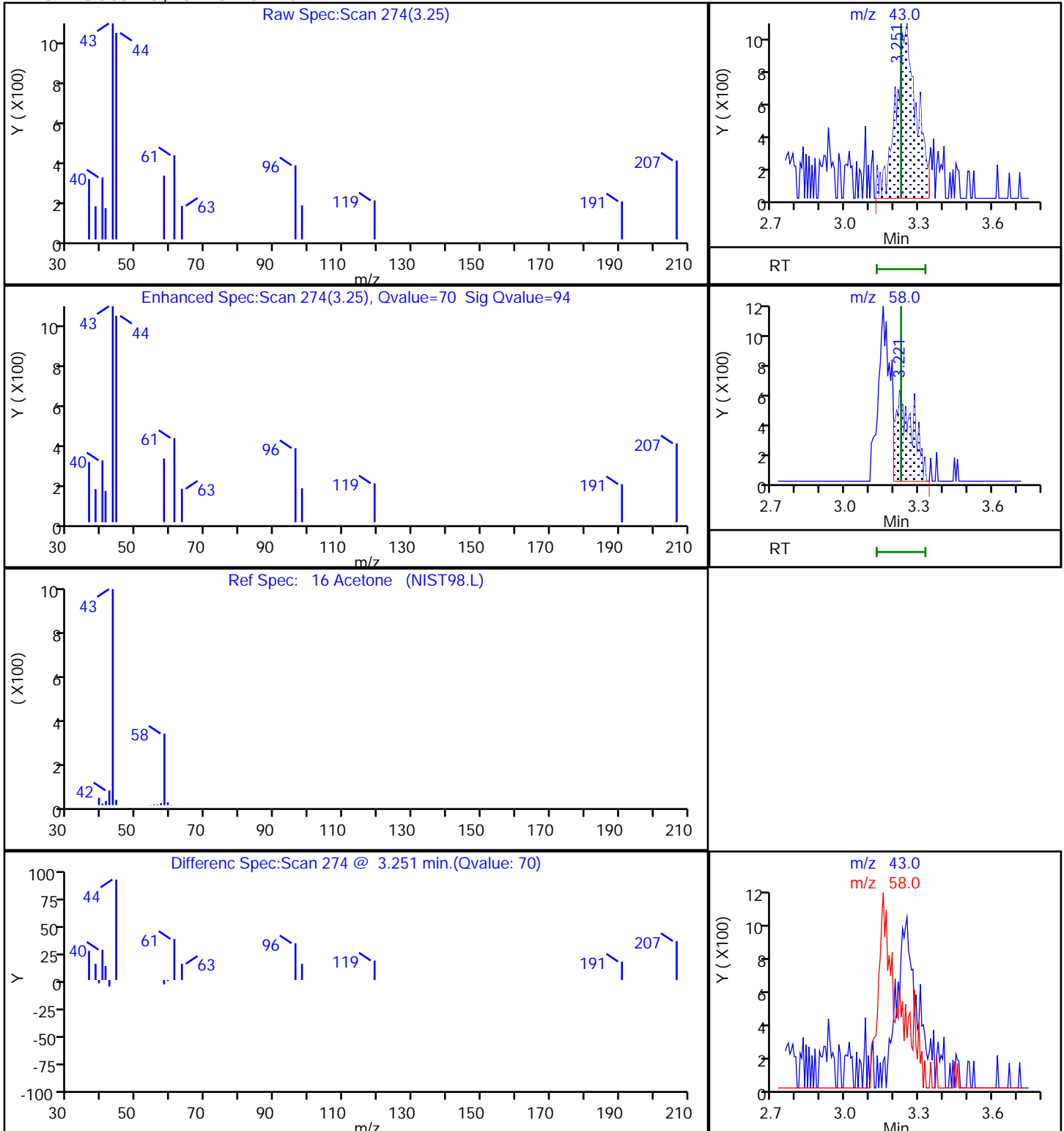
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

16 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X016.D

Injection Date: 06-Jun-2022 16:01:30

Instrument ID: 10193

Lims ID: 410-85437-A-6

Lab Sample ID: 410-85437-6

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

Operator ID: knk41612

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

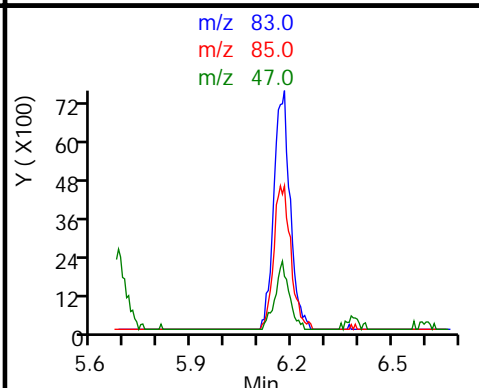
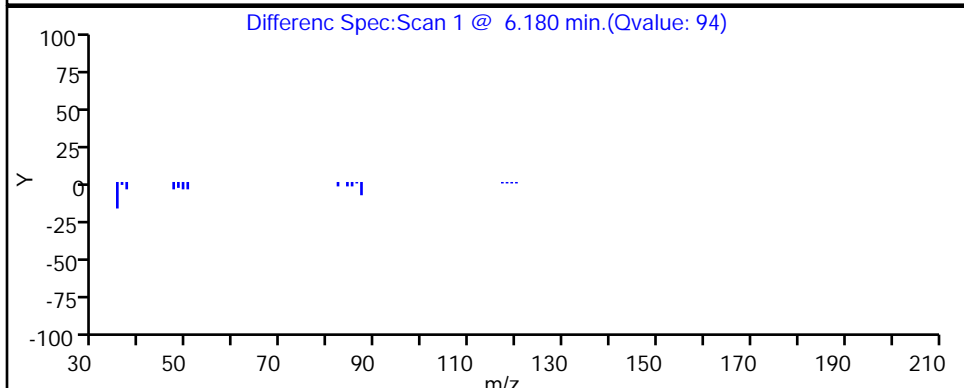
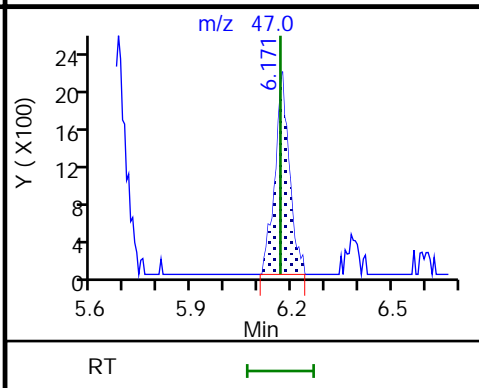
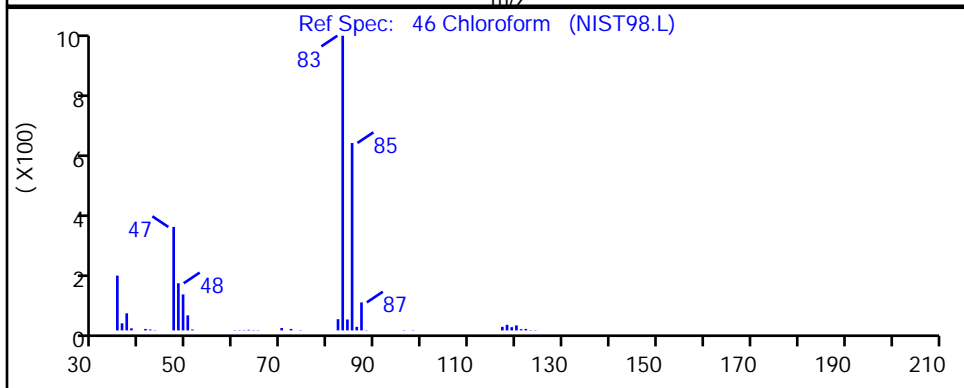
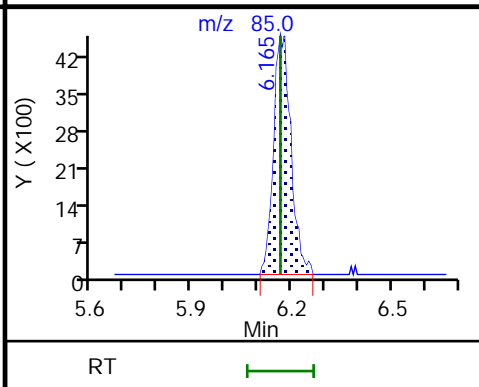
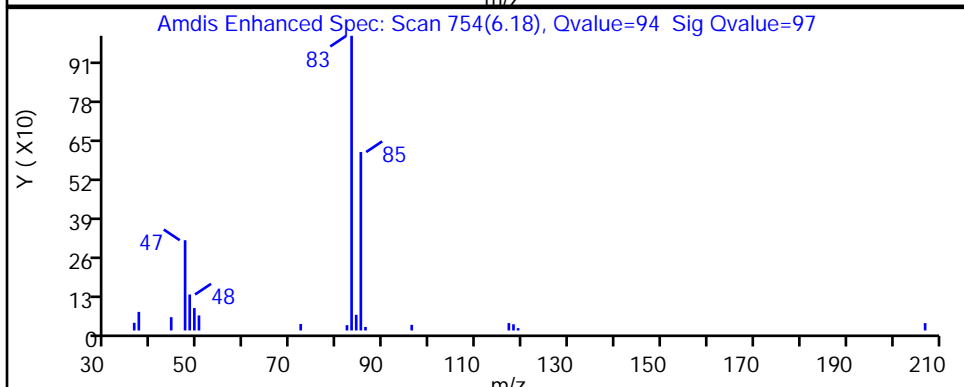
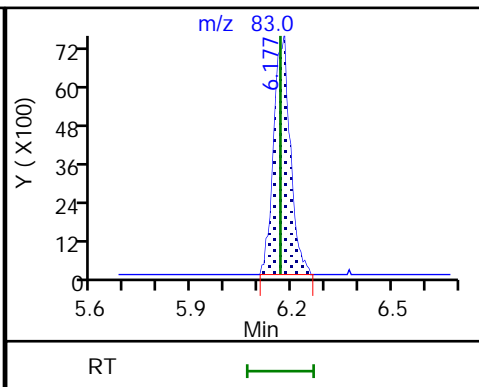
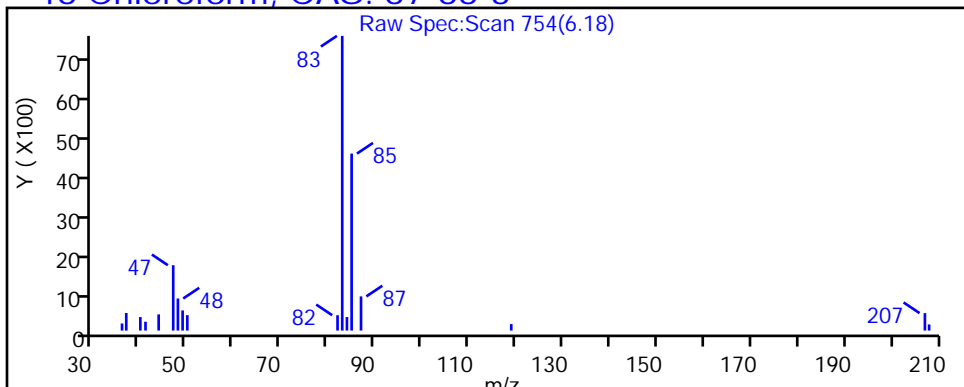
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

46 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X016.D

Injection Date: 06-Jun-2022 16:01:30

Instrument ID: 10193

Lims ID: 410-85437-A-6

Lab Sample ID: 410-85437-6

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

Operator ID: knk41612

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

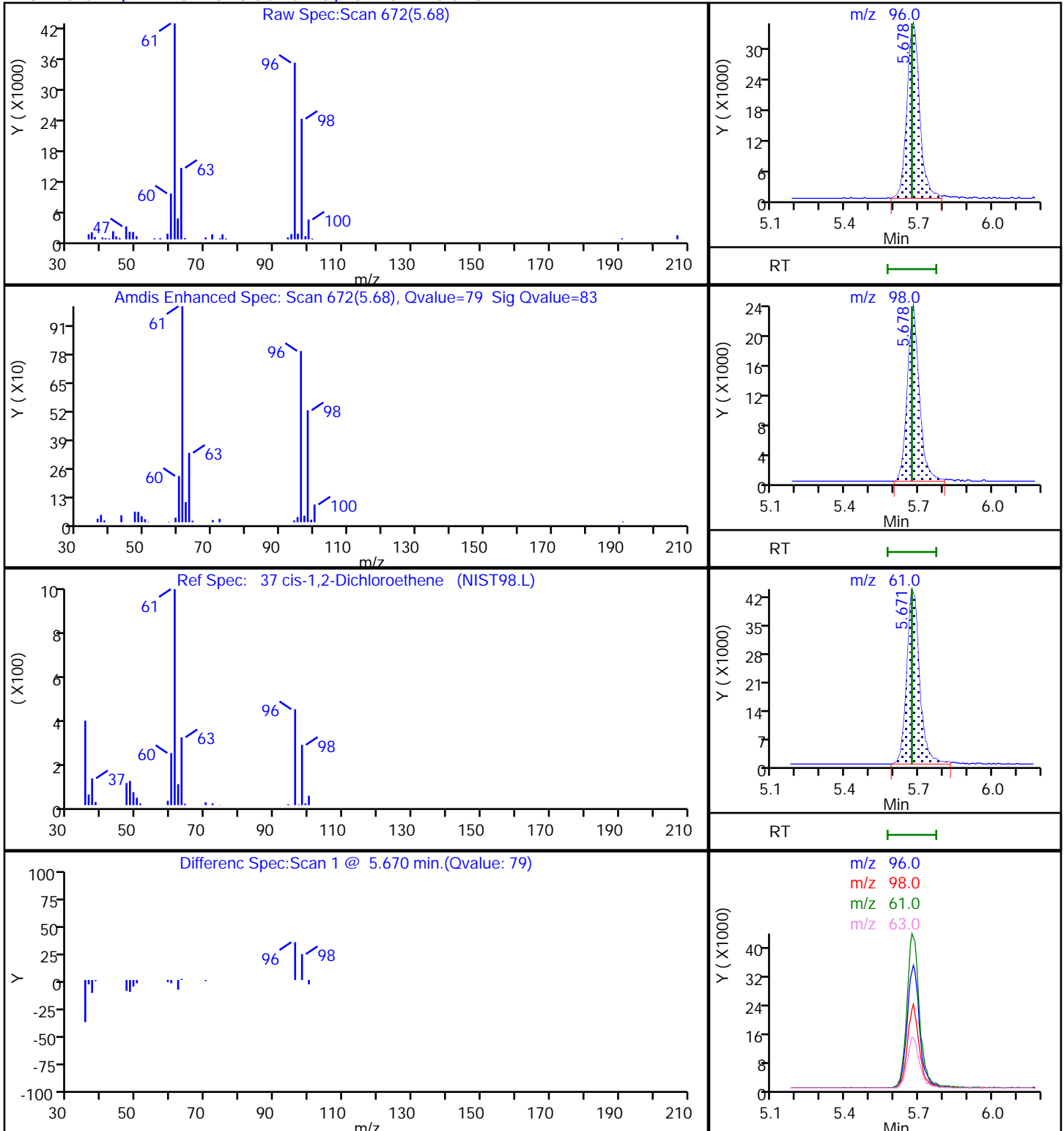
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X016.D

Injection Date: 06-Jun-2022 16:01:30

Instrument ID: 10193

Lims ID: 410-85437-A-6

Lab Sample ID: 410-85437-6

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

Operator ID: knk41612

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

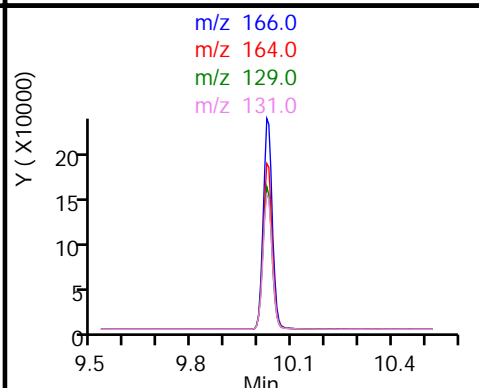
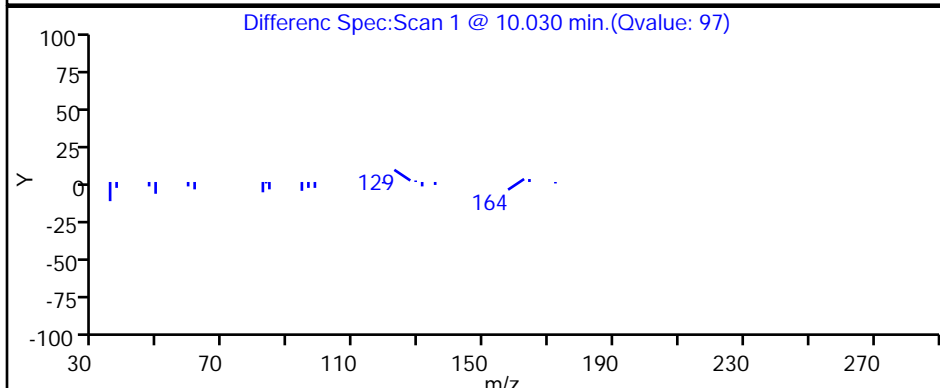
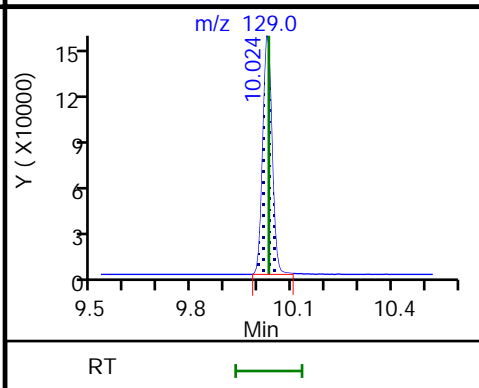
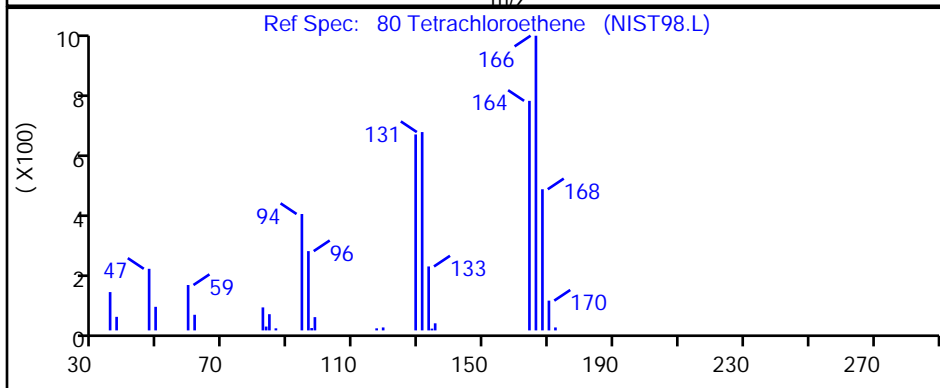
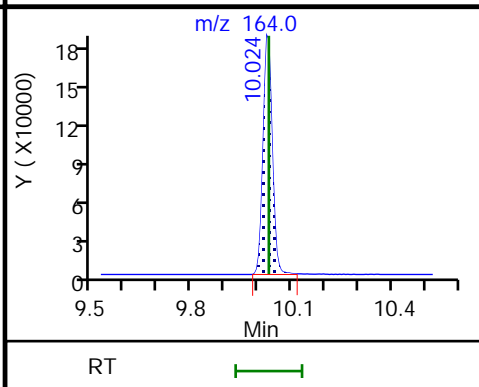
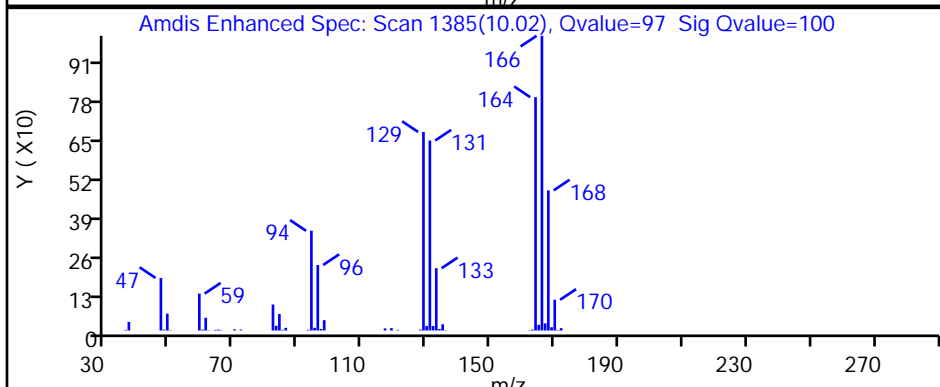
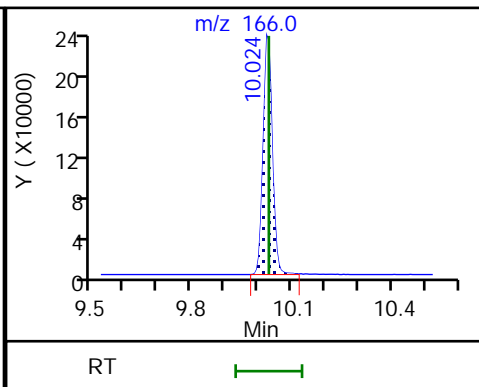
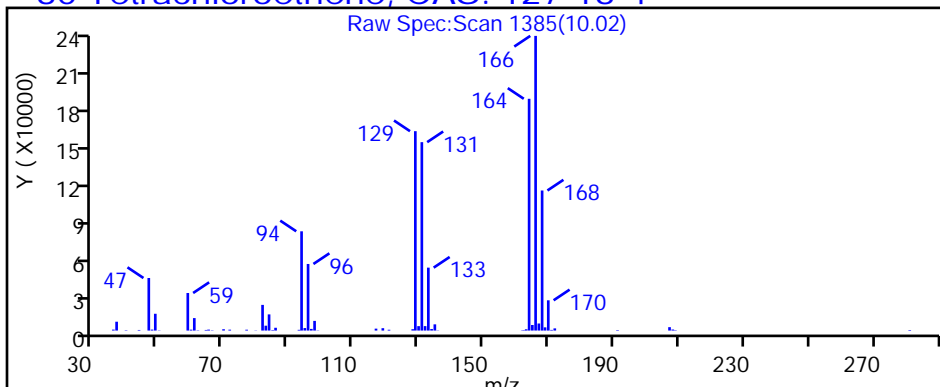
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

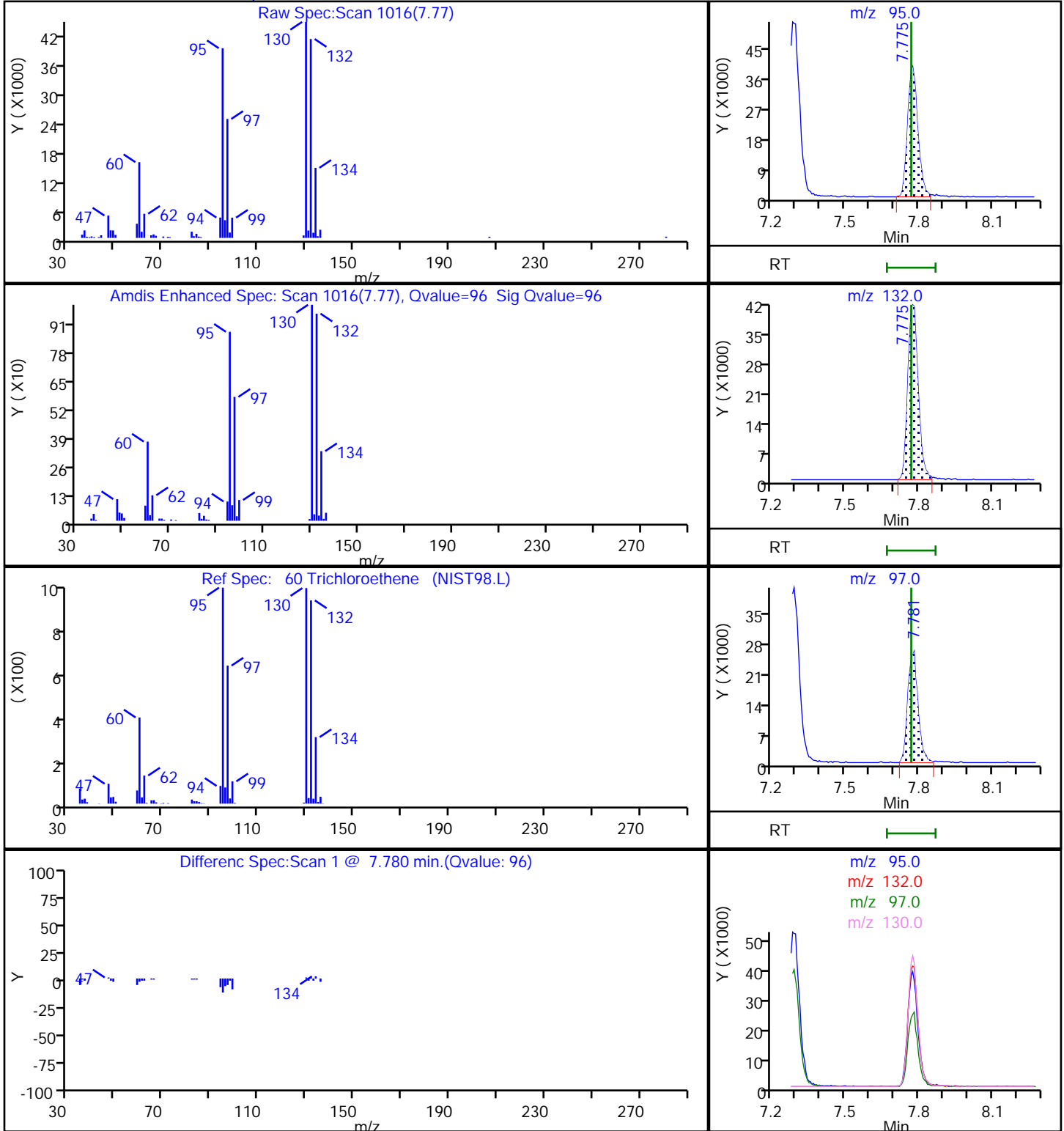
MS Quad

80 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X016.D
Injection Date: 06-Jun-2022 16:01:30 Instrument ID: 10193
Lims ID: 410-85437-A-6 Lab Sample ID: 410-85437-6
Client ID: HD-COD-SW-15-0/1-0
Operator ID: knk41612 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

60 Trichloroethene, CAS: 79-01-6

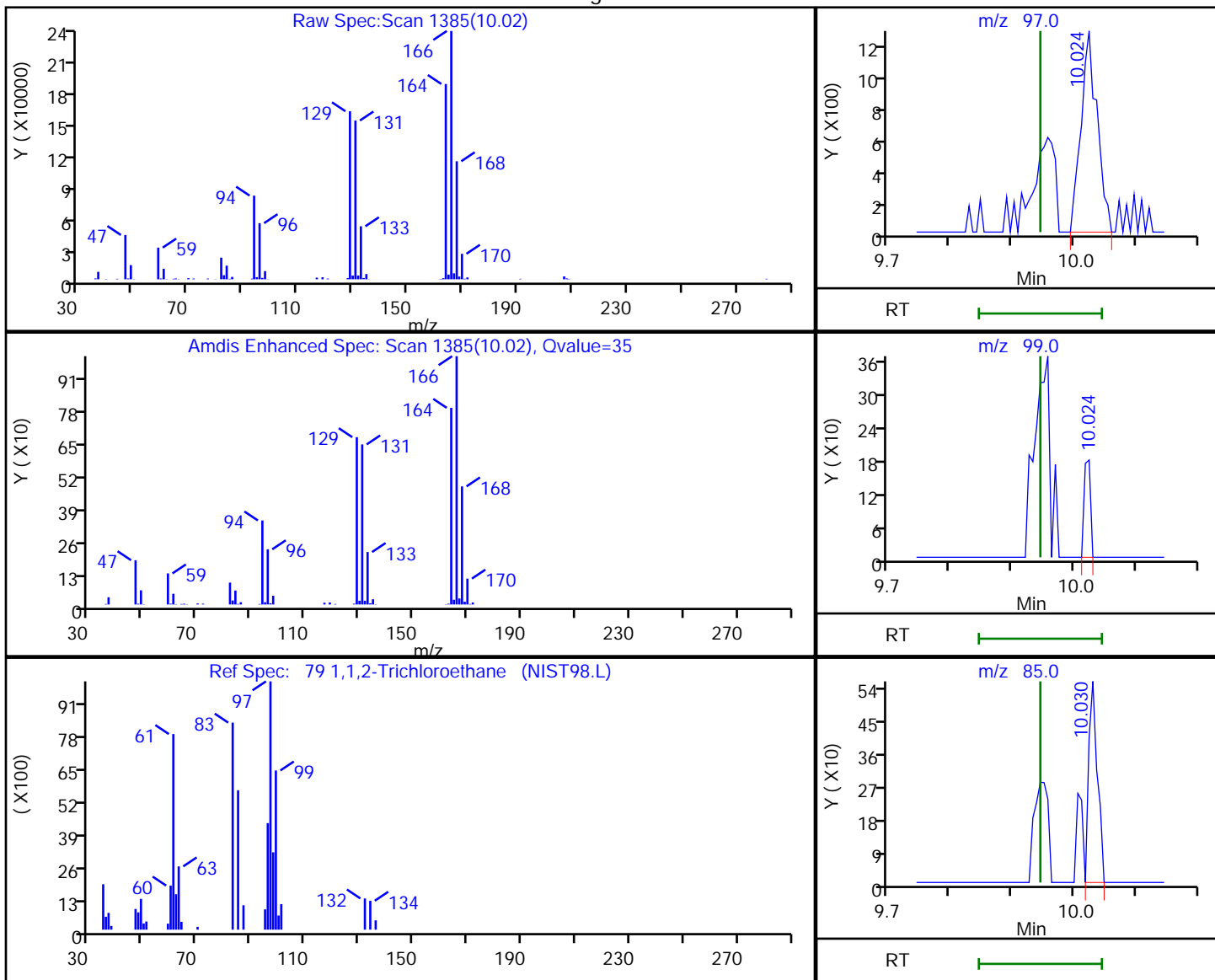


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X016.D
 Injection Date: 06-Jun-2022 16:01:30 Instrument ID: 10193
 Lims ID: 410-85437-A-6 Lab Sample ID: 410-85437-6
 Client ID: HD-COD-SW-15-0/1-0
 Operator ID: knk41612 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
10.02	97.00	2355	0.062563
10.02	99.00	127	
10.03	85.00	544	
10.02	83.00	6537	

Reviewer: johnsons, 06-Jun-2022 22:03:36

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.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-7

Matrix: Water

Lab File ID: CU06X020.D

Analysis Method: 8260D

Date Collected: 05/25/2022 10:25

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 17:30

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.: 261977

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	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.1	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c cn	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	*+	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.086	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.52		0.50	0.060
108-88-3	Toluene	0.092	J	0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-7

Matrix: Water

Lab File ID: CU06X020.D

Analysis Method: 8260D

Date Collected: 05/25/2022 10:25

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 17:30

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.081	J	0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		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\10193\20220603-58749.b\CU06X020.D
 Lims ID: 410-85437-A-7
 Client ID: HD-COD-SW-16-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 17:30:30 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-021
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:06:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50	1.940	1.959	-0.019	63	2589	0.0470	
5 Vinyl chloride	62		2.069				ND	
6 Bromomethane	94		2.355				ND	7
7 Chloroethane	64		2.434				ND	
14 1,1-Dichloroethene	96		3.196				ND	7
16 Acetone	43	3.239	3.227	0.012	88	11741	2.10	
20 Carbon disulfide	76		3.459				ND	7
24 Methylene Chloride	84		3.794				ND	7
* 25 t-Butyl alcohol-d10 (IS)	65	3.830	3.812	0.018	91	122219	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63		4.824				ND	
36 2-Butanone (MEK)	43		5.641				ND	U
37 cis-1,2-Dichloroethene	96	5.702	5.672	0.030	0	4408	0.0859	M
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83	6.171	6.165	0.006	81	3061	0.0365	
48 1,1,1-Trichloroethane	97		6.385				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.385	6.385	0.000	94	417187	10.2	
50 Carbon tetrachloride	117		6.598				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.848	6.848	0.000	70	73562	9.34	
54 Benzene	78		6.873				ND	
55 1,2-Dichloroethane	62		6.946				ND	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1642807	10.0	
60 Trichloroethene	95	7.787	7.769	0.018	94	4251	0.0808	
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1634064	10.1	
75 Toluene	92	9.445	9.445	0.000	97	11399	0.0923	
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.030	10.030	0.000	96	31894	0.5216	
82 2-Hexanone	43		10.183				ND	7
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1316317	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106	11.140	11.140	0.000	98	5233	0.0543	
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	7
93 Styrene	104		11.494				ND	7
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	593136	9.18	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.828	12.829	-0.001	93	780722	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X020.D

Injection Date: 06-Jun-2022 17:30:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-7

Lab Sample ID: 410-85437-7

Worklist Smp#: 21

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 20

Method: MSV_10193_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\10193\20220603-58749.b\CU06X020.D
 Lims ID: 410-85437-A-7
 Client ID: HD-COD-SW-16-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 17:30:30 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-021
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:06:28

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.2	102.04
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.34	93.44
\$ 74 Toluene-d8 (Surr)	10.0	10.1	100.76
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.18	91.83

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X020.D

Injection Date: 06-Jun-2022 17:30:30

Instrument ID: 10193

Lims ID: 410-85437-A-7

Lab Sample ID: 410-85437-7

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

Operator ID: knk41612

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

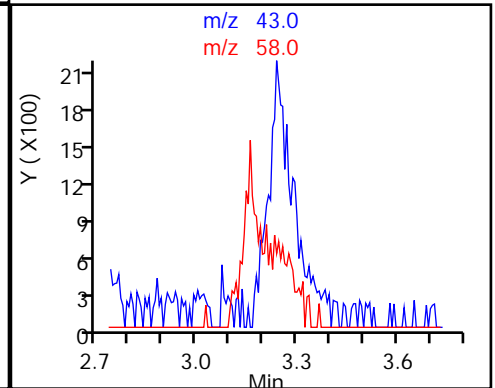
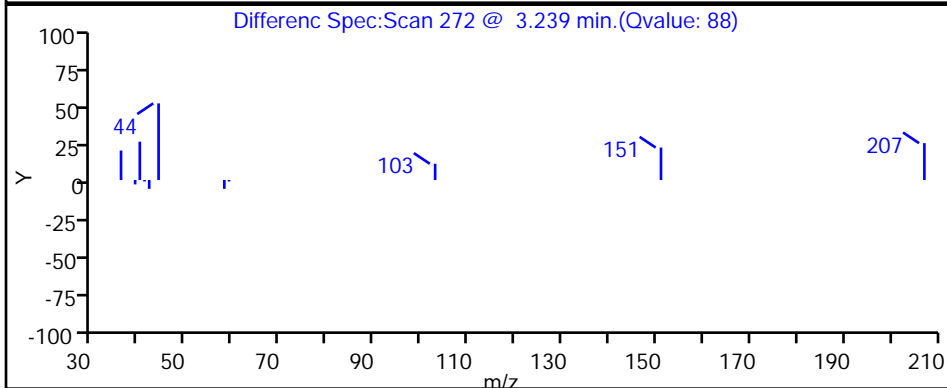
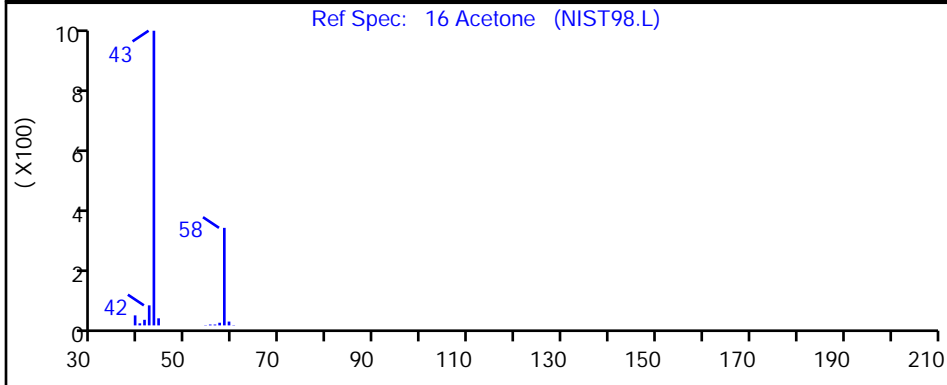
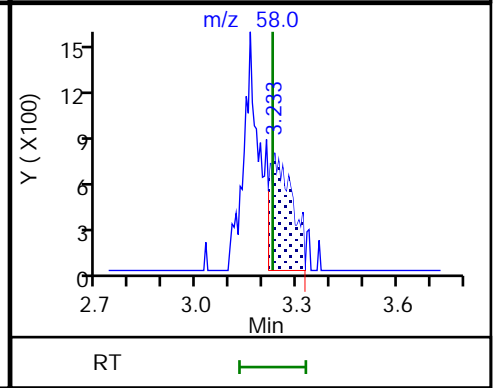
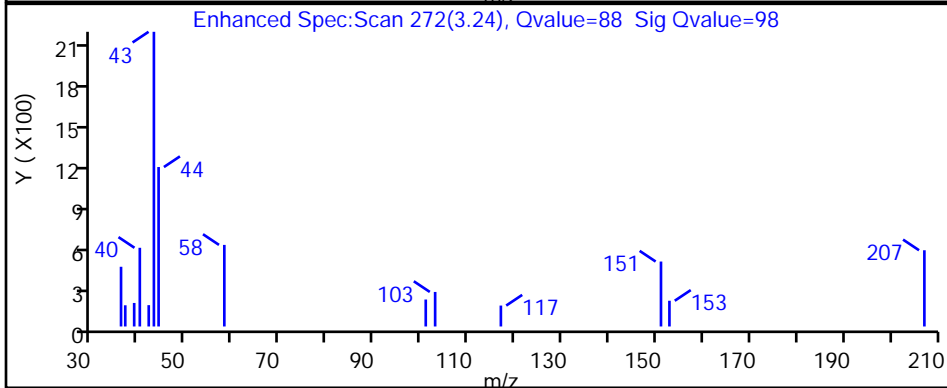
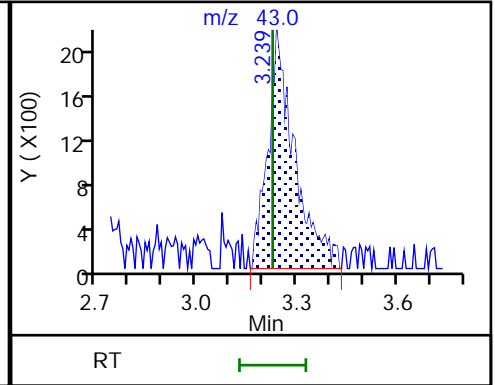
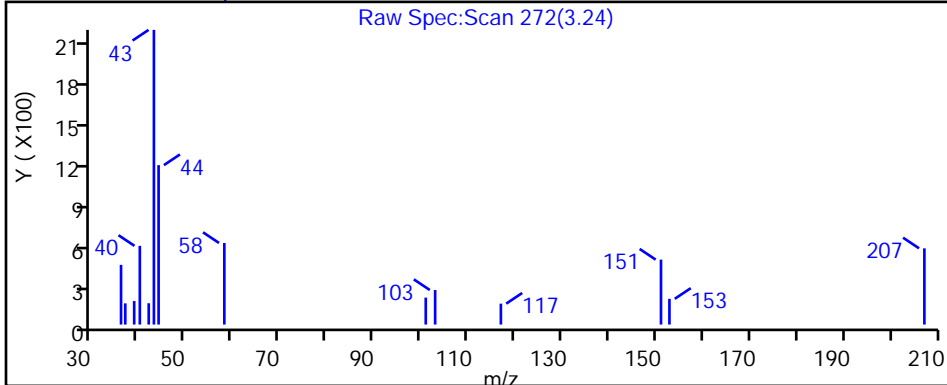
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

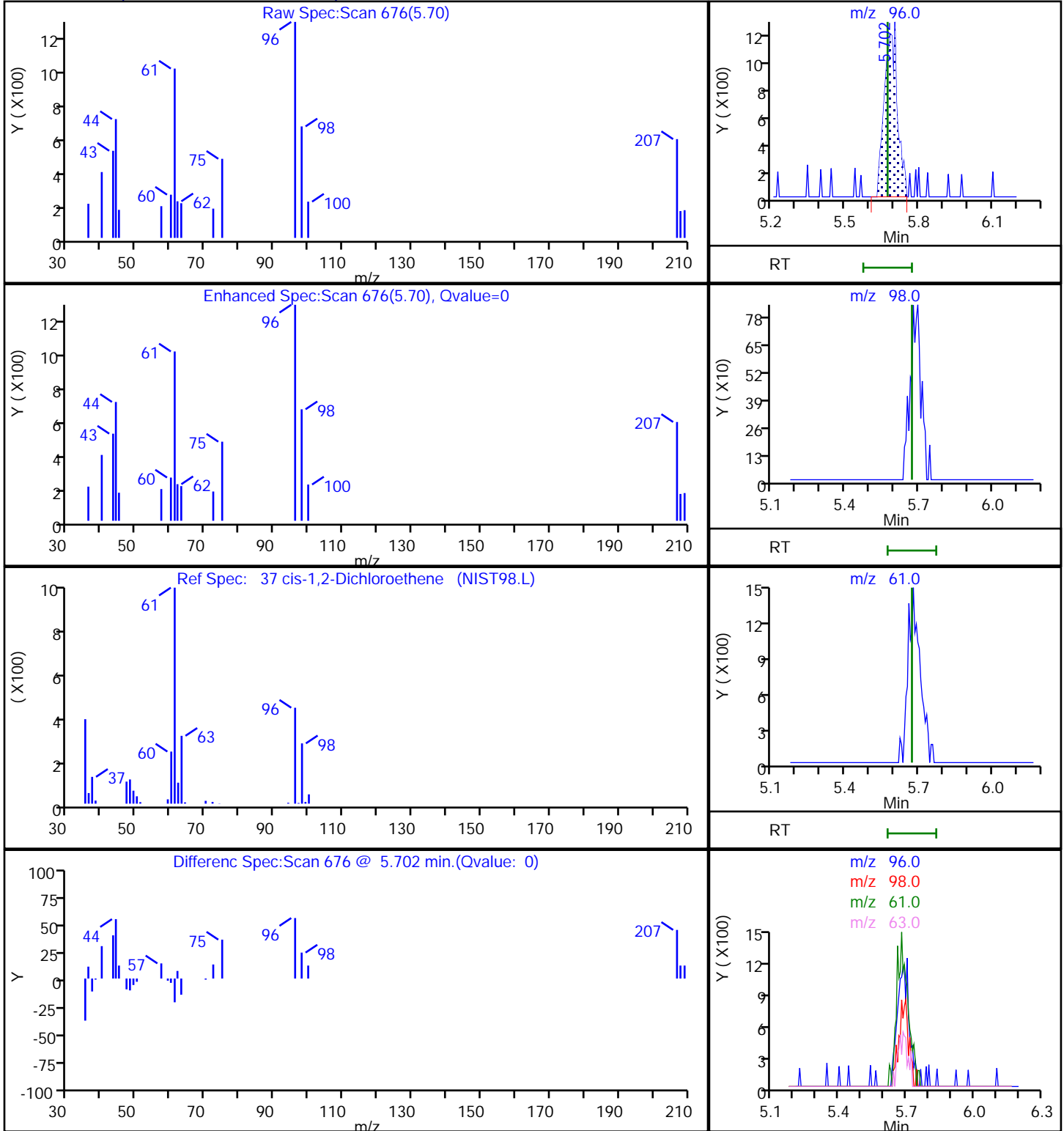
MS Quad

16 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X020.D
Injection Date: 06-Jun-2022 17:30:30 Instrument ID: 10193
Lims ID: 410-85437-A-7 Lab Sample ID: 410-85437-7
Client ID: HD-COD-SW-16-0/1-0
Operator ID: knk41612 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X020.D

Injection Date: 06-Jun-2022 17:30:30

Instrument ID: 10193

Lims ID: 410-85437-A-7

Lab Sample ID: 410-85437-7

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

Operator ID: knk41612

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

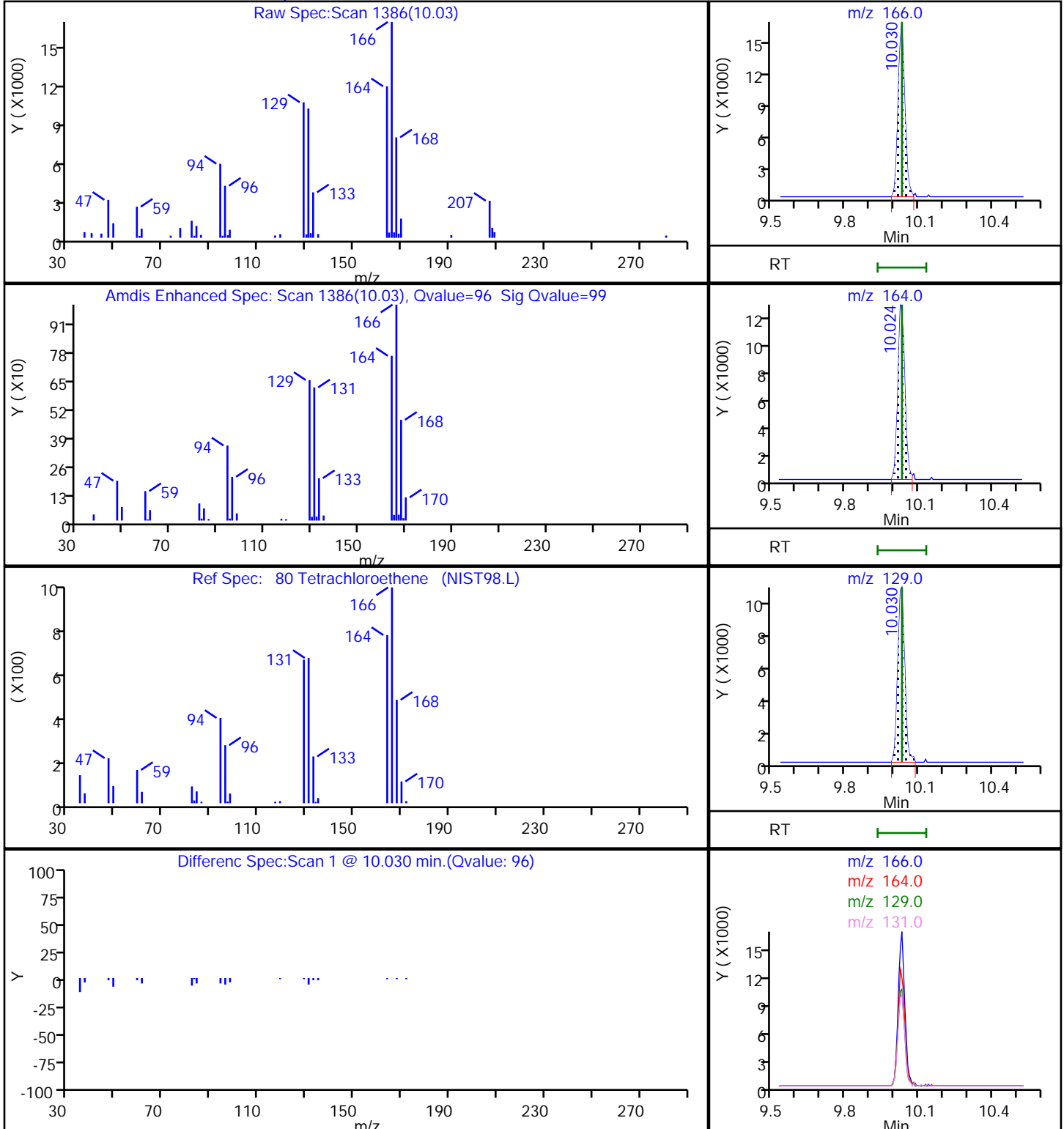
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

80 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X020.D

Injection Date: 06-Jun-2022 17:30:30

Instrument ID: 10193

Lims ID: 410-85437-A-7

Lab Sample ID: 410-85437-7

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

Operator ID: knk41612

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

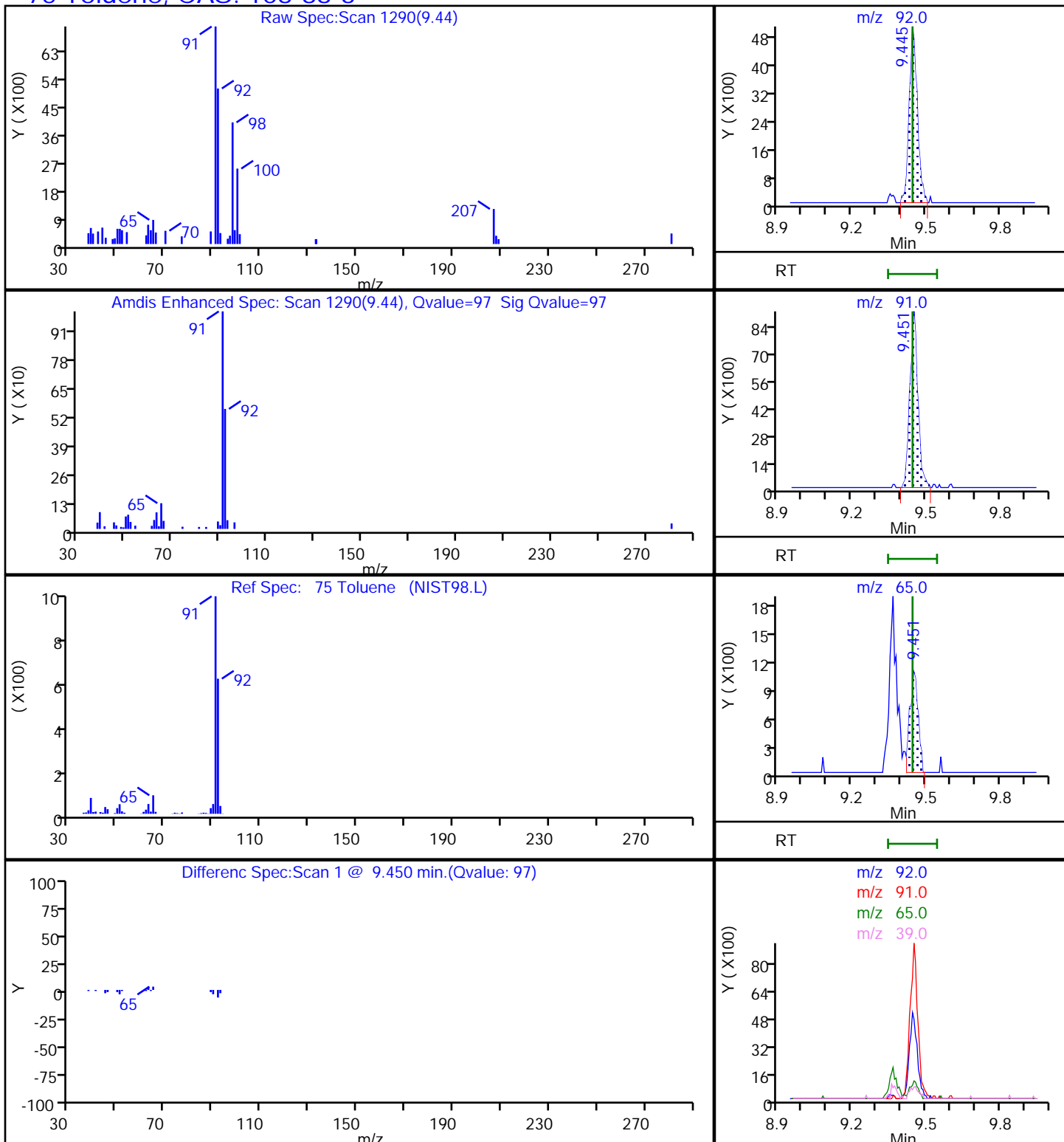
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

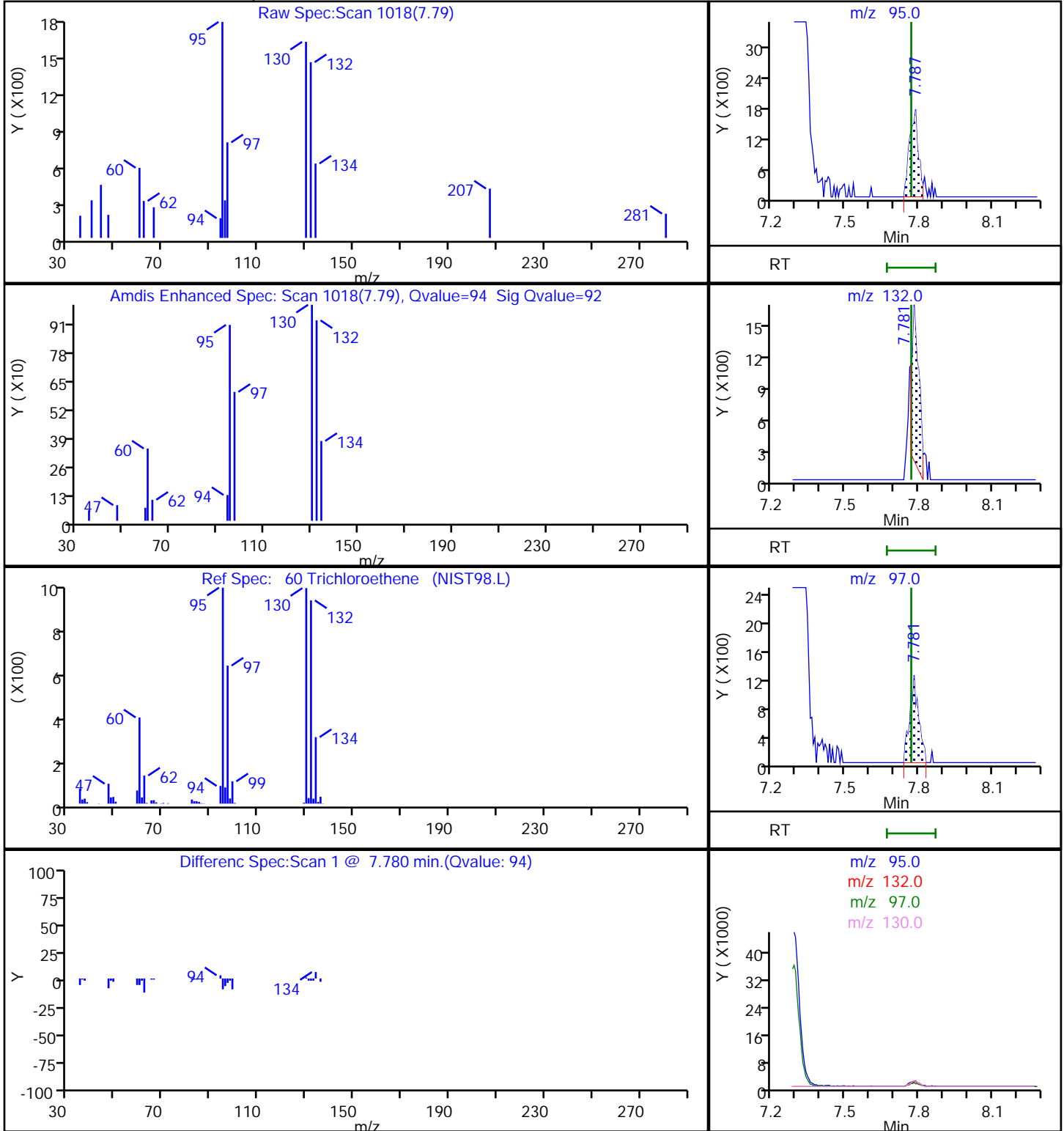
MS Quad

75 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X020.D
Injection Date: 06-Jun-2022 17:30:30 Instrument ID: 10193
Lims ID: 410-85437-A-7 Lab Sample ID: 410-85437-7
Client ID: HD-COD-SW-16-0/1-0
Operator ID: knk41612 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

60 Trichloroethene, CAS: 79-01-6

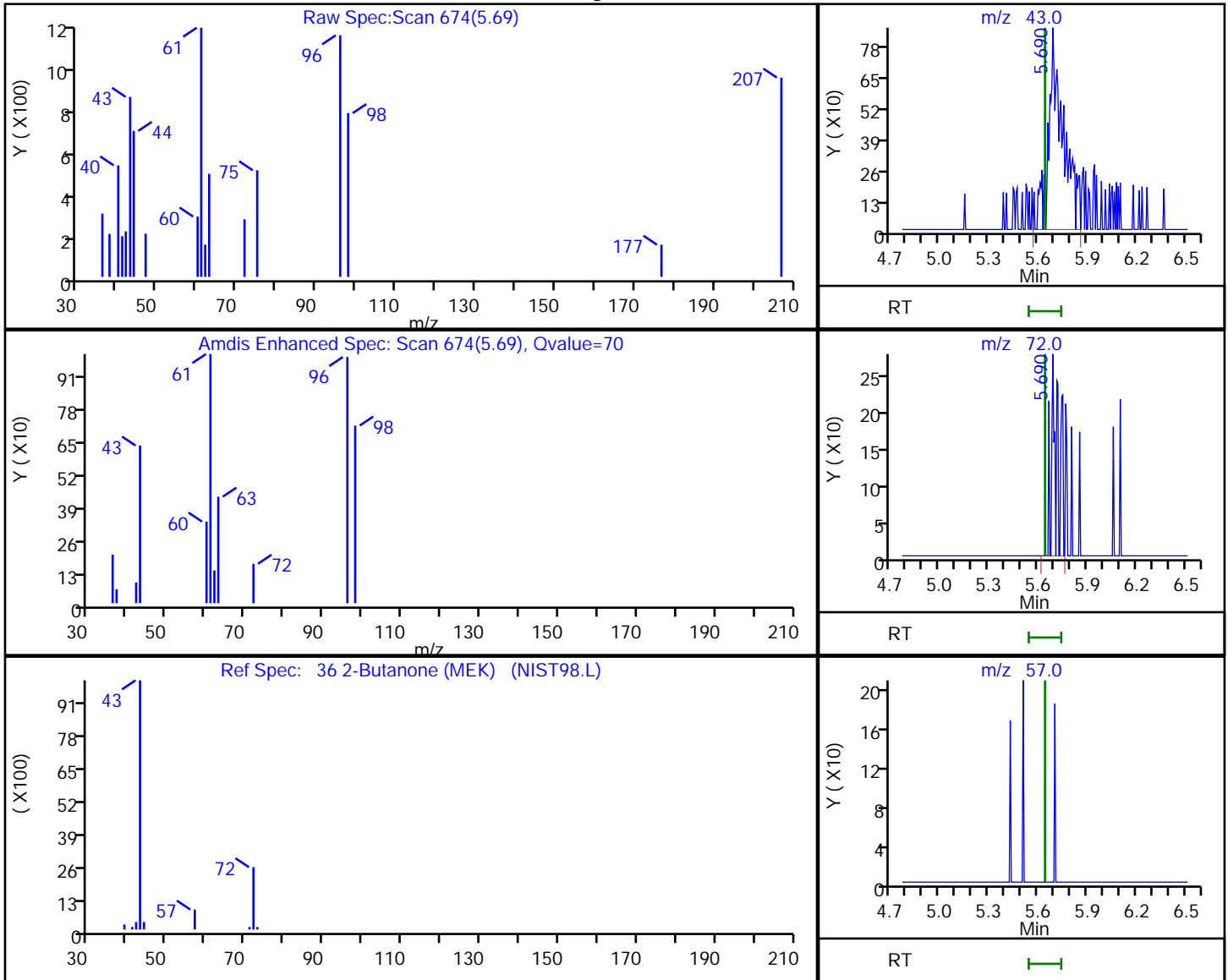


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X020.D
 Injection Date: 06-Jun-2022 17:30:30 Instrument ID: 10193
 Lims ID: 410-85437-A-7 Lab Sample ID: 410-85437-7
 Client ID: HD-COD-SW-16-0/1-0
 Operator ID: knk41612 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
5.69	43.00	5301	0.463280
5.69	72.00	741	
5.64	57.00	0	

Reviewer: johnsons, 06-Jun-2022 22:05:59
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

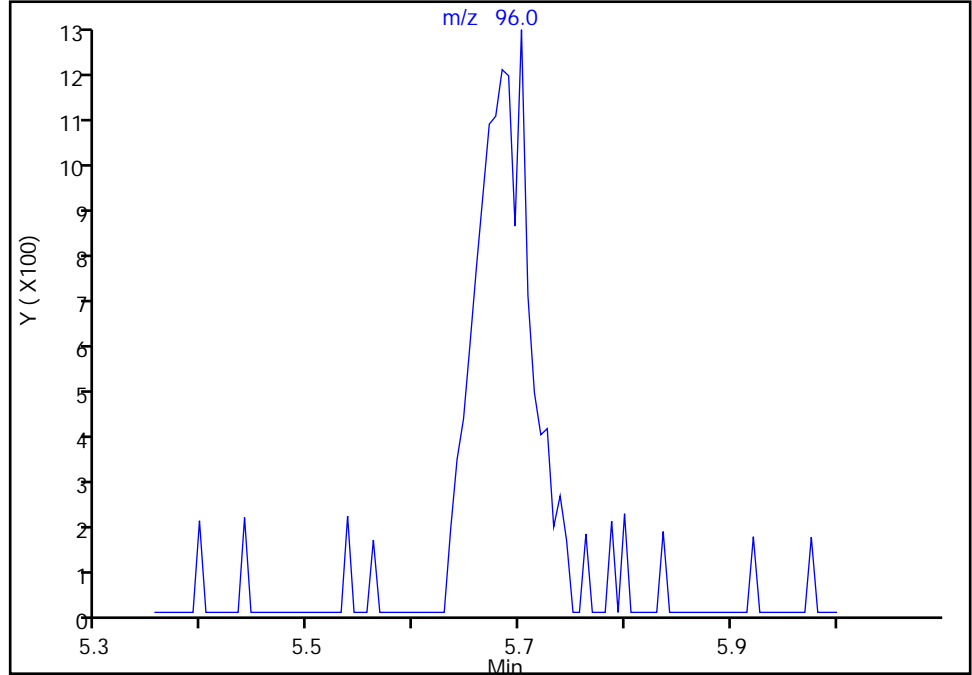
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X020.D
Injection Date: 06-Jun-2022 17:30:30 Instrument ID: 10193
Lims ID: 410-85437-A-7 Lab Sample ID: 410-85437-7
Client ID: HD-COD-SW-16-0/1-0
Operator ID: knk41612 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

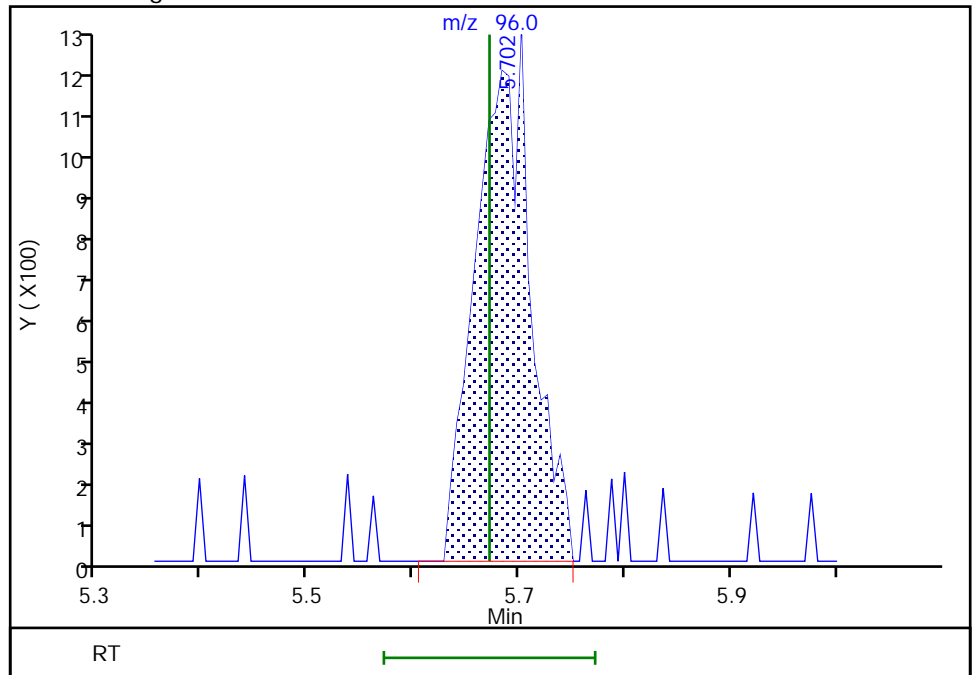
Not Detected
Expected RT: 5.67

Processing Integration Results



Manual Integration Results

RT: 5.70
Area: 4408
Amount: 0.085881
Amount Units: ug/l



Reviewer: johnsons, 06-Jun-2022 22:06:11
Audit Action: Manually Integrated

Audit Reason: Missed Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-8

Matrix: Water

Lab File ID: CU06X021.D

Analysis Method: 8260D

Date Collected: 05/25/2022 10:35

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 17:52

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.: 261977

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	2.8		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	0.58		0.50	0.070
75-35-4	1,1-Dichloroethene	0.27	J	0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.0	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c cn	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.10	J	0.50	0.090
74-87-3	Chloromethane	ND	*+	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	3.4		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-85437-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-85437-8

Matrix: Water Lab File ID: CU06X021.D

Analysis Method: 8260D Date Collected: 05/25/2022 10:35

Sample wt/vol: 25 (mL) Date Analyzed: 06/06/2022 17:52

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.: 261977 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	2.4		0.50	0.060
75-01-4	Vinyl chloride	0.18	J	0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		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\10193\20220603-58749.b\CU06X021.D
 Lims ID: 410-85437-A-8
 Client ID: HD-COD-SW-17-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 17:52:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-022
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:07:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50	1.934	1.959	-0.025	1	2287	0.0399	
5 Vinyl chloride	62	2.062	2.069	-0.007	97	10775	0.1770	
6 Bromomethane	94		2.355				ND	7
7 Chloroethane	64		2.434				ND	7
14 1,1-Dichloroethene	96	3.196	3.196	0.000	98	11469	0.2682	
16 Acetone	43	3.233	3.227	0.006	94	10072	2.04	
20 Carbon disulfide	76		3.459				ND	7
24 Methylene Chloride	84		3.794				ND	7
* 25 t-Butyl alcohol-d10 (IS)	65	3.830	3.812	0.018	90	108136	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	7
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63	4.818	4.824	-0.006	96	49100	0.5849	
36 2-Butanone (MEK)	43		5.641				ND	7
37 cis-1,2-Dichloroethene	96	5.671	5.672	-0.001	77	181219	3.39	
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83	6.165	6.165	0.000	93	8844	0.1014	
48 1,1,1-Trichloroethane	97	6.385	6.385	0.000	63	220599	2.77	
\$ 47 Dibromofluoromethane (Surr)	113	6.379	6.385	-0.006	95	417308	9.81	
50 Carbon tetrachloride	117		6.598				ND	7
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.842	6.848	-0.006	48	78362	9.57	
54 Benzene	78		6.873				ND	
55 1,2-Dichloroethane	62		6.946				ND	
* 57 Fluorobenzene (IS)	96	7.281	7.287	-0.006	99	1709493	10.0	
60 Trichloroethene	95	7.775	7.769	0.006	96	129390	2.36	
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1785861	10.5	
75 Toluene	92	9.445	9.445	0.000	98	5516	0.0426	
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.024	10.030	-0.006	98	2345735	36.6	E
82 2-Hexanone	43		10.183				ND	7
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1380702	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106		11.140				ND	7
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	7
93 Styrene	104		11.494				ND	7
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	98	612022	9.03	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.829	12.829	0.000	93	806079	10.0	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X021.D

Injection Date: 06-Jun-2022 17:52:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-8

Lab Sample ID: 410-85437-8

Worklist Smp#: 22

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

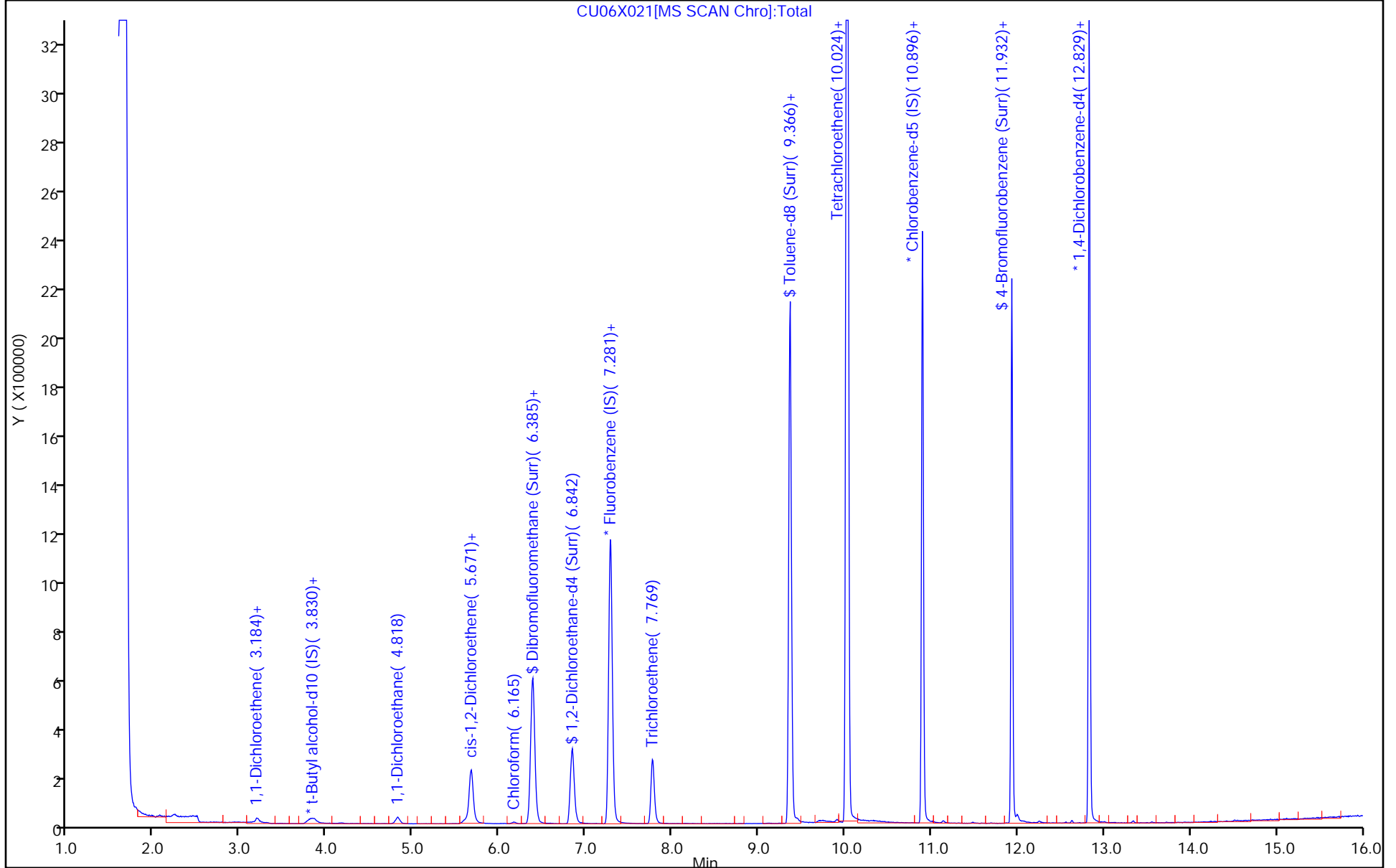
ALS Bottle#: 21

Method: MSV_10193_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\10193\20220603-58749.b\CU06X021.D
 Lims ID: 410-85437-A-8
 Client ID: HD-COD-SW-17-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 17:52:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-022
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

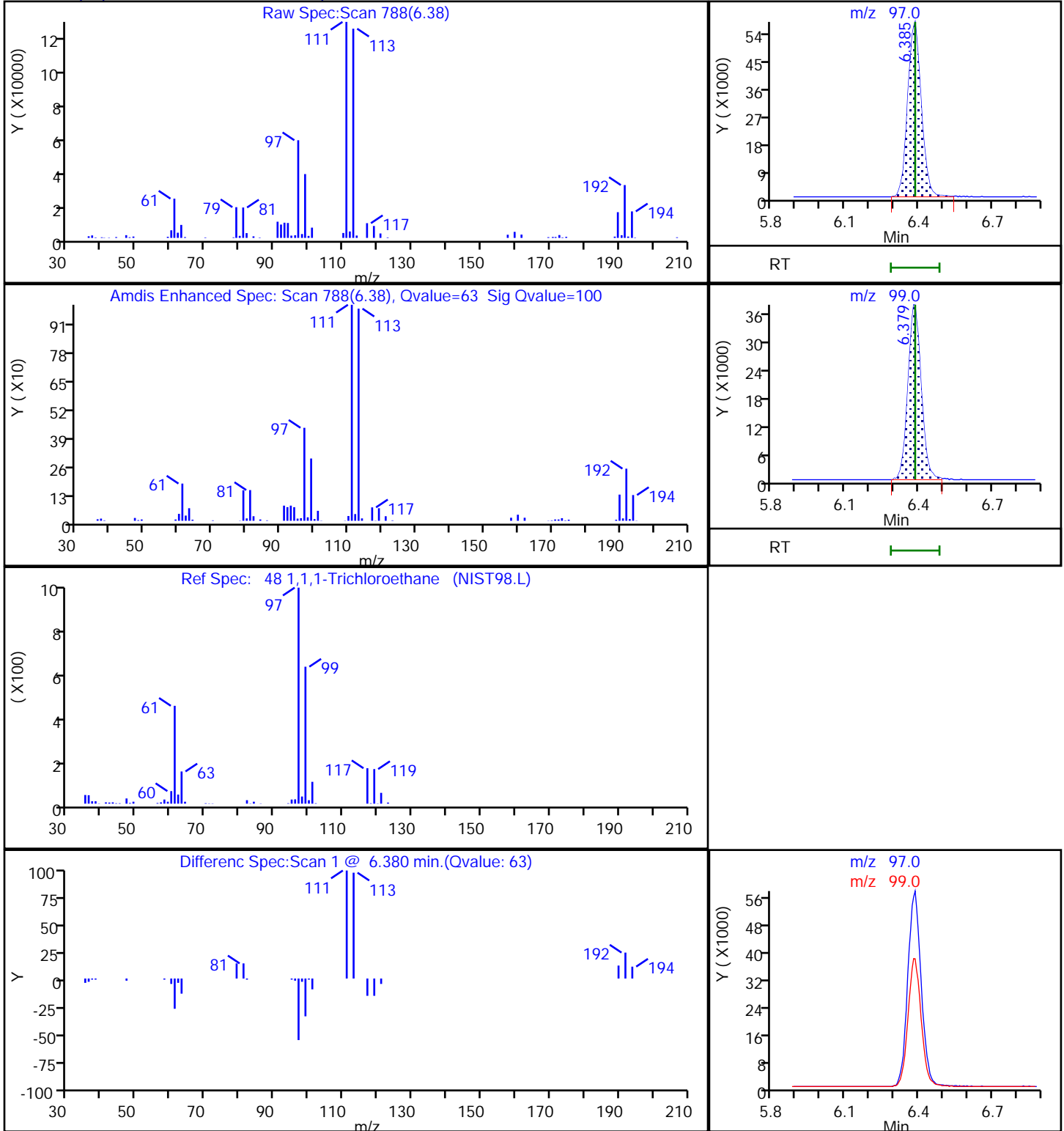
First Level Reviewer: johnsons

Date: 06-Jun-2022 22:07:13

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.81	98.09
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.57	95.65
\$ 74 Toluene-d8 (Surr)	10.0	10.5	104.98
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.03	90.33

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X021.D
Injection Date: 06-Jun-2022 17:52:30 Instrument ID: 10193
Lims ID: 410-85437-A-8 Lab Sample ID: 410-85437-8
Client ID: HD-COD-SW-17-0/1-0
Operator ID: knk41612 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

48 1,1,1-Trichloroethane, CAS: 71-55-6



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X021.D

Injection Date: 06-Jun-2022 17:52:30

Instrument ID: 10193

Lims ID: 410-85437-A-8

Lab Sample ID: 410-85437-8

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

Operator ID: knk41612

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

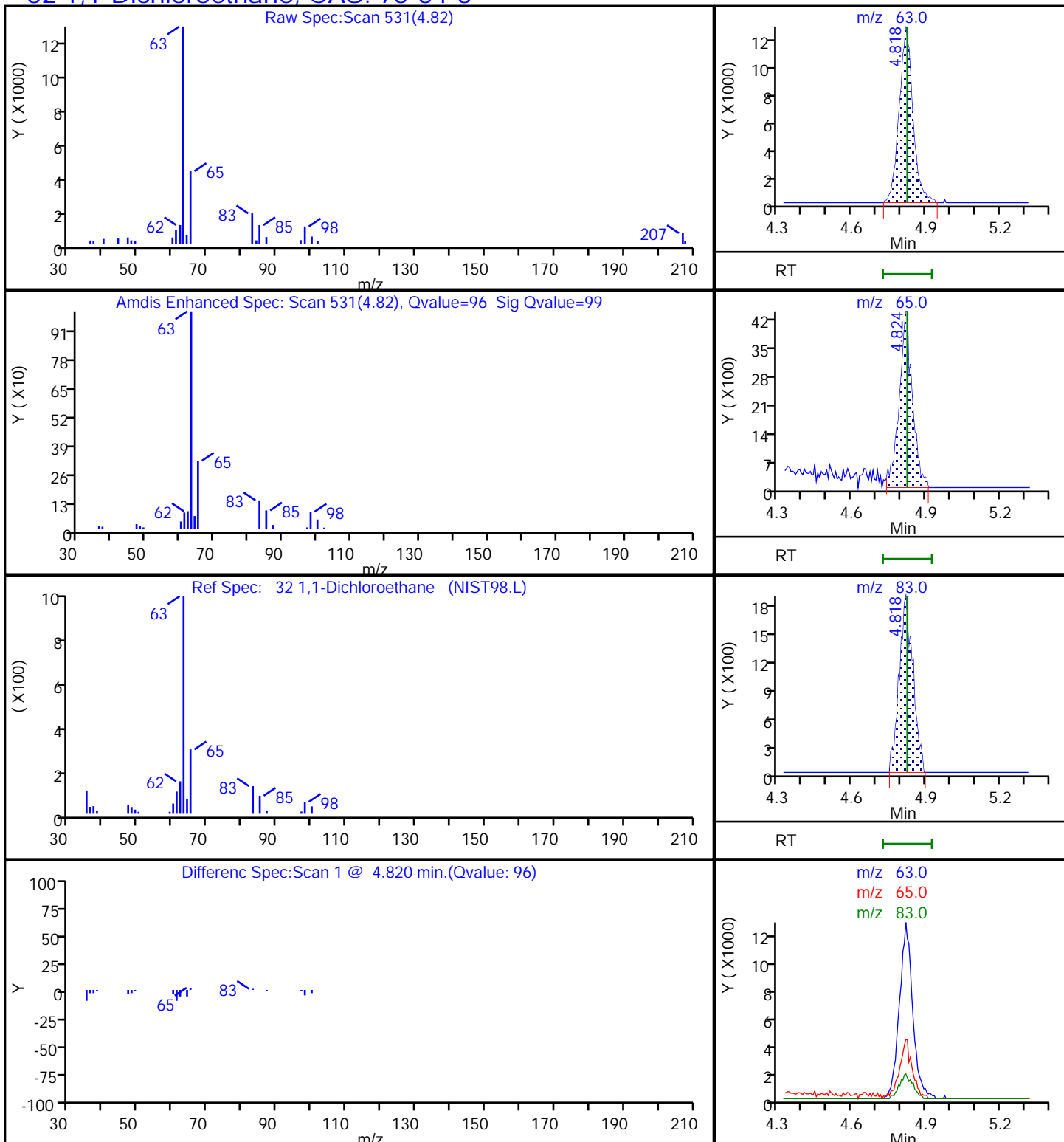
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

32 1,1-Dichloroethane, CAS: 75-34-3



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X021.D

Injection Date: 06-Jun-2022 17:52:30

Instrument ID: 10193

Lims ID: 410-85437-A-8

Lab Sample ID: 410-85437-8

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

Operator ID: knk41612

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

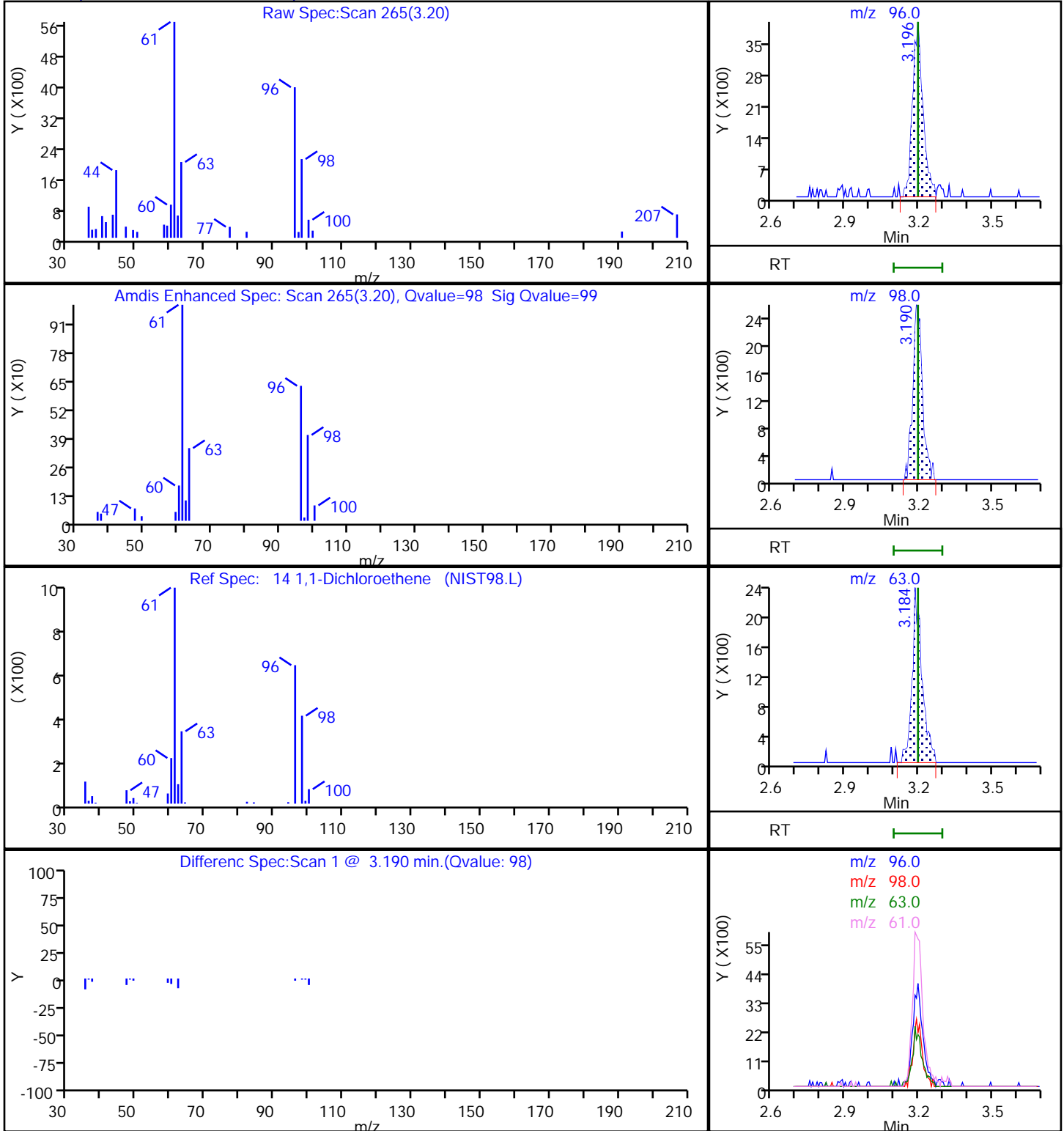
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

14 1,1-Dichloroethene, CAS: 75-35-4



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X021.D

Injection Date: 06-Jun-2022 17:52:30

Instrument ID: 10193

Lims ID: 410-85437-A-8

Lab Sample ID: 410-85437-8

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

Operator ID: knk41612

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

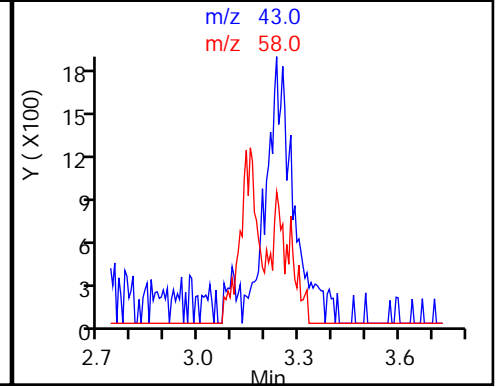
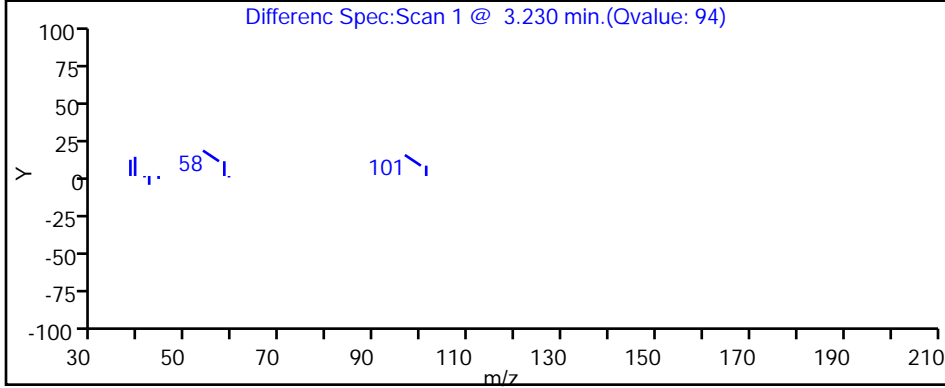
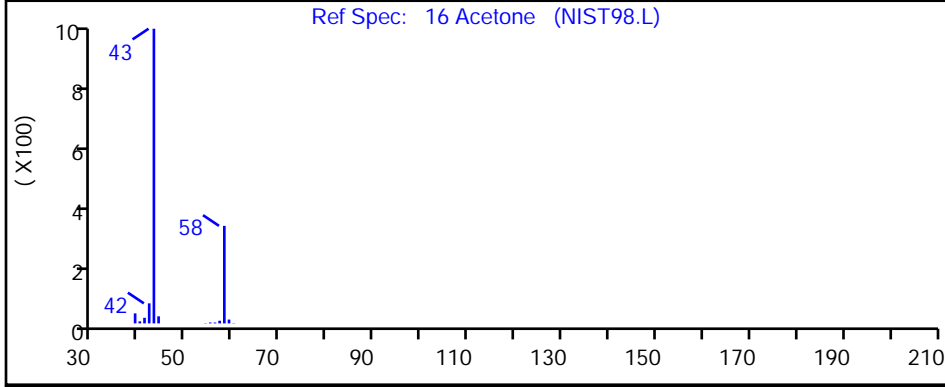
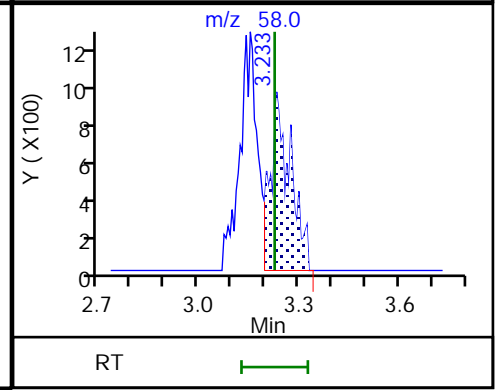
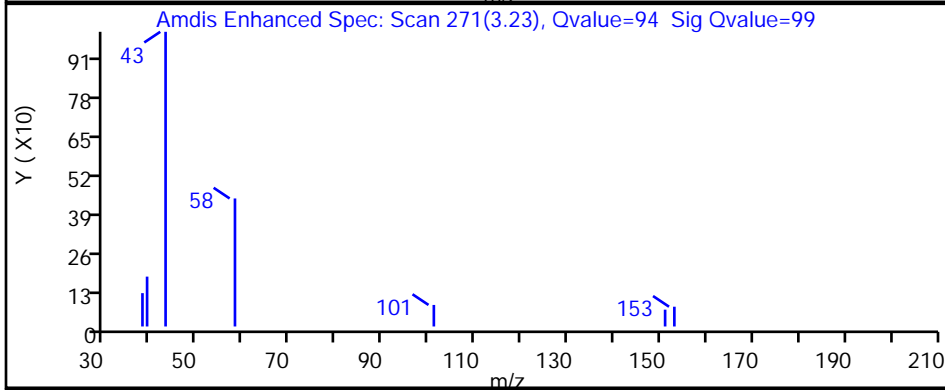
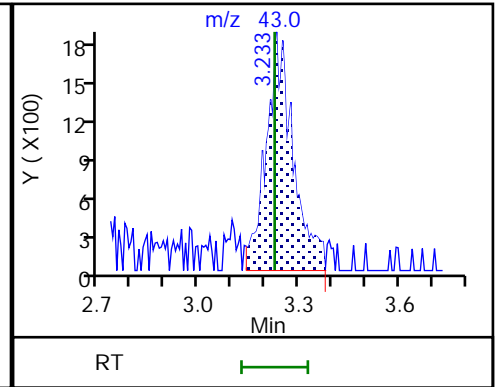
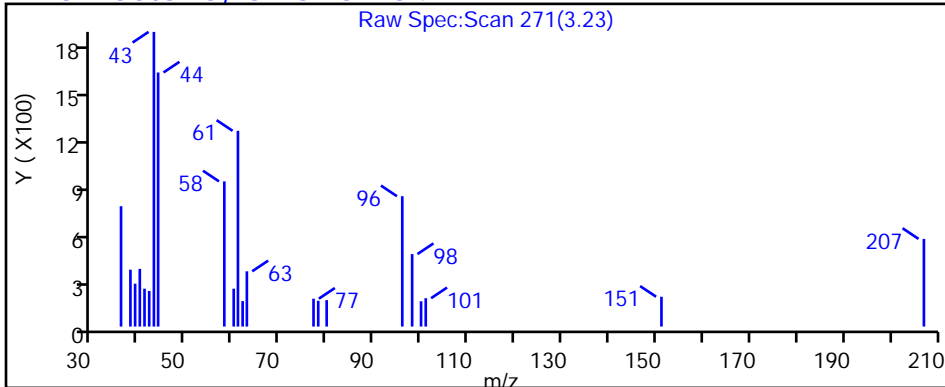
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

16 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X021.D

Injection Date: 06-Jun-2022 17:52:30

Instrument ID: 10193

Lims ID: 410-85437-A-8

Lab Sample ID: 410-85437-8

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

Operator ID: knk41612

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

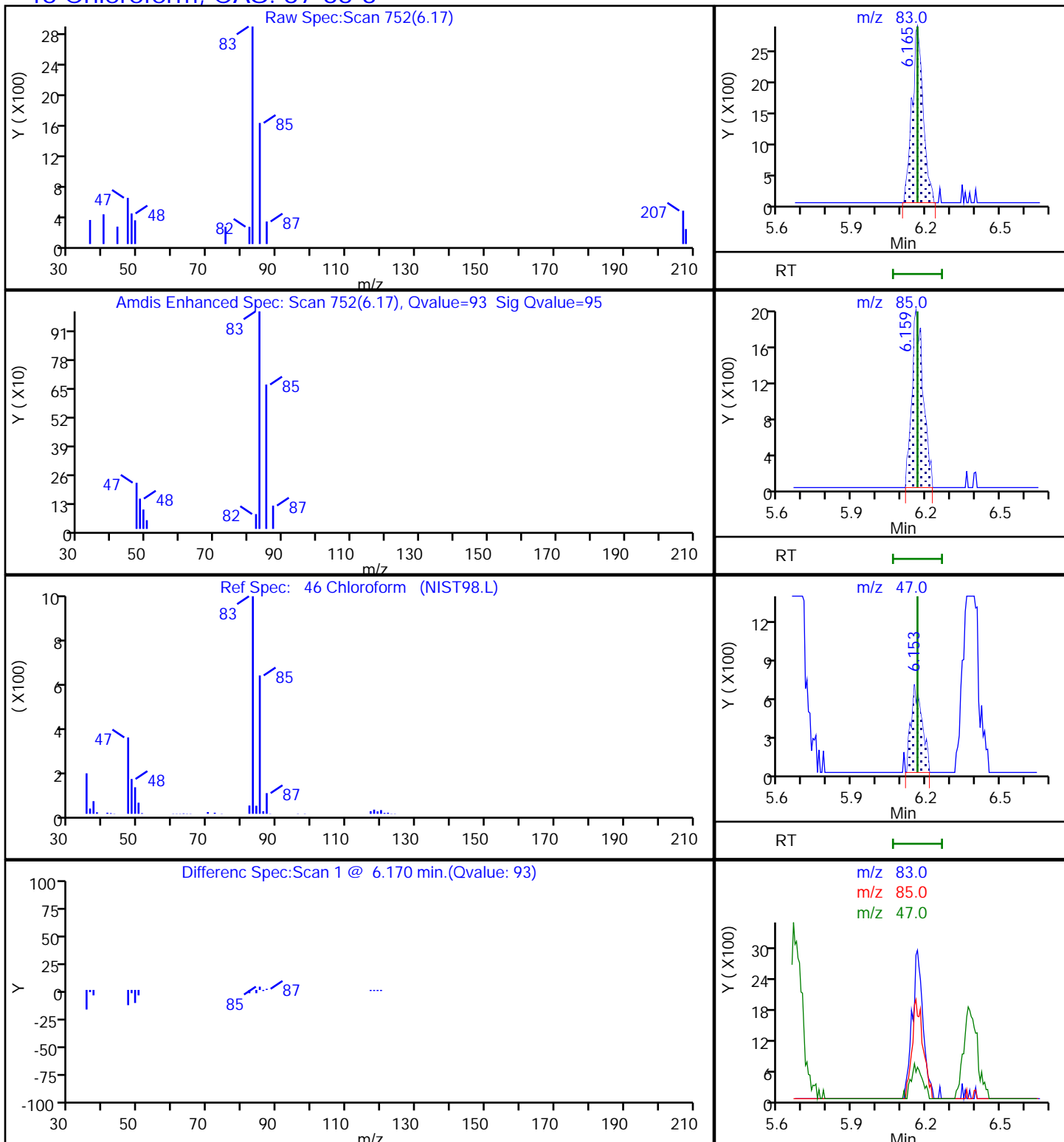
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

46 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X021.D

Injection Date: 06-Jun-2022 17:52:30

Instrument ID: 10193

Lims ID: 410-85437-A-8

Lab Sample ID: 410-85437-8

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

Operator ID: knk41612

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

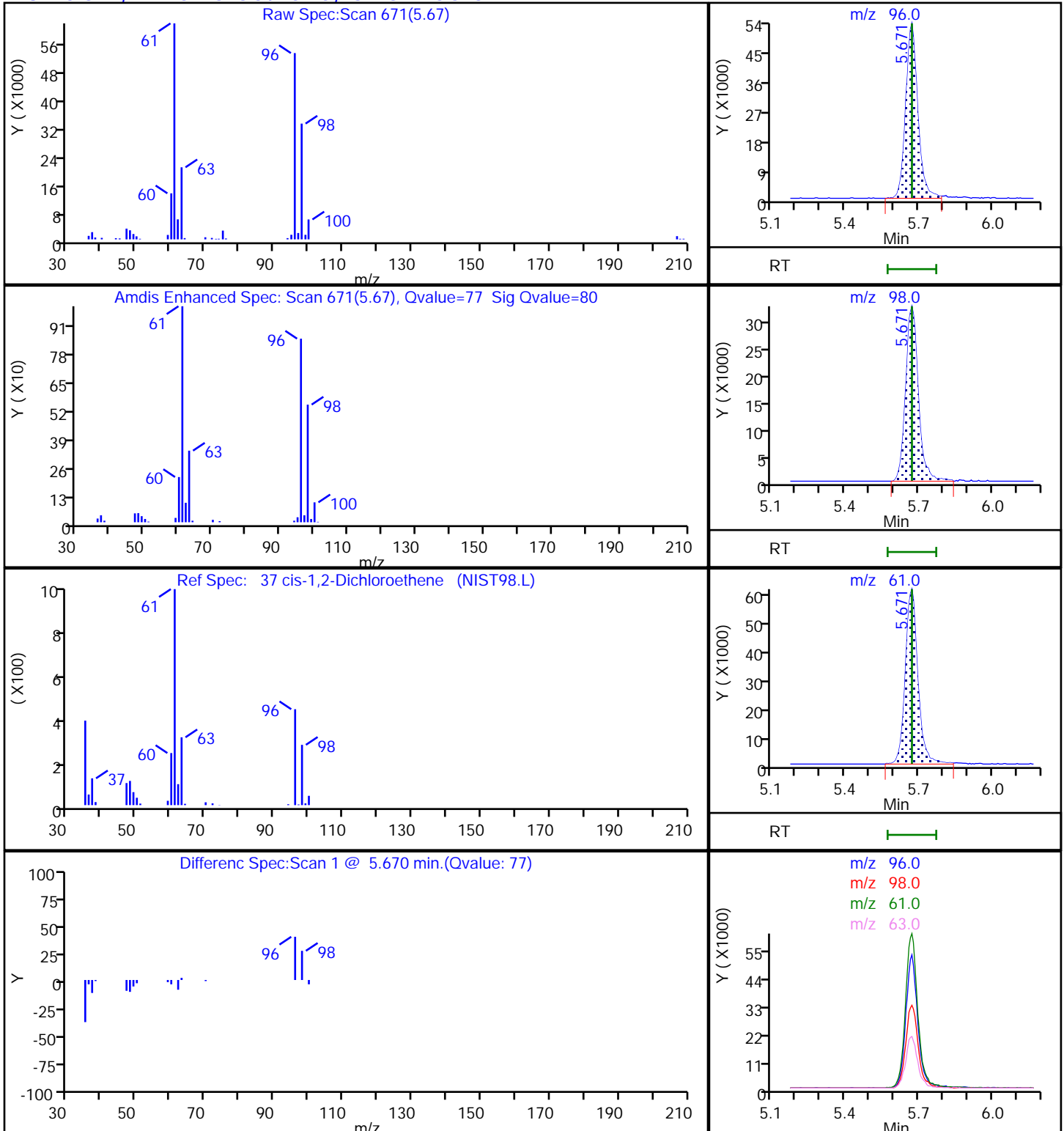
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

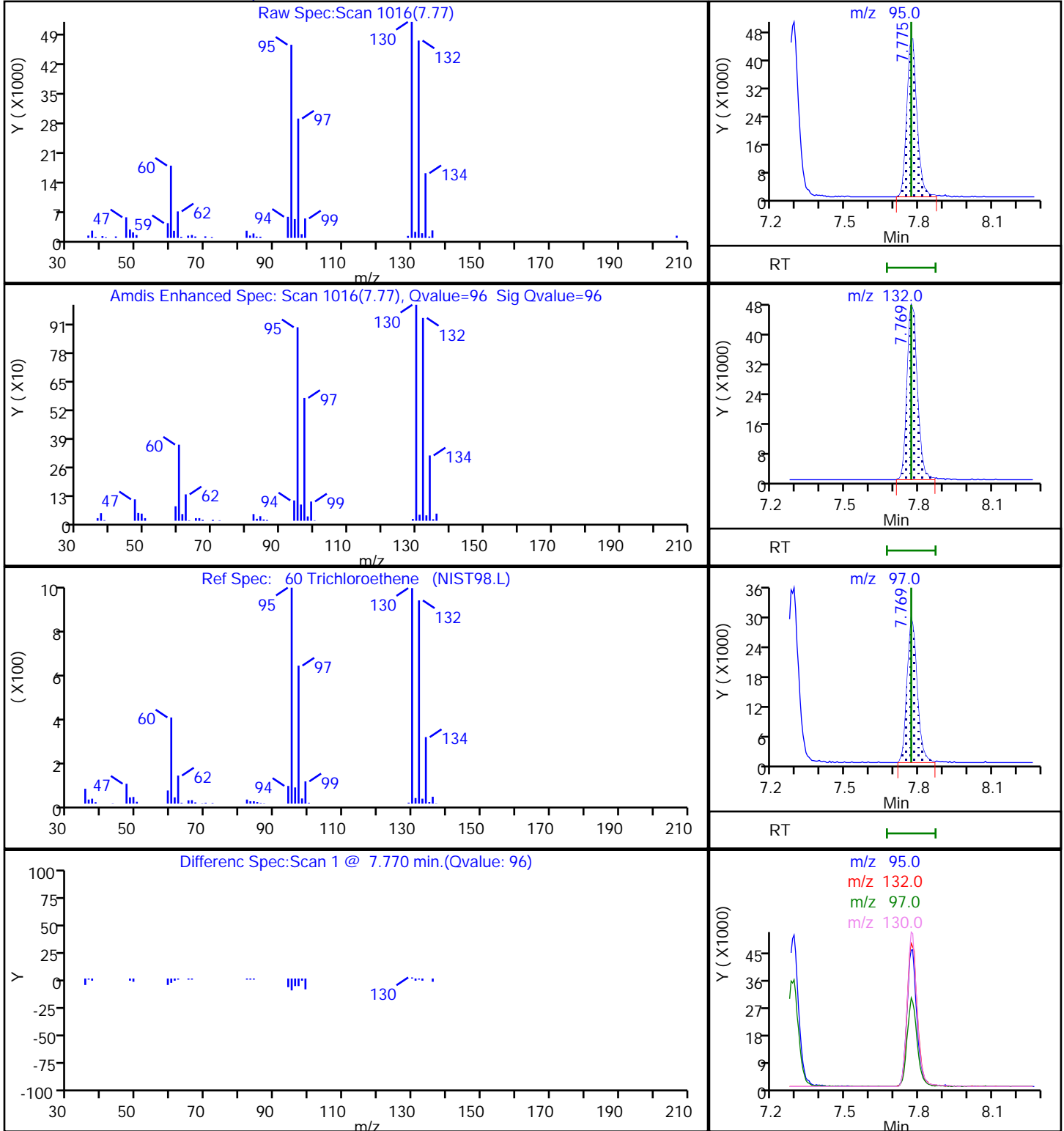
MS Quad

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



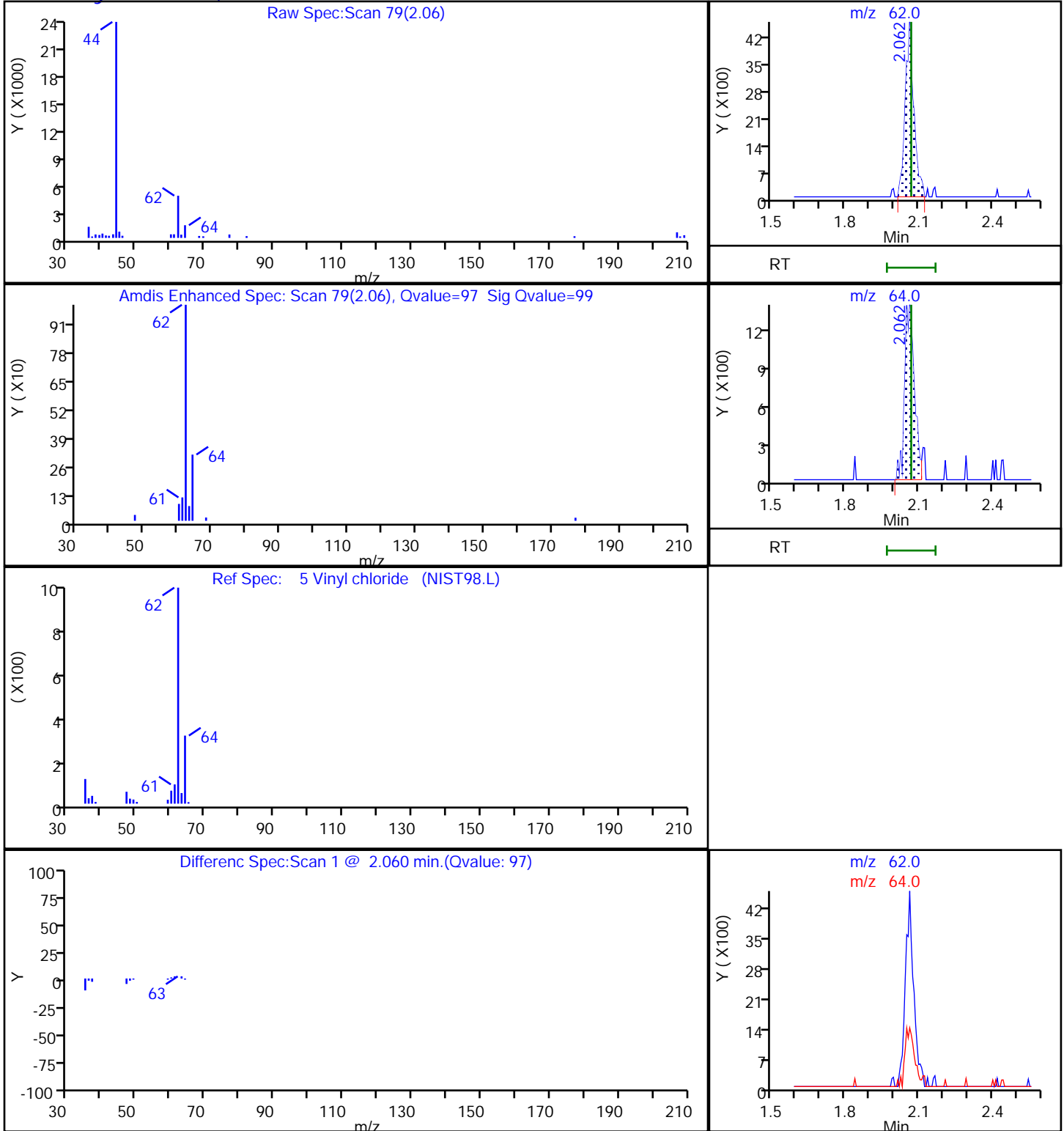
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X021.D
Injection Date: 06-Jun-2022 17:52:30 Instrument ID: 10193
Lims ID: 410-85437-A-8 Lab Sample ID: 410-85437-8
Client ID: HD-COD-SW-17-0/1-0
Operator ID: knk41612 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

60 Trichloroethene, CAS: 79-01-6



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X021.D
Injection Date: 06-Jun-2022 17:52:30 Instrument ID: 10193
Lims ID: 410-85437-A-8 Lab Sample ID: 410-85437-8
Client ID: HD-COD-SW-17-0/1-0
Operator ID: knk41612 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

5 Vinyl chloride, CAS: 75-01-4

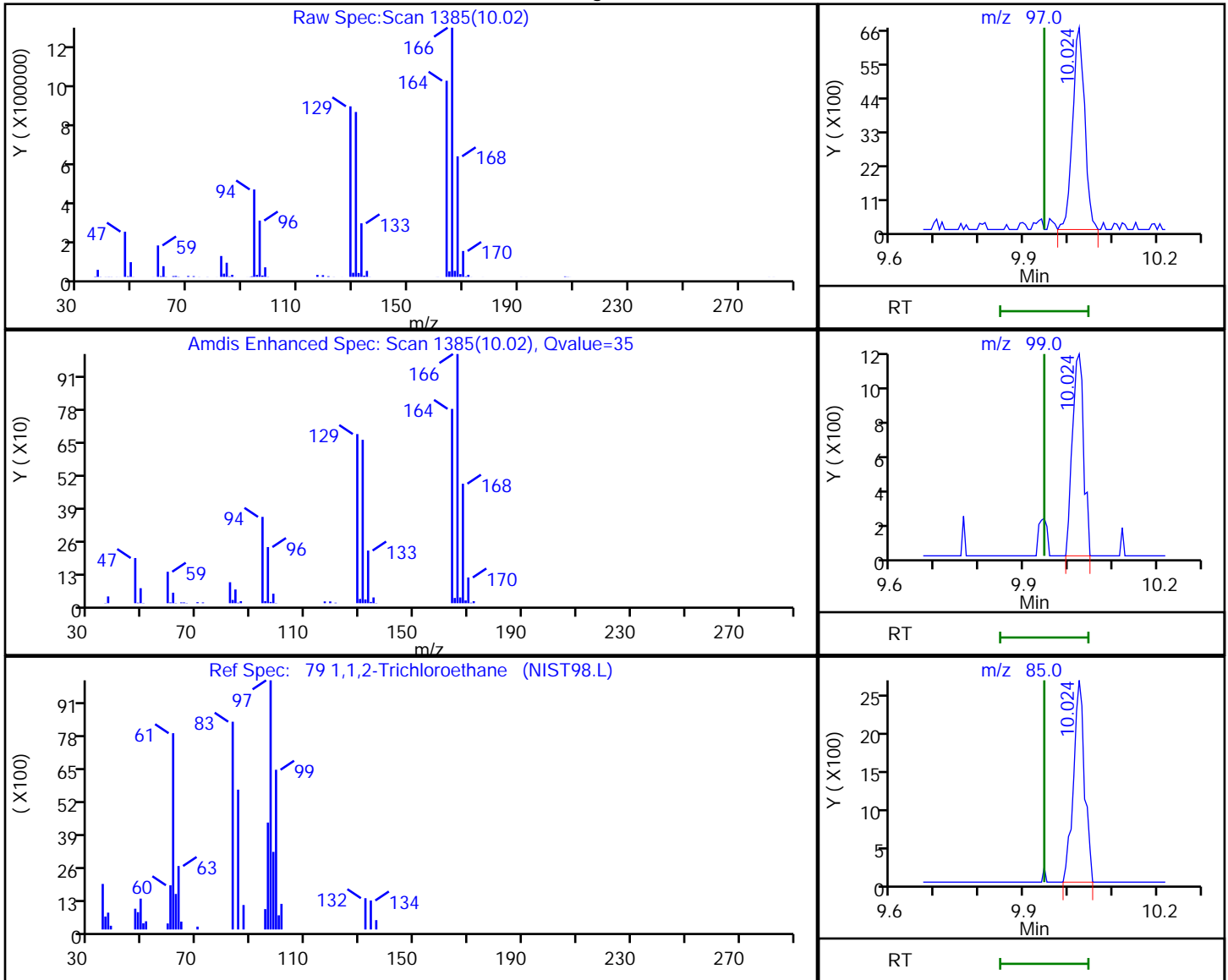


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X021.D
 Injection Date: 06-Jun-2022 17:52:30 Instrument ID: 10193
 Lims ID: 410-85437-A-8 Lab Sample ID: 410-85437-8
 Client ID: HD-COD-SW-17-0/1-0
 Operator ID: knk41612 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
10.02	97.00	12507	0.350402
10.02	99.00	1963	
10.02	85.00	4590	
10.02	83.00	32061	

Reviewer: johnsons, 06-Jun-2022 22:07:03

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.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-8 DL

Matrix: Water

Lab File ID: CU06X022.D

Analysis Method: 8260D

Date Collected: 05/25/2022 10:35

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 18:14

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	28		5.0	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		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\10193\20220603-58749.b\CU06X022.D
 Lims ID: 410-85437-B-8 DL
 Client ID: HD-COD-SW-17-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 18:14:30 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 25.000 mL Dil. Factor: 10.0000
 Sample Info: 410-0058749-023
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:07:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50		1.959				ND	7
5 Vinyl chloride	62		2.069				ND	7
6 Bromomethane	94		2.355				ND	
7 Chloroethane	64		2.434				ND	
14 1,1-Dichloroethene	96	3.196	3.196	0.000	1	1181	0.0251	
16 Acetone	43	3.270	3.227	0.043	53	3053	0.5443	
20 Carbon disulfide	76		3.459				ND	7
24 Methylene Chloride	84	3.794	3.794	0.000	87	2598	0.0514	M
* 25 t-Butyl alcohol-d10 (IS)	65	3.824	3.812	0.012	90	122660	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63	4.830	4.824	0.006	2	4452	0.0482	
36 2-Butanone (MEK)	43		5.641				ND	
37 cis-1,2-Dichloroethene	96	5.678	5.672	0.006	79	16659	0.2836	
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83		6.165				ND	
48 1,1,1-Trichloroethane	97	6.385	6.385	0.000	37	18895	0.2156	
\$ 47 Dibromofluoromethane (Surr)	113	6.391	6.385	0.006	94	451330	9.64	
50 Carbon tetrachloride	117		6.598				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.842	6.848	-0.006	48	84158	9.34	
54 Benzene	78		6.873				ND	7
55 1,2-Dichloroethane	62		6.946				ND	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1880419	10.0	
60 Trichloroethene	95	7.781	7.769	0.012	95	11538	0.1915	
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1864904	10.1	
75 Toluene	92		9.445				ND	7
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.024	10.030	-0.006	98	197998	2.85	
82 2-Hexanone	43		10.183				ND	
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1496368	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106		11.140				ND	7
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	
93 Styrene	104		11.494				ND	
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	96	675116	9.19	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.829	12.829	0.000	93	860784	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X022.D

Injection Date: 06-Jun-2022 18:14:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-B-8 DL

Lab Sample ID: 410-85437-8

Worklist Smp#: 23

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

Purge Vol: 25.000 mL

Dil. Factor: 10.0000

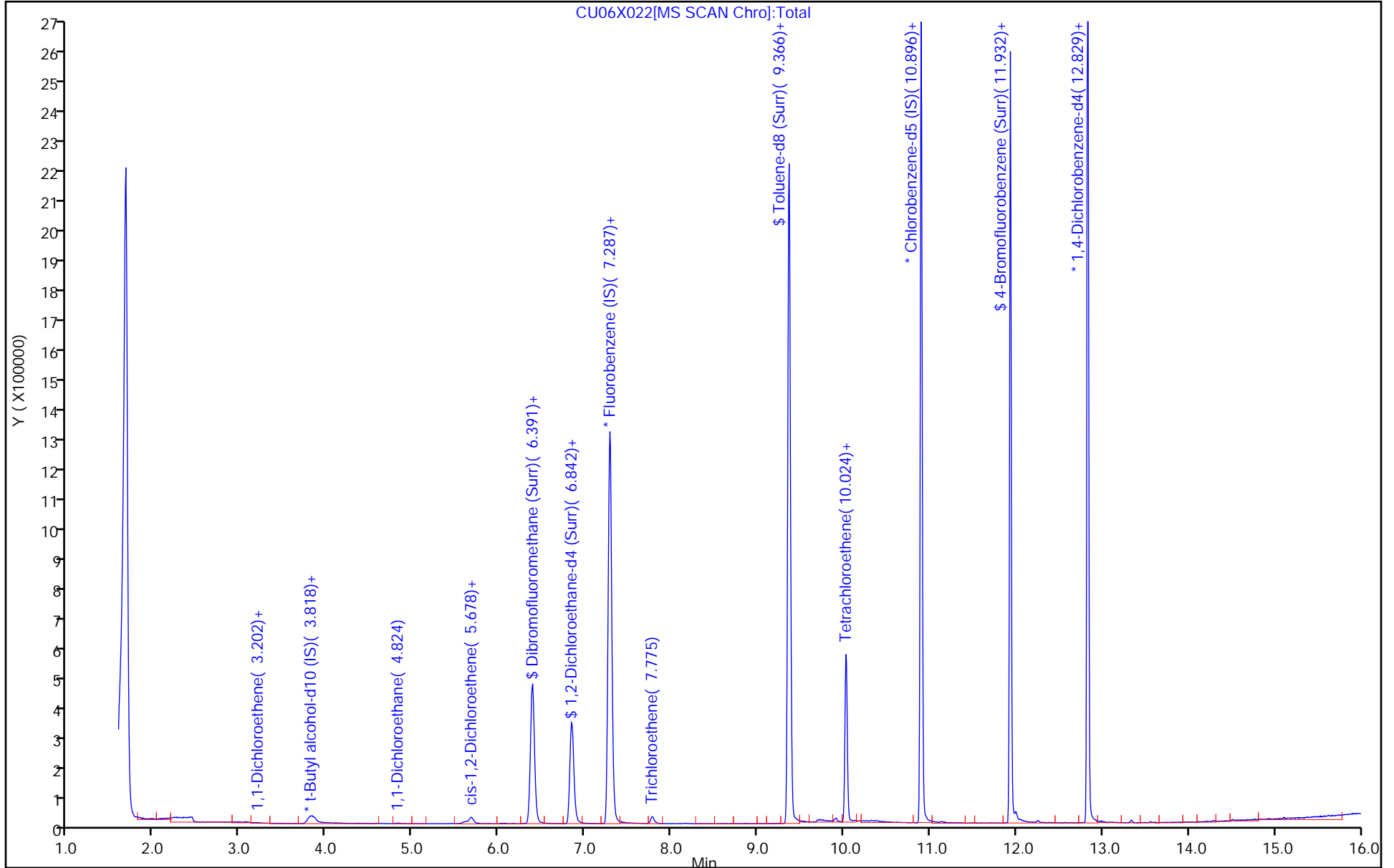
ALS Bottle#: 22

Method: MSV_10193_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\10193\20220603-58749.b\CU06X022.D
 Lims ID: 410-85437-B-8 DL
 Client ID: HD-COD-SW-17-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 18:14:30 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 25.000 mL Dil. Factor: 10.0000
 Sample Info: 410-0058749-023
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:07:54

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.64	96.45
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.34	93.39
\$ 74 Toluene-d8 (Surr)	10.0	10.1	101.16
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.19	91.94

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X022.D

Injection Date: 06-Jun-2022 18:14:30

Instrument ID: 10193

Lims ID: 410-85437-B-8 DL

Lab Sample ID: 410-85437-8

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

Operator ID: knk41612

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 25.000 mL

Dil. Factor: 10.0000

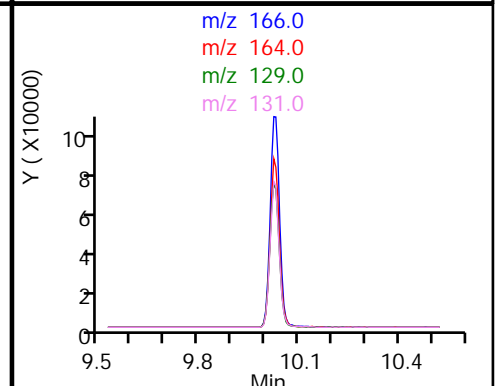
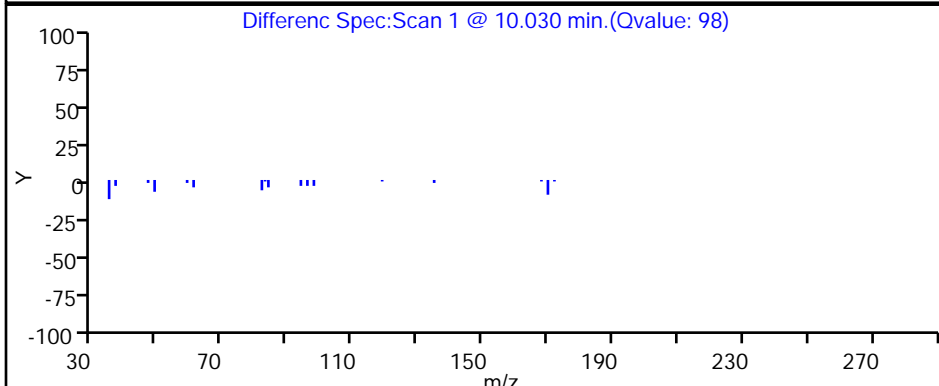
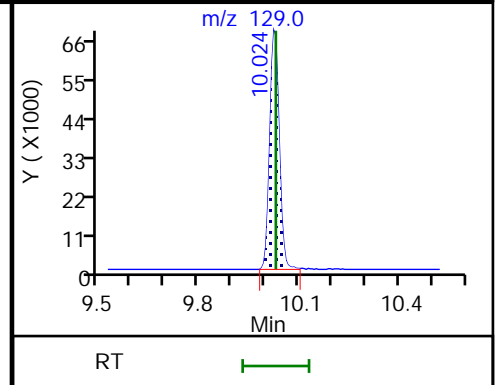
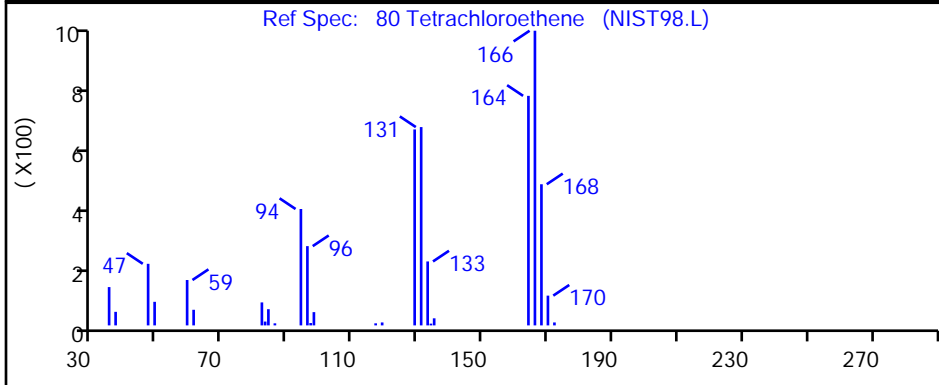
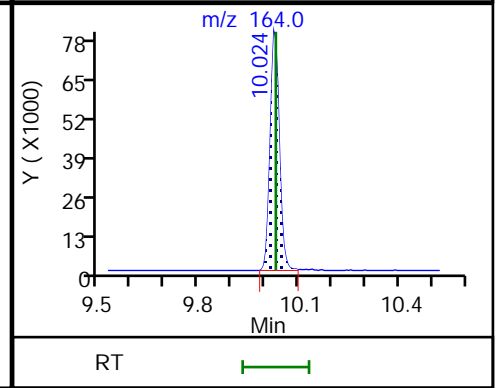
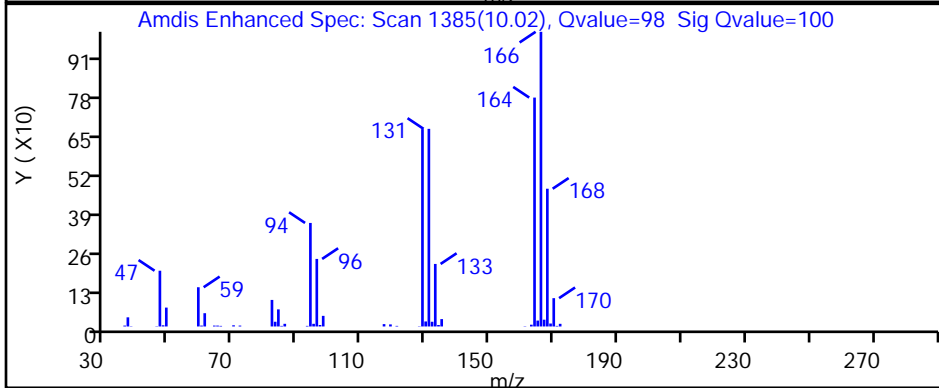
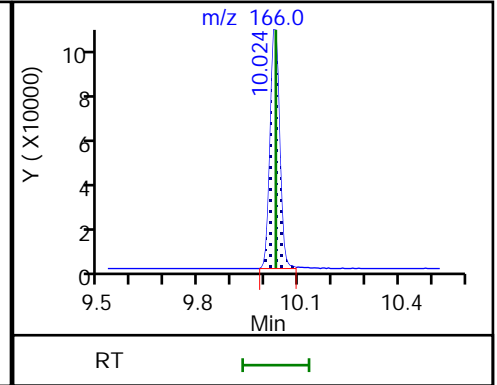
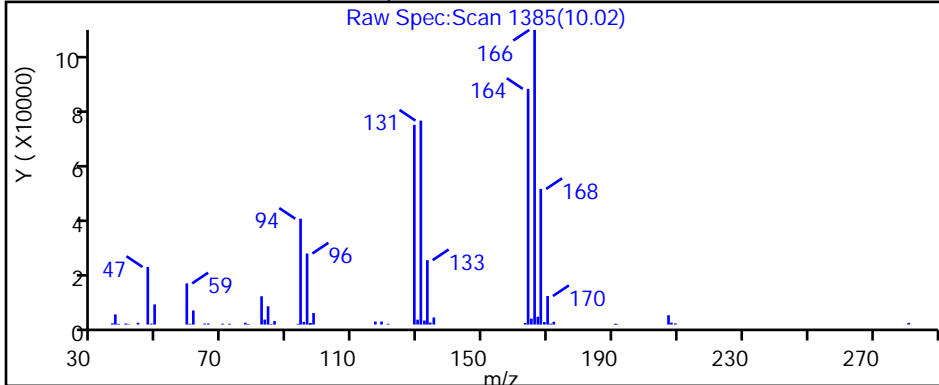
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

80 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-9

Matrix: Water

Lab File ID: CU06X023.D

Analysis Method: 8260D

Date Collected: 05/25/2022 11:45

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 18:36

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.: 261977

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	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	0.074	J	0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	0.97	J	5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.0	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c cn	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.23	J	0.50	0.090
74-87-3	Chloromethane	ND	*+	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.061	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	1.4		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-9

Matrix: Water

Lab File ID: CU06X023.D

Analysis Method: 8260D

Date Collected: 05/25/2022 11:45

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 18:36

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.093	J	0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		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\10193\20220603-58749.b\CU06X023.D
 Lims ID: 410-85437-A-9
 Client ID: HD-COD-SW-26-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 18:36:30 ALS Bottle#: 23 Worklist Smp#: 24
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-024
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:09:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50		1.959				ND	7
5 Vinyl chloride	62		2.069				ND	
6 Bromomethane	94		2.355				ND	
7 Chloroethane	64		2.434				ND	
14 1,1-Dichloroethene	96	3.190	3.196	-0.006	94	3318	0.0738	
16 Acetone	43	3.251	3.227	0.024	90	10970	2.03	
20 Carbon disulfide	76	3.459	3.459	-0.001	94	2694	0.0208	7M
24 Methylene Chloride	84		3.794				ND	
* 25 t-Butyl alcohol-d10 (IS)	65	3.843	3.812	0.031	90	118053	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63		4.824				ND	7
36 2-Butanone (MEK)	43	5.684	5.641	0.043	95	10688	0.9670	M
37 cis-1,2-Dichloroethene	96	5.671	5.672	-0.001	75	3419	0.0609	
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83	6.177	6.165	0.012	90	21295	0.2324	
48 1,1,1-Trichloroethane	97		6.385				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.385	6.385	0.000	95	429130	9.60	
50 Carbon tetrachloride	117		6.598				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.848	6.848	0.000	48	80214	9.32	
54 Benzene	78		6.873				ND	7
55 1,2-Dichloroethane	62		6.946				ND	7
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1796459	10.0	
60 Trichloroethene	95	7.775	7.769	0.006	95	5325	0.0925	
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	7
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1647838	10.1	
75 Toluene	92	9.451	9.445	0.006	96	8184	0.0656	
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.024	10.030	-0.006	97	86086	1.39	
82 2-Hexanone	43		10.183				ND	7
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1329043	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106	11.140	11.140	0.000	98	4913	0.0505	
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	7
93 Styrene	104		11.494				ND	7
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	586085	8.99	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.829	12.829	0.000	93	770915	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X023.D

Injection Date: 06-Jun-2022 18:36:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-9

Lab Sample ID: 410-85437-9

Worklist Smp#: 24

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

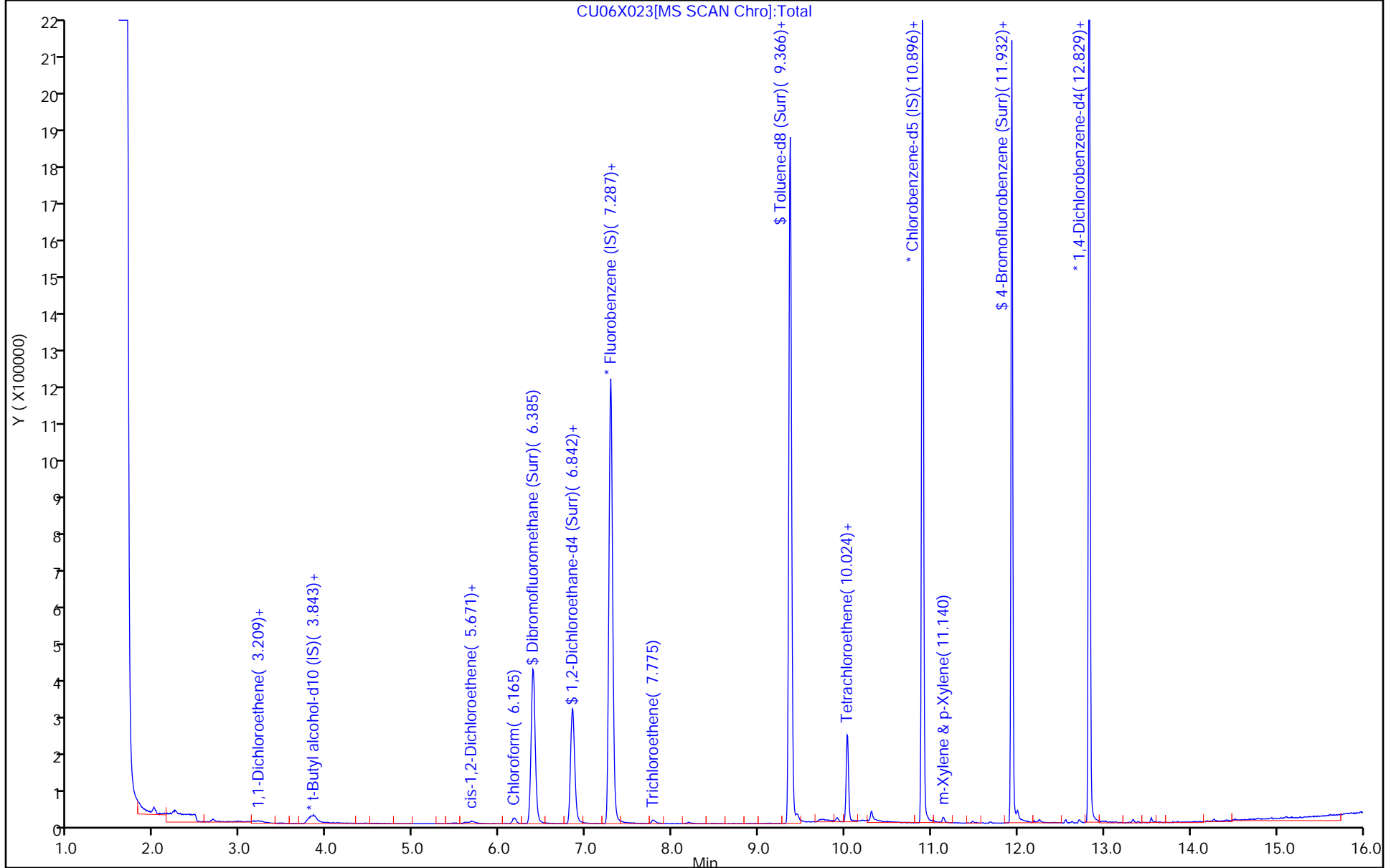
ALS Bottle#: 23

Method: MSV_10193_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\10193\20220603-58749.b\CU06X023.D
 Lims ID: 410-85437-A-9
 Client ID: HD-COD-SW-26-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 18:36:30 ALS Bottle#: 23 Worklist Smp#: 24
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-024
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:09:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.60	95.99
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.32	93.17
\$ 74 Toluene-d8 (Surr)	10.0	10.1	100.63
\$ 98 4-Bromofluorobenzene (Surr)	10.0	8.99	89.87

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X023.D

Injection Date: 06-Jun-2022 18:36:30

Instrument ID: 10193

Lims ID: 410-85437-A-9

Lab Sample ID: 410-85437-9

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

Operator ID: knk41612

ALS Bottle#: 23

Worklist Smp#: 24

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

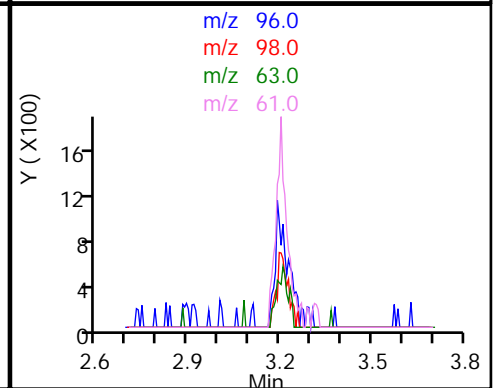
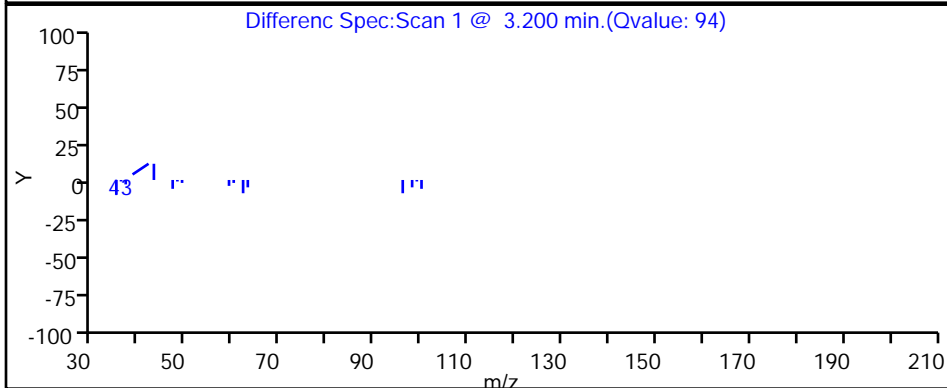
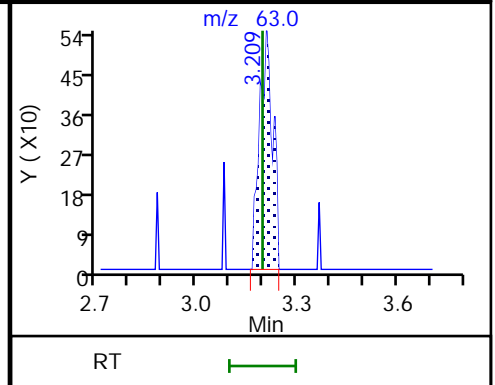
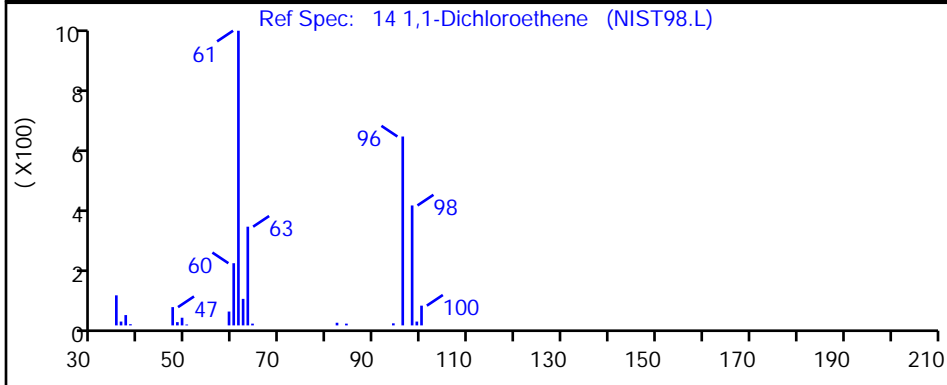
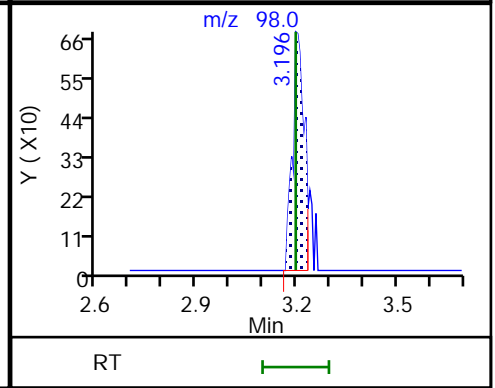
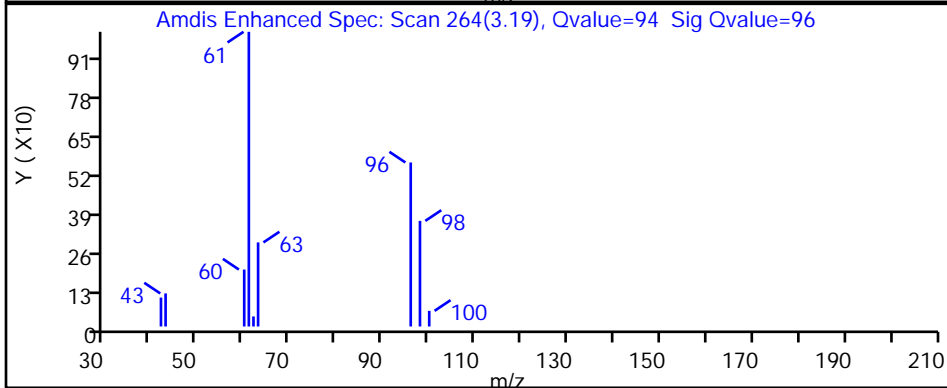
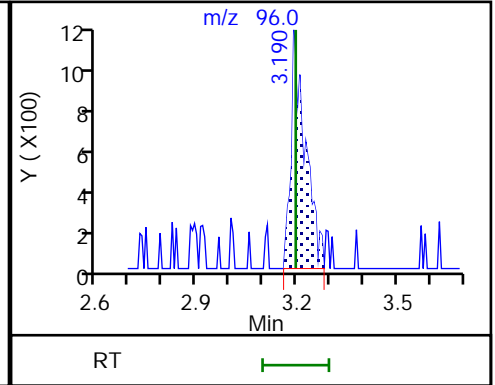
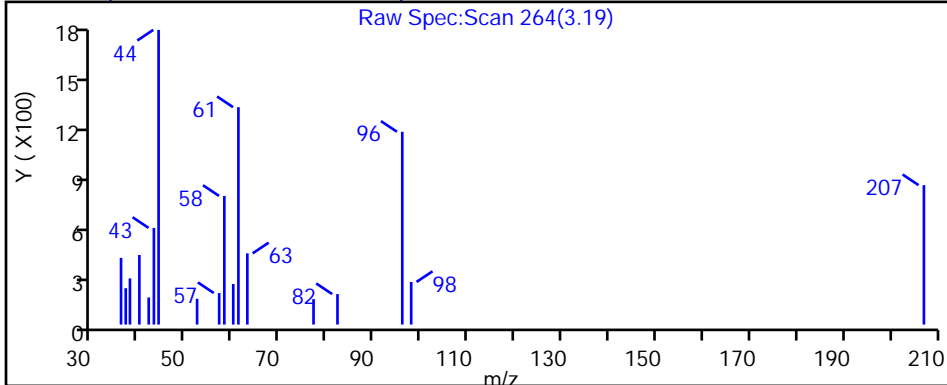
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

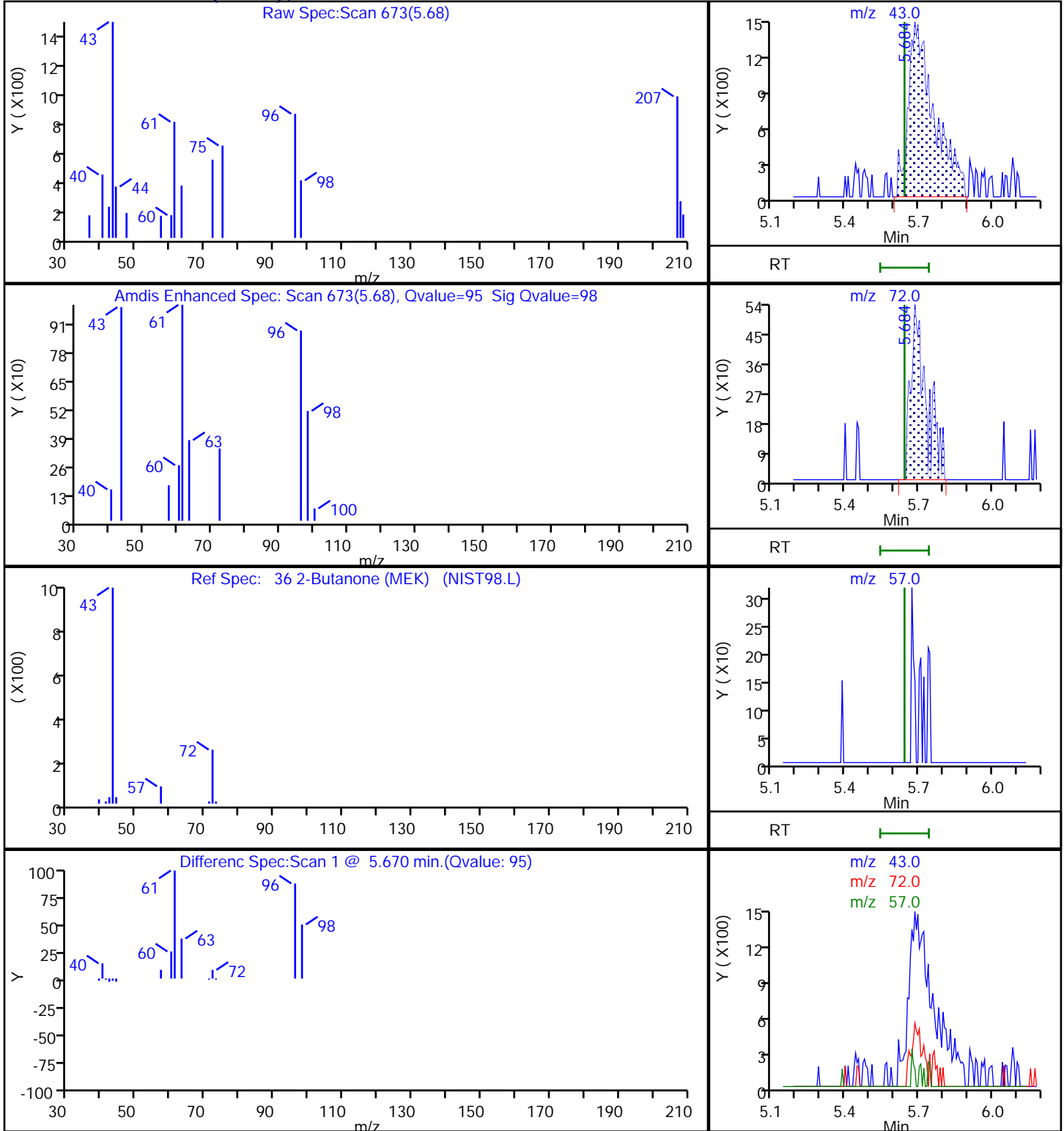
MS Quad

14 1,1-Dichloroethene, CAS: 75-35-4



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X023.D
Injection Date: 06-Jun-2022 18:36:30 Instrument ID: 10193
Lims ID: 410-85437-A-9 Lab Sample ID: 410-85437-9
Client ID: HD-COD-SW-26-0/1-0
Operator ID: knk41612 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

36 2-Butanone (MEK), CAS: 78-93-3



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X023.D

Injection Date: 06-Jun-2022 18:36:30

Instrument ID: 10193

Lims ID: 410-85437-A-9

Lab Sample ID: 410-85437-9

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

Operator ID: knk41612

ALS Bottle#: 23

Worklist Smp#: 24

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

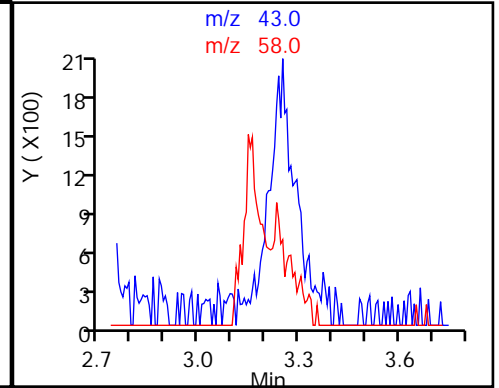
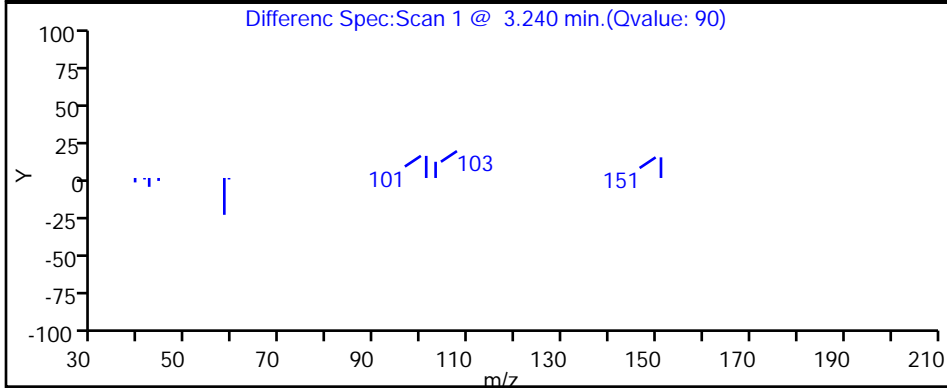
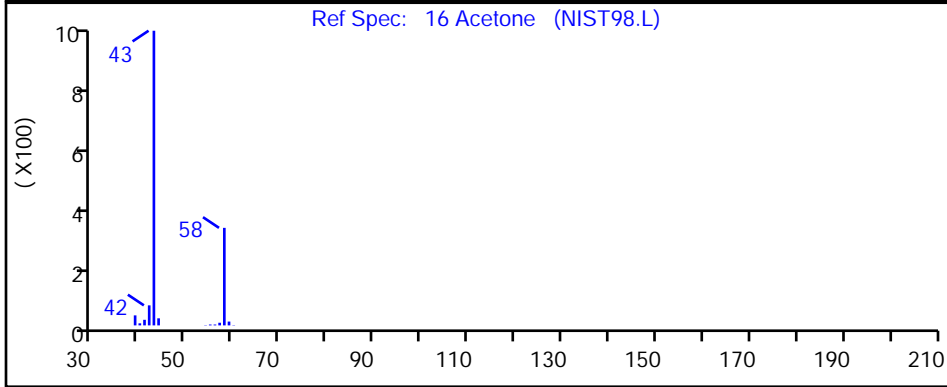
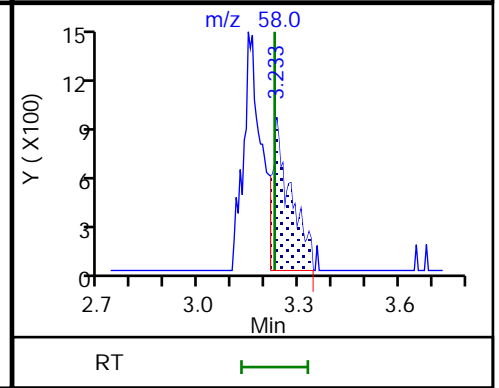
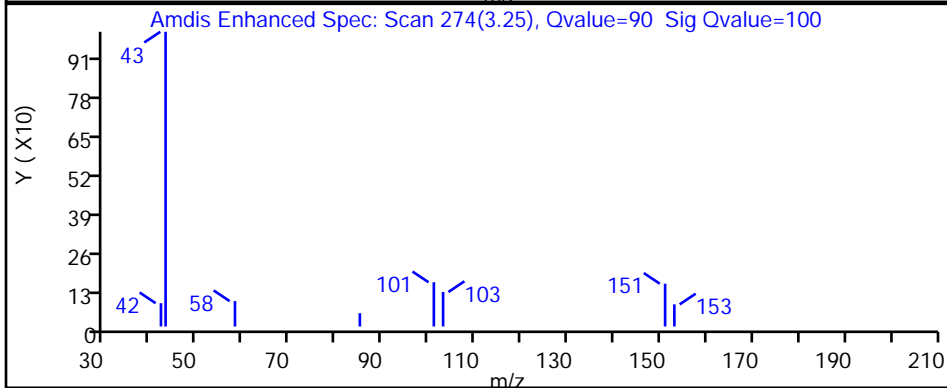
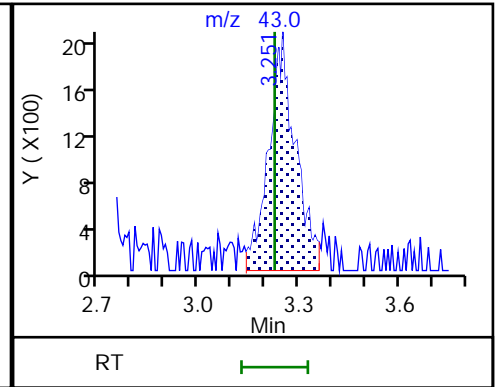
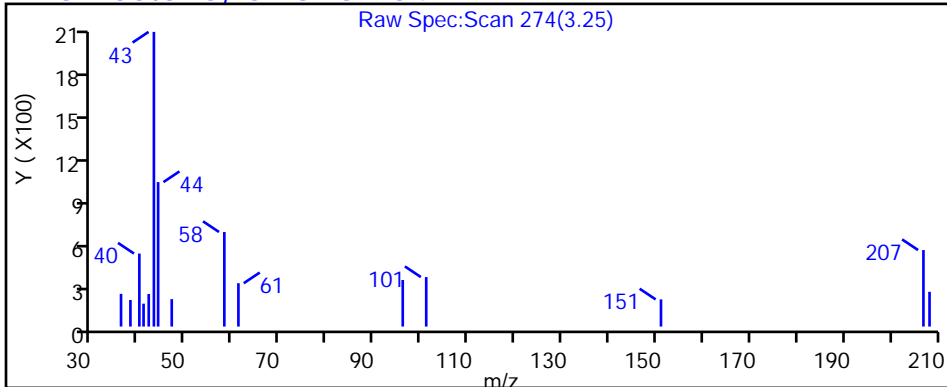
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

16 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X023.D

Injection Date: 06-Jun-2022 18:36:30

Instrument ID: 10193

Lims ID: 410-85437-A-9

Lab Sample ID: 410-85437-9

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

Operator ID: knk41612

ALS Bottle#: 23

Worklist Smp#: 24

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

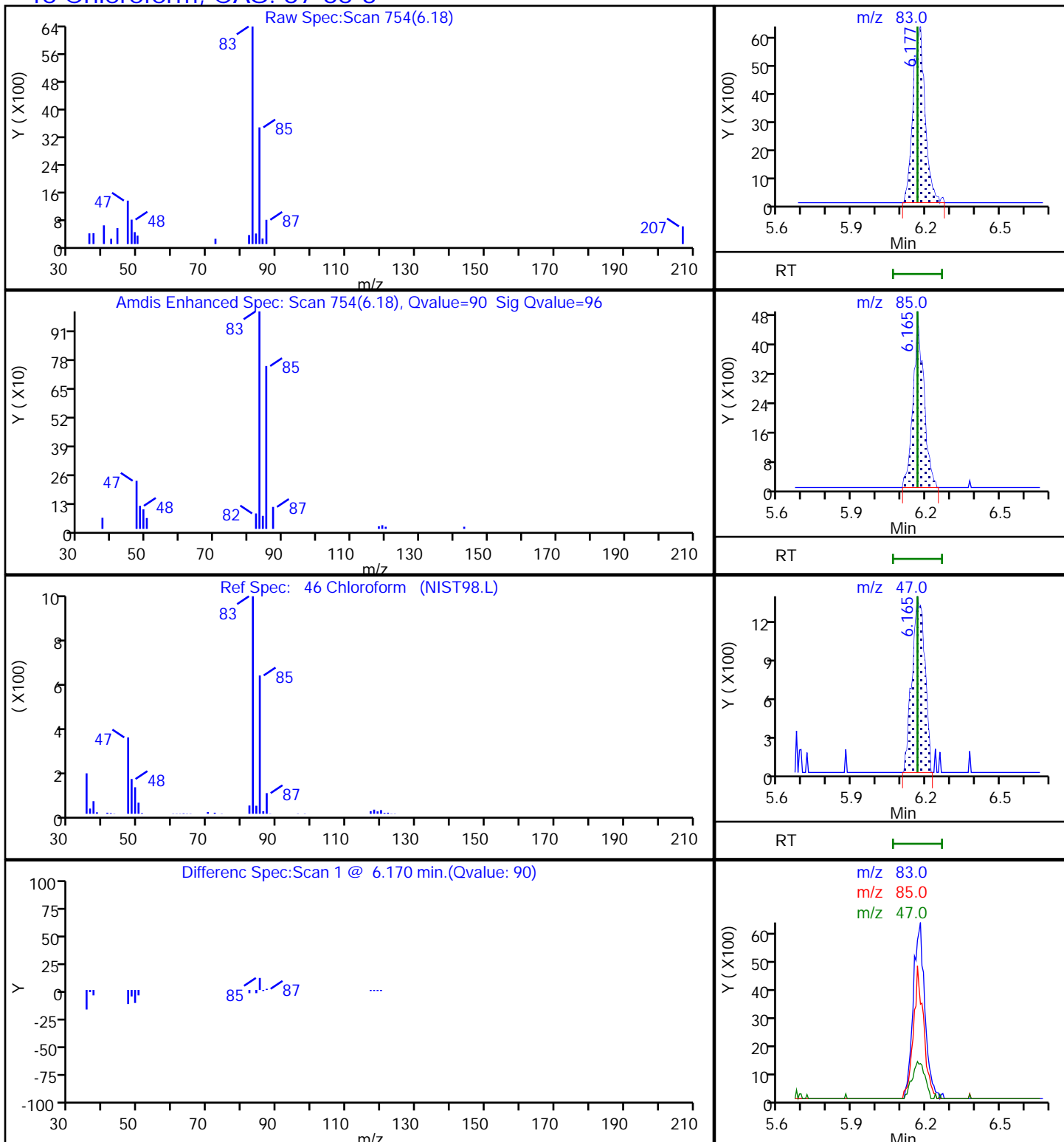
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

46 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X023.D

Injection Date: 06-Jun-2022 18:36:30

Instrument ID: 10193

Lims ID: 410-85437-A-9

Lab Sample ID: 410-85437-9

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

Operator ID: knk41612

ALS Bottle#: 23

Worklist Smp#: 24

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

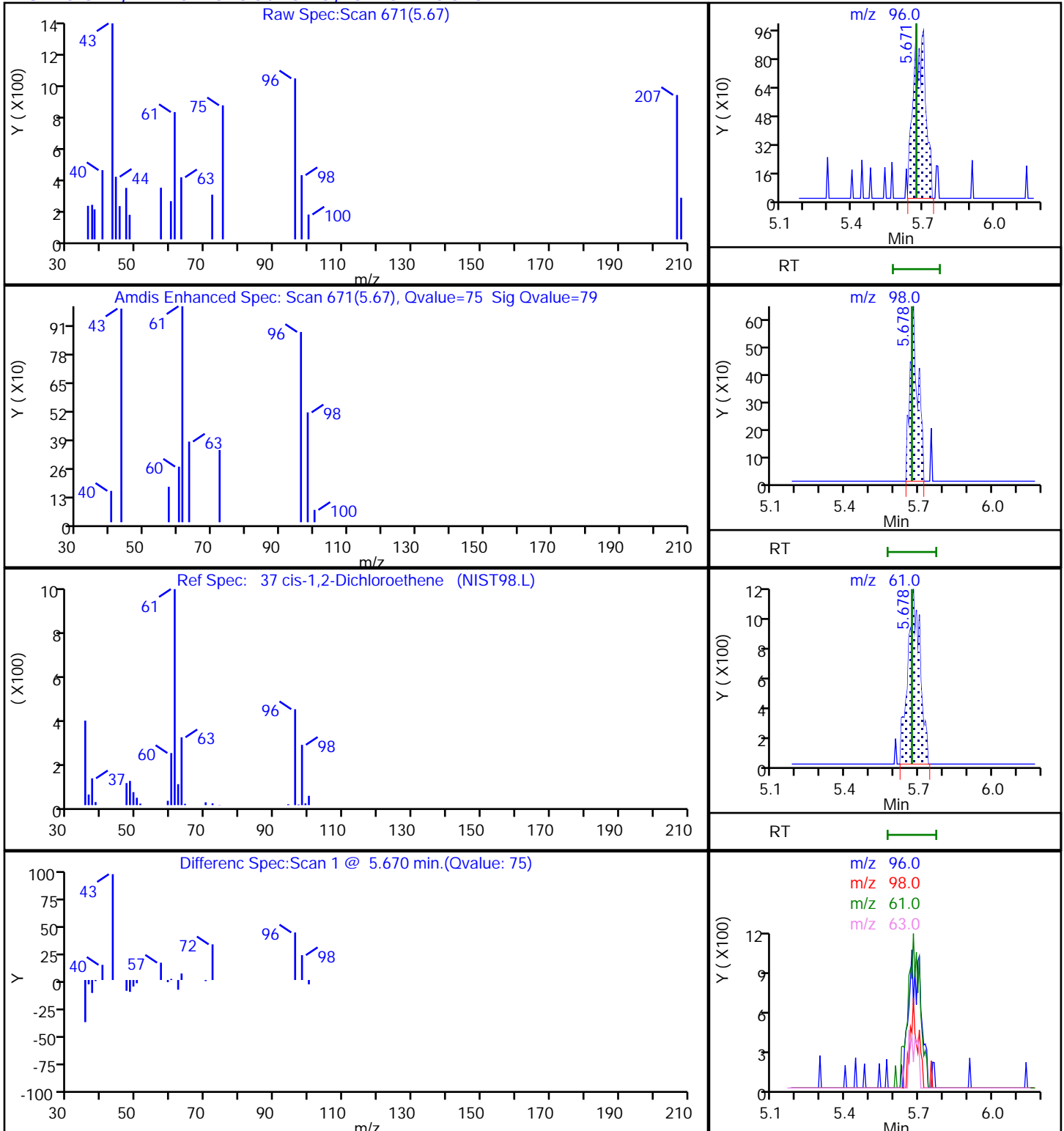
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X023.D

Injection Date: 06-Jun-2022 18:36:30

Instrument ID: 10193

Lims ID: 410-85437-A-9

Lab Sample ID: 410-85437-9

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

Operator ID: knk41612

ALS Bottle#: 23

Worklist Smp#: 24

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

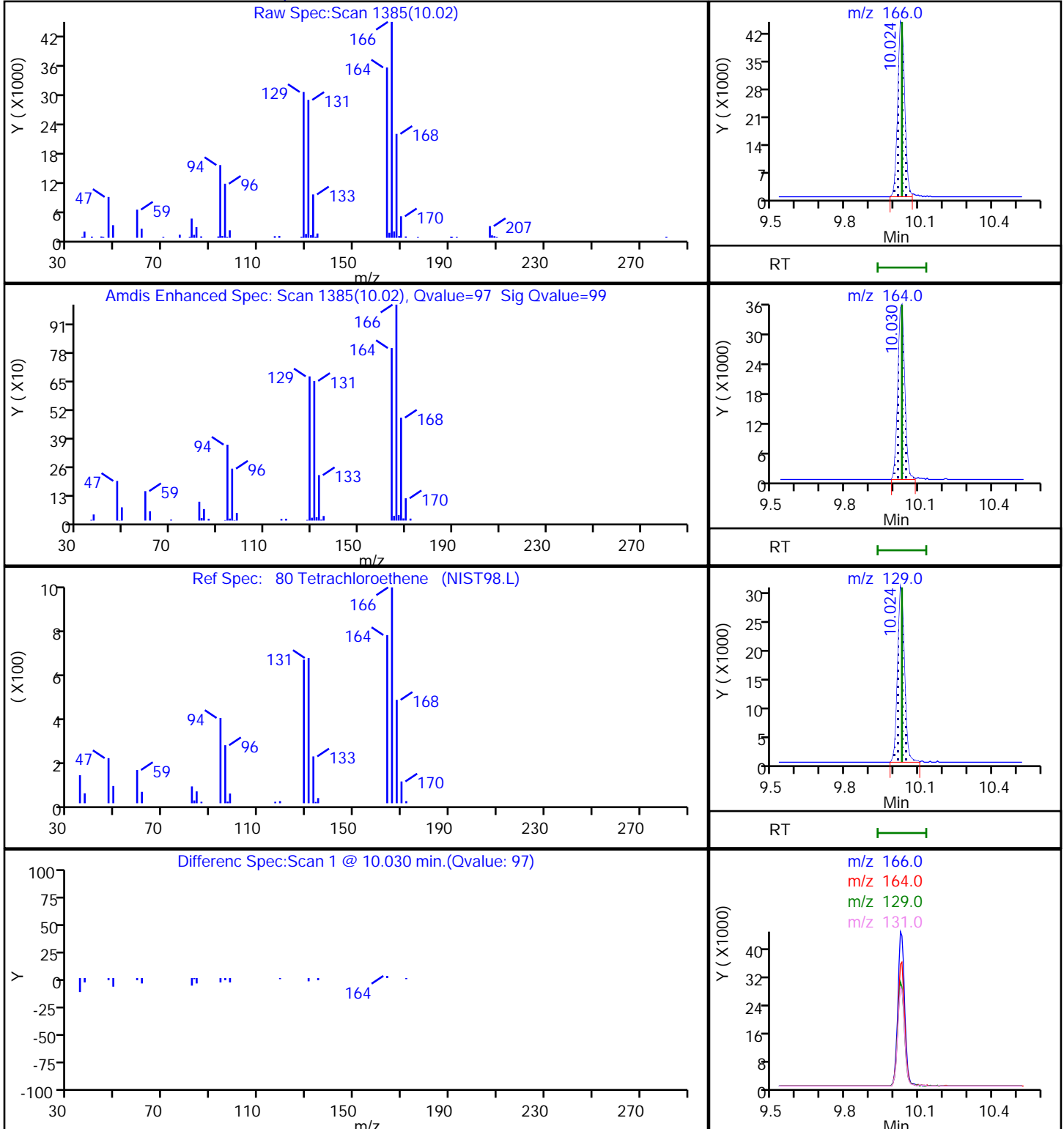
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

80 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X023.D

Injection Date: 06-Jun-2022 18:36:30

Instrument ID: 10193

Lims ID: 410-85437-A-9

Lab Sample ID: 410-85437-9

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

Operator ID: knk41612

ALS Bottle#: 23

Worklist Smp#: 24

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

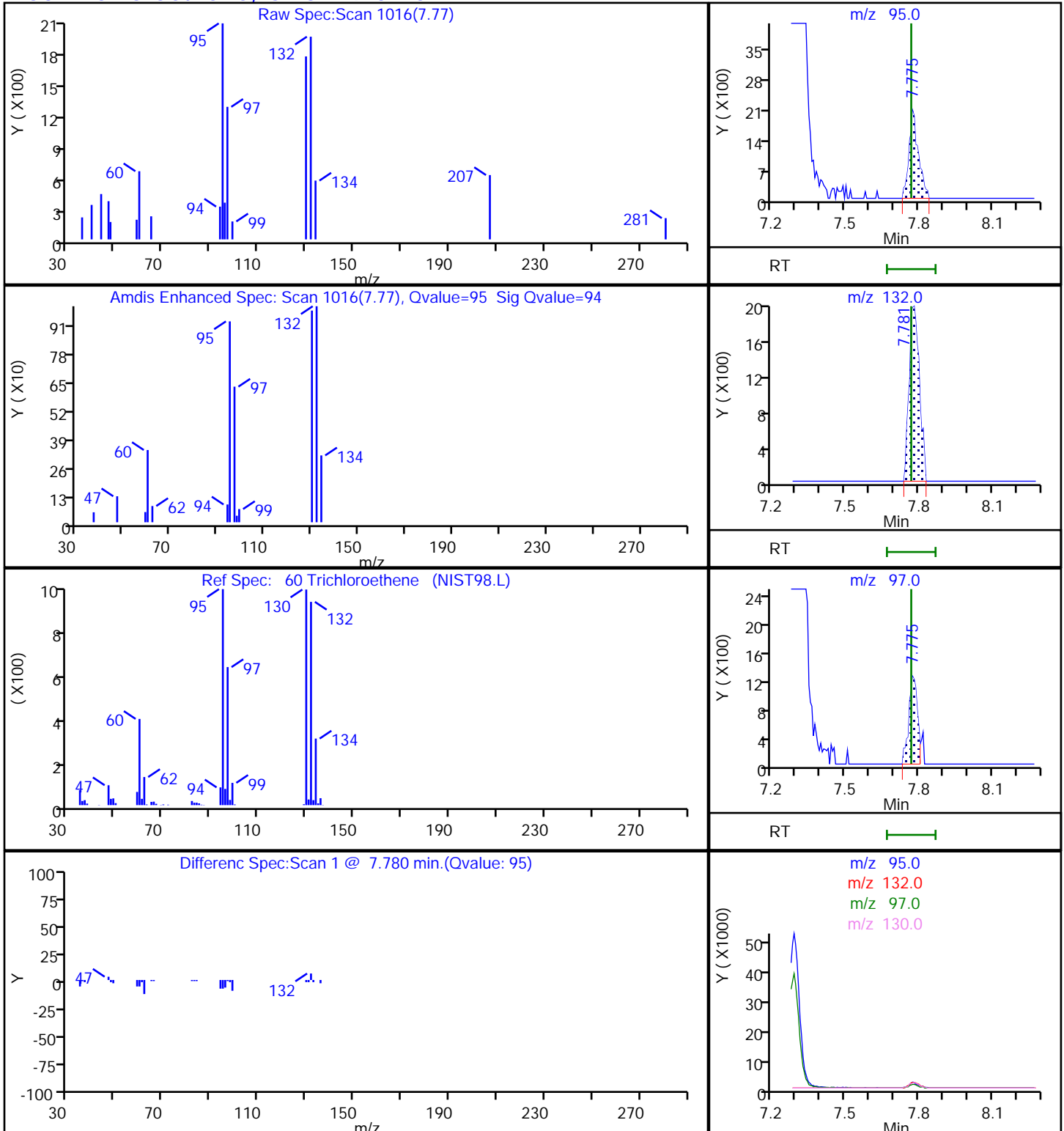
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

60 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Environment Testing, LLC

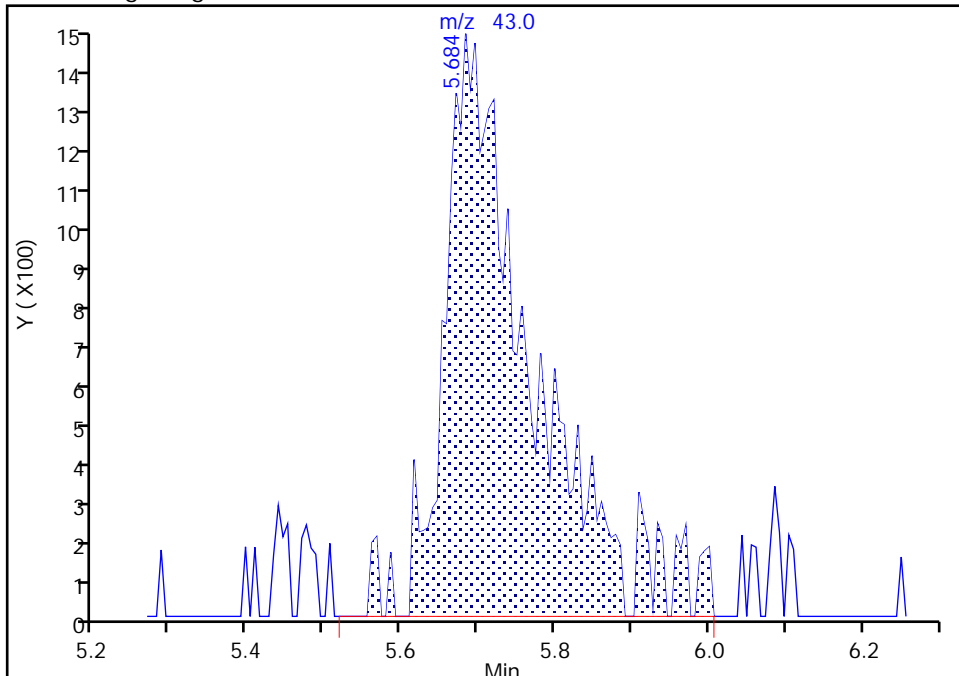
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X023.D
Injection Date: 06-Jun-2022 18:36:30 Instrument ID: 10193
Lims ID: 410-85437-A-9 Lab Sample ID: 410-85437-9
Client ID: HD-COD-SW-26-0/1-0
Operator ID: knk41612 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

36 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

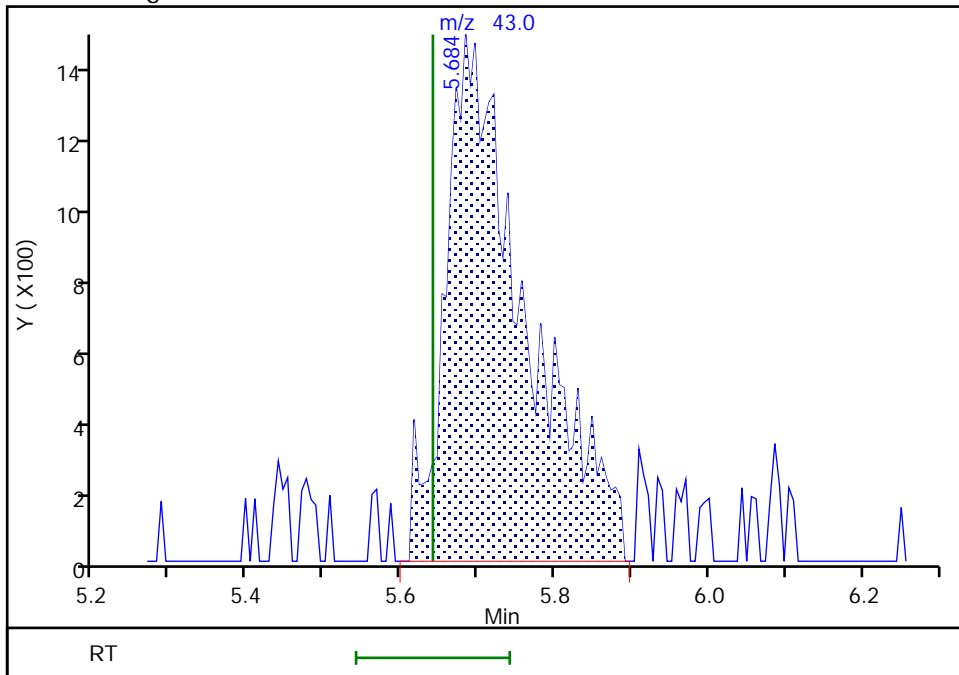
RT: 5.68
Area: 11729
Amount: 1.061228
Amount Units: ug/l

Processing Integration Results



RT: 5.68
Area: 10688
Amount: 0.967039
Amount Units: ug/l

Manual Integration Results



Reviewer: johnsons, 06-Jun-2022 22:08:45
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Environment Testing, LLC

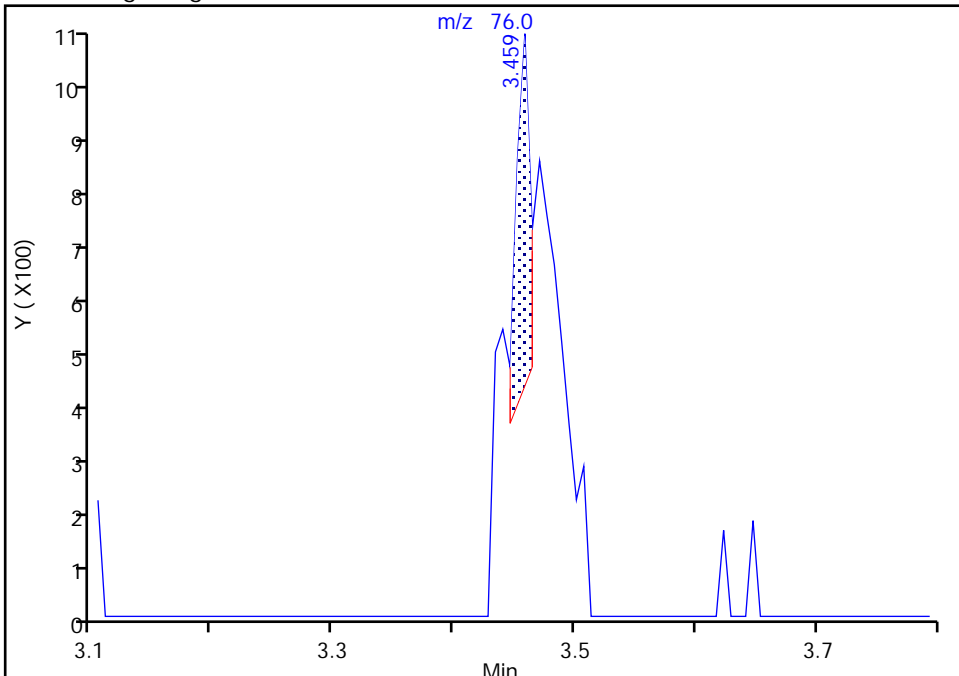
Data File:	\\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X023.D		
Injection Date:	06-Jun-2022 18:36:30	Instrument ID:	10193
Lims ID:	410-85437-A-9	Lab Sample ID:	410-85437-9
Client ID:	HD-COD-SW-26-0/1-0		
Operator ID:	knk41612	ALS Bottle#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	24

20 Carbon disulfide, CAS: 75-15-0

Signal: 1

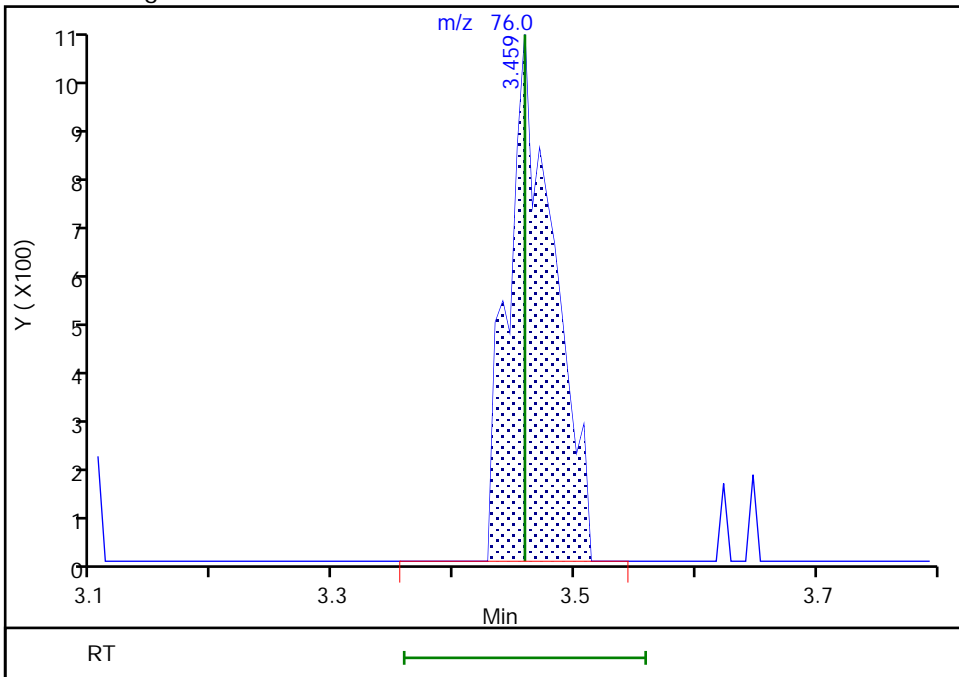
RT: 3.46
 Area: 512
 Amount: 0.003945
 Amount Units: ug/l

Processing Integration Results



RT: 3.46
 Area: 2694
 Amount: 0.020756
 Amount Units: ug/l

Manual Integration Results



Reviewer: johnsons, 06-Jun-2022 22:08:20
 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.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-10

Matrix: Water

Lab File ID: CU06X024.D

Analysis Method: 8260D

Date Collected: 05/25/2022 12:20

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 18:59

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.: 261977

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	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	1.3	J	5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.8	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c cn	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	*+	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.081	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.082	J	0.50	0.060
108-88-3	Toluene	0.12	J	0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-10

Matrix: Water

Lab File ID: CU06X024.D

Analysis Method: 8260D

Date Collected: 05/25/2022 12:20

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 18:59

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.080	J	0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		80-120
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		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\10193\20220603-58749.b\CU06X024.D
 Lims ID: 410-85437-A-10
 Client ID: HD-COD-SW-27-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 18:59:30 ALS Bottle#: 24 Worklist Smp#: 25
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-025
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:29:24 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:26:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50	1.946	1.959	-0.013	1	2210	0.0395	
5 Vinyl chloride	62		2.069				ND	7
6 Bromomethane	94		2.355				ND	7
7 Chloroethane	64		2.434				ND	
14 1,1-Dichloroethene	96		3.196				ND	7
16 Acetone	43	3.245	3.227	0.018	90	15039	2.82	M
20 Carbon disulfide	76	3.458	3.459	-0.001	97	3935	0.0327	M
24 Methylene Chloride	84		3.794				ND	7
* 25 t-Butyl alcohol-d10 (IS)	65	3.842	3.812	0.030	91	116537	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63		4.824				ND	
36 2-Butanone (MEK)	43	5.690	5.641	0.049	97	13923	1.28	M
37 cis-1,2-Dichloroethene	96	5.677	5.672	0.005	72	4208	0.0808	M
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83		6.165				ND	7
48 1,1,1-Trichloroethane	97		6.385				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.385	6.385	0.000	94	413171	9.96	
50 Carbon tetrachloride	117		6.598				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.848	6.848	0.000	60	75720	9.48	
54 Benzene	78		6.873				ND	7
55 1,2-Dichloroethane	62		6.946				ND	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1667024	10.0	
60 Trichloroethene	95	7.775	7.769	0.006	0	4269	0.0799	M
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1661339	10.1	
75 Toluene	92	9.451	9.445	0.006	97	14763	0.1177	
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.030	10.030	0.000	93	5063	0.0815	
82 2-Hexanone	43		10.183				ND	7
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1337293	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106	11.134	11.140	-0.006	99	7966	0.0814	
S 88 Xylenes, Total	106				0		0.1109	
92 o-Xylene	106	11.475	11.475	0.000	92	2880	0.0295	
93 Styrene	104		11.494				ND	7
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	597923	9.11	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.828	12.829	-0.001	93	789611	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X024.D

Injection Date: 06-Jun-2022 18:59:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-10

Lab Sample ID: 410-85437-10

Worklist Smp#: 25

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

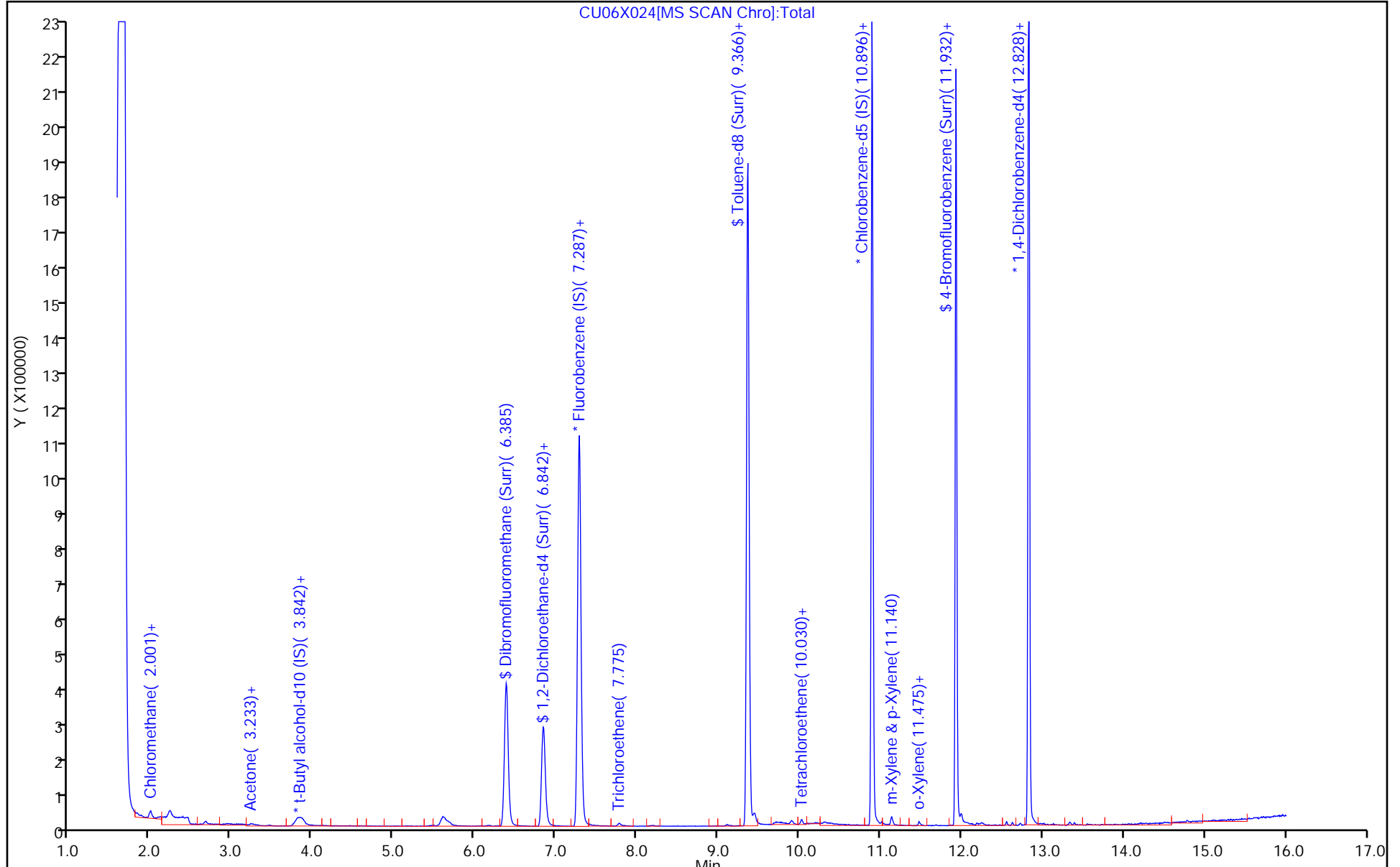
ALS Bottle#: 24

Method: MSV_10193_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\10193\20220603-58749.b\CU06X024.D
 Lims ID: 410-85437-A-10
 Client ID: HD-COD-SW-27-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 18:59:30 ALS Bottle#: 24 Worklist Smp#: 25
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-025
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:29:24 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:26:49

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.96	99.59
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.48	94.78
\$ 74 Toluene-d8 (Surr)	10.0	10.1	100.83
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.11	91.11

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X024.D

Injection Date: 06-Jun-2022 18:59:30

Instrument ID: 10193

Lims ID: 410-85437-A-10

Lab Sample ID: 410-85437-10

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

Operator ID: knk41612

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

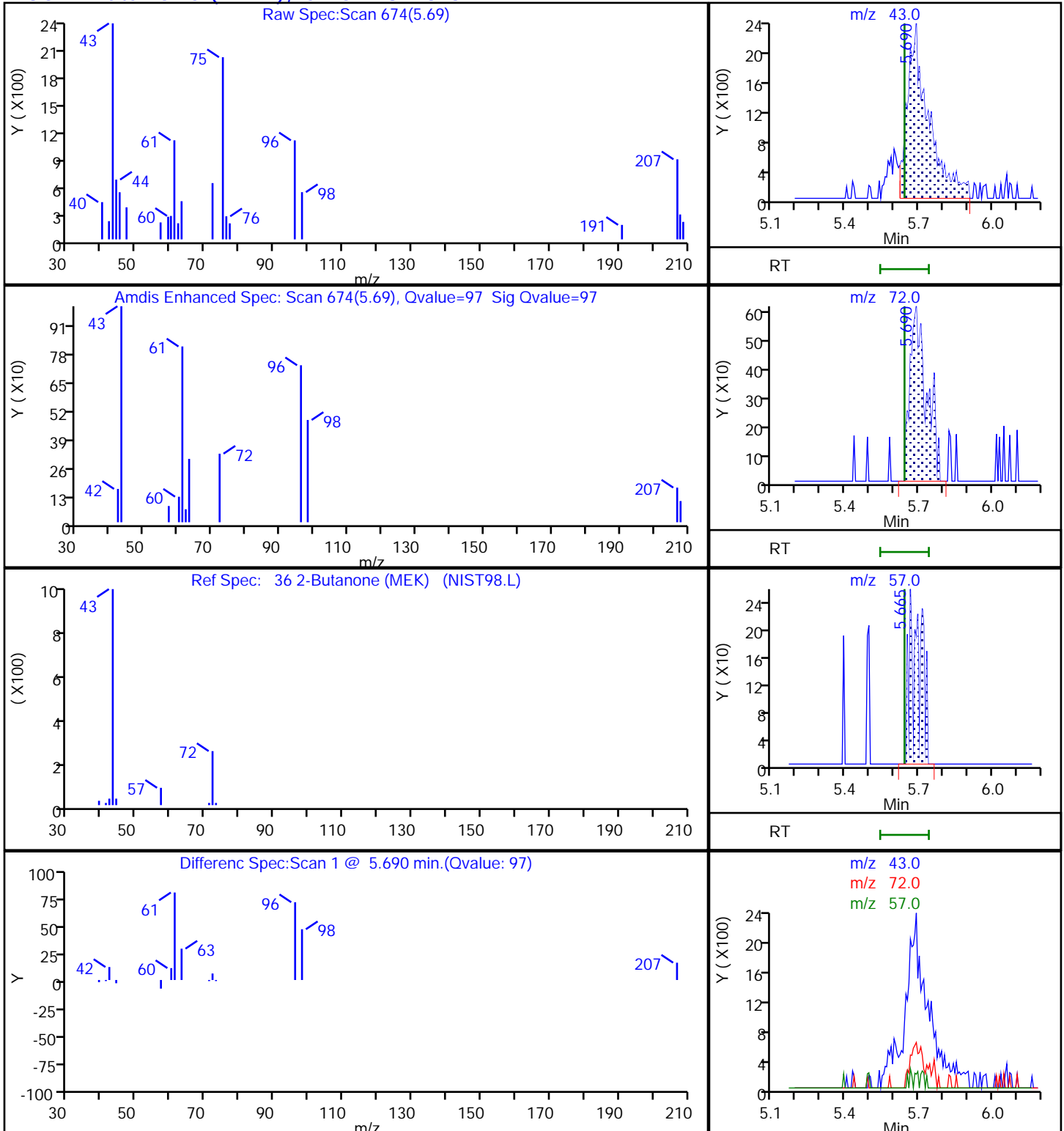
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

36 2-Butanone (MEK), CAS: 78-93-3



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X024.D

Injection Date: 06-Jun-2022 18:59:30

Instrument ID: 10193

Lims ID: 410-85437-A-10

Lab Sample ID: 410-85437-10

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

Operator ID: knk41612

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

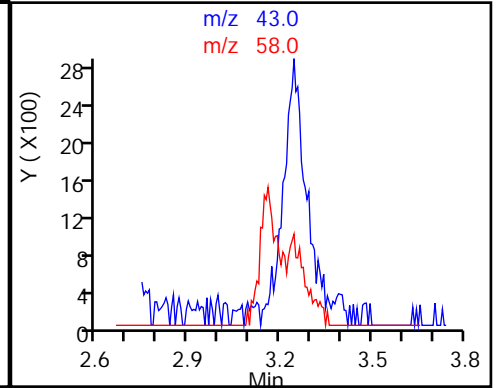
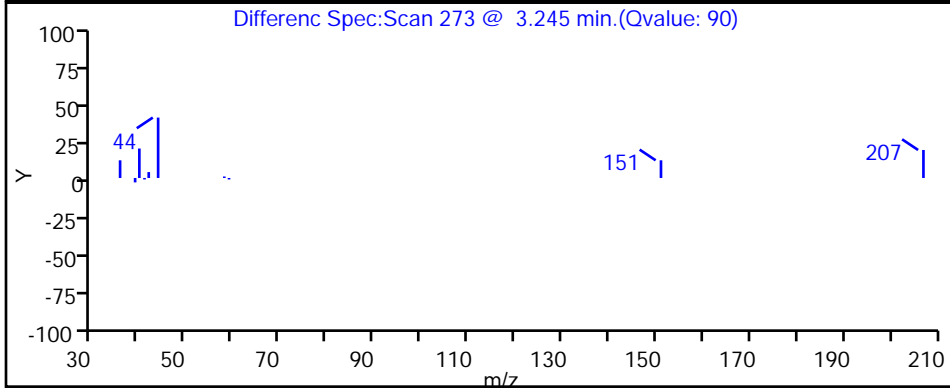
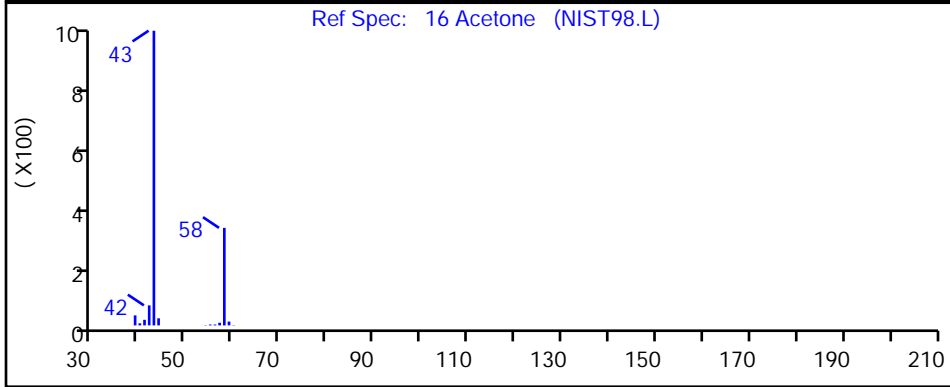
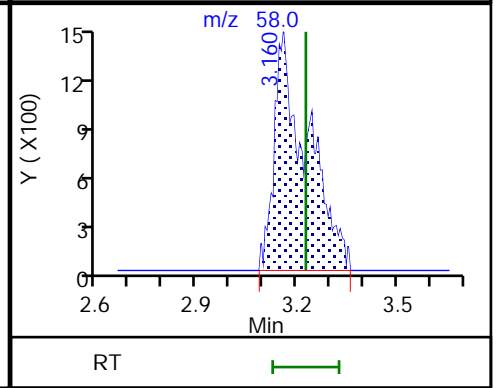
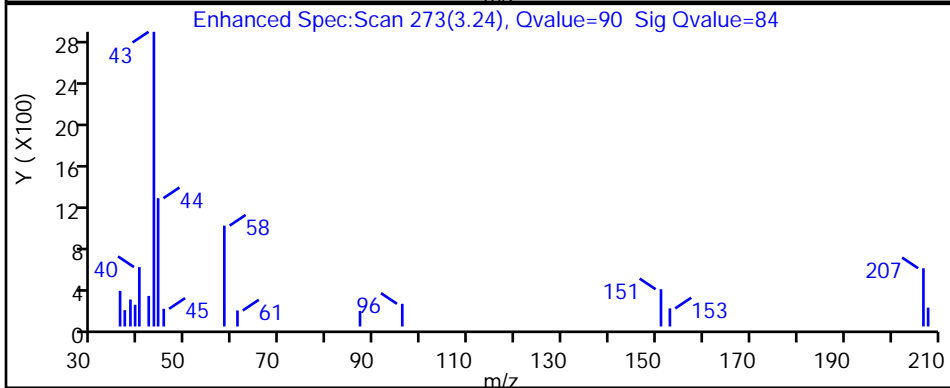
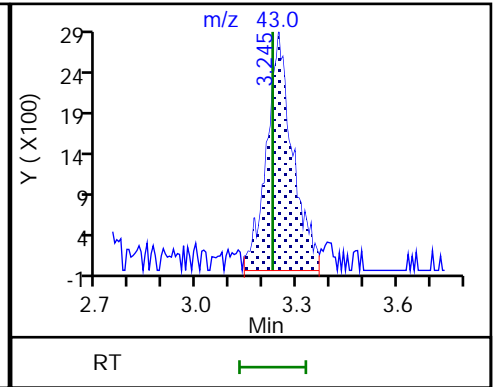
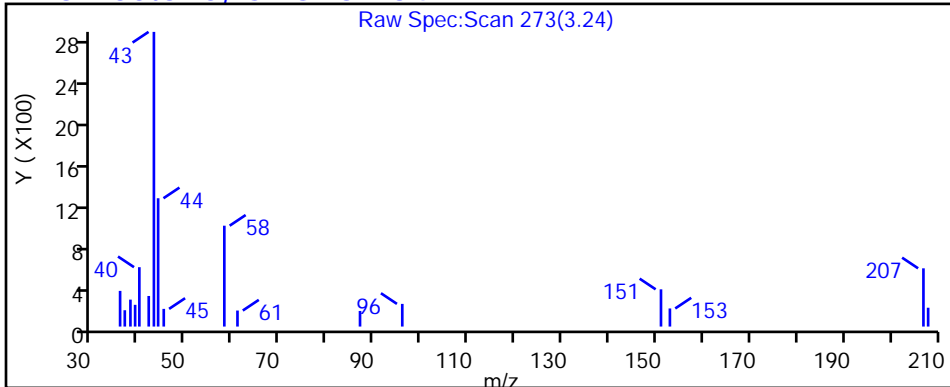
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

16 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X024.D

Injection Date: 06-Jun-2022 18:59:30

Instrument ID: 10193

Lims ID: 410-85437-A-10

Lab Sample ID: 410-85437-10

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

Operator ID: knk41612

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

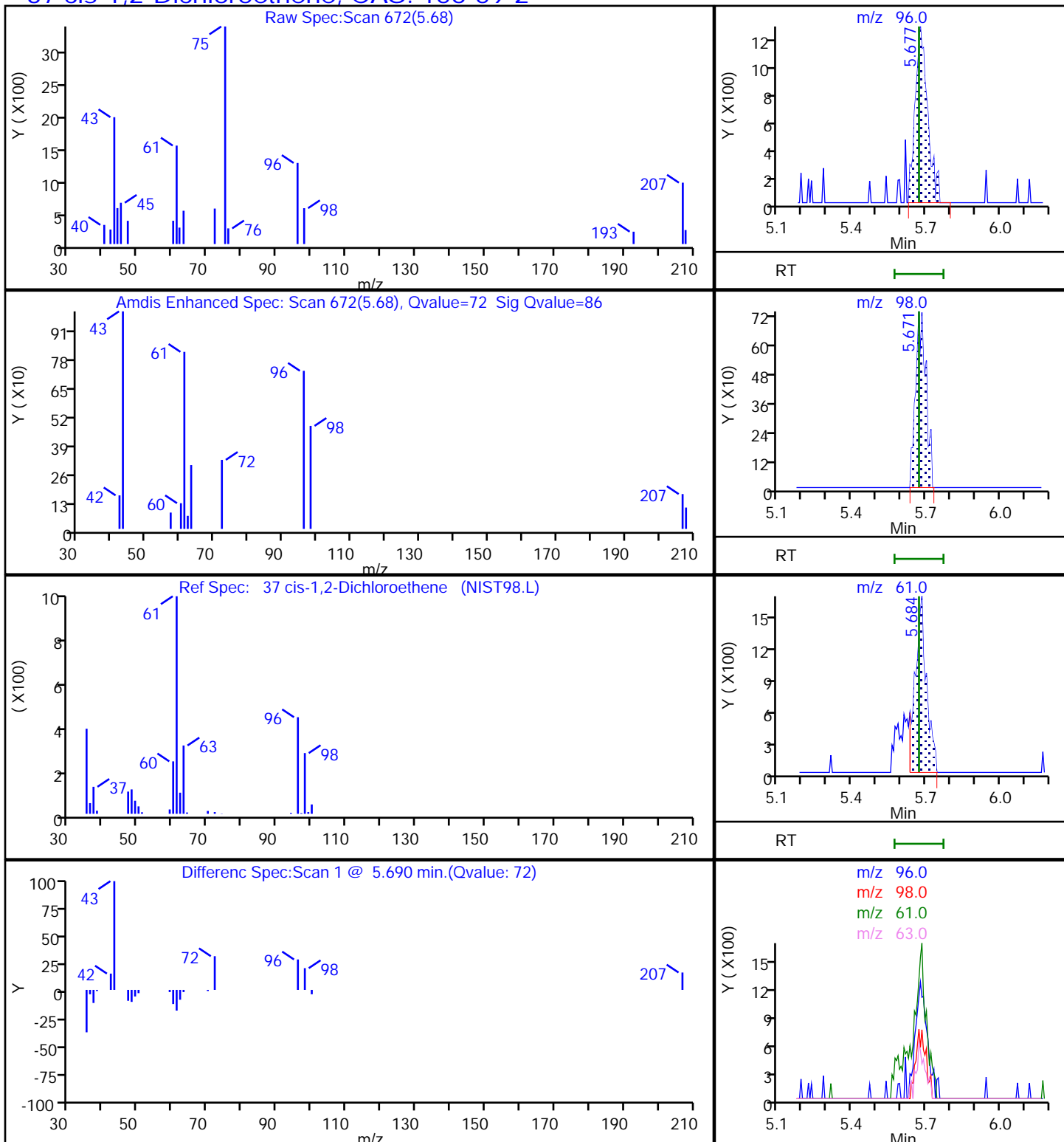
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

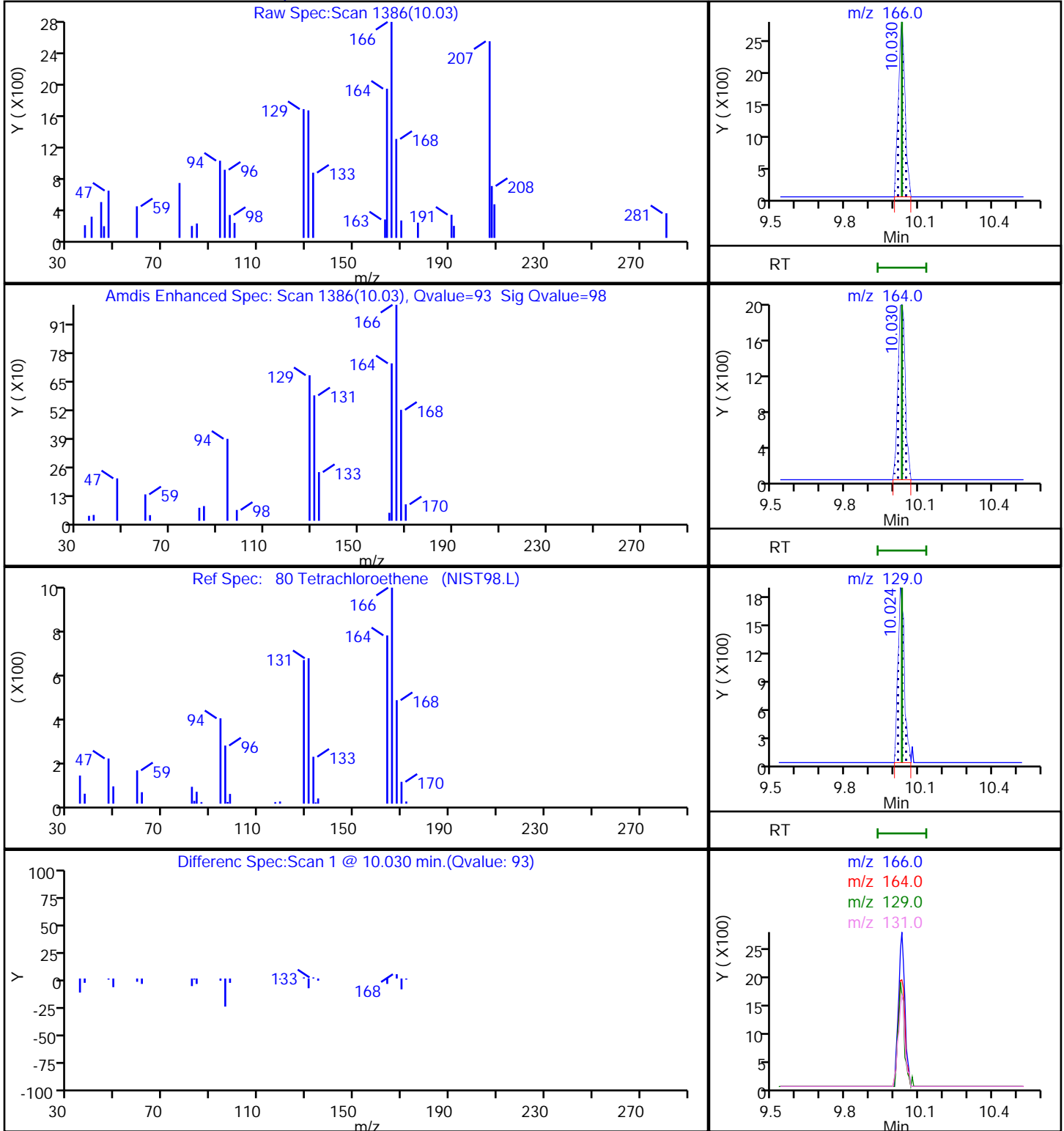
MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X024.D
Injection Date: 06-Jun-2022 18:59:30 Instrument ID: 10193
Lims ID: 410-85437-A-10 Lab Sample ID: 410-85437-10
Client ID: HD-COD-SW-27-0/1-0
Operator ID: knk41612 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

80 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X024.D

Injection Date: 06-Jun-2022 18:59:30

Instrument ID: 10193

Lims ID: 410-85437-A-10

Lab Sample ID: 410-85437-10

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

Operator ID: knk41612

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

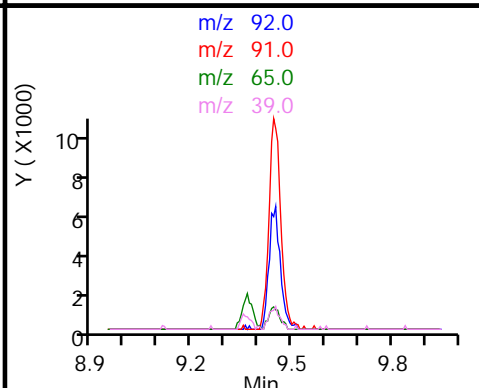
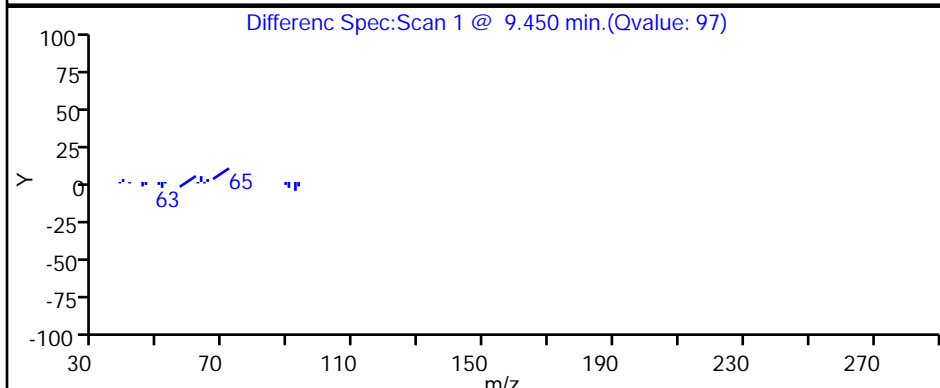
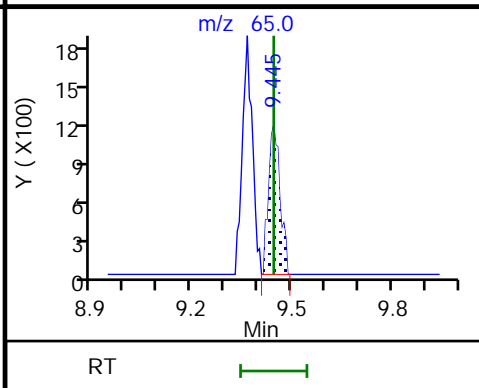
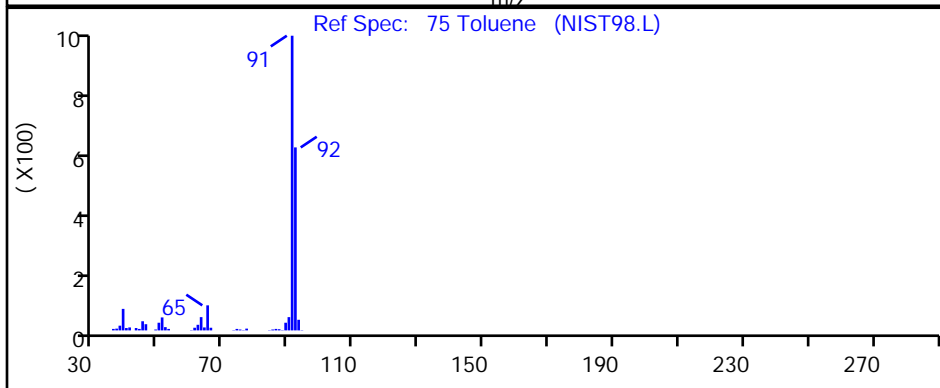
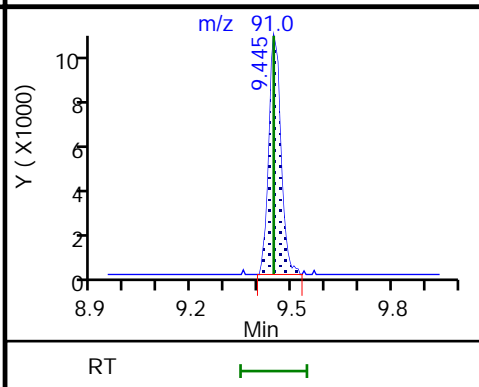
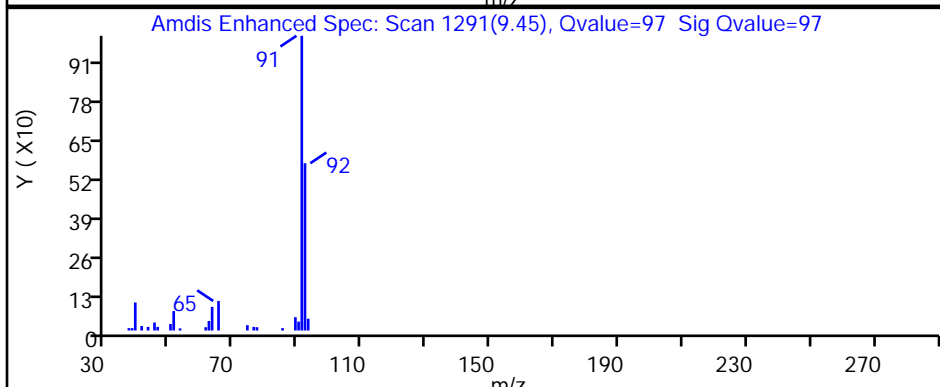
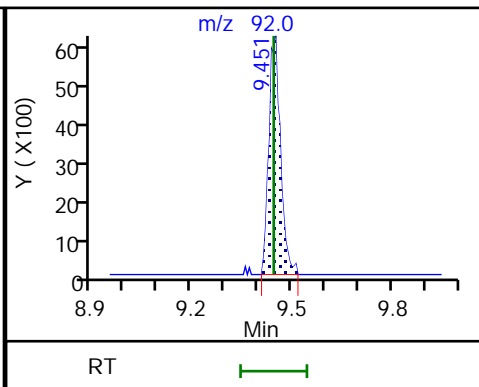
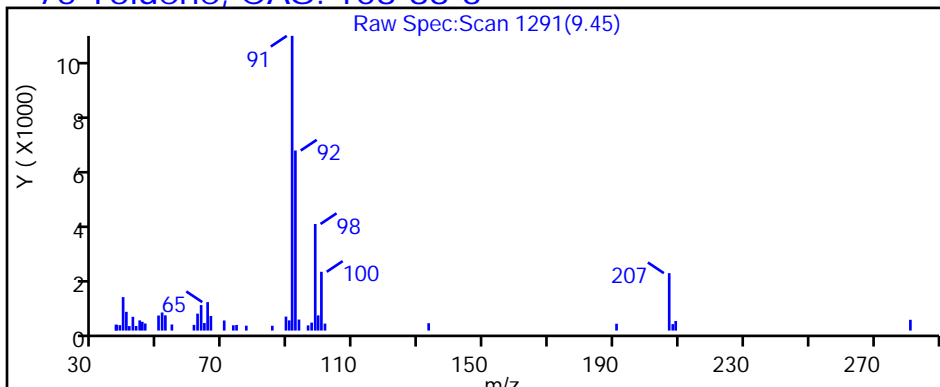
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

75 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X024.D

Injection Date: 06-Jun-2022 18:59:30

Instrument ID: 10193

Lims ID: 410-85437-A-10

Lab Sample ID: 410-85437-10

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

Operator ID: knk41612

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

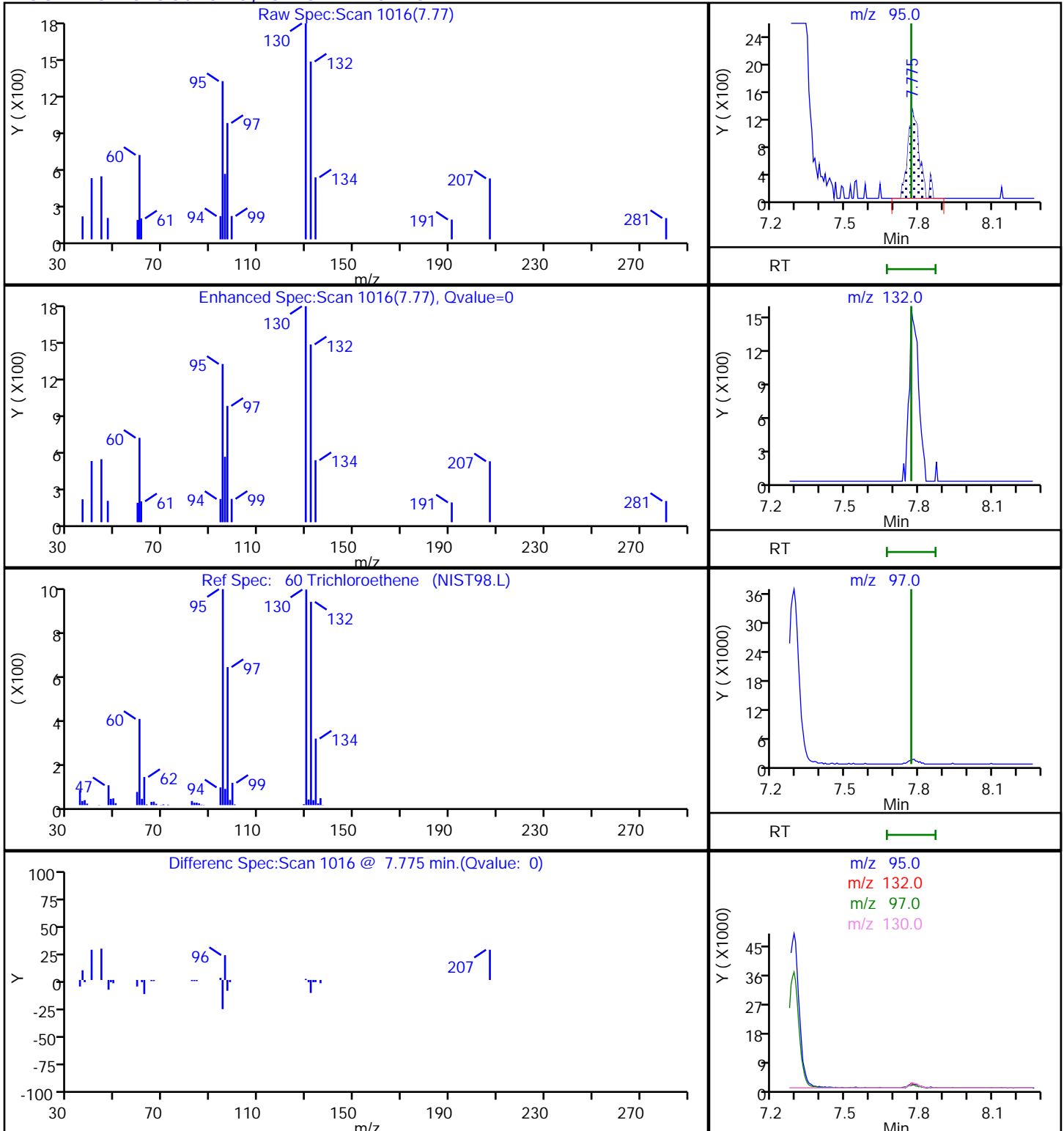
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

60 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Environment Testing, LLC

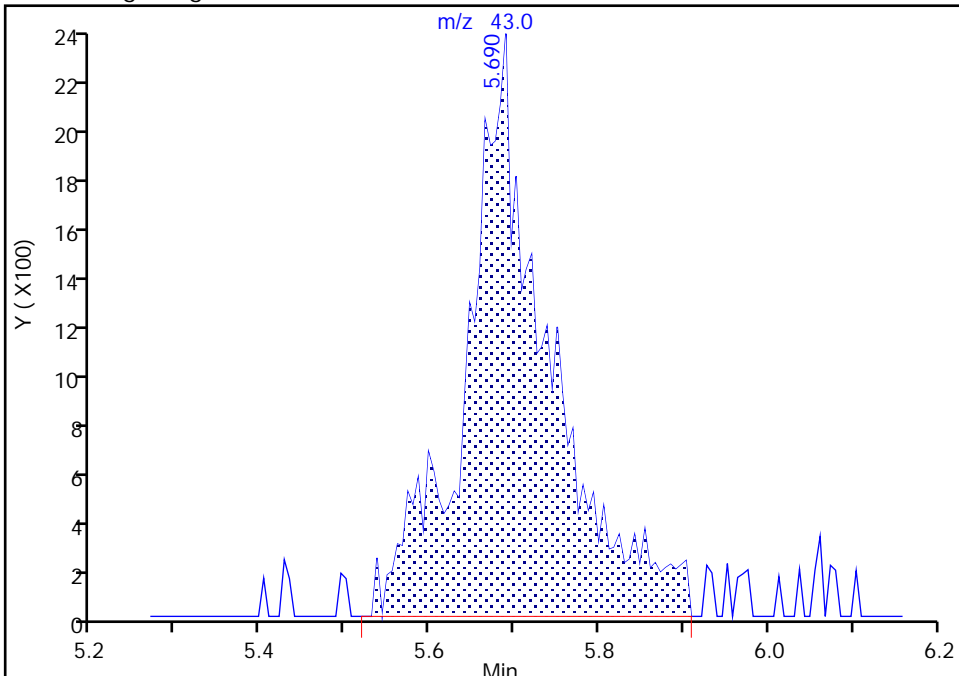
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X024.D
Injection Date: 06-Jun-2022 18:59:30 Instrument ID: 10193
Lims ID: 410-85437-A-10 Lab Sample ID: 410-85437-10
Client ID: HD-COD-SW-27-0/1-0
Operator ID: knk41612 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

36 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

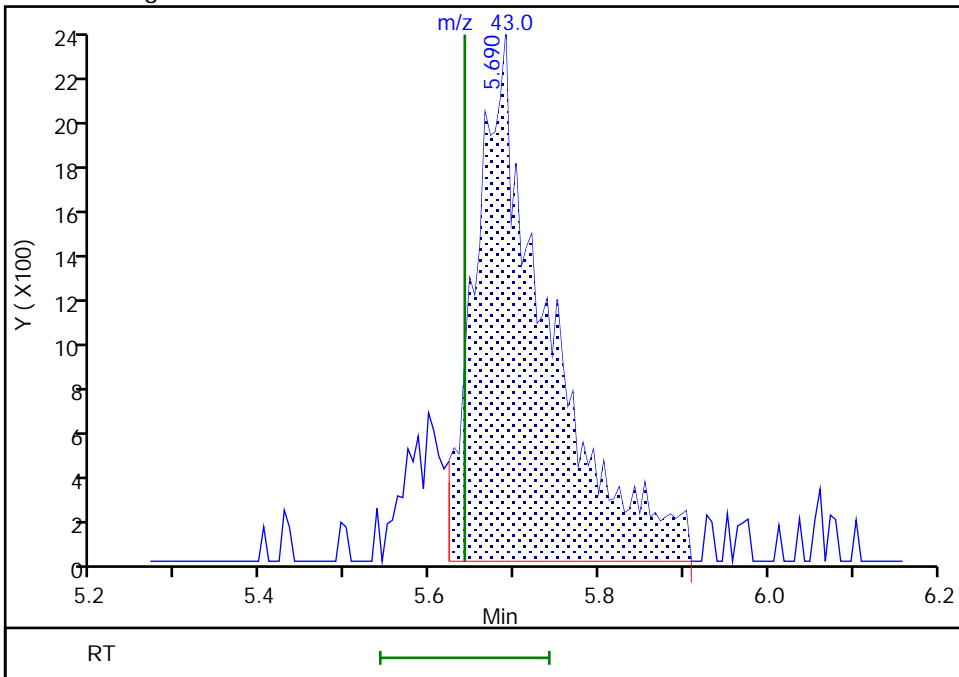
RT: 5.69
Area: 15802
Amount: 1.448348
Amount Units: ug/l

Processing Integration Results



RT: 5.69
Area: 13923
Amount: 1.276126
Amount Units: ug/l

Manual Integration Results



Reviewer: johnsons, 06-Jun-2022 22:26:13
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC

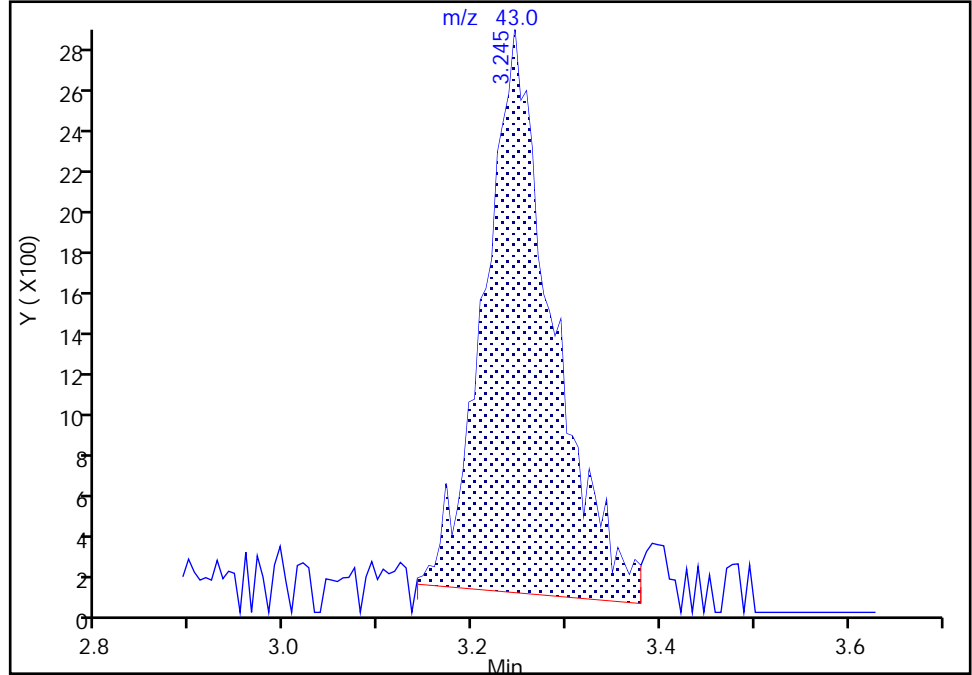
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X024.D
Injection Date: 06-Jun-2022 18:59:30 Instrument ID: 10193
Lims ID: 410-85437-A-10 Lab Sample ID: 410-85437-10
Client ID: HD-COD-SW-27-0/1-0
Operator ID: knk41612 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

16 Acetone, CAS: 67-64-1

Signal: 1

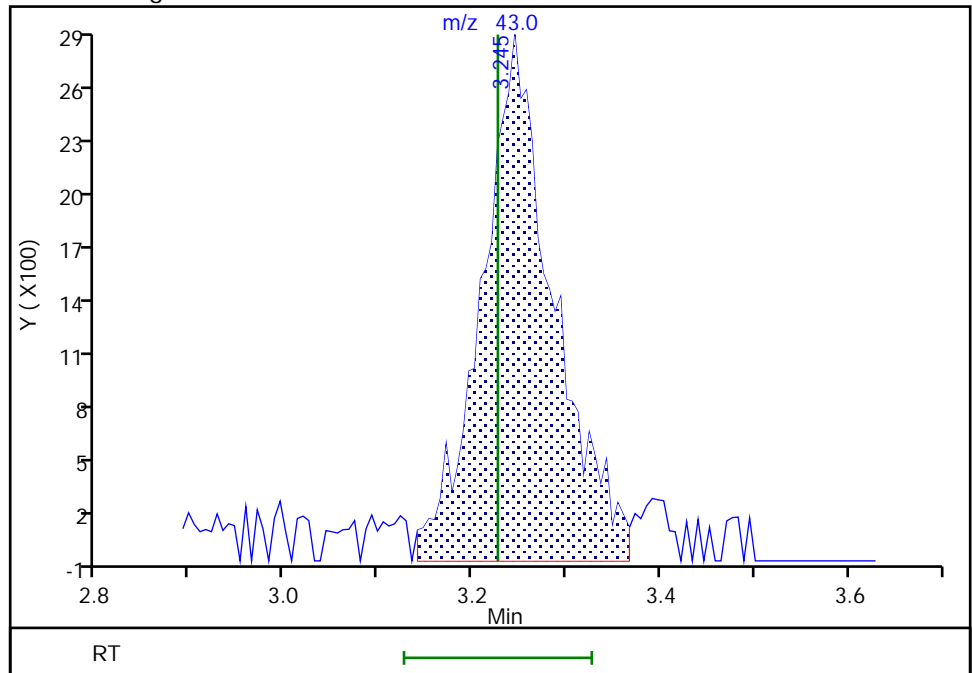
RT: 3.24
Area: 13870
Amount: 2.602602
Amount Units: ug/l

Processing Integration Results



RT: 3.24
Area: 15039
Amount: 2.821956
Amount Units: ug/l

Manual Integration Results



Reviewer: johnsons, 06-Jun-2022 22:25:53
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC

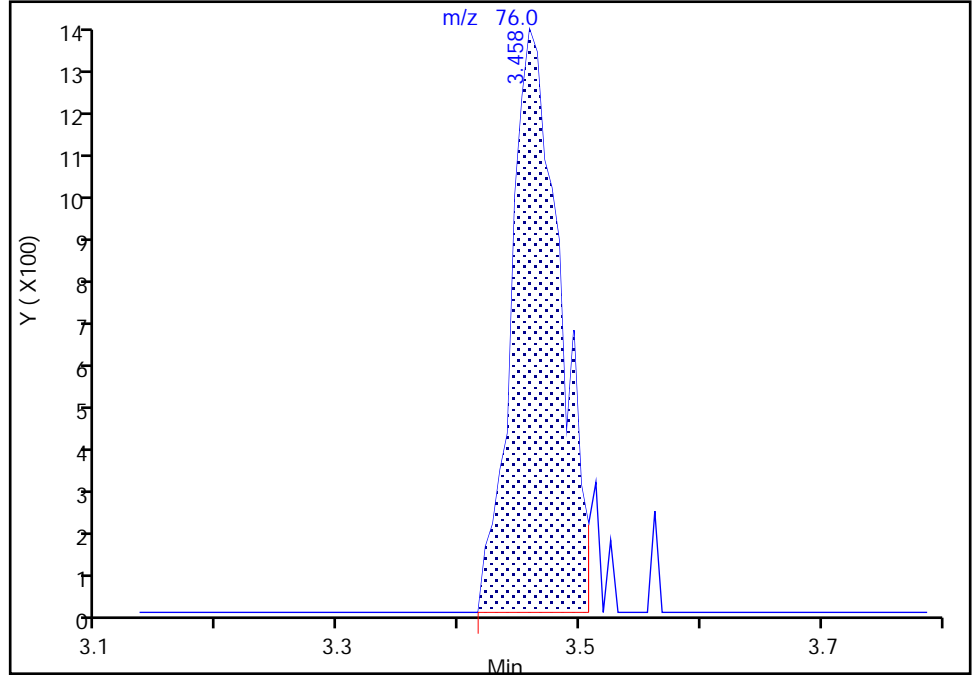
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X024.D
Injection Date: 06-Jun-2022 18:59:30 Instrument ID: 10193
Lims ID: 410-85437-A-10 Lab Sample ID: 410-85437-10
Client ID: HD-COD-SW-27-0/1-0
Operator ID: knk41612 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

20 Carbon disulfide, CAS: 75-15-0

Signal: 1

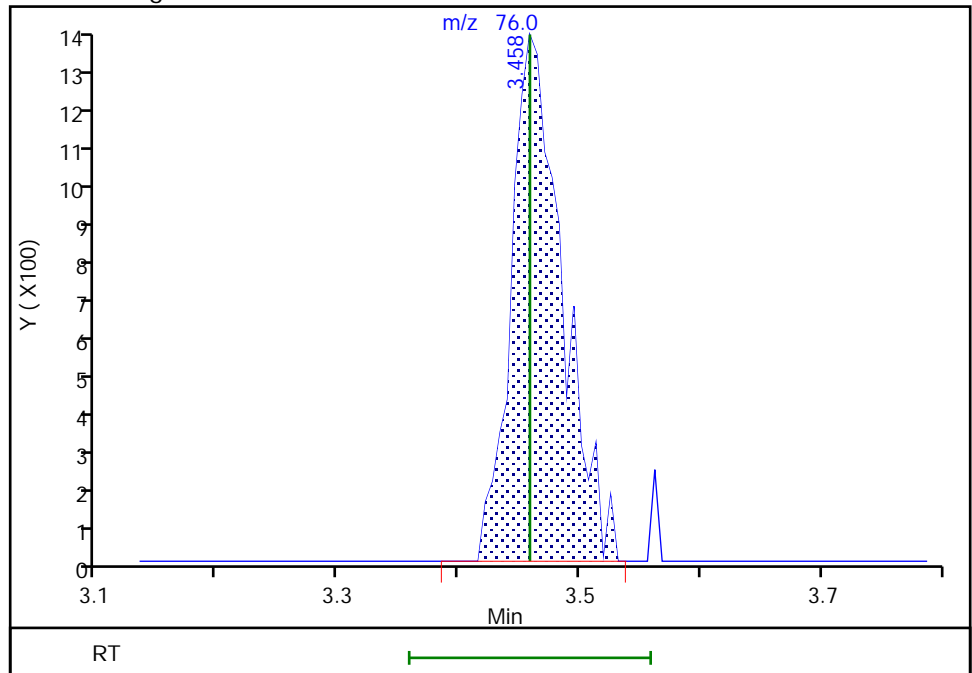
RT: 3.46
Area: 3764
Amount: 0.031252
Amount Units: ug/l

Processing Integration Results



RT: 3.46
Area: 3935
Amount: 0.032672
Amount Units: ug/l

Manual Integration Results



Reviewer: johnsons, 06-Jun-2022 22:26:01
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

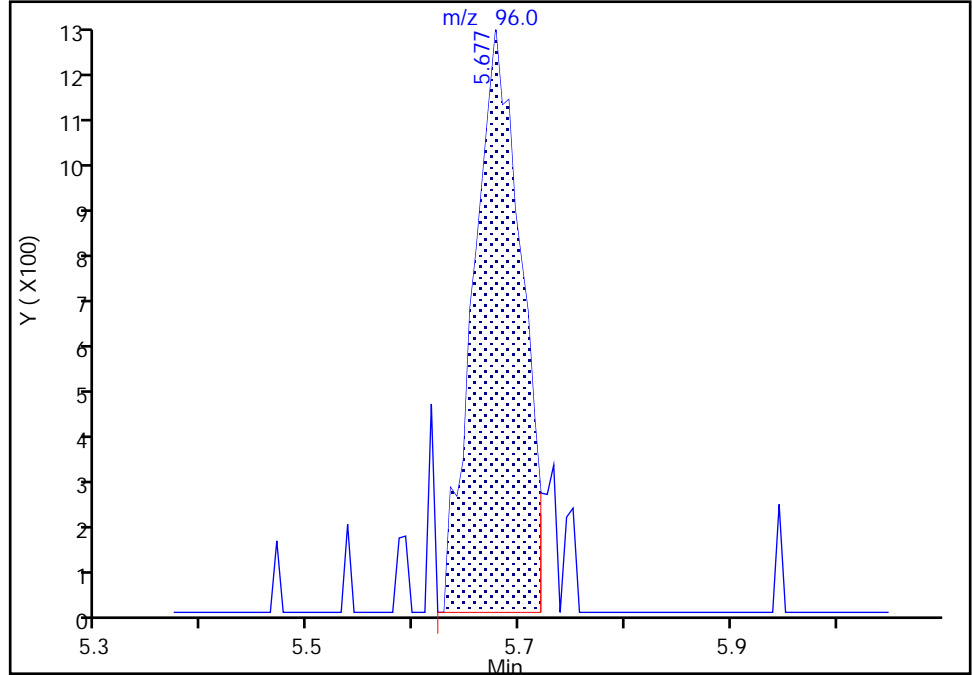
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X024.D
Injection Date: 06-Jun-2022 18:59:30 Instrument ID: 10193
Lims ID: 410-85437-A-10 Lab Sample ID: 410-85437-10
Client ID: HD-COD-SW-27-0/1-0
Operator ID: knk41612 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

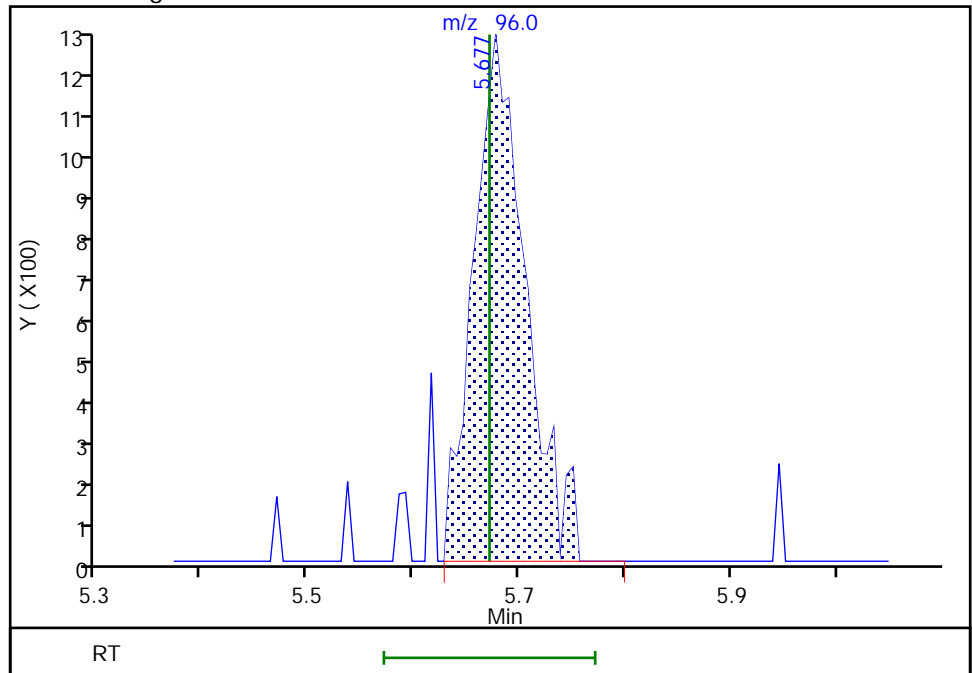
RT: 5.68
Area: 3849
Amount: 0.073901
Amount Units: ug/l

Processing Integration Results



RT: 5.68
Area: 4208
Amount: 0.080794
Amount Units: ug/l

Manual Integration Results



Reviewer: johnsons, 06-Jun-2022 22:26:28
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

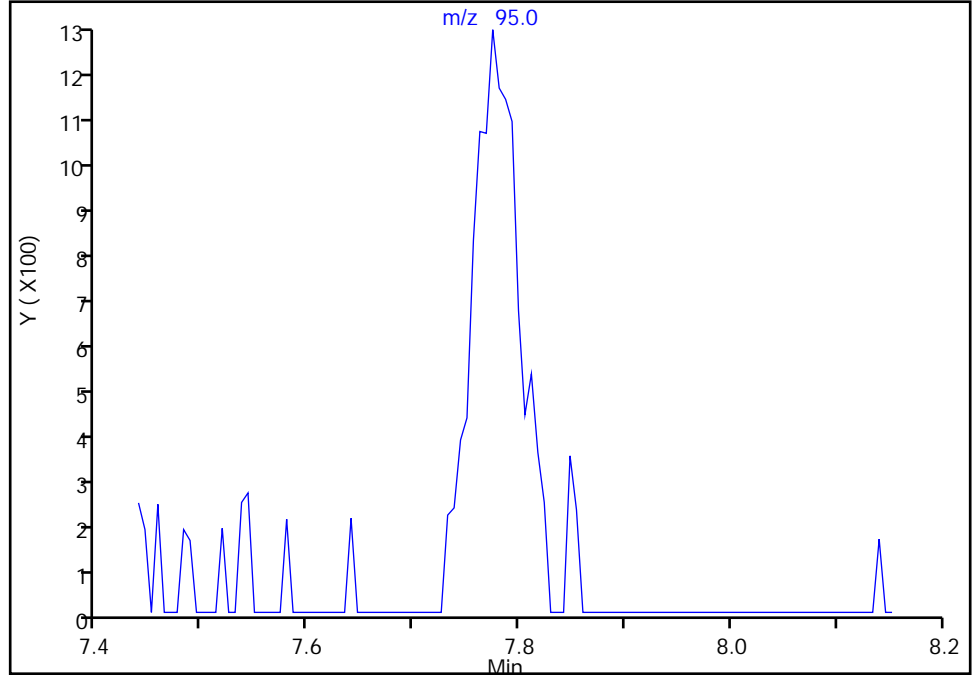
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X024.D
Injection Date: 06-Jun-2022 18:59:30 Instrument ID: 10193
Lims ID: 410-85437-A-10 Lab Sample ID: 410-85437-10
Client ID: HD-COD-SW-27-0/1-0
Operator ID: knk41612 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 Trichloroethene, CAS: 79-01-6

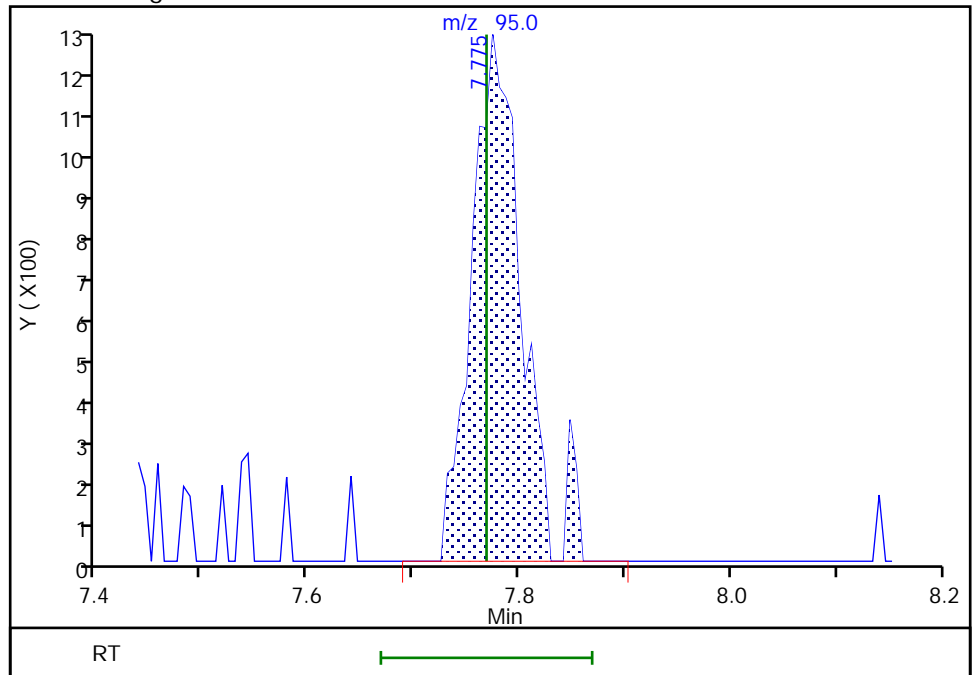
Signal: 1

Not Detected
Expected RT: 7.77

Processing Integration Results



Manual Integration Results



RT: 7.77
Area: 4269
Amount: 0.079922
Amount Units: ug/l

Reviewer: johnsons, 06-Jun-2022 22:26:38
Audit Action: Manually Integrated

Audit Reason: Missed Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-11

Matrix: Water

Lab File ID: CU06X025.D

Analysis Method: 8260D

Date Collected: 05/25/2022 13:30

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 19:21

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.: 261977

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	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.9	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c cn	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	*+	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.089	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.20	J	0.50	0.060
108-88-3	Toluene	0.087	J	0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-85437-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-85437-11

Matrix: Water Lab File ID: CU06X025.D

Analysis Method: 8260D Date Collected: 05/25/2022 13:30

Sample wt/vol: 25 (mL) Date Analyzed: 06/06/2022 19:21

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.: 261977 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.088	J	0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		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\10193\20220603-58749.b\CU06X025.D
 Lims ID: 410-85437-A-11
 Client ID: HD-COD-SW-28-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 19:21:30 ALS Bottle#: 25 Worklist Smp#: 26
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-026
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:29:24 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:27:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50	1.946	1.959	-0.013	96	2731	0.0504	
5 Vinyl chloride	62		2.069				ND	
6 Bromomethane	94		2.355				ND	7
7 Chloroethane	64		2.434				ND	
14 1,1-Dichloroethene	96		3.196				ND	7
16 Acetone	43	3.239	3.227	0.012	88	14806	2.94	
20 Carbon disulfide	76		3.459				ND	7
24 Methylene Chloride	84		3.794				ND	7
* 25 t-Butyl alcohol-d10 (IS)	65	3.818	3.812	0.006	90	110047	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63		4.824				ND	
36 2-Butanone (MEK)	43		5.641				ND	MU
37 cis-1,2-Dichloroethene	96	5.665	5.672	-0.007	84	4491	0.0891	
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83	6.171	6.165	0.006	0	5051	0.0613	M
48 1,1,1-Trichloroethane	97		6.385				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.385	6.385	0.000	95	388407	9.67	
50 Carbon tetrachloride	117		6.598				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.842	6.848	-0.006	49	72223	9.34	
54 Benzene	78		6.873				ND	7
55 1,2-Dichloroethane	62		6.946				ND	
* 57 Fluorobenzene (IS)	96	7.281	7.287	-0.006	99	1614127	10.0	
60 Trichloroethene	95	7.768	7.769	-0.001	94	4533	0.0876	
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	7
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1650835	10.1	
75 Toluene	92	9.445	9.445	0.000	98	10830	0.0868	
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.030	10.030	0.000	96	12215	0.1977	
82 2-Hexanone	43		10.183				ND	7
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1329961	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106		11.140				ND	7
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	7
93 Styrene	104		11.494				ND	7
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	593825	9.10	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.828	12.829	-0.001	93	771852	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X025.D

Injection Date: 06-Jun-2022 19:21:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-11

Lab Sample ID: 410-85437-11

Worklist Smp#: 26

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

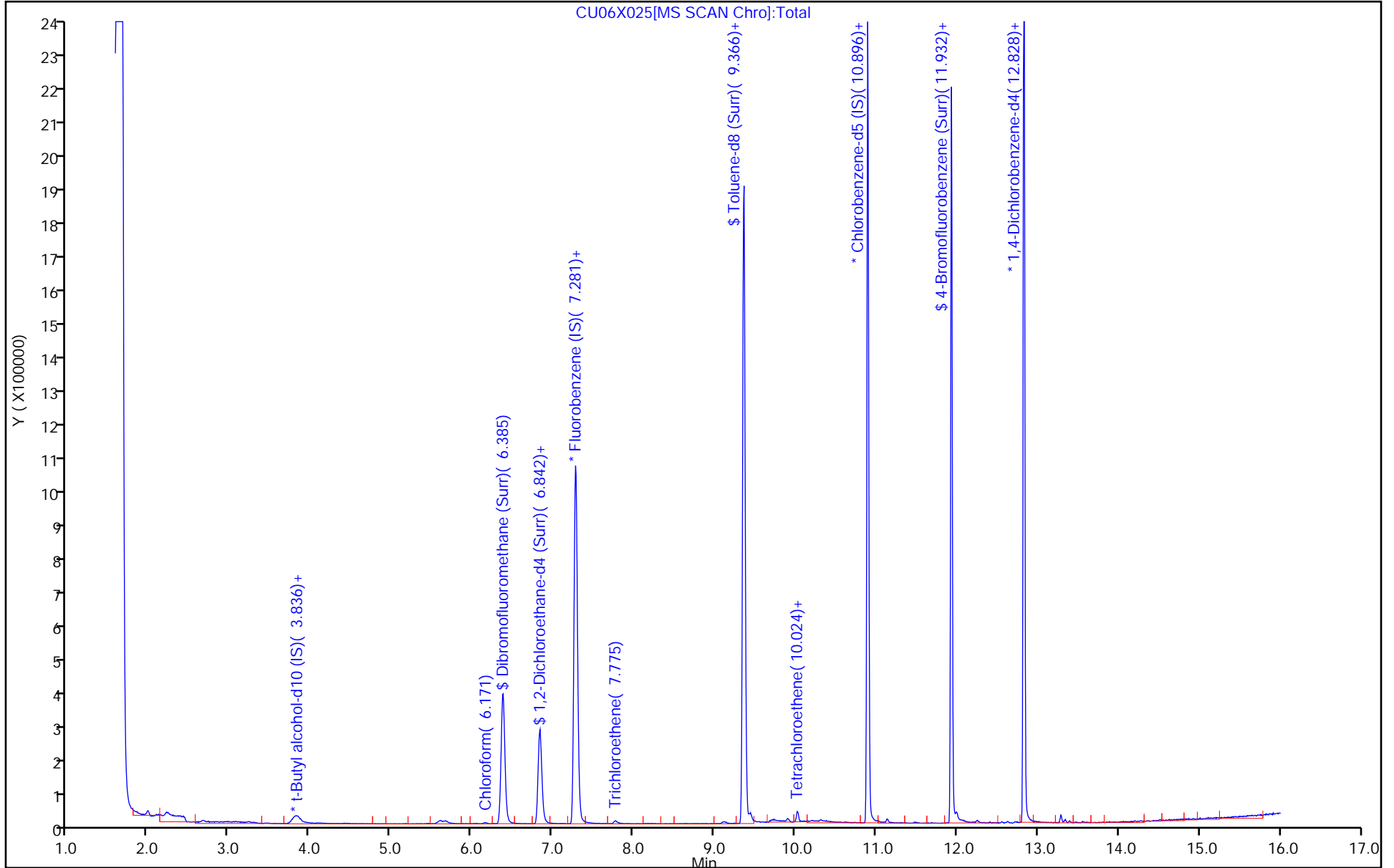
ALS Bottle#: 25

Method: MSV_10193_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\10193\20220603-58749.b\CU06X025.D
 Lims ID: 410-85437-A-11
 Client ID: HD-COD-SW-28-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 19:21:30 ALS Bottle#: 25 Worklist Smp#: 26
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-026
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:29:24 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:27:49

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.67	96.69
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.34	93.37
\$ 74 Toluene-d8 (Surr)	10.0	10.1	100.75
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.10	90.99

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X025.D

Injection Date: 06-Jun-2022 19:21:30

Instrument ID: 10193

Lims ID: 410-85437-A-11

Lab Sample ID: 410-85437-11

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

Operator ID: knk41612

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

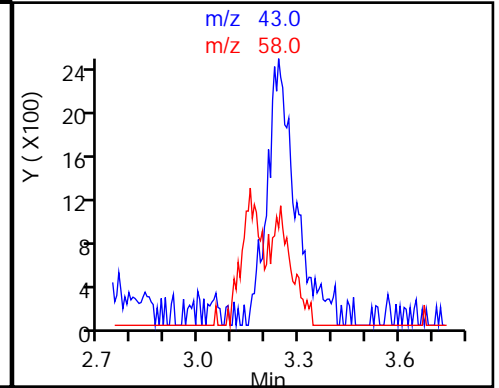
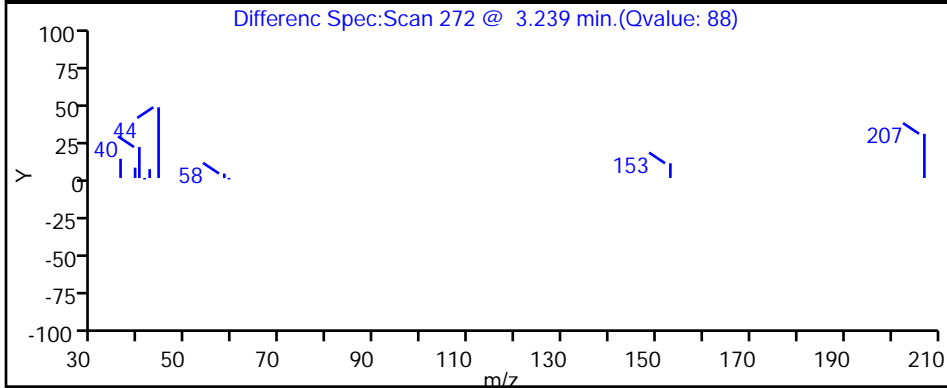
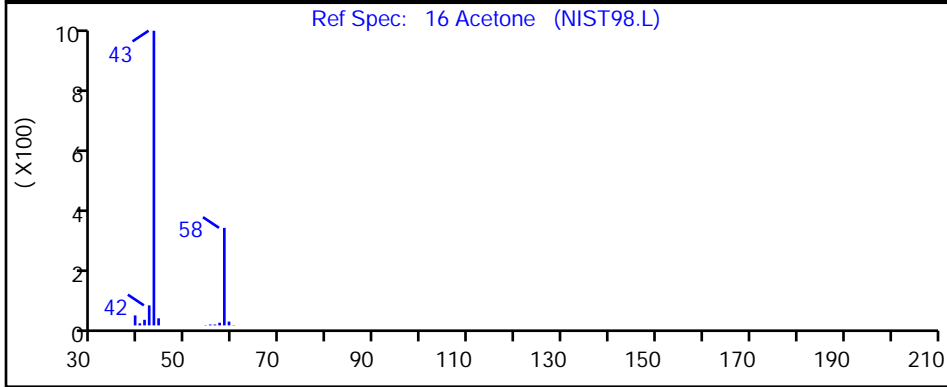
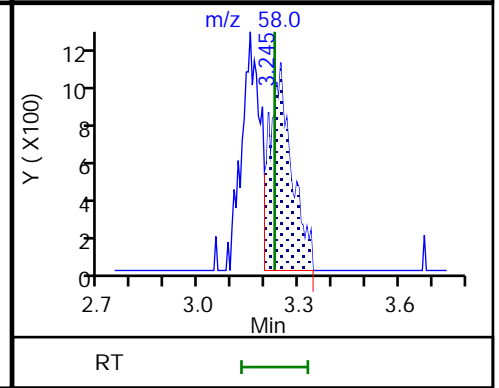
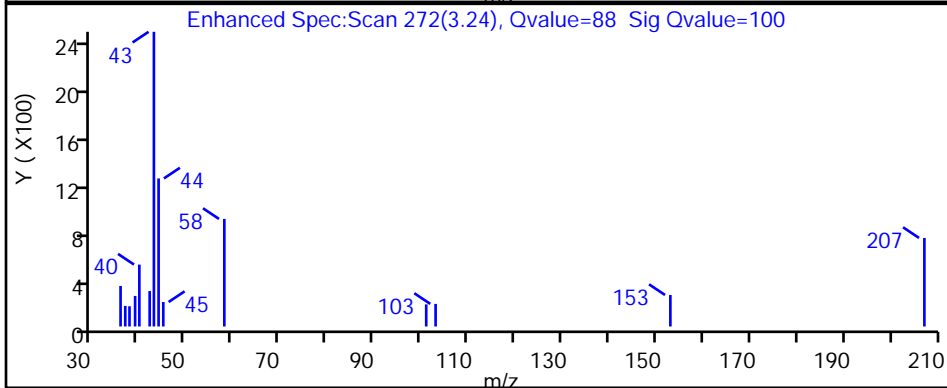
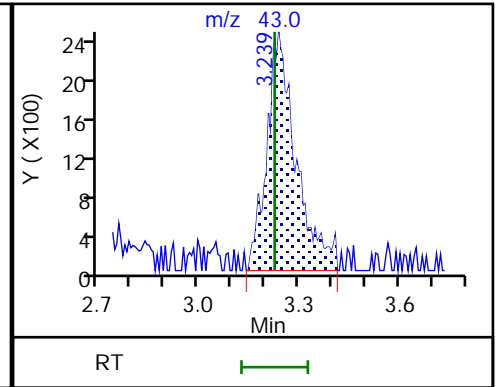
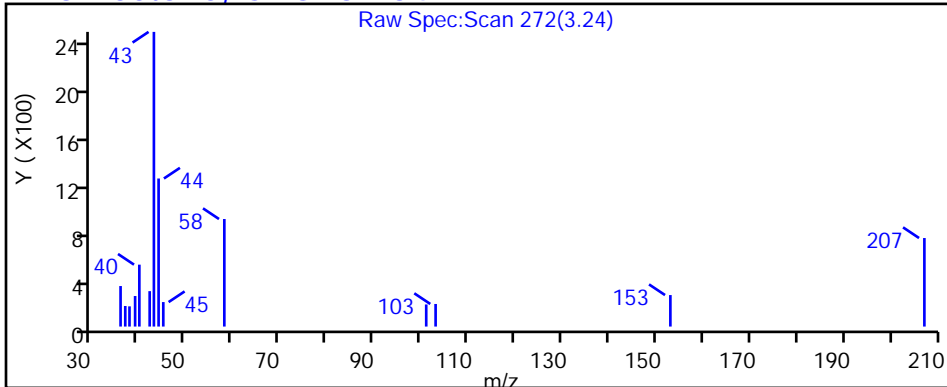
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

16 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X025.D

Injection Date: 06-Jun-2022 19:21:30

Instrument ID: 10193

Lims ID: 410-85437-A-11

Lab Sample ID: 410-85437-11

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

Operator ID: knk41612

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

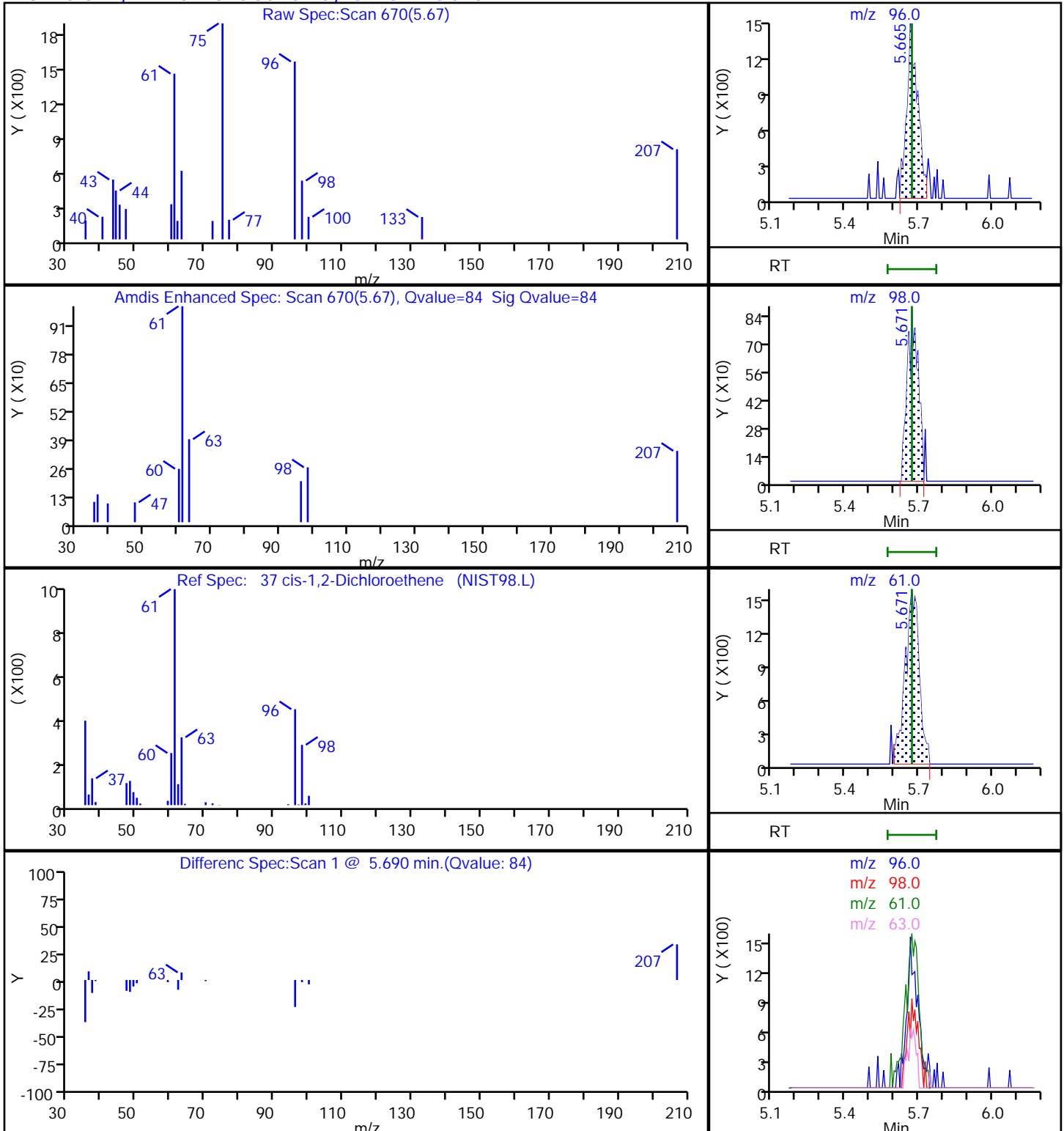
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X025.D

Injection Date: 06-Jun-2022 19:21:30

Instrument ID: 10193

Lims ID: 410-85437-A-11

Lab Sample ID: 410-85437-11

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

Operator ID: knk41612

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

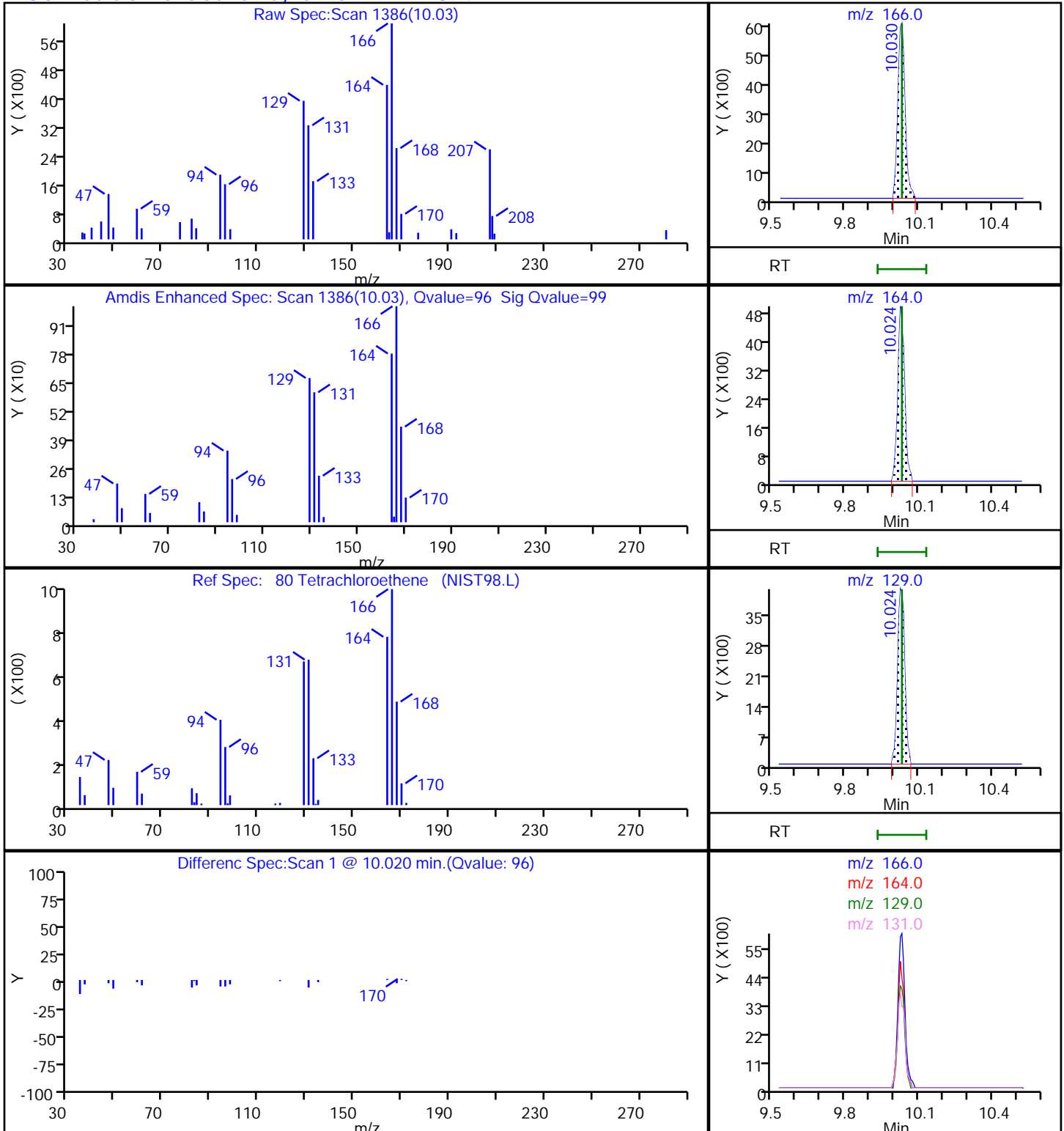
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

80 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X025.D

Injection Date: 06-Jun-2022 19:21:30

Instrument ID: 10193

Lims ID: 410-85437-A-11

Lab Sample ID: 410-85437-11

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

Operator ID: knk41612

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

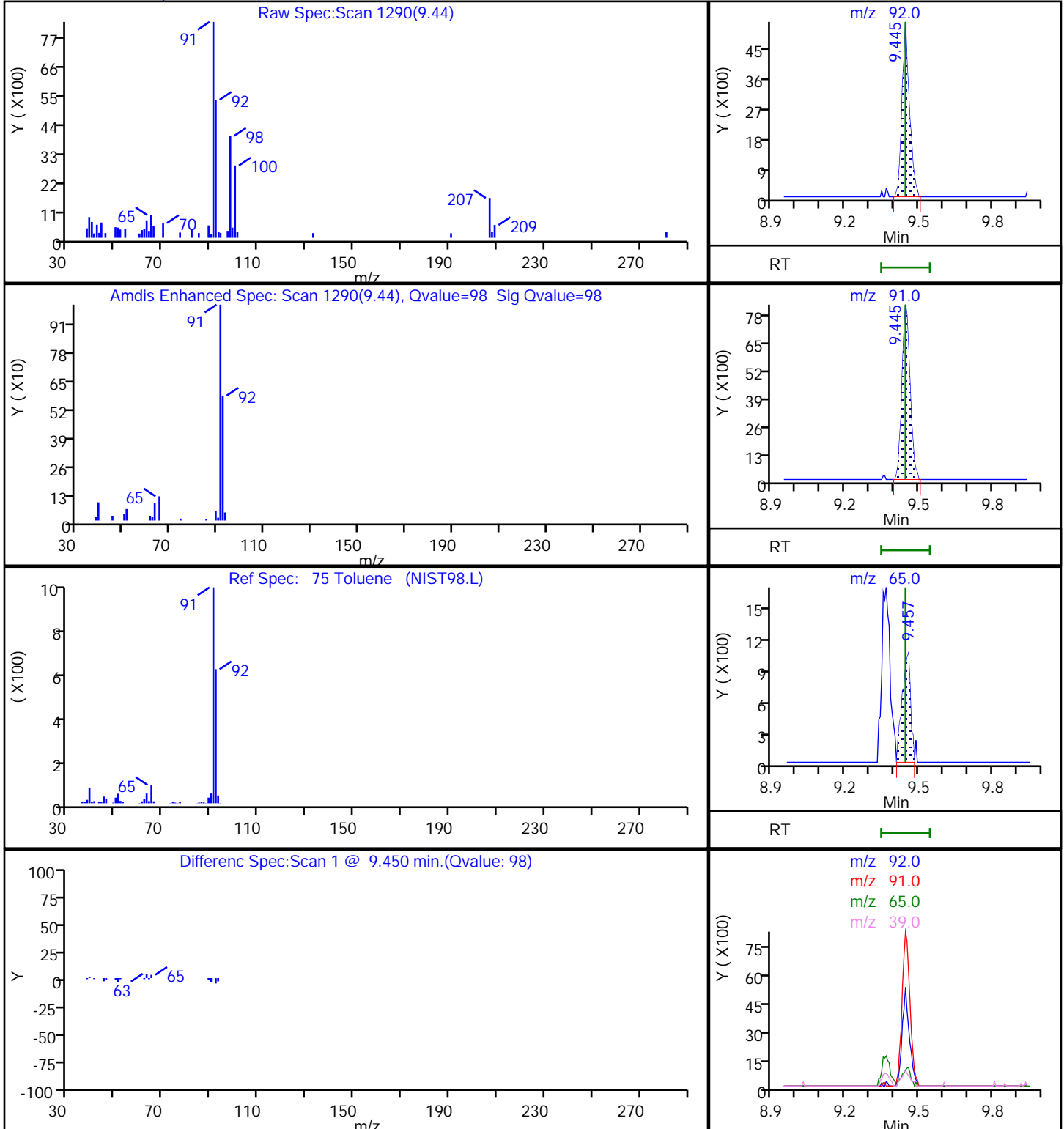
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

75 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X025.D

Injection Date: 06-Jun-2022 19:21:30

Instrument ID: 10193

Lims ID: 410-85437-A-11

Lab Sample ID: 410-85437-11

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

Operator ID: knk41612

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

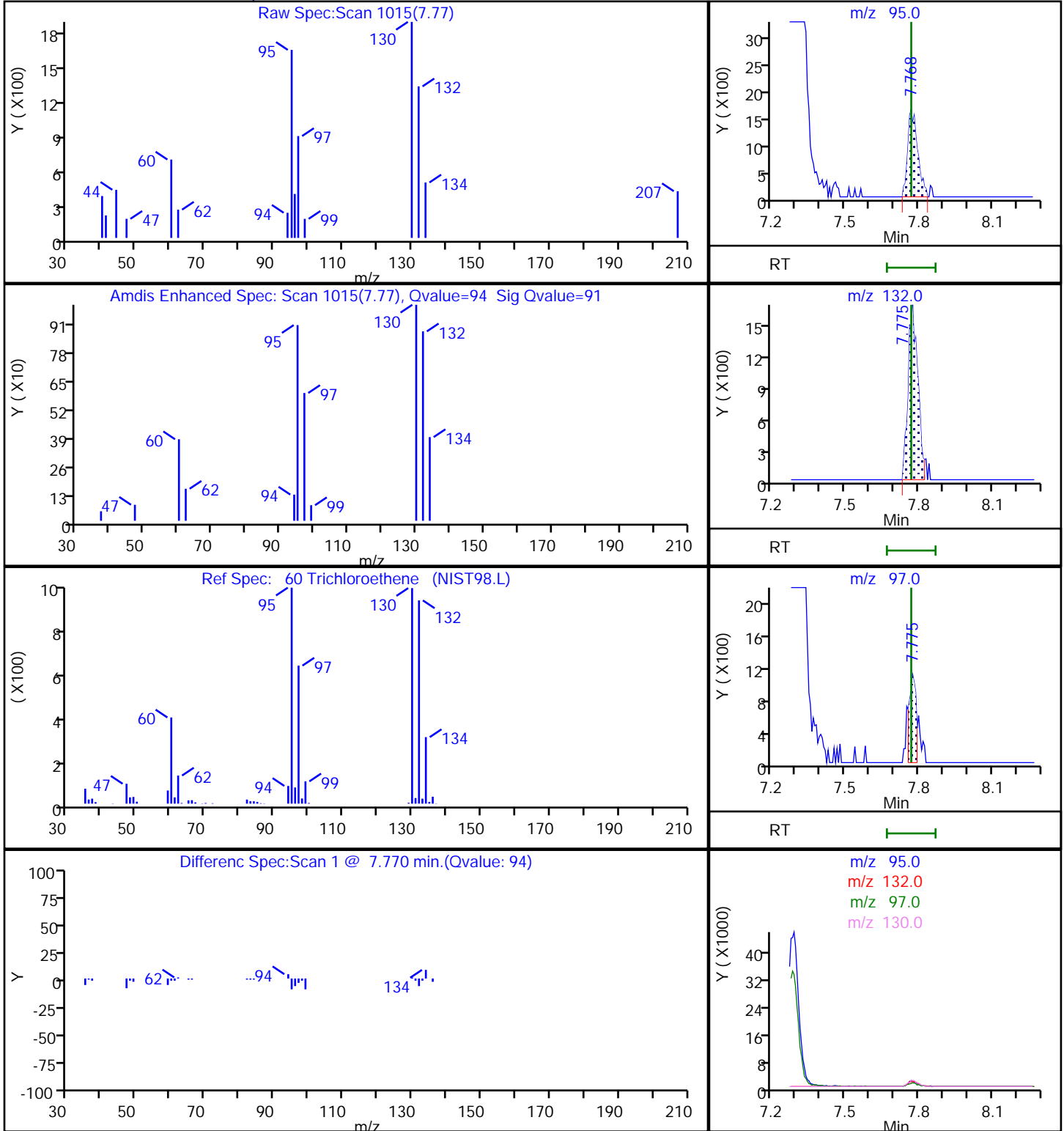
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

60 Trichloroethene, CAS: 79-01-6

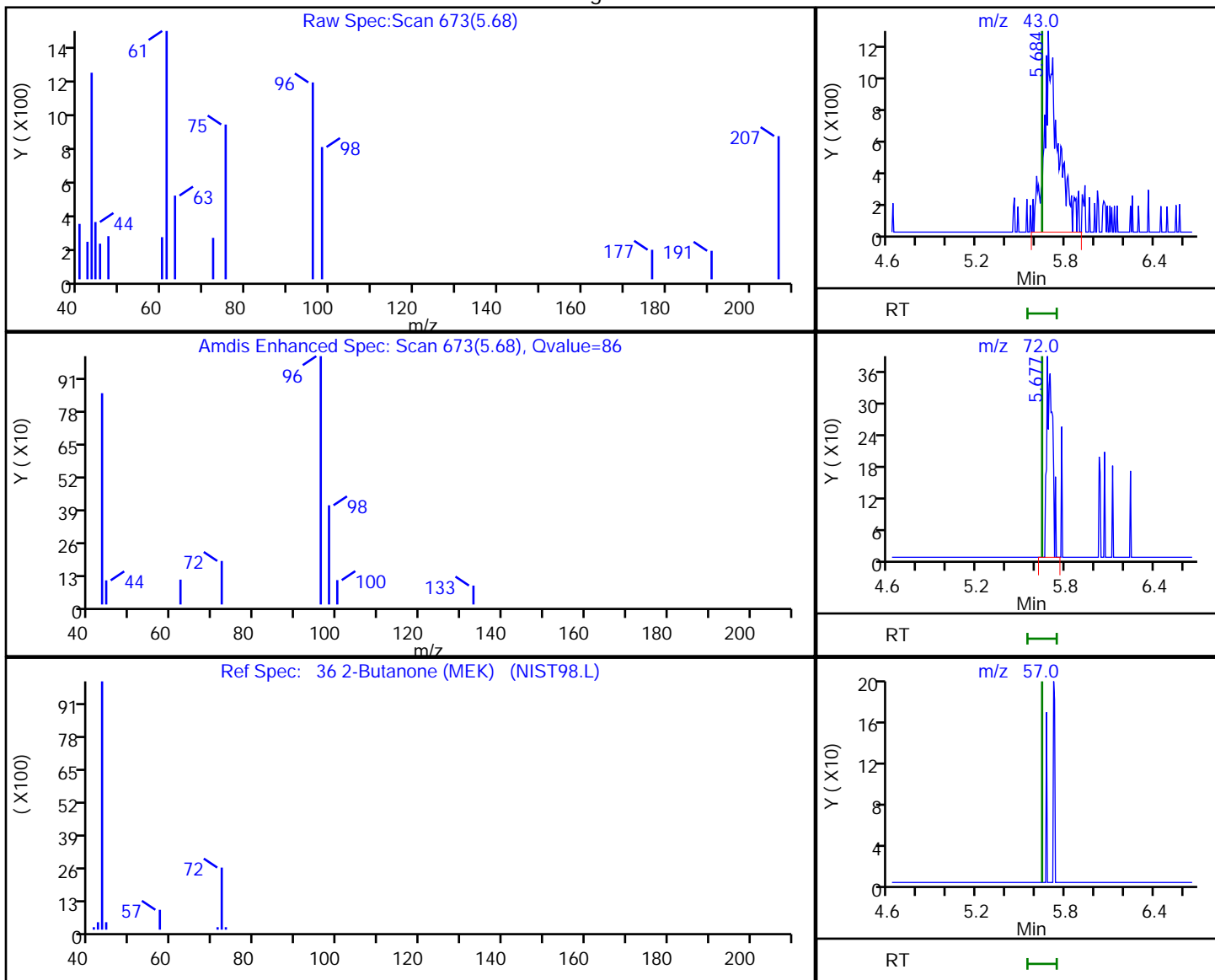


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X025.D
 Injection Date: 06-Jun-2022 19:21:30 Instrument ID: 10193
 Lims ID: 410-85437-A-11 Lab Sample ID: 410-85437-11
 Client ID: HD-COD-SW-28-0/1-0
 Operator ID: knk41612 ALS Bottle#: 25 Worklist Smp#: 26
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
5.68	43.00	7927	0.769405
5.68	72.00	1010	
5.64	57.00	0	

Reviewer: johnsons, 06-Jun-2022 22:27:23

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

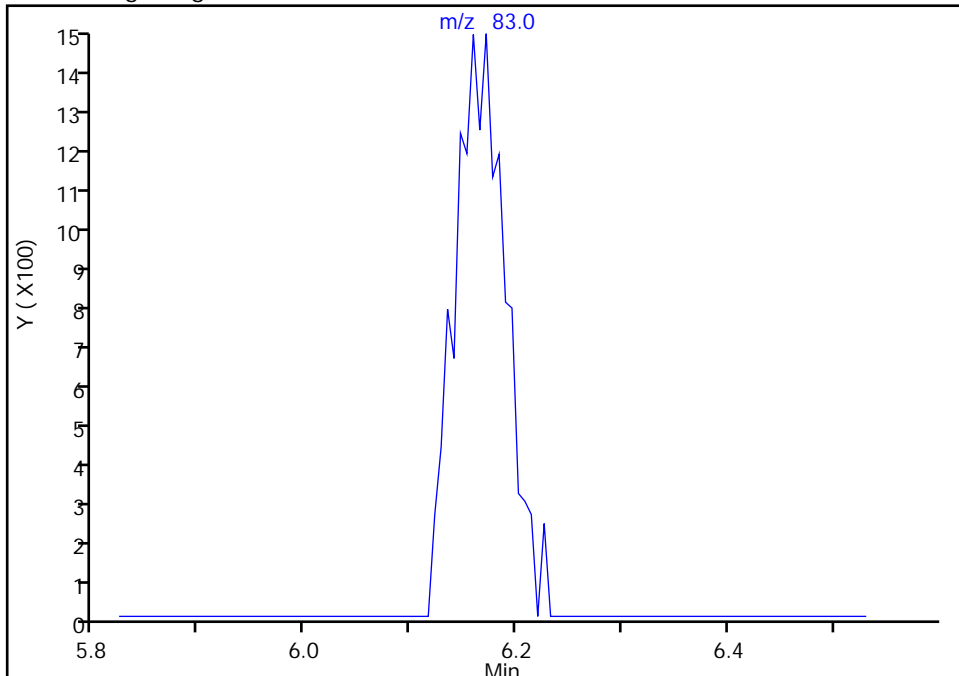
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X025.D
Injection Date: 06-Jun-2022 19:21:30 Instrument ID: 10193
Lims ID: 410-85437-A-11 Lab Sample ID: 410-85437-11
Client ID: HD-COD-SW-28-0/1-0
Operator ID: knk41612 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

46 Chloroform, CAS: 67-66-3

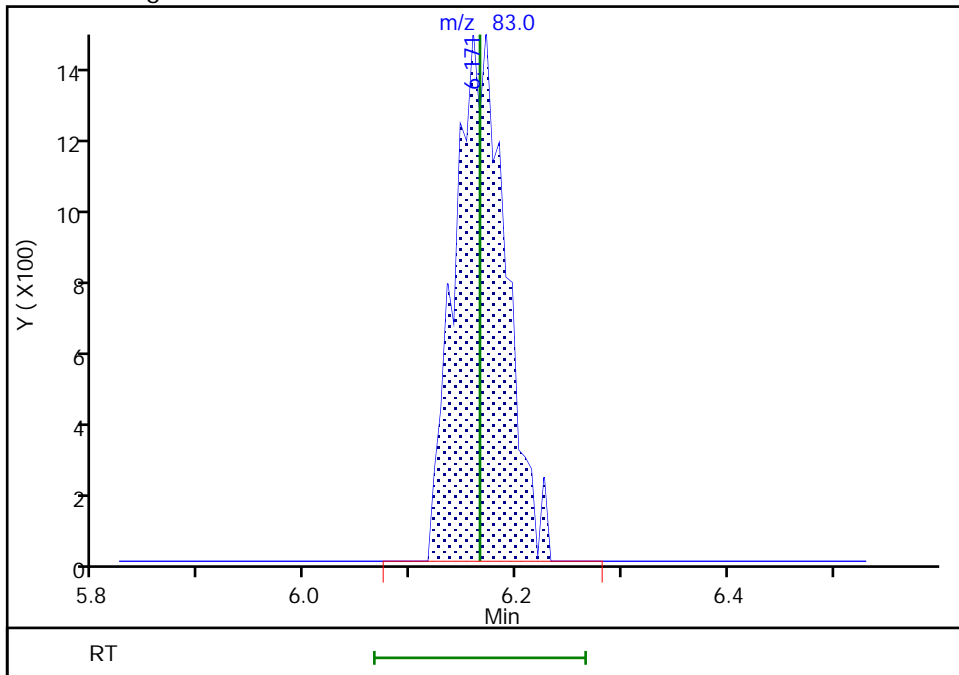
Signal: 1

Not Detected
Expected RT: 6.17

Processing Integration Results



Manual Integration Results



RT: 6.17
Area: 5051
Amount: 0.061344
Amount Units: ug/l

Reviewer: johnsons, 06-Jun-2022 22:27:34
Audit Action: Manually Integrated

Audit Reason: Missed Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-12

Matrix: Water

Lab File ID: CU06X026.D

Analysis Method: 8260D

Date Collected: 05/25/2022 09:20

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 19:43

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.: 261977

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	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.0	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	*+	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.072	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.26	J	0.50	0.060
108-88-3	Toluene	0.071	J	0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-12

Matrix: Water

Lab File ID: CU06X026.D

Analysis Method: 8260D

Date Collected: 05/25/2022 09:20

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 19:43

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.082	J	0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		80-120
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		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\10193\20220603-58749.b\CU06X026.D
 Lims ID: 410-85437-A-12
 Client ID: HD-COD-SW-29-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 19:43:30 ALS Bottle#: 26 Worklist Smp#: 27
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-027
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 07-Jun-2022 10:02:46 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1637

First Level Reviewer: mellotr

Date: 07-Jun-2022 10:01:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50	1.953	1.959	-0.006	94	2680	0.0492	
5 Vinyl chloride	62		2.069				ND	
6 Bromomethane	94		2.355				ND	
7 Chloroethane	64		2.434				ND	
14 1,1-Dichloroethene	96		3.196				ND	7
16 Acetone	43	3.263	3.227	0.036	99	10564	2.02	
20 Carbon disulfide	76		3.459				ND	7
24 Methylene Chloride	84		3.794				ND	7
* 25 t-Butyl alcohol-d10 (IS)	65	3.836	3.812	0.024	90	114251	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63		4.824				ND	
36 2-Butanone (MEK)	43		5.641				ND	7
37 cis-1,2-Dichloroethene	96	5.690	5.672	0.018	21	3654	0.0720	
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83	6.171	6.165	0.006	83	2414	0.0291	
48 1,1,1-Trichloroethane	97		6.385				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.391	6.385	0.006	95	389360	9.64	
50 Carbon tetrachloride	117		6.598				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.848	6.848	0.000	48	73439	9.44	
54 Benzene	78		6.873				ND	
55 1,2-Dichloroethane	62		6.946				ND	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1623555	10.0	
60 Trichloroethene	95	7.781	7.769	0.012	61	4245	0.0816	M
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1589219	9.85	
75 Toluene	92	9.451	9.445	0.006	99	8676	0.0706	
76 trans-1,3-Dichloropropene	75		9.732				ND	
79 1,1,2-Trichloroethane	97		9.945				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.030	10.030	0.000	96	15736	0.2586	
82 2-Hexanone	43		10.183				ND	7
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1310164	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106		11.140				ND	7
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	7
93 Styrene	104		11.494				ND	
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	589407	9.17	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.828	12.829	-0.001	93	773928	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X026.D

Injection Date: 06-Jun-2022 19:43:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-12

Lab Sample ID: 410-85437-12

Worklist Smp#: 27

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

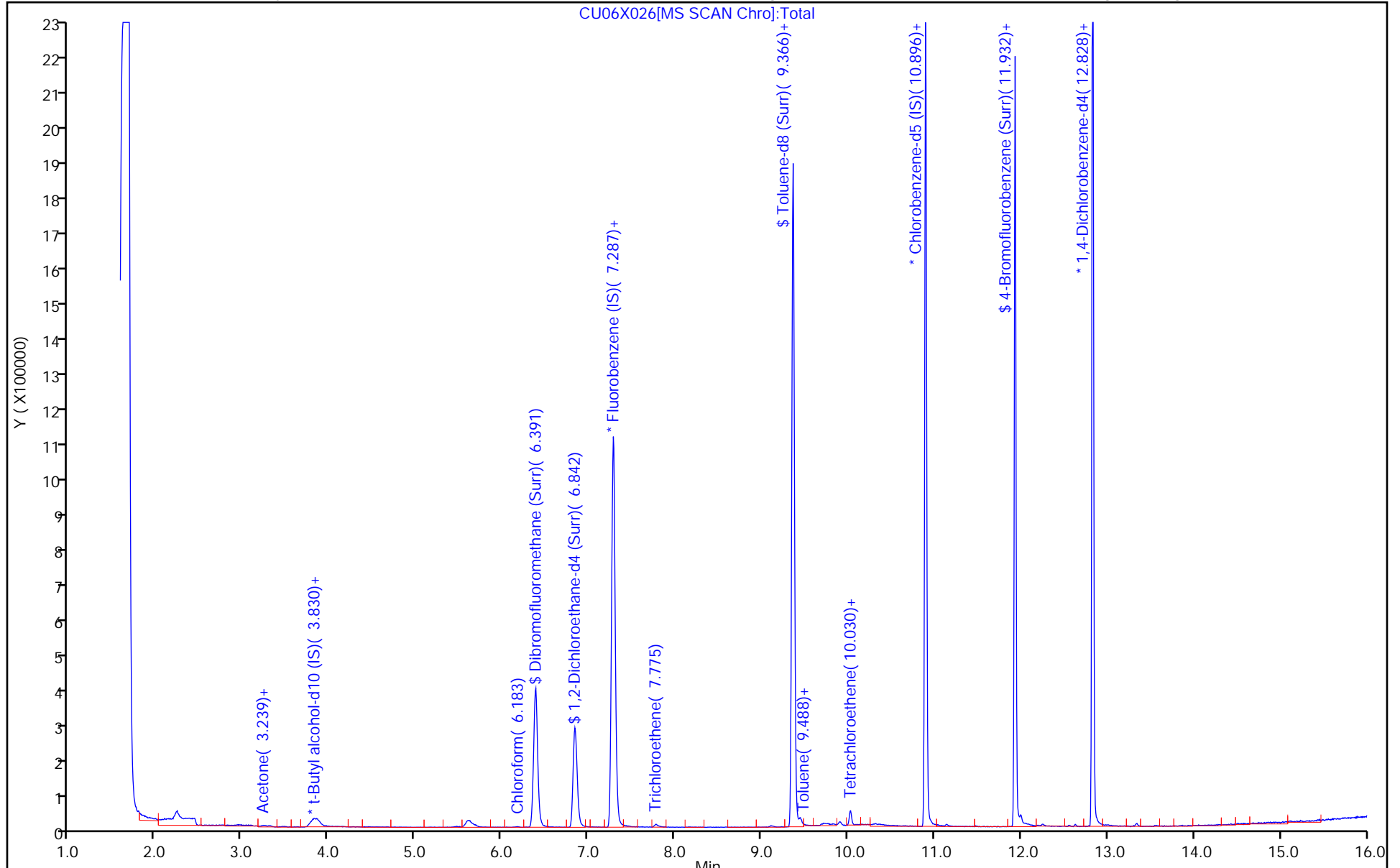
ALS Bottle#: 26

Method: MSV_10193_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\10193\20220603-58749.b\CU06X026.D
 Lims ID: 410-85437-A-12
 Client ID: HD-COD-SW-29-0/1-0
 Sample Type: Client
 Inject. Date: 06-Jun-2022 19:43:30 ALS Bottle#: 26 Worklist Smp#: 27
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-027
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 07-Jun-2022 10:02:46 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1637

First Level Reviewer: mellottr

Date: 07-Jun-2022 10:01:38

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.64	96.37
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.44	94.39
\$ 74 Toluene-d8 (Surr)	10.0	9.85	98.45
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.17	91.68

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X026.D

Injection Date: 06-Jun-2022 19:43:30

Instrument ID: 10193

Lims ID: 410-85437-A-12

Lab Sample ID: 410-85437-12

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

Operator ID: knk41612

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

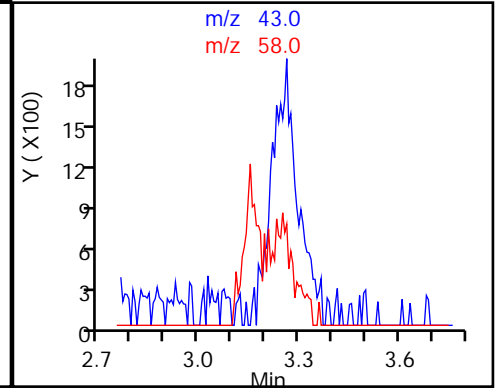
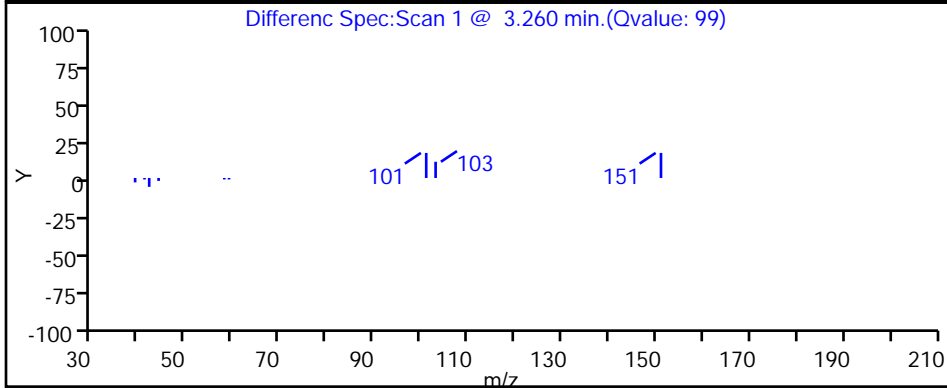
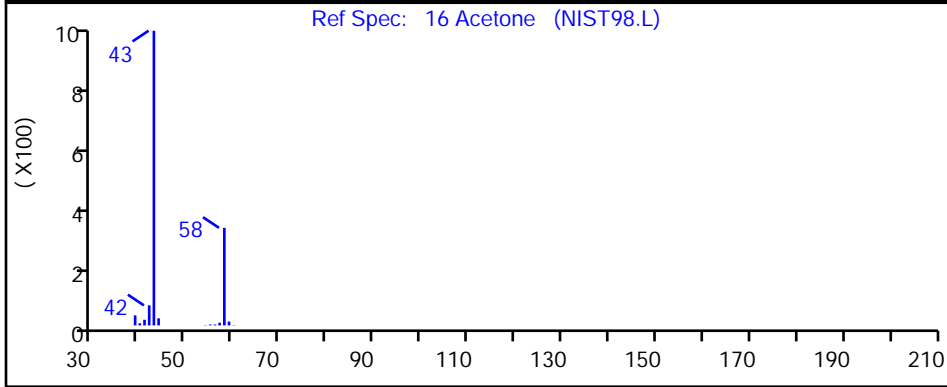
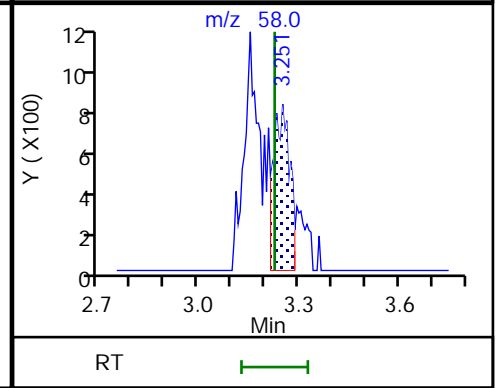
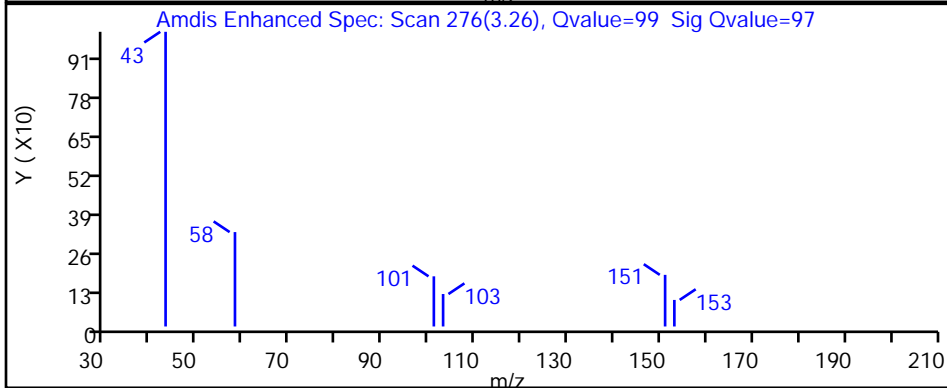
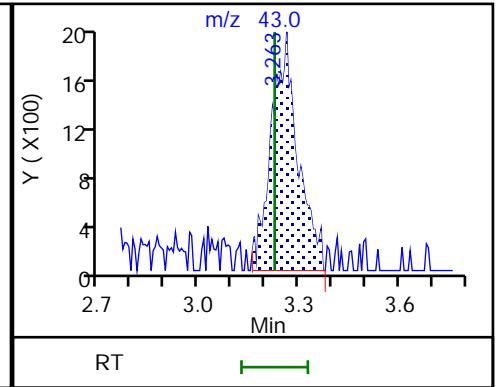
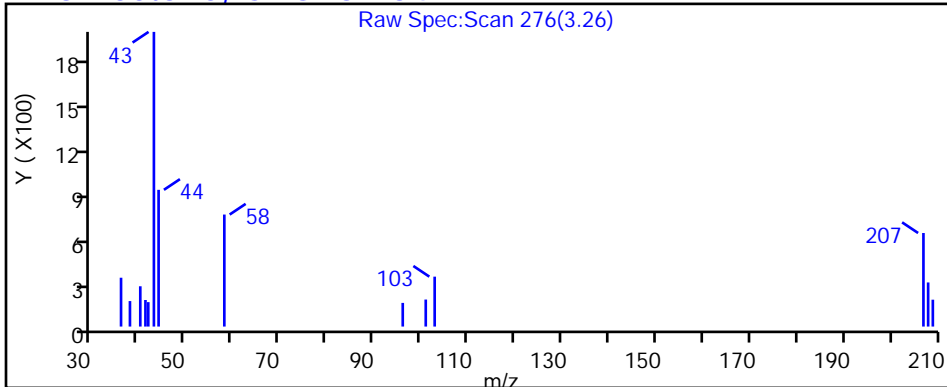
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

16 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X026.D

Injection Date: 06-Jun-2022 19:43:30

Instrument ID: 10193

Lims ID: 410-85437-A-12

Lab Sample ID: 410-85437-12

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

Operator ID: knk41612

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

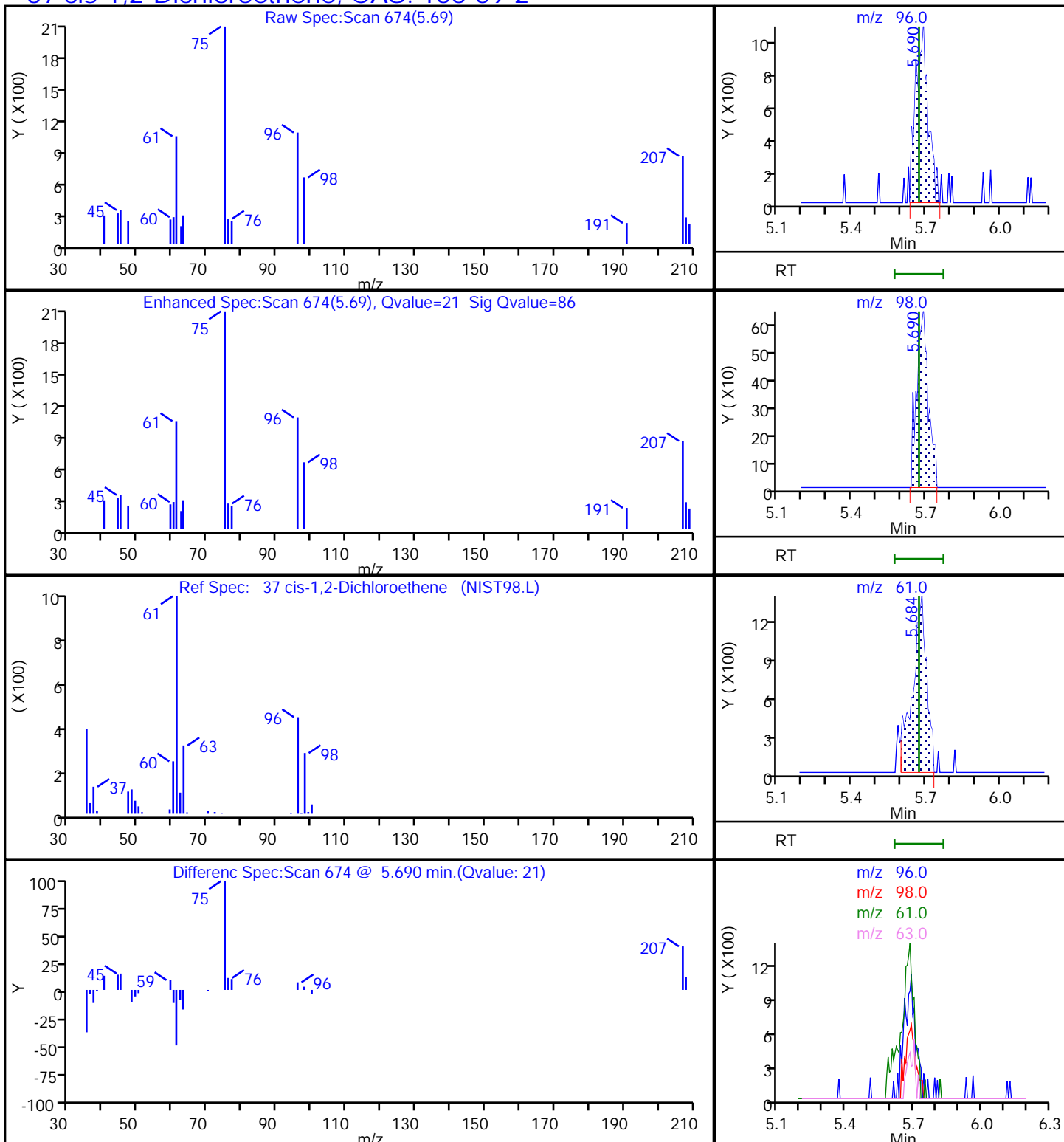
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

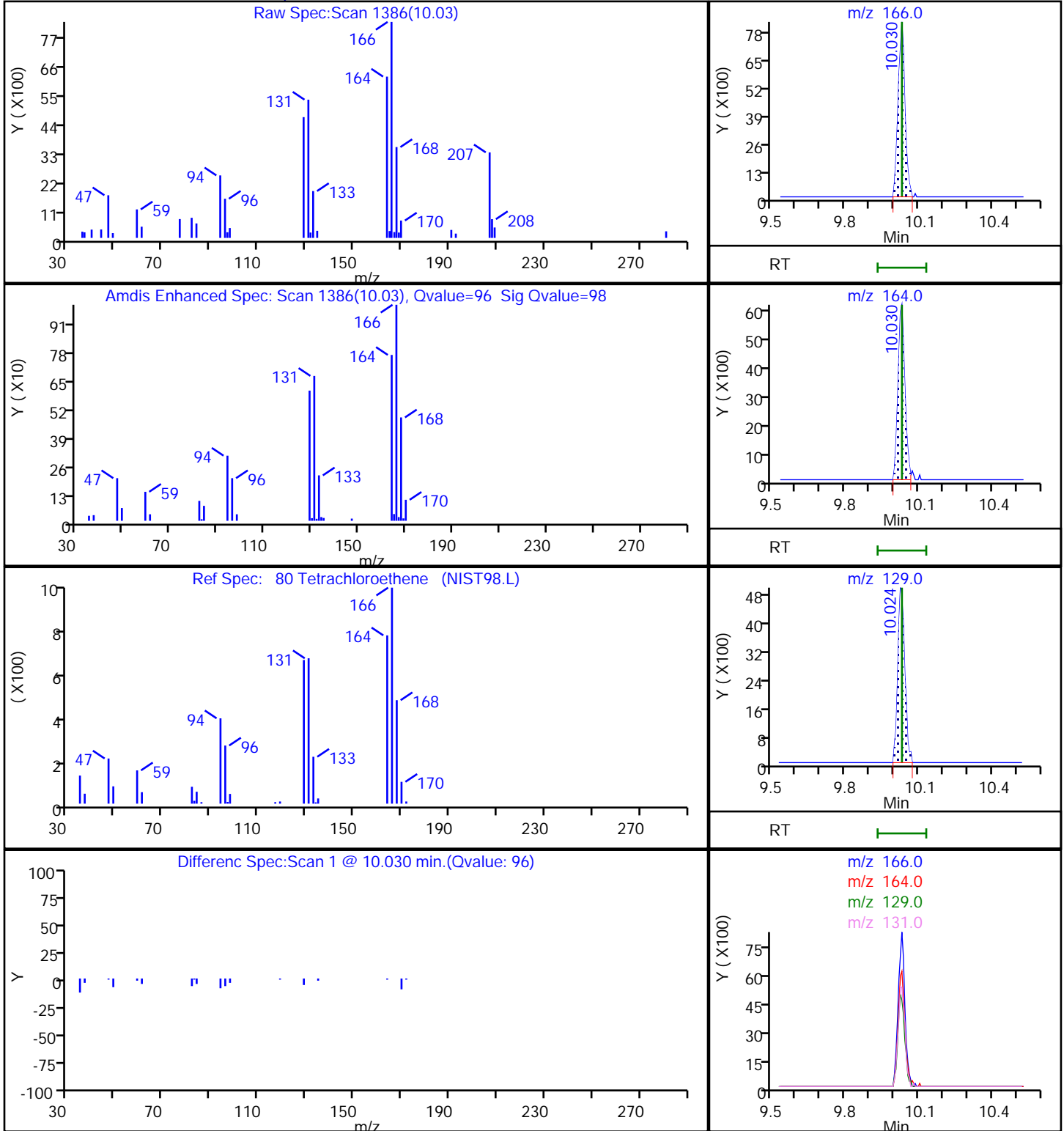
MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X026.D
Injection Date: 06-Jun-2022 19:43:30 Instrument ID: 10193
Lims ID: 410-85437-A-12 Lab Sample ID: 410-85437-12
Client ID: HD-COD-SW-29-0/1-0
Operator ID: knk41612 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

80 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X026.D

Injection Date: 06-Jun-2022 19:43:30

Instrument ID: 10193

Lims ID: 410-85437-A-12

Lab Sample ID: 410-85437-12

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

Operator ID: knk41612

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

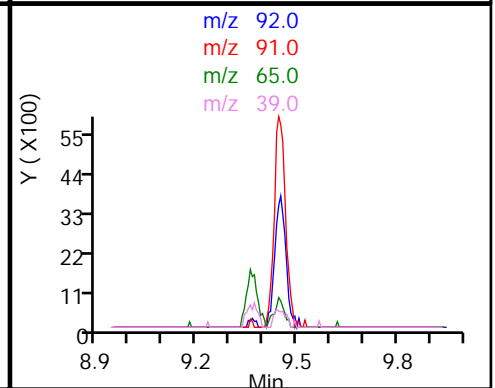
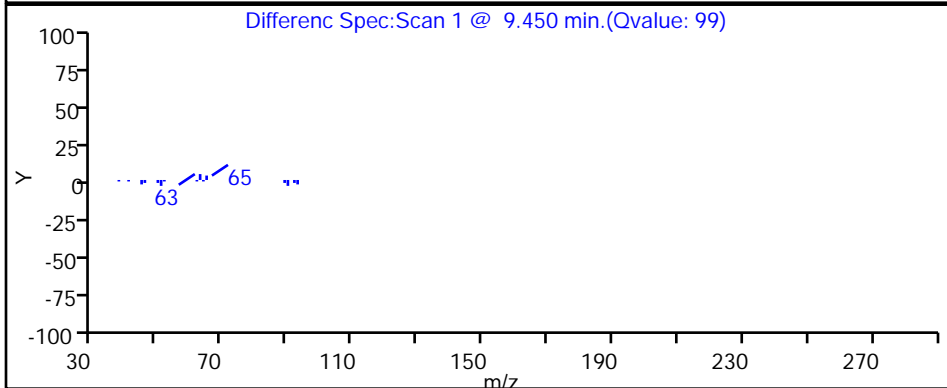
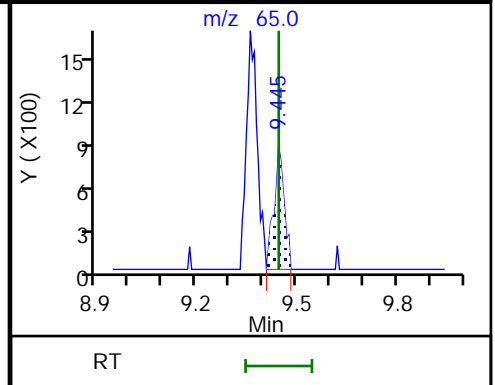
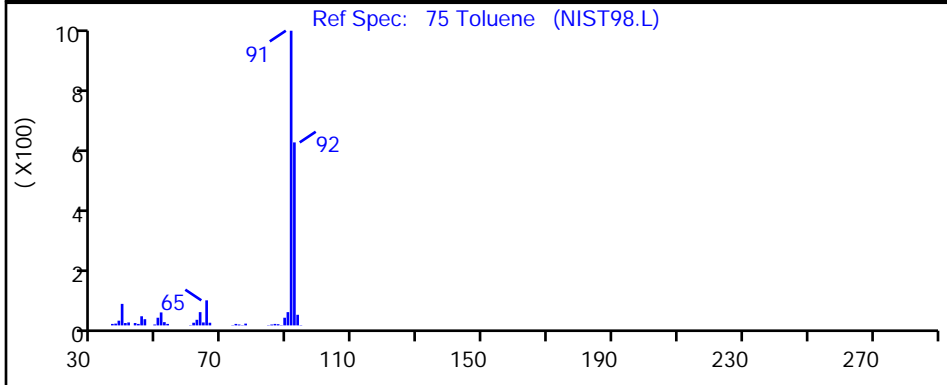
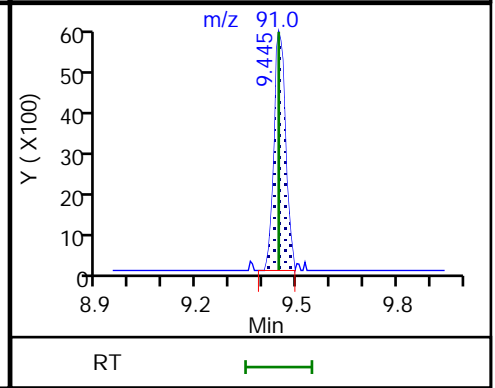
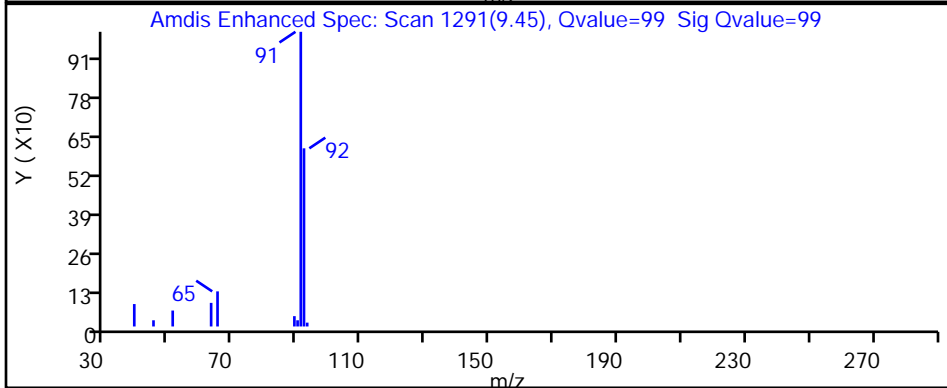
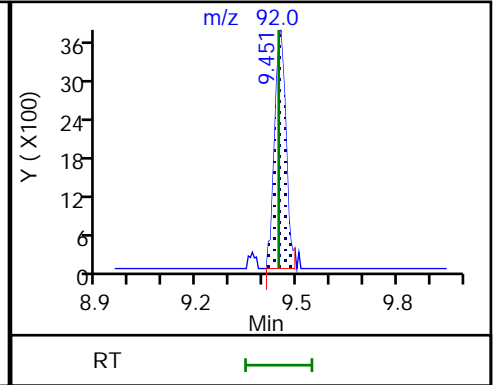
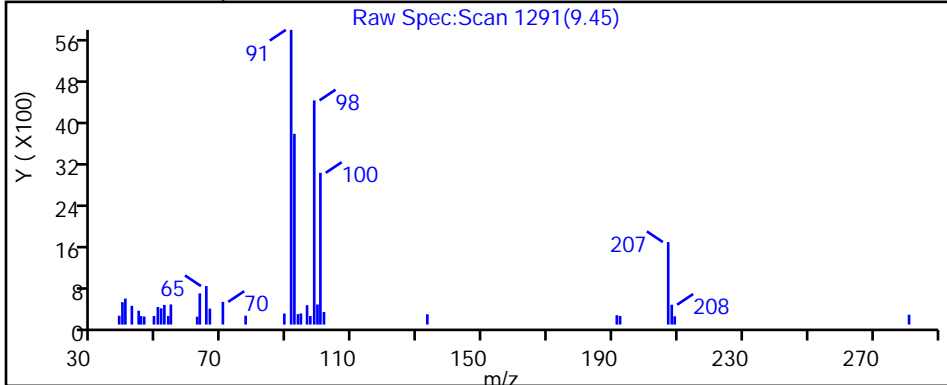
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

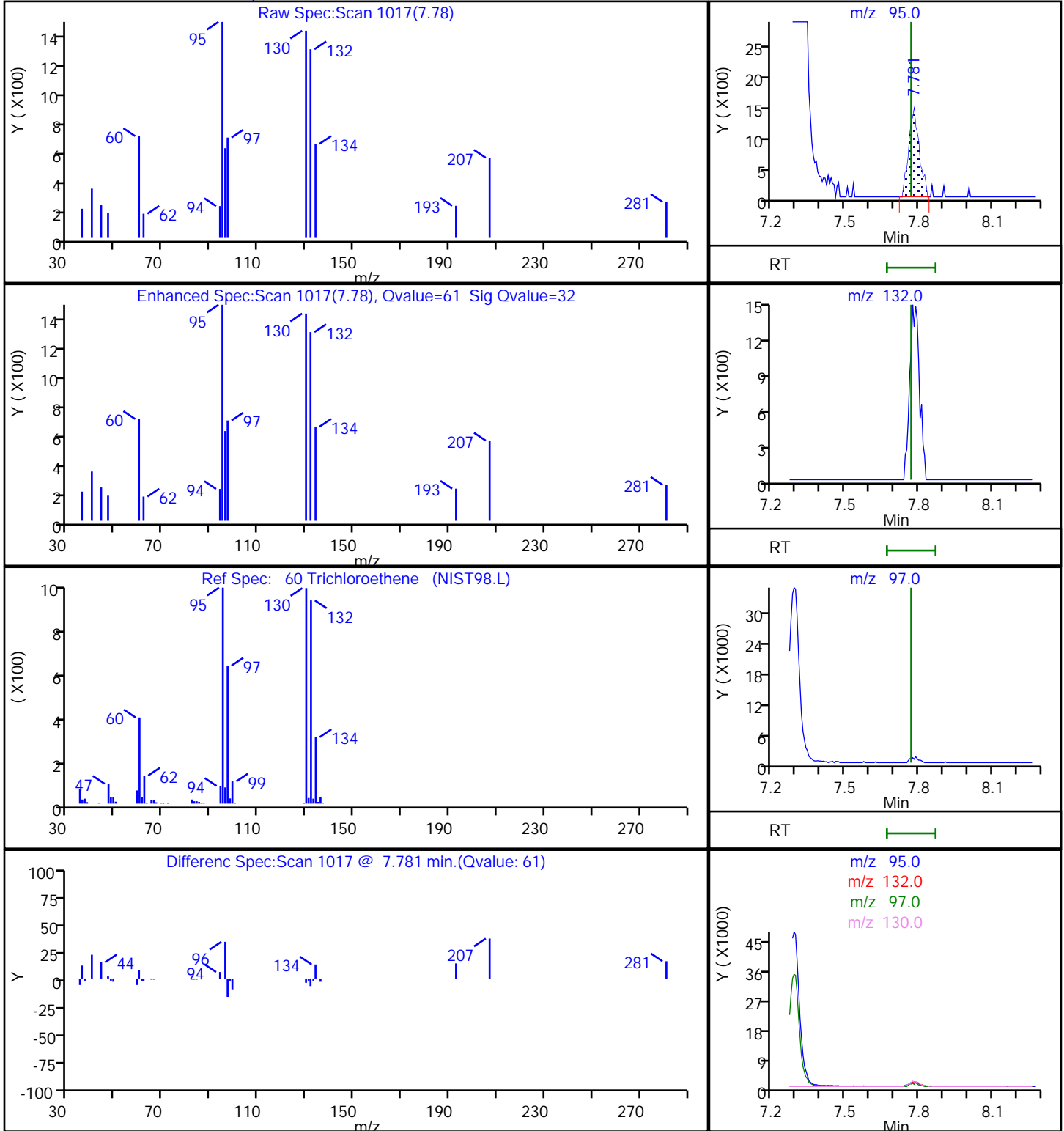
MS Quad

75 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X026.D
Injection Date: 06-Jun-2022 19:43:30 Instrument ID: 10193
Lims ID: 410-85437-A-12 Lab Sample ID: 410-85437-12
Client ID: HD-COD-SW-29-0/1-0
Operator ID: knk41612 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

60 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Environment Testing, LLC

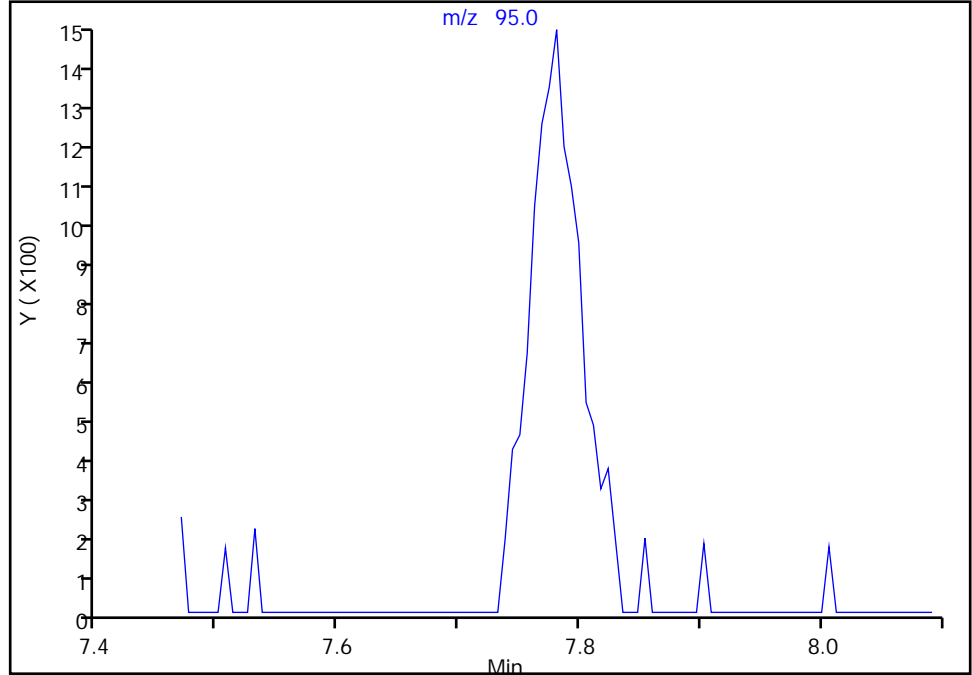
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X026.D
Injection Date: 06-Jun-2022 19:43:30 Instrument ID: 10193
Lims ID: 410-85437-A-12 Lab Sample ID: 410-85437-12
Client ID: HD-COD-SW-29-0/1-0
Operator ID: knk41612 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 Trichloroethene, CAS: 79-01-6

Signal: 1

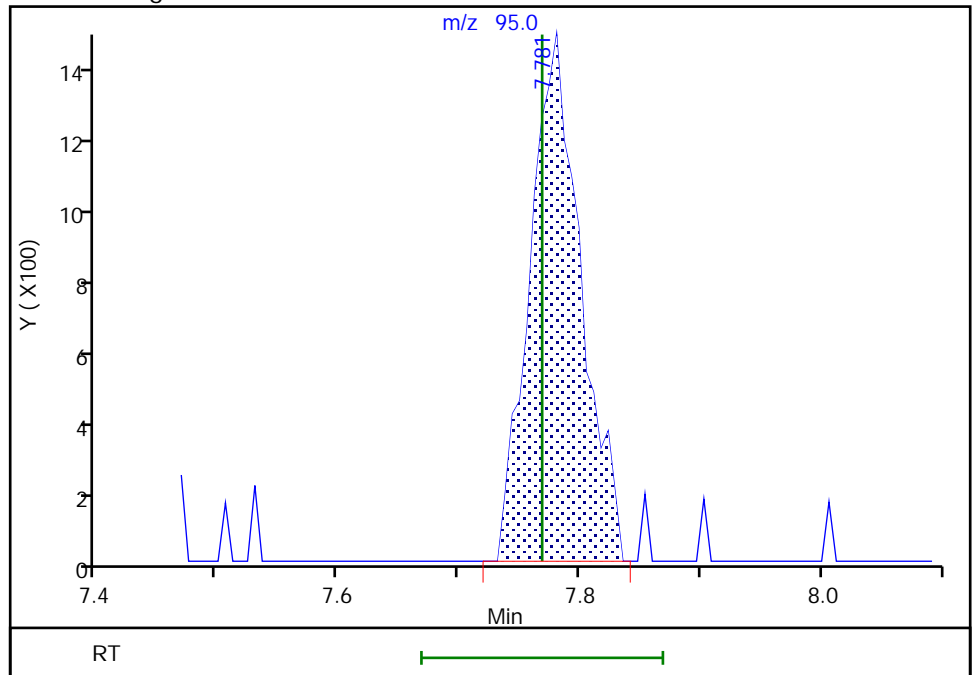
Not Detected
Expected RT: 7.77

Processing Integration Results



Manual Integration Results

RT: 7.78
Area: 4245
Amount: 0.081601
Amount Units: ug/l



Reviewer: mellotr, 07-Jun-2022 10:01:29
Audit Action: Manually Integrated

Audit Reason: Missed Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-13

Matrix: Water

Lab File ID: CU06X027.D

Analysis Method: 8260D

Date Collected: 05/25/2022 12:00

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 20:05

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.: 261977

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	2.8		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	0.59		0.50	0.070
75-35-4	1,1-Dichloroethene	0.28	J	0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.7	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c cn	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.10	J	0.50	0.090
74-87-3	Chloromethane	ND	*+	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	3.3		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-85437-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-85437-13

Matrix: Water Lab File ID: CU06X027.D

Analysis Method: 8260D Date Collected: 05/25/2022 12:00

Sample wt/vol: 25 (mL) Date Analyzed: 06/06/2022 20:05

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.: 261977 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	2.4		0.50	0.060
75-01-4	Vinyl chloride	0.20	J	0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		80-120
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		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\10193\20220603-58749.b\CU06X027.D
 Lims ID: 410-85437-A-13
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 06-Jun-2022 20:05:30 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-028
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:29:24 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:28:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50		1.959				ND	7
5 Vinyl chloride	62	2.075	2.069	0.006	97	11565	0.2003	
6 Bromomethane	94		2.355				ND	7
7 Chloroethane	64		2.434				ND	
14 1,1-Dichloroethene	96	3.202	3.196	0.006	98	11187	0.2760	
16 Acetone	43	3.251	3.227	0.024	91	7681	1.70	M
20 Carbon disulfide	76		3.459				ND	7
24 Methylene Chloride	84		3.794				ND	7
* 25 t-Butyl alcohol-d10 (IS)	65	3.836	3.812	0.024	90	98567	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	7
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63	4.824	4.824	0.000	96	46805	0.5881	
36 2-Butanone (MEK)	43		5.641				ND	
37 cis-1,2-Dichloroethene	96	5.678	5.672	0.006	78	168392	3.33	
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83	6.171	6.165	0.006	93	8340	0.1009	
48 1,1,1-Trichloroethane	97	6.391	6.385	0.006	96	208641	2.76	
\$ 47 Dibromofluoromethane (Surr)	113	6.391	6.385	0.006	95	387929	9.62	
50 Carbon tetrachloride	117		6.598				ND	7
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.842	6.848	-0.006	70	71716	9.23	
54 Benzene	78		6.873				ND	
55 1,2-Dichloroethane	62		6.946				ND	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1620718	10.0	
60 Trichloroethene	95	7.775	7.769	0.006	96	124670	2.40	
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1624782	9.80	
75 Toluene	92	9.445	9.445	0.000	98	4951	0.0392	
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.024	10.030	-0.006	97	2427350	38.8	E
82 2-Hexanone	43		10.183				ND	7
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1345222	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106		11.140				ND	7
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	7
93 Styrene	104		11.494				ND	7
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	594210	9.00	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.829	12.829	0.000	93	773413	10.0	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X027.D

Injection Date: 06-Jun-2022 20:05:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-13

Lab Sample ID: 410-85437-13

Worklist Smp#: 28

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

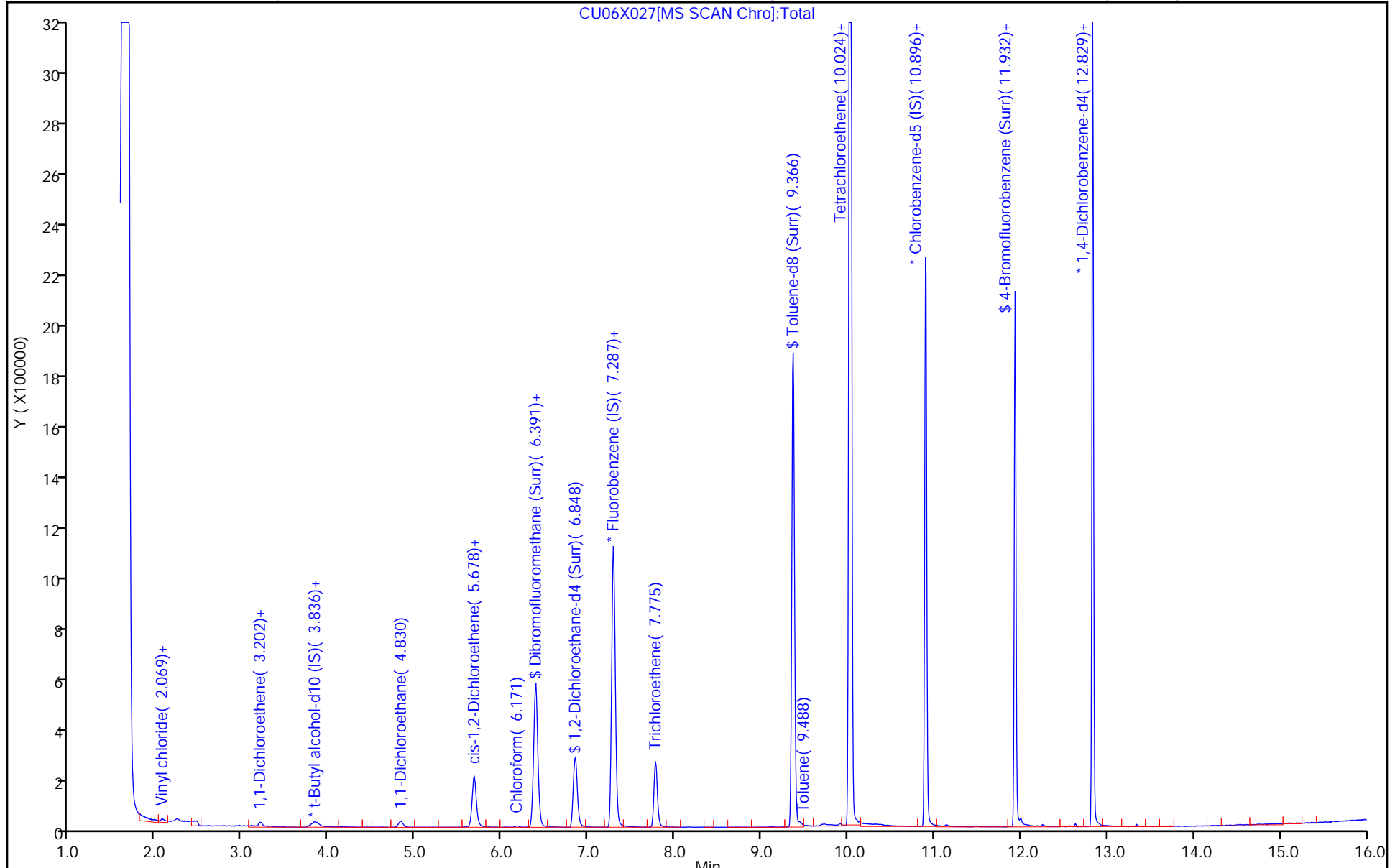
ALS Bottle#: 27

Method: MSV_10193_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\10193\20220603-58749.b\CU06X027.D
 Lims ID: 410-85437-A-13
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 06-Jun-2022 20:05:30 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-028
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:29:24 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:28:52

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.62	96.18
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.23	92.33
\$ 74 Toluene-d8 (Surr)	10.0	9.80	98.03
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.00	90.02

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X027.D

Injection Date: 06-Jun-2022 20:05:30

Instrument ID: 10193

Lims ID: 410-85437-A-13

Lab Sample ID: 410-85437-13

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

Operator ID: knk41612

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

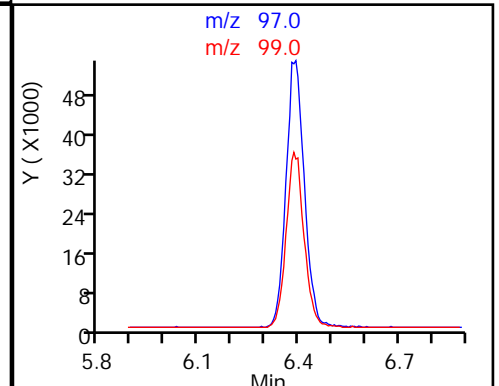
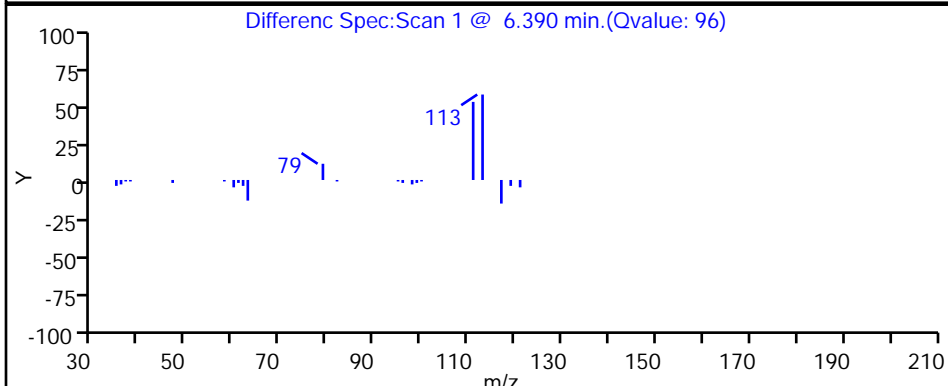
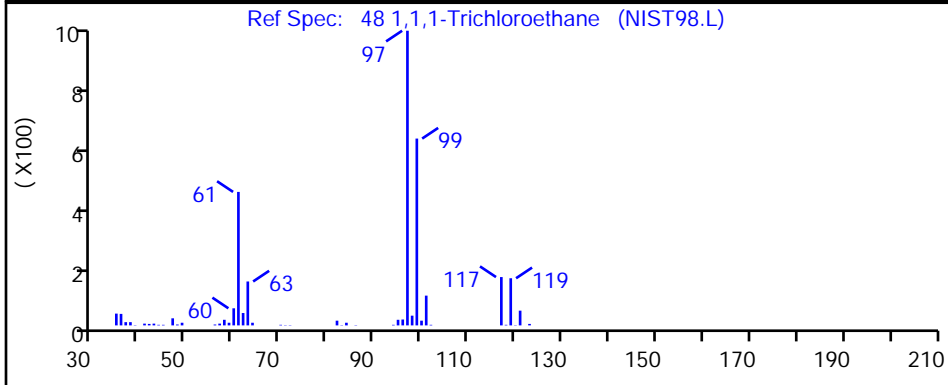
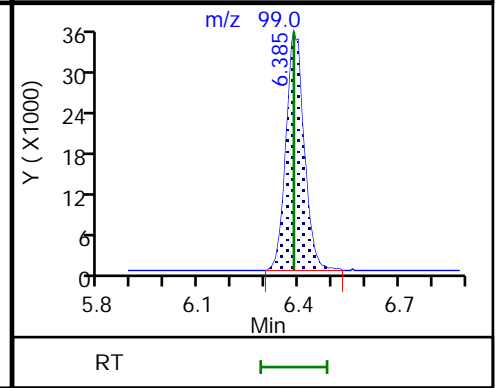
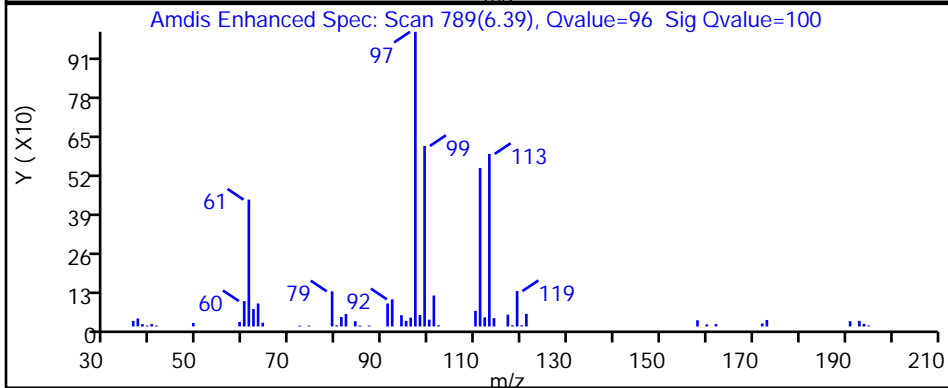
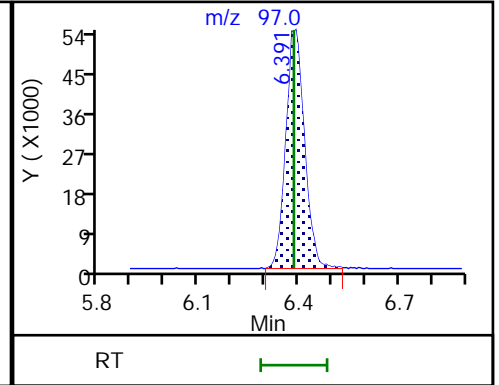
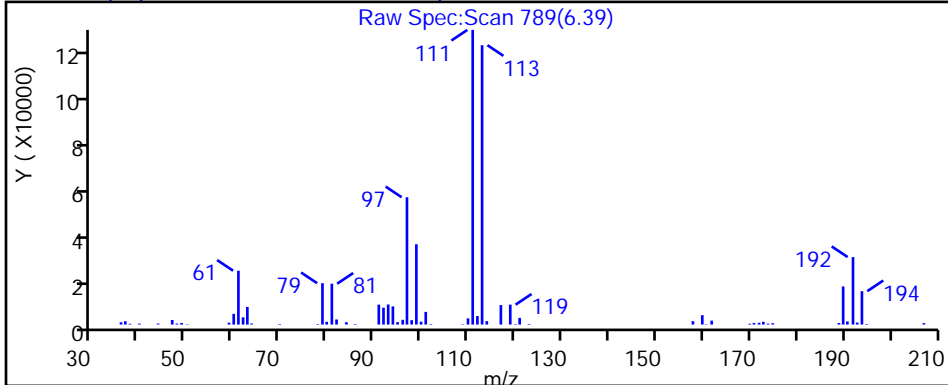
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

48 1,1,1-Trichloroethane, CAS: 71-55-6



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X027.D

Injection Date: 06-Jun-2022 20:05:30

Instrument ID: 10193

Lims ID: 410-85437-A-13

Lab Sample ID: 410-85437-13

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

Operator ID: knk41612

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

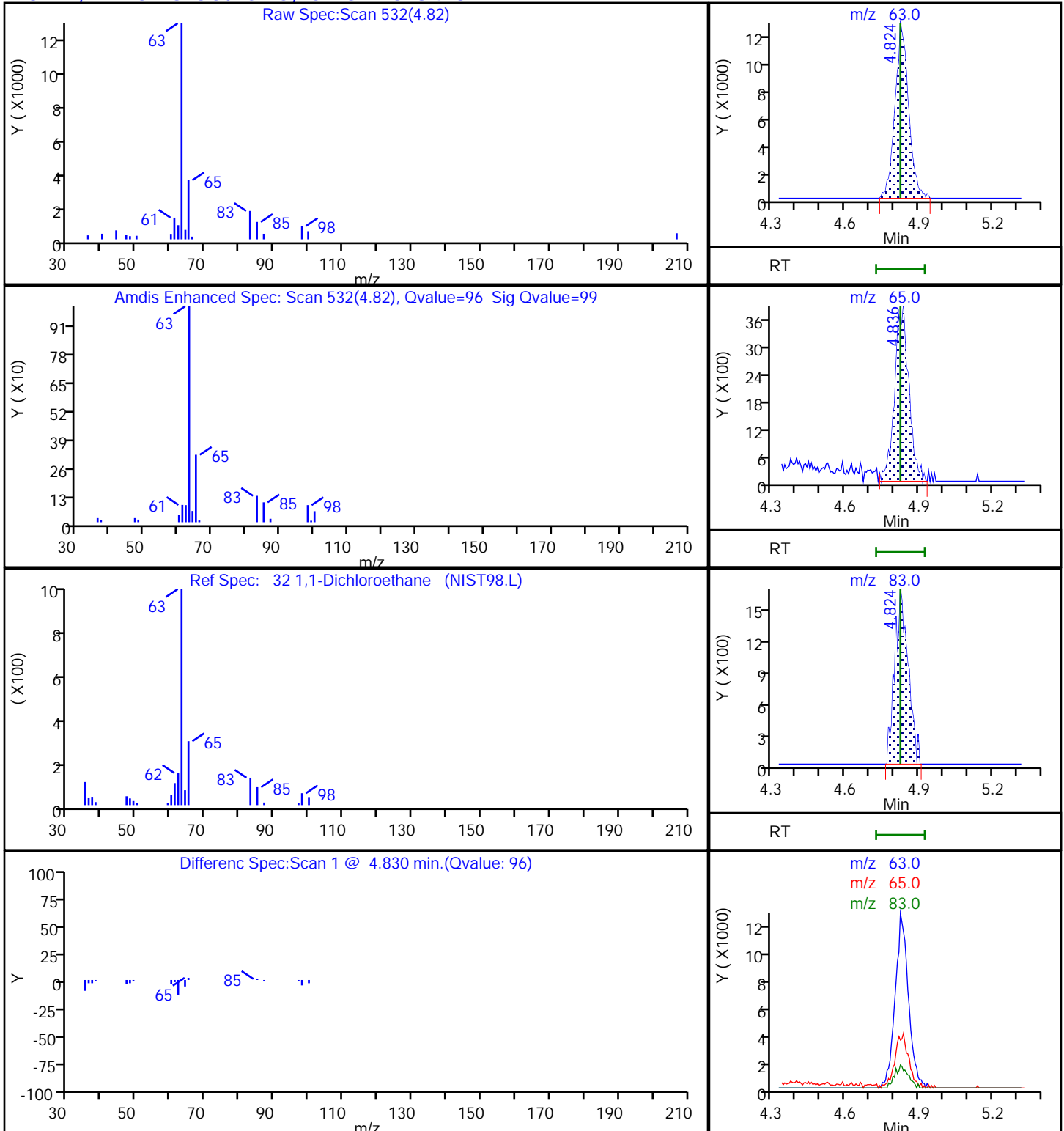
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

32 1,1-Dichloroethane, CAS: 75-34-3



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X027.D

Injection Date: 06-Jun-2022 20:05:30

Instrument ID: 10193

Lims ID: 410-85437-A-13

Lab Sample ID: 410-85437-13

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

Operator ID: knk41612

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

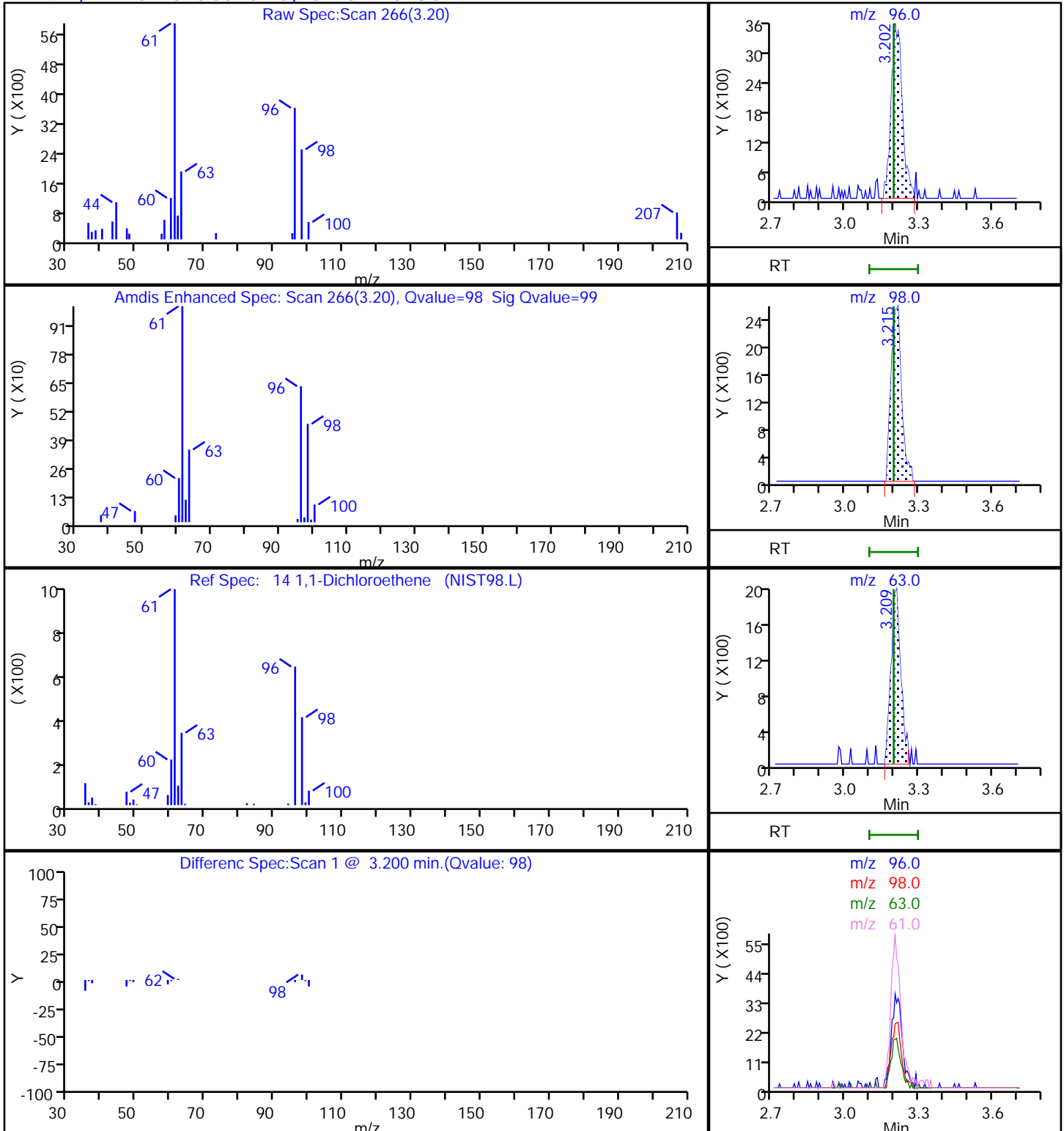
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

14 1,1-Dichloroethene, CAS: 75-35-4



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X027.D

Injection Date: 06-Jun-2022 20:05:30

Instrument ID: 10193

Lims ID: 410-85437-A-13

Lab Sample ID: 410-85437-13

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

Operator ID: knk41612

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

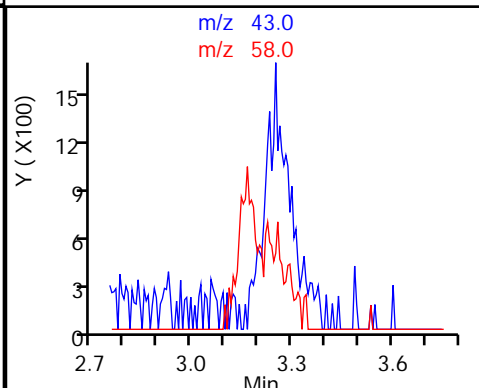
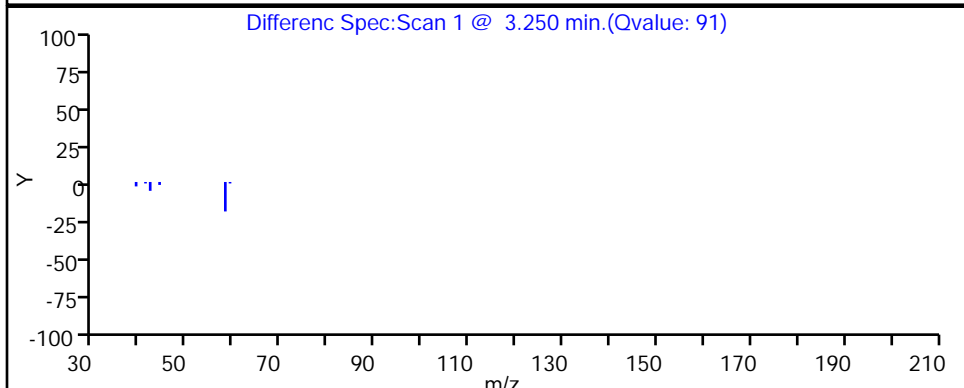
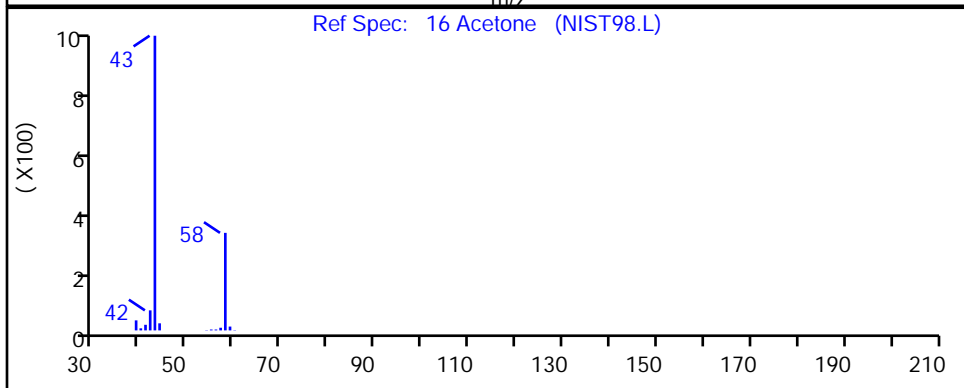
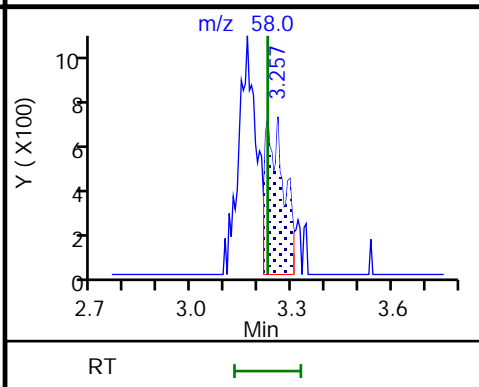
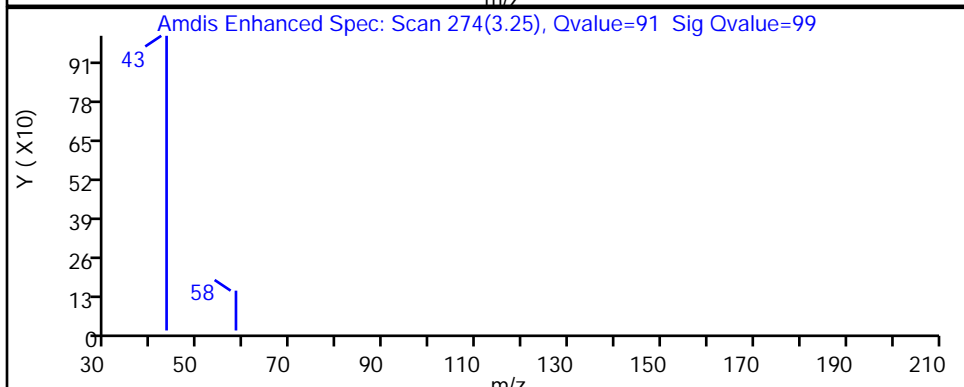
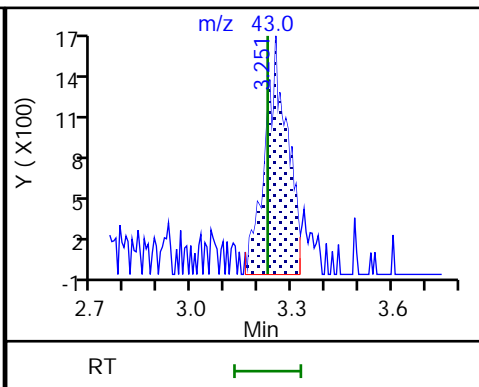
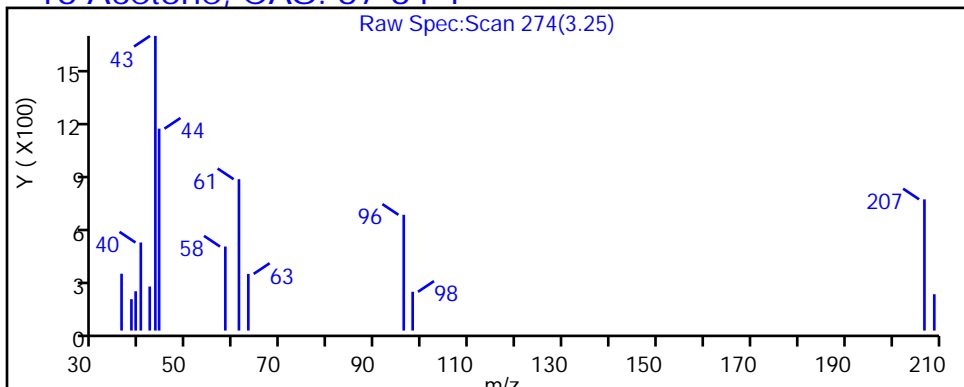
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

16 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X027.D

Injection Date: 06-Jun-2022 20:05:30

Instrument ID: 10193

Lims ID: 410-85437-A-13

Lab Sample ID: 410-85437-13

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

Operator ID: knk41612

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

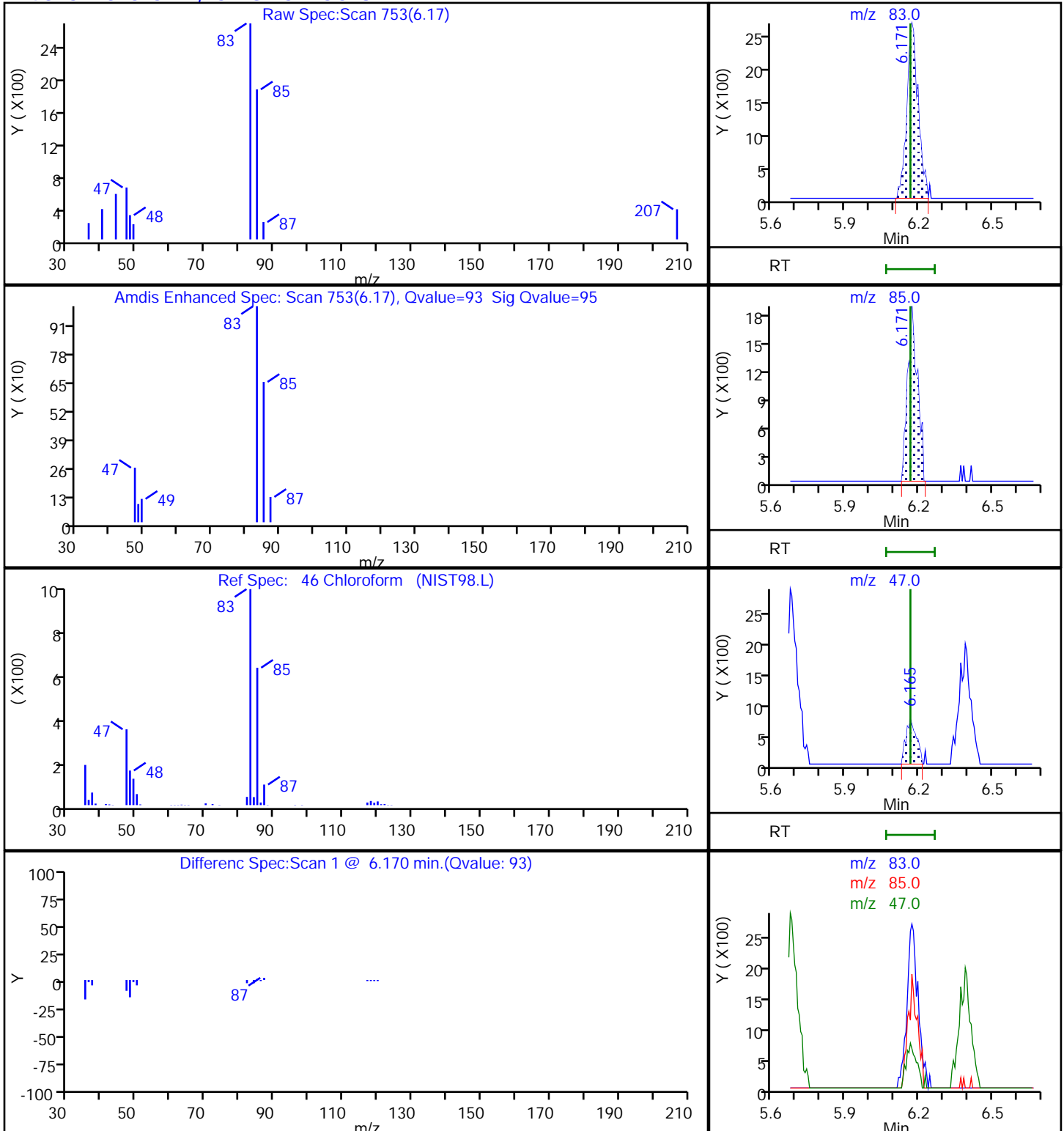
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

46 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X027.D

Injection Date: 06-Jun-2022 20:05:30

Instrument ID: 10193

Lims ID: 410-85437-A-13

Lab Sample ID: 410-85437-13

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

Operator ID: knk41612

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

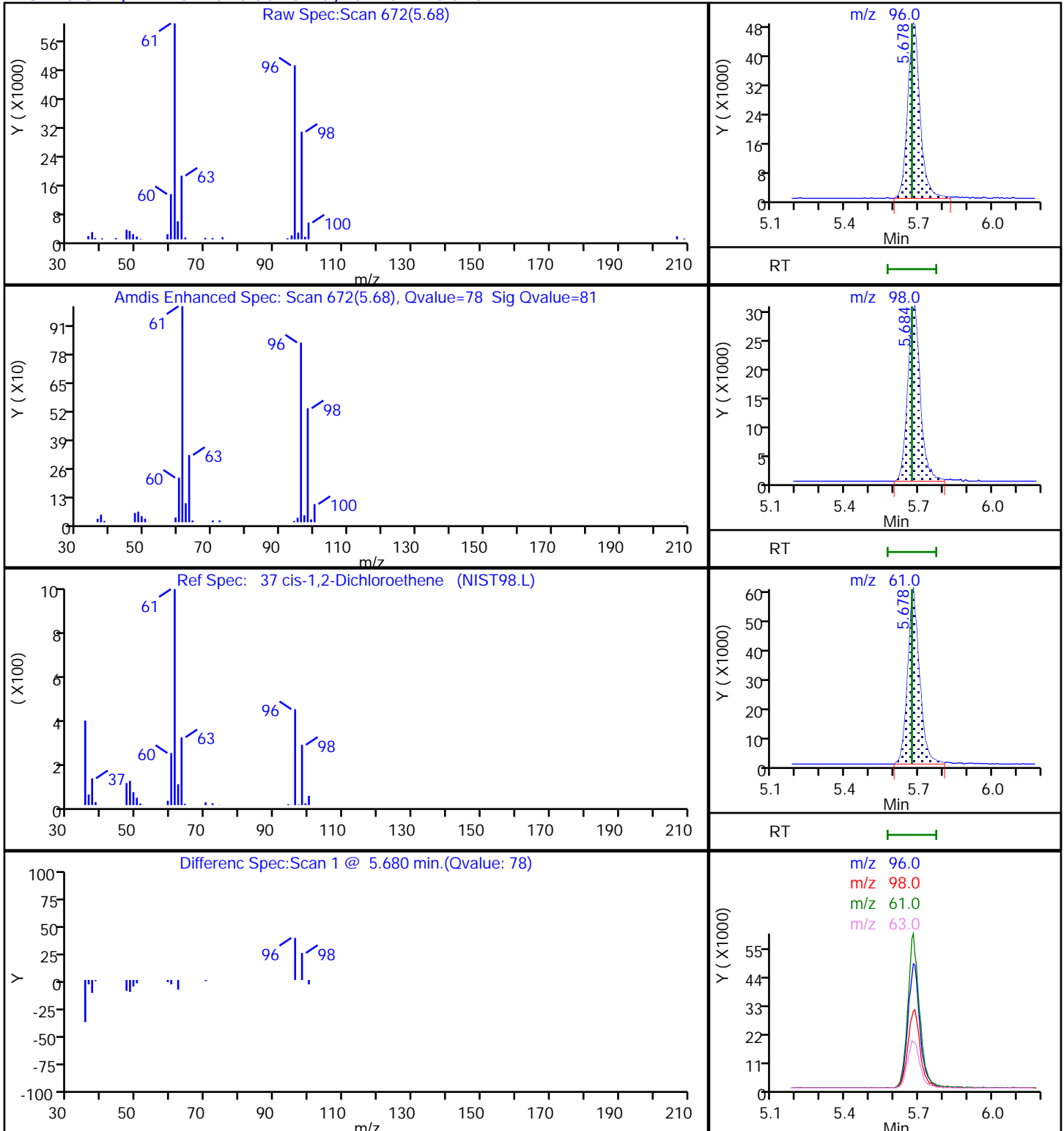
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X027.D

Injection Date: 06-Jun-2022 20:05:30

Instrument ID: 10193

Lims ID: 410-85437-A-13

Lab Sample ID: 410-85437-13

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

Operator ID: knk41612

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

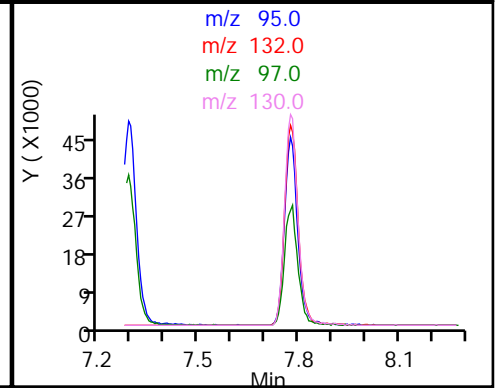
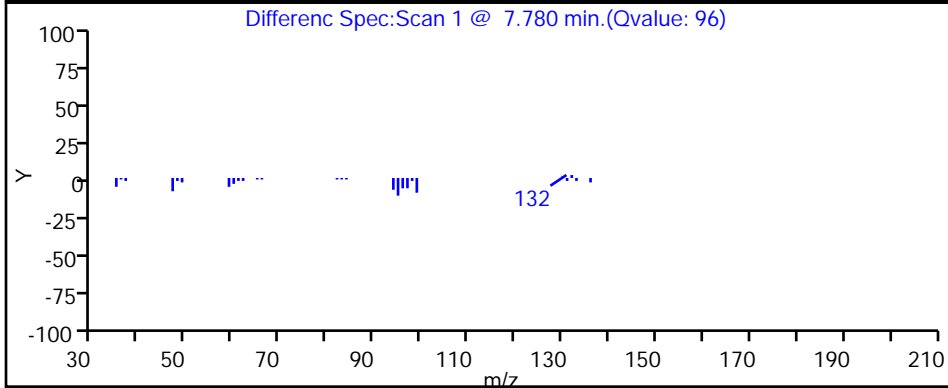
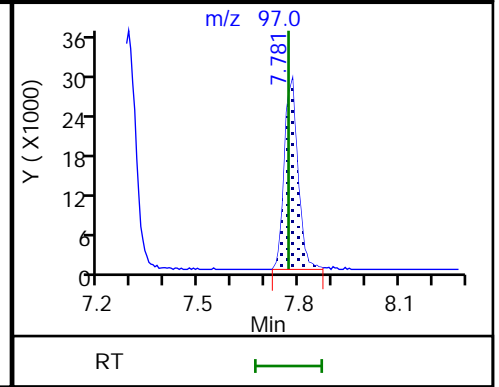
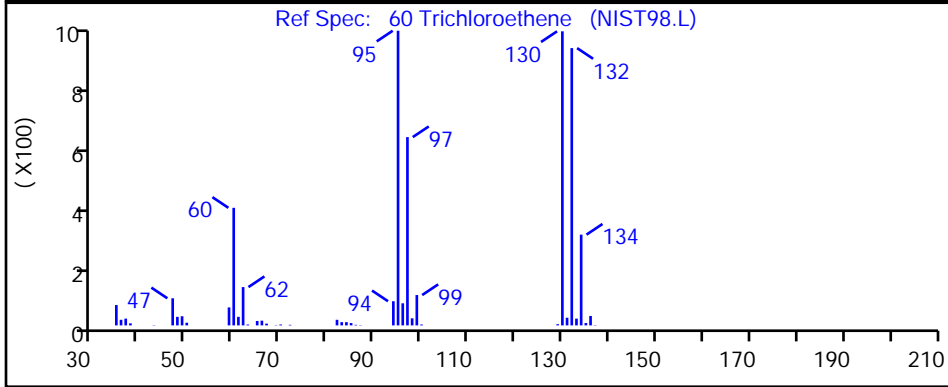
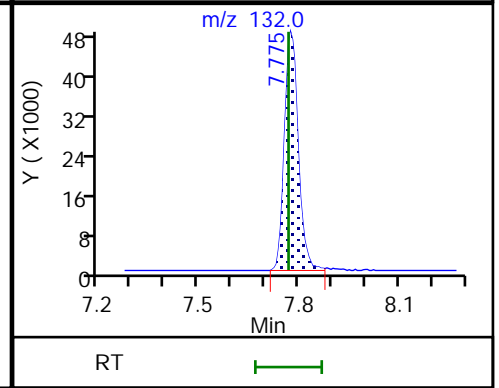
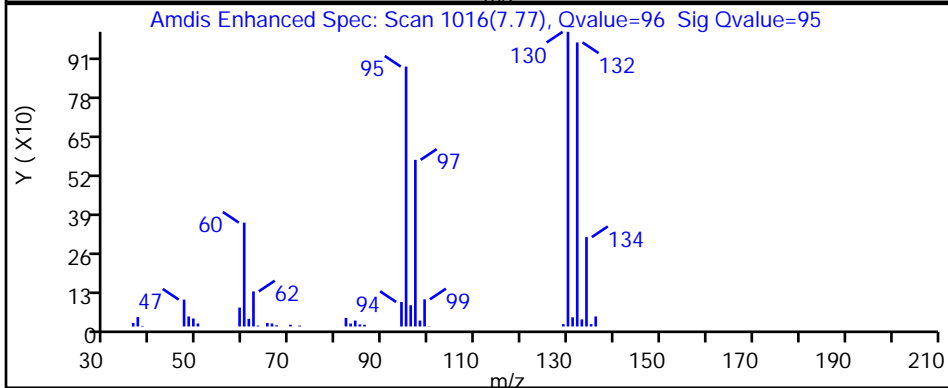
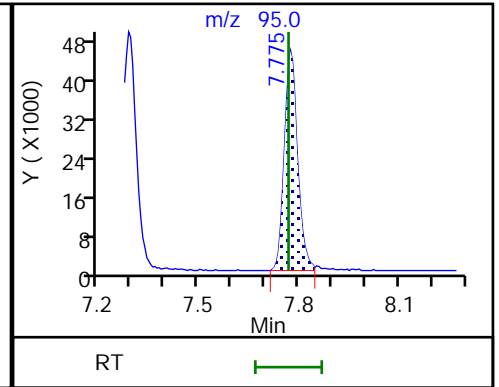
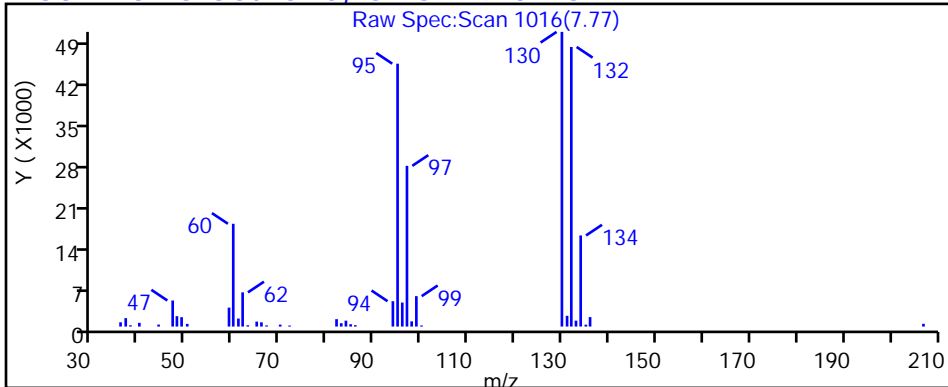
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

60 Trichloroethene, CAS: 79-01-6



Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X027.D

Injection Date: 06-Jun-2022 20:05:30

Instrument ID: 10193

Lims ID: 410-85437-A-13

Lab Sample ID: 410-85437-13

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

Operator ID: knk41612

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

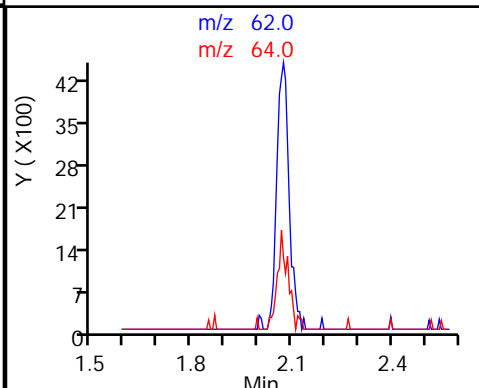
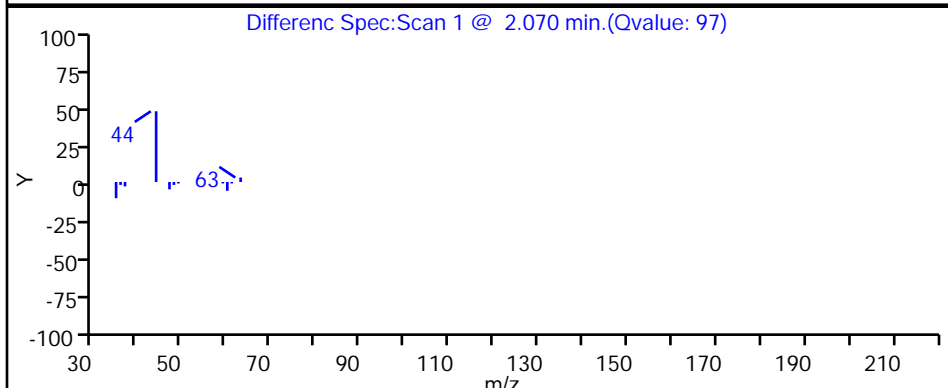
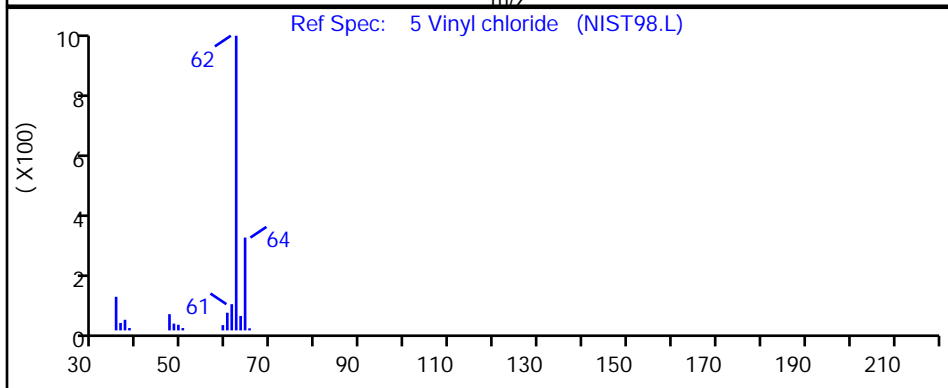
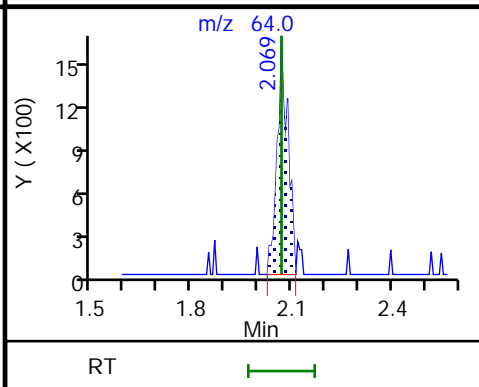
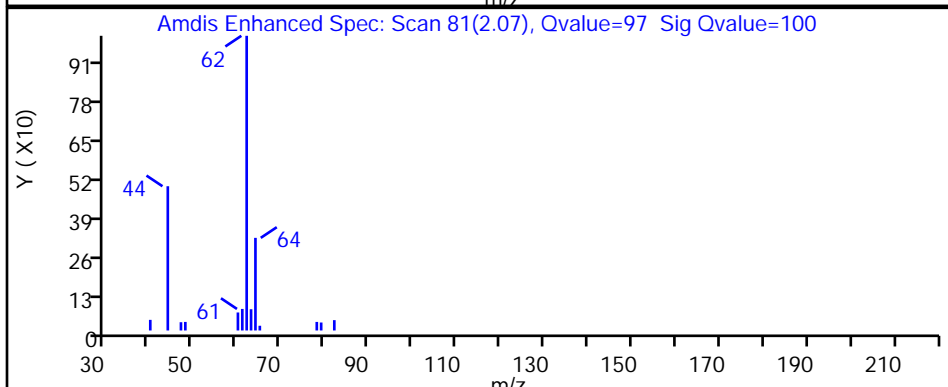
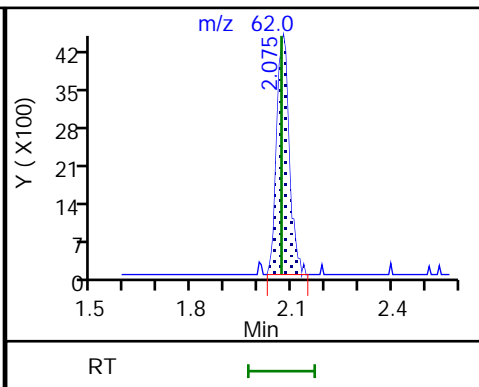
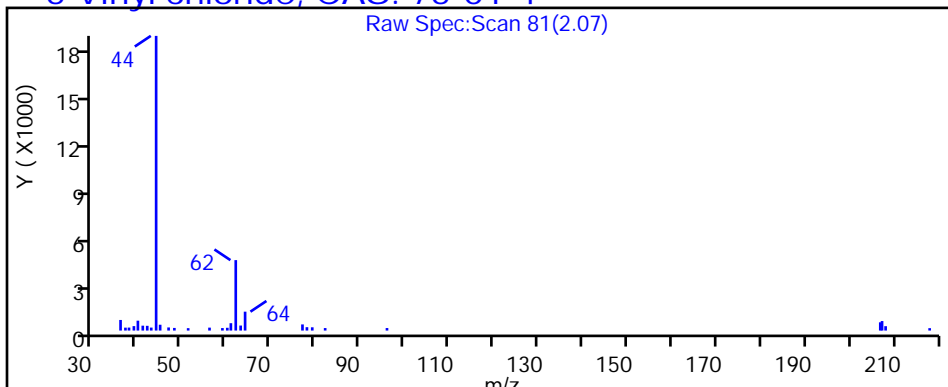
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

5 Vinyl chloride, CAS: 75-01-4

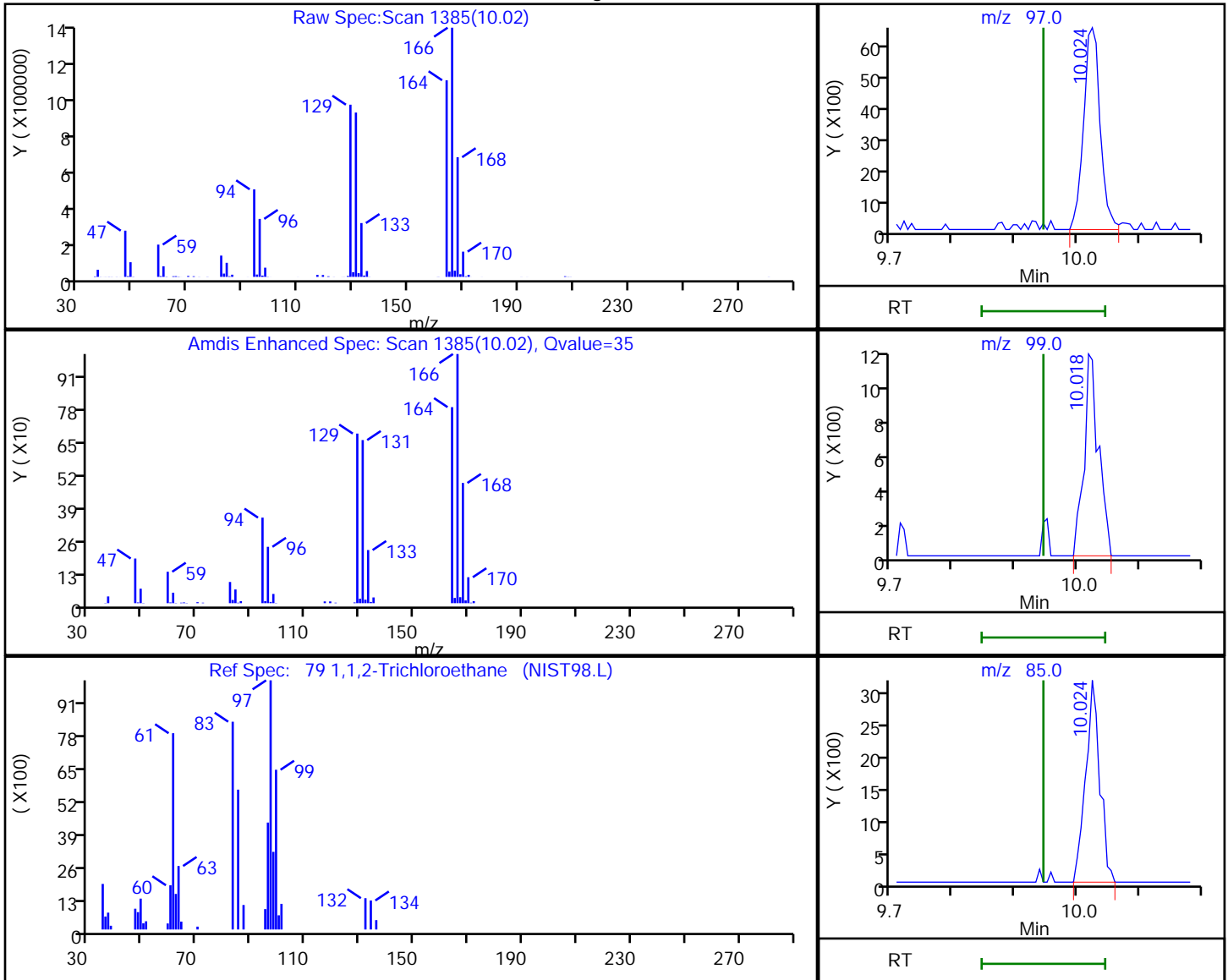


Euofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X027.D
 Injection Date: 06-Jun-2022 20:05:30 Instrument ID: 10193
 Lims ID: 410-85437-A-13 Lab Sample ID: 410-85437-13
 Client ID: HD-QC1-0/1-1
 Operator ID: knk41612 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
10.02	97.00	12187	0.350442
10.02	99.00	1867	
10.02	85.00	5003	
10.02	83.00	30673	

Reviewer: johnsons, 06-Jun-2022 22:28:44

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

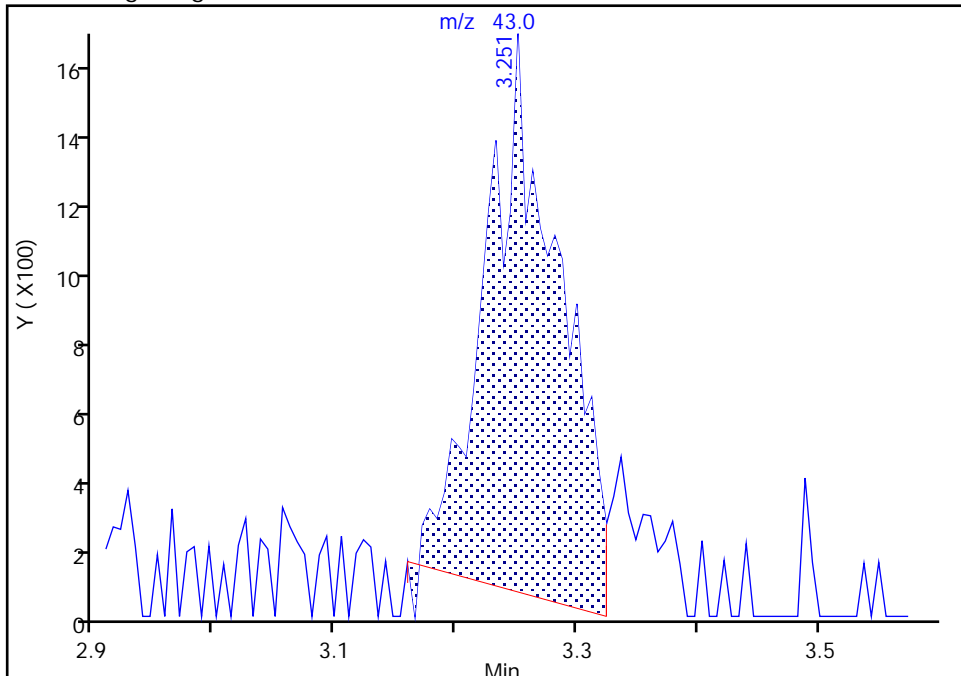
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X027.D
Injection Date: 06-Jun-2022 20:05:30 Instrument ID: 10193
Lims ID: 410-85437-A-13 Lab Sample ID: 410-85437-13
Client ID: HD-QC1-0/1-1
Operator ID: knk41612 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

16 Acetone, CAS: 67-64-1

Signal: 1

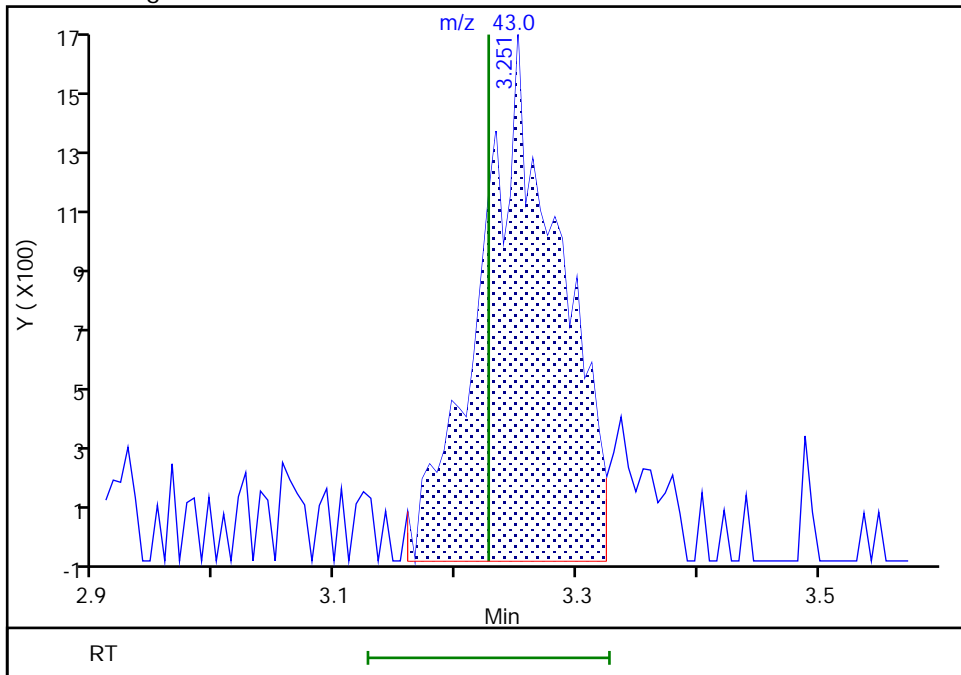
RT: 3.25
Area: 6862
Amount: 1.522349
Amount Units: ug/l

Processing Integration Results



RT: 3.25
Area: 7681
Amount: 1.704046
Amount Units: ug/l

Manual Integration Results



Reviewer: johnsons, 06-Jun-2022 22:28:33
Audit Action: Assigned New Baseline

Audit Reason: Baseline

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-85437-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: HD-QC1-0/1-1 DL Lab Sample ID: 410-85437-13 DL

Matrix: Water Lab File ID: CU06X028.D

Analysis Method: 8260D Date Collected: 05/25/2022 12:00

Sample wt/vol: 25 (mL) Date Analyzed: 06/06/2022 20:28

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.: 261977 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	29		5.0	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		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\10193\20220603-58749.b\CU06X028.D
 Lims ID: 410-85437-B-13 DL
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 06-Jun-2022 20:28:30 ALS Bottle#: 28 Worklist Smp#: 29
 Purge Vol: 25.000 mL Dil. Factor: 10.0000
 Sample Info: 410-0058749-029
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:29:24 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:29:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50		1.959				ND	7
5 Vinyl chloride	62		2.069				ND	7
6 Bromomethane	94		2.355				ND	7
7 Chloroethane	64		2.434				ND	
14 1,1-Dichloroethene	96		3.196				ND	7
16 Acetone	43	3.270	3.227	0.043	48	3366	0.7879	
20 Carbon disulfide	76		3.459				ND	7
24 Methylene Chloride	84	3.788	3.794	-0.006	84	2045	0.0441	M
* 25 t-Butyl alcohol-d10 (IS)	65	3.830	3.812	0.018	89	93419	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63	4.818	4.824	-0.006	84	3678	0.0434	
36 2-Butanone (MEK)	43		5.641				ND	
37 cis-1,2-Dichloroethene	96	5.678	5.672	0.006	78	14401	0.2670	
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83		6.165				ND	
48 1,1,1-Trichloroethane	97	6.385	6.385	0.000	37	16892	0.2100	
\$ 47 Dibromofluoromethane (Surr)	113	6.391	6.385	0.006	94	422083	9.82	
50 Carbon tetrachloride	117		6.598				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.842	6.848	-0.006	48	80327	9.71	
54 Benzene	78		6.873				ND	7
55 1,2-Dichloroethane	62		6.946				ND	
* 57 Fluorobenzene (IS)	96	7.293	7.287	0.006	99	1726439	10.0	
60 Trichloroethene	95	7.775	7.769	0.006	95	11907	0.2152	
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1613404	10.0	
75 Toluene	92		9.445				ND	7
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166	10.024	10.030	-0.006	97	174618	2.88	
82 2-Hexanone	43		10.183				ND	
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1306528	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	7
91 m-Xylene & p-Xylene	106		11.140				ND	7
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	
93 Styrene	104		11.494				ND	
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	98	583777	9.11	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.829	12.829	0.000	93	769714	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X028.D

Injection Date: 06-Jun-2022 20:28:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-B-13 DL

Lab Sample ID: 410-85437-13

Worklist Smp#: 29

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

Purge Vol: 25.000 mL

Dil. Factor: 10.0000

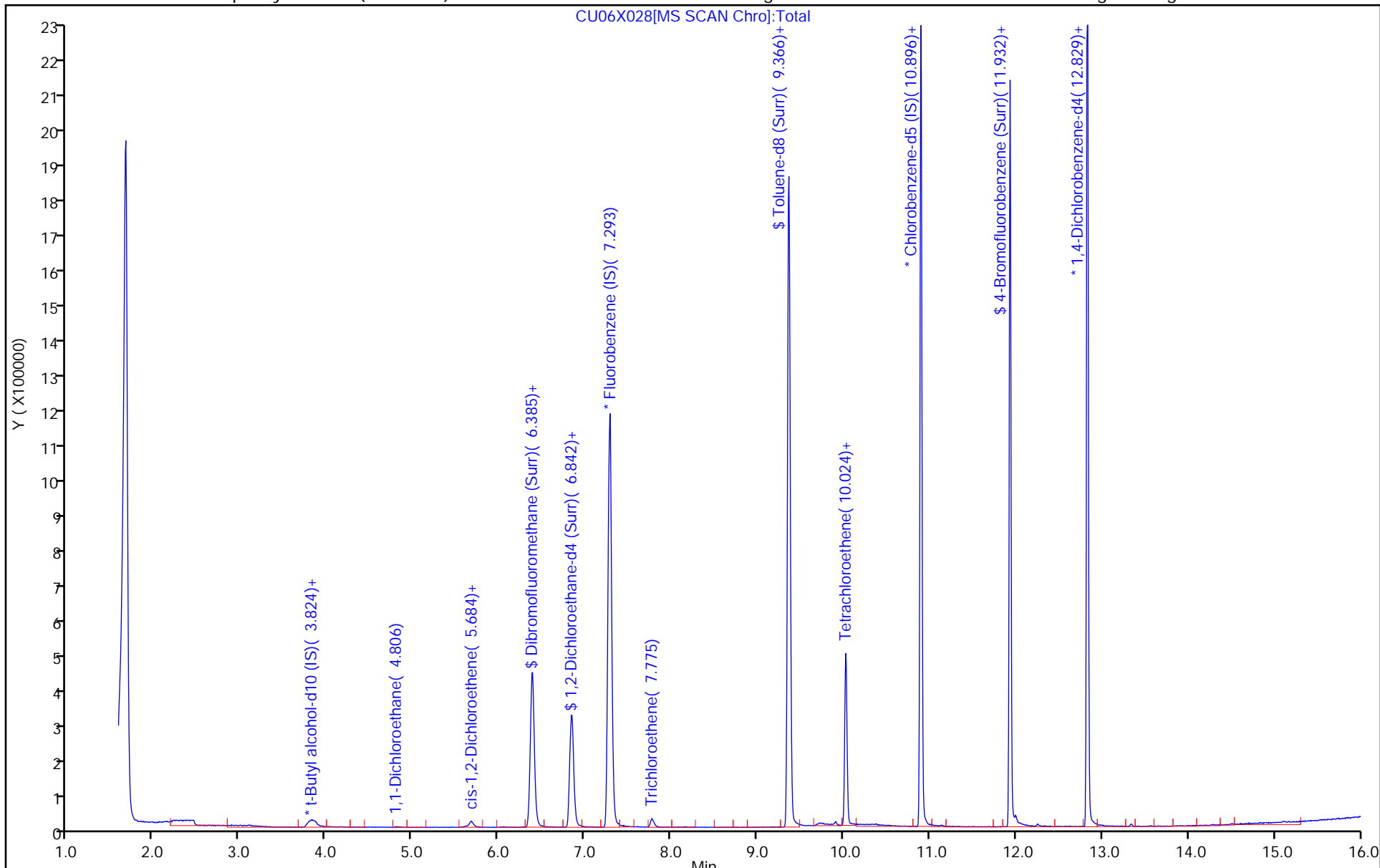
ALS Bottle#: 28

Method: MSV_10193_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\10193\20220603-58749.b\CU06X028.D
 Lims ID: 410-85437-B-13 DL
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 06-Jun-2022 20:28:30 ALS Bottle#: 28 Worklist Smp#: 29
 Purge Vol: 25.000 mL Dil. Factor: 10.0000
 Sample Info: 410-0058749-029
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:29:24 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:29:24

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.82	98.24
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.71	97.09
\$ 74 Toluene-d8 (Surr)	10.0	10.0	100.23
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.11	91.05

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X028.D

Injection Date: 06-Jun-2022 20:28:30

Instrument ID: 10193

Lims ID: 410-85437-B-13 DL

Lab Sample ID: 410-85437-13

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

Operator ID: knk41612

ALS Bottle#: 28

Worklist Smp#: 29

Purge Vol: 25.000 mL

Dil. Factor: 10.0000

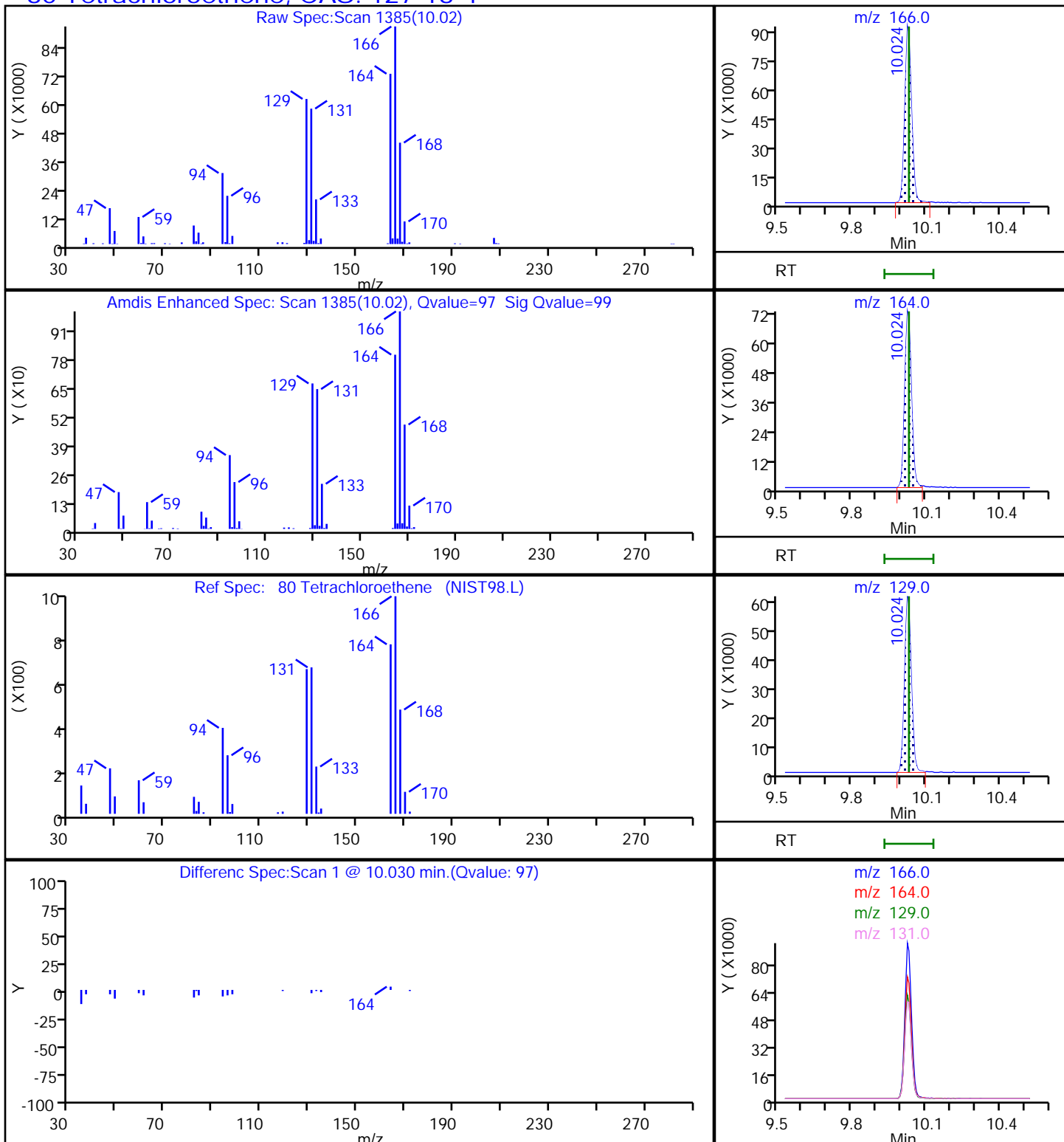
Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector

MS Quad

80 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-14

Matrix: Water

Lab File ID: CU06X008.D

Analysis Method: 8260D

Date Collected: 05/25/2022 00:00

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 13:02

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.: 261977

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	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND	^c cn	0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND	*+	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-14

Matrix: Water

Lab File ID: CU06X008.D

Analysis Method: 8260D

Date Collected: 05/25/2022 00:00

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 13:02

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	102		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X008.D
 Lims ID: 410-85437-A-14
 Client ID: HD-QC1-0/1-2
 Sample Type: Client
 Inject. Date: 06-Jun-2022 13:02:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-009
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 21:57:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Chloromethane	50		1.959				ND	7
5 Vinyl chloride	62		2.069				ND	
6 Bromomethane	94		2.355				ND	
7 Chloroethane	64		2.434				ND	7
14 1,1-Dichloroethene	96		3.196				ND	7
16 Acetone	43	3.215	3.227	-0.012	52	3167	0.6359	
20 Carbon disulfide	76		3.459				ND	7
24 Methylene Chloride	84		3.794				ND	
* 25 t-Butyl alcohol-d10 (IS)	65	3.818	3.812	0.006	88	108912	50.0	
28 Methyl tert-butyl ether	73		4.154				ND	
29 trans-1,2-Dichloroethene	96		4.160				ND	
32 1,1-Dichloroethane	63		4.824				ND	
36 2-Butanone (MEK)	43		5.641				ND	
37 cis-1,2-Dichloroethene	96		5.672				ND	
44 Chlorobromomethane	128		6.007				ND	
46 Chloroform	83		6.165				ND	
48 1,1,1-Trichloroethane	97		6.385				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.385	6.385	0.000	94	447341	9.43	
50 Carbon tetrachloride	117		6.598				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.842	6.848	-0.006	48	86200	9.44	
54 Benzene	78		6.873				ND	7
55 1,2-Dichloroethane	62		6.946				ND	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1905327	10.0	
60 Trichloroethene	95		7.769				ND	
62 1,2-Dichloropropane	63		8.110				ND	
67 Dichlorobromomethane	83		8.470				ND	
72 cis-1,3-Dichloropropene	75		9.037				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238				ND	
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1901654	10.2	
75 Toluene	92		9.445				ND	7
76 trans-1,3-Dichloropropene	75		9.732				ND	7
79 1,1,2-Trichloroethane	97		9.945				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 Tetrachloroethene	166		10.030				ND	
82 2-Hexanone	43		10.183				ND	7
83 Chlorodibromomethane	129		10.335				ND	
84 Ethylene Dibromide	107		10.445				ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1510052	10.0	
87 Chlorobenzene	112		10.927				ND	
89 1,1,1,2-Tetrachloroethane	131		11.012				ND	
90 Ethylbenzene	91		11.018				ND	
91 m-Xylene & p-Xylene	106		11.140				ND	
S 88 Xylenes, Total	106		11.245				ND	7
92 o-Xylene	106		11.475				ND	
93 Styrene	104		11.494				ND	
94 Bromoform	173		11.652				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	96	690908	9.32	
99 1,1,2,2-Tetrachloroethane	83		12.048				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.829	12.829	0.000	93	865229	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X008.D

Injection Date: 06-Jun-2022 13:02:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-14

Lab Sample ID: 410-85437-14

Worklist Smp#: 9

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

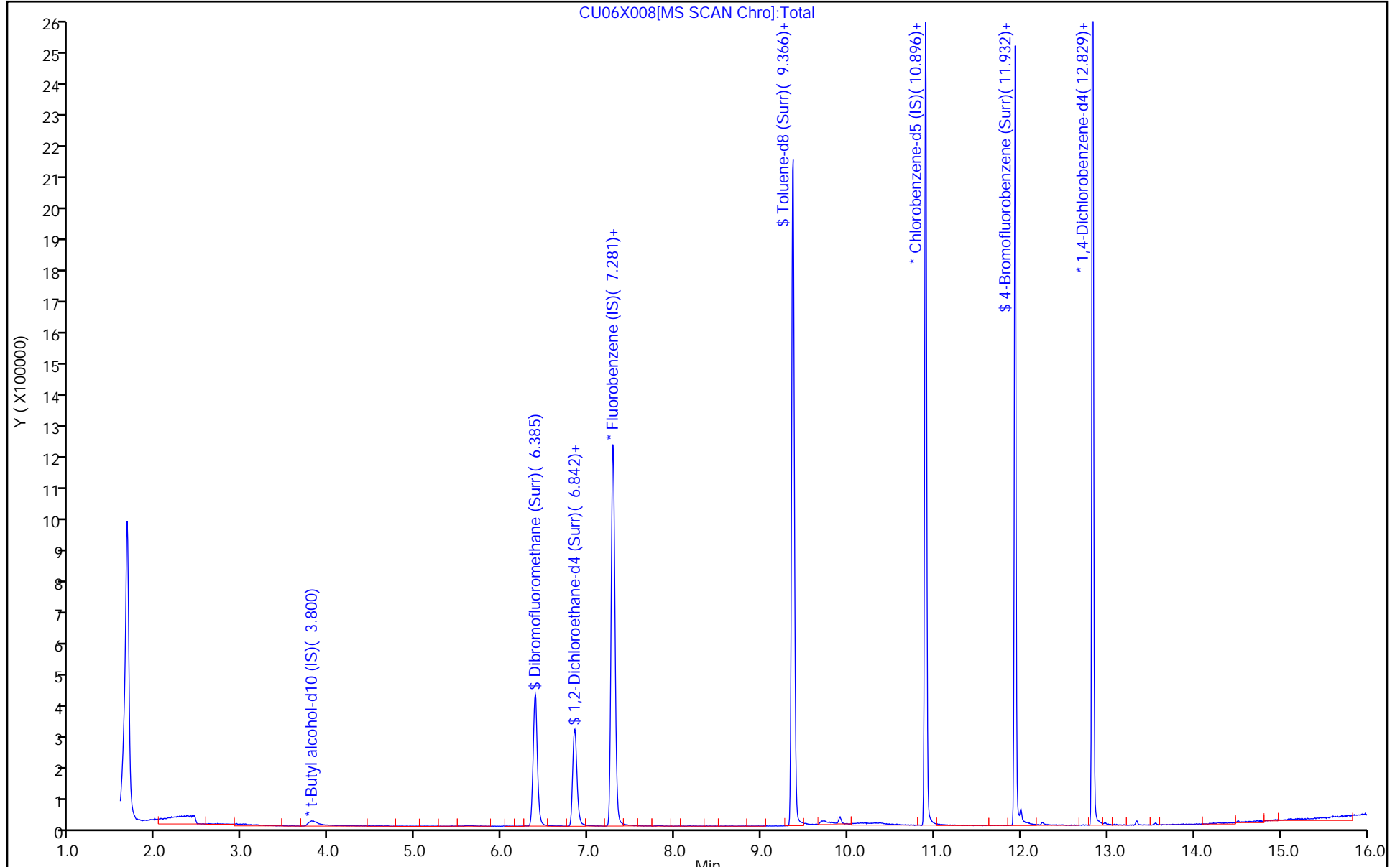
ALS Bottle#: 8

Method: MSV_10193_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\10193\20220603-58749.b\CU06X008.D
 Lims ID: 410-85437-A-14
 Client ID: HD-QC1-0/1-2
 Sample Type: Client
 Inject. Date: 06-Jun-2022 13:02:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-009
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:09:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 21:57:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.43	94.34
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.44	94.40
\$ 74 Toluene-d8 (Surr)	10.0	10.2	102.21
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.32	93.24

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-220276/13	CF02X13.D
Level 2	IC 410-220276/14	CF02X14.D
Level 3	IC 410-220276/15	CF02X15.D
Level 4	IC 410-220276/16	CF02X16.D
Level 5	IC 410-220276/17	CF02X17.D
Level 6	ICIS 410-220276/18	CF02X18.D
Level 7	IC 410-220276/19	CF02X19.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	0.3317 0.3133	0.2982 0.2888	0.3131	0.3154	0.2974	Ave		0.308 3		0.1000	4.7		20.0				
Chloromethane	0.3830 0.3321	0.3410 0.3184	0.3377	0.3226	0.3140	Ave		0.335 5		0.1000	6.9		20.0				
Vinyl chloride	0.3850 0.3578	0.3565 0.3349	0.3667	0.3554	0.3370	Ave		0.356 2		0.1000	4.8		20.0				
1,3-Butadiene	0.3330 0.3277	0.3242 0.2978	0.3344	0.3382	0.3154	Ave		0.324 4			4.3		20.0				
Bromomethane	0.2881 0.2715	0.2741 0.2591	0.2730	0.2739	0.2613	Ave		0.271 6		0.1000	3.5		20.0				
Chloroethane	0.2431 0.2077	0.2074 0.2003	0.2057	0.2104	0.1961	Ave		0.210 1		0.1000	7.3		20.0				
Dichlorofluoromethane	0.5811 0.5013	0.5254 0.4822	0.5249	0.5134	0.4807	Ave		0.515 6		0.1000	6.6		20.0				
Trichlorofluoromethane	0.5425 0.5177	0.5111 0.4591	0.5013	0.5170	0.4877	Ave		0.505 2		0.1000	5.2		20.0				
Ethyl ether	0.1936 0.1872	0.1830 0.1834	0.1851	0.1840	0.1762	Ave		0.184 6			2.8		20.0				
Freon 123a	0.4069 0.3297	0.3374 0.3084	0.3415	0.3386	0.3129	Ave		0.339 3			9.6		20.0				
Acrolein	1.7866 2.2461	2.1145 2.2704	1.9707	1.9336	1.9721	Ave		2.042 0			8.6		20.0				
1,1-Dichloroethene	0.2712 0.2547	0.2478 0.2375	0.2488	0.2480	0.2428	Ave		0.250 1		0.1000	4.3		20.0				
Acetone	1.8929 2.3770	2.5280 2.3092	2.3367	2.2111	2.3508	Ave		2.286 5		0.1000	8.6		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 Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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															
Freon 113	0.2619 0.2589	0.2434 0.2400	0.2540	0.2550	0.2428	Ave		0.250 9		0.1000	3.5		20.0				
Methyl iodide	0.4939 0.4768	0.4636 0.4545	0.4646	0.4675	0.4579	Ave		0.468 4			2.8		20.0				
Carbon disulfide	0.7551 0.7594	0.6822 0.7290	0.7017	0.7170	0.7130	Ave		0.722 5		0.1000	3.8		20.0				
Methyl acetate	4.7411 6.7609	5.5919 6.7612	6.4519	6.1883	6.7676	Ave		6.180 4		0.1000	12.4		20.0				
Allyl chloride	0.4363 0.3703	0.3608 0.3646	0.3631	0.3603	0.3561	Ave		0.373 1			7.6		20.0				
Methylene Chloride	0.2823 0.2725	0.2631 0.2625	0.2689	0.2670	0.2635	Ave		0.268 5		0.1000	2.6		20.0				
t-Butyl alcohol	1.2966 0.9839	0.9113 0.9097	0.8583	0.8926	0.9500	Ave		0.971 8			15.3		20.0				
Acrylonitrile	3.2983 3.2720	3.2944 3.3742	3.0030	3.2462	3.5126	Ave		3.285 8			4.7		20.0				
Methyl tert-butyl ether	0.7248 0.6888	0.6574 0.6722	0.6806	0.6932	0.6752	Ave		0.684 6		0.1000	3.1		20.0				
trans-1,2-Dichloroethene	0.3031 0.2930	0.2760 0.2809	0.2897	0.2853	0.2805	Ave		0.286 9		0.1000	3.2		20.0				
n-Hexane	0.3784 0.3581	0.3390 0.3360	0.3527	0.3503	0.3362	Ave		0.350 1			4.3		20.0				
1,1-Dichloroethane	0.5169 0.4968	0.4774 0.4821	0.5040	0.4824	0.4779	Ave		0.491 1		0.2000	3.1		20.0				
di-Isopropyl ether	0.8664 0.8253	0.7833 0.8160	0.8336	0.8160	0.8015	Ave		0.820 3			3.2		20.0				
2-Chloro-1,3-butadiene	0.4041 0.4101	0.3976 0.3919	0.4060	0.3954	0.3881	Ave		0.399 0			2.0		20.0				
Ethyl t-butyl ether	0.8431 0.8444	0.7967 0.8209	0.8473	0.8288	0.8162	Ave		0.828 2			2.2		20.0				
2-Butanone (MEK)	4.5165 4.8926	4.4457 4.6192	4.7762	4.4540	5.0633	Ave		4.681 1		0.1000	5.1		20.0				
cis-1,2-Dichloroethene	0.3213 0.3169	0.2990 0.3077	0.3218	0.3128	0.3076	Ave		0.312 4		0.1000	2.7		20.0				
2,2-Dichloropropane	0.4828 0.4416	0.4234 0.4238	0.4392	0.4407	0.4218	Ave		0.439 0			4.8		20.0				

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

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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															
Propionitrile	1.1031 1.3805	1.1971 1.2750	1.3002	1.1210	1.1669	Ave		1.220 6			8.3		20.0				
Methacrylonitrile	4.4362 5.5049	5.3424 5.4818	4.9119	4.9023	5.6789	Ave		5.179 8			8.5		20.0				
Bromochloromethane	0.1547 0.1416	0.1370 0.1381	0.1444	0.1445	0.1417	Ave		0.143 1			4.1		20.0				
Tetrahydrofuran	1.4047 1.4782	1.4173 1.4613	1.3367	1.3115	1.5468	Ave		1.422 4			5.7		20.0				
Chloroform	0.5429 0.5152	0.4952 0.4977	0.5210	0.5018	0.4969	Ave		0.510 1		0.2000	3.4		20.0				
1,1,1-Trichloroethane	0.4949 0.4736	0.4645 0.4512	0.4686	0.4612	0.4479	Ave		0.466 0		0.1000	3.4		20.0				
Cyclohexane	0.5168 0.4582	0.4569 0.4279	0.4617	0.4433	0.4224	Ave		0.455 3		0.1000	6.8		20.0				
Carbon tetrachloride	0.4017 0.4192	0.3886 0.4017	0.4028	0.3963	0.3931	Ave		0.400 5		0.1000	2.4		20.0				
1,1-Dichloropropene	0.4162 0.4035	0.3883 0.3803	0.3915	0.3910	0.3780	Ave		0.392 7			3.4		20.0				
Isobutyl alcohol	0.2718 0.3606	0.2775 0.3370	0.3341	0.3114	0.3348	Ave		0.318 2			10.4		20.0				
Benzene	1.2003 1.1723	1.1304 1.1363	1.1669	1.1505	1.1225	Ave		1.154 2		0.5000	2.4		20.0				
1,2-Dichloroethane	0.3560 0.3120	0.3081 0.2958	0.3191	0.3121	0.3001	Ave		0.314 7		0.1000	6.3		20.0				
t-Amyl methyl ether	0.8211 0.7787	0.7373 0.7571	0.7658	0.7687	0.7507	Ave		0.768 5			3.5		20.0				
n-Heptane	0.4297 0.3850	0.3648 0.3529	0.3769	0.3690	0.3596	Ave		0.376 9			6.8		20.0				
n-Butanol	++++ 0.3635	0.2037 0.3628	0.2955	0.2991	0.3201	Ave		0.307 5			19.2		20.0				
Trichloroethene	0.3429 0.3258	0.3115 0.3109	0.3237	0.3195	0.3086	Ave		0.320 4		0.2000	3.7		20.0				
Methylcyclohexane	0.5179 0.5382	0.5168 0.5004	0.5161	0.5169	0.4979	Ave		0.514 9		0.1000	2.6		20.0				
1,2-Dichloropropane	0.2816 0.2914	0.2711 0.2820	0.2871	0.2833	0.2735	Ave		0.281 4		0.1000	2.5		20.0				

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

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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															
1,4-Dioxane	++++ 0.0884	++++ 0.0883	0.0895	0.0814	0.0707	Ave		0.083 7		0.0050	9.5		20.0				
Methyl methacrylate	7.9520 10.913	10.145 10.998	9.2800	9.0980	11.019	Ave		9.915 0			11.9		20.0				
Dibromomethane	0.1497 0.1478	0.1398 0.1420	0.1455	0.1479	0.1409	Ave		0.144 8			2.7		20.0				
Bromodichloromethane	0.3669 0.3734	0.3343 0.3627	0.3526	0.3546	0.3528	Ave		0.356 8		0.2000	3.5		20.0				
2-Nitropropane	2.8631 3.0631	2.9400 3.0912	2.5173	2.5705	3.0616	Ave		2.872 4			8.3		20.0				
cis-1,3-Dichloropropene	0.4094 0.4542	0.4011 0.4524	0.4211	0.4262	0.4361	Ave		0.428 6		0.2000	4.7		20.0				
4-Methyl-2-pentanone (MIBK)	10.808 13.348	12.859 13.165	12.104	11.844	13.606	Ave		12.53 4		0.1000	8.0		20.0				
Toluene	1.0040 0.9341	0.9123 0.9461	0.9508	0.9119	0.9090	Ave		0.938 3		0.4000	3.6		20.0				
trans-1,3-Dichloropropene	0.3694 0.4652	0.3896 0.4830	0.4301	0.4228	0.4473	Ave		0.429 6		0.1000	9.4		20.0				
Ethyl methacrylate	0.2987 0.3735	0.3062 0.3761	0.3424	0.3424	0.3570	Ave		0.342 3			8.9		20.0				
1,1,2-Trichloroethane	0.2766 0.2565	0.2551 0.2550	0.2588	0.2524	0.2551	Ave		0.258 5		0.1000	3.2		20.0				
Tetrachloroethene	0.5000 0.4613	0.4587 0.4568	0.4718	0.4537	0.4493	Ave		0.464 5		0.2000	3.7		20.0				
1,3-Dichloropropane	0.4304 0.4318	0.4087 0.4253	0.4305	0.4180	0.4268	Ave		0.424 5			2.0		20.0				
2-Hexanone	6.7574 10.071	8.7962 10.095	8.8646	8.7831	10.316	Ave		9.097 5		0.1000	13.6		20.0				
Dibromochloromethane	0.3103 0.3406	0.2938 0.3492	0.3120	0.3163	0.3242	Ave		0.320 9			5.9		20.0				
1,2-Dibromoethane (EDB)	0.2314 0.2620	0.2358 0.2598	0.2568	0.2526	0.2571	Ave		0.250 8		0.1000	4.9		20.0				
1-Chlorohexane	0.6544 0.5362	0.5243 0.5322	0.5484	0.5256	0.5176	Ave		0.548 4			8.7		20.0				
Chlorobenzene	1.1620 1.1114	1.0972 1.1087	1.1202	1.0963	1.0956	Ave		1.113 1		0.5000	2.1		20.0				

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

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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	0.3675 0.4002	0.3525 0.4050	0.3882	0.3762	0.3827	Ave		0.381 8			4.8		20.0				
Ethylbenzene	1.8988 1.8670	1.7712 1.8683	1.8521	1.8179	1.8208	Ave		1.842 3		0.1000	2.3		20.0				
m&p-Xylene	0.7561 0.7370	0.7047 0.7425	0.7454	0.7239	0.7145	Ave		0.732 0		0.1000	2.5		20.0				
o-Xylene	0.7443 0.7283	0.7006 0.7470	0.7527	0.7201	0.7192	Ave		0.730 3		0.3000	2.6		20.0				
Styrene	1.1544 1.2540	1.1370 1.2773	1.2298	1.2194	1.2274	Ave		1.214 2		0.3000	4.2		20.0				
Bromoform	0.1715 0.2093	0.1732 0.2204	0.1872	0.1874	0.1986	Ave		0.192 5		0.1000	9.4		20.0				
Isopropylbenzene	1.9448 1.9215	1.8257 1.9131	1.9242	1.8636	1.8699	Ave		1.894 7		0.1000	2.2		20.0				
1,1,2,2-Tetrachloroethane	0.5581 0.5588	0.5119 0.5484	0.5450	0.5457	0.5342	Ave		0.543 2		0.3000	3.0		20.0				
Bromobenzene	0.8883 0.8404	0.7973 0.8151	0.8457	0.8316	0.8130	Ave		0.833 1			3.6		20.0				
trans-1,4-Dichloro-2-butene	0.1271 0.1532	0.1235 0.1518	0.1423	0.1419	0.1445	Ave		0.140 6			8.1		20.0				
1,2,3-Trichloropropane	0.1683 0.1538	0.1455 0.1481	0.1529	0.1538	0.1477	Ave		0.152 9			5.0		20.0				
N-Propylbenzene	3.9934 3.9019	3.6481 3.7280	3.8833	3.7465	3.7360	Ave		3.805 3			3.2		20.0				
2-Chlorotoluene	0.8846 0.8349	0.8051 0.8176	0.8323	0.8235	0.8011	Ave		0.828 5			3.4		20.0				
1,3,5-Trimethylbenzene	2.9193 2.8799	2.7624 2.8277	2.8228	2.7918	2.7683	Ave		2.824 6			2.1		20.0				
4-Chlorotoluene	0.8169 0.8672	0.8287 0.8598	0.8786	0.8566	0.8274	Ave		0.847 9			2.8		20.0				
tert-Butylbenzene	0.7000 0.6554	0.6604 0.6341	0.6567	0.6353	0.6217	Ave		0.652 0			3.9		20.0				
Pentachloroethane	0.4597 0.5321	0.4472 0.5388	0.4935	0.4998	0.4896	Ave		0.494 4			6.9		20.0				
1,2,4-Trimethylbenzene	2.9812 3.0004	2.8259 2.9381	2.9375	2.8846	2.8703	Ave		2.919 7			2.1		20.0				

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

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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															
sec-Butylbenzene	3.6399 3.6549	3.4825 3.4989	3.6002	3.5482	3.4985	Ave		3.560 5			2.0		20.0				
1,3-Dichlorobenzene	1.7452 1.7258	1.6521 1.6848	1.7433	1.7096	1.6606	Ave		1.703 0		0.6000	2.2		20.0				
p-Isopropyltoluene	3.2649 3.3106	3.0734 3.2111	3.2368	3.1500	3.1355	Ave		3.197 5			2.6		20.0				
1,4-Dichlorobenzene	1.7925 1.7353	1.7295 1.7147	1.8172	1.7476	1.7058	Ave		1.748 9		0.5000	2.4		20.0				
1,2,3-Trimethylbenzene	1.3660 1.3362	1.2686 1.3441	1.3275	1.3131	1.2903	Ave		1.320 8			2.5		20.0				
Benzyl chloride	0.1745 0.2664	0.1870 0.2693	0.2209	0.2290	0.2435	Ave		0.227 2			16.1		20.0				
n-Butylbenzene	1.6130 1.6615	1.5288 1.6050	1.6092	1.5632	1.5855	Ave		1.595 2			2.6		20.0				
1,2-Dichlorobenzene	1.6676 1.6042	1.5254 1.5658	1.6213	1.5821	1.5570	Ave		1.589 0		0.4000	2.9		20.0				
1,2-Dibromo-3-Chloropropane	0.0706 0.0942	0.0694 0.0952	0.0822	0.0828	0.0858	Ave		0.082 9		0.0500	12.3		20.0				
1,3,5-Trichlorobenzene	1.4631 1.4718	1.3982 1.4291	1.4425	1.4405	1.4200	Ave		1.437 9			1.7		20.0				
1,2,4-Trichlorobenzene	1.1842 1.2724	1.1367 1.2512	1.2206	1.2114	1.2294	Ave		1.215 1		0.2000	3.7		20.0				
Hexachlorobutadiene	0.6724 0.6585	0.6164 0.6217	0.6806	0.6289	0.6261	Ave		0.643 5			4.1		20.0				
Naphthalene	1.7152 1.9495	1.6287 1.9418	1.7859	1.8135	1.8794	Ave		1.816 3			6.5		20.0				
1,2,3-Trichlorobenzene	0.9719 1.0433	0.9248 1.0340	0.9873	0.9727	0.9971	Ave		0.990 2			4.1		20.0				
Dibromofluoromethane (Surr)	0.2492 0.2517	0.2482 0.2457	0.2466	0.2505	0.2501	Ave		0.248 9			0.9		20.0				
1,2-Dichloroethane-d4 (Surr)	0.0481 0.0485	0.0476 0.0469	0.0477	0.0481	0.0484	Ave		0.047 9			1.1		20.0				
Toluene-d8 (Surr)	1.2231 1.2272	1.2246 1.2615	1.2328	1.2159	1.2392	Ave		1.232 0			1.2		20.0				
4-Bromofluorobenzene (Surr)	0.4852 0.4888	0.4861 0.5052	0.4891	0.4863	0.4942	Ave		0.490 7			1.4		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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-220276/13	CF02X13.D
Level 2	IC 410-220276/14	CF02X14.D
Level 3	IC 410-220276/15	CF02X15.D
Level 4	IC 410-220276/16	CF02X16.D
Level 5	IC 410-220276/17	CF02X17.D
Level 6	ICIS 410-220276/18	CF02X18.D
Level 7	IC 410-220276/19	CF02X19.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	12235 599509	27996 1465831	58861	118421	286285	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	14127 635499	32016 1616179	63497	121098	302315	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	14199 684714	33473 1700264	68939	133445	324438	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	12282 627025	30436 1511989	62874	126980	303705	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	10627 519587	25730 1315264	51333	102845	251549	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	8965 397384	19473 1016941	38671	78998	188823	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	21435 959416	49324 2447758	98693	192745	462794	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	20008 990677	47982 2330802	94257	194111	469586	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	7141 358205	17177 930811	34797	69094	169668	0.200 10.00	0.500 25.0	1.000	2.00	5.00
Freon 123a	FB	Ave	15008 630944	31674 1565426	64216	127119	301263	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd 10	Ave	50498 2765672	117361 7020882	251287	507753	1133981	10.0 500	25.0 1250	50.0	100	250
1,1-Dichloroethene	FB	Ave	10002 487396	23268 1205671	46774	93092	233800	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAd 10	Ave	10700	28061	59588	116118	270333	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 Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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
			585346	1428072				100	250			
Freon 113	FB	Ave	9659 495443	22848 1218524	47757	95726	233782	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl iodide	FB	Ave	18216 912388	43523 2307106	87364	175506	440896	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon disulfide	FB	Ave	27851 1453194	64051 3700679	131936	269188	686458	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd 10	Ave	2680 166489	6207 418138	16453	32499	77825	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	16092 708663	33874 1850674	68262	135286	342828	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	10414 521458	24697 1332462	50555	100231	253727	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd 10	Ave	14658 484583	20231 1125138	43775	93749	218504	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd 10	Ave	4661 201433	9142 521691	19145	42620	100986	0.500 25.0	1.25 62.5	2.50	5.00	12.5
Methyl tert-butyl ether	FB	Ave	26734 1318121	61721 3412424	127977	260233	650102	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	11180 560795	25911 1426126	54471	107124	270086	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	13958 685256	31827 1705685	66324	131519	323680	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	19064 950690	44820 2447137	94758	181125	460122	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	31958 1579295	73544 4142589	156734	306354	771663	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	14906 784709	37328 1989610	76332	148453	373616	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	31099 1615992	74797 4167315	159303	311166	785780	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone (MEK)	TBAd 10	Ave	25530	49347	121800	233911	582266	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 Env Job No.: 410-85437-1

Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193

GC Column: R-624SilMS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57

Calibration End Date: 02/02/2022 21:11

Calibration ID: 35216

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
			1204819	2856668				100	250			
cis-1,2-Dichloroethene	FB	Ave	11851 606505	28067 1561762	60505	117444	296129	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	17808 845110	39753 2151214	82575	165457	406121	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd 10	Ave	12471 679910	26576 1577010	66313	117747	268381	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd 10	Ave	25076 1355605	59300 3390156	125260	257453	653060	2.00 100	5.00 250	10.0	20.0	50.0
Bromochloromethane	FB	Ave	5705 271054	12858 700876	27146	54244	136424	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd 10	Ave	3970 182006	7866 451853	17044	34439	88940	1.00 50.0	2.50 125	5.00	10.0	25.0
Chloroform	FB	Ave	20026 985966	46491 2526526	97966	188396	478420	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	18253 906289	43607 2290676	88116	173135	431195	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	19062 876811	42900 2172337	86805	166412	406663	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	14816 802154	36487 2038969	75727	148781	378499	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	15351 772206	36454 1930599	73603	146798	363954	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	TBAd 10	Ave	7683 443956	15400 1042186	42598	81756	192500	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	44274 2243434	106130 5768074	219408	431934	1080745	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	13130 597042	28928 1501515	60002	117170	288899	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	30285 1490251	69223 3843125	143990	288610	722776	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	15851	34249	70870	138541	346244	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 Env Job No.: 410-85437-1

Analy Batch No.: 220276

SDG No.:

Instrument ID: 10193

GC Column: R-624SilMS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57

Calibration End Date: 02/02/2022 21:11

Calibration ID: 35216

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	
			736828	1791612					10.0	25.0			
n-Butanol	TBAd 10	Ave	++++	19783	65946	137463	322136	++++	43.8	87.5	175	438	
			783296	1963467				875	2188				
Trichloroethene	FB	Ave	12648 623476	29247 1578146	60869	119953	297096	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Methylcyclohexane	FB	Ave	19102 1030029	48521 2540467	97042	194051	479351	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,2-Dichloropropane	FB	Ave	10385 557697	25450 1431525	53981	106349	263351	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,4-Dioxane	TBAd 10	Ave	++++	++++	11409	21369	40630	++++	++++	50.0	100	250	
			108872	273127				500	1250				
Methyl methacrylate	TBAd 10	Ave	4495 268737	11261 680147	23665	47780	126712	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Dibromomethane	FB	Ave	5520 282811	13122 721062	27362	55542	135638	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Bromodichloromethane	FB	Ave	13533 714556	31390 1841061	66293	133131	339676	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
2-Nitropropane	TBAd 10	Ave	8092 377150	16317 955876	32097	67497	176039	1.00 50.0	2.50 125	5.00	10.0	25.0	
cis-1,3-Dichloropropene	FB	Ave	15102 869218	37655 2296691	79169	160002	419879	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
4-Methyl-2-pentanone (MIBK)	TBAd 10	Ave	61092 3287003	142738 8141984	308678	622003	1564692	2.00 100	5.00 250	10.0	20.0	50.0	
Toluene	CBZd 5	Ave	30417 1487302	70894 3845159	145843	283636	715208	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
trans-1,3-Dichloropropene	CBZd 5	Ave	11191 740700	30273 1962835	65967	131509	351934	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Ethyl methacrylate	CBZd 5	Ave	9049	23799	52523	106512	280910	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 Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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
			594703	1528446				10.0	25.0			
1,1,2-Trichloroethane	CBZd 5	Ave	8379	19822	39701	78522	200725	0.200	0.500	1.00	2.00	5.00
			408430	1036474				10.0	25.0			
Tetrachloroethene	CBZd 5	Ave	15147	35644	72373	141109	353464	0.200	0.500	1.00	2.00	5.00
			734499	1856466				10.0	25.0			
1,3-Dichloropropane	CBZd 5	Ave	13039	31758	66036	130010	335769	0.200	0.500	1.00	2.00	5.00
			687547	1728377				10.0	25.0			
2-Hexanone	TBAd 10	Ave	38197	97637	226057	461262	1186297	2.00	5.00	10.0	20.0	50.0
			2479902	6243001				100	250			
Dibromochloromethane	CBZd 5	Ave	9400	22834	47850	98379	255043	0.200	0.500	1.00	2.00	5.00
			542302	1419401				10.0	25.0			
1,2-Dibromoethane (EDB)	CBZd 5	Ave	7009	18324	39393	78581	202282	0.200	0.500	1.00	2.00	5.00
			417126	1056041				10.0	25.0			
1-Chlorohexane	CBZd 5	Ave	19826	40742	84112	163473	407253	0.200	0.500	1.00	2.00	5.00
			853674	2162837				10.0	25.0			
Chlorobenzene	CBZd 5	Ave	35203	85267	171825	341009	861967	0.200	0.500	1.00	2.00	5.00
			1769503	4506108				10.0	25.0			
1,1,1,2-Tetrachloroethane	CBZd 5	Ave	11133	27396	59547	117024	301092	0.200	0.500	1.00	2.00	5.00
			637124	1645974				10.0	25.0			
Ethylbenzene	CBZd 5	Ave	57524	137639	284082	565458	1432602	0.200	0.500	1.00	2.00	5.00
			2972568	7593076				10.0	25.0			
m&p-Xylene	CBZd 5	Ave	45813	109527	228665	450324	1124269	0.400	1.00	2.00	4.00	10.0
			2346847	6035178				20.0	50.0			
o-Xylene	CBZd 5	Ave	22549	54445	115456	223981	565844	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 Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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
			1159564	3035761				10.0	25.0			
Styrene	CBZd 5	Ave	34971	88360	188630	379294	965722	0.200	0.500	1.00	2.00	5.00
			1996506	5191221				10.0	25.0			
Bromoform	CBZd 5	Ave	5197	13459	28720	58304	156254	0.200	0.500	1.00	2.00	5.00
			333282	895729				10.0	25.0			
Isopropylbenzene	CBZd 5	Ave	58917	141874	295148	579675	1471229	0.200	0.500	1.00	2.00	5.00
			3059350	7775129				10.0	25.0			
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	9890	23236	49337	100152	250466	0.200	0.500	1.00	2.00	5.00
			520715	1344360				10.0	25.0			
Bromobenzene	DCBd 4	Ave	15743	36187	76557	152618	381166	0.200	0.500	1.00	2.00	5.00
			783108	1998200				10.0	25.0			
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	22526	56041	128777	260447	677622	2.00	5.00	10.0	20.0	50.0
			1427235	3721298				100	250			
1,2,3-Trichloropropane	DCBd 4	Ave	2983	6604	13838	28232	69255	0.200	0.500	1.00	2.00	5.00
			143350	362995				10.0	25.0			
N-Propylbenzene	DCBd 4	Ave	70772	165585	351532	687587	1751497	0.200	0.500	1.00	2.00	5.00
			3635758	9139528				10.0	25.0			
2-Chlorotoluene	DCBd 4	Ave	15678	36543	75346	151125	375595	0.200	0.500	1.00	2.00	5.00
			777981	2004417				10.0	25.0			
1,3,5-Trimethylbenzene	DCBd 4	Ave	51736	125381	255533	512374	1297813	0.200	0.500	1.00	2.00	5.00
			2683430	6932433				10.0	25.0			
4-Chlorotoluene	DCBd 4	Ave	14477	37616	79537	157208	387922	0.200	0.500	1.00	2.00	5.00
			808031	2107992				10.0	25.0			
tert-Butylbenzene	DCBd 4	Ave	12406	29975	59447	116603	291473	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 Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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
			610691	1554546				10.0	25.0			
Pentachloroethane	DCBd 4	Ave	8147	20296	44677	91733	229539	0.200	0.500	1.00	2.00	5.00
			495806	1320964				10.0	25.0			
1,2,4-Trimethylbenzene	DCBd 4	Ave	52834	128264	265919	529395	1345643	0.200	0.500	1.00	2.00	5.00
			2795722	7203013				10.0	25.0			
sec-Butylbenzene	DCBd 4	Ave	64508	158066	325908	651192	1640185	0.200	0.500	1.00	2.00	5.00
			3405601	8577932				10.0	25.0			
1,3-Dichlorobenzene	DCBd 4	Ave	30929	74987	157808	313764	778508	0.200	0.500	1.00	2.00	5.00
			1608089	4130426				10.0	25.0			
p-Isopropyltoluene	DCBd 4	Ave	57862	139501	293011	578110	1470005	0.200	0.500	1.00	2.00	5.00
			3084750	7872294				10.0	25.0			
1,4-Dichlorobenzene	DCBd 4	Ave	31767	78499	164499	320737	799706	0.200	0.500	1.00	2.00	5.00
			1616914	4203888				10.0	25.0			
1,2,3-Trimethylbenzene	DCBd 4	Ave	24208	57583	120174	240992	604917	0.200	0.500	1.00	2.00	5.00
			1245084	3295151				10.0	25.0			
Benzyl chloride	DCBd 4	Ave	3092	8490	19998	42023	114150	0.200	0.500	1.00	2.00	5.00
			248227	660249				10.0	25.0			
n-Butylbenzene	DCBd 4	Ave	28587	69389	145675	286886	743324	0.200	0.500	1.00	2.00	5.00
			1548185	3934711				10.0	25.0			
1,2-Dichlorobenzene	DCBd 4	Ave	29554	69238	146764	290351	729946	0.200	0.500	1.00	2.00	5.00
			1494727	3838667				10.0	25.0			
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1252	3149	7442	15204	40213	0.200	0.500	1.00	2.00	5.00
			87737	233494				10.0	25.0			
1,3,5-Trichlorobenzene	DCBd 4	Ave	25930	63464	130582	264362	665722	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 Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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
			1371402	3503588				10.0	25.0			
1,2,4-Trichlorobenzene	DCBd 4	Ave	20987	51592	110493	222331	576353	0.200	0.500	1.00	2.00	5.00
			1185637	3067379				10.0	25.0			
Hexachlorobutadiene	DCBd 4	Ave	11917	27977	61611	115422	293536	0.200	0.500	1.00	2.00	5.00
			613587	1524215				10.0	25.0			
Naphthalene	DCBd 4	Ave	30397	73925	161672	332832	881114	0.200	0.500	1.00	2.00	5.00
			1816545	4760566				10.0	25.0			
1,2,3-Trichlorobenzene	DCBd 4	Ave	17225	41975	89371	178524	467448	0.200	0.500	1.00	2.00	5.00
			972096	2535063				10.0	25.0			
Dibromofluoromethane (Surr)	FB	Ave	459557	466023	463655	470270	481628	10.0	10.0	10.0	10.0	10.0
			481651	498920				10.0	10.0			
1,2-Dichloroethane-d4 (Surr)	FB	Ave	88704	89442	89746	90323	93267	10.0	10.0	10.0	10.0	10.0
			92831	95315				10.0	10.0			
Toluene-d8 (Surr)	CBZd 5	Ave	1852613	1903356	1890925	1891072	1949965	10.0	10.0	10.0	10.0	10.0
			1953958	2050702				10.0	10.0			
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	734986	755579	750275	756237	777732	10.0	10.0	10.0	10.0	10.0
			778258	821267				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 Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-220276/13	CF02X13.D
Level 2	IC 410-220276/14	CF02X14.D
Level 3	IC 410-220276/15	CF02X15.D
Level 4	IC 410-220276/16	CF02X16.D
Level 5	IC 410-220276/17	CF02X17.D
Level 6	ICIS 410-220276/18	CF02X18.D
Level 7	IC 410-220276/19	CF02X19.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	7.6 -6.3	-3.3	1.6	2.3	-3.5	1.6	50 30	30	30	30	30	30
Chloromethane	14.1 -5.1	1.6	0.6	-3.9	-6.4	-1.0	50 30	30	30	30	30	30
Vinyl chloride	8.1 -6.0	0.1	2.9	-0.2	-5.4	0.5	50 30	30	30	30	30	30
1,3-Butadiene	2.6 -8.2	-0.1	3.1	4.3	-2.8	1.0	50 30	30	30	30	30	30
Bromomethane	6.1 -4.6	0.9	0.5	0.9	-3.8	0.0	50 30	30	30	30	30	30
Chloroethane	15.7 -4.6	-1.3	-2.1	0.2	-6.7	-1.2	50 30	30	30	30	30	30
Dichlorofluoromethane	12.7 -6.5	1.9	1.8	-0.4	-6.8	-2.8	50 30	30	30	30	30	30
Trichlorofluoromethane	7.4 -9.1	1.2	-0.8	2.3	-3.5	2.5	50 30	30	30	30	30	30
Ethyl ether	4.9 -0.7	-0.9	0.2	-0.3	-4.6	1.4	50 30	30	30	30	30	30
Freon 123a	19.9 -9.1	-0.6	0.6	-0.2	-7.8	-2.8	50 30	30	30	30	30	30
Acrolein	-12.5 11.2	3.6	-3.5	-5.3	-3.4	10.0	50 30	30	30	30	30	30
1,1-Dichloroethene	8.4 -5.0	-0.9	-0.5	-0.9	-2.9	1.8	50 30	30	30	30	30	30
Acetone	-17.2 1.0	10.6	2.2	-3.3	2.8	4.0	50 30	30	30	30	30	30
Freon 113	4.4 -4.3	-3.0	1.3	1.6	-3.2	3.2	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 Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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	5.4 -3.0	-1.0	-0.8	-0.2	-2.2	1.8	50 30	30	30	30	30	30
Carbon disulfide	4.5 0.9	-5.6	-2.9	-0.8	-1.3	5.1	50 30	30	30	30	30	30
Methyl acetate	-23.3 9.4	-9.5	4.4	0.1	9.5	9.4	50 30	30	30	30	30	30
Allyl chloride	16.9 -2.3	-3.3	-2.7	-3.4	-4.6	-0.7	50 30	30	30	30	30	30
Methylene Chloride	5.1 -2.3	-2.0	0.1	-0.6	-1.9	1.5	50 30	30	30	30	30	30
t-Butyl alcohol	33.4 -6.4	-6.2	-11.7	-8.2	-2.2	1.2	50 30	30	30	30	30	30
Acrylonitrile	0.4 2.7	0.3	-8.6	-1.2	6.9	-0.4	50 30	30	30	30	30	30
Methyl tert-butyl ether	5.9 -1.8	-4.0	-0.6	1.2	-1.4	0.6	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	5.6 -2.1	-3.8	1.0	-0.6	-2.2	2.1	50 30	30	30	30	30	30
n-Hexane	8.1 -4.0	-3.2	0.8	0.1	-4.0	2.3	50 30	30	30	30	30	30
1,1-Dichloroethane	5.3 -1.8	-2.8	2.6	-1.8	-2.7	1.2	50 30	30	30	30	30	30
di-Isopropyl ether	5.6 -0.5	-4.5	1.6	-0.5	-2.3	0.6	50 30	30	30	30	30	30
2-Chloro-1,3-butadiene	1.3 -1.8	-0.4	1.7	-0.9	-2.7	2.8	50 30	30	30	30	30	30
Ethyl t-butyl ether	1.8 -0.9	-3.8	2.3	0.1	-1.5	2.0	50 30	30	30	30	30	30
2-Butanone (MEK)	-3.5 -1.3	-5.0	2.0	-4.9	8.2	4.5	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	2.8 -1.5	-4.3	3.0	0.1	-1.6	1.4	50 30	30	30	30	30	30
2,2-Dichloropropane	10.0 -3.5	-3.6	0.0	0.4	-3.9	0.6	50 30	30	30	30	30	30
Propionitrile	-9.6 4.5	-1.9	6.5	-8.2	-4.4	13.1	50 30	30	30	30	30	30
Methacrylonitrile	-14.4 5.8	3.1	-5.2	-5.4	9.6	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 Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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	8.1 -3.5	-4.3	0.9	0.9	-1.0	-1.0	50 30	30	30	30	30	30
Tetrahydrofuran	-1.2 2.7	-0.4	-6.0	-7.8	8.8	3.9	50 30	30	30	30	30	30
Chloroform	6.4 -2.4	-2.9	2.1	-1.6	-2.6	1.0	50 30	30	30	30	30	30
1,1,1-Trichloroethane	6.2 -3.2	-0.3	0.6	-1.0	-3.9	1.6	50 30	30	30	30	30	30
Cyclohexane	13.5 -6.0	0.4	1.4	-2.6	-7.2	0.6	50 30	30	30	30	30	30
Carbon tetrachloride	0.3 0.3	-3.0	0.6	-1.0	-1.8	4.7	50 30	30	30	30	30	30
1,1-Dichloropropene	6.0 -3.2	-1.1	-0.3	-0.4	-3.7	2.8	50 30	30	30	30	30	30
Isobutyl alcohol	-14.6 5.9	-12.8	5.0	-2.1	5.2	13.3	50 30	30	30	30	30	30
Benzene	4.0 -1.6	-2.1	1.1	-0.3	-2.7	1.6	50 30	30	30	30	30	30
1,2-Dichloroethane	13.1 -6.0	-2.1	1.4	-0.8	-4.7	-0.9	50 30	30	30	30	30	30
t-Amyl methyl ether	6.8 -1.5	-4.1	-0.3	0.0	-2.3	1.3	50 30	30	30	30	30	30
n-Heptane	14.0 -6.4	-3.2	0.0	-2.1	-4.6	2.2	50 30	30	30	30	30	30
n-Butanol	++++ 18.0	-33.8	-3.9	-2.7	4.1	18.2	30	50	30	30	30	30
Trichloroethene	7.0 -3.0	-2.8	1.0	-0.3	-3.7	1.7	50 30	30	30	30	30	30
Methylcyclohexane	0.6 -2.8	0.4	0.2	0.4	-3.3	4.5	50 30	30	30	30	30	30
1,2-Dichloropropane	0.0 0.2	-3.7	2.0	0.7	-2.8	3.6	50 30	30	30	30	30	30
1,4-Dioxane	++++ 5.6	++++	7.0	-2.7	-15.5	5.7	30		50	30	30	30
Methyl methacrylate	-19.8 10.9	2.3	-6.4	-8.2	11.1	10.1	50 30	30	30	30	30	30
Dibromomethane	3.4 -1.9	-3.5	0.5	2.2	-2.7	2.1	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 Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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	2.8 1.7	-6.3	-1.2	-0.6	-1.1	4.7	50 30	30	30	30	30	30
2-Nitropropane	-0.3 7.6	2.4	-12.4	-10.5	6.6	6.6	50 30	30	30	30	30	30
cis-1,3-Dichloropropene	-4.5 5.5	-6.4	-1.8	-0.6	1.7	6.0	50 30	30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	-13.8 5.0	2.6	-3.4	-5.5	8.6	6.5	50 30	30	30	30	30	30
Toluene	7.0 0.8	-2.8	1.3	-2.8	-3.1	-0.4	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-14.0 12.4	-9.3	0.1	-1.6	4.1	8.3	50 30	30	30	30	30	30
Ethyl methacrylate	-12.8 9.9	-10.5	0.0	0.0	4.3	9.1	50 30	30	30	30	30	30
1,1,2-Trichloroethane	7.0 -1.3	-1.3	0.1	-2.3	-1.3	-0.8	50 30	30	30	30	30	30
Tetrachloroethene	7.6 -1.7	-1.3	1.6	-2.3	-3.3	-0.7	50 30	30	30	30	30	30
1,3-Dichloropropane	1.4 0.2	-3.7	1.4	-1.5	0.5	1.7	50 30	30	30	30	30	30
2-Hexanone	-25.7 11.0	-3.3	-2.6	-3.5	13.4	10.7	50 30	30	30	30	30	30
Dibromochloromethane	-3.3 8.8	-8.4	-2.8	-1.4	1.0	6.1	50 30	30	30	30	30	30
1,2-Dibromoethane (EDB)	-7.7 3.6	-6.0	2.4	0.7	2.5	4.5	50 30	30	30	30	30	30
1-Chlorohexane	19.3 -3.0	-4.4	0.0	-4.2	-5.6	-2.2	50 30	30	30	30	30	30
Chlorobenzene	4.4 -0.4	-1.4	0.6	-1.5	-1.6	-0.2	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-3.7 6.1	-7.7	1.7	-1.4	0.2	4.8	50 30	30	30	30	30	30
Ethylbenzene	3.1 1.4	-3.9	0.5	-1.3	-1.2	1.3	50 30	30	30	30	30	30
m&p-Xylene	3.3 1.4	-3.7	1.8	-1.1	-2.4	0.7	50 30	30	30	30	30	30
o-Xylene	1.9 2.3	-4.1	3.1	-1.4	-1.5	-0.3	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 Env Job No.: 410-85437-1

Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193

GC Column: R-624SilMS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57

Calibration End Date: 02/02/2022 21:11

Calibration ID: 35216

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	-4.9 5.2	-6.4	1.3	0.4	1.1	3.3	50 30	30	30	30	30	30
Bromoform	-10.9 14.5	-10.0	-2.7	-2.6	3.1	8.7	50 30	30	30	30	30	30
Isopropylbenzene	2.6 1.0	-3.6	1.6	-1.6	-1.3	1.4	50 30	30	30	30	30	30
1,1,2,2-Tetrachloroethane	2.7 1.0	-5.8	0.3	0.5	-1.6	2.9	50 30	30	30	30	30	30
Bromobenzene	6.6 -2.2	-4.3	1.5	-0.2	-2.4	0.9	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	-9.6 8.0	-12.2	1.2	0.9	2.8	8.9	50 30	30	30	30	30	30
1,2,3-Trichloropropane	10.1 -3.1	-4.8	0.0	0.6	-3.4	0.6	50 30	30	30	30	30	30
N-Propylbenzene	4.9 -2.0	-4.1	2.0	-1.5	-1.8	2.5	50 30	30	30	30	30	30
2-Chlorotoluene	6.8 -1.3	-2.8	0.5	-0.6	-3.3	0.8	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	3.4 0.1	-2.2	-0.1	-1.2	-2.0	2.0	50 30	30	30	30	30	30
4-Chlorotoluene	-3.7 1.4	-2.3	3.6	1.0	-2.4	2.3	50 30	30	30	30	30	30
tert-Butylbenzene	7.4 -2.7	1.3	0.7	-2.5	-4.6	0.5	50 30	30	30	30	30	30
Pentachloroethane	-7.0 9.0	-9.6	-0.2	1.1	-1.0	7.6	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	2.1 0.6	-3.2	0.6	-1.2	-1.7	2.8	50 30	30	30	30	30	30
sec-Butylbenzene	2.2 -1.7	-2.2	1.1	-0.3	-1.7	2.7	50 30	30	30	30	30	30
1,3-Dichlorobenzene	2.5 -1.1	-3.0	2.4	0.4	-2.5	1.3	50 30	30	30	30	30	30
p-Isopropyltoluene	2.1 0.4	-3.9	1.2	-1.5	-1.9	3.5	50 30	30	30	30	30	30
1,4-Dichlorobenzene	2.5 -2.0	-1.1	3.9	-0.1	-2.5	-0.8	50 30	30	30	30	30	30
1,2,3-Trimethylbenzene	3.4 1.8	-4.0	0.5	-0.6	-2.3	1.2	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 Env Job No.: 410-85437-1 Analy Batch No.: 220276

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2022 18:57 Calibration End Date: 02/02/2022 21:11 Calibration ID: 35216

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	-23.2 18.5	-17.7	-2.8	0.8	7.2	17.2	50 30	30	30	30	30	30
n-Butylbenzene	1.1 0.6	-4.2	0.9	-2.0	-0.6	4.2	50 30	30	30	30	30	30
1,2-Dichlorobenzene	4.9 -1.5	-4.0	2.0	-0.4	-2.0	1.0	50 30	30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-14.8 14.9	-16.3	-0.8	-0.1	3.5	13.6	50 30	30	30	30	30	30
1,3,5-Trichlorobenzene	1.8 -0.6	-2.8	0.3	0.2	-1.2	2.4	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-2.5 3.0	-6.5	0.4	-0.3	1.2	4.7	50 30	30	30	30	30	30
Hexachlorobutadiene	4.5 -3.4	-4.2	5.8	-2.3	-2.7	2.3	50 30	30	30	30	30	30
Naphthalene	-5.6 6.9	-10.3	-1.7	-0.2	3.5	7.3	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	-1.8 4.4	-6.6	-0.3	-1.8	0.7	5.4	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	0.1 -1.3	-0.3	-0.9	0.7	0.5	1.1	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	0.4 -2.1	-0.6	-0.4	0.4	1.1	1.2	50 30	30	30	30	30	30
Toluene-d8 (Surr)	-0.7 2.4	-0.6	0.1	-1.3	0.6	-0.4	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	-1.1 2.9	-0.9	-0.3	-0.9	0.7	-0.4	50 30	30	30	30	30	30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X13.D
 Lims ID: IC std1 0.2
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 02-Feb-2022 18:57:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0049623-013
 Misc. Info.: IC STD.2 LG
 Operator ID: jml01693 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 08-Feb-2022 19:29:40 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1661

First Level Reviewer: longj

Date: 07-Feb-2022 14:24:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.794	1.794	0.000	99	12235	0.2000	0.2152	
3 Chloromethane	50	1.983	1.977	0.006	98	14127	0.2000	0.2283	
5 Vinyl chloride	62	2.087	2.087	0.000	97	14199	0.2000	0.2162	
4 Butadiene	39	2.093	2.093	0.000	93	12282	0.2000	0.2053	
6 Bromomethane	94	2.392	2.386	0.006	88	10627	0.2000	0.2122	
7 Chloroethane	64	2.465	2.453	0.012	99	8965	0.2000	0.2314	
8 Dichlorofluoromethane	67	2.678	2.678	0.000	97	21435	0.2000	0.2254	
9 Trichlorofluoromethane	101	2.733	2.739	-0.006	94	20008	0.2000	0.2147	
225 Pentane	43	2.751	2.745	0.006	95	14741	0.2000	0.2225	
11 Ethyl ether	59	2.934	2.940	-0.006	84	7141	0.2000	0.2097	M
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.020	3.032	-0.012	87	15008	0.2000	0.2398	M
13 Acrolein	56	3.093	3.093	0.000	99	50498	10.0	8.75	
14 1,1-Dichloroethene	96	3.209	3.215	-0.006	96	10002	0.2000	0.2168	
16 Acetone	43	3.251	3.239	0.012	58	10700	2.00	1.66	M
15 112TCTFE	101	3.270	3.263	0.007	90	9659	0.2000	0.2088	
18 Isopropyl alcohol	45	3.416	3.379	0.037	29	5889	4.00	4.11	
17 Iodomethane	142	3.392	3.385	0.007	98	18216	0.2000	0.2109	
19 Ethyl bromide	108	3.410	3.416	-0.006	59	9039	0.1999	0.2093	
20 Carbon disulfide	76	3.483	3.477	0.006	100	27851	0.2000	0.2090	
22 Methyl acetate	43	3.635	3.623	0.012	20	2680	0.2000	0.1534	M
23 3-Chloro-1-propene	41	3.641	3.635	0.006	89	16092	0.2000	0.2339	
24 Methylene Chloride	84	3.812	3.806	0.006	84	10414	0.2000	0.2103	
* 25 t-Butyl alcohol-d10 (IS)	65	3.812	3.818	-0.006	91	141316	50.0	50.0	
26 2-Methyl-2-propanol	59	3.958	3.910	0.048	37	14658	4.00	5.34	M
27 Acrylonitrile	53	4.160	4.141	0.019	26	4661	0.5000	0.5019	
28 Methyl tert-butyl ether	73	4.184	4.178	0.006	94	26734	0.2000	0.2117	
29 trans-1,2-Dichloroethene	96	4.184	4.184	0.000	96	11180	0.2000	0.2113	
30 Hexane	57	4.599	4.592	0.007	94	13958	0.2000	0.2162	
32 1,1-Dichloroethane	63	4.842	4.842	0.000	95	19064	0.2000	0.2105	
33 Isopropyl ether	45	4.910	4.897	0.013	93	31958	0.2000	0.2112	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 2-Chloro-1,3-butadiene	53	4.964	4.952	0.012	91	14906	0.2000	0.2026	
35 Tert-butyl ethyl ether	59	5.446	5.440	0.006	96	31099	0.2000	0.2036	M
36 2-Butanone (MEK)	43	5.690	5.659	0.031	87	25530	2.00	1.93	
37 cis-1,2-Dichloroethene	96	5.690	5.690	0.000	82	11851	0.2000	0.2057	
38 2,2-Dichloropropane	77	5.702	5.702	0.000	66	17808	0.2000	0.2199	
40 Propionitrile	54	5.787	5.751	0.036	98	12471	4.00	3.62	
43 Methacrylonitrile	67	5.976	5.970	0.006	90	25076	2.00	1.71	
44 Chlorobromomethane	128	6.025	6.025	0.000	90	5705	0.2000	0.2161	
45 Tetrahydrofuran	71	6.037	6.025	0.012	83	3970	1.00	0.9876	
S 42 1,2-Dichloroethene, Total	100				0			0.4169	
46 Chloroform	83	6.190	6.184	0.006	93	20026	0.2000	0.2129	
48 1,1,1-Trichloroethane	97	6.403	6.403	0.000	54	18253	0.2000	0.2124	
\$ 47 Dibromofluoromethane (Surr)	113	6.403	6.403	0.000	94	459557	10.0	10.0	
49 Cyclohexane	56	6.488	6.494	-0.006	89	19062	0.2000	0.2270	
50 Carbon tetrachloride	117	6.610	6.610	0.000	93	14816	0.2000	0.2006	
51 1,1-Dichloropropene	75	6.623	6.616	0.007	94	15351	0.2000	0.2120	M
52 Isobutyl alcohol	41	6.836	6.811	0.025	90	7683	10.0	8.54	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.860	6.854	0.006	80	88704	10.0	10.0	
54 Benzene	78	6.885	6.879	0.006	96	44274	0.2000	0.2080	
55 1,2-Dichloroethane	62	6.970	6.958	0.012	97	13130	0.2000	0.2262	
56 Tert-amyl methyl ether	73	7.092	7.086	0.006	98	30285	0.2000	0.2137	
* 57 Fluorobenzene (IS)	96	7.299	7.299	0.000	99	1844216	10.0	10.0	
58 n-Heptane	43	7.305	7.311	-0.006	52	15851	0.2000	0.2281	
59 n-Butanol	56	7.769	7.720	0.049	83	11606	17.5	13.4	
60 Trichloroethene	95	7.799	7.787	0.012	97	12648	0.2000	0.2140	M
61 Methylcyclohexane	83	8.092	8.086	0.006	86	19102	0.2000	0.2012	
62 1,2-Dichloropropane	63	8.128	8.122	0.006	93	10385	0.2000	0.2001	
63 2-ethoxy-2-methyl butane	87	8.147	8.141	0.007	94	16754	0.2000	0.1998	
65 1,4-Dioxane	88	8.287	8.220	0.067	30	891	10.0	3.77	
64 Methyl methacrylate	69	8.250	8.232	0.018	69	4495	0.2000	0.1604	
66 Dibromomethane	93	8.238	8.238	0.000	91	5520	0.2000	0.2067	
67 Dichlorobromomethane	83	8.488	8.482	0.006	98	13533	0.2000	0.2057	
68 2-Nitropropane	41	8.769	8.768	0.000	99	8092	1.00	1.00	M
71 1-Bromo-2-chloroethane	63	8.884	8.872	0.012	98	10836	0.2000	0.2026	
72 cis-1,3-Dichloropropene	75	9.061	9.049	0.012	95	15102	0.2000	0.1910	
73 4-Methyl-2-pentanone (MIBK)	43	9.250	9.250	0.000	96	61092	2.00	1.72	
\$ 74 Toluene-d8 (Surr)	98	9.378	9.378	0.000	93	1852613	10.0	9.93	
75 Toluene	92	9.457	9.457	0.000	99	30417	0.2000	0.2140	
76 trans-1,3-Dichloropropene	75	9.756	9.744	0.012	93	11191	0.2000	0.1720	
78 Ethyl methacrylate	69	9.829	9.817	0.012	90	9049	0.2000	0.1745	
79 1,1,2-Trichloroethane	97	9.963	9.957	0.006	88	8379	0.2000	0.2140	
80 Tetrachloroethene	166	10.037	10.036	0.001	98	15147	0.2000	0.2153	
S 77 1,3-Dichloropropene, Total	100				0			0.3630	
81 1,3-Dichloropropane	76	10.128	10.128	0.000	90	13039	0.2000	0.2028	
82 2-Hexanone	43	10.201	10.189	0.012	96	38197	2.00	1.49	
83 Chlorodibromomethane	129	10.347	10.347	0.000	89	9400	0.2000	0.1934	
84 Ethylene Dibromide	107	10.463	10.457	0.006	98	7009	0.2000	0.1845	
* 85 Chlorobenzene-d5 (IS)	117	10.908	10.902	0.006	84	1514739	10.0	10.0	
86 1-Chlorohexane	91	10.927	10.927	0.000	87	19826	0.2000	0.2387	
87 Chlorobenzene	112	10.933	10.933	0.000	97	35203	0.2000	0.2088	
89 1,1,1,2-Tetrachloroethane	131	11.024	11.018	0.006	89	11133	0.2000	0.1925	
90 Ethylbenzene	91	11.030	11.024	0.006	98	57524	0.2000	0.2061	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
91 m-Xylene & p-Xylene	106	11.146	11.146	0.000	99	45813	0.4000	0.4132	
S 88 Xylenes, Total	106				0			0.6170	
92 o-Xylene	106	11.487	11.487	0.000	96	22549	0.2000	0.2038	
93 Styrene	104	11.506	11.500	0.006	95	34971	0.2000	0.1901	
94 Bromoform	173	11.664	11.658	0.006	97	5197	0.2000	0.1782	
95 Isopropylbenzene	105	11.792	11.792	0.000	95	58917	0.2000	0.2053	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.939	11.939	0.000	94	734986	10.0	9.89	
100 Bromobenzene	156	12.054	12.054	0.000	89	15743	0.2000	0.2133	
99 1,1,2,2-Tetrachloroethane	83	12.054	12.054	0.000	73	9890	0.2000	0.2055	
101 trans-1,4-Dichloro-2-butene	53	12.079	12.079	0.000	93	22526	2.00	1.81	
102 1,2,3-Trichloropropane	110	12.097	12.097	0.000	78	2983	0.2000	0.2202	
103 N-Propylbenzene	91	12.134	12.128	0.006	99	70772	0.2000	0.2099	
104 2-Chlorotoluene	126	12.207	12.207	0.000	97	15678	0.2000	0.2136	
105 1,3,5-Trimethylbenzene	105	12.274	12.274	0.000	94	51736	0.2000	0.2067	
106 4-Chlorotoluene	126	12.304	12.304	0.000	97	14477	0.2000	0.1927	
107 tert-Butylbenzene	134	12.518	12.518	0.000	93	12406	0.2000	0.2147	
108 Pentachloroethane	167	12.548	12.548	0.000	75	8147	0.2000	0.1860	
109 1,2,4-Trimethylbenzene	105	12.560	12.560	0.000	97	52834	0.2000	0.2042	
110 sec-Butylbenzene	105	12.682	12.682	0.000	94	64508	0.2000	0.2045	
111 1,3-Dichlorobenzene	146	12.786	12.780	0.006	98	30929	0.2000	0.2049	
112 4-Isopropyltoluene	119	12.792	12.792	0.000	97	57862	0.2000	0.2042	
* 113 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	93	886118	10.0	10.0	M
114 1,4-Dichlorobenzene	146	12.853	12.853	0.000	93	31767	0.2000	0.2050	
115 1,2,3-Trimethylbenzene	120	12.871	12.871	0.000	95	24208	0.2000	0.2068	
116 Benzyl chloride	126	12.938	12.938	0.000	99	3092	0.2000	0.1536	
119 n-Butylbenzene	92	13.091	13.091	0.000	97	28587	0.2000	0.2022	
120 1,2-Dichlorobenzene	146	13.121	13.121	0.000	99	29554	0.2000	0.2099	
118 p-Diethylbenzene	119	13.146	13.146	0.000	86	30703	0.2000	0.2103	
123 1,2-Dibromo-3-Chloropropane	155	13.670	13.670	0.000	83	1252	0.2000	0.1704	
124 1,3,5-Trichlorobenzene	180	13.798	13.798	0.000	97	25930	0.2000	0.2035	
125 1,2,4-Trichlorobenzene	180	14.225	14.225	0.000	95	20987	0.2000	0.1949	
126 Hexachlorobutadiene	225	14.310	14.310	0.000	97	11917	0.2000	0.2090	
127 Naphthalene	128	14.414	14.408	0.006	96	30397	0.2000	0.1889	
128 1,2,3-Trichlorobenzene	180	14.554	14.554	0.000	95	17225	0.2000	0.1963	
129 2-Methylnaphthalene	142	15.164	15.157	0.007	88	12974	0.2000	0.1579	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00034

Amount Added: 2.00

Units: uL

MSV_LL_#2_826_00038

Amount Added: 2.00

Units: uL

MSV_LL_GAS826_00063

Amount Added: 2.00

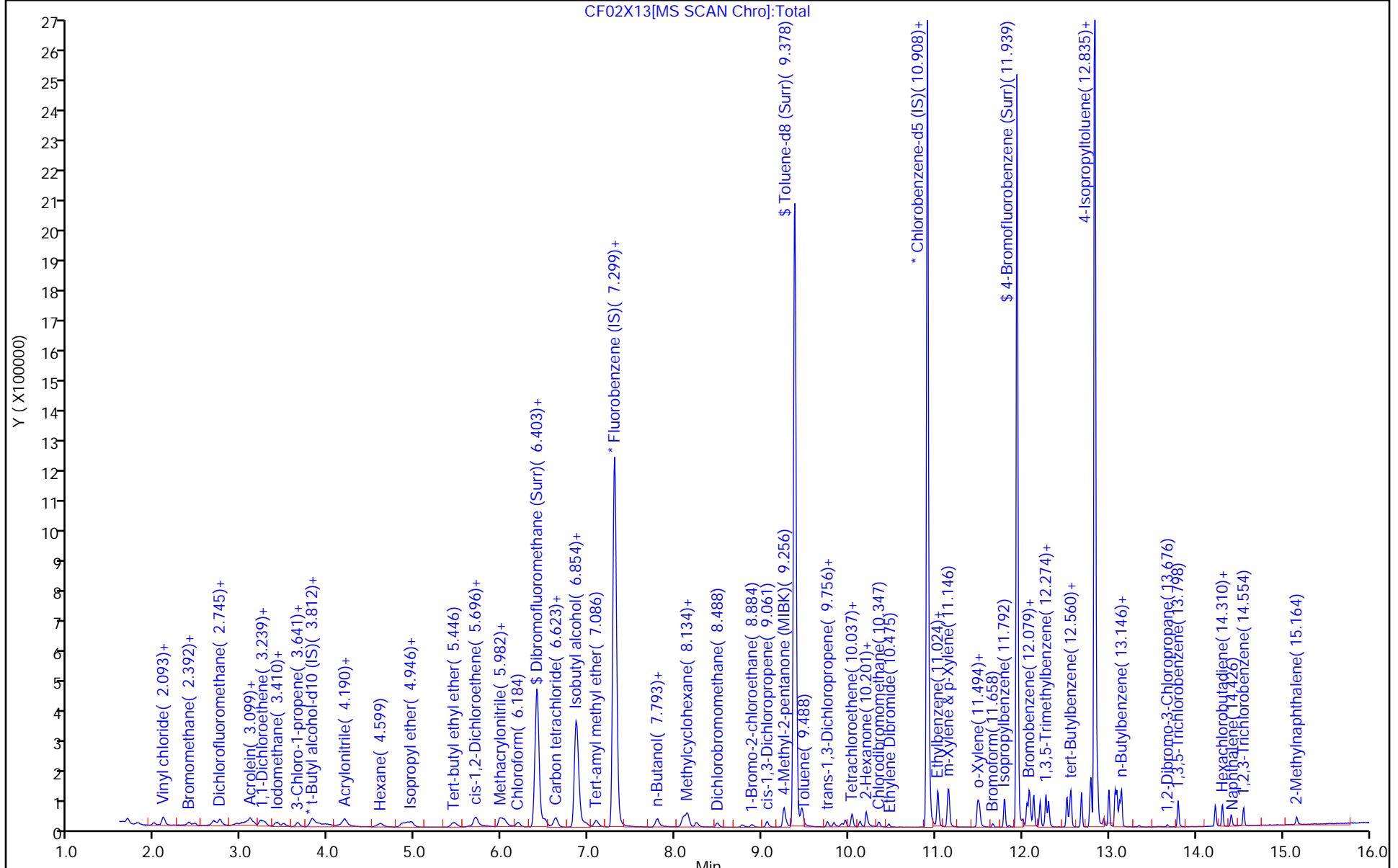
Units: uL

MSV_HP25_ISSS_00046

Amount Added: 1.00

Units: uL

Run Reagent



Eurofins Lancaster Laboratories Env, LLC

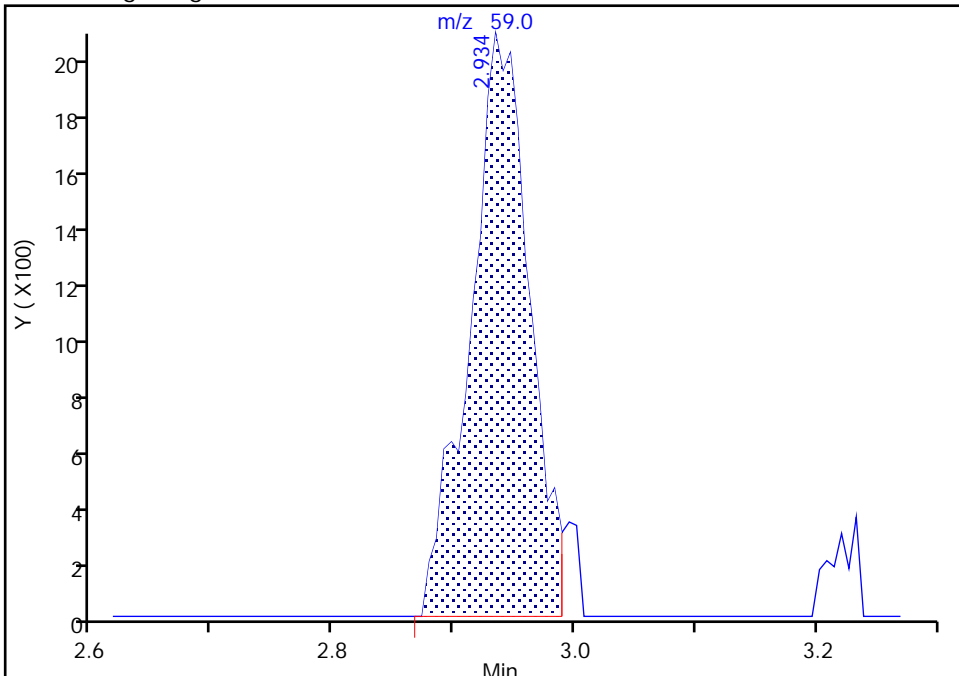
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X13.D
Injection Date: 02-Feb-2022 18:57:30 Instrument ID: 10193
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

11 Ethyl ether, CAS: 60-29-7

Signal: 1

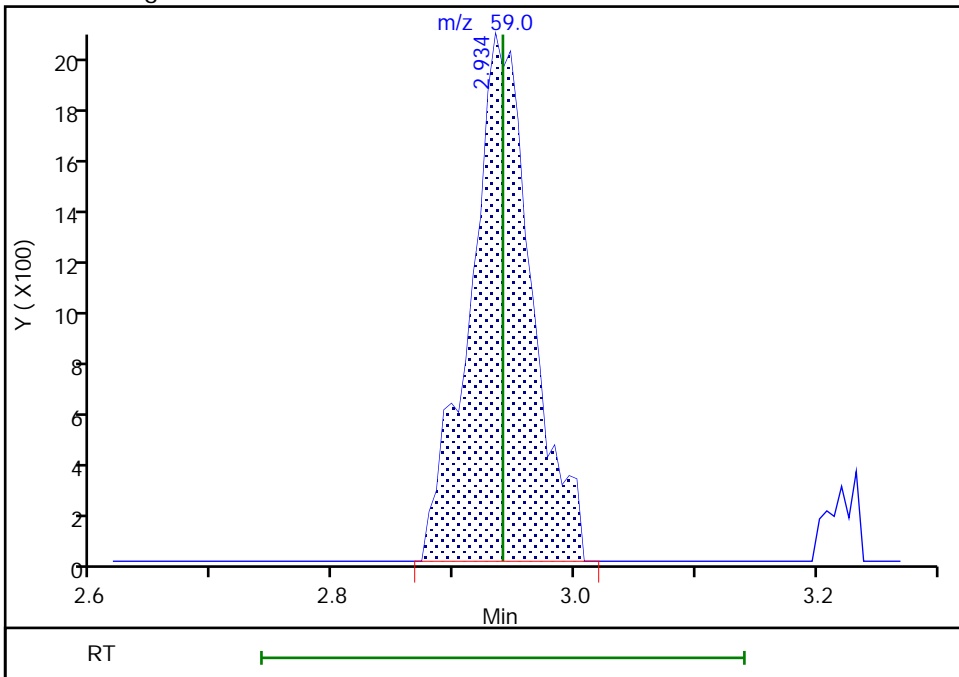
RT: 2.93
Area: 6906
Amount: 0.203821
Amount Units: ug/l

Processing Integration Results



RT: 2.93
Area: 7141
Amount: 0.209718
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:06:07
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

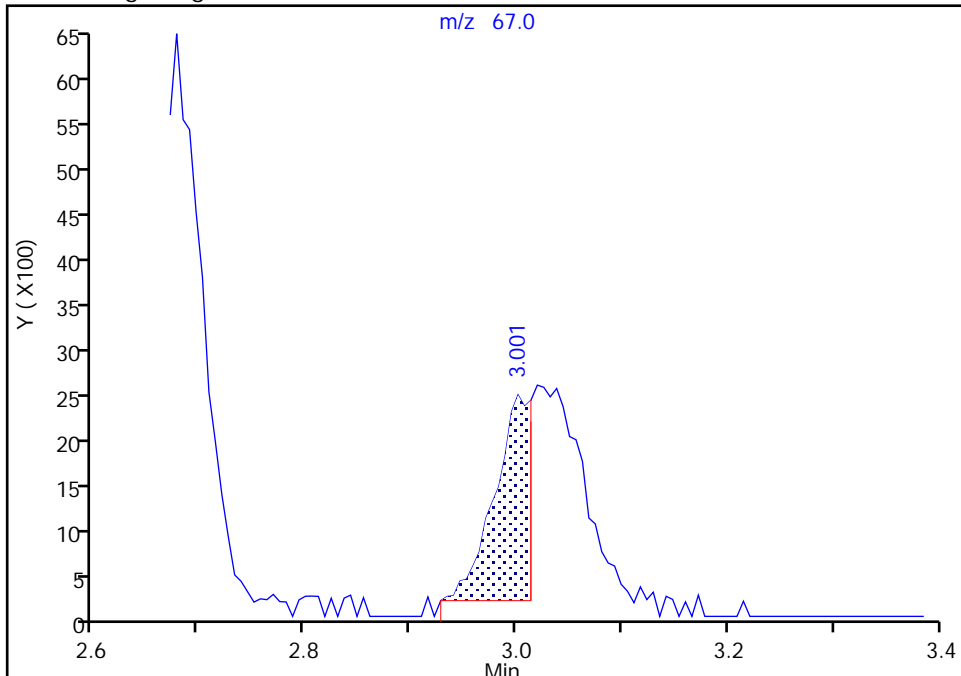
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X13.D
Injection Date: 02-Feb-2022 18:57:30 Instrument ID: 10193
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

12 1,2-Dichloro-1,1,2-trifluoroetha, CAS: 354-23-4

Signal: 1

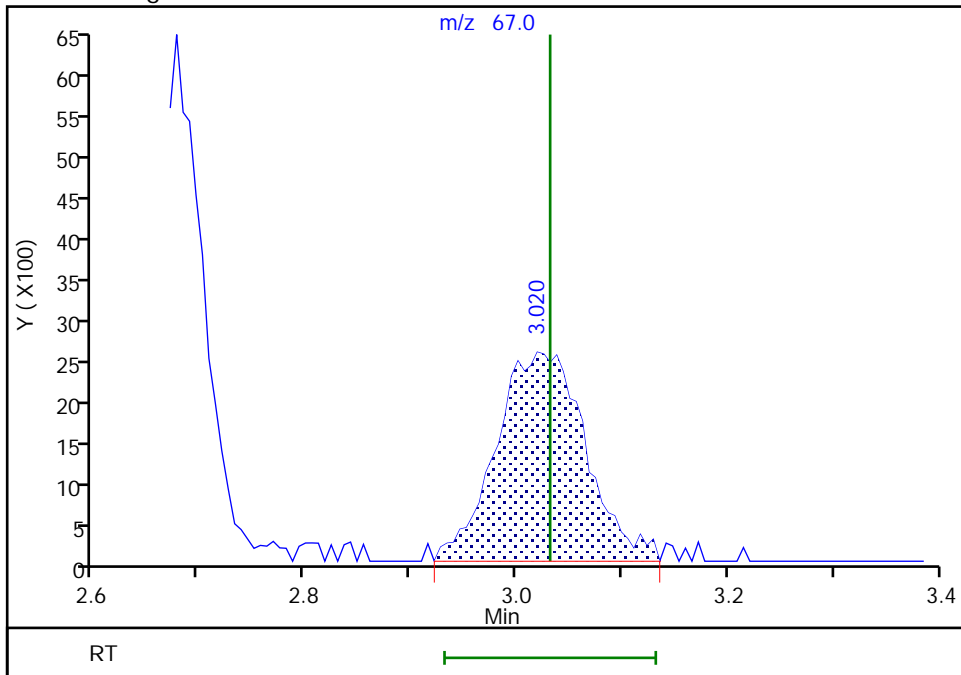
RT: 3.00
Area: 5482
Amount: 0.130996
Amount Units: ug/l

Processing Integration Results



RT: 3.02
Area: 15008
Amount: 0.239815
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:06:12
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

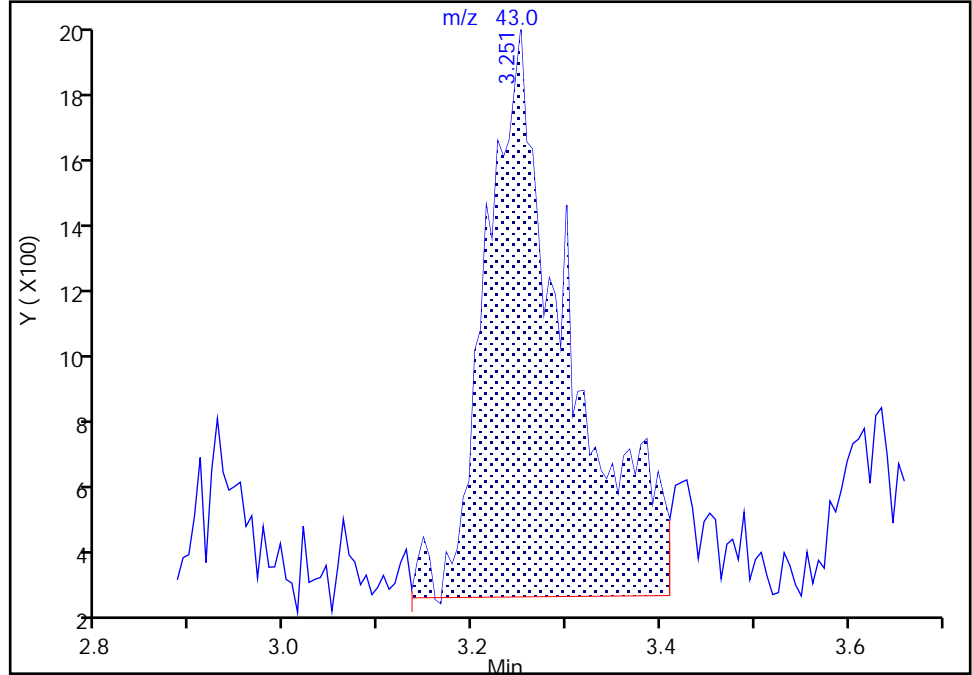
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X13.D
Injection Date: 02-Feb-2022 18:57:30 Instrument ID: 10193
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

16 Acetone, CAS: 67-64-1

Signal: 1

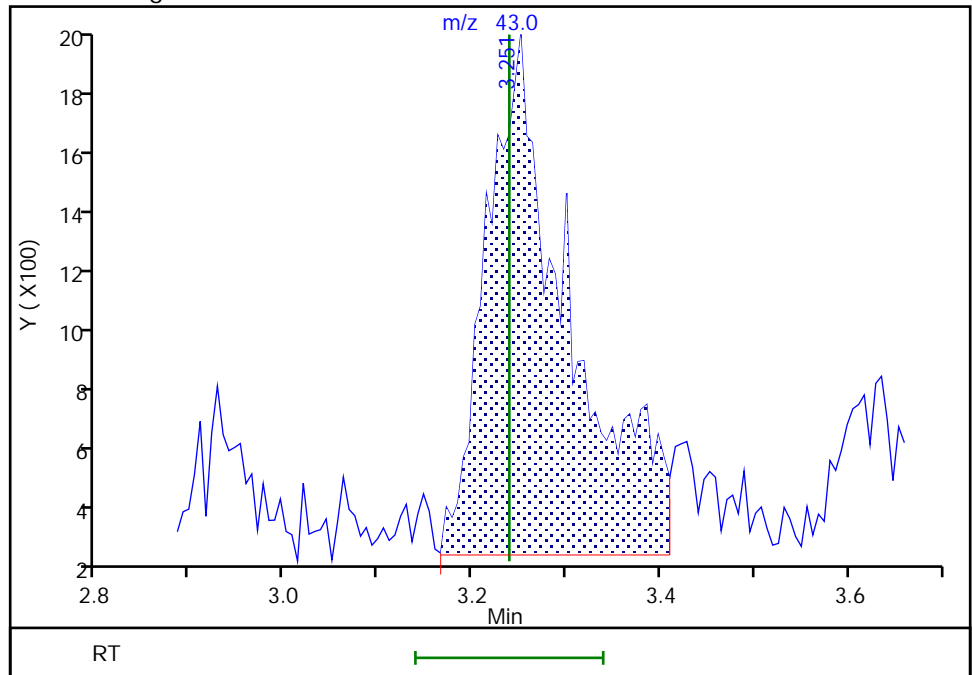
RT: 3.25
Area: 10457
Amount: 1.707093
Amount Units: ug/l

Processing Integration Results



RT: 3.25
Area: 10700
Amount: 1.655723
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:06:29
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

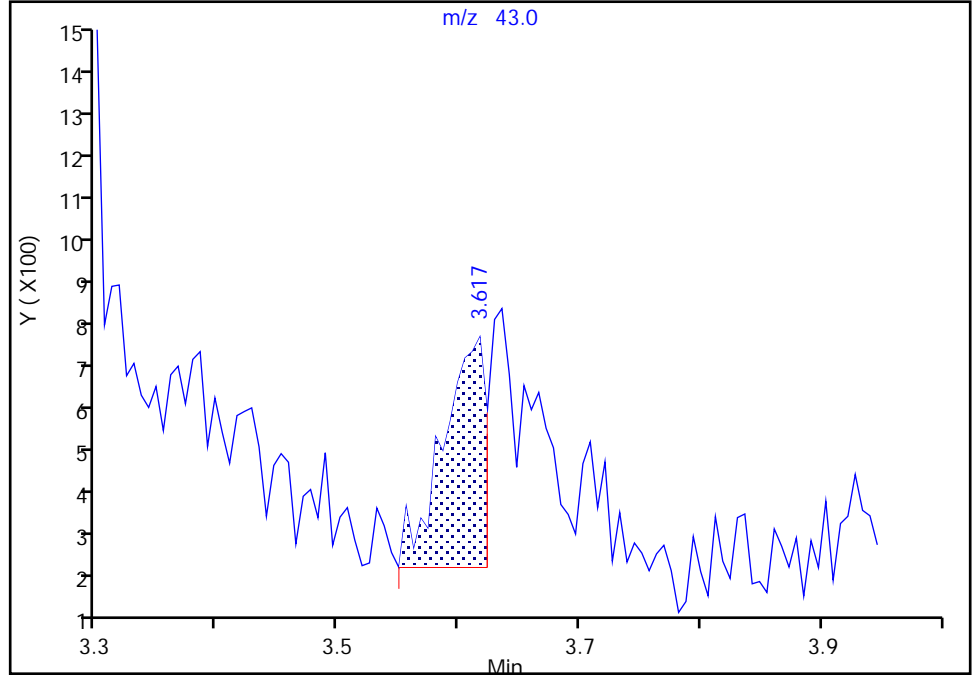
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X13.D
Injection Date: 02-Feb-2022 18:57:30 Instrument ID: 10193
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Methyl acetate, CAS: 79-20-9

Signal: 1

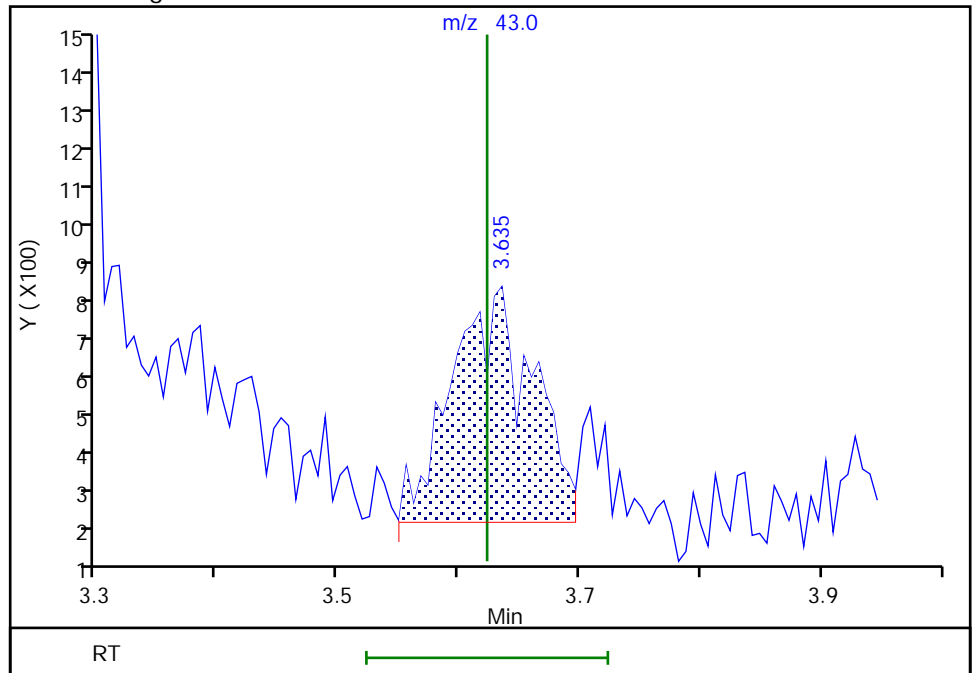
RT: 3.62
Area: 1253
Amount: 0.240146
Amount Units: ug/l

Processing Integration Results



RT: 3.64
Area: 2680
Amount: 0.153425
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:06:45
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

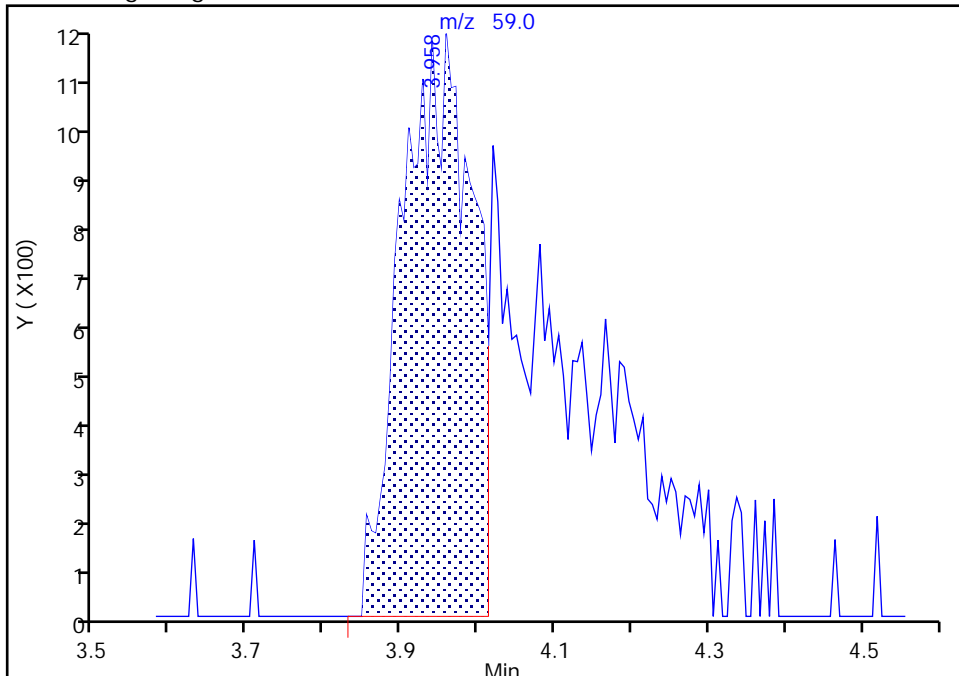
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X13.D
Injection Date: 02-Feb-2022 18:57:30 Instrument ID: 10193
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

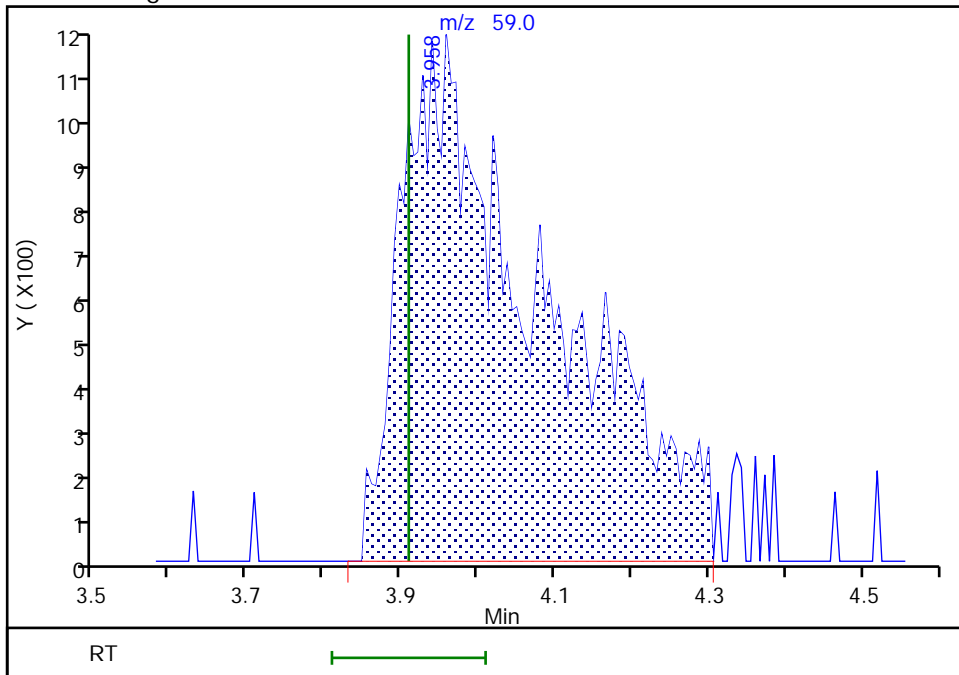
RT: 3.96
Area: 7325
Amount: 2.990305
Amount Units: ug/l

Processing Integration Results



RT: 3.96
Area: 14658
Amount: 5.336949
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:07:09
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

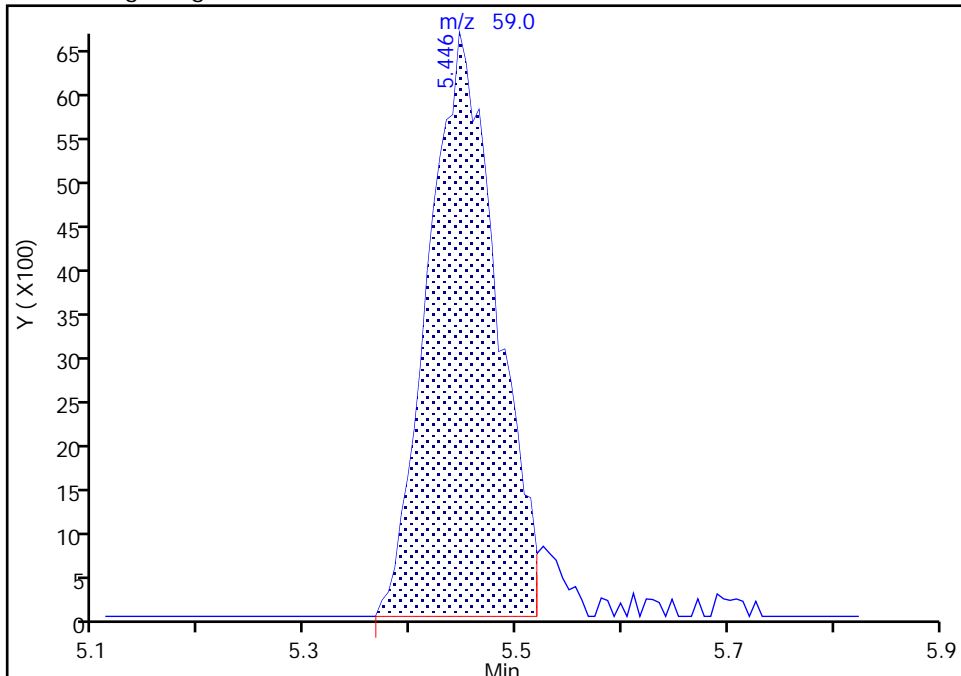
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X13.D
Injection Date: 02-Feb-2022 18:57:30 Instrument ID: 10193
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

35 Tert-butyl ethyl ether, CAS: 637-92-3

Signal: 1

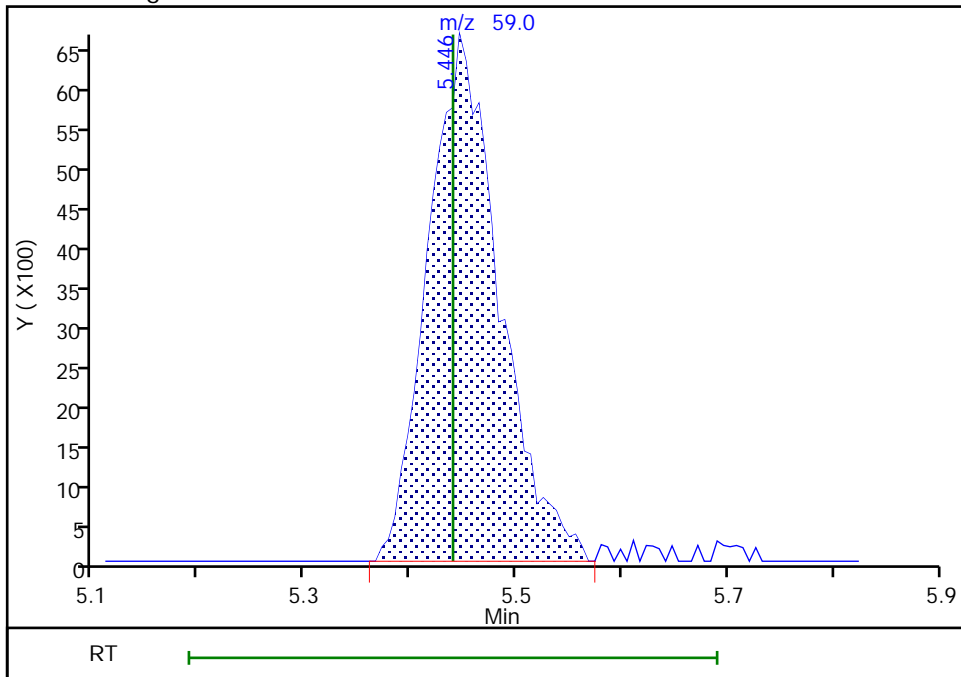
RT: 5.45
Area: 29854
Amount: 0.196603
Amount Units: ug/l

Processing Integration Results



RT: 5.45
Area: 31099
Amount: 0.203609
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:07:54
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

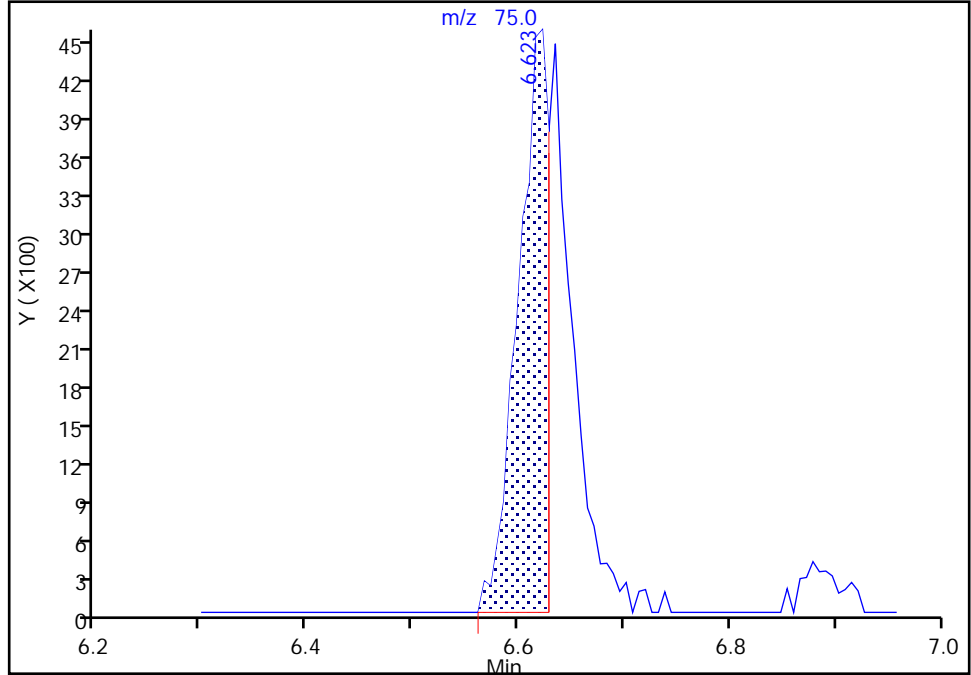
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X13.D
Injection Date: 02-Feb-2022 18:57:30 Instrument ID: 10193
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

51 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

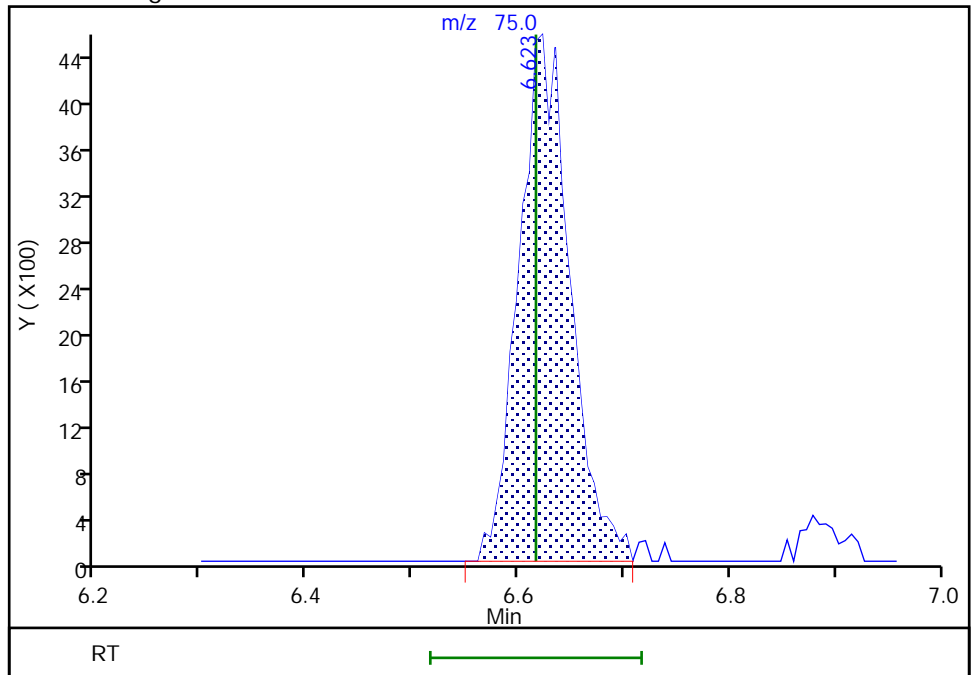
RT: 6.62
Area: 9244
Amount: 0.135826
Amount Units: ug/l

Processing Integration Results



RT: 6.62
Area: 15351
Amount: 0.211973
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:08:19
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

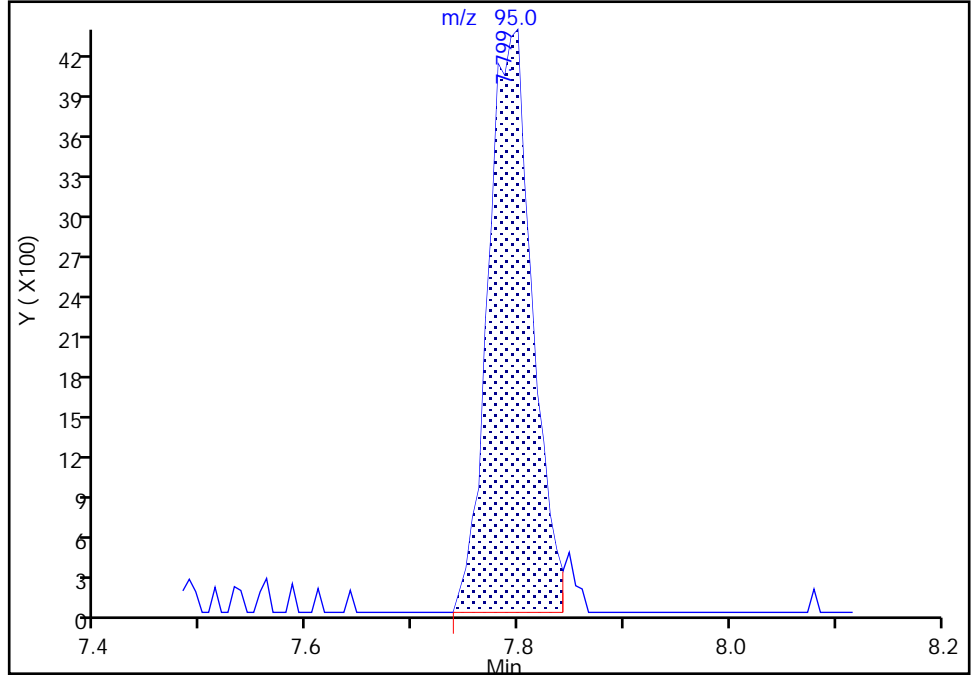
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X13.D
Injection Date: 02-Feb-2022 18:57:30 Instrument ID: 10193
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 Trichloroethene, CAS: 79-01-6

Signal: 1

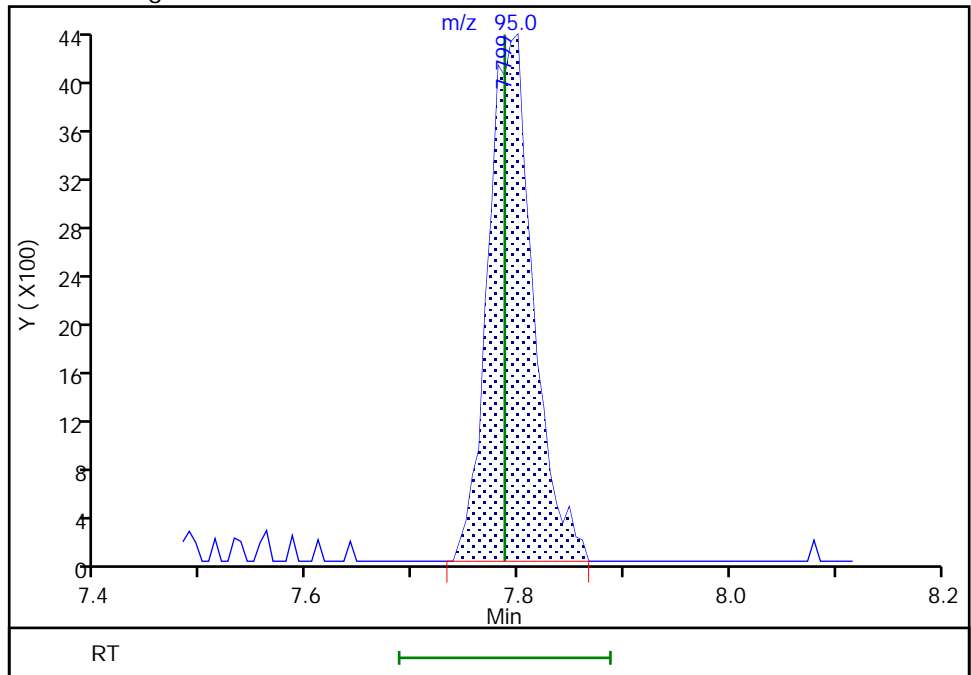
RT: 7.80
Area: 12351
Amount: 0.209766
Amount Units: ug/l

Processing Integration Results



RT: 7.80
Area: 12648
Amount: 0.214039
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:08:35
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

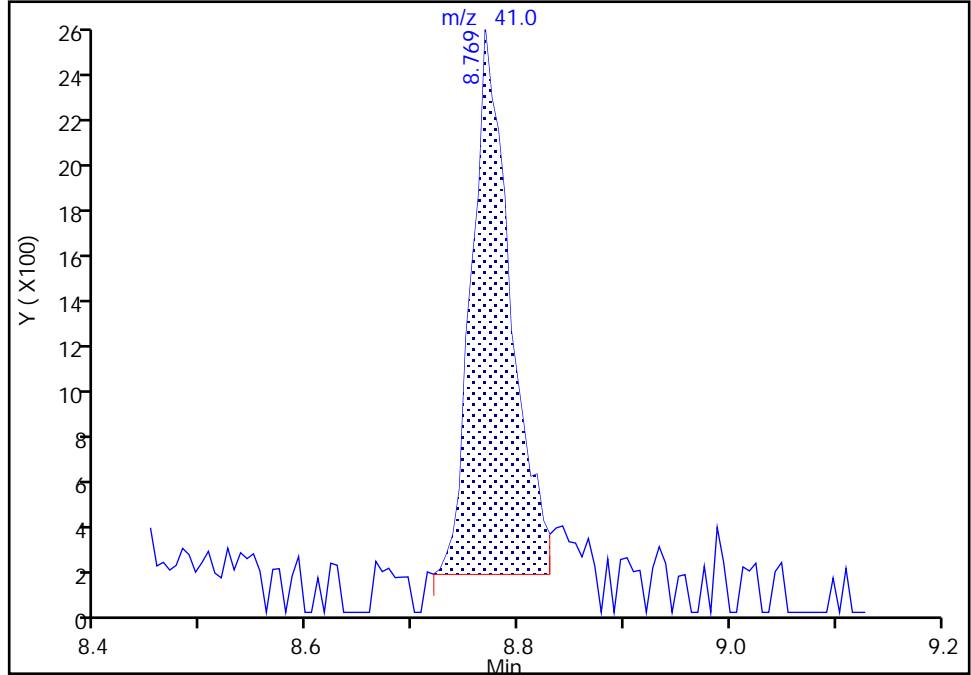
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X13.D
Injection Date: 02-Feb-2022 18:57:30 Instrument ID: 10193
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

68 2-Nitropropane, CAS: 79-46-9

Signal: 1

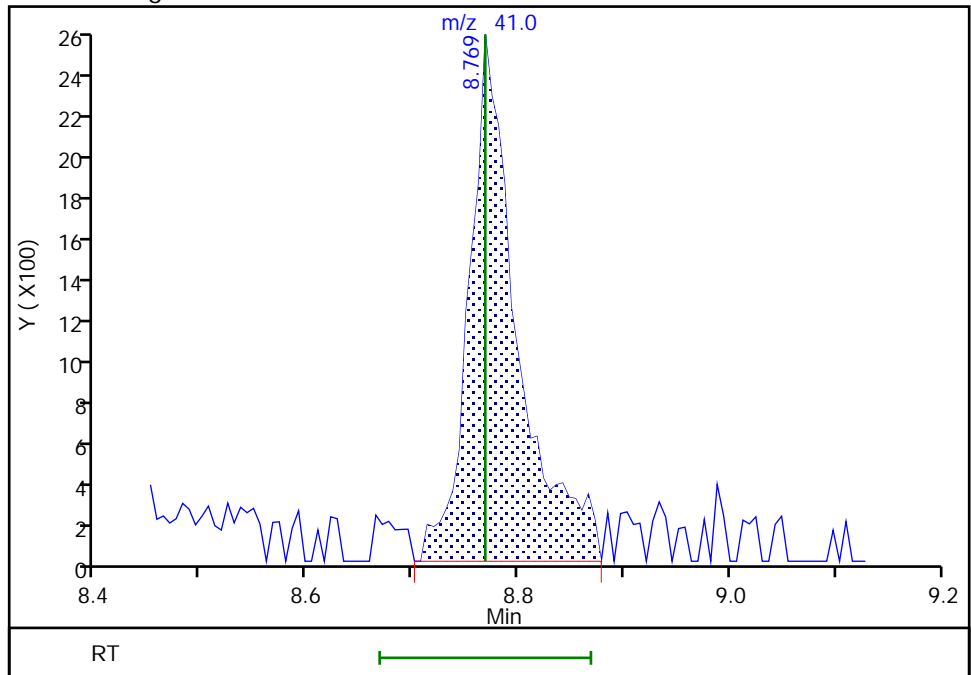
RT: 8.77
Area: 6095
Amount: 0.789100
Amount Units: ug/l

Processing Integration Results



RT: 8.77
Area: 8092
Amount: 0.996754
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:08:47
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

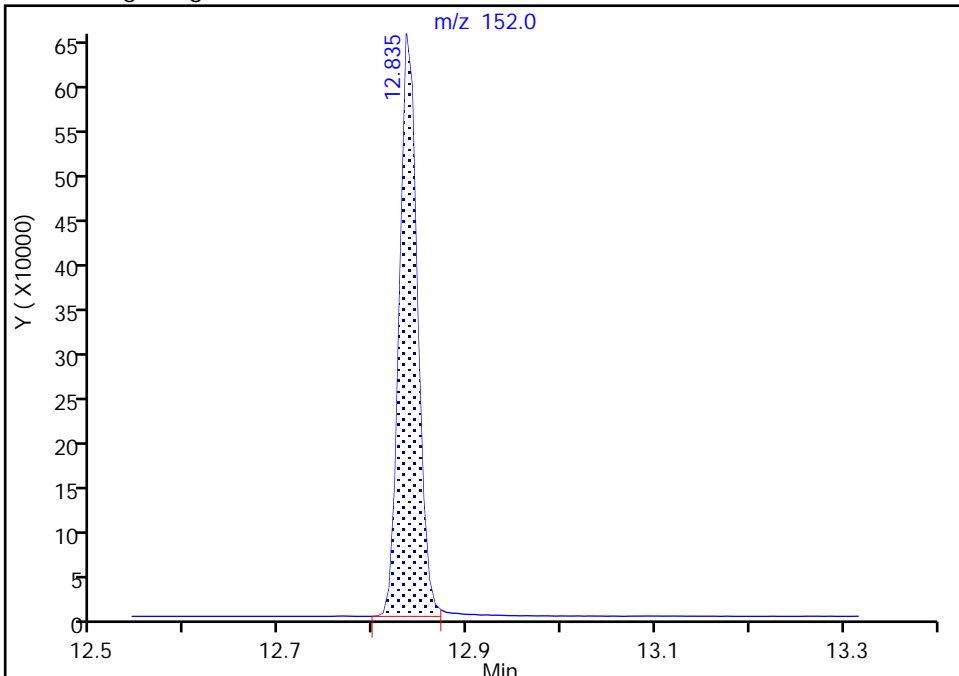
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X13.D
Injection Date: 02-Feb-2022 18:57:30 Instrument ID: 10193
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 113 1,4-Dichlorobenzene-d4, CAS: 3855-82-1

Signal: 1

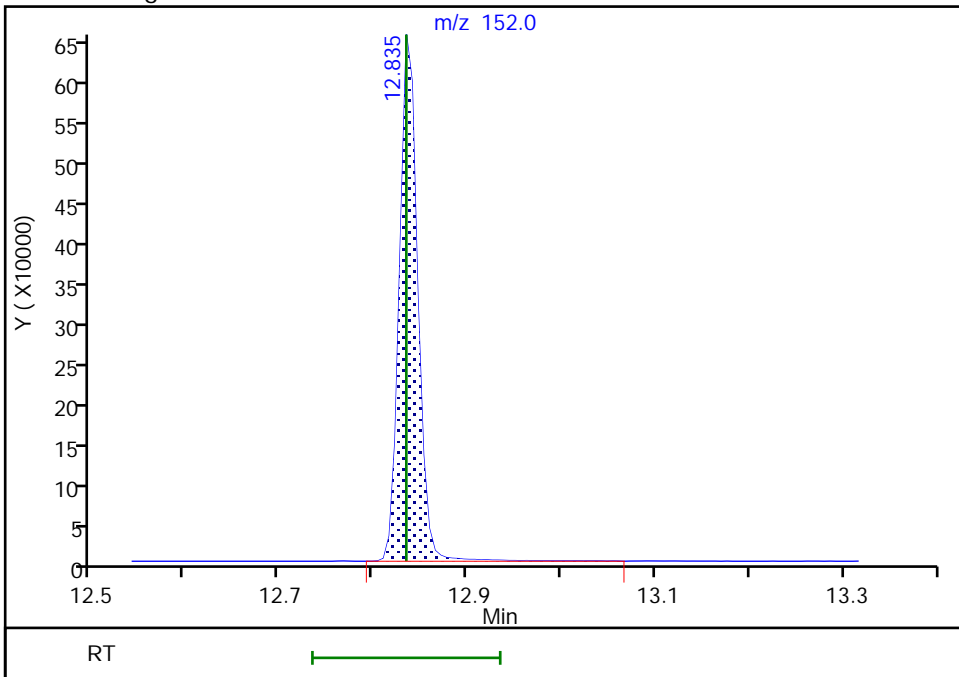
RT: 12.83
Area: 873451
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results



RT: 12.83
Area: 886118
Amount: 10.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: kellerk, 08-Feb-2022 18:36:39
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 418 of 643

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfms\Lancaster\ChromData\10193\20220202-49623.b\CF02X14.D
 Lims ID: IC std2 0.5
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 02-Feb-2022 19:20:30 ALS Bottle#: 14 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0049623-014
 Misc. Info.: IC STD.5 LG
 Operator ID: jml01693 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfms\Lancaster\ChromData\10193\20220202-49623.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 08-Feb-2022 19:29:45 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfms\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1661

First Level Reviewer: spositok

Date: 03-Feb-2022 09:24:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.800	1.794	0.006	99	27996	0.5000	0.4837	
3 Chloromethane	50	1.977	1.977	0.000	98	32016	0.5000	0.5082	
5 Vinyl chloride	62	2.075	2.087	-0.012	97	33473	0.5000	0.5005	
4 Butadiene	39	2.087	2.093	-0.006	93	30436	0.5000	0.4997	
6 Bromomethane	94	2.373	2.386	-0.013	90	25730	0.5000	0.5046	
7 Chloroethane	64	2.446	2.453	-0.007	99	19473	0.5000	0.4936	
8 Dichlorofluoromethane	67	2.672	2.678	-0.006	97	49324	0.5000	0.5095	
9 Trichlorofluoromethane	101	2.733	2.739	-0.006	77	47982	0.5000	0.5058	
225 Pentane	43	2.739	2.745	-0.006	96	34040	0.5000	0.5047	
11 Ethyl ether	59	2.928	2.940	-0.012	91	17177	0.5000	0.4955	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.007	3.032	-0.025	93	31674	0.5000	0.4971	
13 Acrolein	56	3.087	3.093	-0.006	99	117361	25.0	25.9	
14 1,1-Dichloroethene	96	3.209	3.215	-0.006	98	23268	0.5000	0.4955	
16 Acetone	43	3.233	3.239	-0.006	89	28061	5.00	5.53	
15 112TCTFE	101	3.251	3.263	-0.012	89	22848	0.5000	0.4851	
18 Isopropyl alcohol	45	3.391	3.379	0.012	30	11294	10.0	10.0	
17 Iodomethane	142	3.385	3.385	0.000	98	43523	0.5000	0.4949	
19 Ethyl bromide	108	3.410	3.416	-0.006	99	21068	0.4998	0.4792	
20 Carbon disulfide	76	3.477	3.477	0.000	99	64051	0.5000	0.4721	
22 Methyl acetate	43	3.629	3.623	0.006	34	6207	0.5000	0.4524	
23 3-Chloro-1-propene	41	3.635	3.635	0.000	87	33874	0.5000	0.4836	
24 Methylene Chloride	84	3.800	3.806	-0.006	90	24697	0.5000	0.4898	
* 25 t-Butyl alcohol-d10 (IS)	65	3.812	3.818	-0.006	72	110999	50.0	50.0	
26 2-Methyl-2-propanol	59	3.928	3.910	0.018	69	20231	10.0	9.38	
27 Acrylonitrile	53	4.129	4.141	-0.012	31	9142	1.25	1.25	
28 Methyl tert-butyl ether	73	4.172	4.178	-0.006	96	61721	0.5000	0.4801	
29 trans-1,2-Dichloroethene	96	4.172	4.184	-0.012	99	25911	0.5000	0.4809	
30 Hexane	57	4.574	4.592	-0.018	94	31827	0.5000	0.4841	
32 1,1-Dichloroethane	63	4.830	4.842	-0.012	96	44820	0.5000	0.4861	
33 Isopropyl ether	45	4.897	4.897	0.000	93	73544	0.5000	0.4775	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 2-Chloro-1,3-butadiene	53	4.952	4.952	0.000	92	37328	0.5000	0.4982	
35 Tert-butyl ethyl ether	59	5.434	5.440	-0.006	97	74797	0.5000	0.4810	
36 2-Butanone (MEK)	43	5.671	5.659	0.012	98	49347	5.00	4.75	
37 cis-1,2-Dichloroethene	96	5.684	5.690	-0.006	80	28067	0.5000	0.4784	
38 2,2-Dichloropropane	77	5.696	5.702	-0.006	76	39753	0.5000	0.4822	
40 Propionitrile	54	5.757	5.751	0.006	95	26576	10.0	9.81	
43 Methacrylonitrile	67	5.970	5.970	0.000	91	59300	5.00	5.16	
44 Chlorobromomethane	128	6.031	6.025	0.006	89	12858	0.5000	0.4784	
45 Tetrahydrofuran	71	6.025	6.025	0.000	72	7866	2.50	2.49	
S 42 1,2-Dichloroethene, Total	100				0			0.9593	
46 Chloroform	83	6.177	6.184	-0.007	93	46491	0.5000	0.4854	
48 1,1,1-Trichloroethane	97	6.397	6.403	-0.006	40	43607	0.5000	0.4984	
\$ 47 Dibromofluoromethane (Surr)	113	6.397	6.403	-0.006	94	466023	10.0	9.97	
49 Cyclohexane	56	6.488	6.494	-0.006	91	42900	0.5000	0.5018	
50 Carbon tetrachloride	117	6.610	6.610	0.000	88	36487	0.5000	0.4852	
51 1,1-Dichloropropene	75	6.616	6.616	0.000	93	36454	0.5000	0.4944	
52 Isobutyl alcohol	41	6.811	6.811	0.000	89	15400	25.0	21.8	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.848	6.854	-0.006	77	89442	10.0	9.94	
54 Benzene	78	6.879	6.879	0.000	92	106130	0.5000	0.4897	
55 1,2-Dichloroethane	62	6.964	6.958	0.006	97	28928	0.5000	0.4895	M
56 Tert-amyl methyl ether	73	7.080	7.086	-0.006	98	69223	0.5000	0.4797	
* 57 Fluorobenzene (IS)	96	7.293	7.299	-0.006	99	1877699	10.0	10.0	
58 n-Heptane	43	7.311	7.311	0.000	38	34249	0.5000	0.4840	
59 n-Butanol	56	7.738	7.720	0.018	95	19783	43.8	29.0	
60 Trichloroethene	95	7.781	7.787	-0.006	97	29247	0.5000	0.4861	
61 Methylcyclohexane	83	8.086	8.086	0.000	86	48521	0.5000	0.5019	
62 1,2-Dichloropropane	63	8.122	8.122	0.000	95	25450	0.5000	0.4816	
63 2-ethoxy-2-methyl butane	87	8.140	8.141	0.000	93	41250	0.5000	0.4832	
65 1,4-Dioxane	88	8.232	8.220	0.012	32	2457	25.0	13.2	M
64 Methyl methacrylate	69	8.238	8.232	0.006	87	11261	0.5000	0.5116	
66 Dibromomethane	93	8.238	8.238	0.000	93	13122	0.5000	0.4826	
67 Dichlorobromomethane	83	8.482	8.482	0.000	99	31390	0.5000	0.4686	
68 2-Nitropropane	41	8.768	8.768	0.000	99	16317	2.50	2.56	
71 1-Bromo-2-chloroethane	63	8.872	8.872	0.000	99	25674	0.5000	0.4715	
72 cis-1,3-Dichloropropene	75	9.049	9.049	0.000	95	37655	0.5000	0.4678	
73 4-Methyl-2-pentanone (MIBK)	43	9.244	9.250	-0.006	96	142738	5.00	5.13	
\$ 74 Toluene-d8 (Surr)	98	9.372	9.378	-0.006	93	1903356	10.0	9.94	
75 Toluene	92	9.457	9.457	0.000	98	70894	0.5000	0.4861	
76 trans-1,3-Dichloropropene	75	9.750	9.744	0.006	94	30273	0.5000	0.4534	
78 Ethyl methacrylate	69	9.823	9.817	0.006	89	23799	0.5000	0.4473	
79 1,1,2-Trichloroethane	97	9.957	9.957	0.000	90	19822	0.5000	0.4933	
80 Tetrachloroethene	166	10.036	10.036	0.000	98	35644	0.5000	0.4937	
S 77 1,3-Dichloropropene, Total	100				0			0.9212	
81 1,3-Dichloropropane	76	10.128	10.128	0.000	91	31758	0.5000	0.4814	
82 2-Hexanone	43	10.195	10.189	0.006	96	97637	5.00	4.83	
83 Chlorodibromomethane	129	10.347	10.347	0.000	89	22834	0.5000	0.4578	
84 Ethylene Dibromide	107	10.457	10.457	0.000	98	18324	0.5000	0.4701	
* 85 Chlorobenzene-d5 (IS)	117	10.908	10.902	0.006	84	1554228	10.0	10.0	
86 1-Chlorohexane	91	10.927	10.927	0.000	96	40742	0.5000	0.4780	
87 Chlorobenzene	112	10.933	10.933	0.000	97	85267	0.5000	0.4929	
89 1,1,1,2-Tetrachloroethane	131	11.024	11.018	0.006	93	27396	0.5000	0.4617	
90 Ethylbenzene	91	11.024	11.024	0.000	98	137639	0.5000	0.4807	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
91 m-Xylene & p-Xylene	106	11.146	11.146	0.000	99	109527	1.00	0.9627	
S 88 Xylenes, Total	106				0			1.44	
92 o-Xylene	106	11.487	11.487	0.000	96	54445	0.5000	0.4797	
93 Styrene	104	11.506	11.500	0.006	95	88360	0.5000	0.4682	
94 Bromoform	173	11.658	11.658	0.000	97	13459	0.5000	0.4498	
95 Isopropylbenzene	105	11.792	11.792	0.000	95	141874	0.5000	0.4818	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.939	11.939	0.000	94	755579	10.0	9.91	
100 Bromobenzene	156	12.054	12.054	0.000	91	36187	0.5000	0.4785	
99 1,1,2,2-Tetrachloroethane	83	12.054	12.054	0.000	89	23236	0.5000	0.4712	
101 trans-1,4-Dichloro-2-butene	53	12.079	12.079	0.000	93	56041	5.00	4.39	
102 1,2,3-Trichloropropane	110	12.097	12.097	0.000	80	6604	0.5000	0.4759	
103 N-Propylbenzene	91	12.134	12.128	0.006	98	165585	0.5000	0.4793	
104 2-Chlorotoluene	126	12.207	12.207	0.000	97	36543	0.5000	0.4859	
105 1,3,5-Trimethylbenzene	105	12.274	12.274	0.000	93	125381	0.5000	0.4890	
106 4-Chlorotoluene	126	12.304	12.304	0.000	96	37616	0.5000	0.4887	
107 tert-Butylbenzene	134	12.518	12.518	0.000	93	29975	0.5000	0.5065	
108 Pentachloroethane	167	12.548	12.548	0.000	76	20296	0.5000	0.4522	
109 1,2,4-Trimethylbenzene	105	12.560	12.560	0.000	97	128264	0.5000	0.4839	
110 sec-Butylbenzene	105	12.682	12.682	0.000	94	158066	0.5000	0.4890	
111 1,3-Dichlorobenzene	146	12.780	12.780	0.000	98	74987	0.5000	0.4850	
112 4-Isopropyltoluene	119	12.792	12.792	0.000	96	139501	0.5000	0.4806	
* 113 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	93	907784	10.0	10.0	M
114 1,4-Dichlorobenzene	146	12.853	12.853	0.000	96	78499	0.5000	0.4944	
115 1,2,3-Trimethylbenzene	120	12.871	12.871	0.000	98	57583	0.5000	0.4802	
116 Benzyl chloride	126	12.938	12.938	0.000	98	8490	0.5000	0.4116	
119 n-Butylbenzene	92	13.091	13.091	0.000	97	69389	0.5000	0.4792	
120 1,2-Dichlorobenzene	146	13.121	13.121	0.000	99	69238	0.5000	0.4800	
118 p-Diethylbenzene	119	13.146	13.146	0.000	85	72526	0.5000	0.4849	
123 1,2-Dibromo-3-Chloropropane	155	13.676	13.670	0.006	85	3149	0.5000	0.4185	
124 1,3,5-Trichlorobenzene	180	13.798	13.798	0.000	98	63464	0.5000	0.4862	
125 1,2,4-Trichlorobenzene	180	14.225	14.225	0.000	94	51592	0.5000	0.4677	
126 Hexachlorobutadiene	225	14.310	14.310	0.000	96	27977	0.5000	0.4789	
127 Naphthalene	128	14.408	14.408	0.000	96	73925	0.5000	0.4484	
128 1,2,3-Trichlorobenzene	180	14.554	14.554	0.000	96	41975	0.5000	0.4670	
129 2-Methylnaphthalene	142	15.164	15.157	0.007	91	34392	0.5000	0.4086	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00034

Amount Added: 2.00

Units: uL

MSV_LL_#2_826_00038

Amount Added: 2.00

Units: uL

MSV_LL_GAS826_00063

Amount Added: 2.00

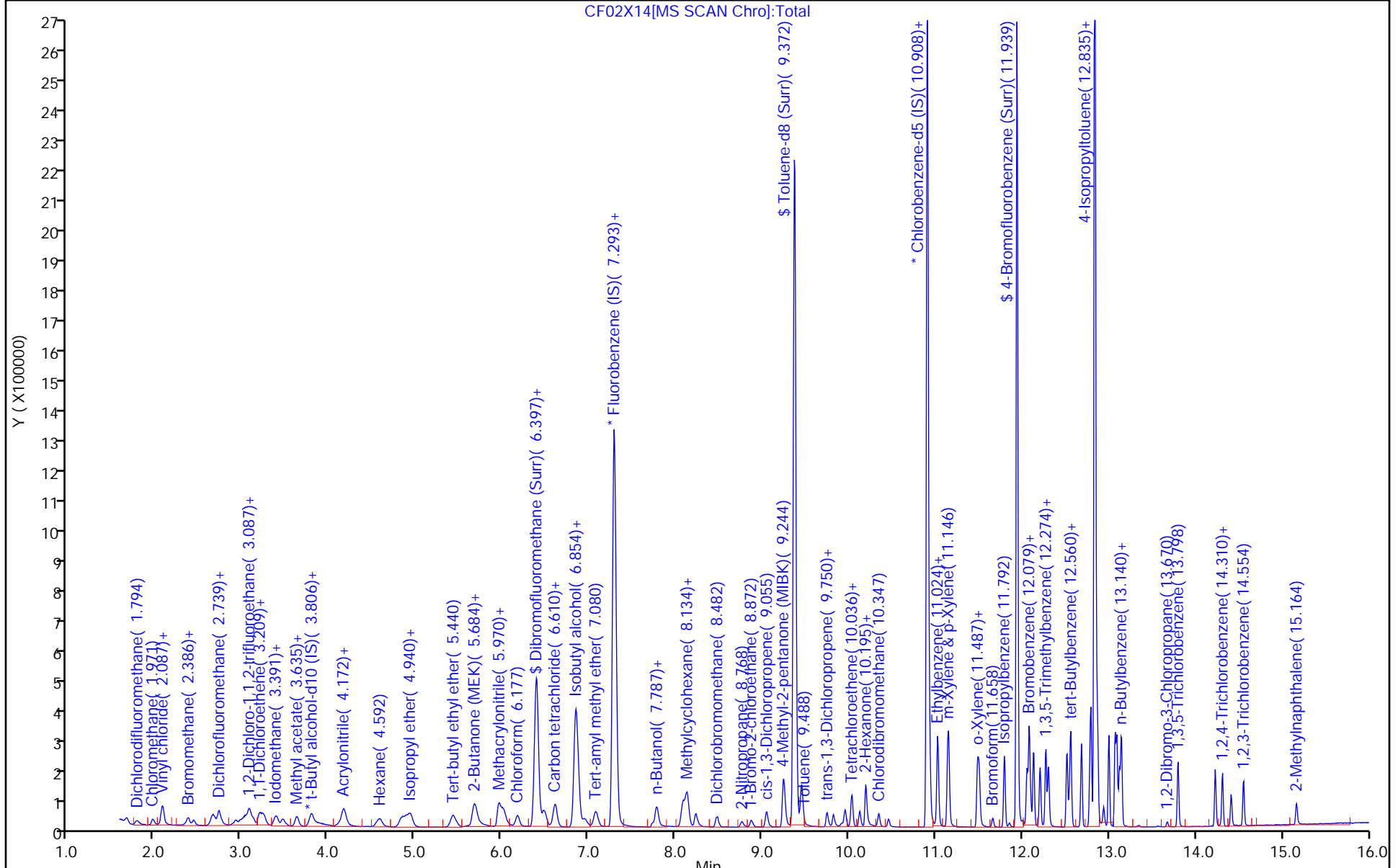
Units: uL

MSV_HP25_ISSS_00046

Amount Added: 1.00

Units: uL

Run Reagent



Eurofins Lancaster Laboratories Env, LLC

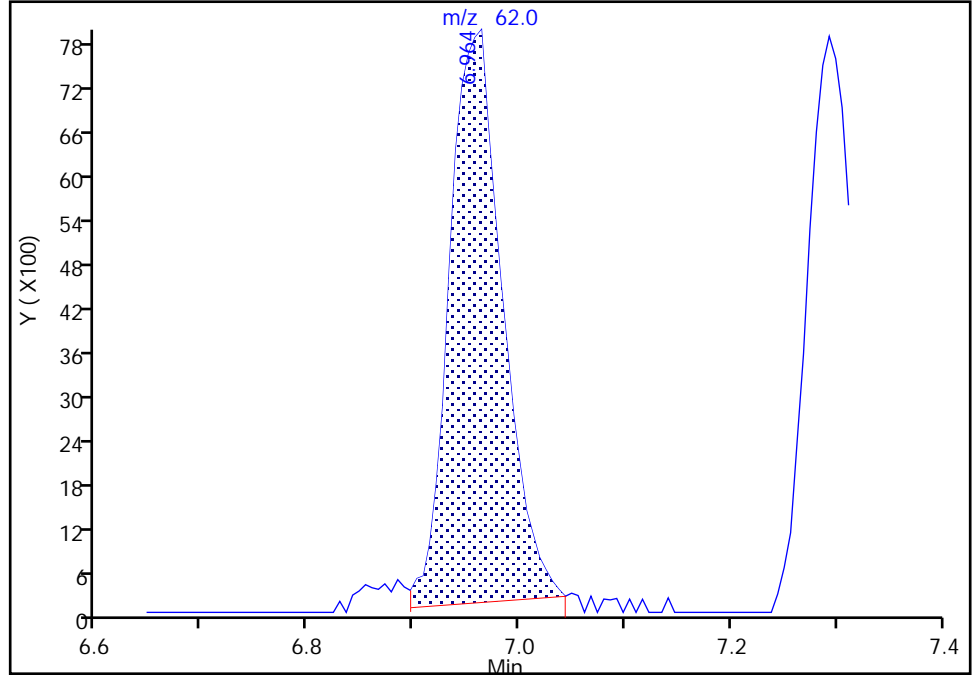
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X14.D
Injection Date: 02-Feb-2022 19:20:30 Instrument ID: 10193
Lims ID: IC std2 0.5
Client ID:
Operator ID: jml01693 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

55 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

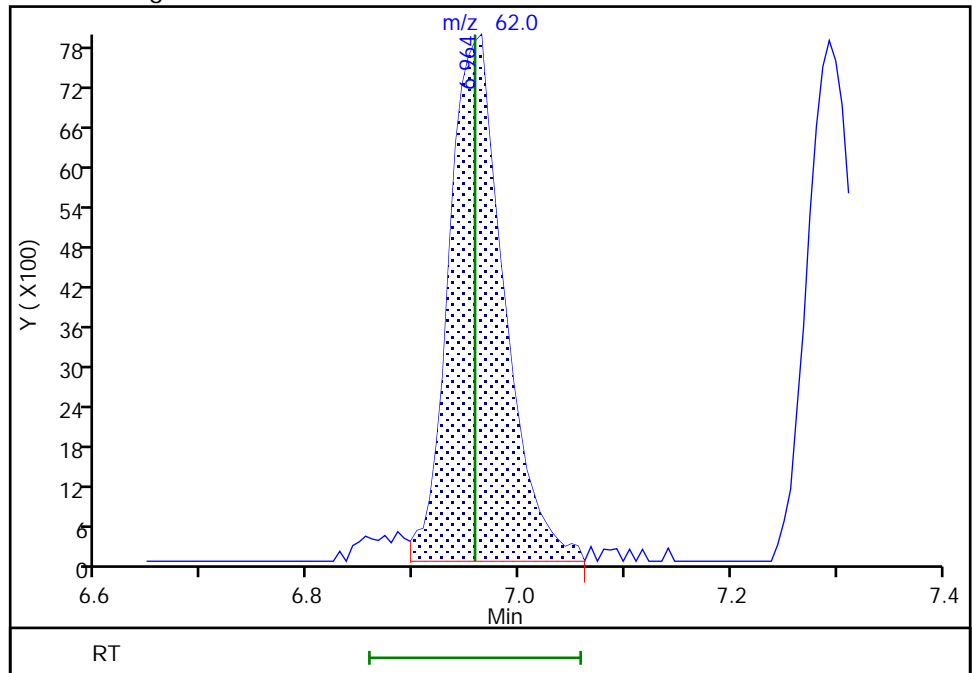
RT: 6.96
Area: 27450
Amount: 0.471872
Amount Units: ug/l

Processing Integration Results



RT: 6.96
Area: 28928
Amount: 0.489493
Amount Units: ug/l

Manual Integration Results



Reviewer: kellerk, 08-Feb-2022 19:03:00
Audit Action: Split an Integrated Peak

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

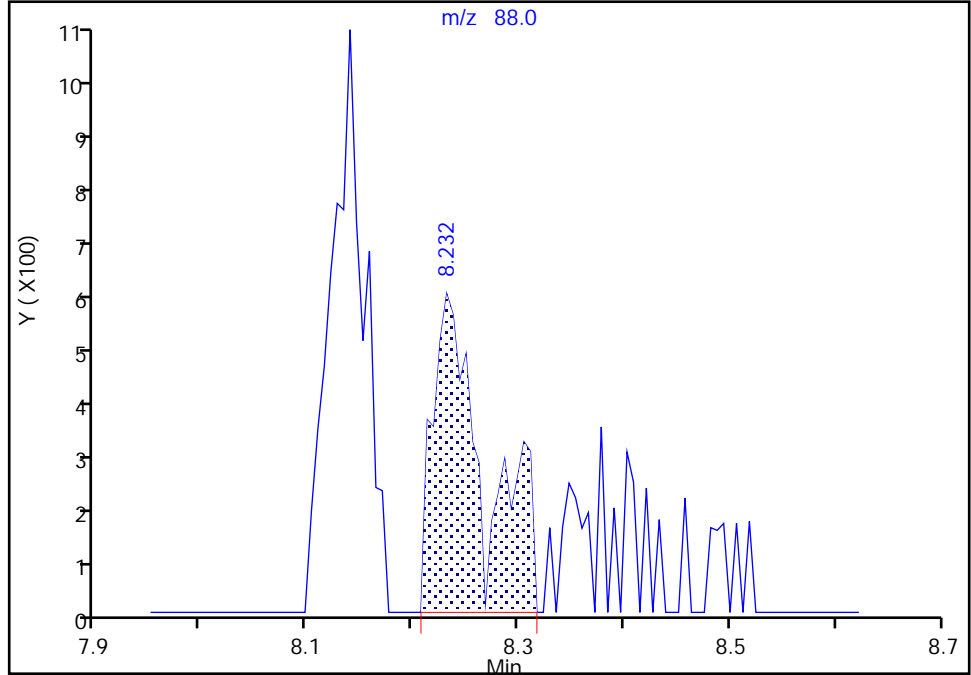
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X14.D
Injection Date: 02-Feb-2022 19:20:30 Instrument ID: 10193
Lims ID: IC std2 0.5
Client ID:
Operator ID: jml01693 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

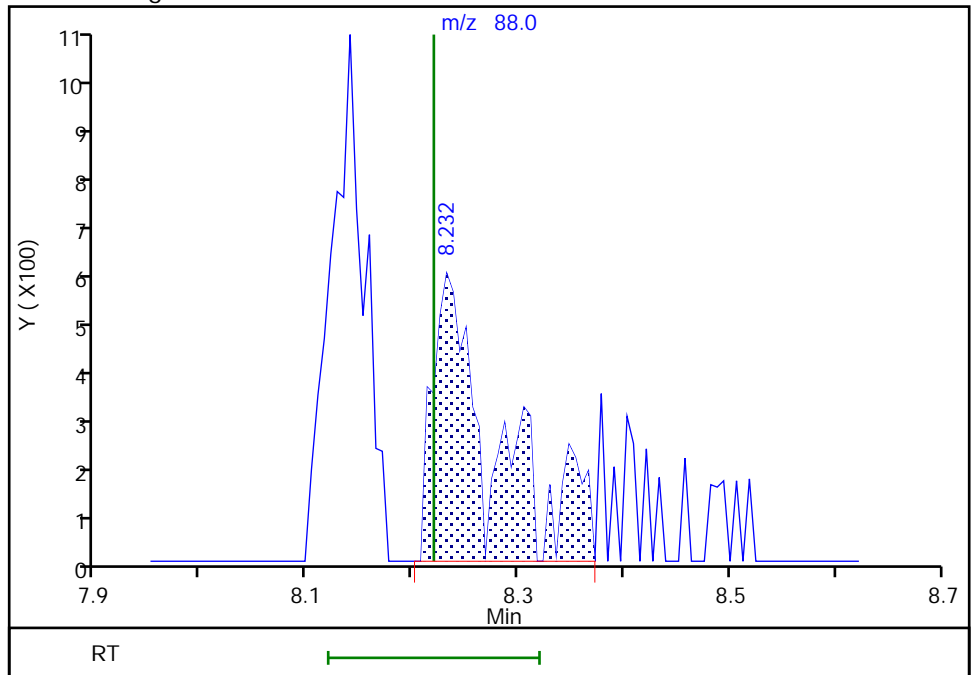
RT: 8.23
Area: 2049
Amount: 21.210086
Amount Units: ug/l

Processing Integration Results



RT: 8.23
Area: 2457
Amount: 13.230266
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:05:13
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

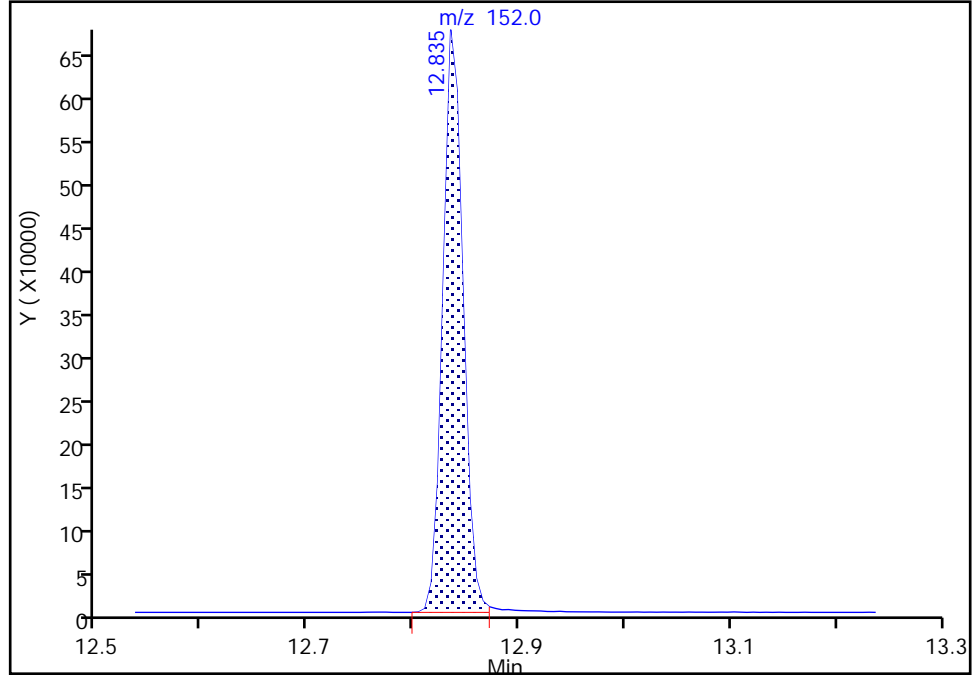
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X14.D
Injection Date: 02-Feb-2022 19:20:30 Instrument ID: 10193
Lims ID: IC std2 0.5
Client ID:
Operator ID: jml01693 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 113 1,4-Dichlorobenzene-d4, CAS: 3855-82-1
Signal: 1

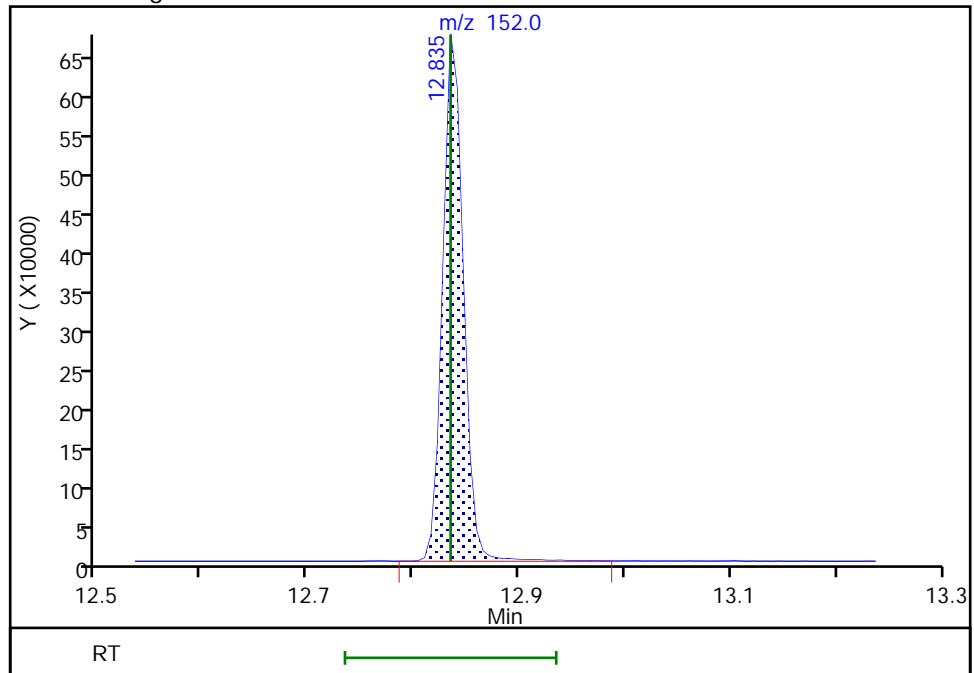
RT: 12.83
Area: 897630
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results



RT: 12.83
Area: 907784
Amount: 10.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: kellerk, 08-Feb-2022 18:37:09
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X15.D
 Lims ID: IC std3 1
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 02-Feb-2022 19:42:30 ALS Bottle#: 15 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0049623-015
 Misc. Info.: IC STD1 LG
 Operator ID: jml01693 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 08-Feb-2022 19:29:49 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1661

First Level Reviewer: longj

Date: 07-Feb-2022 14:04:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.800	1.794	0.006	99	58861	1.00	1.02	
3 Chloromethane	50	1.977	1.977	0.000	99	63497	1.00	1.01	
5 Vinyl chloride	62	2.087	2.087	0.000	97	68939	1.00	1.03	
4 Butadiene	39	2.099	2.093	0.006	91	62874	1.00	1.03	
6 Bromomethane	94	2.398	2.386	0.012	91	51333	1.00	1.01	
7 Chloroethane	64	2.452	2.453	-0.001	100	38671	1.00	0.9789	
8 Dichlorofluoromethane	67	2.678	2.678	0.000	97	98693	1.00	1.02	
9 Trichlorofluoromethane	101	2.739	2.739	0.000	66	94257	1.00	0.99	
225 Pentane	43	2.745	2.745	0.000	95	67743	1.00	1.00	
11 Ethyl ether	59	2.940	2.940	0.000	90	34797	1.00	1.00	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.038	3.032	0.006	94	64216	1.00	1.01	
13 Acrolein	56	3.093	3.093	0.000	100	251287	50.0	48.3	
14 1,1-Dichloroethene	96	3.215	3.215	0.000	97	46774	1.00	0.99	
16 Acetone	43	3.245	3.239	0.006	86	59588	10.0	10.2	
15 112TCTFE	101	3.263	3.263	0.000	90	47757	1.00	1.01	
18 Isopropyl alcohol	45	3.373	3.379	-0.006	36	23819	20.0	18.4	
17 Iodomethane	142	3.391	3.385	0.006	99	87364	1.00	0.99	
19 Ethyl bromide	108	3.416	3.416	0.000	98	43883	1.00	1.00	
20 Carbon disulfide	76	3.483	3.477	0.006	100	131936	1.00	0.9712	
22 Methyl acetate	43	3.635	3.623	0.012	23	16453	1.00	1.04	M
23 3-Chloro-1-propene	41	3.641	3.635	0.006	88	68262	1.00	0.9732	
24 Methylene Chloride	84	3.818	3.806	0.012	90	50555	1.00	1.00	
* 25 t-Butyl alcohol-d10 (IS)	65	3.812	3.818	-0.006	87	127506	50.0	50.0	
26 2-Methyl-2-propanol	59	3.910	3.910	0.000	99	43775	20.0	17.7	
27 Acrylonitrile	53	4.159	4.141	0.018	90	19145	2.50	2.28	
28 Methyl tert-butyl ether	73	4.172	4.178	-0.006	96	127977	1.00	0.99	
29 trans-1,2-Dichloroethene	96	4.184	4.184	0.000	97	54471	1.00	1.01	
30 Hexane	57	4.598	4.592	0.006	94	66324	1.00	1.01	
32 1,1-Dichloroethane	63	4.842	4.842	0.000	96	94758	1.00	1.03	
33 Isopropyl ether	45	4.897	4.897	0.000	93	156734	1.00	1.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 2-Chloro-1,3-butadiene	53	4.958	4.952	0.006	91	76332	1.00	1.02	
35 Tert-butyl ethyl ether	59	5.440	5.440	0.000	97	159303	1.00	1.02	
36 2-Butanone (MEK)	43	5.659	5.659	0.000	99	121800	10.0	10.2	
37 cis-1,2-Dichloroethene	96	5.690	5.690	0.000	81	60505	1.00	1.03	
38 2,2-Dichloropropane	77	5.702	5.702	0.000	71	82575	1.00	1.00	
40 Propionitrile	54	5.757	5.751	0.006	98	66313	20.0	21.3	
43 Methacrylonitrile	67	5.970	5.970	0.000	90	125260	10.0	9.48	
44 Chlorobromomethane	128	6.025	6.025	0.000	84	27146	1.00	1.01	
45 Tetrahydrofuran	71	6.031	6.025	0.006	71	17044	5.00	4.70	
S 42 1,2-Dichloroethene, Total	100				0			2.04	
46 Chloroform	83	6.183	6.184	-0.001	94	97966	1.00	1.02	
48 1,1,1-Trichloroethane	97	6.403	6.403	0.000	45	88116	1.00	1.01	
\$ 47 Dibromofluoromethane (Surr)	113	6.403	6.403	0.000	94	463655	10.0	9.91	
49 Cyclohexane	56	6.494	6.494	0.000	90	86805	1.00	1.01	
50 Carbon tetrachloride	117	6.610	6.610	0.000	97	75727	1.00	1.01	
51 1,1-Dichloropropene	75	6.622	6.616	0.006	95	73603	1.00	1.00	
52 Isobutyl alcohol	41	6.818	6.811	0.007	91	42598	50.0	52.5	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.860	6.854	0.006	79	89746	10.0	9.96	
54 Benzene	78	6.885	6.879	0.006	95	219408	1.00	1.01	
55 1,2-Dichloroethane	62	6.958	6.958	0.000	98	60002	1.00	1.01	M
56 Tert-amyl methyl ether	73	7.086	7.086	0.000	98	143990	1.00	1.00	
* 57 Fluorobenzene (IS)	96	7.299	7.299	0.000	99	1880230	10.0	10.0	
58 n-Heptane	43	7.317	7.311	0.006	89	70870	1.00	1.00	
59 n-Butanol	56	7.720	7.720	0.000	90	65946	87.5	84.1	
60 Trichloroethene	95	7.787	7.787	0.000	97	60869	1.00	1.01	
61 Methylcyclohexane	83	8.092	8.086	0.006	89	97042	1.00	1.00	
62 1,2-Dichloropropane	63	8.122	8.122	0.000	96	53981	1.00	1.02	
63 2-ethoxy-2-methyl butane	87	8.147	8.141	0.006	95	86667	1.00	1.01	
65 1,4-Dioxane	88	8.232	8.220	0.012	32	11409	50.0	53.5	M
64 Methyl methacrylate	69	8.232	8.232	0.000	90	23665	1.00	0.9360	
66 Dibromomethane	93	8.232	8.238	-0.006	93	27362	1.00	1.01	
67 Dichlorobromomethane	83	8.482	8.482	0.000	99	66293	1.00	0.9883	
68 2-Nitropropane	41	8.762	8.768	-0.006	99	32097	5.00	4.38	
71 1-Bromo-2-chloroethane	63	8.884	8.872	0.012	98	54110	1.00	0.99	
72 cis-1,3-Dichloropropene	75	9.055	9.049	0.006	95	79169	1.00	0.9823	
73 4-Methyl-2-pentanone (MIBK)	43	9.250	9.250	0.000	96	308678	10.0	9.66	
\$ 74 Toluene-d8 (Surr)	98	9.378	9.378	0.000	93	1890925	10.0	10.0	
75 Toluene	92	9.457	9.457	0.000	98	145843	1.00	1.01	
76 trans-1,3-Dichloropropene	75	9.750	9.744	0.006	93	65967	1.00	1.00	
78 Ethyl methacrylate	69	9.823	9.817	0.006	88	52523	1.00	1.00	
79 1,1,2-Trichloroethane	97	9.957	9.957	0.000	90	39701	1.00	1.00	
80 Tetrachloroethene	166	10.036	10.036	0.000	97	72373	1.00	1.02	
S 77 1,3-Dichloropropene, Total	100				0			1.98	
81 1,3-Dichloropropane	76	10.128	10.128	0.000	91	66036	1.00	1.01	
82 2-Hexanone	43	10.195	10.189	0.006	96	226057	10.0	9.74	
83 Chlorodibromomethane	129	10.347	10.347	0.000	89	47850	1.00	0.9721	
84 Ethylene Dibromide	107	10.457	10.457	0.000	99	39393	1.00	1.02	
* 85 Chlorobenzene-d5 (IS)	117	10.908	10.902	0.006	84	1533837	10.0	10.0	
86 1-Chlorohexane	91	10.926	10.927	-0.001	95	84112	1.00	1.00	
87 Chlorobenzene	112	10.933	10.933	0.000	96	171825	1.00	1.01	
89 1,1,1,2-Tetrachloroethane	131	11.024	11.018	0.006	94	59547	1.00	1.02	
90 Ethylbenzene	91	11.024	11.024	0.000	98	284082	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
91 m-Xylene & p-Xylene	106	11.146	11.146	0.000	99	228665	2.00	2.04	
S 88 Xylenes, Total	106				0			3.07	
92 o-Xylene	106	11.487	11.487	0.000	96	115456	1.00	1.03	
93 Styrene	104	11.506	11.500	0.006	95	188630	1.00	1.01	
94 Bromoform	173	11.658	11.658	0.000	97	28720	1.00	0.9725	
95 Isopropylbenzene	105	11.792	11.792	0.000	96	295148	1.00	1.02	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.938	11.939	-0.001	94	750275	10.0	9.97	
100 Bromobenzene	156	12.054	12.054	0.000	90	76557	1.00	1.02	
99 1,1,2,2-Tetrachloroethane	83	12.054	12.054	0.000	81	49337	1.00	1.00	
101 trans-1,4-Dichloro-2-butene	53	12.079	12.079	0.000	96	128777	10.0	10.1	
102 1,2,3-Trichloropropane	110	12.097	12.097	0.000	81	13838	1.00	1.00	
103 N-Propylbenzene	91	12.134	12.128	0.006	98	351532	1.00	1.02	
104 2-Chlorotoluene	126	12.207	12.207	0.000	97	75346	1.00	1.00	
105 1,3,5-Trimethylbenzene	105	12.274	12.274	0.000	95	255533	1.00	1.00	
106 4-Chlorotoluene	126	12.304	12.304	0.000	97	79537	1.00	1.04	
107 tert-Butylbenzene	134	12.518	12.518	0.000	93	59447	1.00	1.01	
108 Pentachloroethane	167	12.548	12.548	0.000	90	44677	1.00	1.00	
109 1,2,4-Trimethylbenzene	105	12.560	12.560	0.000	97	265919	1.00	1.01	
110 sec-Butylbenzene	105	12.682	12.682	0.000	94	325908	1.00	1.01	
111 1,3-Dichlorobenzene	146	12.780	12.780	0.000	98	157808	1.00	1.02	
112 4-Isopropyltoluene	119	12.792	12.792	0.000	97	293011	1.00	1.01	
* 113 1,4-Dichlorobenzene-d4	152	12.841	12.835	0.006	93	905251	10.0	10.0	M
114 1,4-Dichlorobenzene	146	12.853	12.853	0.000	96	164499	1.00	1.04	
115 1,2,3-Trimethylbenzene	120	12.871	12.871	0.000	98	120174	1.00	1.01	
116 Benzyl chloride	126	12.938	12.938	0.000	98	19998	1.00	0.9722	
119 n-Butylbenzene	92	13.091	13.091	0.000	96	145675	1.00	1.01	
120 1,2-Dichlorobenzene	146	13.121	13.121	0.000	99	146764	1.00	1.02	
118 p-Diethylbenzene	119	13.146	13.146	0.000	85	147629	1.00	0.9899	
123 1,2-Dibromo-3-Chloropropane	155	13.670	13.670	0.000	85	7442	1.00	0.99	
124 1,3,5-Trichlorobenzene	180	13.798	13.798	0.000	97	130582	1.00	1.00	
125 1,2,4-Trichlorobenzene	180	14.225	14.225	0.000	94	110493	1.00	1.00	
126 Hexachlorobutadiene	225	14.310	14.310	0.000	96	61611	1.00	1.06	
127 Naphthalene	128	14.407	14.408	-0.001	96	161672	1.00	0.9833	
128 1,2,3-Trichlorobenzene	180	14.554	14.554	0.000	96	89371	1.00	1.00	
129 2-Methylnaphthalene	142	15.163	15.157	0.006	91	79273	1.00	0.9446	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00034

Amount Added: 2.00

Units: uL

MSV_LL_#2_826_00038

Amount Added: 2.00

Units: uL

MSV_LL_GAS826_00063

Amount Added: 2.00

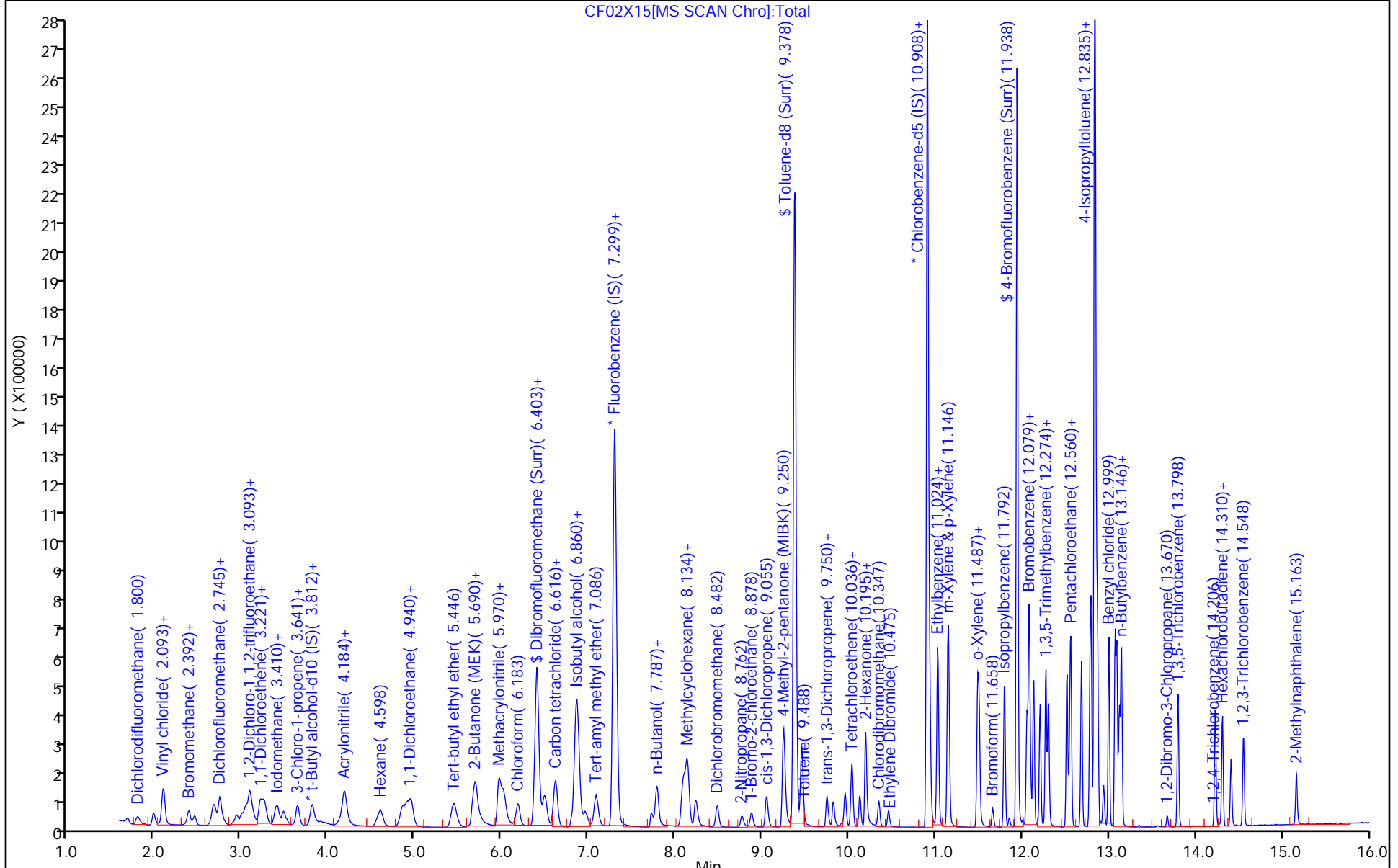
Units: uL

MSV_HP25_ISSS_00046

Amount Added: 1.00

Units: uL

Run Reagent



Eurofins Lancaster Laboratories Env, LLC

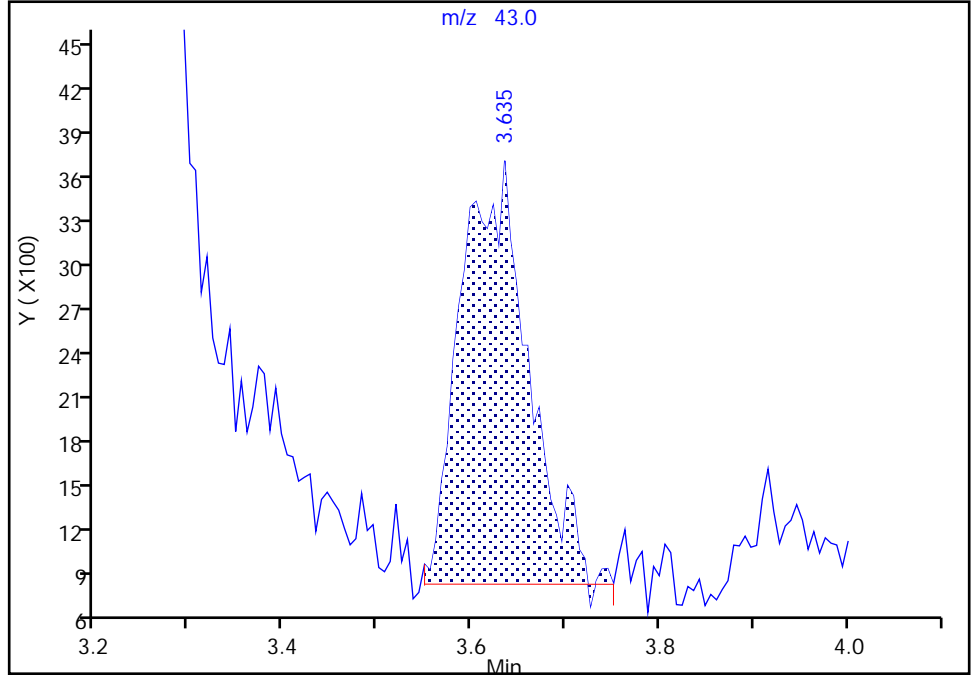
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X15.D
Injection Date: 02-Feb-2022 19:42:30 Instrument ID: 10193
Lims ID: IC std3 1
Client ID:
Operator ID: jml01693 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Methyl acetate, CAS: 79-20-9

Signal: 1

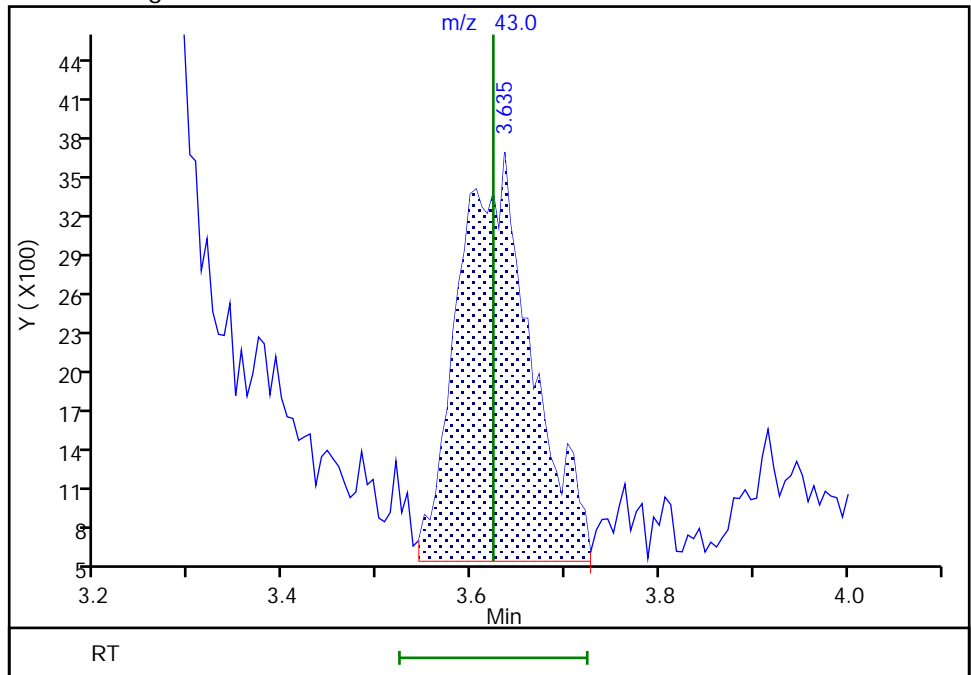
RT: 3.64
Area: 14168
Amount: 0.883631
Amount Units: ug/l

Processing Integration Results



RT: 3.64
Area: 16453
Amount: 1.043920
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:03:18
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

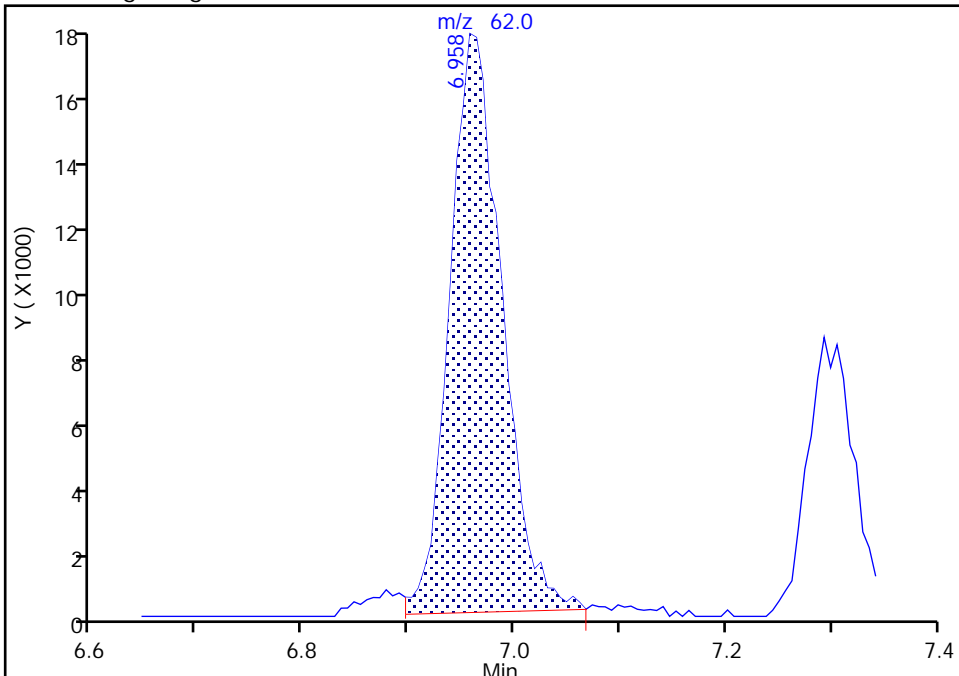
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X15.D
Injection Date: 02-Feb-2022 19:42:30 Instrument ID: 10193
Lims ID: IC std3 1
Client ID:
Operator ID: jml01693 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

55 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

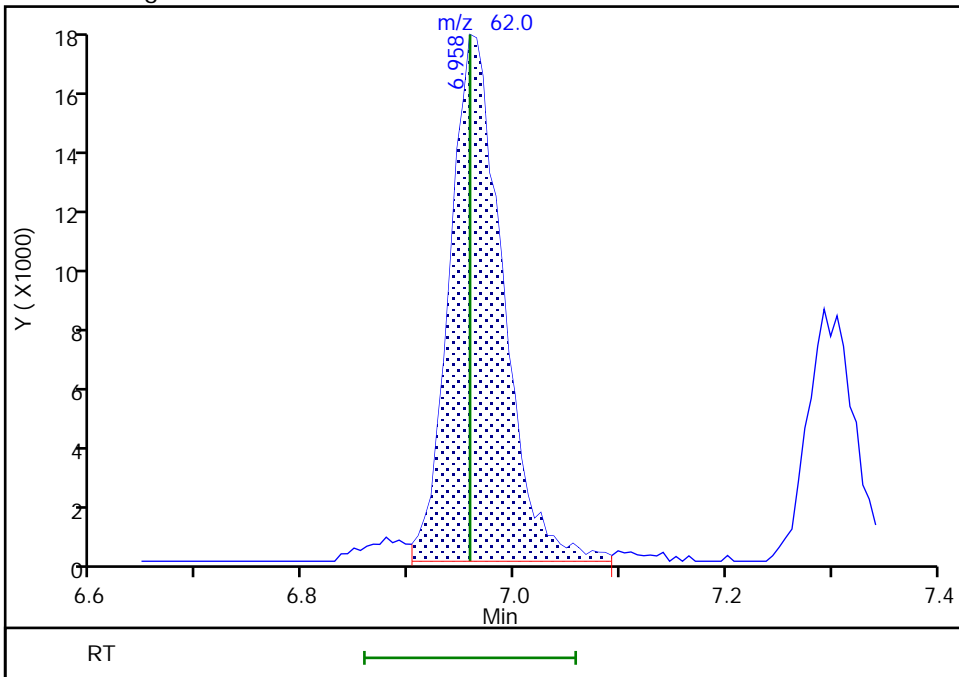
RT: 6.96
Area: 58396
Amount: 0.995265
Amount Units: ug/l

Processing Integration Results



RT: 6.96
Area: 60002
Amount: 1.013931
Amount Units: ug/l

Manual Integration Results



Reviewer: kellerk, 08-Feb-2022 19:03:50
Audit Action: Split an Integrated Peak

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

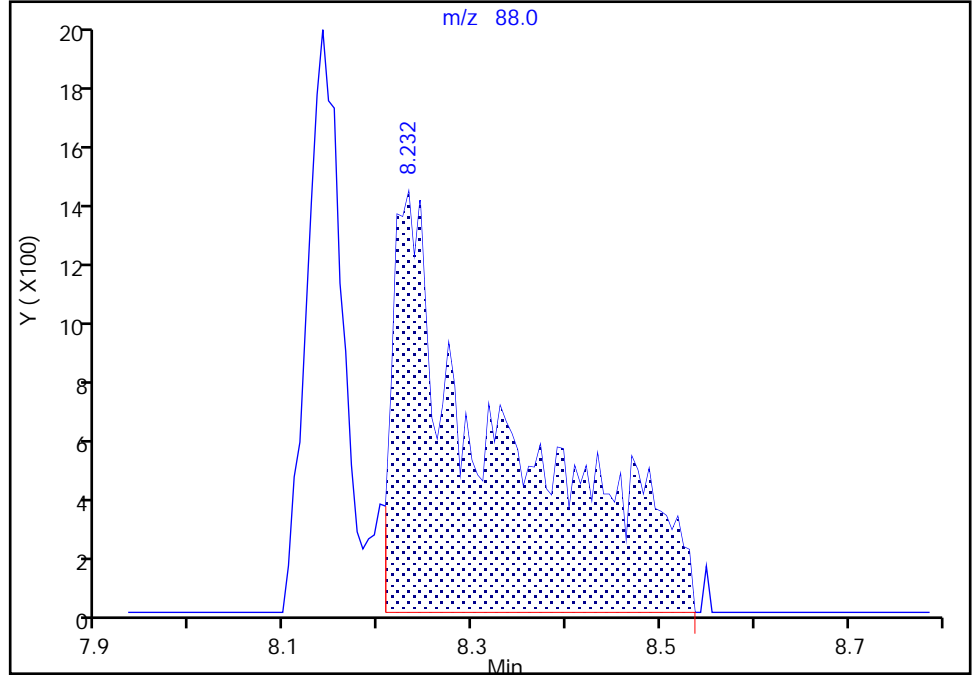
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X15.D
Injection Date: 02-Feb-2022 19:42:30 Instrument ID: 10193
Lims ID: IC std3 1
Client ID:
Operator ID: jml01693 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

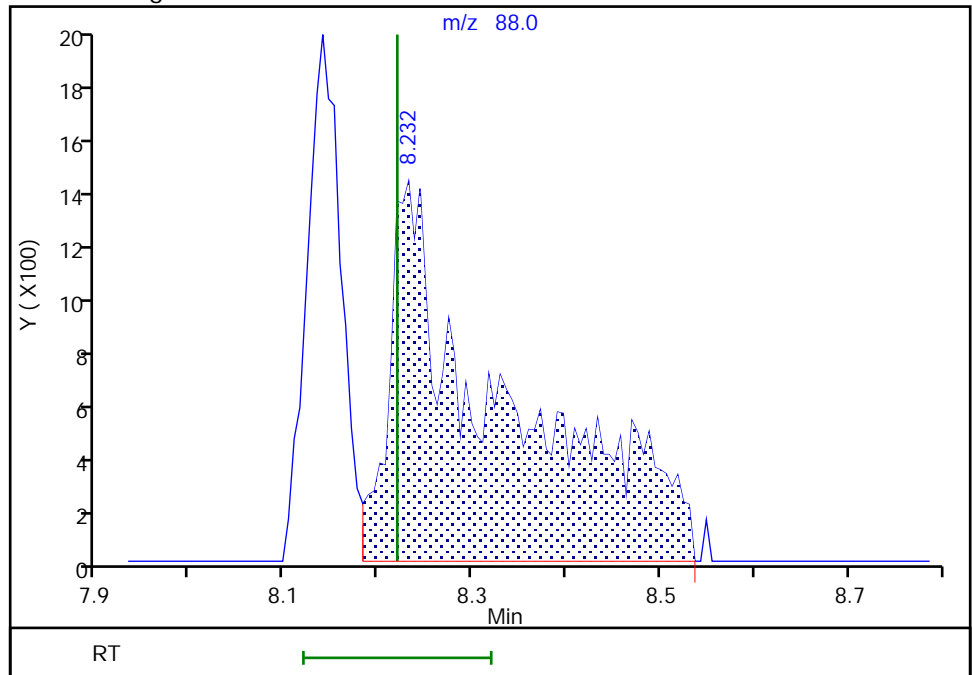
RT: 8.23
Area: 11022
Amount: 53.040719
Amount Units: ug/l

Processing Integration Results



RT: 8.23
Area: 11409
Amount: 53.480991
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:03:45
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

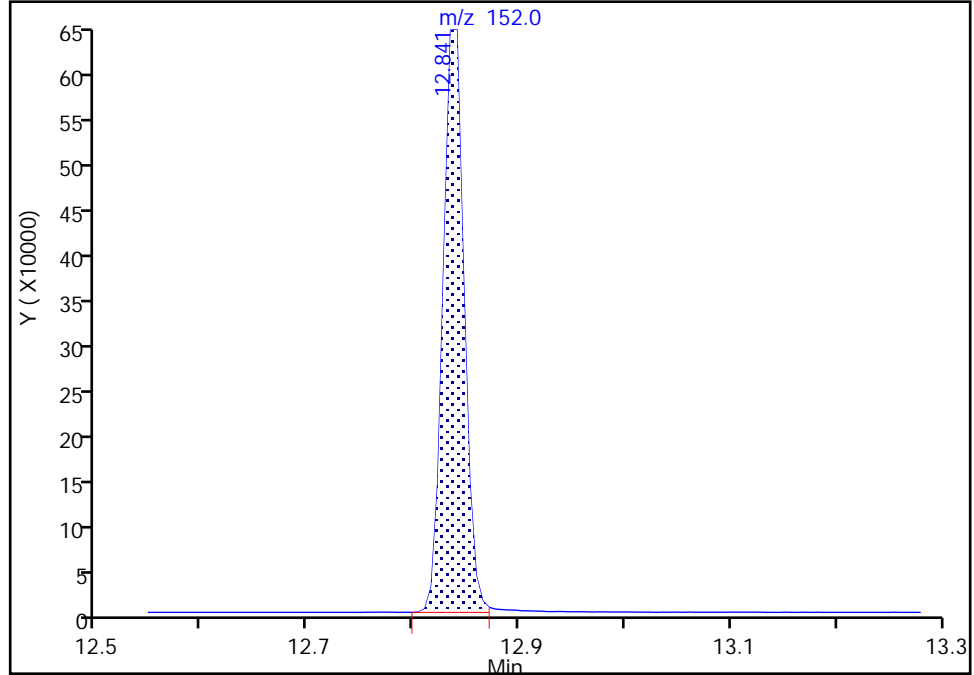
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X15.D
Injection Date: 02-Feb-2022 19:42:30 Instrument ID: 10193
Lims ID: IC std3 1
Client ID:
Operator ID: jml01693 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 113 1,4-Dichlorobenzene-d4, CAS: 3855-82-1
Signal: 1

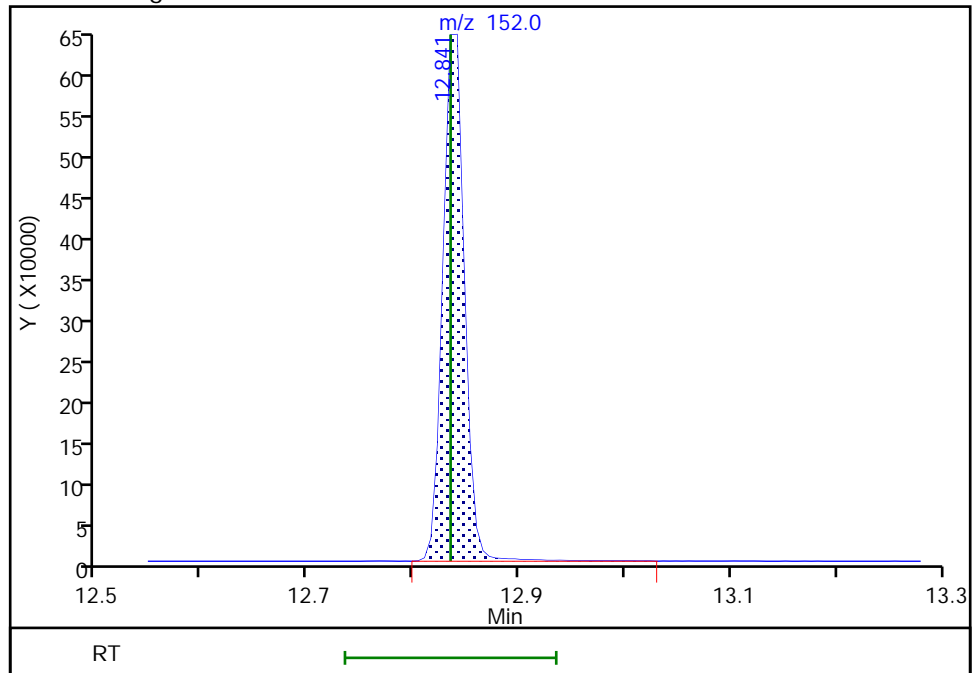
RT: 12.84
Area: 895051
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results



RT: 12.84
Area: 905251
Amount: 10.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: kellerk, 08-Feb-2022 18:37:33
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X16.D
 Lims ID: IC std4 2
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 02-Feb-2022 20:04:30 ALS Bottle#: 16 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0049623-016
 Misc. Info.: IC STD2 LG
 Operator ID: jml01693 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 08-Feb-2022 19:29:54 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1661

First Level Reviewer: longj

Date: 07-Feb-2022 14:02:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.794	1.794	0.000	99	118421	2.00	2.05	
3 Chloromethane	50	1.977	1.977	0.000	98	121098	2.00	1.92	
5 Vinyl chloride	62	2.087	2.087	0.000	98	133445	2.00	2.00	
4 Butadiene	39	2.093	2.093	0.000	94	126980	2.00	2.09	
6 Bromomethane	94	2.386	2.386	0.000	90	102845	2.00	2.02	
7 Chloroethane	64	2.453	2.453	0.000	100	78998	2.00	2.00	
8 Dichlorofluoromethane	67	2.678	2.678	0.000	97	192745	2.00	1.99	
9 Trichlorofluoromethane	101	2.739	2.739	0.000	98	194111	2.00	2.05	
225 Pentane	43	2.745	2.745	0.000	96	131692	2.00	1.95	
11 Ethyl ether	59	2.940	2.940	0.000	90	69094	2.00	1.99	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.032	3.032	0.000	94	127119	2.00	2.00	
13 Acrolein	56	3.093	3.093	0.000	99	507753	100.0	94.7	
14 1,1-Dichloroethene	96	3.215	3.215	0.000	98	93092	2.00	1.98	
16 Acetone	43	3.239	3.239	0.000	85	116118	20.0	19.3	
15 112TCTFE	101	3.263	3.263	0.000	90	95726	2.00	2.03	
18 Isopropyl alcohol	45	3.379	3.379	0.000	30	45205	40.0	33.9	
17 Iodomethane	142	3.385	3.385	0.000	98	175506	2.00	2.00	
19 Ethyl bromide	108	3.416	3.416	0.000	98	91318	2.00	2.08	
20 Carbon disulfide	76	3.477	3.477	0.000	99	269188	2.00	1.98	
22 Methyl acetate	43	3.623	3.623	0.000	97	32499	2.00	2.00	
23 3-Chloro-1-propene	41	3.635	3.635	0.000	90	135286	2.00	1.93	
24 Methylene Chloride	84	3.806	3.806	0.000	90	100231	2.00	1.99	
* 25 t-Butyl alcohol-d10 (IS)	65	3.812	3.812	0.000	90	131292	50.0	50.0	
26 2-Methyl-2-propanol	59	3.910	3.910	0.000	99	93749	40.0	36.7	
27 Acrylonitrile	53	4.141	4.141	0.000	97	42620	5.00	4.94	
28 Methyl tert-butyl ether	73	4.178	4.178	0.000	95	260233	2.00	2.02	
29 trans-1,2-Dichloroethene	96	4.184	4.184	0.000	99	107124	2.00	1.99	
30 Hexane	57	4.592	4.592	0.000	92	131519	2.00	2.00	
32 1,1-Dichloroethane	63	4.842	4.842	0.000	96	181125	2.00	1.96	
33 Isopropyl ether	45	4.897	4.897	0.000	93	306354	2.00	1.99	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 2-Chloro-1,3-butadiene	53	4.952	4.952	0.000	92	148453	2.00	1.98	
35 Tert-butyl ethyl ether	59	5.440	5.440	0.000	97	311166	2.00	2.00	
36 2-Butanone (MEK)	43	5.659	5.659	0.000	99	233911	20.0	19.0	
37 cis-1,2-Dichloroethene	96	5.690	5.690	0.000	81	117444	2.00	2.00	
38 2,2-Dichloropropane	77	5.702	5.702	0.000	88	165457	2.00	2.01	
40 Propionitrile	54	5.751	5.751	0.000	99	117747	40.0	36.7	
43 Methacrylonitrile	67	5.970	5.970	0.000	91	257453	20.0	18.9	
44 Chlorobromomethane	128	6.025	6.025	0.000	91	54244	2.00	2.02	
45 Tetrahydrofuran	71	6.025	6.025	0.000	73	34439	10.0	9.22	
S 42 1,2-Dichloroethene, Total	100				0			3.99	
46 Chloroform	83	6.184	6.184	0.000	93	188396	2.00	1.97	
48 1,1,1-Trichloroethane	97	6.403	6.403	0.000	65	173135	2.00	1.98	
\$ 47 Dibromofluoromethane (Surr)	113	6.403	6.403	0.000	94	470270	10.0	10.1	
49 Cyclohexane	56	6.494	6.494	0.000	90	166412	2.00	1.95	
50 Carbon tetrachloride	117	6.610	6.610	0.000	96	148781	2.00	1.98	
51 1,1-Dichloropropene	75	6.616	6.616	0.000	96	146798	2.00	1.99	
52 Isobutyl alcohol	41	6.811	6.811	0.000	92	81756	100.0	97.9	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.854	6.854	0.000	80	90323	10.0	10.0	
54 Benzene	78	6.879	6.879	0.000	96	431934	2.00	1.99	
55 1,2-Dichloroethane	62	6.958	6.958	0.000	97	117170	2.00	1.98	M
56 Tert-amyl methyl ether	73	7.086	7.086	0.000	99	288610	2.00	2.00	
* 57 Fluorobenzene (IS)	96	7.299	7.299	0.000	99	1877168	10.0	10.0	
58 n-Heptane	43	7.311	7.311	0.000	93	138541	2.00	1.96	
59 n-Butanol	56	7.720	7.720	0.000	88	137463	175.0	170.3	
60 Trichloroethene	95	7.787	7.787	0.000	97	119953	2.00	1.99	
61 Methylcyclohexane	83	8.086	8.086	0.000	89	194051	2.00	2.01	
62 1,2-Dichloropropane	63	8.122	8.122	0.000	95	106349	2.00	2.01	
63 2-ethoxy-2-methyl butane	87	8.141	8.141	0.000	93	169182	2.00	1.98	
65 1,4-Dioxane	88	8.220	8.220	0.000	38	21369	100.0	97.3	M
64 Methyl methacrylate	69	8.232	8.232	0.000	90	47780	2.00	1.84	
66 Dibromomethane	93	8.238	8.238	0.000	94	55542	2.00	2.04	
67 Dichlorobromomethane	83	8.482	8.482	0.000	99	133131	2.00	1.99	
68 2-Nitropropane	41	8.768	8.768	0.000	99	67497	10.0	8.95	
71 1-Bromo-2-chloroethane	63	8.872	8.872	0.000	98	112627	2.00	2.07	
72 cis-1,3-Dichloropropene	75	9.049	9.049	0.000	95	160002	2.00	1.99	
73 4-Methyl-2-pentanone (MIBK)	43	9.250	9.250	0.000	96	622003	20.0	18.9	
\$ 74 Toluene-d8 (Surr)	98	9.378	9.378	0.000	93	1891072	10.0	9.87	
75 Toluene	92	9.457	9.457	0.000	98	283636	2.00	1.94	
76 trans-1,3-Dichloropropene	75	9.744	9.744	0.000	94	131509	2.00	1.97	
78 Ethyl methacrylate	69	9.817	9.817	0.000	88	106512	2.00	2.00	
79 1,1,2-Trichloroethane	97	9.957	9.957	0.000	91	78522	2.00	1.95	
80 Tetrachloroethene	166	10.036	10.036	0.000	98	141109	2.00	1.95	
S 77 1,3-Dichloropropene, Total	100				0			3.96	
81 1,3-Dichloropropane	76	10.128	10.128	0.000	90	130010	2.00	1.97	
82 2-Hexanone	43	10.189	10.189	0.000	96	461262	20.0	19.3	
83 Chlorodibromomethane	129	10.347	10.347	0.000	90	98379	2.00	1.97	
84 Ethylene Dibromide	107	10.457	10.457	0.000	99	78581	2.00	2.01	
* 85 Chlorobenzene-d5 (IS)	117	10.908	10.908	0.000	84	1555227	10.0	10.0	
86 1-Chlorohexane	91	10.927	10.927	0.000	95	163473	2.00	1.92	
87 Chlorobenzene	112	10.933	10.933	0.000	96	341009	2.00	1.97	
89 1,1,1,2-Tetrachloroethane	131	11.018	11.018	0.000	95	117024	2.00	1.97	
90 Ethylbenzene	91	11.024	11.024	0.000	98	565458	2.00	1.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
91 m-Xylene & p-Xylene	106	11.146	11.146	0.000	99	450324	4.00	3.96	
S 88 Xylenes, Total	106				0			5.93	
92 o-Xylene	106	11.487	11.487	0.000	96	223981	2.00	1.97	
93 Styrene	104	11.500	11.500	0.000	95	379294	2.00	2.01	
94 Bromoform	173	11.658	11.658	0.000	97	58304	2.00	1.95	
95 Isopropylbenzene	105	11.792	11.792	0.000	95	579675	2.00	1.97	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.939	11.939	0.000	94	756237	10.0	9.91	
100 Bromobenzene	156	12.054	12.054	0.000	90	152618	2.00	2.00	
99 1,1,2,2-Tetrachloroethane	83	12.054	12.054	0.000	75	100152	2.00	2.01	
101 trans-1,4-Dichloro-2-butene	53	12.079	12.079	0.000	95	260447	20.0	20.2	
102 1,2,3-Trichloropropane	110	12.097	12.097	0.000	80	28232	2.00	2.01	
103 N-Propylbenzene	91	12.128	12.128	0.000	98	687587	2.00	1.97	
104 2-Chlorotoluene	126	12.207	12.207	0.000	97	151125	2.00	1.99	
105 1,3,5-Trimethylbenzene	105	12.274	12.274	0.000	94	512374	2.00	1.98	
106 4-Chlorotoluene	126	12.304	12.304	0.000	97	157208	2.00	2.02	
107 tert-Butylbenzene	134	12.518	12.518	0.000	92	116603	2.00	1.95	
108 Pentachloroethane	167	12.548	12.548	0.000	90	91733	2.00	2.02	
109 1,2,4-Trimethylbenzene	105	12.560	12.560	0.000	97	529395	2.00	1.98	
110 sec-Butylbenzene	105	12.682	12.682	0.000	94	651192	2.00	1.99	
111 1,3-Dichlorobenzene	146	12.780	12.780	0.000	98	313764	2.00	2.01	
112 4-Isopropyltoluene	119	12.792	12.792	0.000	96	578110	2.00	1.97	
* 113 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	93	917630	10.0	10.0	M
114 1,4-Dichlorobenzene	146	12.853	12.853	0.000	97	320737	2.00	2.00	
115 1,2,3-Trimethylbenzene	120	12.871	12.871	0.000	98	240992	2.00	1.99	
116 Benzyl chloride	126	12.938	12.938	0.000	98	42023	2.00	2.02	
119 n-Butylbenzene	92	13.091	13.091	0.000	97	286886	2.00	1.96	
120 1,2-Dichlorobenzene	146	13.121	13.121	0.000	99	290351	2.00	1.99	
118 p-Diethylbenzene	119	13.146	13.146	0.000	86	298170	2.00	1.97	
123 1,2-Dibromo-3-Chloropropane	155	13.670	13.670	0.000	87	15204	2.00	2.00	
124 1,3,5-Trichlorobenzene	180	13.798	13.798	0.000	98	264362	2.00	2.00	
125 1,2,4-Trichlorobenzene	180	14.225	14.225	0.000	94	222331	2.00	1.99	
126 Hexachlorobutadiene	225	14.310	14.310	0.000	97	115422	2.00	1.95	
127 Naphthalene	128	14.408	14.408	0.000	96	332832	2.00	2.00	
128 1,2,3-Trichlorobenzene	180	14.554	14.554	0.000	96	178524	2.00	1.96	
129 2-Methylnaphthalene	142	15.157	15.157	0.000	92	163231	2.00	1.92	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00034

Amount Added: 2.00

Units: uL

MSV_LL_#2_826_00038

Amount Added: 2.00

Units: uL

MSV_LL_GAS826_00063

Amount Added: 2.00

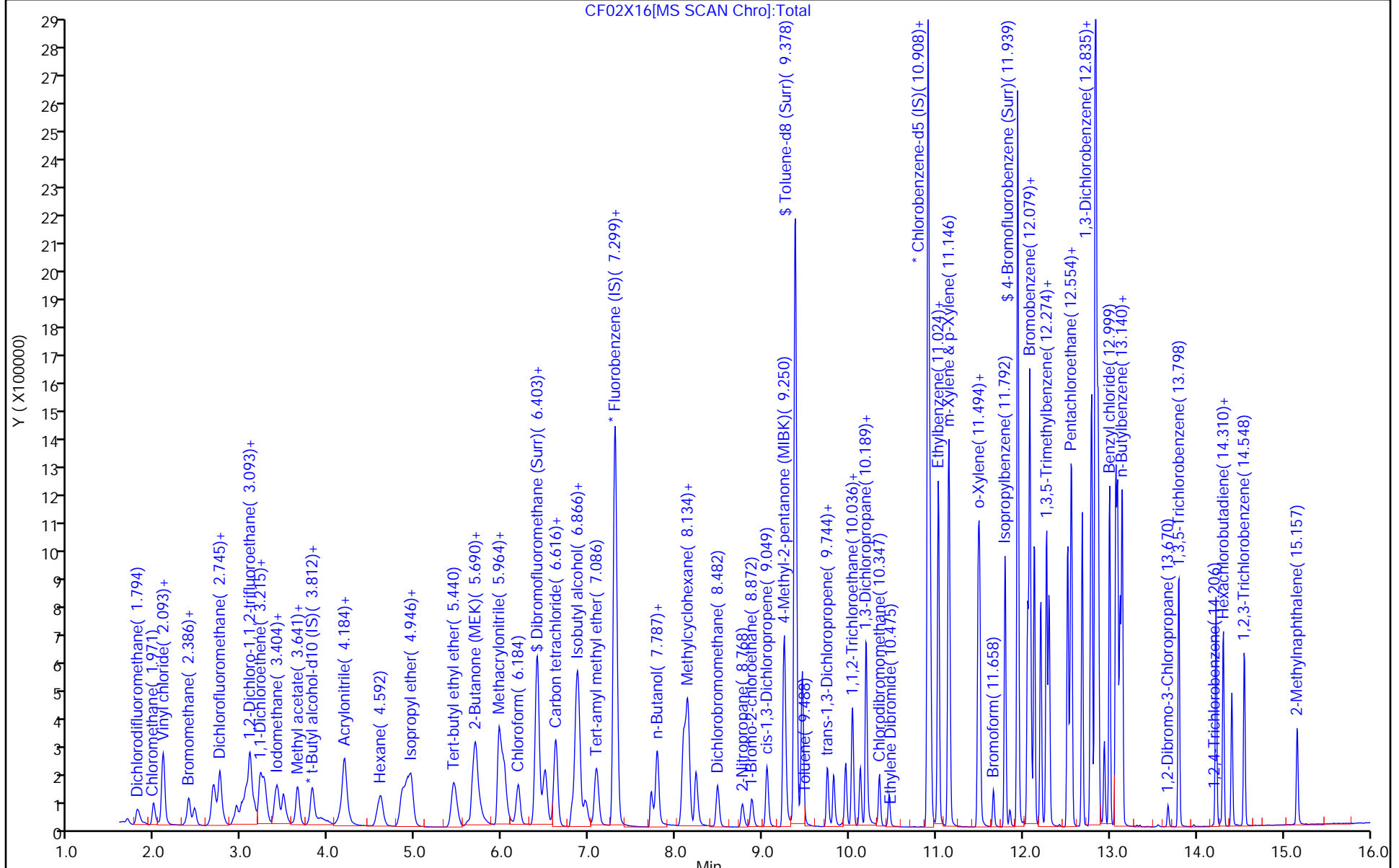
Units: uL

MSV_HP25_ISSS_00046

Amount Added: 1.00

Units: uL

Run Reagent



Euofins Lancaster Laboratories Env, LLC

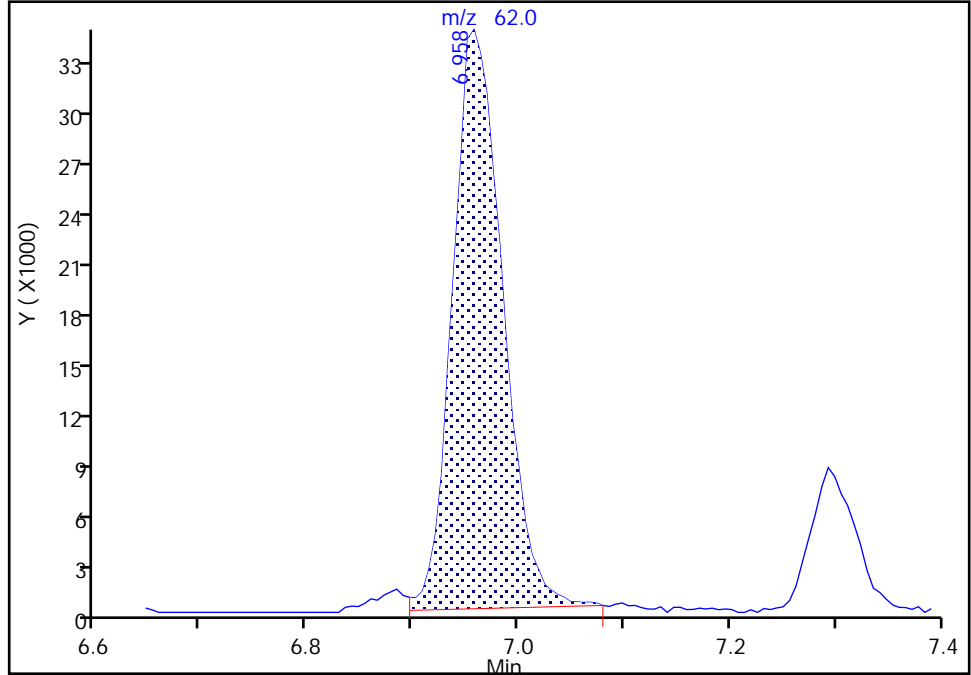
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X16.D
Injection Date: 02-Feb-2022 20:04:30 Instrument ID: 10193
Lims ID: IC std4 2
Client ID:
Operator ID: jml01693 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

55 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

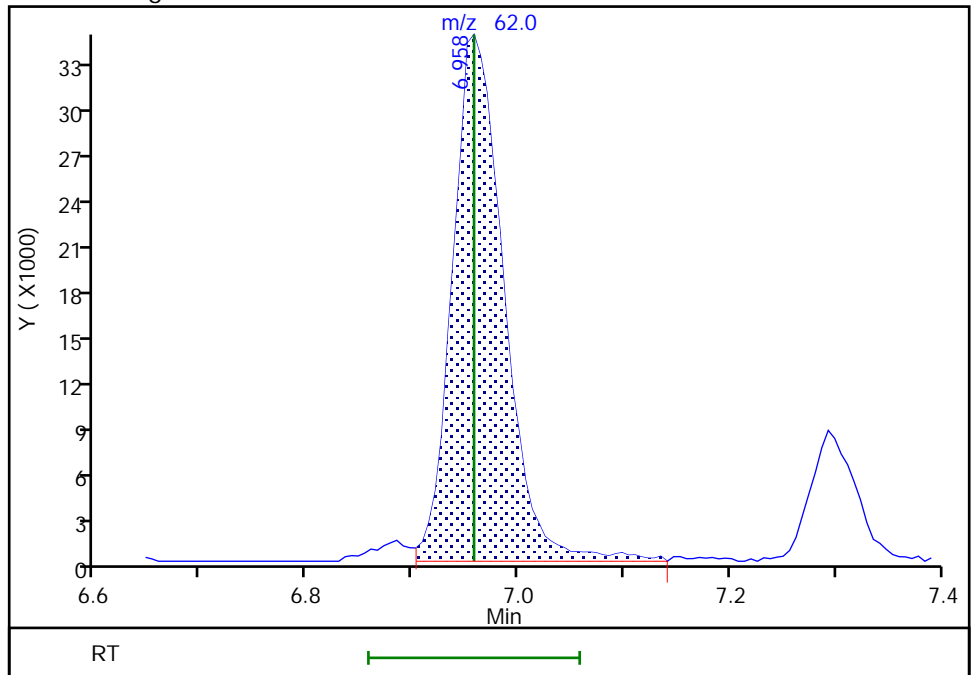
RT: 6.96
Area: 113336
Amount: 1.927242
Amount Units: ug/l

Processing Integration Results



RT: 6.96
Area: 117170
Amount: 1.983203
Amount Units: ug/l

Manual Integration Results



Reviewer: kellerk, 08-Feb-2022 19:04:22
Audit Action: Split an Integrated Peak

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

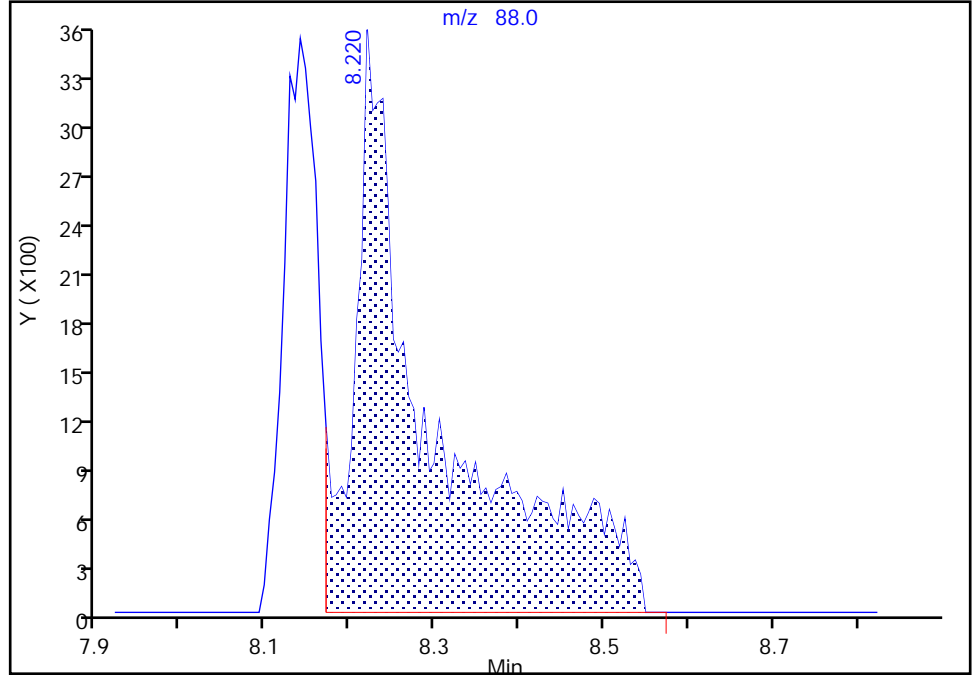
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X16.D
Injection Date: 02-Feb-2022 20:04:30 Instrument ID: 10193
Lims ID: IC std4 2
Client ID:
Operator ID: jml01693 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

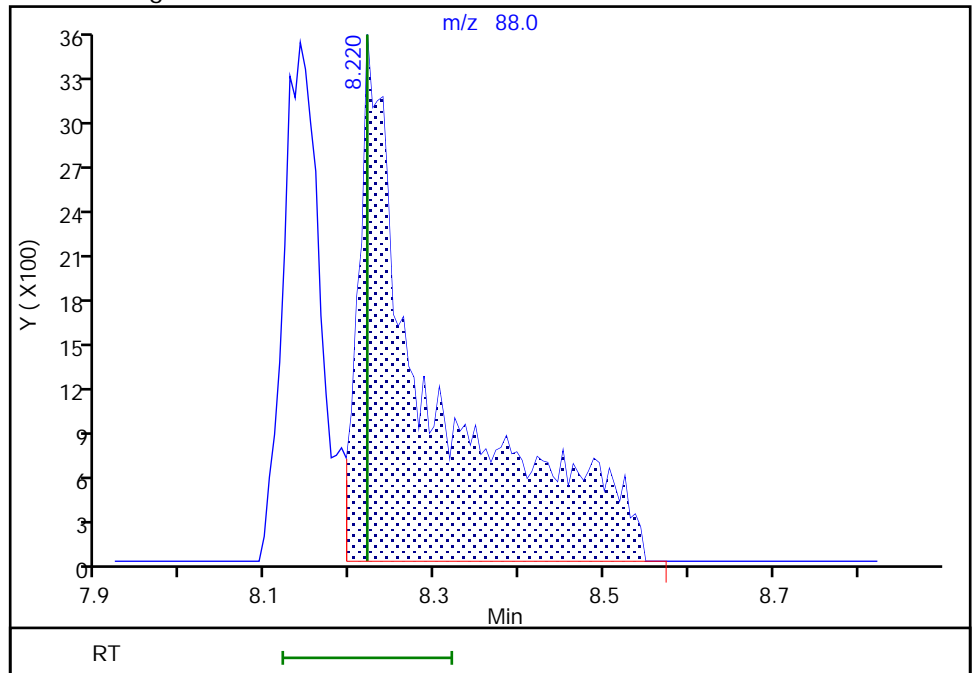
RT: 8.22
Area: 22570
Amount: 105.6044
Amount Units: ug/l

Processing Integration Results



RT: 8.22
Area: 21369
Amount: 97.281088
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:02:19
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC

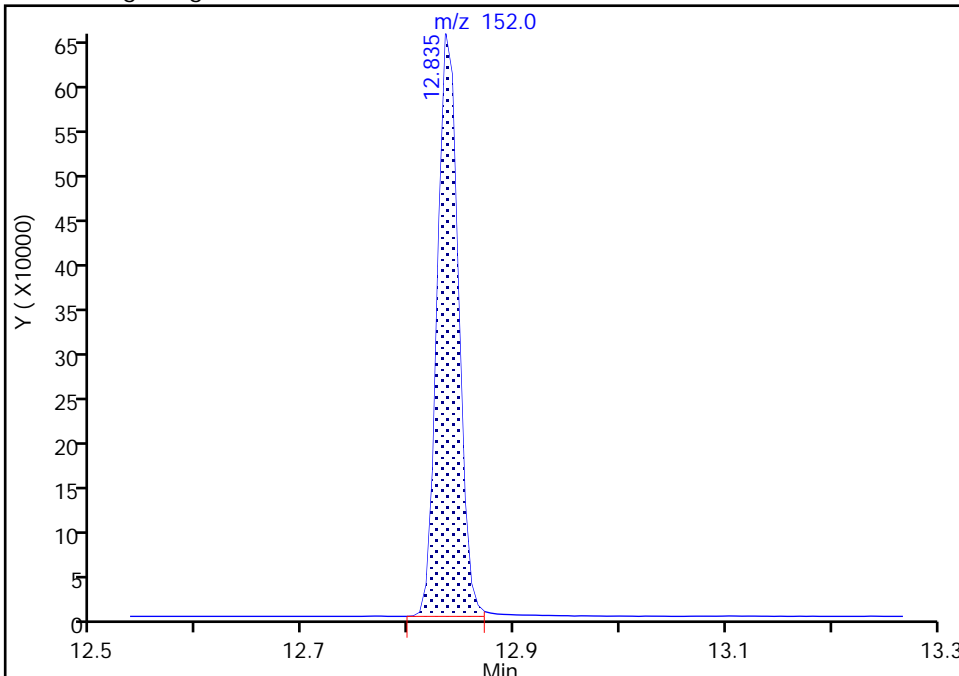
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X16.D
Injection Date: 02-Feb-2022 20:04:30 Instrument ID: 10193
Lims ID: IC std4 2
Client ID:
Operator ID: jml01693 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 113 1,4-Dichlorobenzene-d4, CAS: 3855-82-1

Signal: 1

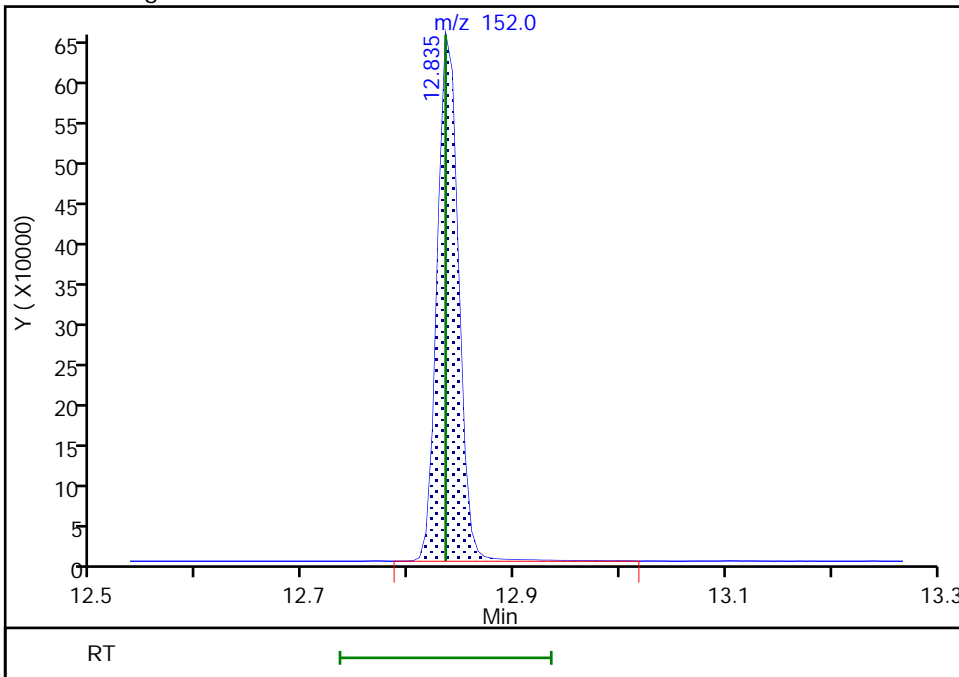
RT: 12.83
Area: 908510
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results



RT: 12.83
Area: 917630
Amount: 10.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: kellerk, 08-Feb-2022 18:37:53
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X17.D
 Lims ID: IC std5 5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 02-Feb-2022 20:26:30 ALS Bottle#: 17 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0049623-017
 Misc. Info.: IC STD5 LG
 Operator ID: jml01693 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 08-Feb-2022 19:29:59 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1661

First Level Reviewer: longj

Date: 07-Feb-2022 14:01:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.794	1.794	0.000	99	286285	5.00	4.82	
3 Chloromethane	50	1.977	1.977	0.000	99	302315	5.00	4.68	
5 Vinyl chloride	62	2.081	2.087	-0.006	98	324438	5.00	4.73	
4 Butadiene	39	2.093	2.093	0.000	93	303705	5.00	4.86	
6 Bromomethane	94	2.385	2.386	-0.001	91	251549	5.00	4.81	
7 Chloroethane	64	2.452	2.453	-0.001	100	188823	5.00	4.67	
8 Dichlorofluoromethane	67	2.672	2.678	-0.006	97	462794	5.00	4.66	
9 Trichlorofluoromethane	101	2.733	2.739	-0.006	98	469586	5.00	4.83	
225 Pentane	43	2.745	2.745	0.000	98	325578	5.00	4.71	
11 Ethyl ether	59	2.934	2.940	-0.006	91	169668	5.00	4.77	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.032	3.032	0.000	90	301263	5.00	4.61	
13 Acrolein	56	3.086	3.093	-0.007	99	1133981	250.0	241.5	
14 1,1-Dichloroethene	96	3.208	3.215	-0.007	98	233800	5.00	4.85	
16 Acetone	43	3.233	3.239	-0.006	99	270333	50.0	51.4	M
15 112TCTFE	101	3.257	3.263	-0.006	90	233782	5.00	4.84	
18 Isopropyl alcohol	45	3.385	3.379	0.006	51	107106	100.0	91.8	
17 Iodomethane	142	3.385	3.385	0.000	98	440896	5.00	4.89	
19 Ethyl bromide	108	3.410	3.416	-0.006	98	216636	5.00	4.81	M
20 Carbon disulfide	76	3.477	3.477	0.000	99	686458	5.00	4.93	
22 Methyl acetate	43	3.617	3.623	-0.006	97	77825	5.00	5.48	M
23 3-Chloro-1-propene	41	3.635	3.635	0.000	96	342828	5.00	4.77	
24 Methylene Chloride	84	3.806	3.806	0.000	90	253727	5.00	4.91	
* 25 t-Butyl alcohol-d10 (IS)	65	3.818	3.812	0.006	43	114997	50.0	50.0	
26 2-Methyl-2-propanol	59	3.916	3.910	0.006	100	218504	100.0	97.8	
27 Acrylonitrile	53	4.123	4.141	-0.018	98	100986	12.5	13.4	
28 Methyl tert-butyl ether	73	4.172	4.178	-0.006	95	650102	5.00	4.93	
29 trans-1,2-Dichloroethene	96	4.178	4.184	-0.006	98	270086	5.00	4.89	
30 Hexane	57	4.592	4.592	0.000	93	323680	5.00	4.80	
32 1,1-Dichloroethane	63	4.842	4.842	0.000	96	460122	5.00	4.87	
33 Isopropyl ether	45	4.903	4.897	0.006	93	771663	5.00	4.89	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 2-Chloro-1,3-butadiene	53	4.946	4.952	-0.006	91	373616	5.00	4.86	
35 Tert-butyl ethyl ether	59	5.440	5.440	0.000	97	785780	5.00	4.93	
36 2-Butanone (MEK)	43	5.647	5.659	-0.012	99	582266	50.0	54.1	
37 cis-1,2-Dichloroethene	96	5.684	5.690	-0.006	81	296129	5.00	4.92	
38 2,2-Dichloropropane	77	5.696	5.702	-0.006	72	406121	5.00	4.80	
40 Propionitrile	54	5.751	5.751	0.000	99	268381	100.0	95.6	
43 Methacrylonitrile	67	5.958	5.970	-0.012	91	653060	50.0	54.8	
44 Chlorobromomethane	128	6.019	6.025	-0.006	88	136424	5.00	4.95	
45 Tetrahydrofuran	71	6.025	6.025	0.000	72	88940	25.0	27.2	
S 42 1,2-Dichloroethene, Total	100				0			9.81	
46 Chloroform	83	6.177	6.184	-0.007	93	478420	5.00	4.87	
48 1,1,1-Trichloroethane	97	6.403	6.403	0.000	82	431195	5.00	4.81	
\$ 47 Dibromofluoromethane (Surr)	113	6.397	6.403	-0.006	94	481628	10.0	10.1	
49 Cyclohexane	56	6.488	6.494	-0.006	90	406663	5.00	4.64	
50 Carbon tetrachloride	117	6.610	6.610	0.000	95	378499	5.00	4.91	
51 1,1-Dichloropropene	75	6.610	6.616	-0.006	97	363954	5.00	4.81	
52 Isobutyl alcohol	41	6.805	6.811	-0.006	94	192500	250.0	263.1	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.854	6.854	0.000	89	93267	10.0	10.1	
54 Benzene	78	6.878	6.879	-0.001	97	1080745	5.00	4.86	
55 1,2-Dichloroethane	62	6.952	6.958	-0.006	98	288899	5.00	4.77	
56 Tert-amyl methyl ether	73	7.080	7.086	-0.006	98	722776	5.00	4.88	
* 57 Fluorobenzene (IS)	96	7.299	7.299	0.000	99	1925569	10.0	10.0	
58 n-Heptane	43	7.311	7.311	0.000	92	346244	5.00	4.77	
59 n-Butanol	56	7.714	7.720	-0.006	87	322136	437.5	455.5	
60 Trichloroethene	95	7.781	7.787	-0.006	97	297096	5.00	4.82	
61 Methylcyclohexane	83	8.086	8.086	0.000	91	479351	5.00	4.83	
62 1,2-Dichloropropane	63	8.122	8.122	0.000	96	263351	5.00	4.86	
63 2-ethoxy-2-methyl butane	87	8.140	8.141	0.000	93	433919	5.00	4.96	
65 1,4-Dioxane	88	8.226	8.220	0.006	30	40630	250.0	211.2	M
64 Methyl methacrylate	69	8.226	8.232	-0.006	90	126712	5.00	5.56	
66 Dibromomethane	93	8.238	8.238	0.000	93	135638	5.00	4.86	
67 Dichlorobromomethane	83	8.482	8.482	0.000	99	339676	5.00	4.94	
68 2-Nitropropane	41	8.762	8.768	-0.006	99	176039	25.0	26.6	
71 1-Bromo-2-chloroethane	63	8.872	8.872	0.000	98	273801	5.00	4.90	
72 cis-1,3-Dichloropropene	75	9.049	9.049	0.000	96	419879	5.00	5.09	
73 4-Methyl-2-pentanone (MIBK)	43	9.244	9.250	-0.006	96	1564692	50.0	54.3	
\$ 74 Toluene-d8 (Surr)	98	9.372	9.378	-0.006	93	1949965	10.0	10.1	
75 Toluene	92	9.457	9.457	0.000	98	715208	5.00	4.84	
76 trans-1,3-Dichloropropene	75	9.744	9.744	0.000	93	351934	5.00	5.21	
78 Ethyl methacrylate	69	9.817	9.817	0.000	88	280910	5.00	5.21	
79 1,1,2-Trichloroethane	97	9.957	9.957	0.000	90	200725	5.00	4.93	
80 Tetrachloroethene	166	10.036	10.036	0.000	98	353464	5.00	4.84	
S 77 1,3-Dichloropropene, Total	100				0			10.3	
81 1,3-Dichloropropane	76	10.128	10.128	0.000	90	335769	5.00	5.03	
82 2-Hexanone	43	10.189	10.189	0.000	96	1186297	50.0	56.7	
83 Chlorodibromomethane	129	10.347	10.347	0.000	90	255043	5.00	5.05	
84 Ethylene Dibromide	107	10.457	10.457	0.000	99	202282	5.00	5.13	
* 85 Chlorobenzene-d5 (IS)	117	10.908	10.908	0.000	85	1573561	10.0	10.0	
86 1-Chlorohexane	91	10.920	10.927	-0.007	96	407253	5.00	4.72	
87 Chlorobenzene	112	10.933	10.933	-0.001	96	861967	5.00	4.92	
89 1,1,1,2-Tetrachloroethane	131	11.024	11.018	0.006	95	301092	5.00	5.01	
90 Ethylbenzene	91	11.024	11.024	0.000	98	1432602	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
91 m-Xylene & p-Xylene	106	11.146	11.146	0.000	99	1124269	10.0	9.76	
S 88 Xylenes, Total	106				0			14.7	
92 o-Xylene	106	11.487	11.487	0.000	96	565844	5.00	4.92	
93 Styrene	104	11.499	11.500	-0.001	95	965722	5.00	5.05	
94 Bromoform	173	11.658	11.658	0.000	97	156254	5.00	5.16	
95 Isopropylbenzene	105	11.792	11.792	0.000	95	1471229	5.00	4.93	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.938	11.939	-0.001	93	777732	10.0	10.1	
100 Bromobenzene	156	12.054	12.054	0.000	89	381166	5.00	4.88	
99 1,1,2,2-Tetrachloroethane	83	12.054	12.054	0.000	74	250466	5.00	4.92	
101 trans-1,4-Dichloro-2-butene	53	12.079	12.079	0.000	95	677622	50.0	51.4	
102 1,2,3-Trichloropropane	110	12.097	12.097	0.000	81	69255	5.00	4.83	
103 N-Propylbenzene	91	12.133	12.128	0.005	99	1751497	5.00	4.91	
104 2-Chlorotoluene	126	12.207	12.207	0.000	97	375595	5.00	4.84	
105 1,3,5-Trimethylbenzene	105	12.274	12.274	0.000	94	1297813	5.00	4.90	
106 4-Chlorotoluene	126	12.298	12.304	-0.006	97	387922	5.00	4.88	
107 tert-Butylbenzene	134	12.518	12.518	0.000	93	291473	5.00	4.77	
108 Pentachloroethane	167	12.548	12.548	0.000	91	229539	5.00	4.95	
109 1,2,4-Trimethylbenzene	105	12.560	12.560	0.000	97	1345643	5.00	4.92	
110 sec-Butylbenzene	105	12.682	12.682	0.000	94	1640185	5.00	4.91	
111 1,3-Dichlorobenzene	146	12.780	12.780	0.000	98	778508	5.00	4.88	
112 4-Isopropyltoluene	119	12.792	12.792	0.000	97	1470005	5.00	4.90	
* 113 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	92	937641	10.0	10.0	M
114 1,4-Dichlorobenzene	146	12.853	12.853	0.000	95	799706	5.00	4.88	
115 1,2,3-Trimethylbenzene	120	12.871	12.871	0.000	98	604917	5.00	4.88	
116 Benzyl chloride	126	12.938	12.938	0.000	98	114150	5.00	5.36	
119 n-Butylbenzene	92	13.091	13.091	0.000	97	743324	5.00	4.97	
120 1,2-Dichlorobenzene	146	13.121	13.121	0.000	99	729946	5.00	4.90	
118 p-Diethylbenzene	119	13.145	13.146	-0.001	86	749911	5.00	4.85	
123 1,2-Dibromo-3-Chloropropane	155	13.670	13.670	0.000	90	40213	5.00	5.17	
124 1,3,5-Trichlorobenzene	180	13.798	13.798	0.000	98	665722	5.00	4.94	
125 1,2,4-Trichlorobenzene	180	14.225	14.225	0.000	94	576353	5.00	5.06	
126 Hexachlorobutadiene	225	14.310	14.310	0.000	97	293536	5.00	4.86	
127 Naphthalene	128	14.407	14.408	-0.001	96	881114	5.00	5.17	
128 1,2,3-Trichlorobenzene	180	14.548	14.554	-0.006	95	467448	5.00	5.03	
129 2-Methylnaphthalene	142	15.157	15.157	0.000	92	469598	5.00	5.40	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00034

Amount Added: 5.00

Units: uL

MSV_LL_#2_826_00038

Amount Added: 5.00

Units: uL

MSV_LL_GAS826_00063

Amount Added: 5.00

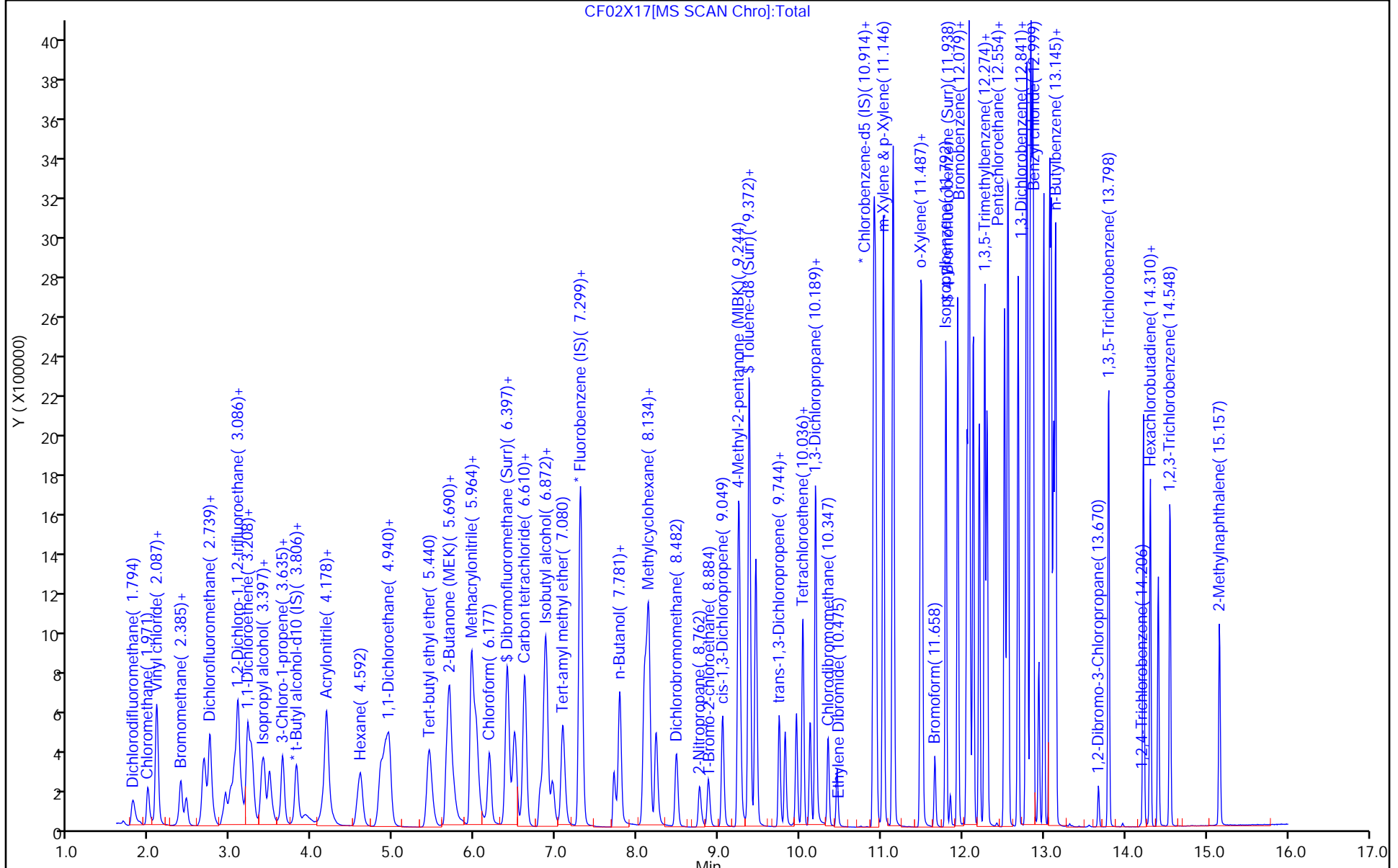
Units: uL

MSV_HP25_ISSS_00046

Amount Added: 1.00

Units: uL

Run Reagent



Eurofins Lancaster Laboratories Env, LLC

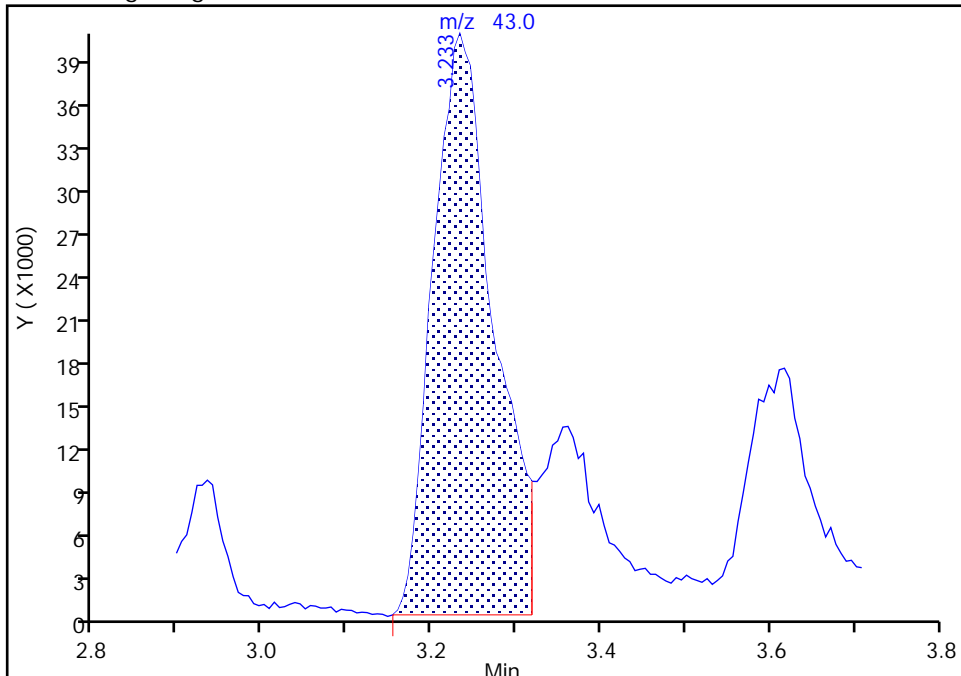
Data File:	\\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X17.D		
Injection Date:	02-Feb-2022 20:26:30	Instrument ID:	10193
Lims ID:	IC std5 5		
Client ID:			
Operator ID:	jml01693	ALS Bottle#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	17

16 Acetone, CAS: 67-64-1

Signal: 1

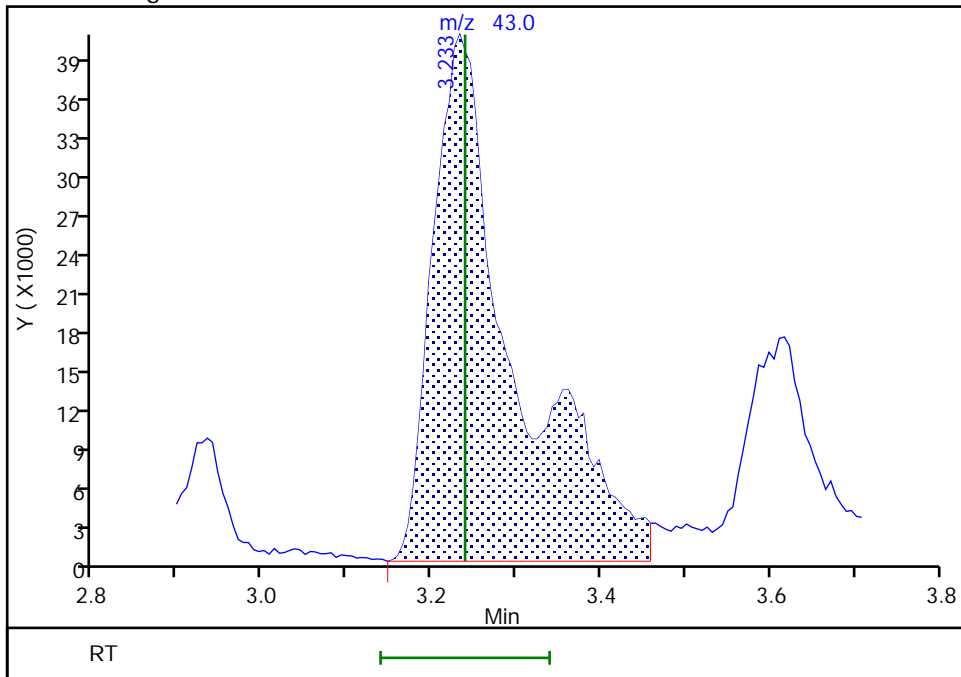
RT: 3.23
 Area: 203455
 Amount: 40.146790
 Amount Units: ug/l

Processing Integration Results



RT: 3.23
 Area: 270333
 Amount: 51.405272
 Amount Units: ug/l

Manual Integration Results



Reviewer: kellerk, 08-Feb-2022 19:09:59
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X17.D

Injection Date: 02-Feb-2022 20:26:30 Instrument ID: 10193

Lims ID: IC std5 5

Client ID:

Operator ID: jml01693

ALS Bottle#: 17 Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

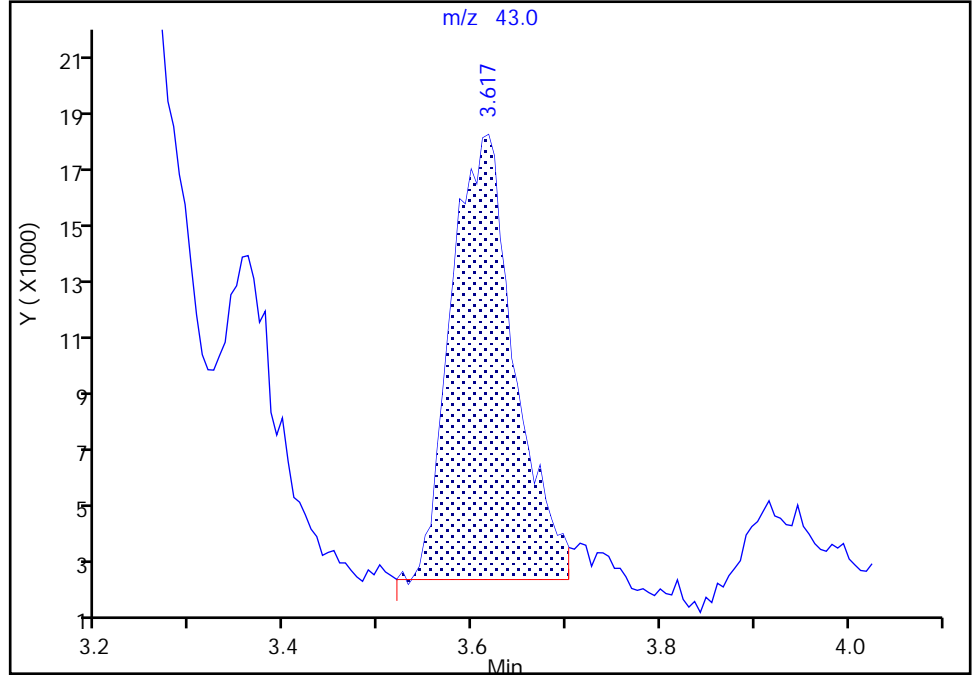
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Methyl acetate, CAS: 79-20-9

Signal: 1

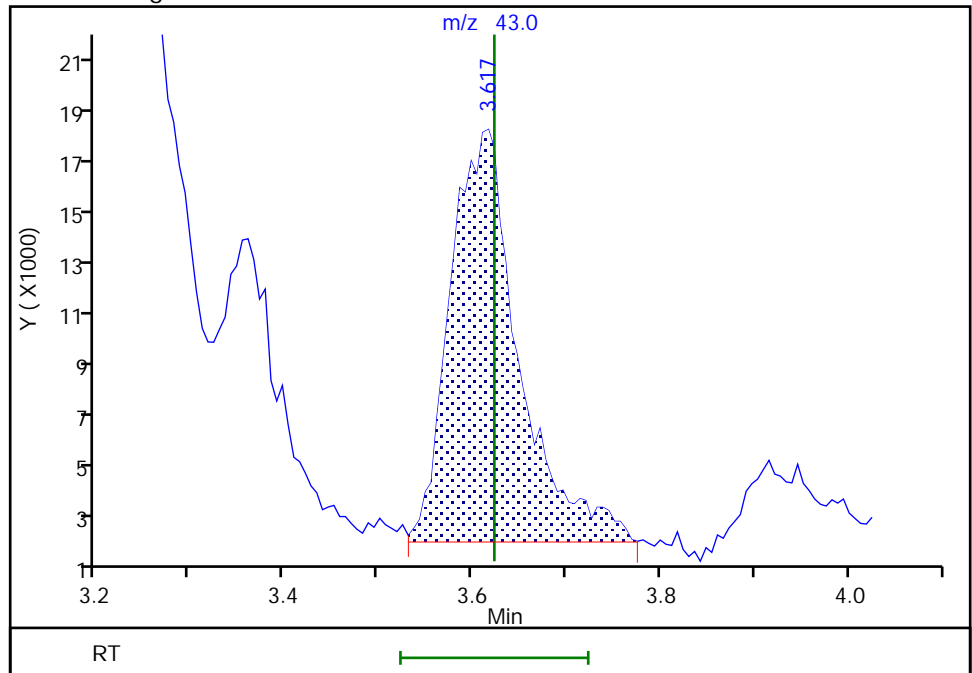
RT: 3.62
Area: 69689
Amount: 4.787841
Amount Units: ug/l

Processing Integration Results



RT: 3.62
Area: 77825
Amount: 5.475017
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:00:54
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins Lancaster Laboratories Env, LLC

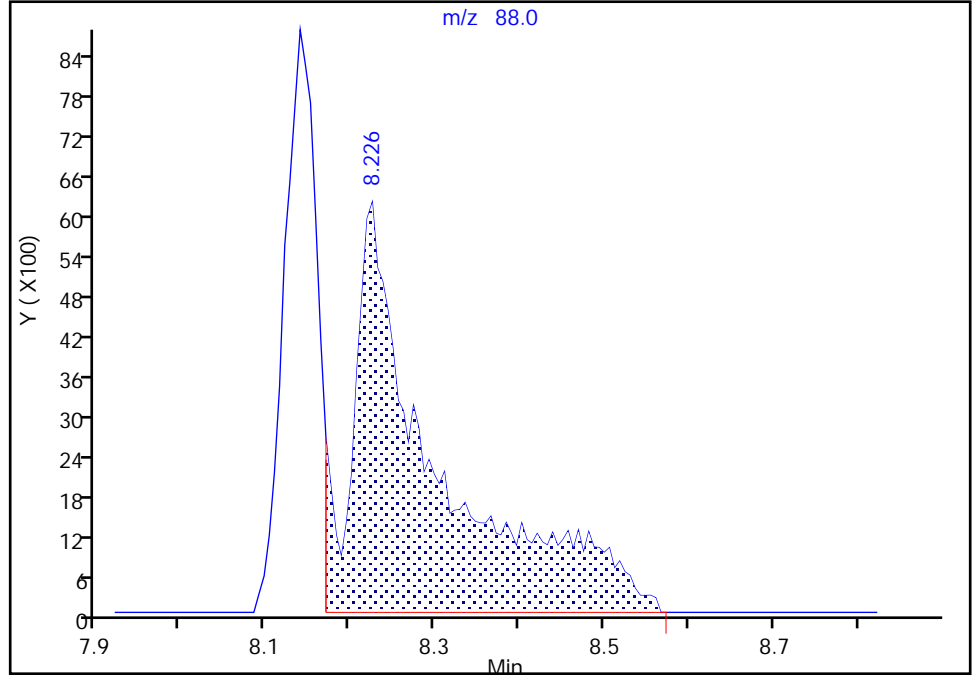
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X17.D
Injection Date: 02-Feb-2022 20:26:30 Instrument ID: 10193
Lims ID: IC std5 5
Client ID:
Operator ID: jml01693 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

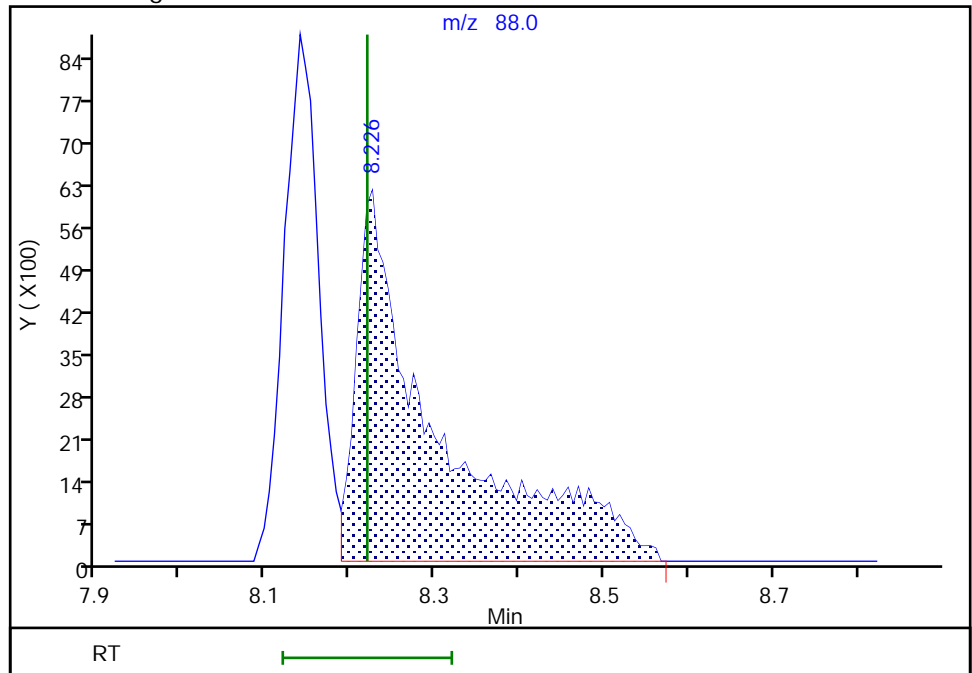
RT: 8.23
Area: 42693
Amount: 228.9781
Amount Units: ug/l

Processing Integration Results



RT: 8.23
Area: 40630
Amount: 211.1751
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:01:20
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

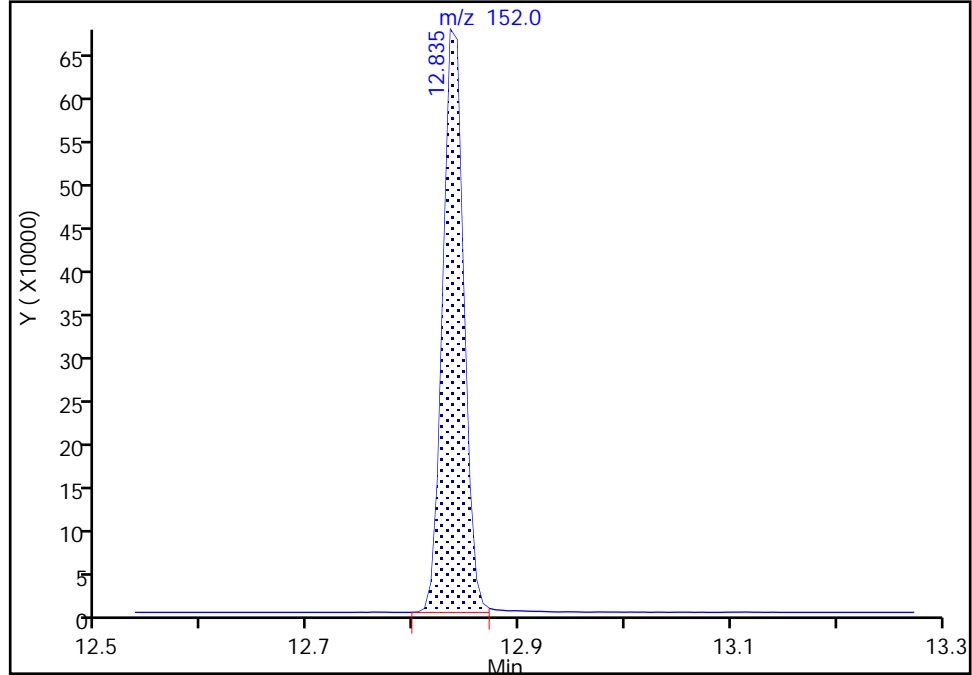
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X17.D
Injection Date: 02-Feb-2022 20:26:30 Instrument ID: 10193
Lims ID: IC std5 5
Client ID:
Operator ID: jml01693 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 113 1,4-Dichlorobenzene-d4, CAS: 3855-82-1
Signal: 1

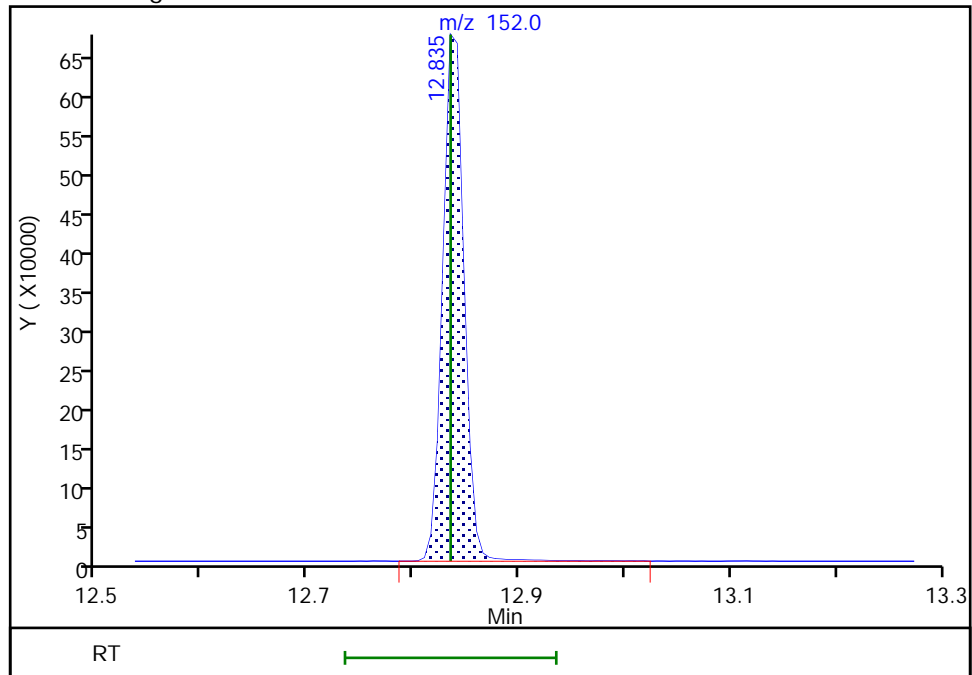
RT: 12.83
Area: 929700
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results



RT: 12.83
Area: 937641
Amount: 10.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: kellerk, 08-Feb-2022 18:38:30
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 448 of 643

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X18.D
 Lims ID: ICIS 10
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 02-Feb-2022 20:49:30 ALS Bottle#: 18 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0049623-018
 Misc. Info.: IC STD10 LG
 Operator ID: jml01693 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 08-Feb-2022 19:30:04 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1661

First Level Reviewer: longj

Date: 07-Feb-2022 13:58:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.794	1.794	0.000	99	599509	10.0	10.2	
3 Chloromethane	50	1.983	1.983	0.000	99	635499	10.0	9.90	
5 Vinyl chloride	62	2.081	2.081	0.000	98	684714	10.0	10.0	
4 Butadiene	39	2.093	2.093	0.000	93	627025	10.0	10.1	
6 Bromomethane	94	2.385	2.385	0.000	90	519587	10.0	10.0	
7 Chloroethane	64	2.452	2.452	0.000	100	397384	10.0	9.88	
8 Dichlorofluoromethane	67	2.678	2.678	0.000	97	959416	10.0	9.72	
9 Trichlorofluoromethane	101	2.739	2.739	0.000	98	990677	10.0	10.2	
225 Pentane	43	2.739	2.739	0.000	98	696954	10.0	10.1	
11 Ethyl ether	59	2.934	2.934	0.000	90	358205	10.0	10.1	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.026	3.026	0.000	92	630944	10.0	9.72	
13 Acrolein	56	3.086	3.086	0.000	99	2765672	500.0	550.0	
14 1,1-Dichloroethene	96	3.208	3.208	0.000	97	487396	10.0	10.2	
16 Acetone	43	3.239	3.239	0.000	99	585346	100.0	104.0	
15 112TCTFE	101	3.257	3.257	0.000	91	495443	10.0	10.3	
18 Isopropyl alcohol	45	3.391	3.391	0.000	40	290781	200.0	232.8	
17 Iodomethane	142	3.385	3.385	0.000	98	912388	10.0	10.2	
19 Ethyl bromide	108	3.410	3.410	0.000	99	457435	10.0	10.2	
20 Carbon disulfide	76	3.477	3.477	0.000	99	1453194	10.0	10.5	
22 Methyl acetate	43	3.617	3.617	0.000	96	166489	10.0	10.9	M
23 3-Chloro-1-propene	41	3.635	3.635	0.000	90	708663	10.0	9.93	
24 Methylene Chloride	84	3.806	3.806	0.000	89	521458	10.0	10.1	
* 25 t-Butyl alcohol-d10 (IS)	65	3.818	3.818	0.000	88	123127	50.0	50.0	M
26 2-Methyl-2-propanol	59	3.916	3.916	0.000	99	484583	200.0	202.5	
27 Acrylonitrile	53	4.123	4.123	0.000	98	201433	25.0	24.9	
28 Methyl tert-butyl ether	73	4.166	4.166	0.000	95	1318121	10.0	10.1	
29 trans-1,2-Dichloroethene	96	4.178	4.178	0.000	99	560795	10.0	10.2	
30 Hexane	57	4.586	4.586	0.000	92	685256	10.0	10.2	
32 1,1-Dichloroethane	63	4.836	4.836	0.000	96	950690	10.0	10.1	
33 Isopropyl ether	45	4.897	4.897	0.000	93	1579295	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 2-Chloro-1,3-butadiene	53	4.946	4.946	0.000	91	784709	10.0	10.3	
35 Tert-butyl ethyl ether	59	5.440	5.440	0.000	97	1615992	10.0	10.2	
36 2-Butanone (MEK)	43	5.653	5.653	0.000	99	1204819	100.0	104.5	
37 cis-1,2-Dichloroethene	96	5.684	5.684	0.000	81	606505	10.0	10.1	
38 2,2-Dichloropropane	77	5.696	5.696	0.000	87	845110	10.0	10.1	
40 Propionitrile	54	5.751	5.751	0.000	99	679910	200.0	226.2	
43 Methacrylonitrile	67	5.964	5.964	0.000	90	1355605	100.0	106.3	
44 Chlorobromomethane	128	6.025	6.025	0.000	87	271054	10.0	9.90	
45 Tetrahydrofuran	71	6.025	6.025	0.000	71	182006	50.0	52.0	
46 Chloroform	83	6.183	6.183	0.000	93	985966	10.0	10.1	
48 1,1,1-Trichloroethane	97	6.397	6.397	0.000	98	906289	10.0	10.2	
\$ 47 Dibromofluoromethane (Surr)	113	6.397	6.397	0.000	75	481651	10.0	10.1	
49 Cyclohexane	56	6.488	6.488	0.000	89	876811	10.0	10.1	
50 Carbon tetrachloride	117	6.610	6.610	0.000	97	802154	10.0	10.5	
51 1,1-Dichloropropene	75	6.616	6.616	0.000	96	772206	10.0	10.3	
52 Isobutyl alcohol	41	6.805	6.805	0.000	95	443956	500.0	566.6	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.854	6.854	0.000	97	92831	10.0	10.1	
54 Benzene	78	6.878	6.878	0.000	96	2243434	10.0	10.2	
55 1,2-Dichloroethane	62	6.958	6.958	0.000	98	597042	10.0	9.91	
56 Tert-amyl methyl ether	73	7.086	7.086	0.000	98	1490251	10.0	10.1	
* 57 Fluorobenzene (IS)	96	7.299	7.299	0.000	99	1913666	10.0	10.0	
58 n-Heptane	43	7.305	7.305	0.000	93	736828	10.0	10.2	
59 n-Butanol	56	7.708	7.708	0.000	89	783296	875.0	1034.5	
60 Trichloroethene	95	7.781	7.781	0.000	97	623476	10.0	10.2	
61 Methylcyclohexane	83	8.086	8.086	0.000	91	1030029	10.0	10.5	
62 1,2-Dichloropropane	63	8.122	8.122	0.000	96	557697	10.0	10.4	
63 2-ethoxy-2-methyl butane	87	8.140	8.140	0.000	93	894503	10.0	10.3	
65 1,4-Dioxane	88	8.220	8.220	0.000	32	108872	500.0	528.5	M
64 Methyl methacrylate	69	8.226	8.226	0.000	90	268737	10.0	11.0	
66 Dibromomethane	93	8.232	8.232	0.000	95	282811	10.0	10.2	
67 Dichlorobromomethane	83	8.482	8.482	0.000	99	714556	10.0	10.5	
68 2-Nitropropane	41	8.762	8.762	0.000	99	377150	50.0	53.3	
71 1-Bromo-2-chloroethane	63	8.872	8.872	0.000	98	579703	10.0	10.4	
72 cis-1,3-Dichloropropene	75	9.049	9.049	0.000	96	869218	10.0	10.6	
73 4-Methyl-2-pentanone (MIBK)	43	9.244	9.244	0.000	96	3287003	100.0	106.5	
\$ 74 Toluene-d8 (Surr)	98	9.378	9.378	0.000	93	1953958	10.0	9.96	
75 Toluene	92	9.457	9.457	0.000	98	1487302	10.0	9.96	
76 trans-1,3-Dichloropropene	75	9.744	9.744	0.000	93	740700	10.0	10.8	
78 Ethyl methacrylate	69	9.817	9.817	0.000	88	594703	10.0	10.9	
79 1,1,2-Trichloroethane	97	9.957	9.957	0.000	91	408430	10.0	9.92	
80 Tetrachloroethene	166	10.036	10.036	0.000	98	734499	10.0	9.93	
81 1,3-Dichloropropane	76	10.122	10.122	0.000	90	687547	10.0	10.2	
82 2-Hexanone	43	10.189	10.189	0.000	96	2479902	100.0	110.7	
83 Chlorodibromomethane	129	10.347	10.347	0.000	90	542302	10.0	10.6	
84 Ethylene Dibromide	107	10.457	10.457	0.000	99	417126	10.0	10.4	
* 85 Chlorobenzene-d5 (IS)	117	10.908	10.908	0.000	84	1592159	10.0	10.0	
86 1-Chlorohexane	91	10.920	10.920	0.000	96	853674	10.0	9.78	
87 Chlorobenzene	112	10.933	10.933	0.000	95	1769503	10.0	9.98	
89 1,1,1,2-Tetrachloroethane	131	11.024	11.024	0.000	96	637124	10.0	10.5	
90 Ethylbenzene	91	11.024	11.024	0.000	98	2972568	10.0	10.1	
91 m-Xylene & p-Xylene	106	11.146	11.146	0.000	100	2346847	20.0	20.1	
92 o-Xylene	106	11.481	11.481	0.000	97	1159564	10.0	9.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
93 Styrene	104	11.499	11.499	0.000	94	1996506	10.0	10.3	
94 Bromoform	173	11.658	11.658	0.000	98	333282	10.0	10.9	
95 Isopropylbenzene	105	11.792	11.792	0.000	95	3059350	10.0	10.1	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.938	11.938	0.000	93	778258	10.0	9.96	
100 Bromobenzene	156	12.054	12.054	0.000	90	783108	10.0	10.1	
99 1,1,2,2-Tetrachloroethane	83	12.054	12.054	0.000	75	520715	10.0	10.3	
101 trans-1,4-Dichloro-2-butene	53	12.079	12.079	0.000	95	1427235	100.0	108.9	
102 1,2,3-Trichloropropane	110	12.097	12.097	0.000	81	143350	10.0	10.1	
103 N-Propylbenzene	91	12.133	12.133	0.000	98	3635758	10.0	10.3	
104 2-Chlorotoluene	126	12.207	12.207	0.000	97	777981	10.0	10.1	
105 1,3,5-Trimethylbenzene	105	12.274	12.274	0.000	94	2683430	10.0	10.2	
106 4-Chlorotoluene	126	12.298	12.298	0.000	97	808031	10.0	10.2	
107 tert-Butylbenzene	134	12.518	12.518	0.000	93	610691	10.0	10.1	
108 Pentachloroethane	167	12.548	12.548	0.000	92	495806	10.0	10.8	
109 1,2,4-Trimethylbenzene	105	12.560	12.560	0.000	96	2795722	10.0	10.3	
110 sec-Butylbenzene	105	12.682	12.682	0.000	94	3405601	10.0	10.3	
111 1,3-Dichlorobenzene	146	12.780	12.780	0.000	98	1608089	10.0	10.1	
112 4-Isopropyltoluene	119	12.792	12.792	0.000	97	3084750	10.0	10.4	
* 113 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	92	931787	10.0	10.0	M
114 1,4-Dichlorobenzene	146	12.853	12.853	0.000	95	1616914	10.0	9.92	
115 1,2,3-Trimethylbenzene	120	12.871	12.871	0.000	98	1245084	10.0	10.1	
116 Benzyl chloride	126	12.938	12.938	0.000	98	248227	10.0	11.7	
119 n-Butylbenzene	92	13.091	13.091	0.000	97	1548185	10.0	10.4	
120 1,2-Dichlorobenzene	146	13.121	13.121	0.000	99	1494727	10.0	10.1	
118 p-Diethylbenzene	119	13.145	13.145	0.000	86	1572599	10.0	10.2	
123 1,2-Dibromo-3-Chloropropane	155	13.670	13.670	0.000	90	87737	10.0	11.4	
124 1,3,5-Trichlorobenzene	180	13.798	13.798	0.000	98	1371402	10.0	10.2	
125 1,2,4-Trichlorobenzene	180	14.225	14.225	0.000	94	1185637	10.0	10.5	
126 Hexachlorobutadiene	225	14.310	14.310	0.000	97	613587	10.0	10.2	
127 Naphthalene	128	14.407	14.407	0.000	97	1816545	10.0	10.7	
128 1,2,3-Trichlorobenzene	180	14.548	14.548	0.000	96	972096	10.0	10.5	
129 2-Methylnaphthalene	142	15.157	15.157	0.000	92	1026191	10.0	11.9	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00034

Amount Added: 10.00

Units: uL

MSV_LL_#2_826_00038

Amount Added: 10.00

Units: uL

MSV_LL_GAS826_00063

Amount Added: 10.00

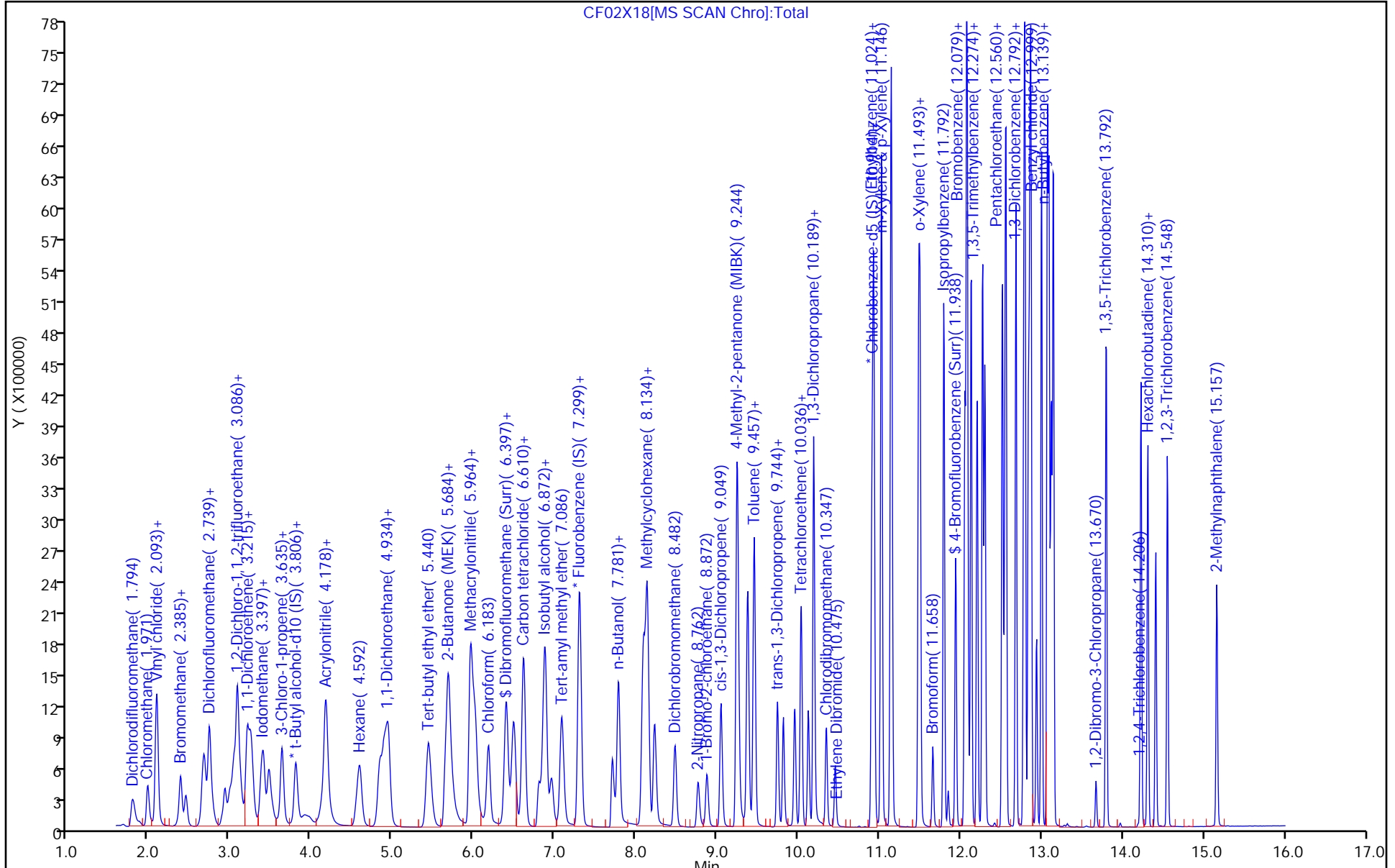
Units: uL

MSV_HP25_ISSS_00046

Amount Added: 1.00

Units: uL

Run Reagent



Euofins Lancaster Laboratories Env, LLC

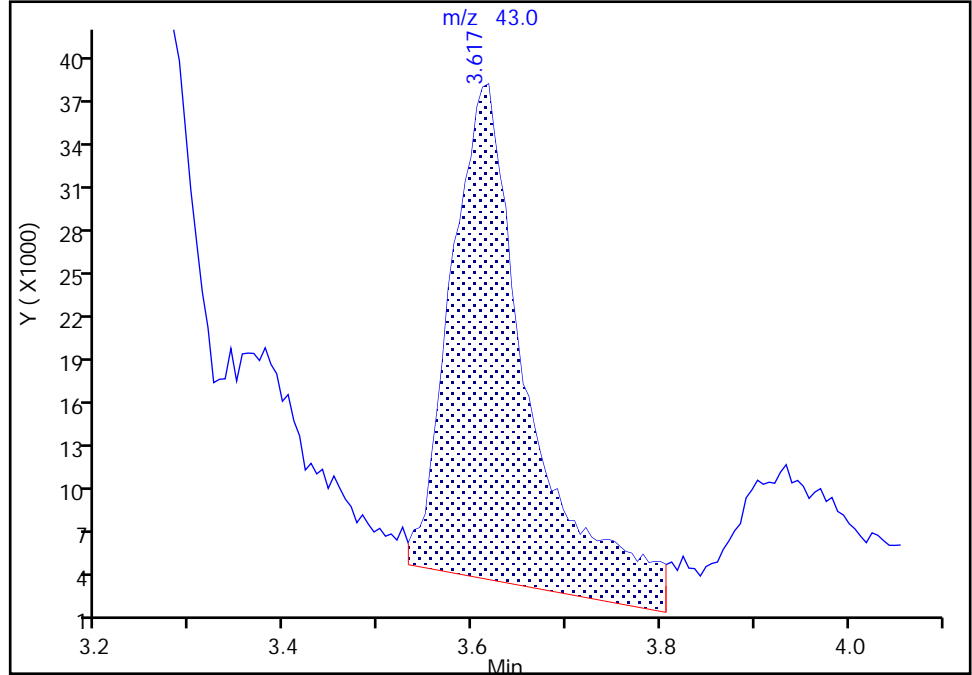
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X18.D
Injection Date: 02-Feb-2022 20:49:30 Instrument ID: 10193
Lims ID: ICIS 10
Client ID:
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Methyl acetate, CAS: 79-20-9

Signal: 1

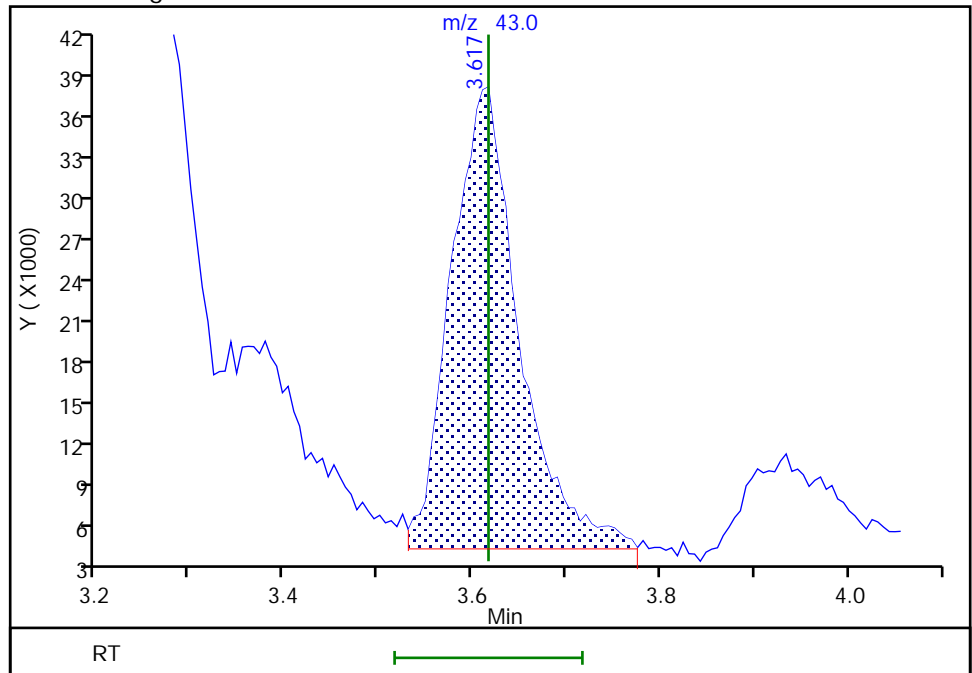
RT: 3.62
Area: 196118
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results



RT: 3.62
Area: 166489
Amount: 10.939189
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 13:49:30
Audit Action: Manually Integrated

Audit Reason: Baseline

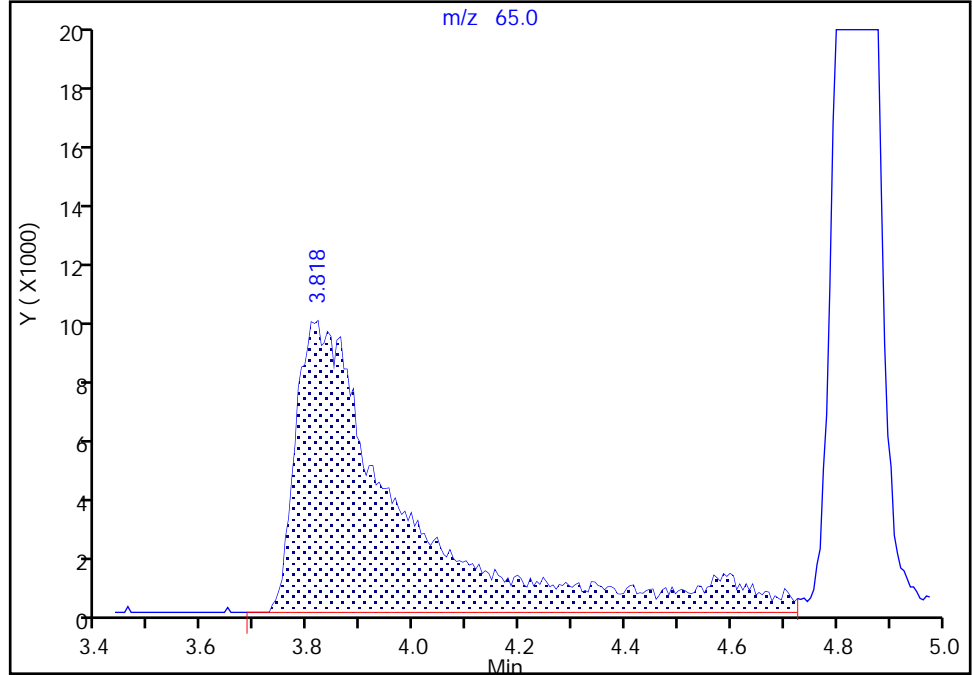
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X18.D
Injection Date: 02-Feb-2022 20:49:30 Instrument ID: 10193
Lims ID: ICIS 10
Client ID:
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 25 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2
Signal: 1

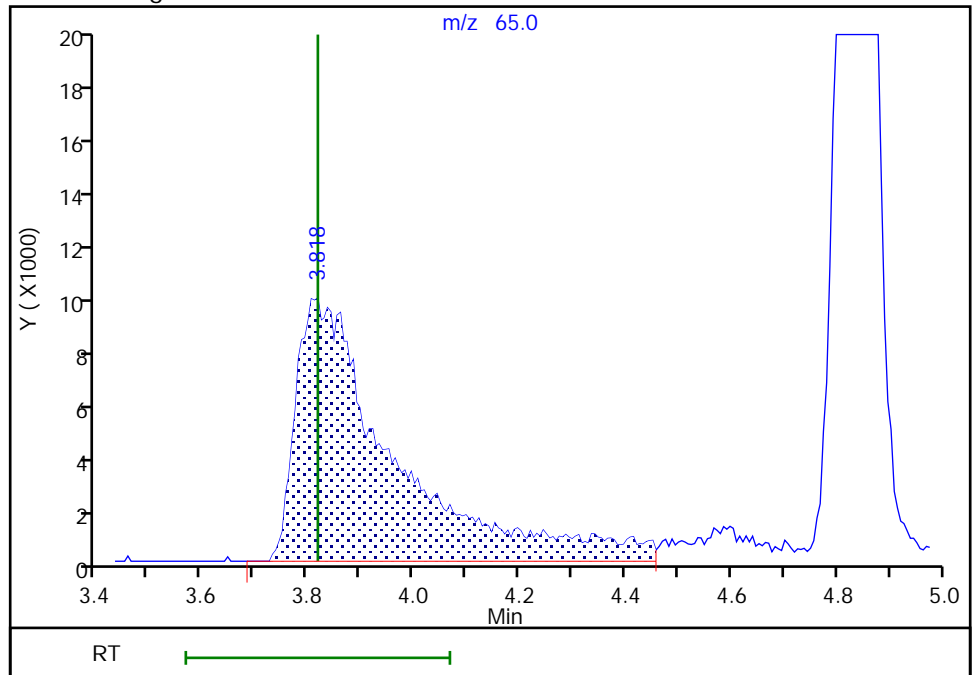
RT: 3.82
Area: 135037
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 3.82
Area: 123127
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: kellerk, 08-Feb-2022 19:06:40
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC

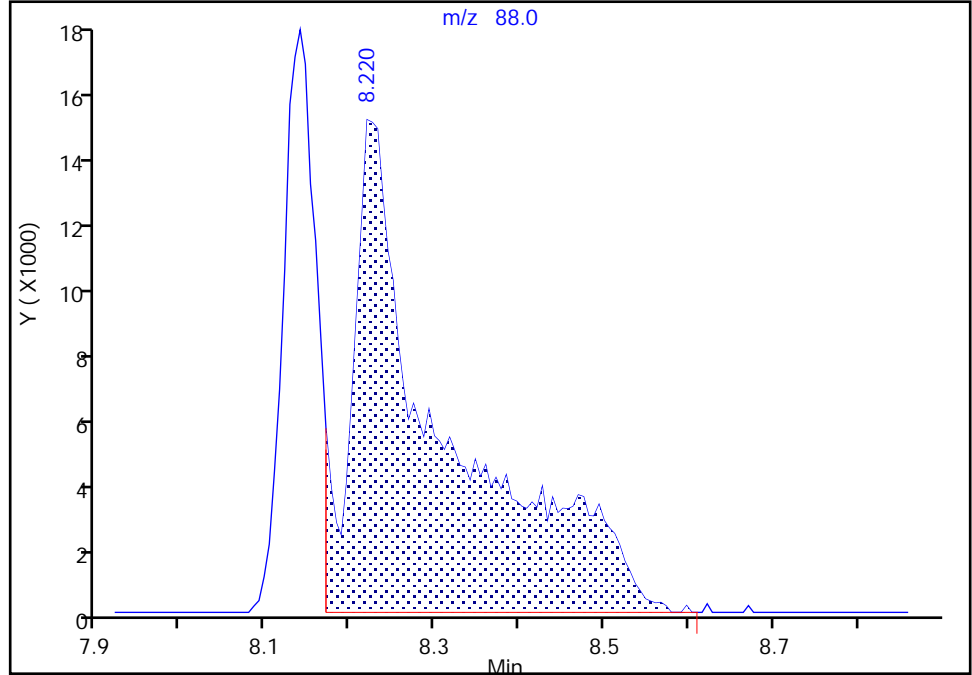
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X18.D
Injection Date: 02-Feb-2022 20:49:30 Instrument ID: 10193
Lims ID: ICIS 10
Client ID:
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

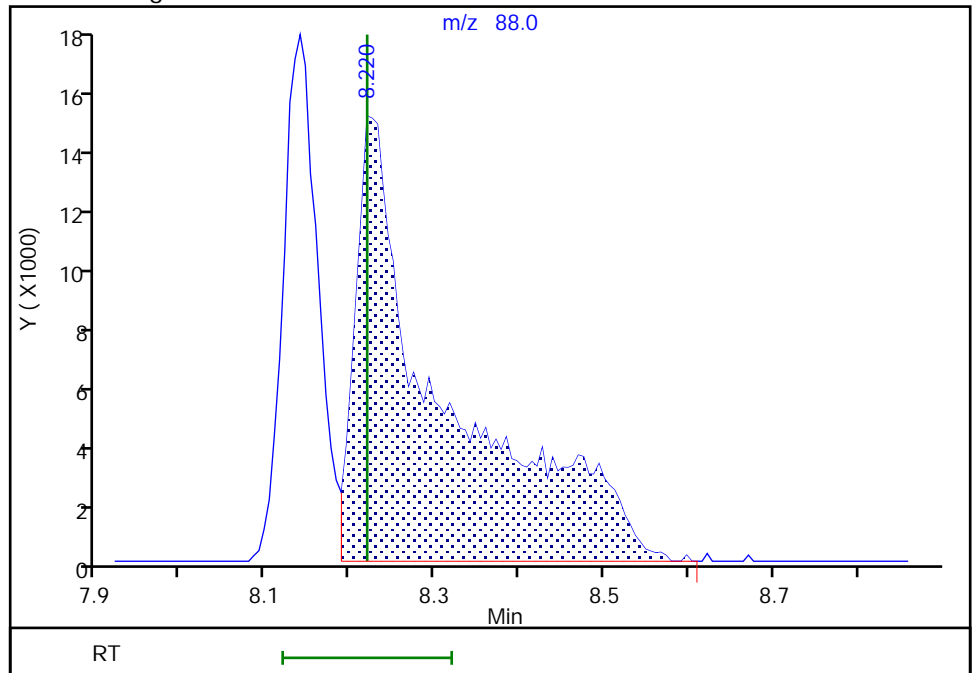
RT: 8.22
Area: 113288
Amount: 500.0000
Amount Units: ug/l

Processing Integration Results



RT: 8.22
Area: 108872
Amount: 528.5005
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 13:50:06
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

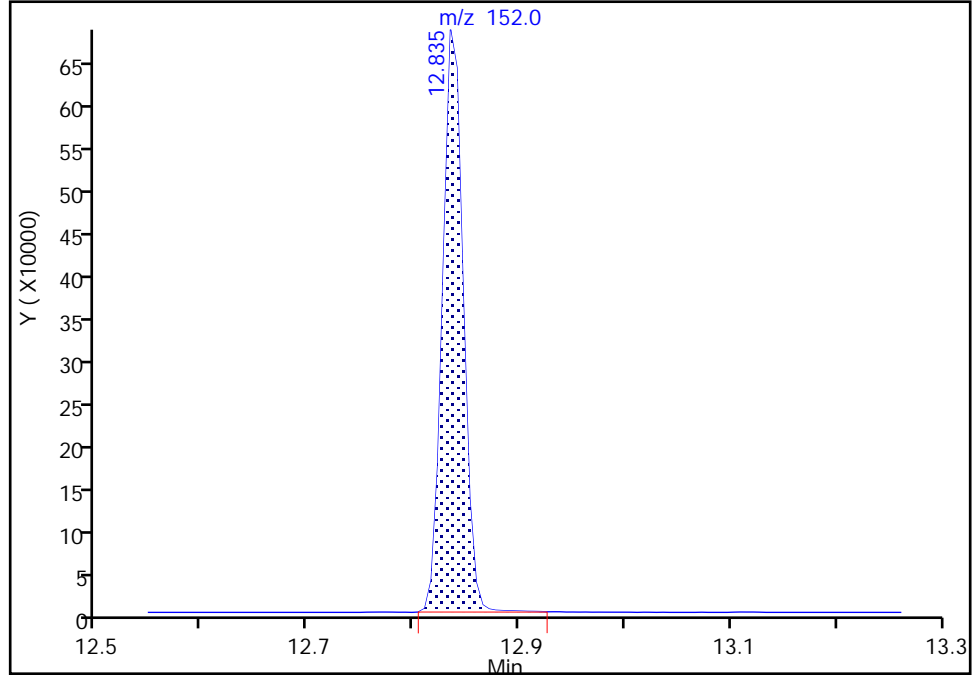
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X18.D
Injection Date: 02-Feb-2022 20:49:30 Instrument ID: 10193
Lims ID: ICIS 10
Client ID:
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 113 1,4-Dichlorobenzene-d4, CAS: 3855-82-1
Signal: 1

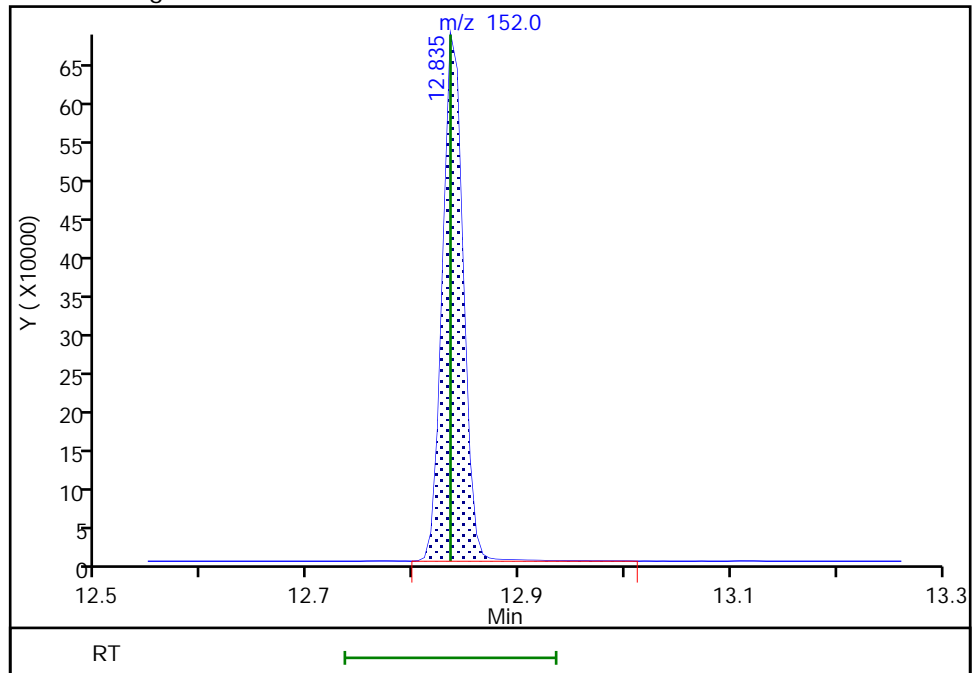
RT: 12.83
Area: 927299
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results



RT: 12.83
Area: 931787
Amount: 10.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: kellerk, 08-Feb-2022 18:39:14
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Lims ID: IC std7 25
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 02-Feb-2022 21:11:30 ALS Bottle#: 19 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0049623-019
 Misc. Info.: IC STD25 LG
 Operator ID: jml01693 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 08-Feb-2022 19:29:20 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1661

First Level Reviewer: kellerk

Date: 08-Feb-2022 19:29:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.794	1.794	0.000	99	1465831	25.0	23.4	
3 Chloromethane	50	1.983	1.977	0.006	99	1616179	25.0	23.7	
5 Vinyl chloride	62	2.087	2.087	0.000	98	1700264	25.0	23.5	
4 Butadiene	39	2.093	2.093	0.000	93	1511989	25.0	23.0	
6 Bromomethane	94	2.385	2.386	-0.001	90	1315264	25.0	23.9	
7 Chloroethane	64	2.452	2.453	-0.001	100	1016941	25.0	23.8	
8 Dichlorofluoromethane	67	2.678	2.678	0.000	97	2447758	25.0	23.4	
9 Trichlorofluoromethane	101	2.733	2.739	-0.006	98	2330802	25.0	22.7	
225 Pentane	43	2.739	2.745	-0.006	96	1718640	25.0	23.6	
11 Ethyl ether	59	2.934	2.940	-0.006	91	930811	25.0	24.8	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.032	3.032	0.000	93	1565426	25.0	22.7	
13 Acrolein	56	3.087	3.093	-0.006	99	7020882	1250.1	1389.9	
14 1,1-Dichloroethene	96	3.208	3.215	-0.007	97	1205671	25.0	23.7	
16 Acetone	43	3.239	3.239	0.000	99	1428072	250.0	252.5	
15 112TCTFE	101	3.257	3.263	-0.006	91	1218524	25.0	23.9	
18 Isopropyl alcohol	45	3.397	3.379	0.018	35	701269	500.0	559.0	
17 Iodomethane	142	3.385	3.385	0.000	98	2307106	25.0	24.3	
19 Ethyl bromide	108	3.410	3.416	-0.006	98	1157945	25.0	24.4	
20 Carbon disulfide	76	3.477	3.477	0.000	99	3700679	25.0	25.2	
22 Methyl acetate	43	3.617	3.623	-0.006	96	418138	25.0	27.3	M
23 3-Chloro-1-propene	41	3.635	3.635	0.000	91	1850674	25.0	24.4	
24 Methylene Chloride	84	3.806	3.806	0.000	90	1332462	25.0	24.4	
* 25 t-Butyl alcohol-d10 (IS)	65	3.836	3.812	0.024	86	123688	50.0	50.0	
26 2-Methyl-2-propanol	59	3.934	3.910	0.024	100	1125138	500.0	468.0	
27 Acrylonitrile	53	4.123	4.141	-0.018	98	521691	62.5	64.2	
28 Methyl tert-butyl ether	73	4.178	4.178	0.000	94	3412424	25.0	24.5	
29 trans-1,2-Dichloroethene	96	4.178	4.184	-0.006	99	1426126	25.0	24.5	
30 Hexane	57	4.592	4.592	0.000	92	1705685	25.0	24.0	
32 1,1-Dichloroethane	63	4.836	4.842	-0.006	96	2447137	25.0	24.5	
33 Isopropyl ether	45	4.897	4.897	0.000	93	4142589	25.0	24.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 2-Chloro-1,3-butadiene	53	4.946	4.952	-0.006	91	1989610	25.0	24.6	
35 Tert-butyl ethyl ether	59	5.446	5.440	0.006	97	4167315	25.0	24.8	
36 2-Butanone (MEK)	43	5.653	5.659	-0.006	99	2856668	250.0	246.7	
37 cis-1,2-Dichloroethene	96	5.690	5.690	0.000	81	1561762	25.0	24.6	
38 2,2-Dichloropropane	77	5.702	5.702	0.000	87	2151214	25.0	24.1	
40 Propionitrile	54	5.745	5.751	-0.006	99	1577010	500.0	522.3	
43 Methacrylonitrile	67	5.970	5.970	0.000	91	3390156	250.0	264.6	
44 Chlorobromomethane	128	6.019	6.025	-0.006	93	700876	25.0	24.1	
45 Tetrahydrofuran	71	6.031	6.025	0.006	85	451853	125.0	128.4	
S 42 1,2-Dichloroethene, Total	100				0			49.1	
46 Chloroform	83	6.183	6.184	-0.001	93	2526526	25.0	24.4	
48 1,1,1-Trichloroethane	97	6.403	6.403	0.000	98	2290676	25.0	24.2	
\$ 47 Dibromofluoromethane (Surr)	113	6.403	6.403	0.000	51	498920	10.0	9.87	
49 Cyclohexane	56	6.494	6.494	0.000	90	2172337	25.0	23.5	
50 Carbon tetrachloride	117	6.610	6.610	0.000	96	2038969	25.0	25.1	
51 1,1-Dichloropropene	75	6.622	6.616	0.006	96	1930599	25.0	24.2	
52 Isobutyl alcohol	41	6.805	6.811	-0.006	94	1042186	1250.0	1324.1	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.860	6.854	0.006	88	95315	10.0	9.79	
54 Benzene	78	6.885	6.879	0.006	96	5768074	25.0	24.6	
55 1,2-Dichloroethane	62	6.964	6.958	0.006	98	1501515	25.0	23.5	
56 Tert-amyl methyl ether	73	7.086	7.086	0.000	98	3843125	25.0	24.6	
* 57 Fluorobenzene (IS)	96	7.305	7.299	0.006	99	2030561	10.0	10.0	
58 n-Heptane	43	7.311	7.311	0.000	92	1791612	25.0	23.4	
59 n-Butanol	56	7.708	7.720	-0.012	88	1963467	2187.5	2581.4	
60 Trichloroethene	95	7.787	7.787	0.000	97	1578146	25.0	24.3	
61 Methylcyclohexane	83	8.092	8.086	0.006	90	2540467	25.0	24.3	
62 1,2-Dichloropropane	63	8.128	8.122	0.006	96	1431525	25.0	25.1	
63 2-ethoxy-2-methyl butane	87	8.147	8.141	0.006	94	2332622	25.0	25.3	
65 1,4-Dioxane	88	8.220	8.220	0.000	33	273127	1250.0	1319.8	M
64 Methyl methacrylate	69	8.226	8.232	-0.006	90	680147	25.0	27.7	
66 Dibromomethane	93	8.238	8.238	0.000	94	721062	25.0	24.5	
67 Dichlorobromomethane	83	8.482	8.482	0.000	100	1841061	25.0	25.4	
68 2-Nitropropane	41	8.768	8.768	0.000	98	955876	125.0	134.5	
71 1-Bromo-2-chloroethane	63	8.878	8.872	0.006	99	1459153	25.0	24.8	
72 cis-1,3-Dichloropropene	75	9.049	9.049	0.000	96	2296691	25.0	26.4	
73 4-Methyl-2-pentanone (MIBK)	43	9.250	9.250	0.000	96	8141984	250.0	262.6	
\$ 74 Toluene-d8 (Surr)	98	9.378	9.378	0.000	93	2050702	10.0	10.2	
75 Toluene	92	9.457	9.457	0.000	98	3845159	25.0	25.2	
76 trans-1,3-Dichloropropene	75	9.744	9.744	0.000	93	1962835	25.0	28.1	
78 Ethyl methacrylate	69	9.817	9.817	0.000	88	1528446	25.0	27.5	
79 1,1,2-Trichloroethane	97	9.957	9.957	0.000	90	1036474	25.0	24.7	
80 Tetrachloroethene	166	10.036	10.036	0.000	98	1856466	25.0	24.6	
S 77 1,3-Dichloropropene, Total	100				0			54.5	
81 1,3-Dichloropropane	76	10.128	10.128	0.000	90	1728377	25.0	25.0	
82 2-Hexanone	43	10.189	10.189	0.000	95	6243001	250.0	277.4	
83 Chlorodibromomethane	129	10.347	10.347	0.000	90	1419401	25.0	27.2	
84 Ethylene Dibromide	107	10.457	10.457	0.000	99	1056041	25.0	25.9	
* 85 Chlorobenzene-d5 (IS)	117	10.908	10.908	0.000	84	1625666	10.0	10.0	
86 1-Chlorohexane	91	10.926	10.927	-0.001	96	2162837	25.0	24.3	
87 Chlorobenzene	112	10.933	10.933	0.000	97	4506108	25.0	24.9	
89 1,1,1,2-Tetrachloroethane	131	11.024	11.018	0.006	96	1645974	25.0	26.5	
90 Ethylbenzene	91	11.030	11.024	0.006	98	7593076	25.0	25.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
91 m-Xylene & p-Xylene	106	11.146	11.146	0.000	100	6035178	50.0	50.7	
S 88 Xylenes, Total	106				0			76.3	
92 o-Xylene	106	11.487	11.487	0.000	96	3035761	25.0	25.6	
93 Styrene	104	11.500	11.500	0.000	94	5191221	25.0	26.3	
94 Bromoform	173	11.658	11.658	0.000	98	895729	25.0	28.6	
95 Isopropylbenzene	105	11.792	11.792	0.000	96	7775129	25.0	25.2	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.938	11.939	-0.001	93	821267	10.0	10.3	
99 1,1,2,2-Tetrachloroethane	83	12.054	12.054	0.000	76	1344360	25.0	25.2	
100 Bromobenzene	156	12.054	12.054	0.000	90	1998200	25.0	24.5	
101 trans-1,4-Dichloro-2-butene	53	12.079	12.079	0.000	93	3721298	250.0	269.9	
102 1,2,3-Trichloropropane	110	12.097	12.097	0.000	79	362995	25.0	24.2	
103 N-Propylbenzene	91	12.134	12.128	0.006	98	9139528	25.0	24.5	
104 2-Chlorotoluene	126	12.207	12.207	0.000	97	2004417	25.0	24.7	
105 1,3,5-Trimethylbenzene	105	12.274	12.274	0.000	94	6932433	25.0	25.0	
106 4-Chlorotoluene	126	12.298	12.304	-0.006	97	2107992	25.0	25.4	
107 tert-Butylbenzene	134	12.518	12.518	0.000	92	1554546	25.0	24.3	
108 Pentachloroethane	167	12.548	12.548	0.000	92	1320964	25.0	27.2	
109 1,2,4-Trimethylbenzene	105	12.560	12.560	0.000	97	7203013	25.0	25.2	
110 sec-Butylbenzene	105	12.682	12.682	0.000	94	8577932	25.0	24.6	
111 1,3-Dichlorobenzene	146	12.780	12.780	0.000	98	4130426	25.0	24.7	
112 4-Isopropyltoluene	119	12.792	12.792	0.000	96	7872294	25.0	25.1	
* 113 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	93	980643	10.0	10.0	M
114 1,4-Dichlorobenzene	146	12.853	12.853	0.000	95	4203888	25.0	24.5	
115 1,2,3-Trimethylbenzene	120	12.871	12.871	0.000	98	3295151	25.0	25.4	
116 Benzyl chloride	126	12.938	12.938	0.000	98	660249	25.0	29.6	
119 n-Butylbenzene	92	13.091	13.091	0.000	97	3934711	25.0	25.2	
120 1,2-Dichlorobenzene	146	13.121	13.121	0.000	99	3838667	25.0	24.6	
118 p-Diethylbenzene	119	13.146	13.146	0.000	86	4068183	25.0	25.2	
123 1,2-Dibromo-3-Chloropropane	155	13.670	13.670	0.000	90	233494	25.0	28.7	
124 1,3,5-Trichlorobenzene	180	13.798	13.798	0.000	98	3503588	25.0	24.8	
125 1,2,4-Trichlorobenzene	180	14.225	14.225	0.000	94	3067379	25.0	25.7	
126 Hexachlorobutadiene	225	14.310	14.310	0.000	97	1524215	25.0	24.2	
127 Naphthalene	128	14.407	14.408	-0.001	97	4760566	25.0	26.7	
128 1,2,3-Trichlorobenzene	180	14.548	14.554	-0.006	96	2535063	25.0	26.1	
129 2-Methylnaphthalene	142	15.157	15.157	0.000	92	2774687	25.0	30.5	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00034

Amount Added: 25.00

Units: uL

MSV_LL_#2_826_00038

Amount Added: 25.00

Units: uL

MSV_LL_GAS826_00063

Amount Added: 25.00

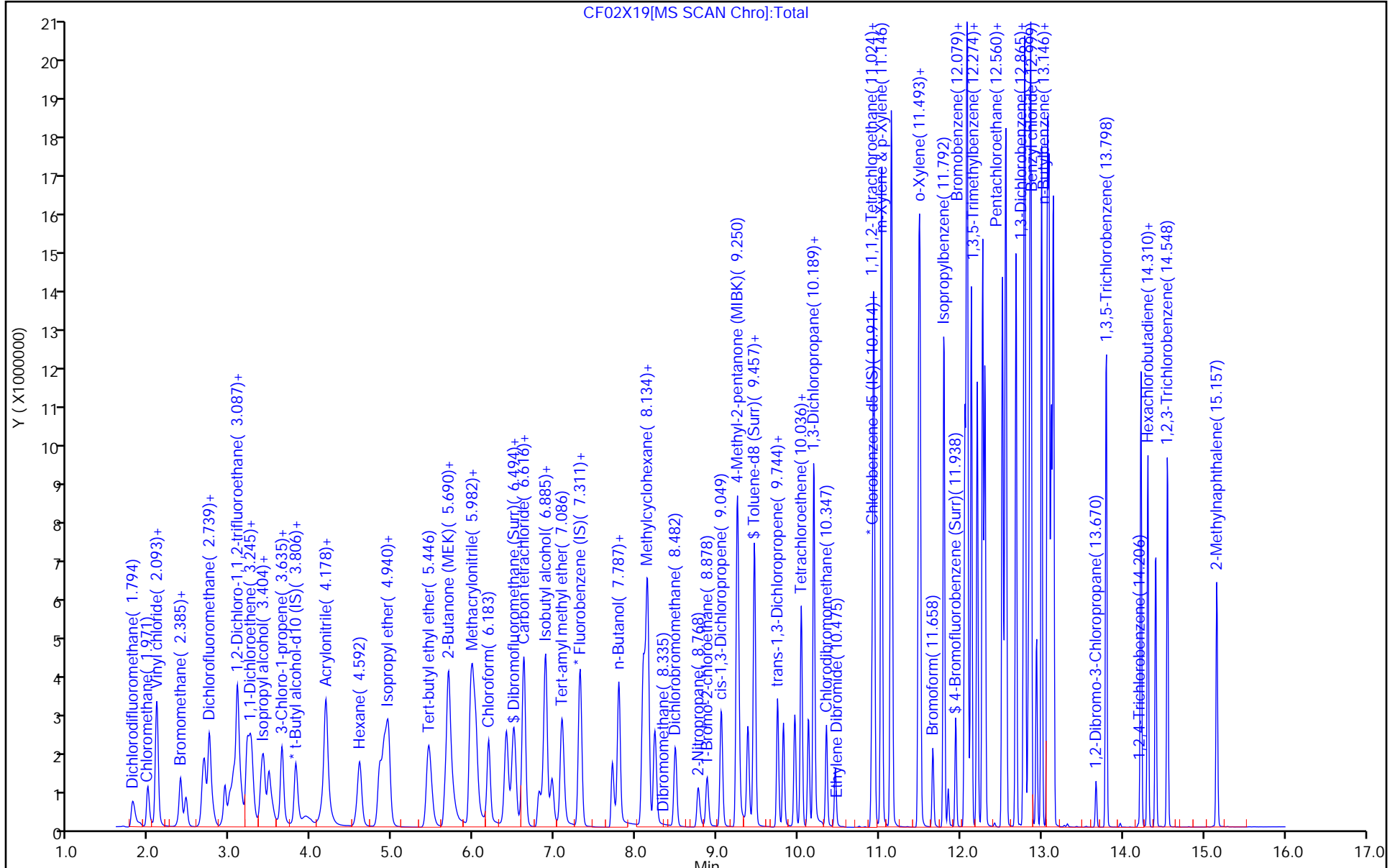
Units: uL

MSV_HP25_ISSS_00046

Amount Added: 1.00

Units: uL

Run Reagent



Eurofins Lancaster Laboratories Env, LLC

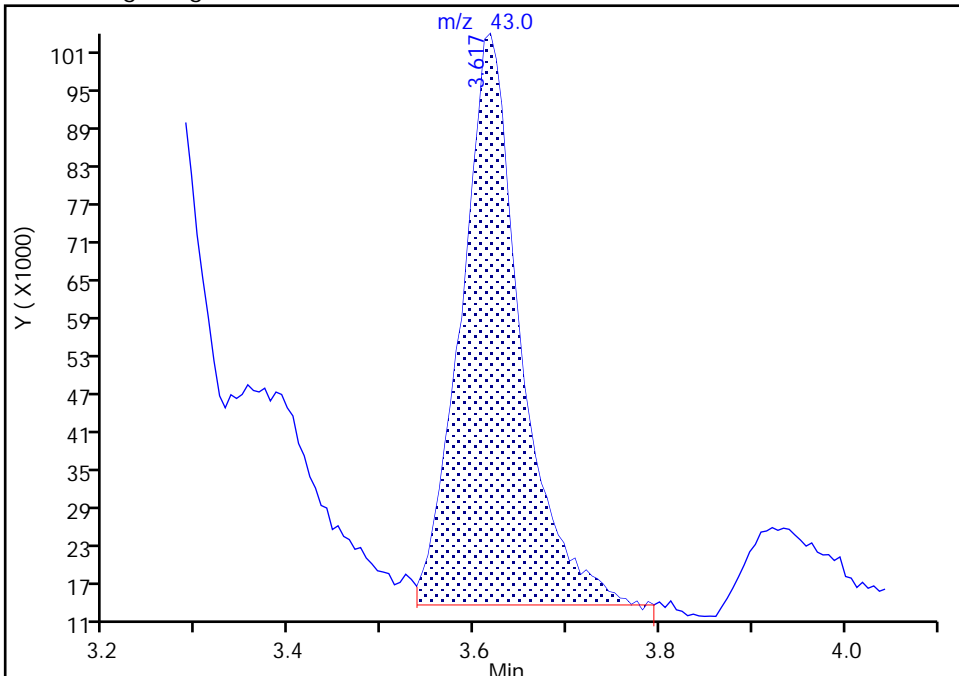
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
Injection Date: 02-Feb-2022 21:11:30 Instrument ID: 10193
Lims ID: IC std7 25
Client ID:
Operator ID: jml01693 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Methyl acetate, CAS: 79-20-9

Signal: 1

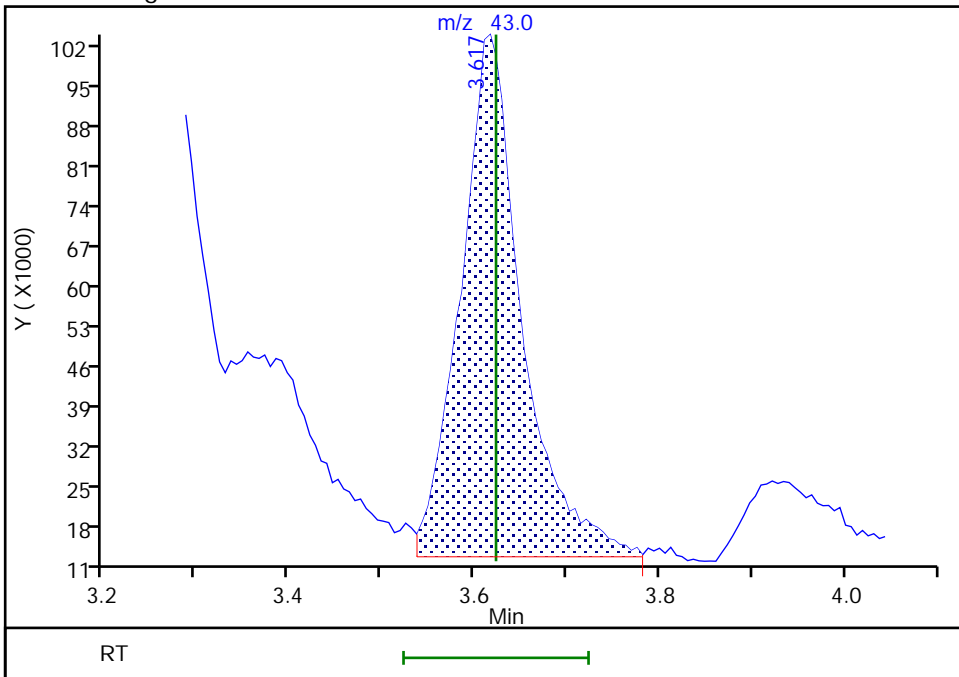
RT: 3.62
Area: 402973
Amount: 25.692774
Amount Units: ug/l

Processing Integration Results



RT: 3.62
Area: 418138
Amount: 27.349220
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 13:59:47
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 461 of 643

Eurofins Lancaster Laboratories Env, LLC

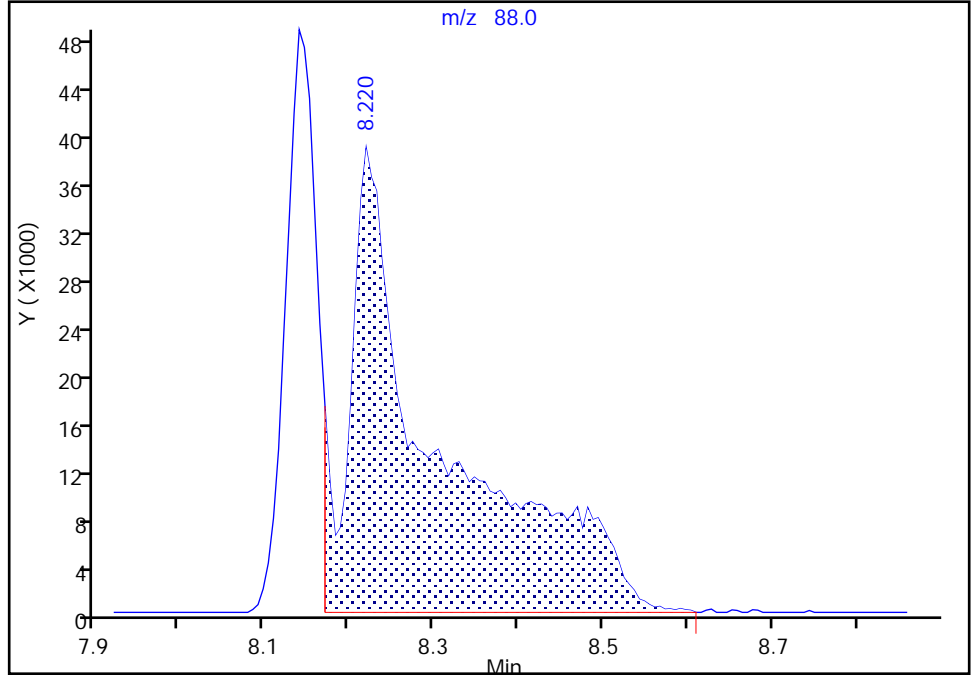
Data File:	\\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D		
Injection Date:	02-Feb-2022 21:11:30	Instrument ID:	10193
Lims ID:	IC std7 25		
Client ID:			
Operator ID:	jml01693	ALS Bottle#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	19

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

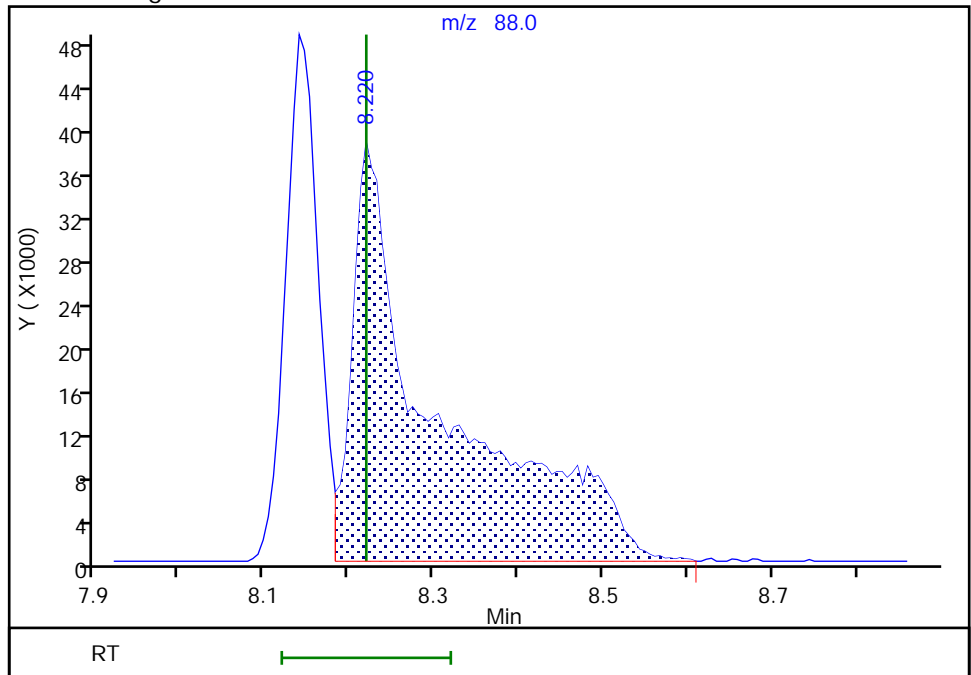
RT: 8.22
 Area: 283296
 Amount: 1329.7759
 Amount Units: ug/l

Processing Integration Results



RT: 8.22
 Area: 273127
 Amount: 1319.8347
 Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 13:59:08
 Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

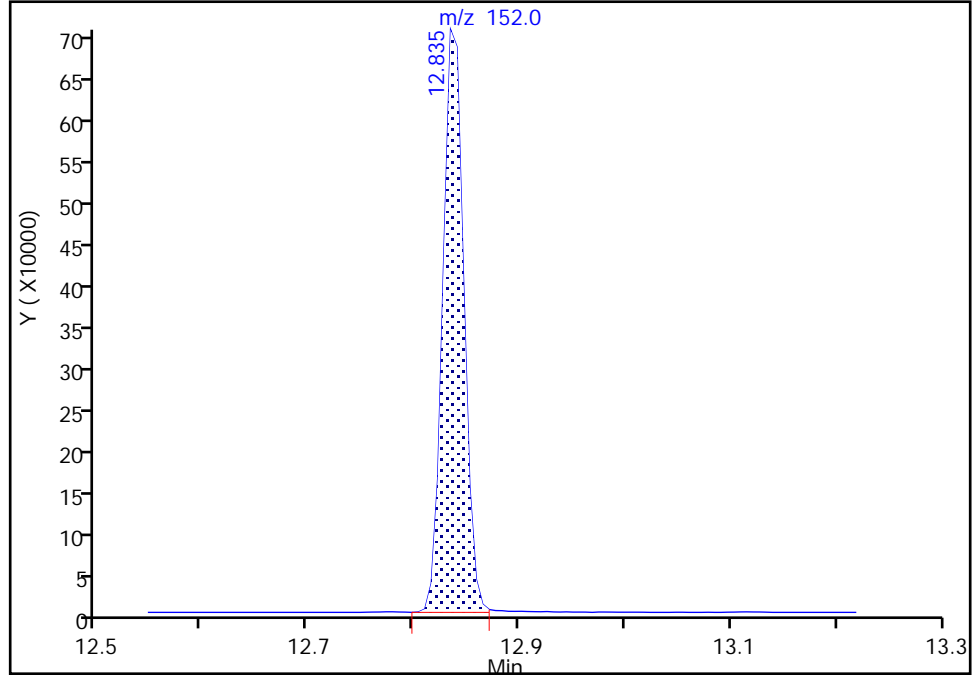
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
Injection Date: 02-Feb-2022 21:11:30 Instrument ID: 10193
Lims ID: IC std7 25
Client ID:
Operator ID: jml01693 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 113 1,4-Dichlorobenzene-d4, CAS: 3855-82-1
Signal: 1

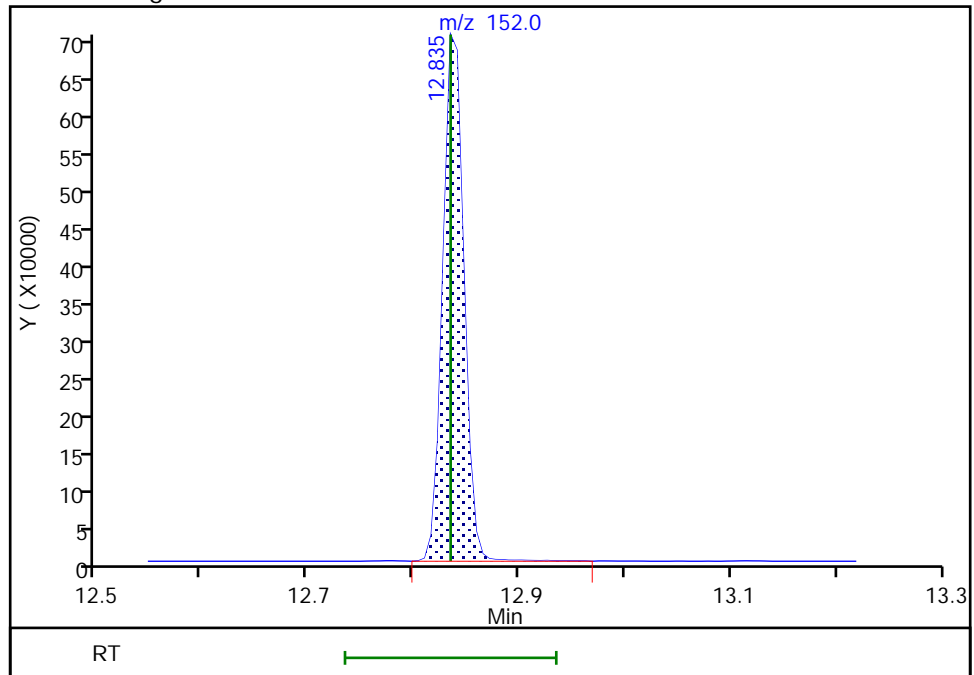
RT: 12.83
Area: 975269
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results



RT: 12.83
Area: 980643
Amount: 10.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: kellerk, 08-Feb-2022 18:39:42
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 463 of 643

Calibration

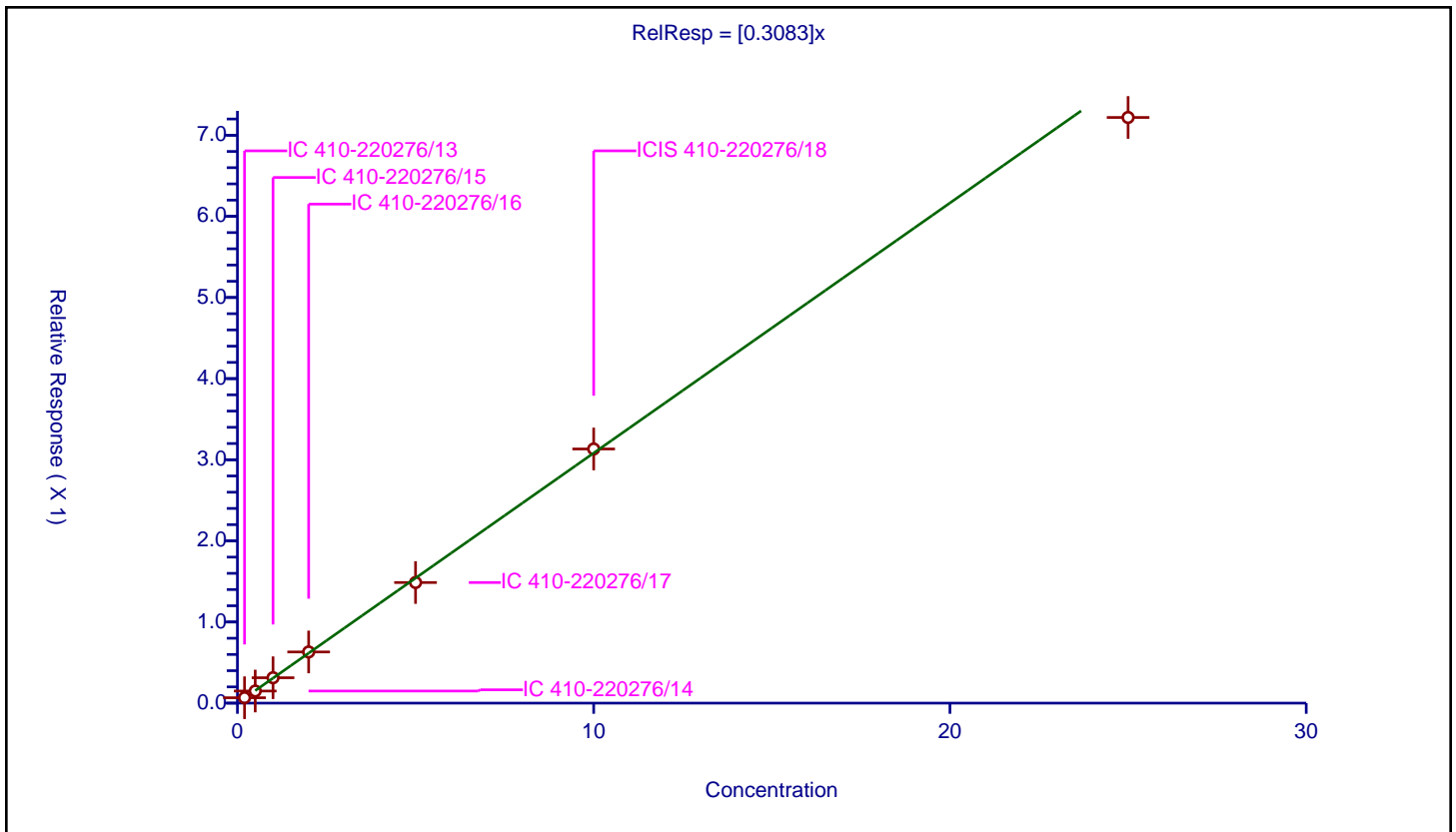
/ Dichlorodifluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3083

Error Coefficients	
Standard Error:	659000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.066343	10.0	1844216.0	0.331713	Y
2	IC 410-220276/14	0.5	0.149097	10.0	1877699.0	0.298195	Y
3	IC 410-220276/15	1.0	0.313052	10.0	1880230.0	0.313052	Y
4	IC 410-220276/16	2.0	0.630849	10.0	1877168.0	0.315425	Y
5	IC 410-220276/17	5.0	1.486755	10.0	1925569.0	0.297351	Y
6	ICIS 410-220276/18	10.0	3.132778	10.0	1913666.0	0.313278	Y
7	IC 410-220276/19	25.0	7.218847	10.0	2030561.0	0.288754	Y



Calibration

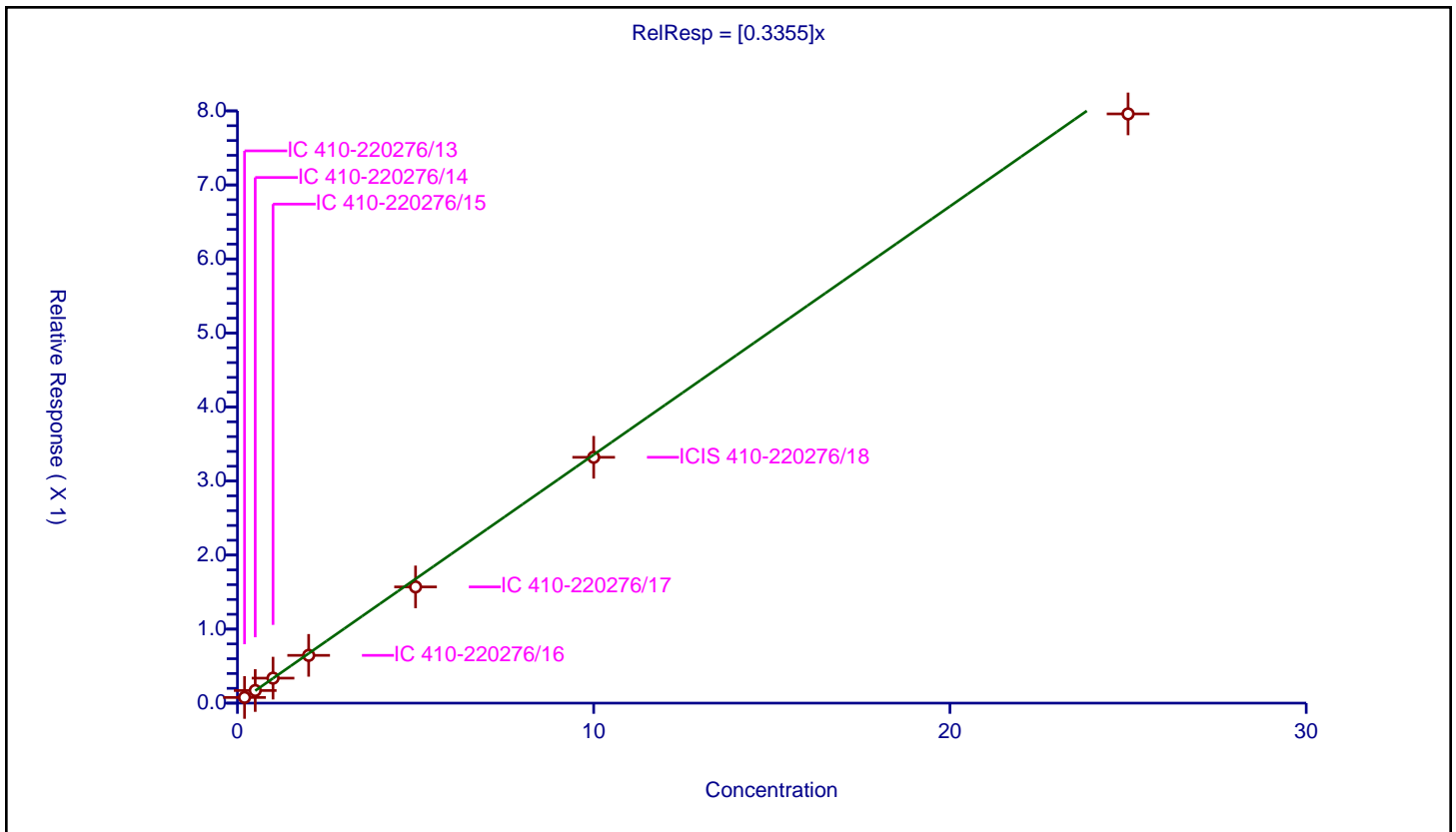
/ Chloromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3355

Error Coefficients	
Standard Error:	722000
Relative Standard Error:	6.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.076602	10.0	1844216.0	0.383008	Y
2	IC 410-220276/14	0.5	0.170507	10.0	1877699.0	0.341013	Y
3	IC 410-220276/15	1.0	0.337709	10.0	1880230.0	0.337709	Y
4	IC 410-220276/16	2.0	0.64511	10.0	1877168.0	0.322555	Y
5	IC 410-220276/17	5.0	1.570003	10.0	1925569.0	0.314001	Y
6	ICIS 410-220276/18	10.0	3.320846	10.0	1913666.0	0.332085	Y
7	IC 410-220276/19	25.0	7.959273	10.0	2030561.0	0.318371	Y



Calibration

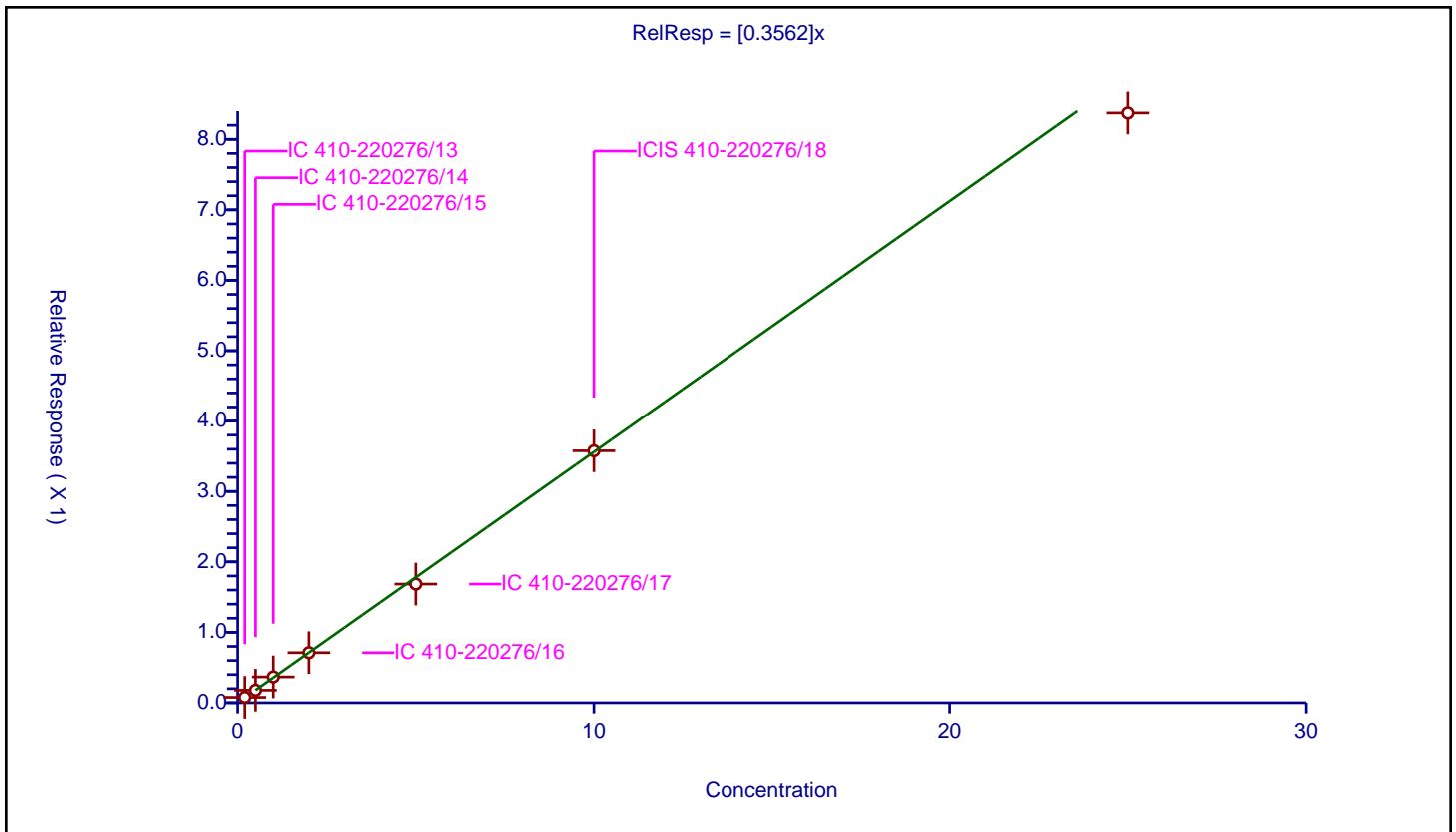
/ Vinyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3562

Error Coefficients	
Standard Error:	763000
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 410-220276/13	0.2	0.076992	10.0	1844216.0	0.38496	Y
2	IC 410-220276/14	0.5	0.178266	10.0	1877699.0	0.356532	Y
3	IC 410-220276/15	1.0	0.366652	10.0	1880230.0	0.366652	Y
4	IC 410-220276/16	2.0	0.710885	10.0	1877168.0	0.355442	Y
5	IC 410-220276/17	5.0	1.684894	10.0	1925569.0	0.336979	Y
6	ICIS 410-220276/18	10.0	3.578022	10.0	1913666.0	0.357802	Y
7	IC 410-220276/19	25.0	8.373371	10.0	2030561.0	0.334935	Y



Calibration

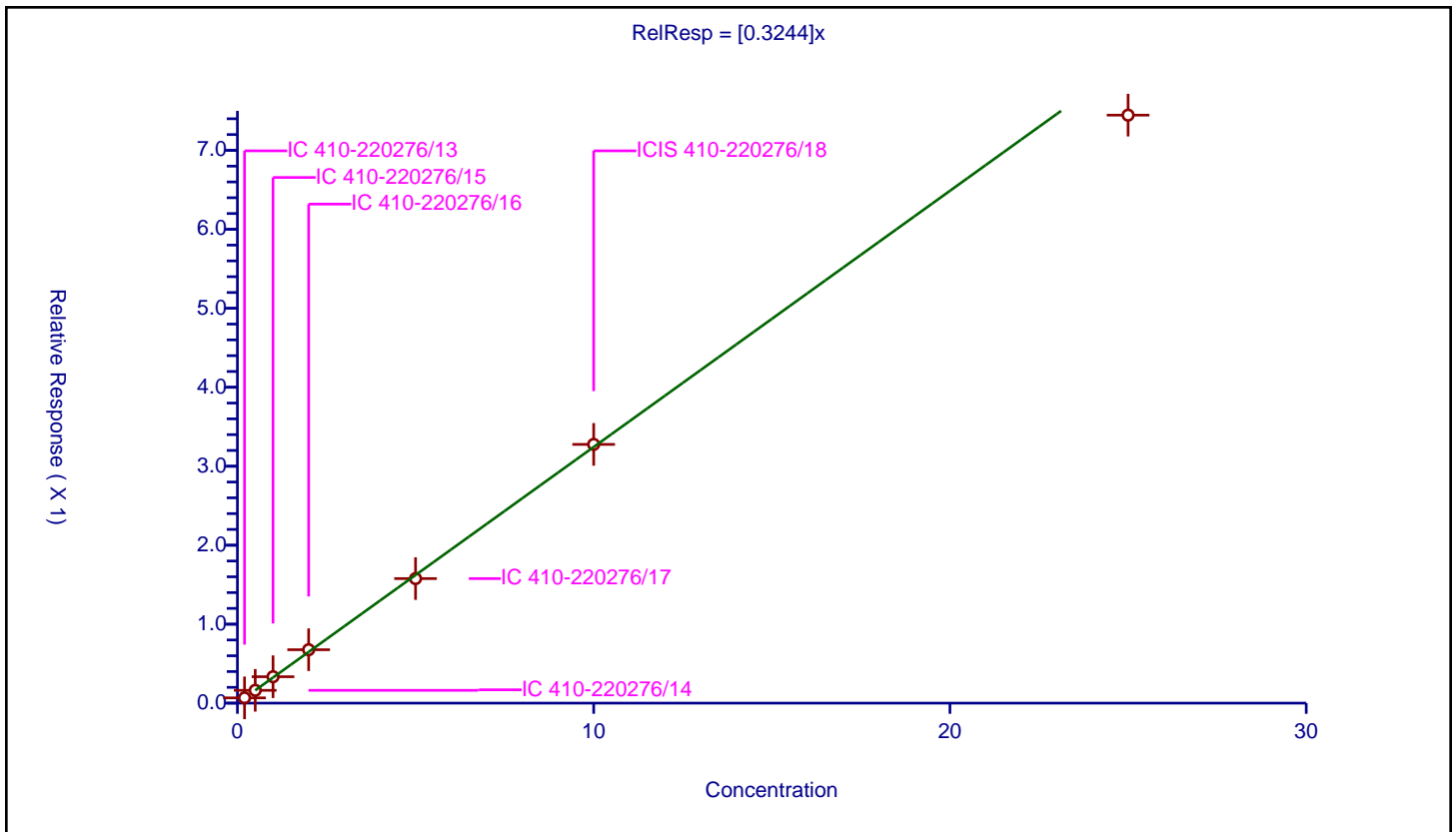
/ Butadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3244

Error Coefficients	
Standard Error:	682000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.066597	10.0	1844216.0	0.332987	Y
2	IC 410-220276/14	0.5	0.162092	10.0	1877699.0	0.324184	Y
3	IC 410-220276/15	1.0	0.334395	10.0	1880230.0	0.334395	Y
4	IC 410-220276/16	2.0	0.676445	10.0	1877168.0	0.338222	Y
5	IC 410-220276/17	5.0	1.577222	10.0	1925569.0	0.315444	Y
6	ICIS 410-220276/18	10.0	3.276564	10.0	1913666.0	0.327656	Y
7	IC 410-220276/19	25.0	7.446164	10.0	2030561.0	0.297847	Y



Calibration

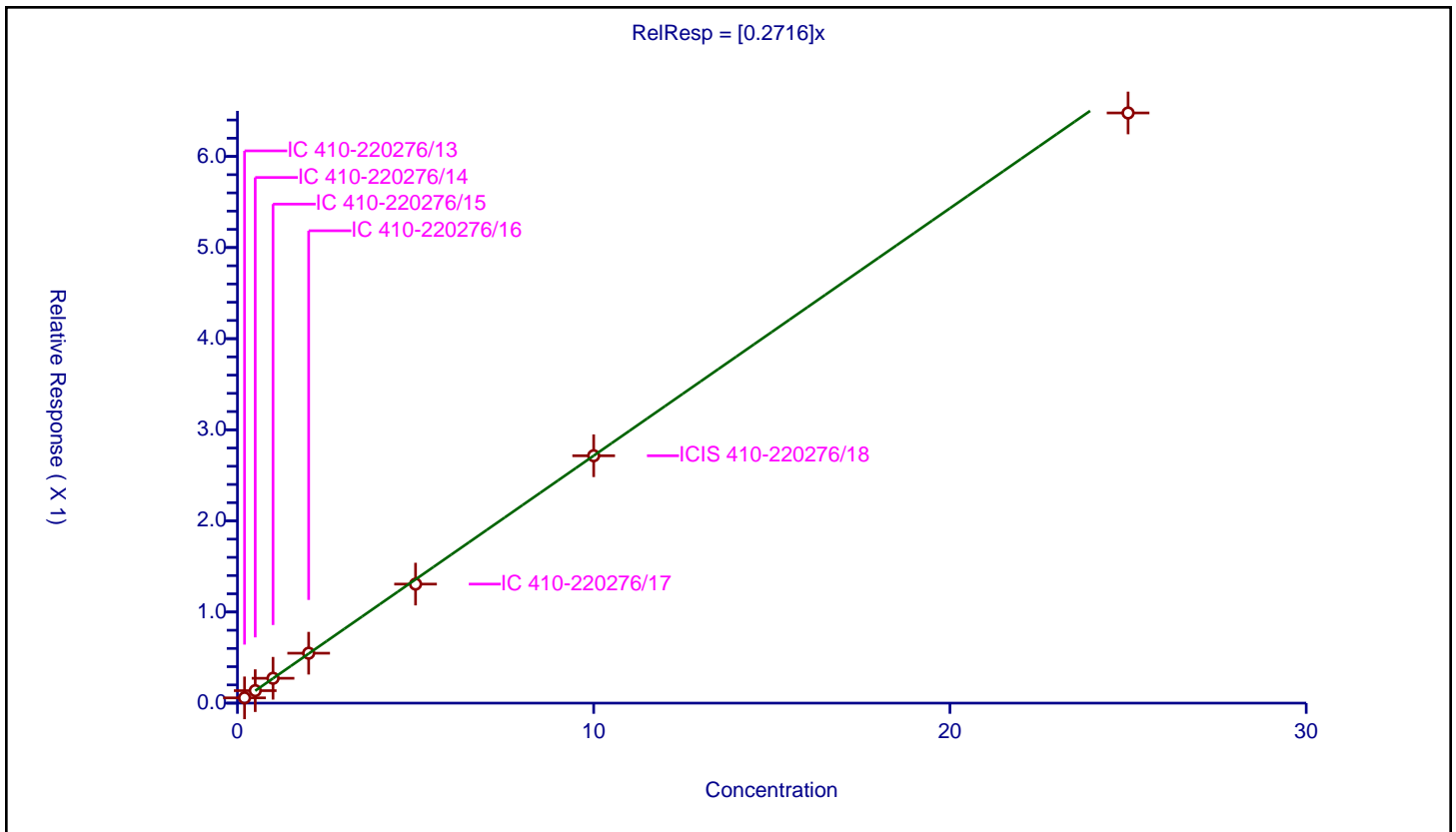
/ Bromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2716

Error Coefficients	
Standard Error:	588000
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 410-220276/13	0.2	0.057623	10.0	1844216.0	0.288117	Y
2	IC 410-220276/14	0.5	0.137029	10.0	1877699.0	0.274059	Y
3	IC 410-220276/15	1.0	0.273014	10.0	1880230.0	0.273014	Y
4	IC 410-220276/16	2.0	0.547873	10.0	1877168.0	0.273937	Y
5	IC 410-220276/17	5.0	1.306362	10.0	1925569.0	0.261272	Y
6	ICIS 410-220276/18	10.0	2.715139	10.0	1913666.0	0.271514	Y
7	IC 410-220276/19	25.0	6.477343	10.0	2030561.0	0.259094	Y



Calibration

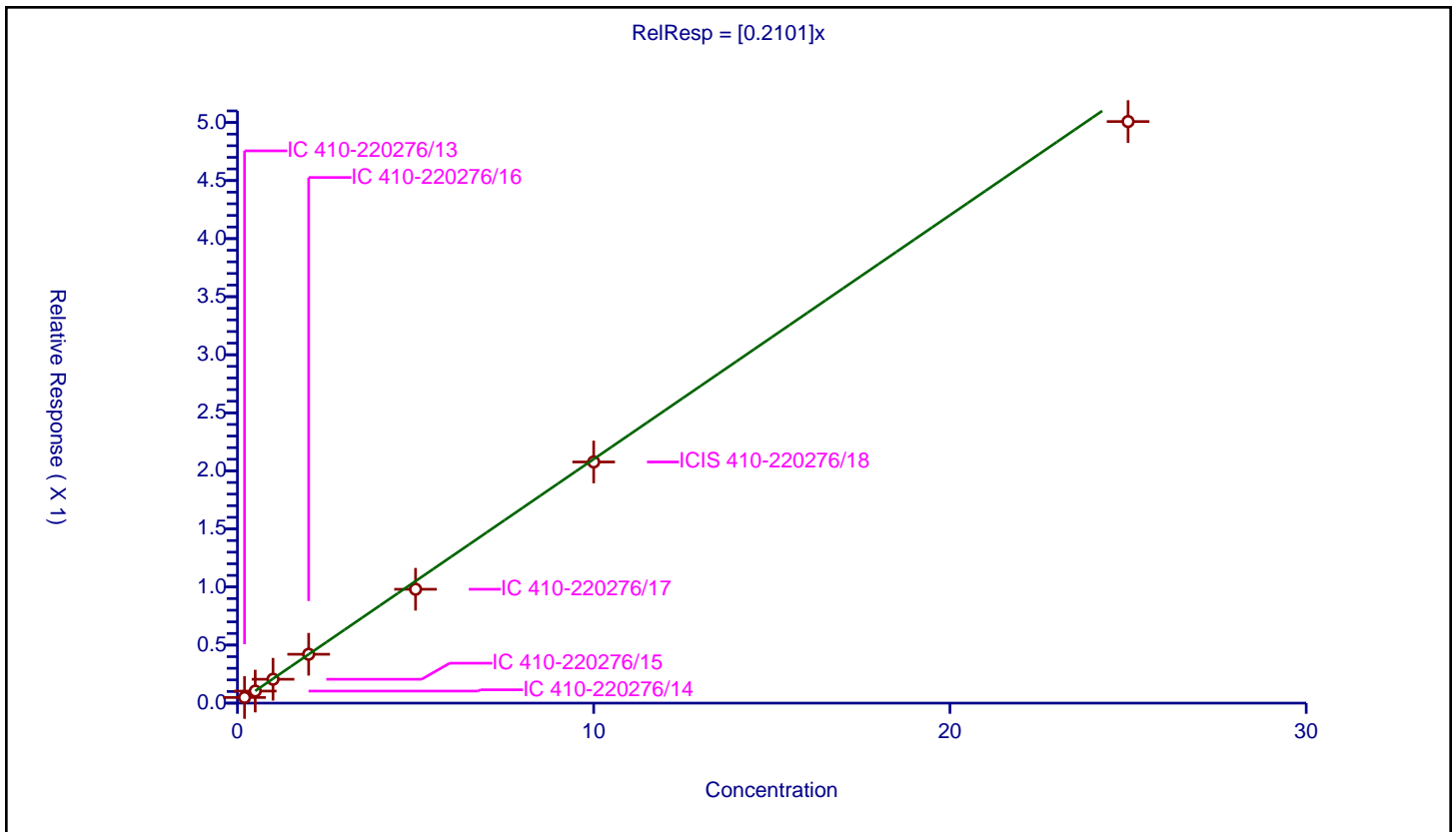
/ Chloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2101

Error Coefficients	
Standard Error:	454000
Relative Standard Error:	7.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.048611	10.0	1844216.0	0.243057	Y
2	IC 410-220276/14	0.5	0.103707	10.0	1877699.0	0.207413	Y
3	IC 410-220276/15	1.0	0.205672	10.0	1880230.0	0.205672	Y
4	IC 410-220276/16	2.0	0.420836	10.0	1877168.0	0.210418	Y
5	IC 410-220276/17	5.0	0.980609	10.0	1925569.0	0.196122	Y
6	ICIS 410-220276/18	10.0	2.076559	10.0	1913666.0	0.207656	Y
7	IC 410-220276/19	25.0	5.008178	10.0	2030561.0	0.200327	Y



Calibration

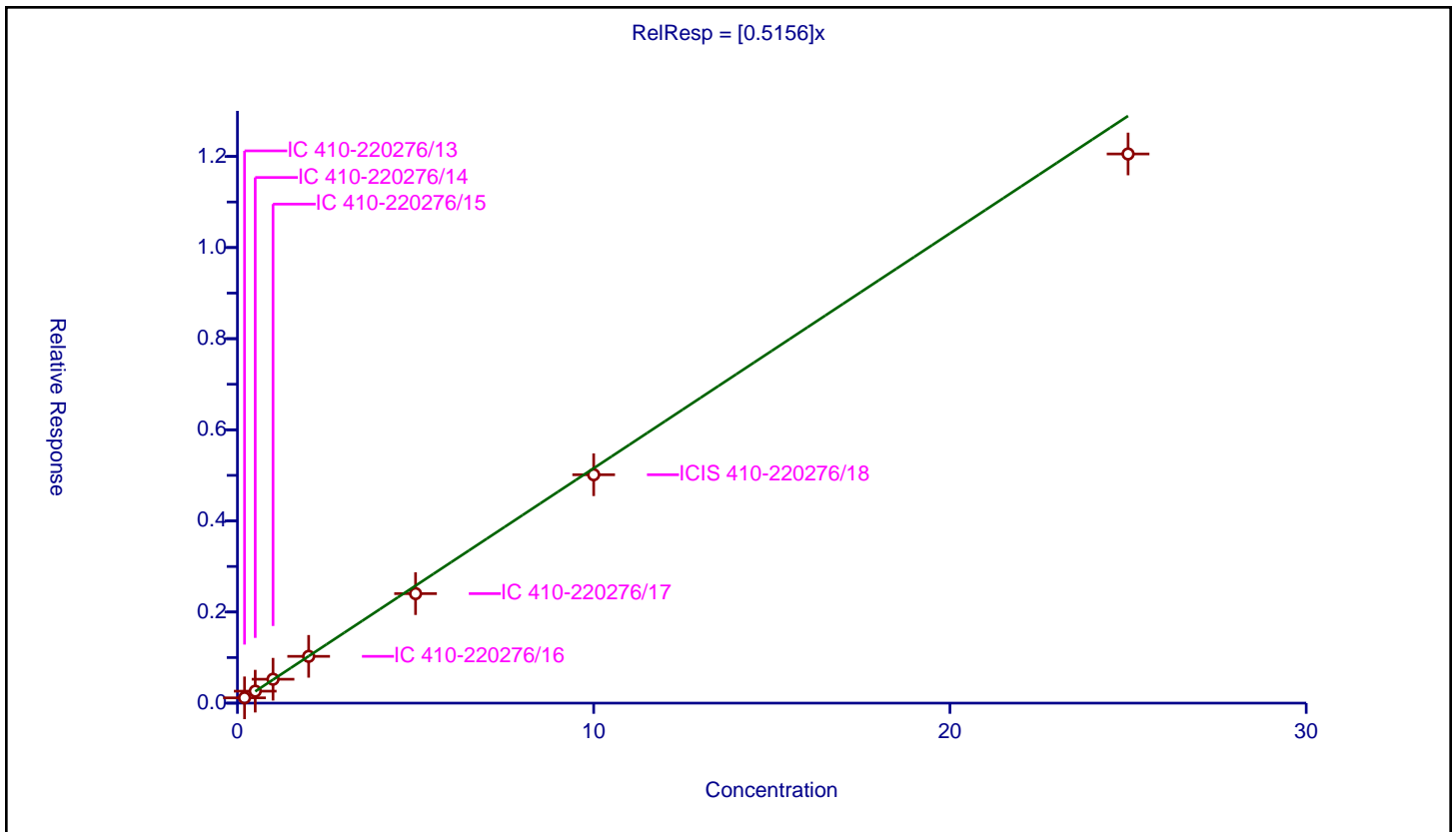
/ Dichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5156

Error Coefficients	
Standard Error:	1090000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.116228	10.0	1844216.0	0.581141	Y
2	IC 410-220276/14	0.5	0.262683	10.0	1877699.0	0.525366	Y
3	IC 410-220276/15	1.0	0.524899	10.0	1880230.0	0.524899	Y
4	IC 410-220276/16	2.0	1.026786	10.0	1877168.0	0.513393	Y
5	IC 410-220276/17	5.0	2.403414	10.0	1925569.0	0.480683	Y
6	ICIS 410-220276/18	10.0	5.013498	10.0	1913666.0	0.50135	Y
7	IC 410-220276/19	25.0	12.05459	10.0	2030561.0	0.482184	Y



Calibration

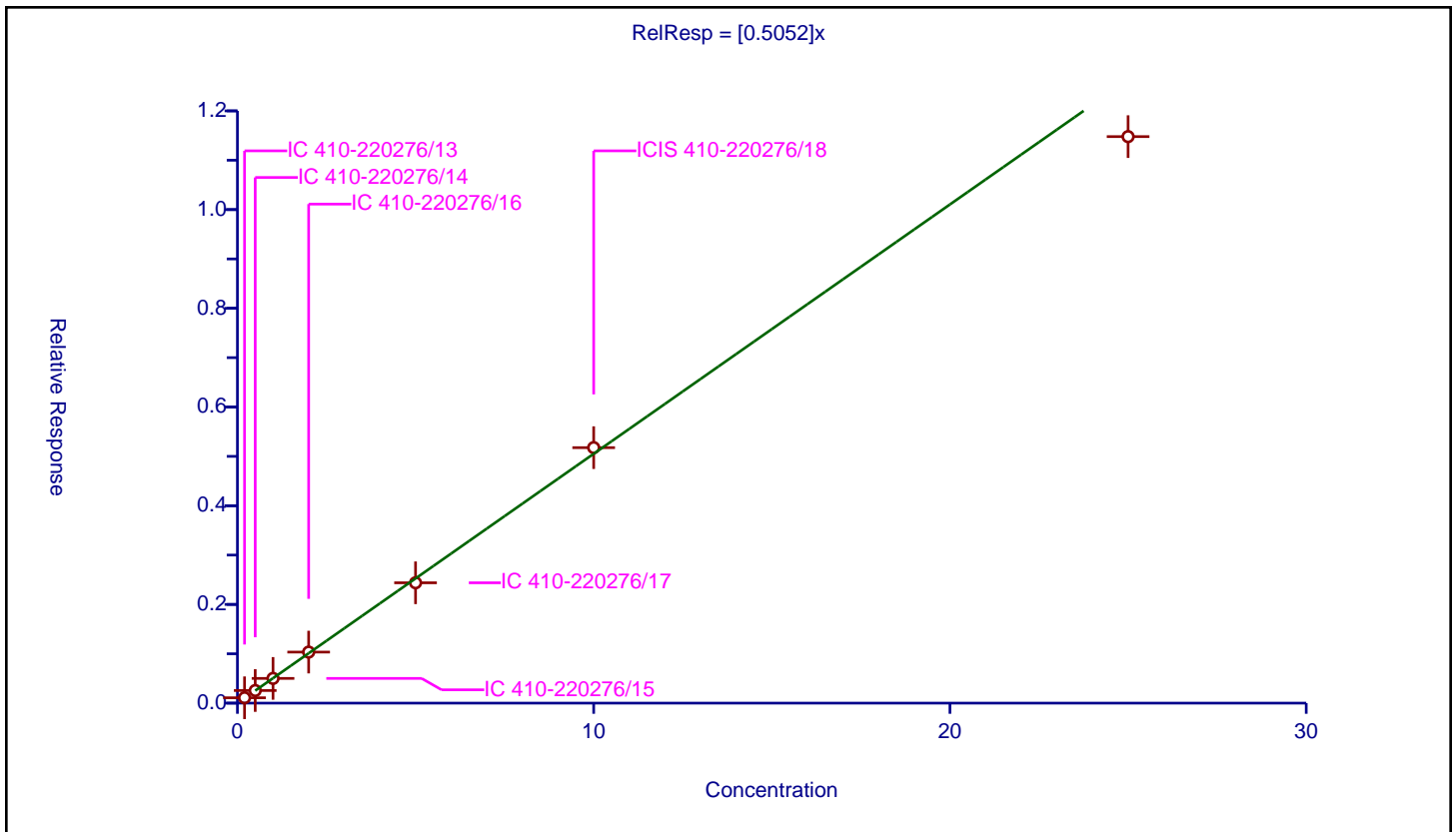
/ Trichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5052

Error Coefficients	
Standard Error:	1060000
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 410-220276/13	0.2	0.108491	10.0	1844216.0	0.542453	Y
2	IC 410-220276/14	0.5	0.255536	10.0	1877699.0	0.511072	Y
3	IC 410-220276/15	1.0	0.501306	10.0	1880230.0	0.501306	Y
4	IC 410-220276/16	2.0	1.034063	10.0	1877168.0	0.517032	Y
5	IC 410-220276/17	5.0	2.438687	10.0	1925569.0	0.487737	Y
6	ICIS 410-220276/18	10.0	5.176854	10.0	1913666.0	0.517685	Y
7	IC 410-220276/19	25.0	11.478611	10.0	2030561.0	0.459144	Y



Calibration

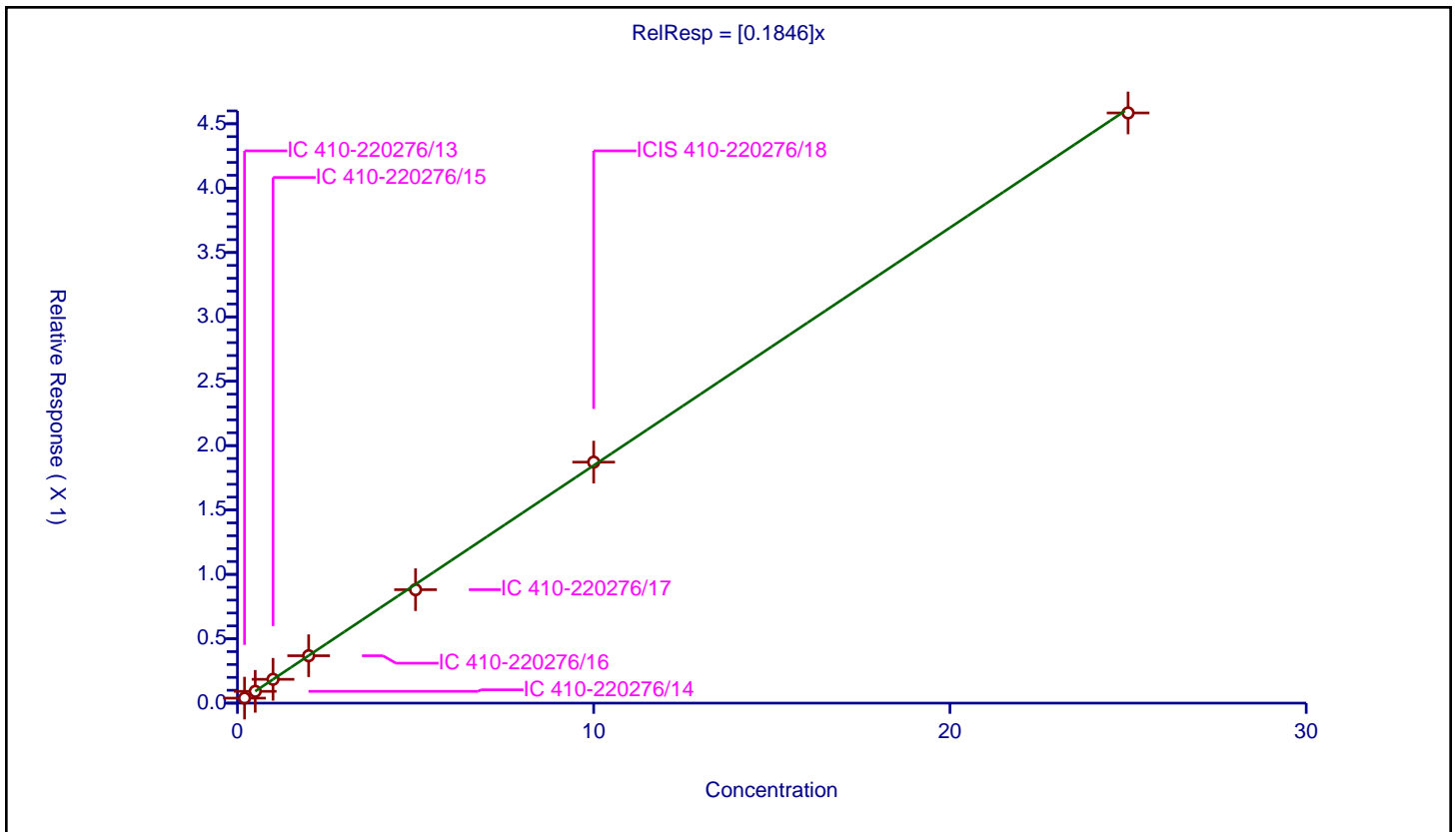
/ Ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1846

Error Coefficients	
Standard Error:	414000
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 410-220276/13	0.2	0.038721	10.0	1844216.0	0.193605	Y
2	IC 410-220276/14	0.5	0.091479	10.0	1877699.0	0.182958	Y
3	IC 410-220276/15	0.999999	0.185068	10.0	1880230.0	0.185068	Y
4	IC 410-220276/16	1.999998	0.368076	10.0	1877168.0	0.184038	Y
5	IC 410-220276/17	4.999995	0.881132	10.0	1925569.0	0.176227	Y
6	ICIS 410-220276/18	9.99999	1.871826	10.0	1913666.0	0.187183	Y
7	IC 410-220276/19	24.999975	4.584009	10.0	2030561.0	0.183361	Y



Calibration

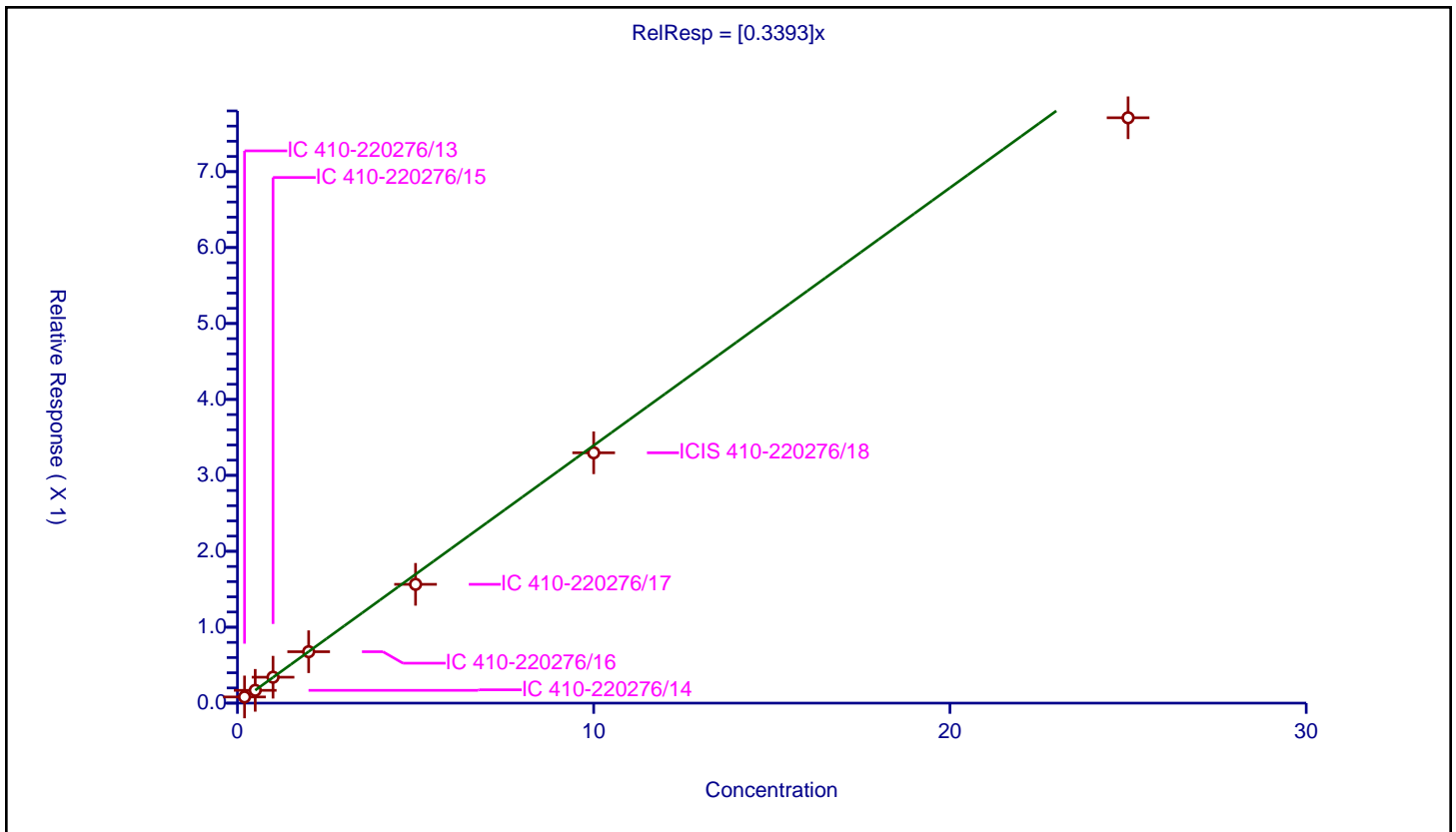
/ 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3393

Error Coefficients	
Standard Error:	702000
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.081379	10.0	1844216.0	0.406894	Y
2	IC 410-220276/14	0.5	0.168685	10.0	1877699.0	0.33737	Y
3	IC 410-220276/15	1.0	0.341533	10.0	1880230.0	0.341533	Y
4	IC 410-220276/16	2.0	0.677185	10.0	1877168.0	0.338592	Y
5	IC 410-220276/17	5.0	1.56454	10.0	1925569.0	0.312908	Y
6	ICIS 410-220276/18	10.0	3.297043	10.0	1913666.0	0.329704	Y
7	IC 410-220276/19	25.0	7.709328	10.0	2030561.0	0.308373	Y



Calibration

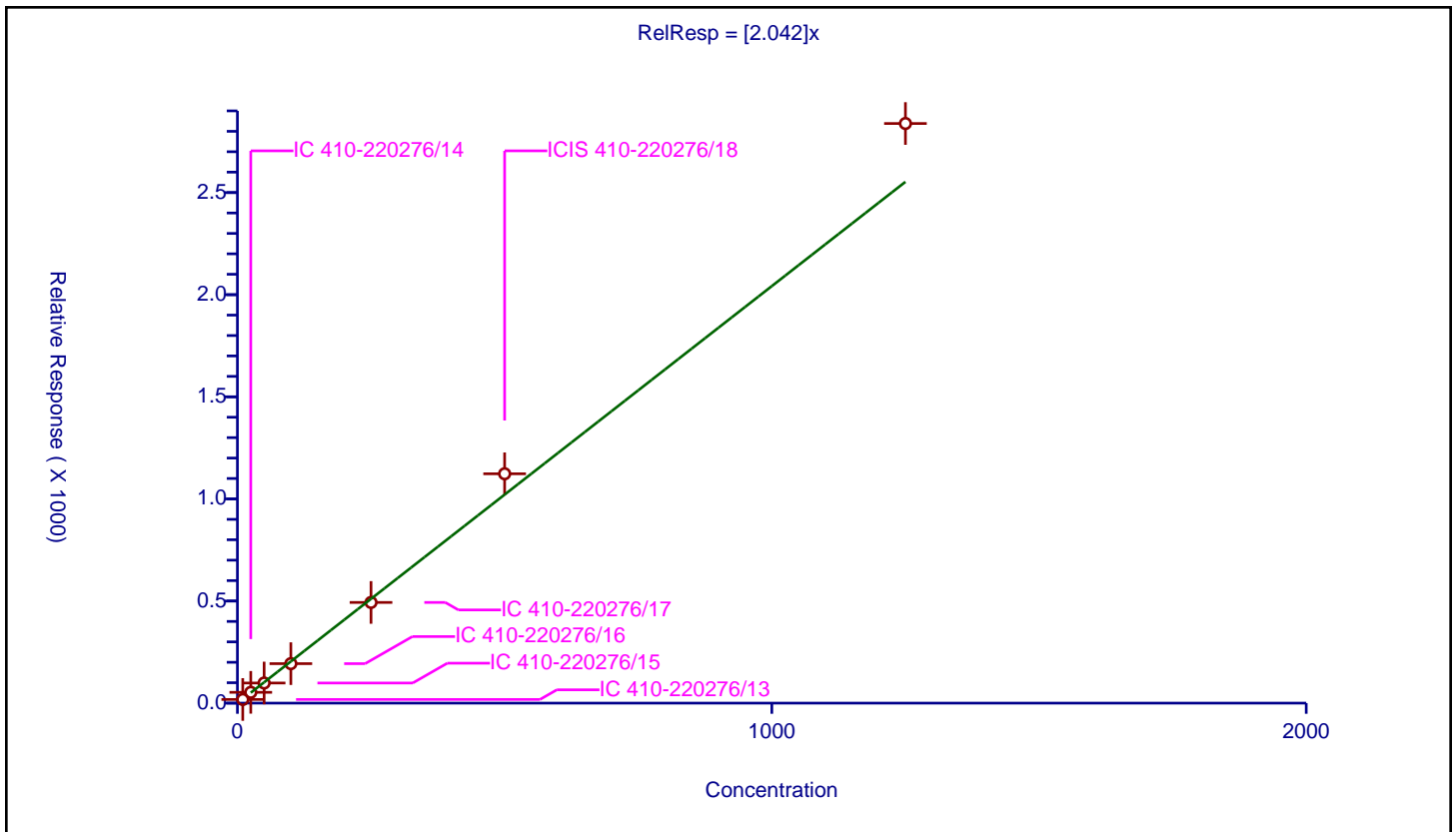
/ Acrolein

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.042

Error Coefficients	
Standard Error:	3120000
Relative Standard Error:	8.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	10.00054	17.86705	50.0	141316.0	1.786609	Y
2	IC 410-220276/14	25.00135	52.865792	50.0	110999.0	2.114518	Y
3	IC 410-220276/15	50.002699	98.539284	50.0	127506.0	1.970679	Y
4	IC 410-220276/16	100.005398	193.367837	50.0	131292.0	1.933574	Y
5	IC 410-220276/17	250.013496	493.04808	50.0	114997.0	1.972086	Y
6	ICIS 410-220276/18	500.026992	1123.09729	50.0	123127.0	2.246073	Y
7	IC 410-220276/19	1250.067479	2838.141938	50.0	123688.0	2.270391	Y



Calibration

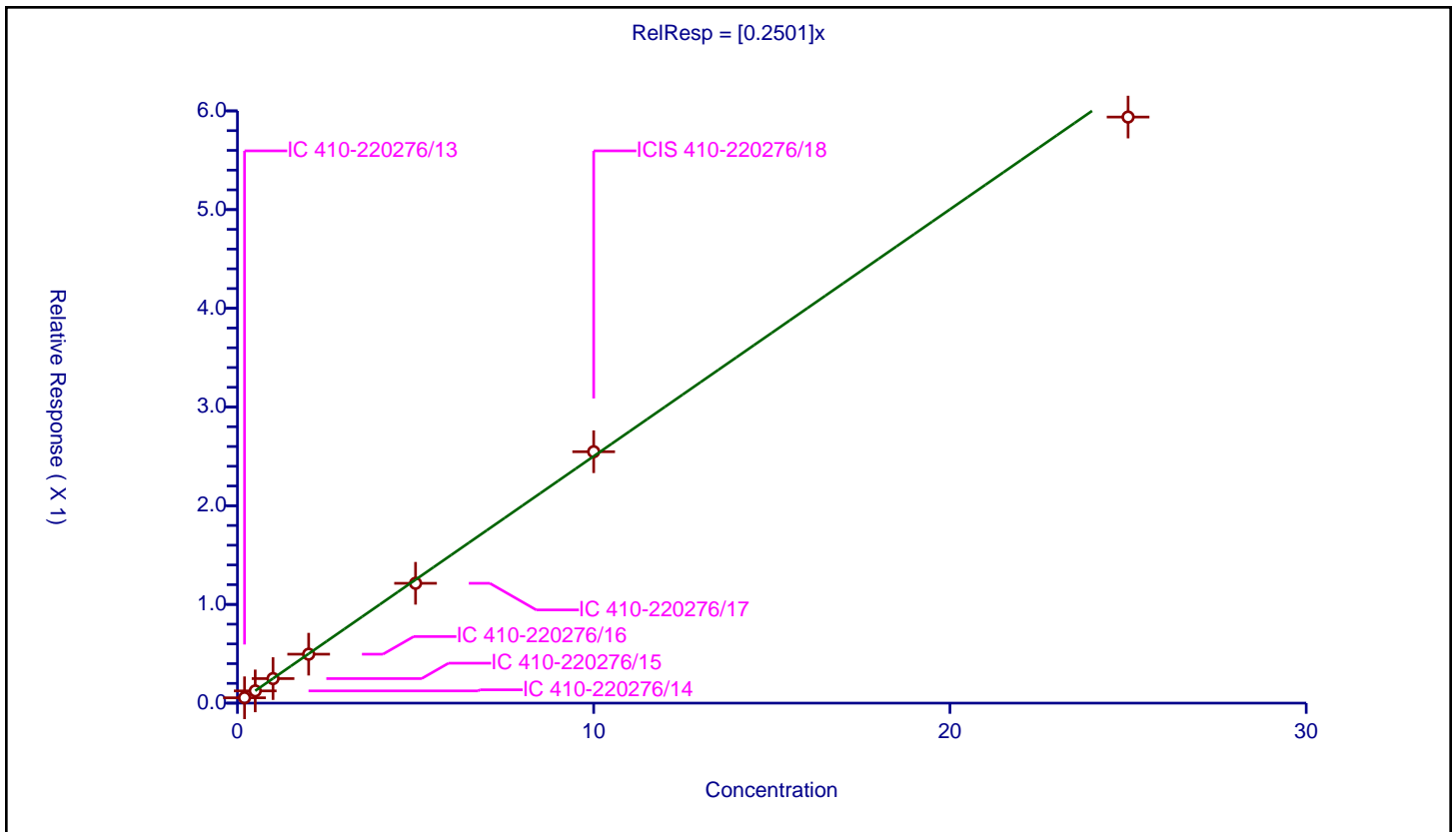
/ 1,1-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2501

Error Coefficients	
Standard Error:	541000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.054234	10.0	1844216.0	0.271172	Y
2	IC 410-220276/14	0.5	0.123918	10.0	1877699.0	0.247835	Y
3	IC 410-220276/15	1.0	0.248767	10.0	1880230.0	0.248767	Y
4	IC 410-220276/16	2.0	0.495917	10.0	1877168.0	0.247959	Y
5	IC 410-220276/17	5.0	1.214187	10.0	1925569.0	0.242837	Y
6	ICIS 410-220276/18	10.0	2.546923	10.0	1913666.0	0.254692	Y
7	IC 410-220276/19	25.0	5.937625	10.0	2030561.0	0.237505	Y



Calibration

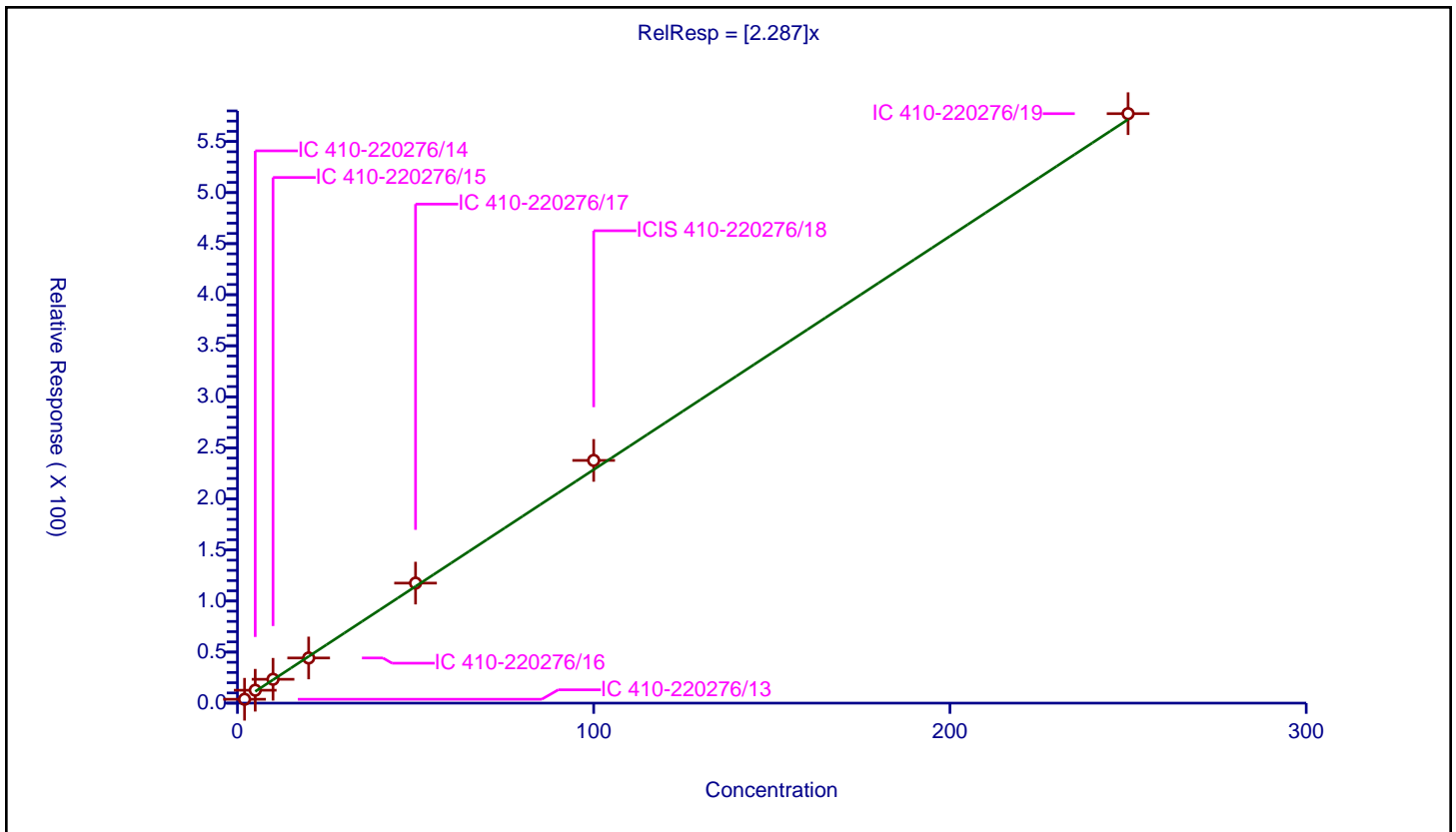
/ Acetone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.287

Error Coefficients	
Standard Error:	642000
Relative Standard Error:	8.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	2.0	3.785842	50.0	141316.0	1.892921	Y
2	IC 410-220276/14	5.0	12.640204	50.0	110999.0	2.528041	Y
3	IC 410-220276/15	10.0	23.366744	50.0	127506.0	2.336674	Y
4	IC 410-220276/16	20.0	44.221278	50.0	131292.0	2.211064	Y
5	IC 410-220276/17	50.0	117.539153	50.0	114997.0	2.350783	Y
6	ICIS 410-220276/18	100.0	237.700098	50.0	123127.0	2.377001	Y
7	IC 410-220276/19	250.0	577.288015	50.0	123688.0	2.309152	Y



Calibration

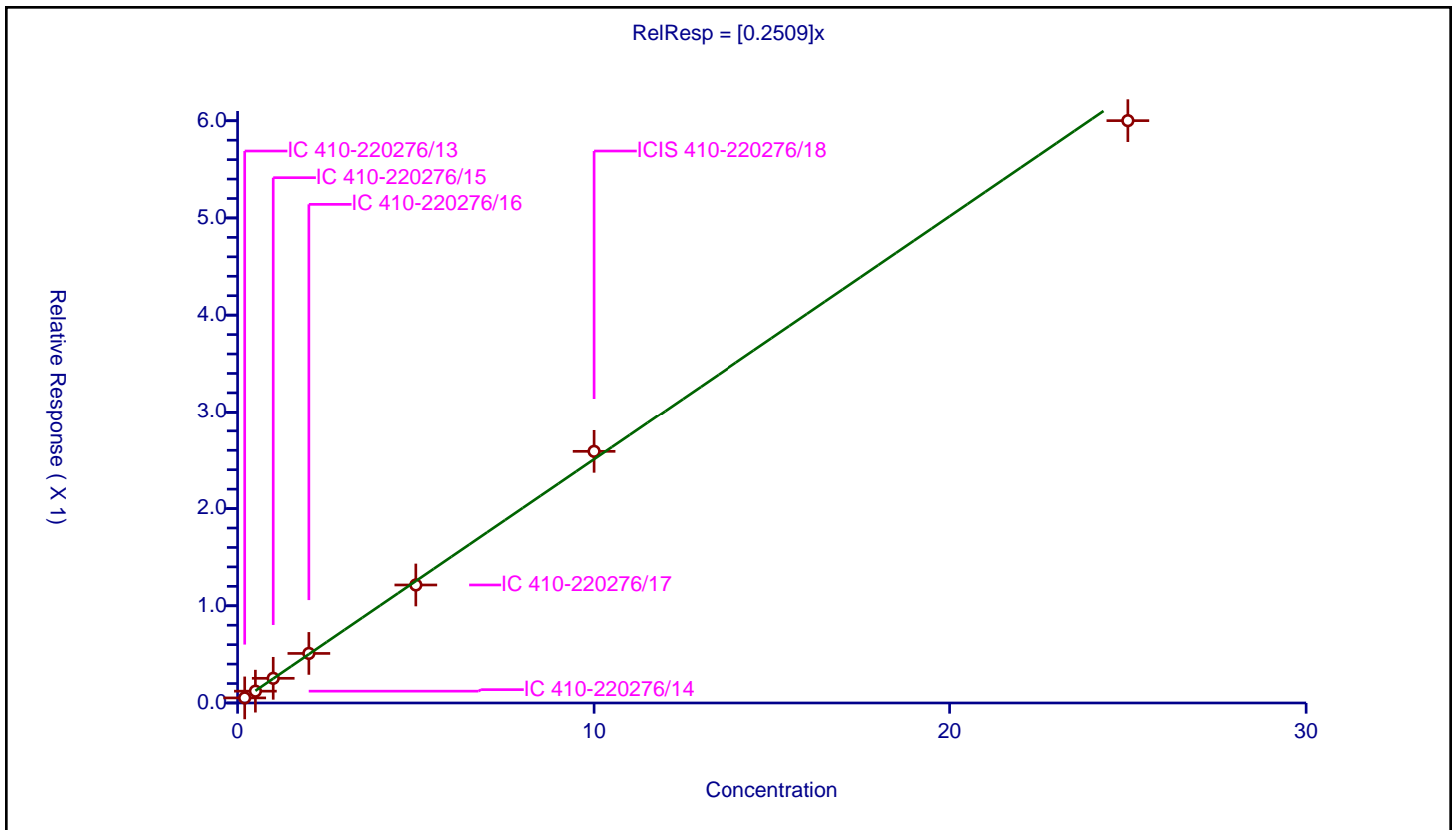
/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2509

Error Coefficients	
Standard Error:	547000
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 410-220276/13	0.2	0.052375	10.0	1844216.0	0.261873	Y
2	IC 410-220276/14	0.5	0.121681	10.0	1877699.0	0.243362	Y
3	IC 410-220276/15	1.0	0.253996	10.0	1880230.0	0.253996	Y
4	IC 410-220276/16	2.0	0.509949	10.0	1877168.0	0.254975	Y
5	IC 410-220276/17	5.0	1.214093	10.0	1925569.0	0.242819	Y
6	ICIS 410-220276/18	10.0	2.588973	10.0	1913666.0	0.258897	Y
7	IC 410-220276/19	25.0	6.000923	10.0	2030561.0	0.240037	Y



Calibration

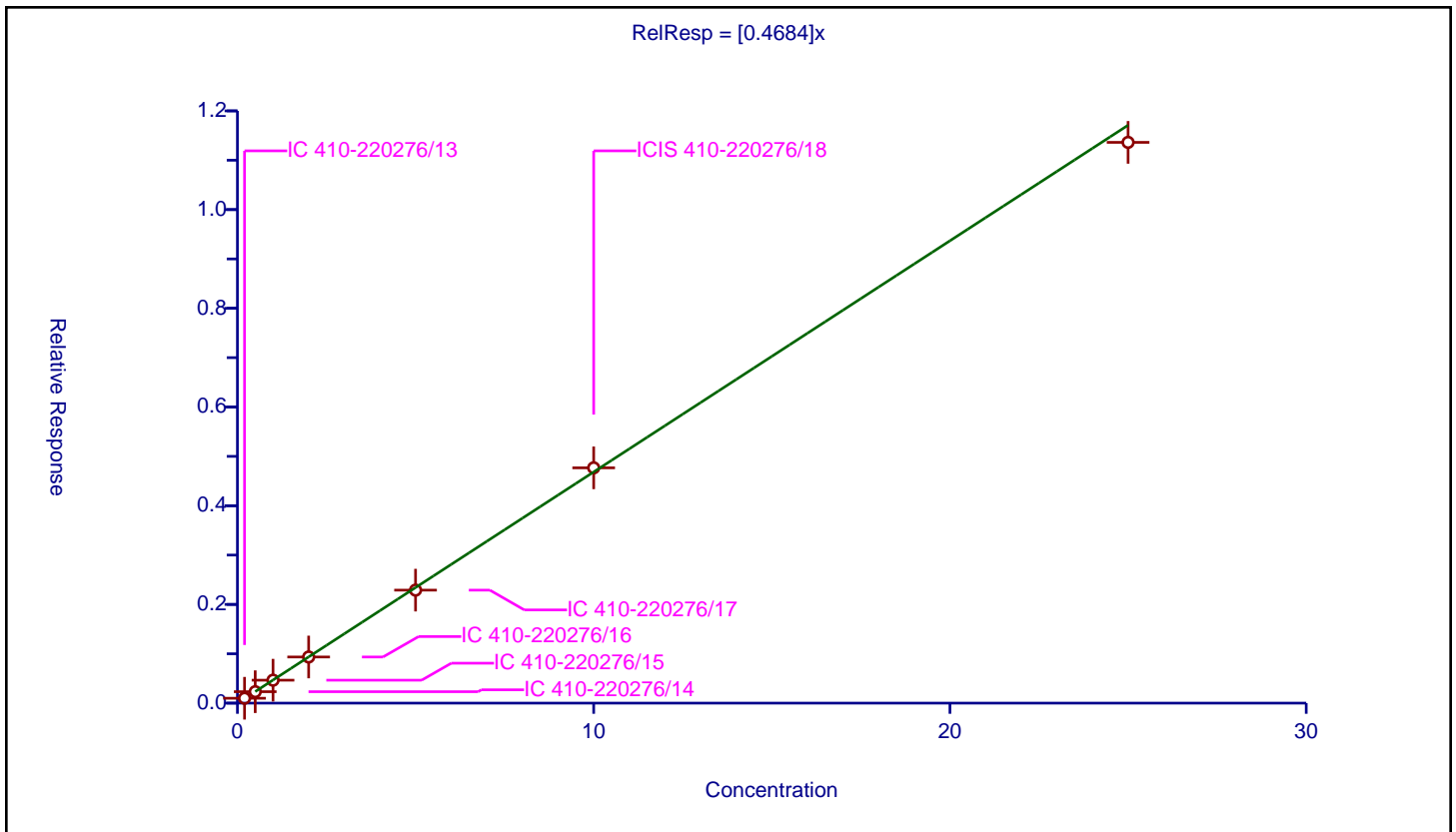
/ Iodomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4684

Error Coefficients	
Standard Error:	1030000
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 410-220276/13	0.2	0.098774	10.0	1844216.0	0.493868	Y
2	IC 410-220276/14	0.5	0.231789	10.0	1877699.0	0.463578	Y
3	IC 410-220276/15	1.0	0.464645	10.0	1880230.0	0.464645	Y
4	IC 410-220276/16	2.0	0.934951	10.0	1877168.0	0.467475	Y
5	IC 410-220276/17	5.0	2.289692	10.0	1925569.0	0.457938	Y
6	ICIS 410-220276/18	10.0	4.767749	10.0	1913666.0	0.476775	Y
7	IC 410-220276/19	25.0	11.361914	10.0	2030561.0	0.454477	Y



Calibration

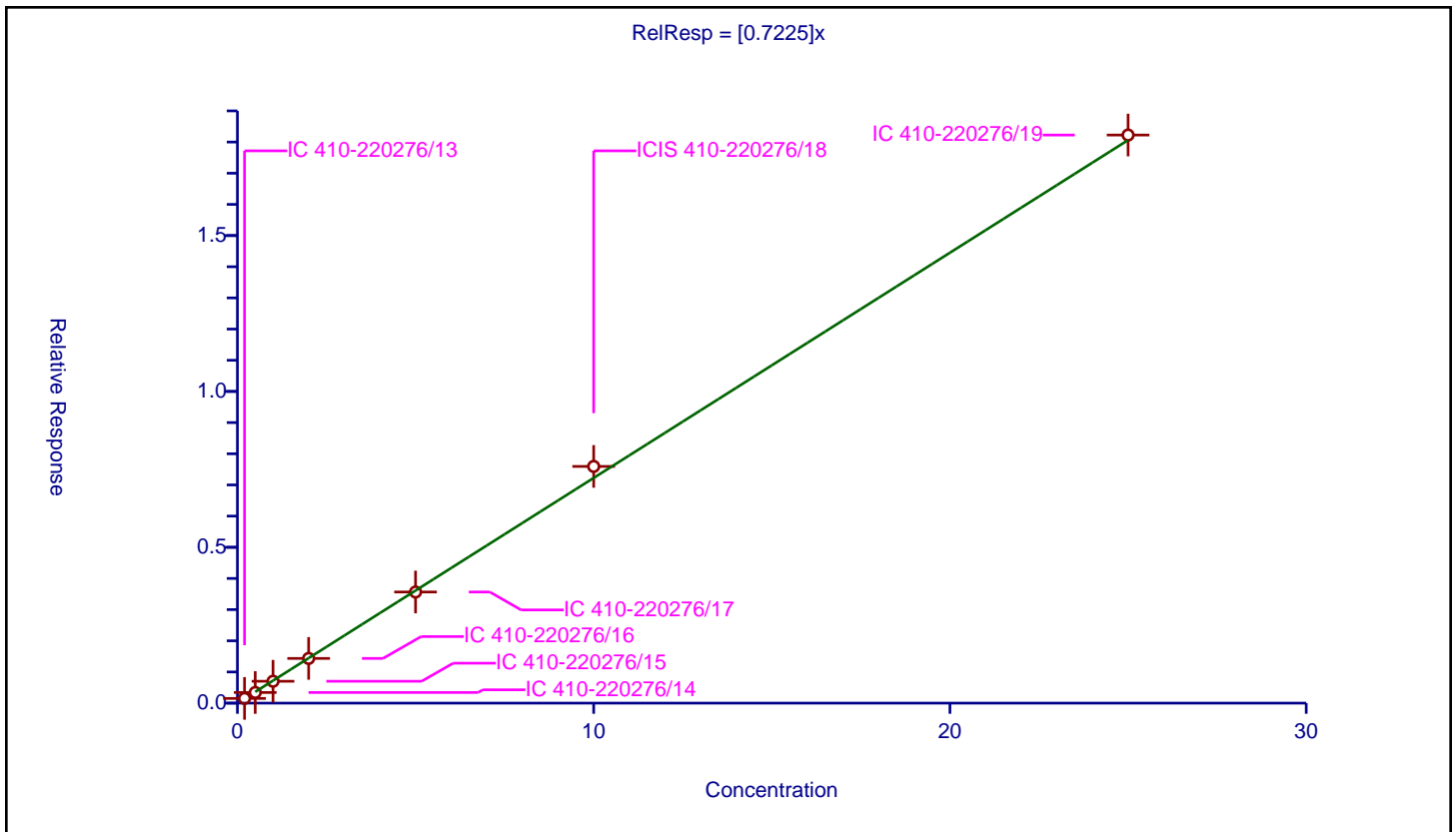
/ Carbon disulfide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7225

Error Coefficients	
Standard Error:	1650000
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 410-220276/13	0.2	0.151018	10.0	1844216.0	0.755091	Y
2	IC 410-220276/14	0.5	0.341114	10.0	1877699.0	0.682229	Y
3	IC 410-220276/15	1.0	0.701701	10.0	1880230.0	0.701701	Y
4	IC 410-220276/16	2.0	1.434011	10.0	1877168.0	0.717006	Y
5	IC 410-220276/17	5.0	3.564962	10.0	1925569.0	0.712992	Y
6	ICIS 410-220276/18	10.0	7.59377	10.0	1913666.0	0.759377	Y
7	IC 410-220276/19	25.0	18.224909	10.0	2030561.0	0.728996	Y



Calibration

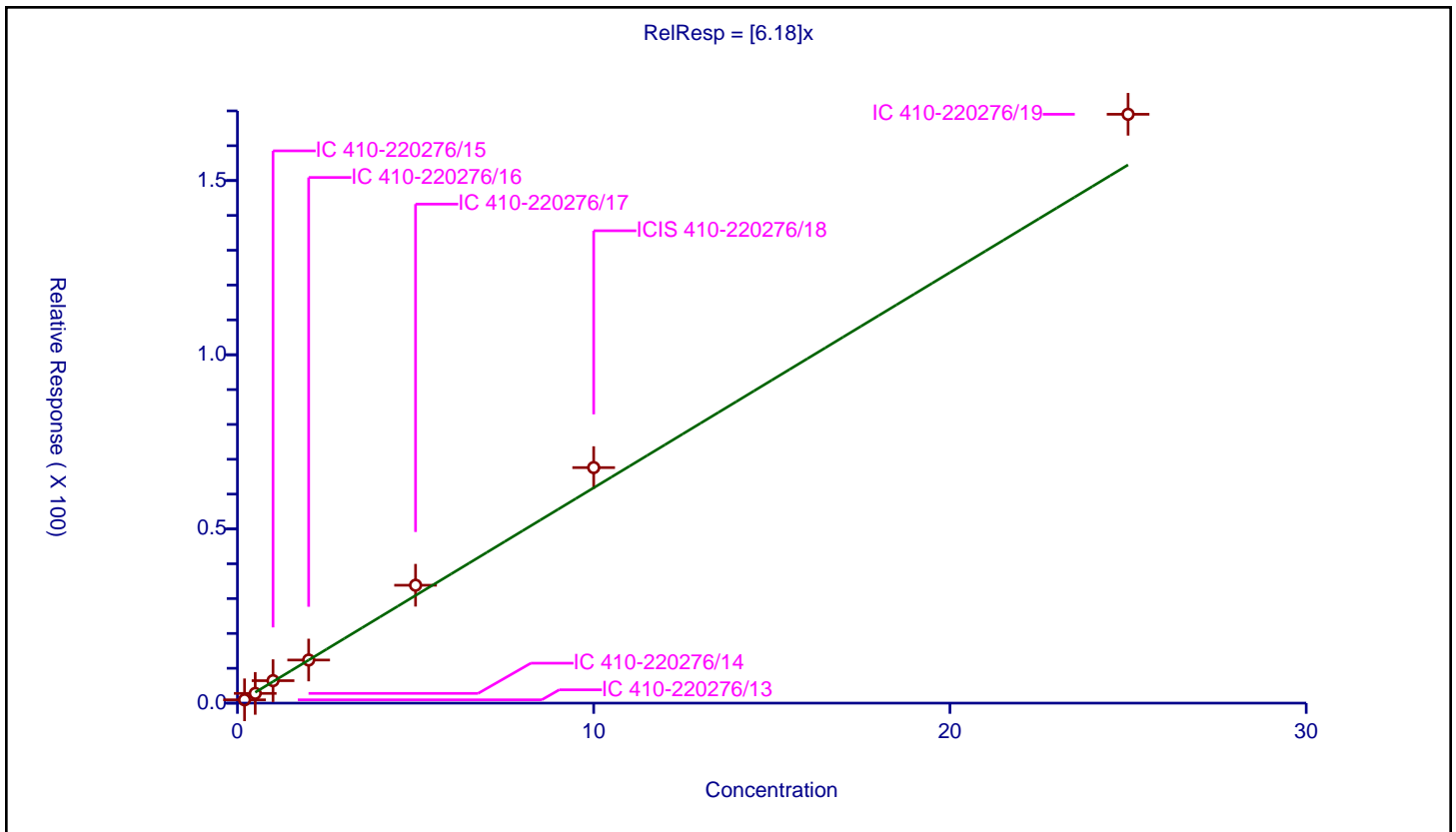
/ Methyl acetate

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	6.18

Error Coefficients	
Standard Error:	187000
Relative Standard Error:	12.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.948229	50.0	141316.0	4.741147	Y
2	IC 410-220276/14	0.5	2.795971	50.0	110999.0	5.591942	Y
3	IC 410-220276/15	1.0	6.451853	50.0	127506.0	6.451853	Y
4	IC 410-220276/16	2.0	12.376611	50.0	131292.0	6.188305	Y
5	IC 410-220276/17	5.0	33.837839	50.0	114997.0	6.767568	Y
6	ICIS 410-220276/18	10.0	67.608648	50.0	123127.0	6.760865	Y
7	IC 410-220276/19	25.0	169.029332	50.0	123688.0	6.761173	Y



Calibration

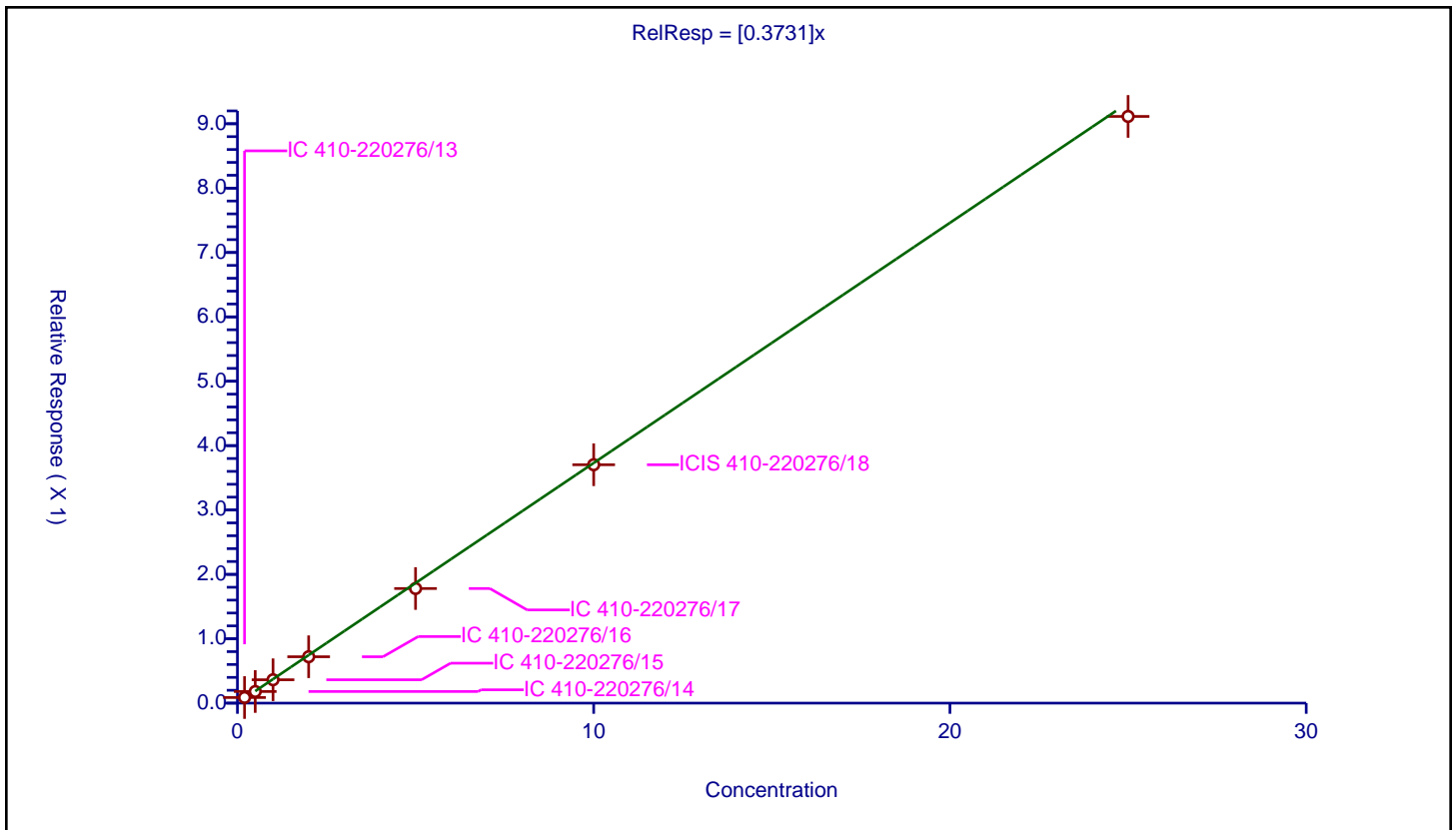
/ 3-Chloro-1-propene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3731

Error Coefficients	
Standard Error:	824000
Relative Standard Error:	7.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.087257	10.0	1844216.0	0.436283	Y
2	IC 410-220276/14	0.5	0.180402	10.0	1877699.0	0.360803	Y
3	IC 410-220276/15	1.0	0.363051	10.0	1880230.0	0.363051	Y
4	IC 410-220276/16	2.0	0.720692	10.0	1877168.0	0.360346	Y
5	IC 410-220276/17	5.0	1.780398	10.0	1925569.0	0.35608	Y
6	ICIS 410-220276/18	10.0	3.70317	10.0	1913666.0	0.370317	Y
7	IC 410-220276/19	25.0	9.114102	10.0	2030561.0	0.364564	Y



Calibration

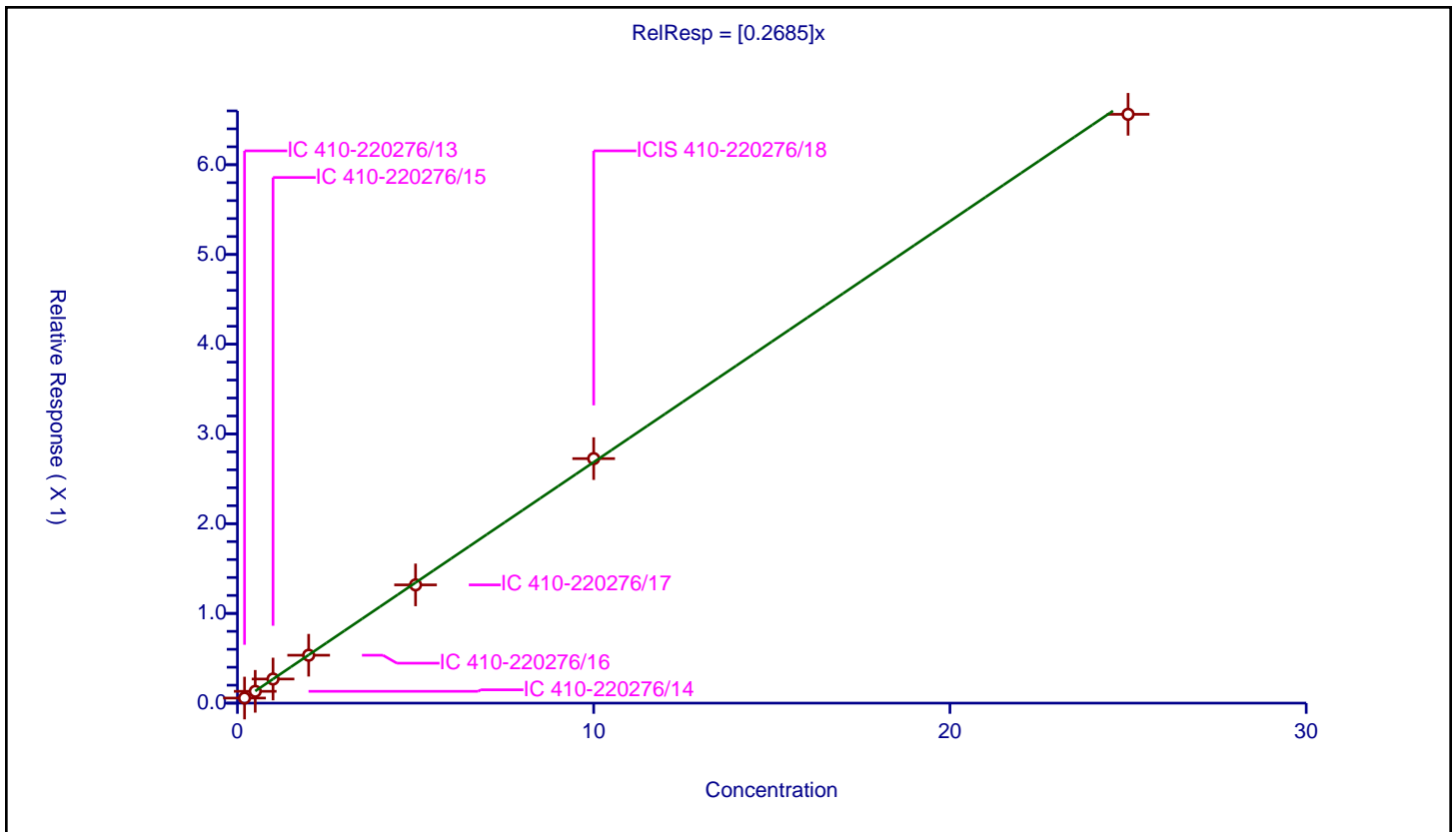
/ Methylene Chloride

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2685

Error Coefficients	
Standard Error:	595000
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 410-220276/13	0.2	0.056468	10.0	1844216.0	0.282342	Y
2	IC 410-220276/14	0.5	0.131528	10.0	1877699.0	0.263056	Y
3	IC 410-220276/15	1.0	0.268877	10.0	1880230.0	0.268877	Y
4	IC 410-220276/16	2.0	0.533948	10.0	1877168.0	0.266974	Y
5	IC 410-220276/17	5.0	1.317673	10.0	1925569.0	0.263535	Y
6	ICIS 410-220276/18	10.0	2.724916	10.0	1913666.0	0.272492	Y
7	IC 410-220276/19	25.0	6.562039	10.0	2030561.0	0.262482	Y



Calibration

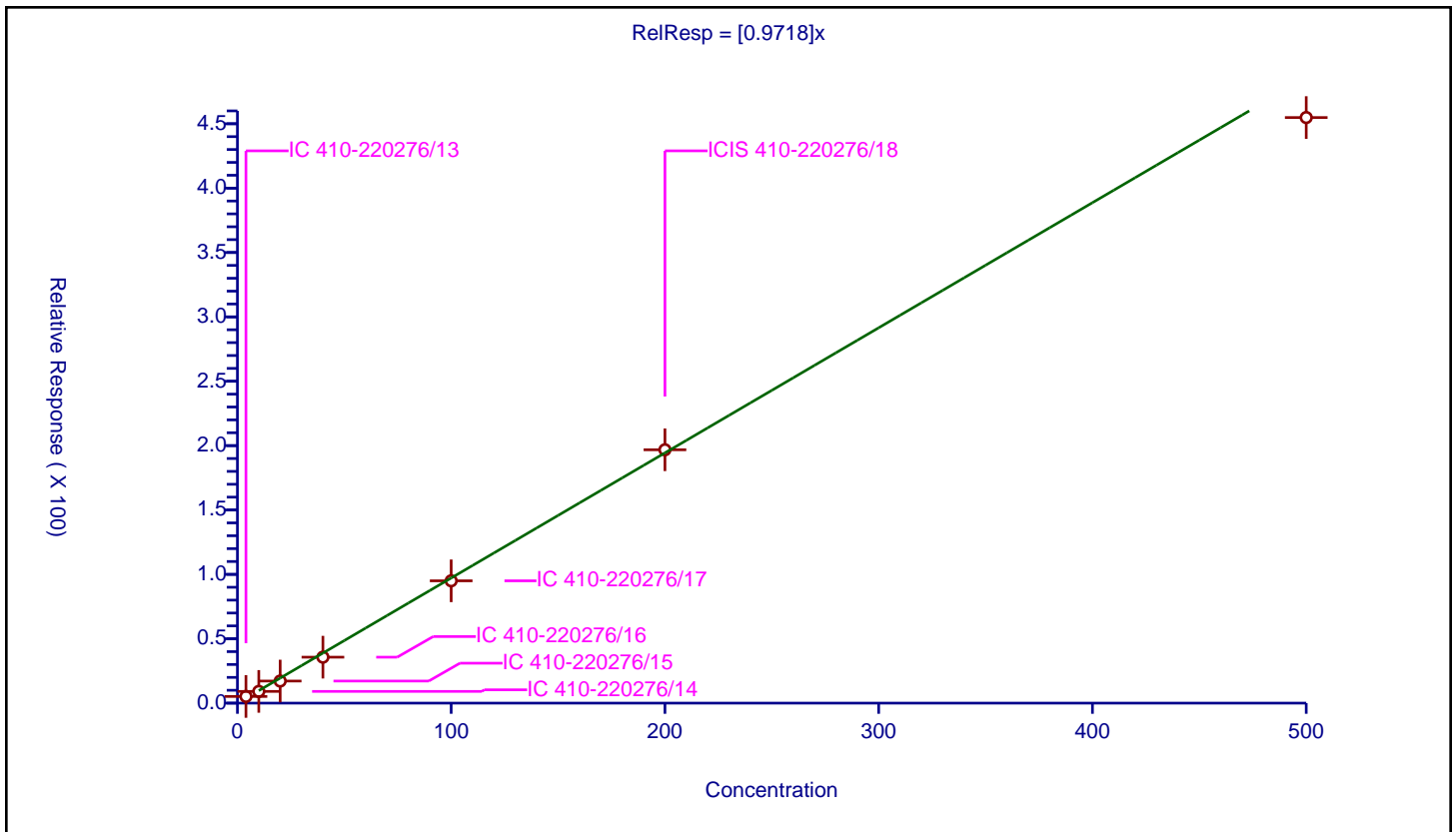
/ 2-Methyl-2-propanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9718

Error Coefficients	
Standard Error:	510000
Relative Standard Error:	15.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.962

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	4.0	5.186249	50.0	141316.0	1.296562	Y
2	IC 410-220276/14	10.0	9.113145	50.0	110999.0	0.911315	Y
3	IC 410-220276/15	20.0	17.165859	50.0	127506.0	0.858293	Y
4	IC 410-220276/16	40.0	35.70248	50.0	131292.0	0.892562	Y
5	IC 410-220276/17	100.0	95.004218	50.0	114997.0	0.950042	Y
6	ICIS 410-220276/18	200.0	196.781778	50.0	123127.0	0.983909	Y
7	IC 410-220276/19	500.0	454.829086	50.0	123688.0	0.909658	Y



Calibration

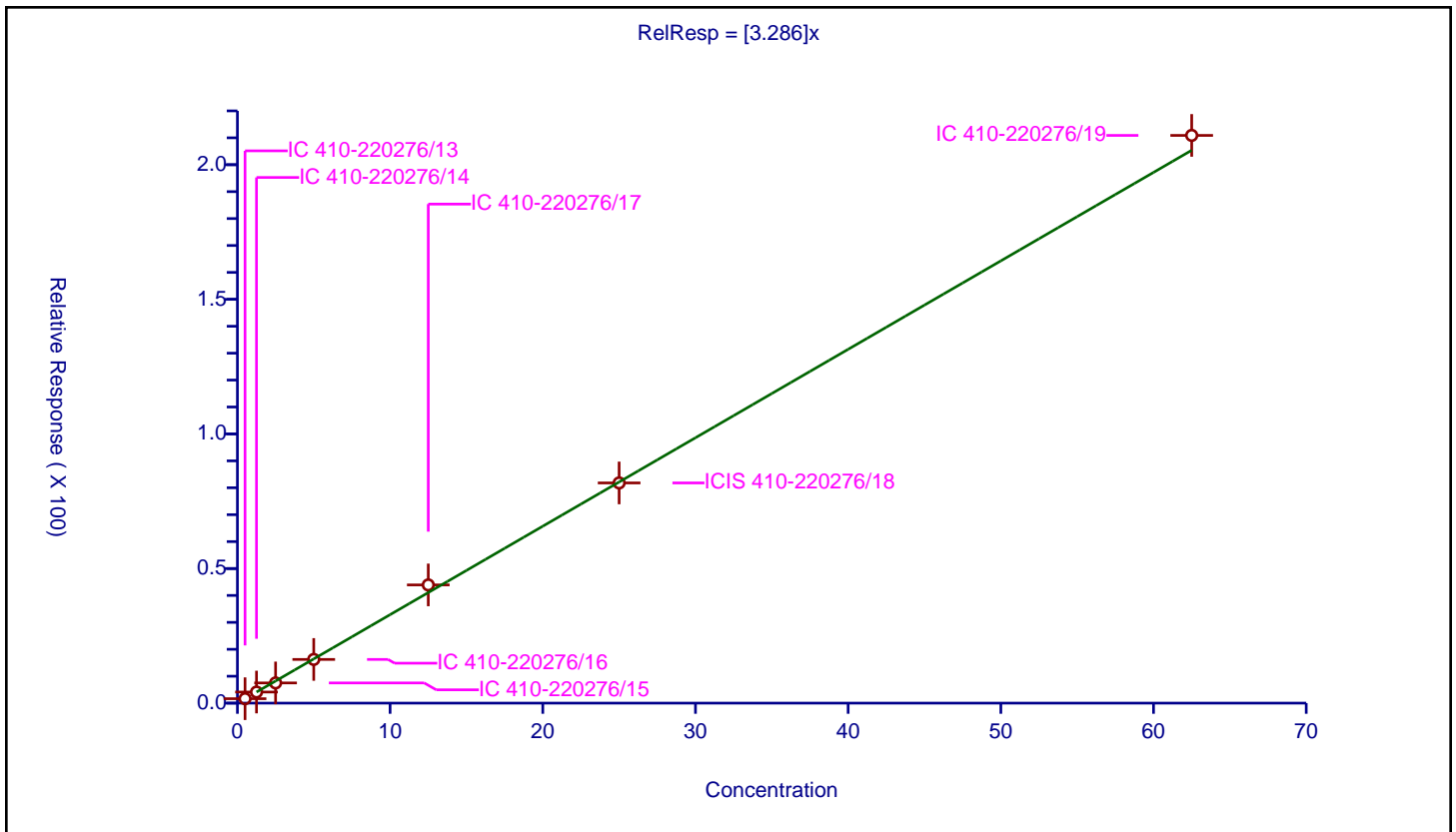
/ Acrylonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.286

Error Coefficients	
Standard Error:	233000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.5	1.649141	50.0	141316.0	3.298282	Y
2	IC 410-220276/14	1.25	4.118055	50.0	110999.0	3.294444	Y
3	IC 410-220276/15	2.5	7.50749	50.0	127506.0	3.002996	Y
4	IC 410-220276/16	5.0	16.230997	50.0	131292.0	3.246199	Y
5	IC 410-220276/17	12.5	43.908102	50.0	114997.0	3.512648	Y
6	ICIS 410-220276/18	25.0	81.798874	50.0	123127.0	3.271955	Y
7	IC 410-220276/19	62.5	210.8899	50.0	123688.0	3.374238	Y



Calibration

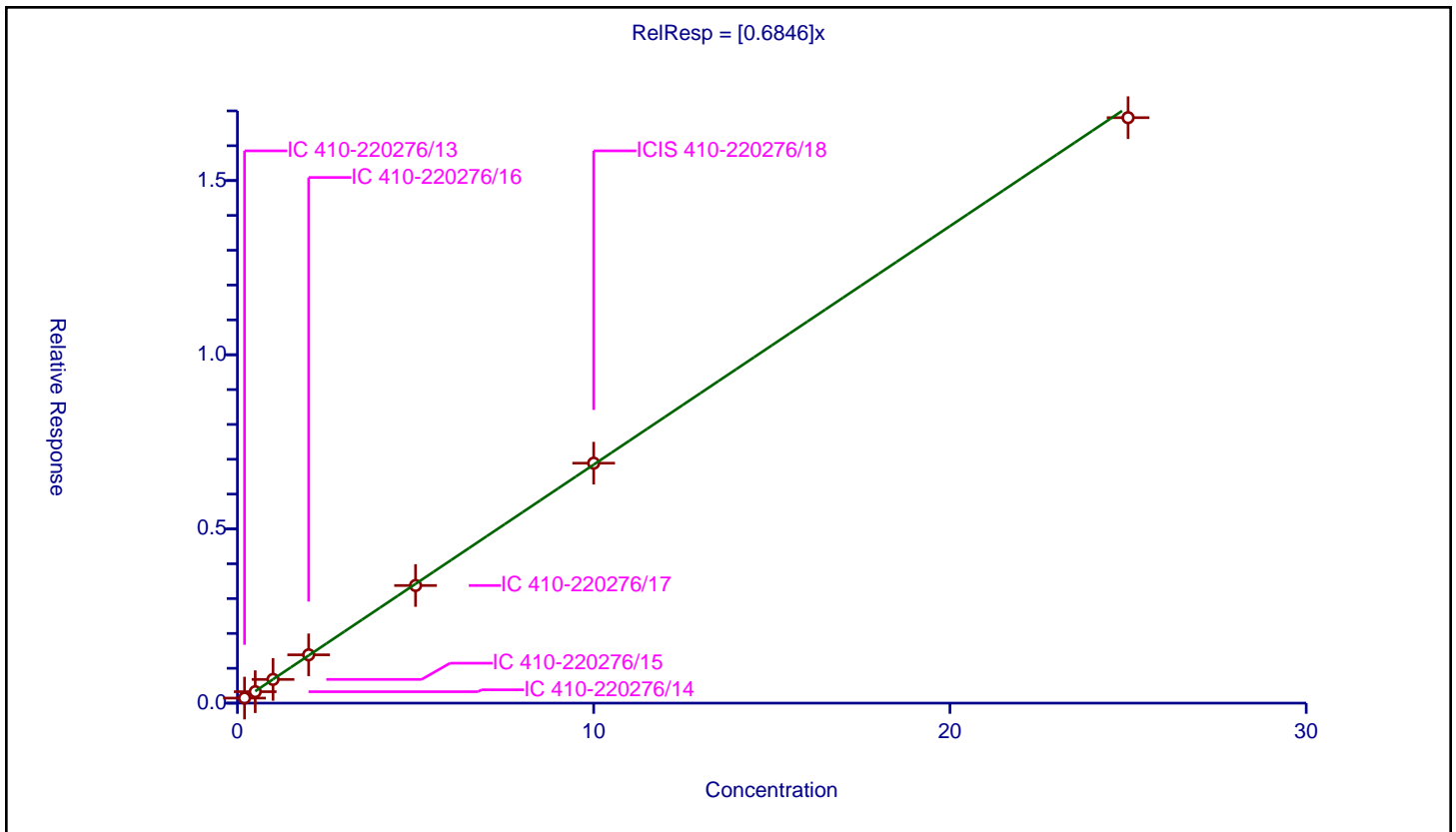
/ Methyl tert-butyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6846

Error Coefficients	
Standard Error:	1520000
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 410-220276/13	0.2	0.144961	10.0	1844216.0	0.724807	Y
2	IC 410-220276/14	0.5	0.328706	10.0	1877699.0	0.657411	Y
3	IC 410-220276/15	1.0	0.680645	10.0	1880230.0	0.680645	Y
4	IC 410-220276/16	2.0	1.386306	10.0	1877168.0	0.693153	Y
5	IC 410-220276/17	5.0	3.376155	10.0	1925569.0	0.675231	Y
6	ICIS 410-220276/18	10.0	6.887937	10.0	1913666.0	0.688794	Y
7	IC 410-220276/19	25.0	16.805326	10.0	2030561.0	0.672213	Y



Calibration

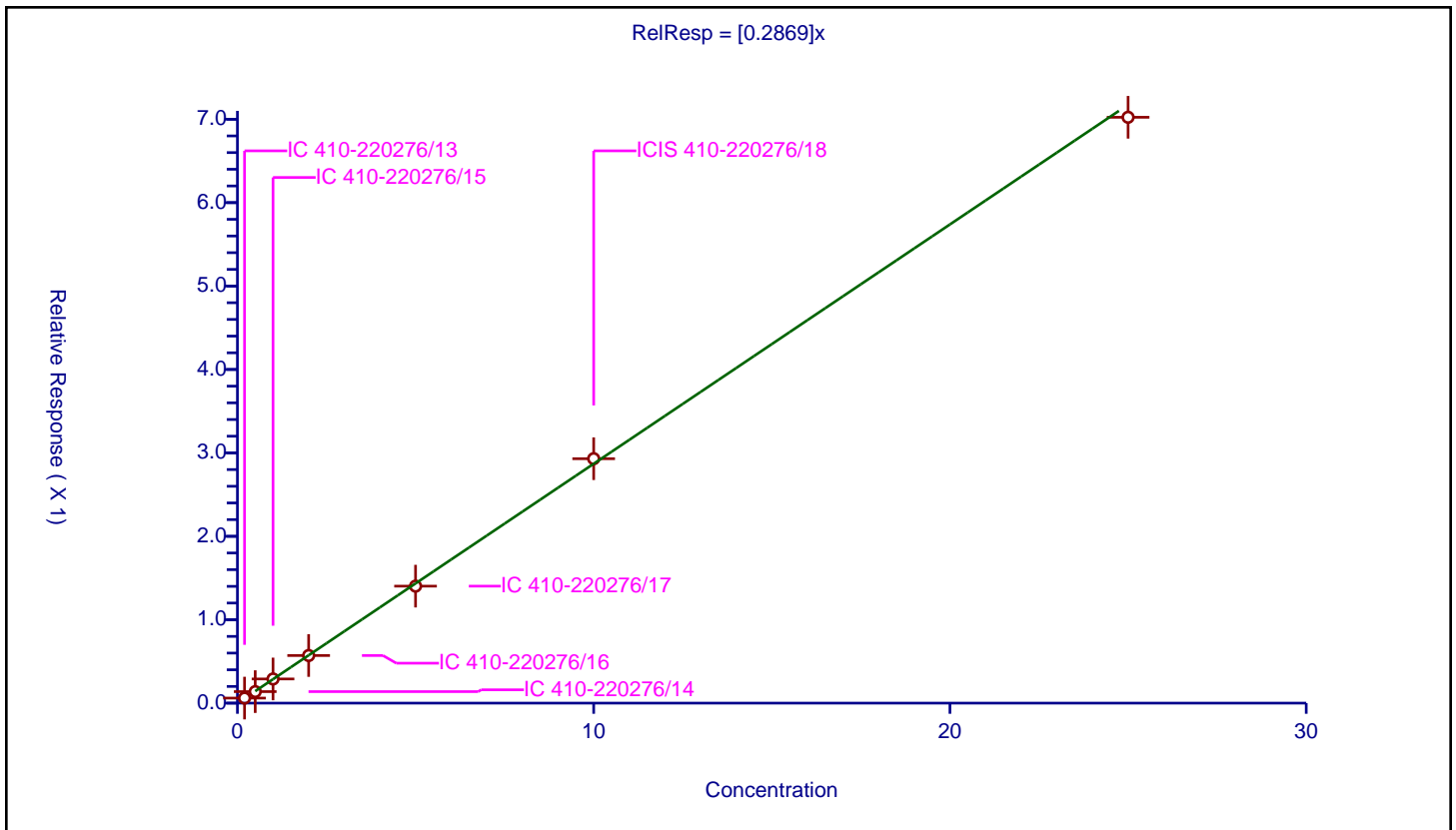
/ trans-1,2-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2869

Error Coefficients	
Standard Error:	637000
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 410-220276/13	0.2	0.060622	10.0	1844216.0	0.30311	Y
2	IC 410-220276/14	0.5	0.137993	10.0	1877699.0	0.275987	Y
3	IC 410-220276/15	1.0	0.289704	10.0	1880230.0	0.289704	Y
4	IC 410-220276/16	2.0	0.570668	10.0	1877168.0	0.285334	Y
5	IC 410-220276/17	5.0	1.40263	10.0	1925569.0	0.280526	Y
6	ICIS 410-220276/18	10.0	2.930475	10.0	1913666.0	0.293047	Y
7	IC 410-220276/19	25.0	7.02331	10.0	2030561.0	0.280932	Y



Calibration

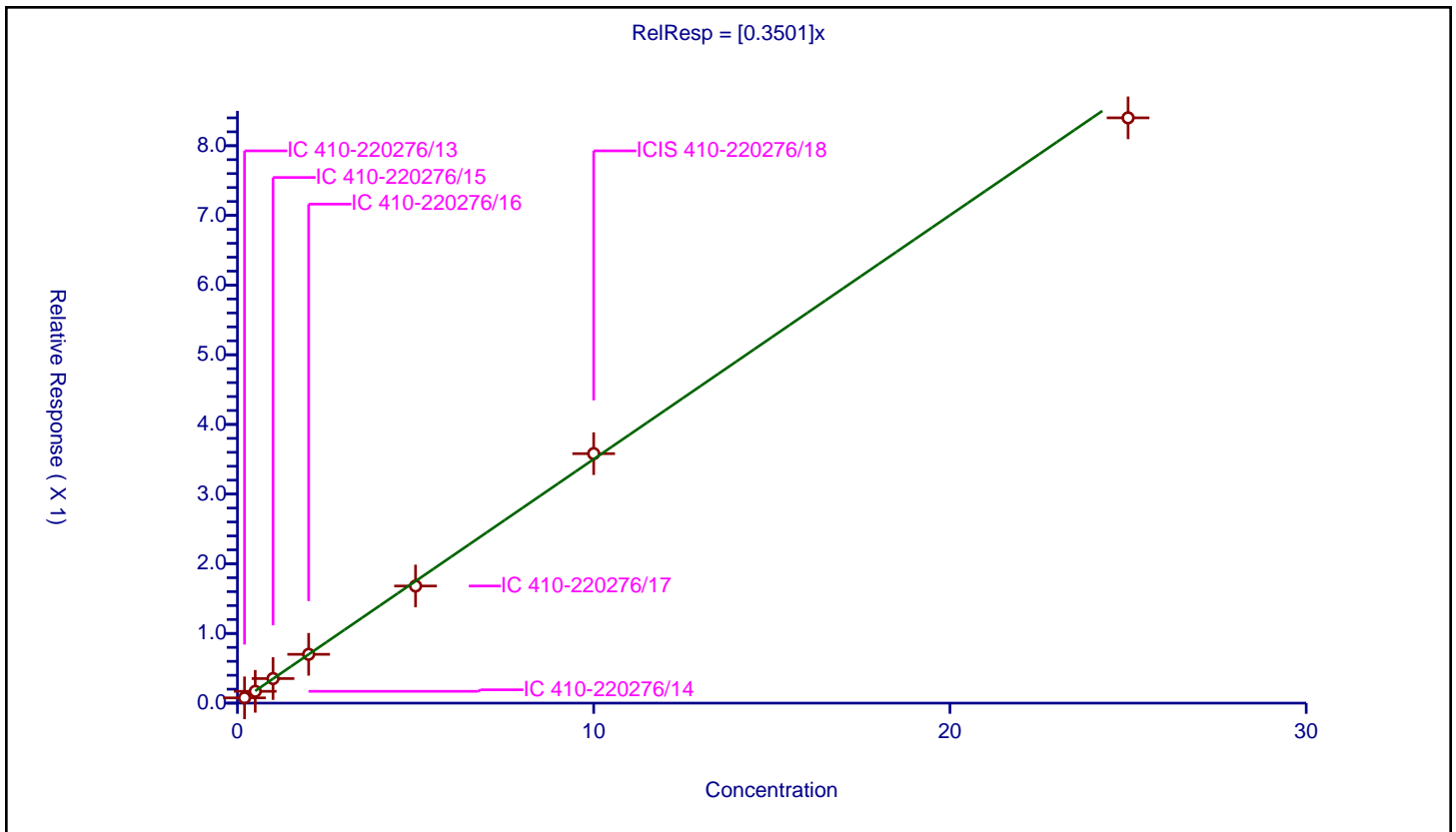
/ Hexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3501

Error Coefficients	
Standard Error:	764000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.075685	10.0	1844216.0	0.378426	Y
2	IC 410-220276/14	0.5	0.1695	10.0	1877699.0	0.339	Y
3	IC 410-220276/15	1.0	0.352744	10.0	1880230.0	0.352744	Y
4	IC 410-220276/16	2.0	0.700625	10.0	1877168.0	0.350312	Y
5	IC 410-220276/17	5.0	1.680958	10.0	1925569.0	0.336192	Y
6	ICIS 410-220276/18	10.0	3.580855	10.0	1913666.0	0.358085	Y
7	IC 410-220276/19	25.0	8.400068	10.0	2030561.0	0.336003	Y



Calibration

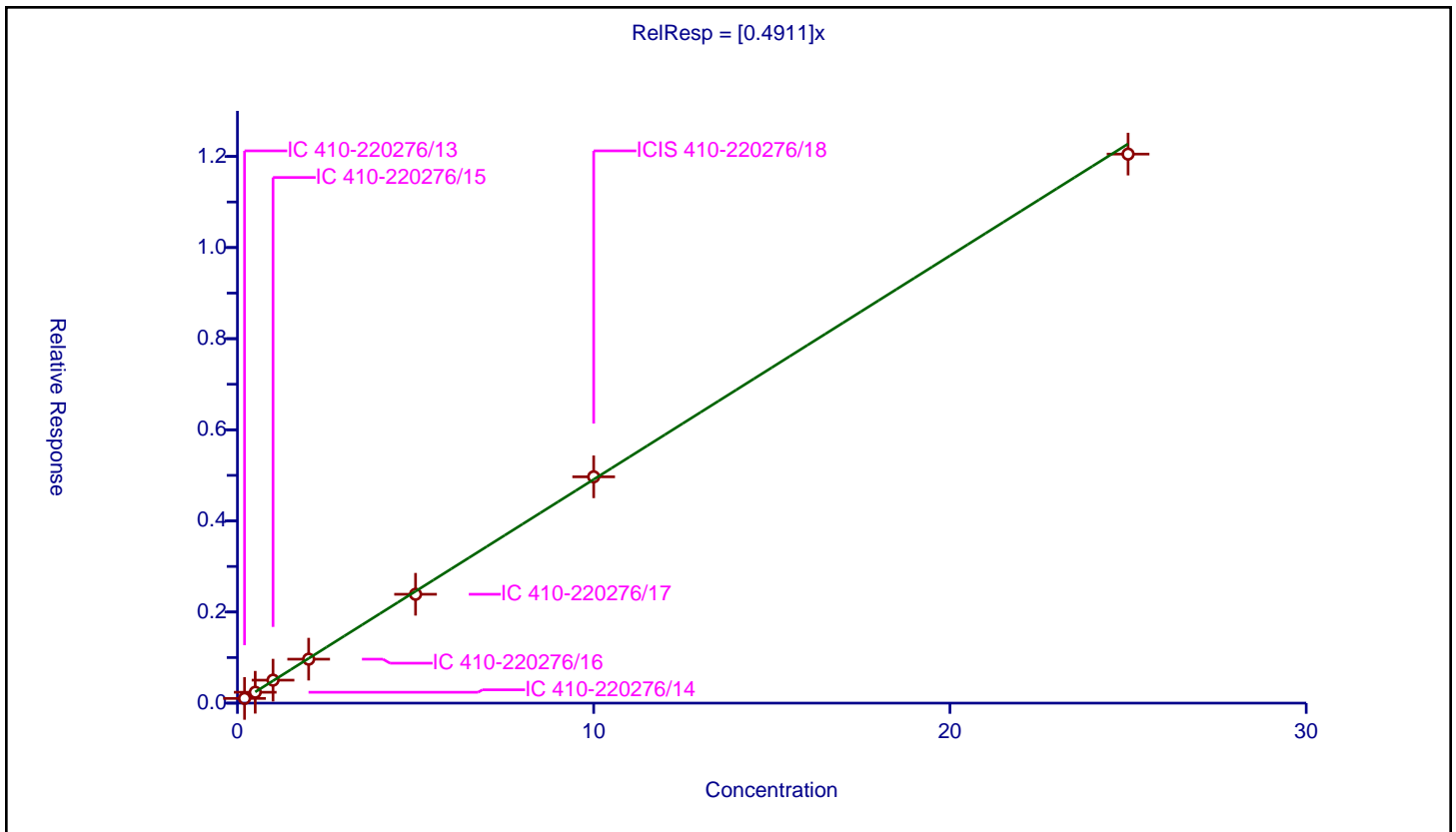
/ 1,1-Dichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4911

Error Coefficients	
Standard Error:	1090000
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 410-220276/13	0.2	0.103372	10.0	1844216.0	0.516859	Y
2	IC 410-220276/14	0.5	0.238696	10.0	1877699.0	0.477393	Y
3	IC 410-220276/15	1.0	0.50397	10.0	1880230.0	0.50397	Y
4	IC 410-220276/16	2.0	0.964884	10.0	1877168.0	0.482442	Y
5	IC 410-220276/17	5.0	2.389538	10.0	1925569.0	0.477908	Y
6	ICIS 410-220276/18	10.0	4.967899	10.0	1913666.0	0.49679	Y
7	IC 410-220276/19	25.0	12.051532	10.0	2030561.0	0.482061	Y



Calibration

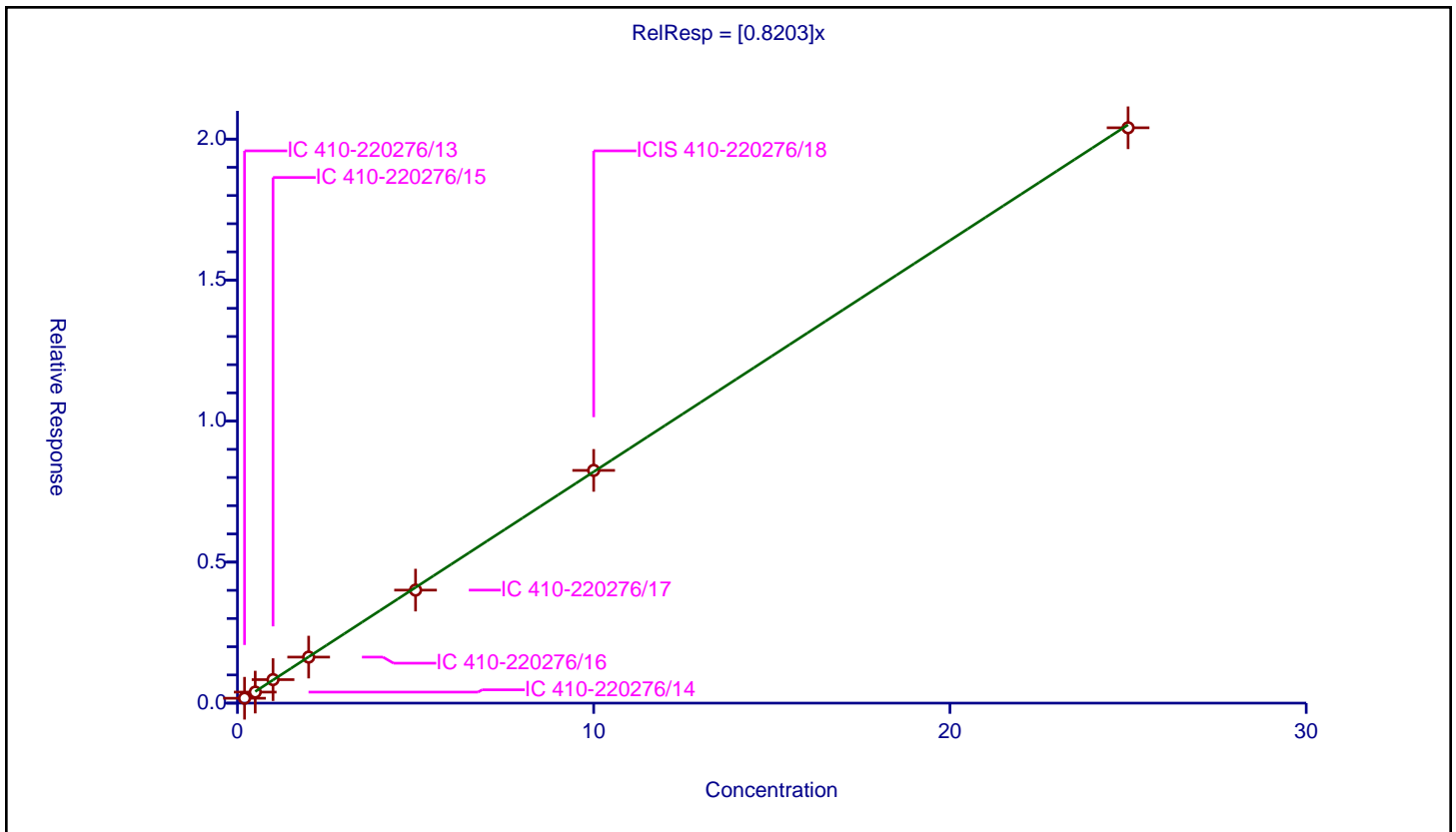
/ Isopropyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8203

Error Coefficients	
Standard Error:	1840000
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 410-220276/13	0.2	0.173288	10.0	1844216.0	0.866439	Y
2	IC 410-220276/14	0.5	0.391671	10.0	1877699.0	0.783342	Y
3	IC 410-220276/15	1.0	0.83359	10.0	1880230.0	0.83359	Y
4	IC 410-220276/16	2.0	1.632001	10.0	1877168.0	0.816	Y
5	IC 410-220276/17	5.0	4.007454	10.0	1925569.0	0.801491	Y
6	ICIS 410-220276/18	10.0	8.25272	10.0	1913666.0	0.825272	Y
7	IC 410-220276/19	25.0	20.401204	10.0	2030561.0	0.816048	Y



Calibration

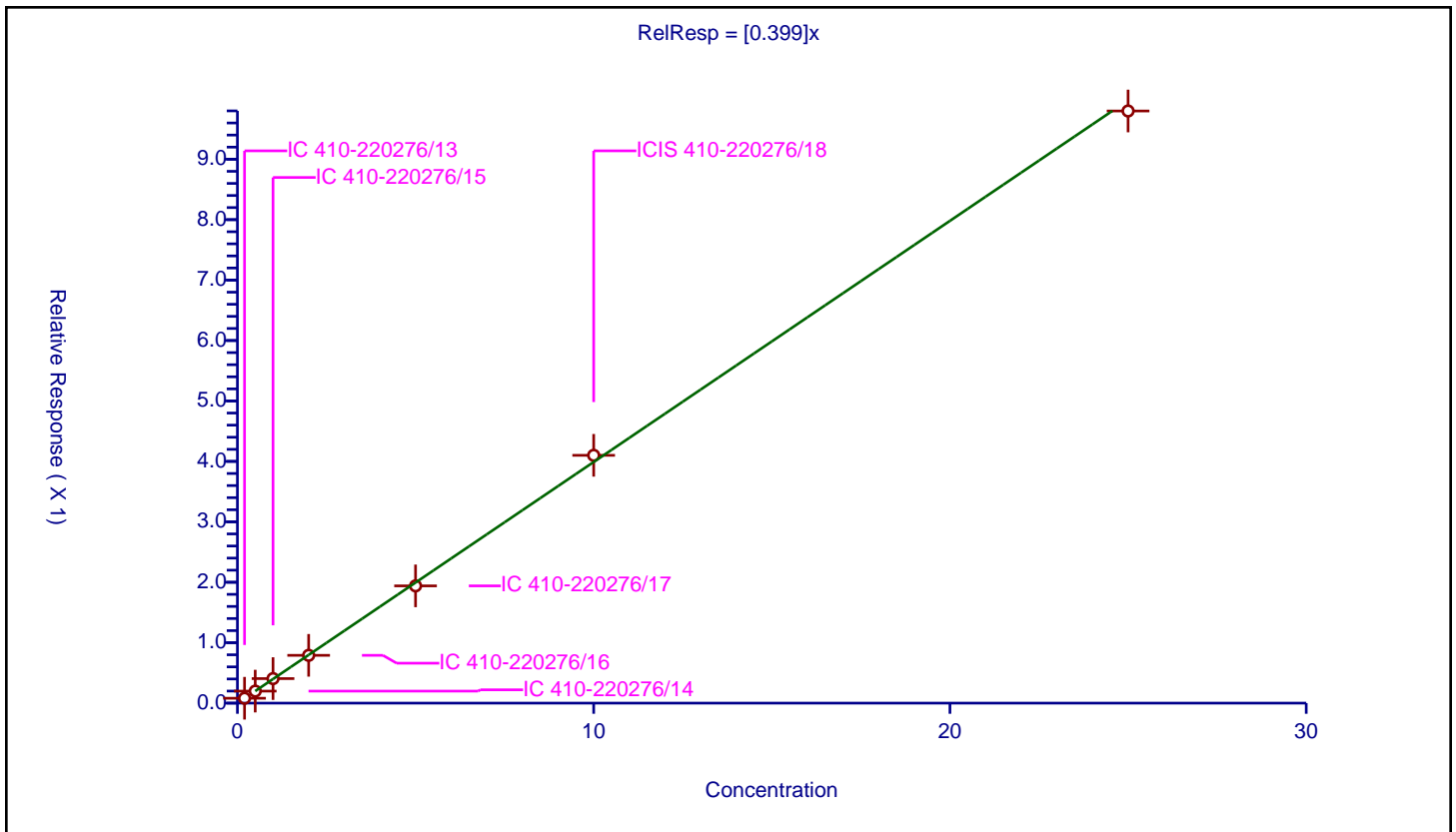
/ 2-Chloro-1,3-butadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.399

Error Coefficients	
Standard Error:	889000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.080826	10.0	1844216.0	0.404128	Y
2	IC 410-220276/14	0.5	0.198797	10.0	1877699.0	0.397593	Y
3	IC 410-220276/15	1.0	0.405972	10.0	1880230.0	0.405972	Y
4	IC 410-220276/16	2.0	0.790835	10.0	1877168.0	0.395417	Y
5	IC 410-220276/17	5.0	1.940289	10.0	1925569.0	0.388058	Y
6	ICIS 410-220276/18	10.0	4.100554	10.0	1913666.0	0.410055	Y
7	IC 410-220276/19	25.0	9.798327	10.0	2030561.0	0.391933	Y



Calibration

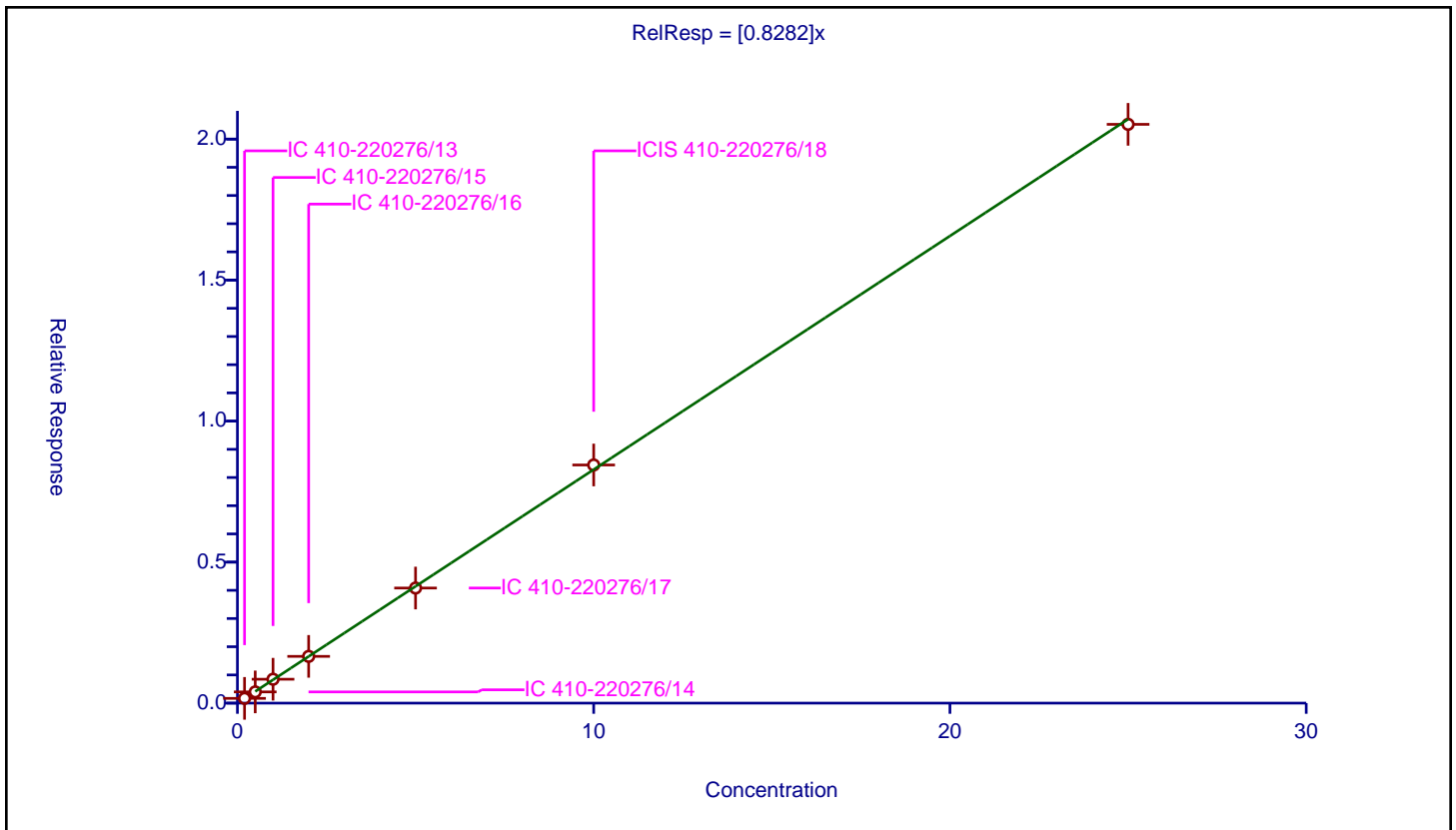
/ Tert-butyl ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8282

Error Coefficients	
Standard Error:	1860000
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 410-220276/13	0.2	0.16863	10.0	1844216.0	0.84315	Y
2	IC 410-220276/14	0.5	0.398344	10.0	1877699.0	0.796688	Y
3	IC 410-220276/15	1.0	0.847253	10.0	1880230.0	0.847253	Y
4	IC 410-220276/16	2.0	1.657635	10.0	1877168.0	0.828818	Y
5	IC 410-220276/17	5.0	4.080768	10.0	1925569.0	0.816154	Y
6	ICIS 410-220276/18	10.0	8.444483	10.0	1913666.0	0.844448	Y
7	IC 410-220276/19	25.0	20.522974	10.0	2030561.0	0.820919	Y



Calibration

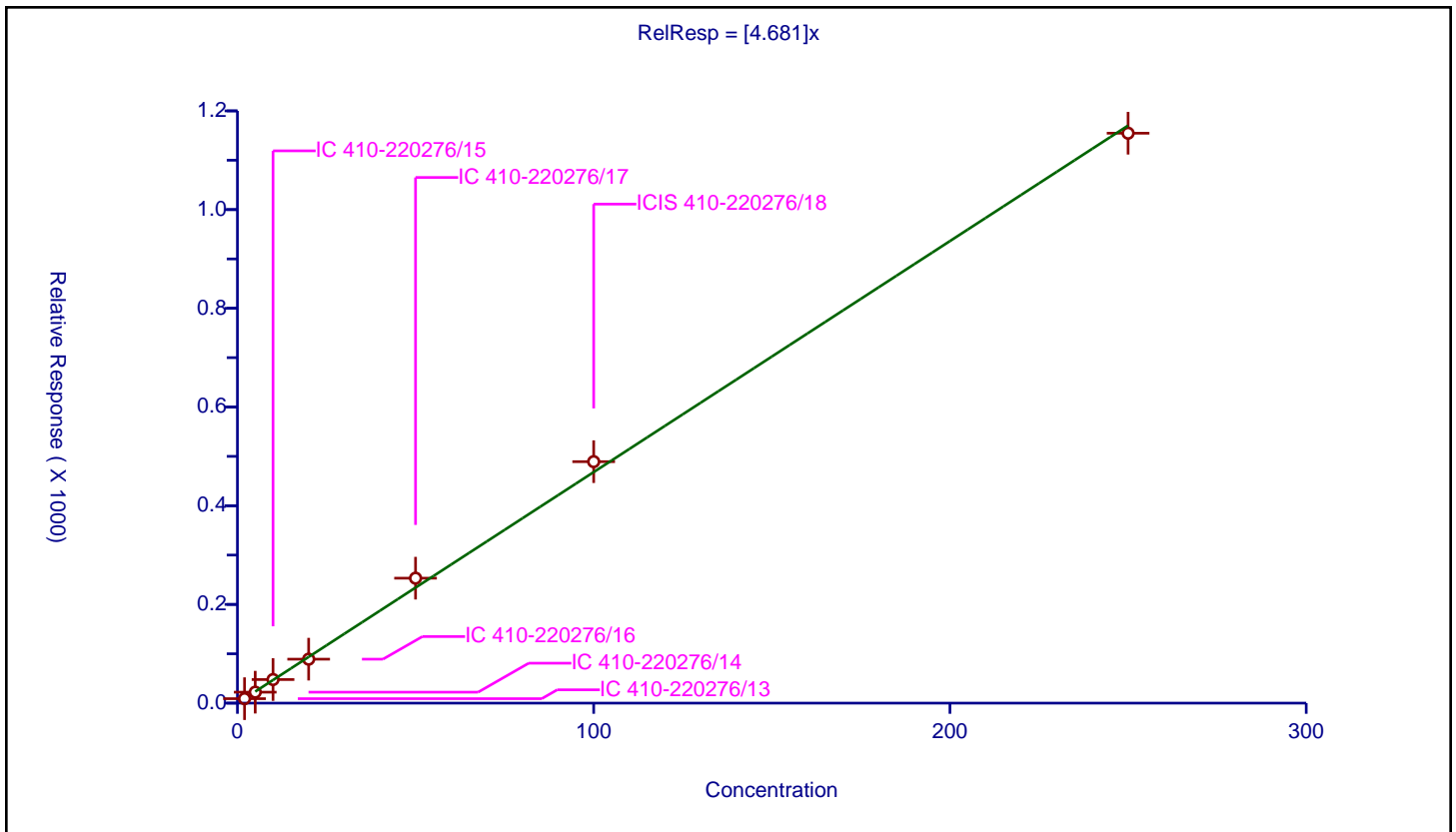
/ 2-Butanone (MEK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.681

Error Coefficients	
Standard Error:	1290000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	2.0	9.032947	50.0	141316.0	4.516474	Y
2	IC 410-220276/14	5.0	22.228579	50.0	110999.0	4.445716	Y
3	IC 410-220276/15	10.0	47.762458	50.0	127506.0	4.776246	Y
4	IC 410-220276/16	20.0	89.080447	50.0	131292.0	4.454022	Y
5	IC 410-220276/17	50.0	253.165735	50.0	114997.0	5.063315	Y
6	ICIS 410-220276/18	100.0	489.258652	50.0	123127.0	4.892587	Y
7	IC 410-220276/19	250.0	1154.787853	50.0	123688.0	4.619151	Y



Calibration

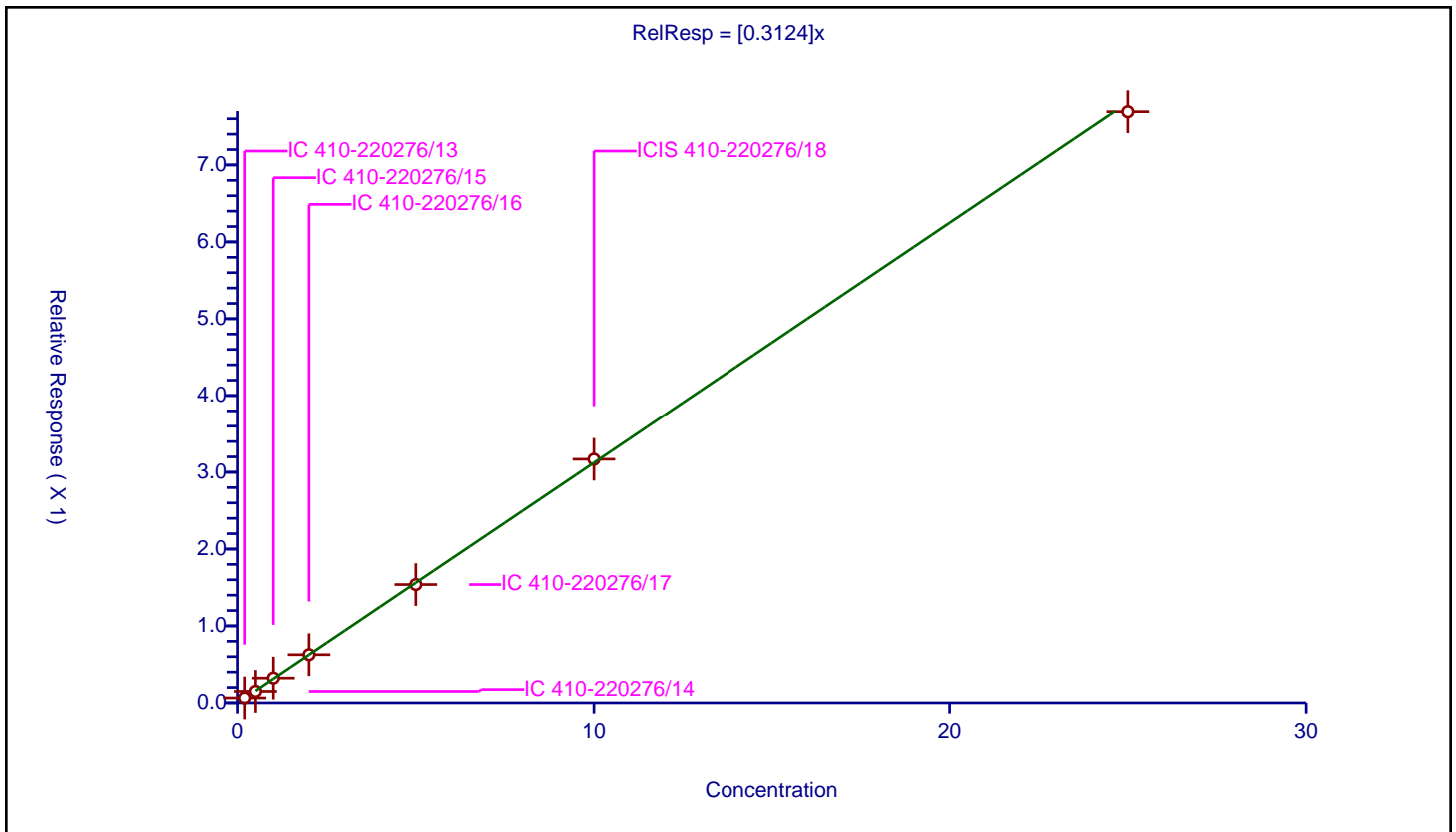
/ cis-1,2-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3124

Error Coefficients	
Standard Error:	697000
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 410-220276/13	0.2	0.06426	10.0	1844216.0	0.321302	Y
2	IC 410-220276/14	0.5	0.149476	10.0	1877699.0	0.298951	Y
3	IC 410-220276/15	1.0	0.321796	10.0	1880230.0	0.321796	Y
4	IC 410-220276/16	2.0	0.625645	10.0	1877168.0	0.312822	Y
5	IC 410-220276/17	5.0	1.537878	10.0	1925569.0	0.307576	Y
6	ICIS 410-220276/18	10.0	3.169336	10.0	1913666.0	0.316934	Y
7	IC 410-220276/19	25.0	7.691283	10.0	2030561.0	0.307651	Y



Calibration

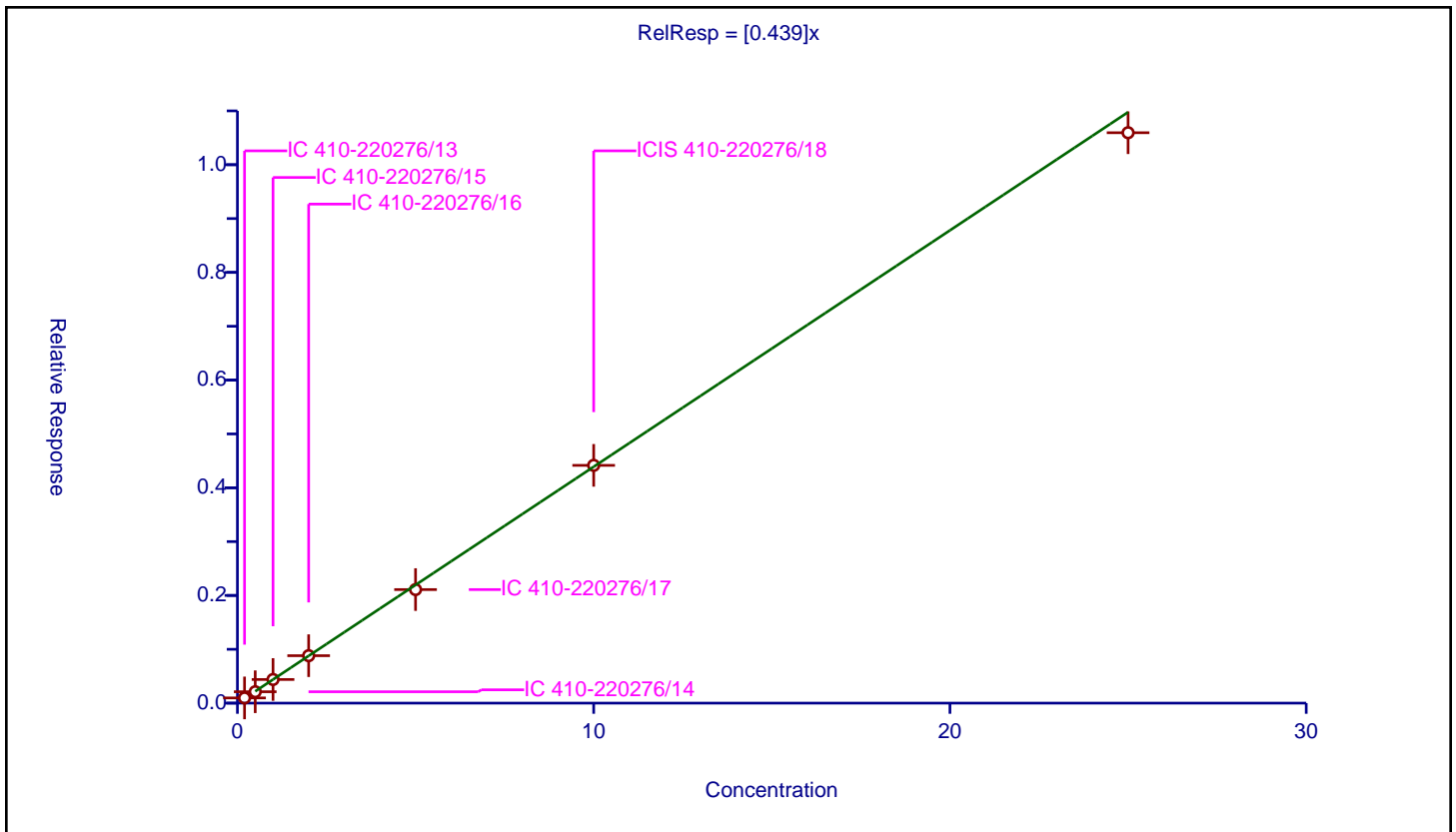
/ 2,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.439

Error Coefficients	
Standard Error:	961000
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 410-220276/13	0.2	0.096561	10.0	1844216.0	0.482807	Y
2	IC 410-220276/14	0.5	0.211711	10.0	1877699.0	0.423422	Y
3	IC 410-220276/15	1.0	0.439175	10.0	1880230.0	0.439175	Y
4	IC 410-220276/16	2.0	0.881418	10.0	1877168.0	0.440709	Y
5	IC 410-220276/17	5.0	2.109096	10.0	1925569.0	0.421819	Y
6	ICIS 410-220276/18	10.0	4.416183	10.0	1913666.0	0.441618	Y
7	IC 410-220276/19	25.0	10.594186	10.0	2030561.0	0.423767	Y



Calibration

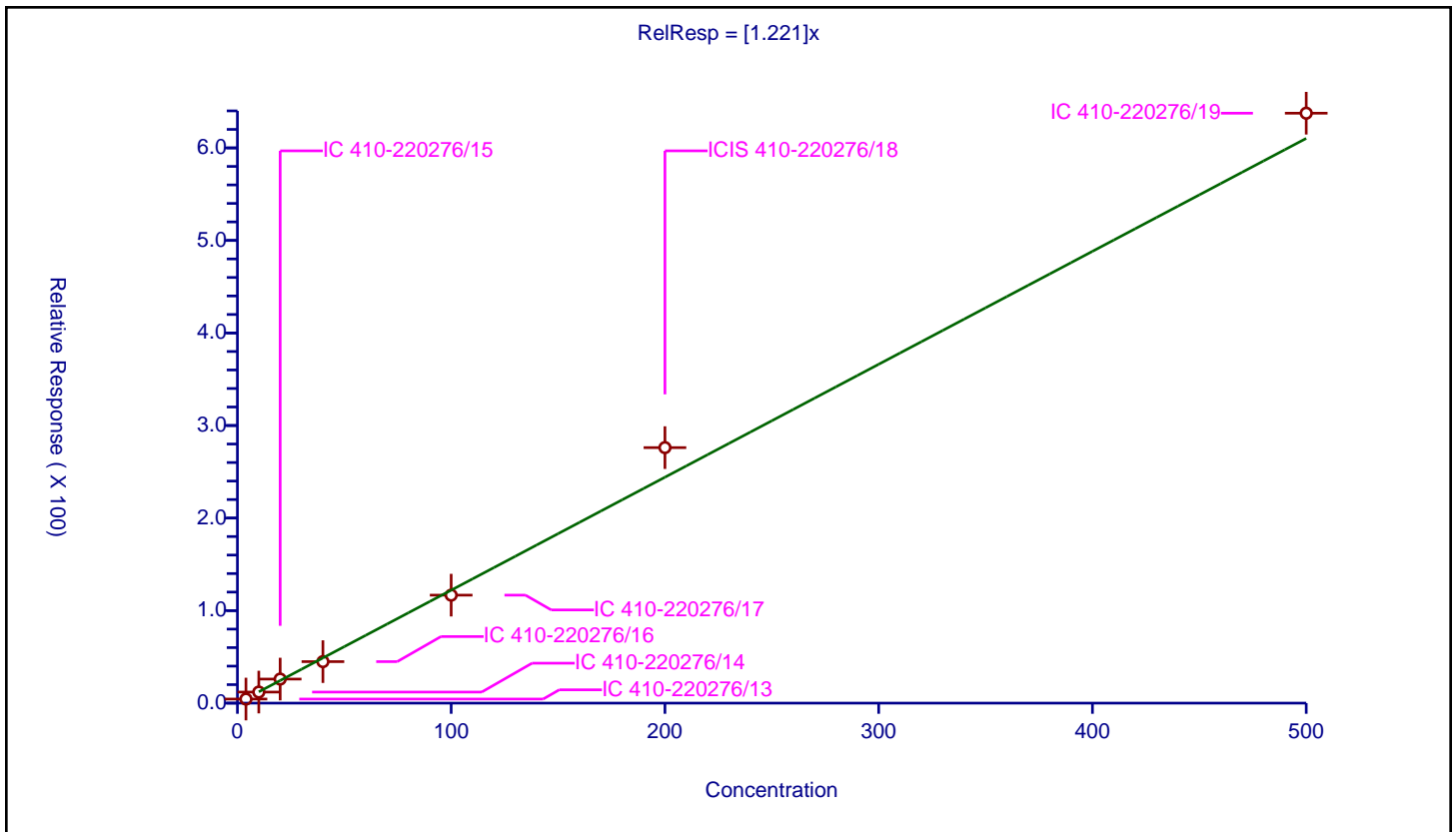
/ Propionitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.221

Error Coefficients	
Standard Error:	712000
Relative Standard Error:	8.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	4.0	4.412452	50.0	141316.0	1.103113	Y
2	IC 410-220276/14	10.0	11.971279	50.0	110999.0	1.197128	Y
3	IC 410-220276/15	20.0	26.003874	50.0	127506.0	1.300194	Y
4	IC 410-220276/16	40.0	44.841651	50.0	131292.0	1.121041	Y
5	IC 410-220276/17	100.0	116.690435	50.0	114997.0	1.166904	Y
6	ICIS 410-220276/18	200.0	276.101099	50.0	123127.0	1.380505	Y
7	IC 410-220276/19	500.0	637.495149	50.0	123688.0	1.27499	Y



Calibration

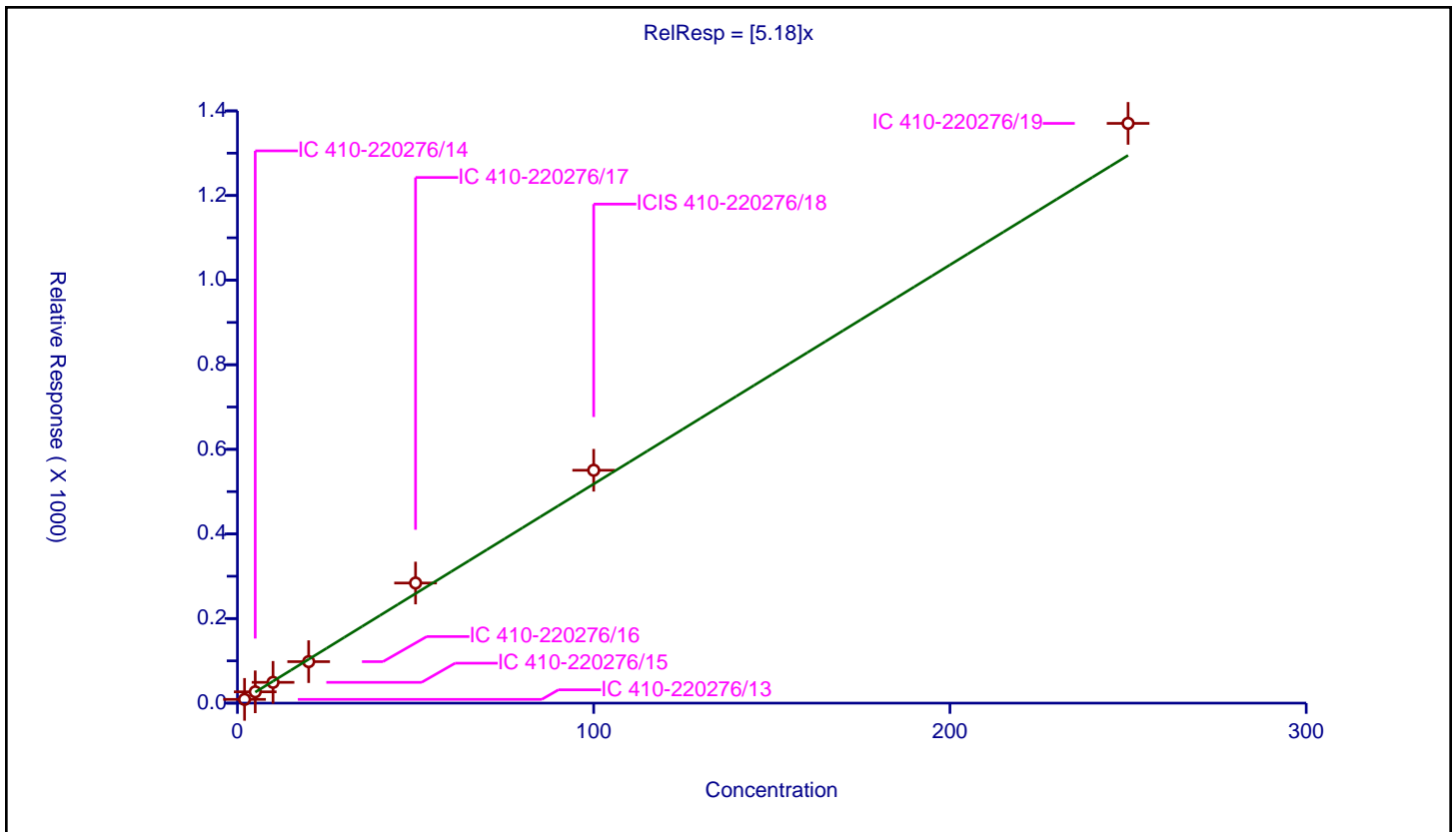
/ Methacrylonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.18

Error Coefficients	
Standard Error:	1520000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	2.0	8.872315	50.0	141316.0	4.436157	Y
2	IC 410-220276/14	5.0	26.711952	50.0	110999.0	5.34239	Y
3	IC 410-220276/15	10.0	49.119257	50.0	127506.0	4.911926	Y
4	IC 410-220276/16	20.0	98.045959	50.0	131292.0	4.902298	Y
5	IC 410-220276/17	50.0	283.946538	50.0	114997.0	5.678931	Y
6	ICIS 410-220276/18	100.0	550.49055	50.0	123127.0	5.504906	Y
7	IC 410-220276/19	250.0	1370.446608	50.0	123688.0	5.481786	Y



Calibration

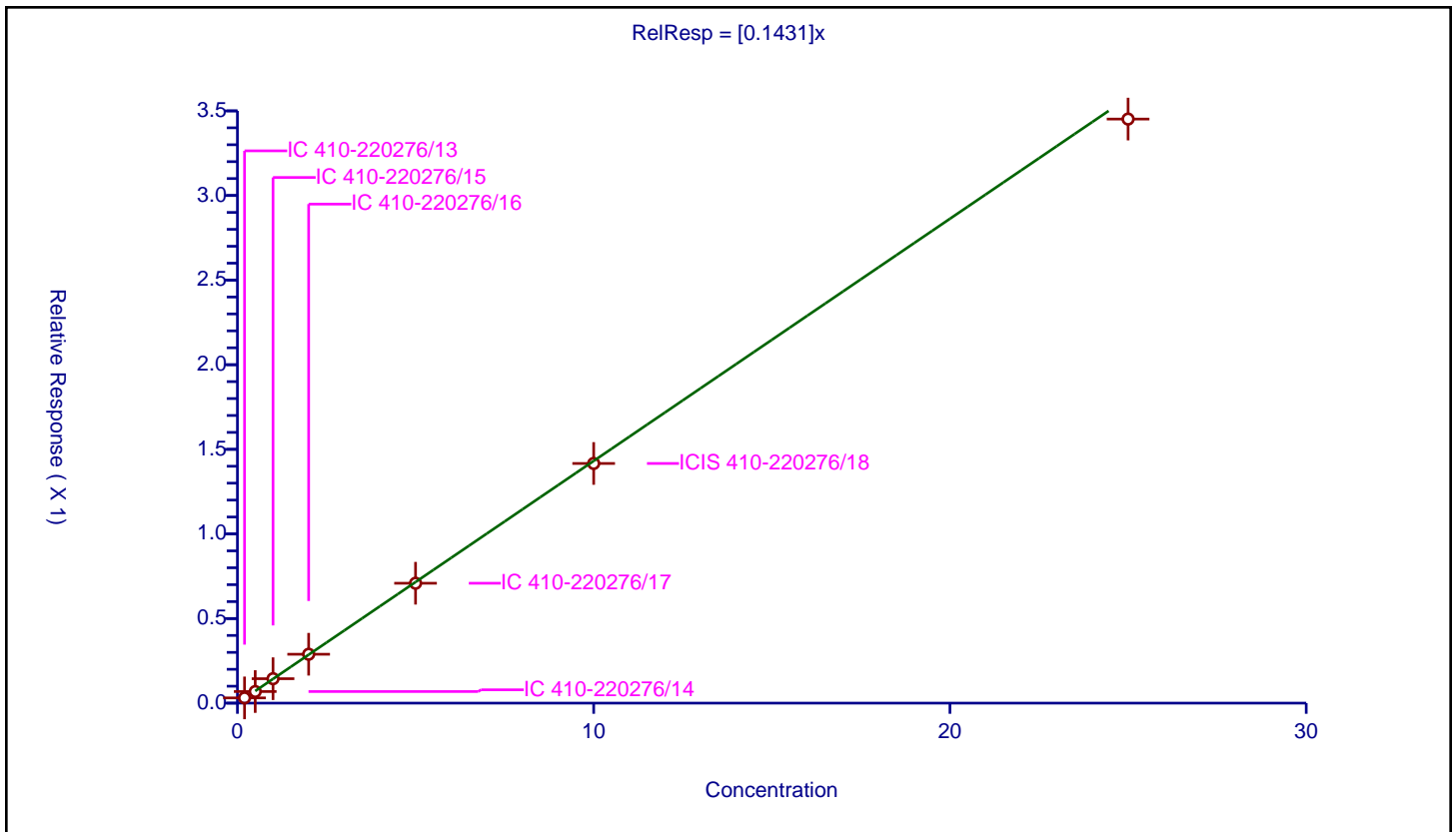
/ Chlorobromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1431

Error Coefficients	
Standard Error:	313000
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 410-220276/13	0.2	0.030935	10.0	1844216.0	0.154673	Y
2	IC 410-220276/14	0.5	0.068477	10.0	1877699.0	0.136955	Y
3	IC 410-220276/15	1.0	0.144376	10.0	1880230.0	0.144376	Y
4	IC 410-220276/16	2.0	0.288967	10.0	1877168.0	0.144484	Y
5	IC 410-220276/17	5.0	0.708487	10.0	1925569.0	0.141697	Y
6	ICIS 410-220276/18	10.0	1.416412	10.0	1913666.0	0.141641	Y
7	IC 410-220276/19	25.0	3.451637	10.0	2030561.0	0.138065	Y



Calibration

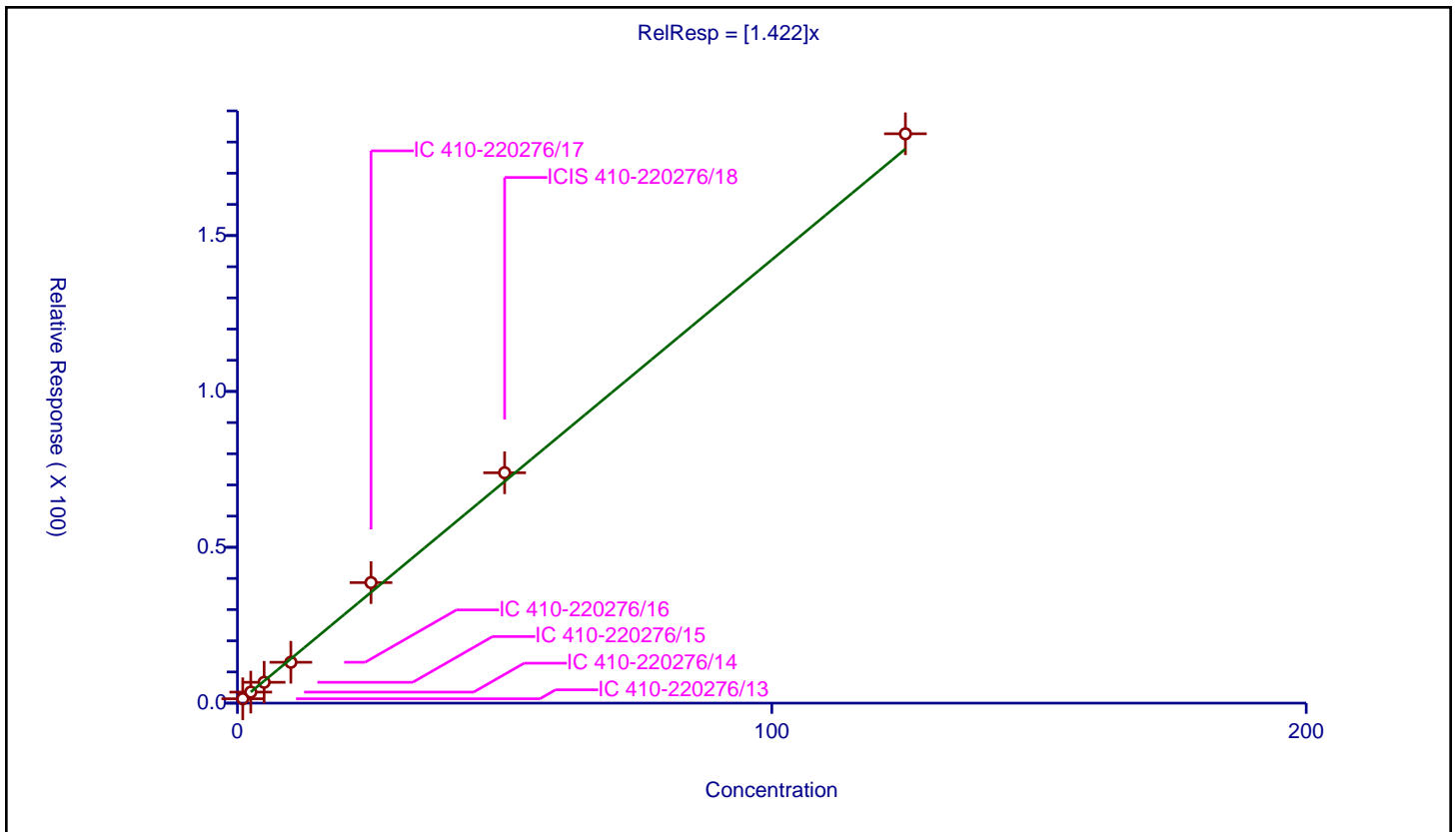
/ Tetrahydrofuran

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.422

Error Coefficients	
Standard Error:	203000
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 410-220276/13	1.0	1.404653	50.0	141316.0	1.404653	Y
2	IC 410-220276/14	2.5	3.543275	50.0	110999.0	1.41731	Y
3	IC 410-220276/15	5.0	6.683607	50.0	127506.0	1.336721	Y
4	IC 410-220276/16	10.0	13.115422	50.0	131292.0	1.311542	Y
5	IC 410-220276/17	25.0	38.670574	50.0	114997.0	1.546823	Y
6	ICIS 410-220276/18	50.0	73.909865	50.0	123127.0	1.478197	Y
7	IC 410-220276/19	125.0	182.658382	50.0	123688.0	1.461267	Y



Calibration

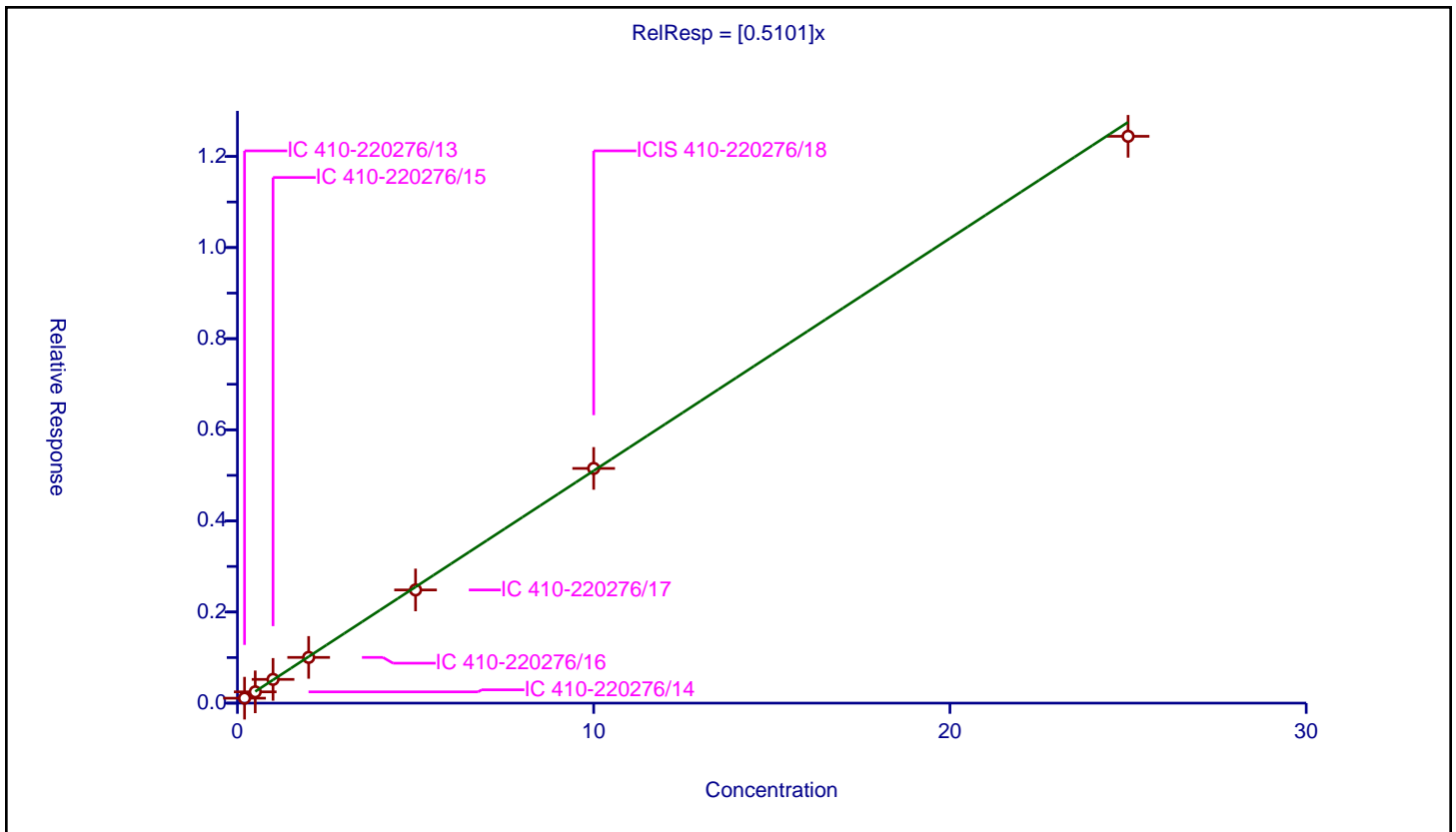
/ Chloroform

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5101

Error Coefficients	
Standard Error:	1130000
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 410-220276/13	0.2	0.108588	10.0	1844216.0	0.542941	Y
2	IC 410-220276/14	0.5	0.247596	10.0	1877699.0	0.495191	Y
3	IC 410-220276/15	1.0	0.521032	10.0	1880230.0	0.521032	Y
4	IC 410-220276/16	2.0	1.003618	10.0	1877168.0	0.501809	Y
5	IC 410-220276/17	5.0	2.484564	10.0	1925569.0	0.496913	Y
6	ICIS 410-220276/18	10.0	5.152237	10.0	1913666.0	0.515224	Y
7	IC 410-220276/19	25.0	12.442502	10.0	2030561.0	0.4977	Y



Calibration

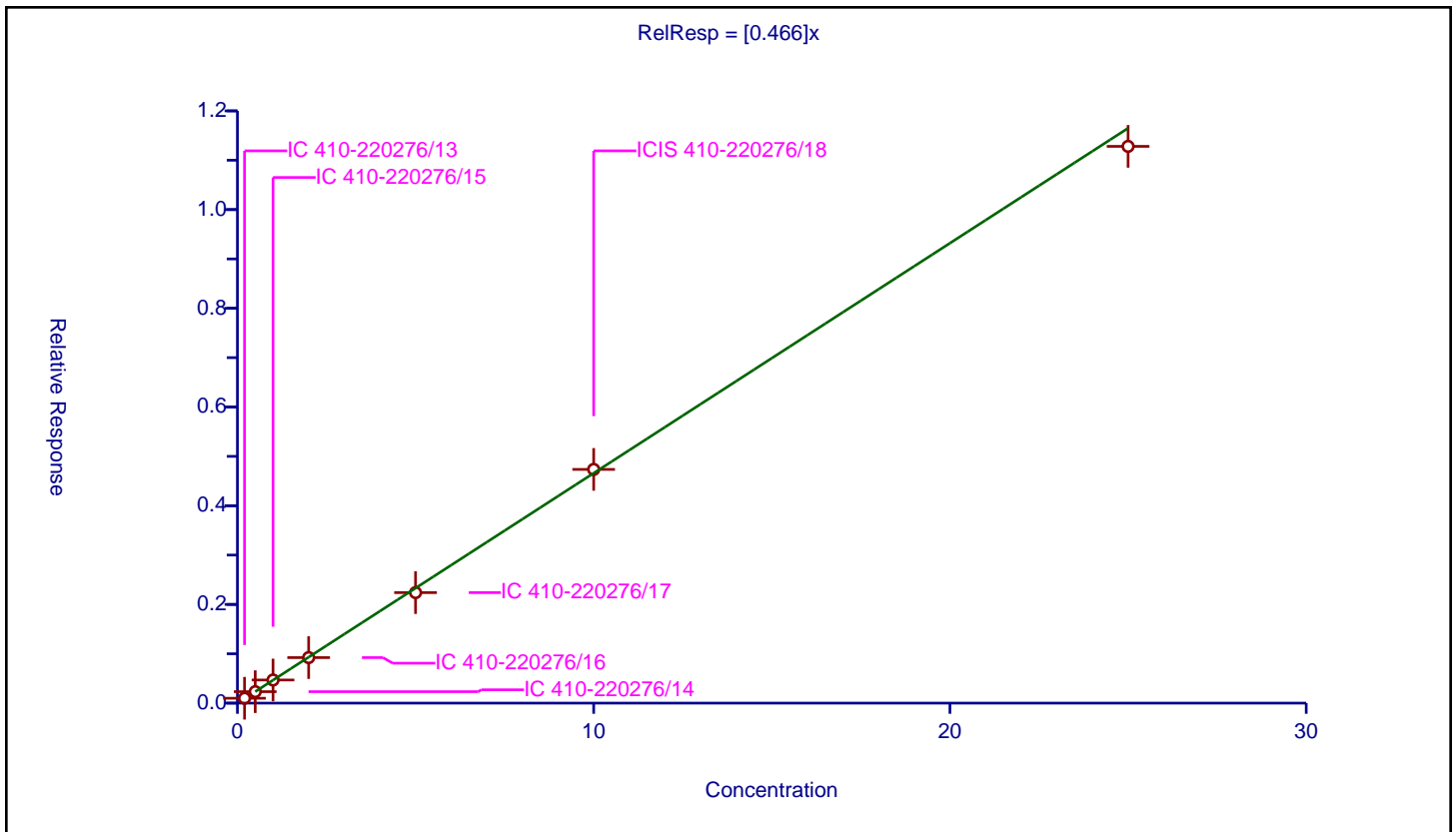
/ 1,1,1-Trichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.466

Error Coefficients	
Standard Error:	1020000
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 410-220276/13	0.2	0.098974	10.0	1844216.0	0.494872	Y
2	IC 410-220276/14	0.5	0.232236	10.0	1877699.0	0.464473	Y
3	IC 410-220276/15	1.0	0.468645	10.0	1880230.0	0.468645	Y
4	IC 410-220276/16	2.0	0.92232	10.0	1877168.0	0.46116	Y
5	IC 410-220276/17	5.0	2.239312	10.0	1925569.0	0.447862	Y
6	ICIS 410-220276/18	10.0	4.735879	10.0	1913666.0	0.473588	Y
7	IC 410-220276/19	25.0	11.281001	10.0	2030561.0	0.45124	Y



Calibration

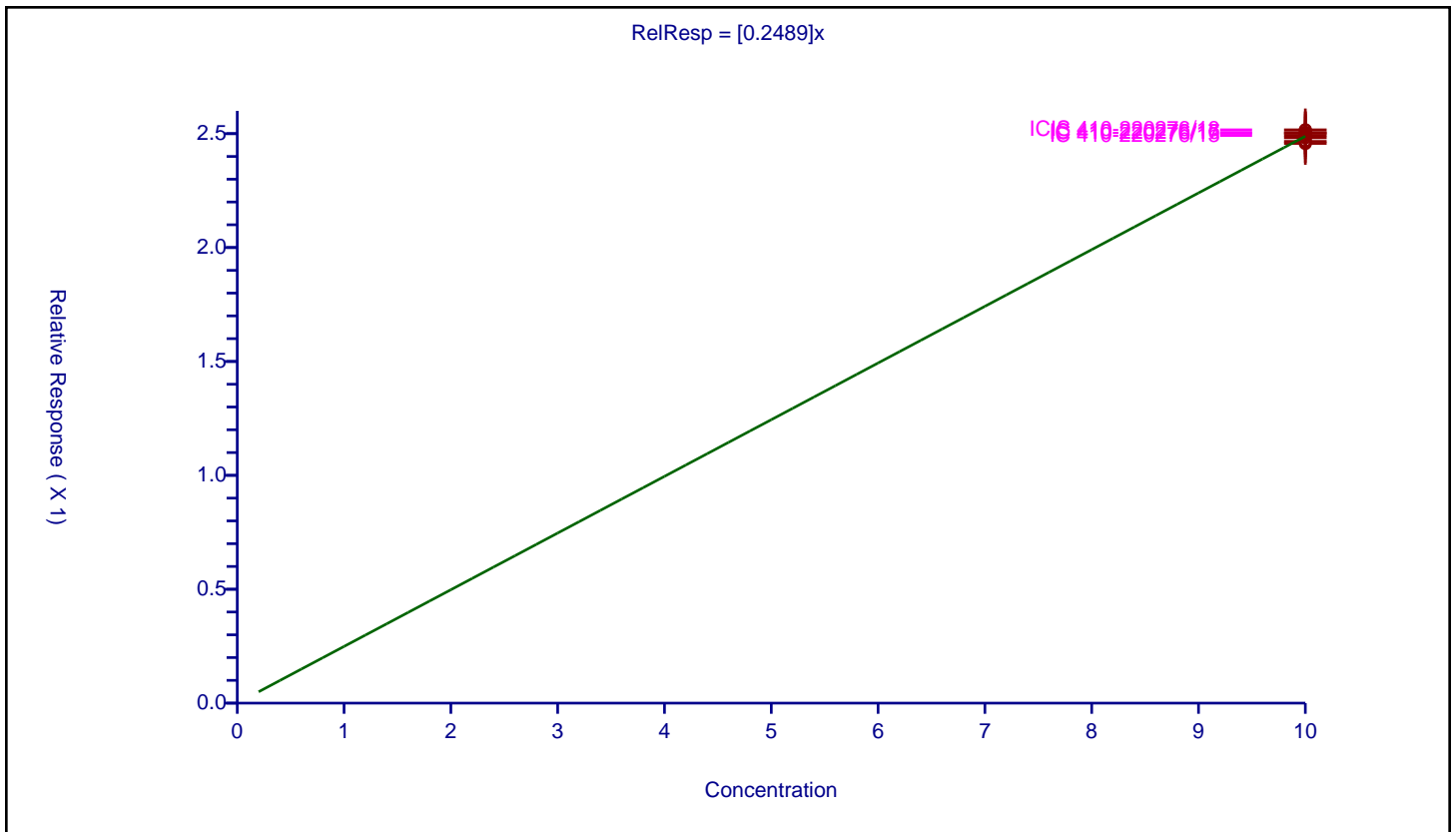
/ Dibromofluoromethane (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2489

Error Coefficients	
Standard Error:	513000
Relative Standard Error:	0.9
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0.0000000000000000222

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	10.0	2.491883	10.0	1844216.0	0.249188	Y
2	IC 410-220276/14	10.0	2.481883	10.0	1877699.0	0.248188	Y
3	IC 410-220276/15	10.0	2.465948	10.0	1880230.0	0.246595	Y
4	IC 410-220276/16	10.0	2.50521	10.0	1877168.0	0.250521	Y
5	IC 410-220276/17	10.0	2.501224	10.0	1925569.0	0.250122	Y
6	ICIS 410-220276/18	10.0	2.516902	10.0	1913666.0	0.25169	Y
7	IC 410-220276/19	10.0	2.457055	10.0	2030561.0	0.245705	Y



Calibration

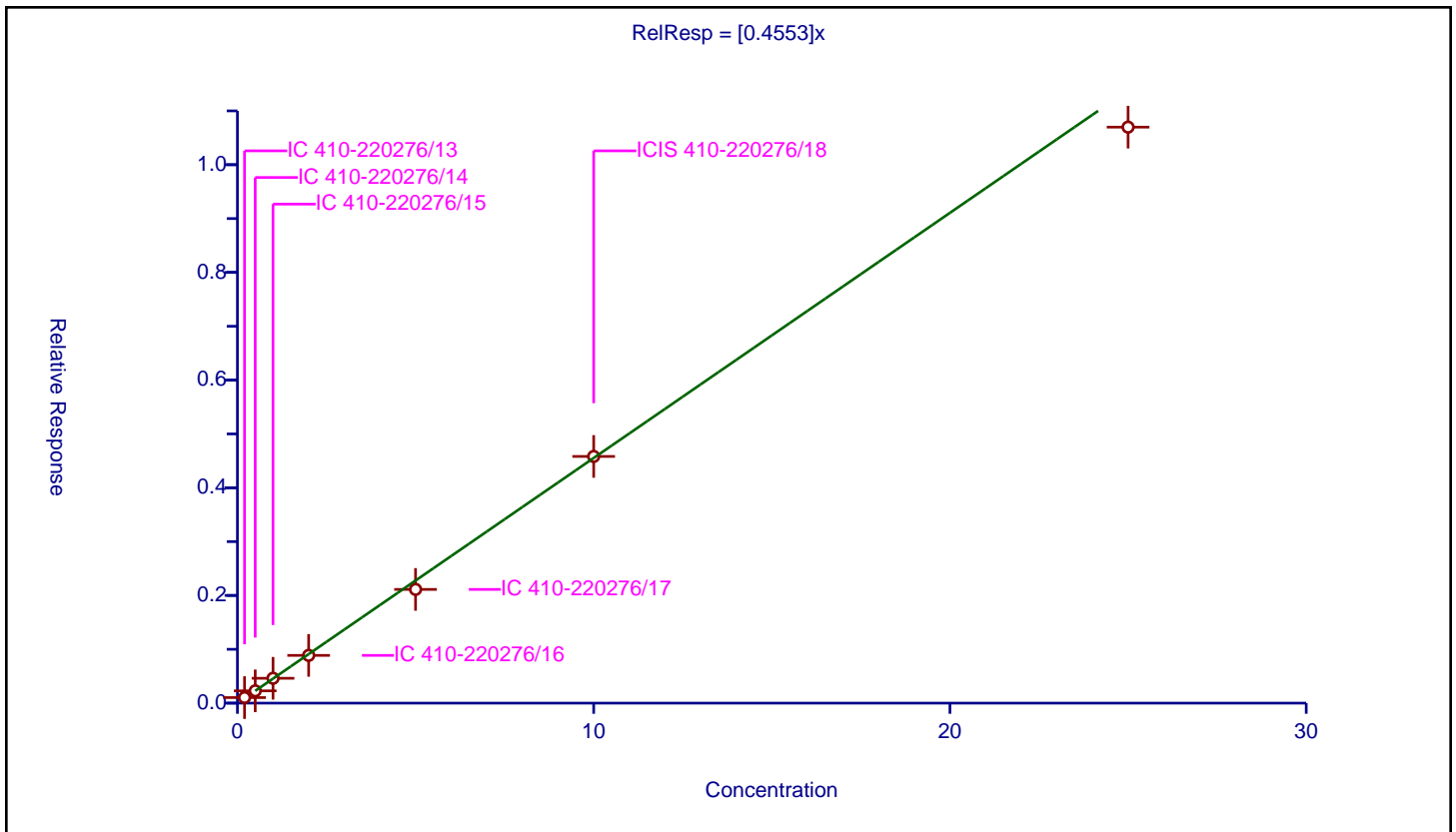
/ Cyclohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4553

Error Coefficients	
Standard Error:	974000
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 410-220276/13	0.2	0.103361	10.0	1844216.0	0.516805	Y
2	IC 410-220276/14	0.5	0.228471	10.0	1877699.0	0.456942	Y
3	IC 410-220276/15	1.0	0.461672	10.0	1880230.0	0.461672	Y
4	IC 410-220276/16	2.0	0.886506	10.0	1877168.0	0.443253	Y
5	IC 410-220276/17	5.0	2.111911	10.0	1925569.0	0.422382	Y
6	ICIS 410-220276/18	10.0	4.581839	10.0	1913666.0	0.458184	Y
7	IC 410-220276/19	25.0	10.698211	10.0	2030561.0	0.427928	Y



Calibration

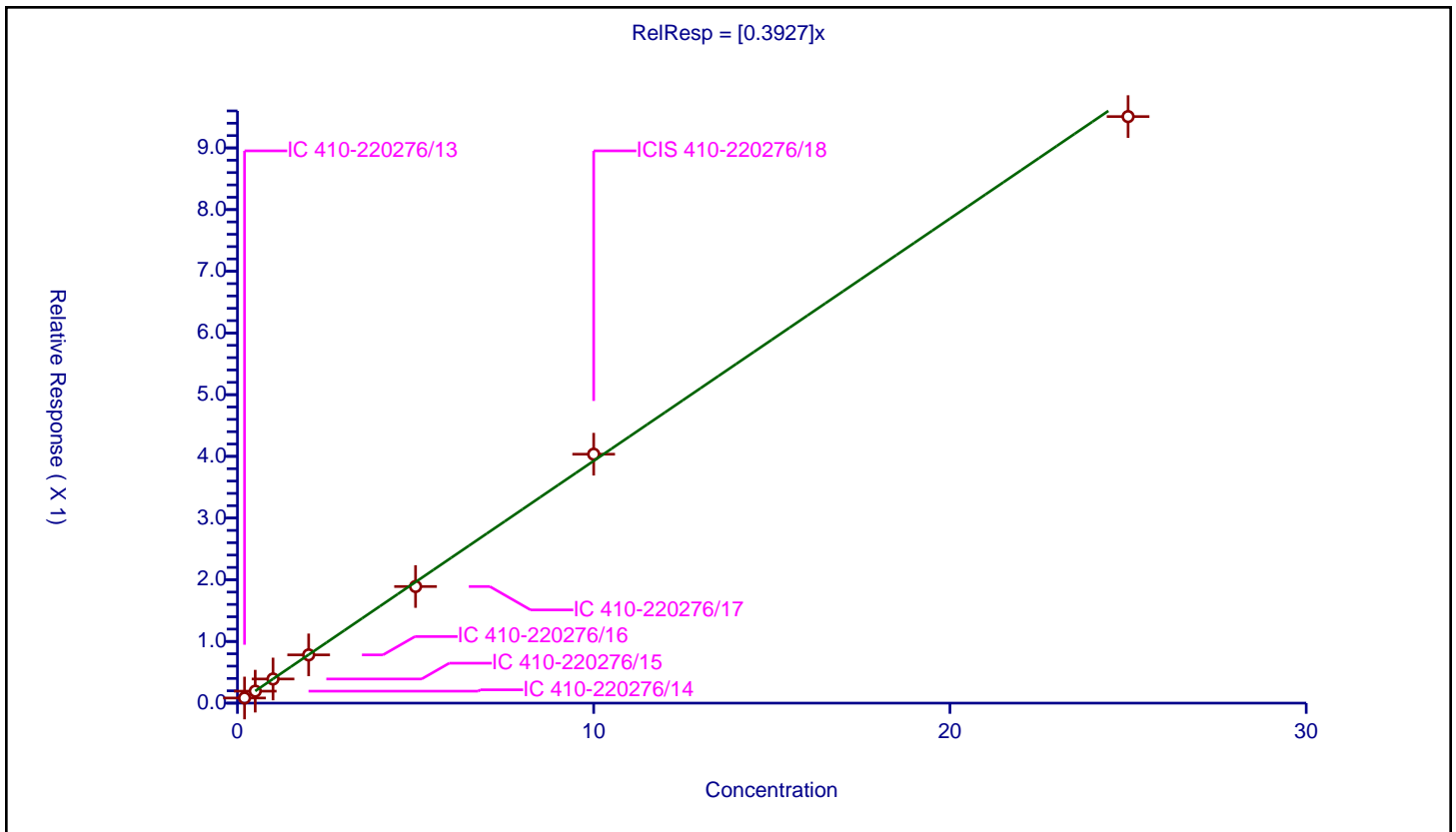
/ 1,1-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3927

Error Coefficients	
Standard Error:	865000
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 410-220276/13	0.2	0.083239	10.0	1844216.0	0.416193	Y
2	IC 410-220276/14	0.5	0.194142	10.0	1877699.0	0.388284	Y
3	IC 410-220276/15	1.0	0.391457	10.0	1880230.0	0.391457	Y
4	IC 410-220276/16	2.0	0.782018	10.0	1877168.0	0.391009	Y
5	IC 410-220276/17	5.0	1.890111	10.0	1925569.0	0.378022	Y
6	ICIS 410-220276/18	10.0	4.035218	10.0	1913666.0	0.403522	Y
7	IC 410-220276/19	25.0	9.507712	10.0	2030561.0	0.380308	Y



Calibration

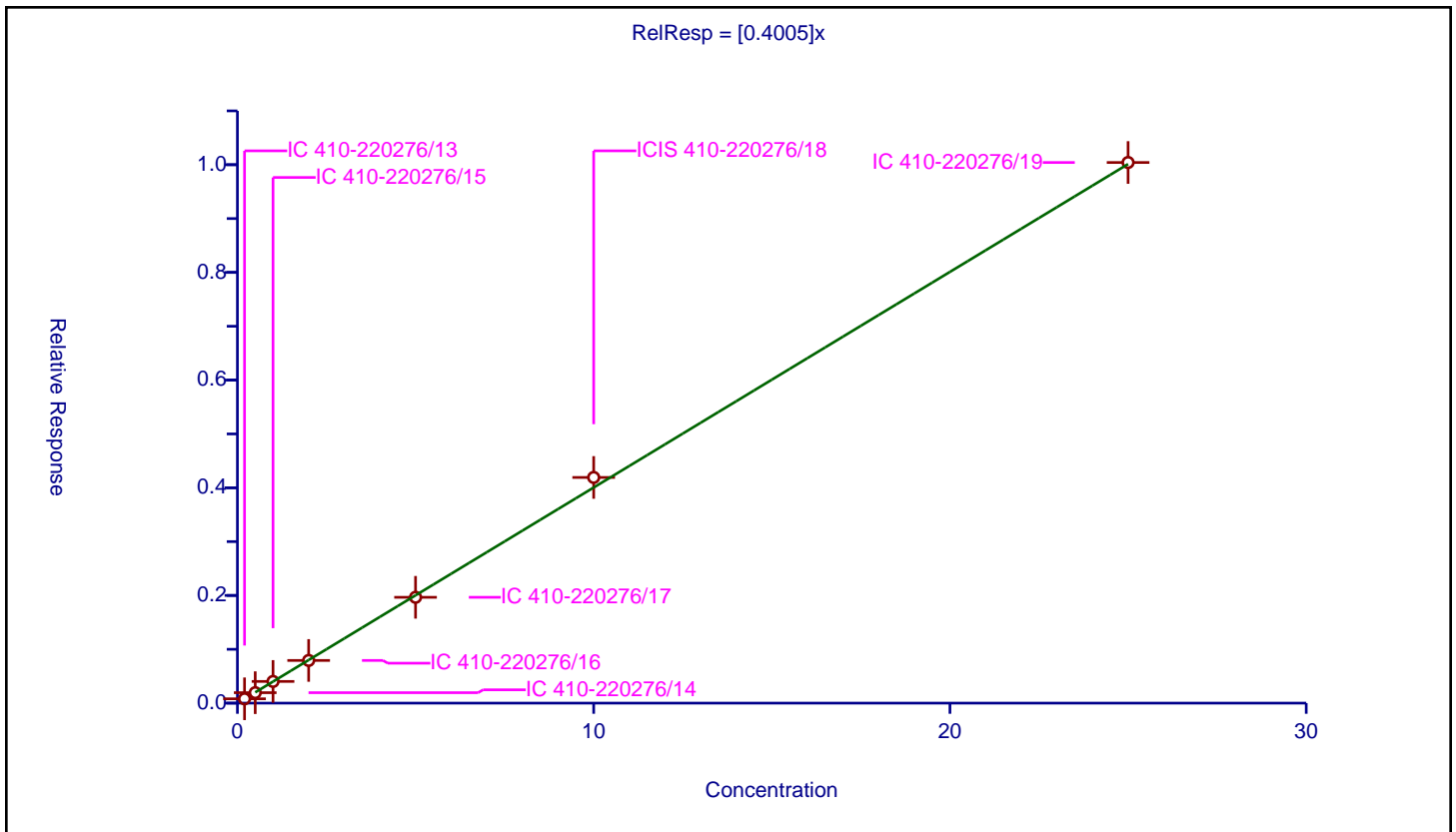
/ Carbon tetrachloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4005

Error Coefficients	
Standard Error:	910000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.080338	10.0	1844216.0	0.401688	Y
2	IC 410-220276/14	0.5	0.194318	10.0	1877699.0	0.388635	Y
3	IC 410-220276/15	1.0	0.402754	10.0	1880230.0	0.402754	Y
4	IC 410-220276/16	2.0	0.792582	10.0	1877168.0	0.396291	Y
5	IC 410-220276/17	5.0	1.965648	10.0	1925569.0	0.39313	Y
6	ICIS 410-220276/18	10.0	4.191714	10.0	1913666.0	0.419171	Y
7	IC 410-220276/19	25.0	10.041407	10.0	2030561.0	0.401656	Y



Calibration

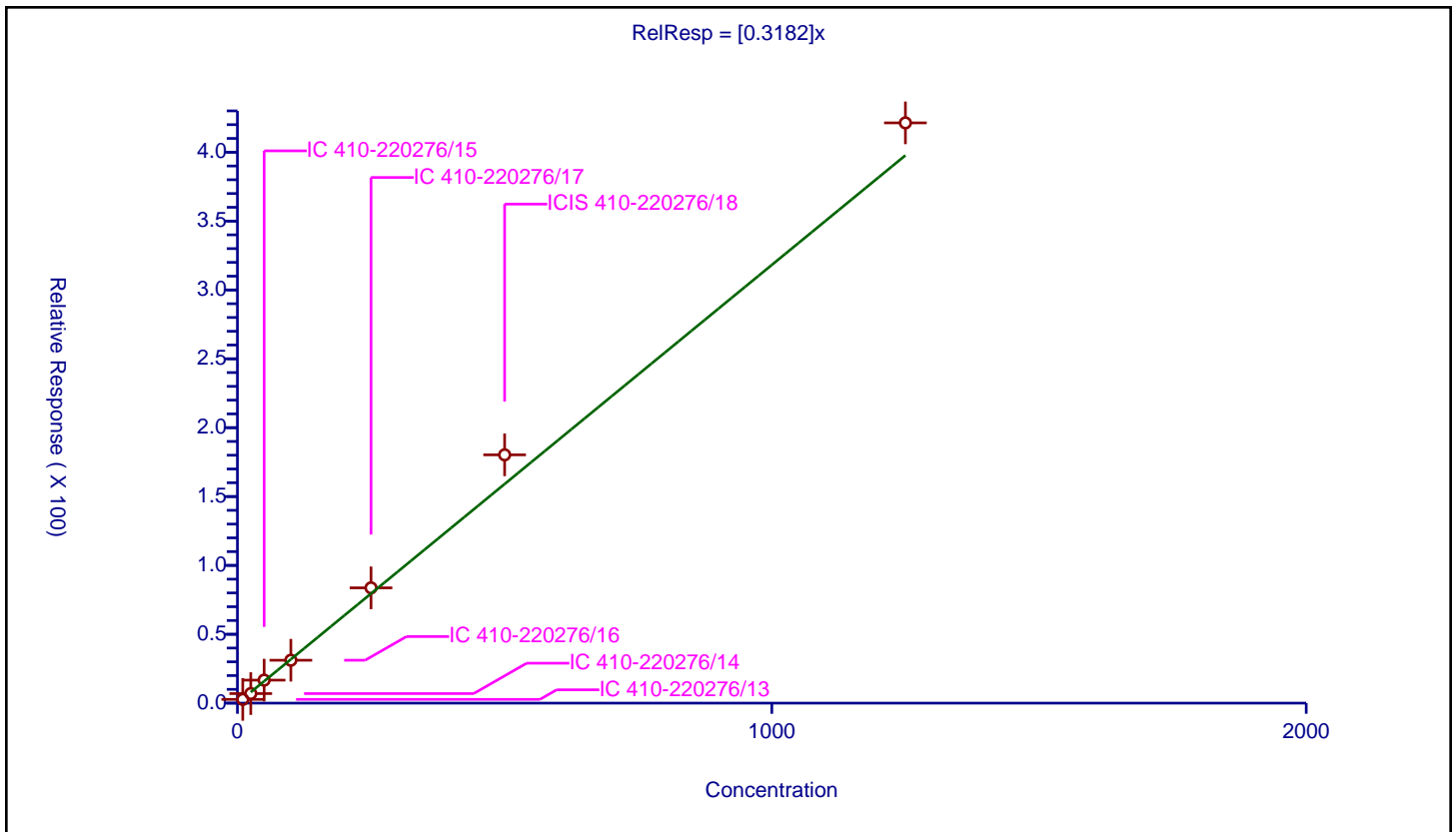
/ Isobutyl alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3182

Error Coefficients	
Standard Error:	470000
Relative Standard Error:	10.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	10.0	2.718376	50.0	141316.0	0.271838	Y
2	IC 410-220276/14	25.0	6.936999	50.0	110999.0	0.27748	Y
3	IC 410-220276/15	50.0	16.704312	50.0	127506.0	0.334086	Y
4	IC 410-220276/16	100.0	31.13518	50.0	131292.0	0.311352	Y
5	IC 410-220276/17	250.0	83.697836	50.0	114997.0	0.334791	Y
6	ICIS 410-220276/18	500.0	180.283772	50.0	123127.0	0.360568	Y
7	IC 410-220276/19	1250.0	421.296326	50.0	123688.0	0.337037	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

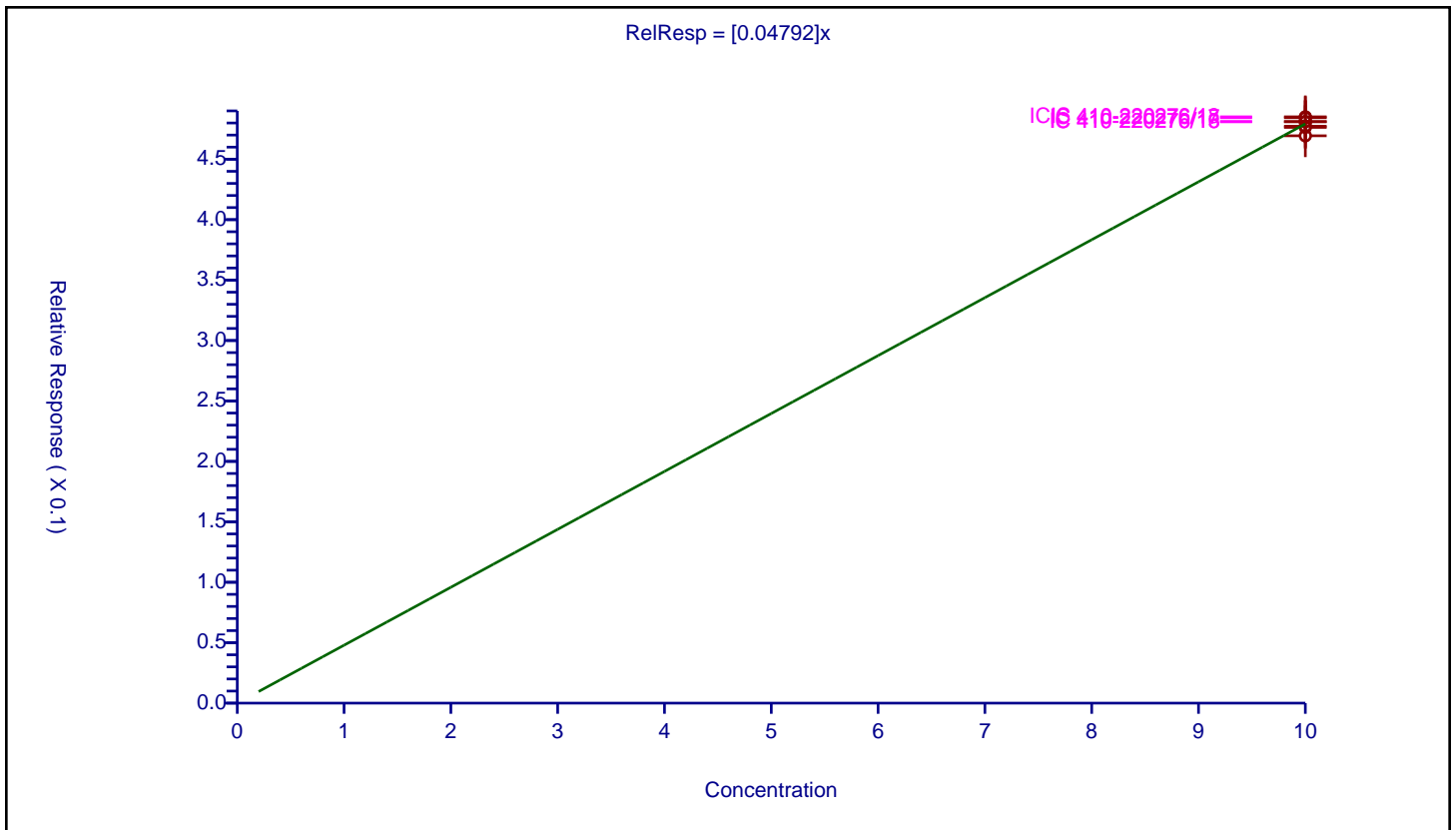
Curve Coefficients

Intercept: 0
 Slope: 0.04792

Error Coefficients

Standard Error: 98700
 Relative Standard Error: 1.1
 Correlation Coefficient: 0.00000000000000000000
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	10.0	0.480985	10.0	1844216.0	0.048098	Y
2	IC 410-220276/14	10.0	0.476338	10.0	1877699.0	0.047634	Y
3	IC 410-220276/15	10.0	0.477314	10.0	1880230.0	0.047731	Y
4	IC 410-220276/16	10.0	0.481166	10.0	1877168.0	0.048117	Y
5	IC 410-220276/17	10.0	0.484361	10.0	1925569.0	0.048436	Y
6	ICIS 410-220276/18	10.0	0.485095	10.0	1913666.0	0.04851	Y
7	IC 410-220276/19	10.0	0.469402	10.0	2030561.0	0.04694	Y



Calibration

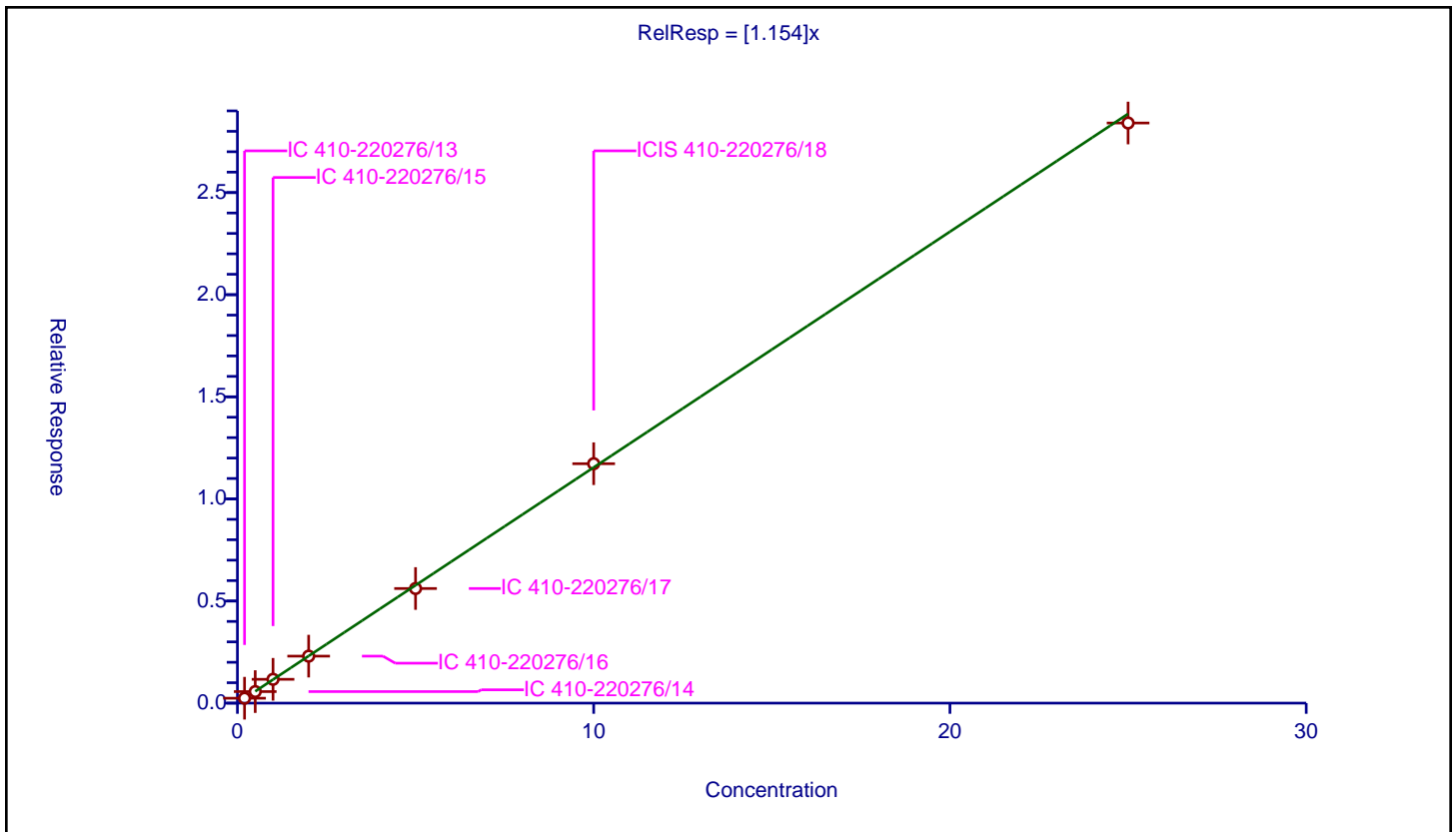
/ Benzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.154

Error Coefficients	
Standard Error:	2570000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.240069	10.0	1844216.0	1.200347	Y
2	IC 410-220276/14	0.5	0.565213	10.0	1877699.0	1.130426	Y
3	IC 410-220276/15	1.0	1.166921	10.0	1880230.0	1.166921	Y
4	IC 410-220276/16	2.0	2.300987	10.0	1877168.0	1.150494	Y
5	IC 410-220276/17	5.0	5.612601	10.0	1925569.0	1.12252	Y
6	ICIS 410-220276/18	10.0	11.723227	10.0	1913666.0	1.172323	Y
7	IC 410-220276/19	25.0	28.406307	10.0	2030561.0	1.136252	Y



Calibration

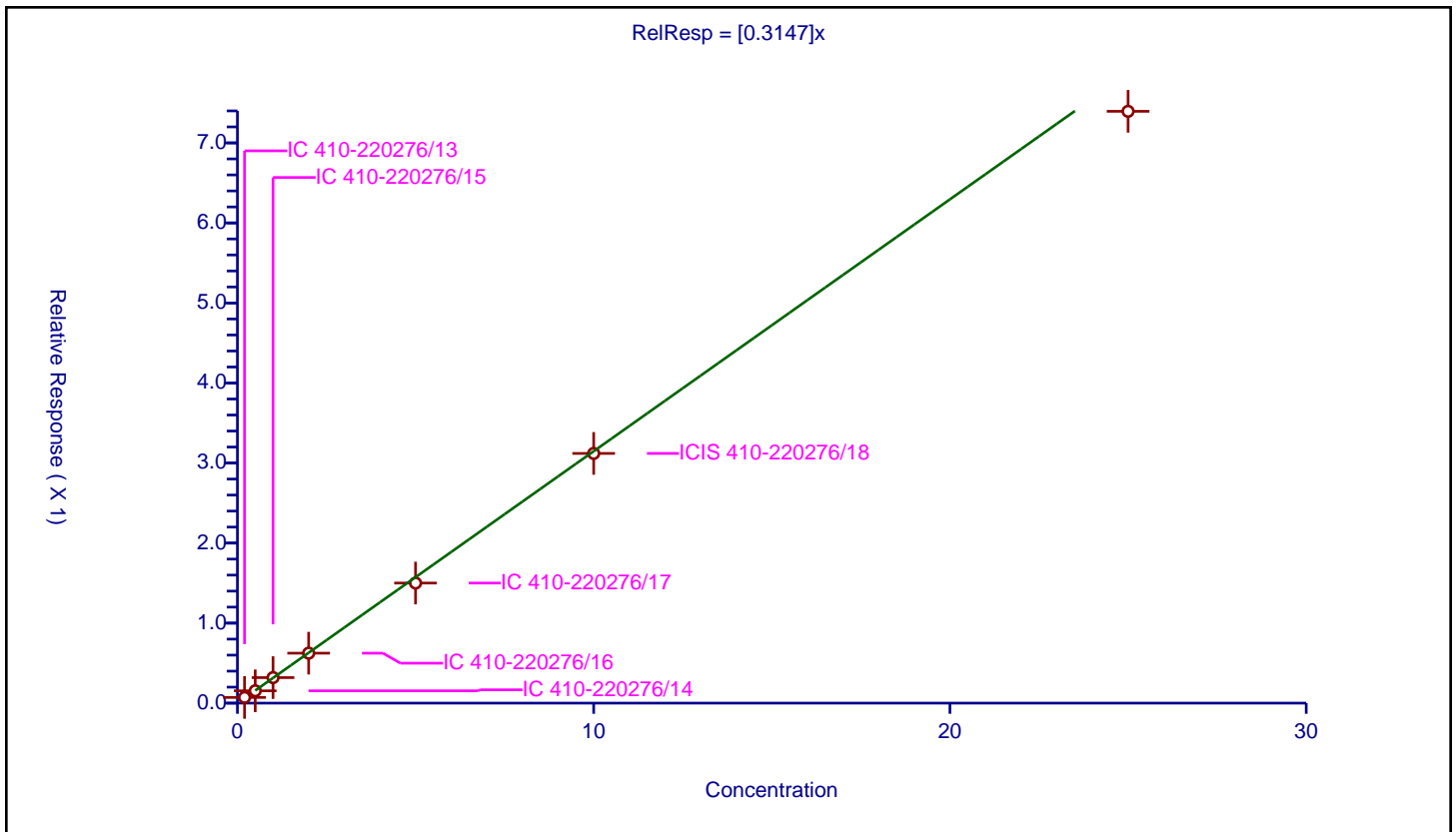
/ 1,2-Dichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3147

Error Coefficients	
Standard Error:	672000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.071196	10.0	1844216.0	0.355978	Y
2	IC 410-220276/14	0.5	0.154061	10.0	1877699.0	0.308122	Y
3	IC 410-220276/15	1.0	0.319121	10.0	1880230.0	0.319121	Y
4	IC 410-220276/16	2.0	0.624185	10.0	1877168.0	0.312092	Y
5	IC 410-220276/17	5.0	1.500331	10.0	1925569.0	0.300066	Y
6	ICIS 410-220276/18	10.0	3.119886	10.0	1913666.0	0.311989	Y
7	IC 410-220276/19	25.0	7.394582	10.0	2030561.0	0.295783	Y



Calibration

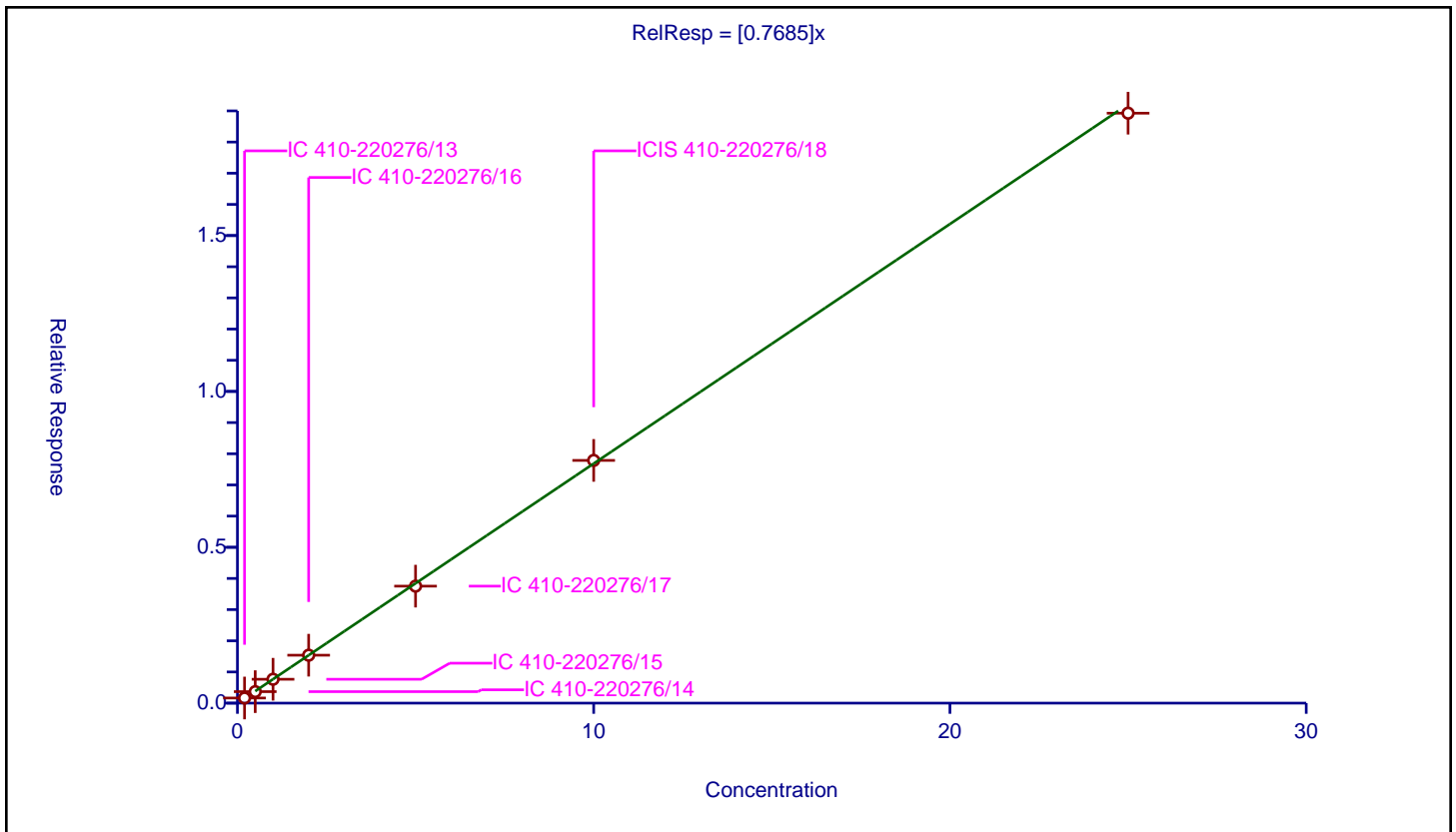
/ Tert-amyl methyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7685

Error Coefficients	
Standard Error:	1710000
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 410-220276/13	0.2	0.164216	10.0	1844216.0	0.821081	Y
2	IC 410-220276/14	0.5	0.368659	10.0	1877699.0	0.737317	Y
3	IC 410-220276/15	1.0	0.765811	10.0	1880230.0	0.765811	Y
4	IC 410-220276/16	2.0	1.537476	10.0	1877168.0	0.768738	Y
5	IC 410-220276/17	5.0	3.753571	10.0	1925569.0	0.750714	Y
6	ICIS 410-220276/18	10.0	7.787414	10.0	1913666.0	0.778741	Y
7	IC 410-220276/19	25.0	18.92642	10.0	2030561.0	0.757057	Y



Calibration

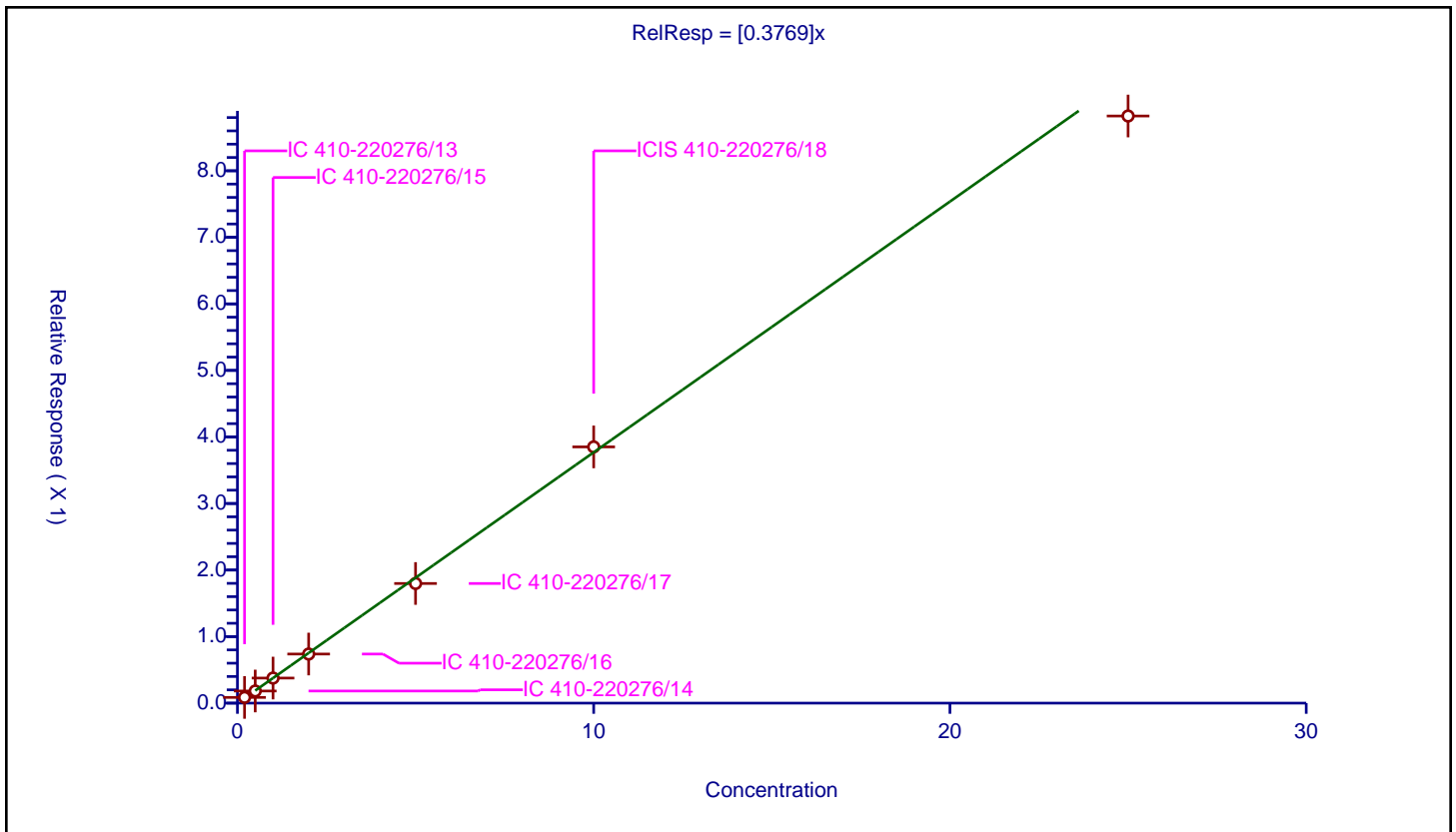
/ n-Heptane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3769

Error Coefficients	
Standard Error:	806000
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 410-220276/13	0.2	0.08595	10.0	1844216.0	0.429749	Y
2	IC 410-220276/14	0.5	0.182399	10.0	1877699.0	0.364798	Y
3	IC 410-220276/15	1.0	0.376922	10.0	1880230.0	0.376922	Y
4	IC 410-220276/16	2.0	0.738032	10.0	1877168.0	0.369016	Y
5	IC 410-220276/17	5.0	1.798139	10.0	1925569.0	0.359628	Y
6	ICIS 410-220276/18	10.0	3.850348	10.0	1913666.0	0.385035	Y
7	IC 410-220276/19	25.0	8.823237	10.0	2030561.0	0.352929	Y



Calibration

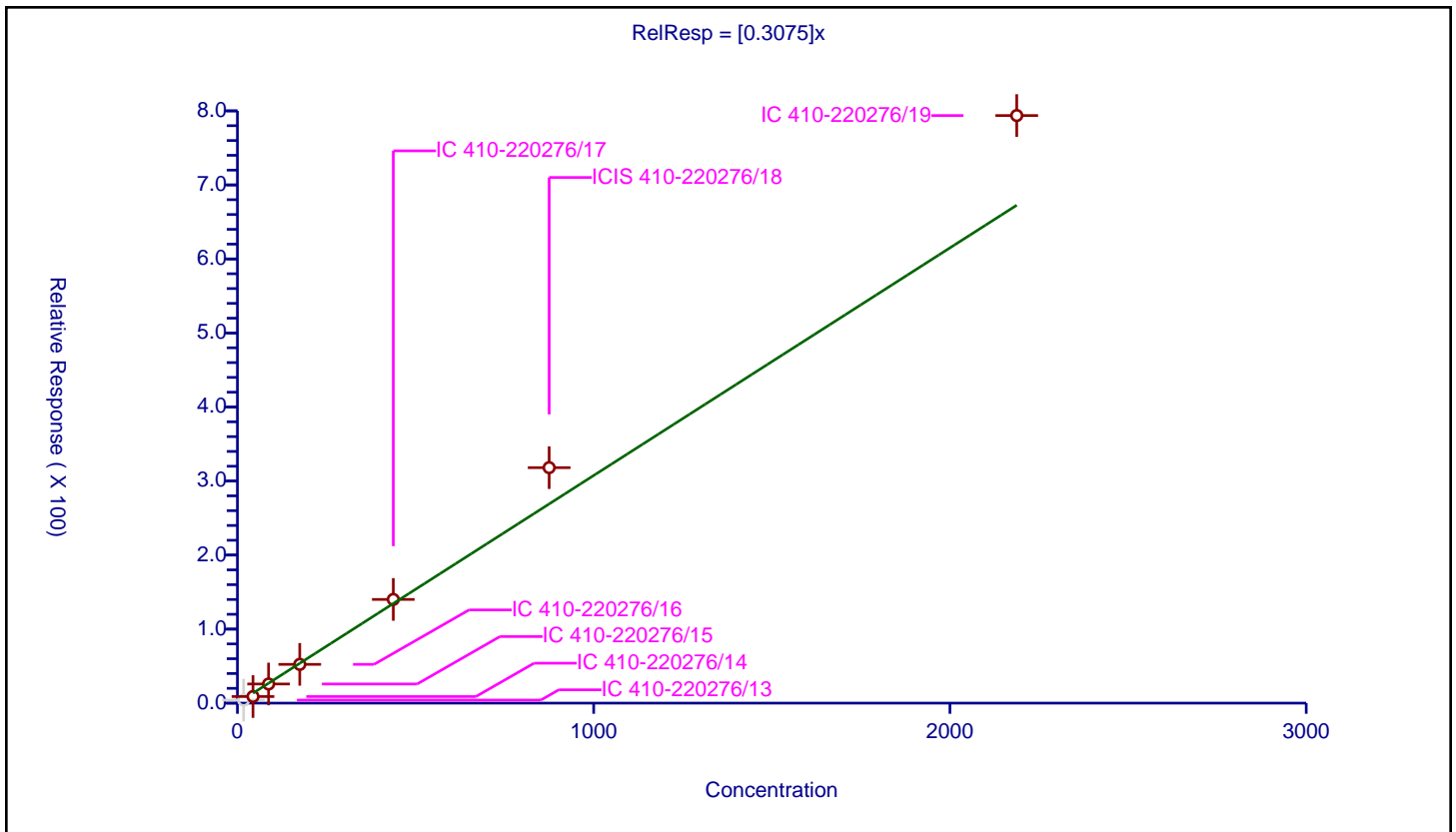
/ n-Butanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3075

Error Coefficients	
Standard Error:	958000
Relative Standard Error:	19.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.957

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	17.5	4.1064	50.0	141316.0	0.234651	N
2	IC 410-220276/14	43.75	8.911342	50.0	110999.0	0.203688	Y
3	IC 410-220276/15	87.5	25.85996	50.0	127506.0	0.295542	Y
4	IC 410-220276/16	175.0	52.350105	50.0	131292.0	0.299143	Y
5	IC 410-220276/17	437.5	140.062784	50.0	114997.0	0.320144	Y
6	ICIS 410-220276/18	875.0	318.084579	50.0	123127.0	0.363525	Y
7	IC 410-220276/19	2187.5	793.717661	50.0	123688.0	0.362842	Y



Calibration

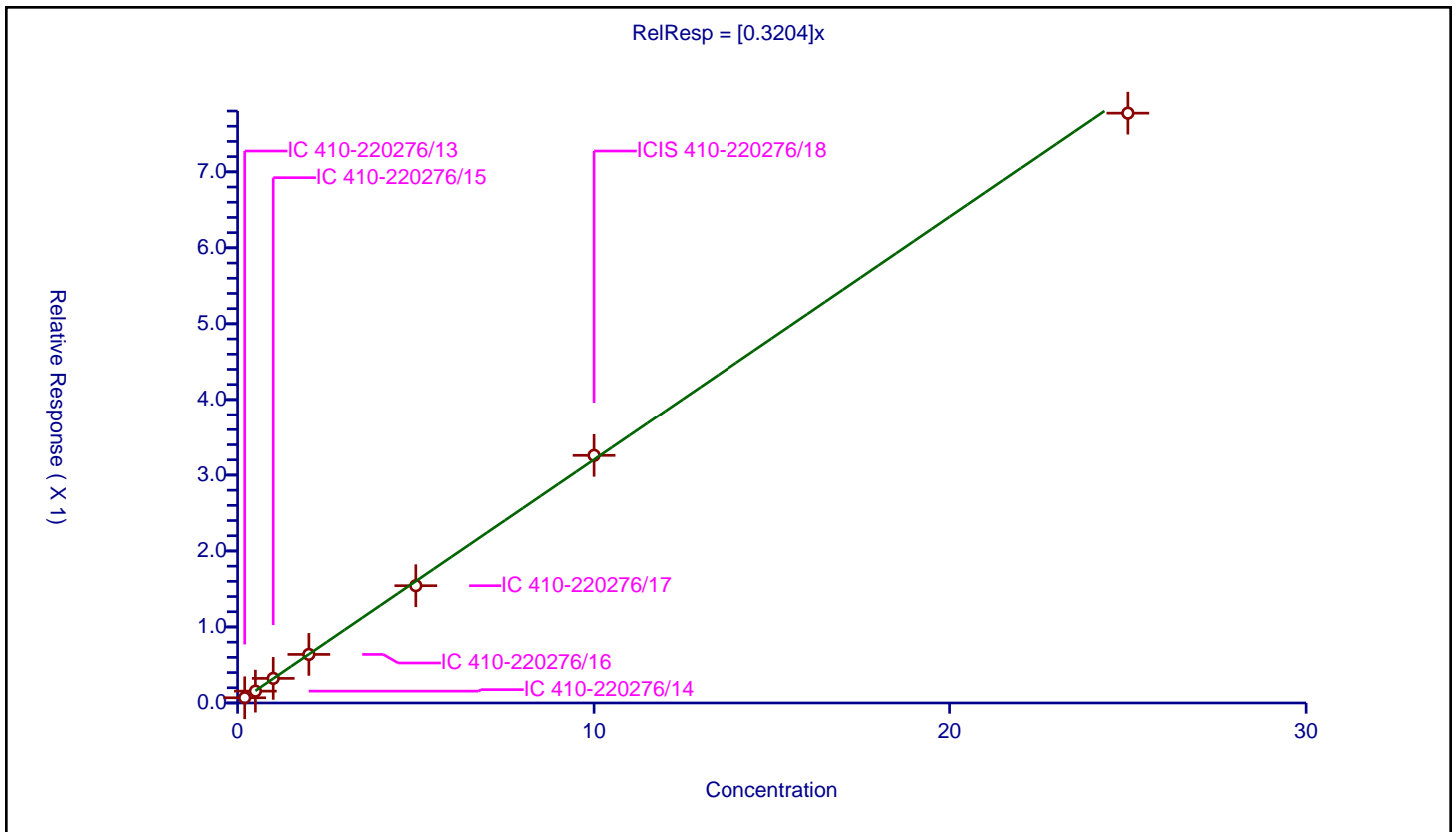
/ Trichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3204

Error Coefficients	
Standard Error:	706000
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 410-220276/13	0.2	0.068582	10.0	1844216.0	0.34291	Y
2	IC 410-220276/14	0.5	0.15576	10.0	1877699.0	0.31152	Y
3	IC 410-220276/15	1.0	0.323732	10.0	1880230.0	0.323732	Y
4	IC 410-220276/16	2.0	0.63901	10.0	1877168.0	0.319505	Y
5	IC 410-220276/17	5.0	1.5429	10.0	1925569.0	0.30858	Y
6	ICIS 410-220276/18	10.0	3.258019	10.0	1913666.0	0.325802	Y
7	IC 410-220276/19	25.0	7.77197	10.0	2030561.0	0.310879	Y



Calibration

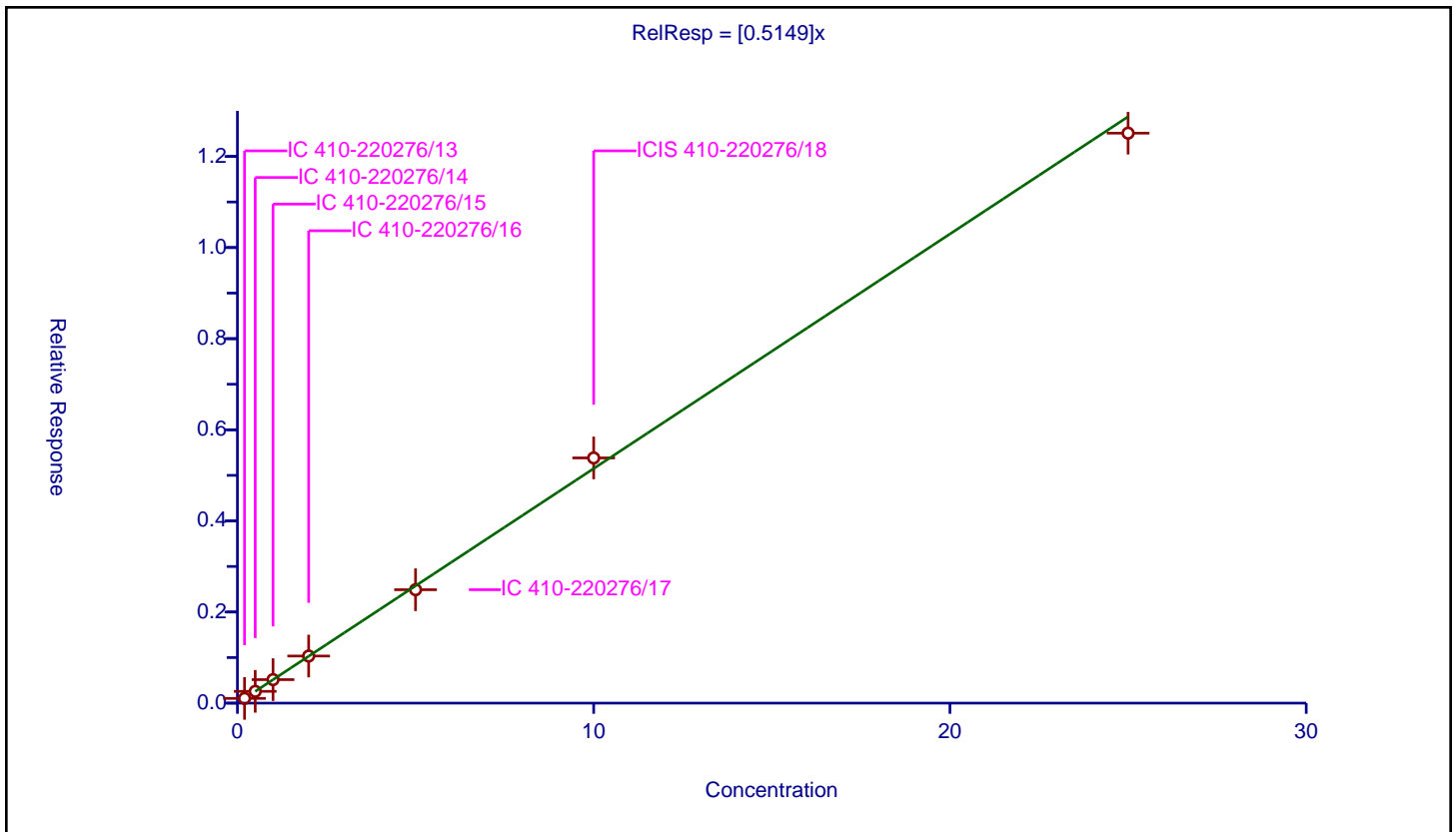
/ Methylcyclohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5149

Error Coefficients	
Standard Error:	1140000
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 410-220276/13	0.2	0.103578	10.0	1844216.0	0.517889	Y
2	IC 410-220276/14	0.5	0.258407	10.0	1877699.0	0.516813	Y
3	IC 410-220276/15	1.0	0.516118	10.0	1880230.0	0.516118	Y
4	IC 410-220276/16	2.0	1.033743	10.0	1877168.0	0.516872	Y
5	IC 410-220276/17	5.0	2.489399	10.0	1925569.0	0.49788	Y
6	ICIS 410-220276/18	10.0	5.382491	10.0	1913666.0	0.538249	Y
7	IC 410-220276/19	25.0	12.511158	10.0	2030561.0	0.500446	Y



Calibration

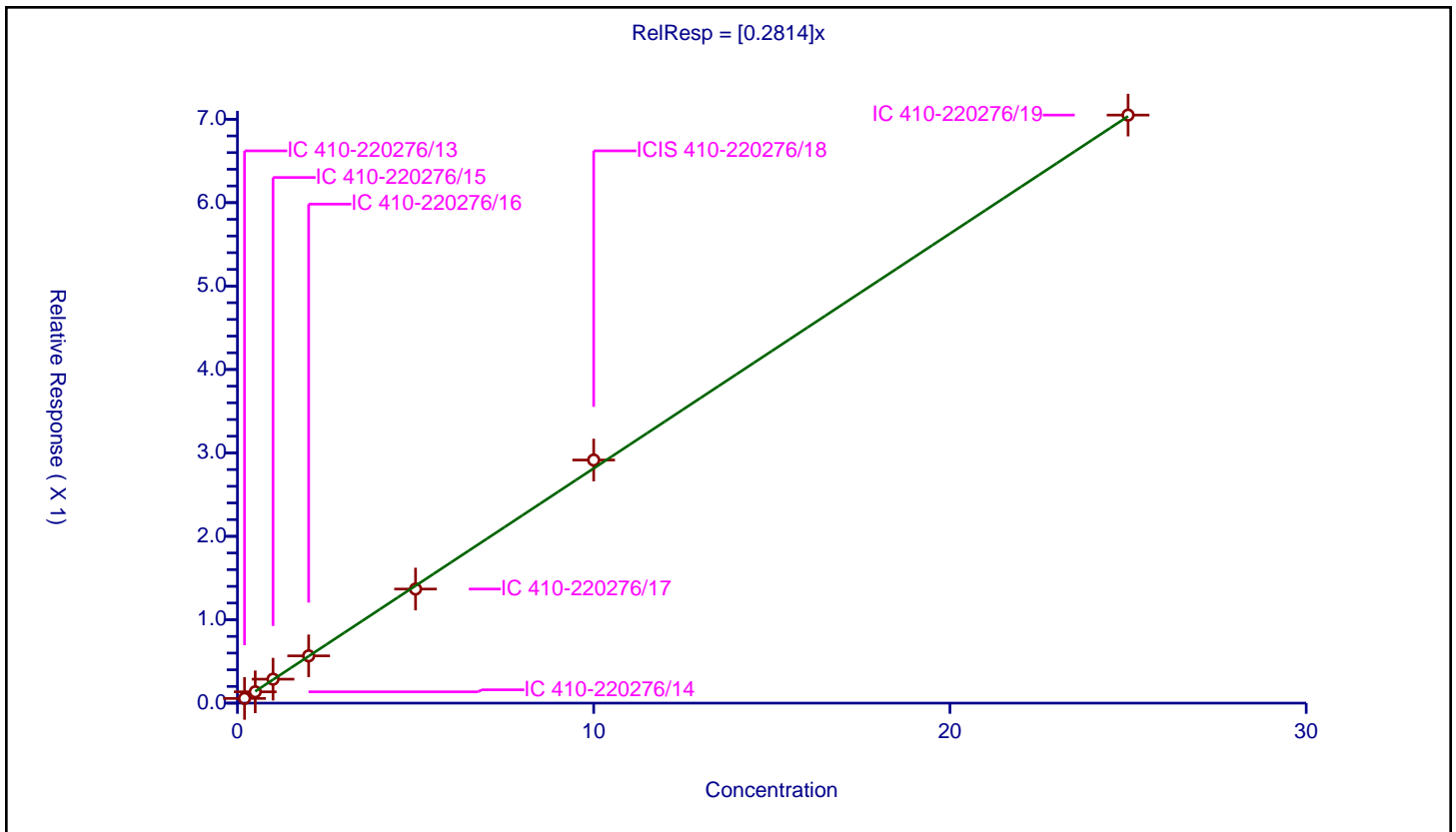
/ 1,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2814

Error Coefficients	
Standard Error:	638000
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 410-220276/13	0.2	0.056311	10.0	1844216.0	0.281556	Y
2	IC 410-220276/14	0.5	0.135538	10.0	1877699.0	0.271076	Y
3	IC 410-220276/15	1.0	0.287098	10.0	1880230.0	0.287098	Y
4	IC 410-220276/16	2.0	0.56654	10.0	1877168.0	0.28327	Y
5	IC 410-220276/17	5.0	1.367653	10.0	1925569.0	0.273531	Y
6	ICIS 410-220276/18	10.0	2.914286	10.0	1913666.0	0.291429	Y
7	IC 410-220276/19	25.0	7.049899	10.0	2030561.0	0.281996	Y



Calibration

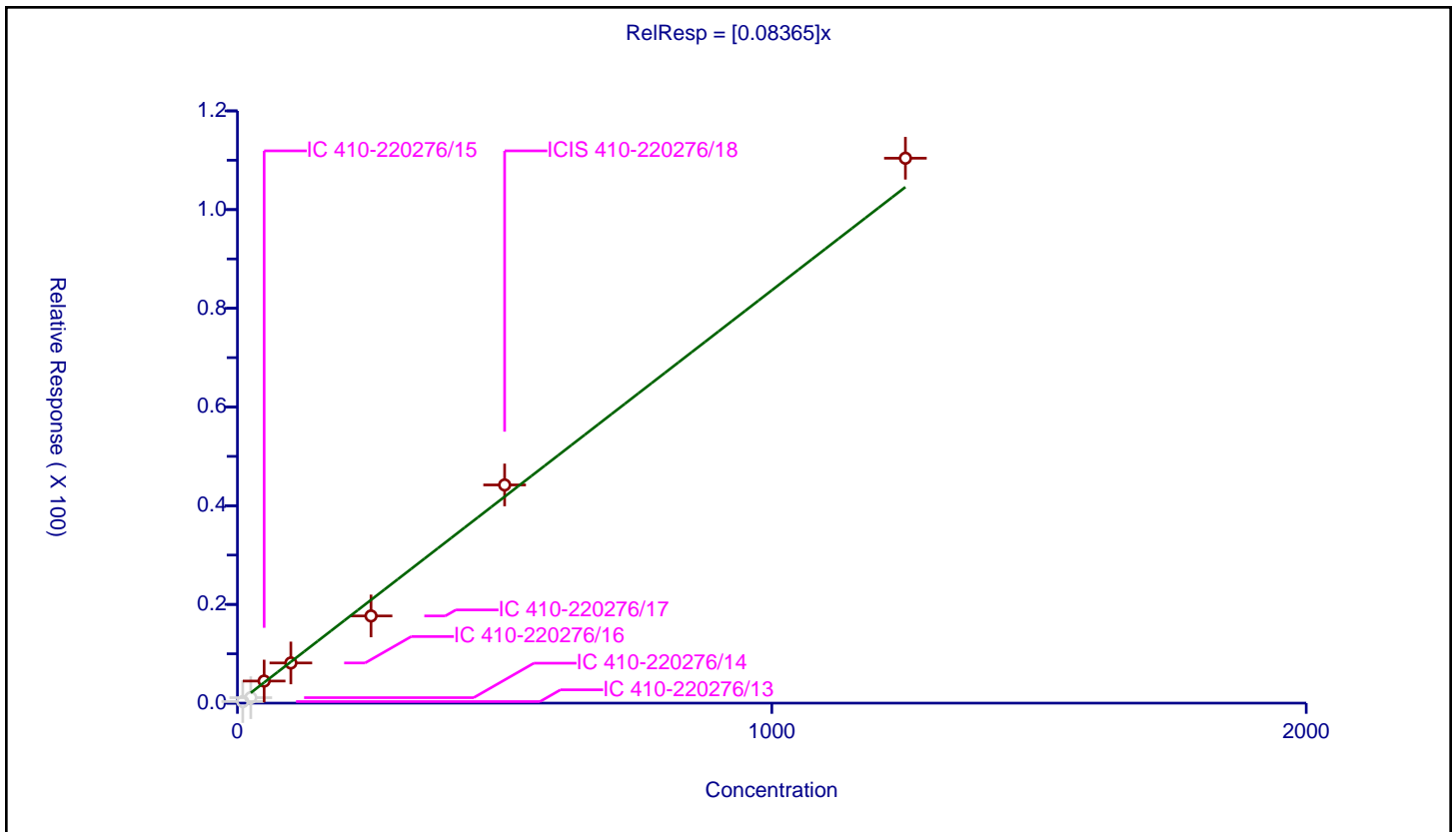
/ 1,4-Dioxane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.08365

Error Coefficients	
Standard Error:	149000
Relative Standard Error:	9.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	10.0	0.315251	50.0	141316.0	0.031525	N
2	IC 410-220276/14	25.0	1.106767	50.0	110999.0	0.044271	N
3	IC 410-220276/15	50.0	4.473907	50.0	127506.0	0.089478	Y
4	IC 410-220276/16	100.0	8.137967	50.0	131292.0	0.08138	Y
5	IC 410-220276/17	250.0	17.665678	50.0	114997.0	0.070663	Y
6	ICIS 410-220276/18	500.0	44.211262	50.0	123127.0	0.088423	Y
7	IC 410-220276/19	1250.0	110.40966	50.0	123688.0	0.088328	Y



Calibration

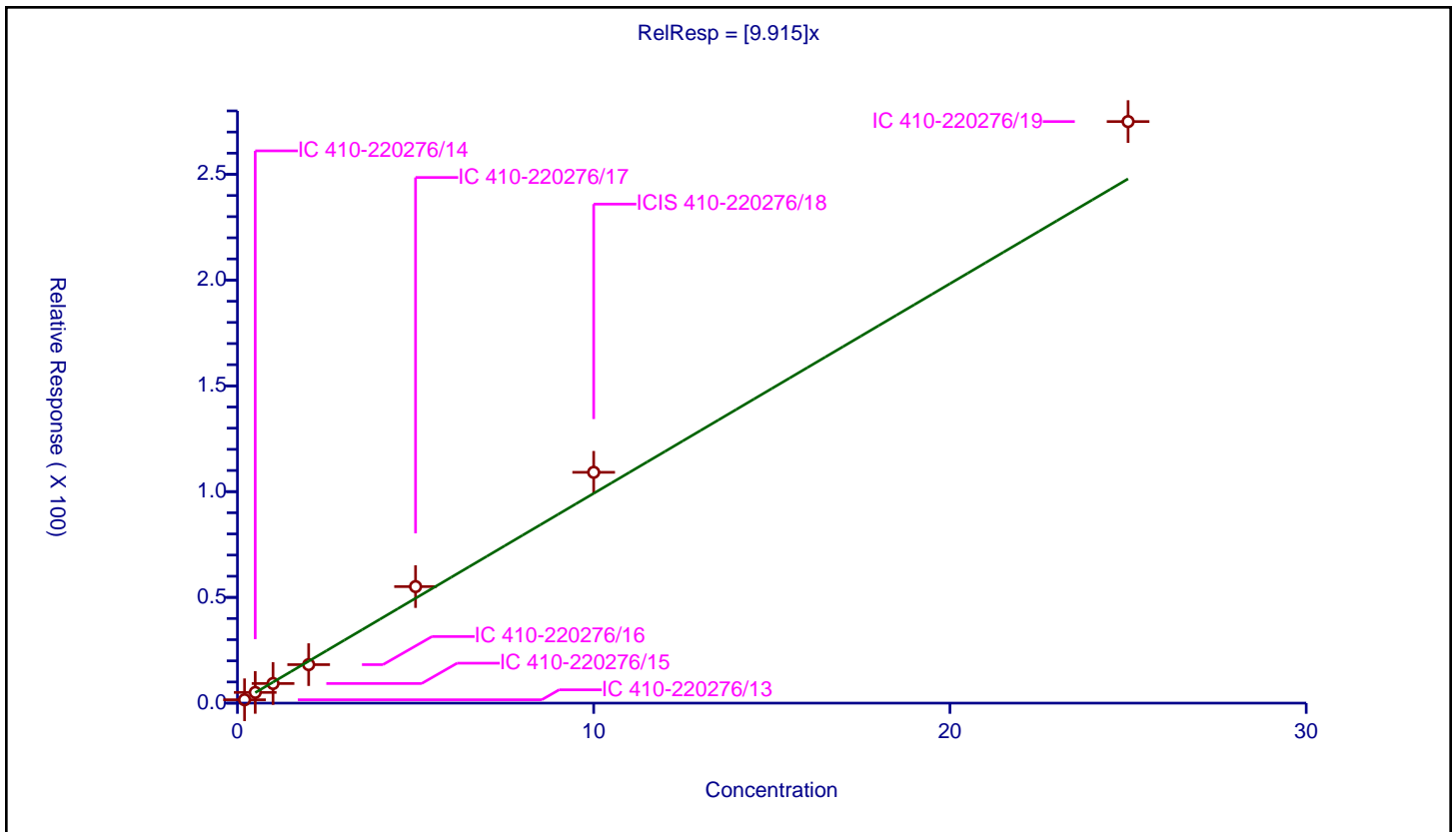
/ Methyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	9.915

Error Coefficients	
Standard Error:	304000
Relative Standard Error:	11.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	1.590407	50.0	141316.0	7.952037	Y
2	IC 410-220276/14	0.5	5.072568	50.0	110999.0	10.145136	Y
3	IC 410-220276/15	1.0	9.279955	50.0	127506.0	9.279955	Y
4	IC 410-220276/16	2.0	18.196082	50.0	131292.0	9.098041	Y
5	IC 410-220276/17	5.0	55.093611	50.0	114997.0	11.018722	Y
6	ICIS 410-220276/18	10.0	109.130004	50.0	123127.0	10.913	Y
7	IC 410-220276/19	25.0	274.944619	50.0	123688.0	10.997785	Y



Calibration

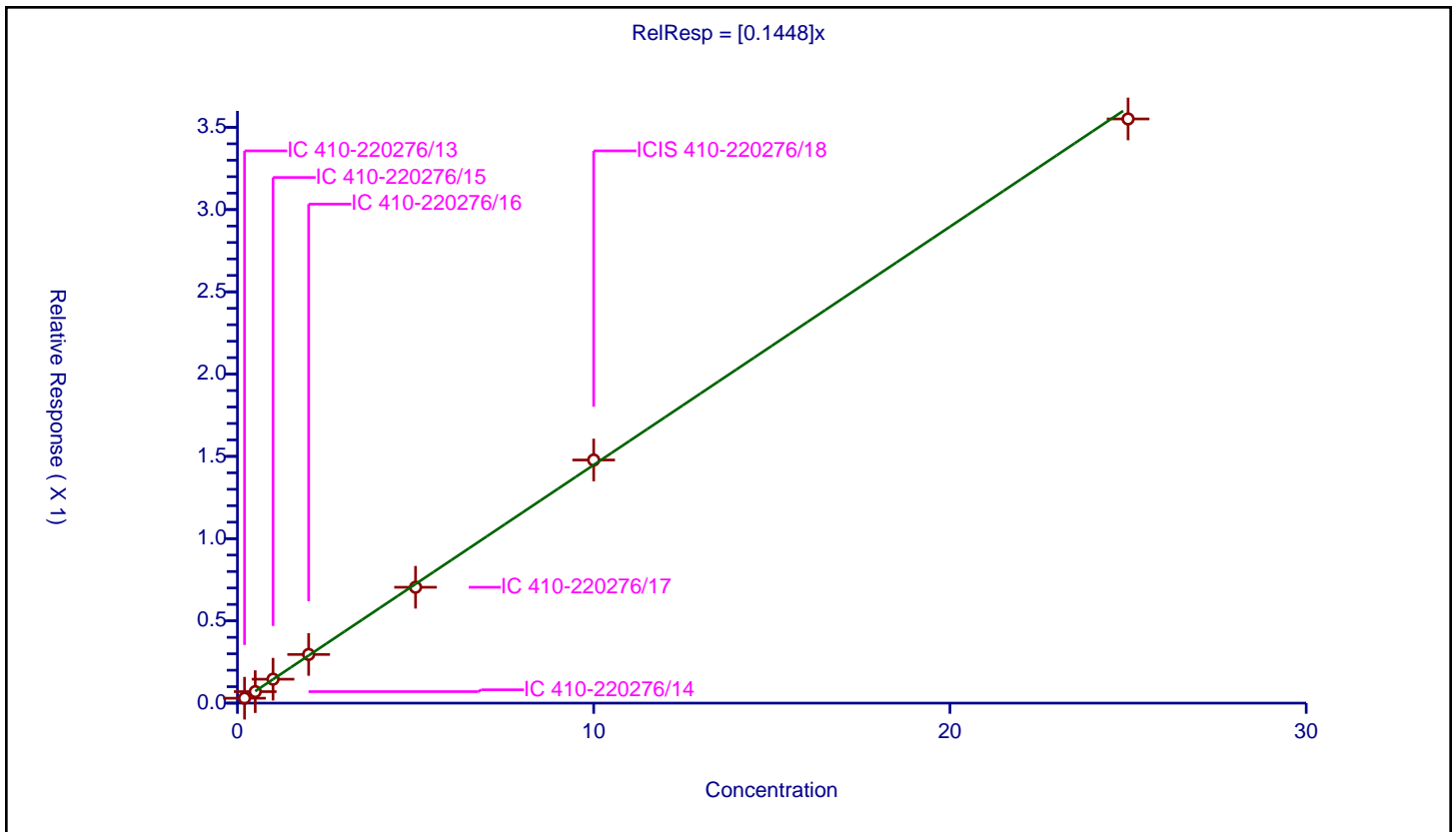
/ Dibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1448

Error Coefficients	
Standard Error:	322000
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 410-220276/13	0.2	0.029931	10.0	1844216.0	0.149657	Y
2	IC 410-220276/14	0.5	0.069883	10.0	1877699.0	0.139767	Y
3	IC 410-220276/15	1.0	0.145525	10.0	1880230.0	0.145525	Y
4	IC 410-220276/16	2.0	0.295882	10.0	1877168.0	0.147941	Y
5	IC 410-220276/17	5.0	0.704405	10.0	1925569.0	0.140881	Y
6	ICIS 410-220276/18	10.0	1.477849	10.0	1913666.0	0.147785	Y
7	IC 410-220276/19	25.0	3.551048	10.0	2030561.0	0.142042	Y



Calibration

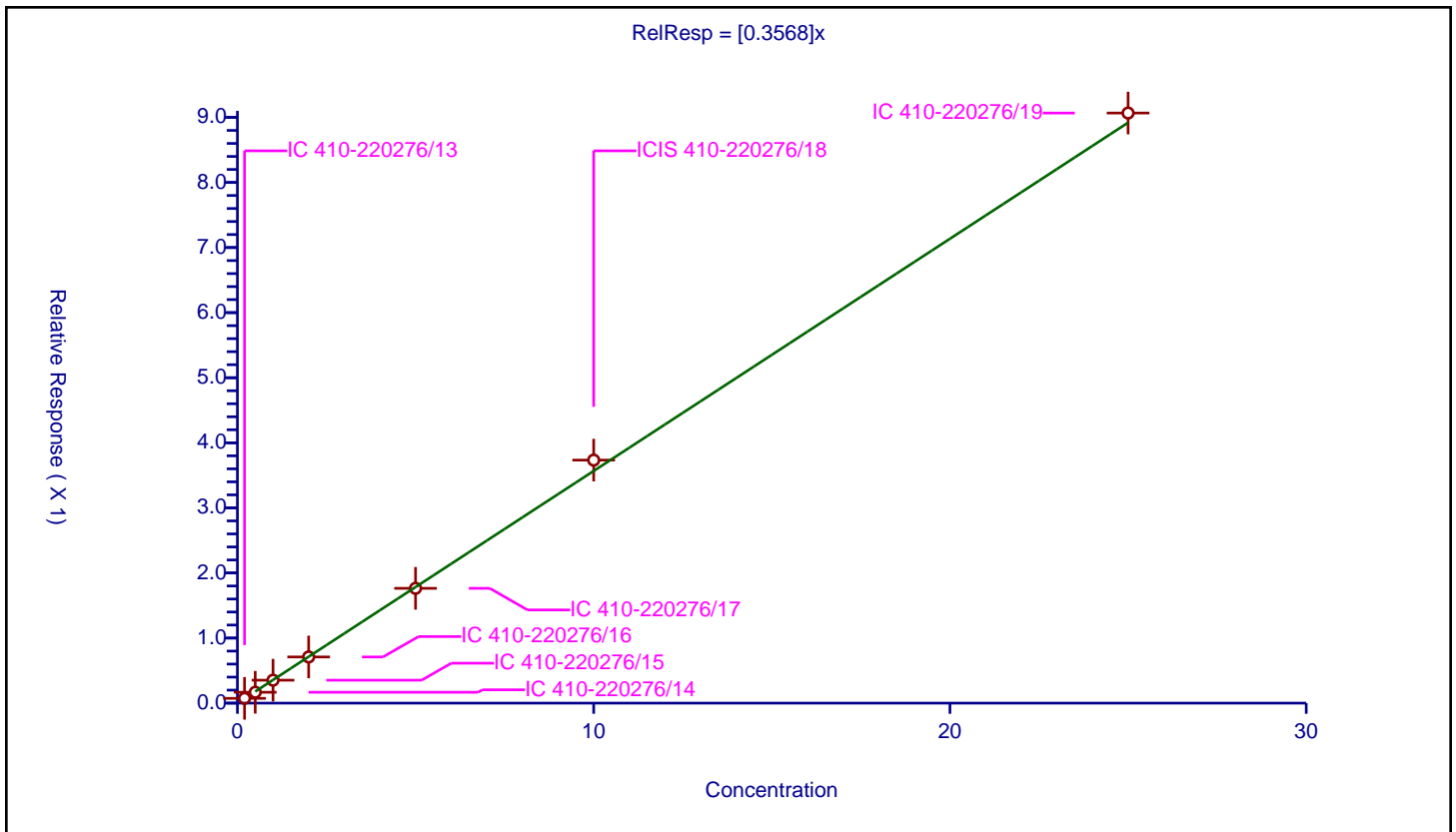
/ Dichlorobromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3568

Error Coefficients	
Standard Error:	820000
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 410-220276/13	0.2	0.073381	10.0	1844216.0	0.366904	Y
2	IC 410-220276/14	0.5	0.167173	10.0	1877699.0	0.334345	Y
3	IC 410-220276/15	1.0	0.352579	10.0	1880230.0	0.352579	Y
4	IC 410-220276/16	2.0	0.709212	10.0	1877168.0	0.354606	Y
5	IC 410-220276/17	5.0	1.764029	10.0	1925569.0	0.352806	Y
6	ICIS 410-220276/18	10.0	3.733964	10.0	1913666.0	0.373396	Y
7	IC 410-220276/19	25.0	9.06676	10.0	2030561.0	0.36267	Y



Calibration

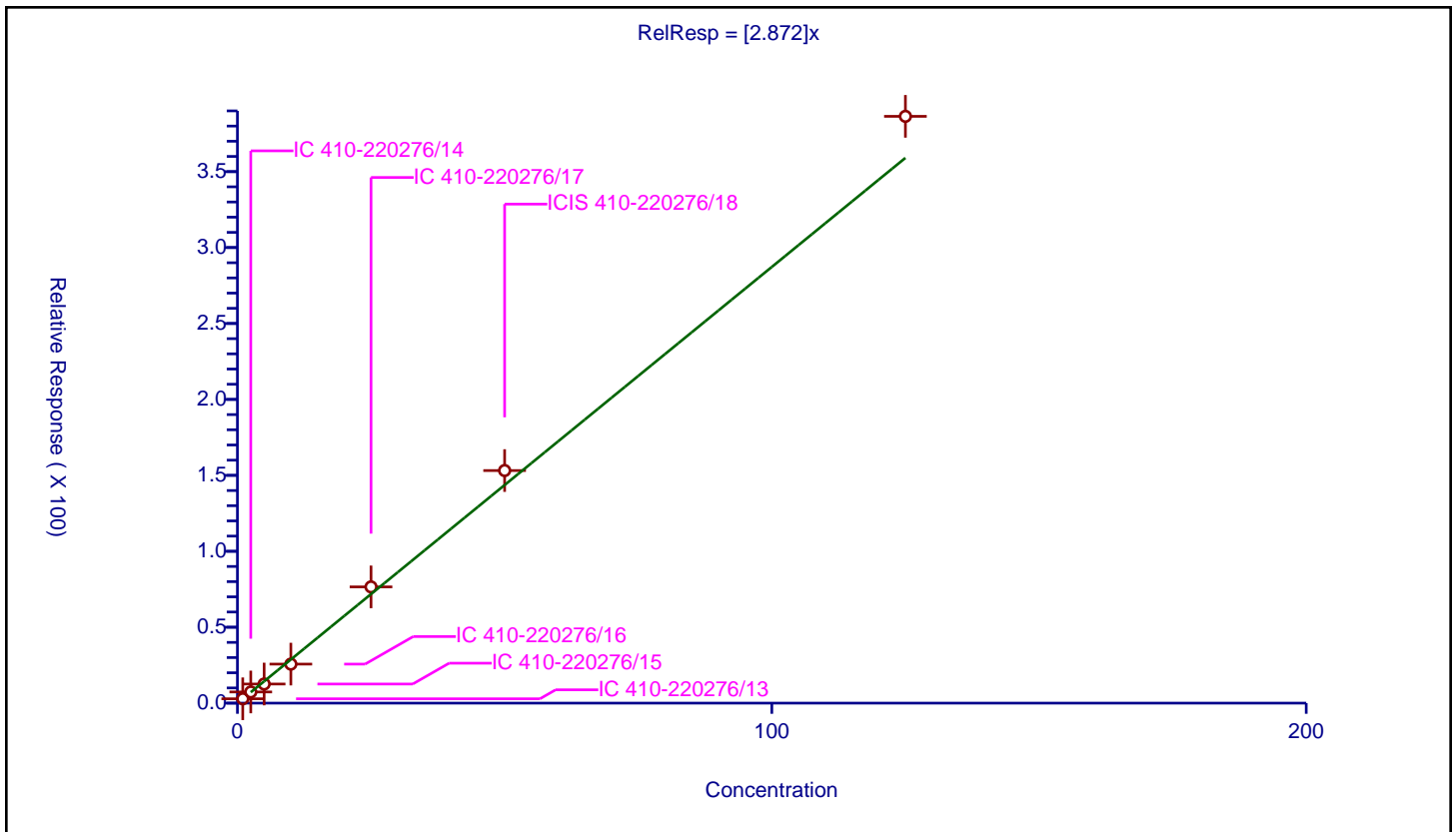
/ 2-Nitropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.872

Error Coefficients	
Standard Error:	427000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	1.0	2.863087	50.0	141316.0	2.863087	Y
2	IC 410-220276/14	2.5	7.350066	50.0	110999.0	2.940026	Y
3	IC 410-220276/15	5.0	12.586467	50.0	127506.0	2.517293	Y
4	IC 410-220276/16	10.0	25.704917	50.0	131292.0	2.570492	Y
5	IC 410-220276/17	25.0	76.540692	50.0	114997.0	3.061628	Y
6	ICIS 410-220276/18	50.0	153.154873	50.0	123127.0	3.063097	Y
7	IC 410-220276/19	125.0	386.406119	50.0	123688.0	3.091249	Y



Calibration

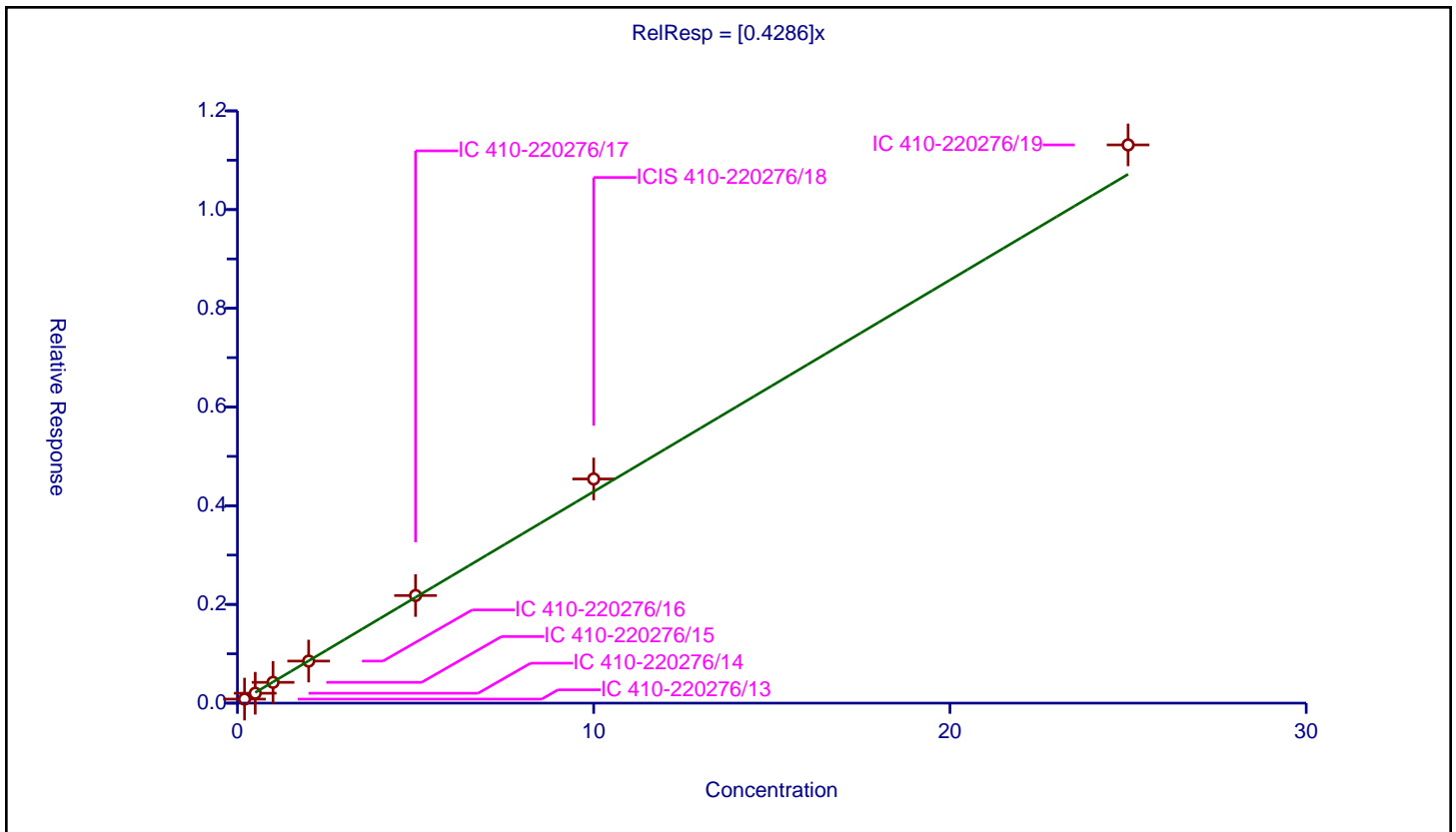
/ cis-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4286

Error Coefficients	
Standard Error:	1020000
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 410-220276/13	0.2	0.081888	10.0	1844216.0	0.409442	Y
2	IC 410-220276/14	0.5	0.200538	10.0	1877699.0	0.401076	Y
3	IC 410-220276/15	1.0	0.42106	10.0	1880230.0	0.42106	Y
4	IC 410-220276/16	2.0	0.852358	10.0	1877168.0	0.426179	Y
5	IC 410-220276/17	5.0	2.180545	10.0	1925569.0	0.436109	Y
6	ICIS 410-220276/18	10.0	4.542161	10.0	1913666.0	0.454216	Y
7	IC 410-220276/19	25.0	11.310623	10.0	2030561.0	0.452425	Y



Calibration

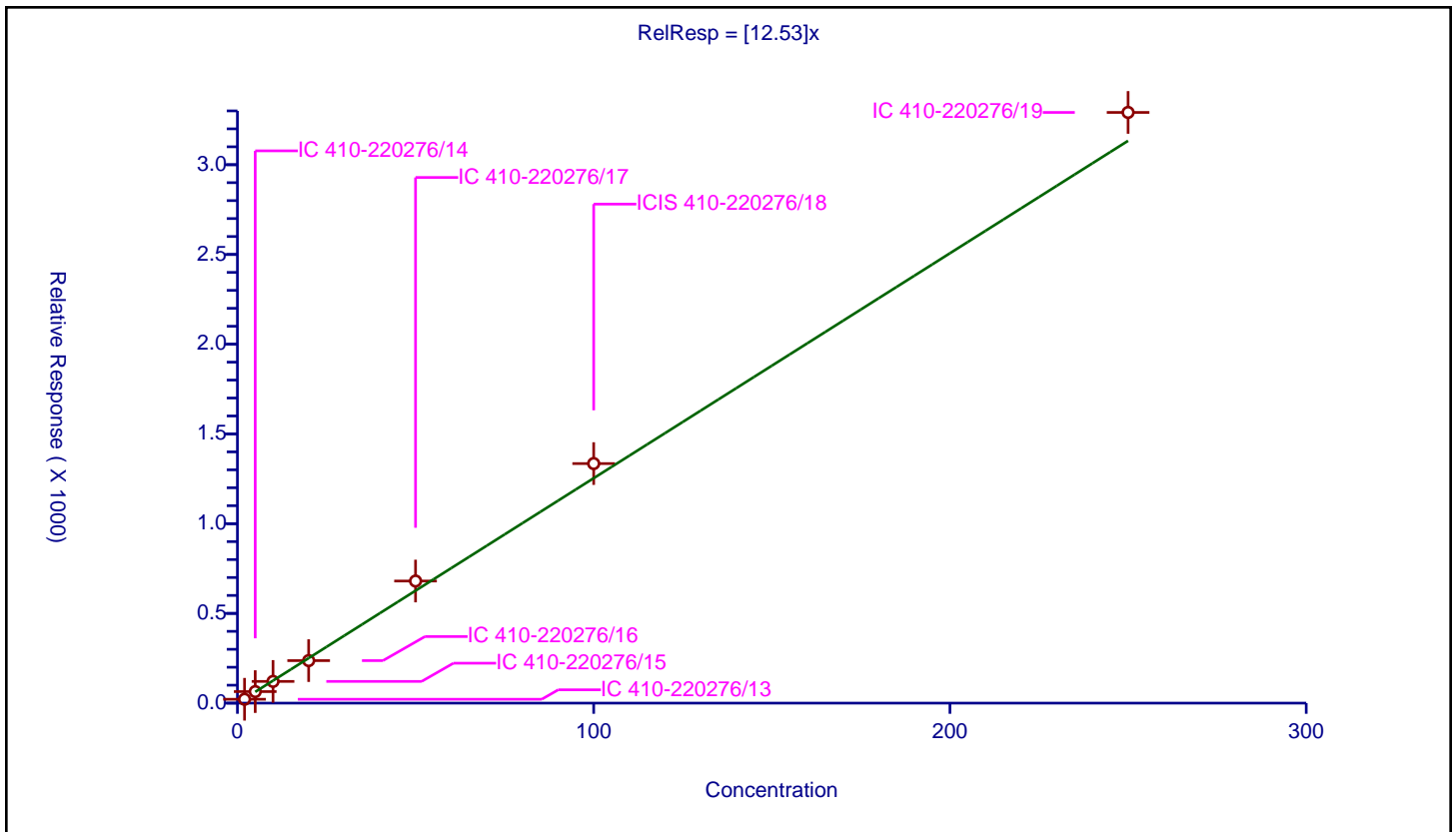
/ 4-Methyl-2-pentanone (MIBK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	12.53

Error Coefficients	
Standard Error:	3650000
Relative Standard Error:	8.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	2.0	21.615387	50.0	141316.0	10.807693	Y
2	IC 410-220276/14	5.0	64.296976	50.0	110999.0	12.859395	Y
3	IC 410-220276/15	10.0	121.0445	50.0	127506.0	12.10445	Y
4	IC 410-220276/16	20.0	236.877723	50.0	131292.0	11.843886	Y
5	IC 410-220276/17	50.0	680.318617	50.0	114997.0	13.606372	Y
6	ICIS 410-220276/18	100.0	1334.801871	50.0	123127.0	13.348019	Y
7	IC 410-220276/19	250.0	3291.339499	50.0	123688.0	13.165358	Y



Calibration

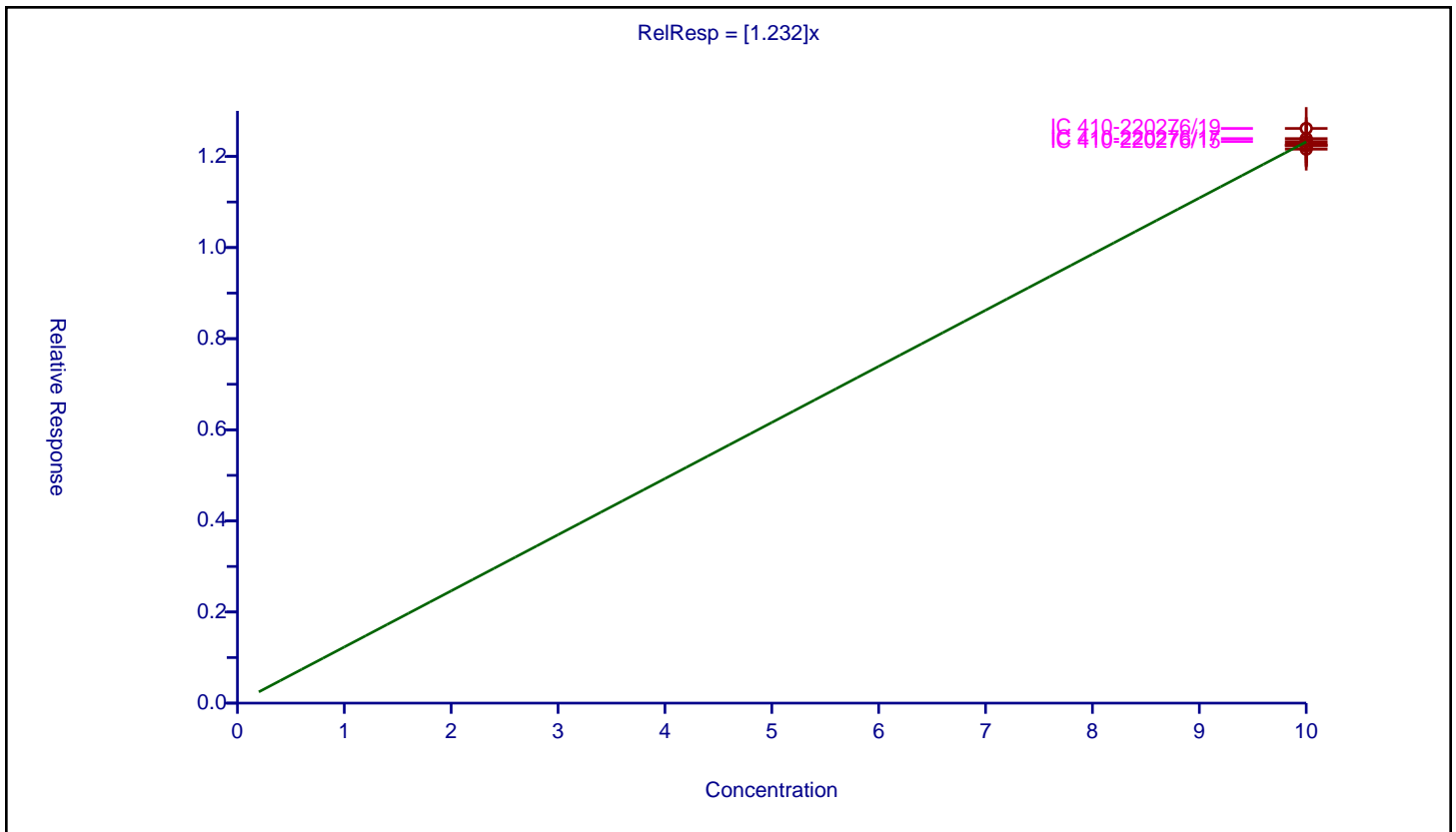
/ Toluene-d8 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.232

Error Coefficients	
Standard Error:	2080000
Relative Standard Error:	1.2
Correlation Coefficient:	0
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	10.0	12.230576	10.0	1514739.0	1.223058	Y
2	IC 410-220276/14	10.0	12.246311	10.0	1554228.0	1.224631	Y
3	IC 410-220276/15	10.0	12.32807	10.0	1533837.0	1.232807	Y
4	IC 410-220276/16	10.0	12.15946	10.0	1555227.0	1.215946	Y
5	IC 410-220276/17	10.0	12.392052	10.0	1573561.0	1.239205	Y
6	ICIS 410-220276/18	10.0	12.27238	10.0	1592159.0	1.227238	Y
7	IC 410-220276/19	10.0	12.614535	10.0	1625666.0	1.261453	Y



Calibration

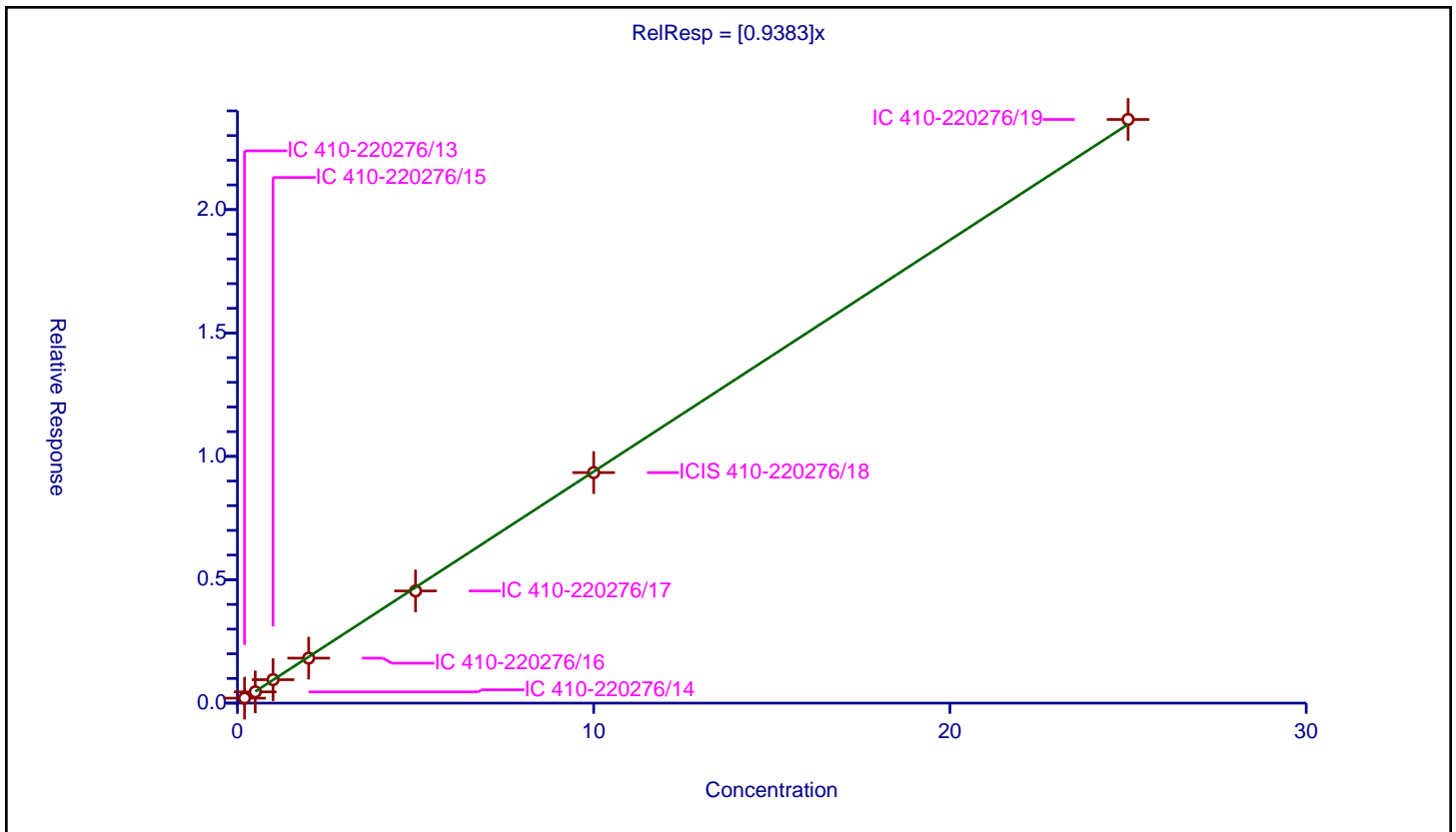
/ Toluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9383

Error Coefficients	
Standard Error:	1710000
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 410-220276/13	0.2	0.200807	10.0	1514739.0	1.004034	Y
2	IC 410-220276/14	0.5	0.456136	10.0	1554228.0	0.912273	Y
3	IC 410-220276/15	1.0	0.950838	10.0	1533837.0	0.950838	Y
4	IC 410-220276/16	2.0	1.823759	10.0	1555227.0	0.91188	Y
5	IC 410-220276/17	5.0	4.545156	10.0	1573561.0	0.909031	Y
6	ICIS 410-220276/18	10.0	9.341416	10.0	1592159.0	0.934142	Y
7	IC 410-220276/19	25.0	23.652823	10.0	1625666.0	0.946113	Y



Calibration

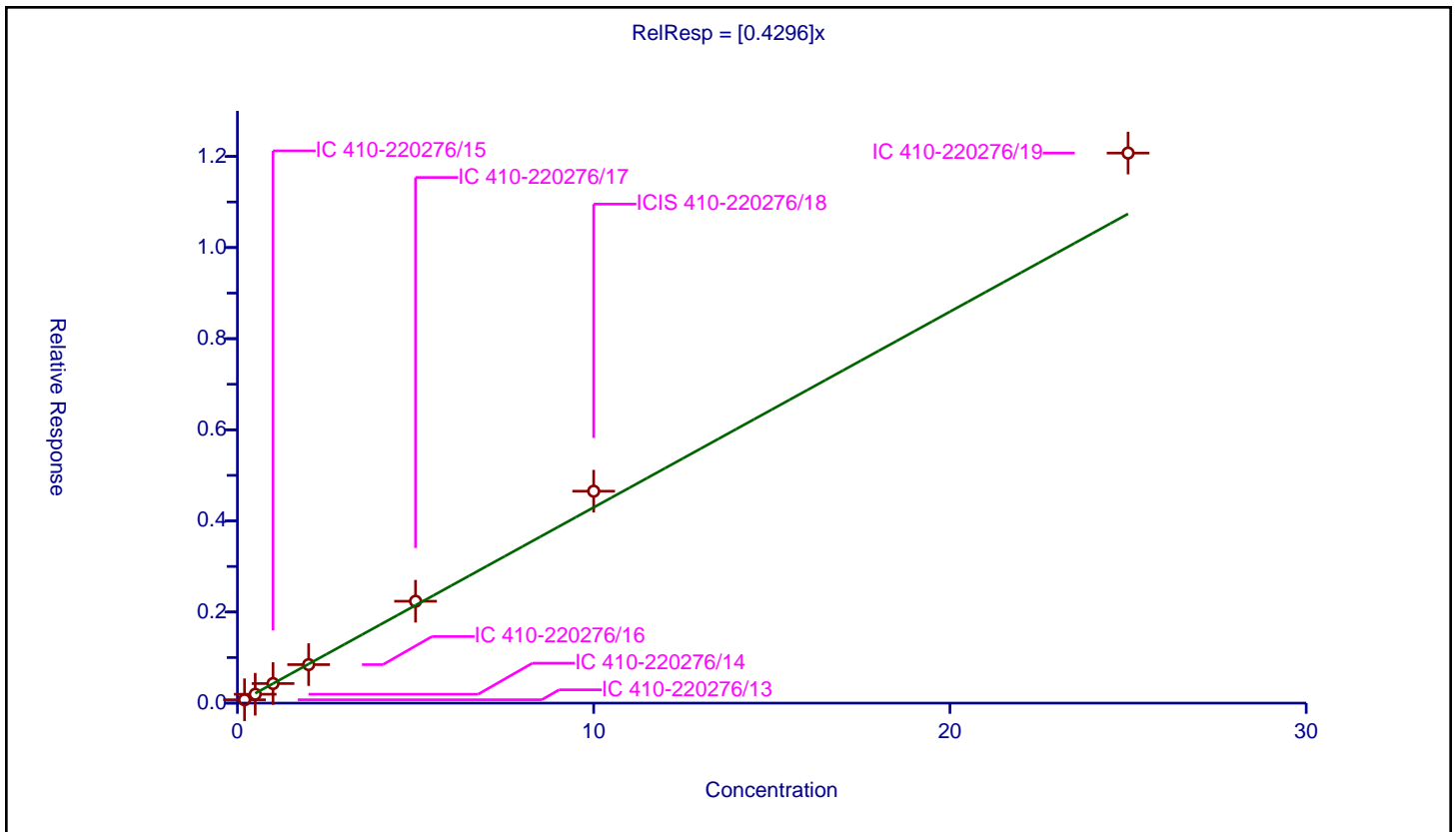
/ trans-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4296

Error Coefficients	
Standard Error:	871000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.073881	10.0	1514739.0	0.369404	Y
2	IC 410-220276/14	0.5	0.194778	10.0	1554228.0	0.389557	Y
3	IC 410-220276/15	1.0	0.430078	10.0	1533837.0	0.430078	Y
4	IC 410-220276/16	2.0	0.845594	10.0	1555227.0	0.422797	Y
5	IC 410-220276/17	5.0	2.236545	10.0	1573561.0	0.447309	Y
6	ICIS 410-220276/18	10.0	4.652174	10.0	1592159.0	0.465217	Y
7	IC 410-220276/19	25.0	12.074036	10.0	1625666.0	0.482961	Y



Calibration

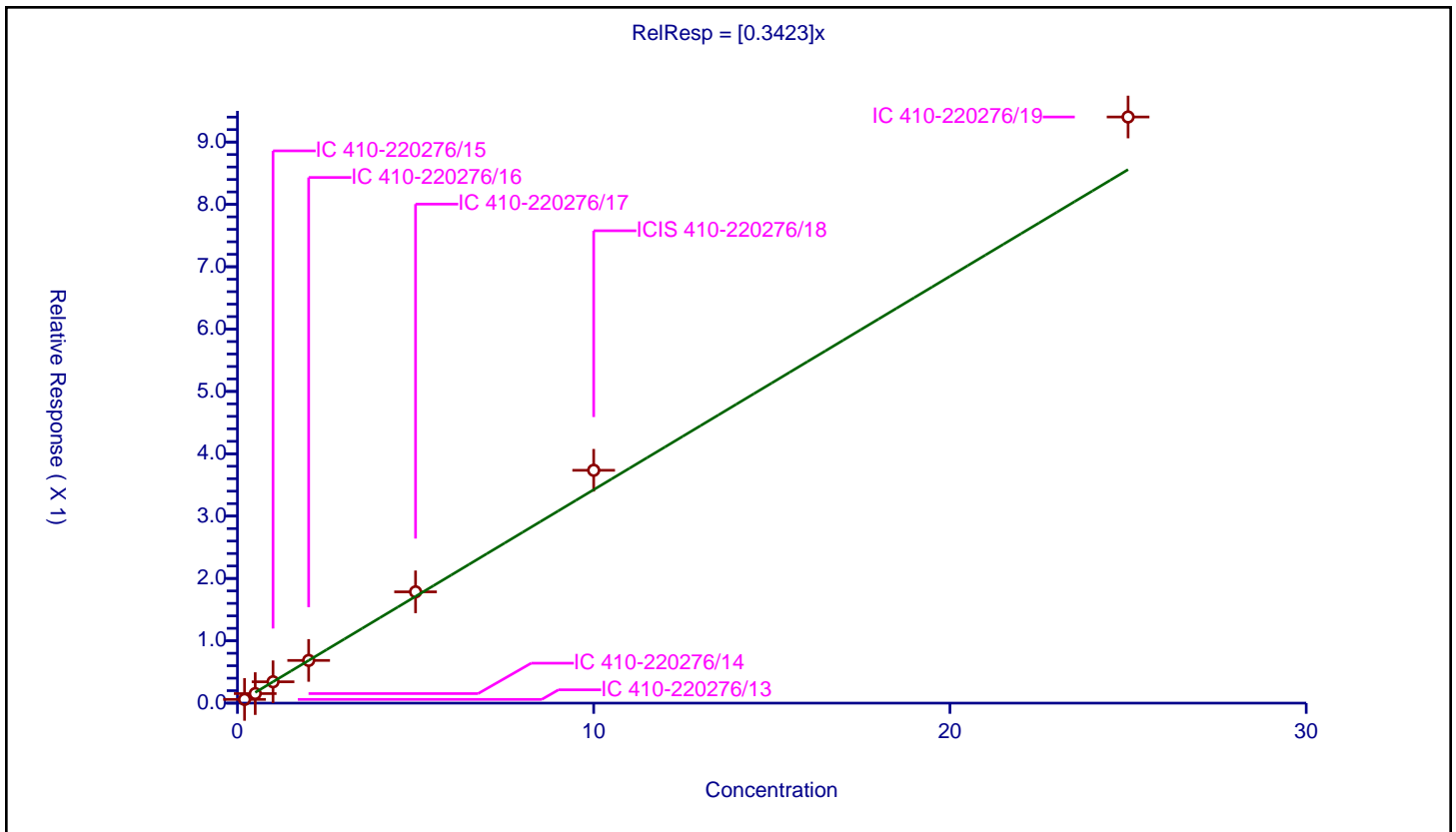
/ Ethyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3423

Error Coefficients	
Standard Error:	681000
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 410-220276/13	0.2	0.05974	10.0	1514739.0	0.298698	Y
2	IC 410-220276/14	0.5	0.153124	10.0	1554228.0	0.306249	Y
3	IC 410-220276/15	1.0	0.342429	10.0	1533837.0	0.342429	Y
4	IC 410-220276/16	2.0	0.684865	10.0	1555227.0	0.342432	Y
5	IC 410-220276/17	5.0	1.785187	10.0	1573561.0	0.357037	Y
6	ICIS 410-220276/18	10.0	3.735199	10.0	1592159.0	0.37352	Y
7	IC 410-220276/19	25.0	9.401968	10.0	1625666.0	0.376079	Y



Calibration

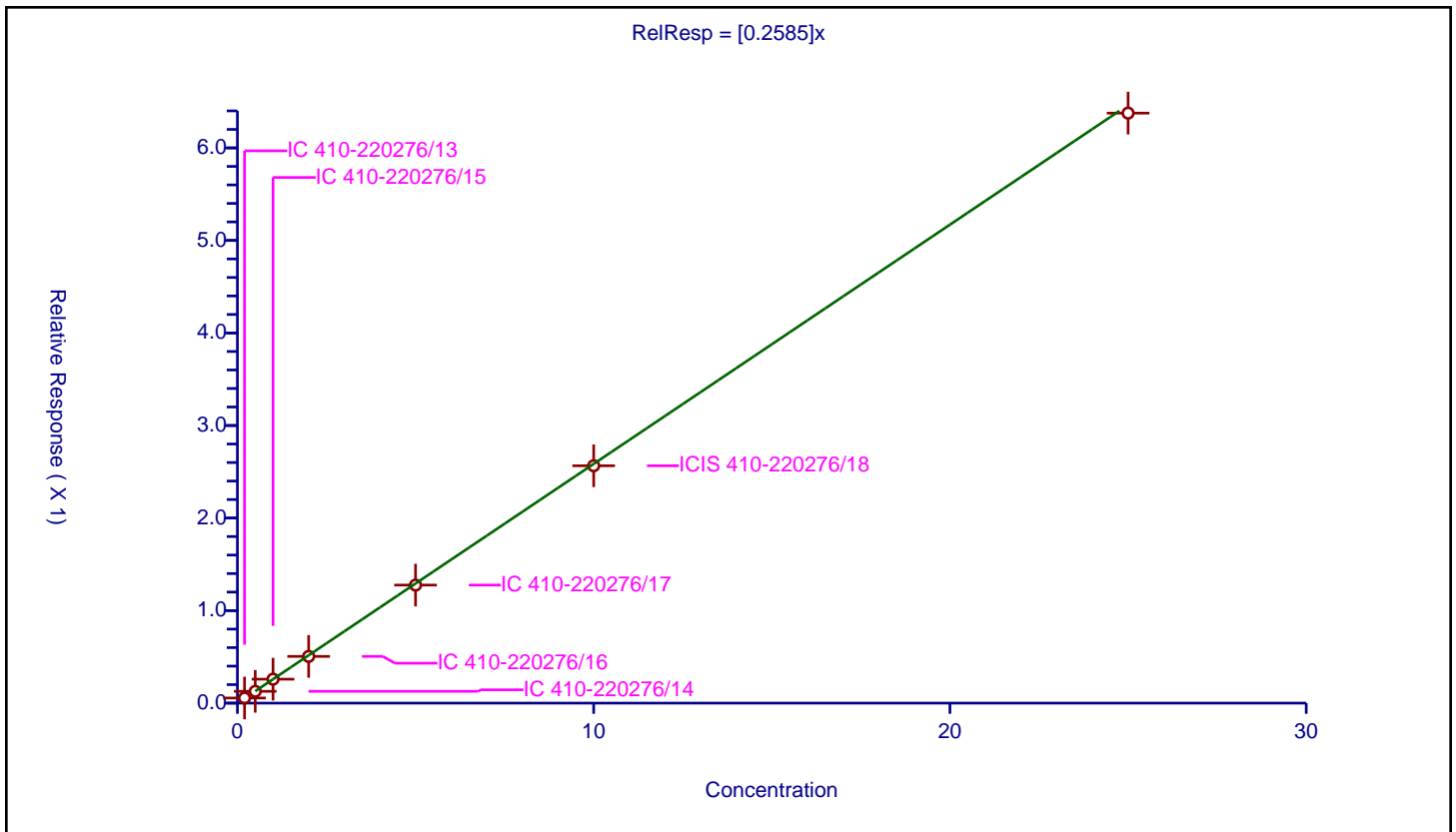
/ 1,1,2-Trichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2585

Error Coefficients	
Standard Error:	464000
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 410-220276/13	0.2	0.055316	10.0	1514739.0	0.276582	Y
2	IC 410-220276/14	0.5	0.127536	10.0	1554228.0	0.255072	Y
3	IC 410-220276/15	1.0	0.258835	10.0	1533837.0	0.258835	Y
4	IC 410-220276/16	2.0	0.504891	10.0	1555227.0	0.252445	Y
5	IC 410-220276/17	5.0	1.27561	10.0	1573561.0	0.255122	Y
6	ICIS 410-220276/18	10.0	2.565259	10.0	1592159.0	0.256526	Y
7	IC 410-220276/19	25.0	6.375688	10.0	1625666.0	0.255028	Y



Calibration

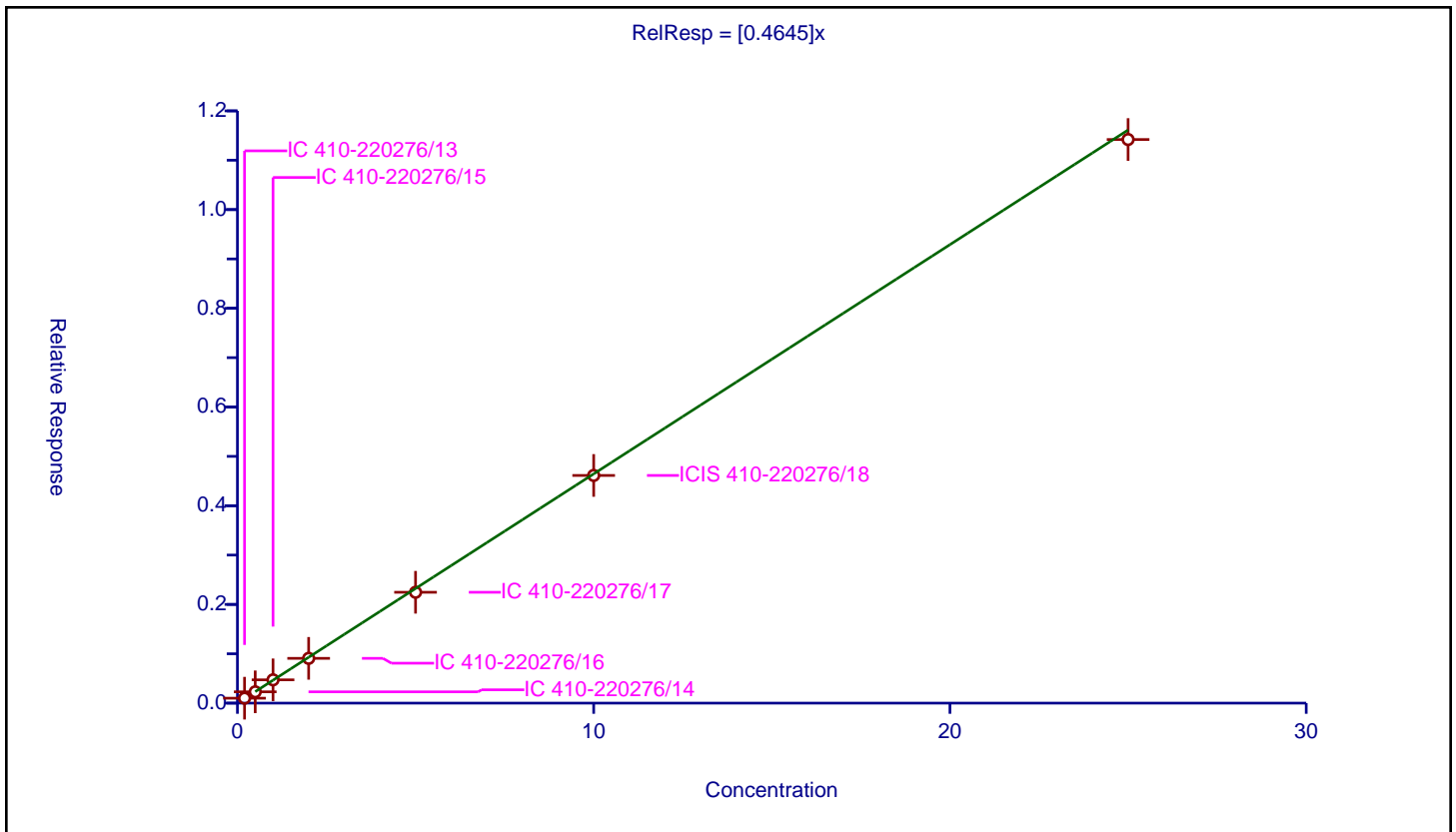
/ Tetrachloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4645

Error Coefficients	
Standard Error:	830000
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 410-220276/13	0.2	0.099997	10.0	1514739.0	0.499987	Y
2	IC 410-220276/14	0.5	0.229336	10.0	1554228.0	0.458671	Y
3	IC 410-220276/15	1.0	0.471843	10.0	1533837.0	0.471843	Y
4	IC 410-220276/16	2.0	0.907321	10.0	1555227.0	0.45366	Y
5	IC 410-220276/17	5.0	2.246268	10.0	1573561.0	0.449254	Y
6	ICIS 410-220276/18	10.0	4.613226	10.0	1592159.0	0.461323	Y
7	IC 410-220276/19	25.0	11.419726	10.0	1625666.0	0.456789	Y



Calibration

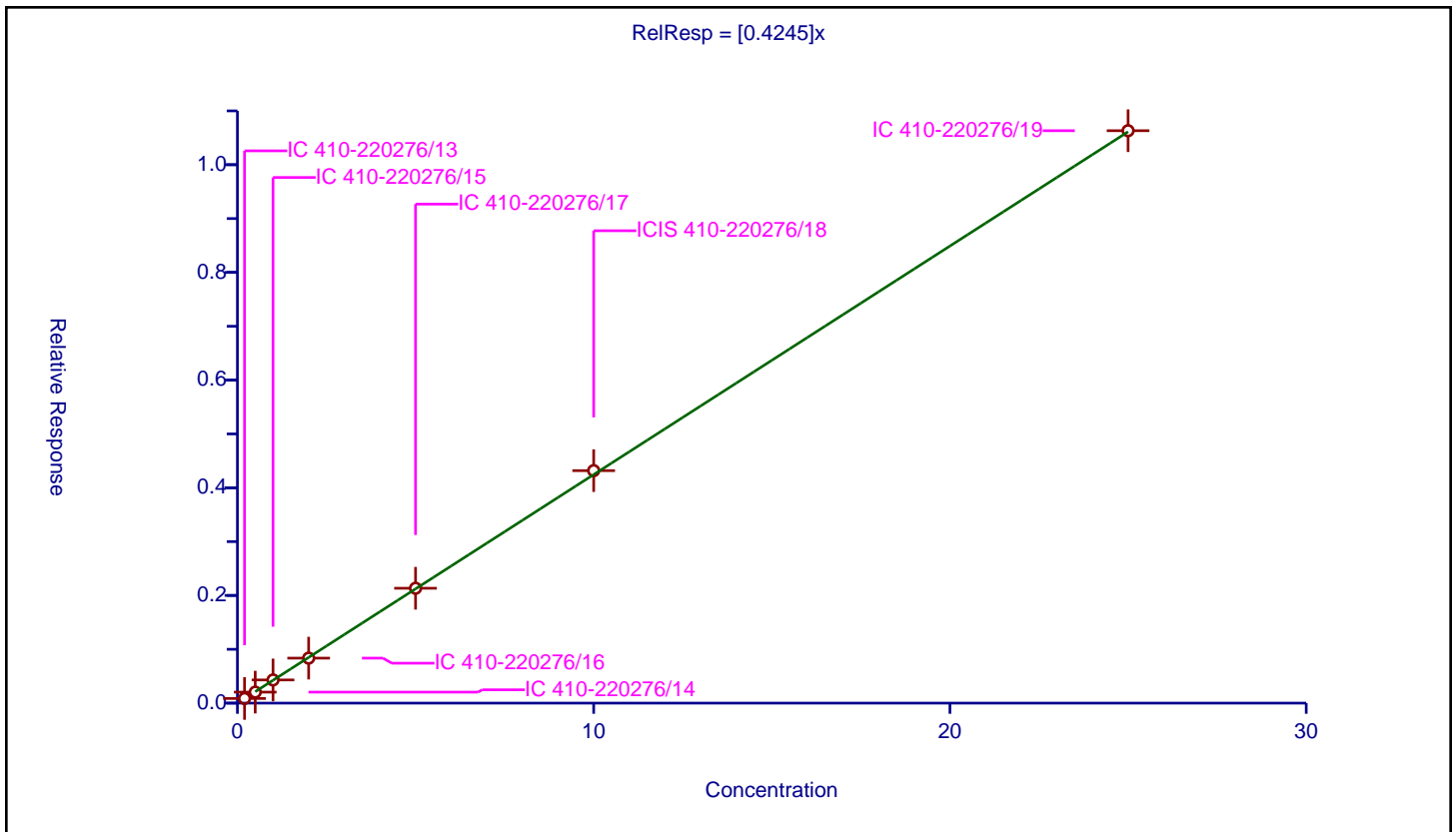
/ 1,3-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4245

Error Coefficients	
Standard Error:	774000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.086081	10.0	1514739.0	0.430404	Y
2	IC 410-220276/14	0.5	0.204333	10.0	1554228.0	0.408666	Y
3	IC 410-220276/15	1.0	0.430528	10.0	1533837.0	0.430528	Y
4	IC 410-220276/16	2.0	0.835955	10.0	1555227.0	0.417978	Y
5	IC 410-220276/17	5.0	2.133816	10.0	1573561.0	0.426763	Y
6	ICIS 410-220276/18	10.0	4.318331	10.0	1592159.0	0.431833	Y
7	IC 410-220276/19	25.0	10.631809	10.0	1625666.0	0.425272	Y



Calibration

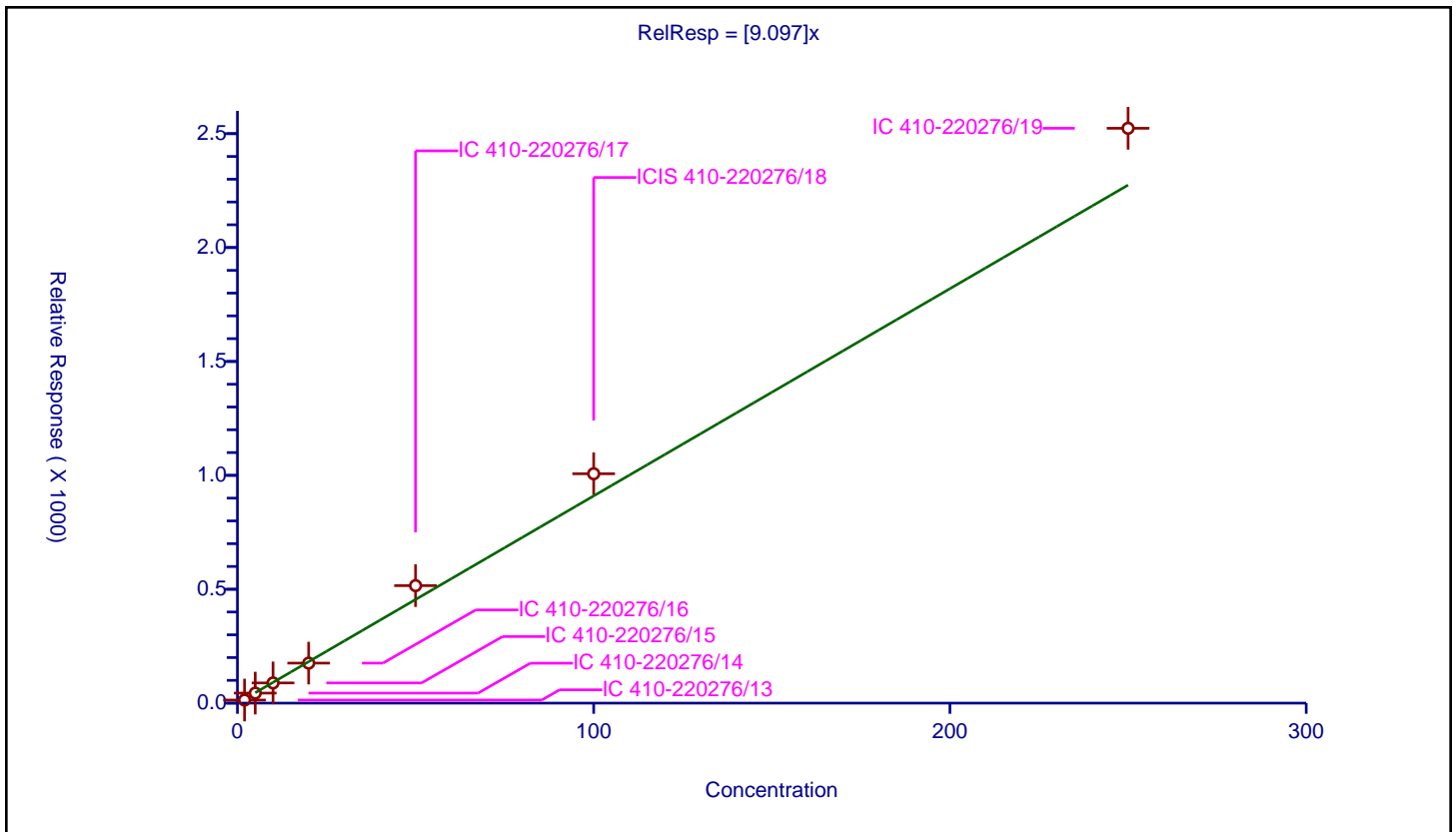
/ 2-Hexanone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	9.097

Error Coefficients	
Standard Error:	2790000
Relative Standard Error:	13.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	2.0	13.514747	50.0	141316.0	6.757374	Y
2	IC 410-220276/14	5.0	43.981027	50.0	110999.0	8.796205	Y
3	IC 410-220276/15	10.0	88.645632	50.0	127506.0	8.864563	Y
4	IC 410-220276/16	20.0	175.662645	50.0	131292.0	8.783132	Y
5	IC 410-220276/17	50.0	515.79476	50.0	114997.0	10.315895	Y
6	ICIS 410-220276/18	100.0	1007.050444	50.0	123127.0	10.070504	Y
7	IC 410-220276/19	250.0	2523.68904	50.0	123688.0	10.094756	Y



Calibration

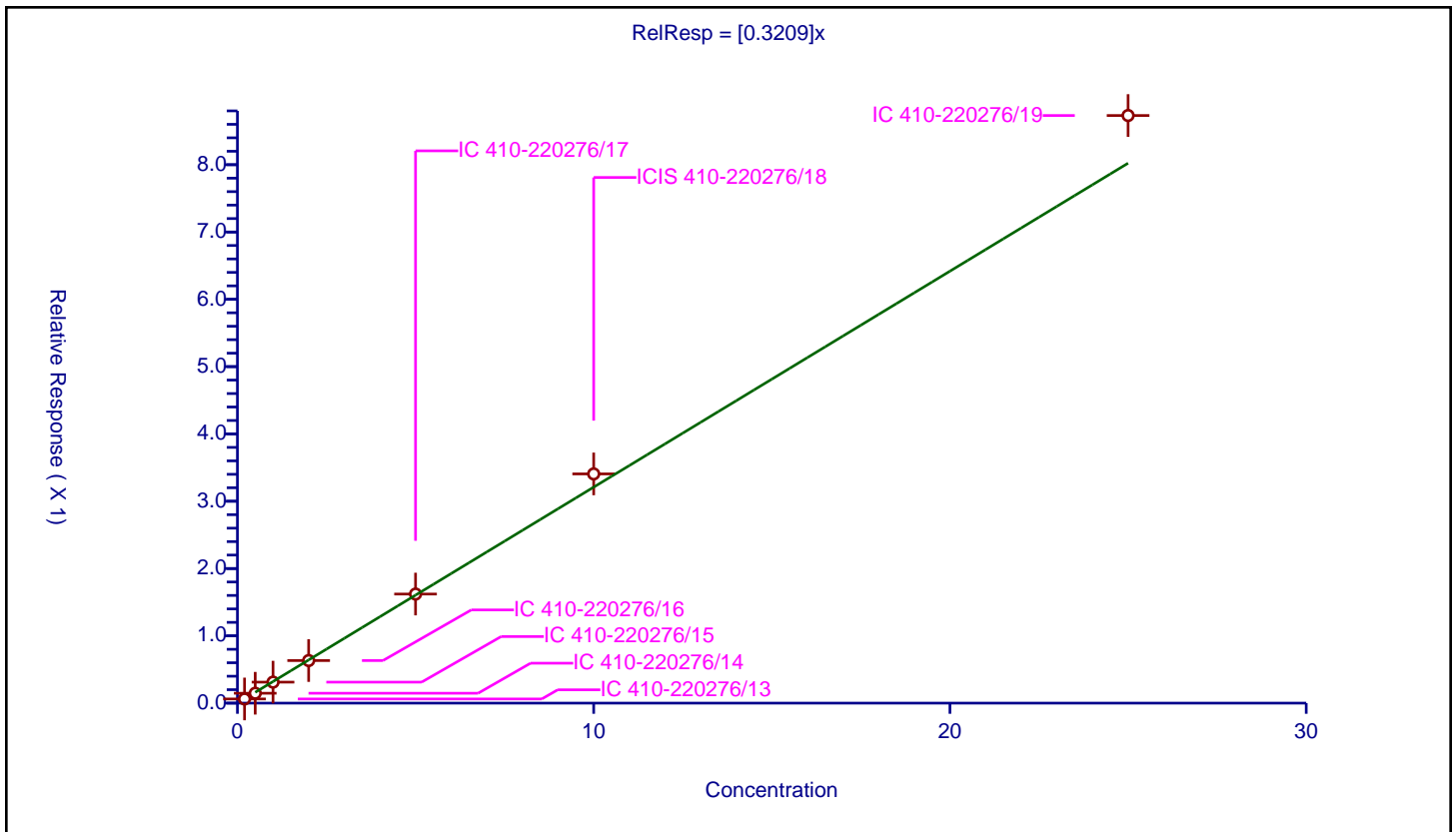
/ Chlorodibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3209

Error Coefficients	
Standard Error:	631000
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 410-220276/13	0.2	0.062057	10.0	1514739.0	0.310284	Y
2	IC 410-220276/14	0.5	0.146915	10.0	1554228.0	0.293831	Y
3	IC 410-220276/15	1.0	0.311963	10.0	1533837.0	0.311963	Y
4	IC 410-220276/16	2.0	0.63257	10.0	1555227.0	0.316285	Y
5	IC 410-220276/17	5.0	1.620801	10.0	1573561.0	0.32416	Y
6	ICIS 410-220276/18	10.0	3.406079	10.0	1592159.0	0.340608	Y
7	IC 410-220276/19	25.0	8.731197	10.0	1625666.0	0.349248	Y



Calibration

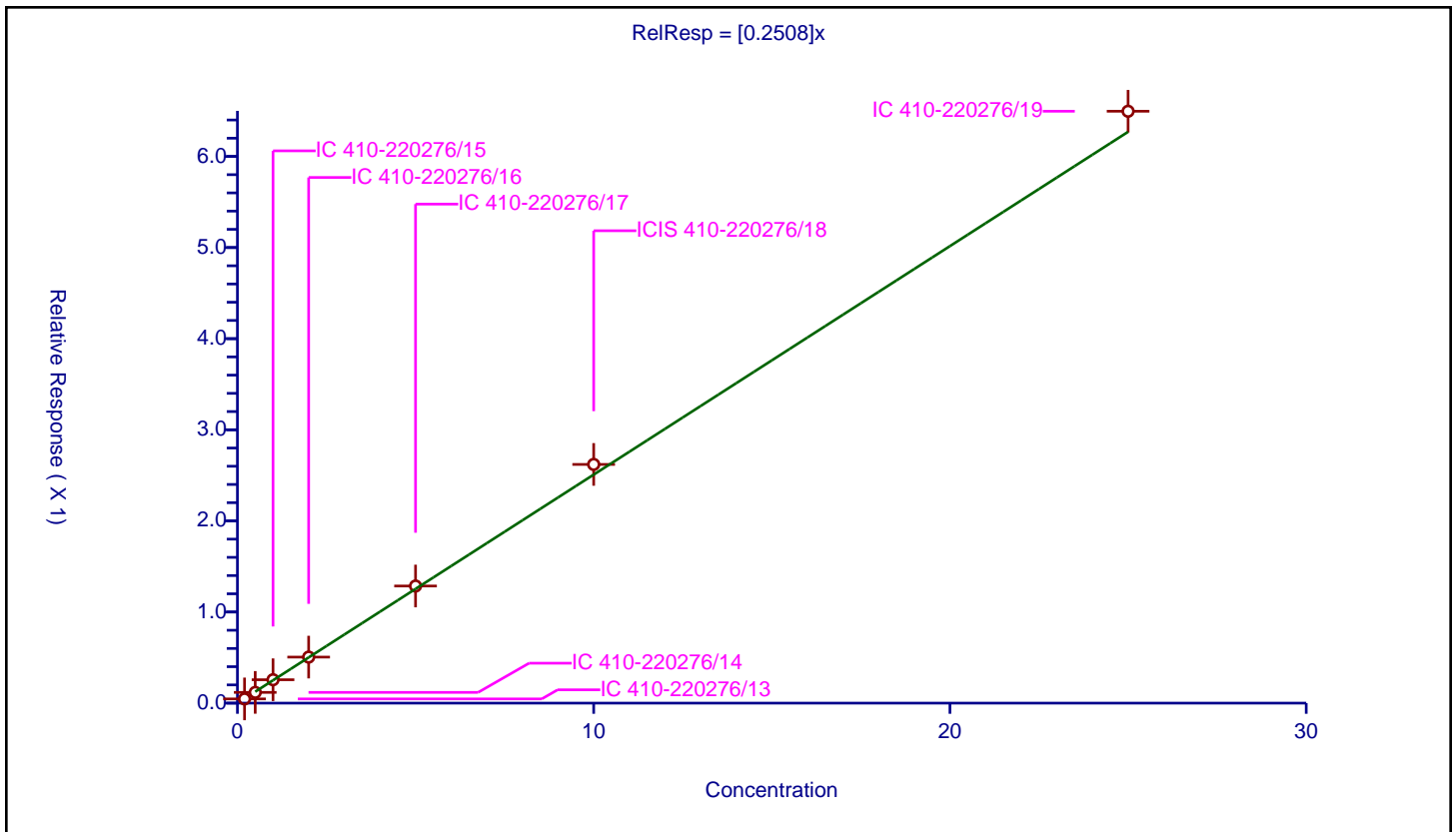
/ Ethylene Dibromide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2508

Error Coefficients	
Standard Error:	472000
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 410-220276/13	0.2	0.046272	10.0	1514739.0	0.23136	Y
2	IC 410-220276/14	0.5	0.117898	10.0	1554228.0	0.235796	Y
3	IC 410-220276/15	1.0	0.256827	10.0	1533837.0	0.256827	Y
4	IC 410-220276/16	2.0	0.50527	10.0	1555227.0	0.252635	Y
5	IC 410-220276/17	5.0	1.285505	10.0	1573561.0	0.257101	Y
6	ICIS 410-220276/18	10.0	2.619877	10.0	1592159.0	0.261988	Y
7	IC 410-220276/19	25.0	6.496051	10.0	1625666.0	0.259842	Y



Calibration

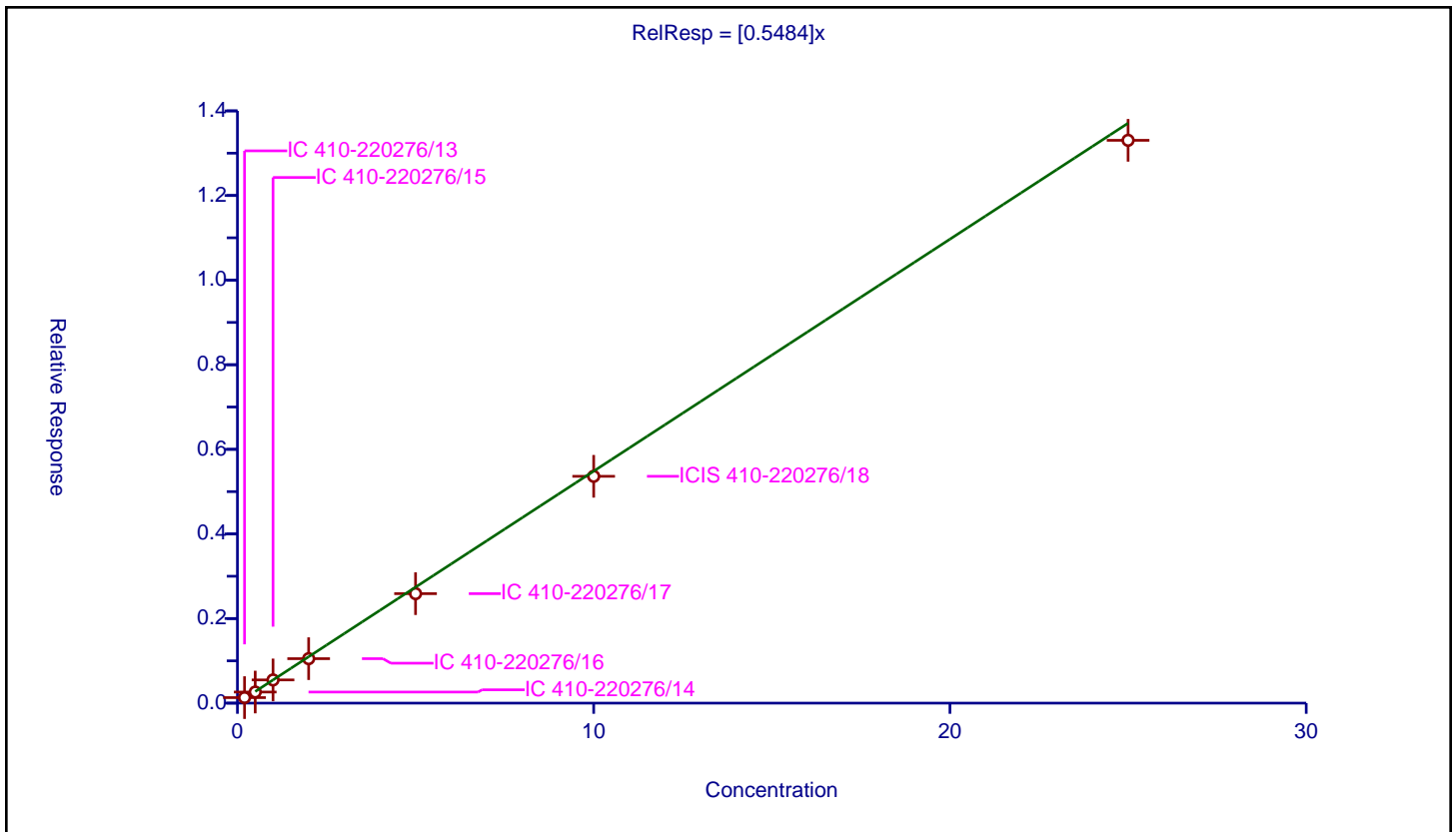
/ 1-Chlorohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5484

Error Coefficients	
Standard Error:	967000
Relative Standard Error:	8.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.130887	10.0	1514739.0	0.654436	Y
2	IC 410-220276/14	0.5	0.262137	10.0	1554228.0	0.524273	Y
3	IC 410-220276/15	1.0	0.548376	10.0	1533837.0	0.548376	Y
4	IC 410-220276/16	2.0	1.05112	10.0	1555227.0	0.52556	Y
5	IC 410-220276/17	5.0	2.588098	10.0	1573561.0	0.51762	Y
6	ICIS 410-220276/18	10.0	5.361738	10.0	1592159.0	0.536174	Y
7	IC 410-220276/19	25.0	13.304313	10.0	1625666.0	0.532173	Y



Calibration

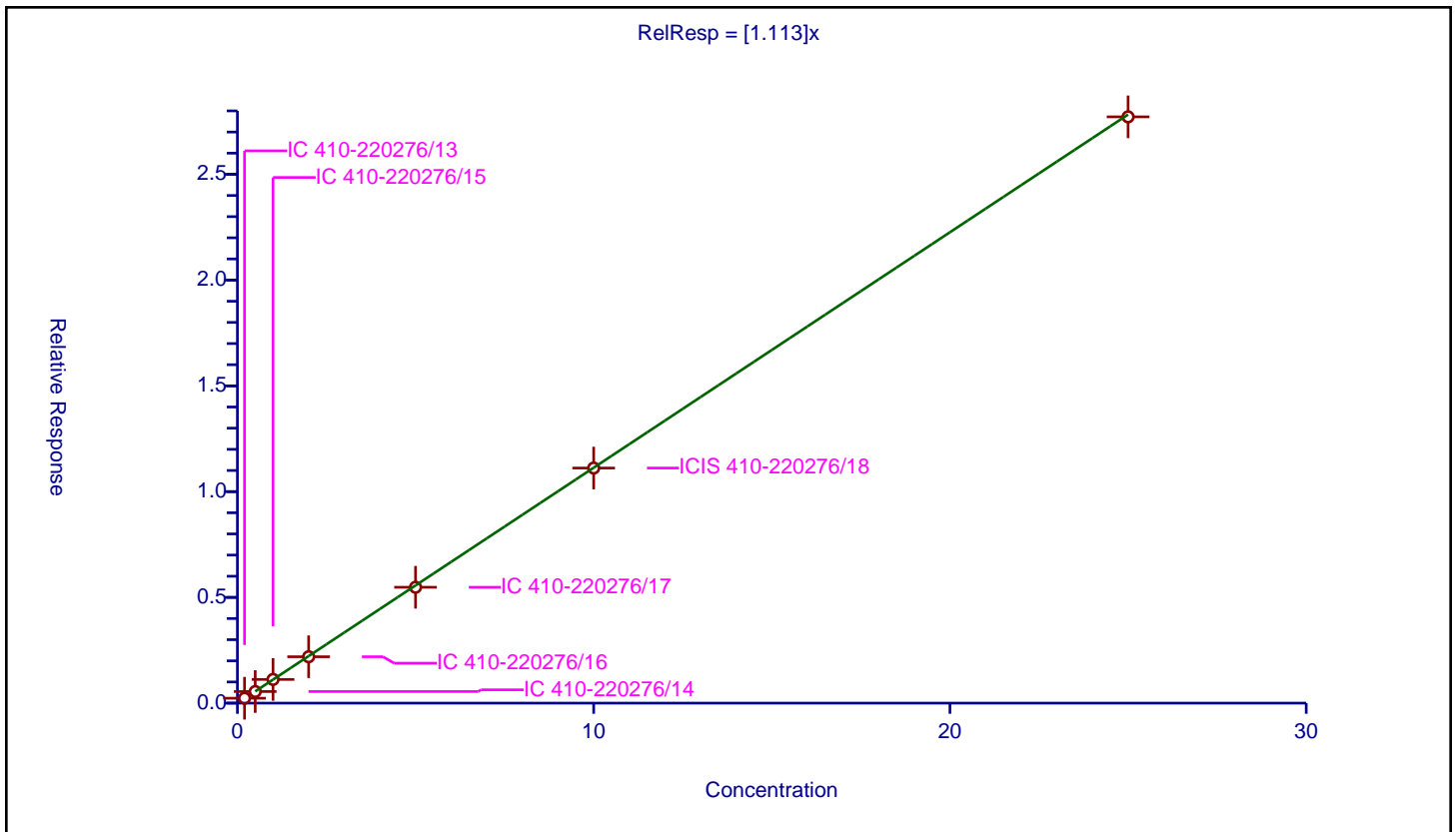
/ Chlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.113

Error Coefficients	
Standard Error:	2010000
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 410-220276/13	0.2	0.232403	10.0	1514739.0	1.162015	Y
2	IC 410-220276/14	0.5	0.548613	10.0	1554228.0	1.097226	Y
3	IC 410-220276/15	1.0	1.12023	10.0	1533837.0	1.12023	Y
4	IC 410-220276/16	2.0	2.192664	10.0	1555227.0	1.096332	Y
5	IC 410-220276/17	5.0	5.477811	10.0	1573561.0	1.095562	Y
6	ICIS 410-220276/18	10.0	11.113859	10.0	1592159.0	1.111386	Y
7	IC 410-220276/19	25.0	27.718535	10.0	1625666.0	1.108741	Y



Calibration

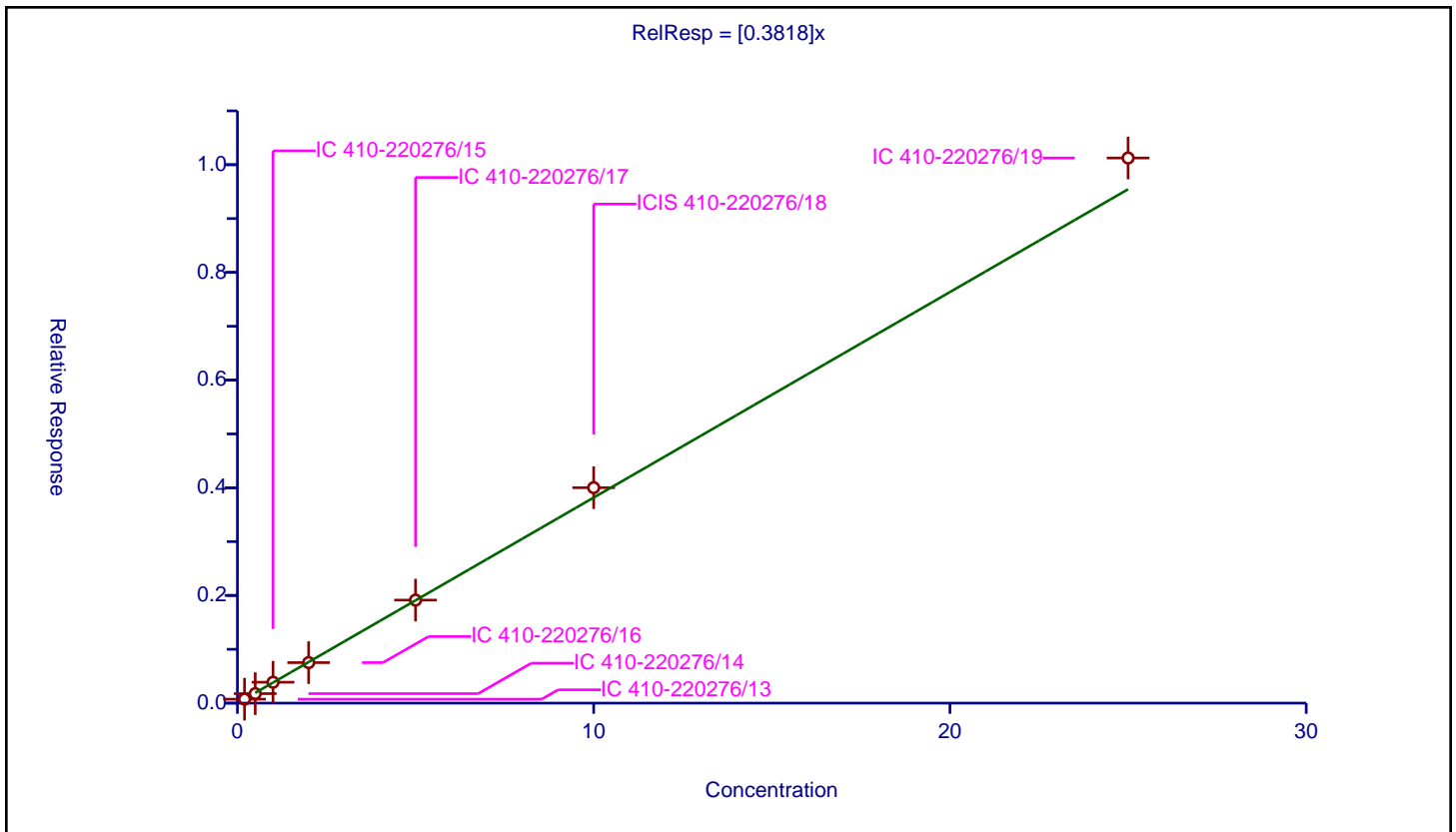
/ 1,1,1,2-Tetrachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3818

Error Coefficients	
Standard Error:	733000
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 410-220276/13	0.2	0.073498	10.0	1514739.0	0.367489	Y
2	IC 410-220276/14	0.5	0.176268	10.0	1554228.0	0.352535	Y
3	IC 410-220276/15	1.0	0.388222	10.0	1533837.0	0.388222	Y
4	IC 410-220276/16	2.0	0.752456	10.0	1555227.0	0.376228	Y
5	IC 410-220276/17	5.0	1.913443	10.0	1573561.0	0.382689	Y
6	ICIS 410-220276/18	10.0	4.001636	10.0	1592159.0	0.400164	Y
7	IC 410-220276/19	25.0	10.124921	10.0	1625666.0	0.404997	Y



Calibration

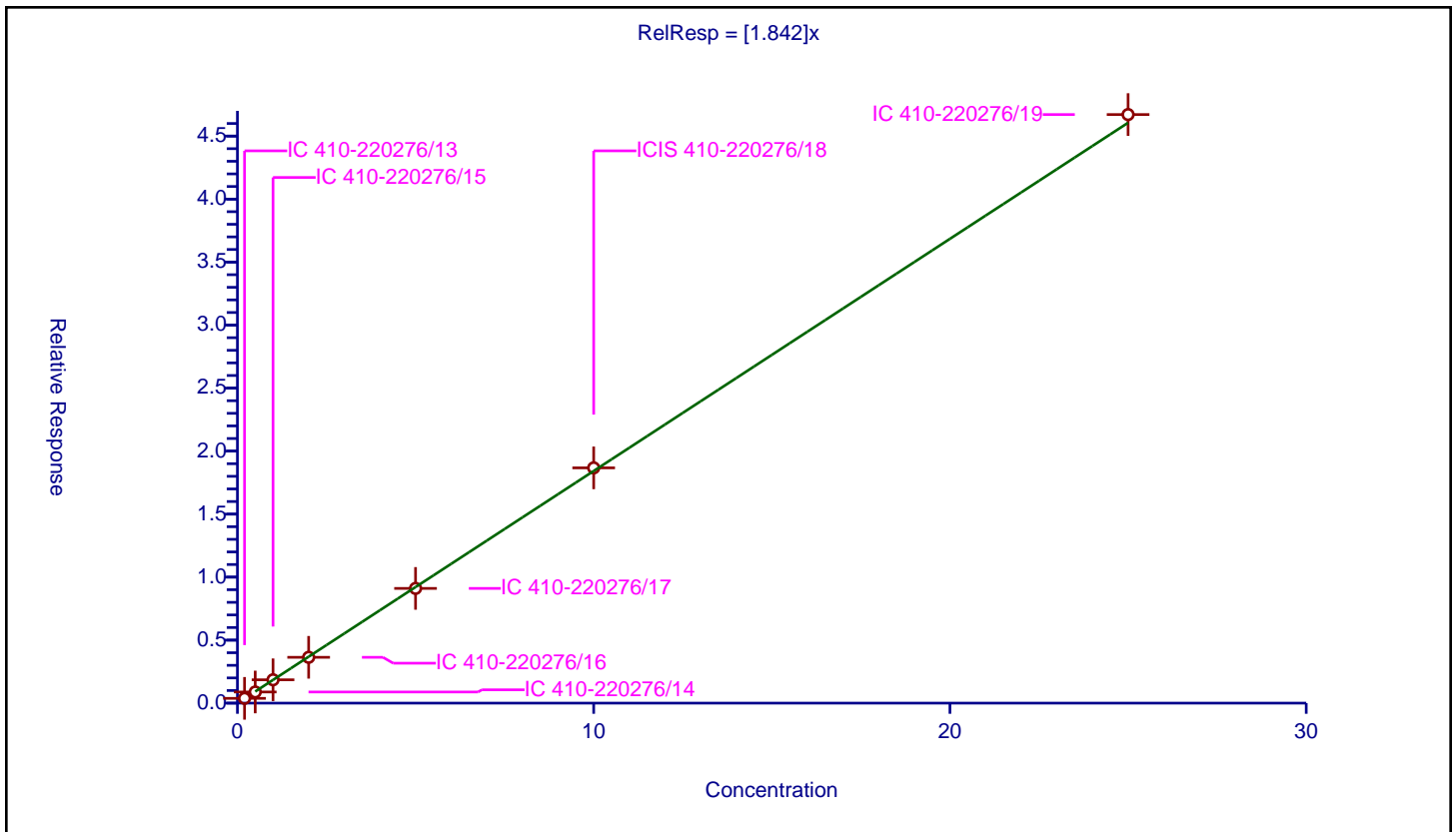
/ Ethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.842

Error Coefficients	
Standard Error:	3390000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.379762	10.0	1514739.0	1.898809	Y
2	IC 410-220276/14	0.5	0.885578	10.0	1554228.0	1.771156	Y
3	IC 410-220276/15	1.0	1.8521	10.0	1533837.0	1.8521	Y
4	IC 410-220276/16	2.0	3.635855	10.0	1555227.0	1.817928	Y
5	IC 410-220276/17	5.0	9.104204	10.0	1573561.0	1.820841	Y
6	ICIS 410-220276/18	10.0	18.670045	10.0	1592159.0	1.867004	Y
7	IC 410-220276/19	25.0	46.707479	10.0	1625666.0	1.868299	Y



Calibration

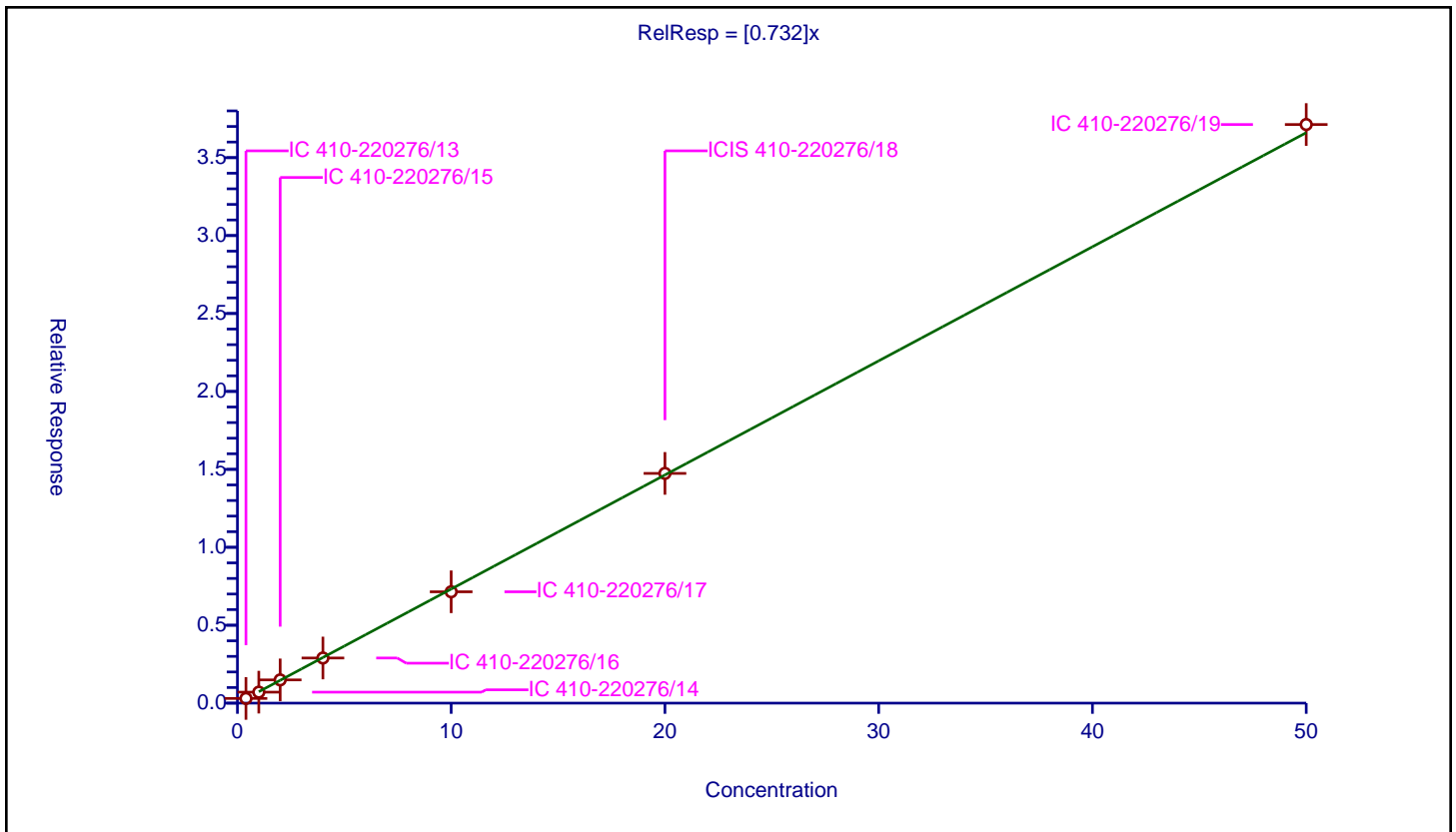
/ m-Xylene & p-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.732

Error Coefficients	
Standard Error:	2690000
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 410-220276/13	0.4	0.302448	10.0	1514739.0	0.75612	Y
2	IC 410-220276/14	1.0	0.704704	10.0	1554228.0	0.704704	Y
3	IC 410-220276/15	2.0	1.490804	10.0	1533837.0	0.745402	Y
4	IC 410-220276/16	4.0	2.895552	10.0	1555227.0	0.723888	Y
5	IC 410-220276/17	10.0	7.144744	10.0	1573561.0	0.714474	Y
6	ICIS 410-220276/18	20.0	14.740029	10.0	1592159.0	0.737001	Y
7	IC 410-220276/19	50.0	37.124342	10.0	1625666.0	0.742487	Y



Calibration

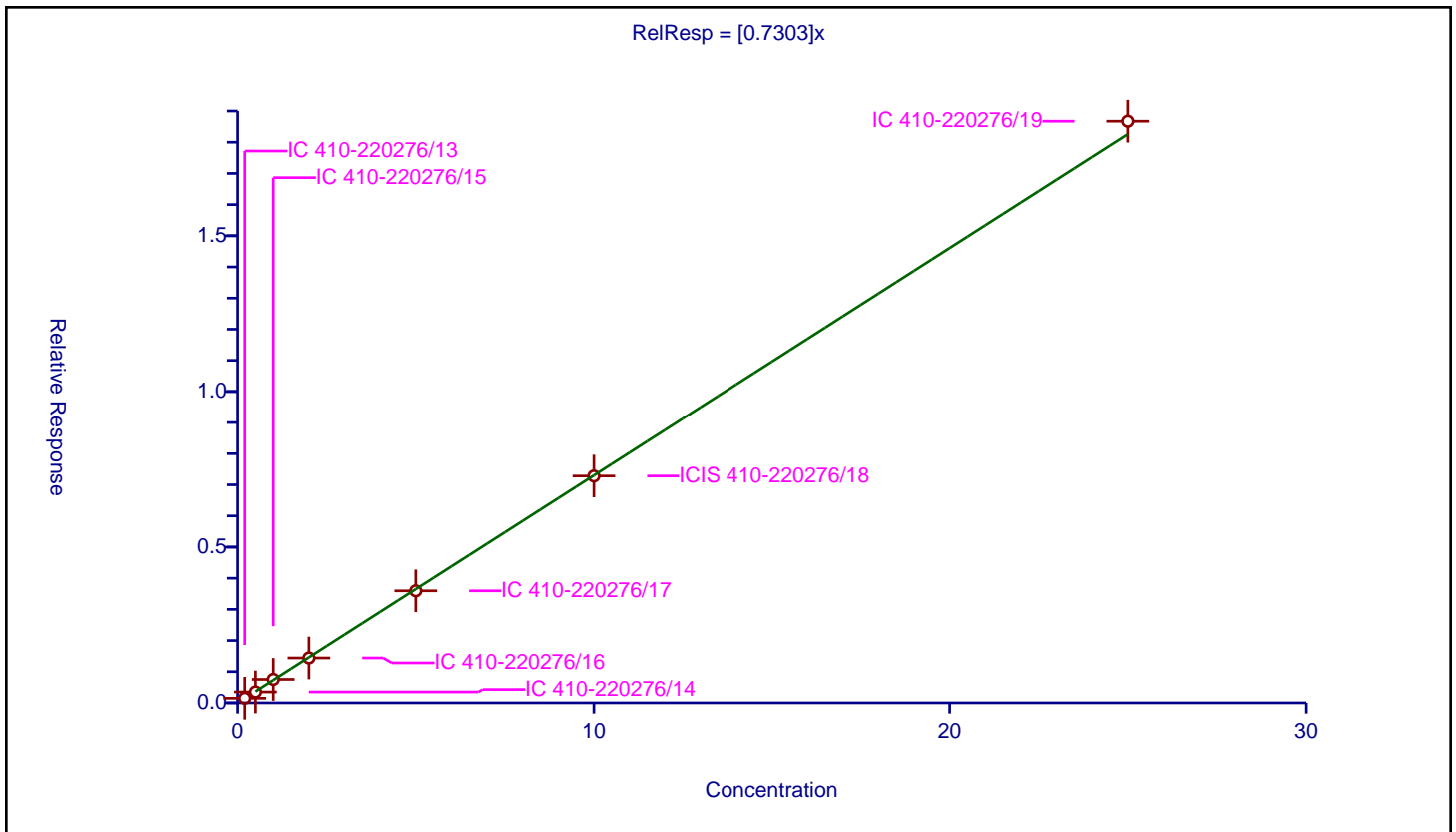
/ o-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7303

Error Coefficients	
Standard Error:	1350000
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 410-220276/13	0.2	0.148864	10.0	1514739.0	0.74432	Y
2	IC 410-220276/14	0.5	0.350303	10.0	1554228.0	0.700605	Y
3	IC 410-220276/15	1.0	0.752727	10.0	1533837.0	0.752727	Y
4	IC 410-220276/16	2.0	1.440182	10.0	1555227.0	0.720091	Y
5	IC 410-220276/17	5.0	3.595946	10.0	1573561.0	0.719189	Y
6	ICIS 410-220276/18	10.0	7.282966	10.0	1592159.0	0.728297	Y
7	IC 410-220276/19	25.0	18.673953	10.0	1625666.0	0.746958	Y



Calibration

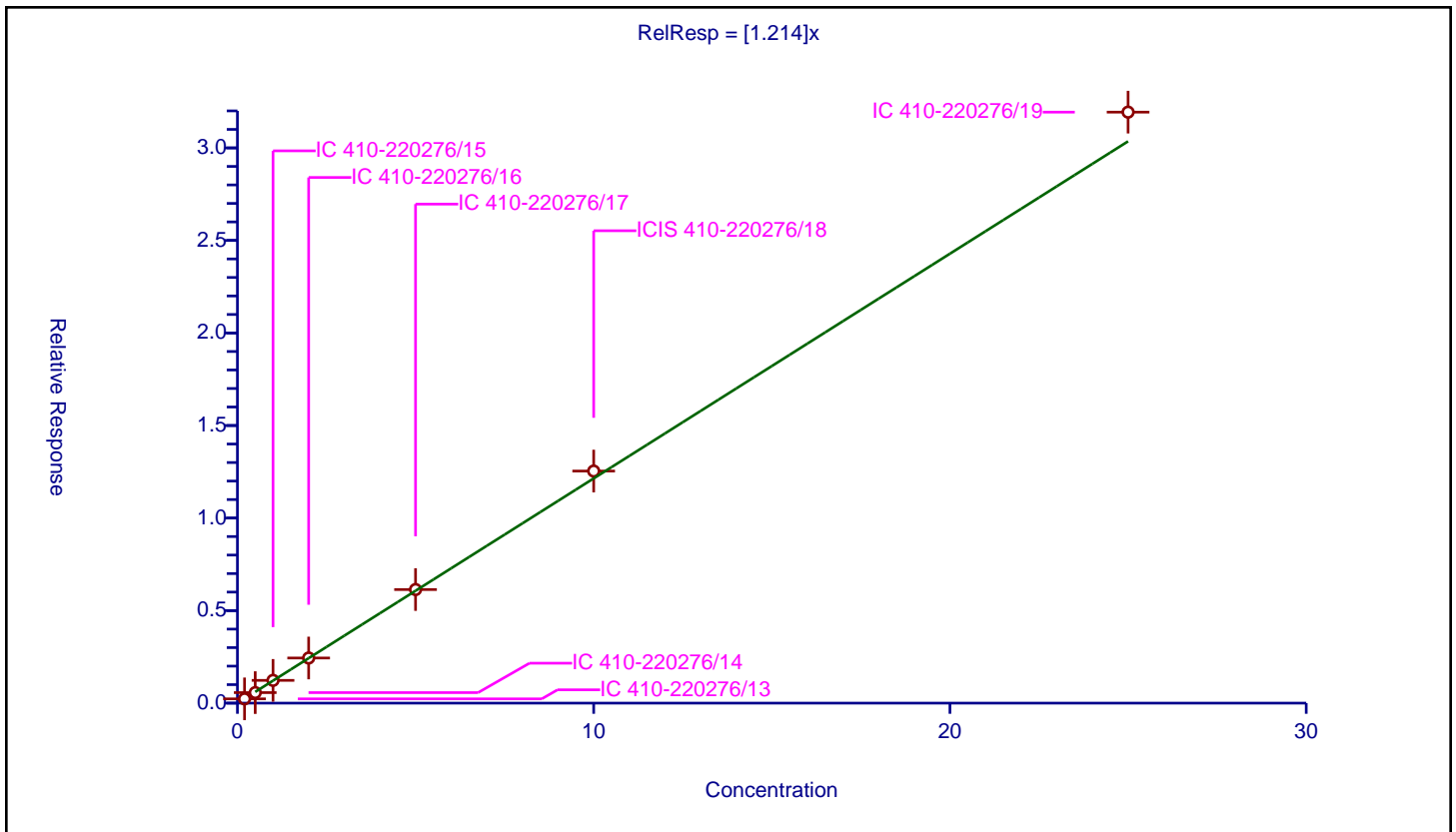
/ Styrene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.214

Error Coefficients	
Standard Error:	2310000
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 410-220276/13	0.2	0.230871	10.0	1514739.0	1.154357	Y
2	IC 410-220276/14	0.5	0.568514	10.0	1554228.0	1.137028	Y
3	IC 410-220276/15	1.0	1.229792	10.0	1533837.0	1.229792	Y
4	IC 410-220276/16	2.0	2.438834	10.0	1555227.0	1.219417	Y
5	IC 410-220276/17	5.0	6.137175	10.0	1573561.0	1.227435	Y
6	ICIS 410-220276/18	10.0	12.539614	10.0	1592159.0	1.253961	Y
7	IC 410-220276/19	25.0	31.932888	10.0	1625666.0	1.277316	Y



Calibration

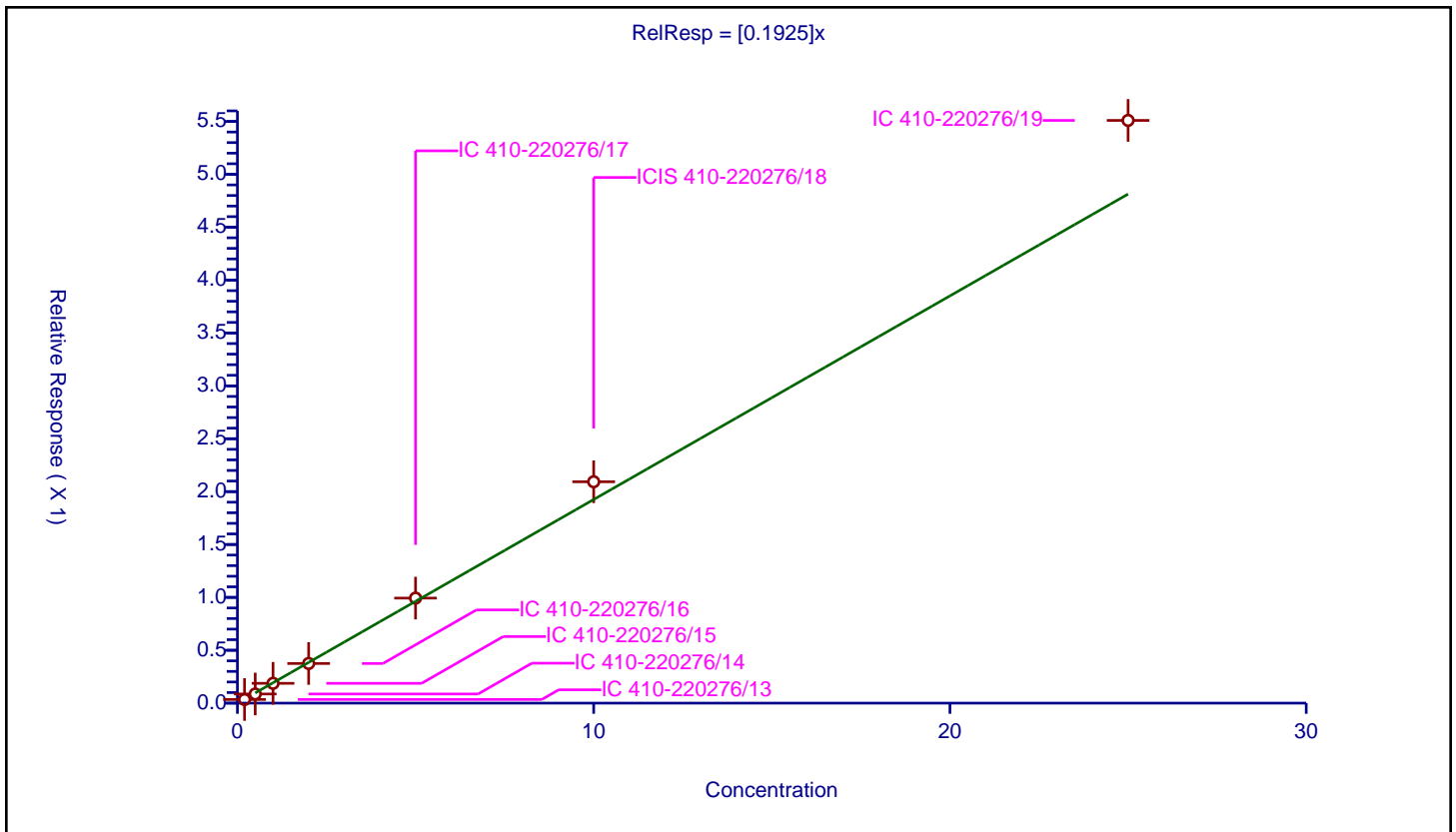
/ Bromoform

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1925

Error Coefficients	
Standard Error:	396000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.03431	10.0	1514739.0	0.171548	Y
2	IC 410-220276/14	0.5	0.086596	10.0	1554228.0	0.173192	Y
3	IC 410-220276/15	1.0	0.187243	10.0	1533837.0	0.187243	Y
4	IC 410-220276/16	2.0	0.374891	10.0	1555227.0	0.187445	Y
5	IC 410-220276/17	5.0	0.992996	10.0	1573561.0	0.198599	Y
6	ICIS 410-220276/18	10.0	2.093271	10.0	1592159.0	0.209327	Y
7	IC 410-220276/19	25.0	5.50992	10.0	1625666.0	0.220397	Y



Calibration

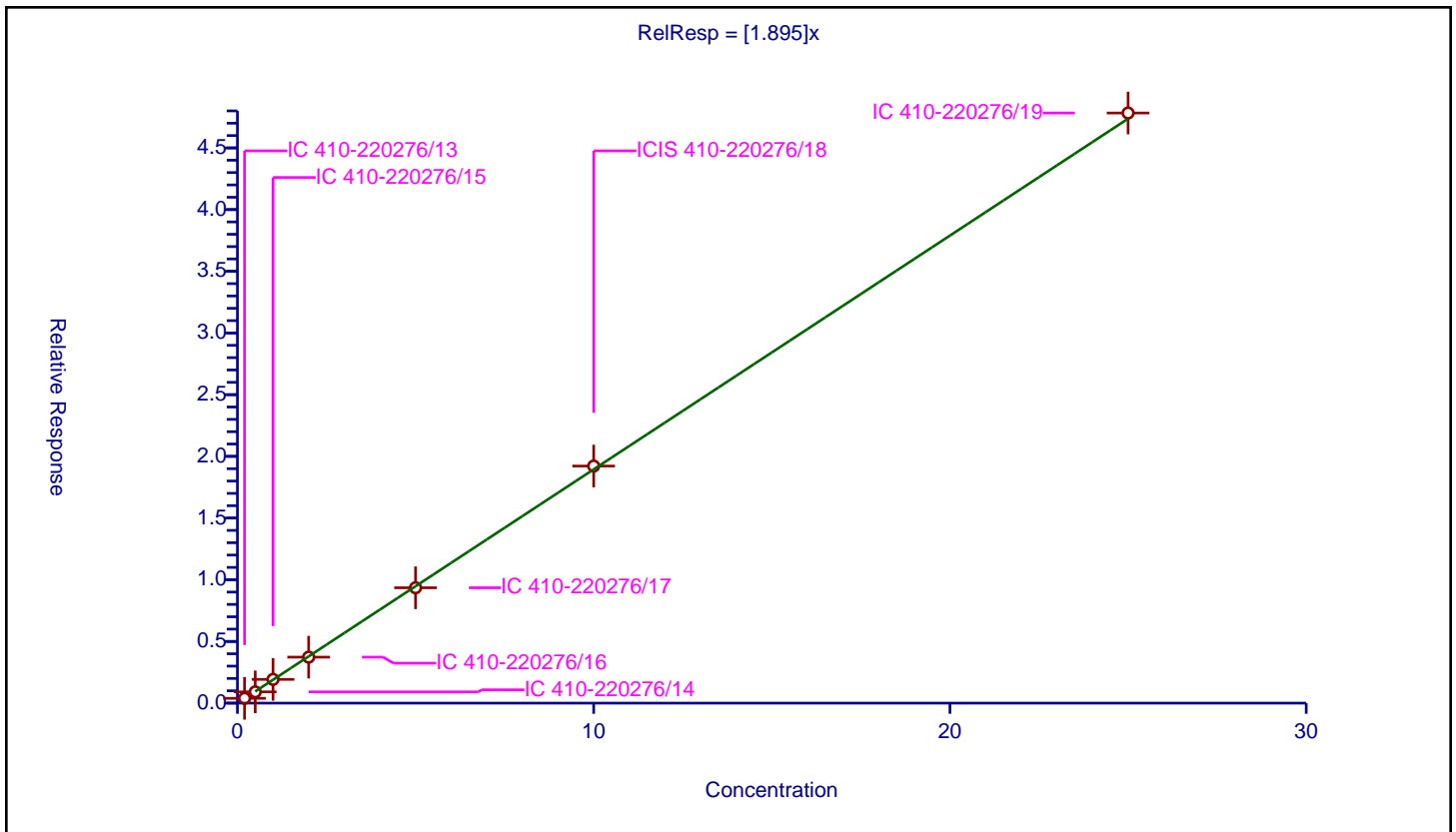
/ Isopropylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.895

Error Coefficients	
Standard Error:	3470000
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 410-220276/13	0.2	0.388958	10.0	1514739.0	1.94479	Y
2	IC 410-220276/14	0.5	0.912826	10.0	1554228.0	1.825652	Y
3	IC 410-220276/15	1.0	1.924246	10.0	1533837.0	1.924246	Y
4	IC 410-220276/16	2.0	3.727269	10.0	1555227.0	1.863635	Y
5	IC 410-220276/17	5.0	9.349679	10.0	1573561.0	1.869936	Y
6	ICIS 410-220276/18	10.0	19.215104	10.0	1592159.0	1.92151	Y
7	IC 410-220276/19	25.0	47.827346	10.0	1625666.0	1.913094	Y



Calibration

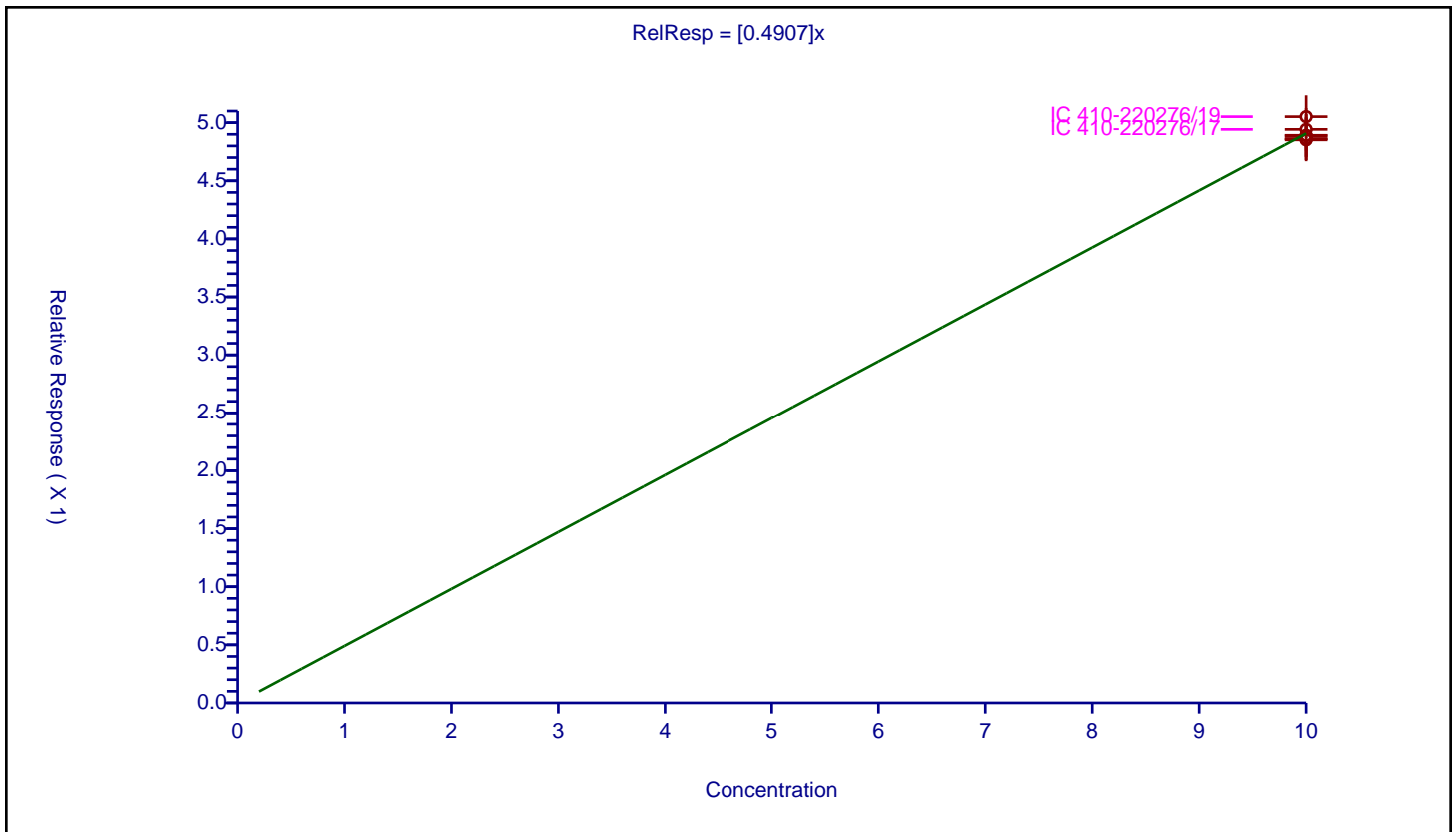
/ 4-Bromofluorobenzene (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4907

Error Coefficients	
Standard Error:	830000
Relative Standard Error:	1.4
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	10.0	4.852229	10.0	1514739.0	0.485223	Y
2	IC 410-220276/14	10.0	4.861442	10.0	1554228.0	0.486144	Y
3	IC 410-220276/15	10.0	4.891491	10.0	1533837.0	0.489149	Y
4	IC 410-220276/16	10.0	4.862551	10.0	1555227.0	0.486255	Y
5	IC 410-220276/17	10.0	4.942497	10.0	1573561.0	0.49425	Y
6	ICIS 410-220276/18	10.0	4.888067	10.0	1592159.0	0.488807	Y
7	IC 410-220276/19	10.0	5.05188	10.0	1625666.0	0.505188	Y



Calibration

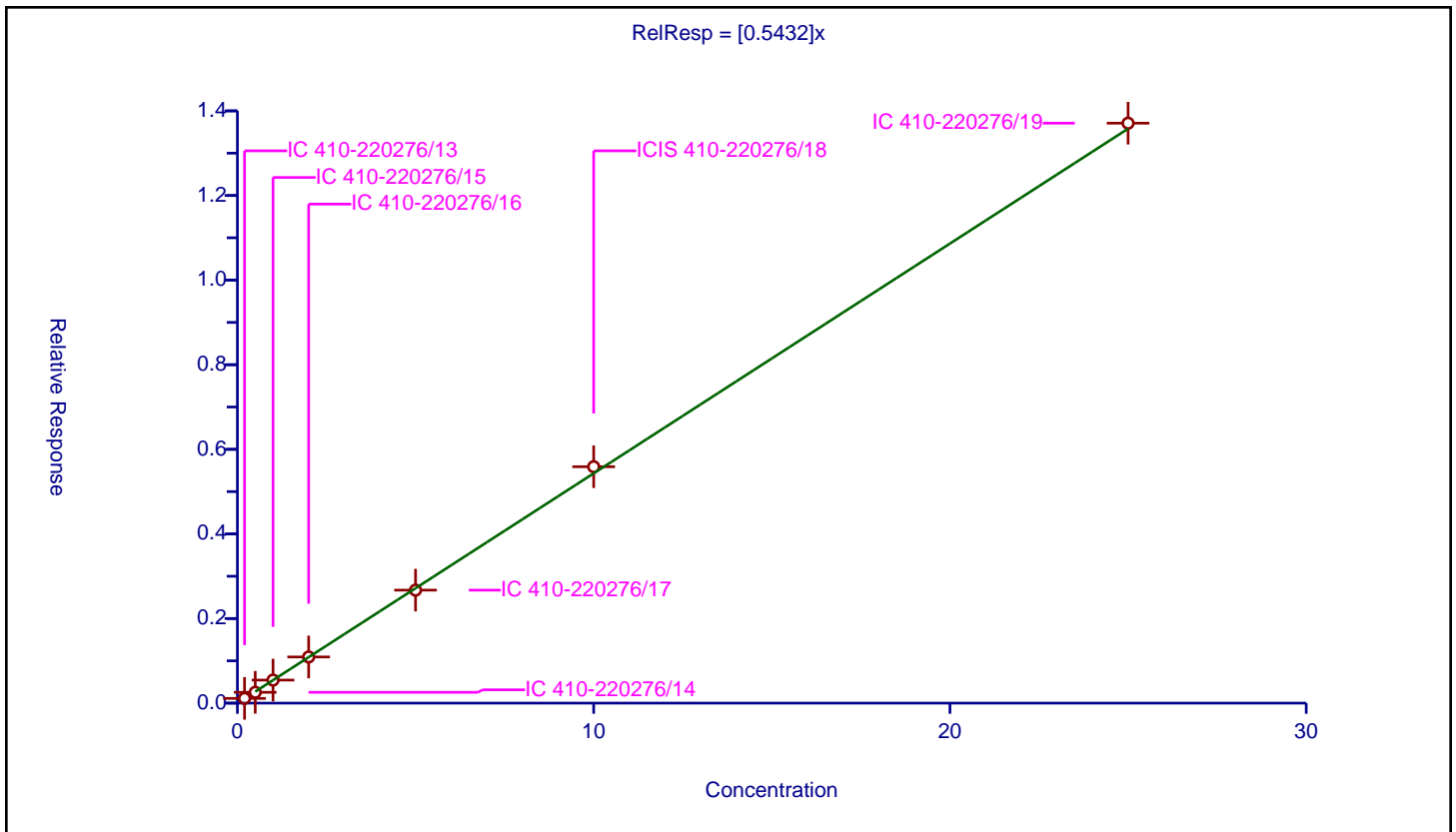
/ 1,1,2,2-Tetrachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5432

Error Coefficients	
Standard Error:	599000
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 410-220276/13	0.2	0.11161	10.0	886118.0	0.558052	Y
2	IC 410-220276/14	0.5	0.255964	10.0	907784.0	0.511928	Y
3	IC 410-220276/15	1.0	0.545009	10.0	905251.0	0.545009	Y
4	IC 410-220276/16	2.0	1.09142	10.0	917630.0	0.54571	Y
5	IC 410-220276/17	5.0	2.671236	10.0	937641.0	0.534247	Y
6	ICIS 410-220276/18	10.0	5.588348	10.0	931787.0	0.558835	Y
7	IC 410-220276/19	25.0	13.708964	10.0	980643.0	0.548359	Y



Calibration

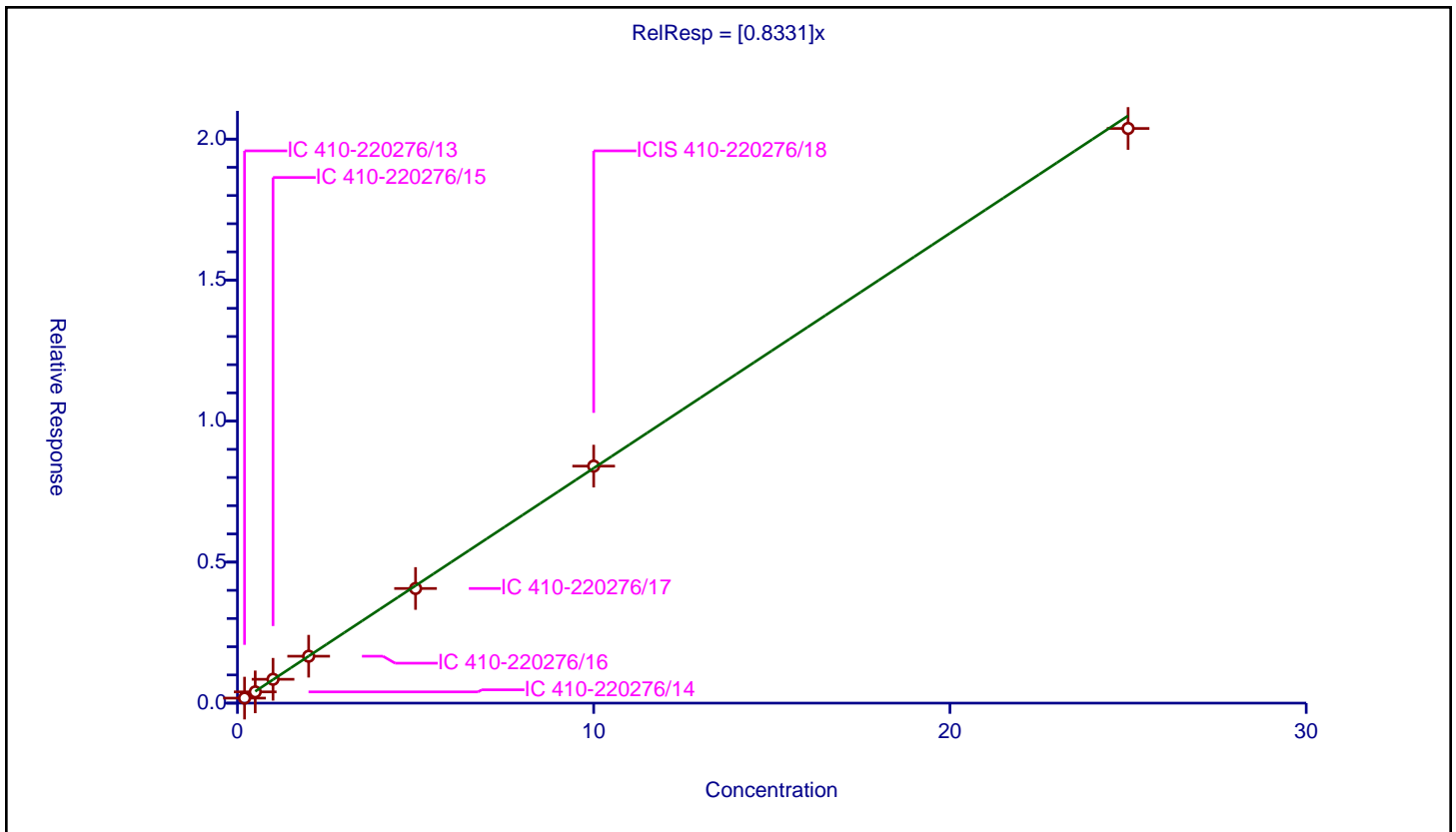
/ Bromobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8331

Error Coefficients	
Standard Error:	893000
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 410-220276/13	0.2	0.177663	10.0	886118.0	0.888313	Y
2	IC 410-220276/14	0.5	0.39863	10.0	907784.0	0.79726	Y
3	IC 410-220276/15	1.0	0.845699	10.0	905251.0	0.845699	Y
4	IC 410-220276/16	2.0	1.663176	10.0	917630.0	0.831588	Y
5	IC 410-220276/17	5.0	4.065159	10.0	937641.0	0.813032	Y
6	ICIS 410-220276/18	10.0	8.404367	10.0	931787.0	0.840437	Y
7	IC 410-220276/19	25.0	20.376426	10.0	980643.0	0.815057	Y



Calibration

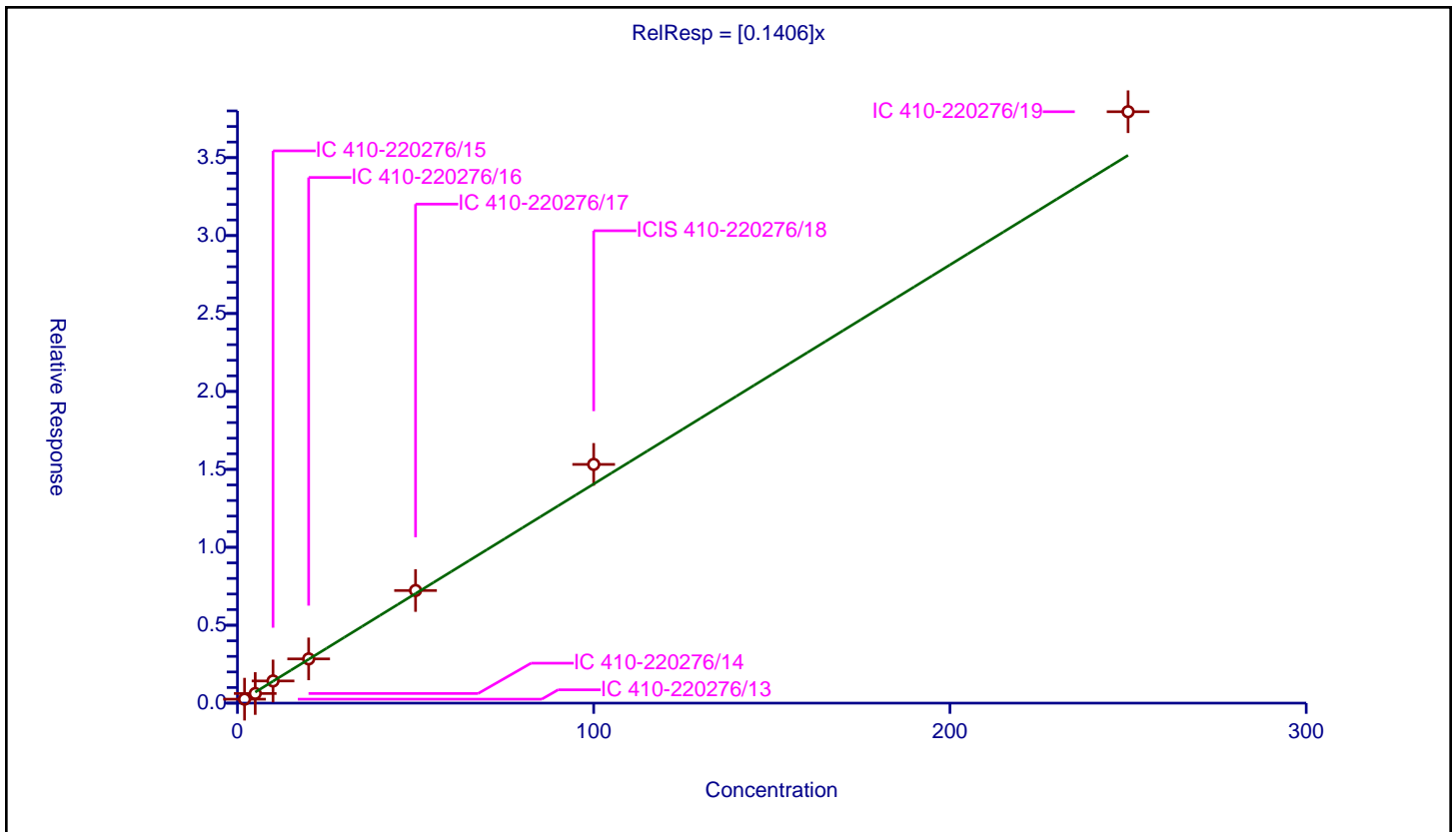
/ trans-1,4-Dichloro-2-butene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1406

Error Coefficients	
Standard Error:	1650000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	2.0	0.25421	10.0	886118.0	0.127105	Y
2	IC 410-220276/14	5.0	0.617338	10.0	907784.0	0.123468	Y
3	IC 410-220276/15	10.0	1.422556	10.0	905251.0	0.142256	Y
4	IC 410-220276/16	20.0	2.838257	10.0	917630.0	0.141913	Y
5	IC 410-220276/17	50.0	7.226881	10.0	937641.0	0.144538	Y
6	ICIS 410-220276/18	100.0	15.317181	10.0	931787.0	0.153172	Y
7	IC 410-220276/19	250.0	37.94753	10.0	980643.0	0.15179	Y



Calibration

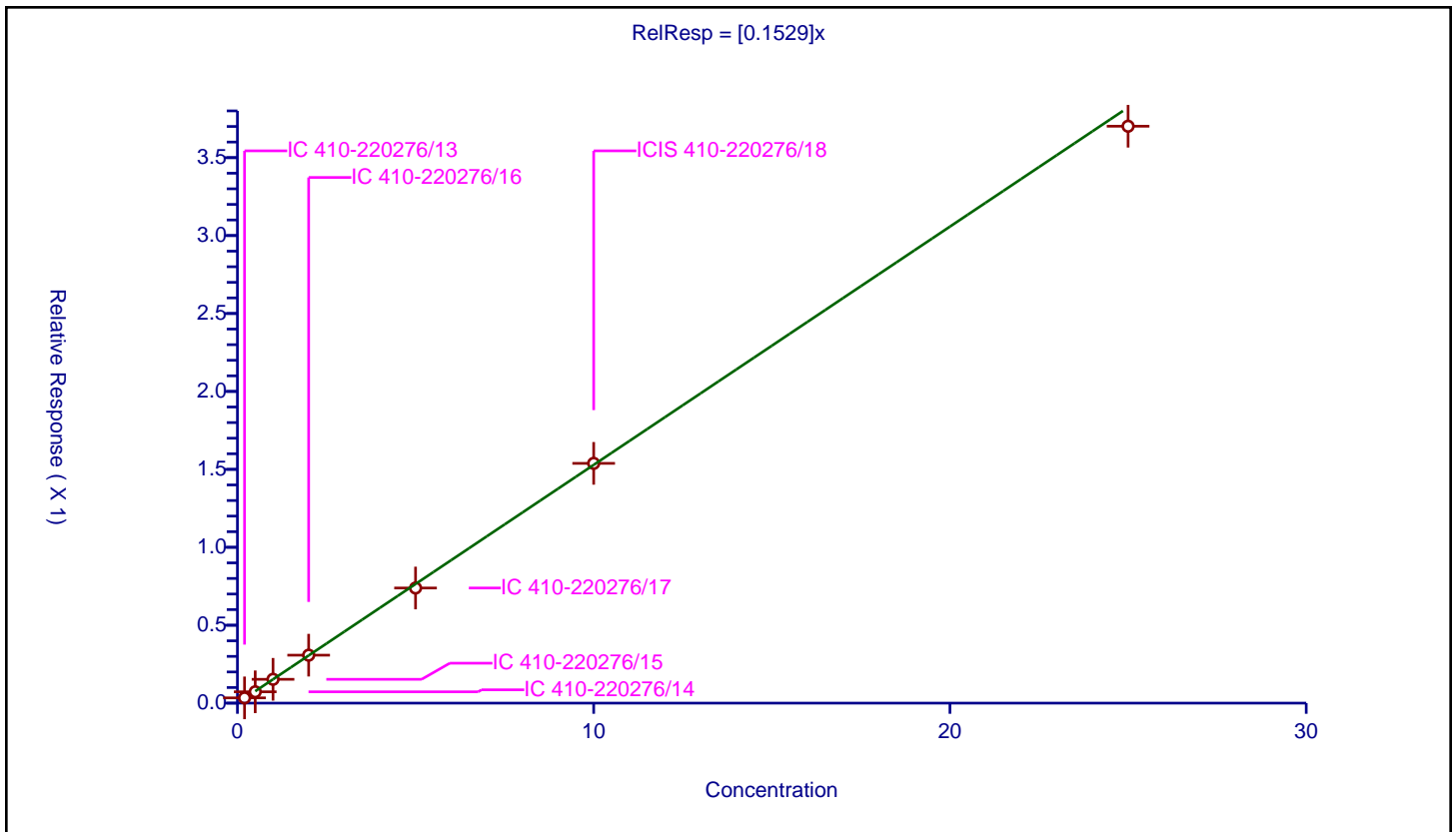
/ 1,2,3-Trichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1529

Error Coefficients	
Standard Error:	162000
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.033664	10.0	886118.0	0.168318	Y
2	IC 410-220276/14	0.5	0.072749	10.0	907784.0	0.145497	Y
3	IC 410-220276/15	1.0	0.152864	10.0	905251.0	0.152864	Y
4	IC 410-220276/16	2.0	0.307662	10.0	917630.0	0.153831	Y
5	IC 410-220276/17	5.0	0.738609	10.0	937641.0	0.147722	Y
6	ICIS 410-220276/18	10.0	1.538442	10.0	931787.0	0.153844	Y
7	IC 410-220276/19	25.0	3.701602	10.0	980643.0	0.148064	Y



Calibration

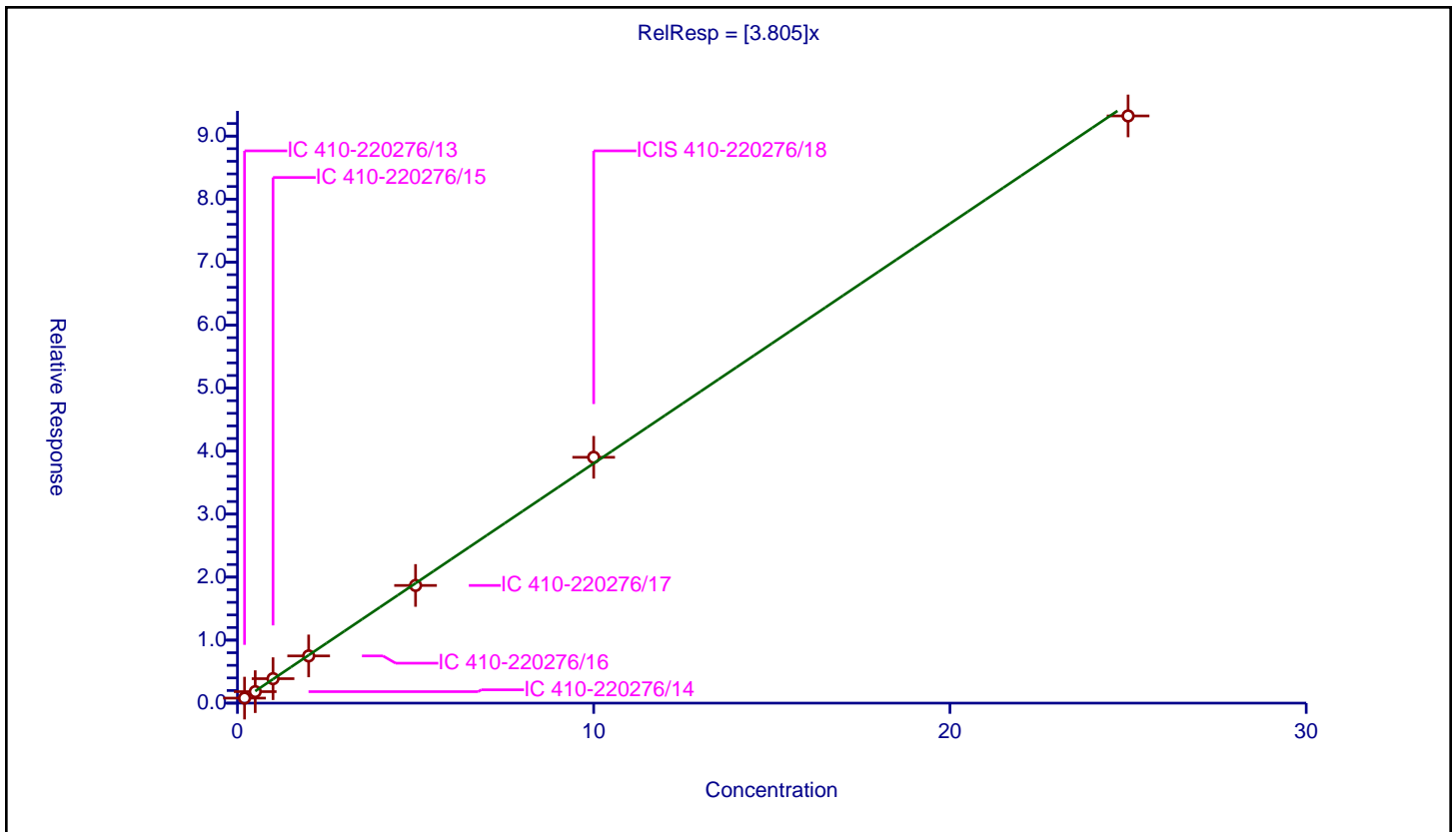
/ N-Propylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.805

Error Coefficients	
Standard Error:	4090000
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 410-220276/13	0.2	0.798675	10.0	886118.0	3.993373	Y
2	IC 410-220276/14	0.5	1.824057	10.0	907784.0	3.648115	Y
3	IC 410-220276/15	1.0	3.883254	10.0	905251.0	3.883254	Y
4	IC 410-220276/16	2.0	7.493075	10.0	917630.0	3.746537	Y
5	IC 410-220276/17	5.0	18.679825	10.0	937641.0	3.735965	Y
6	ICIS 410-220276/18	10.0	39.019196	10.0	931787.0	3.90192	Y
7	IC 410-220276/19	25.0	93.19934	10.0	980643.0	3.727974	Y



Calibration

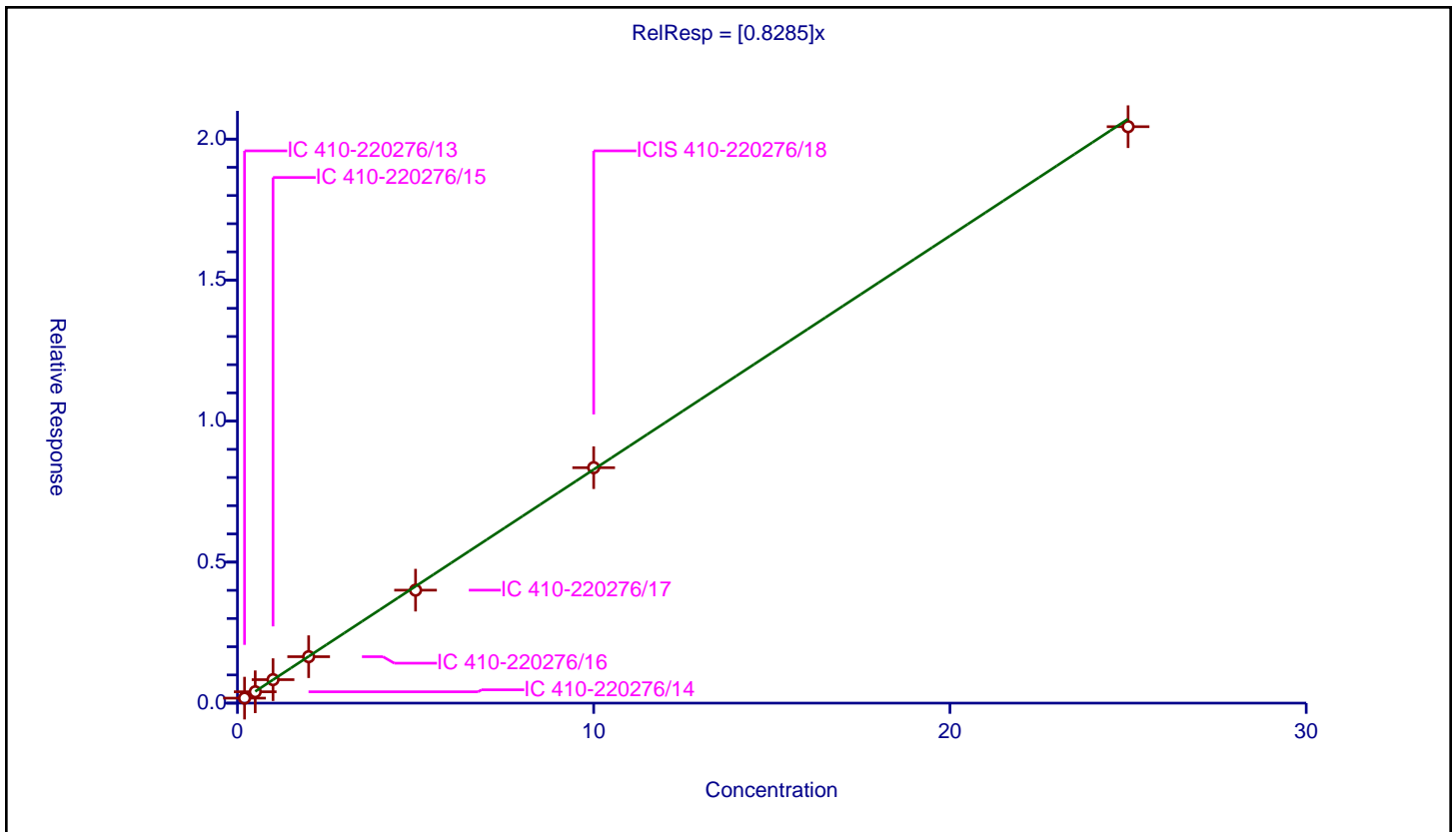
/ 2-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8285

Error Coefficients	
Standard Error:	894000
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 410-220276/13	0.2	0.176929	10.0	886118.0	0.884645	Y
2	IC 410-220276/14	0.5	0.402552	10.0	907784.0	0.805103	Y
3	IC 410-220276/15	1.0	0.832322	10.0	905251.0	0.832322	Y
4	IC 410-220276/16	2.0	1.646906	10.0	917630.0	0.823453	Y
5	IC 410-220276/17	5.0	4.005744	10.0	937641.0	0.801149	Y
6	ICIS 410-220276/18	10.0	8.349344	10.0	931787.0	0.834934	Y
7	IC 410-220276/19	25.0	20.439824	10.0	980643.0	0.817593	Y



Calibration

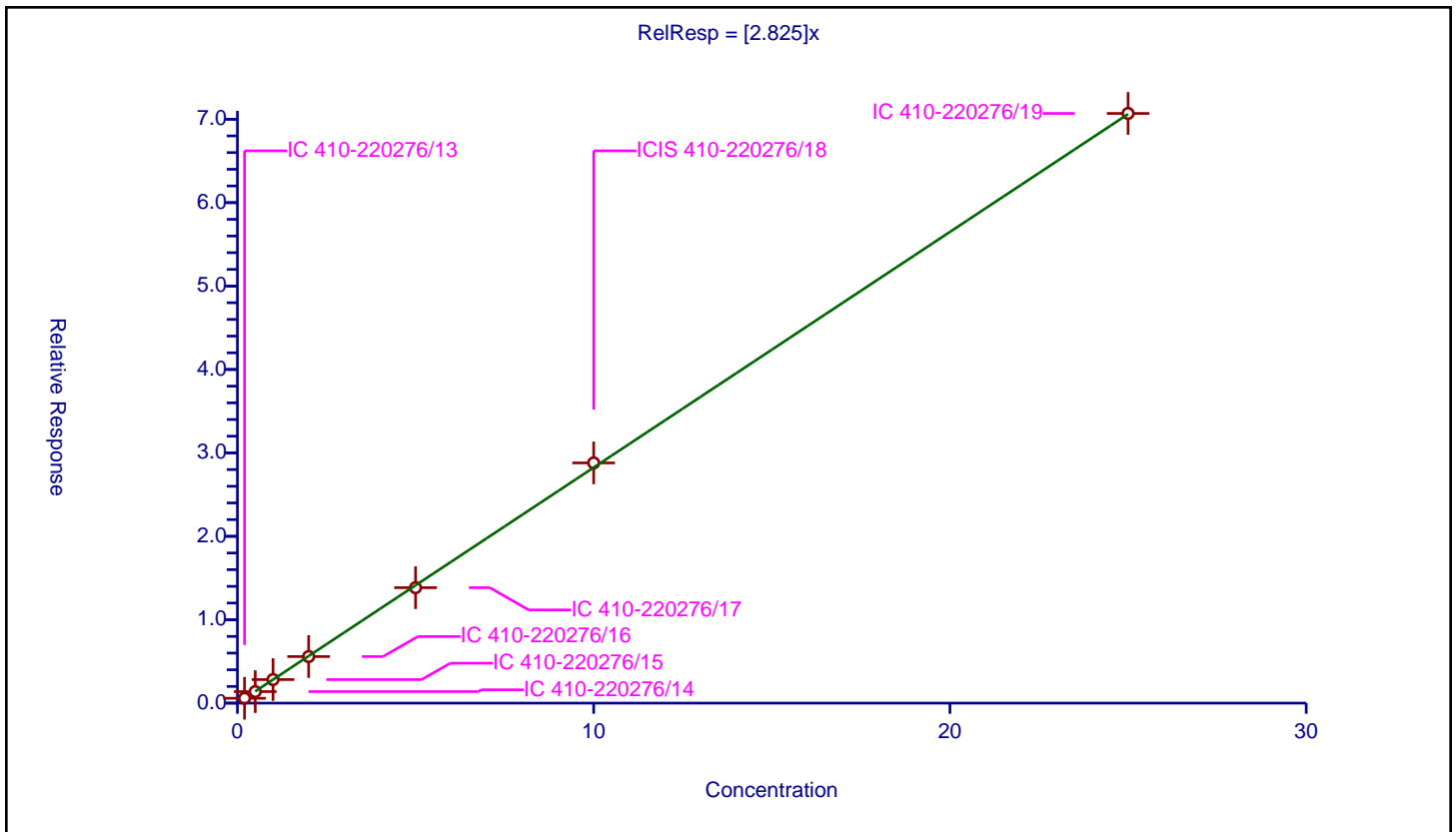
/ 1,3,5-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.825

Error Coefficients	
Standard Error:	3090000
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 410-220276/13	0.2	0.58385	10.0	886118.0	2.91925	Y
2	IC 410-220276/14	0.5	1.381177	10.0	907784.0	2.762353	Y
3	IC 410-220276/15	1.0	2.822786	10.0	905251.0	2.822786	Y
4	IC 410-220276/16	2.0	5.583667	10.0	917630.0	2.791833	Y
5	IC 410-220276/17	5.0	13.841257	10.0	937641.0	2.768251	Y
6	ICIS 410-220276/18	10.0	28.798749	10.0	931787.0	2.879875	Y
7	IC 410-220276/19	25.0	70.692729	10.0	980643.0	2.827709	Y



Calibration

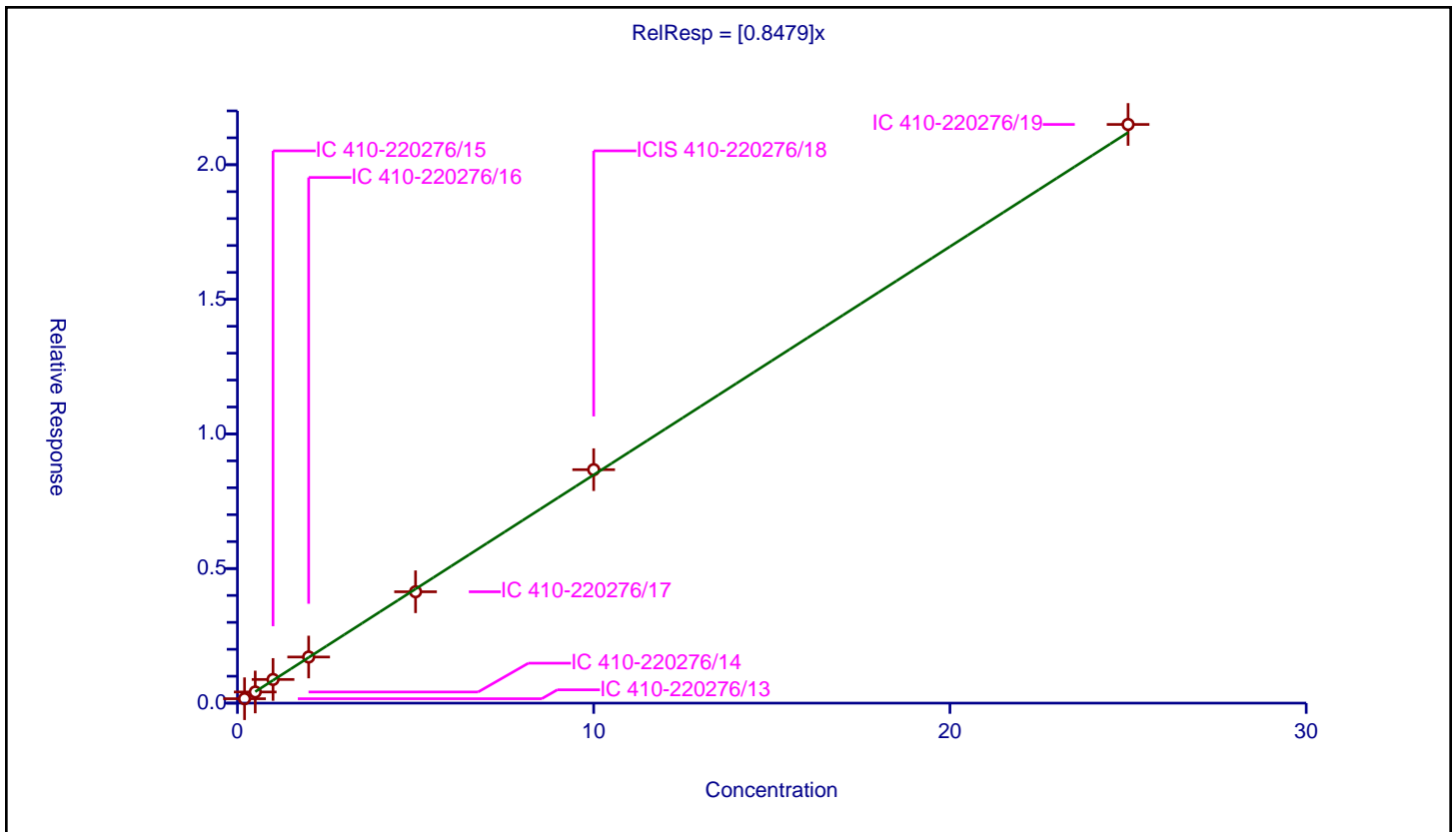
/ 4-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8479

Error Coefficients	
Standard Error:	938000
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 410-220276/13	0.2	0.163376	10.0	886118.0	0.816878	Y
2	IC 410-220276/14	0.5	0.414372	10.0	907784.0	0.828743	Y
3	IC 410-220276/15	1.0	0.878618	10.0	905251.0	0.878618	Y
4	IC 410-220276/16	2.0	1.713196	10.0	917630.0	0.856598	Y
5	IC 410-220276/17	5.0	4.137212	10.0	937641.0	0.827442	Y
6	ICIS 410-220276/18	10.0	8.671842	10.0	931787.0	0.867184	Y
7	IC 410-220276/19	25.0	21.496018	10.0	980643.0	0.859841	Y



Calibration

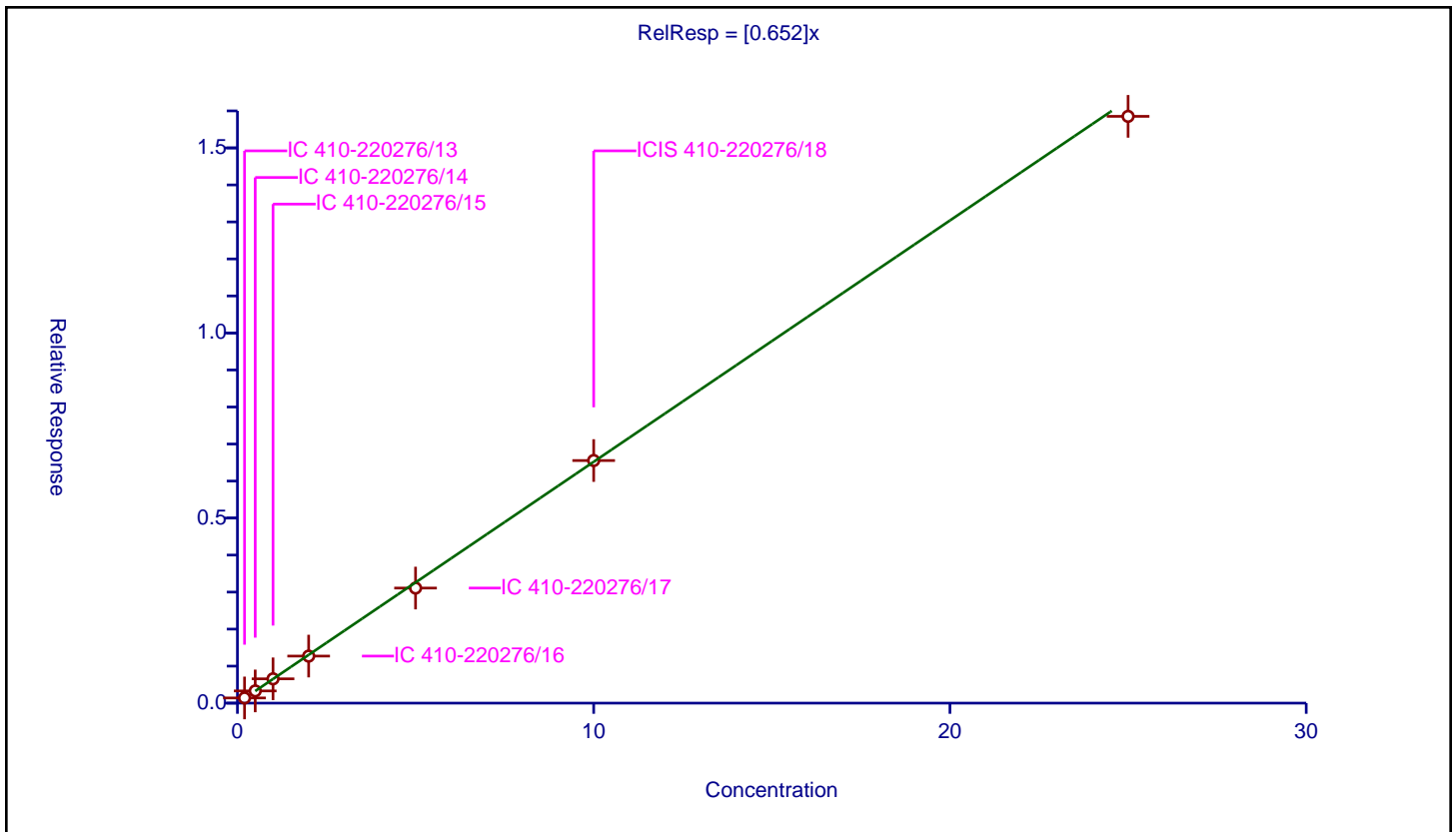
/ tert-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.652

Error Coefficients	
Standard Error:	694000
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 410-220276/13	0.2	0.140004	10.0	886118.0	0.70002	Y
2	IC 410-220276/14	0.5	0.3302	10.0	907784.0	0.660399	Y
3	IC 410-220276/15	1.0	0.656691	10.0	905251.0	0.656691	Y
4	IC 410-220276/16	2.0	1.270697	10.0	917630.0	0.635349	Y
5	IC 410-220276/17	5.0	3.108578	10.0	937641.0	0.621716	Y
6	ICIS 410-220276/18	10.0	6.553976	10.0	931787.0	0.655398	Y
7	IC 410-220276/19	25.0	15.852313	10.0	980643.0	0.634093	Y



Calibration

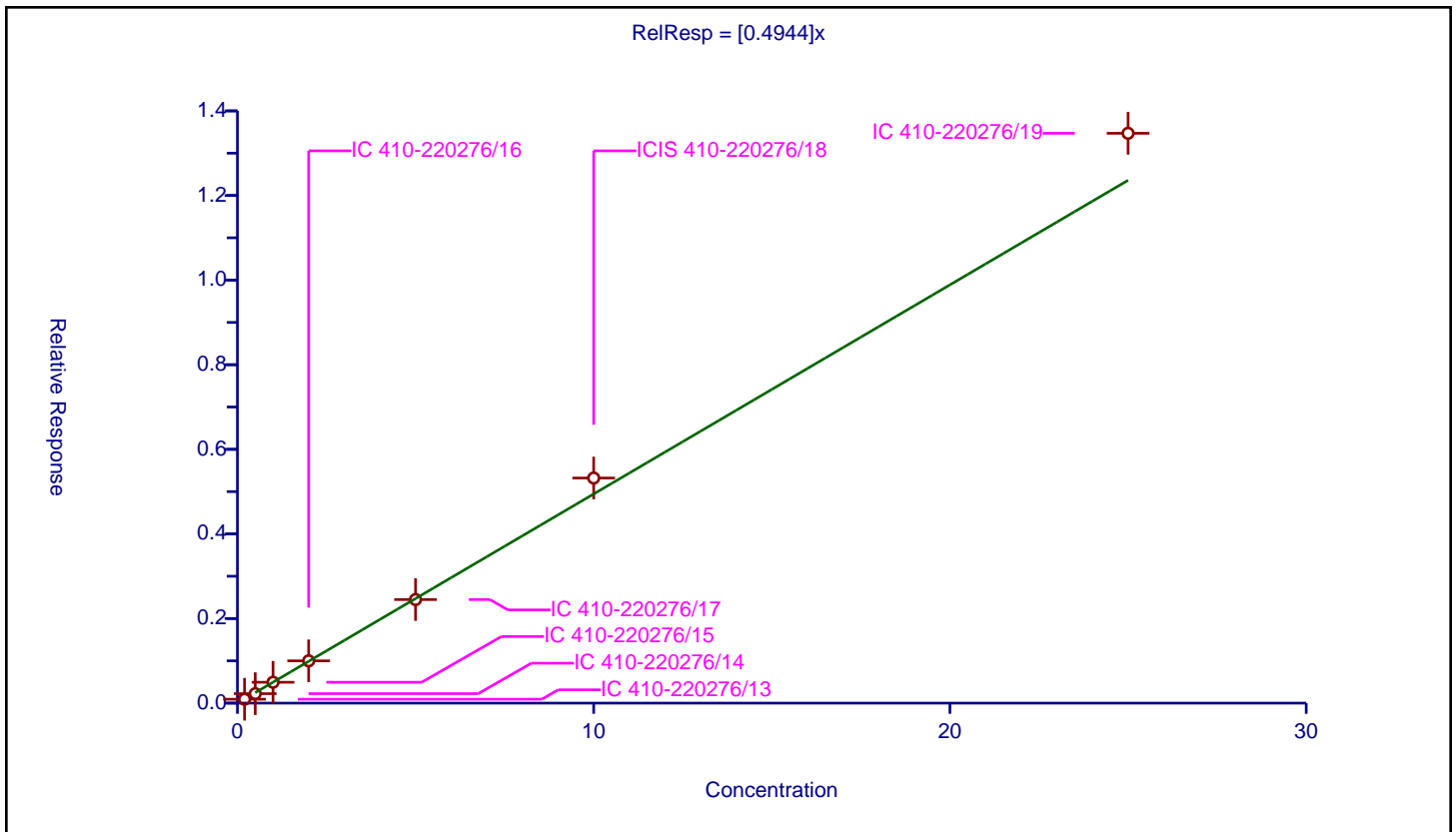
/ Pentachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4944

Error Coefficients	
Standard Error:	585000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.09194	10.0	886118.0	0.459702	Y
2	IC 410-220276/14	0.5	0.223577	10.0	907784.0	0.447155	Y
3	IC 410-220276/15	1.0	0.493532	10.0	905251.0	0.493532	Y
4	IC 410-220276/16	2.0	0.999673	10.0	917630.0	0.499837	Y
5	IC 410-220276/17	5.0	2.448048	10.0	937641.0	0.48961	Y
6	ICIS 410-220276/18	10.0	5.321023	10.0	931787.0	0.532102	Y
7	IC 410-220276/19	25.0	13.470386	10.0	980643.0	0.538815	Y



Calibration

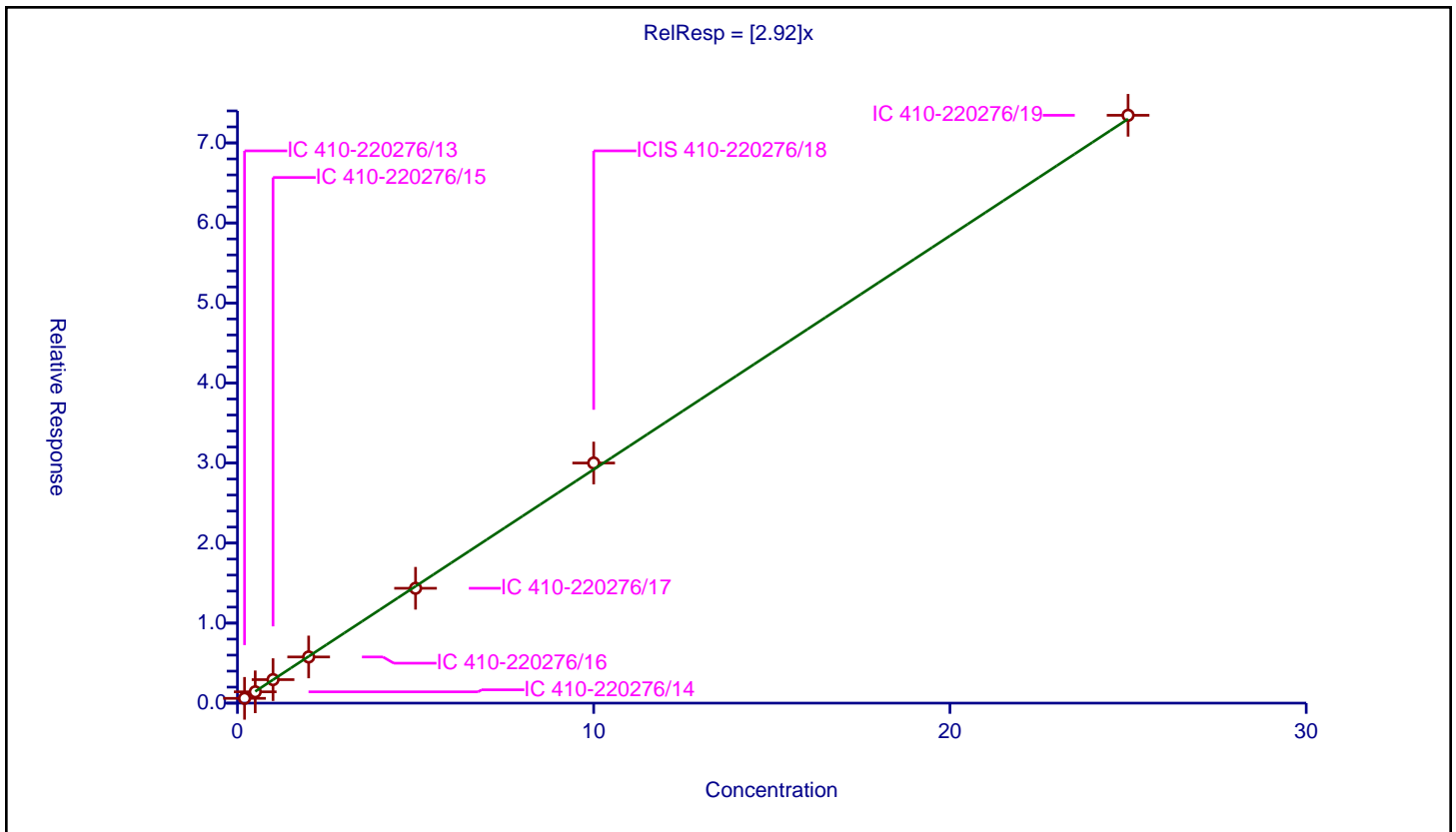
/ 1,2,4-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.92

Error Coefficients	
Standard Error:	3210000
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 410-220276/13	0.2	0.596241	10.0	886118.0	2.981206	Y
2	IC 410-220276/14	0.5	1.412935	10.0	907784.0	2.82587	Y
3	IC 410-220276/15	1.0	2.937517	10.0	905251.0	2.937517	Y
4	IC 410-220276/16	2.0	5.769155	10.0	917630.0	2.884578	Y
5	IC 410-220276/17	5.0	14.351367	10.0	937641.0	2.870273	Y
6	ICIS 410-220276/18	10.0	30.003874	10.0	931787.0	3.000387	Y
7	IC 410-220276/19	25.0	73.451939	10.0	980643.0	2.938078	Y



Calibration

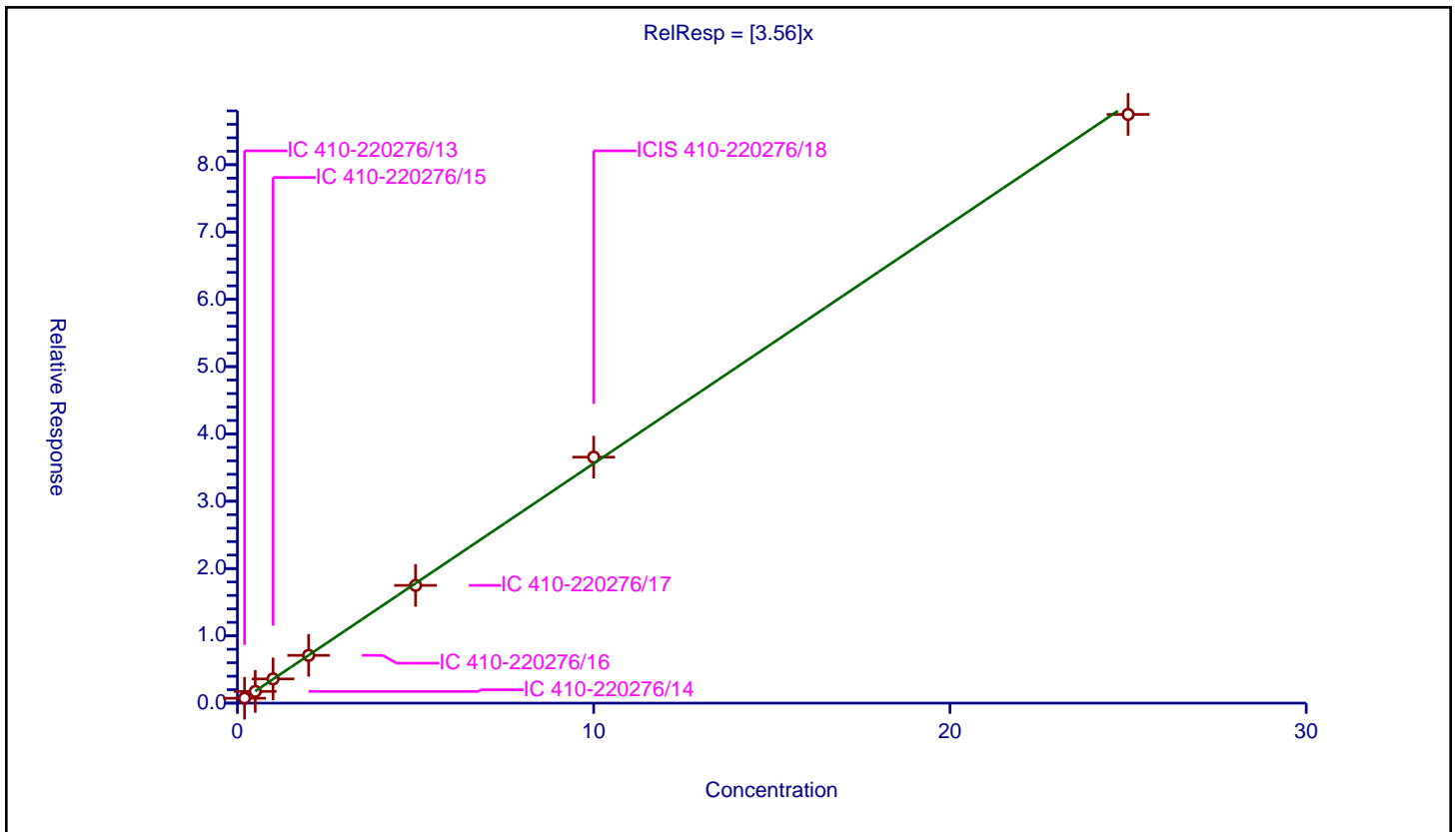
/ sec-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.56

Error Coefficients	
Standard Error:	3840000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.727984	10.0	886118.0	3.639922	Y
2	IC 410-220276/14	0.5	1.741229	10.0	907784.0	3.482458	Y
3	IC 410-220276/15	1.0	3.600195	10.0	905251.0	3.600195	Y
4	IC 410-220276/16	2.0	7.096455	10.0	917630.0	3.548227	Y
5	IC 410-220276/17	5.0	17.492676	10.0	937641.0	3.498535	Y
6	ICIS 410-220276/18	10.0	36.549136	10.0	931787.0	3.654914	Y
7	IC 410-220276/19	25.0	87.472526	10.0	980643.0	3.498901	Y



Calibration

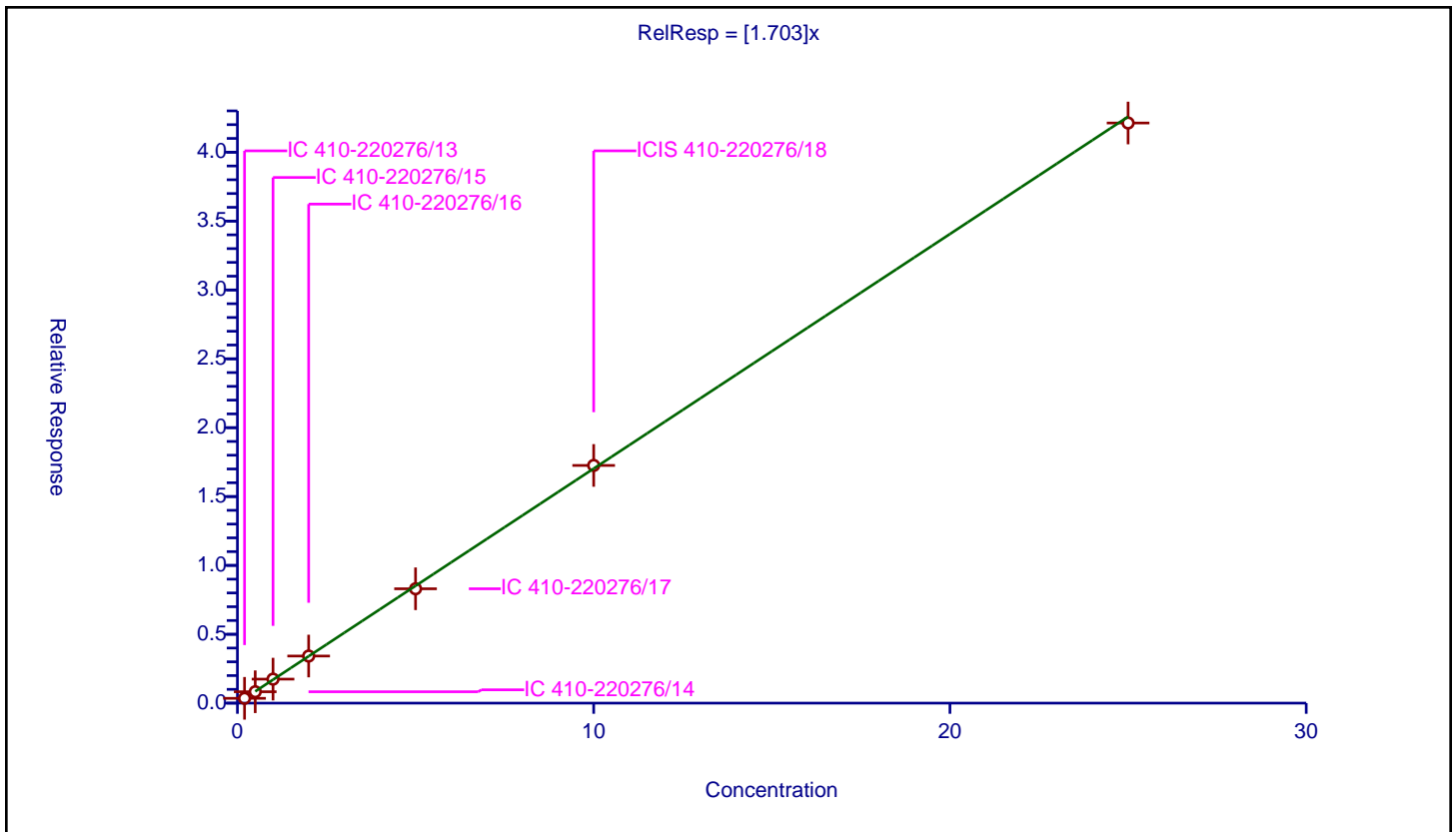
/ 1,3-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.703

Error Coefficients	
Standard Error:	1840000
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 410-220276/13	0.2	0.349039	10.0	886118.0	1.745196	Y
2	IC 410-220276/14	0.5	0.826045	10.0	907784.0	1.652089	Y
3	IC 410-220276/15	1.0	1.743251	10.0	905251.0	1.743251	Y
4	IC 410-220276/16	2.0	3.419287	10.0	917630.0	1.709643	Y
5	IC 410-220276/17	5.0	8.302837	10.0	937641.0	1.660567	Y
6	ICIS 410-220276/18	10.0	17.258118	10.0	931787.0	1.725812	Y
7	IC 410-220276/19	25.0	42.119568	10.0	980643.0	1.684783	Y



Calibration

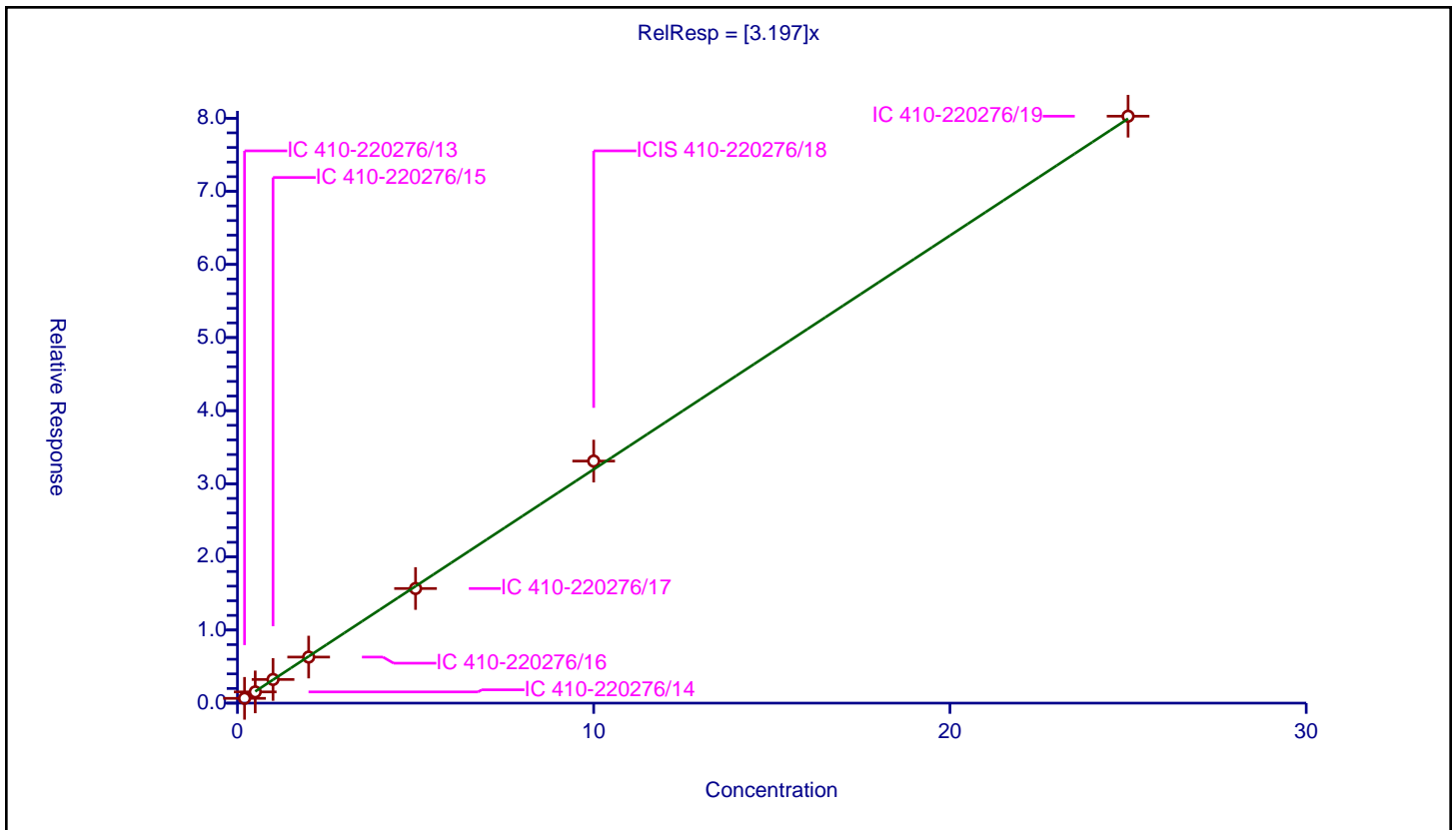
/ 4-Isopropyltoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.197

Error Coefficients	
Standard Error:	3510000
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 410-220276/13	0.2	0.652983	10.0	886118.0	3.264915	Y
2	IC 410-220276/14	0.5	1.53672	10.0	907784.0	3.07344	Y
3	IC 410-220276/15	1.0	3.236793	10.0	905251.0	3.236793	Y
4	IC 410-220276/16	2.0	6.300034	10.0	917630.0	3.150017	Y
5	IC 410-220276/17	5.0	15.677695	10.0	937641.0	3.135539	Y
6	ICIS 410-220276/18	10.0	33.105742	10.0	931787.0	3.310574	Y
7	IC 410-220276/19	25.0	80.276859	10.0	980643.0	3.211074	Y



Calibration

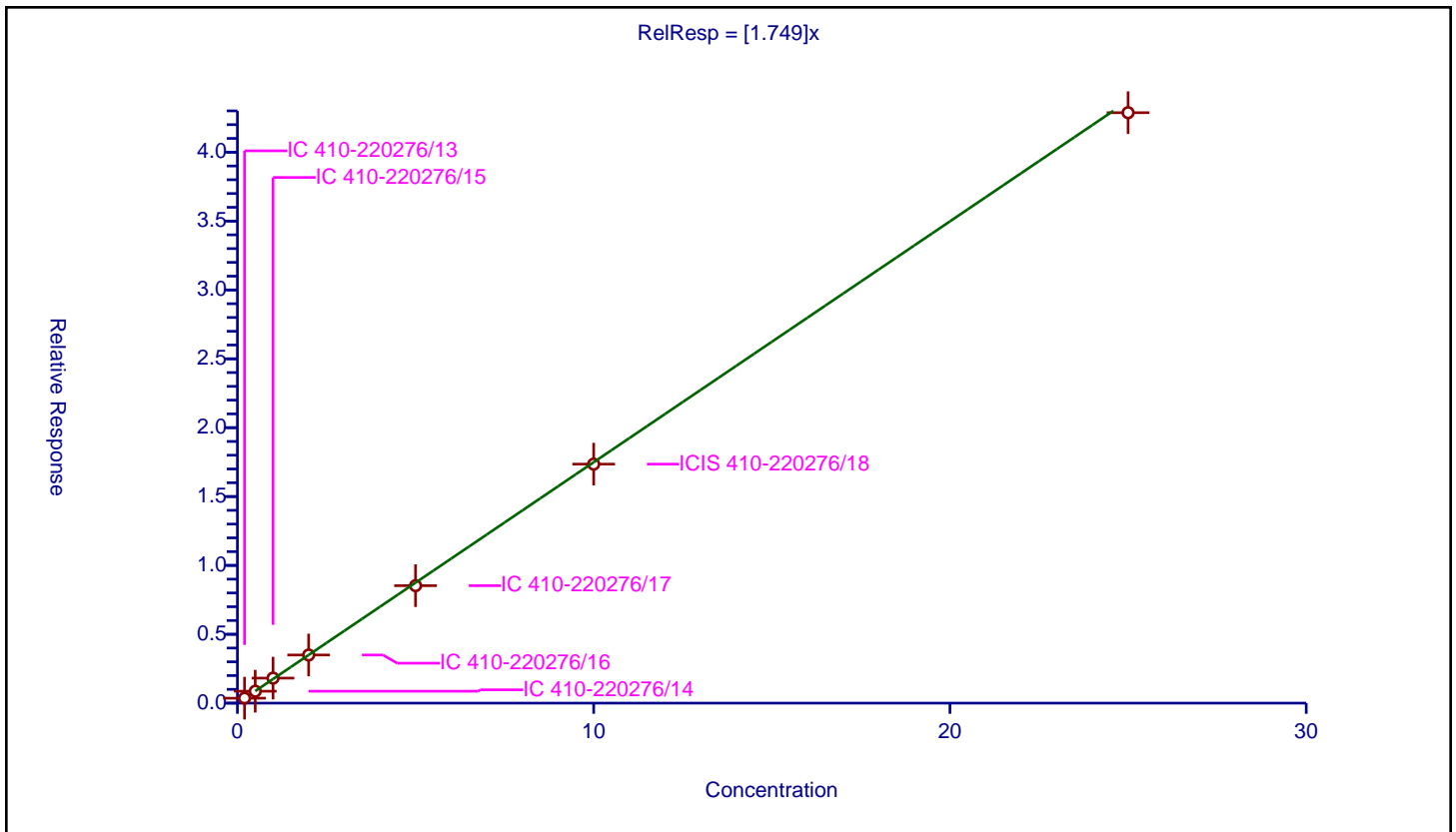
/ 1,4-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.749

Error Coefficients	
Standard Error:	1870000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.358496	10.0	886118.0	1.792481	Y
2	IC 410-220276/14	0.5	0.864732	10.0	907784.0	1.729464	Y
3	IC 410-220276/15	1.0	1.817165	10.0	905251.0	1.817165	Y
4	IC 410-220276/16	2.0	3.495276	10.0	917630.0	1.747638	Y
5	IC 410-220276/17	5.0	8.528915	10.0	937641.0	1.705783	Y
6	ICIS 410-220276/18	10.0	17.352828	10.0	931787.0	1.735283	Y
7	IC 410-220276/19	25.0	42.868689	10.0	980643.0	1.714748	Y



Calibration

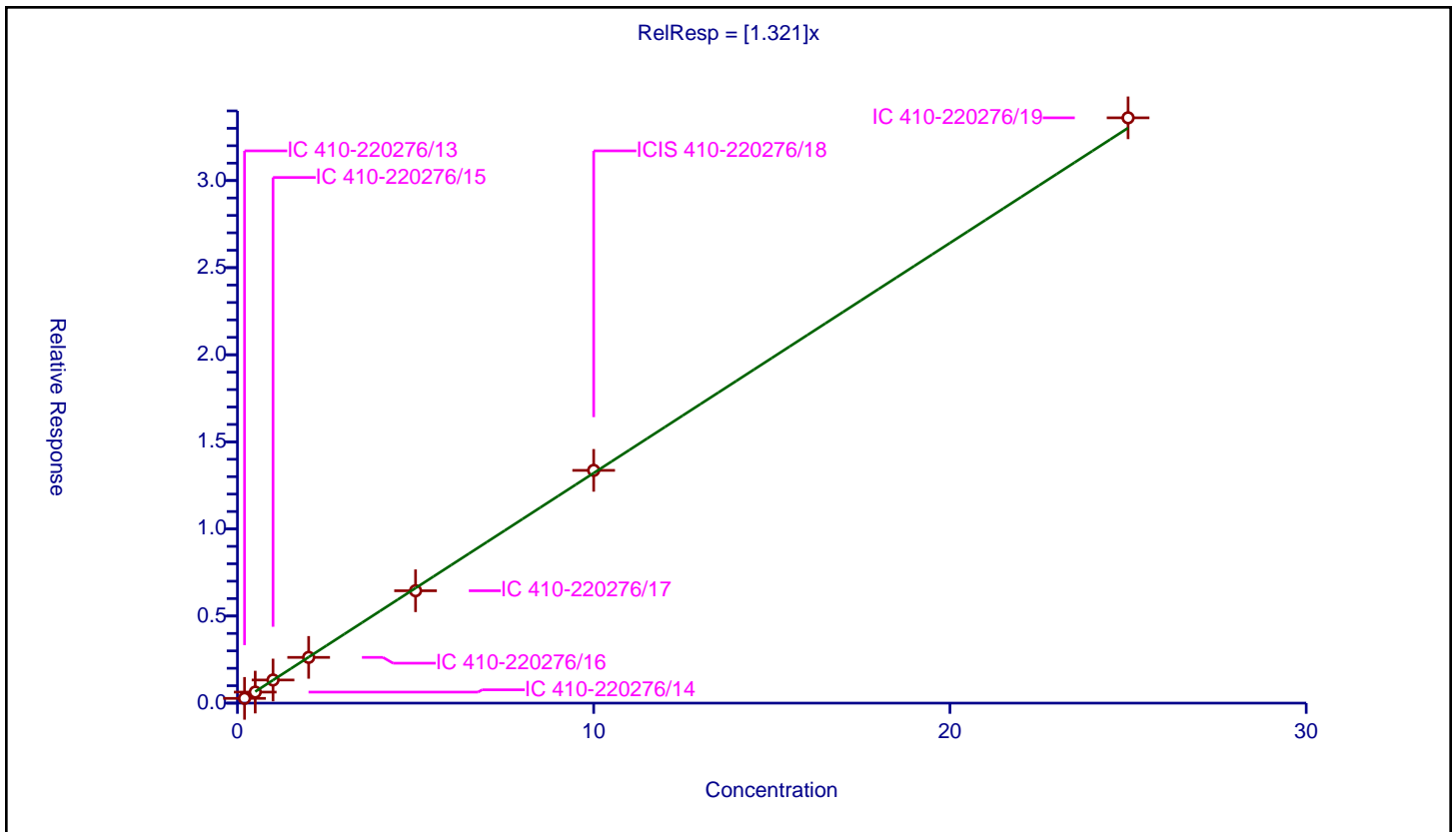
/ 1,2,3-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.321

Error Coefficients	
Standard Error:	1460000
Relative Standard Error:	2.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.273192	10.0	886118.0	1.365958	Y
2	IC 410-220276/14	0.5	0.634325	10.0	907784.0	1.26865	Y
3	IC 410-220276/15	1.0	1.327521	10.0	905251.0	1.327521	Y
4	IC 410-220276/16	2.0	2.626244	10.0	917630.0	1.313122	Y
5	IC 410-220276/17	5.0	6.451478	10.0	937641.0	1.290296	Y
6	ICIS 410-220276/18	10.0	13.362324	10.0	931787.0	1.336232	Y
7	IC 410-220276/19	25.0	33.601943	10.0	980643.0	1.344078	Y



Calibration

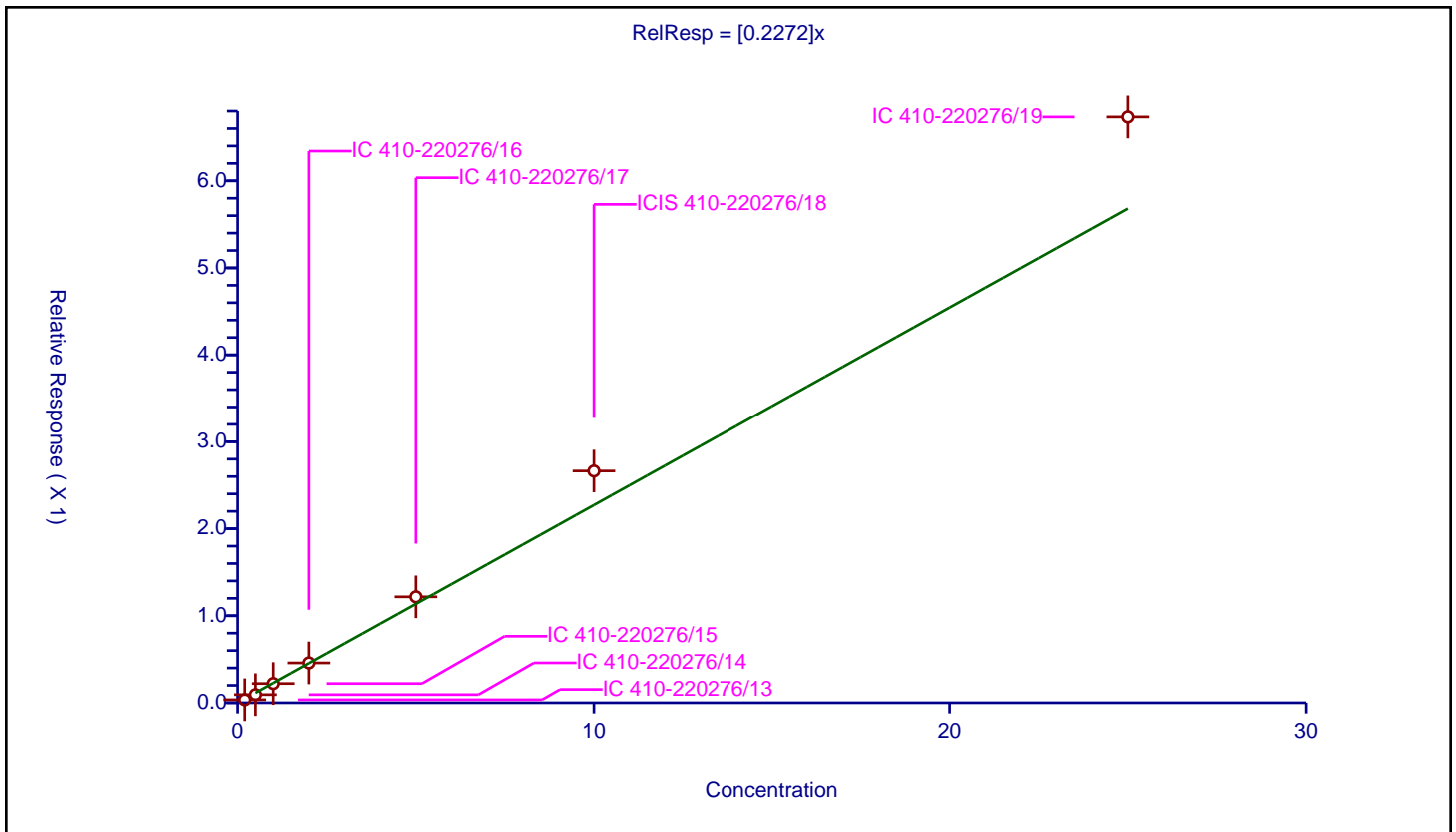
/ Benzyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2272

Error Coefficients	
Standard Error:	292000
Relative Standard Error:	16.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.971

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.034894	10.0	886118.0	0.174469	Y
2	IC 410-220276/14	0.5	0.093524	10.0	907784.0	0.187049	Y
3	IC 410-220276/15	1.0	0.220911	10.0	905251.0	0.220911	Y
4	IC 410-220276/16	2.0	0.457951	10.0	917630.0	0.228976	Y
5	IC 410-220276/17	5.0	1.217417	10.0	937641.0	0.243483	Y
6	ICIS 410-220276/18	10.0	2.663989	10.0	931787.0	0.266399	Y
7	IC 410-220276/19	25.0	6.732817	10.0	980643.0	0.269313	Y



Calibration

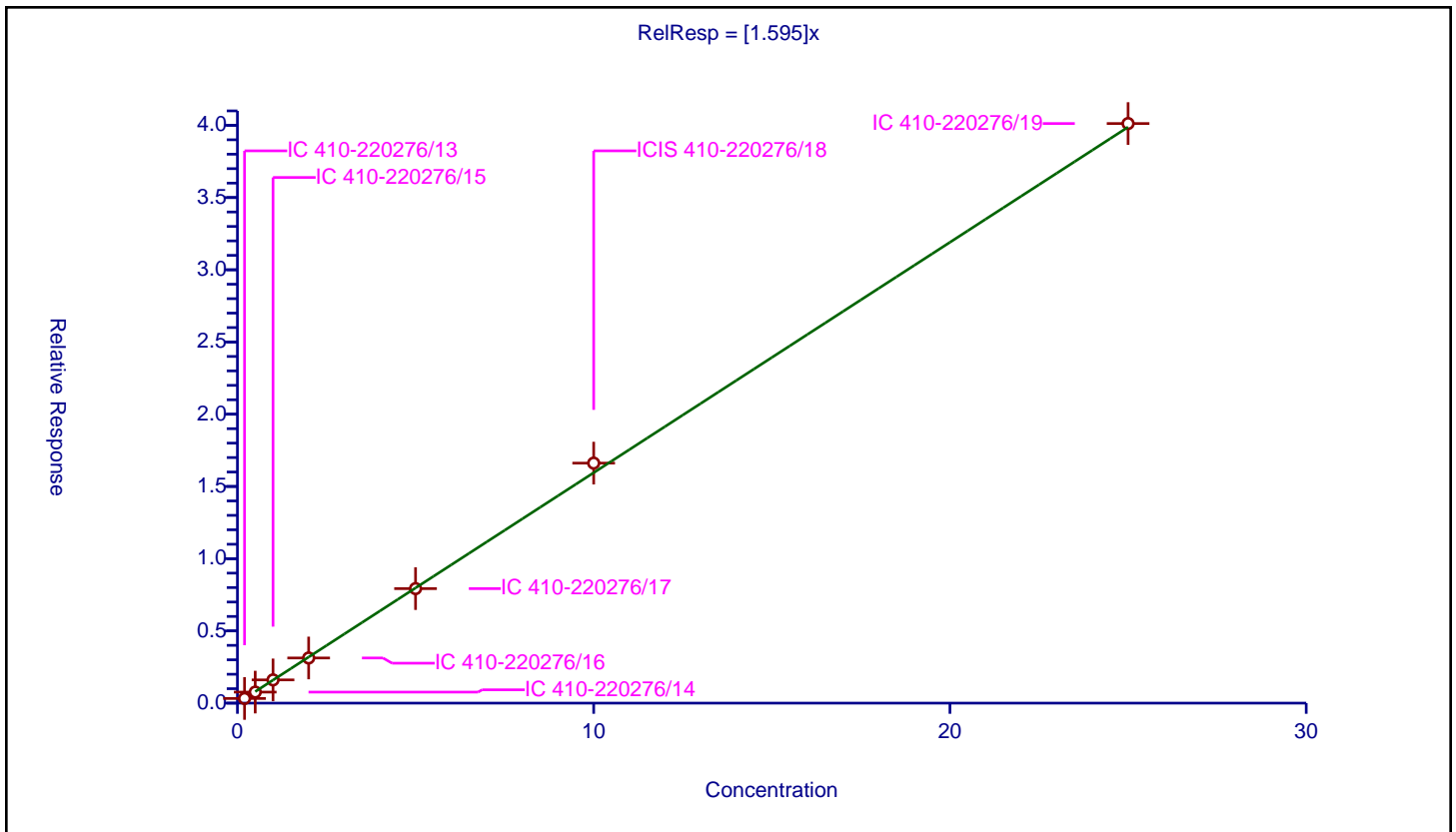
/ n-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.595

Error Coefficients	
Standard Error:	1760000
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 410-220276/13	0.2	0.322609	10.0	886118.0	1.613047	Y
2	IC 410-220276/14	0.5	0.764378	10.0	907784.0	1.528756	Y
3	IC 410-220276/15	1.0	1.609222	10.0	905251.0	1.609222	Y
4	IC 410-220276/16	2.0	3.12638	10.0	917630.0	1.56319	Y
5	IC 410-220276/17	5.0	7.927597	10.0	937641.0	1.585519	Y
6	ICIS 410-220276/18	10.0	16.615224	10.0	931787.0	1.661522	Y
7	IC 410-220276/19	25.0	40.123786	10.0	980643.0	1.604951	Y



Calibration

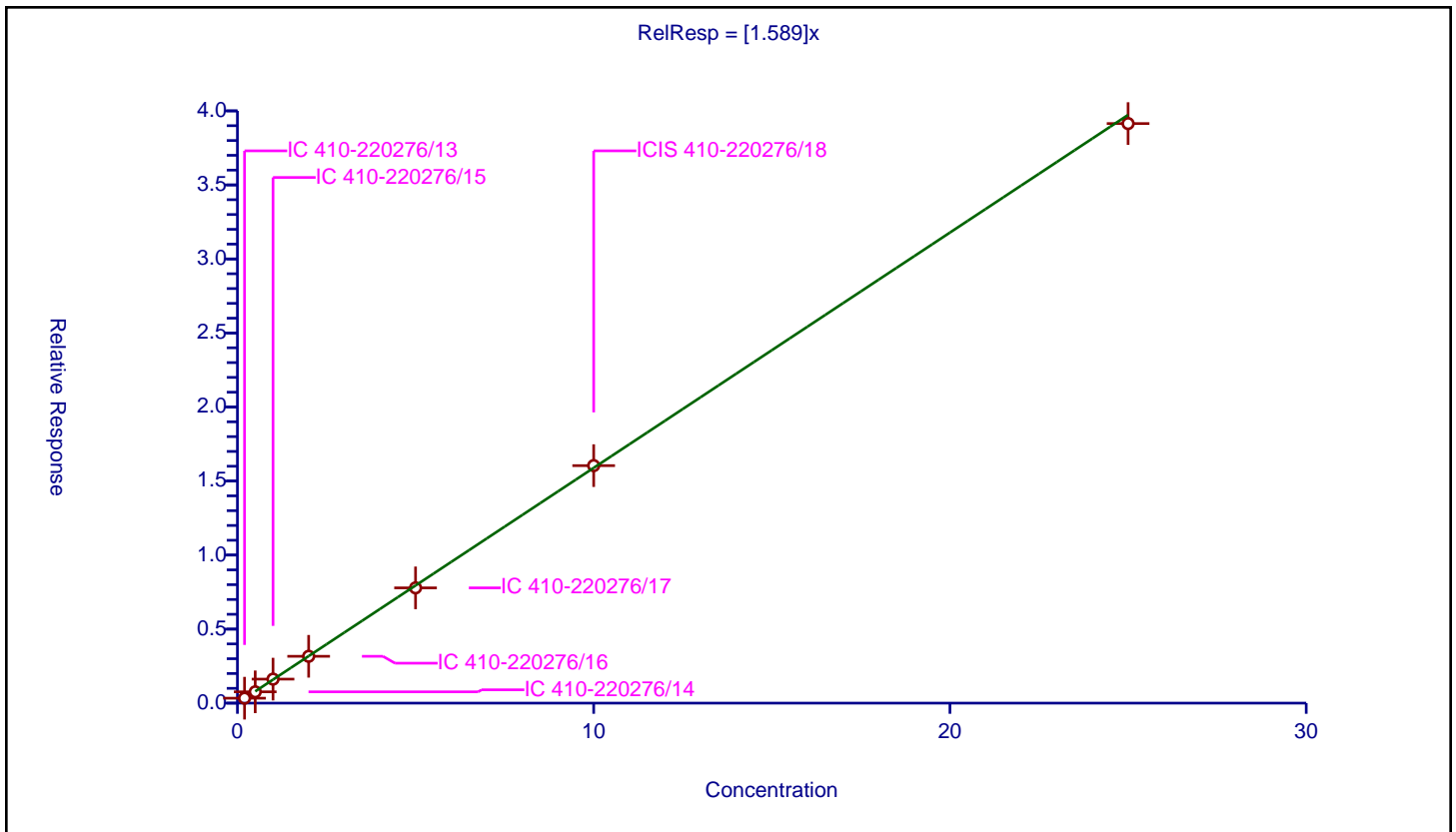
/ 1,2-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.589

Error Coefficients	
Standard Error:	1710000
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 410-220276/13	0.2	0.333522	10.0	886118.0	1.667611	Y
2	IC 410-220276/14	0.5	0.762714	10.0	907784.0	1.525429	Y
3	IC 410-220276/15	1.0	1.621252	10.0	905251.0	1.621252	Y
4	IC 410-220276/16	2.0	3.16414	10.0	917630.0	1.58207	Y
5	IC 410-220276/17	5.0	7.78492	10.0	937641.0	1.556984	Y
6	ICIS 410-220276/18	10.0	16.041509	10.0	931787.0	1.604151	Y
7	IC 410-220276/19	25.0	39.144388	10.0	980643.0	1.565776	Y



Calibration

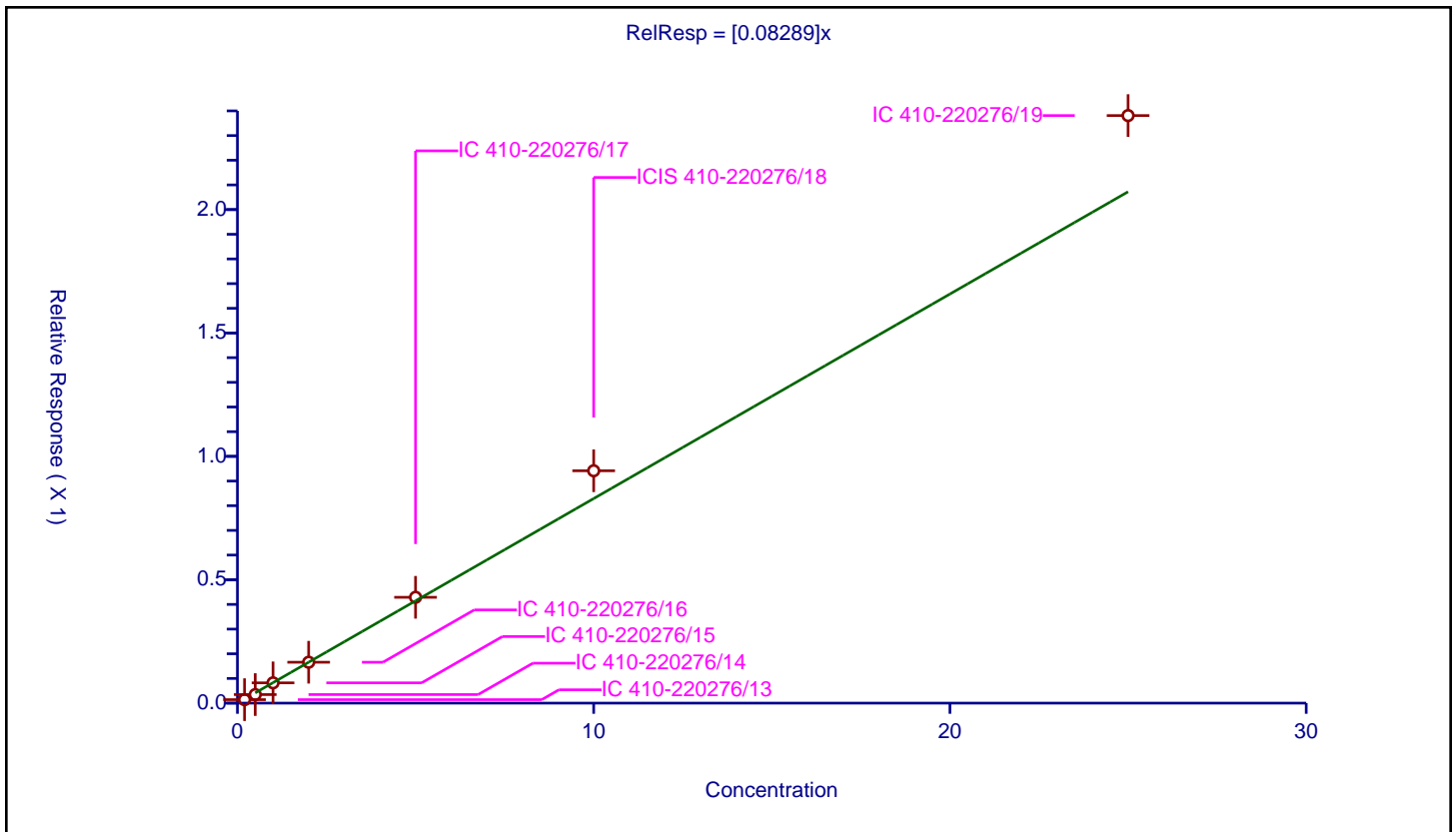
/ 1,2-Dibromo-3-Chloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.08289

Error Coefficients	
Standard Error:	103000
Relative Standard Error:	12.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.014129	10.0	886118.0	0.070645	Y
2	IC 410-220276/14	0.5	0.034689	10.0	907784.0	0.069378	Y
3	IC 410-220276/15	1.0	0.082209	10.0	905251.0	0.082209	Y
4	IC 410-220276/16	2.0	0.165688	10.0	917630.0	0.082844	Y
5	IC 410-220276/17	5.0	0.428874	10.0	937641.0	0.085775	Y
6	ICIS 410-220276/18	10.0	0.941599	10.0	931787.0	0.09416	Y
7	IC 410-220276/19	25.0	2.38103	10.0	980643.0	0.095241	Y



Calibration

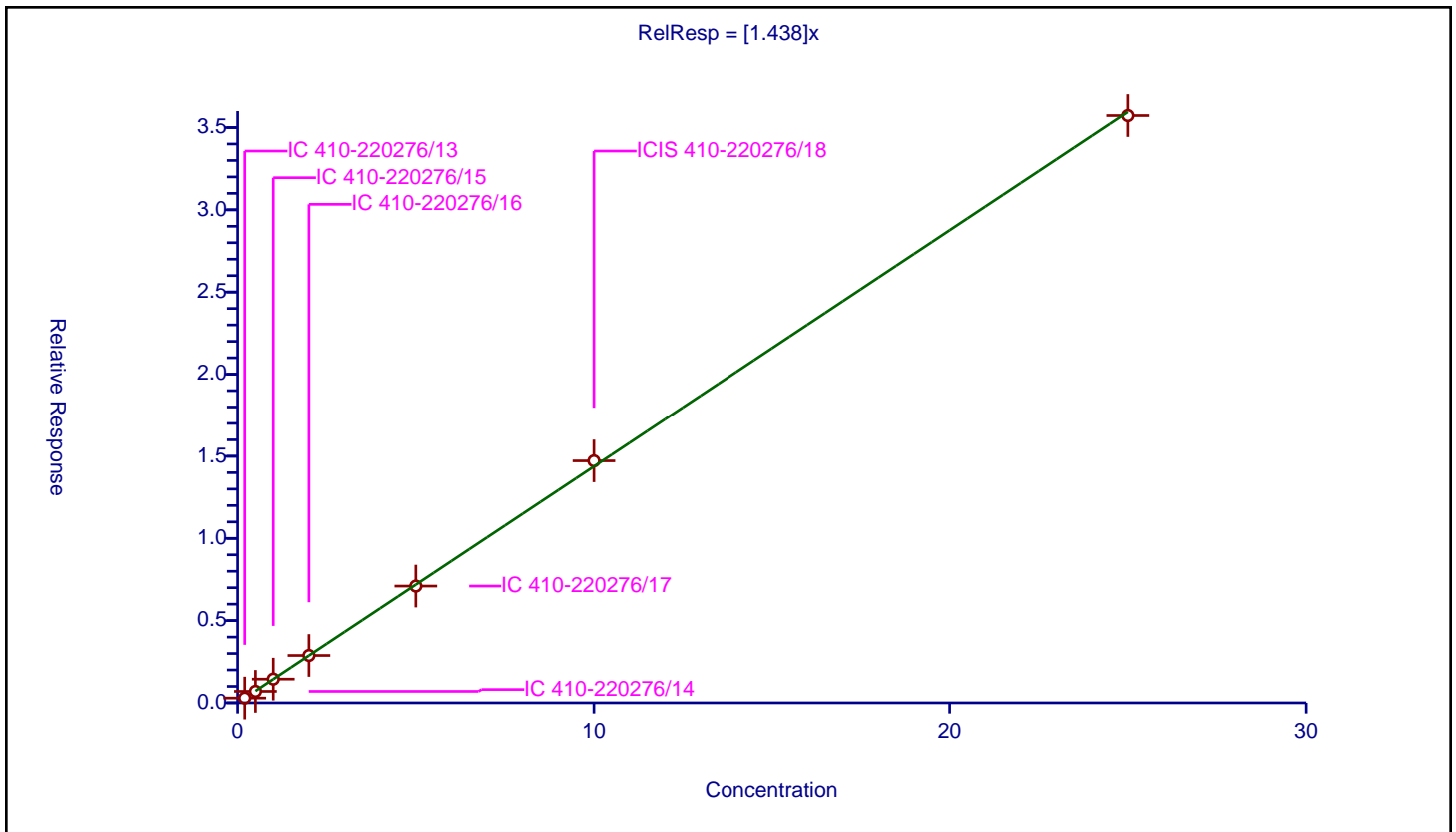
/ 1,3,5-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.438

Error Coefficients	
Standard Error:	1560000
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 410-220276/13	0.2	0.292625	10.0	886118.0	1.463123	Y
2	IC 410-220276/14	0.5	0.699109	10.0	907784.0	1.398218	Y
3	IC 410-220276/15	1.0	1.442495	10.0	905251.0	1.442495	Y
4	IC 410-220276/16	2.0	2.880922	10.0	917630.0	1.440461	Y
5	IC 410-220276/17	5.0	7.099967	10.0	937641.0	1.419993	Y
6	ICIS 410-220276/18	10.0	14.717977	10.0	931787.0	1.471798	Y
7	IC 410-220276/19	25.0	35.727456	10.0	980643.0	1.429098	Y



Calibration

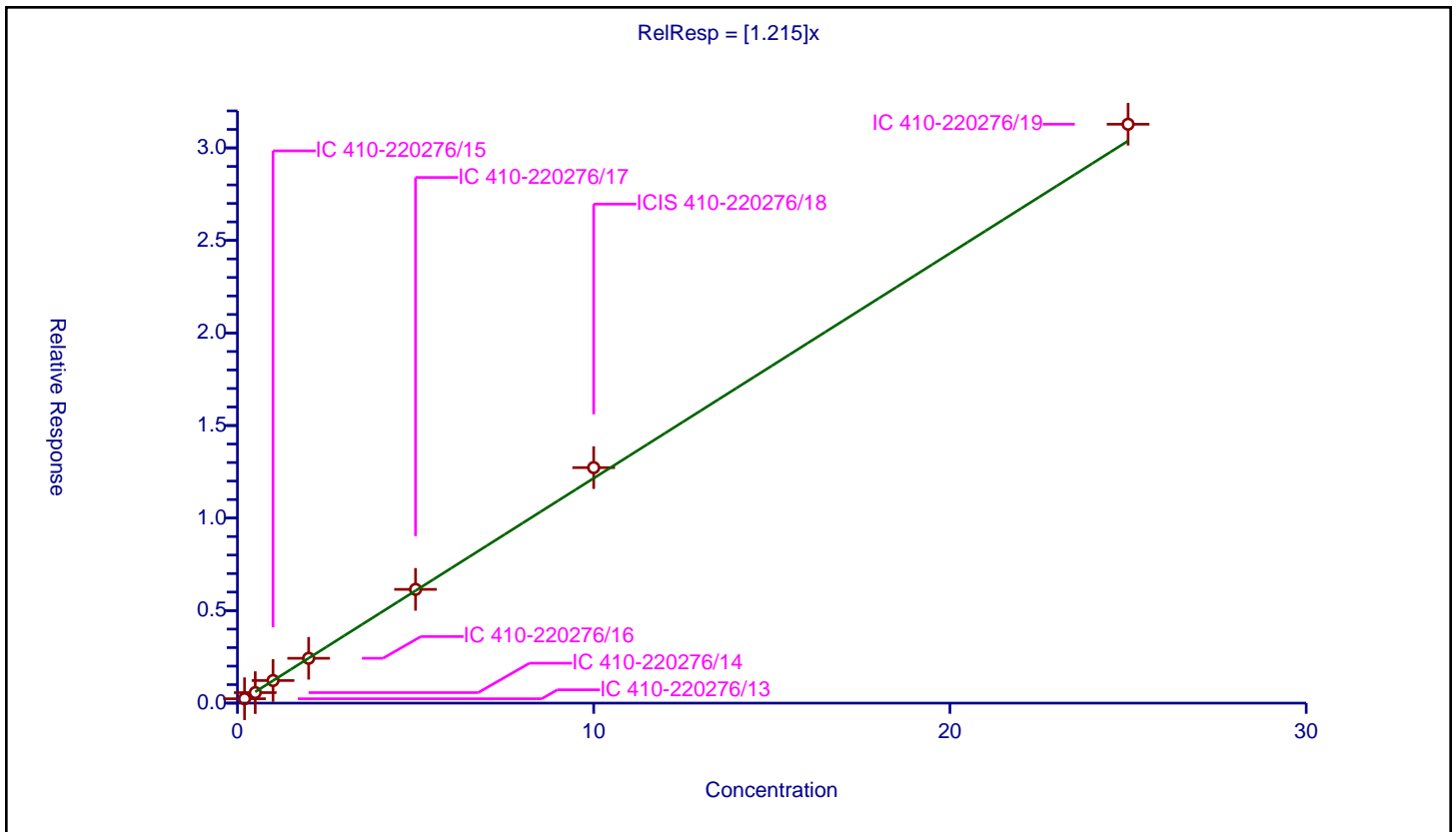
/ 1,2,4-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.215

Error Coefficients	
Standard Error:	1370000
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 410-220276/13	0.2	0.236842	10.0	886118.0	1.18421	Y
2	IC 410-220276/14	0.5	0.568329	10.0	907784.0	1.136658	Y
3	IC 410-220276/15	1.0	1.220579	10.0	905251.0	1.220579	Y
4	IC 410-220276/16	2.0	2.422883	10.0	917630.0	1.211441	Y
5	IC 410-220276/17	5.0	6.146841	10.0	937641.0	1.229368	Y
6	ICIS 410-220276/18	10.0	12.724335	10.0	931787.0	1.272434	Y
7	IC 410-220276/19	25.0	31.279263	10.0	980643.0	1.251171	Y



Calibration

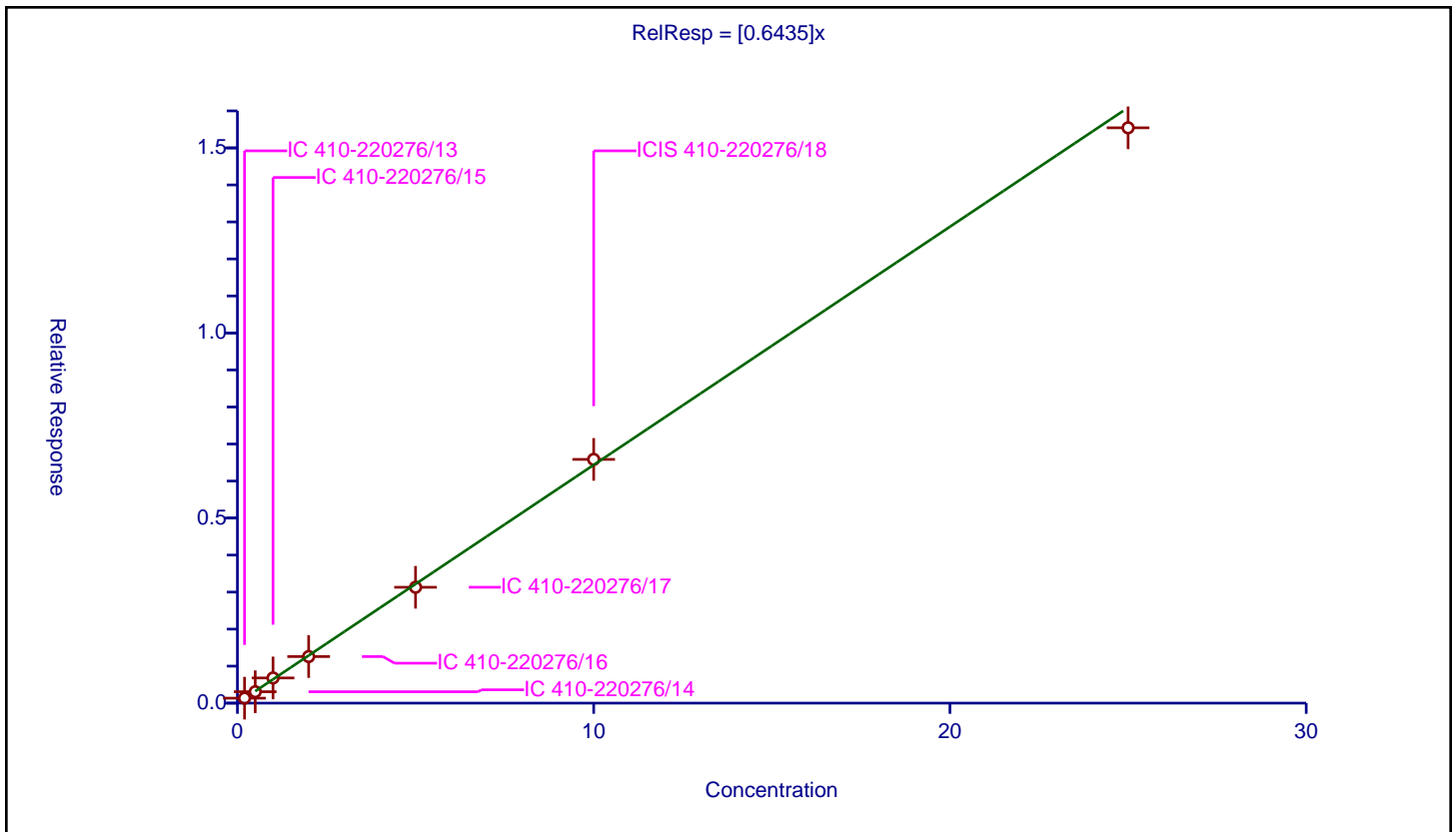
/ Hexachlorobutadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6435

Error Coefficients	
Standard Error:	684000
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 410-220276/13	0.2	0.134485	10.0	886118.0	0.672427	Y
2	IC 410-220276/14	0.5	0.30819	10.0	907784.0	0.61638	Y
3	IC 410-220276/15	1.0	0.680596	10.0	905251.0	0.680596	Y
4	IC 410-220276/16	2.0	1.257827	10.0	917630.0	0.628914	Y
5	IC 410-220276/17	5.0	3.13058	10.0	937641.0	0.626116	Y
6	ICIS 410-220276/18	10.0	6.585056	10.0	931787.0	0.658506	Y
7	IC 410-220276/19	25.0	15.543016	10.0	980643.0	0.621721	Y



Calibration

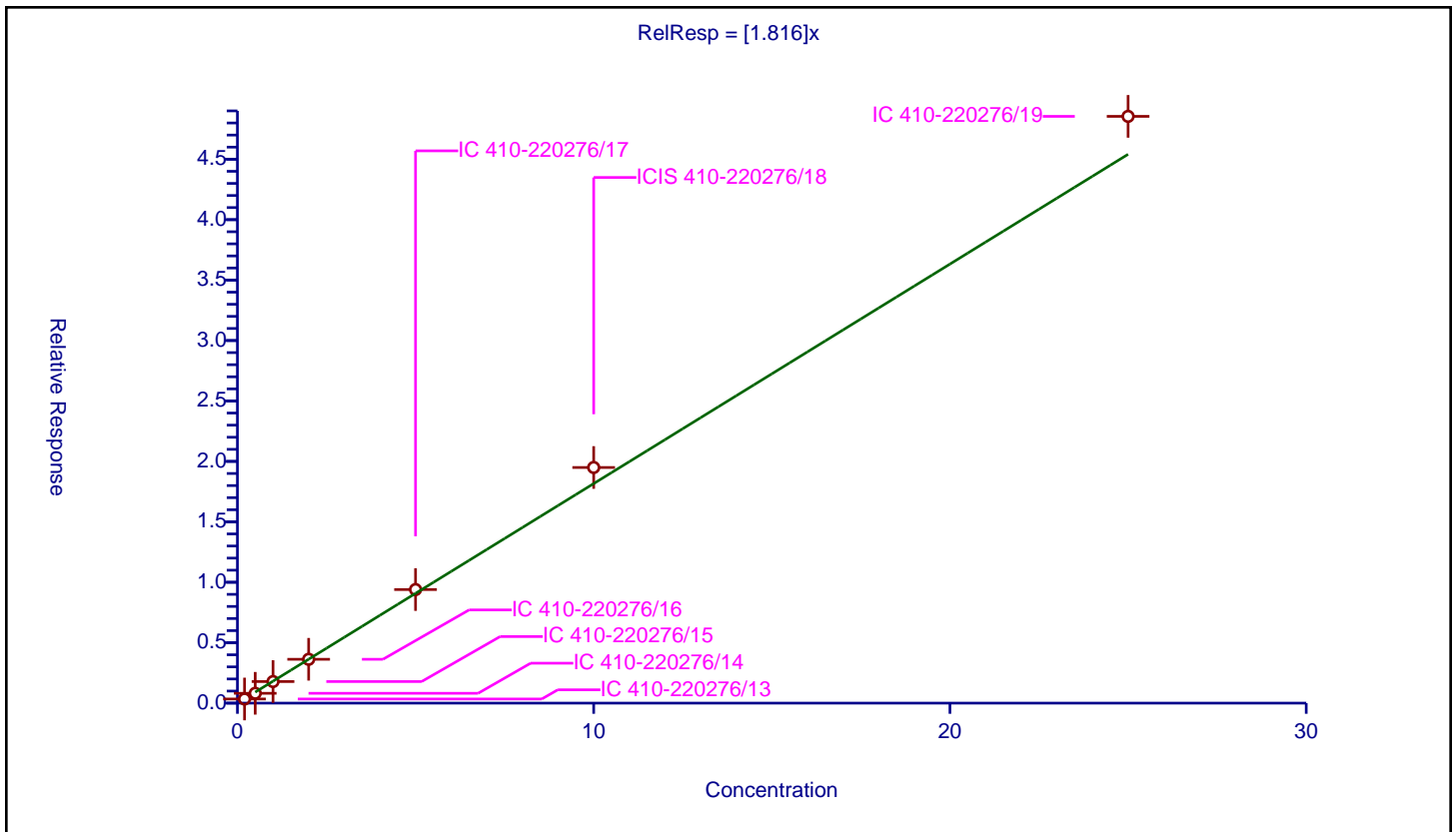
/ Naphthalene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.816

Error Coefficients	
Standard Error:	2120000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-220276/13	0.2	0.343036	10.0	886118.0	1.715178	Y
2	IC 410-220276/14	0.5	0.814346	10.0	907784.0	1.628691	Y
3	IC 410-220276/15	1.0	1.785936	10.0	905251.0	1.785936	Y
4	IC 410-220276/16	2.0	3.627083	10.0	917630.0	1.813541	Y
5	IC 410-220276/17	5.0	9.397136	10.0	937641.0	1.879427	Y
6	ICIS 410-220276/18	10.0	19.495282	10.0	931787.0	1.949528	Y
7	IC 410-220276/19	25.0	48.545352	10.0	980643.0	1.941814	Y



Calibration

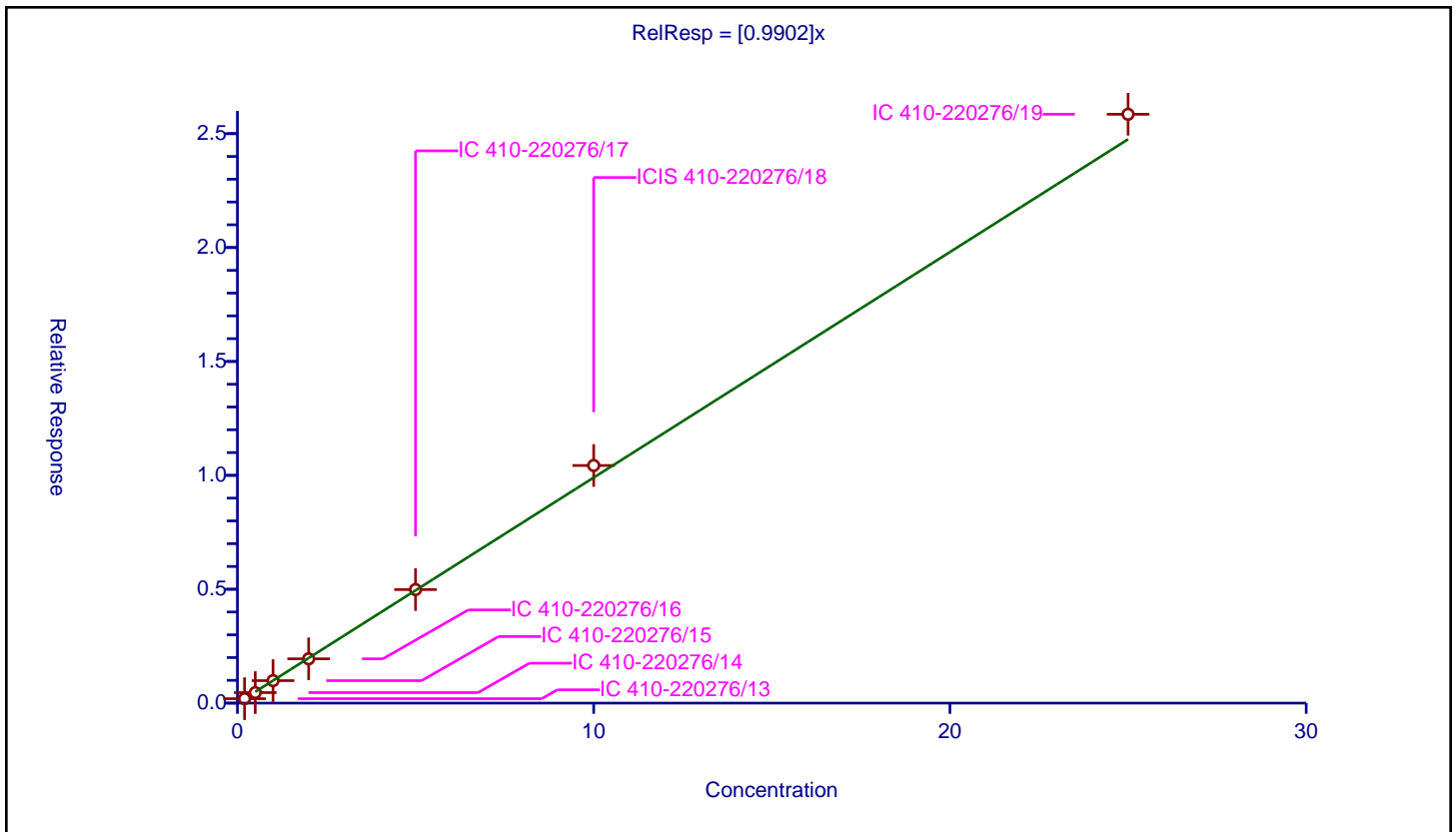
/ 1,2,3-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9902

Error Coefficients	
Standard Error:	1130000
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 410-220276/13	0.2	0.194387	10.0	886118.0	0.971936	Y
2	IC 410-220276/14	0.5	0.46239	10.0	907784.0	0.924779	Y
3	IC 410-220276/15	1.0	0.987251	10.0	905251.0	0.987251	Y
4	IC 410-220276/16	2.0	1.94549	10.0	917630.0	0.972745	Y
5	IC 410-220276/17	5.0	4.985362	10.0	937641.0	0.997072	Y
6	ICIS 410-220276/18	10.0	10.432599	10.0	931787.0	1.04326	Y
7	IC 410-220276/19	25.0	25.851028	10.0	980643.0	1.034041	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-85437-1

SDG No.: _____

Lab Sample ID: ICV 410-220276/21 Calibration Date: 02/02/2022 21:55

Instrument ID: 10193 Calib Start Date: 02/02/2022 18:57

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 02/02/2022 21:11

Lab File ID: CF02X21.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	0.3083	0.3580	0.1000	5.81	5.00	16.2	30.0
Chloromethane	Ave	0.3355	0.3467	0.1000	5.17	5.00	3.3	30.0
Vinyl chloride	Ave	0.3562	0.3615	0.1000	5.07	5.00	1.5	30.0
1,3-Butadiene	Ave	0.3244	0.3164		4.88	5.00	-2.5	30.0
Bromomethane	Ave	0.2716	0.2741	0.1000	5.05	5.00	0.9	30.0
Chloroethane	Ave	0.2101	0.2105	0.1000	5.01	5.00	0.2	30.0
Dichlorofluoromethane	Ave	0.5156	0.5159		5.00	5.00	0.0	30.0
Trichlorofluoromethane	Ave	0.5052	0.4996	0.1000	4.94	5.00	-1.1	30.0
Ethyl ether	Ave	0.1846	0.2146		5.78	4.97	16.2	30.0
Freon 123a	Ave	0.3393	0.3303		4.87	5.00	-2.7	30.0
Acrolein	Ave	2.042	2.031		37.3	37.5	-0.6	30.0
1,1-Dichloroethene	Ave	0.2501	0.2693	0.1000	5.38	5.00	7.7	30.0
Acetone	Ave	2.287	2.227	0.1000	60.9	62.5	-2.6	30.0
Freon 113	Ave	0.2509	0.2888	0.1000	5.76	5.00	15.1	30.0
Methyl iodide	Ave	0.4684	0.5238		5.59	5.00	11.8	30.0
Ethyl bromide	Ave	0.2341	0.2216		4.72	4.99	-5.4	30.0
Carbon disulfide	Ave	0.7225	0.8674	0.1000	6.00	5.00	20.1	30.0
Methyl acetate	Ave	6.180	7.113	0.1000	5.75	5.00	15.1	30.0
Allyl chloride	Ave	0.3731	0.3947		5.29	5.00	5.8	30.0
Methylene Chloride	Ave	0.2685	0.2723	0.1000	5.07	5.00	1.4	30.0
t-Butyl alcohol	Ave	0.9718	0.9527		49.0	50.0	-2.0	30.0
Acrylonitrile	Ave	3.286	3.374		25.7	25.0	2.7	30.0
Methyl tert-butyl ether	Ave	0.6846	0.7136	0.1000	5.21	5.00	4.2	30.0
trans-1,2-Dichloroethene	Ave	0.2869	0.2907	0.1000	5.07	5.00	1.3	30.0
n-Hexane	Ave	0.3501	0.3666		5.24	5.00	4.7	30.0
1,1-Dichloroethane	Ave	0.4911	0.4859	0.2000	4.95	5.00	-1.0	30.0
di-Isopropyl ether	Ave	0.8203	0.8426		5.14	5.00	2.7	30.0
2-Chloro-1,3-butadiene	Ave	0.3990	0.4307		5.40	5.00	7.9	30.0
Ethyl t-butyl ether	Ave	0.8282	0.8730		5.27	5.00	5.4	30.0
2-Butanone (MEK)	Ave	4.681	5.054	0.1000	67.5	62.5	8.0	30.0
cis-1,2-Dichloroethene	Ave	0.3124	0.3234	0.1000	5.18	5.00	3.5	30.0
2,2-Dichloropropane	Ave	0.4390	0.4501		5.13	5.00	2.5	30.0
Propionitrile	Ave	1.221	1.165		35.8	37.5	-4.6	30.0
Methacrylonitrile	Ave	5.180	5.319		38.5	37.5	2.7	30.0
Bromochloromethane	Ave	0.1431	0.1472		5.14	5.00	2.9	30.0
Tetrahydrofuran	Ave	1.422	1.517		26.7	25.0	6.6	30.0
Chloroform	Ave	0.5101	0.5080	0.2000	4.98	5.00	-0.4	30.0
1,1,1-Trichloroethane	Ave	0.4660	0.4704	0.1000	5.05	5.00	0.9	30.0
Cyclohexane	Ave	0.4553	0.4675	0.1000	5.13	5.00	2.7	30.0
1,1-Dichloropropene	Ave	0.3927	0.3991		5.08	5.00	1.6	30.0
Carbon tetrachloride	Ave	0.4005	0.4108	0.1000	5.13	5.00	2.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-85437-1

SDG No.: _____

Lab Sample ID: ICV 410-220276/21 Calibration Date: 02/02/2022 21:55

Instrument ID: 10193 Calib Start Date: 02/02/2022 18:57

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 02/02/2022 21:11

Lab File ID: CF02X21.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	0.3182	0.3245		127	125	2.0	30.0
Benzene	Ave	1.154	1.163	0.5000	5.04	5.00	0.7	30.0
1,2-Dichloroethane	Ave	0.3147	0.3089	0.1000	4.91	5.00	-1.8	30.0
t-Amyl methyl ether	Ave	0.7685	0.7904		5.14	5.00	2.8	30.0
n-Heptane	Ave	0.3769	0.3734		4.95	5.00	-0.9	30.0
n-Butanol	Ave	0.3075	0.3127		254	250	1.7	30.0
Trichloroethene	Ave	0.3204	0.3185	0.2000	4.97	5.00	-0.6	30.0
Methylcyclohexane	Ave	0.5149	0.5364	0.1000	5.21	5.00	4.2	30.0
1,2-Dichloropropane	Ave	0.2814	0.2825	0.1000	5.02	5.00	0.4	30.0
1,4-Dioxane	Ave	0.0837	0.0752	0.0050	112	125	-10.1	30.0
Methyl methacrylate	Ave	9.915	11.10		5.60	5.00	12.0	30.0
Dibromomethane	Ave	0.1448	0.1470		5.08	5.00	1.5	30.0
Bromodichloromethane	Ave	0.3568	0.3664	0.2000	5.13	5.00	2.7	30.0
2-Nitropropane	Ave	2.872	2.776		4.83	5.00	-3.3	30.0
1-Bromo-2-chloroethane	Ave	0.2900	0.2918		5.03	5.00	0.6	30.0
cis-1,3-Dichloropropene	Ave	0.4286	0.4399	0.2000	5.13	5.00	2.6	30.0
4-Methyl-2-pentanone (MIBK)	Ave	12.53	13.62	0.1000	67.9	62.5	8.7	30.0
Toluene	Ave	0.9383	0.9385	0.4000	5.00	5.00	0.0	30.0
trans-1,3-Dichloropropene	Ave	0.4296	0.4706	0.1000	5.48	5.00	9.5	30.0
Ethyl methacrylate	Ave	0.3423	0.3760		5.49	5.00	9.8	30.0
1,1,2-Trichloroethane	Ave	0.2585	0.2636	0.1000	5.10	5.00	2.0	30.0
Tetrachloroethene	Ave	0.4645	0.4683	0.2000	5.04	5.00	0.8	30.0
1,3-Dichloropropane	Ave	0.4245	0.4279		5.04	5.00	0.8	30.0
2-Hexanone	Ave	9.097	10.40	0.1000	71.5	62.5	14.3	30.0
Dibromochloromethane	Ave	0.3209	0.3325		5.18	5.00	3.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.2508	0.2637	0.1000	5.26	5.00	5.1	30.0
1-Chlorohexane	Ave	0.5484	0.5346		4.87	5.00	-2.5	30.0
Chlorobenzene	Ave	1.113	1.116	0.5000	5.01	5.00	0.3	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3818	0.3967		5.20	5.00	3.9	30.0
Ethylbenzene	Ave	1.842	1.866	0.1000	5.06	5.00	1.3	30.0
m&p-Xylene	Ave	0.7320	0.7446	0.1000	10.2	10.0	1.7	30.0
o-Xylene	Ave	0.7303	0.7328	0.3000	5.02	5.00	0.3	30.0
Styrene	Ave	1.214	1.255	0.3000	5.17	5.00	3.4	30.0
Bromoform	Ave	0.1925	0.2026	0.1000	5.26	5.00	5.2	30.0
Isopropylbenzene	Ave	1.895	1.953	0.1000	5.15	5.00	3.1	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5432	0.5459	0.3000	5.03	5.00	0.5	30.0
Bromobenzene	Ave	0.8331	0.8643		5.19	5.00	3.8	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1406	0.1477		26.3	25.0	5.1	30.0
1,2,3-Trichloropropane	Ave	0.1529	0.1497		4.90	5.00	-2.1	30.0
N-Propylbenzene	Ave	3.805	3.828		5.03	5.00	0.6	30.0
2-Chlorotoluene	Ave	0.8285	0.8235		4.97	5.00	-0.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-85437-1

SDG No.: _____

Lab Sample ID: ICV 410-220276/21 Calibration Date: 02/02/2022 21:55

Instrument ID: 10193 Calib Start Date: 02/02/2022 18:57

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 02/02/2022 21:11

Lab File ID: CF02X21.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	2.825	2.856		5.05	5.00	1.1	30.0
4-Chlorotoluene	Ave	0.8479	0.8692		5.13	5.00	2.5	30.0
tert-Butylbenzene	Ave	0.6520	0.6430		4.93	5.00	-1.4	30.0
Pentachloroethane	Ave	0.4944	0.5249		5.31	5.00	6.2	30.0
1,2,4-Trimethylbenzene	Ave	2.920	2.919		5.00	5.00	-0.0	30.0
sec-Butylbenzene	Ave	3.560	3.681		5.17	5.00	3.4	30.0
1,3-Dichlorobenzene	Ave	1.703	1.695	0.6000	4.98	5.00	-0.4	30.0
p-Isopropyltoluene	Ave	3.197	3.277		5.12	5.00	2.5	30.0
1,4-Dichlorobenzene	Ave	1.749	1.732	0.5000	4.95	5.00	-0.9	30.0
1,2,3-Trimethylbenzene	Ave	1.321	1.332		5.04	5.00	0.8	30.0
Benzyl chloride	Ave	0.2272	0.2456		5.40	5.00	8.1	30.0
n-Butylbenzene	Ave	1.595	1.600		5.01	5.00	0.3	30.0
1,2-Dichlorobenzene	Ave	1.589	1.575	0.4000	4.96	5.00	-0.9	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0829	0.0833	0.0500	5.02	5.00	0.5	30.0
1,3,5-Trichlorobenzene	Ave	1.438	1.439		5.00	5.00	0.0	30.0
1,2,4-Trichlorobenzene	Ave	1.215	1.234	0.2000	5.08	5.00	1.6	30.0
Hexachlorobutadiene	Ave	0.6435	0.6666		5.18	5.00	3.6	30.0
Naphthalene	Ave	1.816	1.861		5.12	5.00	2.5	30.0
1,2,3-Trichlorobenzene	Ave	0.9902	1.012		5.11	5.00	2.2	30.0
Dibromofluoromethane (Surr)	Ave	0.2489	0.2493		10.0	10.0	0.2	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0479	0.0469		9.78	10.0	-2.2	30.0
Toluene-d8 (Surr)	Ave	1.232	1.233		10.0	10.0	0.0	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4907	0.4937		10.1	10.0	0.6	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X21.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 02-Feb-2022 21:55:30 ALS Bottle#: 21 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0049623-021
 Misc. Info.: ICV LG
 Operator ID: jml01693 Instrument ID: 10193
 Sublist:

Method: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 08-Feb-2022 19:30:04 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1661

First Level Reviewer: longj Date: 07-Feb-2022 14:26:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.788	1.794	-0.006	99	343150	5.00	5.81	
3 Chloromethane	50	1.971	1.983	-0.012	99	332313	5.00	5.17	
5 Vinyl chloride	62	2.075	2.081	-0.006	98	346453	5.00	5.07	
4 Butadiene	39	2.087	2.093	-0.006	92	303259	5.00	4.88	
6 Bromomethane	94	2.380	2.385	-0.005	90	262728	5.00	5.05	
7 Chloroethane	64	2.447	2.452	-0.005	100	201786	5.00	5.01	
8 Dichlorofluoromethane	67	2.666	2.678	-0.012	97	494475	5.00	5.00	
9 Trichlorofluoromethane	101	2.733	2.739	-0.006	98	478865	5.00	4.94	
225 Pentane	43	2.733	2.739	-0.006	96	401494	5.00	5.83	
11 Ethyl ether	59	2.922	2.934	-0.012	91	204566	4.97	5.78	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.026	3.026	0.000	90	316577	5.00	4.87	
13 Acrolein	56	3.081	3.086	-0.005	99	182378	37.5	37.3	
14 1,1-Dichloroethene	96	3.203	3.208	-0.006	97	258146	5.00	5.38	
16 Acetone	43	3.233	3.239	-0.006	100	333398	62.5	60.9	
15 112TCTFE	101	3.251	3.257	-0.006	91	276793	5.00	5.76	
17 Iodomethane	142	3.379	3.385	-0.006	98	502034	5.00	5.59	
18 Isopropyl alcohol	45	3.392	3.391	0.001	29	41112	37.5	33.8	
19 Ethyl bromide	108	3.404	3.410	-0.006	98	211987	4.99	4.72	
20 Carbon disulfide	76	3.471	3.477	-0.006	99	831344	5.00	6.00	
22 Methyl acetate	43	3.599	3.617	-0.018	96	85175	5.00	5.75	M
23 3-Chloro-1-propene	41	3.635	3.635	0.000	90	378289	5.00	5.29	
24 Methylene Chloride	84	3.800	3.806	-0.006	89	261007	5.00	5.07	
* 25 t-Butyl alcohol-d10 (IS)	65	3.806	3.818	-0.012	42	119739	50.0	50.0	
26 2-Methyl-2-propanol	59	3.916	3.916	0.000	100	114071	50.0	49.0	
27 Acrylonitrile	53	4.111	4.123	-0.012	98	201983	25.0	25.7	
28 Methyl tert-butyl ether	73	4.166	4.166	0.000	96	683891	5.00	5.21	
29 trans-1,2-Dichloroethene	96	4.172	4.178	-0.006	99	278604	5.00	5.07	
30 Hexane	57	4.586	4.586	0.000	93	351394	5.00	5.24	
32 1,1-Dichloroethane	63	4.830	4.836	-0.006	96	465739	5.00	4.95	
33 Isopropyl ether	45	4.897	4.897	0.000	94	807534	5.00	5.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 2-Chloro-1,3-butadiene	53	4.940	4.946	-0.006	91	412763	5.00	5.40	
35 Tert-butyl ethyl ether	59	5.440	5.440	0.000	97	836715	5.00	5.27	
36 2-Butanone (MEK)	43	5.647	5.653	-0.006	99	756446	62.5	67.5	
37 cis-1,2-Dichloroethene	96	5.678	5.684	-0.006	81	309959	5.00	5.18	
38 2,2-Dichloropropane	77	5.696	5.696	0.000	85	431382	5.00	5.13	
40 Propionitrile	54	5.751	5.751	0.000	98	104595	37.5	35.8	
43 Methacrylonitrile	67	5.958	5.964	-0.006	90	477698	37.5	38.5	
44 Chlorobromomethane	128	6.013	6.025	-0.012	91	141120	5.00	5.14	
45 Tetrahydrofuran	71	6.019	6.025	-0.006	88	90801	25.0	26.7	
46 Chloroform	83	6.178	6.183	-0.005	93	486847	5.00	4.98	
48 1,1,1-Trichloroethane	97	6.397	6.397	0.000	83	450843	5.00	5.05	
\$ 47 Dibromofluoromethane (Surr)	113	6.397	6.397	0.000	94	477941	10.0	10.0	
49 Cyclohexane	56	6.488	6.488	0.000	90	448052	5.00	5.13	
50 Carbon tetrachloride	117	6.610	6.610	0.000	96	393683	5.00	5.13	
51 1,1-Dichloropropene	75	6.610	6.616	-0.006	97	382515	5.00	5.08	
52 Isobutyl alcohol	41	6.812	6.805	0.007	94	97127	125.0	127.5	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.854	6.854	0.000	96	89835	10.0	9.78	
54 Benzene	78	6.879	6.878	0.001	97	1114488	5.00	5.04	
55 1,2-Dichloroethane	62	6.958	6.958	0.000	98	296069	5.00	4.91	
56 Tert-amyl methyl ether	73	7.080	7.086	-0.006	99	757531	5.00	5.14	
* 57 Fluorobenzene (IS)	96	7.293	7.299	-0.006	99	1916842	10.0	10.0	
58 n-Heptane	43	7.305	7.305	0.000	89	357873	5.00	4.95	
59 n-Butanol	56	7.714	7.708	0.006	87	187183	250.0	254.2	
60 Trichloroethene	95	7.781	7.781	0.000	97	305293	5.00	4.97	
61 Methylcyclohexane	83	8.086	8.086	0.000	89	514122	5.00	5.21	
62 1,2-Dichloropropane	63	8.116	8.122	-0.006	96	270731	5.00	5.02	
63 2-ethoxy-2-methyl butane	87	8.141	8.140	0.001	94	446962	5.00	5.13	
65 1,4-Dioxane	88	8.226	8.220	0.006	29	22518	125.0	112.4	M
64 Methyl methacrylate	69	8.226	8.226	0.000	89	132950	5.00	5.60	
66 Dibromomethane	93	8.232	8.232	0.000	94	140893	5.00	5.08	
67 Dichlorobromomethane	83	8.476	8.482	-0.006	99	351119	5.00	5.13	
68 2-Nitropropane	41	8.762	8.762	0.000	98	33244	5.00	4.83	
71 1-Bromo-2-chloroethane	63	8.872	8.872	0.000	98	279627	5.00	5.03	
72 cis-1,3-Dichloropropene	75	9.049	9.049	0.000	96	421580	5.00	5.13	
73 4-Methyl-2-pentanone (MIBK)	43	9.244	9.244	0.000	96	2038587	62.5	67.9	
\$ 74 Toluene-d8 (Surr)	98	9.372	9.378	-0.006	93	1929927	10.0	10.0	
75 Toluene	92	9.457	9.457	0.000	98	734654	5.00	5.00	
76 trans-1,3-Dichloropropene	75	9.744	9.744	0.000	93	368353	5.00	5.48	
78 Ethyl methacrylate	69	9.817	9.817	0.000	88	294289	5.00	5.49	
79 1,1,2-Trichloroethane	97	9.957	9.957	0.000	90	206329	5.00	5.10	
80 Tetrachloroethene	166	10.037	10.036	0.001	98	366607	5.00	5.04	
81 1,3-Dichloropropane	76	10.122	10.122	0.000	90	334917	5.00	5.04	
82 2-Hexanone	43	10.189	10.189	0.000	96	1556831	62.5	71.5	
83 Chlorodibromomethane	129	10.347	10.347	0.000	89	260246	5.00	5.18	
84 Ethylene Dibromide	107	10.457	10.457	0.000	99	206406	5.00	5.26	
* 85 Chlorobenzene-d5 (IS)	117	10.908	10.908	0.000	84	1565528	10.0	10.0	
86 1-Chlorohexane	91	10.927	10.920	0.007	96	418482	5.00	4.87	
87 Chlorobenzene	112	10.933	10.933	0.001	96	873846	5.00	5.01	
89 1,1,1,2-Tetrachloroethane	131	11.024	11.024	0.000	94	310487	5.00	5.20	
90 Ethylbenzene	91	11.024	11.024	0.000	98	1460825	5.00	5.06	
91 m-Xylene & p-Xylene	106	11.146	11.146	0.000	100	1165640	10.0	10.2	
92 o-Xylene	106	11.481	11.481	0.000	97	573641	5.00	5.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
93 Styrene	104	11.500	11.499	0.001	95	982424	5.00	5.17	
94 Bromoform	173	11.658	11.658	0.000	98	158575	5.00	5.26	
95 Isopropylbenzene	105	11.792	11.792	0.000	95	1528630	5.00	5.15	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.939	11.938	0.001	94	772897	10.0	10.1	
100 Bromobenzene	156	12.054	12.054	0.000	89	397237	5.00	5.19	
99 1,1,2,2-Tetrachloroethane	83	12.054	12.054	0.000	69	250888	5.00	5.03	
101 trans-1,4-Dichloro-2-butene	53	12.079	12.079	0.000	93	339432	25.0	26.3	
102 1,2,3-Trichloropropane	110	12.097	12.097	0.000	83	68819	5.00	4.90	
103 N-Propylbenzene	91	12.128	12.133	-0.005	98	1759374	5.00	5.03	
104 2-Chlorotoluene	126	12.207	12.207	0.000	97	378456	5.00	4.97	
105 1,3,5-Trimethylbenzene	105	12.274	12.274	0.000	94	1312395	5.00	5.05	
106 4-Chlorotoluene	126	12.298	12.298	0.000	97	399473	5.00	5.13	
107 tert-Butylbenzene	134	12.518	12.518	0.000	92	295500	5.00	4.93	
108 Pentachloroethane	167	12.548	12.548	0.000	93	241240	5.00	5.31	
109 1,2,4-Trimethylbenzene	105	12.560	12.560	0.000	97	1341542	5.00	5.00	
110 sec-Butylbenzene	105	12.682	12.682	0.000	94	1691748	5.00	5.17	
111 1,3-Dichlorobenzene	146	12.780	12.780	0.000	98	779227	5.00	4.98	
112 4-Isopropyltoluene	119	12.792	12.792	0.000	97	1505949	5.00	5.12	
* 113 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	93	919181	10.0	10.0	M
114 1,4-Dichlorobenzene	146	12.853	12.853	0.000	96	796183	5.00	4.95	
115 1,2,3-Trimethylbenzene	120	12.865	12.871	-0.006	98	612158	5.00	5.04	
116 Benzyl chloride	126	12.938	12.938	0.000	98	112860	5.00	5.40	
119 n-Butylbenzene	92	13.091	13.091	0.000	97	735318	5.00	5.01	
120 1,2-Dichlorobenzene	146	13.121	13.121	0.000	99	723885	5.00	4.96	
118 p-Diethylbenzene	119	13.146	13.145	0.001	85	757588	5.00	5.00	
123 1,2-Dibromo-3-Chloropropane	155	13.670	13.670	0.000	91	38286	5.00	5.02	
124 1,3,5-Trichlorobenzene	180	13.798	13.798	0.000	97	661170	5.00	5.00	
125 1,2,4-Trichlorobenzene	180	14.225	14.225	0.000	94	567310	5.00	5.08	
126 Hexachlorobutadiene	225	14.310	14.310	0.000	97	306379	5.00	5.18	
127 Naphthalene	128	14.408	14.407	0.001	97	855225	5.00	5.12	
128 1,2,3-Trichlorobenzene	180	14.548	14.548	0.000	95	465144	5.00	5.11	
129 2-Methylnaphthalene	142	15.157	15.157	0.000	92	495767	5.00	5.82	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00038

Amount Added: 12.50

Units: uL

MSV_QC_Gas826_00063

Amount Added: 12.50

Units: uL

MSV_LCS_EE_00001

Amount Added: 12.50

Units: uL

MSV_LCS_ETBR_00001

Amount Added: 12.50

Units: uL

MSV_LCS_ACROL_00041

Amount Added: 12.50

Units: uL

MSV_LCS_Penta_00011

Amount Added: 12.50

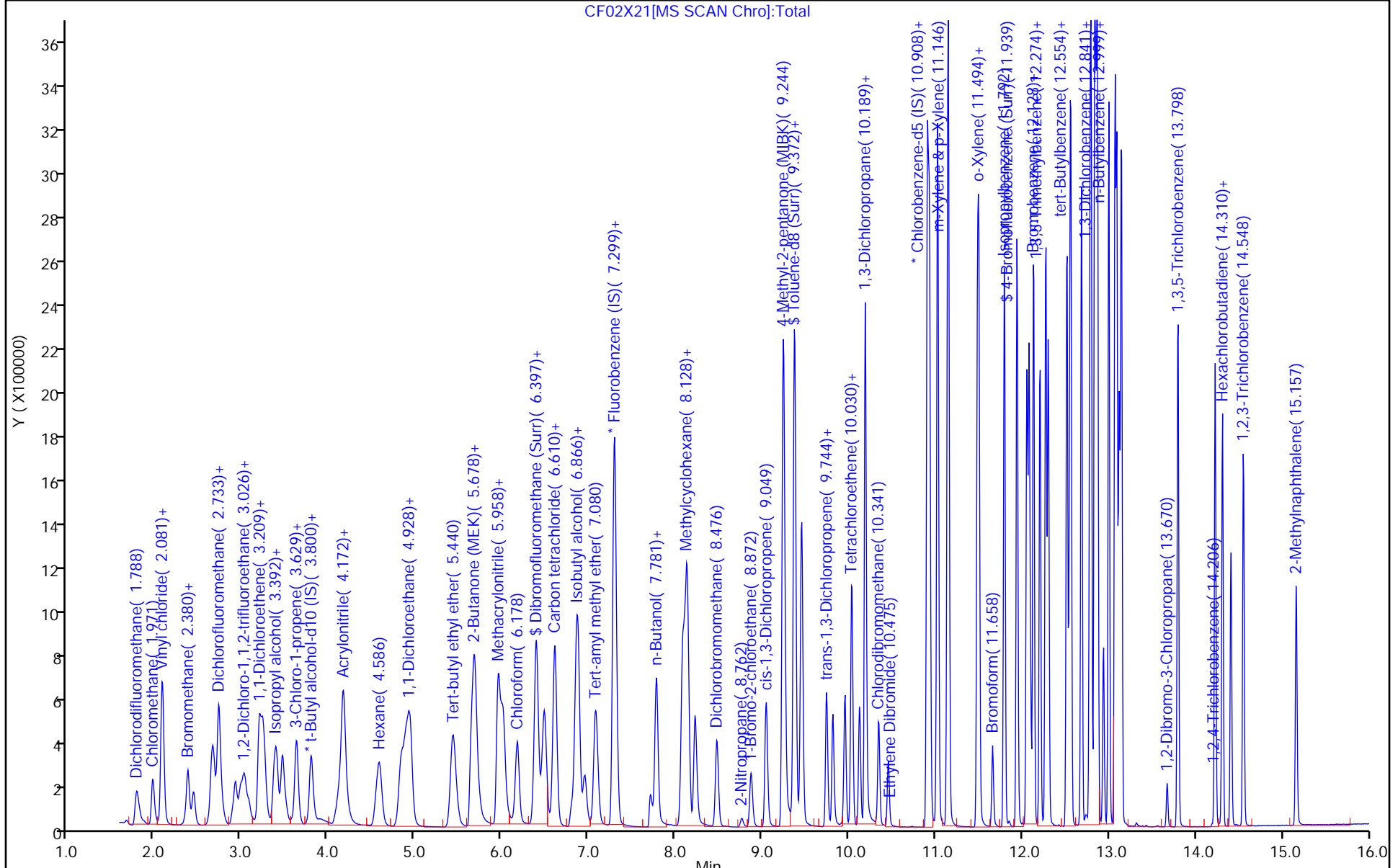
Units: uL

MSV_HP25_ISSS_00046

Amount Added: 1.00

Units: uL

Run Reagent



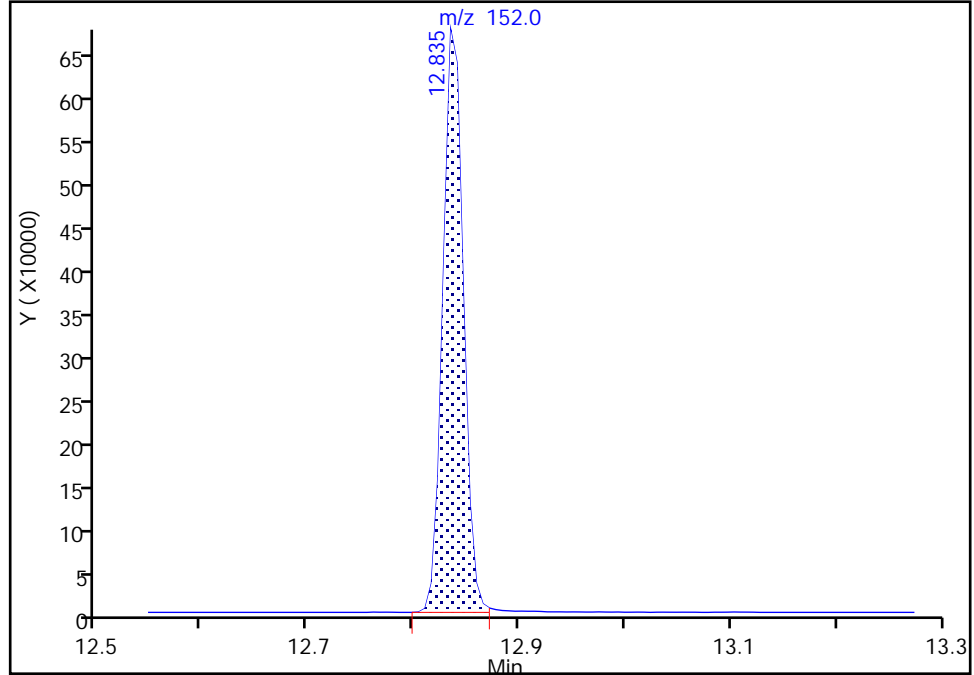
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X21.D
Injection Date: 02-Feb-2022 21:55:30 Instrument ID: 10193
Lims ID: ICV
Client ID:
Operator ID: jml01693 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 113 1,4-Dichlorobenzene-d4, CAS: 3855-82-1
Signal: 1

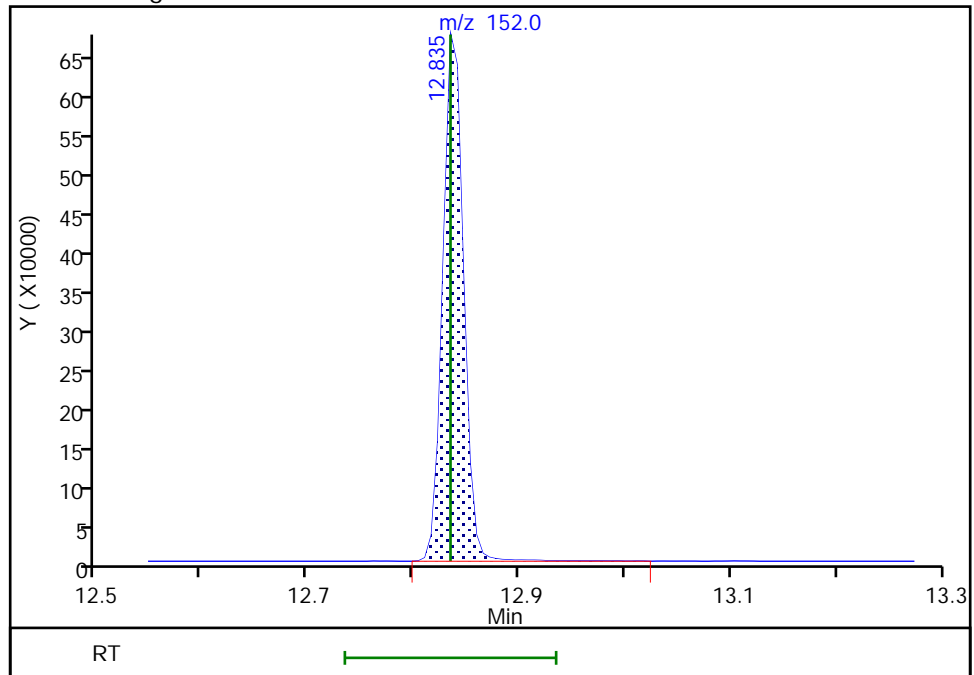
RT: 12.83
Area: 911611
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results



RT: 12.83
Area: 919181
Amount: 10.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: kellerk, 08-Feb-2022 18:40:12
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 574 of 643

Eurofins Lancaster Laboratories Env, LLC

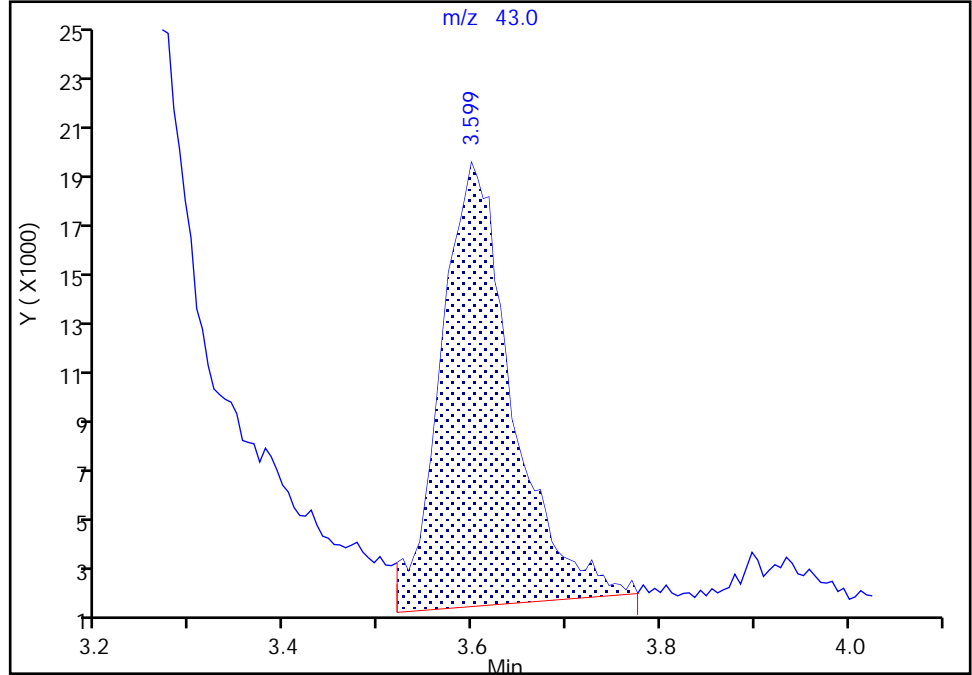
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X21.D
Injection Date: 02-Feb-2022 21:55:30 Instrument ID: 10193
Lims ID: ICV
Client ID:
Operator ID: jml01693 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Methyl acetate, CAS: 79-20-9

Signal: 1

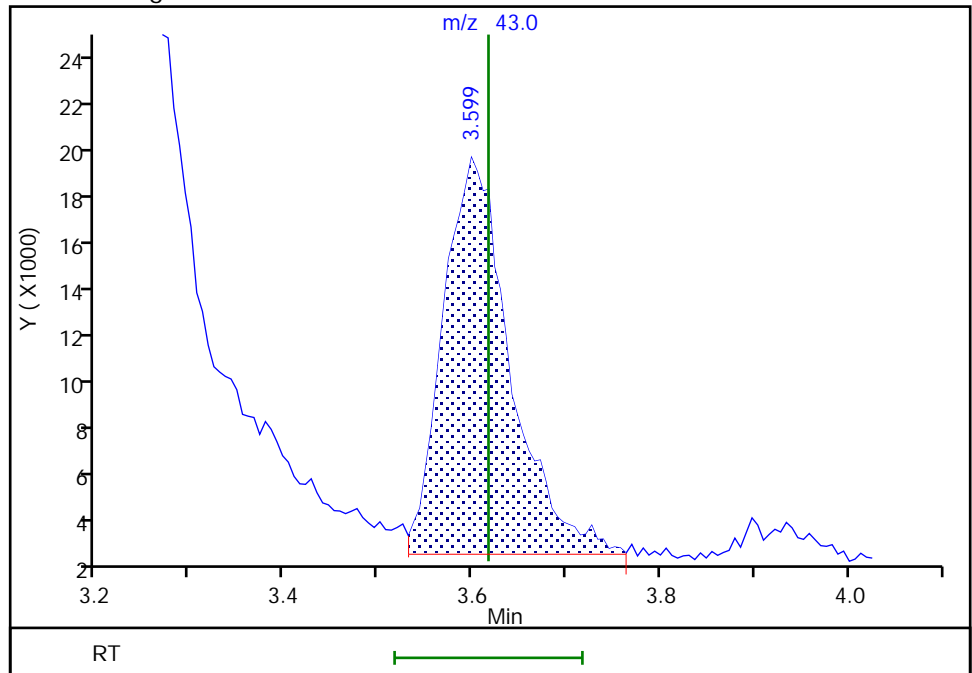
RT: 3.60
Area: 93286
Amount: 6.390889
Amount Units: ug/l

Processing Integration Results



RT: 3.60
Area: 85175
Amount: 5.754789
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:25:16
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins Lancaster Laboratories Env, LLC

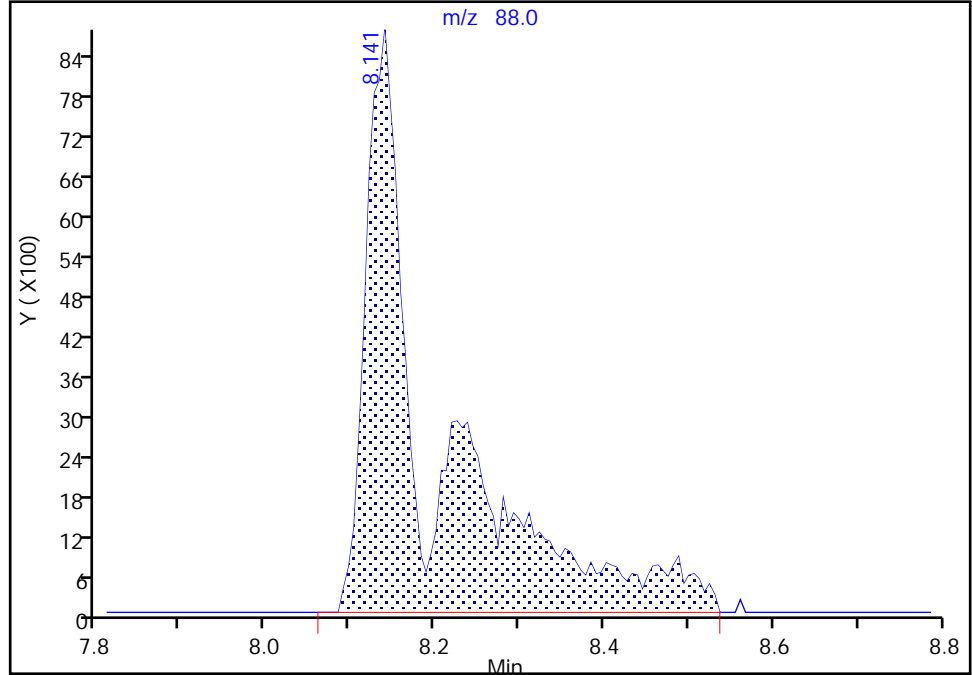
Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X21.D
Injection Date: 02-Feb-2022 21:55:30 Instrument ID: 10193
Lims ID: ICV
Client ID:
Operator ID: jml01693 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

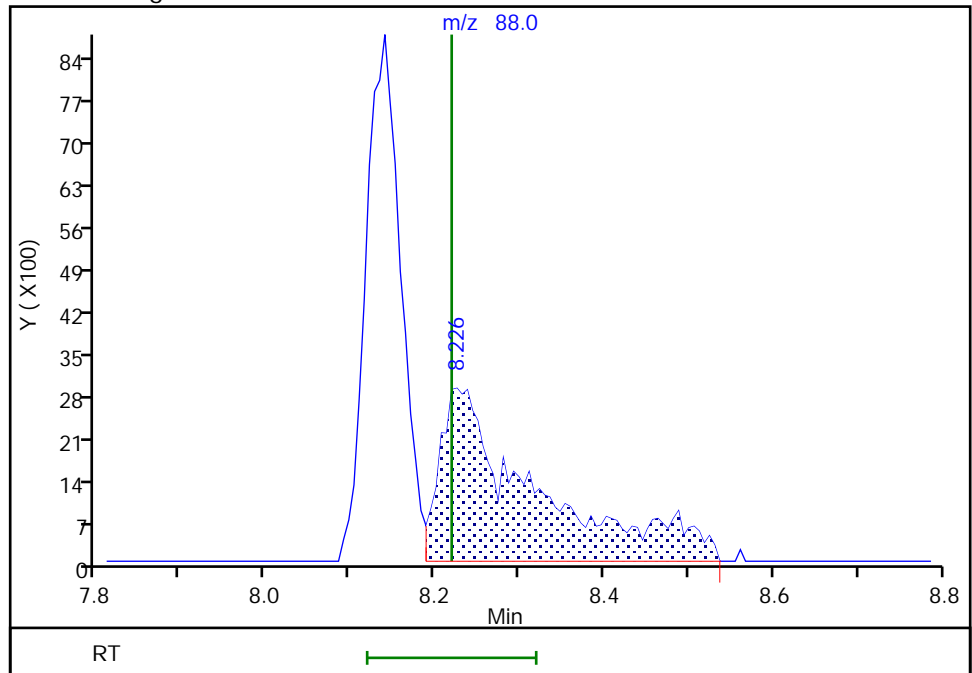
RT: 8.14
Area: 47373
Amount: 240.9637
Amount Units: ug/l

Processing Integration Results



RT: 8.23
Area: 22518
Amount: 112.4027
Amount Units: ug/l

Manual Integration Results



Reviewer: longj, 07-Feb-2022 14:24:43
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-85437-1

SDG No.: _____

Lab Sample ID: CCVIS 410-261977/3 Calibration Date: 06/06/2022 10:48

Instrument ID: 10193 Calib Start Date: 02/02/2022 18:57

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 02/02/2022 21:11

Lab File ID: CU06X002.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	0.3083	0.1848	0.1000	6.00	10.0	-40.0*	20.0
Chloromethane	Ave	0.3355	0.3248	0.1000	9.68	10.0	-3.2	20.0
1,3-Butadiene	Ave	0.3244	0.6096		18.8	10.0	87.9*	20.0
Vinyl chloride	Ave	0.3562	0.2946	0.1000	8.27	10.0	-17.3	20.0
Bromomethane	Ave	0.2716	0.2014	0.1000	7.41	10.0	-25.9*	20.0
Chloroethane	Ave	0.2101	0.1741	0.1000	8.29	10.0	-17.1	20.0
Dichlorofluoromethane	Ave	0.5156	0.4181		8.11	10.0	-18.9	20.0
Trichlorofluoromethane	Ave	0.5052	0.3331	0.1000	6.59	10.0	-34.1*	20.0
Ethyl ether	Ave	0.1846	0.1947		10.5	10.0	5.4	20.0
Freon 123a	Ave	0.3393	0.2748		8.10	10.0	-19.0	20.0
Acrolein	Ave	2.042	2.168		531	500	6.2	20.0
1,1-Dichloroethene	Ave	0.2501	0.2094	0.1000	8.37	10.0	-16.3	20.0
Acetone	Ave	2.287	1.906	0.1000	83.3	100	-16.7	20.0
Freon 113	Ave	0.2509	0.1895	0.1000	7.55	10.0	-24.5*	20.0
Methyl iodide	Ave	0.4684	0.3878		8.28	10.0	-17.2	20.0
Ethyl bromide	Ave	0.2341	0.1969		8.41	10.0	-15.9	20.0
Carbon disulfide	Ave	0.7225	0.6223	0.1000	8.61	10.0	-13.9	20.0
Methyl acetate	Ave	6.180	6.731	0.1000	10.9	10.0	8.9	20.0
Allyl chloride	Ave	0.3731	0.3351		8.98	10.0	-10.2	20.0
Methylene Chloride	Ave	0.2685	0.2199	0.1000	8.19	10.0	-18.1	20.0
t-Butyl alcohol	Ave	0.9718	0.9751		201	200	0.3	20.0
Acrylonitrile	Ave	3.286	3.297		25.1	25.0	0.3	20.0
Methyl tert-butyl ether	Ave	0.6846	0.5496	0.1000	8.03	10.0	-19.7	20.0
trans-1,2-Dichloroethene	Ave	0.2869	0.2439	0.1000	8.50	10.0	-15.0	20.0
n-Hexane	Ave	0.3501	0.2885		8.24	10.0	-17.6	20.0
1,1-Dichloroethane	Ave	0.4911	0.4542	0.2000	9.25	10.0	-7.5	20.0
di-Isopropyl ether	Ave	0.8203	0.8489		10.3	10.0	3.5	20.0
2-Chloro-1,3-butadiene	Ave	0.3990	0.3783		9.48	10.0	-5.2	20.0
Ethyl t-butyl ether	Ave	0.8282	0.7447		8.99	10.0	-10.1	20.0
2-Butanone (MEK)	Ave	4.681	5.166	0.1000	110	100	10.4	20.0
cis-1,2-Dichloroethene	Ave	0.3124	0.2776	0.1000	8.89	10.0	-11.1	20.0
2,2-Dichloropropane	Ave	0.4390	0.3799		8.65	10.0	-13.5	20.0
Propionitrile	Ave	1.221	1.339		219	200	9.7	20.0
Methacrylonitrile	Ave	5.180	5.040		97.3	100	-2.7	20.0
Bromochloromethane	Ave	0.1431	0.1193		8.33	10.0	-16.7	20.0
Tetrahydrofuran	Ave	1.422	1.376		48.4	50.0	-3.3	20.0
Chloroform	Ave	0.5101	0.4508	0.2000	8.84	10.0	-11.6	20.0
1,1,1-Trichloroethane	Ave	0.4660	0.4068	0.1000	8.73	10.0	-12.7	20.0
Cyclohexane	Ave	0.4553	0.3988	0.1000	8.76	10.0	-12.4	20.0
Carbon tetrachloride	Ave	0.4005	0.3519	0.1000	8.79	10.0	-12.1	20.0
1,1-Dichloropropene	Ave	0.3927	0.3524		8.98	10.0	-10.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-85437-1

SDG No.: _____

Lab Sample ID: CCVIS 410-261977/3 Calibration Date: 06/06/2022 10:48

Instrument ID: 10193 Calib Start Date: 02/02/2022 18:57

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 02/02/2022 21:11

Lab File ID: CU06X002.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	0.3182	0.4004		629	500	25.8*	20.0
Benzene	Ave	1.154	1.087	0.5000	9.42	10.0	-5.8	20.0
1,2-Dichloroethane	Ave	0.3147	0.2584	0.1000	8.21	10.0	-17.9	20.0
t-Amyl methyl ether	Ave	0.7685	0.6585		8.57	10.0	-14.3	20.0
n-Heptane	Ave	0.3769	0.3370		8.94	10.0	-10.6	20.0
n-Butanol	Ave	0.3075	0.3649		1040	875	18.7	20.0
Trichloroethene	Ave	0.3204	0.2832	0.2000	8.84	10.0	-11.6	20.0
Methylcyclohexane	Ave	0.5149	0.4026	0.1000	7.82	10.0	-21.8*	20.0
1,2-Dichloropropane	Ave	0.2814	0.2551	0.1000	9.06	10.0	-9.4	20.0
Methyl methacrylate	Ave	9.915	9.654		9.74	10.0	-2.6	20.0
1,4-Dioxane	Ave	0.0837	0.0896	0.0050	535	500	7.1	20.0
Dibromomethane	Ave	0.1448	0.1143		7.90	10.0	-21.0*	20.0
Bromodichloromethane	Ave	0.3568	0.2998	0.2000	8.40	10.0	-16.0	20.0
2-Nitropropane	Ave	2.872	2.874		50.0	50.0	0.0	20.0
1-Bromo-2-chloroethane	Ave	0.2900	0.2322		8.01	10.0	-19.9	20.0
cis-1,3-Dichloropropene	Ave	0.4286	0.3812	0.2000	8.89	10.0	-11.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	12.53	13.89	0.1000	111	100	10.9	20.0
Toluene	Ave	0.9383	0.8700	0.4000	9.27	10.0	-7.3	20.0
trans-1,3-Dichloropropene	Ave	0.4296	0.3901	0.1000	9.08	10.0	-9.2	20.0
Ethyl methacrylate	Ave	0.3423	0.3198		9.34	10.0	-6.6	20.0
1,1,2-Trichloroethane	Ave	0.2585	0.2226	0.1000	8.61	10.0	-13.9	20.0
Tetrachloroethene	Ave	0.4645	0.4365	0.2000	9.40	10.0	-6.0	20.0
1,3-Dichloropropane	Ave	0.4245	0.3759		8.85	10.0	-11.5	20.0
2-Hexanone	Ave	9.097	10.51	0.1000	116	100	15.5	20.0
Dibromochloromethane	Ave	0.3209	0.2837		8.84	10.0	-11.6	20.0
1,2-Dibromoethane (EDB)	Ave	0.2508	0.2138	0.1000	8.53	10.0	-14.7	20.0
1-Chlorohexane	Ave	0.5484	0.4948		9.02	10.0	-9.8	20.0
Chlorobenzene	Ave	1.113	1.054	0.5000	9.47	10.0	-5.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3818	0.3701		9.69	10.0	-3.1	20.0
Ethylbenzene	Ave	1.842	1.804	0.1000	9.79	10.0	-2.1	20.0
m&p-Xylene	Ave	0.7320	0.7091	0.1000	19.4	20.0	-3.1	20.0
o-Xylene	Ave	0.7303	0.7008	0.3000	9.60	10.0	-4.0	20.0
Styrene	Ave	1.214	1.176	0.3000	9.68	10.0	-3.2	20.0
Bromoform	Ave	0.1925	0.1665	0.1000	8.65	10.0	-13.5	20.0
Isopropylbenzene	Ave	1.895	1.811	0.1000	9.56	10.0	-4.4	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5432	0.4754	0.3000	8.75	10.0	-12.5	20.0
Bromobenzene	Ave	0.8331	0.7749		9.30	10.0	-7.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1406	0.0614		43.7	100	-56.3*	20.0
1,2,3-Trichloropropane	Ave	0.1529	0.1270		8.31	10.0	-16.9	20.0
N-Propylbenzene	Ave	3.805	3.626		9.53	10.0	-4.7	20.0
2-Chlorotoluene	Ave	0.8285	0.7727		9.33	10.0	-6.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-85437-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-261977/3 Calibration Date: 06/06/2022 10:48
 Instrument ID: 10193 Calib Start Date: 02/02/2022 18:57
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 02/02/2022 21:11
 Lab File ID: CU06X002.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	2.825	2.660		9.42	10.0	-5.8	20.0
4-Chlorotoluene	Ave	0.8479	0.8130		9.59	10.0	-4.1	20.0
tert-Butylbenzene	Ave	0.6520	0.5905		9.06	10.0	-9.4	20.0
Pentachloroethane	Ave	0.4944	0.4973		10.1	10.0	0.6	20.0
1,2,4-Trimethylbenzene	Ave	2.920	2.749		9.41	10.0	-5.9	20.0
sec-Butylbenzene	Ave	3.560	3.279		9.21	10.0	-7.9	20.0
1,3-Dichlorobenzene	Ave	1.703	1.597	0.6000	9.37	10.0	-6.3	20.0
p-Isopropyltoluene	Ave	3.197	3.011		9.42	10.0	-5.8	20.0
1,4-Dichlorobenzene	Ave	1.749	1.617	0.5000	9.24	10.0	-7.6	20.0
1,2,3-Trimethylbenzene	Ave	1.321	1.213		9.18	10.0	-8.2	20.0
Benzyl chloride	Ave	0.2272	0.2161		9.51	10.0	-4.9	20.0
n-Butylbenzene	Ave	1.595	1.477		9.26	10.0	-7.4	20.0
1,2-Dichlorobenzene	Ave	1.589	1.410	0.4000	8.87	10.0	-11.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0829	0.0699	0.0500	8.43	10.0	-15.7	20.0
1,3,5-Trichlorobenzene	Ave	1.438	1.370		9.53	10.0	-4.7	20.0
1,2,4-Trichlorobenzene	Ave	1.215	1.109	0.2000	9.13	10.0	-8.7	20.0
Hexachlorobutadiene	Ave	0.6435	0.6014		9.35	10.0	-6.5	20.0
Naphthalene	Ave	1.816	1.472		8.11	10.0	-18.9	20.0
1,2,3-Trichlorobenzene	Ave	0.9902	0.8507		8.59	10.0	-14.1	20.0
Dibromofluoromethane (Surr)	Ave	0.2489	0.2388		9.59	10.0	-4.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0479	0.0445		9.29	10.0	-7.1	20.0
Toluene-d8 (Surr)	Ave	1.232	1.242		10.1	10.0	0.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4907	0.4808		9.80	10.0	-2.0	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X002.D
 Lims ID: CCVIS VSTD10
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 06-Jun-2022 10:48:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-003
 Misc. Info.: CCVIS VSTD10
 Operator ID: knk41612 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 12:04:03 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1632

First Level Reviewer: kephartk

Date: 06-Jun-2022 11:17:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.788	1.788	0.000	99	367340	10.0	6.00	
3 Chloromethane	50	1.959	1.959	0.000	99	645523	10.0	9.68	
5 Vinyl chloride	62	2.069	2.069	0.000	97	585629	10.0	8.27	
4 Butadiene	39	2.069	2.069	0.000	95	1211613	10.0	18.8	
6 Bromomethane	94	2.355	2.355	0.000	91	400224	10.0	7.41	
7 Chloroethane	64	2.434	2.434	0.000	100	346121	10.0	8.29	
8 Dichlorofluoromethane	67	2.648	2.648	0.000	97	830973	10.0	8.11	
9 Trichlorofluoromethane	101	2.654	2.654	0.000	98	662018	10.0	6.59	
225 Pentane	43	2.733	2.733	0.000	96	634254	10.0	8.88	
11 Ethyl ether	59	2.922	2.922	0.000	95	387104	10.0	10.5	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.001	3.001	0.000	95	546154	10.0	8.10	
13 Acrolein	56	3.074	3.074	0.000	99	2506791	500.0	530.8	
14 1,1-Dichloroethene	96	3.196	3.196	0.000	98	416166	10.0	8.37	
16 Acetone	43	3.227	3.227	0.000	99	440693	100.0	83.3	
15 112TCTFE	101	3.239	3.239	0.000	89	376633	10.0	7.55	
17 Iodomethane	142	3.367	3.367	0.000	97	770813	10.0	8.28	
18 Isopropyl alcohol	45	3.385	3.385	0.000	39	264981	200.0	225.9	
19 Ethyl bromide	108	3.398	3.398	0.000	98	391304	10.0	8.41	
20 Carbon disulfide	76	3.459	3.459	0.000	99	1236864	10.0	8.61	
22 Methyl acetate	43	3.599	3.599	0.000	97	155670	10.0	10.9	M
23 3-Chloro-1-propene	41	3.623	3.623	0.000	91	666092	10.0	8.98	
24 Methylene Chloride	84	3.794	3.794	0.000	92	437067	10.0	8.19	
* 25 t-Butyl alcohol-d10 (IS)	65	3.812	3.812	0.000	43	115636	50.0	50.0	M
26 2-Methyl-2-propanol	59	3.928	3.928	0.000	98	451043	200.0	200.7	
27 Acrylonitrile	53	4.105	4.105	0.000	98	190625	25.0	25.1	
28 Methyl tert-butyl ether	73	4.154	4.154	0.000	91	1092454	10.0	8.03	
29 trans-1,2-Dichloroethene	96	4.160	4.160	0.000	100	484706	10.0	8.50	
30 Hexane	57	4.580	4.580	0.000	96	573473	10.0	8.24	
32 1,1-Dichloroethane	63	4.824	4.824	0.000	96	902835	10.0	9.25	
33 Isopropyl ether	45	4.885	4.885	0.000	95	1687343	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
34 2-Chloro-1,3-butadiene	53	4.934	4.934	0.000	91	752003	10.0	9.48	
35 Tert-butyl ethyl ether	59	5.428	5.428	0.000	98	1480199	10.0	8.99	
36 2-Butanone (MEK)	43	5.641	5.641	0.000	100	1194752	100.0	110.4	
37 cis-1,2-Dichloroethene	96	5.672	5.672	0.000	82	551798	10.0	8.89	
38 2,2-Dichloropropane	77	5.678	5.678	0.000	89	755061	10.0	8.65	
40 Propionitrile	54	5.732	5.732	0.000	99	619119	200.0	219.3	
43 Methacrylonitrile	67	5.952	5.952	0.000	93	1165635	100.0	97.3	
44 Chlorobromomethane	128	6.007	6.007	0.000	94	237102	10.0	8.33	
45 Tetrahydrofuran	71	6.013	6.013	0.000	93	159086	50.0	48.4	
46 Chloroform	83	6.165	6.165	0.000	93	895981	10.0	8.84	
48 1,1,1-Trichloroethane	97	6.385	6.385	0.000	98	808534	10.0	8.73	
\$ 47 Dibromofluoromethane (Surr)	113	6.385	6.385	0.000	90	474617	10.0	9.59	
49 Cyclohexane	56	6.476	6.476	0.000	92	792787	10.0	8.76	
50 Carbon tetrachloride	117	6.598	6.598	0.000	97	699549	10.0	8.79	
51 1,1-Dichloropropene	75	6.604	6.604	0.000	94	700561	10.0	8.98	
52 Isobutyl alcohol	41	6.799	6.799	0.000	93	462980	500.0	629.2	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.848	6.848	0.000	92	88452	10.0	9.29	
54 Benzene	78	6.873	6.873	0.000	97	2160136	10.0	9.42	
55 1,2-Dichloroethane	62	6.946	6.946	0.000	97	513657	10.0	8.21	
56 Tert-amyl methyl ether	73	7.074	7.074	0.000	98	1308906	10.0	8.57	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1987693	10.0	10.0	
58 n-Heptane	43	7.299	7.299	0.000	93	669899	10.0	8.94	
59 n-Butanol	56	7.702	7.702	0.000	91	738435	875.0	1038.4	
60 Trichloroethene	95	7.769	7.769	0.000	96	562825	10.0	8.84	
61 Methylcyclohexane	83	8.080	8.080	0.000	92	800302	10.0	7.82	
62 1,2-Dichloropropane	63	8.110	8.110	0.000	97	507048	10.0	9.06	
63 2-ethoxy-2-methyl butane	87	8.128	8.128	0.000	92	738622	10.0	8.17	
64 Methyl methacrylate	69	8.208	8.208	0.000	92	223275	10.0	9.74	
65 1,4-Dioxane	88	8.214	8.214	0.000	35	103582	500.0	535.4	
66 Dibromomethane	93	8.220	8.220	0.000	92	227281	10.0	7.90	
67 Dichlorobromomethane	83	8.470	8.470	0.000	99	595915	10.0	8.40	
68 2-Nitropropane	41	8.756	8.756	0.000	99	332285	50.0	50.0	
71 1-Bromo-2-chloroethane	63	8.860	8.860	0.000	98	461543	10.0	8.01	
72 cis-1,3-Dichloropropene	75	9.037	9.037	0.000	95	757767	10.0	8.89	
73 4-Methyl-2-pentanone (MIBK)	43	9.238	9.238	0.000	97	3213226	100.0	110.9	
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1990036	10.0	10.1	
75 Toluene	92	9.445	9.445	0.000	98	1394319	10.0	9.27	
76 trans-1,3-Dichloropropene	75	9.732	9.732	0.000	94	625197	10.0	9.08	
78 Ethyl methacrylate	69	9.811	9.811	0.000	90	512477	10.0	9.34	
79 1,1,2-Trichloroethane	97	9.945	9.945	0.000	90	356718	10.0	8.61	
80 Tetrachloroethene	166	10.030	10.030	0.000	98	699542	10.0	9.40	
81 1,3-Dichloropropane	76	10.116	10.116	0.000	92	602400	10.0	8.85	
82 2-Hexanone	43	10.183	10.183	0.000	97	2431026	100.0	115.5	
83 Chlorodibromomethane	129	10.335	10.335	0.000	90	454630	10.0	8.84	
84 Ethylene Dibromide	107	10.445	10.445	0.000	100	342656	10.0	8.53	
* 85 Chlorobenzene-d5 (IS)	117	10.902	10.902	0.000	85	1602682	10.0	10.0	
86 1-Chlorohexane	91	10.914	10.914	0.000	98	793022	10.0	9.02	
87 Chlorobenzene	112	10.927	10.927	0.000	95	1689369	10.0	9.47	
89 1,1,1,2-Tetrachloroethane	131	11.012	11.012	0.000	95	593121	10.0	9.69	
90 Ethylbenzene	91	11.018	11.018	0.000	98	2890606	10.0	9.79	
91 m-Xylene & p-Xylene	106	11.140	11.140	0.000	99	2272981	20.0	19.4	
92 o-Xylene	106	11.475	11.475	0.000	97	1123156	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
93 Styrene	104	11.494	11.494	0.000	95	1884314	10.0	9.68	
94 Bromoform	173	11.652	11.652	0.000	98	266777	10.0	8.65	
95 Isopropylbenzene	105	11.786	11.786	0.000	96	2902616	10.0	9.56	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	96	770618	10.0	9.80	
99 1,1,2,2-Tetrachloroethane	83	12.048	12.048	0.000	68	460372	10.0	8.75	
100 Bromobenzene	156	12.048	12.048	0.000	89	750375	10.0	9.30	
101 trans-1,4-Dichloro-2-butene	53	12.073	12.073	0.000	92	594434	100.0	43.7	
102 1,2,3-Trichloropropane	110	12.091	12.091	0.000	83	123019	10.0	8.31	
103 N-Propylbenzene	91	12.121	12.121	0.000	99	3510893	10.0	9.53	
104 2-Chlorotoluene	126	12.201	12.201	0.000	97	748250	10.0	9.33	
105 1,3,5-Trimethylbenzene	105	12.268	12.268	0.000	94	2575741	10.0	9.42	
106 4-Chlorotoluene	126	12.292	12.292	0.000	97	787248	10.0	9.59	
107 tert-Butylbenzene	134	12.512	12.512	0.000	93	571826	10.0	9.06	
108 Pentachloroethane	167	12.542	12.542	0.000	93	481513	10.0	10.1	
109 1,2,4-Trimethylbenzene	105	12.554	12.554	0.000	97	2661783	10.0	9.41	
110 sec-Butylbenzene	105	12.676	12.676	0.000	94	3174885	10.0	9.21	
111 1,3-Dichlorobenzene	146	12.774	12.774	0.000	99	1545981	10.0	9.37	
112 4-Isopropyltoluene	119	12.786	12.786	0.000	97	2915610	10.0	9.42	
* 113 1,4-Dichlorobenzene-d4	152	12.829	12.829	0.000	94	968319	10.0	10.0	
114 1,4-Dichlorobenzene	146	12.847	12.847	0.000	96	1565565	10.0	9.24	
115 1,2,3-Trimethylbenzene	120	12.865	12.865	0.000	98	1174419	10.0	9.18	
116 Benzyl chloride	126	12.932	12.932	0.000	98	209277	10.0	9.51	
119 n-Butylbenzene	92	13.085	13.085	0.000	97	1430507	10.0	9.26	
120 1,2-Dichlorobenzene	146	13.115	13.115	0.000	99	1364875	10.0	8.87	
118 p-Diethylbenzene	119	13.140	13.140	0.000	86	1457147	10.0	9.13	
123 1,2-Dibromo-3-Chloropropane	155	13.664	13.664	0.000	90	67654	10.0	8.43	
124 1,3,5-Trichlorobenzene	180	13.792	13.792	0.000	98	1326206	10.0	9.53	
125 1,2,4-Trichlorobenzene	180	14.219	14.219	0.000	94	1074141	10.0	9.13	
126 Hexachlorobutadiene	225	14.304	14.304	0.000	95	582343	10.0	9.35	
127 Naphthalene	128	14.402	14.402	0.000	97	1425653	10.0	8.11	
128 1,2,3-Trichlorobenzene	180	14.548	14.548	0.000	95	823759	10.0	8.59	
129 2-Methylnaphthalene	142	15.151	15.151	0.000	92	679006	10.0	7.56	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00046

Amount Added: 20.00

Units: uL

MSV_LL_GAS826_00091

Amount Added: 20.00

Units: uL

MSV_LL_#2_826_00050

Amount Added: 20.00

Units: uL

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X002.D

Injection Date: 06-Jun-2022 10:48:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: CCVIS VSTD10

Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 2

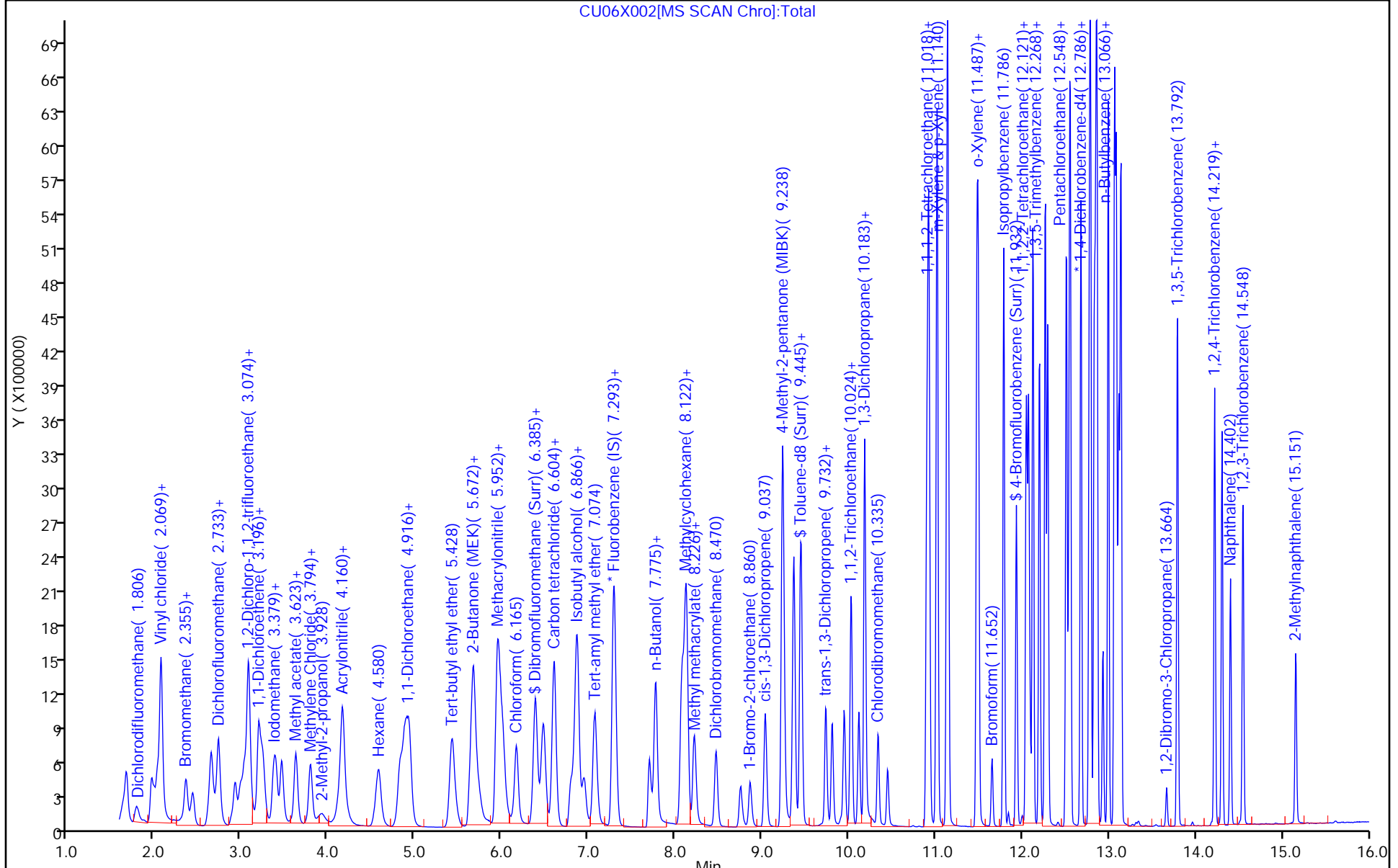
Method: MSV_10193_25mL

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

CU06X002[MS SCAN Chro]:Total



Eurofins Lancaster Laboratories Environment Testing, LLC

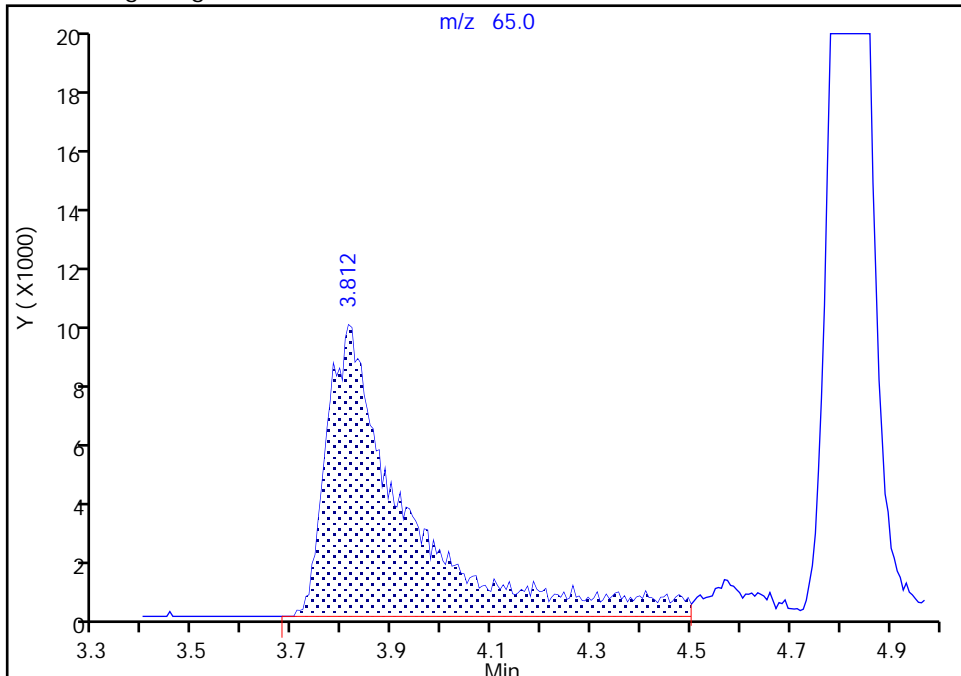
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X002.D
Injection Date: 06-Jun-2022 10:48:30 Instrument ID: 10193
Lims ID: CCVIS VSTD10
Client ID:
Operator ID: knk41612 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 25 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

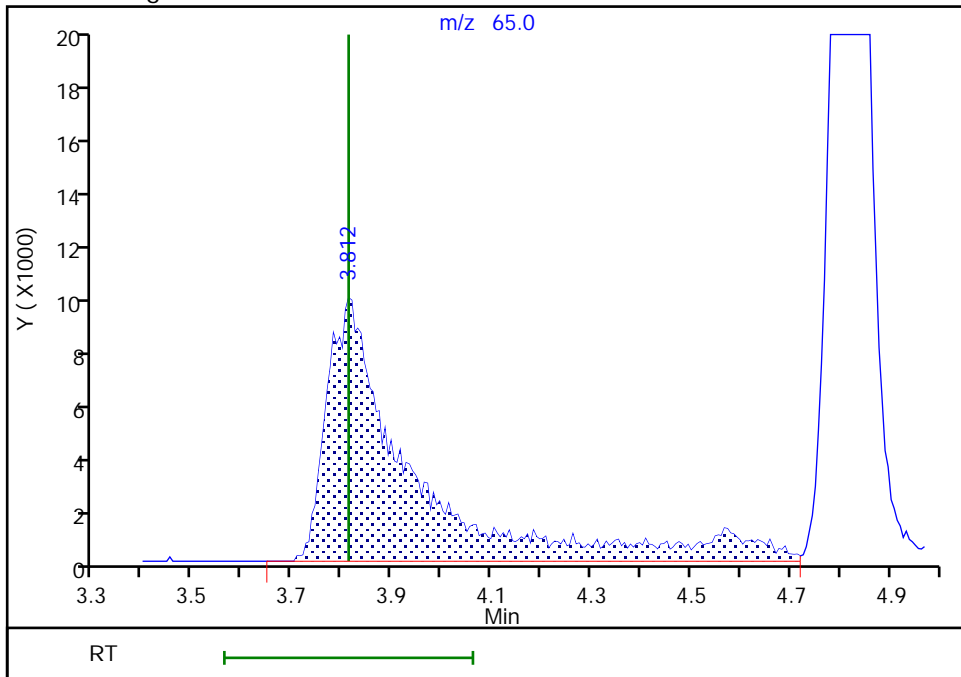
RT: 3.81
Area: 106835
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 3.81
Area: 115636
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Eurofins Lancaster Laboratories Environment Testing, LLC

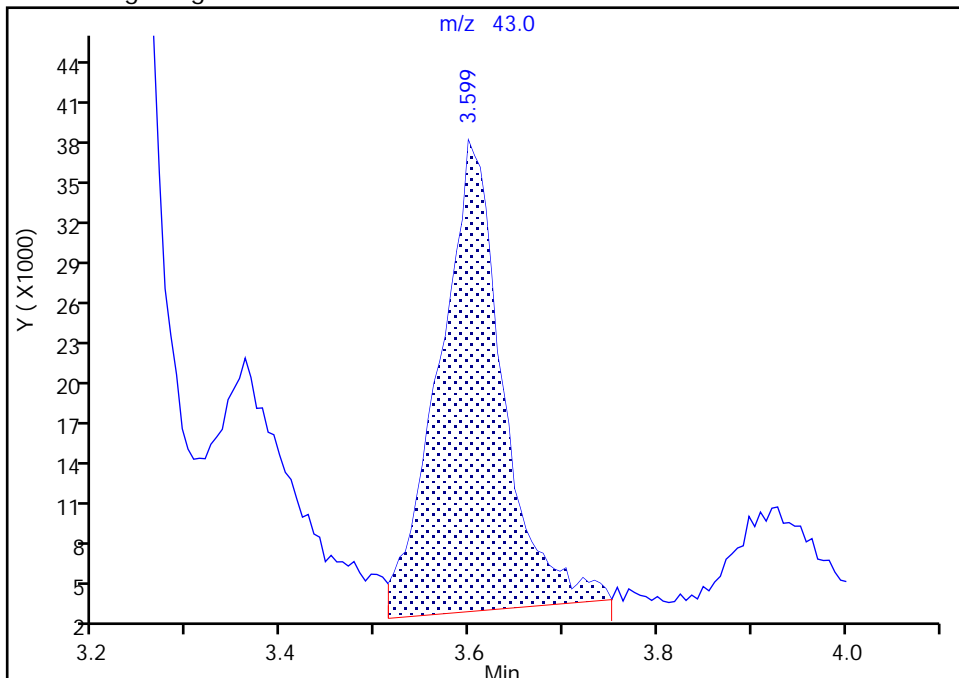
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X002.D
Injection Date: 06-Jun-2022 10:48:30 Instrument ID: 10193
Lims ID: CCVIS VSTD10
Client ID:
Operator ID: knk41612 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Methyl acetate, CAS: 79-20-9

Signal: 1

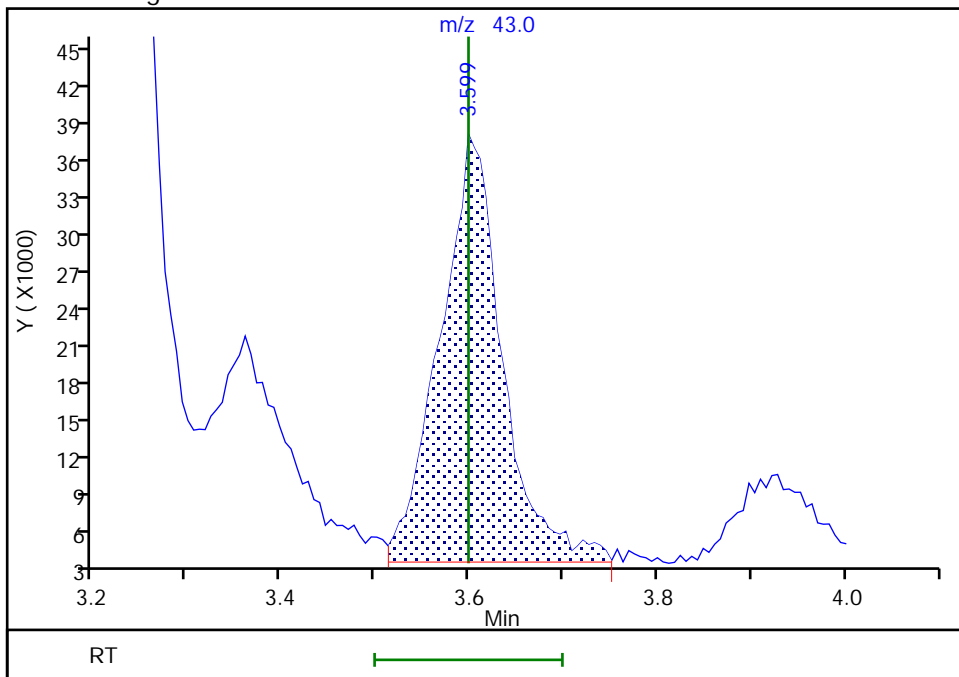
RT: 3.60
Area: 164002
Amount: 12.419053
Amount Units: ug/l

Processing Integration Results



RT: 3.60
Area: 155670
Amount: 10.890924
Amount Units: ug/l

Manual Integration Results



Reviewer: kephartk, 06-Jun-2022 11:12:15
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02T01.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 02-Feb-2022 14:37:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 410-0049623-001
 Misc. Info.: BFB
 Operator ID: jml01693 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 07-Feb-2022 14:45:07 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1608

First Level Reviewer: longj Date: 02-Feb-2022 14:49:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------

\$ 165 BFB	95	5.008	5.008	0.000	0	179163	NR	NR	
------------	----	-------	-------	-------	---	--------	----	----	--

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

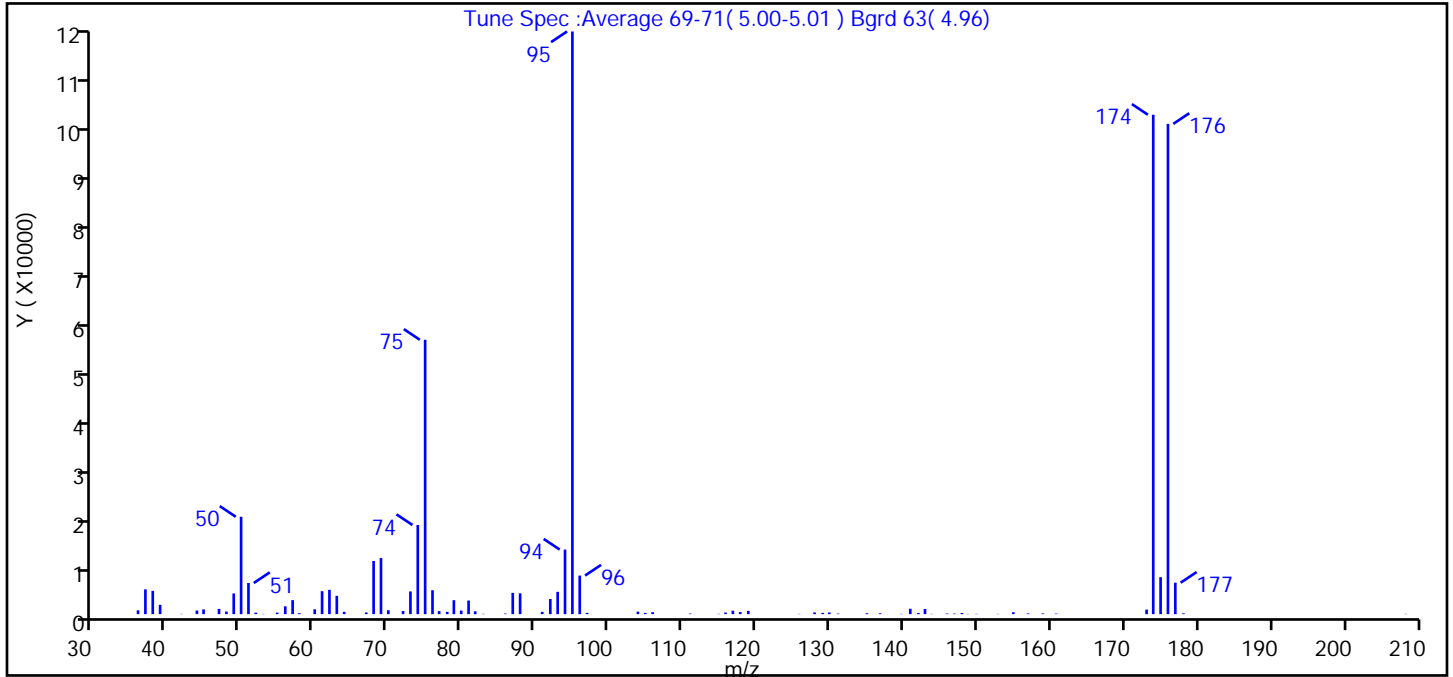
Reagents:

MSV_V_BFB_00007 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02T01.D
 Injection Date: 02-Feb-2022 14:37:30 Instrument ID: 10193
 Lims ID: BFB
 Client ID:
 Operator ID: jml01693 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: MSV_10193_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	16.7
75	30 to 60% of m/z 95	47.1
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.8 (0.9)
174	50 to 120% of m/z 95	85.7
175	5 to 9% of m/z 174	6.3 (7.4)
176	Greater than 95% but less than 101% of m/z 174	84.1 (98.2)
177	5 to 9% of m/z 176	5.4 (6.4)

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02T01.D\MSV_10193_25mL.rslt\spectra.d
 Injection Date: 02-Feb-2022 14:37:30
 Spectrum: Tune Spec :Average 69-71(5.00-5.01) Bgrd 63(4.96)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 87

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	757	64.00	463	93.00	4406	141.00	1063
37.00	4900	67.00	341	94.00	12757	142.00	240
38.00	4599	68.00	10501	95.00	115136	143.00	1011
39.00	1841	69.00	11090	96.00	7625	144.00	52
42.00	59	70.00	775	97.00	249	146.00	117
44.00	721	72.00	611	104.00	495	147.00	111
45.00	940	73.00	4487	105.00	248	148.00	223
47.00	1041	74.00	17616	106.00	396	149.00	51
48.00	514	75.00	54216	111.00	114	150.00	56
49.00	4090	76.00	4723	115.00	67	153.00	52
50.00	19240	77.00	599	116.00	325	155.00	366
51.00	6154	78.00	461	117.00	676	157.00	145
52.00	305	79.00	2757	118.00	416	159.00	141
53.00	51	80.00	707	119.00	646	161.00	104
55.00	304	81.00	2689	126.00	55	173.00	901
56.00	1548	82.00	564	128.00	340	174.00	98680
57.00	2767	83.00	69	129.00	252	175.00	7307
58.00	195	86.00	118	130.00	330	176.00	96880
60.00	964	87.00	4210	131.00	114	177.00	6211
61.00	4540	88.00	4112	135.00	187	178.00	162
62.00	4809	91.00	447	137.00	167	208.00	58
63.00	3619	92.00	2991	140.00	59		

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02T01.D

Injection Date: 02-Feb-2022 14:37:30

Instrument ID: 10193

Operator ID: jml01693

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

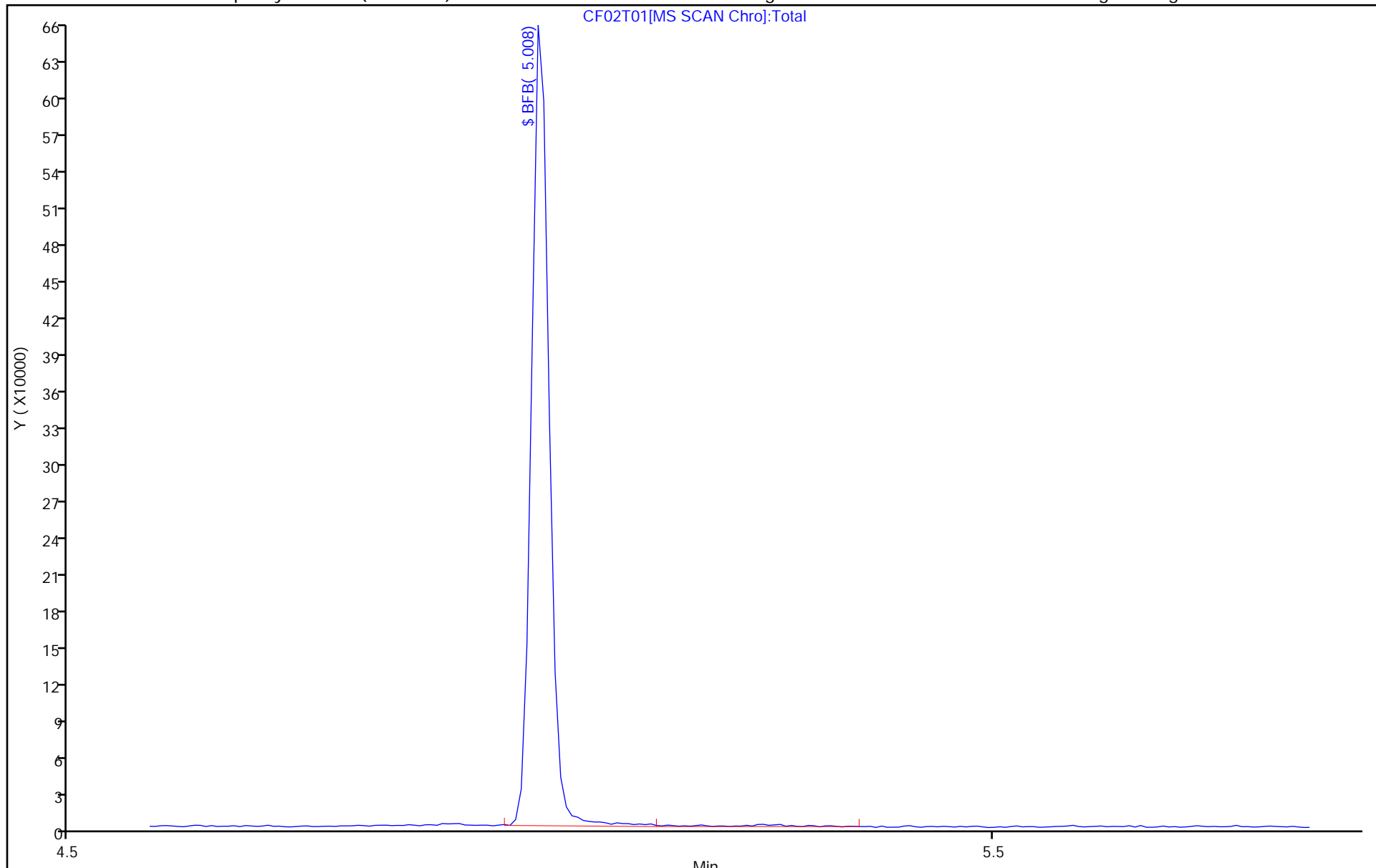
ALS Bottle#: 1

Method: MSV_10193_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\10193\20220603-58749.b\CU06T001.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 06-Jun-2022 10:13:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 410-0058749-001
 Misc. Info.: BFB
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 12:04:17 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1632

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 165 BFB	95	5.001	5.001	0.000	0	140439	NR	NR	

QC Flag Legend

Processing Flags
 NR - Missing Quant Standard

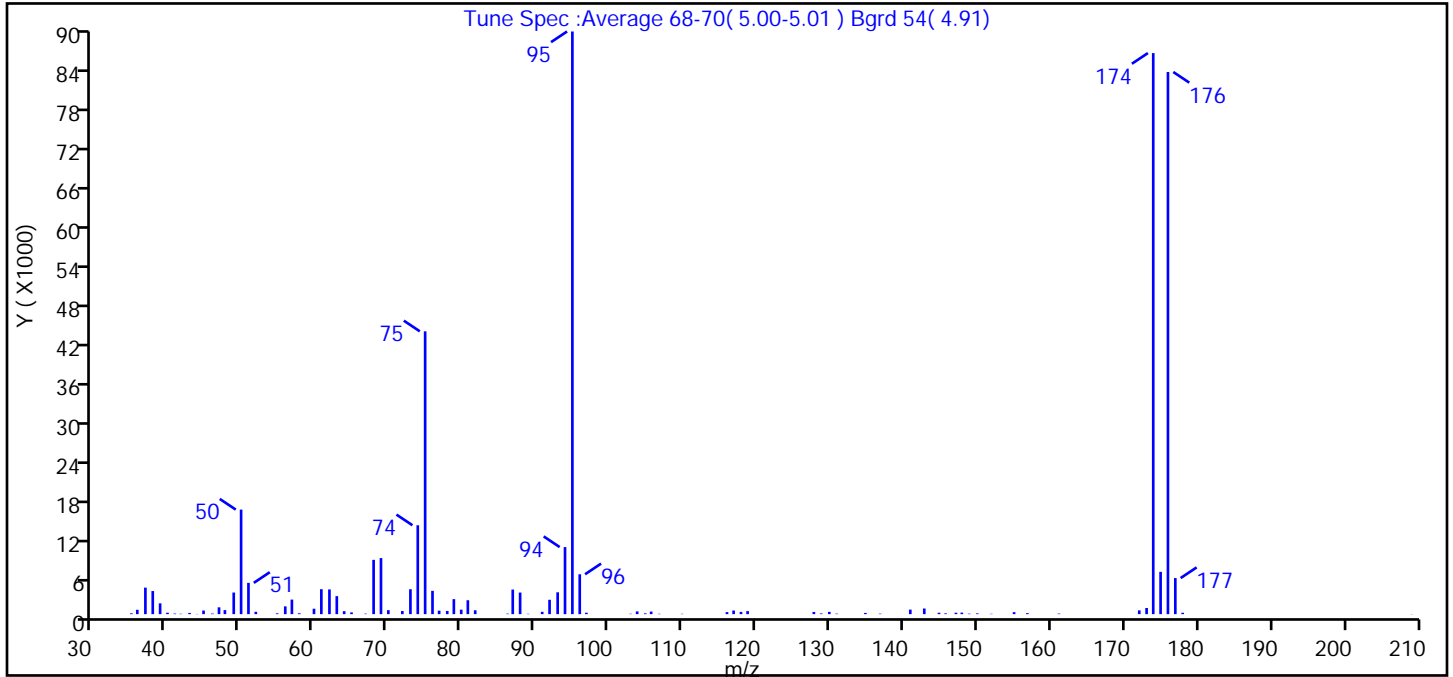
Reagents:

MSV_V_BFB_00007 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06T001.D
 Injection Date: 06-Jun-2022 10:13:30 Instrument ID: 10193
 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_10193_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	17.9
75	30 to 60% of m/z 95	48.5
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	1.1 (1.1)
174	50 to 120% of m/z 95	96.3
175	5 to 9% of m/z 174	7.3 (7.5)
176	Greater than 95% but less than 101% of m/z 174	93.0 (96.6)
177	5 to 9% of m/z 176	6.2 (6.7)

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06T001.D\MSV_10193_25mL.rsl\spectra.d
Injection Date: 06-Jun-2022 10:13:30
Spectrum: Tune Spec :Average 68-70(5.00-5.01) Bgrd 54(4.91)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 90

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	127	61.00	3843	89.00	51	137.00	74
36.00	672	62.00	3807	91.00	358	141.00	700
37.00	4086	63.00	2775	92.00	2211	143.00	870
38.00	3558	64.00	456	93.00	3364	145.00	218
39.00	1663	65.00	270	94.00	10329	146.00	119
40.00	218	67.00	73	95.00	89744	147.00	222
41.00	90	68.00	8363	96.00	6142	148.00	238
42.00	60	69.00	8633	97.00	218	149.00	74
43.00	188	70.00	615	103.00	57	150.00	117
44.00	27	72.00	479	104.00	424	152.00	54
45.00	556	73.00	3837	105.00	126	155.00	307
46.00	94	74.00	13691	106.00	398	157.00	155
47.00	1050	75.00	43560	107.00	56	161.00	84
48.00	623	76.00	3589	110.00	53	172.00	583
49.00	3328	77.00	536	116.00	315	173.00	947
50.00	16101	78.00	488	117.00	557	174.00	86416
51.00	4817	79.00	2312	118.00	342	175.00	6516
52.00	361	80.00	690	119.00	463	176.00	83504
55.00	127	81.00	2144	128.00	336	177.00	5559
56.00	1199	82.00	596	129.00	107	178.00	214
57.00	2241	86.00	78	130.00	347	209.00	26
58.00	134	87.00	3786	131.00	75		
60.00	836	88.00	3329	135.00	188		

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06T001.D

Injection Date: 06-Jun-2022 10:13:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

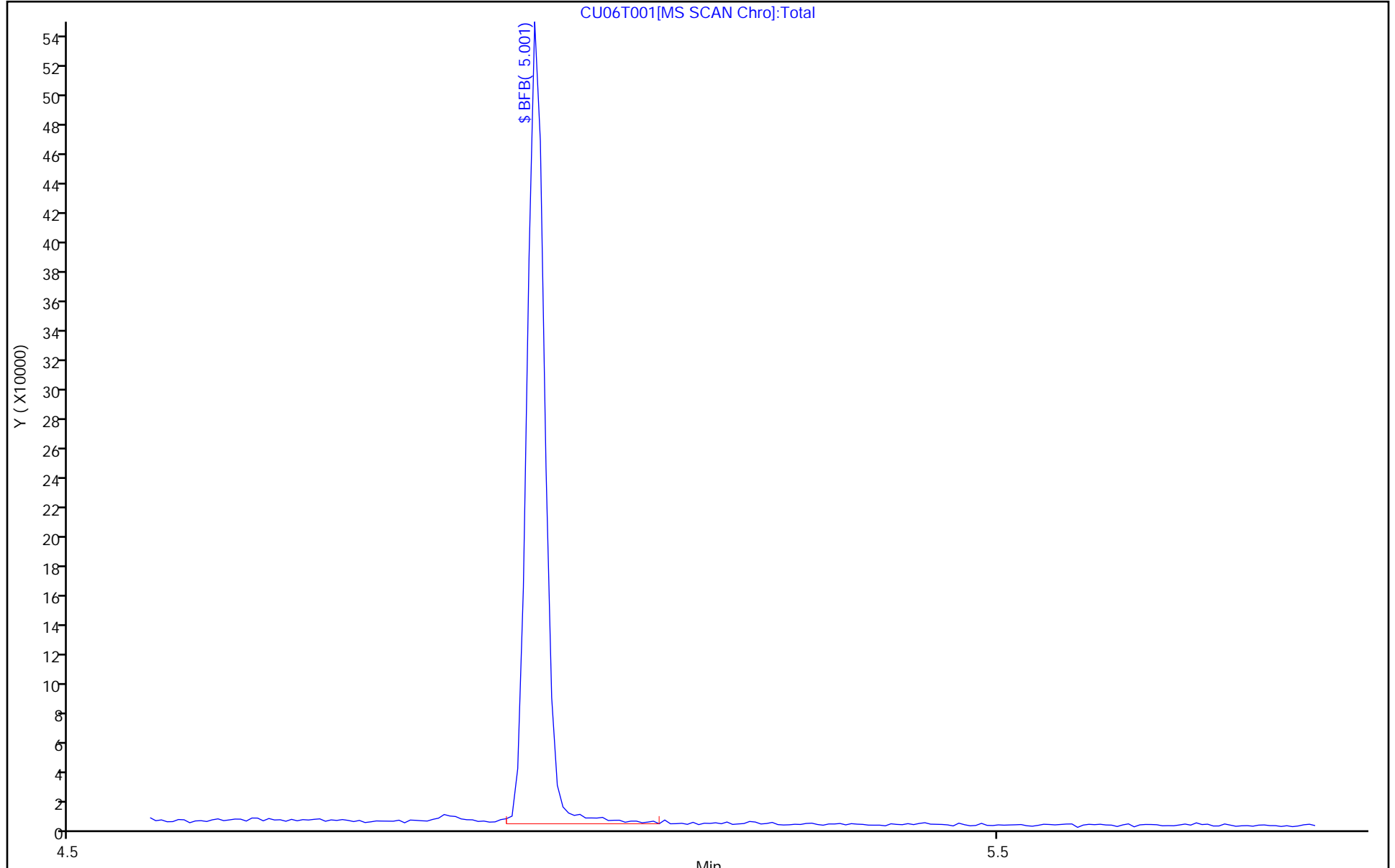
ALS Bottle#: 1

Method: MSV_10193_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.: 410-85437-1

SDG No.:

Client Sample ID:

Lab Sample ID: MB 410-261977/7

Matrix: Water

Lab File ID: CU06X006.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 12:17

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.: 261977

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	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-85437-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 410-261977/7

Matrix: Water Lab File ID: CU06X006.D

Analysis Method: 8260D Date Collected: _____

Sample wt/vol: 25 (mL) Date Analyzed: 06/06/2022 12:17

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.: 261977 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	102		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X006.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 06-Jun-2022 12:17:30 ALS Bottle#: 6 Worklist Smp#: 7
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-007
 Misc. Info.: MB
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 12:43:36 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1632

First Level Reviewer: kephartk Date: 06-Jun-2022 12:43:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
149 Chlorotrifluoroethene	116		1.764					ND	
2 Dichlorodifluoromethane	85		1.788					ND	
1 Chlorodifluoromethane	51		1.819					ND	7
140 Dimethyl ether	45		1.873					ND	7
3 Chloromethane	50		1.959					ND	7
5 Vinyl chloride	62		2.069					ND	
4 Butadiene	39		2.069					ND	7
155 2-Chloro-1,1,1-Trifluoroethane	118		2.172					ND	
6 Bromomethane	94		2.355					ND	7
7 Chloroethane	64		2.434					ND	
8 Dichlorofluoromethane	67		2.648					ND	7
9 Trichlorofluoromethane	101		2.654					ND	
225 Pentane	43		2.733					ND	U
11 Ethyl ether	59		2.922					ND	
12 1,2-Dichloro-1,1,2-trifluoroethane	67		3.001					ND	7
13 Acrolein	56		3.074					ND	7
14 1,1-Dichloroethene	96		3.196					ND	7
16 Acetone	43	3.245	3.227	0.018	52	4440		0.7947	
15 112TCTFE	101		3.239					ND	
17 Iodomethane	142		3.367					ND	
18 Isopropyl alcohol	45		3.385					ND	
19 Ethyl bromide	108		3.398					ND	
20 Carbon disulfide	76		3.459					ND	7
22 Methyl acetate	43		3.599					ND	7
21 Acetonitrile	41		3.611					ND	
23 3-Chloro-1-propene	41		3.623					ND	
24 Methylene Chloride	84		3.794					ND	
* 25 t-Butyl alcohol-d10 (IS)	65	3.818	3.812	0.006	89	122180	50.0	50.0	
26 2-Methyl-2-propanol	59		3.928					ND	
27 Acrylonitrile	53		4.105					ND	
28 Methyl tert-butyl ether	73		4.154					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
29 trans-1,2-Dichloroethene	96		4.160					ND	
30 Hexane	57		4.580					ND	7
32 1,1-Dichloroethane	63		4.824					ND	
31 Vinyl acetate	43		4.830					ND	
33 Isopropyl ether	45		4.885					ND	
34 2-Chloro-1,3-butadiene	53		4.934					ND	
35 Tert-butyl ethyl ether	59		5.428					ND	7
36 2-Butanone (MEK)	43		5.641					ND	
37 cis-1,2-Dichloroethene	96		5.672					ND	
38 2,2-Dichloropropane	77		5.678					ND	7
39 Ethyl acetate	43		5.726					ND	7
40 Propionitrile	54		5.732					ND	
43 Methacrylonitrile	67		5.952					ND	
44 Chlorobromomethane	128		6.007					ND	
41 Methyl acrylate	55		6.013					ND	
45 Tetrahydrofuran	71		6.013					ND	
S 42 1,2-Dichloroethene, Total	100		6.155					ND	7
46 Chloroform	83		6.165					ND	
48 1,1,1-Trichloroethane	97		6.385					ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.385	6.385	0.000	94	455685	10.0	9.43	
49 Cyclohexane	56		6.476					ND	
50 Carbon tetrachloride	117		6.598					ND	
51 1,1-Dichloropropene	75		6.604					ND	
145 1-Chlorobutane	56		6.781					ND	
52 Isobutyl alcohol	41		6.799					ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.842	6.848	-0.006	49	86802	10.0	9.33	
54 Benzene	78		6.873					ND	7
55 1,2-Dichloroethane	62		6.946					ND	
152 Isopropyl acetate	43		6.982					ND	
56 Tert-amyl methyl ether	73		7.074					ND	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1941187	10.0	10.0	
58 n-Heptane	43		7.299					ND	7
59 n-Butanol	56		7.702					ND	
60 Trichloroethene	95		7.769					ND	
61 Methylcyclohexane	83		8.080					ND	
62 1,2-Dichloropropane	63		8.110					ND	
63 2-ethoxy-2-methyl butane	87		8.128					ND	
64 Methyl methacrylate	69		8.208					ND	
65 1,4-Dioxane	88		8.214					ND	
66 Dibromomethane	93		8.220					ND	
160 n-Propyl acetate	61		8.311					ND	
67 Dichlorobromomethane	83		8.470					ND	
68 2-Nitropropane	41		8.756					ND	
69 2-Chloroethyl vinyl ether	63		8.860					ND	
71 1-Bromo-2-chloroethane	63		8.860					ND	
72 cis-1,3-Dichloropropene	75		9.037					ND	
70 Chloroacetonitrile	75		9.067					ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.238					ND	7
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1940936	10.0	10.2	
75 Toluene	92		9.445					ND	7
76 trans-1,3-Dichloropropene	75		9.732					ND	7
78 Ethyl methacrylate	69		9.811					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
79 1,1,2-Trichloroethane	97		9.945					ND	
80 Tetrachloroethene	166		10.030					ND	
S 77 1,3-Dichloropropene, Total	100		10.060					ND	7
81 1,3-Dichloropropane	76		10.116					ND	
82 2-Hexanone	43		10.183					ND	7
161 n-Butyl acetate	43		10.317					ND	
83 Chlorodibromomethane	129		10.335					ND	
84 Ethylene Dibromide	107		10.445					ND	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	85	1551051	10.0	10.0	
86 1-Chlorohexane	91		10.914					ND	7
87 Chlorobenzene	112		10.927					ND	
89 1,1,1,2-Tetrachloroethane	131		11.012					ND	
90 Ethylbenzene	91		11.018					ND	
91 m-Xylene & p-Xylene	106		11.140					ND	7
S 88 Xylenes, Total	106		11.245					ND	7
92 o-Xylene	106		11.475					ND	
93 Styrene	104		11.494					ND	
94 Bromoform	173		11.652					ND	
95 Isopropylbenzene	105		11.786					ND	
96 cis-1,4-Dichloro-2-butene	88		11.847					ND	
97 Cyclohexanone	55		11.871					ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	96	706769	10.0	9.29	
99 1,1,2,2-Tetrachloroethane	83		12.048					ND	
100 Bromobenzene	156		12.048					ND	
101 trans-1,4-Dichloro-2-butene	53		12.073					ND	
102 1,2,3-Trichloropropane	110		12.091					ND	
103 N-Propylbenzene	91		12.121					ND	
104 2-Chlorotoluene	126		12.201					ND	
105 1,3,5-Trimethylbenzene	105		12.268					ND	
106 4-Chlorotoluene	126		12.292					ND	
107 tert-Butylbenzene	134		12.512					ND	
108 Pentachloroethane	167		12.542					ND	
109 1,2,4-Trimethylbenzene	105		12.554					ND	
110 sec-Butylbenzene	105		12.676					ND	
111 1,3-Dichlorobenzene	146		12.774					ND	
112 4-Isopropyltoluene	119		12.786					ND	7
* 113 1,4-Dichlorobenzene-d4	152	12.828	12.829	-0.001	93	899243	10.0	10.0	
114 1,4-Dichlorobenzene	146		12.847					ND	7
115 1,2,3-Trimethylbenzene	120		12.865					ND	7
116 Benzyl chloride	126		12.932					ND	
119 n-Butylbenzene	92		13.085					ND	7
120 1,2-Dichlorobenzene	146		13.115					ND	7
118 p-Diethylbenzene	119		13.140					ND	U
122 Hexachloroethane	117		13.444					ND	
123 1,2-Dibromo-3-Chloropropane	155		13.664					ND	
124 1,3,5-Trichlorobenzene	180		13.792					ND	7
125 1,2,4-Trichlorobenzene	180		14.219					ND	7
126 Hexachlorobutadiene	225		14.304					ND	7
127 Naphthalene	128		14.402					ND	7
128 1,2,3-Trichlorobenzene	180		14.548					ND	7
129 2-Methylnaphthalene	142	15.163	15.151	0.012	89	3820		0.0458	
130 Dodecane	57		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
138 n-Decane	57		0.000					ND	
220 Acetonitrile TIC	1		0.000					ND	
162 Ethanol	45		0.000					ND	
158 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
157 t-Amyl alcohol	1		0.000					ND	
151 Propene oxide	1		0.000					ND	
221 Isopropyl alcohol TIC	1		0.000					ND	
142 1-Bromo-3-Chloropropane	1		0.000					ND	
136 Methylal	1		0.000					ND	
226 1,1-Dichloroacetone	1		0.000					ND	
133 1-Chloropropane	1		0.000					ND	
131 2-Bromo-1-chloropropane	1		0.000					ND	
159 tert-Butyl Formate	1		0.000					ND	
222 Vinyl acetate (TIC)	1		0.000					ND	
223 1,3-Dichloro-2-propanol TIC	1		0.000					ND	
224 Propargyl alcohol TIC	1		0.000					ND	
227 Pentachloroethane TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00054

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X006.D

Injection Date: 06-Jun-2022 12:17:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: MB

Worklist Smp#: 7

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

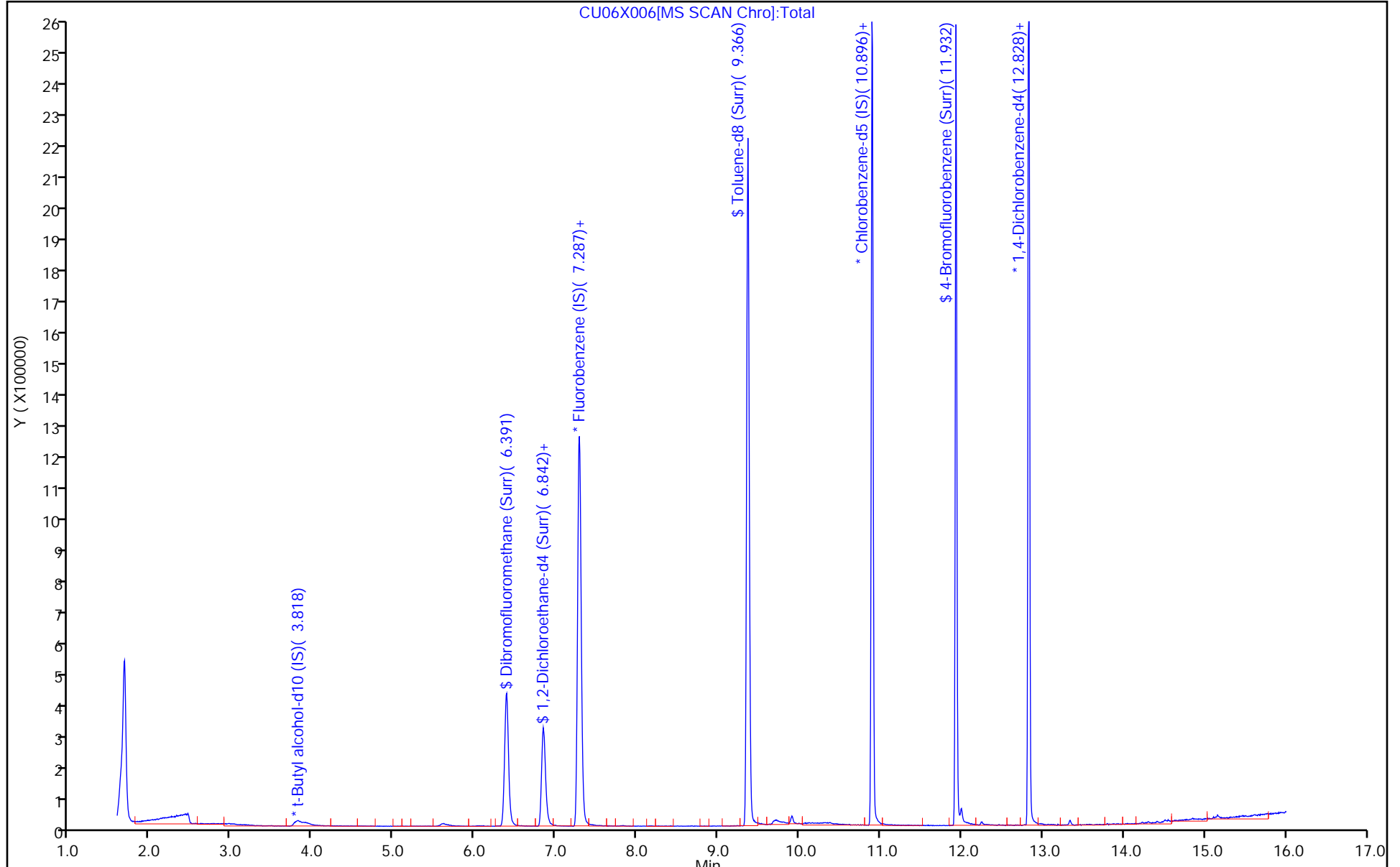
ALS Bottle#: 6

Method: MSV_10193_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\10193\20220603-58749.b\CU06X006.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 06-Jun-2022 12:17:30 ALS Bottle#: 6 Worklist Smp#: 7
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-007
 Misc. Info.: MB
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 12:43:36 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1632

First Level Reviewer: kephartk

Date: 06-Jun-2022 12:43:36

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.43	94.33
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.33	93.31
\$ 74 Toluene-d8 (Surr)	10.0	10.2	101.57
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.29	92.86

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

Client Sample ID:

Lab Sample ID: LCS 410-261977/4

Matrix: Water

Lab File ID: CU06X003.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 11:11

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.75		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.35		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.23		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.38		0.50	0.060
75-34-3	1,1-Dichloroethane	4.65		0.50	0.070
75-35-4	1,1-Dichloroethene	4.66		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.15		0.50	0.060
107-06-2	1,2-Dichloroethane	3.96		0.50	0.050
78-87-5	1,2-Dichloropropane	4.82		0.50	0.060
78-93-3	2-Butanone (MEK)	69.6		5.0	0.60
591-78-6	2-Hexanone	63.8		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	64.5		5.0	0.70
67-64-1	Acetone	67.5		5.0	0.90
71-43-2	Benzene	4.73		0.50	0.050
74-97-5	Bromochloromethane	4.32		0.50	0.050
75-27-4	Bromodichloromethane	4.46		0.50	0.050
75-25-2	Bromoform	3.88		1.0	0.30
74-83-9	Bromomethane	4.53		0.50	0.070
75-15-0	Carbon disulfide	5.33		1.0	0.060
56-23-5	Carbon tetrachloride	4.33		0.50	0.070
108-90-7	Chlorobenzene	4.78		0.50	0.060
75-00-3	Chloroethane	5.09		0.50	0.070
67-66-3	Chloroform	4.44		0.50	0.090
74-87-3	Chloromethane	6.21		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.72		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.14		0.50	0.050
124-48-1	Dibromochloromethane	4.19		0.50	0.070
100-41-4	Ethylbenzene	4.89		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.23		0.50	0.050
75-09-2	Methylene Chloride	4.42		0.50	0.070
100-42-5	Styrene	4.75		0.50	0.050
127-18-4	Tetrachloroethene	4.75		0.50	0.060
108-88-3	Toluene	4.85		0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-85437-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 410-261977/4

Matrix: Water Lab File ID: CU06X003.D

Analysis Method: 8260D Date Collected: _____

Sample wt/vol: 25 (mL) Date Analyzed: 06/06/2022 11:11

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.: 261977 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	4.54		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.48		0.50	0.060
79-01-6	Trichloroethene	4.33		0.50	0.060
75-01-4	Vinyl chloride	5.21		0.50	0.10
1330-20-7	Xylenes, Total	14.5		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	94		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\10193\20220603-58749.b\CU06X003.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 06-Jun-2022 11:11:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-004
 Misc. Info.: LCS
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:41:36 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: kephartk

Date: 06-Jun-2022 11:44:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.794	1.788	0.006	99	281468	5.00	4.42	
3 Chloromethane	50	1.965	1.959	0.006	99	430321	5.00	6.21	
5 Vinyl chloride	62	2.075	2.069	0.006	98	383268	5.00	5.21	
4 Butadiene	39	2.075	2.069	0.006	95	553596	5.00	8.26	
6 Bromomethane	94	2.361	2.355	0.006	90	254299	5.00	4.53	
7 Chloroethane	64	2.440	2.434	0.006	99	220868	5.00	5.09	
8 Dichlorofluoromethane	67	2.654	2.648	0.006	97	527570	5.00	4.95	
9 Trichlorofluoromethane	101	2.654	2.654	0.000	96	408148	5.00	3.91	
225 Pentane	43	2.739	2.733	0.006	97	442846	5.00	5.97	
11 Ethyl ether	59	2.928	2.922	0.006	94	205028	4.98	5.38	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.007	3.001	0.006	94	314905	5.00	4.49	
13 Acrolein	56	3.080	3.074	0.006	99	198161	37.5	40.5	
14 1,1-Dichloroethene	96	3.202	3.196	0.006	98	240911	5.00	4.66	
16 Acetone	43	3.239	3.227	0.012	100	369695	62.5	67.5	M
15 112TCTFE	101	3.251	3.239	0.012	89	232254	5.00	4.48	
17 Iodomethane	142	3.373	3.367	0.006	98	456813	5.00	4.72	
18 Isopropyl alcohol	45	3.397	3.385	0.012	33	48731	37.5	40.1	
19 Ethyl bromide	108	3.404	3.398	0.006	98	183009	4.99	3.78	
20 Carbon disulfide	76	3.465	3.459	0.005	99	795260	5.00	5.33	
22 Methyl acetate	43	3.605	3.599	0.006	98	83400	5.00	5.63	
23 3-Chloro-1-propene	41	3.629	3.623	0.006	92	390128	5.00	5.06	
24 Methylene Chloride	84	3.800	3.794	0.006	93	244871	5.00	4.42	
* 25 t-Butyl alcohol-d10 (IS)	65	3.812	3.812	0.000	53	119770	50.0	50.0	
26 2-Methyl-2-propanol	59	3.922	3.928	-0.006	98	120286	50.0	51.7	
27 Acrylonitrile	53	4.111	4.105	0.006	98	217302	25.0	27.6	
28 Methyl tert-butyl ether	73	4.153	4.154	-0.001	97	598248	5.00	4.23	
29 trans-1,2-Dichloroethene	96	4.166	4.160	0.006	99	268874	5.00	4.54	
30 Hexane	57	4.586	4.580	0.006	95	345855	5.00	4.78	
32 1,1-Dichloroethane	63	4.824	4.824	0.000	97	471768	5.00	4.65	
33 Isopropyl ether	45	4.885	4.885	0.000	97	885117	5.00	5.22	
34 2-Chloro-1,3-butadiene	53	4.940	4.934	0.006	91	406410	5.00	4.93	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Tert-butyl ethyl ether	59	5.421	5.428	-0.007	98	807520	5.00	4.72	
36 2-Butanone (MEK)	43	5.641	5.641	0.000	100	780430	62.5	69.6	
37 cis-1,2-Dichloroethene	96	5.677	5.672	0.005	82	304477	5.00	4.72	
38 2,2-Dichloropropane	77	5.684	5.678	0.006	87	415847	5.00	4.59	
40 Propionitrile	54	5.745	5.732	0.013	98	117510	37.5	40.2	
43 Methacrylonitrile	67	5.958	5.952	0.006	93	450841	37.5	36.3	
44 Chlorobromomethane	128	6.013	6.007	0.006	92	127800	5.00	4.32	
45 Tetrahydrofuran	71	6.013	6.013	0.000	74	82763	25.0	24.3	
46 Chloroform	83	6.165	6.165	0.000	93	467405	5.00	4.44	
48 1,1,1-Trichloroethane	97	6.385	6.385	0.000	96	418742	5.00	4.35	
\$ 47 Dibromofluoromethane (Surr)	113	6.385	6.385	0.000	94	480959	10.0	9.36	
49 Cyclohexane	56	6.476	6.476	0.000	93	424628	5.00	4.52	
50 Carbon tetrachloride	117	6.598	6.598	0.000	97	358191	5.00	4.33	
51 1,1-Dichloropropene	75	6.610	6.604	0.006	95	367322	5.00	4.53	
52 Isobutyl alcohol	41	6.805	6.799	0.006	92	110599	125.0	145.1	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.842	6.848	-0.006	91	86891	10.0	8.78	
54 Benzene	78	6.866	6.873	-0.006	97	1127260	5.00	4.73	
55 1,2-Dichloroethane	62	6.946	6.946	0.000	97	257350	5.00	3.96	
56 Tert-amyl methyl ether	73	7.074	7.074	0.000	98	658647	5.00	4.15	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	2065377	10.0	10.0	
58 n-Heptane	43	7.299	7.299	0.000	94	376016	5.00	4.83	
59 n-Butanol	56	7.701	7.702	-0.001	91	192243	250.0	261.0	
60 Trichloroethene	95	7.775	7.769	0.006	97	286781	5.00	4.33	
61 Methylcyclohexane	83	8.079	8.080	-0.001	93	446446	5.00	4.20	
62 1,2-Dichloropropane	63	8.110	8.110	0.000	96	279962	5.00	4.82	
63 2-ethoxy-2-methyl butane	87	8.134	8.128	0.006	93	402354	5.00	4.28	
64 Methyl methacrylate	69	8.220	8.208	0.012	94	113052	5.00	4.76	
65 1,4-Dioxane	88	8.220	8.214	0.006	32	30367	125.0	151.5	
66 Dibromomethane	93	8.226	8.220	0.006	93	120689	5.00	4.04	
67 Dichlorobromomethane	83	8.470	8.470	0.000	99	328788	5.00	4.46	
68 2-Nitropropane	41	8.756	8.756	0.000	96	32242	5.00	4.69	
71 1-Bromo-2-chloroethane	63		8.860				ND	ND	
72 cis-1,3-Dichloropropene	75	9.037	9.037	0.000	95	366836	5.00	4.14	
73 4-Methyl-2-pentanone (MIBK)	43	9.238	9.238	0.000	97	1936999	62.5	64.5	
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	2022269	10.0	10.6	
75 Toluene	92	9.445	9.445	0.000	99	705129	5.00	4.85	
76 trans-1,3-Dichloropropene	75	9.738	9.732	0.006	93	298375	5.00	4.48	
78 Ethyl methacrylate	69	9.811	9.811	0.000	90	241118	5.00	4.55	
79 1,1,2-Trichloroethane	97	9.945	9.945	0.000	90	175266	5.00	4.38	
80 Tetrachloroethene	166	10.030	10.030	0.000	98	342008	5.00	4.75	
81 1,3-Dichloropropane	76	10.116	10.116	0.000	91	292946	5.00	4.46	
82 2-Hexanone	43	10.183	10.183	0.000	97	1390756	62.5	63.8	
83 Chlorodibromomethane	129	10.335	10.335	0.000	90	208349	5.00	4.19	
84 Ethylene Dibromide	107	10.445	10.445	0.000	100	161289	5.00	4.15	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	85	1548981	10.0	10.0	
86 1-Chlorohexane	91	10.914	10.914	0.000	99	382324	5.00	4.50	
87 Chlorobenzene	112	10.926	10.927	-0.001	95	823738	5.00	4.78	
89 1,1,1,2-Tetrachloroethane	131	11.012	11.012	0.000	96	280996	5.00	4.75	
90 Ethylbenzene	91	11.018	11.018	0.000	98	1395571	5.00	4.89	
91 m-Xylene & p-Xylene	106	11.140	11.140	0.000	99	1100296	10.0	9.70	
92 o-Xylene	106	11.475	11.475	0.000	97	538539	5.00	4.76	
93 Styrene	104	11.493	11.494	-0.001	95	893403	5.00	4.75	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
94 Bromoform	173	11.652	11.652	0.000	98	115670	5.00	3.88	
95 Isopropylbenzene	105	11.786	11.786	0.000	96	1427388	5.00	4.86	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	96	742998	10.0	9.77	
99 1,1,2,2-Tetrachloroethane	83	12.048	12.048	0.000	66	216684	5.00	4.23	
100 Bromobenzene	156	12.048	12.048	0.000	89	365700	5.00	4.65	
101 trans-1,4-Dichloro-2-butene	53	12.073	12.073	0.000	92	101885	25.0	7.67	
102 1,2,3-Trichloropropane	110	12.085	12.091	-0.006	84	56204	5.00	3.89	
103 N-Propylbenzene	91	12.121	12.121	0.000	99	1689698	5.00	4.70	
104 2-Chlorotoluene	126	12.201	12.201	0.000	98	367242	5.00	4.70	
105 1,3,5-Trimethylbenzene	105	12.262	12.268	-0.006	94	1241568	5.00	4.66	
106 4-Chlorotoluene	126	12.292	12.292	0.000	97	381867	5.00	4.77	
107 tert-Butylbenzene	134	12.505	12.512	-0.007	92	273149	5.00	4.44	
109 1,2,4-Trimethylbenzene	105	12.554	12.554	0.000	97	1286114	5.00	4.67	
110 sec-Butylbenzene	105	12.676	12.676	0.000	94	1594300	5.00	4.74	
111 1,3-Dichlorobenzene	146	12.774	12.774	0.000	99	755981	5.00	4.70	
112 4-Isopropyltoluene	119	12.786	12.786	0.000	97	1445961	5.00	4.79	
* 113 1,4-Dichlorobenzene-d4	152	12.829	12.829	0.000	93	944142	10.0	10.0	
114 1,4-Dichlorobenzene	146	12.847	12.847	0.000	96	772297	5.00	4.68	
115 1,2,3-Trimethylbenzene	120	12.859	12.865	-0.006	98	589688	5.00	4.73	
116 Benzyl chloride	126	12.932	12.932	0.000	98	97148	5.00	4.53	
119 n-Butylbenzene	92	13.085	13.085	0.000	97	710263	5.00	4.72	
120 1,2-Dichlorobenzene	146	13.115	13.115	0.000	99	675086	5.00	4.50	
118 p-Diethylbenzene	119	13.139	13.140	-0.001	86	724899	5.00	4.66	
123 1,2-Dibromo-3-Chloropropane	155	13.664	13.664	0.000	89	30264	5.00	3.87	
124 1,3,5-Trichlorobenzene	180	13.792	13.792	0.000	98	667785	5.00	4.92	
125 1,2,4-Trichlorobenzene	180	14.219	14.219	-0.001	94	543041	5.00	4.73	
126 Hexachlorobutadiene	225	14.304	14.304	0.000	95	302606	5.00	4.98	
127 Naphthalene	128	14.401	14.402	-0.001	96	720974	5.00	4.20	
128 1,2,3-Trichlorobenzene	180	14.548	14.548	0.000	95	434276	5.00	4.65	
129 2-Methylnaphthalene	142	15.151	15.151	0.000	93	382522	5.00	4.37	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_ETBR_00001	Amount Added: 12.50	Units: uL	
MSV_LCS_VOC#1_00057	Amount Added: 12.50	Units: uL	
MSV_LCS_ACROL_00060	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00003	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00084	Amount Added: 12.50	Units: uL	
MSV_HP25_ISSS_00054	Amount Added: 1.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X003.D

Injection Date: 06-Jun-2022 11:11:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 3

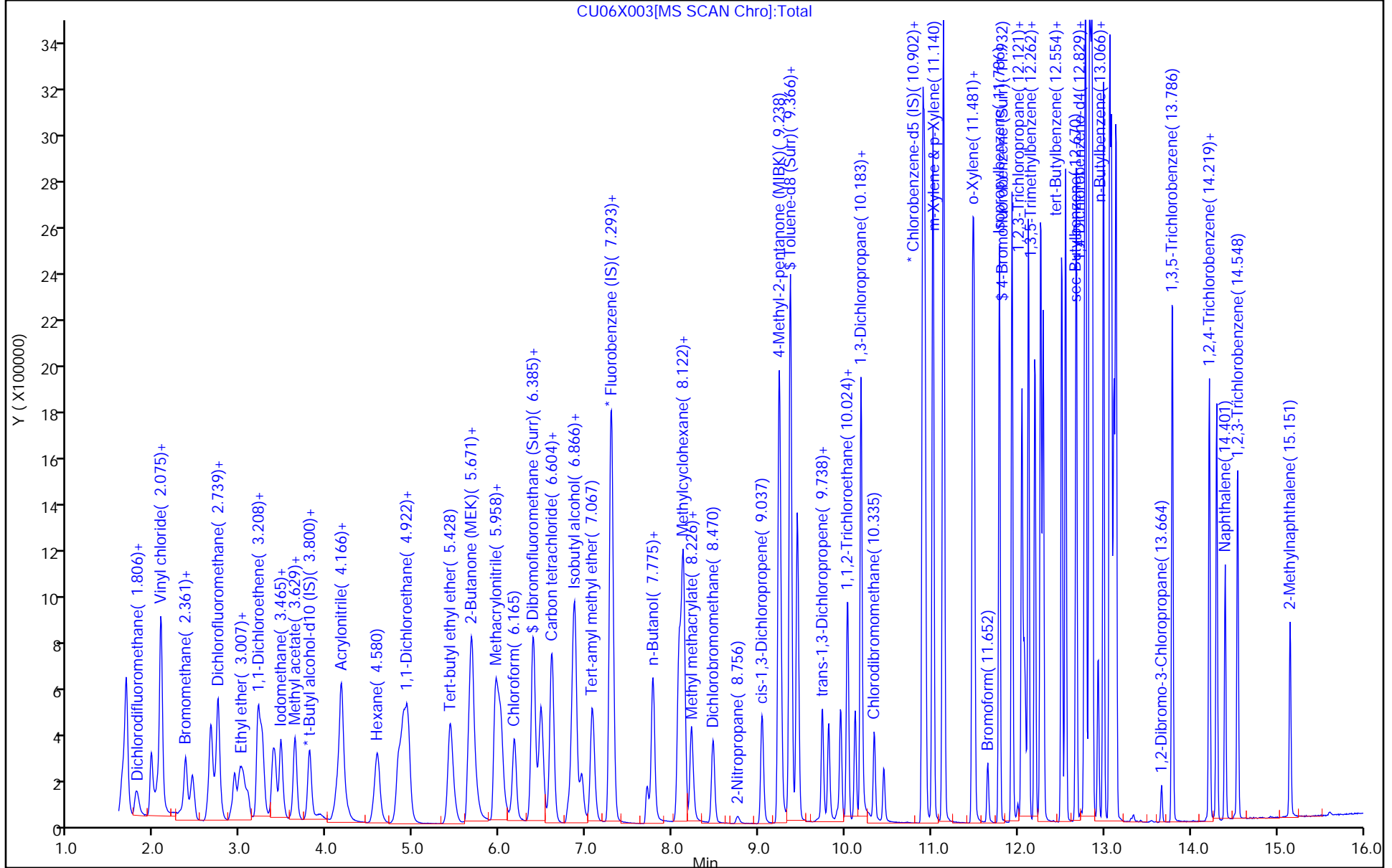
Method: MSV_10193_25mL

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

CU06X003[MS SCAN Chro]:Total



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X003.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 06-Jun-2022 11:11:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-004
 Misc. Info.: LCS
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:41:36 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: kephartk

Date: 06-Jun-2022 11:44:40

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.36	93.57
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	8.78	87.79
\$ 74 Toluene-d8 (Surr)	10.0	10.6	105.97
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.77	97.75

Eurofins Lancaster Laboratories Environment Testing, LLC

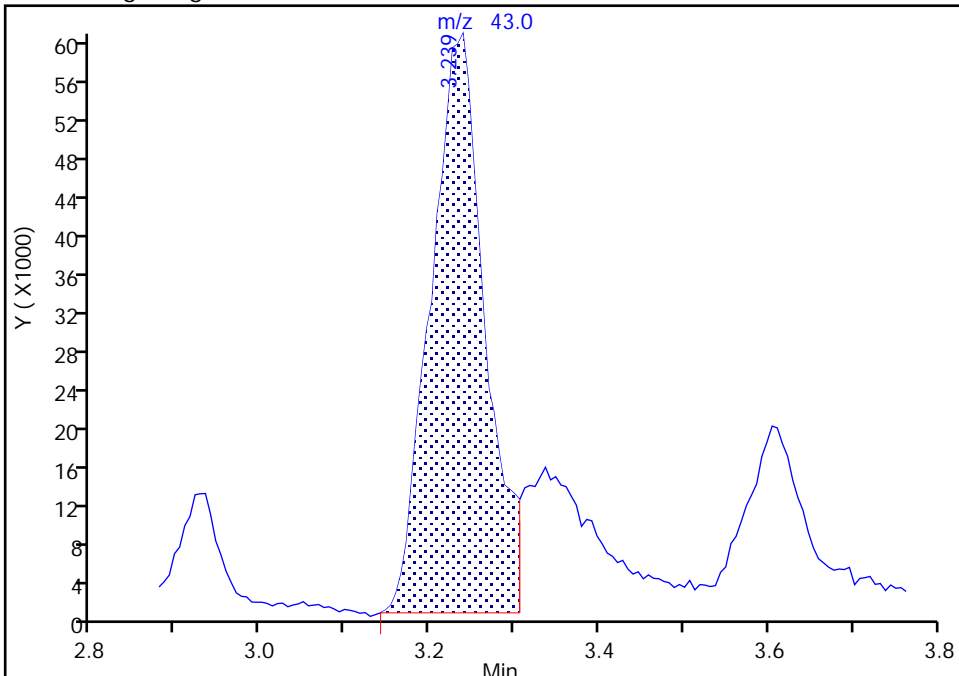
Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X003.D
Injection Date: 06-Jun-2022 11:11:30 Instrument ID: 10193
Lims ID: LCS
Client ID:
Operator ID: knk41612 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

16 Acetone, CAS: 67-64-1

Signal: 1

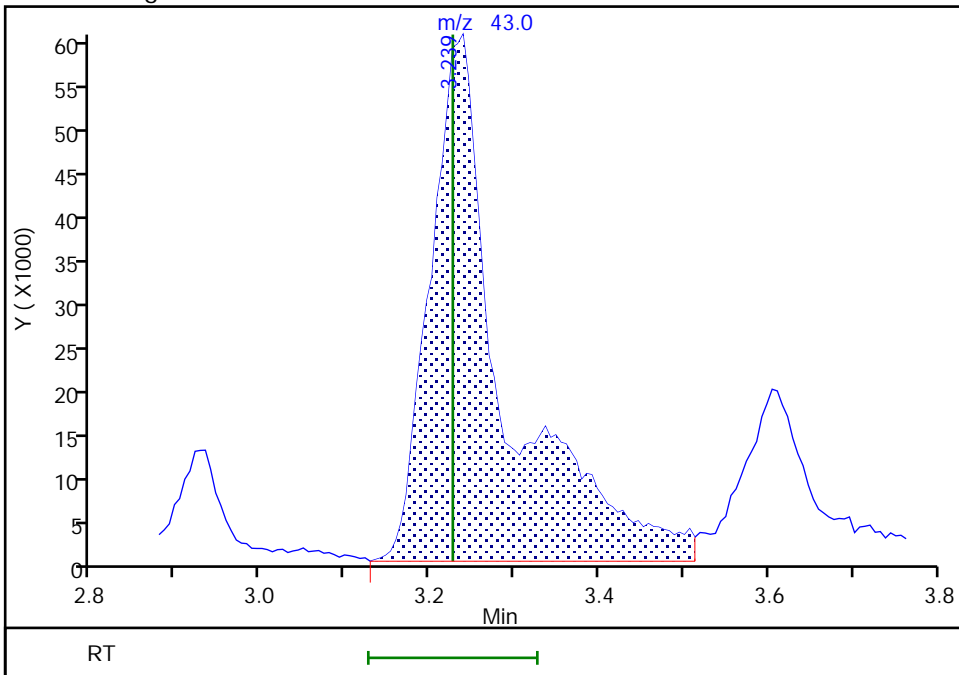
RT: 3.24
Area: 266939
Amount: 48.737033
Amount Units: ug/l

Processing Integration Results



RT: 3.24
Area: 369695
Amount: 67.497958
Amount Units: ug/l

Manual Integration Results



Reviewer: kephartk, 06-Jun-2022 11:44:09
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

Client Sample ID:

Lab Sample ID: LCSD 410-261977/5

Matrix: Water

Lab File ID: CU06X004.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 11:33

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.81		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.42		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.34		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.50		0.50	0.060
75-34-3	1,1-Dichloroethane	4.63		0.50	0.070
75-35-4	1,1-Dichloroethene	5.06		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.29		0.50	0.060
107-06-2	1,2-Dichloroethane	4.07		0.50	0.050
78-87-5	1,2-Dichloropropane	4.75		0.50	0.060
78-93-3	2-Butanone (MEK)	68.0		5.0	0.60
591-78-6	2-Hexanone	72.5		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	70.7		5.0	0.70
67-64-1	Acetone	77.4		5.0	0.90
71-43-2	Benzene	4.79		0.50	0.050
74-97-5	Bromochloromethane	4.30		0.50	0.050
75-27-4	Bromodichloromethane	4.43		0.50	0.050
75-25-2	Bromoform	3.90		1.0	0.30
74-83-9	Bromomethane	4.94		0.50	0.070
75-15-0	Carbon disulfide	5.66		1.0	0.060
56-23-5	Carbon tetrachloride	4.43		0.50	0.070
108-90-7	Chlorobenzene	4.91		0.50	0.060
75-00-3	Chloroethane	5.58		0.50	0.070
67-66-3	Chloroform	4.44		0.50	0.090
74-87-3	Chloromethane	6.67		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.69		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.29		0.50	0.050
124-48-1	Dibromochloromethane	4.24		0.50	0.070
100-41-4	Ethylbenzene	5.01		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.15		0.50	0.050
75-09-2	Methylene Chloride	4.42		0.50	0.070
100-42-5	Styrene	4.91		0.50	0.050
127-18-4	Tetrachloroethene	4.84		0.50	0.060
108-88-3	Toluene	4.95		0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-85437-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCSD 410-261977/5

Matrix: Water Lab File ID: CU06X004.D

Analysis Method: 8260D Date Collected: _____

Sample wt/vol: 25 (mL) Date Analyzed: 06/06/2022 11:33

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.: 261977 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	4.55		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.56		0.50	0.060
79-01-6	Trichloroethene	4.47		0.50	0.060
75-01-4	Vinyl chloride	5.66		0.50	0.10
1330-20-7	Xylenes, Total	14.9		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	93		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\10193\20220603-58749.b\CU06X004.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 06-Jun-2022 11:33:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-005
 Misc. Info.: LCSD
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:41:36 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: kephartk

Date: 06-Jun-2022 12:01:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.794	1.788	0.006	99	294521	5.00	4.90	
3 Chloromethane	50	1.959	1.959	0.000	99	436843	5.00	6.67	
5 Vinyl chloride	62	2.068	2.069	-0.001	85	393325	5.00	5.66	
4 Butadiene	39	2.075	2.069	0.006	95	576345	5.00	9.11	
6 Bromomethane	94	2.355	2.355	0.000	91	261650	5.00	4.94	
7 Chloroethane	64	2.434	2.434	0.000	99	228907	5.00	5.58	
8 Dichlorofluoromethane	67	2.648	2.648	0.000	97	534779	5.00	5.32	
9 Trichlorofluoromethane	101	2.654	2.654	0.000	98	417338	5.00	4.23	
225 Pentane	43	2.733	2.733	0.000	97	464480	5.00	6.63	
11 Ethyl ether	59	2.922	2.922	0.000	95	212839	4.98	5.91	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.001	3.001	0.000	94	326796	5.00	4.94	
13 Acrolein	56	3.080	3.074	0.006	98	199857	37.5	46.1	
14 1,1-Dichloroethene	96	3.202	3.196	0.006	98	247160	5.00	5.06	
16 Acetone	43	3.227	3.227	0.000	100	375955	62.5	77.4	
15 112TCTFE	101	3.239	3.239	0.000	90	242323	5.00	4.95	
17 Iodomethane	142	3.367	3.367	0.000	98	473477	5.00	5.18	
18 Isopropyl alcohol	45	3.373	3.385	-0.012	29	43348	37.5	40.2	
19 Ethyl bromide	108	3.398	3.398	0.000	98	193844	4.99	4.24	
20 Carbon disulfide	76	3.465	3.459	0.006	99	797408	5.00	5.66	
22 Methyl acetate	43	3.599	3.599	0.000	97	76104	5.00	5.79	
23 3-Chloro-1-propene	41	3.623	3.623	0.000	91	375292	5.00	5.16	
24 Methylene Chloride	84	3.794	3.794	0.000	92	231868	5.00	4.42	
* 25 t-Butyl alcohol-d10 (IS)	65	3.818	3.812	0.006	91	106245	50.0	50.0	
26 2-Methyl-2-propanol	59	3.916	3.928	-0.012	99	107009	50.0	51.8	
27 Acrylonitrile	53	4.105	4.105	0.000	98	191006	25.0	27.4	
28 Methyl tert-butyl ether	73	4.147	4.154	-0.007	95	554805	5.00	4.15	
29 trans-1,2-Dichloroethene	96	4.166	4.160	0.006	99	254618	5.00	4.55	
30 Hexane	57	4.580	4.580	0.000	93	315605	5.00	4.62	
32 1,1-Dichloroethane	63	4.824	4.824	0.000	96	444067	5.00	4.63	
33 Isopropyl ether	45	4.879	4.885	-0.006	98	810700	5.00	5.06	
34 2-Chloro-1,3-butadiene	53	4.934	4.934	0.000	91	383650	5.00	4.93	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Tert-butyl ethyl ether	59	5.421	5.428	-0.007	98	741526	5.00	4.59	
36 2-Butanone (MEK)	43	5.641	5.641	0.000	100	675911	62.5	68.0	
37 cis-1,2-Dichloroethene	96	5.665	5.672	-0.007	81	285829	5.00	4.69	
38 2,2-Dichloropropane	77	5.684	5.678	0.006	91	387910	5.00	4.53	
40 Propionitrile	54	5.732	5.732	0.000	97	96329	37.5	37.1	
43 Methacrylonitrile	67	5.952	5.952	0.000	93	409431	37.5	37.2	
44 Chlorobromomethane	128	6.007	6.007	0.000	92	120228	5.00	4.30	
45 Tetrahydrofuran	71	6.019	6.013	0.006	84	78012	25.0	25.8	
46 Chloroform	83	6.165	6.165	0.000	93	442414	5.00	4.44	
48 1,1,1-Trichloroethane	97	6.385	6.385	0.000	83	402067	5.00	4.42	
\$ 47 Dibromofluoromethane (Surr)	113	6.385	6.385	0.000	94	449280	10.0	9.25	
49 Cyclohexane	56	6.476	6.476	0.000	91	400243	5.00	4.50	
50 Carbon tetrachloride	117	6.592	6.598	-0.006	97	345920	5.00	4.43	
51 1,1-Dichloropropene	75	6.604	6.604	0.000	95	352832	5.00	4.60	
52 Isobutyl alcohol	41	6.799	6.799	0.000	93	100077	125.0	148.0	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.842	6.848	-0.006	95	80410	10.0	8.60	
54 Benzene	78	6.866	6.873	-0.006	97	1079516	5.00	4.79	
55 1,2-Dichloroethane	62	6.946	6.946	0.000	97	250121	5.00	4.07	
56 Tert-amyl methyl ether	73	7.068	7.074	-0.006	98	631636	5.00	4.21	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1951329	10.0	10.0	
58 n-Heptane	43	7.299	7.299	0.000	92	364565	5.00	4.96	
59 n-Butanol	56	7.702	7.702	0.000	91	176134	250.0	269.6	
60 Trichloroethene	95	7.769	7.769	0.000	96	279224	5.00	4.47	
61 Methylcyclohexane	83	8.073	8.080	-0.007	91	433716	5.00	4.32	
62 1,2-Dichloropropane	63	8.110	8.110	0.000	97	261065	5.00	4.75	
63 2-ethoxy-2-methyl butane	87	8.128	8.128	0.000	92	386195	5.00	4.35	
64 Methyl methacrylate	69	8.214	8.208	0.006	90	107426	5.00	5.10	
65 1,4-Dioxane	88	8.208	8.214	-0.006	32	28829	125.0	162.2	
66 Dibromomethane	93	8.226	8.220	0.006	93	114294	5.00	4.05	
67 Dichlorobromomethane	83	8.470	8.470	0.000	99	308663	5.00	4.43	
68 2-Nitropropane	41	8.756	8.756	0.000	99	27296	5.00	4.47	
71 1-Bromo-2-chloroethane	63		8.860				5.00	ND	7
72 cis-1,3-Dichloropropene	75	9.037	9.037	0.000	96	358894	5.00	4.29	
73 4-Methyl-2-pentanone (MIBK)	43	9.238	9.238	0.000	97	1882006	62.5	70.7	
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1967030	10.0	10.3	
75 Toluene	92	9.445	9.445	0.000	98	718174	5.00	4.95	
76 trans-1,3-Dichloropropene	75	9.732	9.732	0.000	93	302747	5.00	4.56	
78 Ethyl methacrylate	69	9.811	9.811	0.000	90	237687	5.00	4.49	
79 1,1,2-Trichloroethane	97	9.945	9.945	0.000	89	179598	5.00	4.50	
80 Tetrachloroethene	166	10.024	10.030	-0.006	97	347185	5.00	4.84	
81 1,3-Dichloropropane	76	10.116	10.116	0.000	92	295836	5.00	4.51	
82 2-Hexanone	43	10.183	10.183	0.000	97	1401191	62.5	72.5	
83 Chlorodibromomethane	129	10.335	10.335	0.000	90	210204	5.00	4.24	
84 Ethylene Dibromide	107	10.445	10.445	0.000	99	166228	5.00	4.29	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1545405	10.0	10.0	
86 1-Chlorohexane	91	10.914	10.914	0.000	98	397220	5.00	4.69	
87 Chlorobenzene	112	10.927	10.927	0.000	95	844114	5.00	4.91	
89 1,1,1,2-Tetrachloroethane	131	11.012	11.012	0.000	95	283702	5.00	4.81	
90 Ethylbenzene	91	11.018	11.018	0.000	98	1425906	5.00	5.01	
91 m-Xylene & p-Xylene	106	11.140	11.140	0.000	99	1133814	10.0	10.0	
92 o-Xylene	106	11.475	11.475	0.000	97	547177	5.00	4.85	
93 Styrene	104	11.493	11.494	-0.001	95	921407	5.00	4.91	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
94 Bromoform	173	11.652	11.652	0.000	98	116092	5.00	3.90	
95 Isopropylbenzene	105	11.786	11.786	0.000	95	1469562	5.00	5.02	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	96	733118	10.0	9.67	
99 1,1,2,2-Tetrachloroethane	83	12.042	12.048	-0.006	66	220083	5.00	4.34	
100 Bromobenzene	156	12.048	12.048	0.000	88	376970	5.00	4.85	
101 trans-1,4-Dichloro-2-butene	53	12.073	12.073	0.000	92	101935	25.0	7.77	
102 1,2,3-Trichloropropane	110	12.085	12.091	-0.006	84	58134	5.00	4.07	
103 N-Propylbenzene	91	12.121	12.121	0.000	99	1736885	5.00	4.89	
104 2-Chlorotoluene	126	12.195	12.201	-0.006	97	373906	5.00	4.83	
105 1,3,5-Trimethylbenzene	105	12.262	12.268	-0.006	94	1263663	5.00	4.79	
106 4-Chlorotoluene	126	12.292	12.292	0.000	97	393203	5.00	4.97	
107 tert-Butylbenzene	134	12.505	12.512	-0.007	92	275438	5.00	4.53	
109 1,2,4-Trimethylbenzene	105	12.554	12.554	0.000	97	1325236	5.00	4.86	
110 sec-Butylbenzene	105	12.676	12.676	0.000	94	1645231	5.00	4.95	
111 1,3-Dichlorobenzene	146	12.774	12.774	0.000	99	766973	5.00	4.82	
112 4-Isopropyltoluene	119	12.786	12.786	0.000	97	1471709	5.00	4.93	
* 113 1,4-Dichlorobenzene-d4	152	12.829	12.829	0.000	94	933524	10.0	10.0	
114 1,4-Dichlorobenzene	146	12.847	12.847	0.000	95	791573	5.00	4.85	
115 1,2,3-Trimethylbenzene	120	12.859	12.865	-0.006	98	595827	5.00	4.83	
116 Benzyl chloride	126	12.932	12.932	0.000	98	99464	5.00	4.69	
119 n-Butylbenzene	92	13.085	13.085	0.000	97	726344	5.00	4.88	
120 1,2-Dichlorobenzene	146	13.115	13.115	0.000	99	692519	5.00	4.67	
118 p-Diethylbenzene	119	13.133	13.140	-0.007	86	750157	5.00	4.88	
123 1,2-Dibromo-3-Chloropropane	155	13.664	13.664	0.000	90	30061	5.00	3.88	
124 1,3,5-Trichlorobenzene	180	13.792	13.792	0.000	98	672963	5.00	5.01	
125 1,2,4-Trichlorobenzene	180	14.219	14.219	0.000	94	552549	5.00	4.87	
126 Hexachlorobutadiene	225	14.304	14.304	0.000	95	308977	5.00	5.14	
127 Naphthalene	128	14.401	14.402	-0.001	96	717126	5.00	4.23	
128 1,2,3-Trichlorobenzene	180	14.548	14.548	0.000	96	430472	5.00	4.66	
129 2-Methylnaphthalene	142	15.151	15.151	0.000	92	360350	5.00	4.16	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LCS_ETBR_00001	Amount Added: 12.50	Units: uL	
MSV_LCS_VOC#1_00057	Amount Added: 12.50	Units: uL	
MSV_LCS_ACROL_00060	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00003	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00084	Amount Added: 12.50	Units: uL	
MSV_HP25_ISSS_00054	Amount Added: 1.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X004.D

Injection Date: 06-Jun-2022 11:33:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: LCSD

Worklist Smp#: 5

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 4

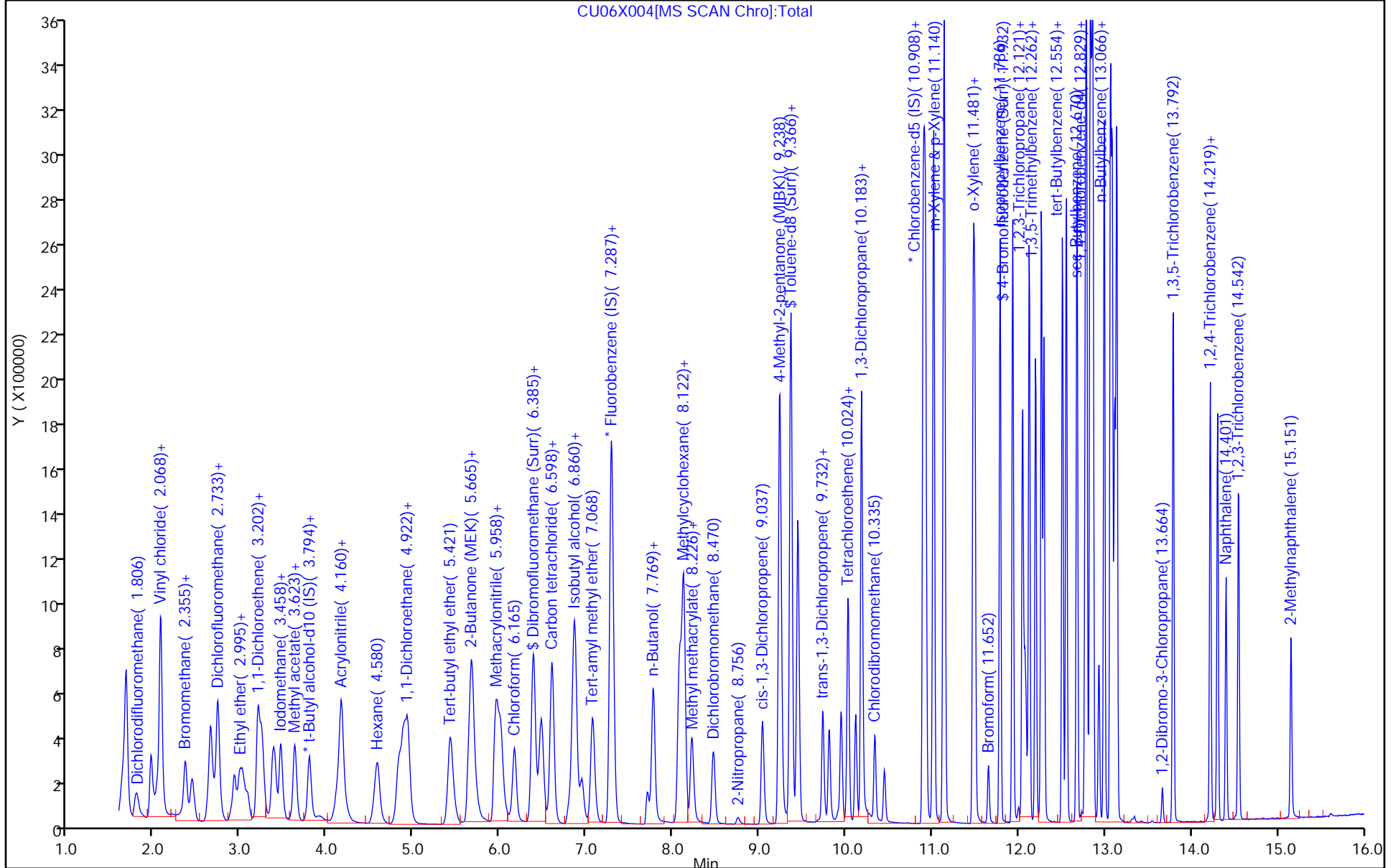
Method: MSV_10193_25mL

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

CU06X004[MS SCAN Chro]:Total



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X004.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 06-Jun-2022 11:33:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-005
 Misc. Info.: LCSD
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:41:36 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: kephartk Date: 06-Jun-2022 12:01:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.25	92.52
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	8.60	85.99
\$ 74 Toluene-d8 (Surr)	10.0	10.3	103.31
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.67	96.67

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-6 MS

Matrix: Water

Lab File ID: CU06X017.D

Analysis Method: 8260D

Date Collected: 05/25/2022 12:25

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 16:23

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.22		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.23		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.37		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.60		0.50	0.060
75-34-3	1,1-Dichloroethane	4.95		0.50	0.070
75-35-4	1,1-Dichloroethene	6.13		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.42		0.50	0.060
107-06-2	1,2-Dichloroethane	4.25		0.50	0.050
78-87-5	1,2-Dichloropropane	4.94		0.50	0.060
78-93-3	2-Butanone (MEK)	64.5		5.0	0.60
591-78-6	2-Hexanone	64.9		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	64.5		5.0	0.70
67-64-1	Acetone	77.4		5.0	0.90
71-43-2	Benzene	5.11		0.50	0.050
74-97-5	Bromochloromethane	4.73		0.50	0.050
75-27-4	Bromodichloromethane	4.64		0.50	0.050
75-25-2	Bromoform	4.44		1.0	0.30
74-83-9	Bromomethane	5.03		0.50	0.070
75-15-0	Carbon disulfide	6.34		1.0	0.060
56-23-5	Carbon tetrachloride	5.14		0.50	0.070
108-90-7	Chlorobenzene	5.25		0.50	0.060
75-00-3	Chloroethane	5.56		0.50	0.070
67-66-3	Chloroform	4.99		0.50	0.090
74-87-3	Chloromethane	6.45		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	7.17		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.46		0.50	0.050
124-48-1	Dibromochloromethane	4.63		0.50	0.070
100-41-4	Ethylbenzene	5.35		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.35		0.50	0.050
75-09-2	Methylene Chloride	4.77		0.50	0.070
100-42-5	Styrene	5.14		0.50	0.050
127-18-4	Tetrachloroethene	12.0		0.50	0.060
108-88-3	Toluene	5.28		0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-6 MS

Matrix: Water

Lab File ID: CU06X017.D

Analysis Method: 8260D

Date Collected: 05/25/2022 12:25

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 16:23

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	5.11		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.66		0.50	0.060
79-01-6	Trichloroethene	6.68		0.50	0.060
75-01-4	Vinyl chloride	5.95		0.50	0.10
1330-20-7	Xylenes, Total	16.0		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	93		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\10193\20220603-58749.b\CU06X017.D
 Lims ID: 410-85437-A-6 MS
 Client ID: HD-COD-SW-15-0/1-0 MS
 Sample Type: MS
 Inject. Date: 06-Jun-2022 16:23:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-018
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:41:36 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:04:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.800	1.788	0.012	99	329640	5.00	6.07	
3 Chloromethane	50	1.965	1.959	0.006	99	381095	5.00	6.45	
5 Vinyl chloride	62	2.075	2.069	0.006	98	373239	5.00	5.95	
4 Butadiene	39	2.081	2.069	0.012	98	540907	5.00	9.47	
6 Bromomethane	94	2.367	2.355	0.012	91	240674	5.00	5.03	
7 Chloroethane	64	2.440	2.434	0.006	99	205743	5.00	5.56	
8 Dichlorofluoromethane	67	2.654	2.648	0.006	97	483600	5.00	5.33	
9 Trichlorofluoromethane	101	2.660	2.654	0.006	95	429454	5.00	4.83	
225 Pentane	43	2.739	2.733	0.006	97	516714	5.00	8.17	
11 Ethyl ether	59	2.928	2.922	0.006	95	189705	4.99	5.83	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.007	3.001	0.006	92	317483	5.00	5.31	
13 Acrolein	56	3.087	3.074	0.013	99	193635	37.5	44.9	
14 1,1-Dichloroethene	96	3.202	3.196	0.006	98	269895	5.00	6.13	
16 Acetone	43	3.233	3.227	0.006	99	373558	62.6	77.4	
15 112TCTFE	101	3.251	3.239	0.012	89	279562	5.00	6.33	
17 Iodomethane	142	3.379	3.367	0.012	98	476949	5.00	5.78	
18 Isopropyl alcohol	45	3.391	3.385	0.006	29	33657	37.5	31.4	
19 Ethyl bromide	108	3.404	3.398	0.006	99	189684	5.00	4.60	
20 Carbon disulfide	76	3.471	3.459	0.012	99	806219	5.00	6.34	
22 Methyl acetate	43	3.617	3.599	0.018	36	71211	5.00	5.46	
23 3-Chloro-1-propene	41	3.635	3.623	0.012	91	355299	5.00	5.41	
24 Methylene Chloride	84	3.800	3.794	0.006	91	225485	5.00	4.77	
* 25 t-Butyl alcohol-d10 (IS)	65	3.824	3.812	0.012	88	105556	50.0	50.0	
26 2-Methyl-2-propanol	59	3.946	3.928	0.018	99	101751	50.0	49.6	
27 Acrylonitrile	53	4.111	4.105	0.006	99	188315	25.0	27.1	
28 Methyl tert-butyl ether	73	4.160	4.154	0.006	96	524059	5.00	4.35	
29 trans-1,2-Dichloroethene	96	4.166	4.160	0.006	99	258217	5.00	5.11	
30 Hexane	57	4.586	4.580	0.006	94	350532	5.00	5.68	
32 1,1-Dichloroethane	63	4.830	4.824	0.006	96	427784	5.00	4.95	
33 Isopropyl ether	45	4.885	4.885	0.000	96	728258	5.00	5.04	
34 2-Chloro-1,3-butadiene	53	4.934	4.934	0.000	91	379863	5.00	5.40	
35 Tert-butyl ethyl ether	59	5.434	5.428	0.006	98	667582	5.00	4.58	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	5.647	5.641	0.006	100	637262	62.6	64.5	
37 cis-1,2-Dichloroethene	96	5.678	5.672	0.006	80	394437	5.00	7.17	
38 2,2-Dichloropropane	77	5.678	5.678	0.000	87	380227	5.00	4.92	
40 Propionitrile	54	5.745	5.732	0.013	98	111179	37.5	43.1	
43 Methacrylonitrile	67	5.958	5.952	0.006	92	382499	37.5	35.0	
44 Chlorobromomethane	128	6.007	6.007	0.000	90	119301	5.00	4.73	
45 Tetrahydrofuran	71	6.025	6.013	0.012	89	77509	25.0	25.8	
46 Chloroform	83	6.165	6.165	0.000	93	447927	5.00	4.99	
48 1,1,1-Trichloroethane	97	6.391	6.385	0.006	89	429170	5.00	5.23	
\$ 47 Dibromofluoromethane (Surr)	113	6.391	6.385	0.006	94	408875	10.0	9.33	
49 Cyclohexane	56	6.476	6.476	0.000	90	426274	5.00	5.32	
50 Carbon tetrachloride	117	6.598	6.598	0.000	95	362573	5.00	5.14	
51 1,1-Dichloropropene	75	6.604	6.604	0.000	97	351699	5.00	5.09	
52 Isobutyl alcohol	41	6.805	6.799	0.006	94	93881	125.1	139.8	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.848	6.848	0.000	94	76488	10.0	9.06	
54 Benzene	78	6.872	6.873	0.000	96	1038084	5.00	5.11	
55 1,2-Dichloroethane	62	6.952	6.946	0.006	98	235859	5.00	4.25	
56 Tert-amyl methyl ether	73	7.074	7.074	0.000	98	585001	5.00	4.32	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1761306	10.0	10.0	
58 n-Heptane	43	7.299	7.299	0.000	91	385137	5.00	5.80	
59 n-Butanol	56	7.708	7.702	0.006	90	162739	250.2	250.7	
60 Trichloroethene	95	7.775	7.769	0.006	96	376773	5.00	6.68	
61 Methylcyclohexane	83	8.073	8.080	-0.007	90	483491	5.00	5.33	
62 1,2-Dichloropropane	63	8.110	8.110	0.000	97	244747	5.00	4.94	
63 2-ethoxy-2-methyl butane	87	8.128	8.128	0.000	94	371845	5.00	4.64	
64 Methyl methacrylate	69	8.220	8.208	0.012	94	101129	5.00	4.83	
65 1,4-Dioxane	88	8.220	8.214	0.006	29	24152	125.1	136.8	M
66 Dibromomethane	93	8.220	8.220	0.000	91	108551	5.00	4.26	
67 Dichlorobromomethane	83	8.470	8.470	0.000	99	291464	5.00	4.64	
68 2-Nitropropane	41	8.750	8.756	-0.006	98	25997	5.00	4.29	
71 1-Bromo-2-chloroethane	63	8.866	8.860	0.006	98	216104	5.00	4.23	
72 cis-1,3-Dichloropropene	75	9.037	9.037	0.000	96	336877	5.00	4.46	
73 4-Methyl-2-pentanone (MIBK)	43	9.238	9.238	0.000	97	1705991	62.6	64.5	
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1768406	10.0	10.3	
75 Toluene	92	9.445	9.445	0.000	98	692918	5.00	5.28	
76 trans-1,3-Dichloropropene	75	9.732	9.732	0.000	93	280051	5.00	4.66	
78 Ethyl methacrylate	69	9.811	9.811	0.000	89	219811	5.00	4.59	
79 1,1,2-Trichloroethane	97	9.945	9.945	0.000	90	166353	5.00	4.60	
80 Tetrachloroethene	166	10.024	10.030	-0.006	97	782475	5.00	12.0	
81 1,3-Dichloropropane	76	10.116	10.116	0.000	91	269113	5.00	4.53	
82 2-Hexanone	43	10.183	10.183	0.000	97	1247370	62.6	64.9	
83 Chlorodibromomethane	129	10.335	10.335	0.000	89	207790	5.00	4.63	
84 Ethylene Dibromide	107	10.445	10.445	0.000	98	154965	5.00	4.42	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	83	1398192	10.0	10.0	
86 1-Chlorohexane	91	10.914	10.914	0.000	98	389927	5.00	5.09	
87 Chlorobenzene	112	10.926	10.927	-0.001	96	817123	5.00	5.25	
89 1,1,1,2-Tetrachloroethane	131	11.012	11.012	0.000	96	278516	5.00	5.22	
90 Ethylbenzene	91	11.018	11.018	0.000	98	1377570	5.00	5.35	
91 m-Xylene & p-Xylene	106	11.140	11.140	0.000	100	1103432	10.0	10.8	
92 o-Xylene	106	11.475	11.475	0.000	96	527852	5.00	5.17	
93 Styrene	104	11.493	11.494	-0.001	95	872031	5.00	5.14	
94 Bromoform	173	11.652	11.652	0.000	98	119658	5.00	4.44	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Isopropylbenzene	105	11.786	11.786	0.000	95	1407225	5.00	5.31	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	646063	10.0	9.42	
99 1,1,2,2-Tetrachloroethane	83	12.042	12.048	-0.006	67	203358	5.00	4.37	
100 Bromobenzene	156	12.048	12.048	0.000	87	368124	5.00	5.15	
101 trans-1,4-Dichloro-2-butene	53	12.073	12.073	0.000	93	125375	25.0	10.4	
102 1,2,3-Trichloropropane	110	12.085	12.091	-0.006	82	53329	5.00	4.07	
103 N-Propylbenzene	91	12.121	12.121	0.000	99	1674727	5.00	5.13	
104 2-Chlorotoluene	126	12.195	12.201	-0.006	98	362454	5.00	5.10	
105 1,3,5-Trimethylbenzene	105	12.262	12.268	-0.006	95	1215702	5.00	5.02	
106 4-Chlorotoluene	126	12.292	12.292	0.000	97	383421	5.00	5.27	
107 tert-Butylbenzene	134	12.505	12.512	-0.007	92	272087	5.00	4.87	
109 1,2,4-Trimethylbenzene	105	12.554	12.554	0.000	97	1257528	5.00	5.02	
110 sec-Butylbenzene	105	12.676	12.676	0.000	94	1608265	5.00	5.27	
111 1,3-Dichlorobenzene	146	12.774	12.774	0.000	98	751197	5.00	5.14	
112 4-Isopropyltoluene	119	12.786	12.786	0.000	97	1451505	5.00	5.29	
* 113 1,4-Dichlorobenzene-d4	152	12.829	12.829	0.000	93	857366	10.0	10.0	
114 1,4-Dichlorobenzene	146	12.847	12.847	0.000	96	770065	5.00	5.14	
115 1,2,3-Trimethylbenzene	120	12.859	12.865	-0.006	98	568215	5.00	5.02	
116 Benzyl chloride	126	12.932	12.932	0.000	98	95106	5.00	4.88	
119 n-Butylbenzene	92	13.085	13.085	0.000	97	704394	5.00	5.15	
120 1,2-Dichlorobenzene	146	13.109	13.115	-0.006	99	658325	5.00	4.83	
118 p-Diethylbenzene	119	13.133	13.140	-0.007	86	712556	5.00	5.04	
123 1,2-Dibromo-3-Chloropropane	155	13.664	13.664	0.000	90	28953	5.00	4.07	
124 1,3,5-Trichlorobenzene	180	13.792	13.792	0.000	97	643273	5.00	5.22	
125 1,2,4-Trichlorobenzene	180	14.219	14.219	0.000	93	507547	5.00	4.87	
126 Hexachlorobutadiene	225	14.304	14.304	0.000	94	310751	5.00	5.63	
127 Naphthalene	128	14.401	14.402	-0.001	96	627662	5.00	4.03	
128 1,2,3-Trichlorobenzene	180	14.542	14.548	-0.006	95	393484	5.00	4.64	
129 2-Methylnaphthalene	142	15.151	15.151	0.000	93	280320	5.00	3.53	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_ETBR_00001	Amount Added: 5.38	Units: uL	
MSV_LCS_VOC#1_00057	Amount Added: 5.38	Units: uL	
MSV_LCS_ACROL_00060	Amount Added: 5.38	Units: uL	
MSV_LCS_EE_00003	Amount Added: 5.38	Units: uL	
MSV_QC_Gas826_00084	Amount Added: 5.38	Units: uL	
MSV_HP25_ISSS_00054	Amount Added: 1.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X017.D

Injection Date: 06-Jun-2022 16:23:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-6 MS

Worklist Smp#: 18

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

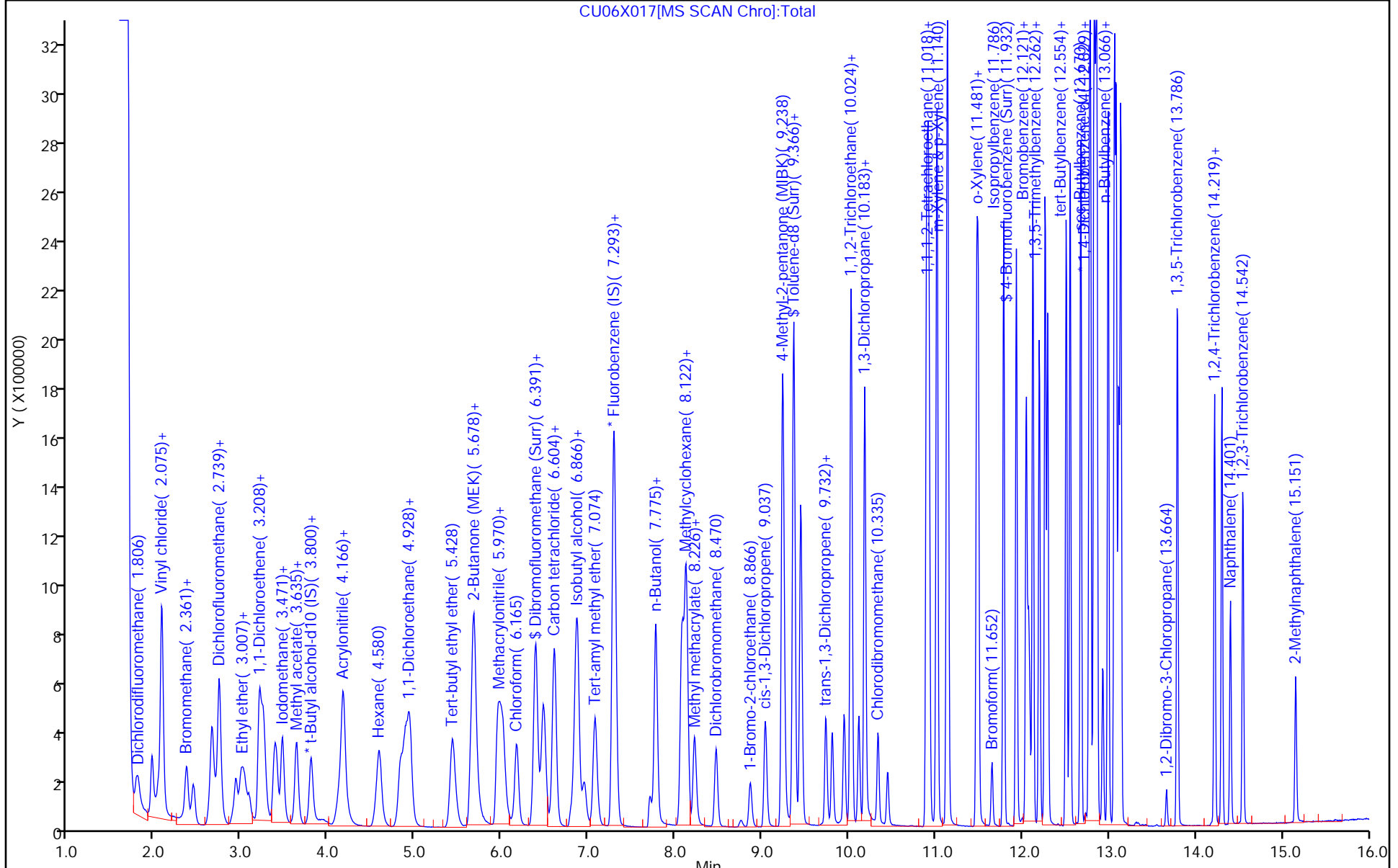
ALS Bottle#: 17

Method: MSV_10193_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\10193\20220603-58749.b\CU06X017.D
 Lims ID: 410-85437-A-6 MS
 Client ID: HD-COD-SW-15-0/1-0 MS
 Sample Type: MS
 Inject. Date: 06-Jun-2022 16:23:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-018
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:41:36 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1680

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:04:44

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.33	93.28
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.06	90.62
\$ 74 Toluene-d8 (Surr)	10.0	10.3	102.66
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.42	94.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-85437-1

SDG No.:

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

Lab Sample ID: 410-85437-6 MSD

Matrix: Water

Lab File ID: CU06X018.D

Analysis Method: 8260D

Date Collected: 05/25/2022 12:25

Sample wt/vol: 25 (mL)

Date Analyzed: 06/06/2022 16:45

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.: 261977

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.29		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.48		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.45		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.77		0.50	0.060
75-34-3	1,1-Dichloroethane	4.97		0.50	0.070
75-35-4	1,1-Dichloroethene	5.86		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.65		0.50	0.060
107-06-2	1,2-Dichloroethane	4.53		0.50	0.050
78-87-5	1,2-Dichloropropane	5.15		0.50	0.060
78-93-3	2-Butanone (MEK)	76.3		5.0	0.60
591-78-6	2-Hexanone	75.4		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	74.0		5.0	0.70
67-64-1	Acetone	85.3		5.0	0.90
71-43-2	Benzene	5.20		0.50	0.050
74-97-5	Bromochloromethane	4.83		0.50	0.050
75-27-4	Bromodichloromethane	4.73		0.50	0.050
75-25-2	Bromoform	4.47		1.0	0.30
74-83-9	Bromomethane	5.34		0.50	0.070
75-15-0	Carbon disulfide	6.31		1.0	0.060
56-23-5	Carbon tetrachloride	5.31		0.50	0.070
108-90-7	Chlorobenzene	5.30		0.50	0.060
75-00-3	Chloroethane	5.88		0.50	0.070
67-66-3	Chloroform	5.11		0.50	0.090
74-87-3	Chloromethane	6.93		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	7.34		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.45		0.50	0.050
124-48-1	Dibromochloromethane	4.80		0.50	0.070
100-41-4	Ethylbenzene	5.40		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.19		0.50	0.050
75-09-2	Methylene Chloride	4.69		0.50	0.070
100-42-5	Styrene	5.17		0.50	0.050
127-18-4	Tetrachloroethene	12.2		0.50	0.060
108-88-3	Toluene	5.38		0.50	0.070

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-85437-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: HD-COD-SW-15-0/1-0 MSD Lab Sample ID: 410-85437-6 MSD
MSD

Matrix: Water Lab File ID: CU06X018.D

Analysis Method: 8260D Date Collected: 05/25/2022 12:25

Sample wt/vol: 25 (mL) Date Analyzed: 06/06/2022 16:45

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.: 261977 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	4.85		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.00		0.50	0.060
79-01-6	Trichloroethene	6.71		0.50	0.060
75-01-4	Vinyl chloride	6.35		0.50	0.10
1330-20-7	Xylenes, Total	15.9		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		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\10193\20220603-58749.b\CU06X018.D
 Lims ID: 410-85437-A-6 MSD
 Client ID: HD-COD-SW-15-0/1-0 MSD
 Sample Type: MSD
 Inject. Date: 06-Jun-2022 16:45:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-019
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:41:36 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1649

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:05:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.794	1.788	0.006	99	352078	5.00	6.30	
3 Chloromethane	50	1.965	1.959	0.006	99	421106	5.00	6.93	
5 Vinyl chloride	62	2.075	2.069	0.006	98	410065	5.00	6.35	
4 Butadiene	39	2.075	2.069	0.006	95	589764	5.00	10.0	
6 Bromomethane	94	2.361	2.355	0.006	91	262635	5.00	5.34	
7 Chloroethane	64	2.440	2.434	0.006	100	223865	5.00	5.88	
8 Dichlorofluoromethane	67	2.654	2.648	0.006	97	539132	5.00	5.77	
9 Trichlorofluoromethane	101	2.660	2.654	0.006	98	466348	5.00	5.10	
225 Pentane	43	2.739	2.733	0.006	97	542504	5.00	8.34	
11 Ethyl ether	59	2.928	2.922	0.006	95	201057	4.99	6.01	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.007	3.001	0.006	92	333096	5.00	5.42	
13 Acrolein	56	3.081	3.074	0.007	99	202408	37.5	50.9	
14 1,1-Dichloroethene	96	3.202	3.196	0.006	98	265611	5.00	5.86	
16 Acetone	43	3.239	3.227	0.012	95	379910	62.6	85.3	
15 112TCTFE	101	3.251	3.239	0.012	88	279138	5.00	6.14	
17 Iodomethane	142	3.373	3.367	0.006	97	483780	5.00	5.70	
18 Isopropyl alcohol	45	3.391	3.385	0.006	26	45242	37.5	45.8	
19 Ethyl bromide	108	3.404	3.398	0.006	98	187427	5.00	4.42	
20 Carbon disulfide	76	3.465	3.459	0.006	99	825827	5.00	6.31	
22 Methyl acetate	43	3.611	3.599	0.012	97	79175	5.00	6.58	
23 3-Chloro-1-propene	41	3.629	3.623	0.006	92	360267	5.00	5.33	
24 Methylene Chloride	84	3.800	3.794	0.006	90	228183	5.00	4.69	
* 25 t-Butyl alcohol-d10 (IS)	65	3.818	3.812	0.006	42	97344	50.0	50.0	
26 2-Methyl-2-propanol	59	3.928	3.928	0.000	100	96707	50.0	51.1	
27 Acrylonitrile	53	4.105	4.105	0.000	98	185683	25.0	29.0	
28 Methyl tert-butyl ether	73	4.160	4.154	0.006	96	519268	5.00	4.19	
29 trans-1,2-Dichloroethene	96	4.166	4.160	0.006	99	251900	5.00	4.85	
30 Hexane	57	4.580	4.580	0.000	94	334058	5.00	5.27	
32 1,1-Dichloroethane	63	4.830	4.824	0.006	96	442430	5.00	4.97	
33 Isopropyl ether	45	4.885	4.885	0.000	93	751670	5.00	5.06	
34 2-Chloro-1,3-butadiene	53	4.934	4.934	0.000	91	390785	5.00	5.41	
35 Tert-butyl ethyl ether	59	5.434	5.428	0.006	98	717358	5.00	4.78	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	5.647	5.641	0.006	100	695027	62.6	76.3	
37 cis-1,2-Dichloroethene	96	5.678	5.672	0.006	81	415371	5.00	7.34	
38 2,2-Dichloropropane	77	5.684	5.678	0.006	60	404295	5.00	5.08	
40 Propionitrile	54	5.757	5.732	0.025	97	110679	37.5	46.6	
43 Methacrylonitrile	67	5.952	5.952	0.000	92	405612	37.5	40.2	
44 Chlorobromomethane	128	6.013	6.007	0.006	91	125259	5.00	4.83	
45 Tetrahydrofuran	71	6.025	6.013	0.012	69	78841	25.0	28.5	
46 Chloroform	83	6.171	6.165	0.006	93	472476	5.00	5.11	
48 1,1,1-Trichloroethane	97	6.391	6.385	0.006	90	462444	5.00	5.48	
\$ 47 Dibromofluoromethane (Surr)	113	6.391	6.385	0.006	95	438878	10.0	9.73	
49 Cyclohexane	56	6.482	6.476	0.006	91	473701	5.00	5.74	
50 Carbon tetrachloride	117	6.598	6.598	0.000	96	385537	5.00	5.31	
51 1,1-Dichloropropene	75	6.604	6.604	0.000	94	376209	5.00	5.29	
52 Isobutyl alcohol	41	6.805	6.799	0.006	89	92044	125.1	148.6	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	6.848	6.848	0.000	95	82963	10.0	9.56	
54 Benzene	78	6.873	6.873	0.000	97	1087251	5.00	5.20	
55 1,2-Dichloroethane	62	6.946	6.946	0.000	98	258240	5.00	4.53	
56 Tert-amyl methyl ether	73	7.074	7.074	0.000	98	609507	5.00	4.38	
* 57 Fluorobenzene (IS)	96	7.287	7.287	0.000	99	1811597	10.0	10.0	
58 n-Heptane	43	7.299	7.299	0.000	93	403187	5.00	5.91	
59 n-Butanol	56	7.708	7.702	0.006	92	169242	250.2	282.7	
60 Trichloroethene	95	7.775	7.769	0.006	96	389481	5.00	6.71	
61 Methylcyclohexane	83	8.073	8.080	-0.007	92	496266	5.00	5.32	
62 1,2-Dichloropropane	63	8.110	8.110	0.000	97	262589	5.00	5.15	
63 2-ethoxy-2-methyl butane	87	8.134	8.128	0.006	93	391246	5.00	4.75	
64 Methyl methacrylate	69	8.220	8.208	0.012	90	106158	5.00	5.50	
65 1,4-Dioxane	88	8.214	8.214	0.000	31	24928	125.1	153.1	M
66 Dibromomethane	93	8.220	8.220	0.000	92	115042	5.00	4.39	
67 Dichlorobromomethane	83	8.470	8.470	0.000	99	305638	5.00	4.73	
68 2-Nitropropane	41	8.756	8.756	0.000	99	26519	5.00	4.74	
71 1-Bromo-2-chloroethane	63	8.860	8.860	0.000	98	231535	5.00	4.41	
72 cis-1,3-Dichloropropene	75	9.037	9.037	0.000	96	345199	5.00	4.45	
73 4-Methyl-2-pentanone (MIBK)	43	9.238	9.238	0.000	97	1804728	62.6	74.0	
\$ 74 Toluene-d8 (Surr)	98	9.366	9.366	0.000	93	1822677	10.0	10.4	
75 Toluene	92	9.445	9.445	0.000	98	715635	5.00	5.38	
76 trans-1,3-Dichloropropene	75	9.738	9.732	0.006	93	304711	5.00	5.00	
78 Ethyl methacrylate	69	9.811	9.811	0.000	90	233075	5.00	4.80	
79 1,1,2-Trichloroethane	97	9.945	9.945	0.000	90	174836	5.00	4.77	
80 Tetrachloroethene	166	10.024	10.030	-0.006	97	804761	5.00	12.2	
81 1,3-Dichloropropane	76	10.116	10.116	0.000	91	288457	5.00	4.79	
82 2-Hexanone	43	10.183	10.183	0.000	97	1336345	62.6	75.4	
83 Chlorodibromomethane	129	10.335	10.335	0.000	90	218371	5.00	4.80	
84 Ethylene Dibromide	107	10.451	10.445	0.006	99	165624	5.00	4.65	
* 85 Chlorobenzene-d5 (IS)	117	10.896	10.902	-0.006	84	1418761	10.0	10.0	
86 1-Chlorohexane	91	10.914	10.914	0.000	98	399777	5.00	5.14	
87 Chlorobenzene	112	10.927	10.927	0.000	95	836184	5.00	5.30	
89 1,1,1,2-Tetrachloroethane	131	11.012	11.012	0.000	96	286581	5.00	5.29	
90 Ethylbenzene	91	11.018	11.018	0.000	98	1412494	5.00	5.40	
91 m-Xylene & p-Xylene	106	11.140	11.140	0.000	100	1114036	10.0	10.7	
92 o-Xylene	106	11.475	11.475	0.000	96	539376	5.00	5.21	
93 Styrene	104	11.494	11.494	0.000	95	889946	5.00	5.17	
94 Bromoform	173	11.652	11.652	0.000	98	122106	5.00	4.47	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Isopropylbenzene	105	11.786	11.786	0.000	95	1431854	5.00	5.33	
\$ 98 4-Bromofluorobenzene (Surr)	95	11.932	11.932	0.000	97	662506	10.0	9.52	
99 1,1,2,2-Tetrachloroethane	83	12.042	12.048	-0.006	67	205923	5.00	4.45	
100 Bromobenzene	156	12.048	12.048	0.000	86	370072	5.00	5.21	
101 trans-1,4-Dichloro-2-butene	53	12.073	12.073	0.000	91	131310	25.0	11.0	
102 1,2,3-Trichloropropane	110	12.085	12.091	-0.006	83	55114	5.00	4.23	
103 N-Propylbenzene	91	12.121	12.121	0.000	98	1713533	5.00	5.28	
104 2-Chlorotoluene	126	12.195	12.201	-0.006	98	369403	5.00	5.23	
105 1,3,5-Trimethylbenzene	105	12.262	12.268	-0.006	94	1238948	5.00	5.14	
106 4-Chlorotoluene	126	12.292	12.292	0.000	97	380250	5.00	5.26	
107 tert-Butylbenzene	134	12.506	12.512	-0.006	92	273933	5.00	4.93	
109 1,2,4-Trimethylbenzene	105	12.554	12.554	0.000	97	1318401	5.00	5.30	
110 sec-Butylbenzene	105	12.676	12.676	0.000	94	1626286	5.00	5.36	
111 1,3-Dichlorobenzene	146	12.774	12.774	0.000	98	763342	5.00	5.26	
112 4-Isopropyltoluene	119	12.786	12.786	0.000	97	1462085	5.00	5.36	
* 113 1,4-Dichlorobenzene-d4	152	12.829	12.829	0.000	93	852607	10.0	10.0	
114 1,4-Dichlorobenzene	146	12.847	12.847	0.000	96	770278	5.00	5.17	
115 1,2,3-Trimethylbenzene	120	12.859	12.865	-0.006	98	581187	5.00	5.16	
116 Benzyl chloride	126	12.932	12.932	0.000	98	94953	5.00	4.90	
119 n-Butylbenzene	92	13.085	13.085	0.000	97	717243	5.00	5.27	
120 1,2-Dichlorobenzene	146	13.109	13.115	-0.006	99	664545	5.00	4.91	
118 p-Diethylbenzene	119	13.133	13.140	-0.007	86	730416	5.00	5.20	
123 1,2-Dibromo-3-Chloropropane	155	13.664	13.664	0.000	90	29885	5.00	4.23	
124 1,3,5-Trichlorobenzene	180	13.792	13.792	0.000	98	658569	5.00	5.37	
125 1,2,4-Trichlorobenzene	180	14.219	14.219	0.000	94	499947	5.00	4.83	
126 Hexachlorobutadiene	225	14.304	14.304	0.000	95	310233	5.00	5.65	
127 Naphthalene	128	14.402	14.402	0.000	96	644956	5.00	4.16	
128 1,2,3-Trichlorobenzene	180	14.548	14.548	0.000	96	398158	5.00	4.72	
129 2-Methylnaphthalene	142	15.151	15.151	0.000	93	310649	5.00	3.93	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_ETBR_00001	Amount Added: 5.38	Units: uL	
MSV_LCS_VOC#1_00057	Amount Added: 5.38	Units: uL	
MSV_LCS_ACROL_00060	Amount Added: 5.38	Units: uL	
MSV_LCS_EE_00003	Amount Added: 5.38	Units: uL	
MSV_QC_Gas826_00084	Amount Added: 5.38	Units: uL	
MSV_HP25_ISSS_00054	Amount Added: 1.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\CU06X018.D

Injection Date: 06-Jun-2022 16:45:30

Instrument ID: 10193

Operator ID: knk41612

Lims ID: 410-85437-A-6 MSD

Worklist Smp#: 19

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

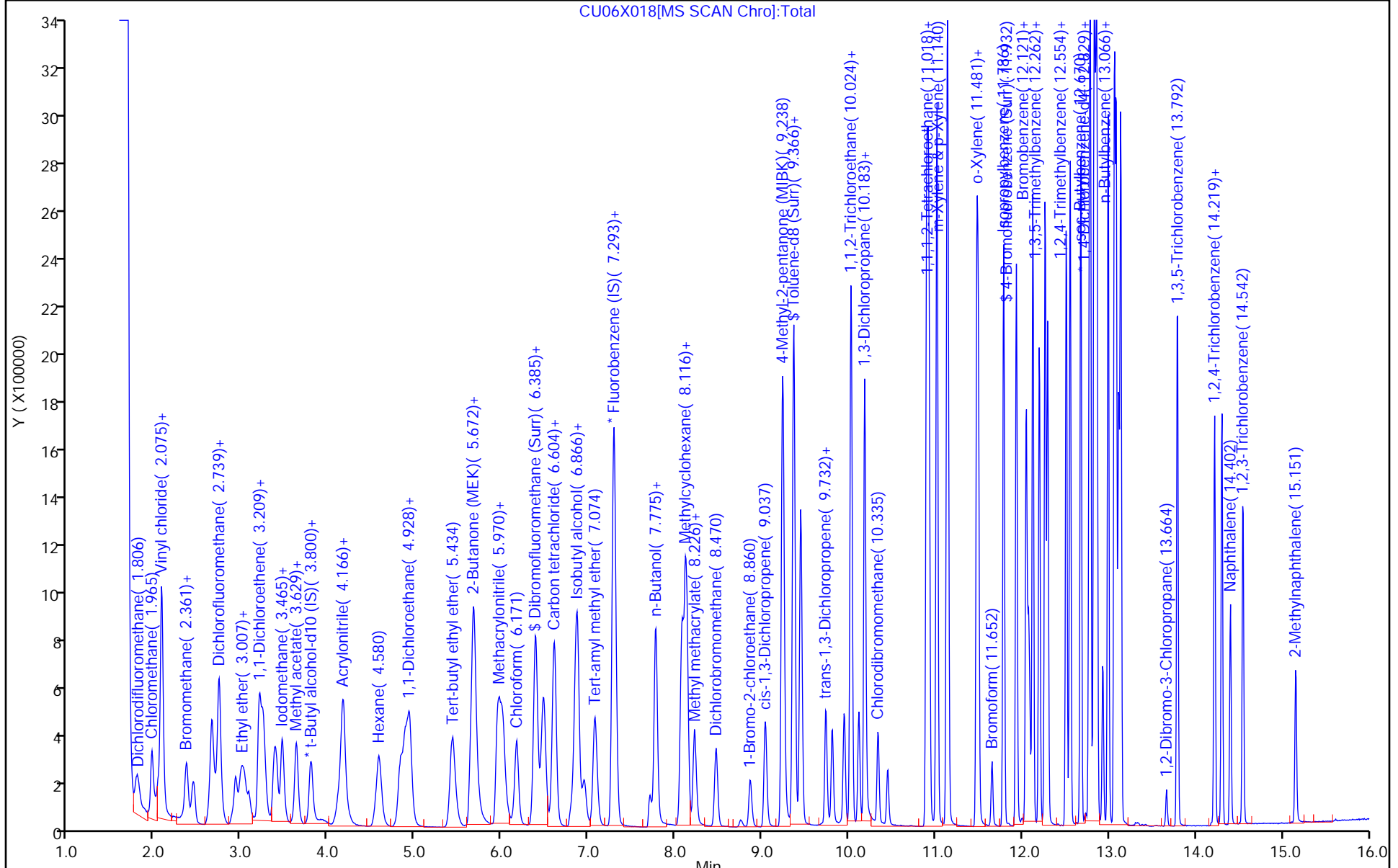
ALS Bottle#: 18

Method: MSV_10193_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\10193\20220603-58749.b\CU06X018.D
 Lims ID: 410-85437-A-6 MSD
 Client ID: HD-COD-SW-15-0/1-0 MSD
 Sample Type: MSD
 Inject. Date: 06-Jun-2022 16:45:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0058749-019
 Operator ID: knk41612 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20220603-58749.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jun-2022 22:41:36 Calib Date: 02-Feb-2022 21:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220202-49623.b\CF02X19.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1649

First Level Reviewer: johnsons

Date: 06-Jun-2022 22:05:40

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	9.73	97.35
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.56	95.56
\$ 74 Toluene-d8 (Surr)	10.0	10.4	104.27
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.52	95.16

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-85437-1

SDG No.: _____

Instrument ID: 10193Start Date: 02/02/2022 14:37Analysis Batch Number: 220276End Date: 02/02/2022 21:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-220276/1		02/02/2022 14:37	1	CF02T01.D	R-624SilMS 30m 0.25 (mm)
IC 410-220276/3		02/02/2022 15:15	1		R-624SilMS 30m 0.25 (mm)
IC 410-220276/4		02/02/2022 15:37	1		R-624SilMS 30m 0.25 (mm)
IC 410-220276/5		02/02/2022 15:59	1		R-624SilMS 30m 0.25 (mm)
IC 410-220276/6		02/02/2022 16:22	1		R-624SilMS 30m 0.25 (mm)
IC 410-220276/7		02/02/2022 16:44	1		R-624SilMS 30m 0.25 (mm)
IC 410-220276/8		02/02/2022 17:06	1		R-624SilMS 30m 0.25 (mm)
IC 410-220276/9		02/02/2022 17:28	1		R-624SilMS 30m 0.25 (mm)
ICV 410-220276/11		02/02/2022 18:13	1		R-624SilMS 30m 0.25 (mm)
IC 410-220276/13		02/02/2022 18:57	1	CF02X13.D	R-624SilMS 30m 0.25 (mm)
IC 410-220276/14		02/02/2022 19:20	1	CF02X14.D	R-624SilMS 30m 0.25 (mm)
IC 410-220276/15		02/02/2022 19:42	1	CF02X15.D	R-624SilMS 30m 0.25 (mm)
IC 410-220276/16		02/02/2022 20:04	1	CF02X16.D	R-624SilMS 30m 0.25 (mm)
IC 410-220276/17		02/02/2022 20:26	1	CF02X17.D	R-624SilMS 30m 0.25 (mm)
ICIS 410-220276/18		02/02/2022 20:49	1	CF02X18.D	R-624SilMS 30m 0.25 (mm)
IC 410-220276/19		02/02/2022 21:11	1	CF02X19.D	R-624SilMS 30m 0.25 (mm)
ICV 410-220276/21		02/02/2022 21:55	1	CF02X21.D	R-624SilMS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-85437-1

SDG No.: _____

Instrument ID: 10193 Start Date: 06/06/2022 10:13

Analysis Batch Number: 261977 End Date: 06/06/2022 20:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-261977/1		06/06/2022 10:13	1	CU06T001.D	R-624SilMS 30m 0.25 (mm)
CCVIS 410-261977/3		06/06/2022 10:48	1	CU06X002.D	R-624SilMS 30m 0.25 (mm)
LCS 410-261977/4		06/06/2022 11:11	1	CU06X003.D	R-624SilMS 30m 0.25 (mm)
LCSD 410-261977/5		06/06/2022 11:33	1	CU06X004.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		06/06/2022 11:55	1		R-624SilMS 30m 0.25 (mm)
MB 410-261977/7		06/06/2022 12:17	1	CU06X006.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		06/06/2022 12:40	1		R-624SilMS 30m 0.25 (mm)
410-85437-14	HD-QC1-0/1-2	06/06/2022 13:02	1	CU06X008.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		06/06/2022 13:24	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		06/06/2022 13:47	1		R-624SilMS 30m 0.25 (mm)
410-85437-1	HD-COD-SW-6-0/1-0	06/06/2022 14:09	1	CU06X011.D	R-624SilMS 30m 0.25 (mm)
410-85437-2	HD-COD-SW-7-0/1-0	06/06/2022 14:31	1	CU06X012.D	R-624SilMS 30m 0.25 (mm)
410-85437-3	HD-COD-SW-8-0/1-0	06/06/2022 14:54	1	CU06X013.D	R-624SilMS 30m 0.25 (mm)
410-85437-4	HD-COD-SW-9-0/1-0	06/06/2022 15:16	1	CU06X014.D	R-624SilMS 30m 0.25 (mm)
410-85437-5	HD-COD-SW-13-0/1-0	06/06/2022 15:38	1	CU06X015.D	R-624SilMS 30m 0.25 (mm)
410-85437-6	HD-COD-SW-15-0/1-0	06/06/2022 16:01	1	CU06X016.D	R-624SilMS 30m 0.25 (mm)
410-85437-6 MS	HD-COD-SW-15-0/1-0 MS MS	06/06/2022 16:23	1	CU06X017.D	R-624SilMS 30m 0.25 (mm)
410-85437-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	06/06/2022 16:45	1	CU06X018.D	R-624SilMS 30m 0.25 (mm)
410-85437-7	HD-COD-SW-16-0/1-0	06/06/2022 17:30	1	CU06X020.D	R-624SilMS 30m 0.25 (mm)
410-85437-8	HD-COD-SW-17-0/1-0	06/06/2022 17:52	1	CU06X021.D	R-624SilMS 30m 0.25 (mm)
410-85437-8 DL	HD-COD-SW-17-0/1-0 DL	06/06/2022 18:14	10	CU06X022.D	R-624SilMS 30m 0.25 (mm)
410-85437-9	HD-COD-SW-26-0/1-0	06/06/2022 18:36	1	CU06X023.D	R-624SilMS 30m 0.25 (mm)
410-85437-10	HD-COD-SW-27-0/1-0	06/06/2022 18:59	1	CU06X024.D	R-624SilMS 30m 0.25 (mm)
410-85437-11	HD-COD-SW-28-0/1-0	06/06/2022 19:21	1	CU06X025.D	R-624SilMS 30m 0.25 (mm)
410-85437-12	HD-COD-SW-29-0/1-0	06/06/2022 19:43	1	CU06X026.D	R-624SilMS 30m 0.25 (mm)
410-85437-13	HD-QC1-0/1-1	06/06/2022 20:05	1	CU06X027.D	R-624SilMS 30m 0.25 (mm)
410-85437-13 DL	HD-QC1-0/1-1 DL	06/06/2022 20:28	10	CU06X028.D	R-624SilMS 30m 0.25 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-85437-1

SDG No.: _____

Batch Number: 220276 Batch Start Date: 02/02/22 14:37 Batch Analyst: Long, Jason M

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	MSV_HP25_ISSS 00046	MSV_LCS_ACROL 00041	MSV_LCS_EE 00001
BFB 410-220276/1		8260D		1 uL	1 uL				
IC 410-220276/13		8260D		25 mL	25 mL	2617	1 uL		
IC 410-220276/14		8260D		25 mL	25 mL	2617	1 uL		
IC 410-220276/15		8260D		25 mL	25 mL	2617	1 uL		
IC 410-220276/16		8260D		25 mL	25 mL	2617	1 uL		
IC 410-220276/17		8260D		25 mL	25 mL	2617	1 uL		
ICIS 410-220276/18		8260D		25 mL	25 mL	2617	1 uL		
IC 410-220276/19		8260D		25 mL	25 mL	2617	1 uL		
ICV 410-220276/21		8260D		25 mL	25 mL	2617	1 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_ETBR 00001	MSV_LCS_Penta 00011	MSV_LCS_VOC#1 00038	MSV_LL_#1_826 00034	MSV_LL_#2_826 00038	MSV_LL_GAS826 00063
BFB 410-220276/1		8260D							
IC 410-220276/13		8260D					2 uL	2 uL	2 uL
IC 410-220276/14		8260D					2 uL	2 uL	2 uL
IC 410-220276/15		8260D					2 uL	2 uL	2 uL
IC 410-220276/16		8260D					2 uL	2 uL	2 uL
IC 410-220276/17		8260D					5 uL	5 uL	5 uL
ICIS 410-220276/18		8260D					10 uL	10 uL	10 uL
IC 410-220276/19		8260D					25 uL	25 uL	25 uL
ICV 410-220276/21		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 Laboratorie Job No.: 410-85437-1

SDG No.: _____

Batch Number: 220276 Batch Start Date: 02/02/22 14:37 Batch Analyst: Long, Jason M

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QC_Gas826 00063	MSV_V_BFB 00007				
BFB 410-220276/1		8260D			1 uL				
IC 410-220276/13		8260D							
IC 410-220276/14		8260D							
IC 410-220276/15		8260D							
IC 410-220276/16		8260D							
IC 410-220276/17		8260D							
ICIS 410-220276/18		8260D							
IC 410-220276/19		8260D							
ICV 410-220276/21		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 Laboratorie Job No.: 410-85437-1

SDG No.: _____

Batch Number: 261977 Batch Start Date: 06/06/22 10:13 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 410-261977/1		8260D		1 uL	1 uL				
CCVIS 410-261977/3		8260D		25 mL	25 mL				2646
LCS 410-261977/4		8260D		25 mL	25 mL				2646
LCS 410-261977/5		8260D		25 mL	25 mL				2646
MB 410-261977/7		8260D		25 mL	25 mL				2646
410-85437-A-14	HD-QC1-0/1-2	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-85437-A-1	HD-COD-SW-6-0/1-0	8260D	T	25 mL	25 mL				
410-85437-A-2	HD-COD-SW-7-0/1-0	8260D	T	25 mL	25 mL				
410-85437-A-3	HD-COD-SW-8-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-85437-A-4	HD-COD-SW-9-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-85437-A-5	HD-COD-SW-13-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-85437-A-6	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-85437-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-85437-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-85437-A-7	HD-COD-SW-16-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-85437-A-8	HD-COD-SW-17-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-85437-B-8	HD-COD-SW-17-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	2646
410-85437-A-9	HD-COD-SW-26-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-85437-A-10	HD-COD-SW-27-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-85437-A-11	HD-COD-SW-28-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-85437-A-12	HD-COD-SW-29-0/1-0	8260D	T	25 mL	25 mL				
410-85437-A-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	

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 Laboratorie Job No.: 410-85437-1

SDG No.: _____

Batch Number: 261977 Batch Start Date: 06/06/22 10:13 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
410-85437-B-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	2646

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_HP25_ISSS 00054	MSV_LCS_ACROL 00060	MSV_LCS_EE 00003	MSV_LCS_ETBR 00001	MSV_LCS_VOC#1 00057	MSV_LL_#1_826 00046
BFB 410-261977/1		8260D							
CCVIS 410-261977/3		8260D		1 uL					20 uL
LCS 410-261977/4		8260D		1 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	
LCSD 410-261977/5		8260D		1 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	
MB 410-261977/7		8260D		1 uL					
410-85437-A-14	HD-QC1-0/1-2	8260D	T	1 uL					
410-85437-A-1	HD-COD-SW-6-0/1-0	8260D	T	1 uL					
410-85437-A-2	HD-COD-SW-7-0/1-0	8260D	T	1 uL					
410-85437-A-3	HD-COD-SW-8-0/1-0	8260D	T	1 uL					
410-85437-A-4	HD-COD-SW-9-0/1-0	8260D	T	1 uL					
410-85437-A-5	HD-COD-SW-13-0/1-0	8260D	T	1 uL					
410-85437-A-6	HD-COD-SW-15-0/1-0	8260D	T	1 uL					
410-85437-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	1 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL	
410-85437-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	1 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL	
410-85437-A-7	HD-COD-SW-16-0/1-0	8260D	T	1 uL					
410-85437-A-8	HD-COD-SW-17-0/1-0	8260D	T	1 uL					
410-85437-B-8	HD-COD-SW-17-0/1-0	8260D	T	1 uL					
410-85437-A-9	HD-COD-SW-26-0/1-0	8260D	T	1 uL					
410-85437-A-10	HD-COD-SW-27-0/1-0	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 Laboratorie Job No.: 410-85437-1

SDG No.: _____

Batch Number: 261977 Batch Start Date: 06/06/22 10:13 Batch Analyst: Johnson, Sara E

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_HP25_ISSS 00054	MSV_LCS_ACROL 00060	MSV_LCS_EE 00003	MSV_LCS_ETBR 00001	MSV_LCS_VOC#1 00057	MSV_LL_#1_826 00046
410-85437-A-11	HD-COD-SW-28-0/1-0	8260D	T	1 uL					
410-85437-A-12	HD-COD-SW-29-0/1-0	8260D	T	1 uL					
410-85437-A-13	HD-QC1-0/1-1	8260D	T	1 uL					
410-85437-B-13	HD-QC1-0/1-1	8260D	T	1 uL					

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_#2_826 00050	MSV_LL_GAS826 00091	MSV_QC_Gas826 00084	MSV_V_BFB 00007		
BFB 410-261977/1		8260D					1 uL		
CCVIS 410-261977/3		8260D		20 uL	20 uL				
LCS 410-261977/4		8260D				12.5 uL			
LCS 410-261977/5		8260D				12.5 uL			
MB 410-261977/7		8260D							
410-85437-A-14	HD-QC1-0/1-2	8260D	T						
410-85437-A-1	HD-COD-SW-6-0/1-0	8260D	T						
410-85437-A-2	HD-COD-SW-7-0/1-0	8260D	T						
410-85437-A-3	HD-COD-SW-8-0/1-0	8260D	T						
410-85437-A-4	HD-COD-SW-9-0/1-0	8260D	T						
410-85437-A-5	HD-COD-SW-13-0/1-0	8260D	T						
410-85437-A-6	HD-COD-SW-15-0/1-0	8260D	T						
410-85437-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T			5.38 uL			
410-85437-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T			5.38 uL			
410-85437-A-7	HD-COD-SW-16-0/1-0	8260D	T						
410-85437-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 Laboratorie Job No.: 410-85437-1

SDG No.: _____

Batch Number: 261977 Batch Start Date: 06/06/22 10:13 Batch Analyst: Johnson, Sara E

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL #2_826 00050	MSV_LL_GAS826 00091	MSV_QC_Gas826 00084	MSV_V_BFB 00007		
410-85437-B-8	HD-COD-SW-17-0/1 -0	8260D	T						
410-85437-A-9	HD-COD-SW-26-0/1 -0	8260D	T						
410-85437-A-10	HD-COD-SW-27-0/1 -0	8260D	T						
410-85437-A-11	HD-COD-SW-28-0/1 -0	8260D	T						
410-85437-A-12	HD-COD-SW-29-0/1 -0	8260D	T						
410-85437-A-13	HD-QC1-0/1-1	8260D	T						
410-85437-B-13	HD-QC1-0/1-1	8260D	T						

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



Lancaster Laboratories
Environmental

Enviroi



410-85437 Chain of Custody

Request/Chain of Custody

1072

Sample # _____

Client: Groundwater Sciences Corporation				Matrix			Analyses Requested										For Lab Use Only																					
Project Name/#: YNOP Monthly Surface Water		Site ID #: YNOP, York PA		<input type="checkbox"/> Soil	<input type="checkbox"/> Sediment	<input type="checkbox"/> Tissue	<input type="checkbox"/> Potable	<input type="checkbox"/> Ground	<input checked="" type="checkbox"/> Surface	Preservation Codes										SF #: _____																		
Project Manager: Chris O'Neil		P.O. #: 10012.49		<input type="checkbox"/> Water	<input type="checkbox"/> NPDES	<input type="checkbox"/> Other:	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">H</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>										H																					SCR #: _____
H																																						
Sampler: Casey Littlefield / Erin Peeling		PWSID #: N/A		Aqueous VOCs via 8260D (low level - 25 ml purge)										Preservation Codes																								
Phone #: (717) 901-8176 / (717) 756-1246		Quote #:												H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ P = H ₃ PO ₄ O = Other																								
State where samples were collected: York, PA		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Total # of Containers										Remarks																								
Sample Identification		Collection												<input type="checkbox"/> Grab	<input type="checkbox"/> Composite																							
	Date	Time																																				
HD-COD-SW-6-0/1-0	5/25/22	1050	X				X					3	X																									
HD-COD-SW-7-0/1-0	↓	1205	X				X					3	X																									
HD-COD-SW-8-0/1-0	↓	0940	X				X					3	X																									
HD-COD-SW-9-0/1-0	↓	1315	X				X					3	X																									
HD-COD-SW-13-0/1-0	↓	0955	X				X					3	X																									
HD-COD-SW-15-0/1-0	↓	1225	X				X					3	X																									
HD-COD-SW-15-0/1-0 MS	↓	1225	X				X					3	X																									
HD-COD-SW-15-0/1-0 MSD	↓	1225	X				X					3	X																									
HD-COD-SW-16-0/1-0	↓	1025	X				X					3	X																									
HD-COD-SW-17-0/1-0	↓	1035	X				X					3	X																									
Turnaround Time Requested (TAT) (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>		5/25/22	1425	<i>[Signature]</i>		5/25/22	1425																									
Date results are needed:						Relinquished by:		Date	Time	Received by:		Date	Time																									
Rush results requested by (please check):				E-Mail <input type="checkbox"/> Phone <input type="checkbox"/>		<i>[Signature]</i>				<i>[Signature]</i>		5/26/22	1127																									
E-mail Address:						Relinquished by:		Date	Time	Received by:		Date	Time																									
Phone:						<i>[Signature]</i>		5/26/22	1750																													
Data Package Options (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>																												
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>		5/26/22	1020																									
NJ DKQP	<input type="checkbox"/>	NYSDEC Category	<input type="checkbox"/>	<input type="checkbox"/> A or <input type="checkbox"/> B			Relinquished by Commercial Carrier:				Temperature upon receipt																											
EDD Required?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, format:	CLP Like Deliverables, Project Specific Analyte List				UPS _____ FedEx _____ Other _____				1.5 °C																											

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

Acct # _____ Group # _____ Sample # _____

Client: Groundwater Sciences Corporation				Matrix			Analyses Requested										For Lab Use Only			
Project Name/#: YNOP Monthly Surface Water		Site ID #: YNOP, York PA		<input type="checkbox"/> Sediment	<input type="checkbox"/> Tissue	<input type="checkbox"/> Polable	<input type="checkbox"/> Ground	<input checked="" type="checkbox"/> Surface	Preservation Codes										SF #: _____	
Project Manager: Chris O'Neil		P.O. #: 10012.49		<input type="checkbox"/> Soil	<input type="checkbox"/> Water	<input type="checkbox"/> NPDES	<input type="checkbox"/> Trip Blank											SCR #: _____		
Sampler: Casey Littlefield / Erin Peeling		PWSID #: N/A		Total # of Containers	Aqueous VOCs via 8260D (low level - 25 ml purge)											Preservation Codes				
Phone #: (717) 901-8176 / (717) 756-1246		Quote #: _____														H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ P = H ₃ PO ₄ O = Other				
State where samples were collected: York, PA		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Collection	Grab	Composite											Remarks			
Sample Identification	Date	Time																		
HD-COD-SW-26-0/1-0	5/25/22	1145	X		X		3	X												
HD-COD-SW-27-0/1-0	↓	1220	X		X		3	X												
HD-COD-SW-28-0/1-0	↓	1330	X		X		3	X												
HD-COD-SW-29-0/1-0	↓	0920	X		X		3	X												
HD-QC1-0/1-1	↓	1200	X		X		3	X												
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: 5/25/22 Time: 1425		Received by: <i>[Signature]</i>			Date: 5/25/22 Time: 1425								
(Rush TAT is subject to laboratory approval and surcharges.)				Relinquished by: <i>[Signature]</i>			Date: 5/25/22 Time: 1127		Received by: <i>[Signature]</i>			Date: 5/26/22 Time: 1127								
Date results are needed: _____				Relinquished by: <i>[Signature]</i>			Date: 5/26/22 Time: 1750		Received by: _____			Date: _____ Time: _____								
Rush results requested by (please check): E-Mail <input type="checkbox"/> Phone <input type="checkbox"/>				Relinquished by: _____			Date: _____ Time: _____		Received by: _____			Date: _____ Time: _____								
E-mail Address: _____				Relinquished by: _____			Date: _____ Time: _____		Received by: _____			Date: _____ Time: _____								
Phone: _____				Relinquished by: _____			Date: _____ Time: _____		Received by: _____			Date: _____ Time: _____								
Data Package Options (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"/>	Type III (Reduced non-CLP) <input type="checkbox"/>	CT RCP <input type="checkbox"/>	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: _____			Date: 5/26/22 Time: 1020								
CLP Like Deliverables, Project Specific Analyte List				Relinquished by Commercial Carrier: _____			Date: _____ Time: _____		Received by: <i>[Signature]</i>			Date: 5/26/22 Time: 1020								
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				If yes, format: _____			UPS _____ FedEx _____ Other _____		Temperature upon receipt: <u>1.5</u> °C											

CC

1699 06/07/2022
[Signature]

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-85437-1

Login Number: 85437

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

Creator: Leakway, Christian

Question	Answer	Comment
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.	True	

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-85437-1

Login Number: 85437

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

Creator: Metzger, Katherine A

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		